

SOUTH DAKOTA SCIENCE AND TECHNOLOGY AUTHORITY
RFP# 2023-05
Access Control Phase 2
Amendment #2

SDSTA amends the subject RFP to add the below specifications and drawings. It is hereby understood that all other provisions will not be otherwise changed nor affected.

This Amendment is effective March 21, 2023.

Date: 3/17/2023**Project:** SURF Access Control Phase II Surface Locations**To:** Contractors**Project #:** Task Order #6
BR22033**From:** West Plains Engineering**Project Location:** Lead, SD**Addendum Number:** 2

To: All prime contract bidders and all others to whom Drawings and Specifications have been issued by the Engineer. Acknowledge receipt of the Addendum by inserting its number and date on the Bid Form. Failure to do so may subject bidder to disqualification. This Addendum forms a part of the Contract Documents. It modifies them as follows:

See also Addendum #2 attached from ARC International for modifications to Architectural specifications and drawings.

Project Manual

Change Title of project manual from "SDSTA/SURF Access Control – Phase II" to "SURF Access Control Phase II Surface Locations".

Drawings

Sheets E1.10, E1.20, E1.30, E1.40, E1.50, E1.60, E1.61, E1.62

1. Change Miscellaneous Note C from "CARD READERS SHALL BE HID SIGNO READERS MODEL 40NKS UNLESS SPECIFICALLY NOTED OTHERWISE." to: "CARD READERS SHALL BE HID FLEX READER UNLESS SPECIFICALLY NOTED OTHERWISE." as follows: E. All conduit within this building shall be GRC.

Sheet E1.60

1. See attached revised sheet E1.60R1 for addition of a new overhead door to replace an existing overhead door. The existing overhead door is manual but the new one will be a motorized system with associated controls and safeties to be installed and wired by the electrical contractor.

Sheet E1.61

1. See attached revised sheet E1.61R1 for location of existing Distribution Power Panel PP. This panel shall provide power to the new overhead door being installed on the level above and called out in revised sheer E1.60R1.

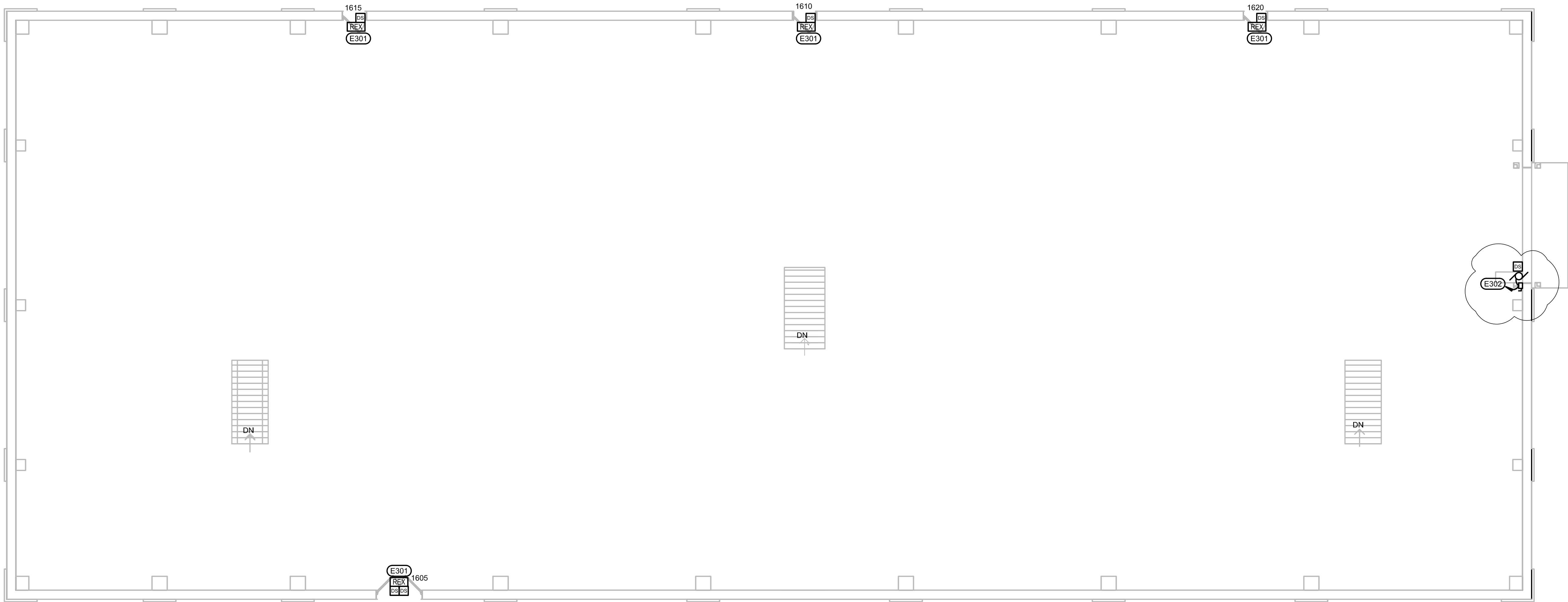
Sheet E2.10

1. Change reference in details DT-1 and DT-2 for card reader from "HID SIGNO 40NKS MultiClass" to "HID Flex Reader".

END OF DOCUMENT – MS

Attachment: Sheet E1.60R1 and E1.61R1

ARC International Addendum #2: Narrative; Specification 083323 – Overhead Coiling Doors; Drawings



① REVISED ROSS HOIST ROOM MAIN LEVEL ELECTRICAL PLAN
1/8" = 1'-0"

ELECTRICAL MISCELLANEOUS NOTES:

- A. THIS PROJECT WILL PROVIDE NEW ACCESS CONTROL DEVICES THAT WILL NEED TO BE INTERFACED WITH THE FACILITIES EXISTING C-CURE 9000 ACCESS CONTROL SYSTEM. JASON KLOCKER OF JOHNSON CONTROLS IS THE POINT OF CONTACT FOR ALL WORK RELATED TO THIS SYSTEM AND HIS CONTACT NUMBER IS (605)828-7927. JOHNSON CONTROLS IS THE SERVICING CONTRACTOR FOR THIS SYSTEM. ALL NEW DEVICES, EQUIPMENT AND PROGRAMMING ARE TO BE PROVIDED BY JOHNSON CONTROLS TO ENSURE EXISTING WARRANTIES ARE NOT VOIDED.
- B. NEW SECURITY CONTROL PANELS WILL BE INSTALLED IN EACH OF THE AREAS/BUILDINGS THIS PROJECT IS AFFECTING. THESE CONTROL PANELS WILL NEED TO BE TIED TO THE EXISTING C-CURE 9000 SERVER SYSTEM THAT RESIDES IN THE EXISTING SERVER ROOM OF THE ADMINISTRATION BUILDING. EACH DOOR THAT IS HAVING DEVICES INSTALLED WILL HAVE CONDUIT RAN FROM THAT DOOR BACK TO THE CONTROL PANEL WITHIN THAT AREA/BUILDING. CONTRACTOR TO PROVIDE SHOP DRAWINGS FOR EACH NEW CONTROL PANEL.
- C. CARD READERS SHALL BE HID SIGNO READERS MODEL 40NKS UNLESS SPECIFICALLY NOTED OTHERWISE. DOOR POSITION SWITCHES (DS) FOR WALK-IN DOORS SHALL BE GE MODEL 1078 FOR RECESSED APPLICATIONS OR GE MODEL 2505A FOR SURFACE MOUNTED APPLICATIONS. DOOR POSITION SWITCHES (DS) FOR OVERHEAD DOORS SHALL BE GE MODEL 2204. REQUEST TO EXIT (REX) DEVICES SHALL BE BOSCH MODEL DS160. CONTRACTOR TO PROVIDE SHOP DRAWINGS FOR ALL DEVICES.
- D. THE FOLLOWING CABLES SHALL BE PROVIDED: 22/8 FOR CARD READERS (CR); 20/4 FOR REQUEST TO EXIT (REX) DEVICES; 22/2 FOR DOOR POSITION SWITCHES (DS); AND 18/2 FOR ELECTRIC LATCHES OR STRIKES.

ELECTRICAL SPECIFIC NOTES:

- E301 THIS DOOR DOES NOT HAVE AN EXISTING ELECTRONIC ACCESS CONTROL DEVICE. THIS DOOR HAS LEVER HANDLES ON BOTH SIDES. CONTRACTOR WILL PROVIDE NEW SURFACE MOUNTED DOOR POSITION SWITCH WITH A NEW REX ON THE SECURE SIDE OF THE DOOR. THE REX AND DOOR POSITION SWITCH SHALL BE CONNECTED AND MONITORED BY THE C-CURE 9000 ACCESS CONTROL SYSTEM. SEE DETAIL DT-3 SHEET E2.11 FOR MORE INFORMATION REGARDING ROUGH-IN AND INSTALLATION OF NEW DEVICES.
- E302 PROVIDE POWER FROM EXISTING PANEL PP TO NEW 80A/3P FUSED DISCONNECT FOR NEW OVERHEAD DOOR OPERATOR. NEW OPERATOR IS ANTICIPATED TO BE 5HP OR LESS. CONTRACTOR TO FUSE PER NAMEPLATE. EXTEND 3-#10 AND 1-#10 GND CU IN SEALTITE FROM THE NEW DISCONNECT TO THE NEW OPERATOR. INSTALL NEW CONTROL UNIT. INSTALL NEW INFRARED SAFETY SENSOR AND INSTALL DOOR POSITION SWITCH THAT IS PART OF NEW SECURITY SYSTEM. SEE DETAIL 2 SHEET E2.12 FOR MORE INFORMATION RELATED TO SECURITY AND DOOR POSITION SWITCH INSTALLATION.

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REVISIONS

#	DESCRIPTION	DATE
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ROSS HOIST ROOM MAIN LEVEL ELECTRICAL PLAN

SURF ACCESS CONTROL PHASE II
SURFACE LOCATIONS

LEAD, SOUTH DAKOTA

PROJECT#: BR22033

DESIGNED: MRS

DRAWN: VLS

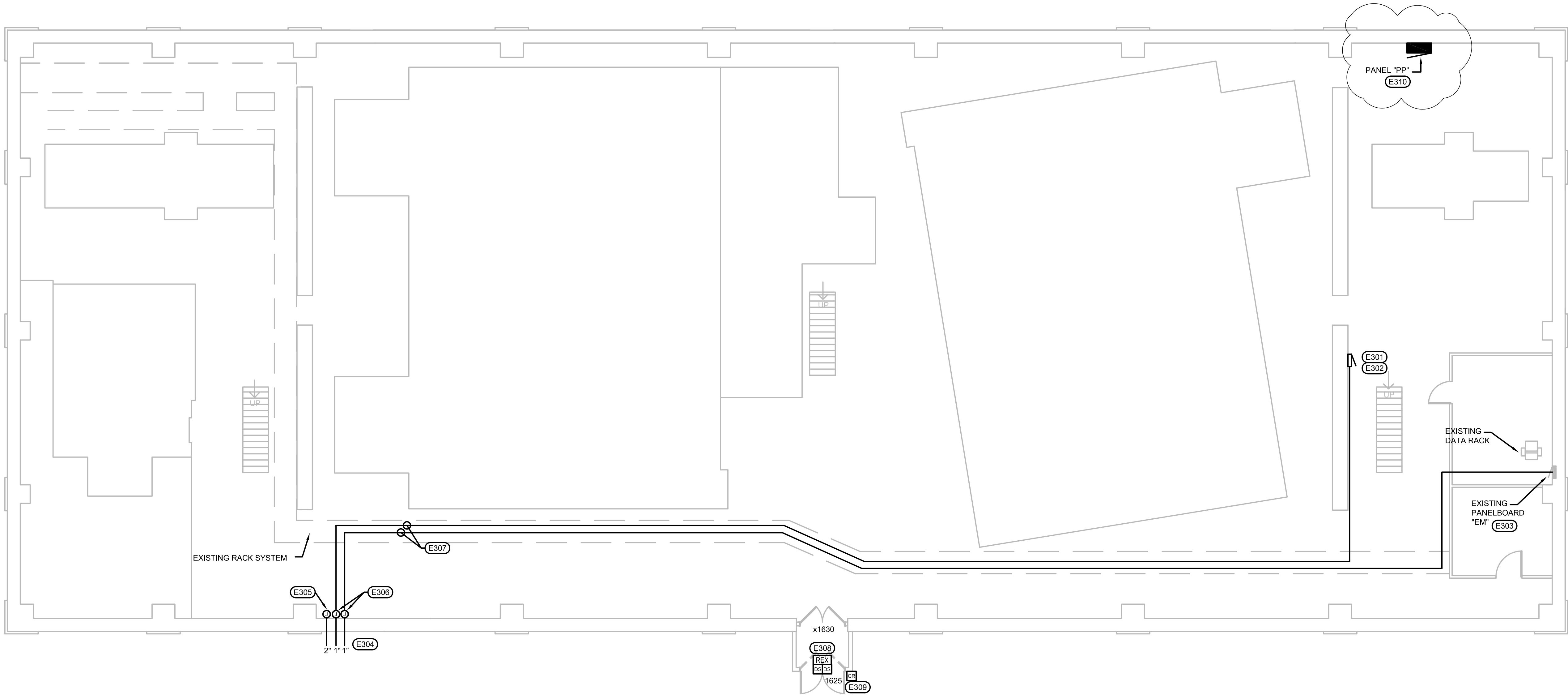
APPROVED: MRS

DATE: 03/17/2023

SHEET:

E1.60-R1

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① REVISED ROSS HOIST ROOM LOWER LEVEL ELECTRICAL PLAN
1/8" = 1'-0"

ELECTRICAL MISCELLANEOUS NOTES:

- A. THIS PROJECT WILL PROVIDE NEW ACCESS CONTROL DEVICES THAT WILL NEED TO BE INTERFACED WITH THE FACILITIES EXISTING C-CURE 9000 ACCESS CONTROL SYSTEM. JASON KLOCKER OF JOHNSON CONTROLS IS THE POINT OF CONTACT FOR ALL WORK RELATED TO THIS SYSTEM AND HIS CONTACT NUMBER IS (605)929-7627. JOHNSON CONTROLS IS THE SERVING CONTRACTOR FOR THIS SYSTEM. ALL NEW DEVICES, EQUIPMENT AND PROGRAMMING ARE TO BE PROVIDED BY JOHNSON CONTROLS TO ENSURE EXISTING WARRANTIES ARE NOT VOIDED.
- B. NEW SECURITY CONTROL PANELS WILL BE INSTALLED IN EACH OF THE AREAS/BUILDINGS THIS PROJECT IS AFFECTING. THESE CONTROL PANELS WILL NEED TO BE TIED TO THE EXISTING C-CURE 9000 SERVER SYSTEM THAT RESIDES IN THE EXISTING SERVER ROOM OF THE ADMINISTRATION BUILDING. EACH DOOR THAT IS HAVING DEVICES INSTALLED WILL HAVE CONDUIT RAN FROM THAT DOOR BACK TO THE CONTROL PANEL WITHIN THAT AREA/BUILDING. CONTRACTOR TO PROVIDE SHOP DRAWINGS FOR EACH NEW CONTROL PANEL.
- C. CARD READERS SHALL BE HID SIGNO READERS MODEL 40NKS UNLESS SPECIFICALLY NOTED OTHERWISE. DOOR POSITION SWITCHES (DS) FOR WALK-IN DOORS SHALL BE GE MODEL 1078 FOR RECESSED APPLICATIONS OR GE MODEL 2505A FOR SURFACE MOUNTED APPLICATIONS. DOOR POSITION SWITCHES (DS) FOR OVERHEAD DOORS SHALL BE GE MODEL 2204. REQUEST TO EXIT (REX) DEVICES SHALL BE BOSCH MODEL DS160. CONTRACTOR TO PROVIDE SHOP DRAWINGS FOR ALL DEVICES.
- D. THE FOLLOWING CABLES SHALL BE PROVIDED: 22/6 FOR CARD READERS (CR); 20/4 FOR REQUEST TO EXIT (REX) DEVICES; 22/2 FOR DOOR POSITION SWITCHES (DS); AND 18/2 FOR ELECTRIC LATCHES OR STRIKES.

#

ELECTRICAL SPECIFIC NOTES:

- E301 LOCATION OF NEW CONTROL PANEL FOR ACCESS CONTROL SYSTEM TO SERVE ROSS HOIST ROOM BUILDING AND ROSS HOIST GATE. PROVIDE POWER FROM EXISTING PANEL EM. CONTRACTOR TO PROVIDE CAT 6 CABLE FROM ACCESS CONTROL PANEL TO EXISTING DATA RACK FOR CONNECTION TO OWNERS NETWORK PANEL.
- E302 PROVIDE CONDUIT AND ASSOCIATED CABLES FROM THIS NEW ACCESS CONTROL PANEL TO NEW GATE LOCATION FOR NEW CARD READER AND CONTROL WIRING FOR THE OPERATION OF THE GATE. CABLES SHALL INCLUDE 8/16 STRANDED, TWISTED, SHIELDED CABLE TO CARD READER AND 2/16 STRANDED, TWISTED, SHIELDED CABLE TO GATE CONTROLLER.
- E303 PANEL EM IS AN EXISTING EATON 125A 120/240V/1-PHASE/3-WIRE LOAD CENTER THAT IS SURFACE MOUNTED ON THE WALL WITH CH AND/OR BR BREAKERS. CONTRACTOR TO PROVIDE A NEW 20A/1P BREAKER TO PROVIDE POWER FOR NEW ACCESS CONTROL PANEL. CONTRACTOR TO EXTEND A 1/2-INCH CONDUIT FROM THIS PANEL TO THE NEW ACCESS CONTROL PANEL. CONTRACTOR TO PROVIDE A NEW 20A/2P BREAKER TO PROVIDE POWER FOR THE NEW GATE. CONTRACTOR TO EXTEND A 1-INCH CONDUIT FROM THIS PANEL TO THE EXISTING WIRE GUTTER SHOWN ON SHEET E1-62. CONDUCTORS SHALL BE 2-#8, 1-#8 NEUTRAL AND 1-#8 GND CU.
- E304 THE TWO 1 INCH CONDUITS AND ONE 2 INCH CONDUIT WILL ENTER THE BUILDING AT THIS LOCATION. CONTRACTOR SHALL EXTEND CONDUITS UP EXTERIOR OF BUILDING TO APPROXIMATELY 7 FEET ABOVE FINISHED FLOOR OF THE LOWER LEVEL AND THEN LB INTO THE BUILDING. CONTRACTOR WILL NEED TO CORE HOLES INTO BUILDING AND SEAL AROUND THE CONDUITS ON BOTH INTERIOR AND EXTERIOR SIDES.

E305 THE 2 INCH CONDUIT WILL TERMINATE INTO A 6 INCH X 6 INCH J-BOX ON THE INSIDE OF THE BUILDING WITH PULL STRING TO THE GUTTER AT THE GATE.

E306 THE TWO 1 INCH CONDUITS SHALL TERMINATE INTO 4 INCH SQUARE BOX ON THE INSIDE OF THE BUILDING

E307 FROM THE 4 INCH SQUARE BOXES THE CONTRACTOR SHALL EXTEND THE 1 INCH CONDUITS TO THE PANEL EM AND ACCESS CONTROL PANEL RESPECTIVELY. THE CONTRACTOR MAY USE THE EXISTING RACK SYSTEM SHOWN ON THE PLANS TO SUPPORT THE CONDUIT FOR MOST OF THE RUN. CONTRACTOR WILL NEED TO PROVIDE NEW SUPPORT WHERE NOT FOLLOWING THE RACK SYSTEM.

E308 THIS SET OF DOORS AND FRAME ARE GOING TO BE REMOVED AND REINSTALLED AFTER ROTATING SO THAT THE DOORS SWING OUT OF THE ROOM RATHER THAN INTO THE ROOM. ONE LEAF OF THESE DOORS HAS AN EXISTING ELECTRONIC ACCESS CONTROL DEVICE WITH LEVERS HANDLES ON BOTH SIDES. THE OTHER LEAF HAS MANUAL VERTICAL RODS FOR LOCKING THE LEAF IN PLACE. THE EXISTING CARD READER AND LEVER LATCH SET WILL BE DEMOED. THE LEVER HARDWARE SET WILL BE REPLACED WITH A NEW PANIC DEVICE ON THE SECURE SIDE AND A NEW ELECTRIFIED OPERATING TRIM WITH LEVER HANDLE ON THE NON-SECURE SIDE. A NEW POWER TRANSFER HINGE WILL BE PROVIDED AND WIRING WILL BE ROUTED FROM THE HINGE THROUGH THE NEW PANIC DEVICE TO THE NEW ELECTRIFIED LATCH SET. CONTRACTOR WILL NEED TO SURFACE MOUNT RACEWAY TO A J-BOX AT THE HINGE AND THEN EXTEND CABLE FROM J-BOX THROUGH A HOLE DRILLED IN FRAME TO THE NEW HINGE. THIS CONTRACTOR SHALL PROVIDE A NEW CARD READER, NEW REQUEST TO EXIT (REX) DEVICE, AND NEW SURFACE MOUNTED DOOR POSITION SWITCHES THAT WILL ALL BE NETWORKED WITH THE EXISTING C-CURE 9000 ACCESS CONTROL SYSTEM AND CONTROL THE ELECTRIFIED LATCH SET. SEE DETAIL DT-2 SHEET E2.10 FOR MORE INFORMATION REGARDING ROUGH-IN AND INSTALLATION OF NEW DEVICES.

E309 CONDUIT FOR CARD READER MAY BE RUN SURFACE MOUNT INSIDE OF BUILDING AND THEN PUNCH THROUGH WALL TO A SURFACE MOUNTED BOX.

E310 EXISTING PANEL PP IS A GE SPECTRA SERIES APNB 800A 208Y/120VOLT/3-PHASE/4-WIRE DISTRIBUTION POWER PANEL. THE PANEL HAS AN EXISTING 50A/3P BREAKER IN SPACES 19, 21, 23 THAT SHALL BE USED TO FEED A NEW 60A/3P FUSED DISCONNECT AT THE DOOR OPERATOR. CIRCUIT SHALL CONSIST OF A 1 INCH GRC CONDUIT WITH 3-#6 AND 1-#10 GND CU.

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ROSS HOIST ROOM LOWER LEVEL ELECTRICAL PLAN

SURF ACCESS CONTROL PHASE II

SURFACE LOCATIONS

LEAD, SOUTH DAKOTA

PROJECT#: BR22033

DESIGNED: MRS

DRAWN: VLS

APPROVED: MRS

DATE: 03/17/2023

SHEET:

E1.61-R1

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March 17, 2023

ADDENDUM NUMBER TWO
SURF Access Control Phase Two – Surface Locations
Lead, SD

This addendum shall be considered as much a part of the Contract Documents as though it had been indicated and written therein.

Administrative Items:

1. Provide for new OH Coiling Door #1630 at the Ross Hoist Room/Building, as follows:
 - a. Opening is approximately 16'-0" wide x 18'-4" high. Contractor to verify exact size.
 - b. Remove existing manually operated OH Coiling door (approximately 11' wide) and steel framed infill side panel.
 - c. Provide new OH Coiling Door. Basis of Design is Cornell ESD20 – motorized, insulated, metal slat coiling door.
 - d. Provide 4 steel bollards for door/frame/jamb protection.
 - e. Provide concrete repair at sill and concrete replacement at apron.
 - f. Coordinate with electrical requirements for power and Door Position Switch.
 - g. See attached drawings #A1.60 (revised per addendum #2) and A1.62 (new sheet per addendum #2)
 - h. See attached specification labeled Section 083323 – Overhead Coiling Doors – Addendum #2

End of Architectural portion of Addendum Number Two

SECTION 083323 - OVERHEAD COILING DOORS

PART 1 - GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Insulated service doors.

1.2 ACTION SUBMITTALS

- A. Product Data: For each type and size of overhead coiling door and accessory.
- B. Shop Drawings: For each installation and for special components not dimensioned or detailed in manufacturer's product data.
 - 1. Document each existing opening condition including size, power, attachment, substrates, and any other conditions that may be pertinent to providing/installing the new OH coiling door.
 - 2. Include points of attachment and their corresponding static and dynamic loads imposed on structure.
 - 3. Show locations of controls, locking devices detectors or replaceable fusible links, and other accessories.
 - 4. Include diagrams for power, signal, and control wiring.
- C. Samples: For each exposed product and for each color and texture specified.

1.3 INFORMATIONAL SUBMITTALS

- A. Sample warranty.

1.4 CLOSEOUT SUBMITTALS

- A. Special warranty.
- B. Maintenance data.

1.5 QUALITY ASSURANCE

- A. Installer Qualifications: An entity that employs installers and supervisors who are trained and approved by manufacturer for both installation and maintenance of units required for this Project.

1.6 WARRANTY

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

PART 2 - PRODUCTS

2.1 PERFORMANCE REQUIREMENTS

- A. Accessibility Standard: Comply with applicable provisions in the USDOJ's "2010 ADA Standards for Accessible Design" and ICC A117.1.
- B. Structural Performance, Exterior Doors: Capable of withstanding the following design wind loads:
 - 1. Design Wind Load: Uniform pressure (velocity pressure) of 20 lbf/sq. ft. (960 Pa), acting inward and outward.
 - 2. Testing: According to ASTM E330/E330M.

2.2 DOOR ASSEMBLY <OH COILING DOOR>

- A. Insulated Service Door: Overhead coiling door formed with curtain of interlocking metal slats. Basis of Design Product is CORNELL ESD20. Provide Basis of Design product or product of equal quality and characteristics.
- B. Operation Cycles: Door components and operators capable of operating for not less than 20,000 cycles.
- C. Door Curtain Material: Galvanized steel.
- D. Door Curtain Slats: Flat profile slats of 3-1/4-inch (83-mm) center-to-center height.
 - 1. Insulated-Slat Interior Facing: Metal.
- E. Bottom Bar: Two angles, each not less than 1-1/2 by 1-1/2 by 1/8 inch (38 by 38 by 3 mm) thick; fabricated from hot-dip galvanized steel and finished to match door.
- F. Curtain Jamb Guides: Galvanized steel with exposed finish matching curtain slats.
- G. Hood: Match curtain material and finish.
 - 1. Mounting: Face of wall.
- H. Locking Devices: Equip door with locking device assembly.

1. Locking Device Assembly: For Interior/Electric Operated Doors provide single-jamb side locking bars, operable from inside with thumbturn.
2. Locking Device: For Exterior/Manual operated doors provide locking device accessible from exterior and suitable for Owner-provided lock.

I. Electric Door Operator:

1. Usage Classification: Light duty, up to 10 cycles per hour.
2. Safety: Listed according to UL 325 by a qualified testing agency for commercial or industrial use.
3. Motor Exposure: Both Interior and Exterior.
4. Motor Electrical Characteristics. Coordinate all electrical requirements with electrical drawings:
 - a. Horsepower: 1/2 hp up to 1.5 hp.
 - b. Voltage: 208 V ac, three phase, 60 Hz
 - c. Verify all electrical requirements for each opening.
5. Emergency Manual Operation: Chain type.
6. Obstruction-Detection Device: Automatic photoelectric sensor.
7. Control Station(s): Interior mounted on wall.
8. Other Equipment: Audible and visual signals; Portable radio-control system.

J. Curtain Accessories: Equip door with weatherseals, push/pull handles, pull-down strap.

K. Door Finish:

1. Baked-Enamel or Powder-Coated Finish: Color as selected by Architect from manufacturer's full range.

2.3 MATERIALS, GENERAL

- A. Electrical Components, Devices, and Accessories: Listed and labeled as defined in NFPA 70, by a qualified testing agency, and marked for intended location and application.

2.4 DOOR CURTAIN MATERIALS AND CONSTRUCTION

- A. Door Curtains: Fabricate overhead coiling-door curtain of interlocking metal slats, designed to withstand wind loading indicated, in a continuous length for width of door without splices. Unless otherwise indicated, provide slats of thickness and mechanical properties recommended by door manufacturer for performance, size, and type of door indicated, and as follows:
1. Insulation: Fill slats for insulated doors with manufacturer's standard thermal insulation complying with maximum flame-spread and smoke-developed indexes of 75 and 450, respectively, according to ASTM E84 or UL 723. Enclose insulation completely within slat faces.
 2. Metal Interior Curtain-Slat Facing: Match metal of exterior curtain-slat face, with minimum steel thickness of 0.010 inch (0.25 mm).

- B. Curtain Jamb Guides: Manufacturer's standard angles or channels and angles of same material and finish as curtain slats unless otherwise indicated, with sufficient depth and strength to retain curtain, to allow curtain to operate smoothly, and to withstand loading. Slot bolt holes for guide adjustment. Provide removable stops on guides to prevent overtravel of curtain.

2.5 HOODS

- A. General: Form sheet metal hood to entirely enclose coiled curtain and operating mechanism at opening head. Contour to fit end brackets to which hood is attached. Roll and reinforce top and bottom edges for stiffness. Form closed ends for surface-mounted hoods and fascia for any portion of between-jamb mounting that projects beyond wall face. Equip hood with intermediate support brackets as required to prevent sagging.
 - 1. Include automatic drop baffle on fire-rated doors to guard against passage of smoke or flame.
 - 2. Exterior-Mounted Doors: Fabricate hood to act as weather protection and with a perimeter sealant-joint-bead profile for applying joint sealant.

2.6 LOCKING DEVICES

- A. Slide Bolt: Fabricate with side-locking bolts to engage through slots in tracks for locking by padlock, located on both left and right jamb sides, operable from coil side.
- B. Locking Device Assembly: Fabricate with cylinder lock, spring-loaded dead bolt, operating handle, cam plate, and adjustable locking bars to engage through slots in tracks. Cylinders provided by Door Hardware 087100.
- C. Safety Interlock Switch: Equip power-operated doors with safety interlock switch to disengage power supply when door is locked.

2.7 CURTAIN ACCESSORIES

- A. Weatherseals for Exterior Doors: Equip each exterior door with weather-stripping gaskets fitted to entire exterior perimeter of door for a weather-resistant installation unless otherwise indicated.
- B. Astragal for Interior Doors: Equip each door bottom bar with a replaceable, adjustable, continuous, compressible gasket of flexible vinyl, rubber, or neoprene as a cushion bumper.
- C. Push/Pull Handles: Equip each push-up-operated or emergency-operated door with lifting handles on each side of door, finished to match door.
- D. Pull-Down Strap: Provide pull-down straps for doors more than 84 inches (2130 mm) high.
- E. Poll Hooks: Provide pole hooks and poles for doors more than 84 inches (2130 mm) high.

2.8 COUNTERBALANCE MECHANISM

- A. General: Counterbalance doors by means of manufacturer's standard mechanism with an adjustable-tension, steel helical torsion spring mounted around a steel shaft and contained in a spring barrel connected to top of curtain with barrel rings. Use grease-sealed bearings or self-lubricating graphite bearings for rotating members.
- B. Brackets: Manufacturer's standard mounting brackets of either cast iron or cold-rolled steel plate.

2.9 MANUAL DOOR OPERATORS

- A. General: Equip door with manual door operator by door manufacturer.
- B. Push-up Door Operation: Lift handles and pull rope for raising and lowering doors, with counterbalance mechanism designed so that required lift or pull for door operation does not exceed 25 lbf (111 N).
- C. Chain-Hoist Operator: Consisting of endless steel hand chain, chain-pocket wheel and guard, and gear-reduction unit with a maximum 30-lbf (133-N) force for door operation. Provide alloy-steel hand chain with chain holder secured to operator guide.
- D. Crank Operator: Consisting of crank and crank gearbox, steel crank drive shaft, and gear-reduction unit, of type indicated. Size gears to require not more than 30-lbf (133-N) force to turn crank. Fabricate gearbox to be oiltight and to completely enclose operating mechanism. Provide manufacturer's standard crank-locking device.

2.10 ELECTRIC DOOR OPERATORS

- A. General: Electric door operator assembly of size and capacity recommended and provided by door manufacturer for door and operation-cycles requirement specified, with electric motor and factory-prewired motor controls, starter, gear-reduction unit, solenoid-operated brake, clutch, control stations, control devices, integral gearing for locking door, and accessories required for proper operation.
 - 1. Comply with NFPA 70.
 - 2. Control equipment complying with NEMA ICS 1, NEMA ICS 2, and NEMA ICS 6, with NFPA 70 Class 2 control circuit, maximum 24-V ac or dc.
- B. Usage Classification: Electric operator and components capable of operating for not less than number of cycles per hour indicated for each door.
- C. Motors: Reversible-type motor with controller (disconnect switch) for motor exposure indicated for each door assembly.
 - 1. Electrical Characteristics: Minimum as indicated for each door assembly. If not indicated, large enough to start, accelerate, and operate door in either direction from any position, at a speed not less than 8 in./sec. (203 mm/s) and not more than 12 in./sec. (305 mm/s), without exceeding nameplate ratings or service factor.

2. Operating Controls, Controllers, Disconnect Switches, Wiring Devices, and Wiring: Manufacturer's standard unless otherwise indicated.
- D. Obstruction-Detection Devices: External entrapment protection consisting of indicated automatic safety sensor capable of protecting full width of door opening activation of device immediately stops and reverses downward door travel.
 1. Photoelectric Sensor: Manufacturer's standard system designed to detect an obstruction in door opening without contact between door and obstruction.
 - a. Self-Monitoring Type: Designed to interface with door operator control circuit to detect damage to or disconnection of sensing device. When self-monitoring feature is activated, door closes only with sustained or constant pressure on close button.
- E. Control Station: Three-button control station in fixed location with momentary-contact push-button controls labeled "Open" and "Stop" and sustained- or constant-pressure push-button control labeled "Close."
 1. Interior-Mounted Units: Full-guarded, surface-mounted, heavy-duty type, with general-purpose NEMA ICS 6, Type 1 enclosure.
 2. Exterior-Mounted Units: Full-guarded, standard-duty, surface-mounted, weatherproof type, NEMA ICS 6, Type 4 enclosure, key operated.
- F. Emergency Manual Operation: Equip each electrically powered door with capability for emergency manual operation. Design manual mechanism so required force for door operation does not exceed 30 lbf (133 N).
- G. Emergency Operation Disconnect Device: Equip operator with hand-operated disconnect mechanism for automatically engaging manual operator and releasing brake for emergency manual operation while disconnecting motor without affecting timing of limit switch. Mount mechanism so it is accessible from floor level. Include interlock device to automatically prevent motor from operating when emergency operator is engaged.
- H. Motor Removal: Design operator so motor may be removed without disturbing limit-switch adjustment and without affecting emergency manual operation.
- I. Audible and Visual Signals: Audible alarm and visual indicator lights in compliance with the accessibility standard.
- J. Portable Radio-Control System: Consisting of two of the following per door operator:
 1. Three-channel universal coaxial receiver to open, close, and stop door.
 2. Portable control device to open and stop door may be momentary-contact type; control to close door shall be sustained- or constant-pressure type.

PART 3 - EXECUTION

3.1 INSTALLATION, GENERAL

- A. Install overhead coiling doors and operating equipment complete with necessary hardware, anchors, inserts, hangers, and equipment supports; according to manufacturer's written instructions and as specified.
- B. Power-Operated Doors: Install automatic garage doors openers according to UL 325.

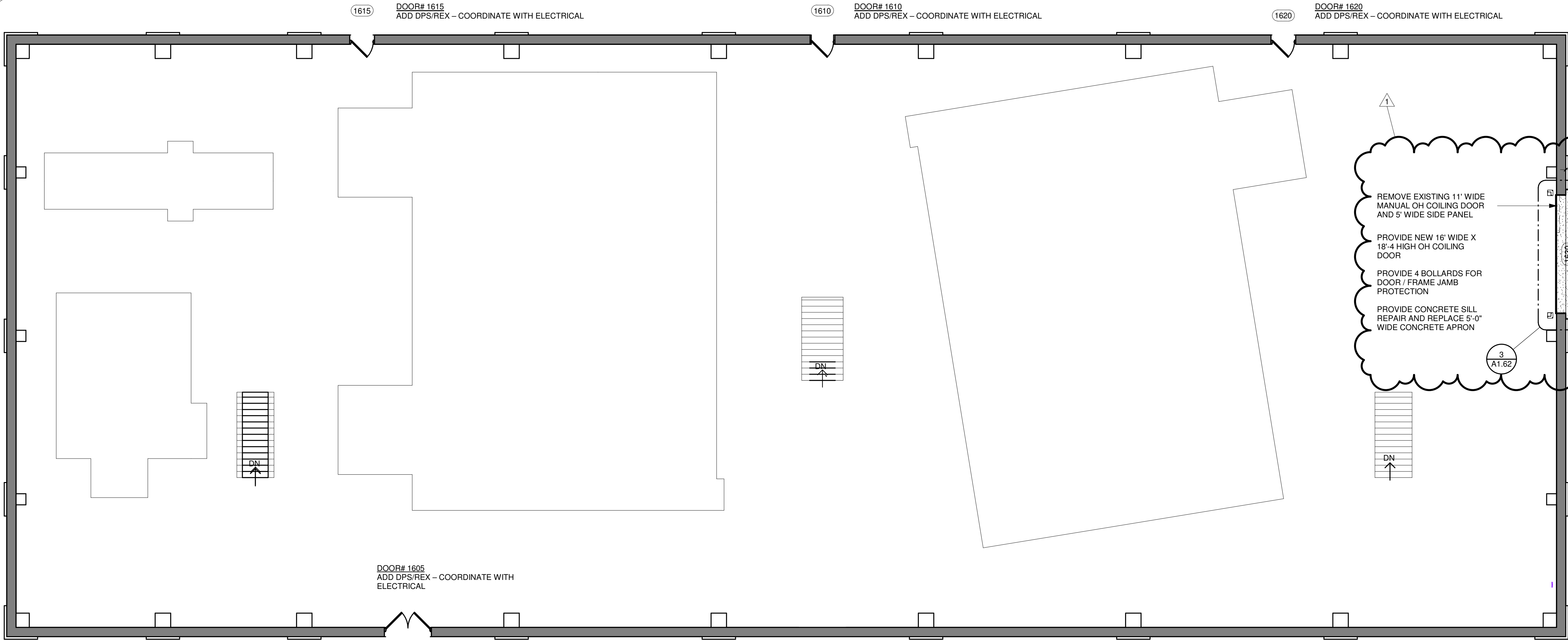
3.2 FIELD QUALITY CONTROL

- A. Perform the following tests and inspections with the assistance of a factory-authorized service representative:
 - 1. Test door release, closing, and alarm operations when activated by smoke detector or building's fire-alarm system. Test manual operation of closed door. Reset door-closing mechanism after successful test.
- B. Repair or remove and replace installations where inspections indicate that they do not comply with specified requirements.
- C. Reinspect repaired or replaced installations to determine if replaced or repaired door assembly installations comply with specified requirements.

3.3 DEMONSTRATION

- A. Engage a factory-authorized service representative to train Owner's maintenance personnel to adjust, operate, and maintain overhead coiling doors.

END OF SECTION 083323



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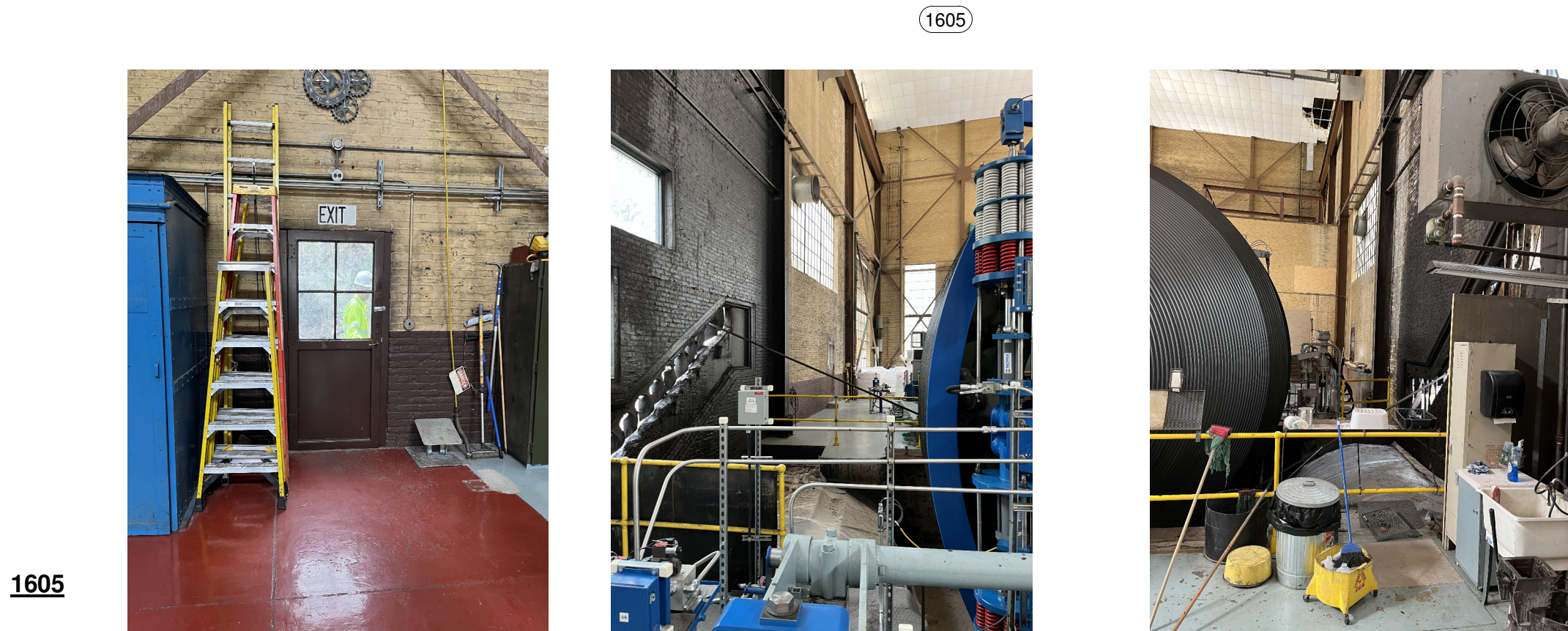
#	DESCRIPTION	DATE
1	ADDENDUM #2	3/17/23
2		
3		
4		

ROSS HOIST ROOM - MAIN LEVEL
SURF ACCESS CONTROL PHASE II
SURFACE LOCATIONS
LEAD, SOUTH DAKOTA

PROJECT#:	2021-011.2
DESIGNED:	DB
DRAWN:	RT
APPROVED:	DB
DATE:	2/10/23

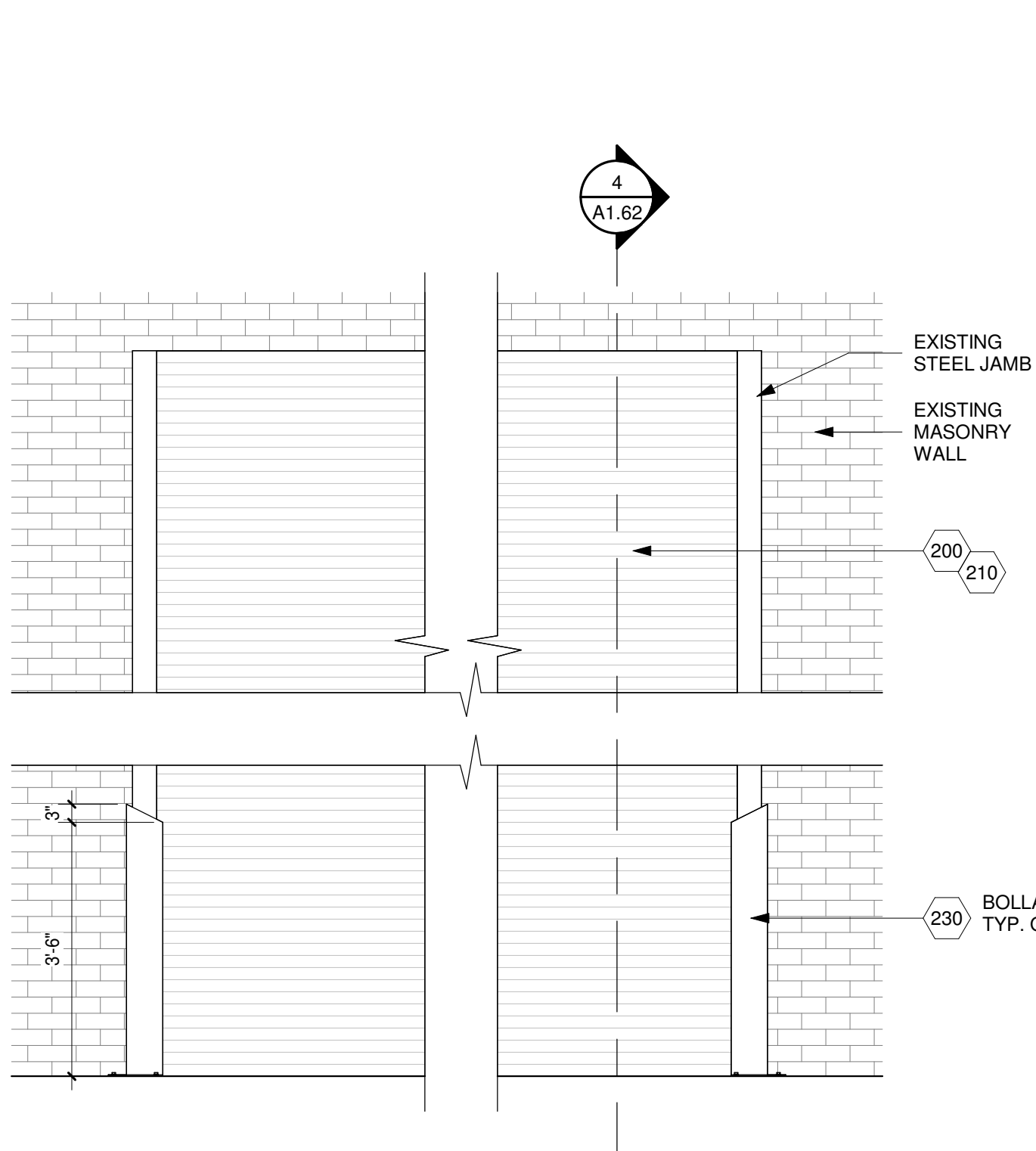


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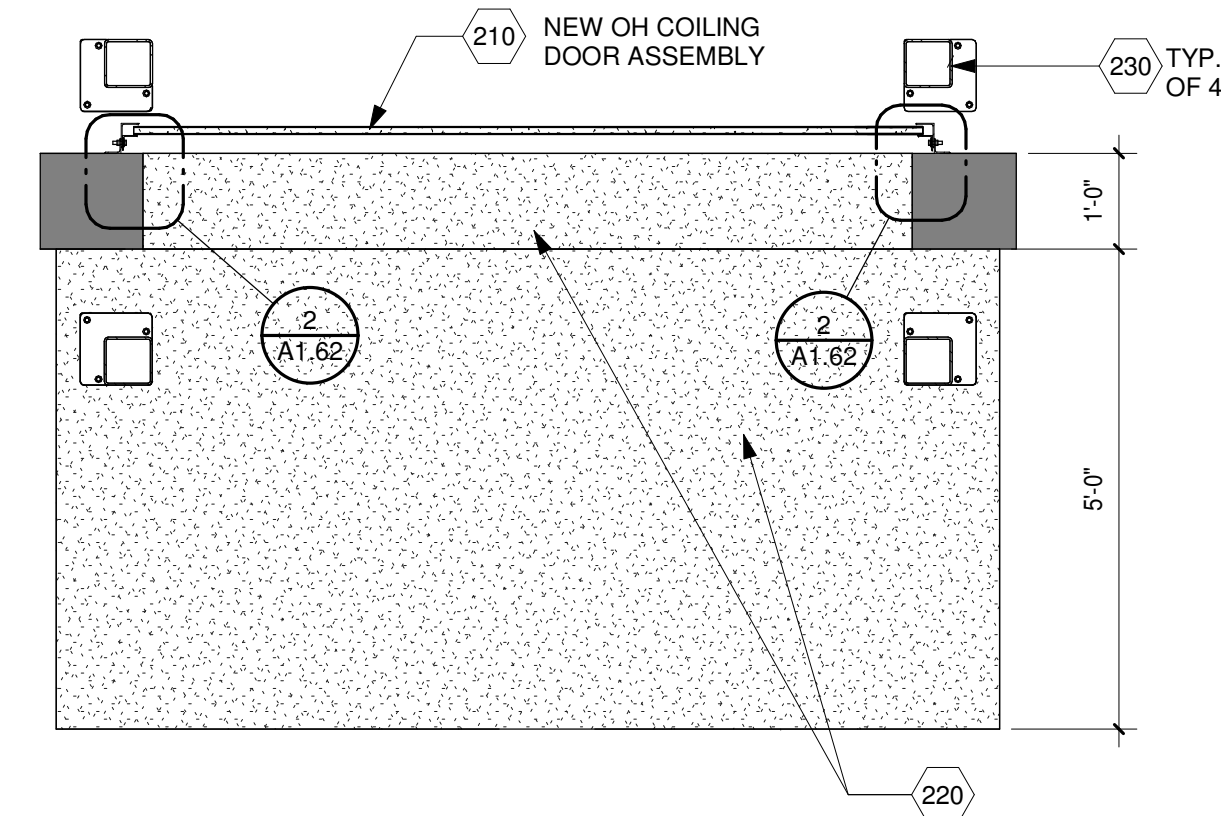


2 ROSS HOIST ROOM - MAIN LEVEL
1/8" = 1'-0"

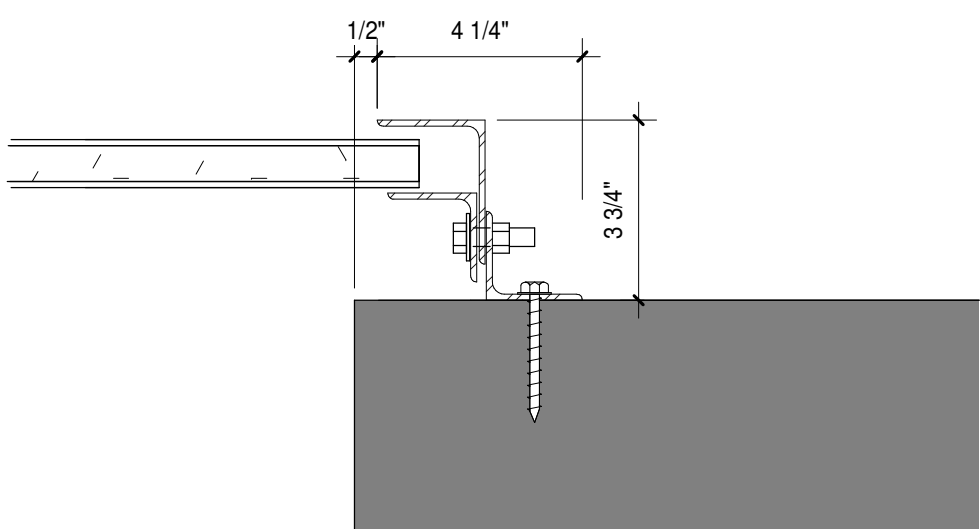




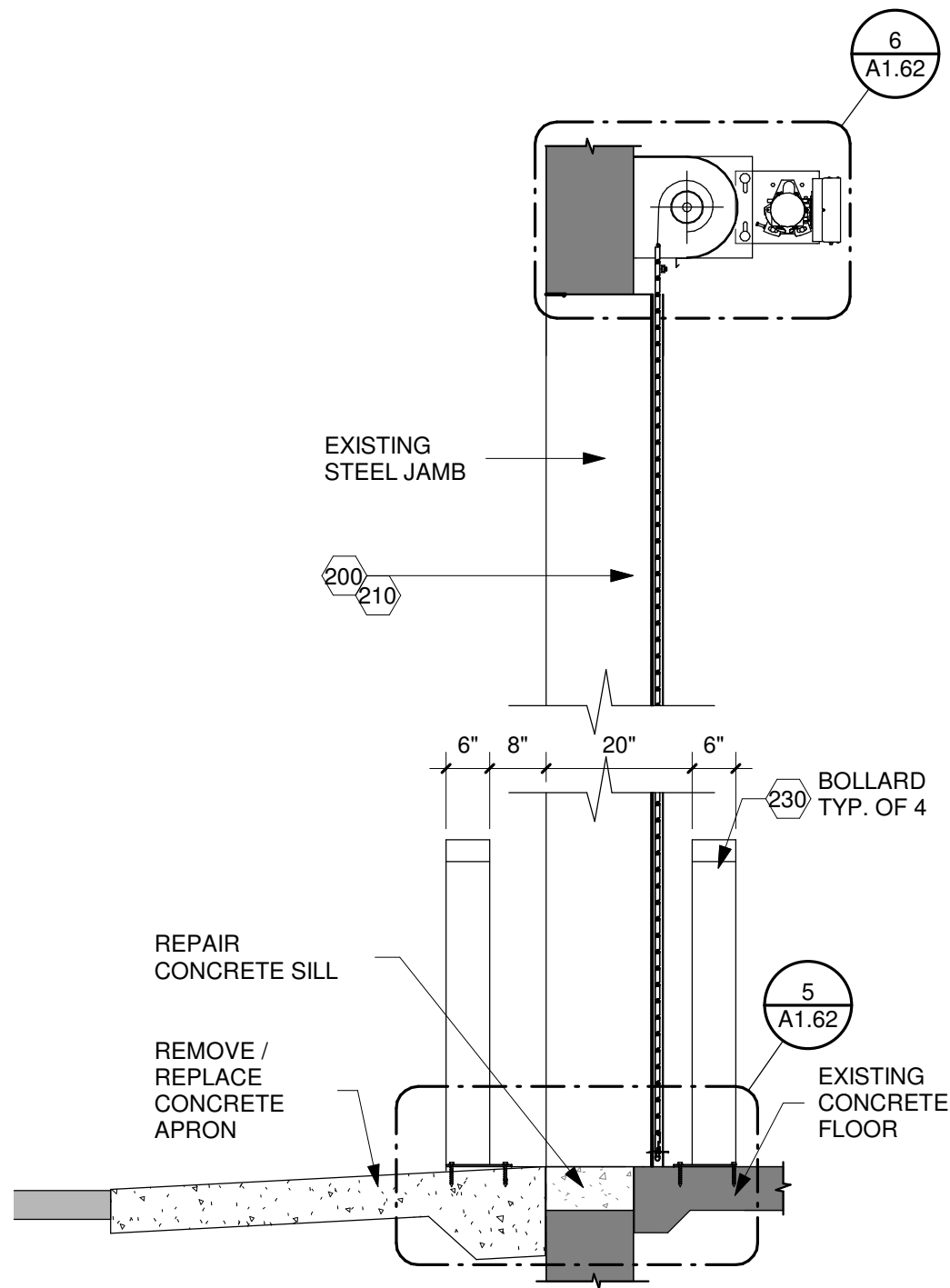
1 OVERHEAD DOOR ELEVATION
1/2" = 1'-0"



3 OVERHEAD DOOR PLAN
1/2" = 1'-0"



2 OVERHEAD DOOR JAMB DETAIL
3" = 1'-0"



4 OVERHEAD DOOR SECTION
1/2" = 1'-0"

PROVIDE AND INSTALL COMPLETE NEW OH COILING DOOR ASSEMBLY
A. TRACK SYSTEM (3 STEEL ANGLES).
B. HOOD SHAFT ASSEMBLY.
C. INSULATED COILING DOOR.
D. MOTOR, 3-BUTTON OPERATOR (WALL MOUNTED), PHOTO SENSOR EDGE; COORDINATE W/ ELECTRICAL.
E. INSTALL WEATHERSTRIPPING AND MISC. HARDWARE

DETERMINE OPENING SIZE:
A. EXISTING OPENING SIZE SHOWN ON SCHEDULE IS ±2".
B. CONFIRM FINAL OPENING SIZE INCLUDING MINIMUM JAMB, HEAD & MOTOR MOUNTING SPACE.

SELECTIVE DEMOLITION:
A. REMOVE EXISTING OH COILING DOOR(S) AND TRACK(S).
B. REMOVE EXISTING CONCRETE SLAB AND APRON.

PROVIDE AND INSTALL COMPLETE NEW OH COILING DOOR ASSEMBLY
A. TRACK SYSTEM (3 STEEL ANGLES).
B. HOOD SHAFT ASSEMBLY.
C. INSULATED COILING DOOR.
D. MOTOR, 3-BUTTON OPERATOR (BOLLARD MOUNTED), PHOTO SENSOR EDGE; COORDINATE W/ ELECTRICAL.
E. INSTALL WEATHERSTRIPPING AND MISC. HARDWARE

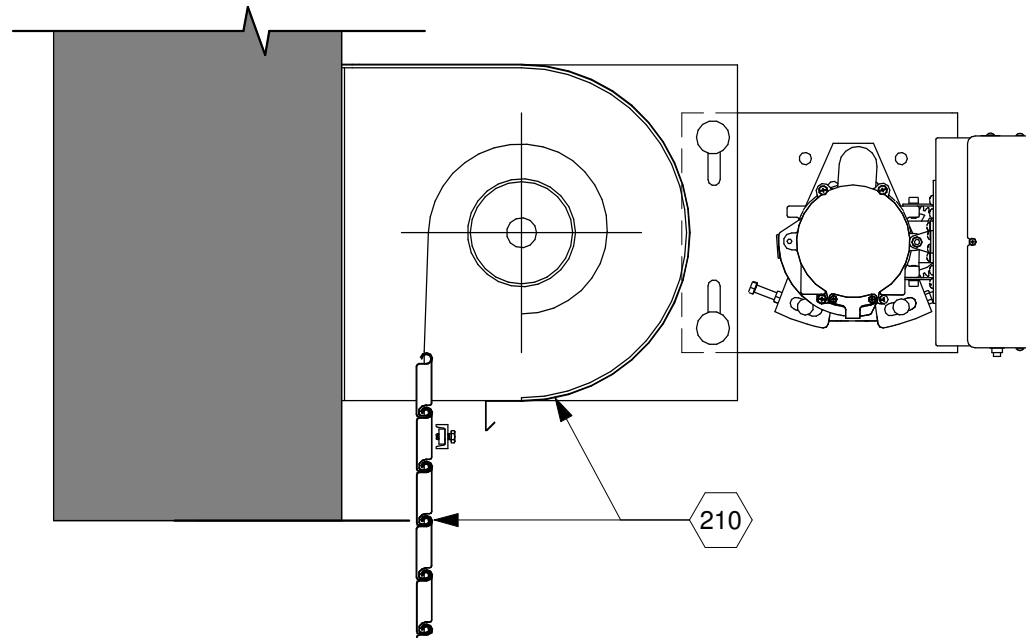
TYPICAL OH COILING DOOR NOTES:

200 PREPARE OPENING FOR NEW OH COILING DOOR(S) REMOVE EXISTING OH COILING DOOR(S) & ACCESSORIES.

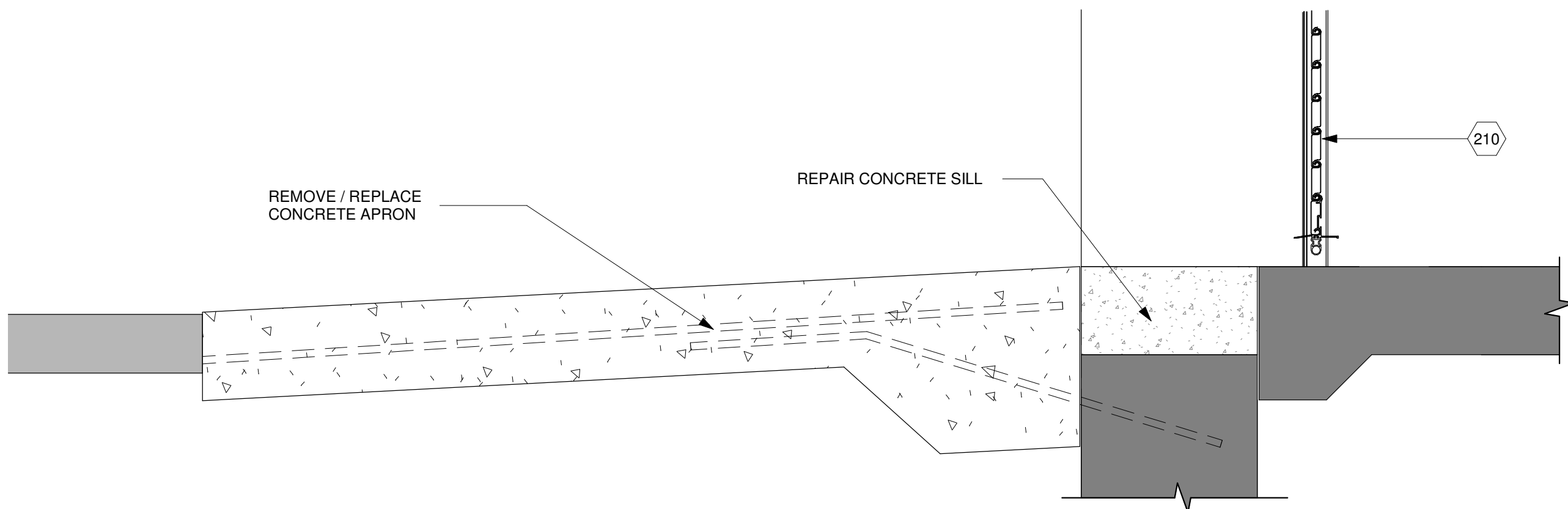
210 NEW OH COILING DOOR & ACCESSORIES DETERMINE ALLOWABLE/MAXIMUM NEW DOOR SIZE

220 CONCRETE APRON -
SAWCUT REMOVE EXISTING CONCRETE = 5'-0"W x OPENING LENGTH +12" EACH END
- NEW 6" CONCRETE APRON W/ #4 REINF. @ 18" O.C. EACH WAY AND DOWELED 8" INTO EXISTING SLABS & FOUNDATION

230 BOLLARD
- HSS 6"x6"x1/4" W/ 9"x9"x1/2" BASEPLATE W/ (3) 1/2" Ø x 6" ANCHORS INTO CONCRETE.
- POWDER COAT ASSEMBLY.



6 OVERHEAD DOOR HEAD DETAIL
1 1/2" = 1'-0"



5 OVERHEAD DOOR APRON DETAIL
1 1/2" = 1'-0"

ARCHITECTURE
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SURF ACCESS CONTROL PHASE II
SURFACE LOCATIONS
LEAD, SOUTH DAKOTA

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