



# **Kalamazoo County Consolidated Dispatch Authority**



## **Renovation / Modification for KCCDA**

**7040 Stadium Drive  
Kalamazoo, MI 49009**

**Schley Nelson Architects**

**4200 S. 9<sup>th</sup> Street  
P.O. Box 239  
Oshtemo, MI 49077**

Phone: 269.375.8360

**Project No. 25-156**

**Issue Date: March 10, 2026**





## NOTICE INVITING BIDS

To: General Contractors

### Notice of Proposed Construction Project

1. NOTICE IS HEREBY GIVEN that the Kalamazoo County Consolidated Dispatch Authority, hereinafter referred to as the "Owner", will accept sealed bids from interested responsible General Contractors for the construction (including general trades, mechanical, plumbing, and electrical work) of Renovation / Modification work hereinafter referred to as the "Project", in strict conformity with the Bidding and Contract Documents, including the drawings and on sheet specifications. The project will generally include renovation / modification work at both floor levels of the existing facility as well as exterior site improvement work. Sealed bids for the project shall be prepared in strict conformity with the bidding and contract documents, including the drawings and on sheet specifications prepared by the Owner's Architect, including any and all drawings and specifications associated therewith. A complete project description of the work is found in the project documents dated **March 10, 2026**.

### Time and Place of Bid Openings

2. Such sealed and any and all bids submitted as a result of this notice and/or any of the instructions contained in the Instructions to Bidders included with the aforementioned Bidding and Contract Documents, must be submitted to the following:

**KCCDA  
7040 Stadium Drive  
Kalamazoo, MI 49009**

Submissions must be received not later than 2:00 p.m., local time, on **April 07, 2026**. Bids submitted by facsimile (fax) machine or email **will not be accepted**.

### Availability of Contract Documents

3. Electronic PDF Bidding and Contract Documents.

Paper copies of the Bidding and Contract Documents, including the Drawings and on sheet Specifications, are available at the offices of Schley Nelson Architects, Inc., 4200 S. 9<sup>th</sup> Street, Oshtemo, Michigan 49077. Mailing address: PO Box 239 Oshtemo 49077, hereinafter referred to as the "Architect", for a cost of \$125 (One Hundred Twenty-five Dollars) per set. Only complete document sets will be available (no separate sheet or specification sections will be issued.) The bidding and contract documents can be shipped by UPS ground for shipping and handling charge, check only **non-refundable**, to, Schley Nelson Architects, Inc.

Contractors are to call 269-375-8360 to request Bidding and Contract Documents.

### **(Mandatory) Pre-Bid Conference**

4. All interested General Contractors and their invited Subcontractors, are requested to attend a pre-bid at the site **March 19, 2026** at 2:00 PM an email invitation will be sent. Attendance is a mandatory requirement. Contractor tendering a bid on this project does so with covenant and agreement that he has reviewed the existing conditions at the project site.

### **Performance and Payment Bonds Requirement**

5. Performance and Labor/Material Bond: The bid as requested shall include the cost for a 100% Performance and a 100% Labor/Material Bond payable to the Owner. The Bond shall warrant the faithful and complete performance of all provisions of the Agreement, payment of all persons performing labor or furnishing materials under the Agreement and honoring all project guarantees. Cost for the Bonds shall be included in the Contract amount (bid). The Bond shall be issued by a surety company acceptable to the Owner.

### **Proposal Form**

6. A separate Proposal Form is bound herein. The Contractor shall obtain two copies of the Proposal Form. Proposals shall be made on This Proposal Form. Submit one completed copy and retain one copy for your records. The Proposals shall be firmly sealed in an envelope marked "KCCDA Renovation" and delivered to the place as designated above. Only Proposals which are made on the regular Proposal Form and which are complete, will be considered (incomplete blanks will be considered a non-responsive bid). Proposals which are not signed by individuals making them should have attached thereto a power of attorney evidencing authority to sign the Proposal in the name of the person for whom it is signed.

The Proposal Form must be completed in its' entirety (all blanks filled in). Proposals with open blanks will be considered unresponsive.

Proposals which are signed for a co-partnership shall be signed by all of the co-partners or by an attorney-in-fact. If signed by an attorney-in-fact, there shall be attached in the Proposal a power of attorney, evidencing authority to sign the Proposal.

Proposals which are signed for a corporation shall have the correct corporate name written in, and the signature of the president or other authorized officer of the corporation manually written below the corporate name following the word "By \_\_\_\_\_".

If Proposals are signed for any other legal entity, the authority of the person signing for such legal entity shall be attached to the Proposal.

### **Withdrawal of Bids**

7. Bids may be withdrawn in person by a bidder or his authorized representative, provided his identify is made known, and he signs a receipt for the bid; but only if the withdrawal is made prior to the exact time set for receipt for bids.
8. The Owner reserves the right to postpone the bid opening for its own convenience.

### **Award of Contract**

9. Notice of Award of Contract shall be given by the Owner by mailing, to the successful bidder at the address stated in his bid. Acceptance of Bid and Award of Contract: Owner reserves the right to reject any and all bids; to waive any informality and/or irregularities in bidding; to require a bidder to submit a Contractor's Qualification Statement; and award the Contract to the Contractor Owner deems most highly qualified irrespective of the bid price and/or to accept the bid that is in the opinion of the Owner in the Owner's best interest is reserved by the Owner, which right may be exercised at the sole discretion of the Owner. By submitting a proposal, each bidder agrees to waive any claim it has or may have against the Owner, the Architect, and their representative employees, arising out of or in connection with the administration, evaluation, or recommendation of any bid. Any Bidder whose Proposal shall be accepted will be required to appear before the Owner in person; or, if a firm or corporation, a duly authorized representative shall so appear providing proof of insurance coverage, and shall execute an original and two (2) counterparts of the Contract. Failure to execute an Agreement within five (5) working days of notice shall constitute abandonment of the project.

### **Time Limited to Commence and Complete Work**

10. The Contractor shall commence work within five (5) calendar days from date designated by the Owner at the time the agreement is executed, and shall adequately staff the project to complete time schedule of construction work and all work in the time stated in the proposal and project schedule. Scheduling of work will be critical to award of work. The Contractor shall work continuously and shall not pull off or shutdown the project without the Owner's consent except as permitted in the Contract Documents. The contract completion date shall be that date stated in the Agreement and adjusted by project bulletins. The actual completion date shall be the date of substantial completion as defined by the General Conditions.

**END NOTICE INVITING BIDS**

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7040 Stadium Drive  
Kalamazoo, MI 49009

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**PROPOSAL FORM**

To: KCCDA  
7040 Stadium Drive  
Kalamazoo, MI 49009  
Attn: Jeffery Troyer, Executive Director

The undersigned, having carefully examined the proposed Contract Documents titled

Renovations / Modifications for:  
Kalamazoo County Consolidated Dispatch Authority  
7040 Stadium Drive  
Kalamazoo, Michigan 49009

and satisfying themselves as to the quantity and quality of materials and workmanship required, and having visited the site and examined and familiarizing himself with the conditions affecting the Work, hereby proposes to furnish all labor, materials, equipment and appliances to complete all Work required by said proposed Contract Documents for the Base Bid Stipulated sum of

\_\_\_\_\_ Dollars

(\$\_\_\_\_\_)

hereby identified as the Base Bid.

Base Bid Work to include items 1, 2, 4, 5, 6, 7, 8, 9, 10, 11, 12, 22 and 23.

By submitting a Proposal, the Contractor agrees that from his own investigation he has satisfied himself as to the nature and location of the work, the general and local conditions, and all matters which may in any way affect the work of its performance and that as a result of such examination and investigation he fully understands the intent and purpose of the documents and conditions of bidding. Claims for additional compensation and/or extensions of time because of the Contractor's failure to follow the foregoing procedure and to familiarize himself with the Contract Documents and all conditions, which might affect the work, will not be allowed.

Alternate Bid No. 1 Work to include items 3, 14, 16, 17, 18, 19, 20 and 21

Alternate Bid No. 1 Add \_\_\_\_\_ Dollars (\$\_\_\_\_\_)

Alternate Bid No. 2 Work to include items 13 and 15

Alternate Bid No. 2 Add \_\_\_\_\_ Dollars (\$\_\_\_\_\_)

The undersigned acknowledges receipt of the following addenda:

\_\_\_\_\_.

The undersigned agrees to complete the Work by \_\_\_\_\_(Base Bid).

The undersigned percentage fee (complete with the profit and overhead) for Contract modifications shall be:

To add work \_\_\_\_\_%

To delete work \_\_\_\_\_%

The undersigned agrees not to withdraw this proposal for a minimum period of 60 days from the date of the bid opening.

The undersigned proposes to use the following Subcontractors and/or suppliers on the project. No substitutions will be permitted. Please fill in all blanks. Bids with open blanks will be considered unresponsive. If work is by General Contractor's own crews, please so note and indicate the cost of the work.

<u>Base Bid Work</u>	<u>Subcontractor</u>	<u>Amount</u>
1. General Conditions	_____	_____
2. Misc. Steel	_____	_____
3. General Carpentry	_____	_____
4. Doors/Frames/Hardware	_____	_____
5. Misc. Metals	_____	_____
6. Flooring	_____	_____
7. Drywall	_____	_____
8. Acoustic Ceilings	_____	_____
9. Wall Finishes/Painting	_____	_____
10. Plumbing	_____	_____
11. HVAC	_____	_____
12. Electrical	_____	_____
13. Permits	_____	_____
14. *Miscellaneous costs not listed in the above:	_____	_____
	TOTAL BASE BID:	\$ _____

**Schedule of Change Order Prices:**

1. Item 23 Removal and Replacement of wet / damaged / rotted existing wood roof sheathing.

Base bid to include removal and replacement of (10) 4'x8'x+/-5/8" plywood or O.S.B. sheets. (Match existing adjacent).

Amount of Add or Deduct for removal and replacement of each 4'x8'x5/8" plywood or O.S.B. sheets. \$ \_\_\_\_\_

2. Item 23 Removal and Replacement of wet / damaged existing blown in or batt insulation.

Base bid to include removal and replacement of 2,000 s.f. of existing 6" thick insulation.

Amount of Add or Deduct for removal and replacement of each 100 s.f. of 6" thick insulation. \$ \_\_\_\_\_

\*It is understood that the total of all subcontractor costs and allowances may not equal the bidders TOTAL Base Bid number, the items that do not fit in the categories listed should be totaled in the Miscellaneous line item to generate the TOTAL BASE BID. Describe any Miscellaneous costs below:

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It is understood and agreed that the Owner reserves the right to award the Contact to their best interests, to reject any or all bids, to waive any informalities in the bidding, and to hold all bids for the period above noted.

Bidder: \_\_\_\_\_

(Seal) By: \_\_\_\_\_

Address: \_\_\_\_\_

\_\_\_\_\_

Telephone Number: \_\_\_\_\_

Type of Business: \_\_\_\_\_  
(Corporation, Partnership, Individual, etc.)

Members of  
Partnership (if any) \_\_\_\_\_

\_\_\_\_\_

President of  
Corporation: \_\_\_\_\_

Secretary of  
Corporation: \_\_\_\_\_

State where Corp.  
Is licensed: \_\_\_\_\_

Date: \_\_\_\_\_

**END OF PROPOSAL FORM**

## SECTION 011000 – SUMMARY OF WORK

### 1.1 GENERAL

- A. Project Identification: Project consists of an interior and exterior building renovation for Kalamazoo County Consolidated Dispatch Authority at the site address
  - 1. Project Location: 7040 Stadium Drive, Kalamazoo, Michigan, 49009
  - 2. Owner: Kalamazoo County Consolidated Dispatch Authority, 7040 Stadium Drive Kalamazoo, Michigan 49009
- B. Architect Identification: The Contract Documents, dated **March 10, 2026**, were prepared for the Project by Schley Nelson Architects, Inc.
- C. The project is the Interior and Exterior Renovations / Modifications of both floor levels as indicated on the drawings dated **March 10, 2026**. The project is to be a complete and functional part of the building for its intended uses and as described in the Construction Documents. The work will involve Architectural, Plumbing, HVAC and Electrical trades at a minimum. All codes and regulations of the State of Michigan and the local authorities must be adhered to in this project. The design and construction of the project MUST conform to the Architectural Barriers Act Accessibility Standards (ABAAS).
- D. Project will be constructed under a single prime general construction contract.
- E. General: The Contractor shall limit his use of the premises to the work indicated, and shall be respectful of adjoining site functions and shall allow for required site adjacent Owner and public use.
- F. Use of the site: Confine operations at the site to the areas permitted. Portions of the site beyond areas on which work is indicated are not to be disturbed.
- G. Keep all existing driveways and entrances serving the premises clear and available at all times.
- H. Do not encumber the site with excessive materials or equipment ahead of the time needed for incorporation in the work. Confine stockpiling of materials and location of storage sheds to the areas as approved by Owner.
- I. Conditions of the work may include overlapping work with Owner directly contracted installers. Cooperate fully with other Contractor(s) parties to minimize conflicts and facilitate the construction work of all parties employed/contracted by the Owner.
- J. Partial Owner Occupancy: Owner reserves the right to occupy and to place and install equipment in completed areas of the building, before Substantial Completion, provided such occupancy does not interfere with completion of the Work. Such placement of equipment and partial occupancy shall not constitute acceptance of the total Work.
- K. At its completion the project must be fully opened with complete Punch List completion and complete regulatory agencies' inspection and occupancy approval before functional use by the Owner.

- L. The Contractor shall arrange and pay for temporary toilets onsite suitable to accommodate the total work force and complying with local ordinances. Location of units shall be subject to Owner's approval. The Contractor shall maintain units in a clean and sanitary condition and remove from the job site upon completion of work leaving the premises clean and tidy.

## 1.2 CONTRACTOR USE OF THE BUILDING

- A. The area of this construction project is surrounded by occupied offices and work areas and construction work shall be coordinated with a designated representative of KCCDA for activities adjacent to the area of work. Maintain the area of work in a safe and weather tight condition throughout the construction period. Repair damage caused by construction operations. Take all precautions necessary to protect the building and its occupants during the construction period. Repair any damage to the site, road or grassy areas and/or from dumpsters or construction work during construction period.
- B. Smoking will not be permitted within the building enclosure. No open fires will be allowed on the project site.
- C. Contractor to coordinate the location of any dumpster on plywood if in an undisturbed grassy area and to restore the site at project completion.

## 1.3 OWNER SITE OCCUPANCY

- A. The area of work is surrounded by owner occupied spaces, access shall be maintained for owner, their clients, visitors and consultants. Any barricades or need to block a space shall be coordinated with owner prior to implementation.
- B. Contractor's schedule will include Owner coordination items and Contractor coordination items described in Section 013200 – Construction Progress Documentation.
- C. Occupancy by the Owner shall not be construed as a waiver of any claims on behalf of General Contractor and Owner against each other.
- D. The Owner also reserves the right to perform work with own staff in the Contract area and to enter into separate Contracts for equipment and systems related to the project.
- E. Temporary Telephone: Install and pay for telephone for personnel engaged in construction. At each telephone location post a list of operational and emergency telephone numbers.
- F. Temporary utility installation: Existing utilities will be available. Temporary services and connections will be the responsibility of the Contractor. Contractor is to provide such costs in their bid.
- G. Temporary Construction Office: Provide a neat and uniform appearance in temporary construction office and support facilities.
  - 1. Locate field offices, if any, storage and fabrication sheds and other support facilities in an area agreed upon by Owner, Architect and Contractor.

- H. Barricades, Warning Signs and Lights: Comply with recognized standards, code and local requirements for erection of substantial, barricades where needed to prevent accidents. Paint with appropriate colors and warning signs to inform personnel at the site and the public of the hazard being protected against. Provide lighting where needed, including flashing warning lights (of appropriate color) where appropriate. Provide direction signage and warning signage to alert public and staff to construction conditions and requirements for safety and convenience.
- I. Fire Protection: Install and maintain temporary fire protection of types needed to protect against predictable and controllable fire losses. Comply with NFPA 10 "Standard for Portable Fire Extinguishers" and NFPA 241 "Standard for Safeguarding Construction, Alterations and Demolition Operations".
- J. Operation: Enforce strict discipline in use of temporary facilities, limit availability to intended use to minimize abuse. Maintain facilities in operating condition until removal. Protect from damage by freezing temperatures and the elements.
  - 1. Maintain operation of enclosures, heating, cooling, humidity control, ventilation and similar facilities on a 24-hour day basis to achieve indicated results and to avoid damage.
  - 2. Prevent piping from freezing. Maintain markers for underground lines. Protect from damage during excavation operations.
  - 3. Maintain closures so occupied areas of building are not disturbed in heating, cooling, humidity control, ventilation, power or lighting.
- K. Termination and Removal: Remove each facility when the need has ended, replaced by a permanent facility, or no later than Substantial Completion. Complete or restore construction delayed because of interference with the facility. Repair damaged work, clean exposed surfaces and replace construction that cannot be satisfactorily repaired.
  - 1. Temporary facilities are property of the Contractor.
  - 2. At Substantial Completion, renovate permanent facilities used during construction period, including but not limited to:  
 Replace air filters and clean inside of ductwork and housings.  
 Replace worn parts and parts subject to unusual operating conditions.  
 Replace all lamps. (see also Electrical Requirements).

#### 1.4 LABOR AND MATERIALS

- A. Unless otherwise specified, the Contractor shall supply and pay for all labor, materials, permits, fees, equipment, construction equipment, transportation, apparatus, fuel, energy, light, water, temporary heat, temporary utilities, scaffolding and tools, necessary for the entire proper execution and substantial completion of this work; and shall construct in the best and most workmanlike manner the work covered by the plans and specifications and everything properly incidental thereto as shown on the plans, stated in the specifications or reasonably implied there from, whether temporary or permanent and whether or not incorporated or to be incorporated in the work. All work by the Contractor shall comply with the local, state and federal codes for the protection of workers and the public.
- B. OSHA Requirements: The General Contractor shall comply with all the safety regulations of the Occupational Safety and Health Act as in force during the

construction period. The Contractor will ensure that all employees comply with the rules, regulations and orders of the MIOSHA.

- C. The Contractor shall at all times enforce strict discipline and good order among his employees and shall not employ on the work any unfit person or anyone not skilled in the task assigned to him.

The Contract Documents are complimentary and what is called for by anyone shall be binding as if called for by all. The intention of the Contract Documents is to include in the Contract Price the cost of all labor, materials, fuel, tools, plants, equipment, light, transportation and all other expense as may be necessary for the proper execution of the work. In interpreting the Contract Documents, words describing materials or works which have a well known technical or trade meaning, unless otherwise specifically defined in the Contract Documents, shall be construed in accordance with such well known meaning recognized by Architects and the trades.

#### 1.5 EROSION CONTROL AND SITE SECURITY

- A. Area of work is in and around areas used by the owner and public. Contractor is to provide an informational submittal to Owner and Architect for a plan to isolate the construction zone from easy or innocent public access. The construction zone under this contract must be controlled to limit public access so as to maintain a safe site in which no public can be harmed. This Owner's requirement is in no way intended to remove Contractor's ultimate safety responsibilities for work but is a reiteration of obvious project needs.

#### 1.6 LAYOUT OF THE WORK

- A. Immediately upon entering the site for the purpose of beginning the work, the Contractor shall establish reference points and dimensions and locate all utilities. The Contractor shall be solely responsible for verifying plan and field dimensions related to structural elements, or points of basic reference. Discrepancies shall be brought immediately to the attention of the Architect to be resolved before commencing work.

#### 1.7 DELIVERIES

- A. Contractors must receive and sign for all deliveries.

#### 1.8 SPECIFICATION CONTENT

- A. The Specifications use certain conventions for the style of language and the intended meaning of certain terms, words and phrases when used particular situations. These conventions are as follows:

1. Abbreviated Language: Language used in the Specifications and other Contract Documents is abbreviated. Words and meanings shall be interpreted as appropriate. Words implied, but not stated, shall be inferred as the sense requires. Singular words shall be interpreted as plural, and plural words shall be interpreted as singular where applicable as the context of the Contract Documents indicates.

2. Imperative mood and streamlined language are generally used in the Specifications. Requirements expressed in the imperative mood are to be performed by Contractor. Occasionally, the indicative or subjunctive mood may be used for clarity to describe responsibilities that must be fulfilled indirectly by Contractor or by others when so noted.
  - a. 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.

#### 1.9 OTHER OWNER CONDITIONS

- A. The Contractor shall maintain adequate protection of all his work from damage and he shall provide and maintain all barricades for other facilities necessary to protect the public and staff from danger or hazardous conditions resulting from the work in this Contract.
- B. The Contractor shall confine his equipment and operations to those areas of the site necessary for the completion of the work within Contract limits as shown in Contract Documents. The Contractor shall protect and preserve from damage any facilities which are not required to be disturbed by the requirements of the work.
- C. The Contractor shall be responsible to determine the location of and to protect from damage any utilities, communications systems, or other site improvements whether shown on the plans or not.
- D. Contractors shall include the necessary concurrent calendar days in construction Schedule for mechanical systems start-up testing and balancing.

**END OF SECTION**

## **SECTION 012300 – ALTERNATES**

### 1.1 GENERAL

- A. Alternate: An amount proposed by bidders and stated on the Bid Form for certain work that may be added to or deducted from the Base Bid amount if Owner decides to accept a corresponding change either in the amount of construction to be completed or in the products, materials, equipment, systems, or installation methods described in the Contract Documents.
  - 1. The cost or credit for each alternate is the net addition to or deduction from the Contract Sum to incorporate alternate into the Work. No other adjustments are made to the Contract Sum.
- B. Coordination: Modify or adjust affected adjacent work as necessary to completely integrate work of the alternate into Project.
  - 1. Include as part of each alternate, miscellaneous devices, accessory objects, and similar items incidental to or required for a complete installation whether or not indicated as part of alternate.
- C. Notification: Immediately following award of the Contract, notify each party involved, in writing, of the status of each alternate. Indicate if alternates have been accepted, rejected, or deferred for later consideration. Include a complete description of negotiated modifications to alternates.
- D. Schedule: A Schedule of Alternates is included at the end of this Section.

### 1.2 EXECUTION

- A. Schedule of Alternates:
  - 1. Add Alternate No. 1: Add all work associated with items 3, 14, 16, 17, 18, 19, 20 and 21 as described on the contract documents.
  - 2. Add Alternate No. 2: Add all work associated with items 13 and 15 as described on the contract documents.

**END OF SECTION**

## **SECTION 012600 - CONTRACT MODIFICATION PROCEDURES**

### 1.1 GENERAL

- A. Coordination: Related Sections include the following:
1. Division 1 Section "Product Requirements" for administrative procedures for handling requests for substitutions made after Contract award.
- B. Minor Changes in the Work: Architect will issue supplemental instructions authorizing Minor Changes in the Work, not involving adjustment to the Contract Sum or the Contract Time.
- C. 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 are for information only. Do not consider them instructions either to stop work in progress or to execute the proposed change.
  2. After receipt of Proposal Request, submit a quotation estimating cost adjustments to the Contract Sum and the Contract Time necessary to execute the change in a timely fashion to progress the work.
    - 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 delivery charges, equipment rental, and amounts of trade discounts.
    - c. Include an updated Contractor's Construction Schedule that indicates the effect of the change, including, but not limited to, changes in activity duration, start and finish times, and activity relationship. Use available total float before requesting an extension of the Contract Time.
- D. Contractor-Initiated Proposals: If latent or unforeseen conditions require modifications to the Contract, Contractor may propose changes by submitting a request for a change.
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 delivery charges, equipment rental, and amounts of trade discounts.
  4. Include an updated Contractor's Construction Schedule that indicates the effect of the change, including, but not limited to, changes in activity duration, start and finish times, and activity relationship. Use available total float before requesting an extension of the Contract Time.
  5. Comply with requirements in Division 1 Section "Product Requirements" if the proposed change requires substitution of one product or system for product or system specified.

- E. Proposal Request Form: Use AIA Document G709 for Proposal Requests.
- F. Proposal Request Form: All Change Order proposals submit in writing.
- G. Allowance Adjustment: Base each Change Order proposal on the difference between purchase amount and the allowance, multiplied by final measurement of work-in-place. Allow for cutting losses, tolerances, mixing wastes, normal product imperfections, and similar margins.
  - 1. Include installation costs only where indicated as part of the allowance.
  - 2. 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. Owner reserves the right to establish the quantity of work-in-place by independent quantity survey, measure, or count.
- H. Submit claims for increased costs because of a change in 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 7 days of receipt of the Change Order or Construction Change Directive authorizing work to proceed. Owner will reject claims submitted later than 14 days after such authorization.
  - 1. Do not include Contractor's or subcontractor's indirect expense in the Change Order cost amount unless 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.
- I. Change Order Procedures: On Owner approval of a Proposal Request, Architect will issue a Change Order for signatures of Owner and Contractor.
- J. Construction Change Directive: Architect may issue a Construction Change Directive. Construction Change Directive instructs Contractor to proceed with a change in the Work, for subsequent inclusion in a Change Order.
  - 1. Construction Change Directive contains a complete description of change in the Work. It also designates method to be followed to determine change in the Contract Sum or the Contract Time.
  - 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. If Owner requires use of special forms, include sample copies here.

**END OF SECTION**

## SECTION 012900 - PAYMENT PROCEDURES

### 1.1 GENERAL

- A. Coordination: Related Sections include the following:
1. Supplementary Conditions.
  2. Division 1 Section "Contract Modification Procedures" for administrative procedures for handling changes to the Contract.
  3. Division 1 Section "Construction Progress Documentation" for administrative requirements governing preparation and submittal of Contractor's Construction Schedule and Submittals Schedule.
- B. Schedule of Values: Coordinate preparation of the Schedule of Values with preparation of Contractor's Construction Schedule. Correlate line items with other required administrative forms and schedules, including Submittals Schedule and Application for Payment forms with Continuation Sheets.
1. Submit the Schedule of Values to Architect at earliest possible date within seven days of Contract Award.
  2. Subschedules: Where the Work is separated into phases requiring separately phased payments, provide subschedules showing values correlated with each phase of payment.
  3. Format and Content: Use the Proposal Form line items as a guide to establish line items for Schedule of Values.
  4. 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.
  5. 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. Name of subcontractor.
    - d. Name of manufacturer or fabricator.
    - e. Name of supplier.
    - f. Change Orders (numbers) that affect value.
    - g. Dollar value.
      - 1) Percentage of the Contract Sum to nearest one-hundredth percent, adjusted to total 100 percent.
  6. Provide a breakdown of the Contract Sum in enough detail to facilitate continued evaluation of Applications for Payment. Provide several line items for principal

subcontract amounts. Round amounts to nearest whole dollar; total shall equal the Contract Sum.

7. Provide a separate line item for each part of the Work where Applications for Payment may include materials or equipment purchased or fabricated and stored, but not yet installed.
8. Provide separate line items for initial cost of materials, for each subsequent stage of completion, and for total installed value of that part of the Work.
9. Allowances: Provide a separate line item for each allowance, if any. 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.
10. 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 items that are not direct cost of work-in-place may be shown either as separate line items or distributed as general overhead expense.
11. 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.

C. Applications 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.
2. 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.
3. Payment Application Forms: Use AIA Document G702 and AIA Document G703 Continuation Sheets as form for Applications for Payment. Please note that the G702 form must have included a signature line for USDA Agency Acceptance.
4. 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.
  - a. Entries shall match data on the Schedule of Values and Contractor's Construction Schedule. Use updated schedules if revisions were made.
  - b. Include amounts of Change Orders and Construction Change Directives issued before last day of construction period covered by application.
5. Payment Applications shall be submitted at least ten days before the date established for each progress payment, the Contractor shall submit to the Architect an itemized Application for Payment for operations completed in accordance with the schedule of values.

6. Transmittal: Submit 4 signed and notarized original copies of each Application for Payment to Architect by a method ensuring receipt within 72 hours. One copy shall include waivers of lien and similar attachments if required. Transmit each copy with a transmittal form listing attachments and recording appropriate information about application.
7. Retainage: The amount retained shall be 10% of the value of Work until 50% of the Work has been completed. At 50% completion, further partial payments shall be made in full to the Contractor and no additional amounts may be retained unless the Architect certifies that the Work is not proceeding satisfactorily, but amounts previously retained shall not be paid to the Contractor. At 50% completion or any time thereafter when the progress of the Work is not satisfactory, additional amounts may be retained but in no event shall the total retainage be more than 10% of the value of Work completed.
8. Waivers of Mechanic's Lien: With each Application for Payment, submit waivers of mechanic's lien from every entity who is lawfully entitled to file a mechanic's lien arising out of the Contract and related to the Work covered by the payment.
  - a. Submit partial waivers on each item for amount requested, before deduction for retainage, on each item.
  - b. When an application shows completion of an item, submit final or full waivers.
  - c. Owner reserves the right to designate which entities involved in the Work must submit waivers.
  - d. Waiver Delays: Submit each Application for Payment with Contractor's waiver of mechanic's lien for construction period covered by the application.
    - 1) Submit final Application for Payment with or preceded by final waivers from every entity involved with performance of the Work covered by the application who is lawfully entitled to a lien.
    - 2) General Contractor may not issue broad waiver in an attempt to balance missing waivers from Subcontractors shown paid in previous months. Each previous month's entity shown paid must have waiver in support of current application.
  - e. Waiver Forms: Submit waivers of lien on forms, executed in a manner acceptable to Owner.
9. Initial Application for Payment: Administrative actions and submittals that must precede or coincide with submittal of first Application for Payment include the following:
  - a. List of subcontractors.
  - b. Schedule of Values.
  - c. Contractor's Construction Schedule (preliminary if not final).
  - d. Submittals Schedule (preliminary if not final).
  - e. List of Contractor's staff assignments.
  - f. Copies of building permits.

- g. Copies of authorizations and licenses from authorities having jurisdiction for performance of the Work.
  - h. Certificates of insurance and insurance policies.
- 10. 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.
  - a. Include documentation supporting claim that the Work is substantially complete and a statement showing an accounting of changes to the Contract Sum.
  - b. This application shall reflect Certificates of Partial Substantial Completion issued previously for Owner occupancy of designated portions of the Work.
- 11. 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:
  - a. Evidence of completion of Project closeout requirements.
  - b. Insurance certificates for products and completed operations where required and proof that taxes, fees, and similar obligations were paid.
  - c. Updated final statement, accounting for final changes to the Contract Sum.
  - d. AIA Document G706A, "Contractor's Affidavit of Release of Liens."
  - e. Evidence that claims have been settled.

**END OF SECTION**

## **SECTION 013100 - PROJECT MANAGEMENT AND COORDINATION**

### 1.1 GENERAL

- A. Coordination: Coordinate construction operations included in various 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 with other contractors to ensure maximum accessibility for required maintenance, service, and repair.
  3. Make adequate provisions to accommodate items scheduled for later installation.
  4. If necessary, 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.
    - a. Prepare similar memoranda for Owner and separate contractors if coordination of their Work is required.
- B. 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. Pre-installation conferences.
  7. Project closeout activities.
- C. Conservation: Coordinate construction activities to ensure that operations are carried out with consideration given to conservation of energy, water, and materials.
1. Salvage materials and equipment involved in performance of, but not actually incorporated into, the Work.
- D. Coordination Drawings: Prepare Coordination Drawings if limited space availability necessitates maximum utilization of space for efficient installation of different components or if coordination is required for installation of products and materials fabricated by separate entities.
1. Indicate relationship of components shown on separate Shop Drawings.
  2. Indicate required installation sequences.

- E. Project Meetings, General: Schedule and conduct meetings and conferences at Project site, unless otherwise indicated.
1. Attendees: Inform participants and others involved, and individuals whose presence is required, of date and time of each meeting. Notify Owner and Architect of scheduled meeting dates and times.
  2. Agenda: Prepare the meeting agenda. Distribute the agenda to all invited attendees.
  3. Minutes: Contractor to record significant discussions and agreements achieved. Distribute the meeting minutes to everyone concerned, including Owner and Architect, within 3 days of the meeting.
- F. Preconstruction Conference: Schedule a preconstruction conference before starting construction, at a time convenient to Owner and Architect, but no later than 15 days after execution of the Agreement. Hold the conference at Project site or another convenient location. Conduct the meeting to review responsibilities and personnel assignments.
1. Attendees: Authorized representatives of Owner, Architect, and their consultants; Contractor and its superintendent; major subcontractors; manufacturers; suppliers; and other concerned parties shall attend the conference. All participants at the conference shall be familiar with Project and authorized to conclude matters relating to the Work.
  2. Agenda: Discuss items of significance that could affect progress, including the following:
    - a. Tentative construction schedule.
    - b. Phasing.
    - c. Critical work sequencing.
    - d. Designation of responsible personnel.
    - e. Procedures for processing field decisions and Change Orders.
    - f. Procedures for processing Applications for Payment.
    - g. Distribution of the Contract Documents.
    - h. Submittal procedures.
    - i. Preparation of Record Documents.
    - j. Use of the premises.
    - k. Responsibility for temporary facilities and controls.
    - l. Parking availability and locations and off limit locations.
    - m. Office, work, and storage areas.
    - n. Equipment deliveries and priorities.
    - o. First aid.
    - p. Security.
    - q. Progress cleaning.
    - r. Working hours.
    - s. Security procedures and badge requirements.
- G. Pre-installation Conferences: Conduct a pre-installation conference at Project site before each construction activity that requires coordination with other construction.
1. Attendees: Installer and representatives of manufacturers and fabricators involved in or affected by the installation and its coordination or integration with

- other materials and installations that have preceded or will follow, shall attend the meeting. Advise Architect 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 Change Orders.
    - d. Purchases.
    - e. Deliveries.
    - f. Submittals.
    - g. Possible conflicts.
    - h. Compatibility problems.
    - i. Time schedules.
    - j. Manufacturer's written recommendations.
    - k. Warranty requirements.
    - l. Compatibility of materials.
    - m. Acceptability of substrates.
    - n. Temporary facilities and controls.
    - o. Space and access limitations.
    - p. Regulations of authorities having jurisdiction.
    - q. Testing and inspecting requirements.
    - r. Required performance results.
    - s. Protection of construction and personnel, public and staff.
  3. Record significant conference discussions, agreements, and disagreements.
  4. 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.
- H. Progress Meetings: Conduct progress meetings bi-weekly. Coordinate dates of meetings with preparation of payment requests.
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 conference shall be familiar with Project and authorized to conclude matters relating to the Work.
  2. 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.

- 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) Work hours.
  - 10) Hazards and risks.
  - 11) Progress cleaning.
  - 12) Quality and work standards.
  - 13) Change Orders.
  - 14) Documentation of information for payment requests.
- 3. Reporting and Recording: Distribute minutes of the meeting to each party present and to parties who should have been present. Include a brief summary, in narrative form, of progress since the previous meeting and report.
  - 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.
- 4. Meeting Content: Meeting with Owner and Architect is not intended to be Contractor's forum for their own necessary coordination and scheduling issues amongst Contractor and Subcontractor. Contractor shall arrange such separate meetings as necessary at other times to support the requirements of the work.
- 5. Review record construction drawings subsequent to meeting to acknowledge continuing updates and good recordkeeping.

## 1.2 INSTALLATION, GENERAL

- A. Comply with manufacturer's instructions and recommendations to extent printed information is more detailed or stringent than requirements contained directly in Contract Documents.
- B. Timing: Install work during time and under conditions which will ensure best possible results, coordinated with required inspection and testing. See Section 01732 – Selective Demolition and other Division 1 sections for required utility cut-off notice.

## 1.3 STAFF NAMES AND SUPERINTENDENT

- A. Within Five (5) days of Notice to Proceed, submit a list of Contractor's staff assignments, including Superintendent and personnel at the site; identify individuals, their duties and responsibilities, addresses and telephone numbers.

1. Post copies in the project meeting room, the field office, (if any) and at each temporary telephone. Issue copies to Owner and Architect.
- B. The project requirements include that the Contractor shall employ and maintain a competent Superintendent and necessary assistants approved by the Architect and Owner and who shall be reasonably available throughout the period of construction whenever work is ongoing at the site. The Superintendent shall be deemed an Agent of the Contractor and any orders given him by the Architect shall be binding upon the Contractor. Important communications shall be confirmed in writing. Other communications shall be similarly confirmed on written request in each chase. The Superintendent of the Contractor may not be removed from (or replaced on) the job during the period of construction without prior written approval of the Architect and Owner.

#### 1.4 MOUNTING HEIGHTS AND VISUAL EFFECTS

- A. Where mounting heights are not indicated, install components at standard heights for the application indicated. Refer questionable decisions to the Architect. Comply with Federal ADA laws and State of Michigan Barrier Free Rules unless otherwise so directed by plans or Architect.
- B. Provide uniform joint widths in exposed work. Arrange joints to obtain the best effect. Refer questionable choices to the Architect for decision.

#### 1.5 CLEANING AND PROTECTION

- A. During Handling and installation, clean and protect construction in progress and adjoining materials in place. Apply protective covering where required to ensure protection from damage or deterioration at Substantial Completion.
- B. Clean and maintain completed construction as often as necessary through the construction period. Adjust and lubricate operable components to ensure operability without damaging effects.
- C. Limiting Exposures: Supervise operations to ensure that no part of construction, completed or in progress, is subject to harmful or deleterious exposure. Such exposures include but are not limited to the following:

Excessive static or dynamic loading.

Excessive internal or external pressures.

Excessive weathering.

Excessively high or low temperatures or humidity.

Air contamination or pollution.

Water or ice.

Chemicals or solvents.

Heavy traffic, soiling, staining and corrosion.

Rodent and insect infestation.

Unusual wear or other misuse.

Contact between incompatible materials.

Theft or vandalism.

**END OF SECTION**

## **SECTION 013200 - CONSTRUCTION PROGRESS DOCUMENTATION**

### 1.1 GENERAL

#### A. Submittals: Submit the following (must be done):

1. Submittals Schedule: Submit three copies of schedule. Arrange the following information in a tabular format:
  - a. Scheduled date for first submittal.
  - b. Specification Section number and title.
  - c. Submittal category (action or informational).
  - d. Name of subcontractor.
  - e. Description of the Work covered.
  - f. Scheduled date for Architect's final release or approval.
2. Contractor's Construction Schedule: Submit email copy of initial schedule, large enough to show entire schedule for entire construction period.
3. Field Condition Reports: Submit at time of discovery of differing conditions.

#### B. Coordination: Coordinate preparation and processing of schedules and reports with performance of construction activities and with scheduling and reporting of separate contractors. Coordinate Contractor's Construction Schedule with the Schedule of Values, list of subcontracts, Submittals Schedule, progress reports, payment requests, and other required schedules and reports.

1. Secure time commitments for performing critical elements of the Work from parties involved.
2. Coordinate each construction activity with other activities and schedule them in proper sequence.

### 1.2 PRODUCTS

#### A. Submittals Schedule: Submit a schedule of submittals, arranged in chronological order by dates required by construction schedule. Include time required for review, re-submittal, ordering, manufacturing, fabrication, and delivery when establishing dates.

1. Coordinate Submittals Schedule with list of subcontracts, the Schedule of Values, and Contractor's Construction Schedule.
2. Submit concurrently with the first complete submittal of Contractor's Construction Schedule.

#### B. Contractor's Construction Schedule: Submit a comprehensive, fully developed, horizontal Gantt-chart-type, Contractor's Construction Schedule within 5 days of date established for commencement of the Work.

1. Preparation: Indicate each significant construction activity separately. Identify first workday of each week with a continuous vertical line.

- a. For construction activities that require 3 months or longer to complete, indicate an estimated completion percentage in 10 percent increments within time bar.
2. Time Frame: Extend schedule from date established for commencement of the Work to date of Final Completion.
  3. Contract completion date shall not be changed by submission of a schedule that shows an early completion date, unless specifically authorized by Change Order.
  4. Activities: Comply with the following:
    - a. Activity Duration: Define activities so no activity is longer than 20 days, unless specifically allowed by Architect.
    - b. Procurement Activities: Include procurement process activities for long lead items and major items, requiring a cycle of more than 60 days, as separate activities in schedule. Procurement cycle activities include, but are not limited to, submittals, approvals, purchasing, fabrication, and delivery.
    - c. Submit schedule indicating proposed sequence of operations for selective demolition work to Owner's Representative for review prior to commencement of work. Include coordination for shut-off, capping, and continuation of utility services as required, together with details for dust and noise control.
    - d. Contractor shall include as necessary the calendar days in Construction Schedule by phase for mechanical systems testing and balancing to be scheduled and completed by the Contractor prior to requesting inspection for Certificate of Substantial Completion. These days are to be included by the Contractor in his proposal.
    - e. Contractor shall include as necessary the calendar days in Construction Schedule for adequate curing of concrete, particularly new areas of direct adhered finish flooring. These days are to be included by the Contractor in his proposal. No Change Orders will be allowed due to inadequate scheduling. Curing allowances are to be included at the project beginning and Owner/Architect will not waive warranted items or quality because of Contractor's scheduling inadequacies.
    - f. Contractor shall include in his schedule an allowance for minor Punch List items to be corrected before final inspections. Minor Punch List is defined here as 10 items or less.
    - g. Contractor shall allow adequate time to reduce Punch List to minimum before calling for final inspection. Note: Architect will not allow Punch List final inspection work of his usual responsibility to replace contractor's duty to complete the work. If the project is not ready for a minimum Punch List by Architect and Owner, Architect and Owner will postpone such responsibility until the project is ready at minimum Punch status. Such postponement will not be an event considered for Change Order.
    - h. Substantial Completion: Indicate completion in advance of date established for Substantial Completion, and allow time for Architect's administrative procedures necessary for certification of Substantial Completion.
    - i. Schedule Owner move-in only after Substantial Completion and minimum Punch List remaining here defined as 5 non-critical items or less.

5. 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.
    - a. Work by Owner: Include a separate activity for each portion of the Work performed by Owner.
    - b. Work Restrictions: Show the effect on the schedule of limitations of continued occupancies, uninterruptible services, use of premises restrictions, and provisions for future construction.
    - c. Work Stages: Indicate important stages of construction for each major portion of the Work.
  6. Milestones: Include milestones indicated in the Contract Documents in schedule, including, but not limited to, the Notice to Proceed, Substantial Completion, Owner move-in and Final Completion.
  7. Contract Modifications: For each proposed contract modification and concurrent with its submission, prepare a time-impact analysis to demonstrate the effect of the proposed change on the overall project schedule.
- C. Daily Construction Reports: Prepare a daily construction report recording events at Project site, including list of subcontractors; high and low temperatures and general weather conditions; accidents; stoppages, delays, shortages, and losses; orders and requests of authorities having jurisdiction; and equipment or system tests and startups. Daily construction reports and copies of same are to be copied to Architect and are to be maintained up-to-date at project site as condition of payment.
- D. Field Condition Reports: Immediately on discovery of a difference between field conditions and the Contract Documents, prepare a detailed report. Submit with a request for information on CSI Form 13.2A. Include a detailed description of the differing conditions, together with recommendations for changing the Contract Documents.

### 1.3 EXECUTION

- A. Contractor's Construction Schedule Updating: At bi-weekly 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, duration's, actual starts and finishes, and activity duration's.
  3. As the Work progresses, indicate Actual Completion percentage for each activity.
  4. Distribution: Distribute copies of approved schedule to Architect, Owner, separate contractors, testing and inspecting agencies, and other parties identified by Contractor with a need-to-know schedule responsibility.
    - a. Post copies in Project meeting rooms and temporary field offices.

- b. When revisions are made, distribute updated schedules to the same parties and post in the same locations.

**END OF SECTION**

## **SECTION 013300 - SUBMITTAL PROCEDURES**

### **PART 1 - GENERAL**

#### **1.1 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. Related Sections:
  - 1. Division 1 Section "Construction Progress Documentation" for submitting schedules and reports, including Contractor's construction schedule.
  - 2. Division 1 Section "Project Record Documents" for submitting record Drawings, record Specifications, and record Product Data.
  - 3. Division 1 Section "Operation and Maintenance Data" for submitting operation and maintenance manuals.
  - 4. Division 1 Section "Demonstration and Training" for submitting video recordings of demonstration of equipment and training of Owner's personnel.

#### **1.2 DEFINITIONS**

- A. Action Submittals: Written and graphic information and physical samples that require Architect's responsive action.
- 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.

#### **1.3 ACTION SUBMITTALS**

- A. Submittal Schedule: Submit a schedule of submittals, arranged in chronological order by dates required by construction schedule. Include time required for review, ordering, manufacturing, fabrication, and delivery when establishing dates. Include additional time required for making corrections or modifications to submittals noted by the Architect and additional time for handling and reviewing submittals required by those corrections.

#### **1.4 SUBMITTAL ADMINISTRATIVE REQUIREMENTS**

- A. Architect's Digital Data Files: Electronic copies of CAD Drawings of the Contract Drawings will, upon request and signed waiver, be provided by Architect for Contractor's use in preparing submittals.

1. Architect will furnish Contractor requested digital data drawing files of the Contract Drawings for use in preparing Shop Drawings.
  - a. Architect makes no representations as to the accuracy or completeness of digital data drawing files as they relate to the Contract Drawings.
  - b. Contractor shall execute an Agreement for Use of Cadd Documents form prior to transmittance of any electronic files.
  
- B. 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. Coordinate transmittal of different types of submittals for related 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 related submittals are received.
  
- C. Processing Time: Allow time for submittal review, including time for resubmittals, 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 resubmittals.
  1. Initial Review: Allow 10 working 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.
  2. Intermediate Review: If intermediate submittal is necessary, process it in same manner as initial submittal.
  3. Resubmittal Review: Allow 10 working days for review of each resubmittal.
  
- D. Identification and Information: Place a permanent label or title block on each paper copy submittal item for identification.
  1. Indicate name of firm or entity that prepared each submittal on label or title block.
  2. Provide a space approximately 3" by 4" on label or beside title block to record Contractor's review and approval markings and action taken by Architect.
  3. Include the following information for processing and recording action taken:
    - a. Project name.
    - b. Date.
    - c. Name of Architect.
    - d. Name of Construction Manager.
    - e. Name of Contractor.
    - f. Name of subcontractor.
    - g. Name of supplier.
    - h. Name of manufacturer.
    - i. Submittal number or other unique identifier, including revision identifier.

- 1) Submittal number shall use Specification Section number followed by a decimal point and then a sequential number (e.g., 06100.01). Resubmittals shall include an alphabetic suffix after another decimal point (e.g., 06100.01.A).
  - j. Number and title of appropriate Specification Section.
  - k. Drawing number and detail references, as appropriate.
  - l. Location(s) where product is to be installed, as appropriate.
  - m. Other necessary identification.
- E. Identification and Information: Identify and incorporate information in each electronic submittal file as follows:
1. Assemble complete submittal package into a single indexed file with links enabling navigation to each item.
  2. Name file with submittal number or other unique identifier, including revision identifier.
    - a. File name shall use project identifier and Specification Section number followed by a decimal point and then a sequential number (e.g., LNHS-06100.01). Resubmittals shall include an alphabetic suffix after another decimal point (e.g., LNHS-06100.01.A).
  3. Provide means for insertion to permanently record Contractor's review and approval markings and action taken by Architect.
  4. Include the following information on an inserted cover sheet:
    - a. Project name.
    - b. Date.
    - c. Name and address of Architect.
    - d. Name of Construction Manager.
    - e. Name of Contractor.
    - f. Name of firm or entity that prepared submittal.
    - g. Name of subcontractor.
    - h. Name of supplier.
    - i. Name of manufacturer.
    - j. Number and title of appropriate Specification Section.
    - k. Drawing number and detail references, as appropriate.
    - l. Location(s) where product is to be installed, as appropriate.
    - m. Related physical samples submitted directly.
    - n. Other necessary identification.
- F. Options: Identify options requiring selection by the Architect.
- G. Deviations: Identify deviations from the Contract Documents on submittals.
- H. Additional Paper Copies: Unless additional copies are required for final submittal, and unless Architect observes noncompliance with provisions in the Contract Documents, initial submittal may serve as final submittal.

- I. Transmittal: Assemble each submittal individually and appropriately for transmittal and handling. Transmit each submittal using a transmittal form. Architect will return submittals, without review, received from sources other than Contractor.
  - 1. 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.
- 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 approval notation from Architect's action stamp.
- K. Distribution: Furnish copies of final submittals to manufacturers, subcontractors, suppliers, fabricators, installers, authorities having jurisdiction, and others as necessary for performance of construction activities. Show distribution on transmittal forms.
- L. Use for Construction: Use only final submittals that are marked with approval notation from Architect's action stamp.

## PART 2 - PRODUCTS

### 2.1 SUBMITTAL PROCEDURES

- A. General Submittal Procedure Requirements:
  - 1. Submit electronic submittals via email as PDF electronic files.
    - a. Architect will return annotated file. Annotate and retain one copy of file as an electronic Project record document file.
  - 2. Closeout Submittals and Maintenance Material Submittals: Comply with requirements specified in Division 1 Section "Closeout Procedures."
  - 3. Certificates and Certifications Submittals: Provide 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.
    - a. Provide a digital signature with digital certificate on electronically-submitted certificates and certifications where indicated.
    - b. Provide a notarized statement on original paper copy certificates and certifications where indicated.
  - 4. Test and Inspection Reports Submittals: Comply with requirements specified in Division 1 Section "Quality Requirements."

- B. Product Data: Collect information into a single submittal for each element of construction and type of product or equipment.
1. If information must be specially prepared for submittal because standard published data are not suitable 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.
  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.
    - 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 showing 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 or concurrent with Samples.
  6. Submit Product Data in the following format:
    - a. PDF electronic file.
- C. Shop Drawings: Prepare Project-specific information, drawn accurately to scale. Do not base Shop Drawings on reproductions of the Contract Documents or standard printed data.
1. Preparation: Fully illustrate requirements in the Contract Documents. Include the following information, as applicable:
    - a. Identification of products.
    - b. Schedules.
    - c. Compliance with specified standards.
    - d. Notation of coordination requirements.
    - e. Notation of dimensions established by field measurement.
    - f. Relationship and attachment to adjoining construction clearly indicated.
    - g. Seal and signature of professional engineer if specified.
  2. Sheet Size: Except for templates, patterns, and similar full-size drawings, submit Shop Drawings on sheets at least 8-1/2 by 11 inches but no larger than 30 by 42 inches.
  3. Submit Shop Drawings in the following format:

- a. PDF electronic file.
- D. Samples: Submit Samples for review of kind, color, pattern, and texture for a check of these characteristics with other elements and for a comparison of these characteristics between submittal and actual component as delivered and installed.
- 1. Transmit Samples that contain multiple, related components such as accessories together in one submittal package.
  - 2. Identification: Attach label on unexposed side of Samples that includes the following:
    - a. Generic description of Sample.
    - b. Product name and name of manufacturer.
    - c. Sample source.
    - d. Number and title of applicable Specification Section.
  - 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.
    - 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 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 three sets of Samples. Architect and Owner will each retain one Sample set; remainder will be returned.
      - 1) If variation in color, pattern, texture, or other characteristic is inherent in material or product represented by a Sample, submit at least three sets of paired units that show approximate limits of variations.

- E. Product Schedule: As required in individual Specification Sections, prepare a written summary indicating types of products required for the Work and their intended location. Include the following information in tabular form:
  - 1. Submit product schedule in the following format:
    - a. PDF electronic file.
- F. Contractor's Construction Schedule: Comply with requirements specified in Division 1 Section "Construction Progress Documentation."
- G. Application for Payment: Comply with requirements specified in Division 1 Section "Payment Procedures."
- H. Schedule of Values: Comply with requirements specified in Division 1 Section "Payment Procedures."
- I. Subcontract 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.
- J. Coordination Drawings: Comply with requirements specified in Division 1 Section "Project Management and Coordination."
- K. 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.
- L. 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 American Welding Society (AWS) forms. Include names of firms and personnel certified.
- M. 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.
- N. 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.
- O. Product Certificates: Submit written statements on manufacturer's letterhead certifying that product complies with requirements in the Contract Documents.
- P. Material Certificates: Submit written statements on manufacturer's letterhead certifying that material complies with requirements in the Contract Documents.
- Q. 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.

- R. Product Test Reports: Submit written reports indicating 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.
- S. 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.
- T. Schedule of Tests and Inspections: Comply with requirements specified in Division 1 Section "Quality Requirements."
- U. 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.
- V. 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.
- W. Field Test Reports: Submit 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.
- X. Maintenance Data: Comply with requirements specified in Division 1 Section "Operation and Maintenance Data."
- Y. Design Data: Prepare and submit written and graphic information, including, but not limited to, performance and design criteria, list of applicable codes and regulations, and calculations. Include list of assumptions and other performance and design criteria and a summary of loads. Include load diagrams if applicable. Provide name and version of software, if any, used for calculations. Include page numbers.

## 2.2 DELEGATED-DESIGN SERVICES

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

1. Indicate that products and systems comply with performance and design criteria in the Contract Documents. Include list of codes, loads, and other factors used in performing these services.

## PART 3 - EXECUTION

### 3.1 CONTRACTOR'S REVIEW

- A. Action and Informational Submittals: Review each submittal and check for coordination with other Work of the Contract and for compliance with the Contract Documents. Note corrections and field dimensions. Mark with **approval** stamp before submitting to Architect, if **approval** is not indicated the submittal will be returned with no action taken.
- B. Project Closeout and Maintenance/Material Submittals: Refer to requirements in Division 1 Section "Closeout Procedures."
- C. Approval Stamp: Stamp each submittal with a uniform, approval stamp. Include Project name and location, submittal number, Specification Section title and number, name of reviewer, date of Contractor's approval, and statement certifying that submittal has been reviewed, checked, and approved for compliance with the Contract Documents.

### 3.2 ARCHITECT'S ACTION

- A. General: Architect will not review submittals that do not bear Contractor's **approval** stamp and will return them without action.
- B. Action Submittals: Architect will review each submittal, make marks to indicate corrections or modifications required, and return it. Architect will stamp each submittal with an action stamp and will mark stamp appropriately to indicate action.
- C. Incomplete submittals are not acceptable, will be considered nonresponsive, and will be returned without review.
- D. Submittals not required by the Contract Documents may not be reviewed and may be discarded.

**END OF SECTION 01330**

## SECTION 01400 - QUALITY REQUIREMENTS

### 1.1 GENERAL

- A. 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. Quality-control services do not include contract enforcement activities performed by Architect.
  
- B. Reports: Prepare and submit certified written reports that 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. Ambient conditions at time of sample taking and testing and inspecting.
  - 11. Comments or professional opinion on whether tested or inspected Work complies with the Contract Document requirements.
  - 12. Name and signature of laboratory inspector.
  - 13. Recommendations on retesting and reinspection.
  
- C. 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.
  
- D. Fabricator Qualifications: A firm experienced in producing products similar to those indicated for this Project and with a record of successful in-service performance, as well as sufficient production capacity to produce required units.
  
- E. 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.
  
- F. Installer Qualifications: A firm or individual experienced in installing, erecting, or assembling work similar in material, design, and extent to that indicated for this Project, whose work has resulted in construction with a record of successful in-service performance.

- G. **Manufacturer Qualifications:** A firm experienced in manufacturing products or systems similar to those indicated for this Project and with a record of successful in-service performance.
- H. **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.
- I. **Testing Agency Qualifications:** An agency with the experience and capability to conduct testing and inspecting indicated, as documented by ASTM E 548, and that specializes in types of tests and inspections to be performed.
- J. **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 the 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.
- K. **Contractor Responsibilities:** Unless otherwise indicated, provide quality-control services specified and required by authorities having jurisdiction.
  - 1. Where services are indicated as Contractor's responsibility, engage a qualified testing agency to perform these quality-control services.
    - a. Contractor shall not employ the same entity engaged by Owner, unless agreed to in writing by Owner.
  - 2. Notify testing agencies at least 24 hours in advance of time when Work that requires testing or inspecting will be performed.
  - 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.
- L. **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.
- M. **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 revised or replaced Work that failed to comply with requirements established by the Contract Documents.

- N. 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. Interpret tests and inspections and state in each report whether tested and inspected work complies with or deviates from requirements.
  3. Submit a certified written report, in duplicate, of each test, inspection, and similar quality-control service through Contractor.
  4. Do not release, revoke, alter, or increase requirements of the Contract Documents or approve or accept any portion of the Work.
  5. Do not perform any duties of Contractor.
- O. Associated Services: Cooperate with agencies performing required tests, inspections, and similar quality-control services, and provide reasonable auxiliary services as requested. Notify agency sufficiently in advance of operations to permit assignment of personnel. Provide the following:
1. Access to the Work.
  2. Incidental labor and facilities necessary to facilitate tests and inspections.
  3. Adequate quantities of representative samples of materials that require testing and inspecting. Assist agency in obtaining samples.
  4. Facilities for storage and field-curing of test samples.
  5. Delivery of samples to testing agencies.
  6. Preliminary design mix proposed for use for material mixes that require control by testing agency.
  7. Security and protection for samples and for testing and inspecting equipment at Project site.
- P. Coordination: Coordinate sequence of activities to accommodate required quality-assurance and quality-control services with a minimum of delay and to avoid necessity of removing and replacing construction to accommodate testing and inspecting.
1. Schedule times for tests, inspections, obtaining samples, and similar activities.

## 1.2 EXECUTION

- A. Repair and Protection: On completion of testing, inspecting, sample taking, and similar services, repair damaged construction and restore substrates and finishes.
1. Provide materials and comply with installation requirements specified in other Sections of these Specifications. Restore patched areas and extend restoration into adjoining areas in a manner that eliminates evidence of patching.
  2. Protect construction exposed by or for quality-control service activities.
  3. Repair and protection are Contractor's responsibility, regardless of the assignment of responsibility for quality-control services.

**END OF SECTION**

## SECTION 014200 - REFERENCES

### 1.1 GENERAL

- A. General: Basic Contract definitions are included in the Conditions of the Contract.
- B. "Approved," when used in conjunction with Architect's action on Contractor's submittals, applications, and requests, is limited to Architect's duties and responsibilities as stated in the Conditions of the Contract.
- C. "Directed," "requested," "authorized," "selected," "approved," "required," and "permitted" mean directed by Architect, requested by Architect, and similar phrases.
- D. "Indicated" refers to graphic representations, notes, or schedules on Drawings; or to other paragraphs or schedules in Specifications and similar requirements in the Contract Documents. Terms such as "shown," "noted," "scheduled," and "specified" are used to help the user locate the reference.
- E. "Regulations" include laws, ordinances, statutes, and lawful orders issued by authorities having jurisdiction, as well as rules, conventions, and agreements within the construction industry that control performance of the Work.
- F. "Furnish" means to supply and deliver to Project site, ready for unloading, unpacking, assembly, installation, and similar operations.
- G. "Install" describes operations at Project site including unloading, temporary storage, unpacking, assembling, erecting, placing, anchoring, applying, working to dimension, finishing, curing, protecting, cleaning, and similar operations.
- H. "Provide" means to furnish and install, complete and ready for the intended use.
- I. "Installer" is Contractor or another entity engaged by Contractor, as an employee, subcontractor, or contractor of lower tier, to perform a particular construction operation, including installation, erection, application, and similar operations.
  - 1. 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 trades people of the corresponding generic name.
- J. "Project site" is the space available for performing construction activities, either exclusively or in conjunction with others performing other work as part of Project. The extent of Project site is described within the Drawings and does not include access or use of all of the land and facilities on which Project is to be sited.
- K. Industry 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.

- L. Publication Dates: Comply with standards in effect as of the date of the Contract Documents.
- M. Conflicting Requirements: Where 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 the requirements. Refer uncertainties to Architect for a decision before proceeding.
- N. Copies of Standards: Copies of applicable standards are not bound with the Contract Documents. Where copies of standards are needed to perform a required construction activity, obtain copies directly from the publication source and make them available on request.
- O. Abbreviations and Names: Abbreviations and acronyms are frequently used in the Specifications and other Contract Documents to represent the name of a trade association, standards-developing organization, authorities having jurisdiction, or other entity in the context of referencing a standard or publication. Where abbreviations and acronyms are used in the Specifications or other Contract Documents, they mean the recognized name of these entities. Refer to Gale Research's "Encyclopedia of Associations" or Columbia Books' "National Trade & Professional Associations of the U.S.," which are available in most libraries.

## **END OF SECTION**

## **SECTION 015000 - TEMPORARY FACILITIES**

### 1.1 TEMPORARY FACILITIES

- A. Description of Requirements: Provide temporary services and facilities ready for use when first needed to avoid delay in the work. Maintain, expand and modify as needed. Do not remove until no longer needed, or replaced by authorized use of permanent facilities.
- B. Use Charges: Usage charges for temporary services or facilities, except telephone, to be paid by Owner.
- C. Regulations: Comply with requirements of local laws and regulations governing construction and local industry standards, in the installation and maintenance of temporary services and facilities.
- D. Standards: Comply with the requirements of NFPA Code 241, "Building Construction and Demolition Operations", the ANSI-A10 series standards for "Safety Requirements for Construction and Demolition", and the NECA, Electrical Design Library "Temporary Electrical Facilities".
- E. Installation: Use qualified tradesmen for installation. Locate temporary services and facilities where they will serve the project adequately and result in minimum interference with the work.
- F. Temporary Utility Installation: Existing water and electric services may be utilized.
- G. Power Distribution System: Provide circuits of proper sizes, characteristics, and ratings for each use indicated. Install wiring overhead, and risers vertically where least exposed to damage.
- H. Temporary Lighting: Provide general service incandescent lamps of wattage required for adequate illumination. Protect lamps with guard cages or tempered glass enclosures, where exposed to breakage.
- I. Temporary Telephones: As required by Contractor. Contractor must pay all use charges. At each telephone location post a list of operational and emergency telephone numbers.
- J. Temporary Construction Office: Establish a neat and uniform appearance in temporary construction office area and support facilities in a fashion acceptable to Owner. Trailers, if any, may be located in area as designated by Owner.
  - 1. Locate field offices, if any, storage and fabrication sheds and other support facilities in an area agreed upon by Owner and Contractor.
- K. Sanitary Facilities: Provide temporary toilet facilities for the entire duration of construction of the project.
- L. First Aid Supplies: Comply with governing regulations and recognized recommendations within the construction industry.
- M. Collection and Disposal of Wastes: Establish a system for daily collection and disposal of waste materials. Enforce requirements strictly. Do not hold collected materials longer than 7 days.

1. Burying or burning of waste materials on the site or washing waste material down sewers will not be permitted.
- N. Barricades, Warning Signs and Lights: Comply with recognized standards and code requirements for erection of substantial, barricades where needed to prevent accidents. Paint with appropriate colors and warning signs to inform personnel at the site and the public of the hazard being protected against. Provide lighting where needed, including flashing lights where appropriate of appropriate color to hazard involved.
- O. Temporary Partitions: Construction areas are to be dust tight isolated from occupied areas.
- P. Fire Protection: Install and maintain temporary fire protection of types needed to protect against predictable and controllable fire losses. Comply with NFPA 10 "Standard for Portable Fire Extinguishers" and NFPA 241 "Standard for Safeguarding Construction, Alterations and Demolition Operations".
1. Fire Extinguishers: Provide hand-carried, portable UL-rated, class "A" fire extinguishers for temporary offices and similar spaces. In other locations provide hand-carried, portable, UL-rated, class "ABC" dry chemical extinguishers. Locate fire extinguishers where effective for the intended purpose and safe protection of the construction project.
- Q. Operation: Enforce strict discipline in use of temporary facilities, limit availability to intended use to minimize abuse. Maintain facilities in operating condition until removal. Protect from damage by freezing temperatures and the elements.
1. Maintain operation of enclosures, heating, cooling, humidity control, ventilation and similar facilities on a 24-hour day basis to achieve indicated results and to avoid damage.
  2. Prevent piping from freezing. Maintain markers for underground lines. Protect from damage during excavation operations.
  3. Maintain enclosures so occupied areas of building are not disturbed in heating, cooling, humidity control, ventilation, power or lighting.
- R. Termination and Removal: Remove each facility when the need has ended, replaced by a permanent facility, or no later than Substantial Completion. Complete or restore construction delayed because of interference with the facility. Repair damaged work, clean exposed surfaces and replace construction that cannot be satisfactorily repaired.
1. Temporary facilities are property of the Contractor.
  2. At Substantial Completion, renovate permanent facilities used during construction period, including but not limited to:  
  
Replace air filters and clean inside of ductwork and housings.  
Replace worn parts and parts subject to unusual operating conditions.  
Replace lamps with new. (See also Electrical Requirements and Supplementary Conditions).  
Any HVAC unit providing ventilation to construction areas must be serviced with new, clean filters at time of delivery.

## END OF SECTION

## **SECTION 016000 - PRODUCT REQUIREMENTS**

### 1.1 GENERAL

#### A. Definitions: As follows:

1. Products: Items purchased for incorporating into the Work, whether purchased for Project or taken from previously purchased stock. The term "product" includes the terms "material," "equipment," "system," and terms of similar intent.
  - a. Named Products: Items identified by manufacturer's product name, including make or model number or other designation, shown or listed in manufacturer's published product literature, that is current as of date of the Contract Documents.
  - b. New Products: Items that have not previously been incorporated into another project or facility. Products salvaged or recycled from other projects are not considered new products.
  - c. Comparable Product: Product that is demonstrated and approved through submittal process, or where indicated as a product substitution, to have the indicated qualities related to type, function, dimension, in-service performance, physical properties, appearance, and other characteristics that equal or exceed those of specified product.
2. Substitutions: Changes in products, materials, equipment, and methods of construction from those required by the Contract Documents and proposed by Contractor.
3. Basis-of-Design Product Specification: Where a specific manufacturer's product is named and accompanied by the words "basis of design," including make or model number or other designation, to establish the significant qualities related to type, function, dimension, in-service performance, physical properties, appearance, and other characteristics for purposes of evaluating comparable products of other named manufacturers.
4. Manufacturer's Warranty: Preprinted written warranty published by individual manufacturer for a particular product and specifically endorsed by manufacturer to Owner.
5. Special Warranty: Written warranty required by or incorporated into the Contract Documents, either to extend time limit provided by manufacturer's warranty or to provide more rights for Owner.

#### B. Substitution Requests: Identify product or fabrication or installation method to be replaced. Include Specification Section number and title and Drawing numbers and titles.

1. See General Conditions and Supplemental Conditions of AIA Document A-201 for additional substitution requirements.

2. Requests by Contractor will be considered when reasonable, timely, fully documented and qualifying under one or more of the following circumstances:
  - A. Substitutions requested during the bidding period, and accepted prior to award of Contract.
  - B. Required product cannot be supplied in time for compliance with Contract time requirements.
  - C. Required product is not acceptable to governing authority, or determined to be non-compatible, or cannot be properly coordinated, warranted or insured, or has other recognized disability as certified by Contractor.
  - D. Substantial advantage is offered Owner after deducting offsetting disadvantages including delays, additional compensation to Architect for redesign, investigation, evaluation and other necessary services and similar considerations.
  - E. The request is directly related to an "or equal" clause or similar language in the Contract Documents.
  
3. Documentation: Show compliance with requirements for substitutions and the following, as applicable:
  - a. Statement indicating why specified material or product cannot be provided.
  - b. Coordination information, including a list of changes or modifications needed to accommodate proposed substitution.
  - c. Detailed comparison of significant qualities of proposed substitution with those of the Work specified.
  - d. Product Data, including drawings and descriptions of products and fabrication and installation procedures.
  - e. Samples, where applicable or requested.
  - f. List of similar installations for completed projects with project names and addresses and names and addresses of architects and owners.
  - g. Material test reports from a qualified testing agency indicating and interpreting test results for compliance with requirements indicated.
  - h. Research/evaluation reports evidencing compliance with building code in effect for Project, from a model code organization acceptable to authorities having jurisdiction.
  - i. Detailed comparison of Contractor's Construction Schedule using proposed substitution with products specified for the Work, including effect on the overall Contract Time.
  - j. Cost information, including a proposal of change, if any, in the Contract Sum.
  - k. Contractor's certification that proposed substitution complies with requirements in the Contract Documents and is appropriate for applications indicated.
  - l. Contractor's waiver of rights to additional payment or time that may subsequently become necessary because of failure of proposed substitution to produce indicated results.
  
5. Architect's Action: If necessary, Architect will request additional information or documentation for evaluation within one week of receipt of a request for substitution. Architect will notify Contractor of acceptance or rejection of

proposed substitution within 15 days of receipt of request, or 7 days of receipt of additional information or documentation, whichever is later.

- a. Form of Acceptance: Change Order.
  - b. Use product specified if Architect cannot make a decision on use of a proposed substitution within time allocated.
- C. Basis-of-Design Product Specification Submittal: Comply with requirements in Division 1 Section "Submittal Procedures." Show compliance with requirements.
- D. Compatibility of Options: If Contractor is given option of selecting between two or more products for use on Project, product selected shall be compatible with products previously selected, even if previously selected products were also options.
- E. Product Delivery, Storage, and Handling: Use means and methods that will prevent damage, deterioration, and loss, including theft. Comply with manufacturer's written instructions.
1. Schedule delivery to minimize long-term storage at Project site and to prevent overcrowding of construction spaces.
  2. Coordinate delivery with installation time to ensure minimum holding time for items that are flammable, hazardous, easily damaged, or sensitive to deterioration, theft, and other losses.
  3. Deliver products to Project site in an undamaged condition in manufacturer's original sealed container or other packaging system, complete with labels and instructions for handling, storing, unpacking, protecting, and installing.
  4. Inspect products on delivery to ensure compliance with the Contract Documents and to ensure that products are undamaged and properly protected.
  5. Store products to allow for inspection and measurement of quantity or counting of units.
  6. Store materials in a manner that will not endanger Project structure.
  7. Store products that are subject to damage by the elements, under cover in a weathertight enclosure above ground, with ventilation adequate to prevent condensation.
  8. Comply with product manufacturer's written instructions for temperature, humidity, ventilation, and weather-protection requirements for storage.
  9. Protect stored products from damage.
- F. Product Warranties: Warranties specified in other Sections shall be in addition to, and run concurrent with, other warranties required by the Contract Documents. Manufacturer's disclaimers and limitations on product warranties do not relieve Contractor of obligations under requirements of the Contract Documents.

1. Special Warranties: Prepare a written document that contains appropriate terms and identification, ready for execution. Submit a draft for approval before final execution.
    - a. Manufacturer's Standard Form: Modified to include Project-specific information and properly executed.
    - b. Specified Form: Forms are included with the Specifications. Prepare a written document using appropriate form properly executed.
    - c. Refer to Divisions 2 through 16 Sections for specific content requirements and particular requirements for submitting special warranties.
  4. Submittal Time: Comply with requirements in Division 1 Section "Closeout Procedures."
- G. Nameplates: Where indicated or needed for operation and maintenance, provide permanent nameplates on equipment, located in inconspicuous but accessible places and containing suitable information and operational data. Otherwise, do not allow manufacturer's trademarks or similar labels or nameplates to be placed on products in locations where exposed to view after installation.

## 1.2 PRODUCTS

- A. General Product Requirements: Provide products that comply with the Contract Documents, that are undamaged, and unless otherwise indicated, that are new at time of installation.
1. Provide products complete with accessories, trim, finish, fasteners, and other items needed for a complete installation and indicated use and effect.
  2. Standard Products: If available, and unless custom products or nonstandard options are specified, provide standard products of types that have been produced and used successfully in similar situations on other projects.
  3. Owner reserves the right to limit selection to products with warranties not in conflict with requirements of the Contract Documents.
  4. Where products are accompanied by the term "as selected," Architect will make selection.
  5. Where products are accompanied by the term "match sample," sample to be matched is Architect's.
  6. Any reference to the term "or equal" is to be as interpreted by the Architect.
  7. Descriptive, performance, and reference standard requirements in the Specifications establish "salient characteristics" of products.
- B. Product Selection Procedures: Procedures for product selection include the following:

1. Product: Where Specification paragraphs or subparagraphs titled "Product" name a single product and manufacturer, provide the product named.
2. Manufacturer/Source: Where Specification paragraphs or subparagraphs titled "Manufacturer" or "Source" name single manufacturers or sources, provide a product by the manufacturer or from the source named that complies with requirements.
  - a. Substitutions may be considered, unless otherwise indicated.
3. Products: Where Specification paragraphs or subparagraphs titled "Products" introduce a list of names of both products and manufacturers, provide one of the products listed that complies with requirements.
4. Manufacturers: Where Specification paragraphs or subparagraphs titled "Manufacturers" introduce a list of manufacturers' names, provide a product by one of the manufacturers listed that complies with requirements.
5. Available Products: Where Specification paragraphs or subparagraphs titled "Available Products" introduce a list of names of both products and manufacturers, provide one of the products listed or another product that complies with requirements. Comply with provisions in "Comparable Products" Paragraph to obtain approval for use of an unnamed product.
6. Available Manufacturers: Where Specification paragraphs or subparagraphs titled "Available Manufacturers" introduce a list of manufacturers' names, provide a product by one of the manufacturers listed or another manufacturer that complies with requirements. Comply with provisions in "Comparable Products" Paragraph to obtain approval for use of an unnamed product.
7. Product Options: Where Specification paragraphs titled "Product Options" indicate that size, profiles, and dimensional requirements on Drawings are based on a specific product or system, provide either the specific product or system indicated or a comparable product or system by another manufacturer. Comply with provisions in "Product Substitutions" Paragraph.
8. Basis-of-Design Products: Where Specification paragraphs or subparagraphs titled "Basis-of-Design Product[s]" are included and also introduce or refer to a list of manufacturers' names, provide either the specified product or a comparable product by one of the other named manufacturers. Drawings and Specifications indicate sizes, profiles, dimensions, and other characteristics that are based on the product named. Comply with provisions in "Comparable Products" Paragraph to obtain approval for use of an unnamed product.
9. Visual Matching Specification: Where Specifications require matching an established Sample, select a product (and manufacturer) that complies with requirements and matches Architect's sample. Architect's decision will be final on whether a proposed product matches satisfactorily.

- a. If no product available within specified category matches satisfactorily and complies with other specified requirements, comply with provisions of the Contract Documents on "substitutions" for selection of a matching product.
10. Visual Selection Specification: Where Specifications include the phrase "as selected from manufacturer's colors, patterns, textures" or a similar phrase, select a product (and manufacturer) that complies with other specified requirements.
- a. Standard Range: Where Specifications include the phrase "standard range of colors, patterns, textures" or similar phrase, Architect will select color, pattern, or texture from manufacturer's product line that does not include premium items.
  - b. Full Range: Where Specifications include the phrase "full range of colors, patterns, textures" or similar phrase, Architect will select color, pattern, or texture from manufacturer's product line that includes both standard and premium items.
1. Conditions: Architect will consider Contractor's request for substitution when the following conditions are satisfied. If the following conditions are not satisfied, Architect will return requests without action, except to record noncompliance with these requirements:
- a. Requested substitution offers Owner a substantial advantage in cost, time, energy conservation, or other considerations, after deducting additional responsibilities Owner must assume. Owner's additional responsibilities may include compensation to Architect for redesign and evaluation services.
  - b. Requested substitution does not require extensive revisions to the Contract Documents.
  - c. Requested substitution is consistent with the Contract Documents and will produce indicated results.
  - d. Substitution request is fully documented and properly submitted.
  - e. Requested substitution will not adversely affect Contractor's Construction Schedule.
  - f. Requested substitution has received necessary approvals of authorities having jurisdiction.
  - g. Requested substitution is compatible with other portions of the Work.
  - h. Requested substitution has been coordinated with other portions of the Work.
  - i. Requested substitution provides specified warranty.
- C. Comparable Products: Where products or manufacturers are specified by name, submit the following, in addition to other required submittals, to obtain approval of an unnamed product:
- 1. Evidence that the proposed product does not require extensive revisions to the Contract Documents, that it is consistent with the Contract Documents and will produce the indicated results, and that it is compatible with other portions of the Work.

2. Detailed comparison of significant qualities of proposed product with those named in the Specifications. Significant qualities include attributes such as performance, weight, size, durability, visual effect, and specific features and requirements indicated.
3. Evidence that proposed product provides specified warranty.
4. List of similar installations for completed projects with project names and addresses and names and addresses of architects and owners, if requested.
5. Samples, if requested.

**END OF SECTION**

## **SECTION 017000 - EXECUTION REQUIREMENTS**

### 1.1 EXECUTION

- A. Existing Conditions: The existence and location of existing conditions, utilities, and other construction indicated as existing are not guaranteed. Before beginning work, investigate and verify the existence and location of mechanical and electrical systems and other construction affecting the Work.
- B. Existing Utilities: The existence and location of other utilities and construction indicated as existing are not guaranteed. Before beginning work, investigate and verify the existence and location of utilities and other construction affecting the Work. Call Miss Dig to identify underground utilities prior to any excavation.
- C. Acceptance of Conditions: 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. Verify compatibility with and suitability of substrates, including compatibility with existing finishes or primers.
  - 2. Examine roughing-in for mechanical and electrical systems to verify actual locations of connections before equipment and fixture installation.
  - 3. Proceed with installation only after unsatisfactory conditions have been corrected. Proceeding with the Work indicates acceptance of surfaces and conditions.
- D. Existing Utility Information: Furnish information to Owner that is necessary to adjust, move, or relocate existing utility lines, services, or other utility appurtenances located in or affected by construction.
- E. 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.
- F. Review of Contract Documents and Field Conditions: Immediately on discovery of the need for clarification of the Contract Documents, submit a request for information to Architect. Include a detailed description of problem encountered, together with recommendations for changing the Contract Documents. Submit requests on CSI Form 13.2A, "Request for Interpretation."
  - 1. "Request for Interpretations" or "RFI's" will not be allowed to be used as Contractor's vehicle to assign work to his Subcontractors or employees because of disagreeable project management necessity. Architect will not do the Contractor's management duties via RFI process and abuse of the RFI process, by Contractors when the work is generally inferred or apparent in the contract documents, may result in an Owner stop work order to resolve the situation and such condition will not be subject to a Change Order.

- G. Reference Points: Locate existing control points and similar reference points before beginning the Work. Preserve and protect permanent benchmarks and control points during construction operations.
  
- H. Installation: 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. Comply with manufacturer's written instructions and recommendations for installing products in applications indicated.
  - 5. Anchors and Fasteners: Provide anchors and fasteners as required to anchor each component securely in place, accurately located and aligned with other portions of the Work.
    - a. Mounting Heights: Where mounting heights are not indicated, mount components at heights directed by Architect.
    - b. Allow for building movement, including thermal expansion and contraction.
  - 6. 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.
  - 7. Hazardous Materials: Use products, cleaners, and installation materials that are not considered hazardous.
  
- I. Progress Cleaning: Clean Project site and work areas daily, including common areas. Coordinate progress cleaning for joint-use areas where more than one installer has worked. 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 materials more than 7 days during normal weather or 3 days if the temperature is expected to rise above 80 deg F.
  - 3. Containerize hazardous and unsanitary waste materials separately from other waste. Mark containers appropriately and dispose of legally, according to regulations.
  - 4. Where dust would impair proper execution of the Work, broom-clean or vacuum the entire work area, as appropriate.
  - 5. 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.
  - 6. Concealed Spaces: Remove debris from concealed spaces before enclosing the space.
  - 7. Waste Disposal: Burying or burning waste materials on-site will not be permitted. Washing waste materials down sewers or into waterways will not be permitted.
  
- J. Starting and Adjusting: Start equipment and operating components to confirm proper operation. Remove malfunctioning units, replace with new units, and retest.

1. Adjust operating components for proper operation without binding. Adjust equipment for proper operation.
- K. Protection of Installed Construction: Provide final protection and maintain conditions that ensure installed Work is without damage or deterioration at time of Substantial Completion.
- L. Correction of the Work: Repair or remove and replace defective construction. Restore damaged substrates and finishes. Comply with requirements in Division 1 Section "Cutting and Patching."
1. Repairing includes replacing defective parts, refinishing damaged surfaces, touching up with matching materials, and properly adjusting operating equipment.
  2. Repair components that do not operate properly. Remove and replace operating components that cannot be repaired.

**END OF SECTION**

## **SECTION 017310 - CUTTING AND PATCHING**

### 1.1 GENERAL

- A. Cutting and Patching Proposal: Submit a proposal describing procedures at least 5 days before the time cutting and patching will be performed, requesting approval to proceed. Include a description of cutting and patching and changes to existing construction, a list of products to be used and firms or entities that will perform the Work, dates when cutting and patching will be performed, and a list of utilities that cutting and patching procedures will disturb or affect.
  - 1. Tie-in to existing systems shall be scheduled with the Owner at least 72 hours in advance. System shut down and tie-ins shall be with Owner's approval and in manner prescribed by the Owner. Insufficient advance notice for such Contractor actions are not warranted by the right to complete work when appropriate notice has not been given allowing the Owner appropriate time for preparatory actions relative to the disturbance.
- B. 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.
- C. Visual Requirements: Do not cut and patch construction in a manner that results in visual evidence of cutting and patching. Remove and replace construction that has been cut and patched in a visually unsatisfactory manner.

### 1.2 PRODUCTS

- A. General: Comply with requirements specified in other Sections of these Specifications.
- B. Existing Materials: Use materials identical to existing materials. For exposed surfaces, use materials that visually match existing adjacent surfaces to the fullest extent possible.
  - 1. If identical materials are unavailable or cannot be used, use materials that, when installed, will match the visual and functional performance of existing materials.

### 1.3 EXECUTION

- A. Examine surfaces to be cut and patched and conditions under which cutting and patching are to be performed.
  - 1. Compatibility: Before patching, verify compatibility with and suitability of substrates, including compatibility with existing finishes or primers.
  - 2. Proceed with installation only after unsafe or unsatisfactory conditions have been corrected.
- B. Temporary Support: Provide temporary support of Work to be cut.

- C. Protection: Protect existing 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.
- D. Adjoining Areas: Avoid interference with use of adjoining areas or interruption of free passage to adjoining areas.
- E. Existing Services: Where existing services are required to be removed, relocated, or abandoned, bypass such services before cutting to avoid interruption of services to occupied areas.
- F. Performance: Employ skilled workers to perform cutting and patching. Proceed with cutting and patching at the earliest feasible time, and complete without delay.
  - 1. Cut existing 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.
- G. Cutting: Cut existing 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 as small as possible, neatly to size required, and with minimum disturbance of adjacent surfaces. Temporarily cover openings when not in use.
  - 2. Existing Finished Surfaces: Cut or drill from the exposed or finished side into concealed surfaces.
  - 3. Concrete and Masonry: Cut using a cutting machine, such as an abrasive saw or a diamond-core drill.
  - 4. Proceed with patching after construction operations requiring cutting are complete.
- 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 possible. Provide materials and comply with installation requirements specified in other Sections of these Specifications.
  - 1. Inspection: Where feasible, test and inspect patched areas after completion to demonstrate 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 eliminate evidence of patching and refinishing.
- I. Cleaning: Thoroughly clean areas and spaces where cutting and patching is performed or used as access.

**END OF SECTION**

## SECTION 017400 - WARRANTIES

### 1.1 GENERAL DEFINITIONS

- A. Standard Product Warranties are preprinted written warranties published by individual manufacturers for particular products and are specifically endorsed by the manufacturer to the Owner.
- B. Special Warranties are written warranties required by or incorporated in Contract Documents, to extend time limits provided by standard warranties or to provide greater rights for the Owner.
  - 1. Refer to the General Conditions for terms of the Contractor's special warranty of workmanship and materials.
- C. Requirements for warranties for products and installations that are specified to be warranted, are included in the individual Sections of Division 2 through 16.

### 1.2 WARRANTIES

- A. Disclaimers and Limitations: Manufacturer's disclaimers and limitations on product warranties do not relieve the Contractor of the warranty on the work that incorporates the products, nor does it relieve suppliers, manufacturers and subcontractors required to countersign special warranties with the Contractor.
- B. Related Damages and Losses: When correcting warranted work that has failed, remove and replace other work that has been damaged as a result of such failure or that must be removed and replaced to provide access for correction of warranted work.
- C. Reinstatement of Warranty: When work covered by a warranty has failed and been corrected, reinstate the warranty by written endorsement. The reinstated warranty shall be equal to the original warranty with an equitable adjustment for depreciation.
- D. Replacement Cost: On determination that work covered by a warranty has failed, replace or rebuild the work to an acceptable condition complying with requirements of Contract Documents. The Contractor is responsible for the cost of replacing or rebuilding defective work regardless of whether the Owner has benefited from use of the work through part of its useful service life.
- E. Owner's Recourse: Written warranties made to the Owner are in addition to implied warranties, and shall not limit duties, obligations, rights and remedies otherwise available under the law, nor shall warranty periods be interpreted as limitations on the time in which the Owner can enforce such other duties, obligations, rights or remedies.
- F. Rejection of Warranties: The Owner reserves the right to reject warranties and limit selections to products with warranties not in conflict with requirements of the Contract Documents.

- G. Submit written warranties to the Architect prior to the date certified for Substantial Completion. If the Architect's Certificate of Substantial Completion designates a commencement date for warranties other than the date of Substantial Completion, submit written warranties on the Architect's request.
1. When a designated portion of the work is completed and occupied or used, by separate agreement with the Contractor during the construction period, submit properly executed warranties to the Architect within fifteen days of completion of that designated portion of the work.
  2. When a special warranty is to be executed by the Contractor, or the Contractor and a Subcontractor, supplier or manufacturer, prepare a written document that contains appropriate terms and identification, ready for execution by the required parties. Final execution must be under notarized signatures for all required parties.
- H. The Contractor warrants to the Owner that materials and equipment furnished under the Contract will be of good quality and new and that the work will be free from defects not inherent in the quality required or permitted, and that the work will conform with the requirements of the Contract Documents. Work not conforming to these requirements, including substitutions not properly approved and authorized, may be considered defective. The Contractor's warranty excludes remedy for damage or defect caused by abuse, modifications not executed by the Contractor, improper or insufficient maintenance, improper operation, or normal wear and tear under normal usage. If required by the Owner, the Contractor shall furnish satisfactory evidence as to the kind and quality of materials and equipment.
- I. The Contractor shall, for a period of one year following the Date of Substantial Completion, and upon written notice from the Owner, return to correct defective or nonconforming work, as previously described, with the Contractor's own forces. The Contractor's obligations to correct defective or nonconforming work shall be further extended to include work under additional warranties required by the Contract Documents which exceed one year in duration. The Contractor may perform correction of defective or nonconforming under such additional warranties with forces other than the Contractor's. The Contractor's obligation to correct such defective or nonconforming work shall survive acceptance of the work under the Contract and termination of the Contract.

The Statutory Limitation period shall commence to run upon the date of the issuance of the Final certificate for Payment and any cause of action shall be deemed to have accrued no later than: (a) the date of any act or failure to act by the Contractor under any warranty; (b) the date of any correction of the Work or failure to correct the Work by the Contractor under the preceding paragraph; (c) the date of the actual commission of any other act or failure to perform any duty or obligation by the Contractor or Owner; whichever occurs last.

- J. When operating and maintenance manuals are required for warranted construction, provide additional copies of each warranty, as necessary, for inclusion in each required manual.

**END OF SECTION**

## SECTION 017700 - CLOSEOUT PROCEDURES

### 1.1 GENERAL

- A. Substantial Completion: Before requesting inspection for determining date of Substantial Completion complete the following.
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. Do not submit if Punch List is more than 5 items. If Punch List is more than 5 items project is not ready as substantially complete and Substantial Completion will be delayed by this action until Punch List is a reasonable 5 items or less. Any such delay will not be an allowed basis for Change Order. Five items must not be critical to Owner's mission use.
  2. Advise Owner of pending insurance changeover requirements.
  3. Submit specific warranties, workmanship bonds, maintenance service agreements, final certifications, and similar documents.
  4. Obtain and submit releases permitting Owner unrestricted use of the Work and access to services and utilities.
  5. Prepare and submit Project Record Documents, operation and maintenance manuals, and similar final record information.
  6. Deliver tools, spare parts, extra materials, and similar items to location designated by Owner. Label with manufacturer's name and model number where applicable.
  7. Make final changeover of permanent locks and deliver keys to Owner. Advise Owner's personnel of changeover in security provisions.
  8. Complete startup testing of systems.
  9. Submit test/adjust/balance records.
  10. Terminate and remove temporary facilities from Project site, along with construction tools, and similar elements.
  11. Submit changeover information related to Owner's occupancy, use, operation, and maintenance.
  12. Complete final cleaning requirements, including touchup painting.
  13. Touch up and otherwise repair and restore marred exposed finishes to eliminate visual defects.
- B. Substantial Completion Inspection: Submit a written request for inspection for Substantial Completion. 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. Re-inspection: Request re-inspection when the Work identified in previous inspections as incomplete is completed or corrected.
  2. Results of completed inspection will form the basis of requirements for Final Completion.
  3. Architect will not do the Contractor's work of coordinating final directions via Architect Punch List. Punch List will be minor and minimum remaining items only or work is not ready as substantially complete.

- C. Final Completion: Before requesting final inspection for determining date of Final Completion, complete the following:
1. Submit a final Application for Payment according to Division 1 Section "Payment Procedures."
  2. Submit certified copy of Architect's Substantial Completion inspection list of items to be completed or corrected (punch list), endorsed and dated by Architect. The certified copy of the list shall state that each item has been completed or otherwise resolved for acceptance.
  3. Submit evidence of final, continuing insurance coverage complying with insurance requirements.
  4. Instruct Owner's personnel in operation, adjustment, and maintenance of products, equipment, and systems.
  5. Submit consent of surety to final payment.
- D. Final Completion Inspection: Submit a written request for final inspection for acceptance. 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. Re-inspection: Request re-inspection when the Work identified in previous inspections as incomplete is completed or corrected.
  2. See earlier comments this Section on minimum Punch List.
- E. List of Incomplete Items (Punch List): Submit three copies 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.
  2. Organize items applying to each space by major element, including categories for ceiling, individual walls, floors, equipment, and building systems.
- F. Project Record Documents: Do not use Project Record Documents for construction purposes. Protect Project Record Documents from deterioration and loss. Provide access to Project Record Documents for Architect's reference during normal working hours.
- G. Record Drawings: Maintain and submit one set of blue- or black-line white prints of Contract Drawings and Shop Drawings.
1. Mark Record Prints to show the actual installation where installation varies from that shown originally. Require individual or entity who obtained record data, whether individual or entity is Installer, subcontractor, or similar entity, to prepare the marked-up Record Prints.
    - a. Give particular attention to information on concealed elements that cannot be readily identified and recorded later.

2. Mark record sets with erasable, red-colored pencil. Use other colors to distinguish between changes for different categories of the Work at the same location.
  3. Identify and date each Record Drawing; include the designation "PROJECT RECORD DRAWING" in a prominent location. Organize into manageable sets; bind each set with durable paper cover sheets. Include identification on cover sheets.
- H. Record Specifications: Submit one copy of Project's Specifications, including addenda and contract modifications. Mark copy to indicate the actual product installation where installation varies from that indicated in Specifications, addenda, and contract modifications.
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.
- I. Operation and Maintenance Manuals: Assemble a complete set of operation and maintenance data indicating the operation and maintenance of each system, subsystem, and piece of equipment not part of a system. Include operation and maintenance data required in individual Specification Sections and as follows:
1. Operation Data: Include emergency instructions and procedures, system and equipment descriptions, operating procedures, and sequence of operations.
  2. Maintenance Data: Include manufacturer's information, list of spare parts, maintenance procedures, maintenance and service schedules for preventive and routine maintenance, and copies of warranties and bonds.
  3. Organize operation and maintenance manuals into suitable sets of manageable size. Bind and index data in heavy-duty, 3-ring, vinyl-covered, loose-leaf binders, in thickness necessary to accommodate contents, with pocket inside the covers to receive folded oversized sheets. Identify each binder on front and spine with the printed title "OPERATION AND MAINTENANCE MANUAL," Project name, and subject matter of contents.
  4. Provide unless otherwise noted three copies of each manual this section.
- J. Warranties: 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.
1. Organize warranty documents into an orderly sequence based on the table of contents of the Project Manual.
  2. Bind warranties and bonds in heavy-duty, 3-ring, vinyl-covered, loose-leaf binders, thickness as necessary to accommodate contents, and sized to receive 8-1/2-by-11-inch paper.
  3. Provide unless otherwise noted three copies of each manual this section.

## 1.2 PRODUCTS

- 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.

### 1.3 EXECUTION

- A. Demonstration and Training: Instruct Owner's personnel to adjust, operate, and maintain systems, subsystems, and equipment not part of a system.
1. Provide instructors experienced in operation and maintenance procedures.
  2. Provide instruction at mutually agreed-on times. For equipment that requires seasonal operation, provide similar instruction at the start of each season.
  3. Schedule training with Owner, through Architect, with at least seven days' advance notice.
  4. Coordinate instructors, including providing notification of dates, times, length of instruction, and course content.
  5. Program Structure: Develop an instruction program that includes individual training modules for each system and equipment not part of a system, as required by individual Specification Sections. For each training module, develop a learning objective and teaching outline. Include instruction for system design and operational philosophy, review of documentation, operations, adjustments, troubleshooting, maintenance, and repair.
- B. Final Cleaning: Provide final cleaning. Conduct cleaning and waste-removal operations to comply with local laws and ordinances and Federal and local environmental and antipollution regulations.
1. 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.
  2. Complete the following cleaning operations before requesting inspection for certification of Substantial Completion for entire Project or for a 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 spills, stains, and other foreign deposits.
    - c. Rake grounds that are neither planted nor paved to a smooth, even-textured surface.
    - d. Remove construction equipment and surplus material from Project site.
    - e. Clean exposed exterior and interior hard-surfaced finishes to a dirt-free condition, free of stains.
    - f. Clean exposed interior hard surfaced finishes to a dust-free condition.
    - g. Remove debris and surface dust from limited access spaces.
    - h. Sweep concrete floors broom clean and wash them clean in unoccupied spaces.
    - i. Vacuum carpet and similar soft surfaces; shampoo if visible soil or stains remain.
    - j. Clean, wash and wax VCT floors.
    - k. Clean and wash clean Sheet Vinyl floors.
    - l. Clean transparent materials, including mirrors and glass. Remove glazing compounds and other noticeable, vision-obscuring materials. Replace chipped or broken transparent materials. Polish mirrors and glass.

- m. Remove labels that are not permanent.
  - n. Touch up and otherwise repair and restore marred, exposed finishes and surfaces. Replace finishes and surfaces that cannot be satisfactorily repaired or restored.
    - 1) Do not paint over "UL" and similar labels, including mechanical and electrical nameplates.
  - o. Wipe surfaces of mechanical and electrical equipment, and similar equipment. Remove excess lubrication and foreign substances.
  - p. Clean plumbing fixtures to a sanitary condition, free of stains.
  - q. Replace disposable air filters and clean permanent air filters.
  - r. Clean light fixtures, lamps, globes, and reflectors. Replace all bulbs and defective and noisy starters in fluorescent and mercury vapor fixtures to comply with requirements for new fixtures. Note: bulbs in fixtures for extended periods of time during construction will be rejected. New bulbs are required immediate to Substantial Completion.
- C. Comply with safety standards for cleaning. Do not burn waste materials. Do not bury debris or excess materials on Owner's property. Do not discharge volatile, harmful, or dangerous materials into drainage systems. Remove waste materials from Project site and dispose of lawfully.

**END OF SECTION**