ADDENDUM NO. 3

TO THE PLANS AND SPECIFICATIONS FOR:

JFSB 2024 CNA Remodel Office Suites 1041 & 1053

Prepared by

Brigham Young University Planning & Construction Dept. 240 Brewster Physical Plant Provo, Utah 84602 19 March 2024

This Addendum issued 19 March 2024 is for all persons preparing bids and as such shall be made a part of the contract documents. This Addendum consists of this cover sheet and 31 pages. In case of any conflict between the drawings, specifications, and this Addendum, this Addendum shall govern. All changes, corrections, deletions and/or additions to the initial bidding documents shall be included in the Bidder's proposal. Receipt of this Addendum shall be acknowledged on the Bid proposal forms.

Approved by:

Anthony R. Burdette, Director of Construction

<u>19 March 2024</u> Date

2024 - CNA (JSFB) Joseph Fielding Smith Building Interior Remodel of Office Suite 1041 and Suite 1053 Work Order - #M8101

ADDENDUM NO. 3 - 03/19/2024

General Information:

- 1. As a matter of clarification, We have not able to find the details as to how the wall panels are connected to the floor and the ceiling systems. The wall to ceiling connection appears to be a u-channel type connection to the ceiling grid runners with a screw attachment.
- 2. As a matter of clarification, The existing hardwood doors are Maple.

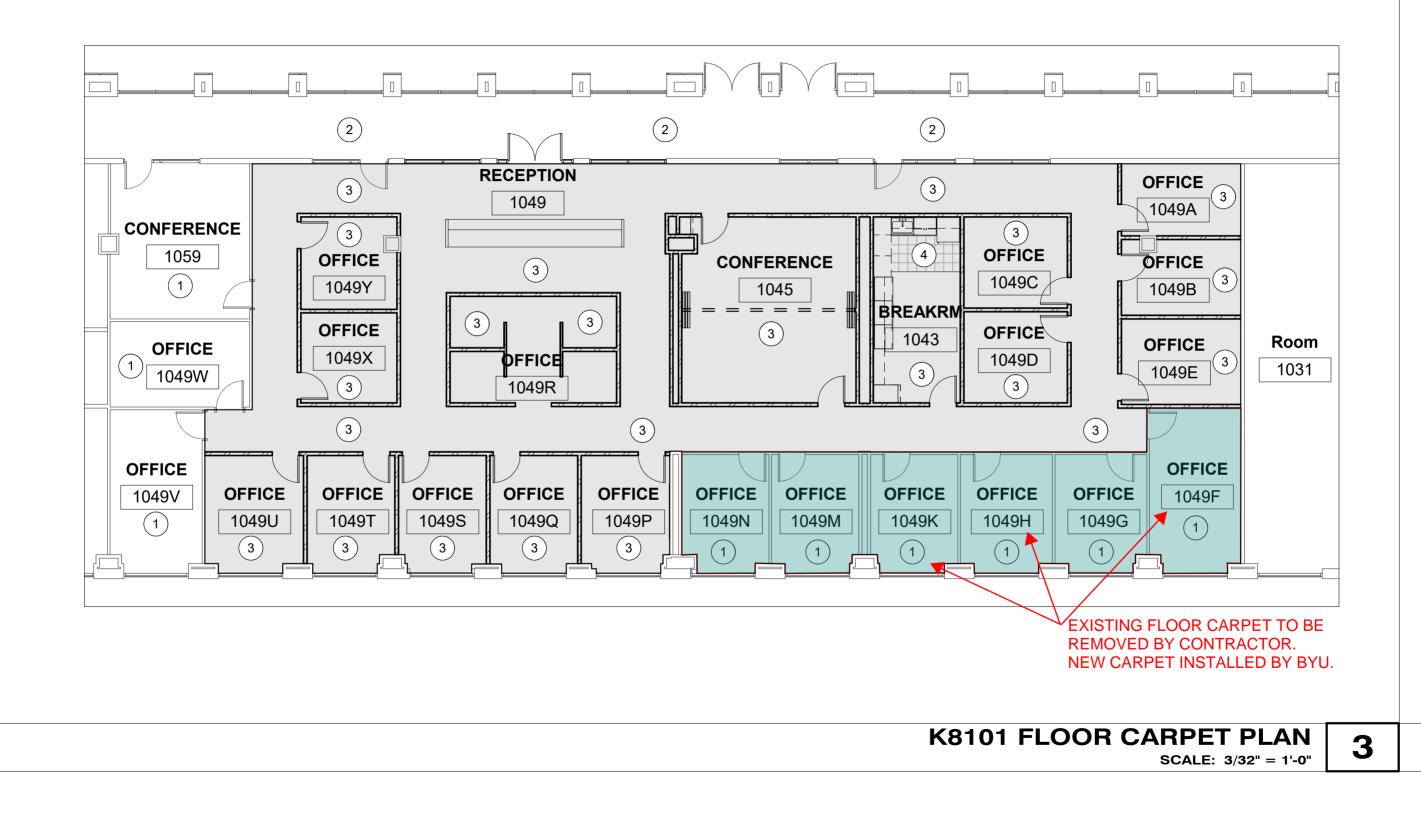
Drawing Information:

- 3. As a matter of clarification, Sheet A1.1, Detail 2, and A5.0, Detail 3, the floor carpet in Offices 1049F, G, H, K, M, and N is to be removed by the contractor. See the attached floor plan.
- 4. As a matter of clarification, Sheet A2.1 Detail #2, The new ceiling elevation is to be set at 10'-0". This is typical for all rooms.
- 5. As a matter of clarification, Sheet A3.1 Door schedule, The door hardware groups has been added to the schedule.
- 6. As a matter of clarification, Sheet A3.3 The folding door details have been added to this project, this includes elevation, head, and hole pattern details. See attached Sheet A3.3.
- 7. As a matter of clarification, Sheet A5.0 The new hardwood base is to be maple to match the existing base and doors See hardwood base detail.
- 8. As a matter of clarification, Sheet A5.1 Details 1 and 2, The metal letters and the vinyl letters are to provided and installed by BYU sign shop.
- As a matter of clarification, Sheet A5.1 Detail 1, The new wall behind the front reception desk is to be painted an accent color - Sherwin-Williams Kestrel White SW7516 (266-C5).
- 10. As a matter of clarification, Sheet F1, Furniture Plan, The new chair mats are to be provided and installed by BYU.
- 11. As a matter of clarification, Sheet P1.1 Run a 1-1/4" vent pipe in the wall behind the sink to the ceiling space. Install an air admittance valve in an accessible location above the ceiling.

12. As a matter of clarification, Sheet F1.1 – The existing fire sprinklers heads are not on flexible drops, they are hard piped to the ceiling. All new flexible drops installed on this project shall be a minimum of 4' in length.

Specification Information:

- 13. As a matter of clarification, Specification section 087100 Door Hardware has been included in this addendum.
- 14. As a matter of clarification, Specification section 101100 Visual Display Boards has been included in this addendum.



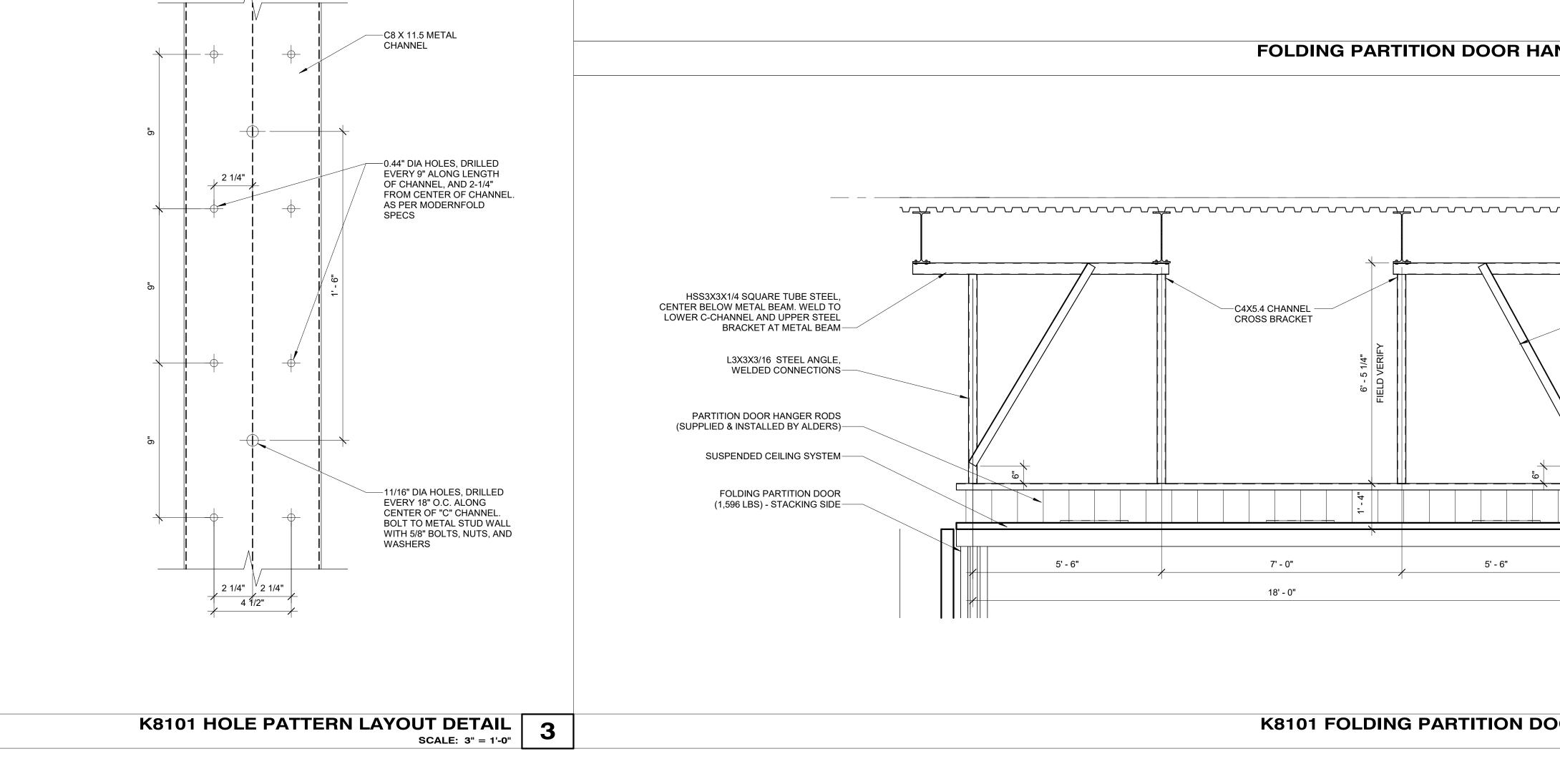
て	Hardware	Fire	Jamb	Head	Door					Frame	Door	
く	Group	Rating	Detail	Detail	Swing	Frame Material	Door Material	Height	Width	Туре	Туре	Mark
<u> </u>												
	03	7	2/A3.2	1/A3.2	RHR	METAL	HARDWOOD	7' - 0"	3' - 0"	1	1	1043
	02	7	2/A3.2	1/A3.2	RHR	METAL	HARDWOOD	7' - 0"	3' - 0"	1	1	1045A
)	02	7	2/A3.2	1/A3.2	RHR	METAL	HARDWOOD	7' - 0"	3' - 0"	1	1	1045B
)	04	7	4/A3.2	3/A3.2	LH/RH	METAL	HDWD/GLASS	7' - 0"	6' - 0"	2	2	1049
)	01		2/A3.2	1/A3.2	RHR	METAL	HARDWOOD	7' - 0"	3' - 0"	1	1	1049A
)	01		2/A3.2	1/A3.2	LHR	METAL	HARDWOOD	7' - 0"	3' - 0"	1	1	1049B
1	01		2/A3.2	1/A3.2	LHR	METAL	HARDWOOD	7' - 0"	3' - 0"	1	1	1049C
5	01		2/A3.2	1/A3.2	RHR	METAL	HARDWOOD	7' - 0"	3' - 0"	1	1	1049D
5	01		2/A3.2	1/A3.2	RHR	METAL	HARDWOOD	7' - 0"	3' - 0"	1	1	1049E
3	01		2/A3.2	1/A3.2	LHR	METAL	HARDWOOD	7' - 0"	3' - 0"	1	1	1049P
3	01		2/A3.2	1/A3.2	RHR	METAL	HARDWOOD	7' - 0"	3' - 0"	1	1	1049Q
イ	01		2/A3.2	1/A3.2	RHR	METAL	HARDWOOD	7' - 0"	3' - 0"	1	1	1049S
イ	01		2/A3.2	1/A3.2	LHR	METAL	HARDWOOD	7' - 0"	3' - 0"	1	1	1049T
イ	01		2/A3.2	1/A3.2	LHR	METAL	HARDWOOD	7' - 0"	3' - 0"	1	1	1049U
イ	01		2/A3.2	1/A3.2	RHR	METAL	HARDWOOD	7' - 0"	3' - 0"	1	1	1049X
イ	01		2/A3.2	1/A3.2	LHR	METAL	HARDWOOD	7' - 0"	3' - 0"	1	1	1049Y
KEM	02	(_			LHR	METAL	HARDWOOD	7' - 0"	3' - 0"	1	1	1059B

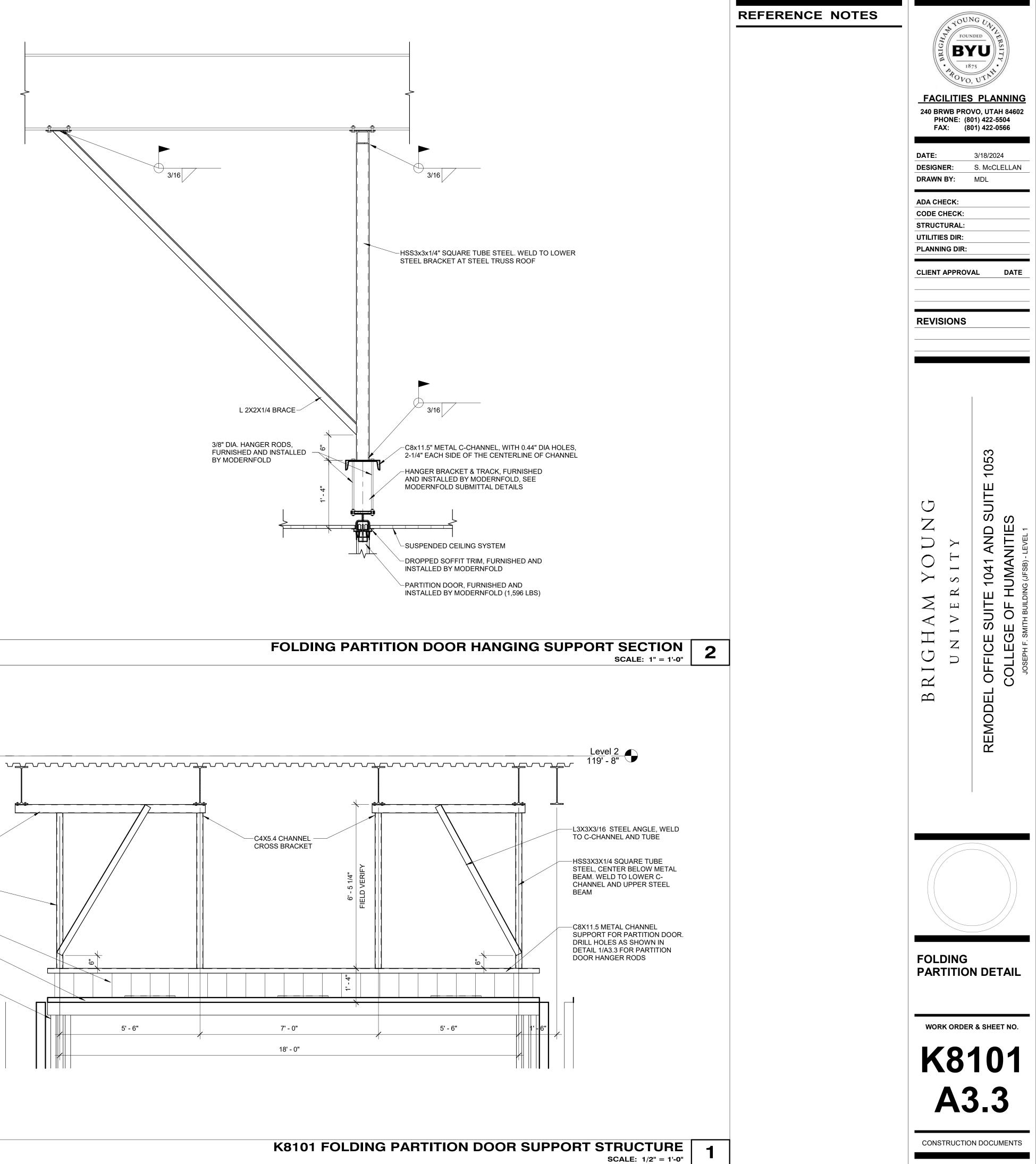
Remarks	
HANDLE / LOCKET- INSTALL NEW COVER PL	AIE
DOOR SCHEDULE	8

109202 OPT0365837 Version 1

Door#	HwSet#
1043	03
1045A	02
1045B	02
1049	04
1049A	01
1049B	01
1049C	01
1049D	01
1049E	01
1049P	01
1049Q	01
1049S	01
1049T	01
1049U	01
1049X	01
1049Y	01
1059B	02

Λ

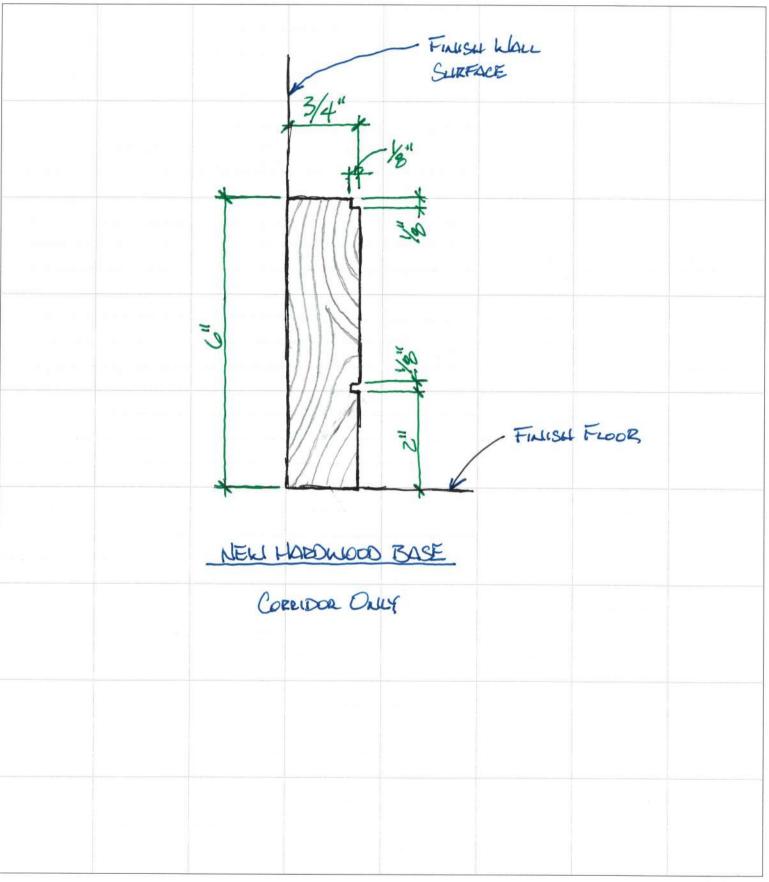






FACILITIES PLANNING

240 BRWB PROVO, UT 84602 PH (801) 422-5504 / FAX (801) 422-0565





SECTION 087100 - DOOR HARDWARE

PART 1 - GENERAL

1.01 SUMMARY

- A. Section includes:
 - 1. Mechanical and electrified door hardware
 - 2. Electronic access control system components
- B. Section excludes:
 - 1. Windows
 - 2. Cabinets (casework), including locks in cabinets.
 - 3. Signage
 - 4. Toilet accessories
 - 5. Overhead doors
- C. Related Sections:
 - 1. Division 01 "General Requirements" sections for Allowances, Alternates, Owner Furnished Contractor Installed, Project Management and Coordination.
 - 2. Division 06 Section "Rough Carpentry"
 - 3. Division 06 Section "Finish Carpentry"
 - 4. Division 07 Section "Joint Sealants" for sealant requirements applicable to threshold installation specified in this section.
 - 5. Division 08 Sections:
 - a. "Metal Doors and Frames"
 - b. "Flush Wood Doors"
 - c. "Stile and Rail Wood Doors"
 - d. "Interior Aluminum Doors and Frames"
 - e. "Aluminum-Framed Entrances and Storefronts"
 - f. "Stainless Steel Doors and Frames"
 - g. "Special Function Doors"
 - h. "Entrances"
 - 6. Division 26 "Electrical" sections for connections to electrical power system and for lowvoltage wiring.
 - 7. Division 28 "Electronic Safety and Security" sections for coordination with other components of electronic access control system and fire alarm system.

1.02 REFERENCES

- A. UL LLC
 - 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. Keying Systems and Nomenclature
- 4. Installation Guide for Doors and Hardware
- C. NFPA National Fire Protection Association
 - 1. NFPA 70 National Electric Code
 - 2. NFPA 80 2016 Edition Standard for Fire Doors and Other Opening Protectives
 - 3. NFPA 101 Life Safety Code
 - 4. NFPA 105 Smoke and Draft Control Door Assemblies
 - 5. NFPA 252 Fire Tests of Door Assemblies
- D. ANSI American National Standards Institute
 - 1. ANSI A117.1 2017 Edition Accessible and Usable Buildings and Facilities
 - 2. ANSI/BHMA A156.1 A156.29, and ANSI/BHMA A156.31 Standards for Hardware and Specialties
 - 3. ANSI/BHMA A156.28 Recommended Practices for Keying Systems
 - 4. ANSI/WDMA I.S. 1A Interior Architectural Wood Flush Doors
 - 5. ANSI/SDI A250.8 Standard Steel Doors and Frames

1.03 SUBMITTALS

- A. General:
 - 1. Submit in accordance with Conditions of Contract and Division 01 Submittal Procedures.
 - 2. Prior to forwarding submittal:
 - a. Review drawings and Sections from related trades to verify compatibility with specified hardware.
 - b. Highlight, encircle, or otherwise specifically identify on submittals: deviations from Contract Documents, issues of incompatibility or other issues which may detrimentally affect the Work.
- B. Action Submittals:
 - 1. Product Data: Submit 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. Door Hardware Schedule:
 - a. Submit 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 critical in Project construction schedule.

- b. Submit under direct supervision of a Door Hardware Institute (DHI) certified Architectural Hardware Consultant (AHC) or Door Hardware Consultant (DHC) with hardware sets in vertical format as illustrated by Sequence of Format for the Hardware Schedule published by DHI.
- c. Indicate complete designations of each item required for each opening, include:
 - 1) Door Index: door number, heading number, and Architect's hardware set number.
 - 2) Quantity, type, style, function, size, and finish of each hardware item.
 - 3) Name and manufacturer of each item.
 - 4) Fastenings and other pertinent information.
 - 5) Location of each hardware set cross-referenced to indications on Drawings.
 - 6) Explanation of all abbreviations, symbols, and codes contained in schedule.
 - 7) Mounting locations for hardware.
 - 8) Door and frame sizes and materials.
 - 9) Degree of door swing and handing.
 - 10) Operational Description of openings with electrified hardware covering egress, ingress (access), and fire/smoke alarm connections.
- 4. Key Schedule:
 - a. After Keying Conference, provide keying schedule that includes levels of keying, explanations of key system's function, key symbols used, and door numbers controlled.
 - 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. 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.
- C. Informational Submittals:
 - 1. Provide Qualification Data for Supplier, Installer and Architectural Hardware Consultant.
 - 2. Provide Product Data:
 - a. Certify that door hardware approved for use on types and sizes of labeled fire-rated doors complies with listed fire-rated door assemblies.
 - b. Include warranties for specified door hardware.
- 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. Final approved hardware schedule edited to reflect conditions as installed.
 - d. Final keying schedule
 - e. Copy of warranties including appropriate reference numbers for manufacturers to identify project.
 - f. As-installed wiring diagrams for each opening connected to power, both low voltage and 110 volts.

1.04 QUALITY ASSURANCE

- A. Qualifications and Responsibilities:
 - 1. Supplier: Recognized architectural hardware supplier with a minimum of 5 years documented experience supplying both mechanical and electromechanical door hardware similar in quantity, type, and quality to that indicated for this Project. Supplier to be recognized as a factory direct distributor by the manufacturer of the primary materials with a warehousing facility in the Project's vicinity. Supplier to have on staff, a certified Architectural Hardware Consultant (AHC) or Door Hardware Consultant (DHC) available to Owner, Architect, and Contractor, at reasonable times during the Work for consultation.
 - 2. Installer: Qualified tradesperson skilled in the application of commercial grade hardware with experience installing door hardware similar in quantity, type, and quality as indicated for this Project.
 - 3. Architectural Hardware Consultant: 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:
 - a. For door hardware: DHI certified AHC or DHC.
 - b. Can provide installation and technical data to Architect and other related subcontractors.
 - c. Can inspect and verify components are in working order upon completion of installation.
 - d. Capable of producing wiring diagram and coordinating installation of electrified hardware with Architect and electrical engineers.
 - 4. Single Source Responsibility: Obtain each type of door hardware from single manufacturer.
- B. Pre-Installation Meetings
 - 1. Keying Conference
 - a. Incorporate keying conference decisions into final keying schedule after reviewing door hardware keying system including:
 - 1) Function of building, flow of traffic, purpose of each area, degree of security required, and plans for future expansion.
 - 2) Preliminary key system schematic diagram.
 - 3) Requirements for key control system.
 - 4) Requirements for access control.
 - 5) Address for delivery of keys.
 - 2. Pre-installation Conference
 - Review and finalize construction schedule and verify availability of materials, Installer's personnel, equipment, and facilities needed to make progress and avoid delays.
 - b. Inspect and discuss preparatory work performed by other trades.
 - c. Inspect and discuss electrical roughing-in for electrified door hardware.
 - d. Review sequence of operation for each type of electrified door hardware.
 - e. Review required testing, inspecting, and certifying procedures.
 - f. Review questions or concerns related to proper installation and adjustment of door hardware.
 - 3. Electrified Hardware Coordination Conference:
 - a. Prior to ordering electrified hardware, schedule and hold meeting to coordinate door hardware with security, electrical, doors and frames, and other related suppliers.

1.05 DELIVERY, STORAGE, AND HANDLING

- A. Inventory door hardware on receipt and provide secure lock-up for hardware delivered to Project site. Promptly replace products damaged during shipping.
- 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. Deliver each article of hardware in manufacturer's original packaging.
- C. Maintain manufacturer-recommended environmental conditions throughout storage and installation periods.
- D. Provide secure lock-up for door hardware delivered to Project. Control handling and installation of hardware items so that completion of Work will not be delayed by hardware losses both before and after installation.
- E. Handle hardware in manner to avoid damage, marring, or scratching. Correct, replace or repair products damaged during Work. Protect products against malfunction due to paint, solvent, cleanser, or any chemical agent.

1.06 COORDINATION

- A. Coordinate layout and installation of floor-recessed door hardware with floor construction. Cast anchoring inserts into concrete.
- B. Installation Templates: Distribute for doors, frames, and other work specified to be factory or shop 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.

1.07 WARRANTY

- A. Manufacturer's standard form in which manufacturer agrees to repair or replace components of door hardware that fail in materials or workmanship within published warranty period.
 - 1. Warranty does not cover damage or faulty operation due to improper installation, improper use or abuse.
 - 2. Warranty Period: Beginning from date of Substantial Completion, for durations indicated in manufacturer's published listings.
 - a. Mechanical Warranty
 - 1) Locks
 - a) Schlage ND Series: 10 years
 - 2) Exit Devices
 - a) Von Duprin: 10 years
 - 3) Closers
 - a) LCN 4000 Series: 30 years

1.08 MAINTENANCE

A. Turn over unused materials to Owner for maintenance purposes.

PART 2 - PRODUCTS

2.01 MANUFACTURERS

- A. The Owner requires use of certain products for their unique characteristics and project suitability to ensure 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 alternate manufacturers and/or products other than those listed as "Scheduled Manufacturer" or "Acceptable Manufacturers" in the individual article for the product category are only to be considered by official substitution request in accordance with section 01 25 00.
- 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. 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.

2.02 MATERIALS

- A. Fabrication
 - 1. Provide door hardware manufactured to comply with published templates generally prepared for machine, wood, and sheet metal screws. provide screws according to manufacturer's recognized installation standards for application intended.
 - 2. Finish exposed 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 wherever possible for hardware units exposed when door is closed. Coordinate with "Metal Doors and Frames", "Flush Wood Doors", "Stile and Rail Wood Doors" to ensure proper reinforcements. Advise the Architect where visible fasteners, such as thru bolts, are required.
- 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:

- 1. Where scheduled in the hardware sets, provide each item of electrified hardware and wire harnesses with number and gage of wires enough to accommodate electric function of specified hardware.
- 2. Provide Molex connectors that plug directly into connectors from harnesses, electric locking and power transfer devices.
- 3. 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.

2.03 HINGES

- A. Manufacturers and Products:
 - Scheduled Manufacturer and Product: a. Ives 5BB series
 - 2. Acceptable Manufacturers and Products:
 - a. Hager BB1191/1279 series
 - b. McKinney TB series
- B. Requirements:
 - 1. Provide hinges conforming to ANSI/BHMA A156.1.
 - 2. Provide five knuckle, ball bearing hinges.
 - 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
 - 4. 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
 - 5. 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
 - 6. Adjust hinge width for door, frame, and wall conditions to allow proper degree of opening.
 - 7. 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.
 - 8. 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
 - 9. Provide hinges with electrified options as scheduled in the hardware sets. Provide with number and gage of wires enough to accommodate electric function of specified hardware. Locate electric hinge at second hinge from bottom or nearest to electrified locking component. Provide mortar guard for each electrified hinge specified.

2.04 CYLINDRICAL LOCKS - GRADE 1

A. Manufacturers and Products:

- Scheduled Manufacturer and Product: a. Schlage ND series
- Acceptable Manufacturers and Products: a. Sargent 10X
- B. Requirements:
 - 1. Provide cylindrical locks conforming to ANSI/BHMA A156.2 Series 4000, Grade 1, and UL Listed for 3-hour fire doors.
 - 2. Indicators: Where specified, provide escutcheon with lock status indicator window on top of lockset rose:
 - a. Escutcheon height (including rose) 6.05 inches high by 3.68 inches wide.
 - b. Indicator window measuring a minimum 3.52-inch by .60 inch with 1.92 squareinches of front facing viewing area and 180-degree visibility with a total of .236 square-inches of total viewable area.
 - c. Provide snap-in serviceable window to prevent tampering. Lock must function if indicator is compromised.
 - d. Provide messages color-coded with full text and symbol, as scheduled, for easy visibility.
 - e. Unlocked and Unoccupied message will display on white background, and Locked and Occupied message will display on red background.
 - 3. Cylinders: Refer to "KEYING" article, herein.
 - 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. Vandlgard: Provide levers with vandal resistant technology for use at heavy traffic or abusive applications.
 - b. Lever Design: Rhodes

2.05 EXIT DEVICES

- A. Manufacturers and Products:
 - Scheduled Manufacturer and Product: a. Von Duprin 98/35A series
 - Acceptable Manufacturers and Products: a. Sargent
- B. Requirements:
 - 1. Provide exit devices tested to ANSI/BHMA A156.3 Grade 1 and UL listed for Panic Exit or Fire Exit Hardware.
 - 2. Cylinders: Refer to "KEYING" article, herein.
 - 3. Provide smooth touchpad type exit devices, fabricated of brass, bronze, stainless steel, or aluminum, plated to standard architectural finishes to match balance of door hardware.
 - 4. Touchpad must extend a minimum of one half of door width. No plastic inserts are allowed in touchpads.

- 5. Provide exit devices with deadlatching feature for security and for future addition of alarm kits and/or other electrified requirements.
- 6. Provide exit devices with weather resistant components that can withstand harsh conditions of various climates and corrosive cleaners used in outdoor pool environments.
- 7. Provide flush end caps for exit devices.
- 8. Provide exit devices with manufacturer's approved strikes.
- 9. Provide exit devices cut to door width and height. Install exit devices at height recommended by exit device manufacturer, allowable by governing building codes, and approved by Architect.
- 10. Mount mechanism case flush on face of doors or provide spacers to fill gaps behind devices. Where glass trim or molding projects off face of door, provide glass bead kits.
- 11. Provide cylinder or hex-key dogging as specified at non fire-rated openings.
- 12. Removable Mullions: 2 inches (51 mm) x 3 inches (76 mm) steel tube. Where scheduled as keyed removable mullion, provide type that can be removed by use of a keyed cylinder, which is self-locking when re-installed.
- 13. Provide factory drilled weep holes for exit devices used in full exterior application, highly corrosive areas, and where noted in hardware sets.
- 14. Provide electrified options as scheduled.
- 15. Top latch mounting: double- or single-tab mount for steel doors, face mount for aluminum doors eliminating requirement of tabs, and double tab mount for wood doors.
- 16. Provide exit devices with optional trim designs to match other lever and pull designs used on the project.

2.06 CYLINDERS

- A. Manufacturers:
 - Scheduled Manufacturer and Product: a. ASSA (Owner Standard)
- B. Requirements:
 - 1. Provide cylinders/cores to match Owner's existing key system, compliant with ANSI/BHMA A156.5; latest revision; cylinder face finished to match lockset, manufacturer's series as indicated. Refer to "KEYING" article, herein.

2.07 KEYING

- A. Scheduled System: To be verified with owner.
 - 1. New factory registered system:
 - a. Provide a factory registered keying system, complying with guidelines in ANSI/BHMA A156.28, incorporating decisions made at keying conference.
 - 2. Existing factory registered system:
 - a. Provide cylinders/cores keyed into Owner's existing factory registered keying system. Comply with guidelines in ANSI/BHMA A156.28, incorporating decisions made at keying conference.
 - 3. Existing non-factory registered system:
 - a. Provide cylinders/cores keyed into Owner's existing keying system managed by Owner's locksmith, complying with guidelines in ANSI/BHMA A156.28, incorporating decisions made at keying conference. Contact:

 Firm Name:

- 2) Contact Person:
- 3) Telephone:
- B. Requirements:
 - 1. Construction Keying:
 - a. Temporary Construction Cylinder Keying.
 - 1) Provide construction cores that permit voiding construction keys without cylinder removal, furnished in accordance with the following requirements.
 - a) Split Key or Lost Ball Construction Keying System.
 - b) 3 construction control keys, and extractor tools or keys as required to void construction keying.
 - c) 12 construction change (day) keys.
 - 2) Owner or Owner's Representative will void operation of temporary construction keys.
 - b. Replaceable Construction Cores.
 - 1) Provide temporary construction cores replaceable by permanent cores, furnished in accordance with the following requirements.
 - a) 3 construction control keys
 - b) 12 construction change (day) keys.
 - 2) Owner or Owner's Representative will replace temporary construction cores with permanent cores.
 - 2. Permanent Keying:
 - a. Provide permanent cylinders/cores keyed by the manufacturer according to the following key system.
 - 1) Master Keying system as directed by the Owner.
 - b. Forward bitting list and keys separately from cylinders, by means as directed by Owner. Failure to comply with forwarding requirements will be cause for replacement of cylinders/cores involved at no additional cost to Owner.
 - c. Provide keys with the following features:
 - 1) Material: Nickel silver; minimum thickness of .107-inch (2.3mm)
 - 2) Patent Protection: Keys and blanks protected by one or more utility patent(s).
 - 3) Geographically Exclusive: Where High Security or Security cylinders/cores are indicated, provide nationwide, geographically exclusive key system complying with the following restrictions.
 - d. Identification:
 - 1) Mark permanent cylinders/cores and keys with applicable blind code for identification. Do not provide blind code marks with actual key cuts.
 - 2) Identification stamping provisions must be approved by the Architect and Owner.
 - 3) 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.
 - 4) Failure to comply with stamping requirements will be cause for replacement of keys involved at no additional cost to Owner.
 - 5) Forward permanent cylinders/cores to Owner, separately from keys, by means as directed by Owner.
 - e. Quantity: Furnish in the following quantities.
 - 1) Permanent Control Keys: As required.
 - 2) Master Keys: As required.
 - 3) Change (Day) Keys: As required per cylinder/core that is keyed differently
 - 4) Key Blanks: Quantity as determined in the keying meeting.

2.08 KEY CONTROL SYSTEM Brigham Young University Remodel Office Suite 1041 and1053 03/18/2024

- A. Manufacturers:
 - Scheduled Manufacturer: a. Telkee
 - 2. Acceptable Manufacturers:
 - a. HPC
 - b. 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.

2.09 DOOR CLOSERS

- A. Manufacturers and Products:
 - Scheduled Manufacturer and Product: a. LCN 4040XP series (Owner Standard)
- B. Requirements:
 - 1. Provide door closers conforming to ANSI/BHMA A156.4 Grade 1 requirements by BHMA certified independent testing laboratory. ISO 9000 certify closers. Stamp units with date of manufacture code.
 - 2. Provide door closers with fully hydraulic, full rack and pinion action with high strength cast iron cylinder, and full complement bearings at shaft.
 - 3. Cylinder Body: 1-1/2-inch (38 mm) diameter piston with 5/8-inch (16 mm) diameter double heat-treated pinion journal. QR code with a direct link to maintenance instructions.
 - 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. Provide snap-on cover clip, with plastic covers, that secures cover to spring tube.
 - 6. Hydraulic Regulation: By tamper-proof, non-critical valves, with separate adjustment for latch speed, general speed, and backcheck. Provide graphically labelled instructions on the closer body adjacent to each adjustment valve. Provide positive stop on reg valve that prevents reg screw from being backed out.
 - 7. Provide closers with solid forged steel main arms and factory assembled heavy-duty forged forearms for parallel arm closers.
 - 8. Pressure Relief Valve (PRV) Technology: Not permitted.
 - 9. Finish for Closer Cylinders, Arms, Adapter Plates, and Metal Covers: Powder coating finish which has been certified to exceed 100 hours salt spray testing as described in ANSI Standard A156.4 and ASTM B117, or has special rust inhibitor (SRI).
 - 10. 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:
 - a. Ives
 - 2. Acceptable Manufacturers:
 - a. Trimco
 - b. Rockwood
- B. Requirements:
 - 1. Provide push plates, push bars, pull plates, pulls, and hands-free reversible door pulls with diameter and length as scheduled.

2.11 DOOR STOPS AND HOLDERS

- A. Manufacturers:
 - 1. Scheduled Manufacturer: a. lves
- B. Provide door stops at each door leaf:
 - 1. Provide wall stops wherever possible. Provide concave type where lockset has a push button of thumbturn.
 - 2. Where a wall stop cannot be used, provide universal floor stops.
 - 3. Where wall or floor stop cannot be used, provide overhead stop.
 - 4. Provide roller bumper where doors open into each other and overhead stop cannot be used.

2.12 THRESHOLDS, SEALS, DOOR SWEEPS, AUTOMATIC DOOR BOTTOMS, AND GASKETING

- A. Manufacturers:
 - 1. Scheduled Manufacturer:
 - a. Zero International
 - 2. Acceptable Manufacturers:
 - a. National Guard
 - b. Pemko
- B. Requirements:
 - 1. Provide thresholds, weather-stripping, and gasketing systems as specified and per architectural details. Match finish of other items.
 - 2. 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.
 - 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.

4. Size thresholds 1/2 inch (13 mm) high by 5 inches (127 mm) wide by door width unless otherwise specified in the hardware sets or detailed in the drawings.

2.13 FINISHES

- A. FINISH: BHMA 626/652 (US26D); EXCEPT:
 - 1. Hinges at Exterior Doors: BHMA 630 (US32D)
 - 2. Aluminum Geared Continuous Hinges: BHMA 628 (US28)
 - 3. Push Plates, Pulls, and Push Bars: BHMA 630 (US32D)
 - 4. Protection Plates: BHMA 630 (US32D)
 - 5. Overhead Stops and Holders: BHMA 630 (US32D)
 - 6. Door Closers: Powder Coat to Match
 - 7. Wall Stops: BHMA 630 (US32D)
 - 8. Latch Protectors: BHMA 630 (US32D)
 - 9. Weatherstripping: Clear Anodized Aluminum
 - 10. Thresholds: Mill Finish Aluminum

PART 3 - EXECUTION

3.01 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. Verify doors, frames, and walls have been properly reinforced for hardware installation.
- B. Examine roughing-in for electrical power systems to verify actual locations of wiring connections before electrified door hardware installation.
- C. Submit a list of deficiencies in writing and proceed with installation only after unsatisfactory conditions have been corrected.

3.02 INSTALLATION

- A. 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. Interior Architectural Wood Flush Doors: ANSI/WDMA I.S. 1A
 - 4. Installation Guide for Doors and Hardware: DHI TDH-007-20
- B. Install door hardware in accordance with NFPA 80, NFPA 101 and provide post-install inspection, testing as specified in section 1.03.E unless otherwise required to comply with governing regulations.
- C. Install each hardware item in compliance with manufacturer's instructions and recommendations, using only fasteners provided by manufacturer.

- D. Do not install surface mounted items until finishes have been completed on substrate. Protect all installed hardware during painting.
- E. Set units level, plumb and true to line and location. Adjust and reinforce attachment substrate as necessary for proper installation and operation.
- F. Drill and countersink units that are not factory prepared for anchorage fasteners. Space fasteners and anchors according to industry standards.
- G. Install operating parts so they move freely and smoothly without binding, sticking, or excessive clearance.
- H. Hinges: Install types and in quantities indicated in door hardware schedule but not fewer than quantity recommended by manufacturer for application indicated.
- I. Lock Cylinders:
 - 1. Install construction cores to secure building and areas during construction period.
 - 2. Replace construction cores with permanent cores as indicated in keying section.
 - 3. Furnish permanent cores to Owner for installation.
- J. Wiring: Coordinate with Division 26, ELECTRICAL and Division 28 ELECTRONIC SAFETY AND SECURITY 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. Connections to panel interface modules, controllers, and gateways.
 - 6. Testing and labeling wires with Architect's opening number.
- K. Key Control System: Tag keys and place them on markers and hooks in key control system cabinet, as determined by final keying schedule.
- L. Continuous Hinges: Re-locate the door and frame fire rating labels where they will remain visible so that the hinge does not cover the label once installed.
- M. Door Closers & Auto Operators: Mount closers/operators on room side of corridor doors, inside of exterior doors, and stair side of stairway doors from corridors. Mount closers/operators so they are not visible in corridors, lobbies and other public spaces unless approved by Architect.
- N. Overhead Stops/Holders: Mount overhead stops/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.
- 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 and Sweeps: Apply to bottom of door, forming seal with threshold when door is closed.

3.03 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 can 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 to six months after date of Substantial Completion, examine and readjust each item of door hardware, including adjusting operating forces, as necessary to ensure function of doors and door hardware.

3.04 CLEANING AND PROTECTION

- A. Clean adjacent surfaces soiled by door hardware installation.
- B. Clean operating items per manufacturer's instructions 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.

3.05 DOOR HARDWARE SCHEDULE

- A. The intent of the hardware specification is to specify the hardware for interior and exterior doors, and to establish a type, continuity, and standard of quality. However, it is the door hardware supplier's responsibility to thoroughly review existing conditions, schedules, specifications, drawings, and other Contract Documents to verify the suitability of the hardware specified.
- B. Discrepancies, conflicting hardware, and missing items are to be brought to the attention of the architect with corrections made prior to the bidding process. Omitted items not included in a hardware set should be scheduled with the appropriate additional hardware required for proper application.
- C. Hardware items are referenced in the following hardware schedule. Refer to the above specifications for special features, options, cylinders/keying, and other requirements.
- D. Hardware Sets:

10920	2 OPT0	365837 Version 2							
Legen ÈLink ∕∕Eleo		log cut sheet)pening							
Hardw	Hardware Group No. 01								
For us	e on Do	oor #(s):							
1049		1049B	1049C		1049E		1049P		
1049		1049S	1049T		1049X		1049Y		
		SGL door(s) with the DESCRIPTION	following:						
QTY 3	EA	HINGE		CATALOG NUMBER 5BB1 4.5 X 4.5		Ē	FINISH 652	MFR IVE	
1	EA	VANDL ENTRANCI					626	SCH	
1	EA	KEY IN LEVER CY		OWNER TO PROVIDE/IN	STALL		626	ASA	
1	EA	WALL STOP		WS406/WS407 CCV/CVX			630	IVE	
				REQUIRED					
3	EA	GASKETING		488S @ HEAD & JAMBS			Gy	ZER	
Hardw	are Gro	oup No. 02							
For us	e on Do	or #(s):							
104	5A	1045B	1059B						
Provid	e each	SGL door(s) with the	following:						
QTY	,	DESCRIPTION		CATALOG NUMBER			FINISH	MFR	
3	EA	HINGE		5BB1 4.5 X 4.5			652	IVE	
1	EA	PASSAGE SET		ND10S RHO			626	SCH	
1	EA	WALL STOP		WS406/WS407 CCV/CVX REQUIRED	AS		630	IVE	
3	EA	GASKETING		488S @ HEAD & JAMBS		Ē	Gy	ZER	
· ·							- ,		
Hardw	are Gro	up No. 03							
	e on Do	·							
1043									
Provid	e each	SGL door(s) with the	following:						
QTY	•	DESCRIPTION		CATALOG NUMBER		_	FINISH	MFR	
3	EA	HINGE		5BB1 4.5 X 4.5			652	IVE	
1	EA			ND92LD RHO	07411		626	SCH	
1	EA	KEY IN LEVER CY SURFACE CLOSE		OWNER TO PROVIDE/IN		e	626 680	ASA	
1 1	EA EA	MOUNTING PLATE		4040XP RW/PA (PULLSID 4040XP-18 (AS REQUIRE			689 689	LCN LCN	
1	EA	WALL STOP	_	4040XP-18 (AS REQUIRE WS406/WS407 CCV/CVX	,		630	IVE	
I	LA			REQUIRED			000		
3	EA	GASKETING		488S @ HEAD & JAMBS			Gy	ZER	

Hardware Group No. 04

For use on Door #(s):

1049

Provide each PR door(s) with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
6	EA	HINGE	5BB1 4.5 X 4.5 NRP	652	IVE
1	EA	REMOVABLE MULLION	KR4954 STAB	SP28	VON
1	EA	PANIC HARDWARE	98-EO	626	VON
1	EA	PANIC HARDWARE	98-NL-OP	626	VON
1	EA	RIM CYLINDER	OWNER WILL PROVIDE/INSTALL	626	ASA
1	EA	MORTISE CYLINDER	OWNER WILL PROVIDE/INSTALL	626	ASA
2	EA	LONG DOOR PULL	9264F 36"	630	IVE
2	EA	SURFACE CLOSER	4040XP SCUSH	689	LCN
2	EA	PA MOUNTING PLATE	4040XP-18PA	689	LCN
2	EA	CUSH SHOE SUPPORT	4040XP-30	689	LCN
2	EA	BLADE STOP SPACER	4040XP-61	689	LCN
2	EA	GASKETING	488S @ HEAD & JAMBS	Gy	ZER

END OF SECTION

SECTION 10 1100 VISUAL DISPLAY UNITS

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Porcelain enamel steel markerboards.
- B. Glass markerboards.
- C. Tackboards.
- D. Bulletin board cabinets.
- E. Horizontal sliding visual display units.

1.02 RELATED REQUIREMENTS

- A. Section 06 1000 Rough Carpentry: Blocking and supports.
- B. Section 06 2000 Finish Carpentry: Wood frame and marker rails.
- C. Section 09 2116 Gypsum Board Assemblies: Concealed supports in metal stud walls.
- D. Section 09 2216 Non-Structural Metal Framing: Concealed supports in metal stud walls.
- E. Section 09 9123 Interior Painting: Finishing of wood frame and marker rail.

1.03 REFERENCE STANDARDS

- A. 16 CFR 1201 Safety Standard for Architectural Glazing Materials; Current Edition.
- B. ANSI A135.4 Basic Hardboard; 2012 (Reaffirmed 2020).
- C. ANSI A208.1 American National Standard for Particleboard; 2016.
- D. ANSI Z97.1 American National Standard for Safety Glazing Materials Used in Buildings -Safety Performance Specifications and Methods of Test; 2015 (Reaffirmed 2020).
- E. ASTM A424/A424M Standard Specification for Steel, Sheet, for Porcelain Enameling; 2018.
- F. ASTM A475 Standard Specification for Metallic-Coated Steel Wire Strand; 2022.
- G. ASTM A555/A555M Standard Specification for General Requirements for Stainless Steel Wire and Wire Rods; 2023.
- H. ASTM A666 Standard Specification for Annealed or Cold-Worked Austenitic Stainless Steel Sheet, Strip, Plate, and Flat Bar; 2015.
- I. ASTM B221 Standard Specification for Aluminum and Aluminum-Alloy Extruded Bars, Rods, Wire, Profiles, and Tubes; 2020.
- J. ASTM B221M Standard Specification for Aluminum and Aluminum-Alloy Extruded Bars, Rods, Wire, Profiles, and Tubes (Metric); 2013.
- K. ASTM C208 Standard Specification for Cellulosic Fiber Insulating Board; 2022.
- L. ASTM C1036 Standard Specification for Flat Glass; 2021.
- M. ASTM C1048 Standard Specification for Heat-Strengthened and Fully Tempered Flat Glass; 2018.
- N. ASTM C1172 Standard Specification for Laminated Architectural Flat Glass; 2019.
- O. ASTM C1396/C1396M Standard Specification for Gypsum Board; 2017.
- P. ASTM E84 Standard Test Method for Surface Burning Characteristics of Building Materials; 2021a.
- Q. ASTM F793/F793M Standard Classification of Wall Coverings by Use Characteristics; 2020.

R. PS 1 - Structural Plywood; 2009 (Revised 2019).

1.04 SUBMITTALS

- A. See Section 01 3000 Administrative Requirements, for submittal procedures.
- B. Product Data: Provide manufacturer's data on chalkboard, porcelain enamel steel markerboard, glass markerboard, tackboard, tackboard surface covering, trim, and accessories.
- C. Shop Drawings: Indicate wall elevations, dimensions, joint locations, special anchor details.
- D. Samples: Color charts for selection of color and texture of chalkboard, porcelain enamel steel markerboard, glass markerboard, tackboard, tackboard surface covering, and trim.
- E. Test Reports: Show compliance to specified surface burning characteristics requirements.
- F. Manufacturer's printed installation instructions.
- G. Manufacturer's Qualification Statement.
- H. Maintenance Data: Include data on regular cleaning, stain removal, and _____.

1.05 QUALITY ASSURANCE

A. Manufacturer Qualifications: Company specializing in manufacturing the products specified in this section with minimum three years documented experience.

1.06 WARRANTY

- A. See Section 01 7800 Closeout Submittals, for additional warranty requirements.
- B. Provide five year warranty for chalkboard and markerboard to include warranty against discoloration due to cleaning, crazing or cracking, and staining.

PART 2 PRODUCTS

2.01 VISUAL DISPLAY UNITS

- A. Porcelain Enamel Steel Markerboards:
 - 1. Manufacturers:
 - a. AJW Architectural Products; ____: www.ajw.com/#sle.
 - b. ASI Visual Display Products; _____: www.asi-visualdisplayproducts.com/#sle.
 - c. Claridge Products and Equipment, Inc; ____: www.claridgeproducts.com/#sle.
 - d. Nelson Adams NACO; ____: www.nelsonadamsnaco.com/#sle.
 - e. _____
 - f. Substitutions: See Section 01 6000 Product Requirements.
 - 2. Color: White.
 - 3. Steel Face Sheet Thickness: 24 gauge, 0.0239 inch (0.61 mm).
 - 4. Core: Particleboard, manufacturer's standard thickness, laminated to face sheet.
 - 5. Backing: Aluminum foil, laminated to core.
 - 6. Size: As indicated on drawings.
 - 7. Frame: Extruded aluminum, with concealed fasteners.
 - 8. Frame Profile: As indicated on drawings.
 - 9. Frame Finish: Anodized, natural.
 - 10. Accessories: Provide marker tray and map rail.
- B. Magnetic Glass Markerboards:
 - 1. Manufacturers:
 - a. Claridge Products and Equipment, Inc; ____: www.claridgeproducts.com/#sle.
 - b. GGI General Glass International; ____: www.generalglass.com/#sle.

- c. Ghent, a GMI Company; ____: www.ghent.com/#sle.
- d. MooreCo, Inc; ____: www.moorecoinc.com/#sle.
- e. Substitutions: See Section 01 6000 Product Requirements.
- 2. Glass: Laminated, low iron, 1/4 inch thick (6 mm thick), with bevel edges and radiused corners, laminated to steel backing sheet for use with magnets. Coated or treated for use as dry erase board or projection surface.
- 3. Glass Finish: White back-coating.
- 4. Steel Backing Sheet Thickness: 24 gauge, 0.0239 inch (0.61 mm).
- 5. Size: As indicated on drawings.
- 6. Frame: Same as for porcelain enamel steel markerboards.
- 7. Frame Finish: Anodized, natural.
- 8. Mounting: Concealed Z clips.
- 9. Accessories: Provide magnetic marker tray and magnetic marker holder.
- 10. Products:
 - a. Egan Visual Corporation; Egan Visual GlassBoards: www.egan.com/#sle.
 - b. Dreamwalls by Gardner Glass Products; Glass Markerboards: www.dreamwalls.com/#sle.
 - c. Goldray Industries, Inc; Glass Marker Boards: www.goldrayglass.com/#sle.
 - d. Substitutions: See Section 01 6000 Product Requirements.
- C. Tackboards: Fine-grained, homogeneous natural cork.
 - 1. Manufacturers:
 - a. AJW Architectural Products; ____: www.ajw.com/#sle.
 - b. ASI Visual Display Products; _____: www.asi-visualdisplayproducts.com/#sle.
 - c. Nelson Adams NACO; ____: www.nelsonadamsnaco.com/#sle.
 - 2. Cork Thickness: 1/8 inch (3 mm).
 - 3. Fabric: Vinyl-coated fabric.
 - 4. Backing: Hardboard, 1/4 inch (6 mm) thick, laminated to tack surface.
 - 5. Surface Burning Characteristics: Flame spread index of 25, maximum, and smoke developed index of 450, maximum, when tested in accordance with ASTM E84.
 - 6. Size: As indicated on drawings.
 - 7. Length: As indicated on drawings.
 - 8. Frame: Extruded aluminum, with concealed fasteners.
 - 9. Frame Profile: As indicated on drawings.
 - 10. Frame Finish: Anodized, natural.
 - 11. Accessories: Provide map rail.
 - 12. Products:
 - a. Egan Visual Corporation; Egan Visual TackBoards: www.egan.com/#sle.
 - b. Substitutions: See Section 01 6000 Product Requirements.

2.02 MATERIALS

- A. Porcelain Enameled Steel Sheet: ASTM A424/A424M, Type I, Commercial Steel, with fired-on vitreous finish.
- B. Hardboard for Chalk Surface: ANSI A135.4, Tempered type.
- C. Float Glass: Provide float-glass-based glazing unless otherwise indicated.
 - 1. Annealed Type: ASTM C1036, Type I Transparent Flat, Class 1 Clear, Quality Q3.
 - 2. Kind HS Heat-Strengthened Type: Comply with ASTM C1048.
 - 3. Kind FT Fully Tempered Type: Comply with ASTM C1048.
 - 4. Fully Tempered Safety Glass: Comply with ANSI Z97.1 or 16 CFR 1201 criteria for safety glazing used in hazardous locations.
 - 5. Thickness: As indicated.

- D. Laminated Glass: Float glass laminated in accordance with ASTM C1172.
 - 1. Laminated Safety Glass: Comply with ANSI Z97.1 Class B or 16 CFR 1201 Category I impact test requirements.
 - 2. Polyvinyl Butyral (PVB) Interlayer: 0.030 inch (0.762 mm) thick, minimum.
- E. Vinyl-Coated Fabric: ASTM F793/F793M Category VI.
- F. Burlap: Tightly woven, flame retardant treated.
- G. Plywood: PS 1, Grade C-D, softwood.
- H. Hardboard for Cores: ANSI A135.4, Class 1 Tempered, S2S (smooth two sides).
- I. Particleboard: ANSI A208.1; wood chips, set with waterproof resin binder, sanded faces.
- J. Gypsum Board: ASTM C1396/C1396M, paper/foil faced, plain type.
- K. Fiber Board: ASTM C208, cellulosic fiber board.
- L. Foil Backing: Aluminum foil sheet, 0.005 inch (0.13 mm) thick.
- M. Aluminum Sheet Backing: 27 gauge, 0.014 inch (0.36 mm) thick.
- N. Steel Sheet Backing: 28 gauge, 0.0149 inch (0.38 mm), galvanized.
- O. Adhesives: Type used by manufacturer.

2.03 ACCESSORIES

- A. Map Rail: Extruded aluminum, manufacturer's standard profile, with cork insert and runners for accessories; 1 inch (25 mm) wide overall, full width of frame.
- B. Map Supports: Formed aluminum sliding hooks and roller brackets to fit map rail.
- C. Temporary Protective Cover: Sheet polyethylene, 8 mil (0.2 mm) thick.
- D. Flag Holders: Cast aluminum bored to receive 1 inch (25 mm) diameter flag staff, bracketed to fit top rail of board.
- E. Cleaning Instruction Plate: Provide instructions for chalkboard cleaning on a metal plate fastened to perimeter frame near chalkrail.
- F. Marker Tray: Aluminum, manufacturer's standard profile, one piece full length of markerboard, molded ends, concealed fasteners, same finish as frame.
- G. Mounting Brackets: Concealed.

PART 3 EXECUTION

3.01 EXAMINATION

- A. Verify that field measurements are as indicated.
- B. Verify that internal wall blocking is ready to receive work and positioning dimensions are as indicated on shop drawings.
- C. Verify flat wall surface for frameless adhesive-applied boards.

3.02 PREPARATION

- A. Acclimatize tackable wall panels by removing from packaging in installation area not less than 24 hours before application.
- B. Remove switchplates, wall plates, and surface-mounted fixtures where tackable wall paneling is applied. Reinstall items on completion of installation.
- C. Prepare surfaces using the methods recommended by the manufacturer for achieving the best result for the substrate under the project conditions.

3.03 INSTALLATION

- A. Install boards in accordance with manufacturer's instructions.
- B. Install with top of marker tray at 30 inches (760 mm) above finished floor.
- C. Secure units level and plumb.
- D. Butt Joints: Install with tight hairline joints.
- E. Carefully cut holes in boards for thermostats.
- F. Install tackable wall panels in accordance with manufacturer's recommendations on specified substrates with concealed attachments.
 - 1. Fabricate re-wrapped edges where partial panels about each other, or adjacent surfaces or trim.
 - 2. Re-wrap top, bottom or side edges for cutting panels around door or window openings, abutting trim, protruding objects, and at other openings, including x-cut at receptacles, light switches, and other openings.
 - a. Wrap minimum 2 inches (51 mm) around back of panel.
 - b. Carefully cut fiber board, leaving vinyl wallcovering intact. Wrap wallcovering tightly around edge of board and adhere continuously around back of panel with manufacturer's recommended vinyl wallcovering adhesive.

3.04 CLEANING

- A. Clean board surfaces in accordance with manufacturer's instructions.
- B. Cover with protective cover, taped to frame.
- C. Remove temporary protective cover at Date of Substantial Completion.
- D. Break-in slate chalkboards with a chalk and clean treatment.

END OF SECTION

BRIGHAM YOUNG UNIVERSITY

ADDENDUM RECEIPT

DATE: Ma	arch 19, 2024
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PROJECT: JFSB 2024 CNA Remodel Office Suites 1041 & 1053

PROJ. #: WO# M8101

We acknowledge receipt of Addendum Number 3.

COMPANY:	 	 	
BY:	 	 	
TITLE:			

PLEASE EMAIL SIGNED RECEIPT TO construction@byu.edu