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## SECTION 011000 - SUMMARY

## PART 1 - GENERAL

## 1.1 SUMMARY

## A. Section Includes:

1. Project information.
2. Statement of Bid Item(s).
3. Access to site.
4. Coordination with occupants.
5. Work restrictions.
6. Specification and drawing conventions.

## B. Related Requirements:

1. Section 015000 "Temporary Facilities and Controls" for limitations and procedures governing temporary use of Owner's facilities.

## 1.2 PROJECT INFORMATION

## A. Project Identification: Griffin-Kilmer Residence Independent Living Construction Home Renovations.

1. Project Location: 779 Parker Farm Road, Buxton, Maine, 04093.

## B. Residence Owner: Veteran Griffin-Kilmer.

1. VA Representative: David Jones, AFG Group, Inc.

## C. Architect: Sealander Studio, LLC.

## 1.3 STATEMENT OF BID ITEM(S)

## A. GENERAL CONSTRUCTION: Work includes general construction and alterations as follows:

1. BID ITEM #1: Kitchen. Kitchen work includes all carpentry, finish, electrical and plumbing required to make appliances and fixtures fully operational.
  - a. Oven: Install Owner's Magic Chef Wall Oven in existing cabinets with modifications shown in Drawings.
  - b. Cooktop: Provide new peninsula countertop with base cabinet at 90 degrees to the existing countertop. Install owner's Magic Chef Glass Cooktop and new Frigidaire Downdraft Vent in peninsula countertop, including necessary electrical work and dedicated circuits for both cooktop and vent.
  - c. Sink: Remove doors to existing sink cabinet. Modify cabinet to create new wheelchair space under existing sink. Install new flooring to match existing.

2. BID ITEM #2: Bathroom. Bathroom work includes all carpentry, finish and plumbing required to make fixtures fully operational.
  - a. New Lavatory Countertop: Remove and dispose of existing lavatory countertop, preserve the existing support framework, sink and fixtures. Reinstall the sink and faucet in the new countertop. The existing support framework edges will be rounded, and all plumbing underneath and in the new wheelchair space will be padded. Reinstall the existing sink as close to the front of the countertop as possible to permit operation from a motorized wheelchair. Patch existing surfaces disturbed.
  - b. New Bariatric Solution ComfortSeat: Remove existing toilet seat. Provide Bariatric Solution ComfortSeat. Provide three new stainless steel ADA grab bars at side wall, back wall and side of lavatory countertop support. Reinstall owner's toilet paper holder and towel bar in appropriate locations.
  - c. New Voyager Easytrack Ceiling Lift System: Provide Overhead Patient Lift System consisting of a Guardian Voyager 98000 Portable Overhead Lifter mounted to and operating on the Guardian Easytrack 2 Wall Mount system which attaches to wall studs near the ceiling behind the toilet and behind tub surround.
3. BID ITEM #3: Stairway Chairlift. Stairway Chairlift work includes all carpentry, finish and electrical required to make equipment fully operational.
  - a. Furnish and install a new straight run electrically powered AmeriGlide Heavy Duty stair lift in the stairway to the basement apartment. Stair lift will include a swiveling, folding seat to permit transfer at the top and bottom of the stair. Top of stair is at kitchen floor level, which is the upper landing. Stair lift will require a dedicated circuit from the panel. Remove door in kitchen to basement. Demolish trim and wall to increase width of opening, finish widened opening. Paint exposed finishes. Provide new wall and door at top of stair.
4. BID ITEM #4: Propane Generator. Propane Generator work includes all grading, carpentry, finish, electrical and piping to make equipment fully operational.
  - a. Furnish and install new LP Standby Generator, Kohler 14RES (14KW 50 Amp). Furnish and install precast concrete housekeeping pad, automatic transfer switch and all necessary electrical work to provide standby power to the Owner's oxygen concentrator. Furnish and install required LP piping and accessories to connect to existing exterior propane tank, located on west side of home. Existing electrical service entry and meter located on east side of home. Priority of standby power will be furnished to certain existing outlets in bedroom, den, and kitchen, and to handicap lift in garage.
5. BID ITEM #5: Enlarge Four Door Openings. Door Openings work includes all carpentry, finish and hardware to make equipment fully operational.
  - a. Enlarge three existing interior door openings in hallway to bathroom, bedroom and den. Provide track-mounted sliding doors with hardware for bedroom and bathroom, similar to existing bathroom door. Widened entry to den will be a cased opening, door and hardware to be supplied for future installation.
  - b. Enlarge one exterior door opening from kitchen to garage, provide new fireproof door with ADA hardware.
  - c. Provide new gypsum wallboard and paint walls to match at enlarge openings as required.

6. BID ITEM #6: Kitchen Pass-Through. Pass-Through work includes all carpentry, finish, electrical and piping to make equipment fully operational.
    - a. Enlarge (combine) existing pass-through opening and door opening in kitchen/living room wall to create a single opening. Provide new framing at new opening. Remove heater, repair or replace flooring to match existing, provide gypsum wall board, provide new casing at opening, and paint walls to match existing.
  7. BID ITEM #7: Patio Door. Patio Door work includes all carpentry and hardware to make equipment fully operational.
    - a. Remove existing sliding glass door from kitchen to back porch. Replace with new double-leaf French door to fit in existing door opening. Provide paint and trim as required. Provide ADA modular ramp to porch. Provide ADA modular ramp at door to sunroom from porch.
- B. Refer to Technical Specifications for model numbers of specified products.

#### 1.4 ACCESS TO SITE

- A. Use of Site: Limit use of Project site to work in areas indicated. Do not disturb portions of Project site beyond areas in which the Work, as agreed prior to commencement.
1. Driveways, Walkways and Entrances: Keep driveways, parking garage, and entrances serving premises clear and available to Owner, Owner's employees, 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.
- B. Condition of Existing Building: Maintain portions of existing building affected by construction operations in a weathertight condition throughout construction period. Repair damage caused by construction operations.

#### 1.5 COORDINATION WITH OCCUPANTS

- A. Full Owner Occupancy: Owner will occupy site and existing building(s) during entire construction period. Cooperate with Owner during construction operations to minimize conflicts and facilitate Owner 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.

## 1.6 WORK RESTRICTIONS

- A. Work Restrictions, General: Comply with restrictions on construction operations.
  - 1. Comply with limitations on use of public streets and with 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 5:00 p.m., Monday through Friday, unless otherwise indicated and as coordinated with VA and homeowner.
- C. Existing Utility Interruptions: Do not interrupt utilities serving facilities occupied by Owner or others unless permitted under the following conditions and then only after providing temporary utility services according to requirements indicated:
  - 1. Notify Owner not less than seven days in advance of proposed utility interruptions.
  - 2. Obtain Owner's 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 Owner not less than two days in advance of proposed disruptive operations.
  - 2. Obtain Owner's written permission before proceeding with disruptive operations.
- E. Controlled Substances: Use of tobacco products and other controlled substances on Project site is not permitted.

## 1.7 SPECIFICATION AND DRAWING CONVENTIONS

- A. Specification Content: The Specifications use certain conventions for the style of language and the intended meaning of certain terms, words, and phrases when used in particular situations. These conventions are as follows:
  - 1. Imperative mood and streamlined language are generally used in the Specifications. The words "shall," "shall be," or "shall comply with," depending on the context, are implied where a colon (:) is used within a sentence or phrase.
  - 2. Specification requirements are to be performed by Contractor unless specifically stated otherwise.
- B. Division 01 General Requirements: Requirements of Sections in Division 01 apply to the Work of all Sections in the Specifications.
- C. Drawing Coordination: Requirements for materials and products identified on Drawings are described in detail in the Specifications. One or more of the following are used on Drawings to identify materials and products:
  - 1. Terminology: Materials and products are identified by the typical generic terms used in the individual Specifications Sections.
  - 2. Abbreviations: Materials and products are identified by abbreviations published as part of the U.S. National CAD Standard and scheduled on Drawings.

3. Keynoting: Materials and products are identified by reference keynotes referencing Specification Section numbers found in this Project Manual.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION 011000

## SECTION 013300 - SUBMITTAL PROCEDURES

## PART 1 - GENERAL

## 1.1 SUMMARY

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

## 1.2 DEFINITIONS

- A. Action Submittals: Written and graphic information and physical samples that require VA Representative's responsive action.
- B. Informational Submittals: Written and graphic information and physical samples that do not require VA Representative's responsive action. Submittals may be rejected for not complying with requirements.

## 1.3 ACTION SUBMITTALS

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

## 1.4 SUBMITTAL ADMINISTRATIVE REQUIREMENTS

- A. Architect's Digital Data Files: Electronic copies of digital data files of the Contract Drawings will be provided by Architect for Contractor's use in preparing submittals.
- B. Coordination: Coordinate preparation and processing of submittals with performance of construction activities.
  - 1. Coordinate each submittal with fabrication, purchasing, testing, delivery, other submittals, and related activities that require sequential activity.
  - 2. Coordinate transmittal of different types of submittals for related parts of the Work so processing will not be delayed because of need to review submittals concurrently for coordination.
    - a. VA Representative reserves the right to withhold action on a submittal requiring coordination with other submittals until related submittals are received.
- C. Processing Time: Allow time for submittal review, including time for resubmittals, as follows. Time for review shall commence on VA Representative's receipt of submittal. No extension of

the Contract Time will be authorized because of failure to transmit submittals enough in advance of the Work to permit processing, including resubmittals.

1. Initial Review: Allow seven days for initial review of each submittal. Allow additional time if coordination with subsequent submittals is required. VA Representative will advise Contractor when a submittal being processed must be delayed for coordination.
  2. Intermediate Review: If intermediate submittal is necessary, process it in same manner as initial submittal.
  3. Resubmittal Review: Allow seven days for review of each resubmittal.
- D. Paper Submittals: Place a permanent label or title block on each submittal item for identification.
1. Indicate name of firm or entity that prepared each submittal on label or title block.
  2. Provide a space approximately **6 by 8 inches (150 by 200 mm)** on label or beside title block to record Contractor's review and approval markings and action taken by VA Representative.
  3. Include the following information for processing and recording action taken:
    - a. Project name.
    - b. Date.
    - c. Name of Architect.
    - d. Name of VA Representative.
    - e. Name of Contractor.
    - f. Name of subcontractor.
    - g. Name of supplier.
    - h. Name of manufacturer.
    - i. Submittal number or other unique identifier, including revision identifier.
      - 1) Submittal number shall use Specification Section number followed by a decimal point and then a sequential number (e.g., 061000.01). Resubmittals shall include an alphabetic suffix after another decimal point (e.g., 061000.01.A).
    - j. Number and title of appropriate Specification Section.
    - k. Drawing number and detail references, as appropriate.
    - l. Location(s) where product is to be installed, as appropriate.
    - m. Other necessary identification.
  4. Additional Paper Copies: Unless additional copies are required for final submittal, and unless VA Representative observes noncompliance with provisions in the Contract Documents, initial submittal may serve as final submittal.
    - a. Submit one copy of submittal to concurrent reviewer in addition to specified number of copies to VA Representative.
  5. Transmittal for Paper Submittals: Assemble each submittal individually and appropriately for transmittal and handling. Transmit each submittal using a transmittal form. VA Representative will discard submittals received from sources other than Contractor.

- a. Transmittal Form for Paper Submittals: Provide locations on form for the following information:
  - 1) Project name.
  - 2) Date.
  - 3) Destination (To:).
  - 4) Source (From:).
  - 5) Name and address of Architect.
  - 6) Name of VA Representative.
  - 7) Name of Contractor.
  - 8) Name of firm or entity that prepared submittal.
  - 9) Names of subcontractor, manufacturer, and supplier.
  - 10) Category and type of submittal.
  - 11) Submittal purpose and description.
  - 12) Specification Section number and title.
  - 13) Specification paragraph number or drawing designation and generic name for each of multiple items.
  - 14) Drawing number and detail references, as appropriate.
  - 15) Indication of full or partial submittal.
  - 16) Transmittal number, numbered consecutively.
  - 17) Submittal and transmittal distribution record.
  - 18) Remarks.
  - 19) Signature of transmitter.
- E. Options: Identify options requiring selection by VA Representative.
- F. Deviations: Identify deviations from the Contract Documents on submittals.
- G. Resubmittals: Make resubmittals in same form and number of copies as initial submittal.
  1. Note date and content of previous submittal.
  2. Note date and content of revision in label or title block and clearly indicate extent of revision.
  3. Resubmit submittals until they are marked with approval notation from VA Representative's action stamp.
- H. Distribution: Furnish copies of final submittals to manufacturers, subcontractors, suppliers, fabricators, installers, authorities having jurisdiction, and others as necessary for performance of construction activities. Show distribution on transmittal forms.
- I. Use for Construction: Retain complete copies of submittals on Project site. Use only final action submittals that are marked with approval notation from VA Representative's action stamp.

## PART 2 - PRODUCTS

### 2.1 SUBMITTAL PROCEDURES

- A. General Submittal Procedure Requirements:

1. Submit electronic submittals via email as PDF electronic files.
    - a. VA Representative will return annotated file. Annotate and retain one copy of file as an electronic Project record document file.
  2. Action Submittals: Submit four paper copies of each submittal unless otherwise indicated. VA Representative will return three copies.
  3. Informational Submittals: Submit three paper copies of each submittal unless otherwise indicated. VA Representative will not return copies.
  4. Certificates and Certifications Submittals: Provide a statement that includes signature of entity responsible for preparing certification. Certificates and certifications shall be signed by an officer or other individual authorized to sign documents on behalf of that entity.
- B. Product Data: Collect information into a single submittal for each element of construction and type of product or equipment.
1. If information must be specially prepared for submittal because standard published data are not suitable for use, submit as Shop Drawings, not as Product Data.
  2. Mark each copy of each submittal to show which products and options are applicable.
  3. Include the following information, as applicable:
    - a. Manufacturer's catalog cuts.
    - b. Manufacturer's product specifications.
    - c. Standard color charts.
    - d. Statement of compliance with specified referenced standards.
    - e. Testing by recognized testing agency.
    - f. Application of testing agency labels and seals.
    - g. Notation of coordination requirements.
    - h. Availability and delivery time information.
  4. For equipment, include the following in addition to the above, as applicable:
    - a. Wiring diagrams showing factory-installed wiring.
    - b. Printed performance curves.
    - c. Operational range diagrams.
    - d. Clearances required to other construction, if not indicated on accompanying Shop Drawings.
  5. Submit Product Data before or concurrent with Samples.
- C. Shop Drawings: Prepare Project-specific information, drawn accurately to scale. Do not base Shop Drawings on reproductions of the Contract Documents or standard printed data.
1. Preparation: Fully illustrate requirements in the Contract Documents. Include the following information, as applicable:
    - a. Identification of products.
    - b. Schedules.
    - c. Compliance with specified standards.
    - d. Notation of coordination requirements.

- e. Notation of dimensions established by field measurement.
    - f. Relationship and attachment to adjoining construction clearly indicated.
    - g. Seal and signature of professional engineer if specified.
  2. Sheet Size: Except for templates, patterns, and similar full-size drawings, submit Shop Drawings on sheets at least **8-1/2 by 11 inches (215 by 280 mm)**, but no larger than **30 by 42 inches (750 by 1067 mm)**.
  3. Submit Shop Drawings in the following format:
    - a. Three opaque copies of each submittal. VA Representative will retain two copies; remainder will be returned.
- D. Samples: Submit Samples for review of kind, color, pattern, and texture for a check of these characteristics with other elements and for a comparison of these characteristics between submittal and actual component as delivered and installed.
  1. Transmit Samples that contain multiple, related components such as accessories together in one submittal package.
  2. Identification: Attach label on unexposed side of Samples that includes the following:
    - a. Generic description of Sample.
    - b. Product name and name of manufacturer.
    - c. Sample source.
    - d. Number and title of applicable Specification Section.
  3. Disposition: Maintain sets of approved Samples at Project site, available for quality-control comparisons throughout the course of construction activity. Sample sets may be used to determine final acceptance of construction associated with each set.
    - a. Samples that may be incorporated into the Work are indicated in individual Specification Sections. Such Samples must be in an undamaged condition at time of use.
    - b. Samples not incorporated into the Work, or otherwise designated as Owner's property, are the property of Contractor.
  4. Samples for Initial Selection: Submit manufacturer's color charts consisting of units or sections of units showing the full range of colors, textures, and patterns available.
    - a. Number of Samples: Submit one full set(s) of available choices where color, pattern, texture, or similar characteristics are required to be selected from manufacturer's product line. VA Representative will return submittal with options selected.
- E. Installer Certificates: Submit written statements on manufacturer's letterhead certifying that Installer complies with requirements in the Contract Documents and, where required, is authorized by manufacturer for this specific Project.
- F. Manufacturer Certificates: Submit written statements on manufacturer's letterhead certifying that manufacturer complies with requirements in the Contract Documents. Include evidence of manufacturing experience where required.
- G. Product Certificates: Submit written statements on manufacturer's letterhead certifying that product complies with requirements in the Contract Documents.

- H. Material Certificates: Submit written statements on manufacturer's letterhead certifying that material complies with requirements in the Contract Documents.
- I. Design Data: Prepare and submit written and graphic information, including, but not limited to, performance and design criteria, list of applicable codes and regulations, and calculations. Include list of assumptions and other performance and design criteria and a summary of loads. Include load diagrams if applicable. Provide name and version of software, if any, used for calculations. Include page numbers.

### PART 3 - EXECUTION

#### 3.1 CONTRACTOR'S REVIEW

- A. Action and Informational Submittals: Review each submittal and check for coordination with other Work of the Contract and for compliance with the Contract Documents. Note corrections and field dimensions. Mark with approval stamp before submitting to VA Representative.
- B. Approval Stamp: Stamp each submittal with a uniform, approval stamp. Include Project name and location, submittal number, Specification Section title and number, name of reviewer, date of Contractor's approval, and statement certifying that submittal has been reviewed, checked, and approved for compliance with the Contract Documents.

#### 3.2 VA REPRESENTATIVE'S ACTION

- A. General: VA Representative will not review submittals that do not bear Contractor's approval stamp and will return them without action.
- B. Action Submittals: VA Representative will review each submittal, make marks to indicate corrections or revisions required, and return it. VA Representative will stamp each submittal with an action stamp and will mark stamp appropriately to indicate action.
- C. Informational Submittals: VA Representative will review each submittal and will not return it, or will return it if it does not comply with requirements. VA Representative will forward each submittal to appropriate party.
- D. Incomplete submittals are unacceptable, will be considered nonresponsive, and will be returned for resubmittal without review.
- E. Submittals not required by the Contract Documents may not be reviewed and may be discarded.

END OF SECTION 013300

## SECTION 015000 - TEMPORARY FACILITIES AND CONTROLS

## PART 1 - GENERAL

## 1.1 SUMMARY

- A. Section includes requirements for temporary utilities, support facilities, and security and protection facilities.

- 1. Section 011000 "Summary" for work restrictions and limitations on utility interruptions.

## 1.2 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, Architect, VA's Representative, Owner, occupants of Project, testing agencies, and authorities having jurisdiction.
- B. Water and Sewer 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 from Existing System: Electric power from Owner's existing system is available for use without metering and without payment of use charges. Provide connections and extensions of services as required for construction operations.

## 1.3 INFORMATIONAL SUBMITTALS

- A. Site Plan: Show temporary facilities, utility hookups, staging areas, and parking areas for construction personnel.
- B. Fire-Safety Program: Show compliance with requirements of NFPA 241 and authorities having jurisdiction. Indicate Contractor personnel responsible for management of fire prevention program.

## 1.4 QUALITY ASSURANCE

- A. Electric Service: Comply with NECA, NEMA, and UL standards and regulations for temporary electric service. Install service to comply with NFPA 70.
- B. Accessible Temporary Egress: Comply with applicable provisions in the U.S. Architectural & Transportation Barriers Compliance Board's ADA-ABA Accessibility Guidelines and ICC/ANSI A117.1.

## 1.5 PROJECT CONDITIONS

- A. In the event of a power outage, Contractor is responsible for providing temporary power for use by Owner.

## PART 2 - PRODUCTS

### 2.1 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. Locate facilities where they will serve Project adequately and result in minimum interference with performance of the Work.
- B. Provide each facility ready for use when needed to avoid delay. Do not remove until facilities are no longer needed or are replaced by authorized use of completed permanent facilities.

### 3.2 TEMPORARY UTILITY INSTALLATION

- A. Sanitary Facilities: Provide temporary toilets, wash facilities, and drinking water for use of construction personnel. Comply with requirements of authorities having jurisdiction for type, number, location, operation, and maintenance of fixtures and facilities.

### 3.3 SUPPORT FACILITIES INSTALLATION

- A. Parking: Use designated areas of Owner's existing parking areas for construction personnel.
- B. Waste Disposal Facilities: Provide waste-collection containers in sizes adequate to handle waste from construction operations. Comply with requirements of authorities having jurisdiction.

### 3.4 SECURITY AND PROTECTION FACILITIES INSTALLATION

- A. Protection of Existing Facilities: Protect existing vegetation, equipment, structures, utilities, and other improvements at Project site and on adjacent properties, except those indicated to be removed or altered. Repair damage to existing facilities.
- 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: Install temporary fencing located as indicated or outside the drip line of trees to protect vegetation from damage from construction operations. Protect tree root systems from damage, flooding, and erosion.
- D. Pest Control: Engage pest-control service to recommend practices to minimize attraction and harboring of rodents, roaches, and other pests and to perform extermination and control procedures at regular intervals so Project will be free of pests and their residues at Substantial Completion. Perform control operations lawfully, using environmentally safe materials.
- E. Temporary Enclosures: Provide temporary enclosures for protection of construction, in progress and completed, from exposure, foul weather, other construction operations, and similar activities. Provide temporary weathertight enclosure for building exterior.
  - 1. Where heating or cooling is needed and permanent enclosure is not complete, insulate temporary enclosures.
- F. Temporary Partitions: Provide floor-to-ceiling dustproof partitions to limit dust and dirt migration and to separate areas occupied by Owner from fumes and noise.
  - 1. Construct dustproof partitions with two layers of 6-mil (0.14-mm) polyethylene sheet on each side. Cover floor with two layers of 6-mil (0.14-mm) polyethylene sheet, extending sheets 18 inches (460 mm) up the sidewalls. Overlap and tape full length of joints. Cover floor with fire-retardant-treated plywood.
  - 2. Provide walk-off mats at each entrance through temporary partition.

### 3.5 OPERATION, TERMINATION, AND REMOVAL

- A. Supervision: Enforce strict discipline in use of temporary facilities. To minimize waste and abuse, limit availability of temporary facilities to essential and intended uses.
- B. Maintenance: Maintain facilities in good operating condition until removal.
- C. Termination and Removal: Remove each temporary facility when need for its service has ended, when it has been replaced by authorized use of a permanent facility, or no later than Substantial Completion. Complete or, if necessary, restore permanent construction that may have been delayed because of interference with temporary facility. Repair damaged Work, clean exposed surfaces, and replace construction that cannot be satisfactorily repaired.
  - 1. Materials and facilities that constitute temporary facilities are property of Contractor.
  - 2. At Substantial Completion, repair, renovate, and clean permanent facilities used during construction period.

END OF SECTION 015000

## SECTION 024119 - SELECTIVE DEMOLITION

## PART 1 - GENERAL

## 1.1 SUMMARY

- A. Section Includes:
  - 1. Demolition and removal of selected portions of building or structure.
  - 2. Salvage of existing items to be reused or recycled.

## 1.2 DEFINITIONS

- A. Remove: Detach items from existing construction and legally dispose of them off-site unless indicated to be removed and salvaged or removed and reinstalled.
- B. Remove and Salvage: Carefully detach from existing construction, in a manner to prevent damage, and deliver to Owner.
- C. Remove and Reinstall: Detach items from existing construction, prepare for reuse, and reinstall where indicated.
- D. Existing to Remain: Existing items of construction that are not to be permanently removed and that are not otherwise indicated to be removed, removed and salvaged, or removed and reinstalled.

## 1.3 FIELD CONDITIONS

- A. Owner will occupy portions of building immediately adjacent to selective demolition area. Conduct selective demolition so Owner's operations will not be disrupted.
- B. Notify VA Representative of discrepancies between existing conditions and Drawings before proceeding with selective demolition.
- C. Hazardous Materials: It is not expected that hazardous materials will be encountered in the Work.
  - 1. If suspected hazardous materials are encountered, do not disturb; immediately notify VA Representative and Owner. Hazardous materials will be removed by Owner under a separate contract.
- D. Storage or sale of removed items or materials on-site is not permitted.
- E. Utility Service: Maintain existing utilities indicated to remain in service and protect them against damage during selective demolition operations.

#### 1.4 WARRANTY

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

### PART 2 - PRODUCTS

#### 2.1 PERFORMANCE REQUIREMENTS

- A. Regulatory Requirements: Comply with governing EPA notification local, state and federal regulations before beginning selective demolition. Comply with hauling and disposal regulations of authorities having jurisdiction.
- B. Standards: Comply with ANSI/ASSE A10.6 and NFPA 241.

### PART 3 - EXECUTION

#### 3.1 EXAMINATION

- A. Verify that utilities have been disconnected and capped before starting selective demolition operations.
- B. Survey existing conditions and correlate with requirements indicated to determine extent of selective demolition required.
- C. When unanticipated mechanical, electrical, or structural elements that conflict with intended function or design are encountered, investigate and measure the nature and extent of conflict. Promptly submit a written report to VA Representative.

#### 3.2 UTILITY SERVICES AND MECHANICAL/ELECTRICAL SYSTEMS

- A. Existing Services/Systems to Remain: Maintain services/systems indicated to remain and protect them against damage.
  - 1. Comply with requirements for existing services/systems interruptions specified in Section 011000 "Summary."
- B. Existing Services/Systems to Be Removed, Relocated, or Abandoned: Locate, identify, disconnect, and seal or cap off indicated utility services and mechanical/electrical systems serving areas to be selectively demolished.
  - 1. Arrange to shut off indicated utilities with utility companies.
  - 2. If services/systems are required to be removed, relocated, or abandoned, provide temporary services/systems that bypass area of selective demolition and that maintain continuity of services/systems to other parts of building.
  - 3. Disconnect, demolish, and remove fire-suppression systems, plumbing, and HVAC systems, equipment, and components indicated to be removed.

- a. Piping to Be Removed: Remove portion of piping indicated to be removed and cap or plug remaining piping with same or compatible piping material.
- b. Piping to Be Abandoned in Place: Drain piping and cap or plug piping with same or compatible piping material.
- c. Equipment to Be Removed: Disconnect and cap services and remove equipment.
- d. Equipment to Be Removed and Reinstalled: Disconnect and cap services and remove, clean, and store equipment; when appropriate, reinstall, reconnect, and make equipment operational.
- e. Equipment to Be Removed and Salvaged: Disconnect and cap services and remove equipment and deliver to Owner.

### 3.3 PREPARATION

- A. Site Access and Temporary Controls: Conduct selective demolition and debris-removal operations to ensure minimum interference with roads, streets, walks, walkways, and other adjacent occupied and used facilities.
  1. Comply with requirements for access and protection specified in Section 015000 "Temporary Facilities and Controls."

### 3.4 SELECTIVE DEMOLITION, GENERAL

- A. General: Demolish and remove existing construction only to the extent required by new construction and as indicated. Use methods required to complete the Work within limitations of governing regulations and as follows:
  1. Neatly cut openings and holes plumb, square, and true to dimensions required. Use cutting methods least likely to damage construction to remain or adjoining construction. Use hand tools or small power tools designed for sawing or grinding, not hammering and chopping, to minimize disturbance of adjacent surfaces. Temporarily cover openings to remain.
  2. Cut or drill from the exposed or finished side into concealed surfaces to avoid marring existing finished surfaces.
  3. Do not use cutting torches until work area is cleared of flammable materials. At concealed spaces, such as duct and pipe interiors, verify condition and contents of hidden space before starting flame-cutting operations. Maintain portable fire-suppression devices during flame-cutting operations.
  4. Locate selective demolition equipment and remove debris and materials so as not to impose excessive loads on supporting walls, floors, or framing.
  5. Dispose of demolished items and materials promptly.
- B. Reuse of Building Elements: Project has been designed to result in end-of-Project rates for reuse of building elements as follows. Do not demolish building elements beyond what is indicated on Drawings without VA Representative's approval.
- C. Removed and Salvaged Items:
  1. Clean salvaged items.
  2. Pack or crate items after cleaning. Identify contents of containers.

3. Store items in a secure area until delivery to Owner.
4. Transport items to Owner's storage area designated by Owner.
5. Protect items from damage during transport and storage.

D. Removed and Reinstalled Items:

1. Clean and repair items to functional condition adequate for intended reuse.
2. Pack or crate items after cleaning and repairing. Identify contents of containers.
3. Protect items from damage during transport and storage.
4. Reinstall items in locations indicated. Comply with installation requirements for new materials and equipment. Provide connections, supports, and miscellaneous materials necessary to make item functional for use indicated.

E. Existing Items to Remain: Protect construction indicated to remain against damage and soiling during selective demolition. When permitted by VA Representative, items may be removed to a suitable, protected storage location during selective demolition and cleaned and reinstalled in their original locations after selective demolition operations are complete.

### 3.5 DISPOSAL OF DEMOLISHED MATERIALS

- A. General: Except for items or materials indicated to be recycled, reused, salvaged, reinstalled, or otherwise indicated to remain Owner's property, remove demolished materials from Project site.
1. Do not allow demolished materials to accumulate on-site.
  2. Remove and transport debris in a manner that will prevent spillage on adjacent surfaces and areas.
- B. Burning: Do not burn demolished materials.
- C. Disposal: Transport demolished materials off Owner's property and legally dispose of them.

### 3.6 CLEANING

- A. Clean adjacent structures and improvements of dust, dirt, and debris caused by selective demolition operations. Return adjacent areas to condition existing before selective demolition operations began.

END OF SECTION 024119

SECTION 034100 - PRECAST CONCRETE

PART 1 - GENERAL

1.1 SUMMARY

- A. Section Includes precast concrete generator pads.

1.2 PREINSTALLATION MEETINGS

1.3 ACTION SUBMITTALS

- A. Product Data: For each type of product.

PART 2 - PRODUCTS

2.1 PERFORMANCE REQUIREMENTS

- A. Basis of Design:
  - 1. Gagne & Sons precast generator pad, 3000 psi minimum. Depth: 2-1/2-inches. Width: Four feet. Breadth: Five feet.

PART 3 - EXECUTION

3.1 INSTALLATION

- A. Install level on bed of crushed stone.
- B. Orient pad parallel to house foundation as shown on drawings.

END OF SECTION 034100

## SECTION 061053 - MISCELLANEOUS ROUGH CARPENTRY

## PART 1 - GENERAL

## 1.1 SUMMARY

- A. Section Includes:
1. Framing with dimension lumber.
  2. Wood blocking and nailers.
  3. Wood furring.
  4. Wood sleepers.
  5. Plywood backing panels.

## 1.2 ACTION SUBMITTALS

- A. Product Data: For each type of process and factory-fabricated product. Indicate component materials and dimensions and include construction and application details.

## PART 2 - PRODUCTS

## 2.1 WOOD PRODUCTS, GENERAL

- A. Lumber: DOC PS 20 and applicable rules of grading agencies indicated. If no grading agency is indicated, provide lumber that complies with the applicable rules of any rules-writing agency certified by the ALSC Board of Review. Provide lumber graded by an agency certified by the ALSC Board of Review to inspect and grade lumber under the rules indicated.
1. Factory mark each piece of lumber with grade stamp of grading agency.
- B. Maximum Moisture Content of Lumber: 15 percent for 2-inch nominal (38-mm actual) thickness or less, 19 percent for more than 2-inch nominal (38-mm actual) thickness unless otherwise indicated.

## 2.2 DIMENSION LUMBER FRAMING

- A. Non-Load-Bearing Interior Partitions: No. 2 grade SPF.
- B. Other Framing: No. 2 grade and the following species:
1. Spruce-pine-fir (south); NeLMA, WCLIB, or WWPA.

## 2.3 MISCELLANEOUS LUMBER

- A. General: Provide miscellaneous lumber indicated and lumber for support or attachment of other construction, including the following:
  - 1. Blocking.
  - 2. Nailers.
  - 3. Furring.
  - 4. Grounds.
- B. For items of dimension lumber size, provide No. 2 grade SPF.
- C. For concealed boards, provide lumber with 19 percent maximum moisture content and the following species and grades:
  - 1. No. 2 SPF.

## 2.4 PLYWOOD BACKING PANELS

- A. Equipment Backing Panels: DOC PS 1, Exposure 1, C-D X, in thickness indicated or, if not indicated, not less than **3/4-inch (19-mm)** nominal thickness.

## 2.5 FASTENERS

- A. General: Provide fasteners of size and type indicated that comply with requirements specified in this article for material and manufacture.
  - 1. Provide fasteners with hot-dip zinc coating complying with ASTM A 153/A 153M.
- B. Power-Driven Fasteners: NES NER-272.

## PART 3 - EXECUTION

### 3.1 INSTALLATION, GENERAL

- A. Set carpentry to required levels and lines, with members plumb, true to line, cut, and fitted. Fit carpentry to other construction; scribe and cope as needed for accurate fit.
- B. Where wood-preservative-treated lumber is installed adjacent to metal decking, install continuous flexible flashing separator between wood and metal decking.
- C. Framing Standard: Comply with AF&PA's WCD 1, "Details for Conventional Wood Frame Construction," unless otherwise indicated.
- D. Install plywood backing panels by fastening to 2x furring; coordinate locations with utilities requiring backing panels.
- E. Do not splice structural members between supports unless otherwise indicated.

- F. Comply with AWP M4 for applying field treatment to cut surfaces of preservative-treated lumber.
- G. Securely attach carpentry work to substrate by anchoring and fastening as indicated, complying with the following:
  - 1. NES NER-272 for power-driven fasteners.
  - 2. Table 2304.9.1, "Fastening Schedule," in ICC's International Building Code.
  - 3. Table R602.3(1), "Fastener Schedule for Structural Members," and Table R602.3(2), "Alternate Attachments," in ICC's International Residential Code for One- and Two-Family Dwellings.

### 3.2 PROTECTION

- A. Protect wood that has been treated with inorganic boron (SBX) from weather. If, despite protection, inorganic boron-treated wood becomes wet, apply EPA-registered borate treatment. Apply borate solution by spraying to comply with EPA-registered label.

END OF SECTION 061053

## SECTION 062023 - FINISH CARPENTRY

## PART 1 - GENERAL

## 1.1 SUMMARY

- A. Section Includes:
  - 1. Interior trim.
  - 2. Exterior trim.

## 1.2 ACTION SUBMITTALS

- A. Product Data: For each type of process and factory-fabricated product.

## PART 2 - PRODUCTS

## 2.1 MATERIALS, GENERAL

- A. Lumber: DOC PS 20.
  - 1. Factory mark each piece of lumber with grade stamp of inspection agency indicating grade, species, moisture content at time of surfacing, and mill.
    - a. For exposed lumber, mark grade stamp on end or back of each piece.
- B. Softwood Plywood: DOC PS 1.
- C. Hardboard: AHA A135.4.
- D. MDF: ANSI A208.2, Grade 130.
- E. Particleboard: ANSI A208.1, Grade M-2.
- F. Melamine-Faced Particleboard: Particleboard complying with ANSI A208.1, Grade M-2, finished on both faces with thermally fused, melamine-impregnated decorative paper and complying with requirements of NEMA LD3, Grade VGL, for test methods 3.3, 3.4, 3.6, 3.8, and 3.10.
  - 1. Color: White.

## 2.2 INTERIOR TRIM

- A. Softwood Moldings, casing and jambs for Transparent Finish (Stain or Clear Finish): WMMPA WM 4, N-grade wood moldings. Made to patterns included in WMMPA WM 12.
1. Species: Eastern white pine.
  2. Maximum Moisture Content: 15 percent.
  3. Molding Patterns:
    - a. Clamshell: Match existing, similar to BroscoWM315.

## 2.3 EXTERIOR TRIM

- A. Lumber Trim:
1. Eastern white pine 1x4 FJP.
  2. Maximum Moisture Content: 19 percent.
  3. Face Surface: Surfaced (smooth).

## 2.4 MISCELLANEOUS MATERIALS

- A. Fasteners for Finish Carpentry: Provide nails or screws, in sufficient length to penetrate not less than 1-1/2 inches (38mm) into wood substrate.
1. For applications not otherwise indicated, provide hot-dip galvanized-steel fasteners.

## PART 3 - EXECUTION

### 3.1 PREPARATION

- A. Before installing interior finish carpentry, condition materials to average prevailing humidity in installation areas for a minimum of 24 hours unless longer conditioning is recommended by manufacturer.

### 3.2 INSTALLATION, GENERAL

- A. Install interior finish carpentry level, plumb, true, and aligned with adjacent materials. Use concealed shims where necessary for alignment.
1. Scribe and cut interior finish carpentry to fit adjoining work. Refinish and seal cuts as recommended by manufacturer.
  2. Countersink fasteners, fill surface flush, and sand unless otherwise indicated.
  3. Install to tolerance of **1/8 inch in 96 inches (3 mm in 2438 mm)** for level and plumb. Install adjoining interior finish carpentry with **1/32-inch (0.8-mm)** maximum offset for flush installation and **1/16-inch (1.5-mm)** maximum offset for reveal installation.

3.3 STANDING AND RUNNING TRIM INSTALLATION

- A. Install with minimum number of joints practical, using full-length pieces from maximum lengths of lumber available. Miter at returns, miter at outside corners, and cope at inside corners to produce tight-fitting joints with full-surface contact throughout length of joint. Use scarf joints for end-to-end joints.

END OF SECTION 062023

## SECTION 064113 - WOOD-VENEER-FACED ARCHITECTURAL CABINETS

## PART 1 - GENERAL

## 1.1 SUMMARY

## A. Section Includes:

1. Architectural wood cabinets.
2. Wood furring, blocking, shims, and hanging strips for installing architectural wood cabinets unless concealed within other construction before cabinet installation.
3. Shop finishing of architectural wood cabinets.

## 1.2 ACTION SUBMITTALS

## A. Product Data: For each type of product.

## B. Shop Drawings: Show location of each item, dimensioned plans and elevations, large-scale details, attachment devices, and other components.

## C. Samples:

1. Lumber for transparent finish, for each species and cut, finished on one side and one edge. Transparent finishes shall match existing.
2. Thermoset decorative panels, for each color, pattern, and surface finish.
3. Exposed cabinet hardware and accessories, one unit for each type.

## PART 2 - PRODUCTS

## 2.1 ARCHITECTURAL WOOD CABINETS, GENERAL

- A. Quality Standard: Unless otherwise indicated, comply with the "Architectural Woodwork Standards" for grades of architectural wood cabinets indicated for construction, finishes, installation, and other requirements.

## 2.2 WOOD CABINETS FOR TRANSPARENT FINISH

- A. Grade: Custom.
- B. Type of Construction: Face frame.
- C. Cabinet and Door and Drawer Front Interface Style: Reveal overlay.
- D. Reveal Dimension: to match existing.

- E. Wood for Exposed Surfaces:
  - 1. Species: Pine or birch, to achieve a match to existing.
  - 2. Cut: Plain sliced/plain sawn.
  - 3. Grain Direction: Vertically for drawer fronts, doors, and fixed panels, to match existing.
- F. Semiexposed Surfaces: Provide surface materials indicated below:
  - 1. Surfaces Other Than Drawer Bodies: Compatible species to that indicated for exposed surfaces, stained to match.
  - 2. Drawer Subfronts, Backs, and Sides: Solid-hardwood lumber, stained to match species indicated for exposed surfaces.
  - 3. Drawer Bottoms: Hardwood plywood.

## 2.3 WOOD MATERIALS

- A. Composite Wood and Agrifiber Products: Provide materials that comply with requirements of referenced quality standard for each type of woodwork and quality grade specified unless otherwise indicated.
  - 1. Veneer-Faced Panel Products (Hardwood Plywood): HPVA HP-1.
  - 2. Thermoset Decorative Panels: Particleboard or medium-density fiberboard finished with thermally fused, melamine-impregnated decorative paper and complying with requirements of NEMA LD 3, Grade VGL, for test methods 3.3, 3.4, 3.6, 3.8, and 3.10.

## 2.4 CABINET HARDWARE AND ACCESSORIES

- A. General: Provide cabinet hardware and accessory materials associated with architectural cabinets except for items specified in Section 087111 "Door Hardware (Descriptive Specification)."
- B. Drawer Slides: BHMA A156.9, B05011 Heavy Duty, bottom edge mounted.

## 2.5 MISCELLANEOUS MATERIALS

- A. Furring, Blocking, Shims, and Hanging Strips: Softwood or hardwood lumber, kiln dried to less than 15 percent moisture content.
- B. Anchors: Select material, type, size, and finish required for each substrate for secure anchorage. Provide metal expansion sleeves or expansion bolts for post-installed anchors. Use nonferrous-metal or hot-dip galvanized anchors and inserts at inside face of exterior walls and at floors.

## 2.6 FABRICATION

- A. Complete fabrication, including assembly, finishing, and hardware application, to maximum extent possible before shipment to Project site. Disassemble components only as necessary for shipment and installation. Where necessary for fitting at site, provide ample allowance for scribing, trimming, and fitting.

- B. Shop-cut openings to maximum extent possible to receive hardware, appliances, electrical work, and similar items. Locate openings accurately and use templates or roughing-in diagrams to produce accurately sized and shaped openings. Sand edges of cutouts to remove splinters and burrs.

## 2.7 SHOP FINISHING

- A. General: Finish architectural wood cabinets at fabrication shop to maximum extent possible, as specified in this Section. Defer only final touchup, cleaning, and polishing until after installation.
- B. Preparation for Finishing: Comply with referenced quality standard for sanding, filling countersunk fasteners, sealing concealed surfaces, and similar preparations for finishing architectural wood cabinets, as applicable to each unit of work.
  - 1. Backpriming: Apply one coat of sealer or primer, compatible with finish coats, to concealed surfaces of cabinets.
- C. Transparent Finish:
  - 1. Grade: Same as item to be finished.
  - 2. Finish: System - 5, conversion varnish.
  - 3. Sheen: match existing.

## PART 3 - EXECUTION

### 3.1 PREPARATION

- A. Before installation, condition cabinets to average prevailing humidity conditions in installation areas.

### 3.2 INSTALLATION

- A. Grade: Install cabinets to comply with same grade as item to be installed.
- B. Install cabinets level, plumb, true, and straight. Shim as required with concealed shims. Install level and plumb to a tolerance of **1/8 inch in 96 inches (3 mm in 2400 mm)**.
- C. Scribe and cut cabinets to fit adjoining work, refinish cut surfaces, and repair damaged finish at cuts.
- D. Anchor cabinets to anchors or blocking built in or directly attached to substrates. Secure with countersunk, concealed fasteners and blind nailing. Use fine finishing nails for exposed fastening, countersunk and filled flush with woodwork.
- E. Cabinets: Install without distortion so doors and drawers fit openings properly and are accurately aligned. Adjust hardware to center doors and drawers in openings and to provide unencumbered operation. Complete installation of hardware and accessory items as indicated.

1. Install cabinets with no more than **1/8 inch in 96-inch (3 mm in 2400-mm)** sag, bow, or other variation from a straight line.
  2. Fasten wall cabinets through back, near top and bottom, and at ends not more than **16 inches (400 mm)** o.c. with No. 10 wafer-head screws sized for not less than **1-1/2-inch (38-mm)** penetration into wood framing, blocking, or hanging strips.
- F. Touch up finishing work specified in this Section after installation of woodwork. Fill nail holes with matching filler where exposed.

END OF SECTION 064113

## SECTION 079200 - JOINT SEALANTS

## PART 1 - GENERAL

## 1.1 SUMMARY

## A. Section Includes:

1. Silicone joint sealants.

## PART 2 - PRODUCTS

## 2.1 MATERIALS, GENERAL

- A. Liquid-Applied Joint Sealants: Comply with ASTM C 920 and other requirements indicated for each liquid-applied joint sealant specified, including those referencing ASTM C 920 classifications for type, grade, class, and uses related to exposure and joint substrates.

## 2.2 SILICONE JOINT SEALANTS

## A. Neutral-Curing Silicone Joint Sealant: ASTM C 920.

1. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:
  - a. [BASF Building Systems.](#)
  - b. [Dow Corning Corporation.](#)
  - c. [GE Advanced Materials - Silicones.](#)
  - d. [May National Associates, Inc.](#)
  - e. [Pecora Corporation.](#)
  - f. [Polymeric Systems, Inc.](#)
  - g. [Schnee-Morehead, Inc.](#)
  - h. [Sika Corporation; Construction Products Division.](#)
  - i. [Tremco Incorporated.](#)
2. Type: Single component (S).
3. Grade: nonsag (NS).
4. Class: 50.
5. Uses Related to Exposure: Nontraffic (NT).

## 2.3 MISCELLANEOUS MATERIALS

- A. Cleaners for Nonporous Surfaces: Chemical cleaners acceptable to manufacturers of sealants and sealant backing materials.

- B. Masking Tape: Nonstaining, nonabsorbent material compatible with joint sealants and surfaces adjacent to joints.

## PART 3 - EXECUTION

### 3.1 PREPARATION

- A. Surface Cleaning of Joints: Clean out joints immediately before installing joint sealants to comply with joint-sealant manufacturer's written instructions.
- B. Joint Priming: Prime joint substrates where recommended by joint-sealant manufacturer or as indicated by preconstruction joint-sealant-substrate tests or prior experience. Apply primer to comply with joint-sealant manufacturer's written instructions. Confine primers to areas of joint-sealant bond; do not allow spillage or migration onto adjoining surfaces.
- C. Masking Tape: Use masking tape where required to prevent contact of sealant or primer with adjoining surfaces that otherwise would be permanently stained or damaged by such contact or by cleaning methods required to remove sealant smears. Remove tape immediately after tooling without disturbing joint seal.

### 3.2 INSTALLATION

- A. Sealant Installation Standard: Comply with recommendations in ASTM C 1193 for use of joint sealants as applicable to materials, applications, and conditions indicated.
- B. Install sealant backings of kind indicated to support sealants during application and at position required to produce cross-sectional shapes and depths of installed sealants relative to joint widths that allow optimum sealant movement capability.
  - 1. Do not leave gaps between ends of sealant backings.
  - 2. Do not stretch, twist, puncture, or tear sealant backings.
  - 3. Remove absorbent sealant backings that have become wet before sealant application and replace them with dry materials.
- C. Install sealants using proven techniques that comply with the following and at the same time backings are installed:
  - 1. Place sealants so they directly contact and fully wet joint substrates.
  - 2. Completely fill recesses in each joint configuration.
  - 3. Produce uniform, cross-sectional shapes and depths relative to joint widths that allow optimum sealant movement capability.
- D. Tooling of Nonsag Sealants: Immediately after sealant application and before skinning or curing begins, tool sealants according to requirements specified in subparagraphs below to form smooth, uniform beads of configuration indicated; to eliminate air pockets; and to ensure contact and adhesion of sealant with sides of joint.
  - 1. Remove excess sealant from surfaces adjacent to joints.

2. Use tooling agents that are approved in writing by sealant manufacturer and that do not discolor sealants or adjacent surfaces.
  3. Provide concave joint profile per Figure 8A in ASTM C 1193, unless otherwise indicated.
- E. Clean off excess sealant or sealant smears adjacent to joints as the Work progresses by methods and with cleaning materials approved in writing by manufacturers of joint sealants and of products in which joints occur.

END OF SECTION 079200

## SECTION 081416 - DOORS

## PART 1 - GENERAL

## 1.1 SUMMARY

- A. Section Includes:
1. Solid-core doors with wood-veneer faces.
  2. Aluminum Clad exterior French doors.
  3. Shop finished flush wood doors.

## 1.2 ACTION SUBMITTALS

- A. Product Data: For each type of door.
- B. Shop Drawings: Indicate location, size, and hand of each door; elevation of each kind of door; construction details not covered in Product Data; and the following:
1. Dimensions and locations of blocking.
  2. Dimensions and locations of mortises and holes for hardware.
  3. Dimensions and locations of cutouts.
  4. Undercuts.
  5. Requirements for veneer matching.
  6. Finish requirements.
  7. Fire-protection ratings for fire-rated doors.

## PART 2 - PRODUCTS

## 2.1 MANUFACTURERS

- A. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:
1. [Algoma Hardwoods, Inc.](#)
  2. [Ampco.](#)
  3. [Chappell Door Co.](#)
  4. [Eggers Industries.](#)
  5. [General Veneer Manufacturing Co.](#)
  6. [Graham Wood Doors; an Assa Abloy Group company.](#)
  7. [Haley Brothers, Inc.](#)
  8. [Ipik Door Company.](#)
  9. [Lambton Doors.](#)
  10. [Marlite.](#)
  11. [Marshfield Door Systems, Inc.](#)
  12. [Mohawk Doors; a Masonite company.](#)

13. [Oshkosh Door Company.](#)
14. [Poncraft Door Company.](#)
15. [Vancouver Door Company.](#)
16. [VT Industries, Inc.](#)

## 2.2 VENEER-FACED DOORS FOR TRANSPARENT FINISH

### A. Interior Solid-Core Doors:

1. Grade: Custom (Grade A faces).
2. Species: Select white birch.
3. Cut: Plain sliced (flat sliced).
4. Match between Veneer Leaves: Book match.
5. Assembly of Veneer Leaves on Door Faces: Running match.
6. Core: Particleboard.

## 2.3 ALUMINUM CLAD EXTERIOR FRENCH DOORS

### A. Manufacturers

1. Basis-of-Design Product: Subject to compliance with requirements, provide Pella Designer Series Out-Swing Double-Swing French Doors.
  - a. Glazing: Advanced Low-E insulating glass with argon.
  - b. Exterior: EnduraClad aluminum-clad. Color: white.
  - c. Interior: Factory-primed pine.
  - d. Endura Hardware Collection, Bright Brass.
  - e. Grilles: To be selected by Owner.
  - f. Sill: Low Profile.

## 2.4 FABRICATION

- ### A. Factory machine doors for hardware that is not surface applied.

## 2.5 SHOP FINISHING

- ### A. General: Comply with referenced quality standard for shop finishing. Complete fabrication, including fitting doors for openings and machining for hardware that is not surface applied, before finishing.

1. Finish faces, all four edges, edges of cutouts, and mortises. Stains and fillers may be omitted on top and bottom edges, edges of cutouts, and mortises.

- ### B. Shop finish doors that are indicated to receive transparent finish.

### C. Transparent Finish:

1. Grade: Custom.
2. Finish: AWI's, AWMAC's, and WI's "Architectural Woodwork Standards" System 5, conversion varnish.

3. Staining: Match existing.
4. Sheen: Match existing.

### PART 3 - EXECUTION

#### 3.1 INSTALLATION

- A. Hardware: For installation, see Section 087100 "Door Hardware."
- B. Installation Instructions: Install doors to comply with manufacturer's written instructions and referenced quality standard, and as indicated.
- C. Job-Fitted Doors: Align and fit doors in frames with uniform clearances and bevels as indicated below; do not trim stiles and rails in excess of limits set by manufacturer or permitted for fire-rated doors. Machine doors for hardware. Seal edges of doors, edges of cutouts, and mortises after fitting and machining.
  1. Clearances: Provide **1/8 inch (3.2 mm)** at heads, jambs, and between pairs of doors. Provide **1/8 inch (3.2 mm)** from bottom of door to top of decorative floor finish or covering unless otherwise indicated. Where threshold is shown or scheduled, provide **1/4 inch (6.4 mm)** from bottom of door to top of threshold unless otherwise indicated.
- D. Factory-Fitted Doors: Align in frames for uniform clearance at each edge.
- E. Shop-Finished Doors: Restore finish before installation if fitting or machining is required at Project site.

END OF SECTION 081416

## SECTION 087100 - DOOR HARDWARE

## PART 1 - GENERAL

## 1.1 SUMMARY

- A. Section includes:
  - 1. Mechanical door hardware for the following:
    - a. Swinging doors.
    - b. Sliding barn doors.
  - 2. Modular Ramps.

## 1.2 ACTION SUBMITTALS

- A. Product Data: For each type of product indicated.
- B. Other Action Submittals:
  - 1. Door Hardware Schedule: Prepared by or under the supervision of Installer, detailing fabrication and assembly of door hardware, as well as installation procedures and diagrams. Coordinate final door hardware schedule with doors, frames, and related work to ensure proper size, thickness, hand, function, and finish of door hardware.
    - a. Format: Use same scheduling sequence and format and use same door numbers as in the Contract Documents.
    - b. Content: Include the following information:
      - 1) Identification number, location, hand, fire rating, size, and material of each door and frame.
      - 2) Locations of each door hardware set, cross-referenced to Drawings on floor plans and to door and frame schedule.
      - 3) Complete designations, including name and manufacturer, type, style, function, size, quantity, function, and finish of each door hardware product.
  - 2. Keying Schedule: Prepared by or under the supervision of Installer, detailing Owner's final keying instructions for locks.

## 1.3 WARRANTY

- A. Special Warranty: Manufacturer's standard form in which manufacturer agrees to repair or replace components of door hardware that fail in materials or workmanship within specified warranty period.
  - 1. Warranty Period: Three years from date of Substantial Completion, unless otherwise indicated.

## PART 2 - PRODUCTS

## 2.1 SCHEDULED DOOR HARDWARE

- A. Provide door hardware for each door as scheduled in Part 3 "Door Hardware Schedule" Article to comply with requirements in this Section.
1. Door Hardware Sets: Provide quantity, item, size, finish or color indicated, and products equivalent in function and comparable in quality to named products.
- B. Designations: Requirements for design, grade, function, finish, size, and other distinctive qualities of each type of door hardware are indicated in Part 3 "Door Hardware Schedule" Article. Products are identified by using door hardware designations, as follows:
1. Named Manufacturers' Products: Manufacturer and product designation are listed for each door hardware type required for the purpose of establishing minimum requirements. Manufacturers' names are abbreviated in Part 3 "Door Hardware Schedule" Article.

## 2.2 HINGES

- A. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:
1. [Baldwin Hardware Corporation.](#)
  2. [Bommer Industries, Inc.](#)
  3. [Cal-Royal Products, Inc.](#)
  4. [Hager Companies.](#)
  5. [IVES Hardware; an Ingersoll-Rand company.](#)
  6. [Lawrence Hardware Inc.](#)
  7. [McKinney Products Company; an ASSA ABLOY Group company.](#)
  8. [PBB, Inc.](#)
  9. [Stanley Commercial Hardware; Div. of The Stanley Works.](#)
- B. Products: Five knuckle full-mortise plain bearing.
1. H1: 3-1/2" x 3-1/2" for 1-3/8" doors; polished brass finish.
  2. H2: 4" x 4" for 1-3/4" doors; polished brass finish.

## 2.3 LEVER SETS

1. **Basis-of-Design Product:** Subject to compliance with requirements, provide products indicated below or comparable product by one of the following:
  - a. [Arrow USA; an ASSA ABLOY Group company.](#)
  - b. [ASSA, Inc.; An ASSA ABLOY Group Company.](#)
  - c. [Best Access Systems; Div. of Stanley Security Solutions, Inc.](#)
  - d. [Corbin Russwin Architectural Hardware; an ASSA ABLOY Group company.](#)
  - e. [Falcon Lock; an Ingersoll-Rand company.](#)
  - f. [Medeco Security Locks, Inc.; an ASSA ABLOY Group company.](#)
  - g. [SARGENT Manufacturing Company; an ASSA ABLOY Group company.](#)
  - h. [Schlage Commercial Lock Division; an Ingersoll-Rand company.](#)

- i. [Yale Security Inc.; an ASSA ABLOY Group company.](#)

B. Products:

1. L1: Schlage S-Series, Jupiter Lever, S51PD ANSI F81 Entrance Lock; Finish 605.
2. L2: Schlage S-Series, Jupiter Lever, S10D ANSI F75 Passage Latch; Finish 605.

## 2.4 DOOR GASKETING

- A. Door Gasketing: BHMA A156.22; air leakage not to exceed **0.50 cfm per foot (0.000774 cu. m/s per m)** of crack length for gasketing other than for smoke control, as tested according to ASTM E 283; with resilient or flexible seal strips that are easily replaceable and readily available from stocks maintained by manufacturer.

1. **Basis-of-Design Product:** Subject to compliance with requirements, provide product indicated below or comparable product by one of the following:
  - a. [Hager Companies.](#)
  - b. [M-D Building Products, Inc.](#)
  - c. [National Guard Products.](#)
  - d. [Pemko Manufacturing Co.; an ASSA ABLOY Group company.](#)
  - e. [Reese Enterprises, Inc.](#)
  - f. [Sealeze; a unit of Jason Incorporated.](#)
  - g. [Zero International.](#)
2. Products:
  - a. G1: Pemko Kerf-in Weatherstrip Q103.

## 2.5 MODULAR RAMPS

- A. Separately installed ramps at exterior deck: BHMA A156.21; fabricated to full width of opening indicated.

1. **Basis-of-Design Product:** Subject to compliance with requirements, provide product indicated below or comparable product by one of the following:
  - a. [Hager Companies.](#)
  - b. [M-D Building Products, Inc.](#)
  - c. [National Guard Products.](#)
  - d. [Pemko Manufacturing Co.; an ASSA ABLOY Group company.](#)
  - e. [Reese Enterprises, Inc.](#)
  - f. [Rixson Specialty Door Controls; an ASSA ABLOY Group company.](#)
  - g. [Sealeze; a unit of Jason Incorporated.](#)
  - h. [Zero International.](#)
2. Products:
  - a. T1: Pemko Assa Abloy Modular Ramp R1.25OSSAK; Assembly Length 22-1/8"; MillFinish Aluminum with PemKote Non-Slip Coating. Verify elevation difference between door threshold and deck surface. Provide modular ramp suitable for actual elevation difference.

## 2.6 SLIDING DOOR HARDWARE

- A. Sliding Door Hardware: BHMA A156.14; consisting of complete sets including rails, hangers, supports, bumpers, floor guides, and accessories indicated.
  - 1. Basis-of-Design Product: Subject to compliance with requirements, provide product indicated or comparable product by one of the following:
    - a. Cox, Arthur, & Sons, Inc.
    - b. Hager Companies.
    - c. Henderson, PC Inc.
    - d. Johnson, L. E., Products, Inc.
    - e. Stanley Commercial Hardware; Div. of The Stanley Works.
  - 2. Products:
    - a. S1: L.E. Johnson Products, Inc. 2610F Series Wall Mount Open Pocket Single Door with optional extended jamb latch and privacy pocket door lock #1521.

## 2.7 FINISHES

- A. Provide finishes complying with BHMA A156.18 as indicated.
- B. Protect mechanical finishes on exposed surfaces from damage by applying a strippable, temporary protective covering before shipping.

## PART 3 - EXECUTION

### 3.1 INSTALLATION

- A. Wood Doors: Comply with DHI WDHS.5 "Recommended Hardware Reinforcement Locations for Mineral Core Wood Flush Doors."
- B. Mounting Heights: Mount door hardware units at heights to comply with the following unless otherwise indicated or required to comply with governing regulations.
  - 1. Wood Doors: DHI WDHS.3, "Recommended Locations for Architectural Hardware for Wood Flush Doors."
- C. Install each door hardware item to comply with manufacturer's written instructions. Where cutting and fitting are required to install door hardware onto or into surfaces that are later to be painted or finished in another way, coordinate removal, storage, and reinstallation of surface protective trim units with finishing work. Do not install surface-mounted items until finishes have been completed on substrates involved.
  - 1. Set units level, plumb, and true to line and location. Adjust and reinforce attachment substrates as necessary for proper installation and operation.
  - 2. Drill and countersink units that are not factory prepared for anchorage fasteners. Space fasteners and anchors according to industry standards.
- D. Hinges: Install types and in quantities indicated in door hardware schedule but not fewer than the number recommended by manufacturer for application indicated or one hinge for every 30

**inches (750 mm)** of door height, whichever is more stringent, unless other equivalent means of support for door, such as spring hinges or pivots, are provided.

- E. Thresholds integral to door: Set thresholds for exterior doors and other doors indicated in full bed of sealant complying with requirements specified in Section 079200 "Joint Sealants."
- F. Modular ramp thresholds: Set thresholds on wood block fastened to exterior deck.
- G. Perimeter Gasketing: Apply to head and jamb, forming seal between door and frame.
- H. Adjustment: Adjust and check each operating item of door hardware and each door to ensure proper operation or function of every unit. Replace units that cannot be adjusted to operate as intended. Adjust door control devices to compensate for final operation of heating and ventilating equipment and to comply with referenced accessibility requirements.

### 3.2 DOOR HARDWARE SCHEDULE

Mark	Hardware		Lever			
	Group	Hinge	Set	Gasketing	Threshold	Sliding
01	1	*	*	*	T1	-
02	2	-	-	-	-	S1
03	3	H1	L2	-	-	-
04	2	-	-	-	-	S1
05	4	H2	L1	G1	-	-
06	3	H1	L2	-	-	-
07	5	-	-	-	T1	-

\*Manufacturer's Standard. See 081416 Doors.

END OF SECTION 087100

## SECTION 092900 - GYPSUM BOARD

## PART 1 - GENERAL

## 1.1 SUMMARY

## A. Section Includes:

1. Interior gypsum board.

## 1.2 ACTION SUBMITTALS

- A. Product Data: For each type of product.

## PART 2 - PRODUCTS

## 2.1 INTERIOR GYPSUM BOARD

- A. **Manufacturers:** Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:

1. [American Gypsum.](#)
2. [CertainTeed Corp.](#)
3. [Georgia-Pacific Gypsum LLC.](#)
4. [Lafarge North America Inc.](#)
5. [National Gypsum Company.](#)
6. [PABCO Gypsum.](#)
7. [Temple-Inland.](#)
8. [USG Corporation.](#)

- B. Gypsum Wallboard: ASTM C 1396/C 1396M.

1. Thickness: **1/2 inch (12.7 mm).**
2. Long Edges: Tapered.

## 2.2 TRIM ACCESSORIES

- A. Interior Trim: ASTM C 1047.

1. Material: Galvanized or aluminum-coated steel sheet, rolled zinc, plastic, or paper-faced galvanized steel sheet.

### 2.3 JOINT TREATMENT MATERIALS

- A. General: Comply with ASTM C 475/C 475M.
- B. Joint Tape:
  - 1. Interior Gypsum Board: Paper.
- C. Joint Compound for Interior Gypsum Board: For each coat use formulation that is compatible with other compounds applied on previous or for successive coats.

### 2.4 AUXILIARY MATERIALS

- A. Laminating Adhesive: Adhesive or joint compound recommended for directly adhering gypsum panels to continuous substrate.
- B. Steel Drill Screws: ASTM C 1002, unless otherwise indicated.

## PART 3 - EXECUTION

### 3.1 APPLYING AND FINISHING PANELS

- A. Comply with ASTM C 840.
- B. Examine panels before installation. Reject panels that are wet, moisture damaged, and mold damaged.
- C. Isolate perimeter of gypsum board applied to non-load-bearing partitions at structural abutments, except floors. Provide 1/4- to 1/2-inch- (6.4- to 12.7-mm-) wide spaces at these locations and trim edges with edge trim where edges of panels are exposed. Seal joints between edges and abutting structural surfaces with acoustical sealant.
- D. Install trim with back flanges intended for fasteners, attach to framing with same fasteners used for panels. Otherwise, attach trim according to manufacturer's written instructions.
- E. Prefill open joints, rounded or beveled edges, and damaged surface areas.
- F. Apply joint tape over gypsum board joints, except for trim products specifically indicated as not intended to receive tape.
- G. Gypsum Board Finish Levels: Finish panels to levels indicated below and according to ASTM C 840:
  - 1. Level 1: Ceiling plenum areas, concealed areas, and where indicated.
  - 2. Level 4: At panel surfaces that will be exposed to view unless otherwise indicated.
    - a. Primer and its application to surfaces are specified in Section 099123 "Interior Painting."

- H. Protect adjacent surfaces from drywall compound and texture finishes and promptly remove from floors and other non-drywall surfaces. Repair surfaces stained, marred, or otherwise damaged during drywall application.
- I. Remove and replace panels that are wet, moisture damaged, and mold damaged.

END OF SECTION 092900

## SECTION 096219 - LAMINATE FLOORING

## PART 1 - GENERAL

## 1.1 SUMMARY

- A. Section includes laminate flooring.

## 1.2 ACTION SUBMITTALS

- A. Product Data: For each type of product indicated.
- B. Samples: For each type of wood flooring and accessory.

## 1.3 DELIVERY, STORAGE AND HANDLING

- A. Store products in manufacturer's unopened packaging until ready for installation.
- B. Protect materials from exposure to moisture.
- C. Store materials flat in a dry, warm, ventilated and weather tight location.
- D. Protect existing flooring products from damage.

## PART 2 - PRODUCTS

## 2.1 MANUFACTURERS

- A. Subject to compliance with requirements, provide products to match existing flooring.

## PART 3 - EXECUTION

## 3.1 EXAMINATION

- A. Do not begin installation until substrates have been properly prepared.
- B. Verify that surfaces to receive laminate flooring are smooth, flat and sound.
- C. Verify laminate flooring has been acclimated to ambient temperatures in accordance with manufacturer's instructions.

### 3.2 PREPARATION

- A. Clean surfaces thoroughly prior to installation.
- B. Prepare surfaces using methods recommended by manufacturer for achieving the best result for the substrate under the project conditions.
- C. Allow unopened cartons of planks to remain in room where they are to be installed at least 48 hours prior to installation.

### 3.3 INSTALLATION

- A. Comply with flooring manufacturer's written installation instructions
- B. Install flooring planks parallel to direction of existing planks.
- C. Fit flooring neatly to vertical interruptions. Follow shape of interrupting item when joint will remain exposed and maintain 1/4 inch expansion space.
- D. Maintain movement gaps between perimeter of flooring and fixed objects, such as casework and walls. Ensure gap can be concealed by specified trim and baseboard.

### 3.4 PROTECTION

- A. Protect installed products during remainder of construction period with covering of heavy kraft paper or other suitable material. Do not use plastic sheet or film that might cause condensation.
- B. For glued installations, prohibit traffic on floor finish for 24 hours after installation.

END OF SECTION 096400

## SECTION 099123 - INTERIOR PAINTING

## PART 1 - GENERAL

## 1.1 SUMMARY

- A. Section includes surface preparation and the application of paint systems on interior substrates.

## 1.2 ACTION SUBMITTALS

- A. Product Data: For each type of product. Include preparation requirements and application instructions.
- B. Samples: For each type of paint system and in each color and gloss of topcoat.

## 1.3 MAINTENANCE MATERIAL SUBMITTALS

- A. Furnish extra materials, from the same product run, that match products installed and that are packaged with protective covering for storage and identified with labels describing contents.

## PART 2 - PRODUCTS

## 2.1 PAINT, GENERAL

- A. MPI Standards: Provide products that comply with MPI standards indicated and that are listed in its "MPI Approved Products List."
- B. Colors: As selected by Owner from manufacturer's full range to match Existing.

## 2.2 WATER-BASED PAINTS

- A. Latex, Interior, Finish to match Existing
  - 1. Products: Subject to compliance with requirements, available products that may be incorporated into the Work include, but are not limited to:
    - a. Sherwin-Williams.

## PART 3 - EXECUTION

## 3.1 EXAMINATION

- A. Examine substrates and conditions, with Applicator present, for compliance with requirements for maximum moisture content and other conditions affecting performance of the Work.
- B. Verify suitability of substrates, including surface conditions and compatibility with existing finishes and primers.
- C. Proceed with coating application only after unsatisfactory conditions have been corrected.
  - 1. Application of coating indicates acceptance of surfaces and conditions.

## 3.2 PREPARATION

- A. Comply with manufacturer's written instructions and recommendations in "MPI Manual" applicable to substrates indicated.
- B. Remove hardware, covers, plates, and similar items already in place that are removable and are not to be painted. If removal is impractical or impossible because of size or weight of item, provide surface-applied protection before surface preparation and painting.
  - 1. After completing painting operations, use workers skilled in the trades involved to reinstall items that were removed. Remove surface-applied protection if any.
- C. Clean substrates of substances that could impair bond of paints, including dust, dirt, oil, grease, and incompatible paints and encapsulants.

## 3.3 APPLICATION

- A. Apply paints according to manufacturer's written instructions and to recommendations in "MPI Manual."
- B. Apply paints to produce surface films without cloudiness, spotting, holidays, laps, brush marks, roller tracking, runs, sags, ropiness, or other surface imperfections. Cut in sharp lines and color breaks.
- C. Where a wall plane is indicated to be painted, paint entire wall plane to corners and intersections.

## 3.4 CLEANING AND PROTECTION

- A. Protect work of other trades against damage from paint application. Correct damage to work of other trades by cleaning, repairing, replacing, and refinishing, as approved by Architect, and leave in an undamaged condition.

- B. At completion of construction activities of other trades, touch up and restore damaged or defaced painted surfaces.

END OF SECTION 099123

## SECTION 102800 - TOILET, BATH, AND LAUNDRY ACCESSORIES

## PART 1 - GENERAL

## 1.1 SUMMARY

- A. Section Includes:
  - 1. Private-use bathroom accessories.
  - 2. Overhead lifts.

## PART 2 - PRODUCTS

## 2.1 PRIVATE-USE BATHROOM ACCESSORIES

- A. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:
- B. Toilet Tissue Dispenser: Remove and protect Existing; Reinstall.
- C. Towel Bar: Remove and protect Existing; Reinstall.
- D. Grab Bar GB:
  - 1. Basis-of-Design Product: Bobrick No. B-5806 Series.
  - 2. Mounting: Flanges with concealed fasteners.
  - 3. Material: Stainless steel, 0.05 inch (1.3 mm) thick.
    - a. Finish: Smooth, No. 4 finish (satin) on ends and slip-resistant texture in grip area.
  - 4. Outside Diameter: 1-1/2 inches.
  - 5. Configuration and Length: As indicated on Drawings.

## 2.2 OVERHEAD LIFTS

- A. Portable Overhead Lifter:
  - 1. Basis-of-Design Product: Guardian Voyager 98000.
- B. Overhead Lift Track:
  - 1. Basis-of-Design Product: Guradian Easytrack 2 Wall Mount.

## PART 3 - EXECUTION

## 3.1 INSTALLATION

- A. Install accessories according to manufacturers' written instructions, using fasteners appropriate to substrate indicated and recommended by unit manufacturer. Install units level, plumb, and firmly anchored in locations and at heights indicated.
- B. Grab Bars: Install to withstand a downward load of at least 250 lbf (1112 N), when tested according to ASTM F 446.
- C. Install Overhead Lift Track according to manufacturer's written instructions, using fasteners appropriate to substrate indicated and recommended by unit manufacturer. Install units level, plumb, and firmly anchored in locations and at heights indicated.

END OF SECTION 102800

## SECTION 113100 - RESIDENTIAL APPLIANCES

## PART 1 - GENERAL

## 1.1 SUMMARY

- A. Section Includes:
  - 1. Cooking appliances.

## 1.2 ACTION SUBMITTALS

- A. Product Data: For each type of product indicated.

## 1.3 CLOSEOUT SUBMITTALS

- A. Operation and maintenance data.

## 1.4 QUALITY ASSURANCE

- A. Installer Qualifications: An employer of workers trained and approved by manufacturer for installation and maintenance of units required for this Project.

## PART 2 - PRODUCTS

## 2.1 MANUFACTURERS

- A. Basis-of-Design Product: Subject to compliance with requirements, provide product indicated or comparable product by one of the following:
  - 1. Amana; a division of Whirlpool Corporation.
  - 2. ASKO North America; a division of AM Appliance Group.
  - 3. BSH Home Appliances Corporation (Thermador).
  - 4. Dacor, Inc.
  - 5. Dynamic Cooking Systems, Inc.; a subsidiary of Fisher & Paykel Appliances Holdings Limited.
  - 6. Electrolux Home Products (Frigidaire).
  - 7. General Electric Company (GE).
  - 8. General Electric Company (Hotpoint).
  - 9. Jenn-Air; a division of Whirlpool Corporation.
  - 10. KitchenAid; a division of Whirlpool Corporation.
  - 11. LG Appliances.
  - 12. Maytag; a division of Whirlpool Corporation.
  - 13. Samsung.

14. [Sears Brands LLC \(Kenmore\)](#).
15. [Sharp Electronics Corp.](#)
16. [Whirlpool Corporation](#).

## 2.2 DOWNDRAFT VENT

- A. Basis-of-Design Product: Frigidaire PL30DD50E C, 30" Stainless Steel.

## 2.3 COOKTOPS

- A. Electric Cooktop: Install Owner's product (Magic Chef Glass Cooktop).

## 2.4 WALL OVENS

- A. Electric Wall Oven: Install Owner's product (Magic Chef single wall oven).

# PART 3 - EXECUTION

## 3.1 INSTALLATION, GENERAL

- A. Built-in Equipment: Securely anchor units to supporting cabinets or countertops with concealed fasteners. Verify that clearances are adequate for proper functioning and that rough openings are completely concealed.
- B. Utilities: Comply with plumbing and electrical requirements.

## 3.2 FIELD QUALITY CONTROL

- A. Tests and Inspections:
  1. Perform visual, mechanical, and electrical inspection and testing for each appliance according to manufacturers' written recommendations. Certify compliance with each manufacturer's appliance-performance parameters.
  2. Leak Test: After installation, test for leaks. Repair leaks and retest until no leaks exist.
  3. Operational Test: After installation, start units to confirm proper operation.
  4. Test and adjust controls and safeties. Replace damaged and malfunctioning controls and components.

END OF SECTION 113100

## SECTION 123623.13 - PLASTIC-LAMINATE-CLAD COUNTERTOPS

## PART 1 - GENERAL

## 1.1 SUMMARY

- A. Section includes new plastic-laminate countertops.

## 1.2 ACTION SUBMITTALS

- A. Product Data: For each type of product.
- B. Shop Drawings: Show location of each item, dimensioned plans and elevations, large-scale details, attachment devices, and other components.
- C. Samples:
  - 1. Plastic laminates, for each color, pattern, and surface finish.

## PART 2 - PRODUCTS

## 2.1 PLASTIC-LAMINATE COUNTERTOPS

- A. Quality Standard: Unless otherwise indicated, comply with the "Architectural Woodwork Standards" for grades indicated for construction, installation, and other requirements.
- B. Grade: Custom.
- C. High-Pressure Decorative Laminate: NEMA LD 3, Grade HGS.
  - 1. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:
    - a. Abet Laminati, Inc.
    - b. Formica Corporation.
    - c. Lamin-Art, Inc.
    - d. Panolam Industries International, Inc.
    - e. Wilsonart International; Div. of Premark International, Inc.
- D. Colors, Patterns, and Finishes: Provide materials and products that result in colors and textures of exposed laminate surfaces complying with the following requirements:
  - 1. White, to be selected from Manufacturer's standard range by Owner to match existing.
- E. Edge Treatment: Same as laminate cladding on horizontal surfaces.

- F. Core Thickness: **3/4 inch (19 mm)**.
  - 1. Build up countertop thickness to **1-1/2 inches (38 mm)** at front, back, and ends with additional layers of core material laminated to top.
- G. Paper Backing: Provide paper backing on underside of countertop substrate.

## 2.2 WOOD MATERIALS

- A. Wood Products: Provide materials that comply with requirements of referenced quality standard unless otherwise indicated.
- B. Composite Wood and Agrifiber Products: Provide materials that comply with requirements of referenced quality standard for each type of woodwork and quality grade specified unless otherwise indicated.
  - 1. Particleboard: ANSI A208.1, Grade M-2.
  - 2. Softwood Plywood: DOC PS 1.

## PART 3 - EXECUTION

### 3.1 PREPARATION

- A. Before installation, condition countertops to average prevailing humidity conditions in installation areas.

### 3.2 INSTALLATION

- A. Grade: Install countertops to comply with same grade as item to be installed.
- B. Assemble countertops and complete fabrication at Project site to the extent that it was not completed in the shop.
  - 1. Provide cutouts for appliances, plumbing fixtures, electrical work, and similar items.
  - 2. Seal edges of cutouts by saturating with varnish.
- C. Field Jointing: Prepare edges to be joined in shop so Project-site processing of top and edge surfaces is not required.
  - 1. Secure field joints in plastic-laminate countertops with concealed clamping devices located within **6 inches (150 mm)** of front and back edges and at intervals not exceeding **24 inches (600 mm)**. Tighten according to manufacturer's written instructions to exert a constant, heavy-clamping pressure at joints.
- D. Install countertops level, plumb, true, and straight. Shim as required with concealed shims. Install level and plumb to a tolerance of **1/8 inch in 96 inches (3 mm in 2400 mm)**.
- E. Scribe and cut countertops to fit adjoining work, refinish cut surfaces, and repair damaged finish at cuts.

- F. Countertops: Anchor securely by screwing through corner blocks of base cabinets or other supports into underside of countertop.
1. Install countertops with no more than **1/8 inch in 96-inch (3 mm in 2400-mm)** sag, bow, or other variation from a straight line.
  2. Secure backsplashes to walls with adhesive.
  3. Seal junctures of tops, splashes, and walls with mildew-resistant silicone sealant or another permanently elastic sealing compound recommended by countertop material manufacturer.

END OF SECTION 123623.13

## SECTION 144119 - STAIRWAY CHAIRLIFTS

## PART 1 - GENERAL

## 1.1 SUMMARY

- A. Section includes private-residence, inclined stairway chairlifts.

## 1.2 ACTION SUBMITTALS

- A. Product Data: For each type of product.
- B. Shop Drawings: For each lift.
  - 1. Include plans, elevations, sections, details, attachments to other work, and required clearances.
  - 2. Indicate dimensions, weights, loads, and points of load to building structure.
  - 3. Include diagrams for power, signal, and control wiring.
- C. Samples: For each exposed product and for each color and texture specified.

## 1.3 INFORMATIONAL SUBMITTALS

- A. Product certificates.
- B. Sample warranty.

## 1.4 CLOSEOUT SUBMITTALS

- A. Operation and maintenance data.
- B. Inspection and acceptance certificates and operating permits.

## 1.5 QUALITY ASSURANCE

- A. Installer Qualifications: An authorized representative who is trained and approved by manufacturer.

## 1.6 WARRANTY

- A. Special Warranty: Manufacturer agrees to repair or replace components of lifts that fail in materials or workmanship within specified warranty period.
  - 1. Warranty Period: Two years from date of Substantial Completion.

## PART 2 - PRODUCTS

### 2.1 PERFORMANCE REQUIREMENTS

- A. Regulatory Requirements: Comply with ASME A18.1, "Safety Standard for Platform Lifts and Stairway Chairlifts."

### 2.2 INCLINED STAIRWAY CHAIRLIFT A4.2

- A. Private-Residence, Inclined Stairway Chairlift, General: Preengineered lift system.
  - 1. Basis-of-Design Product: Subject to compliance with requirements, provide AmeriGlide Heavy Duty Stair Lift, or comparable product by one of the following:
    - a. Bruno Independent Living Aids, Inc.
    - b. Savaria Concord Lifts.
    - c. ThyssenKrupp Access.
- B. Rated Capacity: Minimum 500 lbs.
- C. Power Supply: 110 V, 60 Hz, grounded outlet.
- D. Support to Structure: Provide brackets to support vertical loads from floor or stair treads and to support lateral loads from walls. Fabricate brackets from steel plates, shapes, or bars.
- E. Accessories: Provide units with the following accessories:
  - 1. Seat with back and two handgrips or arms.

## PART 3 - EXECUTION

### 3.1 INSTALLATION

- A. Adjust stops for accurate stopping at each landing.
- B. Lubricate operating parts of lift, including drive mechanism, guide rails, hinges, safety devices, and hardware.
- C. Test safety devices and verify smoothness of required protective enclosures and other surfaces.

### 3.2 FIELD QUALITY CONTROL

- A. Acceptance Testing: On completion of lift installation and before permitting use of lifts, perform acceptance tests as required and recommended by ASME A18.1 and authorities having jurisdiction.
- B. Operating Test: In addition to acceptance testing, load lifts to rated capacity and operate continuously for 30 minutes between lowest and highest landings served. Readjust stops, signal equipment, and other devices for accurate stopping and operation of system.

3.3 DEMONSTRATION

- A. Engage a factory-authorized service representative to train Owner's maintenance personnel to adjust, operate, and maintain lifts. Include a review of emergency systems and emergency procedures to be followed at time of operational failure and other building emergencies.
- B. Check operation of lifts with Owner's personnel present and before date of Substantial Completion. Determine that operating systems and devices are functioning properly.
- C. Check operation of lifts with Owner's personnel present not more than one month before end of warranty period. Determine that operating systems and devices are functioning properly.

END OF SECTION 144119

## SECTION 224100 - RESIDENTIAL PLUMBING FIXTURES

## PART 1 - GENERAL

## 1.1 SUMMARY

- A. Section Includes:
  - 1. Kitchen sinks.
  - 2. Water closets.
  - 3. Supply fittings.
  - 4. Waste fittings.

## 1.2 ACTION SUBMITTALS

- A. Product Data: For each type of product.

## 1.3 INFORMATIONAL SUBMITTALS

- A. Coordination Drawings: Counter cutout templates for mounting of counter-mounted plumbing fixtures.

## 1.4 CLOSEOUT SUBMITTALS

- A. Maintenance data.

## PART 2 - PRODUCTS

## 2.1 KITCHEN SINKS

- A. Kitchen Sinks: Two bowl, counter mounted, stainless steel.
  - 1. Stainless-Steel Kitchen Sinks:
    - a. **Basis-of-Design Product:** Subject to compliance with requirements, provide Elkay Gourmet Sink LRADQ2922 18 gauge self-rimming kitchen sink, 29-inch side-to-side by 22-inch front-to-back by 6-inch bowl depth, or comparable product by one of the following:
      - 1) [Elkay Manufacturing Co.](#)
      - 2) [Franke Consumer Products, Inc.](#)
      - 3) [Griffin Products, Inc.](#)
      - 4) [Houzer, Inc.](#)
      - 5) [Just Manufacturing.](#)
      - 6) [Kohler Co.](#)
      - 7) [Revere Sink.](#)

- 8) [Sterling](#).
  - 9) [WhiteRock Corp.](#)
2. Faucet: Reinstall existing.
  3. Supply Fittings: Comply with requirements in "Supply Fittings" Article.
  4. Waste Fittings: Comply with requirements in "Waste Fittings" Article, except include continuous waste for multibowl sinks.
    - a. Disposer: Reinstall existing.

## 2.2 WATER CLOSETS

- A. Water Closets: Floor mounted, floor outlet, close coupled (gravity tank), vitreous china.
  1. **Basis-of-Design Product:** Subject to compliance with requirements, provide Sterling Riverton Luxury Height Elongated 2-Piece Toilet, model 402532, or comparable product by one of the following:
    - a. [American Standard America](#).
    - b. [Barclay Products Limited](#).
    - c. [Briggs Plumbing Products, Inc.](#)
    - d. [Capizzi](#).
    - e. [Crane Plumbing, L.L.C.](#)
    - f. [Duravit USA, Inc.](#)
    - g. [Eljer, Inc.](#)
    - h. [Ferguson Enterprises, Inc.; ProFlo Brand](#).
    - i. [Gerber Plumbing Fixtures LLC](#).
    - j. [Kohler Co.](#)
    - k. [Lamosa Corp.; Sanitaryware](#).
    - l. [Mansfield Plumbing Products LLC](#).
    - m. [Peerless Pottery Sales, Inc.](#)
    - n. [St. Thomas Creations](#).
    - o. [TOTO USA, INC.](#)
    - p. [Zurn Industries, LLC; Commercial Brass and Fixtures](#).
  2. Supply Fittings: reuse existing.

## PART 3 - EXECUTION

### 3.1 INSTALLATION

- A. Install plumbing fixtures level and plumb according to roughing-in drawings.
- B. Install floor-mounted water closets on closet flange attachments to drainage piping.
- C. Install counter-mounting fixtures in and attached to casework.
- D. Install water-supply piping with stop on each supply to each fixture to be connected to water distribution piping. Attach supplies to supports or substrate within pipe spaces behind fixtures. Install stops in locations where they can be easily reached for operation.

- E. Install tanks for accessible, tank-type water closets with lever handle mounted on wide side of compartment.
- F. Install toilet seats on water closets.
- G. Install traps on fixture outlets.
  - 1. Exception: Omit trap on fixtures with integral traps.
  - 2. Exception: Omit trap on indirect wastes unless otherwise indicated.
- H. Install disposer in outlet of each sink indicated to have disposer. Install switch where indicated or in wall adjacent to sink if location is not indicated.
- I. Install wall flanges or escutcheons at piping wall penetrations in exposed, finished locations. Use deep-pattern escutcheons if required to conceal protruding fittings.
- J. Seal joints between plumbing fixtures, counters, floors, and walls using sanitary-type, one-part, mildew-resistant silicone sealant. Match sealant color to fixture color. Comply with sealant requirements specified in Section 079200 "Joint Sealants."

### 3.2 CONNECTIONS

- A. Connect fixtures with water supplies, stops, and risers, and with traps, soil, waste, and vent piping. Use size fittings required to match fixtures.
- B. Install protective shielding pipe covers and enclosures on exposed supplies and waste piping of accessible lavatories and sinks.

### 3.3 ADJUSTING

- A. Operate and adjust plumbing fixtures and controls. Replace damaged and malfunctioning fixtures, fittings, and controls.
- B. Adjust water pressure at faucets to produce proper flow.

### 3.4 CLEANING AND PROTECTION

- A. After completing installation of plumbing fixtures, inspect and repair damaged finishes.
- B. Clean plumbing fixtures, faucets, and other fittings with manufacturers' recommended cleaning methods and materials.
- C. Provide protective covering for installed plumbing fixtures and fittings.
- D. Do not allow use of plumbing fixtures for temporary facilities unless approved in writing by Owner.

END OF SECTION 224100

## SECTION 260100 – BASIC ELECTRICAL REQUIREMENTS

## PART 1 - GENERAL

## 1.1 SUMMARY

- A. Section Includes:
  - 1. Wiring Materials.
  - 2. Electrical Panelboards.
  - 3. Grounding Materials.
  - 4. Disconnect Safety Switches.
- B. Related Sections:
  - 1. Section 263213 "Engine Generators" for Generator and Transfer Switch.

## 1.2 QUALITY ASSURANCE

- A. Minimum Requirements: National Electrical Code (NEC), Underwriters Laboratories, Inc. (UL), National Fire Codes and National Fire Protection Association (NFPA) are a minimum requirement for work under this section.
- B. All wiring shall be in accordance with the latest issue of the NEC.
- C. Service equipment shall be grounded at the service entrance switch enclosure.
- D. All electrical equipment shall be approved by UL. Each system shall be products of a single manufacturer of established reputation and experience.

## 1.3 SYSTEM DESCRIPTION

- A. Provide a new electrical panel for connection of all electrical items. Reroute the existing building service via new transfer switch.

## 1.4 SUBMITTALS

- A. Manufacturer's descriptive literature: For each type of product indicated.

## PART 2 - PRODUCTS

## 2.1 WIRING MATERIALS

- A. All wiring shall be type THW, XHHW or THWN, UL labeled, copper conductors with 600-volt insulation, except as otherwise noted. Minimum size wire shall be No. 12 AWG.

1. Aluminum conductors shall be permitted in accordance with NEC for sizes 1/0 AWG and larger where conductor and, if required, conduit sizes are increased to provide at least the ampacity of indicated copper conductors. Aluminum conductors used for service entrance conductors shall also comply with utility company requirements.

## 2.2 PANELBOARD

- A. Manufacturers: Subject to compliance with requirements, available products that may be incorporated into the Work include, but are not limited to the following:
  1. SQUARE D
  2. Siemens
  3. General Electric Company
  4. Cutler-Hammer
- B. General: Except as otherwise indicated, provide panelboards, enclosures and ancillary components of types, sizes, and ratings indicated, which comply with manufacturer's standard materials, design and construction in accordance with published product information; equip with number of unit panelboard devices as required for complete installation. Where types, sizes, or ratings are not indicated, comply with NEC, UL and established industry standards for applications indicated.
- C. Load Center, 100Amps, 24-circuit Main Lug Panel with cover: GE TM2410CCU.

## 2.3 GROUNDING MATERIALS

- A. Grounding Conductors:
  1. Soft-drawn bare copper.
  2. Insulated grounding wires shall be UL and NEC approved types, copper, with THWN or XHHW insulation color identified green, except where otherwise noted.
  3. Wire shall not be less than shown on drawings and not less than required by the NEC.
- B. Ground Clamps:
  1. Cast bronze or cast copper; UL listed for grounding connections.
  2. Size by specific conductor and electrode to be clamped.
- C. Grounding Connections:
  1. Exothermic type welding process as manufactured by Caldwell or approved equal.
- D. Equipment Grounding Connections:
  1. Compression-type solderless connectors.

## 2.4 DISCONNECT SAFETY SWITCH

- A. Products:
  1. Between service entrance and ATS: 100A.
  2. Between generator and ATS: 50A.

## PART 3 - EXECUTION

## 3.1 INSTALLATION

## A. General:

1. All work shall be in accordance with NEC, Fire Underwriter, and local electric utility company regulations, and all local, state and federal laws and regulations.
2. Wiring in finished areas shall be concealed in walls or above ceilings. Exposed wiring shall be installed in conduit or surface metal raceway as indicated. Exposed wiring shall not be installed in finished areas.
3. Size conduits and surface metal raceways according to NEC. Install exposed conduits and surface metal raceways with runs parallel or perpendicular to walls and ceiling with right-angle turns consisting of bends, fittings or outlet or device boxes.
4. Provide disconnect switches required by NEC.
5. Mount disconnect switches and starters at 60 inches above finished floor unless otherwise noted.
6. Anchor equipment firmly to walls and structural surfaces.
7. Provide legible circuit directory card in panel.
8. Mount panelboard with circuit breakers not greater than 78 inches above finished floor.
9. Provide necessary hardware for mounting equipment.
10. Provide electrical connections within enclosures.
11. Branch circuit wiring may be Type NM nonmetallic-sheathed cable where concealed and allowed by code. All romex shall be properly supported.
12. Feeder circuit wiring shall be in conduit or EMT.
13. Wiring in outside walls shall be in conduit or EMT.
14. Conductors shall be the same size from the last protective device to the load and shall have an ampacity equal to or greater than that of the protective device.
15. Provide a complete installation of the electrical system in accordance with the intent of the project.
16. Reconnect existing circuits to remain. Remove existing equipment to be discontinued.
17. Repair or replace any existing work disturbed or damaged by alterations or new work.
18. Equipment relocated or removed and reinstalled shall be cleaned and repaired before reinstallation.

## B. Grounding:

1. Permanently and effectively ground electrical system in accordance with code requirements.
2. Run grounding electrode conductor between service entrance switch ground bus and metallic water pipe system on street side of water meter.
3. Top of ground rods shall be a minimum of 6 inches below finished grade.

## C. Continuity of Service:

1. Execute Work to provide uninterrupted service to building. Notify owner 24 hours in advance of service interruption. Provide temporary power for owner's medical equipment.

## D. Testing and Adjusting:

1. System shall be free from short-circuits and improper grounds. Tests shall be made in the presence of Construction Manager. System shall be adjusted for proper operation.

2. Lighting circuits shall be tested at panel.

END OF SECTION 265100

## SECTION 263213 - ENGINE GENERATORS

## PART 1 - GENERAL

## 1.1 SUMMARY

- A. Section includes:
  - 1. Liquid Propane Gas-fired generators.
  - 2. Automatic Transfer Switch.
- B. Related Requirements:
  - 1. Division 034100 Section "Precast Concrete" for concrete housekeeping pad.
  - 2. Division 061053 "Miscellaneous Rough Carpentry" for plywood backing panels.

## 1.2 ACTION SUBMITTALS

- A. Product Data: For each type of product.

## 1.3 CLOSEOUT SUBMITTALS

- A. Maintenance data.
- B. Operation and maintenance data.

## 1.4 QUALITY ASSURANCE

- A. Installer Qualifications: An entity that employs installers and supervisors who are trained and approved by manufacturer.

## 1.5 WARRANTY

- A. Manufacturer's Warranty: Manufacturer agrees to repair or replace generator that fail(s) in materials or workmanship within specified warranty period.
  - 1. Warranty Period: Five-year year(s) from date of Substantial Completion.

## PART 2 - PRODUCTS

## 2.1 MANUFACTURERS

- A. Products: Subject to compliance with requirements, available products that may be incorporated into the Work include, but are not limited to, the following:
  - 1. Kohler 12 RES LP Standby Generator, 12kW Standby Rating, 50 Amps.
  - 2. Kohler RDT Automatic Transfer Switch, 100-400 Amps.

### PART 3 - EXECUTION

#### 3.1 EXAMINATION

- A. Examine generator before installation. Reject generators that are wet or damaged.

#### 3.2 INSTALLATION

- A. Install in accordance with manufacturer's installation instructions.
- B. Verify concrete housekeeping pad is level and dry.
- C. Fasten generator to pad with anchors.

#### 3.3 DEMONSTRATION

- A. Train Owner to adjust, operate, and maintain units.

END OF SECTION 263213