



ARCHITECTURE • ENGINEERING • INTERIOR DESIGN

## ADDENDUM

**PROJECT:** Bryan Health  
Bryan Medical Center, West  
Independence Center, New Facility  
Lincoln, Nebraska

### ADDENDUM NUMBER

AD-1

### ISSUED BY:

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**PROJECT #:** 11-0101

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*This addendum is issued by the Architect to all known bidders before receipt of proposals, for the purpose of explaining, interpreting, or modifying the original plans and specifications. When enumerated by the bidder upon the proposal sheet, the information or instructions given hereon will be equally binding upon all parties as if included in the original plans and specifications.*  
**BIDDER MUST ENTER THE NUMBER OF THIS ADDENDUM ON HIS PROPOSAL SHEET**

### THE FOLLOWING ITEMS ARE GENERAL INFORMATION:

#### AD-1, ITEM 1:

**In reference to Exterior Sheathing**, install exterior grade plywood sheathing at the one story link between the existing and new building. Install gypsum sheathing on the two story portion of the new building.

### THE FOLLOWING ITEMS ARE APPLICABLE TO THE SPECIFICATIONS:

#### AD-1, ITEM 2:

**In reference to Section 077200, Roof Accessories**, revise Paragraph 2.3.F to read:

Hardware: Galvanized-steel spring latch with turn handles, butt or pintle-type hinge system, vertical telescoping grab bar system to extend above the roof level to meet OSHA requirements and a padlock hasp on the inside and outside.

#### AD-1, ITEM 3:

**In reference to Index of Specifications**, Division 08 – OPENINGS, add Section 083323 - Overhead Coiling Doors.

**AD-1, ITEM 4:**

In reference to **Section 098319, Acoustical Wall Panels**, revise Paragraph 2.2.B.1 to read Rotofast™ Snap-on Anchor Mounting System with number and locations as directed by acoustical wall panel manufacturer.

Delete Paragraph 2.2.B.2 in its entirety.

**AD-1, ITEM 5:**

In reference to specification **Section 230993 – Control Sequences**, Page 230993-3, delete the following:

- 25) Return fan airflow rate.
- 27) Outside air airflow rate.

**AD-1, ITEM 6:**

In reference to specification **Section 230993 – Control Sequences**, Page 230993-6, add the following:

- L. Cabinet Unit Heaters: Upon a call for heat from the space thermostat the three-way control valve shall open and the fan shall be activated, once the thermostat is satisfied the valve shall go to bypass and the fan shall stop.
  - 1. Operator Station Display: Indicate the following on the operator workstation display terminal:
    - a. System graphic.
    - b. Space temperature.
    - c. Space temperature setpoint.
    - d. Valve position.

**AD-1, ITEM 7:**

In reference to specification **Section 237314 - Air Handling Units**, see attached revised section.

**AD-1, ITEM 8:**

In reference to specification **Section 265100 - Interior Lighting**, Page 265100-3, make the following changes:

Article 2.3, Paragraph B, delete verbiage reading "or Osram Sylvania".

Article 2.3, Paragraph G, delete existing verbiage and replace with the following:

"All dimming ballasts shall be by Lutron and have the following requirements:"

**AD-1, ITEM 9:**

In reference to the **Room Finish Schedule found at the end of the specification booklet - Volume I**, see attached revised Room Finish Schedule.

**THE FOLLOWING ITEMS ARE APPLICABLE TO THE DRAWINGS:**

**AD-1, ITEM 10:**

In reference to drawing Sheet S1-1 – Interior Elevations and Details, see attached Supplemental Drawing S1-1.1 partial foundation plan for revisions.

**AD-1, ITEM 11:**

In reference to drawing Sheet A6-2 – Interior Elevations, revise Interior Elevations 27, 29 and 30 as indicated in Supplemental Drawing A6-2.1 attached.

**AD-1, ITEM 12:**

In reference to drawing Sheet A6-3 – Interior Elevations and Details, add Details 33 and 34 as indicated in Supplemental Drawings A6-3.1 and A6-3.2.

**AD-1, ITEM 13:**

In reference to drawing Sheet M5-3 – Mechanical schedules, In the Hot Water Unit Heater Schedule delete CUH-1 and CUH-2.

**END AD-1**

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SECTION 083323 - OVERHEAD COILING DOORS

PART 1 - GENERAL

1.1 SUMMARY

A. Section includes:

1. Counter doors.

1.2 ACTION SUBMITTALS

A. Product Data: For each type and size of overhead coiling door and accessory.

B. Shop Drawings: For each installation and for special components not dimensioned or detailed in manufacturer's product data. Include plans, elevations, sections, details, and attachments to other work.

1. Detail equipment assemblies and indicate dimensions, weights, loads, required clearances, method of field assembly, components, and location and size of each field connection.
2. Wiring Diagrams: For power, signal, and control wiring.

1.3 CLOSEOUT SUBMITTALS

A. Maintenance Data.

1.4 QUALITY ASSURANCE

A. Installer Qualifications: Manufacturer's authorized representative who is trained and approved for both installation and maintenance of units required for this Project.

PART 2 - PRODUCTS

2.1 DOOR CURTAIN MATERIALS AND CONSTRUCTION

A. Door Curtains: Fabricate overhead coiling-door curtain of interlocking metal slats in a continuous length for width of door without splices. Unless otherwise indicated, provide slats of thickness and mechanical properties recommended by door manufacturer for performance, size, and type of door indicated.

B. Bottom Bar for Counter Doors: Manufacturer's standard continuous channel or tubular shape, fabricated from metal to match curtain slats and finish.

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- C. Astragal for Interior Doors: Equip each door bottom bar with a replaceable, adjustable, continuous, compressible gasket of flexible vinyl, rubber, or neoprene as a cushion bumper.
- D. Curtain Jamb Guides: Manufacturer's standard angles or channels and angles of same material and finish as curtain slats unless otherwise indicated, with sufficient depth and strength to retain curtain, to allow curtain to operate smoothly, and to withstand loading. Slot bolt holes for guide adjustment. Provide removable stops on guides to prevent overtravel of curtain.

## 2.2 HOOD

- A. General: Form sheet metal hood to entirely enclose coiled curtain and operating mechanism at opening head. Contour to fit end brackets to which hood is attached. Roll and reinforce top and bottom edges for stiffness. Form closed ends for surface-mounted hoods and fascia for any portion of between-jamb mounting that projects beyond wall face. Equip hood with intermediate support brackets as required to prevent sagging.

## 2.3 COUNTER DOORS

- A. Integral Frame, Hood, and Fascia for Counter Door: Welded sheet metal assembly of all the same material identified below.

## 2.4 LOCKING DEVICES

- A. Slide Bolt: Where locking device is not indicated on the drawings, fabricate with side-locking bolts to engage through slots in tracks for locking by padlock, located on both left and right jamb sides, operable from coil side.
- B. Locking Device Assembly: Where indicated on the drawings, fabricate with cylinder lock, spring-loaded dead bolt, operating handle, cam plate, and adjustable locking bars to engage through slots in tracks.
  - 1. Lock Cylinders: Provide lock assembly compatible with and prepared to receive a Sargent 11 Series cylinder. Cylinder and keys to be provided by Door Hardware Supplier and are specified in 087100 "Door Hardware."
- C. Safety Interlock Switch: Equip power-operated doors with safety interlock switch to disengage power supply when door is locked.

## 2.5 COUNTERBALANCING MECHANISM

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

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- B. Brackets: Manufacturer's standard mounting brackets of either cast iron or cold-rolled steel plate.

**2.6 MANUAL DOOR OPERATORS**

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

**2.7 ELECTRIC DOOR OPERATORS**

- A. General: Electric door operator assembly of size and capacity recommended and provided by door manufacturer for door specified, with electric motor and factory-prewired motor controls, starter, gear-reduction unit, solenoid-operated brake, clutch, remote-control stations, control devices, integral gearing for locking door, and accessories required for proper operation.
  - 1. Comply with NFPA 70.
  - 2. Provide control equipment complying with NEMA ICS 1, NEMA ICS 2, and NEMA ICS 6, with NFPA 70 Class 2 control circuit, maximum 24 V, ac or dc.
- B. Usage Classification: Electric operator and components capable of operating for not less than number of cycles per hour indicated for each door.
- C. Electric Motors: Comply with NEMA designation, temperature rating, service factor, enclosure type, and efficiency requirements unless otherwise indicated.
  - 1. Electrical Characteristics:
    - a. Phase: Single phase.
    - b. Volts: 115 V.
    - c. Hertz: 60.
  - 2. Motor Type and Controller: Reversible motor and controller (disconnect switch) for motor exposure indicated.

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3. Motor Size: Minimum size as indicated. If not indicated, large enough to start, accelerate, and operate door in either direction from any position, at a speed not less than 8 in./sec. (203 mm/s) and not more than 12 in./sec. (305 mm/s), without exceeding nameplate ratings or service factor.
  4. Operating Controls, Controllers (Disconnect Switches), Wiring Devices, and Wiring: Manufacturer's standard unless otherwise indicated.
- D. Obstruction Detection Device: Equip motorized door with indicated external automatic safety sensor capable of protecting full width of door opening.
1. Sensor Edge: Automatic safety sensor edge, located within astragal or weather stripping mounted to bottom bar. Contact with sensor activates device. Connect to control circuit using manufacturer's standard take-up reel or self-coiling cable.
- E. Remote-Control Station: Momentary-contact, three-button control station with push-button controls labeled "Open," "Close," and "Stop."
1. Interior units, full-guarded, surface-mounted, heavy-duty type, with general-purpose NEMA ICS 6, Type 1 enclosure.
- F. Emergency Manual Operation: Equip each electrically powered door with capability for emergency manual operation. Design manual mechanism so required force for door operation does not exceed 25 lbf (111 N).
- G. Emergency Operation Disconnect Device: Equip operator with hand-operated disconnect mechanism for automatically engaging manual operator and releasing brake for emergency manual operation while disconnecting motor without affecting timing of limit switch. Mount mechanism so it is accessible from floor level. Include interlock device to automatically prevent motor from operating when emergency operator is engaged.
- H. Motor Removal: Design operator so motor may be removed without disturbing limit-switch adjustment and without affecting emergency manual operation.

## 2.8 DOOR ASSEMBLY

- A. Counter Door: Overhead coiling door formed with curtain of interlocking metal slats.
1. Basis-of-Design Product: Subject to compliance with requirements, provide Cookson Company Series CD8 or comparable product by one of the following:
    - a. Overhead Door Corporation.
- B. Door Curtain Material: Aluminum.
- C. Door Curtain Slats: Flat profile slats of 1-1/4-inch center-to-center height.
- D. Curtain Jamb Guides: Aluminum with exposed finish matching curtain slats. Provide continuous integral wear strips to prevent metal-to-metal contact and to minimize operational noise.

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- E. Hood: Match curtain material and finish.
  - 1. Shape: Square.
  - 2. Mounting: As shown on Drawings.
- F. Sill Configuration for Counter Door: No sill.
- G. Locking Devices: Equip door with locking device assembly.
  - 1. Locking Device Assembly: Single-jamb side locking bars, operable from inside with cylinder.
- H. Manual Door Operator: Push-up operation.
- I. Electric Door Operator:
  - 1. Usage Classification: Light duty, up to 10 cycles per hour.
  - 2. Motor Exposure: Interior.
  - 3. Emergency Manual Operation: Push-up-type.
  - 4. Obstruction-Detection Device: Automatic electric sensor edge on bottom bar.
  - 5. Remote-Control Station: Where shown on Drawings.
- J. Door Finish:
  - 1. Aluminum Finish: Clear anodized.

**PART 3 - EXECUTION**

**3.1 INSTALLATION**

- A. Install overhead coiling doors and operating equipment complete with necessary hardware, anchors, inserts, hangers, and equipment supports; according to manufacturer's written instructions and as specified.
- B. Adjust hardware and moving parts to function smoothly so that doors operate easily, free of warp, twist, or distortion. Lubricate bearings and sliding parts as recommended by manufacturer.

**3.2 DEMONSTRATION**

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

END OF SECTION 083323

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SECTION 237314 – AIR HANDLING UNITS

PART 1 - GENERAL

1.1 SECTION INCLUDES

- A. Design, performance criteria, controls, and installation requirements for Custom Air Handling Units.

1.2 SUBMITTALS

- A. Submit shop drawings and product data in accordance with Division 1.
- B. Submittals shall include the following:
  - 1. Dimensioned plan and elevation view drawings, including motor starter and control cabinets, required clearances, and location of all field connections.
  - 2. Summary of all auxiliary utility requirements such as: electricity, water, compressed air, etc. Summary shall indicate quality and quantity of each required utility.
  - 3. Ladder type schematic drawing of the power and ancillary utility field hookup requirements, indicating all items that are furnished.
  - 4. Manufacturer's performance of each unit. Selection shall indicate, as a minimum, the following:
    - a. Input data used for selection.
    - b. Model number of the unit.
    - c. Net capacity.
    - d. Rated load amp draw.
    - e. Noise levels produced by equipment.
    - f. Fan curves.
    - g. Approximate unit shipping weight.

1.3 OPERATION AND MAINTENANCE DATA

- A. Include data on design, inspection and procedures related to preventative maintenance. Operation and Maintenance manuals shall be submitted at the time of unit shipment.

1.4 QUALIFICATIONS

- A. Manufacturer shall be a company specializing in the design and manufacture of commercial / industrial custom HVAC equipment. Manufacturer shall have been in production of custom HVAC equipment for a minimum of 5 years.
- B. Each unit shall bear an ETL or UL label under UL Standard 1995 indicating the complete unit is listed as an assembly. ETL or UL listing of individual components, or control panels only, is not acceptable.

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1.5 DELIVERY, STORAGE, AND HANDLING

- A. Deliver, store, protect and handle products to site under the supervision of the owner.

1.6 SEQUENCING AND SCHEDULING

- A. Coordinate work performed under this section with work performed under the separate installation contract.

1.7 WARRANTY

- A. The complete unit shall be covered by a parts warranty issued by the manufacturer covering the first year of operation. This warranty period shall start upon receipt of start-up forms for the unit or eighteen months after the date of shipment, whichever occurs first.
- B. The installing contractor shall provide labor warranty during the unit's first year of operation.

PART 2 - PRODUCTS

2.1 ACCEPTABLE MANUFACTURERS

- A. Provide custom indoor air handling units as manufactured by Temtrol or ClimateCraft as the basis-of-design. Equipment manufactured by ClimateCraft shall be considered provided the construction specifications capacities and performance criteria are met.

2.2 GENERAL

- A. Furnish and install where shown on the plans, mechanical frame style air handling units with construction features as specified below. The units shall be provided and installed in strict accordance with the specifications. All units shall be complete with all components and accessories as specified. Any exceptions must be clearly defined. The contractor shall be responsible for any additional expenses that may occur due to any exception made.

2.3 FACTORY TESTING AND QUALITY CONTROL

- A. Standard Factory Tests: The fans shall be factory run tested to ensure structural integrity and proper RPM. All electrical circuits shall be tested to ensure correct operation before shipment of unit. Units shall pass quality control and be thoroughly cleaned prior to shipment.

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2.4 UNIT CONSTRUCTION DESCRIPTION

- A. General: Provide factory-fabricated air handling units with capacity as indicated on the schedule. Units shall have overall dimensions as indicated and fit into the space available with adequate clearance for service as determined by the Engineer. Units shall be completely assembled. Multiple sectioned units shall be shipped as a single factory assembled piece (except where shipping limitations prevent) de-mounted into modular sections in the field by the contractor. Units shall be furnished with sufficient gasket and bolts for reassembly in the field by the contractor. Unit manufacturer shall provide certified ratings conforming to the latest edition of AMCA 210, 310, 500 and ARI 410. All electrical components and assemblies shall comply with NEMA standards. Unit internal insulation must have a flame spread rating not over 25 and smoke developed rating no higher than 50 complying with NFPA 90A, "Standard for the Installation of Air Conditioning and Ventilating Systems." Units shall comply with NFPA 70, "National Electrical Code," as applicable for installation and electrical connections of ancillary electrical components of air handling units. Tags and decals to aid in service or indicate caution areas shall be provided. Electrical wiring diagrams shall be attached to the control panel access doors. Operation and maintenance manuals shall be furnished with each unit. Units shall be UL or ETL listed.
- B. Rigging Provision – Multiple Piece Units: Units shipped in multiple sections shall be engineered for field assembly. The base frame shall have integral lifting lugs. The lifting lugs shall be fabricated from structural steel with an appropriate rigging hole. Lifting lugs shall be located at the corner of each section (and along the sides if required) and sized to allow rigging and handling of the unit. All gasket and necessary assembly hardware shall ship loose with unit. Junction boxes with a factory supplied numbered terminal strip shall be supplied at each shipping split for reconnection of control wiring.
- C. Unit Base - Floor: Unit perimeter base shall be completely welded and fabricated using heavy gauge structural steel tubing. (Note: bolted bases are not acceptable) C-Channel cross supports shall be welded to perimeter base steel tubing and located on maximum 24" centers to provide support for internal components. Base rails shall include lifting lugs welded to perimeter base at the corner of the unit or each section if de-mounted. Entire base frame is to be painted with a phenolic coating for long term corrosion resistance. Internal walk-on floor shall be thermal break construction mechanically fastened with caulk seams; 11 gauge aluminum tread plate. The outer sub-floor of the unit shall be made from 20 gauge galvanized steel. The floor cavity shall be spray foam insulated with floor seams gasketed for thermal break and sealed for airtight / watertight construction. Where access is provided to the unit interior, floor openings shall be covered with walk on phenolic coated steel safety grating. Single wall floors with glued and pinned insulation and no sub floor are not acceptable. Base frame shall be attached to the unit at the factory.
- D. Unit Casing – The construction of the air handling unit shall consist of a 1-inch by 2-inch steel frame with formed 16 gauge galvanized steel exterior casing panels. The exterior casing panels shall be attached to the gasketed 1-inch by 2-inch steel frame with corrosion resistant fasteners. All casing panels shall be completely removable from the unit exterior without affecting the unit's structural integrity. (Units without framed type of construction shall be considered, provided the exterior casing panels are made from 14 gauge galvanized steel, maximum panel center lines are less than 20 inches and deflection is less than L/200 @ 9" positive pressure).

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The air handling unit casing shall be of the “no-through-metal” design. The casing shall incorporate insulating thermal breaks as required so that, when fully assembled, there’s no path of continuous unbroken metal to metal conduction from inner to outer surfaces. Provide necessary support to limit casing deflection to L/200 of the narrowest panel dimension. If panels cannot meet this deflection, additional internal reinforcing is required. All panel seams shall be caulked and sealed for an airtight unit. Leakage rates shall be less than 1% at design static pressure or 9” W.C. whichever is greater.

- E. Double Wall Liner - Each unit shall have double wall construction with 20 gauge solid galvanized liner in the entire unit. The double wall interior panel shall be removable from the outside if the unit without affecting the structural integrity of the unit.
- F. Fiberglass Panel:
  - 1. Insulation - Entire unit to be insulated with a full **3-inch** (R16.5) thick non-compressed fiberglass insulation. The insulation shall have an effective thermal conductivity (C) of .24 (BTU in./sq.ft. F°) and a noise reduction coefficient (NRC) of 0.70 / per inch thick (based on a type "A" mounting). The coefficients shall meet or exceed a 3.0 P.C.F. density material rating. Insulation shall meet the erosion requirements of UL 181 facing the air stream and fire hazard classification of 25/50 (per ASTM-84 and UL 723 and CAN/ULC S102-M88) and meet NFPA 90A and 90B. All insulation edges shall be encapsulated within the panel. All perforated sections shall have Micromat® or equal insulation with non-woven mat facing, 5000 fpm rating and non-hygroscopic fibers as manufactured by Johns Manville or approved equal.
- G. Access Doors: The unit shall be equipped with a solid double wall insulated (same as the unit casing), hinged access doors as shown on the plans. The doorframe shall be extruded aluminum, foam filled with a built in thermal break barrier and full perimeter gasket. The door hinge assembly shall be completely adjustable die cast stainless steel. There shall be a minimum of two heavy duty handles per door. Provide ETL, UL 1995, and CAL-OSHA approved tool operated safety latch on all fan section access doors.
  - 1. Note: If manufacturer cannot provide thermal break door design it must be noted as an exception on the bid.
    - a. Access doors in the fan section shall be provided with a 10 x 10 dual thermal pane safety glass window.

2.5 UNIT COMPONENT DESCRIPTION

A. FANWALL TECHNOLOGY™ (FWT)

- 1. The multiple fan array systems shall include multiple, direct driven, arrangement 4 plenum fans constructed per AMCA requirements for the duty specified class III as required. Class I fans are not acceptable. Fans shall be rated in accordance with and certified by AMCA for performance. All fans shall be selected to deliver the specified airflow quantity at the specified operating Total Static Pressure and specified fan/motor

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speed. The fan array shall be selected to operate at a system Total Static Pressure that does not exceed 90% of the specified fan's peak static pressure producing capability at the specified fan/motor speed. Each fan/motor cube or cell shall include a minimum 10 gauge, G 90 Galvanized steel intake wall, .100 aluminum spun fan inlet funnel, and an 7 gauge HR steel (painted) motor support plate rail and structure. All motors shall be standard foot mounted type TEAO selected at the specified operating voltage, RPM, and efficiency as specified or as scheduled elsewhere. Motors shall meet the requirements of NEMA MG-1 Part 30 and 31, section 4.4.2. Motors shall be as manufactured by Baldor, Siemens, or Toshiba for use in multiple fan arrays that operate at varying synchronous speeds as driven by an approved VFD. Motor HP shall not exceed the scheduled HP as indicated in the AHU equipment schedule(s). Steel cased motors and/or ODP motors are not acceptable. All motors shall include permanently sealed (L10-400,000 hr) bearings and AEGIS™ shaft grounding to protect the motor bearings from electrical discharge machining due to stray shaft currents. Each fan/motor assembly shall be dynamically balanced to meet AMCA standard 204-96, exceeding category BV-5, to meet or exceed an equivalent Grade G.55, producing a maximum rotational imbalance of .03" per second peak, filter in ( .55mm per second peak, filter in). Fan and motor assemblies submitted for approval incorporating larger than 22" wheel size and 215 T frames size motors shall be balanced in three orthogonal planes to demonstrate compliance with the G.55 requirement with a maximum rotational imbalance of .03" per second peak filter in ( .55 mm per second peak, filter in). Copies of the certified balancing reports shall be provided with the unit O&M manuals at the time of shipment. Submittals that do not include a statement of compliance with this requirement will be returned to the contractor without review.

2. The fan array shall consist of multiple fan and motor "cubes" or "cells", spaced in the air way tunnel cross section to provide a uniform air flow and velocity profile across the entire air way tunnel cross section and components contained therein. In order to assure uniform velocity profile in the AHU cross section, the fan cube dimensions must be variable, such that each fan rests in an identically sized cube or cell, and in a spacing that must be such that the submitted array dimensions fill a minimum of 90% of the cross sectional area of the AHU air way tunnel. There shall be no blank off plates or "spacers" between adjacent fan columns or rows to position the fans across the air way tunnel. The array shall produce a uniform air flow profile and velocity profile within the airway tunnel of the air handling unit to equal the specified cooling coil and/or filter bank face velocity by +/- 10% when measured at a point 36" from the intake side of the fan array intake plenum wall, and at a distance of 72" from the discharge side of the fan array intake plenum wall. Submittals for units providing less than the scheduled quantity of fans and/or spacing of the fans for multiple fan arrays shall submit CFD modeling of the air flow profile for pre-bid approval that indicates uniform velocity and flow across all internal components without increasing the length of the AHU unit or changing the aspect ratio of the unit casing as designed.
3. Each individual cube or cell in the multiple fan arrays shall be provided with an integral back flow prevention device that prohibits recirculation of air in the event a fan or multiple fans become disabled. The system effects for the back flow prevention device(s) shall be included in the criteria for TSP determination for fan selection purposes, and shall be indicated as a separate line item SP loss in the submittals. Submitted AHU

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performance that does not indicate allowance for system effects for the back flow prevention device(s) and the system effect for the fan and motor enclosure in which each fan is mounted , will be returned to the contractor disapproved and will need to be resubmitted with all of the requested information included for approval. Back Draft Damper performance data that is per AMCA ducted inlet and discharge arrangements will not be accepted. Damper data must be for the specific purpose of preventing back flow in any disabled fan cube and that is mounted directly at the inlet of each fan. Motorized dampers for this purpose are not acceptable. Submitted fan performance data which only reflect published performance for individual fans in AMCA arrangement "A" free inlet and discharge will not be accepted. AHU Manufacturers that do not manufacture the fans being submitted on must provide certified performance data for fans as installed in the AHU unit with Back Draft damper effects included. At the sole discretion of the engineer, such performance testing may be witnessed by the engineer and/or the owner's representative.

4. Each fan motor shall be individually wired to a control panel containing a single VFD as the primary VFD and a backup VFD wired in bypass, as specified elsewhere. Each VFD shall be sized for the total connected HP for all fan motors contained in the fan array. Wire sizing shall be determined, and installed, in accordance with applicable NEC standards and local code requirements. When specified and scheduled, the multiple fan array electrical panel shall include system optimization controls to actively control fan speed and to enable and disable fans in the multiple fan array. The number of active fans in the array shall be automatically determined, and the speed of the enabled fans shall be adjusted to produce the required coincidental flow and pressure at the perimeter boundary of the unit at substantially peak efficiency. The system optimization controls shall continuously monitor required flow and pressure and shall automatically optimize the operating array configuration and speed for peak efficiency. When specified, system, optimization controls shall be provided that will interface with, and be compatible with the BAS as specified elsewhere. It is the responsibility of the contractor to assure that the fan system optimization controls are compatible with the BAS system. System optimization controls shall be provided by the AHU unit manufacturer to assure single source responsibility for fan volume controls, and shall require only an input control signal from the controls contractor for SP or flow for proper operation of the system optimization controls. When specified, the AHU unit manufacturer shall provide a single communication interface with the BAS and shall coordinate with the controls contractor to make sure that all necessary data points are communicated.
5. Each fan & motor assembly shall be removable through a 24" wide, free area, access door located on the discharge side of the fan wall array without removing the fan wheel from the motor. All fan/motor access doors shall open against pressure.

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B. Motor Circuit Protection:

1. All motors in the FANWALL Array shall be provided with individual Motor Protection for thermal overload protection. All motor circuit protectors can be located in starting device enclosure or, if required by design, in a separate enclosure. Motor circuit protector enclosure must be located and mounted at a minimal distance from motors in the FANWALL Array. Provide remote indication by means of aux contacts wired in series.
  - a. Remote indication:
    - 1) Current Sensors wired in series.
  - b. Pilot Lights:
    - 1) Single cover mounted pilot light for local monitoring.
    - 2) Multiple (one per fan) cover mounted pilot lights for local monitoring.

2.6 **FANWALL TECHNOLOGY™ (FWT) CONTROL:**

A. **FANWALL TECHNOLOGY™ (FWT) WITH REDUNDANT VARIABLE FREQUENCY DRIVE CONTROL:**

1. As required by system design, provide one **ABB** Variable Frequency Drive for normal operation and a second **ABB** Variable Frequency Drive for Redundant Backup operation. Provide control wiring and control circuitry to transfer from main VFD to Redundant VFD when main drive has faulted. The Variable Frequency Drives shall be sized accordingly to start and hold all motors in the FANWALL Array. Provide service disconnect with fuses or circuit breaker.

2.7 **FLOW MONITORING SYSTEM:**

A. As required by system design, each fan assembly shall be equipped with airflow monitoring probes, Huntair Flow-Cone. The flow measuring system shall consist of a flow measuring station with two static pressure taps and two total pressure tubes located at the throat of the fan inlet cone. The flow measuring station shall not obstruct the inlet of the fan and shall have no effect on fan performance (flow or static) or sound power levels. A surface mounted indicator shall provide a:

1. Output control signal transmitter (4-20mA) (0-10 volt) for use in BAS as specified elsewhere.

B. Heat Transfer Coils – Water Coil:

1. All coil assemblies shall be leak tested under water at 315 PSIG and PERFORMANCE is to be CERTIFIED under ARI Standard 410. Coils exceeding the range of ARI standard rating conditions shall be noted.

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2. Cooling coils shall be mounted on stainless steel support rack to permit coils to slide out individually from the unit. Provide intermediate drain pans on all stacked cooling coils. The intermediate pan shall drain to the main drain pan through a copper downspout. Water coils shall be constructed of seamless copper tubing mechanically expanded into fin collars. All fins shall be continuous within the coil casing to eliminate carryover inherent with a split fin design. Fins are die formed Plate type.
3. Headers are to be seamless copper with die formed tube holes.
4. Connections shall be male pipe thread (MPT) Schedule 40 Red Brass with 1/8" vent and drain provided on coil header for coil drainage. All coil connections shall be extended to the exterior of the unit casing by the manufacturer. Coils shall be suitable for 250 PSIG working pressure. Intermediate tube supports shall be supplied on coils over 44" fin length with an additional support every 42" multiple thereafter.
5. Water coils shall have the following construction:
  - a. Standard 5/8":
    - 1) 5/8 inch o.d. by .025 inch wall copper tube with .035 return bends.
    - 2) .008 inch aluminum fins
    - 3) 16 gauge Type 304 stainless steel casing

**C. Heat Transfer Coils – NF (non-freeze) Steam Coils:**

1. NF (non-freeze) steam coils shall be constructed of 1 1/8" o.d. seamless copper tubing mechanically expanded into fin collars. The 5/8" o.d. inner steam distributing tubes shall be centered in the outer condensing tube (1 1/8" o.d.). The inner tube shall have proportionally spaced directional steam jet orifices. These orifices direct the condensate flow to the outlet. Fins shall be die formed plate type. Headers shall be seamless copper with die formed tube holes. Connections shall be male pipe thread (MPT) copper. Intermediate tube supports shall be supplied on coils over 44" fin length with an additional support every 42" multiple thereafter. Coils exceeding 144" fin length shall have two coils with connections right and left. Coils are to be pitched in the casing for drainage. Standard construction shall be suitable for 50 PSIG steam pressure.
  - a. Standard:
    - 1) 1 1/8 inch by .035 inch wall tube. (50 psig maximum steam pressure)
    - 2) .010 inch aluminum fins.
    - 3) 16 gauge 304 stainless steel casing.

- D. Condensate / Drain Pans - IAQ style drain pans shall be provided under all cooling coils as shown on the drawings. The drain pan shall be fabricated from 16 gauge 304 stainless steel. All pans are to be triple pitched for complete drainage with no standing water in the unit. They shall be insulated minimum 3-inch "Double Bottom" construction with welded corners. Provide stainless steel, 1-1/4" MPT drain connection extended to the exterior of the unit base rail. Units in excess of 159 inches shall have drain connections on both sides. All drain connections shall be piped and trapped separately for proper drainage.**

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- E. Filters: Provide filters of the type indicated on the schedule. Factory fabricated filter sections shall be of the same construction and finish as the unit. Face loaded pre and final filters shall have Type 8 frames as manufactured by BLC, FARR or equal. Filter racks over 72" in length shall require an angle center reinforcement support. Side service filter racks shall be fabricated from no less than 16 gauge galvanized steel and include hinged access doors on both sides of the unit or as indicated on unit drawings. Internal blank-offs shall be provided by the air unit manufacturer as required to prevent air bypass around the filters.
1. Filter Gauge: Each Filter bank shall be furnished with Dwyer Series 2000 filter gauge or equal.
  2. Medium Efficiency MERV 8 Pleated filters – Provide **2 inch** filters as specified on filter schedule. The filters shall be as manufactured by AAF, FARR or equal. Filters shall be in compliance with ANSI/UL 900 – Test Performance of Air Filters. Provide two total sets of media.
  3. High Efficiency MERV 13 Rigid filters - Provide **12 inch** deep filters as specified on the filter schedule. The filters shall be listed as Class II under UL Standard 900. The filters shall be as manufactured by AAF, FARR or equal. Filters shall be in compliance with ANSI/UL 900 – Test Performance of Air Filters. Option: Provide two total sets of media.
- F. Humidifier - Steam humidifier shall be a steam separator type providing full separation ahead of a control valve which discharges through an internal drying chamber. Steam humidifier shall be electrically controlled. The humidifier capacity shall meet or exceed the capacity specified in the mechanical schedule. The size and number of distribution manifolds shall be sized so all steam is absorbed by the air before reaching the next component in the air stream. Humidifier shall receive steam at supply pressure and discharge at atmospheric pressure. Humidifier shall be furnished with inlet strainer and float and thermostatic traps or a bucket steam trap. Separating chambers shall be of a volume and design that will disengage and remove water droplets and particle matter when the humidifier is operating. The distribution manifold shall provide uniform distribution over its entire length and be jacketed by steam to assure that vapor discharged is free of water droplets. Humidifier shall be completely factory piped and wired. Traps shall be shipped loose to avoid damage during shipment. All humidifiers shall be mounted above a pitched drain pan constructed from **16 gauge** type 304 stainless steel.
1. High-efficiency dispersion tube option:
    - a. Dispersion tubes shall be insulated with a plenum-approved insulating material for in-duct installation and have an R-value not less than 0.5 at a thickness not more than 0.125" (3.2 mm), for minimal increase in dispersion tube diameter.
    - b. Airstream heat gain shall not exceed the values as scheduled; the values shall be supported by the manufacturer's published data.
    - c. Insulating material shall meet the following criteria at 0.125" (3.2 mm) thickness:
      - 1) Fire/smoke index shall be 0/0 per any of the following test procedures:
        - a) UL 723 fire/smoke index (Test for Surface Burning Characteristics of Building Materials)
        - b) NFPA 255 (Standard Method of Test of Surface Burning Characteristics of Building Materials)

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- c) ASTM E84 (Surface Burning Characteristics for Materials Used in Plenums)
  - 2) Stable up to 300 °F (148 °C) continuous — to prevent material degradation, hardening, or crumbling at high temperatures
  - 3) Closed-cell construction does not absorb water or support microbial growth — to negate the need for vapor barriers and jackets
  - 4) Non-toxic and pure as documented in manufacturer's data — to prevent off-gassing and to facilitate use in clean rooms, pharmaceutical applications, and food industries
  - 5) Will not degrade when exposed to UVC light — to negate the need for UV wraps
  - 6) Continuous, seam-welded, and held in place without bands or clamps — to minimize surfaces for the accumulation of particulate matter

**2.8 ELECTRICAL POWER AND CONTROLS**

- A. All electrical and automatic control devices not previously called out or listed below are to be furnished and installed in the field by OTHERS.
- B. All wiring shall be (75°C) Insulated copper wires.
- C. The unit shall feature a mounted permanent nameplate displaying at a minimum the manufacturer, serial number, model number and current and amps voltage. The unit must have an ETL or UL Listing and bear the appropriate mark.
- D. Conduit shall consist of a combination of EMT or flexible metal conduit as required. Liquidtight flexible metal conduit may be used outside the air tunnel for wet locations.
- E. Unit Convenience Features:
  - 1. Each fan section shall be equipped with a 4' vapor- proof fluorescent light fixtures for service with 2 – 32W T-38 bulbs.
  - 2. Each light shall have its own light switch with pilot light mounted adjacent to the access door.
  - 3. Furnish a 120 volt GFI duplex convenience outlet on the exterior of the unit located next to the fan section as indicated on the unit drawing.

END OF SECTION 237314

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**ROOM FINISH SCHEDULE**

ROOM DESIGNATION		FLOORS	BASE	WALLS				CEILING	CABINET	COUNTERTOP	REMARKS
Number	Name		Mat'l/Finish	North	South	East	West	Mat'l/Finish	Mat'l/Finish	Mat'l/Finish	
1F100	Vest.	C-361	VB-317	P-342	P-342	P-342	P-342	AC-17	-	-	
1F101	Alcove	C-359, 360	VB-316	P-342	P-342	P-342	P-342	AC-17	-	-	
1F102	Staff Conf. Room	C-360	VB-316	P-406	P-342	P-342	P-342	AC-17	-	-	
1F103	Hall	C-359, 360	VB-316	-	-	P-342	P-342	AC-17	-	-	
1F104	Counselor 1	C-360	VB-316	P-342	P-407	P-342	P-342	AC-17	-	-	
1F105	Counselor 2	C-360	VB-316	P-342	P-342	P-342	P-405	AC-17	-	-	
1F106	Passage	C-359, 360	VB-316	P-342	P-342	P-342	-	AC-17	-	-	
1F107	File Room	C-359, 360	VB-316	P-342	P-342	P-342	P-342	AC-01	PL-393	-	
1F108	Counselor 10	C-360	VB-316	P-407	P-342	P-342	P-342	AC-17	-	-	
1F109	File Room	C-359, 360	VB-316	P-342	P-342	P-342	P-342	AC-01	PL-393	-	
1F110	Counselor 9	C-360	VB-316	P-342	P-342	P-405	P-342	AC-17	-	-	
1F111	Counselor 3	C-360	VB-316	P-342	P-342	P-342	P-407	AC-17	-	-	
1F112	Counselor 4	C-360	VB-316	P-407	P-342	P-342	P-342	AC-17	-	-	
1F113	Passage	C-359, 360	VB-316	P-342	P-342	P-342	-	AC-17	-	-	
1F114	Family Conf. Room	C-360	VB-316	P-406	P-342	P-342	P-342	AC-17	-	-	
1F115	Counselor 8	C-360	VB-316	P-405	P-342	P-342	P-342	AC-17	-	-	
1F116	Family Conf. Room	C-360	VB-316	P-342	P-407	P-342	P-342	AC-17	-	-	
1F117	Counselor 7	C-360	VB-316	P-342	P-405	P-342	P-342	AC-17	-	-	
1F118	Env. Serv.	RFC-339	VB-316	P-401	P-401, WP-308	P-401	P-401, WP-308	AC-01	-	-	
1F119	Toilet	CTF-343, 344	TB-323	CTW-353, 354	P-403	P-403	P-403	P-391	-	-	5
1F120	Toilet	CTF-343, 344	TB-323	P-403	CTW-353, 354	P-403	P-403	P-391	-	-	5
1F121	Work & Storage	C359-360	VB-316	P-342	P-342	P-342	P-342	AC-17	PL-393	PL-395	
1F122	Corridor	C-359, 360	VB-316	-	-	P-342	P-342	AC-17	-	-	
1F123	Private Waiting Area	C-359, 360	VB-316	P-342	P-342	P-342	P-342	AC-17	-	-	
1F124	Passage	C-359, 360	VB-316	P-342	P-342	P-342	-	AC-17	-	-	
1F125	Meditation/Listening	C-360	VB-316	P-342	P-342	P-342	P-342	AC-17	-	-	
1F126	Counselor 6	C-360	VB-316	P-342	P-342	P-342	P-405	AC-17	-	-	
1F127	Counselor 5	C-360	VB-316	P-342	P-407	P-342	P-342	AC-17	-	-	
1F128	Vest.	C-361	VB-317	P-342	P-342	P-342	P-342	AC-17	-	-	
1F129	Vest.	C-361, CTF-343, 344	TB-323	P-342	P-342	P-342	P-342	AC-17	-	-	
1F129a	Alcove	CTF-343, 344	TB-323	P-342	P-342	P-342	P-342	AC-17	-	-	
1F130	Men's Toilet	CTF-343, 344	TB-323	P-403	P-403	CTW-353, 354	P-403	P-391	PL-393	SS-344	5
1F131	Women's Toilet	CTF-343, 344	TB-323	P-403	P-403	P-403	CTW-353, 354	P-391	PL-393	SS-344	5
1F132	Hall	C-359, 360	VB-316	-	-	P-342	P-342	AC-17	-	-	
1F133	Passage	C-359, 360	VB-316	-	P-342	P-342	P-342	AC-17	-	-	
1F134	Case Coord.	C-360	VB-316	P-342	P-342	P-407	P-342	AC-17	-	-	
1F135	Case Coord.	C-360	VB-316	P-342	P-342	P-407	P-342	AC-17	-	-	
1F136	Storage	C-359, 360	VB-316	P-342	P-342	P-342	P-342	AC-01	PL-393	-	
1F137	Corridor	C-359, 360	VB-316	-	-	P-342	P-342	AC-17	-	-	
1F138	NOT USED										
1F139	Storage	C-359, 360	VB-316	P-342	P-342	P-342	P-342	AC-01	PL-393	-	
1F140	NOT USED										
1F141	Passage	C-359, 360	VB-316	P-342	P-342	P-342	P-342	AC-17	-	-	
1F142	Storage	C-359, 360	VB-316	P-342	P-342	P-342	P-342	AC-01	PL-393	-	
1F143	Clinical Manager	C-360	VB-316	P-342	P-342	P-405	P-342	AC-17	-	-	
1F144	Spiritual Counselor	C-360	VB-316	P-342	P-405	P-342	P-342	AC-17	-	-	
1F145	Storage	C-359, 360	VB-316	P-342	P-342	P-342	P-342	AC-01	PL-393	-	
1F146	Passage	C-359, 360	VB-316	P-342	P-342	P-342	P-342	AC-01	PL-393	-	
1F147	Intake Conf. Room	C-360	VB-316	P-342	P-342	-	P-342	AC-17	-	-	
1F148	Intake Conf. Room	C-360	VB-316	P-342	P-342	P-342	P-342	AC-17	-	-	
1F149	Passage	C-359, 360	VB-316	P-342	P-342	P-342	-	AC-17	-	-	
1F150	Intervention Nurse	C-360	VB-316	P-342	P-342	P-407	P-342	AC-17	-	-	

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ROOM DESIGNATION		FLOORS	BASE	WALLS				CEILINGS	CABINET	COUNTERTOP	REMARKS
Number	Name		Mat'l/Finish	North	South	East	West	Mat'l/Finish	Mat'l/Finish	Mat'l/Finish	
1F151	Intervention Nurse	C-360	VB-316	P-342	P-407	P-342	P-342	AC-17	-	-	
1F152	Corridor	C-359, 360	VB-316	-	P-342	P-342	P-342	AC-17	-	-	
1F153	Alumni/Volunteer Resource Center	C-360	VB-316	P-405	P-342	P-342	P-405	AC-17	PL-393	-	
1F154	Staff Lounge	C-360, RT-323	VB-316	P-342	P-406	P-406	P-342	AC-17	PL-393	SS-345	
1F155	Passage	C-359, 360	VB-316	P-342	P-342	P-342	-	AC-17	-	-	
1F156	P.T. Counselor 11	C-360	VB-316	P-342	P-342	P-407	P-342	AC-17	-	-	
1F157	P.T. Counselor 12	C-360	VB-316	P-405	P-342	P-342	P-342	AC-17	-	-	
1F158	Phys. Office	C-360	VB-316	P-342	P-407	P-342	P-342	AC-17	-	-	
1F159	Passage	C-359, 360	VB-316	P-342	P-342	P-342	P-342	AC-01	-	-	
1F160	IT ER	-	-	P-391	P-391	P-391	P-391	-	-	-	
1F161	Mech. Stair	-	-	P-411	P-411	P-411	P-411	-	-	-	
1F162	Admin. Asst.	C-360	VB-316	P-342	P-342	P-406	P-342	AC-17	-	-	
1F163	Alcove	-	-	P-411	P-411	P-411	P-411	-	-	-	
1F164	Elect.	-	-	P-411	P-411	P-411	P-411	-	-	-	
1F165	Director's Office	C-360	VB-316	P-342	P-407	P-342	P-342	AC-17	-	-	
1F166	Elec. Room	-	-	P-411	P-411	P-411	P-411	-	-	-	
1G101	Vestibule	C-361	-	-	-	-	-	P-391	-	-	
1G102	Waiting	CTF-343, 344, C-357	TB-323	P-401, 402, SSV-300, 301	P-401, 402, SSV-300, 301	P-401, 402, SSV-300, 301	P-401, 402, SSV-300, 301	AC-17	-	-	1, 3
1G103	Reception	C-357	VB-317	P-402	P-402	P-402	P-402	AC-17	PL-393, WT-300	SS-344	
1G104	Stair CC	CTF-343, ST-302	-	P-342	P-401	-	P-342	-	-	-	6
1G105	Alcove	CTF-343, 344	TB-323	P-401	P-401	-	P-401	AC-17	-	-	
1G106	Corridor	C-359, 360	VB-316	P-408, 409, WP-307	P-408, 409, WP-307	P-408, 409, WP-307	-	AC-17	-	-	2
1G107	Young Female (2)	C-358	VB-317	P-404	P-404	P-404	P-404	P-391	PL-393, 396, 397	PL-394	
1G108	Bath	CTF-342	TB-322	CTW-355	CTW-355	CTW-355	CTW-355	P-391	PL-393	SS-343	
1G109	Young Female (2)	C-358	VB-317	P-404	P-404	P-404	P-404	P-391	PL-393, 396, 397	PL-394	
1G110	Bath	CTF-342	TB-322	CTW-355	CTW-355	CTW-355	CTW-355	P-391	PL-393	SS-343	
1G111	Detox. (1)	C-358	VB-317	P-404	P-404	P-404	P-404	P-391	PL-393, 396, 397	-	
1G112	Bath	CTF-342	TB-322	CTW-355	CTW-355	CTW-355	CTW-355	P-391	PL-393	SS-343	
1G113	Nurse Station	C-359, 360	VB-316	P-342	P-342	P-342, 408, 409, WP-307	P-342, 408, 409, WP-307	AC-17, P-391, 408	PL-393, wt-300	SS-345	2, 4, 7
1G114	Adolescent Lounge	C-360, RT-323	VB-316	P-401	P-401	P-401	P-401	AC-17	PL-393	SS-345	
1G115	Corridor	C-359, 360	VB-316	P-408, 409, WP-307	P-408, 409, WP-307	-	P-408, 409, WP-307	AC-17	-	-	2
1G116	Detox. (1)	C-358	VB-317	P-404	P-404	P-404	P-404	P-391	PL-393, 396, 397	-	
1G117	Bath	CTF-342	TB-322	CTW-355	CTW-355	CTW-355	CTW-355	P-391	PL-393	SS-343	
1G118	Detox. (1)	C-358	VB-317	P-404	P-404	P-404	P-404	P-391	PL-393, 396, 397	-	
1G119	Bath	CTF-342	TB-322	CTW-355	CTW-355	CTW-355	CTW-355	P-391	PL-393	SS-343	
1G120	Young Male (2)	C-358	VB-317	P-404	P-404	P-404	P-404	P-391	PL-393, 396, 397	PL-394	
1G121	Bath	CTF-342	TB-322	CTW-355	CTW-355	CTW-355	CTW-355	P-391	PL-393	SS-343	
1G122	Young Male (2)	C-358	VB-317	P-404	P-404	P-404	P-404	P-391	PL-393, 396, 397	PL-394	
1G123	Bath	CTF-342	TB-322	CTW-355	CTW-355	CTW-355	CTW-355	P-391	PL-393	SS-343	
1G124	Corridor	C-359, 360	VB-316	-	-	P-408, 409, WP-307	P-408, 409, WP-307	AC-17	-	-	2
1G125	Young Male (2)	C-358	VB-317	P-404	P-404	P-404	P-404	P-391	PL-393, 396, 397	PL-394	
1G126	Bath	CTF-342	TB-322	CTW-355	CTW-355	CTW-355	CTW-355	P-391	PL-393	SS-343	
1G127	Stair BB	ST-303	-	P-342	P-342	P-342	P-342	P-391	-	-	
1G128	Adult Male (2)	C-358	VB-317	P-404	P-404	P-404	P-404	P-391	PL-393, 396, 397	PL-394	
1G129	Bath	CTF-342	TB-322	CTW-355	CTW-355	CTW-355	CTW-355	P-391	PL-393	SS-343	
1G130	Corridor	C-359, 360	VB-316	P-408, 409, WP-307	P-408, 409, WP-307	-	P-408, 409, WP-307	AC-17	-	-	2
1G131	Adult Male (2)	C-358	VB-317	P-404	P-404	P-404	P-404	P-391	PL-393, 396, 397	PL-394	

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ROOM DESIGNATION		FLOORS	BASE	WALLS				CEILING	CABINET	COUNTERTOP	REMARKS
Number	Name		Mat'l/Finish	North	South	East	West	Mat'l/Finish	Mat'l/Finish	Mat'l/Finish	
IG132	Bath	CTF-342	TB-322	CTW-355	CTW-355	CTW-355	CTW-355	P-391	PL-393	SS-343	
IG133	Adult Male (2)	C-358	VB-317	P-404	P-404	P-404	P-404	P-391	PL-393, 396, 397	PL-394	
IG134	Bath	CTF-342	TB-322	CTW-355	CTW-355	CTW-355	CTW-355	P-391	PL-393	SS-343	
IG135	Adult Male (2)	C-358	VB-317	P-404	P-404	P-404	P-404	P-391	PL-393, 396, 397	PL-394	
IG136	Bath	CTF-342	TB-322	CTW-355	CTW-355	CTW-355	CTW-355	P-391	PL-393	SS-343	
IG137	Adult Male (2)	C-358	VB-317	P-404	P-404	P-404	P-404	P-391	PL-393, 396, 397	PL-394	
IG138	Bath	CTF-342	TB-322	CTW-355	CTW-355	CTW-355	CTW-355	P-391	PL-393	SS-343	
IG139	Nurse Station	C-359, 360	VB-316	P-342	P-342	P-342, 408, 409, WP-307	P-342, 408, 409, WP-307	AC-17, P-391, 408	PL-393, WT-300	SS-345	2, 4, 7
IG140	Adult Lounge	C-360, RT-323	VB-316	P-401	P-401	P-401	P-401	AC-17	PL-393	SS-345	
IG141	Corridor	C-359, 360	VB-316	P-408, 409, WP-307	P-408, 409, WP-307	P-408, 409, WP-307	-	AC-17	-	-	2
IG142	Consult	C-360	VB-316	P-342	P-342	P-342, 404	P-342	AC-17	PL-393	-	
IG143	Exam	RT-323	VB-317	P-401	P-401	P-401	P-401	AC-17	PL-393	SS-345	
IG144	Adult Female (2)	C-358	VB-317	P-404	P-404	P-404	P-404	P-391	PL-393, 396, 397	PL-394	
IG145	Bath	CTF-342	TB-322	CTW-355	CTW-355	CTW-355	CTW-355	P-391	PL-393	SS-343	
IG146	Adult Female (2)	C-358	VB-317	P-404	P-404	P-404	P-404	P-391	PL-393, 396, 397	PL-394	
IG147	Bath	CTF-342	TB-322	CTW-355	CTW-355	CTW-355	CTW-355	P-391	PL-393	SS-343	
IG148	Corridor	C-359, 360	VB-316	P-408, 409, WP-307	-	P-408, 409, WP-307	P-408, 409, WP-307	AC-17	-	-	2
IG149	Adult Female (2)	C-358	VB-317	P-404	P-404	P-404	P-404	P-391	PL-393, 396, 397	PL-394	
IG150	Bath	CTF-342	TB-322	CTW-355	CTW-355	CTW-355	CTW-355	P-391	PL-393	SS-343	
IG151	NOT USED	-	-	-	-	-	-	-	-	-	
IG152	Stair AA	CTF-343, ST-302	-	P-342	P-342	P-342	P-342	P-391	-	-	
IG153	Env. Srv.	RFC-339	VB-316	P-401, WP-308	P-401	P-401, WP-308	P-401	AC-01	PL-393		
IG154	Toilet	CTF-343, 344	TB-323	P-403	CTW-353, 354	P-403	P-403		PL-393	SS-344	5
IG155	Soiled	RFC-339	VB-316	P-401	P-401	P-401	P-401	AC-01	PL-393	SS-345	
IG156	Clean	RFC-339	VB-316	P-401	P-401	P-401	P-401	AC-01	-	-	
IG157	Tele.	C-359, 360	VB-316	P-406	P-406	P-406	P-406	AC-17	PL-393	-	
IG158	Staff Lounge	C-360, RT-323	VB-316	P-342	P-407	P-342, 407	P-342	AC-17	PL-393	SS-345	
IG159	Meds	RFC-339	VB-316	P-342	P-342	P-342	P-342	AC-17	PL-393	SS-345	
IG160	Passage	C-359, 360	VB-316	P-408	P-408	-	P-408	AC-17	-	-	
IG161	Storage	C-359, 360	VB-316	P-342	P-342	P-342	P-342	AC-01	PL-393	-	
IG162	Elec.	-	-	P-411	P-411	P-411	P-411	-	-	-	
IG163	I.T.	-	-	P-391	P-391	P-391	P-391	-	-	-	
IG164	Tele.	C-359, 360	VB-316	P-406	P-406	P-406	P-406	AC-17	PL-393	-	
IG165	Exercise Room	C-360	VB-316	P-405	P-405	P-342	P-342	AC-17	PL-393	PL-394	
IG166	Nurse Mgr. Office	C-360	VB-316	P-342	P-342	P-342	P-405	AC-17	-	-	
IG167	Laundry	RFC-339	VB-316	P-401	P-401	P-401	P-401	AC-17	PL-393	SS-343	
IG168	Toilet	CTF-343, 344	TB-323	P-403	CTW-353, 354	P-403, CTW-353, 354	P-403	P-391	-	-	5
IG169	Toilet	CTF-343, 344	TB-323	P-403	CTW-353, 354	P-403, CTW-353, 354	P-403	P-391	-	-	5
OG101	Stair BB	CTF-343, ST-302	-	P-342	P-342	P-342	P-342	-	-	-	
OG102	Corridor	C-359, 360	VB-316	P-342	P-342	P-342	P-342	AC-17	-	-	
OG103	Environ. Services	RFC-339	VB-316	P-401, WP-308	P-401	P-401	P-401, WP-308	AC-01	-	-	
OG104	Elevator Equip.	-	-	-	-	-	-	-	-	-	
OG105	Shell (Storage)	-	-	-	-	-	-	-	-	-	
OG106	Classroom	C-360	VB-316	TW-302	P-403	P-403	P-403, 405	AC-17	PL-393	PL-395	
OG107	Teacher's Work	C-360	VB-316	P-342	P-407	P-342	P-342	AC-17	PL-393	-	
OG108	Corridor	C-359, 360	VB-316	P-342	P-342	-	P-342	AC-17	-	-	
OG109	Family Group Room	C-360	VB-316	P-407	P-407	P-407	P-407	AC-17	PL-393	PL-395	
OG110	Vending	C-359, 360	VB-316	P-405	-	P-342	P-342	AC-17	PL-393	PL-395	

Bryan Health  
West Medical Center  
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ROOM DESIGNATION		FLOORS	BASE	WALLS				CEILING	CABINET	COUNTERTOP	REMARKS
Number	Name		Mat'l/Finish	North	South	East	West	Mat'l/Finish	Mat'l/Finish	Mat'l/Finish	
0G111	Conference Center	C-359, 360	VB-316	P-401	P-401, WT-301	P-401, WT-301	P-401, WT-301	AC-17	-	-	
0G112	Women's	CTF-343, 344	TB-323	CTW-353, 354	P-403	CTW-353,354, P-403	P-403	P-391	PL-393	SS-344	5
0G113	Men's	CTF-343, 344	TB-323	CTW-353, 354	P-403	P-403	CTW-353, 354. P-403	P-391	PL-393	SS-344	5
0G114	Electrical	-	-	-	-	-	-	-	-	-	
0G115	Mechanical	-	-	-	-	-	-	-	-	-	
0G116	IT ER	-	-	P-391	P-391	P-391	P-391	-	-	-	
0G117	Security	-	-	P-411	P-411	P-411	P-411	-	-	-	
0G118	Stair AA	ST-303	-	P-342	P-342	P-342	P-342	-	-	-	
0G119	Service Area	RT-323	VB-317	P-342	P-342	P-342	P-342	AC-17	PL-393	SS-345	
0G120	Recreation Room	RT-323, C-357	VB-317	P-401	P-401	P-401, 405	P-401	AC-17	PL-393	-	
0G121	TV Area	C-357	VB-317	P-342, 407	P-342	P-342	P-342	AC-17	PL-393	PL-395	
0G122	Passage	C-359, 360	VB-316	P-342	P-342	P-342	P-342	AC-17	-	-	
0G123	Passage	C-359, 360	VB-316	P-342	-	P-342	P-342	AC-17	-	-	
0G124	Passage	C-359, 360	VB-316	P-342	-	P-342	P-342	AC-17	-	-	
0G125	Group Room 7	C-360	VB-316	P-406	P-406	P-406	P-406	AC-17	PL-393	PL-395	
0G126	Group Room 6	C-360	VB-316	P-406	P-406	P-406	P-406	AC-17	PL-393	PL-395	
0G127	Group Room 5	C-360	VB-316	P-407	P-407	P-407	P-407	AC-17	PL-393	PL-395	
0G128	Group Room 4	C-360	VB-316	P-407	P-407	P-407	P-407	AC-17	PL-393	PL-395	
0G129	Group Room 3	C-360	VB-316	P-406	P-406	P-406	P-406	AC-17	PL-393	PL-395	
0G130	Group Room 2	C-360	VB-316	P-407	P-407	P-407	P-407	AC-17	PL-393	PL-395	

**REMARKS**

- 1 SSV-300, 301 to be on fireplace surround and columns only.
- 2 P-408 shall be used above WP-307 and P-409 shall be used below WP-307. Installation height of WP-307 to be verified by owner.
- 3 P-402 shall only be used on clerestory walls and at Reception where noted on A6-2.
- 4 P-342 shall only be used on the interior walls of Nurse Station casework.
- 5 CTW-353, 354 to be installed as continuation of floor pattern with CTF-343, 344.
- 6 Top cap at partial height wall to be SS-344.
- 7 Bulkheads at 11'-0" to be P-408.

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ROOM DESIGNATION		FLOORS	BASE	WALLS				CEILINGS	CABINET	COUNTERTOP	REMARKS
Number	Name		Mat'l/Finish	North	South	East	West	Mat'l/Finish	Mat'l/Finish	Mat'l/Finish	

**GENERAL NOTES**

When C-359, 360 is listed for floor finish; it is to be installed with a combination of 66% C-359 and 34% C-360.

Unless otherwise noted all new vertical cabinetry shall be PL-393.

Unless otherwise noted all bulkheads in Area 1G to be P-408 and bulkheads in Areas F and 0G to be P-342.

Unless otherwise stated paint vertical and underside of soffit the same paint color.

Vertical surfaces at skylights to be P-391.

On partial height walls at Nurse Station 1G113 and Nurse Station 1G139, top cap shall be SS-345.

All window sills shall be SS-346.

Grout for CTF-343, 344, CTW-353, 354 and TB-323 shall be G-322.

Grout for CTF-342 and TB-322 shall be G-321.

Grout for CTW-355 to be G-301.

All new interior hollow metal doors shall be PL-393.

All vision panels frames to be P-412.

Handrails and stringers in stairwells shall be P-410.

P-391 in patient bathrooms to be epoxy finish

PL-393 shall be used on elevator cab panels with grain to run vertically.

Refer to A6 series drawings for tile pattern elevations and paint locations where multiple are listed.

Refer to ID series drawings for floor pattern details and direction.

Installation height of WP-307 to be verified by owner.

All interior hollow metal door frames and window frames (new, existing, and otherwise) shall be painted P-410 unless otherwise noted.

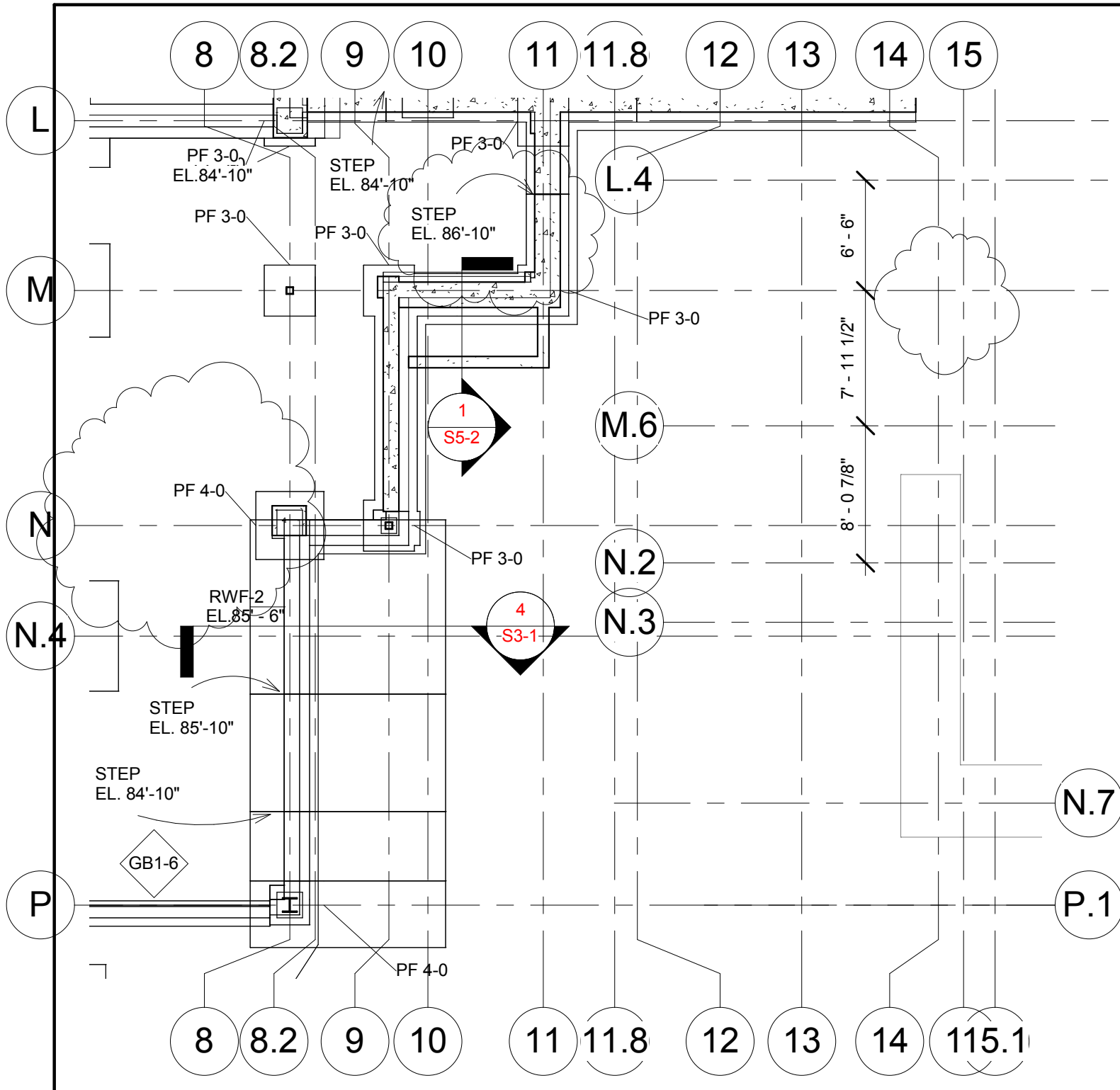
Contractor shall provide paint draw downs for all paints specified.

Contractor responsible for patching and repairing any existing finishes damaged during construction process.

No alternative specifications or materials to those specified by the architect/interior designer shall be accepted as substitutions unless approved during bidding process.

Contact Davis Design with any questions concerning materials and/or installation prior to proceeding.

All installation of finish materials by subcontractors to adhere to installation specifications of applicable manufacturer or to project architectural specifications as called out in project manuals.

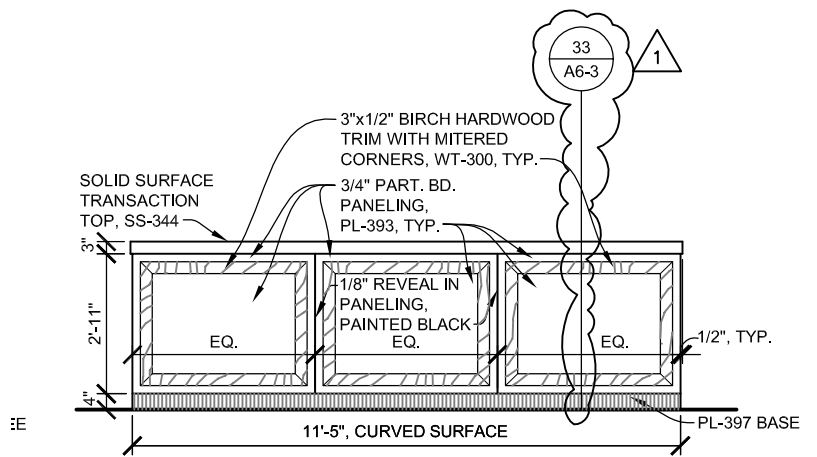


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211 North 14th Street  
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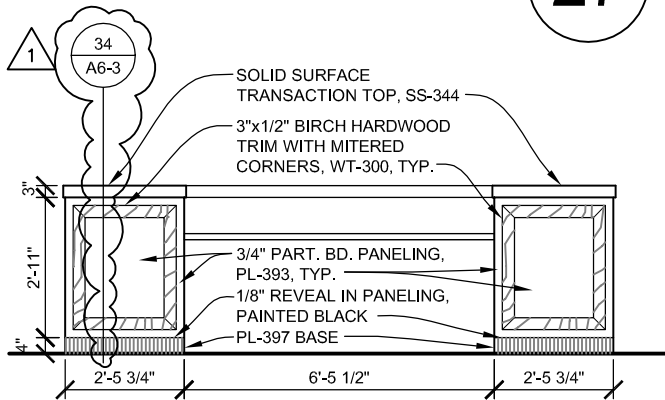
CLIENT INFORMATION	
Bryan Health Medical Center West	
PROJECT INFORMATION	
Independence Center	
2300 S. 16th Lincoln, NE 68502	
Issue Date:	03/12/13
Job #	11-0101
Drawn by:	ktr
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Drawing Title	
Partial Foundation Plan	
From Sheet	for CA use:
Drawing #	S1-1.1



27

## Desk ( Corridor Side)

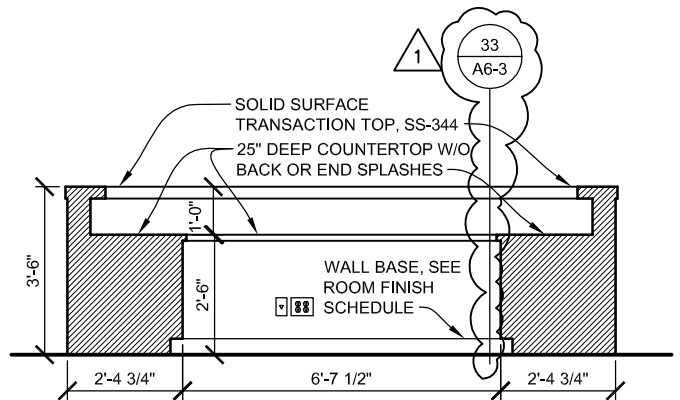
Scale: 1/4" = 1'-0"



29

## Desk ( Back)

Scale: 1/4" = 1'-0"



30

## Desk ( Inside Front)

Scale: 1/4" = 1'-0"



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1221 N Street, Suite 600  
Lincoln NE 68508  
Phone 402-476-9700  
Fax 402-476-9722

Vermillion  
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Vermillion SD 57069  
Phone 605-624-1081

### Client Information

**Bryan Health  
West Medical  
Center**

### Project Information

**Independence Center  
Lincoln, Nebraska**

Issue Date 03-12-2013

Job # 11-0101

Drawn by: kas

CADD file: A6-2.DWG

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### Drawing Title

Revision to Elevations 27, 29 & 30

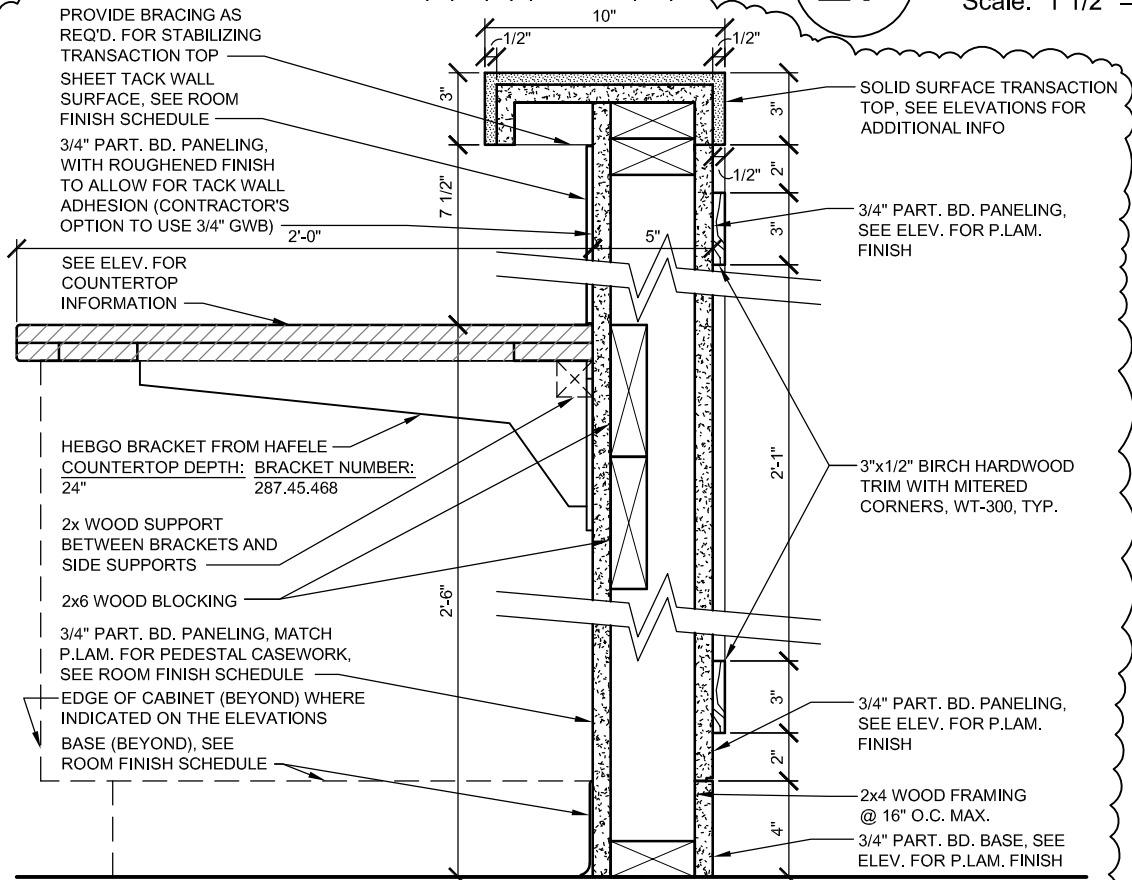
From Sheet: A6-2

for CA use:

Drawing # A6-2.1

21

Scale: 1 1/2" =



33

# SECTION THRU NURSE STATION

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



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Client Information  
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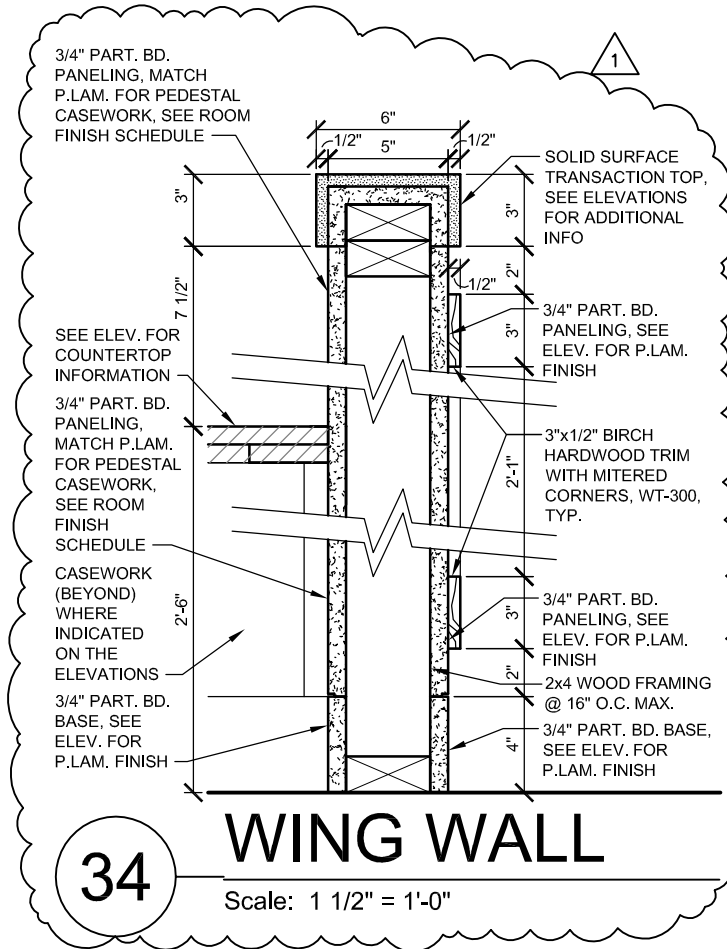
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Job #	11-0101
Drawn by:	kas
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Drawing Title  
**Addition of Detail 33**

From Sheet:	A6-3	for CA use:
Drawing #	A6-3.1	



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Client Information  
**Bryan Health  
 West Medical  
 Center**

Project Information  
**Independence Center  
 Lincoln, Nebraska**

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Drawing Title Addition of Detail 34	
From Sheet:	for CA use:
A6-3	
Drawing #	
A6-3.2	