**PREPARATION** 

A. Prepare all interior and exterior surfaces in strict compliance with paint manufacturer's published instructions for each particular substrate condition, and as specified with paint systems indicated in this section.

1. Schedule the cleaning and painting so that contaminants from cleaning process will not fall on wet, newly painted surfaces. 2. Clean surfaces to be painted before applying paint or surface treatments.

3. Remove oil and grease prior to mechanical cleaning. 4. Correct minor defects and clean surfaces which affect the work of this section.

5. Shellac and seal marks which may bleed through surface

finishes. B. Daily Clean-Up and Protection: As specified in this section. C. Items to be Removed and Replaced:

1. Prior to surface preparation and painting operations, remove hardware, hardware accessories, machined surfaces, electrical plates, fittings and fastenings, lighting fixtures and similar items already installed which are not to be painted and carefully store from paint and other damage.

2. Upon completion of painting work of each space or area, reinstall the items previously removed. D. Exterior Galvanized Metal:

I. Prepare galvanized surfaces in accordance with paint manufacturer's published instructions. 2. Remove surface contamination and oils and wash with

solvent. Apply coat of etching primer E. Exterior Metal (Shop-Primed):

1. Prepare shop-primed steel surfaces in accordance with paint manufacturer's published instructions. 2. Not applicable to Sections 05120-Structural Steel and Section

05999-Miscellaneous Metals. 3. Sand and scrape to remove loose primer and rust. 4. Feather edges to make touch-up patches inconspicuous.

5. Clean surfaces with solvent. Prime bare steel surfaces. 6. Prime metal items including shop primed items. F. Exterior Steel (Not Shop-Primed)

1. Prepare uncoated steel in accordance with paint manufacturer's published instructions. 2. Not applicable to Sections 05120-Structural Steel and Section 05999-Miscellaneous Metals.

3. Remove grease, scale, dirt, and rust. 4. Where heavy coatings of scale are evident, remove by wire brushing or sandblasting; clean by washing with solvent. 5. Apply a treatment of phosphoric acid solution, ensuring weld

joints, bolts, and nuts are similarly cleaned. 6. Spot prime paint after repairs. G. Interior Gypsum Board:

1. Prepare gypsum board in accordance with paint manufacturer's published instructions. 2. Fill minor defects with latex.

3. Spot-prime defects after repair. H. Interior Wood-Paint 1. Prepare interior wood for painting in accordance with paint manufacturer's published instructions.

Wipe off dust and grit prior to priming. 3. Seal knots, pitch streaks, and sappy sections with sealer. 4. Fill nail holes and cracks after primer has dried; sand between coats.

I. Prime back surfaces of interior woodwork scheduled to receive stain or varnish finish with gloss varnish reduced 25 percent with mineral spirits.

J. Impervious Surfaces: Prepare in accordance with paint manufacturer's published instructions. I. Remove mildew by scrubbing with solution of trisodium phosphate and bleach.

2. Rinse with clean water and allow surface to day.

**APPLICATION** 

A. All painting work shall be completed before carpet work is

B. Apply all interior and exterior coatings in accordance with manufacturer's published instructions. 1. Do <u>not</u> paint over dirt, scale, grease, moisture, scuffed surfaces, or conditions otherwise detrimental to formation of paint

2. Provide barrier coats over incompatible primers or remove and reprime as required.

3. Notify Architect in writing of any anticipated problems in using the specified coating systems with substrates primed by others.

4. Do not paint over code-required labels. 5. Do not paint sprinklers and testing agency labels. C. During progress of painting work:

 Adequately protect other surfaces from paint and damage 2. Repair damage as a result of inadequate or unsuitable

3. Remove from site discarded paint materials, rubbish, cans and rags at end of each work day

4. Maintain premises free of unnecessary accumulation of toots, equipment, surplus materials and debris. Remove paint where spilled, splashed, or splattered.

D. The number of coats specified in this section for various finishes is customarily sufficient to obtain satisfactory finish, but should such finish not be obtained, it shall be responsibility of Contractor to apply additional coats as may be required to meet requirements of this section. E. Do <u>not</u> apply finishes to surfaces that are not dry. Allow

previous coat to dry before next coat is applied. F. Apply each coat of paint to uniform finish. Apply each coat slightly darker than preceding coat unless otherwise approved. Sand lightly between coats to achieve required finish. G. For Job-Painted Woodwork: Prime back of interior and exterior woodwork with primer.

H. Behind Movable Equipment & Furniture: Paint surfaces behind movable equipment and furniture same as similar exposed

1. Paint surfaces behind permanently-fixed equipment or furniture with only a prime coat before final installation of

J. Concealed Spaces: Unless otherwise indicated, painting is not

I. Panels and Covers: Paint back sides of access panels, and removable or hinged covers to match exposed surfaces.

required on walls and ceiling in concealed or generally inaccessible areas.

FIRE EXTINGUISHERS- Section 10520

complete with accessories. **SUBMITTALS** 

A. Manufacturer's Product Data: Clearly mark the technical data

to identify type of extinguisher and cabinet specified in this section and as required to meet Contract Documents, including manufacturer's installation recommendation. B. Sample: Submittal to include: Item S1:Cabinet with Extinguisher: One full size unit (If

approved, unit can be installed as part of work).

**MANUFACTURERS** 

A. General: For the purpose of establishing the minimum functional, aesthetic and quality standards required for fire extinguishers, products of the following manufacturer are

1. Larsen's Manufacturing Company / Minneapolis, MN (800) 527-7367 B. Substitutions: Products of the following, and other fire

2. Potter-Rohmer / Div. of Smith Industries Inc. / Cerritos, CA

Documents and Developer's written approval:

FIRE EXTINGUISHERS AND CABINETS

2. Finish: Standard white acrylic enamel.

fires, and is a nonconductor of electricity.

1. Rating: UL 2A-10B:C, 5 lb capacity.

POSTAL SPECIALTIES - Section 10550

3. Rough-in dimensions for each unit.

C. Hazardous Material Certificates:

not contain lead, asbestos or PCB.

Chicago, IL (800)275-1747

Developer's written approval:

Steeleville, IL (800) 637-3763

2. Color/Finish: Standard red acrylic enamel.

(800) 366-3473

EXTINGUISHER.

**INSTALLATION** 

SUBMITTALS

Service requirements.

**MANUFACTURERS** 

specified.

measurements as required.

conditions are corrected.

1. J.L. Industries / Bloomington, MN (800) 5544077

vision panel, with white letters on glass to read FIRE

B. Fire Extinguishers: Larsen Model MP5 Multi-Purpose Dry

Chemical unit which contains fluidizied and siliconized mono

chain reaction on Class 6 fires, fuses and insulates Class A

A. Deliver inserts and rough-in frames to Project site at

B. Examine existing conditions. If wall conditions are

unacceptable for proper installation, do a proceed until

ammonium phosphate powder which smothers and breaks the

3. Provide brackets for fire extinguishers not requiring cabinets.

appropriate time for installation. Provide templates and rough-in

Provide mailboxes and parcel boxes of aluminum construction.

A. Shop Drawings: Submittal to include but not be limited to:

U.S. Postal Service requirements and Contract Documents.

2. Locations and anchorage details for each type of unit

to identify types of mailboxes specified in this section and as

1. All information and details indicating full compliance with

B. Manufacturer's Product Data: Clearly mark the technical data

required to meet Contract Documents, including manufacturer's

1. Manufacturer shall certify in writing that products, materials

and processes used in manufacturing mailboxes do not contain

2. Contractor and installer shall certify in writing that products,

materials and methods used in the installation of mailboxes do

General: For the purpose of establishing the minimum

mailboxes, products of the following manufacturer are specified:

B. Substitutions: Products of the following, and other mailbox

2. Cutter Manufacturing Corp Eaton, FL (800) 237-2312

3. Bommer Industries Inc Landrum, SC (800)334-1654

A. Type: The Auth-Florence 1400 Series horizontal mailboxes

with parcel boxes of aluminum construction, fabricated and

complete with accessories in accordance with U.S. Postal

5. Laramie Company Midothian, IL (708) 388-7600

6. Smedbo Inc Lake Bluff, IL (847) 615-0000

4. Salsbury Industries Los Angeles, CA (800) 323-3003

manufacturers, are acceptable only after full compliance with the

functional, aesthetic and quality standards required for

requirements of this section, Contract Documents and

1. American Device Manufacturing Company

I. Auth-Florence Manufacturing Company

lead, asbestos or polychlorinated biphenyls (PCB).

installation recommendation and compliance with U.S. Postal

scratches or dents. extinguisher manufacturers, are acceptable only after full compliance with the requirements of this section, Contract prevent electrolysis.

installation.

**FACTORY FINISHING** 

A. Cabinets: Larsen Architectural Series Model 3012-RK semi-A. Galvanizing: ASTM AV3 to 1.25 oz/sq ft. B. Chrome/Nickel Plating ASTM B456, Type SC 2 polished finish. recessed cabinet with 5/16" flat trim, heavy-gauge cold-rolled steel construction, complete with attachments. C. Stainless Steel: No. 4 satin luster finish. 1. Door Style: Vertical DUO of cold-rolled steel and gray glass

> B. Verify that site conditions are ready to receive work and dimensions are as indicated on shop drawings and instructed by the manufacturer. C. Check openings for plumbness of blocking and frames.

**PREPARATION** 

building in.

B. Provide templates and rough in measurements as required. C. Verify exact location of accessories for installation. during installation.

INSTALLATION

A. Install using skilled workmen in accordance with manufacturers' printed

B. Install plumb and level, securely and rigidly anchored to substrate. completed.

D. Anchor accessories with bolts, plates, and approved type fasteners. Take down any loose items and repair damaged wall surfaces. E. Mount surface mounted accessories to backup material with toggle bolts, plumb and align.

**SECTION INCLUDES:** 

Range. 3. Microwave Oven/Hood. 4. Dishwasher.

A. Product Data: Manufacturers specifications and descriptive literature for

each specified product. B. Shop Drawings: Furnish rough-in drawings for utility service. D. Manufacturer's Standard Warranty for each appliance.

MANUFACTURER B. Substitutions will only be accepted with Owner approval.

1. Total Capacity: 22 cubic feet. 2. Finish: Stainless Steel

B. Characteristics:

1. 4.8 cubic feet capacity electric range with self-cleaning system Finish: Stainless Steel

Accessible Units Only: A. Whirlpool Model: GY397LXUS B. Characteristics:

1. 30 inch self-cleaning slide in electric range 2. Finish: Stainless Steel

2. Locks: 5-pin cylinder cam locks with 3 keys and 1,000 key

3. Number Slots: Engraved on door. 4. Compartments/Doors: Meet USPS 4C code Finish: Anodized aluminum.

Model Required: As indicated on Drawings

**INSTALLATION** 

Service requirements.

**MAILBOXES** 

A. Install postal specialty units in accordance with approved shop drawings, manufacturer's published instructions, U.S. Postal Service requirements and Contract Document. 1. Examine existing conditions for compliance with United States Postal Service requirements.

2. If wall conditions are unacceptable, do <u>not</u> proceed with work until conditions are corrected. B. The completed installations shall be plumb, flush and

Adjust each unit for proper operation without racking and binding.

TOILET AND BATH ACCESSORIES – SECTION 10800

**SECTION INCLUDES** 

A. Toilet and bath accessories. B. Attachment hardware and related trim.

SUBMITTALS

A. Submit the following in accordance with Section O1340. B. Product Data: Submit manufacturer's catalog cut sheets, data sheets, installation instructions, maintenance data, and operating instructions.

**SEQUENCING AND SCHEDULING** A. Coordinate work with placement of wall reinforcement and reinforcement of toilet partitions to receive anchor attachments.

Supply rough in data in sufficient time to be built into other work.

Truebro, Inc. B. Do not install accessories until room finishes are completed.

**MANUFACTURERS** A. Better Home Products

Provide and install\_dry-chemical fire extinguishers and cabinets

2.2 SCHEDULE OF ACCESSORIES (LIVING UNITS) A. Grab Bars:

1. Material: 1 1/4 diameter stainless steel, satin finish. 2. Construction: 1 1/2 inch clearance between grab bar and wall. 3. Mounting: Surface mounted, exposed fasteners. B. Toilet Tissue Dispenser:

\1. Material: Polished chrome 2. Mounting: Surface mounted, concealed fasteners. 3. Capacity: One roll. C. Towel Bar:

1. Material: Polished chrome. 2. Construction: Surface mounted, concealed fasteners. D. Medicine Cabinet: Jensen model 84OM18, American Heritage No. AH-65

E. Curved Shower Rod: Material: 28 gage, 1 inch diameter, aluminum. Mounting: 1 inch diameter flange; mount above tub surround. F. Underlavatory Guards: 1. Brocar Products, In

**FABRICATION** A. Weld and grind smooth joints of fabricated components. B. Form exposed surfaces from single sheet of stock, free of joints. C. Form surfaces flat without distortion. Maintain flat surfaces without

D. Back paint components where contact is made with building finishes to

E. Shop assemble components and package complete with anchors and F. Provide steel anchor plates, adapters, and anchor components for

**EXAMINATION** A. Examine conditions and proceed with Work in accordance with Section

D. Beginning of installation means acceptance of existing conditions.

A. Deliver inserts and rough in frames to site at appropriate time for

D. Protect adjacent or adjoining finished surfaces and work from damage

C. Locate accessories in order that they do not interfere with door swings or use of fixtures. Install recessed accessories after wall finishes have been

F. Anchor grab bars to drywall with concealed 16 gage steel anchor

RESIDENTIAL APPLIANCES – SECTION 11310

Refrigerator.

Disposal 6. Clothes Washer. 7. Clothes Dryer

SUBMITTALS

C. Operation and Maintenance Data: Manufacturers standard information

A. Specified appliances are based on products of Whirlpool Appliances

**REFRIGERATOR** A. Whirlpool, Model: WRT311FZBM, standard unit and ADA refrigerator

B. Characteristics:

**RANGE** A. Whirlpool Model: WFE510SOAS

Under Cabinet Range Hood A. Whirlpool Model UXT4230ADS B. Finish: Stainless Steel

DISPOSAL A. Whirlpool Model: GC2000PE B. Characteristics:

2. Electrical: 15 Amps, 60 Hz, 120 V.

1. In sink disposer with continuous feed operation C. Electrical Requirements: 15 or 20 Amps. 60 Hz. 120 V.

**MICROWAVE OVEN** A. Whirlpool Model WMH31017AS 1. Characteristics: 1.7 cubic feet microwave hood combination with 2-speed

3. Finish: Black on stainless, Universal Silver For Accessible Units Only: A. Whirlpool Model WMC30516AS 1. Characteristics: 1.7 cubic feet countertop microwave with 1,200 watts

cooking power 2. Electrical: 15 Amps, 60 Hz, 120 V. 3. Finish: Black on stainless, Universal Silver DISHWASHER

A. Whirlpool Model: WDF310PAAS 1. Characteristics: Dishwasher with energy star qualification. 2. Electrical: 15 Amps, 60 Hz, 120 V. 15

3. Finish: Black on stainless, Universal Silver WASHER/DRYER: A. Side by Side Washer:

1. WTW4850BW – Standard Units 2. WFW70HEBW – Accessible Units B. Side by Side Dryer 3. WED4870BW – Standard Units 4. WED70HEBW – Accessible Units C. Stackable:

1. WET3300XQ **INSTALLATION** 

**MOCK-UP** 

MANUFACTURERS

A. Comply with manufacturer's installation instructions, product data and shop drawings reviewed by Architect.

RESIDENTIAL CASEWORK - SECTION 12355 Provide and install kitchen cabinets, countertops, vanity cabinets and casework hardware.

SUBMITTALS A. Product Data: Provide component dimensions and construction details.

B. Shop Drawings: Indicate casework locations, large scale plans, elevations, clearances required, rough-in and anchor placement dimensions and tolerances. C. Samples: Submit two cabinet doors, 12 x 24 inch in size, illustrating each color of finish.

A. Provide full size mock-up of casework, each type of base unit, upper cabinet, and counter top. B. Locate where directed. C. Mock-up may remain as part of the Work.

A. Residential Casework: Leedo. 2. Mid-America Cabinet Co. COMPONENTS

A. Cabinet Construction: Softwood lumber framing and particle board. B. Kitchen Countertop: 3 cm Level 1 granite. C. Vanity Countertop: 2 cm Level 1 granite.

D. Door and Drawer Fronts: Manufacturer's standard materials shaker style birch full overlay design. E. Bolts, Nuts, Washers and Screws: Of size and type to suit application. F. Concealed Joint Fasteners: Threaded steel. G. Provide removable cabinets where shown to conform to requirements of ANSI A117.1-1998, Chapter 10.

HARDWARE

INSTALLATION

A. Hardware: Manufacturer's standard bar pulls on doors and drawers. B. Drawer Slides: Extension arms, steel and ball bearing construction.

C. Hinges: European, 110 degrees, self-closing. **FABRICATION** 

A. Shop-assemble casework for delivery to site in units easily handled and to permit passage through building openings. B. Fabricate corners and joints without gaps or inaccessible spaces or areas where dirt or moisture could accumulate. C. Fabricate each unit to be rigid and not dependent on building structure for rigidity. D. Form smooth edges. Form material for countertops, facing, and

shelves from continuous sheets. E. Provide cutouts for plumbing fixtures, appliances, and fixtures and fittings. Prime paint contact surfaces of cut edges. F. When necessary to cut and fit on site, provide materials with ample allowance for cutting. Provide trim for scribing and site cutting. FINISHES

A. Exposed To View Surfaces: Manufacturer's standard coated surfaces, color as selected. B. Interior Surfaces: Plastic laminate or melamine.

A. Install casework, components and accessories in accordance with manufacturer's instructions. B. Use anchoring devices to suit conditions and substrate materials encountered. C. Set casework items plumb and square, securely anchored to building

D. Carefully scribe casework abutting other components, with maximum

gaps of 1/32 inch. Use filler strips; not additional overlay trim for this E. Close ends of units, back splashes, shelves and bases.

CHUTES – SECTION 14560

A. This Section includes metal, vertical, gravity-type waste chutes.

SUBMITTALS

A. Poduct Data: For each product indicated. B. Shop Drawings: Detail chute assemblies and indicate installation details, dimensions, required clearances, method of field assembly, components, and location and size of each field connection.

**QUALITY ASSURANCE** A. NFPA Compliance: Provide chutes complying with NFPA 82.

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:

B. Manufacturers: Subject to compliance with requirements, provide products by one of the following: 1. Cutler Manufacturing Corporation. Midland Metalcraft Co.

MATERIALS A. Chute Metal: Type 304 stainless steel, ASTM A 240/A 240M.

3. U.S. Chutes Corp.

4. Wilkinson Co., Inc

1. Specified (Nominal) Thickness: 0.080 inch (2.0 mm).

A. Intake Door Assemblies: ASTM A 240/A 240M. Type 302/304

stainless-steel, self-closing units with positive latch and latch handle; Class B labeled; 1-1/2-hour fire rated with 30-minute temperature rise of

predetermined, adjustable temperature.

250 deg F (121 deg C); and with frame suitable for enclosing chase construction. 1. Door Type: Hopper 2. Size: Manufacturer's standard size for door type, and chute type and diameter indicated 3. Finish: Manufacturer's standard satin or No. 3 directional polish finish.

4. Locks: Cylinder locks with keys that are removable only when cylinder

is locked. For each chute, key locks alike. For each door, furnish four 5. Foot Operators: Hopper-type door operators that unlatch and open door when foot pedal is depressed 6. Electrical Interlocks: Interlock system that is energized by opening one intake door; remaining doors automatically lock when system is energized. B. Heat-Detector System: Interlock system with temperature-rise elements that lock chute doors when temperature in chute reaches a

C. Manual Control System: Control system with manual switches that lock doors of chute during shutdown hours and service operations. D. Discharge Door Assemblies: Aluminum-coated-steel doors of onehour fire-rated construction that is suitable for Class B openings; equipped with fusible links that cause doors to close in the event of fire. 1. Direct Vertical Discharge: Provide inclined, horizontally rolling, shutter-2. Horizontal Discharge: Provide top-hinged, self-closing, hopper door with self-latching hardware; floor leg-brace designed to absorb impact of material dropping against chute; and minimum NPS 2 (DN50) drain pipe E. Access Door Assemblies: Manufacturer's standard ASTM A 240/A 240M, Type 302/304 stainless-steel doors; Class B labeled; 1-1/2-hour fire

rated with 30-minute temperature rise of 250 deg F (121 deg C); with

frame suitable for enclosing chase construction; and in satin or No. 3

directional polish finish.

ACCESSORIES A. Fire Sprinklers: NPS 1/2 (DN 13) fire sprinklers ready for piping B. Flushing Spray Unit: NPS 3/4 (DN 19) spray head unit located in chute above highest intake door, ready for hot-water piping connection, and with access for head and piping maintenance. C. Sanitizing Unit: NPS 3/4 (DN 19) disinfecting and sanitizing spray head unit located in chute above highest intake door, including 1-gal. (3.8-L) tank and adjustable proportioning valve with bypass for manual control of

and with access for head and piping maintenance. A. General: Factory assemble chutes to greatest extent practical with continuously welded or lock-seamed joints without bolts, rivets, or clips projecting on chute interior. Include intake-door assemblies and chutesupport frames at each floor, and chute expansion joints between each

sanitizing and flushing operation, ready for hot-water piping connection,

support point. B. Roof Vent: Fabricate vent unit to extend 48 inches (1200 mm) above roof with full-diameter, screened vent and metal safety cap or glass explosion-release cap. Fabricate with roof-deck flange, and with counterflashing and clamping ring of nonferrous metal compatible with C. Fire Sprinklers: Comply with NFPA 13. Locate fire sprinklers at or

levels in buildings more than two stories tall, and at the lowest service D. Equipment Access: Fabricate chutes with access for maintaining equipment located within the chute, such as flushing and sanitizing units, fire sprinklers, and plumbing and electrical connections.

above the top service opening of chutes, within the chute at alternate floor

**ELECTRIC TRACTION ELEVATORS – SECTION 14210** 

SUMMARY A. This Section specifies electric traction elevators.

than the elevator manufacturer/installer.

B. Work Required: 1. The work required under this section consists of all labor, materials and services required for the complete installation (including operational verification) of all the equipment required for the elevator(s) as herein specified.

2. All work shall be performed in a first class, safe and workmanlike manner 3. In all cases where a device or part of the equipment is herein referred to in the singular, it is intended that such reference shall apply to as many of such devices or parts as are required to make complete installation. A. Related work not specified herein: The following sections contain requirements that relate to this section and are performed by trades other

1. Section 01500 - Construction Facilities and Temporary Controls: protection of floor openings and personnel barriers; temporary power and

2. Section 02200 - Earthwork: excavation for elevator pit. 3. Section 03300 - Cast-In-Place Concrete: elevator pit, and elevator 4. Section 04200 - Unit Masonry: masonry hoistway enclosure, building-in

and grouting hoistway doorframes, and grouting of sills. 5. Section 05500 - Metal Fabrications: pit ladder, divider beams, and supports for entrances, rails and hoisting beam at top of elevator hoistway. 6. Section 07145 - Cementitious Waterproofing: waterproofing of elevator pit. 7. Section 15500 - Heating, Ventilating, and Air Conditioning: ventilation and temperature control of elevator equipment areas.

8. Section 16100 - Electrical: a. Main disconnects for each elevator.

b. Electrical power for elevator installation and testing. c. Disconnecting device to elevator equipment prior to activation of sprinkler

e. Lighting in controller area, machine area and pit. f. Wiring for telephone service to controller 1. Section 16610 – Emergency (Standby) Power Supply Systems: emergency generator for elevator operation.

d. The installation of dedicated GFCI receptacles in the pit and overhead.

2. Section 16720 - Fire Alarm Systems: The installation of fire and smoke

detectors at required locations and interconnecting devices; fire alarm signal

lines to contacts in the machine area. 3. Section 16740 - Telephone Systems: ADAAG-required emergency communications equipment.

C. Drive: Regenerative

F. Openings: In line

L. Cab Height: 9'9"

3. Ride Quality:

SYSTEM DESCRIPTION A. Equipment Description: Gen2® gearless machine-room less elevator from Otis Elevator Company where all components fit inside the hoistway. B. Equipment Control: Elevonic® Control System.

D. Quantity of Elevators: 3 E. Stops: 5

G. Rated Capacity: 3500 lb., H. Rated Speed: 200 fpm I. Platform Size: 6'-6 3/4" W x 6'-1 1/8" D J. Clear Inside Dimensions: 6'-5 9/16" W x 5'-5 9/16" D

M. Clear Cab Height: assume 5/16" floor recess and 4 LED ceiling N. Entrance Type and Width: Single-Slide Door 36" (915 mm) O. Entrance Height: 8'-0" (2438 mm) P. Main Power Supply: 208, 220-240, 440-480 or 600 Volts + or - 5% of normal, three-Phase, with a separate equipment grounding conductor.

Transformer (by others) required for voltages other than 208, 220-240,

Q. Car Lighting Power Supply: 120 Volts, Single-phase, 15 Amp, 60 Hz. R. Machine Location: Inside the hoistway at the top of the hoistway. S. Signal Fixtures: Manufacturer's standard with metal button targets (exc.

T. Controller Location: Machine-Roomless Controller(s) must be in the front wall on the same side as the counterweight, located at the top landing. Optional Machine Room/Space. Optional remote controller (max distance 250') U. Performance:

1. Car Speed: ± 3 % of contract speed under any loading condition or 2. Car Capacity: Safely lower, stop and hold up to 120% of rated load. (code required).

a. Vertical Vibration (maximum): 20 milli-g b. Horizontal Vibration (maximum): 12 milli-g c. Vertical Jerk (maximum):  $4.59 \pm 1.0$  ft./ sec3 ( $1.4 \pm 0.3$  m/ sec3) d. Acceleration/Deceleration (maximum): 2.62 ft./ sec2 (0.8 m/ sec2)

e. In Car Noise: 55 – 60 dB(A) f. Stopping Accuracy:  $\pm 0.375$  in. ( $\pm 10$  mm) max,  $\pm 0.25$  in. ( $\pm 6$  mm) g. Re-leveling Distance: ± 0.5 in. (± 12 mm)

A. Operation B. Simplex Collective Operation: Using a microprocessor-based controller, operation shall be automatic by means of the car and hall buttons. If all calls in the system have been answered, the car shall park at the last landing served. C. Operating Features – Standard

2. Anti-nuisance. 3. Fan and Light Protection 4. Load Weighing Bypass. Independent Service. 6. Full Collective Operation 7. Firefighters' Service Phase I and Phase II

A. Provide equipment according to seismic zone: 2

1. Full Collective Operation

adjustable period of time.

2. Cab design, dimensions and layout.

8. Top of Car Inspection A. Door Control Features: 1. Door control to open doors automatically when car arrives at a landing in response to a normal hall or car call. 2. Elevator doors shall be provided with a reopening device that will stop and

(s) become obstructed by an object or person 3. Door protection shall consist of a two dimensional, multi-beam array projecting across the car door opening. 4. Door nudging operation to occur if doors are prevented from closing for an

reopen the car door(s) and hoistway door(s) automatically should the door

SUBMITTALS A. Product Data: Submit manufacturer's product data for each system proposed for use. Include the following:

1. Signal and operating fixtures, operating panels and indicators.

3. Hoistway-door and frame details. 4. Electrical characteristics and connection requirements 5. Expected heat dissipation of elevator equipment in hoistway (BTU). 6. Color selection chart for Cab and Entrances. A. Shop Drawings: Submit approval layout drawings. Include the following:

Car, guide rails, buffers and other components in hoistway.

2. Maximum rail bracket spacing. 3. Maximum loads imposed on guide rails requiring load transfer to building structure. 4. Clearances and travel of car.

6. Location and sizes of access doors, hoistway entrances and frames.

A. Operations and Maintenance Manuals (at the end of the project – presented to the Owner): Provide manufacturer's standard operations and maintenance manual.

5. Clear inside hoistway and pit dimensions.

WARRANTY

A. The elevator contractor's acceptance is conditional on the understanding that their warranty covers defective material and workmanship. The warranty period shall not extend longer than one (1) year from the date of completion or acceptance thereof by beneficial use, whichever is earlier, of each elevator. The warranty excludes: ordinary wear and tear, improper use, vandalism, abuse, misuse, or neglect or any other causes beyond the control of the elevator contractor and this express warranty is in lieu of all other warranties, express or implied, including any warranty of merchantability or fitness for a particular purpose.

**MAINTENANCE and SERVICE** 

A. Maintenance service consisting of regular examinations and adjustments of the elevator equipment shall be provided by the elevator contractor for a period twelve (12) months after the elevator has been turned over for the customer's use. This service shall not be subcontracted but shall be performed by the elevator contractor. All work shall be performed by competent employees during regular working hours of regular working days. This service shall not cover adjustments, repairs or replacement of parts due to negligence, misuse, abuse or accidents caused by persons other than the elevator contractor. Only genuine parts and supplies as used in the manufacture and installation of the original equipment

shall be provided. B. The periodic lubrication of elevator components shall be required including: Sheaves, Rails, Belts, Ropes, Car and CWT guides, etc. C. The elevator control system must 1) Provide in the controller the necessary devices to run the

elevator on inspection operation. 2) Provide on top of the car the necessary devices to run the elevator in inspection operation. 3) Provide in the controller an emergency stop switch. This emergency stop switch when opened disconnects power from the

brake and prevents the motor from running. 4) Provide in the event of a power outage, means from the controller to electrically lift and control the elevator brake to safely bring the elevator to the nearest available landing. 5) Provide the means from the controller to reset the governor over

6) Provide the means from the controller to reset the emergency

brake when set because of an unintended car movement or ascending car over speed. D. Provide system capabilities to enable a remote expert to create a live, interactive connection with the elevator system to enable the

following functions: 1. Remotely diagnose elevator issues with a remote team of

experts 2. Remotely return an elevator to service 3. Provide real-time status updates via email

time, release trapped passengers

**DESIGN AND SPECIFICATIONS** 

components:

speed switch and also trip the governor.

group operation, shut down elevator, select up peak/down peak mode, activate independent service b. Conserve energy: Activate cab light energy save mode, activate fan energy save mode, shut down car(s) c. Improve passenger experience: Extend door open times, change parking floor, activate auto car full, activate anti-nuisance, advance

4. Remotely make changes to selected elevator functions including:

door opening, door nudging, extend specific floor extended opening

a. Control building traffic: Restrict floor access, remove car from

A. Provide machine-roomless Gen2™ traction passenger elevators from Otis Elevator Company. The control system and car design based on materials and systems manufactured by Otis Elevator Company. Specifically, the system shall consist of the following

B. 1. Controller located entirely inside the hoistway. No extra machine room or control closet space required. 1. 2. An AC gearless machine using embedded permanent magnets mounted at the top of the hoistway 2. 3. Polyurethane Coated-Steel Belts for elevator hoisting

3. 4. Regenerative drive that captures normally wasted energy and

feeds clean power back into the building's power grid. 4. 5. LED lighting standard in ceiling lights and elevator fixtures. 5. 6. Sleep mode operation for LED ceiling lights and car fan. A. Approved Installer: Otis Elevator Company

**EQUIPMENT: CONTROLLER COMPONENTS** 

provided to perform all of the functions of safe elevator operation The system shall also perform car and group operational control. B. 1. All high voltage (110V or above) contact points inside the controller shall be protected from accidental contact when the controller doors are open. C. 2. Controller shall be separated into two distinct halves; Motor

A. Controller: A microcomputer based control system shall be

shall be routed so as to be physically segregated from the rest of the controller. D. 3. Field conductor terminations points shall be segregated; high voltage (>30 volts DC and 110 VAC,) and low voltage (< 30 volts

E. 4. Controllers shall be designed and tested for Electromagnetic

Drive side and Control side. High voltage motor power conductors

Interference (EMI) immunity according to the EN 12016 (May 1998): "EMC Product Family Standards for lifts, escalators, and passenger conveyors Part 2 – immunity" 5. Controller shall be located inside the wall next to the top landing entrance frame. Emergency access shall be provided through an access panel in the entrance frame secured by a key lock. 6. A separate control room or cabinet should not be required. Drive: A Variable Voltage Variable Frequency AC drive system shall

**EQUIPMENT: MACHINE AND GOVERNOR** A. Machine: AC gearless machine, with a synchronous permanentmagnet motor, dual solenoid service and emergency disc brakes, mounted at the top of the hoistway.

B. Governor: The governor shall be a tension type car-mounted

be provided. The drive shall be set up for regeneration of AC power

C. Buffers, Car and Counterweight: Polyurethane type buffers shall be used. D. Hoistway Operating Devices:

E. 1. Emergency stop switch in the pit

F. 2. Terminal stopping switches.

door zone vanes.

UL fire rated steel

2. Sills shall be extruded aluminum.

vertical channel reinforcements.

steel and gold satin doors.

back to the building grid.

H. Guide Rails and Attachments: Guide rails shall be Tee-section steel rails with brackets and fasteners. Side counterweight arrangements shall have a dual-purpose bracket that combines both counterweight guide rails, and one of the car guide rails to building fastening. I. Coated-Steel Belts: Polyurethane coated belts with high-tensilegrade, zinc-plated steel cords and a flat profile on the running

surface and the backside of the belt. All driving sheaves and

G. Positioning System: Consists of an encoder, reader box, and

resistance based technology has to be installed to continuously monitor the integrity of the coated steel belts and provide advanced notice of belt wear. J. Governor Rope: Governor rope shall be steel and shall consist of at least eight strands wound about a sisal core center.

deflector sheaves should have a crowned profile to ensure center

tracking of the belts. A continuous 24/7 monitoring system using

the hoistway. L. Hoistway Entrances: 1. Frames: Entrance frames shall be of bolted construction for complete one-piece unit assembly. All frames shall be securely fastened to fixing angles mounted in the hoistway and shall be of

K. Fascia: Galvanized sheet steel shall be provided at the front of

4. Fire Rating: Entrance and doors shall be UL fire rated for 1-1/2 5. Entrance marking plates: Entrance jambs shall be marked with 4" x 4" (102 mm x 102 mm) plates having raised floor markings with Braille located adjacent to the floor marking. Marking plates shall be provided on both sides of the entrance. 6. Sight Guards: sight guards will be furnished with all doors

painted to match with painted doors, painted black for stainless

3. Doors: Entrance doors shall be of metal construction with

THE PRESTON PARTNERSHIP, LLC A MULTI-DISCIPLINARY DESIGN FIRM

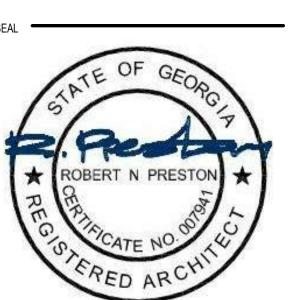
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RESERVE AT THE BALLPARK, PHASE II AKA REVEL AT THE

2885 CRESCENT PKWY

SMYRNA, GA 30080

BALLPARK

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ISSUES & # - REVISIONS \_\_\_\_\_ CONCEPTUAL DESIGN 08/21/2015 09/28/2015 SCHEMATIC DESIGN GMP/DESIGN DEVELOPMENT 10/15/2015 GMP 04/03/2017 PERMIT SET 05/22/2017 **3 BUILDING PERMIT** 07/25/2017

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COMMENTS

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