

# Project Manual

Bid Package 02  
Addendum No.04  
Volume I  
Divisions 08

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## Cherokee Nation WILMA P. MANKILLER HEALTH CENTER EXPANSION

Stilwell, Oklahoma

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February 18, 2020



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Feb. 14, 2020

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<b>Bid Package 02</b>	<b>Construction Documents</b>	<b>Dec. 06, 2019</b>
<b>Bid Package 02</b>	<b>Addendum No. 01.</b>	<b>Jan. 10, 2020</b>
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### NOTE FOR REVISED SPECIFICATION SECTIONS

1. DELETED INFORMATION IS INDICATED BY A STRIKETHROUGH (IE, ~~THIS IS DELETED~~).
2. NEW INFORMATION IS INDICATED BY A DOUBLE UNDERLINE (IE, THIS IS ADDED).
3. ALL REVISED INFORMATION IS FURTHER IDENTIFIED BY A HEAVY VERTICAL LINE TO THE RIGHT OF ALL REVISIONS IN EACH INDIVIDUAL SPECIFICATION SECTION (REFER TO HEAVY BOLD LINE TO THE RIGHT FOR AN EXAMPLE).

## VOLUME 1

### CIVIL, STRUCTURAL, ARCHITECTURAL

#### DIVISION 00 - PROCUREMENT AND CONTRACTING REQUIREMENTS

	<input type="checkbox"/>	00 1115	Invitation to Bid
	<input type="checkbox"/>	00 2113	Instructions to Bidders
2019-11-01	<input type="checkbox"/>	00 3100	Available Project Information
	<input type="checkbox"/>	00 4100	Bid Form
	<input type="checkbox"/>	00 5200	Agreement Form
	<input type="checkbox"/>	00 6100	Bonds
2019-11-01	<input type="checkbox"/>	00 7200	General Conditions
	<input type="checkbox"/>	00 7300	Supplementary Conditions

#### DIVISION 01 - GENERAL REQUIREMENTS

	<input type="checkbox"/>	01 0500	Design Selections
	<input type="checkbox"/>	01 0510	Exterior Design Selections
	<input type="checkbox"/>	01 0520	Interior Design Selections
	<input type="checkbox"/>	01 1000	Summary

	<input type="checkbox"/>	01 2100	Allowances
	<input type="checkbox"/>	01 2200	Unit Prices
	<input type="checkbox"/>	01 2300	Alternates
2019-11-01	<input type="checkbox"/>	01 2500	Substitution Procedures
2019-11-01	<input type="checkbox"/>	01 2500a	Substitution Procedure Form
2019-11-01	<input type="checkbox"/>	01 2600	Contract Modification Procedures
2019-11-01	<input type="checkbox"/>	01 2900	Payment Procedures
2019-11-01	<input type="checkbox"/>	01 2900a	Project Cost Summary Form
2019-11-01	<input type="checkbox"/>	01 3100	Project Management and Coordination
2019-11-01	<input type="checkbox"/>	01 3200	Construction Progress Documentation
	<input type="checkbox"/>	01 3233	Photographic Documentation
2019-11-01	<input type="checkbox"/>	01 3300	Submittal Procedures
2019-11-01	<input type="checkbox"/>	01 4000	Quality Requirements
	<input type="checkbox"/>	01 4200	References
2019-11-01	<input type="checkbox"/>	01 4323	Special Inspection
2019-11-01	<input type="checkbox"/>	01 4339	Visual Mock-Up Requirements
2019-11-01	<input type="checkbox"/>	01 4516	Field Test for Water Leakage
2019-12-06	<input type="checkbox"/>	01 4529	Testing Laboratory Services
2019-12-06	<input type="checkbox"/>	01 4534	Testing of Piping Systems
2019-11-01	<input type="checkbox"/>	01 5000	Temporary Facilities and Controls
2019-11-01	<input type="checkbox"/>	01 6000	Product Requirements
2019-11-01	<input type="checkbox"/>	01 7300	Execution
2019-11-01	<input type="checkbox"/>	01 7416	Clean Up (Site Maintenance)
2019-11-01	<input type="checkbox"/>	01 7419	Construction Waste Management and Disposal
	<input type="checkbox"/>	01 7420	LEED Construction Waste Management and Disposal
2019-11-01	<input type="checkbox"/>	01 7700	Closeout Procedures
2019-11-01	<input type="checkbox"/>	01 7823	Operations and Maintenance Data
2019-11-01	<input type="checkbox"/>	01 7839	Project Record Documents
2019-11-01	<input type="checkbox"/>	01 7900	Demonstration and Training
	<input type="checkbox"/>	01 8111	Sustainable Construction Requirements
	<input type="checkbox"/>	01 8112	LEED Construction Requirements
	<input type="checkbox"/>	01 8113	LEED Construction Requirements for New Construction and Major Renovations
	<input type="checkbox"/>	01 8123	LEED Construction Requirements for Commercial Interiors
	<input type="checkbox"/>	01 8133	LEED Construction Requirements for Core and Shell Development
	<input type="checkbox"/>	01 8143	LEED Construction Requirements for Schools
2019-11-01	<input type="checkbox"/>	01 9113	General Commissioning Requirements

## DIVISION 02 - EXISTING CONDITIONS

2019-11-01	<input type="checkbox"/>	02 1113	Demolition
2019-11-01	<input type="checkbox"/>	02 4116	Building Demolition
2019-11-01	<input type="checkbox"/>	02 4119	Selective Demolition

## DIVISION 03 - CONCRETE

	<input type="checkbox"/>	03 0150	Concrete Patching
2019-11-01	<input type="checkbox"/>	03 1000	Concrete Forming and Accessories
	<input type="checkbox"/>	03 1500	Concrete Accessories
2019-11-01	<input type="checkbox"/>	03 2000	Concrete Reinforcing
2019-12-06	<input type="checkbox"/>	03 2100	Steel Reinforcement (Sidewalk)
	<input type="checkbox"/>	03 3000	Cast-In-Place Concrete
2019-12-06	<input type="checkbox"/>	03 3053	Cast-in Place Concrete (Site work)
	<input type="checkbox"/>	03 3500	Concrete Finishing
2019-12-06	<input type="checkbox"/>	03 3536	Concrete Finishing (Site work)
	<input type="checkbox"/>	03 3543	Polished Concrete
	<input type="checkbox"/>	03 3600	Special Concrete Finishes
	<input type="checkbox"/>	03 3800	Post-Tensioned Concrete
2019-11-01	<input type="checkbox"/>	03 4000	Precast Concrete
2019-12-06	<input type="checkbox"/>	03 4500	Architectural Precast Concrete
	<input type="checkbox"/>	03 4713	Tilt-Up Concrete
	<input type="checkbox"/>	03 4900	Glass-Fiber Reinforced Precast Concrete (GFRC)
	<input type="checkbox"/>	03 5216	Lightweight Insulating Concrete
	<input type="checkbox"/>	03 5300	Concrete Toppings
	<input type="checkbox"/>	03 5416	Hydraulic Cement Underlayment

## DIVISION 04 – MASONRY

2019-12-06	<input type="checkbox"/>	04 2100	Masonry Veneer
2019-11-01	<input type="checkbox"/>	04 2200	Reinforced Unit Masonry
	<input type="checkbox"/>	04 2300	Glass Unit Masonry
	<input type="checkbox"/>	04 4200	Exterior Stone Cladding
	<input type="checkbox"/>	04 4216	Steel Supported Stone Cladding
	<input type="checkbox"/>	04 7200	Cast Stone Masonry
	<input type="checkbox"/>	04 7500	Adhered Masonry Veneer

## DIVISION 05 – METALS

2019-11-01	<input type="checkbox"/>	05 1000	Structural Steel
2019-11-01	<input type="checkbox"/>	05 1213	Architecturally Exposed Structural Steel (AESS)
	<input type="checkbox"/>	05 1636	Barrier Cables
2019-11-01	<input type="checkbox"/>	05 2100	Steel Joists Framing
	<input type="checkbox"/>	05 5214	Ornamental & Misc. Metals
	<input type="checkbox"/>	05 3000	Steel Decking
	<input type="checkbox"/>	05 3123	Steel Roof Deck System
	<input type="checkbox"/>	05 3133	Permanent Metal Forming
2019-11-01	<input type="checkbox"/>	05 4000	Cold-Formed Steel Framing
	<input type="checkbox"/>	05 4300	Slotted Channel Framing
2019-12-06	<input type="checkbox"/>	05 5000	Metal Fabrications
2019-11-01	<input type="checkbox"/>	05 5100	Metal Stairs
	<input type="checkbox"/>	05 5213	Pipe and Tube Railings
2019-12-06	<input type="checkbox"/>	05 5214	Ornamental & Misc. Metals

<input type="checkbox"/>	05 5300	Metal Gratings
<input type="checkbox"/>	05 5813	Ornamental Metal Column Covers
<input type="checkbox"/>	05 7000	Ornamental Metal
<input type="checkbox"/>	05 7300	Ornamental Handrails and Railings

## DIVISION 06 - WOOD, PLASTICS, AND COMPOSITES

2019-12-06	<input type="checkbox"/>	06 1053	Miscellaneous Rough Carpentry
2019-12-06	<input type="checkbox"/>	06 1643	Exterior Gypsum Sheathing
2019-12-06	<input type="checkbox"/>	06 4023	Interior Architectural Woodwork
	<input type="checkbox"/>	06 4223	Slatwall Paneling
	<input type="checkbox"/>	06 6100	Simulated Stone Fabrications
2019-12-06	<input type="checkbox"/>	06 6400	Plastic (FRP) Paneling
	<input type="checkbox"/>	06 6413	Translucent Resin Panel Fabrications
	<input type="checkbox"/>	06 6419	Simulated Stone Paneling
	<input type="checkbox"/>	06 6713	Louvered Light Diffusers
	<input type="checkbox"/>	06 6813	Plastic Gratings

## DIVISION 07 - THERMAL AND MOISTURE PROTECTION

	<input type="checkbox"/>	07 0151	Preparation for Re-Roofing
	<input type="checkbox"/>	07 0152	Patching of Existing Roofing
	<input type="checkbox"/>	07 1114	Asphalt Mastic Dampproofing
	<input type="checkbox"/>	07 1328	Pre-Applied Sheet Waterproofing
	<input type="checkbox"/>	07 1352	Modified Bituminous Sheet Waterproofing
	<input type="checkbox"/>	07 1413	Hot Fluid-Applied Rubberized Asphalt Waterproofing
	<input type="checkbox"/>	07 1416	Cold Fluid Applied Waterproofing
	<input type="checkbox"/>	07 1616	Crystalline Waterproofing
	<input type="checkbox"/>	07 1700	Bentonite Waterproofing
	<input type="checkbox"/>	07 1800	Traffic Coatings
	<input type="checkbox"/>	07 1900	Water Repellents
2019-12-06	<input type="checkbox"/>	07 2100	Thermal Insulation
2020-01-27	<input type="checkbox"/>	07 2119	Spray-Applied Foam Insulation
2019-12-06	<input type="checkbox"/>	07 2400	EIFS
	<input type="checkbox"/>	07 2423	DEFS for Soffits
2019-12-06	<input type="checkbox"/>	07 2500	Mechanically Fastened Air and Water Barriers
2019-11-01	<input type="checkbox"/>	07 2600	Under-Slab Vapor Retarder
	<input type="checkbox"/>	07 2613	Rubberized Asphalt Vapor Retarders
	<input type="checkbox"/>	07 2713	Self-Adhering Air and Water Barriers
	<input type="checkbox"/>	07 3113	Asphalt Shingles
	<input type="checkbox"/>	07 3127	Simulated Slate Roofing
	<input type="checkbox"/>	07 3200	Roof Tiles
2019-12-06	<input type="checkbox"/>	07 4114	Metal Roof Panels
	<input type="checkbox"/>	07 4213	Formed Metal Wall Panels
	<input type="checkbox"/>	07 4229	Terra Cotta Wall Panels
	<input type="checkbox"/>	07 4243	Composite Metal Wall Panels
	<input type="checkbox"/>	07 4263	Insulated-Core Metal Wall Panels
2019-12-06	<input type="checkbox"/>	07 5013	Single-Ply Membrane Roofing
	<input type="checkbox"/>	07 5216	Modified Bituminous Membrane Roofing
	<input type="checkbox"/>	07 5556	Fluid-Applied Protected Membrane Roofing

	<input type="checkbox"/>	07 5563	Vegetated Protected Membrane Roofing
2019-12-06	<input type="checkbox"/>	07 6200	Flashing and Sheet Metal
2020-01-27	<input type="checkbox"/>	07 7200	Roof Accessories
	<input type="checkbox"/>	07 7600	Roof Pavers and Pedestal Assemblies
2020-01-27	<input type="checkbox"/>	07 8116	Cementitious Fireproofing
	<input type="checkbox"/>	07 8123	Intumescent Mastic Fireproofing
	<input type="checkbox"/>	07 8413	Penetration Firestopping
2019-12-06	<input type="checkbox"/>	07 8446	Fire-Resistive Joint Firestopping
	<input type="checkbox"/>	07 9100	Preformed Joint Seals
2019-12-06	<input type="checkbox"/>	07 9200	Joint Sealants
2019-12-06	<input type="checkbox"/>	07 9500	Expansion Control

## DIVISION 08 - OPENINGS

	<input type="checkbox"/>	08 0610	Door Schedule
2019-12-06	<input type="checkbox"/>	08 1113	Hollow Metal Doors and Frames
	<input type="checkbox"/>	08 1114	Interior Hollow Metal Frames
	<input type="checkbox"/>	08 1170	Steel Fire Door and Frame Assembly
	<input type="checkbox"/>	08 1216	Interior Aluminum Frames
2019-12-06	<input type="checkbox"/>	08 1416	Prefinished Flush Wood Doors
	<input type="checkbox"/>	08 1433	Stile and Rail Wood Doors
2019-12-06	<input type="checkbox"/>	08 3113	Access Doors and Frames
	<input type="checkbox"/>	08 3213	Sliding Aluminum-Framed Glass Doors
2019-12-06	<input type="checkbox"/>	08 3313	Coiling Counter Doors
2019-12-06	<input type="checkbox"/>	08 3323	Overhead Coiling Doors
	<input type="checkbox"/>	08 3326	Overhead Coiling Grilles
	<input type="checkbox"/>	08 3338	Interior Side Coiling Grilles
2019-12-06	<input type="checkbox"/>	08 3400	Special Function Doors
	<input type="checkbox"/>	08 3513	Folding Doors
	<input type="checkbox"/>	08 3515	Accordion Folding Fire Doors
	<input type="checkbox"/>	08 3613	Sectional Overhead Doors
	<input type="checkbox"/>	08 4110	Interior Storefront
	<input type="checkbox"/>	08 4127	Exterior All-Glass Entrances and Storefronts
	<input type="checkbox"/>	08 4128	Interior All-Glass Entrances and Storefronts
	<input type="checkbox"/>	08 4213	Exterior Aluminum Entrance Doors
	<input type="checkbox"/>	08 4216	Interior Aluminum Entrance Doors
	<input type="checkbox"/>	08 4229	Automatic Entrances
	<input type="checkbox"/>	08 4233	Revolving Entrance Doors
	<input type="checkbox"/>	08 4243	Medical Specialty Sliding Entrances
	<input type="checkbox"/>	08 4400	Glazed Aluminum Framing Systems
	<input type="checkbox"/>	08 4426	Structural Glass Curtainwall
	<input type="checkbox"/>	08 4500	Translucent Insulating Panel Assemblies
	<input type="checkbox"/>	08 5113	Aluminum Windows
2019-12-06	<input type="checkbox"/>	08 5619	Sliding Pass Windows
	<input type="checkbox"/>	08 5656	Bullet-Resistive Windows
	<input type="checkbox"/>	08 6200	Unit Skylights
	<input type="checkbox"/>	08 6300	Metal-Framed Skylights
2020-02-14	<input checked="" type="checkbox"/>	08 7100	Door Hardware
	<input type="checkbox"/>	08 7121	Interior Automatic Door Operators for Staff Use
	<input type="checkbox"/>	08 7122	Automatic Door Operators for the Disabled
2019-12-06	<input type="checkbox"/>	08 8000	Glazing
2019-12-06	<input type="checkbox"/>	08 8300	Unframed Mirrored Glazing
	<input type="checkbox"/>	08 8816	Between Glass Blinds Units

- 08 8840 Switchable Privacy Glass Units
- 08 9100 Wall Louvers

**DIVISION 09 – FINISHES**

- 09 0565 Floor Preparation for Renovation Work
- 09 0600 Room Finish Schedule
- 09 2300 Gypsum Plastering
- 09 2400 Portland Cement Plastering
- 09 2600 Veneer Plastering
- 09 2613 Gypsum Veneer Plastering
- 09 2713 GFRG Fabrications
- 2019-12-06  09 2900 Gypsum Board Assemblies
- 2019-12-06  09 3000 Tiling
- 2019-12-06  09 5113 Acoustical Panel Ceilings
- 09 5133 Acoustical Metal Pan Ceilings
- 09 5135 Snap-in Metal Pan Ceilings
- 09 5423 Linear Metal Ceilings
- 09 5436 Suspended Decorative Grids
- 2019-12-06  09 5451 Linear Wood Wall and Ceiling Systems
- 09 6115 Concrete Floor Sealer
- 2019-12-06  09 6116 Liquid Floor Hardener
- 09 6119 Moisture Floor Treatment
- 09 6340 Stone Flooring
- 09 6400 Wood Flooring
- 2019-12-06  09 6500 Resilient Flooring
- 2019-12-06  09 6513 Resilient Base and Accessories
- 09 6520 Interlocking Rubber Tile Flooring
- 2019-12-06  09 6566 Resilient Athletic Flooring
  
- 09 6603 Precast Terrazzo Flooring for Stairs
- 09 6613 Thick-Set Terrazzo Flooring
- 09 6623 Thin-Set Terrazzo Flooring
- 2019-12-06  09 6723 Resinous Flooring
- 09 6800 Carpeting
- 09 6900 Access Flooring
- 09 7200 Wall Covering
- 09 7213 Tackboard Wall Coverings
- 09 7500 Interior Stone Facing
- 09 7723 Fabric Wrapped Panels
- 2019-12-06  09 8433 Acoustical Wall Panels
- 09 9100 Painting
- 09 9413 Textured Interior Coatings
- 09 9600 High-Performance Coatings
- 09 9613 Multicolored Interior Coatings
- 09 9653 Elastomeric Coatings
- 09 9663 Textured Acrylic Coating



## DIVISION 10 - SPECIALTIES

	<input type="checkbox"/>	10 1100	Visual Display Boards
	<input type="checkbox"/>	10 1146	Visual Display Fabrics
2019-12-06	<input type="checkbox"/>	10 1400	Interior Signage
	<input type="checkbox"/>	10 1443	Photoluminescent Exit Path Marking System
	<input type="checkbox"/>	10 1700	Telephone Specialties
2019-12-06	<input type="checkbox"/>	10 2113	Toilet Compartments
2019-12-06	<input type="checkbox"/>	10 2115	Cubicle Specialties
	<input type="checkbox"/>	10 2213	Wire Mesh Partitions
	<input type="checkbox"/>	10 2223	Accordion Folding Partitions
2019-12-06	<input type="checkbox"/>	10 2238	Operable Panel Partition
	<input type="checkbox"/>	10 2239	Vertically Folding Panel Partitions
2019-12-06	<input type="checkbox"/>	10 2613	Wall and Corner Guards
2019-12-06	<input type="checkbox"/>	10 2813	Toilet Accessories
	<input type="checkbox"/>	10 2819	Shower Doors and Enclosures
	<input type="checkbox"/>	10 4116	Emergency Key Cabinets
2019-12-06	<input type="checkbox"/>	10 4400	Fire Protection Specialties
	<input type="checkbox"/>	10 4450	Automated External Defibrillators (AED)
2019-12-06	<input type="checkbox"/>	10 5113	Metal Lockers
	<input type="checkbox"/>	10 5116	Wood Lockers
	<input type="checkbox"/>	10 5503	USPS-Delivery Postal Specialties
	<input type="checkbox"/>	10 5506	Private-Delivery Postal Specialties
	<input type="checkbox"/>	10 5713	Wall Mounted Coat Rack and Shelf
	<input type="checkbox"/>	10 7113	Exterior Sun Control Devices
2019-12-06	<input type="checkbox"/>	10 7310	Aluminum Walkways and Canopies
	<input type="checkbox"/>	10 7500	Flagpoles

## DIVISION 11 - EQUIPMENT

2019-12-06	<input type="checkbox"/>	11 1300	Loading Dock Equipment
	<input type="checkbox"/>	11 2400	Building Maintenance Equipment
	<input type="checkbox"/>	11 5213	Projection Screens
2019-12-06	<input type="checkbox"/>	11 7000	Medical Equipment
	<input type="checkbox"/>	11 7313	Wall-Mounted Fold-Up Writing Surface
	<input type="checkbox"/>	11 7316	Wall-Mounted Chart Rack

## DIVISION 12 - FURNISHINGS

	<input type="checkbox"/>	12 2113	Horizontal Louver Blinds
	<input type="checkbox"/>	12 2116	Vertical Louver Blinds
2019-12-06	<input type="checkbox"/>	12 2413	Roller Window Shades
	<input type="checkbox"/>	12 2500	Between Glass Blinds
	<input type="checkbox"/>	12 3553	Laboratory Casework
	<input type="checkbox"/>	12 3571	Stainless Steel Casework
	<input type="checkbox"/>	12 3640	Stone Countertops
2019-12-06	<input type="checkbox"/>	12 3661	Simulated Stone Countertops
	<input type="checkbox"/>	12 4816	Entrance Floor Grilles
	<input type="checkbox"/>	12 4843	Entrance Floor Mats
	<input type="checkbox"/>	12 6300	Stadium Seating
	<input type="checkbox"/>	12 9313	Bicycle Racks

## DIVISION 13 - SPECIAL CONSTRUCTION

<input type="checkbox"/>	13 2817	Ballpark Netting and Supports
<input type="checkbox"/>	13 3448	Pre-Fabricated Rooftop Helipad
<input type="checkbox"/>	13 4900	Radiation Protection
<input type="checkbox"/>	13 4923	RF/MRI Modular Shielding Enclosure

## DIVISION 14 - CONVEYING EQUIPMENT

2019-12-06	<input type="checkbox"/>	14 1000	Dumbwaiters
	<input type="checkbox"/>	14 2100	Electric Traction Elevators
	<input type="checkbox"/>	14 2400	Hydraulic Elevators
	<input type="checkbox"/>	14 3100	Escalators
	<input type="checkbox"/>	14 9100	Chutes
	<input type="checkbox"/>	14 9200	Pneumatic Tube Systems

## DIVISION 31 - EARTHWORK

2019-11-01	<input type="checkbox"/>	31 1100	Cleaning and Grubbing
	<input type="checkbox"/>	31 2119	Site Grading
2019-11-01	<input type="checkbox"/>	31 2300	Excavation & Fill
2019-11-01	<input type="checkbox"/>	31 2311	Earthwork for Building Construction
2019-12-06	<input type="checkbox"/>	31 2333	Trenching
2019-11-01	<input type="checkbox"/>	31 2500	Erosion Control
2019-11-01	<input type="checkbox"/>	31 2573	Temporary Silt Fence
2019-12-06	<input type="checkbox"/>	31 3116	Termite Control
2019-12-06	<input type="checkbox"/>	31 4134	Excavation/Trench & Shore
	<input type="checkbox"/>	31 6218	Mini-Piles
2019-11-01	<input type="checkbox"/>	31 6613	Aggregate Piers

## DIVISION 32 - EXTERIOR IMPROVEMENTS

2019-12-06	<input type="checkbox"/>	32 1123	Aggregate Base Course
2019-12-06	<input type="checkbox"/>	32 1313	Concrete Paving
	<input type="checkbox"/>	32 1413	Interlocking Precast Concrete Paving
	<input type="checkbox"/>	32 1416	Brick unit Paving
	<input type="checkbox"/>	32 1440	Stone Paving
2019-12-06	<input type="checkbox"/>	32 1613	Concrete Curb & gutters
2019-12-06	<input type="checkbox"/>	32 1614	Concrete Side Walk
	<input type="checkbox"/>	32 1715	Parking Accessories
	<input type="checkbox"/>	32 3113	Chain Link Fencing
	<input type="checkbox"/>	32 3115	Tubular Steel Fencing
	<input type="checkbox"/>	32 3117	Gate Operators
	<input type="checkbox"/>	32 3121	Cable Guardrail System
2019-12-06	<input type="checkbox"/>	32 3223	Segmental Retaining Walls

## **DIVISION 33 - UTILITIES**

2019-12-06	<input type="checkbox"/>	33 0516	Manholes Vaults
2019-12-06	<input type="checkbox"/>	33 0526	Utility Line Marking
2019-12-06	<input type="checkbox"/>	33 0527	Connection to Existing Utilities
2019-12-06	<input type="checkbox"/>	33 0533	Plastic Pipe (water & San. Swr.)
2019-12-06	<input type="checkbox"/>	33 1113	HDPE Potable Water Pipe
2019-12-06	<input type="checkbox"/>	33 1216	Valves
2019-12-06	<input type="checkbox"/>	33 1219	Hydrants
2019-12-06	<input type="checkbox"/>	33 1300	Disinfection of Waterlines
2019-12-06	<input type="checkbox"/>	33 4100	Storm Drainage

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## **SECTION 08 71 00**

### **DOOR HARDWARE**

#### **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. Mechanical and electrified door hardware for:
  - a. Swinging doors.
  - b. Sliding doors.
  - c. Gates.
- 2. Electronic access control system components, including:
  - a. Biometric access control reader.
  - b. Electronic access control devices.
- 3. Field verification, preparation and modification of existing doors and frames to receive new door hardware.
- 4. Lead-lining door hardware items required for radiation protection at door openings.

###### **B. Exclusions: Unless specifically listed in hardware sets, hardware is not specified in this section for:**

- 1. Windows
- 2. Cabinets (casework), including locks in cabinets
- 3. Signage
- 4. Toilet accessories
- 5. Overhead doors

###### **C. Related Sections:**

- 1. Division 01 Section "Alternates" for alternates affecting this section.
- 2. Division 07 Section "Joint Sealants" for sealant requirements applicable to threshold installation specified in this section.
- 3. Division 09 sections for touchup finishing or refinishing of existing openings modified by this section.
- 4. Division 13 Section "Radiation Protection" for requirements for lead-lining for door hardware at openings indicated to receive radiation protection.

5. Division 26 sections for connections to electrical power system and for low-voltage wiring.
6. Division 28 sections for coordination with other components of electronic access control system.

### 1.3 REFERENCES

#### A. UL - Underwriters Laboratories

1. UL 10B - Fire Test of Door Assemblies
2. UL 10C - Positive Pressure Test of Fire Door Assemblies
3. UL 1784 - Air Leakage Tests of Door Assemblies
4. UL 305 - Panic Hardware

#### B. DHI - Door and Hardware Institute

1. Sequence and Format for the Hardware Schedule
2. Recommended Locations for Builders Hardware
3. Key Systems and Nomenclature

#### C. ANSI - American National Standards Institute

1. ANSI/BHMA A156.1 - A156.29, and ANSI/BHMA A156.31 - Standards for Hardware and Specialties

### 1.4 SUBMITTALS

#### A. General:

1. Submit in accordance with Conditions of Contract and Division 01 requirements.
2. Highlight, encircle, or otherwise specifically identify on submittals deviations from Contract Documents, issues of incompatibility or other issues which may detrimentally affect the Work.
3. Prior to forwarding submittal, comply with procedures for verifying existing door and frame compatibility for new hardware, as specified in PART 3, "EXAMINATION" article, herein.

#### B. Action Submittals:

1. Product Data: Product data including manufacturers' technical product data for each item of door hardware, installation instructions, maintenance of operating parts and finish, and other information necessary to show compliance with requirements.
2. Riser and Wiring Diagrams: After final approval of hardware schedule, submit details of electrified door hardware, indicating:
  - a. Wiring Diagrams: For power, signal, and control wiring and including:
    - 1) Details of interface of electrified door hardware and building safety and security systems.
    - 2) Schematic diagram of systems that interface with electrified door hardware.
    - 3) Point-to-point wiring.
    - 4) Risers.

3. Samples for Verification: If requested by Architect, submit production sample or sample installations of each type of exposed hardware unit in finish indicated, and tagged with full description for coordination with schedule.
  - a. Samples will be returned to supplier in like-new condition. Units that are acceptable to Architect may, after final check of operations, be incorporated into Work, within limitations of key coordination requirements.
4. Door Hardware Schedule: Submit schedule with hardware sets in vertical format as illustrated by Sequence of Format for the Hardware Schedule as published by the Door and Hardware Institute. Indicate complete designations of each item required for each door or opening, include:
  - a. Door Index; include door number, heading number, and Architects hardware set number.
  - b. Opening Lock Function Spreadsheet: List locking device and function for each opening.
  - c. Type, style, function, size, and finish of each hardware item.
  - d. Name and manufacturer of each item.
  - e. Fastenings and other pertinent information.
  - f. Location of each hardware set cross-referenced to indications on Drawings.
  - g. Explanation of all abbreviations, symbols, and codes contained in schedule.
  - h. Mounting locations for hardware.
  - i. Door and frame sizes and materials.
  - j. Name and phone number for local manufacturer's representative for each product.
  - k. Operational Description of openings with any electrified hardware (locks, exits, electromagnetic locks, electric strikes, automatic operators, door position switches, magnetic holders or closer/holder units, and access control components). Operational description should include how door will operate on egress, ingress, and fire and smoke alarm connection.
    - 1) Submittal Sequence: Submit door hardware schedule concurrent with submissions of Product Data, Samples, and Shop Drawings. Coordinate submission of door hardware schedule with scheduling requirements of other work to facilitate fabrication of other work that is critical in Project construction schedule.
5. Key Schedule:
  - a. After Keying Conference, provide keying schedule listing levels of keying as well as explanation of key system's function, key symbols used and door numbers controlled.
  - b. Use ANSI/BHMA A156.28 "Recommended Practices for Keying Systems" as guideline for nomenclature, definitions, and approach for selecting optimal keying system.
  - c. Provide 3 copies of keying schedule for review prepared and detailed in accordance with referenced DHI publication. Include schematic keying diagram and index each key to unique door designations.
  - d. Index keying schedule by door number, keyset, hardware heading number, cross keying instructions, and special key stamping instructions.
  - e. Provide one complete bitting list of key cuts and one key system schematic illustrating system usage and expansion.
    - 1) Forward bitting list, key cuts and key system schematic directly to Owner, by means as directed by Owner.
  - f. Prepare key schedule by or under supervision of supplier, detailing Owner's final keying instructions for locks.

6. Templates: After final approval of hardware schedule, provide templates for doors, frames and other work specified to be factory prepared for door hardware installation.

C. Informational Submittals:

1. Qualification Data: For Supplier, Installer and Architectural Hardware Consultant.
2. Product Certificates for electrified door hardware, signed by manufacturer:
  - a. Certify that door hardware approved for use on types and sizes of labeled fire-rated doors complies with listed fire-rated door assemblies.
3. Certificates of Compliance:
  - a. Certificates of compliance for fire-rated hardware and installation instructions if requested by Architect or Authority Having Jurisdiction.
  - b. Installer Training Meeting Certification: Letter of compliance, signed by Contractor, attesting to completion of installer training meeting specified in "QUALITY ASSURANCE" article, herein.
  - c. Electrified Hardware Coordination Conference Certification: Letter of compliance, signed by Contractor, attesting to completion of electrified hardware coordination conference, specified in "QUALITY ASSURANCE" article, herein.
4. Product Test Reports: For compliance with accessibility requirements, based on evaluation of comprehensive tests performed by manufacturer and witnessed by qualified testing agency, for door hardware on doors located in accessible routes.
5. Warranty: Special warranty specified in this Section.

D. Closeout Submittals:

1. Operations and Maintenance Data : Provide in accordance with Division 01 and include:
  - a. Complete information on care, maintenance, and adjustment; data on repair and replacement parts, and information on preservation of finishes.
  - b. Catalog pages for each product.
  - c. Name, address, and phone number of local representative for each manufacturer.
  - d. Parts list for each product.
  - e. Final approved hardware schedule, edited to reflect conditions as-installed.
  - f. Final keying schedule
  - g. Copies of floor plans with keying nomenclature
  - h. As-installed wiring diagrams for each opening connected to power, both low voltage and 110 volts.
  - i. Copy of warranties including appropriate reference numbers for manufacturers to identify project.

## 1.5 QUALITY ASSURANCE

- A. Product Substitutions: Comply with product requirements stated in Division 01 and as specified herein.
  1. Where specific manufacturer's product is named and accompanied by "No Substitute," including make or model number or other designation, provide product specified. (Note: Certain products have been selected for their unique characteristics and particular project suitability.)



- a. Where no additional products or manufacturers are listed in product category, requirements for “No Substitute” govern product selection.
  2. Where products indicate “acceptable manufacturers” or “acceptable manufacturers and products”, provide product from specified manufacturers, subject to compliance with specified requirements and “Single Source Responsibility” requirements stated herein.
- B. Supplier Qualifications and Responsibilities: Recognized architectural hardware supplier with record of successful in-service performance for supplying door hardware similar in quantity, type, and quality to that indicated for this Project and that provides certified Architectural Hardware Consultant (AHC) available to Owner, Architect, and Contractor, at reasonable times during the Work for consultation.
1. Warehousing Facilities: In Project's vicinity.
  2. Scheduling Responsibility: Preparation of door hardware and keying schedules.
  3. Engineering Responsibility: Preparation of data for electrified door hardware, including Shop Drawings, based on testing and engineering analysis of manufacturer's standard units in assemblies similar to those indicated for this Project.
  4. Coordination Responsibility: Coordinate installation of electronic security hardware with Architect and electrical engineers and provide installation and technical data to Architect and other related subcontractors.
    - a. Upon completion of electronic security hardware installation, inspect and verify that all components are working properly.
- C. Installer Qualifications: Qualified tradesmen, skilled in application of commercial grade hardware with record of successful in-service performance for installing door hardware similar in quantity, type, and quality to that indicated for this Project.
- D. Architectural Hardware Consultant Qualifications: Person who is experienced in providing consulting services for door hardware installations that are comparable in material, design, and extent to that indicated for this Project and meets these requirements:
1. For door hardware, DHI-certified, Architectural Hardware Consultant (AHC).
  2. Can provide installation and technical data to Architect and other related subcontractors.
  3. Can inspect and verify components are in working order upon completion of installation.
  4. Capable of producing wiring diagrams.
  5. Capable of coordinating installation of electrified hardware with Architect and electrical engineers.
- E. Single Source Responsibility: Obtain each type of door hardware from single manufacturer.
1. Provide electrified door hardware from same manufacturer as mechanical door hardware, unless otherwise indicated.
  2. Manufacturers that perform electrical modifications and that are listed by testing and inspecting agency acceptable to authorities having jurisdiction are acceptable.
- F. Fire-Rated Door Openings: Provide door hardware for fire-rated openings that complies with NFPA 80 and requirements of authorities having jurisdiction. Provide only items of door hardware that are listed and are identical to products tested by Underwriters Laboratories, Intertek Testing Services, or other testing and inspecting organizations acceptable to authorities having jurisdiction for use on types and sizes of doors indicated, based on testing at positive pressure and according to NFPA 252 or UL 10C and in compliance with requirements of fire-rated door and door frame labels.

- G. Smoke- and Draft-Control Door Assemblies: Where smoke- and draft-control door assemblies are required, provide door hardware that meets requirements of assemblies tested according to UL 1784 and installed in compliance with NFPA 105.
  - 1. Air Leakage Rate: Maximum air leakage of 0.3 cfm/sq. ft. (3 cu. m per minute/sq. m) at tested pressure differential of 0.3-inch wg (75 Pa) of water.
- H. Electrified Door Hardware: Listed and labeled as defined in NFPA 70, Article 100, by testing agency acceptable to authorities having jurisdiction.
- I. Means of Egress Doors: Latches do not require more than 15 lbf (67 N) to release latch. Locks do not require use of key, tool, or special knowledge for operation.
- J. Accessibility Requirements: For door hardware on doors in an accessible route, comply with governing accessibility regulations cited in "REFERENCES" article, herein.
  - 1. Provide operating devices that do not require tight grasping, pinching, or twisting of wrist and that operate with force of not more than 5 lbf (22.2 N).
  - 2. Maximum opening-force requirements:
    - a. Interior, Non-Fire-Rated Hinged Doors: 5 lbf (22.2 N) applied perpendicular to door.
    - b. Sliding or Folding Doors: 5 lbf (22.2 N) applied parallel to door at latch.
    - c. Fire Doors: Minimum opening force allowable by authorities having jurisdiction.
  - 3. Bevel raised thresholds with slope of not more than 1:2. Provide thresholds not more than 1/2 inch (13 mm) high.
  - 4. Adjust door closer sweep periods so that, from open position of 70 degrees, door will take at least 3 seconds to move to 3 inches (75 mm) from latch, measured to leading edge of door.
- K. Keying Conference: Conduct conference at Project site to comply with requirements in Division 01.
  - 1. Attendees: Owner, Contractor, Architect, Installer, Owner's security consultant, and Supplier's Architectural Hardware Consultant.
  - 2. Incorporate keying conference decisions into final keying schedule after reviewing door hardware keying system including:
    - a. Function of building, flow of traffic, purpose of each area, degree of security required, and plans for future expansion.
    - b. Preliminary key system schematic diagram.
    - c. Requirements for key control system.
    - d. Requirements for access control.
    - e. Address for delivery of keys.
- L. Pre-installation 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. Inspect and discuss preparatory work performed by other trades.
  - 3. Inspect and discuss electrical roughing-in for electrified door hardware.
  - 4. Review sequence of operation for each type of electrified door hardware.
  - 5. Review required testing, inspecting, and certifying procedures.

M. Coordination Conferences:

1. Installation Coordination Conference: Prior to hardware installation, schedule and hold meeting to review questions or concerns related to proper installation and adjustment of door hardware.
  - a. Attendees: Door hardware supplier, door hardware installer, Contractor.
  - b. After meeting, provide letter of compliance to Architect, indicating when meeting was held and who was in attendance.
2. Electrified Hardware Coordination Conference: Prior to ordering electrified hardware, schedule and hold meeting to coordinate door hardware with security, electrical, doors and frames, and other related suppliers.
  - a. Attendees: electrified door hardware supplier, doors and frames supplier, electrified door hardware installer, electrical subcontractor, Owner, Owner's security consultant, Architect and Contractor.
  - b. After meeting, provide letter of compliance to Architect, indicating when coordination conference was held and who was in attendance.

#### 1.6 DELIVERY, STORAGE, AND HANDLING

- A. Inventory door hardware on receipt and provide secure lock-up for hardware delivered to Project site.
- B. Tag each item or package separately with identification coordinated with final door hardware schedule, and include installation instructions, templates, and necessary fasteners with each item or package.
  1. Deliver each article of hardware in manufacturer's original packaging.
- C. Project Conditions:
  1. Maintain manufacturer-recommended environmental conditions throughout storage and installation periods.
  2. Provide secure lock-up for door hardware delivered to Project, but not yet installed. Control handling and installation of hardware items so that completion of Work will not be delayed by hardware losses both before and after installation.
- D. Protection and Damage:
  1. Promptly replace products damaged during shipping.
  2. Handle hardware in manner to avoid damage, marring, or scratching. Correct, replace or repair products damaged during Work.
  3. Protect products against malfunction due to paint, solvent, cleanser, or any chemical agent.
- E. Deliver keys to manufacturer of key control system for subsequent delivery to Owner.
- F. Deliver keys to Owner by registered mail or overnight package service.

## 1.7 COORDINATION

- A. Coordinate layout and installation of floor-recessed door hardware with floor construction. Cast anchoring inserts into concrete. Concrete, reinforcement, and formwork requirements are specified in Division 03.
- B. Installation Templates: Distribute for doors, frames, and other work specified to be factory prepared. Check Shop Drawings of other work to confirm that adequate provisions are made for locating and installing door hardware to comply with indicated requirements.
- C. Security: Coordinate installation of door hardware, keying, and access control with Owner's security consultant.
- D. Electrical System Roughing-In: Coordinate layout and installation of electrified door hardware with connections to power supplies and building safety and security systems.
- E. Existing Openings: Where hardware components are scheduled for application to existing construction or where modifications to existing door hardware are required, field verify existing conditions and coordinate installation of door hardware to suit opening conditions and to provide proper door operation.
- F. Direct shipments not permitted, unless approved by Contractor.

## 1.8 WARRANTY

- A. Special Warranty: Manufacturer's standard form in which manufacturer agrees to repair or replace components of door hardware that fail in materials or workmanship within specified warranty period.
  - 1. Warranty Period: Years from date of Substantial Completion, for durations indicated.
    - a. Closers:
      - 1) Mechanical: 30 years.
    - b. Automatic Operators: 2 year.
    - c. Exit Devices:
      - 1) Mechanical: 3 years.
      - 2) Electrified: 1 year.
    - d. Locksets:
      - 1) Mechanical: 3 years.
      - 2) Electrified: 1 year.
    - e. Key Blanks: Lifetime
  - 2. Warranty does not cover damage or faulty operation due to improper installation, improper use or abuse.

## 1.9 MAINTENANCE

- A. Maintenance Tools:

1. Furnish complete set of special tools required for maintenance and adjustment of hardware, including changing of cylinders.

## **PART 2 - PRODUCTS**

### **2.1 MANUFACTURERS**

- A. The Owner requires use of certain products for their unique characteristics and particular project suitability to insure continuity of existing and future performance and maintenance standards. After investigating available product offerings, the Awarding Authority has elected to prepare proprietary specifications. These products are specified with the notation: "No Substitute."
  1. Where "No Substitute" is noted, submittals and substitution requests for other products will not be considered.
- B. Approval of manufacturers and/or products other than those listed as "Scheduled Manufacturer" or "Acceptable Manufacturers" in the individual article for the product category shall be in accordance with QUALITY ASSURANCE article, herein.
- C. Approval of products from manufacturers indicated in "Acceptable Manufacturers" is contingent upon those products providing all functions and features and meeting all requirements of scheduled manufacturer's product.
- D. Hand of Door: Drawings show direction of slide, swing, or hand of each door leaf. Furnish each item of hardware for proper installation and operation of door movement as shown.
- E. Where specified hardware is not adaptable to finished shape or size of members requiring hardware, furnish suitable types having same operation and quality as type specified, subject to Architect's approval.

### **2.2 MATERIALS**

- A. Fasteners
  1. Provide hardware manufactured to conform to published templates, generally prepared for machine screw installation.
  2. Furnish screws for installation with each hardware item. Finish exposed (exposed under any condition) screws to match hardware finish, or, if exposed in surfaces of other work, to match finish of this other work including prepared for paint surfaces to receive painted finish.
  3. Provide concealed fasteners for hardware units exposed when door is closed except when no standard units of type specified are available with concealed fasteners. Do not use thru-bolts for installation where bolt head or nut on opposite face is exposed in other work unless thru-bolts are required to fasten hardware securely. Review door specification and advise Architect if thru-bolts are required.
  4. Install hardware with fasteners provided by hardware manufacturer.
- B. Provide screws, bolts, expansion shields, drop plates and other devices necessary for hardware installation.

1. Where fasteners are exposed to view: Finish to match adjacent door hardware material.
- C. Cable and Connectors: Hardwired Electronic Access Control Lockset and Exit Device Trim:
1. Data: 24AWG, 4 conductor shielded, Belden 9843, 9841 or comparable.
  2. DC Power: 18 AWG, 2 conductor, Belden 8760 or comparable.
  3. Provide type of data and DC power cabling required by access control device manufacturer for this installation.
  4. Where scheduled in the hardware sets, provide each item of electrified hardware and wire harnesses with sufficient number and wire gauge with standardized Molex plug connectors to accommodate electric function of specified hardware. Provide Molex connectors that plug directly into connectors from harnesses, electric locking and power transfer devices. Provide through-door wire harness for each electrified locking device installed in a door and wire harness for each electrified hinge, electrified continuous hinge, electrified pivot, and electric power transfer for connection to power supplies.

## 2.3 HINGES

### A. Manufacturers and Products:

1. Scheduled Manufacturer and Product: Ives 5BB series
2. Acceptable Manufacturers and Products: Hager BB series, McKinney TA/T4A series

### B. Requirements:

1. Provide five-knuckle, ball bearing hinges conforming to ANSI/BHMA A156.1.
2. 1-3/4 inch (44 mm) thick doors, up to and including 36 inches (914 mm) wide:
  - a. Exterior: Standard weight, bronze or stainless steel, 4-1/2 inches (114 mm) high
  - b. Interior: Standard weight, steel, 4-1/2 inches (114 mm) high
3. 1-3/4 inch (44 mm) thick doors over 36 inches (914 mm) wide:
  - a. Exterior: Heavy weight, bronze/stainless steel, 5 inches (127 mm) high
  - b. Interior: Heavy weight, steel, 5 inches (127 mm) high
4. 2 inches or thicker doors:
  - a. Exterior: Heavy weight, bronze or stainless steel, 5 inches (127 mm) high
  - b. Interior: Heavy weight, steel, 5 inches (127 mm) high
5. Provide three hinges per door leaf for doors 90 inches (2286 mm) or less in height, and one additional hinge for each 30 inches (762 mm) of additional door height.
6. Where new hinges are specified for existing doors or existing frames, provide new hinges of identical size to hinge preparation present in existing door or existing frame.
7. Hinge Pins: Except as otherwise indicated, provide hinge pins as follows:
  - a. Steel Hinges: Steel pins
  - b. Non-Ferrous Hinges: Stainless steel pins
  - c. Out-Swinging Exterior Doors: Non-removable pins
  - d. Out-Swinging Interior Lockable Doors: Non-removable pins
  - e. Interior Non-lockable Doors: Non-rising pins

8. Width of hinges: 4-1/2 inches (114 mm) at 1-3/4 inch (44 mm) thick doors, and 5 inches (127 mm) at 2 inches (51 mm) or thicker doors. Adjust hinge width as required for door, frame, and wall conditions to allow proper degree of opening.
9. Doors 36 inches (914 mm) wide or less furnish hinges 4-1/2 inches (114 mm) high; doors greater than 36 inches (914 mm) wide furnish hinges 5 inches (127 mm) high, heavy weight or standard weight as specified.
10. Provide hinges with electrified options as scheduled in the hardware sets. Provide with sufficient number and wire gage to accommodate electric function of specified hardware. Locate electric hinge at second hinge from bottom or nearest to electrified locking component.
11. Provide mortar guard for each electrified hinge specified.
12. Provide spring hinges where specified. Provide two spring hinges and one bearing hinge per door leaf for doors 90 inches (2286 mm) or less in height. Provide one additional bearing hinge for each 30 inches (762 mm) of additional door height.

## 2.4 CYLINDRICAL LOCKS – GRADE 1

### A. Manufacturers and Products:

1. Scheduled Manufacturer and Product: Corbin-Russwin – Mechanical; Schlage ND Series - Electrified
2. Acceptable Manufacturers and Products: No Substitution.

### B. Requirements:

1. Provide cylindrical locks conforming to the following standards and requirements:
  - a. ANSI/BHMA A156.2 Series 4000, Grade 1.
  - b. UL 10C for 4'-0" x 10'-0" 3-hour fire door.
  - c. Florida Building Code (ASTM E330, E1886, E1996) and Miami Dade (TAS 201, 202, 203) requirements for hurricanes.
2. Cylinders: Refer to "KEYING" article, herein.
3. Provide cylindrical locksets exceeding the ANSI/BHMA A156.2 Grade 1 performance standards for strength, security, and durability in the categories below:
  - a. Abusive Locked Lever Torque Test – minimum 3,100 inch-pounds without gaining access
  - b. Cycle life - tested to minimum 10 million cycles per ANSI/BHMA A156.2 Cycle Test with no visible lever sag or use of performance aids such as set screws or spacers.
4. Provide locks with standard 2-3/4 inches (70 mm) backset, unless noted otherwise, with 1/2 inch latch throw. Provide proper latch throw for UL listing at pairs.
5. Provide locksets with separate anti-rotation thru-bolts, and no exposed screws.
6. Provide independently operating levers with two external return spring cassettes mounted under roses to prevent lever sag.
7. Provide standard ASA strikes unless extended lip strikes are necessary to protect trim.
8. Provide electrified options as scheduled in the hardware sets.
9. Lever Trim: Solid cast levers without plastic inserts, and wrought roses on both sides.
  - a. Lever Design: Dane.
  - b. Knurled finishes at openings serving rooms considered to be hazardous.

## 2.5 EXIT DEVICES

### LOW PROFILE PUSH BAR EXIT DEVICES

#### A. Manufacturers and Products:

1. Scheduled Manufacturer and Product: Von Duprin 99-series.
2. Acceptable Manufacturer and Product: No Substitution.

B. The maximum exit device projection shall be a maximum of 3-1/16" when activated. The exit device bar shall have an average minimum thickness of .201". The pushpad surface shall be constructed of stainless steel; pushpads with plastic or Lexan coatings shall not be acceptable. Nylon bearings and stainless steel springs shall be used for long life and durability. Only torsion or compression springs are acceptable. Extension type springs are not acceptable. All device covers shall be of cast brass, deep drawn steel or stainless steel. Latchbolts shall be of stainless steel and shall have a deadlocking latch for extra security, except at full-glass or two-light glass doors requiring narrow stile device. Mounting screws shall be concealed to deter tampering. All ferrous parts shall be zinc coated to prevent rusting.

C. Single point, one quarter turn hex dogging shall be standard on panic listed devices. Optional key cylinder dogging shall be available, and furnished if so indicated in the hardware sets, on panic listed devices. Devices with hex key dogging shall be easily field converted to cylinder dogging.

D. All devices shall be listed by Underwriters Laboratories for safety as panic hardware. Fire rated devices shall be UL listed for A label and lesser class doors, 4' x 8' single and 8 x 8' pair. The model number shall be located on the end cap; devices having the model number located other than on the end cap shall not be acceptable.

E. All exit devices shall have a unitized installation feature and may be cut in the field to size. Devices shall be closed on all sides with no pinch points. The pushpad shall be designed to prevent pinching of the fingers when depressed.

F. Exit Device trim to be throughbolted. Lever trim to be heavy duty forged escutcheon with free wheeling levers.

G. All exit devices shall conform to Federal Specification FF-H-1820, and be certified as meeting ANSI A156.3, Grade 1 requirements.

## 2.6 CYLINDERS

#### A. Manufacturers:

1. Scheduled Manufacturer: Corbin-Russwin
2. Acceptable Manufacturers: No Substitution

#### B. Requirements:

1. Provide permanent cylinders/cores to match Owner's existing key system, compliant with ANSI/BHMA A156.5; latest revision, Section 12, Grade 1; permanent cylinders; cylinder



face finished to match lockset, manufacturer's series as indicated. Refer to "KEYING" article, herein.

2. Replaceable Construction Cores.
  - a. Provide temporary construction cores replaceable by permanent cores, furnished in accordance with the following requirements.
    - 1) 3 construction control keys
    - 2) 12 construction change (day) keys.
  - b. Owner or Owner's Representative will replace temporary construction cores with permanent cores.

## 2.7 KEYING

- A. Provide a factory registered keying system, complying with guidelines in ANSI/BHMA A156.28, incorporating decisions made at keying conference.
- B. Provide cylinders/cores keyed into Owner's existing factory registered keying system, complying with guidelines in ANSI/BHMA A156.28, incorporating decisions made at keying conference.
- C. Requirements:
  1. Provide permanent cylinders/cores keyed by the manufacturer according to the following key system.
    - a. Master Keying system as directed by the Owner.
  2. Forward biting list and keys separately from cylinders, by means as directed by Owner. Failure to comply with forwarding requirements shall be cause for replacement of cylinders/cores involved at no additional cost to Owner.
  3. Provide keys with the following features:
    - a. Material: Nickel silver; minimum thickness of .107-inch (2.3mm)
    - b. Patent Protection: Keys and blanks protected by one or more utility patent(s).
  4. Identification:
    - a. Mark permanent cylinders/cores and keys with applicable blind code per DHI publication "Keying Systems and Nomenclature" for identification. Blind code marks shall not include actual key cuts.
    - b. Identification stamping provisions must be approved by the Architect and Owner.
    - c. Stamp cylinders/cores and keys with Owner's unique key system facility code as established by the manufacturer; key symbol and embossed or stamped with "DO NOT DUPLICATE" along with the "PATENTED" or patent number to enforce the patent protection.
    - d. Failure to comply with stamping requirements shall be cause for replacement of keys involved at no additional cost to Owner.
    - e. Forward permanent cylinders/cores to Owner, separately from keys, by means as directed by Owner.
  5. Quantity: Furnish in the following quantities.
    - a. Change (Day) Keys: 3 per cylinder/core.

- b. Master Keys: 6.

## 2.8 KEY CONTROL SYSTEM

### A. Manufacturers:

1. Scheduled Manufacturer: Telkee
2. Acceptable Manufacturers: HPC, Lund

### B. Requirements:

1. Provide key control system, including envelopes, labels, tags with self-locking key clips, receipt forms, 3-way visible card index, temporary markers, permanent markers, and standard metal cabinet, all as recommended by system manufacturer, with capacity for 150% of number of locks required for Project.
  - a. Provide complete cross index system set up by hardware supplier, and place keys on markers and hooks in cabinet as determined by final key schedule.
  - b. Provide hinged-panel type cabinet for wall mounting.

## 2.9 DOOR CLOSERS

### A. Manufacturers and Products:

1. Scheduled Manufacturer and Product: LCN 4040 series
2. Acceptable Manufacturers and Products: No Substitution.

### B. Requirements:

1. Provide door closers conforming to ANSI/BHMA A156.4 Grade 1 requirements by BHMA certified independent testing laboratory.
2. Provide door closers with fully hydraulic, full rack and pinion action cast iron cylinder.
3. Closer Body: 1-1/4 inch (32 mm) diameter, with 5/8 inch (16 mm) diameter heat-treated pinion journal.
4. Hydraulic Fluid: Fireproof, passing requirements of UL10C, and requiring no seasonal closer adjustment for temperatures ranging from 120 degrees F to -30 degrees F.
5. Spring Power: Continuously adjustable over full range of closer sizes, and providing reduced opening force as required by accessibility codes and standards. OPTION LCN No Substitute: Cylinder body to have "FAST" power adjust speed dial to visually indicate spring power.
6. Hydraulic Regulation: By tamper-proof, non-critical valves, with separate adjustment for latch speed, general speed, and backcheck.
7. Pressure Relief Valve (PRV) Technology: not permitted.
8. Provide special templates, drop plates, mounting brackets, or adapters for arms as required for details, overhead stops, and other door hardware items interfering with closer mounting.

## 2.10 DOOR TRIM

### A. Manufacturers:

1. Scheduled Manufacturer: Ives
2. Acceptable Manufacturers: Burns, Rockwood

B. Requirements:

1. Provide push plates 4 inches (102 mm) wide by 16 inches (406 mm) high by 0.050 inch (1 mm) thick and beveled 4 edges. Where width of door stile prevents use of 4 inches (102 mm) wide plate, adjust width to fit.
2. Provide push bars of solid bar stock, diameter and length as scheduled. Provide push bars of sufficient length to span from center to center of each stile. Where required, mount back to back with pull.
3. Provide offset pulls of solid bar stock, diameter and length as scheduled. Where required, mount back to back with push bar.
4. Provide flush pulls as scheduled. Where required, provide back-to-back mounted model.
5. Provide pulls of solid bar stock, diameter and length as scheduled. Where required, mount back to back with push bar.
6. Provide pull plates 4 inches (102 mm) wide by 16 inches (406 mm) high by 0.050 inch (1 mm) thick, beveled 4 edges, and prepped for pull. Where width of door stile prevents use of 4 inches (102 mm) wide plate, adjust width to fit.
7. Provide wire pulls of solid bar stock, diameter and length as scheduled.
8. Provide decorative pulls as scheduled. Where required, mount back to back with pull.

## 2.11 PROTECTION PLATES

A. Manufacturers:

1. Scheduled Manufacturer: Ives
2. Acceptable Manufacturers: Burns, Rockwood

B. Requirements:

1. Provide kick plates, mop plates, and armor plates minimum of 0.050 inch (1 mm) thick, beveled four edges as scheduled. Furnish with sheet metal or wood screws, finished to match plates.
2. Sizes of plates:
  - a. Kick Plates: 10 inches (254 mm) high by 2 inches (51 mm) less width of door on single doors, 1 inch (25 mm) less width of door on pairs
  - b. Mop Plates: 4 inches (102 mm) high by 2 inches (51 mm) less width of door on single doors, 1 inch (25 mm) less width of door on pairs
  - c. Armor Plates: 36 inches (914 mm) high by 2 inches (51 mm) less width of door on single doors, 1 inch (25 mm) less width of door on pairs

## 2.12 OVERHEAD STOPS AND OVERHEAD STOP/HOLDERS

A. Manufacturers:

1. Scheduled Manufacturers: Glynn-Johnson
2. Acceptable Manufacturers: Rixson, Sargent

B. Requirements:

1. Provide heavy duty concealed mounted overhead stop or holder as specified for exterior and interior vestibule single acting doors.
2. Provide heavy duty concealed mounted overhead stop or holder as specified for double acting doors.
3. Provide heavy or medium duty and concealed or surface mounted overhead stop or holder for interior doors as specified. Provide medium duty surface mounted overhead stop for interior doors and at any door that swings more than 140 degrees before striking wall, open against equipment, casework, sidelights, and where conditions do not allow wall stop or floor stop presents tripping hazard.
4. Where overhead holders are specified provide friction type at doors without closer and positive type at doors with closer.

## 2.13 DOOR STOPS AND HOLDERS

### A. Manufacturers:

1. Scheduled Manufacturer: Ives
2. Acceptable Manufacturers: Burns, Rockwood

### B. Provide door stops at each door leaf:

1. Provide wall stops wherever possible. Provide convex type where mortise type locks are used and concave type where cylindrical type locks are used.
2. Where a wall stop cannot be used, provide universal floor stops for low or high rise options.
3. Where wall or floor stop cannot be used, provide medium duty surface mounted overhead stop.

## 2.14 THRESHOLDS, SEALS, DOOR SWEEPS, AUTOMATIC DOOR BOTTOMS, AND GASKETING

### A. Manufacturers:

1. Scheduled Manufacturer: Zero International
2. Acceptable Manufacturers: National Guard, Reese

### B. Requirements:

1. Provide thresholds, weather-stripping (including door sweeps, seals, and astragals) and gasketing systems (including smoke, sound, and light) as specified and per architectural details. Match finish of other items.
2. Size of thresholds:
  - a. Saddle Thresholds: 1/2 inch (13 mm) high by jamb width by door width
  - b. Bumper Seal Thresholds: 1/2 inch (13 mm) high by 5 inches (127 mm) wide by door width
3. Provide door sweeps, seals, astragals, and auto door bottoms only of type where resilient or flexible seal strip is easily replaceable and readily available.

## 2.15 SILENCERS

### A. Manufacturers:

1. Scheduled Manufacturer: Ives
2. Acceptable Manufacturers: Burns, Rockwood

### B. Requirements:

1. Provide "push-in" type silencers for hollow metal or wood frames.
2. Provide one silencer per 30 inches (762 mm) of height on each single frame, and two for each pair frame.
3. Omit where gasketing is specified.

## 2.16 FINISHES

### A. Finish: BHMA 626/652 (US26D); except:

1. Hinges at Exterior Doors: BHMA 630 (US32D)
2. Continuous Hinges: BHMA 630 (US32D)
3. Continuous Hinges: BHMA 628 (US28)
4. Push Plates, Pulls, and Push Bars: BHMA 630 (US32D)
5. Protection Plates: BHMA 630 (US32D)
6. Overhead Stops and Holders: BHMA 630 (US32D)
7. Door Closers: Powder Coat to Match
8. Wall Stops: BHMA 630 (US32D)
9. Latch Protectors: BHMA 630 (US32D)
10. Weatherstripping: Clear Anodized Aluminum
11. Thresholds: Mill Finish Aluminum

## PART 3 - EXECUTION

### 3.1 EXAMINATION

- A. Prior to installation of hardware, examine doors and frames, with Installer present, for compliance with requirements for installation tolerances, labeled fire-rated door assembly construction, wall and floor construction, and other conditions affecting performance.
- B. Existing Door and Frame Compatibility: Field verify existing doors and frames receiving new hardware and existing conditions receiving new openings. Verify that new hardware is compatible with existing door and frame preparation and existing conditions.
- C. Examine roughing-in for electrical power systems to verify actual locations of wiring connections before electrified door hardware installation.
- D. Proceed with installation only after unsatisfactory conditions have been corrected.

### 3.2 PREPARATION

- A. Where on-site modification of doors and frames is required:

1. Carefully remove existing door hardware and components being reused. Clean, protect, tag, and store in accordance with storage and handling requirements specified herein.
2. Field modify and prepare existing door and frame for new hardware being installed.
3. When modifications are exposed to view, use concealed fasteners, when possible.
4. Prepare hardware locations and reinstall in accordance with installation requirements for new door hardware and with:
  - a. Steel Doors and Frames: For surface applied door hardware, drill and tap doors and frames according to ANSI/SDI A250.6.
  - b. Wood Doors: DHI WDHS.5 "Recommended Hardware Reinforcement Locations for Mineral Core Wood Flush Doors."
  - c. Doors in rated assemblies: NFPA 80 for restrictions on on-site door hardware preparation.

### 3.3 INSTALLATION

- A. Mounting Heights: Mount door hardware units at heights to comply with the following, unless otherwise indicated or required to comply with governing regulations.
  1. Standard Steel Doors and Frames: ANSI/SDI A250.8.
  2. Custom Steel Doors and Frames: HMMA 831.
  3. Wood Doors: DHI WDHS.3, "Recommended Locations for Architectural Hardware for Wood Flush Doors."
- B. Install each hardware item in compliance with manufacturer's instructions and recommendations, using only fasteners provided by manufacturer.
- C. Do not install surface mounted items until finishes have been completed on substrate. Protect all installed hardware during painting.
- D. Set units level, plumb and true to line and location. Adjust and reinforce attachment substrate as necessary for proper installation and operation.
- E. Drill and countersink units that are not factory prepared for anchorage fasteners. Space fasteners and anchors according to industry standards.
- F. Install operating parts so they move freely and smoothly without binding, sticking, or excessive clearance.
- G. Hinges: Install types and in quantities indicated in door hardware schedule but not fewer than quantity recommended by manufacturer for application indicated or one hinge for every 30 inches (750 mm) of door height, whichever is more stringent, unless other equivalent means of support for door, such as spring hinges or pivots, are provided.
- H. Intermediate Offset Pivots: Where offset pivots are indicated, provide intermediate offset pivots in quantities indicated in door hardware schedule but not fewer than one intermediate offset pivot per door and one additional intermediate offset pivot for every 30 inches (750 mm) of door height greater than 90 inches (2286 mm).
- I. Lock Cylinders: Install construction cores to secure building and areas during construction period.
  1. Replace construction cores with permanent cores as indicated in keying section.

- J. Lead Protection: Lead wrap hardware penetrating lead-lined doors. Levers and roses to be lead lined. Apply kick and armor plates on lead-lined doors with adhesive as recommended by manufacturer.
- K. Wiring: Coordinate with Division 26, ELECTRICAL sections for:
  - 1. Conduit, junction boxes and wire pulls.
  - 2. Connections to and from power supplies to electrified hardware.
  - 3. Connections to fire/smoke alarm system and smoke evacuation system.
  - 4. Connection of wire to door position switches and wire runs to central room or area, as directed by Architect.
  - 5. Testing and labeling wires with Architect's opening number.
- L. Key Control System: Tag keys and place them on markers and hooks in key control system cabinet, as determined by final keying schedule.
- M. Door Closers: Mount closers on room side of corridor doors, inside of exterior doors, and stair side of stairway doors from corridors. Closers shall not be visible in corridors, lobbies and other public spaces unless approved by Architect.
- N. Closer/holders: Mount closer/holders on room side of corridor doors, inside of exterior doors, and stair side of stairway doors.
- O. Power Supplies: Locate power supplies as indicated or, if not indicated, above accessible ceilings or in equipment room, or alternate location as directed by Architect.
  - 1. Configuration: Provide least number of power supplies required to adequately serve doors with electrified door hardware.
- P. Thresholds: Set thresholds in full bed of sealant complying with requirements specified in Division 07 Section "Joint Sealants."
- Q. Stops: Provide floor stops for doors unless wall or other type stops are indicated in door hardware schedule. Do not mount floor stops where they may impede traffic or present tripping hazard.
- R. Perimeter Gasketing: Apply to head and jamb, forming seal between door and frame.
- S. Meeting Stile Gasketing: Fasten to meeting stiles, forming seal when doors are closed.
- T. Door Bottoms: Apply to bottom of door, forming seal with threshold when door is closed.

### 3.4 FIELD QUALITY CONTROL

- A. Architectural Hardware Consultant: Engage qualified independent Architectural Hardware Consultant to perform inspections and to prepare inspection reports.
  - 1. Architectural Hardware Consultant will inspect door hardware and state in each report whether installed work complies with or deviates from requirements, including whether door hardware is properly installed and adjusted.

### 3.5 ADJUSTING

- A. Initial Adjustment: Adjust and check each operating item of door hardware and each door to ensure proper operation or function of every unit. Replace units that cannot be adjusted to operate as intended. Adjust door control devices to compensate for final operation of heating and ventilating equipment and to comply with referenced accessibility requirements.
  - 1. Spring Hinges: Adjust to achieve positive latching when door is allowed to close freely from an open position of 30 degrees.
  - 2. Electric Strikes: Adjust horizontal and vertical alignment of keeper to properly engage lock bolt.
  - 3. Door Closers: Adjust sweep period to comply with accessibility requirements and requirements of authorities having jurisdiction.
- B. Occupancy Adjustment: Approximately three months after date of Substantial Completion, Installer's Architectural Hardware Consultant shall examine and readjust each item of door hardware, including adjusting operating forces, as necessary to ensure function of doors, door hardware, and electrified door hardware.

### 3.6 CLEANING AND PROTECTION

- A. Clean adjacent surfaces soiled by door hardware installation.
- B. Clean operating items as necessary to restore proper function and finish.
- C. Provide final protection and maintain conditions that ensure door hardware is without damage or deterioration at time of Substantial Completion.

### 3.7 DEMONSTRATION

- A. Provide training for Owner's maintenance personnel to adjust, operate, and maintain door hardware and door hardware finishes. Refer to Division 01 Section "Demonstration and Training."

### 3.8 DOOR HARDWARE SCHEDULE

- A. Locksets, exit devices, and other hardware items are referenced in the following hardware sets for series, type and function. Refer to the above-specifications for special features, options, cylinders/keying, and other requirements.
- B. Hardware Sets:

Hardware Group No. 001

For use on Door #(s):

01-15-02A      01-15-03A      01-15-04A      01-15-05A      01-15-06A      01-15-07A

Provide each SL door(s) with the following:

QTY	DESCRIPTION	CATALOG NUMBER	FINISH	MFR
1 EA	NOTE			ADS

**18-01.01 WPMHC Expansion  
Childers Architect  
2020-02-14**

**Door Hardware**

**087100-20**



Hardware Group No. 002

For use on Door #(s):

01-00-02B	01-00-02C	01-00-02D	01-00-07A	01-01-00B	01-01-00C
01-05-01B	01-05-01G	01-08-01A	01-09-00B	01-09-00C	01-09-00D
01-09-00E	01-13-00A	01-13-01A	01-15-01A	01-15-01B	01-15-01C
01-16-01B	02-17-01B	02-17-01C	02-17-01D		

Provide each RU door(s) with the following:

QTY	EA	DESCRIPTION	CATALOG NUMBER	FINISH	MFR
1	EA	NOTE			UNK

Hardware Group No. 103

For use on Door #(s):

01-04-04	01-07-03	01-09-16	01-09-17	01-12-05	01-12-06
01-15-12	01-16-01A	01-16-05	01-16-08	01-16-09	01-16-10
01-16-12	02-17-39				

Provide each SGL door(s) with the following:

QTY	EA	DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3	EA	HINGE	5BB1 4.5 X 4.5	626	IVE
1	EA	CYLINDRICAL LOCK			C-R
1	EA	CYLINDER			C-R
1	EA	WALL STOP	WS406/407CCV	626	IVE
1	EA	GASKETING	188SBK (USE SILENCERS AT NON-RATED DOORS)	BK	ZER

Hardware Group No. 103A

For use on Door #(s):

02-17-25      02-17-28

Provide each SGL door(s) with the following:

QTY	EA	DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3	EA	HINGE	5BB1 4.5 X 4.5	626	IVE
1	EA	CYLINDRICAL LOCK			C-R
1	EA	CYLINDER			C-R
1	EA	WALL STOP	WS406/407CCV	626	IVE
1	EA	SEAL SET			UNK

Hardware Group No. 103W

For use on Door #(s):

01-08-14      01-08-15      01-11-03      01-11-04      01-11-07

Provide each SGL door(s) with the following:

QTY	EA	DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3	EA	HINGE	5BB1 5 X 4.5	626	IVE
1	EA	CYLINDRICAL LOCK			C-R
1	EA	CYLINDER			C-R
1	EA	WALL STOP	WS406/407CCV	626	IVE
1	EA	GASKETING	188SBK (USE SILENCERS AT NON-RATED DOORS)	BK	ZER

Hardware Group No. 201

For use on Door #(s):

01-09-07 01-11-05

Provide each SGL door(s) with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3	EA	HINGE	5BB1 4.5 X 4.5	626	IVE
1	EA	STOREROOM	CL3557 IC6 NZD W/ CT6	626	C-R
1	EA	CYLINDER			C-R
1	EA	SURFACE CLOSER	4040XP REG OR PA AS REQ	689	LCN
1	EA	KICK PLATE	8400 10" X 1" LDW B-CS	626	IVE
1	EA	WALL STOP	WS406/407CCV	626	IVE
1	EA	GASKETING	188SBK (USE SILENCERS AT NON-RATED DOORS)	BK	ZER

Hardware Group No. 201W

For use on Door #(s):

01-08-03 01-09-14 01-13-06

Provide each SGL door(s) with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3	EA	HINGE	5BB1 5 X 4.5	626	IVE
1	EA	STOREROOM	CL3557 IC6 NZD W/ CT6	626	C-R
1	EA	CYLINDER			C-R
1	EA	SURFACE CLOSER	4040XP REG OR PA AS REQ	689	LCN
1	EA	KICK PLATE	8400 10" X 1" LDW B-CS	626	IVE
1	EA	WALL STOP	WS406/407CCV	626	IVE
1	EA	GASKETING	188SBK (USE SILENCERS AT NON-RATED DOORS)	BK	ZER

Hardware Group No. 207

For use on Door #(s):

01-07-10

Provide each SGL door(s) with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3	EA	HINGE	5BB1 4.5 X 4.5	626	IVE
1	EA	STOREROOM	CL3557 IC6 NZD W/ CT6	626	C-R
1	EA	CYLINDER			C-R
1	EA	OH STOP	100S ADJ	630	GLY
1	EA	SURFACE CLOSER	4040XP REG OR PA AS REQ	689	LCN
1	EA	KICK PLATE	8400 10" X 1" LDW B-CS	626	IVE
1	EA	GASKETING	188SBK (USE SILENCERS AT NON-RATED DOORS)	BK	ZER

Hardware Group No. 207W

For use on Door #(s):

01-04-02

Provide each SGL door(s) with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3	EA	HINGE	5BB1 5 X 4.5	626	IVE
1	EA	STOREROOM	CL3557 IC6 NZD W/ CT6	626	C-R
1	EA	CYLINDER			C-R
1	EA	OH STOP	100S ADJ	630	GLY
1	EA	SURFACE CLOSER	4040XP REG OR PA AS REQ	689	LCN
1	EA	KICK PLATE	8400 10" X 1" LDW B-CS	626	IVE
1	EA	GASKETING	188SBK (USE SILENCERS AT NON-RATED DOORS)	BK	ZER

Hardware Group No. 301

For use on Door #(s):

01-02-02      01-02-03      01-02-04      01-02-05      01-02-06      01-02-07  
 01-15-09      01-16-03      02-17-05      02-17-06      02-17-32      02-17-33

Provide each SGL door(s) with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3	EA	HINGE	5BB1 4.5 X 4.5	626	IVE
1	EA	CYLINDRICAL LOCK	CL3520 NZD		C-R
1	EA	SURFACE CLOSER	4040XP REG OR PA AS REQ	689	LCN
1	EA	KICK PLATE	8400 10" X 1" LDW B-CS	626	IVE
1	EA	WALL STOP	WS406/407CCV	626	IVE
1	EA	GASKETING	188SBK (USE SILENCERS AT NON-RATED DOORS)	BK	ZER

Hardware Group No. 301W

For use on Door #(s):

01-00-07      01-07-05      01-07-06      01-08-04      01-09-003      01-11-01  
 01-11-02      01-13-03      02-17-02      02-17-03

Provide each SGL door(s) with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3	EA	HINGE	5BB1 5 X 4.5	626	IVE
1	EA	CYLINDRICAL LOCK	CL3520 NZD		C-R
1	EA	SURFACE CLOSER	4040XP REG OR PA AS REQ	689	LCN
1	EA	KICK PLATE	8400 10" X 1" LDW B-CS	626	IVE
1	EA	WALL STOP	WS406/407CCV	626	IVE
1	EA	GASKETING	188SBK (USE SILENCERS AT NON-RATED DOORS)	BK	ZER

Hardware Group No. 403SW

For use on Door #(s):

01-13-05

Provide each SGL door(s) with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3	EA	HINGE	5BB1 5 X 4.5	626	IVE
1	EA	PASSAGE/CLOSET	CL3510 NZD	626	C-R
1	EA	OH STOP	100S ADJ	630	GLY
1	EA	GASKETING	188SBK (USE SILENCERS AT NON-RATED DOORS)	BK	ZER

Hardware Group No. 403W

For use on Door #(s):

01-07-07	01-07-08	01-07-09	01-07-11	01-08-05	01-09-04
01-09-05	01-09-06	01-09-11	01-10-02	01-10-03	01-10-04
01-10-05B	01-10-06B	01-10-07	01-10-08	01-10-09	01-12-01
01-12-02	01-12-03				

Provide each SGL door(s) with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3	EA	HINGE	5BB1 5 X 4.5	626	IVE
1	EA	PASSAGE/CLOSET	CL3510 NZD	626	C-R
1	EA	WALL STOP	WS406/407CCV	626	IVE
1	EA	GASKETING	188SBK (USE SILENCERS AT NON-RATED DOORS)	BK	ZER

Hardware Group No. 501

For use on Door #(s):

01-02-01	01-02-08A	01-02-08B	01-05-01A	01-06-01	01-07-12
01-09-12	01-09-13	01-09-15	01-13-00B	01-13-12	01-14-04A
01-14-04B	01-16-02	01-16-06A	01-16-06B	01-16-07A	02-17-04A
02-17-04B	02-17-24	02-19-01B			

Provide each SGL door(s) with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3	EA	HINGE	5BB1 4.5 X 4.5	626	IVE
1	EA	CYLINDRICAL LOCK			C-R
1	EA	CYLINDER			C-R
1	EA	SURFACE CLOSER	4040XP REG OR PA AS REQ	689	LCN
1	EA	KICK PLATE	8400 10" X 1" LDW B-CS	626	IVE
1	EA	WALL STOP	WS406/407CCV	626	IVE
1	EA	GASKETING	188SBK (USE SILENCERS AT NON-RATED DOORS)	BK	ZER

Hardware Group No. 501A

For use on Door #(s):

02-17-26

Provide each SGL door(s) with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3	EA	HINGE	5BB1 4.5 X 4.5	626	IVE
1	EA	CYLINDRICAL LOCK			C-R
1	EA	CYLINDER			C-R
1	EA	SURFACE CLOSER	4040XP REG OR PA AS REQ	689	LCN
1	EA	WALL STOP	WS406/407CCV	626	IVE
1	EA	SEAL SET			UNK

Hardware Group No. 501W

For use on Door #(s):

01-04-05      01-04-06      01-04-07      01-10-00      01-11-08

Provide each SGL door(s) with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3	EA	HINGE	5BB1 5 X 4.5	626	IVE
1	EA	CYLINDRICAL LOCK			C-R
1	EA	CYLINDER			C-R
1	EA	SURFACE CLOSER	4040XP REG OR PA AS REQ	689	LCN
1	EA	KICK PLATE	8400 10" X 1" LDW B-CS	626	IVE
1	EA	WALL STOP	WS406/407CCV	626	IVE
1	EA	GASKETING	188SBK (USE SILENCERS AT NON-RATED DOORS)	BK	ZER

Hardware Group No. 503

For use on Door #(s):

02-17-38

Provide each SGL door(s) with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3	EA	HINGE	5BB1 4.5 X 4.5	626	IVE
1	EA	CYLINDRICAL LOCK			C-R
1	EA	CYLINDER			C-R
1	EA	WALL STOP	WS406/407CCV	626	IVE
1	EA	GASKETING	188SBK (USE SILENCERS AT NON-RATED DOORS)	BK	ZER

Hardware Group No. 503W

For use on Door #(s):

01-01-01A      01-01-02A      01-01-03A      01-01-04A

Provide each SGL door(s) with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3	EA	HINGE	5BB1 5 X 4.5	626	IVE
1	EA	CYLINDRICAL LOCK			C-R
1	EA	CYLINDER			C-R
1	EA	WALL STOP	WS406/407CCV	626	IVE
1	EA	GASKETING	188SBK (USE SILENCERS AT NON-RATED DOORS)	BK	ZER

Hardware Group No. 507

For use on Door #(s):

01-08-06

Provide each SGL door(s) with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3	EA	HINGE	5BB1 4.5 X 4.5	626	IVE
1	EA	CYLINDRICAL LOCK			C-R
1	EA	CYLINDER			C-R
1	EA	OH STOP	100S ADJ	630	GLY
1	EA	SURFACE CLOSER	4040XP REG OR PA AS REQ	689	LCN
1	EA	KICK PLATE	8400 10" X 1" LDW B-CS	626	IVE
1	EA	GASKETING	188SBK (USE SILENCERS AT NON-RATED DOORS)	BK	ZER

Hardware Group No. 603W

For use on Door #(s):

01-08-16

Provide each SGL door(s) with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3	EA	HINGE	5BB1 HT 5 X 4.5	652	IVE
1	EA	PUSH/PULL LATCH	HL6 5" A (MOUNT/WITH HANDLES POINTING DOWNWARD)	626	SCH
1	EA	WALL STOP	WS406/407CCV	626	IVE
1	EA	GASKETING	188SBK (USE SILENCERS AT NON-RATED DOORS)	BK	ZER

Hardware Group No. 700M

For use on Door #(s):

01-14-01A 01-14-02A

Provide each PR door(s) with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
2	EA	CONT. HINGE	224HD	628	IVE
1	EA	REMOVABLE MULLION	KR4954 STAB	689	VON
1	EA	PANIC HARDWARE	99-L-06	626	VON
1	EA	PANIC HARDWARE	99-L-DT-06	626	VON
2	EA	CYLINDER			C-R
1	EA	CYLINDER			C-R
1	EA	CYLINDER			C-R
2	EA	SURFACE CLOSER	4040XP REG OR PA AS REQ	689	LCN
2	EA	KICK PLATE	8400 10" X 1" LDW B-CS	626	IVE
2	EA	WALL STOP	WS406/407CCV	626	IVE
1	EA	GASKETING	188SBK (USE SILENCERS AT NON-RATED DOORS)	BK	ZER

Hardware Group No. 701

For use on Door #(s):

01-07-02A 01-11-00B 02-19-07

Provide each SGL door(s) with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
1	EA	CONT. HINGE	224HD	628	IVE
1	EA	PANIC HARDWARE	99-L-06	626	VON
1	EA	CYLINDER			C-R
1	EA	CYLINDER			C-R
1	EA	SURFACE CLOSER	4040XP REG OR PA AS REQ	689	LCN
1	EA	KICK PLATE	8400 10" X 2" LDW B-CS	626	IVE
1	EA	WALL STOP	WS406/407CCV	626	IVE
1	EA	GASKETING	188SBK (USE SILENCERS AT NON-RATED DOORS)	BK	ZER

Hardware Group No. 711

For use on Door #(s):

02-18-00

Provide each SGL door(s) with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
1	EA	CONT. HINGE	224HD	628	IVE
1	EA	PANIC HARDWARE	99-L-NL-06	643E	VON
1	EA	CYLINDER			C-R
1	EA	SURFACE CLOSER	4040XP REG OR PA AS REQ	689	LCN
1	EA	KICK PLATE	8400 10" X 2" LDW B-CS	626	IVE
1	EA	WALL STOP	WS406/407CCV	626	IVE
1	EA	GASKETING	188SBK (USE SILENCERS AT NON-RATED DOORS)	BK	ZER

Hardware Group No. 731CR

For use on Door #(s):

01-14-03

Provide each SGL door(s) with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
1	EA	CONT. HINGE	224HD	628	IVE
1	EA	FIRE EXIT HARDWARE	99-L-BE-F-06	626	VON
1	EA	SURFACE CLOSER	4040XP SCUSH	689	LCN
1	EA	KICK PLATE	8400 10" X 2" LDW B-CS	626	IVE
1	EA	GASKETING	188SBK PSA	BK	ZER

Hardware Group No. 731R

For use on Door #(s):

01-00-10A 01-19-06A

Provide each SGL door(s) with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
1	EA	CONT. HINGE	224HD	628	IVE
1	EA	FIRE EXIT HARDWARE	99-L-BE-F-06	626	VON
1	EA	SURFACE CLOSER	4040XP REG OR PA AS REQ	689	LCN
1	EA	KICK PLATE	8400 10" X 2" LDW B-CS	626	IVE
1	EA	WALL STOP	WS406/407CCV	626	IVE
1	EA	GASKETING	188SBK PSA	BK	ZER

Hardware Group No. 800AV

For use on Door #(s):

01-00-00B

Provide each PR door(s) with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
2	EA	CONT. HINGE	224HD	628	IVE
2	EA	DUMMY PUSH BAR	330	626	VON
2	EA	90 DEG OFFSET PULL	8190HD 10" A	630	IVE
2	EA	SURFACE CLOSER	4040XP SCUSH	689	LCN
1	EA	SEAL SET			UNK
1	EA	ASTRAGAL			UNK

Hardware Group No. 801L

For use on Door #(s):

02-17-10A 02-17-10B 02-17-11A 02-17-11B 02-17-35A 02-17-35B  
02-17-40 02-17-48A 02-17-48B 02-17-49A 02-17-49B

Provide each SGL door(s) with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
1	EA	CONT. HINGE	224HD	628	IVE
1	EA	DEADBOLT			C-R
1	EA	CYLINDER			C-R
1	EA	PUSH PLATE	8200 4" X 16"	630	IVE
1	EA	PULL PLATE	8302 10" 4" X 16"	630	IVE
1	EA	SURFACE CLOSER	4040XP REG OR PA AS REQ	689	LCN
1	EA	KICK PLATE	8400 10" X 2" LDW B-CS	626	IVE
1	EA	WALL STOP	WS406/407CCV	626	IVE
1	EA	GASKETING	188SBK (USE SILENCERS AT NON-RATED DOORS)	BK	ZER

Hardware Group No. C001

For use on Door #(s):

01-15-02B 01-15-03B 01-15-04B 01-15-05B 01-15-06B 01-15-07B

Provide each SL door(s) with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
1	EA	MULTITECH READER	MT15 12 VDC	BLK	SCE
1	EA	DOOR CONTACT	679-05	WHT	SCE
1	EA	POWER SUPPLY			UNK
1	EA	NOTE			ADS



Hardware Group No. C201

For use on Door #(s):

01-00-09	01-01-01B	01-01-02B	01-01-03B	01-01-04B	01-01-05
01-01-06	01-01-07	01-01-08	01-01-09	01-01-10	01-05-02
01-05-04	01-05-05	01-06-02	01-07-01	01-08-01B	01-08-11
01-08-12	01-08-13	01-10-10	01-10-11	01-11-06	01-12-00
01-12-04	01-13-07	01-13-10	01-13-11	01-15-10	01-15-11A
01-15-11B	01-15-14	01-16-04	02-05-10	02-05-11	02-05-12
02-17-01A	02-17-08	02-17-09	02-17-29	02-17-30	02-17-34A
02-17-34B	02-17-46	02-19-16	02-19-21		

Provide each SGL door(s) with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3	EA	HINGE	5BB1 4.5 X 4.5	626	IVE
1	EA	POWER TRANSFER	EPT10 CON	689	VON
1	EA	EU STOREROOM LOCK	ND80TDEU RHO RX CON 12V/24V DC	626	SCH
1	EA	CYLINDER			C-R
1	EA	SURFACE CLOSER	4040XP REG OR PA AS REQ	689	LCN
1	EA	KICK PLATE	8400 10" X 2" LDW B-CS	626	IVE
1	EA	WALL STOP	WS406/407CCV	626	IVE
1	EA	GASKETING	188SBK (USE SILENCERS AT NON-RATED DOORS)	BK	ZER
1	EA	MULTITECH READER	MT15 12 VDC	BLK	SCE
1	EA	DOOR CONTACT	679-05	WHT	SCE
1	EA	POWER SUPPLY			UNK
1	EA	POWER SUPPLY			UNK

Hardware Group No. C201C

For use on Door #(s):

01-01-00A

Provide each SGL door(s) with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3	EA	HINGE	5BB1 4.5 X 4.5	626	IVE
1	EA	POWER TRANSFER	EPT10 CON	689	VON
1	EA	EU STOREROOM LOCK	ND80TDEU RHO RX CON 12V/24V DC	626	SCH
1	EA	CYLINDER			C-R
1	EA	SURFACE CLOSER	4040XP SCUSH	689	LCN
1	EA	KICK PLATE	8400 10" X 2" LDW B-CS	626	IVE
1	EA	GASKETING	188SBK (USE SILENCERS AT NON-RATED DOORS)	BK	ZER
1	EA	MULTITECH READER	MT15 12 VDC	BLK	SCE
1	EA	DOOR CONTACT	679-05	WHT	SCE
1	EA	POWER SUPPLY			UNK
1	EA	POWER SUPPLY			UNK

Hardware Group No. C201W

For use on Door #(s):

01-04-03      01-05-03      01-07-02B      01-07-02C      01-08-02      01-08-07  
 01-08-08      01-08-09      01-08-10      01-13-04      02-17-07

Provide each SGL door(s) with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3	EA	HINGE	5BB1 5 X 4.5	626	IVE
1	EA	POWER TRANSFER	EPT10 CON	689	VON
1	EA	EU STOREROOM LOCK	ND80TDEU RHO RX CON 12V/24V DC	626	SCH
1	EA	CYLINDER			C-R
1	EA	SURFACE CLOSER	4040XP REG OR PA AS REQ	689	LCN
1	EA	KICK PLATE	8400 10" X 2" LDW B-CS	626	IVE
1	EA	WALL STOP	WS406/407CCV	626	IVE
1	EA	GASKETING	188SBK (USE SILENCERS AT NON-RATED DOORS)	BK	ZER
1	EA	MULTITECH READER	MT15 12 VDC	BLK	SCE
1	EA	DOOR CONTACT	679-05	WHT	SCE
1	EA	POWER SUPPLY			UNK
1	EA	POWER SUPPLY			UNK

Hardware Group No. C205

For use on Door #(s):

03-19-01

Provide each SGL door(s) with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3	EA	HINGE	5BB1 4.5 X 4.5	626	IVE
1	EA	POWER TRANSFER	EPT10 CON	689	VON
1	EA	EU STOREROOM LOCK	ND80TDEU RHO RX CON 12V/24V DC	626	SCH
1	EA	CYLINDER			C-R
1	EA	SURFACE CLOSER	4040XP SCUSH	689	LCN
1	EA	KICK PLATE	8400 10" X 2" LDW B-CS	626	IVE
1	EA	RAIN DRIP	142AA	AA	ZER
1	EA	GASKETING	328AA-S	AA	ZER
1	EA	DOOR SWEEP	39A	A	ZER
1	EA	THRESHOLD	65A-223	A	ZER
1	EA	MULTITECH READER	MT15 12 VDC	BLK	SCE
1	EA	DOOR CONTACT	679-05	WHT	SCE
1	EA	POWER SUPPLY			UNK
1	EA	POWER SUPPLY			UNK

Hardware Group No. C205I

For use on Door #(s):

01-04-01

Provide each SGL door(s) with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3	EA	HINGE	5BB1 4.5 X 4.5	626	IVE
1	EA	POWER TRANSFER	EPT10 CON	689	VON
1	EA	EU STOREROOM LOCK	ND80TDEU RHO RX CON 12V/24V DC	626	SCH
1	EA	CYLINDER			C-R
1	EA	SURFACE CLOSER	4040XP SCUSH	689	LCN
1	EA	KICK PLATE	8400 10" X 2" LDW B-CS	626	IVE
1	EA	RAIN DRIP	142AA	AA	ZER
1	EA	GASKETING	328AA-S	AA	ZER
1	EA	DOOR SWEEP	39A	A	ZER
1	EA	THRESHOLD	655A-223	A	ZER
1	EA	MULTITECH READER	MT15 12 VDC	BLK	SCE
1	EA	DOOR CONTACT	679-05	WHT	SCE
1	EA	POWER SUPPLY			UNK
1	EA	POWER SUPPLY			UNK

Hardware Group No. C207

For use on Door #(s):

01-00-02A 01-09-00A 02-19-02B

Provide each SGL door(s) with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3	EA	HINGE	5BB1 4.5 X 4.5	626	IVE
1	EA	POWER TRANSFER	EPT10 CON	689	VON
1	EA	EU STOREROOM LOCK	ND80TDEU RHO RX CON 12V/24V DC	626	SCH
1	EA	CYLINDER			C-R
1	EA	OH STOP	100S ADJ	630	GLY
1	EA	SURFACE CLOSER	4040XP REG OR PA AS REQ	689	LCN
1	EA	KICK PLATE	8400 10" X 2" LDW B-CS	626	IVE
1	EA	GASKETING	188SBK (USE SILENCERS AT NON-RATED DOORS)	BK	ZER
1	EA	MULTITECH READER	MT15 12 VDC	BLK	SCE
1	EA	DOOR CONTACT	679-05	WHT	SCE
1	EA	POWER SUPPLY			UNK
1	EA	POWER SUPPLY			UNK

Hardware Group No. C711

For use on Door #(s):

01-07-14      01-08-00A      01-08-00B      01-09-01A      01-09-01B      01-11-00A  
 01-11-00C      01-13-01      01-16-11      02-19-01A

Provide each SGL door(s) with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
1	EA	CONT. HINGE	224HD EPT	628	IVE
1	EA	POWER TRANSFER	EPT10 CON	689	VON
1	EA	ELEC PANIC HARDWARE	RX-QEL-99-L-NL-06-CON 24 VDC	626	VON
1	EA	CYLINDER			C-R
1	EA	CYLINDER			C-R
1	EA	SURFACE CLOSER	4040XP REG OR PA AS REQ	689	LCN
1	EA	KICK PLATE	8400 10" X 2" LDW B-CS	626	IVE
1	EA	WALL STOP	WS406/407CCV	626	IVE
1	EA	GASKETING	188SBK (USE SILENCERS AT NON-RATED DOORS)	BK	ZER
1	EA	MULTITECH READER	MT15 12 VDC	BLK	SCE
1	EA	DOOR CONTACT	679-05	WHT	SCE
1	EA	POWER SUPPLY			UNK
1	EA	POWER SUPPLY	PS902 900-2RS 120/240 VAC		VON

Hardware Group No. C711C

For use on Door #(s):

02-17-23      02-17-36      02-17-45

Provide each SGL door(s) with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
1	EA	CONT. HINGE	224HD EPT	628	IVE
1	EA	POWER TRANSFER	EPT10 CON	689	VON
1	EA	ELEC PANIC HARDWARE	RX-QEL-99-L-NL-06-CON 24 VDC	626	VON
1	EA	CYLINDER			C-R
1	EA	CYLINDER			C-R
1	EA	SURFACE CLOSER	4040XP SCUSH	689	LCN
1	EA	KICK PLATE	8400 10" X 2" LDW B-CS	626	IVE
1	EA	GASKETING	188SBK (USE SILENCERS AT NON-RATED DOORS)	BK	ZER
1	EA	MULTITECH READER	MT15 12 VDC	BLK	SCE
1	EA	DOOR CONTACT	679-05	WHT	SCE
1	EA	POWER SUPPLY			UNK
1	EA	POWER SUPPLY	PS902 900-2RS 120/240 VAC		VON

Hardware Group No. C711R

For use on Door #(s):

02-18-02          02-19-08          02-19-30

Provide each SGL door(s) with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
1	EA	CONT. HINGE	224HD EPT	628	IVE
1	EA	POWER TRANSFER	EPT10 CON	689	VON
1	EA	ELEC FIRE EXIT HARDWARE	RX-QEL-99-L-NL-F-06-CON 24 VDC	626	VON
1	EA	CYLINDER			C-R
1	EA	CYLINDER			C-R
1	EA	SURFACE CLOSER	4040XP REG OR PA AS REQ	689	LCN
1	EA	KICK PLATE	8400 10" X 2" LDW B-CS	626	IVE
1	EA	WALL STOP	WS406/407CCV	626	IVE
1	EA	GASKETING	188SBK (USE SILENCERS AT NON-RATED DOORS)	BK	ZER
1	EA	MULTITECH READER	MT15 12 VDC	BLK	SCE
1	EA	DOOR CONTACT	679-05	WHT	SCE
1	EA	POWER SUPPLY			UNK
1	EA	POWER SUPPLY	PS902 900-2RS 120/240 VAC		VON

Hardware Group No. C714AM

For use on Door #(s):

01-00-00A

Provide each PR door(s) with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
2	EA	CONT. HINGE	224HD EPT	628	IVE
2	EA	POWER TRANSFER	EPT10 CON	689	VON
1	EA	REMOVABLE MULLION	KR4954 STAB	689	VON
1	EA	ELEC PANIC HARDWARE	RX-QEL-99-EO-CON 24 VDC	626	VON
1	EA	ELEC PANIC HARDWARE	RX-QEL-99-NL-OP-110MD-CON 24 VDC	626	VON
1	EA	CYLINDER			C-R
1	EA	CYLINDER			C-R
2	EA	90 DEG OFFSET PULL	8190HD 10" A	630	IVE
2	EA	SURFACE CLOSER	4040XP SCUSH	689	LCN
1	EA	SEAL SET			UNK
2	EA	DOOR SWEEP	39A	A	ZER
1	EA	THRESHOLD	65A-223	A	ZER
1	EA	MULTITECH READER	MT15 12 VDC	BLK	SCE
2	EA	DOOR CONTACT	679-05	WHT	SCE
1	EA	POWER SUPPLY			UNK
1	EA	POWER SUPPLY	PS902 900-2RS 120/240 VAC		VON

Hardware Group No. C715

For use on Door #(s):

01-00-10B      01-00-11      01-00-13      01-00-14      01-05-01C      01-13-01B  
01-14-01B      01-14-02B      01-16-07B      01-19-06B

Provide each SGL door(s) with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
1	EA	CONT. HINGE	224HD EPT	628	IVE
1	EA	POWER TRANSFER	EPT10 CON	689	VON
1	EA	ELEC PANIC HARDWARE	RX-QEL-99-NL-OP-110MD-CON 24 VDC	626	VON
1	EA	CYLINDER			C-R
1	EA	CYLINDER			C-R
1	EA	90 DEG OFFSET PULL	8190HD 10" A	630	IVE
1	EA	SURFACE CLOSER	4040XP SCUSH	689	LCN
1	EA	RAIN DRIP	142AA	AA	ZER
1	EA	GASKETING	328AA-S	AA	ZER
1	EA	DOOR SWEEP	39A	A	ZER
1	EA	THRESHOLD	65A-223	A	ZER
1	EA	MULTITECH READER	MT15 12 VDC	BLK	SCE
1	EA	DOOR CONTACT	679-05	WHT	SCE
1	EA	POWER SUPPLY			UNK
1	EA	POWER SUPPLY	PS902 900-2RS 120/240 VAC		VON

**End of Section**