

**ADDENDUM NO. 1**

**KENTUCKY UNITED METHODIST HOME  
HIASTORIC HOME**

**1115 ASHGROVE ROAD  
NICHOLASVILLE, KENTUCKY  
SCB PROJECT NO. 1533**

TO: All Plan Holders

FROM: Sherman Carter Barnhart PLLC  
2405 Harrodsburg Road  
Lexington, Kentucky 40504

DATE: October 20, 2016

The purpose of this Addendum is to clarify further the requirements of the Plans and Specifications.

The Bidders shall be governed by the information in this Addendum as if included in the Plans and Specifications.

This Addendum does hereby become a part of the Contract Documents.

Each Bidder shall acknowledge receipt of this Addendum on the space provided in the Bid Form.

This Addendum consists of thirty-two (32) pages.

**A. General**

1. Submittal has been made to Nicholasville Building Inspection / Planning for their review.
2. Refer to Section 001113, Paragraph 1.1, E, 1. Estimate should read "approximately \$2,000,000".

**B. Architectural**

1. Refer to the following Specification Sections, attached.
  - a. 062023 "Interior Finish Carpentry".
  - b. 085200 "Clad Wood Windows, Doors, and Entrances".
  - c. 096816 "Sheet Carpeting".
  - d. 099113 "Exterior Painting".
  - e. 142600 "Limited-Use/Limited-Application Elevators".
2. Elevator cab flooring shall be 20 mil luxury vinyl tile. Refer to Section 096519 "Resilient Tile".
3. Refer to Specification Section 087100, Paragraphs 2.5, 2.6, and 3.7: Change lockset levers for mortise locksets from "69" model to "16" model. Change locksets on all pre-hung doors to Stanley Best 7KC series with "16D" trim. For all pre-hung doors delete the hinges and add "Hinges by pre-hung door supplier". Coordinate to adapt strikes, backsets, bolts, fasteners, etc. as required for pre-hung door and frame construction.

Coordinate requirements of Sections 081113, 081416, and 085200 with Section 087100 and this Addendum.

4. Refer to Sheet A3.1, Typical Window Notes. Note 3 pertaining to window screens shall be revised to read "full-window" in lieu of "half-window".

End of Addendum No. 1

## SECTION 062023 - INTERIOR FINISH CARPENTRY

### PART 1 - GENERAL

#### 1.1 RELATED DOCUMENTS

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

#### 1.2 SUMMARY

- A. Section Includes:

- 1. Interior trim.

- B. Related Requirements:

- 1. Section 061053 "Miscellaneous Rough Carpentry" for furring, blocking, and other carpentry work not exposed to view.
- 2. Section 099123 "Interior Painting" for priming, backpriming, and finishing of interior finish carpentry.
- 3. Section 099300 "Staining and Transparent Finishing" for finishing of interior finish carpentry.

#### 1.3 ACTION SUBMITTALS

- A. Samples for Initial Selection: For each type of product involving selection of colors, profiles, or textures.

- B. Samples for Verification:

- 1. For each species and cut of lumber with nonfactory-applied finish, with half of exposed surface finished, 50 sq. in. (300 sq. cm) for lumber.

#### 1.4 DELIVERY, STORAGE, AND HANDLING

- A. Stack lumber, plywood, and other panels flat with spacers between each bundle to provide air circulation. Protect materials from weather by covering with waterproof sheeting, securely anchored. Provide for air circulation around stacks and under coverings.

- B. Deliver interior finish carpentry materials only when environmental conditions comply with requirements specified for installation areas. If interior finish carpentry materials must be stored in other than installation areas, store only where environmental conditions comply with requirements specified for installation areas.

## 1.5 FIELD CONDITIONS

- A. Environmental Limitations: Do not deliver or install interior finish carpentry materials until building is enclosed and weatherproof, wet work in space is completed and nominally dry, and HVAC system is operating and maintaining temperature and relative humidity at occupancy levels during the remainder of the construction period.
- B. Do not install finish carpentry materials that are wet, moisture damaged, or mold damaged.
  - 1. Indications that materials are wet or moisture damaged include, but are not limited to, discoloration, sagging, or irregular shape.
  - 2. Indications that materials are mold damaged include, but are not limited to, fuzzy or splotchy surface contamination and discoloration.

## PART 2 - PRODUCTS

### 2.1 INTERIOR TRIM

- A. Hardwood Lumber Trim for Transparent Finish (Stain or Clear Finish):
  - 1. Species and Grade: Red oak Clear; NHLA.
  - 2. Maximum Moisture Content: 10 percent.
  - 3. Finger Jointing: Not allowed.
  - 4. Gluing for Width: Not allowed.
  - 5. Veneered Material: Not allowed.
  - 6. Face Surface: Surfaced (smooth).
  - 7. Matching: Selected for compatible grain and color.
  - 8. Moulding Profiles: As indicated.
- B. Lumber Trim for Opaque Finish (Painted Finish):
  - 1. Species and Grade: Eastern white pine, clear, no knots for typical mouldings. Yellow poplar, clear, no knots for balusters.
  - 2. Maximum Moisture Content: 15 percent.
  - 3. Moulding Profiles: As indicated.

### 2.2 MISCELLANEOUS MATERIALS

- A. Fasteners for Interior Finish Carpentry: Nails, screws, and other anchoring devices of type, size, material, and finish required for application indicated to provide secure attachment, concealed where possible.

### 2.3 FABRICATION

- A. Back out or kerf backs of the following members, except those with ends exposed in finished work:
  - 1. Interior standing and running trim, except shoe and crown molds.

- B. Ease edges of lumber less than 1 inch (25 mm) in nominal thickness to 1/16-inch (1.5-mm) radius and edges of lumber 1 inch (25 mm) or more in nominal thickness to 1/8-inch (3-mm) radius.

## PART 3 - EXECUTION

### 3.1 EXAMINATION

- A. Examine substrates, with Installer present, for compliance with requirements for installation tolerances and other conditions affecting performance of the Work.
- B. Examine finish carpentry materials before installation. Reject materials that are wet, moisture damaged, and mold damaged.
- C. Proceed with installation only after unsatisfactory conditions have been corrected.

### 3.2 PREPARATION

- A. Clean substrates of projections and substances detrimental to application.
- B. Before installing interior finish carpentry, condition materials to average prevailing humidity in installation areas for a minimum of 24 hours.

### 3.3 INSTALLATION, GENERAL

- A. Do not use materials that are unsound; warped; improperly treated or finished; inadequately seasoned; too small to fabricate with proper jointing arrangements; or with defective surfaces, sizes, or patterns.
- B. 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. Where face fastening is unavoidable, 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.
  - 4. Coordinate interior finish carpentry with materials and systems in or adjacent to it. Provide cutouts for mechanical and electrical items that penetrate interior finish carpentry.

### 3.4 STANDING AND RUNNING TRIM INSTALLATION

- A. Install with minimum number of joints practical, using full-length pieces from maximum lengths of lumber available. Do not use pieces less than 24 inches (610 mm) long, except where necessary. Stagger joints in adjacent and related standing and running trim. 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. Plane backs of casings to provide uniform thickness across joints where necessary for alignment.

1. Install trim after gypsum-board joint finishing operations are completed.
2. Install without splitting; drill pilot holes before fastening where necessary to prevent splitting. Fasten to prevent movement or warping. Countersink fastener heads on exposed carpentry work and fill holes.

### 3.5 STAIR AND RAILING INSTALLATION

- A. Balusters: Dovetail or mortise balusters into treads, glue, and nail in place. Let into railings and glue in place.
- B. Newel Posts: Secure newel posts to stringers, rough carriages, and risers with countersunk-head wood screws and glue.
- C. Railings: Secure wall rails with metal brackets. Fasten freestanding railings to newel posts and to trim at walls with countersunk-head wood screws (or rail bolts) and glue. Assemble railings at goosenecks, easements, and splices with rail bolts and glue.

### 3.6 ADJUSTING

- A. Replace interior finish carpentry that is damaged or does not comply with requirements. Interior finish carpentry may be repaired or refinished if work complies with requirements and shows no evidence of repair or refinishing. Adjust joinery for uniform appearance.

### 3.7 CLEANING

- A. Clean interior finish carpentry on exposed and semiexposed surfaces. Restore damaged or soiled areas and touch up factory-applied finishes if any.

### 3.8 PROTECTION

- A. Protect installed products from damage from weather and other causes during construction.
- B. Remove and replace finish carpentry materials that are wet, moisture damaged, and mold damaged.
  1. Indications that materials are wet or moisture damaged include, but are not limited to, discoloration, sagging, or irregular shape.
  2. Indications that materials are mold damaged include, but are not limited to, fuzzy or splotchy surface contamination and discoloration.

END OF SECTION 062023

## SECTION 085200 – CLAD WOOD WINDOWS, DOORS, AND ENTRANCES

### PART 1 - GENERAL

#### 1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.
- B. Section 062023 “Interior Finish Carpentry” for interior wood trim installed with exterior clad wood doors and entrances.
- C. Section 088000 “Glazing” for glazing associated with work in this Section.
- D. Section 087100 “Door Hardware” for hardware requirements associated with clad doors and entrances.
  - 1. Refer to hardware set descriptions for hardware provided by door and entrance manufacturer vs. hardware provided by hardware supplier.

#### 1.2 SUMMARY

- A. Section includes vinyl-clad wood windows.
- B. Section includes aluminum-clad wood doors and entrances.
  - 1. Include transoms and/or sidelites where applicable.

#### 1.3 PREINSTALLATION MEETINGS

- A. Preinstallation Conference: Conduct conference at Project site.
  - 1. Review and finalize construction schedule and verify availability of materials, Installer's personnel, equipment, and facilities needed to make progress and avoid delays.
  - 2. Review, discuss, and coordinate the interrelationship of wood windows with other exterior wall components. Include provisions for anchoring, flashing, weeping, sealing perimeters, and protecting finishes.
  - 3. Review and discuss the sequence of work required to construct a watertight and weathertight exterior building envelope.
  - 4. Inspect and discuss the condition of substrate and other preparatory work performed by other trades.
  - 5. Review specific coordination requirements at openings in existing building.

#### 1.4 ACTION SUBMITTALS

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

1. Include construction details, material descriptions, glazing and fabrication methods, dimensions of individual components and profiles, hardware, and finishes for wood windows.
- B. Shop Drawings:
1. Include plans, elevations, sections, hardware, accessories, insect screens, operational clearances, and details of installation, including anchor, flashing, and sealant installation.
- C. Samples: For each exposed product and for each color specified, 2 by 4 inches (50 by 100 mm) in size.
1. Exposed Hardware: Full-size units.
- D. Product Schedule: Use same designations indicated on Drawings.

#### 1.5 INFORMATIONAL SUBMITTALS

- A. Qualification Data: For Installer.
- B. Product Test Reports: For each type of wood window, for tests performed by a qualified testing agency.
- C. Field quality-control reports.
- D. Sample Warranties: For manufacturer's warranties.

#### 1.6 QUALITY ASSURANCE

- A. Installer Qualifications: An installer acceptable to manufacturer for installation of units required for this Project.

#### 1.7 PROJECT CONDITIONS

- A. Field Measurements: Verify openings by field measurements before fabrication and include measurements on Shop Drawings.
  1. Established Dimensions: Where field measurements cannot be made without delaying the Work, establish opening dimensions and proceed with fabricating vinyl windows without field measurements. Coordinate wall construction to ensure that actual opening dimensions correspond to established dimensions.
  2. Contractor shall field verify actual finished unit dimensions.

#### 1.8 WARRANTY

- A. Manufacturer's Warranty: Manufacturer agrees to repair or replace components that fail in materials or workmanship within specified warranty period.
  1. Failures include, but are not limited to, the following:



- a. Failure to meet performance requirements.
- b. Structural failures including excessive deflection, water leakage, and air infiltration.
- c. Faulty operation of movable sash and hardware.
- d. Deterioration of materials and finishes beyond normal weathering.
- e. Failure of insulating glass.
- f. Failure of insect screens.
- g. Failure of prefinished surfaces.

2. Warranty Period:

- a. Window: 10 years from date of Substantial Completion.
- b. Glazing Units: 20 years from date of Substantial Completion.
- c. Aluminum-Cladding Finish: 10 years from date of Substantial Completion.
- d. Vinyl Cladding: Lifetime warranty.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- A. Source Limitations: Obtain from single source from single manufacturer.

2.2 WINDOW PERFORMANCE REQUIREMENTS

- A. Product Standard: Comply with AAMA/WDMA/CSA 101/I.S.2/A440 for definitions and minimum standards of performance, materials, components, accessories, and fabrication unless more stringent requirements are indicated.

2.3 WOOD WINDOWS

- A. Vinyl-Clad Wood Windows:

1. Basis-of-Design: Andersen 400 Series Woodwright.

- a. Refer to Drawing A3.1 descriptions.
- b. Windows shall be supplied for both new construction and replacement conditions.

- B. Operating Types: Provide the following operating types in locations indicated on Drawings:

- 1. Double hung.
- 2. Fixed transom and circle.

- C. Provide windows that meet or exceed all aspects of Basis-of-Design specifications.

- D. Integral Finish and Color: Uniform, solid, homogeneous selected from manufacturer's standard White color range.

- E. Provide prefinished White interior wood finishes on windows, frames, and trim.

## 2.4 WOOD DOORS AND ENTRANCES

- A. Prefinished Aluminum-Clad Wood Doors and Entrances:
  - 1. Basis-of-Design: Andersen 400 Series Woodwright residential entry doors, frames and entrances.
    - a. Refer to Drawing A8.1 descriptions.
    - b. Doors and entrances shall be supplied for both new construction and replacement conditions.
- B. Door and Entrance Types: Provide the following types in locations indicated on Drawings.
  - 1. Refer to Drawing A8.1, Exterior Door Legend.
- C. Provide doors, frames, and entrances that meet or exceed all aspects of Basis-of-Design specifications.
- D. Prefinished Aluminum Exterior Cladding: Provide manufacturer's standard finish in white for exterior.
- E. Provide prefinished white interior wood finishes on doors and frames.

## 2.5 FABRICATION

- A. Fabricate units in sizes indicated. Include a complete system for installing and anchoring windows.
- B. Glaze units in the factory.
- C. Weather strip each operable sash and door to provide weathertight installation.
- D. Mullions: Provide mullions and cover plates, matching window units, complete with anchors for support to structure and installation of window units. Allow for erection tolerances and provide for movement of window units due to thermal expansion and building deflections. Provide mullions and cover plates capable of withstanding design wind loads of window units.
- E. Complete fabrication, assembly, finishing, hardware application, and other work in the factory to greatest extent possible. Disassemble components only as necessary for shipment and installation. Allow for scribing, trimming, and fitting at Project site.

## PART 3 - EXECUTION

### 3.1 EXAMINATION

- A. Examine openings, substrates, structural support, anchorage, and conditions, with Installer present, for compliance with requirements for installation tolerances and other conditions affecting performance of the Work.
- B. Verify rough opening dimensions, levelness of sill plate, and operational clearances.

- C. Examine wall flashings, vapor retarders, water and weather barriers, and other built-in components to ensure weathertight unit installation.
- D. Proceed with installation only after unsatisfactory conditions have been corrected.

### 3.2 INSTALLATION

- A. Comply with manufacturer's written instructions for installing windows, hardware, accessories, and other components. For installation procedures and requirements not addressed in manufacturer's written instructions, comply with installation requirements in ASTM E 2112.
- B. Install units level, plumb, square, true to line, without distortion, anchored securely in place to structural support, and in proper relation to wall flashing and other adjacent construction to produce weathertight construction.

### 3.3 FIELD QUALITY CONTROL

- A. Testing Agency: Engage a qualified testing agency to perform tests and inspections.
  - 1. Testing and inspecting agency will interpret tests and state in each report whether tested work complies with or deviates from requirements.
- B. Windows will be considered defective if they do not pass tests and inspections.
- C. Prepare test and inspection reports.

### 3.4 ADJUSTING, CLEANING, AND PROTECTION

- A. Adjust operating sashes and hardware for a tight fit at contact points and weather stripping for smooth operation and weathertight closure.
- B. Clean exposed surfaces immediately after installing units. Remove excess sealants, glazing materials, dirt, and other substances.
  - 1. Keep protective films and coverings in place until final cleaning.
- C. Remove and replace sashes if glass has been broken, chipped, cracked, abraded, or damaged during construction period.
- D. Protect window surfaces from contact with contaminating substances resulting from construction operations. If contaminating substances do contact window surfaces, remove contaminants immediately according to manufacturer's written instructions.

END OF SECTION 085200

## SECTION 096816 - SHEET CARPETING

### PART 1 - GENERAL

#### 1.1 RELATED DOCUMENTS

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

#### 1.2 SUMMARY

- A. Section Includes:

1. Carpet.
2. Carpet cushion.

- B. Related Requirements:

1. Section 024119 "Selective Demolition" for removing existing floor coverings.
2. Section 062023 "Interior Finish Carpentry" for wood base installed with carpet.
3. Section 096513 "Resilient Base and Accessories" for resilient wall base and accessories installed with carpet.

#### 1.3 ACTION SUBMITTALS

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

1. Include manufacturer's written data on physical characteristics and durability.
2. Include manufacturer's written installation recommendations for each type of substrate.

- B. Shop Drawings: For carpet installation, showing the following:

1. Carpet type, color, and dye lot.
2. Seam locations, types, and methods.
3. Type of subfloor.
4. Type of installation.
5. Pattern type, repeat size, location, direction, and starting point.
6. Pile direction.
7. Types, colors, and locations of edge, transition, and other accessory strips.
8. Transition details to other flooring materials.
9. Type of carpet cushion.

- C. Samples for Initial Selection: For each type of product.

1. Include Samples of exposed edge, transition, and other accessory stripping involving color or finish selection.

- D. Samples for Verification: For each of the following products and for each color and texture required. Label each Sample with manufacturer's name, material description, color, pattern, and designation indicated on Drawings and in schedules.
1. Carpet: 12-inch- (300-mm-) square Sample.
  2. Exposed Bound Edge, Transition, and Other Accessory Stripping: 12-inch- (300-mm-) long Samples.
  3. Carpet Cushion: 6-inch- (150-mm-) square Sample.
  4. Carpet Seam: 6-inch (150-mm) Sample.
  5. Mitered Carpet-Border Seam: 12-inch- (300-mm-) square Sample. Show carpet pattern alignment.

#### 1.4 INFORMATIONAL SUBMITTALS

- A. Qualification Data: For Installer.
- B. Product Test Reports: For carpet and carpet cushion, for tests performed by a qualified testing agency.
- C. Sample Warranties: For special warranties.

#### 1.5 CLOSEOUT SUBMITTALS

- A. Maintenance Data: For carpet to include in maintenance manuals. Include the following:
  1. Methods for maintaining carpet, including cleaning and stain-removal products and procedures and manufacturer's recommended maintenance schedule.
  2. Precautions for cleaning materials and methods that could be detrimental to carpet and carpet cushion.

#### 1.6 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.
  1. Carpet: Full-width rolls equal to 5 percent of amount installed for each type indicated, but not less than 10 sq. yd. (8.3 sq. m).

#### 1.7 QUALITY ASSURANCE

- A. Installer Qualifications: An experienced installer who is certified by the International Certified Floorcovering Installers Association at the Commercial II certification level.

#### 1.8 DELIVERY, STORAGE, AND HANDLING

- A. Comply with CRI's "CRI Carpet Installation Standard."
- B. Deliver carpet in original mill protective covering with mill register numbers and tags attached.

## 1.9 FIELD CONDITIONS

- A. Comply with CRI's "CRI Carpet Installation Standard" for temperature, humidity, and ventilation limitations.
- B. Environmental Limitations: Do not deliver or install carpet and carpet cushion until spaces are enclosed and weathertight, wet-work in spaces is complete and dry, and ambient temperature and humidity conditions are maintained at levels planned for building occupants during the remainder of the construction period.
- C. Do not install carpet and carpet cushion over concrete slabs until slabs have cured, are sufficiently dry to bond with adhesive, and have pH range recommended by carpet manufacturer.

## 1.10 WARRANTY

- A. Special Warranty for Carpet: Manufacturer agrees to repair or replace components of carpet installation that fail in materials or workmanship within specified warranty period.
  - 1. Warranty does not include deterioration or failure of carpet due to unusual traffic, failure of substrate, vandalism, or abuse.
  - 2. Failures include, but are not limited to, the following:
    - a. More than 10 percent loss of face fiber, edge raveling, snags, and runs.
    - b. Loss of tuft bind strength.
    - c. Excess static discharge.
    - d. Delamination.
  - 3. Warranty Period: 10 years from date of Substantial Completion.
- B. Special Warranty for Carpet Cushion: Manufacturer agrees to repair or replace components of carpet cushion installation that fail in materials or workmanship within specified warranty period.
  - 1. Warranty includes removal and replacement of carpet and accessories required by replacement of carpet cushion.
  - 2. Warranty does not include deterioration or failure of carpet cushion due to unusual traffic, failure of substrate, vandalism, or abuse.
  - 3. Failure includes, but is not limited to, permanent indentation or compression.
  - 4. Warranty Period: 10 years from date of Substantial Completion.

## PART 2 - PRODUCTS

### 2.1 TUFTED CARPET

- A. Basis-of-Design: Shaw, Movement 50875. Carpet shall meet or exceed all aspects of Basis-of-Design specifications.
- B. Color: As selected by Architect from manufacturer's full range.

## 2.2 CARPET CUSHION

- A. Basis-of-Design: Duratech V, CF200, 1/4" thick nominal for double glue down application.
- B. Traffic Classification: CCC Class I, moderate traffic.

## 2.3 INSTALLATION ACCESSORIES

- A. Trowelable Leveling and Patching Compounds: Latex-modified, hydraulic-cement-based formulation provided or recommended by carpet cushion manufacturer.
- B. Adhesives: Water-resistant, mildew-resistant, nonstaining type to suit products and subfloor conditions indicated, that complies with flammability requirements for installed carpet and is recommended or provided by carpet and carpet cushion manufacturers.
- C. Seam Adhesive: Hot-melt adhesive tape or similar product recommended by carpet manufacturer for sealing and taping seams and butting cut edges at backing to form secure seams and to prevent pile loss at seams.

## PART 3 - EXECUTION

### 3.1 EXAMINATION

- A. Examine substrates, areas, and conditions, with Installer present, for compliance with requirements for maximum moisture content, alkalinity range, installation tolerances, and other conditions affecting carpet performance.
- B. Examine carpet for type, color, pattern, and potential defects.
- C. Concrete Slabs: Verify that finishes comply with requirements specified in Section 033000 "Cast-in-Place Concrete" and that surfaces are free of cracks, ridges, depressions, scale, and foreign deposits.
  - 1. Moisture Testing: Perform tests so that each test area does not exceed 1000 sq. ft. (304.8 sq. m), and perform no fewer than three tests in each installation area and with test areas evenly spaced in installation areas.
    - a. Anhydrous Calcium Chloride Test: ASTM F 1869. Proceed with installation only after substrates have maximum moisture-vapor-emission rate of 3 lb of water/1000 sq. ft. (1.36 kg of water/92.9 sq. m) in 24 hours.
    - b. Relative Humidity Test: Using in situ probes, ASTM F 2170. Proceed with installation only after substrates have a maximum 75 percent relative humidity level measurement.
    - c. Perform additional moisture tests recommended in writing by adhesive, carpet cushion, and carpet manufacturers. Proceed with installation only after substrates pass testing.
- D. Wood Subfloors: Verify the following:
  - 1. Underlayment over subfloor complies with requirements specified in Section 061600 "Sheathing."

2. Underlayment surface is free of irregularities and substances that may interfere with adhesive bond or show through surface.
- E. Proceed with installation only after unsatisfactory conditions have been corrected.

### 3.2 PREPARATION

- A. General: Comply with CRI's "CRI Carpet Installation Standard" and with carpet manufacturer's written installation instructions for preparing substrates.
- B. Use trowelable leveling and patching compounds, according to manufacturer's written instructions, to fill cracks, holes, depressions, and protrusions in substrates. Fill or level cracks, holes and depressions 1/8 inch (3 mm) wide or wider, and protrusions more than 1/32 inch (0.8 mm), unless more stringent requirements are required by manufacturer's written instructions.
- C. Concrete Substrates: Remove coatings, including curing compounds, and other substances that are incompatible with adhesives and that contain soap, wax, oil, or silicone, without using solvents. Use mechanical methods recommended in writing by adhesive, carpet, and carpet cushion manufacturers.
- D. Broom and vacuum clean substrates to be covered immediately before installing carpet.

### 3.3 CARPET INSTALLATION

- A. Comply with CRI's "CRI Carpet Installation Standard" and carpet and carpet cushion manufacturers' written installation instructions for the following:
  1. Double-glue-down installation.
  2. Stair installation.
- B. Comply with carpet manufacturer's written instructions and Shop Drawings for seam locations and direction of carpet; maintain uniformity of carpet direction and lay of pile. At doorways, center seams under the door in closed position.
- C. Cut and fit carpet to butt tightly to vertical surfaces, permanent fixtures, and built-in furniture including cabinets, pipes, outlets, edgings, thresholds, and nosings. Bind or seal cut edges as recommended by carpet manufacturer.
- D. Extend carpet into toe spaces, door reveals, closets, open-bottomed obstructions, removable flanges, alcoves, and similar openings.
- E. Maintain reference markers, holes, and openings that are in place or marked for future cutting by repeating on carpet as marked on subfloor. Use nonpermanent, nonstaining marking device.

### 3.4 CLEANING AND PROTECTION

- A. Perform the following operations immediately after installing carpet:
  1. Remove excess adhesive, seam sealer, and other surface blemishes using cleaner recommended by carpet manufacturer.
  2. Remove yarns that protrude from carpet surface.



3. Vacuum carpet using commercial machine with face-beater element.
- B. Protect installed carpet to comply with CRI's "CRI Carpet Installation Standard."
- C. Protect carpet against damage from construction operations and placement of equipment and fixtures during the remainder of construction period. Use protection methods recommended in writing by carpet manufacturer and carpet cushion and adhesive manufacturers.

END OF SECTION 096816

## SECTION 099113 - EXTERIOR PAINTING

### PART 1 - GENERAL

#### 1.1 RELATED DOCUMENTS

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

#### 1.2 SUMMARY

- A. This Section includes surface preparation and the application of paint systems on the following exterior substrates:

1. Steel.
2. Galvanized metal.
3. Exterior brick.
4. Exterior wood trim.

- B. Related Sections include the following:

1. Division 05 Sections for shop priming of metal substrates with primers specified in this Section.
2. Division 06 Sections for shop priming carpentry with primers specified in this Section.
3. Division 09 Section "Interior Painting" for surface preparation and the application of paint systems on interior substrates.
4. Division 09 Section "Staining and Transparent Finishing" for stained interior finishes.

#### 1.3 DEFINITIONS

- A. MPI Gloss Level 1: Not more than five units at 60 degrees and 10 units at 85 degrees, according to ASTM D 523.
- B. MPI Gloss Level 3: 10 to 25 units at 60 degrees and 10 to 35 units at 85 degrees, according to ASTM D 523.
- C. MPI Gloss Level 4: 20 to 35 units at 60 degrees and not less than 35 units at 85 degrees, according to ASTM D 523.
- D. MPI Gloss Level 5: 35 to 70 units at 60 degrees according to ASTM D 523.
- E. MPI Gloss Level 6: 70 to 85 units at 60 degrees, according to ASTM D 523.
- F. MPI Gloss Level 7: More than 85 units at 60 degrees, according to ASTM D 523.

#### 1.4 SUBMITTALS

- A. The Architect shall not review individual submittal items separately. All submittals shall be submitted simultaneously as a single package.
- B. Product Data: For each type of product indicated.
- C. Samples for Initial Selection: For each type of topcoat product indicated.
- D. Samples for Verification: For each type of paint system and each color and gloss of topcoat indicated.
  - 1. Submit Samples on rigid backing, 8 inches (200 mm) square.
  - 2. Step coats on Samples to show each coat required for system.
  - 3. Label each coat of each Sample.
  - 4. Label each Sample for location and application area.
- E. Product List: For each product indicated, include the following:
  - 1. Cross-reference to paint system and locations of application areas. Use same designations indicated on Drawings and in schedules.
  - 2. Printout of current "MPI Approved Products List" for each product category specified in Part 2, with the proposed product highlighted.

#### 1.5 QUALITY ASSURANCE

- A. MPI Standards:
  - 1. Products: Complying with MPI standards indicated and listed in "MPI Approved Products List."
  - 2. Preparation and Workmanship: Comply with requirements in "MPI Architectural Painting Specification Manual" for products and paint systems indicated.

#### 1.6 DELIVERY, STORAGE, AND HANDLING

- A. Store materials not in use in tightly covered containers in well-ventilated areas with ambient temperatures continuously maintained at not less than 45 deg F (7 deg C).
  - 1. Maintain containers in clean condition, free of foreign materials and residue.
  - 2. Remove rags and waste from storage areas daily.

#### 1.7 PROJECT CONDITIONS

- A. Apply paints only when temperature of surfaces to be painted and ambient air temperatures are between 50 and 95 deg F (10 and 35 deg C).
- B. Do not apply paints in snow, rain, fog, or mist; when relative humidity exceeds 85 percent; at temperatures less than 5 deg F (3 deg C) above the dew point; or to damp or wet surfaces.

## 1.8 EXTRA MATERIALS

- A. Furnish extra materials described below that are from same production run (batch mix) as materials applied and that are packaged for storage and identified with labels describing contents.
  - 1. Quantity: Furnish an additional 5 percent, but not less than 1 gallon, of each material and color applied in unopened containers.

## PART 2 - PRODUCTS

### 2.1 MANUFACTURERS

- A. Available Manufacturers: Subject to compliance with requirements, manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:
  - 1. Benjamin Moore & Co.
  - 2. ICI Paints.
  - 3. PPG Architectural Finishes, Inc.
  - 4. Sherwin-Williams Company (The).

### 2.2 PAINT, GENERAL

- A. Material Compatibility:
  - 1. Provide materials for use within each paint system that are compatible with one another and substrates indicated, under conditions of service and application as demonstrated by manufacturer, based on testing and field experience.
  - 2. For each coat in a paint system, provide products recommended in writing by manufacturers of topcoat for use in paint system and on substrate indicated.
- B. Colors: As selected by Architect from manufacturer's full range.

## 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 work.
- B. Verify suitability of substrates, including surface conditions and compatibility with existing finishes and primers.
- C. Begin coating application only after unsatisfactory conditions have been corrected and surfaces are dry.
  - 1. Beginning coating application constitutes Contractor's acceptance of substrates and conditions.

### 3.2 PREPARATION

- A. Comply with manufacturer's written instructions and recommendations in "MPI Architectural Painting Specification Manual" applicable to substrates and paint systems indicated.
- B. Remove plates, machined surfaces, and similar items already in place that 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.
  - 2. Do not paint over labels of independent testing agencies or equipment name, identification, performance rating, or nomenclature plates.
- C. Clean substrates of substances that could impair bond or finished appearance of paints, including dust, dirt, oil, grease, and incompatible paints and encapsulants.
  - 1. Remove incompatible primers and reprime substrate with compatible primers as required to produce paint systems indicated.
- D. Steel Substrates: Remove rust and loose mill scale. Clean using methods recommended in writing by paint manufacturer.
- E. Galvanized-Metal Substrates: Remove grease and oil residue from galvanized sheet metal fabricated from coil stock by mechanical methods to produce clean, lightly etched surfaces that promote adhesion of subsequently applied paints.
  - 1. Scrape and clean knots, and apply coat of knot sealer before applying primer.
  - 2. Sand surfaces that will be exposed to view, and dust off.
  - 3. Prime edges, ends, faces, undersides, and backsides of wood.
  - 4. After priming, fill holes and imperfections in the finish surfaces with putty or plastic wood filler. Sand smooth when dried.
- F. All brick (new and existing) must be free of dirt, loose and excess mortar, and foreign material. All brick should be allowed to weather for the minimum time required by coating manufacturer, followed by wire brushing to remove efflorescence. Treat the bare brick with one coat of Loxon Exterior Acrylic Masonry Primer. Refer also to Demolition Building Elevation drawings for additional brick preparation requirements.
- G. At previously coated surfaces, all surface contamination such as oil, grease, loose paint, mill scale, dirt, foreign matter, rust, mold, mildew, mortar, efflorescence, and sealers must be removed to assure sound bonding to the tightly adhering old paint. Glossy surfaces of old paint films must be cleaned and dull before repainting. Wash thoroughly and dull by sanding. Spot prime any bare areas with an appropriate primer. Verify compatibility by applying a test patch of the recommended coating system, covering at least 2 to 3 square feet. Allow to dry one week before testing adhesion per ASTM D3359. If the coating system is incompatible, complete removal is required.
- H. Exterior wood must be clean and dry. Prime all surfaces, including concealed surfaces, and paint exposed surfaces as soon as possible. Pitch streaks must be scraped, sanded, and spot primed before a full priming coat is applied. Patch all nail holes and imperfections with a wood filler or putty sand smooth.

### 3.3 APPLICATION

- A. Apply paints according to manufacturer's written instructions.
  - 1. Use applicators and techniques suited for paint and substrate indicated.
  - 2. Paint surfaces behind movable items same as similar exposed surfaces. Before final installation, paint surfaces behind permanently fixed items with prime coat only.
- B. Tint each undercoat a lighter shade to facilitate identification of each coat if multiple coats of same material are to be applied. Tint undercoats to match color of topcoat, but provide sufficient difference in shade of undercoats to distinguish each separate coat.
- C. If undercoats or other conditions show through topcoat, apply additional coats until cured film has a uniform paint finish, color, and appearance.
- D. 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.

### 3.4 CLEANING AND PROTECTION

- A. At end of each workday, remove rubbish, empty cans, rags, and other discarded materials from Project site.
- B. After completing paint application, clean spattered surfaces. Remove spattered paints by washing, scraping, or other methods. Do not scratch or damage adjacent finished surfaces.
- C. 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.
- D. At completion of construction activities of other trades, touch up and restore damaged or defaced painted surfaces.

### 3.5 EXTERIOR PAINTING SCHEDULE

- A. Steel Substrates:
  - 1. Alkyd System: MPI EXT 5.1D.
    - a. Prime Coat: Alkyd anticorrosive metal primer.
    - b. Intermediate Coat: Exterior alkyd enamel matching topcoat.
    - c. Topcoat: Exterior alkyd enamel (gloss).
- B. Galvanized-Metal Substrates:
  - 1. Alkyd System: MPI EXT 5.3B.
    - a. Prime Coat: Cementitious galvanized-metal primer.
    - b. Intermediate Coat: Exterior alkyd enamel matching topcoat.
    - c. Topcoat: Exterior alkyd enamel (gloss).

C. Wood / Wood Trim Substrates:

1. Latex System: (Basis-of-Design: Sherwin-Williams):
  - a. Prep Coat (At Existing Surfaces Only): Prime Rx Peel Bonding Primer Clear.
  - b. Prime Coat: BS1T00600 – Prime Rx Peeling Bonding Primer Clear.
  - c. Intermediate Coat: K33W00151 – Duration Coating Exterior Latex Satin.
  - d. Topcoat: K33W00151 – Duration Coating Exterior Latex Satin.

D. Brick Substrates:

1. Latex System: (Basis-of-Design: Sherwin-Williams):
  - a. At prepainted (existing) surfaces only:
    - 1) Prep Coat #1: Loxon Conditioner.
    - 2) Prep Coat #2: BS1T00600 – Prime Rx Peel Bonding Primer Clear.
  - b. Prime Coat (At Both New and Prepainted Existing Surfaces): Loxon Exterior Acrylic Masonry Primer.
  - c. Intermediate Coat (At Both New and Prepainted Existing Surfaces): K33W00151 – Duration Coating Exterior Latex Satin.
  - d. Top Coat (At both New and Prepainted Existing Surfaces): K33W00151 – Duration Coating Exterior Latex Satin.

END OF SECTION 099113

## SECTION 142600 - LIMITED-USE/LIMITED-APPLICATION ELEVATORS

### PART 1 - GENERAL

#### 1.1 RELATED DOCUMENTS

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

#### 1.2 SECTION INCLUDES

- A. Limited Use/Limited Application (LU/LA) Hydraulic Passenger Elevator.
- B. The scope of this section of work is the provision and installation of a LU/LA Elevator, all the necessary equipment required to fully complete the installation, and coordinate between the other associated work required by other trades. The equipment specifications are based on the Symmetry Elevating Solutions Elevation LU/LA product design as Basis-of-Design.

#### 1.3 RELATED SECTIONS

Section includes limited-use/limited-application (LU/LA) elevators.

##### B. Related Requirements:

1. Section 033000 "Concrete" for setting sleeves, inserts, and anchoring devices in concrete.
2. Section 042000 "Unit Masonry" for setting sleeves, inserts, and anchoring devices in masonry.
3. Section 051200 "Structural Steel" for attachment plates, angle brackets, and other preparation of structural steel for fastening guide-rail brackets.
4. Section 096519 "Resilient Tile" for finish flooring in elevator cars.
5. Electrical Sections:
  - a. Electrical characteristics and wiring connections.
  - b. Electrical service to lockable fused disconnect in elevator machine room.
  - c. Electrical service for machine room, machine room convenience outlets, machine room lighting and lighting in elevator pit.
  - d. Telephone service and wiring connections.

#### 1.4 DEFINITIONS

- A. Definitions in ASME A17.1/CSA B44 apply to Work of this Section.

#### 1.5 REFERENCES

1. This elevator shall be designed and tested in accordance with ICC/ANSI 117.1, NEC and ASME A17.1 Guidelines.
2. All designs, clearances, construction, workmanship and installation shall be in accordance with the requirements and code adopted by the authority having jurisdiction.



3. This LU/LA elevator shall be subject to local, city and state approval prior to and following installation.

## 1.6 REGULATORY REQUIREMENTS

- A. Provide passenger elevator in compliance with:
  1. ASME A17.1 - Safety Code for Elevators and Escalators.
  2. ASME A17.5 - Elevator and Escalator Electrical Equipment.
  3. Requirements of Americans with Disabilities Act.

## 1.7 ACTION SUBMITTALS

- A. Product Data: Include capacities, sizes, performances, operations, safety features, finishes, and similar information. Include Product Data for car enclosures, hoistway entrances, and operation, control, and signal equipment.
  1. Submit manufacturer's installation instructions including preparation, and equipment handling requirements.
  2. Show maximum and average power necessity.
- B. Shop Drawings:
  1. Include plans, elevations, sections, and large-scale details indicating service at each landing, machine room layout, coordination with building structure, relationships with other construction, and locations of equipment.
  2. Indicate loads imposed on building structure at points of support and power requirements.
  3. Show typical details of assembly, erection and anchorage.
  4. Include wiring diagrams for power, control, and signal systems.
  5. Show complete layout and location of equipment, including required clearances and coordination with shaftway.
- C. Samples for Initial Selection: For finishes involving color selection.
- D. Samples for Verification: For exposed car finishes, hoistway doors, and frames; 3-inch- (75-mm-) square Samples.

## 1.8 INFORMATIONAL SUBMITTALS

- A. Qualification Data: For Installer.
- B. Manufacturer Certificates: Signed by elevator manufacturer certifying that hoistway, pit, and machine room layout and dimensions, as shown on Drawings, and electrical service, as shown and specified, are adequate for elevator being provided.
- C. Preinstallation Examination Report: Indicating dimensional discrepancies and conditions detrimental to performance or indicating that dimensions and conditions were found to be satisfactory.
- D. Sample Warranty: For special warranty.

## 1.9 CLOSEOUT SUBMITTALS

- A. Operation and Maintenance Data: For elevators to include in emergency, operation, and maintenance manuals.
- B. Inspection and Acceptance Certificates and Operating Permits: As required by authorities having jurisdiction, for normal, unrestricted elevator use.

## 1.10 QUALITY ASSURANCE

- A. Manufacturer: Company shall contain personnel with not less than ten (10) years of experience in the design and fabrication of LU/LA elevators.
- B. Technical Services: Manufacturer and authorized dealer shall work with architects, engineers and contractors to adapt the LU/LA elevator to the design and structural requirements of the building, site, and code requirements.
- C. Unit shall be tested in the factory before shipment. Elevator equipment shall meet or exceed the National and Local standards.
- D. All load ratings and safety factors shall meet or exceed those specified by all governing agencies and be certified by an independent professional engineer.
- E. Installer Qualifications: Factory trained and licensed to install equipment of this scope, with evidence of experience with specified equipment. Installing company shall have qualified people available to ensure fulfillment of maintenance and callback service.

## 1.11 DELIVERY, STORAGE AND HANDLING

- A. Deliver, store, and handle materials, components, and equipment in manufacturer's protective packaging. Store materials, components, and equipment off of ground, under cover, and in a dry location.

## 1.12 PROJECT CONDITIONS

- A. LU/LA Elevator not to be used for hoisting materials or personnel during construction.

## 1.13 COORDINATION

- A. Coordinate installation of sleeves, block outs, and items that are embedded in concrete or masonry for elevator equipment. Furnish templates and installation instructions and deliver to Project site in time for installation.
- B. Coordinate locations and dimensions of other work relating to LU/LA elevators including sumps and floor drains in pits; entrance subsills; electrical service; and electrical outlets, lights, and switches in hoistways, pits, and machine rooms.

#### 1.14 WARRANTY

- A. Unit shall have a THREE (3) year limited parts warranty covering replacement of defective parts of the basic unit, including all electrical and drive system components, at no cost. Labor costs required to replace parts is not included. Preventative maintenance agreement required.

#### 1.15 MAINTENANCE SERVICE

- A. Maintenance of a LU/LA elevator shall consist of regular cleaning, inspection, and adjustment of the unit at intervals not longer than every six (6) months. Rule 10.2.1 of ASME A17.1 requires all LU/LA elevators to be inspected every six (6) months. Provide Maintenance contract for the following years:
  - 1. 3 years.
- B. Maintenance of the LU/LA elevator until shall consist of regular cleaning, inspection, adjustment, lubrication and examination not less than every six (6) months. Repair or replace parts when necessary. Rule 10.2.1 of ASME A17.1 requires all LU/LA elevators to be inspected every six (6) months. Proved emergency call back service for this maintenance period.
- C. Maintenance work to be performed by factory trained and licensed technician.

### PART 2 - PRODUCTS

#### 2.1 MANUFACTURERS

- A. Basis-of-Design: Symmetry Elevating Solutions

Email: [customerservice@symmetryelevator.com](mailto:customerservice@symmetryelevator.com)

Toll Free: 877.568.5804

Website: [www.symmetryelevators.com](http://www.symmetryelevators.com)

#### 2.2 PERFORMANCE REQUIREMENTS

- A. Regulatory Requirements: Comply with ASME A17.1/CSA B44.
- B. Accessibility Requirements: Comply with requirements for LU/LA elevators in the United States Access Board's ADA-ABA Accessibility Guidelines and with ICC A117.1.

#### 2.3 SYSTEMS AND COMPONENTS

- A. Elevator System, General: Manufacturer's standard LU/LA elevator. Unless otherwise indicated, manufacturer's standard components shall be used, as included in standard LU/LA elevators and as required for complete system.

1. Capacity:
  - A. 1400 pounds.
2. Car Size: Maximum of:
  - A. 42 inches by 54 inches.
3. Platform Configuration:
  - A. As indicated on Drawings.
4. Travel:
  - A. As indicated on Drawings.
5. Stops:
  - A. 3 stops.
6. Speed: 30 feet per minute.
7. Pit Depth:
  - A. 13 inches minimum with alternate bottom car clearance device standard Elastomeric Bumpers.
8. Overhead Clearance:
  - A. Total overhead clearance required is 108" with alternate top car clearance device.
9. Power Requirements.
  - A. 240 VAC, 30 Amp, Single Phase.
  - B. A Separate 115 VAC 15 Amp circuit is required for car lighting.
10. Hydraulic Power Unit:
  - A. The pump shall utilize a 4 HP high efficiency, low power consumption motor.
  - B. The pump, submerged motor and valve shall be pre-wired, ready for connection to the controller in the field.
  - C. Acceleration, deceleration, and leveling speed controls shall be provided in the up and down directions. Full speed adjustment shall be provided in the down direction only.
  - D. Two speed operation shall be provided.
  - E. Adjustable pressure relief valves shall be provided.
  - F. Manual emergency lowering valve shall be provided.
  - G. Pressure gauges and pressure gauge isolation valves shall be provided.
  - H. Manual valve isolation between pump unit and jack shall be provided.
  - I. Negative pressure switch shall be provided.
  - J. Testing: Shall be factory tested prior to shipment.
  - K. Muffler shall be provided for vibration & noise damping during elevator operation.
11. Cylinder:
  - A. Construction: Steel pipe with cylinder head having an internal guide ring and self-adjusting, Self-lubricating packing.
  - B. Safety Valve: Cylinder shall be equipped with an overspeed safety valve to prevent uncontrolled car descent.
12. Plunger:
  - A. Construction: Shall be machined steel shaft equipped with a stop, electrically welded to bottom end, to prevent plunger from leaving shaft cylinder.
  - B. Diameter: 90 mm.
13. Components:
  - A. Suspension system: 1:2 system using (2) 3/8" – 7x19 Galvanized aircraft cables integrated with rams header sheave mounted to the plunger.
  - B. Guide Rail: Shall consist of two 8 lb. tee rails. Provide brackets to hold rail assembly to walls. Rail shall be furnished with steel splice plates and hardware.

- C. Car Frame: Shall be equipped with non-metallic faced roller guide wheels.
  - D. Leveling Device: Provide Hall-effect Sensor based device integrated with tapeless Selector Package to maintain car within ¼" of the landing.
14. Controls:
- A. Selective collective PLC-based controller (Programmable Logic Controller) with Hardware Circuit Monitoring.
  - B. "Self Diagnostic System" utilizing diagnostic codes displayed in car to provide information in the event the elevator will not operate. All required redundancies are monitored by the PLC and verified by a hardware monitoring system in compliance with A17.1 2.26.9.3.
  - C. Visual & Audible directional indicators passing chime.
  - D. All Elevator Electrical Systems shall conform to ASME A17.5.
15. Car Doors
- A. Size 3'0" x 6'8".
  - B. Closed Loop Linear 2 speed Door Operator.
  - C. Car Door Equipped with a full height safety light screen.
  - D. Car Door with electric switch to ensure the car door is closed prior to the operation of the elevator.
16. Hoistway Doors:
- A. Size: Minimum Dimensions 3'0" W x 6'8" H
  - B. Type and installation of doors and frames must comply with ASME A17.1, all local codes and manufacturer's layout drawings.
  - C. Locking Device: Door shall have a concealed locking device, interlocked with the car operation, to interrupt electrical power when the door is not securely closed and a car is not at the landing zone.
17. Safety Features:
- A. Slack cable protection: Provide an electronically monitored and mechanically actuated hardened steel device that stops and sustains the car in the event of breakage or slackening of cables.
  - B. Terminal stopping Device: Shall be provided at the top and bottom of the car travel.
  - C. Provide a platform toe guard at the car entrance.
  - D. Battery powered emergency operation system:
    - 1. Powers a light in the car.
    - 2. Powers an emergency alarm system.
    - 3. Powers a system to allow car to stop at the next available floor, then run down to the bottom floor stopping at each floor along the way. Door cycles at each landing.
    - 4. The batteries shall be re-chargeable type complete with an automatic re-charging system.
  - E. Emergency operation of Car Lights with half illumination level.
  - F. 1/2" x 2" Flat Handrail #4 SS w/ returned ends.
  - G. Overspeed valve.
  - H. Low oil protection timer circuit.

## 2.4 CAB DESIGN

- A. Cab Design:
  - 1. Interior Walls: Panel selections.

- A. Metal Panel.
- 2. Interior Walls: Metal Finish.
  - A. Stainless Steel.
- 3. Car Doors:
  - A. Stainless Steel.
- 4. Hoistway Door/Frames
  - A. Stainless Steel.
- 5. Fire Service Options:
  - A. No Fire Service
- 6. Floor: Prepared LVT flooring by others.
- 7. Lighting:
  - A. 115 VAC, single phase, 15 Amps.
  - B. Failure of one lamp shall not cause the remaining lamps to extinguish.
  - C. Lights shall turn on automatically when the elevator door is opened and stay on while the elevator is in use. Lights will automatically turn off after a predetermined time interval when the elevator is not in use.
  - D. Overhead low power consumption LED light fixtures.
  - E. Color:
    - 1. Nickel.
- B. Call Stations:
  - 1. Control Panel:
    - A. One momentary pressure illuminated button for each landing
    - B. Keyed in car stop switch and alarm button.
    - C. Door open & close buttons.
    - D. Hands free ADA phone.
    - E. Digital position indicator.
    - F. Finish:
      - 1. Stainless Steel.
  - 2. Hall Call Stations:
    - A. Non-Keyed COP
      - 1. Black.

## PART 3 - EXECUTION

### 3.1 EXAMINATION

- A. Examine elevator areas, with Installer present, for compliance with requirements for installation tolerances and other conditions affecting performance of the Work. Verify critical dimensions and examine supporting structure and other conditions under which elevator work is to be installed.
- B. Do not begin installation until preliminary work including hoistway, landings and machine space has been properly prepared.
- C. Verify shaft and machine space are of correct size and within tolerance.
- D. Verify required landings and openings are of correct size and within tolerances.
- E. Verify hoistway shaft and machine room temperature is designed to have maintainable temperatures between 50 degrees F and 90 degrees F.

- F. Verify machine room, when required, is provided with lighting, light switch, convenience outlets and meets the clear space requirements of ASME A17.1 & NEC.
- G. Verify hoistway and openings are of correct size and within tolerance.
- H. Verify electrical power is available and of correct characteristics.
- I. Prepare written report, endorsed by Installer, listing conditions detrimental to performance of the Work.
- J. Proceed with installation only after unsatisfactory conditions have been corrected.

### 3.2 ADJUSTING

- A. Adjust for smooth acceleration and deceleration.
- B. Adjust automatic floor leveling feature at each floor to provide stopping zone of 1/4 inch.
- C. Adjust door operation.

### 3.4 PREPARATION

- A. Clean surfaces thoroughly prior to installation.
- B. Prepare surfaces using the methods recommended by the manufacturer for achieving the optimum performance of LU/LA elevator.

### 3.5 INSTALLATION

- A. Install cylinder plumb and accurately located for elevator car position and travel. Anchor securely in place, supported at pit floor and braced at intervals as needed to maintain alignment. Anchor cylinder guides at spacing needed to maintain alignment and avoid overstressing guides.
- B. Sound Isolation: Mount rotating and vibrating equipment on vibration-isolating mounts to minimize vibration transmission to structure and structure-borne noise from elevator system.
- C. Lubricate operating parts of systems as recommended by manufacturers.
- D. Alignment: Coordinate installation of hoistway entrances with installation of elevator guide rails for accurate alignment of entrances with car. Reduce clearances to minimum, safe, workable dimension at each landing.
- E. Leveling Tolerance: 1/4 inch (6 mm), up or down, regardless of load and direction of travel.
- F. Set sills flush with finished floor surface at landing. Fill space under sill solidly with nonshrink, nonmetallic grout.

Unit shall be installed and operated in accordance with the ICC/A117.1, NAEC and ASME A17.1 Guidelines.

- H. A dedicated electrical supply provided to the disconnect shall be capable of supplying sufficient power.
- I. GC to coordinate "work by others" with elevator contractor.
- J. The installation of the LU/LA elevator shall be made in accordance with approved plans and specifications and to the manufacturer's installation instructions.
- K. Startup and test unit in accordance with manufacturer's instructions.

### 3.6 FIELD QUALITY CONTROL

- A. Acceptance Testing: On completion of elevator installation and before permitting elevator use, perform acceptance tests as required and recommended by ASME A17.1/CSA B44 and by authorities having jurisdiction.
- B. Advise Owner, Architect, and authorities having jurisdiction in advance of dates and times that tests are to be performed.
- C. Load the LU/LA elevator to rated capacity and test for several cycles to insure proper operation. No mechanical failures shall occur and no wear that would affect the reliability of the unit shall be detected.

### 3.7 PROTECTION

- A. Protect installed products until completion of project.
- B. Touch-up, repair or replace damaged products before Substantial Completion.
- C. Clean unit prior to final inspection.

### 3.8 DEMONSTRATION

- A. Engage a factory-authorized service representative to train Owner's maintenance personnel to operate, adjust, and maintain elevator.
- B. Check operation of elevator with Owner's personnel present before date of Substantial Completion and again not more than one month before end of warranty period. Determine that operation systems and devices are functioning properly.

END OF SECTION 142600