

PROJECT MANUAL

FOR:

FRANKLIN AND CAPITOL PLAZAS WINDOW AND DOOR UPGRADE - PHASE IV

BID SET
JULY 2019

Client:

Boise City / Ada County Housing Authority

Architect:

HUMMEL ARCHITECTS PLLC



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HA Project No. 19017

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TABLE OF CONTENTS

BIDDING REQUIREMENTS

INVITATION FOR BID
INSTRUCTIONS TO BIDDERS – BOISE CITY/ADA COUNTY HOUSING AUTHORITY (PHA)
CONTRACTOR'S BID FORM
BIDDER'S QUALIFICATIONS
WHAT IS SECTION 3
CERTIFICATION FOR BUSINESS CONCERNS SEEKING SECTION 3 PREFERENCE IN CONTRACTING
FY ~~2016~~ INCOME LIMITS DOCUMENTATION SYSTEM -2019
SECTION 3 RESIDENT EMPLOYMENT PLAN
REPRESENTATIONS, CERTIFICATIONS, AND OTHER STATEMENTS OF BIDDERS
AFFIDAVIT OF MBE/WBE/ESB PARTICIPATION
NON-COLLUSIVE AFFIDAVIT
DAVIS BACON WAGE DETERMINATION – BUILDING
SUBMITTALS CHECKLIST AND ACKNOWLEDGEMENT

CONTRACTING REQUIREMENTS

FORM OF CONTRACT
GENERAL CONDITIONS FOR CONSTRUCTION CONTRACTS – PUBLIC HOUSING PROGRAMS
IDAHO STATE TAX COMMISSION FORM WH-5
U.S. DEPARTMENT OF LABOR PAYROLL FORM WH-347
INSTRUCTIONS FOR COMPLETEING PAYROLL FORM WH-347
CERTIFICATE FROM CONTRACTOR APPOINTING OFFICER OR EMPLOYEE TO SUPERVISE
AUTHORIZATION FOR PAYROLL DEDUCTIONS

TECHNICAL SPECIFICATIONS

DIVISION 01 – GENERAL REQUIREMENTS

SECTION 011000 – SUMMARY
SECTION 012500 – SUBSTITUTION PROCEDURES
SECTION 012600 – CONTRACT MODIFICATION PROCEDURES
SECTION 012900 – PAYMENT PROCEDURES
SECTION 013100 – PROJECT MANAGEMENT AND COORDINATION
SECTION 015000 – TEMPORARY FACILITIES AND CONTROLS
SECTION 017300 – EXECUTION
SECTION 017700 – CLOSEOUT PROCEDURES
SECTION 017839 – PROJECT RECORD DOCUMENTS

DIVISIONS 02 – 07

NO REQUIREMENTS

DIVISION 08 – OPENINGS

SECTION 085200 – ALUMINUM-CLAD WOOD AND WINDOWS
SECTION 085313 – VINYL WINDOWS

DIVISIONS 09 – 49

NO REQUIREMENTS

END OF TABLE OF CONTENTS

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SECTION 011000 - SUMMARY

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

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

1.2 SUMMARY

- A. Section includes:
 - 1. Project information.
 - 2. Work covered by Contract Documents.
 - 3. Access to site.
 - 4. Coordination with occupants.
 - 5. Work restrictions.
 - 6. Specification and drawing conventions.
- B. Related Section:
 - 1. Division 01 Section "Temporary Facilities and Controls" for limitations and procedures governing temporary use of Owner's facilities.

1.3 PROJECT INFORMATION

- A. Project Identification: Franklin and Capitol Plaza Window and Door Upgrade.
 - 1. Project Location: Franklin Plaza: 155 W Franklin St., Boise, ID 83702 and Capitol Plaza: 700 Cunningham Place, Boise , ID 83702.
- B. Owner: Boise City/Ada County Housing Authority.
 - 1. Contracting Officer: Deanna Watson, Executive Director, Boise City/Ada County Housing Authority; Phone: 208-2345-4907; Fax: 208-345-4909; email: dwatson@bcacha.org.
 - 2. Owner's Representative: Ben Duke: Boise City/Ada County Housing Authority; Phone: 208-345-4907; Fax: 208-345-4909; email: bduke@bcacha.org.
- C. Architect: Hummel Architects PLLC; 2785 North Bogus Basin Road, Boise, Idaho; Phone: 208-343-7523; Fax: 208-343-0940.
 - 1. Contact: Greg Allen; Email: gallen@hummelarch.com.

1.4 WORK COVERED BY CONTRACT DOCUMENTS

- A. The Work of the Project is defined by the Contract Documents and includes, but is not limited to, the following:
 - 1. The removal of existing aluminum windows as indicated on the contract drawings at Franklin Plaza and replacing with vinyl window assemblies. At Capitol Plaza, the replacement of existing aluminum windows and doors with aluminum clad wood windows and doors as specified.
- B. Type of Contract.
 - 1. Project will be constructed under a single prime contract.
 - a. The project is financed in part using Federal funds.

1.5 ACCESS TO SITE

- A. **General:** The Contractor shall have limited use of Project sites for construction operations during construction period. Contractor's use of Project sites is limited only by Owner's right to perform work or to retain other contractors on portions of Project.
- B. **Use of Site:** Limit use of Project sites to work in areas indicated. Do not disturb portions of Project site beyond areas in which the Work is indicated.
 - 1. **Limits:** Confine construction operations to interior areas receiving new systems. Coordinate with owner for location of site waste disposal and staging areas.
 - 2. **Driveways, Walkways and Entrances:** Keep driveways, loading areas, and entrances serving premises clear and available to Owner, Owner's employees, building tenants, and emergency vehicles at all times. Do not use these areas for parking or storage of materials.
 - a. Schedule deliveries to minimize use of driveways and entrances by construction operations.
 - b. Schedule deliveries to minimize space and time requirements for storage of materials and equipment on-site.
- C. **Condition of Existing Building:** Maintain portions of existing building affected by construction operations in a weathertight condition throughout construction period.

1.6 COORDINATION WITH OCCUPANTS

- A. **Full Owner Occupancy:** Owner and building tenants will occupy site and building during entire construction period. Cooperate with Owner and tenants during construction operations to minimize conflicts and facilitate Owner and tenant usage. Perform the Work so as not to interfere with Owner's day-to-day operations. Maintain existing exits unless otherwise indicated.
 - 1. Maintain access to existing walkways, corridors, and other adjacent occupied or used facilities. Do not close or obstruct walkways, corridors, or other occupied or used facilities without written permission from Owner and approval of authorities having jurisdiction.
 - 2. Notify Owner not less than 72 hours in advance of activities that will affect Owner's operations.
 - 3. **INCLUDE ALL PRICING WITHIN THE BID TOTAL SUBMITTED.**

1.7 WORK RESTRICTIONS

- A. **Work Restrictions, General:** Comply with restrictions on construction operations.
 - 1. Comply with limitations on use of public streets and other requirements of authorities having jurisdiction.
- B. **On-Site Work Hours:** Limit work in the existing building to normal business working hours of 8:00 a.m. to 6:00 p.m., Monday through Friday, excluding federal and state holidays.
 - 1. Work during weekends will be allowed only as specifically agreed to by the Owner.
- C. **Existing Utility Interruptions:** Do not interrupt utilities serving facilities and property unless permitted under the following conditions and then only after providing temporary utility services according to requirements indicated:
 - 1. Notify Owners Representative not less than two days in advance of proposed utility interruptions.
 - 2. Obtain Owners Representative's (OR) written permission before proceeding with utility interruptions.
- D. **Noise, Vibration, and Odors:** Coordinate operations that may result in high levels of noise and vibration, odors, or other disruption to Owner occupancy with Owner.
 - 1. Notify OR not less than two days in advance of proposed disruptive operations.

2. Obtain OR's written permission before proceeding with disruptive operations.
- E. Controlled Substances: Use of tobacco products, alcohol, and other controlled substances on the Project site is not permitted.

1.8 SPECIFICATION AND DRAWING CONVENTIONS

- A. Division 01 General Requirements: Requirements of Sections in Division 01 apply to the Work of all Sections in the Specifications.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION 011000

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SECTION 012500 - SUBSTITUTION PROCEDURES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

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

1.2 SUMMARY

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

1.3 DEFINITIONS

- A. Substitutions: Changes in products, materials, equipment, and methods of construction from those required by the Contract Documents and proposed by Contractor.

1.4 SUBMITTALS

- A. The Contractor may, at its option, use any equipment, material, article, or process that, in the judgment of and as approved by the Architect, is equal to that named in the specifications, unless otherwise specifically provided in this contract. Submit three copies of each request for consideration. Identify product or fabrication or installation method to be replaced. Include Specification Section number and title and Drawing numbers and titles.
 - 1. Form: Use form acceptable to Architect.
 - 2. Documentation: Show compliance with requirements for substitutions and the following, as applicable:
 - a. Statement indicating why specified product or fabrication or installation cannot be provided, if applicable.
 - b. Coordination information, including a list of changes or modifications needed to other parts of the Work and to construction performed by Owner and separate contractors, that will be necessary to accommodate proposed substitution.
 - c. Detailed comparison of significant qualities of proposed substitution with those of the Work specified. Include annotated copy of applicable specification section. Significant qualities may include attributes such as performance, weight, size, durability, visual effect, sustainable design characteristics, warranties, and specific features and requirements indicated. Indicate deviations, if any, from the Work specified.
 - d. Product Data, including drawings and descriptions of products and fabrication and installation procedures.
 - e. Samples, where applicable or requested.
 - f. Certificates and qualification data, where applicable or requested.
 - g. List of similar installations for completed projects with project names and addresses and names and addresses of architects and owners.

- h. Material test reports from a qualified testing agency indicating and interpreting test results for compliance with requirements indicated.
 - i. Research reports evidencing compliance with building code in effect for Project, from ICC-ES.
 - j. Detailed comparison of Contractor's construction schedule using proposed substitution with products specified for the Work, including effect on the overall Contract Time. If specified product or method of construction cannot be provided within the Contract Time, include letter from manufacturer, on manufacturer's letterhead, stating date of receipt of purchase order, lack of availability, or delays in delivery.
 - k. Cost information, including a proposal of change, if any, in the Contract Sum.
 - l. Contractor's certification that proposed substitution complies with requirements in the Contract Documents except as indicated in substitution request, is compatible with related materials, and is appropriate for applications indicated.
 - m. Contractor's waiver of rights to additional payment or time that may subsequently become necessary because of failure of proposed substitution to produce indicated results.
3. Owners Representative's Action: If necessary, Architect, through the OR, will request additional information or documentation for evaluation within seven days of receipt of a request for substitution. Architect will notify Contractor of acceptance or rejection of proposed substitution within 15 days of receipt of request, or seven days of receipt of additional information or documentation, whichever is later.
- a. Forms of Acceptance: Change Order.
 - b. Use product specified if Architect does not issue a decision on use of a proposed substitution within time allocated.

1.5 QUALITY ASSURANCE

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

PART 2 - PRODUCTS

2.1 SUBSTITUTIONS

- A. Substitutions for Cause: Submit requests for substitution immediately upon discovery of need for change, but not later than 15 days prior to time required for preparation and review of related submittals.
 - 1. Conditions: Contracting Officer will consider Contractor's request for substitution when the following conditions are satisfied:
 - a. Requested substitution is consistent with the Contract Documents and will produce indicated results.
 - b. Requested substitution will not adversely affect Contractor's construction schedule.
 - c. Requested substitution has received necessary approvals of authorities having jurisdiction.
 - d. Requested substitution is compatible with other portions of the Work.
 - e. Requested substitution has been coordinated with other portions of the Work.
 - f. Requested substitution provides specified warranty.
 - g. If requested substitution involves more than one contractor, requested substitution has been coordinated with other portions of the Work, is uniform and consistent, is compatible with other products, and is acceptable to all contractors involved.
- B. Substitutions for Convenience: Architect will consider requests for substitution when the following conditions are satisfied:

1. Requested substitution offers Owner a substantial advantage in cost, time, energy conservation, or other considerations, after deducting additional responsibilities Owner must assume. Owner's additional responsibilities may include compensation to Architect for redesign and evaluation services, increased cost of other construction by Owner, and similar considerations.
 2. Requested substitution does not require extensive revisions to the Contract Documents.
 3. Requested substitution is consistent with the Contract Documents and will produce indicated results.
 4. Requested substitution will not adversely affect Contractor's construction schedule.
 5. Requested substitution has received necessary approvals of authorities having jurisdiction.
 6. Requested substitution is compatible with other portions of the Work.
 7. Requested substitution has been coordinated with other portions of the Work.
 8. Requested substitution provides specified warranty.
- C. If requested substitution involves more than one contractor, requested substitution has been coordinated with other portions of the Work, is uniform and consistent, is compatible with other products, and is acceptable to all contractors involved.

PART 3 - EXECUTION (Not Used)

END OF SECTION 012500

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SECTION 012600 - CONTRACT MODIFICATION PROCEDURES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

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

1.2 SUMMARY

- A. Section includes administrative and procedural requirements for handling and processing Contract modifications.

1.3 PROPOSAL REQUESTS

- A. Owner-Initiated Proposal Requests: Owners Representative (OR) will issue a detailed description of proposed changes in the Work that may require adjustment to the Contract Sum or the Contract Time. If necessary, the description will include supplemental or revised Drawings and Specifications.
 - 1. Proposal Requests issued by OR are not instructions either to stop work in progress or to execute the proposed change.
 - 2. Within time specified in Proposal Request, after receipt of Proposal Request, submit a quotation estimating cost adjustments to the Contract Sum and the Contract Time necessary to execute the change.
 - a. Include a list of quantities of products required or eliminated and unit costs, with total amount of purchases and credits to be made. If requested, furnish survey data to substantiate quantities.
 - b. Indicate applicable taxes, delivery charges, equipment rental, and amounts of trade discounts.
 - c. Include costs of labor and supervision directly attributable to the change.
 - d. Include an updated Contractor's construction schedule that indicates the effect of the change, including, but not limited to, changes in activity duration, start and finish times, and activity relationship. Use available total float before requesting an extension of the Contract Time.
 - e. Quotation Form: Use form acceptable to the Architect.
- B. Contractor-Initiated Proposals: If latent or changed conditions require modifications to the Contract, Contractor may initiate a claim by submitting a request for a change to Contracting Officer.
 - 1. Include a statement outlining reasons for the change and the effect of the change on the Work. Provide a complete description of the proposed change. Indicate the effect of the proposed change on the Contract Sum and the Contract Time.
 - 2. Include a list of quantities of products required or eliminated and unit costs, with total amount of purchases and credits to be made. If requested, furnish survey data to substantiate quantities.
 - 3. Indicate applicable taxes, delivery charges, equipment rental, and amounts of trade discounts.
 - 4. Include costs of labor and supervision directly attributable to the change.
 - 5. Include an updated Contractor's construction schedule that indicates the effect of the change, including, but not limited to, changes in activity duration, start and finish times, and activity relationship. Use available total float before requesting an extension of the Contract Time.
 - 6. Comply with requirements in Division 01 Section "Substitution Procedures" if the proposed change requires substitution of one product or system for product or system specified.
 - 7. Proposal Request Form: Use form acceptable to the Architect.

1.4 CHANGE ORDER PROCEDURES

- A. On OR's approval of a Proposal Request, Architect will issue a Change Order for signatures of Owner and Contractor on form acceptable to the Architect.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION 012600

SECTION 012900 - PAYMENT PROCEDURES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

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

1.2 SUMMARY

- A. This Section specifies administrative and procedural requirements necessary to prepare and process Requests for Progress Payment.

1.3 PERIODIC ESTIMATE SHOWING THE VALUE OF THE WORK

- A. The Periodic Estimate Showing the Value of the Work shall be a breakdown of the total contract price showing the amount included therein for each principal category of the work, which shall substantiate the payment amount requested in order to provide a basis for determining progress payments.
- B. Coordination: Coordinate preparation of the Periodic Estimate Showing the Value of the Work with preparation of Contractor's Construction Progress Schedule.
 - 1. Correlate line items in the Periodic Estimate Showing the Value of the Work with other required administrative forms and schedules, including the following:
 - a. Requests for Progress Payment forms with continuation sheets.
 - b. Submittal schedule.
 - c. Items required to be indicated as separate activities in Contractor's construction schedule.
 - 2. Submit the Periodic Estimate Showing the Value of the Work (Schedule of Values) to Architect at earliest possible date but no later than seven days before the date scheduled for submittal of initial Request for Progress Payment.
- C. Format and Content: Use the Project Manual table of contents as a guide to establish line items for the Periodic Estimate Showing the Value of the Work. Provide at least one line item for each Specification Section.
 - 1. Identification: Include the following Project identification on the schedule of values:
 - a. Project name and location.
 - b. Name of Owners Representative
 - c. Name of Architect.
 - d. Project number.
 - e. Contractor's name and address.
 - f. Date of submittal.
 - 2. Arrange Periodic Estimate Showing the Value of the Work on forms provided by the Owners Representative.
 - 3. Provide a breakdown of the Contract Sum in enough detail to facilitate continued evaluation of Applications for Payment and progress reports. Coordinate with the Project Manual table of contents. Provide multiple line items for principal subcontract amounts in excess of five percent of Contract Sum.
 - 4. Round amounts to nearest whole dollar; total shall equal the Contract Sum.

5. Provide a separate line item in the Periodic Estimate Showing the Value of the Work for each part of the Work where Applications for Payment may include materials or equipment purchased or fabricated and stored, but not yet installed.
6. Provide separate line items in the Periodic Estimate Showing the Value of the Work for initial cost of materials, for each subsequent stage of completion, and for total installed value of that part of the Work.
7. Each item in the Periodic Estimate Showing the Value of the Work (Schedule of Values) and Applications for Payment shall be complete. Include total cost and proportionate share of general overhead and profit for each item.
 - a. Temporary facilities and other major cost items that are not direct cost of actual work-in-place may be shown either as separate line items in the Periodic Estimate Showing the Value of the Work or distributed as general overhead expense, at Contractor's option.
8. Schedule Updating: Update and resubmit the Periodic Estimate Showing the Value of the Work (Schedule of Values) before the next Request for Progress Payment when Change Orders result in a change in the Contract Sum.

1.4 REQUESTS FOR PROGRESS PAYMENT

- A. Each Request for Progress Payment shall be consistent with previous applications and payments as certified by the OR and paid for by Owner.
 1. Initial Application for Payment, Application for Payment at time of Substantial Completion, and final Application for Payment involve additional requirements.
- B. Payment Application Times: Requests for Progress Payments shall be submitted to OR, through the Architect, not later than 30 (thirty) days in advance of the date set for payment. The period covered by each Application for Payment is one month, ending on the last day of the month.
- C. Requests for Progress Payment Forms: Use forms provided by OR.
 1. Along with each request for progress payment, the Contractor shall furnish the certification as stated in the General Conditions.
- D. Application Preparation: Complete every entry on form. Notarize and execute by a person authorized to sign legal documents on behalf of Contractor. OR will return incomplete applications without action.
 1. Entries shall match data on the schedule of values and Contractor's construction schedule. Use updated schedules if revisions were made.
 2. Include amounts of Change Orders issued before last day of construction period covered by application.
- E. Certifications: With each request for Progress Payment, provide an executed certification, on the form provided by the OR.
- F. Transmittal: Submit two (2) signed and notarized original copies of each Request for Progress Payment to Contracting Officer by a method ensuring receipt within 24 hours. One copy shall include waivers of lien and similar attachments if required.
 1. Transmit each copy with a transmittal form listing attachments and recording appropriate information about application.
- G. Liens: The Contractor, all subcontractors at any tier, and all materials suppliers are prohibited from placing a lien on the Public Housing Authority.
- H. Initial Request for Progress Payment: Administrative actions and submittals that must precede or coincide with submittal of first Application for Payment include the following:
 1. List of subcontractors.
 2. Schedule of values.
 3. Contractor's construction schedule (preliminary if not final).

4. Submittal schedule (preliminary if not final).
 5. List of Contractor's staff assignments.
 6. List of Contractor's principal consultants.
 7. Copies of building permits.
 8. Copies of authorizations and licenses from authorities having jurisdiction for performance of the Work.
 9. Initial progress report.
 10. Report of preconstruction conference.
 11. Certificates of insurance and insurance policies.
- I. Request for Progress Payment at Final Completion: After issuing the Release of Claims, submit final Request for Progress Payment with releases and supporting documentation not previously submitted and accepted, including, but not limited, to the following:
1. Evidence of completion of Project closeout requirements.
 2. Insurance certificates for products and completed operations where required and proof that taxes, fees, and similar obligations were paid.
 3. Updated final statement, accounting for final changes to the Contract Sum.
 4. Release of Waivers for final payment.
 5. Evidence that claims have been settled.
 6. Final meter readings for utilities, a measured record of stored fuel, and similar data as of date of Substantial Completion or when Owner took possession of and assumed responsibility for corresponding elements of the Work.
 7. Final liquidated damages settlement statement.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

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SECTION 013100 - PROJECT MANAGEMENT AND COORDINATION

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

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

1.2 SUMMARY

- A. Section includes administrative provisions for coordinating construction operations on Project including, but not limited to, the following:
 - 1. Coordination.
 - 2. Requests for Information (RFIs).
 - 3. Project meetings.
- B. Related Sections:
 - 1. Division 01 Section "Execution" for procedures for coordinating general installation.

1.3 DEFINITIONS

- A. RFI: Request from Owners Representative (OR) or Contractor seeking information from each other during construction.

1.4 COORDINATION

- A. Coordination: Contractor shall coordinate construction operations included in different Sections of the Specifications to ensure efficient and orderly installation of each part of the Work. Coordinate construction operations, included in different Sections, that depend on each other for proper installation, connection, and operation.
 - 1. Schedule construction operations in sequence required to obtain the best results where installation of one part of the Work depends on installation of other components, before or after its own installation.
 - 2. Coordinate installation of different components to ensure maximum performance and accessibility for required maintenance, service, and repair.
 - 3. Make adequate provisions to accommodate items scheduled for later installation.

1.5 REQUESTS FOR INFORMATION (RFIs)

- A. General: Immediately on discovery of the need for additional information or interpretation of the Contract Documents, Contractor shall prepare and submit an RFI in the form specified.
 - 1. The OR, through the Architect, will return RFIs submitted to Architect by other entities controlled by Contractor with no response.
 - 2. Coordinate and submit RFIs in a prompt manner so as to avoid delays in Contractor's work or work of subcontractors.

1.6 PROJECT MEETINGS

- A. General: Schedule and conduct meetings and conferences at Project site, unless otherwise indicated.
 - 1. Attendees: Inform participants and others involved, and individuals whose presence is required, of date and time of each meeting. Notify Owner and Architect of scheduled meeting dates and times.
 - 2. Agenda: Prepare the meeting agenda. Distribute the agenda to all invited attendees.
 - 3. Minutes: Entity responsible for conducting meeting will record significant discussions and agreements achieved. Distribute the meeting minutes to everyone concerned, including OR, and Architect, within three calendar days of the meeting.

- B. Progress Meetings: Owners Representative will conduct progress meetings at least one per month.
 - 1. Attendees: In addition to OR and Architect, Contractor, each subcontractor, supplier, and other entity concerned with current progress or involved in planning, coordination, or performance of future activities shall be represented at these meetings. All participants at the meeting shall be familiar with Project and authorized to conclude matters relating to the Work.
 - 2. Agenda: Review and correct or approve minutes of previous progress meeting. Review other items of significance that could affect progress. Include topics for discussion as appropriate to status of Project.
 - a. Construction Progress Schedule: Review progress since the last meeting. Determine whether each activity is on time, ahead of schedule, or behind schedule, in relation to Contractor's construction schedule. Determine how construction behind schedule will be expedited; secure commitments from parties involved to do so. Discuss whether schedule revisions are required to ensure that current and subsequent activities will be completed within the Contract Time.
 - 1) Review schedule for next period.
 - b. Review present and future needs of each entity present, including the following:
 - 1) Interface requirements.
 - 2) Sequence of operations.
 - 3) Status of submittals.
 - 4) Deliveries.
 - 5) Off-site fabrication.
 - 6) Access.
 - 7) Site utilization.
 - 8) Temporary facilities and controls.
 - 9) Progress cleaning.
 - 10) Quality and work standards.
 - 11) Status of correction of deficient items.
 - 12) Field observations.
 - 13) Status of RFIs.
 - 14) Status of proposal requests.
 - 15) Pending changes.
 - 16) Status of Change Orders.
 - 17) Pending claims and disputes.
 - 18) Documentation of information for payment requests.
 - 3. Minutes: Entity responsible for conducting the meeting will record and distribute the meeting minutes to each party present and to parties requiring information.
 - a. Schedule Updating: Revise Contractor's construction schedule after each progress meeting where revisions to the schedule have been made or recognized. Issue revised schedule concurrently with the report of each meeting.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION 013100

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SECTION 015000 - TEMPORARY FACILITIES AND CONTROLS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

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

1.2 SUMMARY

- A. Section includes requirements for temporary support facilities, and security and protection facilities.
- B. Related Section:
 - 1. Division 01 Section "Summary" for work restrictions and limitations on utility interruptions.

1.3 USE CHARGES

- A. General: Installation and removal of and use charges for temporary facilities shall be included in the Contract Sum unless otherwise indicated. Allow other entities to use temporary services and facilities without cost, including, but not limited to, **Owners representative**, Architect, testing agencies, and authorities having jurisdiction.
- B. Water Service from Existing System: Water from Owner's existing water system is available for use without metering and without payment of use charges. Provide connections and extensions of services as required for construction operations.
- C. Electric Power Service: Contractor must provide a portable generator for electrical service. Do not use the Owners service.

1.4 INFORMATIONAL SUBMITTALS

- A. Fire-Safety Program: Show compliance with requirements of NFPA 241 and authorities having jurisdiction. Indicate Contractor personnel responsible for management of fire prevention program.

1.5 QUALITY ASSURANCE

- A. Tests and Inspections: Arrange for authorities having jurisdiction to test and inspect each temporary utility before use. Obtain required certifications and permits.

PART 2 - PRODUCTS

2.1 MATERIALS

- A. Provide all temporary fencing and barriers required by authorities having jurisdiction.

2.2 TEMPORARY FACILITIES

- A. Refer to Article 17 of the General Conditions.

2.3 EQUIPMENT

- A. Fire Extinguishers: Portable, UL rated; with class and extinguishing agent as required by locations and classes of fire exposures.

PART 3 - EXECUTION

3.1 INSTALLATION, GENERAL

- A. Water Service: Connect to Owner's existing water service facilities. Clean and maintain water service facilities in a condition acceptable to Owner. At Substantial Completion, restore these facilities to condition existing before initial use.
- B. Electric Power: Contractor to provide portable generator

3.2 SUPPORT FACILITIES INSTALLATION

- A. General: Maintain support facilities until Architect schedules Substantial Completion inspection. Remove before prior to Final Completion.
- B. Protect existing curbs, gutters, sidewalks, and landscaping from damage by construction activities. Repair or replace existing curbs, sidewalks, gutters, and landscaping to remain that are damaged during construction.
- C. Traffic Controls: Comply with requirements of authorities having jurisdiction.
 - 1. Protect existing site improvements to remain including curbs, pavement, and utilities.
 - 2. Maintain access for fire-fighting equipment and access to fire hydrants.
- D. Parking: Parking for construction forces is not available at project site. Construction forces shall use available street parking or other spaces that are acceptable to adjacent property owners and authorities having jurisdiction.
- E. Signs: Provide temporary, directional signs necessary to inform public and individuals seeking entrance to Project as indicated. Signs are not permitted unless authorized by the contracting Officer.
 - 1. Maintain and touchup signs so they are legible at all times.
- F. Waste Disposal Facilities: Provide waste-collection containers in sizes adequate to handle waste from construction operations. Comply with requirements of authorities having jurisdiction. Comply with Division 01 Section "Execution" for progress cleaning requirements.

3.3 SECURITY AND PROTECTION FACILITIES INSTALLATION

- A. General: Comply with Article 16 of the General Conditions. Replace damaged lawn areas and replace and test any landscape sprinklers that may be damaged as a result of this projects work.

- B. Environmental Protection: Provide protection, operate temporary facilities, and conduct construction as required to comply with environmental regulations and that minimize possible air, waterway, and subsoil contamination or pollution or other undesirable effects.
- C. Tree and Plant Protection: Protect tree root systems from damage, flooding, and erosion. Do not perform construction-related activities, including storage, transportation, or disposal of construction materials or waste within the drip line of existing trees.
- D. Barricades, Warning Signs, and Lights: Comply with requirements of authorities having jurisdiction for erecting structurally adequate barricades, including warning signs and lighting.
- E. Temporary Enclosures: Provide temporary enclosures for protection of existing construction and installed materials from exposure, foul weather, other construction operations, and similar activities. Provide temporary weathertight enclosure for building exterior.
- F. Temporary Fire Protection: Install and maintain temporary fire-protection facilities of types needed to protect against reasonably predictable and controllable fire losses. Comply with NFPA 241.
 - 1. Prohibit smoking in construction areas.
 - 2. Supervise welding operations, combustion-type temporary heating units, and similar sources of fire ignition according to requirements of authorities having jurisdiction.
 - 3. Develop and supervise an overall fire-prevention and -protection program for personnel at Project site. Review needs with local fire department and establish procedures to be followed. Instruct personnel in methods and procedures. Post warnings and information.
 - 4. Provide temporary hoses for fire protection. Hang hoses with a warning sign stating that hoses are for fire-protection purposes only and are not to be removed. Match hose size with outlet size and equip with suitable nozzles.

3.4 OPERATION, TERMINATION, AND REMOVAL

- A. Energy Conservation: On the construction site, the Contractor shall conserve energy in compliance with the requirements of the Energy Policy and Conservation Act (Pub. L. 94-163) as adopted by the State of Idaho.
- B. Supervision: Enforce strict discipline in use of temporary facilities. To minimize waste and abuse, limit availability of temporary facilities to essential and intended uses.
- C. Security and Protection Facility Removal: Do not remove temporary security and protection facilities until Final Completion.
 - 1. Prior to Final Completion, repair, renovate, and clean permanent facilities used during construction period. Comply with final cleaning requirements specified in Division 01 Section "Closeout Procedures."

END OF SECTION 015000

SECTION 017300 - EXECUTION

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

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

1.2 SUMMARY

- A. Section includes general administrative and procedural requirements governing execution of the Work including, but not limited to, the following:
 1. Removal of existing assemblies to allow installation of new work indicated.
 2. Installation of the Work.
 3. Cutting and patching.
 4. Progress cleaning.
 5. Protection of installed construction.
 6. Correction of the Work.

1.3 WARRANTY

- A. Existing Warranties: Remove, replace, patch, and repair materials and surfaces cut or damaged during installation or cutting and patching operations, by methods and with materials so as not to void existing warranties.

PART 2 - PRODUCTS

2.1 MATERIALS

- A. General: Comply with requirements specified in other Sections.
- B. In-Place Materials: Use materials for patching identical to in-place materials. For exposed surfaces, use materials that visually match in-place adjacent surfaces to the fullest extent possible.
 1. If identical materials are unavailable or cannot be used, use materials that, when installed, will provide a match acceptable to the Architect for the visual and functional performance of in-place materials.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examination and Acceptance of Conditions: Before proceeding with Work, examine substrates, areas, and conditions, with Installer present for compliance with requirements for installation tolerances and other conditions affecting performance. Record observations.

1. Verify compatibility with and suitability of substrates, including compatibility with existing finishes.
2. Remove existing windows and doors complete including anchors and dispose of in on-site dumpster.
3. Proceed with installation only after unsatisfactory conditions have been corrected. Proceeding with the Work indicates acceptance of surfaces and conditions.

3.2 PREPARATION

- A. **Field Measurements:** Take field measurements as required to fit the Work properly. Recheck measurements before installing each product. Where portions of the Work are indicated to fit to other construction, verify dimensions of other construction by field measurements before fabrication. Coordinate fabrication schedule with construction progress to avoid delaying the Work.
- B. **Space Requirements:** Verify space requirements and dimensions of items shown diagrammatically on Drawings.
- C. **Review of Contract Documents and Field Conditions:** Immediately on discovery of the need for clarification of the Contract Documents caused by differing field conditions outside the control of the Contractor, submit a request for information to Architect.

3.3 INSTALLATION

- A. **General:** Locate the Work and components of the Work accurately, in correct alignment and elevation, as indicated.
 1. Make vertical work plumb and make horizontal work level.
 2. Where space is limited, install components to maximize space available for maintenance and ease of removal for replacement.
- B. Comply with manufacturer's written instructions and recommendations for installing products in applications indicated.
- C. Install products at the time and under conditions that will ensure the best possible results. Maintain conditions required for product performance until Substantial Completion.
- D. **Tools and Equipment:** Do not use tools or equipment that produce harmful noise levels.
- E. **Attachment:** Provide blocking shims and spacers along with anchors and fasteners of adequate size and number to securely anchor each windows and doors in place, accurately located and aligned with other portions of the Work. Where size and type of attachments are not indicated, verify size and type required for load conditions.
 1. Allow for building movement, including thermal expansion and contraction.
 2. Coordinate installation of anchorages. Furnish setting drawings, templates, and directions for installing anchorages.
- F. **Joints:** Make joints of uniform width. Where joint locations in exposed work are not indicated, arrange joints for the best visual effect. Fit exposed connections together to form hairline joints.
- G. **Hazardous Materials:** Use products, cleaners, and installation materials that are not considered hazardous.

3.4 CUTTING AND PATCHING

- A. Cutting and Patching, General: Employ skilled workers to perform cutting, removal of existing work and patching.
 - 1. Cut in-place construction to provide for installation of other components or performance of other construction, and subsequently patch as required to restore surfaces to their original condition.
- B. Existing Warranties: Remove, replace, patch, and repair materials and surfaces cut or damaged during installation or cutting and patching operations, by methods and with materials so as not to void existing warranties.
- C. Temporary Support: Provide temporary support of work to be cut.
- D. Protection: Protect in-place construction during cutting and patching to prevent damage. Provide protection from adverse weather conditions for portions of Project that might be exposed during cutting and patching operations.
- E. Adjacent Occupied Areas: Avoid interference with use of adjoining areas or interruption of free passage to adjoining areas.
- F. Cutting: Remove door and window anchors sawing, drilling or grinding using methods least likely to damage adjoining finishes.
 - 1. In general, use hand or small power tools designed for sawing and grinding, not hammering and chopping.
 - 2. Proceed with patching after construction operations requiring cutting are complete.
- G. Patching: Patch construction by filling, repairing, refinishing, closing up, and similar operations following performance of other work. Patch with durable seams that are as invisible as practicable.
 - 1. Inspection: Where feasible, test and inspect patched areas after completion to demonstrate physical integrity of installation.
 - 2. Exposed Finishes: Restore exposed finishes of patched areas and extend finish restoration into retained adjoining construction in a manner that will minimize evidence of patching and refinishing.
 - 3. Exterior Building Enclosure: Patch components in a manner that restores enclosure to a weathertight condition and ensures thermal and moisture integrity of building enclosure.
- H. Cleaning: Clean areas and spaces where cutting and patching are performed. Remove paint, mortar, oils, putty, and similar materials from adjacent finished surfaces.

3.5 PROGRESS CLEANING

- A. General: Clean Project site and work areas daily, in conformance to the requirements of the General Conditions. Enforce requirements strictly. Dispose of materials lawfully.
 - 1. Comply with requirements in NFPA 241 for removal of combustible waste materials and debris.
- B. Site: Maintain Project site free of waste materials and debris.
- C. Work Areas: Clean areas where work is in progress to the level of cleanliness necessary for proper execution of the Work.
 - 1. Remove liquid spills promptly.
 - 2. Where dust would impair proper execution of the Work, broom-clean or vacuum the entire work area, as appropriate.
- D. Installed Work: Keep installed work clean. Clean installed surfaces according to written instructions of manufacturer or fabricator of product installed, using only cleaning materials specifically

recommended. If specific cleaning materials are not recommended, use cleaning materials that are not hazardous to health or property and that will not damage exposed surfaces.

- E. **Adjacent Exposed Surfaces:** Clean exposed surfaces and protect as necessary to ensure freedom from damage and deterioration at time of Substantial Completion.
- F. **Waste Disposal:** Do not bury or burn waste materials on-site. Do not wash waste materials down sewers or into waterways.
- G. **During handling and installation,** clean and protect construction in progress and adjoining materials already in place. Apply protective covering where required to ensure protection from damage or deterioration at Substantial Completion.
- H. **Clean and provide maintenance on completed construction as frequently as necessary through the remainder of the construction period.**
- I. **Limiting Exposures:** Supervise construction operations to assure that no part of the construction, completed or in progress, is subject to harmful, dangerous, damaging, or otherwise deleterious exposure during the construction period.

3.6 PROTECTION OF INSTALLED CONSTRUCTION

- A. **Provide final protection and maintain conditions that ensure installed Work is without damage or deterioration at time of Substantial Completion.**
- B. **Comply with manufacturer's written instructions for temperature and relative humidity.**

3.7 CORRECTION OF THE WORK

- A. **Repair or remove and replace defective construction. Restore damaged substrates and finishes.**
 - 1. **Repairing includes refinishing damaged surfaces and touching up with matching materials.**
- B. **Restore permanent facilities used during construction to their specified condition.**
- C. **Remove and replace damaged surfaces that are exposed to view if surfaces cannot be repaired without visible evidence of repair.**

END OF SECTION 017300

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SECTION 017700 - CLOSEOUT PROCEDURES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

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

1.2 SUMMARY

- A. Section includes administrative and procedural requirements for contract closeout, including, but not limited to, the following:
 1. Partial acceptance procedures.
 2. Final completion procedures.
 3. Warranties.
 4. Final cleaning.

1.3 PARTIAL ACCEPTANCE

- A. Preliminary Procedures: Before requesting inspection for determining date of Partial Acceptance, complete the following. List items below that are incomplete with request.
 1. Prepare a list of items to be completed and corrected (punch list), the value of items on the list, and reasons why the Work is not complete.
 2. Submit specific warranties, workmanship bonds, maintenance service agreements, final certifications, and similar documents.
 3. Obtain and submit releases permitting Owner unrestricted use of the Work and access to services and utilities. Include occupancy permits, operating certificates, and similar releases.
 4. Prepare and submit Project Record Documents, operation and maintenance manuals and similar final record information.
 5. Terminate and remove temporary facilities from Project site, along with mockups, construction tools, and similar elements.
 6. Complete final cleaning requirements.
 7. Touch up and otherwise repair and restore marred exposed finishes to eliminate visual defects.
- B. Inspection: Submit a written request for inspection for Substantial Completion. On receipt of request, Architect and Owners Representative (OR) will either proceed with inspection or notify Contractor of unfulfilled requirements. Architect will prepare the Certificate of Substantial Completion after inspection or will notify Contractor of items, either on Contractor's list or additional items identified by Architect, that must be completed or corrected before certificate will be issued.
 1. Reinspection: Request reinspection when the Work identified in previous inspections as incomplete is completed or corrected.
 2. Results of completed inspection will form the basis of requirements for final completion.

1.4 FINAL (COMPLETE) ACCEPTANCE

- A. Preliminary Procedures: Before requesting final inspection for determining final completion, complete the following:

1. Submit a final Request for Progress Payment according to Division 01 Section "Payment Procedures."
 2. Submit certified copy of Architect's Punch List of items to be completed or corrected (punch list), endorsed and dated by Architect. The certified copy of the list shall state that each item has been completed or otherwise resolved for acceptance.
 3. Instruct Owner's personnel in maintenance of products.
- B. Inspection: Submit a written request for final inspection for acceptance. On receipt of request, Architect and OR will either proceed with inspection or notify Contractor of unfulfilled requirements. Architect will prepare a final Certificate for Payment after inspection or will notify Contractor of construction that must be completed or corrected before certificate will be issued.
1. Reinspection: Request reinspection when the Work identified in previous inspections as incomplete is completed or corrected.

1.5 LIST OF INCOMPLETE ITEMS (PUNCH LIST)

- A. Organization of List: Include name and identification of each space and area affected by construction operations for incomplete items and items needing correction including, if necessary, areas disturbed by Contractor that are outside the limits of construction. Use CSI Form 14.1A or a form acceptable to the OR.
1. Organize list of spaces in sequential order.
 2. Submit list of incomplete items in the following format:
 - a. Four paper copies, unless otherwise indicated. Architect, through OR, will return two copies.

1.6 WARRANTIES

- A. Submittal Time: Submit written warranties on request of Architect for designated portions of the Work where commencement of warranties other than date of Substantial Completion is indicated.

PART 2 - PRODUCTS

2.1 MATERIALS

- A. Cleaning Agents: Use cleaning materials and agents recommended by manufacturer or fabricator of the surface to be cleaned. Do not use cleaning agents that are potentially hazardous to health or property or that might damage finished surfaces.

PART 3 - EXECUTION

3.1 FINAL CLEANING

- A. General: Perform final cleaning. Conduct cleaning and waste-removal operations to comply with local laws and ordinances and Federal and local environmental and antipollution regulations.
- B. Cleaning: Employ experienced workers or professional cleaners for final cleaning. Clean each surface or unit to condition expected in an average commercial building cleaning and maintenance program. Comply with manufacturer's written instructions.

1. Complete the following cleaning operations before requesting inspection for certification of Substantial Completion for entire Project or for a portion of Project:
 - a. Clean Project site, yard, and grounds, in areas disturbed by construction activities, including landscape development areas, of rubbish, waste material, litter, and other foreign substances.
 - b. Sweep paved areas broom clean. Remove chemical spills, stains, and other foreign deposits.
 - c. Remove tools, construction equipment, machinery, and surplus material from Project site.
 - d. Remove labels that are not permanent.

END OF SECTION 017700

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SECTION 017839 - PROJECT RECORD DOCUMENTS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

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

1.2 SUMMARY

- A. Section includes administrative and procedural requirements for project record documents, including the following:
 - 1. Record Drawings.
 - 2. Record Specifications.
 - 3. Record Product Data.

1.3 CLOSEOUT SUBMITTALS

- A. Record Drawings: Comply with the following:
 - 1. Number of Copies: Submit one set of marked-up record prints.
- B. Record Specifications: Submit one paper copy and annotated PDF electronic files of Project's Specifications, including addenda and contract modifications.
- C. Record Product Data: Submit one paper copy and annotated PDF electronic files and directories of each submittal.

PART 2 - PRODUCTS

2.1 RECORD DRAWINGS

- A. Record Prints: Maintain one set of marked-up paper copies of the Contract Drawings and Shop Drawings.
 - 1. Preparation: Mark record prints to show the actual installation where installation varies from that shown originally. Require individual or entity who obtained record data, whether individual or entity is Installer, subcontractor, or similar entity, to provide information for preparation of corresponding marked-up record prints.
 - a. Record data as soon as possible after obtaining it.
 - 2. Mark the Contract Drawings and Shop Drawings completely and accurately. Utilize personnel proficient at recording graphic information in production of marked-up record prints.
 - 3. Mark record sets with erasable, red-colored pencil. Use other colors to distinguish between changes for different categories of the Work at same location.
 - 4. Note Construction Change Directive numbers, alternate numbers, Change Order numbers, and similar identification, where applicable.
- B. Format: Identify and date each record Drawing; include the designation "PROJECT RECORD DRAWING" in a prominent location.

1. Record Prints: Organize record prints and newly prepared record Drawings into manageable sets. Bind each set with durable paper cover sheets.
2. Identification: As follows:
 - a. Project name.
 - b. Date.
 - c. Designation "PROJECT RECORD DRAWINGS."
 - d. Name of Architect.
 - e. Name of Contractor.

2.2 RECORD SPECIFICATIONS

- A. Preparation: Mark Specifications to indicate the actual product installation where installation varies from that indicated in Specifications, addenda, and contract modifications.
 1. Mark copy with the proprietary name and model number of products, materials, and equipment furnished, including substitutions and product options selected.
 2. Record the name of manufacturer, supplier, Installer, and other information necessary to provide a record of selections made.
 3. Note related Change Orders and record Drawings where applicable.
- B. Format: Submit record Specifications as paper copy and annotated PDF electronic file.

2.3 RECORD PRODUCT DATA

- A. Preparation: Mark Product Data to indicate the actual product installation where installation varies substantially from that indicated in Product Data submittal.
 1. Include significant changes in the product delivered to Project site and changes in manufacturer's written instructions for installation.
 2. Note related Change Orders and record Drawings where applicable.
- B. Format: Submit record Product Data as paper copy and annotated PDF electronic file.

PART 3 - EXECUTION

3.1 RECORDING AND MAINTENANCE

- A. Recording: Maintain one copy of each submittal during the construction period for project record document purposes. Post changes and modifications to project record documents as they occur; do not wait until the end of Project.

END OF SECTION 017839

SECTION 085200 - ALUMINUM-CLAD WOOD WINDOWS AND DOORS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

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

1.2 SUMMARY

- A. This Section includes:
 - 1. Aluminum-Clad Wood Direct Set Commercial Windows, sliding and swing doors with glass and glazing as indicated on the Drawings for retrofit installation in existing openings.
 - 2. Anchorages, attachments, perimeter sealants, flashings, and accessories.

1.3 RELATED SECTIONS

- A. Section 085313 – Vinyl Windows.

1.4 REFERENCES

- A. American Society for Testing and Materials (ASTM):
 - 1. ASTM E 283 - Rate of Air Leakage through Exterior Windows, Curtain Walls and Doors under Specified Pressure Difference across the Specimen.
 - 2. ASTM E 330 - Structural Performance of Exterior Windows, Curtain Walls and Doors by Uniform Static Air Pressure Difference.
 - 3. ASTM E 547 - Water Penetration of Exterior Windows, Curtain Walls and Doors by Cyclic Static Air Pressure Differential.
- B. American Architectural Manufacturers Association (AAMA):
 - 1. AAMA/WDMA/CSA 101/I.S.2/A440-11 North American Fenestration Standard/Specification for Windows, Doors and Skylights.
- C. Window and Door Manufacturers Association (WDMA):
 - 1. WDMA I.S-4-07 Industry Standard for Water-Repellent Preservative Treatment for Millwork.
- D. National Fenestration Rating Council (NFRC):
 - 1. NFRC 100 - Procedure for Determining Fenestration Product U-Factors.
 - 2. NFRC 200 - Procedure for Determining Fenestration Product Solar Heat Gain Coefficient and Visible Transmittance (VT) at Normal Incidence.
 - 3. NFRC 400 - Procedure for Determining Fenestration Product Air Leakage.

1.5 PERFORMANCE REQUIREMENTS

- A. Direct Set Window units shall meet requirements in accordance with ANSI/AAMA/CSA 101/I.S.2/A440-11.
- B. Air Leakage shall not exceed 0.30 cfm per sq. ft. of sash when tested in accordance with ASTM E 283 at 1.57 psf (25 mph).
- C. No water penetration shall be allowed when tested in accordance with ASTM E 547.
- D. Window units shall withstand positive and negative wind loads without damage. The units shall be tested in accordance with ASTM E 330.
- E. Windows shall have a U-Value ≤ 0.30 and a SHGC ≤ 0.40

1.6 SUBMITTALS

- A. Shop Drawings: Submit manufacturer's shop drawings, indicating dimensions, construction, component connections and locations, anchorage methods and locations, hardware locations, flashing and installation details.
- B. Product Data: Submit manufacturer's product data in the form of general catalogs, installation instructions, test lab reports, product performance, and warranty,
- C. Samples: Submit partial size sample of Window and Door illustrating glazing system, quality of construction, and color of finish for frame.
- D. Warranty: Submit manufacturer's standard warranty with compliance to requirements as per specifications.

1.7 QUALITY ASSURANCE

- A. Source Limitations: Obtain aluminum clad wood windows and doors through one source from a single manufacturer.

1.8 DELIVERY, STORAGE, AND HANDLING

- A. Delivery: Deliver materials to site undamaged, in manufacturer's original, unopened protective packaging, with labels clearly identifying manufacturer and product name. Include manufacturer's installation and finishing instructions.
- B. Storage: Store units in manufacturer's protective packaging in a clean, dry location, off the ground in an upright position.
- C. Handling: Protect materials and finish during handling and installation to prevent damage.

1.9 WARRANTY

- A. Manufacturer's Warranty: Manufacturer agrees to repair or replace units that fail in materials or workmanship within a specified warranty period as follows in accordance with manufacturer's

submitted warranty.

B. Warranty Period:

1. Insulated Glass Seal Failures: 20 years from substantial completion.
2. Workmanship and Materials: 10 years from substantial completion.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- A. Basis-of-Design Product: Andersen E Series Direct Set Windows and Gliding Patio Door Units in Contemporary panel style and aluminum clad commercial wood swing door and frame assembly as manufactured by Andersen Windows and Doors. Comparable product that meets or exceeds the specified basis-of-design product and is approved in writing by Owner and Architect prior to bidding will be considered.

1. Provide units as indicated on Drawings.

2.2 MATERIALS

- A. Frame: Shall be select pine treated with water repellent preservative in accordance with NWWDA I.S - 4. Exposed exterior portion shall be extruded aluminum sealed at corners with injected silicone.
- B. Finish: All aluminum exterior surfaces shall be covered with a factory-applied, polyester powder-coat paint in color Dove Gray. Interior wood surface to have factory-applied white paint.
- C. Glazing: Shall be double-pane LoE 366 clear, insulating glass as standard, glazed with double-faced tape, a full perimeter bead of silicone, and interior wood stops.

2.3 AWNING WINDOWS

- A. Rating: Impact Rated Awning with Impact resistant glazing.
- B. Frame Depth: 2-7/8 inches (22.5 mm).
- C. Nailing Fin:
1. No nailing fin.

2.4 INSECT SCREENS

- A. Exterior Insect Screens:
- B. Extruded-aluminum frame: Manufacturer's standard, finished to match windows and doors.
- C. Screen Cloth: Vinyl-coated fiberglass, 18/16 mesh, with black finish.
- D. Complete with necessary hardware

2.5 AWNING HARDWARE:

- A. Weatherstripping: Compression type on all sash and frame meeting surfaces. Weatherstripping color as follows.
 - 1. Black
- B. Operator Handle: Folding crank type.
- C. Hinges: Concealed from exterior, with stainless steel hinge track and screws.
- D. Locks: Two cam action concealed sash locks on each sash; provide temporary construction lock lever/operator handle for each unit

2.6 CLAD WOOD DOORS

- A. Gliding patio doors with 2 ¾" rails and stiles in arrangement and size with fixed glass units as indicated on drawings
 - 1. Provide gliding doors with insect screen door.
- B. Hinged commercial entry door with fixed side light as indicated on drawings. Provide door standard bottom rail with low-profile aluminum thermally broken sill.
- C. Thresholds: Provide continuous subsill plates to replace existing. Provide thresholds at opening set in full bed of mastic and mechanically anchored.

2.7 HARDWARE FINISHES

- A. Window Hardware Exposed to View on Interior when window is closed. Finish in color selected from manufacturer's standard selection as follows:
 - 1. White
- B. Provide manufacturer's standard locks for windows and doors.

2.8 WINDOW AND DOOR INSTALLATION ACCESSORIES

- A. Flashing/Sealant Tape: as recommended by window manufacturer.
- B. Aluminum-foil-backed butyl window flashing tape.
- C. Maximum Total Thickness: 0.013 inch.
- D. UV resistant.
- E. Verify sealant compatibility with sealant manufacturer.
 - 1. Insulating-Foam Sealant: Dow Great Stuff Window & Door.
 - 2. Low-pressure, polyurethane window and door insulating-foam sealant.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine areas to receive Windows and doors. Coordinate with the removal of existing assemblies. Notify Architect in writing of conditions that would adversely affect installation or subsequent use. Do not proceed with installation until unsatisfactory conditions are corrected.
- B. Verify that there is no visible damage to each window and door unit prior to installation.

3.2 INSTALLATION – WINDOWS AND DOOR

- A. Verify the rough opening is of the recommended size and that it is plumb, level, and square.
- B. Install each unit in accordance with manufacturer's instructions and approved shop drawings. Install continuous subsill at patio door locations to replace existing and maintain weathertight installation.
- C. Install units to be weather-tight and freely operating.
- D. Maintain alignment with adjacent work.
- E. Install trim as necessary on this project in accordance with the construction documents and in accordance with the approved shop drawings.
- F. Integrate installation with exterior weather-resistant barrier using flashing/sealant tape, Apply and integrate flashing/sealant tape with weather-resistant barrier using watershed principles in accordance with manufacturer's instructions for retrofit situations.
- G. Place interior seal around units perimeter to maintain continuity of building thermal and air barrier using insulating-foam sealant.
- H. Seal unit to exterior wall finish with sealant and related backing materials at perimeter of assembly.
- I. Leave windows closed.

3.3 PROTECTION

- A. Protect installed assemblies to ensure that, except for normal weathering, units will be without damage or deterioration at time of Substantial Completion.

3.4 CLEANING

- A. Remove labels and visible markings.
- B. Clean frames, glass, and aluminum-clad insulated panels in accordance with Division 01 requirements.
- C. Do not use harsh cleaning materials or methods that would damage finish.

END OF SECTION 085200

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SECTION 085313 - VINYL WINDOWS

PART 1 - GENERAL

1.1 SUMMARY

- A. Section includes vinyl-framed windows for retrofit installation into existing openings.

1.2 ACTION SUBMITTALS

- A. Product Data: For each type of product.
- B. Shop Drawings: Include plans, elevations, sections, hardware, accessories, insect screens, operational clearances, and details of installation, including anchor, flashing, and sealant installation.
- C. Samples: For each exposed product and for color specified.

1.3 INFORMATIONAL SUBMITTALS

- A. Product test reports.
- B. Sample warranties.

1.4 WARRANTY

- A. Manufacturer's Warranty: Manufacturer agrees to repair or replace vinyl windows that fail in materials or workmanship within specified warranty period.
 - 1. Warranty Period:
 - a. Window: 10 years from date of Substantial Completion.
 - b. Glazing Units: 20 years from date of Substantial Completion.

PART 2 - PRODUCTS

2.1 WINDOW PERFORMANCE REQUIREMENTS

- A. Product Standard: Comply with AAMA/WDMA/CSA 101/I.S.2/A440 for definitions and minimum standards of performance, materials, components, accessories, and fabrication unless more stringent requirements are indicated.
 - 1. Window Certification: WDMA certified with label attached to each window.
- B. Performance Class and Grade: AAMA/WDMA/CSA 101/I.S.2/A440 as follows:
 - 1. Minimum Performance Class: LC.

2. Minimum Performance Grade: 50.
- C. Thermal Transmittance: NFRC 100 maximum whole-window U-factor of [0.30 Btu/sq. ft. x h x deg F].
- D. Solar Heat-Gain Coefficient (SHGC): NFRC 200 maximum whole-window SHGC of [0.30].
- E. Windborne-Debris Impact Resistance: Passes ASTM E1886 missile-impact and cyclic-pressure tests in accordance with ASTM E1996 for Wind Zone 3 for basic protection.

2.2 VINYL WINDOWS

- A. Provide vinyl windows in configuration size and operation as show on drawings. Acceptable manufacturer's including the followings.
 - The Coeur d'Alene window company-3000 series
 - Western window company-Premier series
 - Cascade windows-8000 Frame series
 - Milgard windows and doors
- B. Operating Types: As indicated on Drawings.
- C. Frames and Sashes: Impact-resistant, UV-stabilized PVC complying with AAMA/WDMA/CSA 101/I.S.2/A440.
 1. Finish: Integral color clay color to match existing sliding vinyl doors.
 2. Gypsum Board Returns: repair and paint existing returns.
 3. Nailing fins only required at window Type V1 at built up centermullion.
- D. Glass: Clear annealed glass, ASTM C1036, Type 1, Class 1, q3.
 1. Kind: Fully tempered where indicated on Drawings.
- E. Insulating-Glass Units: ASTM E2190.
 1. Glass: ASTM C1036, Type 1, Class 1, q3.
 - a. Tint: Clear.
 - b. Kind: Fully tempered where indicated on Drawings.
 2. Lites: Two
 3. Filling: Fill space between glass lites with argon.
 4. Low-E Coating: Pyrolytic on second surface.
- F. Glazing System: Manufacturer's standard factory-glazing system that produces weathertight seal.
- G. Hardware, General: Provide manufacturer's standard corrosion-resistant hardware sized to accommodate sash weight and dimensions.
 1. Exposed Hardware Color and Finish: As selected by Architect from manufacturer's full range.
- H. Projected Window Hardware:

1. Gear-Type Rotary Operators: Complying with AAMA 901 when tested according to ASTM E405, Method A. Provide operators that function without requiring the removal of interior screens or using screen wickets.
 - a. Type and Style: As selected by Architect from manufacturer's full range of types and styles.
 2. Hinges: Manufacturer's standard type for sash weight and size indicated.
 3. Single-Handle Locking System: Operates positive-acting arms that pull sash into locked position. Provide one arm on sashes up to 29 inches (735 mm) tall and two arms on taller sashes.
 4. Limit Devices: Limit clear opening to 8 inches dimension for ventilation; with custodial key release.
- I. Weather Stripping: Provide full-perimeter weather stripping for each operable sash unless otherwise indicated.
- J. Fasteners: Noncorrosive and compatible with window members, trim, hardware, anchors, and other components.
1. Exposed Fasteners: Do not use exposed fasteners to greatest extent possible. For application of hardware, use fasteners that match finish hardware being fastened.

2.3 INSECT SCREENS

- A. General: Fabricate insect screens to integrate with window frame. Provide screen for each operable exterior sash. Screen wickets are not permitted.
1. Type and Location: Full, inside for project-out sashes.
- B. Aluminum Frames: Complying with SMA 1004 or SMA 1201.
1. Finish for Interior Screens: Baked-on organic coating in color selected by Architect from manufacturer's full range.
 2. Finish for Exterior Screens: Baked-on organic coating in color selected by Architect from manufacturer's full range.
- C. Glass-Fiber Mesh Fabric: (0.85-by-0.42-mm) mesh of PVC-coated, glass-fiber threads; woven and fused to form a fabric mesh resistant to corrosion, shrinkage, stretch, impact damage, and weather deterioration. Comply with ASTM D3656/D3656M.
1. Mesh Color: Manufacturer's standard.

2.4 FABRICATION

- A. Fabricate vinyl windows in sizes indicated. Include a complete system for installing and anchoring windows into existing openings.
- B. Glaze vinyl windows in the factory.
- C. Weather strip each operable sash to provide weathertight installation.

- D. Mullions: Provide mullions and cover plates, compatible with window units, complete with anchors for support to structure and installation of window units. Allow for erection tolerances and provide for movement of window units due to thermal expansion and building deflections. Provide mullions and cover plates capable of withstanding design wind loads of window units. Provide manufacturer's standard finish to match window units.
- E. Hardware: Mount hardware through double walls of vinyl extrusions or provide corrosion-resistant reinforcement.
- F. Complete fabrication, assembly, finishing, hardware application, and other work in the factory to greatest extent possible. Disassemble components only as necessary for shipment and installation. Allow for scribing, trimming, and fitting at Project site. Nailing fins are not acceptable.

PART 3 - EXECUTION

3.1 INSTALLATION

- A. Field verify existing conditions where retrofit will occur. Comply with manufacturer's written instructions for installing windows, hardware, accessories, and other components. For installation procedures and requirements not addressed in manufacturer's written instructions, comply with installation requirements in ASTM E2112.
- B. Install windows level, plumb, square, true to line, without distortion, anchored securely in place to existing framing, and in same exterior location as original windows install flashings and sealant to produce weathertight installation.
- C. Adjust operating sashes and hardware for a tight fit at contact points and weather stripping for smooth operation and weathertight closure.
- D. Clean exposed surfaces immediately after installing windows. Remove excess sealants, glazing materials, dirt, and other substances. Repair and paint to match surrounding surface of openings damaged during construction.
- E. Remove and replace sashes if glass has been broken, chipped, cracked, abraded, or damaged during construction period.

END OF SECTION 085313