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State of Ohio Standard Requirements for Public Facility Construction

PROCUREMENT AND CONTRACTING REQUIREMENTS GROUP

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END OF DOCUMENT

Document 00 10 00 - Solicitation (General Contracting / Paper Bid)
State of Ohio Standard Requirements for Public Facility Construction

Sealed bids will be received by:

Lakeland Community College
7700 Clocktower Drive
Kirtland, Ohio 44094

for the following Project:

Project TK26SEP30
"Breakers" Food Service Renovation
Lakeland Community College
Kirtland, Ohio 44094

in accordance with the Contract Documents prepared by:

CPL Architects, Engineers, Landscape Architects
25 Main Street, Suite 200
Westlake, Ohio 440145
440-891-8910
Kiernan Weese
kweese@cplteam.com
cplteam.com

Bidders may submit requests for consideration of a proposed Substitution for a specified product, equipment, or service to the Architect/Engineer ("A/E") no later than 10 days prior to the bid opening. Additional products, equipment, and services may be accepted as approved Substitutions only by written Addendum.

From time to time, the Commission issues new editions of the "State of Ohio Standard Requirements for Public Facility Construction" and may issue interim changes. Bidders must submit Bids that comply with the version of the Standard Requirements included in the Contract Documents.

Prevailing Wage rates and Equal Employment Opportunity requirements are applicable to this Project.

This Project is subject to the State of Ohio's Encouraging Diversity, Growth, and Equity ("EDGE") Business Development Program. A Bidder is required to submit with its Bid and with its Bidder's Qualifications form, certain information about the EDGE-certified Business(es) participating on the Project with the Bidder. Refer to **Section 6.1.11** of the **Instructions to Bidders**.

The EDGE Participation Goal for the Project is **5.0 percent**. EDGE participation is encouraged, not required.

The percentage is determined by the contracted value of goods, services, materials, and labor that are provided by EDGE-certified Business(es). The participation is calculated on the total amount of each awarded contract. For more information about EDGE, contact the State of Ohio Department of Development at http://development.ohio.gov/business; or by telephone at (800) 848-1300.

The Bidder must indicate on the electronic Bid Form, in the spaces provided or by attachment, the locations where its services will be performed, in accordance with the requirements of Executive Order 2019-12D related to providing services only within the United States. The Bidder must also affirm its compliance with Executive Order 2022-02D prohibiting purchases from or investment in any Russian institution or company. Failure to do so may cause the Bid to be rejected as non-responsive.

DOMESTIC STEEL USE REQUIREMENTS AS SPECIFIED IN OHIO REVISED CODE SECTION 153.011 APPLY TO THIS PROJECT. COPIES OF OHIO REVISED CODE SECTION 153.011 CAN BE OBTAINED FROM ANY OF THE OFFICES OF THE OHIO FACILITIES CONSTRUCTION COMMISSION.

Bidders are encouraged to be enrolled in and to be in good standing in a Substance Use Prevention and Recovery ("SUPR") Program approved by the Ohio Bureau of Workers' Compensation ("OBWC") prior to submitting a Bid and provide, on the Bid Form with its Bid, certain information relative to their enrollment in such a program; and, if awarded a Contract, shall comply with other SUPR criteria described in **Section 1.6** of the **General Conditions**.

Bids will be received for:

Trade	Estimate
Base Bid	**$1,320,515**
Alternate 1	**$ 19,250**
Alternate 2	**$ 7,340**
Alternate 3	**$ 7,810**
Alternate 4	**$ 6,160**
Alternate 5	**$ 27,175**
Alternate 6	**$ 12,485**
Alternate 7	**$ 33,540**

until **October 23, 2026**, at **2:00 p.m.**, when all Bids will be opened and read aloud.

All Bidders shall attend the MANDATORY Pre-Bid Meeting on **October 8th, 2026, at 2:00 p.m.** until approximately **3:00 p.m.**, at the following location: S-Building First Floor "Breakers" North Lobby - 7700 Clocktower Dr, Kirtland, OH 44094.

Cut-off for bidder questions is October 16th at 5:00 PM

Final addendum to be issued 72 hours prior to bid open – October 20th, 2:00 PM

The Contractor is responsible for scheduling the Project, coordinating the Subcontractors, and providing other services identified in the Contract Documents.

The Contract Documents are available for purchase from ARC Document Solutions-Cleveland, 3666 Carnegie Avenue, Cleveland, OH 44115, (p) 216.281.1234, (e) cleveland.csr@e-arc.com, at the non-refundable cost to be determined per set, plus shipping, if requested.

The Contract Documents may be reviewed for bidding purposes without charge during business hours at the office of the Contracting Authority.

END OF DOCUMENT

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ARTICLE 1 - GENERAL INSTRUCTIONS

1.1 Applicable Law and Forum

1.1.1 The rights of any Bidder or any party to a subsequent Contract shall be governed by the laws of the state of Ohio and only Ohio courts shall have jurisdiction over any action or proceeding related to the Bid or any subsequent Contract. The Bidder irrevocably consents to such jurisdiction.

1.2 Project Scheduling and Coordination

1.2.1 When the Contract Documents refer to a period of time by a number of days, it excludes the first day and includes the last day of the period. If the last day of the period falls on a Saturday, Sunday, or a legal holiday, that day shall be omitted and the period shall end on the next day which is not a Saturday, Sunday, or legal holiday.

1.2.2 The time for completion of the Project indicated on the **Bid Form** is the time for Substantial Completion applicable to the Bidder.

1.2.3 The State may assign all or any portion of its interest in a Contract with one or more of the successful Bidders to another successful Bidder as an agreed condition for an award of the Contract for the respective Bid. The assignment may include, without limitation, the duty to schedule, coordinate, and administer the Contract.

1.2.4 The Contractor is responsible for scheduling the Project, coordinating the Subcontractors, and providing other services identified in the Contract Documents.

1.2.5 By submitting its Bid, the Bidder indicates its understanding that the Contract Sum, based on its Bid and as amended by Change Orders, includes all costs that the Contracting Authority owes the Bidder.

1.3 Written Notice

1.3.1 Notice under the Contract Documents shall be validly given if:

1.3.1.1 delivered personally to a member of the organization for whom the notice is intended;

1.3.1.2 delivered, or sent by registered or certified mail, to the last known business address of the organization; or

1.3.1.3 sent by facsimile, email, or web-based project management software, provided the original signed document is delivered within 3 business days after the date of the electronic transmission.

1.3.2 Notices provided to one Project Participant from another shall be simultaneously copied to the prospective Bidders, the Owner, the Contracting Authority, and the A/E.

ARTICLE 2 - BIDDING PROCEDURES

2.1 Examination of Contract Documents and the Site

2.1.1 Before submitting a Bid, the Bidder shall examine all Contract Documents, including, but not limited to, the Drawings, Specifications, and Addenda for all divisions of Work for the Project, noting in particular all requirements that may affect its Work in any way.

2.1.2 The Bidder's failure to become acquainted with the extent and nature of Work required to complete any portion of the Work in conformity with the requirements of the Contract Documents, shall not be a basis for additional compensation.

2.1.3 Before submitting a Bid, the Bidder should not only examine and evaluate the Site and related Project conditions where the Work will be performed, but shall also consider when the Work will be performed including, but not limited to, the following:

2.1.3.1 the condition, layout, and nature of the Site and surrounding area;

2.1.3.2 the availability and cost of labor;

2.1.3.3 the availability and cost of materials, supplies, and equipment;

2.1.3.4 the cost of temporary utilities required in the Bid;

2.1.3.5 the cost of any permit or license required by a local or regional authority having jurisdiction over the Project;

2.1.3.6 the usual weather conditions of the Project location;

2.1.3.7 conditions bearing upon transportation, disposal, handling, and storage of equipment, materials, and waste; and

2.1.3.8 subsurface and concealed physical conditions and related information provided in the Contract Documents.

2.2 Pre-Bid Meeting

2.2.1 The Bidder is encouraged to attend the pre-bid meeting, where the A/E, the Contracting Authority, and the Owner will receive questions regarding the Contract Documents. If not given in **Document 00 10 00 - Solicitation**, the A/E shall issue notice of the time and place of any pre-bid meeting to each registered Plan Holder.

2.2.2 The A/E shall prepare minutes of the pre-bid meeting for the Project record. If questions raised by the prospective Bidders require changes to, or clarifications of, the Contract Documents, the A/E shall issue the changes by written Addendum, along with a list of pre-bid meeting attendees.

2.2.3 Additional compensation shall not be based upon the Bidder's failure to attend the pre-bid meeting, which results in the Bidder's incomplete knowledge and familiarity of the Project requirements.

2.3 Request for Interpretation

2.3.1 If the Bidder finds any perceived ambiguity, conflict, error, omission, or discrepancy within the Contract Documents, including the Drawings, Specifications, and Addenda, or between any of the Contract Documents and Applicable Law, the Bidder shall submit a written Request for Interpretation ("RFI") to the A/E for an interpretation or clarification.

2.3.1.1 The Bidder is responsible for prompt delivery of the RFI.

2.3.1.2 The A/E shall respond to RFIs received more than 7 days before the bid opening.

2.3.2 The A/E shall issue Addenda in response to RFIs that modify or clarify the Contract Documents. Any Addenda issued within 72 hours before any bid opening (excluding Saturdays, Sundays, and legal holidays) shall extend the bid opening date by 7 days pursuant to **Section 3.3.1**.

2.3.2.1 The Addenda may be delivered via e-mail, posted to a web or FTP site, or otherwise furnished to each registered Plan Holder.

2.3.3 Any interpretation or clarification of the Contract Documents made by any Person other than the A/E, in any manner other than a written Addendum, shall not be binding, and the Bidder shall not rely upon the interpretation or clarification.

2.3.4 The successful Bidder shall not be compensated for a claim alleging insufficient data, incomplete, ambiguous, conflicting, or erroneous Contract Documents or proposed Contract Documents, or assumed conditions regarding the nature, extent, or character of the Work, if the Bidder did not submit a related RFI prior to the bid opening.

2.4 Basis of Design and Acceptable Components

2.4.1 The Contract Documents may list components produced by specific manufacturers to denote kind, quality, or performance requirements.

2.4.2 The component listed first is the Basis of Design Component.

2.4.3 Other listed components are Acceptable Components.

2.4.3.1 If the Bidder includes an Acceptable Component in its Bid, the Bidder is responsible for the costs of coordination and modification required.

2.5 Substitutions Prior to Bid Opening

2.5.1 If the Bidder proposes to use an article, device, material, equipment, form of construction, fixture, or item other than the Basis of Design or Acceptable Components named in the Specifications, the Bidder shall certify that the proposed item is equal in quality and all aspects of performance and appearance, to the item specified.

2.5.1.1 If approval of a Substitution requires changes to the Contract Documents or affects the work of other trades, the Bidder is responsible for the additional costs, including, but not limited to, changes to the design by the A/E.

2.5.2 The Bidder shall submit its request for Substitution to the A/E no later than 10 days prior to the bid opening, which must include:

2.5.2.1 the name and complete description of the proposed Substitution, including Drawings, performance and test data, and other information necessary for a complete evaluation; and

2.5.2.2 a statement setting forth any changes that the Proposed Substitution will require in the Contract Documents or the Project.

2.5.3 If the A/E approves the Proposed Substitution, the A/E shall issue an Addendum.

2.5.4 If the A/E does not approve the Proposed Substitution, the A/E shall inform the Bidder of its decision, which is final. The A/E may reject a proposed Substitution because the Bidder failed to provide sufficient information to enable the A/E to completely evaluate the Proposed Substitution without causing a delay in the scheduled bid opening.

2.5.5 Proposed Substitutions received by the A/E less than 10 days prior to the bid opening shall not be considered.

2.6 Bid Form

2.6.1 Each Bid shall be submitted on the **Bid Form** and sealed in an envelope clearly marked as containing a Bid, indicating the Contracting Authority's Project number and name, and the date and time of the bid opening on the envelope. Refer to **Section 3.1.2** for requirements related to envelope markings.

2.6.1.1 Any change, alteration, omission, or addition in the wording of the **Bid Form** shall cause the Bid to be rejected as non-responsive.

2.6.1.2 All pages of the **Bid Form**, including a completed "Bidder Affirmation and Disclosure" page acknowledging that the Bidder affirms, understands, and will abide by the requirements of Executive Order 2019-12D related to providing services only within the United States and Executive Order 2022-02D prohibiting purchases from or investment in any Russian institution or company, and a completed "Commitment to Participate in the EDGE Business Assistance Program" page, shall be submitted with the Bid. Failure to do so may cause the Bid to be rejected as non-responsive.

.1 If the names, locations, and service locations of Subcontractors are not known at the time of the Bid Opening, the Bidder must provide the information requested with its **Subcontractor and Material Supplier Declaration** form.

2.6.1.3 Unless the Bidder withdraws the Bid as provided in **Article 4**, the Bidder is required to comply with all requirements of the Contract Documents, regardless of whether the Bidder had actual knowledge of the requirements and regardless of any statement or omission made by the Bidder that might indicate a contrary intention.

2.6.2 The Bidder shall fill in all relevant blank spaces on the **Bid Form** by printing in ink or by typewriting, and not in pencil.

2.6.2.1 The Bidder shall show all bid amounts in both words and figures. In the case of a conflict between the words and figures, the amount shown in words shall govern, where the words are not ambiguous. When the Bidder's intention and the meaning of the words are clear, omissions, or misspellings of words shall not render the words ambiguous.

2.6.2.2 The Bidder shall initial alteration or erasure of items filled in on the **Bid Form**.

2.6.3 If the Bidder is a corporation, partnership, or sole proprietorship, an officer, partner or principal of the Bidder shall print or type the legal name of the Bidder on the line provided, and sign the **Bid Form**. If the Bidder is a joint venture, an officer, partner or principal, as applicable, of each member of the joint venture shall print or type the legal name of the

applicable member on the line provided, and sign the **Bid Form** on behalf of that member. All signatures must be original.

2.7 Allowances

2.7.1 If Allowances are provided on the **Bid Form**, the amount of each Allowance shall be included in the Base Bid amount. Allowances shall be used solely for the purpose of determining the adjustment to the Contract Sum for the difference between the amount of the Allowance and the actual cost of the related Work provided. Allowances shall not include the Contractor's Fee.

2.8 Unit Prices

2.8.1 If Unit Prices are requested on the **Bid Form**, the amount of the scheduled quantities shall be included in the Base Bid amount. Unit prices shall be used solely for the purpose of determining the adjustment to the Contract Sum for the difference between the estimated quantities on the **Bid Form** and the actual quantities provided.

2.8.2 Unit Prices shall include all materials, equipment, labor, delivery, installation, and any other cost or expense, in connection with, or incidental to, the performance of that portion of the Work. Unit Prices shall not include the Contractor's Fee on account of the associated Unit Price Work. The Bidder shall submit Unit Prices for all items listed.

2.9 Alternates

2.9.1 If an Alternate is listed on the **Bid Form**, the Bidder shall fill in the applicable blank with an increased or decreased bid amount and indicate which by circling the word "ADD" or the word "DEDUCT" as applicable. The Contracting Authority reserves the right to accept or reject any or all bid amounts for Alternates, in whole or in part, and in any order.

2.9.1.1 If no change in the bid amount is required, indicate "No Change" or "$0."

2.9.1.2 Failure to make an entry or an entry of "No Bid," "N/A," or similar entry on any Alternate shall cause the Bid to be rejected as non-responsive if that Alternate is selected.

2.9.1.3 Failure to indicate a negative number by circling "DEDUCT," preceding the number by a minus sign, or enclosing the number in parentheses will indicate the Bidder's intent to increase the Base Bid by the amount entered in the applicable blank.

2.9.1.4 If an Alternate is not selected, an entry as listed in **Section 2.9.1.2** on that Alternate shall not, by itself, render a Bid non-responsive.

2.10 Submittals with Bid Form

2.10.1 The Contracting Authority shall reject a Bid as non-responsive if the Bidder fails to submit the following with the Bid Form in a sealed envelope:

2.10.1.1 A Bid Guaranty as provided in **Article 5**, meeting the requirements of Ohio Revised Code ("ORC") Sections 153.54 and 153.571.

2.10.2 If the apparent low Bidder does not submit a valid Power of Attorney of the agent signing for the Surety with its Bid, the Contracting Authority shall direct the apparent low Bidder to deliver a valid and appropriate Power of Attorney to the Contracting Authority within a period determined by the Contracting Authority. The Contracting Authority shall not enter into a Contract without a valid Power of Attorney.

2.10.3 The Bidder is encouraged to submit background information with its Bid using the **Bidder's Qualifications** form and including, but not limited to, the information listed in this **Section 2.10**. If the apparent low Bidder does not submit the **Bidder's Qualifications** form and related information with its Bid, the Bidder shall provide it upon request in accordance with **Section 3.5.4**, including, but not limited to:

2.10.3.1 the overall experience of the Bidder, including number of years in business under present and former business names;

2.10.3.2 a complete listing of all the Bidder's ongoing construction projects and a listing of construction projects which are similar in cost and type to the Project completed by the Bidder in the last 5 years. Include information of the scope of work and value of each contract, a description of Encouraging Diversity Growth and Equity ("EDGE") participation and performance, and a project name/contact Person/address/phone number for the owner and the architect or engineer for each project;

2.10.3.3 a complete listing of Prevailing Wage, EPA, OSHA, or other regulatory entity issues or violations in the last 5 years;

2.10.3.4 a complete listing of judgments, claims, arbitration proceedings or suits pending or outstanding in the last 5 years;

2.10.3.5 a complete listing of Substance Use Prevention and Recovery ("SUPR") violations in the last 5 years;

2.10.3.6 upon request of the Contracting Authority, the apparent low Bidder shall submit the following information, which is not a public record under ORC Section 149.43; and shall remain confidential, except under proper order of a court:

.1 an annual financial statement prepared within the 12 months prior to the bid opening by an independent licensed accounting firm; and the name, address, contact Person, and phone number of the bank normally used by the Bidder for its primary banking**;** or

.2 a financial report generated within 30 days prior to the bid opening from Standard and Poor, Dun and Bradstreet or a similar company acceptable to the Contracting Authority documenting the financial condition of the Bidder; and the name, address, contact Person, and phone number of the bank normally used by the Bidder for its primary banking.

2.10.3.7 a description of the Bidder's relevant facilities and major equipment, whether leased or owned;

2.10.3.8 a description of the management experience of the Bidder's project manager(s) and superintendent(s) and a comprehensive resume for each;

2.10.3.9 a description of the EDGE-certified Business(es) the Bidder proposes as Subcontractors and Material Suppliers for this Project by attaching a fully completed EDGE Affidavit for each EDGE-certified Business;

2.10.3.10 to support a Bond, a current and signed Certificate of Compliance issued by the Ohio Department of Insurance, showing the Surety is licensed to do business as a surety in Ohio;

2.10.3.11 a current Ohio Workers' Compensation Certificate;

2.10.3.12 if the Bidder is a foreign corporation not incorporated under the laws of Ohio, a Certificate of Good Standing from the Ohio Secretary of State; or, if the Bidder is a foreign person or partnership, evidence that the Bidder filed, with the Ohio Secretary of State, a Power of Attorney designating the Ohio Secretary of State as the Bidder's agent for the purpose of accepting service of summons in any action brought under ORC Section 153.05 or under ORC Sections 4123.01 to 4123.94, inclusive;

2.10.3.13 evidence that the Bidder is enrolled in, and in good standing in, a SUPR program approved by the Ohio Bureau of Workers' Compensation ("OBWC"); and

2.10.3.14 any other data or information which the A/E may request concerning the responsibility of the Bidder, including a complete list of major Subcontractors with an estimated contract value of $200,000 or more, which the Bidder proposes to employ on the Project.

2.11 Changes in the Bid Amount

2.11.1 Any change to a previously submitted Bid shall be in writing and received by the Contracting Authority before the time scheduled for the bid opening.

2.11.2 Changes shall provide an amount to be added to, or subtracted from, the bid amount, so that the final bid amount may be determined only after the sealed envelope is opened.

2.11.3 If the Bidder's written instruction reveals the bid amount in any way prior to the bid opening, the Contracting Authority may, in its sole discretion, reject the Bid as non-responsive.

ARTICLE 3 - BID OPENING AND EVALUATION

3.1 Delivery of Bid

3.1.1 The Bidder shall submit its Bid to the Contracting Authority at the location indicated in **Document 00 10 00 - Solicitation** prior to the time scheduled for the bid opening.

3.1.2 If the sealed bid envelope is enclosed in another envelope for the purpose of delivery, the exterior envelope shall also be clearly marked as containing a Bid with the Project name and Project number, construction trade of the Bid, and the date and time of the bid opening shown on the envelope.

3.1.3 Bids that arrive at the location designated in **Document 00 10 00 - Solicitation** after the time set for the bid opening shall not be opened or considered.

3.2 Bid Opening

3.2.1 Sealed Bids shall be received at the location designated in **Document 00 10 00 - Solicitation** until the time stated when all Bids shall be opened, read aloud, and the tabulation made public.

3.2.2 The public opening and reading of Bids is for informational purposes only and is not to be construed as an acceptance or rejection of any Bid submitted.

3.2.3 The contents of the bid envelope are public records and open for inspection, upon request, at any time after the bid opening, except for any information that is not defined as a public record under Ohio law.

3.3 Bid Opening Extension

3.3.1 If an Addendum is issued within 72 hours prior to the published time for the bid opening, excluding Saturdays, Sundays and legal holidays, the bid opening shall be extended 7 days. If the Contracting Authority approves, the bid opening may be extended for more than 7 days, and consideration for additional advertising may be recommended.

3.3.2 As part of issuing any Addendum earlier than 72 hours prior to the published time for the bid opening, excluding Saturdays, Sundays and legal holidays, only the Contracting Authority may approve a revised bid opening date or additional advertising.

3.4 Bid Evaluation Criteria

3.4.1 The Contracting Authority reserves the right to accept or reject any or all Bids, in whole or in part, and reserves the right to award the Contract to any remaining Bidder the Contracting Authority determines, in its sole discretion, to have submitted the lowest responsive and responsible Bid.

3.4.2 The Contracting Authority reserves the right to accept or reject any or all Alternates. Alternates may be accepted or rejected in any order.

3.4.3 If any Bidder has engaged in collusive bidding, the Contracting Authority shall reject that Bidder's Bid as non-responsible for the Contract. A collusive bidder may also be debarred from future State Contracts.

3.4.4 The Contracting Authority reserves the right to waive, or to allow any Bidder a reasonable opportunity to cure a minor irregularity or technical deficiency in a Bid, provided the irregularity or deficiency does not affect the bid amount, or otherwise give the Bidder a competitive advantage. Noncompliance with any material requirements of the Contract Documents shall cause a Bid to be rejected as non-responsive.

3.4.5 If, in the opinion of the Owner, the award of the Contract to the lowest Bidder is not in the best interest of the State, with the written consent of the Contracting Authority, the Owner may accept, in its discretion, another Bid so opened, or the Contracting Authority may reject all Bids and solicit for other Bids. The solicitation shall be for the period, in the form, and in the manner directed by the Contracting Authority.

3.5 Bid Evaluation Procedure

3.5.1 The Contract shall be awarded to the lowest responsive and responsible Bidder as determined in the discretion of the Contracting Authority, or all Bids may be rejected in accordance with Applicable Law.

3.5.1.1 In determining which Bid is the lowest, the Contracting Authority shall consider the Base Bid and the bid amounts for any Alternate, or Alternates, which the Owner decides, in its sole discretion, to accept.

3.5.1.2 The total of the bid amounts for the accepted Alternate(s) shall be added to, or deducted from, the Base Bid, as applicable, for determining the lowest Bidder.

3.5.1.3 If two Bidders submit the same bid amount and both are determined to be responsive and responsible, the Contracting Authority may select one Bidder by the flip of a coin, which shall be conducted in the presence of both Bidders and shall be final.

.1 If one of the Bidders refuses to participate in, or fails to be present at, the flip of a coin, the remaining Bidder shall be selected.

3.5.2 A Bidder for a Contract shall be considered responsive if the Bidder's Bid responds to the Contract Documents in all material respects and contains no irregularities or deviations from the Contract Documents that would affect the amount of the Bid or otherwise give the Bidder a competitive advantage.

3.5.2.1 A Bid shall be rejected as non-responsive if the Bid contains a Bid Guaranty executed by a Surety not licensed in Ohio or a Bid Guaranty that is otherwise determined to be insufficient by the Contracting Authority.

3.5.2.2 If the lowest Bidder is non-responsive, the Bidder shall be notified according to **Section 3.6**.

3.5.3 In determining whether a Bidder is responsible, factors to be considered include, without limitation:

3.5.3.1 preferences required by law, where applicable;

3.5.3.2 the experience of the Bidder;

3.5.3.3 the financial condition of the Bidder;

3.5.3.4 the conduct and performance of the Bidder on previous Contracts, including compliance with Equal Employment Opportunity in the Construction Industry Administrative Rules, OSHA and Prevailing Wage laws, and demonstration of good faith effort to participate in the EDGE Business Development program, or actual participation in the EDGE Business Development program, or both, as indicated in the ORC and the Ohio Administrative Code;

3.5.3.5 the facilities of the Bidder;

3.5.3.6 the management skills of the Bidder, including the capability of the Bidder to construct and manage the entire Project, including but not limited to the plumbing, fire protection, heating, ventilating and air conditioning, and electrical branches or classes of the Work; and

3.5.3.7 the Bidder's ability to execute the Contract properly, including past performance of the Bidder and the Subcontractors that the Bidder proposes to use on the Project.

3.5.4 The A/E shall obtain from the lowest responsive Bidder any information the Contracting Authority determines appropriate to consideration of factors showing responsibility. If the lowest responsive Bidder is responsible, the Contract shall be awarded to that Bidder, unless all Bids are rejected. The Bidder shall provide all requested information within 3 days of a request from the A/E**,** or a longer period, if the Contracting Authority consents in writing.

3.5.5 If the lowest responsive Bidder is not responsible, the Contracting Authority shall evaluate the next lowest Bidder according to the procedures set forth in this **Section 3.5** until the Contract is awarded, all Bids are rejected, or all responsive Bidders are determined to be not responsible.

3.6 Rejection of Bid

3.6.1 If the lowest Bidder is not responsive or responsible, the Contracting Authority shall reject the Bid and notify the Bidder in writing of the finding and the reasons for the finding. The notice shall be given by email, or by certified mail if no email address is available.

3.6.2 Ten Percent Rule.

3.6.2.1 If the lowest responsive and responsible Bid for the Contract, including the Base Bid and accepted Alternates if any, exceeds an amount 10 percent greater than the published Estimated Construction Cost for the Contract, the Contracting Authority shall reject all Bids.

3.6.3 A Bidder notified in accordance with **Section 3.6.1** may object to its rejection by filing a written protest, which must be received by the Contracting Authority within 5 days of the notification provided pursuant to **Section 3.6.1**.

3.6.4 Upon receipt of a timely protest, the Contracting Authority shall meet with the protesting Bidder to hear its objections. ORC Chapter 119 administrative hearing requirements are not applicable to the bid protest meeting**.**

3.6.4.1 No Contract award shall become final until after the Contracting Authority has met with all Bidders who have timely filed protests and the award of the Contract is affirmed by the Contracting Authority.

3.6.4.2 If all protests are rejected, the Contract shall be awarded to the lowest responsive and responsible Bidder, or all Bids shall be rejected.

3.7 Notice of Intent to Award

3.7.1 The Contracting Authority shall notify the apparent successful Bidder that upon satisfactory compliance with all conditions precedent for execution of the Contract, within the time specified, the Bidder shall be awarded the Contract.

3.7.2 The Contracting Authority reserves the right to rescind any Notice of Intent to Award if the Contracting Authority determines it issued the Notice of Intent to Award in error, or if the conditions precedent for execution of Contract set forth in **Article 6** are not met.

ARTICLE 4 - WITHDRAWAL OF BID

4.1 Withdrawal prior to Bid Opening

4.1.1 A Bidder may withdraw a Bid after the Contracting Authority receives the Bid, provided the Bidder makes a request in writing and the Contracting Authority receives the request prior to the time of the bid opening, as determined by the Contracting Authority.

4.2 Withdrawal after Bid Opening

4.2.1 The Bid shall remain valid and open for acceptance for a period of 60 days after the bid opening; provided, however, a Bidder may withdraw a Bid from consideration after the bid opening if the bid amount was substantially lower than the amounts of other Bids, providing the Bid was submitted in good faith, and the reason for the bid amount being substantially lower was a clerical mistake, as opposed to a judgment mistake, and was actually due to an unintentional and substantial arithmetic error or an unintentional omission of a substantial quantity of Work, labor, or material made directly in the compilation of the bid amount.

4.2.1.1 Notice of a request to withdraw a Bid shall be made in writing filed with the Contracting Authority within 2 business days after the bid opening. The Contracting Authority reserves the right to request the Bidder to submit evidence substantiating the Bidder's request to withdraw the Bid.

4.2.1.2 No Bid may be withdrawn under **Section 4.2.1** which would result in awarding a Contract involving the same item on another Bid to the same Bidder.

4.2.2 If a Bidder withdraws its Bid under **Section 4.2.1**, the Contracting Authority may award the Contract to the next lowest responsive and responsible Bidder, or reject all Bids and advertise for other Bids. In the event the Contracting Authority advertises for other Bids, the withdrawing Bidder shall pay the costs, in connection with the re-bidding, of printing new Contract Documents, required advertising, and printing and mailing of notices to prospective Bidders, if the Contracting Authority finds that these costs would not have been incurred but for the withdrawal.

4.2.3 A Bidder may withdraw the Bidder's Bid at any time after the 60-day period described in **Section 4.2.1** by giving written notice to the Contracting Authority.

4.3 Refusal to Accept Withdrawal

4.3.1 If the Contracting Authority contests the right of a Bidder to withdraw a Bid pursuant to **Section 4.2.1**, a hearing shall be held within 10 days after the bid opening and the Contracting Authority shall issue an order allowing or denying the claim of this right within 5 days after the hearing is concluded. The Contracting Authority shall give the withdrawing Bidder timely notice of the time and place of the hearing.

4.3.1.1 The Contracting Authority shall make a stenographic record of all testimony, other evidence, and rulings on the admissibility of evidence presented at the hearing. The Bidder shall pay the costs of the hearing.

4.3.1.2 Pursuant to ORC Section 119.12, the Bidder may appeal the order of the Contracting Authority required by **Section 4.3.1**.

4.4 Refusal to Perform

4.4.1 In the event the Contracting Authority denies the request for withdrawal and the Bidder refuses to perform the Contract, the Contracting Authority may reject all Bids or award the Contract to the next lowest responsive and responsible Bidder.

4.5 Effect of Withdrawal

4.5.1 A Bidder, who is permitted to withdraw a Bid under **Section 4.2.1**, shall not supply material or labor to, or perform a subcontract or other work for, the Person to whom the Contract is awarded. The Bidder shall not otherwise benefit, directly or indirectly, from the performance of the Project for which the withdrawn Bid was submitted without the Contracting Authority's prior written consent.

ARTICLE 5 - BID GUARANTY AND BOND

5.1 Bid Guaranty

5.1.1 The Bidder shall submit a Bid Guaranty with the Bidder's Bid, payable to the Contracting Authority, in the form of either:

5.1.1.1 the signed **Document 00 43 13 - Bid Security Form** contained in the Contract Documents for the amount of the Base Bid plus all additive Alternates; or

5.1.1.2 a certified check, cashier's check, or letter of credit, for 10 percent of the Base Bid, plus all additive Alternates – a letter of credit shall expressly provide that it is revocable only by the Contracting Authority.

5.1.2 The Bid Guaranty shall be in form and substance satisfactory to the Contracting Authority and shall serve as an assurance that upon acceptance of the Bid, the Bidder shall comply with all conditions precedent for Contract execution, within the time specified by the Contracting Authority.

5.1.3 If the blank line on the **Bid Security Form** is not filled in, the penal sum shall be the full amount of the Base Bid plus all additive Alternates. If the blank line is filled in, the amount shall not be less than the full amount of the Base Bid plus all additive Alternates, stated in dollars and cents. A percentage is not acceptable. In the event the blank line is filled in for an amount less than the full amount of the Base Bid plus all additive alternates, the Bid shall be rejected as non-responsive.

5.1.4 An authorized agent must sign the **Bid Security Form**, and the Bidder shall provide a Power of Attorney from the Surety. A Surety authorized by the Ohio Department of Insurance to transact business in Ohio must issue the **Bid Security Form**.

5.1.5 The requirements of ORC Section 3901.86 may be applicable requiring an Ohio resident agent countersign the **Bid Security Form**. The Bidder shall determine the applicability of this provision.

5.1.6 Bid Guaranties in the form of a certified check, cashier's check, or letter of credit shall be returned to unsuccessful Bidders 60 days after the bid opening. Bid Guaranties in the form of a certified check, cashier's check, or letter of credit shall be returned to the successful Bidder upon providing **Document 00 61 13 - Performance and Payment Bond Form** from a Surety satisfactory to the Contracting Authority.

5.2 Forfeiture of Bid Guaranty

5.2.1 If for any reason, other than as authorized by **Section 4.2.1** or **Section 5.3**, the Bidder fails to execute the Agreement, and the Contracting Authority awards the Contract to another Bidder, which the Contracting Authority determines is the lowest responsive and responsible Bidder:

5.2.1.1 The Bidder who failed to execute the Agreement is liable to the State for the difference between its Bid and the Bid of the next lowest responsive and responsible Bidder, or for a penal sum not to exceed ten percent of the bid amount, whichever is less.

5.2.2 If the Contracting Authority then awards a Contract to another Bidder, which the Contracting Authority determines is the lowest responsive and responsible Bidder and that Bidder fails or refuses to execute the Agreement:

5.2.2.1 The liability of the lowest responsive and responsible Bidder shall be the difference between the bid amount of the lowest responsive and responsible Bidder and another Bidder which the Contracting Authority determines is the lowest responsive and responsible Bidder, except as provided in **Section 5.3**, but not in excess of the liability specified in **Section 4.2.2**.

5.2.2.2 The liability on account of an award to the lowest responsive and responsible Bidder beyond the third lowest responsive and responsible Bidder shall be determined in like manner**.**

5.2.3 If the Contracting Authority does not award the Contract to another Bidder under **Section 5.2.2**, but submits the Project for re-bidding:

5.2.3.1 The Bidder failing or refusing to execute the Agreement is liable to the State for a penal sum not to exceed 10 percent of the Bidder's bid amount or the costs in connection with the resubmission of printing new Contract Documents, required advertising, and printing and mailing notices to prospective Bidders, whichever is less, except as provided in **Section 5.3**.

5.3 Exception to Forfeiture

5.3.1 A Bidder for a Contract with the State costing less than $500,000 may withdraw its Bid from consideration if its Bid for another Contract with the State for less than $500,000 has already been accepted if:

5.3.1.1 the Bidder certifies in good faith that the total amount of its current contracts is less than $500,000; and

5.3.1.2 the Bidder's Surety certifies in good faith that the Bidder is unable to perform the subsequent Contract because such performance would exceed the Bidder's bonding capacity.

5.3.2 If a Bid is withdrawn pursuant to **Section 5.3.1**:

5.3.2.1 the Contracting Authority may award the Contract to another Bidder which the Contracting Authority determines is the lowest responsive and responsible Bidder or reject all Bids and submit the Project for re-bidding; and

5.3.2.2 neither the withdrawing Bidder nor the Bidder's Surety shall be liable for the difference between the Bidder's Bid and that of the next lowest responsive and responsible Bidder for a penal sum, or for the costs of printing new Contract Documents, required advertising, and printing and mailing notices to prospective Bidders.

5.4 Bond

5.4.1 Prior to signing the Agreement, the Bidder shall provide the Bond required by law in form and substance satisfactory to the Contracting Authority, and from a Surety licensed to do business in the state of Ohio and satisfactory to the Contracting Authority.

5.4.1.1 If the Bidder provided **Document 00 43 13 - Bid Security Form**, described in **Section 5.1.1.1**, as its Bid Guaranty then that form shall be the Bond.

5.4.1.2 If the Bidder provided another form of Bid Guaranty, described in **Section 5.1.1.2**, then **Document 00 61 13 - Performance and Payment Bond Form**, described in **Section 5.1.6**, shall be the Bond.

5.4.1.3 The Bidder shall not be required to provide both forms described above.

5.4.2 The Bond must be in the full amount of the Contract to indemnify the State against all direct and consequential damages suffered by failure of the Contractor to perform according to the provisions of the Contract and in accordance with the Plans, Specifications, details, and bills of material therefore and pay all lawful claims of Subcontractors, Material Suppliers, and laborers for labor performed or materials furnished in performing and completing the Contract.

ARTICLE 6 - CONTRACT AWARD AND EXECUTION

6.1 Conditions Precedent for Execution of Contract

6.1.1 The successful Bidder must submit the items in this **Section 6.1** to the Contracting Authority before executing the Agreement.

6.1.2 Bond, and to support the Bond, a Certificate of Compliance issued by the Ohio Department of Insurance, showing the Surety is licensed to do business in the state of Ohio.

6.1.3 Ohio Workers' Compensation Certificate

6.1.4 Certificate of Insurance (ACORD form is acceptable) and copy of additional insured or loss payee endorsement. The Contracting Authority reserves the right to request and receive a certified copy of the Contractor's insurance policies.

6.1.5 If a Bidder is a foreign corporation (e.g., not incorporated under the laws of Ohio) it must submit a Certificate of Good Standing from the Ohio Secretary of State showing the right of the Bidder to do business in the state of Ohio.

6.1.6 If a Bidder is an individual or partnership, nonresident of the State, it must submit a Power of Attorney designating the Ohio Secretary of State as the Bidder's agent for accepting service of summons in any action brought under ORC Section 153.05 or under ORC Sections 4123.01 to 4123.94, inclusive.

6.1.7 If the Contract includes plumbing; electrical; hydronics; refrigeration; and heating, ventilating and air conditioning ("HVAC") Work, the Contractor or its Subcontractors must submit proof of current licensing pursuant to Applicable Law.

6.1.8 Evidence that the Bidder is enrolled in, and in good standing in, a SUPR program approved by the OBWC.

6.1.9 Required Notice of Unresolved Findings for Recovery.

6.1.9.1 By submitting its Bid, the Bidder warrants that it is not subject to an unresolved findings for recovery under ORC Section 9.24. ORC Section 9.24 prohibits the State from awarding a Contract to any Bidder against whom the Auditor of State has issued a finding for recovery if the finding for recovery is unresolved at the time of award. If the Contract is awarded to a Bidder subject to an unresolved finding for recovery under ORC Section 9.24, the Contract is void on its face and the Contractor shall immediately repay to the Owner any funds paid under the Contract.

6.1.10 EDGE Program – Supporting Documentation Required.

6.1.10.1 The Bidder shall provide evidence acceptable to the Contracting Authority of the Bidder's participation in the EDGE Program by contracting with EDGE-certified Business(es) for the Project by submitting a fully completed **EDGE Affidavit** for each EDGE-certified Business, by requesting a waiver or partial waiver of the advertised EDGE Program participation goal for the Project on the Bidder's company letterhead including full documentation of the Bidder's good faith effort to contract with EDGE-certified Business(es) for this Project, or both.

6.1.11 Registered Apprentices – Supporting Documentation Required.

6.1.11.1 The Bidder shall provide evidence acceptable to the Contracting Authority of the registration of all apprentices who the Bidder or its Subcontractors intend to employ on the Project pursuant to ORC Section 4115.05.

6.1.12 If the Bidder is a joint venture, it must submit the executed agreement between the joint venturers describing the division of services/work and percentage of contract for each company, and a Power of Attorney which authorizes one or more individuals to bind the joint venture and each individual joint venturer to Contract Modifications.

6.2 Non-compliance with Conditions Precedent

6.2.1 The award of the Contract and execution of the Agreement require the Contractor to comply with:

6.2.1.1 all conditions precedent for execution of the Contract within 10 days of the date of the Notice of Intent to Award; and

6.2.1.2 the **Bidder's Qualifications** form, including a fully completed EDGE Affidavit for each EDGE-certified Business, not previously provided within 3 business days of receiving the Contracting Authority's request.

6.2.2 Non-compliance with the conditions precedent for execution of the Contract as stated in **Section 6.1** within the timelines stated in **Section 6.2.1** following the date of the Notice of Intent to Award shall be sufficient cause to permit the Contracting Authority to cancel the Notice of Intent to Award, for the Bidder's lack of responsibility and award the Contract to another Bidder, which the Contracting Authority determines is the lowest responsive and responsible Bidder; or the Contracting Authority may re-bid the Work at its sole discretion.

6.2.3 The Contracting Authority may extend the time for complying with the conditions precedent for execution of the Contract for good cause. The extension is not a waiver of the conditions precedent for execution of the Contract.

6.3 Time Limits

6.3.1 The Contracting Authority's failure to award the Contract and execute the Agreement-within 60 days of the bid opening invalidates the entire bid process and all Bids submitted, unless the time is extended by written consent of the apparent lowest responsive and responsible Bidder and the Contracting Authority.

6.3.1.1 If the Contracting Authority awards the Contract within 60 days of the bid opening, increases in material, labor, and subcontract costs shall be borne by the Bidder.

6.3.1.2 If failure to execute the Contract within 60 days of the bid opening is due to matters for which the State is solely responsible, the Contractor is entitled to a Change Order authorizing payment of verifiable increased costs in materials, labor, or subcontracts. This increase shall not exceed the difference in price between the successful Bidder and the price of the next lowest responsive and responsible Bidder.

6.3.1.3 If failure to execute the Contract within 60 days of the bid opening is due to matters for which the Contractor is responsible, the Contracting Authority shall not grant a request for increased costs.

6.4 Notice to Proceed

6.4.1 The Contracting Authority shall issue a Notice to Proceed to the Contractor, which establishes the date for commencement and the calendar days allocated for Substantial Completion. Within 10 days of the date of the Notice to

Proceed, or other period as mutually agreed by the Contractor and the Contracting Authority, the Contractor shall furnish the following submittals to the A/E:

6.4.1.1 Schedule of Values;

6.4.1.2 preliminary schedule of Shop Drawings and other Submittals;

6.4.1.3 Subcontractor and Material Supplier Declaration form, with completed "Bidder Affirmation and Disclosure" forms acknowledging that the Contractor affirms, understands, and will abide by the requirements of Executive Order 2019-12D and Executive Order 2022-02D for Subcontractors that were not identified in the **Bid Form**;

6.4.1.4 qualifications of proposed project manager(s) and superintendent(s) and a comprehensive resume of each; and

6.4.1.5 evidence that an authorization agreement for automatic deposit of state warrants has been submitted to Ohio Shared Services using the electronic funds transfer form provided on the Internet at http://supplier.ohio.gov.

6.5 Prevailing Wage Rates

6.5.1 The Bidder shall base its Bid upon the prevailing rates of wages as ascertained by the Ohio Department of Commerce, Wage and Hour Bureau for the Project as provided in ORC Sections 4115.03 through 4115.14. Refer to **Document 00 73 43 - Wage Rate Requirements** for related information and the Project's prevailing rates of wages with an appropriate ratio of registered apprentices.

6.5.2 The Bidder shall not be entitled to an increase in the Contract Sum on account of an increase in prevailing wage rates, except as otherwise provided by Applicable Law. The Bidder is responsible for compliance of its Subcontractors with prevailing wage requirements.

6.5.3 Within 10 days of the date of the Notice to Proceed, the Contractor shall provide the Contracting Authority's Prevailing Wage Coordinator with a schedule of dates during the term of the Contract when the Contractor shall pay wages to its employees for the Project.

END OF DOCUMENT

Certifications

These Supplementary Instructions amend and supplement the Instructions to Bidders (Multiple-Prime Contract or General Contract) and other provisions of the Contract Documents as indicated below. All provisions not amended remain in full force and effect. The terms in these Supplementary Instructions defined in the Contracting Definitions or the Instructions to Bidders shall have the meanings assigned to them in those documents.

These Supplementary Instructions are authorized, by the Ohio Facilities Construction Commission, for use on projects constructed by and for Lakeland Community College.

Contracting Authority and Owner

Lakeland Community College
7700 Clocktower Drive.
Kirtland OH. 44094
(440) 525-7000
https://www.lakelandcc.edu/

MODIFICATIONS TO INSTRUCTIONS TO BIDDERS

Replace Sections 2.6.1.2 and 2.6.1.2.1 with the following:

2.6.1.2 All pages of the Bid Form, including a completed "Bidder Affirmation and Disclosure" page acknowledging that the Bidder affirms, understands, and will abide by the requirements of Executive Order 2011-12K, shall be submitted with the Bid. Failure to do so may cause the Bid to be rejected as non-responsive.

.1 If the names, locations, and service locations of Subcontractors are not known at the time of the Bid Opening, the Bidder must provide the information requested with its Subcontractor and Material Supplier Declaration form.

Replace Section 2.10.3.2 with the following:

2.10.3.2 a complete listing of all the Bidder's ongoing construction projects and a listing of construction projects which are similar in cost and type to the Project completed by the Bidder in the last 5 years. Include information of the scope of work and value of each contract, and a project name/contact Person/address/phone number for the owner and the architect or engineer for each project;

Replace Section 2.10.3.4 with the following:

2.10.3.4 a complete listing of Affirmative Action violations in the last 5 years;

Delete Section 2.10.3.11 in its entirety.

Insert Section 2.10.3.17 with the following:

2.10.3.17 In addition to the items above, the Bidder shall provide a current Disclosure of Personal Property Taxes form.

Replace Section 3.5.3.4 with the following:

3.5.3.4 The conduct and performance of the Bidder on previous Contracts, including compliance with Equal Employment Opportunity in the Construction Industry Administrative Rules, OSHA, and Prevailing Wage laws;

Delete Section 6.1.12 in its entirety.

Replace Section 6.2.1.2 with the following:

6.2.1.2 The Bidder's Qualifications form not previously provided within 3 business days of receiving the Contracting Authority's request.

END OF DOCUMENT

00 31 24 - Environmental Assessment Information

EA GROUP
Environmental Analysis and Management

September 10, 2026

Mr. Jay Kahn
Lakeland Community College
7700 Clocktower Drive
Kirtland, Ohio 44094

RE: **Pre-Renovation Asbestos-Containing Materials Survey**
Cafeteria Renovation, S Building, Lakeland Community College
7700 Clocktower Drive, Kirtland, Ohio
OH47387

Description of Work

EA Group, Mentor, Ohio was contracted by Lakeland Community College to conduct a survey for asbestos-containing materials (ACMs) in support of a Cafeteria renovation project in the S Building on the Lakeland Community College campus at 7700 Clocktower Drive in Kirtland, Ohio. This report provides the results of the pre-renovation asbestos survey. Additionally, Precision ProCut of Independence, Ohio, was scheduled to drill two cores in the concrete slab floor of the Cafeteria to determine if a vapor barrier was present below the concrete slab. Core drilling activities were completed on August 18, 2026.

Asbestos Survey

EA Group's licensed Asbestos Hazard Evaluation Specialist Scott Landis, ES31801, reviewed renovation plans, as provided by Client, inspected the designated areas, developed a sampling strategy, and procured bulk samples of suspect ACM on August 18, 2026 and completed additional visual inspection above the metal panel ceiling of Cafeteria on August 25, 2026. Homogeneous Groups of suspect ACM are identified on the *Asbestos Inspection Data Sheet* forms in Appendix A. Classification of any positively identified ACM has been made per National Emission Standard for Hazardous Air Pollutants (NESHAP) regulations, with additional notations for compliance with Occupational Safety and Health Administration (OSHA) regulations, if and where applicable. Room/area designations and general sampling locations for the survey are illustrated on the schematic in Appendix A.

Objective and Limitations of the Inspection

The objective of this survey was to identify and sample suspect ACM associated with a Cafeteria renovation project in the S Building on the Lakeland Community College campus at 7700 Clocktower Drive in Kirtland, Ohio, pursuant to NESHAP and OSHA regulations.

The survey and sampling were limited to suspect ACMs that would be affected by the planned renovation activities. Other suspect ACMs may be present in the renovation area(s) but were not required to be specifically identified or assessed.

7118 Industrial Park Boulevard • Mentor, Ohio 44060-5314
440-951-3514 • 800-875-3514 • Fax: 440-951-3774 • www.eagroupohio.com

Suspect materials that could not be sampled without causing an unacceptable level of damage are identified as assumed ACMs (some suspect materials may also be assumed to be present).

Upon core drilling the first of two cores of the concrete floor of the Cafeteria, drilling was stopped as the core was approximately 14 inches long and had not cut through the bottom surface of the concrete. Mr. Landis of EA Group and Mr. Tim Pie of Precision ProCut explored the basement storage area beneath the two designated locations to be cored and found the locations were not slab on grade. Therefore, no further core drilling was required.

GENERAL LIMITATIONS

1. EA Group cannot guarantee that all ACM has been identified by this assessment, as additional asbestos materials, not previously identified or quantified, are frequently encountered during renovation or demolition.
2. Actual quantities of asbestos material may vary from any estimates provided in EA Group's report due to identification of additional materials and difficulties in quantifying hidden or inaccessible materials.
3. Prior to demolition or renovation of any structure or equipment, suspect materials that were previously inaccessible or excluded from sampling should be sampled and analyzed for asbestos.

Asbestos Analysis

The bulk samples were analyzed by polarized light microscopy for asbestos content at or through the Laboratory Division of EA Group, which is accredited by the National Institute of Standards and Technology – National Voluntary Laboratory Accreditation Program. The United States Environmental Protection Agency requires all materials containing greater than one percent asbestos by weight to be considered asbestos-containing materials. Composite or layered analyses were performed, depending on the nature of a material. In all cases that at least one sample from a homogeneous group [Group] was determined to be ACM, the Group as a whole is considered ACM regardless of the results for any other samples from that Group. Analytical results are provided in Appendix A.

Results of Asbestos Analysis

The materials that were sampled as suspect are identified in Table 1, which include materials determined to be non-ACM (no asbestos detected) and any assumed ACMs.

Duct mastic may exist on duct seams. It was barely visible and was not accessible for sampling, therefore it is considered assumed ACM. If present and encountered during renovation activities it should be sampled to determine appropriate handling procedures.

Any activities that involve the handling or disturbance of ACM, should be carried out by a licensed abatement contractor or other appropriately trained personnel in accordance with all applicable regulations.

If you have any questions or concerns regarding the above information, please contact the undersigned. Thank you for consulting EA Group.

Sincerely,

EA Group

Timothy S. Bowen,
Vice President/Technical Director

Scott Landis,
ES31801

Table 1 Summary of Results - Cafeteria Renovation, S Building, Lakeland Community College, Kirtland, Ohio

Group	ID # OH47387	MATERIAL DESCRIPTION	Material Type	RESULT
A	01	Ceramic Tile Mastic	M/NF2	0
A	02	Ceramic Tile Mastic	M/NF2	0
B	03	2'x4' Ceiling Panel; Pockmark, Pinhole	M/NF2	0
B	04	2'x4' Ceiling Panel; Pockmark, Pinhole	M/NF2	0
C	05	Spray-On Fireproofing	M	0
C	06	Spray-On Fireproofing	M	0
C	07	Spray-On Fireproofing	M	0
C	08	Spray-On Fireproofing	M	0
C	09	Spray-On Fireproofing	M	0
D	10	Drywall System	M/NF2	0
D	11	Drywall System	M/NF2	0
D	12	Drywall System	M/NF2	0
E	13	12"x12" Floor Tile & mastic; Cream w/ Gray Specks	M/NF2	0
E	14	12"x12" Floor Tile & mastic; Cream w/ Gray Specks	M/NF2	0
F	Assumed	Duct Sealant	M/NF1	**[+]**

Group = Homogeneous Group identification

Material Type: S = Surfacing
T = Thermal System Insulation
M = Miscellaneous
NF1 = Non-Friable Category I
NF2 = Non-Friable Category II
N/S = material not suspect

Result: 0 = non-ACM
[+] = ACM

EA GROUP
Environmental Analysis and Management

APPENDIX A

Asbestos Inspection Data Sheet(s),
Schematic(s) of Sample Locations,
and
Laboratory Analytical Report(s)

ASBESTOS INSPECTION DATA SHEET KEY

Client and Project: Information provided by either Work Order or Scope of Work

Building: Name or address of building.

Functional Space: A room, group of rooms, or homogeneous area designated by the inspector to prepare management plans, design abatement projects, or conduct response actions.

Location: Location of homogeneous material being sampled or occurrence of homogeneous material.

Group:- An arbitrary designation (number or letter) assigned to each homogeneous material (material that is uniform in color and texture, serves the same function, and was installed at the same time) encountered during sampling.

ID #: A sample number assigned by the inspector which begins with the work order number (OHXXXXX) at the top of the column and then a unique sample number for each sample. May include an additional suffix (e.g., building ID, sampling date).

Material Description: Distinguishing characteristics that may include system type, function, size, color, shape etc.

Quantity: Defined as square feet (SF) [default], linear feet (LF), or individual number of fittings or miscellaneous items, each (EA)

Material Type: Abbreviations provided on the form as:

S Surfacing Material (troweled or sprayed-on)

T Thermal System Insulation (TSI)

M Miscellaneous (Friable, unless otherwise noted): **NF1** - Non-friable Category I **NF2** - Non-friable Category II

Material Condition: Typically noted only for general surveys (e.g., for O&M planning purposes).

ND No Damage. The material is in visibly good condition with no apparent/obvious damage.

D Damage. Material has damage to less than 10% of the entire homogeneous group or less than 25% of a localized section of the homogeneous group.

SD Significant Damage. Material has damage to greater than 10% of the entire homogeneous group or greater than 25% of a localized section of the homogeneous group.

Friable: When dry, an asbestos-containing material [ACM] is considered friable if it can be crumbled, pulverized, or reduced to powder by *hand pressure*

Result: 0 = material determined to be non-ACM (no asbestos); **[+]** = material determined to contain a regulated amount of asbestos (confirmed ACM)

Additional notations may be included for specific samples or materials for further clarification, which would be defined under “Comments”

ASBESTOS INSPECTION DATA SHEET

Client: Lakeland Community College — 7700 Clocktower Drive, Kirtland, Ohio — Building: S Building

Project: Pre-Renovation Asbestos Survey — Functional Space: Cafeteria

LOCATION	Group	ID # OH47387	MATERIAL DESCRIPTION	Quantity	Material		FRIABLE	RESULT	NOTES
					Type	Cond			
Café Main Area	A	01	Ceramic Tile Mastic					0	
	A	02	Ceramic Tile Mastic					0	
	C	---	Spray-On Fireproofing					0	Assumed present
	D	10	Drywall System					0	
Café Main Area (above metal ceiling system)	C	---	Spray-On Fireproofing					0	
	F	Assumed	Duct Sealant	NQ	M/NF1		N	[+]	
Sprinkler Closet	B	03	2'x4' Ceiling Panel; Pockmark, Pinhole					0	
	B	04	2'x4' Ceiling Panel; Pockmark, Pinhole					0	
	C	05	Spray-On Fireproofing					0	
	C	06	Spray-On Fireproofing					0	
	C	07	Spray-On Fireproofing					0	
	D	11	Drywall System					0	

MATERIALS:
TYPE:
S - Surfacing
T - Thermal
M - Miscellaneous
NF1 - Non-friable Cat. I
NF2 - Non-friable Cat. II
N/S = not suspect
CONDITION: [if relevant]
ND - No Damage
D - Damage
SD - Significant Damage

QUANTITY = Square Feet unless noted
LF = Linear Feet; EA = each
NQ = not quantified
FRIABLE:
Y = Regulated ACM (RACM) by definition
N = not RACM by definition
NF1/NF2 may be friable due to condition or may become friable during reno/demo
RESULT:
0 - Non-ACM
[+] = ACM [no other assessment required]
B = Verified by layering/point counting

COMMENTS:

Sampling limited to designated material(s) in designated area(s)

Visibility very limited above metal ceiling system:
Pipe insulation is paper/fiberglass and not suspect.
Duct is barely visible. The visible portion is not insulated. Duct sealant may be present and is assumed [+] if present

EA GROUP
7118 Industrial Park Blvd.
Mentor, OH 44060-5314
(440) 951-3514

EAG Technician(s): Scott Landis ES 31801 EAG OH47387

Survey Date(s): August 18, 2026 and August 25, 2026

ASBESTOS INSPECTION DATA SHEET

Client: Lakeland Community College — 7700 Clocktower Drive, Kirtland, Ohio — Building: S Building

Project: Pre-Renovation Asbestos Survey — Functional Space: Cafeteria

LOCATION	Group	ID # OH47387	MATERIAL DESCRIPTION	Quantity	Material		FRIABLE	RESULT	NOTES
					Type	Cond			
Sprinkler Closet	E	13	12"x12" Floor Tile & mastic; Cream w/ Gray Specks					0	
	E	14	12"x12" Floor Tile & mastic; Cream w/ Gray Specks					0	
Kitchen	A	---	Ceramic Tile Mastic					0	
	C	08	Spray-On Fireproofing					0	
	C	09	Spray-On Fireproofing					0	
	D	12	Drywall System					0	

MATERIALS:
TYPE:
S - Surfacing
T - Thermal
M - Miscellaneous
NF1 - Non-friable Cat. I
NF2 - Non-friable Cat. II
N/S = not suspect
CONDITION: [if relevant]
ND - No Damage
D - Damage
SD - Significant Damage

QUANTITY = Square Feet unless noted
LF = Linear Feet; EA = each
NQ = not quantified
FRIABLE:
Y = Regulated ACM (RACM) by definition
N = not RACM by definition
NF1/NF2 may be friable due to condition or may become friable during reno/demo
RESULT:
0 - Non-ACM
[+] = ACM [no other assessment required]
B = Verified by layering/point counting

COMMENTS:

Sampling limited to designated material(s) in designated area(s)

Visibility very limited above metal ceiling system:
Pipe insulation is paper/fiberglass and not suspect.
Duct is barely visible. The visible portion is not insulated. Duct sealant may be present and is assumed [+] if present

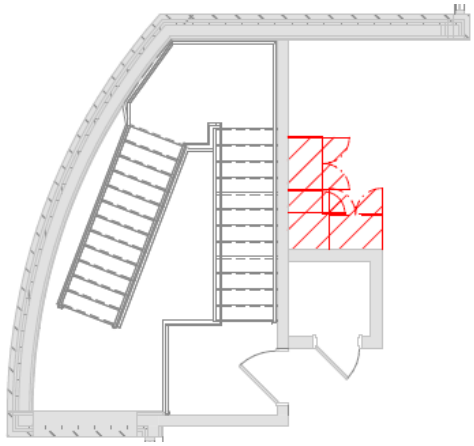
EA GROUP
7118 Industrial Park Blvd.
Mentor, OH 44060-5314
(440) 951-3514

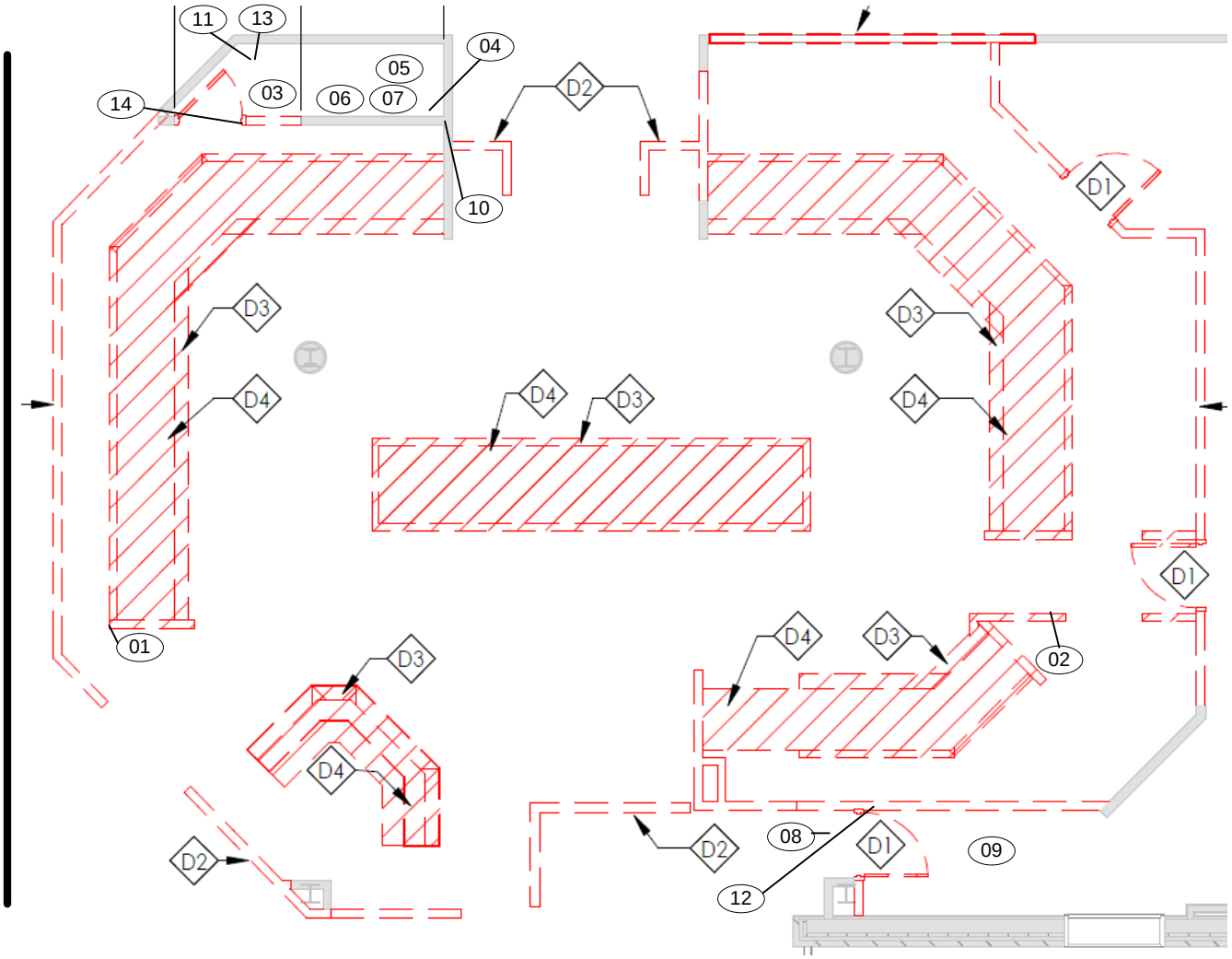
EAG Technician(s): Scott Landis ES 31801 EAG OH47387

Survey Date(s): August 18, 2026 and August 25, 2026

F:\PROJECTS\ASB\OH46800-OH47534\OH47387,LAKELANDCC\47387,LAKELANDCC,BREAKERS_FIG1.VSD

EA GROUP





CAFETERIA

Key

01 = Sample Location

Asbestos Sampling Locations Diagram

Lakeland Community College – S Building
7700 Clocktower Drive, Kirtland, Ohio

DRAWING FOR GENERAL REFERENCE PURPOSES ONLY. BASE PROVIDED BY CLIENT.
ACTUAL ROOM CONFIGURATIONS MAY DIFFER FROM THOSE SHOWN; ANNOTATIONS BY EA GROUP.
REFER TO SURVEY FOR DETAILS. NO SCALE.

EAG No. OH47387	Date: August 18, 2026	Figure 1

eurofins | Built Environment Testing

Report for:

Mr. Tim Bowen
EA Group
7118 Industrial Park Blvd.
Mentor, OH 44060

Regarding: Eurofins Built Environment Testing East, LLC
Project: OH47387 Lakeland Comm. College
EML ID: 4675151

Approved by:

Approved Signatory
Aidan Becker

Dates of Analysis:
Asbestos PLM: 08-24-2026

Service SOPs: Asbestos PLM (EPA 40CFR App E to Sub E of Part 763 & EPA 600/R-93-116, EBET-PLM-SOP83921)
NVLAP Lab Code 101165-0

All samples were received in acceptable condition unless noted in the Report Comments portion in the body of the report. The results relate only to the samples as received and tested. The results include an inherent uncertainty of measurement associated with estimating percentages by polarized light microscopy. Measurement uncertainty data for sample results with >1% asbestos concentration can be provided when requested.

Eurofins Built Environment Testing East, LLC ("the Company"), a member of the Eurofins Built Environment Testing group of companies, shall have no liability to the client or the client's customer with respect to decisions or recommendations made, actions taken or courses of conduct implemented by either the client or the client's customer as a result of or based upon the Test Results. In no event shall the Company be liable to the client with respect to the Test Results except for the Company's own willful misconduct or gross negligence nor shall the Company be liable for incidental or consequential damages or lost profits or revenues to the fullest extent such liability may be disclaimed by law, even if the Company has been advised of the possibility of such damages, lost profits or lost revenues. In no event shall the Company's liability with respect to the Test Results exceed the amount paid to the Company by the client therefor.

Eurofins Built Environment Testing East, LLC
1006 Astoria Blvd., Cherry Hill, NJ 08003
(856) 231-9449 www.eurofinsus.com/Built

Client: EA Group
C/O: Mr. Tim Bowen
Re: OH47387 Lakeland Comm. College

Date of Receipt: 08-19-2026
Date of Report: 08-24-2026

ASBESTOS PLM REPORT

Total Samples Submitted:	14
Total Samples Analyzed:	14
Total Samples with Layer Asbestos Content > 1%:	0

Location: 47387-01, Group A Lab ID-Version‡: 23611344-1

Sample Layers	Asbestos Content
Yellow Mastic	ND
Sample Composite Homogeneity:	Good

Location: 47387-02, Group A Lab ID-Version‡: 23611345-1

Sample Layers	Asbestos Content
Yellow Mastic	ND
Sample Composite Homogeneity:	Good

Location: 47387-03, Group B Lab ID-Version‡: 23611346-1

Sample Layers	Asbestos Content
White Ceiling Tile	ND
Composite Non-Asbestos Content:	60% Cellulose 20% Glass Fibers
Sample Composite Homogeneity:	Good

Location: 47387-04, Group B Lab ID-Version‡: 23611347-1

Sample Layers	Asbestos Content
White Ceiling Tile	ND
Composite Non-Asbestos Content:	60% Cellulose 20% Glass Fibers
Sample Composite Homogeneity:	Good

The test report shall not be reproduced except in full, without written approval of the laboratory. The report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the federal government. The Company reserves the right to dispose of all samples after a period of thirty (30) days, according to all state and federal guidelines, unless otherwise specified.

All components not quantified as asbestos content and non-asbestos content are considered to be non-fibrous matrix components. Matrix components may include, but are not limited to, gypsum, paint, silicate minerals, vinyl, binder, calcium carbonate, tar, and foam.

Inhomogeneous samples are separated into homogeneous subsamples and analyzed individually. ND means no fibers were detected. When detected, the minimum detection and reporting limit is less than 1% unless point counting is performed. Floor tile samples may contain large amounts of interference material and it is recommended that the sample be analyzed by gravimetric point count analysis to lower the detection limit and to aid in asbestos identification.
‡ A "Version" indicated by -"x" after the Lab ID# with a value greater than 1 indicates a sample with amended data. The revision number is reflected by the value of "x".

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Client: EA Group
C/O: Mr. Tim Bowen
Re: OH47387 Lakeland Comm. College

Date of Receipt: 08-19-2026
Date of Report: 08-24-2026

ASBESTOS PLM REPORT

Location: 47387-05, Group C Lab ID-Version‡: 23611348-1

Sample Layers	Asbestos Content
Gray Fireproofing	ND
Composite Non-Asbestos Content:	30% Cellulose
Sample Composite Homogeneity:	Good

Location: 47387-06, Group C Lab ID-Version‡: 23611349-1

Sample Layers	Asbestos Content
Gray Fireproofing	ND
Composite Non-Asbestos Content:	30% Cellulose
Sample Composite Homogeneity:	Good

Location: 47387-07, Group C Lab ID-Version‡: 23611350-1

Sample Layers	Asbestos Content
Gray Fireproofing	ND
Composite Non-Asbestos Content:	30% Cellulose
Sample Composite Homogeneity:	Good

Location: 47387-08, Group C Lab ID-Version‡: 23611351-1

Sample Layers	Asbestos Content
Gray Fireproofing	ND
Composite Non-Asbestos Content:	30% Cellulose
Sample Composite Homogeneity:	Good

Location: 47387-09, Group C Lab ID-Version‡: 23611352-1

Sample Layers	Asbestos Content
Gray Fireproofing	ND
Composite Non-Asbestos Content:	30% Cellulose
Sample Composite Homogeneity:	Good

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Client: EA Group
C/O: Mr. Tim Bowen
Re: OH47387 Lakeland Comm. College

Date of Receipt: 08-19-2026
Date of Report: 08-24-2026

ASBESTOS PLM REPORT

Location: 47387-10, Group D Lab ID-Version‡: 23611353-1

Sample Layers	Asbestos Content
White Drywall with Brown Paper	ND
White Joint Compound	ND
White Tape	ND
Composite Non-Asbestos Content:	25% Cellulose 2% Glass Fibers
Sample Composite Homogeneity:	Good

Location: 47387-11, Group D Lab ID-Version‡: 23611354-1

Sample Layers	Asbestos Content
White Drywall with Brown Paper	ND
White Joint Compound	ND
White Tape	ND
Composite Non-Asbestos Content:	25% Cellulose 2% Glass Fibers
Sample Composite Homogeneity:	Good

Location: 47387-12, Group D Lab ID-Version‡: 23611355-1

Sample Layers	Asbestos Content
White Drywall with Brown Paper	ND
White Joint Compound	ND
White Tape	ND
Composite Non-Asbestos Content:	25% Cellulose 2% Glass Fibers
Sample Composite Homogeneity:	Good

Location: 47387-13, Group E Lab ID-Version‡: 23611356-1

Sample Layers	Asbestos Content
Off-White Floor Tile	ND
Tan Mastic	ND
Sample Composite Homogeneity:	Good

The test report shall not be reproduced except in full, without written approval of the laboratory. The report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the federal government. The Company reserves the right to dispose of all samples after a period of thirty (30) days, according to all state and federal guidelines, unless otherwise specified.

All components not quantified as asbestos content and non-asbestos content are considered to be non-fibrous matrix components. Matrix components may include, but are not limited to, gypsum, paint, silicate minerals, vinyl, binder, calcium carbonate, tar, and foam.

Inhomogeneous samples are separated into homogeneous subsamples and analyzed individually. ND means no fibers were detected. When detected, the minimum detection and reporting limit is less than 1% unless point counting is performed. Floor tile samples may contain large amounts of interference material and it is recommended that the sample be analyzed by gravimetric point count analysis to lower the detection limit and to aid in asbestos identification.
‡ A "Version" indicated by -"x" after the Lab ID# with a value greater than 1 indicates a sample with amended data. The revision number is reflected by the value of "x".

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(856) 231-9449 www.eurofinsus.com/Built

Client: EA Group
C/O: Mr. Tim Bowen
Re: OH47387 Lakeland Comm. College

Date of Receipt: 08-19-2026
Date of Report: 08-24-2026

ASBESTOS PLM REPORT

Location: 47387-14, Group E

Lab ID-Version‡: 23611357-1

Sample Layers	Asbestos Content
Off-White Floor Tile	ND
Tan Mastic	ND
Blue-Green Floor Tile	ND
Sample Composite Homogeneity:	Good

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Inhomogeneous samples are separated into homogeneous subsamples and analyzed individually. ND means no fibers were detected. When detected, the minimum detection and reporting limit is less than 1% unless point counting is performed. Floor tile samples may contain large amounts of interference material and it is recommended that the sample be analyzed by gravimetric point count analysis to lower the detection limit and to aid in asbestos identification.
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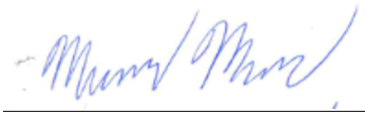
Client: EA Group
C/O: Mr. Tim Bowen
Re: OH47387 Lakeland Comm. College

Date of Receipt: 08-19-2026
Date of Report: 08-24-2026

ASBESTOS PLM REPORT

PROJECT ANALYST AND SIGNATORY REPORT

Project Analyst



Analyst: Maxamillian Roselli

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‡ A "Version" indicated by -"x" after the Lab ID# with a value greater than 1 indicates a sample with amended data. The revision number is reflected by the value of "x".

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East: (866) 871-1984
Central: (800) 651-4802
West: (833) 465-5857

CONTACT INFORMATION

Company:	EA Group	Address:	7118 Industrial Park Boulevard, Mentor, Ohio 44060
Contact:	TIM BOWEN	Special Instructions:	
Phone:	440 951-3514		

PROJECT INFORMATION

Project ID:	OH 47387		
Project Description:	LAKELAND COMM. COLLEGE		
Project State:		Sampling Date/Time:	8-18-26
Project Zip Code:			
PO Number:		Sampled By:	S.L.

TURN AROUND TIME CODES - (TAT)

STD - Standard (Default)
ND - Next Business Day
SD - Same Business Day
WH - Weekend/Holiday/ASAP

Rushes received after 2pm or on weekends, will be considered received the next business day. Please alert us in advance of weekend analysis needs. Rush availability is Matrix Dependent.

ASBESTOS ANALYSIS

REQUESTED SERVICES

SAMPLE ID	DESCRIPTION	Sample Type (Below)	TAT (Above)	Total Volume (L) /Area (ft2) (as applicable)	NOTES (Flow Rate, Start/End Times, Sampling Time (min) etc.)
47387-01	GROUP A	B	STD		
-02	A				
-03	B				
-04	B				
-05	C				
-06					
-07					
-08					
-09					
-10	D				
-11	B				
-12	D				
-13	E				
-14	E				

PCM: Air - Fiber Count (NIOSH 7400); Air - OSHA with TWA

PLM: Bulk - EPA 600/R-93/116 (X, X); Bulk - EPA Point Count (1000, ✓); Bulk - Gravimetric Pt. Ct. (1000); Soil/Rock - CARB 435 (1000); Pt. Ct. 400

TEM: Air - EPA AHERA; Air - NIOSH 7402; Air (PCME) - ISO 10312; Soil - ASTM D7521 (PLM with TEM Follow-Up); Bulk - Chatfield/ EPA 600/R-93/116 Sec. 2.5.5.1; Dust / Wipe - ASTM D6480; Dust Microvac (ASTM D5755); Vermiculite - USEPA 600 R04-004 (ASTM D5755); Spray on Fireproofing with Vermiculite - ELAP 198.8 (Non-Potable); Water - EPA 100.2 (Potable); Bulk / Dust / Wipe / Soil - Qualitative In-House Method; NYS - ELAP 198.1; 198.4; 198.6; Other

SAMPLE TYPE CODES

A - Air	W - Wipe		
B - Bulk	T - Tape		
D - Dust	R - Rock		
SO - Soil	O - Other		

RELINQUISHED BY	DATE & TIME
	8-18-26 1400

RECEIVED BY	DATE & TIME
8119126 9:30	

By submitting this Chain of Custody, you agree to be bound by the terms and conditions set forth at https://www.eurofinsus.com/environment-testing/built-environment/resources/sampling-guides-cocs-and-forms/

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Document 00 41 13 - Bid Form (General Contracting Project)
State of Ohio Standard Requirements for Public Facility Construction

Sealed bids will be received by **Lakeland Community College** at 7700 Clocktower Drive, Kirtland, Ohio 44094 for:

Project TK26SEP30
"Breakers" Food Service Renovation

at

S-Building First Floor "Breakers" North Lobby
7700 Clocktower Drive
Kirtland, Lake County

for the

Lakeland Community College

The time for Substantial Completion of all Work is **205** consecutive days from the Notice to Proceed.

Having read and examined the proposed Contract Documents prepared by the Architect/Engineer for the above-referenced Project and the following Addenda:

Addendum Number	Date Received
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

The undersigned Bidder proposes to perform all Work for the applicable Contract in accordance with the proposed Contract Documents, for the following sum(s):

Bid Package 101 – GENERAL CONTRACT

ALLOWANCES (Include Allowance amounts in the Base Bid below. The Contractor's Fee and costs for unloading and handling on the Site, labor, installation costs, and other expenses contemplated for the Allowances are included in the Base Bid and not in the Allowance.)

Item	Description	Amount
Allowance A-1	**Owner's Construction Contingency**	$100,000

Alternate 1, First floor dining area millwork (Circle appropriate choice below and insert amount)

If Alternate is accepted, ADD TO / DEDUCT FROM Base Bid: $ _____

Sum in words: _____ and _____ /100 dollars.

Alternate 2, Paint existing metal ceiling (first floor) (Circle appropriate choice below and insert amount)

If Alternate is accepted, ADD TO / DEDUCT FROM Base Bid: $ _____

Sum in words: _____ and _____ /100 dollars.

Alternate 3, Gypsum soffit and column wrap (first floor) (Circle appropriate choice below and insert amount)

If Alternate is accepted, ADD TO / DEDUCT FROM Base Bid: $ _____

Sum in words: _____ and _____ /100 dollars.

Alternate 4, Specialty film on Servery and Coffee Station ceilings (Circle appropriate choice below and insert amount)

If Alternate is accepted, ADD TO / DEDUCT FROM Base Bid: $ _____

Sum in words: _____ and _____ /100 dollars.

Alternate 5, Second floor dining area millwork, gypsum soffit, and metal ceiling paint (Circle appropriate choice below and insert amount)

If Alternate is accepted, ADD TO / DEDUCT FROM Base Bid: $ _____

Sum in words: _____ and _____ /100 dollars.

Alternate 6, Acoustic panels at SW first floor dining wall (Circle appropriate choice below and insert amount)

If Alternate is accepted, ADD TO / DEDUCT FROM Base Bid: $ _____

Sum in words: _____ and _____ /100 dollars.

Alternate 7, SV-1 flooring and associated floor prep in Servery (Circle appropriate choice below and insert amount)

If Alternate is accepted, ADD TO / DEDUCT FROM Base Bid: $ _____

Sum in words: _____ and _____ /100 dollars.

-- remainder of page left blank intentionally --

BIDDER AFFIRMATION AND DISCLOSURE

Bidder acknowledges that by signing the Bid Form on the Bidder Signature and Information page, that it has read and understands the applicable Executive Orders regarding the prohibitions of performance of offshore services, locating State data offshore in any way, or purchasing from Russian institutions or companies. If awarded a Contract, the Bidder will become the Contractor and affirms that both the Contractor and its Subcontractors shall perform no services requested under this Contract outside of the United States.

The Bidder shall provide the locations where services under this Contract will be performed in the spaces provided below or by attachment. Failure to provide this information as part of its Bid may cause the Bidder to be deemed non-responsive and no further consideration will be given to its Bid. If the Bidder will not be using Subcontractors, indicate "Not Applicable" in the appropriate spaces.

1. Principal business location of Contractor:

(Contractor Address)	(City, State, Zip)

Name / Principal location of business of Subcontractor(s), if known at time of Bid Opening:

(Subcontractor Name)	(Address, City, State, Zip)
(Subcontractor Name)	(Address, City, State, Zip)
(Subcontractor Name)	(Address, City, State, Zip)
(Subcontractor Name)	(Address, City, State, Zip)

2. Location where services will be performed by Contractor (Project Sites):

(Address)	(City, State, Zip)
(Address)	(City, State, Zip)

Name(s) / Location(s) where services will be performed by Subcontractors (Project Sites):

(Subcontractor Name)	(Address, City, State, Zip)
(Subcontractor Name)	(Address, City, State, Zip)
(Subcontractor Name)	(Address, City, State, Zip)
(Subcontractor Name)	(Address, City, State, Zip)

3. Location where State data will be located by Contractor:

(Address)	(City, State, Zip)

Locations where State data will be located by Subcontractor(s), if known at time of Bid Opening:

(Subcontractor Name)	(Address, City, State, Zip)
(Subcontractor Name)	(Address, City, State, Zip)
(Subcontractor Name)	(Address, City, State, Zip)
(Subcontractor Name)	(Address, City, State, Zip)
(Subcontractor Name)	(Address, City, State, Zip)

Bidder also affirms, understands and agrees that Bidder and its subcontractors are under a duty to disclose to the State any change or shift in location of services performed by Bidder or its subcontractors before, during and after execution of any Contract with the State. Bidder agrees it shall so notify the State immediately of any such change or shift in location of its services. The State has the right to immediately terminate the contract, unless a duly signed waiver from the State has been attained by the Bidder to perform the services outside the United States.

On behalf of the Bidder, I acknowledge that I am duly authorized to execute this Bid Form including this Bidder Affirmation and Disclosure form and have read and understand that this form is a part of any Contract that Bidder may enter into with the State and is incorporated therein.

COMMITMENT TO PARTICIPATE IN THE EDGE BUSINESS ASSISTANCE PROGRAM

Bidder: Mark only one option.
Use "✓" or "✗" to mark option included in Bid
If marking Option B, also show percentage of proposed participation.

___ **Option A**

Bidder commits to *meet or exceed* the advertised EDGE Participation Goal of **the Contract award amount,** calculated as a portion of the Base Bid plus all accepted Alternates, by using certified EDGE Business Enterprise(s).

Bidder agrees that if selected for consideration of the Contract, it shall provide (if not provided with the Bidder's Bid) to the Contracting Authority, at the location required and within 3 business days after receiving notice from the Contracting Authority, its fully completed ***Bidder's Qualification Form***, including an ***EDGE Affadavit*** form for each certified EDGE Business Enterprise proposed for use by the Bidder if awarded the Contract for this Project.

___ **Option B (also indicate percentage -- see text)**

Bidder *does not meet* the advertised EDGE Participation Goal percentage, but, if awarded the Contract for this Project, *commits to provide* _____ **percent of the Contract award amount**, calculated as a portion of the Base Bid plus all accepted Alternates, by using certified EDGE Business Enterprise(s).

Bidder acknowledges it understands the requirement for it to provide and agrees to provide to the Contracting Authority, if selected for consideration of the Contract, within 3 business days after notice from the Contracting Authority, a detailed ***Demonstration of Good Faith*** form describing its efforts undertaken prior to submitting its Bid to meet the advertised EDGE Participation Goal percentage for the Contract for this Project.

Bidder commits to provide to the Contracting Authority at the location required, and within 3 days after receiving notice from the Contracting Authority, its fully completed ***Bidder's Qualification Form***, including an ***EDGE Affadavit*** form for each certified EDGE Business Enterprise proposed for use by the Bidder if awarded the Contract for this Project.

___ **Option C**

Bidder declares that the Bidder is a certified EDGE Business Enterprise and that if awarded this Contract, the EDGE Participation percentage will be 100 percent of the Contract award amount.

BIDDER'S CERTIFICATIONS

The Bidder hereby acknowledges that the following representations in this Bid are material and not mere recitals:

1. The Bidder has read and understands the proposed Contract Documents and agrees to comply with all requirements of the proposed Contract Documents, regardless of whether the Bidder has actual knowledge of the requirements and regardless of any statement or omission made by the Bidder, which might indicate a contrary intention.

2. The Bidder represents that the Bid is based upon the Basis of Design and Acceptable Components specified by the proposed Contract Documents.

3. The Bidder has visited the Site, become familiar with local conditions, and has correlated personal observations about the requirements of the proposed Contract Documents. The Bidder has no outstanding questions regarding the interpretation or clarification of the proposed Contract Documents.

4. The Bidder understands that the execution of the Project will require sequential, coordinated, and interrelated operations, which may involve interference, disruption, hindrance, or delay in the progress of the Bidder's Work. The Bidder agrees that the Contract Sum, as amended from time to time, shall cover all amounts due from the State resulting from interference, disruption, hindrance, or delay that is not caused by the State or its agents and employees. The Bidder agrees that any such interference, disruption, hindrance, or delay is within the contemplation of the Bidder and the State and that the Contractor’s sole remedy from the State for any such interference, disruption, hindrance, or delay shall be an extension of time in accordance with the proposed Contract Documents.

5. During the performance of the Contract, the Bidder agrees to comply with Ohio Administrative Code (“OAC”) Chapters 123:2-3 through 123:2-9 and agrees to incorporate the monthly reporting provisions of OAC Section 123:2-9-01 into all subcontracts on the Project, regardless of tier. The Bidder understands the State’s Equal Opportunity Coordinator or the Contracting Authority may conduct pre-award and post-award compliance reviews to determine if the Bidder maintains nondiscriminatory employment practices, maintains an affirmative action program, and is exerting good faith efforts to accomplish the goals of the affirmative action program. For a full statement of the rules regarding Equal Employment Opportunity in the Construction Industry, see OAC Chapters 123:2-1 through 123:2-9.

6. The Bidder and each Person signing on behalf of the Bidder certifies, and in the case of a Bid by a joint venture each member thereof certifies as to such member’s entity, under penalty of perjury, that to the best of the undersigned's knowledge and belief: **(a)** the Base Bid, any Unit Prices, and any Alternate bid in the Bid have been arrived at independently without collusion, consultation, communication or agreement, for the purpose of restricting competition as to any matter relating to such Base Bid, Unit Prices or Alternate bid with any other Bidder; **(b)** unless otherwise required by law, the Base Bid, any Unit Prices and any Alternate bid in the Bid have not been knowingly disclosed by the Bidder and shall not knowingly be disclosed by the Bidder prior to the bid opening, directly or indirectly, to any other Bidder who would have any interest in the Base Bid, Unit Prices or Alternate bid; **(c)** no attempt has been made or shall be made by the Bidder to induce any other Person to submit or not to submit a Bid for the purpose of restricting competition.

7. The Bidder understands that the Contract is subject to all the provisions, duties, obligations, remedies and penalties of Ohio Revised Code Chapter 4115 and that the Bidder shall pay any wage increase in the locality during the term of the Contract.

8. The Bidder shall execute the Agreement with the Contracting Authority, if a Contract is awarded on the basis of this Bid, and if the Bidder does not execute the Agreement for any reason, other than as authorized by law, the Bidder and the Bidder's Surety are liable to the State as provided in **Article 5** of the Instructions to Bidders.

9. The Bidder certifies that the upon the award of a Contract, as the Contractor it shall make a good faith effort to ensure that all of the Contractor’s employees, while working on the Site, shall not purchase, transfer, use, or possess illegal drugs or alcohol or abuse prescription drugs in any way.

10. The Bidder acknowledges that it read all of the **Instructions to Bidders**, and in particular, **Section 2.10** - Submittals With Bid Form, and by submitting its Bid certifies that it has read the Instructions to Bidders and it understands and agrees to the terms and conditions stated in them.

11. The Bidder agrees to furnish any information requested by the Contracting Authority or Architect/Engineer to evaluate the responsibility of the Bidder.

12. The Bidder agrees to furnish the submittals required by **Section 6.1** of the **Instructions to Bidders** for execution of the Agreement within 10 days of the date of the Notice of Intent to Award.

13. When the Bidder is a corporation, partnership or sole proprietorship, an officer, partner or principal of the Bidder, as applicable, shall print or type the legal name of the Bidder on the line provided, and **sign the Bid Form**.

14. When the Bidder is a joint venture, an officer, partner or principal, as applicable, of each member of the joint venture shall print or type the legal name of the applicable member on the line provided, and **sign the Bid Form**.

15. Bidder acknowledges that by signing the Bid Form on the following Bidder Signature and Information page that it is signing the actual Bid and when submitted as a part of its bid package, shall serve as the Bidder's authorization for the further consideration and activity in the bidding and contract process.

16. All signatures must be original.

-- remainder of page left blank intentionally --

BIDDER SIGNATURE AND INFORMATION

Bidder's Authorized Signature: _____

Please print or type the following:

Name of Bidder's Authorized Signatory _____

Title: _____

Company Name: _____

Mailing Address: _____

_____

Telephone Number: _____

Facsimile Number: _____

Email Address: _____

State of Incorporation: _____

Federal Tax ID Number: _____

Date enrolled in an OBWC-approved DFSP (month/date/year): _____ / _____ / _____

Contact person for Contract processing: _____

President's or Chief Executive Officer's Name / Title: _____

JOINT VENTURE ADDITIONAL BIDDER SIGNATURE & INFORMATION

Joint Venture Bidder's Authorized Signature: _____

Please print or type the following:

Name of Joint Venture Bidder's Authorized Signatory _____

Title: _____

Company Name: _____

Mailing Address: _____

_____

Telephone Number: _____

Facsimile Number: _____

Email Address: _____

State of Incorporation: _____

Federal Tax ID Number: _____

Date enrolled in an OBWC-approved DFSP (month/date/year): _____ / _____ / _____

Contact person for Contract processing: _____

President's or Chief Executive Officer's Name / Title: _____

END OF DOCUMENT

Document 00 43 13 - Bid Security Form
State of Ohio Standard Requirements for Public Facility Construction

(Form of combined Bid Guaranty and Bond prescribed by Ohio Revised Code Section 153.571)

KNOW ALL PERSONS BY THESE PRESENTS, that we, the undersigned _____

_____, as Principal,

and _____ as Sureties,

are hereby held and firmly bound unto _____

_____ as Obligee(s), in the penal sum of the dollar amount of the Bid submitted by the Principal

to the Obligee on _____ (date) to undertake the Project known as:

Project Number: _____

Project Name: _____

Contract Description: _____
(e.g., General Contractor/Trades, Plumbing, HVAC, Electrical)

The penal sum, referred to herein, shall be the dollar amount of the Principal's Bid to the Obligee, incorporating any additive alternate Bids made by the Principal on the date referred to above to the Obligee, which are accepted by the Obligee. In no case shall the penal sum exceed the amount of dollars ($_____). (If the preceding line is left blank, the penal sum will be the full amount of the Principal's Bid, including add alternates. Alternatively, if completed, the amount stated shall not be less than the full amount of the Bid, including Alternates, in dollars and cents. A percentage is not acceptable.) For the payment of the penal sum well and truly to be made, we hereby jointly and severally bind ourselves, our heirs, executors, administrators, successors and assigns.

THE CONDITION OF THE ABOVE OBLIGATION IS SUCH, that whereas the above-named Principal has submitted a Bid for the above referenced Project;

NOW, THEREFORE, if the Obligee accepts the Bid of the Principal, and the Principal fails to enter into a proper contract in accordance with the Bid, Plans, Specifications, details, and bills of material; and in the event the Principal pays to the Obligee the difference, not to exceed ten percent of the penal sum hereof between the amount specified in the Bid and such larger amount for which the Obligee may in good faith contract with the Bidder determined by the Obligee to be the next lowest responsive and responsible to perform the Work covered by the Bid; or in the event the Obligee does not award the Contract to such next lowest responsive and responsible Bidder and resubmits the Project for bidding, the Principal pays to the Obligee the difference not to exceed ten percent of the penal sum hereof between the amount specified in the Bid, or the costs, in connection with the resubmission, of printing new Contract Documents, required advertising and printing and mailing notices to prospective Bidders, whichever is less, then this obligation shall be null and void, otherwise to remain in full force and effect. If the Obligee accepts the Bid of the Principal, and the Principal, within 10 days after the awarding of the Contract, enters into a proper contract and executes the Agreement Form in accordance with the Contract Documents, including without limitation the Bid, Plans, Specifications, details, and bills of material, which said Contract is made a part of this Bond the same as though set forth herein; and

NOW ALSO, IF THE SAID Principal shall well and faithfully perform each and every condition of such Contract; and indemnify the Obligee against all damage suffered by failure to perform such Contract according to the provisions thereof and in accordance with the Contract Documents, including without limitation Plans, Specifications, details, and bills of material therefore; and shall pay all lawful claims of Subcontractors, Material Suppliers and laborers for labor performed and materials furnished in the carrying forward, performing or completing of said Contract; we, agreeing and assenting that this undertaking shall be for the benefit of any Subcontractor, Material Suppliers or laborer having a just claim, as well as for the Obligee herein; then this obligation shall be void; otherwise the same shall remain in full 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 SAID Surety hereby stipulates and agrees that no modifications, omissions or additions, in or to the terms of said Contract, the Work thereunder or the Contract Documents, including without limitation the Plans and Specifications, therefore, shall in any way affect the obligations of said Surety on its bond, and it does hereby waive notice of any such modifications, omissions or additions in or to the terms of the Contract, the Work, or the Contract Documents, including without limitation the Plans and Specifications.

SIGNED AND SEALED this _____ day of _____ , _____ .

PRINCIPAL:

_____
Signature

By: _____
Name

_____
Title

SURETY:

_____
Signature

By: _____
Attorney-in-Fact

SURETY INFORMATION:

_____
Name

_____
Address 1

_____
Address 2

_____
City State Zip

_____
Telephone

_____
Email

SURETY AGENT'S INFORMATION:

_____
Name

_____
Address 1

_____
Address 2

_____
City State Zip

_____
Telephone

_____
Email

END OF DOCUMENT

Document 00 45 13 - Bidder's Qualifications
State of Ohio Standard Requirements for Public Facility Construction

Project Number: _____

Project Name: _____

1. **Company Name**: _____

   Physical Address: _____
   Street, Building, Unit

   _____
   City, State, Zip

   Mailing Address (if different): _____
   P.O. Box

   _____
   City, State, Zip

   Telephone Number (w/ Area Code): (_____) _____

   Fax Number (w/ Area Code): (_____) _____

   Email address: _____

2. **Overall Experience.** Indicate Bidder's overall experience performing the trades bid, including the years in business performing the trade under present and former business names.

3. **Financial.** The apparent low Bidder shall submit, upon request of the Contracting Authority, either:

   a) An annual financial statement prepared within the 12 months prior to the bid opening by an independent licensed accounting firm; and the name, address, contact person and phone number of the bank normally used by the Bidder for its primary banking; or,

   b) A financial report generated within 30 days prior to the bid opening from Standard and Poor, Dun and Bradstreet or a similar company acceptable to the Contracting Authority documenting the financial condition of the Bidder; and the name, address, contact person and phone number of the bank normally used by the Bidder for its primary banking;

   This information is not a public record under Ohio Revised Code Section 149.43; and shall remain confidential, except under proper order of a court.

4. **Facilities & Equipment**. Indicate Bidder's relevant facilities and major equipment (leased or owned).

5. **Ongoing & Relevant Projects.** List all ongoing projects and projects completed in the last 5 years, which are similar in cost and type to the Project. Include scope of Work, Contract value, a description of EDGE participation and performance, and project name/contact person/address/phone number for each owner and the architect or engineer for each project.

6. **Regulatory / Contractual.** Indicate all occurrences of the following in the last 5 years (indicate if none). For verification, attach documentation, and/or provide sufficient and appropriate detail information such as: project name, owner, contact person and phone number, amount of contract, etc.

    a) State or federal Prevailing Wage violations or judgments

    b) EDGE program violations

    c) Contract abandonment, contract termination, as either a prime- or sub-contractor, or Surety takeover

    d) Debarment by state, federal, or local jurisdictions

e) EPA/OSHA violations

f) Liquidated damages and Statutory Delay Forfeiture assessed

g) Drug-Free Safety Program and Drug Free Workplace Program violations (currently titled ***Substance Use Prevention and Recovery Program)***

7. Management. Identify individuals assigned to this Project.

Principal _____ Years with firm _____ Total Exp._____

Project Manager _____ Years with firm _____ Total Exp._____

Field Superintendent _____ Years with firm _____ Total Exp._____

8. EDGE Participation. Identify EDGE-certified Business Enterprises proposed as Subcontractors and Material Suppliers for this Project. Attach a fully completed Document 00 45 39 - "EDGE Affidavit" for each EDGE-certified Business Enterprise.

9. Certification. I hereby certify that the information in this entire Bidder's Qualifications form, including all attachments and referenced information, is factual and complete.

Company Name _____

Authorized Official (please print or type) _____

Signature of Authorized Official _____ Date _____

END OF DOCUMENT

Document 00 45 39 – EDGE Affidavit

State of Ohio Standard Requirements for Public Facility Construction

EDGE PARTICIPATION

Statement of Intent to Contract and Perform

Bidder or Proposer: submit one fully completed form for each EDGE-certified Business

Project Name _____ Project Number _____

Bidder or Proposer Name _____ Federal Tax I.D. _____

Mark the type of contract:

☐ Multi-Prime Contract ☐ General Contract ☐ CM at Risk Contract ☐ Design-Build Contract

---

EDGE-certified Business information (for contract at any tier)

EDGE Business Name _____ Contact Person _____

EDGE Business Address _____ Phone _____

EDGE City, State ZIP _____ E-mail _____

EDGE Certification No. _____ Federal Tax I.D. _____

Mark all that apply:

☐ Subcontractor ☐ Professional Services ☐ Goods & Services

Describe the materials, labor, services, supplies, etc. to be provided by the EDGE-certified Business (may use industry codes – continue on separate page if needed):

_____

_____

_____

Certification of Intent by EDGE-Certified Business and by the Bidder or Proposer

The Bidder or Proposer certifies that it intends to contract with the EDGE-certified Business for the portion of the contract described above related to its Contract for this Project and for the estimated cost shown below. The EDGE-certified Business certifies that it intends to contract with the Bidder or Proposer and intends to provide the portion of the contract described above for this Project for the estimated cost of:

_____ Dollars ($_____).

If the Bidder or Proposer is not awarded a Contract, this Statement of Intent shall be null and void.

EDGE-certified Business	***Bidder or Proposer***
_____	_____
Authorized Signature	Authorized Signature
_____	_____
Name	Name
_____	_____
Title	Title
_____	_____
Date Signed	Date Signed

Document 00 52 00 - Agreement Form (College Project)
State of Ohio Standard Requirements for Public Facility Construction

This Agreement is made as of the date set forth below between the State of Ohio, acting by and through the College, and the Contractor in connection with the Project.

Project Number:	**TK26SEP30**
Project Name:	**"Breakers" Food Service Renovation**
Site Address:	7700 Clocktower Dr Kirtland, OH 44094 Lake County
Owner ("College"):	**Lakeland Community College**
Owner's Representative:	Joseph Kahn
Address:	7700 Clocktower Dr Kirtland, OH 44094
Contracting Authority:	The College above
Project Manager:	Joseph Kahn
Contractor:	**«insert name»**
Contractor's Principal Contact:	«insert name»
Address:	«insert street address» «insert city, state zip code»
Architect/Engineer ("A/E"):	CPL Architects, Engineers, Landscape Architects
A/E's Principal Contact:	Kiernan Weese
Address:	25 Main Street, Suite 200 Westlake, OH 44145

ARTICLE 1 - SCOPE OF WORK; EDGE COMMITMENT

1.1 The Contractor shall perform and provide all of the Work described in the Contract. The Work is allocated to the below-identified Phases.

Phase	Scope of Work
Construction	Renovation of the Breakers Dining Facility as indicated in the Contract Documents.

1.2 The project delivery method for this Project shall General Contracting.

1.3 The Contractor shall contract with EDGE-certified Business(es) for not less than «insert Contractor's EDGE commitment» percent of the Contract Sum.

ARTICLE 2 - COMPENSATION

2.1 The Owner shall pay the Contractor the Contract Sum for the Contractor's proper, timely, and complete performance of the Contract. The Contract Sum is **$«insert amount»**, subject to Modifications as provided in the Contract Documents. The Contract Sum is comprised of the following:

2.1.1 Base Bid: .....$«Insert Base Bid Amount»

2.1.2 Alternate «Insert Alternates Awarded»: .....$«Insert Alternate Amount»

2.1.3 Alternate «Insert Alternates Awarded»: .....$«Insert Alternate Amount»

2.1.4 Alternate «Insert Alternates Awarded»: .....$«Insert Alternate Amount»

2.1.5 Alternate «Insert Alternates Awarded»: $«Insert Alternate Amount»

2.1.6 Alternate «Insert Alternates Awarded»: $«Insert Alternate Amount»

2.1.7 Alternate «Insert Alternates Awarded»: $«Insert Alternate Amount»

2.2 The funding for the Project, including funds retained from payments to the Contractor, will not accrue interest for the benefit of the Project or the Contractor.

ARTICLE 3 - CONTRACT TIMES

3.1 The Contract Times are the periods established in the following table for the achievement of the associated Milestones:

Construction Stage Milestone(s) to which Liquidated Damages apply	**Contract Time**	**Projected Date** (as of the date of this Agreement)
Substantial Completion of all Work	145 days	07/23/2027

Each duration in the Contract Time column above must be calculated from the anticipated Date of Commencement established the Notice to Proceed for the Work covered by this Agreement to the date that the milestone must be achieved. DO NOT insert durations calculated between interim milestones as this DOES NOT comply with the General Conditions.

3.1.1 The projected dates listed under "Projected Date (as of the date of this Agreement)" are **(1)** based upon an anticipated, but not guaranteed, Date of Commencement of March 1, 2027; and **(2)** provided only for convenient reference during consideration of the Agreement. The durations listed under "Contract Time" define the Contract Times and take precedence over the projected dates.

ARTICLE 4 - KEY PERSONNEL

4.1 The Contractor's key personnel for the Project are:

4.1.1 «insert name», Project Manager;

4.1.2 «insert name», Lead Scheduling Engineer;

4.1.3 «insert name», General Superintendent.

Edit the above list as appropriate for the Project.

4.2 The Contractor's key personnel are authorized to act on the Contractor's behalf with respect to the Project and all matters concerning the Project.

ARTICLE 5 - GENERAL PROVISIONS

5.1 Effectiveness.

5.1.1 It is expressly understood by the Contractor that none of the rights, duties, and obligations described in the Contract Documents shall be valid and enforceable unless the Director of the Office of Budget and Management first certifies that there is a balance in the College's appropriation not already encumbered to pay existing obligations and until all relevant statutory provisions of the Ohio Revised Code, including ORC Section 126.07, have been complied with, and until such time as all necessary funds are available or encumbered and, when required, such expenditure of such funds is approved by the State Controlling Board, or other applicable approving body.

5.1.2 In addition, if federal funds are to be used to pay fees and expenses under this Agreement, none of the rights, duties, and obligations contained in this Agreement shall be binding on any party until the College gives the Contractor written notice that such funds are available from the College's funding source.

5.1.3 Subject to **Section 5.1.1**, the Contract shall become binding and effective upon execution by the College, Contractor, and if the total estimated Project cost is $250,000 or more, upon approval of the Ohio Attorney General.

5.1.3.1 If the Contractor is a joint venture, **(1)** each individual joint venturer shall **(a)** sign the Agreement in its own name and **(b)** be a party to the Contract, and **(2)** the Contract and the Performance and Payment Bond shall be binding on and apply to all joint venturers jointly and severally.

5.1.3.2 If the Contractor is a limited liability company, which the Contracting Authority reasonably believes to be a special purpose or similar entity, the Contracting Authority may in its discretion require the limited liability company and each member of the limited liability company to **(1)** sign the Agreement in its own name and **(2)** be a party to the Contract. In that case, the Contract and the Performance and Payment Bond shall be binding on and apply to the limited liability company and to all of its members jointly and severally.

5.1.4 This Agreement may be executed in several counterparts, each of which shall constitute a complete original Agreement, which may be introduced in evidence or used for any other purpose without production of any other counterparts.

5.2 Representations.

5.2.1 The Contractor represents and warrants that it is not subject to an unresolved finding for recovery under ORC Section 9.24. If this representation and warranty is found to be false, the Contract is void, and the Contractor shall immediately repay to the College any funds paid under this Contract.

5.2.2 The Contractor hereby certifies that neither the Contractor nor any of the Contractor's partners, officers, directors, shareholders nor the spouses of any such person have made contributions in excess of the limitations specified in ORC Section 3517.13.

5.2.3 The Contractor, by signature on this Agreement, certifies that it is currently in compliance with, and will continue to adhere to, the requirements of Ohio ethics laws and conflict of interest laws and will take no action inconsistent with those laws.

5.2.4 The Contractor affirms to have read and understands Executive Order 2019-12D and shall abide by those requirements in the performance of this Contract. Notwithstanding any other terms of this Contract, the State reserves the right to recover any funds paid for services the Contractor performs outside of the United States for which it did not receive a waiver. The State does not waive any other rights and remedies provided the State in this Contract.

5.2.5 The Contractor affirms to have read and understands Executive Order 2022-02D regarding the prohibition of purchases from or investment in a Russian institution or company and shall abide by those requirements in the performance of this Contract. Notwithstanding any other terms of this Contract, the State reserves the right to recover any funds paid to the Contractor for purchases or investments in a Russian institution or company in violation of this paragraph. The provisions of this paragraph will expire when the applicable Executive Order is no longer effective.

5.2.6 During the performance of this Contract, if the Contractor changes the location(s) disclosed on the **Affirmation and Disclosure Form** (a page in its **Bid Form**), the Contractor must complete and submit a revised **Affirmation and Disclosure Form**.

5.2.7 Pursuant to ORC Section 9.76(B), the Contractor warrants that it is not boycotting any jurisdiction with whom the State of Ohio can enjoy open trade, including Israel, and will not do so during the term of this Contract.

5.2.8 All non-residential contractors, subcontractors, and labor brokers shall comply with the E-Verify Workforce Integrity Act's requirements as set forth in sections 4151.02 and 4151.03 of the Revised Code.

ARTICLE 6 - Enumeration of Documents

6.1 The Contract Documents constitute the substance of the Contract, and include this Agreement, Drawings, Specifications, Addenda if any, **Contracting Definitions**, **General Conditions**, Supplementary Conditions if any, **Bid Form**, **Wage Rate Requirements**, **Bid Guaranty and Contract Bond** or **Performance and Payment Bond**, and Change Orders if any.

TREASURER'S CERTIFICATION

This signature certifies the amount required to meet the obligation in the fiscal year in which this Agreement is made has been lawfully appropriated for such purpose and is in the treasury or in process of collection to the credit of an appropriate fund free from any previous encumbrances.

_____

Signature

Printed Name

Chief Financial Officer

SIGNATURES

IN WITNESS WHEREOF, the parties hereto have executed this Agreement as of the date set forth below:

«INSERT CONTRACTOR’S NAME»	OWNER
Signature	*Signature*
Printed Name	*Printed Name*
Title	*Title*

OHIO ATTORNEY GENERAL
Approval as to Form

Signature

Printed Name

Title

Date

If the Contractor is a corporation, partnership, sole proprietorship, or limited liability company, use the table above. If the Contractor is a joint venture or special purpose entity, use the table below. Then delete the unused table and this note.

«INSERT CONTRACTOR’S NAME» by «insert Joint Venturer/Member’s name»	OWNER
Signature	*Signature*
Printed Name	*Printed Name*
Title	*Title*
by «insert Joint Venturer/Member’s name»	**OHIO ATTORNEY GENERAL** Approval as to Form

Signature	*Signature*
Printed Name	*Printed Name*
Title	*Title*
	Date

END OF DOCUMENT

Document 00 52 14 - State of Ohio Subcontract Form
State of Ohio Standard Requirements for Public Facility Construction

This Agreement is made as of the date set forth below between the Constructor and the Subcontractor in connection with the Project.

Project Number:	**TK26SEP30**
Project Name:	**"Breakers" Food Service Renovation**
Site Address:	7700 Clocktower Drive Kirtland, Lake County
Constructor:	**ENTER NAME**
Constructor's Principal Contact:	ENTER FULL NAME
Address:	ENTER STREET ADDRESS ENTER CITY, STATE ZIP CODE
Subcontractor:	**ENTER NAME**
Subcontractor's Principal Contact:	ENTER NAME
Address:	ENTER STREET ADDRESS ENTER CITY, STATE ZIP CODE
Public Authority:	**Lakeland Community College**
Public Authority Contact:	Joseph Kahn
Address:	7700 Clocktower Drive Kirtland, Ohio 44094

ARTICLE 1 - NATURE OF SUBCONTRACT

1.1 The Subcontractor shall perform the entire Subcontract Work as specified in Exhibit **ENTER EXHIBIT DESIGNATION** and described in the Contract Documents for the Project.

1.1.1 The project delivery method for the Project is **Choose an item.**.

1.1.2 The above-identified "Constructor" is the **Choose an item.**.

ARTICLE 2 - COMPENSATION

2.1 The Constructor agrees to pay for the performance of this Subcontract, subject to additions and deductions as provided in the Contract Documents, the Subcontract Sum of **Enter Subcontract Sum**, comprised of the following:

Enter Subcontract Sum Component..... $**0.00**

Enter Subcontract Sum Component..... $**0.00**

Enter Subcontract Sum Component..... $**0.00**

Enter Subcontract Sum Component..... $**0.00**

ARTICLE 3 - TIME OF PERFORMANCE

3.1 Time is of the essence. The Subcontractor shall diligently prosecute and complete all Subcontract Work in accordance with the construction progress schedule agreed between the parties.

ARTICLE 4 - CONTRACT DOCUMENTS

4.1 To the extent that the contract between the Public Authority and the Constructor applies to the Subcontract Work:

4.1.1 The Constructor and the Subcontractor agree to be mutually bound by the terms of the Contract Documents;

4.1.2 The Constructor assumes toward the Subcontractor the rights, remedies, obligations, and responsibilities that the Public Authority has and assumes toward the Constructor;

4.1.3 The Subcontractor assumes toward the Constructor the rights, remedies, obligations, and responsibilities that the Constructor assumes toward the Public Authority; and

4.1.4 The Subcontractor agrees to perform its portion of the Work in accordance with the Contract Documents.

4.2 The Subcontract and any modifications, amendments, or alterations thereto shall be governed, construed, and enforced by and under the laws of the State of Ohio.

4.3 If any term or provision of the Subcontract or the application thereof to any Person or circumstance is finally determined to be invalid or unenforceable by a court of competent jurisdiction, the remainder of the Subcontract or the application of such term or provision to other Persons or circumstances shall not be affected thereby, and each term and provision of the Subcontract shall be valid and enforced to the fullest extent permitted by Applicable Law.

4.4 The Subcontract shall be binding on the Constructor and Subcontractor and their successors and assigns, in respect to all respective covenants and obligations contained in the Contract Documents, but the Subcontractor may not assign the Subcontract without the prior written consent of the Constructor and the Public Authority.

ARTICLE 5 - EFFECTIVENESS

5.1 The Subcontract shall become binding and effective upon execution by the Constructor.

5.2 This Subcontract has been executed in several counterparts, each of which shall constitute a complete original Subcontract, which may be introduced in evidence or used for any other purpose without production of any other counterparts.

5.3 Any signatory may deliver a copy of its counterpart signature page to this Subcontract via fax or e-mail. Each signatory shall be entitled to rely upon a signature of any other signatory delivered in such a manner as if such signature were an original.

ARTICLE 6 - REPRESENTATIONS

6.1 Contingent Assignment. The Constructor's contingent assignment of this Subcontract to the Public Authority, as provided in the Contract, is effective only after **(1)** termination of the Contract in whole or in part by the Public Authority and **(2)** the Public Authority's acceptance of the assignment in whole or in part by written notice to the Subcontractor. The Subcontractor consents to the assignment and to be bound to the Public Authority at the same price and terms as in the Subcontract. Unless the Public Authority takes assignment of the Subcontract, the Subcontractor will not have any contractual rights against the Public Authority.

6.2 Intended Third-Party Beneficiary. The Public Authority is an intended third-party beneficiary of the Subcontract, entitled to enforce any rights thereunder for its benefit.

6.3 Insurance. The Subcontractor shall maintain insurance in accordance with the Contract Documents. Exhibit **ENTER EXHIBIT DESIGNATION** sets forth the minimum limits of liability for the insurance required in the Contract Documents.

6.4 Right to Audit. The Public Authority and any of its agents shall have access to and may audit and copy at the Public Authority's cost all of the Subcontractor's books, records, contracts, correspondence,

instructions, drawings, receipts, vouchers, purchase orders, and memoranda relating to the Subcontract Work for a period of not less than three years following completion of the Work consistent with Ohio Revised Code ("ORC") Section 149.43 with regard to the Public Authority's obligation to maintain confidentiality of trade secrets.

6.5 Indemnity. To the fullest extent permitted by Applicable Law, the Subcontractor shall indemnify, defend, and hold harmless the Public Authority, the CM, and their respective consultants and employees from and against all claims, costs, damages, losses, fines, penalties, and expenses (including but not limited to all reasonable fees and charges of attorneys and other professionals, and all court, arbitration, or other dispute-resolution costs) arising out of or in connection with the Project, provided that any such claim, cost, damage, loss, fine, penalty, or expense is attributable to third-party bodily injury, sickness, disease, or death, or to injury to or destruction of tangible property, including loss of use, but only to the extent caused by the acts, errors, or omissions of the Subcontractor or a person or entity for whom the Subcontractor may be liable.

6.5.1 In claims against a Person indemnified under **Section 6.5** by any direct or indirect employee (or the survivor or personal representative of that employee) of the Subcontractor or a person or entity for whom the Subcontractor may be liable, the indemnification obligation under **Section 6.5** will not be limited by a limitation on the amount or type of damages, compensation, or benefits payable under workers' compensation acts, disability benefit acts, or other employee benefit acts. The Subcontractor **(1)** specifically and expressly waives any immunity afforded to it by virtue of any applicable state constitutional or statutory protections, including but not limited to Section 35, Article II of the Ohio Constitution and Ohio Revised Code Section 4123.73, but only to the extent required to honor the indemnity obligations set forth under this **Section 6.5**; and **(2)** shall ensure that the foregoing waiver is explicitly included in all agreements with the Subcontractor's subcontractors at every tier.

6.6 Prompt Pay. The Constructor shall at a minimum make payments to the Subcontractor in accordance with Applicable Law, including ORC Sections 153.12 and 4113.61.

6.6.1 Progress payments to the Subcontractor for satisfactory performance of Subcontract Work shall be made no later than ten days after receipt by the Constructor of payment from the Public Authority for the Subcontract Work.

6.6.2 The Constructor may reduce the amount to be paid to the Subcontractor pursuant to **Section 6.6.1** at a rate equal to the percentage retained from the Constructor and may withhold amounts necessary to **(1)** resolve disputed liens or claims involving the Subcontract Work or **(2)** account for the failure of the Subcontractor to perform its obligations under this Subcontract.

6.7 Retainage. Subcontractor retainage shall be at a rate equal to the percentage retained from the Constructor's payment by the Public Authority for the Subcontract Work, unless a lesser percentage is otherwise specified.

6.7.1 Labor Payments.

6.7.1.1 Partial payments to the Subcontractor for labor performed shall be made at the rate of 96 percent of the amount invoiced through the Subcontractor's request for payment.

6.7.2 Material Payments.

6.7.2.1 The Constructor shall pay the Subcontractor at the rate of 100 percent of the scheduled value for materials incorporated into the Project.

6.7.2.2 The Constructor shall pay the Subcontractor at the rate of 92 percent of the invoice cost, not to exceed the scheduled value, for materials delivered to the Site, or other off-site storage location approved by the A/E, provided the Subcontractor provides the following information with its request for payment:

.1 a list of the fabricated materials consigned to the Project, giving the place of storage, together with copies of invoices, in order to verify quantity and cost; and

.2 a certification of materials stored off-site, prepared by the Subcontractor and signed by the A/E to evidence that the materials are in conformity with the Specifications and have been tagged with the Project name and number for delivery to the Project. The Subcontractor shall reimburse the A/E, through the Constructor, for all costs incurred to visit a storage site, other than the areas adjacent to the Project.

6.7.2.3 The Constructor shall pay the balance of the scheduled value when the materials are incorporated into and become a part of the Project.

6.8 Warranty. The Subcontractor warrant to the Public Authority and Constructor that all materials and equipment furnished under the Subcontract shall be new and of good quality unless otherwise required or permitted by the Contract Documents, that the Subcontract Work shall be free from defects not inherent in the quality required or permitted, and that the Work shall conform to the requirements of the Contract Documents.

6.9 Non-Waiver of Lien Rights or Payment Bond Rights. This Subcontract shall not prohibit a Subcontractor from exercising its rights under ORC Chapter 1311 or under any Constructor-provided payment bond.

6.10 Non-Discrimination. The Subcontractor agrees to fully comply with Applicable Law regarding equal opportunity, including ORC Section 153.59 and, to the extent applicable, all Executive Orders issued by the Governor of the state of Ohio.

6.11 Dispute Resolution. The supplemental conditions to this Subcontract shall provide for a dispute resolution process comparable to the Contract's dispute resolution process in terms of timing, notice, substantiation, and informal dispute resolution efforts. The dispute resolution process provided in the supplemental conditions shall result in prompt access to the ultimate dispute resolution mechanism selected by the parties.

6.12 In the event that any supplemental conditions or other Subcontract terms conflict with the **State of Ohio Subcontract Form**, the **State of Ohio Subcontract Form** takes precedence and this Subcontract shall be read and enforced to include the provisions of the **State of Ohio Subcontract Form**.

6.13 The following exhibits are attached to and are a part of this Subcontract:

6.13.1 Exhibit A: Enter Name of Exhibit

6.13.2 Exhibit B:Enter Name of Exhibit

6.13.3 Exhibit C:Enter Name of Exhibit

6.13.4 Exhibit D:Enter Name of Exhibit

SIGNATURES

IN WITNESS WHEREOF, the parties have executed this Subcontract Form.

ENTER SUBCONTRACTOR'S NAME	**ENTER CONSTRUCTOR'S NAME**
Signature	*Signature*
Click or tap here to enter text.	Click or tap here to enter text.
Printed Name	*Printed Name*
Click or tap here to enter text.	Click or tap here to enter text.
Title	*Title*
	Click or tap to enter a date.
	Date

END OF DOCUMENT

Document 00 61 13 - Performance and Payment Bond Form
State of Ohio Standard Requirements for Public Facility Construction

(Form of Bond prescribed by Ohio Revised Code Section 153.57 - Not to be used as Bid Guaranty)

KNOW ALL PERSONS BY THESE PRESENTS, that we, the undersigned _____ _____, as Principal, and _____ as Sureties, are hereby held and firmly bound unto _____ _____ as Obligee(s), in the penal sum of _____ dollars, for the payment of which well and truly to be made, we jointly and severally bind ourselves, our heirs, executors, administrators, successors, and assigns.

SIGNED AND SEALED this _____ day of _____, _____.

THE CONDITION OF THE ABOVE OBLIGATION IS SUCH, that whereas the above-named Principal did on the _____ day of _____, _____, enter into a Contract with the Obligee, which said Contract is made a part of this Bond the same as though set forth herein and which is more fully described as:

Project Number: _____

Project Name: _____

Contract Description: _____
(e.g., General Trades, Plumbing, HVAC, Electrical)

NOW, THEREFORE, if the above-named Principal shall well and faithfully do and perform the things agreed by the Obligee to be done and performed according to the terms of said Contract; and shall pay all lawful claims of Subcontractors, Material Suppliers, and laborers, for labor performed and materials furnished in the carrying forward, performing, or completing of said Contract; we agreeing and assenting that this undertaking shall be for the benefit of any Subcontractor, Material Supplier or laborer having a just claim as well as for the Obligee herein; then this obligation shall be void; otherwise the same shall remain in full force and effect; it being expressly understood and agreed that the liability of the Sureties for any and all claims hereunder shall in no event exceed the penal amount of this obligation as herein stated.

THE SAID Surety hereby stipulates and agrees that no modifications, omissions, or additions, in or to the terms of the said Contract or in or to the Plans and Specifications therefor shall in any wise affect the obligations of said Surety on its bond, and it does hereby waive notice of any such modifications, omissions or additions in or to the terms of the Contract, the Work or the Contract Documents, including without limitation the Plans and Specifications.

PRINCIPAL:

_____
Principal Signature

By: _____

Title: _____

SURETY:

_____
Surety Signature

By: _____
Attorney-in-Fact

SURETY INFORMATION:

_____
Street

_____
City State Zip

_____
Telephone Number

SURETY AGENT'S INFORMATION:

_____
Agency Name

_____
Street

_____
City State Zip

_____
Telephone Number

_____
Email Address

END OF DOCUMENT

Document 00 61 13.19 - Acknowledgement of Surety (General Contracting)
State of Ohio Standard Requirements for Public Facility Construction

Project Number: _____

Project Name: _____

Owner: _____

Contracting Authority: _____

Contractor: _____

Surety Name: _____

Performance & Payment Bond No.: _____

Original Penal Sum: _____

As required under the Contract between the State of Ohio, acting by and through the Contracting Authority, and the Contractor in connection with the Project, the Surety hereby acknowledges that the Penal Sum of the above-mentioned Bond has been increased to **$**_____ *(must be not less than 100% of the Contract Sum).*

SURETY:

_____
Surety Signature

By: _____
Attorney-in-Fact

_____
Date

SURETY INFORMATION:

_____
Street

_____
City State Zip

_____
Telephone Number

SURETY AGENT'S INFORMATION:

_____
Agency Name

_____
Street

_____
City State Zip

_____
Telephone Number

END OF DOCUMENT

Acceptable Component	A component listed in the Specifications after the Basis of Design Component.
Addenda or Addendum	Written or graphic instrument issued prior to the bid opening which modifies or interprets the proposed Contract Documents by additions, deletions, clarifications, or corrections.
ADR	See "Alternative Dispute Resolution."
A/E	See "Architect/Engineer."
Agreement	The form furnished by the Contracting Authority (including all of its exhibits) that, when completed and signed by the Contractor and Contracting Authority evidences entry into the Contract.
Allowance	A sum stipulated in the Contract Documents for a defined scope of the Work that may not be completely defined at the time of bidding.
Alternate	A potential change in the scope of the Work, which may include but is not limited to alternate materials or methods of construction, and an amount stated on the Bid form to be added to or deducted from the Base Bid if the corresponding Alternate is incorporated into the Contract.
Alternative Dispute Resolution	A voluntary and non-binding process for the administrative review, consideration, and attempted settlement of a dispute, without resort to judicial process, including but not limited to partnering, negotiation, mediation, impartial fact-finding, dispute review board, and mini-trials, but shall not include arbitration.
Applicable Law	All federal, state, and local codes, statutes, ordinances, and regulations that apply to the performance of the Work or the A/E's Services on the Project.
Architect/Engineer	The Person responsible for providing professional design services and construction contract administration for the Project as provided in the Contract Documents. The A/E shall be a **(1)** registered architect holding a license and certificate of authorization issued by the Ohio Architects Board pursuant to ORC Chapter 4703, **(2)** landscape architect holding a license and certificate of authorization issued by the Ohio Landscape Architects Board pursuant to ORC Chapter 4703, or **(3)** professional engineer or professional surveyor holding a license and certificate of authorization issued by the Ohio Engineers and Surveyors Board pursuant to ORC Chapter 4733.
As-Built Documents	Documents, including but not limited to Drawings, Addenda, Specifications, Modifications, and other elements of the Contract Documents which the Contractor annotates and otherwise modifies to indicate changes made during the construction process, the location of concealed and buried items, and other information useful to the Owner throughout the life of the completed Project.
Base Bid	The amount stated in a Bid as the sum for which the Bidder offers to perform the Work in a particular trade or other category, which is described in the Contract Documents, excluding Alternates.

Basis of Design	A document that records the concepts, calculations, decisions, and product selections used to meet the Owner's Project Requirements and to satisfy applicable regulatory requirements, standards, and guidelines. The document includes both narrative descriptions and lists of individual items that support the design process.
Basis of Design Component	A component listed first in the Specifications.
Bid	A written proposal to perform a Contract, submitted on a completed Bid Form, accompanied by other required documents. The term Bid includes a proposal that has been digitally signed, encrypted, and submitted through the State's electronic bidding application pursuant to OAC Section 153:1-8-01.
Bidder	A Person that submitted a Bid.
Bidding Documents	The advertisement or invitation to bid; instructions to bidders; Bid Guaranty; Bid Form with any supplements; and the proposed Contract Documents (including all Addenda).
Bid Form	A form furnished by the Contracting Authority with the proposed Contract Documents that are to be completed, signed, and submitted containing the Bidder's Bid.
Bid Guaranty	A bid bond or other instrument of security authorized by ORC Section 153.54 submitted with the Bid to provide assurance that the Bidder will execute the Agreement.
BIM	See "Building Information Model."
Bond	A performance and payment bond in the format specified by ORC Section 153.57 submitted by the Contractor to provide assurance that the Contractor will perform the Work of the Contract, including making required payments to Subcontractors and Materials Suppliers.
Building Information Model	A digital representation of physical and functional characteristics of a facility; a shared knowledge resource for information about a facility forming a reliable basis for decisions during its life-cycle, which is defined as existing from earliest conception to demolition; electronic files used to design and coordinate the Project; and may be used to describe a single model or multiple models used in the aggregate.
Certificate of Contract Completion	A form used to document the Contractor's achievement of Contract Completion. This form may also be used to document partial Contract Completion.
Certificate of Substantial Completion	A form used to document **(1)** that the Contractor has achieved Substantial Completion of the Work or a designated portion of the Work for which the Contracting Authority and the Owner have agreed to take Partial Occupancy, and **(2)** the date on which the associated Substantial Completion of the Work was achieved.
Change Directive	A written order prepared by the A/E and executed by the Contracting Authority and Owner that directs a change in the Work or the performance of disputed Work as described in the General Conditions.
Change Order	A document recommended by the A/E and executed by the Contracting Authority, Owner, and Contractor that modifies the Contract.

Change Request A written request from the Contractor accompanied by a Proposal seeking an adjustment or interpretation of Contract terms, payment of money, extension of time, or other relief with respect to the terms of the Contract.

Claim A demand or assertion, initiated by written notice, certified by one of the parties to the Contract seeking, as a matter of right, adjustment or interpretation of Contract terms, payment of money, extension of time, or other relief with respect to the terms of the Contract.

CM See "Construction Manager." *(not applicable to General Contracting or Multiple Prime project delivery system)*

Combined Bid A Bid that combines bid items for separate Contracts stated on the Bid Form. *(not applicable to General Contracting project delivery system)*

Commission See "Ohio Facilities Construction Commission."

Commissioning Agent The Person identified by the Contracting Authority who leads, plans, schedules, and coordinates the commissioning team to implement the Commissioning Process for the Project.

Commissioning Plan A document that outlines the organization, schedule, allocation of resources, and documentation requirements of the Commissioning Process.

Commissioning Process A quality-focused process for enhancing the delivery of a project. The process focuses on verifying and documenting that the facility and all of its systems are planned, designed, installed, tested, operated, and maintained to meet the Owner's Project Requirements.

Commissioning Report A document that records the activities and results of the Commissioning Process. The Commissioning Report is developed from the final Commissioning Plan with its attached appendices.

Conformed Documents Contract Documents with all Addenda items and accepted Alternates incorporated by the A/E, published, and issued to a successful Bidder for its use during performance of the Contract. The Conformed Documents are furnished solely for the Contractor's convenience. In the event of any conflict between the Contract Documents modified by Addenda and the Conformed Documents, the Contract Documents take precedence.

Construction Budget The budget for Construction Cost.

Construction Cost The total cost for the Contractor's performance of the Work including all elements of the Project designed or specified by the A/E (at current market rates of labor and materials). Construction Cost does not include the following: A/E fees, CM fees (if applicable), the cost of the land, right-of-way acquisition costs, financing costs, or Owner's contingencies.

Construction Manager A Person responsible, under the Multiple-Prime/CM Adviser version of the Commission's General Conditions, for providing administration, management, and related services as required for scheduling the Project, coordinating the Contractors, and providing other services as provided in the Contract Documents. Under the Multiple-Prime/CM Adviser project delivery system, the CM is not be responsible for performance of Work on the Project. *(not applicable to General Contracting project delivery system)*

Construction Progress Schedule The critical path schedule for performance of the Contract; showing the time for completing the Work within the Contract Times; the planned sequence for performing the various components of the Work; the interrelationship between the activities of the Contractors, Subcontractors, A/E, CM (if any), Contracting Authority, and Owner; and the Contractors' resource and cost loading information; as periodically updated during the performance of the Work.

Contract The state of legal obligation entered into by the State and the Contractor, whereby they have agreed to an exchange of certain acts, materials, equipment, and services for certain monetary consideration, under all terms and conditions specified in the Contract Documents, which shall remain in full force and effect until such time as all obligations under the Contract have been lawfully and completely discharged, or the Contract is terminated under other conditions specified in the Contract Documents.

Contract Completion The stage in the progress of the Work when the Work is completed in accordance with the terms of the Contract Documents including but not limited to **(1)** all governmental authorities have given final, written approval of the Work, **(2)** a final unconditional certificate of occupancy or certificate of completion (as appropriate) has been granted and issued to the Owner by the appropriate governmental authorities, **(3)** the Contractor's Work is 100 percent complete, **(4)** all Punch List items have been completed or corrected, and **(5)** the Contractor has complied with conditions precedent to final payment and release of retained funds. Contract Completion may apply to a single Phase of a multi-Phase Project without applying to one or more other Phases of the same Project or to the Project as a whole.

Contract Documents Collectively, the documents that constitute the substance of the Contract including Drawings, Specifications, Addenda if any, Project Manual, General Conditions, Supplementary Conditions if any, Bid Form, Wage Rate Requirements; and the executed Agreement, Bid Guaranty and Contract Bond, and Modifications if any. Notwithstanding the foregoing sentence, the Contract Documents do not include the advertisement or invitation to bid, instructions to bidders, sample forms, other procurement-related documents or information furnished by the Contracting Authority or Owner in anticipation of receiving Bids, the Contractor's Bid, or portions of Addenda relating to bidding requirements except to the extent specifically incorporated into the Contract Documents.

Contract Sum The amount stipulated as such in the Agreement. The Contract Sum is the Contractor's entire compensation for the Contractor's proper, timely, and complete performance of the Work and is subject to adjustment as provided in the Contract.

Contract Times The periods stipulated in the Agreement for the achievement of associated Milestones, in consecutive days, beginning on the Date of Commencement established by the Notice to Proceed, including adjustments as provided in the Contract.

Contracting Authority The party identified as such in the Agreement, which may be the Ohio Facilities Construction Commission; an agency of the state of Ohio; an Institution of Higher Education or division thereof; a School District Board; or the legislative body of a political subdivision.

Contractor The party identified as such in the Agreement. If the Contractor is a joint venture or special purpose entity, each joint venturer and each member (as applicable) is individually, jointly, and severally obligated under the Contract.

Contractor's Documents All Project-related documents, including those in electronic form, prepared by the Contractor and its Subcontractors.

Contractor's Fee The portion of the Contract Sum attributable to the aggregate of the Contractor's Overhead and profit related to the Contractor's proper, timely, and complete performance of the Work.

Contractor Payment Request The form furnished by the Commission that is to be used by the Contractor in requesting payments and which, when submitted by the Contractor, shall serve as an affidavit that payments requested are in proportion to the Work completed as shown on the Schedule of Values.

Contractor's Punch List A document prepared by the Contractor that consists of a list of items of Work to be completed or corrected by the Contactor as a condition precedent to Contract Completion.

Coordination Drawings Drawings and Electronic Files prepared by the Contractor and Subcontractors to demonstrate how multiple-system and interdisciplinary work will be coordinated. Clash reports generated by BIM authoring software may be included in the Coordination Drawing submittals if applicable.

Correction Period A period of one year commencing on the date of Substantial Completion of the Work or a designated portion of the Work which the Contracting Authority and Owner have agreed to take Partial Occupancy.

CxA See "Commissioning Agent."

Date of Commencement The date established in a Notice to Proceed issued by the Contracting Authority to the Contractor to mark the start of the Work and the beginning of the running of the Contract Times.

day A calendar day of 24 hours measured from midnight to midnight, unless otherwise expressly specified to mean a business day.

Defective Work Work that does not conform to the Contract Documents; or does not meet the requirements of any applicable statute, rule or regulation, inspection, reference standard, test, or approval; or has been damaged prior to the A/E's recommendation of final payment, unless responsibility for the protection thereof has been expressly assumed by the Owner; or that is not free from defects in workmanship, materials, or equipment during the period of any warranty or guarantee.

Delegated Design A form of collaboration between the A/E and the Contractor whereby **(1)** the A/E defines the performance and design criteria for specifically identified systems, materials, equipment, or details included in the Work; and **(2)** the Contractor provides the detailed design of those identified systems, materials, equipment, or details; which responsibility may require the Contractor to engage a licensed design professional to perform the related services. The items and scope of Delegated Design included in the Work are subject to the Contracting Authority's approval and may include, but is not limited to, structural steel elements and connections, precast concrete systems, curtain wall systems, metal panel facades, waterproofing systems, roofing systems, mechanical systems, and fire protection systems.

Differing Site Condition Either **(1)** a subsurface or otherwise concealed physical condition encountered at the Site that differs materially from the conditions indicated in the Contract Documents or **(2)** an unknown physical condition of an unusual nature encountered at the Site that differs materially from those ordinarily found to exist and generally recognized as inherent in construction activities of the character provided for in the Contract Documents.

Drawings Graphic portions of the Contract Documents showing the design, type of construction, location, dimension, and character of the Work to be provided by the Contractor, which generally includes plans, elevations, sections, details, schedules, diagrams, notes, and text.

Electronic File Information maintained in a computer system or format that is intended to facilitate a Person's use and manipulation of the information including but not limited to Word, Excel, PDF, Primavera, CAD, and BIM files all in their native format.

Enclosure, Permanent The condition in which the permanent exterior walls and roofs are in place, insulated and weathertight, and permanent windows and entrances are in place.

Enclosure, Temporary The condition in which the permanent exterior walls and roofs are in place, insulated and weathertight, and windows and entrances are provided with suitable temporary enclosures.

Estimated Construction Cost The sum of the estimated Construction Cost amount(s) (including Base Bid and Alternates) published in the bidding documents, as modified by Addenda, for a Phase of the Project.

Extra Materials Materials required by the Contract Documents that are not incorporated into the Project but are given to the Owner to be used for future maintenance or repairs.

Fee See "Contractor's Fee."

Field Meeting A meeting between the Contracting Authority, Owner, and Contractor to review and endeavor to resolve a Change Directive, Change Request, or other matter.

Final Inspection The final review of the Work of the Contractor by the A/E to determine whether issuance of the Certificate of Contract Completion is appropriate.

furnish Supply and deliver to the Site, or other specified location, ready for installation.

General Conditions The State's Standard General Conditions in effect as of the date of the Agreement.

General Conditions Costs General Conditions Costs include only the Contractor's costs to provide the general conditions Work including without limitation the costs of all of the following Site-related items: scheduling and coordinating the Work. telephone, telephone charges, facsimile, telegrams, postage, photos, photocopying, hand tools, simple scaffolds (one level high), tool breakage, tool repairs, tool replacement, tool blades, tool bits, and pre-approved travel, lodging, and parking costs. General Conditions Costs also include **(1)** Bond premiums; **(2)** premiums for subcontractor default insurance to the extent incurred on account of Subcontractors enrolled for the Project; and **(3)** premiums for builder's risk insurance if the Contractor is required to provide the builder's risk insurance described in the General Conditions (premiums for "difference in conditions" insurance coverage are included in Overhead and are not included in General Conditions Costs).

Hazardous Materials Any material, substance, pollutant, or contaminant that is defined, regulated, referenced, or classified in the Comprehensive Environmental Response, Compensation and Liability Act, Federal Water Pollution Control Act, Resource Conservation and Recovery Act, Clean Air Act, Hazardous Materials Transportation Uniform Safety Act, Toxic Substances Control Act, or any other Applicable Law relating to any hazardous, toxic, or dangerous waste, substance, or material. Any substance or material that, after release into the environment or upon exposure, ingestion, inhalation, or assimilation, either directly from the environment or directly by ingestion through food chains, will, or may reasonably be anticipated to, cause death, disease, behavior abnormalities, cancer or genetic abnormalities and specifically includes but is not limited to asbestos, polychlorinated biphenyls ("PCBs"), radioactive materials, including radon and naturally occurring radio nuclides, natural gas, natural gas liquids, liquefied natural gas, synthetic gas, oil, petroleum and petroleum-based derivatives and urea formaldehyde.

Indemnified Parties The State, Contracting Authority, Owner, A/E, other Separate Consultants, and their respective officials, officers, consultants, agents, representatives, and employees, in both individual and official capacities.

install Put into use or place in final position, complete and ready for intended service or use.

Institutional Designee The party identified in the Agreement empowered with a level of authority similar to the Executive Director of the Commission, which may be the university architect or engineer, director of capital facilities, or an institution vice president.

Institution of Higher Education Any state institution of higher education as defined in ORC Section 3345.011, including any state university or college, community college, state community college, technical college, university branch, community college district, technical college district, university branch district, and the applicable board of trustees or, in the case of a university branch district, any other managing authority.

Lead Contractor The Contractor identified by the Architect/Engineer, under the Multiple-Prime version of the Commission's General Conditions, when a CM is not involved in the Project, responsible for scheduling the Project, coordinating the Contractors, and providing other services identified in the Contract Documents. *(not applicable to General Contracting or CM Advisor project delivery system)*

Legal Holiday Legal Holidays are as follows: **(1)** New Year's Day – First Day in January; **(2)** Martin Luther King Jr. Day – Third Monday in January; **(3)** Washington-Lincoln (President's) Day – Third Monday in February; **(4)** Memorial Day – Last Monday in May; **(5)** Juneteenth National Independence Day (Juneteenth) – Nineteenth day of June; **(6)** Independence Day – Fourth day of July; **(7)** Labor Day – First Monday in September; **(8)** Columbus Day – Second Monday in October; **(9)** Veterans' Day – Eleventh Day of November; **(10)** Thanksgiving Day – Fourth Thursday of November; and **(11)** Christmas Day – Twenty-fifth day of December. If a Legal Holiday falls on a Saturday, it is observed on the preceding Friday. If a Legal Holiday falls on a Sunday, it is observed on the following Monday.

Liquidated Damages A sum established in the Contract Documents, pursuant to the statutory delay forfeiture authorized under ORC Section 153.19, to be paid to the Owner due to the Contractor's failure to complete the Work within the Contract Time for achievement of Substantial Completion, or any applicable portion of the Work on or prior to any Milestone date stated on the Agreement.

Material Supplier A Person under a contract with the Contractor to furnish materials or supplies in furtherance of the Work, including all such Persons in any tier. Material Supplier does not include any Separate Contractor unless expressly assigned in writing to the Contractor by the Owner and accepted by the Contractor.

mediation A voluntary process in which a neutral third party meets with the parties who have a disagreement or dispute and attempts to facilitate a mutually satisfactory resolution.

Milestone A principal event specified in the Contract relating to a completion date or time.

Modification A **(1)** written amendment to the Contract signed by both parties, **(2)** Change Order, **(3)** Change Directive, or **(4)** an order for a minor change in the Work.

negotiation A form of Alternative Dispute Resolution in which all parties involved are represented by those invested with the authority to agree to a determination of an adjustment in the Contract Sum, Contract Times, or both.

Neutral Facilitator A nonpartisan third-party without decision-making authority who is engaged to assist the Project's key stakeholders in developing cooperative relationships, achieving project objectives, avoiding or minimizing disputes, and nurturing a more-collaborative ethic characterized by trust, cooperation, and teamwork.

Notice of Commencement A notice prepared by the Contracting Authority identifying the Project, the Contractors, the Surety for each Contractor, and the name of the Contracting Authority's representative upon whom a claim affidavit may be served.

Notice of Intent to Award A written notice provided by the Contracting Authority to the apparent successful Bidder stating that upon satisfactory compliance with all conditions precedent for execution of a Contract within the time specified, the Contracting Authority intends to execute a Contract with the Bidder.

Notice to Proceed A written notice provided by the Contracting Authority to the Contractor to establish the Date of Commencement and to authorize the Contactor to proceed with the Work.

OAC Ohio Administrative Code.

Ohio Facilities Construction Commission The authorized contracting agent for public improvement projects in accordance with ORC Chapters 123 and 153, acting by and through its Executive Director.

ORC Ohio Revised Code.

Overhead The term "Overhead" includes all of the following costs: **(1)** home-office payroll, which includes: payroll costs and all other compensation (including without limitation membership in trade, business, or professional organizations; professional licenses; training; and bonuses or similar plans/arrangements related to performance on, or profit from, the Project) of the Contractor's officers, executives, principals (of partnerships and sole proprietorships), general managers, engineers, architects, estimators, attorneys, auditors, accountants, purchasing and contracting agents, expediters, timekeepers, clerks, and other personnel employed by the Contractor in the Contractor's principal or a branch office (not including the Contractor's Site office) for general administration of the Work; **(2)** home-office expenses, which include (except where specifically allowed as a General Conditions Cost): all expenses of the Contractor's principal and branch offices including without limitation home-office telephone, telephone charges, computers, fax, postage, photos, copies, legal services, and accounting services; **(3)** all of the Contractor's capital expenses, including without limitation interest on the Contractor's capital employed for the Work and charges against the Contractor for delinquent payments; **(4)** all costs due to the negligence or breach of contract of the Contractor, a Subcontractor, or anyone for whom they may be liable, including without limitation the correction of Defective Work, disposal of materials or equipment wrongly supplied, and making good any damage to property; **(5)** all costs related to insurance provided by the Contractor, whether required under the Contract or not, except **(a)** premiums for subcontractor default insurance in the Construction Stage if those insurance premiums are included as a General Conditions Cost and **(b)** premiums for builder's risk insurance if the Contractor is required to provide the builder's risk insurance described in the General Conditions (premiums for "difference in conditions" insurance coverage are included in Overhead); **(6)** all travel, lodging, and parking costs, except where specifically allowed as a pre-approved General Conditions Cost; **(7)** all applicable taxes of every kind (including but not limited to commercial activity tax ("CAT")) except where otherwise specifically allowed; **(8)** all other overhead or general administrative expenses of any kind and any cost not specifically allowed as a separately recoverable cost of the Work in the Construction Stage.

Owner The state of Ohio agency, Institution of Higher Education or division thereof, School District Board, or other instrumentality for whom the Project is being constructed.

Owner's Project Requirements A written document that details the functional requirements of the Project and the expectations of how it will be used and operated. These requirements include project goals, measurable performance criteria, cost considerations, benchmarks, success criteria, and supporting information.

Partial Occupancy The condition that occurs when the Owner occupies or uses a portion of the Project prior to Contract Completion, partial occupancy is approved by authorities with jurisdiction over the Project and the insurer(s) providing the builders risk insurance, and items of Work cannot be completed until a subsequent date.

partnering A voluntary dispute prevention process involving team building activities to help define common goals, improve communication, and foster a problem-solving attitude among a group of contracting parties that must work together throughout Contract performance to be less adversarial and more cooperative.

Payment Request See "Contractor Payment Request."

Person An individual, corporation, business trust, estate, partnership, association, or other public or private entity.

Phase A separation in the Work of the Project by sequence or time intervals, as defined in the Agreement (e.g., in a multiple-site or multiple-building Project, each site or building may be identified as a separate "Phase"). Each Phase may include different Subcontractors.

Product Data Manufacturer's standard illustrations, schedules, diagrams, performance charts, instructions, and brochures that illustrate physical appearance, size, and other characteristics of materials and equipment.

Progress Status Report A monthly progress report prepared by the Contractor and containing the following information for each Phase of the Work: **(1)** the updated Construction Progress Schedule; **(2)** progress photos; **(3)** an executive summary; **(4)** a discussion of pending items and existing or anticipated problems and status of RFIs; **(5)** a safety and accident report; **(6)** information on each Subcontractor and each Subcontractor's work as well as the entire Work, showing percentages of completion and the number and amounts of Change Orders and Change Directives and relating such information to the Construction Progress Schedule and the Contract Sum; **(7)** a list of all identified Claims, any threatened claims and issues that, in the reasonable judgment of Contractor, may potentially become Claims and any potential Change Orders that have been submitted to the Owner by the Contractor; **(8)** information on compliance with the EDGE participation goals established for the Project; **(9)** status of compliance with required LEED components, if applicable; and **(10)** such other relevant information as may be reasonably required by the Owner from time to time.

Project The public improvement, of which the Work performed under the Contract Documents may be the whole or a part.

Project Manager A permanent employee of the Contracting Authority assigned to the Project and authorized to perform specific responsibilities.

Project Manual That part of Contract Documents which consists of bound volume(s) of primarily written material which generally contain Division 00 - "Procurement and Contracting Requirements," and Divisions 01 through 49 - "Specifications," and other documents pertaining to the Project.

Proposal The offer of a Contractor to perform the Work set forth in a Change Request or Proposal Request.

Proposal Request A document issued after execution of the Contract requesting a Proposal from the Contractor(s), which may initiate a Change Order to modify the Contract.

provide Furnish and install, complete and ready for intended use.

Punch List Milestone The date 30 days after the achievement of Substantial Completion of all or a portion of the Work.

Record Documents Electronic files and printed documents of all nature prepared by the A/E, which incorporate the information shown on the Contractor's As-Built Documents. They consist of the "Record Drawings" and "Record Project Manual," Certificate of Substantial Completion, Certificate of Contract Completion (as complete), manufacturers' warranties, certificate(s) of occupancy or completion (as appropriate), approved shop drawings and other action submittals, responses to Requests for Information, Addenda, Modifications, balancing reports, and the final version of the approved Construction Progress Schedule.

Record Drawings The Drawings, which have been revised by the A/E to show the changes made during the construction process, conformed to represent the Work as executed by the Contractor.

Record Model The Building Information Model, which has been revised by the A/E to show the changes made during the construction process, conformed to represent the Work as executed by the Contractor.

Record Project Manual The Project Manual of the Contract Documents, which has been revised by the A/E to show the changes made during the construction process, based on the As-Built Project Manual furnished by the Contractor.

Request for Information A written request to the A/E seeking an interpretation or clarification of the Contract Documents.

RFI See "Request for Information."

Samples Physical examples, color selection items, field samples, and mock-ups furnished by the Contractor to illustrate functional and aesthetic characteristics of products, materials, equipment, or workmanship and establish criteria by which the Work shall be judged.

Schedule Consultant If the Project does not involve a CM, the Person qualified to create and keep current the Construction Progress Schedule and schedule of submittals for the Project provided by the Lead Contractor. *(not applicable to General Contracting or CM Advisor project delivery system)*

Schedule Manager The Person responsible to create and keep current the Construction Progress Schedule and schedule of submittals for the Project under the Multiple-Prime version of the Standard Requirements. If the Estimated Construction Cost for the Project is less than $500,000, the Lead Contractor shall be the Schedule Manager. If the Estimated Construction Cost for the Project is $500,000 or more, the Schedule Consultant shall be the Schedule Manager. If the Contracting Authority contracted with a Schedule Consultant either directly or through the A/E, the Schedule Consultant is the Schedule Manager. *(not applicable to General Contracting or CM Advisor project delivery system)*

Schedule of Values A full, accurate, and detailed statement furnished by the Contractor reflecting a defined breakdown of the Contract Sum.

School District A local, exempted village, or city school district as defined in ORC Chapter 3311, or a joint vocational school established pursuant to ORC Section 3311.18, performing essential governmental functions of state government pursuant to ORC Sections 3318.01 to 3318.20.

School District Board The board of education of a School District.

Separate Consultant A Person engaged by the Owner or Contracting Authority to provide Project-related professional services other than the services under this Contract. The term includes the Separate Consultant's authorized representatives, successors, assigns, and subconsultants regardless of tier.

Separate Contract The contract between the Owner or Contracting Authority and a Separate Consultant or Separate Contractor.

Separate Contractor A Person under contract with the Owner or Contracting Authority to provide Project-related work other than the Work under this Contract. The term includes the Separate Contractor's authorized representatives, successors, assigns, and subcontractors regardless of tier.

Shop Drawings Drawings, diagrams, illustrations, and schedules specifically prepared for the Project provided by the Contractor or a Subcontractor to illustrate some portion of the Work. Shop Drawings are not Contract Documents.

Site The location designated for the Project.

Specifications Those portions of the Contract Documents consisting of detailed written administrative, procedural, and technical requirements, included in Divisions 01 through 49, for the construction of the Work, whether physically on the Drawings or bound in separate volumes, including identification of acceptable materials, methods, equipment, quality, and workmanship.

Stage A distinct period in the life cycle of a facility from concept through construction, to use and deconstruction or demolition. Typical Stages include Program Verification, Schematic Design, Design Development, Construction Documents, Bidding and Award stages; and the Construction Stage, which includes Construction and Closeout activities.

Standard Requirements The brief name of the "State of Ohio Standard Requirements for Public Facility Construction," including but not limited to General Conditions, and other Division 00 Documents and Division 01 Sections; in effect as of date of the Agreement.

State The government of Ohio, including any organized body, office, or agency established by the laws of this state for the exercise of any function of state government, or any state institution of higher education as defined in ORC Section 3345.011.

Subcontract Any contract or agreement between the Contractor and a Subcontractor for performance of a portion of the Work.

Subcontract Form The **State of Ohio Subcontract Form** prescribed by OAC Section 153:1-3-02 and required for use with the General Contracting method of project delivery.

Subcontractor A Person who undertakes to perform any part of the Work on the Project under a contract with a Contractor or with any Person other than the State, including all such Persons in any tier. The term "Subcontractor" includes Material Suppliers, but does not include any Separate Contractor unless expressly assigned in writing to the Contractor by the Owner and accepted by the Contractor.

Substantial Completion The stage in the progress of the Work when the Work (or designated portion of the Work for which the Contracting Authority and Owner have agreed to take Partial Occupancy) is sufficiently complete in accordance with the Contract that the Owner can utilize the Work for its intended use, as determined by the A/E. The issuance of a certificate of occupancy, partial certificate of occupancy, certificate of completion, or partial certificate of completion (as applicable) to the Owner by the appropriate governmental authorities is a condition precedent to the achievement of Substantial Completion.

Substantially Complete See “Substantial Completion.”

Substitution An article, device, material, equipment, form of construction, or other item, proposed by a prospective Bidder prior to the bid opening and approved by the A/E by Addendum, for incorporation or use in the Work as being functionally and qualitatively equivalent to essential attributes of a Basis of Design or Acceptable Component specified in the proposed Contract Documents.

Supplementary Conditions Amendments to the General Conditions, issued as a separate document, which describe conditions of the Contract unique to a particular Owner or Project, which may include provisions regarding the assignment of responsibility for refuse removal, safety and security precautions and programs, temporary Project facilities and utilities, weather and fire protection, scaffolding and equipment, materials and services to be used commonly by the Contractor and Subcontractors and requiring the Contractor to provide assistance in the utilization of any applicable equipment system, preparation of operation and maintenance manuals, and training of Owner personnel for operation and maintenance of the Project. The General Conditions shall not be superseded or amended by Drawings and Specifications, unless so provided in Supplementary Conditions prepared by the Contracting Authority and approved by the Commission.

Supplementary Instructions Amendments to the Instructions to Bidders, issued as a separate document, which describe instructions unique to a particular Owner or Project. The Instructions to Bidders shall not be superseded or amended by Drawings and Specifications, unless so provided in Supplementary Instructions prepared by the Contracting Authority and approved by the Commission.

Surety A Person providing a Bid Guaranty or a Bond to a Bidder or a Contractor, as applicable.

Systems Manual A system focused composite document that includes the operation manual, maintenance manual, and additional information of use to the Owner after they begin using the facility.

Unit Price The cost of providing a unit of Work including labor, materials, services, and associated expenses. Unit Prices include the Contractor's Fee on account of the associated Unit Price Work.

Work The labor, materials, equipment, and services, individually or collectively which are required by the Contract Documents, to be performed or provided by the Contractor for the Project. The furnishing of all material, labor, detailing, layout, supplies, plants, tools, scaffolding, transportation, temporary construction, superintendence, demolition, and all other services, facilities and items reasonably necessary for the full and proper performance and completion of the requirements of the Project as set forth in the Contract Documents, and items reasonably inferable therefrom and consistent therewith for the proper execution and completion of the construction and other services required by the Contract Documents, whether provided or to be provided by the Contractor or a Subcontractor, or any other entity for whom the Contractor is responsible, and whether or not performed or located on or off of the Site.

Work Day Any day **(1)** that is not a Sunday or Legal Holiday (except as further provided in this paragraph); and **(2)** on which the Contractor performs Work or intends to perform Work as evidenced by the contemporaneous Construction Progress Schedule. Sundays and Legal Holidays are not Work Days unless **(1)** identified as such in the contemporaneous Construction Progress Schedule or **(2)** the Contractor provides 48-hours' advance notice to the Owner scheduling those days as Work Days.

END OF DOCUMENT

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ARTICLE 1 - CONTRACTOR'S RESPONSIBILITIES

1.1 Nondiscrimination

1.1.1 The Contractor shall comply with Applicable Law regarding equal employment opportunity, including ORC Section 153.59 and all Executive Orders issued by the Governor of the state of Ohio.

1.1.1.1 As required under ORC Section 153.59, the Contractor agrees to both of the following:

.1 "in the hiring of employees for the performance of work under the contract or any subcontract, no contractor, subcontractor, or any person acting on a contractor's or subcontractor's behalf, by reason of race, creed, sex, disability or military status as defined in section 4112.01 of the Revised Code, or color, shall discriminate against any citizen of the state in the employment of labor or workers who is qualified and available to perform the work to which the employment relates;" and

.2 "no contractor, subcontractor, or any person on a contractor's or subcontractor's behalf, in any manner, shall discriminate against or intimidate any employee hired for the performance of work under the contract on account of race, creed, sex, disability or military status as defined in section 4112.01 of the Revised Code, or color."

1.1.1.2 The Contractor shall cooperate fully with the State's Equal Opportunity Coordinator ("EOC"), with any other official or agency of the state or federal government that seeks to eliminate unlawful employment discrimination, and with all other state and federal efforts to assure equal employment practices under the Contract.

1.1.1.3 In the event the Contractor fails to comply with these nondiscrimination clauses, the Contracting Authority shall deduct from the amount payable to the Contractor a forfeiture of the statutory penalty pursuant to ORC 153.60 for each person who is discriminated against or intimidated in violation of this **Section 1.1.1**.

1.1.1.4 The Contract may be terminated or suspended in whole or in part by the Contracting Authority and all money to become due hereunder may be forfeited in the event of a subsequent violation of this **Section 1.1.1**.

1.1.2 Hiring Under State Public Improvement Contracts.

1.1.2.1 Any provision of a hiring hall contract or agreement which obligates the Contractor to hire, if available, only employees referred to the Contractor by a labor organization shall be void as against public policy and unenforceable with respect to employment under any public improvement contract unless at the date of execution of the hiring hall contract or agreement, or within 30 days thereafter, the labor organization has procedures in effect for referring qualified employees for hire without regard to race, color, religion, national origin, military status as defined in ORC Section 4112.01, or ancestry and unless the labor organization includes in its apprentice and

journeyman's membership, or otherwise has available for job referral without discrimination, qualified employees, both whites and non-whites (including African-Americans).

1.2 Prevailing Wages

1.2.1 The Contractor shall comply with the prevailing wage requirements described under ORC Chapter 4115 that include, without limitation, the requirements described under this **Section 1.2**.

1.2.2 If the Project is subject to payment of prevailing wage rates, the Contractor shall:

1.2.2.1 pay to laborers and mechanics performing Work on the Project the prevailing wage rates of the Project locality, as determined by the Ohio Department of Commerce, Wage and Hour Bureau;

1.2.2.2 post in a prominent place readily accessible by all workers on the Site, a legible listing of the current classifications of laborers, workers, and mechanics employed under this Contract;

1.2.2.3 ensure that the rates posted are current and remain posted in legible condition during the period of the Contract; and

1.2.2.4 not be entitled to an increase in the Contract Sum on account of an increase in prevailing wage rates, except as otherwise provided by Applicable Law.

1.2.3 The Contractor may access the Ohio Department of Commerce, Wage & Hour Bureau at its website, http://198.234.41.198/w3/webwh.nsf/pages/PrevailingWageBid, to obtain the current wage rates.

1.3 Royalties and Patents

1.3.1 The Contractor shall pay all royalties and license fees and assume all costs incident to the use, in the performance of the Work or the incorporation in the Work, of any invention, design, process, product, or device that is the subject of patent rights or copyrights held by others.

1.3.2 If the Contractor has reason to believe that use of the specified item is subject to patent or copyright protection, the Contractor shall immediately notify the Contracting Authority.

1.4 Assignment of Antitrust Claims

1.4.1 By signing the Agreement, the Contractor assigns, conveys and transfers to the Contracting Authority any right, title, and interest to any claims or causes of action it may have or acquire under state or federal antitrust laws relating to any goods, products, or services purchased, procured, or rendered to the State pursuant to the Contract.

1.5 Use of Domestic Steel

1.5.1 The Contractor is required by law to supply domestically produced steel products used for load bearing structural purposes on all projects funded in whole or in part with State funds.

1.5.2 The Contractor and Subcontractors shall comply with ORC Section 153.011 regarding the use of domestically produced steel products for load bearing structural purposes on all projects funded in whole or in part with State funds. Copies of ORC Section 153.011 may be obtained from the Ohio Facilities Construction Commission or downloaded at http://codes.ohio.gov/orc/153.011v1.

1.6 Drug Free Safety Program Participation

1.6.1 Throughout the performance of the Work, the Contractor shall be enrolled in and remain in good standing in the Ohio Bureau of Workers' Compensation ("OBWC") Drug-Free Safety Program ("DFSP") or a comparable program approved by the OBWC that meets the requirements specified in ORC Section 153.03 ("OBWC-approved DFSP").

1.6.2 As required under ORC Section 153.03(E):

1.6.2.1 "Each contractor shall require all subcontractors with whom the contractor is in contract for the public improvement to be enrolled in and be in good standing in the Bureau of Workers' Compensation's Drug-Free Workplace Program or a comparable program approved by the Bureau that meets the requirements specified in section 153.03 of the Revised Code prior to a subcontractor providing labor at the project site of the public improvement."

1.6.2.2 "Each subcontractor shall require all lower-tier subcontractors with whom the subcontractor is in contract for the public improvement to be enrolled in and be in good standing in the Bureau of Workers' Compensation's Drug-Free Workplace Program or a comparable program approved by the Bureau that meets the requirements specified in

section 153.03 of the Revised Code prior to a lower-tier subcontractor providing labor at the project site of the public improvement."

1.6.2.3 "Failure of a contractor to require a subcontractor to be enrolled in and be in good standing in the Bureau of Workers' Compensation's Drug-Free Workplace Program or a comparable program approved by the Bureau that meets the requirements specified in section 153.03 of the Revised Code prior to the time that the subcontractor provides labor at the project site will result in the contractor being found in breach of the contract and that breach shall be used in the responsibility analysis of that contractor or the subcontractor who was not enrolled in a program for future contracts with the State for five years after the date of the breach."

1.6.2.4 "Failure of a subcontractor to require a lower-tier subcontractor to be enrolled in and be in good standing in the Bureau of Workers' Compensation's Drug-Free Workplace Program or a comparable program approved by the Bureau that meets the requirements specified in section 153.03 of the Revised Code prior to the time that the lower-tier subcontractor provides labor at the project site will result in the subcontractor being found in breach of the contract and that breach shall be used in the responsibility analysis of that subcontractor or the lower-tier subcontractor who was not enrolled in a program for future contracts with the State for five years after the date of the breach."

1.6.3 Prior to authorizing a Subcontractor to commence Work on the Site, the Contractor shall obtain the Contracting Authority's approval, and shall also submit to the A/E written confirmation of the Subcontractor's enrollment on the **Subcontractor and Material Supplier Declaration** form.

1.6.4 In addition to OBWC-approved DFSP Basic requirements, the Contractor, each Subcontractor, and each Separate Contractor that provides labor on the Site shall participate in a pool that performs random drug testing of at least five percent of its employees who perform labor on the Site. The random drug testing percentage shall also include the on-site supervisors of the Contractor, Subcontractors, and Separate Contractors. Basic random drug testing shall otherwise comply with the same testing guidelines and criteria as required for OBWC-approved advanced testing. The Contractor and Subcontractor shall provide evidence of required testing to the Contracting Authority upon request.

1.7 Use of Project Management Software

1.7.1 If the Contracting Authority decides, in its sole discretion, to use project management software for the Project, the Contractor shall use that software for all compatible services required under this Contract.

1.7.2 All costs for the Contractor's use of the project management software for the Project shall be included in the Contract Sum. If the Contractor is unfamiliar with the proper use of the software, the Contractor shall provide its employees for training without additional compensation.

1.8 EDGE Participation and Reporting

1.8.1 The Contractor shall participate in the "Encouraging Diversity, Growth and Equity" ("EDGE") Program by subcontracting with, and using one or more, businesses certified as an EDGE Business Enterprise ("EDGE-certified Business") by the Ohio Department of Development.

1.8.1.1 If the Contractor is an EDGE-certified Business, the Contractor may include its own compensation under this Contract in the reporting.

1.8.1.2 The amount of EDGE participation cannot exceed 100 percent of the Contract Sum.

1.8.1.3 The Contractor shall include in the reporting only those expenditures to EDGE-certified Businesses that perform a commercially useful function as described in the OAC.

1.8.2 The Contractor shall provide an EDGE Participation Report with each Contractor Payment Request.

1.8.2.1 The Contractor shall provide status reports, produced by the Contractor and each applicable EDGE-certified Business for the Contract, indicating:

- **.1** the name of each EDGE-certified Business;
- **.2** the federal tax identification number of each EDGE-certified Business;
- **.3** the date of the EDGE-certified Business contract, Subcontract, or purchase order;
- **.4** the projected and actual start and end dates of the EDGE-certified Business contract, Subcontract, or purchase order;
- **.5** the original amount of the EDGE-certified Business contract, Subcontract, or purchase order with the Contractor;
- **.6** the current amount of the EDGE-certified Business contract, Subcontract, or purchase order;

.7 the amount invoiced to date;

.8 the amount paid to date;

.9 the status of the EDGE-certified Business contract, Subcontract, or purchase order (active, complete, or void); and

.10 a statement describing any substantive product or performance deficiencies.

1.8.2.2 The Contractor shall provide reports for each EDGE-certified Business; however, the reports may be consolidated and submitted as one document.

1.8.3 The Contractor shall provide an EDGE Participation Final Report simultaneously with its final Contractor Payment Request.

1.8.3.1 The Contractor and each EDGE-certified Business shall provide in the report certification that the submitted document is a true and accurate accounting of the original contract amount paid to and, received by each EDGE-certified Business.

1.8.4 The Contractor shall provide the EDGE Participation Reports in detail and form acceptable to the Contracting Authority.

1.8.4.1 Failure to timely submit EDGE Participation Reports may result in withholding payment in accordance with **Section 9.8**.

1.8.5 The Contractor shall cooperate fully with requests for additional EDGE information and documentation from the Ohio Department of Development or Contracting Authority.

1.9 Owner Work Rules

1.9.1 The Contractor shall consult with the Owner to obtain full knowledge of the Owner's rules, regulations, or requirements affecting the Project.

1.10 Emergency

1.10.1 In the event of an emergency affecting the safety of the Project, other property, or individuals, the Contractor, without special instruction or authorization, shall act to prevent the threatened damage, injury, or loss.

1.10.2 If the Contractor believes that it is entitled to an adjustment of the Contract Sum or Contract Times, or both, on account of its actions in response to an emergency, the Contractor shall initiate a Change Request **(1)** as required under **Section 7.6**; and **(2)** within the time period required under **Section 7.6**, which begins to run on the day that the emergency began.

1.11 Contractor's Standard of Care

1.11.1 The Contractor shall perform the Work in a workmanlike manner, consistent with the standards of skill and care exercised by entities licensed to perform (where required under Applicable Law) and regularly performing comparable work in the same or similar locality under the same or similar circumstances.

1.12 Limit of Contractor's Responsibility

1.12.1 The Contractor is not responsible for the A/E's negligence or the A/E's failure to properly perform the A/E's contract.

1.13 Sustainability Requirements

1.13.1 This Project shall be designed and constructed in accordance with the requirements, rules, policies, and procedures adopted by the Ohio Facilities Construction Commission establishing Sustainability Requirements for Capital Improvements Projects, including but not limited to the applicable provisions of OAC 3318-3.

1.13.2 If the Project is designed and constructed under the Leadership in Energy and Environmental Design ("LEED") Rating System developed by the U.S. Green Building Council or another rigorous rating system used to facilitate achievement of sustainability goals for the Project, the Contractor shall provide submittals certifying achievement of sustainable design rating system criteria for verification by the Green Building Certification Institute or other third party in accordance with the Contract Documents.

ARTICLE 2 - STATE'S RIGHTS AND RESPONSIBILITIES

2.1 Contracting Authority

2.1.1 The Contracting Authority shall designate a Project Manager for the Project. The Project Manager is authorized to act on behalf of the Contracting Authority to perform specific responsibilities under the Contract.

2.1.2 The Contracting Authority shall furnish information and services required of it in a timely manner.

2.1.3 The Contracting Authority shall have access to the Work at all times, whenever the Project is in preparation or progress.

2.1.4 The Ohio Facilities Construction Commission requires use of its forms where indicated in the Contract Documents. The party responsible for initiating forms shall utilize the latest edition obtained from the Commission's website: https://ofcc.ohio.gov. The Commission may make modifications to its forms at any time.

2.1.4.1 The Contractor shall not modify any form provided by the Commission or Contracting Authority.

2.1.4.2 If the Project is administered using project management software, the Contractor shall utilize the web-based forms and reports within the applicable business process. The project management software is sponsored by the Commission, and the web-based forms and reports are acceptable to the Commission in lieu of its paper forms.

2.1.5 The Contracting Authority is not responsible for construction means, methods, manners, techniques, sequences, procedures, or for safety precautions and programs in connection with the Work, or for the Contractor's failure to carry out the Work in conformity with the Contract Documents.

2.2 Owner

2.2.1 The Owner shall designate a representative authorized to act on behalf of the Owner during the Project.

2.2.2 The Owner shall furnish information and services required of it in a timely manner.

2.2.3 The Owner shall have access to the Work at all times whenever the Project is in preparation or progress.

2.2.4 Upon issuance of the Notice to Proceed, the Owner shall provide the Site to the Contractor in a condition to permit the Contractor to perform the Work.

2.2.5 The Owner may request a change in the Work if the A/E recommends and the Contracting Authority approves the change.

2.2.6 The Owner shall communicate with the Contractor through the Contracting Authority.

2.2.7 The Owner is not responsible for construction means, methods, manners, techniques, sequences, procedures, or for safety precautions and programs in connection with the Work, or for the Contractor's failure to carry out the Work in conformity with the Contract Documents.

2.3 Approval of Owner, Contracting Authority, and State

2.3.1 The Owner, Contracting Authority, or State's review and approval of the Work and any information the Contractor submits to them is for the sole purpose of determining whether the Work and information are generally consistent with the Contract's intent, and will not relieve the Contractor of its sole responsibility for the performance, preparation, completeness, and accuracy of the Work and information.

2.4 Neutral Facilitation

2.4.1 The Contracting Authority or Owner may engage a Neutral Facilitator for the purposes of **(1)** building cooperative relationships among the Project participants to achieve discrete objectives; **(2)** encouraging educated, productive, and expedited attempts to avoid, minimize, and resolve disputes; and **(3)** maximizing the effectiveness of each participant's resources.

2.4.1.1 For example, a Neutral Facilitator may facilitate the organizational meeting, partnering session(s), and efforts to resolve disputes throughout the Project.

2.4.2 The Contracting Authority, Owner, and Contractor are entitled to interact with the Neutral Facilitator with the full expectation that **(1)** they may act, speak, and disclose information with complete candor and **(2)** all communication, whether oral or written, made in the course of facilitated sessions is confidential.

2.4.3 At any hearing or proceeding regarding any dispute arising out of or related to the Project **(1)** the Neutral Facilitator will not be competent to testify and shall not be called as a witness and **(2)** the Neutral Facilitator's testimony and work product will not be admissible.

2.4.4 The Neutral Facilitator will not **(1)** perform any services with respect to or bear any responsibility for any legal services, design-professional services, construction, or construction management associated with the Project or **(2)** have any liability whatsoever for any claims related to any legal services, design-professional services, construction, or construction management associated with the Project, including without limitation, claims for legal or design-professional errors or omissions, delays, cost overruns, faulty construction, or increased costs.

2.4.5 The Neutral Facilitator's participation in the Project will not relieve the Contracting Authority, Owner, and Contractor of any of their respective rights or obligations under the Contract.

2.5 Contractor Performance Evaluation

2.5.1 The Contracting Authority may evaluate the Contractor's performance during the progress of the Work, at completion of a Phase of the Project, completion of the Project, or any of the foregoing. The Contracting Authority shall retain the evaluation(s).

2.5.1.1 The Contractor may request a copy of the completed evaluation(s). If the Contractor wishes to comment or take exception to any rating or remark, the Contractor shall send a response in writing to the Contracting Authority within 30 days after receiving the evaluation(s).

2.5.1.2 The Contracting Authority may use the evaluation(s) in determining the responsibility of the Contractor for award of future contracts.

2.5.1.3 The Contracting Authority may request information from the Contractor for use in evaluating the A/E's performance. If information is requested, the Contractor shall comply in a timely and responsive manner.

2.5.1.4 If a breach of the Contract is committed by the Contractor or is attributable to a Subcontractor, that breach will be used in the responsibility analysis of the Contractor and Subcontractor (where applicable) for future contracts with the State or subcontracts on State projects for five years after the date of the breach.

ARTICLE 3 - A/E'S RESPONSIBILITIES

3.1 The A/E's Contract Administration Duties

3.1.1 The A/E shall administer the Contract as provided in the Contract Documents and Architect/Engineer Agreement, including, but not limited to, performance of the functions described as follows:

3.1.1.1 The A/E shall attend and conduct progress meetings. The A/E shall prepare an agenda and produce a written report of each progress meeting, and distribute the report to the Contracting Authority, Owner, and Contractor within three business days after the meeting. The A/E shall not delegate the duty to prepare the agenda and written reports of any progress meeting.

3.1.1.2 The A/E may authorize minor changes or alterations in the Work that are consistent with the intent of the Contract Documents and do not involve adjustment of the Contract Sum or Contract Times, or both. The A/E has no authority to authorize the Contractor to perform additional or extra Work for which the Contractor may seek adjustment of the Contract Sum or Contract Times, or both.

3.1.1.3 The A/E shall review and recommend, certify, or approve applicable forms required under the Contract Documents.

3.1.1.4 The A/E shall render decisions in connection with the Contractor's responsibilities under the Contract Documents, and submit recommendations to the Contracting Authority for enforcement of the Contract as necessary.

3.1.2 The A/E is the initial interpreter of all requirements of the Contract Documents. All decisions of the A/E are subject to final determination by the Contracting Authority.

3.2 Site Visits and Observation

3.2.1 The A/E shall notify, advise, and consult with the Contracting Authority and Owner and protect the State against Defective Work throughout completion of the Project, which includes the Correction Period.

3.2.1.1 The A/E shall designate a field representative, subject to the Contracting Authority's approval, to attend to the Project, to observe and check the progress and quality of the Work, and to take action as necessary or appropriate to achieve conformity with the Contract Documents.

3.2.1.2 The A/E shall have its consultants attend to the Project at intervals required by its agreement or the Contracting Authority.

3.2.2 The A/E is authorized to disapprove or reject Defective Work. The A/E shall immediately notify the Contracting Authority any time the A/E disapproves or rejects an item of Work.

3.2.3 The A/E is not responsible for construction means, methods, manners, techniques, sequences, procedures, or for safety precautions and programs in connection with the Work, or for the Contractor's failure to carry out the Work in conformity with the Contract Documents.

3.3 Testing and Inspection Services

3.3.1 Unless otherwise specified in the Contract Documents, the A/E, directly or through a consultant, shall manage, apply for, secure, and pay for the costs of structural testing and special inspections under Chapter 17 of the Ohio Building Code; testing including geotechnical analysis, environmental testing and analysis, concrete, masonry, structural steel, reinforcing steel, welding, bolts, steel connections, HVAC systems and controls, plumbing and piping, air and water balancing and testing, or other testing; or approval required by Applicable Law. The Contractor shall coordinate with the A/E and cooperate in the A/E's effort to complete the testing and inspection services required in this **Section 3.3**

3.4 Approval of A/E

3.4.1 The A/E's review and approval of the Work and any information the Contractor submits to the A/E is for the sole purpose of determining whether the Work and information are generally consistent with the Contract's intent, and will not relieve the Contractor of its sole responsibility for the performance, preparation, completeness, and accuracy of the Work and information.

3.5 Limitation of A/E's Authority

3.5.1 Under no circumstances is the A/E authorized to:

3.5.1.1 bind the Owner or Contracting Authority to any authorizations under, modifications of, or amendments to any contract other than as expressly described under **Section 3.1.1.2**;

3.5.1.2 accept any defective or non-conforming services, Work, or vendor-furnished items;

3.5.1.3 make any settlements on behalf of the Owner or Contracting Authority; or

3.5.1.4 assume any responsibilities of the Contractor or Subcontractors.

ARTICLE 4 - SUBCONTRACTORS

4.1 Evaluation and Approval

4.1.1 Within ten days after the Notice to Proceed, or other period as mutually agreed by the Contractor and Contracting Authority, the Contractor shall submit to the A/E a **Subcontractor and Material Supplier Declaration** form through which the Contractor identifies its Subcontractors.

4.1.2 The Contractor's failure to timely submit the information regarding a proposed Subcontractor may result in withholding payment in accordance with **Section 9.8**.

4.1.3 After receiving the **Subcontractor and Material Supplier Declaration** form, the A/E shall verify that it is complete and deliver it to the Contracting Authority and Owner. If the A/E finds the form incomplete, the A/E shall return it to the Contractor and identify the incomplete information. If the A/E returns such incomplete forms to the Contractor, the Contractor shall resubmit the forms with revisions complying with the corrective action identified by the A/E.

4.1.4 If the Contracting Authority rejects any proposed Subcontractor, the Contractor shall propose a replacement Subcontractor with no adjustment of the Contract Sum. The proposed replacement Subcontractor will be evaluated as described above.

4.1.5 No less than ten days before Work is to be performed by the Subcontractor, or within a shorter period as mutually agreed by the Contractor and Contracting Authority, the Contractor shall submit to the Contracting Authority and A/E a complete copy of the executed Subcontract between the Contractor and Subcontractor. After receiving the Subcontract,

the A/E shall verify that it is complete and deliver it to the Contracting Authority. If the A/E finds the Subcontract incomplete, the A/E shall return it to the Contractor and identify the incomplete information.

4.2 Form of Subcontract

4.2.1 All Subcontracts shall be on the **State of Ohio Subcontract Form** prescribed by OAC Section 153:1-03-02.

4.3 Replacement of Subcontractors

4.3.1 The Contractor shall not replace any Subcontractor after execution of the Subcontract without the prior written approval of the Contracting Authority.

4.4 Contractor's Responsibility

4.4.1 The Contractor is fully responsible for all acts and omissions of its Subcontractors and is responsible for scheduling and coordinating the Work of its Subcontractors.

4.4.1.1 The Contractor is fully responsible for any delay, interference, disruption, or hindrance attributable to its Subcontractors.

4.4.1.2 The Contractor shall require each of its Subcontractors to have a competent supervisor at the Site whenever the Subcontractor is performing Work.

4.4.1.3 The Contractor shall bind its Subcontractors to the terms of the Contract Documents, so far as applicable to the Work of the Subcontractor.

4.4.1.4 The Contractor shall not agree to any provision, which seeks to bind the State to terms inconsistent with or at variance from the Contract Documents.

4.4.2 The Contractor will not be relieved of its full responsibility for Subcontractors and their performance of the Work by **(1)** the participation of the Owner, Contracting Authority, and A/E in the processes described under this **Article 4** or other related provisions of the Contract Documents or **(2)** the Contracting Authority's rejection of a Subcontractor or failure to reject a Subcontractor under **Section 4.1**.

4.5 Contingent Assignment of Subcontracts

4.5.1 The Contractor hereby assigns its agreement with each Subcontractor to the Contracting Authority provided that the assignment is effective only after termination of the Contract in whole or in part by the Contracting Authority and only for those agreements that the Contracting Authority accepts by notifying the Contractor and applicable Subcontractors in writing. The Contracting Authority may re-assign accepted agreements.

4.5.1.1 If the Contracting Authority terminates the Contract in part, the Contracting Authority may **(1)** take assignment of any entire Subcontract affected by the termination or **(2)** take partial assignment of only the portion of any Subcontract associated with the terminated part of the Contract.

4.6 Prompt Payment

4.6.1 The Contractor shall make payments to Subcontractors in accordance with Applicable Law, including ORC Sections 153.12 and 4113.61.

4.6.2 The Contractor may reduce the amount paid to a Subcontractor pursuant to **Section 4.6.1** at a rate equal to the percentage retained from the Contractor and may withhold amounts necessary to **(1)** resolve disputed liens or claims involving the Work of the Subcontractor or **(2)** account for the failure of the Subcontractor to perform its obligations under its agreement with the Contractor.

ARTICLE 5 - PRECONSTRUCTION ACTIVITIES

5.1 Neutral Facilitation

5.1.1 The Contracting Authority or Owner may engage a Neutral Facilitator for the purposes of **(1)** building cooperative relationships among the Project participants to achieve discrete objectives; **(2)** encouraging educated, productive, and expedited attempts to avoid, minimize, and resolve disputes; and **(3)** maximizing the effectiveness of each participant's resources.

5.1.1.1 For example, a Neutral Facilitator may facilitate a preconstruction organizational meeting, a partnering session, or efforts to resolve disputes throughout the Project, all of which the Contractor shall participate in at the Contracting Authority's request. The Contractor's compensation for participating in those meetings, sessions,

efforts, and related activities is included in the Contract Sum, and the Contractor will not be entitled to an increase of the Contract Sum for participating as requested.

5.1.2 The Contracting Authority, Owner, and Contractor are entitled to interact with the Neutral Facilitator with the full expectation that **(1)** they may act, speak, and disclose information with complete candor and **(2)** all communication, whether oral or written, made in the course of facilitated sessions is confidential.

5.1.3 At any hearing or proceeding regarding any dispute arising out of or related to the Project **(1)** the Neutral Facilitator will not be competent to testify and shall not be called as a witness and **(2)** the Neutral Facilitator's testimony and work product will not be admissible.

5.1.4 The Neutral Facilitator will not **(1)** perform any services with respect to or bear any responsibility for any legal services, design-professional services, construction, or construction management associated with the Project or **(2)** have any liability whatsoever for any claims related to any legal services, design-professional services, construction, or construction management associated with the Project, including without limitation, claims for legal or design-professional errors or omissions, delays, cost overruns, faulty construction, or increased costs.

5.1.5 The Neutral Facilitator's participation in the Project will not relieve the Contracting Authority, Owner, and Contractor of any of their respective rights or obligations under the Contract.

5.2 Building and Trade Permits and Licenses

5.2.1 Plan Approval.

5.2.1.1 The A/E shall secure the required structural, plumbing, HVAC, and electrical plan approvals.

5.2.1.2 The Contractor shall schedule and attend all intermediate and final inspections required for any permit applicable to the Work. The Contractor shall schedule the State Fire Marshal or local fire authority for the life safety inspection for occupancy permits. The Contractor shall give the A/E, Contracting Authority, and Owner reasonable notice of the dates and times arranged for inspections.

.1 The Contractor shall pay for any reinspections required as a result of the Contractor's failure to receive approval of its Work, unless the reinspection is required because the design does not comply with Applicable Law.

5.2.2 Trade Permits and Licenses.

5.2.2.1 The Contractor shall obtain, maintain, and pay for any permit, inspection, or license applicable to the Contractor's particular trade.

5.2.3 Local Permits.

5.2.3.1 The Contractor shall secure and pay the fees for any permits, inspections, licenses, capacity charges, or tap fees required by local authorities having jurisdiction over the Project. The Contractor shall give the A/E, Contracting Authority, and Owner reasonable notice of the date arranged for inspections.

5.2.4 National Pollutant Discharge Elimination System ("NPDES") Storm Water General Permit.

5.2.4.1 The A/E shall secure the NPDES general permit by submitting a Notice of Intent ("NOI") application form to the Ohio Environmental Protection Agency at least 45 days prior to the start of construction. The Contractor shall be a "co-permitee" if required under Applicable Law.

5.2.4.2 The A/E shall prepare and certify a storm water pollution prevention plan to provide sedimentation and erosion controls at the Project.

5.2.4.3 The A/E shall prepare and process the required Notice of Termination ("NOT") prior to Contract Completion.

ARTICLE 6 - CONSTRUCTION AND CLOSEOUT

6.1 Commencement of Work on the Site

6.1.1 The Construction Stage will start and the Contract Times will begin to run on the Date of Commencement established in a Notice to Proceed, which the Contracting Authority will issue to the Contractor. The date on which the Contracting Authority issues the Notice to Proceed **(1)** is not relevant to the running of the Contract Times, and **(2)** may differ from Date of Commencement. Unless the Contracting Authority agrees otherwise in writing, the Contractor shall begin to perform the Work within seven days after the Date of Commencement and thereafter diligently prosecute the Work. The Construction Stage terminates upon Contract Completion.

6.2 Contractor's General Responsibilities

6.2.1 The Contractor shall **(1)** maintain a competent, full-time staff at the Site at all times that Work is in preparation or progress on the Project, **(2)** shall supervise the Work; **(3)** establish and implement on-Site organization and authority so that the Work is accomplished in conformance with the Project Schedule; and **(4)** complete portions of the Work in the sequence and time in the Construction Progress Schedule.

6.2.2 The Contractor shall perform the Work so as not to interfere with, disturb, hinder, or delay the services of Separate Consultants or the work of Separate Contractors. The Contractor shall cooperate and coordinate fully with all Separate Consultants and Separate Contractors and shall freely share all of the Contractor's Project-related information with them to facilitate the timely and proper performance of the Work and of the services and work of the Separate Consultants and Separate Contractors.

6.2.3 The Contractor shall afford every Separate Consultant and Separate Contractor proper and safe access to the Site and a reasonable opportunity for the introduction and storage of materials and equipment and the execution of their services and work.

6.2.4 If the Contractor damages the property or work of any Separate Consultant or Separate Contractor, or by failure to perform the Work with due diligence, delays, interferes with, hinders, or disrupts the services of any Separate Consultant or the work of any Separate Contractor who suffers additional expense and damage as a result, the Contractor is responsible for that damage, injury, or expense.

6.2.5 The intent of **Sections 6.2.2** through **6.2.4** is to benefit the Separate Consultants and Separate Contractors, and to demonstrate that the Separate Consultants and Separate Contractors are intended third-party beneficiaries of the Contractor's obligations under the Contract.

6.2.6 If the proper execution or results of any part of the Work depends upon work performed or services provided by the Owner, a Separate Consultant, or a Separate Contractor, the Contractor shall inspect that other work and appropriate instruments of service, and promptly report to the Contracting Authority in writing any defects or deficiencies in that other work or services that render it unavailable or unsuitable for the proper execution and results of the Work. The Contractor's failure to report before starting the affected part of its Work will constitute an acceptance of the other work and services as fit and proper for integration with the Contractor's Work except for defects and deficiencies in the other work or services that were not reasonably discoverable at the time of the Contractor's inspection.

6.2.7 The Contractor shall not delay the Work on account of any claim, dispute, or action between the Contractor and a Separate Consultant or Separate Contractor.

6.2.8 The Contractor shall develop and keep current the Construction Progress Schedule in accordance with **Section 6.5**, and prepare and keep current a schedule of submittals that is coordinated with the Construction Progress Schedule, for the A/E and Contracting Authority's acceptance.

6.2.9 The Contractor shall monitor the progress of the Work for conformance with the Construction Progress Schedule and shall initiate revisions as required by **Section 6.5.6**.

6.2.10 The Contractor shall establish the Project's regular working hours, subject to approval by the A/E and the Owner.

6.2.11 The Contractor shall coordinate the Work with the activities and responsibilities of the A/E, Owner, and Contracting Authority to complete the Project in accordance with the Contract Documents.

6.2.12 In the event of default of the Contractor, the Contractor shall cooperate with the A/E, Owner, Contracting Authority, and Contractor's Surety to achieve the Substantial Completion date and Contract Completion.

6.2.13 The Contractor shall remove all snow and ice as may be required for reasonably safe access to the Project including, but not limited to, building entries, driveways, parking lots, and sidewalks.

6.2.14 The Contractor shall keep a daily log containing a record of weather, number of workers on Site, identification of equipment, Work accomplished, problems encountered, and other similar relevant data.

6.3 Construction Procedures

6.3.1 The Contractor is solely responsible for and has control over all construction means, methods, manners, techniques, sequences, and procedures, for safety precautions and programs in connection with the Work, and for coordinating all portions of the Work.

6.3.1.1 If the Contract Documents give instructions that affect construction means, methods, manners, techniques, sequences, or procedures, the Contractor shall evaluate the jobsite safety of them and, except as stated below, shall

be fully and solely responsible for the jobsite safety of the means, methods, manners, techniques, sequences, or procedures.

6.3.1.2 If the Contractor determines that the means, methods, manners, techniques, sequences, or procedures specified in the Contract Documents may not be safe, the Contractor shall give timely written notice to the A/E, Owner, and Contracting Authority. The Contractor shall not proceed with that portion of the Work without further written instructions from the A/E. Any modification of the Contract shall be in accordance with **Article 7**.

6.3.2 The Contractor shall lay out and coordinate all lines, levels, elevations, and measurements for all of the Work, coordinate and verify existing conditions, and notify the A/E of discrepancies and conflicts before proceeding with installation or excavation.

6.3.3 The Contractor shall perform all cutting, fitting, or patching required for the Work and shall not endanger the Project by cutting, excavating, or otherwise altering the Project, or any part of it.

6.3.3.1 If the Contractor requires sleeves for the Work, the Contractor shall furnish and install the sleeves. The Contractor is responsible for the exact location and size of all holes and openings required to be formed or built for the Work.

6.3.3.2 The Contractor's patching shall match and blend with the existing or adjacent surface(s).

6.3.4 The Contractor shall comply with ORC Sections 3781.25 through 3781.32. In addition, before starting excavation or trenching, the Contractor shall determine the location of any underground utilities and notify any public authority or utility having jurisdiction over the Project and secure any required approval.

6.3.5 The Contractor shall install all Work in accordance with the Contract Documents and any installation recommendations of the manufacturer, including required temperature and humidity limits for installation of the various materials.

6.3.6 The Contractor shall comply with all requirements and conditions of the NPDES general permit, including, but not limited to, implementing and maintaining the sedimentation and erosion control measures specified in the storm water pollution prevention plan prepared by the A/E pursuant to **Section 5.2.4**, which are related to the Work, maintaining records of its construction activities, removing materials no longer required, and taking proper action if there is a reportable quantity spill.

6.3.7 The Contractor shall communicate with the Contracting Authority and Owner through the A/E.

6.4 Construction Supervision

6.4.1 Unless waived by the Contracting Authority in writing, the Contractor shall provide continuous supervision at the Site by a competent superintendent when any Work is being performed, and the Contractor's superintendent shall not be involved with any work other than the Project.

6.4.2 The Contractor's project manager and superintendent shall each have the responsibility and authority to act on behalf of the Contractor. All communications to the Contractor's project manager or superintendent shall be binding as if given directly to the Contractor.

6.4.3 Within ten days after the Date of Commencement, the Contractor shall submit to the Contracting Authority an outline of the qualifications and experience of the Contractor's proposed project manager and proposed superintendent, including references. Upon receiving a request from the Contracting Authority, the Contractor shall submit to the Contracting Authority an outline of the qualifications and experience of any Subcontractor's proposed project manager and proposed superintendent.

6.4.3.1 The Contracting Authority may reject the Contractor's or Subcontractor's proposed project manager or proposed superintendent. If the Contracting Authority does not notify the Contractor of the rejection within 30 days after receiving the required information, it shall indicate that the Contracting Authority has no objection, but does not affect the Contracting Authority's rights under **Section 6.12.2** or any other provision relative to that project manager or superintendent.

6.4.3.2 If the Contracting Authority rejects the Contractor's or Subcontractor's proposed project manager or proposed superintendent, the Contractor shall replace, or cause the Subcontractor to replace the project manager or superintendent (as appropriate) with someone acceptable to the Contracting Authority at no additional cost.

6.4.4 The Contractor and its Subcontractors shall not replace their respective project managers or superintendents without prior written approval of the Contracting Authority.

6.4.4.1 If the Contractor or a Subcontractor proposes to change its project manager or superintendent, the Contractor shall submit written justification to the Contracting Authority, along with the name and qualifications of the proposed replacement.

6.4.4.2 The procedure provided in **Section 6.4.3** shall be conducted to evaluate the Contractor's or Subcontractor's (as applicable) proposed replacement project manager or superintendent.

6.5 Construction Progress Schedule

6.5.1 General Requirements

6.5.1.1 The Contractor shall prepare and maintain the Construction Progress Schedule using the critical path method of scheduling and commercially available computer software acceptable to the Contracting Authority.

.1 In the Construction Progress Schedule, the Contractor shall **(1)** organize all Work activities into a logical work breakdown structure; **(2)** set forth a reasonable, efficient, economical, and practical plan to complete the Work within the Contract Times, and **(3)** convey the prosecution and progress of the Work in a manner that accounts for **(a)** normal adverse weather, as defined under **Section 7.10**, through reasonably anticipated productivity variations for weather-sensitive activities, **(b)** Legal Holidays, and **(c)** similar reasonably anticipated events.

6.5.1.2 The Contractor shall use the most-current, accepted Construction Progress Schedule **(1)** to plan, organize, execute, and manage the Work using early start dates and early finish dates; **(2)** to record and report actual performance and progress of the Work; **(3)** to show how it plans to coordinate and complete all remaining Work within applicable Milestones; and **(4)** as the basis for requests for extensions of the Contract Times.

6.5.1.3 The Project participants will use the Construction Progress Schedule as a tool for scheduling and reporting sequenced progress of the Work.

6.5.1.4 The Contracting Authority's, Owner's, or A/E's review, acceptance, or approval of any Construction Progress Schedule will not **(1)** relieve the Contractor of any of the Contractor's responsibilities under the Contract including the responsibility to perform the Work in accordance with the Construction Progress Schedule and within the Contract Times, or **(2)** imply, warrant, or acknowledge the reasonableness or accuracy of the logic, durations, cost, resource loading, or any other attributes of the Construction Progress Schedule.

6.5.1.5 The Contracting Authority may withhold payment from the Contractor on account of the Contractor's failure to prepare, maintain, or update the Construction Progress Schedule as required under the Contract.

6.5.2 Submission Requirements

6.5.2.1 The Contractor shall provide each submission of the Construction Progress Schedule **(1)** as a Gantt chart in PDF; **(2)** as a Gantt chart in hardcopy if the Contracting Authority requests; and **(3)** an Electronic File.

.1 The hardcopy format for the Construction Progress Schedule shall be 11x17 inch.

.2 The Electronic File of the Construction Progress Schedule shall be in .xer, .xml, or .mpp format.

6.5.2.2 At the Contracting Authority's request, the Contractor shall prepare and submit to the Contracting Authority reports produced through the scheduling software (collectively "Schedule Reports").

.1 Unless the Contracting Authority requests otherwise, the Contractor shall submit each Schedule Report in Electronic File format, PDF format, and 8.5x11 hardcopy format.

6.5.3 Schedule Information Requirements

6.5.3.1 General Requirements. The Contractor shall include at least the following information in the Construction Progress Schedule:

.1 a clear graphics legend;

.2 the Contracting Authority's Project number and Project name;

.3 a graphic presentation of the sequence of all of the Work;

.4 identification of each stage of the Work and any Milestone dates;

.5 identification of activities and durations for **(1)** entering into each Subcontract with an anticipated value in excess of 10% of the Construction Budget or as otherwise requested by the Contracting Authority; **(2)** preparation, review, and approval of Shop Drawings and other action submittals; **(3)** fabrication and review of mock-up Work; **(4)** product review and procurement, fabrication, shop inspection, and delivery, including, but not limited to, lead time and coordination drawing delivery; **(5)** Date of Commencement identified as "Start Milestone"; **(6)** date(s) of Substantial Completion identified as "Finish Milestone"; **(7)**

Punch List development; **(8)** Punch List correction; **(9)** Project close-out requirements; **(10)** occupancy requirements; and **(11)** Contract Completion;

.6 for each activity:

1. Activity ID, Activity Description, and Calendar ID;

2. identification of the single organization responsible for performing the activity;

3. early start, early finish, late start, late finish, duration, and total float;

4. in other than the baseline Construction Progress Schedule: original duration, remaining duration, and percentage of completion;

5. identification of predecessor and successor activities, constraints, and percentage of completion; and

6. a maximum duration that is appropriate for the activity but not in excess of 15 days except **(1)** non-construction activities such as procurement of materials, delivery of equipment, concrete curing, etc.; and **(2)** other activities for which the Contracting Authority may approve a longer duration;

.7 identification of disruptions and shutdowns due to other operations;

.8 identification of all planned work hours for each Work Day;

.9 identification of the longest path of the Work (in red) and all critical paths of the Work;

.10 identification of the crew size and total resource hours for each activity in the schedule;

.11 other items required by the Contracting Authority, Owner, or A/E; and

.12 the Contractor's signature approval and date lines, which the Contractor shall complete indicating approval of each submitted schedule.

6.5.3.2 Activity Identifications ("ID")

.1 Activity ID's shall follow the naming convention agreed upon between the Contracting Authority and the Contractor before the Contractor begins to prepare the baseline Construction Progress Schedule.

.2 Each Activity ID for a specific Activity Description shall remain unchanged and connected to its original Activity Description throughout the Project.

6.5.3.3 Activity Descriptions

.1 Each activity shall have a clear and concise Activity Description..

6.5.3.4 Activity Relationships

.1 All activities except Date of Commencement shall have at least one predecessor, and all activities except Contract Completion shall have at least one successor.

.2 To link activities, the Contractor may use **(1)** finish-to-start relationships with no leads or lags; **(2)** start-to-start relationships with lags no greater than the predecessor duration; or **(3)** finish-to-finish relationships when both activities are already aligned with a start-to-start relationship.

6.5.3.5 Project Level Activity Codes

.1 For each activity, the Contractor shall assign responsibility to an identified, single performing organization.

6.5.3.6 Project Level Calendars

.1 The Contractor shall create and maintain calendars at the project level.

6.5.3.7 No Global Data

.1 The Contractor may not use global data of any kind (e.g., codes, calendars, etc.).

6.5.3.8 Float and Critical Activities

.1 "Float" is the amount of time between the early start date and the late start date (or the early finish date and the late finish date) for each activity. Float is for the benefit of both the Contracting Authority and the Contractor; i.e., float is not for the Contractor's exclusive benefit. Either the Contracting Authority or the Contractor may use float on a first-come-first-served basis without cost impact. The Contractor may not suppress or consume float by artificially extending activity durations, creating dummy activities, or applying preferential sequencing.

1. The Contractor shall exhaust existing float before claiming additional time for a Modification, or show that it is not possible to use float to cover the time requirements of the Modification.

2. The Contractor may not suppress or sequester float through, for example, artificial/illogical sequencing, excessive durations, date constraints, float constraints, improper use of lag, or calendar manipulation.

.2 "Critical Activities" are activities **(1)** occurring on the longest path through the Construction Progress Schedule; or **(2)** with float of less than one day; or **(3)** both. The Contractor shall monitor and diligently pursue any activities with ten or fewer days of total float.

6.5.4 Baseline Construction Progress Schedule

6.5.4.1 Unless the Contracting Authority and Contractor agree otherwise, within 45 days after the execution of the Agreement, the Contractor shall submit to the Contracting Authority and A/E a fully developed, baseline Construction Progress Schedule in compliance with this **Section 6.5** that demonstrates the longest path and all critical paths for all of the Work.

.1 The Contracting Authority's approval of the baseline Construction Progress Schedule is a condition precedent to the Contractor's entitlement to payment under the Contract.

6.5.4.2 The Contractor shall develop the baseline Construction Progress Schedule based upon **(1)** the Contract Times defined in the Agreement, and **(2)** the schedule information included in the Bidding Documents.

6.5.4.3 In the event of a significant change or combination of changes, as determined by the Contracting Authority in its discretion, the Contracting Authority may identify a Contracting Authority-approved, updated or revised Construction Progress Schedule as the new baseline Construction Progress Schedule for future updates and reports.

6.5.5 Monthly Construction Progress Schedule Updates

6.5.5.1 The Contractor shall include a monthly Construction Progress Schedule update as a component of each of the Contractor's Progress Status Reports.

6.5.5.2 The Contractor shall generate monthly Construction Progress Schedule updates based upon and relative to the Contracting Authority-approved baseline Construction Progress Schedule and using retained logic (as opposed to logic override) to reflect and include:

.1 the actual progression and sequence of the Work;

.2 actual and projected start and completion dates;

.3 actual Modifications; and

.4 the longest path of the Work and all critical paths of the Work.

6.5.5.3 The Contractor shall use the first date of the next month at 12:01 a.m. as the data date for calculating the monthly Construction Progress Schedule update (e.g., progress through March will have a data date of April 1 @ 12:01 am).

6.5.5.4 The Contractor shall accurately input actual start and actual completion dates and correct all logic errors. If the Contractor changes/corrects any actual dates in any following month, the Contractor shall clearly identify the change/correction and provide a written explanation for it.

6.5.5.5 If the Contracting Authority requests, the Contractor shall include with each monthly Construction Progress Schedule update any of the associated Schedule Reports produced by the scheduling software.

6.5.5.6 The Contractor's submission of a monthly Construction Progress Schedule update shall serve as an affirmation that the Contractor intends to and is capable of performing the Work consistent with the associated monthly Construction Progress Schedule update.

6.5.5.7 The Contracting Authority and the A/E will review and may approve or reject and return the monthly Construction Progress Schedule update to the Contractor with recommendations for revisions.

6.5.6 Revised Construction Progress Schedules

6.5.6.1 Unless and until the Contracting Authority agrees in writing, the Contractor shall not change any of the accepted activities, activity durations, schedule logic, interdependencies, Milestones, planned sequence of operations, or resource loading set forth in the Construction Progress Schedule.

6.5.6.2 Once the Contracting Authority accepts a Modification involving Construction Progress Schedule changes (including no-cost time extensions such as on account of excessive weather days and other excusable delays), but not before then, the Contractor shall promptly incorporate the associated activity, duration, and logic changes, additions, combinations, eliminations, or other modifications into the then-current Construction Progress Schedule and submit for the Contracting Authority's approval **(1)** that revised Construction Progress Schedule; and **(2)** if the Contracting Authority requests, any of the associated Schedule Reports produced by the scheduling software.

6.5.6.3 If the Contractor incurs an inexcusable delay, the Contractor shall promptly incorporate any associated activity, duration, and logic changes, additions, combinations, eliminations, or other modifications into the then-current Construction Progress Schedule and submit for the Contracting Authority's approval **(1)** that revised

Construction Progress Schedule; and **(2)** if the Contracting Authority requests, any of the associated Schedule Reports produced by the scheduling software. The Contracting Authority's approval will not constitute an extension of the Contract Times due to the inexcusable delay.

6.5.6.4 The Contractor's submission of a revised Construction Progress Schedule shall serve as an affirmation that the Contractor intends to and is capable of performing the Work consistent with the associated revised Construction Progress Schedule update.

6.5.6.5 If the Contracting Authority and the Contractor cannot reach agreement on Construction Progress Schedule modifications resulting from a Modification or inexcusable delay, and the Contracting Authority requests, the Contractor shall prepare and submit a time-impact analysis when and as described under **Section 7.9.3**.

6.5.7 Short-Interval Schedules and Weekly Schedule Reports

6.5.7.1 A "Short-Interval Schedule" is a three- to four-week (past week, current week, and the next one to two weeks) schedule window that **(1)** breaks down existing schedule activities into smaller and more-manageable components with relatively short durations; and **(2)** is consistent with the then-current Construction Progress Schedule.

6.5.7.2 On a weekly basis, and no less than 24 hours before the next regularly scheduled Progress Meeting, the Contractor shall prepare and submit a Short-Interval Schedule to the A/E. The Contractor shall present and be prepared to discuss the Short-Interval Schedule during that Progress Meeting, and the A/E shall attach the Short-Interval Schedule to the minutes of that Progress Meeting.

6.5.8 Recovery Plan and Revised Construction Progress Schedule

6.5.8.1 If it is apparent to the Contracting Authority or A/E that the Contractor may be unable to meet critical path activities, Milestone completion dates, or the Substantial Completion date(s); the A/E shall direct the Contractor to submit within three days a recovery plan to avoid or minimize delay to the Project.

6.5.8.2 A recovery plan shall include, but is not limited to, adjustments to the following:

- **.1** workforce;
- **.2** hours per shift;
- **.3** shifts per workday;
- **.4** workdays per week;
- **.5** material and equipment procurement; and
- **.6** activity logic.

6.5.8.3 The Contractor's submission of a recovery plan shall serve as an affirmation that the Contractor **(1)** prepared the recovery plan in consultation with its Subcontractors, and **(2)** intends to and is capable of performing the Work consistent with that recovery plan.

6.5.8.4 If the Owner and Contracting Authority approve the recovery plan, within seven days after the plan approval, the Contractor shall incorporate that plan into a revised Construction Progress Schedule which the Contractor shall prepare and submit for review and approval in accordance with **Section 6.5.6**. If the Owner and Contracting Authority do not approve the recovery plan, the Contractor shall submit an alternate recovery plan within three days.

6.5.9 Small-Project Exceptions

6.5.9.1 This **Section 6.5** applies to a Small Project, which is a Project for which the initial Contract Sum is less than $500,000, except as explicitly provided in this **Section 6.5.9.**

6.5.9.2 In lieu of **Section 6.5.2**, the Contractor shall provide each submission of the Construction Progress Schedule **(1)** as a Gantt chart in PDF; **(2)** as a Gantt chart in hardcopy if the Contracting Authority requests; and **(3)** an Electronic File in its native format.

6.5.9.3 In lieu of **Section 6.5.3**, the Contractor shall include at least the following information in the Construction Progress Schedule:

- **.1** a clear graphics legend;
- **.2** the Contracting Authority's Project number and Project name;
- **.3** identification of each stage of the Work and any Milestone dates;
- **.4** identification of activities and durations for **(1)** date(s) of Substantial Completion; **(2)** Project close-out requirements; and **(3)** and Contract Completion;
- **.5** for each activity, a maximum duration that is appropriate for the activity but not in excess of 15 days;
- **.6** other items required by the Contracting Authority, Owner, or A/E; and

.7 the Contractor's signature approval and date lines, which the Contractor shall complete indicating approval of each submitted schedule.

6.5.9.4 In lieu of **Section 6.5.4.1**, unless the Contracting Authority and Contractor agree otherwise, within 15 days after the execution of the Agreement, the Contractor shall submit to the Contracting Authority and A/E a fully developed, baseline Construction Progress Schedule in compliance with this **Section 6.4.**

6.5.9.5 In lieu of **Section 6.5.5.2,** the Contractor shall generate monthly Construction Progress Schedule updates based upon and relative to the Contracting Authority-approved baseline Construction Progress Schedule to reflect and include **(1)** the actual progression and sequence of the Work; **(2)** actual and projected start and completion dates; and **(3)** actual Modifications.

6.5.9.6 The Contractor may, but is not obligated to comply with **Sections 6.5.3.4**, **6.5.3.5**, **6.5.3.6**, **6.5.3.7**, **6.5.5.3**, **6.5.5.4**, and **6.5.5.5**.

6.6 Progress Meetings

6.6.1 The A/E shall schedule a weekly progress meeting for the Contractor and other Persons involved in the Project. The purpose of the progress meeting is to review progress on the Project during the previous week, discuss anticipated progress during the following weeks, review critical operations, and discuss critical problems.

6.6.2 The Contractor shall be represented at every progress meeting by a Person authorized with signature authority to make decisions regarding possible modification of the Contract Documents or Construction Progress Schedule.

6.6.2.1 The A/E shall notify the Contractor and other Persons involved in the Project of the time and place of the progress meeting that shall thereafter be the same day and hour of the week for the duration of the Project, unless the A/E notifies the Contractor and other Persons involved in the Project of a different day and hour at least two days in advance.

6.6.2.2 The Contractor shall have any of its Subcontractors attend the progress meeting as determined advisable by the Contractor, or as requested by the A/E.

6.6.3 The A/E shall prepare a written report of each progress meeting and distribute the report to the Contracting Authority, Owner, and Contractor. The A/E shall not delegate the duty to prepare a written report of any progress meeting.

6.6.3.1 If any Person in attendance objects to anything in a report of a progress meeting, the Person shall notify the A/E, Contracting Authority, and any other affected Person in writing explaining the objection within five days.

6.6.3.2 The report of each progress meeting shall reflect any objection made to the report of the previous progress meeting and any response.

6.7 Project Coordination

6.7.1 The Contractor shall prepare drawings ("Coordination Drawings") after the Contractor and appropriate Subcontractors ("Coordination Participants") **(1)** determine the sequence of the Project, **(2)** identify the areas requiring special attention ("Coordination Areas"), and **(3)** determine the need for a coordination drawing for any Coordination Area. The Contractor shall prepare the Coordination Drawings with Computer-Aided Design ("CAD") or BIM software acceptable to the Contracting Authority. The Coordination Drawings shall show the sheet metal work with plan and elevation dimensions, which specifically locate all HVAC ductwork, HVAC equipment, and HVAC piping for each Coordination Area based upon the information, discussion, and resulting consensus of the Coordination Participants.

6.7.1.1 After the Contractor completes the Coordination Drawings, the Contractor shall forward a copy of the Coordination Drawings to the A/E, Contracting Authority, and Owner.

6.7.1.2 The A/E shall review the Coordination Drawings to determine whether the Coordination Participants achieved the goals listed in **Section 6.7.1**. The A/E shall report any concerns, in writing, to the Coordination Participants within 14 days after receiving the drawings.

6.8 Review of Contract Documents and Field Conditions

6.8.1 Before starting each portion of the Work, the Contractor shall carefully study and compare the various Contract Documents relative to that portion of the Work, shall take field measurements of any existing conditions related to that portion of the Work, and shall observe any conditions at the Site affecting it.

6.8.2 If the Contractor finds any perceived ambiguity, conflict, error, omission, or discrepancy on or between any of the Contract Documents, or between any of the Contract Documents and any Applicable Law, the Contractor, before proceeding with the Work, shall promptly submit a RFI to the A/E for an interpretation or clarification.

6.8.2.1 Before submitting any RFI to the A/E, the Contractor shall carefully review the Contract Documents to ensure that the Contract Documents do not answer the RFI.

6.8.2.2 The A/E shall promptly respond to each RFI.

6.8.2.3 Any interpretation or clarification of the Contract Documents made by any Person other than the A/E, or in any manner other than writing, shall not be binding and the Contractor shall not rely upon it.

6.8.3 If the Contractor believes that it is entitled to an adjustment of the Contract Sum or Contract Times, or both, on account of clarifications or instructions issued by the A/E in response to a RFI, the Contractor shall initiate a Change Request **(1)** as required under **Section 7.6**, and **(2)** within the time period under **Section 7.6**, which begins to run on the day that the Contractor receives the A/E's RFI response.

6.9 Differing Site Conditions

6.9.1 If the Contractor reasonably believes that it has encountered a Differing Site Condition, the Contractor shall immediately stop Work on that suspected Differing Site Condition and verbally report the condition to the Contracting Authority and A/E, and within one business day deliver written notice of the condition to the Contracting Authority and A/E.

6.9.1.1 The Contractor's failure to give notice of the Differing Site Condition as required under this **Section 6.9** will constitute an irrevocable waiver of any associated Claim.

6.9.1.2 The written notice of a Differing Site Condition under this **Section 6.9** shall be required before submission of a Change Request under **Section 7.6** or notice of Claim under **Article 8**.

6.9.2 Promptly after receiving notice from the Contractor under **Section 6.9.1**, the A/E shall investigate to determine whether the Contractor has encountered a Differing Site Condition. The A/E shall give written notice of its determination to the Contracting Authority and Contractor within ten days after completing the investigation.

6.9.2.1 If the A/E determines that the Contractor has encountered a Differing Site Condition and the Contracting Authority and Contractor agree with the A/E's determination, the A/E shall process an associated Change Order or Change Directive as appropriate.

6.9.2.2 If the A/E determines that the Contractor has encountered a Differing Site Condition, but the Contracting Authority disagrees with the A/E's determination, the A/E shall process an associated Change Directive through which the Contracting Authority may convey its disagreement with the A/E's determination.

6.9.2.3 If the A/E determines that the Contractor has not encountered a Differing Site Condition and the Contractor does not agree with that determination, the Contractor shall initiate a Change Request **(1)** as required under **Section 7.6**; and **(2)** within the time period required under **Section 7.6** which begins to run on the day that the A/E issues its determination.

6.10 Protection of the Project

6.10.1 The Contractor shall protect the Work from weather and maintain the Work and all materials, apparatus, and fixtures free from injury or damage until Substantial Completion of the Work.

6.10.1.1 The Contractor shall at all times cover or protect the Work.

6.10.1.2 The Contractor, at its expense, shall remove, and replace with new, any Work damaged as a result of the Contractor's failure to provide coverage or protection.

6.10.1.3 The Contractor, at its expense, shall repair or replace any adjacent property, including, but not limited to, roads, walks, shrubbery, plants, trees, or turf, damaged during performance of the Contract.

6.10.1.4 After the date of Substantial Completion of the Work, the Owner is responsible for protecting and maintaining all materials, apparatus, and fixtures for the occupied portion of the Project free from injury or damage.

6.10.2 The Contractor shall protect the Project and existing or adjacent property from damage at all times and shall erect and maintain necessary barriers, furnish and keep lighted necessary danger signals at night, and take reasonable precautions to prevent injury or damage to individuals or property.

6.10.3 The Contractor shall not load, or permit any part of the Project to be loaded, in any manner that endangers the Project, or any portion thereof. The Contractor shall not subject any part of the Project or existing or adjacent property to stress or pressure that endangers the Project or property.

6.10.4 The Contractor shall provide all temporary bracing, shoring, and other structural support required for safety and proper execution of the Work.

6.10.5 Vibration, Noise, and Dust Control.

6.10.5.1 The Contractor shall provide controls/barriers for vibrations, noise, and dust control in occupied buildings as required by the construction operations.

6.10.5.2 The Contractor will not be permitted to exhaust or release unfiltered air, dust, construction debris, or other undesirable products into the exterior atmosphere or into occupied areas of the building outside the Site. The Project Manager may limit or stop the Work if the Contractor does not maintain proper air-quality standards.

6.10.5.3 In certain occupied buildings, tasks might be of such a nature that noise and vibration cannot be tolerated. In such spaces, Work shall be scheduled for other than normal working hours. The Contractor is cautioned that weekend or overtime work, if required, shall be performed at no additional cost. The Contractor shall obtain the Contracting Authority's written permission before working other than standard hours. Weekend and overtime Work shall be reflected in the Construction Progress Schedule.

6.10.5.4 The Contractor is responsible for vibration control and control of transmission of noise arising from the Work. Principal considerations that shall be given to noise and vibration control are:

- **.1** Noise control in compliance with Occupational Safety and Health Administration ("OSHA") requirements for the health and safety of building occupants; control shall be for all areas of the facility, including equipment rooms, boiler rooms, and fan rooms.
- **.2** Vibration control to limit sound produced by construction equipment, and for protection of the equipment existing in a building and the building structure.
- **.3** Vibration control to provide for maximum usefulness of the facility by keeping levels of vibration within ranges conducive to study and work or other uses for which the facility is designed.

6.11 Materials and Equipment

6.11.1 The Contractor shall bring to or store at the Site only the materials and equipment required in the Work. If possible, materials and equipment should be installed in their final positions when brought to the Site.

6.11.1.1 The Contractor shall properly store and protect all materials and equipment it provides to the Project.

6.11.1.2 The Contractor shall timely remove from the Site any materials or equipment no longer required for the Work.

6.11.2 The Contractor shall not allow materials or equipment to damage the Project or adjacent property, or to endanger any individual at or near the Site.

6.11.3 If the Contractor provides an Acceptable Component, the Contractor shall be solely responsible for the costs of coordination and modification required.

6.11.4 If the Contractor provides approved Substitutions that require changes to the Contract Documents, the Contractor shall be solely responsible for the additional costs incurred as a result, including, but not limited to, changes to the design by the A/E.

6.11.5 The A/E shall consider Requests for Substitutions after the Bid opening only when the Contractor can conclusively demonstrate to the A/E the following conditions:

6.11.5.1 the specified Basis of Design Components, Acceptable Components, or previously-approved Substitutions, through no fault of the Contractor or a Subcontractor, are not available; or

6.11.5.2 the specified Basis of Design Components, Acceptable Components, or previously-approved Substitutions will not perform as designed or intended.

6.11.6 The Contractor's incorporation of unapproved Substitutions in the Work is Defective Work.

6.12 Labor

6.12.1 The Contractor shall maintain a sufficient workforce and enforce good discipline and order among its employees and the employees of its Subcontractors. The Contractor shall not permit employment of individuals not skilled in tasks assigned to them.

6.12.2 The Contractor shall dismiss from the Project any individual employed by the Contractor, or a Subcontractor, who the Contracting Authority finds, in its sole discretion, to be incompetent, guilty of misconduct, or detrimental to the Project.

6.12.3 The Contractor shall employ all legal efforts to minimize the likelihood or effect of any strike, Work stoppage, or other labor disturbance. Informational pickets shall not justify any Work stoppage.

6.13 Safety Precautions

6.13.1 The Contractor shall take reasonable precautions to ensure the safety of individuals on the Project.

6.13.1.1 The Contractor is responsible for designing and implementing its own safety program, including compliance with OSHA regulations. The Contractor's safety plans, such as fall protection, hazards, communications, competent person, etc., shall meet or exceed the Owner's safety plan (if any).

6.13.2 The Contractor shall pay any fine or cost incurred because of the Contractor's violation, or alleged violation, of Applicable Law.

6.13.3 Before starting any Work, the Contractor shall submit to the Contracting Authority a copy of the Contractor's site-specific safety plan and safety manuals.

6.13.4 The Contractor shall not introduce Hazardous Materials to the Project (other than as specified in the Contract Documents or customary construction materials or equipment) or burn any fires on the Site.

6.13.4.1 If the Contractor brings Hazardous Materials to the Project, the Contractor shall take reasonable precautions to prevent the Hazardous Materials from causing bodily injury or death, property damage, or environmental damage.

6.13.4.2 The Contractor shall notify the Project Manager 24 hours before the start of non-routine or non-recurring hot-work. Use of sources of fire, flame or sparks and flammable materials shall be kept to an absolute minimum. At the beginning of the Project, the Contractor shall inform the Project Manager of its intent to use blowtorches, welding apparatus or similar exposed flame and sparking devices. The Contractor shall give similar notice in regard to the use of flammable liquids, adhesives, and cleaners.

6.13.4.3 The Contractor shall furnish an appropriate number of fire extinguishers (minimum of one), which shall be within the immediate areas where work is being done at all times. The extinguisher(s) shall be adequate and suitable for the class of fire likely to be caused by the Contractor's operations.

6.13.5 Work Stoppage Due to Hazardous Materials.

6.13.5.1 If the Contractor encounters material the Contractor reasonably believes to be or contain, a Hazardous Material that has not been rendered harmless, the Contractor shall immediately stop Work in the affected area and verbally report the condition to the Contracting Authority and A/E, and within one business day deliver written notice of the condition to the Contracting Authority and A/E.

6.13.5.2 The Contracting Authority will promptly determine the necessity of the Owner retaining a qualified environmental consultant to evaluate the suspected Hazardous Material and to issue a related written report. Where appropriate, the Owner will engage a licensed abatement contractor to remove the material or render it harmless as directed.

6.13.5.3 The Contractor shall resume Work in the affected area upon written notice from the A/E that **(1)** the suspect material was evaluated and found not to be or contain a Hazardous Material, or **(2)** the suspect material has been removed or rendered harmless.

6.13.5.4 If the Contractor knowingly or negligently proceeds with the Work in an area where a Hazardous Material exists and has not been rendered harmless, the Contractor shall be solely responsible for all related claims, damages, losses, and expenses, including, but not limited to, attorneys' fees, arising out of or resulting from performing the Work in the affected area.

6.13.5.5 The term "rendered harmless" means that the level of exposure is less than any applicable exposure standards set forth in Applicable Law.

6.13.6 Safety Data Sheets.

6.13.6.1 The Contractor shall identify any material it uses at the Site with a Safety Data Sheet ("SDS") meeting the requirements of OSHA's Hazard Communication Standard.

6.13.6.2 The Contractor shall maintain a notebook containing all of its applicable SDSs. That notebook shall be kept at the Site for the duration of the Project.

6.14 Construction Facilities, Utilities, and Equipment

6.14.1 Facilities.

6.14.1.1 The Contractor shall provide and maintain clean and suitable temporary facilities, equipment, services, and enclosed storage for its use at the Site.

6.14.1.2 The Contractor shall provide and maintain in a clean condition:

.1 suitable facilities, equipment, and services for use by the A/E and Contracting Authority;

.2 adequate space, equipment, furnishings, and services to conduct progress meetings including Wi-Fi internet access and the ability to conduct internet-based video conferences, and a large-format electronic display of suitable scale for the meeting room;

.3 adequate space to store approved documents and permits; and

.4 adequate sanitary facilities for use by all Persons at the Site.

6.14.2 Environmental Controls.

6.14.2.1 The Contractor shall protect its Work and materials from weather and damage from heat, cold, and humidity.

6.14.2.2 Until the permanent HVAC system is complete and available for use:

.1 the Contractor shall make arrangements and pay for installation and maintenance of temporary heating and ventilating systems; and

.2 the Contractor shall pay the costs incurred in operating the temporary heating and ventilating systems.

6.14.2.3 When the permanent HVAC system is complete and available for use:

.1 The Contractor shall start up and maintain operation of the permanent HVAC system, including filters, and promptly remove temporary heating and ventilating systems.

.2 If the Project consists entirely of new construction, the Contractor shall pay the costs of energy consumed in operating the permanent HVAC system until Substantial Completion.

.3 If the Project is a renovation of an existing building or structure, addition(s) to an existing building or structure, or any combination of new construction and renovation work that does not allow separate metering of utilities, the Owner shall pay the costs of energy consumed in operating the permanent HVAC system.

6.14.2.4 From the date of Substantial Completion, the Owner shall pay the cost of operating the permanent HVAC system for the occupied portion of the Project.

6.14.2.5 If the permanent HVAC system is used during construction, the Contractor shall furnish an extended warranty and service contract in effect until the expiration of the Correction Period.

6.14.3 Water and Drainage.

6.14.3.1 The Contractor shall provide water necessary for the Work until the permanent plumbing system is available for use.

6.14.3.2 The Contractor shall provide temporary drainage and dewatering necessary for the Work and shall employ pumps, trenches, drains, sumps, and other necessary elements required to provide satisfactory working conditions for the protection, execution, and completion of the Project.

6.14.3.3 The Contractor shall make arrangements and pay for installation and maintenance of temporary plumbing systems until the permanent plumbing system is available for use.

6.14.3.4 When the permanent plumbing system is complete and available for use:

.1 The Contractor shall start up and maintain operation of the permanent plumbing systems, and make arrangements and pay for removal of temporary plumbing systems.

.2 If the Project consists entirely of new construction, the Contractor shall pay the costs of water consumed and sewerage charges until Substantial Completion.

.3 If the Project is a renovation of an existing building or structure, addition(s) to an existing building or structure, or any combination of new construction and renovation work that does not allow separate metering of utilities, the Owner shall pay the costs of water consumed and sewerage charges.

6.14.3.5 From the date of Substantial Completion, the Owner shall pay the costs of water consumed and sewerage charges for the occupied portion of the Project.

6.14.3.6 If the permanent plumbing system is used during construction, the Contractor shall furnish an extended warranty and service contract in effect until the expiration of the Correction Period.

6.14.4 Electric Service.

6.14.4.1 The Contractor shall provide temporary light and power; and pay the charges for temporary electric service installation and removal if required.

6.14.4.2 If the Project consists entirely of new construction, the Contractor shall pay the cost of energy consumed until Substantial Completion.

6.14.4.3 If the Project is a renovation of an existing building or structure, addition(s) to an existing building or structure, or any combination of new construction and renovation work that does not allow separate metering of utilities, the Owner shall pay the cost of energy consumed.

6.14.4.4 From the date of Substantial Completion, the Owner shall pay the cost of energy consumed for the occupied portions of the Project.

6.14.4.5 If the permanent electrical system is used during construction, the Contractor shall furnish an extended warranty and service contract in effect until the expiration of the Correction Period.

6.14.5 Hoisting Facilities.

6.14.5.1 The Contractor shall erect and maintain any hoisting equipment required for its Work.

6.14.5.2 If the electric service requirements of hoisting facilities differ from that available at the Site, the Contractor shall provide and pay for all necessary connections.

6.14.5.3 If a permanent elevator is identified in the Contract Documents to be used for hoisting materials or personnel during construction, the Contractor shall furnish an extended warranty and service contract in effect until the expiration of the Correction Period.

6.15 Progress Cleaning

6.15.1 The Contractor shall remove all waste materials, rubbish, and mud attributable to the Work to an appropriate disposal location at or near the Site.

6.15.2 The Contractor shall perform weekly broom cleaning of hard flooring surfaces in the area of the Work.

6.15.3 The Contractor shall remove, once each working day or as appropriate for the Project, all waste materials and rubbish from the disposal location at or near the Site.

6.15.4 The Contractor shall remove, as appropriate for the Project or as the A/E or Owner directs, any waste materials or rubbish from areas adjacent to the Project.

6.15.4.1 The Contractor shall dispose of waste materials, rubbish, and construction debris in a lawful manner in approved recycling facilities or landfills.

6.15.5 If the Contractor fails to clean up during the progress of the Work, the Contracting Authority may clean up on behalf of the Contractor and at the Contractor's expense. If the Contractor fails to maintain the areas adjacent to the Project clean and free of waste materials and rubbish, the Contracting Authority may also direct the local jurisdiction responsible for the area to have the area cleaned to its satisfaction at the Contractor's expense.

6.15.5.1 The Contracting Authority may deduct the cleaning costs from payments then or thereafter due the Contractor. If payments then or thereafter due the Contractor are not sufficient to cover those amounts, the Contractor shall immediately pay the amount of the insufficiency to the Owner.

6.15.6 The Contractor shall remove excavated material and spoil to a suitable off-site location approved by the Contracting Authority.

6.15.6.1 If the Owner designates a location on its property for disposal or storage of clean topsoil and/or subsoil in the Contract Documents, the Contractor shall remove such materials to the designated location.

6.16 Use of Premises

6.16.1 The Contractor shall use corridors, stairs, and elevators as designated by the Contracting Authority. The Contractor shall exercise extreme care to not exceed the carrying capacity of elevators or damage the cab interior in any way.

6.16.2 Loitering or wandering through the interior of buildings or exterior grounds outside the limits of the Work will not be permitted.

6.16.3 The Contractor shall confine its apparatus, materials, and the operations of its workers to the limits indicated by Applicable Law and the directions of the A/E or Project Manager.

6.16.4 No signs or advertising of any kind will be permitted on or about the Site, except those appearing on trucks and trailers.

6.16.5 Site Logistics Plan.

6.16.5.1 No later than seven days after the Date of Commencement, the Contractor shall prepare a Site Logistics Plan and submit it to the Contracting Authority and Owner for their review and approval. Through the Site Logistics Plan, the Contractor shall indicate how the Contractor intends to use the Site, and illustrate things such as areas to be used for lay down of material and equipment; office and storage trailer locations; vehicular access gates with ingress and egress routes; locations of wheel wash and concrete truck wash out activities; and offloading and hoisting locations.

6.16.6 Smoking and Tobacco Products.

6.16.6.1 All State buildings are smoke free. Smoking will not be permitted in any indoor area. The ban on tobacco products will be observed in all indoor and outdoor areas and parking areas on all State-owned and -leased property. The Contractor shall enforce these restrictions on any individual employed by the Contractor or a Subcontractor.

6.17 Interruption of Existing Services

6.17.1 Whenever it becomes necessary to interrupt existing services in use by the Owner or its tenants, including but not limited to sewer, water, gas, and steam lines, electric, telephone, and cable service, the Contractor shall continue the associated Work on a non-stop 24-hour per day basis until that Work is completed and the service restored, or at an alternate time required by the Contracting Authority.

6.17.2 Before beginning that Work, the Contractor shall apply in writing to, and receive approval in writing from, the Owner, through the A/E, to establish a time when interruption of the service will cause a minimum of interference with the activities of the Owner and its tenants.

6.18 Explosives and Blasting

6.18.1 The Contractor shall not conduct blasting on, or bring explosives to, the Site without the prior written approval of the Contracting Authority, Owner, and other authorities with jurisdiction.

6.18.2 The Contractor shall perform all blasting, storing, and handling of explosives as required under Applicable Law.

6.18.2.1 The Contractor shall carry appropriate liability insurance coverage, as required by the Contract Documents, for its blasting and explosives storage and handling operations. Immediately upon request, the Contractor shall deliver evidence of that insurance to the Contracting Authority.

6.19 Building Commissioning

6.19.1 If the Project scope includes building commissioning, the Contractor shall participate in the Commissioning Process, as prescribed in the Contract Documents.

6.19.2 The Contractor shall permit the A/E, or a third-party Commissioning Agent ("CxA") if applicable, access to commission performance based equipment, fixtures, and systems (e.g., HVAC, fire protection, smoke evacuation, fume hoods, emergency power, etc.), prior to Substantial Completion.

6.19.3 The A/E, or CxA if applicable, shall promptly notify the Contractor in writing of any deficiency identified during the Commissioning Process.

6.19.4 To facilitate the Commissioning Process, the Contractor shall submit one hard copy and one electronic copy of Operation and Maintenance Manuals for dynamic and engineered systems to the A/E, and CxA if applicable, for approval. That submission shall occur within 30 days following approval of all related Contractor submittals required by the Contract Documents.

6.20 Action Submittals

6.20.1 Submittal Description. Shop Drawings, Product Data, Samples, and other submittals for the A/E's review and action shall be provided by the Contractor for any item required by the Contract Documents but not fully described in the Contract Documents, unless waived by the A/E, and include, but are not limited to:

6.20.1.1 construction of the various parts, method of joinery, type of materials, grade, quality and thickness of materials, alloy of materials, profiles of all sections, reinforcement, method of hanging doors or installing windows, anchorage, and type and grade of finish;

6.20.1.2 capacities, types of materials and performance charts that are pertinent to the materials, and performance charts that are pertinent to the equipment item; and

6.20.1.3 wiring diagrams, control diagrams, schematic diagrams, working and erection dimensions, arrangement, and specifications.

6.20.2 Form of Submittals. The Contractor shall provide a transmittal letter, review and stamp its approval, and transmit the submittals to the A/E in accordance with the submittal schedule established by the A/E and Contractor.

6.20.2.1 The Contractor shall submit a minimum of one reproducible and three copies of Shop Drawings, and a minimum of four copies of any other submittal, except when using the project management software under **Section 2.1.4.2**.

6.20.2.2 The data shown on the Shop Drawings shall be complete with respect to quantities, dimensions, specified performance and design criteria, materials, and similar data to communicate to the A/E the materials and equipment that the Contractor proposes to provide.

6.20.2.3 Each Sample shall be identified clearly as to materials, supplier, pertinent data as catalog numbers, the intended use, and other uses as the A/E may require enabling the A/E to review the submittal.

6.20.3 Delegated Design.

6.20.3.1 If the Contract Documents require the Contractor to provide professional design services or certifications by a design professional related to systems, materials, or equipment, the Contractor shall confirm with the A/E the appropriate performance and design criteria that such services shall satisfy. The Contractor shall submit Shop Drawings and other submittals related to the Work designed or certified by the design professional retained by the Contractor to the A/E for review.

6.20.4 Variation from Contract Documents. If the submittals show variations from the requirements of the Contract Documents, the Contractor shall specifically and clearly identify the variations in its letter of transmittal.

6.20.4.1 Variations that may affect the construction quality, cost or timeline shall be submitted by the A/E to the Contracting Authority for review, and if approved, shall be incorporated into the Work by Change Order or an order for a minor change in the Work (as appropriate).

6.20.4.2 The Contractor shall not be relieved of responsibility for deviations from the Contract Documents by the A/E's approval of submittals.

6.20.4.3 Submittals are not Contract Documents. In the event of conflicts between submittals and the Contract Documents, the Contract Documents take precedence and govern the Work.

6.20.5 Contractor's Submittal Review. The Contractor shall review and stamp "approved" all submittals before forwarding them to the A/E. If it is apparent to the A/E that the Contractor has not reviewed the submittals, or has conducted an incomplete review, the A/E may reject the submittals.

6.20.5.1 The Contractor shall field verify conditions as necessary and make corrections of dimensions, locations of various items, encroachments of work of Separate Contractors, or variations from the requirements of the Contract Documents.

6.20.5.2 If required by the Contract Documents or Applicable Law, the Contractor shall have Shop Drawings or other submittals prepared by Persons possessing expertise and experience in an appropriate trade or profession or by a registered architect, professional engineer, or other professional as required under Applicable Law.

6.20.5.3 By approving and submitting submittals, the Contractor represents that the Contractor has determined and verified materials, field measurements, and field construction criteria related to the associated Work, or shall do so, and has checked and coordinated the information contained within the submittals with the requirements of the Work and of the Contract Documents.

6.20.6 A/E's Submittal Review. The A/E shall review submittals for conformity with design intent within 14 days after receiving them or in accordance with the approved submittal schedule, or other period as mutually agreed by the A/E and Contractor. The A/E's review of submittals is to determine if the items covered by the submittals will, after installation and incorporation into the Work, conform to the Contract Documents and be compatible with the design concept of the Project as a functioning whole.

6.20.6.1 The Contractor shall make corrections required by the A/E and resubmit the required number of corrected copies of submittals until approved, which resubmission shall be acted upon by the A/E within 14 days after receiving them, or other period mutually agreed by the A/E and Contractor.

6.20.6.2 When resubmitting corrected submittals, the Contractor shall direct the A/E's attention to revisions made by noting revisions on the resubmittal.

6.20.6.3 The Contractor shall pay all reasonable costs of the A/E, Owner, and Contracting Authority for attendant delay, interference, hindrance, or disruption of the Project due to excessive resubmittals without fault of the A/E, Owner, or Contracting Authority. Resubmittals in excess of two without fault of the A/E, Owner, or Contracting Authority may be determined excessive by the Contracting Authority.

6.20.6.4 The A/E may hold Samples and other submittals used to coordinate finishes, colors, patterns, textures, or other characteristics until submittals for adjacent materials are available. Within seven days after receiving the submittal, the A/E shall issue a written notice to the Contractor stating that the submittal is being held.

6.20.6.5 If coordinating submittals are not received within the period required for action on previously received submittals that are held in accordance with **Section 6.20.6.4**, review of the previously received submittals may be delayed.

6.20.6.6 The A/E's review shall not extend to means, methods, manners, techniques, sequences, or procedures of construction, or to safety precautions or incident programs.

6.20.6.7 The review and approval of a separate item shall not indicate approval of the assembly in which the item functions.

6.20.7 Risk of Nonpayment. The Contractor shall not commence any portion of the Work requiring Shop Drawings, Product Data, Samples, or other submittals until the submittal has been approved by the A/E. If the Contractor starts Work before the A/E's final approval of the submittal, the Contractor does so at its own risk that payment may not be approved by the Contracting Authority or made by the Owner for the related Work.

6.21 Warranty

6.21.1 The Contractor warrants to the Contracting Authority and Owner that all materials and equipment furnished under the Contract shall be new and of good quality unless otherwise required or permitted by the Contract Documents, that the Work shall be free from defects not inherent in the quality required or permitted, and that the Work shall conform to the requirements of the Contract Documents. Work not conforming to those requirements, including Substitutions not properly approved and authorized is Defective Work. If required by the A/E, the Contractor shall furnish satisfactory evidence as to the kind and quality of materials and equipment.

6.21.2 If the Contractor or a Subcontractor recommends a particular product, material, system, or item of equipment for incorporation into the Project and the Owner accepts that recommendation, the above warranty includes a warranty from the Contractor to the Owner that the recommended product, material, system, or item of equipment is fit and appropriate for the associated purpose.

6.22 Additional Tests and Inspections

6.22.1 If before or after Substantial Completion the A/E or the Contracting Authority determines that any portion of the Work requires special inspection, testing, or approval not otherwise required under the Contract Documents, the A/E shall order such inspection, testing, or approval.

6.22.1.1 If the special inspection, testing, or approval reveals Defective Work, the Contractor shall pay all associated costs and will not be entitled to any related adjustment of the Contract Times. Those costs may include, but are not limited to:

- **.1** the cost of the special inspection, testing, or approval;
- **.2** the cost of conducting the special inspection, testing, or approval on similar Work regardless of whether the similar Work is also revealed as Defective Work;
- **.3** the cost of additional special inspections, testing, or approvals to evaluate remedial Work;
- **.4** the cost of correcting the Defective Work; and
- **.5** all related Owner-incurred fees and charges of contractors, engineers, architects, attorneys, and other professionals.

6.22.1.2 The Contracting Authority may deduct the costs described under **Section 6.22.1.1** from payments then or thereafter due the Contractor. If payments then or thereafter due the Contractor are not sufficient to cover those amounts, the Contractor shall immediately pay the amount of the insufficiency to the Owner.

6.22.1.3 If the special inspection, testing, or approval reveals that the Work complies with the Contract Documents, and the Contractor believes that it is entitled to an adjustment of the Contract Sum or Contract Times, or both, on account of the special inspection, testing, or approval, the Contractor shall initiate a Change Request **(1)** as required under **Section 7.6**, and **(2)** within the time period required under **Section 7.6** which begins to run on the day of the special inspection, testing, or approval.

6.22.2 If the Contractor is aware of a need for inspection, testing, or approval, or of a need to have any inspection, testing, or approval completed by a particular time to avoid delay, then the Contractor shall timely communicate such information to the A/E and Contracting Authority.

6.22.3 Except as described under **Section 6.22.1**, the Owner shall pay for any inspection, testing, or approval that did not become a requirement until after it awarded the Contract.

6.22.4 The Contractor shall coordinate with and give the A/E, Contracting Authority, and Owner reasonable notice of the anticipated dates of all inspections, testing, or approvals.

6.22.5 Within five days after completion of an inspection, testing, or approval, the A/E shall provide an original report/certificate of the inspection, testing, or approval to the Contractor and Contracting Authority with a recommendation for or against acceptance of the results therein.

6.23 Uncovering the Work

6.23.1 If the Contractor covers Work contrary to the requirements of the Contract Documents or contrary to the written request of the Contracting Authority or A/E, the Contractor shall, if the Contracting Authority or A/E requests in writing, uncover that Work for observation, correct it if not in conformity with the Contract Documents, and recover it at the Contractor's expense without adjustment of the Contract Times.

6.23.2 If the Contractor covers Work in accordance with the Contract Documents and not contrary to a request from the A/E or Contracting Authority for an opportunity to observe the Work prior to covering, the Contractor shall, if the A/E requests in writing, uncover that Work.

6.23.2.1 If the uncovered Work is Defective Work, the Contractor shall pay the costs of uncovering, correcting, and recovering the Work and shall not be entitled to an adjustment of the Contract Times.

6.23.2.2 If the uncovered Work is not Defective Work and the Contractor believes that it is entitled to an adjustment of the Contract Sum or Contract Times, or both, on account of the uncovering and recovering of the Work, the Contractor shall initiate a Change Request **(1)** as required under **Section 7.6**, and **(2)** within the time period required under **Section 7.6** which begins to run on the day that the Contracting Authority or A/E observes the uncovered Work.

6.24 Correction of the Work

6.24.1 Before Substantial Completion.

6.24.1.1 If the Contractor provides Defective Work or fails or neglects to perform the Work in accordance with the Construction Progress Schedule, the Contracting Authority or A/E may issue a written notice to the Contractor and Contractor's Surety directing the Contractor to correct the Defective Work or recover schedule deficiencies. Unless otherwise specified in that written notice, the Contractor shall promptly commence and diligently pursue correction of the Defective Work and recovery of schedule deficiencies within three days after the Contracting Authority issues the written notice ("72-Hour Notice").

6.24.1.2 If the Contractor fails to promptly commence and diligently pursue correction of the Defective Work and recovery of schedule deficiencies required under **Section 6.24.1.1**, the Owner may correct the Defective Work or take action to recover schedule deficiencies without giving further notice to the Contractor or Contractor's Surety.

6.24.2 After Substantial Completion.

6.24.2.1 In addition to the Contractor's other obligations under the Contract Documents, if any of the Work is found to be Defective Work after Substantial Completion, the Contractor shall correct it promptly after receipt of written notice from the A/E, Contracting Authority, or Owner to do so, unless the Contracting Authority and Owner have previously acknowledged and accepted the Defective Work in writing as described under **Section 6.25.1**. The A/E, Contracting Authority, or Owner may send a copy of the written notice to the Contractor's Surety, but are not obligated to do so.

6.24.2.2 During the Correction Period. If the Contracting Authority or Owner issues a notice under **Section 6.24.2.1** during the Correction Period, the Owner may correct the Defective Work itself without giving further notice to the Contractor or Contractor's Surety if the Contractor fails to **(1)** notify the Owner in writing of the Contractor's intent to correct the Defective Work within seven days after the Contracting Authority or Owner issues the notice and **(2)** thereafter promptly commence and diligently pursue correction of Defective Work.

6.24.2.3 The Correction Period:

.1 commences on the date of Substantial Completion of the Work or a designated portion of the Work which the Contracting Authority and Owner have agreed to take Partial Occupancy;

.2 relates only to the Contractor's specific obligation and opportunity to correct the Work during the Correction Period;

.3 does not establish a period of limitation with respect to any of the Contractor's other obligations under the Contract Documents;

.4 has no relationship to the time within which the State or Owner may seek to enforce the Contract;

.5 does not establish a period of limitation within respect to the commencement of litigation to establish the Contractor's liability under the Contract or otherwise; and

.6 shall not be extended by corrective Work performed by the Contractor under this **Section 6.24.2**.

6.24.2.4 After the Correction Period. If the Owner issues a notice under **Section 6.24.2.1** after expiration of the Correction Period, the Owner may correct the Defective Work without giving further notice to the Contractor or Contractor's Surety if the Contractor fails to **(1)** notify the Owner in writing of the Contractor's intent to correct the Defective Work within 14 days after the Owner issues the notice and **(2)** thereafter promptly commence and diligently pursue correction of Defective Work.

6.24.3 Emergency Correction of Defective Work.

6.24.3.1 Notwithstanding any other provision of the Contract to the contrary, if in the Contracting Authority's or Owner's opinion the Defective Work presents a threat of imminent harm or danger to people, property, or the environment, the Contracting Authority or Owner may order the Contractor to immediately correct Defective Work or the Owner may correct the Defective Work itself without any prior notice to the Contractor or Contractor's Surety.

6.24.4 Responsibility for Costs of Correction.

6.24.4.1 The Contractor shall pay all of the costs and damages associated with the correction of Defective Work and the recovery of schedule deficiencies under this **Section 6.24**. Those costs and damages may include, but are not limited to, the related fees and charges of contractors, engineers, architects, attorneys, and other professionals; and the cost of correcting or replacing adjacent work. The Contracting Authority may deduct those costs and damages from payments then or thereafter due the Contractor. If payments then or thereafter due the Contractor are not sufficient to cover those amounts, the Contractor shall immediately pay the amount of the insufficiency to the Owner.

6.25 Acceptance of Defective Work

6.25.1 Before final Contract Completion, the Owner may accept any Defective Work instead of requiring its removal or correction, in which case the Contract Sum shall be equitably reduced as described under **Article 7**.

6.25.1.1 The Owner may only accept Defective Work through a deduct Change Order that makes explicit reference to this **Section 6.25**.

6.25.1.2 After final Contract Completion, the Owner may only accept Defective Work by giving written notice to the Contractor that the Owner is accepting the associated Defective Work.

6.25.2 None of the following will constitute **(1)** acceptance of Defective Work, **(2)** a release of the Contractor's obligation to perform the Work in accordance with the Contract, or **(3)** a waiver of any rights set forth in the Contract or otherwise provided by Applicable Law:

6.25.2.1 observations or inspections by the Owner, Contracting Authority, or A/E;

6.25.2.2 the making of any payment;

6.25.2.3 Substantial Completion or the issuance of a Certificate of Substantial Completion;

6.25.2.4 Partial Occupancy and the Owner's use or occupancy of the Work or any part of it;

6.25.2.5 Contract Completion or the issuance of a partial or final Certificate of Contract Completion;

6.25.2.6 any review or approval of a submittal;

6.25.2.7 any inspection, test, or approval by other Persons; or

6.25.2.8 any correction of Defective Work by the Owner.

6.26 Project Document Maintenance and Submittal

6.26.1 During Construction.

6.26.1.1 The Contractor shall maintain in good order at a secure location on the Site:

.1 a complete copy of all Contract Documents; Shop Drawings, Product Data, Samples and similar required submittals; manufacturer operating and maintenance instructions; certificates; warranties; RFIs and responses thereto; and other Project-related documents, all marked currently and accurately to record field changes and selections made during construction and to show actual installation where installation varies from Work as originally shown, including the exact location and depth of underground utility lines; and

.2 a set of Drawings and Specifications, approved in accordance with **Section 5.2.1.1**, and the records required by **Section 6.2.14**.

6.26.1.2 Before submitting each Contractor Payment Request, the Contractor shall record all changes on the Contract Documents, neatly in a contrasting color, noting new information not shown on the original Contract Documents. Failure to record all changes may cause payment to be withheld or delayed by the Contracting Authority.

6.26.1.3 The Contractor shall keep a record of changes made to the Specifications, noting particularly any approved variation from manufacturers' installation instructions and recommendations.

6.26.1.4 If the Contractor uses Shop Drawings to indicate as-built conditions, the Contractor shall cross-reference the Shop Drawing sheet numbers to the corresponding sheet numbers on the Contract Documents. The Contractor shall note related numbers where applicable.

6.26.1.5 The Contractor shall at all times permit access to the documents described in this **Section 6.26.1** to authorized representatives of the State, local authorities with jurisdiction over the Project, Contracting Authority, Owner, and A/E.

6.26.2 Before Contract Completion.

6.26.2.1 As a condition precedent to execution of the Certificate of Contract Completion and final payment, the Contractor shall submit to the A/E:

.1 all LEED-related documents not previously submitted (if applicable); and

.2 the As-Built Documents including one electronic version and one hard-copy version organized into suitable sets of manageable size bound with durable cover sheets and appropriate identification marked on the front and the spine of each binder.

6.26.2.2 The Contractor's As-Built Documents submission shall include, but is not limited to:

.1 Certificate of Occupancy;

.2 inspection certificates for pressure piping, elevator, boiler, electrical, plumbing or piping purification, etc.;

.3 Letter of Approval from the local fire authority or State Fire Marshal for the fire suppression system;

.4 Operation and Maintenance Manuals;

.1 The Contractor shall organize the hard copy of the Operation and Maintenance Manuals into suitable sets of manageable size, and include indexed data bound in individual binders, with pocket folders for folded sheet information.

.5 neatly and accurately marked sets of As-Built Documents, and other Contract Documents reflecting the actual construction of the Project;

.6 detailed Drawings reflecting the exact location of any concealed utilities, mechanical or electrical systems, and components;

.7 assignment to the Owner of all warranties and guarantees, including the most-recent address and telephone number of any Subcontractors or manufacturers.

6.26.2.3 By submitting the As-Built Documents to the A/E, the Contractor certifies that its As-Built Documents are complete, correct, and accurate.

6.26.3 Record Documents.

6.26.3.1 The A/E shall revise the original Contract Documents and related Electronic Files with the information contained on the As-Built Documents. The A/E shall label the revised original Contract Documents and related Electronic Files as "Record Documents" and reflect the date of the A/E's incorporation of the As-Built Documents.

6.26.3.2 The Owner may thereafter use the Record Documents for any purpose relating to the Project including, but not limited to, additions to or completion of the Project.

6.27 Final Cleaning

6.27.1 Before requesting the Substantial Completion inspection of the Work, the Contractor shall clean the Site, remove waste materials and rubbish attributable to the Project, and restore the property to its original condition so that upon Substantial Completion, the premises are ready for occupancy by the Owner.

6.27.2 If the Contractor performs any Work after final cleaning, the Contractor shall clean the affected area as provided above so that upon Substantial Completion, the premises are ready for occupancy by the Owner.

6.27.3 Final cleaning shall be done to the reasonable satisfaction of the A/E and Contracting Authority.

6.28 Substantial Completion

6.28.1 Contractor's Punch List.

6.28.1.1 When the Contractor considers the Work, or a designated portion thereof, Substantially Complete the Contractor shall inspect the Work and prepare a list of Defective Work and incomplete or unacceptable Work ("Contractor's Punch List"). The Contractor shall list all items of Work not in compliance with the Contract Documents, including items the Contractor is requesting to be deferred.

.1 The Contractor shall proceed to correct all items listed on the Contractor's Punch List and certify that the incomplete items listed on the Contractor's Punch List are to its knowledge an accurate and complete list by signing the Contractor's Punch List.

.2 The Contractor's failure to include an item on the Contractor's Punch List shall not alter the Contractor's responsibility to complete the Work in accordance with the Contract Documents.

.3 The Contractor shall submit the signed Contractor's Punch List to the A/E, together with a request for the Substantial Completion inspection of the Work.

6.28.2 Substantial Completion Inspection.

6.28.2.1 Within three business days after receipt of the request for the Substantial Completion inspection of the Work, the A/E shall notify the Contractor of acceptance or rejection of the request, stating reasons for any rejection.

.1 Within seven days after its acceptance of the Contractor's request, the A/E shall conduct the Substantial Completion inspection to determine whether the Work, or designated portion, is in conformity with the Contract Documents and Substantially Complete. The A/E shall notify the Contractor, Contracting Authority, and Owner of the scheduled time of the inspection.

.2 If the A/E determines that the Work is Substantially Complete, within three business days after the Substantial Completion inspection, the A/E shall prepare a Certificate of Substantial Completion that shall establish the date of Substantial Completion and include a list of Defective, incomplete, or unacceptable Work ("A/E's Punch List"). The A/E's Punch List shall include **(1)** the items on the Contractor's Punch List that are not yet completed or corrected as of the date of the Substantial Completion inspection, and **(2)** comments from the Contracting Authority and Owner.

.3 The A/E shall submit the Certificate of Substantial Completion to the Contracting Authority, Owner, and Contractor for their written acceptance. Upon their acceptance and consent of the Contractor's Surety, and subject to the Owner's right to withhold payment, the Owner shall release retainage as described under **Section 9.6.1**.

.4 The A/E's failure to include an item on the A/E's Punch List shall not alter the Contractor's responsibility to complete the Work in accordance with the Contract Documents.

.5 If the A/E accepts the request for the Substantial Completion inspection and subsequently determines that the Work is not Substantially Complete, the A/E may request compensation for expenses related to excessive Punch List activities. The Contracting Authority may deduct that additional compensation to the A/E from payments then or thereafter due the Contractor. If payments then or thereafter due the Contractor are not sufficient to cover those amounts, the Contractor shall immediately pay the amount of the insufficiency to the Owner.

6.28.3 Completion of Punch List Items.

6.28.3.1 Before expiration of the Punch List Milestone and before the date of Final Contract Completion, the Contractor shall complete all items on the A/E's Punch List. After completing all items on the A/E's Punch List, the Contractor shall provide a written request for Final Inspection of the Work to the A/E.

.1 If Work on the A/E's Punch List cannot be timely completed, the Contractor shall justify in writing to the reasonable satisfaction of the Contracting Authority and A/E, the reasons the items cannot be completed, and the Contractor may propose, for the Contracting Authority and A/E's approval, an adjustment of the

Punch List Milestone for the associated Punch List items to establish a time when the Contractor shall complete those items.

.2 Within three business days after receipt of the Contractor's request for the Final Inspection, the A/E shall complete a Final Inspection of the Work for compliance with the Contract Documents.

.3 If multiple inspections of items on the A/E's Punch List are required due to the Contractor's failure to properly and timely complete them, the Contractor shall pay any additional costs incurred by the A/E, Owner, and Contracting Authority resulting from any attendant delay and re-inspections. The Contracting Authority may deduct those additional costs from payments then or thereafter due the Contractor. If payments then or thereafter due the Contractor are not sufficient to cover those amounts, the Contractor shall immediately pay the amount of the insufficiency to the Owner.

6.29 Partial Occupancy

6.29.1 The Owner may occupy or use a portion of the Project prior to Substantial Completion of all Work if:

6.29.1.1 the building authority with jurisdiction over the Project issues a partial certificate of occupancy for the portion of the Project the Owner intends to occupy (if applicable);

6.29.1.2 the Owner with the Contractor's and A/E's assistance has provided written notice of the Partial Occupancy to the insurers providing builder's risk property insurance for the Project; and

6.29.1.3 the Contracting Authority has received notice of the Partial Occupancy from the A/E and has consented to it.

6.29.2 Before the Owner commences Partial Occupancy, the Owner, Contracting Authority, A/E, and Contractor shall proceed as described under **Section 6.28** for the area designated for Partial Occupancy. The Owner may commence Partial Occupancy before the Contractor has achieved Substantial Completion of the area designated for Partial Occupancy.

6.29.3 The Contractor shall be relieved of the obligation to maintain the area accepted for Partial Occupancy, but shall remain obligated to complete and correct the Work and to carry the insurance required by the Contract Documents during performance of any such Work.

6.30 Demonstration and Training, Operating Appurtenances

6.30.1 The Contractor, as a condition precedent to execution of the Certificate of Contract Completion and final payment, shall perform demonstration and training of the Owner's maintenance personnel as specified in the Contract Documents.

6.30.2 The Contractor, as a condition precedent to execution of the Certificate of Contract Completion and final payment, shall organize and submit operating appurtenances and loose items related to operation and maintenance of the completed Project to the Owner, including, but not limited to:

6.30.2.1 keys to door and window hardware, panels, and other devices not directly provided to the Owner from the manufacturer;

6.30.2.2 operating handles, levers, cranks, specialized wrenches or drivers, remote controls, and similar items; and

6.30.2.3 extra materials (e.g., attic stock).

6.31 Contract Completion

6.31.1 Partial Contract Completion.

6.31.1.1 When items of Work cannot be completed until a subsequent date, the A/E shall prepare a partial Certificate of Contract Completion that shall include a detailed list of the deferred Work and the date(s) by which the Contractor will complete that Work.

6.31.1.2 The A/E shall submit the partial Certificate of Contract Completion to the Contracting Authority, Owner, and Contractor for their written acceptance. After they accept the partial Certificate of Contract Completion and the Contractor has submitted the Contractor's Surety's consent to payment, the Contracting Authority may release payment to the Contractor in the Contracting Authority's sole discretion.

6.31.2 Final Contract Completion.

6.31.2.1 When all items on the A/E's Punch List have been completed to the satisfaction of the A/E, all requirements of the Contract Documents have been completed, and the provisions of **Sections 6.26** through **6.30** have been fulfilled, the A/E shall prepare and recommend execution of a final Certificate of Contract Completion.

The date that the Contracting Authority executes the final Certificate of Contract Completion is the date of Contract Completion.

6.31.2.2 Within 30 days after the Contracting Authority executes the final Certificate of Contract Completion, the Contracting Authority will make final payment to the Contractor of all remaining funds then due and payable including any funds retained following Substantial Completion as described under **Section 9.7**.

ARTICLE 7 - MODIFICATIONS

7.1 General

7.1.1 Changes in the Work.

7.1.1.1 The Contracting Authority may order changes in the Work without invalidating the Contract. Subject to the limitations stated in this **Article 7** and elsewhere in the Contract Documents, a change in the Work may be accomplished by a Change Order, Change Directive, or order for a minor change in the Work.

- **.1** The Contractor shall proportionately increase the amount of the Bond whenever the Contract Sum is increased.
- **.2** If notice of any change affecting the Contract is required by the provision of any Bond, notice is the Contractor's responsibility, and the amount of each applicable Bond shall be adjusted accordingly.

7.1.1.2 The Contractor shall not proceed with any change in the Work without the Contracting Authority's prior written authorization except as provided under **Sections 1.10** and **7.4**.

7.1.1.3 Except as provided in **Section 1.10**, the Contractor's failure to obtain prior written authorization for a change in the Work will prejudice the Owner and Contracting Authority and constitute a waiver by the Contractor of any adjustment to the Contract Sum or Contract Times, or both, for the related Work.

7.1.1.4 The Contractor shall perform all changes in the Work under the applicable provisions of the Contract Documents, and the Contractor shall proceed promptly with the change unless otherwise provided in the Change Order, Change Directive, or order for a minor change in the Work

7.1.2 Paperwork Consolidation.

7.1.2.1 Related Modifications, with the same or similar justification (e.g., Owner Request or field resolution), may be consolidated into the same Change Order.

7.1.2.2 Add and deduct Modifications, with the same or similar justification, may be included on the same Change Order.

7.1.2.3 Modifications resulting from errors or omissions shall not be combined with other modifications for which the A/E will receive a fee.

7.1.3 Modification Numbering.

7.1.3.1 The A/E shall assign a number to each Modification, which shall uniquely identify it.

7.1.3.2 The A/E shall not duplicate or reuse any number throughout the Project or reuse assigned numbers for Proposal Requests that are initiated but cancelled in process.

7.1.3.3 The number for each Change Order shall be coordinated with any associated Proposal Request, Change Request, or Change Directive.

7.1.4 Modification Log.

7.1.4.1 The A/E shall create and maintain a Modification Log for the Project, which shall contain the following minimum information:

- **.1** number of the Modification;
- **.2** a brief description of the Modification;
- **.3** cost of the Modification;
- **.4** schedule impact of the Modification; and
- **.5** dates sent to, and received from, the parties.

7.1.5 Reconciliation of Unit Price Items.

7.1.5.1 The Contracting Authority may increase, decrease, or delete entirely the scheduled quantities of Unit Price Work.

7.1.5.2 If the actual quantity of a Unit Price item exceeds or appears that it will exceed the scheduled quantity, the Contractor shall immediately notify the A/E in writing. The A/E, after consulting with the Contracting Authority, will issue a Change Order or Change Directive to authorize an adjustment of the scheduled quantity or to otherwise address the excess.

7.1.5.3 If the actual quantity of a Unit Price item differs from the scheduled quantity by 20 percent or more, so that application of the Unit Price to the quantities of Work performed or reasonably expected to be performed would create an undue hardship on either the Owner or Contractor:

.1 the Contractor shall initiate a Change Request seeking an adjustment of the Unit Price **(1)** as required under **Section 7.6**, and **(2)** within the time period required under **Section 7.6** which begins to run on the day that the Contractor knew or should have known that the actual quantity of a Unit Price item would differ from the scheduled quantity by 20 percent or more; or

.2 the A/E, after consulting with the Contracting Authority, will issue a Change Directive to adjust the Unit Price.

7.1.5.4 If a Unit Price is adjusted as described under **Section 7.1.5.3**, the new Unit Price will only apply to the units of Work performed that are **(1)** less than the 20 percent threshold if the Unit Price is changed on account of an over-estimation of the scheduled quantity of a Unit Price item involved in the Work or **(2)** in excess of the 20 percent threshold if the Unit Price is changed on account of an under-estimation of the scheduled quantity of a Unit Price item involved in the Work.

7.1.5.5 Before final payment, the A/E shall issue a Change Order to reconcile any difference between the scheduled and actual quantities of Unit Price Work performed and materials furnished.

7.1.5.6 Notwithstanding **Section 7.1.5.3**, if the actual quantity of any item of Unit Price Work is zero, there shall be no adjustment of the Unit Price.

7.1.6 Notice of Credits and Schedule Reductions.

7.1.6.1 Notwithstanding any other provision of the Contract to the contrary, the Contractor shall promptly notify the Contracting Authority, Owner, and A/E in writing whenever any change in the Project (including without limitation through an order for a minor change in the Work) may entitle the Owner to a credit from the Contractor or a reduction of the time for completion of the Project.

7.2 Change Orders

7.2.1 A Change Order is a written instrument prepared by the A/E and executed by the Contracting Authority, Owner, and Contractor, stating their agreement upon all of the following:

7.2.1.1 a change in the Work;

7.2.1.2 the amount of the adjustment of the Contract Sum, if any; and

7.2.1.3 the extent of the adjustment of the Contract Times, if any.

7.2.2 Except with the Contracting Authority's written consent as explicitly provided under **Sections 7.3.9**, **7.3.10**, **7.6.2**, and **7.6.3**, the Contractor is not entitled to reserve any rights or take other similar action with respect to a Change Order if the effect or intent of the reservation or action would be to accommodate a further adjustment of the Contract Sum or Contract Times, or both, after the Contractor signs the Change Order. By signing a Change Order, the Contractor irrevocably certifies that the elements of a Change Order described in **Section 7.2.1** are completely and fully satisfied, and waives all rights, if any, to seek further adjustment of the Contract Sum or Contract Times, or both, at a later date with respect to the associated change in the Work including without limitation on account of **(1)** the "cumulative impact" of the associated change in the Work in combination with one or more other changes in the Work; **(2)** all costs, including interest on those costs; and **(3)** any delays, inefficiencies, disruptions, suspensions, extended overhead, and acceleration.

7.2.3 The A/E shall prepare each Change Order form, attach the supporting documentation, and issue the Change Order to the Contractor for signature.

7.2.4 If the Contractor is in agreement with the Change Order under **Section 7.2.1**, the Contractor shall sign and return the Change Order to the A/E within three days after receiving it.

7.2.5 When the A/E receives the Change Order signed by the Contractor, the A/E will recommend approval by signing the form and transmitting the Change Order and the revised Change Order Log to the Owner.

7.2.6 When the Owner receives the Change Order, the Owner may sign the form accepting the Change Order, attach certification of funding, and transmit the Change Order to the Contracting Authority; or, if the Owner does not accept the Change Order, the Owner will reject and return it to the A/E.

7.2.7 When the Contracting Authority receives the Change Order, the Contracting Authority may sign the form approving the Change Order, and transmit the fully executed Change Order to all signers; or, if the Contracting Authority does not accept the Change Order, the Contracting Authority will reject and return it to the A/E.

7.2.8 When the Change Order is signed by the Contractor, A/E, Owner, and Contracting Authority, the fully executed Change Order modifies the Contract Documents and authorizes and directs the Contractor to proceed, and the Contractor shall promptly proceed with the associated change in the Work.

7.3 Change Directives

7.3.1 A Change Directive is a written order prepared by the A/E and executed by the Contracting Authority and Owner directing a change in the Work or the performance of disputed Work as described under **Section 7.3.4.1**.

7.3.1.1 The parties will endeavor to resolve each Change Directive through the Field Meeting described under **Section 7.7**.

7.3.2 Through a Change Directive, the Contracting Authority may:

7.3.2.1 propose a basis for adjustment, if any, in the Contract Sum or Contract Times, or both; or

7.3.2.2 limit the scope of the change in the Work on a time and materials basis, not to exceed a fixed adjustment of the Contract Sum.

7.3.3 If a change in the Work must start immediately to avoid an imminent impact to the schedule of the Project, the A/E may prepare a Change Directive for the Contracting Authority's and the Owner's signatures pursuant to **Section 7.3.1**, authorizing the Contractor to proceed.

7.3.4 A Change Directive shall be used to direct a change in the Work in the absence of total agreement on the terms of a Change Order.

7.3.4.1 For the purposes of clarity, the Contract refers to a Change Directive as if it is only to be used in the absence of total agreement on the terms of a Change Order concerning the associated change of the Work. A Change Directive may also be used in the absence of agreement as to whether the subject of the Change Directive actually constitutes a change in the Work; such as but not limited to the situations described under **Sections 6.9.2** and **7.4.3**.

7.3.5 Upon receipt of a Change Directive, the Contractor shall promptly proceed with the change in the Work involved.

7.3.6 If the Change Directive contains a proposed basis for adjustment of the Contract Sum or Contract Times, or both, within ten days after receiving it, the Contractor may sign the Change Directive to accept the proposed basis for adjustment, and return it to the A/E. Thereafter, the A/E shall prepare and the A/E, Contracting Authority, Owner, and Contractor shall promptly execute an associated Change Order as described under **Section 7.2**.

7.3.7 Within ten days after receiving the Change Directive, or other period as mutually agreed by the Contractor and Contracting Authority, the Contractor shall submit to the A/E and Contracting Authority a Proposal meeting the requirements of **Section 7.5** for adjustment of the Contract Sum or Contract Times, or both, on account of the change, unless the Change Directive is performed on a time and materials basis under **Section 7.3.2.2**. If the Change Directive is performed on a time and materials basis, the Contractor shall submit its Proposal within ten days after completing the changed Work, which is the subject of the Change Directive.

7.3.8 If the Contractor does not respond to a Change Directive as and when required under **Section 7.3.6** or **Section 7.3.7 (1)** the Contracting Authority shall determine the adjustments, if any, of the Contract Sum and Contract Times and issue its determination to the Owner, A/E, and Contractor, and **(2)** the A/E shall prepare a Change Order consistent with that determination and issue it to the Contractor as described under **Section 7.2.3**. If the Contractor does not agree with the Contracting Authority's determination, the Contractor shall initiate a Claim as and when required under **Article 8**.

7.3.9 Pending final determination of the total adjustment of the Contract Times on account of a Change Directive, to the extent that the Contracting Authority, Owner, and Contractor agree on a portion of the adjustment of the Contract Times, that the period of time not in dispute may be included in the Construction Progress Schedule accompanied by a Change Order indicating the parties' agreement with only that portion of the time adjustment.

7.3.10 Pending final determination of the total adjustment of the Contract Sum on account of a Change Directive, to the extent that the Contracting Authority, Owner, and Contractor agree on a portion of the adjustment of the Contract Sum, the amount not in dispute for that change in the Work may be included in a Contractor Payment Request accompanied by a Change Order indicating the parties' agreement with only that portion of the cost adjustment.

7.3.11 If the Contracting Authority, Owner, and Contractor agree on the adjustments of the Contract Sum and Contract Times associated with a Change Directive, the A/E shall prepare an appropriate Change Order. The A/E, Contracting Authority, Owner, and Contractor shall sign the Change Order as described under **Section 7.2**.

7.3.12 If the Contracting Authority, Owner, and Contractor do not agree on the adjustments of the Contract Sum and Contract Times associated with a Change Directive, **(1)** the Contracting Authority shall determine the adjustments, if any, of the Contract Sum and Contract Times and issue its determination to the Owner, A/E, and Contractor, and **(2)** the A/E shall prepare a Change Order consistent with that determination and issue it to the Contractor as described under **Section 7.2.3**. If the Contractor does not agree with the Contracting Authority's determination, the Contractor shall initiate a Claim as and when required under **Article 8.**

7.3.13 The Contracting Authority may at any time reject the Contractor's Proposal submitted under **Section 7.3.7**. If the Contractor does not agree with the Contracting Authority's rejection, the Contractor shall initiate a Claim as and when required under **Article 8**.

7.3.14 If a Change Directive or portion of a Change Directive remains pending or otherwise unresolved 60 days after the date on which the Change Directive was issued, the associated Contractor's Proposal or portion of the Contractor's Proposal still pending will be deemed rejected by the Contracting Authority. If the Contractor does not agree with the deemed rejection, the Contractor shall initiate a Claim as and when required under **Article 8**.

7.3.15 The Contractor's failure to comply with the requirements of this **Section 7.3** will constitute an irrevocable waiver of the Contractor's Proposal and any related Claim.

7.4 Minor Changes in the Work

7.4.1 The A/E may order minor changes in the Work not involving adjustment of the Contract Sum or extension of the Contract Times and not inconsistent with the intent of the Contract Documents. Those changes shall be effected by written order issued to the Contractor.

7.4.2 The Contractor shall promptly carry out each order for a minor change in the Work if the Contractor agrees that the order does not involve adjustment of the Contract Sum or Contract Times, or both.

7.4.3 If the Contractor reasonably believes that it would be entitled to an adjustment of the Contract Sum or Contract Times, or both, on account of an order for a minor change in the Work, the Contractor, within five business days after receiving the order, shall give the Contracting Authority and A/E written notice of the Contractor's position, and not proceed with the subject Work without first receiving a Change Directive or Change Order related to it.

7.4.4 The Contractor waives its right to an adjustment of the Contract Sum or Contract Times on account of an order for a minor change in the Work by:

7.4.4.1 starting the Work that is the subject of the order for a minor change in the Work; or

7.4.4.2 failing to give the notice described under **Section 7.4.3** within five business days after receiving the order for a minor change in the Work.

7.5 Proposal Requests and Contractor Proposals

7.5.1 Proposal Requests. The A/E shall prepare and issue a Proposal Request to the Contractor to obtain the Contractor's Proposal for the adjustment of the Contract Sum or Contract Times, or both, associated with a contemplated change in the Work.

7.5.1.1 The Contractor shall respond with a Proposal to the A/E and Contracting Authority within ten days after receiving the Proposal Request. The allowable time for the Contractor's response may be extended by written agreement of the Contractor and A/E.

7.5.1.2 If the Contractor does not submit a Proposal within the time required in **Section 7.5.1.1**, the Contractor waives its right to an adjustment of the Contract Sum or Contract Times, or both, associated with the contemplated change in the Work.

7.5.1.3 A Proposal Request does not authorize the Contractor to proceed with a change in the Work.

7.5.2 Contractor Proposals in General.

7.5.2.1 In any Proposal for an adjustment of the Contract Sum, the Contractor shall specifically identify the items set forth in **Section 7.8**. By submitting a Proposal for an adjustment of the Contract Sum, the Contractor represents to the Contracting Authority and Owner that the proposed adjustment is the entire adjustment of the Contract Sum to which the Contractor is entitled on account of the associated change or proposed change in the Work.

7.5.2.2 In any Proposal for an adjustment of the Contract Times, the Contractor shall specifically identify the items set forth in **Section 7.9**. By submitting a Proposal for an adjustment of the Contract Times, the Contractor represents to the Contracting Authority and Owner that the proposed adjustment is the entire adjustment of the Contract Times to which the Contractor is entitled on account of the associated change or proposed change in the Work.

7.5.2.3 The Contractor shall hold every Proposal valid and open for acceptance for at least 45 days. The acceptance period may be adjusted by mutual consent of the Contractor and Contracting Authority.

7.5.2.4 A Proposal may be accepted by the Contracting Authority and Owner only through a Change Order.

7.5.2.5 The Contractor's cost of preparing and providing Proposals is included in the Contract Sum and shall not be included in any cost or credit determination under the Contract.

7.5.3 Contractor Proposals Related to Change Requests. In addition to complying with **Section 7.5.2**, if the Proposal relates to a Change Request, the Contractor shall include in the Proposal the following information to permit timely and appropriate evaluation of the Change Request, determination of responsibility, and opportunity for mitigation:

7.5.3.1 if applicable, the Contractor's planned actions to mitigate costs and delays by avoiding interference, disruption, hindrance, delay, or impact;

7.5.3.2 recommended action to mitigate costs and delays by avoiding interference, disruption, hindrance, delay, or impact; and

7.5.3.3 additional information **(1)** the Contracting Authority requests or **(2)** the Contractor believes is relevant to resolution of the Change Request.

7.6 Change Requests

7.6.1 The Contractor shall initiate a change in the Work by submitting to the Contracting Authority and A/E a Change Request accompanied by a Proposal meeting the requirements of **Section 7.5** within ten days after the occurrence of the event giving rise to the Change Request.

7.6.1.1 The parties will endeavor to resolve each Change Request through the Field Meeting described under **Section 7.7**.

7.6.2 Pending final determination of the total adjustment of the Contract Times on account of a Change Request, to the extent that the Contracting Authority, Owner, and Contractor agree on a portion of the adjustment of the Contract Times, that period of time not in dispute may be included in the Construction Progress Schedule accompanied by a Change Order indicating the parties' agreement with only that portion of the time adjustment.

7.6.3 Pending final determination of the total adjustment of the Contract Sum on account of a Change Request, to the extent that the Contracting Authority, Owner, and Contractor agree on a portion of the adjustment of the Contract Sum, the amount not in dispute for that change in the Work may be included in a Contractor Payment Request accompanied by a Change Order indicating the parties' agreement with only that portion of the cost adjustments.

7.6.4 If the Contracting Authority, Owner, and Contractor agree on the adjustments of the Contract Sum and Contract Times associated with a Change Request, the A/E shall prepare an appropriate Change Order. The A/E, Contracting Authority, Owner, and Contractor shall sign the Change Order as described under **Section 7.2**.

7.6.5 If the Contracting Authority, Owner, and Contractor do not agree on the adjustments of the Contract Sum and Contract Times associated with a Change Request, **(1)** the Contracting Authority may determine the adjustments, if any, of the Contract Sum and Contract Times and issue its determination to the Owner, A/E, and Contractor, and **(2)** the A/E shall prepare a Change Order consistent with that determination and issue it to the Contractor as described under **Section 7.2.3**. If the Contractor does not agree with the Contracting Authority's determination, the Contractor shall initiate a Claim as and when required under **Article 8**.

7.6.6 The Contracting Authority may at any time reject the Contractor's Change Request and Proposal submitted under **Section 7.6.1**. If the Contractor does not agree with the Contracting Authority's rejection, the Contractor shall initiate a Claim as and when required under **Article 8**.

7.6.7 If a Change Request or portion of a Change Request remains pending or otherwise unresolved 60 days after the date on which the Change Request was submitted, the Change Request or portion of the Change Request still pending will be deemed rejected by the Contracting Authority. If the Contractor does not agree with the deemed rejection, the Contractor shall initiate a Claim as and when required under **Article 8**.

7.6.8 The Contractor's failure to comply with the requirements of this **Section 7.6** will constitute an irrevocable waiver of the Change Request and any related Claim.

7.7 Field Meeting

7.7.1 The Contracting Authority, Owner, and Contractor shall meet to review and endeavor to resolve **(1)** a Change Directive within 14 days after the Contracting Authority and Owner issue it under **Section 7.3.1** and **(2)** a Change Request within seven days after the Contractor initiates it under **Section 7.6.1**.

7.7.2 Notwithstanding **Section 7.7.1**:

7.7.2.1 a Field Meeting is not a condition precedent to the exercise of any right or the performance of any obligation under the Contract;

7.7.2.2 whether and when a Field Meeting is convened does not alter any right or any obligation under the Contract; and

7.7.2.3 the Contracting Authority, Owner, and Contractor may convene a Field Meeting at any time to address and attempt to resolve any pending Change Directive, Change Request, or other matter.

7.8 Change Order Cost or Credit Determination

7.8.1 General.

7.8.1.1 The maximum cost or credit resulting from a change in the Work shall be determined as described below.

.1 Proposals shall include the information required by **Section 7.8.1.4**.

.2 A Unit Price Proposal shall only be valid when incorporated into the Contract by Change Order except for Unit Price Work included in the Contract.

.3 The maximum cost or credit includes all compensation for impact costs. Additional costs for impacts shall not be allowed.

7.8.1.2 The Contractor shall not assign any portion of the Work to another Person whereby the Contractor would benefit directly or indirectly from the double application of charges for overhead or profit.

Example: Assume that **(1)** the Contractor is or is capable of self-performing general trades Work and **(2)** the change in the Work includes both electrical trade Work and general trades Work. The Contractor may not assign the general trades Work to the Contractor's electrical Subcontractor and then perform that general trades Work as a sub-subcontractor to the Contractor's electrical Subcontractor.

7.8.1.3 The Contracting Authority may require notarized invoices for material costs and may audit the records of the Contractor and Subcontractors.

7.8.1.4 For each change in the Work, the Contractor shall furnish a detailed Proposal itemized on the **Proposal Worksheet Summary Form (Contractor)** published by the Ohio Facilities Construction Commission through which the Contractor shall document the related changes in the Contract Sum as described under **Section 7.8.2**. Any Subcontractor pricing shall be itemized on the appropriate **Proposal Worksheet Summary Form**.

.1 The Contractor's cost of preparing and providing Proposals is included in the Contract Sum and shall not be included in any cost or credit determination under the Contract.

7.8.1.5 Section 7.8.2 establishes the exclusive and maximum amount that the Owner shall pay for any change in the Work, including, but not limited to, all amounts for interference with, delay, hindrance, disruption of, or impact on the Work ("Pricing Criteria"). These Pricing Criteria also govern the value of deduct Change Orders and the Contractor's entitlement to additional compensation or damages through the Change Directive, Change Request, Claims, and dispute resolution processes on account of changes in the Work. In order to expedite the review and approval process, Proposals shall be prepared in the categories and order listed in **Section 7.8.2**.

7.8.2 Pricing Criteria.

7.8.2.1 Contractor Personnel Costs. Any cost or credit arising from a change in the quantity of the Contractor's on-Site management (including supervision and administrative personnel) not subject to prevailing wage under ORC Chapter 4115 shall be calculated on an hourly basis according to the rates acceptable to the Contracting Authority.

.1 In no event will the Contractor be entitled to an increase in the Contract Sum on account of Contractor Personnel Costs unless the Contractor actually incurs additional Contractor Personnel Costs solely on account of the associated change in the Work.

.2 Under no conditions will the increase under this **Section 7.8.2.1** exceed those additional Contractor Personnel Costs the Contractor actually incurs.

7.8.2.2 Labor. Any cost or credit arising from a change in the quantity of field labor directly involved in the Work shall be based upon the actual rate of pay to the worker. If the Project is subject to payment of prevailing wage rates, field labor shall be paid according to the relevant classification of labor as established in the applicable prevailing wage determination for the Project locality, as determined by the Ohio Department of Commerce, Wage and Hour Bureau.

.1 In no event will the Contractor be entitled to an increase in the Contract Sum on account of labor costs unless the Contractor actually incurs additional labor costs solely on account of the associated change in the Work.

.2 Under no conditions will the increase under this **Section 7.8.2.2** exceed those additional labor costs the Contractor actually incurs.

.3 The cost for supervision above the level of working forepersons (such as general forepersons, superintendent, project manager, etc.) is included in the adjustment under **Section 7.8.2.1** for the Contractor and under **Section 7.8.2.10** for Subcontractors.

7.8.2.3 Fringes. Fringe benefit credit for labor provided under **Section 7.8.2.2** is only allowable for prevailing wage fringe benefits pursuant to ORC Chapter 4115, including, but not limited to, Health and Welfare, vacation, apprenticeship training, and certain types of pension plans. The parties shall defer to the Ohio Department of Commerce's policy on which benefits are granted fringe benefit credit. Each fringe benefit for which credit is requested shall be calculated on an hourly basis and listed as a separate line item. The Contractor shall submit documentation supporting the calculation of the amounts for each fringe benefit for each worker classification, including labor provided by Subcontractors.

7.8.2.4 Allowable Payroll Expenses. Allowable payroll expenses for labor provided under **Section 7.8.2.2** including payroll taxes as well as other benefits that are required by Applicable Law, such as federal and state unemployment and workers' compensation shall each be a separate line item and shall not be credited for compliance with ORC Chapter 4115.

7.8.2.5 Equipment Rentals. Any cost or credit arising from a change in the quantity of non-owned heavy or specialized equipment shall be based on the documented rental cost, but shall not exceed 100 percent of that documented cost. No rental charges shall be allowed for hand tools, minor equipment, simple scaffolds, etc. Downtime due to repairs, maintenance, and weather delays shall not be allowed. The Contractor shall submit copies of actual paid invoices to substantiate rental costs.

7.8.2.6 Owned Equipment. Any cost or credit arising from a change in the quantity of heavy or specialized equipment owned by the Contractor or Subcontractor performing the Work shall be based on the cost listed by the current edition of the Associated Equipment Distributors' *AED Blue Book* heavy equipment rental rates, but shall not exceed 100 percent of that documented cost. No recovery shall be allowed for hand tools, minor equipment, simple scaffolds, etc. The longest period of time that the equipment is to be required for the Work shall be the basis for the pricing. Downtime due to repairs, maintenance, and weather delays shall not be allowed.

7.8.2.7 Trucking. Any cost or credit arising from a change in the quantity of trucking shall be based on a reasonable delivery charge or per-mile trucking charge for delivery of required materials or equipment. Charges for use of a pick-up truck shall not be allowed.

7.8.2.8 Materials. Any cost or credit arising from a change in the quantity of materials incorporated into the changed Work shall be based on the actual cost (including all discounts, rebates, or related credits) of those materials. Documentation shall show costs, quantities, or Unit Prices of all items, as appropriate.

.1 The cost or credit for reusable materials (e.g., concrete form lumber, shoring, or temporary enclosures) shall be limited to 33 percent of the material cost for each use.

7.8.2.9 Contractor's General Conditions Costs. Any cost or credit arising from a change in the quantity of the Contractor's General Conditions Costs shall be limited to the extent to which the change is attributable to an associated change in the Contract Time for achievement of Substantial Completion resulting from the change in the Work.

.1 In no event shall the Contract Sum adjustment per day of Contract Time adjustment exceed an amount equal to **(1)** the sum of the General Conditions Costs line items in the Contractor's Schedule of Values approved by the Contracting Authority, **(2)** divided by the total number of days of the original Contract Time for achievement of Substantial Completion.

.2 The Contractor shall **(1)** exclude the Bond premium from the Schedule of Values for the purposes of the calculation under **Section 7.8.2.9.1**, and **(2)** include the actual adjustment of the Bond premium attributable to an associated change in the Contract Sum.

.3 If the Contractor purchases the builder's risk insurance for the Project, the Contractor shall **(1)** exclude the builder's risk insurance premium from the Schedule of Values for the purposes of the calculation under **Section 7.8.2.9.1**, and **(2)** include the actual adjustment of the builder's risk insurance premium attributable to an associated change in the Contract Sum.

7.8.2.10 Subcontractor Overhead and Profit. Any cost or credit arising from a change in Subcontractor-performed Work shall include the Subcontractor's aggregate overhead and profit allowance equal to 15 percent of the sum of the Subcontractor's costs described under **Sections 7.8.2.2** through **7.8.2.8** that are associated with that changed Work.

.1 The allowance applies to each Subcontractor tier. The Contractor is not entitled to recover overhead and profit under **Section 7.8.2.10** on account of changes in Contractor self-performed Work or Work the Contractor performs as a Subcontractor at any tier.

Example: Assume that **(1)** the Contractor is self-performing general trades Work and **(2)** the change in the Work includes both $25,000 of electrical trade Work and $10,000 of general trades Work. Under this **Section 7.8.2.10**, **(1)** the Contractor's Subcontractor would be entitled to overhead and profit mark-up but **(2)** the Contractor would not be entitled to any mark-up. Under **Section 7.8.2.11**, the Contractor would be entitled to Contractor's Fee mark-up on its self-performed Work and on the electrical Work. The amount of the Change Order would be calculated as follows: Subcontractor Change Order = $25,000 + ($25,000 x 15%) = $28,750; Contractor Change Order = $10,000 + $28,750 + (($10,000 + $28,750) x 10%) = $42,625.

.2 The allowance covers Subcontractor general conditions costs, home office overhead, and profit including, but not limited to: payroll costs, the costs required to schedule and coordinate the Work, telephone, telephone charges, facsimile, telegrams, postage, photos, photocopying, hand tools, simple scaffolds (one level high), tool breakage, tool repairs, tool replacement, tool blades, tool bits, home office estimating and expediting, home office clerical and accounting support, home office labor (management, supervision, engineering), all costs related to Subcontractor-provided insurance, all other home office expense, legal services, travel, and parking expenses.

.3 An exception is allowed for shop or engineering labor on items in **Section 7.8.2.10.2**, which shall not be subject to Prevailing Wage rates for steel fabricators, sheet metal fabricators, and sprinkler system fabricators performing work off Site. Recovery for these matters shall be allowed on an hourly basis under items in **Sections 7.8.2.2**, **7.8.2.3**, and **7.8.2.4** of these Pricing Criteria.

.4 An exception is allowed for field supervision labor on items in **Section 7.8.2.10.2**, for those portions of the Change Order Work that will be performed, or was performed, at times when the superintendent is not required to be on Site under **Section 6.4**, including but not limited to overtime hours due to acceleration and extensions of the Contract Times. Recovery for this matter will be allowed on an hourly basis under items in **Sections 7.8.2.2**, **7.8.2.3**, and **7.8.2.4** of these Pricing Criteria.

7.8.2.11 Contractor's Fee. Any cost or credit arising from a change in the Work shall include an allowance for the Contractor's Fee equal to **(1)** ten percent times **(2)** the sum of the costs described under **Sections 7.8.2.1** through **7.8.2.10** that are associated with that changed Work.

7.8.2.12 Miscellaneous. Any cost or credit arising from a change in Work may include the following costs with no allowance for Contractor's Fee under **Section 7.8.2.11** or Subcontractor overhead and profit under **Section 7.8.2.10**.

.1 The premium portion only for approved overtime (labor and fringes). The straight time portion is included in items in **Sections 7.8.2.2**, **7.8.2.3**, and **7.8.2.4**.

.2 State sales tax shall be allowed on items as defined by **Section 12.7**.

7.8.3 Costs that shall not be reimbursed for changes in the Work include the following:

7.8.3.1 Voluntary employee deductions including, but not limited to, deductions for charitable donations or U.S. savings bonds.

7.8.3.2 Employee profit sharing.

7.9 Time Extension

7.9.1 Every adjustment of the Contract Times associated with any change in the Work shall be determined as provided in this **Section 7.9**, which establishes the Contractor's maximum entitlement for any change in the Work, including without limitation all adjustments for interference, delay, hindrance, disruption of, or impact on the Work. This **Section 7.9** also governs time adjustments for deduct Change Orders and the Contractor's entitlement to additional time through the Change Directive, Change Request, Claims, and dispute resolution processes on account of changes in the Work.

7.9.2 The Contractor shall substantiate all changes in the Contract Times with:

7.9.2.1 a written description of the nature of the interference, disruption, hindrance, or delay;

7.9.2.2 identification of Persons and events responsible for the interference, disruption, hindrance, or delay;

7.9.2.3 date or anticipated date of commencement of the interference, disruption, hindrance, or delay;

7.9.2.4 identification of activities by schedule activity number and name on the Construction Progress Schedule, which may be affected by the interference, disruption, hindrance, or delay, or new activities created by the interference, disruption, hindrance, or delay and the relationship with existing activities;

7.9.2.5 anticipated duration of the interference, disruption, hindrance, or delay and of any remobilization period;

7.9.2.6 specific number of days of extension requested and specific number of days for remobilization requested;

7.9.2.7 recommended action to avoid or minimize any future interference, disruption, hindrance, or delay; and

7.9.2.8 If the Contracting Authority requests, a Proposal as described under **Section 7.8** for an increase in the Contract Sum which would fully compensate the Contractor for all costs of acceleration of the Work needed to completely overcome the associated delay, if any.

7.9.3 If the Contracting Authority requests, in addition to the requirements under **Section 7.9.2**, the Contractor shall also substantiate changes in the Contract Times with a prospective time-impact analysis (in native format), which illustrates the influence of each change on all affected Milestones and all affected activities. The Contractor shall submit the time-impact analysis within 30 days after the Contracting Authority requests, unless the Contracting Authority and Contractor agree otherwise.

7.9.3.1 The Contractor shall prepare the time-impact analysis consistent with a currently published, recognized standard for construction schedule analysis.

7.9.3.2 The Contractor shall prepare the time-impact analysis on the basis of **(1)** the last Construction Progress Schedule the Contracting Authority approved before the first day of the delay which is the subject of the analysis or **(2)** an interim update of the Construction Progress Schedule if the Contracting Authority determines that the period between the last approved Construction Progress Schedule and first day of the delay which is the subject of the analysis is too long.

7.9.3.3 The time-impact analysis shall include a fragmentary network analysis (fragnet), which **(1)** illustrates the sequence of new activities, activity revisions, or both, that the Contractor proposes to add to the Construction Progress Schedule upon which the time-impact analysis is based and **(2)** mathematically and graphically demonstrates the influence and proper measurement of the delay and how the Contractor proposes to incorporate that delay into the Construction Progress Schedule.

7.9.3.4 The time-impact analysis shall include a written narrative of the analysis.

7.9.4 Critical Path. Time extensions shall depend upon the extent to which the Work on the critical path of the Construction Progress Schedule is affected, if applicable.

7.9.4.1 A Change Order granting a time extension may provide that the Contract Times shall be extended for only those specific elements so interfered with, disrupted, hindered, or delayed and related remobilization and that remaining Milestone dates shall not be altered and may further provide for adjustment of Liquidated Damages.

7.10 Weather Delays

7.10.1 The parties expect adverse weather to delay the Work to some extent, and have included in the Contract Times a certain number of Work Days lost on account of adverse weather as follows:

Month	Expected Number of Work Days Lost Due to Weather
January	8
February	8
March	7
April	6
May	5
June	5
July	4
August	4

September	5
October	6
November	6
December	6

7.10.2 The Contractor will not be entitled to an extension of the Contract Times on account of adverse weather unless the actual number of Work Days lost due to adverse weather in a particular calendar month exceed the expected number of Work Days lost in that calendar month due to adverse weather. The Contractor shall reconcile lost Work Days with the A/E on a weekly basis.

7.10.3 A Work Day will be "lost" if adverse weather reduces the Contractor's efficiency on the Work on the critical path that Work Day to less than 50%. The Contractor shall substantiate its claim that its efficiency on the Work on the critical path that Work Day was less than 50%.

7.10.4 If the Contractor reasonably believes that it is entitled to an extension of the Contract Times on account of Work Days lost due to adverse weather in a particular month, the Contractor shall initiate a Change Request **(1)** as required under **Section 7.6,** and **(2)** within the time period required under **Section 7.6** which begins to run on the last calendar day of that month.

7.11 Examination and Audit of Contractor's Records

7.11.1 The Contracting Authority and Owner may examine all books, records, documents and other data of the Contractor and its Subcontractors related to the bidding, pricing, or performance of the Work for the purpose of evaluating any Contractor Payment Request, Proposal, Modification, or Claim.

7.11.2 The above referenced materials shall be made available at the office of the Contractor or Subcontractor, as applicable, at all reasonable times for inspection, audit, and reproduction until the expiration of ten years after the date of Substantial Completion of all Work.

7.11.2.1 The Contractor shall maintain and require its Subcontractors to maintain complete and accurate business records at its principal place of business. If the principal place of business is greater than 50 miles from the Site, the Contractor shall timely make records available, and shall require its Subcontractors to timely make records available, at the office of the Contracting Authority or Owner upon request for the records.

7.11.3 To the extent that the Contractor or Subcontractor, as applicable, informs the Contracting Authority or Owner in writing that any documents provided to the Contracting Authority or Owner are trade secrets, the Contracting Authority or Owner shall treat those documents, to the extent permitted by Applicable Law, as trade secrets of the Contractor or Subcontractor, as applicable.

7.11.3.1 If a dispute arises with any other Person about whether that Person should be given access to the documents, the Contractor or Subcontractor as applicable, shall indemnify the Contracting Authority and Owner against all costs, expenses, and damages, including but not limited to attorneys' fees, incurred or paid by reason of that dispute.

7.11.4 The right of inspection, audit, and reproduction extends to all documents necessary to permit adequate evaluation of the cost of pricing data submitted along with the computations and projections used therein.

7.11.5 If the Contract has been terminated in whole or in part, the records relating to the Work terminated shall be made available to the Contracting Authority or Owner for a period of ten years from the date of any applicable final settlement or payment, as applicable.

7.11.6 Records that relate to disputes, litigation, or settlement of Claims arising out of the performance of the Work shall be made available until the dispute, litigation or Claims have been finally decided or settled.

ARTICLE 8 - DISPUTE RESOLUTION

8.1 Initiation of a Claim

8.1.1 Every Claim shall accrue upon the date of occurrence of the event giving rise to the Claim.

8.1.2 The Contractor shall initiate every Claim by giving written notice of the Claim to the A/E and Contracting Authority within ten days after occurrence of the event giving rise to the Claim, including:

8.1.2.1 with regard to a Change Directive, the ten-day time limit on initiating a Claim begins to run on the earlier of the date that **(1)** the Contracting Authority issues its determination under **Sections 7.3.8** or **7.3.12; (2)** the A/E issues

a Change Order to the Contractor under **Sections 7.3.8** or **7.3.12**; **(3)** the Contracting Authority rejects the Contractor's Proposal in whole or in part under **Section 7.3.13**; or **(4)** the Contracting Authority is deemed to have rejected the Contractor's Proposal in whole or in part under **Section 7.3.14**; and

8.1.2.2 with regard to a Change Request, the ten-day time limit on initiating a Claim begins to run on the earlier of the date that **(1)** the Contracting Authority issues its determination under **Section 7.6.5**; **(2)** the A/E issues a Change Order to the Contractor under **Section 7.6.5**; **(3)** the Contracting Authority rejects the Contractor's Proposal in whole or in part under **Section 7.6.6**; or **(4)** the Contracting Authority is deemed to have rejected the Change Request in whole or in part under **Section 7.6.7**.

8.1.3 The Contractor's written notice of a Claim shall provide the following information to permit timely and appropriate evaluation of the Claim, determination of responsibility, and opportunity for mitigation:

8.1.3.1 nature and anticipated amount of the impact, including all costs for any interference, disruption, hindrance, or delay, which shall be calculated in accordance with **Section 7.8** and be a fair and reasonably accurate assessment of the damages suffered or anticipated by the Contractor;

8.1.3.2 identification of the circumstances responsible for causing the impact, including, but not limited to, the date or anticipated date, of the commencement of any interference, disruption, hindrance, or delay;

8.1.3.3 identification of activities on the Construction Progress Schedule that will be affected by the impact or new activities that may be created and the relationship with existing activities;

8.1.3.4 anticipated impacts and anticipated duration of any interference, disruption, hindrance, delay, or impact, and any remobilization period;

8.1.3.5 the Contractor's completed and planned actions to mitigate damages by avoiding interference, disruption, hindrance, delay, or impact; and

8.1.3.6 recommended action to avoid or minimize any interference, disruption, hindrance, delay, or impact.

8.1.4 The Contractor's failure to initiate a Claim as and when required under this **Section 8.1** will constitute the Contractor's irrevocable waiver of the Claim.

8.2 Substantiation of Claims – General Requirements

8.2.1 Within 30 days after the initiation of a Claim, the Contractor shall submit three copies of all information and statements required to substantiate a Claim as provided in this **Article 8** and all other information that the Contractor believes substantiates the Claim. The Contractor shall file the three copies by delivering one copy to the A/E, one copy to the Owner, and one copy to the Contracting Authority.

8.2.2 The Contractor shall substantiate all of its Claims by providing the following minimum information:

8.2.2.1 a narrative of the circumstances, which gave rise to the Claim, including without limitation the start date of the event or events and the actual or anticipated finish date;

8.2.2.2 detailed identification of the Work (e.g., activity codes from the Construction Progress Schedule) affected by the event giving rise to the Claim;

8.2.2.3 copies of the Contractor's daily log (**Section 6.2.14**) for each day of impact;

8.2.2.4 copies of relevant correspondence and other information regarding or supporting Contractor entitlement;

8.2.2.5 copies of the Contractor's most-recent income statement and complete and detailed job-cost report, including segregated general and administrative expenses for the most-recent reporting period, and for the period of the Contract, if available, and similar information for any Subcontractor claim included; and

8.2.2.6 the notarized certification described under **Section 8.5.1.1**.

8.2.3 The Contractor's failure to comply with the requirements of this **Section 8.2** will constitute an irrevocable waiver of any related Claim.

8.3 Substantiation of Claims – Increase of the Contract Sum

8.3.1 The Contractor shall substantiate each Claim for an increase of the Contract Sum with:

8.3.1.1 written documentation as described under **Section 7.8** of the actual additional costs to the Contractor due to the event giving rise to the Claim; and

8.3.1.2 the general substantiation documentation described under **Section 8.2**.

8.3.2 The Contractor's failure to comply with the requirements of this **Section 8.3** will constitute an irrevocable waiver of any related Claim.

8.4 Substantiation of Claims – Extension of the Contract Times

8.4.1 The Contractor shall substantiate each Claim for an extension of the Contract Times with:

8.4.1.1 written documentation as described under **Section 7.9** of the actual delay to the critical path of the Construction Progress Schedule due to the event giving rise to the Claim;

8.4.1.2 a Proposal as described under **Section 7.8** for an increase in the Contract Sum that would fully compensate the Contractor for all costs of acceleration of the Work needed to completely overcome the associated delay together with a statement consistent with **Section 8.3.1.1**; and

8.4.1.3 the general substantiating documentation described under **Section 8.2**.

8.4.2 The Contractor's failure to comply with the requirements of this **Section 8.4** will constitute an irrevocable waiver of any related Claim.

8.5 Certification of the Claim

8.5.1 The Contractor shall certify each Claim within 30 days after initiating the Claim under **Section 8.1** by providing the notarized certification specified in **Section 8.5.1.1**, signed and dated by the Contractor:

8.5.1.1 "The undersigned Contractor certifies that the Claim is made in good faith; that the supporting data is accurate and complete to the best of the Contractor's knowledge and belief; that the amount of money, time, or both requested is a fair, reasonable, and necessary adjustment; that the amount of money, time, or both requested is the entire amount of money, time, or both to which the Contractor is entitled on account of the Claim; and that the undersigned is duly authorized to certify the Claim on behalf of the Contractor."

8.5.2 The date that the Contractor's certified and fully substantiated Claim is received by the Contracting Authority, or the date that the Contractor is required to certify and fully substantiate a Claim pursuant to **Sections 8.2.1** and **8.5.1**, shall trigger the 120-day period for exhaustion of administrative remedies pursuant to ORC Section 153.16(B).

8.5.3 The Contractor's failure to comply with the requirements of this **Section 8.5** will constitute an irrevocable waiver of any related Claim.

8.6 Delay and Delay Damage Limitations; Derivative Claims

8.6.1 Subject to other provisions of the Contract, the Contractor will be entitled only to an extension of the Contract Times on account of delay in the commencement or progress of Work on the critical path of the Construction Progress Schedule caused by acts of Nature or the public enemy, acts of the government not arising from the Contractor's failure to comply with Applicable Law, fires, floods, epidemics, weather, and labor disputes beyond the Contractor's control.

8.6.2 Notwithstanding any other provision of the Contract Documents to the contrary, the Contractor shall not be entitled to an increase in the Contract Sum, or an extension of the Contract Times, or both:

8.6.2.1 on account of the impact of any normal adverse weather on any of the Work or on account of the impact of any abnormal adverse weather as indicated under **Section 7.10** on Work not on the critical path;

8.6.2.2 to the extent that a delay occurs concurrently with a delay attributable to the Contractor; or

8.6.2.3 on account of the delay of any Work not on the critical path.

8.6.3 Notwithstanding any other provision of the Contract Documents to the contrary, the Contractor shall not be entitled to an increase in the Contract Sum or any type of damages on account of a delay in the commencement or progress of Work on the critical path unless **(1)** the delay is caused by the Owner and **(2)** the delay was not authorized or permitted under the Contract.

8.6.4 Notwithstanding any other provision of the Contract Documents to the contrary, the Contractor shall not be entitled to an increase in the Contract Sum or any type of damages arising from a delay in the commencement or progress of any of the Work caused by the occurrence or non-occurrence of an event beyond the Owner's control such as acts of Nature or the public enemy, acts of the government, fires, floods, epidemics, labor disputes, unusual delivery delays, weather, or damages caused by the Contractor.

8.6.5 Derivative Claims. Notwithstanding any other provision of the Contract to the contrary, if the Owner prosecutes a claim, suit, or appeal against a Separate Consultant or Separate Contractor to recover damages the Contractor suffers on account of the acts or neglects of a Separate Consultant or Separate Contractor or a person or entity for whom either is

legally responsible, the Owner's liability to the Contractor shall not exceed the amount the Owner actually recovers from the Separate Consultant or Separate Contractor on account of those damages less the costs the Owner incurs recovering them. The Owner is not obligated to prosecute any such claim, suit, or appeal.

8.7 Liquidated Damages

8.7.1 If the Contractor fails to achieve a Milestone within the associated Contract Time, it would be difficult, if not impossible, to determine the Owner's resulting damages. Therefore, if the Contractor fails to achieve a Milestone within the associated Contract Time, the Contractor shall (at the Owner's option) pay to or credit the Owner the Liquidated Damages per day sum determined according to the following schedule for each day that the Contractor fails to achieve a Milestone within the associated Contract Time. If the Project involves more than one Phase as explicitly identified in the Agreement, the Contract Sum in the below schedule refers to the total Contract Sum for each of the Phases individually as opposed to the aggregate Contract Sum for all Phases.

Contract Sum	Liquidated Damages per day for Milestones other than the Punch List Milestone	Liquidated Damages per day for the Punch List Milestone
Less than $1,000,000	$500	$125
From $1,000,000.01 to $2,000,000	$1,000	$250
From $2,000,000.01 to $5,000,000	$2,000	$500
From $5,000,000.01 to $10,000,000	$5,000	$1,250
From $10,000,000.01 to $20,000,000	$7,500	$1,875
From $20,000,000.01 to $50,000,000	$10,000	$2,500
More than $50,000,000	$15,000	$3,750

8.7.2 The Liquidated Damages described in this **Section 8.7** are only intended to compensate the Owner for the damages it incurs as a direct result of the Contractor's failure to achieve the Milestones within their associated Contract Times.

8.7.3 The Liquidated Damages described in this **Section 8.7** are not intended to compensate the Owner for any damages the Owner incurs on account of **(1)** any claims attributable to the Contractor that are brought by others including Separate Consultants and Separate Contractors as a result of the Contractor's failure to achieve the Milestones within their associated Contract Times or **(2)** any failure of the Contractor to timely, properly, and completely perform the Contract other than the failure to achieve the Milestones within their associated Contract Times.

8.7.4 The parties acknowledge that the above-listed Liquidated Damages per day sums are not penalties but are a reasonable estimate of the damages the Owner itself would incur as a direct result of the Contractor's failure to achieve the Milestones within their associated Contract Times. The parties each irrevocably waive the right (if any) to challenge the validity and enforceability of those Liquidated Damages per day sums. Notwithstanding any other provision of the Contract Documents to the contrary, if a court determines that the Liquidated Damages per day sums or their application are void and unenforceable, the Owner shall be entitled to recover the actual damages that it incurs on account of the Contractor's failure to achieve one or more of the Milestones within the Contract Times.

8.7.5 In addition to other rights that the Owner may have relative to the Liquidated Damages, the Contracting Authority may deduct Liquidated Damages from the Contract Sum as the damages accrue. If payments then or thereafter due the Contractor are not sufficient to cover such amounts, the Contractor shall immediately pay the amount of the insufficiency to the Owner.

8.8 Mutual Waiver of Consequential Damages

8.8.1 Except as provided under **Section 8.8.2**, the Owner and Contractor each waive against the other all Claims for consequential damages that may arise out of or relate to this Contract.

8.8.1.1 The Owner's waiver includes Claims for loss of use, income, profit, revenue, financing, cost of capital, business and reputation, management and employee productivity, and consequential damages arising from termination of the Contract or related to insolvency.

8.8.1.2 The Contractor's waiver includes Claims for unabsorbed home-office overhead; any other form of overhead in excess of that specifically provided for under **Section 7.8**; delay damages except as otherwise specifically provided for in **Section 8.6**; increased cost of funds for the Project; lost opportunity to work on other projects; losses of financing, business, and reputation; loss of profit except anticipated profit arising directly from properly performed Work; loss of bonding capacity; and consequential damages arising from termination of the Contract or related to insolvency.

8.8.2 Notwithstanding **Section 8.8.1**, this **Section 8.8**:

8.8.2.1 does not apply to any damages that would be covered by insurance provided in connection with the Project if the Contract did not include **Section 8.8.1;**

8.8.2.2 does not apply to the Contractor's indemnity obligations for third-party claims against the Indemnified Parties even if those claims are for damages that **Section 8.8.1** would otherwise preclude;

8.8.2.3 does not preclude the Owner's recovery of Liquidated Damages under **Section 8.7**; and

8.8.2.4 does not apply to Claims for damages arising from the Owner's or the Contractor's gross negligence or willful misconduct.

8.8.3 This **Section 8.8** shall survive termination of the Contract.

8.9 Review of the Claim

8.9.1 The A/E shall review the Claim and prepare a written analysis of its content, which shall include:

8.9.1.1 a narrative of the A/E's examination of the facts giving rise to the Claim;

8.9.1.2 identification of relevant Contract Documents and language;

8.9.1.3 an analysis of whether the Contractor complied with the requirements of the Contract Documents pertaining to Claim initiation and substantiation including, without limitation, the issues of entitlement to, and calculation of, adjustments of the Contract Sum, Contract Times, or both;

8.9.1.4 an analysis of claimed additional labor, materials, and equipment for the scope of the Work items described;

8.9.1.5 an analysis of any time extension for any interference, disruption, hindrance, impact, or delay claimed (to include the calculation of any concurrent delays affecting entitlement);

8.9.1.6 a concluding opinion regarding Contractor entitlement to, and the appropriateness and reasonableness of all, or any part of, the Claim; and

8.9.1.7 an appendix containing copies of contemporaneous documentation supporting the concluding opinion.

8.9.2 The A/E shall submit the written analysis to the Project Manager no more than 30 days after receiving the Contractor's substantiated and certified Claim.

8.10 Claim Decision

8.10.1 The Project Manager shall examine the Contractor's Claim and A/E's analysis.

8.10.2 The Project Manager shall approve or deny all, or any part, of the Contractor's Claim and forward a written decision to the Contractor, A/E, Owner, and Contracting Authority within 14 days after receiving the A/E's analysis. The Project Manager may employ independent resources to assist in its review, or refer evaluation of the Claim to a consultant.

8.10.3 If the Contractor and Owner agree with the Project Manager's decision, the decision shall be incorporated into a Change Order.

8.10.4 Any Claim remaining unresolved after completion of the process described under this **Section 8.10** shall be subject to Claim decision review as described under **Section 8.11**.

8.11 Claim Decision Review

8.11.1 The Contractor may request review of the Project Manager's decision by written notice delivered by certified mail within 14 days after the Project Manager's decision.

8.11.1.1 If the Project is administered by the Commission, jointly administered by the Commission and a public school district, or locally administered by authority granted to an agency of the state of Ohio by the Commission, the written notice shall be delivered to the Executive Director of the Commission.

8.11.1.2 If the Project is locally administered by an Institution of Higher Education under ORC Section 3345.50 or ORC Section 3345.51, the written notice shall be delivered to the Institutional Designee who will review the Project Manager's decision instead of the Commission.

8.11.2 The Commission or Institutional Designee, as applicable, shall schedule and conduct a meeting within 30 days after receiving the Contractor's request for review. The Commission or Institutional Designee may employ independent resources to assist in the meeting and review.

8.11.3 The Commission or Institutional Designee, as applicable, shall determine the final disposition of the Contractor's request for review and provide a written decision to the Contractor and Owner within 14 days after the meeting.

8.11.4 The decision of the Commission or Institutional Designee is the final administrative decision of the Contracting Authority as described under ORC Section 153.12(B).

8.11.5 If the Contractor and Owner agree with the Commission's or the Institutional Designee's decision, the decision shall be incorporated into a Change Order.

8.11.6 Any Claim remaining unresolved after completion of the process described under this **Section 8.11** shall be subject to litigation, which may be preceded by Alternative Dispute Resolution ("ADR") as described under **Section 8.13**.

8.12 Delegation

8.12.1 No provision of this **Article 8** shall prevent the Executive Director from delegating the duties or authorities of the Commission to any other person selected at the Executive Director's sole discretion.

8.13 Alternative Dispute Resolution

8.13.1 At any point in the Claims and dispute-resolution processes, the Project's key stakeholders may agree to enter into non-binding ADR including progressive negotiation, dispute review board, mediation, or another non-binding ADR procedure accepted by all of the Project's key stakeholders.

8.14 Audit of the Claim

8.14.1 All Claims shall be subject to audit at any time following filing of the Claim, whether or not the Claim is part of a lawsuit.

8.14.2 The audit may be performed by employees of the Contracting Authority or by a consultant engaged by the Contracting Authority.

8.14.3 The audit may begin upon ten-days' notice to the Contractor or affected Subcontractor.

8.14.4 The Contractor shall cooperate with the request.

8.14.5 Failure of the Contractor or Subcontractor to produce sufficient records to allow the Contracting Authority to audit and verify a Claim will constitute an irrevocable waiver of the Claim or portion of the Claim that could not be completely audited.

8.14.6 The Contractor shall make available to the Contracting Authority all Contractor and Subcontractor documents related to the Claim including, without limitation, the following documents:

8.14.6.1 daily time sheets and superintendent's daily reports;

8.14.6.2 union agreements, if any, and employer agreements;

8.14.6.3 insurance, welfare, fringes, and benefits records;

8.14.6.4 payroll register;

8.14.6.5 earnings records;

8.14.6.6 payroll tax returns;

8.14.6.7 material invoices, purchase orders, Subcontracts, and all material and supply acquisition contracts;

8.14.6.8 material cost distribution worksheets;

8.14.6.9 equipment records (list of Contractor equipment, rates, etc.);

8.14.6.10 vendor rental agreements and Subcontractor invoices;

8.14.6.11 Subcontractor payment certificates;

8.14.6.12 canceled checks (payroll and vendors);

8.14.6.13 complete and detailed job-cost report;

8.14.6.14 job payroll ledger;

8.14.6.15 general ledger, general journal (if used), and all subsidiary ledgers and journals together with all supporting documentation pertinent to entries made in those ledgers and journals;

8.14.6.16 cash disbursements journal;

8.14.6.17 financial statements for all years reflecting operations on the Project;

8.14.6.18 income tax returns for all years reflecting operations on the Project;

8.14.6.19 depreciation records on all equipment utilized whether the records are maintained by the Contractor, its accountant, or others;

8.14.6.20 if a source other than depreciation records is used to develop costs for the Contractor's internal purposes in establishing the actual cost of owning and operating equipment, all other source documents;

8.14.6.21 all documents that reflect the Contractor's actual profit and overhead during the years the Project was being performed;

8.14.6.22 all documents related to the preparation of the Contractor's Bid(s), including the final calculations on which the Bid was based, unless the documents are placed in escrow under provisions of the Instructions to Bidders;

8.14.6.23 all documents that relate to the Claim together with all documents that support the amount of damages as to the Claim;

8.14.6.24 worksheets used to prepare the Claim establishing the cost components for items of the Claim including, but not limited to, labor, fringes, benefits and insurance, materials, equipment, Subcontractors, and all documents that establish the periods of time, individuals involved, the hours and rate of pay for the individuals; and

8.14.6.25 all other documents required by the Contracting Authority to reasonably review the Claim.

8.15 False Certification of the Claim

8.15.1 If the Contractor falsely certifies all or any part of a Claim, the portion of the Claim falsely certified shall be denied, and may be sufficient cause for the State to debar the Contractor from future State contracting opportunities as permitted by Applicable Law.

8.16 Performance and Payment

8.16.1 The Contractor shall proceed with the Work during any dispute resolution process, unless otherwise agreed by the Contractor and Contracting Authority in writing.

8.16.2 The Contracting Authority shall continue to make payment of any undisputed amounts in accordance with the Contract Documents pending final resolution of a Claim, unless otherwise agreed by the Contractor and Contracting Authority in writing.

ARTICLE 9 - COMPENSATION AND PAYMENT

9.1 Allowances

9.1.1 The Contract Sum includes the Allowances (if any) identified in the Contract.

9.1.2 Unless otherwise explicitly stated in the Agreement, Allowance amounts cover all compensation to which the Contractor would be entitled for completing the associated Work, including without limitation the cost to the Contractor (less any applicable trade discounts) of materials and equipment required by the Allowances delivered, unloaded, handled, and installed at the Site; all associated labor costs of every kind; all applicable taxes; and the Contractor's Fee.

9.1.3 Before final payment, an appropriate Change Order will be issued to reconcile the Contract Sum so that it reflects actual amounts due to the Contractor on account of Work covered by Allowances.

9.2 Unit Prices

9.2.1 Unless otherwise explicitly stated in the Agreement:

9.2.1.1 The Contract Sum includes the Unit Price Work (if any) identified in the Agreement.

9.2.1.2 Where the Contract provides that all or part of the Work is to be Unit Price Work, initially the Contract Sum will include for all Unit Price Work **(1)** an amount equal to the sum of the established Unit Prices for each separately identified item of Unit Price Work times the estimated quantity of each item as indicated in the Contract plus **(2)** the Contractor's Fee, which is included in the Unit Prices.

9.2.1.3 The estimated quantities of items of Unit Price Work are not guaranteed and are solely for the purpose of comparison of Bids and determining an initial Contract Sum. The Contracting Authority will determine the actual quantities and classifications of Unit Price Work performed by Contractor.

9.2.2 Before final payment, an appropriate Change Order will be issued as described under **Section 7.1.5** to reconcile the Contract Sum so that it reflects actual amounts due to the Contractor on account of Unit Price Work actually performed including an associated adjustment on account of the Contractor's Fee.

9.3 Schedule of Values

9.3.1 Within ten days after receipt of the Notice to Proceed, or other period as mutually agreed by the Contractor and Contracting Authority, the Contractor shall submit to the A/E a Schedule of Values on a form published by the Commission, with separate amounts shown for labor and materials for each branch of Work, following the numbers and titles of the Construction Specifications Institute's *MasterFormat* for individual work results, or *UniFormat* for assemblies in place.

9.3.1.1 The Contractor shall clearly indicate on the Schedule of Values, the amount(s) allocated, including separate items for Contractor's Fee, for each EDGE-certified Business used in the performance of the Work. The amount(s) shall indicate labor and materials, as appropriate, and separate items for Contractor's Fee.

9.3.2 The grand total shown on the Schedule of Values shall equal the total Contract Sum. The Contracting Authority may use the approved Schedule of Values to determine the cost or credit to the Owner resulting from any change in the Work.

9.3.2.1 The first items shall be a breakdown of General Conditions Costs.

9.3.2.2 The amounts for labor and materials shall accurately reflect the cost for each item and include Contractor's Fee. Separate line items shall not be shown for Contractor's Fee, except as provided under **Section 9.3.1.1**.

9.3.2.3 If the material allocation exceeds 55 percent of the Contract Sum, the Contractor shall provide, upon request, sufficient information to support the higher percentage.

9.3.2.4 Subcontract Work shall show amounts for labor and materials. Fringe benefits shall be shown as a part of labor costs.

9.3.2.5 When more than one major structure is included in the Work, the Contractor shall subdivide the Schedule of Values accordingly, with cost details for each structure shown separately.

9.3.2.6 The line items shall be coordinated with line items in the Project Schedule, which may require division of items of Work by area of the Project by floor, phase, or other appropriate area.

9.3.2.7 Mechanical and electrical Work shall be included in separate line items for all major pieces of equipment, and group smaller equipment items by type.

9.3.2.8 Line items shall be included for each Allowance, Coordination Drawings, Punch List Work, Project Record Document Submittals, delivery of attic stock, and specified demonstrations and training.

9.3.3 The A/E may return the Schedule of Values to the Contractor for re-submittal if it does not meet the requirements or contains insufficient items or details of the Work, or approve the Schedule of Values if the A/E determines that it conforms to this **Section 9.3**.

9.3.4 No payment shall be made until the A/E has approved the Contractor's Schedule of Values.

9.4 Contractor Payment Request

9.4.1 After the Date of Commencement, the Contractor may request payment of the Contract Sum. The Owner will pay the Contract Sum to the Contractor on a percent-complete progress basis.

9.4.2 The Contractor may submit a Contractor Payment Request to the A/E each month or upon another interval approved by the Contracting Authority. When the rate of Work and amount involved is sufficient that it is considered appropriate by the Contracting Authority, the Contractor may submit Contractor Payment Requests twice a month. The Contractor shall base each Contractor Payment Request on the Schedule of Values current as of the date that the Contractor submits the Contractor Payment Request.

9.4.2.1 The Contractor shall support each Contractor Payment Request with documentation substantiating the Contractor's right to payment. The Contractor shall supply additional documentation as the A/E may request in connection with each payment to the Contractor.

9.4.2.2 The Contracting Authority may require proof of the renewal of required insurance as a condition precedent to payment.

9.4.2.3 The Contractor shall attach certified payroll reports for the relevant period to one copy of each Contractor Payment Request, see **Document 00 73 43 - Prevailing Wage Requirements**.

9.4.2.4 The Contractor may list on the Contractor Payment Request any Change Orders approved and performed prior to submission of the Contractor Payment Request.

9.4.2.5 The Contractor shall submit its Contractor Payment Request using the Contractor Payment Request form or forms current at the time of each application and as provided by the Contracting Authority in the manner prescribed by the Contracting Authority.

9.4.2.6 The Contractor shall submit one draft copy of its Contractor Payment Request ("Pencil Copy") to the A/E not less than one week prior to submitting multiple copies of its Contractor Payment Request. The A/E shall review the Pencil Copy and provide comments to the Contractor within three days after receiving it. The Contractor shall incorporate the A/E's comments into its Contractor Payment Request prior to submitting multiple copies for payment.

9.4.2.7 The Contractor shall clearly indicate on the Contractor Payment Request, the amount(s) requested for each EDGE-certified Business used in the performance of the Contract. The amount(s) shall indicate labor and materials, as appropriate.

9.4.2.8 The Contractor shall submit an electronic copy of the Contractor Payment Request to the A/E with its paper copies of the Contractor Payment Request for collection and reporting of information used for contract compliance evaluation and statistical purposes. The Contractor may issue the copy in any electronic media acceptable to the Contracting Authority.

9.4.3 Payments for Unit Price Work shall be made to the Contractor only for the authorized actual quantities of Work performed or materials furnished in accordance with the Contract Documents.

9.4.4 Subject to **Section 9.8**, the Owner shall pay an approved Contractor Payment Request within 30 days after the date the A/E recommends acceptance of the Contractor Payment Request.

9.5 Retainage on Labor Payments

9.5.1 Partial payments to the Contractor for labor shall be made at the rate of 96 percent of the amount invoiced through the Contractor Payment Request.

9.5.2 If the Project involves more than one Phase as explicitly identified in the Agreement, this **Section 9.5** will apply on a per-Phase basis.

9.6 Release of Retainage on Labor Payments

9.6.1 When the Contractor has achieved Substantial Completion of all Work, and there is no other reason to retain funds, the retained funds shall be paid to the Contractor within 30 days after the Contractor's request, except to the extent necessary, in the Contracting Authority's sole discretion, to assure the Contractor's faithful completion of the Work including but not limited to compliance with **Section 6.26.2**.

9.6.2 Upon consent of the Contractor's Surety, the Contracting Authority may reduce the amount of funds retained for the faithful performance of Work by up to 50 percent of the amount of funds required to be retained, provided the Contractor's Surety remains responsible for all damages that may be caused due to default by the Contractor, including, but not limited to, the following:

9.6.2.1 completion of the Work;

9.6.2.2 all interference, disruption, hindrance, and delay claims;

9.6.2.3 all Liquidated Damages; and

9.6.2.4 all additional expenses incurred by the State.

9.6.3 Funds retained until Contract Completion will be paid to the Contractor as described under **Section 6.31.2.**

9.6.4 If the funds retained under **Section 9.5** accrued interest while withheld from the Contractor, the payments of those retained funds to the Contractor will include that accrued interest.

9.6.5 If the Project involves more than one Phase as explicitly identified in the Agreement, this **Section 9.6** will apply on a per-Phase basis.

9.7 Retainage on Material Payments

9.7.1 The Owner shall pay the Contractor at the rate of 100 percent of the scheduled value for materials incorporated into the Project.

9.7.2 The Owner shall pay the Contractor at the rate of 92 percent of the invoice cost, not to exceed the scheduled value , for materials delivered to the Site, or other off-site storage location approved by the A/E, provided the Contractor provides the following information with the Contractor Payment Request:

9.7.2.1 a list of the fabricated materials consigned to the Project, giving the place of storage, together with copies of invoices verifying quantity and cost, written evidence of insurance covering the off-site stored materials; and

9.7.2.2 a certification of materials stored off-site, prepared by the Contractor and signed by the A/E to evidence that the materials are in conformity with the Specifications and have been tagged with the Project name and number for delivery to the Project. The Contractor shall directly reimburse the A/E for all costs incurred to visit a storage site, other than the areas adjacent to the Project.

9.7.3 The Owner shall pay the balance of the scheduled value when the materials are incorporated into and become a part of the Project.

9.7.4 When payment is allowed for materials delivered to the Site or other approved off-site storage location but not yet incorporated into the Project, the materials are the property of the Owner.

9.7.4.1 The Owner may, at its sole discretion, retain any material not ultimately incorporated into the Project or return it to the Contractor for credit of an amount proportionate to the value of the extra materials.

9.8 Payments Withheld

9.8.1 The A/E may recommend to the Contracting Authority that payments be withheld from, or Liquidated Damages be assessed against, a Contractor Payment Request.

9.8.2 The Contracting Authority may reject any Contractor Payment Request or part thereof, or withdraw any previous Contractor Payment Request, in whole or in part, to the extent necessary in the Contracting Authority's sole opinion to protect the Owner from loss because of:

9.8.2.1 Defective Work not remedied;

9.8.2.2 damage caused by the Contractor;

9.8.2.3 reasonable evidence that the Work cannot be completed for the unpaid balance of the Contract Sum;

9.8.2.4 reasonable evidence that the Work will not be completed within the Contract Times, and that the unpaid balance would not be adequate to cover damages under the Contract Documents for the anticipated delay;

9.8.2.5 failure to comply with Applicable Law including, but not limited to, the requirements of ORC Chapter 4115;

9.8.2.6 failure to timely submit EDGE Participation Reports in accordance with **Section 1.8.2**;

9.8.2.7 failure to timely identify the Contractor's proposed Subcontractors in accordance with **Section 4.1.1**;

9.8.2.8 failure to timely fulfill the Contractor's obligations related to the Construction Progress Schedule;

9.8.2.9 failure to carry out the Work in accordance with the Contract Documents; or

9.8.2.10 that which is permitted under other provisions of the Contract Documents.

9.8.3 The Contracting Authority shall notify the Owner, Contractor, and A/E in writing of the Contracting Authority's exercise of its rights under **Section 9.8.2**. If the Contractor remedies the basis for withholding payment under **Section 9.8.2** to the Contracting Authority's satisfaction, the Owner shall pay the amounts withheld.

9.8.4 If the Contractor takes exception to the withholding of payments under **Section 9.8.2**, the Contractor shall initiate a Claim as and when required under **Article 8**.

9.9 Final Contractor Payment Request

9.9.1 The Contractor, as a condition precedent to Contract Completion and final payment, shall complete all requirements of the Contract Documents.

9.9.1.1 The Contractor and each of its Subcontractors, regardless of tier, shall execute a Payment Release Affidavit to certify that the Contractor and each of its Subcontractors, regardless of tier, have complied with all requirements of ORC Chapter 4115, and to certify that all of its Subcontractors have been paid in full for all Work performed or materials furnished for the Project.

9.9.2 The Owner shall pay the final Contractor Payment Request within 30 days after the date the A/E recommends acceptance of the final Contractor Payment Request.

9.9.3 Acceptance of final payment by the Contractor or a Subcontractor constitutes the payee's waiver of all claims against the State except those previously made in writing under **Article 8** and identified by that payee as unsettled at the time of the final Contractor Payment Request.

ARTICLE 10 - BONDS, INSURANCE, AND INDEMNIFICATION

10.1 Payment and Performance Bonds

10.1.1 Before signing the Agreement, the Contractor shall provide the Bond required under Applicable Law and below:

10.1.1.1 If the Contractor provided **Document 00 43 13 - Bid Security Form** as its Bid Guaranty, then that form shall be the Bond.

10.1.1.2 If the Contractor provided another form of Bid Guaranty, then **Document 00 61 13 - Performance and Payment Bond Form** shall be the Bond.

10.1.1.3 Each Surety under the Bond shall be licensed to do business in Ohio and satisfactory to the Contracting Authority.

10.1.1.4 If there is more than one Surety under the Bond, each of them shall be jointly and severally liable as surety under the Bond.

10.1.1.5 Unless the Contracting Authority and the Owner are the same entity, the Bond shall name as co-obligees **(1)** the State by and through the Contracting Authority and **(2)** the Owner.

- **.1** If any document is used to name the required co-obligees of the Bond (e.g., a form commonly known as a "dual obligee rider"), that document will not alter the terms of the Contract in any way or the terms of the Bond in any way beyond merely naming the co-obligees notwithstanding any term of that document to the contrary.
- **.2** The Surety will not be obligated to more than the Penal Sum of any Bond solely on account of the existence of more than one obligee under that Bond.

10.1.1.6 The penal sum of the Bond, when initially submitted, shall be equal to one-hundred percent of the Contract Sum.

10.1.2 The Contractor shall submit with the executed Bond **(1)** a certified copy of the authority to act (power of attorney) of the agent signing the Bond on behalf of the Surety and **(2)** a current and signed Certificate of Compliance under ORC Section 9.311 issued by the Ohio Department of Insurance showing the Surety is licensed to do business in Ohio.

10.1.3 If the Contract Sum increases at any time such that it exceeds the penal sum of the Bond, the Contractor shall cause the penal sum of the Bond to be increased such that the penal sum equals one-hundred percent of the increased Contract Sum.

10.1.4 Any time the Contractor increases the penal sum of the Bond under **Section 10.1.3**, the Contractor shall deliver to the Contracting Authority an Acknowledgment of Surety from the affected Surety or Sureties to evidence the Surety's or Sureties' receipt of notice of the increased penal sum.

10.1.4.1 The Contracting Authority's receipt of the required Acknowledgement(s) of Surety is a condition precedent to the Owner's obligation to pay the Contractor for any portion of the Work associated with the increase of the penal sum.

10.1.4.2 The Contractor's failure to submit a required Acknowledgment of Surety or a Surety's failure or refusal to provide an Acknowledgment of Surety will not relieve the Surety of its obligation for the increased penal sum.

10.1.4.3 If any Surety fails or refuses to provide a required Acknowledgement of Surety, the Contracting Authority may require the Contractor to deliver to the Contracting Authority a new Bond showing the increased penal sum and written consent of the affected Surety or Sureties confirming the increased penal sum. In that event, the Contracting Authority's receipt of replacement Bonds will be a condition precedent to the Owner's obligation to pay the Contractor for any portion of the Work associated with the increase of the penal sum.

10.1.4.4 Each Acknowledgment of Surety shall be **(1)** on a form provided by the Contracting Authority and **(2)** subject to the acceptance of the Contracting Authority.

10.1.5 If at any time prior to final payment, any surety providing a Bond for the Project **(1)** is adjudged bankrupt or has made a general assignment for the benefit of its creditors; **(2)** has liquidated all assets or has made a general assignment for the benefit of its creditors; **(3)** is placed in receivership; **(4)** otherwise petitions a state or federal court for protection from its creditors; or **(5)** allows its license to do business in Ohio to lapse or to be revoked, then the Contractor shall, within 21 days after any such action listed above, provide the Contracting Authority with a new Bond in the form and

amount described in this **Section 10.1**. The Contracting Authority's receipt of a replacement Bond is a condition precedent to the Owner's obligation to pay the Contractor.

10.1.6 If notice of any change affecting the Contract is required by any Surety or by the provision of any Bond, the Contractor shall provide that notice.

10.2 Contractor's General Insurance Requirements

10.2.1 Throughout the performance of the Work or longer as may be described below, the Contractor shall obtain, pay for, and keep in force, the minimum insurance coverage described in this **Article 10**.

10.2.1.1 Each requirement of this **Article 10** applies to Subcontractors just as it applies to the Contractor.

10.2.1.2 If a Subcontractor's usual insurance coverage does not meet the minimum coverage requirements, before entering into an agreement with that Subcontractor, the Contractor shall submit to the Contracting Authority **(1)** a certificate of insurance evidencing the insurance the Subcontractor will carry without additional compensation and **(2)** if the Contracting Authority requests, a written proposal from the Subcontractor to provide coverage that meets the minimum coverage requirements. The Contracting Authority will decide whether to accept the non-conforming insurance coverage or the proposal to provide conforming coverage.

.1 Notwithstanding any other provision of the Contract to the contrary, the Contractor will not be entitled to any increase of the Contract Sum, Contract Times, or both on account of the Contracting Authority's refusal to accept a Subcontractor's nonconforming insurance coverage.

10.2.1.3 On a case-by-case basis, the Contracting Authority and Contractor may agree to adjust the below requirements for any particular Subcontractor.

10.2.2 Before starting the Work on the Site, upon renewal of any policy, and upon a change of any insurance carrier, the Contractor shall deliver to the Contracting Authority certificates evidencing that the required insurance is in force.

10.2.2.1 Certificates of insurance for other than government-controlled workers' compensation insurance shall identify **(1)** all below-required additional insureds and **(2)** the Project name.

10.2.3 With the exception of government-controlled workers' compensation coverage:

10.2.3.1 the Contractor shall place the insurance with companies that **(1)** are satisfactory to the Contracting Authority, **(2)** hold an A.M. Best Rating of A-, X, or higher, and **(3)** are authorized to conduct business in Ohio;

10.2.3.2 the policies shall be endorsed to require the Contractor's insurance carrier to **(1)** provide 30-days' written notice to the Contracting Authority (as certificate holder) of the cancellation or non-renewal of the insurance and **(2)** provide at least ten-days' written notice to the Contracting Authority (as certificate holder) of the cancellation of the insurance for non-payment of premium; and

10.2.3.3 within 30 days after the Contracting Authority's request, the Contractor shall submit insurance-company certified copies of the policies, the policy endorsements, loss-run reports, or all three.

10.2.4 The Contractor shall pay all deductibles, or self-insured retentions, or both contained in the Contractor's policies of insurance required or provided in connection with the Project. The Contracting Authority reserves the right to approve or reject all levels of self-insured retention, captive insurance programs, or other alternative risk financing the Contractor may use to comply with any insurance requirement.

10.2.5 The Contractor shall pay a proportionate share of the deductibles, or self-insured retentions, or both contained in any insurance policy the Contracting Authority purchases for the Project. The Contractor's proportionate share will derive from the percentage of the associated claim or loss attributable to the alleged or actual negligence of the Contractor or a Subcontractor.

10.2.6 The Contracting Authority and Owner do not represent that required coverage or limits are adequate to protect the Contractor.

10.2.7 Failure of the Contracting Authority to demand a certificate or other evidence of full compliance with the insurance requirements or failure of the Contracting Authority to identify a deficiency from evidence that is provided shall not be construed as a waiver of the Contractor's obligation to maintain the required insurance.

10.2.8 The Contracting Authority may terminate the Contract for cause on account of the Contractor's failure to maintain required insurance.

10.3 Contractor's Minimum Coverage Requirements

10.3.1 Workers Compensation. The Contractor shall maintain workers' compensation coverage meeting the requirements of Applicable Law including, without limitation, the Jones Act and the Longshore & Harbor Workers Compensation Act if Work involves hazards arising from work on or near navigable waterways, including vessels and docks.

10.3.2 Employers' Liability Coverage. The Contractor shall maintain employers' liability coverage with **(1)** an each-accident limit of not less than $1,000,000, **(2)** a disease each-employee limit of not less than $1,000,000, and **(3)** a disease policy limit of not less than $1,000,000.

10.3.3 Commercial General Liability. The Contractor shall maintain commercial general liability ("CGL") coverage that provides **(1)** an each-occurrence limit of not less than $1,000,000, **(2)** a general-aggregate limit of not less than $2,000,000, and **(3)** a products and completed-operations aggregate limit of not less than $2,000,000.

10.3.3.1 The CGL insurance shall be written on ISO occurrence form CG 00 01 04 13 or a substitute form, providing at least equivalent coverage for liability arising from premises, operations, independent contractors, products/completed-operations, personal and advertising injury, and liability assumed under an insured contract.

10.3.3.2 The Contractor shall include the State, Contracting Authority, Owner, and A/E as additional insureds under the CGL policy using ISO endorsement CG 20 10 07 04 and ISO endorsement CG 20 37 07 04 or a substitute form(s) providing equivalent coverage.

10.3.3.3 The CGL policy shall be endorsed using ISO endorsement CG 25 03 or a substitute form providing equivalent coverage to provide that the general aggregate limit applies separately to each of the insured's projects.

10.3.3.4 The CGL policy shall not exclude coverage for property damage to the Work arising out of the products/completed-operations hazard where a Subcontractor performed the damaged Work or the Work out of which the damage arises.

10.3.3.5 The CGL insurance shall not exclude coverage for property damage to electronic data.

10.3.3.6 The CGL insurance shall apply as primary and non-contributory insurance with respect to any other insurance or self-insurance programs that cover the additional insured(s).

10.3.3.7 The CGL policy shall not exclude coverage to the additional insured(s) for bodily injury or property damage arising out of the products/completed-operations hazard.

10.3.3.8 The Contractor shall maintain the CGL insurance in effect for no less than five years after the earlier of termination of the Contract or Substantial Completion of all Work.

10.3.4 Business Automobile Liability. The Contractor shall maintain business automobile ("BA") coverage written on ISO form CA 00 01 04 13 or a substitute form, providing at least equivalent coverage with a limit of not less than $1,000,000 each accident.

10.3.4.1 The coverage shall extend to any auto (owned, not owned, leased, rented, hired, or borrowed).

10.3.4.2 The Contractor shall include the State, Contracting Authority, Owner, and A/E as additional insureds under the BA policy.

10.3.4.3 The BA policy shall include an MCS-90 endorsement if transporting hazardous wastes/materials.

10.3.5 Umbrella/Excess Liability. The Contractor may employ an umbrella/excess liability policy to achieve the above-required minimum coverage.

10.3.5.1 The Contractor shall maintain umbrella/excess liability coverage with a limit of not less than $2,000,000 (in addition to the above-required limits) if the Work (or the Work to be performed by the Subcontractor) includes any of the following:

.1 brick/block masonry;
.2 exterior caulking/sealant;
.3 cast-in-place or precast concrete;
.4 curtain wall;
.5 dampproofing/waterproofing;
.6 electrical;
.7 elevator;
.8 exterior glass and/or glazing;
.9 exterior marble, granite, and/or other stonework;
.10 miscellaneous metals;

.11 plaster/stucco;

.12 plumbing;

.13 HVAC;

.14 roofing and/or sheet metal;

.15 scaffolding;

.16 spray-on fireproofing;

.17 sprinkler and/or fire protection; or

.18 structural steel and/or metal deck.

10.3.5.2 The Contractor shall maintain umbrella/excess liability coverage with a limit of not less than $5,000,000 (in addition to the above-required limits) if the Work (or the Work to performed by the Subcontractor) includes any of the following:

.1 caissons and/or piles;

.2 demolition;

.3 excavation and/or utility work;

.4 sheeting, shoring, and/or underpinning;

.5 window washing equipment; or

.6 wrecking.

10.3.6 Contractor's Pollution Liability. If the Work includes environmentally sensitive, hazardous types of activities (such as demolition, exterior insulation finish systems, Asbestos abatement, storage-tank removal, or similar activities), or involves Hazardous Materials, the Contractor shall maintain a contractor's pollution liability ("CPL") policy with **(1)** a per-claim limit of not less than $1,000,000 and **(2)** an annual-aggregate limit of not less than $1,000,000, covering the acts, errors and/or omissions of the Contractor for damages (including from mold) sustained by the Owner by reason of the Contractor's performance of the Work.

10.3.6.1 The CPL policy shall have an effective date, which is on or before the date that the Contractor first started to perform any Project-related services.

10.3.6.2 Upon submission of the associated certificate of insurance and at each policy renewal, the Contractor shall advise the Contracting Authority in writing of any actual or alleged claims that may erode the CPL policy's limits.

10.3.6.3 The Contractor shall maintain the CPL insurance in effect for no less than five years after the earlier of termination of the Contract or Substantial Completion of all Work.

10.3.7 Professional Liability—Contractor. The Contractor shall maintain contractor's professional liability ("PL") insurance (including without limitation for sprinkler and/or fire protection and other design-build work included in the Work, and services related to coordination and scheduling of construction activities, and means and methods) without design-build exclusions with limits not less than as identified in the following table:

Contract Sum	Each Claim	Annual Aggregate
Up to $50,000,000	$1,000,000	$2,000,000
More than $50,000,000	$2,000,000	$4,000,000

10.3.7.1 The PL policy shall have an effective date on or before the date that the Contractor first started to provide any Project-related services.

10.3.7.2 Upon submission of the associated certificate of insurance and at each policy renewal, the Contractor shall advise the Contracting Authority in writing of any actual or alleged claims that may erode the PL policy's limits.

10.3.7.3 The Contractor shall maintain the PL insurance in effect for no less than five years after the earlier of termination of the Contract or Substantial Completion of all Work.

10.3.7.4 If the Contractor is authorized under Applicable Law to directly provide professional design services, the Contractor may satisfy the requirements of this **Section 10.3.7** by providing a professional liability insurance policy.

10.3.7.5 If the Contractor is a joint venture:

.1 the Contractor may meet the requirements of this **Section 10.3.7** by providing a PL policy under which each joint venturer is the insured; or

.2 each joint venturer shall individually meet the requirements of this **Section 10.3.7** by providing a PL policy **(1)** under which the individual joint venturer is the insured and **(2)** that covers that joint venturer's interests

in the joint venture by endorsement or otherwise. The certificate of insurance shall reflect that the PL policy covers the joint venturer's interest in the joint venture.

Example: Assume that the Contractor **(1)** is the "XY joint venture" of company "X" and company "Y"; and **(2)** is required under **Section 10.3.7** to maintain PL insurance limits of $1M/$2M. In order to comply with **Section 10.3.7.5.2**, "X" must maintain PL insurance limits of $1M/$2M and "Y" must maintain PL insurance limits of $1M/$2M.

10.3.7.6 If the Contractor is a limited-liability company, which members consist of two or more separate firms:

.1 the Contractor may meet the requirements of this **Section 10.3.7** by providing a PL policy under which the limited-liability company is the insured; or

.2 each member of the limited-liability company shall individually meet the requirements of this **Section 10.3.7** by providing a PL policy **(1)** under which the individual member is the insured and **(2)** that covers that member's interests in the limited-liability company by endorsement or otherwise. The certificate of insurance shall reflect that the PL policy covers the member's interest in the limited-liability company.

Example: Assume that the Contractor **(1)** is the "XY limited-liability company," the members of which are "X" and "Y"; and **(2)** is required under **Section 10.3.7** to maintain PL insurance limits of $1M/$2M. In order to comply with **Section 10.3.7.6.2**, "X" must maintain PL insurance limits of $1M/$2M and "Y" must maintain PL insurance limits of $1M/$2M.

10.3.8 Professional Liability—Subcontractors. If the Work to be performed by a Subcontractor includes any professional design services (including without limitation sprinkler and/or fire protection and other design-build work) the Subcontractor shall maintain contractor's PL insurance without design-build exclusions with limits not less than as identified in the following table:

Subcontract Sum	Each Claim	Annual Aggregate
Up to $50,000,000	$1,000,000	$2,000,000
More than $50,000,000	$2,000,000	$4,000,000

10.3.8.1 The PL policy shall have an effective date on or before the date that the Subcontractor first started to provide any Project-related services.

10.3.8.2 Upon submission of the associated certificate of insurance and at each policy renewal, the Contractor shall advise the Contracting Authority in writing of any actual or alleged claims that may erode the Subcontractor's PL policy's limits.

10.3.8.3 The Subcontractor shall maintain the PL insurance in effect for no less than five years after the earlier of termination of the Contract or Substantial Completion of all Work.

10.3.8.4 If the Subcontractor is authorized under Applicable Law to directly provide professional design services, the Subcontractor may satisfy the requirements of this **Section 10.3.7.5** by providing a professional liability insurance policy.

10.3.9 Aviation Liability. If the Contractor or a Subcontractor uses manned or unmanned aircraft, including helicopters, in performance of the Work, the Contractor shall maintain aircraft or aviation liability coverage in an amount of no less than $10,000,000. The Contracting Authority and Owner will not be liable for any damage to any aircraft owned, leased, rented, or borrowed by the Contractor or a Subcontractor.

10.3.10 Watercraft Liability. If the Contractor or a Subcontractor uses watercraft in performance of the Work, the Contractor shall maintain watercraft liability coverage including protection and indemnity insurance in an amount of no less than $5,000,000. The Contracting Authority and Owner will not be liable for any damage to any watercraft owned, leased, rented, or borrowed by the Contractor or Subcontractor.

10.3.11 Equipment Coverage. The Contracting Authority and Owner will not insure or be liable for damage to any Contractor or Subcontractor owned, leased, rented, or borrowed tools, equipment, or vehicles. The Contractor and Subcontractors are solely responsible for maintaining all insurance necessary to cover their tools, equipment, and vehicles.

10.3.12 Ocean Marine Insurance. If the shipment of equipment or materials for the Work will not be covered by the builder's risk insurance described under **Section 10.4**, the Contractor shall maintain ocean marine insurance to the Site including cost, insurance, and freight with limits of not less than an amount equal to the full replacement cost of equipment/materials shipped to final destination point.

10.3.12.1 The insurance shall include the following minimum requirements:

.1 all-risk basis including war risk and all forms of terrorism;
.2 coverage for general average and salvage charges;
.3 "on deck" coverage;
.4 warehouse-to-warehouse coverage;
.5 coverage to include losses from strikes, riots, and civil commotions ("SR&CC coverage");
.6 coverage to include losses from free of capture and seizure warranty ("FC&S Warranty coverage");
.7 "Inchmaree" clause;
.8 sue and labor;
.9 "both-to-blame" coverage;
.10 free of particular average;
.11 inland coverage including on-land shipment, port storage, and barge transit upon inland waterways; and
.12 damage by saltwater and rainwater perils and cargo sweat.

10.3.13 Additional Property Insurance. For any demolition, blasting, excavating, tunneling, shoring, or similar operations, the Contractor shall provide and maintain Property Damage Liability insurance with a limit of liability equal to the limit as specified in the applicable sections of **Article 10**.

10.4 Builder's Risk Insurance

10.4.1 The Contractor shall maintain a builder's risk insurance policy written on a special causes of loss form and an open-perils basis providing coverage for direct physical loss of or damage to covered property arising from insured perils that shall not exclude: theft; fire; vandalism; malicious mischief; earthquake; earth movement; tornado; lightning; explosion; breakage of glass; flood; windstorm; collapse; water damage; hot and cold testing; debris removal and/or demolition occasioned by enforcement of Applicable Law; sudden and accidental equipment breakdown; and resulting damage from error, omission, or deficiency in construction methods, design, specifications, workmanship, or materials.

10.4.1.1 The policy shall cover the Project in the course of construction including false-work, temporary buildings and structures, and materials used in the construction process, stored on or off-site, or while in transit.

10.4.1.2 The coverage shall be written on a replacement-cost basis in an amount equal to not less than the initial Contract Sum, plus the value of: **(1)** all subsequent GMP Amendments and Modifications; **(2)** materials supplied and installed by others; and **(3)** any furnishings, fixtures, materials, or equipment located at the Site. All sub-limits of coverage are subject to the prior written approval of the Contracting Authority and Owner.

10.4.1.3 The policy shall not include any deductible of more than $25,000 per occurrence. Any deductible over that amount is subject to the prior written approval of the Contracting Authority and Owner.

10.4.1.4 The named insureds under the policy shall include the State, Contracting Authority, Owner, Contractor, Subcontractors at all tiers, and Separate Contractors.

10.4.1.5 Coverage shall include the reasonable extra costs of acceleration and expediting temporary and permanent repairs to, or permanent replacement of, damaged property. Those covered costs shall include overtime wages and the extra cost of "express" or other means for rapidly transporting materials and supplies necessary to the repair or replacement.

10.4.1.6 Coverage shall include a "soft cost endorsement" including, but not limited to, the reasonable extra costs of the A/E and reasonable Contractor extension or acceleration costs.

10.4.1.7 Coverage shall waive all rights between the Owner, Contracting Authority, Contractor, and Subcontractors at any tier, for damages caused by fire or any other perils to the extent of actual recovery of any insurance proceeds under the policy.

10.4.1.8 Coverage shall include provisions for mechanical or electrical breakdown, or boiler system testing if a boiler system is part of the Work.

10.4.1.9 Coverage shall include temporary structures and scaffolding, along with collapse coverage.

10.4.1.10 Coverage shall be primary to all other applicable insurance.

10.4.1.11 The policy shall specifically permit and allow for Partial Occupancy as defined under the Contract Documents and for partial occupancy or a similar term as used under the policy.

10.4.1.12 The Contractor shall maintain the policy in effect until Substantial Completion of all Work. The Contractor shall provide written notice to the Contracting Authority no less than 30 days before the expiration or termination of the policy.

10.4.1.13 The Contractor's tools and equipment shall not be covered under the builder's risk policy. It is the Contractor's sole responsibility to maintain such coverage, the cost of which shall be included in its Overhead (a component of Contractor's Fee) and not included as a separate item in the Contractor's Schedule of Values.

10.4.2 If the Contractor is involved solely in the installation of material and equipment and not in new building construction, the Contractor shall purchase and maintain a builder's risk, builder's risk-renovations, or installation floater insurance policy. The policy shall comply with the provisions of **Section 10.4.1.**

10.4.3 No less than ten days before the Contractor starts to perform any Work on the Site, the Contractor shall provide to the Contracting Authority an insurance-company certified copy of the complete insurance policy required under **Section 10.4.1** or **10.4.2** as applicable. The Contracting Authority's receipt of that copy of the policy is a condition precedent to the Contractor's entitlement to payment of any portion of the Contract Sum.

10.5 Waivers of Subrogation

10.5.1 To the fullest extent permitted by Applicable Law, the Contractor waives all rights against the Owner, Contracting Authority, and their agents and employees for damages to the extent covered by any insurance, except rights to the proceeds of that insurance. All policies shall accomplish the waiver of subrogation by endorsement or otherwise.

10.5.2 The Owner, Contracting Authority, and Contractor waive all rights against each other for damages caused by fire or other perils to the extent of actual recovery of any insurance proceeds under any property insurance, inland marine insurance, or builder's risk insurance applicable to the Work.

10.6 Indemnification for Injury or Damage

10.6.1 To the fullest extent permitted by Applicable Law, the Contractor shall indemnify, defend, and hold harmless the Indemnified Parties from and against all claims, costs, damages, losses, fines, penalties, and expenses (including but not limited to all fees and charges of attorneys and other professionals, and all court, arbitration, or other dispute-resolution costs) arising out of or in connection with the Project, provided that any such claim, cost, damage, loss, fine, penalty, or expense is attributable to:

10.6.1.1 bodily injury, sickness, disease, or death, or to injury to or destruction of tangible property but only to the extent caused by the negligent acts, errors, or omissions of the Contractor or a person or entity for whom the Contractor may be liable;

10.6.1.2 infringement of patent rights or copyrights by the Contractor or a person or entity for whom the Contractor may be liable; or

10.6.1.3 a violation of Applicable Law but only to the extent attributable to the Contractor or a person or entity for whom the Contractor may be liable.

10.6.2 The Contractor's indemnification obligation under **Section 10.6** exists regardless of whether or not and the extent to which the claim, damage, loss, fine, penalty, or expense is caused in part by a party indemnified under **Section 10.6**. But nothing in **Section 10.6** obligates the Contractor to indemnify any individual or entity from and against the consequences of that individual or entity's own negligence.

10.6.3 The Contractor's obligations under **Section 10.6** shall not extend to the liability of the A/E, A/E's consultants, agents, representatives, or employees for negligent preparation or approval of Drawings, Specifications, Change Orders, opinions, and any other responsibility of the A/E, except to the extent covered by the Contractor's insurance.

10.6.4 In claims against an Indemnified Party by any direct or indirect employee (or the survivor or personal representative of that employee) of the Contractor or a person or entity for whom the Contractor may be liable, the indemnification obligation under **Section 10.6** will not be limited by a limitation on the amount or type of damages, compensation, or benefits payable under workers' compensation acts, disability benefit acts, or other employee benefit acts.

10.6.5 The Contractor's indemnification obligation under **Section 10.6** will not be limited by any insurance policy provided or required in connection with the Project.

10.6.6 The Contractor's obligations under **Section 10.6** shall not negate, abridge, or reduce other rights or obligations of indemnity, which would otherwise exist as to an Indemnified Party.

10.6.7 The Contractor's indemnification obligation under **Section 10.6** will survive termination of the Contract and Contract Completion.

10.6.8 The Contracting Authority may deduct from the Contract Sum the claims, damages, losses, fines, penalties, and expenses for which the Contractor is liable under **Section 10.6**. If those claims, damages, losses, fines, penalties, and expenses exceed the unpaid balance of the Contract Sum, the Contractor shall immediately pay the difference to the Owner.

ARTICLE 11 - SUSPENSION AND TERMINATION

11.1 Suspension of the Work

11.1.1 The Contracting Authority, without cause and without prejudice to any other right or remedy it may have, may order the Contractor in writing to suspend, delay, or interrupt performance of the Work in whole or in part for such period as the Contracting Authority may determine.

11.1.1.1 If the Contracting Authority suspends the Work under this **Section 11.1.1** and the Contractor complies with **Article 7** and **Article 8**, the Contract Sum and Contract Times shall be adjusted for increases in the cost and time caused by the suspension, delay, or interruption.

11.1.1.2 Notwithstanding the foregoing, no adjustment shall be made to the Contract Sum or Contract Times to the extent that:

.1 performance was or could have been suspended, delayed, or interrupted by a cause for which the Contractor is responsible; or

.2 an equitable adjustment is made or denied under another provision of the Contract.

11.1.1.3 If the Contracting Authority suspends the Work under this **Section 11.1.1** and the Contractor submits a proper Contractor Payment Request, subject to all other provisions of the Contract Documents, the Contractor shall be entitled to payment of compensation due under the Contract Documents for Work performed before the suspension based upon the Schedule of Values.

11.1.2 The Contracting Authority, without prejudice to any other right or remedy it may have, may order the Contractor in writing to suspend, delay, or interrupt the performance of the Work in whole or in part for such period as the Contracting Authority may determine for any of the following reasons: **(1)** Defective Work; **(2)** the Contractor is causing undue risk of damage to any part of the Project or adjacent area; **(3)** the Contractor fails to furnish or perform the Work in such a way that the complete Work will conform to the requirements of the Contract Documents; or **(4)** any other cause the Contracting Authority reasonably believes justifies suspension.

11.1.2.1 The Contracting Authority's exercise of its right to suspend the Work under this **Section 11.1.2** shall not entitle the Contractor to any adjustment of the Contract Sum, Contract Times, or both.

11.1.2.2 If the Contracting Authority is adjudged to have improperly or unjustifiably suspended the Work under this **Section 11.1.2**, the suspension shall be deemed to have been a suspension under **Section 11.1.1**.

11.1.3 Upon receipt of notice of suspension under this **Section 11.1**, the Contractor shall cease Work on the suspended activities and take all necessary or appropriate steps to limit disbursements and minimize respective costs. The Contractor shall furnish a report to the Contracting Authority, within five days after receiving the notice of suspension, describing the status of the Work, including, but not limited to, results accomplished, resulting conclusions, and other information as the Contracting Authority may require.

11.1.4 The Contracting Authority's right to stop the Work shall not give rise to any duty to exercise the right for the benefit of the Contractor or any other party, and the Contracting Authority's exercise or failure to exercise the right shall not prejudice any of the Contracting Authority's other rights.

11.2 Termination for Convenience

11.2.1 The Contracting Authority may at any time terminate the Contract in whole or in part for the Owner's convenience and without cause, upon written notice to the Contractor.

11.2.2 Upon receipt of the notice of termination for convenience, the Contractor shall immediately proceed with performance of the following duties in accordance with instructions from the Contracting Authority:

11.2.2.1 cease operation as specified in the notice;

11.2.2.2 proceed as described under **Section 11.3.4;** ;

11.2.2.3 proceed with Work not terminated; and

11.2.2.4 take actions that may be necessary, or that the Contracting Authority may direct, for the protection and preservation of the terminated Work.

11.2.3 After terminating the Contract for convenience, the Owner shall pay the Contractor in accordance with the Schedule of Values for Work completed, including Contractor's Fee, any retained funds, and the value of materials ordered and delivered, less any salvage credit the Contractor may receive for them.

11.2.3.1 All materials, equipment, facilities, and supplies at the Site or stored off-site, for which the Contractor has received payment, shall become the property of the Owner.

11.2.3.2 In no event shall the Contractor be entitled to **(1)** Contractor's Fee on or any other compensation for Work not performed or **(2)** compensation in excess of the total Contract Sum.

11.2.4 If the Contracting Authority terminates the Work under this **Section 11.2**, the termination shall not affect the rights or remedies of the State against the Contractor then existing or which may thereafter accrue.

11.2.5 Notwithstanding **Section 11.2.3**, if the Contracting Authority terminates the Work under this **Section 11.2**, but there exists an event of the Contractor's default, the Contractor shall be entitled to receive only such amounts as it would be entitled to receive following the occurrence of an event of default as provided in **Section 11.3**.

11.3 Termination for Cause

11.3.1 The Contracting Authority may terminate the Contract in whole or in part if the Contractor commits a material breach of the Contract including but not limited to:

11.3.1.1 failure to prosecute the Work with the necessary force or in a timely manner;

11.3.1.2 refusal to remedy Defective Work;

11.3.1.3 failure to supply enough properly skilled workers or proper materials;

11.3.1.4 failure to properly make payment to Subcontractors or Consultants;

11.3.1.5 performance of any services outside of the United States;

11.3.1.6 permitting its Subcontractors or Consultants to perform any services outside of the United States; or

11.3.1.7 disregarding laws, ordinances, rules, regulations, or orders of a public authority with jurisdiction over the Project.

11.3.2 If the Contracting Authority intends to exercise its termination rights under this **Section 11.3**, the Contracting Authority shall issue not less than five days' written notice to the Contractor and the Contractor's Surety in accordance with ORC Section 153.17 ("Five-Day Notice").

11.3.2.1 Notwithstanding any provision of the Contract to the contrary **(1)** the issuance of a 72-Hour Notice under **Section 6.24.1** is not a condition precedent to the Contracting Authority's exercise of its rights under **Section 11.3** and **(2)** the Contracting Authority's decision to not issue a 72-Hour Notice under **Section 6.24.1** will not prejudice the Contracting Authority's rights under **Section 11.3**.

11.3.3 If the Contractor fails to satisfy the requirements set forth in the Five-Day Notice within 15 days after receipt of the Five-Day Notice, the Contracting Authority may declare the Contractor in default, terminate the Contract, and employ upon the Work the additional force or supply materials or either as appropriate, and remove Defective Work.

11.3.4 After termination, the Contractor shall to the extent related to the performance of the discontinued portion of the Work, unless the notice of termination directs otherwise:

11.3.4.1 immediately discontinue the Work on that date, place no further orders or Subcontracts for materials, equipment, services, facilities, or otherwise, except as may be necessary for completion of such portion of the Work as is not discontinued;

11.3.4.2 subject to the Contracting Authority's exercise of its rights under **Section 4.5**, promptly make every effort to procure cancellation upon terms satisfactory to the Contracting Authority of all Subcontracts;

11.3.4.3 promptly work with the Contracting Authority in good-faith to develop and implement plans to **(1)** secure the Site and off-Site stored materials; **(2)** inventory and verify **(a)** the location and quantity of materials stored on and off-Site and **(b)** the status of the progress of the Work; and **(3)** identify all Project-related permits;

11.3.4.4 no less than five days after the effective date of the termination, deliver to the Contracting Authority all Contractor-maintained, Project-related permits;

11.3.4.5 no less than seven days after the effective date of the termination, deliver to the Contracting Authority the following information and documents concerning each Subcontractor: **(1)** name and address; **(2)** name, address, telephone number, and email address of the Subcontractor's primary point of contact for the Project; **(3)** scope of the Subcontract Work (including equipment supplied); **(4)** a complete and unredacted copy of the Subcontract(s); **(5)**

complete and unredacted copies of all Subcontract modifications (e.g., change orders, amendments, etc.) and related documents; **(6)** complete and unredacted copies of all pending claims, requests for additional compensation, requests for additional time, unexecuted change orders, and related documents; **(7)** complete and unredacted copies of all pay applications (paid and pending); **(8)** a complete and unredacted copy of the Contractor's accounts-payable report for the Subcontractor; **(9)** complete and unredacted copies of any non-conforming Work reports/notices and related documents; and **(10)** complete and unredacted copies of any surety bond(s) or other performance security provided by the Subcontractor.

11.3.4.6 no less than 21 days after the effective date of the termination, pay all undisputed amounts due to each Subcontractor for Work performed before the effective date of termination and deliver to the Contracting Authority lien waivers to evidence those payments; and

11.3.4.7 do only such Work as may be necessary to protect the Work already in progress and to protect materials and equipment on the Project Site or in transit thereto.

11.3.5 If the Contract is terminated, the Contractor's Surety may perform the Contract. If the Contractor's Surety does not commence performance of the Contract within ten days after the date of Contract termination, the Contracting Authority may complete the Work by any means the Contracting Authority determines appropriate. The Contracting Authority may take possession of and use all materials, facilities, and equipment at the Site or stored off-site, for which the Owner has paid.

11.3.6 If the Contract is terminated, the Contractor shall not be entitled to further payment. If the unpaid balance of the Contract Sum is exceeded by the costs of finishing the Work, including without limitation the fees and charges of engineers, architects, attorneys, and other professionals and court costs, and other damages incurred by the Owner and not expressly waived, the Contractor or Surety shall immediately pay the amount of the insufficiency to the Owner. This obligation for payment shall survive termination of the Contract.

11.3.7 If the Contractor's Surety performs the Work, the provisions of the Contract Documents govern the Surety's performance, with the Surety in place of the Contractor in all provisions including, but not limited to, provisions for payment for the Work, and provisions of the right of the Contracting Authority to complete the Work.

11.3.8 If the Contracting Authority terminates the Contract under this **Section 11.3**, the termination shall not affect any rights or remedies of the State against the Contractor then existing or which may thereafter accrue. The Contracting Authority's retention or payment of funds due the Contractor shall not release the Contractor or the Contractor's Surety from liability for performance of the Work in accordance with the requirements of the Contract Documents.

11.3.9 If the Contracting Authority is adjudged to have improperly or unjustifiably terminated the Contract under this **Section 11.3**, the termination will be deemed to have been a termination under **Section 11.2**.

11.4 Contractor Insolvency

11.4.1 The Contracting Authority may immediately terminate the Contract for cause if:

11.4.1.1 the Contractor commences a voluntary case under Title 11 of the United States Code or the corresponding provisions of any successor laws; or

11.4.1.2 any legal entity commences an involuntary case against the Contractor under Title 11 of the United States Code or the corresponding provisions of any successor laws and **(1)** the case is not dismissed within 60 days after its commencement; or **(2)** the court before which the case is pending issues an order for relief or similar order approving the case; or

11.4.1.3 a court of competent jurisdiction appoints, or the Contractor makes an assignment of all or substantially all of its assets to, a receiver, trustee, liquidator, or other similar custodian for the Contractor or all or substantially all of the Contractor's assets; or

11.4.1.4 any attachment, execution, or other judicial seizure is levied against all or substantially all of the Contractor's assets; or

11.4.1.5 the Contractor takes any action toward the dissolution or winding up of its business; or

11.4.1.6 the Contractor fails generally to pay its debts as they become due (unless those debts are subject to a good-faith dispute as to liability or amount) or it acknowledges in writing that it is unable to do so.

11.4.2 If the Contractor files a voluntary petition in bankruptcy or has an involuntary petition in bankruptcy filed against it, the Contractor, the Contractor as the debtor-in-possession, or the trustee of the Contractor's bankruptcy estate shall file a motion to assume or reject the Contract under Bankruptcy Code § 365, 11 U.S.C. § 365, within 20 days after the

filing of the voluntary petition or involuntary petition and shall diligently prosecute that motion to conclusion so as to obtain an order granting or denying that motion within 45 days after the filing of the voluntary or involuntary petition.

11.4.3 If the Contracting Authority intends to exercise its termination rights under this **Section 11.4**, the Contracting Authority shall notify the Contractor in writing of the Contracting Authority's termination of the Contract and the cause(s) for that termination.

11.4.4 The Contractor agrees to the granting of relief from the automatic stay of the Bankruptcy Code, 11 U.S.C. § 362(a), to permit the Contracting Authority to terminate the Contract for cause in such instance and issue and serve all notices necessary to terminate the Contract or arising out of the termination of the Contract and to take any and all other action necessary to terminate the Contract.

ARTICLE 12 - GENERAL PROVISIONS

12.1 Contractor's Documents and Contract Documents

12.1.1 Ownership.

12.1.1.1 The Owner alone owns the Contractor's Documents and the Contract Documents and every right, title, and interest therein.

.1 The Contractor shall execute and deliver and cause its employees and agents and all Subcontractors and Consultants to execute and deliver to the Owner any transfers, assignments, documents, or other instruments (if any) necessary to vest in the Owner complete right, title, interest in and ownership of the Contractor's Documents and the Contract Documents.

12.1.1.2 The Contractor may retain copies, including reproducible copies, of the Contractor's Documents and the Contract Documents for information, reference, and performance of the Work.

12.1.1.3 The submission or distribution of the Contractor's Documents or the Contract Documents to meet official regulatory requirements or for similar purposes in connection with the Project is not a waiver of the Owner's reserved rights in the Contractor's Documents and the Contract Documents. Any unauthorized use of the Contractor's Documents or the Contract Documents shall be at the sole risk of the entity making the unauthorized use.

12.1.1.4 The Contractor shall provide Electronic Files of the Contractor's Documents to Separate Consultants and Separate Contractors for their use in connection with the Project. The Contractor shall provide the Electronic Files **(1)** at no additional cost to the Separate Consultants, Separate Contractors, and Owner and **(2)** without requiring the Separate Consultants, Separate Contractors, or Owner to agree to any terms or conditions concerning the provision, receipt, or use of the Electronic Files that differ in any material respect from the Contract.

12.1.2 Intent.

12.1.2.1 The intent of the Contract Documents is to include all items necessary for the proper execution and completion of the Work by the Contractor.

12.1.2.2 The Contract Documents are complementary, and what is required by one is binding as if required by all.

12.1.2.3 The Contractor shall provide all labor and materials necessary for the entire completion of the Work described in the Contract Documents and reasonably inferable to produce the intended results.

12.1.2.4 The Drawings govern dimensions, details, and locations of the Work. The Specifications govern quality of materials and workmanship.

12.1.2.5 The organization of the Specifications in divisions, sections, and articles, and the arrangement of Drawings shall not restrict the Contractor in dividing the Work among Subcontractors or in establishing the extent of Work to be performed by any trade.

12.1.2.6 In the event of inconsistency or conflict within the Contract Documents, the Contractor shall provide the better quality or greater quantity of Work, and comply with the stricter requirement.

12.1.2.7 Unless otherwise defined in the Contract Documents, words that have well-known technical or construction industry meanings are used in accordance with those recognized meanings.

12.1.2.8 The Sections of Division 01 - "General Requirements" govern the performance of the Work of all Sections of the Specifications.

12.1.3 Use of Electronic Files.

12.1.3.1 The Owner, Contracting Authority, A/E, and Contractor reasonably expect that they will provide Electronic Files to each other to facilitate the design and construction of the Project consistent with current practices and customs in the construction industry.

12.1.3.2 The Owner, Contracting Authority, A/E, and Contractor acknowledge that the use of Electronic Files involves risks not generally associated with the use of paper documents. Those risks include, for example and without limitation, alteration (inadvertent or intentional) and deterioration, both of which may not be readily apparent through casual observation.

12.1.3.3 The Owner, Contracting Authority, A/E, and Contractor do not warrant to each other that any Electronic File they provide **(1)** was not altered through transmission; **(2)** is compatible with the recipient's computer system or software; **(3)** will not be altered through degradation of the recipient's storage media; or **(4)** is suitable for conversion/translation to and subsequent use in a system or format other than the Electronic File's original system or format.

12.1.3.4 Before relying on any Electronic File it receives, the recipient is responsible for verifying that the Electronic File was not altered through transmission, degradation of the recipient's own storage media, or other causes.

12.1.3.5 If the recipient of an Electronic File converts/translates the Electronic File from its original system or format to an alternate system or format, the recipient assumes the risk that the conversion/translation created errors in the converted/translated file.

12.1.3.6 The Owner, Contracting Authority, A/E, and Contractor shall each maintain and operate its own computer systems and storage media in a commercially reasonable way and take reasonable steps to prevent errors in and deterioration of the Electronic Files it creates, provides, and receives.

12.1.3.7 In the event of a discrepancy between information contained in a paper version of a document and the Electronic File of that document, the paper version will govern.

12.1.3.8 This **Section 12.1.3** does not relieve the Contractor of its responsibility for the preparation, completeness, or accuracy of the Contractor's Documents.

12.2 Public Relations

12.2.1 Publicity prior to completion of the Project. Prior to completion of the Project, public relations or publicity about the Project shall be solely within the control, and with the consent of, the Owner.

12.2.2 Publicity after completion of the Project. After completion of the Project, the Contractor may exercise reasonable public relations and marketing efforts related to the Project, provided the Contractor properly identifies the Owner and Contracting Authority, and their participation in the Project.

12.2.3 Professional Photography. If the Contractor commissions photography of the completed Project, the Contractor shall include in its photography agreements a release for unrestricted and unlimited use of photographs by the Owner and Contracting Authority, and shall provide the Owner and Contracting Authority with a reasonable quantity of photographs for use in the Owner's and the Contracting Authority's marketing and awareness activities, including, but not limited to, profiles of the Project on their respective websites.

12.2.4 Craft Awards and Other Recognition. If the Contractor submits the Project for craft awards or other similar venues for recognition of the Project, the Contractor shall properly identify the Owner and Contracting Authority, and their participation in the Project. In addition, if the Project receives any craft award or other recognition, the Contractor shall provide duplicate copies of the award plaque or other memento of the award to the Owner and Contracting Authority.

12.3 Application and Governing Law

12.3.1 The Contract and the rights of the parties thereunder shall be governed by the laws of the state of Ohio and only Ohio courts shall have jurisdiction over any action or proceeding concerning the Contract and/or performance thereunder. The Contractor irrevocably consents to such jurisdiction.

12.3.2 The parties to the Contract shall comply with Applicable Law.

12.3.3 Other rights and responsibilities of the Contractor, A/E, Contracting Authority, and Owner are set forth throughout the Contract Documents and included under different titles, articles, and paragraphs for convenience.

12.4 Conditions of the Contract

12.4.1 These General Conditions govern, take precedence over, and shall not be superseded or amended by Drawings and Specifications, unless so provided in Supplementary Conditions prepared by the Contracting Authority and approved by the Ohio Facilities Construction Commission.

12.5 Notice of Commencement.

12.5.1 The Contracting Authority shall prepare a Notice of Commencement and make it available as required under ORC Section 1311.252.

12.5.2 Upon request, the Contracting Authority or the Contractor shall furnish the Notice of Commencement to Subcontractors or any other member of the public.

12.6 Written Notice

12.6.1 Notice under the Contract Documents shall be validly given if:

12.6.1.1 delivered personally to a member of the organization for whom the notice is intended;

12.6.1.2 delivered by trackable delivery service, or sent by registered or certified mail, to the last known business address of the organization; or

12.6.1.3 delivered by facsimile, email, or project management software.

12.6.2 When the Owner, Contracting Authority, A/E, or Contractor gives notice to one of the other three, it shall also simultaneously send a copy of that notice to the others.

12.6.3 A copy of all notices, certificates, requests, or other communications to the Contracting Authority shall be sent to the Project Manager.

12.6.4 In the event of an emergency involving the Project, including, but not limited to, a fatality, serious injury, fire, collapse, flood, utility, or power loss to occupied facilities, explosion, or environmental damage, the Contractor shall immediately notify the A/E, Contracting Authority, and Owner by the most expedient means available.

12.6.5 The Contracting Authority, Owner, A/E, or Contractor may, by written notice given hereunder, designate addresses, telephone numbers, email addresses, or facsimile numbers to which notices, certificates, requests, or communications shall be sent.

12.7 Taxes

12.7.1 Only those materials that ultimately become a part of the completed structure or improvement that constitutes the Project shall be exempt from state sales tax and state use tax.

12.7.2 The purchase, lease, or rental of material, equipment, parts, or expendable items as concrete form lumber, tools, oils, greases, and fuels, which are used in connection with the Work, are subject to the application of state sales tax and state use tax.

12.8 Computing Time

12.8.1 When the Contract Documents refer to a period of time by a number of days, the period shall be computed to exclude the first and include the last day of the period. If the last day of the period falls on a Saturday, Sunday, or a Legal Holiday, that day shall be omitted from the computation and the period shall end on the next succeeding day that is not a Saturday, Sunday, or Legal Holiday.

12.8.2 Except as excluded under **Section 12.8.1**, the Contract Times and all other periods referred to in the Contract Documents includes Saturdays, Sundays, and all days defined as Legal Holidays in the Contracting Definitions.

12.8.3 The standard workdays for State projects are Monday through Friday, excluding Legal Holidays.

12.9 Time of the Essence

12.9.1 Time limits stated in the Contract Documents are of the essence of the Contract and all obligations under the Contract. By signing the Agreement, the Contractor acknowledges that the Contract Times are reasonable, taking into consideration the usual weather and other conditions prevailing in the locality of the Project. By signing the Construction Schedule, the Contractor acknowledges that the specified Milestone dates are reasonable, taking into consideration the usual weather and other conditions prevailing in the locality of the Project.

12.9.1.1 The Contractor acknowledges that the Owner has entered into, or may enter into, agreements for use of all or part of the premises where the Work is to be completed based upon the Contractor achieving Substantial Completion within the associated Contract Time.

12.9.1.2 The Contractor shall perform the Work in a reasonable, efficient, and economical sequence, and in the order and time as provided in the Construction Progress Schedule.

12.9.1.3 The Contractor acknowledges that it may be subject to interference, disruption, hindrance, or delay in the progress of the Work from any cause.

12.10 Successors and Assigns

12.10.1 The Contracting Authority and Contractor each bind themselves, their successors, assigns, and legal representatives, to the other party to this Contract and to the successors, assigns, and legal representatives of the other party with respect to all terms of this Contract.

12.10.2 The Contracting Authority and Contractor each acknowledge that the Owner is an intended third-party beneficiary of this Contract.

12.10.3 The Contractor shall not assign or transfer any right, title, or interest in this Contract without the Contracting Authority's prior written consent.

12.11 Extent of Contract

12.11.1 Entire Contract. Contract Documents represent the entire and integrated agreement between the Contracting Authority and Contractor and supersede all prior negotiations, representations, or agreements, either written or oral.

12.11.2 Multiple Counterparts. This Contract may be executed in any number of counterparts, each of which shall be regarded as an original and all of which shall constitute but one and the same instrument.

12.11.3 Captions. The captions and headings in this Contract are for convenience only and in no way define, limit, or describe the scope or intent of any provisions or sections hereof.

12.11.4 Precedence. In the event of a conflict or inconsistency between these General Conditions and any other Contract Documents (except Supplementary General Conditions), these General Conditions take precedence. In the event of a conflict or inconsistency between these General Conditions and Supplementary Conditions, the Supplementary Conditions take precedence.

12.12 Severability

12.12.1 If any term or provision of this Contract or the application thereof to any Person or circumstance, is finally determined to be invalid or unenforceable by a court of competent jurisdiction, the remainder of this Contract or the application of such term or provision to other Persons or circumstances, shall not be affected thereby, and each term and provision of this Contract shall be valid and enforced to the fullest extent permitted by Applicable Law.

12.13 Electronic and Facsimile Signatures

12.13.1 Any party hereto may deliver a copy of its counterpart signature page to this Contract via electronic signature software, fax, e-mail, or project management software. Each party hereto shall be entitled to rely upon an electronic, scanned, or facsimile signature of any other party delivered in such a manner as if such signature were an original.

12.14 No Third-Party Interest

12.14.1 Except as expressly provided under **Sections 6.2.2** through **6.2.5** and **Section 12.10.2**, **(1)** no person or entity, other than the Contracting Authority, Owner, and Contractor, will have any right or interest under the Contract, and **(2)** the Contract does not create a contractual relationship of any kind between any people or entities other than the Contracting Authority, Owner, and Contractor.

12.15 Ohio Retirement System

12.15.1 All individuals employed by the Contractor that provide personal services to the Contracting Authority or Owner are not public employees for the purposes of ORC Chapter 145, as amended.

12.15.2 If the Contractor is a PERS retirant, as defined by ORC Section 145.38, the Contractor shall notify the Contracting Authority of such status in writing prior to commencement of Work. The Contracting Authority, Owner, or State is not responsible for changes to the Contractor's retirement benefits resulting from entering into this Contract.

12.16 No Waiver

12.16.1 The failure of the Contracting Authority or Contractor to insist in any one or more instances upon the strict performance of any one or more of the provisions of the Contract or to exercise any rights under the Contract or provided by law will not be construed as a waiver or relinquishment of that provision or right or of the right to subsequently demand strict performance or exercise the right and the rights will continue unchanged and remain in full force and effect.

12.17 Rights and Remedies

12.17.1 The duties, obligations, rights, and remedies under the Contract are in addition to and not a limitation of the duties, obligations, rights, and remedies otherwise imposed by or available under Applicable Law.

12.18 Survival of Obligations

12.18.1 All representations, indemnity obligations, warranties, guarantees, and necessarily continuing obligations under the Contract, will survive final payment, completion and acceptance of the Work, and termination or completion of the Contract.

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END OF DOCUMENT

Document 00 73 00 - Supplementary Conditions (General Contracting - HB 96 Changes)

State of Ohio Standard Requirements for Public Facility Construction

Certifications

These Supplementary Conditions amend and supplement the General Conditions and other provisions of the Contract Documents as indicated below. All provisions not amended remain in full force and effect. The terms in these Supplementary Conditions defined in the Contracting Definitions or the General Conditions shall have the meanings assigned to them in those documents.

These Supplementary Conditions are authorized, by the Ohio Facilities Construction Commission, for use on projects constructed for the «insert name».

Contracting Authority

«insert name»
«insert street address»
«insert city, state zip code»
«insert phone number»
«insert website»

Owner

«insert name»
«insert street address»
«insert city, state zip code»
«insert phone number»
«insert website»

MODIFICATIONS TO GENERAL CONDITIONS

Delete Section 1.1.3 in its entirety.

Replace 9.5.1 with:

9.5.1 Partial payments to the Contractor for labor shall be made at the rate of 96 percent of the amount invoiced through the Contractor Payment Request.

Delete Section 9.5.2 in its entirety.

Delete Section 9.7.1 in its entirety.

Replace Section 9.7.2 with the following:

9.7.2 When the Contractor has achieved Substantial Completion of all Work and there is no other reason to retain funds, the retained funds shall be paid to the Contractor within 30 days after the Contractor's request, except to the extent necessary, in the Contracting Authority's sole discretion, to assure the Contractor's faithful completion of the Work including but not limited to compliance with **Section 6.25.2**.

Insert Section 9.7.4.

9.7.4 If the funds retained under **Section 9.5.1** accrued interest while withheld from the Contractor, the payments of those retained funds to the GC will include that accrued interest.

Change Section 9.74 to 9.7.5

END OF DOCUMENT

Document 00 73 00 - Supplementary Conditions (Two-Year College Sample)
State of Ohio Standard Requirements for Public Facility Construction

Certifications

These Supplementary Conditions amend and supplement the General Conditions and other provisions of the Contract Documents as indicated below. All provisions not amended remain in full force and effect. The terms in these Supplementary Conditions defined in the Contracting Definitions or the General Conditions shall have the meanings assigned to them in those documents.

These Supplementary Conditions are authorized, by the Ohio Facilities Construction Commission, for use on projects constructed by and for Lakeland Community College.

Contracting Authority and Owner

Lakeland Community College
7700 Clocktower Drive.
Kirtland, OH. 44094
(440) 525-7000
https://www.lakelandcc.edu/

Institutional Designee

Joseph (Jay) Kahn AIA
Director for Facilities Management

MODIFICATIONS TO GENERAL CONDITIONS

Delete Section 1.8 in its entirety.

Replace Section 9.3.1 with the following:

9.3.1 Within 10 days of receipt of the Notice to Proceed, or other period as mutually agreed by the Contractor and the Contracting Authority, the Contractor shall submit to the A/E a Schedule of Values on a form published by the Commission, with separate amounts shown for labor and materials for each branch of Work, following the numbers and titles of the Construction Specifications Institute's *MasterFormat* for individual work results, or *UniFormat* for assemblies in place. All costs shall indicate labor and material cost associated with each item specified on the cost breakdown.

Delete Section 9.3.1.1 in its entirety.

Delete Section 9.4.1.6 in its entirety.

Delete Section 9.8.2.6 in its entirety.

END OF DOCUMENT

Document 00 73 43 - Wage Rate Requirements
State of Ohio Standard Requirements for Public Facility Construction

PREVAILING WAGE RATES

1.1 Payment of Prevailing Wage Rates

1.1.1 The Contractor shall pay the prevailing wage rates of the Project locality, as issued by the Ohio Department of Commerce, Wage and Hour Bureau to laborers and mechanics performing Work on the Project.

1.1.2 The Contractor shall comply with the provisions, duties, obligations, and is subject to the remedies and penalties of ORC Chapter 4115.

1.1.3 If the Contractor or its Subcontractors fail to comply with ORC Chapter 4115, the Contracting Authority may withhold payment pursuant to **Section 9.8.2.5** of the **General Conditions**. The Contractor is liable for violations committed by the Contractor or its Subcontractors to the extent provided in ORC Chapter 4115.

1.1.4 The Contractor shall submit all payroll reports in compliance with the requirements of **Section 1.2** for all employees of the Contractor and of the Contractor's Subcontractors.

1.1.5 By executing a Contract, the Contractor certifies that it based its Bid upon the prevailing rates of wages as ascertained by the Ohio Department of Commerce, Wage and Hour Bureau for the Project as provided in ORC Sections 4115.03 through 4115.14, which are inserted at the end of this Document.

1.2 Prevailing Wage Rate Revisions

1.2.1 The Contracting Authority shall, within 7 business days after receipt of a notice of a change in the prevailing wage rates, notify the Contractor of the change. The prevailing wage rates are available at the Ohio Department of Commerce's web site: https://pwr.com.ohio.gov/.

1.2.2 The Contractor shall pay any revised wage rates issued during the term of the Contract.

1.3 Payroll Schedule

1.3.1 Within 10 days of the date of the Notice to Proceed, the Contractor shall provide the Contracting Authority's Prevailing Wage Coordinator a schedule of dates during the term of the Contract on which wages shall be paid to employees for the Project.

1.4 Payroll Reports

1.4.1 The Contractor shall submit payroll reports with each Contractor Payment Request, which reports shall be certified by the Contractor that the payroll is correct and complete, and that the wage rates shown are not less than those required by the Contract. The Contractor is responsible for submitting all payroll reports of its Subcontractors.

1.4.1.1 Each payroll report shall indicate the period covered and include a list containing the name, address, and last four digits of the social security number of each employee of the Contractor and its Subcontractors paid for the Work.

1.4.1.2 Each payroll report shall list the number of hours each employee worked each day on the Project during the reporting period, the total hours each week on the Project, the employee's hourly rate of pay, job classification, hourly rate of fringe benefits, and all deductions from wages and net pay.

1.4.1.3 Each payroll report shall list each fringe benefit and state if it is paid as cash to the employee or to a named plan.

1.4.1.4 The Contractor and its Subcontractors shall submit apprenticeship agreements for all apprentices utilized on the Project with the first payroll report from the Contractor or its Subcontractor that includes apprentices.

END OF DOCUMENT

Prevailing Wage Rate
Skilled Crafts

Name of Union: Asbestos Local 207

Type of Rate: Commercial

Change #:	**Craft:**	**Effective Date:**	**Effective Date:**
LCN01-2026ib	Asbestos Worker	7/8/2026	7/8/2026

	BHR		Fringe Benefit Payments						Irrevocable Fund		Total PWR	Overtime Rate
			H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)	MISC (*)		
Classification												
Asbestos Abatement	$35.25		$11.20	$7.50	$1.00	$4.00	$0.00	$0.05	$0.00	$0.00	$59.00	$76.63
Apprentice	BHR	Percent										
Trainee 1 Year - 600 Hrs	$25.00	$70.92	$11.20	$1.90	$1.00	$1.00	$0.00	$0.05	$0.00	$0.00	$40.15	$52.65

(*)Special Calculation Note :

Other: Drug Testing

Ratio :

3 Journeymen to 1 Trainee

Jurisdiction (* denotes special jurisdictional note) :

Adams, Ashland, Ashtabula*, Athens, Auglaize, Brown, Butler*, Carroll, Champaign, Clark, Clermont, Clinton, Columbiana, Coshocton, Crawford, Cuyahoga, Darke, Delaware, Erie*, Fairfield, Fayette, Franklin, Geauga, Greene, Guernsey, Hamilton, Hardin, Harrison, Highland, Hocking, Holmes, Huron, Knox, Lake, Licking, Logan, Lorain, Madison, Mahoning, Marion, Medina, Miami, Montgomery, Morgan, Morrow, Muskingum, Noble, Perry, Pickaway, Portage, Preble, Richland, Ross, Shelby, Stark, Summit, Trumbull, Tuscarawas, Union, Vinton, Warren*, Wayne

Special Jurisdictional Note :

Ashtabula County: (post offices & townships of Ashtabula, Austinburg, Geneva, Harperfield, Jefferson, Plymouth & Saybrook) (townships of Andover, Cherry Valley, Colbrook, Canneaut, Denmark, Dorset, East Orwell, Hartsgrove, Kingville, Lenox, Monroe,Morgan,New Lyme,North Kingsville, Orwell, Pierpoint, Richmond Rock Creek, Rome, Shefield, Trumbull, Wayne, Williamsfield & Windsor)

Butler County: (townships of Fairfield, Hanover, Liberty, Milford, Morgan, Oxford, Ripley, Ross, St. Clair, Union & Wayne) (Lemon & Madison)

Erie County: (post offices & townships of Berlin, Berlin Heights,Birmingham,Florence, Huron, Milan, Shinrock & Vermilion)

Warren County: (townships of: Deerfield, Hamilton, Harlan, Salem, Union & Washington) (Clear Creek, Franklin, Mossie, Turtle Creek & Wayne)

Details :

An Abatement Journeyman is anyone who has more than 600 hours in the Asbestos Abatement field.

Asbestos & lead paint abatement including, but not limited to the removal or encapsulation of asbestos & lead paint, all work in conjunction with the preparation of the removal of same & all work in conjunction with the clean up after said removal. The removal of all insulation materials, whether they contain asbestos or not, from mechanical systems (pipes, boilers, ducts, flues, breaching, etc.) is recognized as being the exclusive work of the Asbestos Abatement Workers.

On all mechanical systems (pipes, boilers, ducts, flues, breaching, etc.) that are going to be demolished, the removal of all insulating materials whether they contain asbestos or not shall be the exclusive work of the Laborers.

Prevailing Wage Rate
Skilled Crafts

Name of Union: Asbestos Local 3 Heat & Frost Insulators

Type of Rate: Commercial

Change #:	**Craft:**	**Effective Date:**	**Effective Date:**
LCN01-2026ib	Asbestos Worker	8/12/2026	8/12/2026

	BHR		Fringe Benefit Payments						Irrevocable Fund		Total PWR	Overtime Rate
			H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)	MISC (*)		
Classification												
Asbestos Insulation Worker	$47.13		$17.30	$11.35	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$75.78	$99.34
Fire Stop Specialist	$47.13		$17.30	$11.35	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$75.78	$99.34
Fire Stop Technician	$38.82		$17.30	$4.50	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$60.62	$80.03
Apprentice	BHR	Percent										
1st year	$26.67	$56.58	$17.30	$1.50	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$45.47	$58.81
2nd year	$29.46	$62.50	$17.30	$2.50	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$49.26	$63.99
3rd year	$32.27	$68.47	$17.30	$3.50	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$53.07	$69.20
4th year	$38.82	$82.36	$17.30	$4.50	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$60.62	$80.03

(*)Special Calculation Note :

Ratio :

3 Journeymen to 1 Apprentice

Jurisdiction (* denotes special jurisdictional note) :

Ashtabula*, Cuyahoga, Erie*, Geauga, Huron, Lake, Lorain

Special Jurisdictional Note :

Ashtabula: the townships of Ashtabula, Austinburg, Geneva, Jefferson, Plymouth & Saybrook
Erie: to Sandusky limits

Details :

Mechanics & apprentices engaged in the manufacture, fabrication, assembling, molding, handling, erection, spraying, pouring, mixing, hanging, clean-up, preparation, application, adjusting, alteration, repairing, dismantling, reconditioning, testing & maintenance of Heat & Frost Insulation such as Magnesia, Asbestos, Hair Felt, Wool Felt, Cork, Mineral Wool, Infusorial Earth, Mercerized Silk, Flax, Fiber, Fire Felt, Asbestos Paper, Asbestos Curtain, Asbestos Millboard, Fiberglass, Foam glass, Styrofoam, Polyurethane, fire stopping, smoke stopping, all recyclable material, soundproofing, all penetrations, any flexible or rigid fireproofing, all jacketing systems including metal, lead, and PVC or other material.

Prevailing Wage Rate
Skilled Crafts

Name of Union: Boilermaker Local 744

Type of Rate: Commercial

Change #: LCN01-2024ib

Craft: Boilermaker

Effective Date: 6/5/2024

Effective Date: 6/5/2024

	BHR		Fringe Benefit Payments						Irrevocable Fund		Total PWR	Overtime Rate
			H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)	MISC (*)		
Classification												
Boilermaker	$42.70		$7.07	$17.74	$0.78	$0.00	$9.56	$0.34	$0.00	$0.00	$78.19	$99.54
Apprentice	BHR	Percent										
1st 6 months	$29.89	$70.00	$7.07	$17.74	$0.78	$0.00	$9.56	$0.34	$0.00	$0.00	$65.38	$80.33
2nd 6 months	$30.96	$72.50	$7.07	$17.74	$0.78	$0.00	$9.56	$0.34	$0.00	$0.00	$66.45	$81.93
3rd 6 months	$32.03	$75.00	$7.07	$17.74	$0.78	$0.00	$9.56	$0.34	$0.00	$0.00	$67.52	$83.53
4th 6 months	$33.09	$77.50	$7.07	$17.74	$0.78	$0.00	$9.56	$0.34	$0.00	$0.00	$68.58	$85.13
5th 6 months	$34.16	$80.00	$7.07	$17.74	$0.78	$0.00	$9.56	$0.34	$0.00	$0.00	$69.65	$86.73
6th 6 months	$36.30	$85.00	$7.07	$17.74	$0.78	$0.00	$9.56	$0.34	$0.00	$0.00	$71.79	$89.93
7th 6 months	$38.43	$90.00	$7.07	$17.74	$0.78	$0.00	$9.56	$0.34	$0.00	$0.00	$73.92	$93.14
8th 6 months	$40.57	$95.00	$7.07	$17.74	$0.78	$0.00	$9.56	$0.34	$0.00	$0.00	$76.06	$96.34

(*)Special Calculation Note :

Other: Training Fund

Ratio :

3 Journeymen to 1 Apprentice

Jurisdiction (* denotes special jurisdictional note) :

Ashtabula, Carroll, Coshocton, Cuyahoga, Geauga, Harrison, Holmes, Lake, Lorain, Mahoning, Medina, Portage, Stark, Summit, Trumbull, Tuscarawas, Wayne

Special Jurisdictional Note :

Details :

Prevailing Wage Rate
Skilled Crafts

Name of Union: Bricklayer Local 23 (Cleveland Marble Finisher)

Type of Rate: Commercial

Change #:	**Craft:**	**Effective Date:**	**Effective Date:**
LCN01-2024ib	Bricklayer	5/1/2024	5/1/2024

	BHR		Fringe Benefit Payments						Irrevocable Fund		Total PWR	Overtime Rate
			H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)	MISC (*)		
Classification												
Bricklayer Tile Marble Finisher	$30.52		$11.40	$5.15	$0.66	$0.00	$0.00	$0.00	$0.00	$0.00	$47.73	$62.99
Apprentice	BHR	Percent										
1st 6 months	$18.31	$60.00	$11.40	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$29.71	$38.87
2nd 6 months	$21.36	$70.00	$11.40	$5.15	$0.66	$0.00	$0.00	$0.00	$0.00	$0.00	$38.57	$49.26
3rd 6 months	$22.89	$75.00	$11.40	$5.15	$0.66	$0.00	$0.00	$0.00	$0.00	$0.00	$40.10	$51.55
4th 6 months	$24.42	$80.00	$11.40	$5.15	$0.66	$0.00	$0.00	$0.00	$0.00	$0.00	$41.63	$53.83
5th 6 months	$25.94	$85.00	$11.40	$5.15	$0.66	$0.00	$0.00	$0.00	$0.00	$0.00	$43.15	$56.12
6th 6 months	$27.47	$90.00	$11.40	$5.15	$0.66	$0.00	$0.00	$0.00	$0.00	$0.00	$44.68	$58.41

(*)Special Calculation Note :

Classification title contains "Bricklayer" because contract originates within the Bricklayer Local. Note that the classification description is clarified after the local union number at the top of the page.

Ratio :

1-2 Journeymen to 1 Apprentice 3- 4 Journeymen to 2 Apprentice 5-6 Journeymen to 3 Apprentice 7-8 Journeymen to 4 Apprentice

Jurisdiction (* denotes special jurisdictional note) :

Ashtabula, Cuyahoga, Geauga, Lake, Lorain, Medina, Portage, Summit

Special Jurisdictional Note :

Details :

Tile Finishers:do all the cleaning, acid washing,grouting,by any methods or means. Also unpacking of all tiles,opening of all mastic containers,mixing of all mortar,thin-set and epoxy materials,also the distribution of it. They shall handle and distribute all materials such as sand,cement,lime,tile,all types of tile panels,prefabricated tile units, plastic materials and protective covering of all tile.Clean up and removal of always used in connection of said work. Terrazzo Finishers:Assisting in grinding, and handling of material whether by hand or wheel barrow, or power buggies, including sand Portland cement, resinous cement and admixtures, aggregates of marble, stone or other compositions, bonding adhesives, sealers, waxes, and coatings used for Terrazzo Mosaic work, preparing, mixing by hand or machine, and distributing (spreading) all kinds of underbed or underlayment necessary and all scratch coat used for terrazzo and mosaic work. Also the rubbing, grinding, cleaning, sealing and polishing same either by hand or machine. will assist in the installation of the sand bed, tar paper, wire lath, divider strips, and rolling procedures and acid etching of all concrete floors that require it before installation. Shall handle all materials and assist in the installation of all types of terrazzo floors whether conventional or thin-set variety. Marble Finishers:Loading and unloading handling and distributing of marble materials including the mixing of all materials used for the installation of marble, such as cement underbeds for the floors, thin-set or epoxies including but not limited to plastic materials. Clean up and removal of all waster material of said work. Cleaning and grouting of all marble and slate, and all polishing of marble and slate floors.

Prevailing Wage Rate
Skilled Crafts

Name of Union: Bricklayer Local 23 (Cleveland Marble Mason)

Type of Rate: Commercial

Change #:	**Craft:**	**Effective Date:**	**Effective Date:**
LCN01-2024ib	Bricklayer	5/1/2024	5/1/2024

	BHR		Fringe Benefit Payments						Irrevocable Fund		Total PWR	Overtime Rate
			H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)	MISC (*)		
Classification												
Bricklayer Horizontal Marble Mason	$27.16		$11.40	$9.45	$0.67	$0.00	$0.00	$0.00	$0.00	$0.00	$48.68	$62.26
Masonary Maintenance Specialist	$13.58		$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$13.58	$20.37
Apprentice	BHR	Percent										
1st 6 Months	$16.30	$60.00	$11.40	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$27.70	$35.84
2nd 6 Months	$17.65	$65.00	$11.40	$1.60	$0.67	$0.00	$0.00	$0.00	$0.00	$0.00	$31.32	$40.15
3rd 6 Months	$19.01	$70.00	$11.40	$9.45	$0.67	$0.00	$0.00	$0.00	$0.00	$0.00	$40.53	$50.04
4th 6 Months	$20.37	$75.00	$11.40	$9.45	$0.67	$0.00	$0.00	$0.00	$0.00	$0.00	$41.89	$52.08
5th 6 Months	$21.73	$80.00	$11.40	$9.45	$0.67	$0.00	$0.00	$0.00	$0.00	$0.00	$43.25	$54.11
6th 6 Months	$23.09	$85.02	$11.40	$9.45	$0.67	$0.00	$0.00	$0.00	$0.00	$0.00	$44.61	$56.16
MASON TRAINEES	$	$	$	$	$	$	$	$	$	$	$	$
1st 90 Days	$12.22	$45.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$12.22	$18.33
1st year after 90 Days	$12.22	$45.00	$11.40	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$23.62	$29.73
2nd Year	$13.58	$50.00	$11.40	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$24.98	$31.77

(*)Special Calculation Note :

No special calculations for this skilled craft wage rate are required at this time. Classification title contains "Bricklayer" because contract originates within the Bricklayer Local.

Ratio :

1-2 Journeyman to 1 Apprentice 3-4 Journeyman to 2 Apprentices 5-6 Journeyman to 2 Apprentices 6-10 Journeyman to 3 Apprentices 1 Apprentice permits 1 Mason Trainee 2 Apprentice permits 1 Mason Trainee 3 Apprentice permits 2 Mason Trainee 4 Apprentice permits 2 Mason Trainee

Jurisdiction (* denotes special jurisdictional note) :

Ashtabula, Cuyahoga, Geauga, Lake, Lorain, Medina, Portage, Summit

Special Jurisdictional Note :

Details :

In the mutual interest of both Employer and Union and to promote the masonry industry, it is agreed that the Employer may work with the Union and the Local Educational Partners in the jurisdiction of this agreement to employ School to work students provided that no conflicts exist with any Federal or State Laws. Employer must be party to a bonified Apprenticeship and Training program registered with the State of Ohio (OSAC). It is further agreed by both parties that the wages for the Masonry Maintenance Specialist shall be forty-five percent (45%) of the journeyman rate with no fringe benefits or as specified by the Local Educational Partner in the jurisdiction of the agreement.

Prevailing Wage Rate
Skilled Crafts

Name of Union: Bricklayer Local 23 (Cleveland Marble, Terrazzo, & Mosiac)

Type of Rate: Commercial

Change #: LCN01-2024ib

Craft: Bricklayer

Effective Date: 5/1/2024

Effective Date: 5/1/2024

	BHR		Fringe Benefit Payments						Irrevocable Fund		Total PWR	Overtime Rate
			H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)	MISC (*)		
Classification												
Bricklayer Marble, Terrazzo, Mosaic	$37.96		$11.40	$9.45	$0.78	$0.00	$0.00	$0.00	$0.00	$0.00	$59.59	$78.57
Swing Scaffold Workers	$38.96		$11.40	$9.45	$0.78	$0.00	$0.00	$0.00	$0.00	$0.00	$60.59	$80.07
Stack	$38.46		$11.40	$9.45	$0.78	$0.00	$0.00	$0.00	$0.00	$0.00	$60.09	$79.32
Masonary Maintenance	$17.08		$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$17.08	$25.62
Apprentice	BHR	Percent										
1st 6 months	$22.78	$60.00	$11.40	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$34.18	$45.56
2nd 6 months	$24.67	$65.00	$11.40	$9.45	$0.78	$0.00	$0.00	$0.00	$0.00	$0.00	$46.30	$58.64
3rd 6 months	$26.57	$70.00	$11.40	$9.45	$0.78	$0.00	$0.00	$0.00	$0.00	$0.00	$48.20	$61.49
4th 6 months	$28.47	$75.00	$11.40	$9.45	$0.78	$0.00	$0.00	$0.00	$0.00	$0.00	$50.10	$64.34
5th 6 months	$30.37	$80.00	$11.40	$9.45	$0.78	$0.00	$0.00	$0.00	$0.00	$0.00	$52.00	$67.18
6th 6 months	$32.27	$85.02	$11.40	$9.45	$0.78	$0.00	$0.00	$0.00	$0.00	$0.00	$53.90	$70.04
7th 6 months	$34.16	$90.00	$11.40	$9.45	$0.78	$0.00	$0.00	$0.00	$0.00	$0.00	$55.79	$72.88
8th 6 months	$36.06	$95.00	$11.40	$9.45	$0.78	$0.00	$0.00	$0.00	$0.00	$0.00	$57.69	$75.72
MASON TRAINEES 1st 90 Days	$17.08	$45.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$17.08	$25.62
1st Year after 90 Days	$17.08	$45.00	$11.40	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$28.48	$37.02
2nd Year	$18.98	$50.00	$11.40	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$30.38	$39.87

(*)Special Calculation Note :

Classification title contains "Bricklayer" because contract originates within the Bricklayer Local.

Ratio :

1-2 Journeyman to 1 Apprentice 3-4 Journeyman to 2 Apprentices 5-6 Journeyman to 3 Apprentices 7-10 Journeyman to 4 Apprentices 1 Apprentice permits 1 Mason Trainee 2 Apprentice permits 1 Mason Trainee 3 Apprentice permits 2 Mason Trainee 4 Apprentice permits 2 Mason Trainee

Jurisdiction (* denotes special jurisdictional note) :

Ashtabula, Geauga, Lake, Portage, Summit

Special Jurisdictional Note :

Details :

In the mutual interest of both Employer and Union and to promote the masonry industry, it is agreed that the Employer may work with the Union and the Local Educational Partners in the jurisdiction of this agreement to employ School to work students provided that no conflicts exist with any Federal or State Laws. Employer must be party to a bonified Apprenticeship and Training program registered with the State of Ohio (OSAC). It is further agreed by both parties that the wages for the Masonry Maintenance Specialist shall be forty-five percent (45%) of the journeyman rate with no fringe benefits or as specified by the Local Educational Partner in the jurisdiction of the agreement.

Prevailing Wage Rate
Skilled Crafts

Name of Union: Bricklayer Local 23 (Cleveland Terrazzo Finisher)

Type of Rate: Commercial

Change #:	**Craft:**	**Effective Date:**	**Effective Date:**
LCN01-2024ib	Bricklayer	5/1/2024	5/1/2024

	BHR		Fringe Benefit Payments						Irrevocable Fund		Total PWR	Overtime Rate
			H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)	MISC (*)		
Classification												
Bricklayer Terrazzo Finisher	$30.52		$11.40	$5.15	$0.66	$0.00	$0.00	$0.00	$0.00	$0.00	$47.73	$62.99
Apprentice	BHR	Percent										
1st 6 months	$18.31	$60.00	$11.40	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$29.71	$38.87
2nd 6 months	$21.36	$70.00	$11.40	$5.15	$0.66	$0.00	$0.00	$0.00	$0.00	$0.00	$38.57	$49.26
3rd 6 months	$22.89	$75.00	$11.40	$5.15	$0.66	$0.00	$0.00	$0.00	$0.00	$0.00	$40.10	$51.55
4th 6 months	$24.42	$80.00	$11.40	$5.15	$0.66	$0.00	$0.00	$0.00	$0.00	$0.00	$41.63	$53.83
5th 6 months	$25.94	$85.00	$11.40	$5.15	$0.66	$0.00	$0.00	$0.00	$0.00	$0.00	$43.15	$56.12
6th 6 months	$27.47	$90.00	$11.40	$5.15	$0.66	$0.00	$0.00	$0.00	$0.00	$0.00	$44.68	$58.41

(*)Special Calculation Note :

Classification title contains "Bricklayer" because contract originates within the Bricklayer Local. Note that the classification description is clarified after the local union number at the top of the page.

Ratio :

1-2 Journeymen to 1 Apprentice 3- 4 Journeymen to 2 Apprentices 5- 6 Journeymen to 3 Apprentices 7- 8 Journeymen to 4 Apprentices

Jurisdiction (* denotes special jurisdictional note) :

Ashtabula, Cuyahoga, Geauga, Lake, Lorain, Medina, Portage, Summit

Special Jurisdictional Note :

Details :

Tile Finishers:do all the cleaning, acid washing,grouting,by any methods or means. Also unpacking of all tiles,opening of all mastic containers,mixing of all mortar,thin-set and epoxy materials,also the distribution of it. They shall handle and distribute all materials such as sand,cement,lime,tile,all types of tile panels,prefabricated tile units, plastic materials and protective covering of all tile.Clean up and removal of always used in connection of said work. Terrazzo Finishers:Assisting in grinding, and handling of material whether by hand or wheel barrow, or power buggies, including sand Portland cement, resinous cement and admixtures, aggregates of marble, stone or other compositions, bonding adhesives, sealers, waxes, and coatings used for Terrazzo Mosaic work, preparing, mixing by hand or machine, and distributing (spreading) all kinds of underbed or underlayment necessary and all scratch coat used for terrazzo and mosaic work. Also the rubbing, grinding, cleaning, sealing and polishing same either by hand or machine. will assist in the installation of the sand bed, tar paper, wire lath, divider strips, and rolling procedures and acid etching of all concrete floors that require it before installation. Shall handle all materials and assist in the installation of all types of terrazzo floors whether conventional or thin-set variety. Marble Finishers:Loading and unloading handling and distributing of marble materials including the mixing of all materials used for the installation of marble, such as cement underbeds for the floors, thin-set or epoxies including but not limited to plastic materials. Clean up and removal of all waster material of said work. Cleaning and grouting of all marble and slate, and all polishing of marble and slate floors.

Prevailing Wage Rate
Skilled Crafts

Name of Union: Bricklayer Local 23 (Cleveland Zone 1 Tile Finisher)

Type of Rate: Commercial

Change #:	**Craft:**	**Effective Date:**	**Effective Date:**
LCN01-2026ib	Bricklayer	5/6/2026	5/6/2026

	BHR		Fringe Benefit Payments						Irrevocable Fund		Total PWR	Overtime Rate
			H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)	MISC (*)		
Classification												
Bricklayer Tile Finisher	$33.25		$10.20	$6.37	$0.76	$0.00	$0.00	$0.00	$0.00	$0.00	$50.58	$67.20
Apprentice	BHR	Percent										
1st 6 months	$19.95	$60.00	$10.20	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$30.15	$40.13
2nd 6 months	$23.28	$70.02	$10.20	$6.37	$0.76	$0.00	$0.00	$0.00	$0.00	$0.00	$40.61	$52.25
3rd 6 months	$24.94	$75.00	$10.20	$6.37	$0.76	$0.00	$0.00	$0.00	$0.00	$0.00	$42.27	$54.74
4th 6 months	$26.60	$80.00	$10.20	$6.37	$0.76	$0.00	$0.00	$0.00	$0.00	$0.00	$43.93	$57.23
5th 6 months	$28.26	$85.00	$10.20	$6.37	$0.76	$0.00	$0.00	$0.00	$0.00	$0.00	$45.59	$59.72
6th 6 months	$29.93	$90.00	$10.20	$6.37	$0.76	$0.00	$0.00	$0.00	$0.00	$0.00	$47.26	$62.22

(*)Special Calculation Note :

Ratio :

1-4 Journeymen to 1 Apprentice
5-10 Journeymen to 2 Apprentices
11-16 Journeymen to 3 Apprentices

Jurisdiction (* denotes special jurisdictional note) :

Ashtabula, Cuyahoga, Geauga, Lake, Lorain, Medina

Special Jurisdictional Note :

Details :

Tile Finishers: do all the cleaning, acid washing, grouting, by any methods or means. Also unpacking of all tiles, opening of all mastic containers, mixing of all mortar, thin-set and epoxy materials, also the distribution of it. They shall handle and distribute all materials such as sand, cement, lime, tile, all types of tile panels, prefabricated tile units, plastic materials and protective covering of all tile. Clean up and removal of always used in connection of said work.

Prevailing Wage Rate
Skilled Crafts

Name of Union: Bricklayer Local 23 (Cleveland Zone 1 Tile Layer)

Type of Rate: Commercial

Change #:	**Craft:**	**Effective Date:**	**Effective Date:**
LCN01-2026ib	Bricklayer	5/6/2026	5/6/2026

	BHR		Fringe Benefit Payments						Irrevocable Fund		Total PWR	Overtime Rate
			H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)	MISC (*)		
Classification												
Bricklayer Tile Layer	$38.22		$10.30	$2.43	$0.84	$0.00	$7.12	$0.00	$0.00	$0.00	$58.91	$78.02
Apprentice	BHR	Percent										
1st 30 days	$22.93	$60.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$22.93	$34.39
1st 6 months months	$22.93	$60.00	$10.30	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$33.23	$44.69
2nd 6 months	$24.84	$65.00	$10.30	$2.43	$0.84	$0.00	$7.12	$0.00	$0.00	$0.00	$45.53	$57.95
3rd 6 months	$26.75	$70.00	$10.30	$2.43	$0.84	$0.00	$7.12	$0.00	$0.00	$0.00	$47.44	$60.81
4th 6 months	$28.67	$75.02	$10.30	$2.43	$0.84	$0.00	$7.12	$0.00	$0.00	$0.00	$49.36	$63.70
5th 6 months	$30.58	$80.00	$10.30	$2.43	$0.84	$0.00	$7.12	$0.00	$0.00	$0.00	$51.27	$66.56
6th 6 months	$32.49	$85.00	$10.30	$2.43	$0.84	$0.00	$7.12	$0.00	$0.00	$0.00	$53.18	$69.42
7th 6 months	$34.40	$90.00	$10.30	$2.43	$0.84	$0.00	$7.12	$0.00	$0.00	$0.00	$55.09	$72.29
8th 6 months	$36.31	$95.00	$10.30	$2.43	$0.84	$0.00	$7.12	$0.00	$0.00	$0.00	$57.00	$75.16

(*)Special Calculation Note :

Ratio :

1-4 Journeymen to 1 Apprentice
5-10 Journeymen to 2 Apprentices
11-16 Journeymen to 3 Apprentices

Jurisdiction (* denotes special jurisdictional note) :

Ashtabula, Cuyahoga, Geauga, Lake, Lorain, Medina

Special Jurisdictional Note :

Details :

Prevailing Wage Rate
Skilled Crafts

Name of Union: Bricklayer Local 23 (Mentor)

Type of Rate: Commercial

Change #: LCN01-2026ib

Craft: Bricklayer

Effective Date: 5/6/2026

Effective Date: 5/6/2026

	BHR		Fringe Benefit Payments						Irrevocable Fund		Total PWR	Overtime Rate
			H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)	MISC (*)		
Classification												
Bricklayer	$40.73		$10.78	$8.94	$0.90	$0.00	$3.00	$0.00	$0.00	$0.00	$64.35	$84.72
Cement & Stone Masons	$40.73		$10.78	$8.94	$0.90	$0.00	$3.00	$0.00	$0.00	$0.00	$64.35	$84.72
Pointer Caulker Cleaner	$40.73		$10.78	$8.94	$0.90	$0.00	$3.00	$0.00	$0.00	$0.00	$64.35	$84.72
Plasterers	$40.73		$10.78	$8.94	$0.90	$0.00	$3.00	$0.00	$0.00	$0.00	$64.35	$84.72
Mason Trainess	$		$	$	$	$	$	$	$	$	$	$
1-90 Days	$24.44		$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$24.44	$36.66
91-365 Days	$24.44		$10.78	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$35.22	$47.44
366 plus days	$28.51		$10.78	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$39.29	$53.55
Apprentice	BHR	Percent										
1st 6 months	$24.44	$60.00	$10.78	$0.00	$0.90	$0.00	$0.00	$0.00	$0.00	$0.00	$36.12	$48.34
2nd 6 months	$26.47	$65.00	$10.78	$8.94	$0.90	$0.00	$3.00	$0.00	$0.00	$0.00	$50.09	$63.32
3rd 6 months	$28.51	$70.00	$10.78	$8.94	$0.90	$0.00	$3.00	$0.00	$0.00	$0.00	$52.13	$66.38
4th 6 months	$30.55	$75.00	$10.78	$8.94	$0.90	$0.00	$3.00	$0.00	$0.00	$0.00	$54.17	$69.44
5th 6 months	$32.58	$80.00	$10.78	$8.94	$0.90	$0.00	$3.00	$0.00	$0.00	$0.00	$56.20	$72.49
6th 6 months	$34.62	$85.00	$10.78	$8.94	$0.90	$0.00	$3.00	$0.00	$0.00	$0.00	$58.24	$75.55
7th 6 months	$36.66	$90.00	$10.78	$8.94	$0.90	$0.00	$3.00	$0.00	$0.00	$0.00	$60.28	$78.61
8th 6 months	$38.69	$95.00	$10.78	$8.94	$0.90	$0.00	$3.00	$0.00	$0.00	$0.00	$62.31	$81.66

(*)Special Calculation Note :

Apprentices must be employed prior to hiring Mason Finisher(s).

Ratio :

1-3 Journeymen to 1 Apprentice
4-6 Journeymen to 2 Apprentices
7-9 Journeymen to 3 Apprentices
10-12 Journeymen to 4 Apprentices

1 Apprentice permits 1 Mason Trainee
2 Apprentice permits 1 Mason Trainees
3 Apprentice permits 2 Mason Trainees
4 Apprentice permits 2 Mason Trainees

*Apprentices must be employed prior to hiring Mason Finisher(s).

Jurisdiction (* denotes special jurisdictional note) :

Ashtabula, Geauga, Lake

Special Jurisdictional Note :

Details :

Prevailing Wage Rate
Skilled Crafts

Name of Union: Bricklayer Local 23 Heavy Hwy (A)

Type of Rate: Commercial

Change #:	**Craft:**	**Effective Date:**	**Effective Date:**
LCN02-2026ib	Bricklayer	6/10/2026	6/10/2026

	BHR		Fringe Benefit Payments						Irrevocable Fund		Total PWR	Overtime Rate
			H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)	MISC (*)		
Classification												
Cement Mason Bricklayer Sewer Water Works A	$35.31		$10.71	$10.14	$0.59	$0.00	$1.80	$0.00	$0.00	$0.00	$58.55	$76.21
Apprentice	BHR	Percent										
1st year	$24.72	$70.00	$10.71	$10.14	$0.59	$0.00	$1.80	$0.00	$0.00	$0.00	$47.96	$60.32
2nd year	$28.25	$80.00	$10.71	$10.14	$0.59	$0.00	$1.80	$0.00	$0.00	$0.00	$51.49	$65.62
3rd year	$31.78	$90.00	$10.71	$10.14	$0.59	$0.00	$1.80	$0.00	$0.00	$0.00	$55.02	$70.91

(*)Special Calculation Note :

This rate is not for building construction.

This rate applies only to the Cement Masons. All other Bricklaying, PCC, Stone, Tile, Marble, Refractory, Industrial and all other applicable work performed will be performed under the applicable rates for those contracts.

Ratio :

3 Journeymen to 1 Apprentice
6 Journeymen to 2 Apprentice
9 Journeymen to 3 Apprentice
12 Journeymen to 4 Apprentice
15 Journeymen to 5 Apprentice

Jurisdiction (* denotes special jurisdictional note) :

Adams, Allen, Ashland, Ashtabula, Athens, Auglaize, Belmont, Brown, Butler, Carroll, Champaign, Clark, Clermont, Clinton, Columbiana, Coshocton, Crawford, Cuyahoga, Darke, Defiance, Delaware, Erie, Fairfield, Fayette, Franklin, Fulton, Gallia, Geauga, Greene, Guernsey, Hamilton, Hancock, Hardin, Harrison, Henry, Highland, Hocking, Holmes, Huron, Jackson, Jefferson, Knox, Lake, Lawrence, Licking, Logan, Lorain, Lucas, Madison, Mahoning, Marion, Medina, Meigs, Mercer, Miami, Monroe, Montgomery, Morgan, Morrow, Muskingum, Noble, Ottawa, Paulding, Perry, Pickaway, Pike, Portage, Preble, Putnam, Richland, Ross, Sandusky, Scioto, Seneca, Shelby, Stark, Summit, Trumbull, Tuscarawas, Union, Van Wert, Vinton, Warren, Washington, Wayne

Special Jurisdictional Note :

Details :

Bricklayer Local 23 Heavy Hwy (A): Highway Construction, Sewer, Waterworks And Utility Construction, Industrial & Building Site Heavy Construction, Airport Construction Or Railroad Construction Work.

Bricklayer Local 23 Heavy Hwy (B): Power Plant, Tunnels, Amusement Park, Athletic Stadium Site Work ,Pollution Control, Sewer Plant, Waste Plant, & Water Treatment Facilities, Construction.

Prevailing Wage Rate
Skilled Crafts

Name of Union: Bricklayer Local 23 Heavy Hwy (B)

Type of Rate: Commercial

Change #:	**Craft:**	**Effective Date:**	**Effective Date:**
LCN02-2026ib	Bricklayer	6/10/2026	6/10/2026

	BHR		Fringe Benefit Payments						Irrevocable Fund		Total PWR	Overtime Rate
			H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)	MISC (*)		
Classification												
Cement Mason Bricklayer Power Plants Tunnels Amusement Parks B	$36.31		$10.71	$10.14	$0.60	$0.00	$1.80	$0.00	$0.00	$0.00	$59.56	$77.72
Apprentice	BHR	Percent										
1st year	$25.42	$70.00	$10.71	$10.14	$0.60	$0.00	$1.80	$0.00	$0.00	$0.00	$48.67	$61.38
2nd year	$29.05	$80.00	$10.71	$10.14	$0.60	$0.00	$1.80	$0.00	$0.00	$0.00	$52.30	$66.83
3rd year	$32.68	$90.00	$10.71	$10.14	$0.60	$0.00	$1.80	$0.00	$0.00	$0.00	$55.93	$72.27

(*)Special Calculation Note :

This rate is not for building construction.

This rate applies only to the Cement Masons. All other Bricklaying, PCC, Stone, Tile, Marble, Refractory, Industrial and all other applicable work performed will be performed under the applicable rates for those contracts.

Ratio :

3 Journeymen to 1 Apprentice
6 Journeymen to 2 Apprentice
9 Journeymen to 3 Apprentice
12 Journeymen to 4 Apprentice
15 Journeymen to 5 Apprentice

Jurisdiction (* denotes special jurisdictional note) :

Adams, Allen, Ashland, Ashtabula, Athens, Auglaize, Belmont, Brown, Butler, Carroll, Champaign, Clark, Clermont, Clinton, Columbiana, Coshocton, Crawford, Cuyahoga, Darke, Defiance, Delaware, Erie, Fairfield, Fayette, Franklin, Fulton, Gallia, Geauga, Greene, Guernsey, Hamilton, Hancock, Hardin, Harrison, Henry, Highland, Hocking, Holmes, Huron, Jackson, Jefferson, Knox, Lake, Lawrence, Licking, Logan, Lorain, Lucas, Madison, Mahoning, Marion, Medina, Meigs, Mercer, Miami, Monroe, Montgomery, Morgan, Morrow, Muskingum, Noble, Ottawa, Paulding, Perry, Pickaway, Pike, Portage, Preble, Putnam, Richland, Ross, Sandusky, Scioto, Seneca, Shelby, Stark, Summit, Trumbull, Tuscarawas, Union, Van Wert, Vinton, Warren, Washington, Wayne

Special Jurisdictional Note :

Details :

Bricklayer Local 23 Heavy Hwy (A): Highway Construction, Sewer, Waterworks And Utility Construction, Industrial & Building Site Heavy Construction, Airport Construction Or Railroad Construction Work.

Bricklayer Local 23 Heavy Hwy (B): Power Plant, Tunnels, Amusement Park, Athletic Stadium Site Work ,Pollution Control, Sewer Plant, Waste Plant, & Water Treatment Facilities, Construction.

Prevailing Wage Rate
Skilled Crafts

Name of Union: Carpenter Commercial Zone NEO 1A

Type of Rate: Commercial

Change #: LCN01-2026ib

Craft: Carpenter

Effective Date: 6/24/2026

Effective Date: 6/24/2026

	BHR		Fringe Benefit Payments						Irrevocable Fund		Total PWR	Overtime Rate
			H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)	MISC (*)		
Classification												
Carpenter	$39.54		$9.59	$10.98	$0.82	$0.00	$4.20	$0.15	$0.00	$0.00	$65.28	$85.05
Apprentice	BHR	Percent										
1st 3 months	$23.72	$60.00	$9.59	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$33.31	$45.17
2nd 3 months	$23.72	$60.00	$9.59	$0.00	$0.82	$0.00	$4.20	$0.15	$0.00	$0.00	$38.48	$50.34
2nd 6 months	$25.70	$65.00	$9.59	$0.00	$0.82	$0.00	$4.20	$0.15	$0.00	$0.00	$40.46	$53.31
3rd 6 months	$27.68	$70.00	$9.59	$0.00	$0.82	$0.00	$4.20	$0.15	$0.00	$0.00	$42.44	$56.28
4th 6 months	$29.66	$75.00	$9.59	$0.00	$0.82	$0.00	$4.20	$0.15	$0.00	$0.00	$44.42	$59.25
5th 6 months	$31.63	$80.00	$9.59	$8.78	$0.82	$0.00	$4.20	$0.15	$0.00	$0.00	$55.17	$70.98
6th 6 months	$33.61	$85.00	$9.59	$9.33	$0.82	$0.00	$4.20	$0.15	$0.00	$0.00	$57.70	$74.50
7th 6 months	$35.59	$90.00	$9.59	$9.88	$0.82	$0.00	$4.20	$0.15	$0.00	$0.00	$60.23	$78.03
8th 6 months	$37.56	$95.00	$9.59	$10.43	$0.82	$0.00	$4.20	$0.15	$0.00	$0.00	$62.75	$81.53

(*)Special Calculation Note :

*Other is International Training

Ratio :

1 Journeymen to 1 Apprentice

Jurisdiction (* denotes special jurisdictional note) :

Ashtabula, Cuyahoga, Geauga, Lake

Special Jurisdictional Note :

Details :

Prevailing Wage Rate
Skilled Crafts

Name of Union: Carpenter Floorlayer Zone NEO 1A

Type of Rate: Commercial

Change #: LCN01-2026ib

Craft: Carpenter

Effective Date: 7/1/2026

Effective Date: 7/1/2026

	BHR		Fringe Benefit Payments						Irrevocable Fund		Total PWR	Overtime Rate
			H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)	MISC (*)		
Classification												
Carpenter Floorlayer	$39.54		$9.59	$10.98	$0.82	$0.00	$4.19	$0.18	$0.00	$0.00	$65.30	$85.07
Apprentice	BHR	Percent										
1st 3 months	$23.72	$60.00	$9.59	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$33.31	$45.17
2nd 3 months	$23.72	$60.00	$9.59	$0.00	$0.82	$0.00	$4.19	$0.18	$0.00	$0.00	$38.50	$50.36
2nd 6 months	$25.70	$65.00	$9.59	$0.00	$0.82	$0.00	$4.19	$0.18	$0.00	$0.00	$40.48	$53.33
3rd 6 months	$27.68	$70.00	$9.59	$0.00	$0.82	$0.00	$4.19	$0.18	$0.00	$0.00	$42.46	$56.30
4th 6 months	$29.66	$75.00	$9.59	$0.00	$0.82	$0.00	$4.19	$0.18	$0.00	$0.00	$44.44	$59.27
5th 6 months	$31.63	$80.00	$9.59	$8.78	$0.82	$0.00	$4.19	$0.18	$0.00	$0.00	$55.19	$71.00
6th 6 months	$33.61	$85.00	$9.59	$9.33	$0.82	$0.00	$4.19	$0.18	$0.00	$0.00	$57.72	$74.53
7th 6 months	$35.59	$90.00	$9.59	$9.88	$0.82	$0.00	$4.19	$0.18	$0.00	$0.00	$60.25	$78.05
8th 6 months	$37.56	$95.00	$9.59	$10.43	$0.82	$0.00	$4.19	$0.18	$0.00	$0.00	$62.77	$81.55

(*)Special Calculation Note :

Other: International Training

Ratio :

1 Journeymen to 1 Apprentice

Jurisdiction (* denotes special jurisdictional note) :

Ashtabula, Cuyahoga, Geauga, Lake

Special Jurisdictional Note :

Details :

Prevailing Wage Rate
Skilled Crafts

Name of Union: Carpenter Hev Hwy Zone NHH C1-B

Type of Rate: Commercial

Change #:	**Craft:**	**Effective Date:**	**Effective Date:**
LCN01-2026ib	Carpenter	7/1/2026	7/1/2026

	BHR		Fringe Benefit Payments						Irrevocable Fund		Total PWR	Overtime Rate
			H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)	MISC (*)		
Classification												
Carpenter	$39.55		$9.59	$10.98	$0.82	$0.00	$4.19	$0.15	$0.00	$0.00	$65.28	$85.05
Apprentice	BHR	Percent										
1st 3 Months	$23.73	$60.00	$9.59	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$33.32	$45.19
2nd 3 Months	$23.73	$60.00	$9.59	$0.00	$0.82	$0.00	$4.19	$0.15	$0.00	$0.00	$38.48	$50.34
2nd 6 Months	$25.71	$65.00	$9.59	$0.00	$0.82	$0.00	$4.19	$0.15	$0.00	$0.00	$40.46	$53.31
3rd 6 Months	$27.68	$70.00	$9.59	$0.00	$0.82	$0.00	$4.19	$0.15	$0.00	$0.00	$42.43	$56.27
4th 6 Months	$29.66	$75.00	$9.59	$0.00	$0.82	$0.00	$4.19	$0.15	$0.00	$0.00	$44.41	$59.24
5th 6 Months	$31.64	$80.00	$9.59	$8.78	$0.82	$0.00	$4.19	$0.15	$0.00	$0.00	$55.17	$70.99
6th 6 Months	$33.62	$85.00	$9.59	$9.33	$0.82	$0.00	$4.19	$0.15	$0.00	$0.00	$57.70	$74.51
7th 6 Months	$35.59	$90.00	$9.59	$9.88	$0.82	$0.00	$4.19	$0.15	$0.00	$0.00	$60.22	$78.02
8th 6 Months	$37.57	$95.00	$9.59	$10.43	$0.82	$0.00	$4.19	$0.15	$0.00	$0.00	$62.75	$81.53

(*)Special Calculation Note :

Other: Training

Ratio :

1 Journeymen to 1 Apprentice

Jurisdiction (* denotes special jurisdictional note) :

Ashtabula, Cuyahoga, Geauga, Lake

Special Jurisdictional Note :

Details :

Any construction work as performed within the definitions listed here below, all of which, taken together are "Heavy-Highway Construction" work:

"HIGHWAY CONSTRUCTION" work is defined as work performed to provide a facility to accommodate vehicular or pedestrian traffic and includes, but is not limited to, the construction of all streets, roads, expressways, turnpikes, bridges, drainage structures, grade separations, parking lots, rest areas, alleys, sidewalks, guardrails, fences, and sound barriers, but shall not include construction of buildings. "AIRPORT CONSTRUCTION" work is defined as including site preparation, grading, paving, drainage, fences, sidewalks, driveways, parking areas and similar work incidental to the construction of airfields but shall not include the construction of buildings. "HEAVY CONSTRUCTION" work is defined as including, but not limited to grade separations, foundations (does not include building foundations), abutments, retaining walls, shafts, tunnels, subways, elevators, drainage projects, flood control projects, reclamation projects, reservoirs, water supply projects, water development projects, hydro-electric development, utility transmission lines, including right-of-way clearing, locks, dams, dikes, levees, revetments, channels, channel cutoffs, intakes, dredging projects, jetties, breakwater, docks, harbors; and all municipal and utility construction except construction classified as building construction.

"RAILROAD CONSTRUCTION" work is defined as including, grading, drainage, placing of rails, crossties, ballast and the construction of bridges, and other incidentals for railroads, street railways construction projects and rapid transit system projects, but shall not include the construction of buildings.

"SEWER WATERWORKS AND UTILITY CONSTRUCTION" work is defined as including construction of all storm sewers, sanitary sewers, supplying and distributing waterlines, gas lines, telephone and television conduit, underground electrical lines, and similar utility construction. Main waterline and trunk sewers connecting water works and/or sewage disposal plants are included within this definition.

"SUPPORIVE EXCAVATION AND DEEP FOUNDATIONS" work is all driven and drilled foundations within the building site.

"POWER PLANT SITE" work is defined as all work which is inside the property line, but outside the actual building construction. Such work shall include, but is not limited to, the grading and installation of sewer lines, drainage lines, gas lines, telephone and television conduit, underground electrical lines and similar utility construction, parking lots, bridges, roads, streets, sidewalks, reservoirs, ash pits, storage tanks, ramps and other such construction work performed on the work site, but shall not include the actual excavation for the buildings, foundations or footers or construction of the buildings.

"POLLUTION CONTROL, SEWAGE PLANT, WASTE PLANT AND WATER TREATMENT FACILITIES CONSTRUCTION" WORK shall be all work in construction of pumping stations, waste and sewage disposal plants, incinerator plants, water treatment plants, filtration plants, solid waste disposal and similar pollution control facilities.

"SOLAR & WIND FARM" WORK is considered "HEAVY CONSTRUCTION" and includes all work in the construction of solar fields/farms and wind fields/farms (not installations on buildings).

Prevailing Wage Rate
Skilled Crafts

Name of Union: Carpenter Insulation Zone NEO 1A

Type of Rate: Commercial

Change #: LCN01-2026ib

Craft: Carpenter

Effective Date: 7/15/2026

Effective Date: 7/15/2026

	BHR		Fringe Benefit Payments						Irrevocable Fund		Total PWR	Overtime Rate
			H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)	MISC (*)		
Classification												
Carpenter Insulation	$31.63		$9.59	$10.98	$0.82	$0.00	$4.20	$0.15	$0.00	$0.00	$57.37	$73.19
Apprentice	BHR	Percent										
1st 3 months	$18.98	$60.00	$9.59	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$28.57	$38.06
2nd 3 months	$18.98	$60.00	$9.59	$0.00	$0.82	$0.00	$4.20	$0.15	$0.00	$0.00	$33.74	$43.23
2nd 6 months	$20.56	$65.00	$9.59	$0.00	$0.82	$0.00	$4.20	$0.15	$0.00	$0.00	$35.32	$45.60
3rd 6 months	$22.14	$70.00	$9.59	$0.00	$0.82	$0.00	$4.20	$0.15	$0.00	$0.00	$36.90	$47.97
4th 6 months	$23.73	$75.02	$9.59	$0.00	$0.82	$0.00	$4.20	$0.15	$0.00	$0.00	$38.49	$50.35
5th 6 months	$25.30	$80.00	$9.59	$8.78	$0.82	$0.00	$4.20	$0.15	$0.00	$0.00	$48.84	$61.49
6th 6 months	$26.89	$85.00	$9.59	$9.33	$0.82	$0.00	$4.20	$0.15	$0.00	$0.00	$50.98	$64.42
7th 6 months	$28.47	$90.00	$9.59	$9.88	$0.82	$0.00	$4.20	$0.15	$0.00	$0.00	$53.11	$67.34
8th 6 month	$30.05	$95.00	$9.59	$10.43	$0.82	$0.00	$4.20	$0.15	$0.00	$0.00	$55.24	$70.27

(*)Special Calculation Note :

*Other is Training

Ratio :

1 Journeyman to 1 Apprentice

Jurisdiction (* denotes special jurisdictional note) :

Ashtabula, Cuyahoga, Geauga, Lake

Special Jurisdictional Note :

Details :

Prevailing Wage Rate
Skilled Crafts

Name of Union: Carpenter Millwright NE Zone M1-A

Type of Rate: Commercial

Change #:	**Craft:**	**Effective Date:**	**Effective Date:**
LCN01-2026ib	Carpenter	7/1/2026	7/1/2026

	BHR		Fringe Benefit Payments						Irrevocable Fund		Total PWR	Overtime Rate
			H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)	MISC (*)		
Classification												
Carpenter Millwright	$37.41		$9.60	$11.33	$0.82	$0.00	$6.87	$0.20	$0.00	$0.00	$66.23	$84.94
Certified Welder	$38.41		$9.60	$11.33	$0.82	$0.00	$6.87	$0.20	$0.00	$0.00	$67.23	$86.44
Layout man on Monorail	$40.22		$9.60	$11.33	$0.82	$0.00	$6.87	$0.20	$0.00	$0.00	$69.04	$89.15
Apprentice	BHR	Percent										
1st 6 months	$22.45	$60.00	$9.60	$11.33	$0.82	$0.00	$6.87	$0.20	$0.00	$0.00	$51.27	$62.49
2nd 6 months	$24.32	$65.00	$9.60	$11.33	$0.82	$0.00	$6.87	$0.20	$0.00	$0.00	$53.14	$65.30
3rd 6 months	$26.19	$70.00	$9.60	$11.33	$0.82	$0.00	$6.87	$0.20	$0.00	$0.00	$55.01	$68.11
4th 6 months	$28.06	$75.00	$9.60	$11.33	$0.82	$0.00	$6.87	$0.20	$0.00	$0.00	$56.88	$70.91
5th 6 months	$29.93	$80.00	$9.60	$11.33	$0.82	$0.00	$6.87	$0.20	$0.00	$0.00	$58.75	$73.72
6th 6 months	$31.80	$85.00	$9.60	$11.33	$0.82	$0.00	$6.87	$0.20	$0.00	$0.00	$60.62	$76.52
7th 6 months	$33.67	$90.00	$9.60	$11.33	$0.82	$0.00	$6.87	$0.20	$0.00	$0.00	$62.49	$79.33
8th 6 months	$35.54	$95.00	$9.60	$11.33	$0.82	$0.00	$6.87	$0.20	$0.00	$0.00	$64.36	$82.13

(*)Special Calculation Note :

Other is Training

Ratio :

1 Journeymen to 1 Apprentice

Jurisdiction (* denotes special jurisdictional note) :

Ashland, Ashtabula, Cuyahoga, Erie, Geauga, Huron, Lake, Lorain, Medina, Portage, Richland, Summit

Special Jurisdictional Note :

Details :

The term “Millwright and Machine Erectors’” jurisdiction shall mean the unloading, hoisting, rigging, skidding, moving, dismantling, aligning, erecting, assembling, repairing, maintenance and adjusting of all structures, processing areas either under cover, under ground or elsewhere, required to process material, handle, manufacture or service, be it powered or receiving power manually, by steam, gas, electricity, gasoline, diesel, nuclear, solar, water, air or chemically, and in industries such as and including, which are identified for the purpose of description, but not limited to, the following: woodworking plants; canning industries; steel mills; coffee roasting plants; paper and pulp; cellophane; stone crushing; gravel and sand washing and handling; refineries; grain storage and handling; asphalt plants; sewage disposal; water plants; laundries; bakeries; mixing plants; can, bottle and bag packing plants; textile mills; paint mills; breweries; milk processing plants; power plants; aluminum processing or manufacturing plants; and amusement and entertainment fields. The installation of mechanical equipment in atomic energy plants; installation of reactors in power plants; installation of control rods and equipment in reactors; and installation of mechanical equipment in rocket missile bases, launchers, launching gantry, floating bases, hydraulic escape doors and any and all component parts thereto, either assembled, semi-assembled or disassembled. The installation of, but not limited to, the following: setting-up of all engines, motors, generators, air compressors, fans, pumps, scales, hoppers, conveyors of all types, sizes and their supports; escalators; man lifts; moving sidewalks; hoists; dumb waiters; all types of feeding machinery; amusement devices; mechanical pin setters and spotters in bowling alleys; refrigeration equipment; and the installation of all types of equipment necessary and required to process material either in the manufacturing or servicing. The handling and installation of pulleys, gears, sheaves, fly wheels, air and vacuum drives, worm drives and gear drives directly or indirectly coupled to motors, belts, chains, screws, legs, boots, guards, booth tanks, all bin valves, turn heads and indicators, shafting, bearings, cable sprockets, cutting all key seats in new and old work, troughs, chippers, filters, calendars, rolls, winders, rewinders, slitters, cutters, wrapping machines, blowers, forging machines, rams, hydraulic or otherwise, planing, extruder, ball, dust collectors, equipment in meat packing plants, splicing of ropes and cables. The laying-out, fabrication and installation of protection equipment including machinery guards, making and setting of templates for machinery, fabrication of bolts, nuts, pans, drilling of holes for any equipment which the Millwrights install regardless of materials; all welding and burning regardless of type, fabrication of all lines, hose or tubing used in lubricating machinery installed by Millwrights; grinding, cleaning, servicing and any machine work necessary for any part of any equipment installed by the Millwrights; and the break-in and trial run of any equipment or machinery installed by the Millwrights. It is agreed the Millwrights shall use the layout tools and optic equipment necessary to perform their work.

Prevailing Wage Rate
Skilled Crafts

Name of Union: Carpenter Pile Driver Hev Hwy Zone NHH P2-B

Type of Rate: Commercial

Change #:	**Craft:**	**Effective Date:**	**Effective Date:**
LCN01-2026ib	Carpenter	7/1/2026	7/1/2026

	BHR		Fringe Benefit Payments						Irrevocable Fund		Total PWR	Overtime Rate
			H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)	MISC (*)		
Classification												
Carpenter Pile Driver	$37.35		$9.55	$11.33	$0.82	$0.00	$6.98	$0.20	$0.00	$0.00	$66.23	$84.91
Diver	$56.03		$9.55	$11.33	$0.82	$0.00	$6.98	$0.20	$0.00	$0.00	$84.91	$112.93
Certified Welder	$38.40		$9.55	$11.33	$0.82	$0.00	$6.98	$0.20	$0.00	$0.00	$67.28	$86.48
Apprentice	BHR	Percent										
1st 6 months	$22.41	$60.00	$9.55	$11.33	$0.82	$0.00	$6.98	$0.20	$0.00	$0.00	$51.29	$62.50
2nd 6 months	$24.28	$65.00	$9.55	$11.33	$0.82	$0.00	$6.98	$0.20	$0.00	$0.00	$53.16	$65.30
3rd 6 months	$26.14	$70.00	$9.55	$11.33	$0.82	$0.00	$6.98	$0.20	$0.00	$0.00	$55.02	$68.09
4th 6 months	$28.01	$75.00	$9.55	$11.33	$0.82	$0.00	$6.98	$0.20	$0.00	$0.00	$56.89	$70.90
5th 6 months	$29.88	$80.00	$9.55	$11.33	$0.82	$0.00	$6.98	$0.20	$0.00	$0.00	$58.76	$73.70
6th 6 months	$31.75	$85.00	$9.55	$11.33	$0.82	$0.00	$6.98	$0.20	$0.00	$0.00	$60.63	$76.50
7th 6 months	$33.62	$90.00	$9.55	$11.33	$0.82	$0.00	$6.98	$0.20	$0.00	$0.00	$62.50	$79.31
8th 6 months	$35.48	$95.00	$9.55	$11.33	$0.82	$0.00	$6.98	$0.20	$0.00	$0.00	$64.36	$82.10

(*)Special Calculation Note :

*Other is Training

Ratio :

1 Journeymen to 1 Apprentice

Jurisdiction (* denotes special jurisdictional note) :

Ashland, Ashtabula, Cuyahoga, Erie, Geauga, Huron, Lake, Lorain, Medina, Portage, Richland, Summit

Special Jurisdictional Note :

Details :

Pile Drivers duties shall include but not limited to: Pile driving, milling, fashioning, joining assembling, erecting, fastening, or dismantling of all material of wood, plastic, metal, fiber, cork and composition and all other substitute materials: pile driving, cutting, fitting and placing of lagging, and the handling, cleaning, erecting, installing and dismantling of machinery, equipment and erecting pre-engineered metal buildings. Pile Drivers work but not limited to: unloading, assembling, erection, repairs, operation, signaling, dismantling and reloading all equipment that is used for pile driving including pule butts is defined as sheeting or scrap piling. Underwater work that may be required in connection with the installation of piling. The driver and his tender work as a team and shall arrive at their own financial arrangements with the contractor. Any configuration of wood, steel, concrete or composite that is jetted, driven or vibrated onto the ground by conventional pile driving equipment for the purpose of supporting a future load that may be permanent or temporary. The construction of all wharves and docks, including the fabrication and installation of floating docks. Driving bracing, plumbing, cutting off and capping of all piling whether wood, metal, pipe piling or composite, loading, unloading, erecting, framing, dismantling, moving and handling of pile driving equipment piling used in the construction and repair of all wharves, docks, piers, trestles, caissons, cofferdams and erection of all sea walls and breakwaters. All underwater and marine work on bulkheads, wharves, docks, shipyards, caissons, piers, bridges, pipeline, work, viaducts, marine cable and trestles, as well as salvage and reclamation work where divers are employed. Rate shall include carpenters, acoustic and ceiling installers, drywall installers, pile drivers and floorlayers.

Prevailing Wage Rate
Skilled Crafts

Name of Union: Cement Mason Local 404

Type of Rate: Commercial

Change #: LCN01-2026ib

Craft: Cement Mason

Effective Date: 8/19/2026

Effective Date: 8/19/2026

	BHR		Fringe Benefit Payments						Irrevocable Fund		Total PWR	Overtime Rate
			H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)	MISC (*)		
Classification												
Cement Mason	$38.58		$10.15	$7.50	$0.78	$0.00	$6.20	$0.08	$0.00	$0.07	$63.36	$82.65
Apprentice	BHR	Percent										
1st yr	$22.39	$58.03	$10.15	$7.50	$0.78	$0.00	$3.10	$0.08	$0.00	$0.07	$44.07	$55.27
2nd yr	$28.18	$73.04	$10.15	$7.50	$0.78	$0.00	$3.10	$0.08	$0.00	$0.07	$49.86	$63.95
3rd yr	$32.04	$83.04	$10.15	$7.50	$0.78	$0.00	$3.10	$0.08	$0.00	$0.07	$53.72	$69.74
4th yr	$37.82	$98.03	$10.15	$7.50	$0.78	$0.00	$3.10	$0.08	$0.00	$0.07	$59.50	$78.41

(*)Special Calculation Note :

OTHER: Training Fund
MISC: Substance Abuse Testing ($0.04) & Respirator Safety ($0.03)

Ratio :

5 Journeymen to 1 Apprentice
2 Journeymen to 1 Apprentice

Jurisdiction (* denotes special jurisdictional note) :

Ashtabula, Cuyahoga, Geauga, Lake, Lorain

Special Jurisdictional Note :

Details :

Prevailing Wage Rate
Skilled Crafts

Name of Union: Cement Mason Local 404 Hev Hwy

Type of Rate: Commercial

Change #:
LCN01-2026ib

Craft:
Cement Mason

Effective Date:
5/1/2026

Effective Date:
5/1/2026

	BHR		Fringe Benefit Payments						Irrevocable Fund		Total PWR	Overtime Rate
			H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)	MISC (*)		
Classification												
Cement Mason	$37.29		$9.50	$8.05	$0.75	$0.00	$3.74	$0.08	$0.00	$0.00	$59.41	$78.06
Apprentice	BHR	Percent										
1st Year	$26.10	$70.00	$9.50	$8.05	$0.75	$0.00	$3.74	$0.08	$0.00	$0.00	$48.22	$61.27
2nd Year	$29.83	$80.00	$9.50	$8.05	$0.75	$0.00	$3.74	$0.08	$0.00	$0.00	$51.95	$66.86
3rd Year	$33.56	$90.00	$9.50	$8.05	$0.75	$0.00	$3.74	$0.08	$0.00	$0.00	$55.68	$72.46
4th Year	$35.43	$95.00	$9.50	$8.05	$0.75	$0.00	$3.74	$0.08	$0.00	$0.00	$57.55	$75.26

(*)Special Calculation Note :

Other: International Training Fund

Ratio :

1 Journeyman to 1 Apprentice
2 Journeymen to 1 Apprentice thereafter

Jurisdiction (* denotes special jurisdictional note) :

Ashtabula, Cuyahoga, Geauga, Lake, Lorain

Special Jurisdictional Note :

Details :

Highway Construction, Sewer, Waterworks And Utility Construction, Industrial & Building Site, Heavy Construction, Airport Construction Or Railroad Construction Work, Power Plant, Tunnels, Amusement Park, Athletic Stadium Site Work, Pollution Control, Sewer Plant, Waste & Water Plant, Water Treatment Facilities Construction.

Prevailing Wage Rate
Skilled Crafts

Name of Union: Electrical Local 673 Inside

Type of Rate: Commercial

Change #:	**Craft:**	**Effective Date:**	**Effective Date:**
LCN01-2026ib	Electrical	3/4/2026	3/4/2026

	BHR		Fringe Benefit Payments						Irrevocable Fund		Total PWR	Overtime Rate
			H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)	MISC (*)		
Classification												
Electrician	$41.00		$7.83	$8.98	$0.70	$0.00	$6.00	$1.23	$0.00	$0.00	$65.74	$86.24
Welder	$45.10		$7.83	$8.98	$0.70	$0.00	$6.00	$1.35	$0.00	$0.00	$69.96	$92.51
Apprentice	BHR	Percent										
1st Period	$18.45	$45.00	$7.83	$0.00	$0.70	$0.00	$0.00	$0.55	$0.00	$0.00	$27.53	$36.75
2nd Period	$20.50	$50.00	$7.83	$0.00	$0.70	$0.00	$0.00	$0.62	$0.00	$0.00	$29.65	$39.90
3rd Period	$22.55	$55.00	$7.83	$8.98	$0.70	$0.00	$6.00	$0.68	$0.00	$0.00	$46.74	$58.02
4th Period	$26.65	$65.00	$7.83	$8.98	$0.70	$0.00	$6.00	$0.80	$0.00	$0.00	$50.96	$64.28
5th Period	$30.75	$75.00	$7.83	$8.98	$0.70	$0.00	$6.00	$0.92	$0.00	$0.00	$55.18	$70.56
6th Period	$34.85	$85.00	$7.83	$8.98	$0.70	$0.00	$6.00	$1.05	$0.00	$0.00	$59.41	$76.84

(*)Special Calculation Note :

Other: National Electrical Benefit Fund

Ratio :

1 to 3 Journeymen to 2 Apprentices
4 to 6 Journeymen to 4 Apprentices
7 to 9 Journeymen to 6 Apprentices

Jurisdiction (* denotes special jurisdictional note) :

Ashtabula*, Geauga*, Lake

Special Jurisdictional Note :

The following townships In Ashtabula County are EXCLUDED: Orwell, Colebrook, Williamsfield, Wayne and Windsor.

In Geauga County the following townships are INCLUDED: Burton, Chardon, Claridon, Hambden, Huntsburg, Montville, Munson, Newbury and Thompson.

Details :

Prevailing Wage Rate
Skilled Crafts

Name of Union: Electrical Local 673 Inside Lt Commercial Northern

Type of Rate: Commercial

Change #: LCN01-2026ib

Craft: Electrical

Effective Date: 3/4/2026

Effective Date: 3/4/2026

	BHR		Fringe Benefit Payments						Irrevocable Fund		Total PWR	Overtime Rate
			H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)	MISC (*)		
Classification												
Electrician	$41.00		$7.83	$8.98	$0.70	$0.00	$6.00	$1.23	$0.00	$0.00	$65.74	$86.24
Welder	$45.10		$7.83	$8.98	$0.70	$0.00	$6.00	$1.35	$0.00	$0.00	$69.96	$92.51
CE-3 12,001-14,000 Hrs	$31.71		$6.99	$0.00	$0.95	$0.00	$0.95	$0.95	$0.00	$0.10	$41.65	$57.50
CE-2 10,001-12,000 Hrs	$24.92		$6.99	$0.00	$0.95	$0.00	$0.75	$0.75	$0.00	$0.10	$34.46	$46.92
CE-1 8,001-10,000 Hrs	$22.65		$6.99	$0.00	$0.95	$0.00	$0.68	$0.68	$0.00	$0.10	$32.05	$43.37
CW-4 6,001-8,000 Hrs	$20.39		$6.99	$0.00	$0.95	$0.00	$0.61	$0.61	$0.00	$0.10	$29.65	$39.84
CW-3 4,001-6,000 Hrs	$18.12		$6.99	$0.00	$0.95	$0.00	$0.54	$0.54	$0.00	$0.10	$27.24	$36.30
CW-2 2,001-4,000 Hrs	$16.99		$6.99	$0.00	$0.95	$0.00	$0.51	$0.51	$0.00	$0.10	$26.05	$34.55
CW-1 0-2,000 Hrs	$15.86		$6.99	$0.00	$0.95	$0.00	$0.48	$0.48	$0.00	$0.10	$24.86	$32.79
Apprentice	BHR	Percent										
1st Period	$18.45	$45.00	$7.83	$0.50	$0.70	$0.00	$0.00	$0.00	$0.00	$0.00	$27.48	$36.70
2nd Period	$20.51	$50.02	$7.83	$0.56	$0.70	$0.00	$0.00	$0.00	$0.00	$0.00	$29.60	$39.86
3rd Period	$22.55	$55.00	$7.83	$9.59	$0.70	$0.00	$5.46	$0.00	$0.00	$0.00	$46.13	$57.41
4th Period	$26.65	$65.00	$7.83	$9.71	$0.70	$0.00	$5.46	$0.00	$0.00	$0.00	$50.35	$63.67
5th Period	$30.75	$75.00	$7.83	$9.82	$0.70	$0.00	$5.46	$0.00	$0.00	$0.00	$54.56	$69.94
6th Period	$34.85	$85.00	$7.83	$9.93	$0.70	$0.00	$5.46	$0.00	$0.00	$0.00	$58.77	$76.20

(*)Special Calculation Note :

Other: National Electrical Benefit Fund
Misc: Central Collection Admin Fee

Ratio :

1 to 3 Journeymen to 2 Apprentices
4 to 6 Journeymen to 4 Apprentices
7 to 9 Journeymen to 6 Apprentices

Construction Electrician and Construction Wireman Ratio There shall be a minimum ratio of one inside Journeyman Wireman to every (4) employees of different classifications per jobsite. An Inside Journeyman Wireman is required on the project as the fifth (5th) worker or when apprentices are used

Jurisdiction (* denotes special jurisdictional note) :

Ashtabula*, Geauga*, Lake

Special Jurisdictional Note :

The following townships In Ashtabula County are EXCLUDED: Orwell, Colebrook, Williamsfield, Wayne and Windsor.

In Geauga County the following townships are INCLUDED: Burton, Chardon, Claridon, Hambden, Huntsburg, Montville, Munson, Newbury and Thompson.

Details :

The scope of work for the light commercial agreement shall apply to the following small medical clinics, stand-alone doctor and dentist offices with up to 600 amp service (not attached to a hospital), gas stations/convenience stores, fast food restaurants and franchised chain restaurants including independent bars and taverns, places of worship, funeral homes, nursing homes, assisted living facilities and day-care facilities under 15,000 sq ft, small office, retail/wholesale facilities under 15,000 sq ft with less than 10 units attached, storage units, car washes, express hotels and motels (4 stories or less) without conference or restaurants facilities, residential units (subject to Davis Bacon Rates) small stand-alone manufacturing facilities when free standing and not part of a larger facility (less than 15,000 sq ft) solar projects (500 panels or less) unless other wise covered under this agreement, lighting retrofits (when not associated with remodels involving branch re-circuiting) Lighting retrofits shall be defined as the changing of lamps and ballasts in existing light fixtures and shall also include the one for one replacement of existing fixtures.

Prevailing Wage Rate
Skilled Crafts

Name of Union: Electrical Local 673 Lightning Rod

Type of Rate: Commercial

Change #:	**Craft:**	**Effective Date:**	**Effective Date:**
OCR01-2022sks	Electrical	11/10/2022	11/10/2022

	BHR		Fringe Benefit Payments						Irrevocable Fund		Total PWR	Overtime Rate
			H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)	MISC (*)		
Classification												
Electrical Lightning Protection	$30.44		$7.50	$0.91	$0.00	$2.84	$1.83	$0.00	$0.00	$0.00	$43.52	$58.74
Apprentice	BHR	Percent										
Lightning Protection Installer 1st day-6 months	$15.22	$50.00	$7.50	$0.46	$0.00	$0.41	$0.92	$0.00	$0.00	$0.00	$24.51	$32.12
Lightning Protection Installer 2nd 6 months	$16.74	$55.00	$7.50	$0.50	$0.00	$0.45	$1.01	$0.00	$0.00	$0.00	$26.20	$34.57
Lightning Protection Installer 3rd 6th months	$18.26	$60.00	$7.50	$0.55	$0.00	$0.89	$1.10	$0.00	$0.00	$0.00	$28.30	$37.44
Lightning Protection Installer 4th 6 months months	$19.79	$65.00	$7.50	$0.59	$0.00	$0.97	$1.19	$0.00	$0.00	$0.00	$30.04	$39.93
Lightning Protection Installer 3rd Year	$21.31	$70.00	$7.50	$0.64	$0.00	$1.52	$1.28	$0.00	$0.00	$0.00	$32.25	$42.90
Lightning Protection Installer 4th Year	$24.35	$80.00	$7.50	$0.73	$0.00	$1.73	$1.46	$0.00	$0.00	$0.00	$35.77	$47.95
Lightning Protection Installer 5th Year	$27.40	$90.00	$7.50	$0.82	$0.00	$1.95	$1.65	$0.00	$0.00	$0.00	$39.32	$53.01

(*)Special Calculation Note :

Ratio :

1- 3 Journeyman to 2 Trainee 4-6 Journeyman to 4 Trainee 7-9 Journeyman to 6 Trainee

Jurisdiction (* denotes special jurisdictional note) :

Ashtabula, Geauga, Lake

Special Jurisdictional Note :

Details :

Prevailing Wage Rate
Skilled Crafts

Name of Union: Electrical Local 673 Voice Data Video

Type of Rate: Commercial

Change #: LCN01-2023ib

Craft: Electrical

Effective Date: 6/14/2023

Effective Date: 6/14/2023

	BHR		Fringe Benefit Payments						Irrevocable Fund		Total PWR	Overtime Rate
			H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)	MISC (*)		
Classification												
Electrical Installer Technician	$28.95		$10.98	$0.87	$0.70	$0.00	$1.36	$0.00	$0.00	$0.00	$42.86	$57.34
Communication Technician	$30.20		$10.98	$0.91	$0.70	$0.00	$1.36	$0.00	$0.00	$0.00	$44.15	$59.25
Senior Technician	$31.17		$10.98	$0.93	$0.70	$0.00	$1.36	$0.00	$0.00	$0.00	$45.14	$60.73
Security Tech Level I	$28.95		$10.98	$0.87	$0.70	$0.00	$1.36	$0.00	$0.00	$0.00	$42.86	$57.34
Security Tech Level II	$30.20		$10.98	$0.91	$0.70	$0.00	$1.36	$0.00	$0.00	$0.00	$44.15	$59.25
Security Tech Level III	$31.17		$10.98	$0.93	$0.70	$0.00	$1.36	$0.00	$0.00	$0.00	$45.14	$60.73
Audio Visual Tech Level I	$28.95		$10.98	$0.87	$0.70	$0.00	$1.36	$0.00	$0.00	$0.00	$42.86	$57.34
Audio Visual Tech Level II	$30.20		$10.98	$0.91	$0.70	$0.00	$1.36	$0.00	$0.00	$0.00	$44.15	$59.25
Audio Visual Tech Level III	$31.17		$10.98	$0.93	$0.70	$0.00	$1.36	$0.00	$0.00	$0.00	$45.14	$60.73
Apprentice	BHR	Percent										
1st 6 Months	$15.92	$55.00	$10.98	$0.48	$0.70	$0.00	$1.36	$0.00	$0.00	$0.00	$29.44	$37.40
2nd 6 Months	$18.82	$65.00	$10.98	$0.56	$0.70	$0.00	$1.36	$0.00	$0.00	$0.00	$32.42	$41.83
2nd Year	$21.71	$75.00	$10.98	$0.65	$0.70	$0.00	$1.36	$0.00	$0.00	$0.00	$35.40	$46.26
3rd Year	$23.16	$80.00	$10.98	$0.69	$0.70	$0.00	$1.36	$0.00	$0.00	$0.00	$36.89	$48.47
4th Year	$24.61	$85.00	$10.98	$0.74	$0.70	$0.00	$1.36	$0.00	$0.00	$0.00	$38.39	$50.69
5th Year	$26.06	$90.00	$10.98	$0.78	$0.70	$0.00	$1.36	$0.00	$0.00	$0.00	$39.88	$52.90

(*)Special Calculation Note :

No special calculations for this skilled craft wage rate are required at this time.

Ratio :

1 to 3 Journeyman to 2 Apprentice 4 to 6 Journeyman to 4 Apprentice 7 to 9 Journeyman to 6 Apprentices

Jurisdiction (* denotes special jurisdictional note) :

Ashtabula*, Geauga*, Lake

Special Jurisdictional Note :

In Ashtabula County the following townships are excluded: (Orwell, Colebrook, Williamsfield, Wayne and Windsor). In Geauga County the following townships are included: (Burton, Chardon, Claridon, Hambden, Huntsburg, Montville, Munson, Newbury and Thompson)

Details :

The following work is EXCLUDED from the Teledata Technician work scope: The installation of computer systems in industrial applications such as assembly lines, robotics, computer controller manufacturing systems. The installation of conduit and/ or raceways shall be installed by Inside Wireman . On sites where there is no Inside Wireman employed, the Teledata Technician may install raceway, or conduit not greater then 10 ft. Fire Alarm work is excluded on all new construction sites or wherever the fire alarm system is installed in conduit All HVAC control work. *Installer Technician: Successful completion of the Installer/Technician Apprenticeship Program or have been certified by the IBEW/NECA Joint Apprenticeship and Training Program as an Installer/Technician. *Communications Technician: At least 2 years experience as a Installer/Technician and a minimum of 12 hours continuous related education or have been certified by an IBEW/NECA Joint Apprenticeship Training Program as a Communication Technician.

Prevailing Wage Rate
Skilled Crafts

Name of Union: Electrical Local 71 Cleveland Commercial Projects

Type of Rate: Commercial

Change #: LCN01-2026ib

Craft: Electrical

Effective Date: 1/21/2026

Effective Date: 1/21/2026

	BHR		Fringe Benefit Payments						Irrevocable Fund		Total PWR	Overtime Rate
			H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)	MISC (*)		
Classification												
Electrical Lineman	$61.19		$7.50	$1.84	$0.61	$0.00	$14.69	$1.00	$0.00	$0.00	$86.83	$117.42
Cable Splicer	$61.19		$7.50	$1.84	$0.61	$0.00	$14.69	$1.00	$0.00	$0.00	$86.83	$117.42
Equip. Operator	$55.07		$7.50	$1.65	$0.55	$0.00	$13.22	$1.00	$0.00	$0.00	$78.99	$106.53
Groundman 0 to 12 months	$36.71		$7.50	$1.10	$0.37	$0.00	$8.81	$1.00	$0.00	$0.00	$55.49	$73.84
Groundman 1 year plus	$42.83		$7.50	$1.28	$0.43	$0.00	$10.28	$1.00	$0.00	$0.00	$63.32	$84.73
Apprentice	BHR	Percent										
1st 1000 Hrs	$36.71	$60.00	$7.50	$1.10	$0.37	$0.00	$8.81	$1.00	$0.00	$0.00	$55.49	$73.84
2nd 1000 Hrs	$39.77	$65.00	$7.50	$1.19	$0.40	$0.00	$9.54	$1.00	$0.00	$0.00	$59.40	$79.28
3rd 1000 Hrs	$42.83	$70.00	$7.50	$1.28	$0.43	$0.00	$10.28	$1.00	$0.00	$0.00	$63.32	$84.73
4th 1000 Hrs	$45.89	$75.00	$7.50	$1.38	$0.46	$0.00	$11.01	$1.00	$0.00	$0.00	$67.24	$90.19
5th 1000 Hrs	$48.95	$80.00	$7.50	$1.47	$0.49	$0.00	$11.75	$1.00	$0.00	$0.00	$71.16	$95.64
6th 1000 Hrs	$52.01	$85.00	$7.50	$1.56	$0.55	$0.00	$12.48	$1.00	$0.00	$0.00	$75.10	$101.11
7th 1000 Hrs	$55.07	$90.00	$7.50	$1.65	$0.55	$0.00	$13.22	$1.00	$0.00	$0.00	$78.99	$106.53

(*)Special Calculation Note :

Other: Health Reimbursement Account

Ratio :

1 Journeymen to 1 Apprentice

Jurisdiction (* denotes special jurisdictional note) :

Ashtabula, Cuyahoga, Geauga, Lake, Lorain

Special Jurisdictional Note :

Details :

A groundman when directed shall assist a Journeymen in the performance of his/her work on the ground, including the use of hand tools. Under no circumstances shall this classification climb poles, towers, ladders, or work from an elevated platform or bucket truck. This classification shall not perform work normally assigned to an apprentice lineman. There shall be no more than one (1) Groundman for each two (2) Journeyman except when performing DOT Traffic Signal or Highway lighting work where the ratio can be two (2) Groundman for each Journeyman or Operator.

Prevailing Wage Rate
Skilled Crafts

Name of Union: Electrical Local 71 Cleveland Municipal Power & Transit

Type of Rate: Commercial

Change #:	**Craft:**	**Effective Date:**	**Effective Date:**
LCN01-2025ib	Electrical	1/21/2026	1/21/2026

	BHR		Fringe Benefit Payments						Irrevocable Fund		Total PWR	Overtime Rate
			H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)	MISC (*)		
Classification												
Electrical Lineman	$56.91		$7.50	$1.71	$0.57	$0.00	$13.09	$1.00	$0.00	$0.00	$80.78	$109.23
Cable Splicer	$56.91		$7.50	$1.71	$0.57	$0.00	$13.09	$1.00	$0.00	$0.00	$80.78	$109.23
Equip. Operator	$51.22		$7.50	$1.54	$0.51	$0.00	$11.78	$1.00	$0.00	$0.00	$73.55	$99.16
Groundman 0 to 12 months	$34.15		$7.50	$1.02	$0.34	$0.00	$7.85	$1.00	$0.00	$0.00	$51.86	$68.94
Groundman 1 Year or More	$39.84		$7.50	$1.20	$0.40	$0.00	$9.16	$1.00	$0.00	$0.00	$59.10	$79.02
Apprentice	BHR	Percent										
1st 1000 Hrs	$34.15	$60.00	$7.50	$1.02	$0.34	$0.00	$7.85	$1.00	$0.00	$0.00	$51.86	$68.94
2nd 1000 Hrs	$36.99	$65.00	$7.50	$1.11	$0.37	$0.00	$8.51	$1.00	$0.00	$0.00	$55.48	$73.97
3rd 1000 Hrs	$39.84	$70.00	$7.50	$1.20	$0.40	$0.00	$9.16	$1.00	$0.00	$0.00	$59.10	$79.02
4th 1000 Hrs	$42.68	$75.00	$7.50	$1.28	$0.43	$0.00	$9.82	$1.00	$0.00	$0.00	$62.71	$84.05
5th 1000 Hrs	$45.53	$80.00	$7.50	$1.37	$0.46	$0.00	$10.47	$1.00	$0.00	$0.00	$66.33	$89.09
6th 1000 Hrs	$48.37	$85.00	$7.50	$1.45	$0.48	$0.00	$11.13	$1.00	$0.00	$0.00	$69.93	$94.11
7th 1000 Hrs	$51.22	$90.00	$7.50	$1.54	$0.51	$0.00	$11.78	$1.00	$0.00	$0.00	$73.55	$99.16

(*)Special Calculation Note :

Other: Health Reimbursement Account

Ratio :

1 Journeymen to 1 Apprentice

Jurisdiction (* denotes special jurisdictional note) :

Ashtabula, Cuyahoga, Geauga, Lake, Lorain

Special Jurisdictional Note :

Details :

A groundman when directed shall assist a Journeymen in the performance of his/her work on the ground, including the use of hand tools. Under no circumstances shall this classification climb poles, towers, ladders, or work from an elevated platform or bucket truck. This classification shall not perform work normally assigned to an apprentice lineman. There shall be no more than one (1) Groundman for each two (2) Journeyman except when performing DOT Traffic Signal or Highway lighting work where the ratio can be two (2) Groundman for each Journeyman or Operator.

Prevailing Wage Rate
Skilled Crafts

Name of Union: Electrical Local 71 DOT Traffic Signal Highway Lighting Cleveland

Type of Rate: Commercial

Change #:	**Craft:**	**Effective Date:**	**Effective Date:**
LCN01-2026ib	Electrical	1/21/2026	1/21/2026

	BHR		Fringe Benefit Payments						Irrevocable Fund		Total PWR	Overtime Rate
			H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)	MISC (*)		
Classification												
Electrical Lineman	$45.50		$7.50	$1.37	$0.46	$0.00	$10.01	$0.75	$0.00	$0.00	$65.59	$88.34
Traffic Signal & Lighting Journeyman	$45.50		$7.50	$1.37	$0.46	$0.00	$10.01	$0.75	$0.00	$0.00	$65.59	$88.34
Equipment Operator	$41.32		$7.50	$1.24	$0.41	$0.00	$9.09	$0.75	$0.00	$0.00	$60.31	$80.97
Groundman 0 to 1 Year	$27.06		$7.50	$0.81	$0.27	$0.00	$5.95	$0.75	$0.00	$0.00	$42.34	$55.87
Groundman 1 Year or more	$32.09		$7.50	$0.96	$0.32	$0.00	$7.06	$0.75	$0.00	$0.00	$48.68	$64.73
Apprentice	BHR	Percent										
1st 1,000 Hours	$27.30	$60.00	$7.50	$0.82	$0.27	$0.00	$6.01	$0.75	$0.00	$0.00	$42.65	$56.30
2nd 1,000 Hours	$29.57	$65.00	$7.50	$0.89	$0.30	$0.00	$6.51	$0.75	$0.00	$0.00	$45.52	$60.31
3rd 1,000 Hours	$31.85	$70.00	$7.50	$0.96	$0.32	$0.00	$7.01	$0.75	$0.00	$0.00	$48.39	$64.31
4th 1,000 Hours	$34.13	$75.00	$7.50	$1.02	$0.34	$0.00	$7.51	$0.75	$0.00	$0.00	$51.25	$68.31
5th 1,000 Hours	$36.40	$80.00	$7.50	$1.09	$0.36	$0.00	$8.01	$0.75	$0.00	$0.00	$54.11	$72.31
6th 1,000 Hours	$40.95	$90.00	$7.50	$1.23	$0.41	$0.00	$9.01	$0.75	$0.00	$0.00	$59.85	$80.33

(*)Special Calculation Note :

Other: Health Reimburstment Account

Ratio :

1 Journeymen to 1 Apprentice

Jurisdiction (* denotes special jurisdictional note) :

Ashtabula, Cuyahoga, Geauga, Lake, Lorain

Special Jurisdictional Note :

Details :

A groundman when directed shall assist a Journeymen in the performance of his/her work on the ground, including the use of hand tools. Under no circumstances shall this classification climb poles, towers, ladders, or work from an elevated platform or bucket truck. This classification shall not perform work normally assigned to an apprentice lineman. There shall be no more than one (1) Groundman for each two (2) Journeyman except when performing DOT Traffic Signal or Highway lighting work where the ratio can be two (2) Groundman for each Journeyman or Operator.

Prevailing Wage Rate
Skilled Crafts

Name of Union: Electrical Local 71 High Tension Pipe Type Cable

Type of Rate: Commercial

Change #: LCN01-2026ib

Craft: Electrical

Effective Date: 1/7/2026

Effective Date: 1/7/2026

	BHR		Fringe Benefit Payments						Irrevocable Fund		Total PWR	Overtime Rate
			H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)	MISC (*)		
Classification												
Electrical Lineman	$54.94		$7.50	$1.65	$0.55	$0.00	$13.19	$1.00	$0.00	$0.00	$78.83	$106.30
Certified Lineman Welder	$54.94		$7.50	$1.65	$0.55	$0.00	$13.19	$1.00	$0.00	$0.00	$78.83	$106.30
Certified Cable Splicer	$54.94		$7.50	$1.65	$0.55	$0.00	$13.19	$1.00	$0.00	$0.00	$78.83	$106.30
Operator A	$49.20		$7.50	$1.48	$0.49	$0.00	$11.81	$1.00	$0.00	$0.00	$71.48	$96.08
Operator B	$43.52		$7.50	$1.31	$0.44	$0.00	$10.44	$1.00	$0.00	$0.00	$64.21	$85.97
Operator C	$34.93		$7.50	$1.05	$0.35	$0.00	$8.38	$1.00	$0.00	$0.00	$53.21	$70.67
Groundman 0-12 months Exp	$27.47		$7.50	$0.82	$0.27	$0.00	$6.59	$1.00	$0.00	$0.00	$43.65	$57.38
Groundman 0-12 months Exp w/CDL	$30.22		$7.50	$0.91	$0.30	$0.00	$7.25	$1.00	$0.00	$0.00	$47.18	$62.29
Groundman 1 yr or more	$30.22		$7.50	$0.91	$0.30	$0.00	$7.25	$1.00	$0.00	$0.00	$47.18	$62.29
Groundman 1 yr or more w/CDL	$35.71		$7.50	$1.07	$0.36	$0.00	$8.57	$1.00	$0.00	$0.00	$54.21	$72.06
Equipment Mechanic A	$43.52		$7.50	$1.31	$0.44	$0.00	$10.44	$1.00	$0.00	$0.00	$64.21	$85.97
Equipment Mechanic B	$39.22		$7.50	$1.18	$0.39	$0.00	$9.41	$1.00	$0.00	$0.00	$58.70	$78.31
Equipment Mechanic C	$34.92		$7.50	$1.05	$0.35	$0.00	$8.38	$1.00	$0.00	$0.00	$53.20	$70.66
X-Ray Technician	$54.94		$7.50	$1.65	$0.55	$0.00	$13.19	$1.00	$0.00	$0.00	$78.83	$106.30
Apprentice	BHR	Percent										
1st 1000 hrs	$32.96	$60.00	$7.50	$0.99	$0.33	$0.00	$7.91	$1.00	$0.00	$0.00	$50.69	$67.17
2nd 1000 hrs	$35.71	$65.00	$7.50	$1.07	$0.36	$0.00	$8.57	$1.00	$0.00	$0.00	$54.21	$72.06
3rd 1000 hrs	$38.46	$70.00	$7.50	$1.15	$0.38	$0.00	$9.23	$1.00	$0.00	$0.00	$57.72	$76.95

4th 1000 hrs	$41.20	$75.00	$7.50	$1.24	$0.41	$0.00	$9.89	$1.00	$0.00	$0.00	$61.24	$81.84
5th 1000 hrs	$43.95	$80.00	$7.50	$1.32	$0.44	$0.00	$10.55	$1.00	$0.00	$0.00	$64.76	$86.74
6th 1000 hrs	$46.70	$85.00	$7.50	$1.39	$0.47	$0.00	$11.21	$1.00	$0.00	$0.00	$68.27	$91.62
7th 1000 hrs	$49.45	$90.00	$7.50	$1.48	$0.49	$0.00	$11.87	$1.00	$0.00	$0.00	$71.79	$96.52

(*)Special Calculation Note :

Other is Health Reimbursement Account

Ratio :

1 Journeyman to 1 Apprentice

Jurisdiction (* denotes special jurisdictional note) :

Adams, Ashland, Ashtabula, Athens, Auglaize, Belmont, Brown, Butler, Carroll, Champaign, Clark, Clermont, Clinton, Columbiana, Coshocton, Crawford, Cuyahoga, Darke, Delaware, Fairfield, Fayette, Franklin, Gallia, Geauga, Greene, Guernsey, Hamilton, Harrison, Highland, Hocking, Holmes, Jackson, Jefferson, Knox, Lake, Lawrence, Licking, Logan, Lorain, Madison, Mahoning, Marion, Medina, Meigs, Mercer, Miami, Monroe, Montgomery, Morgan, Morrow, Muskingum, Noble, Perry, Pickaway, Pike, Portage, Preble, Richland, Ross, Scioto, Shelby, Stark, Summit, Trumbull, Tuscarawas, Union, Vinton, Warren, Washington, Wayne

Special Jurisdictional Note :

Details :

Operator "A": John Henry Rock Drill, D-6 (or equivalent) and above, Trackhoe Digger, (320 Track excavator), Cranes (greater then 25 tons and less than 45 tons).
Operator "B": Cranes (greater than 6 tons and up to 25 tons), Backhoes, Road Tractor, Dozer up to D-5, Pressure Digger- wheeled or tracked, all Tension wire Stringing equipment.
Operator "C": Trench, Backhoe, Riding type vibratory Compactor, Ground Rod Driver, Boom Truck (6 ton & below), Skid Steer Loaders, Material Handler.

Special Notes:

When Cable Splicer helpers are used, they must be a Journeyman Lineman.

Pipe installation, holiday testing, welding, cable splicing operation of vacuum pumps and cable pulling equipment and all work requiring the use of hand tools shall be done by Journeymen and Apprentices. Pipe coating, manhole preparations and conditioning, nitrogen connections and flowmeter installation shall be done by or under the direct supervision of a Journeyman.

At least two (2) Journeyman Linemen in addition to certified lineman welders shall be employed to install high voltage pipe.

When pulling cable, at least six (6) of the workmen shall be no less than Journeyman classifications. When pumping oil, only Journeyman Lineman or equipment operators shall be permitted to operate degasifying and oil pumping equipment

Prevailing Wage Rate
Skilled Crafts

Name of Union: Electrical Local 71 Outside Utility Power

Type of Rate: Commercial

Change #: LCN01-2026ib

Craft: Electrical

Effective Date: 1/7/2026

Effective Date: 1/7/2026

	BHR		Fringe Benefit Payments						Irrevocable Fund		Total PWR	Overtime Rate
			H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)	MISC (*)		
Classification												
Electrical Lineman	$52.03		$7.50	$1.56	$0.52	$0.00	$12.49	$1.00	$0.00	$0.00	$75.10	$101.12
Substation Technician	$52.03		$7.50	$1.56	$0.50	$0.00	$12.49	$1.00	$0.00	$0.00	$75.08	$101.09
Cable Splicer	$54.50		$7.50	$1.64	$0.55	$0.00	$13.08	$1.00	$0.00	$0.00	$78.27	$105.52
Operator A	$46.61		$7.50	$1.40	$0.47	$0.00	$11.19	$1.00	$0.00	$0.00	$68.17	$91.47
Operator B	$41.17		$7.50	$1.23	$0.41	$0.00	$9.87	$1.00	$0.00	$0.00	$61.18	$81.77
Operator C	$33.00		$7.50	$0.99	$0.33	$0.00	$7.92	$1.00	$0.00	$0.00	$50.74	$67.24
Groundman 0-12 months Exp	$26.02		$7.50	$0.78	$0.26	$0.00	$6.24	$1.00	$0.00	$0.00	$41.80	$54.81
Groundman 0-12 months Exp w/CDL	$28.62		$7.50	$0.86	$0.29	$0.00	$6.87	$1.00	$0.00	$0.00	$45.14	$59.45
Groundman 1 yr or more	$28.62		$7.50	$0.86	$0.29	$0.00	$6.87	$1.00	$0.00	$0.00	$45.14	$59.45
Groundman 1 yr or more w/CDL	$33.82		$7.50	$1.01	$0.34	$0.00	$8.12	$1.00	$0.00	$0.00	$51.79	$68.70
Equipment Mechanic A	$41.17		$7.50	$1.23	$0.41	$0.00	$9.87	$1.00	$0.00	$0.00	$61.18	$81.77
Equipment Mechanic B	$37.09		$7.50	$1.11	$0.37	$0.00	$8.90	$1.00	$0.00	$0.00	$55.97	$74.52
Equipment Mechanic C	$33.00		$7.50	$0.99	$0.33	$0.00	$7.92	$1.00	$0.00	$0.00	$50.74	$67.24
Line Truck w/auger	$36.40		$7.50	$1.09	$0.36	$0.00	$8.71	$1.00	$0.00	$0.00	$55.06	$73.26
Apprentice	BHR	Percent										
1st 1000 hrs	$31.22	$60.00	$7.50	$0.94	$0.31	$0.00	$7.49	$1.00	$0.00	$0.00	$48.46	$64.07
2nd 1000 hrs	$33.82	$65.00	$7.50	$1.01	$0.34	$0.00	$8.12	$1.00	$0.00	$0.00	$51.79	$68.70
3rd 1000 hrs	$36.42	$70.00	$7.50	$1.09	$0.36	$0.00	$8.74	$1.00	$0.00	$0.00	$55.11	$73.32

4th 1000 hrs	$39.02	$75.00	$7.50	$1.17	$0.39	$0.00	$9.37	$1.00	$0.00	$0.00	$58.45	$77.96
5th 1000 hrs	$41.62	$80.00	$7.50	$1.25	$0.44	$0.00	$9.99	$1.00	$0.00	$0.00	$61.80	$82.61
6th 1000 hrs	$44.23	$85.00	$7.50	$1.33	$0.44	$0.00	$10.61	$1.00	$0.00	$0.00	$65.11	$87.22
7th 1000 hrs	$46.83	$90.00	$7.50	$1.40	$0.47	$0.00	$11.24	$1.00	$0.00	$0.00	$68.44	$91.86

(*)Special Calculation Note :

Other: Health Reimbursement Account

Ratio :

(1) Journeyman Lineman to (1) Apprentice

Jurisdiction (* denotes special jurisdictional note) :

Adams, Ashland, Ashtabula, Athens, Auglaize, Belmont, Brown, Butler, Carroll, Champaign, Clark, Clermont, Clinton, Columbiana, Coshocton, Crawford, Cuyahoga, Darke, Delaware, Fairfield, Fayette, Franklin, Gallia, Geauga, Greene, Guernsey, Hamilton, Harrison, Highland, Hocking, Holmes, Jackson, Jefferson, Knox, Lake, Lawrence, Licking, Logan, Lorain, Madison, Mahoning, Marion, Medina, Meigs, Mercer, Miami, Monroe, Montgomery, Morgan, Morrow, Muskingum, Noble, Perry, Pickaway, Pike, Portage, Preble, Richland, Ross, Scioto, Shelby, Stark, Summit, Trumbull, Tuscarawas, Union, Vinton, Warren, Washington, Wayne

Special Jurisdictional Note :

Details :

Operator "A": John Henry Rock Drill, D-6 (or equivalent) and above, Trackhoe Digger, (320 Track excavator), Cranes (greater then 25 tons and less than 45 tons).
Operator "B": Cranes (greater than 6 tons and up to 25 tons), Backhoes, Road Tractor, Dozer up to D-5, Pressure Digger- wheeled or tracked, all Tension wire Stringing equipment.
Operator "C": Trench, Backhoe, Riding type vibratory Compactor, Ground Rod Driver, Boom Truck (6 ton & below), Skid Steer Loaders, Material Handler.

Prevailing Wage Rate
Skilled Crafts

Name of Union: Electrical Local 71 Underground Residential Distribution

Type of Rate: Commercial

Change #: LCN01-2026ib

Craft: Electrical

Effective Date: 1/7/2026

Effective Date: 1/7/2026

	BHR		Fringe Benefit Payments						Irrevocable Fund		Total PWR	Overtime Rate
			H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)	MISC (*)		
Classification												
URD Electrican	$39.42		$7.50	$1.18	$0.39	$0.00	$9.43	$1.00	$0.00	$0.00	$58.92	$78.63
Equipment Operator A	$35.24		$7.50	$1.06	$0.35	$0.00	$8.46	$1.00	$0.00	$0.00	$53.61	$71.23
Equipment Operator B	$32.34		$7.50	$0.97	$0.32	$0.00	$7.76	$1.00	$0.00	$0.00	$49.89	$66.06
Directional Drill Locator	$35.24		$7.50	$1.06	$0.35	$0.00	$8.46	$1.00	$0.00	$0.00	$53.61	$71.23
Directional Drill Operator	$32.34		$7.50	$0.97	$0.32	$0.00	$7.76	$1.00	$0.00	$0.00	$49.89	$66.06
Groundman 0-12 months Exp	$25.50		$7.50	$0.77	$0.26	$0.00	$6.12	$1.00	$0.00	$0.00	$41.15	$53.90
Groundman 0-12 months Exp w/CDL	$28.15		$7.50	$0.84	$0.28	$0.00	$6.76	$1.00	$0.00	$0.00	$44.53	$58.60
Groundman 1 yr or more	$28.15		$7.50	$0.84	$0.28	$0.00	$6.76	$1.00	$0.00	$0.00	$44.53	$58.60
Groundman 1 yr or more w/CDL	$33.47		$7.50	$1.00	$0.33	$0.00	$8.03	$1.00	$0.00	$0.00	$51.33	$68.06
Apprentice	BHR	Percent										
1st 1000 hrs	$31.54	$80.00	$7.50	$0.95	$0.32	$0.00	$7.57	$1.00	$0.00	$0.00	$48.88	$64.65
2nd 1000 hrs	$33.51	$85.00	$7.50	$1.01	$0.34	$0.00	$8.04	$1.00	$0.00	$0.00	$51.40	$68.16
3rd 1000 hrs	$35.48	$90.00	$7.50	$1.06	$0.35	$0.00	$8.51	$1.00	$0.00	$0.00	$53.90	$71.64
4th 1000 hrs	$37.45	$95.00	$7.50	$1.12	$0.37	$0.00	$8.99	$1.00	$0.00	$0.00	$56.43	$75.16

(*)Special Calculation Note :

Other: Health Reimburstment Account

Ratio :

(1) Journeyman Lineman to (1) Apprentice

Jurisdiction (* denotes special jurisdictional note) :

Adams, Ashland, Ashtabula, Athens, Auglaize, Belmont, Brown, Butler, Carroll, Champaign, Clark, Clermont, Clinton, Columbiana, Coshocton, Crawford, Cuyahoga, Darke, Delaware, Fairfield, Fayette, Franklin, Gallia, Geauga, Greene, Guernsey, Hamilton, Harrison, Highland, Hocking, Holmes, Jackson, Jefferson, Knox, Lake, Lawrence, Licking, Logan, Lorain, Madison, Mahoning, Marion, Medina, Meigs, Mercer, Miami, Monroe, Montgomery, Morgan, Morrow, Muskingum, Noble, Perry, Pickaway, Pike, Portage, Preble, Richland, Ross, Scioto, Shelby, Stark, Summit, Trumbull, Tuscarawas, Union, Vinton, Warren, Washington, Wayne

Special Jurisdictional Note :

Details :

This work applies to projects designated for any outside Underground Residential Distribution construction work for electrical utilities, municipalities and rural electrification projects.

Prevailing Wage Rate
Skilled Crafts

Name of Union: Electrical Local 71 Voice Data Video Outside

Type of Rate: Commercial

Change #: LCN02-2024ib

Craft: Electrical

Effective Date: 3/6/2024

Effective Date: 3/6/2024

	BHR		Fringe Benefit Payments						Irrevocable Fund		Total PWR	Overtime Rate
			H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)	MISC (*)		
Classification												
Electrical Installer Technician I	$35.39		$7.25	$1.06	$0.00	$0.00	$1.77	$0.00	$0.00	$0.00	$45.47	$63.17
Installer Technician II	$33.37		$7.25	$1.00	$0.00	$0.00	$1.67	$0.00	$0.00	$0.00	$43.29	$59.98
Installer Repairman	$33.37		$7.25	$1.00	$0.00	$0.00	$1.67	$0.00	$0.00	$0.00	$43.29	$59.98
Equipment Operator II	$24.98		$7.25	$0.75	$0.00	$0.00	$1.25	$0.00	$0.00	$0.00	$34.23	$46.72
Cable Splicer	$35.39		$7.25	$1.06	$0.00	$0.00	$1.77	$0.00	$0.00	$0.00	$45.47	$63.17
Ground Driver W/CDL	$16.69		$7.25	$0.50	$0.00	$0.00	$0.83	$0.00	$0.00	$0.00	$25.27	$33.62
Groundman	$14.57		$7.25	$0.44	$0.00	$0.00	$0.73	$0.00	$0.00	$0.00	$22.99	$30.28
Apprentice	BHR	Percent										
Trainee F	$17.70	$50.01	$7.25	$0.53	$0.00	$0.89	$0.00	$0.00	$0.00	$0.00	$26.37	$35.22
Trainee E	$20.53	$58.00	$7.25	$0.62	$0.00	$1.03	$0.00	$0.00	$0.00	$0.00	$29.43	$39.69
Trainee D	$23.36	$66.00	$7.25	$0.70	$0.00	$1.17	$0.00	$0.00	$0.00	$0.00	$32.48	$44.16
Trainee C	$26.19	$74.00	$7.25	$0.79	$0.00	$1.31	$0.00	$0.00	$0.00	$0.00	$35.54	$48.63
Trainee B	$29.02	$82.00	$7.25	$0.87	$0.00	$1.45	$0.00	$0.00	$0.00	$0.00	$38.59	$53.10
Trainee A	$31.85	$90.00	$7.25	$0.96	$0.00	$1.59	$0.00	$0.00	$0.00	$0.00	$41.65	$57.58

(*)Special Calculation Note :

Ratio :

1Trainee to 1 Journeyman

Jurisdiction (* denotes special jurisdictional note) :

Adams, Ashland, Ashtabula, Athens, Auglaize, Belmont, Brown, Butler, Carroll, Champaign, Clark, Clermont, Clinton, Columbiana, Coshocton, Crawford, Cuyahoga, Darke, Delaware, Fairfield, Fayette, Franklin, Gallia, Geauga, Greene, Guernsey, Hamilton, Harrison, Highland, Hocking, Holmes, Jackson, Jefferson, Knox, Lake, Lawrence, Licking, Logan, Lorain, Madison, Mahoning, Marion, Medina, Meigs, Mercer, Miami, Monroe, Montgomery, Morgan, Morrow, Muskingum, Noble, Perry, Pickaway, Pike, Portage, Preble, Richland, Ross, Scioto, Shelby, Stark, Summit, Trumbull, Tuscarawas, Union, Vinton, Warren, Washington, Wayne

Special Jurisdictional Note :

Details :

Cable Splicer: Inspect and test lines or cables, analyze results, and evaluate transmission characteristics. Cover conductors with insulation or seal splices with moisture-proof covering. Install, splice, test, and repair cables using tools or mechanical equipment. This will include the splicing of fiber. Installer Technician I: Must know all aspects of telephone and cable work. This is to include aerial, underground, and manhole work. Must know how to climb and run bucket. Must have all the tools required to perform these tasks. Must be able to be responsible for the safety of the crew at all times. Must also have CDL license and have at least 5 years experience. Installer Repairman: Perform tasks of repairing, installing, and testing phone and CATV services. Installer Technician II: Have at least three years of telephone and CATV experience. Must have the knowledge of underground, aerial, and manhole work. Must be able to climb and operate bucket. Must have CDL. Must have all tools needed to perform these tasks. Equipment Operator II: Able to operate a digger derrick or bucket truck. Have at least 3 years of experience and must have a valid CDL license. Groundman W/CDL: Must have a valid CDL license and be able to perform tasks such as: climbing poles, pulling down guys, making up material, and getting appropriate tools for the job. Must have at least 5 year's experience. Groundman: Perform tasks such as: climbing poles, pulling down guys, making up material, and getting appropriate tools for the job. Experience 0-5 years.

Prevailing Wage Rate
Skilled Crafts

Name of Union: Elevator Local 17

Type of Rate: Commercial

Change #:	**Craft:**	**Effective Date:**	**Effective Date:**
LCN01-2026ib	Elevator	3/11/2026	3/11/2026

	BHR		Fringe Benefit Payments						Irrevocable Fund		Total PWR	Overtime Rate
			H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)	MISC (*)		
Classification												
Elevator Mechanic	$66.52		$16.37	$11.06	$0.85	$5.32	$10.70	$2.50	$0.00	$0.00	$113.32	$146.58
Apprentice	BHR	Percent										
0-6months Probation	$33.26	$50.00	$0.00	$0.00	$0.00	$2.00	$0.00	$0.00	$0.00	$0.00	$35.26	$51.89
1st year	$36.59	$55.00	$16.37	$11.06	$0.85	$2.20	$10.70	$1.38	$0.00	$0.00	$79.15	$97.45
2nd year	$43.24	$65.00	$16.37	$11.06	$0.85	$2.59	$10.70	$1.63	$0.00	$0.00	$86.44	$108.06
3rd year	$46.56	$70.00	$16.37	$11.06	$0.85	$2.79	$10.70	$1.75	$0.00	$0.00	$90.08	$113.36
4th year	$53.22	$80.00	$16.37	$11.06	$0.85	$3.19	$10.70	$2.00	$0.00	$0.00	$97.39	$124.00
Assistant Mechanic	$53.22	$80.00	$16.37	$11.06	$0.85	$4.26	$10.70	$2.00	$0.00	$0.00	$98.46	$125.07
Helper	$46.56	$70.00	$16.37	$11.06	$0.85	$3.72	$10.70	$1.75	$0.00	$0.00	$91.01	$114.29

(*)Special Calculation Note :

Vacation: 6% for employees under 5 years based on regular hourly rate for all hours worked, 8% for employees over 5 years based on regular hourly rate for all hours worked.

Other: Holiday Pay

Ratio :

1 Journeyman to 1 Apprentice
1 Journeyman to 1 Helper
1 Journeyman to 1 Assistant Mechanic

Jurisdiction (* denotes special jurisdictional note) :

Ashtabula, Cuyahoga, Erie, Geauga, Lake, Lorain

Special Jurisdictional Note :

Details :

Prevailing Wage Rate
Skilled Crafts

Name of Union: Glazier Local 181

Type of Rate: Commercial

Change #:	**Craft:**	**Effective Date:**	**Effective Date:**
LCN01-2026ib	Glazier	6/17/2026	6/17/2026

	BHR		Fringe Benefit Payments						Irrevocable Fund		Total PWR	Overtime Rate
			H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)	MISC (*)		
Classification												
Glazier	$38.00		$9.92	$12.60	$0.45	$0.00	$0.00	$0.00	$0.00	$0.00	$60.97	$79.97
Apprentice	BHR	Percent										
1st Year	$24.70	$65.00	$9.92	$1.02	$0.45	$0.00	$0.00	$0.00	$0.00	$0.00	$36.09	$48.44
2nd Year	$26.60	$70.00	$9.92	$3.52	$0.45	$0.00	$0.00	$0.00	$0.00	$0.00	$40.49	$53.79
3rd Year	$30.40	$80.00	$9.92	$7.69	$0.45	$0.00	$0.00	$0.00	$0.00	$0.00	$48.46	$63.66
4th Year	$34.20	$90.00	$9.92	$8.53	$0.45	$0.00	$0.00	$0.00	$0.00	$0.00	$53.10	$70.20

(*)Special Calculation Note :

High Pay: All work is defined for the purpose of the agreement as being work which requires that the employee be supported by equipment that hangs from or suspends from the wall or roof of a building or structure. This work shall receive and additional $1.50 per hour.

Ratio :

1 Journeymen to 1 Apprentice

Jurisdiction (* denotes special jurisdictional note) :

Ashtabula, Cuyahoga, Erie*, Geauga, Huron, Lake, Lorain, Medina*, Portage*, Summit*

Special Jurisdictional Note :

Start at the intersection of Route 305 and the eastern boundary line of Portage County. Follow Route 305 west onto Route 82, follow Route 82 west to the intersection of Routes 82, 8 and 271, follow Route 271 south to Medina County line west to Route 94, follow Route 94 south to Route 303, follow Route 303 west to Route 252, follow Route 252 south to Route 18, follow Route 18 west to Route 301, follow 301 south to Route 162, follow Route 162 west to Route 58, follow Route 58 south to the Ashland County line, follow the Ashland County line. The eastern part of Route 4 north to Lake Erie is the jurisdiction of Local 181. Local 181 has the jurisdiction on all projects built on the property which borders on the above Routes and/or intersections, wherever a County line is the divider between Local 181 and another Union, the jurisdiction is only to the county line.

Details :

Prevailing Wage Rate
Skilled Crafts

Name of Union: Ironworker Local 17

Type of Rate: Commercial

Change #:	**Craft:**	**Effective Date:**	**Effective Date:**
LCN01-2026ib	Ironworker	5/1/2026	5/1/2026

	BHR		Fringe Benefit Payments						Irrevocable Fund		Total PWR	Overtime Rate
			H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)	MISC (*)		
Classification												
Ironworker	$39.48		$9.14	$10.00	$0.72	$2.50	$8.00	$0.00	$0.00	$0.00	$69.84	$89.58
Apprentice	BHR	Percent										
1st Year - 1st 6 Months	$23.69	$60.00	$9.14	$10.00	$0.72	$2.50	$8.00	$0.00	$0.00	$0.00	$54.05	$65.90
1st Year - 2nd 6 Months	$25.66	$65.00	$9.14	$10.00	$0.72	$2.50	$8.00	$0.00	$0.00	$0.00	$56.02	$68.85
2nd Year - 1st 6 Months	$27.64	$70.00	$9.14	$10.00	$0.72	$2.50	$8.00	$0.00	$0.00	$0.00	$58.00	$71.82
2nd Year - 2nd 6 Months	$29.61	$75.00	$9.14	$10.00	$0.72	$2.50	$8.00	$0.00	$0.00	$0.00	$59.97	$74.78
3rd Year - 1st 6 Months	$31.58	$80.00	$9.14	$10.00	$0.72	$2.50	$8.00	$0.00	$0.00	$0.00	$61.94	$77.73
3rd Year - 2nd 6 Months	$33.56	$85.00	$9.14	$10.00	$0.72	$2.50	$8.00	$0.00	$0.00	$0.00	$63.92	$80.70
4th Year - 1st 6 Months	$35.53	$90.00	$9.14	$10.00	$0.72	$2.50	$8.00	$0.00	$0.00	$0.00	$65.89	$83.66
4th Year - 2nd 6 Months	$37.51	$95.00	$9.14	$10.00	$0.72	$2.50	$8.00	$0.00	$0.00	$0.00	$67.87	$86.63

(*)Special Calculation Note :

Ratio :

4 Journeymen to 1 Apprentice on Structural Work
3 Journeymen to 1 Apprentice on Rod Work
2 Journeymen to 1 Apprentice on Finishing, Steel Sash, Stairway and Ornamental Work
1 Apprentice for every Sheeting Gang
1 Journeymen to 2 Apprentice Roadway Signage and Sound Barriers
2 Journeymen to 2 Apprentice Unloading and Erection of Light Gauge Mental Trusses

Jurisdiction (* denotes special jurisdictional note) :

Ashland*, Ashtabula, Cuyahoga, Erie, Geauga, Huron, Lake, Lorain, Medina, Ottawa*, Portage, Summit

Special Jurisdictional Note :

WEST BOUNDARY LINE: Sandusky, Ohio - Columbus Avenue north to Sandusky Bay (and/or Lake Erie); Columbus Avenue south to present Route 4; Route 4 south to present Route 99; from Route 99 south to old Route 224 - all territory to the west of the boundary line is to be within the jurisdiction of Local Union No.55, Toledo, Ohio. All territory to the east of the boundary line is to be within the jurisdiction of Local Union No. 17, Cleveland, Ohio. Kelly's Island is to be within the jurisdiction of Local
Union No. 17, Cleveland, Ohio. All bridges, tunnels, viaducts, etc., relative to these boundary lines shall be under the jurisdiction of Local Union No. 17, Cleveland, Ohio.

EAST BOUNDARY LINE: Ashtabula, Ohio - All territory from the Geauga County Line on the West boundary North of State Route 6 and West of State Route 11 and North of Interstate Route 90 to the Pennsylvania Line on the East boundary shall fall under the jurisdiction of Local Union No. 17, Cleveland, Ohio.

SOUTH BOUNDARY LINE: Canton, Ohio - All territory north of old Route 224 line to be within the jurisdiction of Local Union No. 17, Cleveland, Ohio. All bridges, tunnels, viaducts, signs, etc., relative to old Route 224 line to be within the jurisdiction of Local Union No. 17, Cleveland, Ohio. All territory south of old Route 224 line is to be within the jurisdiction of Local Union No. 550, Canton, Ohio, except for everything within the city limits of Barberton, Ohio, which shall be under the jurisdiction of Local Union No. 17, Cleveland, Ohio.

SOUTHEAST BOUNDARY: West of a line from Middlefield to Shalersville to Deerfield, shall be under the jurisdiction of Local Union No.
17, Cleveland, Ohio. East of a line from Middlefield, to Shalersville to Deerfield, shall be under the jurisdiction of Local Union No.
207, Youngstown, Ohio. Local Union No. 17, Cleveland, Ohio and Local Union No. 207, Youngstown, Ohio has agreed that the Ohio County of Ashtabula, shall be as follows: Ashtabula County in Ohio-All territory from the Portage County Line on the West boundary South of State Route 6 and East of State Route 11 and South of Interstate Route 90 to the Pennsylvania Line on the East boundary shall fall under the jurisdiction of Local Union 207, Youngstown, Ohio. Everything south, starting at the Geauga County line, shall be under the jurisdiction of Local Union No. 207, Youngstown, Ohio.

NORTH BOUNDARY: The east boundary line and the west boundary line continuing north half-way across Lake Erie.

Details :

Prevailing Wage Rate
Skilled Crafts

Name of Union: Labor HevHwy 1A

Type of Rate: Commercial

Change #:	**Craft:**	**Effective Date:**	**Effective Date:**
LCN01-2026ib	Laborer	5/1/2026	5/1/2026

	BHR		Fringe Benefit Payments						Irrevocable Fund		Total PWR	Overtime Rate
			H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)	MISC (*)		
Classification												
Laborer Group 1	$40.43		$9.45	$4.60	$0.45	$0.00	$2.50	$0.00	$0.10	$0.00	$57.53	$77.75
Group 2	$40.60		$9.45	$4.60	$0.45	$0.00	$2.50	$0.00	$0.10	$0.00	$57.70	$78.00
Group 3	$40.93		$9.45	$4.60	$0.45	$0.00	$2.50	$0.00	$0.10	$0.00	$58.03	$78.50
Group 4	$41.38		$9.45	$4.60	$0.45	$0.00	$2.50	$0.00	$0.10	$0.00	$58.48	$79.17
Watch Person	$32.00		$9.45	$4.60	$0.45	$0.00	$2.50	$0.00	$0.10	$0.00	$49.10	$65.10
Apprentice	BHR	Percent										
0-1000 hrs	$32.34	$80.00	$9.45	$4.60	$0.45	$0.00	$2.50	$0.00	$0.10	$0.00	$49.44	$65.61
1001-2000 hrs	$34.37	$85.00	$9.45	$4.60	$0.45	$0.00	$2.50	$0.00	$0.10	$0.00	$51.47	$68.66
2001-3000 hrs	$36.39	$90.00	$9.45	$4.60	$0.45	$0.00	$2.50	$0.00	$0.10	$0.00	$53.49	$71.69
3001-4000 hrs	$38.41	$95.00	$9.45	$4.60	$0.45	$0.00	$2.50	$0.00	$0.10	$0.00	$55.51	$74.72
More than 4000 hrs	$40.43	$100.00	$9.45	$4.60	$0.45	$0.00	$2.50	$0.00	$0.10	$0.00	$57.53	$77.75

(*)Special Calculation Note :

Tunnel Laborer rate with air-pressurized add $1.00 to the above wage rate.

Commercial Driver’s License – Any Laborer required to utilize a valid Commercial Driver’s License (CDL), are in compliance with necessary FMCSA regulations and approved by the Contractor to operate a Commercial Motor Vehicle (CMV), shall be paid one dollar ($1.00) per hour above the base rate for the entirety of their working shift.

Ratio :

1 Journeymen to 1 Apprentice
3 Journeymen to 1 Apprentice thereafter

*Watchman have no apprentices

Jurisdiction (* denotes special jurisdictional note) :

Lake

Special Jurisdictional Note :

Hod Carriers and Common Laborers - Heavy, Highway, Sewer, Waterworks, Utility, Airport, Railroad, Industrial and Building Site, Sewer Plant, Waste Water Treatment Facilities Construction

Details :

Group 1 Laborer (Construction); Plant Laborer or Yardman, Right-of-way Laborer, Landscape Laborer, Highway Lighting Worker, Signalization Worker, (Swimming) Pool Construction Laborer, Utility Man, *Bridge Man, Handyman, Joint Setter, Flag person, Carpenter Helper, Waterproofing Laborer, Slurry Seal, Seal Coating, Surface Treatment or Road Mix Laborer, Riprap Laborer & Grouter, Asphalt Laborer, Dump Man (batch trucks), Guardrail & Fence Installer, Mesh Handler & Placer, Concrete Curing Applicator, Scaffold Erector, Sign Installer, Hazardous Waste (level D), Diver Helper, Zone Person and Traffic Control. *Bridge Man will perform work as per the October 31, 1949, memorandum on concrete forms, by and between the United Brotherhood of Carpenters and Joiners of America and the Laborers' International Union of North America, which states in; "the moving, cleaning, oiling and carrying to the next point of erection, and the stripping of forms which are not to be re-used, and forms on all flat arch work shall be done by members of the Laborers' International Union of North America."

Group 2 Asphalt Raker, Screwman or Paver, Concrete Puddler, Kettle Man (pipeline), All Machine-Driven Tools (Gas, Electric, Air), Mason Tender, Brick Paver, Mortar Mixer, Skid Steer, Sheeting & Shoring Person, Surface Grinder Person, Screed person, Water Blast, Hand Held Wand, Power Buggy or Power Wheelbarrow, Paint Striper, Plastic fusing Machine Operator, Rodding Machine Operator, Pug Mill Operator, Operator of All Vacuum Devices Wet or Dry, Handling of all Pumps 4 inches and under (gas, air or electric), Diver, Form Setter, Bottom Person, Welder Helper (pipeline), Concrete Saw Person, Cutting with Burning Torch, Pipe Layer, Hand Spiker (railroad), Underground Person (working in sewer and waterline, cleaning, repairing and reconditioning). Tunnel Laborer (without air),Caisson, Cofferdam (below 25 feet deep), Air Track and Wagon Drill, Sandblaster Nozzle Person, Hazardous Waste (level B), ***Lead Abatement, Hazardous Waste (level C) ***Includes the erecting of structures for the removal, including the encapsulation and containment of Lead abatement process.

Group 3 Blast and Powder Person, Muckers will be defined as shovel men working directly with the miners, Wrencher (mechanical joints & utility pipeline), Yarner, Top Lander, Hazardous Waste (level A), Concrete Specialist, Curb Setter and Cutter, Grade Checker, Concrete Crew in Tunnels. Utility pipeline Tappers, Waterline, Caulker, Signal Person will receive the rate equal to the rate paid the Laborer classification for which the Laborer is signaling.

Group 4 Miner, Welder, Gunite Nozzle Person A.) The Watchperson shall be responsible to patrol and maintain a safe traffic zone including but not limited to barrels, cones, signs, arrow boards, message boards etc. The responsibility of a watchperson is to see that the equipment, job and office trailer etc. are secure.

Prevailing Wage Rate
Skilled Crafts

Name of Union: Labor Local 310

Type of Rate: Commercial

Change #:	**Craft:**	**Effective Date:**	**Effective Date:**
LCN01-2026ib	Laborer	5/6/2026	5/6/2026

	BHR		Fringe Benefit Payments						Irrevocable Fund		Total PWR	Overtime Rate
			H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)	MISC (*)		
Classification												
Laborer Group 1	$34.53		$9.26	$10.95	$0.10	$0.00	$3.18	$0.15	$0.00	$0.21	$58.38	$75.65
Group 2	$35.01		$9.26	$10.95	$0.10	$0.00	$3.18	$0.15	$0.00	$0.21	$58.86	$76.37
Group 3	$34.78		$9.26	$10.95	$0.10	$0.00	$3.18	$0.15	$0.00	$0.21	$58.63	$76.02
Group 4	$31.43		$9.26	$10.95	$0.10	$0.00	$3.18	$0.15	$0.00	$0.21	$55.28	$71.00
Group 5	$28.93		$9.26	$10.95	$0.10	$0.00	$3.18	$0.15	$0.00	$0.21	$52.78	$67.25
Group 6	$31.08		$9.26	$10.95	$0.10	$0.00	$3.18	$0.15	$0.00	$0.21	$54.93	$70.47
Group 7	$35.03		$9.26	$10.95	$0.10	$0.00	$3.18	$0.15	$0.00	$0.21	$58.88	$76.40
Group 8	$35.18		$9.26	$10.95	$0.10	$0.00	$3.18	$0.15	$0.00	$0.21	$59.03	$76.62
Group 9	$29.38		$9.26	$10.95	$0.10	$0.00	$3.18	$0.15	$0.00	$0.21	$53.23	$67.92
Group 10	$25.38		$9.26	$10.95	$0.10	$0.00	$3.18	$0.15	$0.00	$0.21	$49.23	$61.92
Group 11	$34.68		$9.26	$10.95	$0.10	$0.00	$3.18	$0.15	$0.00	$0.21	$58.53	$75.87
Group 12	$34.92		$9.26	$10.95	$0.10	$0.00	$3.18	$0.15	$0.00	$0.21	$58.77	$76.23
Group 13	$36.03		$9.26	$10.95	$0.10	$0.00	$3.18	$0.15	$0.00	$0.21	$59.88	$77.90
Apprentice	BHR	Percent										
1-1000 hours	$20.72	$60.00	$9.26	$0.00	$0.10	$0.00	$3.18	$0.15	$0.00	$0.21	$33.62	$43.98
1001-2000 hours	$24.17	$70.00	$9.26	$5.48	$0.10	$0.00	$3.18	$0.15	$0.00	$0.21	$42.55	$54.64
2001-3000 hours	$27.62	$80.00	$9.26	$10.95	$0.10	$0.00	$3.18	$0.15	$0.00	$0.21	$51.47	$65.28
3001-4000 hours	$31.08	$90.00	$9.26	$10.95	$0.10	$0.00	$3.18	$0.15	$0.00	$0.21	$54.93	$70.47
4001 plus	$34.53	$100.00	$9.26	$10.95	$0.10	$0.00	$3.18	$0.15	$0.00	$0.21	$58.38	$75.65

(*)Special Calculation Note :

Other is Supplemental Unemployment Benefit (SUB).

Ratio :

3 Journeymen to 1 Apprentice

Jurisdiction (* denotes special jurisdictional note) :

Cuyahoga, Geauga, Lake

Special Jurisdictional Note :

Details :

Group 1 - Building and construction Laborers and Tenders; Asbestos Removal - hazardous materials; unloading of furniture and fixtures
Group 2 - Gunite Operating (Machines of all type)
Group 3 - Laborers on swinging scaffolds; air track and wagon drill
Group 4 - Drywall stocking and handling
Group 5 - General Landscaping
Group 6 - Final Clean-up (must perform clean-up duties for entire work shift, and excludes demolition work)
Group 7 - Blasters, Shooters, Caissons, Well Cylinder, Cofferdams, Mine Workers without air, acid brick tenders
Group 8 - Top man on free standing radial stack; bellman and bottom man in blast furnace and stove
Group 9 - Sewer jet
Group 10 - Heat tender
Group 11 - Firebrick
Group 12 - Mason tender handling carbon block and bottom block for blast furnace stoves, stacks etc
Group 13 - Lansing Burners

Prevailing Wage Rate
Skilled Crafts

Name of Union: Operating Engineers - Building Local 18 - Zone I (A)

Type of Rate: Commercial

Change #:	**Craft:**	**Effective Date:**	**Effective Date:**
LCN01-2026ib	Operating Engineer	5/1/2026	5/1/2026

	BHR		Fringe Benefit Payments						Irrevocable Fund		Total PWR	Overtime Rate
			H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)	MISC (*)		
Classification												
Operator Group A	$51.61		$10.01	$6.25	$1.00	$0.00	$0.00	$0.09	$0.00	$0.10	$69.06	$94.86
Operator Group B	$51.46		$10.01	$6.25	$1.00	$0.00	$0.00	$0.09	$0.00	$0.10	$68.91	$94.64
Operator Group C	$50.01		$10.01	$6.25	$1.00	$0.00	$0.00	$0.09	$0.00	$0.10	$67.46	$92.47
Operator Group D	$49.23		$10.01	$6.25	$1.00	$0.00	$0.00	$0.09	$0.00	$0.10	$66.68	$91.30
Operator Group E	$48.91		$10.01	$6.25	$1.00	$0.00	$0.00	$0.09	$0.00	$0.10	$66.36	$90.81
Operator Group F	$41.83		$10.01	$6.25	$1.00	$0.00	$0.00	$0.09	$0.00	$0.10	$59.28	$80.19
Master Mechanic	$52.61		$10.01	$6.25	$1.00	$0.00	$0.00	$0.09	$0.00	$0.10	$70.06	$96.36
Lift Director	$52.61		$10.01	$6.25	$1.00	$0.00	$0.00	$0.09	$0.00	$0.10	$70.06	$96.36
Crane 200'-299'	$52.61		$10.01	$6.25	$1.00	$0.00	$0.00	$0.09	$0.00	$0.10	$70.06	$96.36
Crane 300' and over	$53.11		$10.01	$6.25	$1.00	$0.00	$0.00	$0.09	$0.00	$0.10	$70.56	$97.11
Mobile Concrete Pumps 200'-299'r	$52.61		$10.01	$6.25	$1.00	$0.00	$0.00	$0.09	$0.00	$0.10	$70.06	$96.36
Mobile Concrete Pumps 300' and over	$53.11		$10.01	$6.25	$1.00	$0.00	$0.00	$0.09	$0.00	$0.10	$70.56	$97.11
Apprentice	BHR	Percent										
1st Year	$30.88	$59.83	$10.01	$6.25	$1.00	$0.00	$0.00	$0.09	$0.00	$0.10	$48.33	$63.77
2nd Year	$36.02	$69.79	$10.01	$6.25	$1.00	$0.00	$0.00	$0.09	$0.00	$0.10	$53.47	$71.48
3rd Year	$41.17	$79.77	$10.01	$6.25	$1.00	$0.00	$0.00	$0.09	$0.00	$0.10	$58.62	$79.20
4th Year	$46.31	$89.73	$10.01	$6.25	$1.00	$0.00	$0.00	$0.09	$0.00	$0.10	$63.76	$86.92

(*)Special Calculation Note :

Other & Misc is Education & Safety and National Training Fund.

Note: There will be a 5% increase for the apprentices on top of the percentages listed above provided they are operating mobile equipment.

Operating Engineers employed on any piece of equipment requiring a Certified Crane Operator (CCO) certification or employed on cranes involved in pile driving operations shall be paid a premium of one dollar ($1.00) per hour in addition to the crane rate or any escalated rate that may be in effect.

Ratio :

For every (3) Operating Engineer Journeymen employed by the company ,there may be employed (1) Registered Apprentice. An apprentice, while employed as part of a crew per Article VIII, paragraph77, will not be subject to the apprenticeship ratios in this collective bargaining agreement.

Jurisdiction (* denotes special jurisdictional note) :

Ashtabula, Cuyahoga, Erie, Geauga, Huron, Lake, Lorain, Medina

Special Jurisdictional Note :

Details :

Group A - A-Frames; " Boiler Operators, Compressor Operators, Hydraulic Pumps & Power Pacs when mounted on a crane or regardless of where said equipment is mounted (piggy-back operatotion)"; Boom Trucks (all types); Cableways; Cherry Pickers; Combination - Concrete Mixers & Towers; Concrete Pumps; Cranes (all types); Cranes-compact: Track or rubber over 4000lbs. capacity; Cranes- self erecting: stationary, track or truck (all configurations); Derricks (all types); Draglines; Dredges (dipper, clam or suction) 3-man crew; Elevating Graders or Euclid Loaders; Floating Equipment; Gradalls; Helicopter Operators, hoisting building materials; Helicopter Winch Operators, hoisting building materials; Hoes (All types); Hoists (two or more drums); Lift Slab or Panel Jack Operators; Locomotives (all types); Maintenance Engineers (Maintenance Operators and/or Welder); Mixers, paving (multiple drum); Mobile Concrete Pumps with booms; Panelboards, (all types on site); Pile Drivers; Power Shovels; Robotics Equipment Operator/Mechanic; Rotary Drills (all), used on caissons work, wells (all types), Geothermal work and sub-structure work; Rough Terrain Forklifts with Winch/Hoist (when used as a crane); Side Booms; Slip Form Pavers; Straddle Carriers (Building Construction on site); Trench Machines (over 24” wide); Tug Boats; Tunnel Boring Machine (TBM).

Group B - Asphalt Pavers; Bulldozers; CMI type Equipment; End Loaders; Horizontal Directional Drill Locator; Horizontal Directional Drill Operator; Instrument Man; Kolman-type Loaders (Dirt Loading); Lead Greasemen; Mucking Machines; Power Graders; Power Scoops; Power Scrapers; Push Cats; Rotomills; Vermeer Type Concrete Saw.

Group C - Air Compressors, Pressurizing Shafts or Tunnels; Articulating/Straight bed end dumps if assigned by the employer (minus $4.00 per hour from Group C); All Asphalt Rollers; Fork Lifts; Hoists (with one drum); House Elevators (except those automatic call button controlled); Hydro Excavator (all types C rate) (F rate if a second person is needed) Helper rate; Laser Screeds and like equipment; Man Lifts; Modular Moving and Placement machine (C Rate) (F Rate if second person is needed); Mud Jacks; Portable Hydraulic Gantry (lift system C rate) (F Rate if a second person is needed); Power Boilers (over 15 lbs. pressure); Pump Operators (installing or operating Well Points or other types of Dewatering Systems); Pressure Grouting; Trenchers (24" and under); Utility Operators.

Group D – Brokks with a manufacture’s weight of 3,500 lbs. and above; Compressors, on building construction; Conveyors, used for handling building materials; Generators; Gunite Machines; Mixers, more than one bag capacity; Mixers, one bag capacity (side loader); Pavement Breakers (hydraulic or cable); Post Drivers; Post Hole Diggers; Road Widening Trenchers; Rollers; Welder Operators.

Group E - Backfillers and Tampers; Batch Plants; Bar and Joint Installing Machines; Bull Floats; Burlap and Curing Machines; Cleaning Machine Operator (decontamination included); Clefplanes; Concrete Spreading Machines; Crushers; Deckhands; Drum Fireman (asphalt); Farm-type, Tractor, pulling attachments; Finishing Machines; Forklifts (masonry work only); Form Trenchers; High Pressure Pumps (over 1/2" discharge); Hydro Seeders; Pumps (4" and over discharge), provided it is not part of a de-watering system discharged into a common header; Self-Propelled Power Spreaders; Self-Propelled Sub Graders; Submersible Pump (4" and over discharge), provided it is not part of a dewatering system discharged into a common header; Tire Repairman; Tractors, pulling sheepsfoot rollers or graders; Vibratory Compactors with integral power.

Group F - Apprentice/Helpers, Oiler, Signalmen; Barrier Moving Machines (additional duty, paid same rate); Bobcat-type and/or Skid Steer Loader; Bobcat-type and/or Skid Steer Loader with any and all attachments; Brokks with a manufacture’s weight less than 3,500 lbs.; Cranes – compact, track or rubber under 4000 lbs. capacity; Geodimeter; Grade Checker; Grinders (all); Inboard/Outboard Motor Boat Launches; Light Plant Operators; Planers (all types); Power Boilers (less than 15 lbs. pressure); Power Driven Heaters (oil fired); Power Scrubbers; Power Sweepers; Pumps (under 4 inch discharge); Rod Man; Rotomills; Saw (concrete Vermeer-type); Submersible Pumps (under 4 inch discharge); Vac Alls; Cutting, burning and fabricating on equipment and their attachments.

Master Mechanic - Master Mechanic

Crane 200’-299’ - Boom & Jib 200’ feet and over Crane 300’ and Over - Boom & Jib 300' and over

Prevailing Wage Rate
Skilled Crafts

Name of Union: Operating Engineers - HevHwy Zone I

Type of Rate: Commercial

Change #: LCN01-2026ib

Craft: Operating Engineer

Effective Date: 5/1/2026

Effective Date: 5/1/2026

	BHR		Fringe Benefit Payments						Irrevocable Fund		Total PWR	Overtime Rate
			H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)	MISC (*)		
Classification												
Operator Class A	$48.78		$10.01	$6.25	$1.00	$0.00	$0.00	$0.09	$0.00	$0.10	$66.23	$90.62
Operator Class B	$48.68		$10.01	$6.25	$1.00	$0.00	$0.00	$0.09	$0.00	$0.10	$66.13	$90.47
Operator Class C	$47.64		$10.01	$6.25	$1.00	$0.00	$0.00	$0.09	$0.00	$0.10	$65.09	$88.91
Operator Class D	$46.42		$10.01	$6.25	$1.00	$0.00	$0.00	$0.09	$0.00	$0.10	$63.87	$87.08
Operator Class E	$41.13		$10.01	$6.25	$1.00	$0.00	$0.00	$0.09	$0.00	$0.10	$58.58	$79.15
Master Mechanic	$49.78		$10.01	$6.25	$1.00	$0.00	$0.00	$0.09	$0.00	$0.10	$67.23	$92.12
Lift Director	$49.78		$10.01	$6.25	$1.00	$0.00	$0.00	$0.09	$0.00	$0.10	$67.23	$92.12
Crane and Mobile Concrete Pump 150' - 179'	$49.28		$10.01	$6.25	$1.00	$0.00	$0.00	$0.09	$0.00	$0.10	$66.73	$91.37
Crane and Mobile Concrete Pump 180' - 249'	$49.78		$10.01	$6.25	$1.00	$0.00	$0.00	$0.09	$0.00	$0.10	$67.23	$92.12
Crane and Mobile Concrete Pump 250' and Over	$50.03		$10.01	$6.25	$1.00	$0.00	$0.00	$0.09	$0.00	$0.10	$67.48	$92.50
Apprentice	BHR	Percent										
1st Year	$24.39	$50.00	$10.01	$6.25	$1.00	$0.00	$0.00	$0.09	$0.00	$0.10	$41.84	$54.03
2nd Year	$29.27	$60.00	$10.01	$6.25	$1.00	$0.00	$0.00	$0.09	$0.00	$0.10	$46.72	$61.36
3rd Year	$34.15	$70.00	$10.01	$6.25	$1.00	$0.00	$0.00	$0.09	$0.00	$0.10	$51.60	$68.67
4th Year	$39.02	$80.00	$10.01	$6.25	$1.00	$0.00	$0.00	$0.09	$0.00	$0.10	$56.47	$75.98
Field Mech Trainee	$	$	$	$	$	$	$	$	$	$	$	$
1st Year	$29.27	$60.00	$10.01	$6.25	$1.00	$0.00	$0.00	$0.09	$0.00	$0.00	$46.62	$61.25
2nd Year	$34.15	$70.00	$10.01	$6.25	$1.00	$0.00	$0.00	$0.09	$0.00	$0.00	$51.50	$68.57
3rd Year	$39.02	$80.00	$10.01	$6.25	$1.00	$0.00	$0.00	$0.09	$0.00	$0.00	$56.37	$75.88
4th Year	$43.90	$90.00	$10.01	$6.25	$1.00	$0.00	$0.00	$0.09	$0.00	$0.00	$61.25	$83.20

(*)Special Calculation Note :

Other: Education & Safety Fund
Misc: National Training

**Apprentices will receive a 10% increase on top of the percentages listed above provided they are operating mobile equipment.

Ratio :

For every (3) Operating Engineer Journeymen employed by the company, there may be employed (1) Registered Apprentice or Trainee Engineer through the referral when they are available. An Apprentice, while employed as part of a crew per Article VIII, paragraph 68 will not be subject to the apprenticeship ratios in this collective bargaining agreement

Jurisdiction (* denotes special jurisdictional note) :

Ashtabula, Cuyahoga, Erie, Geauga, Lake, Lorain, Medina, Portage, Summit

Special Jurisdictional Note :

Details :

Class A - Air Compressors on Steel Erection; Asphalt Plant Engineers (Cleveland District Only); Barrier Moving Machine; Boiler Operators, Compressor Operators, or Generators, when mounted on a rig; Boom Trucks (all types); Cableways; Cherry Pickers; Combination- Concrete Mixers & Towers; Concrete Plants (over 4 yd capacity); Concrete Pumps; Cranes (all types); Compact Cranes track or rubber over 4,000 pounds capacity; Cranes self-erecting stationary, track or truck; Derricks (all types); Draglines; Dredges dipper, clam or suction; Elevating Graders or Euclid Loaders; Floating Equipment (all types); Gradalls; Helicopter Crew (Operator- hoist or winch); Hoes (all types); Hoisting Engines; Hoisting Engines, on shaft or tunnel work; Hydraulic Gantry (lifting system); Industrial-type Tractors; Jet Engine Dryer (D8 or D9) diesel Tractors; Locomotives (standard gauge); Maintenance Operators/Technicians (class A); Mixers, paving (single or double drum); Mucking Machines; Multiple Scrapers; Piledriving Machines (all types); Power Shovels, Prentice Loader; Quad 9 (double pusher); Rail Tamper (with automatic lifting and aligning device); Refrigerating Machines (freezer operation); Rotary Drills, on caisson work; Rough Terrain Fork Lift with winch/hoist; Side Booms; Slip Form Pavers; Survey Crew Party Chiefs; Tower Derricks; Tree Shredders; Trench Machines (over 24” wide); Truck Mounted Concrete Pumps; Tug Boats; Tunnel Machines and /or Mining Machines; Wheel Excavators.

Class B - Asphalt Pavers; Automatic Subgrade Machines, self-propelled (CMI-type); Bobcat-type and /or Skid Steer Loader with hoe attachment greater than 7000 lbs.; Boring Machine Operators (more than 48 inches); Bulldozers; Concrete Saws, Vermeer type; Endloaders; Horizontal Directional Drill (50,000 ft. lbs. thrust and over); Hydro Milling Machine; Kolman-type Loaders (production type-dirt); Lead Greasemen; Lighting and Traffic Signal Installation Equipment includes all groups or classifications; Maintenance Operators/Technicians, Class B - Material Transfer Equipment (shuttle buggy) Asphalt; Pettibone-Rail Equipment; Power Graders; Power Scrapers; Push Cats; Rotomills (all), Grinders and Planners of all types, Groovers (excluding walk-behinds); Trench Machines (24 inch wide and under).

Class C - A-Frames; Air Compressors, on tunnel work (low Pressure); Articulating/straight bed end dumps if assigned (minus $4.00 per hour); Asphalt Plant Engineers (Portage and Summit Counties only); Bobcat-type and/or skid steer loader with or without attachments; Drones; Highway Drills (all types); HydroVac/Excavator (when a second person is needed, the rate of pay will be “Class E”); Locomotives (narrow gauge); Material Hoist/Elevators; Mixers, concrete (more than one bag capacity); Mixers, one bag capacity (side loader); Power Boilers (over 15 lbs. pressure); Pump Operators (installing or operating well Points); Pumps (4 inch and over discharge); Railroad Tie Inserter/Remover; Rollers, Asphalt; Rotovator (lime-soil Stabilizer); Switch & Tie Tampers (without lifting and aligning device); Utilities Operators, (small equipment); Welding Machines and Generators.

Class D – Backfillers and Tampers; Ballast Re-locator; Bar and Joint Installing Machines; Batch Plant Operators; Boring Machine Operators (48 inch or less); Bull Floats; Burlap and Curing Machines; Concrete Plants (capacity 4 yds. and under); Concrete Saws (multiple); Conveyors (highway); Crushers; Deckhands; Farm type tractors, with attachments (highway); Finishing Machines; Firemen, Floating Equipment (all types); Fork Lifts (highway), except masonry; Form Trenchers; Hydro Hammers; Hydro Seeders; Pavement Breakers (hydraulic or cable); Plant Mixers; Post Drivers; Post Hole Diggers; Power Brush Burners; Power Form Handling Equipment; Road Widening Trenchers; Rollers (brick, grade, macadam); Self-Propelled Power Spreaders; Self-Propelled Sub-Graders; Steam Firemen; Survey Instrument men; Tractors, pulling sheepsfoot rollers or graders; Vibratory Compactors, with integral power.

Class E - Compressors (portable, Sewer, Heavy and Highway); Cranes-Compact, track or rubber under 4,000 pound capacity; Drum Firemen (asphalt plant); Fueling and greasing (Primary Operator with Specialized CDL Endorsement Add $3.00/hr); Generators; Inboard-Outboard Motor Boat Launches; Masonry Fork Lifts; Oil Heaters (asphalt plant); Oilers/Helpers; Power Driven Heaters (oil fired); Power Scrubbers; Power Sweepers; Pumps (under 4 inch discharge); Signalperson; Survey Rodmen or Chairmen; Tire Repairmen; VAC/ALLS.

Master Mechanic - Master Mechanic

Cranes and Mobile Concrete Pumps 150' -179' - Boom & Jib 150 - 179 feet Cranes and Mobile Concrete Pumps 180' - 249' - Boom & Jib 180 - 249 feet Cranes and Mobile Concrete Pumps 250' and over - Boom & Jib 250 feet or over

Prevailing Wage Rate
Skilled Crafts

Name of Union: Painter Local 505 Drywall

Type of Rate: Commercial

Change #:	**Craft:**	**Effective Date:**	**Effective Date:**
LCN01-2026ib	Painter	5/1/2026	5/1/2026

	BHR		Fringe Benefit Payments						Irrevocable Fund		Total PWR	Overtime Rate
			H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)	MISC (*)		
Classification												
Painter Drywall Finisher	$36.40		$9.92	$7.30	$0.45	$0.00	$4.74	$0.00	$0.00	$0.00	$58.81	$77.01
Apprentice	BHR	Percent										
1st Year	$25.48	$70.00	$9.92	$2.61	$0.45	$0.00	$0.00	$0.00	$0.00	$0.00	$38.46	$51.20
2nd Year	$29.12	$80.00	$9.92	$3.28	$0.45	$0.00	$3.79	$0.00	$0.00	$0.00	$46.56	$61.12
3rd Year	$32.76	$90.00	$9.92	$4.08	$0.45	$0.00	$4.27	$0.00	$0.00	$0.00	$51.48	$67.86

(*)Special Calculation Note :

Ratio :

2 Journeyman to 1 Apprentice
3 Journeyman to 1 Apprentice after 9 total tapers

Jurisdiction (* denotes special jurisdictional note) :

Ashtabula, Cuyahoga, Geauga, Lake, Lorain, Portage*, Summit*

Special Jurisdictional Note :

Portage & Summit North of the East-West Turnpike.

Details :

Prevailing Wage Rate
Skilled Crafts

Name of Union: Painter Local 639 Sign and Display

Type of Rate: Commercial

Change #:	**Craft:**	**Effective Date:**	**Effective Date:**
LCN01-2025ib	Painter	6/18/2025	6/18/2025

	BHR		Fringe Benefit Payments						Irrevocable Fund		Total PWR	Overtime Rate
			H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)	MISC (*)		
Classification												
Top Mechanic Class A	$27.53		$4.50	$0.00	$0.00	$0.00	$0.00	$1.45	$0.00	$0.00	$33.48	$47.25
Top Mechanic Class B	$27.53		$4.50	$0.75	$0.00	$0.53	$0.00	$1.45	$0.00	$0.00	$34.76	$48.53
Top Helper Class A	$22.33		$4.50	$0.00	$0.00	$0.00	$0.00	$1.20	$0.00	$0.00	$28.03	$39.20
Top Helper Class B	$22.33		$4.50	$0.75	$0.00	$0.43	$0.00	$1.20	$0.00	$0.00	$29.21	$40.38
Helper Class A	$17.19		$4.50	$0.00	$0.00	$0.00	$0.00	$0.90	$0.00	$0.00	$22.59	$31.19
Helper Class B	$17.19		$4.50	$0.75	$0.00	$0.30	$0.00	$0.90	$0.00	$0.00	$23.64	$32.24
New Hire (90 Days)	$15.75		$4.50	$0.00	$0.00	$0.00	$0.00	$0.55	$0.00	$0.00	$20.80	$28.68
Apprentice	BHR	Percent										

(*)Special Calculation Note :

Other: Sick, Personal & Holiday Pay Swing Stage Rate: Employees shall receive a differential of $1.50 per hour for all hours worked on scaffolds four sections or higher, including any boom lifts and swing stage scaffolds. In addition, the rigging and derigging of hanging/suspended swing stage systems and rappelling/bolson chair work of a single employee will qualify for $1.50 differential, will be paid to a single lead Top Mechanic or single lead Top Helper on any given swing stage job, even when it includes multiple running rigs on a single jobsite.

Ratio :

Jurisdiction (* denotes special jurisdictional note) :

Adams, Allen, Ashland, Ashtabula, Athens, Auglaize, Belmont, Brown, Butler, Carroll, Champaign, Clark, Clermont, Clinton, Columbiana, Coshocton, Crawford, Cuyahoga, Darke, Defiance, Delaware, Erie, Fairfield, Fayette, Franklin, Fulton, Gallia, Geauga, Greene, Guernsey, Hamilton, Hancock, Hardin, Harrison, Henry, Highland, Hocking, Holmes, Huron, Jackson, Jefferson, Knox, Lake, Lawrence, Licking, Logan, Lorain, Lucas, Madison, Mahoning, Marion, Medina, Meigs, Mercer, Miami, Monroe, Montgomery, Morgan, Morrow, Muskingum, Noble, Ottawa, Paulding, Perry, Pickaway, Pike, Portage, Preble, Putnam, Richland, Ross, Sandusky, Scioto, Seneca, Shelby, Stark, Summit, Trumbull, Tuscarawas, Union, Van Wert, Vinton, Warren, Washington, Wayne, Williams, Wood, Wyandot

Special Jurisdictional Note :

Details :

The work performed by employees covered by this rate shall include cleaning and refinishing of architectural metals using chemicals, solvents, coatings and hand-applied lacquer thinner, removing scratches from mirror finished metals, burnishing of bronze, statuary finishes on exterior and interior surfaces during the course of the restoration and maintenance of architectural metals, and other specialty metal finishing work, and the use of all tools required to perform such work, including but not limited to polishes, spray equipment and scaffolding. Class A: Less Than 1 Year of Service Class B: More Than 1 Year of Service Top Mechanic: Top Mechanic shall be responsible for ensuring the highest quality of workmanship by Helpers, and be highly competent and knowledgeable in the following areas: coatings, both solvent and waterborne, spraying ability, stainless steel, aluminum and bronze finishing, scaffolding and swing stage work. The Top Mechanic shall also be responsible for providing necessary training of employees in lower classifications and for directing all employees in his/her crew to perform their responsibilities in a productive and efficient manner. Top Helper: For existing Top Helpers at the time of this Agreement shall, in addition to performing the responsibilities of a Helper, be responsible and accountable for the setup, breakdown, safety and quality of the Company's product. Helper: A Helper shall be responsible for performing tasks in refinishing, compliance with safety procedures, setting up and breaking down job sites, setting up and breaking down scaffolding and swing stages, preparing surfaces for refinishing, including but not limited to masking and stripping, cleaning, oxidizing, polishing and scratch removal on various finishes.

Prevailing Wage Rate
Skilled Crafts

Name of Union: Painter Local 639 Zone 1 Sign

Type of Rate: Commercial

Change #: LCN01-2025ib

Craft: Painter

Effective Date: 7/30/2025

Effective Date: 7/30/2025

	BHR	Fringe Benefit Payments						Irrevocable Fund		Total PWR	Overtime Rate
		H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)	MISC (*)		
Classification											
Class A: Painter Sign Erector Service/Pattern/Metal Fab/Neon	$26.28	$8.91	$5.57	$0.25	$0.79	$0.00	$1.10	$0.00	$0.00	$42.90	$56.04
Class B: Painter Sign Erector/Service/Pattern/Metal Fab/Neon	$26.28	$8.91	$5.57	$0.25	$1.58	$0.00	$1.10	$0.00	$0.00	$43.69	$56.83
Class C: Painter Sign Erector/Service/Pattern/Metal Fab/Neon	$26.28	$8.91	$5.57	$0.25	$2.37	$0.00	$1.10	$0.00	$0.00	$44.48	$57.62
Class D: Painter Sign Erector/Service/Pattern/Metal Fab/Neon	$26.28	$8.91	$5.57	$0.25	$3.15	$0.00	$1.10	$0.00	$0.00	$45.26	$58.40
Class A: Computer Operator, Router, Spray Painter/Wood	$24.60	$8.91	$5.57	$0.25	$0.76	$0.00	$1.06	$0.00	$0.00	$41.15	$53.45
Class B: Computer Operator, Router, Spray Painter/Wood	$24.60	$8.91	$5.57	$0.25	$1.51	$0.00	$1.06	$0.00	$0.00	$41.90	$54.20
Class C: Computer Operator, Router, Spray Painter/Wood	$24.60	$8.91	$5.57	$0.25	$2.27	$0.00	$1.06	$0.00	$0.00	$42.66	$54.96
Class D: Computer Operator, Router, Spray Painter/Wood	$24.60	$8.91	$5.57	$0.25	$3.03	$0.00	$1.06	$0.00	$0.00	$43.42	$55.72

Class A: Final Assembly, Helper	$19.62		$8.91	$5.57	$0.25	$0.66	$0.00	$0.92	$0.00	$0.00	$35.93	$45.74
Class B: Final Assembly, Helper	$19.62		$8.91	$5.57	$0.25	$1.32	$0.00	$0.92	$0.00	$0.00	$36.59	$46.40
Class C: Final Assembly, Helper	$19.62		$8.91	$5.57	$0.25	$1.98	$0.00	$0.92	$0.00	$0.00	$37.25	$47.06
Class D: Final Assembly, Helper	$19.62		$8.91	$5.57	$0.25	$2.64	$0.00	$0.92	$0.00	$0.00	$37.91	$47.72
Apprentice	BHR	Percent										
1-2000 hrs	$13.14	$50.00	$8.91	$5.57	$0.25	$0.00	$0.00	$0.75	$0.00	$0.00	$28.62	$35.19
2001-3000 hrs	$14.45	$55.00	$8.91	$5.57	$0.25	$0.56	$0.00	$0.79	$0.00	$0.00	$30.53	$37.75
3001-4000 hrs	$15.77	$60.00	$8.91	$5.57	$0.25	$0.59	$0.00	$0.82	$0.00	$0.00	$31.91	$39.80
4001-5000 hrs	$17.08	$65.00	$8.91	$5.57	$0.25	$1.22	$0.00	$0.86	$0.00	$0.00	$33.89	$42.43
5001-6000 hrs	$18.40	$70.00	$8.91	$5.57	$0.25	$1.27	$0.00	$0.89	$0.00	$0.00	$35.29	$44.49
6001-7000 hrs	$22.34	$85.00	$8.91	$5.57	$0.25	$1.43	$0.00	$1.00	$0.00	$0.00	$39.50	$50.67
7001-8000 hrs	$23.65	$90.00	$8.91	$5.57	$0.25	$1.48	$0.00	$1.03	$0.00	$0.00	$40.89	$52.71

(*)Special Calculation Note :

Other: Holiday Pay
Apprentice Pay Rate should be based on proper Classification.
Any employee working over 100 ft. above the ground shall receive $1.00 per hour additional pay.

Ratio :

Jurisdiction (* denotes special jurisdictional note) :

Ashland, Ashtabula, Cuyahoga, Geauga, Lake, Medina, Portage, Richland, Summit

Special Jurisdictional Note :

Details :

Class A Worker: More than 1 year but less that 2 years
Class B Worker: More than 2 years but less than 10 years
Class C Worker: More than 10 years but less that 20 years
Class D Worker: More than 20 years

Prevailing Wage Rate
Skilled Crafts

Name of Union: Painter Local 707

Type of Rate: Commercial

Change #:	**Craft:**	**Effective Date:**	**Effective Date:**
LCN01-2026ib	Painter	5/1/2026	5/1/2026

	BHR		Fringe Benefit Payments						Irrevocable Fund		Total PWR	Overtime Rate
			H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)	MISC (*)		
Classification												
Painter Brush Roll	$37.45		$9.92	$6.08	$0.45	$0.00	$4.75	$0.00	$0.00	$0.00	$58.65	$77.38
Paperhanger	$37.45		$9.92	$6.08	$0.45	$0.00	$4.75	$0.00	$0.00	$0.00	$58.65	$77.38
REPAINT Brush Roll & Paperhanger	$35.95		$9.92	$6.08	$0.45	$0.00	$4.75	$0.00	$0.00	$0.00	$57.15	$75.13
Apprentice	BHR	Percent										
1st Year	$24.34	$65.00	$9.92	$1.64	$0.45	$0.00	$0.00	$0.00	$0.00	$0.00	$36.35	$48.52
2nd Year	$28.09	$75.00	$9.92	$2.25	$0.45	$0.00	$3.56	$0.00	$0.00	$0.00	$44.27	$58.31
3rd Year	$31.83	$85.00	$9.92	$2.70	$0.45	$0.00	$4.04	$0.00	$0.00	$0.00	$48.94	$64.85
4th Year	$35.58	$95.00	$9.92	$3.75	$0.45	$0.00	$4.51	$0.00	$0.00	$0.00	$54.21	$72.00

(*)Special Calculation Note :

Apprentice pay based on percentage of above appropriate classification.

The following Premiums shall be added to proper classification in full including apprentice rates:

Spray Painting: $.70 per hour
Sandblasting and buffing: $.40 per hour
Height pay (Over 100ft): $.50 per hour
Fiberglass Insulator & Catalytic material applicator: $.70 per hour
Application of Catalytic materials under class 3 hazardous per MSDS- add $.65 per hour
Application of Catalytic materials under class 4 hazardous per MSDS- add $1.00 per hour

Ratio :

1 Apprentice to 1 Journeyman

Jurisdiction (* denotes special jurisdictional note) :

Ashtabula, Cuyahoga, Geauga, Lake, Lorain, Portage*, Summit*

Special Jurisdictional Note :

Portage & Summit North of the East-West Turnpike.

Details :

Repaint: 20% or less of new surfaces. A general contractor holding a construction contract does not constitute the rate of pay. Bridge work, tanks, towers and all work covered by NMA, PLA, GPA is excluded from any repaint rate.

Prevailing Wage Rate
Skilled Crafts

Name of Union: Painter Local 707 HvyHwy

Type of Rate: Commercial

Change #:	**Craft:**	**Effective Date:**	**Effective Date:**
LCN01-2026ib	Painter	5/1/2026	5/1/2026

	BHR	Fringe Benefit Payments						Irrevocable Fund		Total PWR	Overtime Rate
		H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)	MISC (*)		
Classification											
Class 1: Bridge Blaster	$43.71	$9.92	$6.08	$0.45	$0.00	$4.75	$0.00	$0.00	$0.00	$64.91	$86.77
Class 2: Bridge Painter, Rigger, Containment Builder, Spot Blaster	$40.71	$9.92	$6.08	$0.45	$0.00	$4.75	$0.00	$0.00	$0.00	$61.91	$82.27
Class 3: Equipment Operator/ Field Mechanic, Grit Reclamation, Paint Mixer, Traffic Control Boat Person, Driver (0-5 Years Exp.)	$33.71	$9.92	$6.08	$0.45	$0.00	$4.75	$0.00	$0.00	$0.00	$54.91	$71.77
Class 3: Equipment Operator/ Field Mechanic, Grit Reclamation, Paint Mixer, Traffic Control Boat Person, Driver (5 Plus Years Exp.)	$36.71	$9.92	$6.08	$0.45	$0.00	$4.75	$0.00	$0.00	$0.00	$57.91	$76.27
Class 4: Concrete Sealing, Concrete Blasting/Power Washing/ Etc	$32.71	$9.92	$6.08	$0.45	$0.00	$4.75	$0.00	$0.00	$0.00	$53.91	$70.27

Class 5: Quality Control/Quality Assurance, Traffic Safety, Competent Person	$36.71		$9.92	$6.08	$0.45	$0.00	$4.75	$0.00	$0.00	$0.00	$57.91	$76.27
Apprentice	BHR	Percent										
1st Year	$28.41	$65.00	$9.92	$1.64	$0.45	$0.00	$0.00	$0.00	$0.00	$0.00	$40.42	$54.63
2nd Year	$32.78	$75.00	$9.92	$2.25	$0.45	$0.00	$3.56	$0.00	$0.00	$0.00	$48.96	$65.35
3rd Year	$37.15	$85.00	$9.92	$2.70	$0.45	$0.00	$4.04	$0.00	$0.00	$0.00	$54.26	$72.83

(*)Special Calculation Note :

Apprentice pay based on percentage of above appropriate classification.

Application of Catalytic materials under class 3 hazardous per MSDS- add .65 per hour to the above Job Classification basic hourly rate.
Application of Catalytic materials under class 4 hazardous per MSDS- add 1.00 per hour to the above Job Classification basic hourly rate.

Ratio :

1 Apprentice to 1 Journeyman

Jurisdiction (* denotes special jurisdictional note) :

Ashtabula, Cuyahoga, Geauga, Lake, Lorain, Portage*, Summit*

Special Jurisdictional Note :

Portage & Summit North of the East-West Turnpike.

Details :

Painter Bridge Class 2 is Defined as; Bridge Painter, Rigger, Containment Builder

Concrete Sealing: on highway work, scaling of concrete surfaces, the treating and sealing of bridge decks, the painting and staining of concrete, including the abutments, barricades, noise barriers, lane dividers, etc.

Prevailing Wage Rate
Skilled Crafts

Name of Union: Pipefitter Local 120

Type of Rate: Commercial

Change #:	**Craft:**	**Effective Date:**	**Effective Date:**
OCR01-2026ib	Pipefitter	7/1/2026	7/1/2026

	BHR		Fringe Benefit Payments						Irrevocable Fund		Total PWR	Overtime Rate
			H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)	MISC (*)		
Classification												
Pipefitter	$51.02		$13.30	$12.20	$1.32	$0.00	$3.50	$0.20	$0.00	$0.00	$81.54	$107.05
Apprentice	BHR	Percent										
1st year	$24.70	$48.41	$5.78	$0.00	$1.32	$0.00	$0.00	$0.00	$0.00	$0.00	$31.80	$44.15
2nd year	$25.42	$49.82	$12.43	$7.60	$1.32	$0.00	$0.88	$0.20	$0.00	$0.00	$47.85	$60.56
3rd year	$29.43	$57.68	$12.43	$7.60	$1.32	$0.00	$0.88	$0.20	$0.00	$0.00	$51.86	$66.57
4th year	$35.04	$68.68	$12.43	$7.60	$1.32	$0.00	$0.88	$0.20	$0.00	$0.00	$57.47	$74.99
5th year	$39.06	$76.56	$12.43	$7.60	$1.32	$0.00	$0.88	$0.20	$0.00	$0.00	$61.49	$81.02

(*)Special Calculation Note :

OTHER: SUPPLEMENTAL UNEMPLOYMENT BENEFITS

Ratio :

1 Journeyman to 1 Apprentice
2-4 Journeymen to 2 Apprentices
5-7 Journeymen to 3 Apprentices
3 to 1 on jobs with 12 or more journeymen

Jurisdiction (* denotes special jurisdictional note) :

Ashtabula, Cuyahoga, Geauga, Lake, Medina*, Summit*

Special Jurisdictional Note :

Summit County - North of State Route 303 including work within the corporate limits of the City of Hudson, that portion of Medina County North of State Route 18 and Smith Road and including work within the corporate limits of the City of Medina.

Details :

Under pipefitter duties shall include - steam and hot water heating boilers and related controls such as automatic feedwater and low water cut-offs, safety relief valves and gas trains; steam regulators, traps, steam valves, steam heaters, steam and hot water heating coils; feedwater lines to boilers, condensate pumps, condensate tanks and related piping to boilers, expansion tanks and controls on hot water heating systems; refrigeration and air conditioning systems that are separate from one another and are connected through piping; install, calibrate and maintain pneumatic temperature controls and piping for heating and cooling devices; piping, pumps and controls on the fluent water system in water treatment plants; hose cabinets and automatic fire sprinkler systems; underground water supply piping and devices; all fire stopping of piping systems; to operate a pipe cutting machine, to thread pipe by machine or hand dies; to do oxyacetylene and electric welding on iron and steel pipes when required; to perform other tasks when assigned.

Prevailing Wage Rate
Skilled Crafts

Name of Union: Pipefitter Local 120 Mechanical Equipment

Type of Rate: Commercial

Change #:	**Craft:**	**Effective Date:**	**Effective Date:**
LCN01-2026ib	Pipefitter	5/4/2026	5/4/2026

	BHR		Fringe Benefit Payments						Irrevocable Fund		Total PWR	Overtime Rate
			H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)	MISC (*)		
Classification												
Pipefitter Mechanical Equipment Service A-2	$38.99		$13.30	$12.20	$1.32	$0.00	$3.50	$0.20	$0.00	$0.00	$69.51	$89.00
Pipefitter Mechanical Equipment Service A-1	$34.98		$13.30	$12.20	$1.32	$0.00	$3.50	$0.20	$0.00	$0.00	$65.50	$82.99
Apprentice	BHR	Percent										
1st year	$21.86	$56.07	$6.22	$0.00	$1.32	$0.00	$0.00	$0.00	$0.00	$0.00	$29.40	$40.33
2nd year	$22.63	$58.04	$6.22	$5.30	$1.32	$0.00	$1.75	$0.20	$0.00	$0.00	$37.42	$48.73
3rd year	$25.04	$64.22	$6.22	$5.30	$1.32	$0.00	$1.75	$0.20	$0.00	$0.00	$39.83	$52.35
4th year	$29.05	$74.51	$6.22	$5.30	$1.32	$0.00	$1.75	$0.20	$0.00	$0.00	$43.84	$58.37
5th year	$31.45	$80.66	$6.22	$5.30	$1.32	$0.00	$1.75	$0.20	$0.00	$0.00	$46.24	$61.96

(*)Special Calculation Note :

OTHER: SUPPLEMENTAL UNEMPLOYMENT BENEFITS

Ratio :

A per employer ratio of one (1) unindentured trainee to the first three (3) to fifteen (15) journeymen and/or apprentices shall be established, with a ratio of one (1) unindentured trainee for every fifteen (15) journeymen and/or apprentices thereafter. Each employer shall be limited to three (3) unindentured trainees. At no time shall the number of unindentured trainees exceed the number of apprentices.

Jurisdiction (* denotes special jurisdictional note) :

Ashtabula, Cuyahoga, Geauga, Lake, Medina*, Summit*

Special Jurisdictional Note :

Summit County - North of State Route 303 including work within the corporate limits of the City of Hudson, that portion of Medina County North of Route 18 and Smith Road and including work within the corporate limits of the City of Medina.

Details :

Work scope but not limited to:Mechanical Service and Maintenance work normally performed by contractors, either by contracts or emergency call basis, who are equipped to handle all work relating to evacuation, charging, start-up, inspection, operating, maintenance and service call necessary to keep mechanical system and controls of a refrigeration , air conditioning, heating and/or ventilation or any other newly installed, remodeled, revamped or redesigned mechanical system in operational order; all fire stopping and piping systems. Shall include but not limited to all maintaining, cleaning, adjusting, repairing, overhauling, starting and balancing of any system or component part thereof, regardless of size or location, including all other service and maintenance work assigned to the employer by the customer. Shall also be allowed to do the following installation work: All residential humidifiers and dehumidifiers, all window type units, all residential heating and cooling systems, excluding steam and hot water, and when a building is not new construction, all refrigeration systems up to 20 tons, split air conditioning systems up to 50 tons, and package or self-contained air conditioning units up to 50 tons.

Prevailing Wage Rate
Skilled Crafts

Name of Union: Pipefitter Local 120 Sprinklerfitter

Type of Rate: Commercial

Change #: LCN01-2026ib

Craft: Sprinkler Fitter

Effective Date: 5/4/2026

Effective Date: 5/4/2026

	BHR		Fringe Benefit Payments						Irrevocable Fund		Total PWR	Overtime Rate
			H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)	MISC (*)		
Classification												
Sprinkler Fitter	$51.02		$13.30	$12.20	$1.32	$0.00	$3.50	$0.20	$0.00	$0.00	$81.54	$107.05
Apprentice	BHR	Percent										
1st Year	$24.70	$48.41	$5.78	$0.00	$1.32	$0.00	$0.00	$0.00	$0.00	$0.00	$31.80	$44.15
2nd Year	$25.42	$49.82	$12.43	$7.60	$1.32	$0.00	$0.88	$0.20	$0.00	$0.00	$47.85	$60.56
3rd Year	$29.43	$57.68	$12.43	$7.60	$1.32	$0.00	$0.88	$0.20	$0.00	$0.00	$51.86	$66.57
4th Year	$35.04	$68.68	$12.43	$7.60	$1.32	$0.00	$0.88	$0.20	$0.00	$0.00	$57.47	$74.99
5th Year	$39.06	$76.56	$12.43	$7.60	$1.32	$0.00	$0.88	$0.20	$0.00	$0.00	$61.49	$81.02

(*)Special Calculation Note :

OTHER: SUPPLEMENTAL UNEMPLOYMENT BENEFITS

Ratio :

1 Journeymen to 1 Apprentice
2 - 4 Journeymen to 2 Apprentices
5 - 7 Journeymen to 3 Apprentices
3 Journeymen to 1 Apprentice on jobs with 12 or more journeymen

Jurisdiction (* denotes special jurisdictional note) :

Cuyahoga, Geauga, Lake, Lorain

Special Jurisdictional Note :

Details :

Sprinklerfitter duties shall include: installation, dismantling, maintenance, repairs, adjustments and corrections of all fire protection and extinguishing systems; consist of handling and installing of all piping and appurtenances pertaining to sprinkler equipment including both overhead and underground water mains, fire hydrants and hydrants mains, stand pipes, hose connections, tank heaters, air lines, thermal systems and their connections; all operating and actuating lines and devices and their protective covering; all fire stopping of sprinkler piping systems; all tanks, pumps and city connections; fire protection systems using emulsify, spray, water fog, CO2 gas, foam and other fire control agents, settling of all fire pumps and tank filling pumps, air compressors and their connections; all work related to sprinkler inspections (included but not limited to: adjustments, maintenance, repair, testing, etc.)

Prevailing Wage Rate
Skilled Crafts

Name of Union: Plasterer Local 526

Type of Rate: Commercial

Change #:	**Craft:**	**Effective Date:**	**Effective Date:**
LCN01-2026ib	Plasterer	5/1/2026	5/1/2026

	BHR		Fringe Benefit Payments						Irrevocable Fund		Total PWR	Overtime Rate
			H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)	MISC (*)		
Classification												
Plasterer	$34.71		$9.37	$7.10	$0.50	$0.00	$5.60	$0.21	$0.00	$0.00	$57.49	$74.84
Apprentice	BHR	Percent										
1st Year	$17.36	$50.00	$9.37	$7.10	$0.50	$0.00	$5.60	$0.21	$0.00	$0.00	$40.14	$48.82
2nd Year	$20.83	$60.00	$9.37	$7.10	$0.50	$0.00	$5.60	$0.21	$0.00	$0.00	$43.61	$54.02
3rd Year	$26.03	$75.00	$9.37	$7.10	$0.50	$0.00	$5.60	$0.21	$0.00	$0.00	$48.81	$61.83
4th Year	$31.24	$90.00	$9.37	$7.10	$0.50	$0.00	$5.60	$0.21	$0.00	$0.00	$54.02	$69.64

(*)Special Calculation Note :

Other is for Substance abuse and training.

Ratio :

1 Journeymen to 1 Apprentice
3 Journeymen to 1 Apprentice

Jurisdiction (* denotes special jurisdictional note) :

Ashtabula, Cuyahoga, Geauga, Lake, Lorain

Special Jurisdictional Note :

Details :

Prevailing Wage Rate
Skilled Crafts

Name of Union: Plumber Local 55

Type of Rate: Commercial

Change #:	**Craft:**	**Effective Date:**	**Effective Date:**
LCN01-2026ib	Plumber	6/10/2026	6/10/2026

	BHR		Fringe Benefit Payments						Irrevocable Fund		Total PWR	Overtime Rate
			H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)	MISC (*)		
Classification												
Plumber	$47.11		$13.37	$9.63	$1.23	$0.00	$7.10	$0.20	$0.00	$0.00	$78.64	$102.19
Shopman (When in the field)	$25.98		$9.79	$5.59	$0.10	$0.00	$3.85	$0.00	$0.00	$0.00	$45.31	$58.30
Apprentice	BHR	Percent										
1-6 Months	$20.69	$43.91	$7.59	$0.24	$0.95	$0.00	$1.56	$0.00	$0.00	$0.00	$31.03	$41.38
7-12 Months	$23.50	$49.89	$7.84	$0.44	$1.00	$0.00	$2.01	$0.20	$0.00	$0.00	$34.99	$46.74
2nd Year 1-6	$25.19	$53.46	$8.62	$0.85	$1.05	$0.00	$3.06	$0.20	$0.00	$0.00	$38.97	$51.57
2nd Year 7-12	$26.23	$55.67	$8.83	$2.85	$1.05	$0.00	$3.78	$0.20	$0.00	$0.00	$42.94	$56.05
3rd Year 1-6	$29.43	$62.47	$9.38	$2.80	$1.05	$0.00	$4.00	$0.20	$0.00	$0.00	$46.86	$61.57
3rd Year 7-12	$31.69	$67.27	$9.65	$3.63	$1.05	$0.00	$4.62	$0.20	$0.00	$0.00	$50.84	$66.69
4th Year	$34.59	$73.42	$9.92	$4.07	$1.05	$0.00	$4.98	$0.20	$0.00	$0.00	$54.81	$72.11
5th Year	$37.51	$79.63	$10.19	$4.51	$1.05	$0.00	$5.33	$0.20	$0.00	$0.00	$58.79	$77.55

(*)Special Calculation Note :

OTHER IS: SUPPLEMENTAL UNEMPLOYMENT

Ratio :

1 Journeyman 1 Apprentice
2 Journeymen to 1 Apprentice thereafter

Jurisdiction (* denotes special jurisdictional note) :

Ashtabula, Cuyahoga, Geauga, Lake, Medina*, Summit*

Special Jurisdictional Note :

Summit County - North of State Route 303 including work within the corporate limits of the City of Hudson, that portion of Medina County North of Route 18 and Smith Road and the corporate limits of the City of Medina.

Details :

The Plumber Shopman will have charge of the Employer's shop and warehouse containing plumbing and heating supplies and equipment, and perform such duties as are customarily required by a Plumber or a Plumber's Shopman, including casual delivery of tools and equipment necessary for installation of Plumbing and Heating facilities. One field shopman per shop may be hired after employing the 1st apprentice, and a second field shopman per shop may be hired after employing the 5th apprentice. These shopmen may work in the field performing primarily non-mechanical work. The plumber shopman's duties do not include the installation of plumbing.

Prevailing Wage Rate
Skilled Crafts

Name of Union: Roofer Local 44

Type of Rate: Commercial

Change #:	**Craft:**	**Effective Date:**	**Effective Date:**
OCR02-2026ib	Roofer	6/17/2026	6/17/2026

	BHR		Fringe Benefit Payments						Irrevocable Fund		Total PWR	Overtime Rate
			H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)	MISC (*)		
Classification												
Roofer	$41.35		$9.76	$11.30	$0.52	$0.00	$0.00	$0.06	$0.00	$0.00	$62.99	$83.67
Applicant & Helper Trainees	$		$	$	$	$	$	$	$	$	$	$
0 to 1851 hrs	$18.61		$0.65	$0.50	$0.52	$0.00	$0.00	$0.06	$0.00	$0.00	$20.34	$29.64
1852 to 3350 hrs	$22.74		$9.76	$11.30	$0.52	$0.00	$0.00	$0.06	$0.00	$0.00	$44.38	$55.75
3351 to 4850 hrs	$28.95		$9.76	$11.30	$0.52	$0.00	$0.00	$0.06	$0.00	$0.00	$50.59	$65.06
4851 to 6350 hrs	$33.08		$9.76	$11.30	$0.52	$0.00	$0.00	$0.06	$0.00	$0.00	$54.72	$71.26
6351 to 7550 hrs	$37.22		$9.76	$11.30	$0.52	$0.00	$0.00	$0.06	$0.00	$0.00	$58.86	$77.47
7551 hrs	$41.35		$9.76	$11.30	$0.52	$0.00	$0.00	$0.06	$0.00	$0.00	$62.99	$83.67
Apprentice	BHR	Percent										
Start of school	$18.61	$45.00	$0.65	$0.50	$0.52	$0.00	$0.00	$0.06	$0.00	$0.00	$20.34	$29.64
600 hrs worked/72 school hrs	$20.68	$50.00	$0.65	$0.50	$0.52	$0.00	$0.00	$0.06	$0.00	$0.00	$22.41	$32.75
1200 hrs worked/144 school hrs	$22.74	$55.00	$0.65	$0.50	$0.52	$0.00	$0.00	$0.06	$0.00	$0.00	$24.47	$35.84
1800 hrs worked/216 school hrs	$24.81	$60.00	$9.76	$11.30	$0.52	$0.00	$0.00	$0.06	$0.00	$0.00	$46.45	$58.85
2400 hrs worked/ 288 school hrs	$26.88	$65.00	$9.76	$11.30	$0.52	$0.00	$0.00	$0.06	$0.00	$0.00	$48.52	$61.96
3000 hrs worked/360 school hrs	$28.95	$70.00	$9.76	$11.30	$0.52	$0.00	$0.00	$0.06	$0.00	$0.00	$50.59	$65.06
3600 hrs worked/432 school hrs	$31.01	$75.00	$9.76	$11.30	$0.52	$0.00	$0.00	$0.06	$0.00	$0.00	$52.65	$68.16
4200 hrs worked/504 school hrs	$33.08	$80.00	$9.76	$11.30	$0.52	$0.00	$0.00	$0.06	$0.00	$0.00	$54.72	$71.26
4800 hrs worked/576 school hrs	$37.22	$90.00	$9.76	$11.30	$0.52	$0.00	$0.00	$0.06	$0.00	$0.00	$58.86	$77.47

(*)Special Calculation Note :

Other: Drug Testing

Ratio :

2 Journeymen to 1 Apprentice
2 Journeymen to 1 Applicant/Helper Trainee

Jurisdiction (* denotes special jurisdictional note) :

Ashtabula, Cuyahoga, Erie, Geauga, Lake, Lorain, Sandusky

Special Jurisdictional Note :

Details :

Prevailing Wage Rate
Skilled Crafts

Name of Union: Sheet Metal Local 33 (Cleveland)

Type of Rate: Commercial

Change #:	**Craft:**	**Effective Date:**	**Effective Date:**
LCN01-2026ib	Sheet Metal Worker	5/20/2026	5/20/2026

	BHR		Fringe Benefit Payments						Irrevocable Fund		Total PWR	Overtime Rate
			H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)	MISC (*)		
Classification												
Sheet Metal Worker	$47.15		$10.64	$18.38	$0.98	$0.00	$3.33	$0.00	$0.00	$0.00	$80.48	$104.05
Apprentice	BHR	Percent										
1st year	$23.57	$50.00	$10.64	$3.15	$0.22	$0.00	$0.00	$0.00	$0.00	$0.00	$37.58	$49.37
2nd year	$25.91	$54.95	$10.64	$3.47	$0.98	$0.00	$3.33	$0.00	$0.00	$0.00	$44.33	$57.29
3rd year	$28.27	$59.96	$10.64	$3.78	$0.98	$0.00	$3.33	$0.00	$0.00	$0.00	$47.00	$61.14
4th year	$35.34	$74.96	$10.64	$4.73	$0.98	$0.00	$3.33	$0.00	$0.00	$0.00	$55.02	$72.69

(*)Special Calculation Note :

Ratio :

1 Journeyman to 1 Apprentice
2 Journeymen to 2 Apprentices
3-6 Journeymen to 3 Apprentices
7-8 Journeymen to 4 Apprentices
9-10 Journeymen to 5 Apprentices
11-12 Journeymen to 6 Apprentices
13-14 Journeymen to 7 Apprentices
15-16 Journeymen to 8 Apprentices
17-18 Journeymen to 9 Apprentices
19-20 Journeymen to 10 Apprentices

Jurisdiction (* denotes special jurisdictional note) :

Ashtabula, Cuyahoga, Geauga, Lake

Special Jurisdictional Note :

Details :

Prevailing Wage Rate
Skilled Crafts

Name of Union: Sheet Metal Local 33 Industrial Door

Type of Rate: Commercial

Change #:	**Craft:**	**Effective Date:**	**Effective Date:**
LCN01-2025ib	Sheet Metal Worker	8/1/2025	8/1/2025

	BHR		Fringe Benefit Payments						Irrevocable Fund		Total PWR	Overtime Rate
			H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)	MISC (*)		
Classification												
Sheet Metal Worker	$26.53		$8.71	$5.66	$0.19	$0.00	$2.61	$0.61	$0.00	$0.00	$44.31	$57.58
Apprentice	BHR	Percent										
Probationary Period (60 Days)	$13.80	$52.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$13.80	$20.70
61st day -12 months	$15.39	$58.00	$8.71	$1.96	$0.19	$0.00	$1.68	$0.35	$0.00	$0.00	$28.28	$35.98
2nd Year	$18.04	$68.00	$8.71	$1.96	$0.19	$0.00	$1.90	$0.41	$0.00	$0.00	$31.21	$40.23
3rd Year	$19.37	$73.00	$8.71	$1.96	$0.19	$0.00	$2.05	$0.45	$0.00	$0.00	$32.73	$42.41
4th Year	$21.22	$80.00	$8.71	$1.96	$0.19	$0.00	$2.17	$0.49	$0.00	$0.00	$34.74	$45.35
5th Year	$22.82	$86.00	$8.71	$1.96	$0.19	$0.00	$2.31	$0.52	$0.00	$0.00	$36.51	$47.92

(*)Special Calculation Note :

Other: Holiday Pay

Ratio :

1-2 Journeyman to 1 Trainee
3-4 Journeymen to 2 Trainee
5-6 Journeymen to 3 Trainees
7-8 Journeymen to 4 Trainees
9-10 Journeymen to 5 Trainees
11-13 Journeymen to 6 Trainees
14-16 Journeymen to 7 Trainees
17-19 Journeymen to 8 Trainees
Maintaining a 3 Journeymen to 1 Trainee ratio thereafter

Jurisdiction (* denotes special jurisdictional note) :

Ashland, Ashtabula, Carroll, Columbiana, Coshocton, Crawford, Cuyahoga, Defiance, Erie, Fulton, Geauga, Hancock, Henry, Holmes, Huron, Lake, Lorain, Lucas, Mahoning, Medina, Ottawa, Paulding, Portage, Putnam, Richland, Sandusky, Seneca, Stark, Summit, Trumbull, Tuscarawas, Wayne, Williams, Wood

Special Jurisdictional Note :

Details :

Prevailing Wage Rate
Skilled Crafts

Name of Union: Truck Driver Local 436 - HevHwy Class 1

Type of Rate: Commercial

Change #:
LCN02-2025ib

Craft:
Truck Driver

Effective Date:
5/28/2025

Effective Date:
5/28/2025

	BHR		Fringe Benefit Payments						Irrevocable Fund		Total PWR	Overtime Rate
			H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)	MISC (*)		
Classification												
Truck Driver CLASS 1	$34.92		$9.25	$10.05	$0.40	$0.00	$0.00	$0.00	$0.00	$0.00	$54.62	$72.08
Apprentice	BHR	Percent										
First 6 months	$27.94	$80.00	$9.25	$10.05	$0.40	$0.00	$0.00	$0.00	$0.00	$0.00	$47.64	$61.60
7-12 months	$29.68	$85.00	$9.25	$10.05	$0.40	$0.00	$0.00	$0.00	$0.00	$0.00	$49.38	$64.22
13-18 months	$31.43	$90.00	$9.25	$10.05	$0.40	$0.00	$0.00	$0.00	$0.00	$0.00	$51.13	$66.84
19-24 months	$33.17	$95.00	$9.25	$10.05	$0.40	$0.00	$0.00	$0.00	$0.00	$0.00	$52.87	$69.46
25-30 months	$34.92	$100.00	$9.25	$10.05	$0.40	$0.00	$0.00	$0.00	$0.00	$0.00	$54.62	$72.08

(*)Special Calculation Note :

Ratio :

3 Journeymen to 1 Apprentice

Jurisdiction (* denotes special jurisdictional note) :

Cuyahoga, Geauga, Lake

Special Jurisdictional Note :

Details :

CLASS 1: Drivers on trucks, including but not limited to: 4-wheel service trucks; 4-wheel dump trucks; batch trucks; drivers on tandems; truck sweepers (not to include power sweepers and scrubbers) Drivers on tractor – trailer combinations including but not limited to the following: Semi-tractor trucks; pole trailers; ready-mix trucks; fuel trucks; all trucks five (5) axle and over; drivers on belly dumps; truck mechanics (when needed).

Prevailing Wage Rate
Skilled Crafts

Name of Union: Truck Driver Local 436 - HevHwy Class 2

Type of Rate: Commercial

Change #:	**Craft:**	**Effective Date:**	**Effective Date:**
LCN02-2025ib	Truck Driver	5/28/2025	5/28/2025

	BHR		Fringe Benefit Payments						Irrevocable Fund		Total PWR	Overtime Rate
			H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)	MISC (*)		
Classification												
Truck Driver CLASS 2	$35.73		$9.25	$10.05	$0.40	$0.00	$0.00	$0.00	$0.00	$0.00	$55.43	$73.30
Apprentice	BHR	Percent										
First 6 months	$28.58	$80.00	$9.25	$10.05	$0.40	$0.00	$0.00	$0.00	$0.00	$0.00	$48.28	$62.58
7-12 months	$30.37	$85.00	$9.25	$10.05	$0.40	$0.00	$0.00	$0.00	$0.00	$0.00	$50.07	$65.26
13-18 months	$32.16	$90.00	$9.25	$10.05	$0.40	$0.00	$0.00	$0.00	$0.00	$0.00	$51.86	$67.94
19-24 months	$33.94	$95.00	$9.25	$10.05	$0.40	$0.00	$0.00	$0.00	$0.00	$0.00	$53.64	$70.62
25-30 months	$35.73	$100.00	$9.25	$10.05	$0.40	$0.00	$0.00	$0.00	$0.00	$0.00	$55.43	$73.30

(*)Special Calculation Note :

Ratio :

3 Journeymen to 1 Apprentice

Jurisdiction (* denotes special jurisdictional note) :

Cuyahoga, Geauga, Lake

Special Jurisdictional Note :

Details :

CLASS 2: Drivers on articulated dump trucks; rigid-frame rock trucks; distributor trucks; low boys/drag driver on the construction site only and heavy duty equipment (irrespective of load carried) when used exclusively for transportation on the construction site only.

SECTION 01 10 00
SUMMARY

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Project information.

B. Work covered by Contract Documents.

C. Access to site.

D. Work by Owner.

E. Specification and Drawing Conventions.

1.02 PROJECT INFORMATION

A. Project Name: "Breakers" Food Service Renovation

B. Project Address: 7700 Clocktower Drive, Kirkland, Ohio 44094

C. Owner's Name: Lakeland Community College

D. Owner Contact: Joseph (Jay) Kahn

E. Architect's Name: CPL Architects, Engineers, Landscape Architect

F. Architect Address: 25 Main Street, Suite 200, Westlake, Ohio 44145

G. Architect's Contact: Kiernan Weese

H. Consultants:
   1. Mechanical:Tec Inc.
   2. Plumbing: Tec Inc.
   3. Electrical: Tec Inc.

I. The Project consists of the alteration of approximately 2,700 SF of servery and dining space..

1.03 CONTRACT DESCRIPTION

A. Contract Type: General Contractor based on a Stipulated Price as described in Document 00 52 00 - Agreement Form.

1.04 DEFINITIONS

A. Work Package: The Project Manual, drawings, and schedules prepared by the design team to describe a portion of the Project Work for pricing, permitting, and construction.

1.05 DESCRIPTION OF ALTERATIONS WORK

A. Scope of demolition and removal work is indicated on drawings.

B. Scope of alterations work is indicated on drawings.

C. Plumbing: Alter existing system and add new construction, keeping existing in operation.

D. HVAC: Alter existing system and add new construction, keeping existing in operation.

E. Electrical Power and Lighting: Alter existing system and add new construction, keeping existing in operation.

F. Fire Suppression Sprinklers: Alter existing system and add new construction, keeping existing in operation.

G. Fire Alarm: Alter existing system and add new construction, keeping existing in operation.

1.06 WORK RESTRICTIONS

A. Work Restrictions, General: Comply with restrictions for new construction operations.
   1. Comply with limitations on use of public streets and other requirements of authorities having jurisdiction.

2. General: Contractor shall have full use of Project site for new construction operations during construction period. Contractor's use of Project site shall not disrupt continuous use of the remainder of the building

B. On-Site Work Hours: Limit work to normal business working hours of 7:00 a.m. to 6:00 p.m, Monday through Saturday, except as otherwise indicated.
   1. Special Events: The Owner will provide dates and times of any special events that might restrict construction operations (if any).

C. Existing Utility Interruptions: Do not interrupt utilities serving facilities occupied by Owner or others unless permitted under the following conditions and then only after providing temporary utility services according to requirements indicated:
   1. Notify **the Architect and Owner** not less than two days in advance of proposed utility interruptions. Notification must be in writing.
   2. Obtain the **Owner's** written permission before proceeding with utility interruptions.

1.07 WORK BY OWNER

A. General: Cooperate fully with Owner so work may be carried out smoothly, without interfering with or delaying work under this Contract or work by Owner. Coordinate the Work of this Contract with work performed by Owner.

B. Concurrent Work: No concurrent work is expected.

C. Items noted NIC (Not in Contract) will be supplied and installed by Owner before Substantial Completion. Some items include:
   1. Furnishings.
   2. Display Screens.
   3. Point of Sale Systems.

1.08 OWNER OCCUPANCY

A. Owner intends to continue to occupy adjacent portions of the existing building during the entire construction period.

B. Owner intends to occupy the Project upon Substantial Completion.

C. Cooperate with Owner to minimize conflict and to facilitate Owner's operations.

D. Schedule the Work to accommodate Owner occupancy.

1.09 SPECIFICATION AND DRAWING CONVENTIONS

A. Specification Content: The Specifications use certain conventions for the style of language and the intended meaning of certain terms, words, and phrases when used in particular situations. These conventions are as follows:
   1. Imperative mood and streamlined language are generally used in the Specifications. The words "shall," "shall be," or "shall comply with," depending on the context, are implied where a colon (:) is used within a sentence or phrase.
   2. Specification requirements are to be performed by Contractor unless specifically stated otherwise.
   3. Division 01 General Requirements: Requirements of Sections in Division 01 apply to the Work of all Sections in the Specifications.
   4. Drawing Coordination: Requirements for materials and products identified on the Drawings are described in detail in the Specifications. One or more of the following are used on the Drawings to identify materials and products:

B. Terminology: Materials and products are identified by the typical generic terms used in the individual Specifications Sections.
   1. Abbreviations: Materials and products are identified by abbreviations (published as part of the U.S. National CAD Standard) (and) scheduled on Drawings.
   2. Keynoting: Materials and products are identified by reference keynotes referencing Specification Section numbers found in this Project Manual.

PART 2 PRODUCTS - NOT USED

PART 3 EXECUTION - NOT USED

END OF SECTION 01 10 00

SECTION 01 25 00
SUBSTITUTION PROCEDURES

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Procedural requirements for proposed substitutions.
   1. Should the Contractor desire to substitute other materials, apparatus, products or processes than those specified or approved as equivalent, the Contractor shall apply to the Architect in writing for approval of such substitution. It should be noted that the bid shall not be based on a substituted material, apparatus, product or process. With the application shall be furnished such information as required by the Architect to demonstrate that the article, material, apparatus, product or process he wishes to use is the equivalent of that specified in quality, finish, design, efficiency and durability and has been elsewhere demonstrated to be equally serviceable for the purpose for which it is intended. The Contractor shall set forth the reasons for desiring to make the proposed substitution and shall further state what difference, if any, will be made in the construction schedule and the contract price for such substitution should it be accepted; it being the intent hereunder that any savings shall accrue to the benefit of the Owner.
   2. The Architect shall reject any such proposed substitution as not being specifically named in the contract, or if he shall determine that the adjustment in price in favor of the Owner is insufficient, the Contractor shall immediately proceed to furnish the specified or basis of design, material, apparatus, product or process.
   3. Request for substitutes shall conform to the requirements of this Article.
   4. Requests for substitutions shall, include full information relating to any impact that the proposed substitution may have upon other associtated devices or systems to be provided by other contractors or vendors.
   5. Requests for utilization of substitutes will be reviewed during the course of the project. The impact on the project and the timeliness of submission will be of key consideration.
   6. The approval of utilization of a substitute is subject to the sole and final discretion of the Architect.

1.02 RELATED REQUIREMENTS

A. Section 00 43 25 - Substitution Request Form - During Procurement / For Convenience: Required form for substitution requests made prior to award of contract (During procurement).

B. Section 00 63 25 - Substitution Request Form - During Construction / For Cause: Required form for substitution requests made after award of contract (During construction).

C. Section 01 60 00 - Product Requirements: Fundamental product requirements, product options, delivery, storage, and handling.

1.03 DEFINITIONS

A. Substitutions: Changes from Contract Documents requirements proposed by Contractor to materials, products, assemblies, and equipment.
   1. Substitutions for Cause: Proposed due to changed Project circumstances beyond Contractor's control. This may include but not limited to unforeseen 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 Owner and Contractor.
      a. Substitution requests offering advantages solely to the Contractor will not be considered.

B. Substitute Items (Or Equivalent): If in Architect/Engineer's sole discretion an item of material or equipment proposed by Contractor does not qualify as an "or-equal" item it will not be considered as an acceptable or equivalent.

PART 2 PRODUCTS - NOT USED

PART 3 EXECUTION

3.01 GENERAL REQUIREMENTS

A. A Substitution Request for products, assemblies, materials, and equipment constitutes a representation that the submitter:
   1. Has investigated proposed product and determined that it meets or exceeds the quality level of the specified product, equipment, assembly, or system.
   2. Agrees to provide the same warranty for the substitution as for the specified product.
   3. Agrees to provide same or equivalent maintenance service and source of replacement parts, as applicable.
   4. Agrees to coordinate installation and make changes to other work that may be required for the work to be complete, with no additional cost to Owner.
   5. Waives claims for additional costs or time extension that may subsequently become apparent.
   6. Agrees to reimburse Owner and Architect for review or redesign services associated with re-approval by authorities.

B. A Substitution Request for specified installer constitutes a representation that the submitter:
   1. Has acted in good faith to obtain services of specified installer, but was unable to come to commercial, or other terms.

C. Document each request with complete data substantiating compliance of proposed substitution with Contract Documents. Burden of proof is on proposer.

D. Content: Include information necessary for tracking the status of each Substitution Request, and information necessary to provide an actionable response.
   1. No specific form is required. Contractor's Substitution Request documentation must include the following:
      a. Project Information:
         1) Official project name and number, and any additional required identifiers established in Contract Documents.
         2) Owner's, Architect's, and Contractor's names.
      b. Substitution Request Information:
         1) Discrete and consecutive Substitution Request number, and descriptive subject/title.
         2) Indication of whether the substitution is for CAUSE or CONVENIENCE.
         3) Issue date.
         4) Reference to particular Contract Document(s) specification section number, title, and article/paragraph(s).
         5) Description of Substitution.
         6) Reason why the specified item cannot be provided.
         7) Differences between proposed substitution and specified item.
         8) Description of how proposed substitution affects other parts of work.
      c. Attached Comparative Data: Provide point-by-point, side-by-side comparison addressing essential attributes specified, as appropriate and relevant for the item:
         1) Physical characteristics.
         2) In-service performance.
         3) Expected durability.
         4) Visual effect.
         5) Sustainable design features.
         6) Warranties.
         7) Other salient features and requirements.
         8) Include, as appropriate or requested, the following types of documentation:
            (a) Product Data:

(b) Samples.
(c) Certificates, test, reports or similar qualification data.
(d) Drawings, when required to show impact on adjacent construction elements.

d. Impact of Substitution:
1) Savings to Owner for accepting substitution.
2) Change to Contract Time due to accepting substitution.

E. Limit each request to a single proposed substitution item.
1. Submit an electronic document, combining the request form with supporting data into single document.

3.02 SUBSTITUTION PROCEDURES DURING PROCUREMENT

A. Submittal Time Restrictions:
1. Instructions to Bidders specifies time restrictions and the documents required for submitting substitution requests during the bidding period.

B. Submit request for Substitution for Convenience immediately upon discovery of its potential advantage to the project, but not later than 7 days prior to time required for review and approval by Architect, in order to stay on approved project schedule.
1. In addition to meeting general documentation requirements, document how the requested substitution benefits the Owner through cost savings, time savings, greater energy conservation, or in other specific ways.
2. Document means of coordinating of substitution item with other portions of the work, including work by affected subcontractors.
3. Bear the costs engendered by proposed substitution of:
a. Owner's compensation to the Architect for any required redesign, time spent processing and evaluating the request.
b. Other construction by Owner.
c. Other unanticipated project considerations.

3.03 SUBSTITUTION PROCEDURES DURING CONSTRUCTION

A. Architect will consider requests for substitutions only within 30 days after date of Agreement.

B. Submit request for Substitution for Cause immedately upon discovery of need for substitution, but not later than 7 days prior to time required for review and approval by Architect, in order to stay on approved project schedule.

C. Submit request for Substitution for Convenience immediately upon discovery of its potential advantage to the project, but not later than 14 days prior to time required for review and approval by Architect, in order to stay on approved project schedule.
1. In addition to meeting general documentation requirements, document how the requested substitution benefits the Owner through cost savings, time savings, greater energy conservation, or in other specific ways.
2. Document means of coordinating of substitution item with other portions of the work, including work by affected subcontractors.
3. Bear the costs engendered by proposed substitution of:
a. Owner's compensation to the Architect for any required redesign, time spent processing and evaluating the request.

D. Substitutions will not be considered under one or more of the following circumstances:
1. When they are indicated or implied on shop drawing or product data submittals, without having received prior approval.
2. Without a separate written request.
3. When acceptance will require revisions to Contract Documents.

3.04 RESOLUTION

A. Architect may request additional information and documentation prior to rendering a decision. Provide this data in an expeditious manner.

B. Architect will notify Contractor in writing of decision to accept or reject request.
   1. Architect's decision following review of proposed substitution will be noted on the submitted form.

3.05 ACCEPTANCE

A. Accepted substitutions change the work of the Project. They will be documented and incorporated into work of the project by Change Order, Construction Change Directive, Architectural Supplementary Instructions, or similar instruments provided for in the Conditions of the Contract.

3.06 CLOSEOUT ACTIVITIES

A. See Section 01 78 00 - Closeout Submittals, for closeout submittals.

B. Include completed Substitution Request Forms as part of the Project record. Include both approved and rejected Requests.

END OF SECTION 01 25 00

SECTION 012600
CONTRACT MODIFICATION PROCEDURES

PART 1 GENERAL

1.01 SUMMARY

A. Section includes administrative and procedural requirements for handling and processing Contract modifications.

B. Related Sections:
   1. Division 01 Section "Product Requirements" for administrative procedures for handling requests for substitutions made after Contract award.

1.02 NO COST CHANGES IN THE WORK

A. Architect will issue supplemental instructions authorizing minor changes in the Work, not involving adjustment to the Contract Sum or the Contract Time, on the Information Bulletin form bound in section 006000 of this Project Manual.

1.03 PROPOSAL REQUESTS

A. Owner-Initiated Proposal Requests: Architect 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. Proposal Requests issued by Architect are not instructions either to stop work in progress or to execute the proposed change.
   2. Within time specified in Proposal Request or (10) ten working 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.

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.
   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.
   6. Comply with requirements in Division 01 Section "Substitution Procedures" if the proposed change requires substitution of one product or system for product or system specified.

CONTRACT MODIFICATION PROCEDURES

1.04 ALLOWANCES

A. Allowance Adjustment: To adjust allowance amounts, base each Change Order proposal on the difference between purchase amount and the allowance, multiplied by final measurement of work-in-place. If applicable, include reasonable allowances for cutting losses, tolerances, mixing wastes, normal product imperfections, and similar margins.
   1. Include installation costs in purchase amount only where indicated as part of the allowance.
   2. If requested, prepare explanation and documentation to substantiate distribution of overhead costs and other margins claimed.
   3. Submit substantiation of a change in scope of work, if any, claimed in Change Orders related to unit-cost allowances.
   4. Owner reserves the right to establish the quantity of work-in-place by independent quantity survey, measure, or count.

B. Submit claims for increased costs because of a change in scope or nature of the allowance described in the Contract Documents, whether for the Purchase Order amount or Contractor's handling, labor, installation, overhead, and profit. Submit claims within (5) five days of receipt of the Change Order or Construction Change Directive authorizing work to proceed. Owner will reject claims submitted later than (5) five days after such authorization.
   1. Do not include Contractor's or subcontractor's indirect expense in the Change Order cost amount unless it is clearly shown that the nature or extent of work has changed from what could have been foreseen from information in the Contract Documents.
   2. No change to Contractor's indirect expense is permitted for selection of higher- or lower-priced materials or systems of the same scope and nature as originally indicated.

1.05 ADMINISTRATIVE CHANGE ORDERS

A. Adjustment from Allowances: Refer to Division 01 Section "Allowances" for administrative procedures for preparation of Change Order Proposal for adjusting the Contract Sum to reflect actual costs of allowances.

B. Adjustments from Unit Prices: Refer to Division 01 Section "Unit Prices" for administrative procedures for preparation of Change Order Proposal for adjusting the Contract Sum to reflect measured scope of unit price work.

1.06 CHANGE ORDER PROCEDURES

A. On Owner's approval of a Proposal Request, Architect will issue a Change Order for signatures of Owner and Contractor on the Information Bulletin form bound in section 006000 of this Project Manual.

1.07 CONSTRUCTION CHANGE DIRECTIVE

A. Construction Change Directive: Architect may issue a Construction Change Directive on the Information Bulletin form bound ins section 006000 of this Project Manual.
   1. Construction Change Directive instructs Contractor to proceed with a change in the Work, for subsequent inclusion in a Change Order.
      a. 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.

CONTRACT MODIFICATION PROCEDURES

2. Documentation: Maintain detailed records on a time and material basis of work required by the Construction Change Directive.
   a. 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 APPLICABLE)

PART 3 EXECUTION (NOT APPLICABLE)

END OF SECTION 012600

SECTION 012900
PAYMENT PROCEDURES

PART 1 GENERAL

1.01 SUMMARY

A. This Section specifies administrative and procedural requirements necessary to prepare and process Applications for Payment.

B. Related Sections:
   1. Division 01 Section "Contract Modification Procedures" for procedures for handling changes to the Contract.
   2. Division 01 Section "Submittal Procedures" for requirements governing the preparation and submittal of the submittal schedule.

1.02 SCHEDULE OF VALUES

A. Schedule of Values: 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.

B. Coordination: Correlate line items in the schedule of values with other required administrative forms and schedules, including the following:
   1. Application for Payment forms AIA G702 and G703 with continuation sheets.
   2. Submittal schedule.
   3. Submit the schedule of values to Architect at earliest possible date but no later than (7) seven days before the date scheduled for submittal of initial Applications for Payment.

C. Format and Content: Use the Project Manual table of contents as a guide to establish line items for the schedule of values.
   1. Identification: Include the following Project identification on the schedule of values:
      a. Project name and location.
      b. Name of Architect.
      c. Architect's project number.
      d. Contractor's name and address.
      e. Date of submittal.
   2. Arrange the schedule of values in tabular form with separate columns to indicate the following for each item listed:
      a. Related Specification Section or Division.
      b. Description of the Work.
      c. Change Orders (numbers) that affect value.
      d. Dollar value of the following, as a percentage of the Contract Sum to nearest one-hundredth percent, adjusted to total 100 percent.
         1) Labor.
         2) Materials.
         3) Equipment.
   3. Provide a breakdown of the Contract Sum in enough detail to facilitate continued evaluation of Applications for Payment and progress reports.
   4. The following line items must be included on the continuation sheet.
      a. Project Bonds and Insurances.
      b. Mobilization.
      c. Shop Drawings.
      d. Project Meetings.
      e. Temporary Heat (where applicable).
      f. Progress Cleaning.
      g. Lawn and Tree Watering (where applicable to establish new lawns and trees).
      h. Punch List.

PAYMENT PROCEDURES

i. Final Cleaning.
j. Close Out documents and Warranties.

5. Round amounts to nearest whole dollar; total shall equal the Contract Sum.
6. Submit draft of AIA Document G703 Continuation Sheets.
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. Purchase Contracts: Provide a separate line item in the schedule of values for each purchase contract. Show line-item value of purchase contract. Indicate owner payments or deposits, if any, and balance to be paid by Contractor.
9. 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.
10. 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.

1.03 APPLICATIONS FOR PAYMENT

A. Each Application for Payment shall be consistent with previous applications and payments as certified by Architect 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: The date for each progress payment is indicated in the Agreement between Owner and Contractor. The period of construction work covered by each Application for Payment is the period indicated in the Agreement.

C. Application for Payment Forms: Use AIA Documents G702 and G703 as form for Applications 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 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. The OWNER shall retain (5%) five percent of the amount due on each Application for both the work completed and materials stored. The OWNER reserves the right to retain a greater percentage in the event the CONTRACTOR fails to make satisfactory progress or in the event there is other specific cause for greater withholding.

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.

PAYMENT PROCEDURES

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.

F. Transmittal: Submit (4) four signed and notarized original copies of each Application for Payment to Architect by a method ensuring receipt. One copy shall include waivers of lien and similar attachments if required.

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. Waiver Forms: Submit waivers of lien on forms, executed in a manner acceptable to Owner.

H. Initial Application for Payment: Administrative actions and submittals that must precede submittal of first Application for Payment include the following:
1. List of Substitutions
2. Contract or Notice to Proceed.
3. Performance and Payment bonds.
4. Liability, Auto, and Umbrella Insurance
5. Worker Compensation certificates
6. Proposed schedule of values for approval.

I. Initial Application for Payment: Administrative actions and submittals that must coincide with submittal of first Application for Payment include the following:
1. Approved Schedule of values.
2. List of subcontractors.
3. Contractors Safety Program.
4. Proof of completion of the OSHA 10 Safety Training Course by all Contractor's and Subcontractor's employees present on the job site.
   a. Attach copy of this proof of completion for each employee.
   b. Attach copy of this proof of completion on each succeeding payroll where each new or additional employee is first listed.
5. Submittal schedule (preliminary if not final).
   a. First Payment WILL NOT be processed without a Submittal Schedule.
6. Emergency Contacts List.
7. Certified Payroll.
8. Schedule of unit prices.
9. List of Contractor's staff assignments.
10. List of Contractor's principal consultants.
11. Copies of building permits.
12. Copies of authorizations and licenses from authorities having jurisdiction for performance of the Work.
13. Minutes or report of preconstruction conference.

J. Application for Payment at Substantial Completion: After issuing the Certificate of Substantial Completion, submit an Application for Payment showing 100 percent completion for portion of the Work claimed as substantially complete.
1. Administrative actions and submittals that shall precede or coincide with this application include:
   a. Occupancy permits and similar approvals.

PAYMENT PROCEDURES

b. List of incomplete Work, recognized as exceptions to Architect's Certificate of Substantial Completion.
c. Record Drawings and Specifications.
d. Operations and Maintenance Manuals.
e. Maintenance Instructions and Training.
f. Start-up performance reports.
g. Test/adjust/balance records.
h. Warranties (guarantees) and maintenance agreements.
i. Final cleaning.
j. Change-over information related to Owner's occupancy, use, operation and maintenance.
k. Application for reduction of retainage and consent of surety.
l. Advice on shifting insurance coverages.

2. Include documentation supporting claim that the Work is substantially complete and a statement showing an accounting of changes to the Contract Sum.
3. This application shall reflect Certificates of Partial Substantial Completion issued previously for Owner occupancy of designated portions of the Work.

K. Final Payment Application: Submit final Application for Payment with releases and supporting documentation not previously submitted and accepted, including, but not limited, to the following:
1. Ensure that incomplete Work is not accepted and will be completed without undue delay.
2. 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.
3. Evidence of completion of Project closeout requirements.
4. Insurance certificates for products and completed operations where required and proof that taxes, fees, and similar obligations were paid.
5. Updated final statement, accounting for final changes to the Contract Sum.
6. AIA Document G706, "Contractor's Affidavit of Payment of Debts and Claims."
7. AIA Document G706A, "Contractor's Affidavit of Release of Liens."
8. AIA Document G707, "Consent of Surety to Final Payment."
9. Evidence that all claims have been settled.
10. Removal of temporary facilities and services.
11. Removal of surplus materials, rubbish, and similar elements.

PART 2 PRODUCTS (NOT APPLICABLE)

PART 3 EXECUTION (NOT APPLICABLE)

END OF SECTION 012900

SECTION 013100
PROJECT MANAGEMENT AND COORDINATION

PART 1 GENERAL

1.01 SUMMARY

A. Section includes administrative provisions for coordinating construction operations on Project including, but not limited to, the following:
   1. General project coordination procedures.
   2. Administrative and supervisory personnel.
   3. Coordination drawings.
   4. Requests for Information (RFIs).
   5. Project meetings.

B. Each contractor shall participate in coordination requirements. Certain areas of responsibility are assigned to a specific contractor.

C. Related Sections:
   1. Division 01 Section " Summary" for Project Information and phasing requirements
   2. Division 01 Section "Execution" for procedures for coordinating general installation and field-engineering services, including establishment of benchmarks and control points.
   3. Division 01 Section "Closeout Procedures" for coordinating closeout of the Contract.

1.02 DEFINITIONS

A. RFI: Request from Owner, Architect, or Contractor seeking information from each other during construction.

1.03 INFORMATIONAL SUBMITTALS

A. Use the Architects Newforma Info Exchange when uploading Submittals.

B. Subcontractor list is required by AIA Document A201 to be submitted as soon as practical prior to award of the Contract. Coordinate with submittal requirements for subcontractor list in Procurement Requirements and Contracting Requirements if any.

C. 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. Use Subcontractor List form bound into 006000 of this Project Manual. 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.
   3. Drawing number and detail references, as appropriate, covered by subcontract.

D. Key Personnel Names: Within (15) fifteen 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, 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. Each Contractor to furnish a 24hr. emergency contact person and cellular phone number.
   2. Post copies of listing in project meeting room, or field office, [on Project Web site,] and by each field telephone. Keep list current...

PROJECT MANAGEMENT AND COORDINATION

1.04 COORDINATION

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. Coordination: Each contractor shall coordinate its construction operations with those of other contractors and entities to ensure efficient and orderly installation of each part of the Work. Each contractor shall coordinate its operations with 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 with other contractors to ensure maximum performance and accessibility for required maintenance, service, and repair.
   3. Make adequate provisions to accommodate items scheduled for later installation.

C. 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.
   1. Prepare similar memoranda for Owner and separate contractors if coordination of their Work is required.

D. Administrative Procedures: Coordinate scheduling and timing of required administrative procedures with other construction activities and activities of other contractors 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.
   9. Project closeout activities.

E. Conservation: Coordinate construction activities to ensure that operations are carried out with consideration given to conservation of energy, water, and materials. Coordinate use of temporary utilities to minimize waste.

PROJECT MANAGEMENT AND COORDINATION

1.05 COORDINATION DRAWINGS

A. Coordination Drawings, General: Prepare coordination drawings in accordance with requirements in individual Sections, 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. Coordinate the addition of trade-specific information to the coordination drawings by multiple contractors in a sequence that best provides for coordination of the information and resolution of conflicts between installed components before submitting for review.
      c. Indicate functional and spatial relationships of components of architectural, structural, civil, mechanical, and electrical systems.
      d. Indicate space requirements for routine maintenance and for anticipated replacement of components during the life of the installation.
      e. Show location and size of access doors required for access to concealed dampers, valves, and other controls.
      f. Indicate required installation sequences.
      g. 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 indicating proposed resolution of such conflicts. Minor dimension changes and difficult installations will not be considered changes to the Contract.

B. Coordination Drawing Organization: Organize coordination drawings as follows:
   1. Floor Plans and Reflected Ceiling Plans: Show architecturall elements, fire alarm, and electrical Work. Show locations of visible ceiling-mounted devices relative to acoustical ceiling grid. Supplement plan drawings with section drawings where required to adequately represent the Work. Provide required information for work sequence to interface with the installation work.
   2. Plenum Space: Indicate sub framing for support of ceiling and wall systems, mechanical and electrical equipment, and related Work. Locate components within ceiling plenum to accommodate layout of light fixtures indicated on Drawings. Indicate areas of conflict between light fixtures and other components.
   3. Mechanical Rooms: Provide coordination drawings for mechanical rooms showing plans and elevations of mechanical, plumbing, fire protection, fire alarm, and electrical equipment.
   4. Structural Penetrations: Indicate penetrations and openings required for all disciplines.
   5. Slab Edge and Embedded Items: Indicate slab edge locations and sizes and locations of embedded items for metal fabrications, sleeves, anchor bolts, bearing plates, angles, door floor closers, slab depressions for floor finishes, curbs and housekeeping pads, and similar items.
   6. Mechanical and Plumbing Work: Show the following:
      a. Sizes and bottom elevations of ductwork, piping, and conduit runs, including insulation, bracing, flanges, and support systems.

PROJECT MANAGEMENT AND COORDINATION

b. Dimensions of major components, such as dampers, valves, diffusers, access doors, cleanouts and electrical distribution equipment.
c. Fire-rated enclosures around ductwork.

7. Electrical Work: Show the following:
   a. Runs of vertical and horizontal conduit 1-1/4 inch diameter and larger.
   b. Light fixture, exit light, emergency battery pack, smoke detector, and other fire alarm locations.
   c. Panel board, switch board, switchgear, transformer, busway, generator, and motor control center locations.
   d. Location of pull boxes and junction boxes, dimensioned from column center lines.
8. Fire Protection System: Show the following:
   a. Locations of standpipes, mains piping, branch lines, pipe drops, and sprinkler heads.
9. Review areas for required access and indicate the need for access doors for access to shutoffs electrical boxes Etc.
10. Prepare coordination wiring diagrams and any drawings necessary to illustrate the complete installation of door hardware and access control to provide fully operational system. General Contractor to provide individual wiring diagrams for hardware for each door. Provide drawings to Electrical Contractor for completion.
11. Review: Architect will review coordination drawings to confirm that the Work is being coordinated, but not for the details of the coordination, which are the Contractor's responsibility. If the Architect determines that the coordination drawings are not being prepared in sufficient scope or detail, or are otherwise deficient, the Architect will so inform the Contractor, who shall make changes as directed and resubmit.
    a. Failure to provide the required coordination drawings as required by this specification section may result in withholding a portion of the Contractor payment requests until such coordination drawings are received.
12. Coordination Drawing Prints: Prepare and submit coordination drawing prints in accordance with requirements of Division 01 Section "Submittal Procedures."

C. Architect's Digital Data Files:
   1. The Architect will provide digital PDF’s of Contract Drawings for the purpose of producing coorodination drawings for a Handling Fee of $ 50 per drawing file.
      a. Contract documents are graphic representations of approximate locations of materials. Therefore, information contained within these files should not be assumed to be accurate and users of the Files accept full responsibility for verifying the accuracy and completeness of the Files with field conditions and the contract documents.
   2. Document Transfer Agreement - For Projects where Architect’s work files are not a deliverable: The Contractor shall execute an Electronic Document Transfer Agreement for all electronic transfers of files, other than PDFs. The contractor must provide acknowledgement, accept the information regarding drawings, ownership and Limitations of Liability. Electronic Document Transfer Agreement form is bound in section 006000 of this Project Manual.
      a. The following CAD files will by furnished for each appropriate discipline:
         1) Floor plans.
         2) Reflected ceiling plans.

PROJECT MANAGEMENT AND COORDINATION

1.06 KEY PERSONNEL

A. Key Personnel Names: Within (5) five 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 email addresses. Provide names, addresses, and telephone numbers of individuals assigned as standbys in the absence of individuals assigned to Project.
   1. Post copies of list in project meeting room, or temporary office, and by field telephone.

1.07 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. Do not submit an RFI if information is readily available in the contract documents. Verify by contacting and questioning the Architect prior to submitting an RFI.
      a. Architect will return with no response, any RFI where information is available to the contractor and is indicated in the Contract Documents.
   2. Architect will return RFI's submitted to Architect by other entities controlled by Contractor with no response.
   3. Coordinate and submit RFI's 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. Name of Contractor.
   4. Name of Architect.
   5. RFI number, numbered sequentially.
   6. RFI subject.
   7. Specification Section number and title and related paragraphs, as appropriate.
   8. Drawing number and detail references, as appropriate.
   9. Field dimensions and conditions, as appropriate.
   10. Contractor's suggested resolution. If Contractor's solution(s) impacts the Contract Time or the Contract Sum, Contractor shall state impact in the RFI.
   11. Contractor's signature.
   12. 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’s sent without the required content information will not be considered a formal RFI and will be returned to the Contractor without comment or response.

D. RFI Forms: Use Request For Information form bound in section 006000 of this Project Manual.

E. Architect's Action: Architect will review each RFI, determine action required, and respond .. Allow (7) seven working days for Architect's response for each RFI. RFI's received by Architect after 1:00 p.m. will be considered as received the following working day.
   1. The following RFI's will be refused without action:
      a. Requests for approval of submittals.

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b. Requests for approval of substitutions.
c. Requests for information already indicated in the Contract Documents.
d. Requests for adjustments in the Contract Time or the Contract Sum.
e. Requests for interpretation of Architect's actions on submittals.
f. Incomplete RFI's or inaccurately prepared RFI's.

2. Architect's action may include a request for additional information, in which case Architect's time for response will date from time of receipt of additional information.
3. Architect's action on RFI's that may result in a change to the Contract Time or the Contract Sum may be eligible for Contractor to submit a Change Proposal according to Division 01 Section "Contract Modification Procedures."
   a. If Contractor believes the RFI response warrants change in the Contract Time or the Contract Sum, notify Architect in writing within (10) ten days of receipt of the RFI response.

F. RFI Log: Prepare, maintain, and submit a tabular log of RFI's 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.
4. RFI number including RFI's that were dropped and not submitted.
5. RFI description.
6. Date the RFI was submitted.
7. Date Architect's response was received.
8. Identification of related Minor Change in the Work, Construction Change Directive, and Proposal Request, as appropriate.
9. Identification of related Field Order, Work Change Directive, and Proposal Request, as appropriate.

G. On receipt of Architect's action, update the RFI log and immediately distribute the RFI response to affected parties. Review response and notify Architect within (7) 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.

1.08 ARCHITECTS WEBSITE

A. The contractor will use Newforma Info Exchange for Submittals, Shop Drawings and RFI’s. Project Web site shall include the following functions:
1. Project directory.
2. Project correspondence.
3. Meeting minutes.
4. Contract modifications forms and logs.
5. RFI forms and logs.
6. Task and issue management.
7. Photo documentation.
8. Schedule and calendar management.
9. Submittals forms and logs.
10. Payment application forms.
11. Drawing and specification document hosting, viewing, and updating.
12. Online document collaboration.

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13. Reminder and tracking functions.
14. Archiving functions.

B. Provide up to (7) seven Project Web site user licenses for use by the Architect. Provide (8) eight hours of software training at Architect's office for Project Web site users.

C. Upon completion of Project, provide (1) one complete archive copy(ies) of Project Web site files to Owner and to Architect in a digital storage format acceptable to Architect.

D. Contractor, subcontractors, and other parties granted access by Contractor to Project Web site shall execute a data licensing agreement in the form of AIA Document C106.

1.09 PROJECT MEETINGS

A. General: Architect will schedule and conduct meetings and conferences at Project site, unless otherwise indicated.

B. Preconstruction Conference: Architect will schedule and conduct a preconstruction conference before starting construction, at a time convenient to Owner and Architect, but no later than (15) fifteen days after execution of the Agreement.
   1. Conduct the conference to review responsibilities and personnel assignments.
   2. Attendees: Authorized representatives of Owner, Architect, and Architect's Consultants; Contractors and their superintendents; major subcontractors; suppliers; and other concerned parties shall attend the conference. Participants at the conference shall be familiar with Project and authorized to decide matters relating to the Work.
   3. Agenda: Discuss items of significance that could affect progress, including the following:
      a. Tentative construction schedule.
      b. Phasing.
      c. Critical work sequencing and long-lead items.
      d. Designation of key personnel and their duties.
      e. Procedures for project communications.
      f. Procedures for processing field decisions and Change Orders.
      g. Procedures for RFI's.
      h. Testing and inspecting reqiurements.
      i. Procedures for processing Applications for Payment.
      j. Distribution of the Contract Documents.
      k. Submittal procedures using Newforma Info Exchange.
      l. Preparation and updating of record documents.
      m. Use of the premises.
      n. Work restrictions.
      o. Working hours.
      p. Owner's occupancy requirements and restrictions.
      q. Responsibility for temporary facilities and controls.
      r. Procedures for moisture and mold control.
      s. Procedures for disruptions and shutdowns.
      t. Construction waste management and recycling.
      u. Parking availability.
      v. Office, work, and storage areas.
      w. Equipment deliveries and priorities.
      x. First aid.
      y. Security.
      z. Progress cleaning.
   4. Minutes: Entity responsible for conducting meeting will record and distribute meeting minutes.

PROJECT MANAGEMENT AND COORDINATION

C. Preinstallation Conferences: Architect shall conduct a preinstallation conference at Project site, unless otherwise indicated, 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 all parties involved 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 RFI's.
      d. Related Change Orders.
      e. Purchases.
      f. Deliveries.
      g. Submittals.
      h. Review of mockups.
      i. Possible conflicts.
      j. Compatibility problems.
      k. Time schedules.
      l. Weather limitations.
      m. Manufacturer's written recommendations.
      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: The entity recording meeting minutes shall distribute them 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. Progress Meetings: Architect will conduct progress meetings at regular intervals.
   1. Coordinate dates of meetings with preparation of payment requests.
   2. Required Attendees: In addition to representatives of Owner and Architect, each Prime 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 decide matters relating to the Work.

PROJECT MANAGEMENT AND COORDINATION

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) Status of correction of deficient items.
      11) Field observations.
      12) Status of RFI's.
      13) Status of proposal requests.
      14) Pending changes.
      15) Status of Change Orders.
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.

E. Coordination Meetings: Architect will conduct Project coordination meetings at regular intervals. Project coordination meetings are in addition to specific meetings held for other purposes, such as progress meetings and preinstallation conferences.
   1. Attendees: In addition to representatives of Owner and Architect, 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 meetings shall be familiar with Project and authorized to conclude matters relating to the Work.
   2. Agenda: Review and correct or approve minutes of the previous coordination meeting. Review other items of significance that could affect progress. Include topics for discussion as appropriate to status of Project.
      a. Combined Contractor's Construction Schedule: Review progress since the last coordination meeting. Determine whether each contract is on time, ahead of schedule, or behind schedule, in relation to combined 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.

PROJECT MANAGEMENT AND COORDINATION

b. Schedule Updating: Revise combined Contractor's construction schedule after each coordination meeting where revisions to the schedule have been made or recognized. Issue revised schedule concurrently with report of each meeting.
c. Review present and future needs of each contractor 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) Work hours.
10) Hazards and risks.
11) Progress cleaning.
12) Quality and work standards.
13) Change Orders.

3. Reporting: Entitiy recording meeting minutes shall distribute copies to everyone in attendance and to others affected by decisions or actions resulting from each meeting.

F. Project Closeout Meeting: Architect will schedule and conduct a Project Closeout Meeting, at a time convenient to Owner and Architect, but no later than (30) thirty days prior to the scheduled date of Substantial Completion.
1. Conduct the conference to review requirements and responsibilities related to Project closeout.
2. Required Attendees: Authorized representatives of Owner and Architect; 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 and completion of Contractor's punch list.
b. Responsibility for removing temporary facilities and controls.
c. Owner's partial occupancy requirements.
d. Coordination of separate contracts for owner related work prior to occupancy.
e. Installation of Owner's furniture, fixtures, and equipment.
f. Requirements for preparing operations and maintenance data.
g. Requirements for the Submittal of written warranties.
h. Requirements for demonstration and training.
i. Requirements for submission of record documents, record specifications and record submittals.
j. Responsibility and schedule for final cleaning
k. Procedures for processing Applications for Payment at Substantial Completion and for final payment.
4. Minutes: Entity conducting meeting will record and distribute meeting minutes.

PROJECT MANAGEMENT AND COORDINATION

PART 2 PRODUCTS (NOT APPLICABLE)

PART 3 EXECUTION (NOT APPLICABLE)

END OF SECTION 013100

SECTION 013200
CONSTRUCTION PROGRESS DOCUMENTATION

PART 1 GENERAL

1.01 SUMMARY

A. Section includes administrative and procedural requirements for documenting the progress of construction during performance of the Work, including the following:
   1. Start-up construction schedule.
   2. Contractor's construction schedule.
   3. Daily construction reports.
   4. Field condition reports.
   5. Special reports.

B. Related Sections:
   1. Division 01 Section "Submittal Procedures" for submitting schedules and reports.
   2. Division 01 Section "Quality Requirements" for submitting a schedule of tests and inspections.

1.02 INFORMATIONAL SUBMITTALS

A. Format for Submittals: Submit required submittals in the following format(s):
   1. Electronic PDF files.

B. Start-up construction schedule.

C. Contractor's Construction Schedule: Initial schedule, of size required to display entire schedule for entire construction period.

D. Daily Construction Reports: Submit at weekly intervals.

E. Field Condition Reports: Submit at time of discovery of differing conditions.

F. Special Reports: Submit at time of unusual event.

1.03 QUALITY ASSURANCE

A. Prescheduling Conference: Conduct conference at Project site to comply with requirements in Division 01 Section "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. Review delivery dates for Owner-furnished products.
   4. Review schedule for work of Owner's separate contracts.
   5. Review time required for review of submittals and resubmittals.
   6. Review requirements for tests and inspections by independent testing and inspecting agencies.
   7. Review time required for completion and startup procedures.
   8. Review and finalize list of construction activities to be included in schedule.
   9. Review submittal requirements and procedures.
   10. Review procedures for updating schedule.

1.04 COORDINATION

A. Coordinate preparation and processing of schedules and reports with performance of construction activities and with scheduling and reporting of separate contractors.

CONSTRUCTION PROGRESS DOCUMENTATION

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

2.01 CONTRACTOR'S CONSTRUCTION SCHEDULE, GENERAL

A. Time Frame: Extend schedule from date established for commencement of the Work to date of Substantial 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 story or separate area as a separate numbered activity for each principal element of the Work. Comply with the following:
   1. Activity Duration: Define activities and days
   2. Procurement Activities: Include procurement process activities for long lead items and major items, requiring a cycle of more than (60) sixty 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 Division 01 Section "Submittal Procedures" in schedule. Coordinate submittal review times in Contractor's construction schedule with submittal schedule.
   4. Startup and Testing Time: Include not less than (15) fifteen days for startup and testing.
   5. Punch List and Final Completion: Include not more than (30) thirty days for punch list and final completion.

C. Schedule Constraints: Include constraints and work restrictions indicated in the Contract Documents and as follows in schedule and show how the sequence of the Work is affected.
   1. Phasing: Arrange list of activities on schedule by phase.
   2. Work under More Than One Contract: Include a separate activity for each contract.
   3. Work by Owner: Include a separate activity for each portion of the Work performed by Owner.
   4. Products Ordered in Advance: Include a separate activity for each product. Include delivery date indicated in Division 01 Section "Summary". Delivery dates indicated stipulate the earliest possible delivery date.
   5. Owner-Furnished Products: Include a separate activity for each product. Include delivery date indicated in Division 01 Section "Summary". Delivery dates indicated stipulate the earliest possible delivery date.
   6. Work Restrictions: Show the effect of the following items on the schedule:
      a. Coordination with existing construction.
      b. Limitations of continued occupancies.
      c. Uninterruptible services.
      d. Partial occupancy before Substantial Completion.
      e. Use of premises restrictions.
      f. Provisions for future construction.
      g. Seasonal variations.
      h. Environmental control.
   7. Work Stages: Indicate important stages of construction for each major portion of the Work, including, but not limited to, the following:
      a. Submittals.
      b. Purchases.
      c. Mockups.

CONSTRUCTION PROGRESS DOCUMENTATION

d. Sample testing.
e. Deliveries.
f. Installation.
g. Tests and inspections.
h. Adjusting.
i. Startup and placement into final use and operation.

8. Construction Areas: Identify each major area of construction for each major portion of the Work. Indicate where each construction activity within a major area must be sequenced or integrated with other construction activities to provide for the following:
   a. Structural completion.
   b. Permanent space enclosure.
   c. Completion of mechanical installation.
   d. Completion of electrical installation.
   e. Substantial Completion.

D. Milestones: Include milestones indicated in the Contract Documents in schedule, including, but not limited to, the Notice to Proceed and Substantial Completion.

E. 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 RFI's.
   3. Rejected or unreturned submittals.
   4. Notations on returned submittals.

F. Recovery Schedule: When periodic update indicates the Work is (14) fourteen or more calendar days behind the current approved schedule, submit a separate recovery schedule indicating means by which Contractor intends to regain compliance with the schedule. Indicate changes to working hours, working days, crew sizes, and equipment required to achieve compliance, and date by which recovery will be accomplished.

G. Computer Scheduling Software: Prepare schedules using current version of a program that has been developed specifically to manage construction schedules.

2.02 START-UP CONSTRUCTION SCHEDULE

A. Bar-Chart Schedule: Submit start-up horizontal bar-chart-type construction schedule within (7) seven days of date established for approval. Schedule to start from the Notice of Award.

B. Preparation: Indicate each significant construction activity separately. Identify first workday of each week with a continuous vertical line. Outline significant construction activities for first (90) ninety days of construction. Include skeleton diagram for the remainder of the Work and a cash requirement prediction based on indicated activities.

2.03 CONTRACTOR'S CONSTRUCTION SCHEDULE (GANTT CHART)

A. Gantt-Chart Schedule: From the approved Bar Chart Schedule submit a comprehensive, fully developed, horizontal, Gantt-chart-type, Contractor's construction schedule within (30) thirty days Base schedule on the approved startup construction schedule and additional information received since the start of Project.

2.04 REPORTS

A. Daily Construction Reports: Prepare a daily construction report recording the following information concerning events at Project site:

CONSTRUCTION PROGRESS DOCUMENTATION

1. List of Prime contractors at Project site.
2. List of subcontractors at Project site.
3. Approximate count of personnel at Project site.
4. Equipment at Project site.
5. Material deliveries.
6. High and low temperatures and general weather conditions, including presence of rain or snow.
7. Accidents.
8. Meetings and significant decisions.
9. Unusual events (refer to special reports).
10. Stoppages, delays, shortages, and losses.
11. Meter readings and similar recordings.
12. Emergency procedures.
13. Orders and requests of authorities having jurisdiction.
14. Change Orders received and implemented.
15. Construction Change Directives received and implemented.
16. Services connected and disconnected.
17. Equipment or system tests and startups.
18. Partial completions and occupancies.
19. Substantial Completions authorized.

B. Field Condition Reports: Immediately on discovery of a difference between field conditions and the Contract Documents, prepare and submit a detailed report. Submit with a Request for Information. Include a detailed description of the differing conditions, together with recommendations for changing the Contract Documents.

2.05 SPECIAL REPORTS

A. General: Submit special reports directly to Owner within (1) one day(s) of an occurrence. Distribute copies of report to parties affected by the occurrence.

B. 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

3.01 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.

B. Distribution: Distribute copies of approved schedule to Owner, Architect, separate contractors, testing and inspecting agencies, and other parties identified by Contractor with a need-to-know schedule responsibility.
   1. Post copies in Project meeting rooms and temporary field offices.

CONSTRUCTION PROGRESS DOCUMENTATION

2. When revisions are made, distribute updated schedules to the same parties and post in the same locations. Delete parties from distribution when they have completed their assigned portion of the Work and are no longer involved in performance of construction activities.

END OF SECTION 013200

SECTION 013300
SUBMITTAL PROCEDURES

PART 1 GENERAL

1.01 SUMMARY

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

B. This specification describes the procedures for submission of submittals and shop drawings using Newforma Info Exchange.
   1. The Contractor will be required to use the Newforma Info Exchange for the transfer of Submittals, Shop Drawings and RFI's. There will be **no exceptions** to this requirement. The contractor will be given a login and password free of charge. For more information follow the procedure below.
      a. Information and instructions for use are available for review by the Contractor by contacting CPL. The Contractor is to provide an email address for the file to be sent. A PDF file will be emailed to the requesting contractor.

C. Related Requirements:
   1. Section 012900 "Payment Procedures" for submitting Applications for Payment and the schedule of values.
   2. Section 013100 "Project Management and Coordination" for submitting coordination drawings and subcontract list..
   3. Section 013200 "Construction Progress Documentation" for submitting schedules and reports, including Contractor's construction schedule.
   4. Section 014000 "Quality Requirements" for submitting test and inspection reports, and schedule of tests and inspections.
   5. Section 017700 "Closeout Procedures" for submitting closeout submittals and maintenance material submittals.
   6. Section 017823 "Operation and Maintenance Data" for submitting operation and maintenance manuals.
   7. Section 017839 "Project Record Documents" for submitting record Drawings, record Specifications, and record Product Data.
   8. Section 017900 "Demonstration and Training" for submitting video recordings of demonstration of equipment and training of Owner's personnel.

1.02 DEFINITIONS

A. Action Submittals: Written and graphic information and physical samples that require Architect'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 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.

1.03 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 insufficient to perform services or certification required, submit a written request for additional information to Architect.
2. Delegated Design must be done by qualified professional, licensed to practice in the State of Pennsylvania.

B. Delegated-Design Services Certification: In addition to Shop Drawings, Product Data, and other required submittals, submit digitally signed PDF file of certificate, signed and sealed by the responsible design professional, licensed to practice in the State of Pennsylvania, 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.

1.04 SUBMITTAL GENERAL ADMINISTRATIVE REQUIREMENTS

A. The Contractor shall prepare a Submittal Log containing the information required to be submitted under the Submittal article from each respective Specification Section. With each item listed the Contractor shall provide anticipated dates for submission to the Architect. The Architect will review and accept or request that corrections be made for subsequent acceptance. This acceptance will constitute an approval for the submittal, shop drawings and sample submissions to commence. **No Submittals or Shop Drawings will be reviewed by the Architect until an approved Submittal Schedule is in place.**

B. The contractor shall prepare expected submittals in Newforma that correspond to all submittals listed on the submittal schedule at the time of submission of the submittal log. These expected submittals are to follow the naming conventions laid out in section “1.5 Submittal Schedule” and “1.6 Submittal Identification”.

C. The Contractor is responsible for all costs for creating electronic files for the submittal process. The Architect will not provide this service.
   1. The Submittal Cover Sheet located in Specification Section 006000 Project Forms shall be used for all Submittals.
      a. An electronic form of the submittal cover is available upon request from the Architect.
   2. The Submittal Cover sheet when scanned to a PDF shall be the first page viewed in the individual file.
      a. Each product submitted within a specification section shall have a Submittal Cover sheet attached. Combined submittals with one cover page will not be accepted
      b. Each Submittal Cover sheet shall be filled in completely. **Files that are sent with the Submittal Cover Sheet missing or not filled in correctly will not be reviewed**. The Architect will send a notice that the submittal is missing information. If the Contractor fails to correct or provide the proper submittal within (15) fifteen days, notice will be provided, and the submittal will be REJECTED.
   3. The Contractor(s) will be provided with a link to upload files to the Newforma Info Exchange. The site address and a “log in” will be provided to the Contractor(s) free of charge.
   4. A read-only Record Submittal Log and RFI Log will be available from the Newforma Info Exchange for the Contractor's reference in checking the status of the submittals and shop drawings.

D. Coordination: Coordinate preparation and processing of submittals with performance of construction activities.
   1. Coordinate each submittal with fabrication, purchasing, testing, delivery, other submittals, and related activities that require sequential activity.
   2. Submit all submittal items required for each Specification Section concurrently unless partial submittals for portions of the Work are indicated on approved submittal schedule.

SUBMITTAL PROCEDURES

3. Submit action submittals and informational submittals required by the same Specification Section as separate packages under separate transmittals.
4. Coordinate transmittals of different types of submittals from related sections for parts of the work so processing will not be delayed because of need to review submittals concurrently for coordination.
    a. Architect reserves the right to withhold action on a submittal requiring coordination with other submittals until all related submittals are received. Delays associated with the above are not the Architects responsibility and rests solely with the Contractor.

E. Architect's Digital Data Files:
1. Architect will not furnish Contractor with digital drawings for the preparation of shop drawings.

1.05 SUBMITTAL SCHEDULE

A. Submittal Schedule: Submit, as an action submittal, a list 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 and additional time for handling and reviewing submittals required by those corrections.
1. Submit a preliminary, if not final, Submittal Schedule for approval a minimum of (15) fifteen days after award of contract. Failure to submit a submittal schedule within the required time frame will result in the refusal by the Architect to review any submittals. Delays associated with failure to receive the Submittal Schedule are not the Architect's responsibly and rest solely with the Contractor.

B. The information is required to be submitted under the Submittal article from each respective Specification Section. With each item listed, the Contractor shall provide anticipated dates for submission to the Architect. The Architect will review and accept or request that corrections be made for subsequent acceptance. This acceptance will constitute a review for the submittal, shop drawings and sample submissions may commence. No Submittals or Shop Drawings will be reviewed by the Architect until an approved Submittal Schedule is in place.
1. The Submittal Schedule shall be coordinated with the overall Project Schedule to ensure that submittals are submitted and reviewed so as not to delay the Project Schedule.
2. The Architect will not be responsible for ensuring that all required Shop Drawings, Product Data, Samples or similar submittals that are required to be submitted and reviewed under the Contract Documents are submitted by the Contractor. Submissions of Shop Drawings, Product Data, Samples or similar submittals are the Contractor’s sole responsibility. Delays associated with the Contractor’s failure to provide the required submittals are the Contractor's responsibility.
3. Coordinate submittal schedule with list of subcontracts, the schedule of values, and Contractor's construction schedule.
4. Initial Submittal Schedule: Submit concurrently with startup construction schedule. Include submittals required during the first (30) thirty 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.
5. Final Submittal Schedule: Submit concurrently with the first complete submittal of Contractor's construction schedule.
    a. Submit revised submittal schedule as required to reflect changes in current status and timing for submittals.
6. 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.

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e. Description of the Work covered.
f. Scheduled date for Architect's final release or approval.
g. Scheduled dates for purchasing.
h. Scheduled date of fabrication.
i. Scheduled dates for installation.

1.06 SUBMITTAL IDENTIFICATION

A. Submittal Cover Sheet: Attach one cover sheet for each product, shop drawing or sample. **DO NOT** combine submittals together with one cover sheet for multiple items. They will not be reviewed.

B. Submittal Information: Include the following information in each submittal. Use the submittal cover form found in specification section 006000 Project Forms. An electronic form can be sent to the contractor upon request.
1. Contractor, Address, Phone/fax and or Email
2. Contractors Submittal Number.
3. Architects Project Number (if not filled in by the Architect).
4. Project Name (if not filled in by the Architect).
5. Type of submittal being sent (select box).
6. Product Identification including the following: Provide one submittal cover sheet for each product within a specification section.
   a. Specification Section Number.
   b. Contract Drawing Number.
   c. Product Name.
   d. Specification Reference: Part/Paragraph.
   e. Detail Reference.
   f. Manufacturer.
7. Contractors Approval: The contractor must acknowledge that they have reviewed the submittal for conformance with the Contract Documents and must sign and date the approval.
8. Deviation from the Contract Documents: Where the submittal may not meet all of the requirements of the specified item. The contractor must indicate how the submitted item differs from the specified item.
9. Contractor Comments: Any additional comments by the contractor should be indicated in this space. (Provide an attachment sheet for any other information required that will not fit on the cover sheet).

C. Deviations and Additional Information: On each individual submittal, clearly indicate deviations from requirements in the Contract Documents, including minor variations and limitations; include relevant additional information, revisions, line by line comparison and other information requested by Architect. Indicate by highlighting on each submittal or noting on attached separate sheet. Identify options requiring selection by Architect.

D. File Naming (for uploading to Newforma Info Exchange): Each submittal or shop drawing file uploaded to the project on the Newforma Info Exchange, shall have in the file name, the specification section number followed by the submittal number, the submittal abbreviation and the specification section name. For re-submissions an R1 would be added following submittal number. The file name must include the following information:

Example:

081416	001	PD	Flush Wood Doors
Spec Section	Submittal No.	Submittal Abbr	Specification Name

File to Read: 081416-001 PD - Flush Wood Doors

SUBMITTAL PROCEDURES

Re-submission to Read: 081416-001-R1 PD - Flush Wood Doors

Submittal Abbreviations required to be used in the file name on submittals are as follows:

CD - Coordination Drawings

CERT - Certification(s)

CLC - Calculations

DD - Design Data

EJ - Engineer's Judgement

O&M - Operations and Maintenance Manuals

PD - Product Data

PHOTO - Photo

QD - Qualification Data

RPT - Report

SAMP - Sample

SCH - Schedule

SEL - Make A Selection

SD - Shop Drawing(s)

STDY - Study

TR - Test Results

WAR - Warranty

E. When uploading submittals or RFI's to the Newforma Info Exchange, complete the online transmittal. The information required is derived from the Contractor's submittal cover sheet or RFI. Instructions for using the Newforma Info Exchange are available from CPL. These instructions can be emailed to the contractor.

1.07 SUBMITTAL DATA AND TESTING REQUIREMENTS

A. Product Data: Collect information into a single submittal for each element of construction and type of product or equipment. Each product within a specification section shall have a separate submittal cover.
   1. If information must be specially prepared for submittal because standard published data are unsuitable for use, submit as Shop Drawings, not as Product Data.
   2. Mark each copy of each submittal to show which products and options are applicable. Send full submittals for each product. Partial submittals will not be reviewed until all required submittal information is received. The Architect will not be responsible for project delays due to the Contractor's failure to submit the required submittal information in a complete package.
   3. Include the following information, as applicable:
      a. Manufacturer's catalog cuts.
      b. Manufacturer's product specifications.
      c. Standard color charts.
      d. Statement of compliance with specified referenced standards.
      e. Testing by recognized testing agency.

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f. Application of testing agency labels and seals.
g. Notation of coordination requirements.
h. Availability and delivery time information.

4. For equipment, include the following in addition to the above, as applicable:
   a. Wiring diagrams that show factory-installed wiring.
   b. Printed performance curves.
   c. Operational range diagrams.
   d. Clearances required to other construction, if not indicated on accompanying Shop Drawings.
5. Submit Product Data before Shop Drawings, and before or concurrently with Samples.

B. Shop Drawings: Prepare project-specific information for each shop drawing. Do not base Shop Drawings on reproductions of the Contract Documents or standard printed data, unless submittal based on Architect's digital data drawing files is otherwise permitted.
   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. Description any conflicts with other trades.
      h. Seal and signature of professional engineer if specified.

C. Samples: Submit Samples for review of type, color, pattern, and texture for a check of these characteristics with other materials.
   1. Transmit Samples that contain multiple, related components, such as accessories together in one submittal package. If samples are delivered with product data, only the samples will be reviewed. The Product Data must be uploaded to the Newforma Info Exchange. A duplicate submittal cover sheet is to be uploaded to the Newforma Info Exchange as a record of sample delivery.
      a. The Product Data is to be loaded concurrent with the delivery of samples. Samples may be delivered/given to the Architect. In the remarks column of the transmittal place “given to the Architect”.
   2. Identification: Permanently attach label on unexposed side of Samples that includes the following:
      a. Project name and submittal number.
      b. Generic description of Sample.
      c. Product name and name of manufacturer.
      d. Sample source.
      e. Number and title of applicable Specification Section.
      f. Specification paragraph number and generic name of each item.
      g. In addition to all hard copy and physical samples submitted, duplicate digital submittal is to be produced for review, record and tracking purposes through Newforma Info Exchange. Include same information as above as well as a high resolution, color, digital image of all samples with labeled information clearly visible for each physical sample.
   3. 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 of use.

SUBMITTAL PROCEDURES

b. Samples not incorporated into the Work, or otherwise designated as Owner's property, are the property of Contractor.

4. 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.
   a. Number of Samples: Submit (1) one full set(s) of available choices where color, pattern, texture, or similar characteristics are required to be selected from manufacturer's product line. Architect will return submittal with options selected.
5. 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.
   a. Number of Samples: Submit (3) three sets of Samples. Architect will retain (2) two Sample sets; remainder will be returned. Mark up and retain one returned Sample set as a project record Sample.
      1) Submit a single Sample where assembly details, workmanship, fabrication techniques, connections, operation, and other similar characteristics are to be demonstrated.
      2) If variation in color, pattern, texture, or other characteristic is inherent in material or product represented by a Sample, submit at least (3) three sets of paired units that show approximate limits of variations.

D. Information requirements for each submittal: Where submittal is requiring Schedules, Product Data, Qualification Data, Design Data, Certificates and Tests use the following protocol.
   1. Schedules: 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:
   2. Product Data: Include unique identifier for each product indicated in the Contract Documents or assigned by Contractor if none is indicated.
      a. Manufacturer and product name, and model number if applicable.
      b. Number and name of room or space.
      c. Location within room or space.
   3. Qualification Data: Prepare written information that demonstrates capabilities and experience of firm or person. Include lists of completed projects with project names and addresses, contact information of architects and owners, and other information specified.
   4. Design Data: Prepare and submit written and graphic information indicating compliance with indicated performance and design criteria in individual Specification Sections. Include list of assumptions and summary of loads. Include load diagrams if applicable. Provide name and version of software, if any, used for calculations. Number each page of submittal.
   5. Certificates:
      a. Certificates and Certifications Submittals: Submit a statement that includes signature of entity responsible for preparing certification. Certificates and certifications shall be signed by an officer or other individual authorized to sign documents on behalf of that entity. Provide a notarized signature where indicated.
      b. Insert definition of Contractor certificates here if required by individual Specification Sections. See the Evaluations.
      c. Installer Certificates: Submit written statements on manufacturer's letterhead, certifying that Installer complies with requirements in the Contract Documents and, where required, is authorized by manufacturer for this specific Project.

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d. 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.
e. Material Certificates: Submit written statements on manufacturer's letterhead, certifying that material complies with requirements in the Contract Documents.
f. Product Certificates: Submit written statements on manufacturer's letterhead, certifying that product complies with requirements in the Contract Documents.
g. Welding Certificates: Prepare written certification that welding procedures and personnel comply with requirements in the Contract Documents. Submit record of AWS B2.1/B2.1M on AWS forms. Include names of firms and personnel certified.
h. Installer Certificates: Submit written statements on manufacturer's letterhead certifying that Installer complies with requirements in the Contract Documents and, where required, is authorized by manufacturer for this specific Project.
i. 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.
j. Product Certificates: Submit written statements on manufacturer's letterhead certifying that product complies with requirements in the Contract Documents.
k. Material Certificates: Submit written statements on manufacturer's letterhead certifying that material complies with requirements in the Contract Documents.

6. Test and Research Reports:
   a. 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 substrate preparation and primers required.
   b. 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.
   c. 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.
   d. 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.
   e. 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.
   f. 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. Include the following information:
      1) Name of evaluation organization.
      2) Date of evaluation.
      3) Time period when report is in effect.
      4) Product and manufacturers' names.
      5) Description of product.
      6) Test procedures and results.
      7) Limitations of use.

E. Submit the following submittals: Within (15) fifteen days of contract award.
   1. Submittal Schedule including dates of anticipated review and approval.
      a. No submittals will be reviewed without an approved Submittal Schedule in place.

2. 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:
   a. Name, address, telephone number and email address of entities performing subcontract or supplying products.
   b. Number and title of related Specification Section(s) covered by subcontract.
3. Contractor's Construction Schedule: Comply with requirements specified in Section 013200 "Construction Progress Documentation".
4. Schedule of Values: Comply with requirements specified in Section 012900 "Payment Procedures".

F. Submit with in the first (30) thirty days after Contract Award
1. Test and Inspection Reports and Schedule of Tests and Inspections Submittals: Comply with requirements specified in Section 014329 "Special Inspections".
2. 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.
3. 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.

G. Submit Field Test Reports during construction within (15) fifteen days of the testing date and as follows:
1. 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.

H. Submit a minimum (30) thirty days prior to Project Closeout:
1. Closeout Submittals and Maintenance Material Submittals: Comply with requirements specified in Section 017700 "Closeout Procedures".
2. Maintenance Data: Comply with requirements specified in Division 01 Section 017823 "Operation and Maintenance Data".

1.08 SUBMITTAL PROCESSING

A. Processing Time: Allow time for submittal review, including time for re-submittals, as follows. Time for review shall commence on Architect's receipt of submittal. No extension of the Contract Time will be authorized because of failure to transmit submittals enough in advance of the Work to permit processing, including re-submittals.

B. The architect will not be responsible for project delays due to the contractor’s failure to submit the required submittal information in time to allow for review based on the stipulated review time and to meet the project schedule.

C. Initial Review: Allow (10) ten Business days for initial review of each submittal. Allow additional time if coordination with subsequent submittals is required. Architect will advise Contractor when a submittal being processed must be delayed for coordination.

D. Intermediate Review: If intermediate submittal is necessary, process it in same manner as initial submittal.

E. Re-submittal Review: Allow (10) ten business days for review of each re-submittal.

F. Sequential Review: Where sequential review of submittals by Architect's consultants, Owner, or other parties is indicated, allow (15) fifteen Business days for initial review of each submittal.

G. Concurrent Consultant Review: Where the Contract Documents indicate that submittals may be transmitted simultaneously to Architect and to Architect's consultants, allow (10) tenBusiness days for review of each submittal. Submittal will be returned to Architect before being returned to Contractor.

H. Where submittal are required to be approved that are part of an assembly or for items such as finishes where color selections are required. The submittal will be retained until all of the information related to these systems and color selections is provided and accepted.

I. Products with multiple submittals may be held until all necessary information has been submitted for architect to make a complete review. Submittals dependent on coordinating information from related or dependent products; or products with critical interface with other products may be held until all information is submitted for architect to make a complete review and coordinate all required information. EXAMPLE: door frames will not be reviewed without door hardware.

J. Resubmittals: Make resubmittals in same form and number of copies as initial submittal.
   1. Note date and content of previous submittal.
   2. Note date and content of revision in label or title block, and clearly indicate extent of revision.
   3. Resubmit submittals until they are marked with reviewed notation from Architect's action stamp.

K. Deviations and Additional Information: On an attached separate sheet, prepared on Contractor's letterhead, record relevant information, requests for data, revisions other than those requested by Architect on previous submittals, and deviations from requirements in the Contract Documents, including minor variations and limitations. Include same identification information as related submittal.

1.09 SUBMITTAL PROCEDURES

A. Qualification Data: Prepare written information that demonstrates capabilities and experience of firm or person. Include lists of completed projects with project names and addresses, contact information of architects and owners, and other information specified.

B. Welding Certificates: Prepare written certification that welding procedures and personnel comply with requirements in the Contract Documents. Submit record of Welding Procedure Specification and Procedure Qualification Record on AWS forms. Include names of firms and personnel certified.

C. Installer Certificates: Submit written statements on manufacturer's letterhead certifying that Installer complies with requirements in the Contract Documents and, where required, is authorized by manufacturer for this specific Project.

D. 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.

E. Product Certificates: Submit written statements on manufacturer's letterhead certifying that product complies with requirements in the Contract Documents.

F. Material Certificates: Submit written statements on manufacturer's letterhead certifying that material complies with requirements in the Contract Documents.

G. 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.

H. 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.

I. 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. Include the following information:
   1. Name of evaluation organization.
   2. Date of evaluation.
   3. Time period when report is in effect.
   4. Product and manufacturers' names.
   5. Description of product.
   6. Test procedures and results.
   7. Limitations of use.

J. Schedule of Tests and Inspections: Comply with requirements specified in Division 01 Section "Quality Requirements".

K. 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.

L. 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.

M. 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.

N. Maintenance Data: Comply with requirements specified in Division 01 Section "Operation and Maintenance Data".

O. 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.

1.10 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.

B. Contractors Approval: Provide Contractor's approval signature and date on the Submittal Cover sheet certifying that submittal has been reviewed, checked, and approved for compliance with the Contract Documents.

1.11 ARCHITECT'S ACTION

A. Submittals: Architect will review each submittal, make marks to indicate corrections or revisions required, and return it. Architect will respond to each submittal indicating one of the following actions required:

SUBMITTAL PROCEDURES

1. NO EXCEPTIONS TAKEN (NET): Architect takes no exception to the submittal. This part of the Work covered by the submittal may proceed provided it complies with requirements of the Contract Documents; final acceptance will depend upon that compliance.
2. FURNISH AS CORRECTED (FAC): No exceptions taken except what is identified by the Architect. The part of the Work covered by the submittal may proceed provided it complies with notations or corrections on the submittal and requirements of the Contract Documents; final acceptance will depend on that compliance. Furnish any additional related information as requested.
3. REVISE AND RESUBMIT (RAR): Revise the submittal based on the Architects comments and resubmit the submittal. Do not proceed with that part of the Work covered by the submittal, including purchasing, fabrication, delivery, or other activity. Revise or prepare a new submittal in accordance with the notations; resubmit without delay. Repeat if necessary to obtain a different action mark.
    a. Do not permit submittals marked “Revise and Resubmit” to be used at the Project Site, or elsewhere where Work is in progress.
4. REJECTED (REJ): The submittal is rejected. See Architects comments on why submittal was rejected.
    a. Submittal has not been reviewed by the Contractor and so noted.
    b. Submittal has been prepared without due regard for information called for or logically implied by the Contract Documents.
    c. Information is not sufficiently complete or accurate to verify that work represented is in accordance with the Contract Documents.
    d. Do not permit submittals marked “Rejected” to be used at the Project Site, or elsewhere where Work is in progress.
5. NO ACTION TAKEN (NAT): The submittal is not required and will not be reviewed.

B. Submittals by Newforma Info Exchange: Architect will indicate, on Newforma Info Exchange, the appropriate action.

C. Informational Submittals: Architect will review each submittal and will not return it or will return it if it does not comply with requirements. The Architect's action will be noted in the Newforma Info Exchange.

D. Partial submittals prepared for a portion of the Work will be reviewed when use of partial submittals has received prior approval from Architect. The Architect's action will be noted in the Newforma Info Exchange and noted as a partial review until a full submittal can be received.

E. Incomplete submittals are unacceptable, will be considered nonresponsive, and will be returned for re-submittal without review.

F. Submittals not required by the Contract Documents will not be reviewed and will receive no action.

PART 2 PRODUCTS (NOT USED)

PART 3 EXECUTION (NOT USED)

END OF SECTION 013300

SECTION 014000
QUALITY REQUIREMENTS

PART 1 GENERAL

1.01 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 and Owner or authorities having jurisdiction are not limited by provisions of this Section.

C. Related Sections:
   1. Divisions 02 through 49 Sections for specific test and inspection requirements.

1.02 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.

C. Mockups: Full size physical assemblies that are constructed on-site. Mockups are constructed to verify selections made under sample submittals; to demonstrate aesthetic effects and, where indicated, qualities of materials and execution; to review coordination, testing, or operation; to show interface between dissimilar materials; and to demonstrate compliance with specified installation tolerances. Mockups are not Samples. Unless otherwise indicated, approved mockups establish the standard by which the Work will be judged.
   1. Integrated Exterior Mockups: Mockups of the exterior envelope erected separately from the building but on Project site, consisting of multiple products, assemblies, and subassemblies.
   2. Room Mockups: Mockups of typical interior spaces complete with wall, floor, and ceiling finishes, doors, windows, millwork, casework, specialties, furnishings and equipment, and lighting.

D. Preconstruction Testing: Tests and inspections performed specifically for the Project before products and materials are incorporated into the Work to verify performance or compliance with specified criteria.

E. 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.

F. Source Quality-Control Testing: Tests and inspections that are performed at the source, i.e., plant, mill, factory, or shop.

G. Field Quality-Control Testing: Tests and inspections that are performed on-site for installation of the Work and for completed Work.

H. Testing Agency: An entity engaged to perform specific tests, inspections, or both. Testing laboratory shall mean the same as testing agency.

I. 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 or trades.

J. Experienced: When used with an entity or individual, "experienced" means having successfully completed a minimum of (5) five Projects similar in nature, size, and extent of this Project; being familiar with special requirements indicated; and having complied with requirements of authorities having jurisdiction.

1.03 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.

B. Delegated-Design Services Statement: Submit a statement 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, indicating that the products and systems are in compliance with performance and design criteria indicated. Include list of codes, loads, and other factors used in performing these services.
   1. The design professional shall be licensed to perform professional design services In the jurisdiction of the project location.

1.04 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 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 for a decision before proceeding.

1.05 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.

QUALITY REQUIREMENTS

1.06 INFORMATIONAL SUBMITTALS

A. Contractor's Statement of Responsibility: When required by authorities having jurisdiction, submit copy of written statement of responsibility sent to authorities having jurisdiction before starting work on the following systems.
   1. Seismic-force resisting system, designated seismic system, or component listed in the designated seismic system quality assurance plan prepared by the Architect.
   2. Main wind-force resisting system or a wind-resisting component listed in the wind-force-resisting system quality assurance plan prepared by the Architect.

B. 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.

C. 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.

1.07 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 title and number.
   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 re-inspecting.

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.

1.08 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 with (5) five years' experience 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 with (5) five years’ experience 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 with (5) five years' experience 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 to those indicated for this Project in material, design, and extent.

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.

QUALITY REQUIREMENTS

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, 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, 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.

K. Mockups: Before installing portions of the Work requiring mockups, build mockups for each form of construction and finish required to comply with the following requirements, using materials indicated for the completed Work:
   1. Build mockups in location indicated or, if not indicated, as directed by Architect.
   2. Notify Architect (7) seven days in advance of dates and times when mockups will be constructed.
   3. Employ supervisory personnel who will oversee mockup construction. Employ workers who will be employed to perform same tasks during the construction at Project.
   4. Demonstrate the proposed range of aesthetic effects and workmanship.
   5. Obtain Architect's approval of mockups before starting corresponding Work, fabrication, or construction.
      a. Allow (7) seven days for initial review and each re-review of each mockup.
   6. Promptly correct unsatisfactory conditions noted by Architect's preliminary review, to the satisfaction of the Architect, before completion of final mockup.
   7. Approval of mockups by the Architect does not constitute approval of deviations from the Contract Documents contained in mockups unless Architect specifically approves such deviations in writing.
   8. Maintain mockups during construction in an undisturbed condition as a standard for judging the completed Work.
   9. Demolish and remove mockups when directed unless otherwise indicated.

L. Integrated Exterior Mockups: Construct integrated exterior mockup as indicated on Drawings. Coordinate installation of exterior envelope materials and products for which mockups are required in individual Specification Sections, along with supporting materials. Comply with requirements in "Mockups" Paragraph.
   1. Coordinate construction of the mockup to allow observation of air barrier installation, flashings, air barrier integration with fenestration systems, and other portions of the building air/moisture barrier and drainage assemblies, prior to installation of veneer, cladding elements, and other components that will obscure the work.

M. Room Mockups: Construct room mockups as indicated on Drawings, incorporating required materials and assemblies, finished according to requirements. Provide required lighting and additional lighting where required to enable Architect to evaluate quality of the Work. Comply with requirements in "Mockups" Paragraph.

1.09 QUALITY CONTROL

A. Owner Responsibilities: Where quality-control services are indicated as Owner's responsibility, Owner will engage a qualified testing agency to perform these services.
   1. Owner will furnish Contractor with names, addresses, and telephone numbers of testing agencies engaged and a description of types of testing and inspecting they are engaged to perform.
   2. Costs for retesting and re-inspecting construction that replaces or is necessitated by work that failed to comply with the Contract Documents will be charged to Contractor, and the Contract Sum will be adjusted by Change Order.

B. 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.
   3. Where quality-control services are indicated as Contractor's responsibility, submit a certified written report, in duplicate, of each quality-control service.
   4. Testing and inspecting requested by Contractor and not required by the Contract Documents are Contractor's responsibility.
   5. Submit additional copies of each written report directly to authorities having jurisdiction, when they so direct.
   6. Notify testing agencies at least (24) twenty four hours in advance of time when Work that requires testing or inspecting will be performed.

C. 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 Division 01 Section "Submittal Procedures".

D. 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.

E. Retesting/Re-inspecting: Regardless of whether original tests or inspections were Contractor's responsibility, provide quality-control services, including retesting and re-inspecting, for construction that replaced Work that failed to comply with the Contract Documents.

QUALITY REQUIREMENTS

F. Testing Agency Responsibilities: Cooperate with Architect and Contractor in performance of duties. Provide qualified personnel to perform required tests and inspections.
   1. Notify Architect 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.

G. 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. Preliminary design mix proposed for use for material mixes that require control by testing agency.
   6. Security and protection for samples and for testing and inspecting equipment at Project site.

H. Coordination: Coordinate sequence of activities to accommodate required quality-assurance and -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.

1.10 QUALITY-CONTROL PLAN

A. Contractor's Quality-Control Plan, The Contractor shall submit quality-control plan within (10) ten days of Notice of Award, and not less than (5) 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 and to coordinate Owner's quality-assurance and quality-control activities. Coordinate with Contractor's Construction Schedule.

B. Quality-Control Personnel Qualifications: Engage qualified 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. Distinguish source quality-control tests and inspections from field quality-control 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 the 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 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.

1.11 SPECIAL TESTS AND INSPECTIONS

A. Special Tests and Inspections: Owner will engage a qualified testing agency to conduct special tests and inspections required by authorities having jurisdiction as the responsibility of the Owner and as follows:
1. Verifying that manufacturer maintains detailed fabrication and quality-control procedures and reviews the completeness and adequacy of those procedures to perform the Work.
2. Notifying Architect and Contractor promptly of irregularities and deficiencies observed in the Work during performance of its services.
3. Submitting a certified written report of each test, inspection, and similar quality-control service to Architect, with a copy to Contractor, and to Authorities having Jurisdiction.
4. Submitting a final report of special tests and inspections at Substantial Completion, which includes a list of unresolved deficiencies.
5. Interpreting tests and inspections and stating in each report whether tested and inspected work complies with or deviates from the Contract Documents.
6. Retesting and re-inspecting corrected work.

PART 2 PRODUCTS (NOT APPLICABLE)

PART 3 EXECUTION

3.01 TEST AND INSPECTION LOG

A. 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 modifications as they occur. Provide access to test and inspection log for Architect's reference during normal working hours.

3.02 REPAIR AND PROTECTION

A. General: On completion of testing, inspecting, sample taking, and similar services, repair damaged construction and restore substrates and finishes.

QUALITY REQUIREMENTS

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 Division 01 Section "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 014000

SECTION 014200
REFERENCES

PART 1 GENERAL

1.01 KEY DEFINITIONS

A. General: Basic Contract definitions are included in the Conditions of the Contract.

B. "Approved": When used to convey Architect's action on Contractor's submittals, applications, and requests, "approved" is limited to Architect's duties and responsibilities as stated in the Conditions of the Contract.

C. "Directed": A command or instruction by Architect. 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": Operations at Project site including unloading, temporarily storing, unpacking, assembling, erecting, placing, anchoring, applying, working to dimension, finishing, curing, protecting, cleaning, and similar operations.

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.

1.02 DEFINITIONS

A. Air Handling Unit: A blower or fan used for the purpose of distributing supply air to a room, space or area.

B. Approved Agency: An established and recognized agency regularly engaged in conducting tests or furnishing inspection services, when such agency has been approved according to the requirements established in this Section and as required by the Code Official having jurisdiction over this project.

C. Architect: Other terms including “Architect/Engineer” and “Engineer” have the same meaning as "Architect".

D. Company Field Adviser: An employee of the Company which lists and markets the primary components of the system under the name who is certified in writing by the Company to be technically qualified in design, installation, and servicing of the required products or an employee of an organization certified by the foregoing Company to be technically qualified in design, installation, and serving of the required products. Personnel involved solely in sales do not qualify.

E. Concealed Location: A location that cannot be accessed without damaging permanent parts of the building structure or finish surface. Spaces above, below or behind readily removable panels or doors shall not be considered as concealed.

F. Concealed Piping: Piping that is located in a concealed location. (See "concealed location".)

REFERENCES

G. Connect: A term contraction and unless otherwise specifically noted is to mean " The labor and materials necessary to join or attach equipment, materials or systems to perform the functions intended".

H. Construction Manager: Construction Manager's Name.

I. Drain: Any pipe that carries wastewater or water-borne wastes in a building drainage system.

J. Drainage Fittings: Type of fitting or fittings utilized in the drainage system. Drainage fittings are similar to cast-iron fittings, except that instead of having a bell and spigot, drainage fittings are recessed and tapped to eliminate ridges on the inside of the installed pipe.

K. Drainage System: Piping within a public or private premise that conveys sewage, rainwater or other liquid wastes to a point of disposal. A drainage system does not include the mains of a public sewer system or a private or public sewage treatment or disposal plant.
   1. Building Gravity: A drainage system that drains by gravity into the building sewer.
   2. Sanitary: A drainage system that carries sewage and excludes storm, surface and ground water.
   3. Storm: A drainage system that carries rainwater, surface water, condensate, cooling water or similar liquid wastes.

L. Duct: A tube or conduit utilized for conveying air. The air passages of self-contained systems are not to be construed as air ducts.

M. Duct System: A continuous passageway for the transmission of air that, in addition to ducts, includes duct fittings, dampers, plenums, fans and accessory air-handling equipment and appliances.

N. Experienced: When used with an entity, "experienced" means having successfully completed a minimum of five previous projects similar in size and scope to this Project; being familiar with special requirements indicated; and having complied with requirements of authorities having jurisdiction.

O. Headroom: Minimum clearance between the floor and the underside of the point of lowest installed mechanical construction above. In case of stairways and walkways, the minimum clearance between the step or surface of the walkway and the lowest installed mechanical construction above the stairway or the walkway.

P. Include: When used in any form other than "inclusive", is non-limiting and is not intended to mean "all-inclusive."

Q. 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."

R. Inspection Certificate: Identification applied on a product by an approved agency containing the name of the manufacturer, the function and performance characteristics, and the name and identification of an approved agency that indicates that the product or material has been inspected and evaluated by an approved agency.

S. Installer: An installer is the Contractor or another entity engaged by the Contractor, either as an employee, subcontractor, or contractor of lower tier, to perform a particular construction activity, including installation, erection, application, or similar operations. Installers are required to be experienced in the operations they are engaged to perform.
   1. Trades: Using a term such as "carpentry" does not imply that certain construction activities must be performed by accredited or unionized individuals of a corresponding generic name, such as "carpenter." It also does not imply that requirements specified apply exclusively to tradespersons of the corresponding generic name.

REFERENCES

2. Assigning Specialists: Certain Sections of the Specifications require that specific construction activities shall be performed by specialists who are recognized experts in those operations. The specialists must be engaged for those activities, and their assignments are requirements over which the Contractor has no option. However, the ultimate responsibility for fulfilling contract requirements remains with the Contractor.
3. This requirement shall not be interpreted to conflict with enforcing building codes and similar regulations governing the Work. It is also not intended to interfere with local trade-union jurisdictional settlements and similar conventions.

T. Label: An identification applied on a product by the manufacturer that contains the name of the manufacturer, the function and performance characteristics of the product or material, and the name and identification of an approved agency and that indicates that the representative sample of the product or material has been tested and evaluated by an approved agency.

U. Location:
1. Damp Location: Partially protected locations under canopies, marquees, roofed open porches and like locations, and interior locations subject to moderate degrees of moisture, such as some basements, some barns and some cold-storage warehouses.
2. Dry Location: A location not normally subject to dampness or wetness. A location classified as dry may be temporarily subject to dampness or wetness, as in the case of a building under construction.
3. Wet Location: Installations underground or in concrete slabs or masonry in direct contact with the earth and locations subject to saturation with water or other liquids, such as vehicle-washing areas, and locations exposed to weather and unprotected.

V. Manufacturer’s Designation: Identification applied on a product by the manufacturer indicating that a product or material complies with a specified standard or set of rules (see also "Inspection Certificate," "Label" and "Mark").

W. Mark: An identification applied on a product by the manufacturer indicating the name of the manufacturer and the function of a product or material (see also "Inspection Certificate," "Label" and "Manufacturer's Designation").

X. Mechanical: Other terms including “HVAC”, “Plumbing”, “Sprinkler”, “Laboratory Equipment”, “Food Service Equipment”, “Laundry Equipment”, and “Refrigeration” have the same meaning as "Mechanical".

Y. Owner: MERCERSBURG ACADEMY.

Z. Piping: This term includes pipe, tube and appurtenant fittings, flanges, valves, traps, hangers and supports.

AA. Piping, Concealed: Piping built into construction and not accessible without removal of construction Work such as masonry, plaster or other finish material, and piping installed in floors, furred spaces, suspended ceilings, non-walk-in tunnels, conduits, and behind removable panels and cabinet doors.

BB. Piping, Distribution: Domestic water supply piping, starting with a connection to service piping, and continuing throughout the building to point of connection to equipment and fixture supply piping.

CC. Piping, Exposed: Piping directly accessible by normal accesses without removal of any construction Work or material.

DD. Piping, Service: Underground domestic water supply piping with a connection to a water main or supply as noted, and continuing to and into a building and terminating with the exposed fitting inside the building.

EE. Piping, Tunnel: Piping installed in walk-in or non-walk-in tunnels or conduits up to first shut-off valve inside building.

REFERENCES

FF. Plumbing System: Includes the water supply and distribution pipes; plumbing fixtures and traps; water-treating or water-using equipment; soil, waste and vent pipes; and sanitary and storm sewers and building drains, in addition to their respective connections, devices and appurtenances within a structure or premises.

GG. Product: As used includes materials, systems and equipment.

HH. Registered Design Professional: An individual who is a registered architect (RA) in accordance with Article 147 of the New York State Education Law or a licensed professional engineer (PE) in accordance with Article 145 of the New York State Education Law.

II. Space, Finished: A space which has a finishing material applied to walls or ceilings, such as paint, plaster, ceramic tile, enamel glazing, face brick, vinyl wall covering, etc. to provide a finished appearance or which will have such finishes applied under a related Contract.

JJ. Space, Unfinished: A space which does not meet the definition of a finished space.

KK. Special Inspection: Inspection as herein required of the materials, installation, fabrication, erection, or placement of components and connections requiring special expertise to ensure compliance with approved construction documents and referenced standards.

LL. Steam-Heating Boiler: A boiler operated at pressures not exceeding 15 psi for steam.

MM. Supplier: Any person or organization who supplies materials or equipment for the work, including that fabricated to a special design.

NN. Utility: Any gas, steam, water, sanitary sewer, storm sewer, electrical or other such service.

OO. Water Supply System: The water service pipe, water distribution pipes, and the necessary connecting pipes, fittings, control valves and all appurtenances in or adjacent to the structure or premises.
1. Chilled: Water-cooled by refrigeration.
2. Cold: Water with at temperature between 33 degrees F and 80 degrees F and which is neither cooled nor heated mechanically.
3. Domestic: Water for use in buildings, except water used in connection with space heating and space cooling.
4. High Temperature: Water with a supply water temperature above 350 degrees.
5. Hot: Water at a temperature greater than or equal to 110ºF.

1.03 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. Conflicting Requirements: 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 uncertainties and requirements that are different, but apparently equal, to Architect for a decision before proceeding.
1. 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 for a decision before proceeding.

REFERENCES

D. 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.

1.04 ABBREVIATIONS AND ACRONYMS

AA	Aluminum Association, Inc. (The)
AABC	Associated Air Balance Council
AAALAC	Association for Assessment and Accreditation of Laboratory Animal Care
AAMA	American Architectural Manufacturers Association
AASHTO	American Association of State Highway and Transportation Officials
ACI	ACI International (American Concrete Institute)
ACPA	American Concrete Pipe Association
AF&PA	American Forest & Paper Association
AGA	American Gas Association
AGC	Associated General Contractors of America (The)
AHA	American Hardboard Association (part of CPA)
AI	Asphalt Institute
AIA	American Institute of Architects (The)
AISC	American Institute of Steel Construction
AISI	American Iron and Steel Institute
ALSC	American Lumber Standard Committee, Incorporated
AMCA	Air Movement and Control Association International, Inc.
ANSI	American National Standards Institute
AOSA	Association of Official Seed Analysts, Inc.

REFERENCES

APA	Architectural Precast Association
APA	APA - The Engineered Wood Association
ARI	Air-Conditioning & Refrigeration Institute
ASCE	American Society of Civil Engineers
ASHRAE	American Society of Heating, Refrigerating and Air-Conditioning Engineers
ASME	ASME International
ASSE	American Society of Sanitary Engineering
ASTM	ASTM International
AWCMA	American Window Covering Manufacturers Association (WCSC)
AWI	Architectural Woodwork Institute
AWPA	American Wood-Preservers' Association
AWS	American Welding Society
AWWA	American Water Works Association
BHMA	Builders Hardware Manufacturers Association
BIA	Brick Industry Association (The)
CBM	Certified Ballast Manufacturers
CCC	Carpet Cushion Council
CDA	Copper Development Association
CISCA	Ceilings & Interior Systems Construction Association
CISPI	Cast Iron Soil Pipe Institute
CLFMI	Chain Link Fence Manufacturers Institute
CPA	Composite Panel Association
CRI	Carpet & Rug Institute (The)

REFERENCES

CRSI	Concrete Reinforcing Steel Institute
CSI	Cast Stone Institute
CSI	Construction Specifications Institute (The)
CTI	Cooling Technology Institute
DHI	Door and Hardware Institute
EIA	Electronic Industries Alliance
EIMA	EIFS Industry Members Association
EJCDC	Engineers Joint Contract Documents Committee
EJMA	Expansion Joint Manufacturers Association, Inc.
ESD	ESD Association
FM Approvals	Factory Mutual Approvals
FSA	Fluid Sealing Association
GA	Gypsum Association
GANA	Glass Association of North America
GSI	Geosynthetic Institute
HI	Hydraulic Institute
HI	Hydronics Institute
HMMA	Hollow Metal Manufacturers Association
HPVA	Hardwood Plywood & Veneer Association
ICEA	Insulated Cable Engineers Association, Inc
ICRI	International Concrete Repair Institute, Inc.
IEC	International Electrotechnical Commission

REFERENCES

IEEE	Institute of Electrical and Electronics Engineers, Inc. (The)
IESNA	Illuminating Engineering Society of North America
IEST	Institute of Environmental Sciences and Technology
IGCC	Insulating Glass Certification Council
IGMA	Insulating Glass Manufacturers Alliance
ILI	Indiana Limestone Institute of America, Inc.
IPCEA	Insulated Power Cable Engineer Associates
ISO	International Organization for Standardization
ISSFA	International Solid Surface Fabricators Association
ITU	International Telecommunication Union
KCMA	Kitchen Cabinet Manufacturers Association
LEED	Leadership in Energy and Environmental Design
MBMA	Metal Building Manufacturers Association
MFMA	Maple Flooring Manufacturers Association, Inc.
MFMA	Metal Framing Manufacturers Association, Inc.
MIA	Marble Institute of America
MPI	Master Painters Institute
MSS	Manufacturers Standardization Society of The Valve and Fittings Industry Inc.
NAAMM	National Association of Architectural Metal Manufacturers
NACE	NACE International
NADCA	National Air Duct Cleaners Association
NAIMA	North American Insulation Manufacturers Association

REFERENCES

NCMA	National Concrete Masonry Association
NCPI	National Clay Pipe Institute
NCTA	National Cable & Telecommunications Association
NEBB	National Environmental Balancing Bureau
NECA	National Electrical Contractors Association
NeLMA	Northeastern Lumber Manufacturers' Association
NEMA	National Electrical Manufacturers Association
NETA	National Electrical Testing Association
NFHS	National Federation of State High School Associations
NFPA	National Fire Protection Association
NFRC	National Fenestration Rating Council
NGA	National Glass Association
NHLA	National Hardwood Lumber Association
NLGA	National Lumber Grades Authority
NOFMA	NOFMA: The Wood Flooring Manufacturers Association
NRCA	National Roofing Contractors Association
NRMCA	National Ready Mixed Concrete Association
NSF	NSF International (National Sanitation Foundation International)
NSSGA	National Stone, Sand & Gravel Association
NTMA	National Terrazzo & Mosaic Association, Inc. (The)
NWWDA	National Wood Window and Door Association (WDMA)
PCI	Precast/Prestressed Concrete Institute

REFERENCES

PDCA	Painting & Decorating Contractors of America
PDI	Plumbing & Drainage Institute
PGI	PVC Geomembrane Institute
PTI	Post-Tensioning Institute
RCSC	Research Council on Structural Connections
RFCI	Resilient Floor Covering Institute
SAE	SAE International
SDI	Steel Deck Institute
SDI	Steel Door Institute
SEFA	Scientific Equipment and Furniture Association
SEI/ASCE	Structural Engineering Institute/American Society of Civil Engineers
SGCC	Safety Glazing Certification Council
SIA	Security Industry Association
SIGMA	Sealed Insulating Glass Manufacturers Association
SJI	Steel Joist Institute
SMA	Screen Manufacturers Association
SMACNA	Sheet Metal and Air Conditioning Contractors' National Association
SPIB	Southern Pine Inspection Bureau (The)
SPRI	Single Ply Roofing Industry
SSINA	Specialty Steel Industry of North America
SSPC	SSPC: The Society for Protective Coatings
STI	Steel Tank Institute
SWRI	Sealant, Waterproofing, & Restoration Institute

REFERENCES

TCA	Tile Council of America, Inc.

1.05 FEDERAL GOVERNMENT AGENCIES:

A. 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. Names, telephone numbers, and Web sites are subject to change and are believed to be accurate and up-to-date as of the date of the Contract Documents.

CE	Army Corps of Engineers
CPSC	Consumer Product Safety Commission
DOC	Department of Commerce
DOD	Department of Defense
DOE	Department of Energy
EPA	Environmental Protection Agency
FAA	Federal Aviation Administration
FCC	Federal Communications Commission
FDA	Food and Drug Administration
GSA	General Services Administration
HUD	Department of Housing and Urban Development
NIST	National Institute of Standards and Technology
OSHA	Occupational Safety & Health Administration
PHS	Office of Public Health and Science
SD	State Department
TRB	Transportation Research Board
USDA	Department of Agriculture

REFERENCES

USPS	Postal Service

B. Codes, 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.

ADAAG	Americans with Disabilities Act (ADA) Accessibility Guidelines
BCNYS	Building Code of New York State
CFR	Code of Federal Regulations
DOD	Department of Defense Military Specifications and Standards
FS	Federal Specification
MILSPEC	Military Specification and Standards

1.06 OTHER TERMS OR ACRONYMS:

A. Where abbreviations and acronyms are used in Specifications or other Contract Documents, they shall mean the recognized name in the following list.
1. Asbestos Containing Materials
2. Acoustical Tile
3. Infection Control Risk Assessment
4. Resilient Vinyl Tile
5. Suspended Acoustical Tile
6. Spray on Fire Resistive Materials
7. Thermal Systems Insulation
8. Vinyl Asbestos Tile
9. Vinyl Composition Tile

1.07 OTHER TERMS OR ACRONYMS:

A. Where abbreviations and acronyms are used in Specifications or other Contract Documents, they shall mean the recognized name in the following list.
a. Asbestos Containing Materials
b. Acoustical Tile
c. Infection Control Risk Assessment
d. Resilient Vinyl Tile
e. Suspended Acoustical Tile
f. Spray on Fire Resistive Materials
g. Thermal Systems Insulation
h. Vinyl Asbestos Tile
i. Vinyl Composition Tile

REFERENCES

PART 2 PRODUCTS (NOT APPLICABLE)

PART 3 EXECUTION (NOT APPLICABLE)

END OF SECTION 014200

SECTION 017300
EXECUTION

PART 1 GENERAL

1.01 SUMMARY

A. Section includes general administrative and procedural requirements governing execution of the Work including, but not limited to, the following:
   1. Construction layout.
   2. Field engineering and surveying.
   3. Installation of the Work.
   4. Cutting and patching.
   5. Coordination of Owner-installed products.
   6. Progress cleaning.
   7. Starting and adjusting.
   8. Protection of installed construction.

B. Related Requirements:
   1. Division 01 "Summary" for limits on use of Project site.
   2. Division 01 "Submittal Procedures" for submitting surveys.
   3. Division 01 "Closeout Procedures" for submitting final property survey with Project Record Documents, recording of Owner-accepted deviations from indicated lines and levels, and final cleaning.
   4. Division 02 "Demolition" for demolition and removal of selected portions of the building.
   5. Division 07 "Penetration Firestopping" for patching penetrations in fire-rated construction.

1.02 DEFINITIONS

A. Cutting: Removal of in-place construction necessary to permit installation or performance of other work.

B. Patching: Fitting and repair work required to restore construction to original conditions after installation of other work.

1.03 INFORMATIONAL SUBMITTALS

A. Qualification Data: For land surveyor.

B. Certificates: Submit certificate signed by land surveyor, certifying that location and elevation of improvements comply with requirements.

C. Cutting and Patching Plan: Submit plan describing procedures at least (10) ten days prior to the time cutting and patching will be performed. Include the following information:
   1. Extent: Describe reason for and extent of each occurrence of cutting and patching.
   2. Changes to In-Place Construction: Describe anticipated results. Include changes to structural elements and operating components as well as changes in building appearance and other significant visual elements.
   3. Products: List products to be used for patching and firms or entities that will perform patching work.
   4. Dates: Indicate when cutting and patching will be performed.
   5. Utilities and Mechanical and Electrical Systems: List services and systems that cutting and patching procedures will disturb or affect. List services and systems that will be relocated and those that will be temporarily out of service. Indicate length of time permanent services and systems will be disrupted.
      a. Include description of provisions for temporary services and systems during interruption of permanent services and systems.

D. Certified Surveys: Submit (2) two copies signed by land surveyor.

EXECUTION

E. Final Property Survey: Submit (10) ten copies showing the Work performed and record survey data.

1.04 QUALITY ASSURANCE

A. Land Surveyor Qualifications: A professional land surveyor who is legally qualified to practice in jurisdiction where Project is located and who is experienced in providing land-surveying services of the kind indicated.

B. Cutting and Patching: Comply with requirements for and limitations on cutting and patching of construction elements.
   1. Structural Elements: When cutting and patching structural elements, notify Architect of locations and details of cutting and await directions from Architect before proceeding. Shore, brace, and support structural elements during cutting and patching. Do not cut and patch structural elements in a manner that could change their load-carrying capacity or increase deflection
   2. Operational Elements: Do not cut and patch operating elements and related components in a manner that results in reducing their capacity to perform as intended or that results in increased maintenance or decreased operational life or safety.
      a. Operational elements include but are not limited to the following:
         1) Primary operational systems and equipment.
         2) Fire separation assemblies.
         3) Air or smoke barriers.
         4) Fire-suppression systems.
         5) Mechanical systems piping and ducts.
         6) Control systems.
         7) Communication systems.
         8) Fire-detection and -alarm systems.
         9) Conveying systems.
         10) Electrical wiring systems.
         11) Operating systems of special construction.
         12) Door access and security controls
   3. Other Construction Elements: Do not cut and patch other construction elements or components in a manner that could change their load-carrying capacity, that results in reducing their capacity to perform as intended, or that results in increased maintenance or decreased operational life or safety.
      a. Other construction elements include but are not limited to the following:
         1) Water, moisture, or vapor barriers.
         2) Membranes and flashings.
         3) Exterior curtain-wall construction.
         4) Spray applied fire-resistive material.
         5) Equipment supports.
         6) Piping, ductwork, vessels, and equipment.
         7) Noise- and vibration-control elements and systems.
   4. Visual Elements: Do not cut and patch construction in a manner that results in visual evidence of cutting and patching. Do not cut and patch exposed construction in a manner that would, in Architect's opinion, reduce the building's aesthetic qualities. Remove and replace construction that has been cut and patched in a visually unsatisfactory manner.

C. Manufacturer's Installation Instructions: Obtain and maintain on-site manufacturer's written recommendations and instructions for installation of products and equipment.

EXECUTION

PART 2 PRODUCTS

2.01 MATERIALS

A. General: Comply with requirements specified in other Sections.

B. In-Place Materials: Use materials for patching identical to in-place materials. For exposed surfaces, use materials that visually match in-place adjacent surfaces to the fullest extent possible.
   1. If identical materials are unavailable or cannot be used, use materials that, when installed, will provide a match acceptable to Architect for the visual and functional performance of in-place materials.

C. 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.

PART 3 EXECUTION

3.01 EXAMINATION

A. Existing Conditions: The existence and location of underground and other utilities and construction indicated as existing are not guaranteed. Before beginning sitework, investigate and verify the existence and location of underground utilities, mechanical and electrical systems, and other construction affecting the Work.
   1. Before construction, verify the location and invert elevation at points of connection of sanitary sewer, storm sewer, and water-service piping; underground electrical services, and other utilities.
   2. Furnish location data for work related to Project that must be performed by public utilities serving Project site.

B. Examination and Acceptance of Conditions: Before proceeding with each component of the Work, examine substrates, areas, and conditions, with Installer or Applicator present where indicated, for compliance with requirements for installation tolerances and other conditions affecting performance. Record observations.
   1. Examine roughing-in for mechanical and electrical systems to verify actual locations of connections before equipment and fixture installation.
   2. Examine walls, floors, and roofs for suitable conditions where products and systems are to be installed.
   3. Verify compatibility with and suitability of substrates, including compatibility with existing finishes or primers.

C. Written Report: Where a written report listing conditions detrimental to performance of the Work is required by other Sections, include the following:
   1. Description of the Work.
   2. List of detrimental conditions, including substrates.
   3. List of unacceptable installation tolerances.
   4. Recommended corrections.

D. Proceed with installation only after unsatisfactory conditions have been corrected. Proceeding with the Work indicates acceptance of surfaces and conditions.

3.02 PREPARATION

A. Existing Utility Information: Furnish information to local utility that is necessary to adjust, move, or relocate existing utility structures, utility poles, lines, services, or other utility appurtenances located in or affected by construction. Coordinate with authorities having jurisdiction.

EXECUTION

B. Field Measurements: Take field measurements as required to fit the Work properly. Recheck measurements before installing each product. Where portions of the Work are indicated to fit to other construction, verify dimensions of other construction by field measurements before fabrication. Coordinate fabrication schedule with construction progress to avoid delaying the Work.

C. Space Requirements: Verify space requirements and dimensions of items shown diagrammatically on Drawings.

D. Review of Contract Documents and Field Conditions: Immediately on discovery of the need for clarification of the Contract Documents caused by differing field conditions outside the control of Contractor, submit a request for information to Architect according to requirements in Section 013100 "Project Management and Coordination."

3.03 CONSTRUCTION LAYOUT

A. Verification: Before proceeding to lay out the Work, verify layout information shown on Drawings, in relation to the property survey and existing benchmarks. If discrepancies are discovered, notify Architect promptly.

B. General: Engage a land surveyor to lay out the Work using accepted surveying practices.
   1. Establish benchmarks and control points to set lines and levels at each story of construction and elsewhere as needed to locate each element of Project.
   2. Establish limits on use of Project site.
   3. Establish dimensions within tolerances indicated. Do not scale Drawings to obtain required dimensions.
   4. Inform installers of lines and levels to which they must comply.
   5. Check the location, level and plumb, of every major element as the Work progresses.
   6. Notify Architect when deviations from required lines and levels exceed allowable tolerances.
   7. Close site surveys with an error of closure equal to or less than the standard established by authorities having jurisdiction.

C. Site Improvements: Locate and lay out site improvements, including pavements, grading, fill and topsoil placement, utility slopes, and rim and invert elevations.

D. Building Lines and Levels: Locate and lay out control lines and levels for structures, building foundations, column grids, and floor levels, including those required for mechanical and electrical work. Transfer survey markings and elevations for use with control lines and levels. Level foundations and piers from two or more locations.

E. Record Log: Maintain a log of layout control work. Record deviations from required lines and levels. Include beginning and ending dates and times of surveys, weather conditions, name and duty of each survey party member, and types of instruments and tapes used. Make the log available for reference by Architect.

3.04 FIELD ENGINEERING

A. Reference Points: Locate existing permanent benchmarks, control points, and similar reference points before beginning the Work. Preserve and protect permanent benchmarks and control points during construction operations.
   1. Do not change or relocate existing benchmarks or control points without prior written approval of Architect. Report lost or destroyed permanent benchmarks or control points promptly. Report the need to relocate permanent benchmarks or control points to Architect before proceeding.
   2. Replace lost or destroyed permanent benchmarks and control points promptly. Base replacements on the original survey control points.

EXECUTION

B. Benchmarks: Establish and maintain a minimum of two permanent benchmarks on Project site, referenced to data established by survey control points. Comply with authorities having jurisdiction for type and size of benchmark.
   1. Record benchmark locations, with horizontal and vertical data, on Project Record Documents.
   2. Where the actual location or elevation of layout points cannot be marked, provide temporary reference points sufficient to locate the Work.
   3. Remove temporary reference points when no longer needed. Restore marked construction to its original condition.

C. Certified Survey: On completion of foundation walls, major site improvements, and other work requiring field-engineering services, prepare a certified survey showing dimensions, locations, angles, and elevations of construction and sitework.

D. Final Property Survey: Engage a land surveyor to prepare a final property survey showing significant features (real property) for Project. Include on the survey a certification, signed by land surveyor, that principal metes, bounds, lines, and levels of Project are accurately positioned as shown on the survey.
   1. Show boundary lines, monuments, streets, site improvements and utilities, existing improvements and significant vegetation, adjoining properties, acreage, grade contours, and the distance and bearing from a site corner to a legal point.
   2. Recording: At Substantial Completion, have the final property survey recorded by or with authorities having jurisdiction as the official "property survey."

3.05 INSTALLATION

A. General: Locate the Work and components of the Work accurately, in correct alignment and elevation, as indicated.
   1. Make vertical work plumb and make horizontal work level.
   2. Where space is limited, install components to maximize space available for maintenance and ease of removal for replacement.
   3. Conceal pipes, ducts, and wiring in finished areas unless otherwise indicated.
   4. Maintain minimum headroom clearance of 96 inches in occupied spaces and 90 inches in unoccupied spaces.

B. Comply with manufacturer's written instructions and recommendations for installing products in applications indicated.

C. Install products at the time and under conditions that will ensure the best possible results. Maintain conditions required for product performance until Substantial Completion.

D. Conduct construction operations so no part of the Work is subjected to damaging operations or loading in excess of that expected during normal conditions of occupancy.

E. Sequence the Work and allow adequate clearances to accommodate movement of construction items on site and placement in permanent locations.

F. Tools and Equipment: Do not use tools or equipment that produce harmful noise levels.

G. Templates: Obtain and distribute to the parties involved templates for work specified to be factory prepared and field installed. Check Shop Drawings of other work to confirm that adequate provisions are made for locating and installing products to comply with indicated requirements.

H. Attachment: Provide blocking and attachment plates and anchors and fasteners of adequate size and number to securely anchor each component in place, accurately located and aligned with other portions of the Work. Where size and type of attachments are not indicated, verify size and type required for load conditions.

EXECUTION

1. Mounting Heights: Where mounting heights are not indicated, mount components at heights directed by Architect.
2. Allow for building movement, including thermal expansion and contraction.
3. Coordinate installation of anchorages. Furnish setting drawings, templates, and directions for installing anchorages, including sleeves, concrete inserts, anchor bolts, and items with integral anchors, that are to be embedded in concrete or masonry. Deliver such items to Project site in time for installation.

I. Joints: Make joints of uniform width. Where joint locations in exposed work are not indicated, arrange joints for the best visual effect. Fit exposed connections together to form hairline joints.

J. Hazardous Materials: Use products, cleaners, and installation materials that are not considered hazardous.

3.06 CUTTING AND PATCHING

A. Cutting and Patching, General: Employ skilled workers to perform cutting and patching. Proceed with cutting and patching at the earliest feasible time, and complete without delay.
   1. Cut in-place construction to provide for installation of other components or performance of other construction, and subsequently patch as required to restore surfaces to their original condition.

B. Existing Warranties: Remove, replace, patch, and repair materials and surfaces cut or damaged during installation or cutting and patching operations, by methods and with materials so as not to void existing warranties.

C. Temporary Support: Provide temporary support of work to be cut.

D. Protection: Protect in-place construction during cutting and patching to prevent damage. Provide protection from adverse weather conditions for portions of Project that might be exposed during cutting and patching operations.

E. Adjacent Occupied Areas: Where interference with use of adjoining areas or interruption of free passage to adjoining areas is unavoidable, coordinate cutting and patching according to requirements in Section 011000 "Summary".

F. Existing Utility Services and Mechanical/Electrical Systems: Where existing services/systems are required to be removed, relocated, or abandoned, bypass such services/systems before cutting to minimize interruption to occupied areas.

G. Cutting: Cut in-place construction by sawing, drilling, breaking, chipping, grinding, and similar operations, including excavation, using methods least likely to damage elements retained or adjoining construction. If possible, review proposed procedures with original Installer; comply with original Installer's written recommendations.
   1. In general, use hand or small power tools designed for sawing and grinding, not hammering and chopping. Cut holes and slots neatly to minimum size required, and with minimum disturbance of adjacent surfaces. Temporarily cover openings when not in use.
   2. Finished Surfaces: Cut or drill from the exposed or finished side into concealed surfaces.
   3. Concrete: Cut using a cutting machine, such as an abrasive saw or a diamond-core drill.
   4. Excavating and Backfilling: Comply with requirements in applicable Sections where required by cutting and patching operations.
   5. Mechanical and Electrical Services: Cut off pipe or conduit in walls or partitions to be removed. Cap, valve, or plug and seal remaining portion of pipe or conduit to prevent entrance of moisture or other foreign matter after cutting.
   6. Proceed with patching after construction operations requiring cutting are complete.

EXECUTION

H. Patching: Patch construction by filling, repairing, refinishing, closing up, and similar operations following performance of other work. Patch with durable seams that are as invisible as practicable. Provide materials and comply with installation requirements specified in other Sections, where applicable.
   1. Inspection: Where feasible, test and inspect patched areas after completion to demonstrate physical integrity of installation.
   2. Exposed Finishes: Restore exposed finishes of patched areas and extend finish restoration into retained adjoining construction in a manner that will minimize evidence of patching and refinishing.
      a. Clean piping, conduit, and similar features before applying paint or other finishing materials.
      b. Restore damaged pipe covering to its original condition.
   3. Floors and Walls: Where walls or partitions that are removed extend one finished area into another, patch and repair floor and wall surfaces in the new space. Provide an even surface of uniform finish, color, texture, and appearance. Remove in-place floor and wall coverings and replace with new materials, if necessary, to achieve uniform color and appearance.
      a. Where patching occurs in a painted surface, prepare substrate and apply primer and intermediate paint coats appropriate for substrate over the patch, and apply final paint coat over entire unbroken surface containing the patch extending to an inside or outside corner of a wall. Provide additional coats until patch blends with adjacent surfaces.
   4. Ceilings: Patch, repair, or rehang in-place ceilings as necessary to provide an even-plane surface of uniform appearance.
   5. Exterior Building Enclosure: Patch components in a manner that restores enclosure to a weathertight condition and ensures thermal and moisture integrity of building enclosure.

I. Cleaning: Clean areas and spaces where cutting and patching are performed. Remove paint, mortar, oils, putty, and similar materials from adjacent finished surfaces.

3.07 OWNER-INSTALLED PRODUCTS

A. Site Access: Provide access to Project site for Owner's construction personnel.

B. Coordination: Coordinate construction and operations of the Work with work performed by Owner's construction personnel.
   1. Construction Schedule: Inform Owner of Contractor's preferred construction schedule for Owner's portion of the Work. Adjust construction schedule based on a mutually agreeable timetable. Notify Owner if changes to schedule are required due to differences in actual construction progress.
   2. Preinstallation Conferences: Include Owner's construction personnel at preinstallation conferences covering portions of the Work that are to receive Owner's work. Attend preinstallation conferences conducted by Owner's construction personnel if portions of the Work depend on Owner's construction.

3.08 PROGRESS CLEANING

A. General: Clean Project site and work areas daily, including common areas. Enforce requirements strictly. Dispose of materials lawfully.
   1. Comply with requirements in NFPA 241 for removal of combustible waste materials and debris.
   2. Do not hold waste materials more than seven days during normal weather or three days if the temperature is expected to rise above 80 deg F.

EXECUTION

3. Containerize hazardous and unsanitary waste materials separately from other waste. Mark containers appropriately and dispose of legally, according to regulations.
   a. Use containers intended for holding waste materials of type to be stored.
4. Coordinate progress cleaning for joint-use areas where Contractor and other contractors are working concurrently.

B. Site: Maintain Project site free of waste materials and debris.

C. Work Areas: Clean areas where work is in progress to the level of cleanliness necessary for proper execution of the Work.
   1. Remove liquid spills promptly.
   2. Where dust would impair proper execution of the Work, broom-clean or vacuum the entire work area, as appropriate.

D. Installed Work: Keep installed work clean. Clean installed surfaces according to written instructions of manufacturer or fabricator of product installed, using only cleaning materials specifically recommended. If specific cleaning materials are not recommended, use cleaning materials that are not hazardous to health or property and that will not damage exposed surfaces.

E. Concealed Spaces: Remove debris from concealed spaces before enclosing the space.

F. Exposed Surfaces in Finished Areas: Clean exposed surfaces and protect as necessary to ensure freedom from damage and deterioration at time of Substantial Completion.

G. Waste Disposal: Do not bury or burn waste materials on-site. Do not wash waste materials down sewers or into waterways. Comply with waste disposal requirements in Section 015000 "Temporary Facilities and Controls".

H. During handling and installation, clean and protect construction in progress and adjoining materials already in place. Apply protective covering where required to ensure protection from damage or deterioration at Substantial Completion.

I. Clean and provide maintenance on completed construction as frequently as necessary through the remainder of the construction period. Adjust and lubricate operable components to ensure operability without damaging effects.

J. Limiting Exposures: Supervise construction operations to assure that no part of the construction, completed or in progress, is subject to harmful, dangerous, damaging, or otherwise deleterious exposure during the construction period.

3.09 STARTING AND ADJUSTING

A. Coordinate startup and adjusting of equipment and operating components with requirements in Section 019113 "General Commissioning Requirements."

B. Start equipment and operating components to confirm proper operation. Remove malfunctioning units, replace with new units, and retest.

C. Adjust equipment for proper operation. Adjust operating components for proper operation without binding.

D. Test each piece of equipment to verify proper operation. Test and adjust controls and safeties. Replace damaged and malfunctioning controls and equipment.

E. Manufacturer's Field Service: Comply with qualification requirements in Section 014000 "Quality Requirements".

3.10 PROTECTION OF INSTALLED CONSTRUCTION

A. Provide final protection and maintain conditions that ensure installed Work is without damage or deterioration at time of Substantial Completion.

EXECUTION

B. Comply with manufacturer's written instructions for temperature and relative humidity.

END OF SECTION 017300 017300

SECTION 017700
CLOSEOUT PROCEDURES

PART 1 GENERAL

1.01 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. Division 01 "Execution" for progress cleaning of Project site.
   2. Division 01 "Operation and Maintenance Data" for operation and maintenance manual requirements.
   3. Division 01 "Project Record Documents" for submitting record Drawings, record Specifications, and record Product Data.
   4. Division 01 "Demonstration and Training" for requirements for instructing Owner's personnel.
   5. Divisions 02 through 49 Sections for specific closeout and special cleaning requirements for the Work in those Sections.

1.02 ACTION SUBMITTALS

A. Product Data: For cleaning agents.

B. Contractor's List of Incomplete Items: Initial submittal at Substantial Completion.

C. Certified List of Incomplete Items: Final submittal at Final Completion.

1.03 CLOSEOUT SUBMITTALS

A. Certificates of Release: From authorities having jurisdiction.

B. Certificate of Insurance: For continuing coverage.

C. Field Report: For pest control inspection.

1.04 MAINTENANCE MATERIAL SUBMITTALS

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

1.05 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. **The Architect will not perform a punch list inspection until the contractor's punch list is received and reviewed.**

B. Submittals Prior to Substantial Completion: Complete the following a minimum of (30) thirty days prior to requesting inspection for determining date of Substantial Completion. List items below that are incomplete at time of request.

CLOSEOUT PROCEDURES

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 photographic documentation, damage or settlement surveys, property surveys, and similar final record information.
3. Submit closeout submittals specified in individual Sections, including specific warranties, workmanship bonds, maintenance service agreements, final certifications, and similar documents.
4. Submit maintenance material submittals specified in individual Sections, including tools, spare parts, extra materials, and similar items, and deliver to location designated by Construction Manager. Label with manufacturer's name and model number where applicable.
    a. Schedule of Maintenance Material Items: Prepare and submit schedule of maintenance material submittal items, including name and quantity of each item and name and number of related Specification Section. Obtain Construction Manager's signature for receipt of submittals.
5. Submit test/adjust/balance records.
6. Submit changeover information related to Owner's occupancy, use, operation, and maintenance.

C. Procedures Prior to Substantial Completion: Complete the following a minimum of (30) thirty days prior to requesting inspection for determining date of Substantial Completion. List items below that are incomplete at time of request.
1. Prepare a list of items to be completed and corrected (punch list), the value of items on the list, and reasons why the Work is not complete.
2. Complete startup and testing of systems and equipment
3. Submit test/adjust/balance records.
4. Terminate and remove temporary facilities from Project site, along with mockups, construction tools, and similar elements.
5. Perform preventive maintenance on equipment used prior to Substantial Completion. Complete startup testing of systems.
6. Instruct Owner's personnel in operation, adjustment, and maintenance of products, equipment, and systems. Submit demonstration and training video recordings specified in Division 01 "Demonstration and Training".
7. Touch up paint and otherwise repair and restore damaged finishes.
8. Complete final cleaning requirements, including touchup painting

D. Inspection: Submit a written request for inspection to determine Substantial Completion a minimum of (30) thirty days prior to date the work will be completed and ready for final inspection and tests. On receipt of request, Architect will either proceed with inspection or notify Contractor of unfulfilled requirements. Architect 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, that must be completed or corrected before certificate will be issued.
1. Reinspection: Request reinspection when the Work identified in previous inspections as incomplete is completed or corrected.
    a. The Architects basic services include (1) one initial punch list and (1) one follow-up punch list inspection to ensure all corrective action and or incomplete work has been finished. The Contractor is responsible to the Owner for all costs incurred by the Architect for additional services to provide multiple punch lists for the same work area. The cost for these additional services, may be deducted from the Contractors Contract by deduct Change Order.

2. Results of completed inspection will form the basis of requirements for final completion.

1.06 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 Division 01 "Payment Procedures".
   2. Certified List of Incomplete Items: Submit certified copy of Architect's Substantial Completion inspection list of items to be completed or corrected (punch list), endorsed and dated by Architect. Certified copy of the list shall state that each item has been completed or otherwise resolved for acceptance.
   3. Submit pest-control final inspection report.
   4. Obtain and submit releases permitting Owner unrestricted use of the Work and access to services and utilities. Include occupancy permits, operating certificates, and similar releases.
   5. Advise Owner of pending insurance changeover requirements.
   6. Advise Owner of changeover in heat and other utilities.
   7. Make final changeover of permanent locks and deliver keys to Owner. Advise Owner's personnel of changeover in security provisions.
   8. Participate with Owner in conducting inspection and walkthrough with local emergency responders.
   9. Touch up and otherwise repair and restore marred exposed finishes to eliminate visual defects.
   10. Deliver tools, spare parts, extra materials, and similar items to location designated by Owner. Label with manufacturer's name and model number where applicable.
   11. Submit specific warranties, workmanship bonds, maintenance service agreements, final certifications, and similar documents.
   12. Prepare and submit Project Record Documents, operation and maintenance manuals, final completion construction photographic documentation, damage or settlement surveys, property surveys, and similar final record information.

B. Inspection: Submit a written request for final inspection to determine acceptance, a minimum of (10) ten days prior to date the work will be completed and ready for final inspection and tests. On receipt of request, Architect will either proceed with inspection or notify Contractor of unfulfilled requirements. Architect will prepare a final Certificate for Payment after inspection or will notify Contractor of construction that must be completed or corrected before certificate will be issued.
   1. Reinspection: Request reinspection when the Work identified in previous inspections as incomplete is completed or corrected.

1.07 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. Organize list of spaces in sequential order, starting with exterior areas first and proceeding from lowest floor to highest floor.
   2. Organize items applying to each space by major element, including categories for ceiling, individual walls, floors, equipment, and building systems.
   3. Include the following information at the top of each page:
      a. Project name.
      b. Date
      c. Name of Architect.
      d. Name of Contractor.

e. Page number.

4. Submit list of incomplete items in the following format:
   a. MS Excel electronic file. Architect will return annotated file.
   b. PDF electronic file. Architect will return annotated file.
   c. Web-Based Project Software Upload: Utilize software feature for creating and updating list of incomplete items (punch list).
   d. Submit (3) paper copies and a digital file. paper copies. Architect will return (2) two copies.

1.08 SUBMITTAL OF PROJECT WARRANTIES

A. Time of Submittal: Submit written warranties on request of Architect 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. Partial Occupancy: Submit properly executed warranties within (15) fifteen days of completion of designated portions of the Work that are completed and occupied or used by Owner during construction period by separate agreement with Contractor.

C. 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.

D. Provide additional copies of each warranty to include in operation and maintenance manuals.

PART 2 PRODUCTS

2.01 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

3.01 FINAL CLEANING

A. General: Perform final cleaning. Conduct cleaning and waste-removal operations to comply with local laws and ordinances and Federal and local environmental and antipollution regulations.

B. 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.

CLOSEOUT PROCEDURES

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. Clean Project site, yard, and grounds, in areas disturbed by construction activities, including landscape development areas, of rubbish, waste material, litter, and other foreign substances.
   b. Sweep paved areas broom clean. Remove petrochemical spills, stains, and other foreign deposits.
   c. Rake grounds that are neither planted nor paved to a smooth, even-textured surface.
   d. Remove tools, construction equipment, machinery, and surplus material from Project site.
   e. Remove snow and ice to provide safe access to building.
   f. Clean exposed exterior and interior hard-surfaced finishes to a dirt-free condition, free of stains, films, and similar foreign substances. Avoid disturbing natural weathering of exterior surfaces. Restore reflective surfaces to their original condition.
   g. Remove debris and surface dust from limited access spaces, including roofs, plenums, shafts, trenches, equipment vaults, manholes, attics, and similar spaces.
   h. Sweep concrete floors broom clean in unoccupied spaces.
   i. Vacuum carpet and similar soft surfaces, removing debris and excess nap; clean according to manufacturer's recommendations if visible soil or stains remain.
   j. Clean transparent materials, including mirrors and glass in doors and windows. Remove glazing compounds and other noticeable, vision-obscuring materials. Polish mirrors and glass, taking care not to scratch surfaces.
   k. Remove labels that are not permanent.
   l. Wipe surfaces of mechanical, electrical, and similar equipment. Remove excess lubrication, paint and mortar droppings, and other foreign substances.
   m. Clean plumbing fixtures to a sanitary condition, free of stains, including stains resulting from water exposure.
   n. Replace disposable air filters and clean permanent air filters. Clean exposed surfaces of diffusers, registers, and grills.
   o. Clean ducts, blowers, and coils if units were operated without filters during construction or that display contamination with particulate matter on inspection.
      1) Clean HVAC system in compliance with NADCA Standard 1992-01. Provide written report on completion of cleaning.
   p. Clean light fixtures, lamps, globes, and reflectors to function with full efficiency.
   q. Leave Project clean and ready for occupancy.

C. Construction Waste Disposal: Comply with waste disposal requirements in Division 01 " Temporary Facilities and Controls"

3.02 REPAIR OF THE WORK

A. Complete repair and restoration operations before requesting inspection for determination of Substantial Completion.

B. Repair or remove and replace defective construction. Repairing includes replacing defective parts, refinishing damaged surfaces, touching up with matching materials, and properly adjusting operating equipment. Where damaged or worn items cannot be repaired or restored, provide replacements. Remove and replace operating components that cannot be repaired. Restore damaged construction and permanent facilities used during construction to specified condition.

END OF SECTION 017700

SECTION 017823
OPERATION AND MAINTENANCE DATA

PART 1 GENERAL

1.01 SUMMARY

A. Section includes administrative and procedural requirements for preparing operation and maintenance manuals, including the following:
   1. Operation and maintenance documentation directory.
   2. Emergency manuals.
   3. Operation manuals for systems, subsystems, and equipment.
   4. Product maintenance manuals.
   5. Systems and equipment maintenance manuals.

B. Related Requirements:
   1. Section 013300 "Submittal Procedures" for submitting copies of submittals for operation and maintenance manuals.
   2. Divisions 02 through 49 Sections for any specific closeout requirements for the Work in those Sections.

1.02 DEFINITIONS

A. System: An organized collection of parts, equipment, or subsystems united by regular interaction.

B. Subsystem: A portion of a system with characteristics similar to a system.

1.03 CLOSEOUT SUBMITTALS

A. Manual Content: Operations and maintenance manual content is specified in individual Specification Sections to be reviewed at the time of Section submittals. Submit reviewed manual content formatted and organized as required by this Section.
   1. Architect will comment on whether content of operations and maintenance submittals are acceptable.
   2. Where applicable, clarify and update reviewed manual content to correspond to revisions and field conditions.

B. Format: Submit operations and maintenance manuals in the following format:
   1. PDF electronic file. Assemble each manual into a composite electronically indexed file. Submit on digital media acceptable to Architect.
      a. Name each indexed document file in composite electronic index with applicable item name. Include a complete electronically linked operation and maintenance directory.
      b. Enable inserted reviewer comments on draft submittals.
   2. Submit (1)one paper copies. Include a complete operation and maintenance directory. Enclose title pages and directories in clear plastic sleeves. Architect will return (2) two copies.

C. Initial Manual Submittal: Submit draft copy of each manual at least (30) thirty days before commencing demonstration and training. Architect will comment on whether general scope and content of manual are acceptable.

D. Final Manual Submittal: Submit each manual in final form prior to requesting inspection for Substantial Completion and at least (15) fifteen days before commencing demonstration and training. Architect will return copy with comments.
   1. Correct or revise each manual to comply with Architect's comments. Submit copies of each corrected manual within (15) fifteen days of receipt of Architect's comments and prior to commencing demonstration and training.

OPERATION AND MAINTENANCE DATA

PART 2 PRODUCTS

2.01 OPERATION AND MAINTENANCE DOCUMENTATION DIRECTORY

A. Directory: Prepare a single, comprehensive directory of emergency, operation, and maintenance data and materials, listing items and their location to facilitate ready access to desired information. Include a section in the directory for each of the following:
   1. List of documents.
   2. List of systems.
   3. List of equipment.
   4. Table of contents.

B. Manuals, Electronic Files: Submit manuals in the form of a multiple file composite electronic PDF file for each manual type required.
   1. Electronic Files: Use electronic files prepared by manufacturer where available. Where scanning of paper documents is required, configure scanned file for minimum readable file size.
   2. File Names and Bookmarks: Bookmark individual documents based on file names. Name document files to correspond to system, subsystem, and equipment names used in manual directory and table of contents. Group documents for each system and subsystem into individual composite bookmarked files, then create composite manual, so that resulting bookmarks reflect the system, subsystem, and equipment names in a readily navigated file tree. Configure electronic manual to display bookmark panel on opening file.

C. Identification: In the documentation directory and in each operation and maintenance manual, identify each system, subsystem, and piece of equipment with same designation used in the Contract Documents. If no designation exists, assign a designation according to ASHRAE Guideline 4, "Preparation of Operating and Maintenance Documentation for Building Systems".

2.02 REQUIREMENTS FOR EMERGENCY, OPERATION, AND MAINTENANCE MANUALS

A. Organization: Unless otherwise indicated, organize each manual into a separate section for each system and subsystem, and a separate section for each piece of equipment not part of a system. Each manual shall contain the following materials, in the order listed:
   1. Title page.
   2. Table of contents.
   3. Manual contents.

B. Title Page: Include the following information:
   1. Subject matter included in manual.
   2. Name and address of Project.
   3. Name and address of Owner.
   4. Date of submittal.
   5. Name and contact information for Contractor.
   6. Name and contact information for Construction Manager.
   7. Name and contact information for Architect.
   8. Name and contact information for Commissioning Authority.
   9. Names and contact information for major consultants to the Architect that designed the systems contained in the manuals.
   10. Cross-reference to related systems in other operation and maintenance manuals.

C. Table of Contents: List each product included in manual, identified by product name, indexed to the content of the volume, and cross-referenced to Specification Section number in Project Manual.

OPERATION AND MAINTENANCE DATA

1. If operation or maintenance documentation requires more than one volume to accommodate data, include comprehensive table of contents for all volumes in each volume of the set.

D. Manual Contents: Organize into sets of manageable size. Arrange contents alphabetically by system, subsystem, and equipment. If possible, assemble instructions for subsystems, equipment, and components of one system into a single binder.

E. Manuals, Electronic Files: Submit manuals in the form of a multiple file composite electronic PDF file for each manual type required.
   1. Electronic Files: Use electronic files prepared by manufacturer where available. Where scanning of paper documents is required, configure scanned file for minimum readable file size.
   2. File Names and Bookmarks: Enable bookmarking of individual documents based on file names. Name document files to correspond to system, subsystem, and equipment names used in manual directory and table of contents. Group documents for each system and subsystem into individual composite bookmarked files, then create composite manual, so that resulting bookmarks reflect the system, subsystem, and equipment names in a readily navigated file tree. Configure electronic manual to display bookmark panel on opening file.

F. Manuals, Paper Copy: Submit manuals in the form of hard copy, bound and labeled volumes.
   1. Binders: Heavy-duty, three-ring, vinyl-covered, loose-leaf binders, in thickness necessary to accommodate contents, sized to hold 8-1/2-by-11-inch paper; with clear plastic sleeve on spine to hold label describing contents and with pockets inside covers to hold folded oversize sheets.
      a. If two or more binders are necessary to accommodate data of a system, organize data in each binder into groupings by subsystem and related components. Cross-reference other binders if necessary to provide essential information for proper operation or maintenance of equipment or system.
      b. Identify each binder on front and spine, with printed title "OPERATION AND MAINTENANCE MANUAL", Project title or name. Indicate volume number for multiple-volume sets.
   2. Dividers: Heavy-paper dividers with plastic-covered tabs for each section of the manual. Mark each tab to indicate contents. Include typed list of products and major components of equipment included in the section on each divider, cross-referenced to Specification Section number and title of Project Manual.
   3. Protective Plastic Sleeves: Transparent plastic sleeves designed to enclose diagnostic software storage media for computerized electronic equipment.
   4. Supplementary Text: Prepared on 8-1/2-by-11-inch white bond paper.
   5. Drawings: Attach reinforced, punched binder tabs on drawings and bind with text.
      a. If oversize drawings are necessary, fold drawings to same size as text pages and use as foldouts.
      b. If drawings are too large to be used as foldouts, fold and place drawings in labeled envelopes and bind envelopes in rear of manual. At appropriate locations in manual, insert typewritten pages indicating drawing titles, descriptions of contents, and drawing locations.

2.03 EMERGENCY MANUALS

A. Content: Organize manual into a separate section for each of the following:
   1. Type of emergency.
   2. Emergency instructions.
   3. Emergency procedures.

OPERATION AND MAINTENANCE DATA

B. Type of Emergency: Where applicable for each type of emergency indicated below, include instructions and procedures for each system, subsystem, piece of equipment, and component:
   1. Fire.
   2. Flood.
   3. Gas leak.
   4. Water leak.
   5. Power failure.
   6. Water outage.
   7. System, subsystem, or equipment failure.
   8. Chemical release or spill.

C. Emergency Instructions: Describe and explain warnings, trouble indications, error messages, and similar codes and signals. Include responsibilities of Owner's operating personnel for notification of Installer, supplier, and manufacturer to maintain warranties.

D. Emergency Procedures: Include the following, as applicable:
   1. Instructions on stopping.
   2. Shutdown instructions for each type of emergency.
   3. Operating instructions for conditions outside normal operating limits.
   4. Required sequences for electric or electronic systems.
   5. Special operating instructions and procedures.

2.04 OPERATION MANUALS

A. Content: In addition to requirements in this Section, include operation data required in individual Specification Sections and the following information:
   1. System, subsystem, and equipment descriptions. Use designations for systems and equipment indicated on Contract Documents.
   2. Performance and design criteria if Contractor has delegated design responsibility.
   3. Operating standards.
   4. Operating procedures.
   5. Operating logs.
   6. Wiring diagrams.
   7. Control diagrams.
   8. Piped system diagrams.
   9. Precautions against improper use.
   10. License requirements including inspection and renewal dates.

B. Descriptions: Include the following:
   1. Product name and model number. Use designations for products indicated on Contract Documents.
   2. Manufacturer's name.
   3. Equipment identification with serial number of each component.
   4. Equipment function.
   5. Operating characteristics.
   6. Limiting conditions.
   7. Performance curves.
   8. Engineering data and tests.
   9. Complete nomenclature and number of replacement parts.

C. Operating Procedures: Include the following, as applicable:
   1. Startup procedures.
   2. Equipment or system break-in procedures.

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3. Routine and normal operating instructions.
4. Regulation and control procedures.
5. Instructions on stopping.
6. Normal shutdown instructions.
7. Seasonal and weekend operating instructions.
8. Required sequences for electric or electronic systems.
9. Special operating instructions and procedures.

D. Systems and Equipment Controls: Describe the sequence of operation, and diagram controls as installed.

E. Piped Systems: Diagram piping as installed and identify color-coding where required for identification.

2.05 PRODUCT MAINTENANCE MANUALS

A. Content: Organize manual into a separate section for each product, material, and finish. Include source information, product information, maintenance procedures, repair materials and sources, and warranties and bonds, as described below.

B. Source Information: List each product included in manual, identified by product name and arranged to match manual's table of contents. For each product, list name, address, and telephone number of Installer or supplier and maintenance service agent, and cross-reference Specification Section number and title in Project Manual and drawing or schedule designation or identifier where applicable.

C. Product Information: Include the following, as applicable:
1. Product name and model number.
2. Manufacturer's name.
3. Color, pattern, and texture.
4. Material and chemical composition.
5. Reordering information for specially manufactured products.

D. Maintenance Procedures: Include manufacturer's written recommendations and the following:
1. Inspection procedures.
2. Types of cleaning agents to be used and methods of cleaning.
3. List of cleaning agents and methods of cleaning detrimental to product.
4. Schedule for routine cleaning and maintenance.
5. Repair instructions.

E. Repair Materials and Sources: Include lists of materials and local sources of materials and related services.

F. Warranties and Bonds: Include copies of warranties and bonds and lists of circumstances and conditions that would affect validity of warranties or bonds.
1. Include procedures to follow and required notifications for warranty claims.

2.06 SYSTEMS AND EQUIPMENT MAINTENANCE MANUALS

A. Content: For each system, subsystem, and piece of equipment not part of a system, include source information, manufacturers' maintenance documentation, maintenance procedures, maintenance and service schedules, spare parts list and source information, maintenance service contracts, and warranty and bond information, as described below.

OPERATION AND MAINTENANCE DATA

B. Source Information: List each system, subsystem, and piece of equipment included in manual, identified by product name and arranged to match manual's table of contents. For each product, list name, address, and telephone number of Installer or supplier and maintenance service agent, and cross-reference Specification Section number and title in Project Manual and drawing or schedule designation or identifier where applicable.

C. Manufacturers' Maintenance Documentation: Manufacturers' maintenance documentation including the following information for each component part or piece of equipment:
   1. Standard maintenance instructions and bulletins.
   2. Drawings, diagrams, and instructions required for maintenance, including disassembly and component removal, replacement, and assembly.
   3. Identification and nomenclature of parts and components.
   4. List of items recommended to be stocked as spare parts.

D. Maintenance Procedures: Include the following information and items that detail essential maintenance procedures:
   1. Test and inspection instructions.
   2. Troubleshooting guide.
   3. Precautions against improper maintenance.
   4. Disassembly; component removal, repair, and replacement; and reassembly instructions.
   5. Aligning, adjusting, and checking instructions.
   6. Demonstration and training video recording, if available.

E. Maintenance and Service Schedules: Include service and lubrication requirements, list of required lubricants for equipment, and separate schedules for preventive and routine maintenance and service with standard time allotment.
   1. Scheduled Maintenance and Service: Tabulate actions for daily, weekly, monthly, quarterly, semiannual, and annual frequencies.
   2. Maintenance and Service Record: Include manufacturers' forms for recording maintenance.

F. Spare Parts List and Source Information: Include lists of replacement and repair parts, with parts identified and cross-referenced to manufacturers' maintenance documentation and local sources of maintenance materials and related services.

G. Maintenance Service Contracts: Include copies of maintenance agreements with name and telephone number of service agent.

H. Warranties and Bonds: Include copies of warranties and bonds and lists of circumstances and conditions that would affect validity of warranties or bonds.
   1. Include procedures to follow and required notifications for warranty claims.

PART 3 EXECUTION

3.01 MANUAL PREPARATION

A. Operation and Maintenance Documentation Directory: Prepare a separate manual that provides an organized reference to emergency, operation, and maintenance manuals.

B. Emergency Manual: Assemble a complete set of emergency information indicating procedures for use by emergency personnel and by Owner's operating personnel for types of emergencies indicated.

C. Product Maintenance Manual: Assemble a complete set of maintenance data indicating care and maintenance of each product, material, and finish incorporated into the Work.

OPERATION AND MAINTENANCE DATA

D. Operation and Maintenance Manuals: Assemble a complete set of operation and maintenance data indicating operation and maintenance of each system, subsystem, and piece of equipment not part of a system.
   1. Engage a factory-authorized service representative to assemble and prepare information for each system, subsystem, and piece of equipment not part of a system.
   2. Prepare a separate manual for each system and subsystem, in the form of an instructional manual for use by Owner's operating personnel.

E. Manufacturers' Data: Where manuals contain manufacturers' standard printed data, include only sheets pertinent to product or component installed. Mark each sheet to identify each product or component incorporated into the Work. If data include more than one item in a tabular format, identify each item using appropriate references from the Contract Documents. Identify data applicable to the Work and delete references to information not applicable.
   1. Prepare supplementary text if manufacturers' standard printed data are not available and where the information is necessary for proper operation and maintenance of equipment or systems.

F. Drawings: Prepare drawings supplementing manufacturers' printed data to illustrate the relationship of component parts of equipment and systems and to illustrate control sequence and flow diagrams. Coordinate these drawings with information contained in record Drawings to ensure correct illustration of completed installation.
   1. Do not use original project record documents as part of operation and maintenance manuals.
   2. Comply with requirements of newly prepared record Drawings in Section 017839 "Project Record Documents".

G. Comply with Section 017700 "Closeout Procedures" for schedule for submitting operation and maintenance documentation.

END OF SECTION 017823

SECTION 017839
PROJECT RECORD DOCUMENTS

PART 1 GENERAL

1.01 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. Division 01 "Execution" for final property survey.
   2. Division 01 "Closeout Procedures" for general closeout procedures.
   3. Division 01 "Operation and Maintenance Data" for operation and maintenance manual requirements.
   4. Divisions 02 through 49 Sections for specific requirements for project record documents of the Work in those Sections.

1.02 CLOSEOUT SUBMITTAL

A. Record Drawings: Comply with the following:
   1. Number of Copies: Submit copies of record Drawings as follows:
      a. Initial Submittal:
         1) Submit (1) one paper-copy set(s) of marked-up record prints.
         2) Submit PDF electronic files of scanned record prints.
         3) Architect will indicate whether general scope of changes, additional information recorded, and quality of drafting are acceptable.
         4) Submit Record Digital Data Files and (1) one set(s) of plots.
      b. Final Submittal:
         1) Submit (1)one paper-copy set(s) of marked-up record prints.
         2) Submit PDF electronic files of scanned record prints.
         3) Print each drawing, whether or not changes and additional information were recorded.
         4) Submit Record Digital Data Files and (1) one set(s) of plots.

B. Record Specifications: Submit annotated PDF electronic files of Project's Specifications, including addenda and contract modifications.

C. Record Product Data: Submit annotated PDF electronic files and directories of each submittal.
   1. Where record Product Data are required as part of operation and maintenance manuals, submit duplicate marked-up Product Data as a component of manual.

D. Miscellaneous Record Submittals: See other Specification Sections for miscellaneous record-keeping requirements and submittals in connection with various construction activities. Submit annotated PDF electronic files and directories of each submittal.

E. Reports: Submit written report bi-weekly indicating items incorporated into project record documents concurrent with progress of the Work, including revisions, concealed conditions, field changes, product selections, and other notations incorporated.

1.03 RECORD DRAWINGS

A. Record Drawings: 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 drawings 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.

PROJECT RECORD DOCUMENTS

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. Depths of foundations below first floor.
d. Locations and depths of underground utilities.
e. Revisions to routing of piping and conduits.
f. Revisions to electrical circuitry.
g. Actual equipment locations.
h. Duct size and routing.
i. Locations of concealed internal utilities.
j. Changes made by Change Order or Construction Change Directive.
k. Changes made following Architect's written orders.
l. Details not on the original Contract Drawings.
m. Field records for variable and concealed conditions.
n. Record information on the Work that is shown only schematically.

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. Mark record sets with erasable, red-colored pencil. Use other colors to distinguish between changes for different categories of the Work at same location.
5. Mark important additional information that was either shown schematically or omitted from original Drawings.
6. Note Construction Change Directive numbers, alternate numbers, Change Order numbers, and similar identification, where applicable.
7. Submit as indicated in the Article 1.2 final submittal.

B. Record Digital Data Files: Immediately before inspection for Certificate of Substantial Completion, review marked-up record drawings with Architect. When authorized, prepare a full set of corrected digital data files of the Contract Drawings, as follows:
1. Format: Same digital data software program, version, and operating system as the original Contract Drawings.
2. Format: Annotated PDF electronic file. Annotated PDF electronic file with comment function enabled.
3. Incorporate changes and additional information previously marked on record prints. Delete, redraw, and add details and notations where applicable.
4. Refer instances of uncertainty to Architect for resolution.
5. Identify and date each record Drawing; include the designation "PROJECT RECORD DRAWING" in a prominent location.
6. Architect will furnish Contractor one set of digital data PDF files of the Contract Drawings for use in recording information.
a. See Section 013300 "Submittal Procedures" for requirements related to use of Architect's digital data files.

1.04 RECORD SPECIFICATIONS

A. Preparation: Mark Specifications to indicate the actual product installation where installation varies from that indicated in Specifications, addenda, and contract modifications.

PROJECT RECORD DOCUMENTS

1. Give particular attention to information on concealed products and installations that cannot be readily identified and recorded later.
2. Mark copy with the proprietary name and model number of products, materials, and equipment furnished, including substitutions and product options selected.
3. Record the name of manufacturer, supplier, Installer, and other information necessary to provide a record of selections made.
4. For each principal product, indicate whether record Product Data has been submitted in operation and maintenance manuals instead of submitted as record Product Data.
5. Note related Change Orders and record Drawings where applicable.
6. Submit as indicated in the Article 1.2 final submittal.

1.05 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. Give particular attention to information on concealed products and installations that cannot be readily identified and recorded later.
   2. Include significant changes in the product delivered to Project site and changes in manufacturer's written instructions for installation.
   3. Note related Change Orders and record Drawings where applicable.
   4. Include record Product Data directory organized by Specification Section number and title, electronically linked to each item of record Product Data.
   5. Submit as indicated in the Article 1.2 final submittal.

1.06 MISCELLANEOUS RECORD SUBMITTALS

A. Assemble miscellaneous records required by other Specification Sections for miscellaneous record keeping and submittal in connection with actual performance of the Work. Bind or file miscellaneous records and identify each, ready for continued use and reference.
   1. Include miscellaneous record submittals directory organized by Specification Section number and title, electronically linked to each item of miscellaneous record submittals.
   2. Submit as indicated in the Article 1.2 final submittal.

PART 2 PRODUCT (NOT USED)

PART 3 EXECUTION

3.01 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 reference during normal working hours.

END OF SECTION 017839

SECTION 017900
DEMONSTRATION AND TRAINING

PART 1 GENERAL

1.01 SUMMARY

A. Section includes administrative and procedural requirements for instructing Owner's personnel, including the following:
   1. Demonstration of operation of systems, subsystems, and equipment.
   2. Training in operation and maintenance of systems, subsystems, and equipment.
   3. Demonstration and training video recordings.

1.02 INFORMATIONAL SUBMITTALS

A. Instruction Program: Submit outline of instructional program for demonstration and training, including a list of training modules and a schedule of proposed dates, times, length of instruction time, and instructors' names for each training module. Include learning objective and outline for each training module.
   1. Indicate proposed training modules using manufacturer-produced demonstration and training video recordings for systems, equipment, and products in lieu of video recording of live instructional module.

1.03 CLOSEOUT SUBMITTALS

A. Demonstration and Training Video Recordings: Submit two copies within seven days of end of each training module.
   1. Identification: On each copy, provide an applied label with the following information:
      a. Name of Project.
      b. Name of Architect.
      c. Name of Contractor.
   2. Transcript: Prepared in PDF electronic format. Include a cover sheet with same label information as the corresponding video recording and a table of contents with links to corresponding training components. Include name of Project and date of video recording on each page.

B. At completion of training, submit complete training manual(s) for Owner's use, prepared and bound in format matching operation and maintenance manuals.

1.04 QUALITY ASSURANCE

A. Instructor Qualifications: A factory-authorized service representative, complying with requirements in Section 014000 "Quality Requirements," experienced in operation and maintenance procedures and training.

1.05 COORDINATION

A. Coordinate instruction schedule with Owner's operations. Adjust schedule as required to minimize disrupting Owner's operations and to ensure availability of Owner's personnel.

B. Coordinate instructors, including providing notification of dates, times, length of instruction time, and course content.

C. Coordinate content of training modules with content of approved emergency, operation, and maintenance manuals. Do not submit instruction program until operation and maintenance data has been reviewed and approved by Architect.

DEMONSTRATION AND TRAINING

PART 2 PRODUCTS

2.01 INSTRUCTION PROGRAM

A. Program Structure: Develop an instruction program that includes individual training modules for each system and for equipment not part of a system, as required by individual Specification Sections.

B. Training Modules: Develop a learning objective and teaching outline for each module. Include a description of specific skills and knowledge that participant is expected to master. For each module, include instruction for the following as applicable to the system, equipment, or component:

1. Basis of System Design, Operational Requirements, and Criteria: Include the following:
    a. System, subsystem, and equipment descriptions.
    b. Performance and design criteria if Contractor is delegated design responsibility.
    c. Operating standards.
    d. Regulatory requirements.
    e. Equipment function.
    f. Operating characteristics.
    g. Limiting conditions.
    h. Performance curves.
2. Documentation: Review the following items in detail:
    a. Emergency manuals.
    b. Operations manuals.
    c. Maintenance manuals.
    d. Project record documents.
    e. Identification systems.
    f. Warranties and bonds.
    g. Maintenance service agreements and similar continuing commitments.
3. Emergencies: Include the following, as applicable:
    a. Instructions on meaning of warnings, trouble indications, and error messages.
    b. Instructions on stopping.
    c. Shutdown instructions for each type of emergency.
    d. Operating instructions for conditions outside of normal operating limits.
    e. Sequences for electric or electronic systems.
    f. Special operating instructions and procedures.
4. Operations: Include the following, as applicable:
    a. Startup procedures.
    b. Equipment or system break-in procedures.
    c. Routine and normal operating instructions.
    d. Regulation and control procedures.
    e. Control sequences.
    f. Safety procedures.
    g. Instructions on stopping.
    h. Normal shutdown instructions.
    i. Operating procedures for emergencies.
    j. Operating procedures for system, subsystem, or equipment failure.
    k. Seasonal and weekend operating instructions.
    l. Required sequences for electric or electronic systems.
    m. Special operating instructions and procedures.
5. Adjustments: Include the following:
    a. Alignments.

DEMONSTRATION AND TRAINING

b. Checking adjustments.
c. Noise and vibration adjustments.
d. Economy and efficiency adjustments.

6. Troubleshooting: Include the following:
   a. Diagnostic instructions.
   b. Test and inspection procedures.
7. Maintenance: Include the following:
   a. Inspection procedures.
   b. Types of cleaning agents to be used and methods of cleaning.
   c. List of cleaning agents and methods of cleaning detrimental to product.
   d. Procedures for routine cleaning
   e. Procedures for preventive maintenance.
   f. Procedures for routine maintenance.
   g. Instruction on use of special tools.
8. Repairs: Include the following:
   a. Diagnosis instructions.
   b. Repair instructions.
   c. Disassembly; component removal, repair, and replacement; and reassembly instructions.
   d. Instructions for identifying parts and components.
   e. Review of spare parts needed for operation and maintenance.

PART 3 EXECUTION

3.01 PREPARATION

A. Assemble educational materials necessary for instruction, including documentation and training module. Assemble training modules into a training manual organized in coordination with requirements in Section 017823 "Operation and Maintenance Data."

B. Set up instructional equipment at instruction location.

3.02 INSTRUCTION

A. Engage qualified instructors to instruct Owner's personnel to adjust, operate, and maintain systems, subsystems, and equipment not part of a system.
   1. Owner will furnish Contractor with names and positions of participants.

B. Scheduling: Provide instruction at mutually agreed on times. For equipment that requires seasonal operation, provide similar instruction at start of each season.
   1. Schedule training with Owner with at least **seven** days' advance notice.

C. Training Location and Reference Material: Conduct training on-site in the completed and fully operational facility using the actual equipment in-place. Conduct training using final operation and maintenance data submittals.

D. Cleanup: Collect used and leftover educational materials and**remove from Project site.** Remove instructional equipment. Restore systems and equipment to condition existing before initial training use.

3.03 DEMONSTRATION AND TRAINING VIDEO RECORDINGS

A. Recording: Mount camera on tripod before starting recording, unless otherwise necessary to adequately cover area of demonstration and training. Display continuous running time.
   1. Film training session(s) in segments not to exceed 15 minutes.

DEMONSTRATION AND TRAINING

a. Produce segments to present a single significant piece of equipment per segment.
b. Organize segments with multiple pieces of equipment to follow order of Project Manual table of contents.
c. Where a training session on a particular piece of equipment exceeds 15 minutes, stop filming and pause training session. Begin training session again upon commencement of new filming segment.

B. Light Levels: Verify light levels are adequate to properly light equipment. Verify equipment markings are clearly visible prior to recording.
   1. Furnish additional portable lighting as required.

C. Narration: Describe scenes on video recording by video recording is recorded. Include description of items being viewed.

D. Transcript: Provide a transcript of the narration. Display images and running time captured from videotape opposite the corresponding narration segment.

END OF SECTION 017900

SECTION 02 41 00
DEMOLITION

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Selective demolition and removal of existing materials, componants, and equipment indicated on drawings.

1.02 RELATED REQUIREMENTS

A. Section 01 70 00 - Execution and Closeout Requirements: Project conditions; protection of bench marks, survey control points, and existing construction to remain; reinstallation of removed products; temporary bracing and shoring.

1.03 REFERENCE STANDARDS

PART 2 PRODUCTS (NOT USED)

PART 3 EXECUTION

3.01 GENERAL PROCEDURES AND PROJECT CONDITIONS

A. Comply with applicable codes and regulations for demolition operations and safety of adjacent structures and the public.
   1. Obtain required permits.
   2. Take precautions to prevent catastrophic or uncontrolled collapse of structures to be removed; do not allow worker or public access within range of potential collapse of unstable structures.
   3. Provide, erect, and maintain temporary barriers and security devices.
   4. Use physical barriers to prevent access to areas that could be hazardous to workers or the public.
   5. Conduct operations to minimize obstruction of public and private entrances and exits; do not obstruct required exits at any time; protect persons using entrances and exits from removal operations.

B. Do not begin removal until receipt of notification to proceed from Owner.

C. Protect existing structures and other elements that are not to be removed.
   1. Provide bracing and shoring.

3.02 SELECTIVE DEMOLITION FOR ALTERATIONS

A. Drawings showing existing construction and utilities are based on casual field observation and existing record documents only.
   1. Verify that construction and utility arrangements are as indicated.
   2. Report discrepancies to Architect before disturbing existing installation.
   3. Beginning of demolition work constitutes acceptance of existing conditions that would be apparent upon examination prior to starting demolition.

B. Separate areas in which demolition is being conducted from other areas that are still occupied.
   1. Provide, erect, and maintain temporary dustproof partitions of construction _____ in locations indicated on drawings.

C. Remove existing work as indicated and as required to accomplish new work.
   1. Remove items indicated on drawings.

D. Services (Including but not limited to HVAC, Plumbing, Fire Protection, Electrical, and Telecommunications): Remove existing systems and equipment as indicated.
   1. Maintain existing active systems that are to remain in operation; maintain access to equipment and operational components.
   2. Where existing active systems serve occupied facilities but are to be replaced with new services, maintain existing systems in service until new systems are complete and ready for service.

3. Verify that abandoned services serve only abandoned facilities before removal.
4. Remove abandoned pipe, ducts, conduits, and equipment, including those above accessible ceilings; remove back to source of supply where possible, otherwise cap stub and tag with identification.

E. Protect existing work to remain.
1. Prevent movement of structure; provide shoring and bracing if necessary.
2. Perform cutting to accomplish removals neatly and as specified for cutting new work.
3. Repair adjacent construction and finishes damaged during removal work.
4. Patch as specified for patching new work.

3.03 DEBRIS AND WASTE REMOVAL

A. Remove debris, junk, and trash from site.

B. Leave site in clean condition, ready for subsequent work.

END OF SECTION 02 41 00

SECTION 05 40 00
COLD-FORMED METAL FRAMING

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Formed steel stud interior wall framing.

1.02 RELATED REQUIREMENTS

A. Section 06 10 00 - Rough Carpentry: Wood blocking and miscellaneous framing.

B. Section 07 92 00 - Joint Sealants.

C. Section 09 51 00 - Acoustical Ceilings: Ceiling suspension system.

1.03 REFERENCE STANDARDS

A. ASTM A153/A153M - Standard Specification for Zinc Coating (Hot-Dip) on Iron and Steel Hardware; 2016a.

B. ASTM A653/A653M - Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process; 2020.

C. ASTM C1396/C1396M - Standard Specification for Gypsum Board; 2017.

1.04 SUBMITTALS

A. See Section 01 30 00 - Administrative Requirements for submittal procedures.

B. Product Data: Provide manufacturer's data on factory-made framing connectors, showing compliance with requirements.

C. Shop Drawings: Indicate component details, framed openings, anchorage, and type and location of fasteners, and accessories or items required of related work.
   1. Describe method for securing studs to tracks and for bolted framing connections.

D. SSMA Manufacturer Qualification: Submit documentation of manufacturer association membership.

1.05 QUALITY ASSURANCE

A. Manufacturer Qualifications: Company specializing in manufacturing the types of products specified in this section, and with minimum three years of documented experience.

B. Manufacturer Qualifications: Member of Steel Stud Manufacturers Association (SSMA): www.ssma.com/#sle.

C. Installer Qualifications: Company specializing in performing the work of this section with minimum three years documented experience.

PART 2 PRODUCTS

2.01 MANUFACTURERS

A. Metal Framing:
   1. CEMCO: www.cemcosteel.com/#sle.
   2. ClarkDietrich: www.clarkdietrich.com/#sle.
   3. Marino: www.marinoware.com/#sle.
   4. SCAFCO Corporation; _____: www.scafco.com/#sle.
   5. Steel Construction Systems: www.steelconsystems.com/#sle.
   6. The Steel Network, Inc: www.SteelNetwork.com/#sle.
   7. Substitutions: See Section 01 60 00 - Product Requirements.

B. Framing Connectors and Accessories:
   1. Same manufacturer as metal framing.

2.02 FRAMING SYSTEM

A. Provide primary and secondary framing members, bridging, bracing, plates, gussets, clips, fittings, reinforcement, and fastenings as required to provide a complete framing system.

B. Design Requirements: Provide completed framing system having the following characteristics:
   1. Design: Calculate structural characteristics of cold-formed steel framing members according to AISI S100.
   2. Live load deflection meeting the following, unless otherwise indicated:
      a. Floors: Maximum vertical deflection under live load of 1/480 of span.
   3. Able to accommodate construction tolerances, deflection of building structural members, and clearances of intended openings.

2.03 FRAMING MATERIALS

A. Studs and Track: ASTM C955; studs formed to channel, C- or Sigma-shaped with punched web; U-shaped track in matching nominal width and compatible height.
   1. Gauge and Depth: As required to meet specified performance levels.
   2. Galvanized in accordance with ASTM A653/A653M, G90/Z275 coating.
   3. Products:
      a. CEMCO; ProX Header: www.cemcosteel.com/#sle.
      b. Super Stud Building Products, Inc; SuperMAXX Studs: www.buysuperstud.com/#sle.
      c. Substitutions: See Section 01 60 00 - Product Requirements.

B. Jamb Studs: Engineered, C-shaped with wide flanges, designed to replace conventional double-stud framing at openings.

C. Header: Engineered one-member or two-member assembly, with wide flanges, designed to replace conventional box or nested header framing at openings.
   1. Jamb Mounting Clips: Manufacturer's standard.
   2. Cripple Stud Clips: Manufacturer's standard.

2.04 FASTENERS

A. Self-Drilling, Self-Tapping Screws, Bolts, Nuts and Washers: Hot dip galvanized per ASTM A153/A153M.
   1. Products:
      a. ITW Commercial Construction North America; ITW CCNA-Buildex Teks Select Series: www.ITWBuildex.com/#sle.
      b. Substitutions: See Section 01 60 00 - Product Requirements.

B. Anchorage Devices: Powder actuated and Screws with sleeves.

2.05 ACCESSORIES

A. Bracing, Furring, Bridging: Formed sheet steel, thickness determined for conditions encountered; finish to match framing components.

B. Touch-Up Primer for Galvanized Surfaces: SSPC-Paint 20 Type I - Inorganic, complying with VOC limitations of authorities having jurisdiction.

PART 3 EXECUTION

3.01 EXAMINATION

A. Verify that substrate surfaces are ready to receive work.

B. Verify field measurements and adjust installation as required.

3.02 INSTALLATION OF STUDS

A. Install components in accordance with manufacturers' instructions and ASTM C1007 requirements.

B. Align floor and ceiling tracks; locate to wall layout. Secure in place with fasteners at maximum 24 inches on center. Coordinate installation of sealant with floor and ceiling tracks.

C. Place studs at 16 inches on center; not more than 2 inches from abutting walls and at each side of openings. Connect studs to tracks using clip and tie method.

D. Construct corners using minimum of three studs. Install double studs at wall openings, door and window jambs.

E. Install intermediate studs above and below openings to align with wall stud spacing.

F. Provide deflection allowance in stud track, directly below horizontal building framing at non-load bearing framing.

G. Attach cross studs to studs for attachment of fixtures anchored to walls.

H. Install framing between studs for attachment of mechanical and electrical items, and to prevent stud rotation.

I. Touch-up field welds and damaged galvanized surfaces with primer.

3.03 TOLERANCES

A. Maximum Variation from True Position: 1/8 inch.

B. Maximum Variation of any Member from Plane: 1/8 inch.

END OF SECTION 05 40 00

SECTION 06 10 00
ROUGH CARPENTRY

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Concealed wood blocking, nailers, and supports.

B. Miscellaneous wood nailers, furring, and grounds.

1.02 RELATED REQUIREMENTS

1.03 REFERENCE STANDARDS

A. ASTM A153/A153M - Standard Specification for Zinc Coating (Hot-Dip) on Iron and Steel Hardware; 2016a.

B. ASTM E84 - Standard Test Method for Surface Burning Characteristics of Building Materials; 2021a.

C. AWPA U1 - Use Category System: User Specification for Treated Wood; 2022.

D. PS 20 - American Softwood Lumber Standard; 2021.

E. SPIB (GR) - Standard Grading Rules; 2021.

1.04 SUBMITTALS

A. Product Data: Provide technical data on each type of specified product.

B. ABAA Manufacturer Qualification: Submit documentation of current evaluation of proposed manufacturer and materials.

1.05 QUALITY ASSURANCE

A. Air Barrier Association of America (ABAA) Evaluated Materials Program (EAP); www.airbarrier.org/#sle: Use evaluated materials from a single manufacturer regularly engaged in air barrier material manufacture. Use secondary materials approved in writing by primary material manufacturer.

1.06 DELIVERY, STORAGE, AND HANDLING

A. General: Cover wood products to protect against moisture. Support stacked products to prevent deformation and to allow air circulation.

1.07 WARRANTY

A. See Section 01 78 00 - Closeout Submittals, for additional warranty requirements.

PART 2 PRODUCTS

2.01 GENERAL REQUIREMENTS

A. Dimension Lumber: Comply with PS 20 and requirements of specified grading agencies.
   1. Species: Southern Pine, unless otherwise indicated.
   2. Grading Agency: Any grading agency whose rules are approved by the Board of Review, American Lumber Standard Committee (www.alsc.org) and who provides grading service for the species and grade specified; provide lumber stamped with grade mark unless otherwise indicated.
   3. Lumber of other species or grades is acceptable provided structural and appearance characteristics are equivalent to or better than products specified.

2.02 ACCESSORIES

A. Fasteners and Anchors:
   1. Metal and Finish: Hot-dipped galvanized steel complying with ASTM A153/A153M for high humidity and preservative-treated wood locations, unfinished steel elsewhere.
   2. Drywall Screws: Bugle head, hardened steel, power driven type, length three times thickness of sheathing.

2.03 FACTORY WOOD TREATMENT

A. Treated Lumber and Plywood: Comply with requirements of AWPA U1 - Use Category System for wood treatments determined by use categories, expected service conditions, and specific applications.

B. Fire Retardant Treatment:
   1. Manufacturers:
      a. Lonza Group: www.wolmanizedwood.com/#sle.
      b. Hoover Treated Wood Products, Inc: www.frtw.com/#sle.
   2. Interior Type A: AWPA U1, Use Category UCFA, Commodity Specification H, low temperature (low hygroscopic) type, chemically treated and pressure impregnated; capable of providing a maximum flame spread index of 25 when tested in accordance with ASTM E84, with no evidence of significant combustion when test is extended for an additional 20 minutes.
      a. Kiln dry wood after treatment to a maximum moisture content of 19 percent for lumber and 15 percent for plywood.
      b. Treat rough carpentry items as indicated .
      c. Do not use treated wood in applications exposed to weather or where the wood may become wet.

PART 3 EXECUTION

3.01 PREPARATION

A. Coordinate installation of rough carpentry members specified in other sections.

3.02 INSTALLATION - GENERAL

A. Select material sizes to minimize waste.

B. Where treated wood is used on interior, provide temporary ventilation during and immediately after installation sufficient to remove indoor air contaminants.

3.03 BLOCKING, NAILERS, AND SUPPORTS

A. Provide framing and blocking members as indicated or as required to support finishes, fixtures, specialty items, and trim.

B. In metal stud walls, provide continuous blocking around door and window openings for anchorage of frames, securely attached to stud framing.

C. In walls, provide blocking attached to studs as backing and support for wall-mounted items, unless item can be securely fastened to two or more studs or other method of support is explicitly indicated.

D. Provide the following specific non-structural framing and blocking:
   1. Cabinets and shelf supports.
   2. Wall brackets.
   3. Wall-mounted door stops.
   4. Wall paneling and trim.
   5. Joints of rigid wall coverings that occur between studs.
   6. Overhead security grilles.

3.04 CLEANING

A. Waste Disposal:
   1. Comply with applicable regulations.
   2. Do not burn scrap on project site.
   3. Do not burn scraps that have been pressure treated.
   4. Do not send materials treated with pentachlorophenol, CCA, or ACA to co-generation facilities or “waste-to-energy” facilities.

B. Do not leave any wood, shavings, sawdust, etc. on the ground or buried in fill.

C. Prevent sawdust and wood shavings from entering the storm drainage system.

END OF SECTION 06 10 00

SECTION 06 41 00
ARCHITECTURAL WOOD CASEWORK

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Specially fabricated cabinet units.

B. Hardware.

1.02 RELATED REQUIREMENTS

A. Section 06 10 00 - Rough Carpentry: Support framing, grounds, and concealed blocking.

B. Section 12 36 00 - Countertops.

1.03 REFERENCE STANDARDS

A. ANSI A208.2 - Medium Density Fiberboard (MDF) for Interior Applications; 2022.

B. AWI (QCP) - Quality Certification Program; Current Edition.

C. AWI/AWMAC/WI (AWS) - Architectural Woodwork Standards, 2nd Edition; 2014, with Errata (2016).

D. AWMAC/WI (NAAWS) - North American Architectural Woodwork Standards; 2021, with Errata.

E. BHMA A156.9 - American National Standard for Cabinet Hardware; 2015.

F. NEMA LD 3 - High-Pressure Decorative Laminates; 2005.

1.04 ADMINISTRATIVE REQUIREMENTS

A. Preinstallation Meeting: Convene a preinstallation meeting not less than one week before starting work of this section; require attendance by all affected installers.

1.05 SUBMITTALS

A. See Section 01 30 00 - Administrative Requirements for submittal procedures.

B. Shop Drawings: Indicate materials, component profiles, fastening methods, jointing details, and accessories.

C. Product Data: Provide data for hardware accessories.

D. Samples: Provide samples for verification not less than 4 inches by 4 inches square of plastic laminate samples.

E. Certificate: Submit labels and certificates required by quality assurance and quality control programs.

1.06 QUALITY ASSURANCE

A. Fabricator Qualifications: Company specializing in fabricating the products specified in this section with minimum five years of documented experience.
   1. Accredited participant in the specified certification program prior to the commencement of fabrication and throughout the duration of the project.
   2. Single Source Responsibility: Provide and install this work from single fabricator.

B. Quality Certification:
   1. Comply with AWI (QCP) woodwork association quality certification service/program in accordance with requirements for work specified in this section: www.awiqcp.org/#sle.
   2. Provide labels or certificates indicating that the installed work complies with AWI/AWMAC/WI (AWS) or AWMAC/WI (NAAWS) requirements for grade or grades specified.
   3. Provide designated labels on shop drawings as required by certification program.
   4. Provide designated labels on installed products as required by certification program.

5. Submit certifications upon completion of installation that verifies this work is in compliance with specified requirements.
6. Replace, repair, or rework all work for which certification is refused.

1.07 DELIVERY, STORAGE, AND HANDLING

A. Protect units from moisture damage.

1.08 FIELD CONDITIONS

A. During and after installation of custom cabinets, maintain temperature and humidity conditions in building spaces at same levels planned for occupancy.

PART 2 PRODUCTS

2.01 CABINETS

A. Quality Standard: Custom Grade, in accordance with AWI/AWMAC/WI (AWS) or AWMAC/WI (NAAWS), unless noted otherwise.

B. Plastic Laminate Faced Cabinets: Custom grade.

C. Stainless Steel Cabients: Refer to requirements shown on drawings.

D. Cabinets:
1. Finish - Exposed Exterior Surfaces: Plastic laminate.
2. Finish - Exposed Interior Surfaces: Plastic laminate.
3. Finish - Semi-Exposed Surfaces: Plastic laminate.
4. Finish - Concealed Surfaces: Melamine.
5. Grained Face Layout for Cabinet and Door Fronts: Flush panel.
   a. Custom Grade: Doors, drawer fronts and false fronts wood grain to run and match vertically within each cabinet unit.
6. Cabinet Design Series: As indicated on drawings.
7. Cabinet Style: Full overlay.
8. Cabinet Doors and Drawer Fronts: Full overlay.
9. Drawer Side Construction: Multiple-dovetailed.
10. Drawer Construction Technique: Dovetail joints.

2.02 WOOD-BASED COMPONENTS

A. Wood fabricated from old growth timber is not permitted.

2.03 PANEL CORE MATERIALS

A. Plywood: Provide marine-grade plywood where noted.

B. Medium Density Fiberboard (MDF): Composite panel composed of cellulosic fibers, additives, and bonding system; cured under heat and pressure; comply with ANSI A208.2.

2.04 LAMINATE MATERIALS

A. Manufacturers: Provide Basis-of-Design Product as listed in Interior Finish Schedule or comparable product by one of the following:
1. Formica Corporation; ____: www.formica.com/#sle.
2. Panolam Industries International, Inc; _____: www.panolam.com/#sle.
3. Wilsonart LLC; ____: www.wilsonart.com/#sle.

B. High Pressure Decorative Laminate (HPDL): NEMA LD 3, types as recommended for specific applications.

2.05 COUNTERTOPS

A. Countertops: See Section 12 36 00.

2.06 ACCESSORIES

A. Adhesive: Type recommended by fabricator to suit application.

B. Plastic Edge Banding: Extruded PVC, convex shaped; smooth finish; self locking serrated tongue; of width to match component thickness, 3mm.
   1. Color: As selected by Architect from manufacturer's full range.

2.07 HARDWARE

A. Hardware: BHMA A156.9, types as recommended by fabricator for quality grade specified.

B. Adjustable Shelf Supports: Standard side-mounted system using recessed metal shelf standards or multiple holes for pin supports and coordinated self rests, polished chrome finish, for nominal 1 inch spacing adjustments.

C. Shelf Support Brackets: Fixed, L-shaped, corner reinforced, face-of-stud mounting.
   1. Materials: Formed steel shapes.
      a. Finish: Manufacturer's standard, factory-applied, textured powder coat.
      b. Color: To be selected by Architect from manufacturer's full line.
   2. Support Length: 8 inches or as shown on drawings.

D. Countertop Support Brackets: Fixed, L-shaped, face-of-stud mounting.
   1. Materials: Steel plates.
      a. Finish: Manufacturer's standard, factory-applied, black powder coat, painted to match wall finish.

E. Drawer and Door Pulls: "U" shaped wire pull, steel with chrome finish, 4 inch centers.

F. Keyed Cabinet Locks: Keyed cylinder, two keys per lock, master keyed, steel with chrome finish.

G. Drawer Slides:
   1. Type: Full extension.
   2. Static Load Capacity: Commercial grade.
   3. Mounting: Side mounted.
   4. Stops: Integral type.
   5. Features: Provide self closing/stay closed type wth soft close.
   6. Basis-of Design Product: Provide Grass Elite Plus Soft Close or comparable product by one of the following:
      a. Blum, Inc/.
      b. Knape & Vogt Manufacturing Company

H. Soft-Close, Door and Drawer Adjustable Dampers:
   1. Manufacturers:
      a. Grass America Inc
      b. Titus Cabinet Hardware
      c. Blum.

I. Hinges: European style concealed self-closing type, steel with nickel-plated finish.

J. Grommets: 2 inch diameter, black, molded-plastic grommets and matching plastic caps with slot for wire passage. Locate grommets above power, data, or other receptacles below the countertop. Add additional grommets after installation above power and data locations as necessary.
   1. Refer to drawings for Trash Grommet size requiremnts.

2.08 FABRICATION

A. Assembly: Shop assemble cabinets for delivery to site in units easily handled and to permit passage through building openings.

B. Edging: Fit shelves, doors, and exposed edges with specified edging. Do not use more than one piece for any single length.

C. Fitting: When necessary to cut and fit on site, provide materials with ample allowance for cutting. Provide matching trim for scribing and site cutting.

D. Plastic Laminate: Apply plastic laminate finish in full uninterrupted sheets consistent with manufactured sizes. Fit corners and joints hairline; secure with concealed fasteners. Slightly bevel arises. Locate counter butt joints minimum 2 feet from sink cut-outs.

E. Mechanically fasten back splash to countertops as recommended by laminate manufacturer at 16 inches on center.

F. Provide cutouts for plumbing fixtures. Verify locations of cutouts from on-site dimensions. Prime paint cut edges.

PART 3 EXECUTION

3.01 EXAMINATION

A. Verify adequacy of backing and support framing.

B. Verify location and sizes of utility rough-in associated with work of this section.

3.02 INSTALLATION

A. Install work in accordance with AWI/AWMAC/WI (AWS) or AWMAC/WI (NAAWS) requirements for grade indicated.

B. Set and secure custom cabinets in place, assuring that they are rigid, plumb, and level.

C. Use fixture attachments in concealed locations for wall mounted components.

D. Use concealed joint fasteners to align and secure adjoining cabinet units.

E. Carefully scribe casework abutting other components, with maximum gaps of 1/32 inch. Do not use additional overlay trim for this purpose.

F. Secure cabinets to floor using appropriate angles and anchorages.

G. Countersink anchorage devices at exposed locations. Conceal with solid wood plugs of species to match surrounding wood; finish flush with surrounding surfaces.

3.03 ADJUSTING

A. Adjust installed work.

B. Adjust moving or operating parts to function smoothly and correctly.

3.04 CLEANING

A. Clean casework, counters, shelves, hardware, fittings, and fixtures.

END OF SECTION

SECTION 07 21 00
THERMAL INSULATION

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Board insulation at Acoustical insulation for interior partitions and ceilings.

1.02 REFERENCE STANDARDS

A. ASTM C423 - Standard Test Method for Sound Absorption and Sound Absorption Coefficients by the Reverberation Room Method; 2023, with Editorial Revision (2024).

B. ASTM C665 - Standard Specification for Mineral-Fiber Blanket Thermal Insulation for Light Frame Construction and Manufactured Housing; 2024.

C. ASTM E84 - Standard Test Method for Surface Burning Characteristics of Building Materials; 2021a.

D. ASTM E96/E96M - Standard Test Methods for Gravimetric Determination of Water Vapor Transmission Rate of Materials; 2022a.

E. ASTM E136 - Standard Test Method for Assessing Combustibility of Materials Using a Vertical Tube Furnace at 750°C; 2019a.

F. NFPA 285 - Standard Fire Test Method for Evaluation of Fire Propagation Characteristics of Exterior Non-Load-Bearing Wall Assemblies Containing Combustible Components; 2019.

1.03 SUBMITTALS

A. Product Data: Provide data on product characteristics, performance criteria, and product limitations.

B. Manufacturer's Installation Instructions: Include information on installation techniques.

PART 2 PRODUCTS

2.01 APPLICATIONS

A. Insulation in Metal Framed Walls: Batt insulation with no vapor retarder.

B. Insulation Above Lay-In Acoustical Ceilings: Batt insulation with no vapor retarder.

2.02 FOAM BOARD INSULATION MATERIALS

2.03 BATT INSULATION MATERIALS

A. Sound Attenuation:: ASTM C665; Flexible preformed batt or blanket, friction fit.
   1. Combustibility: Non-combustible, when tested in accordance with ASTM E136.
   2. Formaldehyde Content: Zero.
   3. Thickness: 3.5 inch.
   4. Facing: Unfaced.
   5. Products:
      a. CertainTeed Corporation; _____: www.certainteed.com/#sle.
      b. Johns Manville; _____: www.jm.com/#sle.
      c. Substitutions: See Section 01 60 00 - Product Requirements.

2.04 ACCESSORIES

A. Tape: Reinforced polyethylene film with acrylic pressure sensitive adhesive.
   1. Application: Sealing of interior circular penetrations, such as pipes or cables.
   2. Width: Are required for application.

B. Insulation Fasteners: Impaling clip of unfinished steel with washer retainer and clips, to be adhered to surface to receive insulation, length to suit insulation thickness and substrate, capable of securely and rigidly fastening insulation in place.

C. Adhesive: Type recommended by insulation manufacturer for application.

PART 3 EXECUTION

3.01 EXAMINATION

A. Verify that substrate, adjacent materials, and insulation materials are dry and that substrates are ready to receive insulation.

B. Verify substrate surfaces are flat, free of honeycomb, fins, irregularities, or materials or substances that may impede adhesive bond.

3.02 BATT INSTALLATION

A. Install insulation in accordance with manufacturer's instructions.

B. Install in exterior walls spaces without gaps or voids. Do not compress insulation.

C. Trim insulation neatly to fit spaces. Insulate miscellaneous gaps and voids.

D. Fit insulation tightly in cavities and tightly to exterior side of mechanical and electrical services within the plane of the insulation.

E. Tape seal butt ends, lapped flanges, and tears or cuts in membrane.

3.03 PROTECTION

A. Do not permit installed insulation to be damaged prior to its concealment.

END OF SECTION 07 21 00

SECTION 07 92 00
JOINT SEALANTS

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Silicone Joint Sealants

B. Mildew-resistant joint sealants

1.02 RELATED REQUIREMENTS

A. Section 08 71 00 - Door Hardware: Setting exterior door thresholds in sealant.

B. Section 08 80 00 - Glazing: Glazing sealants and accessories.

1.03 REFERENCE STANDARDS

A. ASTM C661 - Standard Test Method for Indentation Hardness of Elastomeric-Type Sealants by Means of a Durometer; 2015.

B. ASTM C834 - Standard Specification for Latex Sealants; 2017.

C. ASTM C919 - Standard Practice for Use of Sealants in Acoustical Applications; 2018.

D. ASTM C920 - Standard Specification for Elastomeric Joint Sealants; 2018.

E. ASTM C1193 - Standard Guide for Use of Joint Sealants; 2016.

F. ASTM C1248 - Standard Test Method for Staining of Porous Substrate by Joint Sealants; 2018.

1.04 SUBMITTALS

A. See Section 01 30 00 - Administrative Requirements, for submittal procedures.

B. Product Data for Sealants: Submit manufacturer's technical data sheets for each product to be used, that includes the following.
   1. Physical characteristics, including movement capability, VOC content, hardness, cure time, and color availability.
   2. List of backing materials approved for use with the specific product.
   3. Substrates that product is known to satisfactorily adhere to and with which it is compatible.
   4. Substrates the product should not be used on.
   5. Substrates for which use of primer is required.

C. Color Cards for Selection: Where sealant color is not specified, submit manufacturer's color cards showing standard colors available for selection.

D. Samples for Verification: Where custom sealant color is specified, obtain directions from Architect and submit at least two physical samples for verification of color of each required sealant.

1.05 WARRANTY

A. See Section 01 78 00 - Closeout Submittals, for additional warranty requirements.

B. Correct defective work within a two year period after Date of Substantial Completion.

C. Warranty: Include coverage for installed sealants and accessories that fail to achieve watertight seal , exhibit loss of adhesion or cohesion, or do not cure.

PART 2 PRODUCTS

2.01 MANUFACTURERS

2.02 JOINT SEALANT APPLICATIONS

A. Scope:
   1. Interior Joints: Do not seal interior joints unless specifically indicated to be sealed. Interior joints to be sealed include, but are not limited to, the following items.
      a. Joints between door, window, and other frames and adjacent construction.

b. In sound-rated wall and ceiling assemblies, gaps at electrical outlets, wiring devices, piping, and other openings; between wall/ceiling and other construction; and other flanking sound paths.

B. Interior Joints: Use non-sag polyurethane sealant, unless otherwise indicated.
1. Wall and Ceiling Joints in Non-Wet Areas: Acrylic emulsion latex sealant.
2. Wall and Ceiling Joints in Wet Areas: Non-sag polyurethane sealant for continuous liquid immersion.
3. Joints between Fixtures in Wet Areas and Floors, Walls, and Ceilings: Mildew-resistant silicone sealant; _____.

C. Interior Wet Areas: kitchens, food service areas, and food processing areas; fixtures in wet areas include food service equipment, countertops, cabinets, and other similar items.

D. Sound-Rated Assemblies: Walls and ceilings identified as "STC-rated", "sound-rated", or "acoustical".

2.03 JOINT SEALANTS - GENERAL

A. Sealants and Primers: Provide products with levels of volatile organic compound (VOC) content as indicated in Section 01 61 16.

B. Colors: match adjacent color .

2.04 NONSAG JOINT SEALANTS

A. Non-Staining Silicone Sealant: ASTM C920, Grade NS, Uses M and A; not expected to withstand continuous water immersion or traffic.
1. Movement Capability: Plus and minus 50 percent, minimum.
2. Non-Staining To Porous Stone: Non-staining to light-colored natural stone when tested in accordance with ASTM C1248.
3. Dirt Pick-Up: Reduced dirt pick-up compared to other silicone sealants.
4. Color: To be selected by Architect from manufacturer's full range.
5. Manufacturers:
a. Momentive Performance Materials, Inc/GE Silicones: www.siliconeforbuilding.com/#sle.
b. Pecora Corporation:
c. Sika Corporation: www.usa-sika.com/#sle.
d. Tremco Commercial Sealants & Waterproofing: www.tremcosealants.com/#sle.
e. Substitutions: See Section 01 60 00 - Product Requirements.

B. Mildew-Resistant Silicone Sealant: ASTM C920, Grade NS, Uses M and A; single component, mildew resistant; not expected to withstand continuous water immersion or traffic.
1. Color: As selected by Architect from Manufacturer's range.
2. Manufacturers:
a. Momentive Performance Materials, Inc/GE Silicones: www.siliconeforbuilding.com/#sle.
b. Pecora Corporation: www.pecora.com/#sle.
c. Sika Corporation: www.usa-sika.com/#sle.
d. Tremco Sealants; www.ttremcosealants.com
e. Substitutions: See Section 01 60 00 - Product Requirements.

C. Polyurethane Sealant: ASTM C920, Grade NS, Uses M and A; single-component; not expected to withstand continuous water immersion or traffic.
1. Movement Capability: Plus and minus 20-35 percent, minimum.
2. Hardness Range: 20 to 35, Shore A, when tested in accordance with ASTM C661.
3. Color: To be selected by Architect from manufaturer full range.
4. Manufacturers:
a. Pecora Corporation: www.pecora.com/#sle.
b. Sika Corporation: www.usa-sika.com/#sle.

c. Tremco Commercial Sealants & Waterproofing; Dymeric 240 FC: www.tremcosealants.com/#sle.
d. Substitutions: See Section 01 60 00 - Product Requirements.

2.05 ACCESSORIES

A. Backer Rod: Cylindrical cellular foam rod with surface that sealant will not adhere to, compatible with specific sealant used, and recommended by backing and sealant manufacturers for specific application.
   1. Closed Cell and Bi-Cellular: 25 to 33 percent larger in diameter than joint width.
   2. Manufacturers:
      a. Nomaco, Inc: www.nomaco.com/#sle.
      b. Tremco Sealants; www.tremcosealants.com
      c. Substitutions: See Section 01 60 00 - Product Requirements.

B. Backing Tape: Self-adhesive polyethylene tape with surface that sealant will not adhere to and recommended by tape and sealant manufacturers for specific application.

C. Masking Tape: Self-adhesive, nonabsorbent, non-staining, removable without adhesive residue, and compatible with surfaces adjacent to joints and sealants.

D. Joint Cleaner: Non-corrosive and non-staining type, type recommended by sealant manufacturer; compatible with joint forming materials.

E. Primers: Type recommended by sealant manufacturer to suit application; non-staining.

PART 3 EXECUTION

3.01 EXAMINATION

A. Verify that joints are ready to receive work.

B. Verify that backing materials are compatible with sealants.

C. Verify that backer rods are of the correct size.

3.02 PREPARATION

A. Remove loose materials and foreign matter that could impair adhesion of sealant.

B. Clean joints, and prime as necessary, in accordance with manufacturer's instructions.

C. Perform preparation in accordance with manufacturer's instructions and ASTM C1193.

D. Mask elements and surfaces adjacent to joints from damage and disfigurement due to sealant work; be aware that sealant drips and smears may not be completely removable.

3.03 INSTALLATION

A. Perform work in accordance with sealant manufacturer's requirements for preparation of surfaces and material installation instructions.

B. Perform installation in accordance with ASTM C1193.

C. Perform acoustical sealant application work in accordance with ASTM C919.

D. Measure joint dimensions and size joint backers to achieve width-to-depth ratio, neck dimension, and surface bond area as recommended by manufacturer.

E. Install bond breaker backing tape where backer rod cannot be used.

F. Install sealant free of air pockets, foreign embedded matter, ridges, and sags, and without getting sealant on adjacent surfaces.

G. Do not install sealant when ambient temperature is outside manufacturer's recommended temperature range, or will be outside that range during the entire curing period, unless manufacturer's approval is obtained and instructions are followed.

H. Nonsag Sealants: Tool surface concave, unless otherwise indicated; remove masking tape immediately after tooling sealant surface.

END OF SECTION 07 92 00

SECTION 08 06 71
DOOR HARDWARE SCHEDULE

PART 1 GENERAL

1.01 RELATED REQUIREMENTS

A. Section 08 71 00 - Door Hardware: Requirements to comply with in coordination with this section.

1.02 REFERENCE STANDARDS

A. BHMA A156.18 - American National Standard for Materials and Finishes; 2016.

B. DHI (H&S) - Sequence and Format for the Hardware Schedule; 1996.

1.03 SUBMITTALS

A. See Section 01 30 00 - Administrative Requirements, for submittal procedures.

B. Comply with submittal requirements as indicated in Section 08 71 00.

PART 2 PRODUCTS

2.01 MANUFACTURERS

A. Only manufacturers listed in Door Hardware Schedule or Section 08 71 00 are considered acceptable, unless noted otherwise.

B. Obtain each type of door hardware as indicated from a single manufacturer and single supplier.

C. Manufacturer's Abbreviations: Coordinate with manufacturers listed in Section 08 71 00.

2.02 FINISHES

A. Finishes: Complying with BHMA A156.18.

PART 3 EXECUTION

3.01 DOOR HARDWARE SCHEDULE

A. Organize listing of door hardware components within each hardware set in compliance with 10-Part scheduling sequence indicated in DHI (H&S), unless otherwise indicated.

3.02 HARDWARE SET # 01: "_____"

A. For use on Door Number(s): 103.

UNITS	LOCK	ITEM	DESCRIPTION	FINISH	MFR
3 each		Hingle	TA2714	US26D	MK
1 each		Storeroom Lock	ML2057 LWA	630	RU
1 each		Door Stop	409/441CU	US26D	RO
3 each		Seals and Silencers	S88D/608	as required	PE

B. Keying: Provide mortise cylinder/core compatible with Owner's keying system. Coordinate final keying with owner before fabrication.

C. Provide additional hinge quantity or size where required by final door dimensions, weight, or manufacturer's recommendations.

3.03 HARDWARE SET # 02: "OPENING FOOD PREPARATION AREA TO DINING AREA T"

A. For use on Door Number(s): 117A, 117B.

B. Provide for each Single (SGL) door(s).

C. Configuaration and dimensions as indicated on drawings.

D. 1 set Double-Acting Impact Traffic Door: HCG-10 ABS with actory-installed easy swing hinge system: finish color selected by Architect: Eliason

E. Vision Panels: 14 by 16 inch scratch-resistant acrylic with black rubber molding: one per leaf: Eliason

F. Operation: Door swings in both directions and returns to center. No separate lockset, door closer, door stop, or latch is required unless indicated on drawings.

G. Coordination: Furnish complete manufacturer-required mounting components, including the HCG-10 standard full-perimeter gasket. Refer to section 08 71 00 for panel constrction and limits of use.

END OF SECTION

SECTION 08 12 13
HOLLOW METAL FRAMES

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Non-fire-rated hollow metal frames for non-hollow metal doors.

1.02 RELATED REQUIREMENTS

A. Section 08 71 00 - Door Hardware: Hardware, silencers, and weatherstripping.

B. Section 08 80 00 - Glazing: Glazed borrowed lites.

C. Section 09 91 23 - Interior Painting: Field painting.

1.03 REFERENCE STANDARDS

A. ADA Standards - Americans with Disabilities Act (ADA) Standards for Accessible Design; 2010.

B. ANSI/SDI A250.4 - Test Procedure and Acceptance Criteria for Physical Endurance for Steel Doors, Frames and Frame Anchors; 2011.

C. ANSI/SDI A250.6 - Recommended Practice for Hardware Reinforcing on Standard Steel Doors and Frames; 2003 (R2009).

D. ANSI/SDI A250.8 - Specifications for Standard Steel Doors and Frames (SDI-100); 2017.

E. ASTM A653/A653M - Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process; 2020.

F. ASTM A1008/A1008M - Standard Specification for Steel, Sheet, Cold-Rolled, Carbon, Structural, High-Strength Low-Alloy, High-Strength Low-Alloy with Improved Formability, Required Hardness, Solution Hardened, and Bake Hardenable; 2020.

G. ASTM A1011/A1011M - Standard Specification for Steel, Sheet and Strip, Hot-Rolled, Carbon, Structural, High-Strength Low-Alloy, High-Strength Low-Alloy with Improved Formability, and Ultra-High Strength; 2018a.

H. BHMA A156.115 - American National Standard for Hardware Preparation in Steel Doors and Steel Frames; 2016.

I. ICC A117.1 - Accessible and Usable Buildings and Facilities; 2017.

J. NAAMM HMMA 830 - Hardware Selection for Hollow Metal Doors and Frames; 2002.

K. NAAMM HMMA 831 - Hardware Locations for Hollow Metal Doors and Frames; 2011.

L. NAAMM HMMA 840 - Guide Specifications For Receipt, Storage and Installation of Hollow Metal Doors and Frames; 2007.

M. NFPA 80 - Standard for Fire Doors and Other Opening Protectives; 2019.

N. NFPA 105 - Standard for Smoke Door Assemblies and Other Opening Protectives; 2019.

O. NFPA 252 - Standard Methods of Fire Tests of Door Assemblies; 2017.

P. SDI 117 - Manufacturing Tolerances for Standard Steel Doors and Frames; 2013.

Q. UL 10C - Standard for Positive Pressure Fire Tests of Door Assemblies; Current Edition, Including All Revisions.

1.04 SUBMITTALS

A. See Section 01 30 00 - Administrative Requirements for submittal procedures.

B. Product Data: Materials and details of design and construction, hardware locations, reinforcement type and locations, anchorage and fastening methods, and finishes.

C. Shop Drawings: Details of each opening, showing elevations, glazing, frame profiles, and identifying location of different finishes, if any.

1.05 QUALITY ASSURANCE

A. Manufacturer Qualifications: Company specializing in manufacturing products specified in this section, with not less than three years of documented experience.

B. Installer Qualifications: Company specializing in performing work of the type specified and with at least three years of documented experience.

1.06 DELIVERY, STORAGE, AND HANDLING

A. Store in accordance with applicable requirements and in compliance with standards and/or custom guidelines as indicated.

B. Protect with resilient packaging; avoid humidity build-up under coverings; prevent corrosion.

PART 2 PRODUCTS

2.01 MANUFACTURERS

A. Hollow Metal Frames with Integral Casings: Refer to Owner Facility Standards for acceptable manufacturer.
   1. Ceco Door, an Assa Abloy Group company: www.assaabloydss.com/#sle.
   2. Curries, an Assa Abloy Group company: www.assaabloydss.com/#sle.
   3. Fleming Door Products, an Assa Abloy Group company: www.assaabloydss.com/#sle.
   4. Republic Doors, an Allegion brand; ____: www.republicdoor.com/#sle.
   5. Steelcraft, an Allegion brand; ____: www.allegion.com/#sle.
   6. Substitutions: See Section 01 60 00 - Product Requirements.

2.02 PERFORMANCE REQUIREMENTS

A. Refer to Door and Frame Schedule on the drawings for frame sizes, fire ratings, sound ratings, finishing, door hardware to be installed, and other variations, if any. Refer to Owner Facility Standard for acceptable manufacturer.

B. Door Frames: Provide hollow metal door frames with integral casings unless noted otherwise.

C. Steel Sheet: Comply with one or more of the following requirements; galvannealed steel complying with ASTM A653/A653M, cold-rolled steel complying with ASTM A1008/A1008M, or hot-rolled pickled and oiled (HRPO) steel complying with ASTM A1011/A1011M, commercial steel (CS) Type B, for each.

D. Accessibility: Comply with ICC A117.1 and ADA Standards.

E. Hardware Preparations, Selections and Locations: Comply with BHMA A156.115, NAAMM HMMA 830, NAAMM HMMA 831 or ANSI/SDI A250.8 (SDI-100) in accordance with specified requirements.

2.03 HOLLOW METAL DOOR FRAMES WITH INTEGRAL CASINGS

A. Frame Finish: Factory primed and field finished.

B. Interior Door Frames, Non-Fire Rated: Full profile/continuously welded type.
   1. Based on SDI Standards: ANSI/SDI A250.8 (SDI-100).
      a. Level 2 - Heavy-duty.
      b. Physical Performance Level B, 500,000 cycles; in accordance with ANSI/SDI A250.4.
      c. Frame Metal Thickness: 16 gage, 0.053 inch, minimum.

2.04 FINISHES

A. Primer: Rust-inhibiting, complying with ANSI/SDI A250.10, door manufacturer's standard.

2.05 ACCESSORIES

A. Silencers: Resilient rubber, fitted into drilled hole; provide three on strike side of single door, three on center mullion of pairs, and two on head of pairs without center mullions.

B. Temporary Frame Spreaders: Provide for factory- or shop-assembled frames.

PART 3 EXECUTION

3.01 EXAMINATION

A. Verify existing conditions before starting work.

B. Verify that opening sizes and tolerances are acceptable.

C. Verify that finished walls are in plane to ensure proper door alignment.

3.02 INSTALLATION

A. Install frames in accordance with manufacturer's instructions and related requirements of specified frame standards or custom guidelines indicated.

B. Coordinate frame anchor placement with wall construction.

C. Install door hardware as specified in Section 08 71 00.

D. Coordinate installation of electrical connections to electrical hardware items.

E. Touch up damaged factory finishes.

3.03 TOLERANCES

A. Maximum Diagonal Distortion: 1/16 inch measured with straight edges, crossed corner to corner.

END OF SECTION 08 12 13

SECTION 08 33 26
OVERHEAD COILING GRILLES

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Manually or eletrically operated, non-fire-rated overhead coiling security griilles at interior openings indicated on drawings.

B. Full-opening grille assemblies, including curtain, guides, barrel, torsion-spring counterbalance, hood, bottom bar, locking devices, supports, anchorage, and accessories required for complete installation.

C. Wiring from electric circuit disconnect to operator and to control station.

1.02 RELATED REQUIREMENTS

A. Section 08 71 00 - Door Hardware: Cylinder cores and keys.

B. Section 26 05 83 - Wiring Connections: Power to disconnect.

1.03 REFERENCE STANDARDS

A. ASTM A653/A653M - Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process; 2020.

B. ASTM B221 - Standard Specification for Aluminum and Aluminum-Alloy Extruded Bars, Rods, Wire, Profiles, and Tubes; 2020.

C. ASTM B221M - Standard Specification for Aluminum and Aluminum-Alloy Extruded Bars, Rods, Wire, Profiles, and Tubes (Metric); 2013.

D. ITS (DIR) - Directory of Listed Products; Current Edition.

E. NEMA EN 10250 - Enclosures for Electrical Equipment (1000 Volts Maximum); 2024.

F. NEMA ICS 2 - Controllers, Contactors and Overload Relays Rated 600 Volts; 2000 (Reaffirmed 2020).

G. UL (DIR) - Online Certifications Directory; Current Edition.

H. UL 325 - Standard for Door, Drapery, Gate, Louver, and Window Operators and Systems; Current Edition, Including All Revisions.

1.04 SUBMITTALS

A. See Section 01 30 00 - Administrative Requirements, for submittal procedures.

B. Product Data: Provide general construction component connections and details.

C. Shop Drawings: Indicate pertinent dimensioning, anchorage methods, hardware locations, and installation details.

D. Manufacturer's Installation Instructions: Indicate installation sequences and procedures, adjustment and alignment procedures.

E. Manufacturer's Qualification Statement.

PART 2 PRODUCTS

2.01 MANUFACTURERS

A. Overhead Coiling Grilles:
   1. Alpine Overhead Doors, Inc; _____: www.alpinedoors.com/#sle.
   2. C.H.I. Overhead Doors; 9300 Lift Ready Series: www.chiohd.com/#sle.
   3. Cornell Iron Works, Inc; _____: www.cornelliron.com/#sle.
   4. The Cookson Company; ____: www.cooksondoor.com/#sle.
   5. Substitutions: See Section 01 60 00 - Product Requirements.

2.02 GRILLES AND COMPONENTS

A. Grille: Aluminum; horizontal bar curtain, coiling on overhead counterbalanced shaft.
   1. Finish: Anodized, color as selected by Architect.
   2. Lock Devices: Slide bolt on inside.
   3. Manual push up operation.
   4. Electric operation.
   5. Mounting: As indicated on drawings.

B. Curtain: Round horizontal bars connected with vertical links.
   1. Link spacing: 6 inch on center.
   2. Bottom Bar: Back-to-back angles with tubular resilient cushion.

C. Guides: Extruded aluminum angles, of profile to retain grille in place with snap-on trim, mounting brackets of same metal.

D. Lock Hardware:
   1. Latchset Lock Cylinders: Standard mortise cylinder.
      a. Keying: Master keyed.
   2. For motor operated units, additional lock or latching mechanisms are not required.
   3. Latch Handle: Manufacturer's standard.
   4. Slide Bolt: Provide on both-jamb sides, extending into slot in guides.

E. Roller Shaft Counterbalance: Steel pipe and helical steel spring system, capable of producing torque sufficient to ensure smooth operation of curtain from any position and capable of holding position at mid-travel; with adjustable spring tension; requiring 25 lb nominal force to operate.

2.03 MATERIALS

A. Aluminum: ASTM B221 (ASTM B221M).

2.04 ELECTRIC OPERATION

A. Operator, Controls, Actuators, and Safeties: Comply with UL 325; provide products listed by ITS (DIR), UL (DIR), or testing agency acceptable to authorities having jurisdiction.
   1. Provide interlock switches on motor operated units.

B. Electric Operators:
   1. Mounting: Side mounted.
   2. Motor Enclosure:
   3. Motor Rating: 1/3 hp; continuous duty.
   4. Motor Voltage: 120 volts, single phase, 60 Hz.
   5. Motor Controller: NEMA ICS 2, full voltage, reversing magnetic motor starter.
   6. Controller Enclosure: NEMA EN 10250 Type 1.
   7. Brake: Adjustable friction clutch type, activated by motor controller.
   8. Manual override in case of power failure.
   9. Refer to Section 26 05 83 for electrical connections.

C. Control Station: Provide standard three button (Open-Close-Stop) momentary-contact control device for each operator complying with UL 325.
   1. 24 volt circuit.
   2. Surface mounted, at interior door jamb.
   3. Entrapment Protection Devices: Provide sensing devices and safety mechanisms complying with UL 325.
      a. Primary Device: Provide electric sensing edge, wireless sensing, NEMA 1 photo eye sensors, or NEMA 4X photo eye sensors as required with momentary-contact control device.

PART 3 EXECUTION

3.01 EXAMINATION

A. Verify that opening sizes, tolerances and conditions are acceptable.

3.02 INSTALLATION

A. Install grille unit assembly in accordance with manufacturer's instructions.

B. Use anchorage devices to securely fasten assembly to wall construction and building framing without distortion or stress.

C. Securely and rigidly brace components suspended from structure. Secure guides to structural members only.

D. Fit and align assembly including hardware; level and plumb, to provide smooth operation.

E. Coordinate installation of electrical service with Section 26 05 83.

F. Complete wiring from disconnect to unit components.

G. Install enclosure and perimeter trim.

3.03 TOLERANCES

A. Maintain dimensional tolerances and alignment with adjacent work.

B. Maximum Variation From Plumb: 1/16 inch.

C. Maximum Variation From Level: 1/16 inch.

D. Longitudinal or Diagonal Warp: Plus or minus 1/8 inch per 10 ft straight edge.

3.04 ADJUSTING

A. Adjust grille, hardware and operating assemblies for smooth and noiseless operation.

3.05 CLEANING

A. Clean grille and components.

B. Remove labels and visible markings.

END OF SECTION 08 33 26

SECTION 08 71 00
DOOR HARDWARE

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Hardware for wood doors.

B. Double Acting Doors

1.02 RELATED REQUIREMENTS

A. Section 08 06 71 - Door Hardware Schedule: Schedule of door hardware sets.

1.03 REFERENCE STANDARDS

A. ADA Standards - Americans with Disabilities Act (ADA) Standards for Accessible Design; 2010.

B. BHMA A156.1 - American National Standard for Butts and Hinges; 2016.

C. BHMA A156.7 - American National Standard for Template Hinge Dimensions; 2016.

D. BHMA A156.13 - American National Standard for Mortise Locks & Latches Series 1000; 2017.

E. BHMA A156.16 - American National Standard for Auxiliary Hardware; 2018.

F. ICC A117.1 - Accessible and Usable Buildings and Facilities; 2017.

G. UL (DIR) - Online Certifications Directory; Current Edition.

1.04 ADMINISTRATIVE REQUIREMENTS

A. Coordinate the manufacture, fabrication, and installation of products that door hardware is installed on.

1.05 SUBMITTALS

A. See Section 01 30 00 - Administrative Requirements, for submittal procedures.

B. Product Data: Manufacturer's catalog literature for each type of hardware, marked to clearly show products to be furnished for this project, and includes construction details, material descriptions, finishes, and dimensions and profiles of individual components.

C. Shop Drawings - Door Hardware Schedule: Submit detailed listing that includes each item of hardware to be installed on each door. Use door numbering scheme as included in Contract Documents.
   1. Prepared by or under supervision of Architectural Hardware Consultant (AHC).
   2. Provide complete description for each door listed.

1.06 QUALITY ASSURANCE

A. Manufacturer Qualifications: Company specializing in manufacturing products specified in this section with minimum three years of documented experience.

1.07 DELIVERY, STORAGE, AND HANDLING

A. Package hardware items individually; label and identify each package with door opening code to match door hardware schedule.

1.08 WARRANTY

A. See Section 01 78 00 - Closeout Submittals, for additional warranty requirements.

B. Warranty against defects in material and workmanship for period indicated, from Date of Substantial Completion.
   1. Locksets and Cylinders: Three years, minimum.
   2. Other Hardware: Two years, minimum.

PART 2 PRODUCTS

2.01 DESIGN AND PERFORMANCE CRITERIA

A. Provide specified door hardware as required to make doors fully functional, compliant with applicable codes, and secure to extent indicated.

B. Provide individual items of single type, of same model, and by same manufacturer.

C. Provide door hardware products that comply with the following requirements:
   1. Applicable provisions of federal, state, and local codes.
   2. Accessibility: ADA Standards and ICC A117.1.

D. Lock Function: Provide lock and latch function numbers and descriptions of manufacturer's series. Refer to Section 08 0671 for listing of hardware sets.

E. Fasteners:
   1. Provide fasteners of proper type, size, quantity, and finish that comply with commercially recognized standards for proposed applications.
      a. Aluminum fasteners are not permitted.
      b. Provide phillips flat-head screws with heads finished to match door surface hardware unless otherwise indicated.
   2. Provide machine screws for attachment to reinforced hollow metal and aluminum frames.
      a. Self-drilling (Tek) type screws are not permitted.

2.02 HINGES

A. Manufacturers:
   1. McKinney; an Assa Abloy Group company: www.assaabloydss.com/#sle.
   2. Bommer Industries, Inc: www.bommer.com/#sle.
   3. Hager Companies: www.hagerco.com/#sle.
   4. Pamex, Inc: www.pamexinc.com/#sle.
   5. Stanley, dormakaba Group: www.stanleyhardwarefordoors.com/#sle.
   6. Substitutions: See Section 01 60 00 - Product Requirements.

B. Hinges: Comply with BHMA A156.1, Grade 1.
   1. Butt Hinges: Comply with BHMA A156.1 and BHMA A156.7 for templated hinges.
      a. Provide hinge width required to clear surrounding trim.
   2. Provide hinges on every swinging door.
   3. Provide following quantity of butt hinges for each door:
      a. Doors From 60 inches High up to 90 inches High: Three hinges.

2.03 FLUSH BOLTS

A. Manufacturers:
   1. Adams Rite, an Assa Abloy Group company: www.assaabloydss.com/#sle.
   2. Hager Companies: www.hagerco.com/#sle.
   3. Ives, an Allegion brand: www.allegion.com/us/#sle.
   4. Pamex, Inc: www.pamexinc.com/#sle.
   5. Trimco: www.trimcohardware.com/#sle.
   6. Substitutions: See Section 01 60 00 - Product Requirements.

B. Flush Bolts: Comply with BHMA A156.16, Grade 1.
   1. Flush Bolt Throw: 3/4 inch, minimum.
   2. Provide dustproof floor strike for bolt into floor, except at metal thresholds.
   3. Manual Flush Bolts: Provide lever extensions for top bolt at over-sized doors.

2.04 MORTISE LOCKS

A. Manufacturers:
   1. Basis of Design: Corbin Russwin, ML2057 LWA.

2. Best, dormakaba Group: www.bestaccess.com/#sle.
3. Schlage, an Allegion brand: www.allegion.com/us/#sle.
4. Substitutions: See Section 01 60 00 - Product Requirements.

B. Mortise Locks: Comply with BHMA A156.13, Grade 1, Security, 1000 Series.
1. Latchbolt Throw: 3/4 inch, minimum.
2. Deadbolt Throw: 1 inch, minimum.
3. Backset: 2-3/4 inch unless otherwise indicated.
4. Strikes: Provide manufacturer's standard strike for each latchset or lockset with strike box and curved lip extending to protect frame in compliance with indicated requirements.
a. Finish: To match lock or latch.

2.05 WALL STOPS

A. Manufacturers:
1. Rockwood; an Assa Abloy Group company: www.assaabloydss.com/#sle.
2. Hager Companies: www.hagerco.com/#sle.
3. Hiawatha, Inc, division of Activar Construction Products Group, Inc: www.activarcpg.com/hiawatha/#sle.
4. Trimco: www.trimcohardware.com/#sle.
5. Substitutions: See Section 01 60 00 - Product Requirements.

B. Wall Stops: Comply with BHMA A156.16, Grade 1 and Resilient Material Retention Test as described in this standard.
1. Type: Bumper, concave, wall stop.
2. Material: Aluminum housing with rubber insert.

2.06 SILENCERS

A. Manufacturers:
1. Ives, an Allegion brand: www.allegion.com/us/#sle.
2. Rockwood; an Assa Abloy Group company: www.assaabloydss.com/#sle.
3. Substitutions: See Section 01 60 00 - Product Requirements.

B. Silencers: Provide at equal locations on door frame to mute sound of door's impact upon closing.
1. Single Door: Provide three on strike jamb of frame.
2. Pair of Doors: Provide two on head of frame, one for each door at latch side.
3. Material: Rubber, gray color.

2.07 DOUBLE ACTING IMPACT TRAFFIC DOOR

A. Manufacturers:
1. Basis of Design: Eliason HCG-10 ABS Impact Door.
2. Chase Doors: Durulite standard impact traffic door
3. Curtron Products: Service-Pro Series 35
4. Specail-Lite: Double-Acting Traffic Door.

B. Panels: Normal 1-1/2-inch0thick panels with structural PVC interior framework. Impact-resistant ABS face sheets, foam core, and textured faces on both sides. Provide 18-inch-high rotationally molded bumpers on both faces.

C. Vision Panels: Clear, double-glazed, scratch-resistant acrylic, 14 by 16 inches, set in black rubber molding; provide one vision panel in each leaf unless drawings indicate otherwise.

D. Hinge System: Factory-installed Elison Easy Swing Hinge System designed for double-aching operation.

E. Finish and Color: Manufactirer's standard color selected by Architect. Coordinate edge trim, hnge finish, and optional accessiories with manufacturer's standard offering.

F. Gasketing: Furnish the manufacturer's standard full-perimeter gasketing supplied with HCG-10 traffic door.

G. Provide complete factory-required jamb, header, trim, fasteners, and reinforcement components for a fully operational installation.

2.08 FINISHES

A. Finishes: Identified in Door Hardware Schedule.

PART 3 EXECUTION

3.01 EXAMINATION

A. Verify that doors and frames are ready to receive this work; labeled, fire-rated doors and frames are properly installed, and dimensions are as indicated on shop drawings.

B. Verify that electric power is available to power operated devices and of correct characteristics.

3.02 INSTALLATION

A. Install hardware in accordance with manufacturer's instructions and applicable codes.

B. Use templates provided by hardware item manufacturer.

C. Door Hardware Mounting Heights: Distance from finished floor to center line of hardware item.

1. Mounting heights in compliance with ADA Standards:
   a. Locksets: 40-5/16 inch.

3.03 FIELD QUALITY CONTROL

A. Perform field inspection and testing under provisions of Section 01 40 00 - Quality Requirements.

B. Provide an Architectural Hardware Consultant (AHC) to inspect installation and certify that hardware and installation has been furnished and installed in accordance with manufacturer's instructions and as specified.

3.04 ADJUSTING

A. Adjust work under provisions of Section 01 70 00 - Execution and Closeout Requirements.

B. Adjust hardware for smooth operation.

C. Adjust gasketing for complete, continuous seal; replace if unable to make complete seal.

3.05 CLEANING

A. Clean finished hardware in accordance with manufacturer's written instructions after final adjustments have been made.

B. Clean adjacent surfaces soiled by hardware installation.

C. Replace items that cannot be cleaned to manufacturer's level of finish quality at no additional cost.

3.06 PROTECTION

A. Do not permit adjacent work to damage hardware or finish.

END OF SECTION

SECTION 08 80 00
GLAZING

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Glazing units.

1.02 RELATED REQUIREMENTS

A. Section 07 92 00 - Joint Sealants: Sealants for other than glazing purposes.

1.03 REFERENCE STANDARDS

A. 16 CFR 1201 - Safety Standard for Architectural Glazing Materials; Current Edition.

B. ASTM C1193 - Standard Guide for Use of Joint Sealants; 2016.

1.04 SUBMITTALS

A. See Section 01 30 00 - Administrative Requirements, for submittal procedures.

B. Product Data on Glazing Compounds and Accessories: Provide chemical, functional, and environmental characteristics, limitations, special application requirements, and identify available colors.

C. Certificate: Certify that products of this section meet or exceed specified requirements.

D. Manufacturer's qualification statement.

E. Warranty Documentation: Submit manufacturer warranty and ensure that forms have been completed in Owner's name and registered with manufacturer.

1.05 QUALITY ASSURANCE

A. Installer Qualifications: Company specializing in performing work of the type specified and with at least five years documented experience.
   1. Provide company, field supervisors, and installers that hold active ANSI accredited certifications in appropriate categories for work specified.

1.06 WARRANTY

A. See Section 01 78 00 - Closeout Submittals, for additional warranty requirements.

B. Laminated Glass: Provide a five (5) year manufacturer warranty to include coverage for breakage, coating failure, abrasion resistance, including providing products to replace failed units.

PART 2 PRODUCTS

2.01 MANUFACTURERS

A. Basis of Design: Vitro Architectural Glass (formerly PPG Glass)

B. Float Glass Manufacturers:
   1. AGC Glass North America, Inc: www.agcglass.com/#sle.
   2. Cardinal Glass Industries: www.cardinalcorp.com/#sle.
   3. Guardian Glass, LLC: www.guardianglass.com/#sle.
   4. Pilkington North America Inc: www.pilkington.com/na/#sle.
   5. Vitro Architectural Glass (formerly PPG Glass): www.vitroglazings.com/#sle.
   6. Substitutions: See Section 01 60 00 - Product Requirements.

2.02 GLASS MATERIALS

A. Float Glass: Provide float glass based glazing unless otherwise indicated.
   1. Fully Tempered Safety Glass: Complies with ANSI Z97.1 or 16 CFR 1201 criteria for safety glazing used in hazardous locations.

2.03 ACCESSORIES

A. Setting Blocks: Silicone, with 80 to 90 Shore A durometer hardness; ASTM C864 Option II. Length of 0.1 inch for each square foot of glazing or minimum 4 inch by width of glazing rabbet space minus 1/16 inch by height to suit glazing method and pane weight and area.

B. Spacer Shims: Silicone, 50 to 60 Shore A durometer hardness; ASTM C864 Option II. Minimum 3 inch long by one half the height of the glazing stop by thickness to suit application, self adhesive on one face.

C. Glazing Tape, Back Bedding Mastic Type: Preformed, butyl-based, 100 percent solids compound; 5 to 30 cured Shore A durometer hardness; coiled on release paper; black color.

D. Glazing Splines: Resilient silicone extruded shape to suit glazing channel retaining slot; ASTM C864 Option II; color black.

E. Glazing Clips: Manufacturer's standard type.

PART 3 EXECUTION

3.01 VERIFICATION OF CONDITIONS

A. Verify that openings for glazing are correctly sized and within tolerances, including those for size, squareness, and offsets at corners.

B. Verify that the minimum required face and edge clearances are being provided.

C. Verify that surfaces of glazing channels or recesses are clean, free of obstructions that may impede moisture movement, weeps are clear, and support framing is ready to receive glazing system.

D. Verify that sealing between joints of glass framing members has been completed effectively.

E. Proceed with glazing system installation only after unsatisfactory conditions have been corrected.

3.02 PREPARATION

A. Clean contact surfaces with appropriate solvent and wipe dry within maximum of 24 hours before glazing. Remove coatings that are not tightly bonded to substrates.

B. Seal porous glazing channels or recesses with substrate compatible primer or sealer.

C. Prime surfaces scheduled to receive sealant where required for proper sealant adhesion.

3.03 INSTALLATION, GENERAL

A. Install glazing in compliance with written instructions of glass, gaskets, and other glazing material manufacturers, unless more stringent requirements are indicated, including those in glazing referenced standards.

B. Install glazing sealants in accordance with ASTM C1193, GANA (SM), and manufacturer's instructions.

C. Do not exceed edge pressures around perimeter of glass lites as stipulated by glass manufacturer.

D. Set glass lites of system with uniform pattern, draw, bow, and similar characteristics.

E. Prevent glass from contact with any contaminating substances that may be the result of construction operations such as, and not limited to the following; weld splatter, fire-safing, plastering, mortar droppings, etc.

3.04 INSTALLATION - DRY GLAZING METHOD (GASKET GLAZING)

A. Application - Exterior and/or Interior Glazed: Set glazing infills from either the exterior or the interior of the building.

B. Place setting blocks at 1/4 points with edge block no more than 6 inch from corners.

C. Rest glazing on setting blocks and push against fixed stop with sufficient pressure on gasket to attain full contact.

D. Install removable stops without displacing glazing gasket; exert pressure for full continuous contact.

3.05 FIELD QUALITY CONTROL

A. Glass and Glazing product manufacturers to provide field surveillance of the installation of their products.

B. Monitor and report installation procedures and unacceptable conditions.

3.06 CLEANING

A. Remove excess glazing materials from finish surfaces immediately after application using solvents or cleaners recommended by manufacturers.

B. Remove non-permanent labels immediately after glazing installation is complete.

C. Clean glass and adjacent surfaces after sealants are fully cured.

D. Clean glass on both exposed surfaces not more than 4 days prior to Date of Substantial Completion in accordance with glass manufacturer's written recommendations.

3.07 PROTECTION

A. After installation, mark pane with an 'X' by using removable plastic tape or paste; do not mark heat absorbing or reflective glass units.

B. Remove and replace glass that is damaged during construction period prior to Date of Substantial Completion.

END OF SECTION 08 80 00

SECTION 09 05 61
COMMON WORK RESULTS FOR FLOORING PREPARATION

PART 1 GENERAL

1.01 SECTION INCLUDES

A. This section applies to floors identified in Contract Documents that are receiving the following types of floor coverings:
   1. Resilient tile and sheet.
   2. Thin-set ceramic tile and stone tile.

B. Preparation of existing concrete and terrazzo substrates for installation of floor coverings.

C. Patching compound.

D. Remedial floor coatings.

1.02 RELATED REQUIREMENTS

A. Section 01 22 00 - Unit Prices: Bid pricing for remediation treatments if required.

B. Section 03 30 00 - Cast-in-Place Concrete: Moisture emission reducing curing and sealing compound for slabs to receive adhered flooring, to prevent moisture content-related flooring failures; to remain in place, not to be removed.

1.03 PRICE AND PAYMENT PROCEDURES

A. Unit Price for Alternate Flooring Adhesive: Do not include the cost of the alternate adhesive in the base bid; state on the bid form the unit price per square foot for using the alternate adhesive, in the event such remediation is required.
   1. Base the unit price on a total quantity of 10,000 square feet.

B. Unit Price for Remedial Floor Coating or Sheet Membrane: Do not include the cost of the floor coating or underlayment in the base bid; state on the bid form the unit price per square foot for the floor coating or underlayment, installed, in the event such remediation is required.
   1. Base the unit price on a total quantity calculated by assuming that only 50 percent of the flooring will require the alternate coating.

1.04 REFERENCE STANDARDS

A. ASTM C109/C109M - Standard Test Method for Compressive Strength of Hydraulic Cement Mortars (Using 2-in. or [50 mm] Cube Specimens); 2021.

B. ASTM C472 - Standard Test Methods for Physical Testing of Gypsum, Gypsum Plasters, and Gypsum Concrete; 2020.

C. ASTM F1869 - Standard Test Method for Measuring Moisture Vapor Emission Rate of Concrete Subfloor Using Anhydrous Calcium Chloride; 2016a.

D. ASTM F2170 - Standard Test Method for Determining Relative Humidity in Concrete Floor Slabs Using in situ Probes; 2019a.

1.05 ADMINISTRATIVE REQUIREMENTS

A. Coordinate scheduling of cleaning and testing, so that preliminary cleaning has been completed for at least 24 hours prior to testing.

1.06 SUBMITTALS

A. Floor Covering and Adhesive Manufacturers' Product Literature: For each specific combination of substrate, floor covering, and adhesive to be used; showing:
   1. Moisture and alkalinity (pH) limits and test methods.
   2. Manufacturer's required bond/compatibility test procedure.
   3. Substrate preparation requirements for installation over existing terrazzo, where applicable.

4. Required primers, patching compounds, leveling compounds, and other substrate preparation materials.

B. Testing Agency's Report:
1. Description of areas tested; include floor plans and photographs if helpful.
2. Summary of conditions encountered.
3. Moisture and alkalinity (pH) test reports.
4. Copies of specified test methods.
5. Recommendations for remediation of unsatisfactory surfaces.
6. Submit report to Architect.
7. Submit report not more than two business days after conclusion of testing.

C. Adhesive Bond and Compatibility Test Report.

1.07 QUALITY ASSURANCE

A. Moisture and alkalinity (pH) testing shall be performed by an independent testing agency employed and paid by Contractor.

B. Testing Agency Qualifications: Independent testing agency experienced in the types of testing specified.
1. Submit evidence of experience consisting of at least 3 test reports of the type required, with project Owner's project contact information.

C. Contractor's Responsibility Relating to Independent Agency Testing:
1. Provide access for and cooperate with testing agency.
2. Confirm date of start of testing at least 10 days prior to actual start.
3. Allow at least 4 business days on site for testing agency activities.
4. Achieve and maintain specified ambient conditions.
5. Notify Architect when specified ambient conditions have been achieved and when testing will start.

1.08 DELIVERY, STORAGE, AND HANDLING

A. Deliver, store, handle, and protect products in accordance with manufacturer’s instructions and recommendations.

B. Deliver materials in manufacturer’s packaging; include installation instructions.

C. Keep materials from freezing.

1.09 FIELD CONDITIONS

A. Maintain ambient temperature in spaces where concrete testing is being performed, and for at least 48 hours prior to testing, at not less than 65 degrees F or more than 85 degrees F.

B. Maintain relative humidity in spaces where concrete testing is being performed, and for at least 48 hours prior to testing, at not less than 40 percent and not more than 60 percent.

PART 2 PRODUCTS

2.01 MATERIALS

A. Patching Compound: Floor covering manufacturer's recommended product, suitable for conditions, and compatible with adhesive and floor covering. In the absence of any recommendation from flooring manufacturer, provide a product with the following characteristics:
1. Cementitious moisture-, mildew-, and alkali-resistant compound, compatible with floor, floor covering, and floor covering adhesive, and capable of being feathered to nothing at edges.
2. Compressive Strength: 3000 psi, minimum, after 28 days, when tested in accordance with ASTM C109/C109M or ASTM C472, whichever is appropriate.
3. Products:

a. ARDEX Engineered Cements; ARDEX Feather Finish
b. H.B. Fuller Construction Products, Inc; TEC Feather Edge Skim Coat
c. USG Corporation; Durock Brand Advanced Skim Coat Floor Patch

B. Alternate Flooring Adhesive: Floor covering manufacturer's recommended product, suitable for the moisture and pH conditions present; low-VOC. In the absence of any recommendation from flooring manufacturer, provide a product recommended by adhesive manufacturer as suitable for substrate and floor covering and for conditions present.

C. Remedial Floor Coating, Two-Component: Single-layer coating resistant to water vapor transmission meeting flooring manufacturer's emission limits, resistant to alkalinity (pH) level found, and suitable for flooring adhesion without further treatment.
1. Thickness: 1/8 inch, maximum.

D. Primer: Manufacturer's recommended primer for existing terrazzo and concrete substrates where required by patching, leveling, or adhesive system. Primer shall be compatible with existing substrate, patching compound, adhesive, and floor covering.

PART 3 EXECUTION

3.01 CONCRETE AND TERRAZZO SUBSTRATE PREPARATION

A. Perform following operations in the order indicated:
1. Preliminary cleaning.
2. Moisture vapor emission tests; 3 tests in the first 1000 square feet and one test in each additional 1000 square feet, unless otherwise indicated or required by flooring manufacturer.
3. Internal relative humidity tests; in same locations as moisture vapor emission tests, unless otherwise indicated.
4. Specified remediation, if required.
5. Patching, smoothing, and leveling, as required.
6. Other preparation specified.
7. Adhesive bond and compatibility test.
8. Protection.

B. Existing Terrazzo Substrates: Where resilient flooring is indicated over existing terrazzo, inspect terrazzo for cracks, spalls, chips, loose or delaminated material, existing coatings, sealers, waxes, polish, grease, and other conditions that may interfere with adhesion.

C. Existing terrazzo shall be sound, clean, dry, and suitably prepared to receive the specified floor covering and adhesive.

D. Mechanically prepare existing terrazzo as required by the floor covering and adhesive manufacturers to remove existing surface treatments and contaminants that may interfere with adhesion.

E. Limit mechanical preparation to areas indicated to receive new floor covering. Protect existing terrazzo indicated to remain exposed from grinding, abrasion, staining, and other damage.

F. Where existing terrazzo is polished or sealed, remove surface treatment to the extent required by the floor covering and adhesive manufacturers to achieve proper adhesion.

G. Do not use chemical stripping agents, solvents, or other products that may leave residues detrimental to adhesion.

H. Remediations:
1. Active Water Leaks or Continuing Moisture Migration to Surface of Slab: Correct this condition before doing any other remediation; re-test after correction.
2. Excessive Moisture Emission or Relative Humidity: If an adhesive that is resistant to the level of moisture present is available and acceptable to flooring manufacturer, use that adhesive for installation of the flooring; if not, apply remedial floor coating or remedial sheet membrane over entire suspect floor area.

3. Excessive Alkalinity (pH): If remedial floor coating is necessary to address excessive moisture, no additional remediation is required; if not, if an adhesive that is resistant to the level present is available and acceptable to the flooring manufacturer, use that adhesive for installation of the flooring; otherwise, apply a skim coat of specified patching compound over entire suspect floor area.

3.02 PRELIMINARY CLEANING

A. Clean floors of dust, solvents, paint, wax, oil, grease, asphalt, residual adhesive, adhesive removers, film-forming curing compounds, sealing compounds, alkaline salts, excessive laitance, mold, mildew, and other materials that might prevent adhesive bond.

B. Do not use solvents or other chemicals for cleaning.

C. For existing terrazzo, use cleaning methods recommended by the floor covering and adhesive manufacturers that will not damage the terrazzo or leave residues that could interfere with adhesion.

3.03 MOISTURE VAPOR EMISSION TESTING

A. Where the floor covering manufacturer's requirements conflict with either the referenced test method or this specification, comply with the manufacturer's requirements.

B. Where this specification conflicts with the referenced test method, comply with the requirements of this section.

C. Test in accordance with ASTM F1869 and as follows.

D. Plastic sheet test and mat bond test may not be substituted for the specified ASTM test method, as those methods do not quantify the moisture content sufficiently.

E. In the event that test values exceed floor covering manufacturer's limits, perform remediation as indicated. In the absence of manufacturer limits, perform remediation if test values exceed 3 pounds per 1000 square feet per 24 hours.

F. Report: Report the information required by the test method.

3.04 INTERNAL RELATIVE HUMIDITY TESTING

A. Where the floor covering manufacturer's requirements conflict with either the referenced test method or this specification, comply with the manufacturer's requirements.

B. Where this specification conflicts with the referenced test method, comply with the requirements of this section.

C. Test in accordance with ASTM F2170 Procedure A and as follows.

D. Testing with electrical impedance or resistance apparatus may not be substituted for the specified ASTM test method, as the values determined are not comparable to the ASTM test values and do not quantify the moisture content sufficiently.

E. In the event that test values exceed floor covering manufacturer's limits, perform remediation as indicated. In the absence of manufacturer limits, perform remediation if any test value exceeds 75 percent relative humidity.

F. Report: Report the information required by the test method.

3.05 PREPARATION

A. See individual floor covering section(s) for additional requirements.

B. Comply with requirements and recommendations of floor covering manufacturer.

C. Fill and smooth surface cracks, grooves, depressions, control joints and other non-moving joints, and other irregularities with patching compound.

D. Do not fill expansion joints, isolation joints, or other moving joints.

E. Existing Terrazzo: Repair cracks, spalls, chips, voids, depressions, and other surface irregularities that could telegraph through resilient flooring. Use repair materials recommended by floor covering manufacturer and compatible with existing terrazzo, primer, adhesive, and floor covering.

F. Grind high areas and fill low areas as required to provide a smooth and uniform substrate within the tolerances required by the floor covering manufacturer.

G. Do not bridge structural, expansion, isolation, or other active movement joints with patching or leveling materials or floor covering.

H. Do not use patching or leveling materials to conceal active structural movement or unresolved substrate deficiencies.

I. Feather patching and leveling materials smoothly into adjacent substrate.

3.06 ADHESIVE BOND AND COMPATIBILITY TESTING

A. Comply with requirements and recommendations of floor covering manufacturer.

B. Where resilient sheet flooring is to be installed over existing terrazzo, perform adhesive bond and compatibility testing after completion of substrate preparation and prior to full installation.

C. Test shall demonstrate acceptable bond between prepared terrazzo, specified primer and/or patching materials, adhesive, and floor covering.

3.07 APPLICATION OF REMEDIAL FLOOR COATING

A. Comply with requirements and recommendations of coating manufacturer.

3.08 PROTECTION

A. Cover prepared floors with building paper or other durable covering.

END OF SECTION

SECTION 09 21 16
GYPSUM BOARD ASSEMBLIES

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Performance criteria for gypsum board assemblies.

B. Gypsum wallboard.

C. Joint treatment and accessories.

1.02 RELATED REQUIREMENTS

A. Section 05 40 00 - Cold-Formed Metal Framing: Structural steel stud framing.

B. Section 06 10 00 - Rough Carpentry: Wood blocking product and execution requirements.

C. Section 07 21 00 - Thermal Insulation: Acoustic insulation.

D. Section 07 92 00 - Joint Sealants:

E. Section 07 92 19 - Acoustic Sealants

1.03 REFERENCE STANDARDS

A. AISI S100-12 - North American Specification for the Design of Cold-Formed Steel Structural Members; 2012.

B. ANSI A108.11 - American National Standard Specifications for Interior Installation of Cementitious Backer Units; 2018.

C. ASTM A653/A653M - Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process; 2020.

D. ASTM C475/C475M - Standard Specification for Joint Compound and Joint Tape for Finishing Gypsum Board; 2017.

E. ASTM C645 - Standard Specification for Nonstructural Steel Framing Members; 2018.

F. ASTM C754 - Standard Specification for Installation of Steel Framing Members to Receive Screw-Attached Gypsum Panel Products; 2020.

G. ASTM C840 - Standard Specification for Application and Finishing of Gypsum Board; 2020.

H. ASTM C954 - Standard Specification for Steel Drill Screws for the Application of Gypsum Panel Products or Metal Plaster Bases to Steel Studs From 0.033 in. (0.84 mm) to 0.112 in. (2.84 mm) in Thickness; 2018.

I. ASTM C1002 - Standard Specification for Steel Self-Piercing Tapping Screws for Application of Gypsum Panel Products or Metal Plaster Bases to Wood Studs or Steel Studs; 2020.

J. ASTM C1047 - Standard Specification for Accessories For Gypsum Wallboard and Gypsum Veneer Base; 2019.

K. ASTM C1396/C1396M - Standard Specification for Gypsum Board; 2017.

L. ASTM D3273 - Standard Test Method for Resistance to Growth of Mold on the Surface of Interior Coatings in an Environmental Chamber; 2021.

M. ASTM E90 - Standard Test Method for Laboratory Measurement of Airborne Sound Transmission Loss of Building Partitions and Elements; 2009 (Reapproved 2016).

N. ASTM E413 - Classification for Rating Sound Insulation; 2016.

O. GA-216 - Application and Finishing of Gypsum Panel Products; 2016.

P. UL (FRD) - Fire Resistance Directory; Current Edition.

1.04 SUBMITTALS

A. See Section 01 30 00 - Administrative Requirements for submittal procedures.

B. Product Data: Provide data on gypsum board, accessories, and joint finishing system.

C. Installer's Qualification Statement.

1.05 QUALITY ASSURANCE

A. Installer Qualifications: Company specializing in performing gypsum board installation and finishing, with minimum 3 years of experience.

B. Manufacturer Qualifications: company specializing in metal stud manufacturing, with a minimum 3 years experience.

PART 2 PRODUCTS

2.01 GYPSUM BOARD ASSEMBLIES

A. Provide completed assemblies complying with ASTM C840 and GA-216.
   1. See PART 3 for finishing requirements.

B. Interior Partitions, Indicated as Sound-Rated: Provide completed assemblies with the following characteristics:
   1. Acoustic Attenuation: STC of 50-54 calculated in accordance with ASTM E413, based on tests conducted in accordance with ASTM E90.

2.02 METAL FRAMING MATERIALS

A. Manufacturers - Metal Framing, Connectors, and Accessories:
   1. ClarkDietrich: www.clarkdietrich.com/#sle.
   2. Marino: www.marinoware.com/#sle.
   3. Phillips Manufacturing Co: www.phillipsmfg.com/#sle.
   4. Steel Construction Systems: www.steelconsystems.com/#sle.
   5. Substitutions: See Section 01 60 00 - Product Requirements.

B. Non-structural Framing System Components: ASTM C645; galvanized sheet steel, of size and properties necessary to comply with ASTM C754 for the spacing indicated, with maximum deflection of wall framing of L/120 at 5 psf.
   1. Studs: C-shaped with knurled or embossed faces.
   2. Runners: U shaped, sized to match studs.
   3. Ceiling Channels: C-shaped.
   4. Furring Members: Hat-shaped sections, minimum depth of 7/8 inch.

C. Partition Head to Structure Connections: Provide mechanical anchorage devices that accommodate deflection using slotted holes, screws, and anti-friction bushings, preventing rotation of studs while maintaining structural performance of partition.
   1. Structural Performance: Maintain lateral load resistance and vertical movement capacity required by applicable code, when evaluated in accordance with AISI S100-12.
   2. Material: ASTM A653/A653M steel sheet, SS Grade 50/340, with G60/Z180 hot-dipped galvanized coating.
   3. Provide components UL-listed for use in UL-listed fire-resistance-rated head of partition joint systems indicated on drawings.
   4. Provide mechanical anchorage devices as described above that accommodate deflection while maintaining the fire-resistance rating of the wall assembly.
      a. Products:
         1) ClarkDietrich; BlazeFrame RipTrak: www.clarkdietrich.com/#sle.
         2) FireTrak Corporation; Posi Klip: www.fire-trak.com/#sle.
         3) Substitutions: See Section 01 60 00 - Product Requirements.

D. Deflection and Firestop Track: Intumescent strip factory-applied to track flanges expands when exposed to heat or flames to provide a perimeter joint seal.
   1. Products:
      a. ClarkDietrich; BlazeFrame Firestop Deflection Track: www.clarkdietrich.com/#sle.
      b. Substitutions: See Section 01 60 00 - Product Requirements.

E. Preformed Top Track Firestop Seal:
   1. Provide components UL-listed for use in UL-listed fire-resistance-rated head of partition joint systems indicated on drawings.
   2. Products:
      a. Hilti, Inc; Top Track Seal CFS TTS: www.us.hilti.com/#sle.
      b. Specified Technologies Inc; SpeedFlex TTG Track Top Gasket: www.stfirestop.com/#sle.
      c. Substitutions: See Section 01 60 00 - Product Requirements.

F. Non-structural Framing Accessories:
   1. Ceiling Hangers: Type and size as specified in ASTM C754 for spacing required.
   2. Partial Height Wall Framing Support: Provides stud reinforcement and anchored connection to floor.
      a. Height: as shown on drawings.
   3. Framing Connectors: ASTM A653/A653M G90 galvanized steel clips; secures cold rolled channel to wall studs for lateral bracing.
      a. Products:
         1) ClarkDietrich; FastBridge Clip (FB33): www.clarkdietrich.com/#sle.
         2) Substitutions: See Section 01 60 00 - Product Requirements.

G. Grid Suspension Systems: Steel grid system of main tees and support bars connected to structure using hanging wire.
   1. Products:
      a. USG Corporation; Drywall Suspension System: www.usg.com/#sle.

2.03 BOARD MATERIALS

A. Manufacturers - Gypsum-Based Board:
   1. CertainTeed Corporation: www.certainteed.com/#sle.
   2. Georgia-Pacific Gypsum: www.gpgypsum.com/#sle.
   3. National Gypsum Company: www.nationalgypsum.com/#sle.
   4. USG Corporation: www.usg.com/#sle.

B. Gypsum Wallboard:
   1. Paper-faced gypsum panels as defined in ASTM C1396/C1396M; sizes to minimize joints in place; ends square cut.
   2. Application: Use for vertical surfaces and ceilings, unless otherwise indicated.
   3. Glass mat faced gypsum panels, as defined in ASTM C1658/C1658M, suitable for paint finish, of the same core type and thickness may be substituted for paper-faced board.
   4. Mold Resistance: Score of 10, when tested in accordance with ASTM D3273.
      a. Mold-resistant board is required whenever board is being installed before the building is enclosed and conditioned.
      b. Mold resistant board is required all wet locations.
   5. At Assemblies Indicated with Fire-Resistance Rating: Use type required by indicated tested assembly; if no tested assembly is indicated, use Type X board, UL or WH listed.
   6. Thickness:
      a. Vertical Surfaces: 5/8 inch.
      b. Ceilings: 5/8 inch.
      c. Multi-Layer Assemblies: Thicknesses as indicated on drawings.
   7. Mold Resistant Paper Faced Products:

C. Backing Board For Wet Areas: One of the following products:
   1. Application: Horizontal surfaces behind tile in wet areas including countertops and all other plumbing fixtures.
   2. Mold Resistance: Score of 10, when tested in accordance with ASTM D3273.

D. Backing Board For Non-Wet Areas: Water-resistant gypsum backing board as defined in ASTM C1396/C1396M; sizes to minimum joints in place; ends square cut.

1. Application: Vertical surfaces behind thinset tile, except in wet areas.
2. At Assemblies Indicated with Fire-Resistance Rating: Use type required by indicated tested assembly; if no tested assembly is indicated, use Type X board, UL or WH listed.
3. Type: Regular and Type X, in locations indicated.
4. Edges: Tapered.

E. Ceiling Board: Special sag resistant gypsum ceiling board as defined in ASTM C1396/C1396M; sizes to minimize joints in place; ends square cut.
1. Application: Ceilings, unless otherwise indicated.
2. Thickness: 5/8 inch.
3. Edges: Tapered.
4. Products:
a. CertainTeed Corporation; Interior Ceiling Drywall: www.certainteed.com/#sle.
b. Continental Building Products; Sagcheck: www.continental-bp.com/#sle.
c. Georgia-Pacific Gypsum; ToughRock Span 24 Ceiling Board: www.gpgypsum.com/#sle.

2.04 GYPSUM WALLBOARD ACCESSORIES

A. Acoustic Insulation: As specified in Section 07 21 00.

B. Acoustic Sealant: Acrylic emulsion latex or water-based elastomeric sealant; do not use solvent-based non-curing butyl sealant.
1. Products:
a. Franklin International, Inc; Titebond GREENchoice Professional Acoustical Smoke and Sound Sealant: www.titebond.com/#sle.
b. Liquid Nails, a brand of PPG Architectural Coatings; AS-825 Acoustical Sound Sealant: www.liquidnails.com/#sle.
c. Specified Technologies Inc; Smoke N Sound Acoustical Sealant: www.stifirestop.com/#sle.

C. Beads, Joint Accessories, and Other Trim: ASTM C1047, galvanized steel or rolled zinc, unless noted otherwise.
1. Corner Beads: Low profile, for 90 degree outside corners.
a. Products:
1) CertainTeed Corporation: www.certainteed.com/#sle.
2) ClarkDietrich: www.clarkdietrich.com/#sle.
3) Phillips Manufacturing Co: www.phillipsmfg.com/#sle.
4) Substitutions: See Section 01 60 00 - Product Requirements.
2. Architectural Reveal Beads:
a. Reveal Depth: 1/2 inch.
b. Reveal Width: 1/2 inch.
c. Shapes: As indicated on drawings.
d. Products:
1) Fry Reglet Corporation: www.fryereglet.com
2) Substitutions: See Section 01 60 00 - Product Requirements.
3. Expansion Joints:
a. Type: V-shaped metal with factory-installed protective tape.
b. Products:
1) Phillips Manufacturing Co: www.phillipsmfg.com/#sle.
2) Trim-Tex, Inc: www.trim-tex.com/#sle.
3) Substitutions: See Section 01 60 00 - Product Requirements.

D. Joint Materials: ASTM C475/C475M and as recommended by gypsum board manufacturer for project conditions.
1. Paper Tape: 2 inch wide, creased paper tape for joints and corners.
2. Joint Compound: Drying type, vinyl-based, ready-mixed.

a. Products:
1) CertainTeed Corporation: www.certainteed.com/#sle.
2) Continental Building Products: www.continental-bp.com/#sle.
3) Substitutions: See Section 01 60 00 - Product Requirements.

E. Screws for Fastening of Gypsum Panel Products to Cold-Formed Steel Studs Less than 0.033 inches in Thickness and Wood Members: ASTM C1002; self-piercing tapping screws, corrosion-resistant.

F. Screws for Fastening of Gypsum Panel Products to Steel Members from 0.033 to 0.112 inch in Thickness: ASTM C954; steel drill screws, corrosion-resistant.

G. Anchorage to Substrate: Tie wire, nails, screws, and other metal supports, of type and size to suit application; to rigidly secure materials in place.

PART 3 EXECUTION

3.01 EXAMINATION

A. Verify that project conditions are appropriate for work of this section to commence.

3.02 FRAMING INSTALLATION

A. Metal Framing: Install in accordance with ASTM C754 and manufacturer's instructions.

B. Suspended Ceilings and Soffits: Space framing and furring members as indicated.
1. Level ceiling system to a tolerance of 1/1200.
2. Laterally brace entire suspension system.

C. Studs: Space studs at 16 inches on center.
1. Extend partition framing to structure where indicated and to ceiling in other locations.
2. Partitions Terminating at Structure: Attach top runner to structure, maintain clearance between top of studs and structure, and connect studs to track using specified mechanical devices in accordance with manufacturer's instructions; verify free movement of top of stud connections; do not leave studs unattached to track.

D. Openings: Reinforce openings as required for weight of doors or operable panels, using not less than double studs at jambs.

E. Blocking: Install wood blocking for support of:
1. Wall-mounted cabinets.

3.03 ACOUSTIC ACCESSORIES INSTALLATION

A. Acoustic Insulation: Place tightly within spaces, around cut openings, behind and around electrical and mechanical items within partitions, and tight to items passing through partitions.

B. Acoustic Sealant: Install in accordance with manufacturer's instructions.

3.04 BOARD INSTALLATION

A. Comply with ASTM C840, GA-216, and manufacturer's instructions. Install to minimize butt end joints, especially in highly visible locations.

B. Single-Layer Nonrated: Install gypsum board in most economical direction, with ends and edges occurring over firm bearing.
1. Exception: Tapered edges to receive joint treatment at right angles to framing.

C. Exposed Gypsum Board in Interior Wet Areas: Seal joints, cut edges, and holes with water-resistant sealant.

D. Cementitious Backing Board: Install over steel framing members and plywood substrate where indicated, in accordance with ANSI A108.11 and manufacturer's instructions.

E. Installation on Metal Framing: Use screws for attachment of gypsum board.

F. Curved Surfaces: Apply gypsum board to curved substrates in accordance with GA-226.

3.05 INSTALLATION OF TRIM AND ACCESSORIES

A. Control Joints: Place control joints consistent with lines of building spaces and as directed.
   1. Not more than 30 feet apart on walls and ceilings over 50 feet long.

B. Corner Beads: Install at external corners, using longest practical lengths.

C. Edge Trim: Install at locations where gypsum board abuts dissimilar materials.

3.06 JOINT TREATMENT

A. Paper Faced Gypsum Board: Use paper joint tape, embed with drying type joint compound and finish with drying type joint compound.

B. Finish gypsum board in accordance with levels defined in ASTM C840, as follows:
   1. Level 5: Walls and ceilings to receive semi-gloss or gloss paint finish and other areas specifically indicated.
   2. Level 4: Walls and ceilings to receive paint finish or wall coverings, unless otherwise indicated.
   3. Level 3: Walls to receive textured wall finish.
   4. Level 2: In utility areas, behind cabinetry, and on backing board to receive tile finish.
   5. Level 1: Fire-resistance-rated wall areas above finished ceilings, whether or not accessible in the completed construction.

C. Tape, fill, and sand exposed joints, edges, and corners to produce smooth surface ready to receive finishes.
   1. Feather coats of joint compound so that camber is maximum 1/32 inch.

D. Where Level 5 finish is indicated, spray apply high build drywall surfacer over entire surface after joints have been properly treated; achieve a flat and tool mark-free finish.

3.07 TOLERANCES

A. Maximum Variation of Finished Gypsum Board Surface from True Flatness: 1/8 inch in 10 feet in any direction.

END OF SECTION 09 21 16

SECTION 09 30 00
TILING

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Tile for floor applications.

B. Tile for wall applications.

C. Cementitious backer board as tile substrate.

D. Non-ceramic trim.

1.02 RELATED REQUIREMENTS

A. Section 07 92 00 - Joint Sealants: Sealing joints between tile work and adjacent construction and fixtures.

B. Section 09 05 61 - Common Work Results for Flooring Preparation: Concrete slab moisture and alkalinity testing and remediation procedures.

1.03 REFERENCE STANDARDS

A. ANSI A108.11 - American National Standard Specifications for Interior Installation of Cementitious Backer Units; 2018.

B. ANSI A108.19 - Interior Installation of Gauged Porcelain Tiles and Gauged Porcelain Tile Panels/Slabs by the Thin-Bed Method Bonded with Modified Dry-Set Cement Mortar or Improved Modified Dry-Set Cement Mortar; 2025.

C. ANSI A108.20 - Exterior Installation of Gauged Porcelain Tiles and Gauged Porcelain Tile Panels/Slabs; 2025.

D. ANSI A108/A118/A136 - American National Standard Specifications for the Installation of Ceramic Tile; 2026.

E. ANSI A118.3 - American National Standard Specifications for Chemical Resistant, Water Cleanable Tile-Setting and -Grouting Epoxy and Water Cleanable Tile-Setting Epoxy Adhesive; 2021 (Reaffirmed 2025).

F. ANSI A118.9 - American National Standard Specifications for Test Methods and Specifications for Cementitious Backer Units; 1999 (Reaffirmed 2016).

G. ANSI A118.10 - American National Standard Specifications for Load Bearing, Bonded, Waterproof Membranes For Thin-Set Ceramic Tile And Dimension Stone Installation; 2014.

H. ANSI A118.12 - American National Standard Specifications for Crack Isolation Membranes for Thin-Set Ceramic Tile and Dimension Stone Installation; 2014.

I. ANSI A137.1 - American National Standard Specifications for Ceramic Tile; 2022.

J. TCNA (HB-GP) - Handbook for Gauged Porcelain Tiles and Gauged Porcelain Tile Panels/Slabs Installation; 2025-2026.

K. TCNA (HB) - Handbook for Ceramic, Glass, and Stone Tile Installation; 2026.

1.04 ADMINISTRATIVE REQUIREMENTS

A. Preinstallation Meeting: Convene a preinstallation meeting one week before starting work of this section; require attendance by affected installers.

1.05 SUBMITTALS

A. See Section 01 30 00 - Administrative Requirements for submittal procedures.

B. Product Data: Provide manufacturers' data sheets on tile, mortar, grout, and accessories. Include instructions for using grouts and adhesives.

C. Shop Drawings: Indicate tile layout, patterns, color arrangement, perimeter conditions, junctions with dissimilar materials, control and expansion joints, thresholds, ceramic accessories, and setting details.

D. Samples for verification: Provide samples for verification for products specified, minimum 6 by 6 inches.

E. Installer's qualification statement.

F. Maintenance Data: Include recommended cleaning methods, cleaning materials, and stain removal methods.

G. Maintenance Materials: Furnish the following for Owner's use in maintenance of project.
   1. See Section 01 60 00 - Product Requirements, for additional provisions.
   2. Extra Tile: 1 percent of each size, color, and surface finish combination, but not less than 1 box of each type.

1.06 QUALITY ASSURANCE

A. Manufacturer Qualifications: Company specializing in manufacturing the types of products specified in this section, with minimum five years of documented experience.

B. Installer Qualifications:
   1. Company specializing in performing tile installation, with minimum of five years of documented experience.

1.07 DELIVERY, STORAGE, AND HANDLING

A. See Section 01 74 19 - Construction Waste Management and Disposal for packaging waste requirements.

B. Protect adhesives from freezing or overheating in accordance with manufacturer's instructions.

1.08 FIELD CONDITIONS

A. Maintain ambient and substrate temperature above 50 degrees F and below 100 degrees F during installation and curing of setting materials.

PART 2 PRODUCTS

2.01 TILE

A. Ceramic Tile T-1: Provide Basis-of-Design Product as listed in Interior Finish Schedule or equal by one of the following:
   1. Vitl Baseline- Neutral Ice VTL Baic Glossy 4” x 12”
   2. Roca Color Collection White Ice Bright U081 4 ¼ ” x 12”

B. Porcelain Tile T-2: Provide Basis-of-Design Product as listed in Interior Finish Schedule or equal by one of the following:
   1. Roca Flow Cosmic Saphire FLOCB09-312 3” x 12”
   2. Vitl Sonder Navy VTL S1NV Glossy 3” x 12”

C. Ceramic Tile T-3: Provide Basis-of-Design Product as listed in Interior Finish Schedule or equal by one of the following:
   1. Vitl Baseline – Neutral Ice VTL BAIC Glossy 4” x 4”
   2. Roca Color Collection White Ice Bright U081 4 ¼ ” x 4 ¼ ”

D. Ceramic Tile T-4: Provide Basis-of-Design Product as listed in Interior Finish Schedule or equal by one of the following:
   1. Vitl Baseline – Vibrant Blue VTL BABL Glossy 4” x 4”
   2. Roca Color Collection Soft Blue Bright U723 4 ¼ ” x 4 ¼ ”

E. Ceramic Tile T-5: Provide Basis-of-Design Product as listed in Interior Finish Schedule or equal by one of the following:
   1. Vitl Baseline – Neutral Fog VTL BAFO Glossy 4” x 4”
   2. Roca Color Collection Deep Vlue Bright U725 4 ¼ ” x 4 ¼ ”

F. Ceramic Tile T-6: Provide Basis-of-Design Product as listed in Interior Finish Schedule or equal by one of the following:
   1. Vitl Skyline White Penny Round Mosaic Glossy 12”x12”
   2. Umore Classico 5 Penny White glossy UMOWHIT5CLPRG 11 ” x 11 ”

G. Porcelain Tile T-7: Provide Basis-of-Design Product as listed in Interior Finish Schedule or equal by one of the following:
   1. Tile Bar Brookline Feather Costal Blue Fish Scale Glossy 13” x 12”
   2. Pre-approved Equal

H. Quarry Tile: ANSI A137.1 standard grade.
   1. Match to exsiting

2.02 TRIM AND ACCESSORIES

A. Non-Ceramic Trim: Satin brass anodized extruded aluminum, style and dimensions to suit application, set with tile mortar or adhesive.
   1. Applications:
      a. Open edges of wall tile.
      b. Inside and outside wall corners.
      c. Transition between floor finishes of different heights.
      d. Borders and other trim as indicated on drawings.
      e. Metal wall base
   2. Manufacturers: Provide Basis-of-Design Product as listed in Interior Finish Schedule or comparable product by one of the following:
      a. Blanke Corporation; Blanke - Trims and Profiles: www.blankecorp.com/#sle.
      b. Kuberit USA.
      c. Substitutions: See Section 01 60 00 - Product Requirements.

2.03 SETTING MATERIALS

A. Provide setting and grout materials from same manufacturer.

B. Manufacturers: Provide Basis-of-Design Product as lsited in Interior Finish Schedule or comparable product by one of the follwoing:
   1. Custom Building Products
   2. LATICRETE International, Inc.

C. Epoxy Adhesive and Mortar Bond Coat: ANSI A118.3.
   1. Applications: Where indicated on drawings.
   2. Products:
      a. Custom Building Products; EBM-Lite Epoxy Bonding Mortar: www.custombuildingproducts.com/#sle.
      b. LATICRETE International, Inc; LATICRETE LATAPOXY 300 Adhesive: www.laticrete.com/#sle.

2.04 GROUTS

A. Provide setting and grout materials from same manufacturer.

B. Epoxy Grout: ANSI A118.3 chemical resistant and water-cleanable epoxy grout.
   1. Applications: Use where indicated on drawings.
   2. Color: As indicated on drawings.

2.05 ACCESSORY MATERIALS

A. Waterproofing Membrane Kitchen Walls and floors: Specifically designed for bonding to cementitious substrate under thick mortar bed or thin-set tile; complying with ANSI A118.10.
   1. Crack Resistance: No failure at 1/16-inch gap, minimum; comply with ANSI A118.12.
   2. Fluid or Trowel Applied Type:
      a. Products:

1) Custom Building Products; RedGard Crack Prevention and Waterproofing Membrane.
2) H.B. Fuller Construction Products, Inc; TEC HydraFlex Waterproofing Crack Isolation Membrane.
3) LATICRETE International, Inc; LATICRETE HYDRO BAN.

B. Backer Board: Cementitious type complying with ANSI A118.9; high density, glass fiber reinforced, 5/8 inch thick; 2 inch wide coated glass fiber tape for joints and corners.
1. Products:
a. Custom Building Products; WonderBoard.
b. C-Cure; C-Cure Board 990.
c. USG Corporation; DUROCK Cement Board.

PART 3 EXECUTION

3.01 EXAMINATION

A. Verify subfloor surfaces are smooth and flat within tolerances specified for that type of work and are ready to receive tile.

B. Verify wall surfaces are smooth and flat within tolerances specified for that type of work, are dust-free, and are ready to receive tile.

C. Verify that subfloor surfaces are dust free and free of substances that could impair bonding of setting materials to subfloor surfaces.

D. Cementitious Subfloor Surfaces: Verify that substrates are ready for tiling installation by testing for moisture and alkalinity (pH).
1. Test in accordance with Section 09 05 61.
2. Obtain instructions if test results are not within limits recommended by tiling material manufacturer and setting material manufacturer.
3. Follow moisture and alkalinity remediation procedures in Section 09 05 61.

3.02 PREPARATION

A. Protection of In-Place Conditions.

B. Vacuum clean surfaces and damp clean.

C. Seal substrate surface cracks with filler.

D. Install cementitious backer board in accordance with ANSI A108.11 and board manufacturer's instructions. Tape joints and corners, cover with skim coat of setting material to feather edge.

3.03 INSTALLATION - GENERAL

A. Install tile, thresholds, and stair treads and grout in accordance with applicable requirements of ANSI A108/A118/A136, manufacturer's instructions, and TCNA (HB) or TCNA (HB-GP) recommendations, as applicable.

B. Lay tile to pattern indicated on drawings. Do not interrupt tile pattern through openings.

C. Cut and fit tile to penetrations through tile, leaving sealant joint space. Form corners and bases neatly. Align floor joints.

D. Place tile joints uniform in width, subject to variance in tolerance allowed in tile size. Make grout joints without voids, cracks, excess mortar or excess grout, or too little grout.

E. Form internal angles square and external angles bullnosed.

F. Install non-ceramic trim in accordance with manufacturer's instructions.

G. Sound tile after setting. Replace hollow sounding units.

H. Keep control and expansion joints free of mortar, grout, and adhesive.

I. Prior to grouting, allow installation to completely cure; minimum of 48 hours.

J. Grout tile joints unless otherwise indicated on drawings. Use standard grout unless otherwise indicated on drawings.

K. At changes in plane and tile-to-tile control joints, use tile sealant instead of grout, with either bond breaker tape or backer rod as appropriate to prevent three-sided bonding.

3.04 INSTALLATION - FLOORS - THIN-SET METHODS

A. Over interior concrete substrates, install in accordance with TCNA (HB) Method F113, dry-set or latex-Portland cement bond coat, with polymer modified grout, unless otherwise indicated.
   1. Where waterproofing membrane is indicated on drawings, install in accordance with TCNA (HB) Method F122, with latex-Portland cement grout, on ground.
      a. Any levels above ground level scheduled to receive tile.

3.05 INSTALLATION - WALL TILE

A. Over cementitious backer units on studs, install in accordance with TCNA (HB) Method W244 with epoxy grout unless otherwise indicated, using membrane at kitchens.

3.06 CLEANING

A. Clean tile and grout surfaces.

3.07 PROTECTION

A. Do not permit traffic over finished floor surface for 4 days after installation.

END OF SECTION 09 30 00

SECTION 09 51 00
ACOUSTICAL CEILINGS

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Suspended metal grid ceiling system.

B. Acoustical units.

1.02 REFERENCE STANDARDS

A. ASTM C635/C635M - Standard Specification for the Manufacture, Performance, and Testing of Metal Suspension Systems for Acoustical Tile and Lay-in Panel Ceilings; 2017.

B. ASTM C636/C636M - Standard Practice for Installation of Metal Ceiling Suspension Systems for Acoustical Tile and Lay-In Panels; 2019 (Reapproved 2025).

C. ASTM E580/E580M - Standard Practice for Installation of Ceiling Suspension Systems for Acoustical Tile and Lay-in Panels in Areas Subject to Earthquake Ground Motions; 2024a.

D. ASTM E1264 - Standard Classification for Acoustical Ceiling Products; 2019.

1.03 ADMINISTRATIVE REQUIREMENTS

A. Sequence work to ensure acoustical ceilings are not installed until building is enclosed, sufficient heat is provided, dust generating activities have terminated, and overhead work is completed, tested, and approved.

B. Do not install acoustical units until after interior wet work is dry.

1.04 SUBMITTALS

A. See Section 01 30 00 - Administrative Requirements for submittal procedures.

B. Product Data: Provide data on suspension system components and acoustical units.

C. Samples: Submit two samples 6 by 6 inches in size illustrating material and finish of acoustical units.

D. Samples: Submit two samples each, 6 inches long, of suspension system main runner, cross runner, and perimeter molding.

E. Manufacturer's Installation Instructions: Indicate special procedures and perimeter conditions requiring special attention.

F. Maintenance Materials: Furnish the following for Owner's use in maintenance of project.
   1. See Section 01 60 00 - Product Requirements, for additional provisions.
   2. Extra Acoustical Units: Quantity equal to 5 percent of total installed.

1.05 QUALITY ASSURANCE

A. Suspension System Manufacturer Qualifications: Company specializing in manufacturing the products specified in this section with minimum three years documented experience.

B. Acoustical Unit Manufacturer Qualifications: Company specializing in manufacturing the products specified in this section with minimum three years documented experience.

1.06 FIELD CONDITIONS

A. Maintain uniform temperature of minimum 60 degrees F, and maximum humidity of 40 percent prior to, during, and after acoustical unit installation.

PART 2 PRODUCTS

2.01 MANUFACTURERS

A. Acoustic Tiles/Panels: Provide Basis-of-Design product as listed in Interior Finish Schedule or comparable product by one of the following:
   1. CertainTeed Corporation.

2. USG Corporation.

B. Suspension Systems:
1. Same as for acoustical units.

2.02 ACOUSTICAL UNITS

A. Acoustical Units - General: ASTM E1264, Class A.

B. Acoustical Panels, ACT-1: Mineral fiber with scrubbable finish, with the following characteristics:
1. Classification: ASTM E1264 Type A.
a. Form: A3.2, wet formed.
b. Pattern: G - smooth.
2. Size: 24 by 24 inches.
3. Thickness: 5/8 inch.
4. Light Reflectance: 89 percent, in accordance with ASTM E1264.
5. Ceiling Attenuation Class (CAC): 33, in accordance with ASTM E1264.
6. Panel Edge: Square.
7. Suspension System: Exposed grid.

2.03 SUSPENSION SYSTEMS

A. Metal Suspension Systems - General: Complying with ASTM C635/C635M; die cut and interlocking components, with perimeter moldings, hold-down clips, stabilizer bars, clips, and splices as required.

B. Exposed Suspension System: Hot-dipped galvanized steel grid with steel cap.
1. Structural Classification: Intermediate-duty, when tested in accordance with ASTM C635/C635M.
2. Profile: Tee; 15/16 inch face width.
3. Finish: Baked enamel.
4. Color: White.

2.04 ACCESSORIES

A. Support Channels and Hangers: Galvanized steel; size and type to suit application, seismic requirements, and ceiling system flatness requirement specified.

B. Hanger Wire: 12 gauge, 0.08 inch galvanized steel wire.

C. Perimeter Moldings: Same metal and finish as grid.
1. Size: As required for installation conditions and specified Seismic Design Category.
2. Shadow Molding: Shaped to create a perimeter reveal.
3. Acoustical Sealant For Perimeter Moldings: Non-hardening, non-skinning, for use in conjunction with suspended ceiling system.

D. Touch-up Paint: Type and color to match acoustical and grid units.

PART 3 EXECUTION

3.01 EXAMINATION

A. Verify existing conditions before starting work.

B. Verify that layout of hangers will not interfere with other work.

3.02 PREPARATION

A. Install after major above-ceiling work is complete.

B. Coordinate the location of hangers with other work.

3.03 INSTALLATION - SUSPENSION SYSTEM

A. Install suspension system in accordance with ASTM C636/C636M, ASTM E580/E580M, and manufacturer's instructions, as supplemented in this section.

B. Rigidly secure system, including integral mechanical and electrical components, for maximum deflection of 1:360.

C. Locate system on room axis according to reflected plan.

D. Perimeter Molding: Install at intersection of ceiling and vertical surfaces and at junctions with other interruptions.
   1. Use longest practical lengths.
   2. Do NOT use pop rivets.

E. Suspension System, Non-Seismic: Hang suspension system independent of walls, columns, ducts, pipes and conduit. Where carrying members are spliced, avoid visible displacement of face plane of adjacent members.

F. Where ducts or other equipment prevent the regular spacing of hangers, reinforce the nearest affected hangers and related carrying channels to span the extra distance.

G. Do not support components on main runners or cross runners if weight causes total dead load to exceed deflection capability.

H. Support fixture loads using supplementary hangers located within 6 inches of each corner, or support components independently.

I. Do not eccentrically load system or induce rotation of runners.

3.04 INSTALLATION - ACOUSTICAL UNITS

A. Install acoustical units in accordance with manufacturer's instructions.

B. Fit acoustical units in place, free from damaged edges or other defects detrimental to appearance and function.

C. Lay directional patterned units with pattern parallel to longest room axis.

D. Fit border trim neatly against abutting surfaces.

E. Install acoustical units level, in uniform plane, and free from twist, warp, and dents.

F. Cutting Acoustical Units:
   1. Make field cut edges of same profile as factory edges.

G. Where round obstructions occur, provide preformed closures to match perimeter molding.

3.05 TOLERANCES

A. Maximum Variation from Flat and Level Surface: 1/8 inch in 10 feet.

B. Maximum Variation from Plumb of Grid Members Caused by Eccentric Loads: 2 degrees.

3.06 CLEANING

A. See Section 01 70 00 - Execution and Closeout Requirements for additional requirements.

B. Clean surfaces.

C. Replace damaged or abraded components.

END OF SECTION

SECTION 09 65 00
RESILIENT FLOORING

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Resilient sheet flooring.

B. Resilient base.

C. Installation accessories.

1.02 RELATED REQUIREMENTS

A. Section 09 05 61 - Common Work Results for Flooring Preparation: Removal of existing floor coverings, cleaning, and preparation.

B. Section 09 05 61 - Common Work Results for Flooring Preparation: Concrete slab moisture and alkalinity testing and remediation procedures.

1.03 REFERENCE STANDARDS

A. ASTM F1861 - Standard Specification for Resilient Wall Base; 2021 (Reapproved 2025).

B. ASTM F1913 - Standard Specification for Vinyl Sheet Floor Covering Without Backing; 2019 (Reapproved 2025).

1.04 SUBMITTALS

A. See Section 01 30 00 - Administrative Requirements for submittal procedures.

B. Product Data: Provide data on specified products, describing physical and performance characteristics; including sizes, patterns and colors available; and installation instructions.

C. Shop Drawings: Indicate seaming plans and floor patterns.

D. Verification Samples: Submit two samples, 6 by 6 inches in size illustrating color and pattern for each resilient flooring product specified.

E. Maintenance Data: Include maintenance procedures, recommended maintenance materials, and suggested schedule for cleaning, stripping, and re-waxing.

F. Maintenance Materials: Furnish the following for Owner's use in maintenance of project.
   1. See Section 01 60 00 - Product Requirements, for additional provisions.
   2. Extra Flooring Material:
      a. For Resilient Tile: Furnish 1 box for every 50 boxes or fraction thereof, of each type, color, and pattern of floor tile installed.
      b. For Resilient Sheet: Furnish quantity not less than 10 linear feet or fraction thereof, in roll form and in full roll width for each color, pattern, and type of floor covering installed.
   3. Extra Wall Base: 10 linear feet for every 500 linear feet or fraction therof, of each type and color.

1.05 QUALITY ASSURANCE

A. Manufacturer Qualifications: Company specializing in manufacturing specified flooring with minimum three years documented experience.

B. Installer Qualifications: Company specializing in installing specified flooring with minimum three years documented experience.

1.06 DELIVERY, STORAGE, AND HANDLING

A. Upon receipt, immediately remove any shrink-wrap and check materials for damage and the correct style, color, quantity and run numbers.

B. Store all materials off of the floor in an acclimatized, weather-tight space.

C. Maintain temperature in storage area between 55 degrees F and 90 degrees F.

D. Protect roll materials from damage by storing on end.

E. Do not double stack pallets.

1.07 FIELD CONDITIONS

A. Store materials for not less than 48 hours prior to installation in area of installation at a temperature of 70 degrees F to achieve temperature stability. Thereafter, maintain conditions above 55 degrees F.

PART 2 PRODUCTS

2.01 SHEET FLOORING

A. Vinyl Sheet Flooring - SV-1: Homogeneous without backing, with color and pattern throughout full thickness.
   1. Manufacturers: Provide Basis-of-Design Product as listed in Interior Finish Schedule or comparable product by one of the following:
      a. Tarkett
      b. Gerflor USA, Inc; Mipolam Affinity: www.gerflorusa.com#sle.
      c. Substitutions: See Section 01 60 00 - Product Requirements.
   2. Minimum Requirements: Comply with ASTM F1913.
   3. Thickness: 0.080 inch nominal.
   4. Seams: Heat welded.
   5. Color: As indicated on drawings.

B. Vinyl Sheet Flooring - SV-2: Homogeneous without backing, with color and pattern throughout full thickness.
   1. Manufacturers: Provide Basis-of-Design Product as listed in Interior Finish Schedule or comparable product by one of the following:
      a. Tarkett
      b. Gerflor USA, Inc; Mipolam Affinity: www.gerflorusa.com#sle.
      c. Substitutions: See Section 01 60 00 - Product Requirements.
   2. Thickness: 0.120 inch nominal.
   3. Seams: Heat welded.
   4. Integral coved base with cap strip.
   5. Color: As indicated on drawings.

C. Welding Rod: Solid bead in material compatible with flooring, produced by flooring manufacturer for heat welding seams, and in color matching field color.

2.02 RESILIENT BASE

A. Resilient Base - RB-1: ASTM F1861, Type TS rubber, vulcanized thermoset; style as scheduled.
   1. Manufacturers: Provide Basis-of-Design Product as listed in Interior Finish Schedule or comparable product by one of the following:
      a. Mannington Commercial.
      b. Roppe Corporation; Contours Profiled Wall Base System: www.roppe.com/#sle.
   2. Height: 4 inches.
   3. Thickness: 0.125 inch.
   4. Finish: Satin.
   5. Length: Rolls not less than 120 feet.
   6. Color: As indicated on drawings.
   7. Accessories: Premolded external corners from same lot as coils.

2.03 ACCESSORIES

A. Primers and Adhesives: Waterproof; types recommended by flooring manufacturer.

B. Moldings, Transition and Edge Strips:

1. Manufacturers: Provide Basis-of-Design Product as listed in Interior Finish Schedule or comparable product by one of the following:
   a. Johnsonite, a Tarkett Company.
   b. Other pre-approved equal.

C. Filler for Coved Base: Plastic.

PART 3 EXECUTION

3.01 EXAMINATION

A. Verify that surfaces are flat to tolerances acceptable to flooring manufacturer, free of cracks that might telegraph through flooring, clean, dry, and free of curing compounds, surface hardeners, and other chemicals that might interfere with bonding of flooring to substrate.

B. Verify that wall surfaces are smooth and flat within the tolerances specified for that type of work, are dust-free, and are ready to receive resilient base.

C. Cementitious Subfloor Surfaces: Verify that substrates are ready for resilient flooring installation by testing for moisture and alkalinity (pH).
   1. Test in accordance with Section 09 05 61.
   2. Obtain instructions if test results are not within limits recommended by resilient flooring manufacturer and adhesive materials manufacturer.
   3. Follow moisture and alkalinity remediation procedures in Section 09 05 61.

D. Verify that required floor-mounted utilities are in correct location.

3.02 PREPARATION

A. Prepare floor substrates for installation of flooring in accordance with Section 09 05 61.

B. Prepare floor substrates as recommended by flooring and adhesive manufacturers.

C. Remove subfloor ridges and bumps. Fill minor low spots, cracks, joints, holes, and other defects with subfloor filler to achieve smooth, flat, hard surface.

D. Prohibit traffic until filler is fully cured.

E. Clean substrate.

F. Apply primer as required to prevent "bleed-through" or interference with adhesion by substances that cannot be removed.

3.03 INSTALLATION - GENERAL

A. Starting installation constitutes acceptance of subfloor conditions.

B. Install in accordance with manufacturer's written instructions.

C. Where type of floor finish, pattern, or color are different on opposite sides of door, terminate flooring under centerline of door.

D. Install edge strips at unprotected or exposed edges, where flooring terminates, and where indicated.
   1. Metal Strips: Attach to substrate before installation of flooring using stainless steel screws.
   2. Resilient Strips: Attach to substrate using adhesive.

E. Scribe flooring to walls, columns, cabinets, floor outlets, and other appurtenances to produce tight joints.

F. Install flooring in recessed floor access covers, maintaining floor pattern.

G. At movable partitions, install flooring under partitions without interrupting floor pattern.

3.04 INSTALLATION - SHEET FLOORING

A. Lay flooring with joints and seams parallel to longer room dimensions, to produce minimum number of seams. Lay out seams to avoid widths less than 1/3 of roll width; match patterns at seams.

B. Seams are prohibited in bathrooms, kitchens, toilet rooms, and custodial closets.

C. Seal seams by heat welding where indicated.

D. Coved Base: Install as detailed on drawings, using coved base filler as backing at floor to wall junction. Extend sheet flooring vertically to height indicated, and cover top edge with metal cap strip.

3.05 INSTALLATION - RESILIENT BASE

A. Fit joints tightly and make vertical. Maintain minimum dimension of 18 inches between joints.

B. Miter internal corners. At external corners, use premolded units. At exposed ends, use premolded units.

C. Install base on solid backing. Bond tightly to wall and floor surfaces.

D. Scribe and fit to door frames and other interruptions.

3.06 CLEANING

A. Remove excess adhesive from floor, base, and wall surfaces without damage.

B. Clean in accordance with manufacturer's written instructions.

3.07 PROTECTION

A. Prohibit traffic on resilient flooring for 48 hours after installation.

END OF SECTION 09 65 00

SECTION 09 72 00
WALL COVERINGS

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Architectural finish film applied to gypsum board ceiling surfaces

1.02 RELATED REQUIREMENTS

A. Section 01 61 16 - Volatile Organic Compound (VOC) Content Restrictions.

B. Section 09 29 00 - Gypsum Board: Substrate preparation and finishing.

1.03 REFERENCE STANDARDS

A. ASTM D1308 - Standard Test Method for Effect of Household Chemicals on Clear and Pigmented Coating Systems; 2020.

B. ASTM E84 - Standard Test Method for Surface Burning Characteristics of Building Materials; 2021a.

1.04 SUBMITTALS

A. Product Data: Provide manufacturer's product data for architectural finish film, including physical properties, installation requirements, substrate preparation, cleaning, and maintenance.

B. Shop Drawings: Indicate ceiling layout, film direction, seams, and locations of penetrations and transitions.

C. Samples: Submit two samples of each wall covering, 24 by 24 inch in size illustrating color, finish, and texture.

D. Manufacturer's Installation Instructions: Indicate special procedures.

E. Installer's Qualification Statement.

F. Maintenance Materials: Furnish the following for Owner's use in maintenance of project.
   1. See Section 01 60 00 - Product Requirements, for additional provisions.
   2. Extra Materials: Furnish [5] linear feet of each specified film pattern for Owner's maintenance use.
   3. Package and label each roll by manufacturer, color and pattern, and destination room number.

1.05 QUALITY ASSURANCE

A. Installer Qualifications: Company specializing in performing work of the type specified and with at least three years of documented experience installing architectural finish film.

1.06 DELIVERY, STORAGE, AND HANDLING

A. Inspect roll materials at arrival on site, to verify acceptability.

B. Store film in accordance with manufacturer's written requirements.

C. Do not store roll goods on end.

1.07 FIELD CONDITIONS

A. Do not apply materials when surface and ambient temperatures are outside the temperature ranges required by the architectural finish film manufacturer.

B. Maintain these conditions 24 hours before, during, and after installation as recommended by the architectural finish film manufacturer.

PART 2 PRODUCTS

2.01 ARCHITECTURAL FINISH FILM

A. General Requirements:
   1. Surface Burning Characteristics: Flame spread/Smoke developed index of 25/50, maximum, when tested in accordance with ASTM E84.
   2. Chemical and Stain Resistance: No visible staining or discoloration and no damage to surface texture when tested in accordance with ASTM D1308, where applicable to the specified product.

B. Architectural Finish Film SF-1: Flexible, pressure-sensitive adhesive-backed decorative finish film in roll form, suitable for interior ceiling applications.
   1. Manufacturer: Provide Basis of Design product as listed in Finish Schedule or comparable by one of the follwoing:
      a. Avery Dennison - Architectural Film
      b. LX Hausys - BENIF Interior Film
      c. Substitutions: See Section 01 60 00 – Product Requirements.
   2. Film Type: Flexible decorative architectural finish film with factory-applied pressure-sensitive adhesive.
   3. Width: Approximately 48 inches.
   4. Color: As indicated on Drawings
   5. Surface Texture: Embossed wood-grain texture.
   6. Application: Interior ceiling surfaces.
   7. Substrate: Smooth, sound, dry, fully cured, properly finished gypsum board suitable for application of architectural finish film.

C. Accessories
   1. Primer:
      a. Manufacturer's recommended primer compatible with substrate and film.
      b. Provide primer at substrate locations where required by manufacturer for adequate adhesion.
   2. Edge Sealer:
      a. Manufacturer's recommended edge sealer where required for the substrate, location, or installation condition.
   3. Cleaning Materials:
      a. Manufacturer's recommended cleaning products and procedures.
      b. Do not use solvents, abrasive cleaners, or chemicals that may damage the film finish.

PART 3 EXECUTION

3.01 EXAMINATION

A. Verify that gypsum board substrate is finished to a smooth, uniform surface suitable for application of architectural finish film and complies with manufacturer's requirements.

B. Verify substrate moisture and environmental conditions comply with architectural finish film manufacturer's requirements.

3.02 PREPARATION

A. Examine gypsum board substrates to verify surfaces are Level 5 finished, smooth, dry, clean, sound, and suitable for application of architectural finish film.

B. Correct surface defects that could telegraph through finished film, including cracks, depressions, ridges, fastener heads, joint irregularities, and other surface imperfections.

C. Fill and sand irregularities smooth. Remove dust and loose particles from prepared surfaces.

D. Remove grease, oil, wax, dirt, dust, and other contaminants that may interfere with adhesion. Clean surfaces in accordance with architectural finish film manufacturer's written instructions.

E. Remove loose, peeling, chalking, or otherwise unstable coatings. Do not apply film over unstable surfaces.

F. Apply two coats of manufacturer's recommended high-quality primer/sealer to gypsum board substrate, unless otherwise recommended by architectural finish film manufacturer. Apply with low-nap roller to maintain a smooth surface. Allow each coat to fully cure before proceeding.

G. Allow primer and substrate treatments to dry and cure fully before application of film.

H. Vacuum clean surfaces immediately prior to installation. Surfaces shall be clean and free of dust, debris, and other contaminants.

I. Remove or protect electrical plates, hardware, light fixture trim, escutcheons, and other items that could interfere with installation.

J. Do not begin installation until substrate conditions comply with manufacturer's requirements.

3.03 INSTALLATION

A. Install architectural finish film in accordance with manufacturer's written installation instructions.

B. Verify film pattern, direction, layout, and substrate conditions prior to installation.

C. Install film smooth, tight, and fully adhered to substrate, free from wrinkles, bubbles, blisters, creases, gaps, and other visible defects.

D. Maintain consistent film pattern direction and alignment throughout each continuous ceiling area. Coordinate seams, penetrations, fixtures, and other ceiling conditions for a neat, uniform appearance.

E. Provide clean, straight terminations at walls, reveals, fixtures, diffusers, access panels, and other interruptions.

F. Coordinate installation with other ceiling-mounted work and do not interfere with operation, removal, or maintenance of ceiling-mounted devices.

G. Do not bridge control joints, expansion joints, seismic joints, or other movement joints unless approved by manufacturer.

H. Remove excess adhesive and installation residue in accordance with manufacturer's recommendations.

I. Replace damaged or defective film. Completed installation shall be smooth, clean, securely bonded, and free of visible installation defects.

3.04 CLEANING

A. Clean completed film installation in accordance with manufacturer's written instructions.

B. Remove adhesive residue, fingerprints, dirt, and other contaminants without damaging or altering the film surface.

C. Clean and protect adjacent surfaces and MEP devices, including light fixtures, diffusers, grilles, sprinkler escutcheons, speakers, access panels, and other ceiling-mounted items. Remove adhesive residue and installation debris from such items immediately.

D. Do not apply cleaning agents or solvents to adjacent finishes or MEP devices unless recommended by the applicable manufacturer.

3.05 PROTECTION

A. Protect completed film installation from damage by subsequent construction activities.

B. Replace film that is damaged, stained, scratched, improperly adhered, or otherwise defective.

END OF SECTION

SECTION 09 84 30
SOUND-ABSORBING WALL AND CEILING UNITS

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Sound-absorbing panels.

1.02 RELATED REQUIREMENTS

A. Section 09 91 23 - Interior Painting.

1.03 REFERENCE STANDARDS

A. ASTM C423 - Standard Test Method for Sound Absorption and Sound Absorption Coefficients by the Reverberation Room Method; 2023, with Editorial Revision (2024).

B. ASTM E84 - Standard Test Method for Surface Burning Characteristics of Building Materials; 2021a.

C. ASTM E795 - Standard Practices for Mounting Test Specimens during Sound Absorption Tests; 2023.

1.04 SUBMITTALS

A. See Section 01 30 00 - Administrative Requirements for submittal procedures.

B. Product Data: Manufacturer's printed data sheets for products specified.

C. Shop Drawings: Fabrication and installation details, panel layout and fabric orientation.

D. Verification Samples: Fabricated samples of each type of panel specified; 12 by 12 inch, showing construction, edge details, and fabric covering.

E. Test Reports: Certified test data from an independent test agency verifying that panels meet specified requirements for acoustical and fire performance.

F. Maintenance Materials: Furnish the following for Owner's use in maintenance of project.
   1. See Section 01 60 00 - Product Requirements, for additional provisions.
   2. Extra Panels: Quantity equal to 5 percent of total installed, but not less than one of each type.

1.05 QUALITY ASSURANCE

A. Manufacturer Qualifications: Company specializing in manufacturing products of the type specified in this section, with at least three years of documented experience.

1.06 DELIVERY, STORAGE, AND HANDLING

A. Protect acoustical units from moisture during shipment, storage, and handling. Deliver in factory-wrapped bundles; do not open bundles until units are needed for installation.

B. Store units flat, in dry, well-ventilated space; do not stand on end.

C. Protect edges from damage.

PART 2 PRODUCTS

2.01 FABRIC-COVERED SOUND-ABSORBING UNITS

A. Manufacturers: Provide Basis-of-Design Product as listed in Interior Finish Schedule or comparable product by one of the following:
   1. Pre-approved Equal
   2. Substitutions: See Section 01 60 00 - Product Requirements.

B. General:
   1. Prefinished, factory assembled fabric-covered panels.
   2. Surface Burning Characteristics: Flame spread index of 25 or less and smoke developed index of 450 or less, when tested in accordance with ASTM E84.

C. Fabric-Covered Acoustical Panels for Walls:
   1. Panel Core: Manufacturer's standard rigid or semi-rigid fiberglass core.
   2. Sound Absorption: Noise Reduction Coefficient (NRC) or Sound Absorption Average (SAA) of 1.00 minimum when tested in accordance with ASTM C423 for Type A mounting, per ASTM E795.
   3. Panel Size: As indicated on drawings.
   4. Panel Thickness: 2 inches.
   5. Edges: Perimeter edges reinforced by a formulated resin hardener.
   6. Fabric: As indicated on drawings.
   7. Mounting Method: HS Clip and with construction adhesive.

2.02 FABRICATION

A. Tolerances: Fabricate to finished tolerance of plus or minus 1/16 inch for thickness, overall length and width, and squareness from corner to corner.

2.03 ACCESSORIES

A. Panel Adhesive: Acceptable to acoustical panel manufacturer for application as indicated.

PART 3 EXECUTION

3.01 EXAMINATION

A. Examine substrates for conditions detrimental to installation of acoustical units. Proceed with installation only after unsatisfactory conditions have been corrected.

3.02 INSTALLATION

A. Install acoustical units in locations as indicated, following manufacturer's installation instructions.

B. Install mounting accessories and supports in accordance with shop drawings.

C. Align panels accurately, with edges plumb and top edges level. Scribe to fit accurately at adjoining work and penetrations.

D. Install acoustical units to construction tolerances of plus or minus 1/16 inch for the following:
   1. Plumb and level.
   2. Flatness.
   3. Width of joints.

3.03 CLEANING

A. Clean sound-absorptive panels upon completion of installation from dust and other foreign materials, following manufacturer's instructions.

3.04 PROTECTION

A. Provide protection of installed acoustical panels until Date of Substantial Completion.

B. Replace panels that cannot be cleaned and repaired to satisfaction of the Architect.

END OF SECTION

SECTION 09 91 23
INTERIOR PAINTING

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Surface preparation.

B. Field application of paints.

C. Scope: Finish interior surfaces exposed to view, unless fully factory-finished and unless otherwise indicated.
   1. Both sides and edges of plywood backboards for electrical and telecom equipment before installing equipment.
   2. Elevator pit ladders.
   3. Prime surfaces to receive wall coverings.
   4. Mechanical and Electrical:
      a. In finished areas, paint insulated and exposed pipes, conduit, boxes, insulated and exposed ducts, hangers, brackets, collars and supports, mechanical equipment, and electrical equipment, unless otherwise indicated.

D. Do Not Paint or Finish the Following Items:
   1. Items factory-finished unless otherwise indicated; materials and products having factory-applied primers are not considered factory finished.
   2. Items indicated to receive other finishes.
   3. Items indicated to remain unfinished.
   4. Fire rating labels, equipment serial number and capacity labels, bar code labels, and operating parts of equipment.
   5. Floors, unless specifically indicated.
   6. Glass.
   7. Concealed pipes, ducts, and conduits.

1.02 RELATED REQUIREMENTS

A. Section 09 96 00 - High-Performance Coatings.

1.03 REFERENCE STANDARDS

A. ASTM D4442 - Standard Test Methods for Direct Moisture Content Measurement of Wood and Wood-Based Materials; 2020.

B. MPI (APL) - Master Painters Institute Approved Products List; Master Painters and Decorators Association; Current Edition.

C. MPI (APSM) - Master Painters Institute Architectural Painting Specification Manual; Current Edition.

D. SSPC-SP 1 - Solvent Cleaning; 2015, with Editorial Revision (2016).

E. SSPC-SP 6/NACE No.3 - Commercial Blast Cleaning; 2006.

F. SSPC-SP 13/NACE No.6 - Surface Preparation of Concrete; 2018.

1.04 SUBMITTALS

A. See Section 01 30 00 - Administrative Requirements, for submittal procedures.

B. Product Data: Provide complete list of products to be used, with the following information for each:
   1. Manufacturer's name, product name and/or catalog number, and general product category (e.g., "alkyd enamel").
   2. MPI product number (e.g., MPI #47).

3. Cross-reference to specified paint system products to be used in project; include description of each system.

C. Samples: Submit two paper "draw down" samples, 8-1/2 by 11 inches in size, illustrating range of colors available for each finishing product specified.
   1. Where sheen is specified, submit samples in only that sheen.

D. Maintenance Data: Submit data including finish schedule showing where each product/color/finish was used, product technical data sheets, material safety data sheets (MSDS), care and cleaning instructions, touch-up procedures, repair of painted and finished surfaces, and color samples of each color and finish used.

E. Maintenance Materials: Furnish the following for Owner's use in maintenance of project.
   1. See Section 01 60 00 - Product Requirements, for additional provisions.
   2. Extra Paint and Finish Materials: 1 gal of each color; from the same product run, store where directed.
   3. Label each container with color in addition to the manufacturer's label.

1.05 QUALITY ASSURANCE

A. Applicator Qualifications: Company specializing in performing the type of work specified with minimum 3 years experience and approved by manufacturer.

1.06 DELIVERY, STORAGE, AND HANDLING

A. Deliver products to site in sealed and labeled containers; inspect to verify acceptability.

B. Container Label: Include manufacturer's name, type of paint, brand name, lot number, brand code, coverage, surface preparation, drying time, cleanup requirements, color designation, and instructions for mixing and reducing.

C. Paint Materials: Store at minimum ambient temperature of 45 degrees F and a maximum of 90 degrees F, in ventilated area, and as required by manufacturer's instructions.

1.07 FIELD CONDITIONS

A. Do not apply materials when surface and ambient temperatures are outside the temperature ranges required by the paint product manufacturer.

B. Follow manufacturer's recommended procedures for producing best results, including testing of substrates, moisture in substrates, and humidity and temperature limitations.

C. Provide lighting level of 80 fc measured mid-height at substrate surface.

PART 2 PRODUCTS

2.01 MANUFACTURERS

A. Provide paints and finishes used in any individual system from the same manufacturer; no exceptions.

B. Paints: Provide Basis-of-Design Product as listed in Interior Finish Schedule or comparable product by one of the following:
   1. Benjamin Moore.
   2. PPG Paints.

2.02 PAINTS AND FINISHES - GENERAL

A. Paints and Finishes: Ready-mixed, unless intended to be a field-catalyzed paint.
   1. Where MPI paint numbers are specified, provide products listed in Master Painters Institute Approved Product List, current edition available at www.paintinfo.com, for specified MPI categories, except as otherwise indicated.
   2. Provide paints and finishes of a soft paste consistency, capable of being readily and uniformly dispersed to a homogeneous coating, with good flow and brushing properties, and capable of drying or curing free of streaks or sags.

3. Provide materials that are compatible with one another and the substrates indicated under conditions of service and application, as demonstrated by manufacturer based on testing and field experience.
4. Supply each paint material in quantity required to complete entire project's work from a single production run.
5. Do not reduce, thin, or dilute paint or finishes or add materials unless such procedure is specifically described in manufacturer's product instructions.

B. Flammability: Comply with applicable code for surface burning characteristics.

C. Sheens: Provide the sheens specified; where sheen is not specified, sheen will be selected later by Architect from the manufacturer's full line.

D. Colors: As indicated on drawings.
1. In finished areas, finish pipes, ducts, conduit, and equipment the same color as the wall/ceiling under which they are mounted.

2.03 PAINT SYSTEMS - INTERIOR

A. Paint I-OP - Interior Surfaces to be Painted, Unless Otherwise Indicated: Including gypsum board, concrete, concrete masonry units, brick, wood, plaster, uncoated steel, shop primed steel, galvanized steel, aluminum, and acoustical ceilings.
1. Two top coats and one coat primer.
2. Top Coat(s): Interior Latex; MPI #43, 44, 52, 53, 54, or 114.
a. Basis-of-Design Products:
1) Sherwin-Williams ProMar 200 Zero VOC Interior Latex, Eg-Shel. (MPI #52) - Typical GWB Walls
3. Primer: As recommended by top coat manufacturer for specific substrate.
a. Basis-of-Design Product: Sherwin Williams ProMar 200 Zero VOC Interior Latex Primer, B28W600.

B. Paint I-OP-MD-DT - Medium Duty Door/Trim: For surfaces subject to frequent contact by occupants, including metals and wood:
1. Two top coats and one coat primer.
2. Top Coat(s): Interior Light Industrial Coating, Water Based; MPI #151, 153, or 154.
a. Basis-of-Design Products:
1) Sherwin-Williams Pro Industrial Acrylic Coating, Semi-Gloss. (MPI #153) - Metal Substrates (Aluminum, Steel, Galvanized Steel)
3. Primer: As recommended by top coat manufacturer for specific substrate.
a. Basis-of-Design Product: Sherwin Williams Pro-Industrial Pro-Cryl Universal Primer, B66-310 Series.

C. Paint I-OP-MD-WC - Medium Duty Vertical and Overhead: Including gypsum board, plaster, concrete, concrete masonry units, uncoated steel, shop primed steel, galvanized steel, and aluminum.
1. Two top coats and one coat primer.
2. Top Coat(s): Institutional Low Odor/VOC Interior Latex; MPI #143, 144, 145, 146, 147, or 148.
a. Basis-of-Design Products:
1) Sherwin-Williams ProMar 200 Zero VOC Interior Latex, Flat. (MPI #143) - Typical GWB Ceilings
3. Primer: As recommended by top coat manufacturer for specific substrate.
a. Basis-of-Design Product: Sherwin Williams ProMar 200 Zero VOC Interior Latex Primer B28W2600

D. Paint I-OP-DF - Dry Fall: Metals; exposed structure and overhead-mounted services in utilitarian spaces, including shop primed steel deck, structural steel, metal fabrications, galvanized ducts, galvanized conduit, galvanized piping, and all other exposed structure.

1. Shop primer by others.
2. One top coat.
3. Top Coat: Latex Dry Fall; MPI #118, 155, or 226.
   a. Basis-of-Design Products:
      1) Sherwin-Williams Waterborne Acrylic Dryfall, Eg-Shel. (MPI #155, 226) - Exposed Ceilings

2.04 ACCESSORY MATERIALS

A. Accessory Materials: Provide primers, sealers, cleaning agents, cleaning cloths, sanding materials, and clean-up materials as required for final completion of painted surfaces.

B. Patching Material: Latex filler.

C. Fastener Head Cover Material: Latex filler.

PART 3 EXECUTION

3.01 EXAMINATION

A. Do not begin application of paints and finishes until substrates have been adequately prepared.

B. Verify that surfaces are ready to receive work as instructed by the product manufacturer.

C. Examine surfaces scheduled to be finished prior to commencement of work. Report any condition that may potentially affect proper application.

D. If substrate preparation is the responsibility of another installer, notify Architect of unsatisfactory preparation before proceeding.

E. Test shop-applied primer for compatibility with subsequent cover materials.

F. Measure moisture content of surfaces using an electronic moisture meter. Do not apply finishes unless moisture content of surfaces is below the following maximums:
   1. Gypsum Wallboard: 12 percent.
   2. Plaster and Stucco: 12 percent.
   3. Masonry, Concrete, and Concrete Masonry Units: 12 percent.
   4. Interior Wood: 15 percent, measured in accordance with ASTM D4442.
   5. Concrete Floors and Traffic Surfaces: 8 percent.

3.02 PREPARATION

A. Clean surfaces thoroughly and correct defects prior to application.

B. Prepare surfaces using the methods recommended by the manufacturer for achieving the best result for the substrate under the project conditions.

C. Remove or mask surface appurtenances, including electrical plates, hardware, light fixture trim, escutcheons, and fittings, prior to preparing surfaces or finishing.

D. Seal surfaces that might cause bleed through or staining of topcoat.

E. Concrete:
   1. Remove release agents, curing compounds, efflorescence, and chalk. Do not coat surfaces if moisture content or alkalinity of surfaces to be coated exceeds that permitted in manufacturer's written instructions.
   2. Prepare surface as recommended by top coat manufacturer and in accordance with SSPC-SP 13/NACE No.6.

F. Masonry:
   1. Remove efflorescence and chalk. Do not coat surfaces if moisture content, alkalinity of surfaces, or if alkalinity of mortar joints exceed that permitted in manufacturer's written instructions. Allow to dry.
   2. Prepare surface as recommended by top coat manufacturer.

G. Concrete Floors and Traffic Surfaces: Remove contamination, acid etch and rinse floors with clear water. Verify required acid-alkali balance is achieved. Allow to dry.

H. Gypsum Board: Fill minor defects with filler compound. Spot prime defects after repair.

I. Plaster: Fill hairline cracks, small holes, and imperfections with latex patching plaster. Make smooth and flush with adjacent surfaces. Wash and neutralize high-alkali surfaces.

J. Aluminum: Remove surface contamination and oils and wash with solvent according to SSPC-SP 1.

K. Galvanized Surfaces:
   1. Remove surface contamination and oils and wash with solvent according to SSPC-SP 1.

L. Ferrous Metal:
   1. Solvent clean according to SSPC-SP 1.
   2. Shop-Primed Surfaces: Sand and scrape to remove loose primer and rust. Feather edges to make touch-up patches inconspicuous. Clean surfaces with solvent. Prime bare steel surfaces. Re-prime entire shop-primed item.
   3. Remove rust, loose mill scale, and other foreign substances using methods recommended in writing by paint manufacturer and blast cleaning in accordance with SSPC-SP 6/NACE No.3. Protect from corrosion until coated.

M. Wood Surfaces to Receive Opaque Finish: Wipe off dust and grit prior to priming. Seal knots, pitch streaks, and sappy sections with sealer. Fill nail holes and cracks after primer has dried; sand between coats. Back prime concealed surfaces before installation.

3.03 APPLICATION

A. Remove unfinished louvers, grilles, covers, and access panels on mechanical and electrical components and paint separately.

B. Apply products in accordance with manufacturer's written instructions and recommendations in "MPI Architectural Painting Specification Manual".

C. Do not apply finishes to surfaces that are not dry. Allow applied coats to dry before next coat is applied.

D. Apply each coat to uniform appearance in thicknesses specified by manufacturer.

E. Sand wood and metal surfaces lightly between coats to achieve required finish.

F. Vacuum clean surfaces of loose particles. Use tack cloth to remove dust and particles just prior to applying next coat.

G. Reinstall electrical cover plates, hardware, light fixture trim, escutcheons, and fittings removed prior to finishing.

3.04 CLEANING

A. Collect waste material that could constitute a fire hazard, place in closed metal containers, and remove daily from site.

3.05 PROTECTION

A. Protect finishes until completion of project.

B. Touch-up damaged finishes after Substantial Completion.

END OF SECTION

SECTION 09 96 00
HIGH-PERFORMANCE COATINGS

PART 1 GENERAL

1.01 SECTION INCLUDES

A. High performance coatings.

B. Surface preparation.

1.02 RELATED REQUIREMENTS

A. Section 09 91 23 - Interior Painting: Requirements for mechanical and electrical equipment surfaces.

1.03 REFERENCE STANDARDS

A. MPI (APSM) - Master Painters Institute Architectural Painting Specification Manual; Current Edition.

1.04 SUBMITTALS

A. See Section 01 30 00 - Administrative Requirements for submittal procedures.

B. Product Data: Provide complete list of all products to be used, with the following information for each:
   1. Manufacturer's name, product name and/or catalog number, and general product category (e.g. "alkyd enamel").
   2. MPI product number (e.g. MPI #47).
   3. Cross-reference to specified coating system(s) product is to be used in; include description of each system.

C. Samples: Submit two samples 8 by 8 inch in size illustrating colors available for selection.

D. Maintenance Materials: Furnish the following for Owner's use in maintenance of project.
   1. Extra Coating Materials: 1 gallon of each type and color.
   2. Label each container with manufacturer's name, product number, color number, and room names and numbers where used.

1.05 QUALITY ASSURANCE

A. Applicator Qualifications: Company specializing in performing the work of this section with minimum 3 years documented experience.

1.06 DELIVERY, STORAGE, AND HANDLING

A. Deliver products to site in sealed and labeled containers; inspect to verify acceptability.

B. Container Label: Include manufacturer's name, type of coating, brand name, lot number, brand code, coverage, surface preparation, drying time, cleanup requirements, color designation, and instructions for mixing and reducing.

C. Coating Materials: Store at minimum ambient temperature of 45 degrees F and a maximum of 90 degrees F, in ventilated area, and as required by manufacturer's instructions.

1.07 FIELD CONDITIONS

A. Follow manufacturer's recommended procedures for producing best results, including testing of substrates, moisture in substrates, and humidity and temperature limitations.

B. Do not install materials when temperature is below 55 degrees F or above 90 degrees F.

C. Maintain this temperature range, 24 hours before, during, and 72 hours after installation of coating.

D. Provide lighting level of 80 ft candles measured mid-height at substrate surface.

E. Restrict traffic from area where coating is being applied or is curing.

1.08 WARRANTY

A. See Section 01 78 00 - Closeout Submittals for additional warranty requirements.

B. Correct defective Work within a five year period after Date of Substantial Completion.

C. Warranty: Include coverage for bond to substrate.

PART 2 PRODUCTS

2.01 MANUFACTURERS

A. Provide high performance coating products from the same manufacturer to the greatest extent possible.

B. High-Performance Coatings: Provide Basis-of-Design Product as listed in Interior Finish Schedule or comparable product by one of the following:
   1. PPG Paints.
   2. Benjamin Moore.
   3. Substitutions: Section 01 60 00 - Product Requirements.

2.02 HIGH-PERFORMANCE COATINGS

A. Provide coating systems that meet the following minimum performance criteria, unless more stringent criteria are specified:
   1. Hardness: 2B, when tested in accordance with ASTM D3363.
   2. Adhesion: 5B, when tested in accordance with ASTM D3359.
   3. Scrubbability: Excellent, when tested in accordance with ASTM D2486.

2.03 TOP COAT MATERIALS

A. Coatings - General: Provide complete multi-coat systems formulated and recommended by manufacturer for the applications indicated, in the thicknesses indicated; number of coats specified does not include primer or filler coat.

B. Latex Coating EPT:
   1. Number of Coats: Two.
   2. Top Coat(s): Latex, Interior, High Performance Architectural; MPI #138, #139, #140, #141, #142.
      a. Sheen: Eggshell.
      b. Basis-of-Design Product:
         1) Sherwin-Williams; Pro Industrial Pre-Catalyzed Waterbased Epoxy (MPI #139)
   3. Primer:
      a. Basis-of-Design Product: Sherwin Williams ProMar 200 Zero VOC Interior Latex Primer B28W2600.

C. Shellac: Pure, white type.

2.04 ACCESSORY MATERIALS

A. Accessory Materials: Provide primers, sealers, cleaning agents, cleaning cloths, sanding materials, and clean-up materials as required for final completion of coated surfaces.

PART 3 EXECUTION

3.01 EXAMINATION

A. Verify existing conditions before starting work.

B. Do not begin application of coatings until substrates have been properly prepared.

C. Verify that substrate surfaces are ready to receive work as instructed by the coating manufacturer. Obtain and follow manufacturer's instructions for examination and testing of substrates.

D. Examine surfaces scheduled to be finished prior to commencement of work. Report any condition that may potentially affect proper application.

E. If substrate preparation is the responsibility of another installer, notify Architect of unsatisfactory preparation before proceeding.

F. Measure moisture content of surfaces using an electronic moisture meter. Do not apply finishes unless moisture content of surfaces are below the following maximums:
   1. Cementitious Substrates: Do not begin application until substrate has cured 28 days minimum and measured moisture content is not greater than 12 percent.
   2. Masonry, Concrete, and Concrete Unit Masonry: 12 percent.
   3. Concrete Floors and Traffic Surfaces: 8 percent.
   4. Wood: Do not begin application if substrate has moisture content over 12 percent.

G. Masonry: Verify masonry joints are struck flush.

H. Proceed with coating application only after unacceptable conditions have been corrected.
   1. Commencing coating application constitutes Contractor's acceptance of substrates and conditions.

3.02 PREPARATION

A. Protect adjacent surfaces and materials not receiving coating from spatter and overspray; mask if necessary to provide adequate protection. Repair damage.

B. Clean surfaces of loose foreign matter.

C. Remove substances that would bleed through finished coatings. If unremovable, seal surface with shellac.

D. Remove finish hardware, fixture covers, and accessories and store.

3.03 PRIMING

A. Apply primer to all surfaces, unless specifically not required by coating manufacturer. Apply in accordance with coating manufacturer's instructions.

3.04 COATING APPLICATION

A. Apply coatings in accordance with manufacturer's written instructions, to thicknesses specified and recommendations in MPI - Architectural Painting and Specification Manual.

B. Apply in uniform thickness coats, without runs, drips, pinholes, brush marks, or variations in color, texture, or finish. Finish edges, crevices, corners, and other changes in dimension with full coating thickness.

3.05 CLEANING

A. Collect waste material that could constitute a fire hazard, place in closed metal containers, and remove daily from site.

B. Clean surfaces immediately of overspray, splatter, and excess material.

C. After coating has cured, clean and replace finish hardware, fixtures, and fittings previously removed.

3.06 PROTECTION

A. Protect finished work from damage.

END OF SECTION

SECTION 10 26 00
WALL, CORNER AND DOOR PROTECTION

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Stainless steel corner guards.

B. Stainless steel end wall protectors.

C. Stainless steel wall protection panels.

D. Stainless steel panels wrapping column bases.

1.02 RELATED REQUIREMENTS

A. Section 06 10 00 - Rough Carpentry: Blocking for wall and corner guard anchors.

B. Section 09 22 16 - Non-Structural Metal Framing: Placement of supports in stud wall construction.

C. Section 09 30 00 – Tiling: Tile installation at tile-integrated corner protection.

1.03 REFERENCE STANDARDS

A. A. ASTM A240/A240M – Standard Specification for Chromium and Chromium-Nickel Stainless Steel Plate, Sheet, and Strip for Pressure Vessels and for General Applications.

B. ASTM A480/A480M – Standard Specification for General Requirements for Flat-Rolled Stainless and Heat-Resisting Steel Plate, Sheet, and Strip.

1.04 SUBMITTALS

A. See Section 01 30 00 - Administrative Requirements, for submittal procedures.

B. Product Data: Indicate materials, dimensions, finishes, attachment methods, accessories, and installation requirements.

C. Shop Drawings: Include plans, elevations, dimensions, locations, profiles, seams, joints, transitions, corners, end conditions, column wraps, and attachment details..

D. Samples: Submit samples illustrating component design, configurations, joinery, color and finish.
   1. Submit two sections of each type of corner guards, 24 inches long.
   2. Submit two samples of stainless steel wall protection, 6 by 6 inches square.

E. Manufacturer's Instructions: Indicate special procedures, perimeter conditions requiring special attention.

F. Maintenance Materials: Furnish the following for Owner's use in maintenance of project:
   1. See Section 01 60 00 - Product Requirements, for additional provisions.
   2. Extra Stock Materials: One package(s) of minimum 96 inches long unit of each kind of covers for corner guards.

1.05 DELIVERY, STORAGE, AND HANDLING

A. Deliver wall and door protection items in original, undamaged protective packaging. Label items to designate installation locations.

B. Protect work from moisture damage.

C. Do not deliver products to project site until areas for storage and installation are fully enclosed, and interior temperature and humidity are in compliance with manufacturer's recommendations for each type of item.

D. Store products in either horizontal or vertical position, in compliance with manufacturer's instructions.

1.06 WARRANTY

A. See Section 01 78 00 - Closeout Submittals, for additional warranty requirements.

B. Correct defective Work within a one year period after Date of Substantial Completion.

PART 2 PRODUCTS

2.01 MANUFACTURERS

A. Corner Guards: Provide Basis of Design Product as listed in Finish Schedule or comparable by one of the follwoing:
   1. Construction Specialties, Inc: www.c-sgroup.com/#sle.
   2. Inpro: www.inprocorp.com/#sle.
   3. Koroseal Interior Products: www.koroseal.com/#sle.
   4. Substitutions: See Section 01 60 00 - Product Requirements.

B. Stainless Steel Protective Wall Covering:
   1. Construction Specialties, Inc; Acrovyn High-Impact Wall Covering: www.c-sgroup.com/#sle.
   2. Inpro: www.inprocorp.com/#sle.
   3. Pawling Corp: www.pawling.com/#sle.
   4. Substitutions: See Section 01 60 00 - Product Requirements.

2.02 PERFORMANCE CRITERIA

A. Corrosion Resistance: Provide stainless steel products suitable for interior commercial applications and anticipated environmental conditions.

B. Fire Performance: Where required by applicable code, provide products with fire-performance characteristics complying with applicable requirements.

2.03 PRODUCT TYPES

A. Tile-Integrated Stainless Steel Corner Profile – CG-1:
   1. Material: Type 304 stainless steel.
   2. Finish: Brushed stainless steel.
   3. Configuration: 90-degree outside corner profile with rounded exterior corner.
   4. Profile Height: As indicated on drawings.
   5. Anchoring: Perforated anchoring legs designed for installation in thin-set mortar beneath tile.
   6. Accessories: Provide manufacturer's matching connectors, end caps, and accessories where available.

B. Corner Guards - Surface Mounted: CG-2
   1. Material: Type 304 stainless steel, No. 4 finish, 16 gauge, 0.06 inch thick.
   2. Width of Wings: As indicated on drawings
   3. Corner: Square.
   4. Length: One piece, As indicated on Drawings.
   5. Attachment: Manufacturer's recommended adhesive, mechanical fasteners, or combination of methods appropriate to substrate.

C. Surface-Mounted Stainless Steel End Wall Protector: CG-3
   1. Material: Type 304 stainless steel, No. 4 finish.
   2. Thickness: 16 gauge minimum.
   3. Finish: No. 4 satin.
   4. Configuration: Fabricated to protect exposed end wall condition as indicated on Drawings.
   5. Dimensions: As indicated on Drawings.
   6. Attachment: Manufacturer's recommended adhesive, mechanical fasteners, or combination of methods appropriate to substrate.
   7. Provide continuous, one-piece construction where practical.

D. Stainless Steel Wall Protection Panels and Column Wraps:
   1. Material: Type 304 stainless steel.
   2. Thickness: 16 gauge minimum for flat wall protection panels; 20 gauge minimum for column covers unless otherwise indicated on Drawings.
   3. Finish: No. 4 satin.
   4. Panel Size: As indicated on Drawings. Provide largest practical panel sizes to minimize seams.
   5. Column Wraps:
      a. Fabricate panels to conform tightly to column geometry.
      b. Provide continuous protection around column base as indicated.
      c. Provide manufacturer's standard column-cover system where available.
      d. Provide trim, closures, and edge conditions required for a complete installation.
   6. Attachment: Manufacturer's recommended adhesive, mechanical fasteners, or combination of methods appropriate to substrate and application.

2.04 ACCESSORIES

A. Adhesives and Primers: As recommended by manufacturer.

B. Mechanical Fasteners: Stainless steel or corrosion-resistant fasteners recommended by manufacturer and appropriate for substrate.

C. Trim: Provide all necessary trim members in the same materialas wall covering and in matching color and consistency.

D. Sealant: Manufacturer's recommended sealant compatible with stainless steel and adjacent materials. Color as selected by Architect.

E. Provide accessories in same material and finish as adjacent wall protection unless otherwise indicated.

F. See Section 06 10 00 for wood blocking for wall and corner guard anchors.

2.05 FABRICATION

A. Fabricate wall protection components accurately to required dimensions and configurations.

B. Provide smooth, straight, uniform exposed surfaces free from dents, scratches, warping, discoloration, and other visible defects.

C. Form corners and bends accurately to maintain continuous appearance.

D. Pre-drill holes where required for mechanical attachment.

E. Fabricate joints and seams to be tight, straight, and aligned.

F. Remove sharp edges and provide smooth exposed edges.

G. Coordinate fabrication with field dimensions and actual substrate conditions.

2.06 SOURCE QUALITY CONTROL

A. See Section 01 40 00 - Quality Requirements, for additional requirements.

B. Provide wall systems of each type from a single source and manufacturer.

PART 3 EXECUTION

3.01 EXAMINATION

A. Verify that rough openings, concealed blocking, and anchors are correctly sized and located.

B. Verify that substrate surfaces for adhered items are clean, smooth, dry, and suitable for installation.

C. Verify dimensions and conditions prior to fabrication of column wraps and other custom-fabricated components.

D. Start of installation constitutes acceptance of project conditions.

3.02 INSTALLATION

A. Install components in accordance with manufacturer's instructions, level and plumb, secured rigidly in position to supporting construction.

B. Install CG-1 tile-integrated corner profiles concurrently with tile installation in accordance with profile manufacturer's written instructions.

C. Position corner guards at locations and heights indicated on Drawings.

D. Coordinate wall protection installation with adjacent finishes, doors, frames, casework, base, flooring, and other construction.

E. Install column protection panels tight to column surfaces and maintain consistent alignment and appearance.

F. Minimize visible joints and seams. Align seams consistently and locate them in inconspicuous locations.

G. Do not damage, scratch, dent, or discolor exposed stainless steel surfaces during installation.

H. Protect stainless steel surfaces from contact with dissimilar metals, corrosive materials, and construction chemicals.

I. Remove protective films only after completion of adjacent construction activities that could damage finished surfaces.

3.03 TOLERANCES

A. Maximum Variation From Required Height: 1/4 inch.

B. Maximum Variation From Level or Plane For Visible Length: 1/4 inch.

3.04 CLEANING

A. Clean wall and door protection items of excess adhesive, dust, dirt, and other contaminants in accordance with manufacturer's written instructions.

B. Do not use abrasive cleaners, steel wool, harsh acids, chlorides, or other materials that could damage stainless steel finishes.

3.05 PROTECTION

A. Protect completed wall protection from damage by subsequent construction activities.

B. Replace components that are damaged, scratched, dented, stained, improperly installed, or otherwise defective.

C. Maintain protective film on stainless steel surfaces until completion of construction where recommended by manufacturer.

END OF SECTION

SECTION 11 40 00 FOODSERVICE

PART 1 – GENERAL

1.1 RELATED DOCUMENTS

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

1.2 SCOPE

A. These specifications cover all items associated with the complete Foodservice Equipment package as hereinafter specified and shown on the drawings issued in connection with this project. The Kitchen Equipment Contractor shall have at least five years successful experience furnishing and installing foodservice equipment on projects similar in size and scope to that required for this project and be a recognized distributor for the items of equipment specified herein. The Kitchen Equipment Contractor shall have the financial resources available to handle the work in a satisfactory manner and to deliver the required items of equipment so as not to delay progress of the work. The Kitchen Equipment Contractor shall be fully capable of fulfilling the terms and conditions of the warranty provisions and, if required, capable of providing a performance bond.

B. The equipment herein specified, with the exception of manufactured or standard catalog items, shall be fabricated in a shop bearing the name of a recognized Foodservice Equipment Fabricator. This manufacturer shall be in good standing, have at least five years' experience in similar work, and NSF (National Sanitation Foundation) Certified. All custom fabrication shall be made in the same shop.

C. Provide labor and material required to deliver, uncrate, assemble, set in place, level, install, supervise and coordinate the installation of the foodservice equipment and accessories as indicated on drawings and as specified herein.

D. Refer to Part 3.03 "Openings" for Building Penetration and Fire stopping requirements.

E. Unless specified otherwise under Part 4.02 of the Itemized Equipment Specifications, work NOT included in this contract shall include, but is NOT limited to:

1. All electrical, gas, steam, water and waste services to rough-in points at fixture locations, required field/site interconnections, control wiring for exhaust and refrigeration systems, inter-wiring of the fire suppression system and building alarm systems, providing shunt trip breakers, and final utility connections to fixtures.

2. Ductwork from exhaust/supply hood collar, duct connection to the exhaust/supply hood collar, testing and balancing of the exhaust system, all switches, controls, interlocking devices, etc., necessary for complete and proper system operation.

3. Installation and calibration of faucets, pre-rinse assemblies, hose stations, pot fillers, vacuum breakers, quick disconnect assemblies (water & gas), drain and waste assemblies, indirect waste piping, check valves, and flow control valves as furnished with equipment.

4. Conduit and conductors from the rough-in to the equipment and between remote controls and the equipment.

5. Disconnect switches as required by the electrical code.

6. Concrete work including curbs, raised bases, floor depressions, cement finishes, tile overlay, wall and ceiling openings, sleeves, penetrations, roof flashing, and fire rated duct enclosure.

7. Temporary light and power required to facilitate the installation of the foodservice equipment.

8. Refer to Section 4.01 “Existing Equipment” for requirements regarding existing equipment.

1.3 DEFINITIONS AND ABBREVIATIONS

A. “Owner” – the end user or operator.

B. “Owner’s Representative” – including Architect, Engineer, Construction Manager, Consultant, and Project Coordinator.

C. “Consultant” – for this section of the work is TriMark SS Kemp. The Consultant is responsible to the Architect for ascertaining that the work complies with the requirements of this section.

D. “Equipment Contractor” – Kitchen Equipment Contractor (KEC), is the person or company that will contract for the work specified in this section.

E. “Substantial Completion” – The date of substantial completion of work or designated portion thereof is the date certified by the Owner when construction is sufficiently complete, in accordance with the contract documents, so Owner can occupy or utilize the work or designated portion thereof for the use for which it is intended.\

F. “Furnish” – Kitchen Equipment Contractor to Supply and Deliver to appropriate contractor for installation.

G. “Install” – Kitchen Equipment Contractor Furnish to project site and include unloading, unpacking, assembly, erecting, placing, anchoring, protecting, cleaning, and similar operations; Ready for final utility connections by appropriate contractor.

H. "Provide" – Kitchen Equipment Contractor to furnish and install complete; ready for intended use.

1.4 DISCREPANCIES

A. If, after examination of the contract documents, any discrepancies, omissions, ambiguities, or conflicts are found, or where there is doubt as to their meaning, the Architect is to be notified in the form of a written Request For Information (RFI) at the earliest possible date prior to bid submittal.

B. Such discrepancies include, but are not limited to, clarifications, drafting errors, quantity conflicts, description conflicts, utility information errors, or model number conflicts. Any written responses or addendums issued by the Architect clarifying such conditions shall become a part of the contract documents.

C. Where discrepancies in quantities or conflicts impacting cost are discovered and a written response from the Architect has not or cannot be received prior to bid submittal, the contractor is to assume the greater of quantities and/or cost for inclusion into the bid.

D. The Section 114000 contract documents shall take precedence over discrepancies arising between said documents and those of the other sections and divisions as applies to the Kitchen Equipment Contractor's scope of work.

1.5 CODES AND STANDARDS

A. All material and workmanship shall comply with all applicable codes, specifications, local ordinances, industry standards, and utility company regulations. In the event of differences between codes, specifications, state laws, federal laws, local ordinances, industry standards, utility company regulations and the contract documents, the most stringent shall govern. Kitchen Equipment Contractor shall promptly notify Owner's Representatives in writing of any such conflicts.

B. Manufacture and install equipment and accessories in strict compliance with and, as applicable, bear the seal of UL, NEMA, ASME, NSF, AGA, ANSI, SMACNA, OSHA and NFPA.

C. Non-compliance – Approval of Kitchen Equipment Contractor's submittals does not relieve the Kitchen Equipment Contractor from responsibility of complying with codes and regulations. Should Kitchen Equipment Contractor perform any work that does not comply with the requirements of the applicable building codes, state and federal laws, local ordinances, industry standards, and utility company regulations, the KEC shall bear all associated costs to correct the deficiencies and hold the Owner and its Representatives harmless from any claim or loss resulting from violations.

D. Kitchen Equipment Contractor shall coordinate field inspection and approval of assemblies

and systems (i.e. Fire Suppression, Remote Refrigeration, etc.) from the proper authority having jurisdiction as required. Documentation must be available to be turned over to the Owner's Representatives at the completion of the work.

1.6 SUBMITTAL

A. The Kitchen Equipment Contractor shall, within fifteen (15) days after acceptance of the contract, prepare a set of submittal documents for review and approval by the Owner's Representatives. Files shall be submitted electronically (in manner acceptable to Architect) and hard copy in quantity dictated by contract, to Architect for distribution. Submittal set to consist of the following:

1. A specification book with a complete list of fixtures, devices, materials, and equipment proposed for use. Each item to have an individual cover sheet and contain quantities, illustrations, specifications, line drawings, and utility information on all brand name items (items not of custom manufacture). The specification shall also include the name, address, and phone number of the manufacturer, producer, supplier, or distributor together with the trade name, catalog number, model number or other data required for complete identification.

2. Itemized equipment drawings at 1/4" = 1'-0" showing dimensioned location, size, height, and, where necessary, capacity of all mechanical services required for each item or equipment. Furthermore, drawings to include accurately dimensioned details and locations of any special wall openings and floor pit details required where items of equipment extend through walls, or recess in the floor.

3. Detailed shop drawings at a minimum scale of 3/4" = 1'-0", plus necessary cross sections at a scale of 1-1/2" = 1'-0", showing complete detail of each item of custom fabricated equipment: to also include Exhaust Systems, Walk-In Coolers/Freezers, and Remote Refrigeration Systems. These drawings shall be based upon the contract documents. Drawings to show accurately dimensioned layouts and elevations required to convey design intent and construction as well as pertinent performance and operational data with equipment listings.

B. If any item is rejected by the Architect or the Consultant as not complying with the specifications, the Kitchen Equipment Contractor shall, within seven (7) days of such a rejection, submit an acceptable substitute.

C. Upon approval of submittals, the KEC shall further prepare hard copies of approved documents as requested and deliver them to the Owner's Representatives for distribution to contractors on job site.

1.7 SUBSTITUTIONS

A. All substitutions that are to be considered must be of the same size and shape, capacities,

constructed of the same materials, have the same features, finishes and specific accessories, and meet or exceed the performance of the primary named specifications.

B. All contractors shall submit all proposed substitution equipment manufacturers in writing, 10 days prior to submitting their bid, for review and approval by the Owner and its Representatives. If considered substitutions are not submitted prior to this time line and bid date, it will be presumed that none are being offered, and that the bid is being submitted in full accordance with the listed specifications in the contract documents.

PART 2 – PRODUCTS

2.1 MATERIALS, GENERAL

A. The materials used throughout shall be those of reputable manufactures and shall be new and best of their respective kinds. Equipment, fixtures, and materials of similar types shall be of the same manufacturer, except where specifically indicated otherwise. All work shall be installed in a neat and workmanlike manner in accordance with the best trade practices and by workmen skilled in each particular branch of the work assigned to them.

B. In all cases where equipment and material are specified in the singular or plural number, it is intended that such reference shall apply to as many such items as are required to complete the installation.

C. Unless specified otherwise under Part 4.02 of the Itemized Equipment Specifications, the basis for all materials provided under this scope shall be defined as follows:

1. Stainless steel sheets or shapes: When specified to be 18-8, Type 304, polished to No. 4 finish.

2. Galvanized Iron Sheets: When specified to be zinc G-90 coating.

3. Tubing: When specified to be seamless stainless steel, 16 gauge, 18-8, Type 304, polished to a No. 4 finish, 1-5/8” diameter.

4. Plastic Laminate: Complying with NEMA LD 3 and NSF 35 requirements; NSF certified for end-use application indicated; 0.050 inch (1.27 mm) thick for horizontal and vertical surfaces and 0.042 inch (1.07 mm) thick for post-formed surface; smooth texture and easily cleanable.

5. Plywood and Lumber: Provide plywood and lumber as specified in Division 06 Section “Wood, Plastics, and Composites.”

6. Sealant: ASTM C920; Type S, Grade NS, Class 25, Use NT. Provide elastomeric sealant NSF certified for end-use application that, when cured and washed, meets requirements of Food and Drug Administration’s Title 21 CFR, Section 177.2600 for use in areas that

come in contact with food.

7. Tempered Glass: ASTM C 1048, Kind FT (fully tempered), Condition A (uncoated surfaces), Type I (transparent), Class 1 (clear), Quality q3 (glazing select). Provide products complying with ANSI Z97.1, manufactured by horizontal (roller-hearth) process, and 6 mm thick, unless otherwise indicated. Provide exposed safety edges, if any, seamed before tempering.

8. Plastic: Except for plastic laminate, provide plastic materials and components complying with NSF 51.

9. Sound Deadening: NSF certified, nonabsorbent, hard drying, sound-deadening coating. Provide coating compound for permanent adhesion to metal in 1/8-inch (3-mm) thickness that does not chip, flake or blister.

10. Paint and Coatings: Provide the types of painting and coating material which, after drying and curing, are suitable for use in conjunction with foodservice and which are durable, non-toxic, non-flaking, mildew-resistant, and comply with foodservice regulations.

11. Gaskets: NSF certified for end-use application indicated; of rubber, neoprene, or PVC that is nontoxic, stable, odorless, nonabsorbent and unaffected by exposure to foods and cleaning compounds.

12. Cabinet Hardware: NSF certified, stainless steel hardware for equipment items as indicated. Hardware other than stainless steel shall be heavy duty chrome plated brass, with concealed fasteners. Provide master keyed locks. Refrigeration equipment and fabricated equipment door and drawer locks shall be keyed alike and be of sufficient strength to prevent unauthorized entry into locked space.

13. Casters: NSF certified, 4” or 5” diameter, rubber, neoprene or polyurethane tires as specified with 1” tread width, sealed, self-lubricating, non-marking swivel type with a minimum load capacity 200 lbs. Each having double bearing raceways and sleeve-bearing axles. Equipment specified with casters shall have no less than two (2) with toe brakes.

14. Solid Surface Material, Engineered Stone, Natural Stone: Comply with Section 12 36 00 “Countertops”. Final color selection to be by the Architect unless specified under Part 4.02 of the Itemized Equipment Specifications. Installation must be performed by certified installer and in accordance with all manufacturer requirements. Provide additional support as required. Refer to manufacturer requirements for maximum allowable span, weight loads, and isolation in addition to requirements for commercial food service applications as pertains to protection from heating and cooling components.

2.2 PLUMBING REQUIREMENTS

A. Unless furnished as standard on specified sink units, faucets shall be chrome plated, splash or deck-mounted as applicable, and furnished with 1/2” IPS supply and check valves. When

specified, faucets with hose adapters shall have sink unit provisions to receive and properly install a T & S Brass vacuum breaker or equal. Unless specified otherwise under Part 4.02 of the Itemized Equipment Specifications, faucets and components shall be as follows:

Pre-rinse, backsplash:
T & S Brass B-0133-B
T & S Brass B-0133-ADF12-B with add on faucet

Pre-rinse, deck mount:
T & S Brass B-0113-B
T & S Brass B-0113-ADF12-B with add on faucet

Faucet, backsplash:
T & S Brass B-0231 (12” nozzle) or B-0230 (18” nozzle)

Faucet, deck mount:
T & S Brass B-0221

Faucet, backsplash, 3/4" NPT:
T & S Brass, B-0290

Pot filler, wall mounted:
T & S Brass B-0610

Hose reel, wall mounted:
T & S Brass B-7222-CO1XS1E (Formally B-1433)

Mixing faucet Valve:
T & S Brass B-0512

Vacuum breaker Assemblies:
3/4” T & S Brass B-0457 (with slip flanges for mounting on 45 degree surface)
3/4” T & S Brass B-0458 (with slip flanges for mounting on flat surface)
1/2” T & S Brass B-0455 (with slip flanges for mounting on 45 degree surface)
1/2” T & S Brass B-0456 (with slip flanges for mounting on flat surface)

Basket drain assemblies:
Component Hardware E38-1012

Twist Handle Waste, 2” NPT drain outlet:
T & S Brass B-3952

Twist handle waste w/ overflow assembly, 2” NPT drain outlet:
T & S Brass B-3952-01

Quick disconnect gas connectors:
Dormont (SIZE)-KIT2S-48 with Restraints

Quick disconnect gas connectors (mobile equipment):
Dormont (SIZE)-KIT2S-48PS with Restraints and one pair safety set

B. Faucet components, waste assemblies, supply lines, vacuum breakers, check valves, gauges, regulators, and gas hoses with restraints shall be properly tagged with item numbers and turned

over to Plumbing Contractor on job for mounting and installation. Safety sets shall be installed by the Kitchen Equipment Contractor.

C. All other fittings, such as stops on hot and cold water service, traps, valves, fittings, supply nipples, etc. furnished and installed by others.

D. Chrome plated vacuum breakers shall be supplied with threaded faucets, hose stations, and on fixtures where the water inlets are placed below the water level.

E. Backflow preventers shall be supplied with pre-rinse units.

F. Anti-siphon pressure type vacuum breakers shall be supplied with hose reels.

G. Stainless steel angle flange or deck/wall flange shall be provided where vacuum breaker extends through equipment.

H. Special valves, regulators, strainers, pressure reducing valves, control valves, thermometers, pressure gauges, keyed water flow restrictors and accessories shall be supplied and installed by the Plumbing Contractor where required by code or necessary for the operation of the equipment.

2.3 ELECTRICAL REQIREMENTS

A. All certified electrical systems, components, and accessories to be in accordance with NFPA 70: NEC and installed as specified therein.

B. Grounded receptacles installed flush-mounted in fabricated equipment shall have stainless steel cover plates. Grounded receptacles installed “free standing” on fabricated equipment shall have stainless steel or chrome plated bodies with stainless steel cover plates.

C. All switches and controls are to be listed or recognized Underwriters Laboratory, Inc. controls that are mounted on vertical surfaces of fabricated fixtures, set into recessed die-stamped stainless steel cups, or otherwise indented to prevent damage.

D. All internal wiring for fabricated equipment items, including all electrical devices built into or forming an integral part of these items, furnished by Kitchen Equipment Contractor in the factory shall have all items wired complete to a junction box within the fixture ready for final connection to building lines by electrical contractor unless indicated otherwise in the itemized equipment specifications. All custom built food service equipment having warming, cooking, lighting, power distribution, or power outlet devices shall be listed and display the listing label of Underwriting Laboratories, Inc.

E. The electrical contractor shall make all field inter-wiring connections where equipment assemblies require more than one section be shipped to the site. The manufacturer shall clearly identify, tag, and provide accessibility to all wiring in need of field connection.

F. All cord-connected items must be furnished with cord sets in accordance with authorities having jurisdiction and not exceeding the length of their U.L. listing. All cord sets are to contain an equipment grounding conductor and be furnished with caps or plugs listed or recognized by Underwriters Laboratories, Inc. Cords shall be type SO or SJO and listed by Underwriters Laboratories, Inc.

2.4 CUSTOM FABRICATION, GENERAL

A. This section applies specifically to items listed as "Custom" fabrication in Part 4.02 of the Itemized Equipment Specifications and does not apply to "Buy-out" stainless steel fabricated items that is specified with a manufacturer/brand and model number in the itemized portion of these specifications.

B. Custom fabricated equipment shall be constructed in strict accordance with NSF 2 requirements, contract drawings, and new prime quality and full gauge thickness.

C. Plastic Laminate and Wood Casework: as specified under Part 4.02 of the Itemized Equipment Specifications.

D. Fabricate field-assembled equipment prepared for field joining methods indicated. For metal butt joints, comply with reference SMACNA standard, unless otherwise indicated.

E. Where stainless steel is joined to a dissimilar metal, use stainless steel welding material or fastening devices.

F. Form metal with break bends that are not flaky, scaly, or cracked in appearance; where breaks mar uniform surface appearance of material, remove marks by grinding, polishing and finishing.

G. Sheared Metal Edges: Finish free of burrs, fins and irregular projections.

H. Provide surfaces in food zone as defined in NSF 2: free from exposed fasteners. Bolts, screws, and rivets are not acceptable on exposed surfaces of equipment.

I. Cap exposed fastener threads, including those inside cabinets, with stainless steel lock washers and stainless steel cap (acorn) nuts.

2.5 COUNTER AND TABLETOPS

A. Metal tops shall be 14 gauge, 18-8, Type 304 stainless steel. Shop seams and corners welded, ground and polished smooth. Tops shall be reinforced with 14 gauge channel, one center channel provided on tops up to 36" wide and two channels on tops over 36" wide. Exposed channels shall be galvanized or stainless steel. Attach top to channel reinforcements with studs welded to the underside of top and cadmium plated lock nuts.

B. Metal top open edges shall be turned down 1-1/2" at 90 degrees with a 1/2" return at 45 degrees on the horizontal. Burrs, projections and fins are not acceptable on sheared edges. Neatly grind miters and bullnose corners to a uniform condition.

C. Tops abutting high fixtures or walls shall be furnished with a backsplash. Backsplash shall cove up 6" or as specified and sloped back 2" on a 45 degree angle and down 1" to receive 14 gauge, 18-8, Type 304 stainless steel zee clip for anchoring to wall or high fixture 36" oc. Close ends of splash to bottom oftop.

D. Sound deaden underside of tops with NSF approved sound-deadened mastic.

E. Tops on closed base units shall overhang at least 2" on free sides of unit.

F. Provide a 3/16" high raised die-formed edge around punch or drilled openings.

2.6 DISHTABLE TOPS

A. Dishtable tops shall be 14 gauge, 18-8, Type 304 stainless steel. Shop seams and corners welded, ground and polished smooth. Tops shall be reinforced with 14 gauge, 18-8, Type 304 stainless steel channel, one center channel provided on tops up to 36" wide and two channels on tops over 36" wide. Attach top to channel reinforcements with studs welded to the underside of top and cadmium plated lock nuts. Slope top with an integral pitch so water runs toward dishmachine. Cove all interior corners (horizontal and vertical) of dishtable on a 3/4" radius.

B. Dishtable top open edges shall cove up 3" at 90 degrees with a 1-1/2" dia. rolled rim and 3/4" radius corners. Burrs, projections and fins are not acceptable on sheared edges. Neatly grind miters and bullnose corners to a uniform condition.

C. Tops abutting high fixtures or walls shall be furnished with a backsplash. Backsplash shall cove up 8" or as specified and sloped back 2" on a 45 degree angle and down 1" to receive 14 gauge, 18-8, Type 304 stainless steel 'z' clip for anchoring to wall or high fixture 36" oc. Close ends of splash to bottom oftop.

D. Sound deaden underside of tops with NSF approved sound-deadened mastic.

E. When required, dishtable shall have provisions for installing pre-rinse faucet with back flow preventers and vacuum breakers.

2.7 SINKS

A. Sinks shall be 14 gauge, 18-8, Type 304 stainless steel, and made as an integral part of the top. Overall size and depth shall be as indicated in the drawings and itemized equipment specifications. Sink back, bottom and front shall be formed of one continuous sheet with ends welded into place. Horizontal and vertical corners to have a 3/4" radius. Provide double wall partition between each pair of sink compartments with rounded top edge. Provide sinks having

two or more compartments with full length, full height, flush stainless steel front panel to conceal joint between sinks. Turn back panel at sides and bottom and weld to sink bowl. Sink bottoms to be creased to slope toward drain. Sink shall be fitted with a basket drain assembly with removable crumb cup, twist handle waste assembly, or as specified.

B. Where required, drainboards shall be 14 gauge, 18-8, Type 304 stainless steel, size as shown on drawings and welded to the sink frame to provide an integral unit.

C. All sink units shall be furnished with faucets and drains as indicated under 4.02 Itemized Equipment Specifications.

2.8 OPEN BASE UNITS

A. All pipe stands for open base tables or dishtables constructed of 1-5/8" dia. x 16 gauge, 18-8, Type 304 stainless steel tubing uprights; cross braces of 1-1/4" O.D. x 16 gauge, 18-8, Type 304 stainless steel tubing. All joints between legs and cross braces fully welded, ground and polished smooth.

B. Cross-rails shall reinforce each leg. Legs with stainless steel gussets at top only and without cross-rails are not acceptable except at sinks. Legs fitted with stainless steel enclosed gussets shall be fully welded to reinforcing channel on underside of table top or to the reinforced stainless steel corner pads under the sink.

C. All tube style legs to be fitted with sanitary stainless steel bullet shaped feet, fully enclosed with slightly rounded bottom to protect floor. Bullet feet to have a total adjustment of 1" with thread unexposed.

D. Spacing between legs shall not exceed 5'-0" oc.

2.9 UNDERSHELVES

A. Undershelves shall be 18 gauge, 18-8, Type 304 stainless steel (or as specified. 14 gauge required per OSDM in Ohio areas) turned down 1-1/2" at 90 degrees with a 1/2" return at 45 degrees below the horizontal.

B. Turn up 2" at walls or adjoining high fixtures with 1/4" horizontal coved corners.

C. Weld to stainless steel legs or body of enclosed base table, as applicable, with all welds ground and polished to blend with the adjacent surfaces.

D. When welded to legs, notch all corners for a tight weld.

2.10 ENCLOSED CABINET BASES

A. Enclosed cabinet bases shall be 18 gauge, 18-8, Type 304 stainless steel. Body enclosed on back

and ends with corners square. Ends terminate at operator's side in a 2" wide vertical mullion. Mullions closed in accordance with NSF. Walls of cabinet shall be a fully welded seamless assembly with channels and box section corners. Provide individual compartments separated by a partition, enclosing sinks, machinery, and drawers from the balance of the cabinet. The underside of cabinet shall be reinforced with concealed 14 gauge stainless steel channel supports.

B. Unless indicated otherwise in 4.02 Itemized Equipment Specifications, cabinet base shall be mounted on minimum 6" high, 1-5/8" dia. x 16 gauge, 18-8, Type 304 stainless steel legs welded to a stainless steel mounting plate, secured to reinforcing channel on cabinet base. Legs shall be equipped with stainless steel adjustable bullet feet with a total adjustment of 1" with thread unexposed.

C. For cabinets that rest on solid masonry curbs, cabinet base shall overhang a minimum 2" from curb on all exposed sides. Curbs shall be provided by other trades.

D. Where cabinet fits against or between walls, offset the body 1" from the wall, but not the top. This will allow for tolerance to wall irregularities. Enclose or extend cabinet base to wall at exposed vertical seams.

E. Interior shelves in enclosed bases shall be 16 guage, 18-8, Type 304 stainless steel, set back construction. Front edge turned down 1-1/2" at 90 degrees with a 1/2" return at 45 degrees on the horizontal. Turn back and sides up 2" and cove on a 1/4" minimum radius. Tack weld to cabinet body and seal to the cabinet base. Shelves shall be reinforced with 12 gauge channel, one center channel provided on shelves up to 36" wide and two channels on shelves over 36" wide.

2.11 WALL CABINETS

A. Cabinets shall be 18 gauge, 18-8, Type 304 stainless steel, (or 14 gauge per OSDM in Ohio areas) all welded construction, 15" front to back by 36" high or as indicated in Part 4.02 of the Itemized Equipment Specifications, with edges turned down 1-1/2" on all sides. Top shall slope 6" from rear to front. Bottom is to be finished closure panel. Cabinet interior shall have fixed bottom shelf and two (2) removable, adjustable intermediate shelves. Ends terminate at front in a 2" wide vertical mullion. Mullions closed in accordance with NSF. Doors shall be double wall and constructed as described in Section 2.12. Back shall be fitted with 12 gauge channels for supporting cabinet to wall.

2.12 COUNTER AND CABINET HINGED DOORS

A. Doors shall be double wall construction with 1/2" thick semi-rigid fiberglass board between the two panels. Door shall be 18 gauge, 18-8, Type 304 stainless steel (or 14 gauge per OSDM in Ohio areas), 18-8, Type 304 stainless steel. Doors shall have stainless steel lift off hinges and full length, horizontal stainless steel channel pull across top edge of door. Provide rubber button bumpers and cylinder locks.

2.13 OVERSHELVES

A. Overshelves shall be 16 gauge, 18-8, Type 304 stainless steel with exposed edges turned down 1-1/2” at 90 degrees with a 1/2” return at 45 degrees below the horizontal.

B. Turn up 2” at walls or adjoining high fixtures and cove on a 1/4" minimum radius.

C. Wall mount shelving supports or angle brackets shall be 14 gauge, 18-8, Type 304 stainless steel and spacing shall not exceed 5’-0” O.C. Brackets shall be welded to shelf bottom and be formed in manner so as to secure to wall or vertical surface with stainless steel fasteners.

D. Table mount shelving is to be supported on 1-1/4” O.D. x 16 gauge, 18-8, Type 304 stainless steel tubing with 14 gauge stainless steel cantilever brackets. Uprights shall extend through backsplash of table below and secured with concealed fasteners.

2.14 DRAWERS

A. Drawer assemblies shall be flush mounted double pan construction with semi-rigid fiberglass insulation. Provide each drawer with 18 gauge, 18-8, Type 304 stainless steel 20” x 20” x 5” die stamped drawer insert with horizontal and vertical corners 1-3/4" minimum coved. Drawer insert shall be removable and rest in a stainless steel cradle. Cradle shall be welded to 16 gauge, 18-8, Type 304 stainless steel double pan drawer face. Drawer face to have full-length flush type stainless steel channel pull furnished with ball bearing steel drawer slides and adjustable stops at the fully opened position. Provide two (2) rubber button bumpers, one on each side of drawer face and cylinder lock. Enclose drawers on open base table in an 18 gauge, 18-8, Type 304 stainless steel enclosure.

2.15 FIELD JOINTS

A. Keep field joints to a minimum. Provide field joints only when equipment size must be limited for access into building or for shipping. All field joints must be identified and located on shop drawings.

B. Unless specified otherwise in the contract documents, all field joints are to be a hairline butt joint, mechanically fastened offset “drawn” design. Upon fastening, all field joints, including edges and splash must be fully welded, ground, and polished to match adjacent surface to achieve a seamless appearance. Where specified, “bolted joints” shall be filled with an approved silver sealant (Section 2.01, Paragraph C) in lieu of welding.

C. Stainless steel welds, using stainless steel electrodes, shall be free of pits, flaws, discolorations, and peened to remove flux and impurities. Grind welds smooth, polish to original finish of metal, with grain uniform to grain of original sheet. Where grinding and polishing has destroyed grain, restore and blend to omit all traces of welding.

D. Acetylene welding or silver solder is not acceptable.

E. All concealed or exposed welds on unpolished surfaces to be ground to surface of original metal to remove all impurities from welds. Solder is not permissible unless specified and approved. Make all welds smooth, with neither dip nor bulge.

2.16 DESIGN & CONSTRUCTION

A. All visible seams to be continuously Tig or Meg welded and polished to match adjacent surfaces.

B. All visible seams to be free of pits, flaws, ground smooth, and polished to match adjacent surfaces.

C. The “grain” direction of horizontal stainless steel surface is longitudinal, including splash. Match grain direction across two or more sections welded in either the shop or the field. The polishing procedures at right angle corners of units shall provide for a mitered appearance.

D. All hidden weld joints shall be painted “gray”.

2.17 REMOTE REFRIGERATION

A. Furnish, install, and thoroughly test all refrigeration systems included as part of the foodservice equipment under this section and as indicated in Part 4.02 of the Itemized Equipment Specifications. Provide refrigeration system: complete with components required for operation, designed for direct expansion, employing thermostatic expansion valves, and pressure switches.

B. Rate compressors on the American Society of Refrigeration Engineers Standards, based on a maximum operating time of 16 hours per day on 100 degree F. days. Mount compressor, condenser, motor, and auxiliary equipment on a single rigid base. Automatically control each unit by a suction pressure switch and a high pressure cut-off. Provide relief lines as required by code, capped with screen vent fittings. Hermetically sealed units must be serviceable in the field.

C. All mounting fittings and connection devices inside walk-in compartments must be non-corrosive material.

D. Refrigerant piping shall be Type L hard drawn seamless copper tubing with silver soldered joints. All refrigerant suction lines outside of the Walk-in Boxes shall be insulated with 1/2” flexible closed cell foam insulation for medium temp systems and 3/4" for low temp systems, applied in accordance with the manufacturer’s recommendations. Each refrigerant system shall include a dehydrator, liquid line sight glass, shut-off valve, liquid line solenoid, thermostatic expansion valve at each evaporator, vibration isolator, and other fittings and accessories as required. On parallel systems, isolation valves are to be provided at each fixture and identifiable area. Refrigerant lines shall extend vertically from condensing unit to above the hung ceiling then horizontally to above the evaporators: piped in accordance with

manufacturer's instructions and good practice as set forth in ASHRAE Guide and Data Book. Pressure test refrigerant system to 300 psi for a minimum of 24hrs; vacuum pump system to 500 microns. Provide written inspection report upon acceptance by the authorities having jurisdiction.

E. Condensate drains from evaporator coils shall be refrigeration grade Type L hard drawn copper tubing with silver soldered joints and covered with 1/2" flexible closed cell foam insulation. Wrap condensate drains with line heater where subject to temperatures designed for less than 35˚F with final connection of electrical by other trades. Provide 1" standoff clips for drain lines along inside face of walk-in compartment. Provide sleeves through walk-in and building walls. Foam and caulk around sleeves and drain lines. "P" trap drain with air gap at floor sink as required by code.

F. Provide evaporator coil defrost system on all walk-in cooler and freezer compartments designed to operate at room temperature of less than 35˚F.

G. Verify the requirements of and provide any or all additional refrigeration components required or recommended by the manufacturer for proper operation under any specific conditions and locations of each system specified.

H. All refrigeration equipment items shall utilize CFC Free components or the latest technology available at the purchase date from the manufacturer.

I. Proper ventilation of "built-in" refrigeration systems shall be provided with cut-outs, ventilation panels, or other means to protect the equipment from excessive heat build-up damage and warranty violations.

J. Outdoor compressors shall include weather proof housing with hinged shroud for protection against the elements.

K. Furnish and install support rails and pitch pockets when compressors and rack systems are located at the rooftop. All roof material/flashing and required roof penetrations are by others.

L. Furnish and install support rails for compressors and rack systems located on building floor or at ground level outdoors. The general contractor shall furnish and install a concrete curb for installation of units. Coordinate size and location of pad with the trades.

M. The KEC shall furnish and install all supports, hangers, and brackets when compressors are suspended from ceiling or wall mounted.

2.18 EXHAUST HOODS AND FIRE SUPPRESSION SYSTEMS

A. All Type I exhaust hoods shall be listed by an approved testing agency for compliance with UL710 standards and must meet the listing and installation requirements of the authorities having jurisdiction. Type I hoods shall be designed to capture and confine cooking vapors and residues with the use of UL classified grease filters supplied in size and quantity as

required by ventilator, extending full length of the hood. The hood shall be designed to automatically activate the exhaust fan during cooking operations by means of heat sensors or other approved method. The hood shall allow accessibility for thorough cleaning and be equipped with grease gutters that drain to an approved collection receptacle.

B. Type I recirculating air hoods shall be listed and labeled by an approved testing agency for compliance with UL710B and must meet the listing and installation requirements of the authorities having jurisdiction.

C. All Type II exhaust hoods shall be listed by an approved testing agency for compliance with UL710 standards or adhere to the guidelines of the International Mechanical Code and must meet the listing and installation requirements of the authorities having jurisdiction. Type II hoods shall be limited to equipment that does not produce grease or smoke.

D. The inside lower edge of Type I and Type II "canopy" style exhaust hoods shall overhang or extend a horizontal distance of not less than 6" beyond the edge of the cooking appliance on all open sides.

E. Above the body of the hood canopy provide closure panels to enclose the area from the top of the hood to above the finished ceiling. Closure panels shall be constructed of same material as exhaust hood.

F. Fire Suppression systems shall be listed by an approved testing agency for compliance with NFPA 17A and UL300 and must meet the requirements of the authorities having jurisdiction. Fire suppression system shall be capable of automatic detection and actuation as well as a local or remote manual actuation.

G. The Pull Station for Fire Suppression systems are required to have label or color coding to designate the exhaust hood(s) it services.

PART 3 - EXECUTION

3.1 COORDINATION OF WORK

A. Kitchen Equipment Contractor shall coordinate any and all work schedules respective to this contract with the Owner, participate in required scheduling meetings, and co-sign the schedule agreed to by the Prime Contractors.

B. Field inspect conditions at site and verify that the wall dimensions and rough-ins were properly installed. Notify the Architect in writing of discrepancies between the contract documents and the actual conditions on the jobsite prior to equipment fabrication. Check all door openings, passageways, elevators, etc., to be sure that equipment can be conveyed into its proper location within the building. If necessary, check with the contractor regarding the possibility of holding wall erection, placement of doorjambs, windows, etc. for the purpose of moving the equipment into its proper location.

C. Kitchen Equipment Contractor shall provide a competent foreman or superintendent to supervise the installation of equipment furnished under this contract. The Kitchen Equipment Contractor's superintendent shall coordinate all information necessary for the satisfactory execution and timely installation of the kitchen equipment with all other trades.

D. Slots, chases, openings, and recesses through walls, floors, ceilings, and roofs in construction shall be provided by the other trades in respect to their materials. Refer to Part 3.03 Openings.

E. Locations of pipes, conduits, ducts, panels, equipment, fixtures, etc., shall be adjusted to accommodate anticipated or encountered conflicts. Kitchen Equipment Contractor shall determine the exact route and location of each pipe, conduit, and duct prior to fabrication.

F. Kitchen Equipment Contractor shall provide necessary cut outs and access panels in equipment under this scope required for inspection of interiors, cleaning, utility access, and proper maintenance. Panels shall be made of matching material and removable without the use of tools. Provide 2" holes with grommets in vertical and horizontal surfaces as required to allow accessibility of equipment with cords to utility device.

G. Kitchen Equipment Contractor shall coordinate requirements and locations for wall reinforcement, floor depressions and curbs, ceiling coffers, and special ceiling or structural supports as designated on the foodservice special conditions drawings and required for proper installation of foodservice equipment.

3.2 INSTALLATION REQUIREMENTS AND CLEARANCES

A. Installation of the foodservice equipment shall be by the Kitchen Equipment Contractor and installed level and plumb, according to manufacturer's written instructions, original design, and referenced standards. This installation does not include final connection to utility services.

B. Establish all heights and grades required for installation.

C. Deliver foodservice equipment as factory-assembled units with protective crating and covering.

D. Store foodservice equipment in original protective crating and covering in a dry location. Immediately repair or replace damaged or lost equipment.

E. Equipment that abuts to a wall or against other equipment shall be sealed with General Electric "Silastic" or Dow Corning 732 RTV sealant. Refer to (Section 2.01, Paragraph C). Gaps exceeding 3/8" in width shall be trimmed with stainless steel channel and sealed.

F. Assist in moving equipment to allow other trades to make final connections and be readily available to level and adjust equipment as the last connection is made. Advise the trades during installation on connection requirements for the various items of equipment.

G. It shall be the Kitchen Equipment Contractor's responsibility to provide necessary means to

protect all work and materials within this scope throughout the duration of construction. Equipment shall not to be used as storage or work surface. Damage or theft to equipment on site shall be repaired or replaced at the KEC's expense.

3.3 OPENINGS

A. Openings in walls, floors, ceilings, and other construction to receive pipe lines, risers, duct work, and other equipment shall be provided by other trades. All openings shall be drilled, core bored, or cut in the approved locations and coordinated with an approved schedule to the satisfactory of the Owner's Representatives. Materials damaged under this contract shall be patched or replaced as directed by the Owner's Representatives.

B. Firestop shall be provided at all building penetrations as required and must adhere to Section 078400 Fire- stopping and the regulations of local agencies having jurisdiction. The KEC shall be responsible for fire-stopping where equipment furnished under this scope penetrates fire-rated assemblies, building openings, or shafts.

3.4 CUTTING, PATCHING AND RESTORING

A. Under each of the division specifications, the trades shall be responsible for all required digging, cutting, backfilling, patching, etc., incident to its work under that section, and shall make all required repairs thereafter to the satisfaction of the other trades.

3.5 PAINTING

A. Each trade shall be responsible for painting all material and not having equipment items provided without a factory finish. Factory finishes include painted, galvanized, aluminum, stainless steel, and plated or polished non-corrosive surfaces.

B. A prime coat plus two coats of vinyl base paint shall be provided on items to be field painted. Painting shall be in accordance with manufacturer's recommendations, with color approved by the Owner's Representatives.

3.6 CLEANING

A. Stack and remove all waste material, crating, packaging, etc. resulting from work and keep premises in a satisfactory condition at all times. Refer to General Conditions section for coordination of on-site waste removal responsibilities.

B. All equipment furnished under this scope to be "Construction Clean" prior to project turn over. Remove any temporary protection from equipment and leave ready for use. Refer to General Conditions section for coordination of final cleaning responsibilities.

3.7 TESTS, INSPECTIONS, START-UPS, & PERFORMANCE CHECKS

A. Kitchen Equipment Contractor shall provide all required notices, and pay all deposits and fees necessary for the installation, test, and inspection of all work under this scope. Tests shall adhere to the regulations of local and state authorities and other agencies having jurisdiction.

B. Turn on all mechanical equipment, test for leaks, poor connections, inadequate or faulty performance, and correct as necessary.

C. The Kitchen Equipment Contractor shall coordinate equipment start-ups, performance checks, and adjustments. Equipment start-ups and performance checks must be provided by an authorized Service Company on all equipment that includes them as standard, requires them for proper activation of the warranty under the manufacturer, or as specified under Part 4.02 of the Itemized Equipment Specifications.

3.8 WARRANTY

A. The Kitchen Equipment Contractor shall warranty in writing all workmanship, material, and equipment under this scope for a minimum period of one (1) year from date of substantial completion of the project. During this period, the Kitchen Equipment Contractor shall agree to repair and make good, in a timely manner and at its own expense, any and all defects, which, in the judgment of the Owner and its Representatives, arise from defective or faulty workmanship and/or imperfect or inferior material.

B. The above shall in no way void or abolish the equipment manufacturer's guarantee or warranty on equipment. All guarantees or warranty certificates shall be delivered to the Owner.

C. Kitchen Equipment Contractor shall provide an additional warranty on all refrigeration system compressors (remote and self-contained) extending not less than a period of five (5) years from the date of substantial completion.

D. Additional or extended warranties shall be provided as specified under Part 4.02 of the Itemized Equipment Specifications.

3.9 OPERATING MAINTENANCE MANUALS

A. Three (3) complete hard copies and one (1) electronic copy of the Maintenance Manual labeled as described herein shall be submitted to Architect for approval. The manuals shall be spiral bound.

B. The manuals shall be typewritten and include a table of contents. The information shall be arranged in logical order for use by the Owner's personnel in maintaining the completed project.

C. The Manuals shall include, but not limited to, the following:

1. Table of Contents (denoting item, manufacturer, model number, and serial number)

2. Name and phone number of applicable service agencies for equipment furnished.

3. Materials list with place of purchase.

4. List of normally replaceable items, such as filters, fuses, belts, seals, screens, etc., indicating style, rating, size, etc., and place of purchase.

D. Equipment manuals shall be furnished a minimum of two weeks prior to any live instruction or demonstration to Owner's personnel.

3.10 INSTRUCTION/DEMONSTRATION

A. At a time and date selected by the Owner, the Kitchen Equipment Contractor shall arrange for live and on premise instruction and demonstration conducted by representatives of the equipment manufacturers to those employees who will have charge, care, adjustment, and operation of all parts of the equipment and systems.

B. A representative of the Kitchen Equipment Contractor shall prepare an itinerary and must be present at the facility during the demonstrations by the appropriate equipment manufacturer's representatives. One training session per manufacturer shall be available during normal business hours. Additional sessions shall be provided at the Owner's expense.

C. After instructions, prepare a letter stating that the equipment was demonstrated and personally checked by the manufacturer's representative and found to be operating properly. Acceptance of the installation will not be completed until the letter is signed by the Owner and received.

PART 4 – SCHEDULE OF EQUIPMENT

4.1 EXISITNG EQUIPMENT

A. Non-Reused Equipment – Existing equipment that is not to be re-used in the renovated areas, shall be disconnected by the various trades and removed by others.

B. Existing Equipment – Existing on site equipment that will be reused and relocated in the renovated areas shall be disconnected by the various trades as required. The Kitchen Equipment Contractor shall move the equipment to a temporary storage area as directed by Owner/Operator. Once the schedule allows, the KEC shall set-in-place existing equipment in the new location ready for final connection as indicated in the contract documents.

C. Refurbished Existing Equipment - Existing on site equipment that will be refurbished and reused in the renovated areas shall be disconnected by the various trades as required. The

Kitchen Equipment Contractor shall repair or rework the item as specified under Part 4.02 of the Itemized Equipment Specifications and move the equipment to a temporary storage area as directed by Owner/Operator. Once the schedule allows, the KEC shall set-in-place existing equipment in the new location ready for final connection as indicated in the contract documents.

D. The Kitchen Equipment Contractor shall tag all existing equipment to be reused and document its condition prior to removal. It shall be the KEC's responsibility for the care of equipment while in storage and prior to project turn over. Further damage to existing equipment will be repaired at no cost to the owner. The KEC shall warranty only the repairs and workmanship performed on existing equipment as described in Part 3.08 of the Warranty Section. No additional warranties shall be extended beyond the original factory warranty. The Owner shall bear responsibility for any necessary costs to repair existing equipment not listed under Part 4.02 of the Itemized Equipment Specifications.

4.2 ITEMIZED EQUIPMENT SPECIFICATION

A. The following equipment schedule/specifications refer to various items of food service equipment shown on the Contract Drawings. The Contract Drawings and notes, in addition to these specifications, shall be as binding as if written herein.

B. Parts 1-3 of this document serve as the basis of design for the Kitchen Equipment Contractor's scope of work. Any deviation within the itemized equipment specification portion below shall, however, supersede and take precedence over the previous sections of this document only for the specific item with which the deviation exists.

ITEM # 1 2-SECTION REFRIG. TOPPINGS TABLE (16)
Quantity: One (1)
Manufacturer: Existing Equipment

ITEM # 2 WORK TABLE, CABINET BASE SLIDING DOORS
Quantity: One (1)
Manufacturer: John Boos
Model: EBSS6R5-3060

One (1) Model EBSS6R5-3060 Work Table, cabinet base with sliding doors, 60"W x 30"D, 16/300 stainless steel top with 5" backsplash, Stallion Safety Edge front, 90° turndown on sides, stainless steel base, undershelf, & 1" adjustable bullet feet, all welded set-up, NSF
One (1) Model PB-DISINK101405-P-SSLR Pro-Bowl Drop-In Sink, 1-compartment, 12-5/8"W x 18-1/2"D x 11"H overall size, (1) 10"W x 14" front-to-back x 5" deep bowl, deck mount faucet holes with 4" centers, 3-5/16" drain opening with basket drain, with left & right side splashes, stainless steel construction, includes economy gooseneck faucet (PBF-4-DLF), NSF
Alternate Manufacturer: Eagle, Advance Tabco

ITEM # 3 DISPLAY CASE, REFRIGERATED DELI
Quantity: One (1)
Manufacturer: Howard-McCray

Model: SC-CDS40E-4C-S-LED

One (1) Model SC-CDS40E-4C-S-LED Deli Meat & Cheese Service Case, 51.5"W single duty, endless design, double bend curved glass, self-contained refrigeration, full length gravity coil system, (1) adjustable mezzanine shelf, stainless steel top, stainless steel exterior & interior, LED lighting, 1/4 HP, 115v, 12.0 amps, cULus, UL EPH Classified, UL-Sanitation
One (1) 1 year parts & labor warranty, standard
One (1) 5 year limited compressor warranty, standard
One (1) Gray 2" Boston Brand Bumper, standard

Alternate Manufacturer: Hussmann, Oscartek

ITEM # 4 DISPLAY CASE, NON-REFRIGERATED COUNTERTOP
Quantity: One (1)
Manufacturer: Federal Industries
Model: ITD3626

One (1) Model ITD3626 Italian Glass Non-Refrigerated Display Case, counter display model, 36"W x 30"D x 26"H, 2-tiers adjustable glass shelves, tempered tilt-out straight front glass, tempered glass top, ends & doors, removable sliding rear doors, 3500K LED top light & shelf lights, steel base construction, stainless steel interior, gray textured exterior, UL, UL EPH CLASSIFIED, Made in USA, DOE 2017 compliant
One (1) One year parts & labor warranty, standard
One (1) 120v/60/1-ph, NEMA 5-15P, standard
One (1) Standard glass ends
One (1) Removable sliding rear doors, standard
One (1) Note: This quotation is valid based on current tariff and import duty rates. In the event of any changes to applicable tariffs or import taxes following the date of this quote, we reserve the right to apply corresponding surcharges

Alternate Manufacturer: Hussmann, Oscartek

ITEM # 5 PANINI GRILL
Quantity: One (1)
Manufacturer: Existing Equipment

ITEM # 5 PANINI GRILL - ALTERNATE
Quantity: One (1)
Manufacturer: Waring
Model: WPG300T

One (1) Model WPG300T Panini Ottimo™ Dual Panini Grill, electric, double, 17" x 9-1/2" cooking surface, with timer, hinged auto-balancing top plate with heat resistant handles, ribbed cast iron plates, adjustable thermostats 570°F (300°C), indicator lights, brushed stainless steel body & removable drip tray, 3.2kW, 240v/60/1-ph, 13.3 amps, NEMA 6-20P, UL, NSF

ITEM # 6 DELI/ PIZZA COUNTER
Quantity: One (1)
Manufacturer: By Others

ITEM # 7 DELI / PIZZA / SNEEZE GUARD
Quantity: One (1)

Manufacturer: PREMIER METAL & GLASS
Model: CUSTOM

FM1V-A- 1" OD GEARLESS ADJUSTABLE FOOD SHIELD; 3/8" CLEAR/ CUSTOM VECTRA PRINT TEMPERED GLASS WITH POLISHED EDGES AND RADIUS CORNERS; BOTH END PANELS INCLUDED (USP); LEFT SECTION AND END PANEL TO HAVE VETRA PRINT FROST TO CONCEAL EQUIPMENT; UNDER COUNTER MOUNTING OPTION; NO HEAT/ LIGHT INCLUDED; BRUSHED STAINLESS FINISH; APPROX 31-3/4"(V/ VECTRA PRINT) X 69-1/4"(V) CL LENGTH; APPROX 132 LBS EA (2 END AND 1 CENTER SUPPORTS)

Alternate Manufacturer: BSI, English

ITEM # 8 SPARE NO. <Spare No.>

ITEM # 9 SPARE NO. <Spare No.>

ITEM # 10 SANDWICH / SALAD PREPARATION REFRIGERATOR
Quantity: One (1)
Manufacturer: Hoshizaki
Model: SR60B-16

One (1) Model SR60B-16 Steelheart® Series Sandwich Top Refrigerator, reach-in, two-section, 60"W, 14.8 cu. ft., self-contained rear mounted refrigeration system, (2) solid hinged doors, (2) adjustable shelves, provided with (16) 1/6 pans 4" deep, 6" maximum pan depth (top rail), 10" D x 1/2" thick white polyethylene cutting board & a full set of adapter bars, stainless steel interior, stainless steel exterior front, sides & hinged top cover, hot gas condensate removal, (4) 6" casters (2 with brakes), R290 Hydrocarbon refrigerant, 1/3 HP, NEMA 5-15P, cETLus, ETL-Sanitation
One (1) Warranty: 7-Year labor on entire machine
One (1) Warranty: 7-Year parts on entire machine
One (1) Warranty: 7-Year parts on compressor
One (1) 115v/60/1-ph, 6.0 amps, standard

Alternate Manufacturer: True, Continental

ITEM # 11 CONVEYOR OVEN, ELECTRIC
Quantity: One (1)
Manufacturer: Lincoln Foodservice
Model: 1180-2V

One (1) Model 1180-2V Lincoln Impinger® Ventless II Oven Package, electric, double stack, easyTouch™ controls, includes (2) complete ovens with glass access window, standard six finger setup, take-off shelves and high-stand with casters, (1) cleaner starter kit
One (1) 1 yr. standard warranty, per oven
One (1) NOTE: Must specify voltage & belt direction when ordering
One (1) NOTE: This oven does not ship with a cordset, it must be ordered or otherwise provided
One (1) (2) 208v/60/1-ph
One (1) Belt direction, left to right: Oven #1
One (1) Belt direction, left to right: Oven #2
One (1) NOTE: New oven installations require an appropriate stand to be included with order

Alternate Manufacturer: Middleby Marshall

ITEM # 12 WORK TABLE, 48", STAINLESS STEEL TOP
Quantity: One (1)
Manufacturer: John Boos
Model: ST4R5-3048SSK

One (1) Model ST4R5-3048SSK Work Table, 48"W x 30"D, 14/300 stainless steel top with 5" backsplash, with Stallion Safety Edge front, 90° turndown on sides, box channel understructure with sound deadening tape, stainless steel legs & adjustable undershelf, adjustable bullet feet, NSF, KD
Alternate Manufacturer: Eagle, Advance Tabco

ITEM # 13 REACH-IN REFRIGERATOR
Quantity: One (1)
Manufacturer: Hoshizaki
Model: R1A-FS

One (1) Model R1A-FS Steelheart® Series Refrigerator, reach-in, one-section, 23.1 cu. ft., top mounted self-contained refrigeration system, (3) epoxy coated wire shelves, (1) full-height solid right hinged door, digital temperature display/controls, LED interior lighting, stainless steel exterior front & sides, stainless steel interior, (4) 4" heavy duty casters (2 with brakes), R290 Hydrocarbon refrigerant, 1/4 HP, NEMA 5-15P, cETLus, ETL-Sanitation, ENERGY STAR®
One (1) Warranty: 7-Year labor on entire machine
One (1) Warranty: 7-Year parts on entire machine
One (1) Warranty: 7-Year parts on compressor
One (1) 115v/60/1-ph, 5 amps, standard
One (1) Casters, 4" (set of 4), field installed, standard
Alternate Manufacturer: True, Continental

ITEM # 14 HEATED SHELF FOOD WARMER
Quantity: One (1)
Manufacturer: Existing Equipment

ITEM # 15 HEATED SHELF FOOD WARMER
Quantity: One (1)
Manufacturer: Existing Equipment

ITEM # 15.1 HEAT LAMPS
Quantity: Two (2)
Manufacturer: Existing Equipment

ITEM # 16 REACH-IN FREEZER
Quantity: One (1)
Manufacturer: Hoshizaki
Model: F1A-FSL

One (1) Model F1A-FSL Steelheart® Series Freezer, reach-in, one-section, 23.1 cu. ft., top mounted self-contained refrigeration system, (3) epoxy-coated wire shelves, (1) full-height solid left hinged door, digital temperature display/controls, audible & visual alarms, LED interior lighting, stainless steel exterior front & sides, stainless steel interior, (4) 4" casters (2 with brakes), R290 Hydrocarbon refrigerant, 3/4 HP, cord, NEMA 5-15P, cETLus, ETL-Sanitation
One (1) Warranty: 7-Year labor on entire machine

One (1) Warranty: 7-Year parts on entire machine
One (1) Warranty: 7-Year parts on compressor
One (1) 115v/60/1-ph, 8.46 amps, standard
One (1) Casters, 4" (set of 4), field installed, standard
Alternate Manufacturer: True, Continental

ITEM # 17 WORK TABLE, 30", STAINLESS STEEL TOP
Quantity: One (1)
Manufacturer: John Boos
Model: ST4-3030SSK

One (1) Model ST4-3030SSK Work Table, 30"W x 30"D, 14/300 stainless steel flat top, with Stallion Safety Edge front & back, 90° turndown on sides, box channel understructure with sound deadening tape, stainless steel legs & adjustable undershelf, adjustable bullet feet, NSF, KD
Alternate Manufacturer: Eagle, Advance Tabco

ITEM # 18 FRENCH FRY WARMER
Quantity: One (1)
Manufacturer: Carter-Hoffmann (Middleby)
Model: CNH28

One (1) Model CNH28 (MIDDLEBY ESSENTIALS ITEM) Crisp N Hold Fried Food Station, 4 sections, circulated air heating, 1780 cubic in.
One (1) 1 Year parts & labor warranty, standard
One (1) 208v/60/1-ph, 2890 watts, 14.0 amps, NEMA 6-20P, standard
Alternate Manufacturer: Merco, Vulcan

ITEM # 19 EXHAUST HOOD
Quantity: One (1)
Manufacturer: Existing Equipment

ITEM # 20 GAS FLOOR FRYER
Quantity: Three (3)
Manufacturer: Pitco
Model: 45C+S

Three (3) Model 45C+S (QUICK SHIP) Fryer, gas, floor model, 42-50 lb. oil capacity, millivolt control, stainless steel tank, door & front, 122,000 BTU, CSA Flame, CSA Star, NSF (See flyer for NET price)
Three (3) 1 year parts and labor warranty from the date of installation up to a maximum of 15 months from the date of manufacture (with appropriate documentation), standard
One (1) Startup program, for first serial number (submit on request at least 5 business days in advance on Pitco website, https://www.pitco.com/startup_request) (NET)
Two (2) Startup program, for each additional serial number at same location (submit on request at least 5 business days in advance on Pitco website, https://www.pitco.com/startup_request) (NET) priced per each
One (1) Natural gas
Three (3) Model P6072145 Basket, (2) oblong/twin size, 13-1/2" x 6-1/2" x 5-3/4" deep, long handle, regular mesh (shipped std (n/c) with models "T" SG14, SG14R, SSH55, SE14, SE14X, SE14B, SG14T, 35+, 45+, fryer batteries shipped with (1) per fryer
Three (3) Dormont Model 1675KITS48 Dormont Blue Hose™ Moveable Gas Connector Kit, 3/4" inside dia., 48" long, covered with stainless steel braid, coated with blue antimicrobial PVC, (1) SnapFast®

QD, (1) Swivel MAX®, (1) full port valve, (1) elbow, coiled restraining cable with hardware, 167,000 BTU/hr minimum flow capacity, limited lifetime warranty
Alternate Manufacturer: Imperial, Frymaster

ITEM # 21 EQUIPMENT STAND, FOR COUNTERTOP COOKING
Quantity: One (1)
Manufacturer: John Boos
Model: GS6-3036SSK-X

One (1) Model GS6-3036SSK-X Equipment Stand, 36"W x 30"D x 24"H, 16/300 stainless steel top with 1-1/2"H up-turn on back & both sides, stainless steel legs & adjustable undershelf, bullet feet, KD, NSF
One (1) Standard flyer accessories only, NO modifications to flyer items allowed or their accessories
One (1) Model CAS01-R-X Casters, 5", heavy duty, locking, for 1-5/8" diameter legs (set of 4)
Alternate Manufacturer: Eagle, Advance Tabco

ITEM # 22 GRIDDLE, GAS, COUNTERTOP
Quantity: One (1)
Manufacturer: Magikitch'n (Middleby)
Model: MKG-36

One (1) Model MKG-36 Griddle, countertop, gas, 35-3/4" W x 24" D cooking surface, 1" thick polished griddle plate, snap-action thermostat & piezo ignitor, grease chute and box, front grease trough, 3" side splash, stainless steel, 4" removable legs, 90,000 BTU, CSA Flame, CSA Star, NSF
One (1) 2 year limited parts and labor warranty, standard
One (1) Natural gas, specify elevation if over 2000 feet
One (1) Standard output burners 90,000 BTU
One (1) Dormont Model 1675KITS48 Dormont Blue Hose™ Moveable Gas Connector Kit, 3/4" inside dia., 48" long, covered with stainless steel braid, coated with blue antimicrobial PVC, (1) SnapFast® QD, (1) Swivel MAX®, (1) full port valve, (1) elbow, coiled restraining cable with hardware, 167,000 BTU/hr minimum flow capacity, limited lifetime warranty
Alternate Manufacturer: AccuTemp, Vollrath

ITEM # 23 REACH-IN REFRIGERATOR
Quantity: One (1)
Manufacturer: Hoshizaki
Model: R1A-FS

One (1) Model R1A-FS Steelheart® Series Refrigerator, reach-in, one-section, 23.1 cu. ft., top mounted self-contained refrigeration system, (3) epoxy coated wire shelves, (1) full-height solid right hinged door, digital temperature display/controls, LED interior lighting, stainless steel exterior front & sides, stainless steel interior, (4) 4" heavy duty casters (2 with brakes), R290 Hydrocarbon refrigerant, 1/4 HP, NEMA 5-15P, cETLus, ETL-Sanitation, ENERGY STAR®
One (1) Warranty: 7-Year labor on entire machine
One (1) Warranty: 7-Year parts on entire machine
One (1) Warranty: 7-Year parts on compressor
One (1) 115v/60/1-ph, 5 amps, standard
One (1) Casters, 4" (set of 4), field installed, standard
Alternate Manufacturer: True, Continental

ITEM # 24 HOT FOOD WELL UNIT, DROP-IN, ELECTRIC

Quantity: One (1)
Manufacturer: Delfield
Model: N8745-D

One (1) Model N8745-D Drop-In Hot Food Well Unit, Electric, individual pans, wet/dry type with drain & manifold, 3-pan size for 12" x 20" pans, individual infinite temperature controls, stainless steel top & wells, galvanized outer liner, (44-5/8" x 25" cutout required), cUL, UL, NSF
One (1) Note: If installation of equipment is in Michigan, there is a local code requirement that requires individual drain valves on these models. Please add the accessories as required.
One (1) Introducing: Freight Made Simple
Alternate Manufacturer: Wells, LTI

ITEM # 25 GRILL SNEEZE GUARD
Quantity: One (1)
Manufacturer: PREMIER METAL & GLASS
Model: CUSTOM

TM2N-A - 1" OD GEARLESS ADJUSTABLE FOOD SHIELD WITH TOP SHELF AND REAR SUPPORTS; 3/8" CLEAR TEMPERED GLASS WITH POLISHED EDGES AND RADIUS CORNERS; BOTH END PANELS INCLUDED (USP); UNDER COUNTER MOUNTING OPTION; NO HEAT/LIGHT INCLUDED; BRUSHED STAINLESS FINISH;
APPROX 50" CL LENGTH; APPROX 156 LBS EA (2 END SUPPORTS)
Alternate Manufacturer: BSI, English

ITEM # 26 SPARE NO. <Spare No.>

ITEM # 27 SPARE NO. <Spare No.>

ITEM # 28 TRADITIONS COUNTER
Quantity: One (1)
Manufacturer: By Others

ITEM # 29 TRADITIONS SNEEZE GUARD
Quantity: One (1)
Manufacturer: PREMIER METAL & GLASS
Model: CUSTOM

TM2N-A - 1" OD GEARLESS ADJUSTABLE FOOD SHIELD WITH TOP SHELF AND REAR SUPPORTS; 3/8" CLEAR TEMPERED GLASS WITH POLISHED EDGES AND RADIUS CORNERS; BOTH END PANELS INCLUDED (USP); UNDERCOUNTER MOUNTING OPTION; HATCO GRNM NARROW HEAT LAMP AND ULTRASLIM LED LIGHT IN COMPLEMENTARY COLORED HOUSING; BRUSHED STAINLESS FINISH; APPROX 37" + 50-1/2" CL LENGTH; APPROX 444 LBS EA (2 END AND 1 CENTER SUPPORTS)
Alternate Manufacturer: BSI, English

ITEM # 30 SPARE NO. <Spare No.>

ITEM # 31 UNDERCOUNTER REFRIGERATOR

Quantity: One (1)
Manufacturer: Existing Equipment

ITEM # 32 REACH-IN REFRIGERATOR
Quantity: One (1)
Manufacturer: Hoshizaki
Model: R1A-FS

One (1) Model R1A-FS Steelheart® Series Refrigerator, reach-in, one-section, 23.1 cu. ft., top mounted self-contained refrigeration system, (3) epoxy coated wire shelves, (1) full-height solid right hinged door, digital temperature display/controls, LED interior lighting, stainless steel exterior front & sides, stainless steel interior, (4) 4" heavy duty casters (2 with brakes), R290 Hydrocarbon refrigerant, 1/4 HP, NEMA 5-15P, cETLus, ETL-Sanitation, ENERGY STAR®
One (1) Warranty: 7-Year labor on entire machine
One (1) Warranty: 7-Year parts on entire machine
One (1) Warranty: 7-Year parts on compressor
One (1) 115v/60/1-ph, 5 amps, standard
One (1) Casters, 4" (set of 4), field installed, standard
Alternate Manufacturer: True, Continental

ITEM # 33 WORK TABLE, CABINET BASE SLIDING DOORS
Quantity: One (1)
Manufacturer: John Boos
Model: EBSS6R5-3060

One (1) Model EBSS6R5-3060 Work Table, cabinet base with sliding doors, 60"W x 30"D, 16/300 stainless steel top with 5" backsplash, Stallion Safety Edge front, 90° turndown on sides, stainless steel base, undershelf, & 1" adjustable bullet feet, all welded set-up, NSF
One (1) Model PB-DISINK101405-P-SSLR Pro-Bowl Drop-In Sink, 1-compartment, 12-5/8"W x 18-1/2"D x 11"H overall size, (1) 10"W x 14" front-to-back x 5" deep bowl, deck mount faucet holes with 4" centers, 3-5/16" drain opening with basket drain, with left & right side splashes, stainless steel construction, includes economy gooseneck faucet (PBF-4-DLF), NSF
Alternate Manufacturer: Eagle, Advance Tabco

ITEM # 34 REACH-IN HEATED CABINET
Quantity: One (1)
Manufacturer: Delfield
Model: DSLH1-SH

One (1) Model DSLH1-SH DSL Heated Cabinet, Reach-In, one-section, 21.5 cubic feet capacity, (2) half-height hinged solid door (locking), (3) adjustable wire shelves, 4.3" easyTouch® screen temperature display/control with remote monitoring, stainless steel exterior front, sides & interior, (4) 6" adjustable stainless steel legs, 208-240v/60/1-ph, 6.3 amps, NEMA 6-20P, UL, UL Sanitation
One (1) Model 0460003CN 3 year parts & labor warranty, standard
One (1) Door hinging: on right at factory
One (1) Model DSLCAST12 6" Ride height casters (1 or 2 section)
Alternate Manufacturer: Victory, Traulsen

ITEM # 35 TRADITIONS SNEEZE GUARD
Quantity: One (1)
Manufacturer: PREMIER METAL & GLASS

Model: CUSTOM

TM2N-A - 1" OD GEARLESS ADJUSTABLE FOOD SHIELD WITH TOP SHELF AND REAR SUPPORTS; 3/8" CLEAR TEMPERED GLASS WITH POLISHED EDGES AND RADIUS CORNERS; BOTH END PANELS INCLUDED (USP); UNDERCOUNTER MOUNTING OPTION; NO HEAT/ LIGHT INCLUDED; BRUSHED STAINLESS FINISH;
APPROX 50-1/2" + 37" CL LENGTH; APPROX 444 LBS EA (2 END AND 1 CENTER SUPPORTS)
Alternate Manufacturer: BSI, English

ITEM # 36 HOT FOOD WELL UNIT, DROP-IN, ELECTRIC
Quantity: Two (2)
Manufacturer: Delfield
Model: N8745-D

Two (2) Model N8745-D Drop-In Hot Food Well Unit, Electric, individual pans, wet/dry type with drain & manifold, 3-pan size for 12" x 20" pans, individual infinite temperature controls, stainless steel top & wells, galvanized outer liner, (44-5/8" x 25" cutout required), cUL, UL, NSF
Two (2) Note: If installation of equipment is in Michigan, there is a local code requirement that requires individual drain valves on these models. Please add the accessories as required.
Two (2) Introducing: Freight Made Simple
Alternate Manufacturer: Wells, LTI

ITEM # 37 INDUCTION FOOD PAN WARMER, DROP-IN
Quantity: Two (2)
Manufacturer: Vollrath
Model: 741101DW

Two (2) Model 741101DW Mirage® Induction Warmer, drop-in, dry operation, 11 quart, inset with hinged cover, (4) soup presets, stir indicator LED, solid state controls with locking function, temperature control in °F or °C, cabinet mount controls with leads, includes: induction ready inset, inset cover, mounting hardware & cord with NEMA 5-15P, 250 watts, 2.1 amps, 120v/60/1-ph, cULus, NSF, FCC (cover not NSF) (Refer to vollrathfoodservice.com for full warranty policy)
Two (2) Requires use of included Vollrath induction-ready inset - failure to use these insets may damage the unit & will void the warranty
Alternate Manufacturer: Wells, Cooktec

ITEM # 38 SALAD BAR COUNTER
Quantity: One (1)
Manufacturer: By Others

ITEM # 39 SALAD BAR SNEEZE GUARD
Quantity: One (1)
Manufacturer: PREMIER METAL & GLASS
Model: CUSTOM

TMIR-A - EXT 1" OD DOUBLE SIDED GEARLESS ADJUSTABLE FOOD SHIELD WITH TOP SHELF; 3/8" CLEAR TEMPERED GLASS WITH POLISHED EDGES AND RADIUS CORNERS; BOTH END PANELS INCLUDED (FIXED); UNDER COUNTER MOUNTING OPTION; NO HEAT/ LIGHT INCLUDED; BRUSHED STAINLESS FINISH; APPROX 154" CL LENGTH; APPROX 714 LBS EA (2 END AND 1 CENTER SUPPORTS)
Alternate Manufacturer: BSI, English

ITEM # 40 COLD FOOD WELL UNIT, DROP-IN, REFRIGERATED
Quantity: Two (2)
Manufacturer: Delfield
Model: N8169BP

Two (2) Model N8169BP Drop-In Mechanically Cooled Pan, 69" W x 26" D, 5-pan size, 8" deep, 1" dia. drain, insulated pan, stainless steel inner liner & top, galvanized steel outer liner, includes adapter bars, self-contained refrigeration, R290 Hydrocarbon refrigerant, 1/4 HP, (68" x 25" cutout required), cUL, UL, NSF
Two (2) Introducing: Freight Made Simple
Alternate Manufacturer: Wells, LTI

ITEM # 41 FROST TOP / COLD SLAB, DROP IN
Quantity: One (1)
Manufacturer: Delfield
Model: N8240-STP

One (1) Model N8240-STP Drop-In Frost Top, holds 2 sheet pans (tall left to right), heavy-gauge galvanized steel exterior housing, on/off toggle switch, perimeter gasket, self-contained refrigeration, R290 refrigerant, 1/4 HP, (38.60" x 28.75" cutout required), cUL, UL, NSF
One (1) Introducing: Freight Made Simple
Alternate Manufacturer: Spring USA, Vollrath

ITEM # 42 DESSERT STATION SNEEZE GUARD
Quantity: One (1)
Manufacturer: PREMIER METAL & GLASS
Model: CUSTOM

TMIR-A - 1" OD DOUBLE SIDED GEARLESS ADJUSTABLE FOOD SHIELD WITH TOP SHELF; 3/8" CLEAR TEMPERED GLASS WITH POLISHED EDGES AND RADIUS CORNERS; BOTH END PANELS INCLUDED (FIXED); UNDER COUNTER MOUNTING OPTION; NO HEAT/ LIGHT INCLUDED; BRUSHED STAINLESS FINISH; APPROX 46" CL LENGTH; APPROX 204 LBS EA (2 END SUPPORTS)
Alternate Manufacturer: BSI, English

ITEM # 43 SPARE NO. <Spare No.>

ITEM # 44 SPARE NO. <Spare No.>

ITEM # 45 TRADITIONS COUNTER
Quantity: Three (3)
Manufacturer: By Others

ITEM # 46 DROP-IN REFRIGERATED MERCHANDISER
Quantity: One (1)
Manufacturer: Federal Industries
Model: ITRSS4826

One (1) Model ITRSS4826 Italian Glass Refrigerated Counter Display Case, self-service, drop-in, 48"W x 33"D x 42.7"H, (2) tiers of adjustable shelves, tempered glass ends & removable sliding rear glass doors, 3500K LED top light & shelf lights, rear air intake & discharge, self-contained refrigeration with PTC condensate evaporator, condensate pan, stainless steel interior, proper ventilation of counter is required for proper performance, light, switch power switch, adjustable electronic temperature control, cULus, UL EPH CLASSIFIED, DOE 2017 Compliant, Made in USA
One (1) NOTE: Ventilation of counter is required for proper performance
One (1) One year parts & labor warranty, standard
One (1) Self-contained refrigeration, standard
One (1) 120v/60/1-ph, standard
One (1) Five year compressor warranty, standard (for self-contained units only)
One (1) Standard glass ends
One (1) Removable sliding rear doors, standard
One (1) Note: This quotation is valid based on current tariff and import duty rates. In the event of any changes to applicable tariffs or import taxes following the date of this quote, we reserve the right to apply corresponding surcharges

Alternate Manufacturer: Hussmann, Oscartek

ITEM # 47 SPARE NO. <Spare No.>

ITEM # 48 ICE CREAM MERCHANDISER
Quantity: One (1)
Manufacturer: Existing Equipment

ITEM # 49 SOFT SERVE MACHINE
Quantity: One (1)
Manufacturer: Spaceman USA
Model: 6378A-C

One (1) Model 6378A-C Twin Twist Soft Serve Freezer (Pressurized), high output floor standing , 25.0" W x 27.7"D x 61.5"H, 611 lbs, pressurized air pump system, dual hoppers, V5 auger, inverter motor control, heavy-duty casters, (2) flavors, 3.4 qt cylinders, 13.7 qt hopper, up to 700 servings/hour, 208-230V/60Hz/1-Ph, Nema L6-30, ETL, NSF
One (1) NOTE: Featured models are generally in stock & ready to ship within 3 business days anywhere in the USA. Please confirm availability with your sales rep or via email at orders@spacemanusa.com
One (1) 1 year parts & labor, 5 years compressor/hopper/shell, 5 day a week technical support line. Startup and installation options available, complimentary remote troubleshooting included with every purchase. Our dedicated Spaceman success team ensures a premium customer experience. Free overnight warranty part delivery, Fastest Average Nationwide service response, standard
One (1) 208-230v/60/1-ph, 30.0 amps, 2 poles/3 wires, cord with NEMA L6-30P, standard
One (1) Model AIR COOL Air-cooled, standard

Alternate Manufacturer: Taylor, Stoelting

ITEM # 50 COLD FOOD WELL UNIT, DROP-IN, REFRIGERATED
Quantity: One (1)
Manufacturer: Delfield
Model: N8143BP

One (1) Model N8143BP Drop-In Mechanically Cooled Pan, 43-1/2"W x 26" D, 3-pan size, 1" dia.

drain, insulated pan, stainless steel inner liner & top, galvanized steel outer liner, includes adapter bars, self-contained refrigeration, R290 Hydrocarbon refrigerant, 1/4 HP, (42-1/2" x 25" cutout required), cUL, UL, NSF
One (1) Introducing: Freight Made Simple
Alternate Manufacturer: Wells, LTI

ITEM # 51 DESSERT STATION SNEEZE GUARD
Quantity: One (1)
Manufacturer: PREMIER METAL & GLASS
Model: CUSTOM

TM2R-A - 1" OD GEARLESS ADJUSTABLE SELF SERVICE FOOD SHIELD WITH TOP SHELF AND REAR SUPPORTS; 3/8" CLEAR TEMPERED GLASS WITH POLISHED EDGES AND RADIUS CORNERS; BOTH END PANELS INCLUDED (FIXED); UNDER COUNTER MOUNTING OPTION; NO HEAT/ LIGHT INCLUDED; BRUSHED STAINLESS FINISH; APPROX 55-1/2" CL LENGTH; APPROX 272 LBS EA (2 END SUPPORTS)
Alternate Manufacturer: BSI, English

ITEM # 52 SPARE NO. <Spare No.>

ITEM # 53 SPARE NO. <Spare No.>

ITEM # 54 POS COUNTER
Quantity: One (1)
Manufacturer: By Others

ITEM # 55 POS MONITOR
Quantity: Two (2)
Manufacturer: By Others

ITEM # 56 SPARE NO. <Spare No.>

ITEM # 57 SPARE NO. <Spare No.>

ITEM # 58 COKE MERCHANDISER
Quantity: One (1)
Manufacturer: Existing Equipment

ITEM # 59 COKE FREESTYLE
Quantity: One (1)
Manufacturer: Existing Equipment

ITEM # 60 ICE MAKER, CUBE-STYLE
Quantity: One (1)
Manufacturer: Manitowoc

Model: IDP0620A

One (1) Model IDP0620A Indigo NXT™ Series Ice Maker, cube-style, air-cooled, self-contained condenser, 22"W x 24.5"D x 21.5"H, production capacity up to 482 lb./24 hours at 70°/50° (407 lb. AHRI certified at 90°/70°), easyTouch display with 13 different language options, date/time stamp display, automatic reminder/alert icon, one touch asset information, automatic detection of accessories, continuous operating status, programmable production options (time, weight, day or night), one touch cleaning with displayed instructions, Alpha-San anti-microbial protection, acoustical ice sensing probe, self-diagnostic technology, DuraTech™ exterior, dice size cubes, R290 refrigerant, NSF, cULus, CE
One (1) Model WARRANTY-ICE-SC 3 year parts & labor (Machine), 5 year parts & labor (Evaporator), 5 year parts & 3 years labor (Compressor), standard [Refer to Ice Machine Warranty Bond for complete details]
One (1) (-161) 115v/60/1-ph, 12.2 amps
One (1) Model K00478 Dispenser Thermostat Kit, reduces ice machine overfill & condensation problems, for use with Indigo™ NXT Series mounted to Coke Freestyle beverage dispensers
One (1) Model K0034800 Dispenser Baffle, required for use with any Manitowoc 22" or Indigo Series ice machine in a dispenser application, NOT required for I-1470, I-1870, & I-2170.

Alternate Manufacturer: Hoshizaki, Scotsman

ITEM # 61 BAG-N-BOX SYSTEM
Quantity: One (1)
Manufacturer: By Others

ITEM # 62 COFFEE/ BEVERAGE COUNTER
Quantity: One (1)
Manufacturer: By Others

ITEM # 62.1 DROP-IN SINK
Quantity: One (1)
Manufacturer: John Boos
Model: PB-DISINK101405-P-SSLR

One (1) Model PB-DISINK101405-P-SSLR Pro-Bowl Drop-In Sink, 1-compartment, 12-5/8"W x 18-1/2"D x 11"H overall size, (1) 10"W x 14" front-to-back x 5" deep bowl, deck mount faucet holes with 4" centers, 3-5/16" drain opening with basket drain, with left & right side splashes, stainless steel construction, includes economy gooseneck faucet (PBF-4-DLF), NSF

Alternate Manufacturer: Eagle, Advance Tabco

ITEM # 62.2 DROP-IN SINK
Quantity: One (1)
Manufacturer: John Boos
Model: PB-DISINK101405-P-SSLR

One (1) Model PB-DISINK101405-P-SSLR Pro-Bowl Drop-In Sink, 1-compartment, 12-5/8"W x 18-1/2"D x 11"H overall size, (1) 10"W x 14" front-to-back x 5" deep bowl, deck mount faucet holes with 4" centers, 3-5/16" drain opening with basket drain, with left & right side splashes, stainless steel construction, includes economy gooseneck faucet (PBF-4-DLF), NSF

Alternate Manufacturer: Eagle, Advance Tabco

ITEM # 63 POS MONITOR
Quantity: One (1)
Manufacturer: By Others

ITEM # 64 ESPRESSO CAPPUCCINO MACHINE
Quantity: One (1)
Manufacturer: Franke Coffee Systems
Model: A600 FM

One (1) Model A600 FM (70009367) A600 FoamMaster™ Premium Class Coffee Machine, (2) grinders, (2) 2.5 lbs. locking bean hoppers, (1) powder hopper, 1 gallon milk container with integrated temperature sensor & docking system, (4) operating modes, 8" touch screen with intuitive menu, programmable milk pumping system with temperature control & variable foam consistency, hot milk foam/hot milk, cold milk foam/cold milk, automated CleanMaster cleaning program, cup recognition, hot water wand, plumbed drip tray, glossy black finish, iQFlow, 208v/60/1-ph, 30 amps, 5.4kW, 2L-PE, L6-30P, cETLus, ETL-Sanitation, ADA Touchpad is included at no cost (USA only, for export contact Franke)
One (1) Note: All prices quoted are valid for 30 days from the date stated on the quotation
One (1) Model IQFLOW Define taste profiles and shot times for each product independently. Each taste profile is real time assured by iQFlow. No grinder readjustments needed.
One (1) Model 1P-FM Standard, (1) locking powder hopper
One (1) Model SU05 CM (70008763) Side Refrigeration, 1-gallon capacity, 110v/60/1-ph, 15 amps, 2300 watts, 1LN-PE
One (1) Machine install, startup and calibration of equipment by Franke authorized service partner (COFFEE INSTALL)
One (1) Model INSTALL KIT Installation Kit, includes: water hose and BSP connector, technical support sticker, water hardness test strip, MSDS sheets for cleaning tablets and milk cleaner (included in installation cost)
One (1) 12 month parts & labor warranty, standard
Five (5) Model MILK DETERGENT Milk detergent, 1 liter bottle (3 months of cleanings)
One (1) Shipping from Franke Smyrna, TN 37167 (shipping rates will be returned on order confirmation)
One (1) WARNING: The power cord on this product can expose you to chemicals including phthalate plasticizers, such as diisononyl phthalate (DINP) or di(2-ethylhexyl)phthalate (DEHP), which are known to the State of California to cause cancer, birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.
Alternate Manufacturer: Schaerer, Eversys

ITEM # 65 BEVERAGE DISPENSER
Quantity: One (1)
Manufacturer: Existing Equipment

ITEM # 66 MICROWAVE
Quantity: One (1)
Manufacturer: Existing Equipment

ITEM # 67 DROP-IN REFRIGERATED MERCHANDISER
Quantity: One (1)
Manufacturer: Federal Industries
Model: ITRSS4826

One (1) Model ITRSS4826 Italian Glass Refrigerated Counter Display Case, self-service, drop-in, 48"W x 33"D x 42.7"H, (2) tiers of adjustable shelves, tempered glass ends & removable sliding rear glass doors, 3500K LED top light & shelf lights, rear air intake & discharge, self-contained refrigeration with PTC condensate evaporator, condensate pan, stainless steel interior, proper ventilation of counter is required for proper performance, light, switch power switch, adjustable electronic temperature control, cULus, UL EPH CLASSIFIED, DOE 2017 Compliant, Made in USA
One (1) NOTE: Ventilation of counter is required for proper performance
One (1) One year parts & labor warranty, standard
One (1) Self-contained refrigeration, standard
One (1) 120v/60/1-ph, standard
One (1) Five year compressor warranty, standard (for self-contained units only)
One (1) Standard glass ends
One (1) Removable sliding rear doors, standard
One (1) Note: This quotation is valid based on current tariff and import duty rates. In the event of any changes to applicable tariffs or import taxes following the date of this quote, we reserve the right to apply corresponding surcharges

Alternate Manufacturer: Hussmann, Oscartek

ITEM # 68 TOASTER
Quantity: One (1)
Manufacturer: Existing Equipment

ITEM # 69 SPARE NO. <Spare No.>

ITEM # 70 SPARE NO. <Spare No

END OF SECTION

SECTION 12 36 00
COUNTERTOPS

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Countertops for architectural cabinet work.

1.02 RELATED REQUIREMENTS

A. Section 064100 - Architectural Wood Case

1.03 REFERENCE STANDARDS

A. ANSI A208.2 - Medium Density Fiberboard (MDF) for Interior Applications; 2022.

B. AWI/AWMAC/WI (AWS) - Architectural Woodwork Standards, 2nd Edition; 2014, with Errata (2016).

C. AWMAC/WI (NAAWS) - North American Architectural Woodwork Standards; 2021, with Errata.

D. ISFA 2-01 - Classification and Standards for Solid Surfacing Material; 2013.

E. ISFA 3-01 - Classification and Standards for Quartz Surfacing Material; 2013.

F. NEMA LD 3 - High-Pressure Decorative Laminates; 2005.

G. NSI (DSDM) - Dimension Stone Design Manual; 2024.

H. PS 1 - Structural Plywood; 2009 (Revised 2019).

1.04 SUBMITTALS

A. See Section 01 30 00 - Administrative Requirements for submittal procedures.

B. Product Data: Manufacturer's data sheets on each product to be used, including:
   1. Preparation instructions and recommendations.
   2. Storage and handling requirements and recommendations.
   3. Specimen warranty.

C. Shop Drawings: Complete details of materials and installation ; combine with shop drawings of cabinets and casework specified in other sections.

D. Verification Samples: For each finish product specified, minimum size 6 inches square, representing actual product, color, and patterns.

E. Test Reports: Chemical resistance testing, showing compliance with specified requirements.

F. Maintenance Data: Manufacturer's instructions and recommendations for maintenance and repair of countertop surfaces.

1.05 QUALITY ASSURANCE

A. Installer Qualifications: Company specializing in performing work of the type specified in this section, with not less than three years of documented experience.

1.06 DELIVERY, STORAGE, AND HANDLING

A. Store products in manufacturer's unopened packaging until ready for installation.

B. Store and dispose of solvent-based materials, and materials used with solvent-based materials, in accordance with requirements of local authorities having jurisdiction.

1.07 FIELD CONDITIONS

A. Maintain environmental conditions (temperature, humidity, and ventilation) within limits recommended by manufacturer for optimum results. Do not install products under environmental conditions outside manufacturer's absolute limits.

PART 2 PRODUCTS

2.01 COUNTERTOPS

A. Quality Standard: Custom Grade, in accordance with AWI/AWMAC/WI (AWS) or AWMAC/WI (NAAWS), unless noted otherwise.

B. Solid Surfacing Countertops: Solid surfacing sheet or plastic resin casting over continuous substrate.
   1. Flat Sheet Thickness: 1/2 inch, minimum.
   2. Solid Surfacing Sheet and Plastic Resin Castings: Complying with ISFA 2-01 and NEMA LD 3; acrylic or polyester resin, mineral filler, and pigments; homogenous, non-porous and capable of being worked and repaired using standard woodworking tools; no surface coating; color and pattern consistent throughout thickness.
      a. Manufacturers: Provide Basis-of-Design Product as listed in Interior Finish Schedule.
      b. Finish on Exposed Surfaces: Matte, gloss rating of 5 to 20.
   3. Other Components Thickness: 1/2 inch, minimum.
   4. Back and End Splashes: Same sheet material, square top; minimum 4 inches high.

C. Natural Quartz and Resin Composite Countertops QTZ-1: Sheet or slab of natural quartz and plastic resin over continuous substrate.
   1. Flat Sheet Thickness: 1-1/4 inch, minimum.
   2. Natural Quartz and Resin Composite Sheets, Slabs and Castings: Complying with ISFA 3-01 and NEMA LD 3; orthophthalic polyester resin, mineral filler, and pigments; homogenous, non-porous and capable of being worked and repaired using standard stone fabrication tools; no surface coating; color and pattern consistent throughout thickness.
      a. Manufacturers: Provide Basis-of-Design Product as listed in Interior Finish Schedule or comparable product by one of the following:
         1) Cambria Company LLC.
         2) LG Hausys America, Inc; Viatera 3cm: www.lghausysusa.com/#sle.
         3) Wilsonart.
      b. Factory fabricate components to the greatest extent practical in sizes and shapes indicated; comply with NSI (DSDM).
      c. Finish on Exposed Surfaces: Polished.
   3. Other Components Thickness: 3/4 inch, minimum.
   4. Back and End Splashes: Same sheet material, square top; minimum 4 inches high.

2.02 MATERIALS

A. Plywood for Supporting Substrate: PS 1 Exterior Grade, A-C veneer grade, minimum 5-ply; minimum 3/4 inch thick; join lengths using metal splines.

B. Medium Density Fiberboard for Supporting Substrate: ANSI A208.2.

C. Adhesives: Chemical resistant waterproof adhesive as recommended by manufacturer of materials being joined.

2.03 FABRICATION

A. Fabricate tops and splashes in the largest sections practicable, with top surface of joints flush.
   1. Join lengths of tops using best method recommended by manufacturer.
   2. Fabricate to overhang fronts and ends of cabinets 1 inch except where top butts against cabinet or wall.
   3. Prepare all cutouts accurately to size; replace tops having improperly dimensioned or unnecessary cutouts or fixture holes.

B. Provide back/end splash wherever counter edge abuts vertical surface unless otherwise indicated.
   1. Secure to countertop with concealed fasteners and with contact surfaces set in waterproof glue.

2. Height: 4 inches, unless otherwise indicated.

C. Solid Surfacing: Fabricate tops and wall panels up to 144 inches long in one piece; join pieces with adhesive sealant in accordance with manufacturer's recommendations and instructions.

D. Wall-Mounted Counters: Provide skirts, aprons, brackets, and braces as indicated on drawings, finished to match.

PART 3 EXECUTION

3.01 EXAMINATION

A. Do not begin installation until substrates have been properly prepared.

B. If substrate preparation is the responsibility of another installer, notify Architect of unsatisfactory preparation before proceeding.

C. Verify that wall surfaces have been finished and mechanical and electrical services and outlets are installed in proper locations.

3.02 PREPARATION

A. Clean surfaces thoroughly prior to installation.

B. Prepare surfaces using the methods recommended by the manufacturer for achieving the best result for the substrate under the project conditions.

3.03 INSTALLATION

A. Securely attach countertops to cabinets using concealed fasteners. Make flat surfaces level; shim where required.

B. Seal joint between back/end splashes and vertical surfaces.

3.04 TOLERANCES

A. Variation From Horizontal: 1/8 inch in 10 feet, maximum.

B. Offset From Wall, Countertops: 1/8 inch maximum; 1/16 inch minimum.

C. Field Joints: 1/8 inch wide, maximum.

3.05 CLEANING

A. Clean countertops surfaces thoroughly.

3.06 PROTECTION

A. Protect installed products until completion of project.

B. Touch-up, repair or replace damaged products before Date of Substantial Completion.

END OF SECTION