

**PROJECT MANUAL  
FOR**

**PUBLIC WORKS FAÇADE IMPROVEMENTS  
201 S. BOULEVARD  
OAK PARK, ILLINOIS 60302**

**OWNER**

**VILLAGE OF OAK PARK  
123 MADISON STREET  
OAK PARK, ILLINOIS 60302**

**ARCHITECT / ENGINEER**

**KLUBER, INC.  
41 W. BENTON STREET  
AURORA, ILLINOIS 60506**



**BID & PERMIT – 05/15/2024**

**SECTION 00 01 01  
PROJECT TITLE PAGE**

**PROJECT MANUAL**

**FOR**

**PUBLIC WORKS FACADE IMPROVEMENTS**

**201 SOUTH BOULEVARD**

**OAK PARK, ILLINOIS 60302**

**OWNER**

**VILLAGE OF OAK PARK**

**201 SOUTH BOULEVARD**

**OAK PARK, ILLINOIS 60302**

**ARCHITECT / ENGINEER**

**KLUBER ARCHITECTS + ENGINEERS**

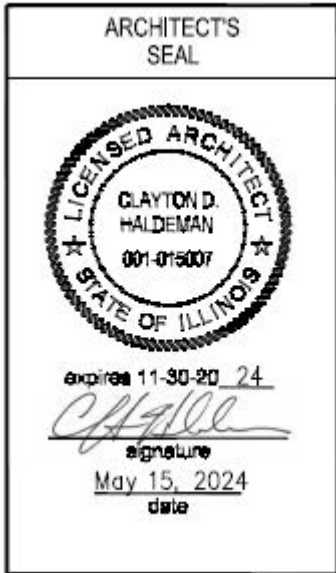
**41 W. BENTON STREET**

**AURORA, ILLINOIS 60506**

**END OF DOCUMENT**

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SEALS PAGE

1.01 DESIGN PROFESSIONALS' SEALS  
A. ARCHITECT



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A700 EXTERIOR BUILDING ELEVATIONS

A710 EXTERIOR BUILDING ELEVATIONS

A1200 PHOTO DETAILS

**END OF DOCUMENT**

**SECTION 00 31 13  
PRELIMINARY SCHEDULE**

**1.01 GENERAL**

- A. The following represents the preliminary construction schedule for the Work. This schedule is the current estimate of the Owner to be used for purposes of bidding. All Bidders shall include the costs of all overtime, double-shift, or so-called "premium" time that may be necessary to meet this milestone.

**1.02 PRELIMINARY SCHEDULE**

- A. Award of Contract: July 30, 2024
- B. Commencement of Construction: Week of August 5, 2024
- C. Substantial Completion: October 18, 2024

**END OF DOCUMENT**

**SECTION 01 10 00  
SUMMARY**

**PART 1 GENERAL**

**1.01 PROJECT**

- A. Project Name: PUBLIC WORKS FACADE IMPROVEMENTS.
- B. Owner's Name: VILLAGE OF OAK PARK.
- C. Architect/Engineer's Name: Kluber Architects + Engineers.
- D. The Project consists of the exterior facade repairs consisting of masonry, tuckpointing, sealants and wood beam and soffits restorations of the existing public works facility.

**1.02 CONTRACT DESCRIPTION**

- A. Refer to Owner's bidding and procurements requirements.

**1.03 DESCRIPTION OF ALTERATIONS WORK**

- A. Scope of alterations work is indicated on drawings.

**1.04 OWNER OCCUPANCY**

- A. Owner intends to continue to occupy adjacent portions of the existing building during the entire construction period.
- B. Cooperate with Owner to minimize conflict and to facilitate Owner's operations.
- C. Schedule the Work to accommodate Owner occupancy.

**PART 2 PRODUCTS - NOT USED**

**PART 3 EXECUTION - NOT USED**

**END OF SECTION**

**SECTION 01 20 00  
PRICE AND PAYMENT PROCEDURES**

**PART 1 GENERAL**

**1.01 SECTION INCLUDES**

- A. Procedures for preparation and submittal of applications for progress payments.
- B. Documentation of changes in Contract Sum and Contract Time.
- C. Change procedures.
- D. Correlation of Contractor submittals based on changes.
- E. Procedures for preparation and submittal of application for final payment.

**1.02 RELATED REQUIREMENTS**

- A. Owner's bidding and procurement requirements.
- B. Section 01 78 00 - Closeout Submittals: Project record documents.
- C. Section 01 77 00 - Closeout Procedures: Final Payment.

**1.03 SCHEDULE OF VALUES**

- A. Use Schedule of Values Form: AIA G703, edition stipulated in the Agreement.
- B. Electronic media printout including equivalent information will be considered in lieu of standard form specified; submit draft to Architect/Engineer for approval.
- C. Forms filled out by hand will not be accepted.
- D. Submit Schedule of Values to the Architect/Engineer at earliest possible date, but no later than 14 days prior to first Pay Request Meeting.
  - 1. After review by the Architect/Engineer, revise and resubmit Schedule as directed.
- E. Format: Utilize the Table of Contents of this Project Manual as a format for the listing of the Work.
- F. Identify as separate line items on the Schedule the costs for the following items:
  - 1. Bonds.
  - 2. Insurance.
  - 3. Site Mobilization.
  - 4. Construction Submittals.
  - 5. General Conditions.
  - 6. Allowances (list each Allowance on a separate line; See Section 01 21 00).
  - 7. Contractor's overhead and profit.
- G. Submit Schedule of Values in sufficient detail for the Architect/Engineer to use in evaluation of Applications for Payment.
  - 1. Itemize the cost of the work of:
    - a. Contractor's materials from stock.
    - b. Contractor's own shop labor.
    - c. Contractor's own field labor.



- d. Subcontractors' materials from stock.
- e. Subcontractors' shop labor.
- f. Subcontractors' field labor.
- g. Suppliers of products and equipment.

H. Revise Schedule of Values to list approved Change Orders, with each Application For Payment.

#### **1.04 APPLICATIONS FOR PROGRESS PAYMENTS**

- A. Payment Period: Submit at intervals stipulated in the Agreement.
- B. Use Form AIA G702 and Form AIA G703, edition stipulated in the Agreement.
- C. Electronic media printout including equivalent information will be considered in lieu of standard form specified; submit sample to Architect/Engineer for approval.
- D. Forms filled out by hand will not be accepted.
- E. For each item, provide a column for listing each of the following:
  - 1. Item Number.
  - 2. Description of work.
  - 3. Scheduled Values.
  - 4. Previous Applications.
  - 5. Work in Place and Stored Materials under this Application.
  - 6. Authorized Change Orders.
  - 7. Total Completed and Stored to Date of Application.
  - 8. Percentage of Completion.
  - 9. Balance to Finish.
  - 10. Retainage.
- F. Execute certification by signature of authorized officer.
- G. Use data from approved Schedule of Values. Provide dollar value in each column for each line item for portion of work performed and for stored products.
- H. List each authorized Change Order as a separate line item, listing Change Order number and dollar amount as for an original item of Work.
- I. Submit one pencil/draft copy of each Application for Payment to the Architect/Engineer at least 7 days prior to the due date for the submission of the Application.
- J. Contractor or Architect/Engineer may schedule a Pay Request Meeting to review the pencil/draft copy of the Application for agreement with the progress of the Work.
- K. After receipt of Architect/Engineer's review comments, submit three final copies, signed and notarized, of each Application for Payment.
- L. Include the following with the application:
  - 1. Transmittal letter as specified for submittals in Section 01 30 00.
  - 2. Construction progress schedule, revised and current as specified in Section 01 30 00.
  - 3. Contractor's partial waiver of lien in the amount of the Application for Payment as well as trailing partial waivers of lien for subcontractors and suppliers who were included in the previous Application for Payment, to the extent of that payment.

- a. When an Application shows completion of a subcontractor or supplier item, submit a final or full waiver for that item.
  - b. Waivers of lien shall be submitted on forms and executed in a manner acceptable to the Owner.
4. Email confirmations and copies of certified transcripts of payroll records accompanying those confirmations from the Illinois Department of Labor for the Contractor and for all Subcontractors and Sub-subcontractors employed on the Project who performed work on the Project during the Payment Period.
    - a. Contractor shall assemble his and all subcontractor and sub-subcontractor records prior to submitting each Application for Payment.
    - b. Applications for Payment submitted without IDOL confirmation emails and transcripts or with missing IDOL confirmation emails or transcripts will result in payment being delayed until the Contractor complies fully with the requirements set forth in the preceding paragraphs.
  5. Affidavits attesting to products or equipment suitably stored off-site in a bonded warehouse. Payments for materials stored off-site shall be conditioned upon submission of bills of sale, applicable insurance, and any other documentation or procedures satisfactory to the Owner to establish the Owner's title to such materials, or otherwise protect the Owner's interest.
- M. When Architect/Engineer requires substantiating information, submit data justifying dollar amounts in question. Provide one copy of data with cover letter for each copy of submittal. Show application number and date, and line item by number and description.

#### **1.05 MODIFICATION PROCEDURES**

- A. Submit name of the individual authorized to receive change documents and who will be responsible for informing others in Contractor's employ or subcontractors of changes to the Contract Documents.
- B. For minor changes not involving an adjustment to the Contract Sum or Contract Time, Architect/Engineer will issue instructions directly to Contractor.
- C. For other required changes, Architect/Engineer will issue a document signed by Owner instructing Contractor to proceed with the change, for subsequent inclusion in a Change Order.
  1. The document will describe the required changes and will designate method of determining any change in Contract Sum or Contract Time.
  2. Promptly execute the change.
- D. For changes for which advance pricing is desired, Architect/Engineer will issue a document that includes a detailed description of a proposed change with supplementary or revised drawings and specifications, a change in Contract Time for executing the change with a stipulation of any overtime work required and the period of time during which the requested price will be considered valid. Contractor shall prepare and submit a fixed price quotation within ten (10) days.
- E. Contractor may propose a change by submitting a request for change to Architect/Engineer, describing the proposed change and its full effect on the Work, with a statement describing the reason for the change, and the effect on the Contract Sum and Contract Time with full documentation and a statement describing the effect on Work by separate or other contractors. Document any requested substitutions in accordance with Section 01 60 00.

- F. Computation of Change in Contract Amount: As specified in the Agreement and Conditions of the Contract.
1. For change requested by Architect/Engineer for work falling under a fixed price contract, the amount will be based on Contractor's price quotation.
  2. For change requested by Contractor, the amount will be based on the Contractor's request for a Change Order as approved by Architect/Engineer.
  3. For pre-determined unit prices and quantities, the amount will be based on the fixed unit prices.
  4. For change ordered by Architect/Engineer without a quotation from Contractor, the amount will be determined by Architect/Engineer based on the Contractor's substantiation of costs as specified for Time and Material work.
- G. Substantiation of Costs: Provide full information required for evaluation.
1. On request, provide the following data:
    - a. Quantities of products, labor, and equipment.
    - b. Taxes, insurance, and bonds.
    - c. Overhead and profit.
    - d. Justification for any change in Contract Time.
    - e. Credit for deletions from Contract, similarly documented.
  2. Support each claim for additional costs with additional information:
    - a. Origin and date of claim.
    - b. Dates and times work was performed, and by whom.
    - c. Time records and wage rates paid.
    - d. Invoices and receipts for products, equipment, and subcontracts, similarly documented.
  3. For Time and Material work, submit itemized account and supporting data after completion of change, within time limits indicated in the Conditions of the Contract.
- H. Execution of Change Orders: Architect/Engineer will issue Change Orders for signatures of parties as provided in the Conditions of the Contract.
- I. After execution of Change Order, promptly revise Schedule of Values and Application for Payment forms to record each authorized Change Order as a separate line item and adjust the Contract Sum.
- J. Promptly revise progress schedules to reflect any change in Contract Time, revise sub-schedules to adjust times for other items of work affected by the change, and resubmit.
- K. Promptly enter changes in Project Record Documents.

## **1.06 APPLICATION FOR FINAL PAYMENT**

- A. Prepare Application for Final Payment as specified for progress payments, identifying total adjusted Contract Sum, previous payments, and sum remaining due.
- B. Application for Final Payment will not be considered until the following have been accomplished:
1. All closeout procedures specified in Section 01 70 00.
  2. Procedures outlined in Article 9 of the General Conditions as amended.
  3. Additional closeout procedures specified in Section 01 77 00.
- C. The submittal of Final Waiver of Lien and the acceptance of the final payment by the Contractor shall be held to be a waiver of any and all claims against the Owner arising from, out of, or in any

connection with the Contract.

**PART 2 PRODUCTS - NOT USED**

**PART 3 EXECUTION - NOT USED**

**END OF SECTION**

**SECTION 01 21 00  
ALLOWANCES**

**PART 1 GENERAL**

**1.01 SECTION INCLUDES**

- A. Contingency allowance.
- B. Payment and modification procedures relating to allowances.

**1.02 RELATED REQUIREMENTS**

- A. Section 01 20 00 - Price and Payment Procedures: Additional payment and modification procedures.

**1.03 CONTINGENCY ALLOWANCES**

- A. Contractor's costs for products, delivery, installation, labor, payroll, taxes and equipment rental will be included in Change Orders authorizing expenditure of funds from this Contingency Allowance.
- B. Funds will be drawn from the Contingency Allowance only by Change Order.
- C. Bond, insurance, overhead and profit fees on Change Orders paid out of Contingency Allowances will not be permitted. The Contractor must carry in its Base Bid OH&P costs on Contingency Allowance funds expenditures.
- D. At closeout of Contract, funds remaining in Contingency Allowance will be credited to Owner by Change Order.

**1.04 ALLOWANCES SCHEDULE**

- A. Contingency Allowance: Include in the Base Bid the stipulated sum of \$10,000.00 for use upon Owner's instructions.

**PART 2 PRODUCTS - NOT USED**

**PART 3 EXECUTION - NOT USED**

**END OF SECTION**

**SECTION 01 23 00  
ALTERNATES**

**PART 1 GENERAL**

**1.01 SECTION INCLUDES**

A. Description of Alternates.

**1.02 RELATED REQUIREMENTS**

A. Owner's bidding and procurement requirements.

**1.03 ACCEPTANCE OF ALTERNATES**

A. Alternates quoted on Bid Forms will be reviewed and accepted or rejected at Owner's option.  
Accepted Alternates will be identified in the Owner-Contractor Agreement.

B. Coordinate related work and modify surrounding work to integrate the Work of each Alternate.

**1.04 SCHEDULE OF ALTERNATES**

A. Alternate No. 1 - Painting of Exterior Exposed Steel: State the amount to be added to the Base Bid to provide surface prep and painting of exposed steel beam along North elevation as depicted on Drawing A700 and as specified in Section 09 90 00 - Painting and Coating.

B. Alternate No. 2 - Cleaning of Existing TPO Roof: State the amount to be added to the Base Bid to provide thorough cleaning of existing TPO roof surfaces to remove accumulated sediment and staining, as indicated on Drawing A330.

**PART 2 PRODUCTS - NOT USED**

**PART 3 EXECUTION - NOT USED**

**END OF SECTION**

**SECTION 01 30 00  
ADMINISTRATIVE REQUIREMENTS**

**PART 1 GENERAL**

**1.01 SECTION INCLUDES**

- A. General administrative requirements.
- B. Preconstruction meeting.
- C. Progress meetings.
- D. Construction progress schedule.
- E. Architect/Engineer-provided CAD files.
- F. Requests for Information (RFI) procedures.
- G. Submittals for review, information, and project closeout.
- H. Number of copies of submittals.
- I. Submittal procedures.

**1.02 RELATED REQUIREMENTS**

- A. Owner's bidding and procurement requirements.
- B. Section 01 60 00 - Product Requirements: General product requirements.
- C. Section 01 70 00 - Execution and Closeout Requirements: Additional coordination requirements.
- D. Section 01 78 00 - Closeout Submittals: Project record documents; operation and maintenance data; warranties and bonds.

**1.03 GENERAL ADMINISTRATIVE REQUIREMENTS**

- A. Comply with requirements of Section 01 70 00 - Execution and Closeout Requirements for coordination of execution of administrative tasks with timing of construction activities.
- B. Make the following types of submittals to Architect/Engineer:
  - 1. Requests for Information (RFI).
  - 2. Requests for substitution.
  - 3. Shop drawings, product data, and samples.
  - 4. Test and inspection reports.
  - 5. Design data.
  - 6. Manufacturer's instructions and field reports.
  - 7. Applications for payment and change order requests.
  - 8. Progress schedules.
  - 9. Coordination drawings.
  - 10. Correction Punch List and Final Correction Punch List for Substantial Completion.
  - 11. Closeout submittals.

## **PART 2 PRODUCTS - NOT USED**

## **PART 3 EXECUTION**

### **3.01 PRECONSTRUCTION MEETING**

- A. Architect/Engineer will schedule a meeting and prepare agenda after Notice of Award.
- B. Attendance required:
  - 1. Owner.
  - 2. Architect/Engineer.
  - 3. Contractor.
- C. Agenda:
  - 1. Execution of Owner-Contractor Agreement.
  - 2. Submission of executed bonds and insurance certificates.
  - 3. Distribution of Contract Documents.
  - 4. Submission of list of subcontractors, list of products, schedule of values, and progress schedule.
  - 5. Designation of personnel representing the parties to Contract and Architect/Engineer.
  - 6. Procedures and processing of field decisions, Submittals, substitutions, applications for payments, proposal request, Change Orders, and Contract closeout procedures.
  - 7. Scheduling.
- D. Architect will record minutes and distribute after meeting to participants.

### **3.02 PROGRESS MEETINGS**

- A. Make arrangements for meetings, prepare agenda with copies for participants, preside at meetings.
- B. Attendance Required:
  - 1. Contractor.
  - 2. Owner.
  - 3. Architect/Engineer.
  - 4. Contractor's superintendent.
- C. Agenda:
  - 1. Review minutes of previous meetings.
  - 2. Review of work progress.
  - 3. Field observations, problems, and decisions.
  - 4. Identification of problems that impede, or will impede, planned progress.
  - 5. Review of Submittals schedule and status of Submittals.
  - 6. Maintenance of progress schedule.
  - 7. Corrective measures to regain projected schedules.
  - 8. Planned progress during succeeding work period.
  - 9. Maintenance of quality and work standards.
  - 10. Effect of proposed changes on progress schedule and coordination.
  - 11. Other business relating to work.
- D. Record minutes and distribute within 2 days after meeting to participants, and to Architect/Engineer, Owner, participants, and those affected by decisions made.



### **3.03 CONSTRUCTION PROGRESS SCHEDULE**

- A. If preliminary schedule requires revision after review, submit revised schedule within 7 days.
- B. Submit updated schedule with each Application for Payment.

### **3.04 ARCHITECT/ENGINEER-PROVIDED CAD FILES**

- A. After the execution of the Contract, Architect/Engineer will provide, free of charge, upon receipt of a properly completed and signed request utilizing "Electronic Data Transfer Consent Form" at the end of this Specification Section, CAD files depicting graphic information for the project as follows:
  - 1. Architectural Floor Plans: Column grid, walls, floors, stairs, doors, windows, room numbers, ceiling grid, mechanical diffusers, plumbing fixtures, sprinkler heads (if depicted in Bid Documents) and lights.
- B. Contractor acknowledges and accepts that the Architectural Floor Plans do not contain structural, mechanical, electrical, plumbing, fire protection and other building systems information depicted in the Bidding Documents. Examples of information not contained in these files include, but are not limited to, title blocks, keynotes, schedules, mechanical ductwork and equipment, electrical device symbols, circuit numbers and home runs, plumbing equipment, piping runs and riser diagrams, and architectural/engineering text or details. No other CAD files, data or information will be provided.
- C. Only requests from Prime Contractors will be honored. Subcontractors must obtain the files from their respective Prime Contractors.
- D. In submitting a request, Contractor acknowledges that:
  - 1. Architect/Engineer bears no responsibility for the data or its transmission,
  - 2. Use of the data by the Contractor or his Subcontractors in no way relieves the Contractor of his obligations under the Contract,
  - 3. Contractor is solely liable for any and all claims arising from any and all products generated by the Contractor or its Subcontractors employing the data,
  - 4. Contractor and its Subcontractors have a limited, non-exclusive license to use the data solely in connection with the Work of the Project, and that
  - 5. Architect/Engineer retains all rights, including copyright, to the data.

### **3.05 REQUESTS FOR INFORMATION (RFI)**

- A. Definition: A request seeking one of the following:
  - 1. An interpretation, amplification, or clarification of some requirement of Contract Documents arising from inability to determine from them the exact material, process, or system to be installed; or when the elements of construction are required to occupy the same space (interference); or when an item of work is described differently at more than one place in Contract Documents.
  - 2. A resolution to an issue which has arisen due to field conditions and affects design intent.
- B. Whenever possible, request clarifications at the next appropriate project progress meeting, with response entered into meeting minutes, rendering unnecessary the issuance of a formal RFI.
- C. Preparation: Prepare an RFI immediately upon discovery of a need for interpretation of Contract Documents. Failure to submit a RFI in a timely manner is not a legitimate cause for claiming additional costs or delays in execution of the work.
  - 1. Prepare a separate RFI for each specific item.

- a. Review, coordinate, and comment on requests originating with subcontractors and/or materials suppliers.
    - b. Do not forward requests which solely require internal coordination between subcontractors.
  2. Prepare in a format and with content acceptable to Owner.
    - a. Use AIA G716 - Request for Information .
  3. Combine RFI and its attachments into a single electronic file. PDF format is preferred.
- D. Reason for the RFI: Prior to initiation of an RFI, carefully study all Contract Documents to confirm that information sufficient for their interpretation is definitely not included.
1. Include in each request Contractor's signature attesting to good faith effort to determine from Contract Documents information requiring interpretation.
  2. Unacceptable Uses for RFIs: Do not use RFIs to request the following:
    - a. Approval of submittals (use procedures specified elsewhere in this section).
    - b. Approval of substitutions (see Section - 01 60 00 - Product Requirements)
    - c. Changes that entail change in Contract Time and Contract Sum (comply with provisions of the Conditions of the Contract).
    - d. Different methods of performing work than those indicated in the Contract Drawings and Specifications (comply with provisions of the Conditions of the Contract).
  3. Improper RFIs: Requests not prepared in compliance with requirements of this section, and/or missing key information required to render an actionable response. They will be returned without a response, with an explanatory notation.
  4. Frivolous RFIs: Requests regarding information that is clearly indicated on, or reasonably inferable from, Contract Documents, with no additional input required to clarify the question. They will be returned without a response, with an explanatory notation.
    - a. The Owner reserves the right to assess the Contractor for the costs (on time-and-materials basis) incurred by the Architect/Engineer, and any of its consultants, due to processing of such RFIs.
- E. Content: Include identifiers necessary for tracking the status of each RFI, and information necessary to provide an actionable response.
1. Official Project name and number, and any additional required identifiers established in Contract Documents.
  2. Owner's, Architect/Engineer's, and Contractor's names.
  3. Discrete and consecutive RFI number, and descriptive subject/title.
  4. Issue date, and requested reply date.
  5. Reference to particular Contract Document(s) requiring additional information/interpretation. Identify pertinent drawing and detail number and/or specification section number, title, and paragraph(s).
  6. Annotations: Field dimensions and/or description of conditions which have engendered the request.
  7. Contractor's suggested resolution: A written and/or a graphic solution, to scale, is required in cases where clarification of coordination issues is involved, for example; routing, clearances, and/or specific locations of work shown diagrammatically in Contract Documents. If applicable, state the likely impact of the suggested resolution on Contract Time or the Contract Sum.
- F. Attachments: Include sketches, coordination drawings, descriptions, photos, submittals, and other information necessary to substantiate the reason for the request.
- G. RFI Log: Prepare and maintain a tabular log of RFIs for the duration of the project.

1. Indicate current status of every RFI. Update log promptly and on a regular basis.
  2. Note dates of when each request is made, and when a response is received.
  3. Highlight items requiring priority or expedited response.
  4. Highlight items for which a timely response has not been received to date.
  5. Identify and include improper or frivolous RFIs.
- H. Review Time: Architect/Engineer will respond and return RFIs to Contractor within seven calendar days of receipt. For the purpose of establishing the start of the mandated response period, RFIs received after 3:00 PM will be considered as having been received on the following regular working day.
1. Response period may be shortened or lengthened for specific items, subject to mutual agreement, and recorded in a timely manner in progress meeting minutes.
- I. Responses: Content of answered RFIs will not constitute in any manner a directive or authorization to perform extra work or delay the project. If in Contractor's belief it is likely to lead to a change to Contract Sum or Contract Time, promptly issue a notice to this effect, and follow up with an appropriate Change Order request to Owner.
1. Response may include a request for additional information, in which case the original RFI will be deemed as having been answered, and an amended one is to be issued forthwith. Identify the amended RFI with an R suffix to the original number.
  2. Do not extend applicability of a response to specific item to encompass other similar conditions, unless specifically so noted in the response.
  3. Upon receipt of a response, promptly review and distribute it to all affected parties, and update the RFI Log.
  4. Notify Architect/Engineer within seven calendar days if an additional or corrected response is required by submitting an amended version of the original RFI, identified as specified above.

### **3.06 SUBMITTAL SCHEDULE**

- A. Submit to Architect/Engineer for review a schedule for submittals in tabular format.
1. Submit at the same time as the preliminary schedule.
  2. Coordinate with Contractor's construction schedule and schedule of values.
  3. Format schedule to allow tracking of status of submittals throughout duration of construction.
  4. Arrange information to include scheduled date for initial submittal, specification number and title, submittal category (for review or for information), description of item of work covered, and role and name of subcontractor.
  5. Account for time required for preparation, review, manufacturing, fabrication and delivery when establishing submittal delivery and review deadline dates.
    - a. For assemblies, equipment, systems comprised of multiple components and/or requiring detailed coordination with other work, allow for additional time to make corrections or revisions to initial submittals, and time for their review.

### **3.07 SUBMITTALS FOR REVIEW**

- A. When the following are specified in individual sections, submit them for review:
1. Product data.
  2. Shop drawings.
  3. Samples for selection.
  4. Samples for verification.

- B. Submit to Architect/Engineer for review for the limited purpose of checking for compliance with information given and the design concept expressed in Contract Documents.
- C. Samples will be reviewed for aesthetic, color, or finish selection.
- D. After review, provide copies and distribute in accordance with Submittal PROCEDURES article below and for record documents purposes described in Section 01 78 00 - Closeout Submittals.

### **3.08 SUBMITTALS FOR INFORMATION**

- A. When the following are specified in individual sections, submit them for information:
  - 1. Design data.
  - 2. Certificates.
  - 3. Test reports.
  - 4. Inspection reports.
  - 5. Manufacturer's instructions.
  - 6. Manufacturer's field reports.
  - 7. Other types indicated.
- B. Submit for Architect/Engineer's knowledge as contract administrator or for Owner.

### **3.09 SUBMITTALS FOR PROJECT CLOSEOUT**

- A. Submit Correction Punch List for Substantial Completion.
- B. Submit Final Correction Punch List for Substantial Completion.
- C. When the following are specified in individual sections, submit them at project closeout in compliance with requirements of Section 01 78 00 - Closeout Submittals:
  - 1. Project record documents.
  - 2. Operation and maintenance data.
  - 3. Warranties.
  - 4. Bonds.
  - 5. Other types as indicated.
- D. Submit for Owner's benefit during and after Project completion.

### **3.10 NUMBER OF COPIES OF SUBMITTALS**

- A. Documents for Review:
  - 1. Submit via email in Adobe PDF electronic file format at native sheet size and right-side up. Architect/Engineer will return via email a reviewed copy in Adobe PDF electronic file format. Files not properly sized and rotated will be rejected. Illegible files will be rejected.
- B. Documents for Information: Submit via email in Adobe PDF electronic file format. Submitted documents are for Architect/Engineer's information and reference only, and will not be reviewed or returned.
- C. Samples: Submit the number specified in individual specification sections; one of which will be retained by Architect/Engineer.
  - 1. Submit original, physical samples. With each physical sample, submit Adobe PDF electronic copies of scanned physical original samples. Architect/Engineer will return via email a reviewed scanned copy in Adobe PDF electronic file format.

2. Retained samples will not be returned to Contractor unless specifically so stated.

### 3.11 SUBMITTAL PROCEDURES

#### A. General Requirements:

1. Use a single transmittal for related items.
2. Submit separate packages of submittals for review and submittals for information, when included in the same specification section.
3. Transmit using approved form.
4. Number each submittal. Prefix the submittal number with the Specification Section number to which the submittal pertains. For revised submittals use original number and a sequential alphanumeric suffix. **Items submitted without a Specification Section number, or with an incorrect Specification Section number will delay the review process.**
5. Identify: Project; Contractor; subcontractor or supplier; pertinent drawing and detail number; and specification section number, article and paragraph, as appropriate on each copy.
6. Correlate submitted items with specified products; clearly indicate the specified product that corresponds to each submitted item. **Submitted items not clearly correlated with specified items will delay the review process.**
7. When options or optional features available for a Product are indicated in a Submittal, and selections for those options/features are indicated in the Contract Documents, identify on the Submittal the selection indicated in the Contract Documents. **Submittals that fail to identify specified options or optional features may be returned marked "Rejected" or "Revise and Resubmit".**
8. Apply Contractor's stamp, signed or initialed certifying that review, approval, verification of products required, field dimensions, adjacent construction work, and coordination of information is in accordance with the requirements of the work and Contract Documents.
  - a. Submittals from sources other than the Contractor, or without Contractor's transmittal will not be acknowledged, reviewed, or returned.
9. Deliver each submittal on date noted in submittal schedule, unless an earlier date has been agreed to by all affected parties, and is of the benefit to the project.
  - a. Deliver submittals to Architect/Engineer at business address.
10. Schedule submittals to expedite the Project, and coordinate submission of related items.
  - a. For each submittal for review, allow 15 days excluding delivery time to and from the Contractor.
  - b. For sequential reviews involving Architect/Engineer's consultants, Owner, or another affected party, allow an additional 7 days.
11. Clearly identify variations from the Contract Documents. Regardless of the type of variation, Contractor is solely responsible for errors in the field or performance issues that arise from Submittal variations from the requirements of the Contract Documents if those variations were not expressly noted to specifically identify for and describe to the reviewer the nature of the variation from the Contract Documents.
12. Provide space for Contractor's review stamp and a 4 inch x 3 inch clear space for Architect/Engineer's review stamp.
13. Promptly return submittals marked "Rejected" or "Revise and Resubmit" to originating subcontractor supplier, and faithfully ensure the prompt resubmittal of the correct or revised information.
14. When revised for resubmission, identify all changes made since previous submission. Use clouds, highlights or other means acceptable to Architect/Engineer. **Resubmittals that do not**

**clearly identify all changes may be delayed and/or returned to the Contractor unreviewed.**

15. Contractor is entitled to one (1) resubmittal of each Submittal For Review or Submittal For Project Closeout rejected by Architect/Engineer or returned by Architect/Engineer for further action. Thereafter, Contractor shall pay the cost of all further Architect/Engineer reviews of any Submittal For Review or Submittal for Project Closeout, at a rate of \$200.00/hour. Cost of such further reviews will be deducted from the Contract Sum by Change Order.
16. Promptly distribute and coordinate the requirements of reviewed submittals with affected parties. Instruct parties to promptly report inability to comply with requirements.
17. Where indicated on the Drawings or in respective product specification Sections, submit reviewed submittals to Authority Having Jurisdiction (AHJ).
18. Incomplete submittals will not be reviewed, unless they are partial submittals for distinct portion(s) of the work, and have received prior approval for their use.
19. Submittals not requested will be returned "Not Reviewed".

**B. Product Data Procedures:**

1. Submit only information required by individual specification sections.
2. Collect required information into a single submittal.
3. Submit concurrently with related shop drawing submittal.
4. Do not submit (Material) Safety Data Sheets for materials or products.

**C. Shop Drawing Procedures:**

1. Prepare accurate, drawn-to-scale, original shop drawing documentation by interpreting Contract Documents and coordinating related work.
2. Use of reproductions of the Contract Documents in digital data form to create shop drawings is only permitted as defined above under Architect/Engineer-Provided CAD Files.
3. Generic, non-project-specific information submitted as shop drawings do not meet the requirements for shop drawings.

**D. Samples Procedures:**

1. Transmit related items together as single package.
2. When relevant, identify each item to allow review for applicability in relation to shop drawings showing installation locations.

**E. Submittal reviews may be delayed and/or Submittals may be returned marked "Rejected" or "Revise and Resubmit" for any of the following reasons:**

1. Submittals submitted outside the scheduled dates of the Submittal Schedule.
2. Submittals are incomplete or are missing information.
3. Submittals are not submitted in accordance with procedures outlined in this Section, including, but not limited to:
  - a. Specification Section number not indicated on submittal or transmittal.
  - b. Contractor's review stamp missing.
  - c. Submitted items not correlated with specified products.
  - d. Re-submitted items not clearly identifying changes.

### **3.12 SUBMITTAL REVIEW**

- A. Submittals for Review:** Architect/Engineer will review each submittal, and approve, or take other appropriate action.

- B. Submittals for Information: Architect/Engineer will not acknowledge receipt, and take no other action.
- C. Architect/Engineer's actions will be reflected by marking each returned submittal using virtual stamp on electronic submittals.
  - 1. Notations may be made directly on submitted items and/or listed on appended Submittal Review cover sheet.
- D. Architect/Engineer's and consultants' actions on items submitted for review:
  - 1. Authorizing purchasing, fabrication, delivery, and installation:
    - a. "No Exception Taken", or language with same legal meaning.
      - 1) Resubmission is not required or requested.
      - 2) Resubmitted items will not be acknowledged.
    - b. "Make Corrections Noted", or language with same legal meaning.
      - 1) Resubmission is not required or requested.
      - 2) Resubmitted items may be returned marked "Not Requested, Not Reviewed".
  - 2. Not Authorizing fabrication, delivery, and installation:
    - a. "Revise and Resubmit".
      - 1) Resubmit revised item, with review notations acknowledged and incorporated.
      - 2) Clearly identify all revisions.
      - 3) Non-responsive resubmittals may be rejected.
    - b. "Rejected".
      - 1) Submit item complying with requirements of Contract Documents.
    - c. "Submit Specified Item".
      - 1) Submit item complying with requirements of Contract Documents.

**END OF SECTION**

## ELECTRONIC DATA TRANSFER CONSENT FORM

Project Name: PUBLIC WORKS FACADE IMPROVEMENTS  
201 S. BOULEVARD  
OAK PARK, ILLINOIS 60302

Project No.: 24-475-1536

Owner: VILLAGE OF OAK PARK

Your Work: \_\_\_\_\_

KLUBER, INC. (hereinafter referred to as "Kluber") an Illinois corporation, is providing electronic data to you solely at your request and for your convenience. By accepting and opening any of the electronic data files, you agree that Kluber bears no liability for the data or its transmission to you and that you are solely liable for any and all claims referring or relating to any and all products you, or your Subcontractors, may generate with the data.

You acknowledge that you have a limited non-exclusive license to use the information solely in connection with your work on the project captioned above, and that Kluber retains all rights, including copyright, to the data.

Acknowledged by: \_\_\_\_\_  
(Printed Name) (Signature)

Company: \_\_\_\_\_

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

Architectural Floor Plans are transmitted for the contractors' use as backgrounds for shop drawings and as-built drawings, and, as such, contain graphic information for column grid, walls, floors, stairs, doors, windows, room numbers, ceiling grid, lights, diffusers and sprinkler heads where indicated on Bid Documents. Plans do not contain title blocks, keynotes, schedules, mechanical ductwork and equipment, electrical device symbols, circuit numbers and home runs, plumbing equipment, piping runs and riser diagrams, and architectural/engineering text and details. Plans depict entire floors and are not formatted, partial plans as depicted in the Bidding Documents. Files are provided in R2013 .DWG format.)



**SECTION 01 40 00  
QUALITY REQUIREMENTS**

**PART 1 GENERAL**

**1.01 SECTION INCLUDES**

- A. Submittals.
- B. Control of installation.
- C. Tolerances.
- D. Defect Assessment.

**1.02 RELATED REQUIREMENTS**

- A. Section 01 41 00 - Regulatory Requirements.
- B. Section 01 42 00 - References.
- C. Section 01 60 00 - Product Requirements: Requirements for material and product quality.

**1.03 SUBMITTALS**

- A. See Section 01 30 00 - Administrative Requirements, for submittal procedures.
- B. Certificates: When specified in individual specification sections, submit certification by the manufacturer and Contractor or installation/application subcontractor to Architect/Engineer, in quantities specified for Product Data.
  - 1. Indicate material or product complies with or exceeds specified requirements. Submit supporting reference data, affidavits, and certifications as appropriate.
  - 2. Certificates may be recent or previous test results on material or product, but must be acceptable to Architect/Engineer.
- C. Manufacturer's Instructions: When specified in individual specification sections, submit printed instructions for delivery, storage, assembly, installation, start-up, adjusting, and finishing, for the Owner's information. Indicate special procedures, perimeter conditions requiring special attention, and special environmental criteria required for application or installation.

**1.04 REGULATORY REQUIREMENTS - SEE SECTION 01 41 00**

**1.05 REFERENCES AND STANDARDS - SEE SECTION 01 42 00**

**PART 2 PRODUCTS - NOT USED**

**PART 3 EXECUTION**

**3.01 CONTROL OF INSTALLATION**

- A. Monitor quality control over suppliers, manufacturers, products, services, site conditions, and workmanship, to produce work of specified quality.
- B. Comply with manufacturers' instructions, including each step in sequence.
- C. Should manufacturers' instructions conflict with Contract Documents, request clarification from Architect/Engineer before proceeding.

- D. Comply with specified standards as minimum quality for the work except where more stringent tolerances, codes, or specified requirements indicate higher standards or more precise workmanship.
- E. Have work performed by persons qualified to produce required and specified quality.
- F. Verify that field measurements are as indicated on shop drawings or as instructed by the manufacturer.
- G. Secure products in place with positive anchorage devices designed and sized to withstand stresses, vibration, physical distortion, and disfigurement.

### **3.02 TOLERANCES**

- A. Monitor fabrication and installation tolerance control of products to produce acceptable Work. Do not permit tolerances to accumulate.
- B. Comply with manufacturers' tolerances. Should manufacturers' tolerances conflict with Contract Documents, request clarification from Architect/Engineer before proceeding.
- C. Adjust products to appropriate dimensions; position before securing products in place.

### **3.03 DEFECT ASSESSMENT**

- A. Replace Work or portions of the Work not complying with specified requirements.
- B. If, in the opinion of Owner, it is not practical to remove and replace the work, Owner will direct an appropriate remedy or adjust payment.

**END OF SECTION**

**SECTION 01 41 00  
REGULATORY REQUIREMENTS**

**PART 1 GENERAL**

**1.01 SECTION INCLUDES**

- A. General.
- B. Definitions.
- C. Quality Assurance.
- D. Regulatory Requirements.

**1.02 RELATED SECTIONS**

- A. Section 01 10 00 - Summary.
- B. Section 01 42 00 - References.

**1.03 GENERAL**

- A. Comply with all applicable laws, rules, regulations, codes and ordinances.
- B. If the Contractor observes that the Contract Documents may be at variance with specified codes, notify the Architect/Engineer immediately. Architect/Engineer shall issue all changes in accordance with the General Conditions.
- C. It shall not be the Contractor's primary responsibility to make certain that the Contract Documents are in accordance with all applicable laws, rules and regulations, however, when the Contractor performs work knowing or having reason to know that the work in question is contrary to applicable laws, rules, and regulations, and fails to notify the Architect/Engineer, the Contractor shall pay all costs arising therefrom.

**1.04 DEFINITIONS**

- A. Definitions:
  - 1. Codes: Codes are statutory requirements, rules or regulations of governmental entities.
  - 2. Standards: Standards are requirements that have been established as accepted criteria, set general consent.

**1.05 QUALITY ASSURANCE**

- A. The Architect/Engineer has designed the project to applicable code requirements and has copies of said codes available for the Contractor's inspection.
- B. The Contractor shall:
  - 1. Ensure that copies of codes and standards referenced herein or specified in individual specifications sections are available to Contractor's personnel, agents, and Sub-Contractors.
  - 2. Ensure that Contractor's personnel, agents, and Sub-Contractors are familiar with the workmanship and requirements of applicable codes and standards.

**1.06 REGULATORY REQUIREMENTS**

- A. Source and Requirements: Verify amendments with local code officials.
  - 1. Local code requirements:

- a. ICC International Building Code, 2021 Edition.
  - b. ICC International Mechanical Code, 2021 Edition.
  - c. ICC International Fire Code, 2021 Edition.
  - d. ICC International Property Maintenance Code, 2021 Edition.
  - e. National Electrical Code, 2021 Edition.
2. State code requirements:
- a. Capital Development Board (CDB):
    - 1) Illinois Accessibility Code, 2018 Edition.
    - 2) Illinois Energy Conservation Code (ICC International Energy Conservation Code, 2021 Edition, with State of Illinois modifications.
  - b. Illinois Department of Labor (IDOL): Safety Glazing Materials Act - Illinois Revised Statutes, chap. 111 1/2, paragraph 3101, et seq.
  - c. Illinois Department of Public Health (IDPH):
    - 1) Illinois Plumbing Code (Illinois Administrative Code, Title 77, Chapter I, Subchapter r, Part 890).
  - d. Illinois Environmental Protection Agency (IEPA):
    - 1) Air-Pollution Standards.
    - 2) Noise Pollution Standards.
    - 3) Water Pollution Standards.
    - 4) Public Water Supplies
    - 5) Solid Waste Standards.
    - 6) Illinois Recommended Standards for Sewage Works (Illinois Administrative Code, Title 35, Subtitle C, Chapter II, Part 370).
  - e. Office of the Illinois State Fire Marshal (OSFM):
    - 1) Boiler & Pressure Vessel Safety Code (Illinois Administrative Code, Title 44, Chapter I, Part 120).
    - 2) Illinois Elevator Safety Rules (Illinois Administrative Code, Title 41, Chapter II, Part 1000).
      - a) ASME A17.1 - Safety Code For Elevators and Escalators, 2019 Edition.
    - 3) Illinois Rules & Regulations for Fire Prevention & Safety (as amended).
    - 4) Gasoline and Volatile Oils (Illinois Revised Statutes, chap. 17 1/2, paragraph 31, et seq.).
3. Information and Requirements for Utility Services: Local utility companies.

**PART 2 PRODUCTS - NOT USED**

**PART 3 EXECUTION - NOT USED**

**END OF SECTION**

**SECTION 01 42 00  
REFERENCES**

**PART 1 GENERAL**

**1.01 SECTION INCLUDES**

- A. Drawing symbols, abbreviations and acronyms.
- B. Definitions of terms used throughout the Contract Documents.
- C. Explanation of specification format and content.
- D. Requirements relating to referenced standards.
- E. Applicability of referenced standards.
- F. List of industry organizations and certain of their respective documents.

**1.02 DRAWING SYMBOLS AND CONVENTIONS**

- A. Abbreviations and graphic symbols are defined on the General Notes, Symbols & Abbreviations sheet of the drawings.
- B. Generally, symbols used on the mechanical and electrical drawings conform to those recommended by ASHRAE, though, where appropriate, these symbols are supplemented by more specific symbols as recommended by ASME, ASPE, or the IEEE.

**1.03 DEFINITIONS**

- A. Where the terms "indicated", "noted", "scheduled", "shown", or "specified" are used it is to help locate the reference; no limitation on location is intended except as specifically noted.
- B. Where the terms "directed", "requested", "authorized", "approved", are used as in "directed by the Architect/Engineer", no implied meaning shall be construed to extend the Architect/Engineer's responsibilities into the Contractor's purview of construction supervision.
- C. Where the term "approved" is used in conjunction with the Architect/Engineer's action on submittals, requests or applications it is limited to the duties of the Architect/Engineer as described in the Agreement, and the General and Supplemental Conditions of the Contract. Such use of the term "approval" shall not limit or release the Contractor from his responsibility to fulfill Contract requirements.
- D. Where the term "regulations" is used it means all applicable statutes, laws, ordinances, and orders issued by authorities having jurisdiction, as well as construction industry standards, rules, or conventions that address performance of the Work.
- E. The "Project Site" is the space available to the Contractor for performance of construction activities. The Project Site may be for the exclusive use of the Contractor and his activities or may be used in conjunction with others performing other construction or related activities on the Project. Unless the extent of the Project Site is indicated on the Drawings, means the limits of the area within the property line of the parcel on which the Project is located, subject to the limitations and restrictions of local ordinance and the discretion of the Owner.

- F. Where the term "furnish" is used it means supply, deliver to, and unload and store at the Project Site until the Work is ready for the item to be assembled and incorporated into the Work.
- G. Where the term "install" is used it is meant to describe operations at the Project Site to include uncrating, assembling, placing, anchoring, connecting to utilities, finishing, protecting, cleaning and all other similar operations required to fully incorporate an item into the Work.
- H. Where the term "provide" is used it means "furnish and install" as defined above.
- I. Where the term "refurbish" is used it means refinish, repair and otherwise restore to like-new condition.
- J. Where the terms "remove" or "demolish" are used they mean safely disconnect from existing utilities, permanently extract from the Work and the Project Site, and legally dispose of off-site.
- K. Where the terms "temporarily remove" or "salvage" are used they mean safely disconnect from existing utilities and carefully extract from the Work so as to prevent damage to the item and the Work.
  - 1. If the item is to be reinstalled or relocated as part of the Work, these terms also mean clean, adjust, lubricate and otherwise restore to best possible condition without repair or refinishing.
  - 2. Otherwise, these terms also mean clean item surfaces and turn over to the Owner for storage and possible future use.
- L. Where the term "reinstall" is used it means the same as "install", with respect to a temporarily removed, salvaged or relocated item.
- M. Where the term "relocate" is used it means temporarily remove and reinstall in a new location.
- N. Where the phrase "salvage in place" is used it means protect in place so as to prevent damage while adjacent elements are demolished, restore to best possible condition without repair or refinishing, and modify as necessary to properly incorporate and integrate with the Work.

#### **1.04 SPECIFICATION FORMAT AND CONTENT**

- A. These Specifications are based on the Construction Specification Institute's 49 Division format and numbering system.
- B. Language used in the Specifications and other Contract Documents is an abbreviated type. Implied words and meanings will appropriately interpreted.
- C. Requirements expressed in imperative and streamlined language are to be performed by the Contractor. At certain locations in the text, subjective language may be used to describe responsibilities that must be fulfilled indirectly by the Contractor or others.
  - 1. Whenever a colon (:) is used within a sentence or phrase, it shall be construed to mean the words "shall be".
- D. Use of certain terms such as "carpentry" is not intended to imply that certain activities must be performed by accredited or unionized individuals of a corresponding generic name. The Specifications do, however, require that certain construction activities shall be performed by specialists who are recognized experts in the operations to be performed. Specialists shall be used for said activities, however the final responsibility for fulfilling the requirements of the Contract remains the Contractor's.

## **1.05 QUALITY ASSURANCE**

- A. For products or workmanship specified by reference to a document or documents not included in the Project Manual, also referred to as reference standards, comply with requirements of the standard, except when more rigid requirements are specified or are required by applicable codes.
- B. Conform to reference standard of date of issue specified in this section, except where a specific date is established by applicable code.
- C. Obtain copies of standards when required by the Contract Documents.
- D. Maintain copy at project site during submittals, planning, and progress of the specific work, until Substantial Completion.
- E. Should specified reference standards conflict with Contract Documents, request clarification from the Architect/Engineer before proceeding.
- F. Neither the contractual relationships, duties, or responsibilities of the parties in Contract nor those of the Architect/Engineer shall be altered by the Contract Documents by mention or inference otherwise in any reference document.

## **1.06 APPLICABILITY OF INDUSTRY STANDARDS**

- A. Construction industry standards shall have the same force and effect as if bound or copied directly in the Contract Documents, except where more stringent requirements are specified. All such applicable standards are made a part of the Contract Documents by reference.
  - 1. Where compliance with two or more standards are referenced and conflicting requirements for quality or quantities occur, comply with the more stringent requirements. Refer questions regarding apparently conflicting standards to the Architect/Engineer for a decision before proceeding.
  - 2. The standard of quality or quantity levels specified, shown, or referenced shall be the minimum to be provided or performed. Refer questions regarding standards of minimum quality or quantity to the Architect/Engineer before proceeding.

## **1.07 CONSTRUCTION INDUSTRY ORGANIZATIONS AND DOCUMENTS**

AA -- ALUMINUM ASSOCIATION, INC.

AABC -- ASSOCIATED AIR BALANCE COUNCIL

AAMA -- AMERICAN ARCHITECTURAL MANUFACTURERS ASSOCIATION

AASHTO -- AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS

ACI -- AMERICAN CONCRETE INSTITUTE INTERNATIONAL

AISC -- AMERICAN INSTITUTE OF STEEL CONSTRUCTION, INC.

ANSI -- AMERICAN NATIONAL STANDARDS INSTITUTE

ASHRAE -- AMERICAN SOCIETY OF HEATING, REFRIGERATING AND AIR-CONDITIONING ENGINEERS, INC.

ASME -- THE AMERICAN SOCIETY OF MECHANICAL ENGINEERS

ASTM -- AMERICAN SOCIETY FOR TESTING AND MATERIALS  
AWI -- ARCHITECTURAL WOODWORK INSTITUTE  
AWPA -- AMERICAN WOOD-PRESERVERS' ASSOCIATION  
AWS -- AMERICAN WELDING SOCIETY  
BHMA -- BUILDERS HARDWARE MANUFACTURERS ASSOCIATION  
BIA -- BRICK INDUSTRY ASSOCIATION  
CPSC -- CONSUMER PRODUCTS SAFETY COMMISSION  
DHI -- DOOR AND HARDWARE INSTITUTE  
DIN -- DEUTSCHES INSTITUT FUR NORMUNG  
FM -- FACTORY MUTUAL RESEARCH CORPORATION  
ICC -- INTERNATIONAL CODE COUNCIL, INC.  
IEEE -- INSTITUTE OF ELECTRICAL AND ELECTRONIC ENGINEERS  
ISO -- INTERNATIONAL STANDARDS ORGANIZATION  
MFMA -- MAPLE FLOORING MANUFACTURERS ASSOCIATION  
NAAMM -- THE NATIONAL ASSOCIATION OF ARCHITECTURAL METAL MANUFACTURERS  
NCMA -- NATIONAL CONCRETE MASONRY ASSOCIATION  
NEBB -- NATIONAL ENVIRONMENTAL BALANCING BUREAU  
NEMA -- NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION  
NFPA -- NATIONAL FIRE PROTECTION ASSOCIATION  
NRCA -- NATIONAL ROOFING CONTRACTORS ASSOCIATION  
PCI -- PRECAST/PRESTRESSED CONCRETE INSTITUTE  
SDI -- STEEL DOOR INSTITUTE  
SDI -- STEEL DECK INSTITUTE, INC.  
SGCC -- SAFETY GLAZING CERTIFICATION COUNCIL  
SIGMA - SEALED INSULATING GLASS MANUFACTURERS ASSOCIATION (See IGMA)  
SJI -- STEEL JOIST INSTITUTE  
SMACNA -- SHEET METAL AND AIR CONDITIONING CONTRACTORS' NATIONAL ASSOCIATION, INC.  
SSPC -- THE SOCIETY FOR PROTECTIVE COATINGS  
TCA -- TILE COUNCIL OF AMERICA, INC.  
UL -- UNDERWRITERS LABORATORIES INC.



WWPA -- WESTERN WOOD PRODUCTS ASSOCIATION

**1.08 UNITED STATES GOVERNMENT AND RELATED AGENCIES/DOCUMENTS**

CFR -- CODE OF FEDERAL REGULATIONS

CPSC -- CONSUMER PRODUCTS SAFETY COMMISSION

EPA -- ENVIRONMENTAL PROTECTION AGENCY

FS -- FEDERAL SPECIFICATIONS AND STANDARDS (General Services Administration)

GSA -- U.S. GENERAL SERVICES ADMINISTRATION

USGS -- UNITED STATES GEOLOGICAL SURVEY

**1.09 STATE GOVERNMENT AND RELATED AGENCIES/DOCUMENTS**

CDB -- ILLINOIS CAPITAL DEVELOPMENT BOARD

IDOL -- ILLINOIS DEPARTMENT OF LABOR

IDPH -- ILLINOIS DEPARTMENT OF PUBLIC HEALTH

IEPA -- ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

OSFM -- OFFICE OF THE ILLINOIS STATE FIRE MARSHAL

**PART 2 PRODUCTS - NOT USED**

**PART 3 EXECUTION - NOT USED**

**END OF SECTION**

**SECTION 01 50 00  
TEMPORARY FACILITIES AND CONTROLS**

**PART 1 GENERAL**

**1.01 SECTION INCLUDES**

- A. Temporary telecommunications services.
- B. Temporary sanitary facilities.
- C. Temporary controls: Barriers, enclosures, and fencing.
- D. Security requirements.
- E. Vehicular access and parking.
- F. Waste removal facilities and services.

**1.02 TEMPORARY UTILITIES**

- A. Owner will provide the following:
  - 1. Electrical power and metering, consisting of connection to existing facilities.
  - 2. Water supply, consisting of connection to existing facilities.

**1.03 TELECOMMUNICATIONS SERVICES**

- A. Provide, maintain, and pay for telecommunications services to field office at time of project mobilization.
- B. Telecommunications services shall include:
  - 1. One (1) mobile cellular telephone for each of Contractor's and any Subcontractor's field personnel.

**1.04 TEMPORARY SANITARY FACILITIES**

- A. Use of existing facilities is permitted. Coordinate with Owner for specific facilities that will be available for Contractor use.
- B. Maintain daily in clean and sanitary condition.

**1.05 BARRIERS**

- A. Provide barriers to prevent unauthorized entry to construction areas, to prevent access to areas that could be hazardous to workers or the public, to allow for owner's use of site and to protect existing facilities and adjacent properties from damage from construction operations and demolition.
- B. Provide barricades and covered walkways required by governing authorities for public rights-of-way and for public access to existing building.
- C. Protect non-owned vehicular traffic, stored materials, site, and structures from damage.

**1.06 SECURITY**

- A. Provide security and facilities to protect Work, existing facilities, and Owner's operations from unauthorized entry, vandalism, or theft.

B. Coordinate with Owner on required security requirements.

### **1.07 VEHICULAR ACCESS AND PARKING**

- A. Comply with regulations relating to use of streets and sidewalks, access to emergency facilities, and access for emergency vehicles.
- B. Coordinate access and haul routes with governing authorities and Owner.
- C. Provide and maintain access to fire hydrants, free of obstructions.
- D. Provide means of removing mud from vehicle wheels before entering streets.
- E. Provide temporary parking areas to accommodate construction personnel. When site space is not adequate, provide additional off-site parking.

Existing parking areas may be used for construction parking.

### **1.08 WASTE REMOVAL**

- A. Provide waste removal facilities and services as required to maintain the site in clean and orderly condition.
- B. Provide containers with lids. Remove trash from site periodically.
- C. If materials to be recycled or re-used on the project must be stored on-site, provide suitable non-combustible containers; locate containers holding flammable material outside the structure unless otherwise approved by the authorities having jurisdiction.
- D. Open free-fall chutes are not permitted. Terminate closed chutes into appropriate containers with lids.

### **1.09 REMOVAL OF UTILITIES, FACILITIES, AND CONTROLS**

- A. Remove temporary utilities, equipment, facilities, materials, prior to Date of Substantial Completion inspection.
- B. Clean and repair damage caused by installation or use of temporary work.
- C. Restore existing facilities used during construction to original condition.

## **PART 2 PRODUCTS - NOT USED**

## **PART 3 EXECUTION - NOT USED**

**END OF SECTION**

**SECTION 01 60 00  
PRODUCT REQUIREMENTS**

**PART 1 GENERAL**

**1.01 SECTION INCLUDES**

- A. General product requirements.
- B. Transportation, handling, storage and protection.
- C. Product option requirements.
- D. Substitution limitations.
- E. Procedures for Owner-supplied products.
- F. Maintenance materials, including extra materials, spare parts, tools, and software.

**1.02 SUBMITTALS**

- A. Product Data Submittals: Submit manufacturer's standard published data. Mark each copy to identify applicable products, models, options, and other data. Supplement manufacturers' standard data to provide information specific to this Project.
- B. Shop Drawing Submittals: Prepared specifically for this Project; indicate utility and electrical characteristics, utility connection requirements, and location of utility outlets for service for functional equipment and appliances.
- C. Sample Submittals: Illustrate functional and aesthetic characteristics of the product, with integral parts and attachment devices. Coordinate sample submittals for interfacing work.
  - 1. For selection from standard finishes, submit samples of the full range of the manufacturer's standard colors, textures, and patterns.

**1.03 QUALITY ASSURANCE**

- A. Environmental Product Declaration (EPD): Publicly available, critically reviewed life cycle analysis having at least a cradle-to-gate scope.
  - 1. Good: Product-specific; compliant with ISO 14044.
  - 2. Better: Industry-wide, generic; compliant with ISO 21930, or with ISO 14044, ISO 14040, ISO 14025, and EN 15804; Type III third-party certification with external verification, in which the manufacturer is recognized as the program operator.
  - 3. Best: Commercial-product-specific; compliant with ISO 21930, or with ISO 14044, ISO 14040, ISO 14025, and EN 15804; Type III third-party certification with external verification, in which the manufacturer is recognized as the program operator.
  - 4. Where demonstration of impact reduction below industry average is required, submit both industry-wide and commercial-product-specific declarations; or submit at least 5 declarations for products of the same type by other manufacturers in the same industry.
- B. Health Product Declarations (HPD): Complete, published declaration with full disclosure of known hazards, prepared using one of the HPDC (HPD-OLT) online tools.

## **PART 2 PRODUCTS**

### **2.01 NEW PRODUCTS**

- A. Provide new products unless specifically required or permitted by Contract Documents.
- B. Designed, manufactured, and tested in accordance with industry standards.
- C. Where other criteria are met, Contractor shall give preference to products that:
  - 1. If used on interior, have lower emissions.
  - 2. If wet-applied, have lower VOC content.
  - 3. Are extracted, harvested, and/or manufactured closer to the location of the project.
  - 4. Have longer documented life span under normal use.
  - 5. Result in less construction waste.
  - 6. Are made of recycled materials.
  - 7. Have a published Environmental Product Declaration (EPD).
  - 8. Have a published Health Product Declaration (HPD).
  - 9. Have a published Manufacturer's Inventory of Chemical Content.

### **2.02 PRODUCT OPTIONS**

- A. Products Specified by Reference Standards or by Description Only: Use any product meeting those standards or description.
- B. Products Specified by Naming One or More Manufacturers: Use a product of one of the manufacturers named and meeting specifications, no options or substitutions allowed.
- C. Products Specified by Naming One or More Manufacturers with a Provision for Substitutions: Submit a request for substitution for any manufacturer not named.

### **2.03 MAINTENANCE MATERIALS**

- A. Furnish extra materials, spare parts, tools, and software of types and in quantities specified in individual specification sections.
- B. Deliver to Project site and place in location directed by Owner's representative; obtain Owner's signature on receipt for delivery prior to final payment. Submit signed receipts with Closeout Submittals.

## **PART 3 EXECUTION**

### **3.01 SUBSTITUTION LIMITATIONS**

- A. Substitutions Prior To Bid Opening: Architect/Engineer will consider a written request for substitution provided that such request is received at least seven (7) days prior to the Bid opening date. Requests received after that time will not be considered.
  - 1. Only Substitution Requests from Bidders will be considered.
  - 2. If a request is approved, the Architect/Engineer will issue and appropriate addendum not less than three (3) days prior to the Bid opening date.
- B. Substitutions After Notice of Award: Architect/Engineer will consider a request for substitution only from the Contractor and only under one or more of the following conditions:
  - 1. Substitution is required for compliance with final interpretation of code requirements or insurance regulations.

2. Specified product is not available through no fault of the Contractor.
  3. Specified product is not compatible with other specified materials/equipment.
  4. Manufacturer will not certify or warranty specified product as required.
- C. Document each request utilizing Substitution Request Form following this section with complete data substantiating compliance of proposed substitution with Contract Documents. Incomplete requests will not be considered. Submit a separate Substitution Request Form and accompanying documentation for each proposed substitution.
- D. Provide the following minimum documentation with each Substitution Request Form:
1. Product identification, manufacturer, product data including dimensions and weight, performance and installation instructions.
  2. Side-by-side itemized comparison of proposed substitution with specified product.
  3. Coordination information including other modifications required as a result of proposed substitution.
  4. Cost information including the effect of the proposed substitution on the Contract Sum.
- E. Sign and date the Substitution Request Form.
- F. A request for substitution constitutes a representation that the submitter:
1. Has investigated proposed product and determined that it meets or exceeds the quality level of the specified product.
  2. Agrees to provide the same warranty for the substitution as for the specified product.
  3. Agrees to coordinate installation and make changes to other Work that may be required for the Work to be complete with no additional cost to Owner.
  4. Waives claims for additional costs or time extension that may subsequently become apparent.
  5. Agrees to reimburse Owner and Architect/Engineer for review or redesign services associated with re-approval by authorities having jurisdiction over the Project.
- G. Architect/Engineer will notify submitter in writing of decision to accept or reject request.
- H. Substitutions of products or product characteristics/components/options/accessories will not be considered when they are indicated or implied on Contractor's submittals, without separate written request, or when acceptance will require revision to the Contract Documents, whether rejection of said substitutions is expressly identified by Architect/Engineer on Contractor's submittals or not.

### **3.02 TRANSPORTATION AND HANDLING**

- A. Package products for shipment in manner to prevent damage; for equipment, package to avoid loss of factory calibration.
- B. If special precautions are required, attach instructions prominently and legibly on outside of packaging.
- C. Coordinate schedule of product delivery to designated prepared areas in order to minimize site storage time and potential damage to stored materials.
- D. Transport and handle products in accordance with manufacturer's instructions.
- E. Transport materials in covered trucks to prevent contamination of product and littering of surrounding areas.

- F. Promptly inspect shipments to ensure that products comply with requirements, quantities are correct, and products are undamaged.
- G. Provide equipment and personnel to handle products by methods to prevent soiling, disfigurement, or damage, and to minimize handling.
- H. Arrange for the return of packing materials, such as wood pallets, where economically feasible.

### **3.03 STORAGE AND PROTECTION**

- A. Designate receiving/storage areas for incoming products so that they are delivered according to installation schedule and placed convenient to work area in order to minimize waste due to excessive materials handling and misapplication.
- B. Store and protect products in accordance with manufacturers' instructions.
- C. Store with seals and labels intact and legible.
- D. Store sensitive products in weathertight, climate-controlled enclosures in an environment favorable to product.
- E. For exterior storage of fabricated products, place on sloped supports above ground.
- F. Protect products from damage or deterioration due to construction operations, weather, precipitation, humidity, temperature, sunlight and ultraviolet light, dirt, dust, and other contaminants.
- G. Comply with manufacturer's warranty conditions, if any.
- H. Cover products subject to deterioration with impervious sheet covering. Provide ventilation to prevent condensation and degradation of products.
- I. Prevent contact with material that may cause corrosion, discoloration, or staining.
- J. Provide equipment and personnel to store products by methods to prevent soiling, disfigurement, or damage.
- K. Arrange storage of products to permit access for inspection. Periodically inspect to verify products are undamaged and are maintained in acceptable condition.

**END OF SECTION**

## SUBSTITUTION REQUEST FORM

PROJECT: PUBLIC WORKS FAÇADE IMPROVEMENTS

SPECIFIED ITEM: \_\_\_\_\_

Specification Section	Page	Paragraph	Description
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The undersigned requests consideration of the following:

PROPOSED SUBSTITUTION: \_\_\_\_\_

Attached data includes project description, specifications, drawings, photographs, performance and test data adequate for evaluation of the request; applicable portions of the data are clearly identified.

Attached data also includes a description of changes to the Contract Documents which the proposed substitution will require for its proper installation.

The undersigned certifies that the following paragraphs, unless modified by attachments, are correct:

1. The proposed substitution does not affect dimensions shown on drawings.
2. The undersigned will pay for changes to the building design, including engineering design, detailing, and construction costs caused by the requested substitution.
3. The proposed substitution will have no adverse effect on other trades, the construction schedule, or specified warranty requirements.
4. Maintenance and service parts will be locally available for the proposed substitution.

The undersigned further states that the function, appearance, and quality of the proposed substitution are equivalent or superior to the specified item.

\_\_\_\_\_  
Printed Name

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

\_\_\_\_\_  
Firm

\_\_\_\_\_  
Telephone

\_\_\_\_\_  
Email

Attachments (list):

For Use By The Architect/Engineer:

Accepted       Accepted As Noted

Not Accepted       Received Too Late

By: \_\_\_\_\_

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

Remarks:



**SECTION 01 70 00  
EXECUTION AND CLOSEOUT REQUIREMENTS**

**PART 1 GENERAL**

**1.01 SECTION INCLUDES**

- A. Examination, preparation, and general installation procedures.
- B. Pre-installation meetings.
- C. Cutting and patching.
- D. Cleaning and protection.
- E. Closeout procedures, including Contractor's Correction Punch List, except payment procedures.

**1.02 RELATED REQUIREMENTS**

- A. Section 01 30 00 - Administrative Requirements: Submittals procedures, Electronic document submittal service.
- B. Section 01 40 00 - Quality Requirements: Testing and inspection procedures.
- C. Section 01 50 00 - Temporary Facilities and Controls
- D. Section 01 78 00 - Closeout Submittals: Project record documents, operation and maintenance data, warranties, and bonds.

**1.03 SUBMITTALS**

- A. See Section 01 30 00 - Administrative Requirements, for submittal procedures.

**1.04 PROJECT CONDITIONS**

- A. Ventilate enclosed areas to assist cure of materials, to dissipate humidity, and to prevent accumulation of dust, fumes, vapors, or gases.
- B. Dust Control: Execute work by methods to minimize raising dust from construction operations. Provide positive means to prevent air-borne dust from dispersing into atmosphere and over adjacent property.
  - 1. Provide dust-proof barriers between construction areas and areas continuing to be occupied by Owner.
- C. Noise Control: Provide methods, means, and facilities to minimize noise produced by construction operations.
- D. Pest and Rodent Control: Provide methods, means, and facilities to prevent pests and insects from damaging the work.
- E. Rodent Control: Provide methods, means, and facilities to prevent rodents from accessing or invading premises.
- F. Pollution Control: Provide methods, means, and facilities to prevent contamination of soil, water, and atmosphere from discharge of noxious, toxic substances, and pollutants produced by construction operations. Comply with federal, state, and local regulations.

## **1.05 COORDINATION**

- A. Coordinate scheduling, submittals, and work of the various sections of the Project Manual to ensure efficient and orderly sequence of installation of interdependent construction elements, with provisions for accommodating items installed later.
- B. Notify affected utility companies and comply with their requirements.
- C. Verify that utility requirements and characteristics of new operating equipment are compatible with building utilities. Coordinate work of various sections having interdependent responsibilities for installing, connecting to, and placing in service, such equipment.
- D. Coordinate space requirements, supports, and installation of mechanical and electrical work that are indicated diagrammatically on Drawings. Follow routing shown for pipes, ducts, and conduit, as closely as practicable; place runs parallel with lines of building. Utilize spaces efficiently to maximize accessibility for other installations, for maintenance, and for repairs.
- E. In finished areas except as otherwise indicated, conceal pipes, ducts, and wiring within the construction. Coordinate locations of fixtures and outlets with finish elements.
- F. Coordinate completion and clean-up of work of separate sections.
- G. After Owner occupancy of premises, coordinate access to site for correction of defective work and work not in accordance with Contract Documents, to minimize disruption of Owner's activities.

## **PART 2 PRODUCTS**

### **2.01 PATCHING MATERIALS**

- A. New Materials: As specified in product sections; match existing products and work for patching and extending work.
- B. Type and Quality of Existing Products: Determine by inspecting and testing products where necessary, referring to existing work as a standard.
- C. Product Substitution: For any proposed change in materials, submit request for substitution described in Section 01 60 00 - Product Requirements.

## **PART 3 EXECUTION**

### **3.01 EXAMINATION**

- A. Verify that existing site conditions and substrate surfaces are acceptable for subsequent work. Start of work means acceptance of existing conditions.
- B. Verify that existing substrate is capable of structural support or attachment of new work being applied or attached.
- C. Examine and verify specific conditions described in individual specification sections.
- D. Take field measurements before confirming product orders or beginning fabrication, to minimize waste due to over-ordering or misfabrication.
- E. Verify that utility services are available, of the correct characteristics, and in the correct locations.

- F. Prior to Cutting: Examine existing conditions prior to commencing work, including elements subject to damage or movement during cutting and patching. After uncovering existing work, assess conditions affecting performance of work. Beginning of cutting or patching means acceptance of existing conditions.

### **3.02 PREPARATION**

- A. Clean substrate surfaces prior to applying next material or substance.
- B. Seal cracks or openings of substrate prior to applying next material or substance.
- C. Apply manufacturer required or recommended substrate primer, sealer, or conditioner prior to applying any new material or substance in contact or bond.

### **3.03 PREINSTALLATION MEETINGS**

- A. When required in individual specification sections, convene a preinstallation meeting at the site prior to commencing work of the section.
- B. Require attendance of parties directly affecting, or affected by, work of the specific section.
- C. Notify Architect/Engineer four days in advance of meeting date.
- D. Prepare agenda and preside at meeting:
  - 1. Review conditions of examination, preparation and installation procedures.
  - 2. Review coordination with related work.
- E. Record minutes and distribute copies within two days after meeting to participants, with two copies to Architect/Engineer, Owner, participants, and those affected by decisions made.

### **3.04 GENERAL INSTALLATION REQUIREMENTS**

- A. Install products as specified in individual sections, in accordance with manufacturer's instructions and recommendations, and so as to avoid waste due to necessity for replacement.
- B. Make vertical elements plumb and horizontal elements level, unless otherwise indicated.
- C. Install equipment and fittings plumb and level, neatly aligned with adjacent vertical and horizontal lines, unless otherwise indicated.
- D. Make consistent texture on surfaces, with seamless transitions, unless otherwise indicated.
- E. Make neat transitions between different surfaces, maintaining texture and appearance.

### **3.05 CUTTING AND PATCHING**

- A. Whenever possible, execute the work by methods that avoid cutting or patching.
- B. Perform whatever cutting and patching is necessary to:
  - 1. Complete the work.
  - 2. Fit products together to integrate with other work.
  - 3. Provide openings for penetration of mechanical, electrical, and other services.
  - 4. Match work that has been cut to adjacent work.
  - 5. Repair areas adjacent to cuts to required condition.
  - 6. Repair new work damaged by subsequent work.
  - 7. Remove samples of installed work for testing when requested.

- 8. Remove and replace defective and non-complying work.
- C. Execute work by methods that avoid damage to other work and that will provide appropriate surfaces to receive patching and finishing. In existing work, minimize damage and restore to original condition.
- D. Employ original installer to perform cutting for weather exposed and moisture resistant elements, and sight exposed surfaces.
- E. Cut rigid materials using masonry saw or core drill. Pneumatic tools not allowed without prior approval.
- F. Restore work with new products in accordance with requirements of Contract Documents.
- G. Fit work air tight to pipes, sleeves, ducts, conduit, and other penetrations through surfaces.
- H. At penetrations of fire rated walls, partitions, ceiling, or floor construction, completely seal voids with fire rated material , to full thickness of the penetrated element.
- I. Patching:
  - 1. Finish patched surfaces to match finish that existed prior to patching. On continuous surfaces, refinish to nearest intersection or natural break. For an assembly, refinish entire unit.
  - 2. Match color, texture, and appearance.
  - 3. Repair patched surfaces that are damaged, lifted, discolored, or showing other imperfections due to patching work. If defects are due to condition of substrate, repair substrate prior to repairing finish.

### **3.06 PROGRESS CLEANING**

- A. Maintain areas free of waste materials, debris, and rubbish. Maintain site in a clean and orderly condition.
- B. Remove debris and rubbish from closed or remote spaces, prior to enclosing the space.
- C. Broom and vacuum clean interior areas prior to start of surface finishing, and continue cleaning to eliminate dust.
- D. Collect and remove waste materials, debris, and trash/rubbish from site periodically and dispose off-site; do not burn or bury.

### **3.07 PROTECTION OF INSTALLED WORK**

- A. Protect installed work from damage by construction operations.
- B. Provide special protection where specified in individual specification sections.
- C. Provide temporary and removable protection for installed products. Control activity in immediate work area to prevent damage.
- D. Protect finished floors, stairs, and other surfaces from traffic, dirt, wear, damage, or movement of heavy objects, by protecting with durable sheet materials.
- E. Remove protective coverings when no longer needed; reuse or recycle coverings if possible.

### **3.08 FINAL CLEANING**

- A. Execute final cleaning prior to final project assessment.
  - 1. Clean areas to be occupied by Owner prior to final completion before Owner occupancy.
- B. Use cleaning materials that are nonhazardous.
- C. Clean equipment and fixtures to a sanitary condition with cleaning materials appropriate to the surface and material being cleaned.
- D. Clean site; sweep paved areas.
- E. Remove waste, surplus materials, trash/rubbish, and construction facilities from the site; dispose of in legal manner; do not burn or bury.

### **3.09 CLOSEOUT PROCEDURES**

- A. See Section 01 77 00 for additional requirements.
- B. Make submittals that are required by governing or other authorities.
- C. Accompany Project Coordinator on preliminary inspection to determine items to be listed for completion or correction in the Contractor's Correction Punch List for Contractor's Notice of Substantial Completion.
- D. Notify Architect/Engineer when work is considered ready for Architect/Engineer's Substantial Completion inspection.
- E. Submit written certification containing Contractor's Correction Punch List, that Contract Documents have been reviewed, work has been inspected, and that work is complete in accordance with Contract Documents and ready for Architect/Engineer's Substantial Completion inspection.
- F. Conduct Substantial Completion inspection and create Final Correction Punch List containing Architect/Engineer's and Contractor's comprehensive list of items identified to be completed or corrected and submit to Architect/Engineer.
- G. Correct items of work listed in Final Correction Punch List and comply with requirements for access to Owner-occupied areas.
- H. Notify Architect/Engineer when work is considered finally complete and ready for Architect/Engineer's Substantial Completion final inspection.
- I. Complete items of work determined by Architect/Engineer listed in executed Certificate of Substantial Completion.

**END OF SECTION**

**SECTION 01 77 00  
CLOSEOUT PROCEDURES**

**PART 1 GENERAL**

**1.01 SECTION INCLUDES:**

- A. Substantial Completion Procedures.
- B. Final Completion Procedures.

**1.02 RELATED REQUIREMENTS:**

- A. Section 01 10 00 - Summary.
- B. Section 01 78 00 - Closeout Submittals.

**1.03 SUBSTANTIAL COMPLETION PROCEDURES**

- A. Substantial Completion Procedures will be in accordance with the Owner's General Conditions of the Contract for Construction, and include the following:
  - 1. When the Work or a portion of the Work is considered to be substantially complete, the Contractor inspects the project and prepares a comprehensive list of outstanding items to be completed or corrected, Initial Punch List.
  - 2. Contractor submits notice of Substantial Completion.
  - 3. Contractor completes items on the Initial Punch List.
  - 4. Architect/Engineer inspects the project to verify substantial completion and prepares a Final Punch List.
  - 5. Architect/Engineer prepares Certificate of Substantial Completion, acceptance is required by Owner and Contractor.

**1.04 FINAL COMPLETION PROCEDURES**

- A. Final Completion Procedures will be in accordance with the Owner's General Conditions of the Contract for Construction, and include the following:
  - 1. When items on Initial and Final Punch Lists are complete, submit notice of final completion and final application for payment.
  - 2. Submit Final Closeout Submittals as specified in Section 01 78 00.
  - 3. Architect will inspect project and verifies the Work is acceptable and conforms with the Contract Documents.
  - 4. Architect will process final application for payment and closeout submittals.

**1.05 CORRECTION PERIOD**

- A. Correction Period commences on the date of Substantial Completion and expires two years from that date.
- B. Owner: document non-conforming or defective work over course of Correction Period. Notify Contractor in writing of nonconforming or defective work. Copy Architect/Engineer.
  - 1. Life safety issues requiring immediate corrective work: Contact Contractor for action.

**PART 2 PRODUCTS - NOT USED.**

**PART 3 EXECUTION - NOT USED.**

**END OF SECTION**

**SECTION 01 78 00  
CLOSEOUT SUBMITTALS**

**PART 1 GENERAL**

**1.01 SECTION INCLUDES**

- A. Warranties and bonds.
- B. Project record documents.

**1.02 RELATED REQUIREMENTS**

- A. Section 01 30 00 - Administrative Requirements: Submittals procedures, shop drawings, product data, and samples.
- B. Section 01 70 00 - Execution and Closeout Requirements: Contract closeout procedures.

**1.03 SUBMITTALS**

- A. Submit preliminary draft of proposed formats and outlines of contents of electronic Operation and Maintenance Manual, including warranties and bonds, record document Bookmarked Adobe PDF form before start of Work. Architect/Engineer will review draft and return with comments.
- B. Warranties and Bonds:
  - 1. Make other submittals within 10 days after Date of Substantial Completion, prior to final Application for Payment.
  - 2. For items of Work for which acceptance is delayed beyond Date of Substantial Completion, submit within 10 days after acceptance, listing the date of acceptance as the beginning of the warranty period.
- C. Project Record Documents: Submit documents to Architect/Engineer with claim for final Application for Payment.

**PART 2 PRODUCTS - NOT USED**

**PART 3 EXECUTION**

**3.01 WARRANTIES AND BONDS**

- A. Obtain warranties and bonds, executed in duplicate by responsible Subcontractors, suppliers, and manufacturers, within 10 days after completion of the applicable item of work. Except for items put into use with Owner's permission, leave date of beginning of time of warranty until Date of Substantial completion is determined.
- B. Verify that documents are in proper form, contain full information, and are notarized.
- C. Co-execute submittals when required.
- D. Retain warranties and bonds until time specified for submittal.
- E. Include originals of each in operation and maintenance manuals, indexed separately on Table of Contents.



- F. Include color, 300 dpi resolution scans of each in Operation and Maintenance Manual PDF file, Bookmarked and indexed separately in Table of Contents.

### **3.02 PROJECT RECORD DOCUMENTS**

- A. Maintain on site one set of the following record documents; record actual revisions to the Work:
  - 1. Drawings.
  - 2. Specifications.
  - 3. Addenda.
  - 4. Change Orders and other modifications to the Contract.
- B. Ensure entries are complete and accurate, enabling future reference by Owner.
- C. Store record documents separate from documents used for construction.
- D. Record information concurrent with construction progress.
- E. Specifications: Legibly mark and record at each product section description of actual products installed, including the following:
  - 1. Manufacturer's name and product model and number.
  - 2. Product substitutions or alternates utilized.
  - 3. Changes made by Addenda and modifications.
- F. Record Drawings and Shop Drawings: Legibly mark each item to record actual construction including:
  - 1. Measured depths of foundations in relation to finish first floor datum.
  - 2. Measured horizontal and vertical locations of underground utilities and appurtenances, referenced to permanent surface improvements.
  - 3. Measured locations of internal utilities and appurtenances concealed in construction, referenced to visible and accessible features of the Work.
  - 4. Field changes of dimension and detail.
  - 5. Details not on original Contract drawings.

**END OF SECTION**

**SECTION 04 01 00  
MAINTENANCE OF MASONRY**

**PART 1 GENERAL**

**1.01 SECTION INCLUDES**

- A. Water and Chemical cleaning of brick and stone masonry surfaces.
- B. Replacement of brick and stone units.
- C. Repointing mortar joints.
- D. Repair of damaged masonry.

**1.02 RELATED REQUIREMENTS**

- A. Section 04 05 11 - Masonry Mortaring and Grouting.

**1.03 REFERENCE STANDARDS**

- A. TMS 402/602 - Building Code Requirements and Specification for Masonry Structures; 2022, with Errata (2024).

**1.04 ADMINISTRATIVE REQUIREMENTS**

- A. Preinstallation Meeting: Convene one week prior to commencing work of this section.
  - 1. Require attendance of parties directly affecting work of this section.

**1.05 SUBMITTALS**

- A. See Section 01 30 00 - Administrative Requirements, for submittal procedures.
- B. Product Data: Provide data on cleaning solutions.
- C. Manufacturer's Instructions: For cleaning materials, indicate special procedures, conditions requiring special attention, and requirements for protection of adjacent surfaces.

**1.06 QUALITY ASSURANCE - MASONRY WORK**

- A. Comply with provisions of TMS 402/602, except where exceeded by requirements of Contract Documents.
- B. Restorer: Company specializing in masonry restoration with minimum five years of documented experience.

**1.07 MOCK-UPS**

- A. Restore and repoint an existing masonry wall area sized 8 feet long by 6 feet high; include in mock-up area instances of mortar.
- B. Clean a 10 ft by 10 ft panel of wall to determine extent of cleaning.
  - 1. Repeat, using different cleaning methods for up to three different panels.
- C. Locate where directed.
- D. Acceptable panel and procedures employed will become the standard for work of this section.

E. Mock-up may remain as part of the Work.

## **1.08 FIELD CONDITIONS - MASONRY WORK**

A. Cold and Hot Weather Requirements: Comply with requirements of TMS 402/602 or applicable building code, whichever is more stringent.

## **PART 2 PRODUCTS**

### **2.01 MANUFACTURERS**

A. Restoration and Cleaning Chemicals:

1. PROSOCO: [www.prosoco.com](http://www.prosoco.com).
2. Substitutions: See Section 01 60 00 - Product Requirements.

### **2.02 CLEANING MATERIALS**

A. Neutral Cleaning Agent: Non-ionic, non-etching, safe for landscape plantings and grass, biodegradable, needing no substrate neutralization.

1. pH: 5.5 to 6.5
2. Product: PROSOCO Enviro Klean ReVive: [www.prosoco.com](http://www.prosoco.com).
3. Application: Use for initial cleaning of all brick and stone masonry surfaces to remove dark, organic deposits.

B. Alkaline Cleaning Agent and Neutralizing Rinse Agent: Two-component liquid biological stain remover.

1. pH:
  - a. Cleaning Agent Liquid Cleaner Component: 13.7
  - b. Cleaning Agent Liquid Activator Component: 2.40
  - c. Rinse Agent: 1.10 in concentrate.
2. Products:
  - a. Cleaning Agent: PROSOCO Enviro Klean ReKlaim: [www.prosoco.com](http://www.prosoco.com).
  - b. Neutralizing Rinse Agent: PROSOCO Sure Klean Limestone and Masonry Afterwash: [www.prosoco.com](http://www.prosoco.com).
3. Application: Use only for cleaning and rinsing of masonry surfaces to remove soot and algae that do not respond to cleaning with neutral cleaning agent.

C. Alkaline Stucco Cleaning Agent: Non-caustic, non-acidic phosphate- and solvent-free.

1. pH: 12.4
2. Product: PROSOCO Enviro Klean EIFS Clean 'N Prep: [www.prosoco.com](http://www.prosoco.com).
3. Application: Use for cleaning of stucco surfaces to remove organic and inorganic deposits.

D. Insoluble Salt Remover: Blend of inorganic and mild organic acids; water rinseable.

1. pH: 1.6 at 1:1 dilution rate.
2. Product: PROSOCO Sure Klean White Scum Remover: [www.prosoco.com](http://www.prosoco.com).
3. Application: Use for cleaning of brick and stone masonry surfaces to remove efflorescence.

### **2.03 MORTAR MATERIALS**

A. Comply with requirements of Section 04 05 11.

## **PART 3 EXECUTION**

### **3.01 EXAMINATION**

- A. Verify that surfaces to be cleaned are ready for work of this section.

### **3.02 PREPARATION**

- A. Protect surrounding elements from damage due to restoration procedures.
- B. Carefully remove and store removable items located in areas to be restored, including fixtures, fittings, finish hardware, and accessories; reinstall upon completion.
- C. Separate areas to be protected from restoration areas using means adequate to prevent damage.
- D. Mask immediately adjacent surfaces with material that will withstand cleaning and restoration procedures.
- E. When using cleaning methods that involve specified alkaline cleaning agents or other liquids,
  1. Protect people, vehicles, property, plants metal and other non-masonry and acid-sensitive surfaces from cleaner, rinse, residue fumes and wind drift.
  2. Protect and/or divert vehicular and pedestrian traffic.
  3. Install drainage devices to prevent runoff over adjacent surfaces unless those surfaces are impervious to damage from runoff.
  4. Do not allow cleaning runoff to drain into sanitary or storm sewers.

### **3.03 REBUILDING/CRACK REPAIR**

- A. Cut out damaged and deteriorated masonry with care in a manner to prevent damage to any adjacent remaining materials.
- B. Cut away loose or unsound adjoining masonry to provide firm and solid bearing for new work. Remove mortar from remaining adjacent masonry after removal of affected units
- C. Build in new units according to the following procedures:
  1. Lay replacement units plumb and true to lines.
  2. Lay replacement units with solidly filled mortar joints.
  3. Butter ends of units with sufficient mortar to fill head joints.
  4. Rock closure units into place with mortar set against the units' head joints in the opening.
  5. Lay units to match existing bond pattern and mortar joint size.
  6. Adjust units to final position while mortar is soft and plastic. If a unit is displaced after initial set, remove, clean joints and unit of mortar, and reset unit with fresh mortar.
- D. Mortar Mix: Colored and proportioned to match existing work.
- E. Ensure that anchors, ties, and stone cramps and dowels are correctly located and built in.
- F. Install built in masonry work to match and align with existing, with joints and coursing true and level, faces plumb and in line. Build in all openings, accessories and fittings.

### **3.04 SOFT JOINT REPAIR/REPLACEMENT**

- A. Repair deteriorated expansion joints as follows:
  1. Remove existing joint sealant with a motor drawn saw.

2. If priming of substrates is required by the manufacturer, apply primer full strength to the ground out expansion joints with a brush or clean cloth per manufacturer's recommendations.
  3. Fill the joints with sealant from the deepest point to the surface by holding a properly-sized nozzle against the back of the joint. In deep joints, control the joint depth by inserting a backer rod into the joint prior to installation of joint sealant. Fill joint with sealant in compliance with manufacturer's recommendations.
  4. Dry tool sealant in joint in the correct bead shape to achieve maximum adhesion.
- B. Repair failed sealant head joints between coping units as follows:
1. Cut out existing sealant around perimeter of unit profile and remove backer rod. Remove residual adhered sealant from joint surfaces.
  2. If priming of substrates is required by sealant manufacturer, apply primer full strength to joint surfaces using a brush or clean cloth in accordance with manufacturer's recommendations.
  3. Insert backer rod into joint.
  4. Fill joints with sealant from the deepest point to the surface by holding a properly-sized nozzle against the back of the joint. Fill joint with sealant in compliance with manufacturer's recommendations.
  5. Dry tool sealant in joint in the correct bead shape to achieve maximum adhesion. See Section 07 92 00 for additional requirements on applying sealants.

### **3.05 REPOINTING**

- A. Perform repointing prior to cleaning masonry surfaces.
- B. Cut out loose or disintegrated mortar in joints to minimum 3/4 inch depth or until sound mortar is reached.
- C. Use power tools only after test cuts determine no damage to masonry units will result.
- D. Do not damage masonry units.
- E. When cutting is complete, remove dust and loose material brushing, blowing with air jet or rinsing with water.
- F. Premoisten joint and apply mortar. Do not saturate the joint. Allow masonry units to absorb surface water before repointing commences. Pack tightly in maximum 1/4 inch layers. Hand tool Form a smooth, compact joint to match profile of existing joints.
- G. Moist cure for 72 hours.

### **3.06 CLEANING EXISTING BRICK AND LIMESTONE MASONRY**

- A. Cleaning: Brush or spray clean masonry surfaces with neutral cleaning agent in accordance with manufacturer's instructions. Saturate masonry with clean water and flush loose mortar and dirt.
- B. Remove soot and algae from brick and stone surfaces that do not respond to neutral cleaning agent using alkaline cleaning agent and neutralizing rinse agent as follows:
  1. Working from bottom to top, apply prepared cleaning solution to dry surface.
  2. Leave solution on surface for 5 to 20 minutes. If solution begins to dry, reapply.
  3. Gently scrub heavily soiled areas.
  4. Rinse thoroughly with clean water. If using a sponge or string mop to rinse, change rinse water frequently. Pressure rinse porous surfaces to remove heavy soiling.

5. Immediately after rinsing cleaning solution from masonry surface, apply the prepared neutralizing rinse solution to the wet surface.
  6. Let the neutralizing rinse solution dwell for 3 to 5 minutes.
  7. Pressure rinse from bottom of treated area to top. Make sure to cover each portion of surface with a concentrated stream of water. To avoid streaking, keep wall surfaces immediately below area being cleaned running wet and free of cleaner rundown and residues.
- C. Remove efflorescence from brickwork and stonework as follows:
1. Working from bottom to top, prewet the surface with clean water.
  2. Apply diluted insoluble salt remover generously, using a low pressure spray (50 psi maximum), a densely filled masonry washing brush or roller.
  3. Leave remover on surface for 2 to 3 minutes. Do not let remover dry on surface, as bleaching may result.
  4. Reapply the diluted remover solution and scrub the surface.
  5. Rinse with low pressure to remove initial acidic residue, then rinse treated area thoroughly using high-pressure (600 to 800 psi) spray, working from bottom to top. Keep surface below set and rinsed of remover solution and residue.

### **3.07 CLEANING**

- A. Immediately remove stains, efflorescence, or other excess resulting from the work of this section.
- B. Remove excess mortar, smears, and droppings as work proceeds and upon completion.
- C. Clean surrounding surfaces.

**END OF SECTION**

**SECTION 04 05 11  
MASONRY MORTARING AND GROUTING**

**PART 1 GENERAL**

**1.01 SECTION INCLUDES**

- A. Pointing mortar for masonry.

**1.02 RELATED REQUIREMENTS**

- A. Section 04 01 00 - Maintenance of Masonry: Bedding and pointing mortar for masonry restoration work.

**1.03 REFERENCE STANDARDS**

- A. ASTM C5 - Standard Specification for Quicklime for Structural Purposes; 2018.
- B. ASTM C91/C91M - Standard Specification for Masonry Cement; 2023.
- C. ASTM C144 - Standard Specification for Aggregate for Masonry Mortar; 2018.
- D. ASTM C150/C150M - Standard Specification for Portland Cement; 2022.
- E. ASTM C207 - Standard Specification for Hydrated Lime for Masonry Purposes; 2018.
- F. ASTM C270 - Standard Specification for Mortar for Unit Masonry; 2019a, with Editorial Revision.
- G. ASTM C979/C979M - Standard Specification for Pigments for Integrally Colored Concrete; 2016.
- H. ASTM C1714/C1714M - Standard Specification for Preblended Dry Mortar Mix for Unit Masonry; 2019a.
- I. TMS 402/602 - Building Code Requirements and Specification for Masonry Structures; 2022, with Errata (2024).

**1.04 SUBMITTALS**

- A. See Section 01 30 00 - Administrative Requirements, for submittal procedures.
- B. Product Data: Include design mix and indicate whether the Proportion or Property specification of ASTM C270 is to be used. Also include required environmental conditions and admixture limitations.
- C. Samples: Submit two samples of mortar, illustrating mortar color and color range.
- D. Manufacturer's Certificate: Certify that products meet or exceed specified requirements.
- E. Manufacturer's Installation Instructions: Submit packaged dry mortar manufacturer's installation instructions.

**1.05 QUALITY ASSURANCE**

- A. Comply with provisions of TMS 402/602, except where exceeded by requirements of Contract Documents.

## **1.06 DELIVERY, STORAGE, AND HANDLING**

- A. Maintain packaged materials clean, dry, and protected against dampness, freezing, and foreign matter.

## **1.07 FIELD CONDITIONS**

- A. Cold and Hot Weather Requirements: Comply with requirements of TMS 402/602 or applicable building code, whichever is more stringent.

## **PART 2 PRODUCTS**

### **2.01 MORTAR AND GROUT APPLICATIONS**

- A. At Contractor's option, mortar and grout may be field-mixed from packaged dry materials, made from factory premixed dry materials with addition of water only, or ready-mixed.
- B. Mortar Color: Match existing.
- C. Mortar Mix Designs: ASTM C270, Property Specification.
  - 1. Exterior Repointing Mortar: Type N with maximum 2 percent ammonium stearate or calcium stearate per cement weight.

### **2.02 MATERIALS**

- A. Packaged Dry Material for Mortar for Unit Masonry: Premixed Portland cement, hydrated lime, and sand; complying with ASTM C1714/C1714M and capable of producing mortar of the specified strength in accordance with ASTM C270 with the addition of water only.
  - 1. Color: Mineral pigments added as required to match existing mortar color.
- B. Packaged Dry Material for Mortar for Repointing: Premixed Portland cement, graded sand, and chemical admixtures complying with ASTM C91/C91M with the addition of water only.
  - 1. Color: To match adjacent mortar color.
- C. Portland Cement: ASTM C150/C150M.
  - 1. Type: Type I - Normal; ASTM C150/C150M.
  - 2. Color: Color as required to match existing mortar color.
- D. Masonry Cement: ASTM C91/C91M.
  - 1. Type: Type N; ASTM C91/C91M.
- E. Hydrated Lime: ASTM C207, Type S.
- F. Quicklime: ASTM C5, non-hydraulic type.
- G. Mortar Aggregate: ASTM C144.
- H. Pigments for Colored Mortar: Pure, concentrated mineral pigments specifically intended for mixing into mortar and complying with ASTM C979/C979M.
  - 1. Color(s): As required to match existing mortar color.
- I. Water: Clean and potable.



## **2.03 MORTAR MIXING**

- A. Thoroughly mix mortar ingredients in accordance with ASTM C270 and in quantities needed for immediate use.
- B. Maintain sand uniformly damp immediately before the mixing process.
- C. Colored Mortar: Proportion selected pigments and other ingredients to match existing mortar color, without exceeding manufacturer's recommended pigment-to-cement ratio; mix in accordance with manufacturer's instructions, uniform in coloration.
- D. Add admixtures in accordance with manufacturer's instructions; mix uniformly.
- E. Do not use anti-freeze compounds to lower the freezing point of mortar.
- F. If water is lost by evaporation, re-temper only within two hours of mixing.

## **PART 3 EXECUTION**

### **3.01 INSTALLATION**

- A. Install mortar to requirements of section(s) in which masonry is specified.
- B. Remove excess mortar from surfaces of masonry units as work progresses.

### **3.02 CLEANING**

- A. Clean excess mortar from surfaces of masonry units using non-metallic wire brushes and neutral, non-acidic cleaning solutions.

**END OF SECTION**

**SECTION 07 92 00  
JOINT SEALANTS**

**PART 1 GENERAL**

**1.01 SECTION INCLUDES**

- A. Nonsag gunnable joint sealants.
- B. Joint backings and accessories.

**1.02 RELATED REQUIREMENTS**

**1.03 REFERENCE STANDARDS**

- A. ASTM C794 - Standard Test Method for Adhesion-in-Peel of Elastomeric Joint Sealants; 2018 (Reapproved 2022).
- B. ASTM C1087 - Standard Test Method for Determining Compatibility of Liquid-Applied Sealants with Accessories Used in Structural Glazing Systems; 2023.
- C. ASTM C1193 - Standard Guide for Use of Joint Sealants; 2016 (Reapproved 2023).
- D. ASTM C1248 - Standard Test Method for Staining of Porous Substrate by Joint Sealants; 2022.
- E. ASTM C1330 - Standard Specification for Cylindrical Sealant Backing for Use with Cold Liquid-Applied Sealants; 2023.
- F. SCAQMD 1168 - Adhesive and Sealant Applications; 1989, with Amendment (2022).
- G. SWRI (VAL) - SWR Institute Validated Products Directory; Current Edition.

**1.04 SUBMITTALS**

- A. See Section 01 30 00 - Administrative Requirements for submittal procedures.
- B. Product Data: Submit manufacturer's technical datasheets for each product to be used; include the following:
  - 1. Physical characteristics, including movement capability, VOC content, hardness, cure time, and color availability.
  - 2. List of backing materials approved for use with the specific product.
  - 3. Backing material recommended by sealant manufacturer.
  - 4. Substrates that product is known to satisfactorily adhere to and with which it is compatible.
  - 5. Substrates the product should not be used on.
  - 6. Substrates for which use of primer is required.
  - 7. Substrates for which laboratory adhesion and/or compatibility testing is required.
  - 8. Installation instructions, including precautions, limitations, and recommended backing materials and tools.
  - 9. Sample product warranty.
  - 10. Certification by manufacturer indicating that product complies with specification requirements.
  - 11. SWRI Validation: Provide currently available sealant product validations as listed by SWRI (VAL) for specified sealants.
- C. Product Data for Accessory Products: Submit manufacturer's technical data sheet for each product to be used, including physical characteristics, installation instructions, and recommended tools.

- D. Color Cards for Selection: Where sealant color is not specified, submit manufacturer's color cards showing standard colors available for selection.
- E. Samples for Verification: Where custom sealant color is specified, obtain directions from Architect/Engineer and submit at least two physical samples for verification of color of each required sealant.
- F. Preconstruction Laboratory Test Reports: Submit at least four weeks prior to start of installation.
- G. Installer's qualification statement.
- H. Executed warranty.

## **1.05 QUALITY ASSURANCE**

- A. Manufacturer Qualifications: Company specializing in manufacturing the products specified in this section with minimum ten years experience.
- B. Installer Qualifications: Company specializing in performing the work of this section and with at least five years of documented experience.
- C. Preconstruction Laboratory Testing: Arrange for sealant manufacturer(s) to test each combination of sealant, substrate, backing, and accessories.
  - 1. Adhesion Testing: In accordance with ASTM C794.
  - 2. Compatibility Testing: In accordance with ASTM C1087.
  - 3. Allow sufficient time for testing to avoid delaying the work.
  - 4. Deliver sufficient samples to manufacturer for testing.
  - 5. Report manufacturer's recommended corrective measures, if any, including primers or techniques not indicated in product data submittals.

## **1.06 WARRANTY**

- A. See Section 01 78 00 - Closeout Submittals for additional warranty requirements.
- B. Manufacturer Warranty: Provide 2-year manufacturer warranty for installed sealants and accessories that fail to achieve a watertight seal, exhibit loss of adhesion or cohesion, or do not cure. Complete forms in Owner's name and register with manufacturer.
- C. Extended Correction Period: Correct defective work within 2-year period commencing on Date of Substantial Completion.

## **PART 2 PRODUCTS**

### **2.01 MANUFACTURERS**

- A. Nonsag Sealants:
  - 1. Dow Corning Corporation: [www.dowcorning.com/construction](http://www.dowcorning.com/construction).
  - 2. Hilti, Inc: [www.us.hilti.com](http://www.us.hilti.com).
  - 3. Master Builders Solutions by BASF: [www.master-builders-solutions.basf.us/en-us](http://www.master-builders-solutions.basf.us/en-us).
  - 4. Momentive Performance Materials, Inc (formerly GE Silicones): [www.momentive.com](http://www.momentive.com).
  - 5. Pecora Corporation: [www.pecora.com](http://www.pecora.com).
  - 6. Sika Corporation: [www.usa-sika.com](http://www.usa-sika.com).
  - 7. Tremco Commercial Sealants & Waterproofing: [www.tremcosealants.com](http://www.tremcosealants.com).

8. W.R. Meadows, Inc: [www.wrmeadows.com](http://www.wrmeadows.com).

## 2.02 JOINT SEALANT APPLICATIONS

### A. Scope:

1. Exterior Joints:
  - a. Seal open joints except open joints indicated on drawings as not sealed.
2. Do Not Seal:
  - a. Intentional weep holes in masonry.
  - b. Weep holes in curtain wall, storefront and window systems.
  - c. Joints indicated to be covered with expansion joint cover assemblies.
  - d. Joints where sealant is specified to be furnished and installed by manufacturer of product to be sealed.
  - e. Joints where sealant installation is specified in other sections.

### B. Exterior Joints: Use non-sag non-staining silicone sealant, unless otherwise indicated.

1. Lap Joints in Sheet Metal Fabrications: Butyl rubber, non-curing.

## 2.03 JOINT SEALANTS - GENERAL

- A. Sealants and Primers: Provide products having lower volatile organic compound (VOC) content than indicated in SCAQMD 1168.

## 2.04 NONSAG JOINT SEALANTS

### A. Non-Staining Silicone Sealant: ASTM C920, Grade NS, Uses M and A; not expected to withstand continuous water immersion or traffic.

1. Nonstaining to Porous Stone: Nonstaining to light-colored natural stone when tested in accordance with ASTM C1248.
2. Color: To be selected by Architect/Engineer from manufacturer's standard range.
3. Cure Type: Single-component, neutral moisture curing.
4. Products:
  - a. Dow Chemical Company; DOWSIL 790 Silicone Building Sealant: [consumer.dow.com/en-us/industry/ind-building-construction.html](http://consumer.dow.com/en-us/industry/ind-building-construction.html).
  - b. Sika Corporation; Sikasil WS-290: [www.usa-sika.com](http://www.usa-sika.com).
  - c. Sika Corporation; Sikasil 728NS: [www.usa-sika.com](http://www.usa-sika.com).
  - d. Tremco Commercial Sealants & Waterproofing; Spectrem 1: [www.tremcosealants.com](http://www.tremcosealants.com).
  - e. Tremco Commercial Sealants & Waterproofing; Tremsil 200: [www.tremcosealants.com](http://www.tremcosealants.com).
  - f. Substitutions: See Section 01 60 00 - Product Requirements.

### B. Noncuring Butyl Sealant: Solvent-based, single component, nonsag, nonskinning, nonhardening, nonbleeding; nonvapor permeable; intended for fully concealed applications.

1. Products:
  - a. Pecora Corporation; Pecora BA-98 Non-Skinning Butyl Sealant: [www.pecora.com](http://www.pecora.com).
  - b. Substitutions: See Section 01 60 00 - Product Requirements.

## 2.05 ACCESSORIES

### A. Sealant Backing Rod, Closed-Cell Type:

1. Cylindrical flexible sealant backings complying with ASTM C1330 Type C.
2. Size: 25 to 50 percent larger in diameter than joint width.

- B. Sealant Backing Rod, Bi-Cellular Type:
  - 1. Cylindrical flexible sealant backings complying with ASTM C1330 Type B.
  - 2. Size: 25 to 50 percent larger in diameter than joint width.
- C. Backing Tape: Self-adhesive polyethylene tape with surface that sealant will not adhere to and recommended by tape and sealant manufacturers for specific application.
- D. Masking Tape: Self-adhesive, nonabsorbent, nonstaining, removable without adhesive residue, and compatible with surfaces adjacent to joints and sealants.
- E. Joint Cleaner: Noncorrosive and nonstaining type, type recommended by sealant manufacturer; compatible with joint forming materials.
- F. Primers: Type recommended by sealant manufacturer to suit application; nonstaining.

## **PART 3 EXECUTION**

### **3.01 EXAMINATION**

- A. Verify that joints are ready to receive work.
- B. Verify that backing materials are compatible with sealants.

### **3.02 PREPARATION**

- A. Remove loose materials and foreign matter that could impair adhesion of sealant.
- B. Clean joints, and prime as necessary, in accordance with manufacturer's instructions.
- C. Perform preparation in accordance with manufacturer's instructions and ASTM C1193.
- D. Mask elements and surfaces adjacent to joints from damage and disfigurement due to sealant work; be aware that sealant drips and smears may not be completely removable.
- E. Concrete Floor Joints That Will Be Exposed in Completed Work: Test joint filler in an inconspicuous area to verify that it does not stain or discolor slab.

### **3.03 INSTALLATION**

- A. Install this work in accordance with sealant manufacturer's requirements for preparation of surfaces and material installation instructions.
- B. Provide joint sealant installations complying with ASTM C1193.
- C. Measure joint dimensions and size joint backers to achieve width-to-depth ratio, neck dimension, and surface bond area as recommended by manufacturer, except where specific dimensions are indicated.
- D. Install bond breaker backing tape where backer rod cannot be used.
- E. Install sealant free of air pockets, foreign embedded matter, ridges, and sags, and without getting sealant on adjacent surfaces.
- F. Do not install sealant when ambient temperature is outside manufacturer's recommended temperature range, or will be outside that range during the entire curing period, unless manufacturer's approval is obtained and instructions are followed.

G. Nonsag Sealants: Tool surface concave, unless otherwise indicated; remove masking tape immediately after tooling sealant surface.

### **3.04 POST-OCCUPANCY**

A. Post-Occupancy Inspection: Perform visual inspection of entire length of project sealant joints at a time that joints have opened to their greatest width, i.e., at low temperature in thermal cycle. Report failures immediately and repair them.

**END OF SECTION**

**SECTION 09 90 00  
PAINTING AND COATING**

**PART 1 GENERAL**

**1.01 SECTION INCLUDES**

- A. Alternate No. 1:
  - 1. Surface preparation.
  - 2. Exterior painting and coating systems.
- B. Scope:
  - 1. Finish surfaces exposed to view, unless fully factory-finished and unless otherwise indicated, including the following:
    - a. Exterior:
      - 1) Metal, Miscellaneous: Iron, ornamental iron, structural iron and steel, ferrous metal.

**1.02 RELATED REQUIREMENTS**

- A. Section 01 23 00 - Alternates: Alternate No. 1 - Painting of Existing Exposed Steel.

**1.03 REFERENCE STANDARDS**

- A. 40 CFR 59, Subpart D - National Volatile Organic Compound Emission Standards for Architectural Coatings; U.S. Environmental Protection Agency; Current Edition.
- B. CARB (SCM) - Suggested Control Measure for Architectural Coatings; California Air Resources Board; 2020.
- C. SCAQMD 1113 - Architectural Coatings; 1977, with Amendment (2016).
- D. SSPC-SP 1 - Solvent Cleaning; 2015, with Editorial Revision (2016).
- E. SSPC-SP 6/NACE No.3 - Commercial Blast Cleaning; 2006.

**1.04 SUBMITTALS**

- A. See Section 01 30 00 - Administrative Requirements for submittal procedures.
- B. Product Data: Provide complete list of products to be used, with the following information for each:
  - 1. Product characteristics.
  - 2. Surface preparation instructions and recommendations.
  - 3. Primer requirements and finish specification.
  - 4. Storage and handling requirements and recommendations.
  - 5. Application methods.
  - 6. Clean-up information.

**PART 2 PRODUCTS**

**2.01 MANUFACTURERS**

- A. Basis of Design Products: Subject to compliance with requirements, provide Sherwin-Williams Company (The) products indicated; [www.sherwin-williams.com](http://www.sherwin-williams.com).
- B. Comparable Products: Products of approved manufacturers will be considered in accordance with 01 60 00 - Product Requirements, and the following:

1. Products that meet or exceed performance and physical characteristics of basis of design products.

## **2.02 PAINTINGS AND COATINGS**

### **A. General:**

1. Provide factory-mixed coatings unless otherwise indicated.
2. Do not reduce, thin, or dilute coatings or add materials to coatings unless specifically indicated in manufacturer's instructions.

### **B. Volatile Organic Compound (VOC) Content:**

1. Provide paints and finishes that comply with the most stringent requirements specified in the following:
  - a. 40 CFR 59, Subpart D--National Volatile Organic Compound Emission Standards for Architectural Coatings.
  - b. SCAQMD 1113 Rule.
  - c. CARB (SCM).
  - d. Architectural coatings VOC limits of State in which the project is located.
2. Determination of VOC Content: Testing and calculation in accordance with 40 CFR 59, Subpart D (EPA Method 24), exclusive of colorants added to a tint base and water added at project site, or other method acceptable to authorities having jurisdiction.

- ### **C. Accessory Materials:** Provide primers, sealers, cleaning agents, cleaning cloths, sanding materials, and clean-up materials as required for final completion of painted surfaces.

## **2.03 PAINT SYSTEMS - EXTERIOR**

### **A. Metal, Miscellaneous:** Iron, ornamental iron, structural iron and steel, ferrous metal.

1. Alkyd Systems, Water Based:
  - a. Semi-Gloss Finish:
    - 1) 1st Coat: Sherwin-Williams Pro Industrial Pro-Cryl Universal Primer, B66-1310 Series: [www.sherwin-williams.com](http://www.sherwin-williams.com).
    - a) 5 mils wet, 2 mils dry per coat.
  - 2) 2nd and 3rd Coat: Sherwin-Williams Pro Industrial Water Based Alkyd Urethane Enamel Semi-Gloss, B53-1150 Series: [www.sherwin-williams.com](http://www.sherwin-williams.com).
  - a) 4 to 5 mils wet, 1.4 to 1.7 mils dry per coat.

## **PART 3 EXECUTION**

### **3.01 EXAMINATION**

- A. Verify that surfaces are ready to receive work as instructed by the product manufacturer.
- B. Examine surfaces scheduled to be finished prior to commencement of work. Report any condition that may potentially effect proper application.
- C. Test shop-applied primer for compatibility with subsequent cover materials.

### **3.02 PREPARATION**

- A. Clean surfaces thoroughly and correct defects prior to application.
- B. Prepare surfaces using the methods recommended by the manufacturer for achieving the best result for the substrate under the project conditions.



- C. Remove mildew from impervious surfaces by scrubbing with solution of water and bleach. Rinse with clean water and allow surface to dry.
- D. Ferrous Metal:
  - 1. Solvent clean according to SSPC-SP 1.
  - 2. Shop-Primed Surfaces: Sand and scrape to remove loose primer and rust. Feather edges to make touch-up patches inconspicuous. Prime bare steel surfaces.
  - 3. Remove rust, loose mill scale, and other foreign substances using methods recommended by paint manufacturer and blast cleaning in accordance with SSPC-SP 6/NACE No.3. Protect from corrosion until coated.

### **3.03 APPLICATION**

- A. Apply products in accordance with manufacturer's written instructions.
- B. Apply coatings at spread rate required to achieve manufacturer's recommended dry film thickness.
- C. Regardless of number of coats specified, apply additional coats until complete hide is achieved.

### **3.04 PRIMING**

- A. Apply primer to all surfaces unless specifically not required by coating manufacturer. Apply in accordance with coating manufacturer's instructions.
- B. Primers specified in painting schedules may be omitted on items that are factory primed or factory finished if acceptable to top coat manufacturers.

### **3.05 CLEANING**

- A. Collect waste material that could constitute a fire hazard, place in closed metal containers, and remove daily from site.
- B. Clean surfaces immediately of overspray, splatter, and excess material.
- C. After coating has cured, clean and replace finish hardware, fixtures, and fittings previously removed.

### **3.06 PROTECTION**

- A. Protect finished coatings from damage until completion of project.
- B. Touch-up damaged finishes after Substantial Completion.

### **END OF SECTION**

**SECTION 09 93 00  
STAINING AND TRANSPARENT FINISHING**

**PART 1 GENERAL**

**1.01 SECTION INCLUDES**

- A. Field application of stains.

**1.02 DEFINITIONS**

- A. Comply with ASTM D16 for interpretation of terms used in this section.

**1.03 REFERENCE STANDARDS**

- A. 40 CFR 59, Subpart D - National Volatile Organic Compound Emission Standards for Architectural Coatings; U.S. Environmental Protection Agency; Current Edition.
- B. ASTM D16 - Standard Terminology for Paint, Related Coatings, Materials, and Applications; 2024.
- C. CARB (SCM) - Suggested Control Measure for Architectural Coatings; California Air Resources Board; 2020.
- D. MPI (APL) - Master Painters Institute Approved Products List; Master Painters and Decorators Association; Current Edition.
- E. MPI (APSM) - Master Painters Institute Architectural Painting Specification Manual; Current Edition.
- F. SCAQMD 1113 - Architectural Coatings; 1977, with Amendment (2016).

**1.04 SUBMITTALS**

- A. Product Data: Provide complete list of products to be used, with the following information for each:
  - 1. Manufacturer's name, product name and catalog number, and general product category.
  - 2. MPI product number (e.g. MPI #33).
  - 3. Manufacturer's installation instructions.
- B. Samples: Submit two samples, illustrating selected colors and sheens for each system with specified coats cascaded. Submit on actual wood substrate to be finished, 8 by 10 inch in size.
- C. Certification: By manufacturer that stains and transparent finishes comply with VOC limits specified.
- D. Manufacturer's Instructions: Indicate special surface preparation procedures.
- E. Applicator's Qualification Statement.
- F. Maintenance Data: Submit data including finish schedule showing where each product, color, and finish was used, product technical data sheets, safety data sheets (SDS), care and cleaning instructions, touch-up procedures, and color samples of each color and finish used.
- G. Maintenance Materials: Furnish the following for Owner's use in maintenance of project.
  - 1. See Section 01 60 00 - Product Requirements for additional provisions.
  - 2. Extra Stain and Transparent Finish Materials: 1 gallon of each color and type; from the same product run, store where directed.
  - 3. Label each container with color and type in addition to the manufacturer's label.

## **1.05 QUALITY ASSURANCE**

- A. Applicator Qualifications: Company specializing in performing work of the type specified and with at least five years of documented experience.

## **1.06 MOCK-UP**

- A. Provide mock-up covering exposed surfaces of one (1) glulam beam and entire area of deck surface between two (2) beams, with one of those beams being the mock-up beam.
- B. Secure Owner's and Architect/Engineer's written approval of mock-up prior to proceeding with balance of the work.
- C. Approved mock-up may remain as part of permanent work.

## **1.07 DELIVERY, STORAGE, AND HANDLING**

- A. Deliver products to site in sealed and labeled containers; inspect to verify acceptability.
- B. Container Label: Include manufacturer's name, type of stain or transparent finish, brand name, lot number, brand code, coverage, surface preparation, drying time, cleanup requirements, color designation, and instructions for mixing and reducing.
- C. Stain and Transparent Finish Materials: Store at minimum ambient temperature of 45 degrees F and a maximum of 90 degrees F, in ventilated area, and as required by manufacturer's instructions.

## **1.08 FIELD CONDITIONS**

- A. Do not apply materials when surface and ambient temperatures are outside the temperature ranges required by manufacturer of stains and transparent finishes.
- B. Follow manufacturer's recommended procedures for producing best results, including testing of substrates, moisture in substrates, and humidity and temperature limitations.
- C. Do not apply materials when relative humidity exceeds 85 percent, at temperatures less than 5 degrees F above the dew point, or to damp or wet surfaces.
- D. Minimum Application Temperature: 50 degrees F unless required otherwise by manufacturer's instructions.
- E. Provide lighting level of 80 fc measured mid-height at substrate surface.

## **PART 2 PRODUCTS**

### **2.01 MANUFACTURERS**

- A. Transparent Finishes:
  - 1. Behr Process Corporation: [www.behr.com](http://www.behr.com).
  - 2. PPG Paints Deft Interior Clears/Polyurethanes: [www.ppgpaints.com](http://www.ppgpaints.com).
  - 3. Sherwin-Williams Company: [www.sherwin-williams.com](http://www.sherwin-williams.com).

### **2.02 STAINS AND TRANSPARENT FINISHES - GENERAL**

- A. Finishes:
  - 1. Where MPI paint numbers are specified, provide products listed in Master Painters Institute Approved Product List, current edition available at [www.paintinfo.com](http://www.paintinfo.com), for specified MPI

- categories, except as otherwise indicated.
2. Provide finishes capable of being readily and uniformly dispersed to a homogeneous coating, with good flow and brushing properties, and capable of drying or curing free of streaks or sags.
  3. Provide materials compatible with one another and the substrates indicated under conditions of service and application, as demonstrated by manufacturer based on testing and field experience.
  4. Supply each finish material in quantity required to complete entire project's work from a single production run.
  5. Do not reduce, thin, or dilute finishes or add materials unless such procedure is specifically described in manufacturer's product instructions.
- B. Volatile Organic Compound (VOC) Content:
1. Provide stains and transparent finishes that comply with the most stringent requirements specified in the following:
    - a. 40 CFR 59, Subpart D--National Volatile Organic Compound Emission Standards for Architectural Coatings.
    - b. SCAQMD 1113 Rule.
    - c. CARB (SCM).
    - d. Architectural coatings VOC limits of the State in which the Project is located.
  2. Determination of VOC Content: Testing and calculation in accordance with 40 CFR 59, Subpart D (EPA Method 24), exclusive of colorants added to a tint base and water added at project site; or other method acceptable to authorities having jurisdiction.
- C. Flammability: Comply with applicable code for surface burning characteristics.
- D. Colors: To be selected from manufacturer's full range of available colors.
1. Selection to be made by Owner after award of contract.

## **2.03 EXTERIOR STAIN AND TRANSPARENT FINISH SYSTEMS**

- A. Finish on Wood- Exposed decking and beam surfaces:
1. 2 coat(s) stain.
  2. Stain: Exterior semi-transparent stain for wood, solvent based; MPI #13.
    - a. Products:
      - 1) PPG Paints ProLuxe Log & Siding Wood Finish Transparent Stain.
      - 2) Substitutions: Section 01 60 00 - Product Requirements.

## **2.04 ACCESSORY MATERIALS**

- A. Accessory Materials: Cleaning agents, cleaning cloths, sanding materials, and clean-up materials as required for final completion of finished surfaces.

## **PART 3 EXECUTION**

### **3.01 EXAMINATION**

- A. Do not begin application of stains and finishes until substrates have been properly prepared.
- B. Verify that surfaces are ready to receive work as instructed by the product manufacturer.
- C. Examine surfaces scheduled to be finished prior to commencement of work. Report any condition that may potentially effect proper application.

- D. If substrate preparation is the responsibility of another installer, notify Architect/Engineer of unsatisfactory preparation before proceeding.

### **3.02 PREPARATION**

- A. Completely remove existing finishes.
- B. Remove mildew from surfaces by scrubbing with solution of water and bleach. Rinse with clean water delivered by 500 psi or less pressure washer and allow surface to dry.
- C. Clean surfaces thoroughly in strict accordance with stain/finish manufacturer's written instructions and correct defects prior to application.
- D. Prepare surfaces using the methods recommended by the manufacturer for achieving the best result for the substrate under the project conditions.
- E. Remove or repair existing finishes that exhibit surface defects.
- F. Remove or mask surface appurtenances, including electrical plates, hardware, light fixture trim, escutcheons, and fittings, prior to preparing surfaces or finishing.
- G. Mask adjacent surfaces and materials that are not to receive stains/finishes.
- H. Wood Surfaces to Receive Transparent Finish: Wipe off dust and grit prior to sealing, seal knots, pitch streaks, and sappy sections with sealer. Fill nail holes and cracks after sealer has dried; sand lightly between coats. Prime concealed surfaces with gloss varnish reduced 25 percent with thinner.

### **3.03 APPLICATION**

- A. Apply products in accordance with manufacturer's written instructions and recommendations in "MPI Architectural Painting Specification Manual".
- B. Do not apply finishes to surfaces that are not dry. Allow applied coats to dry before next coat is applied.
- C. Apply each coat to uniform appearance in thicknesses specified by manufacturer.
- D. Sand wood surfaces lightly between coats to achieve required finish.
- E. Vacuum clean surfaces of loose particles. Use tack cloth to remove dust and particles just prior to applying next coat.
- F. Wood to Receive Transparent Finishes: Tint fillers to match wood. Work fillers into the grain before set. Wipe excess from surface.
- G. Reinstall items removed prior to finishing.

### **3.04 CLEANING**

- A. Collect waste material that could constitute a fire hazard, place in closed metal containers, and remove daily from site.

### **3.05 PROTECTION**

- A. Protect finishes until completion of project.

B. Touch-up damaged finishes after Substantial Completion.

**END OF SECTION**