

07-07-2016

**ADDENDUM TO THE BIDDING DOCUMENTS FOR:**

**Rehabilitation Renovation**

Captain James A. Lovell  
Federal Health Care Center  
3001 Green Bay Road  
North Chicago, IL 60064

TO ALL BIDDERS OF RECORD:

This addendum shall be a part of the Contract Documents and modifies the original Bidding Documents dated 02-03-2016 as follows.

**ITEM NO.**

**CHANGES TO PROJECT MANUAL**

Section 08 35 13.23: Accordion Folding Fire Doors

- 1.1 Part 2.01.A Model changed from FG 90 S to FG 90 CC/CS
- 1.2 Part 2.03.B.3 Lead Post Hangers description changed to accommodate Flat Lead Post integrated pocket door style
- 1.3 Part 2.03.G Added to include integrated header assembly

**CHANGES TO DRAWINGS**

Sheet A-R-601: Door and Window Schedule and Details

- 1.4 Specified rated accordion door has been modified to a Flat Lead Post Integrated Pocket door style. Replace Detail #7 with attached revision CS-01
- 1.5 Specified rated accordion door has been modified to a Flat Lead Post Integrated Pocket door style. Replace Detail #8 with attached revision CS-02
- 1.6 Modified accordion door detail to accommodate straight (non-curved) application. Replace Detail #9 with attached revision CS-03
- 1.7 Specified rated accordion door has been modified to a Flat Lead Post Integrated Pocket door style. Remove Door 161-D Pocket Cover Door and associated hardware from scope

**ATTACHMENTS:**

- Section 08 35 13.23
- CS-01
- CS-02
- CS-03

END OF ADDENDUM

**BANCROFT ARCHITECTS + ENGINEERS**

700 Nicholas Blvd., Suite 300  
Elk Grove, Illinois 60007  
(847) 952-9362

Lovell FHCC Rehabilitation Renovation  
VA Project # 556-12-145  
BAE Project # 13-109

**SECTION 08 35 13.23**  
**ACCORDION FOLDING FIRE DOORS**

**PART 1 - GENERAL**

**1.01 SUMMARY OF WORK**

- A. Division 0 and 1, as indexed, apply to this section.
- B. Furnish and install all horizontal sliding, accordion folding fire rated doors shown on the drawings and specified herein.

**1.02 RELATED SECTIONS**

- A. All headers, support structures, surrounding insulation, jambs, storage pockets, pocket doors, access doors, blocking and trim shall be furnished and installed by other sections.
- B. All electrical wire, wiring, conduit and electrical boxes shall be furnished and installed by electrical section including connections to smoke detectors and building fire alarm panels.
- C. Drilling/placement of anchorage points into pre or post tensioned decks, welding/punching/drilling steel members and all drywall work.
- D. All track, soffit, chain guide, and wall-mounted striker posts shall be painted by Section 09900. Color shall be selected by Architect.
- E. Wiring for Individual LCD door status display at fire door - One (1) USOC RJ14-6POS 4-wire jack shall be supplied at the back of the storage pocket and shall be tied to the 4 square junction box adjacent to the door with CAT 5 twisted 2-pair cable. The junction box, RJ14 jack and wire shall be furnished and installed by the electrical section. Termination to the Individual LCD Door Status Display panel shall be by punch down block and shall be by the electrical section as per the manufacturer's instructions.

**1.03 QUALITY ASSURANCE**

- A. Installation shall be performed by factory trained and certified installers with a minimum of three years' experience installing accordion folding fire doors.
- B. Fire doors shall be listed by Underwriters Laboratories for ratings as indicated, when tested in accordance with the requirements of UL 10B and NFPA 252.

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- C. Automatic closing system shall be listed by Underwriters Laboratories in accordance with the requirements of UL 864 and be listed for use with assembly in compliance with NFPA 80, Chapter 9. Motor operator shall be rated for continuous use with unlimited cycle duty.
- D. Fire doors used for smoke and draft control shall bear the "S" mark on the fire door label and shall have an air leakage of less than 3 ft<sup>3</sup>/ft<sup>2</sup> at 0.1 inch of water column pressure when tested in accordance with UL 1784 with an artificial bottom seal.
- E. Fire doors shall be capable of resisting an air pressure differential up to 0.05 inches of water column. Air pressure resistance to 0.1 inches of water column available

**1.04 SUBMITTALS**

- A. Section 01 33 23 - Administrative requirements for shop drawings and submittals.
- B. Product Data: Provide manufacturer's technical literature; include UL listing data.
- C. Shop Drawings: Indicate construction and installation details and dimensions, including layout, electrical requirements, required stacking depth, height of header above finished floor, and requirements for anchorage and support of each door.
- D. Operation and Maintenance Data: Operating manual, troubleshooting and repair methods, and wiring diagrams shall be provided as part of project close out procedure.

**1.05 DELIVERY, STORAGE, AND HANDLING**

- A. Deliver to the job site in manufacturer's original, unopened package.

**1.06 COORDINATION BY GENERAL CONTRACTOR**

- A. Coordinate with the following:
  - 1. Fire Alarm system.
  - 2. Electrical.
  - 3. Panel pocket doors and wood veneer paneling.
  - 4. Floor and ceiling finish.
- B. Assure accurate installation of header, jamb, and trim. Provide field dimensions for fabrication. Supervise unloading and handling of materials.

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- C. Permanent power shall be in place and ready for final connection when fire doors are erected. Assure access to and proper clearance for motor operators.
- D. After testing the fire alarm system, automatic-closing fire doors shall be re-set to the original position.
- E. Store products flat (no more than three high) in a protected dry location. Replace damaged materials on-site at no cost to owner.

**1.07 WARRANTY**

- A. Materials and installation shall be warranted against defects in workmanship for a period of one (1) year from date of substantial completion.

**PART 2 - PRODUCTS**

**2.01 MANUFACTURERS**

- A. Horizontal sliding accordion fire doors shall be Won-Door FireGuard Model FG 90 CC/CS (number designates minutes of fire rating) as manufactured by Won-Door Corporation, Salt Lake City, UT or approved equal.
  - a. Bidding on:  
Manufacturer: \_\_\_\_\_  
Brand: \_\_\_\_\_  
No.: \_\_\_\_\_

**2.02 ACCORDION FIRE DOORS - GENERAL**

- A. Provide power operated self-closing fire doors of configurations indicated on the drawings.
  - 1. Fire rating as required.
- B. Fire Rating: Fire doors shall be listed by Underwriters Laboratory as special purpose fire doors having a 90 minute fire-resistive rating in accordance with the requirements of UL 10B and NFPA 252.
- C. Closing and Opening Operation: Automatic Closing System including motor operator and releasing devices shall be a Microprocessor-based system rated to UL864 (Releasing Device Control Unit) and shall commence closing upon activation by fire alarm system and/or by low battery charge.

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1. Obstruction Detection: Contact with an obstruction shall cause the door to stop, reverse enough to remove pressure on the leading edge, pause, and then re-close when in an alarm condition.
  2. While the door is opening under motor power, constant pressure to the leading edge in the direction of opening shall cause the door to continue to open until the leading edge is released. This is termed motor-assisted opening.
  3. Constant pressure to the leading edge while not under motor power shall prevent motor operation and allow the door to be opened manually.
- D. Exit Hardware Operation: Provide fire exit hardware on both sides of door.
1. In emergency mode, a slight pressure on the hardware will cause the door to open a minimum of 32 inches, pause for 3 seconds, and then automatically close.
  2. The open distance shall be field programmable, up to the entire opening width, if the local authority requires an opening larger than 32 inches.
  3. The pause before re-close shall be field programmable, up to 30 seconds, if the local authority requires a longer pause time.
- The exit hardware shall have the ability when not in the emergency (fire) mode to be used to open the door and move it back into the storage pocket.

## 2.03 COMPONENTS

- A. Door Construction: Two parallel, accordion-type walls of panels independently suspended with no floor tracks, pantographs or interconnections except at the lead-post.
1. Panels: 24 gauge enamel coated steel, V-grooved; Modular design; Capable of in-place repair. Panels shall be connected by full height 24-gauge enamel coated steel hinges.
  2. Perimeter Seals: shall consist of continuous extruded vinyl sweeps attached to the top and bottom of the fire door to form a smoke and draft seal.
  3. Hanging Weight: 5.5 pounds per sq. ft. when extended across the opening.
  4. Finish: All steel parts factory-applied enamel.

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5. Color: Manufacturer's standard platinum GRAY- ONLY.
- B. Suspension System: Two tracks, on 8 inch centers, attached to overhead structural support.
1. Tracks: 14 gauge cold rolled steel or .125 aluminum.
  2. Panel Hangers: Each panel individually suspended from a steel hanger pin and a 1/4 inch ball bearing roller.
  3. Lead Post Hangers: ~~8-wheel ball bearing trolley.~~ 16-gauge steel structural tube frame with 18-gauge steel preformed cover. The lead post shall function as an integrated cover panel over the storage pocket opening with the fire door is in the open position.
- C. Power Supply: 12-volt /24-volt maintenance-free DC battery, automatically maintained at capacity by continuous charger, 120 V AC.
- D. Automatic Closing System shall be listed to UL864 including capability to send and receive signals from the Fire Control Panel, and shall consist of the following:
1. Microprocessor Based Electronic Control box with these features:
    - a. Ability to monitor dual power sources continually for peak performance including:
      - 1) Detect a missing battery, bad battery, or low battery condition
      - 2) Detect if the charging circuit is bad
      - 3) Detect fuse failures
      - 4) Detect high or low AC conditions
    - b. Ability to monitor the health of the drive train.
    - c. Ability to monitor inputs including sticky door block, exit hardware, and patron hardware.
    - d. Ability to run a "watch dog" monitoring circuit which will force a software restart in the event of software hangs, including tracking number of resets for diagnostic purposes.
    - e. Ability to withstand voltages up to 120 AC on the fire alarm input circuit without damage including the ability to indicate that the alarm circuit has not been wired as a dry contact, "no voltage" circuit when errant voltages are applied to the circuit.
    - f. Ability to communicate with other microprocessors in the assembly via an internal buss system.

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- g. Ability to indicate trouble or supervised information both locally and at a remote location.
- 2. Motor Operator Assembly including: A DC gear-motor, drive sprocket, clutch, and position sensors. The motor shall drive the fire door by means of a chain attached to a stabilizer bar.
- 3. If a key switch (*Note: Section 2.03.H*) is NOT used, a door control momentary rocker switch shall be mounted on one side of the door and shall function as follows:
  - a. Pressing the upper portion shall close the door and/or clear fault conditions.
  - b. Pressing the lower portion of the switch shall open the door and/or temporarily mute the local horn.
  - c. For doors using wall mounted key switches, a color coordinated cover plate shall be provided to fill the opening left when rocker switch is removed.
- 4. Leading Edge Obstruction Detector shall be pressure sensitive such that each contact with an obstruction shall cause the door to stop, reverse enough to remove pressure on the leading edge, pause then re-close when in alarm mode. The leading edge obstruction detector shall be fully functional at all times, including during the initial closing cycle.
- 5. Fire Exit Hardware shall be located on both sides of the fire door.
- E. A key switch module shall be provided, located as directed by the Architect. (*Note: required with Large Door Motor Operators and Access Control Options.*)
- F. An individual LCD door status display panel shall be provided adjacent to the door to indicate in the English language the status of the door, i.e. door position and trouble conditions. It shall have a port that allows easy access to a diagnostic tool for the purpose of field programming the door to customized settings. (*Note: Electrical requirements for the Individual LCD Status Display panel can be found in Section 1.02.E.*)
- G. The header shall be provided as an integrated part of the door assembly. It shall include integrated self-supporting track, threaded rods and mechanical attachment hardware.

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**2.04 RELATED CONSTRUCTION**

- A. Track Support Construction: Provide supports attached to structure and mounting surface for tracks; comply with door manufacturer's instructions and recommendations. Headers, if furnished & installed by the general contractor or other sections, shall be parallel with the finished floor within +/- 1/8" tolerance over the entire length of the opening.
- B. Pocket Construction: Provide pocket for concealment of accordion folding fire door when open; comply with door manufacturer's instructions and recommendations to ensure pocket and soffit are built to the dimensions specified, plumb and level.
- C. Pocket Cover Door: Maintain full pocket clear width when pocket door is open.
- D. Striker Recess: Mount 16 gauge steel striker in wall recess deep enough to prevent striker from protruding beyond face of wall; construct recess to maintain fire rating of wall.

**PART 3 - EXECUTION**

**3.01 EXAMINATION**

- A. Verify that adjacent construction is suitable for installation of door.
- B. Verify that electrical utilities have been installed and are accessible.
- C. Verify that door opening is plumb and header is level and of correct dimensions.
- D. Notify Architect of any unacceptable conditions or varying dimensions.

**3.02 INSTALLATION**

- A. Install in accordance with manufacturer's instructions, shop drawings, and NFPA 80.
- B. Install fire doors plumb and level.
- C. Installation shall be performed by factory trained and certified installers with a minimum of three years' experience installing electrically operated accordion folding fire doors.

**3.03 ADJUSTING**

- A. Adjust door installation to provide uniform clearances and smooth, quiet, non-binding operation.
- B. Verify that all operations are functional and meet the requirements of local codes.



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**3.04 CLEANING**

- A. Clean surfaces using manufacturer's recommended means and methods.

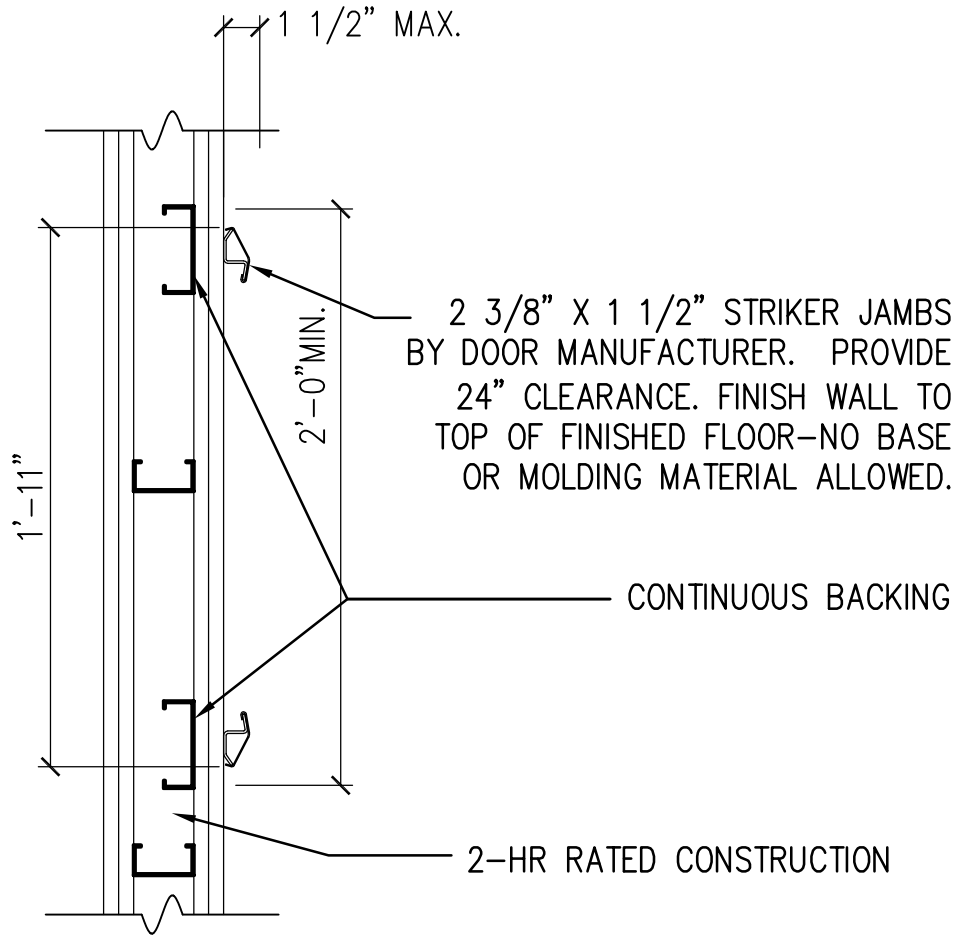
**3.05 PROTECTION**

- A. Protect installed work from damage.

**3.06 STORAGE OF WASTE AND RECYLING**

- A. Store and recycle waste in accordance with Section 01 74 19 Construction Waste Management and Disposal.

- - - END - - -



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## RATED ACCORDION PARTITION JAMB DETAIL

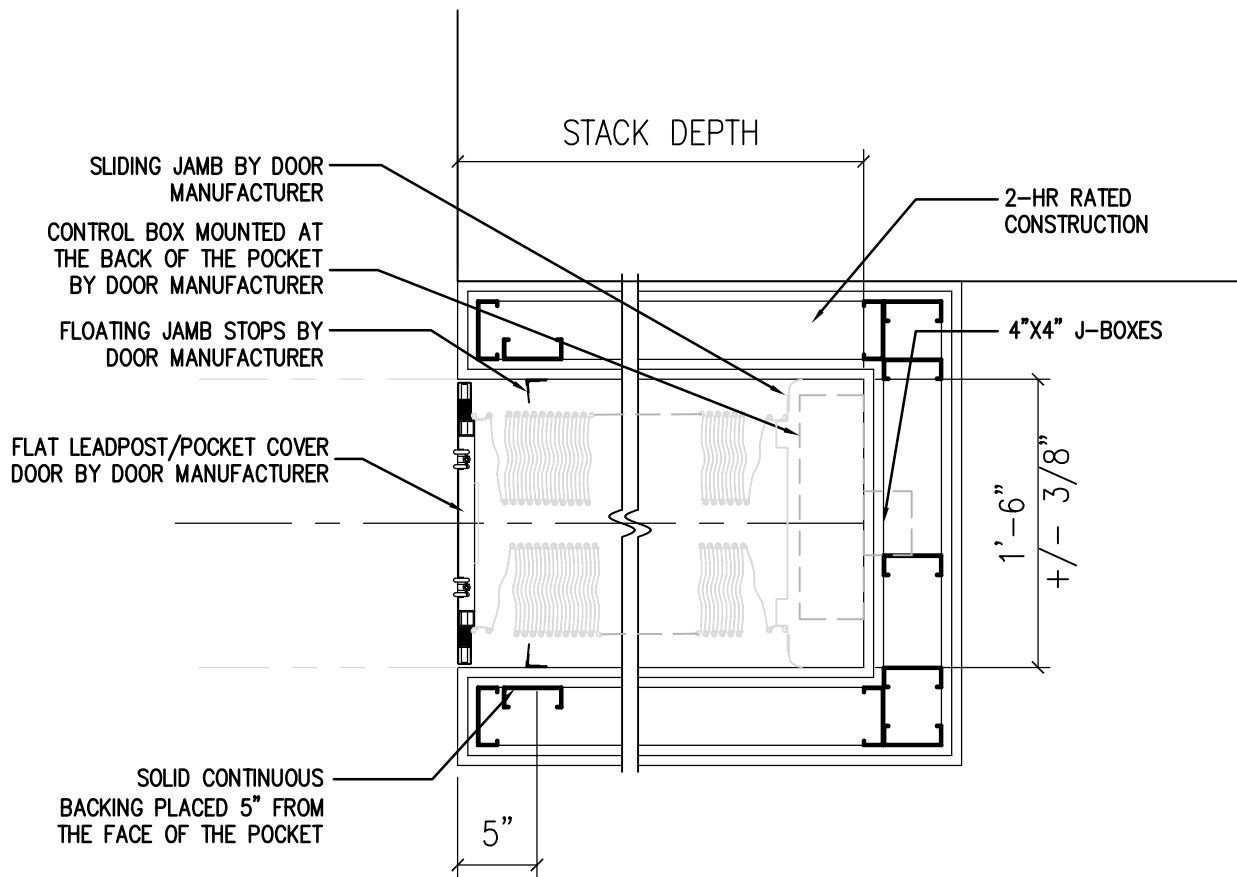
1-1/2" = 1'-0"



R1	07-07-2016	BID AMENDMENT

**LOVELL FHCC  
REHABILITATION**  
DETAIL #7/A-R-601  
RATED ACCORDION PARTITION  
SCALE: 1 1/2" = 1'-0"

DRAWN BY KAR	CHECKED BY KAR
ISSUE DATE 07-07-2016	
PROJ. NO. 556-12-145	
<b>CS-01</b>	



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# RATED ACCORDION PARTITION POCKET DETAIL

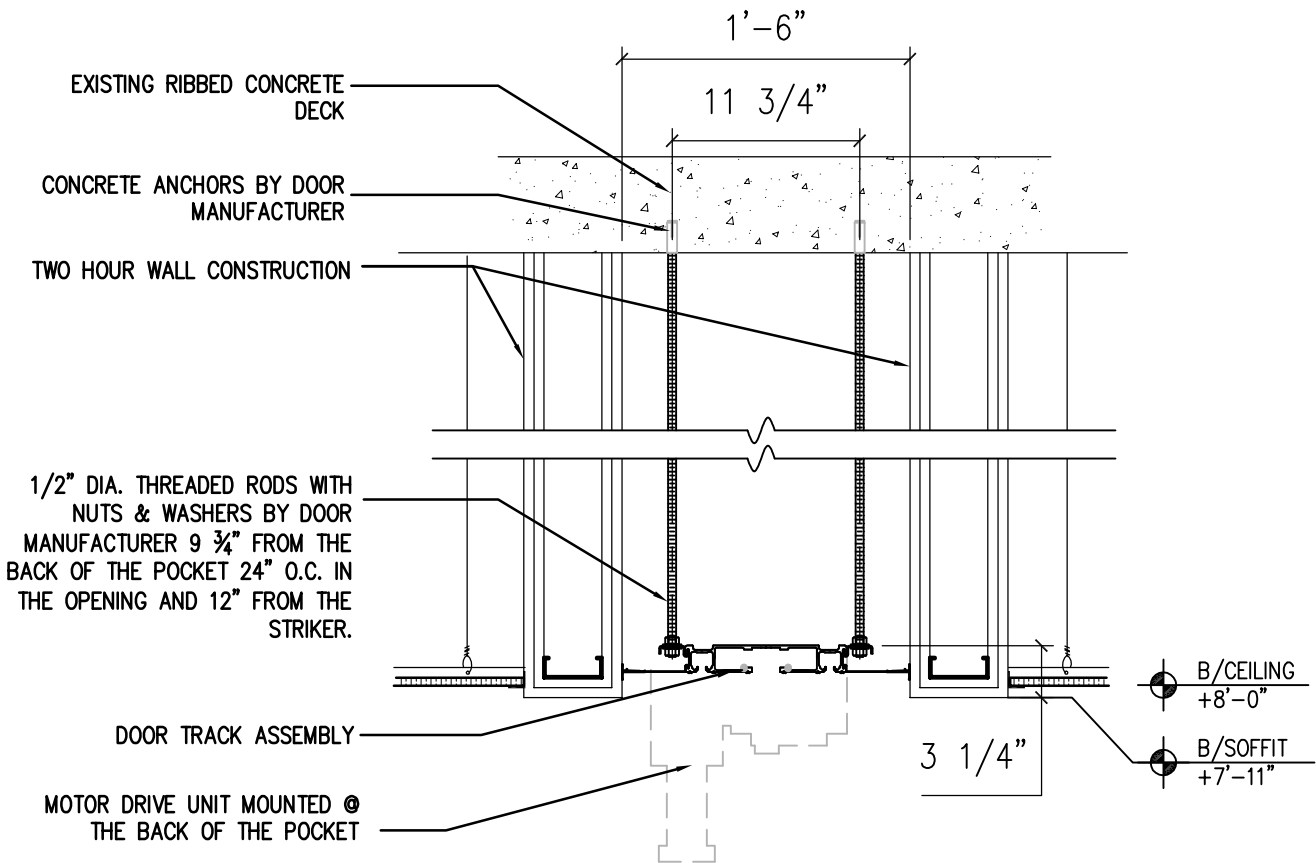
1"=1'-0"



R1	07-07-2016	BID AMENDMENT

**LOVELL FHCC  
REHABILITATION**  
DETAIL #8/A-R-601  
RATED ACCORDION PARTITION  
SCALE: 1" = 1'-0"

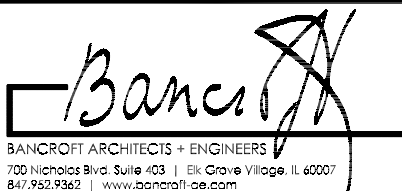
DRAWN BY KAR	CHECKED BY KAR
ISSUE DATE 07-07-2016	
PROJ. NO. 556-12-145	
<b>CS-02</b>	



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# RATED ACCORDION PARTITION HEAD DETAIL

1" = 1'-0"



R1	07-07-2016	BID AMENDMENT

**LOVELL FHCC  
 REHABILITATION**  
 DETAIL #9/A-R-601  
 RATED ACCORDION PARTITION  
 SCALE: 1" = 1'-0"

DRAWN BY KAR	CHECKED BY KAR
ISSUE DATE 07-07-2016	
PROJ. NO. 556-12-145	
<b>CS-03</b>	