ADDENDUM NO. 2

TO: PLANS AND SPECIFICATIONS FOR STATE OF MISSOURI

Upgrades and Renovations
Missouri Veterans Home
Cape Girardeau, Missouri
Project No.: U1805-01 (FAI 29-043)

Bid Opening Date: 1:30 PM, Thursday, July 22, 2025 (Changed)

Bidders are hereby informed that the construction Plans and/or Specifications including Addendum #1 are modified as follows:

GENERAL CLARIFICATIONS:

General Contractor to coordinate various scopes of work referenced in drawings with Owner's existing vendors indicated below. There is currently no access control at this facility, but there will be a new electronic access system planned for install later this year.

1. Vendor List:
    a. Nurse Call Vendor: Tech Electronics
    b. Monitoring Vendor: Johnson Controls
    c. FUTURE Access Control Systems: Gallagher, Contact: Kenton Brothers
    d. Fire Alarm is in the process of being updated throughout the building. Coordinate with Owner for current vendor information.

2. Casework Details shown on drawings A-415, A-416, A-417: MDF cores are acceptable for cabinet bodies, cabinet doors, drawer fronts and shelves.
3. The AWI labeling and full certification program (QCP) can be waived. Documentation showing that the firm holds an AWI certification will meet the bid specification requirements, as previously confirmed in an RFI response.

SPECIFICATION CHANGES:

1. Section 001116-INVITATION FOR BID
    a. REVISE Paragraph 3.0-A as follows:
        A. Until: **1:30 PM, July 22, 2025**
2. Section 011000 -- SUMMARY OF WORK
    a. REVISE Paragraph 1.3-B as follows:
        B. The following phasing schedule is the preliminary phasing schedule. Contractor to provide detailed schedule as described in Section 01 3200. Add 10 processing days between Contractor Notice of Intent and Notice of Award.
3. Section 044313 - STONE MASONRY VENEER Paragraph 2.4-B.2:
    a. ADD mortar product manufacturer:
        d. Tenon – Veneer Mortar HB

4. Section 064100 – ARCHITECTURAL WOOD CASEWORK
    a. REPLACE Section in its entirety
5. Section 072500 WEATHER BARRIERS Paragraph 2.2-A.k:
    a. ADD proposed weather barrier product:
        6) SOPREMA Sopraseal LM 204 VP
        7) TK-AirMax
6. Section 087100 – DOOR HARDWARE
    a. REPLACE Section in its entirety.
7. Section 101200 – DISPLAY CASES
    a. REPLACE Section in its entirety.
8. Section 237313 – MODULAR INDOOR CENTRAL-STATION AIR-HANDLING UNITS
    a. REMOVE AND REPLACE Paragraph 2.7-A

        A. DDC Controller and Control Components: Provided by Controls Contractor.

            1) Provide panel-mounted, factory wired, application-specific (ASC) or advanced application-programmable controller (APC).
            2) ASC or APC: See Section 25 1400 except for manufacturer-provided units that are fully compatible with site BAS, BMS, SCADA, or Integrated Automation System.
            3) Include built-in or provide local screen push-button interface for local monitoring, adjustment, tuning, data logging, and troubleshooting.
            4) Factory configured to handle internal equipment using manufacturer's specific instructions unless directly specified on listed sequence of operation.
            5) Factory wired into panel-mounted auxiliary relay(s) to handle scheduled or interlocked cycle-duty operation of externally linked equipment as indicated on drawings.
            6) Factory installed, wired, programmed, and tested, including each component.
            7) BAS, SCADA, or other Integrated Automation Link: ASHRAE Std 135 BACnet MS/TP.
9. Section 323119 – DECORATIVE METAL FENCES AND GATES
    a. REPLACE Section in its entirety

DRAWING CHANGES:

1. Drawing C-003
    a. DELETE note referring to removal and replacement of asphalt pavement under a separate contract. Existing asphalt pavement in that area will remain as is.
2. Drawing C-007
    a. REVISED fence pedestrian gates to swing out from fence area to allow for egress.

    b. REVISED vehicle access gates to show cantilever slide gates instead of swing gates.

    c. REVISED vehicle access gate and pedestrian gate notes to be separate notes to provide more detail on the specified gate.

    Pedestrian Swing Gate Note(s):
    NEW SWING GATE FOR PEDESTRIAN ACCESS - REFER TO SPEC SECTION 32 3119 (ALTERNATE #2). NOTE: ELECTRICAL CONTRACTOR SHALL FURNISH AND INSTALL ALL WIRING, JUNCTION BOXES, CONDUIT, ETC. AS REQUIRED TO

CONNECT DIGITAL ENTRY SYSTEM TO EXISTING POWER SOURCE AND FIRE ALARM SYSTEM.

Vehicle Access Gate Note(s):
NEW CANTILEVER SLIDE GATE FOR VEHICLE ACCESS -REFER TO SPEC SECTION 32 3119 (ALTERNATE #2). NOTE: ELECTRICAL CONTRACTOR SHALL FURNISH AND INSTALL ALL WIRING, JUNCTION BOXES, CONDUIT, ETC. AS REQUIRED TO CONNECT DIGITAL ENTRY SYSTEM TO EXISTING POWER SOURCE AND FIRE ALARM SYSTEM.

3. Drawing S-101
   a. REMOVE AND REPLACE Note T:
      T. See S-402 for base plate details.
4. Drawing S-102
   a. REMOVE AND REPLACE Note T:
      T. See S-402 for base plate details.

   b. ADD columns tags for clarification.

5. Drawing S-103
   a. REMOVE AND REPLACE Note T:
      T. See S-402 for base plate details.

   b. ADD columns tags for clarification.

6. Drawing S-104
   a. REMOVE AND REPLACE Note T:
      T. See S-402 for base plate details.

   b. ADD columns tags for clarification.

7. Drawing S-202
   a. ADD columns tags for clarification.

8. Drawing S-203
   a. ADD columns tags for clarification.
   b. ADD beam tag on grid line BB for clarification.

9. Drawing S-204
   a. ADD columns tags for clarification.

10. Drawing A-103
    a. REMOVE AND REPLACE Demolition keynote D12:

       12. EXISTING EXTERIOR WINDOW TO BE REMOVED AND INTERIOR LAMINATE WINDOWSILLS. REMOVE AND DISPOSE OF EXISTING WINDOW TREATMENT WHERE OCCURS. PROTECT OPENING TO RECEIVE NEW REPLACEMENT WINDOWS. AT ALT#3 LOCATIONS, WINDOWS TO BE REMOVED AND REPLACED IN ITS ENTIRETY IF ALTERNATE IS REJECTED.

11. Drawing A-104
    a. REMOVE AND REPLACE Demolition keynote D12:

       12. EXISTING EXTERIOR WINDOW TO BE REMOVED AND INTERIOR LAMINATE WINDOWSILLS. REMOVE AND DISPOSE OF EXISTING WINDOW TREATMENT

WHERE OCCURS. PROTECT OPENING TO RECEIVE NEW REPLACEMENT WINDOWS. AT ALT#3 LOCATIONS, WINDOWS TO BE REMOVED AND REPLACED IN ITS ENTIRETY IF ALTERNATE IS REJECTED.

12. Drawing A-105
    a. REMOVE AND REPLACE Demolition keynote D12:

        12. EXISTING EXTERIOR WINDOW TO BE REMOVED AND INTERIOR LAMINATE WINDOWSILLS. REMOVE AND DISPOSE OF EXISTING WINDOW TREATMENT WHERE OCCURS. PROTECT OPENING TO RECEIVE NEW REPLACEMENT WINDOWS. AT ALT#3 LOCATIONS, WINDOWS TO BE REMOVED AND REPLACED IN ITS ENTIRETY IF ALTERNATE IS REJECTED.

13. Drawing A-107
    a. REMOVE AND REPLACE Demolition keynote D15:

        D15 EXISTING GUTTERS AND DOWNSPOUTS TO BE REMOVED, TYPICAL UNLESS NOTED OTHERWISE.

14. Drawing A-109
    a. REVISE Enlarged Floor Plan – Central Core to designate window types ‘N’ on north side of west hall leading from Lobby 002 to Reception 005.
    b. REVISE Enlarged Floor Plan – Central Core to designate window types ‘C’ on north side of Admin Assist. Room 003.

15. Drawing A-110
    a. REVISE Enlarged Floor Plan – Wing A to designate window type ‘B’ at Patio A223

16. Drawing A-116
    a. REVISE Detail 3 – ENLARGED ADMIN. ASSIST. To indicate window tag designations type ‘C’.

17. Drawing A-601
    a. ADD Remark 8.

        8. PREP DOOR FRAME FOR FUTURE CARD READER/ELECTRONIC ACCESS CONTROL.

    b. REVISE Door Schedule by adding Remark 8 to Doors: 001C, 041, A222A, A222B, A222C, A223.

18. M-107 WING A VENTILATION PLAN
    a. ADDED Keynote 21:

        21. SINGLE THERMOSTAT PROVIDED BY CONTROLS CONTRACTOR TO ALL ELECTRIC BASEBOARD HEATERS IN SPACE.

19. M-115 ALTERNATE 1 INFECTIOS DISEASE HYDRONIC PLAN
    a. ADDED HC-1 for preheat

20. M-401 ENLARGED MECHANICAL PLANS
    a. REVISED alternate 1 mech c321 3d view to show HC-1.

21. ADDED page M-504 MECHANICAL DETAILS
    a. HC-1 Hot Water Coil detail.
22. M-601 MECHANICAL SCHEDULES
    a. REMOVE AND REPLACE Fan Coil Schedule note 2:

2. CONTROLS CONTRACTOR WILL SUPPLY BACNET CONTROLLER. MOUNT THERMOSTAT 48" ABOVE FINISHED FLOOR.

b. REMOVE AND REPLACE Door Air Curtain Schedule note 1:

1. PROVIDE ON-BOARD BACNET-IP CONTROLLER AND VENDOR SUPPIED DOOR SWITCH. ENABLE BACNET CONTROL, MONITORING AND ALARMS.

c. REMOVE AND REPLACE Baseboard heater Schedule note 1:

1. CONTROLS CONTRACTOR TO PROVIDE WALL MOUNTED TEMPERATURE SENSOR WITH BACNET CAPABILITY TO ALLOW BAS TO CONTROL THE UNITS.

23. M-602 MECHANICL SCHEDULES
    a. REVISED Gravity Roof Ventilator Schedule to remove backdraft damper
    b. ADD Pre-Heating coil Schedule.

24. M-604 CONTROL DIAGRAM
    a. REVISED Fan Coil Unit controls to add dehumidification sequence.

25. M-605 CONTROL DIAGRAM
    a. REVISED AHU controls to add dehumidification sequence.

26. M-607 INFECTIOUS DISEASE CONTROLS DIAGRAMS
    a. REVISED Make up Air unit controls to add Pre-heat Coil.

27. E-001 ELECTRICAL SYMBOLS
    a. REVISED communications symbols list.

28. E-002 ELECTRICAL GENERAL NOTES AND ABREVIATIONS
    a. ADD General notes – Conduit and Wiring Paragraph B:

       B: CONDUIT AND WIRING ABOVE CEILING SHALL BE LISTED AS PLOENUM RATED.

29. E-106 POWER DEMOLITION PLAN – WING A
    a. ADD general note Paragraph B:

       B. DURING DEMOLITON MAINTAIN EXISTING CIRCUITS FOR REUSE UNLESS NOTED OTHERWISE.

30. E-107 POWER DEMOLITION PLAN – WING B
    a. ADD general note Paragraph B:

       B. DURING DEMOLITON MAINTAIN EXISTING CIRCUITS FOR REUSE UNLESS NOTED OTHERWISE.

31. E-108 POWER DEMOLITION PLAN – WING C
    a. ADD general note Paragraph B:

       B. DURING DEMOLITON MAINTAIN EXISTING CIRCUITS FOR REUSE UNLESS NOTED OTHERWISE.

32. E-109 SYSTEMS DEMOLITION PLAN – CORE
    a. REMOVE general note A:

       A. NOT USED

33. E-110 SYSTEMS DEMOLITION PLAN – WING A
    a. REMOVE general note B:

B. NOT USED

34. E-113 ELECTRICAL SITE PLAN
    a. ADD general note B:

       B. SEE SHEET C-007 FOR EXTERIOR FENCE GATE LOCATIONS. COORDINATE WITH GATE SYSTEM MANUFACTURER FOR EXACT REQUIREMENTS. PROVIDE POWER FROM NEAREST ELECTRICAL PANEL HAVING SPACE. (ALTERNATE #2)

35. E-119 POWER PLAN – CORE
    a. ADDED power to door 043.

36. E-120 POWER PLAN – WING A
    a. ADDED power to door A223.
    b. REMOVED floating keynote 6.

37. E-122 POWER PLAN – WING C
    a. REMOVED floating keynote 8.

38. E-123 POWER PLAN – ALTERNATE 1 INFECTIOUS DISEASE
    a. ADDED 22,000 AIC rating TO SCC RATING (SYM) on panel MCL4.

39. E-124 ELECTRICAL ROOF PLAN
    a. ADDED areas of work with associated keynote 1.

40. E-125 SYSTEMS PLAN – CORE
    a. REVISED general notes.
    b. REVISED access control at door 001C.
    c. ADDED access control at door 043.

41. E-126 SYSTEMS PLAN – WING A
    a. REVISED general notes.
    b. REVISED keynote 1.
    c. ADDED access control at door A223.
    d. REMOVED data in patient rooms throughout.

42. E-127 SYSTEMS PLAN – WING B
    a. REVISED general notes.
    b. REVISED keynote 1.
    c. REMOVED data in patient rooms throughout.

43. E-128 SYSTEMS PLAN – WING C
    a. REVISED general notes.
    b. REVISED keynote 1.
    c. REMOVED data in patient rooms throughout.

44. E-501 ELECTRICAL DETAILS
    a. ADDED access control detail.

45. E-601 ONE-LINE DIAGRAM
    a. REVISED feeder schedule.
    b. REMOVED panel PAV.

46. E-602 ELECTRICAL SCHEDULES
    a. REMOVE AND REPLACE lighting fixture schedule types A:
       A. CPX 2X4 AL07 SWW7 M4

b. REMOVE AND REPLACE lighting fixture schedule types W:
W. CPX 2X4 AL07 SWW7 M4

47. E-604 ELECTRICAL SCHEDULES WING A
a. ADDED “existing” to panel MLL3.

48. E-607 ELECTRICAL SCHEDULES
a. ADDED 22,000 AIC rating TO SCC RATING (SYM) on panel MEL4C.

GENERAL COMMENTS:

1. Bidders needing additional site inspection should contact Brian Blankenship at 573-986-4015 to schedule a time if access to the facility is required.
2. Please contact Mandy Roberson, Contract Specialist, at 573-522-0074 or mandy.roberson@oa.mo.gov for questions about bidding procedures, MBE\WBE\SDVE Goals, and other submittal requirements.
3. The deadline for technical questions was Wednesday, July 9, 2025.
4. Changes to, or clarification of, the bid documents are only made as issued in the addenda.
5. All correspondence with respect to this project must include the State of Missouri project number as indicated above.
6. Current Plan holders list available online at https//www.oafmdcplanroom.com/projects/2928/details/u1805-01 Upgrades & Renovations-Missouri Veterans Home-Cape Girardeau :: State of Missouri Office of Administration
7. Prospective Bidders contact American Document Solutions, 1400 Forum Blvd Suite 1C, Columbia MO 65201, 573-446-7768 to order official plans and specifications.
8. **All bids shall be submitted on the bid form without additional terms and conditions, modifications, or stipulations. Each space on the bid form shall be properly filled. Failure to do so will result in rejection of the bid.**
9. **MBE/WBE/SDVE participation requirements can be found in DIVISION 00. The MBE/WBE/SDVE participation goals are 10%/10%/3%, respectively. Only certified firms as of the bid opening date can be used to satisfy the MBE/WBE/SDVE participation goals for this project. If a bidder is unable to meet a participation goal, a Good Faith Effort Determination Form must be completed. Failure to complete this process will result in rejection of the bid.**
10. **The Contractor shall pay not less than the prevailing hourly rate of wages for work of a similar character in the locality in which the work is performed, as determined by the Missouri Department of Labor and Industrial Relations.** Bidders are to adhere to Prevailing Wage Hourly Rate of Wages, and the Department of Labor and Industrial Relations can be contacted to determine the applicable wage rate for the work on this project.

ATTACHMENTS:

1. **Specification Attachments**:
    1. Section 064100
    2. Section 087100
    3. Section 101200
    4. Section 323119

2. Drawing Attachments:

1. C-007
2. A-109
3. A-110
4. A-116
5. A-601
6. S-102
7. S-103
8. S-104
9. S-202
10. S-203
11. S-204
12. M-115
13. M-401
14. M-504
15. M-602
16. M-604
17. M-605
18. M-607
19. E-001
20. E-119
21. E-120
22. E-124
23. E-125
24. E-126
25. E-127
26. E-128
27. E-501
28. E-601

July 11, 2025

END ADDENDUM NO. 2

SECTION 06 4100 - ARCHITECTURAL WOOD CASEWORK

PART 1 GENERAL

1.1. SECTION INCLUDES

A. Specially fabricated cabinet units.

B. Cabinet hardware.

C. Preparation for installing utilities.

D. Wardrobe cabinet mirrors.

E. Plastic laminate shelving.

F. Custom Recessed display

1.2. RELATED REQUIREMENTS

A. Section 08 8000 - Glazing: Glass for casework.

B. Section 12 3600 - Countertops.

1.3. REFERENCE STANDARDS

A. AWI/AWMAC/WI (AWS) - Architectural Woodwork Standards; 2014, with Errata (2016).

B. AWMAC/WI (NAAWS) - North American Architectural Woodwork Standards, U.S. Version 3.1; 2016, with Errata (2017).

C. BHMA A156.9 - American National Standard for Cabinet Hardware; 2015.

D. NEMA LD 3 - High-Pressure Decorative Laminates; 2005.

1.4. ADMINISTRATIVE REQUIREMENTS

A. Preinstallation Meeting: Convene a preinstallation meeting not less than one week before starting work of this section; require attendance by all affected installers.

1.5. SUBMITTALS

A. See Section 01 3300 - Submittals for submittal procedures.

B. Shop Drawings: Indicate materials, component profiles, fastening methods, jointing details, and accessories.

1) Scale of Drawings: 1-1/2 inch to 1 foot, minimum.

2) Provide the information required by AWI/AWMAC/WI (AWS) or AWMAC/WI (NAAWS).

C. Product Data: Provide data for hardware accessories.

D. Samples: Submit actual samples of architectural cabinet construction, minimum 8 inches square, illustrating proposed cabinet, countertop, and shelf unit substrate and finish.

E. Samples: Submit actual sample items of proposed pulls, hinges, shelf standards, and locksets, demonstrating hardware design, quality, and finish.

1.6. QUALITY ASSURANCE

A. Fabricator Qualifications: Company specializing in fabricating the products specified in this section with minimum five years of documented experience.

1) Company with at least one project in the past 5 years with value of woodwork within 20 percent of cost of woodwork for this Project.

B. Quality Certification:

1) Provide labels or certificates indicating that the installed work complies with AWI/AWMAC/WI (AWS) or AWMAC/WI (NAAWS) requirements for grade or grades specified.

1.7. DELIVERY, STORAGE, AND HANDLING

A. Protect units from moisture damage.

1.8. FIELD CONDITIONS

A. During and after installation of custom cabinets, maintain temperature and humidity conditions in building spaces at same levels planned for occupancy.

PART 2 PRODUCTS

2.1. CABINETS

A. Quality Standard: Custom Grade, in accordance with AWI/AWMAC/WI (AWS) or AWMAC/WI (NAAWS), unless noted otherwise.

B. Plastic Laminate Faced Cabinets: Custom grade.

C. Cabinets:

1) Finish - Exposed Exterior Surfaces: Decorative laminate.

2) Finish - Exposed Interior Surfaces: Decorative laminate.

3) Finish - Semi-Exposed Surfaces: Decorative laminate

4) Finish - Concealed Surfaces: Manufacturer's option.

5) Door and Drawer Front Edge Profiles: ~~Square edge with thick applied band.~~ ½ mm or 1 mm band applied.

6) Door and Drawer Front Retention Profiles: Fixed panel.

7) Casework Construction Type: Type A - Frameless.

8) Interface Style for Cabinet and Door: Style 1 - Overlay; flush overlay.

9) Grained Face Layout for Cabinet and Door Fronts: Flush panel.

a. Custom Grade: Doors, drawer fronts and false fronts wood grain to run and match vertically within each cabinet unit.

10) Cabinet Design Series: As indicated on drawings.

11) Adjustable Shelf Loading: 50 lbs. per sq. ft.

12) Cabinet Style: Flush overlay.

13) Drawer Side Construction: ~~Multiple-dovetail.~~ Dowel Construction

14) Drawer Construction Technique: ~~Dovetail joints.~~ Dowel joints.

2.2. WOOD-BASED COMPONENTS

A. Wood fabricated from old growth timber is not permitted.

2.3. LAMINATE MATERIALS

A. Manufacturers:

1) Formica Corporation; <>: www.formica.com/#sle.

2) Panolam Industries International, Inc; Nevamar; <>: www.nevamar.com/#sle.

3) Panolam Industries International, Inc: www.panolam.com/#sle.

4) Wilsonart LLC; <>: www.wilsonart.com/#sle.

B. Thermally Fused Laminate (TFL): Melamine resin, NEMA LD 3, Type VGL laminate panels.

C. High Pressure Decorative Laminate (HPDL): NEMA LD 3, types as recommended for specific applications.

D. Provide specific types as indicated.

1) Horizontal Surfaces: HGS, 0.048 inch nominal thickness, <> color, finish as indicated.

2) Vertical Surfaces: VGS, 0.028 inch nominal thickness, <> color, finish as indicated.

3) Post-Formed Horizontal Surfaces: HGP, 0.039 inch nominal thickness, <> color, finish as indicated.

2.4. COUNTERTOPS

A. Countertops are specified in Section 12 3600.

2.5. STORAGE ROOM SHELVING

A. Quality Standard: Custom Grade, in accordance with AWI/AWMAC/WI (AWS) or AWMAC/WI (NAAWS), unless noted otherwise.

B. High Pressure Decorative Laminate (HPDL): NEMA LD 3, types as recommended for specific applications.

C. Horizontal Surfaces: HGS, 0.048 inch nominal thickness, color, finish as indicated.

D. Plastic Edge Banding: Extruded PVC, flat shaped; smooth finish; self locking serrated tongue; of width to match component thickness.

2.6. RECESSED DISPLAY SHELVING

A. Glazed Hinged Doors:

1. 1/4 inch clear tempered glass with polished edges.

2.7. ACCESSORIES

A. Adhesive: Type recommended by fabricator to suit application.

B. Plastic Edge Banding: Extruded PVC, convex shaped; smooth finish; self locking serrated tongue; of width to match component thickness.

1) Color: To match face of laminate.

C. Resident Room Wardrobe Glassless Mirrors:

1) Basis of Design Mirrorlite® / Physical Activity Glassless Mirror.www.gomirrorlite.com

2) Other Acceptable Manufacturers:

a. Rose Brand; www.rosebrand.com

b. Dulles Glass & Mirror; www.dullesglassandmirror.com

3) Description: Mirror consists of a rigid foam core framed by an aluminum extrusion. The frame has a raised lip around the four edges. A polyester film, metalized on the backside, is stretched across the raised edges to form the mirror surface. Because the film is mounted on raised edges, an air space is created between the back of the film and the core. This air space, 1/8”, allows the film to flex under minor impact without damage

4) Size: 16- inches wide x 48-inches high x .75-inches thick.

5) Weight: Approximately 6 oz. per square foot. A 4 ft. x 8 ft. (32 sq. ft.) MirrorLite Mirror weighs 12 lbs.

6) Core Composition: Aluminum foil-faced isocyanurate foam.

7) Frame: Aluminum extrusion-nonflammable.

8) Provide unit with pre-drilled holes and mounting kit.

D. Fasteners: Size and type to suit application.

2.8. HARDWARE

A. Hardware: BHMA A156.9, types as recommended by fabricator for quality grade specified.

B. Adjustable Cabinet Shelf Supports: Standard side-mounted system using recessed metal shelf standards or multiple holes for pin supports and coordinated self rests, satin chrome finish, for nominal 1 inch spacing adjustments.

C. Adjustable Wall mounted Shelf Supports: Extra duty, double slot back-mounted system using surface mounted metal shelf standards and coordinated cantilevered shelf brackets, satin chrome finish, for nominal 1 inch spacing adjustments. BHMA Grade 2 compliant.

1) Product: 85/185 Series manufactured by Knape and Vogt. www.knapeandvogt.com

D. Drawer and Door Pulls: "U" shaped wire pull, steel with satin finish, 4 inch centers.

E. Sliding Door Pulls: Circular shape for recessed installation, steel with satin finish.

F. Cabinet Locks: As indicated on drawings

1) Keyed cylinder cam lock, two keys per lock, master keyed, steel with chrome finish.

a. Product: C3186 5/8" double bitted Cam Lock manufactured by CompX Chicago.

2) Combination / Keyed cylinder cam lock, two keys per lock, master keyed, steel with polished nickel finish.

a. Product: Combi-Cam Ultra, 7440S manufactured by Combi-Cam.

G. Catches: Magnetic.

H. Drawer Slides:

1) Type: Full extension.

2) Static Load Capacity: Commercial grade.

3) Mounting: Side mounted.

4) Stops: Integral type.

5) Features: Provide self closing/stay closed type.

6) Manufacturers:

a. Accuride International, Inc; <>: www.accuride.com/#sle.

b. Grass America Inc; Dynapro: www.grassusa.com/#sle.

c. Knape & Vogt Manufacturing Company; <>: www.knapeandvogt.com/#sle.

I. Drawer Systems: Integrated drawer slide and side.

1) Side Type: Double Wall.

2) Drawer Side Height: 4-3/4 inches.

3) Drawer Length: 18 inch.

4) Extension Type: Full extension with overtravel.

5) Static Load Capacity: Heavy Duty grade.

6) Mounting: Side mounted.

7) Stops: Integral type.

8) Features: Provide self closing/stay closed and metallic finish type.

J. Hinges: European style concealed self-closing type, steel with satin finish.

1) Manufacturers:

a. Grass America Inc; TEC Soft-Close: www.grassusa.com/#sle.

b. Hettich America, LP; <>: www.hettich.com/#sle.

c. Blum, Inc; <>: www.blum.com/#sle.

K. Recessed Display Case Glass Shelf Support : adjustable in 1 inch increments along entire length of standard, drilled and countersunk for screws.

1) Shelf Support, For glass shelves, for screw fixing into drill hole Ø 5 mm

2) Steel, load-bearing capacity 80 kg (in compliance with DIN EN 1727:1998-06), with lip, Nickel plated.

L. Recessed Display Case Hardware:

1) Frameless Pivot Hinges: Satin Chrome Flush Mount Cabinet Pivot Hinges.

2) Lock: Glass door cylinder lock. Chrome Single Glass Door Lock - Randomly Keyed

M. Sliding Door Track Assemblies: Upper and lower track of satin anodized aluminum, with matching shoe equipped with nylon rollers.

2.9. FABRICATION

A. Assembly: Shop assemble cabinets for delivery to site in units easily handled and to permit passage through building openings.

B. Edging: Fit shelves, doors, and exposed edges with specified edging. Do not use more than one piece for any single length.

C. Fitting: When necessary to cut and fit on site, provide materials with ample allowance for cutting. Provide matching trim for scribing and site cutting.

D. Plastic Laminate: Apply plastic laminate finish in full uninterrupted sheets consistent with manufactured sizes. Fit corners and joints hairline; secure with concealed fasteners. Slightly bevel arises. Locate counter butt joints minimum 2 feet from sink cut-outs.

1) Apply laminate backing sheet to reverse side of plastic laminate finished surfaces.

2) Cap exposed plastic laminate finish edges with material of same finish and pattern.

E. ~~Matching Wood Grain: Comply with requirements of quality standard for specified Grade and as follows:~~

1) ~~Provide center matched panels at each elevation.~~

2) ~~Provide sequence matching across each elevation.~~

3) ~~Carry figure of cabinet fronts to toe kicks.~~

F. Mechanically fasten back splash to countertops as recommended by laminate manufacturer at 16 inches on center.

G. Provide cutouts for plumbing fixtures. Verify locations of cutouts from on-site dimensions. Prime paint cut edges.

H. Shop glaze glass materials using the Interior Dry method as specified in Section 08 8000.

PART 3 EXECUTION

3.1. EXAMINATION

A. Verify adequacy of backing and support framing.

B. Verify location and sizes of utility rough-in associated with work of this section.

3.2. INSTALLATION

A. Install work in accordance with AWI/AWMAC/WI (AWS) or AWMAC/WI (NAAWS) requirements for grade indicated.

B. Set and secure custom cabinets in place, assuring that they are rigid, plumb, and level.

C. Use fixture attachments in concealed locations for wall mounted components.

D. Use concealed joint fasteners to align and secure adjoining cabinet units.

E. Carefully scribe casework abutting other components, with maximum gaps of 1/32 inch. Do not use additional overlay trim for this purpose.

F. Secure cabinets to floor using appropriate angles and anchorages.

3.3. ADJUSTING

A. Adjust installed work.

B. Adjust moving or operating parts to function smoothly and correctly.

3.4. CLEANING

A. Clean casework, counters, shelves, hardware, fittings, and fixtures.

END OF SECTION

SECTION 087100 - DOOR HARDWARE

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

1.2 SUMMARY

A. This Section includes commercial door hardware for the following:

1. Swinging doors.
2. Sliding doors.
3. Other doors to the extent indicated.

B. Door hardware includes, but is not necessarily limited to, the following:

1. Mechanical door hardware.
2. Electromechanical door hardware.
3. Automatic operators.
4. Cylinders specified for doors in other sections.

C. Related Sections:

1. Division 08 Section “Hollow Metal Doors and Frames”.
2. Division 08 Section “Flush Wood Doors”.
3. Division 08 Section “Aluminum-Framed Entrances and Storefronts.
4. Division 08 Section “Sliding Automatic Entrances”.

D. Codes and References: Comply with the version year adopted by the Authority Having Jurisdiction.

1. ANSI A117.1 - Accessible and Usable Buildings and Facilities.
2. ICC/IBC - International Building Code.
3. NFPA 70 - National Electrical Code.
4. NFPA 80 - Fire Doors and Windows.
5. NFPA 101 - Life Safety Code.
6. NFPA 105 - Installation of Smoke Door Assemblies.
7. UL/ULC and CSA C22.2 - Standards for Automatic Door Operators Used on Fire and Smoke Barrier Doors and Systems of Doors.
8. State Building Codes, Local Amendments.

E. Standards: All hardware specified herein shall comply with the following industry standards as applicable. Any undated reference to a standard shall be interpreted as referring to the latest edition of that standard:

1. ANSI/BHMA Certified Product Standards - A156 Series.
2. UL10C - Positive Pressure Fire Tests of Door Assemblies.
3. ANSI/UL 294 - Access Control System Units.
4. UL 305 - Panic Hardware.
5. ANSI/UL 437- Key Locks.

1.3 SUBMITTALS

A. Product Data: Manufacturer's product data sheets including installation details, material descriptions, dimensions of individual components and profiles, operational descriptions and finishes.

B. Door Hardware Schedule: Prepared by or under the supervision of supplier, detailing, fabrication and assembly of door hardware, as well as procedures and diagrams. Coordinate the final Door Hardware Schedule with doors, frames, and related work to ensure proper size, thickness, hand, function, and finish of door hardware.

1. Format: Comply with scheduling sequence and vertical format in DHI's "Sequence and Format for the Hardware Schedule."
2. Organization: Organize the Door Hardware Schedule into door hardware sets indicating complete designations of every item required for each door or opening. Organize door hardware sets in same order as in the Door Hardware Sets at the end of Part 3. Submittals that do not follow the same format and order as the Door Hardware Sets will be rejected and subject to resubmission.
3. Content: Include the following information:

    a. Type, style, function, size, label, hand, and finish of each door hardware item.
    b. Manufacturer of each item.
    c. Fastenings and other pertinent information.
    d. Location of door hardware set, cross-referenced to Drawings, both on floor plans and in door and frame schedule.
    e. Explanation of abbreviations, symbols, and codes contained in schedule.
    f. Mounting locations for door hardware.
    g. Door and frame sizes and materials.
    h. Warranty information for each product.

4. Submittal Sequence: Submit the final Door Hardware Schedule at earliest possible date, particularly where approval of the Door Hardware Schedule must precede fabrication of other work that is critical in the Project construction schedule. Include Product Data, Samples, Shop Drawings of other work affected by door hardware, and other information essential to the coordinated review of the Door Hardware Schedule.

C. Shop Drawings: Details of electrified access control hardware indicating the following:

1. Wiring Diagrams: Upon receipt of approved schedules, submit detailed system wiring diagrams for power, signaling, monitoring, communication, and control of the access control system electrified hardware. Differentiate between manufacturer-installed and field-installed wiring. Include the following:

    a. Elevation diagram of each unique access controlled opening showing location and interconnection of major system components with respect to their placement in the respective door openings.
    b. Complete (risers, point-to-point) access control system block wiring diagrams.
    c. Wiring instructions for each electronic component scheduled herein.

2. Electrical Coordination: Coordinate with related sections the voltages and wiring details required at electrically controlled and operated hardware openings.

D. Keying Schedule: After a keying meeting with the owner has taken place prepare a separate keying schedule detailing final instructions. Submit the keying schedule in electronic format. Include keying system explanation, door numbers, key set symbols, hardware set numbers and special instructions. Owner must approve submitted keying schedule prior to the ordering of permanent cylinders/cores.

E. Informational Submittals:

1. Product Test Reports: Indicating compliance with cycle testing requirements, based on evaluation of comprehensive tests performed by manufacturer and witnessed by a qualified independent testing agency.

1.4 CLOSEOUT SUBMITTALS

A. Operating and Maintenance Manuals: Provide manufacturers operating and maintenance manuals for each item comprising the complete door hardware installation in quantity as required in Division 01, Closeout Procedures.

1. Maintenance manual must be provided for tornado/hurricane storm shelter impact protective systems.

B. Project Record Documents: Provide record documentation of as-built door hardware sets in digital format (.pdf, .docx, .xlsx, .csv) and as required in Division 01, Project Record Documents.

C. Project Record Documents: Provide record documentation of as-built door hardware sets in digital format (.pdf, .docx, .xlsx, .csv) or acceptable integrated file format for updating of Openings Studio™ management software and as required in Division 01, Project Record Documents.

1.5 QUALITY ASSURANCE

A. Manufacturers Qualifications: Engage qualified manufacturers with a minimum 5 years of documented experience in producing hardware and equipment similar to that indicated for this Project and that have a proven record of successful in-service performance.

B. Certified Products: Where specified, products must maintain a current listing in the Builders Hardware Manufacturers Association (BHMA) Certified Products Directory (CPD).

C. Installer Qualifications: A minimum 3 years documented experience installing both standard and electrified door hardware similar in material, design, and extent to that indicated for this Project and whose work has resulted in construction with a record of successful in-service performance.

D. Door Hardware Supplier Qualifications: Experienced commercial door hardware distributors with a minimum 5 years documented experience supplying both mechanical and electromechanical hardware installations comparable in material, design, and extent to that indicated for this Project. Supplier recognized as a factory direct distributor by the manufacturers of the primary materials with a warehousing facility in Project's vicinity. Supplier to have on staff a certified Architectural Hardware Consultant (AHC) available during the course of the Work to consult with Contractor, Architect, and Owner concerning both standard and electromechanical door hardware and keying.

E. Source Limitations: Obtain each type and variety of door hardware specified in this section from a single source unless otherwise indicated.

1. Electrified modifications or enhancements made to a source manufacturer's product line by a secondary or third party source will not be accepted.
2. Provide electromechanical door hardware from the same manufacturer as mechanical door hardware, unless otherwise indicated.

F. Each unit to bear third party permanent label indicating compliance with the referenced testing standards.

G. Keying Conference: Conduct conference to comply with requirements in Division 01 Section "Project Meetings." Keying conference to incorporate the following criteria into the final keying schedule document:

1. Function of building, purpose of each area and degree of security required.
2. Plans for existing and future key system expansion.
3. Requirements for key control storage and software.
4. Installation of permanent keys, cylinder cores and software.
5. Address and requirements for delivery of keys.

H. Pre-Submittal Conference: Conduct coordination conference in compliance with requirements in Division 01 Section "Project Meetings" with attendance by representatives of Supplier(s), Installer(s), and Contractor(s) to review proper methods and the procedures for receiving, handling, and installing door hardware.

1. Prior to installation of door hardware, conduct a project specific training meeting to instruct the installing contractors' personnel on the proper installation and adjustment of their respective products. Product training to be attended by installers of door hardware (including electromechanical hardware) for aluminum, hollow metal and wood doors. Training will include the use of installation manuals, hardware schedules, templates and physical product samples as required.
2. Inspect and discuss electrical roughing-in, power supply connections, and other preparatory work performed by other trades.
3. Review sequence of operation narratives for each unique access controlled opening.
4. Review and finalize construction schedule and verify availability of materials.
5. Review the required inspecting, testing, commissioning, and demonstration procedures

I. At completion of installation, provide written documentation that components were applied according to manufacturer's instructions and recommendations and according to approved schedule.

1.6 DELIVERY, STORAGE AND HANDLING

A. Inventory door hardware on receipt and provide secure lock-up and shelving for door hardware delivered to Project site. Do not store electronic access control hardware, software or accessories at Project site without prior authorization.

B. Tag each item or package separately with identification related to the final Door Hardware Schedule, and include basic installation instructions with each item or package.

C. Deliver, as applicable, permanent keys, cylinders, cores, access control credentials, software and related accessories directly to Owner via registered mail or overnight package service. Instructions for delivery to the Owner shall be established at the "Keying Conference".

1.7 COORDINATION

A. Templates: Obtain and distribute to the parties involved templates for doors, frames, and other work specified to be factory prepared for installing standard and electrified hardware. Check Shop Drawings of other work to confirm that adequate provisions are made for locating and installing hardware to comply with indicated requirements.

B. Door Hardware and Electrical Connections: Coordinate the layout and installation of scheduled electrified door hardware and related access control equipment with required connections to source power junction boxes, low voltage power supplies, detection and monitoring hardware, and fire and detection alarm systems.

C. Door and Frame Preparation: Doors and corresponding frames are to be prepared, reinforced and pre-wired (if applicable) to receive the installation of the specified electrified, monitoring, signaling and access control system hardware without additional in-field modifications.

1.8 WARRANTY

A. General Warranty: Reference Division 01, General Requirements. Special warranties specified in this Article shall not deprive Owner of other rights Owner may have under other provisions of the Contract Documents and shall be in addition to, and run concurrent with, other warranties made by Contractor under requirements of the Contract Documents.

B. Warranty Period: Written warranty, executed by manufacturer(s), agreeing to repair or replace components of standard and electrified door hardware that fails in materials or workmanship within specified warranty period after final acceptance by the Owner. Failures include, but are not limited to, the following:

1. Structural failures including excessive deflection, cracking, or breakage.
2. Faulty operation of the hardware.
3. Deterioration of metals, metal finishes, and other materials beyond normal weathering.
4. Electrical component defects and failures within the systems operation.

C. Warranty Period: Unless otherwise indicated, warranty shall be one year from date of Substantial Completion.

PART 2 - PRODUCTS

2.1 SCHEDULED DOOR HARDWARE

A. General: Provide door hardware for each door to comply with requirements in Door Hardware Sets and each referenced section that products are to be supplied under.

B. Designations: Requirements for quantity, item, size, finish or color, grade, function, and other distinctive qualities of each type of door hardware are indicated in the Door Hardware Sets at the end of Part 3. Products are identified by using door hardware designations, as follows:

1. Named Manufacturer's Products: Product designation and manufacturer are listed for each door hardware type required for the purpose of establishing requirements. Manufacturers' names are abbreviated in the Door Hardware Schedule.

C. Substitutions: Requests for substitution and product approval for inclusive mechanical and electromechanical door hardware in compliance with the specifications must be submitted in writing and in accordance with the procedures and time frames outlined in Division 01, Substitution Procedures. Approval of requests is at the discretion of the architect, owner, and their designated consultants.

2.2 BUTT HINGES

A. Hinges: ANSI/BHMA A156.1 butt hinges with number of hinge knuckles and other options as specified in the Door Hardware Sets.

1. Quantity: Provide the following hinge quantity:

a. Two Hinges: For doors with heights up to 60 inches.

b. Three Hinges: For doors with heights 61 to 90 inches.
c. Four Hinges: For doors with heights 91 to 120 inches.
d. For doors with heights more than 120 inches, provide 4 hinges, plus 1 hinge for every 30 inches of door height greater than 120 inches.

2. Hinge Size: Provide the following, unless otherwise indicated, with hinge widths sized for door thickness and clearances required:

a. Widths up to 3’0”: 4-1/2” standard or heavy weight as specified.
b. Sizes from 3’1” to 4’0”: 5” standard or heavy weight as specified.

3. Hinge Weight and Base Material: Unless otherwise indicated, provide the following:

a. Exterior Doors: Heavy weight, non-ferrous, ball bearing or oil impregnated bearing hinges unless Hardware Sets indicate standard weight.
b. Interior Doors: Standard weight, steel, ball bearing or oil impregnated bearing hinges unless Hardware Sets indicate heavy weight.

4. Hinge Options: Comply with the following:

a. Non-removable Pins: With the exception of electric through wire hinges, provide set screw in hinge barrel that, when tightened into a groove in hinge pin, prevents removal of pin while door is closed; for the all out-swinging lockable doors.

5. Manufacturers:

a. Hager Companies (HA) - BB Series, 5-knuckle.
b. McKinney (MK) - TA/T4A Series, 5-knuckle.
c. dormakaba BEST (ST) - F/FBB Series, 5-knuckle.

2.3 SLIDING AND FOLDING HARDWARE

A. Sliding and Folding Door Hardware: Hardware is to be of type and design as specified and should conform with ANSI/BHMA A156.14.

1. Sliding Bi-Passing Pocket Door Hardware: Provide complete sets consisting of track, hangers, stops, bumpers, floor channel, guides, and accessories indicated.
2. Manufacturers:

a. Hafele Manufacturing (HF).
b. Johnson Hardware (JO).
c. Pemko (PE).

2.4 POWER TRANSFER DEVICES

A. Concealed Quick Connect Electric Power Transfers: Provide concealed wiring pathway housing mortised into the door and frame for low voltage electrified door hardware. Furnish with Molex™ standardized plug connectors and sufficient number of concealed wires (up to 12) to

accommodate the electrified functions specified in the Door Hardware Sets. Connectors plug directly to through-door wiring harnesses for connection to electric locking devices and power supplies. Wire nut connections are not acceptable.

1. Manufacturers:

    a. Architectural Builders Hardware (AH) - PT1000-EZ Series.
    b. Pemko (PE) - EL-CEPT Series.
    c. Securitron (SU) - EL-CEPT Series.

B. Electric Door Wire Harnesses: Provide electric/data transfer wiring harnesses with standardized plug connectors to accommodate up to twelve (12) wires. Connectors plug directly to through-door wiring harnesses for connection to electric locking devices and power supplies. Provide sufficient number and type of concealed wires to accommodate electric function of specified hardware. Provide a connector for through-door electronic locking devices and from hinge to junction box above the opening. Wire nut connections are not acceptable. Determine the length required for each electrified hardware component for the door type, size and construction, minimum of two per electrified opening.

1. Provide one each of the following tools as part of the base bid contract:

    a. McKinney (MK) - Electrical Connecting Kit: QC-R001.
    b. McKinney (MK) - Connector Hand Tool: QC-R003.

2. Manufacturers:

    a. Hager Companies (HA) - Quick Connect.
    b. McKinney (MK) - QC-C Series.
    c. dormakaba BEST (ST) - WH Series.

2.5 DOOR OPERATING TRIM

A. Flush Bolts and Surface Bolts: Provide products conforming to ANSI/BHMA A156.3 and A156.16, Grade 1.

1. Flush bolts to be furnished with top rod of sufficient length to allow bolt retraction device location approximately six feet from the floor.
2. Furnish dust proof strikes for bottom bolts.
3. Surface bolts to be minimum 8” in length and U.L. listed for labeled fire doors and U.L. listed for windstorm components where applicable.
4. Provide related accessories (mounting brackets, strikes, coordinators, etc.) as required for appropriate installation and operation.
5. Manufacturers:

    a. Burns Manufacturing (BU).
    b. Rockwood (RO).
    c. Trimco (TC).

B. Door Push Plates and Pulls: ANSI/BHMA A156.6 door pushes and pull units of type and design specified in the Hardware Sets. Coordinate and provide proper width and height as required where conflicting hardware dictates.

1. Push/Pull Plates: Minimum .050 inch thick, size as indicated in hardware sets, with beveled edges, secured with exposed screws unless otherwise indicated.
2. Door Pull and Push Bar Design: Size, shape, and material as indicated in the hardware sets. Minimum clearance of 2 1/2-inches from face of door unless otherwise indicated.
3. Offset Pull Design: Size, shape, and material as indicated in the hardware sets. Minimum clearance of 2 1/2-inches from face of door and offset of 90 degrees unless otherwise indicated.
4. Pulls, where applicable, shall be provided with a 10” clearance from the finished floor on the push side to accommodate wheelchair accessibility.
5. Fasteners: Provide manufacturer's designated fastener type as indicated in Hardware Sets. When through-bolt fasteners are in the same location as a push plate, countersink the fasteners flush with the door face allowing the push plate to sit flat against the door.
6. Manufacturers:

    a. Burns Manufacturing (BU).
    b. Rockwood (RO).
    c. Trimco (TC).

2.6 CYLINDERS AND KEYING

A. General: Cylinder manufacturer to have minimum (10) years experience designing secured master key systems and have on record a published security keying system policy.

1. Manufacturers:

    a. .dormakaba BEST (BE)
    b. Sargent Manufacturing (SA)
    c. Schlage (SC)

B. Cylinder Types: Original manufacturer cylinders able to supply the following cylinder formats and types:

1. Threaded mortise cylinders with rings and cams to suit hardware application.
2. Rim cylinders with back plate, flat-type vertical or horizontal tailpiece, and raised trim ring.
3. Bored or cylindrical lock cylinders with tailpieces as required to suit locks.
4. Tubular deadlocks and other auxiliary locks.
5. Mortise and rim cylinder collars to be solid and recessed to allow the cylinder face to be flush and be free spinning with matching finishes.
6. Keyway: Manufacturer’s Standard.

C. Large Format Interchangeable Cores: Provide Large format interchangeable cores (LFIC) as specified, core insert, removable by use of a special key; usable with other manufacturers' cylinders.

D. Keying System: Each type of lock and cylinders to be factory keyed.

1. Supplier shall conduct a "Keying Conference" to define and document keying system instructions and requirements.
2. Furnish factory cut, nickel-silver large bow permanently inscribed with a visual key control number as directed by Owner.
3. Existing System: Field verify and key cylinders to match Owner's existing system.

E. Key Quantity: Provide the following minimum number of keys:

1. Change Keys per Cylinder: Two (2)
2. Master Keys (per Master Key Level/Group): Five (5).
3. Construction Keys (where required): Ten (10).

F. Construction Keying: Provide construction master keyed cylinders.

G. Construction Keying: Provide temporary keyed construction cores.

H. Key Registration List (Bitting List):

1. Provide keying transcript list to Owner's representative in the proper format for importing into key control software.
2. Provide transcript list in writing or electronic file as directed by the Owner.

2.7 CYLINDRICAL LOCKS AND LATCHING DEVICES

A. Cylindrical Locksets, Grade 1 (Heavy Duty): ANSI/BHMA A156.2, Series 4000, Operational Grade 1 Certified Products Directory (CPD) listed cylindrical locksets. Listed manufacturers shall meet all functions and features as specified herein.

1. Provide locksets with functions and features as follows:

a. Meets ANSI/BHMA A156.41 for single motion egress.
b. Where required by code, provide knurling or abrasive coating on all levers leading to hazardous areas.
c. Meets UL and CUL Standard 10C Positive Pressure, Fire Test of Door Assemblies with levers that meet A117.1 Accessibility Code.
d. Extended cycle test: Locks to have been cycle tested in ordinance with ANSI/BHMA 156.13 requirements to 20 million cycles or greater.
e. Exceeds ANSI/BHMA A156.2 requirements by 2.6 times for 3,100 in-lb. abusive locked lever torque with no entry while maintaining egress.
f. Exceeds ANSI/BHMA A156.2 requirements by 8 times for 1,600 lbs. offset lever pull with no entry for protection against attacks.
g. Exceeds ANSI/BHMA A156.3 requirements by 2 times for latch retraction with 100 lb. preload while maintaining operation in warped doors.
h. Exceeds ANSI/BHMA A156.3 requirements by 20 times for no access with minimum 100 vertical impacts for protection against vandalism attempts.
i. Independent return springs allow lock to exceed ANSI/BHMA A156.2 Grade 1 cycle requirements without lever sag.

j. Ten-year limited warranty for mechanical functions.

2. Manufacturers:

a. DormaKaba BEST (BE) – 9K.
b. Sargent Manufacturing (SA) - 10X Line.
c. Schlage (SC) – ND.

B.

2.8 DEADLOCKS AND LATCHES

A. Cylindrical Deadlocks: ANSI/BHMA A156.36 Grade 1 Certified Products Directory (CPD) listed deadlocks to fit standard ANSI 161 preparation. Provide tapered collars to resist vandalism and 1" throw solid steel bolt with hardened steel roller pins. Deadlocks to be products of the same source manufacturer and keyway as other locksets.

1. Manufacturers:

a. dormakaba BEST (BE) - T Series.
b. Sargent Manufacturing (SA) - 480 Series.
c. Schlage (SC) - B600 Series.

2.9 LOCK AND LATCH STRIKES

A. Strikes: Provide manufacturer's standard strike with strike box for each latch or lock bolt, with curved lip extended to protect frame, finished to match door hardware set, unless otherwise indicated, and as follows:

1. Flat-Lip Strikes: For locks with three-piece antifriction latchbolts, as recommended by manufacturer.
2. Extra-Long-Lip Strikes: For locks used on frames with applied wood casing trim.
3. Aluminum-Frame Strike Box: Provide manufacturer's special strike box fabricated for aluminum framing.
4. Double-lipped strikes: For locks at double acting doors. Furnish with retractable stop for rescue hardware applications.

B. Standards: Comply with the following:

1. Strikes for Mortise Locks and Latches: BHMA A156.13.
2. Strikes for Bored Locks and Latches: BHMA A156.2.
3. Strikes for Auxiliary Deadlocks: BHMA A156.36.
4. Dustproof Strikes: BHMA A156.16.

2.10 ELECTROMAGNETIC LOCKING DEVICES

A. Surface Electromagnetic Locks (Heavy Duty): Electromagnetic locks to be surface mounted type conforming to ANSI A156.23, Grade 2 with minimum holding force strength of 1,200 pounds. Locks to be capable of accepting between 12 to 24 volts direct current and be UL listed

for use on fire rated door assemblies. Electromagnetic coils are to consume no more than 1.5W during normal operation. Locks are to have an integrated door position switch, tamper switch, and lock bond sensor. Locks are to have integrated motion sensor and/or security camera as indicated in the hardware sets. Locks to be capable of detecting door prop conditions and entering low power mode. Provide mounting accessories as needed to suit opening conditions. Power supply to be by the same manufacturer as the lock with combined products having a lifetime replacement warranty.

1. Manufacturers:

    a. Securitron (SU) - M680E Series.

2.11 CONVENTIONAL EXIT DEVICES

A. General Requirements: All exit devices specified herein shall meet or exceed the following criteria:

1. Exit devices shall have a five-year warranty.
2. At doors not requiring a fire rating, provide devices complying with NFPA 101 and listed and labeled for "Panic Hardware" according to UL305. Provide proper fasteners as required by manufacturer including sex nuts and bolts at openings specified in the Hardware Sets.
3. Where exit devices are required on fire rated doors, provide devices complying with NFPA 80 and with UL labeling indicating "Fire Exit Hardware". Provide devices with the proper fasteners for installation as tested and listed by UL. Consult manufacturer’s catalog and template book for specific requirements.
4. Except on fire rated doors, provide exit devices with hex key dogging device to hold the pushbar and latch in a retracted position. Provide optional keyed cylinder dogging on devices where specified in Hardware Sets.
5. Devices must fit flat against the door face with no gap that permits unauthorized dogging of the push bar. The addition of filler strips is required in any case where the door light extends behind the device as in a full glass configuration.
6. Lever Operating Trim: Where exit devices require lever trim, furnish manufacturer's heavy duty escutcheon trim with threaded studs for thru-bolts.

    a. Lock Trim Design: As indicated in Hardware Sets, provide finishes and designs to match that of the specified locksets.
    b. Where function of exit device requires a cylinder, provide a cylinder (Rim or Mortise) as specified in Hardware Sets.

7. Vertical Rod Exit Devices: Where surface or concealed vertical rod exit devices are used at interior openings, provide as less bottom rod (LBR) unless otherwise indicated. Provide dust proof strikes where thermal pins are required to project into the floor.
8. Narrow Stile Applications: At doors constructed with narrow stiles, or as specified in Hardware Sets, provide devices designed for maximum 2” wide stiles.
9. Dummy Push Bar: Nonfunctioning push bar matching functional push bar.
10. Rail Sizing: Provide exit device rails factory sized for proper door width application.
11. Through Bolt Installation: For exit devices and trim as indicated in Door Hardware Sets.

B. Conventional Push Rail Exit Devices (Heavy Duty): ANSI/BHMA A156.3, Grade 1 Certified Products Directory (CPD) listed exit devices. Listed manufacturers shall meet all functions and features as specified herein.

1. Electromechanical exit devices shall have the following functions and features:

a. Universal Molex plug-in connectors that have standardized color-coded wiring and are field configurable in fail safe or fail secure and operate from 12vdc to 24vdc regulated.
b. EcoFlex or equivalent technology that reduces energy consumption up to 92% as certified by GreenCircle.
c. Options to be available for request-to-exit or enter signaling, latchbolt and touchbar monitoring.
d. Field configurable electrified trim to fail-safe or fail-secure that operates from 12-24VDC.
e. Five-year limited warranty for electromechanical features.

2. Manufacturers:

a. Dormakaba BEST (BE) - APEX Series.
b. Sargent Manufacturing (SA) - 80 Series.
c. VonDuprin (VD) – 33/35 – 98/99 Series.

2.12 DOOR CLOSERS

A. All door closers specified herein shall meet or exceed the following criteria:

1. General: Door closers to be from one manufacturer, matching in design and style, with the same type door preparations and templates regardless of application or spring size. Closers to be non-handed with full sized covers.
2. Standards: Closers to comply with UL-10C for Positive Pressure Fire Test and be U.L. listed for use of fire rated doors.
3. Size of Units: Comply with manufacturer's written recommendations for sizing of door closers depending on size of door, exposure to weather, and anticipated frequency of use. Where closers are indicated for doors required to be accessible to the Americans with Disabilities Act, provide units complying with ANSI ICC/A117.1.
4. Closer Arms: Provide heavy duty, forged steel closer arms unless otherwise indicated in Hardware Sets.
5. Closers shall not be installed on exterior or corridor side of doors; where possible install closers on door for optimum aesthetics.
6. Closer Accessories: Provide door closer accessories including custom templates, special mounting brackets, spacers and drop plates as required for proper installation. Provide through-bolt and security type fasteners as specified in the hardware sets.

B. Door Closers, Surface Mounted (Large Body Cast Iron): ANSI/BHMA A156.4, Grade 1 Certified Products Directory (CPD) listed surface mounted, heavy duty door closers with complete spring power adjustment, sizes 1 thru 6; and fully operational adjustable according to door size, frequency of use, and opening force. Closers to be rack and pinion type, one piece

cast iron body construction, with adjustable backcheck and separate non-critical valves for closing sweep and latch speed control.

1. Manufacturers:

    a. LCN Closers (LC) - 4040XP Series.
    b. Norton Rixson (NO) - 9500 Series.
    c. Sargent Manufacturing (SA) - 281 Series.

2.13 ELECTROMECHANICAL DOOR OPERATORS

A. Electromechanical Door Operators (Moderate Traffic): Provide ANSI/BHMA A156.19 Certified Products Directory (CPD) listed low energy operators that are UL325/991 and UL10C certified and comply with requirements for the Americans with Disabilities Act (ADA). Operators shall accommodate openings up to 200 pounds and 48” wide.

1. Provide operators with features as follows:

    a. Non-handed with push and pull side mounting.
    b. Activation by push button, hands-free or radio frequency devices.
    c. Adjustable opening force and closing power.
    d. Two-year limited warranty.
    e. Wi-Fi interface where the operator is a secure, password protected WiFi hot spot with no connection to building’s IT required.
        1) Simple setup with no app required.
        2) View status and make adjustments without removing the cover.
        3) Built-in logic to support single use restroom applications with no external relay boards, logic modules, position switches required.
    f. Mounting backplate to simplify and speed up installation.

2. Operators shall have the following functionality:

    a. Adjustable Hold Open: Amount of time a door will stay in the full open position after an activation.
    b. Emergency Interface Relay: Door closes and ignores any activation input until signal is discontinued.
    c. Infinite Hold Open: Door will hold open at set position until power is turned off.
    d. Latch Assist: At closed position, after an activation, the door is pulled in. After the door has closed, the door is pulled in to assist with latch release/engagement.
    e. Obstruction Detection: Door closes if it hits an obstruction while opening; door will reverse to open position if it hits an obstruction while closing. Door will stop once it hits an obstruction and will rest against the obstruction until removed.
    f. Open Delay: Delays operator opening for locking hardware.
    g. Outside Wall Switch Disable: When contact is closed, outside wall switch is disabled.
    h. Power Assist: Senses the door is being opened manually and applies small amount of power to assist the user in opening the door with force less than 5 lbs. The door opens only as far as it is moved manually, then closes once released.
    i. Power Close: Additional force to assist door closing between 7° and 2°.

j. Push & Go: As the door is manually opened, the operator "senses" movement and opens door to the full-open position.
k. Selector Mode Switch: Off disables the signal inputs, on activates the signal inputs, hold open activates the unit to the hold open position.
l. Vestibule Delay: When the wall switch is pressed, first door in vestibule will open the second door will open once vestibule door delay has expired. Delay shall be adjustable.
m. Executive Mode Feature: When the door receives an activation signal it opens and remains open until either a second signal is received, or the door is manually moved in closing direction.

3. Manufacturers:

a. ASSA ABLOY Entrance Systems (BE) - SW100 Series.
b. LCN (LC) - 9530/9540 Series.
c. Norton Rixson (NO) - 6200 Series.

2.14 SURFACE MOUNTED CLOSER HOLDERS

A. Electromagnetic Door Holders: ANSI A156.15 electromagnetic door holder/releases with a minimum 20 to 40 pounds holding power and single coil construction able to accommodate.12VDC, 24VAC, 24VDC and 120VAC. Coils to be independently wound, employing an integral fuse and armatures to include a positive release button.

1. Manufacturers:

a. LCN Door Closers (LC) - SEM7800 Series.
b. Norton Rixson (RF) - 980/990 Series.
c. Sargent Manufacturing (SA) - 1560 Series.

2.15 ARCHITECTURAL TRIM

A. Door Protective Trim

1. General: Door protective trim units to be of type and design as specified below or in the Hardware Sets.
2. Size: Fabricate protection plates (kick, armor, or mop) not more than 2" less than door width (LDW) on stop side of single doors and 1” LDW on stop side of pairs of doors, and not more than 1" less than door width on pull side. Coordinate and provide proper width and height as required where conflicting hardware dictates. Height to be as specified in the Hardware Sets.
3. Where plates are applied to fire rated doors with the top of the plate more than 16” above the bottom of the door, provide plates complying with NFPA 80. Consult manufacturer’s catalog and template book for specific requirements for size and applications.
4. Protection Plates: ANSI/BHMA A156.6 protection plates (kick, armor, or mop), fabricated from the following:

a. Stainless Steel: 300 grade, 050-inch thick.

5. Options and fasteners: Provide manufacturer's designated fastener type as specified in the Hardware Sets. Provide countersunk screw holes.
6. Manufacturers:

    a. Burns Manufacturing (BU).
    b. Rockwood (RO).
    c. Trimco (TC).

2.16 DOOR STOPS AND HOLDERS

A. General: Door stops and holders to be of type and design as specified below or in the Hardware Sets.

B. Door Stops and Bumpers: ANSI/BHMA A156.16, Grade 1 door stops and wall bumpers. Provide wall bumpers, either convex or concave types with anchorage as indicated, unless floor or other types of door stops are specified in Hardware Sets. Do not mount floor stops where they will impede traffic. Where floor or wall bumpers are not appropriate, provide overhead type stops and holders.

1. Manufacturers:

    a. Burns Manufacturing (BU).
    b. Rockwood (RO).
    c. Trimco (TC).

C. Overhead Door Stops and Holders: ANSI/BHMA A156.8, Grade 1 Certified Products Directory (CPD) listed overhead stops and holders to be surface or concealed types as indicated in Hardware Sets. Track, slide, arm and jamb bracket to be constructed of extruded bronze and shock absorber spring of heavy tempered steel. Provide non-handed design with mounting brackets as required for proper operation and function.

1. Manufacturers:

    a. Norton Rixson (RF).
    b. Rockwood (RO).
    c. Sargent Manufacturing (SA).

2.17 ARCHITECTURAL SEALS

A. General: Thresholds, weatherstripping, and gasket seals to be of type and design as specified below or in the Hardware Sets. Provide continuous weatherstrip gasketing on exterior doors and provide smoke, light, or sound gasketing on interior doors where indicated. At exterior applications provide non-corrosive fasteners and elsewhere where indicated.

B. Smoke Labeled Gasketing: Assemblies complying with NFPA 105 that are listed and labeled by a testing and inspecting agency acceptable to authorities having jurisdiction, for smoke control ratings indicated, based on testing according to UL 1784.

1. Provide smoke labeled perimeter gasketing at all smoke labeled openings.

C. Fire Labeled Gasketing: Assemblies complying with NFPA 80 that are listed and labeled by a testing and inspecting agency acceptable to authorities having jurisdiction, for fire ratings indicated, based on testing according to UL-10C.

1. Provide intumescent seals as indicated to meet UL10C Standard for Positive Pressure Fire Tests of Door Assemblies, and NFPA 252, Standard Methods of Fire Tests of Door Assemblies.

D. Sound-Rated Gasketing: Assemblies that are listed and labeled by a testing and inspecting agency, for sound ratings indicated.

E. Replaceable Seal Strips: Provide only those units where resilient or flexible seal strips are easily replaceable and readily available from stocks maintained by manufacturer.

F. Manufacturers:

1. National Guard Products (NG).
2. Pemko (PE).
3. Reese Enterprises, Inc. (RE).

2.18 ELECTRONIC ACCESSORIES

A. Key Switches: Key switches furnished standard with stainless steel single gang face plate with a 12/24VDC bi-color LED indicator. Integral backing bracket permits integration with any 1 1/4" or 1 1/2" mortise type cylinder. Key switches available as momentary or maintained action and in narrow face plate options.

1. Manufacturers:

a. Alarm Controls (AK) - MCK Series.
b. Security Door Controls (SD) - 800 Series.
c. Securitron (SU) - MK Series.

B. Door Position Switches: Door position magnetic reed contact switches specifically designed for use in commercial door applications. On recessed models the contact and magnetic housing snap-lock into a 1" diameter hole. Surface mounted models include wide gap distance design complete with armored flex cabling. Provide SPDT, N/O switches with optional Rare Earth Magnet installation on steel doors with flush top channels.

1. Manufacturers:

a. Sargent Manufacturing (SA) - 3280 Series.
b. Security Door Controls (SD) - DPS Series.
c. Securitron (SU) - DPS Series.

C. Switching Power Supplies: Provide power supplies with either single or dual voltage configurations at 12 or 24VDC. Power supplies shall have battery backup function with an integrated battery charging circuit and shall provide capability for power distribution, direct lock control and Fire Alarm Interface (FAI) through add on modules. Power supplies shall be

expandable up to 16 individually protected outputs. Output modules shall provide individually protected, continuous outputs and/or individually protected, relay controlled outputs.

1. Manufacturers:

   a. Securitron (SU) - AQD Series.
   b. Altronix (AS) - Maximal 3.
   c. VonDuprn (VD) – PS Series

2.19 FABRICATION

A. Fasteners: Provide door hardware manufactured to comply with published templates generally prepared for machine, wood, and sheet metal screws. Provide screws according to manufacturers recognized installation standards for application intended.

2.20 FINISHES

A. Standard: Designations used in the Hardware Sets and elsewhere indicate hardware finishes complying with ANSI/BHMA A156.18, including coordination with traditional U.S. finishes indicated by certain manufacturers for their products.

B. Provide quality of finish, including thickness of plating or coating (if any), composition, hardness, and other qualities complying with manufacturer's standards, but in no case less than specified by referenced standards for the applicable units of hardware

C. Protect mechanical finishes on exposed surfaces from damage by applying a strippable, temporary protective covering before shipping.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Examine scheduled openings, with Installer present, for compliance with requirements for installation tolerances, labeled fire door assembly construction, wall and floor construction, and other conditions affecting performance.

B. Notify architect of any discrepancies or conflicts between the door schedule, door types, drawings and scheduled hardware. Proceed only after such discrepancies or conflicts have been resolved in writing.

3.2 PREPARATION

A. Hollow Metal Doors and Frames: Comply with ANSI/DHI A115 series.

B. Wood Doors: Comply with ANSI/DHI A115-W series.

3.3 INSTALLATION

A. Install each item of mechanical and electromechanical hardware and access control equipment to comply with manufacturer's written instructions and according to specifications.

1. Installers are to be trained and certified by the manufacturer on the proper installation and adjustment of fire, life safety, and security products including: hanging devices; locking devices; closing devices; and seals.

B. Mounting Heights: Mount door hardware units at heights indicated in following applicable publications, unless specifically indicated or required to comply with governing regulations:

1. Standard Steel Doors and Frames: DHI's "Recommended Locations for Architectural Hardware for Standard Steel Doors and Frames."
2. DHI TDH-007-20: Installation Guide for Doors and Hardware.
3. Where indicated to comply with accessibility requirements, comply with ANSI A117.1 "Accessibility Guidelines for Buildings and Facilities."
4. Provide blocking in drywall partitions where wall stops or other wall mounted hardware is located.

C. Retrofitting: Install door hardware to comply with manufacturer's published templates and written instructions. Where cutting and fitting are required to install door hardware onto or into surfaces that are later to be painted or finished in another way, coordinate removal, storage, and reinstallation of surface protective trim units with finishing work specified in Division 9 Sections. Do not install surface-mounted items until finishes have been completed on substrates involved.

D. Push Plates and Door Pulls: When through-bolt fasteners are in the same location as a push plate, countersink the fasteners flush with the door face allowing the push plate to sit flat against the door.

E. Thresholds: Set thresholds for exterior and acoustical doors in full bed of sealant complying with requirements specified in Division 7 Section "Joint Sealants."

F. Storage: Provide a secure lock up for hardware delivered to the project but not yet installed. Control the handling and installation of hardware items so that the completion of the work will not be delayed by hardware losses before and after installation.

3.4 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.

3.5 CLEANING AND PROTECTION

A. Protect all hardware stored on construction site in a covered and dry place. Protect exposed hardware installed on doors during the construction phase. Install any and all hardware at the latest possible time frame.

B. Clean adjacent surfaces soiled by door hardware installation.

C. Clean operating items as necessary to restore proper finish. Provide final protection and maintain conditions that ensure door hardware is without damage or deterioration at time of owner occupancy.

3.6 DEMONSTRATION

A. Instruct Owner's maintenance personnel to adjust, operate, and maintain mechanical and electromechanical door hardware.

3.7 DOOR HARDWARE SETS

A. The hardware sets represent the design intent and direction of the owner and architect. They are a guideline only and should not be considered a detailed hardware schedule. Discrepancies, conflicting hardware and missing items should 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 and functionality.

1. Quantities listed are for each pair of doors, or for each single door.
2. The supplier is responsible for handing and sizing all products.
3. Where multiple options for a piece of hardware are given in a single line item, the supplier shall provide the appropriate application for the opening.

B. Manufacturer’s Abbreviations:

1. MK - McKinney
2. OT - Other
3. PE - Pemko
4. RO - Rockwood
5. SA - SARGENT
6. SU - Securitron
7. RF - Rixson
8. NO - Norton

Hardware Sets

Set: 1.0

Doors: 001C

4	Hinge (heavy weight) ++	T4A3386 USA (NRP and Size as Required)	US32D	MK	087100
1	Magnetic Lock w/REX **	M680EBDX	630	SU	087100
1	Rim Exit Device (NL, CD) ++	16 43 8804 Less Pull	US32D	SA	087100
2	LFIC Core **	Keyed per Owner's Direction	US15	SA	087100
2	Cylinder ++	type as required	US32D	SA	087100
1	Offset Door Pull ++	TBF157	US32D	RO	087100
1	Automatic Opener ++	6211 / 6231 (As Required)	689	NO	087113
1	Sweep **	3452CNB x Length Required		PE	087100
1	Threshold ++	273x3AFG MSES25SS x Length Required		PE	087100
1	Keyswitch **	MKA		SU	087100
2	Auto Operator Actuator Switch **	505		NO	087100
1	Power Supply **	AQD (Size and Options as required)		SU	087100
1	Wiring Diagram	Elevation and Point to Point as Specified		OT	

Notes:
++ Product Meets BABA Qualifications
** Product may require a BABA waiver

Coordinate all Wiring and conduit with electrical contractor.

Operation:
Day Time Operation:
• The exit device latch is normally dogged to allow push/pull operation. Key switch is in the "OFF" position, the magnetic lock is not engaged, allowing manual Push/Pull operation or assisted entry and egress with by pressing the auto operator actuator.
• Cylinder Dogging will hold the latch in the retracted position (Dogged) allowing PUSH/PULL operation.
• Key Switch in the Vestibule will turn the magnetic lock ON/OFF as required.
• Magnetic lock is Fail Safe and will be released to allow free entry or egress in the event of a fire emergency or power outage.

Night Time Operation:
• The exit device latch is normally dogged to allow push/pull operation. Key switch is in the "ON" position engaging the magnetic lock, securing the door and shunting the auto operator actuator switches.
• Cylinder Dogging will hold the latch in the retracted position (Dogged) allowing PUSH/PULL operation, door is secured with the magnetic lock.

~~• Door Position Switch integrated in the magnetic lock will monitor the doors OPEN/CLOSED status.~~
~~• Key Switch in the Vestibule will turn the magnetic lock ON/OFF as required.~~
~~• Magnetic lock is Fail Safe and will be released to allow free entry or egress in the event of a fire emergency or power outage.~~

Set: 1.0

Doors: 001C

4	Hinge (heavy weight) ++	T4A3386-USA (NRP and Size as Required)		US32D	
	MK	087100			
1	Magnetic Lock w/REX **	M680EBDX	630	SU	087100
1	Rim Exit Device (NL, CD) ++	16 43 8804 Less Pull	US32D	SA	087100
2	LFIC Core **	Keyed per Owner's Direction	US15	SA	087100
2	Cylinder ++	type as required	US32D	SA	087100
1	Offset Door Pull ++	TBF157	US32D	RO	087100
1	Automatic Opener ++	6211 / 6231 (As Required)	689	NO	087100
1	Sweep **	3452CNB x Length Required		PE	087100
1	Threshold ++	273x3AFG MSES25SS x Length Required			PE
	087100				
1	Keyswitch **	MKA		SU	087100
2	Auto Operator Actuator Switch **	505		NO	087100
1	Power Supply **	AQD (Size and Options as required)		SU	087100
1	Wiring Diagram	Elevation and Point to Point as Specified			OT

Notes: ++ Product Meets BABA Qualifications
** Product may require a BABA waiver

Coordinate all Wiring and conduit with electrical contractor.

Operation:
• The exit device latch is normally dogged to allow push/pull operation. Cylinder Dogging will hold the latch in the retracted position (Dogged) allowing PUSH/PULL operation.
• On the Pull Side, presenting a valid credential to the card reader, will release the magnetic lock and activate the exterior auto operator actuator to allow authorized manual or assisted entry.
• Egress from the vestibule is always available by the Request to Exit sensor integrated in the magnetic lock releasing the magnetic lock when motion is detected near the push side of the door, or via the vestibule auto operator actuator, when the actuator is pressed the magnetic lock will release and the auto operator will open the door.
• Magnetic lock is Fail Safe and will be released to allow free entry or egress in the event of a fire emergency or power outage.
• Door Position Switch integrated in the magnetic lock will monitor the doors OPEN/CLOSED status.
• An Emergency Egress Push Button mounted on the Push (Patio Side) of the opening will release the magnetic lock should the Request To Exit Fail.

~~**Set: 2.0**~~

~~Doors: A222B, A222C~~

3	Hinge (heavy weight) ++	T4A3386 USA (NRP and Size as Required)	US32D	MK	087100
1	Magnetic Lock w/REX **	M680EBDX	630	SU	087100
1	Rim Exit Device (NL, CD) ++	16 43 8804 Less Pull	US32D	SA	087100
2	LFIC Core **	Keyed per Owner's Direction	US15	SA	087100
2	Cylinder ++	type as required	US32D	SA	087100
1	Offset Door Pull ++	TBF157	US32D	RO	087100
1	Surface Closer **	UNI9500 (HD PA SPG STP Arm)	689	NO	087100
1	Kick Plate ++	K1050 10" high BEV CSK	US32D	RO	087100
1	Gasketing ++	312CR (Head & Jambs)		PE	087100
1	Rain Guard **	346C x Width of Frame Head		PE	087100
1	Sweep **	3452CNB x Length Required		PE	087100
1	Threshold ++	273x3AFG MSES25SS x Length Required		PE	087100
1	ElectroLynx Harness (Frame) **	QC-C3000P		MK	087100
2	Key Pad **	Linear Keypad		OT	
1	Power Supply **	AQD (Size and Options as required)		SU	087100
1	Wiring Diagram	Elevation and Point to Point as Specified		OT	

Notes:
++ Product Meets BABA Qualifications
** Product may require a BABA waiver

Coordinate all Wiring and conduit with electrical contractor.

Operation:
• The exit device latch is normally dogged to allow push/pull operation. the magnetic lock is engaged, securing the door.
• Cylinder Dogging will hold the latch in the retracted position (Dogged) allowing PUSH/PULL operation when magnetic lock is not engaged.
• Entering the correct code into the key pad will release the magnetic lock and allow it to remain disengaged until the correct digital code is re-entered securing the door by re-engaging the magnetic lock.
• Door Position Switch integrated in the magnetic lock will monitor the doors OPEN/CLOSED status.
• Magnetic lock is Fail Safe and will be released to allow free entry or egress in the event of a fire emergency or power outage.

Set: 2.0

Doors: A222B, A222C

3	Hinge (heavy weight) ++ MK	T4A3386-USA (NRP and Size as Required) 087100		US32D	
1	Magnetic Lock w/REX **	M680EBDX	630	SU	087100
1	Rim Exit Device (NL, CD) ++	16 43 8804 Less Pull	US32D	SA	087100
2	LFIC Core **	Keyed per Owner's Direction	US15	SA	087100
2	Cylinder ++	type as required	US32D	SA	087100
1	Offset Door Pull ++	TBF157	US32D	RO	087100
1	Surface Closer **	UNI9500 (HD PA SPG STP Arm)	689	NO	087100
1	Kick Plate ++	K1050 10" high BEV CSK	US32D	RO	087100
1	Gasketing ++	312CR (Head & Jambs)		PE	087100
1	Rain Guard **	346C x Width of Frame Head		PE	087100
1	Sweep **	3452CNB x Length Required		PE	087100
1	Threshold ++ 087100	273x3AFG MSES25SS x Length Required			PE
1	ElectroLynx Harness (Frame) **	QC-C3000P		MK	087100
2	Key Pad **	Linear Keypad		OT	
1	Power Supply **	AQD (Size and Options as required)		SU	087100
1	Wiring Diagram	Elevation and Point to Point as Specified		OT	

Notes: ++ Product Meets BABA Qualifications
** Product may require a BABA waiver

Coordinate all Wiring and conduit with electrical contractor.

Operation:
• The exit device latch is normally dogged to allow push/pull operation. the magnetic lock is engaged, securing the door.
• Cylinder Dogging will hold the latch in the retracted position (Dogged) allowing PUSH/PULL operation when magnetic lock is not engaged.
• Entering the correct code into the key pad on either side of the opening, will release the magnetic lock and allow it to remain disengaged until the correct digital code is re-entered securing the door by re-engaging the magnetic lock.
• Door Position Switch integrated in the magnetic lock will monitor the doors OPEN/CLOSED status.
• Magnetic lock is Fail Safe and will be released to allow free entry or egress in the event of a fire emergency or power outage.

Set: 3.0

Notes: NOT USED

~~**Set: 4.0**~~

~~Doors: A223~~

-

3	~~Hinge (heavy weight) ++~~	~~T4A3386-USA (NRP and Size as~~	~~US32D~~	~~MK~~	~~087100~~

	~~Required)~~			
1 ~~Classroom Lock ++~~	~~BAA 10XG37 LL~~	~~US26D~~	~~SA~~	~~087100~~
1 ~~LFIC Core **~~	~~Keyed per Owner's Direction~~	~~US15~~	~~SA~~	~~087100~~
1 ~~Surface Closer (Tri-Pack) **~~	~~9500 (RA or PA Arm as Required)~~	~~689~~	~~NO~~	~~087100~~
1 ~~Kick Plate ++~~	~~K1050 10" high BEV CSK~~	~~US32D~~	~~RO~~	~~087100~~
1 ~~Door Stop **~~	~~403 (or) 441CU (As Required)~~	~~US26D~~	~~RO~~	~~087100~~
1 ~~Gasketing ++~~	~~312CR (Head & Jambs)~~		~~PE~~	~~087100~~
1 ~~Rain Guard **~~	~~346C x Width of Frame Head~~		~~PE~~	~~087100~~
1 ~~Sweep **~~	~~3452CNB x Length Required~~		~~PE~~	~~087100~~
1 ~~Threshold ++~~	~~172A x Length Required x MSES25SS~~		~~PE~~	~~087100~~

~~Notes:~~
~~++ Product Meets BABA Qualifications~~
~~** Product may require a BABA waiver~~

~~Mount Lockset to allow Free egress from the Patio Area at all times.~~

Set: 4.0

Doors: A223

3 Hinge (heavy weight) ++ MK	T4A3386-USA (NRP and Size as Required)		US32D 087100	
1 Classroom Lock ++	BAA 10XG37 LL	US26D	SA	087100
1 Magnetic Lock w/REX **	M680EBDX	630	SU	087100
1 LFIC Core **	Keyed per Owner's Direction	US15	SA	087100
1 Surface Closer (Tri-Pack) **	9500 (RA or PA Arm as Required)	689	NO	087100
1 Kick Plate ++	K1050 10" high BEV CSK	US32D	RO	087100
1 Door Stop **	403 (or) 441CU (As Required)	US26D	RO	087100
1 Gasketing ++	312CR (Head & Jambs)		PE	087100
1 Rain Guard **	346C x Width of Frame Head		PE	087100
1 Sweep **	3452CNB x Length Required		PE	087100
1 Threshold ++	172A x Length Required x MSES25SS		PE	087100
1 ElectroLynx Harness (Frame) **	QC-C3000P		MK	087100
1 Card Reader**	Card Reader - by Security Contractor		OT	
1 Emergency Push Button** OT	Emergency Egress Push Button - by Security Contractor			
1 Power Supply **	AQD (Size and Options as required)		SU	087100
1 Wiring Diagram	Elevation and Point to Point as Specified			OT

Notes: ++ Product Meets BABA Qualifications
** Product may require a BABA waiver

Mount Lockset to allow Free egress from the Patio Area at all times.

Coordinate all Wiring and conduit with electrical contractor.

Operation:
• On the Pull Side, (interior) presenting a valid credential to the card reader, will release the magnetic lock and allow access to the Patio Area.
• Egress from the Patio Area is always available by the Request to Exit sensor integrated in the magnetic lock releasing the magnetic lock when motion is detected near the push side of the door.
• Door Position Switch integrated in the magnetic lock will monitor the doors OPEN/CLOSED status.
• An Emergency Egress Push Button mounted on the Push (Patio Side) of the opening will release the magnetic lock should the Request To Exit Fail.
• Magnetic lock is Fail Safe and will be released to allow free entry or egress in the event of a fire emergency or power outage.

Set: 5.0

Notes: NOT USED

Set: 6.0

Doors: B038

6 Hinge, Full Mortised, Hvy Wt ++	T4A3786-USA (NRP and Size as Required)	US26D	MK	087100
2 Magnetic Lock **	M680EBD	630	SU	087100
1 LFIC Core **	Keyed per Owner's Direction	US15	SA	087100
1 Cylinder ++	type as required	US32D	SA	087100
2 Push Plate ++	70C-RKW	US32D	RO	087100
2 Offset Door Pull ++	TBF157	US32D	RO	087100
2 Automatic Opener ++	6211 / 6231 (As Required)	689	NO	087113
2 Armor Plate ++	K1050 30" high CSK BEV	US32D	RO	087100
2 Door Stop **	403 (or) 441CU (As Required)	US26D	RO	087100
2 Silencer **	608		RO	087100
2 ElectroLynx Harness (Frame) **	QC-C3000P		MK	087100
1 Keyswitch **	MKA		SU	087100
1 Motion Sensor **	XMS		SU	087100
2 Auto Operator Actuator Switch **	505		NO	087100
1 Power Supply **	AQD (Size and Options as required)		SU	087100
1 Wiring Diagram	Elevation and Point to Point as Specified		OT	

Notes:
++ Product Meets BABA Qualifications

** Product may require a BABA waiver

Coordinate all Wiring and conduit with electrical contractor.

Operation:
Doors are Secured With Magnetic Locks:
• Wall Mounted Key Switch is "ON", magnetic locks are engaged. No access from the pull side of the door and auto operator actuator push button on the pull side is inactive.
• Egress from the PUSH Side by pressing the auto operator actuator switch to signal the power supply to momentarily release the magnetic locks and activate the auto operators to open the doors for assisted egress.
• Manual Egress from the PUSH side is always available by pushing the doors open. Request to Exit motion sensor on the push side will release the magnetic lock when motion is detected near the push side of the door.
• Door Position Switch integrated in the magnetic lock will monitor the doors OPEN/CLOSED status.
• The magnetic locks are fail safe and will be deactivated in the absence of power to allow free entry or egress.

Doors are Not Secured by Magnetic Locks:
• Wall Mounted Key Switch is "OFF", magnetic locks are Disengaged. Auto operator Actuators on Both PUSH and PULL sides are active.
• Entry or Egress from either Side by pressing the auto operator actuator switch to signal the auto operators to open the doors for assisted entry or egress.
• Manual Entry or Egress from either side is always available by pushing or pulling the doors open.

Set: 7.0

Doors: 018, 040, 043, A100, A200, A300, B100, B200, B300, B400, C001, C100, C200, C300

6	Hinge, Full Mortised, Hvy Wt ++	T4A3786-USA (NRP and Size as Required)	US26D	MK	087100
2	Fire Rated SVRod Exit Device (EO, LBR, w, Fire Pin)	12 43 NB8710 EO	630	SA	087100
2	Surface Closer **	9500 (RA or PA Arm as Required)	689	NO	087100
2	Kick Plate ++	K1050 10" high BEV CSK	US32D	RO	087100
2	Electromagnetic Holder **	998 x Voltage as Required	689	RF	087100
2	Astragal Edge Guard (Rated) ++	552-AST UL (Door Height & Cut Outs as required)	US32D	NG	087100
1	Gasketing ++	S88D (Head & Jambs)		PE	087100

Notes:
++ Product Meets BABA Qualifications
** Product may require a BABA waiver

Operation:
Doors normally held open by electromagnetic holders and will be released to close upon activation of fire alarm.

Power to electromagnetic holders and relay to fire alarm by others.

At Opening 043: Wanderguard Magnetic Locks and System to be installed (by Wanderguard Contractor)
Operation:
Wanderguard Management System (By Wanderguard Contractor) to be installed. All Magnetic locks, power supply and controllers to be provided by Wanderguard supplier.

- When a patient comes within the preset range of the Wanderguard system the magnetic locks will engage preventing a person equipped with a Wanderguard Device from exiting through the door opening.
- Once the person wearing the Wanderguard Device moves away from the door opening, the magnetic locks dis-engage.

~~Set: 7.1~~

~~Doors: A222A~~

~~6~~	~~Hinge, Full Mortised, Hvy Wt ++~~	~~T4A3786 USA (NRP and Size as Required)~~	~~US26D~~	~~MK~~	~~087100~~
~~2~~	~~Magnetic Lock **~~	~~M680EBD~~	~~630~~	~~SU~~	~~087100~~
~~2~~	~~Fire Rated SVRod Exit Device (EO, LBR, w, Fire Pin)~~	~~12 43 NB8710 EO~~	~~630~~	~~SA~~	~~087100~~
~~2~~	~~Surface Closer **~~	~~9500 (RA or PA Arm as Required)~~	~~689~~	~~NO~~	~~087100~~
~~2~~	~~Kick Plate ++~~	~~K1050 10" high BEV CSK~~	~~US32D~~	~~RO~~	~~087100~~
~~2~~	~~Electromagnetic Holder **~~	~~998 x Voltage as Required~~	~~689~~	~~RF~~	~~087100~~
~~2~~	~~Astragal Edge Guard (Rated) ++~~	~~552 AST UL (Door Height & Cut Outs as required)~~	~~US32D~~	~~NG~~	~~087100~~
~~1~~	~~Gasketing ++~~	~~S88D (Head & Jambs)~~		~~PE~~	~~087100~~
~~1~~	~~ElectroLynx Harness (Frame) **~~	~~QC-C3000P~~		~~MK~~	~~087100~~
~~1~~	~~Key Pad **~~	~~Linear Keypad~~		~~OT~~	
~~1~~	~~Motion Sensor **~~	~~XMS~~		~~SU~~	~~087100~~
~~1~~	~~Power Supply **~~	~~AQD (Size and Options as required)~~		~~SU~~	~~087100~~
~~1~~	~~Wiring Diagram~~	~~Elevation and Point to Point as Specified~~		~~OT~~	

~~Notes:~~
~~++ Product Meets BABA Qualifications~~
~~** Product may require a BABA waiver~~

~~Coordinate all Wiring and conduit with electrical contractor.~~

~~Operation:~~
~~Doors can be held open by electromagnetic holders and will be released to close upon activation of fire alarm.~~
~~Power to electromagnetic holders and relay to fire alarm by others.~~

~~When doors are closed and secure:~~
~~• The doors are secured by Magnetic Lock.~~
~~• On the Secure Side of the opening a correct code entered into the keypad, will release the magnetic locks allowing authorized entry by pushing the exit device push bar in the direction of travel.~~
~~• Manual Egress from the unsecured side is always available by pressing the exit device push bar in the Direction of Travel. Request to Exit sensor will release the magnetic lock when motion is detected near the push side of the door on the unsecure side of the opening.~~
~~• Door Position Switches integrated in the magnetic lock will monitor the doors OPEN/CLOSED status.~~
~~• Magnetic locks are Fail Safe and will be released to allow free entry or egress in the event of a fire emergency or power outage.~~

Set: 7.1

Doors: 043, A222A

6	Hinge, Full Mortised, Hvy Wt ++	T4A3786-USA (NRP and Size as Required)		US26D	
	MK	087100			
2	Magnetic Lock **	M680EBD	630	SU	087100
2	Fire Rated SVRod Exit Device (EO, LBR, w, Fire Pin)		12 43 NB8710 EO		
	630	SA	087100		
2	Surface Closer **	CLP9500 (HD PA STP Arm)	689	NO	087100
2	Kick Plate ++	K1050 10" high BEV CSK	US32D	RO	087100
2	Electromagnetic Holder **	998 x Voltage as Required	689	RF	087100
1	Astragal Edge Guard (Rated) ++	306-AST UL (Door Height & Cut Outs as required))		US32D	
	RO	087100			
1	Gasketing ++	S88D (Head & Jambs)		PE	087100
1	ElectroLynx Harness (Frame) **	QC-C3000P		MK	087100
1	Key Pad **	Linear Keypad		OT	
1	Motion Sensor **	XMS		SU	087100
1	Power Supply **	AQD (Size and Options as required)		SU	087100
1	Wiring Diagram	Elevation and Point to Point as Specified			OT

Notes: ++ Product Meets BABA Qualifications
** Product may require a BABA waiver

Coordinate all Wiring and conduit with electrical contractor.

Operation:
Doors normally held open by electromagnetic holders and will be released to close upon activation of fire alarm.
Power to electromagnetic holders and relay to fire alarm by others.

When Doors are Secure:
• The doors are secured by Magnetic Lock.
• On the Secure Side of the opening a correct code entered into the keypad, will release the magnetic locks allowing authorized entry by pushing the exit device push bar in the direction of travel.
• Manual Egress from the unsecured side is always available by pressing the exit device push bar in the Direction of Travel. Request to Exit sensor will release the magnetic lock when motion is detected near the push side of the door on the unsecure side of the opening.

• Door Position Switches integrated in the magnetic lock will monitor the doors OPEN/CLOSED status.
• Magnetic locks are Fail Safe and will be released to allow free entry or egress in the event of a fire emergency or power outage.

Set: 8.0

Doors: 045

6	Hinge, Full Mortised, Hvy Wt ++	T4A3786-USA (NRP and Size as Required)	US26D	MK	087100
2	Push Bar & Offset Pull (Back-to-Back Mount) ++	TBF15747 T5	US32D	RO	087100
2	Surface Closer **	CLP9500T (HD PA STP Arm w/HO)	689	NO	087100
2	Kick Plate ++	K1050 10" high BEV CSK	US32D	RO	087100
2	Silencer **	608		RO	087100

Notes:
++ Product Meets BABA Qualifications
** Product may require a BABA waiver

Set: 9.0

Doors: 046

6	Hinges by Door Manufacturer **	Hinges by Door/Frame Manufacturer		OT	
2	Push/Pull by Door Manufacturer **	Push/Pull by Door Manufacturer		OT	
2	Surface Closer **	CLP9500T (HD PA STP Arm w/HO)	689	NO	087100
2	Drop Plate ++	9588	689	NO	087100
2	Blade Stop Spacer ++	9500-1/2SP or 5/8SP (as Required)	689	NO	087100

Notes:
++ Product Meets BABA Qualifications
** Product may require a BABA waiver

~~**Set: 10.0**~~

~~Doors: 041~~

-

~~3~~	~~Hinge, Full Mortised, Hvy Wt ++~~	~~T4A3786-USA (NRP and Size as Required)~~	~~US26D~~	~~MK~~	~~087100~~
~~1~~	~~Magnetic Lock **~~	~~M680EBD~~	~~630~~	~~SU~~	~~087100~~

1	Offset Pull ++	TBF157	US32D	RO	087100
1	Automatic Opener ++	6211 / 6231 (As Required)	689	NO	087113
1	Kick Plate ++	K1050 10" high BEV CSK	US32D	RO	087100
3	Silencer **	608		RO	087100
1	ElectroLynx Harness (Frame) **	QC-C3000P		MK	087100
1	Key Pad **	Linear Keypad		OT	
1	Motion Sensor **	XMS		SU	087100
1	Auto Operator Actuator Switch **	505		NO	087100
1	Power Supply **	AQD (Size and Options as required)		SU	087100
1	Wiring Diagram	Elevation and Point to Point as Specified		OT	

-

Notes:
++ Product Meets BABA Qualifications
** Product may require a BABA waiver

Coordinate all Wiring and conduit with electrical contractor.

Operation:
• The door is normally closed and secured with the magnetic lock.
• Entering the correct code into the key pad will release the magnetic lock and activate the auto operator actuator on the secure side of the opening to allow manual or assisted entry.
• Assisted entry after entering the correct code into the keypad pressing the auto operator actuator switch to signal the auto operators to open the door for assisted entry.
• Assisted Egress from the unsecure side by pressing the auto operator actuator switch to signal the power supply to momentarily release the magnetic lock and activate the auto operator to open the doors for assisted egress.
• Manual Egress from the unsecured side is always available by pushing the doors open. Request to Exit motion sensor on the push side will release the magnetic lock when motion is detected near the push side of the door.
• Door Position Switch integrated in the magnetic lock will monitor the doors OPEN/CLOSED status.
• The magnetic lock is fail safe and will be deactivated in the absence of power to allow free entry or egress.

Set: 10.0

Doors: 041

3	Hinge, Full Mortised, Hvy Wt ++ MK	T4A3786-USA (NRP and Size as Required) 087100		US26D	
1	Magnetic Lock **	M680EBD	630	SU	087100
1	Offset Door Pull ++	TBF157	US32D	RO	087100
1	Automatic Opener ++	6211 / 6231 (As Required)	689	NO	087100
1	Kick Plate ++	K1050 10" high BEV CSK	US32D	RO	087100
3	Silencer **	608		RO	087100
1	ElectroLynx Harness (Frame) **	QC-C3000P		MK	087100

1 Key Pad **	Linear Keypad	OT		
1 Motion Sensor **	XMS	SU	087100	
1 Auto Operator Actuator Switch **	505	NO	087100	
1 Power Supply **	AQD (Size and Options as required)	SU	087100	
1 Wiring Diagram	Elevation and Point to Point as Specified		OT	

Notes: ++ Product Meets BABA Qualifications
** Product may require a BABA waiver

Coordinate all Wiring and conduit with electrical contractor.

Operation:
• The door is normally closed and secured with the magnetic lock.
• Entering the correct code into the key pad will release the magnetic lock and activate the auto operator actuator on the secure side of the opening to allow manual or assisted entry.
• Assisted entry after entering the correct code into the keypad pressing the auto operator actuator switch to signal the auto operators to open the door for assisted entry.
• Assisted Egress from the unsecure side by pressing the auto operator actuator switch to signal the power supply to momentarily release the magnetic lock and activate the auto operator to open the doors for assisted egress.
• Manual Egress from the unsecured side is always available by pushing the doors open. Request to Exit motion sensor on the push side will release the magnetic lock when motion is detected near the push side of the door.
• Door Position Switch integrated in the magnetic lock will monitor the doors OPEN/CLOSED status.
• The magnetic lock is fail safe and will be deactivated in the absence of power to allow free entry or egress.

Set: 11.0

Doors: 024

6 Hinge, Full Mortised, Hvy Wt ++	T4A3786-USA (NRP and Size as Required)	US26D	MK	087100
1 Dust Proof Strike **	570	US26D	RO	087100
2 Flush Bolt **	555 / 557 (As Required)	US26D	RO	087100
1 Storeroom/Closet Lock ++	BAA 10XG04 LL	US26D	SA	087100
1 LFIC Core **	Keyed per Owner's Direction	US15	SA	087100
2 Conc Overhead Stop ++	6-X36 (Size as Required)	630	RF	087100
2 Silencer **	608		RO	087100

Notes:
++ Product Meets BABA Qualifications
** Product may require a BABA waiver

Set: 12.0

Doors: C321

6 Hinge, Full Mortised, Hvy Wt ++	T4A3786-USA (NRP and Size as Required)	US26D	MK	087100
1 Dust Proof Strike **	570	US26D	RO	087100
2 Flush Bolt **	555 / 557 (As Required)	US26D	RO	087100
1 Storeroom/Closet Lock ++	BAA 70 10XG04 LL	US26D	SA	087100
1 LFIC Core **	Keyed per Owner's Direction	US15	SA	087100
2 Surface Closer ++	CLP9500 (HD PA STP Arm)	689	NO	087100
2 Silencer **	608		RO	087100

Notes:
++ Product Meets BABA Qualifications
** Product may require a BABA waiver

Set: 12.1

Doors: 042

3 Hinge, Full Mortised, Hvy Wt ++	T4A3786-USA (NRP and Size as Required)	US26D	MK	087100
1 Storeroom/Closet Lock ++	BAA 10XG04 LL	US26D	SA	087100
1 LFIC Core **	Keyed per Owner's Direction	US15	SA	087100
1 Surface Closer **	CLP9500 (HD PA STP Arm)	689	NO	087100
3 Silencer **	608		RO	087100

Notes:
++ Product Meets BABA Qualifications
** Product may require a BABA waiver

Set: 13.0

Doors: A013, B008, C013

3 Hinge, Full Mortised, Hvy Wt ++	T4A3786-USA (NRP and Size as Required)	US26D	MK	087100
1 Storeroom/Closet Lock ++	BAA 10XG04 LL	US26D	SA	087100
1 LFIC Core **	Keyed per Owner's Direction	US15	SA	087100
1 Surface Closer (Tri-Pack) **	9500 (RA or PA Arm as Required)	689	NO	087100
1 Armor Plate ++	K1050 30" high CSK BEV	US32D	RO	087100
1 Door Stop **	403 (or) 441CU (As Required)	US26D	RO	087100
1 Gasketing ++	S88D (Head & Jambs)		PE	087100

Notes:
++ Product Meets BABA Qualifications
** Product may require a BABA waiver

Set: 13.1

Doors: 048, 053

3 Hinge, Full Mortised, Hvy Wt ++	T4A3786-USA (NRP and Size as Required)	US26D	MK	087100
1 Storeroom/Closet Lock ++	BAA 10XG04 LL	US26D	SA	087100
1 LFIC Core **	Keyed per Owner's Direction	US15	SA	087100
1 Surface Closer (Tri-Pack) **	9500 (RA or PA Arm as Required)	689	NO	087100
1 Door Stop **	403 (or) 441CU (As Required)	US26D	RO	087100
3 Silencer **	608		RO	087100

Notes:
++ Product Meets BABA Qualifications
** Product may require a BABA waiver

Set: 14.0

Doors: 003, 006, 007, 014, 021, 022, 023, 033, 034

3 Hinge, Full Mortised, Hvy Wt ++	T4A3786-USA (NRP and Size as Required)	US26D	MK	087100
1 Classroom Lock ++	BAA 10XG37 LL	US26D	SA	087100
1 LFIC Core **	Keyed per Owner's Direction	US15	SA	087100
1 Door Stop **	403 (or) 441CU (As Required)	US26D	RO	087100
3 Silencer **	608		RO	087100

Notes:
++ Product Meets BABA Qualifications
** Product may require a BABA waiver

Where Existing Frame is to Remain, Review existing hardware preps and match door preps as required.

Set: 14.1

Doors: 008

3 Hinge, Full Mortised, Hvy Wt ++	T4A3786-USA (NRP and Size as Required)	US26D	MK	087100
1 Classroom Lock ++	BAA 10XG37 LL	US26D	SA	087100

1 LFIC Core **	Keyed per Owner's Direction	US15	SA	087100
1 Kick Plate ++	K1050 10" high BEV CSK	US32D	RO	087100
1 Door Stop **	403 (or) 441CU (As Required)	US26D	RO	087100
3 Silencer **	608		RO	087100

Notes:
++ Product Meets BABA Qualifications
** Product may require a BABA waiver

Where Existing Frame is to Remain, Review existing hardware preps and match door preps as required.

Set: 15.0

Doors: 004A, 004B, 004C

3 Hinge, Full Mortised, Hvy Wt ++	T4A3786-USA (NRP and Size as Required)	US26D	MK	087100
1 Classroom Lock ++	BAA 10XG37 LL	US26D	SA	087100
1 LFIC Core **	Keyed per Owner's Direction	US15	SA	087100
1 Door Stop **	403 (or) 441CU (As Required)	US26D	RO	087100
3 Silencer **	608		RO	087100

Notes:
++ Product Meets BABA Qualifications
** Product may require a BABA waiver

Set: 16.0

Doors: 011, 012, 016

3 Hinge, Full Mortised, Hvy Wt ++	T4A3786-USA (NRP and Size as Required)	US26D	MK	087100
1 Classroom Lock ++	BAA 10XG37 LL	US26D	SA	087100
1 LFIC Core **	Keyed per Owner's Direction	US15	SA	087100
1 Surface Closer (Tri-Pack) ++	9500M (RA or PA Arm as Required)	689	NO	087100
1 Kick Plate ++	K1050 10" high BEV CSK	US32D	RO	087100
1 Door Stop **	403 (or) 441CU (As Required)	US26D	RO	087100
3 Silencer **	608		RO	087100

Notes:
++ Product Meets BABA Qualifications
** Product may require a BABA waiver

Where Existing Frame is to Remain, Review existing hardware preps and match door preps as required.

Set: 16.1

Doors: 035

3	Hinge, Full Mortised, Hvy Wt ++	T4A3786-USA (NRP and Size as Required)	US26D	MK	087100
1	Classroom Lock ++	BAA 10XG37 LL	US26D	SA	087100
1	LFIC Core **	Keyed per Owner's Direction	US15	SA	087100
1	Surface Closer (Tri-Pack) ++	9500M (RA or PA Arm as Required)	689	NO	087100
1	Armor Plate ++	K1050 30" high CSK BEV	US32D	RO	087100
1	Door Stop **	403 (or) 441CU (As Required)	US26D	RO	087100
3	Silencer **	608		RO	087100

Notes:
++ Product Meets BABA Qualifications
** Product may require a BABA waiver

Where Existing Frame is to Remain, Review existing hardware preps and match door preps as required.

Set: 17.0

Doors: 005

3	Hinge, Full Mortised, Hvy Wt ++	T4A3786-USA (NRP and Size as Required)	US26D	MK	087100
1	Classroom Lock ++	BAA 10XG37 LL	US26D	SA	087100
1	LFIC Core **	Keyed per Owner's Direction	US15	SA	087100
1	Surface Closer (Tri-Pack) ++	9500M (RA or PA Arm as Required)	689	NO	087100
1	Kick Plate ++	K1050 10" high BEV CSK	US32D	RO	087100
1	Electromagnetic Holder **	998 x Voltage as Required	689	RF	087100
1	Gasketing ++	S88D (Head & Jambs)		PE	087100

Notes:
++ Product Meets BABA Qualifications
** Product may require a BABA waiver

Operation:
Doors normally held open by electromagnetic holders and will be released to close upon activation of fire alarm.
Power to electromagnetic holders and relay to fire alarm by others.

Set: 18.0

Doors: A208, C214, C314

3	Hinge, Full Mortised, Hvy Wt ++	T4A3786-USA (NRP and Size as Required)	US26D	MK 087100
1	Passage Latch ++	BAA 10XU15 LL	US26D	SA 087100
1	Kick Plate ++	K1050 10" high BEV CSK	US32D	RO 087100
1	Door Stop **	403 (or) 441CU (As Required)	US26D	RO 087100
3	Silencer **	608		RO 087100

Notes:
++ Product Meets BABA Qualifications
** Product may require a BABA waiver

Set: 19.0

Doors: A103, A107, A108, A109, A112, A113, A116, A119, A120A, A120B, A201, A205, A207, A209, A212, A213, A218, A220, A224A, A224B, A301, A305, A306, A307, A310, A311, A314, A317, B101, B105, B107, B109, B113, B116, B119, B120A, B120B, B201, B205, B207, B209, B213, B216, B219, B220A, B220B, B301, B305, B306, B307, B311, B314, B317, C102, C105, C108, C109, C112, C113, C114, C118, C201A, C201B, C202, C205, C208, C212, C213, C215, C219, C301A, C301B, C302, C305, C307, C309, C312, C313, C315, C319

3	Hinge, Full Mortised, Hvy Wt ++	T4A3786-USA (NRP and Size as Required)	US26D	MK 087100
1	Passage Latch ++	BAA 10XU15 LL	US26D	SA 087100
1	Kick Plate ++	K1050 10" high BEV CSK	US32D	RO 087100
1	Door Stop **	403 (or) 441CU (As Required)	US26D	RO 087100
3	Silencer **	608		RO 087100

Notes:
++ Product Meets BABA Qualifications
** Product may require a BABA waiver

Set: 20.0

Doors: A206, A219, A221, B106, B108, B206, B208, C216, C316

3	Hinge, Full Mortised, Hvy Wt ++	T4A3786-USA (NRP and Size as Required)	US26D	MK 087100
1	Passage Latch ++	BAA 10XU15 LL	US26D	SA 087100
1	Conc Overhead Stop ++	6-X36 (Size as Required)	630	RF 087100
1	Kick Plate ++	K1050 10" high BEV CSK	US32D	RO 087100
3	Silencer **	608		RO 087100

Notes:
++ Product Meets BABA Qualifications
** Product may require a BABA waiver

Set: 21.0

Doors: A115, A215, A313, A318, B112, B115, B212, B215, B310, B313, B318, C101, C106, C206, C209, C306

3	Hinge, Full Mortised, Hvy Wt ++	T4A3786-USA (NRP and Size as Required)	US26D	MK	087100
1	Passage Latch ++	BAA 10XU15 LL	US26D	SA	087100
1	Conc Overhead Stop ++	6-X36 (Size as Required)	630	RF	087100
1	Kick Plate ++	K1050 10" high BEV CSK	US32D	RO	087100
3	Silencer **	608		RO	087100

Notes:
++ Product Meets BABA Qualifications
** Product may require a BABA waiver

Set: 22.0

Doors: 038

3	Hinge, Full Mortised, Hvy Wt ++	T4A3786-USA (NRP and Size as Required)	US26D	MK	087100
1	Classroom Lock ++	BAA 70 10XG37 LL	US26D	SA	087100
1	SFIC Core **	Keyed per Owner's Direction	US15	SA	087100
1	Surface Closer (Tri-Pack) ++	9500M (RA or PA Arm as Required)	689	NO	087100
1	Kick Plate ++	K1050 10" high BEV CSK	US32D	RO	087100
1	Electromagnetic Holder **	998 x Voltage as Required	689	RF	087100
3	Silencer **	608		RO	087100

Notes:
++ Product Meets BABA Qualifications
** Product may require a BABA waiver

Operation:
Doors normally held open by electromagnetic holders and will be released to close upon activation of fire alarm.
Power to electromagnetic holders and relay to fire alarm by others.

Set: 22.1

Doors: 044

3	Hinge, Full Mortised, Hvy Wt ++	T4A3786-USA (NRP and Size as Required)	US26D	MK	087100
1	Passage Latch ++	BAA 10XU15 LL	US26D	SA	087100
1	Surface Closer (Tri-Pack) ++	9500M (RA or PA Arm as Required)	689	NO	087100
1	Kick Plate ++	K1050 10" high BEV CSK	US32D	RO	087100
1	Electromagnetic Holder **	998 x Voltage as Required	689	RF	087100
3	Silencer **	608		RO	087100

Notes:
++ Product Meets BABA Qualifications
** Product may require a BABA waiver

Operation:
Doors normally held open by electromagnetic holders and will be released to close upon activation of fire alarm.
Power to electromagnetic holders and relay to fire alarm by others.

Set: 23.0

Doors: 039

3	Hinge, Full Mortised, Hvy Wt ++	T4A3786-USA (NRP and Size as Required)	US26D	MK	087100
1	Classroom Lock ++	BAA 10XG37 LL	US26D	SA	087100
1	Conc Overhead Stop ++	6-X36 (Size as Required)	630	RF	087100
1	Kick Plate ++	K1050 10" high BEV CSK	US32D	RO	087100
3	Silencer **	608		RO	087100

Notes:
++ Product Meets BABA Qualifications
** Product may require a BABA waiver

Set: 24.0

Doors: 050A

6	Hinge, Full Mortised, Hvy Wt ++	T4A3786-USA (NRP and Size as Required)	US26D	MK	087100
2	Push Bar & Offset Pull (Back-to-Back Mount) ++	TBF15747 T5	US32D	RO	087100
2	Surf Overhead Hold Open **	10-X26 (Size as Required)	630	RF	087100

2	Surface Closer (Tri-Pack) **	9500 (RA or PA Arm as Required)	689	NO	087100
2	Kick Plate ++	K1050 10" high BEV CSK	US32D	RO	087100
2	Silencer **	608		RO	087100

Notes:
++ Product Meets BABA Qualifications
** Product may require a BABA waiver

Set: 25.0

Doors: 047A, 047B

3	Hinge, Full Mortised, Hvy Wt ++	T4A3786-USA (NRP and Size as Required)	US26D	MK	087100
1	Storeroom/Closet Lock ++	BAA 10XG04 LL	US26D	SA	087100
1	Surface Closer (Tri-Pack) **	9500 (RA or PA Arm as Required)	689	NO	087100
1	Armor Plate ++	K1050 30" high CSK BEV	US32D	RO	087100
1	Electromagnetic Holder **	998 x Voltage as Required	689	RF	087100
3	Silencer **	608		RO	087100

Notes:
++ Product Meets BABA Qualifications
** Product may require a BABA waiver

Operation:
Doors normally held open by electromagnetic holders and will be released to close upon activation of fire alarm.
Power to electromagnetic holders and relay to fire alarm by others.

Set: 26.0

Doors: 050B

2	Track System	W60 x Length Required		PE	087100
4	Door Pull ++	BF T110 Mtg-Type 5	US32D	RO	087100

Notes:
++ Product Meets BABA Qualifications
** Product may require a BABA waiver

Set: 27.0

Notes: NOT USED

Set: 28.0

Doors: 001A, 001B

1 Cylinder ++	type as required	US32D SA 087100
1	All Hardware Provided By Door Supplier	

Notes:
++ Product Meets BABA Qualifications
** Product may require a BABA waiver

Door is Push/Push. No Locking function.

END OF SECTION 087100

SECTION 10 1200 - DISPLAY CASES

PART 1 GENERAL

1.1. SECTION INCLUDES

A. ~~Recessed display cases.~~

B. Free-standing display cases.

1.2. RELATED REQUIREMENTS

A. Section 06 1000 - Rough Carpentry: Blocking and supports.

B. Section 09 2116 - Gypsum Board Assemblies: Concealed supports in metal stud walls.

1.3. REFERENCE STANDARDS

A. AAMA 611 - Voluntary Specification for Anodized Architectural Aluminum; 2014 (2015 Errata).

B. ASTM B221 - Standard Specification for Aluminum and Aluminum-Alloy Extruded Bars, Rods, Wire, Profiles, and Tubes; 2014.

C. ASTM B221M - Standard Specification for Aluminum and Aluminum-Alloy Extruded Bars, Rods, Wire, Profiles, and Tubes (Metric); 2013.

D. ASTM C1048 - Standard Specification for Heat-Strengthened and Fully Tempered Flat Glass; 2012.

1.4. SUBMITTALS

A. See Section 01 3300 Submittals for submittal procedures.

B. Product Data: Submit complete printed data and installation details indicating products to be provided as specified.

1) Submit color charts for selection by the Architect.

C. Shop Drawings: Submit complete installation details. Include dimensioned elevations.

D. Samples: Submit samples of material and trim to illustrate finish, color, and texture.

1.5. QUALITY ASSURANCE

A. Manufacturer Qualifications: Company specializing in manufacturing products specified in this section, with at least three years of documented experience.

B. Regulatory Requirements: Products shall meet requirements of the Americans with Disabilities Act Accessibility Guidelines (ADAAG) and local amendments and modifications.

C. Installer: Installer specialized and experienced in work similar to that required for this project shall perform Installation.

1.6. DELIVERY, STORAGE AND HANDLING

A. Deliver display cases and materials to the Project site with manufacturer's protective crate covering and do not open until ready for use.

B. Protect display cases before, during, and after installation. In case of damage, immediately provide necessary repairs and replacements.

1.7. FIELD CONDITIONS

A. Field Measurements: Verify field measurements for recessed application for display cases before preparation of shop drawings and before fabrication to ensure proper installation.

1.8. WARRANTY

A. See Section 01 7800 - Closeout Submittals, for additional warranty requirements.

B. Correct defective Work within a five year period after Date of Substantial Completion.

C. Provide five year manufacturer warranty against defects and in materials, finish product and workmanship.

PART 2 PRODUCTS

2.1. DISPLAY CASES

A. Manufacturers:

1) Peter Pepper Products Model PMC-B 724224 Free-standing.

2) Claridge Products and Equipment, Inc: www.claridgeproducts.com/#sle.

3) Nelson Adams NACO: www.nelsonadamsnaco.com/#sle.

4) The Tablet & Ticket Co.: https://www.tabletandticket.com/custom-display-cases/school/

5) Blankenship Associates Inc.: https://blankenshipassociates.com/products/display-cases

B. ~~Recessed Display Case: Factory-fabricated wood-framed display case with adjustable glass shelves, finished interior, and aluminum trim on face to cover edge of recessed opening.~~

1) ~~Width: 3 feet.~~

2) ~~Height: As indicated on drawings.~~

3) ~~Depth: As indicated on drawings.~~

4) ~~Components:~~

a. ~~Glazed Doors: Hinged.~~

1) ~~Number of Doors: Two pair.~~

b. ~~Side Panels: Laminate-faced substrate.~~

c. ~~Back Panel: Laminate-faced.~~

d. ~~Top Panel: Laminate-faced substrate.~~

e. ~~Bottom Panel: Laminate-faced substrate.~~

C. Free-Standing Display Case: Factory-fabricated aluminum-framed display case with adjustable glass shelves, finished interior.

1) Width: 6 feet.

2) Height: 42 inches.

3) Depth: 24 inches.

4) Components:

a. Glazed Doors: Sliding.

1) Number of Doors: Two pair.

b. Side Panels: Tempered clear glass.

c. Back Panel: Termpered clear glass.

d. Top Panel: Tempered clear glass.

e. Bottom Panel: Laminate-faced substrate.

5) Free-Standing Display Case Base: Veneer plywood base to match display case interior.

6) Basis of Design Peter Pepper Products Model PMC-B 724224.

2.2. FABRICATION

A. Comply with requirements indicated for materials, thickness, finishes, colors, designs, shapes, sizes, and details of construction.

B. Welded Connections: Comply with AWS standards for recommended practices in shop welding. Provide welds behind finished surfaces without distortion or discoloration of exposed side. Clean exposed welded surfaces of welding flux and dress on exposed and contact surfaces.

C. Mill joints to a tight, hairline fit.

D. Pre-assemble signs in the shop. No visible fasteners.

E. Form panels to required size and shape. Comply with requirements indicated for design, dimensions, finish, color, and details of construction.

F. Coordinate dimensions and attachment methods to produce message panels with closely fitting joints. Align edges and surfaces with one another in the relationship indicated.

G. Increase metal thickness or reinforce with concealed stiffeners or backing materials as required to produce surfaces without distortion, buckles, warp, or other surface deformations.

1) Fabricate frame from extruded aluminum. Corners to have hairline miters and be braced by means of internal aluminum angels. If welding is necessary, none should be visible. Frames shall have a continuous back-up member behind the door.

2.3. COMPONENTS

A. Wood Case Construction: 3/4 inch 7-ply maple veneer plywood with manufacturer's standard stain.

B. Aluminum Framed Case Construction: 1-1/2 inch by 2 inch extruded aluminum tube frame with tempered glass and laminate-faced infill panels.

C. Aluminum Case Construction: Aluminum side, bottom, and top panels fabricated from extruded aluminum shapes.

D. Face Frame Trim for Recessed Installation: 2 inch flat face dimension extruded aluminum trim mitered with corner clips and mechanical fasteners.

E. Glazed Sliding Doors: (Free standing display case)

1) 1/4 inch clear tempered glass with plastic finger pulls.

2) Door track: Extruded aluminum glass shoe with bottom rollers and top plastic guide.

3) Lock: Glass door cylinder lock.

F. ~~Glazed Hinged Doors: (Recess mounted display cases)~~

1) ~~1/4 inch clear tempered glass with polished edges.~~

2) ~~Frameless Pivot Hinges: Satin Chrome Flush Mount Cabinet Pivot Hinges.~~

3) ~~Lock: Glass door cylinder lock. Chrome Single Glass Door Lock - Randomly Keyed~~

G. Glass Shelves:

1) 1/4 inch clear tempered glass with flat-polished edges.

2) Shelf Depth: As indicated on drawings.

3) Shelves per Unit: As indicated on drawings.

H. ~~Recessed Display Case Glass Shelf Support : adjustable in 1 inch increments along entire length of standard, drilled and countersunk for screws.~~

1) ~~Shelf Support, For glass shelves, for screw fixing into drill hole Ø 5 mm~~

2) ~~Steel, load-bearing capacity 80 kg (in compliance with DIN EN 1727:1998-06), with lip, Nickel plated.~~

I. Free-standing Display Case Shelf Standards and Brackets: Integral to case frame single-slotted channel standards for brackets adjustable in 1 inch increments along entire length of standard frame slot.

J. Laminate Back Panel: Low-pressure laminate on one face of plywood substrate.

1) Laminate Color and Texture: As selected from manufacturer's full range.

2.4. MATERIALS

A. Aluminum Extrusions for Framing and Trim: Alloy as recommended by manufacturer for construction and specified finish; nominal 1/8-inch wall thickness.

B. Aluminum Extrusions: ASTM B221 (ASTM B221M), 6063 alloy, T5 temper.

1) Finish: Factory anodized; AAMA 611: Color as selected from manufacturers standard line.

C. Plywood: Softwood plywood with veneer core, waterproof glue, 3/4 inch thick.

D. Heat-Strengthened and Fully Tempered Glass: ASTM C1048, Kind FT.

PART 3 EXECUTION

3.1. PREPARATION

A. Rough openings, electrical pre-wiring, and final finishing are by other trades.

3.2. INSTALLATION

A. Install in accordance with manufacturer's instructions.

B. Locate fastening devices to secure cases securely to back and sides of rough opening.

C. Install recessed display cases plumb and level in wall openings.

D. Refer to drawings for display case mounting heights.

E. Clean case and glass using manufacturers recommended procedures.

F. Provide mitered and wrapped hairline joints for all trims.

3.3. ADJUSTING AND CLEANING

A. Verify that all accessories are installed as detailed for each unit.

B. At completion of work, clean glass surfaces, back panels and trim in accordance with manufacturer’s recommendations leaving units ready for use.

3.4. CLOSEOUT ACTIVITIES

A. See Section 01 7800 - Closeout Submittals, for closeout submittals.

END OF SECTION

SECTION 32 3119 - DECORATIVE METAL FENCES AND GATES

PART 1 GENERAL

1.1. SECTION INCLUDES

A. Decorative aluminum fences.

B. Automatic gate operators.

1.2. REFERENCE STANDARDS

A. ASTM A276/A276M - Standard Specification for Stainless Steel Bars and Shapes; 2017.

B. ASTM B221 - Standard Specification for Aluminum and Aluminum-Alloy Extruded Bars, Rods, Wire, Profiles, and Tubes; 2014.

C. NEMA 250 - Enclosures for Electrical Equipment (1000 Volts Maximum); 2014.

D. NFPA 70 - National Electrical Code; Most Recent Edition Adopted by Authority Having Jurisdiction, Including All Applicable Amendments and Supplements.

E. UL 50 - Enclosures for Electrical Equipment, Non-Environmental Considerations; Current Edition, Including All Revisions.

F. UL 50E - Enclosures for Electrical Equipment, Environmental Considerations; Current Edition, Including All Revisions.

1.3. SUBMITTALS

A. See Section 01 3300 - Submittals, for submittal procedures.

B. Product Data: Submit manufacturer's data sheets on each product to be used, including:

1) Preparation instructions and recommendations.

2) Storage and handling requirements and recommendations.

3) Installation methods.

C. Shop Drawings:

1) Indicate plan layout, spacing of components, post foundation dimensions, hardware anchorage, gates, and schedule of components.

D. Manufacturer's Warranty.

1.4. QUALITY ASSURANCE

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

B. Installer Qualifications: Experienced with type of construction involved and materials and techniques specified and approved by fence manufacturer.

1.5. DELIVERY, STORAGE AND HANDLING

A. Store materials in a manner to ensure proper ventilation and drainage. Protect against damage, weather, vandalism and theft.

PART 2 PRODUCTS

2.1. MANUFACTURERS

A. Decorative Metal Fences and Gates:

1) Alumi-Guard; Belmont: www.alumi-guard.com/sle.

2) Ameristar Perimeter Security, USA; Echelon Plus: www.ameristarfence.com.

3) Ideal Aluminum Products; Maine: www.ideal-ap.com/#sle.

B. Gate Operators:

1) Liftmaster.

2) Viking

3) Doorking

2.2. FENCES

A. Fences: Complete factory-fabricated system of posts and panels, accessories, fittings, and fasteners; finished with electrodeposition coating, and having the following performance characteristics:

B. Electro-Deposition Coating: Multi-stage pretreatment/wash with zinc phosphate, followed by epoxy primer and acrylic topcoat.

1) Total Coating Thickness: 2 mils, minimum.

2) Color: As selected by Architect from manufacturer's standard range.

C. Aluminum: ASTM B221.

1) Tubular Pickets, Rails and Posts: 6005-T5 alloy.

2) Extrusions for Posts and Rails (Outer Channel): 6005-T5 alloy.

3) Extrusions for Pickets and Rail (Inner Slide Channels): 6063-T5 alloy.

D. Fasteners: ASTM A276/A276M, Type 302 stainless steel; finished to match fence components.

2.3. ALUMINUM FENCE

A. Decorative Aluminum Fence System: Provide fence meeting the Test Load and Coating Performance requirements of ASTM F2408 for Industrial class.

1) Fence Panels: 6 feet high by 8 feet long.

a. Panel Style: Three rail.

b. Panel Strength: Capable of supporting 270 pounds minimum load applied at midspan without deflection.

c. Attach panels to posts with manufacturer's standard panel brackets and recommended fasteners.

d. Posts: Aluminum extrusions; 2-1/2 inches square.

e. Rails: Extruded aluminum channels.

f. Pickets: Extruded aluminum tubes.

1) Style: Pickets with finial extend above top rail.

2) Integrally Formed Finial: Spear point.

g. Fasteners: Manufacturer's standard stainless steel bolts, screws, and washers; factory finish fasteners to match fence.

h. Accessories: Aluminum castings, extrusions and cold-formed strips; factory finished to match fence.

1) Flat post cap.

i. Flexibility: Capable of following variable slope of up to 1:4.

j. Color: As selected by Architect from manufacturer's standard range.

B. ~~Decorative Aluminum Gates:~~

1) ~~Gate Panels: Manufacturer's standard decorative aluminum fence panels.~~

2) ~~Posts: Aluminum extrusions; 2 inches square.~~

3) ~~Rails and Frame: Welded aluminum extrusions; 2 inches by 3 inches.~~

4) ~~Hardware:~~

a. ~~Latch: Manufacturer's standard mechanism; factory finished galvanized steel.~~

5) ~~Operation: Automatic locking system.~~

a. ~~Operator: Comply with UL 325, Class III and ASTM F2200.~~

b. ~~Manufacturer's standard electric operating system with integral controls, remote latching and unlatching, safety devices, communication devices, and emergency vehicle access.~~

1) ~~Contractor shall connect digital entry system to existing power source and fire alarm system.~~

6) ~~Color: As selected by Architect from manufacturer's standard range.~~

2.4. Egress Security Man Gate and Hardware Assembly

A. The man gate system shall conform to the Basis of Design Ameristar Exodus Egress Gate (Direct Bury) installation method and 1" picket w/ perforated metal, Pale w/ expanded metal, pale w/ perforated metal, anti-scale pale w/ expanded metal, or anti-scale pale w/ perforated metal) infill, manufactured by Ameristar Perimeter Security in Tulsa, Oklahoma. Other manufactures listed above are acceptable based on compliance with the basis of design specified here.

B. Steel material for gate framework (i.e., jamb frame & gate), shall be galvanized prior to forming in accordance with the requirements of ASTM A653/A653M, with minimum yield strength of 45,000 psi (310 MPa). The steel shall be hot-dip galvanized to meet the requirements of ASTM A653/A653M with a minimum zinc coating weight of 0.90 oz/ft2 (276 g/m2), Coating Designation G-90.

C. Infill frame shall be 12ga steel. Expanded metal mesh shall be ¾" x #9 flattened or Perforated metal mesh shall be 3/16" round x ½" x 18ga.

D. Ornamental picket infill material shall consist of 1" square x 14 Ga. tubing for pickets. Pickets shall be spaced no greater than 5" o.c. Infill frame shall be 12ga steel. Expanded metal mesh shall be ¾" x #9 flattened or Perforated metal mesh shall be 3/16" round x ½" x 18ga.

E. If applicable - material for pales shall be 2.75" x .75" x 14ga. corrugated shape. Standard pale spacing shall be no greater than 6" o.c. or anti-scale pale spacing at no greater than 4.25" o.c.

F. Gate shall be 1.75" x 14ga steel reinforced structural design with ¼" plate reinforced hinge mounting.

G. Hinges shall be stainless steel five knuckle bearing hinges with non-removable pin and stainless-steel fasteners.

H. Gate Fabrication as follows:

1) Gate shall be pre-drilled to accept appropriate hardware set. Infill frames shall be fabricated as a single unit. Frame shall be of welded construction inset with mesh filler, attachment to gate frame by means of security fasteners.

2) Gate jamb frame shall be fully welded consisting of 3" x 12ga square tubing for main jamb, 1" square gate stop, and strike mounting block, with gate stop bumpers. Jamb to include an electrical access point with conduit point of connection. Electrical connection to gate by means of Power Transfer connection mounted in jamb and gate.

3) Gate shall be pre-assembled.

4) Gate threshold to be mounted with fasteners allowing for placement below grade or removal after gate installation.

5) Gate shall have clear opening (from gate stop to face of gate open to 90 degrees) of 41.5" meeting IBC Group I-2 Egress requirements.

6) Gate hardware to consist of exterior rated devices. Gate and hardware to be pre-assembled prior to shipping.

a. Exit Device. Detex V40 Series Exit Device with Alarm

b. Trim Set Lock Handle. Securetech Trim Handle.

c. Parallel Arm Closer. Norton 7500

7) The manufactured galvanized gate shall be subjected to a multi-stage pretreatment/wash, followed by a dual stage coating process consisting of a cathodic electro-coat epoxy primer base coat and an electrostatic spray topcoat application, a PermaCoat . Steel framework is subjected to a six-stage pretreatment/wash followed by an electrostatic spray application of PermaCoat Color System, a two-coat powder system. The base coat is a thermosetting epoxy powder coating (gray in color). The topcoat is a “no-mar” TGIC polyester powder coat finish with a minimum thickness of 2 mils (0.0508mm).

2.5. Cantilever Vehicular Sliding Gate Assembly

A. Ornamental cantilever gates shall conform to the Basi of Design Ameristar® TransPort Traverse II® gate system, Classic design, manufactured by Ameristar Perimeter Security USA Inc., in Tulsa, Oklahoma. The project gate schedule shall include the following additional information for each cantilever gate included in the project scope: opening 18’-0” range opening, (standard height of 6’-0” height, direction of gate travel to the open position, right or left, viewing from outside fence line looking in) gate travel direction refer to drawings.

B. The materials used for cantilever gate framing (uprights & diagonal bracing) shall be manufactured from ASTM A653 Steel with yield strength of 34,800 PSI, a tensile strength of 37,700PSI and a standard mill finish. The aluminum extrusions for top and bottom enclosed tracks shall be alloy and temper designation 6005-T5 to meet ASTM B221.

C. Material for pickets shall be 1” square x 16 ga. steel pickets on gate systems less than 22’ openings, gate systems greater than 22’ openings shall have 1" square x 1/8” wall aluminum pickets. Picket on center spacing shall not exceed 5". Pickets shall be securely fastened to face of top and bottom enclosed track extrusions.

D. Material for gate uprights shall be 2 ½” X 16 ga. and diagonal bracing shall be 2” square x 16 ga. steel. The cross-sectional shape of the enclosed-track shall confirm to the manufacturers Traverse-Trak™ design with a single extrusion consisting of a 3.75” x 7” channeled support with integrated 3” x 3” enclosed-track raceway. Gates less than 18-foot openings shall be constructed as a single-track system, gates greater than 20-foot openings shall be constructed as a spliced track system.

E. Steel material for fence posts and pickets shall be galvanized prior to forming in accordance with the requirements of ASTM A653/A653M, with minimum yield strength of 45,000 psi (310 MPa). The steel shall be hot-dip galvanized to meet the requirements of ASTM A653/A653M with a minimum zinc coating weight of 0.90 oz/ft2 (276 g/m2), Coating Designation G-90. Depending on application and gate size, material for gate support posts shall be 4” x 11 Ga., or 6” x 3/16”.

F. Support carriage trolly assemblies, for the gates enclosed bottom track, shall have two mounting options: concrete slab or post mount bracket configuration, and shall support the vertical load of the gate. The gates center of gravity shall be centered on the bottom support carriage trolly assemblies. Installation of the carriage trolly assemblies shall be per manufacturer’s installation instructions.

G. Gate frame uprights and diagonal bracing shall be prefabricated and pre-punched to accept frame fasteners. Enclosed track shall be pre-punched to accept gate uprights. Pickets shall be precut to specified length and predrilled to accept picket to track fasteners. Posts shall be precut to specified lengths.

H. Top and bottom enclosed track extrusions shall be mechanically fastened to vertical gate uprights and intermediate supports, as required by assembly instructions. Diagonal bracing shall be mechanically fastened to vertical gate uprights and intermediate supports, as required by assembly instructions. Pickets shall be mechanically fastened to top and bottom enclosed track, as required by assembly instructions.

2.6. Automatic Gate Operators

A. ~~Swinging~~ Cantilever Sliding Gates: Pre-wired, pedestal mounted gate operator for horizontal ~~swinging~~ Cantilever Slide gates, per ASTM F2200 and UL 325.

1) Class: Class I.

2) Operating type: ~~Swing arm.~~ Cantilever Sliding Type

3) Control Functions: Open, pause, and close.

4) Maximum Open/Close Time: 10 seconds.

5) Access: Card Reader tied to Using Agency Security System.

6) ~~Maximum gate weight: 500 pounds (187 kilograms).~~

7) Horsepower Rating: Suitable for connected load.

8) Entrapment Protection Devices: Provide sensing devices and safety mechanisms complying with UL 325.

a. Primary Device: Provide electric sensing edge, wireless sensing, NEMA 1 photo eye sensors, or NEMA 4X photo eye sensors as required with momentary-contact control device.

b. For Gates that will be automated, the contractor shall be responsible to ensure the gate, and installation, meet ASTM F2200 and UL325 Standards.

9) Enclosures: Comply with NEMA 250, and list and label as complying with UL 50 and UL 50E.

a. Environment Type per NEMA 250: Unless otherwise indicated, as specified for the following installation locations:

1) Outdoor Locations: Type 3R.

PART 3 EXECUTION

3.1. EXAMINATION

A. Do not begin installation until substrates have been properly prepared.

B. If substrate preparation is the responsibility of another installer, notify Architect of unsatisfactory preparation before proceeding.

3.2. INSTALLATION

A. Install in accordance with manufacturer's instructions.

B. Set fence posts in accordance with the manufacturer recommended spacing.

C. When cutting rails immediately seal the exposed surfaces by:

1) Removing metal shavings from cut area.

2) Apply zinc-rich primer to thoroughly cover cut edge and drilled hole; allow to dry.

3) Apply two coats of custom finish spray paint matching fence color.

4) Failure to seal exposed surfaces in accordance with manufacturer's instructions will negate manufacturer's warranty.

D. Space gate posts according to the manufacturers' drawings, dependent on standard out-to-out gate leaf dimensions and gate hardware selected.

1) Base type and quantity of gate hinges o the application; weight, height, and number of gate cycles.

2) Identify the necessary hardware required for the application on the manufacturer's gate drawings.

3) Provide gate hardware by the manufacturer of the gate and install in compliance with manufacturer's recommendations.

E. Cantilever Gate Installation; Cantilever support posts shall be set in concrete footers having a minimum depth of 48” (Note: In most cases, local soil, code restrictions and inclement weather conditions may require a greater depth). Posts shall be spaced according to gate specific submittal drawings. Safety Kit must be included if the gate is automated. The “Earthwork” and “Concrete” sections of this project manual shall govern material requirements for the concrete footer.

F. Gate posts shall be spaced according to the manufacturers’ drawings, dependent on clear opening. The manufacturers’ gate drawings shall identify the necessary gate hardware required for the application. Gate hardware shall be provided by the manufacture of the gate and shall be installed per manufacturer’s recommendations.

G. Install operator in accordance with manufacturer's instructions and in accordance with NFPA 70.

H. Gate to be installed per manufacturers gate installation instructions (written or video). For Gates that will be automated, the contractor shall be responsible to ensure the gate, and installation, meet ASTM F2200 and UL325 Standards.

I. When cutting/drilling posts adhere to the following steps to seal the exposed steel surfaces; 1) Remove all metal shavings from cut area. 2) Apply zinc-rich primer to thoroughly cover cut edge and/or drilled hole; let dry. 3) Apply 2 coats of manufactures finish paint matching fence color. Failure to seal exposed surfaces per steps 1-3 above will negate warranty. Manufacturers spray cans or paint pens shall be used to prime and finish exposed surfaces; it is recommended that paint pens be used to prevent overspray. Use of non-manufactures parts or components will negate the manufactures’ warranty.

3.3. ERECTION TOLERANCES

A. Maximum Variation From Plumb: 1/4 inch.

B. Maximum Offset From Indicated Position: 1 inch.

C. Minimum Distance from Property Line: 6 inches.

3.4. FIELD QUALITY CONTROL

A. See Section 01 4000 - Quality Requirements, for additional requirements.

B. Layout: Verify that fence installation markings are accurate to design, paying attention to gate locations, underground utilities, and property lines.

C. Post Settings: Randomly inspect three locations against design for:

1) Hole diameter.

2) Hole depth.

3) Hole spacing.

D. Fence Height: Randomly measure fence height at three locations or at areas that appear out of compliance with design.

E. Gates: Inspect for level, plumb, and alignment.

F. Workmanship: Verify neat installation free of defects.

3.5. CLEANING

A. Leave immediate work area neat at end of each work day.

B. Clean jobsite of excess materials; scatter excess material from post hole excavations uniformly away from posts. Remove excess material if required.

C. Clean fence with mild household detergent and clean water rinse well.

D. Remove mortar from exposed posts and other fencing material using a 10 percent solution of muriatic acid followed immediately by several rinses with clean water.

E. Touch up scratched surfaces using materials recommended by manufacturer. Match touched-up paint color to factory-applied finish.

3.6. CLOSEOUT ACTIVITIES

A. See Section 01 7800 - Closeout Submittals, for closeout submittals.

B. See Section 01 7900 - Demonstration and Training, for additional requirements.

C. Demonstrate proper operation of equipment to Owner's designated representative.

D. Demonstration: Demonstrate operation of system to Owner's personnel.

1) Use operation and maintenance data as reference during demonstration.

2) Conduct walking tour of project.

3) Briefly describe function, operation, and maintenance of each component.

E. Training: Train Owner's personnel on operation and maintenance of system.

1) Use operation and maintenance manual as training reference, supplemented with additional training materials as required.

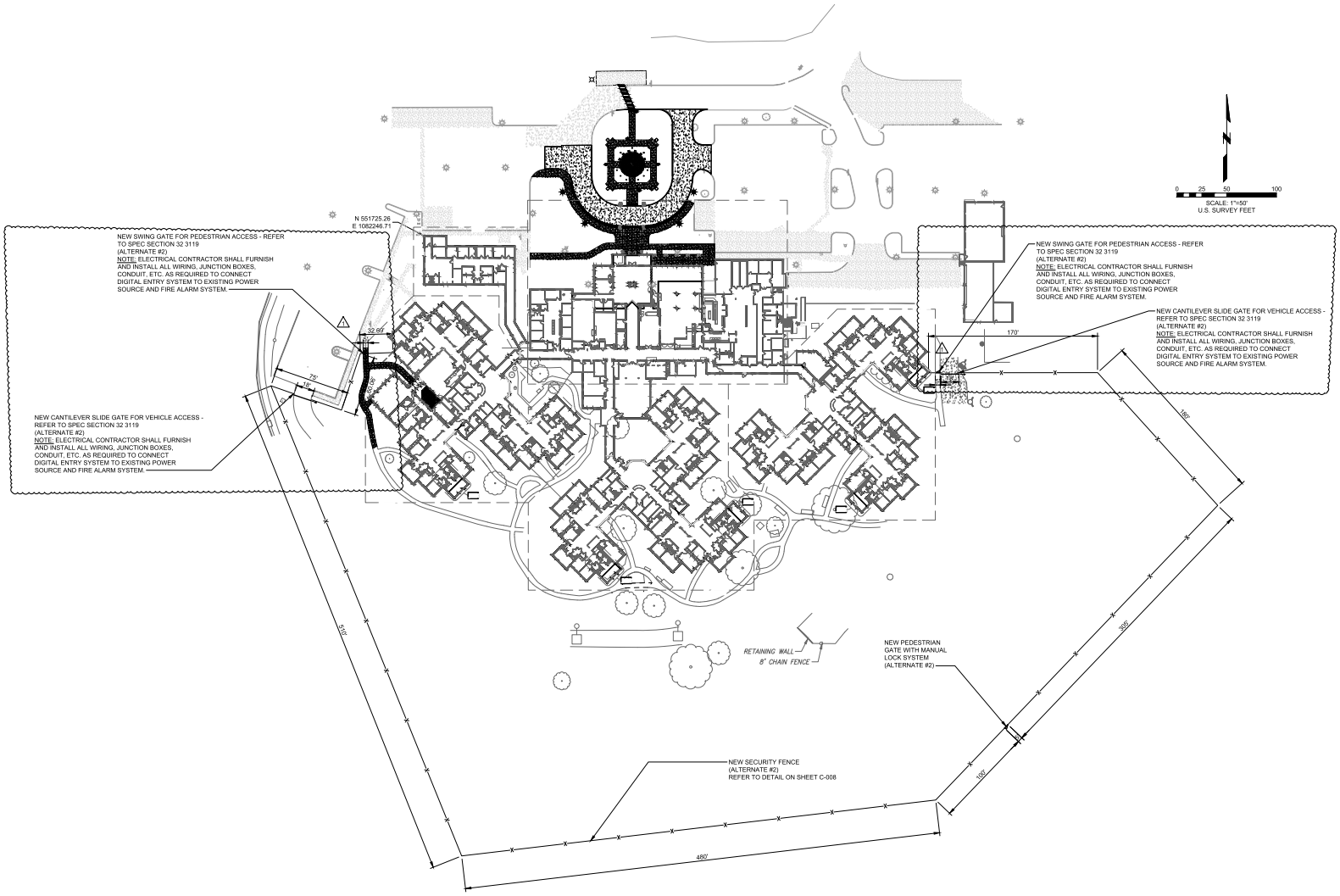
2) Provide minimum of two hours of training.

3.7. PROTECTION

A. Protect installed products until completion of project.

B. Touch-up, repair, or replace damaged products before Date of Substantial Completion.

END OF SECTION



STATE OF MISSOURI
MICHAEL L. PARSON, GOVERNOR

STEPHEN STUMPF
2010022089
PROFESSIONAL ENGINEER

DATE: 7/10/2025

Farnsworth GROUP
20 ALLEN AVENUE, SUITE 200
ST LOUIS, MISSOURI 63119
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MISSOURI VETERANS COMMISSION

MISSOURI VETERANS HOME

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Cape Girardeau, MO 63701

PROJECT #.: U1805-01
SITE #.: 4703
FACILITY #.: 55020
FA#.: 29-043

#	DATE:	DESCRIPTION:
1	07/10/2025	ADDENDUM 2

DRAWN BY: JSE
CHECKED BY: SAS
DESIGNED BY: JSE

SHEET TITLE:

FENCE LAYOUT ALTERNATE #2

SHEET NUMBER:

C-007

SHEET of
ISSUE DATE: 04/26/2024

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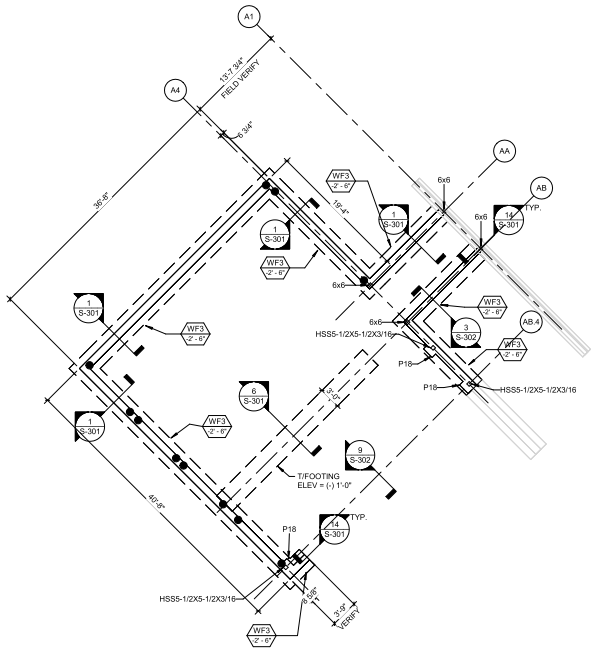


1 **FOUNDATION PLAN - WING A**
Scale: 1/8" = 1'-0"

PAD FOOTING SCHEDULE

TYPE MARK	WIDTH	LENGTH	DEPTH	LONG	TRANS	REMARKS
F3	3' - 0"	3' - 0"	1' - 0"	(4) #6 T&B	(4) #6 T&B	
F4	4' - 0"	4' - 0"	1' - 0"	(5) #6 T&B	(5) #6 T&B	
F5	5' - 0"	5' - 0"	1' - 6"	#6 AT 12" O.C. T&B	#6 AT 12" O.C. T&B	
F7	7' - 0"	7' - 0"	1' - 6"	#6 AT 12" O.C. T&B	#6 AT 12" O.C. T&B	
F10	10' - 0"	10' - 0"	1' - 6"	#6 AT 12" O.C. T&B	#6 AT 12" O.C. T&B	
F12	12' - 0"	12' - 0"	2' - 0"	#6 AT 12" O.C. T&B	#6 AT 12" O.C. T&B	

PEDESTAL SCHEDULE

TYPE MARK	WIDTH	DEPTH	VERTICAL REINF	HORIZONTAL REINF
P1	1' - 0"	1' - 0"	(8) #5	#4 TIES AT 10" OC. TOP 12" AT 3" OC.
P18	1' - 8"	1' - 8"	(16) #5	#4 TIES AT 10" OC. TOP 12" AT 3" OC.
P2	2' - 0"	2' - 0"	(22) #5	#4 TIES AT 10" OC. TOP 12" AT 3" OC.
P26	2' - 6"	2' - 6"	(24) #5	#4 TIES AT 10" OC. TOP 12" AT 3" OC.
P3	3' - 0"	3' - 0"	(26) #7	#4 TIES AT 10" OC. TOP 12" AT 3" OC.

WALL FOOTING SCHEDULE

TYPE MARK	WIDTH	THICKNESS	LONG REINF	TRANS REINF
WF1.5	1' - 6"	1' - 0"	#5 AT 12" O.C.	#5 AT 12" O.C.
WF2	2' - 0"	1' - 0"	#5 AT 12" O.C.	#5 AT 12" O.C.
WF3	3' - 0"	1' - 0"	#5 AT 12" O.C.	#5 AT 12" O.C.
WF4	4' - 0"	1' - 0"	#5 AT 12" O.C.	#5 AT 12" O.C.

FOUNDATION PLAN NOTES

A. SEE S-001 AND S-002 FOR GENERAL STRUCTURAL NOTES.

B. SEE GENERAL STRUCTURAL NOTES FOR DESIGN SOIL BEARING PRESSURE.

C. SEE ARCHITECTURAL FOR DIMENSIONS NOT SHOWN.

D. SEE ARCHITECTURAL FOR FLOOR SLAB SLOPE REQUIREMENTS.

E. COMPACTED FILL UNDER SLAB ON GRADE SHALL BE 6" OF 1" FREE-DRAINING AGGREGATE UNLESS OTHERWISE SHOWN ON DRAWINGS OR AS RECOMMENDED BY A GEOTECHNICAL ENGINEER.

F. SEE PAD FOOTING SCHEDULE FOR FOOTING DIMENSIONS.

G. SEE WALL FOOTING SCHEDULE FOR WALL FOOTING DIMENSIONS.

H. SEE PEDESTAL SCHEDULE FOR PEDESTAL DIMENSIONS.

I. T/FOOTING ELEVATION = (-)2'-6" UNLESS OTHERWISE NOTED.

J. T/SLAB ELEVATION = 0'-0" UNLESS OTHERWISE NOTED.

K. TYP T/ FOUNDATION WALL ELEV. = 0'-0" UNLESS OTHERWISE NOTED.

L. FOR STEEL COLUMNS, T/ CONCRETE PILASTER ELEVATION = 0'-0" @ EXTERIOR WALLS. T/PEDESTAL OR FOOTING AT INTERIOR COLUMNS = (-)1'-0" UNLESS OTHERWISE NOTED. T/CANOPY PEDESTAL ELEVATION = (+)0'-4" UNLESS OTHERWISE NOTED.

M. SEE 9/S-301 FOR FOUNDATION WALL CONSTRUCTION JOINT.

N. SEE 10&12/S-301 FOR TYPICAL CORNER AND WALL INTERSECTION REINFORCEMENT.

O. SLAB ON GRADE SHALL BE 4" CAST IN PLACE CONCRETE REINFORCED W/ WWF6x6xW2.1xW2.1 ON 10 MIL VAPOR BARRIER UNLESS OTHERWISE NOTED.

P. USE CIRCULAR OR DIAMOND ISOLATION JOINTS AT ALL COLUMNS. SEE DETAIL 11/S-301 FOR SLAB CRACK CONTROL AT ISOLATION JOINT.

Q. INSTALL SLAB CONTROL JOINTS AT ALL COLUMNS, INTERIOR CORNERS, AND WITH A MAX. JOINT SPACING OF 15'. SECTIONS OF SLAB BETWEEN CONTROL JOINTS, ASPECT RATIO NOT TO EXCEED 1.5:1. SEE DETAIL 7/S-301.

R. SEE DETAIL 8/S-301 FOR SLAB CRACK CONTROL DETAILS.

S. COORDINATE ALL FLOOR SLAB AND FOUNDATION WALL OPENINGS WITH OTHER TRADES. SEE DETAIL 15/S-301 FOR TYPICAL WALL SLEEVE DETAIL.

T. SEE S-402 FOR BASE PLATE DETAILS.

U. ANCHOR EMBED. DEPTH SHALL BE MEASURED FROM TOP OF FOUNDATION WALL OR FOOTING, NOT TOP OF SLAB.

V. ● INDICATES SIMPSON HD7B HOLDDOWN OR EQUAL W/ 7/8"Ø A307 THREADED RODS IN HILTI HY200 ADHESIVE OR EQUIV. EMBED 8"

W. SEE 13/S-301 FOR HOLD DOWN DETAIL. PROVIDE (2)2X END POST TYP EXCEPT AT WALLS ALONG GRID 3.7 PROVIDE (3)2X END POSTS.

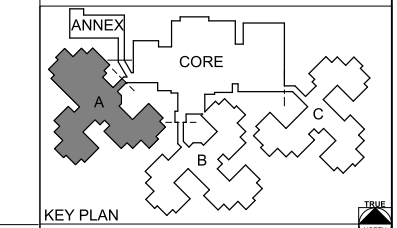
X. SEE ARCHITECTURE AND PLUMBING FOR WATERPROOFING REQUIREMENTS.

Y. REMOVE AND REPLACE EXISTING SLAB ON GRADE AS REQUIRED TO INSTALL NEW FOUNDATIONS

Z. AT FOOTING ELEVATION TRANSITIONS STEP FOOTING PER 2/S-302.

AA. * DENOTES EXISTING COLUMN TO REMAIN

BB. SEE 16/S-301 FOR FOOTING DETAIL AT PIPE PENETRATIONS.



KEY PLAN
SCALE: NO SCALE
TRUE NORTH

STATE OF MISSOURI
MICHAEL L. PARSON, GOVERNOR

DUSTIN KYLE SWEET
EXPIRATION DATE: 12/31/2026
NUMBER PE-2013027946
PROFESSIONAL ENGINEER
SEALED DATE: 07/10/2025

Farnsworth GROUP
20 ALLEN AVENUE, SUITE 200
ST LOUIS, MISSOURI 63119
(314) 962-7900 / info@f-w.com
Farnsworth Group, Inc.
Missouri State Certificate of Authority #000744
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08/15/2024

OFFICE OF ADMINISTRATION
DIVISION OF FACILITIES MANAGEMENT, DESIGN AND CONSTRUCTION

MISSOURI VETERANS COMMISSION

UPGRADES AND RENOVATIONS MISSOURI VETERANS HOME

2400 Veterans Memorial Dr,
Cape Girardeau, MO 63701

PROJECT #.:	U1805-01
SITE #.:	4703
FACILITY #.:	55020
FAI #.:	29-043

#	DATE:	DESCRIPTION:
1	07/10/2025	Addendum #2

DRAWN BY:	AJC
CHECKED BY:	DKS
DESIGNED BY:	AMC

SHEET TITLE:
FOUNDATION PLAN WING A

SHEET NUMBER:
S-102

SHEET of
ISSUE DATE: 08/15/2024

7/8/2025 2:26:48 PM

PAD FOOTING SCHEDULE

TYPE MARK	WIDTH	LENGTH	DEPTH	LONG	TRANS	REMARKS
F3	3' - 0"	3' - 0"	1' - 0"	(4) #6 T&B	(4) #6 T&B	
F4	4' - 0"	4' - 0"	1' - 0"	(5) #6 T&B	(5) #6 T&B	
F5	5' - 0"	5' - 0"	1' - 6"	#6 AT 12" O.C. T&B	#6 AT 12" O.C. T&B	
F7	7' - 0"	7' - 0"	1' - 6"	#6 AT 12" O.C. T&B	#6 AT 12" O.C. T&B	
F10	10' - 0"	10' - 0"	1' - 6"	#6 AT 12" O.C. T&B	#6 AT 12" O.C. T&B	
F12	12' - 0"	12' - 0"	2' - 0"	#6 AT 12" O.C. T&B	#6 AT 12" O.C. T&B	

PEDESTAL SCHEDULE

TYPE MARK	WIDTH	DEPTH	VERTICAL REINF	HORIZONTAL REINF
P1	1' - 0"	1' - 0"	(8) #5	#4 TIES AT 10" OC. TOP 12" AT 3" OC.
P18	1' - 8"	1' - 8"	(16) #5	#4 TIES AT 10" OC. TOP 12" AT 3" OC.
P2	2' - 0"	2' - 0"	(22) #5	#4 TIES AT 10" OC. TOP 12" AT 3" OC.
P26	2' - 6"	2' - 6"	(24) #5	#4 TIES AT 10" OC. TOP 12" AT 3" OC.
P3	3' - 0"	3' - 0"	(26) #7	#4 TIES AT 10" OC. TOP 12" AT 3" OC.

WALL FOOTING SCHEDULE

TYPE MARK	WIDTH	THICKNESS	LONG REINF	TRANS REINF
WF1.5	1' - 6"	1' - 0"	#5 AT 12" O.C.	#5 AT 12" O.C.
WF2	2' - 0"	1' - 0"	#5 AT 12" O.C.	#5 AT 12" O.C.
WF3	3' - 0"	1' - 0"	#5 AT 12" O.C.	#5 AT 12" O.C.
WF4	4' - 0"	1' - 0"	#5 AT 12" O.C.	#5 AT 12" O.C.

FOUNDATION PLAN NOTES

A. SEE S-001 AND S-002 FOR GENERAL STRUCTURAL NOTES.

B. SEE GENERAL STRUCTURAL NOTES FOR DESIGN SOIL BEARING PRESSURE.

C. SEE ARCHITECTURAL FOR DIMENSIONS NOT SHOWN.

D. SEE ARCHITECTURAL FOR FLOOR SLAB SLOPE REQUIREMENTS.

E. COMPACTED FILL UNDER SLAB ON GRADE SHALL BE 6" OF 1" FREE-DRAINING AGGREGATE UNLESS OTHERWISE SHOWN ON DRAWINGS OR AS RECOMMENDED BY A GEOTECHNICAL ENGINEER.

F. SEE PAD FOOTING SCHEDULE FOR FOOTING DIMENSIONS.

G. SEE WALL FOOTING SCHEDULE FOR WALL FOOTING DIMENSIONS.

H. SEE PEDESTAL SCHEDULE FOR PEDESTAL DIMENSIONS.

I. T/FOOTING ELEVATION = (-)2'-6" UNLESS OTHERWISE NOTED.

J. T/SLAB ELEVATION = 0'-0" UNLESS OTHERWISE NOTED.

K. TYP T/ FOUNDATION WALL ELEV. = 0'-0" UNLESS OTHERWISE NOTED.

L. FOR STEEL COLUMNS, T/ CONCRETE PILASTER ELEVATION = 0'-0" @ EXTERIOR WALLS. T/PEDESTAL OR FOOTING AT INTERIOR COLUMNS = (-)1'-0" UNLESS OTHERWISE NOTED. T/CANOPY PEDESTAL ELEVATION = (+)0'-4" UNLESS OTHERWISE NOTED.

M. SEE 9/S-301 FOR FOUNDATION WALL CONSTRUCTION JOINT.

N. SEE 10&12/S-301 FOR TYPICAL CORNER AND WALL INTERSECTION REINFORCEMENT.

O. SLAB ON GRADE SHALL BE 4" CAST IN PLACE CONCRETE REINFORCED W/ WWF6x6xW2.1xW2.1 ON 10 MIL VAPOR BARRIER UNLESS OTHERWISE NOTED.

P. USE CIRCULAR OR DIAMOND ISOLATION JOINTS AT ALL COLUMNS. SEE DETAIL 11/S-301 FOR SLAB CRACK CONTROL AT ISOLATION JOINT.

Q. INSTALL SLAB CONTROL JOINTS AT ALL COLUMNS, INTERIOR CORNERS, AND WITH A MAX. JOINT SPACING OF 15'. SECTIONS OF SLAB BETWEEN CONTROL JOINTS, ASPECT RATIO NOT TO EXCEED 1.5:1. SEE DETAIL 7/S-301.

R. SEE DETAIL 8/S-301 FOR SLAB CRACK CONTROL DETAILS.

S. COORDINATE ALL FLOOR SLAB AND FOUNDATION WALL OPENINGS WITH OTHER TRADES. SEE DETAIL 15/S-301 FOR TYPICAL WALL SLEEVE DETAIL.

T. SEE S-402 FOR BASE PLATE DETAILS.

U. ANCHOR EMBED. DEPTH SHALL BE MEASURED FROM TOP OF FOUNDATION WALL OR FOOTING, NOT TOP OF SLAB.

V. ● INDICATES SIMPSON HD7B HOLDDOWN OR EQUAL W/ 7/8"Ø A307 THREADED RODS IN HILTI HY200 ADHESIVE OR EQUIV. EMBED 8"

W. SEE 13/S-301 FOR HOLD DOWN DETAIL. PROVIDE (2)2X END POST TYP EXCEPT AT WALLS ALONG GRID 3.7 PROVIDE (3)2X END POSTS.

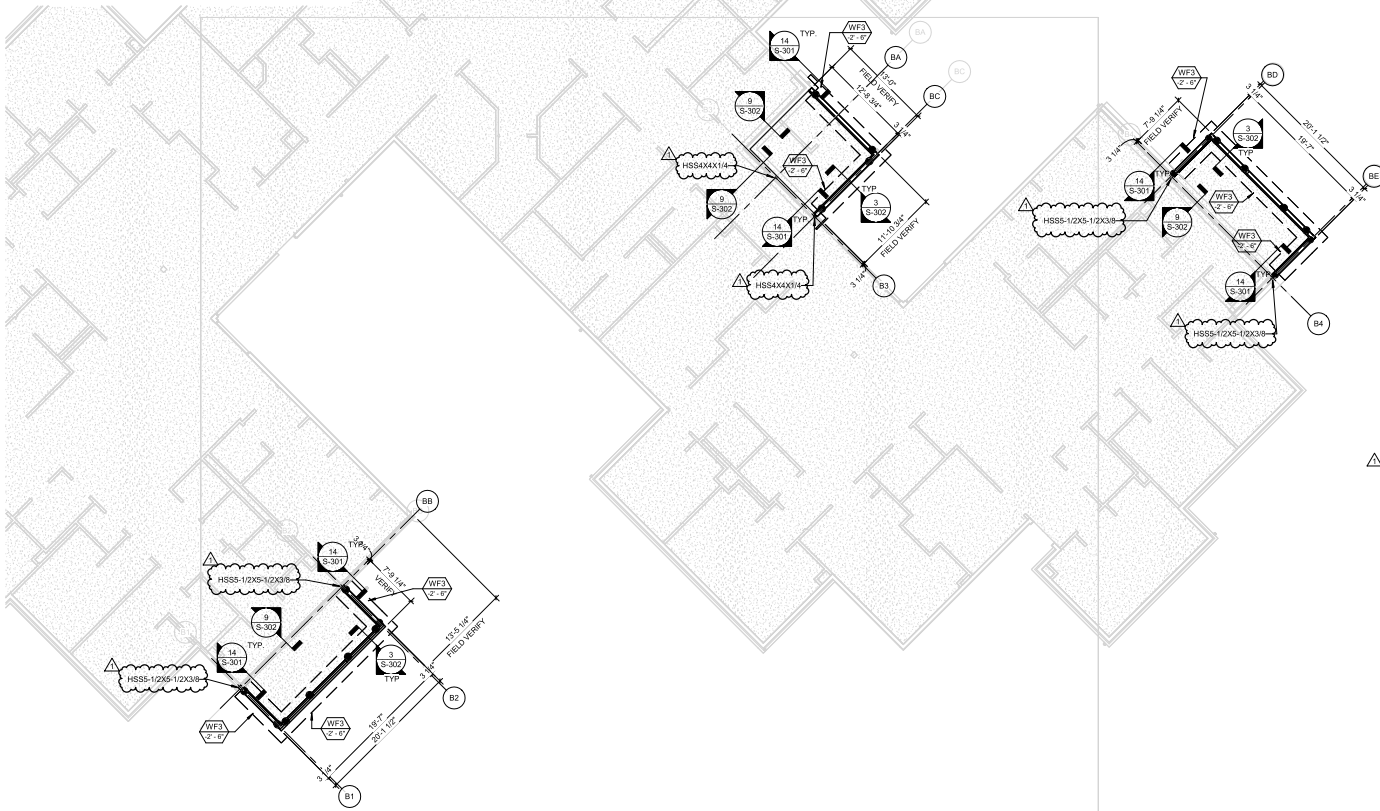
X. SEE ARCHITECTURE AND PLUMBING FOR WATERPROOFING REQUIREMENTS.

Y. REMOVE AND REPLACE EXISTING SLAB ON GRADE AS REQUIRED TO INSTALL NEW FOUNDATIONS

Z. AT FOOTING ELEVATION TRANSITIONS STEP FOOTING PER 2/S-302.

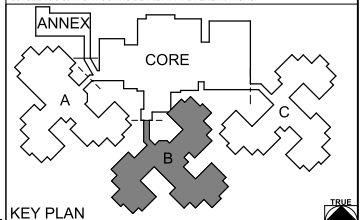
AA. * DENOTES EXISTING COLUMN TO REMAIN

BB. SEE 16/S-301 FOR FOOTING DETAIL AT PIPE PENETRATIONS.



1 **FLOOR PLAN - WING B**

Scale: 1/8" = 1'-0"



KEY PLAN

SCALE: NO SCALE

TRUE NORTH

STATE OF MISSOURI
MICHAEL L. PARSON, GOVERNOR

DUSTIN KYLE SWEET
NUMBER PE-2013027945
PROFESSIONAL ENGINEER
SEALED DATE: 07/10/2025

Farnsworth GROUP
20 ALLEN AVENUE, SUITE 200
ST LOUIS, MISSOURI 63119
(314) 962-7900 / info@f-w.com
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MISSOURI VETERANS COMMISSION

UPGRADES AND RENOVATIONS MISSOURI VETERANS HOME

2400 Veterans Memorial Dr,
Cape Girardeau, MO 63701

PROJECT #.:	U1805-01
SITE #.:	4703
FACILITY #.:	55020
FAI #.:	29-043

#	DATE:	DESCRIPTION:
1	07/10/2025	Addendum #2

DRAWN BY:	AJC
CHECKED BY:	DKS
DESIGNED BY:	AMC

SHEET TITLE:

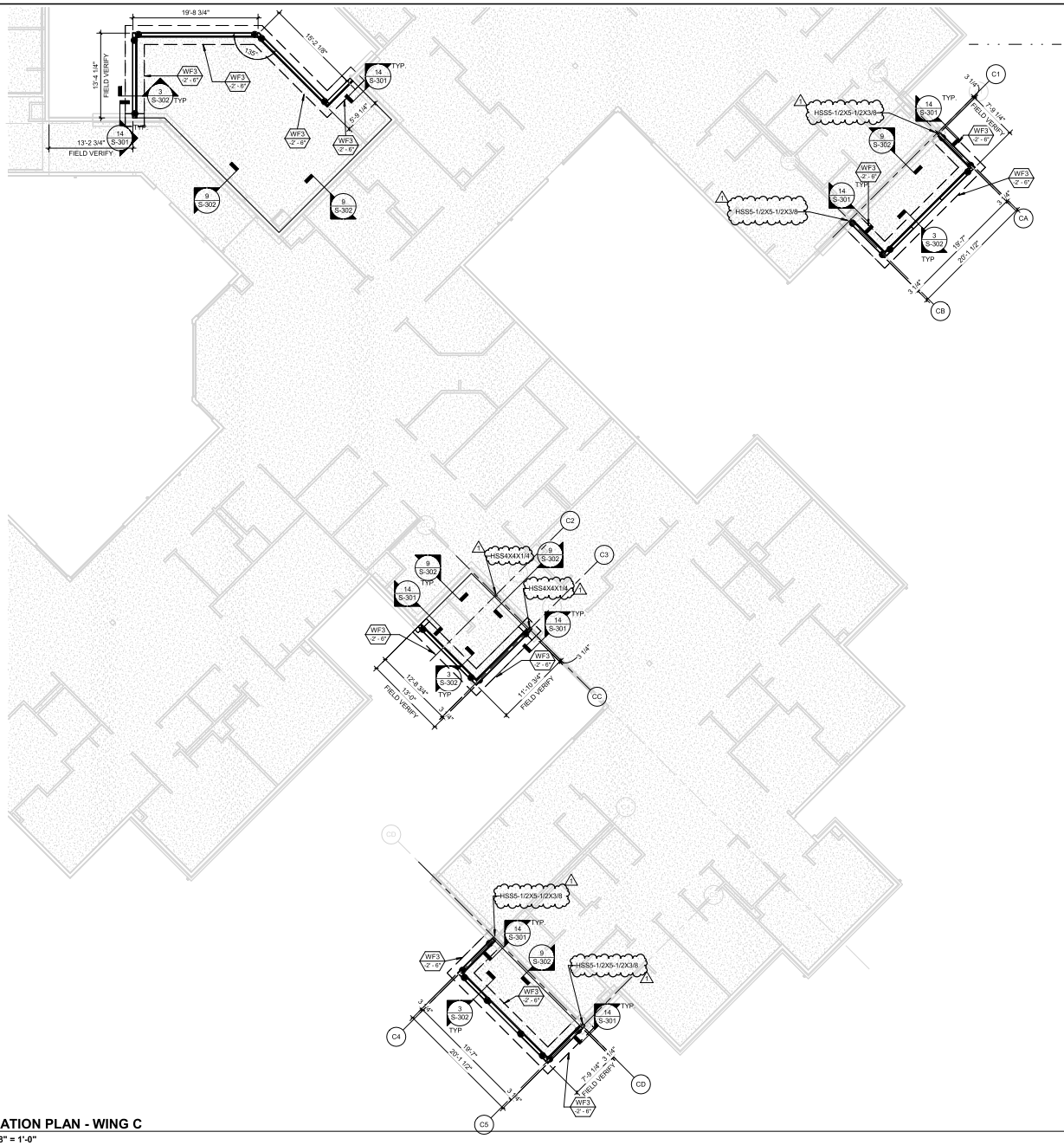
FOUNDATION PLAN WING B

SHEET NUMBER:

S-103

SHEET of
ISSUE DATE: 08/15/2024

7/8/2025 2:26:47 PM



PAD FOOTING SCHEDULE

TYPE MARK	WIDTH	LENGTH	DEPTH	LONG	TRANS	REMARKS
F3	3' - 0"	3' - 0"	1' - 0"	(4) #6 T&B	(4) #6 T&B	
F4	4' - 0"	4' - 0"	1' - 0"	(5) #6 T&B	(5) #6 T&B	
F5	5' - 0"	5' - 0"	1' - 6"	#6 AT 12" O.C. T&B	#6 AT 12" O.C. T&B	
F7	7' - 0"	7' - 0"	1' - 6"	#6 AT 12" O.C. T&B	#6 AT 12" O.C. T&B	
F10	10' - 0"	10' - 0"	1' - 6"	#6 AT 12" O.C. T&B	#6 AT 12" O.C. T&B	
F12	12' - 0"	12' - 0"	2' - 0"	#6 AT 12" O.C. T&B	#6 AT 12" O.C. T&B	

PEDESTAL SCHEDULE

TYPE MARK	WIDTH	DEPTH	VERTICAL REINF	HORIZONTAL REINF
P1	1' - 0"	1' - 0"	(8) #5	#4 TIES AT 10" OC. TOP 12" AT 3" OC.
P18	1' - 8"	1' - 8"	(16) #5	#4 TIES AT 10" OC. TOP 12" AT 3" OC.
P2	2' - 0"	2' - 0"	(22) #5	#4 TIES AT 10" OC. TOP 12" AT 3" OC.
P26	2' - 6"	2' - 6"	(24) #5	#4 TIES AT 10" OC. TOP 12" AT 3" OC.
P3	3' - 0"	3' - 0"	(26) #7	#4 TIES AT 10" OC. TOP 12" AT 3" OC.

WALL FOOTING SCHEDULE

TYPE MARK	WIDTH	THICKNESS	LONG REINF	TRANS REINF
WF1.5	1' - 6"	1' - 0"	#5 AT 12" O.C.	#5 AT 12" O.C.
WF2	2' - 0"	1' - 0"	#5 AT 12" O.C.	#5 AT 12" O.C.
WF3	3' - 0"	1' - 0"	#5 AT 12" O.C.	#5 AT 12" O.C.
WF4	4' - 0"	1' - 0"	#5 AT 12" O.C.	#5 AT 12" O.C.

FOUNDATION PLAN NOTES

A. SEE S-001 AND S-002 FOR GENERAL STRUCTURAL NOTES.

B. SEE GENERAL STRUCTURAL NOTES FOR DESIGN SOIL BEARING PRESSURE.

C. SEE ARCHITECTURAL FOR DIMENSIONS NOT SHOWN.

D. SEE ARCHITECTURAL FOR FLOOR SLAB SLOPE REQUIREMENTS.

E. COMPACTED FILL UNDER SLAB ON GRADE SHALL BE 6" OF 1" FREE-DRAINING AGGREGATE UNLESS OTHERWISE SHOWN ON DRAWINGS OR AS RECOMMENDED BY A GEOTECHNICAL ENGINEER.

F. SEE PAD FOOTING SCHEDULE FOR FOOTING DIMENSIONS.

G. SEE WALL FOOTING SCHEDULE FOR WALL FOOTING DIMENSIONS.

H. SEE PEDESTAL SCHEDULE FOR PEDESTAL DIMENSIONS.

I. T/FOOTING ELEVATION = (-)2'-6" UNLESS OTHERWISE NOTED.

J. T/SLAB ELEVATION = 0'-0" UNLESS OTHERWISE NOTED.

K. TYP T/ FOUNDATION WALL ELEV. = 0'-0" UNLESS OTHERWISE NOTED.

L. FOR STEEL COLUMNS, T/ CONCRETE PILASTER ELEVATION = 0'-0" @ EXTERIOR WALLS. T/PEDESTAL OR FOOTING AT INTERIOR COLUMNS = (-)1'-0" UNLESS OTHERWISE NOTED. T/CANOPY PEDESTAL ELEVATION = (+)0'-4" UNLESS OTHERWISE NOTED.

M. SEE 9/S-301 FOR FOUNDATION WALL CONSTRUCTION JOINT.

N. SEE 10&12/S-301 FOR TYPICAL CORNER AND WALL INTERSECTION REINFORCEMENT.

O. SLAB ON GRADE SHALL BE 4" CAST IN PLACE CONCRETE REINFORCED W/ WWF6x6xW2.1xW2.1 ON 10 MIL VAPOR BARRIER UNLESS OTHERWISE NOTED.

P. USE CIRCULAR OR DIAMOND ISOLATION JOINTS AT ALL COLUMNS. SEE DETAIL 11/S-301 FOR SLAB CRACK CONTROL AT ISOLATION JOINT.

Q. INSTALL SLAB CONTROL JOINTS AT ALL COLUMNS, INTERIOR CORNERS, AND WITH A MAX. JOINT SPACING OF 15'. SECTIONS OF SLAB BETWEEN CONTROL JOINTS, ASPECT RATIO NOT TO EXCEED 1.5:1. SEE DETAIL 7/S-301.

R. SEE DETAIL 8/S-301 FOR SLAB CRACK CONTROL DETAILS.

S. COORDINATE ALL FLOOR SLAB AND FOUNDATION WALL OPENINGS WITH OTHER TRADES. SEE DETAIL 15/S-301 FOR TYPICAL WALL SLEEVE DETAIL.

T. SEE S-402 FOR BASE PLATE DETAILS.

U. ANCHOR EMBED. DEPTH SHALL BE MEASURED FROM TOP OF FOUNDATION WALL OR FOOTING, NOT TOP OF SLAB.

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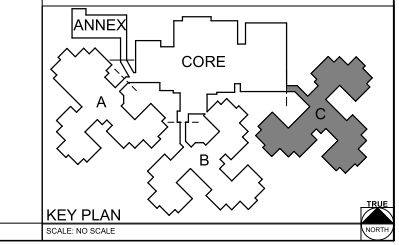
Z. AT FOOTING ELEVATION TRANSITIONS STEP FOOTING PER 2/S-302.

AA. * DENOTES EXISTING COLUMN TO REMAIN

BB. SEE 16/S-301 FOR FOOTING DETAIL AT PIPE PENETRATIONS.



KEY PLAN

SCALE: NO SCALE

1 **FOUNDATION PLAN - WING C**

Scale: 1/8" = 1'-0"

STATE OF MISSOURI
MICHAEL L. PARSON, GOVERNOR

STATE OF MISSOURI DUSTIN KYLE SWEET NUMBER PE-2013027944 PROFESSIONAL ENGINEER

SEALED DATE: 07/10/2025

Farnsworth GROUP

20 ALLEN AVENUE, SUITE 200
ST LOUIS, MISSOURI 63119
(314) 962-7900 / info@f-w.com

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DIVISION OF FACILITIES MANAGEMENT, DESIGN AND CONSTRUCTION

MISSOURI VETERANS COMMISSION

UPGRADES AND RENOVATIONS MISSOURI VETERANS HOME

2400 Veterans Memorial Dr,
Cape Girardeau, MO 63701

PROJECT #.:	U1805-01
SITE #.:	4703
FACILITY #.:	55020
FAI #.:	29-043

#	DATE:	DESCRIPTION:
1	07/10/2025	Addendum #2

DRAWN BY:	AJC
CHECKED BY:	DKS
DESIGNED BY:	AMC

SHEET TITLE:

FOUNDATION PLAN WING C

SHEET NUMBER:

S-104

SHEET of

ISSUE DATE: 08/15/2024

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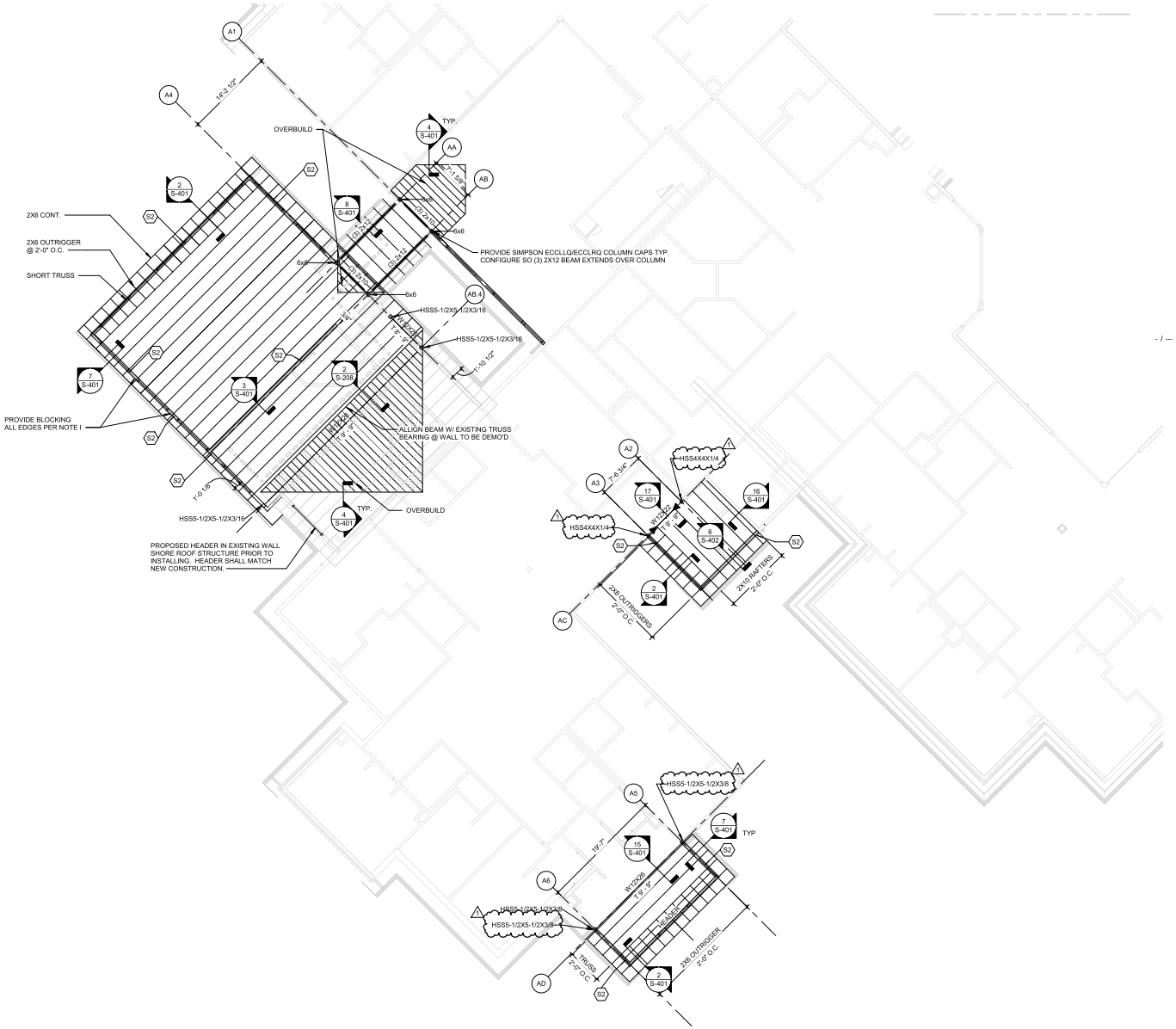


1 **FRAMING PLAN - WING A**

Scale: 1/8" = 1'-0"

ROOF FRAMING PLAN NOTES

A. SEE S-001 FOR GENERAL STRUCTURAL NOTES.

B. SEE ARCHITECTURAL FOR DIMENSIONS NOT SHOWN.

C. SEE PLAN FOR T/BEAM NOTED THUS: W24x55 (14'-2 1/2")

D. ROOF CONSTRUCTION: WOOD ROOF CONSTRUCTION 5/8" APA RATED SHEATHING – BLOCKED. NAILING AT PANEL EDGES IS 10d @ 4" O.C. W/MIN 1-1/2" PENETRATION AND 3" MIN NOMINAL WIDTH OF NAILED FACE AT ADJOINING PANEL EDGES AND BOUNDARIES. NAILING IN FIELD SHALL BE 10d @ 12" O.C. W/MIN 1-1/2" PENETRATION. BLOCKING REQUIRED AT ALL UNSUPPORTED EDGES.

E. COORDINATE SIZES AND LOCATIONS OF OPENINGS THROUGH FLOOR/ROOF DECK WITH MECHANICAL CONTRACTOR.

F. FOR TYPICAL MOMENT CONNECTIONS, SEE S/S-402.

G. FOR SIMPLE FRAMED CONNECTIONS, SEE 1/S-402.

H. STEEL CONNECTIONS:
MOMENT FRAMED
SIMPLE FRAMED

I. INDICATES LOCATIONS OF SHEAR WALL.

SHEAR WALL SHEATHING REQUIREMENTS ARE AS FOLLOWS: S2:7/16" STRUCTURAL 1 PLYWOOD BOTH SIDES FASTENED WITH 8d AT 6" OC AND 8d AT 12" OC IN THE FIELD. PROVIDE 2X BLOCKING IN WALL AT ALL SHEATHING JOINTS IN SHEAR WALL PANELS WHERE INDICATED ON PLAN.

J. SEE 1/S-401 FOR TYPICAL SHEAR WALL DETAIL.

K. BEARING WALL STUDS SHALL BE 2x6 @ 16" OC MAX UNLESS OTHERWISE NOTED. PROVIDE MIN. (3)2X6 STUDS ALIGNED DIRECTLY BELOW ALL GIRDER TRUSS BEARING LOCATIONS UNLESS OTHERWISE NOTED.

L. SEE ARCHITECTURAL BUILDING SECTIONS FOR TRUSS PROFILES. TRUSS PROFILES NOT SHOWN SHALL BE DETERMINED BY TRUSS MFR. ALL OVERHANG AND CORNER FRAMING SHALL BE DESIGNED BY TRUSS MFR. TRUSS TO TRUSS CONNECTIONS SHALL BE SPECIFIED BY THE TRUSS MFR.

M. TYPICAL HEADER AT EXTERIOR WALL SHALL BE MIN (3) 2x10 FOR SPANS UP TO 6 FT W/ MIN (3) KING STUDS & 2 JACK STUDS AT EACH END. TYPICAL HEADER AT INTERIOR LOAD BEARING WALLS SHALL BE MIN (3) 2x6 FOR SPANS UP TO 4 FT W/ MIN (1) FULL HEIGHT STUD & 2 JACK STUDS AT EACH END. AT NON LOAD BEARING INTERIOR PARTITION WALLS, HEADERS MAY BE (2) 2x, SEE ARCH FOR LOCATIONS.

N. TYPICAL TRUSS SPACING SHALL BE 2'-0" UNLESS NOTED OTHERWISE.

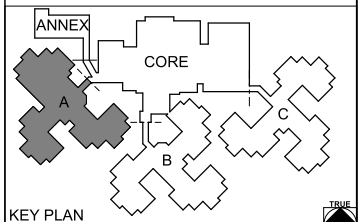
O. TRUSS BEARING AND BOTTOM CHORD ELEVATION VARIES - SEE PLAN & DETAILS. SEE ARCHITECTURAL PLANS, ELEVATIONS, AND SECTIONS FOR ADDITIONAL TRUSS BEARING INFORMATION.

P. ROOF TRUSSES SHALL BE DESIGNED TO SUPPORT MECHANICAL EQUIPMENT COORDINATE SIZE AND LOCATION OF UNITS WITH MECHANICAL CONTRACTOR. COORDINATE WEB LOCATIONS WITH MECHANICAL DUCT RUNS.

Q. INDICATES TRUSS MFR'S OPTION: OVERBUILD TO BE DESIGNED BY TRUSS MFR OR TRUSS PROFILES BELOW SHADING MAY BE DESIGNED TO MATCH ROOF SLOPE.

R. NOT USED

S. CONTRACTOR TO REMOVE EXISTING ROOFING DOWN TO PLYWOOD AT OVERBUILD LOCATIONS



KEY PLAN

SCALE: NO SCALE

TRUE NORTH

STATE OF MISSOURI
MICHAEL L. PARSON, GOVERNOR

DUSTIN KYLE SWEET
EXPIRATION DATE: 12/31/26
NUMBER PE-2013027948
PROFESSIONAL ENGINEER
STATE OF MISSOURI

SEALED DATE: 07/10/2025

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SITE #.:	4703
FACILITY #.:	55020
FAI #.:	29-043

#	DATE:	DESCRIPTION:
1	07/10/2025	Addendum #2

DRAWN BY:	AJC
CHECKED BY:	DKS
DESIGNED BY:	AMC

SHEET TITLE:

FRAMING PLAN WING A

SHEET NUMBER:

S-202

SHEET of
ISSUE DATE: 08/15/2024

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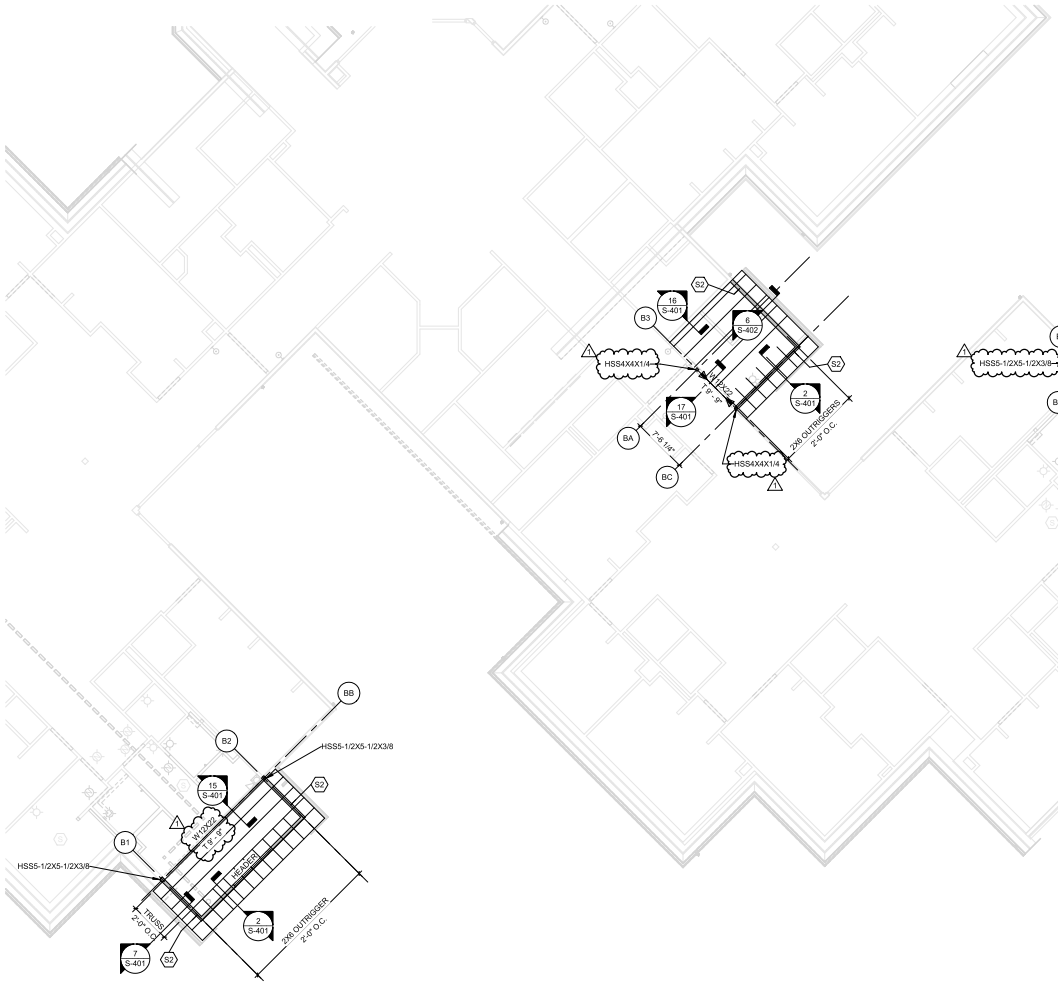
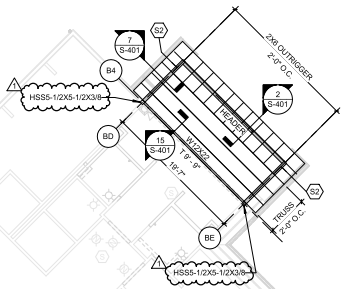




ROOF FRAMING PLAN NOTES

A. SEE S-001 FOR GENERAL STRUCTURAL NOTES.

B. SEE ARCHITECTURAL FOR DIMENSIONS NOT SHOWN.

C. SEE PLAN FOR T/BEAM NOTED THUS: W24x55 / (14'-2 1/2")

D. ROOF CONSTRUCTION: WOOD ROOF CONSTRUCTION 5/8" APA RATED SHEATHING – BLOCKED, NAILING AT PANEL EDGES @ 10d @ 4" O.C. W/MIN 1-1/2" PENETRATION AND 3" MIN NOMINAL WIDTH OF NAILED FACE AT ADJOINING PANEL EDGES AND BOUNDARIES. NAILING IN FIELD SHALL BE 10d @ 12" O.C. W/MIN 1-1/2" PENETRATION. BLOCKING REQUIRED AT ALL UNSUPPORTED EDGES.

E. COORDINATE SIZES AND LOCATIONS OF OPENINGS THROUGH FLOOR/ROOF DECK WITH MECHANICAL CONTRACTOR.

F. FOR TYPICAL MOMENT CONNECTIONS, SEE 5/S-402.

G. FOR SIMPLE FRAMED CONNECTIONS, SEE 1/S-402.

H. STEEL CONNECTIONS:
MOMENT FRAMED
SIMPLE FRAMED

I. INDICATES LOCATIONS OF SHEAR WALL.

SHEAR WALL SHEATHING REQUIREMENTS ARE AS FOLLOWS:
S2:7/16" STRUCTURAL 1 PLYWOOD BOTH SIDES FASTENED WITH 8d AT 6" OC AND 8d AT 12" OC IN THE FIELD. PROVIDE 2X BLOCKING IN WALL AT ALL SHEATHING JOINTS IN SHEAR WALL PANELS WHERE INDICATED ON PLAN.

J. SEE 1/S-401 FOR TYPICAL SHEAR WALL DETAIL.

K. BEARING WALL STUDS SHALL BE 2x6 @ 16" OC MAX UNLESS OTHERWISE NOTED. PROVIDE MIN. (3)2X6 STUDS ALIGNED DIRECTLY BELOW ALL GIRDER TRUSS BEARING LOCATIONS UNLESS OTHERWISE NOTED.

L. SEE ARCHITECTURAL BUILDING SECTIONS FOR TRUSS PROFILES. TRUSS PROFILES NOT SHOWN SHALL BE DETERMINED BY TRUSS MFR. ALL OVERHANG AND CORNER FRAMING SHALL BE DESIGNED BY TRUSS MFR. TRUSS TO TRUSS CONNECTIONS SHALL BE SPECIFIED BY THE TRUSS MFR.

M. TYPICAL HEADER AT EXTERIOR WALL SHALL BE MIN (3) 2x10 FOR SPANS UP TO 6 FT W/ MIN (3) KING STUDS & 2 JACK STUDS AT EACH END. TYPICAL HEADER AT INTERIOR LOAD BEARING WALLS SHALL BE MIN (3) 2x6 FOR SPANS UP TO 4 FT W/ MIN (1) FULL HEIGHT STUD & 2 JACK STUDS AT EACH END. AT NON LOAD BEARING INTERIOR PARTITION WALLS, HEADERS MAY BE (2) 2x, SEE ARCH FOR LOCATIONS.

N. TYPICAL TRUSS SPACING SHALL BE 2'-0" UNLESS NOTED OTHERWISE.

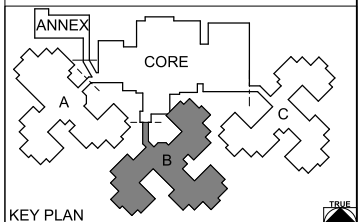
O. TRUSS BEARING AND BOTTOM CHORD ELEVATION VARIES - SEE PLAN & DETAILS. SEE ARCHITECTURAL PLANS, ELEVATIONS, AND SECTIONS FOR ADDITIONAL TRUSS BEARING INFORMATION.

P. ROOF TRUSSES SHALL BE DESIGNED TO SUPPORT MECHANICAL EQUIPMENT COORDINATE SIZE AND LOCATION OF UNITS WITH MECHANICAL CONTRACTOR. COORDINATE WEB LOCATIONS WITH MECHANICAL DUCT RUNS.

Q. INDICATES TRUSS MFR'S OPTION: OVERBUILD TO BE DESIGNED BY TRUSS MFR OR TRUSS PROFILES BELOW SHADING MAY BE DESIGNED TO MATCH ROOF SLOPE.

R. NOT USED

S. CONTRACTOR TO REMOVE EXISTING ROOFING DOWN TO PLYWOOD AT OVERBUILD LOCATIONS



KEY PLAN
SCALE: NO SCALE
TRUE NORTH

1 **FRAMING PLAN - WING B**
Scale: 1/8" = 1'-0"

STATE OF MISSOURI
MICHAEL L. PARSON, GOVERNOR

DUSTIN KYLE SWEET
EXPIRATION DATE: 12/31/2026
NUMBER PE-2013027948
PROFESSIONAL ENGINEER
STATE OF MISSOURI
SEALED DATE: 07/10/2025

Farnsworth GROUP
20 ALLEN AVENUE, SUITE 200
ST LOUIS, MISSOURI 63119
(314) 962-7900 / info@f-w.com
Farnsworth Group, Inc.
Missouri State Certificate of Authority #000744
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08/15/2024

OFFICE OF ADMINISTRATION
DIVISION OF FACILITIES MANAGEMENT, DESIGN AND CONSTRUCTION

MISSOURI VETERANS COMMISSION

UPGRADES AND RENOVATIONS MISSOURI VETERANS HOME

2400 Veterans Memorial Dr,
Cape Girardeau, MO 63701

PROJECT #.:	U1805-01
SITE #.:	4703
FACILITY #.:	55020
FAI #.:	29-043

#	DATE:	DESCRIPTION:
1	07/10/2025	Addendum #2

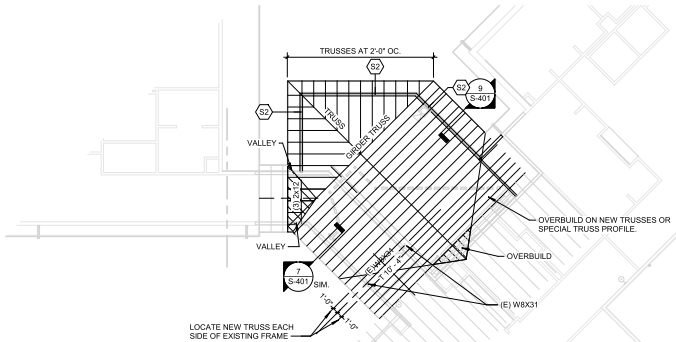
DRAWN BY:	AJC
CHECKED BY:	DKS
DESIGNED BY:	AMC

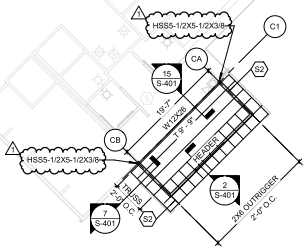
SHEET TITLE:
FRAMING PLAN WING B

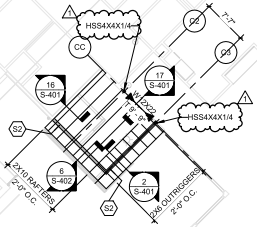
SHEET NUMBER:
S-203

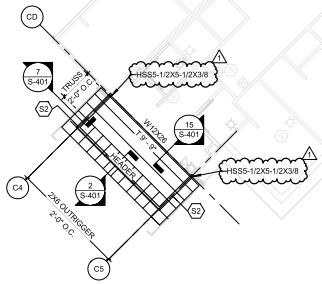
SHEET of
ISSUE DATE: 08/15/2024

7/8/2025 2:37:01 PM









ROOF FRAMING PLAN NOTES

A. SEE S-001 FOR GENERAL STRUCTURAL NOTES.

B. SEE ARCHITECTURAL FOR DIMENSIONS NOT SHOWN.

C. SEE PLAN FOR T/BEAM NOTED THUS: W24x55 (14'-2 1/2")

D. ROOF CONSTRUCTION: WOOD ROOF CONSTRUCTION 5/8" APA RATED SHEATHING – BLOCKED. NAILING AT PANEL EDGES IS 10d @ 4" O.C. W/MIN 1-1/2" PENETRATION AND 3" MIN NOMINAL WIDTH OF NAILED FACE AT ADJOINING PANEL EDGES AND BOUNDARIES. NAILING IN FIELD SHALL BE 10d @ 12" O.C. W/MIN 1-1/2" PENETRATION. BLOCKING REQUIRED AT ALL UNSUPPORTED EDGES.

E. COORDINATE SIZES AND LOCATIONS OF OPENINGS THROUGH FLOOR/ROOF DECK WITH MECHANICAL CONTRACTOR.

F. FOR TYPICAL MOMENT CONNECTIONS, SEE 5/S-402.

G. FOR SIMPLE FRAMED CONNECTIONS, SEE 1/S-402.

H. STEEL CONNECTIONS:
MOMENT FRAMED
SIMPLE FRAMED

I. INDICATES LOCATIONS OF SHEAR WALL.

SHEAR WALL SHEATHING REQUIREMENTS ARE AS FOLLOWS:
S2.7/16" STRUCTURAL 1 PLYWOOD BOTH SIDES FASTENED WITH 8d AT 6" OC AND 8d AT 12" OC IN THE FIELD. PROVIDE 2X BLOCKING IN WALL AT ALL SHEATHING JOINTS IN SHEAR WALL PANELS WHERE INDICATED ON PLAN.

J. SEE 1/S-401 FOR TYPICAL SHEAR WALL DETAIL.

K. BEARING WALL STUDS SHALL BE 2x6 @ 16" OC MAX UNLESS OTHERWISE NOTED. PROVIDE MIN. (3)2X6 STUDS ALIGNED DIRECTLY BELOW ALL GIRDER TRUSS BEARING LOCATIONS UNLESS OTHERWISE NOTED.

L. SEE ARCHITECTURAL BUILDING SECTIONS FOR TRUSS PROFILES. TRUSS PROFILES NOT SHOWN SHALL BE DETERMINED BY TRUSS MFR. ALL OVERHANG AND CORNER FRAMING SHALL BE DESIGNED BY TRUSS MFR. TRUSS TO TRUSS CONNECTIONS SHALL BE SPECIFIED BY THE TRUSS MFR.

M. TYPICAL HEADER AT EXTERIOR WALL SHALL BE MIN (3) 2x10 FOR SPANS UP TO 6 FT W/ MIN (3) KING STUDS & 2 JACK STUDS AT EACH END. TYPICAL HEADER AT INTERIOR LOAD BEARING WALLS SHALL BE MIN (3) 2x6 FOR SPANS UP TO 4 FT W/ MIN (1) FULL HEIGHT STUD & 2 JACK STUDS AT EACH END. AT NON LOAD BEARING INTERIOR PARTITION WALLS, HEADERS MAY BE (2) 2x, SEE ARCH FOR LOCATIONS.

N. TYPICAL TRUSS SPACING SHALL BE 2'-0" UNLESS NOTED OTHERWISE.

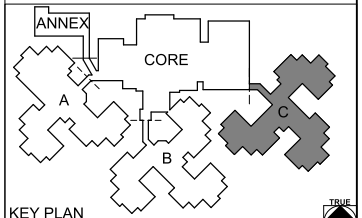
O. TRUSS BEARING AND BOTTOM CHORD ELEVATION VARIES - SEE PLAN & DETAILS. SEE ARCHITECTURAL PLANS, ELEVATIONS, AND SECTIONS FOR ADDITIONAL TRUSS BEARING INFORMATION.

P. ROOF TRUSSES SHALL BE DESIGNED TO SUPPORT MECHANICAL EQUIPMENT COORDINATE SIZE AND LOCATION OF UNITS WITH MECHANICAL CONTRACTOR. COORDINATE WEB LOCATIONS WITH MECHANICAL DUCT RUNS.

Q. INDICATES TRUSS MFR'S OPTION: OVERBUILD TO BE DESIGNED BY TRUSS MFR OR TRUSS PROFILES BELOW SHADING MAY BE DESIGNED TO MATCH ROOF SLOPE.

R. NOT USED

S. CONTRACTOR TO REMOVE EXISTING ROOFING DOWN TO PLYWOOD AT OVERBUILD LOCATIONS



KEY PLAN
SCALE: NO SCALE

1 **FRAMING PLAN - WING C**
Scale: 1" = 10'-0"

STATE OF MISSOURI
MICHAEL L. PARSON, GOVERNOR

SEALED DATE: 07/10/2025

Farnsworth GROUP
20 ALLEN AVENUE, SUITE 200
ST LOUIS, MISSOURI 63119
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DIVISION OF FACILITIES MANAGEMENT, DESIGN AND CONSTRUCTION

MISSOURI VETERANS COMMISSION

UPGRADES AND RENOVATIONS MISSOURI VETERANS HOME

2400 Veterans Memorial Dr,
Cape Girardeau, MO 63701

PROJECT #.:	U1805-01
SITE #.:	4703
FACILITY #.:	55020
FAI #.:	29-043

#	DATE:	DESCRIPTION:
1	07/10/2025	Addendum #2

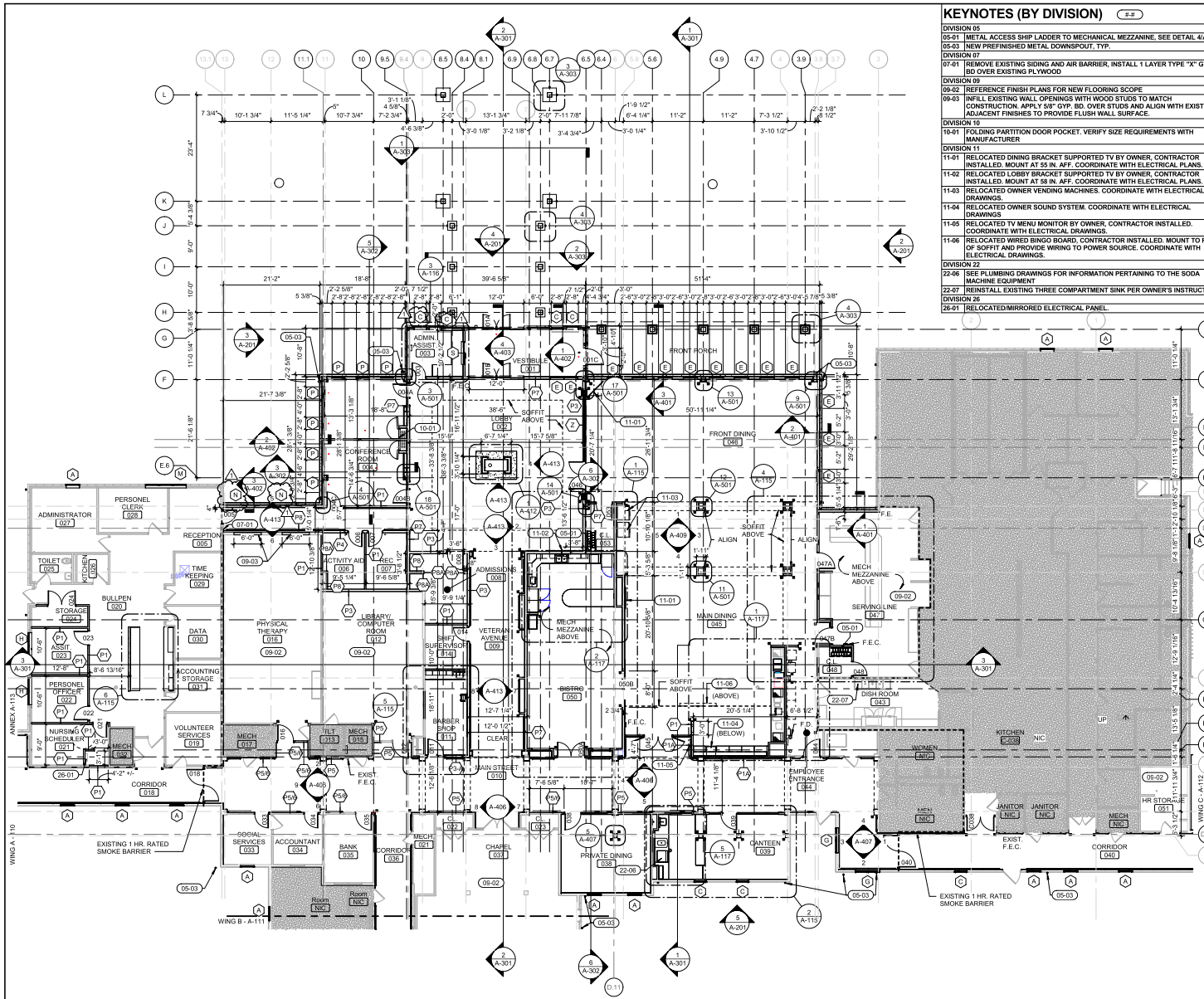
DRAWN BY: AJC
CHECKED BY: DKS
DESIGNED BY: AMC

SHEET TITLE:
FRAMING PLAN WING C

SHEET NUMBER:
S-204

SHEET of
ISSUE DATE: 08/15/2024

7/8/2025 2:27:03 PM



KEYNOTES (BY DIVISION) #-#

DIVISION 05	
05-01	METAL ACCESS SHIP LADDER TO MECHANICAL MEZZANINE, SEE DETAIL 4/A-113
05-03	NEW PREFINISHED METAL DOWNSPOUT, TYP.
DIVISION 07	
07-01	REMOVE EXISTING SIDING AND AIR BARRIER, INSTALL 1 LAYER TYPE "X" GYP BD OVER EXISTING PLYWOOD
DIVISION 09	
09-02	REFERENCE FINISH PLANS FOR NEW FLOORING SCOPE
09-03	INFILL EXISTING WALL OPENINGS WITH WOOD STUDS TO MATCH CONSTRUCTION. APPLY 5/8" GYP. BD. OVER STUDS AND ALIGN WITH EXISTING ADJACENT FINISHES TO PROVIDE FLUSH WALL SURFACE.
DIVISION 10	
10-01	FOLDING PARTITION DOOR POCKET. VERIFY SIZE REQUIREMENTS WITH MANUFACTURER
DIVISION 11	
11-01	RELOCATED DINING BRACKET SUPPORTED TV BY OWNER, CONTRACTOR INSTALLED. MOUNT AT 55 IN. AFF. COORDINATE WITH ELECTRICAL PLANS.
11-02	RELOCATED LOBBY BRACKET SUPPORTED TV BY OWNER, CONTRACTOR INSTALLED. MOUNT AT 58 IN. AFF. COORDINATE WITH ELECTRICAL PLANS.
11-03	RELOCATED OWNER VENDING MACHINES. COORDINATE WITH ELECTRICAL DRAWINGS.
11-04	RELOCATED OWNER SOUND SYSTEM. COORDINATE WITH ELECTRICAL DRAWINGS
11-05	RELOCATED TV MENU MONITOR BY OWNER, CONTRACTOR INSTALLED. COORDINATE WITH ELECTRICAL DRAWINGS.
11-06	RELOCATED WIRED BINGO BOARD, CONTRACTOR INSTALLED. MOUNT TO FACE OF SOFFIT AND PROVIDE WIRING TO POWER SOURCE. COORDINATE WITH ELECTRICAL DRAWINGS.
DIVISION 22	
22-06	SEE PLUMBING DRAWINGS FOR INFORMATION PERTAINING TO THE SODA MACHINE EQUIPMENT
22-07	REINSTALL EXISTING THREE COMPARTMENT SINK PER OWNER'S INSTRUCTION.
DIVISION 26	
26-01	RELOCATED/MIRRORED ELECTRICAL PANEL.

PLAN GENERAL NOTES

A. SEE A-001 FOR PARTITION TYPES.

B. DIMENSIONS ARE SHOWN TO FACE OF STRUCTURE (WALL STUD, CMU AND/OR CONCRETE) UNLESS NOTED OTHERWISE. DIMENSIONS TO EXISTING CONSTRUCTION ARE SHOWN TO FINISH FACE OF WALL.

C. ALL WOOD IN CONTACT WITH CONCRETE SHALL BE PRESSURE TREATED.

D. USE GYP BOARD TYPE "MR" AT ALL WET LOCATIONS. STOP BOARD AT ½" ABOVE FLOOR LINE.

E. SEE LIFE SAFETY PLANS G-003 FOR LOCATION OF RATED PARTITIONS AND SEPARATION INFORMATION.

F. INSTALL ALL DOORS WITH MINIMUM 18 INCHES CLEAR FROM INSIDE FACE OF LATCH SIDE OF JAMB TO FINISH FACE OF WALL ON PULL SIDE OF DOOR, AND MINIMUM 12" ON OPPOSITE SIDE.

G. IT IS THE RESPONSIBILITY OF EACH CONTRACTOR TO PROVIDE COMPLETE WORKING SYSTEMS FOR ALL NEW ELEMENTS.

H. ALL CONTRACTORS SHALL PROVIDE NEW, UNDAMAGED MATERIALS UNLESS OTHERWISE SPECIFIED.

I. STORE MATERIALS IN SUCH A MANNER AS NOT TO OVERSTRESS, OVERLOAD, OR OTHERWISE PUT AN UNSAFE LOAD ON ANY STRUCTURE DURING CONSTRUCTION.

J. INSTALL ALL WORK IN ACCORDANCE WITH CURRENT APPLICABLE CODES, PUBLISHED STANDARDS, AND ACCEPTABLE CONSTRUCTION STANDARDS.

K. ALL NEW WORK SHALL BE PLUMB AND LEVEL UNLESS OTHERWISE NOTED.

L. ALL FIRE RESISTANT CONSTRUCTION SHALL EXTEND TO STRUCTURE ABOVE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR EXTENDING PARTITIONS AROUND EQUIPMENT CABINETS AND OTHER ITEMS WHICH PENETRATE THESE PARTITIONS, AND SHALL BE RESPONSIBLE FOR FILLING ALL VOIDS IN PARTITIONS ABOVE CEILING. IN ORDER TO MAINTAIN DESIGNATED FIRE RESISTANCE.

M. DISSIMILAR FLOOR MATERIALS SHALL MEET UNDER CENTER OF DOOR LEAF

N. EACH CONTRACTOR SHALL COORDINATE THEIR WORK WITH ALL OTHER TRADES.

O. DO NOT SCALE DRAWINGS TO DETERMINE DIMENSIONS. IF A REQUIRED DIMENSION IS NOT INDICATED, CONTACT THE ARCHITECT FOR DETERMINATION.

P. DETAILS ARE GENERALLY TYPICAL, AND ARE NOT TO BE CONSTRUED AS LIMITED TO THOSE AREAS SPECIFICALLY INDICATED. REVIEW ANY QUESTIONS OR CONFLICTING INFORMATION WITH THE ARCHITECT PRIOR TO INSTALLATION.

Q. THE CONTRACTOR SHALL NOT CUT STRUCTURAL MEMBERS/ELEMENTS IN A MANNER RESULTING IN A REDUCTION OF LOAD CARRYING CAPACITY OR LOAD/DEFLECTION RATIO.

R. REFER TO STRUCTURAL DRAWINGS FOR FRAMING INFORMATION AND FRAMING DIMENSIONS.

S. HINGE SIDE OF DOOR JAMBS TO BE LOCATED 4" FROM NEAREST WALL INTERSECTION UNLESS OTHERWISE NOTED.

T. ALL APPLIANCES ARE TO BE PROVIDED AND INSTALLED BY GENERAL CONTRACTOR, UNLESS OTHERWISE NOTED OR SHOWN. VERIFY ALL APPLIANCE DIMENSIONS PRIOR TO FINAL MILLWORK CONSTRUCTION.

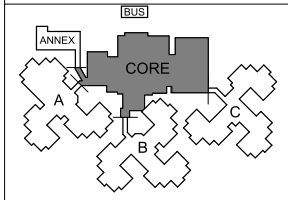
U. PAINT ALL STEEL DOORS, DOOR FRAMES, INTERIOR BORROW LITE FRAMES, LINTELS AND OTHER EXPOSED METAL ITEMS UNLESS OTHERWISE NOTED OR SHOWN.

V. FURNITURE IS SHOWN FOR REFERENCE ONLY AND IS NOT IN CONTRACT.

W. EXISTING CONDITION INFORMATION SHOWN WITHIN THE PROJECT AREA IS BASED ON FIELD OBSERVATION AND EXISTING DRAWING DOCUMENTATION. ALL EXISTING CONDITION INFORMATION SHOWN OUTSIDE THE PROJECT AREA IS PROVIDED FOR REFERENCE ONLY AND HAS NOT BEEN FIELD VERIFIED. CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL EXISTING CONDITIONS PRIOR TO BEGINNING ANY NEW WORK AND SHALL BRING AND DISCREPANCIES TO THE ATTENTION OF THE ARCHITECT/ENGINEER PRIOR TO DEMOLITION AND CONSTRUCTION.

X. PROVIDE TEMPORARY BRACING OF EQUIPMENT, MATERIALS OR OTHER DEVICES AS REQUIRED DURING AND AFTER DEMOLITION UNTIL NEW CONSTRUCTION IS COMPLETE.

Y. REPLACE ALL EXISTING VINYL SIDING AND TRIMS WHERE OCCURS ON EXTERIOR AND REPLACE WITH NEW FIBER CEMENT SIDING, TRIMS, AND SOFFITS AS REQUIRED. COORDINATE WITH NEW CONSTRUCTION, AND VERIFY EXTENTS OF WORK IN FIELD.



KEY PLAN
SCALE: NO SCALE

1 ENLARGED FLOOR PLAN - CENTRAL CORE
Scale: 3/32" = 1'-0"

PLAN NORTH

0 4 8 16

TRUE NORTH

STATE OF MISSOURI
MICHAEL L. PARSON, GOVERNOR

NICOLAS WYATT BRUNS
NUMBER A-2018007676
ARCHITECT

07/10/2025

Farnsworth GROUP
20 ALLEN AVENUE, SUITE 200
ST LOUIS, MISSOURI 63119
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08/15/2024

OFFICE OF ADMINISTRATION
DIVISION OF FACILITIES MANAGEMENT, DESIGN AND CONSTRUCTION

MISSOURI VETERANS COMMISSION

UPGRADES AND RENOVATIONS MISSOURI VETERANS HOME

2400 Veterans Memorial Dr.
Cape Girardeau, MO 63701

PROJECT #.:	U1805-01
SITE #.:	6803
ASSET #.:	8136803002
FAI #.:	29-043

#	DATE:	DESCRIPTION:
1	07/10/2025	ADDENDUM #2

DRAWN BY: AVR
CHECKED BY: NRB
DESIGNED BY: JJH

SHEET TITLE:
ENLARGED FLOOR PLAN - CENTRAL CORE

SHEET NUMBER:
A-109

SHEET of
ISSUE DATE: 08/15/2024

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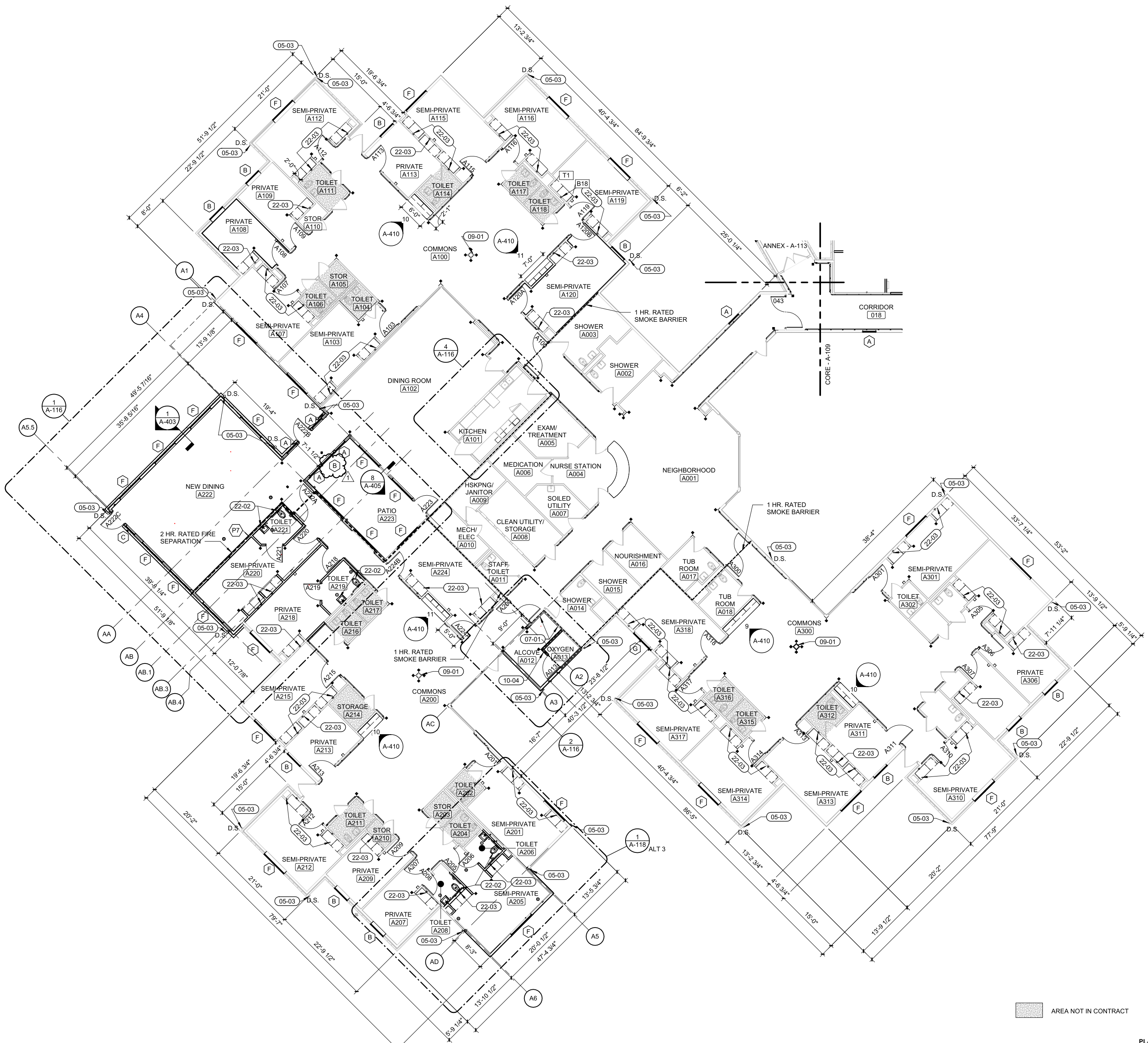

1 ENLARGED FLOOR PLAN - WING A

Scale: 3/32" = 1'-0"

PLAN GENERAL NOTES

A. SEE A-001 FOR PARTITION TYPES.

B. DIMENSIONS ARE SHOWN TO FACE OF STRUCTURE (WALL STUD, CMU AND/OR CONCRETE) UNLESS NOTED OTHERWISE. DIMENSIONS TO EXISTING CONSTRUCTION ARE SHOWN TO FINISH FACE OF WALL.

C. ALL WOOD IN CONTACT WITH CONCRETE SHALL BE PRESSURE TREATED.

D. USE GYP BOARD TYPE "MR" AT ALL WET LOCATIONS. STOP BOARD AT ½" ABOVE FLOOR LINE.

E. SEE LIFE SAFETY PLANS G-003 FOR LOCATION OF RATED PARTITIONS AND SEPARATION INFORMATION

F. INSTALL ALL DOORS WITH MINIMUM 18 INCHES CLEAR FROM INSIDE FACE OF LATCH SIDE OF JAMB TO FINISH FACE OF WALL ON PULL SIDE OF DOOR, AND MINIMUM 12" ON OPPOSITE SIDE.

G. IT IS THE RESPONSIBILITY OF EACH CONTRACTOR TO PROVIDE COMPLETE WORKING SYSTEMS FOR ALL NEW ELEMENTS.

H. ALL CONTRACTORS SHALL PROVIDE NEW, UNDAMAGED MATERIALS UNLESS OTHERWISE SPECIFIED.

I. STORE MATERIALS IN SUCH A MANNER AS NOT TO OVERSTRESS, OVERLOAD, OR OTHERWISE PUT AN UNSAFE LOAD ON ANY STRUCTURE DURING CONSTRUCTION.

J. INSTALL ALL WORK IN ACCORDANCE WITH CURRENT APPLICABLE CODES, PUBLISHED STANDARDS, AND ACCEPTABLE CONSTRUCTION STANDARDS.

K. ALL NEW WORK SHALL BE PLUMB AND LEVEL UNLESS OTHERWISE NOTED.

L. ALL FIRE RESISTANT CONSTRUCTION SHALL EXTEND TO STRUCTURE ABOVE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR EXTENDING PARTITIONS AROUND EQUIPMENT CABINETS AND OTHER ITEMS WHICH PENETRATE THESE PARTITIONS, AND SHALL BE RESPONSIBLE FOR FILLING ALL VOIDS IN PARTITIONS ABOVE CEILING, IN ORDER TO MAINTAIN DESIGNATED FIRE RESISTANCE.

M. DISSIMILAR FLOOR MATERIALS SHALL MEET UNDER CENTER OF DOOR LEAF

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Q. THE CONTRACTOR SHALL NOT CUT STRUCTURAL MEMBERS/ELEMENTS IN A MANNER RESULTING IN A REDUCTION OF LOAD CARRYING CAPACITY OR LOAD/DEFLECTION RATIO.

R. REFER TO STRUCTURAL DRAWINGS FOR FRAMING INFORMATION AND FRAMING DIMENSIONS.

S. HINGE SIDE OF DOOR JAMBS TO BE LOCATED 4" FROM NEAREST WALL INTERSECTION UNLESS OTHERWISE NOTED.

T. ALL APPLIANCES ARE TO BE PROVIDED AND INSTALLED BY GENERAL CONTRACTOR, UNLESS OTHERWISE NOTED OR SHOWN. VERIFY ALL APPLIANCE DIMENSIONS PRIOR TO FINAL MILLWORK CONSTRUCTION.

U. PAINT ALL STEEL DOORS, DOOR FRAMES, INTERIOR BORROW LITE FRAMES, LINTELS AND OTHER EXPOSED METAL ITEMS UNLESS OTHERWISE NOTED OR SHOWN.

V. FURNITURE IS SHOWN FOR REFERENCE ONLY AND IS NOT IN CONTRACT.

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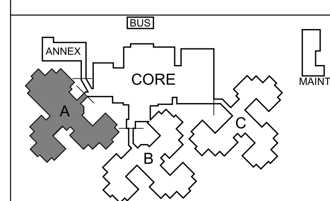
KEYNOTES (BY DIVISION)

DIVISION 05	
05-03	NEW PREFINISHED METAL DOWNSPOUT, TYP.
DIVISION 07	
07-01	REMOVE EXISTING SIDING AND AIR BARRIER, INSTALL 1 LAYER TYPE "X" GYP BD OVER EXISTING PLYWOOD
DIVISION 09	
09-01	PATCH AND REPAIR EXISTING WALL TO MATCH ADJACENT FINISH
DIVISION 10	
10-04	SIGNAGE PER NFPA 99 AT OXYGEN ROOMS
DIVISION 22	
22-02	NEW PLUMBING FIXTURES, SEE PLUMBING DRAWINGS
22-03	SEE TYPICAL RESIDENT ROOM CASEWORK ON INTERIOR ELEVATIONS SHEET FOR CASEWORK TYPES. ADD WALL BLOCKING FOR OWNER PROVIDED TELEVISION MOUNT

AREA NOT IN CONTRACT

KEY PLAN

SCALE: NO SCALE



STATE OF MISSOURI
MICHAEL L. PARSON, GOVERNOR

07/10/2025

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PROJECT #.: U1805-01
SITE #.: 6803
ASSET #.: 8136803002
FAI #.: 29-043

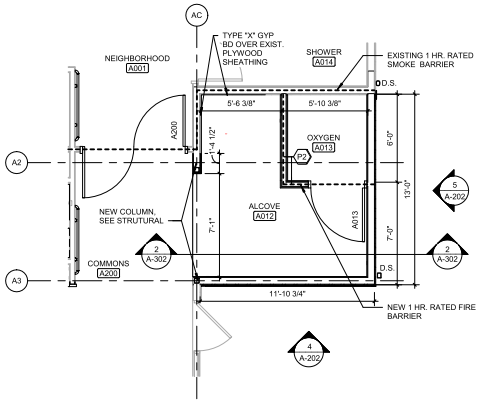
#	DATE:	DESCRIPTION:
1	07/10/2025	ADDENDUM #2

DRAWN BY: SLV/AVR
CHECKED BY: NRB
DESIGNED BY: JJH

SHEET TITLE:
ENLARGED FLOOR PLAN - WING A

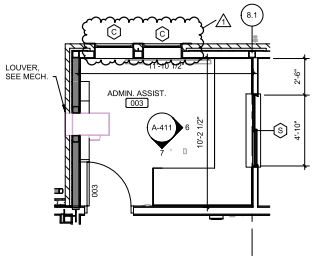
SHEET NUMBER:
A-110

SHEET of
ISSUE DATE: 08/15/2024



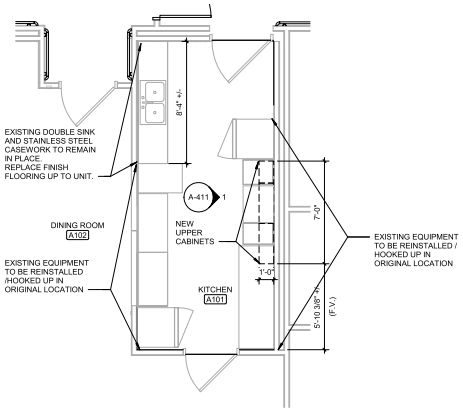
2 ENLARGED OXYGEN ROOM, TYP

Scale: 1/4" = 1'-0"



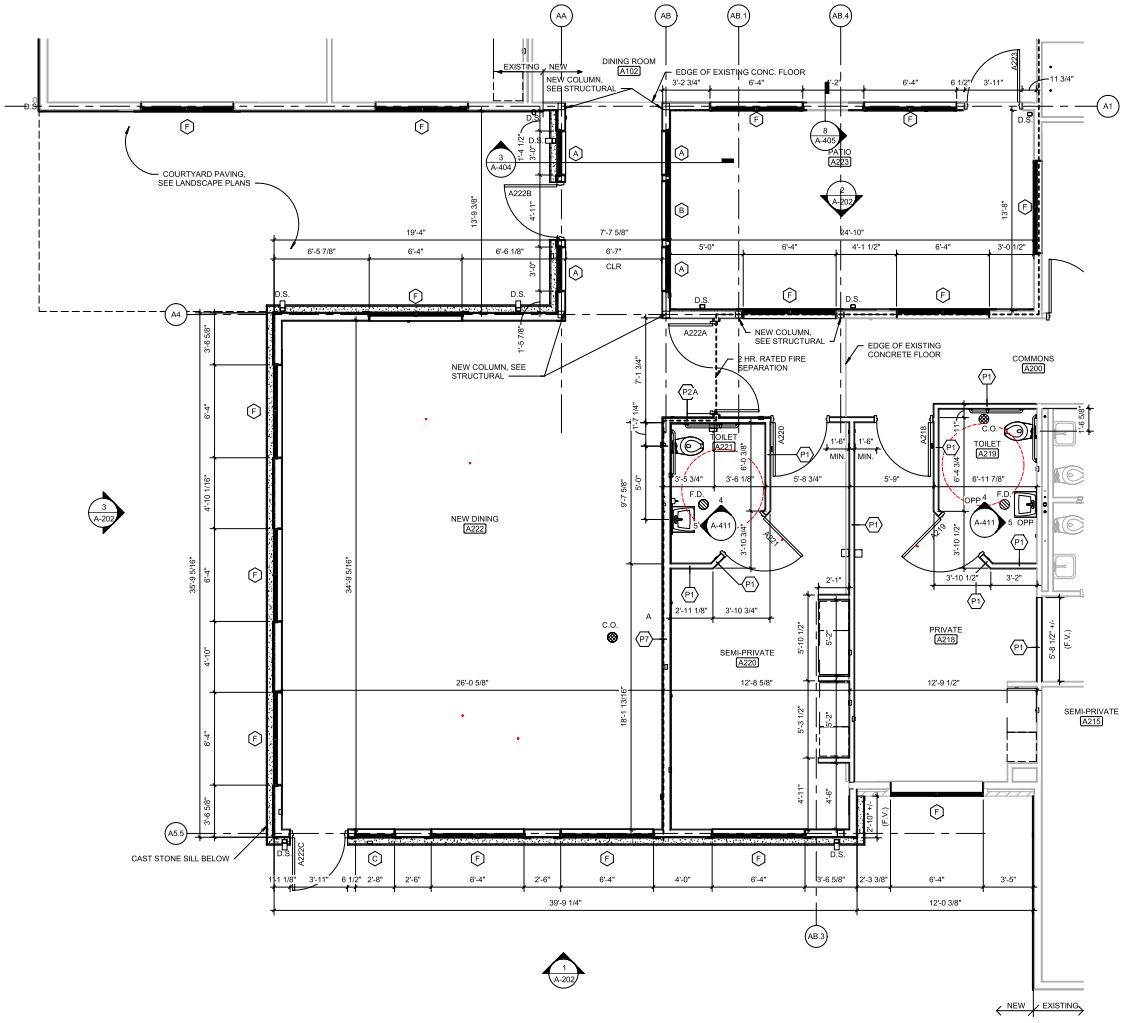
3 ENLARGED ADMIN. ASSIST.

Scale: 1/4" = 1'-0"



4 ENLARGED WING A KITCHEN

Scale: 1/4" = 1'-0"



1 ENLARGED WING A DINING

Scale: 1/4" = 1'-0"

STATE OF MISSOURI
MICHAEL L. PARSON, GOVERNOR

NICOLAS RYAN BRUNER
NUMBER A-2018007676
ARCHITECT

07/10/2025

Farnsworth GROUP
20 ALLEN AVENUE, SUITE 200
ST LOUIS, MISSOURI 63119
(314) 962-7900 / info@f-w.com
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08/15/2024

OFFICE OF ADMINISTRATION
DIVISION OF FACILITIES MANAGEMENT, DESIGN AND CONSTRUCTION

MISSOURI VETERANS COMMISSION

UPGRADES AND RENOVATIONS MISSOURI VETERANS HOME

2400 Veterans Memorial Dr.
Cape Girardeau, MO 63701

PROJECT #.:	U1805-01
SITE #.:	6803
ASSET #.:	8136803002
FAI #.:	29-043

#	DATE:	DESCRIPTION:
1	07/10/2025	ADDENDUM #2

DRAWN BY: AVR
CHECKED BY: NRB
DESIGNED BY: JJH

SHEET TITLE:

ENLARGED PLANS & ROOM ADDITIONS

SHEET NUMBER:

A-116

SHEET of
ISSUE DATE: 08/15/2024

7/10/2025 3:05:09 AM

DOOR SCHEDULE

NO.	DOOR WIDTH	DOOR HEIGHT	DOOR THICK	DOOR MAT'L	DOOR FINISH	DOOR ELEV	FRAME MAT'L	FRAME FINISH	FRAME ELEV	HEAD DETAIL NO.	JAMB DETAIL NO.	THRESH DETAIL NO.	LBL	HDWR SET	REMARKS
001A	6' - 0"	7' - 0"	1 3/4"	AL	PF	SG	AL	PF	SG	20/A-602	19/A-602	18/A-602		28.0	5
001B	6' - 0" *	7' - 0"	1 3/4"	AL	PF	SG	AL	PF	SG	8B/A-602	3/A-602			28.0	5
001C	3' - 6"	7' - 0"	1 3/4"	AL	PF	2-HG-W	AL	PF	SEE REMARK	7/A-602	2/A-602	12/A-602		1.0	5, 7B
003	3' - 0"	7' - 0"	1 3/4"	WD/GL	STN	HG	HM	PNT	1	6/A-602	1/A-602			14.0	
004A	3' - 0"	7' - 0"	1 3/4"	WD	STN	F	HM	PNT	3	6/A-602	1/A-602			15.0	1
004B	3' - 0"	7' - 0"	1 3/4"	WD	STN	F	HM	PNT	3	6/A-602	1/A-602			15.0	1
004C	3' - 0"	7' - 0"	1 3/4"	WD	STN	F	HM	PNT	1	6/A-602	1/A-602			15.0	
005	3' - 0"	7' - 0"	1 3/4"	WD	STN	F	HM	PNT	1	6/A-602	1/A-602		45	17.0	
006	3' - 0"	7' - 0"	1 3/4"	WD	STN	F	HM	PNT	1	6/A-602	1/A-602			14.0	
007	3' - 0"	7' - 0"	1 3/4"	WD	STN	F	HM	PNT	1	6/A-602	1/A-602			14.0	
008	3' - 6"	7' - 0"	1 3/4"	WD	STN	F	HM	PNT	3	6/A-602	1/A-602			14.1	
011	3' - 6"	7' - 0"	1 3/4"	WD/GL	STN	HG	HM	PNT	6	6/A-602	1/A-602			16.0	
012	3' - 6"	7' - 0"	1 3/4"	WD/GL	STN	HG	EXIST	PNT	1	EXIST	EXIST			16.0	
014	3' - 0"	7' - 0"	1 3/4"	WD/GL	STN	N	HM	PNT	1	6/A-602	1/A-602			14.0	
016	3' - 6"	7' - 0"	1 3/4"	WD/GL	STN	HG	HM	PNT	7	6/A-602	1/A-602			16.0	
018	7' - 0"	7' - 0"	1 3/4"	WD/GL	STN	N	HM	PNT	1	10/A-602	5/A-602		45	7.0	
021	3' - 0"	7' - 0"	1 3/4"	WD	STN	F	HM	PNT	1	6/A-602	1/A-602			14.0	
022	3' - 0"	7' - 0"	1 3/4"	WD	STN	F	HM	PNT	1	6/A-602	1/A-602			14.0	
023	3' - 0"	7' - 0"	1 3/4"	WD	STN	F	HM	PNT	1	6/A-602	1/A-602			14.0	
024	6' - 0"	7' - 0"	1 3/4"	WD	STN	F	HM	PNT	1	6/A-602	1/A-602			11.0	
033	3' - 0"	7' - 0"	1 3/4"	WD	STN	F	EXIST	PNT	1	EXIST	EXIST			14.0	4
034	3' - 0"	7' - 0"	1 3/4"	WD	STN	F	EXIST	PNT	1	EXIST	EXIST			14.0	4
035	3' - 6"	7' - 0"	1 3/4"	WD	STN	F	EXIST	PNT	1	EXIST	EXIST			16.1	4
038	3' - 6"	7' - 0"	1 3/4"	WD/GL	STN	2-HG-W	HM	PNT	5	6/A-602	1/A-602			22.0	1
039	3' - 6"	6' - 10"	1 3/4"	WD/GL	STN	FG-W	HM	PNT	4	6/A-602	1/A-602			23.0	
040	7' - 0"	7' - 0"	1 3/4"	WD/GL	STN	N	HM	PNT	1	10/A-602	5/A-602		45	7.0	
041	3' - 0"	7' - 0"	1 3/4"	WD/GL	STN	N	HM	PNT	1	6/A-602	1/A-602			10.0	6
042	3' - 0"	7' - 0"	1 3/4"	HM	PNT	F	HM	PNT	1	6/A-602	1/A-602			12.1	
043	7' - 0"	7' - 0"	1 3/4"	WD/GL	STN	N	HM	PNT	1	10/A-602	5/A-602		90	7.2	
044	3' - 8"	7' - 0"	1 3/4"	WD/GL	STN	N	EXIST	PNT	1	EXIST	EXIST			22.1	4
045	6' - 0"	7' - 0"	1 3/4"	WD/GL	STN	FG-M	HM	PNT	1	6/A-602	1/A-602			8.0	
046	6' - 0"	7' - 0"	1 3/4"	AL	PF	2-HG-W	AL	PF	SEE REMARK	8A/A-602	3/A-602			9.0	7
047A	3' - 6"	7' - 0"	1 3/4"	WD/GL	STN	N	HM	PNT	1	6/A-602	1/A-602			25.0	
047B	3' - 6"	7' - 0"	1 3/4"	WD/GL	STN	N	HM	PNT	1	6/A-602	1/A-602			25.0	
048	3' - 0"	7' - 0"	1 3/4"	HM	PNT	F	HM	PNT	1	6/A-602	1/A-602			13.1	
050A	6' - 0"	7' - 0"	1 3/4"	WD/GL	STN	HG-M	HM	PNT	1	6/A-602	1/A-602			24.0	
050B	4' - 0"	6' - 8"	1 3/4"	WD	STN	-				9/A-602	4/A-602	13/A-602		26.0	3
053	3' - 6"	7' - 0"	1 3/4"	WD	STN	F	HM	PNT	1	6/A-602	1/A-602		45	13.1	
A013	3' - 8"	7' - 0"	1 3/4"	WD	STN	F	HM	PNT	1	6/A-602	1/A-602		90	13.0	
A100	7' - 0"	7' - 0"	1 3/4"	WD/GL	STN	N	HM	PNT	1	10/A-602	5/A-602		45	7.0	
A103	4' - 0"	7' - 0"	1 3/4"	WD	STN	F	HM	PNT	1	6/A-602	1/A-602			19.0	
A107	3' - 8"	7' - 0"	1 3/4"	WD	STN	F	HM	PNT	1	6/A-602	1/A-602			19.0	
A108	3' - 8"	7' - 0"	1 3/4"	WD	STN	F	HM	PNT	1	6/A-602	1/A-602			19.0	
A109	3' - 8"	7' - 0"	1 3/4"	WD	STN	F	HM	PNT	1	6/A-602	1/A-602			19.0	
A112	3' - 8"	7' - 0"	1 3/4"	WD	STN	F	HM	PNT	1	6/A-602	1/A-602			19.0	
A113	4' - 0"	7' - 0"	1 3/4"	WD	STN	F	HM	PNT	1	6/A-602	1/A-602			19.0	
A115	4' - 0"	7' - 0"	1 3/4"	WD	STN	F	HM	PNT	1	6/A-602	1/A-602			21.0	
A116	3' - 8"	7' - 0"	1 3/4"	WD	STN	F	HM	PNT	1	6/A-602	1/A-602			19.0	
A119	3' - 8"	7' - 0"	1 3/4"	WD	STN	F	HM	PNT	1	6/A-602	1/A-602			19.0	
A120A	4' - 0"	7' - 0"	1 3/4"	WD	STN	F	HM	PNT	1	6/A-602	1/A-602			19.0	
A120B	3' - 8"	7' - 0"	1 3/4"	WD	STN	F	HM	PNT	1	6/A-602	1/A-602			19.0	
A200	7' - 0"	7' - 0"	1 3/4"	WD/GL	STN	N	HM	PNT	1	10/A-602	5/A-602		45	7.0	
A201	4' - 0"	7' - 0"	1 3/4"	WD	STN	F	HM	PNT	1	6/A-602	1/A-602			19.0	
A205	3' - 8"	7' - 0"	1 3/4"	WD	STN	F	HM	PNT	1	6/A-602	1/A-602			19.0	
A206	3' - 0"	7' - 0"	1 3/4"	WD	STN	F	HM	PNT	1	6/A-602	1/A-602			20.0	ALT 3
A207	3' - 8"	7' - 0"	1 3/4"	WD	STN	F	HM	PNT	1	6/A-602	1/A-602			19.0	
A208	3' - 0"	7' - 0"	1 3/4"	WD	STN	F	HM	PNT	1	6/A-602	1/A-602			18.0	ALT 3
A209	3' - 8"	7' - 0"	1 3/4"	WD	STN	F	HM	PNT	1	6/A-602	1/A-602			19.0	
A212	3' - 8"	7' - 0"	1 3/4"	WD	STN	F	HM	PNT	1	6/A-602	1/A-602			19.0	
A213	4' - 0"	7' - 0"	1 3/4"	WD	STN	F	HM	PNT	1	6/A-602	1/A-602			19.0	
A215	4' - 0"	7' - 0"	1 3/4"	WD	STN	F	HM	PNT	1	6/A-602	1/A-602			21.0	
A218	3' - 8"	7' - 0"	1 3/4"	WD	STN	F	HM	PNT	1	6/A-602	1/A-602			19.0	
A219	3' - 8"	7' - 0"	1 3/4"	WD	STN	F	HM	PNT	1	6/A-602	1/A-602			20.0	
A220	3' - 8"	7' - 0"	1 3/4"	WD	STN	F	HM	PNT	1	6/A-602	1/A-602			19.0	
A221	3' - 8"	7' - 0"	1 3/4"	WD	STN	F	HM	PNT	1	6/A-602	1/A-602			20.0	
A222A	6' - 0"	7' - 0"	1 3/4"	WD/GL	STN	N	HM	PNT	1	10/A-602	5/A-602		90	7.1	8
A222B	3' - 7"	7' - 0"	1 3/4"	HM	PNT	HG	HM	PNT	1	17/A-602	16/A-602			2.0	8
A222C	3' - 7"	7' - 0"	1 3/4"	HM	PNT	HG	HM	PNT	1	17/A-602	16/A-602			2.0	8
A223	3' - 7"	7' - 0"	1 3/4"	HM	PNT	HG	HM	PNT	1	17/A-602	16/A-602			4.0	8
A224A	3' - 8"	7' - 0"	1 3/4"	WD	STN	F	HM	PNT	1	6/A-602	1/A-602			19.0	
A224B	3' - 8"	7' - 0"	1 3/4"	WD	STN	F	HM	PNT	1	6/A-602	1/A-602			19.0	
A300	7' - 0"	7' - 0"	1 3/4"	WD/GL	STN	N	HM	PNT	1	10/A-602	5/A-602		45	7.0	
A301	4' - 0"	7' - 0"	1 3/4"	WD	STN	F	HM	PNT	1	6/A-602	1/A-602			19.0	
A305	3' - 8"	7' - 0"	1 3/4"	WD	STN	F	HM	PNT	1	6/A-602	1/A-602			19.0	
A306	3' - 8"	7' - 0"	1 3/4"	WD	STN	F	HM	PNT	1	6/A-602	1/A-602			19.0	
A307	3' - 8"	7' - 0"	1 3/4"	WD	STN	F	HM	PNT	1	6/A-602	1/A-602			19.0	
A310	3' - 8"	7' - 0"	1 3/4"	WD	STN	F	HM	PNT	1	6/A-602	1/A-602			19.0	
A311	4' - 0"	7' - 0"	1 3/4"	WD	STN	F	HM	PNT	1	6/A-602	1/A-602			19.0	
A313	4' - 0"	7' - 0"	1 3/4"	WD	STN	F	HM	PNT	1	6/A-602	1/A-602			21.0	
A314	3' - 8"	7' - 0"	1 3/4"	WD	STN	F	HM	PNT	1	6/A-602	1/A-602			19.0	
A317	3' - 8"	7' - 0"	1 3/4"	WD	STN	F	HM	PNT	1	6/A-602	1/A-602			19.0	
A318	4' - 0"	7' - 0"	1 3/4"	WD	STN	F	HM	PNT	1	6/A-602	1/A-602			21.0	
B008	3' - 8"	7' - 0"	1 3/4"	WD	STN	F	HM	PNT	1	6/A-602	1/A-602		90	13.0	
B100	7' - 0"	7' - 0"	1 3/4"	WD/GL	STN	N	HM	PNT	1	10/A-602	5/A-602		45	7.0	
B101	4' - 0"	7' - 0"	1 3/4"	WD	STN	F	HM	PNT	1	6/A-602	1/A-602			19.0	
B105	3' - 8"	7' - 0"	1 3/4"	WD	STN	F	HM	PNT	1	6/A-602	1/A-602			19.0	
B106	3' - 0"	7' - 0"	1 3/4"	WD	STN	F	HM	PNT	1	6/A-602	1/A-602			20.0	
B107	3' - 8"	7' - 0"	1 3/4"	WD	STN	F	HM	PNT	1	6/A-602	1/A-602			19.0	

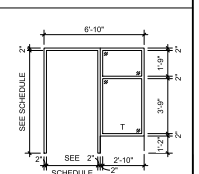
DOOR SCHEDULE

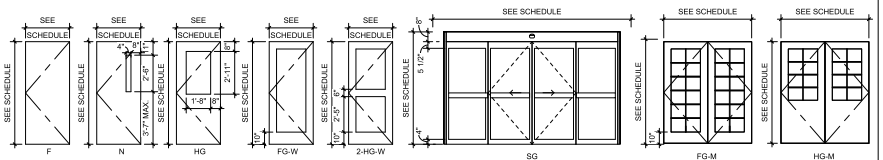
NO.	DOOR WIDTH	DOOR HEIGHT	DOOR THICK	DOOR MAT'L	DOOR FINISH	DOOR ELEV	FRAME MAT'L	FRAME FINISH	FRAME ELEV	HEAD DETAIL NO.	JAMB DETAIL NO.	THRESH DETAIL NO.	LBL	HDWR SET	REMARKS
B108	3' - 0"	7' - 0"	1 3/4"	WD	STN	F	HM	PNT	1	6/A-602	1/A-602			20.0	ALT 3
B109	3' - 8"	7' - 0"	1 3/4"	WD	STN	F	HM	PNT	1	6/A-602	1/A-602			19.0	
B112	3' - 8"	7' - 0"	1 3/4"	WD	STN	F	HM	PNT	1	6/A-602	1/A-602			21.0	
B113	4' - 0"	7' - 0"	1 3/4"	WD	STN	F	HM	PNT	1	6/A-602	1/A-602			19.0	
B115	4' - 0"	7' - 0"	1 3/4"	WD	STN	F	HM	PNT	1	6/A-602	1/A-602			21.0	
B116	3' - 8"	7' - 0"	1 3/4"	WD	STN	F	HM	PNT	1	6/A-602	1/A-602			19.0	
B119	3' - 8"	7' - 0"	1 3/4"	WD	STN	F	HM	PNT	1	6/A-602	1/A-602			19.0	
B120A	3' - 8"	7' - 0"	1 3/4"	WD	STN	F	HM	PNT	1	6/A-602	1/A-602			19.0	
B120B	3' - 8"	7' - 0"	1 3/4"	WD	STN	F	HM	PNT	1	6/A-602	1/A-602			19.0	
B200	7' - 0"	7' - 0"	1 3/4"	WD/GL	STN	N	HM	PNT	1	10/A-602	5/A-602		45	7.0	
B201	4' - 0"	7' - 0"	1 3/4"	WD	STN	F	HM	PNT	1	6/A-602	1/A-602			19.0	
B205	3' - 8"	7' - 0"	1 3/4"	WD	STN	F	HM	PNT	1	6/A-602	1/A-602			19.0	
B206	3' - 0"	7' - 0"	1 3/4"	WD	STN	F	HM	PNT	1	6/A-602	1/A-602			20.0	ALT 3
B207	3' - 8"	7' - 0"	1 3/4"	WD	STN	F	HM	PNT	1	6/A-602	1/A-602			19.0	
B208	3' - 0"	7' - 0"	1 3/4"	WD	STN	F	HM	PNT	1	6/A-602	1/A-602			20.0	ALT 3
B209	3' - 8"	7' - 0"	1 3/4"	WD	STN	F	HM	PNT	1	6/A-602	1/A-602			19.0	
B212	3' - 8"	7' - 0"	1 3/4"	WD	STN	F	HM	PNT	1	6/A-602	1/A-602			21.0	
B213	4' - 0"	7' - 0"	1 3/4"	WD	STN	F	HM	PNT	1	6/A-602	1/A-602			19.0	
B215	4' - 0"	7' - 0"	1 3/4"	WD	STN	F	HM	PNT	1	6/A-602	1/A-602			21.0	
B216	3' - 8"	7' - 0"	1 3/4"	WD	STN	F	HM	PNT	1	6/A-602	1/A-602			19.0	
B219	3' - 8"	7' - 0"	1 3/4"	WD	STN	F	HM	PNT	1	6/A-602	1/A-602			19.0	
B220A	3' - 8"	7' - 0"	1 3/4"	WD	STN	F	HM	PNT	1	6/A-602	1/A-602			19.0	
B220B	3' - 8"	7' - 0"	1 3/4"	WD	STN	F	HM	PNT	1	6/A-602	1/A-602			19.0	
B300	7' - 0"	7' - 0"	1 3/4"	WD/GL	STN	N	HM	PNT	1	10/A-602	5/A-602		45	7.0	
B301	4' - 0"	7' - 0"	1 3/4"	WD	STN	F	HM	PNT	1	6/A-602	1/A-602			19.0	
B305	3' - 8"	7' - 0"	1 3/4"	WD	STN	F	HM	PNT	1	6/A-602	1/A-602			19.0	
B306	3' - 8"	7' - 0"	1 3/4"	WD	STN	F	HM	PNT	1	6/A-602	1/A-602			19.0	
B307	3' - 8"	7' - 0"	1 3/4"	WD	STN	F	HM	PNT	1	6/A-602	1/A-602			19.0	
B310	3' - 8"	7' - 0"	1 3/4"	WD	STN	F	HM	PNT	1	6/A-602	1/A-602			21.0	
B311	4' - 0"	7' - 0"	1 3/4"	WD	STN	F	HM	PNT	1	6/A-602	1/A-602			19.0	
B313	4' - 0"	7' - 0"	1 3/4"	WD	STN	F	HM	PNT	1	6/A-602	1/A-602			21.0	
B314	3' - 8"	7' - 0"	1 3/4"	WD	STN	F	HM	PNT	1	6/A-602	1/A-602			19.0	
B317	3' - 8"	7' - 0"	1 3/4"	WD	STN	F	HM	PNT	1	6/A-602	1/A-602			19.0	
B318	4' - 0"	7' - 0"	1 3/4"	WD	STN	F	HM	PNT	1	6/A-602	1/A-602			21.0	
B400	7' - 0"	7' - 0"	1 3/4"	WD/GL	STN	N	HM	PNT	1	10/A-602	5/A-602		90	7.0	
C001	7' - 0"	7' - 0"	1 3/4"	WD/GL	STN	N	HM	PNT	1	10/A-602	5/A-602		90	7.0	
C013	3' - 8"	7' - 0"	1 3/4"	WD	STN	F	HM	PNT	1	6/A-602	1/A-602		90	13.0	
C038	6' - 0"	7' - 0"	1 3/4"	HM	PNT	N	HM	PNT	1	6/A-602	1/A-602			6.0	
C100	7' - 0"	7' - 0"	1 3/4"	WD/GL	STN	N	HM	PNT	1	10/A-602	5/A-602		45	7.0	
C101	4' - 0"	7' - 0"	1 3/4"	WD	STN	F	HM	PNT	1	6/A-602	1/A-602			21.0	
C102	3' - 8"	7' - 0"	1 3/4"	WD	STN	F	HM	PNT	1	6/A-602	1/A-602			19.0	
C105	3' - 8"	7' - 0"	1 3/4"	WD	STN	F	HM	PNT	1	6/A-602	1/A-602			19.0	
C106	4' - 0"	7' - 0"	1 3/4"	WD	STN	F	HM	PNT	1	6/A-602	1/A-602			21.0	
C108	4' - 0"	7' - 0"	1 3/4"	WD	STN	F	HM	PNT	1	6/A-602	1/A-602			19.0	
C109	3' - 8"	7' - 0"	1 3/4"	WD	STN	F	HM	PNT	1	6/A-602	1/A-602			19.0	
C112	3' - 8"	7' - 0"	1 3/4"	WD	STN	F	HM	PNT	1	6/A-602	1/A-602			19.0	
C113	3' - 8"	7' - 0"	1 3/4"	WD	STN	F	HM	PNT	1	6/A-602	1/A-602			19.0	
C114	3' - 8"	7' - 0"	1 3/4"	WD	STN	F	HM	PNT	1	6/A-602	1/A-602			19.0	
C118	4' - 0"	7' - 0"	1 3/4"	WD	STN	F	HM	PNT	1	6/A-602	1/A-602			19.0	
C200	7' - 0"	7' - 0"	1 3/4"	WD/GL	STN	N	HM	PNT	1	10/A-602	5/A-602		45	7.0	
C201A	3' - 8"	7' - 0"	1 3/4"	WD	STN	F	HM	PNT	1	6/A-602	1/A-602			19.0	
C201B	3' - 8"	7' - 0"	1 3/4"	WD	STN	F	HM	PNT	1	6/A-602	1/A-602			19.0	
C202	3' - 8"	7' - 0"	1 3/4"	WD	STN	F	HM	PNT	1	6/A-602	1/A-602			19.0	
C205	3' - 8"	7' - 0"	1 3/4"	WD	STN	F	HM	PNT	1	6/A-602	1/A-602			19.0	
C206	4' - 0"	7' - 0"	1 3/4"	WD	STN	F	HM	PNT	1	6/A-602	1/A-602			21.0	
C208	4' - 0"	7' - 0"	1 3/4"	WD	STN	F	HM	PNT	1	6/A-602	1/A-602			19.0	
C209	3' - 8"	7' - 0"	1 3/4"	WD	STN	F	HM	PNT	1	6/A-602	1/A-602			21.0	
C212	3' - 8"	7' - 0"	1 3/4"	WD	STN	F	HM	PNT	1	6/A-602	1/A-602			19.0	
C213	3' - 8"	7' - 0"	1 3/4"	WD	STN	F	HM	PNT	1	6/A-602	1/A-602			19.0	
C214	3' - 0"	7' - 0"	1 3/4"	WD	STN	F	HM	PNT	1	6/A-602	1/A-602			18.0	ALT 3
C215	3' - 8"	7' - 0"	1 3/4"	WD	STN	F	HM	PNT	1	6/A-602	1/A-602			19.0	
C216	3' - 0"	7' - 0"	1 3/4"	WD	STN	F	HM	PNT	1	6/A-602	1/A-602			20.0	ALT 3
C219	4' - 0"	7' - 0"	1 3/4"	WD	STN	F	HM	PNT	1	6/A-602	1/A-602			19.0	
C300	7' - 0"	7' - 0"	1 3/4"	WD/GL	STN	N	HM	PNT	1	10/A-602	5/A-602		45	7.0	6
C301A	3' - 8"	7' - 0"	1 3/4"	WD	STN	F	HM	PNT	1	6/A-602	1/A-602			19.0	
C301B	3' - 8"	7' - 0"	1 3/4"	WD	STN	F	HM	PNT	1	6/A-602	1/A-602			19.0	
C302	3' - 8"	7' - 0"	1 3/4"	WD	STN	F	HM	PNT	1	6/A-602	1/A-602			19.0	
C305	3' - 8"	7' - 0"	1 3/4"	WD	STN	F	HM	PNT	1	6/A-602	1/A-602			19.0	
C306	4' - 0"	7' - 0"	1 3/4"	WD	STN	F	HM	PNT	1	6/A-602	1/A-602			21.0	
C307	4' - 0"	7' - 0"	1 3/4"	WD	STN	F	HM	PNT	1	6/A-602	1/A-602			19.0	
C309	3' - 8"	7' - 0"	1 3/4"	WD	STN	F	HM	PNT	1	6/A-602	1/A-602			19.0	
C312	3' - 8"	7' - 0"	1 3/4"	WD	STN	F	HM	PNT	1	6/A-602	1/A-602			19.0	
C313	3' - 8"	7' - 0"	1 3/4"	WD	STN	F	HM	PNT	1	6/A-602	1/A-602			19.0	
C314	3' - 0"	7' - 0"	1 3/4"	WD	STN	F	HM	PNT	1	6/A-602	1/A-602			18.0	ALT 3
C315	3' - 8"	7' - 0"	1 3/4"	WD	STN	F	HM	PNT	1	6/A-602	1/A-602			19.0	
C316	3' - 0"	7' - 0"	1 3/4"	WD	STN	F	HM	PNT	1	6/A-602	1/A-602			20.0	ALT 3
C319	4' - 0"	7' - 0"	1 3/4"	WD	STN	F	HM	PNT	1	6/A-602	1/A-602			19.0	
C321	6' - 0"	7' - 0"	1 3/4"	WD	STN	F	HM	PNT	1	6/A-602	1/A-602			12.0	ALT 1

AL/GL	ALUMINUM AND GLASS
AL=	ALUMINUM
ALCW=	ALUMINUM CLAD WOOD
EXIST=	EXISTING
FRP=	FIBER REINFORCED PLASTIC
HM=	HOLLOW METAL
IHM=	INSULATED HOLLOW METAL
IRD =	IMPACT RESISTANT DOOR
OHD=	OVERHEAD DOOR
PF=	PREFINISHED
PNT=	PAINT
SCW=	SOLID CORE WOOD
STN=	STAIN
WD/GL	WOOD AND GLASS
WD=	WOOD

REMARKS:

1. OBSCURED/PRIVACY GLAZING IN SIDELIGHT AND/OR NARROW LITE - SEE SPECIFICATIONS
2. NOT USED
3. BARN DOOR - SEE SPECIFICATIONS
4. EXISTING FRAME AND EXISTING ADJACENT GLAZED FRAME TO BE PAINTED
5. PREFINISHED COLOR TO BE WHITE
6. DOOR SWITCH, SEE MECHANICAL FOR ALT #1 DOOR FUNCTION
7. FRAME IS PART OF AN ALUMINUM STOREFRONT SYSTEM. REFERENCE WINDOW / STOREFRONT TYPES FOR FRAME ELEVATION
8. PREP DOOR FRAME FOR FUTURE CARD READER/ELECTRONIC ACCESS CONTROL

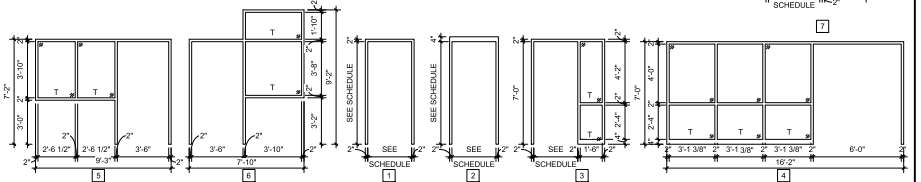




NOTES:
1. PROVIDE FIRE-RATED GLASS AT FIRE RATED CONDITIONS
2. ALL EXTERIOR GLASS SHALL BE INSULATED
3. ALL GLASS MUST BE TEMPERED

DOOR ELEVATIONS

Scale: 1/4" = 1'-0"



NOTES:
1. PROVIDE FIRE-RATED GLASS AT FIRE RATED CONDITIONS
2. ALL EXTERIOR/INSULATED GLASS TO BE IG-2 (FULLY TEMPERED) SEE SPECIFICATION)
3. ALL INTERIOR GLASS TO BE FULLY TEMPERED - 'T' DESIGNATION
4. SEE DOOR REMARKS FOR OBSCURE/PRIVACY GLAZING

FRAME ELEVATIONS

Scale: 1/4" = 1'-0"

STATE OF MISSOURI
MICHAEL L. PARSON, GOVERNOR

07/10/2025

Farnsworth GROUP
20 ALLEN AVENUE, SUITE 200
ST LOUIS, MISSOURI 63119
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MISSOURI VETERANS COMMISSION

UPGRADES AND RENOVATIONS MISSOURI VETERANS HOME

2400 Veterans Memorial Dr.
Cape Girardeau, MO 63701

PROJECT #.:	U1805-01
SITE #.:	6803
ASSET #.:	8136803002
FAI #.:	29-043

#	DATE:	DESCRIPTION:
1	07/10/2025	ADDENDUM #2

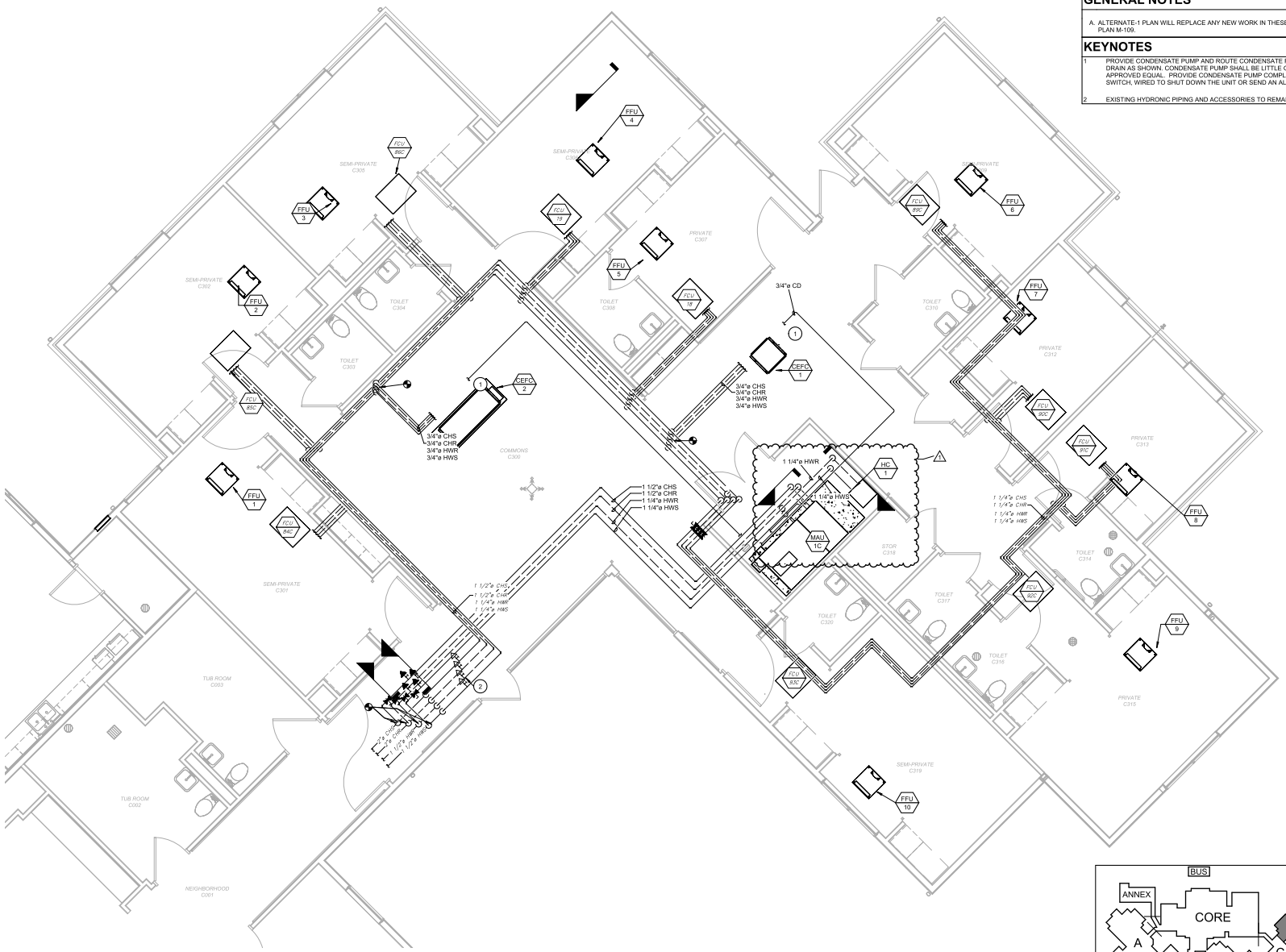
DRAWN BY: AVR
CHECKED BY: NRB
DESIGNED BY: JJH

SHEET TITLE:
DOOR SCHEDULE, ELEVATIONS

SHEET NUMBER:
A-601

SHEET of
ISSUE DATE: 08/15/2024

7/10/2025 9:10:08 AM



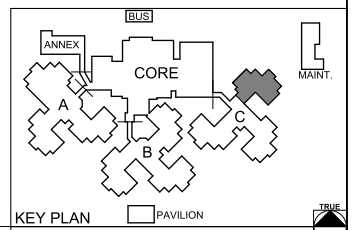
GENERAL NOTES

A. ALTERNATE-1 PLAN WILL REPLACE ANY NEW WORK IN THESE SPACES FROM BASE BID PLAN M-109.

KEYNOTES

1 PROVIDE CONDENSATE PUMP AND ROUTE CONDENSATE PIPING TO NEAREST DRAIN AS SHOWN. CONDENSATE PUMP SHALL BE LITTLE GIANT EC-1, 115/1 OR APPROVED EQUAL. PROVIDE CONDENSATE PUMP COMPLETE WITH OVERFLOW SWITCH, WIRED TO SHUT DOWN THE UNIT OR SEND AN ALARM.

2 EXISTING HYDRONIC PIPING AND ACCESSORIES TO REMAIN.



KEY PLAN
SCALE: NO SCALE

1 **ALTERNATE 1 INFECTIOUS DISEASE HYDRONIC PLAN**
Scale: 1/4" = 1'-0"

7/10/2025 9:06:49 AM

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2400 Veterans Memorial Dr.
Cape Girardeau, MO 63701

PROJECT #.:	U1805-01
SITE #.:	4703
FACILITY #.:	55020
FAI #.:	29-043

#	DATE:	DESCRIPTION:
1	07/01/2025	Addendum 2

DRAWN BY:	SHR/MD
CHECKED BY:	DAH
DESIGNED BY:	AK

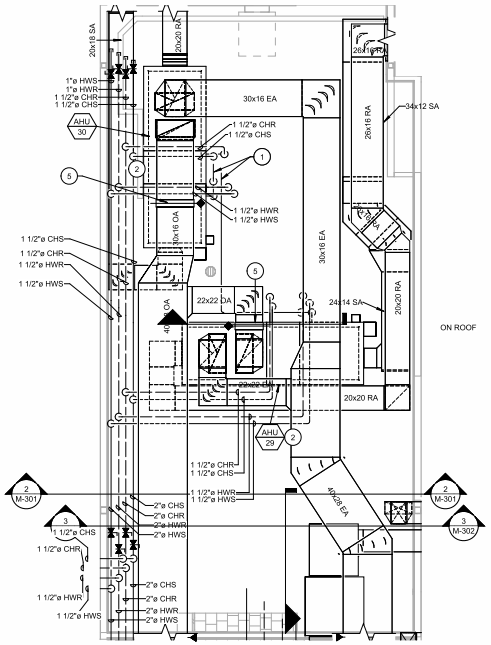
SHEET TITLE:

ALTERNATE 1 INFECTIOUS DISEASE HYDRONIC PLAN

SHEET NUMBER:

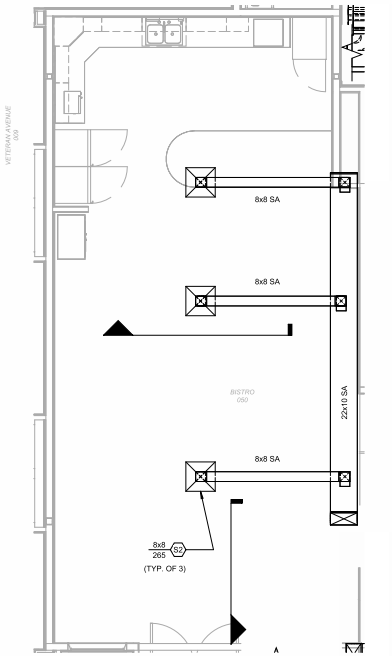
M-115

SHEET 15 of 29
ISSUE DATE: 08/15/2024



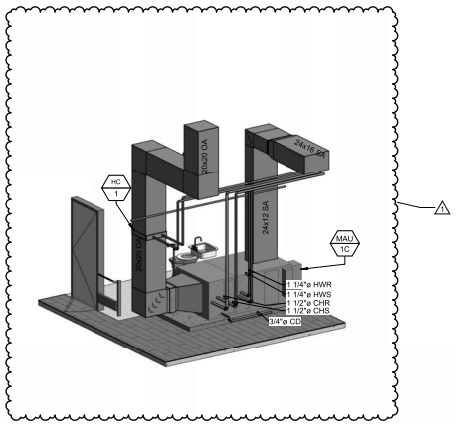
2 MEZZANINE FLOOR PLAN

Scale: 1/4" = 1'-0"



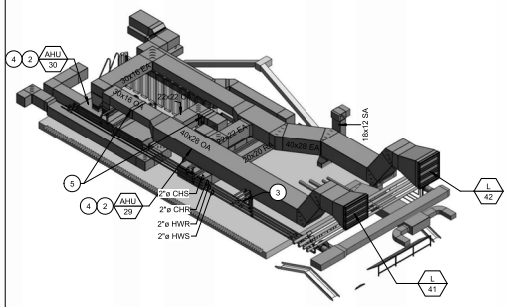
4 BELOW MEZZNINE VENTILATION FLOOR PLAN

Scale: 1/4" = 1'-0"



3 ALTERNATE 1 MECH C321 3D View

Scale:

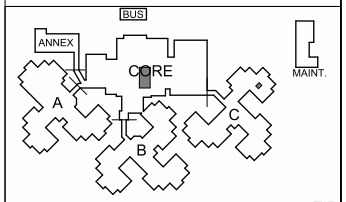


1 MEZZANINE MECHANICAL 3D VIEW

Scale: No Scale

KEYNOTES

1. RUN CONDENSATE DRAIN PIPING FROM UNIT TO THE NEAREST FLOOR DRAIN, MAXIMIZING THE FLOOR CLEAR SPACE. SLOPE PIPING AT 1/8" PER FOOT MINIMUM TERMINATE AT THE FLOOR DRAIN WITH AN AIR GAP. CONDENSATE DRAIN LINE SIZE SHALL BE THE SAME AS THE THE UNIT CONDENSATE DRAIN CONNECTION.
2. SUPPORT UNIT WITH SEISMIC RESTRAINED SPRING VIBRATION ISOLATORS WITH QUANTITIES AND THAT ARE SPACED AT DISTANCES PER THE MANUFACTURER'S INSTALLATION INSTRUCTIONS, OR AT A MINIMUM OF FOUR SUPPORTS AT EACH CORNER OF THE UNIT MODULES, WHICHEVER IS MORE STRINGENT. SIZE SHALL BE AS DESIGNED BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE IN WHICH THE PROJECT IS LOCATED. SEE SPECIFICATION 23 05 48 FOR MORE DETAILS.
3. PROVIDE BALL VALVES ON HHWS & R AND CHWS & R.
4. CONNECT HOT AND CHILLED WATER PIPING TO NEW AIR HANDLING UNITS. SEE DETAILS 1 AND 2 ON DRAWING M-502.
5. FURNISH AND INSTALL COUNTER-BALANCED BACKDRAFT DAMPER PER RUSKIN MODEL NUMBER CBD6 OR APPROVED EQUAL. DAMPER SHALL BE 0.125" EXTRUDED ALUMINUM FRAME, 0.07" EXTRUDED ALUMINUM BLADES WITH ZYTEL BEARINGS. INSTALL DAMPER SO THAT IT WOULD ALLOW AIRFLOW IN THE DIRECTION INDICATED.



KEY PLAN

SCALE: NO SCALE

STATE OF MISSOURI
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WADE ROSS MEMBER PE-2022026452

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UPGRADES AND RENOVATIONS MISSOURI VETERANS HOME

2400 Veterans Memorial Dr.
Cape Girardeau, MO 63701

PROJECT #.:	U1805-01
SITE #.:	4703
FACILITY #.:	55020
FAI #.:	29-043

#	DATE:	DESCRIPTION:
1	07/01/2025	Addendum 2

DRAWN BY:	SHR/MD
CHECKED BY:	DAH
DESIGNED BY:	AK

SHEET TITLE:

ENLARGED MECHANICAL PLANS

SHEET NUMBER:

M-401

SHEET 19 of 29
ISSUE DATE: 08/15/2024

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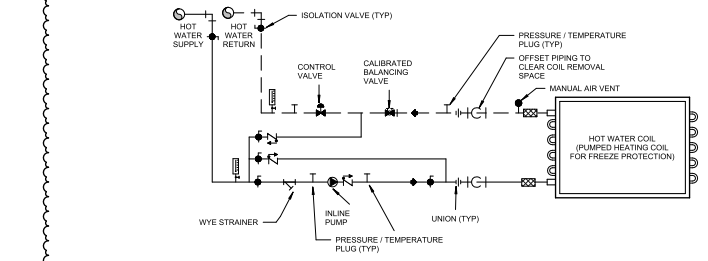

HC-1 HOT WATER COIL W/2-WAY VALVE & FREEZE PROTECTION PUMP

1 **Scale: No Scale**

7/10/2025 9:06:58 AM

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UPGRADES AND RENOVATIONS MISSOURI VETERANS HOME

2400 Veterans Memorial Dr.
Cape Girardeau, MO 63701

PROJECT #.:	U1805-01
SITE #.:	6803
FACILITY #.:	8136803002
FAI #.:	29-043

#	DATE:	DESCRIPTION:
1	07/01/2025	Addendum 2

DRAWN BY:	SHR/MD
CHECKED BY:	DAH
DESIGNED BY:	AK

SHEET TITLE:

MECHANICAL DETAILS

SHEET NUMBER:

M-504

SHEET 153-2 of 197
ISSUE DATE: 08/15/2024

ALTERNATE 1 - CRITICAL ENVIROMENT MAKE UP AIR HANDLING UNIT SCHEDULE

MARK	MANUFACTURER	MODEL	LOCATION	SERVICE	ARRANGEMENT	SUPPLY FAN						REHEAT COIL								COOLING COIL									FILTER			ELECTRICAL DATA			PHYSICAL DATA					REMARKS
						OA CFM/ MIN.	AIM OA CFM	ESP (IN. W.C.)	TSP (IN. W.C.)	BHP	HP	CFM	MAX. AIR P.D. (IN. W.C.)	TOTAL CAP. (MBH)	FLOW (GPM)	MAX. FLUID P.D. (FT. W.C.)	EWT (%%D F)	LWT (%%D F)	EAT (%%D F)	LAT (%%D F)	CFM	TOTAL CAP. (MBH)	SENS. CAP. (MBH)	FLOW (GPM)	MAX. FLUID P.D. (FT. W.C.)	EWT (%%D F)	LWT (%%D F)	EDB (%%D F)	EWB (%%D F)	LDB (%%D F)	LWB (%%D F)	TYPE	MERV	THICK. (IN.)	V/PH	MCA	MOCP	L (IN.)	W (IN.)	H (IN.)	WT. (LB.)	
MAU1C	TRANE	UCCA06	C100 MECH	C100	REHEAT	1600	2150	1.5	3.66	2.25	3	2160	0.1	131.3	13.1	1.2	190	170	7.4	75	2160	169.8	97.15	34	6.35	42	52	95	77	54.6	54.5	PREFILTER	14	2	208/3	19.5	30	92	47	33	786	1-6

NOTES: 1. STAINLESS STEEL DRAIN PAN
2. DIRECT DRIVE
3. OUTISDE AIR TEMP. SENSOR
4. DUCT STATIC PRESSURE SENSOR
5. BACNET CONTROLS PROVIDED BY CONTROLS CONTRACTOR
6. LEFT HAND MOTOR AND SERVICE ACCESS

ALTERNATE 1 - FAN COIL SCHEDULE

MARK	MANUFACTURER	MODEL	LOCATION	SUPPLY FAN			COOLING							HEATING						ELECTRICAL...		PHYSICAL DATA					REMARKS
				CFM	ESP (IN. W.C.)	HP	TOTAL CAP. (MBH)	SENS. (MBH)	FLOW (GPM)	MAX. FLUID P.D. (FT. W.C.)	EDB/ EWB	LDB/ LWB	EWT (%%D F)	LWT (%%D F)	TOTAL CAP. (MBH)	FLOW (GPM)	MAX. FLUID P.D. (FT. W.C.)	EWT (%%D F)	LWT (%%D F)	EDB (%%D F)	LDB (%%D F)	V/PH	MOTOR (W)	MAX (SONES)	L (IN.)	W (IN.)	H (IN.)	WT. (LB.)	
CEFC-1	TRANE	FCCB040	COMMONS	310	0.500	1/6	8.0	7.6	1.58	4.24	75/60	51/50	42	52	14.2	1.42	4.7	190	160	60	102	208/1	132	12	38	25	10	109	1-7
CEFC-2	TRANE	FCCB100	COMMONS	750	0.500	1/4	18.5	18.1	3.68	4	75/60	51/50	42	52	33.3	1.66	13.7	190	140	60	101	208/1	260	9.2	75	25	10	200	1-7

NOTES: 1. PROVIDE PREWIRED SERVICE SWITCH, 2-WAY CONTROL VALVE PACKAGES FOR EACH COIL, UNIONS AND COIL STUBS, MANUAL CIRCUIT SETTER AND BALL SHUT OFF VALVES ON SUPPLY AND RETURN LINES.
2. 4-PIPE SAME SIDE CONNECTION (4 ROW CHILLED WATER COIL/1-ROW HOT WATER COIL).
3. CONTROLS CONTRACTOR WILL SUPPLY BACNET CONTROLLER.
4. PROVIDE WITH NON-CORROSIVE DRAIN PAN, UNIT MOUNTED DISCONNECT SWITCH & FILLED SUPPLIED 1" MERV 14 FILTER.
5. PROVIDE CONDENSATE PUMP, LITTLE GIANT EC-1, 115/1 OR APPROVED EQUAL.

ALTERNATE 1 - GRAVITY ROOF VENTILATOR SCHEDULE

MARK	MANUFACTURER	MODEL	SERVICE/USE	CFM	THROAT SIZE (LxW)	THROAT VELOCITY FPM	APD (IN.W.C.)	DUCT CONN. (LxW-IN.)	SERVING
GV-1	GREENHECK	FGI	OA INTAKE	2,150	24X24	541	0.04	24X24	MAU-1

NOTES: PROVIDE: 14" FACTORY PROVIDED ROOF CURB. ALUMINUM BIRDSCREEN AND TOPCAP INSULATION. FOR FINISH COLOR SEE ARCHITECTURAL SHEETS.

ALTERNATE 1 - CRITICAL ENVIRONMENT EXHAUST FAN SCHEDULE

MARK	MANUFACTURER	MODEL	TYPE	DRIVE	SERVICE	CFM		TSP (IN. W.C.)	FAN MOTOR BHP	DAMPER	ELECTRICAL DATA			PHYSICAL DATA				REMARKS
						MIN.	MAX.				HP	V/PH	FLA	L (IN.)	W (IN.)	H (IN.)	WEIGHT (LBS)	
CEEF1	GREENHECK	CUE-120-VG	ROOF	DIRECT	ROOM EXHAUST	600	1200	0.5	0.19	BACKDRAFT	1/4	115/1	3.8	19	25	41	49	1-3
CEEF2	GREENHECK	CUE-90-VG	ROOF	DIRECT	BATHROOM	300	300	0.3	0.03	BACKDRAFT	1/10	115/1	1.5	20	20	26	31	2,3
CEEF3	GREENHECK	CUE-90-VG	ROOF	DIRECT	ROOM EXHAUST	400	500	0.3	0.09	BACKDRAFT	1/10	115/1	1.5	19	19	27	31	1-3
CEEF4	GREENHECK	CUE-90-VG	ROOF	DIRECT	BATHROOM	300	300	0.3	0.03	BACKDRAFT	1/10	115/1	1.5	17	20	26	31	2,3

NOTES: 1. TWO-SPEED CONTROL
2. DISCONNECT SWITCH
3. SLOPED ROOF CURB

ALTERNATE-1 VARIABLE AIR VOLUME GRILLE

MARK	MANUFACTURER	MODEL	SERVICE	MAX. CFM	MIN. CFM	MAX. AIR P.D. (IN. W.C.)	INLET SIZE (IN.)	OUTLET FACE SIZE (IN.)	PHYSICAL DATA		
									L (IN.)	W (IN.)	H (IN.)
VAV1	ALDES	ZRTS-2-6-24CAR3L6R6	MAU1C/MAU2C	190	100	0.5	6	10x10	10	10	8.5
VAV2	ALDES	ZRTS-2-6-24CAR3L6R6	MAU1C/MAU2C	100	100	0.5	6	10x10	10	10	8.5

SEQUENCE OF OPERATIONS: WHEN IN NORMAL OPERATIONS MODE POWER WILL REMAIN OFF AND THE MINIMUM FLOW CONSTANT AIRFLOW REGULATOR (CAR3L) SHALL REGULATE AIRFLOW TO MIN CFM VALUE. WHEN IN AIM MODE THE MINIMUM FLOW DAMPER SHALL ENERGIZE AND ROTATE OUT OF THE AIRS WAY ALLOWING THE MAX CFM FLOW, CONSTANT AIRFLOW REGULATOR (CAR3L) TO AUTOMATICALLY BALANCE THE SUPPLY RATE TO THE SPECIFIED MAXIMUM CFM AIRFLOW RATE.

NOTES: 24V CONTROLS CONNECTED INTO BAS SYSTEM BY SCHNIEDER CONTROLS. ALL ACCESSORIES TO CONNECT INTO BAS SYSTEM PROVIDED BY CONTROLS CONTRACTOR.

ALTERNATE-1 CRITICAL ENIVRONMENT AIR DEVICE SCHEDULE

MARK	MANUFACTURER	MODEL	SERVICE	STYLE	MODULE SIZE	FRAME	FINISH	MATERIAL	REMARKS
CES1	TITUS	OMNI-AA	SUPPLY	LOUVER	24X24	LAY-IN	WHITE	ALUMINUM	1
CER1	TITUS	50F	RETURN	PERFORATED	24X24	LAY-IN	WHITE	ALUMINUM	1,2
CEE1	TITUS	50F	EXHAUST	PERFORATED	12X12	SURFACE	WHITE	ALUMINUM	1,2
CEE2	TITUS	50F	EXHAUST	PERFORATED	24X24	LAY-IN	WHITE	ALUMINUM	1,2

NOTES: 1. CONTRACTOR IS RESPONSIBLE FOR COORDINATING WITH REFLECTED CEILING PLAN.
2. PROVIDE WITH 1/2"x1/2"x1/2" CORE.

ALTERNATE 1 - FAN FILTER UNIT SCHEDULE

MARK	MANUFACTURER	MODEL	LOCATION	SERVICE	ARRANGEMENT	SUPPLY FAN				ELECTRICAL...		PHYSICAL DATA				REMARKS
						CFM	WATTS	MERV	THICK. (IN.)	V/PH	FLA	L (IN.)	W (IN.)	H (IN.)	WT. (LB.)	
FFU1	PRICE	RSR	CEILING	RESIDENT ROOM	UNDUCTED	300	125	HEPA	2	115/1	2.6	23.625	23.625	12.75	53	ALL
FFU2	PRICE	RSR	CEILING	RESIDENT ROOM	UNDUCTED	300	125	HEPA	2	115/1	2.6	23.625	23.625	12.75	53	ALL
FFU3	PRICE	RSR	CEILING	RESIDENT ROOM	UNDUCTED	300	125	HEPA	2	115/1	2.6	23.625	23.625	12.75	53	ALL
FFU4	PRICE	RSR	CEILING	RESIDENT ROOM	UNDUCTED	300	125	HEPA	2	115/1	2.6	23.625	23.625	12.75	53	ALL
FFU5	PRICE	RSR	CEILING	RESIDENT ROOM	UNDUCTED	300	125	HEPA	2	115/1	2.6	23.625	23.625	12.75	53	ALL
FFU6	PRICE	RSR	CEILING	RESIDENT ROOM	UNDUCTED	300	125	HEPA	2	115/1	2.6	23.625	23.625	12.75	53	ALL
FFU7	PRICE	RSR	CEILING	RESIDENT ROOM	UNDUCTED	300	125	HEPA	2	115/1	2.6	23.625	23.625	12.75	53	ALL
FFU8	PRICE	RSR	CEILING	RESIDENT ROOM	UNDUCTED	300	125	HEPA	2	115/1	2.6	23.625	23.625	12.75	53	ALL
FFU9	PRICE	RSR	CEILING	RESIDENT ROOM	UNDUCTED	300	125	HEPA	2	115/1	2.6	23.625	23.625	12.75	53	ALL
FFU10	PRICE	RSR	CEILING	RESIDENT ROOM	UNDUCTED	300	125	HEPA	2	115/1	2.6	23.625	23.625	12.75	53	ALL

NOTES: 1. BACNET FLOW CONTROLLER
2. CONSTANT FLOW ECM MOTOR
3. FORWARD CURVE FAN WHEEL
4. 8FT 115V POWER CORD
5. MERV 8 PRE-FILTER

ALTERNATE 1 - PREHEATING COIL SCHEDULE

MARK	MANUFACTURER	MODEL	LOCATION	SERVICE	CFM	MAX. FACE VEL. (FPM)	MAX. AIR P.D. (IN. W.C.)	TOTAL CAP. (MBH)	FLOW (GPM)	MAX. FLUID P.D. (FT. W.C.)	EWT (%%D F)	LWT (%%D F)	EAT (%%D F)	LAT (%%D F)	REMARKS
HC1	TRANE	D5WB21020F0AA101EABA00B	C100 MECH	MAU1C	2150	740	0.15	93.7	20	17.75	190	170	0	55	1,2,3

NOTES: 1. INSTALL IN 20X20 OA DUCT SERVING MAU1C.
2. TWO WAY CONTROL VALVE
3. BELL & GOSSET SERIES 60 INLINE CIRCULATION PUMP TO MATCH FLUID PRESSURE DROP AND GPM.

STATE OF MISSOURI
MICHAEL L. PARSON, GOVERNOR

WADE ROSS MEMBER PE-2022026452 PROFESSIONAL ENGINEER

08/15/2024

Farnsworth GROUP

20 ALLEN AVENUE, SUITE 200
ST LOUIS, MISSOURI 63119
(314) 962-7900 / info@f-w.com

Farnsworth Group, Inc.
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MISSOURI VETERANS COMMISSION

UPGRADES AND RENOVATIONS MISSOURI VETERANS HOME

2400 Veterans Memorial Dr.
Cape Girardeau, MO 63701

PROJECT #.: U1805-01
SITE #.: 4703
FACILITY #.: 55020
FAI #.: 29-043

#	DATE:	DESCRIPTION:
1	07/01/2025	Addendum 2

DRAWN BY: SHR/MD
CHECKED BY: DAH
DESIGNED BY: AK

SHEET TITLE:
MECHANICAL SCHEDULES (CONT'D)

SHEET NUMBER:
M-602

SHEET 24 of 29
ISSUE DATE: 08/15/2024

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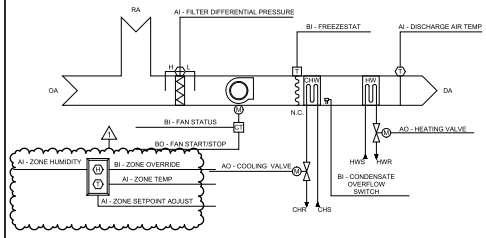


POINT NAME	HARDWARE POINTS AI	AO	BI	BO	SOFTWARE POINTS AV	BV	Loop	Sched	Trend	Alarm	Show on Graphic
Zone Temp	x								x		x
Zone Setpoint Adjustment	x								x		x
Zone Humidity	x								x		x
Filter Differential Pressure									x		x
Discharge Air Temp	x								x		x
Cooling Valve		x							x		x
Heating Valve		x							x		x
Zone Override			x						x		x
Condensate Overflow Switch			x						x	x	x
Freezestat			x						x	x	x
Fan Status			x								x
Fan Start/Stop				x							x
Emergency Shutdown						x			x		x
Schedule								x			
Heating Setpoint									x		x
Cooling Setpoint									x		x
High Zone Temp										x	
Low Zone Temp										x	
Filter Required										x	
High Discharge Air Temp										x	
Low Discharge Air Temp										x	
Fan Failure										x	
Fan in Hand										x	
High Zone Carbon Dioxide..										x	

POINTS INDICATED ABOVE ARE MINIMUM POINTS REQUIRED. CONTRACTOR SHALL PROVIDE ADDITIONAL POINTS AS NEEDED TO COMPLY WITH THE DESIGN INTENT.

SEQUENCE OF OPERATION - FAN COIL UNIT (FCU-118A, 119A, 120A, 121A)

RUN CONDITIONS - SCHEDULED:
THE UNIT SHALL RUN ACCORDING TO A USER DEFINABLE TIME SCHEDULE IN THE FOLLOWING MODES:
- OCCUPIED MODE: THE UNIT SHALL MAINTAIN
- A 74°F (ADJ.) COOLING SETPOINT
- A 70°F (ADJ.) HEATING SETPOINT.

- UNOCCUPIED MODE (NIGHT SETBACK): THE UNIT SHALL MAINTAIN
- A 85°F (ADJ.) COOLING SETPOINT.
- A 55°F (ADJ.) HEATING SETPOINT.

ALARMS SHALL BE PROVIDED AS FOLLOWS:
- HIGH ZONE TEMP: IF THE ZONE TEMPERATURE IS GREATER THAN THE COOLING SETPOINT BY A USER DEFINABLE AMOUNT (ADJ.).
- LOW ZONE TEMP: IF THE ZONE TEMPERATURE IS LESS THAN THE HEATING SETPOINT BY A USER DEFINABLE AMOUNT (ADJ.).

ZONE SETPOINT ADJUST:
THE OCCUPANT SHALL BE ABLE TO ADJUST THE ZONE TEMPERATURE HEATING AND COOLING SETPOINTS AT THE ZONE SENSOR WITHIN PLUS OR MINUS 5 DEGREES.

ZONE UNOCCUPIED OVERRIDE:
A TIMED LOCAL OVERRIDE CONTROL SHALL ALLOW AN OCCUPANT TO OVERRIDE THE SCHEDULE AND PLACE THE UNIT INTO AN OCCUPIED MODE FOR AN ADJUSTABLE PERIOD OF TIME INITIALLY SET TO 120 MINUTES (ADJ.). AT THE EXPIRATION OF THIS TIME, CONTROL OF THE UNIT SHALL AUTOMATICALLY RETURN TO THE SCHEDULE.

EMERGENCY SHUTDOWN:
THE UNIT SHALL SHUT DOWN AND GENERATE AN ALARM UPON RECEIVING AN EMERGENCY SHUTDOWN SIGNAL.

FREEZE PROTECTION:
THE UNIT SHALL SHUT DOWN AND GENERATE AN ALARM UPON RECEIVING A FREEZESTAT STATUS.

CONDENSATE OVERFLOW PROTECTION:
THE UNIT SHALL SHUT DOWN AND GENERATE AN ALARM UPON ACTIVATION OF THE OVERFLOW SWICH LOCATED IN THE CONDENSATE PAN.

FAN:
THE FAN SHALL RUN ANYTIME THE UNIT IS COMMANDED TO RUN, UNLESS SHUTDOWN ON SAFETIES.

COOLING COIL VALVE:
THE CONTROLLER SHALL MEASURE THE ZONE TEMPERATURE AND MODULATE THE COOLING COIL VALVE TO MAINTAIN ITS COOLING SETPOINT.

THE COOLING SHALL BE ENABLED WHENEVER:
- OUTSIDE AIR TEMPERATURE IS GREATER THAN 60°F (ADJ.).
- AND THE ZONE TEMPERATURE IS ABOVE COOLING SETPOINT.
- AND THE FAN IS ON.

HEATING COIL VALVE:
THE CONTROLLER SHALL MEASURE THE ZONE TEMPERATURE AND MODULATE THE HEATING COIL VALVE TO MAINTAIN ITS HEATING SETPOINT.

THE HEATING SHALL BE ENABLED WHENEVER:
- OUTSIDE AIR TEMPERATURE IS LESS THAN 60°F (ADJ.).
- AND THE ZONE TEMPERATURE IS BELOW HEATING SETPOINT.
- AND THE FAN IS ON.

HEATING - HIGH DISCHARGE AIR TEMPERATURE LIMIT:
THE CONTROLLER SHALL MEASURE THE DISCHARGE AIR TEMPERATURE AND, ON RISING TEMPERATURE, MODULATE THE HEATING VALVE TOWARDS THE CLOSED POSITION TO MAINTAIN A DISCHARGE AIR TEMPERATURE OF 95°F
- AS THE DISCHARGE AIR TEMPERATURE RISES FROM 90°F TO 120°F (ADJ.), CONTROLLER SHALL MODULATE THE HEATING VALVE TO THE COMPLETELY CLOSED POSITION.

FILTER DIFFERENTIAL PRESSURE MONITOR:
THE CONTROLLER SHALL MONITOR THE DIFFERENTIAL PRESSURE ACROSS THE FILTER.

ALARMS SHALL BE PROVIDED AS FOLLOWS:
- FILTER CHANGE REQUIRED: FILTER DIFFERENTIAL PRESSURE EXCEEDS A USER DEFINABLE LIMIT (ADJ.).

DEHUMIDIFICATION MODE (LATENT COOLING WITH REHEAT)
- IF SPACE RH EXCEEDS HIGH LIMIT SETPOINT OF 65% ENTER DEHUMIDIFICATION MODE.
- CHILLED WATER VALVE MODULATES OPEN TO LOWER THE SUPPLY AIR TEMPERATURE BELOW THE DEW POINT (50F-55F) TO REMOVE MOISTURE FROM THE AIR.
- ONCE DESIRED RELATIVE HUMIDITY IS REACHED OR FALLS BELOW LOW LIMIT 55% EXIT DEHUMIDIFICATION MODE
- LOW LIMIT PROTECTION: IF DISCHARGE AIR TEMPERATURE DROPS BELOW 50F LIMIT CHILLED WATER VALVE OR CYCLE REHEAT
- DEHUMIDIFICATION/REHEAT DURING OCCUPIED HOURS ONLY.

REHEAT ACTIVATION
- TO PREVENT OVERCOOLING OF THE SPACE HOT WATER VALVE MODULATES TO MAINTAIN THE ZONE TEMPERATURE SETPOINT

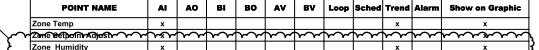
DISCHARGE AIR TEMPERATURE
THE CONTROLLER SHALL MONITOR THE DISCHARGE AIR TEMPERATURE.

ALARMS SHALL BE PROVIDED AS FOLLOWS:
- HIGH DISCHARGE AIR TEMP: IF THE DISCHARGE AIR TEMPERATURE IS GREATER THAN 120° F (ADJ.).
- LOW DISCHARGE AIR TEMP: IF THE DISCHARGE AIR TEMPERATURE IS LESS THAN 40°F (ADJ.).

FAN STATUS:
THE CONTROLLER SHALL MONITOR THE FAN STATUS.

ALARMS SHALL BE PROVIDED AS FOLLOWS:
- FAN FAILURE: COMMANDED ON, BUT THE STATUS IS OFF.
- FAN IN HAND: COMMANDED OFF, BUT THE STATUS IS ON.
- FAN RUNTIME EXCEEDED: FAN STATUS RUNTIME EXCEEDS A USER DEFINABLE LIMIT (ADJ.).

4 FAN COIL UNIT CONTROLS
Scale: No Scale



POINT NAME	HARDWARE POINTS AI	AO	BI	BO	SOFTWARE POINTS AV	BV	Loop	Sched	Trend	Alarm	Show on Graphic
Zone Temp	x								x		x
Heating Enable / Disable				x					x		x
Schedule								x			
Heating Setpoint									x		x
Low Zone Temp										x	

POINTS INDICATED ABOVE ARE MINIMUM POINTS REQUIRED. CONTRACTOR SHALL PROVIDE ADDITIONAL POINTS AS NEEDED TO COMPLY WITH THE DESIGN INTENT.

SEQUENCE OF OPERATION:

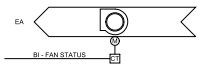
RUN CONDITIONS - SCHEDULED:
THE UNIT SHALL RUN ACCORDING TO A USER DEFINABLE TIME SCHEDULE IN THE FOLLOWING MODES:
- OCCUPIED MODE: THE UNIT SHALL MAINTAIN A HEATING SETPOINT OF 70°F (ADJ.).
- UNOCCUPIED MODE (NIGHT SETBACK): THE UNIT SHALL MAINTAIN A HEATING SETPOINT OF 60°F (ADJ.).

ALARMS SHALL BE PROVIDED AS FOLLOWS:
- LOW ZONE TEMP: IF THE ZONE TEMPERATURE IS LESS THAN THE HEATING SETPOINT BY A USER DEFINABLE AMOUNT (ADJ.).

ELECTRIC HEATING STAGES:
BUILDING AUTOMATION SYSTEM SHALL MEASURE THE ZONE TEMPERATURE AND STAGE THE UNIT ON AND OFF TO MAINTAIN THE SPACE HEATING SETPOINT. TO PREVENT SHORT CYCLING, THERE SHALL BE A USER DEFINABLE (ADJ.) DELAY BETWEEN ON AND OFF MINIMUM RUNTIME.

THE HEATING SHALL BE ENABLED WHENEVER:
- OUTSIDE AIR TEMPERATURE IS LESS THAN 60°F (ADJ.).
- AND THE ZONE TEMPERATURE IS BELOW HEATING SETPOINT.

3 CONVECTIVE ELECTRIC FIN TUBE HEATER CONTROLS
Scale: No Scale



POINT NAME	HARDWARE POINTS AI	AO	BI	BO	SOFTWARE POINTS AV	BV	Loop	Sched	Trend	Alarm	Show on Graphic
Fan Status			x						x		x
Fan Start/Stop				x					x		x
Fan Failure										x	
Fan in Hand										x	

POINTS INDICATED ABOVE ARE MINIMUM POINTS REQUIRED. CONTRACTOR SHALL PROVIDE ADDITIONAL POINTS AS NEEDED TO COMPLY WITH THE DESIGN INTENT.

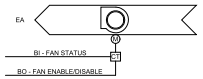
SEQUENCE OF OPERATION (EF-1)

FAN:
FAN SHALL BE INTERLOCKED WITH THE LIGHT SWITCH IN THE SPACE THAT THE FAN IS SERVING. FAN SHALL RUN CONTINUOUSLY WHEN THE LIGHT STATUS IS ON.

FAN STATUS:
THE CONTROLLER SHALL MONITOR THE FAN STATUS.

ALARMS SHALL BE PROVIDED AS FOLLOWS:
- FAN FAILURE: COMMANDED ON, BUT THE STATUS IS OFF.
- FAN IN HAND: COMMANDED OFF, BUT THE STATUS IS ON.

2 TOILET AND BARBER SHOP EXHAUST FANS CONTROLS
Scale: No Scale



POINT NAME	HARDWARE POINTS AI	AO	BI	BO	SOFTWARE POINTS AV	BV	Loop	Sched	Trend	Alarm	Show on Graphic
Fan Status			x						x		x
Fan Start/Stop				x					x		x
Fan Failure										x	
Fan in Hand										x	

POINTS INDICATED ABOVE ARE MINIMUM POINTS REQUIRED. CONTRACTOR SHALL PROVIDE ADDITIONAL POINTS AS NEEDED TO COMPLY WITH THE DESIGN INTENT.

SEQUENCE OF OPERATION (EF-14C, EF-15B, EF-16A)

FAN:
BUILDING AUTOMATION SYSTEM SHALL ENABLE THE FAN TO RUN CONTINOUSLY, UNLESS SHUT DOWN ON SAFETIES.

FAN STATUS:
THE CONTROLLER SHALL MONITOR THE FAN STATUS.

ALARMS SHALL BE PROVIDED AS FOLLOWS:
- FAN FAILURE: COMMANDED ON, BUT THE STATUS IS OFF.
- FAN IN HAND: COMMANDED OFF, BUT THE STATUS IS ON.

1 OXYGEN STORAGE ROOM EXHAUST FANS CONTROLS
Scale: No Scale

STATE OF MISSOURI
MICHAEL L. PARSON, GOVERNOR

WADE LOSS NUMBER PE-2022026452 PROFESSIONAL ENGINEER
08/15/2024

Farnsworth GROUP
20 ALLEN AVENUE, SUITE 200
ST LOUIS, MISSOURI 63119
(314) 962-7900 / info@f-w.com
Farnsworth Group, Inc.
Missouri State Certificate of Authority #000744
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MISSOURI VETERANS COMMISSION

UPGRADES AND RENOVATIONS MISSOURI VETERANS HOME

2400 Veterans Memorial Dr.
Cape Girardeau, MO 63701

PROJECT #.: U1805-01
SITE #.: 4703
FACILITY #.: 55020
FAI #.: 29-043

#	DATE:	DESCRIPTION:
1	07/01/2025	Addendum 2

DRAWN BY: SHR/MD
CHECKED BY: DAH
DESIGNED BY: AK

SHEET TITLE:
CONTROLS DIAGRAMS

SHEET NUMBER:
M-604

SHEET 26 of 29
ISSUE DATE: 08/15/2024

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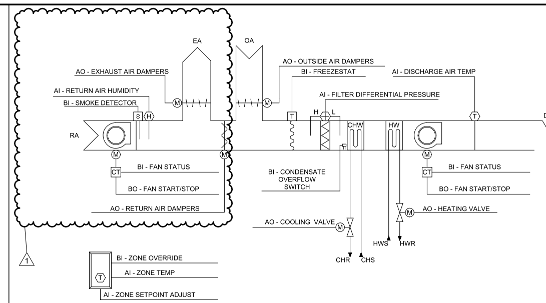

	HARDWARE POINTS				SOFTWARE POINTS						
POINT NAME	AI	AO	BI	BO	AV	BV	Loop	Sched	Trend	Alarm	Show on Graphic
Zone Temp	x								x		x
Zone Setpoint Adjust	x										x
Return Air Humidity	x								x		x
Filter Differential Pressure	x								x		x
Discharge Air Temp	x								x		x
Cooling Valve		x							x		x
Heating Valve		x							x		x
Exhaust Air Dampers		x							x		x
Return Air Damper		x							x		x
Outside Air Damper		x							x		x
Freezestat			x						x	x	x
Condensate Overflow Switch			x						x	x	x
Smoke Detector			x						x	x	x
Return Fan Status			x								x
Supply Fan Status			x								x
Supply Fan Start/Stop				x					x		x
Return Fan Start/Stop				x					x		x
Emergency Shutdown						x			x		x
Schedule								x			
Heating Setpoint									x		x
Cooling Setpoint									x		x
High Zone Temp										x	
Low Zone Temp										x	
Filter Required										x	
High Discharge Air Temp										x	
Low Discharge Air Temp										x	
Return Fan Failure										x	
Supply Fan Failure										x	
Supply Fan in Hand										x	
Return Fan in Hand										x	

POINTS INDICATED ABOVE ARE MINIMUM POINTS REQUIRED. CONTRACTOR SHALL PROVIDE ADDITIONAL POINTS AS NEEDED TO COMPLY WITH THE DESIGN INTENT.

SEQUENCE OF OPERATION - AIR HANDLING UNIT (AHU-29 AND AHU-30)

RUN CONDITIONS - SCHEDULED:
THE UNIT SHALL RUN ACCORDING TO A USER DEFINABLE TIME SCHEDULE IN THE FOLLOWING MODES:
- OCCUPIED MODE: THE UNIT SHALL MAINTAIN
- A 74°F (ADJ.) COOLING SETPOINT
- A 70°F (ADJ.) HEATING SETPOINT.

- UNOCCUPIED MODE (NIGHT SETBACK): THE UNIT SHALL MAINTAIN
- A 85°F (ADJ.) COOLING SETPOINT.
- A 55°F (ADJ.) HEATING SETPOINT.

ALARMS SHALL BE PROVIDED AS FOLLOWS:
- HIGH ZONE TEMP: IF THE ZONE TEMPERATURE IS GREATER THAN THE COOLING SETPOINT BY A USER DEFINABLE AMOUNT (ADJ.).
- LOW ZONE TEMP: IF THE ZONE TEMPERATURE IS LESS THAN THE HEATING SETPOINT BY A USER DEFINABLE AMOUNT (ADJ.).

EMERGENCY SHUTDOWN:
THE UNIT SHALL SHUT DOWN AND GENERATE AN ALARM UPON RECEIVING AN EMERGENCY SHUTDOWN SIGNAL.

CONDENSATE OVERFLOW PROTECTION:
THE UNIT SHALL SHUT DOWN AND GENERATE AN ALARM UPON ACTIVATION OF THE OVERFLOW SWICH LOCATED IN THE CONDENSATE PAN.

FREEZE PROTECTION:
- THE UNIT SHALL SHUT DOWN AND GENERATE AN ALARM UPON RECEIVING A FREEZESTAT STATUS.
- BAS SHALL MODULATE CLOSE THE HEATING AND COOLING COIL VALVES AND SEND AN ALARM AT THE OWS.

SMOKE DETECTION:
THE UNIT SHALL SHUT DOWN AND GENERATE AN ALARM UPON RECEIVING A SMOKE DETECTOR STATUS.

SUPPLY AND RETURN FANS:
THE FAN SHALL RUN ANYTIME THE UNIT IS COMMANDED TO RUN, UNLESS SHUTDOWN ON SAFETIES.

COOLING COIL VALVE:
THE CONTROLLER SHALL MEASURE THE ZONE TEMPERATURE AND MODULATE THE COOLING COIL VALVE TO MAINTAIN ITS COOLING SETPOINT.

THE COOLING SHALL BE ENABLED WHENEVER:
- OUTSIDE AIR TEMPERATURE IS GREATER THAN 60°F (ADJ.).
- AND THE ZONE TEMPERATURE IS ABOVE COOLING SETPOINT.
- AND THE FAN IS ON.

THE COOLING COIL VALVE SHALL OPEN WHENEVER THE FREEZESTAT IS ON.

HEATING COIL VALVE:
THE CONTROLLER SHALL MEASURE THE ZONE TEMPERATURE AND MODULATE THE HEATING COIL VALVE TO MAINTAIN THE SPACE HEATING SETPOINT.

THE HEATING SHALL BE ENABLED WHENEVER:
- OUTSIDE AIR TEMPERATURE IS LESS THAN 60°F (ADJ.).
- AND THE ZONE TEMPERATURE IS BELOW HEATING SETPOINT.
- AND THE FAN IS ON.

THE HEATING COIL VALVE SHALL OPEN WHENEVER THE FREEZESTAT (IF PRESENT) IS ON.

HEATING - HIGH DISCHARGE AIR TEMPERATURE LIMIT:
THE CONTROLLER SHALL MEASURE THE DISCHARGE AIR TEMPERATURE AND, ON RISING TEMPERATURE, LIMIT THE HEATING AS FOLLOWS:
- AS THE DISCHARGE AIR TEMPERATURE RISES FROM 90°F TO 120°F (ADJ.),
- THE CONTROLLER SHALL LIMIT THE HEATING OUTPUT FROM 100% TO 0% (ADJ.).

ECONOMIZER:
THE CONTROLLER SHALL MEASURE THE ZONE TEMPERATURE AND MODULATE THE MIXED AIR DAMPERS IN SEQUENCE TO MAINTAIN THE ZONE COOLING SETPOINT. THE OUTSIDE AIR DAMPERS SHALL MAINTAIN A MINIMUM ADJUSTABLE POSITION OF 20% (ADJ.) OPEN WHENEVER OCCUPIED.

THE ECONOMIZER SHALL BE ENABLED WHENEVER:
- OUTSIDE AIR TEMPERATURE IS AT LEAST 3°F (ADJ.) LESS THAN THE ZONE TEMPERATURE.
- AND THE OUTSIDE AIR TEMPERATURE IS LESS THAN 75°F (ADJ.)

THE OUTSIDE AIR DAMPER SHALL CLOSE WHENEVER THE FREEZESTAT IS ON.

THE OUTSIDE AIR DAMPERS SHALL CLOSE AND THE RETURN AIR DAMPER SHALL OPEN WHEN THE UNIT IS OFF. IF OPTIMAL START UP IS AVAILABLE THE MIXED AIR DAMPER SHALL OPERATE AS DESCRIBED IN THE OCCUPIED MODE EXCEPT THAT THE OUTSIDE AIR DAMPER SHALL MODULATE TO FULLY CLOSED.

MINIMUM OUTSIDE AIR VENTILATION - CARBON DIOXIDE (CO_2) CONTROL:
WHEN IN THE OCCUPIED MODE, THE CONTROLLER SHALL MEASURE THE ZONE CO_2 LEVELS AND MODULATE THE OUTSIDE AIR DAMPER OPEN FROM MINIMUM POSTION ON RISING CO_2 CONCENTRATIONS, OVERRIDING NORMAL DAMPER OPERATION AS CO_2 CONCENTRATIONS RISE FROM 750PPM TO 800PPM (ADJ.) AND ABOVE.

FILTER DIFFERENTIAL PRESSURE MONITOR:
THE CONTROLLER SHALL MONITOR THE DIFFERENTIAL PRESSURE ACROSS THE FILTER.

DEHUMIDIFICATION:
THE CONTROLLER SHALL MEASURE THE RETURN AIR HUMIDITY AND OVERRIDE THE COOLING SEQUENCE TO MAINTAIN RETURN AIR HUMIDITY AT OR BELOW 60% RH (ADJ.). DEHUMIDIFICATION SHALL BE ENABLED WHENEVER THE SUPPLY FAN STATUS IS ON.

ALARMS SHALL BE PROVIDED AS FOLLOWS:
- FILTER CHANGE REQUIRED: FILTER DIFFERENTIAL PRESSURE EXCEEDS A USER DEFINABLE LIMIT (ADJ.).

DISCHARGE AIR TEMPERATURE:
THE CONTROLLER SHALL MONITOR THE DISCHARGE AIR TEMPERATURE.

ALARMS SHALL BE PROVIDED AS FOLLOWS:
- HIGH DISCHARGE AIR TEMP: IF THE DISCHARGE AIR TEMPERATURE IS GREATER THAN 120°F (ADJ.).
- LOW DISCHARGE AIR TEMP: IF THE DISCHARGE AIR TEMPERATURE IS LESS THAN 40°F (ADJ.).

FAN STATUS:
THE CONTROLLER SHALL MONITOR THE FAN STATUS.

ALARMS SHALL BE PROVIDED AS FOLLOWS:
- FAN FAILURE: COMMANDED ON, BUT THE STATUS IS OFF.
- FAN IN HAND: COMMANDED OFF, BUT THE STATUS IS ON.
- FAN RUNTIME EXCEEDED: FAN STATUS RUNTIME EXCEEDS A USER DEFINABLE LIMIT (ADJ.).

1 **AIR HANDLING UNITS CONTROLS**
Scale: No Scale

STATE OF MISSOURI
MICHAEL L. PARSON, GOVERNOR

08/15/2024

Farnsworth GROUP
20 ALLEN AVENUE, SUITE 200
ST LOUIS, MISSOURI 63119
(314) 962-7900 / info@f-w.com
Farnsworth Group, Inc.
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OFFICE OF ADMINISTRATION
DIVISION OF FACILITIES MANAGEMENT, DESIGN AND CONSTRUCTION

MISSOURI VETERANS COMMISSION

UPGRADES AND RENOVATIONS MISSOURI VETERANS HOME

2400 Veterans Memorial Dr.
Cape Girardeau, MO 63701

PROJECT #.: U1805-01
SITE #.: 4703
FACILITY #.: 55020
FAI #.: 29-043

#	DATE:	DESCRIPTION:
1	07/01/2025	Addendum 2

DRAWN BY: SHR/MD
CHECKED BY: DAH
DESIGNED BY: AK

SHEET TITLE:
CONTROLS DIAGRAMS

SHEET NUMBER:
M-605

SHEET 27 of 29
ISSUE DATE: 08/15/2024

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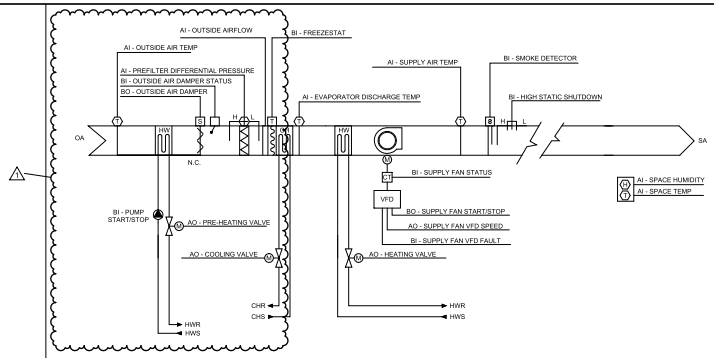

POINT NAME	HARDWARE POINTS AI	AO	BI	BO	SOFTWARE POINTS AV	BV	Loop	Sched	Trend	Alarm	Show on Graphic
Outside Air Temp	x								x		x
Prefilter Differential Pressure	x								x		
Final Filter Differential Pressure	x								x		
Supply Air Temp	x								x		x
Outside Air Airflow	x								x		x
Outside Air Temp	x								x		x
Evaporator Discharge Temp	x								x		x
Space Temp	x								x		x
Space Humidity	x								x		x
Cooling Valve		x							x		x
Pre-Heating Valve		x							x		x
Freeze Protection Pump			X								X
Heating Valve		x							x		x
Supply Fan VFD Speed		x							x		x
Freezestat			x						x	x	x
Smoke Detector			x						x	x	x
Outside Air Damper Status			x						x		x
Supply Fan Status			x						x		x
Supply Fan VFD Speed			x						x		x
High Static Shutdown			x							x	x
Outside Air Damper				x					x		x
Supply Air Damper				x							
Space Dewpoint Temp					x				x		x
Space Dewpoint Temp Setpoint					x				x		x
Supply Dewpoint Setpoint					x				x		x
Supply Air Temp Setpoint					x				x		x
Emergency Shutdown						x			x	x	x
Schedule								x			
Outside Air Damper Failure										x	
Outside Air Damper in Hand										x	
Supply Fan Failure										x	
Supply Fan in Hand										x	
Supply Fan Runtime Exceeded										x	
Prefilter Change Required										x	x
Final Filter Change Required										x	x
High Supply Air Temp										x	
Low Supply Air Temp										x	

SEQUENCE OF OPERATION - MAKEUP AIR UNIT - SUPPLY AIR TEMP (TYPICAL OF (2) MAU-1C, MAU-2C)

RUN CONDITIONS - CONTINIOUS:
THE UNIT SHALL RUN CONTINUOUSLY.

EMERGENCY SHUTDOWN:
- THE UNIT SHALL SHUT DOWN AND GENERATE AN ALARM UPON RECEIVING AN EMERGENCY SHUTDOWN SIGNAL.

HI DUCT STATIC:
- UNIT SHALL SHUT DOWN AND GENERATE AN ALARM ON HIGH DUCT STATIC PRESSURE STATUS.

FREEZE PROTECTION:
- THE UNIT SHALL SHUT DOWN AND GENERATE AN ALARM UPON RECEIVING A FREEZESTAT STATUS.

SMOKE DETECTION:
- THE UNIT SHALL SHUT DOWN AND GENERATE AN ALARM UPON RECEIVING A SMOKE DETECTOR STATUS.

OUTSIDE AIR DAMPER:
- THE OUTSIDE AIR DAMPER SHALL OPEN ANYTIME THE UNIT RUNS AND SHALL CLOSE ANYTIME THE UNIT STOPS. THE SUPPLY FAN SHALL START ONLY AFTER THE DAMPER STATUS HAS PROVEN THE DAMPER IS OPEN. THE OUTSIDE AIR DAMPER SHALL CLOSE 45SEC (ADJ.) AFTER THE SUPPLY FAN STOPS.

ALARMS SHALL BE PROVIDED AS FOLLOWS:
- OUTSIDE AIR DAMPER FAILURE: COMMANDED OPEN, BUT THE STATUS IS CLOSED.
- OUTSIDE AIR DAMPER IN HAND: COMMANDED CLOSED, BUT THE STATUS IS OPEN.

OPERATION IN NORMAL MODE:
- ONLY MAU-2C TO OPERATE WHEN IN NORMAL MODE.
- FAN SPEED SHALL BE MODULATED TO MAINTAIN CFM AT AIRFLOW MEASURING STATION AS FILTERS LOAD.

OPERATION IN AIRBORNE INFECTION ISOLATION MODE (AIIM):
- ONLY MAU-1C TO OPERATE WHEN IN (AIIM) MODE.
- FAN SPEED SHALL BE MODULATED TO MAINTAIN CFM AT AIRFLOW MEASURING STATION AS FILTERS LOAD.

SUPPLY FAN:
- THE SUPPLY FAN SHALL RUN ANYTIME THE UNIT IS COMMANDED TO RUN. TO PREVENT SHORT CYCLING, THE SUPPLY FAN SHALL HAVE A USER DEFINABLE (ADJ.) MINIMUM RUNTIME, UNLESS SHUTDOWN ON SAFETIES.

ALARMS SHALL BE PROVIDED AS FOLLOWS:
- SUPPLY FAN FAILURE: COMMANDED ON, BUT THE STATUS IS OFF.
- SUPPLY FAN IN HAND: COMMANDED OFF, BUT THE STATUS IS ON.
- SUPPLY FAN RUNTIME EXCEEDED: STATUS RUNTIME EXCEEDS A USER DEFINABLE LIMIT (ADJ.).

SUPPLY AIR TEMPERATURE SETPOINT:
THE CONTROLLER SHALL MONITOR THE SUPPLY AIR TEMP AND SHALL MAINTAIN SUPPLY AIR TEMP SETPOINT OF 72 DEGF.(ADJ).

COOLING MODE:
THE CONTROLLER SHALL MEASURE THE SUPPLY AIR TEMP AND MODULATE THE COOLING VALVE TO MAINTAIN ITS COOLING SETPOINT OF SUPPLY AIR SETPOINT PLUS 2 DEGF.

COOLING MODE SHALL BE ENABLED WHENEVER:
- OUTSIDE AIR TEMP IS GREATER THAN THE SUPPLY AIR SETPOINT PLUS 2 DEGF.
- AND THE SUPPLY AIR TEMP IS ABOVE COOLING SETPOINT.
- AND THE FAN STATUS IS ON.

THE COOLING VALVE SHALL OPEN TO 50% (ADJ.) WHENEVER THE FREEZESTAT IS ON.

HEATING MODE:
THE CONTROLLER SHALL MEASURE OUTSIDE AIR TEMPERATURE AND ENABLE FREEZE PROTECTION PUMP VALVE ANYTIME OUTSIDE AIR IS BELOW 38°F. CONTROLLER SHALL MODULATE PRE-HEATING VALVE TO MAINTAIN EVAPORATOR DISCHARGE TEMP OF 55°F. THE CONTROLLER SHALL MEASURE THE SUPPLY AIR TEMP AND MODULATE THE HEATING VALVE TO MAINTAIN ITS HEATING SETPOINT.

TRANSITIONING BETWEEN SET-POINTS:
IF THE DISCHARGE AIR TEMP IS BETWEEN THE HEATING AND COOLING SET-POINT, THE LAST ACTIVE SET-POINT IS USED

THE HEATING SHALL BE ENABLED WHENEVER:
- OUTSIDE AIR TEMP IS LESS THAN THE SUPPLY AIR SETPOINT MINUS 2 DEGF.
- AND THE SUPPLY AIR TEMP IS BELOW HEATING SETPOINT.
- AND THE FAN STATUS IS ON.

THE PRE-HEATING VALVE SHALL OPEN TO 100% (ADJ.) WHENEVER THE FREEZESTAT IS ON.

PREFILTER DIFFERENTIAL PRESSURE MONITOR:
THE CONTROLLER SHALL MONITOR THE DIFFERENTIAL PRESSURE ACROSS THE PREFILTER.

ALARMS SHALL BE PROVIDED AS FOLLOWS:
- PREFILTER CHANGE REQUIRED: PREFILTER DIFFERENTIAL PRESSURE EXCEEDS A USER DEFINABLE LIMIT (ADJ.).

SUPPLY AIR TEMP:
THE CONTROLLER SHALL MONITOR THE SUPPLY AIR TEMP.

ALARMS SHALL BE PROVIDED AS FOLLOWS:
- HIGH SUPPLY AIR TEMP: IF THE SUPPLY AIR TEMP IS GREATER THAN 120°F (ADJ.).
- LOW SUPPLY AIR TEMP: IF THE SUPPLY AIR TEMP IS LESS THAN 45°F (ADJ.).

SPACE DEWPOINT CONTROL:
- WHEN SPACE DEW POINT IS GREATER THAN THE SPACE DEW POINT SET POINT OF 55 DEG F (ADJ.) PLUS 2 DEG F THEN SPACE DEW POINT CONTROL IS ENABLED. SPACE DEW POINT CONTROL OVERRIDES COOLING MODE AND HEATING MODE. SPACE DEWPOINT CONTROL IS DISABLED WHEN SPACE DEW POINT FALLS BELOW THE SPACE DEW POINT SET POINT.
- SPACE DEWPOINT IS CALCULATED USING SPACE TEMP AND SPACE HUMIDITY.
- WHEN SPACE DEWPOINT CONTROL IS ENABLED THE CONTROLER SHALL MONITOR THE EVAPORATOR DISCHARGE TEMP AND MODULATE THE COOLING COIL VALVE TO MAINTAIN THE EVAPORATOR DISCHARGE TEMP TO THE SUPPLY DEWPOINT SETPOINT OF 55 DEG F(ADJ.) AND MODULATE THE HEATING COIL VALVE TO MAINTAIN THE SUPPLY AIR TEMP TO THE SUPPLY AIR TEMPERATURE SETPOINT.

1 **ALT 1 MAKEUP AIR UNIT - SUPPLY AIR TEMP CONTROLS**
Scale: No Scale

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MICHAEL L. PARSON, GOVERNOR

WADE LOSS NUMBER PE-2012026432 PROFESSIONAL ENGINEER

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1	07/01/2025	Addendum 2

DRAWN BY:	SHR/MD
CHECKED BY:	DAH
DESIGNED BY:	AK

SHEET TITLE:
INFECTIOUS DISEASE CONTROLS DIAGRAMS

SHEET NUMBER:
M-607

SHEET 29 of 29
ISSUE DATE: 08/15/2024

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GENERAL SYMBOLS

- AHU 1 — MECHANICAL EQUIPMENT CALL-OUT- REFER TO THE EQUIPMENT DATA SCHEDULE FOR DETAILS
- GWH1 — PLUMBING EQUIPMENT CALL-OUT: REFER TO THE EQUIPMENT DATA SCHEDULE FOR DETAILS
- # — KEYED NOTE
- 100A4G — FEEDER CALL-OUT
- 1 — FOOD SERVICE EQUIPMENT DESIGNATION
- Room name 101A — ROOM NUMBER
- REVISION CALL-OUT
- NEW EQUIPMENT (TYPICAL)
- EXISTING EQUIPMENT (TYPICAL)
- DEMOLITION EQUIPMENT (TYPICAL)
- WALL MOUNT BRACKET (TYPICAL)

WIRING AND CONDUITS

- CONDUIT - CONCEALED IN SUSPENDED CEILING OR WALL
- CONDUIT - EXPOSED
- CONDUIT - CONCEALED BELOW SLAB OR GRADE
- CONDUIT - TURNING UP
- CONDUIT - TURNING DOWN
- CONDUIT - UP AND DOWN (CHANGE IN ELEVATION)
- CONDUIT - CONTINUED
- CONDUIT - FLEXIBLE
- CONDUIT - CAPPED
- J — JUNCTION BOX
- J — JUNCTION BOX - EMERGENCY POWER
- CONDUIT FITTING (CONDULET)
- EXPANSION FITTING
- SEALING FITTING
- CABLE TRAY

COMMUNICATIONS SYMBOLS (FOR ROUGH-IN ONLY WITH 1" CONDUIT TO ACCESSIBLE CEILING

- TTB — TELEPHONE TERMINAL BACKBOARD (PROVIDE WITH 3/4" FIRERATED PLYWOOD)
- COMMUNICATIONS OUTLET - WALL MOUNTED 18" A.F.F
- AC — ABOVE COUNTER COMMUNICATIONS OUTLET
- COMMUNICATIONS OUTLET - FLUSH FLOOR MOUNTED
- COMMUNICATIONS OUTLET - CEILING MOUNTED
- WIFI — WIRELESS ACCESS POINT

POWER SYMBOLS

- BRANCH CIRCUIT PANELBOARD - SURFACE MOUNTED
- BRANCH CIRCUIT PANELBOARD - FLUSH MOUNTED
- DISTRIBUTION PANELBOARD OR SWITCHBOARD
- T — TRANSFORMER
- T — POLE MOUNTED TRANSFORMER
- MOTOR CONTROL CENTER
- CONTROL PANEL
- GROUND BAR
- UTILITY KILOWATT-HOUR METER
- SAFETY SWITCH - NON-FUSIBLE
- SAFETY SWITCH - FUSIBLE
- MAGNETIC STARTER
- VFD — COMBINATION STARTER VFD VARIABLE FREQUENCY DRIVE
- EQUIPMENT - MOTOR
- DUPLEX RECEPTACLE (NEMA 5-20R) - MOUNTED 18" AFF
  - GFI GROUND FAULT CIRCUIT INTERRUPTER
  - SS SURGE SUPPRESSOR (ISOLATED GROUND TYPE)
  - WP WEATHERPROOF
  - H HOSPITAL GRADE
  - TP TAMPER PROOF
  - D DEDICATED
  - USB STANDARD DUPLEX WITH 2 USB PORTS
- AC — DUPLEX RECEPTACLE - MOUNTED 6" ABOVE COUNTER
- DUPLEX RECEPTACLE - SPLIT WIRED - MOUNTED 18" AFF
- DUPLEX RECEPTACLE - EMERGENCY POWER - MOUNTED 18" AFF
- DUPLEX RECEPTACLE - CEILING MOUNTED
- DUPLEX RECEPTACLE - FLUSH FLOOR MOUNTED
- QUADRUPLEX RECEPTACLE - MOUNTED 18" AFF
- AC — QUADRUPLEX RECEPTACLE - MOUNTED 6" ABOVE COUNTER
- QUADRUPLEX RECEPTACLE - FLUSH FLOOR MOUNTED
- SINGLE RECEPTACLE - MOUNTED 18" AFF
- SPECIAL PURPOSE RECEPTACLE - MOUNTED 18" AFF
- SPECIAL PURPOSE RECEPTACLE - CEILING MOUNTED
- SPECIAL PURPOSE RECEPTACLE - FLUSH FLOOR MOUNTED
- FLOOR BOX - SEE SPECS OR KEYED NOTES ON PLAN FOR DETAILS
- PP — POWER POLE
- CEILING FAN
- HAND DRYER
- B — PUSH BUTTON

NURSE CALL SYMBOLS

- NCCP — NURSE CALL CONTROL PANEL
- N # — NURSE CALL DEVICE
  - P PULL CORD
  - B BED STATION
  - D DUTY STATION
  - M MASTER STATION
- NURSE CALL DOME LIGHT

LIGHTING SYMBOLS

- A — LUMINAIRE TYPE
- LUMINAIRE - RECESSED (REFER TO LUMINAIRE SCHEDULE)
- 1LP-1a NL — CONNECTED FOR NIGHT LIGHT USE; CIRCUIT NUMBER AND SWITCH LEG (LUMINAIRES ARE CONTROLLED BY LOCAL SWITCH UNLESS DESIGNATION GIVEN); PANEL NAME
- LUMINAIRE - SURFACE MOUNTED
- RECESSED LUMINAIRE CONNECTED TO THE EMERGENCY POWER SYSTEM OR BALLAST/DRIVER
- OPEN INDUSTRIAL LUMINAIRE
- OPEN INDUSTRIAL LUMINAIRE EMERGENCY POWER SYSTEM OR BALLAST/DRIVER
- WALL MOUNTED LUMINAIRE
- RECESSED DOWNLIGHT - CEILING MOUNTED
- RECESSED DOWNLIGHT w/ EMERGENCY BALLAST/DRIVER - CEILING MTD.
- SURFACE MOUNTED DOWNLIGHT
- RECESSED ADJUSTABLE/WALLWASH - CEILING MOUNTED
- POLE MOUNTED SITE LIGHTING - SINGLE HEAD
- POLE MOUNTED SITE LIGHTING - DUAL HEAD
- POLE MOUNTED SITE LIGHTING - TRIPLE HEAD
- POLE MOUNTED SITE LIGHTING - QUAD HEAD
- LINEAR PENDANT
- PENDANT
- TRACK LIGHTING
- EXIT SIGN - SINGLE FACE, CEILING MOUNTED ARROW INDICATES DIRECTION OF EXIT
- EXIT SIGN - SINGLE FACE, WALL MOUNTED
- EXIT SIGN - DUAL FACE, CEILING MOUNTED
- EXIT SIGN - DUAL FACE, WALL MOUNTED
- EXIT SIGN WITH EMERGENCY LIGHT ARROW INDICATES DIRECTION OF EXIT
- EMERGENCY LIGHT
- $a — TOGGLE SWITCH - MOUNTED 48" AFF
  - b LOWER CASE LETTER DENOTES LTG. SWITCH GROUP
  - 2 DOUBLE-POLE SINGLE-THROW (DPST)
  - 3 3-WAY
  - 4 4-WAY
  - B PUSHBUTTON
  - D DIMMER (WALL BOX TYPE)
  - K KEY OPERATED
  - M MANUAL MOTOR STARTER
  - P PILOT LIGHT
  - T TIMER
  - TT THERMAL TRIP SWITCH
  - WP WEATHERPROOF
  - OS WALL BOX OCCUPANCY SENSOR
  - OS2 WALL BOX OCCUPANCY SENSOR FOR TWO LEVEL SWITCHING
  - VS WALL BOX VACANCY SENSOR
  - LV LOW VOLTAGE SWITCH
  - TC TEACHER CONTROLS STATION
  - TE TEACHER ENTRY STATION
  - MC MOMENTARY CONTAT SWITCH
- OS a — CEILING MOUNTED DUAL TECHNOLOGY OCCUPANCY SENSOR; a LOWER CASE LETTER DENOTES LTG. SWITCH GROUP
- DL a — CEILING MOUNTED DAYLIGHT SENSOR; a LOWER CASE LETTER DENOTES LTG. SWITCH GROUP
- VS a — CEILING MOUNTED DUAL TECHNOLOGY VACANCY SENSOR; a LOWER CASE LETTER DENOTES LTG. SWITCH GROUP
- PC — PHOTOCELL
- RC — ROOM CONTROLLER
- LC1 — LIGHTING CONTACTOR
- LRP — LIGHTING RELAY PANEL
- INV — INVERTER

FIRE ALARM SYMBOLS

- FCP — MAIN CONTROL PANEL (FCP)
  - FCP F/A MAIN CONTROL PANEL
  - FSA FIRE SYSTEM ANNUNCIATOR
  - FTR F/A TRANSPONDER OR TRANSMITTER
  - ESR ELEVATOR STATUS RECALL
  - FRP F/A RELAY PANEL
  - FAC F/A COMMUNICATOR
  - FPS FIRE ALARM ANNUNCIATION CIRCUIT POWER SUPPLY
- F — MANUAL PULL STATION - MOUNTED 46" AFF
- S P — SMOKE DETECTOR
  - P PHOTOELECTRIC
  - PL PLENUM SMOKE DETECTOR
  - S SOUNDER BASE
- D — DUCT DETECTOR HOUSING AND SAMPLING TUBE
- H R — THERMAL (HEAT) DETECTOR
  - R RATE OF RISE ONLY
  - F FIXED TEMPERATURE
  - L LINE TYPE FIXED TEMPERATURE CABLE
  - ALL HEAT DETECTORS SHALL BE 135°, COMBINATION TYPE UNLESS INDICATED OTHWERWISE.
- DP — SUPERVISORY SWITCH - DRY-PIPE PRESSURE SWITCH
- TS — SUPERVISORY SWITCH - TAMPER SWITCH
- WF — SUPERVISORY SWITCH - WATER FLOW SWITCH
- CONTROL DEVICE - DOOR HOLD OPEN
- C — ADDRESSABLE INTERFACE MODULE
  - C CONTROL
  - M MONITORING
  - S SIGNALLING
  - V SOLENOID VALVE
  - R RELAY
- C — NOTIFICATION APPLIANCE MOUNTED 80" AFF OR 6" FROM CEILING WHICHEVER IS LOWER
  - C CHIME
  - H HORN
  - LF LOW FREQUENCY
  - B BELL
- 75 — NOTIFICATION APPLIANCE - STROBE ONLY MOUNTED 80" AFF
  - CANDELA VALUE AS SHOWN MINIMUM
- C 75 — NOTIFICATION APPLIANCE WITH STROBE MOUNTED 80" AFF OR 6" FROM CEILING WHICHEVER IS LOWER
  - CANDELA VALUE AS SHOWN MINIMUM
  - C CHIME
  - H HORN
  - LF LOW FREQUENCY
- SHUNT TRIP PUSH BUTTON - MOUNTED 46" AFF
- C 75 — NOTIFICATION APPLIANCE (CEILING)
  - C CHIME STROBE
  - H HORN STROBE
  - LF LOW FREQUENCY
  - CANDELA VALUE AS SHOWN MINIMUM
- CO — CARBON MONOXIDE DETECTOR
- 75 — CEILING MOUNTED COMBINATION VOICE EVACUATION SPEAKER AND STROBE
  - CANDELA VALUE AS SHOWN MINIMUM
- H 75 — COMBINATION VOICE EVACUATION SPEAKER AND STROBE MOUNTED AT 80" AFF
  - CANDELA VALUE AS SHOWN MINIMUM
- $RTS — REMOTE TEST SWITCH

SPECIAL SYSTEMS SYMBOLS

- ACCP — ACCESS CONTROL CONTROL PANEL
- DVR — DVR AND RACK
- CR — CARD READER - MOUNTED 48" AFF WITH 3/4" CONDUIT
  - K WITH KEY PAD
- ES — ELECTRIC STRIKE WITH 3/4" CONDUIT
- ML — ELECTRO-MAGNETIC LOCK WITH 3/4" CONDUIT
- VM — VIDEO MONITOR, FLAT SCREEN LCD WITH 3/4" CONDUIT
- DC — DOOR STATUS SWITCH WITH 3/4" CONDUIT
- MS — MOTION DETECTOR WITH 3/4" CONDUIT
- PS — POWER SUPPLY FOR PTZ CAMERA WITH 3/4" CONDUIT
- PS4 — 4-CHANNEL CAMERA POWER SUPPLY WITH 3/4" CONDUIT
- INDOOR FIXED CAMERA WITH 3/4" CONDUIT
  - PTZ PAN TILT ZOOM
  - WP WEATHERPROOF
- TV — TV OUTLET WITH 3/4" CONDUIT - MOUNTED 18" AFF
- HANDICAP DOOR OPERATORS - SEE ARCHITECURALS WITH 3/4" CONDUIT
- GB — GLASS BREAK SENSOR WITH 3/4" CONDUIT
- V — VOLUME CONTROLLER - MOUNTED 48" AFF WITH 3/4" CONDUIT
- S — CEILING MOUNTED SPEAKER
- S — WALL MOUNTED SPEAKER
- IMS — INTERCOM MASTER STATION
- I — INTERCOM REMOTE STATION
  - P PEDESTAL MOUNT
  - S HIGH SECURITY
  - G GENERAL USE
- DOOR BELL PUSH BUTTON
- DB — DOOR BELL
- C — CLOCK
- C C — DOUBLE SIDED CLOCK
- RX — REQUEST TO EXIT
- K — KEYPAD AND KEY SWITCH

ONE-LINE DIAGRAM SYMBOLS

- SERVICE DROP
- PANEL ### — PANELBOARD
- T-1 45 KVA 3Ø 208Y/120VAC — DELTA-WYE TRANSFORMER
- G # KVA/KW 480Y/277V, 3Ø, 4W — GENERATOR
- # A # POLES — AUTOMATIC TRANSFER SWITCH
- GROUND
- # AF # AT — CIRCUIT BREAKER
- # AF # AT — DRAWOUT CIRCUIT BREAKER
- M # A — METER
- CURRENT TRANSFORMER
- POTENTIAL TRANSFORMER
- G — GROUND FAULT PROTECTED BREAKER
- ST — SHUNT TRIP BREAKER
- # A — SWITCH
- FUSE
- CONTACTOR
- THERMAL OVERLOAD
- 49 — ELECTRONIC OVERLOAD
- SPD — SURGE PROTECTION DEVICE
- VFD — VARIABLE FREQUENCY DRIVE
- K — KIRK KEY INTERLOCK
- DPM — DIGITAL POWER METER

ELECTRICAL FLOOR PLAN SYMBOLS (NOT ALL SYMBOLS ARE USED IN CONSTRUCTION DOCUMENTS)

Scale: No Scale

7/10/2025 12:13:56 PM

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DRAWN BY:	KMA
CHECKED BY:	WRK
DESIGNED BY:	TLA

SHEET TITLE:

ELECTRICAL SYMBOLS

SHEET NUMBER:

E-001

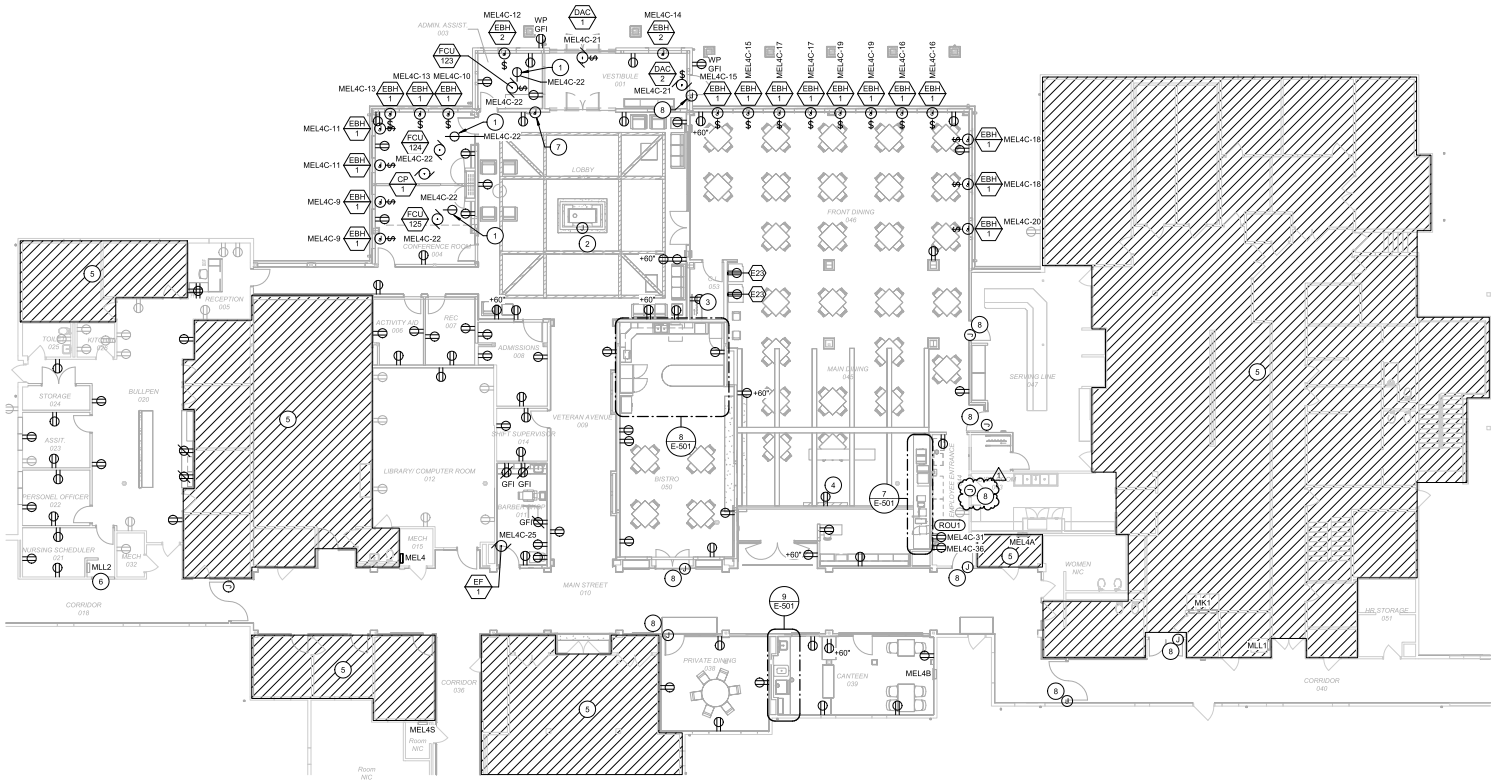
SHEET of
ISSUE DATE: 08/15/2024

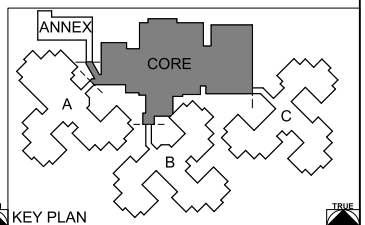
KEYNOTES (#)

1 PROVIDE SINGLE 5-20R RECEPTACLE MOUNTED TO SIDE OF FCU TO POWER CONDENSATE PUMP.
2 POWER CONNECTION FOR FIREPLACE IGNITOR.
3 CONTACTOR FOR STOVE.
4 PROVIDE POWER CONNECTION FOR EXISTING BINGO BOARD. COORDINATE MOUNTING HEIGHT WITH ARCHITECTUAL TRADE AND OWNER.
5 NO WORK IN THIS AREA.
6 REINSTALL EXISTING PANEL IN NEW LOCATION. RECONNECT ALL EXISTING CIRCUITS. REVISE CIRCUIT BREAKER LOCATIONS AS REQUIRED AND UPDATE PANEL SCHEDULE.
7 PROVDE POWER FOR FIREPLACE CONTROLLER SWITCH.
8 PROVIDE POWER FOR DOOR HARDWARE FROM NEAREST LIFE SAFETY ELECTRICAL PANEL. COORDINATE REQUIREMENTS WITH DOOR HARDWARE VENDOR.

GENERAL NOTES

A. EXCEPT AS NOTED, REUSE EXISTING CIRCUITS TO FEED NEW RECEPTACLES.





KEY PLAN
SCALE: NO SCALE

1 POWER PLAN - CORE
Scale: 3/32" = 1'-0"

0 4 8 16

PLAN NORTH | TRUE NORTH

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1	07/10/2025	ADD 02

DRAWN BY: KMA
CHECKED BY: WRK
DESIGNED BY: TLA

SHEET TITLE:
POWER PLAN - CORE

SHEET NUMBER:
E-119

SHEET of
ISSUE DATE: 08/15/2024

7/10/2025 12:14:53 PM

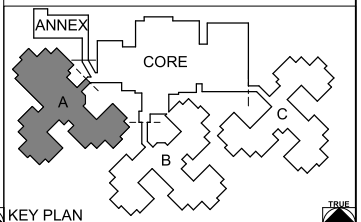
GENERAL NOTES

A. PROVIDE COMBINATION COAXIAL/POWER/DATA RECESSED WALL BOX AT 5'-0" AFF FOR NEW TELEVISION LOCATIONS IN ALL PATIENT ROOMS AS SHOWN.
BASIS OF DESIGN:
LEGRAND TVTWTVSSW.
COORDINATE INSTALLATION WITH ARCHITECTURAL TRADE AND BLOCKING FOR TV MOUNT. EXTEND EXISTING TV POWER CIRCUIT TO NEW LOCATION AS REQUIRED.

B. REINSTALL EXISTING WANDER MANAGEMENT SYSTEM IN SAME LOCATION. COORDINATE WITH ARCHITECT FOR FINISH WORK TO BE COMPLETED FIRST. VERIFY ALL CONNECTIONS ARE MADE TO PROVIDE A COMPLETE AND FULLY FUNCTIONING SYSTEM.

KEYNOTES (#)

1 EXTEND EXISTING CIRCUITS FROM SEMI-PRIVATE A205 TO NEW OUTLETS.
2 RELOCATED RECEPTACLE CIRCUIT, EXTEND EXISTING CONDUIT AND WIRE AS NECESSARY.
3 EXTEND EXISTING CIRCUITS TO NEW FAN COIL UNITS.
4 EXTEND EXISTING CIRCUITS FROM SEMI-PRIVATE A220 AND PRIVATE A218.
5 RECONNECT EXISTING EQUIPMENT IN ORGINAL LOCATION. COORDINATE REINSTALLATION WITH OTHER WORK IN THIS AREA.
6 PROVIDE POWER FOR DOOR HARDWARE FROM NEAREST LIFE SAFETY ELECTRICAL PANEL. COORDINATE REQUIREMENTS WITH DOOR HARDWARE VENDOR.



KEY PLAN
SCALE: NO SCALE

1 **POWER PLAN - WING A**
Scale: 3/32" = 1'-0"

0 4 8 16

PLAN NORTH | TRUE NORTH

STATE OF MISSOURI
MICHAEL L. PARSON, GOVERNOR

07/10/2025

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UPGRADES AND RENOVATIONS MISSOURI VETERANS HOME

2400 Veterans Memorial Dr,
Cape Girardeau, MO 63701

PROJECT #.:	U1805-01
SITE #.:	4703
FACILITY #.:	55020
FAI #.:	29-043

#	DATE:	DESCRIPTION:
1	07/10/2025	ADD 02

DRAWN BY: KMA
CHECKED BY: WRK
DESIGNED BY: TLA

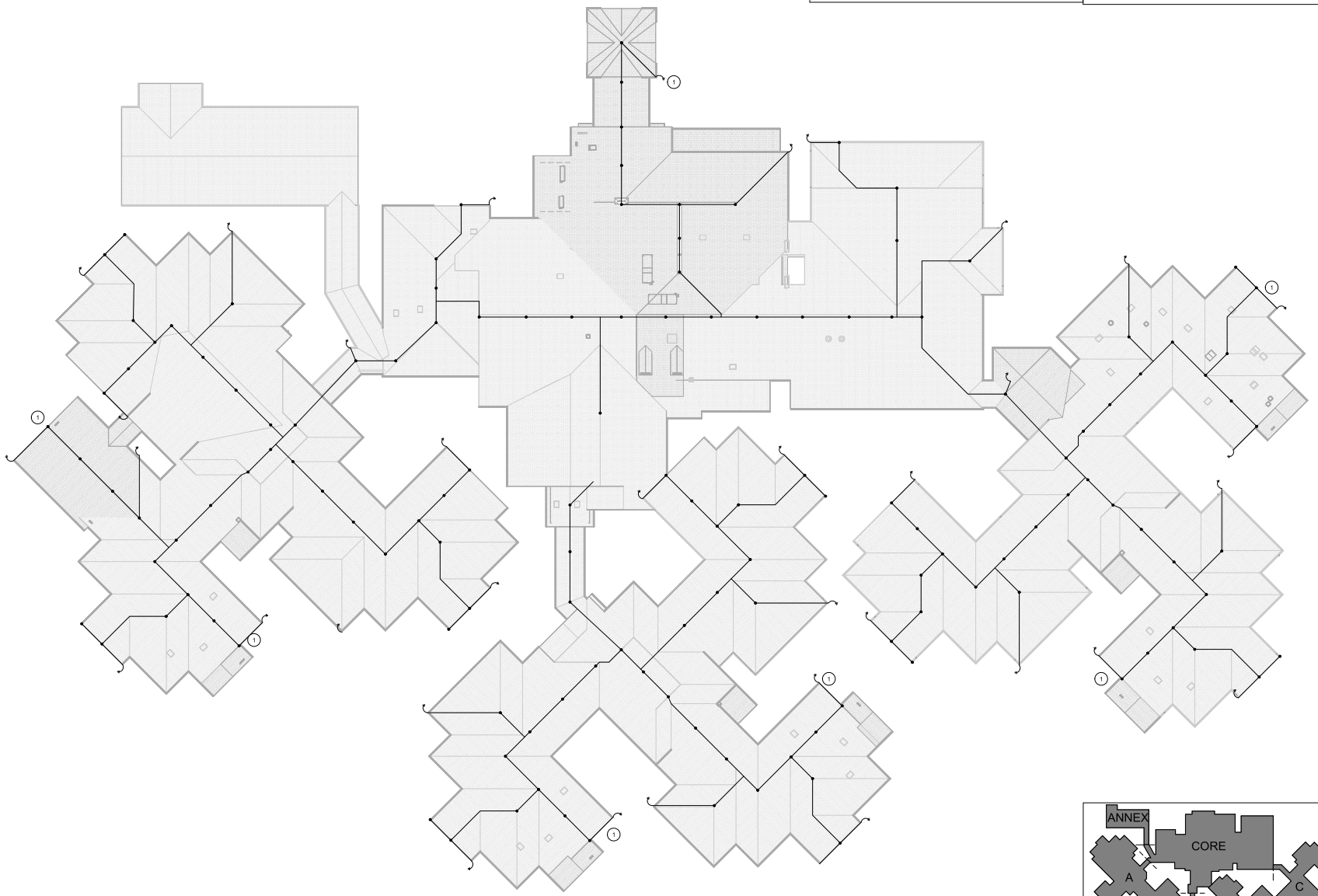
SHEET TITLE:
POWER PLAN - WING A

SHEET NUMBER:
E-120

SHEET of
ISSUE DATE: 08/15/2024

7/10/2025 12:14:45 PM

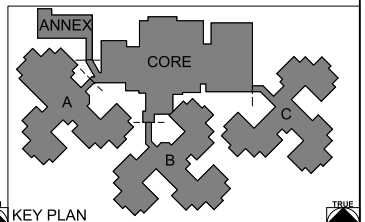
KEYNOTES (#)	GENERAL NOTES
1 EXTEND EXISTING LIGHTNING PROTECTION AS INDICATED. PROVIDE NEW AIR TERMINALS IN LOCATIONS SHOWN.	A. NOT USED



1 **ROOF ELECTRICAL PLAN**
Scale: 1" = 20'-0"

0 10 20 40

PLAN NORTH



KEY PLAN
SCALE: NO SCALE

TRUE NORTH

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PROJECT #.:	U1805-01
SITE #.:	4703
FACILITY #.:	55020
FAI #.:	29-043

#	DATE:	DESCRIPTION:
1	07/10/2025	ADD 02

DRAWN BY: KMA
CHECKED BY: WRK
DESIGNED BY: TLA

SHEET TITLE:
ELECTRICAL ROOF PLAN

SHEET NUMBER:
E-124

SHEET of
ISSUE DATE: 08/15/2024

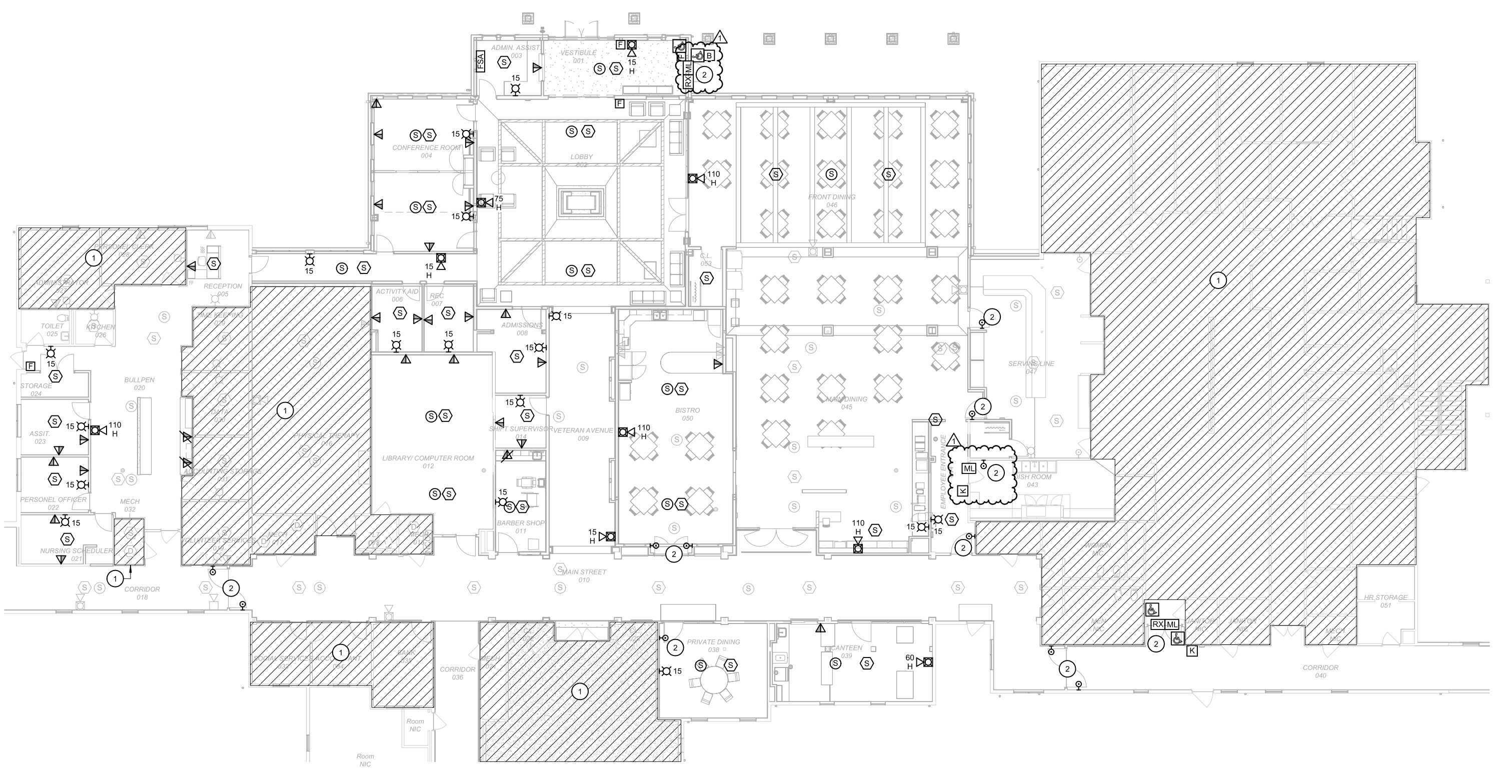
7/10/2025 12:15:12 PM

KEYNOTES

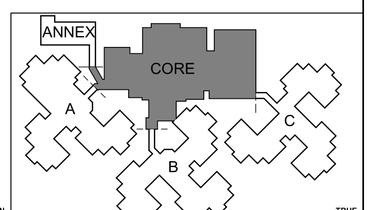
1 NO WORK IN THIS AREA.
2 PROVIDE MONITORING OF AND CONNECTION TO FIRE ALARM SYSTEM AS REQUIRED.

GENERAL NOTES

A. FOR ANY NEW DEVICES REQUIRED, CONTRACTOR SHALL MATCH EXISTING FIRE ALARM AND PA DEVICES.
B. COORDINATE WORK OF FIRE ALARM/PA SYSTEM, NURSE CALL SYSTEM, AND TV SYSTEM WITH OWNER AND OWNER'S VENDOR.
C. COORDINATE ACCESS CONTROL WORK WITH DOOR HARDWARE, OWNER, AND OWNER'S VENDOR. DEVICES SHOWN FOR COORDINATION OF BACKBOXES FOR LOW VOLTAGE ONLY, AS REQUIRED PER DOOR HARDWARE VENDOR.
D. DATA SHOWN TO BE FOR INFRASTRUCTURE ONLY. SEE DETAIL ON SHEET E-501.
E. ALL ABOVE CEILING WIRE/CABLING TO BE PLENUM RATED.



1 SYSTEMS PLAN - CORE
Scale: 3/32" = 1'-0"



KEY PLAN
SCALE: NO SCALE

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PROJECT #.:	U1805-01
SITE #.:	4703
FACILITY #.:	55020
FAI #.:	29-043

#	DATE:	DESCRIPTION:
1	07/10/2025	ADD 02

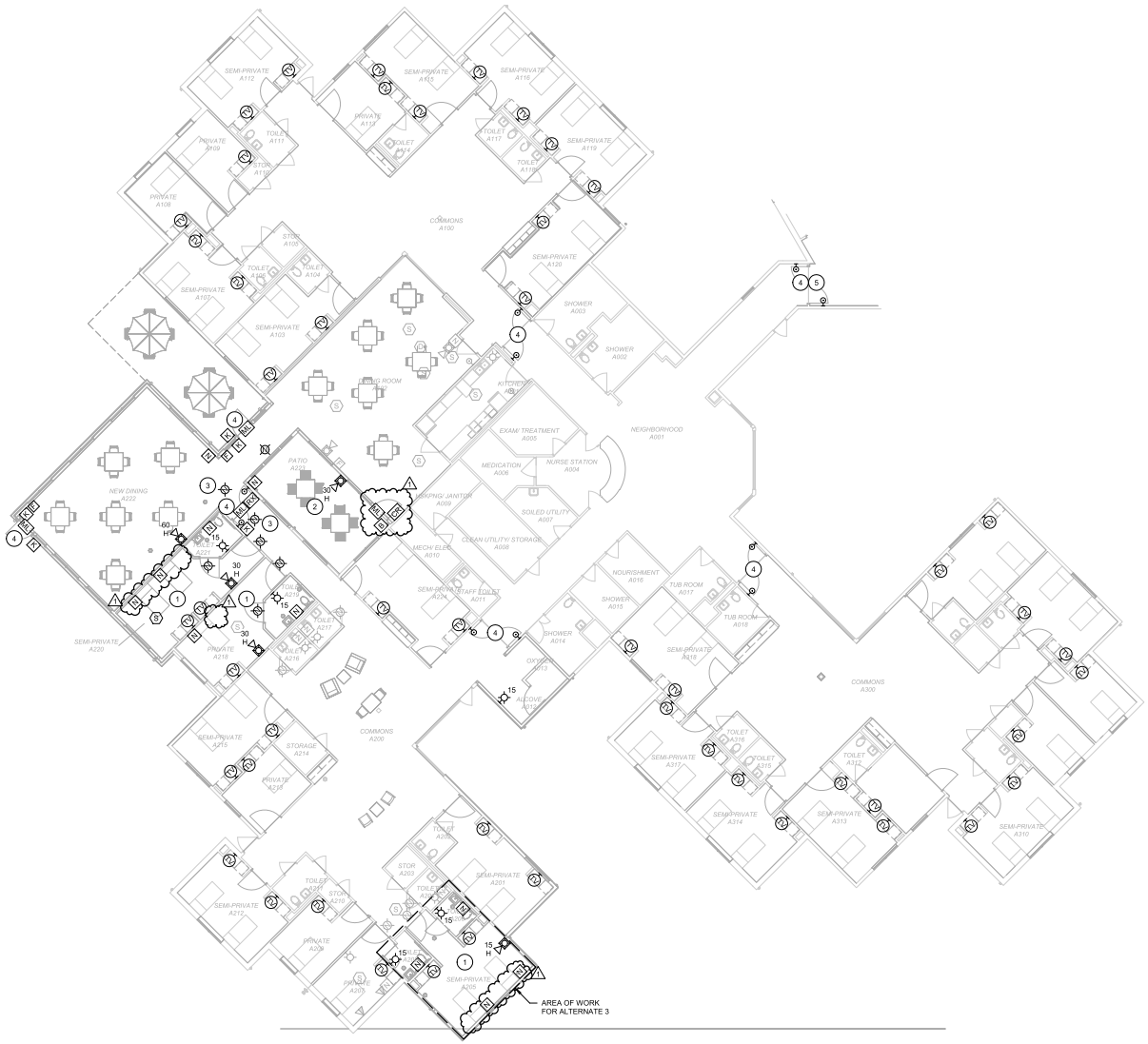
DRAWN BY:	KMA
CHECKED BY:	WRK
DESIGNED BY:	TLA

SHEET TITLE:
SYSTEMS PLAN - CORE

SHEET NUMBER:
E-125

SHEET of
ISSUE DATE: 08/15/2024

7/10/2025 12:15:35 PM



GENERAL NOTES

A. PROVIDE COMBINATION BACKBOX FOR TV IN ALL PATIENTS ROOMS AS NOTED ON SHEET E-126.

B. COORDINATE WORK OF FIRE ALARM/PA SYSTEM, NURSE CALL SYSTEM, AND TV SYSTEM WITH OWNER AND OWNER'S VENDOR. PROVIDE NEW DEVICES TO MATCH...

C. COORDINATE ACCESS CONTROL WORK WITH DOOR HARDWARE, OWNER, AND OWNER'S VENDOR. DEVICES SHOWN FOR COORDINATION OF BACKBOXES FOR LOW VOLTAGE ONLY, AS REQUIRED PER DOOR HARDWARE VENDOR.

D. DATA SHOWN TO BE FOR INFRASTRUCTURE ONLY. SEE DETAIL ON SHEET E-501.

E. ALL ABOVE CEILING WIRE/CABLING TO BE PLENUM RATED.

KEYNOTES (#)

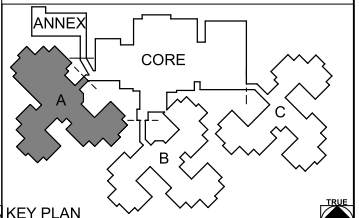
1 RELOCATE NURSE CALL, TV, AND FIRE ALARM DEVICES. EXTEND CABLING TO NEW LOCATIONS.

2 DEVICES IN THIS SPACE SHALL BE OUTDOOR RATED.

3 BOTH DOME LIGHTS INDICATED SHALL ILLUMINATE FOR DINING A222.

4 PROVIDE MONITORING OF AND CONNECTION TO FIRE ALARM SYSTEM AS REQUIRED.

5 REINSTALL EXISTING WANDER MANAGEMENT SYSTEM IN SAME LOCATION. COORDINATE WITH ARCHITECT FOR FINISH WORK TO BE COMPLETED FIRST. VERIFY ALL CONNECTIONS ARE MADE TO PROVIDE A COMPLETE AND FULLY FUNCTIONING SYSTEM.



KEY PLAN
SCALE: NO SCALE

1 SYSTEMS PLAN - WING A
Scale: 3/32" = 1'-0"

0 4 8 16

PLAN NORTH | TRUE NORTH

STATE OF MISSOURI
MICHAEL L. PARSON, GOVERNOR

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PROJECT #.:	U1805-01
SITE #.:	4703
FACILITY #.:	55020
FAI #.:	29-043

#	DATE:	DESCRIPTION:
1	07/10/2025	ADD 02

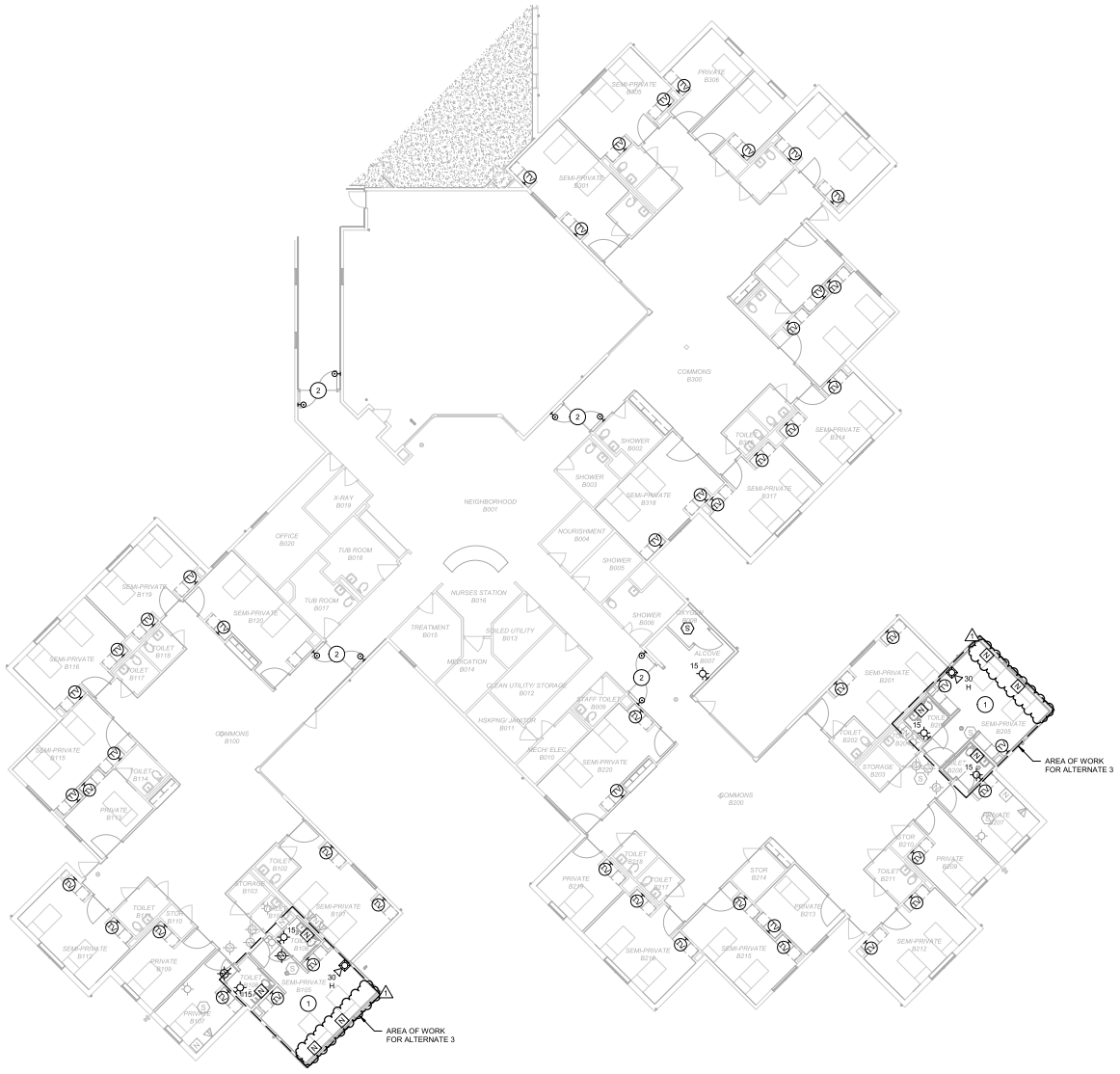
DRAWN BY: KMA
CHECKED BY: WRK
DESIGNED BY: TLA

SHEET TITLE:
SYSTEMS PLAN - WING A

SHEET NUMBER:
E-126

SHEET of
ISSUE DATE: 08/15/2024

7/10/2025 12:13:44 PM



GENERAL NOTES

A. PROVIDE COMBINATION BACKBOX FOR TV IN ALL PATIENTS ROOMS AS NOTED ON SHEET E-121.

B. COORDINATE WORK OF FIRE ALARM/PA SYSTEM, NURSE CALL SYSTEM, AND TV SYSTEM WITH OWNER AND OWNER'S VENDOR. PROVIDE NEW DEVICES TO MATCH...

C. COORDINATE ACCESS CONTROL WORK WITH DOOR HARDWARE, OWNER, AND OWNER'S VENDOR. DEVICES SHOWN FOR COORDINATION OF BACKBOXES FOR LOW VOLTAGE ONLY, AS REQUIRED PER DOOR HARDWARE VENDOR.

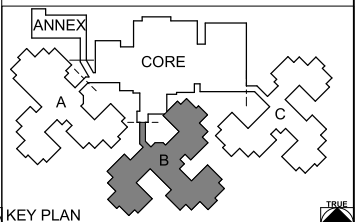
D. DATA SHOWN TO BE FOR INFRASTRUCTURE ONLY. SEE DETAIL ON SHEET E-501.

E. ALL ABOVE CEILING WIRE/CABLING TO BE PLENUM RATED.

KEYNOTES (N)

1 RELOCATE NURSE CALL, TV, AND FIRE ALARM DEVICES. EXTEND CABLING TO NEW LOCATIONS.

2 PROVIDE MONITORING OF AND CONNECTION TO FIRE ALARM SYSTEM AS REQUIRED.



KEY PLAN

SCALE: NO SCALE

1 SYSTEMS PLAN - WING B

Scale: 3/32" = 1'-0"

0 4 8 16

PLAN NORTH

TRUE NORTH

STATE OF MISSOURI
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PROJECT #.:	U1805-01
SITE #.:	4703
FACILITY #.:	55020
FAI #.:	29-043

#	DATE:	DESCRIPTION:
1	07/10/2025	ADD 02

DRAWN BY: KMA
CHECKED BY: WRK
DESIGNED BY: TLA

SHEET TITLE:

SYSTEMS PLAN - WING B

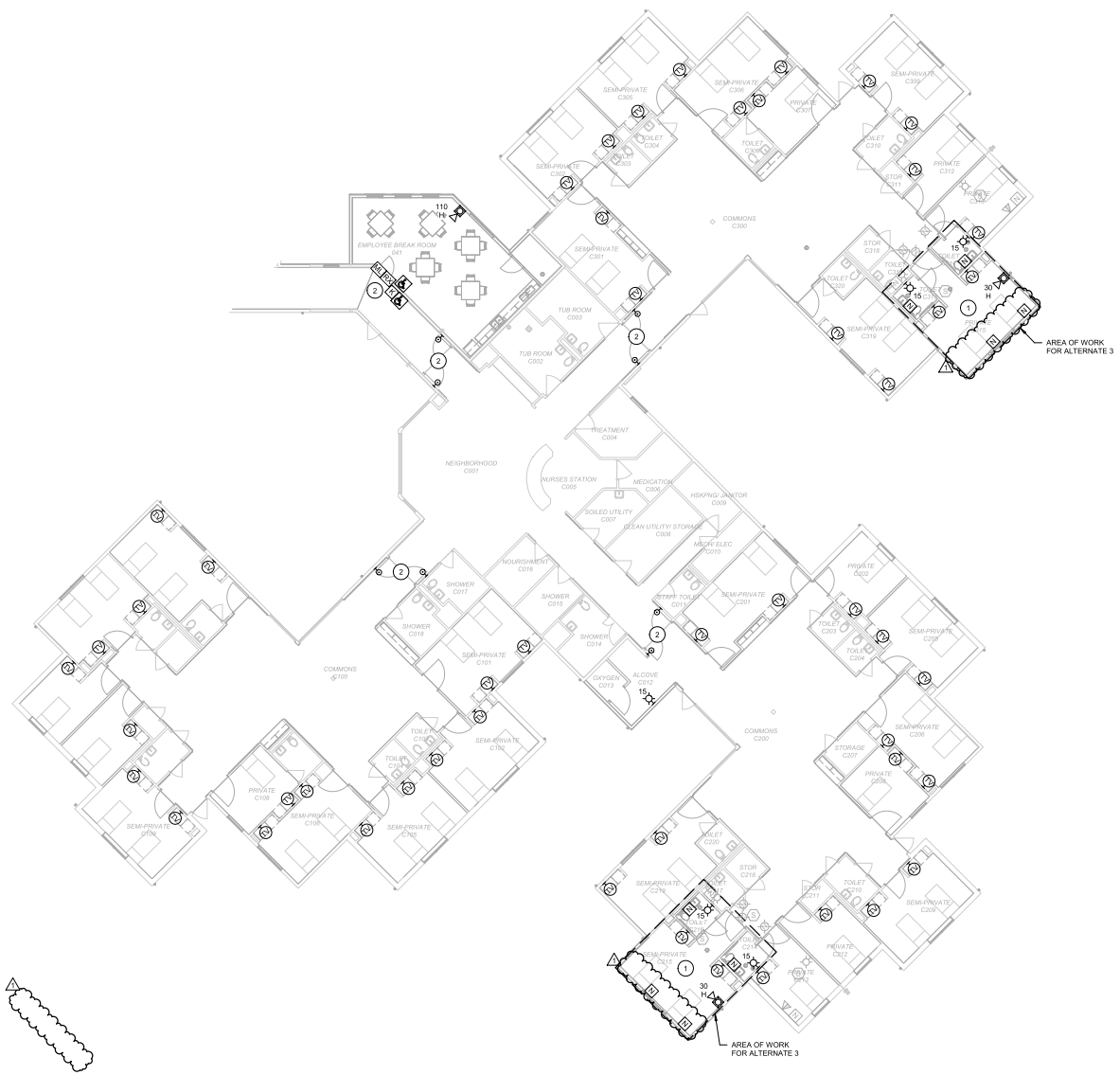
SHEET NUMBER:

E-127

SHEET of

ISSUE DATE: 08/15/2024

7/10/2025 12:15:53 PM



GENERAL NOTES

A. PROVIDE COMBINATION BACKBOX FOR TV IN ALL PATIENTS ROOMS AS NOTED ON SHEET E-123.

B. COORDINATE WORK OF FIRE ALARM/PA SYSTEM, NURSE CALL SYSTEM, AND TV SYSTEM WITH OWNER AND OWNER'S VENDOR. PROVIDE NEW DEVICES TO MATCH EXISTING SYSTEMS.

C. COORDINATE ACCESS CONTROL WORK WITH DOOR HARDWARE, OWNER, AND OWNER'S VENDOR. DEVICES SHOWN FOR COORDINATION OF BACKBOXES FOR LOW VOLTAGE ONLY, AS REQUIRED PER DOOR HARDWARE VENDOR.

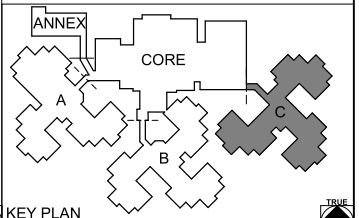
D. DATA SHOWN TO BE FOR INFRASTRUCTURE ONLY. SEE DETAIL ON SHEET E-501.

E. ALL ABOVE CEILING WIRE/CABLING TO BE PLENUM RATED.

KEYNOTES (#)

1 RELOCATE NURSE CALL, TV, AND FIRE ALARM DEVICES. EXTEND CABLING TO NEW LOCATIONS.

2 PROVIDE MONITORING OF AND CONNECTION TO FIRE ALARM SYSTEM AS REQUIRED.



KEY PLAN
SCALE: NO SCALE

1 SYSTEMS PLAN - WING C
Scale: 3/32" = 1'-0"

0 4 8 16

PLAN NORTH

TRUE NORTH

STATE OF MISSOURI
MICHAEL L. PARSON, GOVERNOR

07/10/2025

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PROJECT #.:	U1805-01
SITE #.:	4703
FACILITY #.:	55020
FAI #.:	29-043

#	DATE:	DESCRIPTION:
1	07/10/2025	ADD 02

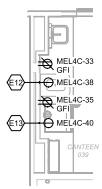
DRAWN BY: KMA
CHECKED BY: WRK
DESIGNED BY: TLA

SHEET TITLE:
SYSTEMS PLAN - WING C

SHEET NUMBER:
E-128

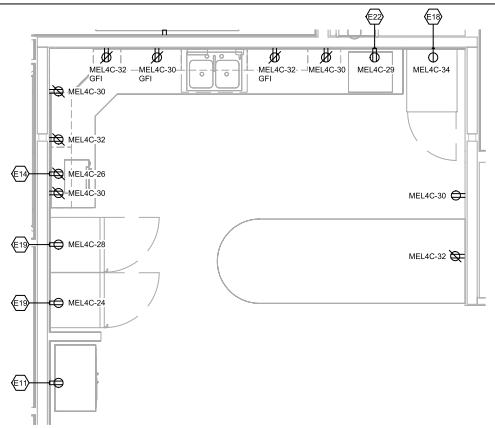
SHEET of
ISSUE DATE: 08/15/2024

7/10/2025 12:18:55 PM



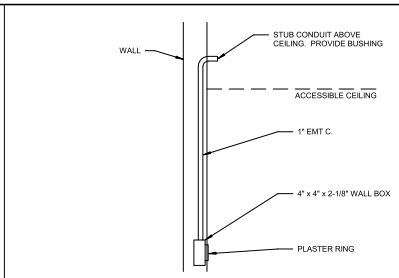
9 ENLARGED CANTEEN POWER PLAN

Scale: 3/16" = 1'-0"



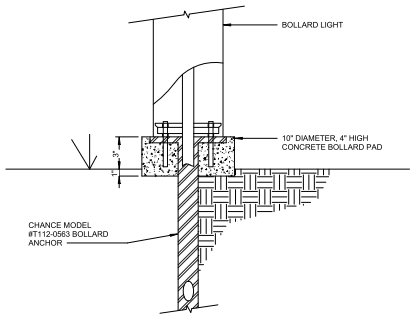
8 BISTRO PLAN

Scale: 3/8" = 1'-0"



4 TYPICAL TELE/DATA OUTLET BOX

Scale: No Scale

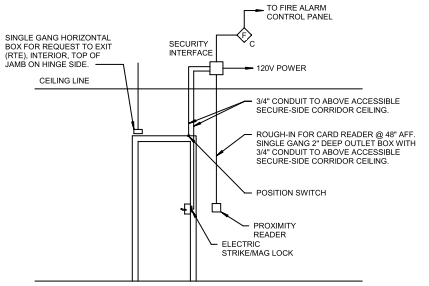


3 BOLLARD FOUNDATION DETAIL

Scale: No Scale

KEYNOTES (#)

2 REUSE AND EXTEND EXISTING CIRCUIT.



NOTES:

A. ALL CONDUIT IS 3/4" UNLESS NOTED OTHERWISE

B. COORDINATE WITH OWNER/ DOOR HARDWARE VENDOR FOR LOCATION OF DEVICES.

C. SEE PLANS FOR LOCATION AND QUANTITY OF DOORS REQUIRING ACCESS CONTROL.

D. SECURED SIDE SHOWN (ALL ROUGH-INS TYPICAL).

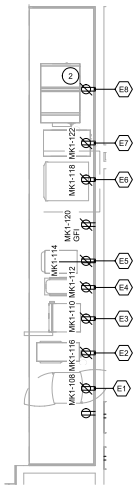
E. DOOR AND FRAME PREP BY GC.

F. CONDUIT AND BOXES BY EC.

G. DEVICES SHOWN ARE FOR INFORMATION ONLY. COORDINATE ACTUAL DEVICES REQUIRED WITH DOOR HARDWARE VENDOR.

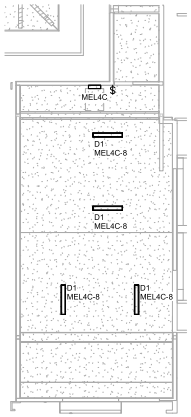
2 ACCESS CONTROL ROUGH-IN

Scale: No Scale



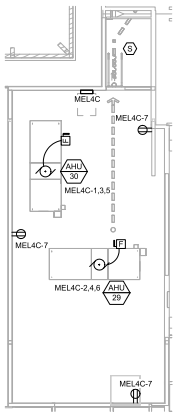
7 MAIN DINING SERVICE LINE PLAN

Scale: 3/8" = 1'-0"



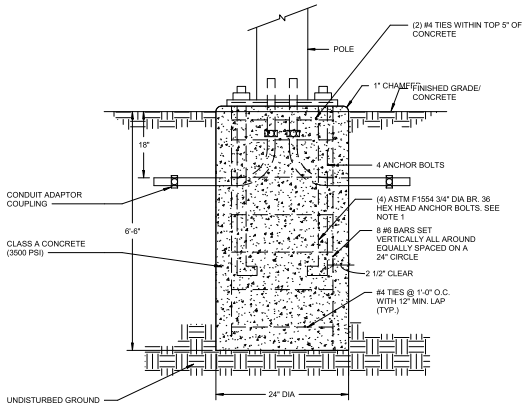
6 MEZZANINE LIGHTING PLAN

Scale: 1/8" = 1'-0"



5 MEZZANINE PLAN

Scale: 1/8" = 1'-0"



NOTES:

1. IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO CHECK AND VERIFY ALL ANCHOR BOLT DIMENSIONS (SIZE, BOLT CIRCLE, ETC.) WITH THE CONTRACTOR WHO WILL BE INSTALLING THE LIGHTING STANDARD PRIOR TO INSTALLATION OF THE FOUNDATIONS.

2. CHAMFER EXPOSED EDGES OF ALL FOUNDATIONS.

3. PROVIDE INSULATING GROUNDING BUSHING ON EXPOSED ENDS (IN BASE OF POLE) OF ALL GALVANIZED STEEL BENDS.

1 LIGHTING POLE FOUNDATION DETAIL

Scale: No Scale

STATE OF MISSOURI
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Cape Girardeau, MO 63701

PROJECT #.: U1805-01
SITE #.: 4703
FACILITY #.: 55020
FAI #.: 29-043

#	DATE:	DESCRIPTION:
1	07/10/2025	ADD 02

DRAWN BY: KMA
CHECKED BY: WRK
DESIGNED BY: TLA

SHEET TITLE:

ELECTRICAL DETAILS

SHEET NUMBER:

E-501

SHEET of
ISSUE DATE: 08/15/2024

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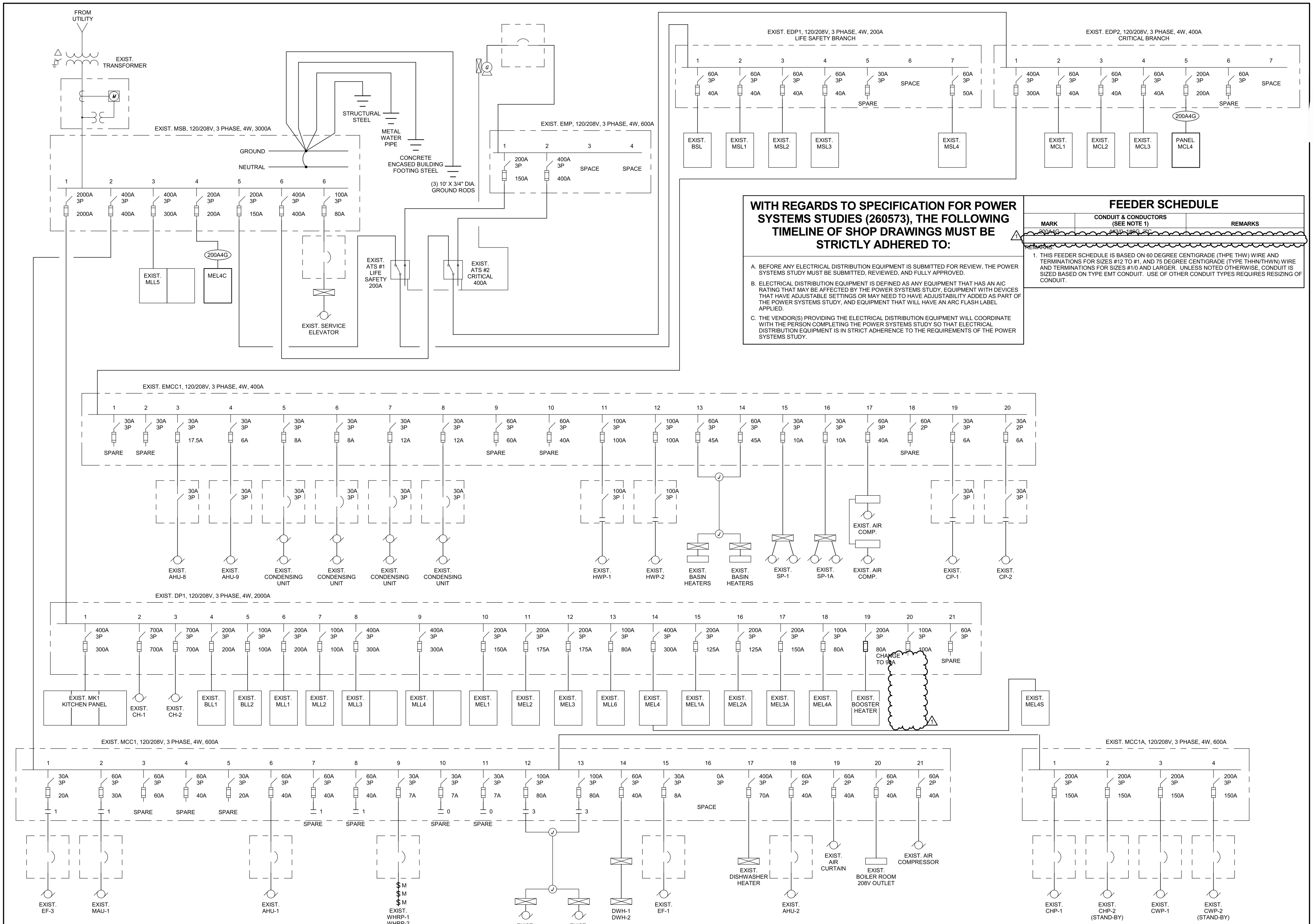

WITH REGARDS TO SPECIFICATION FOR POWER SYSTEMS STUDIES (260573), THE FOLLOWING TIMELINE OF SHOP DRAWINGS MUST BE STRICTLY ADHERED TO:

A. BEFORE ANY ELECTRICAL DISTRIBUTION EQUIPMENT IS SUBMITTED FOR REVIEW, THE POWER SYSTEMS STUDY MUST BE SUBMITTED, REVIEWED, AND FULLY APPROVED.

B. ELECTRICAL DISTRIBUTION EQUIPMENT IS DEFINED AS ANY EQUIPMENT THAT HAS AN AIC RATING THAT MAY BE AFFECTED BY THE POWER SYSTEMS STUDY, EQUIPMENT WITH DEVICES THAT HAVE ADJUSTABLE SETTINGS OR MAY NEED TO HAVE ADJUSTABILITY ADDED AS PART OF THE POWER SYSTEMS STUDY, AND EQUIPMENT THAT WILL HAVE AN ARC FLASH LABEL APPLIED.

C. THE VENDOR(S) PROVIDING THE ELECTRICAL DISTRIBUTION EQUIPMENT WILL COORDINATE WITH THE PERSON COMPLETING THE POWER SYSTEMS STUDY SO THAT ELECTRICAL DISTRIBUTION EQUIPMENT IS IN STRICT ADHERENCE TO THE REQUIREMENTS OF THE POWER SYSTEMS STUDY.

FEEDER SCHEDULE

MARK	CONDUIT & CONDUCTORS (SEE NOTE 1)	REMARKS
200A4G	[illegible]	

REMARKS:

1. THIS FEEDER SCHEDULE IS BASED ON 60 DEGREE CENTIGRADE (THPE THW) WIRE AND TERMINATIONS FOR SIZES #12 TO #1, AND 75 DEGREE CENTIGRADE (TYPE THHN/THWN) WIRE AND TERMINATIONS FOR SIZES #1/0 AND LARGER. UNLESS NOTED OTHERWISE, CONDUIT IS SIZED BASED ON TYPE EMT CONDUIT. USE OF OTHER CONDUIT TYPES REQUIRES RESIZING OF CONDUIT.

1 **ONE-LINE DIAGRAM**
Scale: No Scale

DRAWN BY: KMA
CHECKED BY: WRK
DESIGNED BY: TLA

SHEET TITLE:
ONE-LINE DIAGRAM

SHEET NUMBER:
E-601

SHEET of
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