

BUTTE REGIONAL TRANSIT OPERATIONS CENTER

Tenant Improvement

Butte County Association of Governments

ADDENDUM NO. 1

PROJECT ADDRESS 326 Huss Lane Chico, CA 95928

OWNER
Butte County Association of Governments
2580 Sierra Sunrise Terrace, Suite 100
Chico, CA 95928

Date 1/4/2016

Note: The following changes, modifications and additions to the Project Manual and Drawings described within this Addendum are subject to all of the requirements as if originally specified.

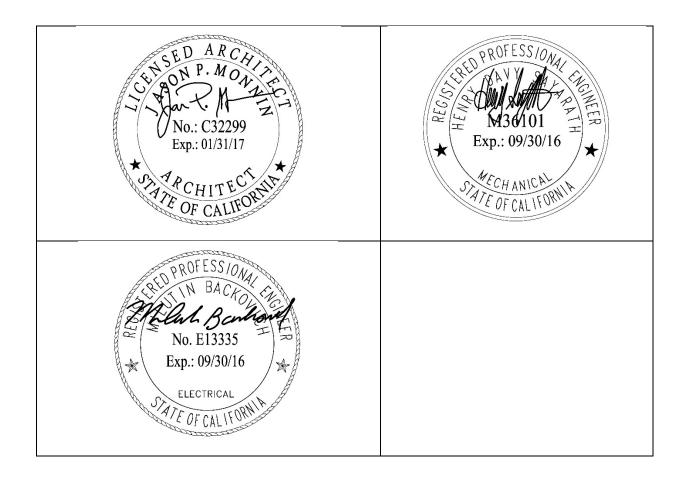
ADDENDUM NO. 1

BUTTE REGIONAL TRANSIT OPERATIONS CENTER

Tenant Improvement

Butte County Association of Governments 2850 Sierra Sunrise Terrace, Suite 100 Chico, CA 95928

Stamps & Signatures



ADDENDUM NO. 1

To the Plans and Specifications for:

BUTTE REGIONAL TRANSIT OPERATIONS CENTER

Tenant Improvement

Butte County Association of Governments 2850 Sierra Sunrise Terrace, Suite 100 Chico, CA 95928

Date: 1-4-2016

GENERAL INFORMATION FOR BIDDERS

- The appendices located after specification section 00 73 00 are out of order.
- The footer for section 09 91 00 PAINTING is mislabeled as 01 91 00.

REVISION TO SPECIFICATIONS

- 1.1 REVISION TO SECTION 01 25 13 PRODUCT SUBSTITUTIONS:
 - a. 1.4 Add paragraph 'O'
 - Owner retains the right to require any project component to match existing campus facility components and reject any substitution
- 1.2 REVISION TO SECTION 00 21 13 INSTRUCTIONS TO BIDDERS:
 - a. Paragraph 6. Add the following: -Section 00 45 11 (Bidder Registration and Safety Experience Form)
- 1.3 REVISION TO SECTION 06 40 23 INTERIOR ARCHITECTURAL WOODWORK:
 - a. 2.5, A Change Grade: Custom to Grade: Premium
 - b. 2.6, A Change Grade: Premium to Grade: Custom
- 1.4 REVISION TO SECTION 08 06 71 DOOR HARDWARE SCHEDULE
 - a. Hardware set 1.0 Replace reference to section 082813 with 28 13 00
- 1.5 REVISION TO SECTION 08 14 16 FLUSH WOOD DOORS
 - a. 2.1, D, 1 Replace text with: 'Stain and veneer: Black Walnut with clear coat, 5-ply thick'

- 1.6 REVISION TO SECTION 09 51 13 ACOUSTIC PANEL CEILINGS
 - a. 2.3, B, 1 Select '15/16" Classic Stab' from list.
 - b. 2.3, D, 2, a Replace text with 'Size: As appropriate and approved by Architect'
 - c. 2.3, D, 3, a Replace text with 'Size: As appropriate and approved by Architect'
 - d. 2.3, D, 4, a Select 'Angle' from list.
- 1.7 REVISION TO SECTION 09 91 00 PAINTING
 - a. Add 3.7, B Concrete Masonry Substrates
 - i. Prime coat: Per manufacturer
 - ii. Two finish coats
- 1.8 REVISION TO SECTION 22 30 00 PLUMBING EQUIPMENT REPLACED IN ITS ENTIRETY
- 1.9 REVISION TO SECTION 23 09 00 HVAC INSTRUMENTATION AND CONTROLS DELETED IN ITS ENTIRETY
- 1.10 REVISION TO SECTION 23 20 00 HVAC PIPING AND PUMPS DELETED IN ITS ENTIRETY
- 1.11 REVISION TO SECTION 23 30 00 HVAC AIR DISTRIBUTION DELETED IN ITS ENTIRETY
- 1.12 REVISION TO SECTION 23 30 10 FIBER GLASS REINFORCED PLASTIC DUCT DELETED IN ITS ENTIRETY
- 1.13 REVISION TO SECTION 23 52 00 HEATING BOILERS DELETED IN ITS ENTIRETY
- 1.14 REVISION TO SECTION 23 73 00 INDOOR CENTRAL-STATION AIR-HANDLING UNITS DELETED IN ITS ENTIRETY
- 1.15 REVISION TO SECTION 23 81 19 SELF-CONTAINED AIR-CONDITIONERS DELETED IN ITS FNTIRFTY
- 1.16 REVISION TO SECTION 23 81 29 VARIABLE REFRIGERANT FLOW HVAC SYSTEMS DELETED IN ITS ENTIRETY
- 1.17 REVISION TO SECTION 23 81 29 VARIABLE REFRIGERANT FLOW HVAC SYSTEMS ADDED NEW SECTION

REVISIONS TO DRAWINGS

- 1.1 REVISION TO DRAWING AD201 DEMO FLOOR PLAN
 - a. Revise Keynote 2 to read (E) DOOR AND FRAME TO BE REMOVED
- 1.2 REVISION TO DRAWING AD230 DEMO ROOF PLAN
 - a. Keynoting revised, all gutters and downspouts to be removed and replaced within the scope of the project

1.3 REVISION TO DRAWING A211 - ENLARGED FLOOR PLANS

- a. Detail 2 2x ledger added
- b. Detail 3 2x ledger added
- c. Detail 4 Revised to clarify the construction of the reception desk
- d. Detail 5 Revised to clarify finish material and substrates to be used
- 1.4 REVISION TO SHEET A222 ENLARGED CEILING PLAN
 - a. Keynote 3 has been omitted
- 1.5 REVISION TO SHEET A230 ROOF PLAN
 - a. Keynote 2 applies to low roof also
- 1.6 REVISION TO SHEET A301 EXTERIOR ELEVATIONS
 - a. Keynote 5 revised to identify EP1 finish
 - b. Keynote 14 added
 - c. Detail 4 West Elevation Keynote 14 shown at louvered gate
 - d. Finish schedule revised
- 1.7 REVISION TO DRAWING A601 SIGNAGE PLAN & ROOM FINISH SCHEDULE
 - a. Room finish schedule revised as shown
 - b. Material Legend revised as shown
- 1.8 REVISION TO DRAWING A602 INTERIOR ELEVATIONS
 - a. Elevations E2, C4, D2, D4, B1, B3 & B4 all have clarifications to finishes
- 1.9 REVISION TO DRAWING A603 INTERIOR ELEVATIONS
 - a. Elevations C1, C2, C3 & C4 all have clarifications to finishes
- 1.10 REVISION TO DRAWING A604 INTERIOR ELEVATIONS
 - a. Elevations D1, D3, D4 all have clarifications to finishes
- 1.11 REVISION TO DRAWING A610 RESTROOM ENLARGED PLANS & ELEVATIONS
 - a. Elevations A1, A2, A3, B1, B2 & B4 all have clarifications to finishes
- 1.12 REVISION TO DRAWING M201 MECHANICAL PLAN
 - a. Added Keynote 7 INSTALL DUCT SMOKE DETECTOR IN THE SUPPLY AIR SECTION OF THE UNIT
- 1.13 REVISION TO DRAWING M801 MECHANICAL SCHEDULE
 - a. Revised Electrical Specifications for "Trane Dedicated Outdoor Air Split System Indoor Fan Coil Unit."

1.14 REVISION TO DRAWING E201 – ELECTRICAL POWER PLAN

- a. Revised HVAC Electrical Schedule FC6-1 Fan and Strip Heater Specifications
- 1.15 REVISION TO DRAWING E805 ELECTRICAL PANEL SCHEDULES
 - a. Added HVAC FC6-1 Strip Heater to Panel "HA" and moved HVAC FC6-1 Fan to Panel "LA"
- 1.16 REVISION TO DRAWING M201 MECHANICAL PLAN
 - a. Added Keynote #7: Install fire smoke duct detector in supply air section of the unit.
- 1.17 REVISION TO DRAWING M801 MECHANICAL SCHEDULES
 - a. Revised Dedicated Outdoor Air Split System Indoor Fan Coil Unit Schedule to include electrical requirements for electric heater and Note 4. Provide electric heater with modulating SCR control.
- 1.18 REVISION TO DRAWING P201 PLUMBING FLOOR PLAN
 - a. Revised plumbing plan for routing clarification.



00 43 13 - BOND ACCOMPANYING BID

BIDDER'S BOND BUTTE COUNTY ASSOCIATION OF GOVERNMENTS

We, All Men by These Presents, That we_	
	as Principal, and
as "Obligee", in the penal sum of TEN PE Principal above named and submitted by payment of which sum we bind ourselves	anty Association of Governments, State of California, hereafter referred to RCENT (10%) OF THE TOTAL AMOUNT OF THE TOTAL BID of the y said Principal to the Obligee for the Work described below, for the , our heirs, executors administrators and successors, jointly and severally, e liability of the surety hereunder exceed the sum of:
\$	
THE CONDITION	ON OF THIS OBLIGATION IS SUCH, THAT:
OPERATIONS CENTER, Tenant Impro	above-mentioned bid to the Obligee, for <u>BUTTE REGIONAL TRANSIT</u> ovement <u>Remodel project</u> for which bids are to be opened at <u>The Butte</u> 80 Sierra Sunrise Terrace, Suite 100, Chico, CA 95928 2:00 pm on
under the specifications, after the prescrib in the prescribed form, in conformance wi performance of the contract and the other obligation shall be null and void; otherwis	ncipal is awarded the contract and, within the time and manner required ed forms are presented to him for signature, enters into a written contract, the the bid, and files two bonds with the Obligee, one to guarantee faithful to guarantee payment for labor and materials as required by law, then this e, it shall remain in full force and virtue. In the event suit is brought upon as recovered, the Surety shall pay all costs incurred by the Obligee in such to be fixed by the court.
IN WITNESS WHEREOF, We have herei	unto set our hands and seal on thisDay of,
	Principal
	Surety By Attorney-in-fact
	Attorney-in-fact
CERTIF State of California City/County of SS	TICATE OF ACKNOWLEDGEMENT
On this day of	in the year 20 before me
	, personally appeared, Attornev-in-fact
	sis of satisfactory evidence) to be the person whose name is subscribed to this instrument as, and acknowledged to me that he (she) subscribed the her) own name as attorney-in-fact.
(SEAL)	ner) own name as attorney-in-ract.
V- /	Notary Public
	·
	END OF SECTION



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SECTION 22 30 00 - PLUMBING EQUIPMENT

PART 1 – GENERAL

- 1.1 SUMMARY
 - A. Section Includes:
 - 1. Water heaters.
- 1.2 SUBMITTALS
 - A. Product Data: Submit manufacturer's literature for plumbing equipment.
- 1.3 CLOSEOUT SUBMITTALS
 - A. Operation and Maintenance Data: Submit literature and parts list.
- 1.4 QUALITY ASSURANCE
 - A. Water Heater Performance Requirements: Equipment efficiency not less than prescribed by ASHRAE 90.1 when tested in accordance with DOE 10 CFR.
 - B. Ice Machine Performance Requirements: Equipment efficiency not less than prescribed by Federal Energy Efficiency Regulations.
- 1.5 WARRANTY
 - A. Furnish five-year manufacturer warranties for water heaters.

PART 2 – PRODUCTS

- 2.1 TANK GAS WATER HEATERS
 - A. Manufacturers:
 - 1. A.O. Smith
 - 2. State Industries
 - 3. Substitutions: Permitted.
 - B. Description: Factory assembled and wired, vertical storage, natural gas fired, power venting or direct venting, non-condensing type.
 - 1. Input: As scheduled on Drawings
 - 2. Minimum recovery as scheduled on Drawings
 - 3. Thermal efficiency: Minimum 80%
 - 4. Maximum working pressure: 150 psi
 - C. Unit Construction: UL listed steel vessel: glass lined with powered anode, with high temperature limit thermostat and ASME rated temperature and pressure relief valve.



- Interior Finish: Corrosion-resistant metal or materials and thicknesses complying with NSF 61, barrier materials for potable-water tank linings. Extend finish into and through tank fittings and outlets.
- 2. Insulation: Comply with ASHRAE 90.1.
- 3. Jacket: Steel, with enameled finish.
- D. Burner: For use with submerged combustion chamber and natural gas fuel, direct spark ignition, and complying with appropriate requirements of UL 795.

PART 3 – EXECUTION

3.1 INSTALLATION

- A. Install water heaters in accordance to UL requirements. Coordinate with plumbing piping and mechanical work to achieve operating system.
- B. Install the following accessories:
 - 1. Wells for temperature regulator sensor at heated water outlet.
 - 2. ASME rated pressure and temperature relief valve on heated water discharge.
 - 3. ASME rated pressure relief valves from taps on heated waterside, set at 120 psi.
 - 4. Thermometers and pressure gauge taps on water inlets and outlets. Refer to Section 22 10 00.
- C. Install piping from relief valves and drain valves to nearest floor drain or mop sink.
- D. Install seismic restraint for tanks, anchored to building structural framing members.
- E. Clean and flush tanks prior to delivery to site. Keep openings sealed until pipe connections are made.
- F. On tanks, install drain at water inlet and outlet, thermometer with range of 40 to 200 degrees F, and ASME pressure relief valve suitable for maximum working pressure.

END OF SECTION



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SECTION 23 81 29 – VARIABLE REFRIGERANT FLOW HVAC SYSTEMS

PART 1 - GENERAL

1.1 SUMMARY

- A. Bidders shall provide the minimum system as indicated on drawing, including Heat Pump with Heat Recovery Systems as defined by model and family numbers. All systems shall be capable of providing the scheduled capacity at the location of the indoor unit regardless of pipe length. Nominal or catalog capacities will not be accepted.
- B. The Variable Refrigerant Flow (VRF) system shall be capable of transferring heat between individual indoor units, and between individual Mode Control Units.
- C. To ensure maximum occupant comfort, VRF systems may have a space temperature controller for each connected indoor unit. Each individual space temperature controller shall be capable of automatically satisfying heating or cooling regardless of time of day, occupancy, or season without inhibiting or affecting other space temperature controllers.
- D. If the application calls for simultaneous cooling and heating with multiple zones and multiple controllers, and the installing contractor submits a Heat Pump system without heat recovery technology, the submittal shall be summarily rejected. The contractor shall then be required to resubmit and install a simultaneous heating and cooling system. The contractor shall bear all additional costs required to provide a simultaneous heating and cooling system, with no additional cost to the owner.
- E. VRF system controls installation and integration shall be provided by the manufacturer of the VRF system. The VRF system controls shall be capable of integrating into Owner's Direct Digital Controls (DDC) system.

1.2 REFERENCES

- A. Air-Conditioning, Heating and Refrigeration Institute:
 - 1. AHRI 1230 Performance Rating of Variable Refrigerant Flow (VRF) Multi-Split Air-Conditioning and Heat Pump Equipment
 - 2. AHRI 210/240 Performance rating of Unitary Air-Conditioning and Air-Source Heat Pump Equipment.
 - 3. AHRI 270 Sound Rating of Outdoor Unitary Equipment.
 - 4. AHRI 340/360 Performance Rating of Commercial and Industrial Unitary Air-Conditioning and Heat Pump Equipment.
 - 5. AHRI 365 Commercial and Industrial Unitary Air-Conditioning Condensing Units.
- B. American Society of Heating, Refrigerating and Air-Conditioning Engineers:
 - 1. ASHRAE 90.1 Energy Standard for Buildings except Low-Rise Residential Buildings.
 - 2. ASHRAE 15 Safety Standard for Refrigeration Systems



C. ASTM International:

- 1. ASTM B117 Standard Practice for Operating Salt Spray (Fog) Apparatus.
- D. National Electrical Manufacturers Association:
 - 1. NEMA MG 1 Motors and Generators.
- E. National Fire Protection Association:
 - 1. NFPA 90A Standard for the Installation of Air Conditioning and Ventilating Systems.

1.3 SUBMITTALS

- A. Section 01 33 00, SUBMITTAL PROCEDURES: Submittal procedures.
- B. Product Data: Submit data indicating:
 - 1. Cooling and heating capacities. Select report showing design conditions, total load profile, and actual capacity at actual indoor unit location.
 - 2. VRF piping and wiring layout showing estimated piping, wiring sizes, equipment quantities, piping length estimate, and additional refrigerant charge.
 - 3. Dimensional and weight data for all products submitted.
 - 4. Rough-in connections and connection requirements.
 - 5. Electrical requirements with electrical characteristics and connection requirements.
 - 6. Controls.
 - 7. Accessories.
- C. Manufacturer's Installation Instructions: Submit assembly, support details, connection requirements, and include start-up instructions. Owner shall be provided with a complete and comprehensive set of Installation and Operation Manuals.
- D. Manufacturer's Certificate: Certify Products meet or exceed specified requirements.
- E. Manufacturer's Field Reports: Submit start-up report for each unit.

1.4 CLOSEOUT SUBMITTALS

- A. Section 01 73 00, EXECUTION: Closeout procedures.
- B. Project Record Documents: Record actual locations of controls installed remotely from units.
- C. Operation and Maintenance Data: Submit manufacturer's descriptive literature, operating instructions, installation instructions, and maintenance and repair data.

1.5 QUALITY ASSURANCE

A. Performance Requirements: Energy Efficiency Rating (EER) not less than prescribed by ASHRAE 90.1 or California Energy Code when used in combination with compressors and evaporator coils when tested in accordance with AHRI 210/240.



- B. Cooling Capacity: Rate in accordance with AHRI 210/240.
- C. Sound Rating: Measure in accordance with AHRI 270.
- D. Insulation and adhesives: Meet requirements of NFPA 90A.
- E. The units shall be listed by Electrical Laboratories (ETL) and bear the ETL label.
- F. All wiring shall be in accordance with the National Electrical Code (N.E.C.).
- G. Project shall comply with the applicable version of ASHRAE standard 15.
- H. Project shall comply with the applicable version of ASHRAE 90.1
- I. The VRF manufacturing facility shall be registered to ISO 9001 and ISO14001.
- J. All components shall be provided by one manufacturer including but not limited to:
 - 1. Outdoor Units
 - 2. Indoor Units
 - 3. Mode Control Units as required
 - 4. All necessary and applicable controls for the VRF System
 - 5. Factory refrigerant charge for outdoor unit(s) only
 - 6. Factory Y and or T-Branch(s) as required
 - 7. Condensate Lift Pump(s)
 - 8. Refrigerant Ball Valves
 - 9. Service Software

1.6 QUALIFICATIONS

- A. Manufacturer: Company specializing in manufacturing products specified in this section with minimum twenty-five (25) years of HVAC experience in the North America market.
- B. Manufacturer to have Local Factory Service within seventy-five (75) miles of jobsite.
- C. Installer: The VRF system shall be installed by a VRF certified installer with extensive VRF installation and service training. The mandatory contractor service and install training shall be performed by the manufacturer.
- 1.7 PRE-INSTALLATION MEETINGS
 - A. Section 01 31 00, PROJECT MANAGEMENT AND COORDINATION: Pre-installation meeting.
 - B. Convene minimum one week prior to commencing work of this section.
- 1.8 DELIVERY, STORAGE, AND HANDLING
 - A. Section 01 60 00, PRODUCT REQUIREMENTS: Requirements for transporting, handling, storing, and protecting products.



- B. Accept units and components on site in factory protective containers, with factory shipping skids and lifting lugs. Inspect for damage.
- C. Comply with manufacturer's installation instruction for rigging, unloading and transporting units.
- D. Protect units from weather and construction traffic by storing in dry, roofed location.

1.9 COORDINATION

- A. Section 01 31 00, PROJECT MANAGEMENT AND COORDINATION: Requirements for coordination.
- B. Coordinate installation of condensing unit with building structure.
- C. Coordinate installation of fan coil unit with building structure.

1.10 WARRANTY

- A. Section 01 73 00, EXECUTION: Requirements for warranties.
- B. The units shall be covered by the manufacturer's standard limited warranty for a period of 12 months from date of installation. If during this period, any part should fail to function properly due to defects in workmanship or material, it shall be replaced or repaired by the manufacturer.
- C. The units shall carry an extended manufacturer's functional parts warranty for a minimum period of 10 years from date of installation.
- D. The following steps shall be taken by the contractor to ensure systems are eligible for extended warranty.
 - 1. System is designed and submitted using the approved application tool.
 - 2. System installed by a contractor who has successfully completed the VRF manufacturer's factory training class.
 - 3. Upon completion of installation and prior to final commissioning, contractor shall provide revised piping layout reflecting actual installation conditions to manufacturer.
 - 4. Provide a verified and submitted commissioning report to manufacturer.
- E. The contractor shall provide labor warranty as specified in the general conditions for this project.

1.11 MAINTENANCE SERVICE

- A. Section 01 73 00, EXECUTION: Requirements for maintenance service.
- B. Furnish service and maintenance of equipment for one year from Date of Substantial Completion. Include maintenance items as shown in manufacturer's operating and maintenance data, including filter replacements, fan belt replacement, and controls checkout and adjustments.



C. Furnish 24-hour emergency service on breakdowns and malfunctions for this maintenance period. Furnish capability of response time within 4 hours.

1.12 MAINTENANCE MATERIALS

- A. Section 01 73 00, EXECUTION: Requirements for maintenance materials.
- B. Furnish one set for each unit of fan belts.

PART 2 – PRODUCTS

2.1 VARIABLE REFRIGERANT FLOW HVAC SYSTEMS

- A. Manufacturers:
 - 1. Basis of design: as scheduled on drawings.
 - 2. Substitutions: Mitsubishi, Daikin, or equal.

2.2 HEAT PUMP WITH HEAT RECOVERY UNIT

- A. The Heat Pump unit shall be used specifically with the same manufacturer's Heat Recovery systems (simultaneous heating and cooling). Units shall have weather tight construction for outdoor installation, (outdoor unit).
- B. To ensure maximum occupant comfort, Heat Recovery systems may have a space temperature controller for each connected indoor unit. The Heat Recovery system shall provide simultaneous heating and cooling without the use of reheat.
- C. The outdoor units shall be equipped with multiple circuit boards. These boards shall perform all functions necessary for operation of the outdoor units.
- D. The outdoor unit shall be completely factory assembled, internally piped and wired. Each unit shall be run tested at the factory.
 - 1. The combination ratio of the nominal indoor cooling capacity versus the nominal outdoor rated cooling capacity shall range from 50% to 130%.
 - 2. Outdoor unit shall have a sound rating no higher than 62/83(Pressure/Power) dB(A).
 - 3. The outdoor unit shall have an accumulator.
 - 4. The outdoor unit shall have a high pressure safety switch, fuse, over-current protection and crank case heater.
 - 5. The outdoor unit shall have a high efficiency oil separator plus additional logic controls to ensure adequate oil volume in the compressor is maintained.
 - 6. The outdoor units shall provide continuous heating during oil return and the defrost cycle through the use of rotational defrost. (multiple module systems).

2.3 MCU (Mode Change Unit)

A. The MCU (Mode Change Unit) shall be used for applications requiring simultaneous heating and cooling. The unit electrical power shall be 208/230 volts, 1 phase, 60 hertz.



- B. MCUs require they be used in conjunction with VRF Heat Recovery water source or air source units. These units shall be equipped with a circuit board that shall perform all functions necessary for operation.
- C. The MCU (Mode Change Unit) shall be completely factory assembled, internally piped and wired. Unit shall be run tested. This unit shall be mounted indoors.
- D. Each MCU shall be capable of transferring heat to connected associated indoor units, and to the connected water source or air source unit. This shall allow simultaneous heating and cooling without the need for reheat.
- E. Isolation valves with access ports shall be installed by the contractor on the entering and leaving refrigerant circuits as shown on the drawings.
- F. Additional subcooling shall be provided at the MCU. The additional subcooling is required to mitigate losses due to pipe length and heat gain. This will ensure scheduled capacity at the indoor unit.
- G. MCU (Mode Change Units) shall be available in three sizes, 4-port, 6-port, and dedicated 2-port. The heat recovery water source or air source unit shall be capable of connecting to multiple MCUs (Mode Change Units).
- H. The 4-port MCU shall connect up to 4 indoor units when the sum of the indoor unit's capacity is less than 120 MBH. Optionally, the 6-port MCUs shall connect up to 6 indoor units where the sum of indoor unit's capacity is less than 180 MBH.
- I. The dedicated 2-port MCU shall be used to connect individual Indoor units whose capacity greater than or equal to 36 MBH, and where the sum of the MCUs capacity is less than 192 MBH.
- J. When connecting indoor units with capacities greater than 36 MBH to a 4-port, 6-port, or dedicated 2-port MCU, two ports shall be twinned together at the MCU to deliver the required refrigerant. The two MCU refrigerant valves shall operate simultaneously.
- K. IDUs with capacity in excess of 48MBH shall not be connected to 4-port or 6-port MCUs. They should be used exclusively with a dedicated 2-port MCUs.
- L. IDUS with capacity less than 36MBH indoor unit shall not be connected to a dedicated 2-port MCUs.
- M. The MCU casing shall be fabricated of galvanized steel. Each cabinet shall house a liquid-gas separator and multiple refrigeration control valves. The unit shall house two tube-in-tube heat exchangers (sub cooling) to ensure heating and cooling capacity at the indoor unit.
- N. The MCU shall be furnished with multiple two position refrigerant valves. Linear electronic expansion valves shall be used to control the variable refrigerant flow.



- O. An integral MCU condensate pan and drain connection shall be provided.
- P. Use 18 AWG, 25pF/ft nom., 60.7 Ω impedance, braid or foil shielded, twisted pair wire for communications wiring. Splicing of communication wiring shall not be permitted.

2.6 1-WAY SLIM CEILING CASSETTE INDOOR UNITS

- A. The 4TVE is a one-way cassette style indoor unit that recesses into the ceiling with a ceiling grille and shall have a 2000 step modulating expansion device. The unit electrical power shall be 208-230 volts, 1-phase, 60 hertz.
- B. The indoor unit shall be a factory assembled, wired and run tested. Contained within the unit shall be all factory wiring, piping, the electronic modulating linear expansion device, control circuit board, and fan motor. The unit shall have a self-diagnostic function, 3-minute time delay mechanism, and auto restart function.
- C. The unit cabinet shall be space-saving ceiling recessed. The one-way grille shall be fixed to bottom of cabinet allowing for one-way airflow.
- D. The indoor fan shall consist of a direct driven cross-flow fan with a single motor. The indoor fan shall be statically and dynamically balanced to run on a motor with permanently lubricated bearings. The indoor fan shall have high, medium, and low fan speeds. The fan speed shall be adjustable by an optional remote controller.
- E. Return air shall be filtered by means of a long-life washable permanent filter.
- F. The indoor coil shall be constructed as follows:
 - 1) The indoor coil shall be of nonferrous construction with slit fins on copper tubing.
 - 2) The tubing shall have inner grooves for high efficiency heat exchange.
 - 3) All tube joints shall be brazed with phos-copper or silver alloy.
 - 4) The coils shall be pressure tested at the factory.
 - 5) A condensate pan and drain shall be provided under the coil.
 - 6) The factory installed condensate lift mechanism shall be able to raise drain water 29.5 inches water column above the condensate pan.
 - 7) The coil fins shall be coated with hydrophilic paints.
 - 8) Both refrigerant lines to the indoor units shall be insulated.
- G. Use 18 AWG, 25pF/ft nom., 60.7 Ω impedance, braid or foil shielded, twisted pair wire for communications wiring. Splicing of communication wiring shall not be permitted.
- H. This unit shall use controls provided by the manufacturer to perform functions necessary to operate the system. Please refer to Part 3 of this guide specification for details on controllers and other control options.



2.7 4-WAY MINI/ 4-WAY CEILING CASSETTE INDOOR UNITS

- A. The four-way cassette style indoor units that recess into the ceiling grid with an exposed ceiling grille and an integral 2000 step modulating expansion device. The unit electrical power shall be 208-230 volts, 1-phase, 60 hertz.
- B. The indoor unit shall be a factory assembled, wired and run tested. Contained within the unit shall be all factory wiring, piping, the electronic modulating linear expansion device, control circuit board, and fan motor. The unit shall have a self-diagnostic function, 3-minute time delay mechanism, an auto restart function.
- C. The unit cabinet shall be a space-saving ceiling-recessed cassette.
- D. The indoor fan shall consist of a turbo fan with a single direct drive motor. The indoor fan shall be statically and dynamically balanced to run on a motor with permanently lubricated bearings. The indoor fan shall have high, medium, and low fan speeds. The fan speed shall be adjustable by an optional remote controller. The auto air swing vanes shall be capable of automatically swinging up and down for uniform air distribution. If require the cassette shall be capable of closing off one or more vanes to prevent "stray airflow".
- E. Return air shall be filtered by means of a long-life washable permanent filter.
- F. The indoor coil shall be constructed as follows:
 - 1) The indoor coil shall be of nonferrous construction with slit fins on copper tubing.
 - 2) The tubing shall have inner grooves for high efficiency heat exchange.
 - 3) All tube joints shall be brazed with phos-copper or silver alloy.
 - 4) The coils shall be pressure tested at the factory.
 - 5) A condensate pan and drain shall be provided under the coil.
 - 6) The coil fins shall be coated with hydrophilic paints.
 - 7) The factory installed condensate lift mechanism shall be able to raise drain water 29.5 inches water column above the condensate pan.
 - 8) Both refrigerant lines to the indoor units shall be insulated.
- G. Use 18 AWG, 25pF/ft nom., 60.7 Ω impedance, braid or foil shielded, twisted pair wire for communications wiring. Splicing of communication wiring shall not be permitted.
- H. This unit shall use controls provided by the manufacturer to perform functions necessary to operate the system. Please refer to Part 3 of this guide specification for details on controllers and other control options.

2.8 SLIM DUCT /MEDIUM STATIC/ HIGH STATIC- DUCTED INDOOR UNITS

A. The ducted indoor fan coil designs that mounts above the ceiling. The unit shall have a 2000 step modulating expansion device. The unit electrical power shall be 208-230 volts, 1-phase, 60 hertz.



- B. The indoor unit shall be factory assembled, wired and run tested. Contained within the unit shall be all factory wiring, piping, the electronic modulating linear expansion device, control circuit board, and fan motor. The unit shall have a self-diagnostic function, 3-minute time delay mechanism, and an auto restart function.
- C. The unit cabinet shall be a space saving, ceiling-concealed, ducted unit. The cabinet panel shall have provisions for a field installed filtered outside air intake.
- D. The indoor unit fan shall consist of two or three Sirocco fans, direct driven by a single motor. The indoor fan shall be statically and dynamically balanced and run on a motor with permanently lubricated bearings. The indoor fan shall have high, medium, and low fan speeds. The fan speed shall be adjustable by an optional remote controller.
- E. The return air shall be filtered by means of a standard factory installed return air filter. An optional return filter box (rear placement) with high-efficiency filter shall be available for ducted indoor units. If using the optional return filter box, verify the filter/filter box performance is within the bounds of the unit's external pressure performance.
- F. The indoor coil shall be constructed as follows:
 - 1) The indoor coil shall be of nonferrous construction with slit fins on copper tubing.
 - 2) The tubing shall have inner grooves for high efficiency heat exchange.
 - 3) All tube joints shall be brazed with phos-copper or silver alloy.
 - 4) The coils shall be pressure tested at the factory.
 - 5) A condensate pan and drain shall be provided under the coil.
 - 6) The coil fins shall be coated with hydrophilic paints.
 - 7) The optional field installed condensate lift mechanism shall be able to raise drain water 29.5 inches water column above the condensate pan.
 - 8) Both refrigerant lines to the indoor units shall be insulated.
- G. Use 18 AWG, 25pF/ft nom., 60.7Ω impedance, braid or foil shielded, twisted pair wire for communications wiring. Splicing of communication wiring shall not be permitted.
- H. This unit shall use controls provided by the manufacturer to perform functions necessary to operate the system. Please refer to Part 3 of this guide specification for details on controllers and other control options.

2.9 CEILING SUSPENDED INDOOR UNITS

A. The indoor unit is a convertible unit that can be mounted on the ceiling in a horizontal configuration, or on the floor/wall in a vertical configuration. The unit electrical power shall be 208-230 volts, 1-phase, 60 hertz. The unit must be installed with the optional single room EEV (Electronic Expansion Valve) kit, or two or three rooms EEV (Electronic Expansion Valve) kits. (Two or three room EEVS are for HP systems only, not for use with HR systems).



- B. The indoor unit shall be factory assembled, wired and run tested. Contained within the unit shall be all factory wiring, piping, control circuit board and fan motor. The unit shall have a self-diagnostic function, 3-minute time delay mechanism, and an auto restart function.
- C. The unit cabinet shall be an exposed ceiling suspended or wall/floor mounted configuration. With multi directional drain and refrigerant piping offering four (4) directions for refrigerant piping and four (4) directions for condensate drainage.
- D. The indoor unit fan shall consist of Sirocco fans direct driven by a single motor. The indoor fan shall be statically and dynamically balanced to run on a motor with permanently lubricated bearings. The indoor fan shall have multiple speeds.
- E. Return air shall be filtered by means of an easily removable, washable filter.
- F. The indoor coil shall be constructed as follows:
 - 1) The indoor coil shall be of nonferrous construction with Slit fins on copper tubing.
 - 2) The tubing shall have inner grooves for high efficiency heat exchange.
 - 3) All tube joints shall be brazed with phos-copper or silver alloy.
 - 4) The coils shall be pressure tested at the factory.
 - 5) A condensate pan and drain shall be provided under the coil.
 - 6) The coil fins shall be coated with hydrophilic paints.
 - 7) The optional field installed condensate lift mechanism shall be able to raise drain water 29.5 inches water column above the condensate pan.
 - 8) Both refrigerant lines to the indoor units shall be insulated.
- G. Use 18 AWG, 25pF/ft nom., 60.7 Ω impedance, braid or foil shielded, twisted pair wire for communications wiring. Splicing of communication wiring shall not be permitted.
- H. This unit shall use controls provided by Manufacturer to perform functions necessary to operate the system. Please refer to Part 3 of this guide specification for details on controllers and other control options.

2.10 WALL MOUNTED INDOOR UNITS

- A. The wall-mounted indoor unit section with a slim silhouette. The wall mounted indoor unit electrical power shall be 208-230 volts, 1-phase, 60 hertz. The 4TVW-C shall have a 2000 step modulating expansion device.
- B. The indoor unit shall be factory assembled, wired and run tested. Contained within the unit shall be all factory wiring, internal piping, the electronic modulating linear expansion device, control circuit board, and fan motor. The unit shall have a self-diagnostic function, 3-minute time delay mechanism, an auto restart function.
- C. The unit casing shall have a white finish, with multi directional drain and refrigerant piping offering four (4) directions for refrigerant piping and four (4) directions for condensate drainage. The unit shall be secured firmly to the wall with factory mounting plate.



- D. The indoor fan shall consist of a cross-flow fan with a single direct drive motor. The indoor fan shall be statically and dynamically balanced to run on a motor with permanently lubricated bearings. A manual adjustable guide vane shall be provided to change the airflow from side to side (left to right) as desired. A motorized air sweep louver shall provide an automatic change in airflow by directing the air up and down to provide uniform air distribution. The indoor fan shall have multiple speeds.
- E. Return air shall be filtered by means of an easily removable, washable filter.
- F. The indoor coil shall be constructed as follows:
 - 1) The indoor coil shall be of nonferrous construction with Slit fins on copper tubing.
 - 2) The tubing shall have inner grooves for high efficiency heat exchange.
 - 3) All tube joints shall be brazed with phos-copper or silver alloy.
 - 4) The coils shall be pressure tested at the factory.
 - 5) A condensate pan and drain shall be provided under the coil.
 - 6) The coil fins shall be coated with hydrophilic paints.
 - 7) The optional field installed condensate lift mechanism shall be able to raise drain water 29.5 inches water column above the condensate pan.
 - 8) Both refrigerant lines to the indoor units shall be insulated.
- G. Use 18 AWG, 25pF/ft nom., 60.7 Ω impedance, braid or foil shielded, twisted pair wire for communications wiring. Splicing of communication wiring shall not be permitted.
- H. This unit shall use controls provided by Manufacturer to perform functions necessary to operate the system. Please refer to Part 3 of this guide specification for details on controllers and other control options.

2.11 ACCESSORIES

- A. Y-Joint Kits- are a required component for VRF-Systems with multiple evaporators or MCU's on the same system. Y-joints shall be provided for liquid, suction, and hot gas fittings as required. Y-joints shall be provided with polystyrene insulation. Y-branches shall facilitate different pipe sizes without having to braze additional fittings. Field fabrication or substitution of Y-Joints shall void warranty. Kits shall be installed per manufacturer guidelines. Requires field installation.
- B. T-Joint Kits are a required component for VRF systems capable of operating multiple outdoor modules on a single system, (check catalog(s) for factory approved combinations). The T-Joint shall be provided for liquid, suction, and hot gas fittings as required. T-Joints shall be provided with polystyrene insulation. T-Branches shall facilitate different pipe sizes without having to braze additional fittings. Field fabrication or substitution of non-Manufacturer T-joints shall void warranty. Kits shall be installed per manufacturer guidelines. Requires field installation.
- C. EEV KITs- the EEV (Electronic Expansion Valve) provides refrigerant management of indoor units. The EEV shall be required for field installation on ceiling suspended (floor) indoor units. Heat Recovery systems shall use the one unit EEV kit. Heat Pump systems may utilize the one,



two, or three unit EEV kits. Kits shall be installed per manufacturer guidelines. Requires field installation.

- D. Condensate Drain Pumps shall be provided for field installation as required for efficient condensate management. Condensate pumps shall be capable of 29.5" of lift to allow condensate to reach the closest gravity drain line. Condensate pumps shall include a check valve to prevent water form flowing back into the indoor unit. Pump shall be mounted in the chassis of the indoor unit. Pump shall draw on required power from the associated indoor unit. Requires field installation (Standard factory installed for all ceiling cassettes).
- E. Refrigerant Isolation Ball Valves shall be provided for field installation as specified by the contract documents. Valves shall utilize a uni-body full port design to minimize leaks and internal pressure drops. Valves shall be rated for 700PSIG, and are offered with an optional factory insulation package. Valves shall be factory tested under pressure. Valves shall require polytetrafluroethylene (PTFE) seals and gaskets. No synthetic O-rings are allowed. Design shall permit valve operation without removal of seal cap. Valves shall have a temperature operation range of -40°F to 300°F. Requires field installation.
- F. Wireless remote temperature controller can be used with all Manufacturer VRF Indoor Units. Remote shall utilize a Multi-function LCD display and shall possesses the following functionality:
 - 1) Infrared control of IDU
 - 2) Battery operated
 - 3) Utilizes indoor unit mounted temperature sensor for temperature control.
 - 4) ON/OFF Control
 - 5) Mode Selection
 - 6) Temperature Set-point
 - 7) Fan Speed Setting
 - 8) Adjustment of individual airflow blade control (cassette units).
 - 9) Dirty Filter Alert
 - 10) 4 transmission channel options can separate control to specific IDUs.
 - 11) Requires VRF Duct Signal receiver for ducted units.
- G. Simple wired remote controller can be used with all Manufacturer VRF Indoor Units. Remote shall utilize a Multi-function LCD display and shall possesses the following functionality:
 - 1) ON/OFF Control
 - 2) Mode Selection
 - 3) Temperature Set-point
 - 4) Fan Speed Setting
 - 5) ON/OFF Timer
 - 6) Controls up to 16 IDUs
 - 7) Up to 2 simple remotes may be configured as Master Slave for 1 IDU
 - 8) Child Lock
 - 9) Dirty Filter Alert



- H. Wired Remote Temperature Controller can be used with all Manufacturer VRF Indoor Units. Remote shall utilize a Multi-function LCD display and shall possesses the following functionality:
 - 1) Temperature set point control
 - 2) Built-in room temperature sensor
 - 3) Operation mode: Auto-Cool-Dry-Fan-Heat
 - 4) Fan speed: Auto-Low-Med-High
 - 5) Filter alarm reset (timer)
 - 6) Individual airflow blade control on cassette units
 - 7) Controls up to 16 IDUs
 - 8) Real-time clock includes current time, day display
 - 9) Daylight savings time adjustment (program in the date)
 - 10) Weekly operating scheduling
 - 11) Motion Detection/Away function (applies to enabled IDU)
 - 12) Upper/Lower temperature limit settings
 - 13) Up to 2 wired remotes may be average as a single controller
 - 14) Error display
 - 15) Service Mode provides configuration settings
 - 16) Security lock code
- I. External Room Temperature Sensor is wall-mounted to provide accurate room temperature sensing for an associated VRF cooling and heating unit. It is used in place of the unit-mounted return air sensor provided with VRF indoor units. It may also be used when there is a desire to prohibit direct occupant control. Requires field installation.
- J. The VRF Duct Signal Receiver is a wall or ceiling-mounted device that receives signals from the Wireless (Infrared) Remote Control. It re-transmits those signals to an associated concealed VRF Indoor Unit. This allows for use of remote control of concealed indoor units. Requires field installation.
- K. Motion Detector is an optional component for the Mini 4-Way cassette that offers a smart solution to saving energy and costs. It works by turning off the air conditioning system once it detects the absence of any users in the vicinity. Energy efficiency is further maximized through its ability to automatically identify and set operation patterns. The Motion Detector Sensor prevents air flow from blowing directly onto a person by adjusting the blade direction when motion is detected. This creates a more constant and comfortable environment. The motion sensor must be used with the wired remote controller. Requires field installation.
- L. External Contact Interface shall permit the on/off control of indoor units through an external input. The device will also allow the indoor unit to interlock control of external devices. This will allow the external devices to operate in sequence with the interlocked indoor unit.
- M. Auxiliary heat contact shall enable the operation of external auxiliary supplemental heat.
- N. Standard Cassette Panels shall be required with as indicated for all 1-way, Mini 4-way, and 4-way ceiling cassettes.



- O. Filter Box is an optional return filter box (rear placement) that enables the use of high efficient filters with ducted concealed indoor units. If using the optional return filter box, verify the filter/filter box performance is within the bounds of the unit's external pressure performance. Requires field installation.
- P. Mode Select Switch shall enable the manually override mode control for the VRF HP system. The switch shall set the operating mode as Cool, Heat, or Auto. (For use on heat pump systems only.)
- Q. Hail guards shall protect the air source condenser coil(s) from damaging hail. Requires field installation.
- R. Wind/Snow Prevention Duct Kit are for vertical air source units. The kits are used in windy or snowy regions to prevent cold gusts of air from interfering with stable operation of the units. They are also for use in snowy regions to prevent snow from accumulating on the units. The kit is recommended when low ambient heating is required. The Wind/Snow prevention kit may require the additional use of the Duct Discharge Kit. Requires field installation.
- S. Duct Discharge Kit allows a vertical air source unit to be located inside a structure, and duct the condenser discharge air to the exterior of the structure. Requires field installation.

2.12 SYSTEM NETWORK CONTROLS

A. The Manufacturer VRF System Network Controls consists of individual controllers, system controllers, and integrated management system. The VRF System Network Controls shall support operation monitoring, scheduling, error monitor, power distribution, personal browsers, tenant billing, online maintenance support, and integration with Building Management Systems (BMS) using BACnet® interfaces.

PART 3 – EXECUTION

3.1 INSTALLATION

- A. Install units level and plumb. Coordinate installation of units with architectural, mechanical and electrical work.
- B. Install evaporator-fan components using manufacturer's standard mounting devices securely fastened to building structure.
- C. Install compressor-condenser components on equipment supports as detailed on Mechanical plans. Anchor units to supports with removable, cadmium-plated fasteners.
- D. Install seismic restraints.
- E. Install and connect precharged refrigerant tubing to component's quick-connect fittings. Install tubing to allow access to unit.



3.2 CONNECTIONS

- A. Piping installation requirements are specified in other Division 23 Sections. Drawings indicate general arrangement of piping, fittings, and specialties.
 - 1. Connect refrigerant pipes with all accessories listed above. Comply with requirements in Division 23 Section "Refrigerant Piping and Specialties.
- B. Install piping adjacent to unit to allow service and maintenance.
- C. Ground equipment according to Division 26 Section "Grounding and Bonding for Electrical Systems."
- D. Electrical Connections: Comply with requirements in Division 26 Sections for power wiring, switches, and motor controls.
- E. The control circuit between the indoor units and the outdoor unit shall be 24VDC completed using a 2-conductor, twisted pair shielded cable to provide total integration of the system. All wiring exposed or installed within walls shall be in conduit.

3.3 FIELD QUALITY CONTROL

- A. Manufacturer's Field Service: Engage a factory-authorized service representative to inspect, test, and adjust field-assembled components and equipment installation, including connections, and to assist in field testing. Report results in writing.
- B. Perform the following field tests and inspections and prepare test reports:
 - 1. Leak Test: After installation, charge system and test for leaks. Repair leaks and retest until no leaks exist.
 - 2. Operational Test: After electrical circuitry has been energized, start units to confirm proper motor rotation and unit operation.
 - 3. Test and adjust controls and safeties. Replace damaged and malfunctioning controls and equipment.
- C. Remove and replace malfunctioning units and retest as specified above.

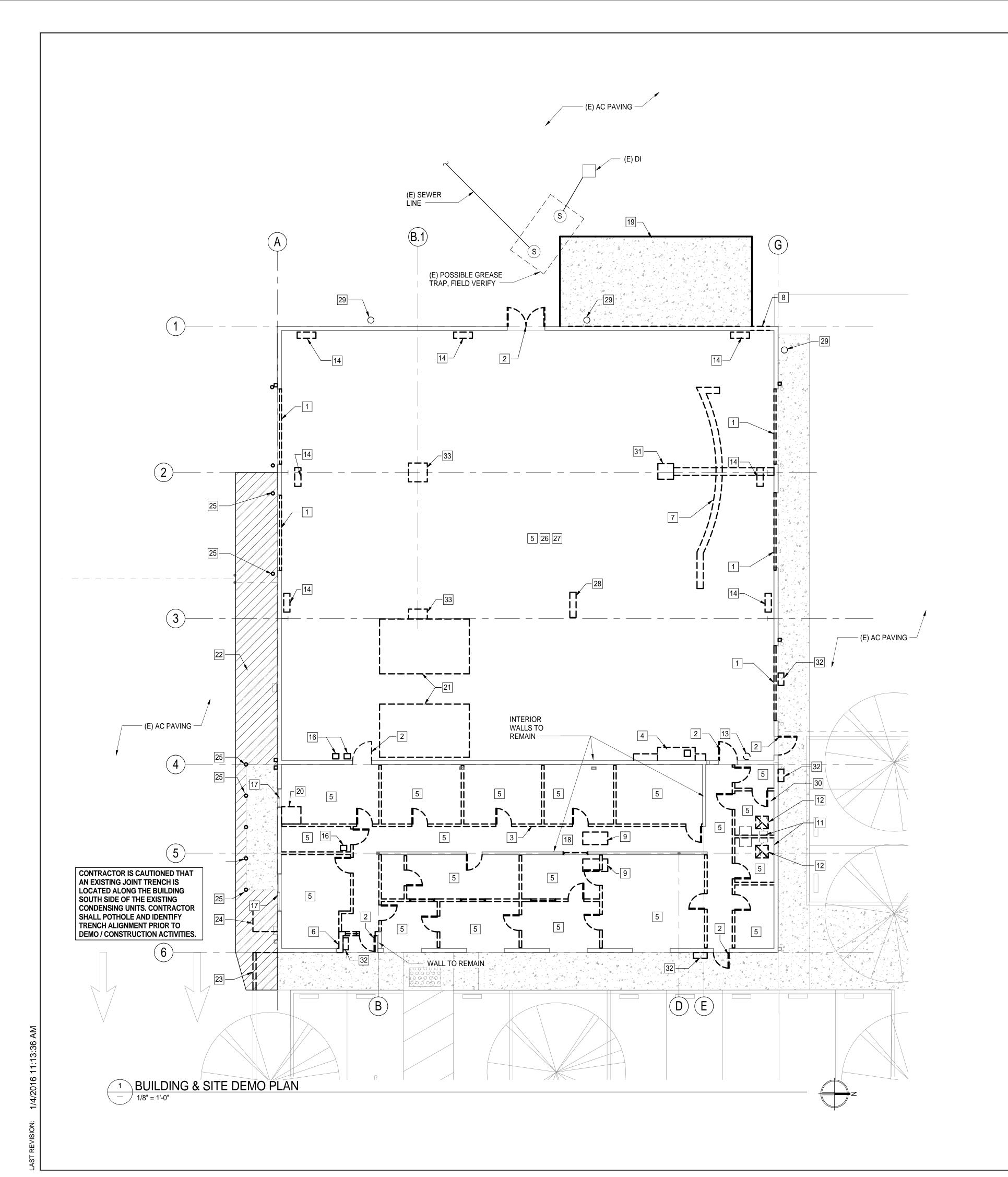
3.4 STARTUP SERVICE

- A. Engage a factory-authorized service representative to perform startup service.
 - 1. Complete installation and startup checks according to manufacturer's written instructions.

3.5 DEMONSTRATION

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

END OF SECTION



EXISTING WALL TO BE REMOVED

EXISTING BOLLARD TO BE REMOVED

EXISTING BOLLARD TO REMAIN

EXISTING BOLLARD TO REMAIN

PAVEMENT SAWCUT LINE

EXISTING CURBS / PAVING TO BE REMOVED

GENERAL NOTES:

- 1. CONTRACTOR TO CHECK AND FIELD VERIFY ALL DIMENSION AND CONDITIONS AT JOB SITE INCLUDING LOCATIONS AND DEPTHS OF (E) UTILITIES AND NOTIFY ARCHITECT OF ANY DISCREPANCIES BETWEEN DRAWINGS AND FIELD CONDITIONS BEFORE COMMENCING ANY WORK.
- 2. CONTRACTOR TO NOTIFY ARCHITECT AND OWNER OF ANY DRY ROT THAT MAY BE DISCOVERED DURING DEMO.
- 3. CONTRACTOR TO REPAIR IN-KIND ANY AREAS DAMAGED DURING REMOVAL AND DEMO OF (E) ROOFING ASSEMBLY.
- 4. CONTRACTOR SHALL COORDINATE ALL UTILITY DISCONNECTS/INTERRUPTIONS WITH OWNER MINIMUM 2 WEEKS PRIOR TO START OF WORK.
- 5. 20 CY DEBRIS BOX FOR OWNER TRASH TO BE RENTED BY CONTRACTOR FOLLOWING MOVE OUT. INCLUDE IN BASE BID AMOUNT.
- 6. GENERAL CONTRACTOR TO DEMO ALL EQUIPMENT NOT REMOVED BY OWNER.
- 7. GENERAL CONTRACTOR TO CLEAN ALL WALLS AND SLABS AS REQUIRED TO OBTAIN OPTIMAL CONDITIONS TO RECEIVE NEW FINISHES AND ELIMINATE ODOR.
- 8. PROVIDE APPROVED REFRIGERENT RECOVERY DOCUMENTATION ACCEPTABLE TO THE AHJ.
- 9. REMOVE ALL CONDUCTORS FROM ALL DEMOLISHED CONTROL, SIGNAL & POWER CIRCUITS TO THE SERVICE TERMINATION POINT.

KEYNOTES

- (E) ROLL UP DOOR TO BE REMOVED IN ITS ENTIRETY AND TURNED OVER TO THE COUNTY.
 - 2 (É) DOOR AND FRAME TO BE REMOVED. 3 (E) INTERIOR WALLS TO BE REMOVED IN THEIR ENTIRETY UNLESS NOTED.
 - 4 (E) WASH STATION TO BE REMOVED.
 - 5 ALL CEILING & ASSOCIATED LIGHTS, DIFFUSERS, ETC TO BE REMOVED.
 - 6 (E) WALL TO BE REMOVED.
 - 7 DEMOLISH (E) SLAB AS SHOWN.
 - 8 DEMOLISH (E) CMU WALL AS REQUIRED FOR (N) DOOR.
 - 9 DEMOLISH (E) FURNACE UNIT, DUCTWORK, AND ALL ASSOCIATED REFRIGERANT PIPING, GAS PIPING, AND CONTROLS.
 - 10 DEMOLISH (E) CONDENSING UNIT AND ALL ASSOCIATED REFREGERANT PIPING AND CONTROLS. REMOVE
 - CAP W/ PROPER FITTINGS INTENDED FOR PIPE, CONDUIT OR DUCT TERMINATION AND ABANDONMENT.

 11 DEMOLISH (E) PLUMBING FIXTURES. REMOVE ALL ASSOCIATED PIPING. REMOVE CAP W/ PROPER FITTINGS
 - INTENDED FOR PIPE, CONDUIT OR DUCT TERMINATION AND ABANDONMENT.

 12 DEMOLISH (E) CEILING EXHAUST JAMS. REMOVE ALL ASSOCIATED DUCTWORK AND CONTROLS. REMOVE
 - CAP W/ PROPER FITTINGS INTENDED FOR PIPE, CONDUIT OR DUCT TERMINATION AND ABANDONMENT.
 - 13 DEMOLISH (E) ELECTRIC WATER HEATER. REMOVE ALL ASSOCIATED PIPING AND CONTROLS. REMOVE CAP W/ PROPER FITTINGS INTENDED FOR PIPE, CONDUIT OR DUCT TERMINATION AND ABANDONMENT.
 - 14 DEMOLISH (E) GAS UNIT HEATERS (TYP. OF 6) AND REMOVE ALL ASSOCIATED GAS PIPING AND CONTROLS. REMOVE CAP W/ PROPER FITTINGS INTENDED FOR PIPE, CONDUIT OR DUCT TERMINATION AND ARANDONMENT.
 - 15 (E) MAIN SERVICE SWITCHBOARD TO BE DEMOLISHED.
 - 16 (E) PANELS TO BE DEMOLISHED.
 - 16 (E) PANELS TO BE DEMOLISHED.

 17 (E) WINDOW / STOREFRONT TO BE REMOVED. PATCH / REPAIR OPENING TO RECEIVE (N) WINDOW.
 - 18 (E) PLATFORM ABOVE CEILING TO REMAIN.
 - 19 DEMOLISH (E) ASPHALT & CONCRETE AS REQUIRED FOR UTILITY YARD.
 - 20 DEMO SLAB AS REQUIRED FOR JANITOR SINK AND PLUMBING LINES.
 - 21 DEMO SLAB AS REQUIRED FOR RESTROOMS AND PLUMBING LINES.
 - 22 SAWCUT, DEMO & REMOVE (E) PAVING WITHIN LIMITS AS SHOWN
 - 23 SAWCUT, DEMO AND REMOVE (E) CURB WITHIN LIMITS AS SHOWN.
 - 24 REMOVE (E) CHAIN LINK FENCE AND GATE; REMOVE FOUNDATION TO 12 INCHES BELOW GRADE.
 25 REMOVE (E) BOLLARDS AND FOUNDATION TO 12 INCHES BELOW GRADE ALONG SOUTH SIDE OF BUILDING.
 - 26 DEMO ALL (E) UNISTRUT ALONG INSIDE OF CMU.
 - 27 ALL (E) ROOF INSULATION TO BE REMOVED AND REPLACED.
 - 28 DEMO SLAB AS REQUIRED FOR RAMP. SEE STRUCTURAL DRAWINGS.
 - 29 COORDINATE THE REMOVAL OF (E) ANTENNA W/ OWNER.
 - 30 DEMO SLAB AS REQUIRED FOR LINES TO KITCHEN SINK.
 - 31 DEMO SLAB AS REQUIRED FOR FLOOR BOX AND CONDUIT PATH.
 - 32 (E) EXTERIOR LIGHTS TO BE DEMOLISHED.
 - 33 DEMO SLAB AS REQUIRED FOR COLUMN FOOTING. SEE STRUCTURAL DAWINGS.



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PROJECT STATUS:

BID SET

SHEET TITLE:

BUILDINGS:

DEMO FLOOR PLAN

0 1/2 1 BAR IS ONE INCH ON DRAWING. IF NOT ONE SHEET, ADJUST SCALES

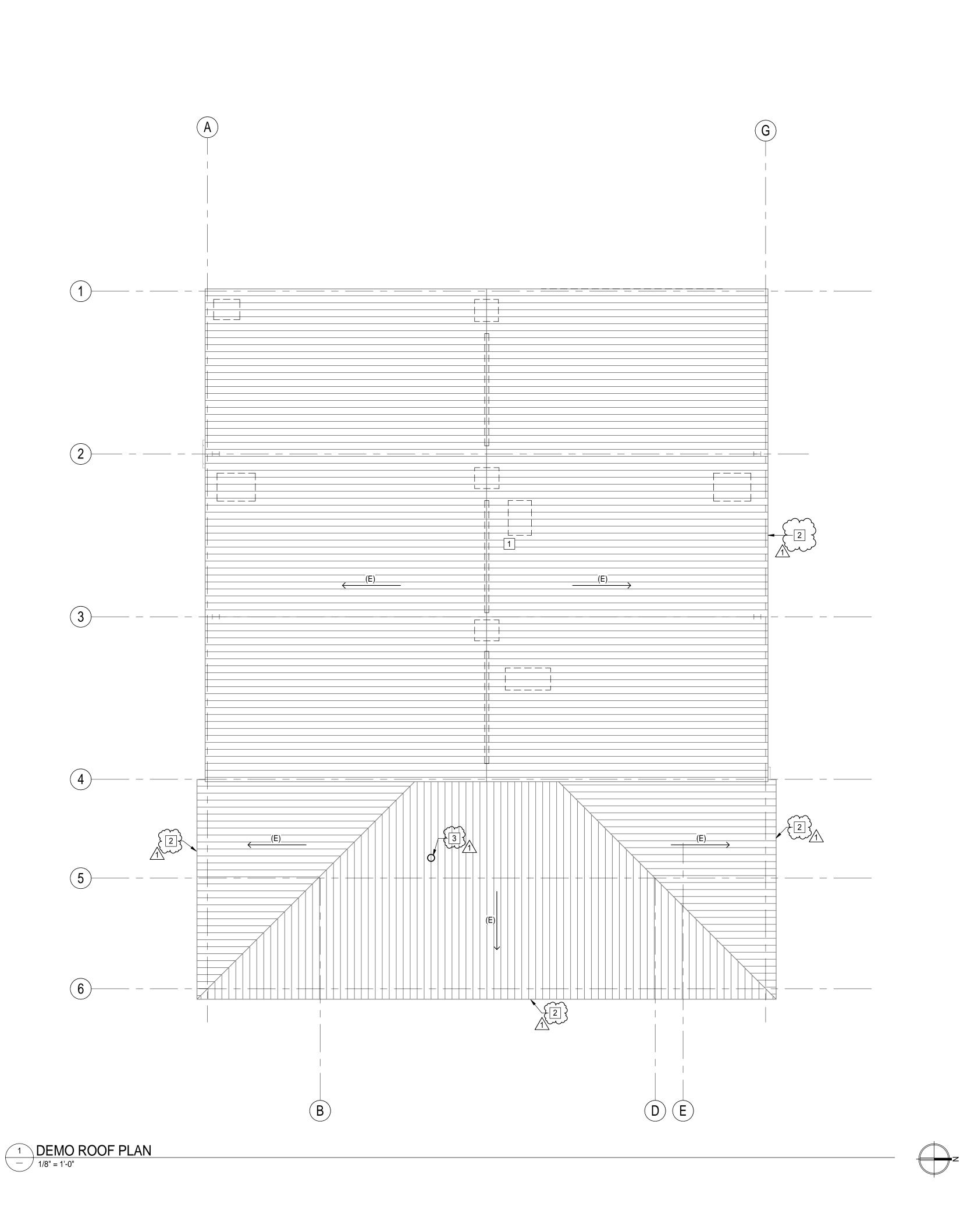
REVISIONS

NO. DESCRIPTION DATE

ADDENDUM 1 1/4/16

JOB NO. 5006A3 SHEET AD20

DATE 12/3/15



GENERAL NOTES:

- 1. ALL ITEMS SHOWN ON PLAN TO BE REMOVED ARE DIAGRAMMATIC & LOCATIONS ARE APPROXIMATE.
- 2. GC TO FIELD VERIFY QUANTITY OF ITEMS TO BE REMOVED FROM ROOM AND TO COORDINATE WITH OWNER WHAT IS TO BE SALVAGED FOR FUTURE USE.

KEYNOTES

- 1 DEMOLISH ALL HVAC & EXHAUST EQUIPMENT FROM ROOF IN THEIR ENTIRETY. ALL ITEMS REMOVED THAT LEAVE AN OPENING IN THE ROOF TO BE FILLED TO MATCH (E) ROOF SECTION. METAL ROOF PANEL ON TOP
- (2 (E) GUTTERS & DOWNSPOUTS TO BE REMOVED.
- 3 REMOVE (E) VENTILATION PIPE & CAP. REUSE PENETRATION FOR (N) RELIEF VENT HOOD.

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PROJECT STATUS:

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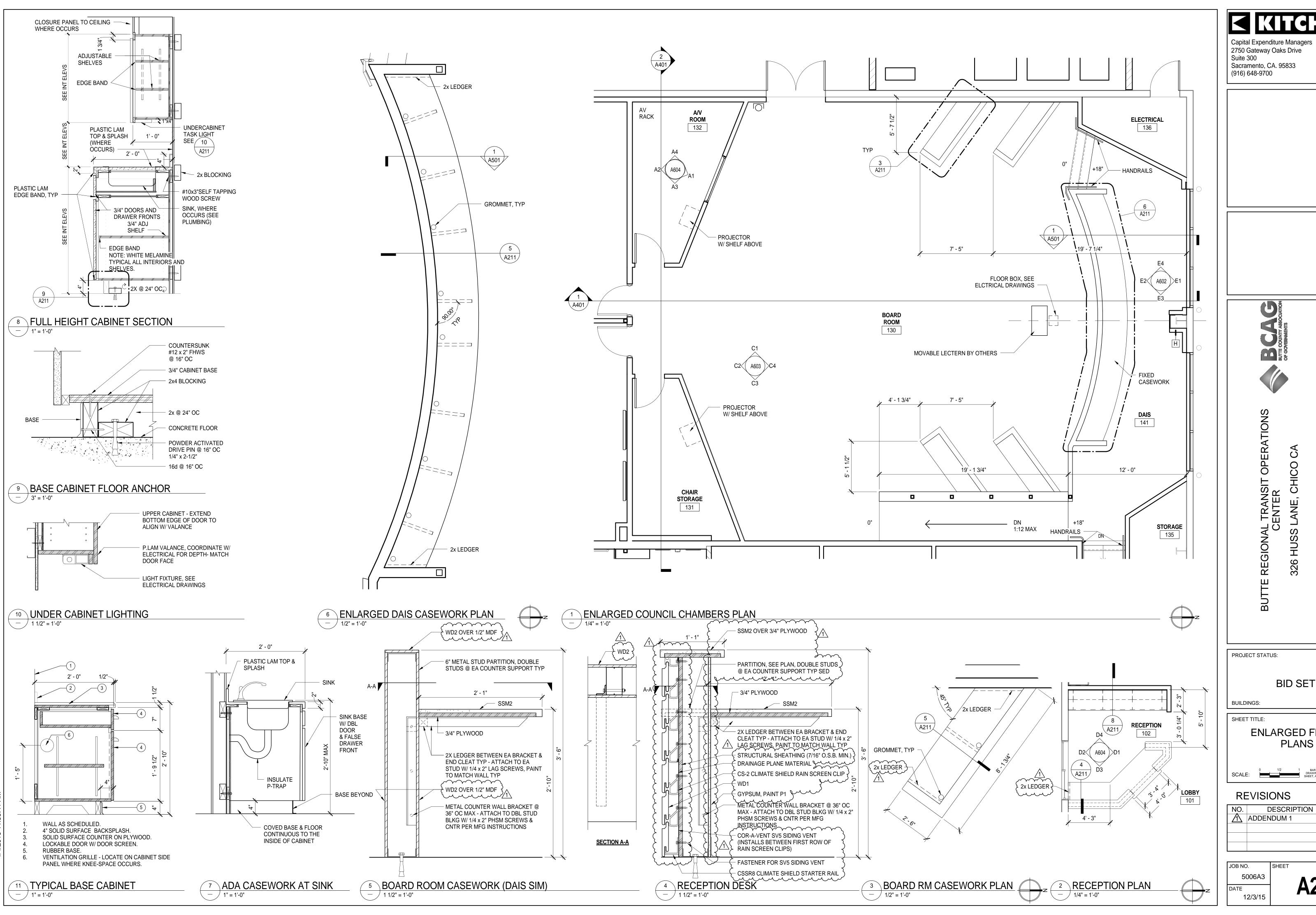
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BUILDINGS:

DEMO ROOF PLAN

REVISIONS

	NO.	DESCRIPTION	DATE
	1	ADDENDUM 1	1/4/16





ENLARGED FLOOR

DATE 1/4/16

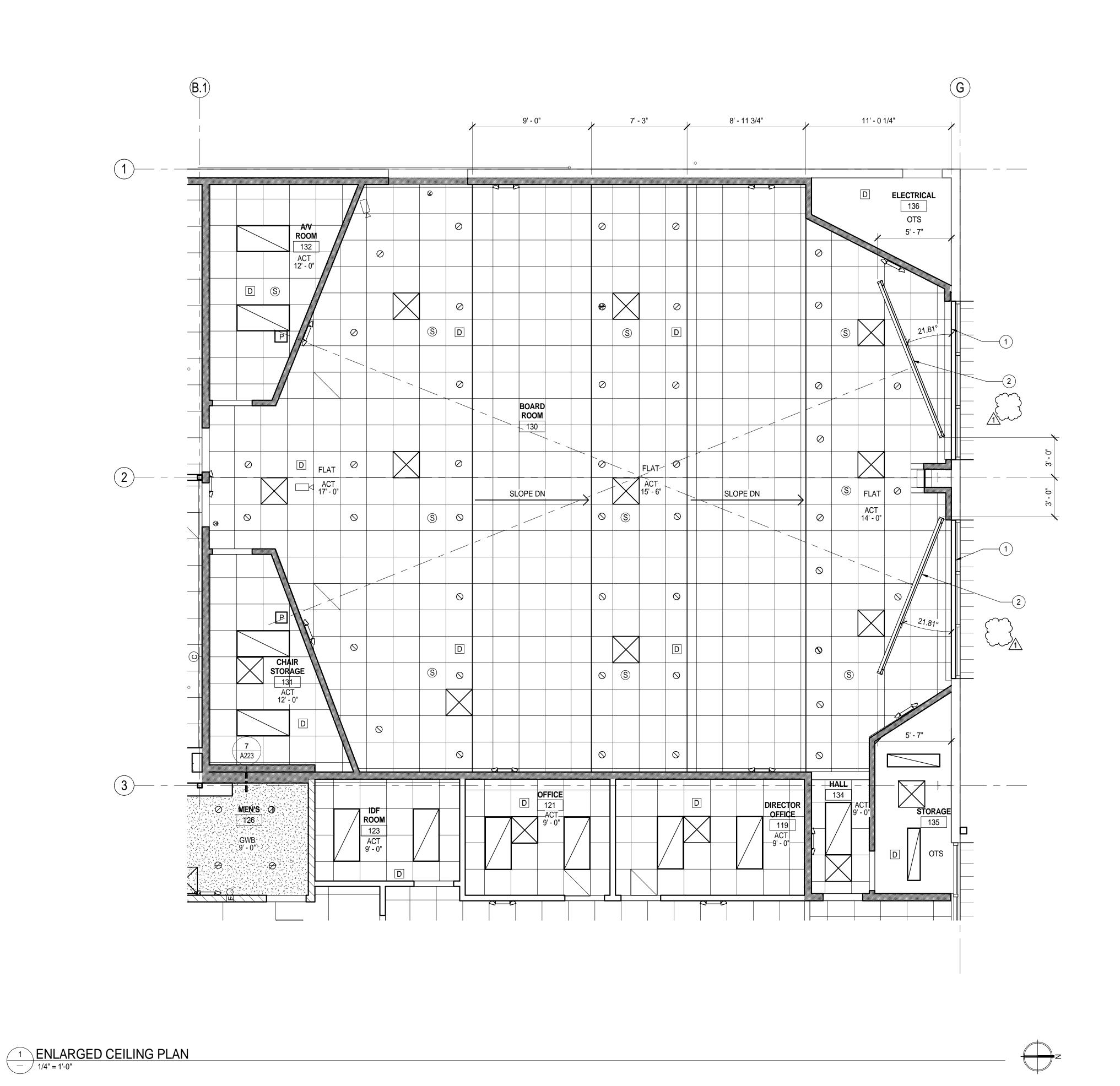
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RCP LEGEND

1 MECHANICAL WINDOW SHADE ATTACH TO UNDERSIDE OF OPENING. SEE 8/A223

Muuuuuuuuu

KEYNOTES

DESCRIPTION	SYMBOL
AIR RETURN	
AIR SUPPLY	
EXHAUST FAN	
CEILING MOUNTED CAMERA (BY OTHERS)	\Diamond
SMOKE DETECTOR	D
CEILING SPEAKER	<u>\$</u>
PROJECTOR	P
EXIT SIGN	€
DOWN LIGHT	Ø
2X2 ACOUSTICAL T-BAR	
1X4 CHAIN SUSPENDED	

2X4 LIGHT

WALL HT 6" ABV ADJACENT CLG

WALL TO UNDERSIDE OF ROOF



COUNTY ASSOCIATION GOVERNMENTS 326 HUSS LANE, CHI

BUTTE

PROJECT STATUS:

BID SET

BUILDINGS:

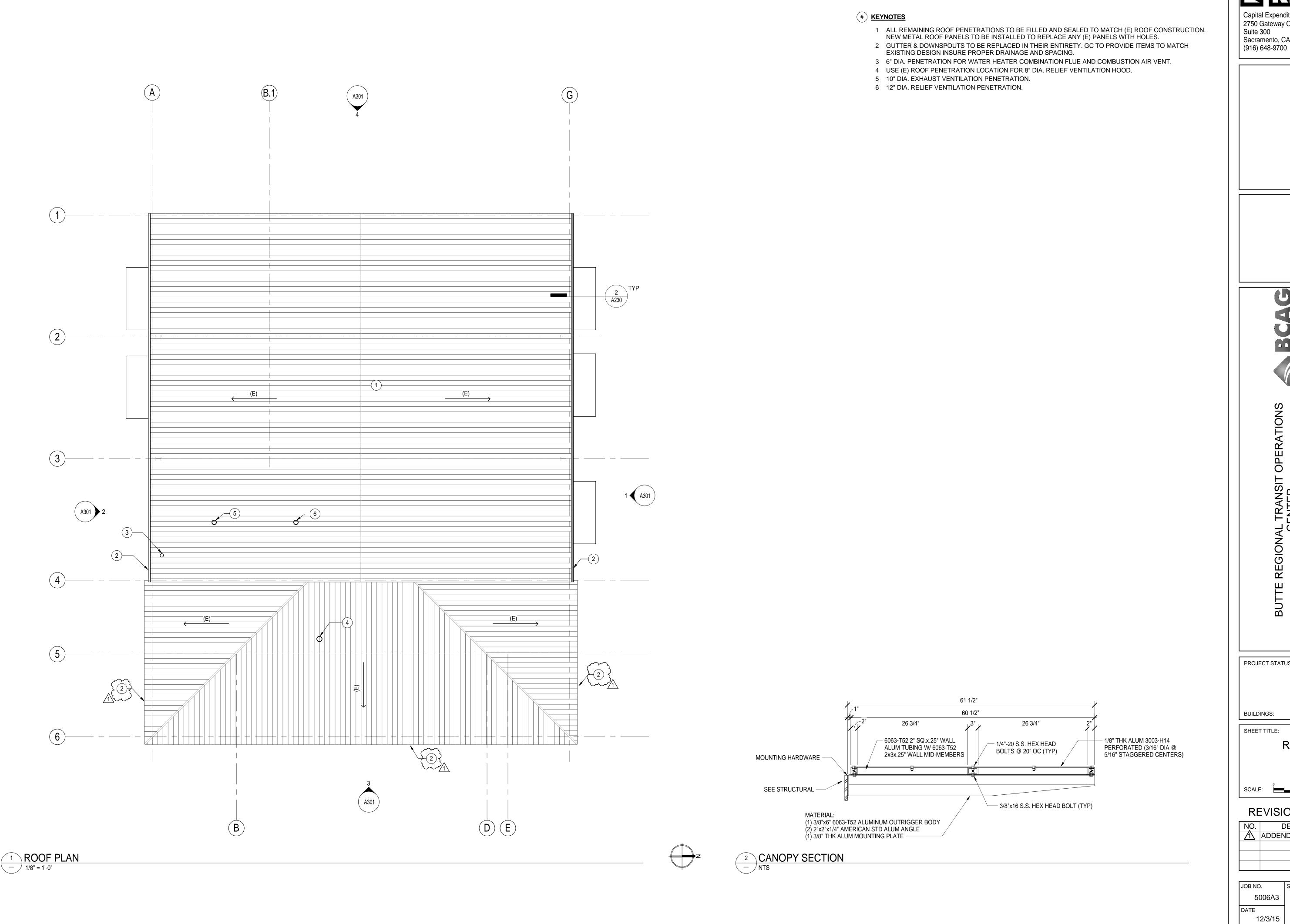
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ENLARGED CEILING PLAN

REVISIONS

	NO.	DESCRIPTION	DATE
	1	ADDENDUM 1	1/4/16
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JOB NO. 5006A3 12/3/15



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Suite 300 Sacramento, CA. 95833



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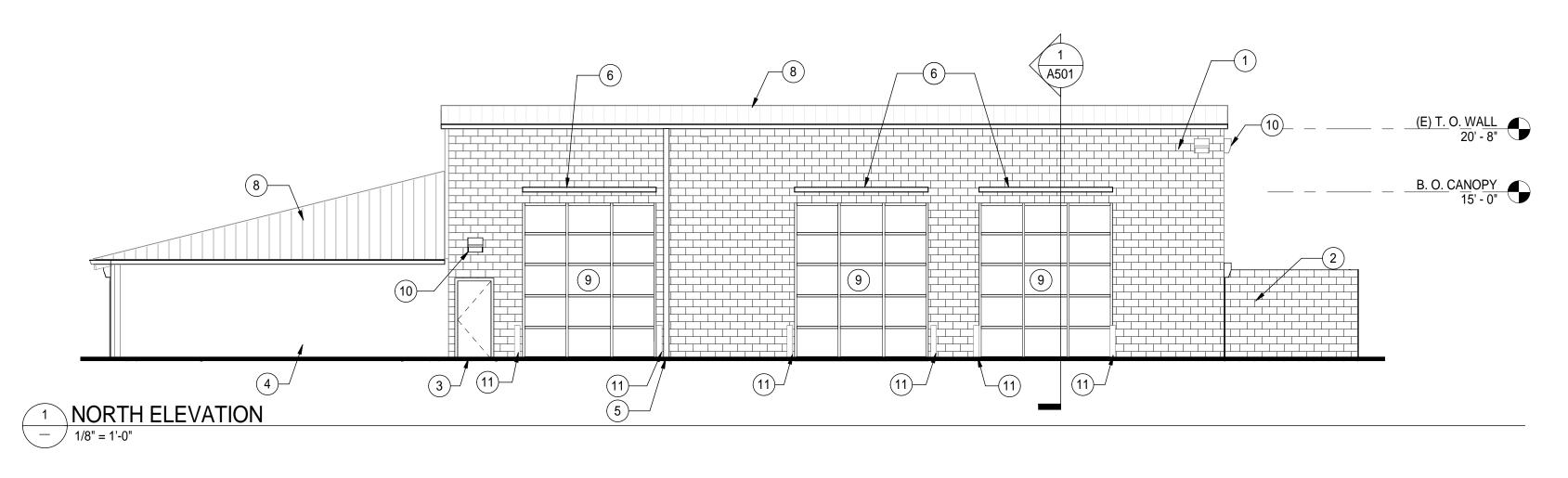
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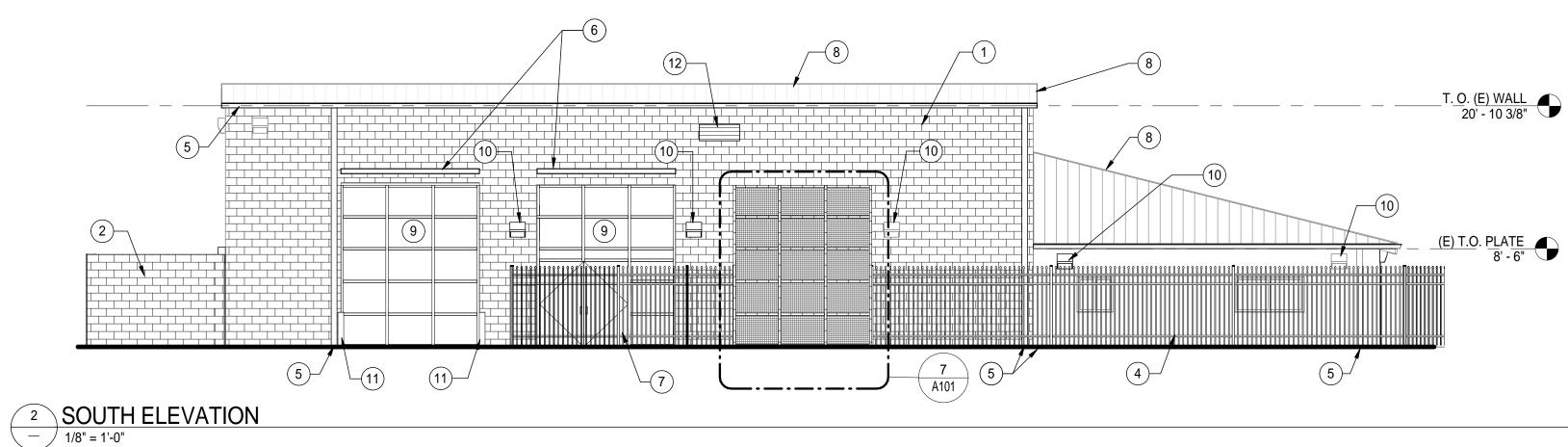
ROOF PLAN

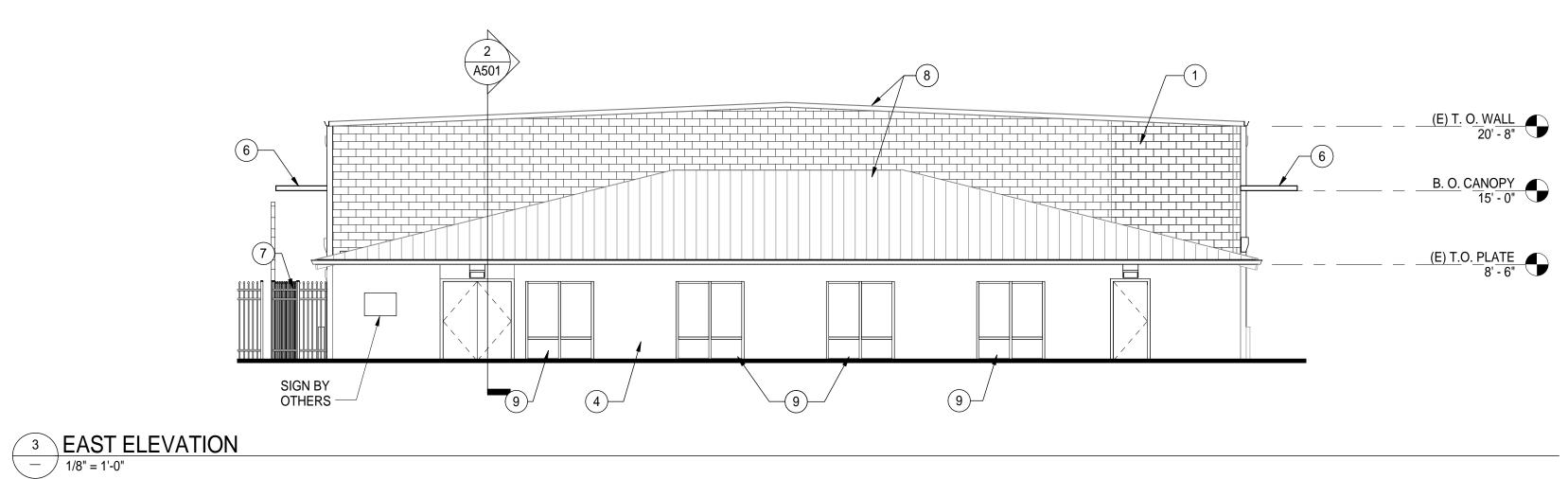
REVISIONS

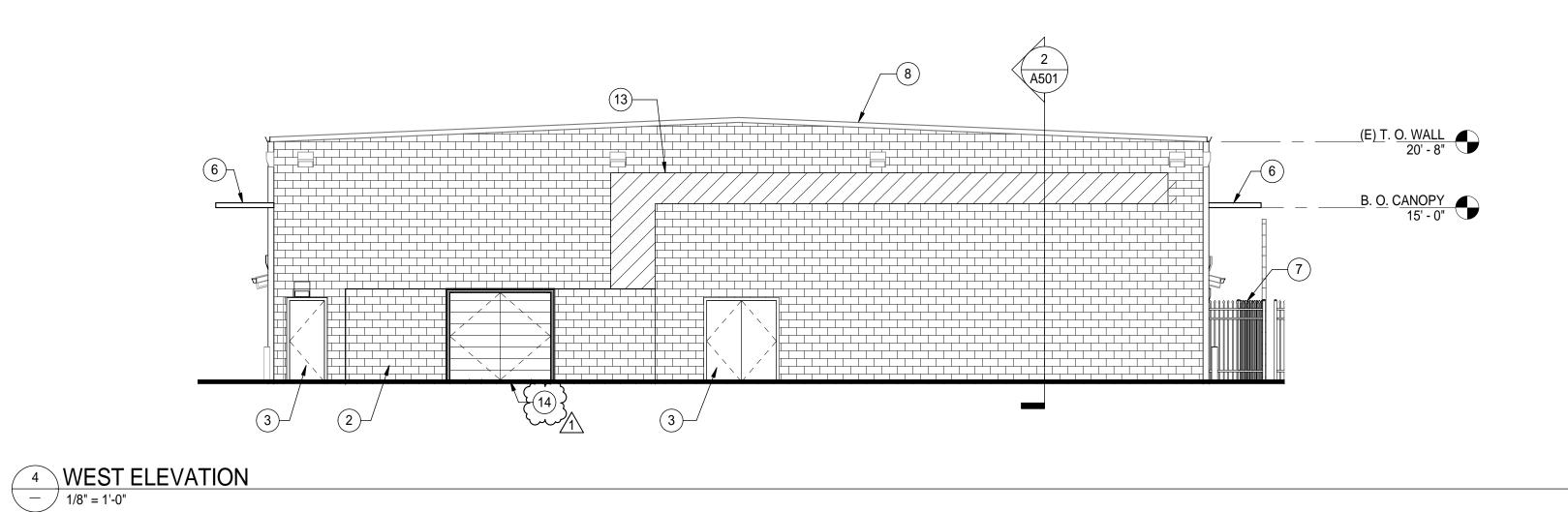
DESCRIPTION DATE ADDENDUM 1 1/4/16

JOB NO.









KEYNOTES

- 1 EXISTING CMU WALL, PAINT EP1.
- 2 CMU WALL, PAINT EP1.
- 3 DOOR, EP2 FINISH.
- 4 EXISTING CEMENT PLASTER WALL, PAINT EP1.
 5 GUTTER & DOWNSPOUT, EP1 FINISH.
 6 METAL SHADE CANOPY, EP2 FINISH.
- 7 ORNAMENTAL METAL GATE, FACTORY FINISH.
- 8 EXISTING ROOF TO REMAIN.
- 9 STOREFRONT SYSTEM, SEE A701.
- 10 EXTERIOR LIGHTING, SEE ELECTRICAL DRAWINGS. 11 PAINT (E) BOLLARD - EP1
- 12 LOUVER, PAINT EP1
- 13 RUN PIPING AS SHOWN AND COORDINATE W/ MECHANICAL PLANS. PAINT PIPE EP1. PAINT WALL PRIOR

TO INSTALLATION OF PIPE ENCLOSURE.

14 LOUVERED GATE, PAINT EP3



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PROJECT STATUS:

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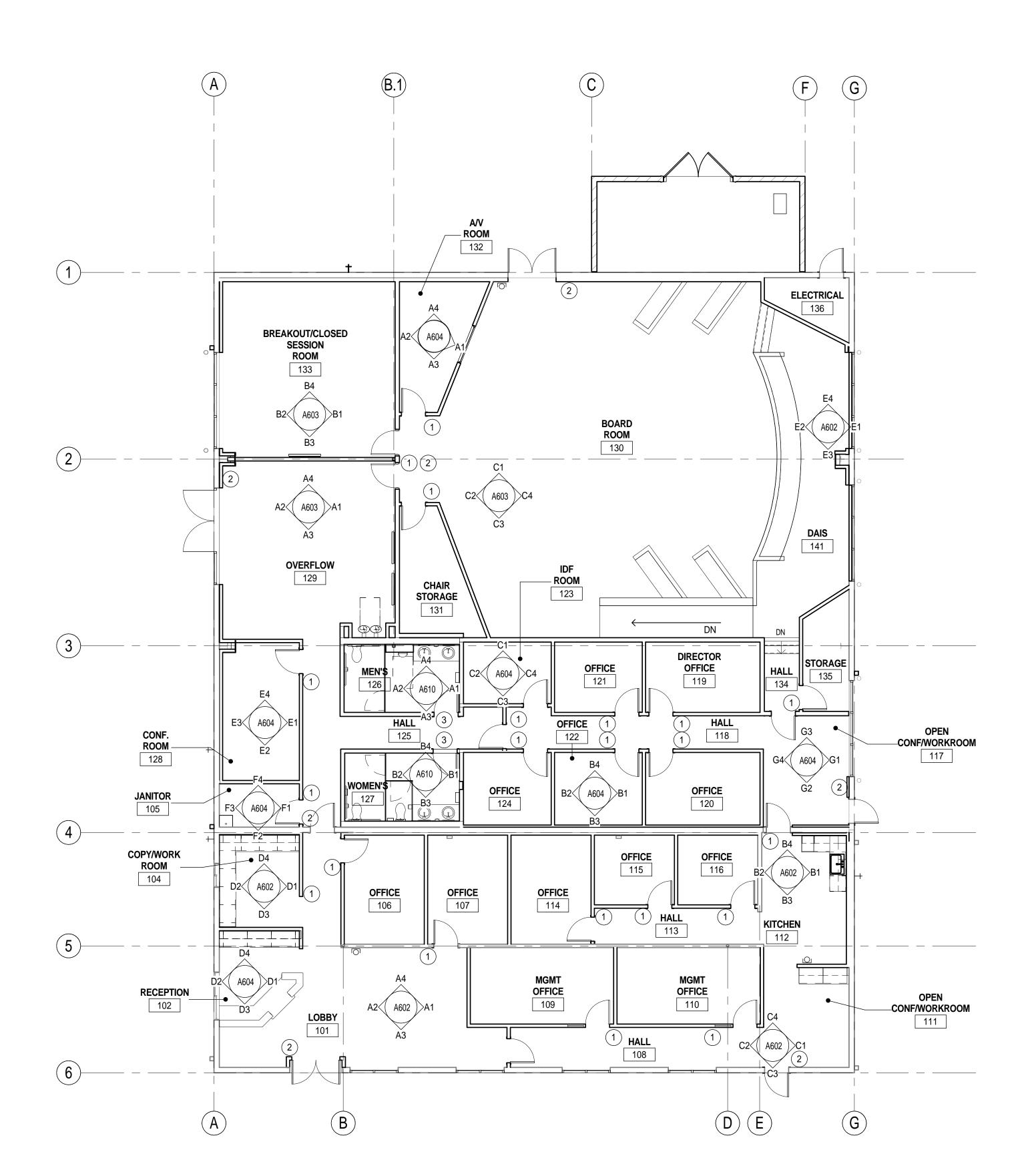
BUILDINGS:

EXTERIOR ELEVATIONS

REVISIONS

DESCRIPTION DATE ADDENDUM 1 1/4/16

JOB NO. 5006A3 A301 12/3/15



	ROOM FINISH SCHEDULE									
		FLOOR			1	FINISH		CEILING		
ROOM #	ROOM NAME	FINISH	BASE	NORTH	SOUTH	EAST	WEST	FINISH	COMMENTS	
	I									
101	LOBBY	C1	B1	P1	P1	P1	P1	APC1		
102	RECEPTION	C1	B1	P1	P1	P1	P1	APC1		
104	COPY/WORK ROOM	C1	B1	P1	~Ph~~	~~P4~	P1	APC1		
105	JANITOR	RF1	B1	P1	P1/FRP	P1/FRP	P1	OTS		
106	OFFICE	C2	B1	P1	MALL	A PAN	P1	APC1		
107	OFFICE	C2	B1	P1	P1 ²	P1	P1	APC1		
108	HALL	C2	B1	P1	P1	P1	P1	APC1		
109	MGMT OFFICE	C1	B1	P1	P1	P1	P1	APC1		
110	MGMT OFFICE	C2	B1	P1	P1	P1	P1	APC1		
111	OPEN CONF/WORKROOM	C1	B1	R11	P1	P1 /1	_~\P1_	APC1		
112	KITCHEN	RF1	B1	{ P3 }	P1	P1	(P3)	APC1		
113	HALL	C1	B1	Ahr)	P1	P1	That I	APC1		
114	OFFICE	C2	B1	P1	P1	P1	P1	APC1		
115	OFFICE	C2	B1	P1	P1	P1	P1	APC1		
116	OFFICE	C2	B1	P1	P1	P1	P1	APC1		
117	OPEN CONF/WORKROOM	C1	B1	P1	P1	P1	P1	APC1		
118	HALL	C1	B1	P1	P1	P1	P1	APC1		
119	DIRECTOR OFFICE	C2	B1	P1	P1	P1	P1	APC1		
120	OFFICE	C2	B1	P1	P1	P1	P1	APC1		
121	OFFICE	C2	B1	P1	P1	P1	P1	APC1		
122	OFFICE	C2	B1	P1	P1	P1	P1	APC1		
123	IDF ROOM	RF2	RF2	P1	P1	P1	P1	APC1		
124	OFFICE	C2	B1	P1	P1	P1	P1	APC1		
125	HALL	C1	_B11	P1	P1	P1	1 2h	APC1		
126	MEN'S	T1	 	T2	T2	12	T3 }	P1		
	WOMEN'S	T1	 	T2	T2	T	T2	P1		
128	CONF. ROOM	C1	BY	P1	P1	T3 } P1	~~Pl~~	APC1		
129	OVERFLOW	C1	B1	P1 /1	~Pl~~	~~P4~~	P3	APC1		
130	BOARD ROOM	C1	B1	P1	P1/FRAP	D1 / EDAD	P1/FRAP	APC1		
131	CHAIR STORAGE	C2	B1	P1	Wey The		THE PARTY OF THE P	APC1		
132	A/V ROOM	C2	B1	P1	P1	P1	Λ .P4	APC1		
133	BREAKOUT/CLOSED	RF2	B1	P1	P1	P1	P4	APC1		
100	SESSION ROOM	IXI Z		1 1		''		711 01		
134	HALL	C1	B1	P1	P1	P1	P1	APC1		
135	STORAGE	RF1	B1	P1	P1	P1	P1	OTS		
136	ELECTRICAL	C01	B1	P1	P1	P1	P1	OTS		
141	DAIS	C2	B1	P1	P1	P1	P1	APC1		
	1					1				

		MATERIALS LEGEND
DESIGNATION	FINISH	DESCRIPTION
C01	SEALED CONCRETE	
B1	RESILIENT BASE	ROPPE / 174 SMOKE
APC1	ACOUSTIC PANEL CEILING	ECOPHON GEDINA 'A' 2'x2'
C1	CARPET TILE	SHAW - MELT 5T048.48516 FUSE 18x36
C2	CARPET TILE	SHAW - STILL 5T051
RF1	LINOLEUM FLOORING	ARMSTRONG / COLORETTE / LP371 HALF BAKED
RF2	STATIC CONTROL FLOORING	NORA / ENVIROCARE / ART 2462 / WINDFLOWER (2930) - 24"x24" LOVE BASE TO MATCH
P1	PAINT	DUNN EDWARDS / DEW316 POWDERED
P2	PAINT	DUNN EDWARDS / DE6331 BAY OF HOPE
P3	PAINT	DUNN EDWARDS / DE6366 SILVER SPOON
P4	PAINT	DUNN EDWARDS / DE5354 HONEY GLOW
FRAP	FABRIC WRAPPED ACOUSTIC PANEL	KINETICS NOISE CONTROL - HARDSIDE - 1" THICK. 4' x 10' MAX PANEL - COORDINATE COLORS AND EDGE CONDITIONS W/ ARCHITECT
FRP	FIBER REINFORCED PANEL	NUDE / FIBERLITE / PEARL (750)
PL1	PLASTIC LAMINATE	FORMICA / 1097-MC / CITADEL
PL2	PLASTIC LAMINATE	FORMICA / 6610-58 ENDLESS GRAYTONE
PL3	PLASTIC LAMINATE	FORMICA / 918-SP / NEUTRAL WHITE
SSM1	SOLID SURFACE	CORIAN - ANTHRACITE
SSM2	COUNTERTOP	PAPER STONE / GUN METAL
	ELOOP TILE	6"x6" / DALTILE - NATURAL HUES - CH08 CINDER W/ ABRASIVE FINISH
T1	FLOOR TILE	
T2	WALL TILE	6"x12" / DALTILE - NATURAL HUES - CH24 IVORY
T3	WALL TILE	6"x12" / DALTILE - NATURAL HUES - QH82 ICEBERG
WD1	WOOD FINISH	MATA VERDE / SANTA MARIA
WD2	WOOD LAMINATE	WILSONART 7946 - BRAZILWOOD

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SIGNAGE PLAN - SIGN CALLOUTS

1 ROOM IDENTIFICATION SIGNAGE, SEE A703

2 EXIT SIGN, SEE 1 A703 ACCESSIBLE REST ROOM SIGNAGE, SEE 4 A610 & 5 A610

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COUNTY ASSOCIATION OF GOVERNMENTS

REGIONAL TRANSIT CENTER

BID SET

SHEET TITLE:

BUILDINGS:

PROJECT STATUS:

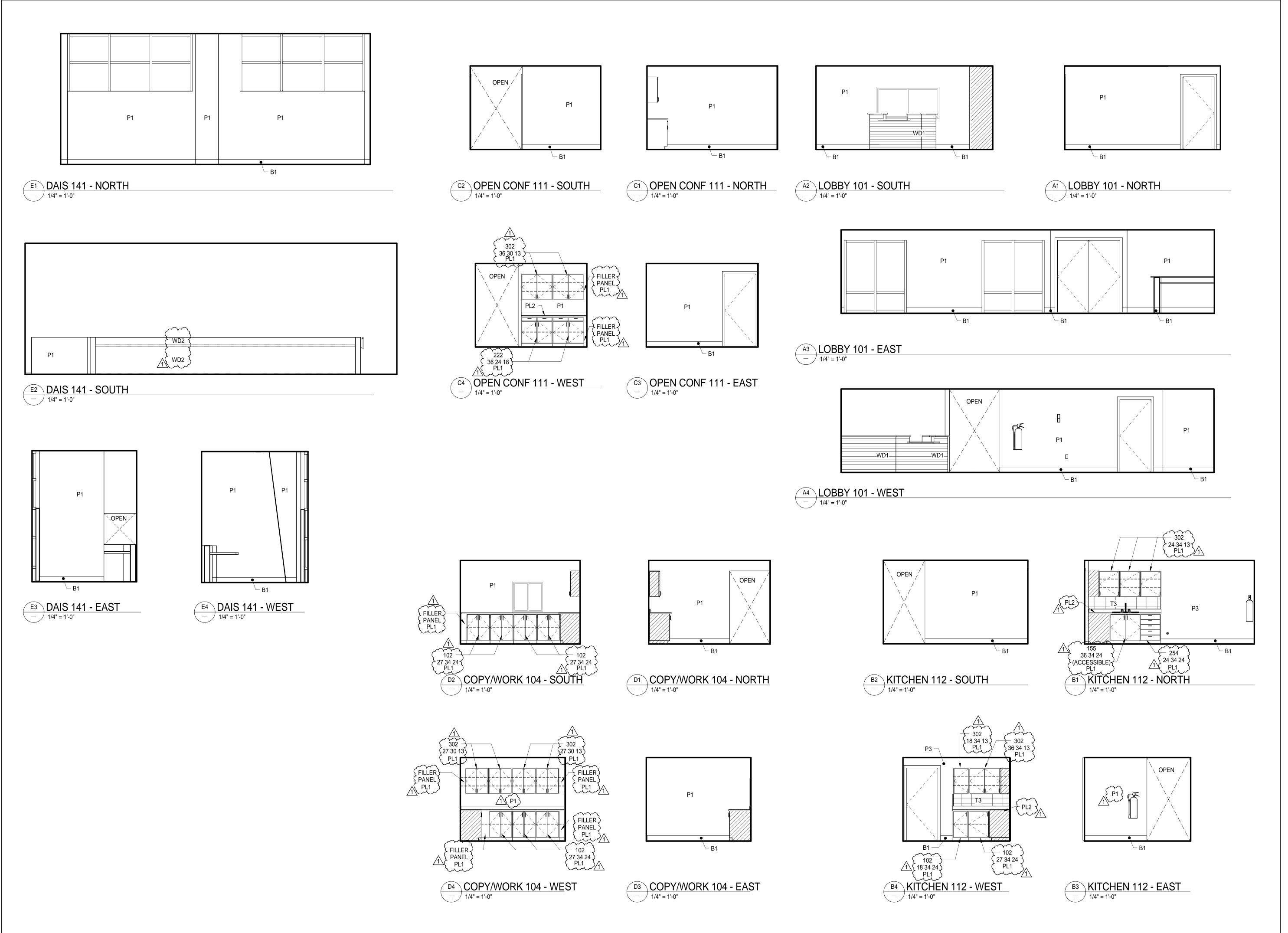
SIGNAGE PLAN & ROOM FINISH SCHEDULE

REVISIONS

	NO.	DESCRIPTION	DATE
	1	ADDENDUM 1	1/4/16

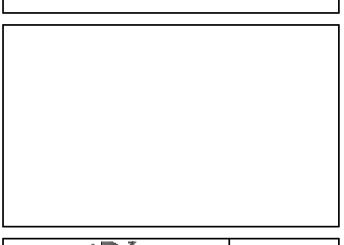
JOB NO. 5006A3 A601 12/3/15

1 SIGNAGE PLAN / INTERIOR ELEVATIONS CALL OUT
1/8" = 1'-0"



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COUNTY ASSOCIATION OF GOVERNMENTS BUTTE

BUTTE REGIONAL TRANSIT CENTER PROJECT STATUS:

BID SET

SHEET TITLE:

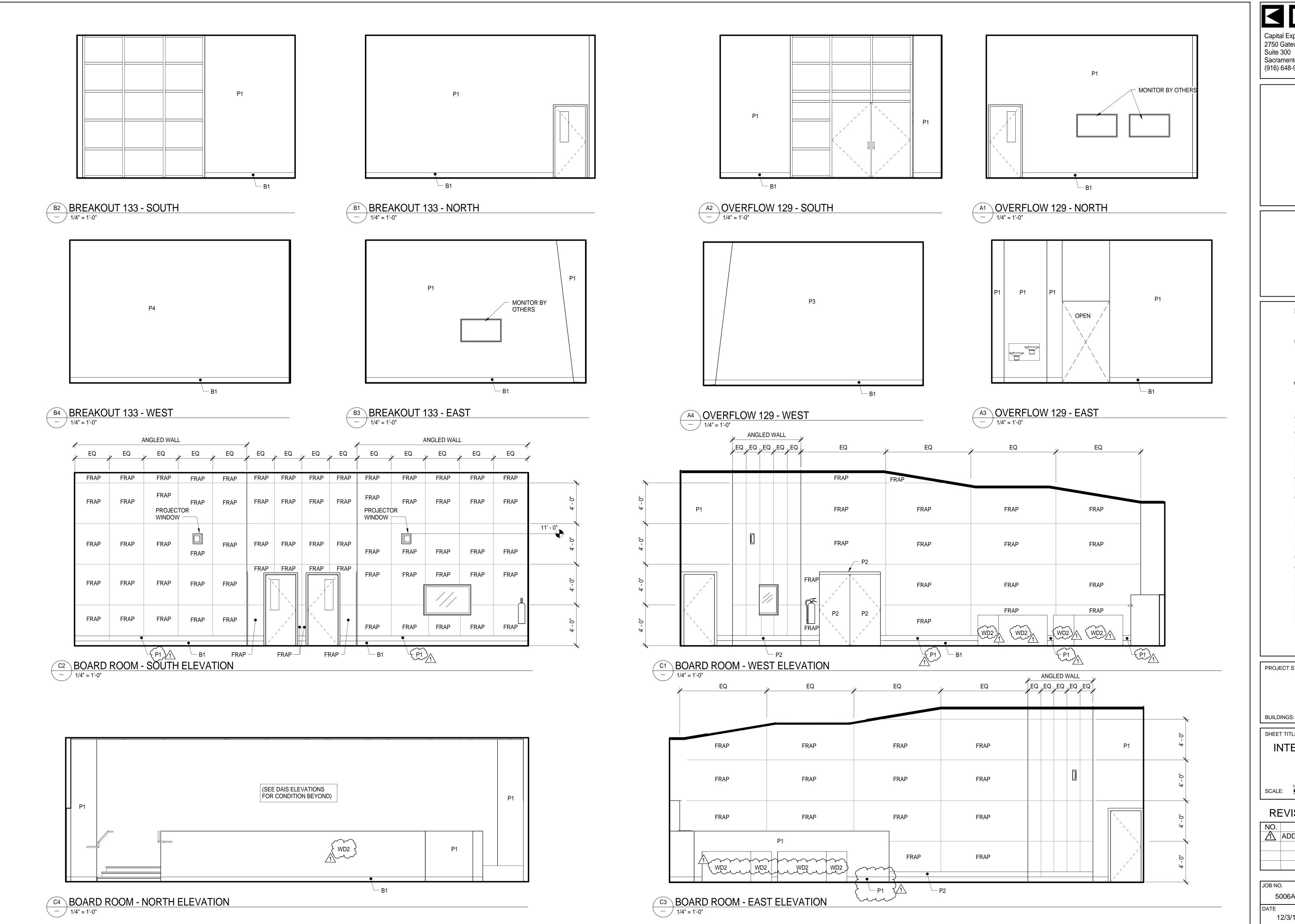
BUILDINGS:

INTERIOR ELEVATIONS

REVISIONS

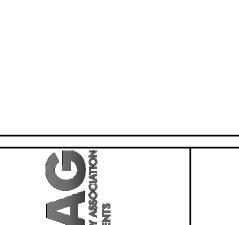
NO. DESCRIF DESCRIPTION DATE 1/4/16

JOB NO. 5006A3 A602 12/3/15



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COUNTY ASSOCIATION OF GOVERNMENTS 326 HUSS LANE, CHI

PROJECT STATUS:

REGIONAL TRANSIT CENTER

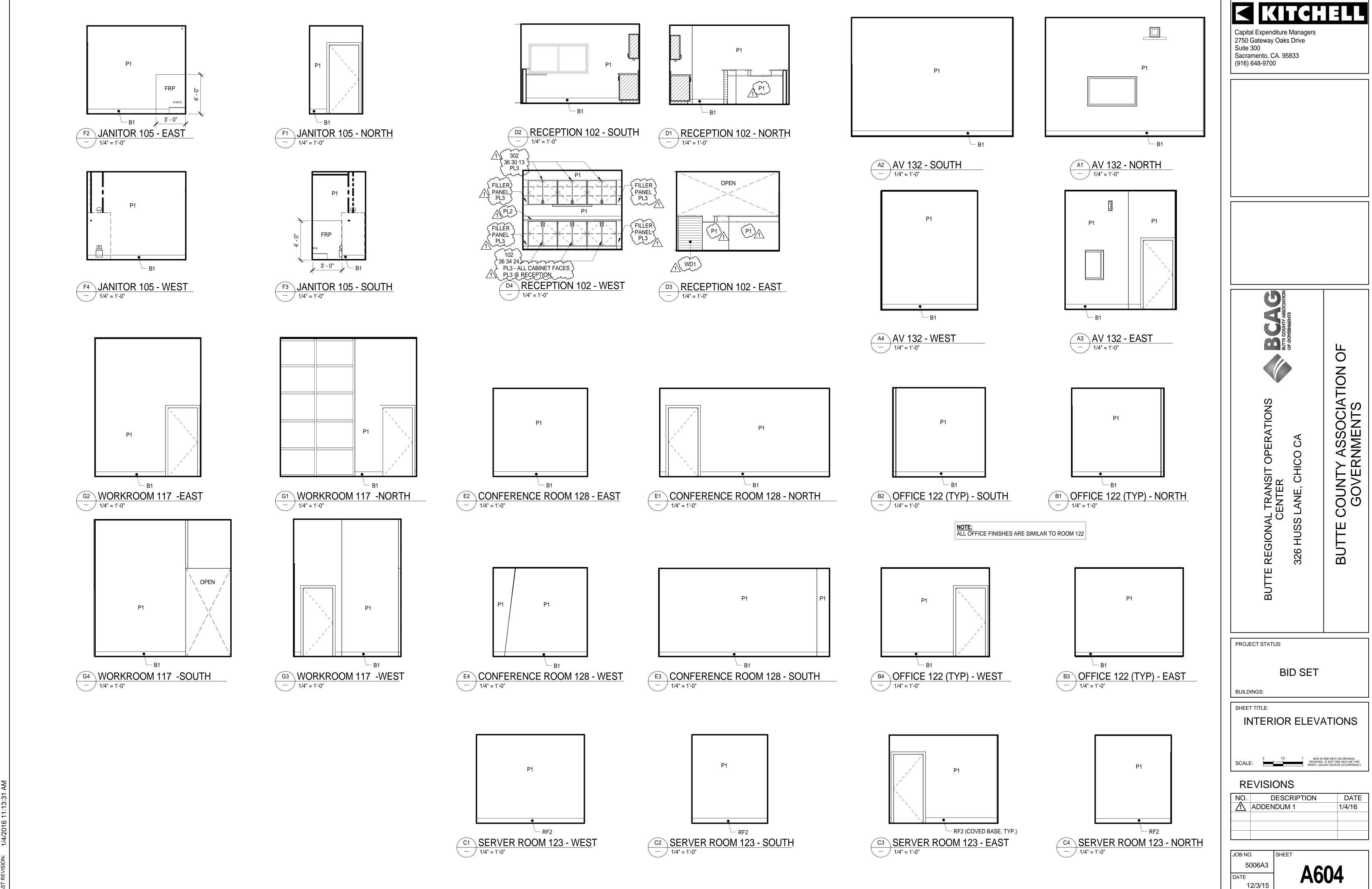
BID SET

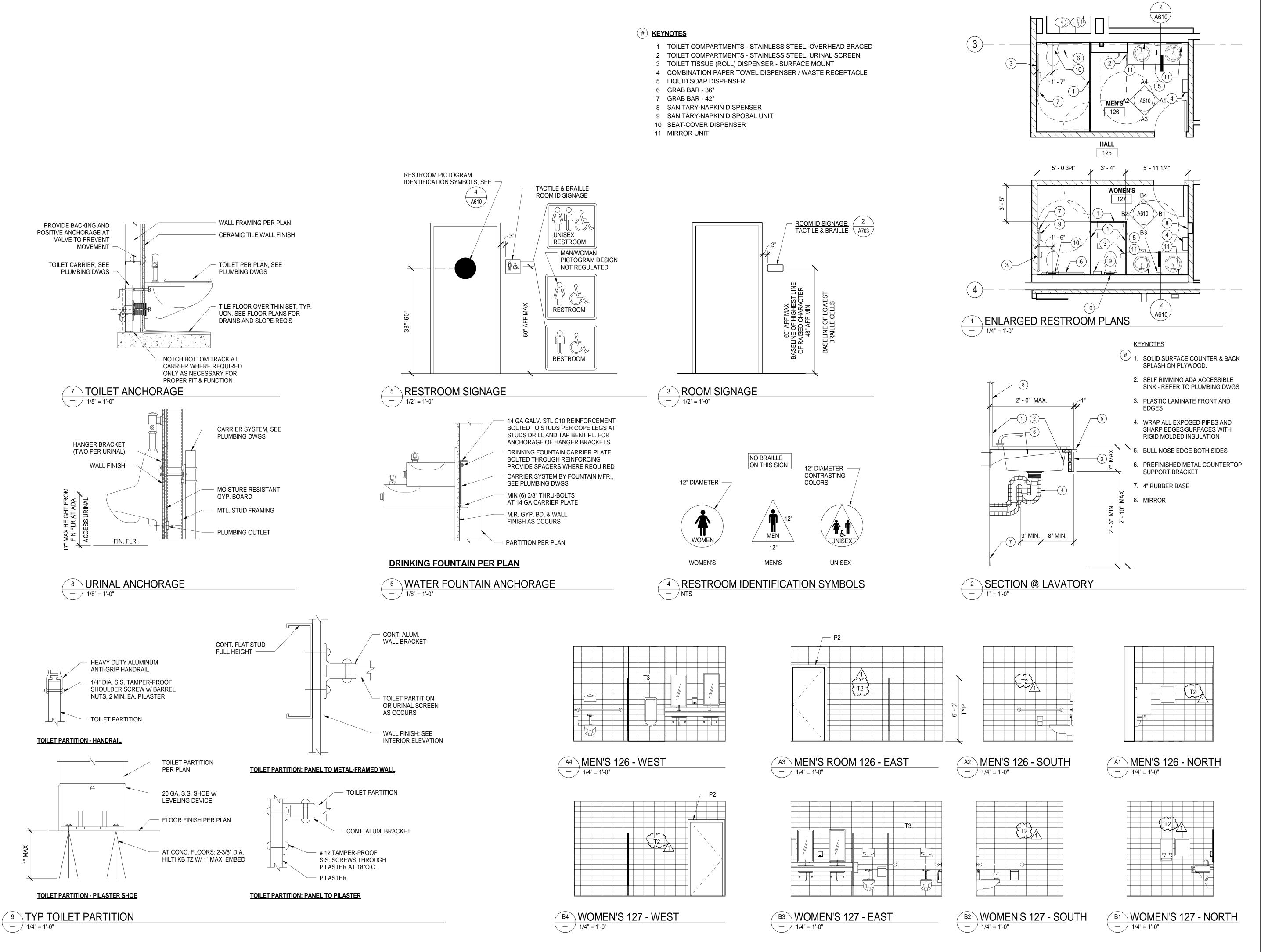
SHEET TITLE: INTERIOR ELEVATIONS

REVISIONS

DESCRIPTION DATE ADDENDUM 1 1/4/16

JOB NO. 5006A3 A603 12/3/15







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MOIL ASSOCIA-RNMENTS Ö COUNTY LANE,

OF

BUT

PROJECT STATUS:

BID SET

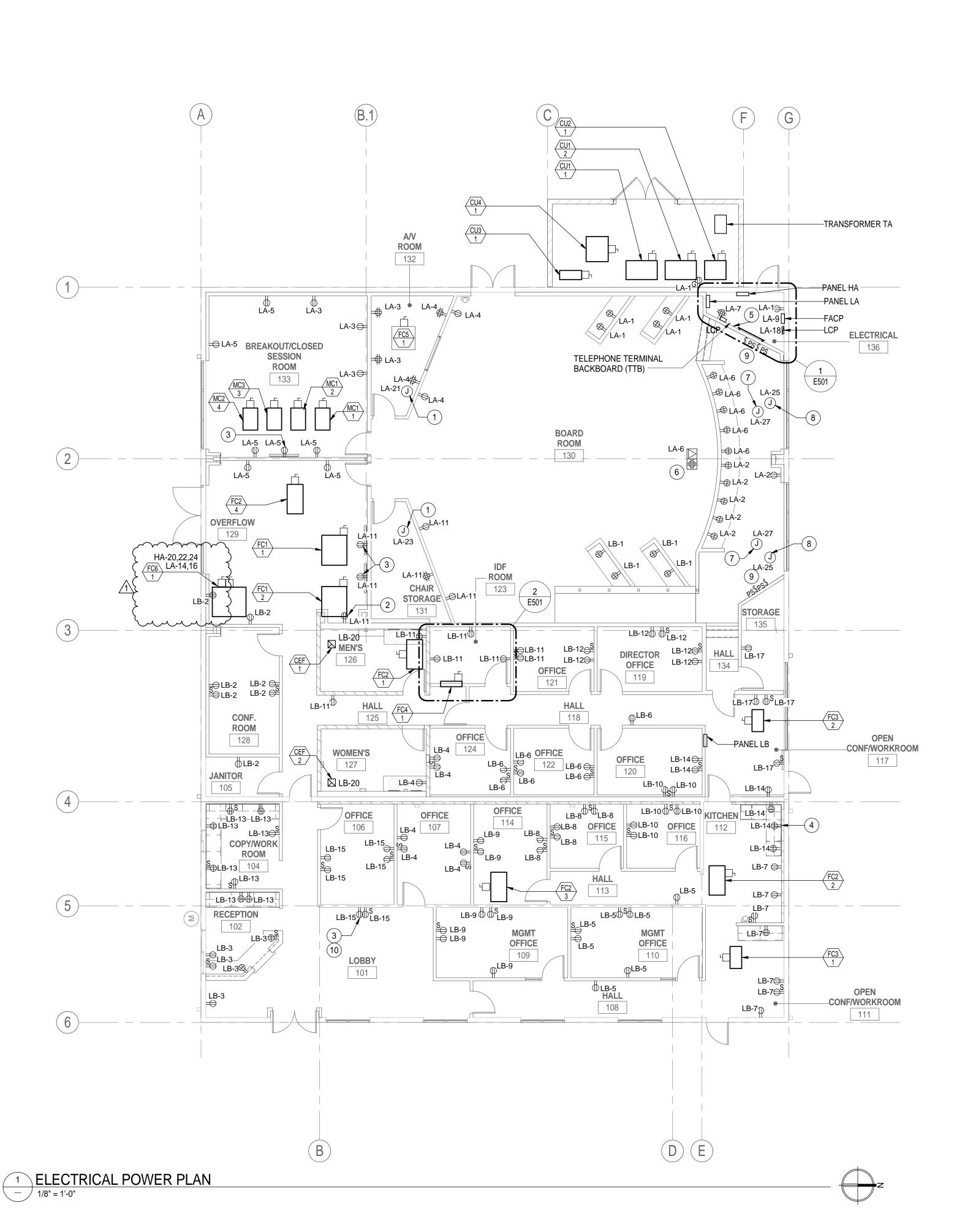
BUILDINGS: SHEET TITLE:

RESTROOM ENLARGED PLANS & ELEVATIONS

REVISIONS

DESCRIPTION DATE ADDENDUM 1 1/4/16

JOB NO. 5006A3 A610 12/3/15



KEYNOTES

- KLINOILS
- 1 PROVIDE POWER FOR PROJECTOR.
- 2 PROVIDE RECEPTACLE FOR DRINKING FOUNTAIN. MOUNT BEHIND DRINKING FOUNTAIN COVER PLATE.
- 3 RECEPTACLE SHALL BE RECESSED INTO WALL BEHIND MONITOR.
- 4 PROVIDE RECEPTACLE UNDER SINK FOR GARBAGE DISPOSAL. PROVIDE SWITCH ABOVE COUNTER.
- 5 PROVIDE 2 2" CONDUIT TO IDF ROOM 123.
- 6 PROVE 2 1" CONDUIT TO FLOOR BOX ONE FOR POWER & ONE FOR DATA. FLOOR BOX SHALL BE WIREMOLD EFB6S, 6 GANG.
- 7 PROVIDE JUNCTION BOX AT CEILING FOR MOTORIZED SCREEN. PROVIDE SWITCH AS INDICATED IN KEYNOTE #9. PROVIDE CABLING FROM SWITCH TO SCREEN MOTOR.
- 8 PROVIDE POWER FOR MOTORIZED BLIND @ +14'-6" AFF. PROVIDE CONTROLLER PER KEYNOTE #9. PROVIDE CABLING FROM CONTROLLER TO MOTOR PER MANUFACTURER'S REQUIREMENTS.
- 9 LOCATION OF SWITCH FOR MOTORIZED PROJECTOR SCREEN AND CONTROLLER FOR MECHANICAL SHADES. PROVIDE SWITCH AND CONTROLLER AS REQUIRED BY BLIND AND SCREEN MANUFACTURER.

05N5041 NOTEO

GENERAL NOTES:

1. DUPLEX RECEPTACLES DENOTED WITH AN "S" ARE SWITCHED BY AN AUXILIARY RELAY CONTROLLED BY THE LIGHTING SYSTEM OCCUPANCY SENSOR WITHIN THE SPACE. REFER TO DETAIL 1/E803.

HVAC SCHEDULE								
UNIT TAG	ELECTRICAL RATING	DISCONNECT SWITCH SIZE	FUSE SIZE	WIRING SIZE				
CU1-1	26.4A, 480V, 3-PHASE	3P, 60A DISCONNECT SWITCH	40A	1"C W/3#8, #10 GND				
CU1-2	19A, 480V, 3-PHASE	3P, 30A DISCONNECT SWITCH	30A	3/4"C W/3#12, #10 GND				
CU2-1	16.4A, 480V, 3-PHASE	3P, 30A DISCONNECT SWITCH	25A	3/4"C W/3#12, #12 GND				
CU3-1	3.75A, 208V, 1-PHASE	3P, 30A DISCONNECT SWITCH	15A	3/4"C W/2#12, #10 GND				
CU4-1	25.8A, 480V, 3-PHASE	3P, 30A DISCONNECT SWITCH	40A	1"C W/3#8, #10 GND				
MCU1-1	0.26A, 208V, 1-PHASE	2P, 30A DISCONNECT SWITCH	15A	3/4"C W/2#10, #10 GND				
MCU1-2	0.26A, 208V, 1-PHASE	2P, 30A DISCONNECT SWITCH	15A	3/4"C W/2#10, #10 GND				
MCU3-3	0.26A, 208V, 1-PHASE	2P, 30A DISCONNECT SWITCH	15A	3/4"C W/2#10, #10 GND				
MCU2-4	0.26A, 208V, 1-PHASE	2P, 30A DISCONNECT SWITCH	15A	3/4"C W/2#10, #10 GND				
FC1-1	2.5A, 208V, 1-PHASE	2P, 30A DISCONNECT SWITCH	15A	3/4"C W/2#10, #10 GND				
FC1-2	2.5A, 208V, 1-PHASE	2P, 30A DISCONNECT SWITCH	15A	3/4"C W/2#10, #10 GND				
FC2-1	1A, 208V, 1-PHASE	2P, 30A DISCONNECT SWITCH	15A	3/4"C W/2#10, #10 GND				
FC2-2	1A, 208V, 1-PHASE	2P, 30A DISCONNECT SWITCH	15A	3/4"C W/2#10, #10 GND				
FC2-3	1A, 208V, 1-PHASE	2P, 30A DISCONNECT SWITCH	15A	3/4"C W/2#10, #10 GND				
FC2-4	1A, 208V, 1-PHASE	2P, 30A DISCONNECT SWITCH	15A	3/4"C W/2#10, #10 GND				
FC3-1	1A, 208V, 1-PHASE	2P, 30A DISCONNECT SWITCH	15A	3/4"C W/2#10, #10 GND				
FC3-2	1A, 208V, 1-PHASE	2P, 30A DISCONNECT SWITCH	15A	3/4"C W/2#10, #10 GND				
FC4-1	7A, 208V, 1-PHASE	2P, 30A DISCONNECT SWITCH	15A	3/4"C W/2#10, #10 GND				
FC5-1	0.15A,208V, 1-PHASE	2P, 30A DISCONNECT SWITCH	15A~	3/4"C W/2#10, #10 GND				
FC6-1 FAN	6.6Å, 208V, 1-PHASE	2P, 30A DISCONNECT SWITCH	15A	3/4"C W/2#10, #10 GND				
FC6-1 STRIP HEATER	41A, 480V, 3-PHASE	3P, 30A DISCONNECT SWITCH	45A	1"C W/3#6, #8 GND				

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26

MOIL

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JSS LANE, CHICO CA

PROJECT STATUS:

BID SET

SHEET TITLE:

BUILDINGS:

ELECTRICAL POWER PLAN

0 1/2 1 BAR IS ONE INCH ON ORIGINAL DRAWING. IF NOT ONE INCH ON TI SHEET, ADJUST SCALES ACCORDIN

REVISIONS

	NO.	DESCRIPTION	DATE
	1	ADDENDUM 1	1/4/16

JOB NO. 5006A3

DATE 12/3/15

SHEET

E201

				Α	В	С	A	В	С				
СКТ	Circuit Description	Trip	Poles	- 1	_			_		Poles	Trip	Circuit Description	СКТ
1		20 A	1	720 VA			1260 VA			1	20 A	105 & 128 RECEPTACLES	2
3	101 & 102 RECEPTACLES	20 A	1		900 VA			1260 VA		1	20 A	107, 124, 127 RECEPTACLES	4
5	110 & 113 RECEPTACLES	20 A	1			1260 VA			1260 VA	1	20 A	120 & 122 RECEPTACLES	6
7	111 & 112 RECEPTACLES	20 A	1	1260 VA			1080 VA			1	20 A	115 & 116 RECEPTACLES	8
9	109 & 114 RECEPTACLES	20 A	1		1260 VA			1080 VA		1	20 A	116 & 120 RECEPTACLES	10
11	121, 123, 126 RECEPTACLES	20 A	1			1260 VA			1080 VA	1	20 A	119 & 121 RECEPTACLES	12
13	102 & 104 RECEPTACLES	20 A	1	1440 VA			1080 VA			1	20 A	112 RECEPTACLES	14
15	106 & HALL RECEPTACLES	20 A	1		1080 VA			430 VA		2	20 A	FC: 2-2, 2-3, 3-1, 3-2	16
17	112 & 117 RECEPTACLES	20 A	1			720 VA			430 VA				18
19	FC4-1	20 A	2	728 VA			83 VA			2	20 A	CEF-1, CEF-2	20
21					728 VA			83 VA					22
23	SPACE					0 VA			1500 VA	2	30 A	SERVER RACK 1	24
25	SPACE			0 VA			1500 VA						26
27	SPACE				0 VA			1500 VA		2	30 A	SERVER RACK 2	28
29	SPACE					0 VA			1500 VA				30
31	SPACE			0 VA			1000 VA			1	20 A	GATE OPERATOR	32
33	SPACE				0 VA			0 VA		1	20 A	SPARE	34
35	SPACE					0 VA			0 VA	1	20 A	SPARE	36
37	SPACE			0 VA			0 VA			1	20 A	SPARE	38
39	SPACE				0 VA			1000 VA		1	20 A	(E) EXTERIOR LIGHTS	40
41	SPACE					0 VA			1000 VA	1	20 A	(E) EXTERIOR LIGHTS	42
	Total Load				1 VA	932	1 VA	1001	0 VA				

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel	Totals
HVAC	2482 VA	100.00%	2482 VA		
Receptacle	18000 VA	77.78%	14000 VA	Total Conn. Load:	29482 VA
Spare	9000 VA	100.00%	9000 VA	Total Est. Demand:	25482 VA
				Total Conn.:	82 A
				Total Est. Demand:	71 A

78 A

84 A

Total Amps:

Legend:

Branch Panel: HA A.I.C. Rating: Location: Volts: 480/277 Wye Supply From: Mains Type: Phases: 3 Mounting: Surface Mains Rating: 200 A Wires: 4 Enclosure: Type 1 MCB Rating: 200 A C A ВС Α В **Circuit Description** Trip Poles Poles Trip **Circuit Description** CKT 1 Z2 Lighting Mid-Building (Offices) 20 A 1 3062 VA 455 VA 1 20 A EXTERIOR LIGHTS 2 40 A 3 1377 VA 4191 VA 1 20 A Z1 LIGHTING BACK BUILDING (BOARD ROOM) 3 CU4-1 1377 VA -- -- 1377 VA 5 --7 --2903 VA 1 20 A Z3 LIGHTING FRONT BUILDING (RECEPTION) 2439 VA 3 40 A CU1-1 8 30 A 3 1755 VA 9 CU1-2 10 12 11 --13 --15 SPACE 16 17 SPACE 18 19 SPACE 20 22 21 SPACE 23 SPACE 24 25 SPACE 26 27 SPACE 28 30 29 SPACE 31 SPACE 32 33 SPACE 34 36 38 35 SPACE 37 TRANSFORMER TA 125 A 3 17316 VA 0 VA 1 20 A SPARE -- --39 --16708 VA 0 VA 1 20 A SPARE 40 -- -- 14214.VA 1 20 A SPARE 42 **Total Load:** 39281 VA 39347 VA 35565 VA Total Amps: 144 A 144 A 128 A Legend: **Load Classification** Panel Totals Connected Load **Demand Factor Estimated Demand** 31356 VA 100.00% 31356 VA

Lighting	3992 VA	100.00%	3992 VA	Total Conn. Load:	186095 VA
Lighting - Dwelling Unit	6186 VA	66.52%	4115 VA	Total Est. Demand:	175884 VA
Other	6820 VA	100.00%	6820 VA	Total Conn.:	224 A
Receptacle	26280 VA	69.03%	18140 VA	Total Est. Demand:	212 A
Spare	111461 VA	100.00%	111461 VA		
Notes:					

Branch Panel: LA

Location: ELECTRICAL 136

Supply From: TA

Mounting: Surface
Enclosure: Type 1

Volts: 120/208 Wye
A.I.C. Rating:
Mains Type:
Mains Rating: 200 A
MCB Rating: 200 A

				Α	В	С	Α	В	С				
CKT	Circuit Description	Trip	Poles							Poles	Trip	Circuit Description	СКТ
1	WEST BOARD ROOM RECEPTACLES	20 A	1	1080 VA			1080 VA			1	20 A	STAGE DAIS RECEPTACLES	2
3	AV/ BREAKOUT RECEPTACLES	20 A	1		1260 VA			1080 VA		1	20 A	A/V RECEPTACLES	4
5	BREAKOUT / OVERFLOW ROOM RECEPTACLES	20 A	1			1260 VA			1260 VA	1	20 A	STAGE DAIS 1 RECEPTACLES	6
7	TELEPHONE TERMINAL BACKBOARD	20 A	1	360 VA			10151 VA			3	100 A	PANEL LB	8
9	FACP	20 A	1		240 VA			9321 VA					10
11	STORAGE RECEPTACLES	20 A	1			1260 VA	$\sim\sim$	$\sim\sim$	10010 VA	ہر	~~		12
13	CU3-1	20 A	2	1560 VA		\	1372 VA	•)/\	2 {		FC 6-1 FAN	14
15					1560 VA			1372 VA		\	سيب		16
17	FC: 1-1, 1-2, 2-1, 2-4, 5-1	20 A	2			756 VA	uu	سسب	200 VA	1	20 A	LIGHTING CONTROL PANEL (LCP)	18
19				756 VA			120 VA			2	20 A	MCU1-1,MCU1-2,MCU3-3,MCU2-4	20
21	PROJECTOR RM 132	20 A	1		1000 VA			120 VA					22
23	PROJECTOR RM 131	20 A	1			1000 VA			200 VA	1	20 A	VRF SYSTEM CONTROL PANEL	24
25	MECHANICAL BLINDS	20 A	1	2000 VA			0 VA					SPACE	26
27	MOTORIZED SCREENS	20 A	1		2000 VA			0 VA				SPACE	28
29	SPARE	20 A	1			0 VA			0 VA			SPACE	30
31	SPARE	20 A	1	0 VA			0 VA					SPACE	32
33	SPARE	20 A	1		0 VA			0 VA				SPACE	34
35	SPARE	20 A	1			0 VA			0 VA			SPACE	36
37							0 VA					SPACE	38
39								0 VA				SPACE	40
41				\sim	~~~	~~~	~~~		0 VA			SPACE	42
	1	Tota	Load	1847	9 VA	1795	3 VA) 1594	6 VA			1	
		Total	Amps;	15	7 A	15	2 A	13:	3 A	1			

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel	Totals
HVAC	10098 VA	100.00%	10098 VA		
Other	6360 VA	100.00%	6360 VA	Total Conn. Load:	51938 VA
Receptacle	26280 VA	69.03%	18140 VA	Total Est. Demand:	43798 VA
Spare	9200 VA	100.00%	9200 VA	Total Conn.:	144 A
				Total Est. Demand:	122 A

Capital Expenditure Managers

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COUNTY ASSOCIATION WEBNAMENTS

OF GOVERN

OPERATIONS

OF

TTE COUNTY ASSOCIATION
GOVERNMENTS

PROJECT STATUS:

BID SET

BUILDINGS:
SHEET TITLE:

ELECTRICAL PANEL SCHEDULES

0 1/2 1 BAR IS ONE INCH ON ORIGINAL DRAWING. IF NOT ONE INCH ON TH SHEET, ADJUST SCALES ACCORDING

REVISIONS

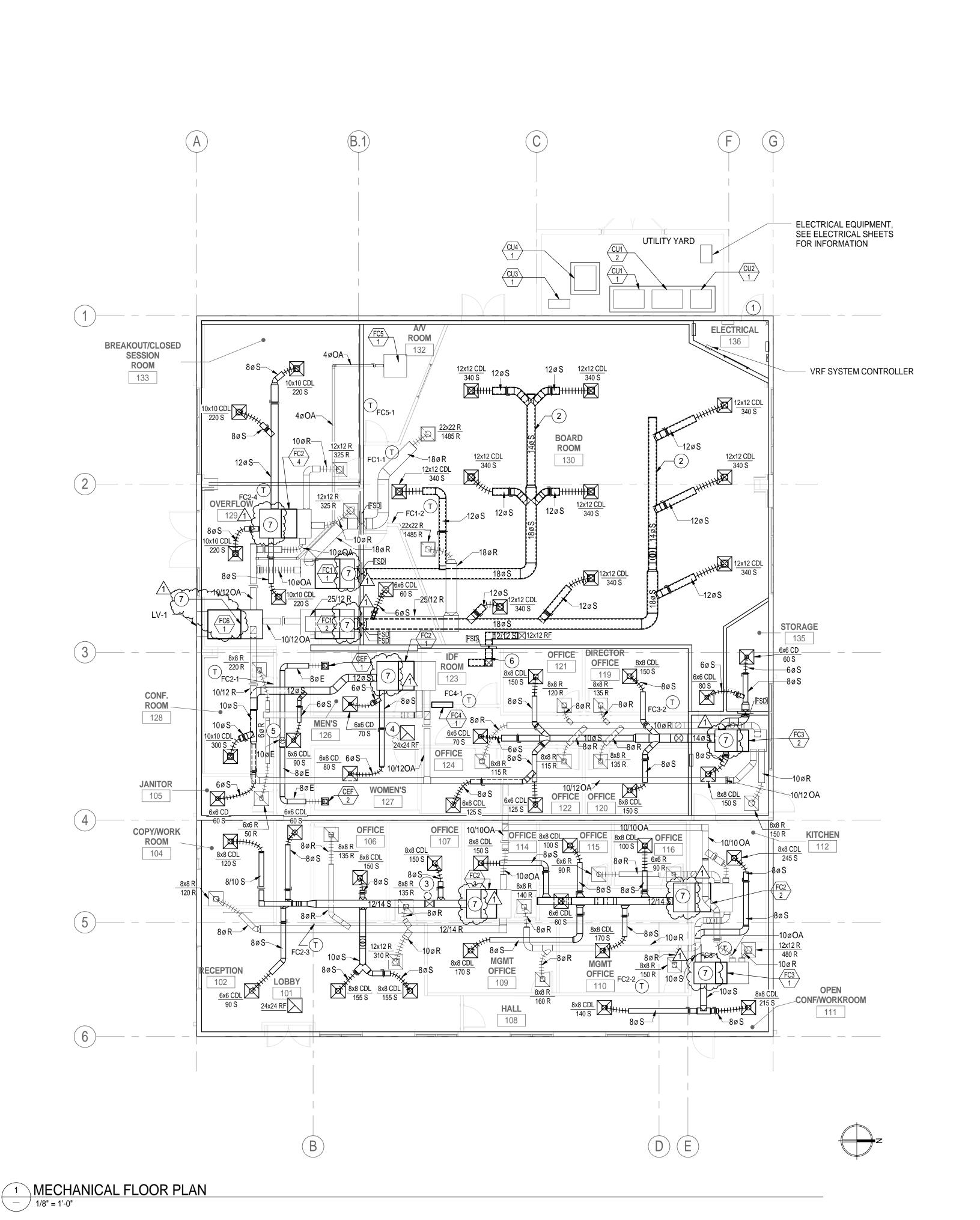
NO.	DESCRIPTION	DATE
	ADDENDUM 1	1/4/16

JOB NO. 5006A3

DATE 12/3/15

SHEET

E805





GENERAL NOTES:

- 1. DESIGN DRAWINGS ARE DIAGRAMMATIC AND DO NOT SHOW ALL OFFSETS, BENDS, ELBOWS AND OTHER ELEMENTS THAT MAY BE REQUIRED. THE DRAWINGS SHOW THE GENERAL ARRANGEMENT OF EQUIPMENT, DUCTWORK, ETC. AND SHALL BE FOLLOWED AS CLOSELY TO THE ACTUAL BUILDING CONSTRUCTION AND THE WORK FROM OTHER TRADES SHALL PERMIT. CONTRACTOR WILL PROVIDE ALL NECESSARY ACCESSORIES REQUIRED FOR A COMPLETE INSTALLATION.
- 2. MOUNT THERMOSTATS AT 48" AFF.

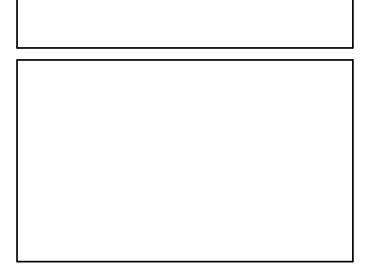
(#) KEYNOTES

- 1 PROVIDE DOOR LOUVER WITH AT LEAST 196IN SQUARED FREE OPENING.
- 2 ACOUSTICAL LINED SUPPLY DUCTWORK IN BOARDROOM, TYP.
- 3 QTY (1) ONE 8" RELIEF AIR HOOD, SEE RELIEF HOOD SCHEDULE ON SHEET M801. COORDINATE ROOF
- PENETRATION WITH ARCH., SEE SHEET A230. 4 QTY (1) ONE 12" RELIEF AIR HOOD, SEE RELIEF HOOD SCHEDULE ON SHEET M801. COORDINATE ROOF
- PENETRATION WITH ARCH., SEE SHEET A230.
- 5 QTY (1) ONE 10" EXHAUST AIR HOOD, SEE EXHAUST HOOD SCHEDULE ON SHEET M801. COORDINATE ROOF PENETRATION WITH ARCH., SEE SHEET A230.
- 6 ACOUSTICAL LINED RELIEF AIR DUCT. TERMINATE IN PLENUM ABOVE IDF ROOM 123 CEILING. 7 INSTALL DUCT SMOKE DETECTOR IN THE SUPPLY ADR SECTION OF THE UNIT. }



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MOIL

COUNTY

PROJECT STATUS:

BID SET

SHEET TITLE:

BUILDINGS:

MECHANICAL PLAN

REVISIONS

	NO.	DESCRIPTION	DATE
	1	ADDENDUM 1	1/4/16

JOB NO. 12/3/15 NOTES & OPTIONS:

1. PROVIDE LAY-IN BORDER TYPE 2. PROVIDE SURFACE MOUNT BORDER TYPE

EGGCRATE

UNIT TAG LOCATION DIMENSIONS 'TRANE' MODEL NUMBER TYPE REMOTE SENSOR COOLING CAPACITY (BTU/H) HEATING CAPACITY (BTU/H) DESIGN ENTERING TEMP DB/WB (°F) DESI	HEATING DESIGN PEAR					TRANE VRF INDOOR UNIT SCHEDULE													
FC1-1 OVERFLOW ROOM 129 49"W x 19" H x 26"D 4TVA0076B100NB TYPE (DUCTED) WIRED SENSOR 76800 85200 80.0/67.0 FC1-2 OVERFLOW ROOM 129 49"W x 19" H x 26"D 4TVA0076B100NB CEILING CONCEALED TYPE (DUCTED) WIRED SENSOR 76800 85200 80.0/67.0 FC2-1 MENS RESTROOM 126 48"W x 15" H x 26"D 4TVA0036B100NB CEILING CONCEALED TYPE (DUCTED) WIRED SENSOR 36000 40000 80.0/67.0 FC2-2 KITCHEN ROOM 112 48"W x 15" H x 26"D 4TVA0036B100NB CEILING CONCEALED TYPE (DUCTED) WIRED SENSOR 36000 40000 80.0/67.0 FC3-3 OFFICE POOM 114 48"W x 15" H x 26"D 4TVA0036B100NB CEILING CONCEALED TYPE (DUCTED) WIRED SENSOR 36000 40000 80.0/67.0	TERING TEMP AIRFLO DB/WB (°F)	AK FAN OUTSIDE AIR COW (CFM)	VOLTAGE / PHASE	ELECTRICAL MCA/MOP	WEIGHT (LBS)	NOTES / OPTIONS													
FC2-2 WITCHEN ROOM 129 49"W x 19" H x 26"D 4TVA0076B100NB TYPE (DUCTED) WIRED SENSOR 76800 85200 80.0/67.0 FC2-2 KITCHEN ROOM 112 48"W x 15" H x 26"D 4TVA0036B100NB CEILING CONCEALED TYPE (DUCTED) WIRED SENSOR 36000 40000 80.0/67.0 FC2-2 KITCHEN ROOM 112 48"W x 15" H x 26"D 4TVA0036B100NB CEILING CONCEALED TYPE (DUCTED) WIRED SENSOR 36000 40000 80.0/67.0 FC3-3 OFFICE ROOM 114 48"W x 15" H x 26"D 4TVA0036B100NB CEILING CONCEALED WIRED SENSOR 36000 40000 80.0/67.0	70.0 19	1920 320	208/230V/1-PHASE	530 W	200	1, 2, 3, 4, 5, 6, 8													
FC2-1 MENS RESTROOM 126 48 W X 15" H X 26"D 4TVA0036B100NB TYPE (DUCTED) WIRED SENSOR 36000 40000 80.0/67.0 FC2-2 KITCHEN ROOM 112 48 "W X 15" H X 26"D 4TVA0036B100NB TYPE (DUCTED) WIRED SENSOR 36000 40000 80.0/67.0 FC2-3 OFFICE BOOM 114 48 "W X 15" H X 26"D 4TVA0036B100NB CEILING CONCEALED WIRED SENSOR 36000 40000 80.0/67.0	70.0 19	1920 310	208/230V/1-PHASE	530 W	200	1, 2, 3, 4, 5, 6, 8													
ROOM 112 48 W X 15 H X 26 D 41 VA0036B100NB TYPE (DUCTED) WIRED SENSOR 36000 40000 80.0/67.0	70.0 5	550 100	208/230V/1-PHASE	210 W	140	1, 2, 3, 4, 5, 6, 8													
	70.0	750 90	208/230V/1-PHASE	210 W	140	1, 2, 3, 4, 5, 6, 8													
	70.0 8	870 180	208/230V/1-PHASE	210 W	140	1, 2, 3, 4, 5, 6, 8													
FC2-4 OVERFLOW ROOM 129 48"W x 15" H x 26"D 4TVA0036B100NB CEILING CONCEALED TYPE (DUCTED) WIRED SENSOR 36000 40000 80.0/67.0	70.0	880 230	208/230V/1-PHASE	210 W	140	1, 2, 3, 4, 5, 6, 8													
FC3-1 OPEN CONF/WORKROOM 111 36"W x 11" H x 19"D 4TVD0024B100NB CEILING CONCEALED TYPE (DUCTED) WIRED SENSOR 24000 27000 80.0/67.0	70.0 4	410 120	208/230V/1-PHASE	220 W	70	1, 2, 3, 4, 5, 6, 8													
FC3-2 OPEN CONF/WORKROOM 117 36"W x 11" H x 19"D 4TVD0024B100NB CEILING CONCEALED TYPE (DUCTED) WIRED SENSOR 24000 27000 80.0/67.0	70.0	890 90	208/230V/1-PHASE	220 W	70	1, 2, 3, 4, 5, 6, 8													
FC4-1 SERVER ROOM 123 35"W x 12"H x 9"D 4MYW6518A10NOVBA WALL MOUNTING TYPE WIRELESS REMOTE 21000 0 95°F DB	NA 4	470 0	POWERED FROM OUTDOOR UNIT (CU3-1)	15/25 A	35	3													
FC5-1 AV ROOM 132 37.5"W x 10"H x 37.5"D 4TVD0018B100NB CEILING CASSETTE (4-WAY AIRFLOW) TYPE WIRED SENSOR 18000 20000 80.0/67.0	70.0 4	495 15	208/230V/1-PHASE	32 W	60	1, 2, 3, 4, 5, 6, 7													

NOTES & OPTIONS:

1. NOMINAL COOLING CAPACITIES ARE BASED ON INDOOR COIL EAT OF 80/67°F (DB/WB), OUTDOOR OF 95°F (DB).

2. NOMINAL HEATING CAPACITIES ARE BASED ON INDOOR COIL EAT OF 70°F (DB), OUTDOOR OF 43°F (WB).

3. SEE OUTDOOR UNIT SCHEDULE FOR OUTDOOR AMBIENT CONDITIONS, CONNECTED CAPACITY, AND OTHER FACTORS ASSOCIATED WITH CORRECTED CAPACITIES. 4. SEE SCHEMATIC PIPING/CONTROL DIAGRAM FOR INDICATION OF REQUIRED INDOOR UNIT REMOTE CONTROLLERS, SYSTEM CONTROLLERS, AND INTEGRATION DEVICES.

5. FULL DEMAND CORRECTED CAPACITY INCLUDES DE-RATE ASSOCIATED WITH INDOOR VS. OUTDOOR CONNECTED CAPACITY DE-RATE DOES NOT APPLY.

6. IT IS RECOMMENDED TO ALWAYS BASE HEATING CORRECTED CAPACITY ON FULL DEMAND.

7. CONDENSATE PUMP BUILT-IN.

8. PROVIDE CONDENSATE PUMP BY MANUFACTURER.

	TRANE VRF OUTDOOR UNIT SCHEDULE															
UNIT TAG	NUMBER		NOMINAL HEATING CAPACITY	DESIGN COOLING OUTDOOR TEMP DB/WB (°F)	DESIGN HEATING OUTDOOR) TEMP WB (°F)	EER	EER VOLTAGE / PHASE		ELECTRICAL		NOTES / OPTIONS	UNIT WEIGHT	SOUND PRESSURE/SOUND	LIQUID LINE (IN.	VAPOR LINE (IN. OD)	HIGH PRESSURE GAS LINE (IN. OD)
		(BTU/H)	(BTU/H)	. ,	. ,			MCA	MOP	No. of Fan			POWER dB(A)	,	·	, ,
CU1-1	4TVR0144B400NB	144,000.00	162,000.00	102/69	26.9	9.2	480V / 3-PHASE	26.4	40	2	1, 2, 3, 4, 5	700	62/83	1/2" BRAZE	1-1/8" BRAZE	7/8" BRAZE
CU1-2	4TVR0096B400NB	96,000.00	108,000.00	102/69	26.9	9.9	480V / 3-PHASE	19	25	2	1, 2, 3, 4, 5	650	61/81	3/8" BRAZE	7/8" BRAZE	3/4" BRAZE
CU2-1	4TVR0072B400NB	72,000.00	81,000.00	102/69	26.9	10.6	480V / 3-PHASE	16.4	20	1	1, 2, 3, 4, 5	450	60/81	3/8" BRAZE	3/4" BRAZE	5/8" BRAZE
CU3-1	4TYK6518A10N0BA	21,000.00	0.00	95/69	NA	11.1	208/ 1-PHASE	15	25	1	1, 2, 3, 4, 5	105	56/66	1/4"	1/2"	NA

1. NOMINAL COOLING CAPACITIES ARE BASED ON INDOOR COIL EAT OF 80/67°F (DB/WB), OUTDOOR OF 102°F (DB).

2. NOMINAL HEATING CAPACITIES ARE BASED ON INDOOR COIL EAT OF 70°F (DB), OUTDOOR OF 43°F (WB).

3. EFFICIENCY VALUES FOR EER, IEER, COP ARE BASED ON AHRI 1230 TEST METHOD FOR MIXTURE OF DUCTED & NON-DUCTED INDOOR UNITS.

4. FOR SYSTEMS WITH MULTIPLE MODULES, REFRIGERANT PIPE DIMENSIONS INDICATE TOTAL SYSTEM COMBINED PIPING DOWNSTREAM OF MODULE TWINNING. 5. ADDED FIELD CHARGE LISTED IS IN ADDITION TO FACTORY CHARGE, THIS MUST BE UPDATED BASED UPON FINAL AS-BUILT PIPING LAYOUT.

ROOF EXHAUST/RELIEF HOOD SCHEDULE 'GREENHECK' MODEL SIZE (IN) TOTAL PRESSURE DROP WEIGHT LOCATION (LBS) (INCH W.G.) ROOF ROOF GRSR 0.15

24X24

NOTES & OPTIONS:

ROOF

1. SEE SHEET A230 FOR LOCATION OF EXHAUST AND RELIEF HOOD.

2. PROVIDE WITH MANUFACTURERS BACK DRAFT DAMPER.

					TRANE DED	ICATED OUTDO	OR AIR SPLIT	SYSTEM INDOOR	FAN COIL UNIT	•
UNIT 1	TAG LOCATION	DIMENSIONS	'TRANE' MODEL NUMBER	TYPE	REMOTE SENSOR	NOMINAL COOLING CAPACITY (BTU/H)	NOMINAL HEATING CAPACITY (BTU/H)	COOLING DESIGN ENTERING TEMP DB/WB (°F)		
FC6-1	OVERFLOW ROOM 129	48"W x 26" H x 55"D	TWE090D300A	CEILING CONCEALED TYPE (DUCTED)	WIRED SENSOR	60,760	65,970	105/72	32/30	70

NOTES & OPTIONS:

1. SEE OUTDOOR UNIT SCHEDULE FOR OUTDOOR AMBIENT CONDITIONS, CONNECTED CAPACITY, AND OTHER FACTORS ASSOCIATED WITH CORRECTED CAPACITIES.

2. IT IS RECOMMENDED TO ALWAYS BASE HEATING CORRECTED CAPACITY ON FULL DEMAND. -3--PROVIDE-CONDENSATE-RUMP BY MANUFACTURER.

4. PROVIDE ELECTRIC HEATER WITH MODULATION SCR CONTROL. www.....

	CEILING EXHAUST FAN SCHEDULE														
UNIT TAG	LOCATION	'GREENHECK' MODEL NUMBER	CFM	TOTAL SP (INCH W.G.)	SONES	INPUT WATTS	VOLTS/ PHASE	WEIGHT (LBS)	NOTES						
CEF-1	MENS RESTROOM	SP-A250	180	0.5	4	83.1	115/1	24	1						
CEF-2	WOMEN'S RESTROOM	SP-A250	180	0.5	4	83.1	115/1	24	1						

NOTES & OPTIONS:

1. PROVIDE WITH MANUFACTURERS BACK DRAFT DAMPER.

	LOUVER SCHEDULE														
UNIT TAG	LOCATION	'GREENHECK' MODEL NUMBER	APPLICATION	CFM	PRESSURE DROP (INCH W.G.)	VELOCITY (FT/MIN)	WIDTH (IN.)	HEIGHT (IN.)	DEPTH (IN.)	FREE AREA (SF)	NOTES / OPTIONS				
LV-1	OVERFLOW ROOM 129	EDK-402	INTAKE	1600	0.09	749	42	17	4	2.14	1				

NOTES & OPTIONS:

1. PROVIDE INTERNAL BIRD SCREEN

			TRANE I	DEDICATED (OUTDOOR AIR SI	PLIT SYSTEM	I OUTDOOR U	INIT				
UNIT TAG			DESIGN COOLING OUTDOOR TEMP DB/WB (°F)	EER	VOLTAGE / PHASE		ELECTRICAL		NOTES / OPTIONS	UNIT WEIGHT	LIQUID LINE (IN. OD)	VAPOR LINE (IN. OD)
		(BTU/H)	, ,			MCA	MOP	No. of Fan			ŕ	_
CU4-1	TWA073D40RA	74,000	105/72	12.5	480/3	14.9	20.0	1	1,2	328	1/2"	1-1/8"

PEAK FAN

1600

AIRFLOW (CFM) \ VOLTAGE / PHASE

480/3

 \cdots

ELECTRICAL DATA

MCA/MOP

41/45

ELEC. HEATER FAN MOTOR

MCA/MOP

6.6/15

WEIGHT

(LBS)

323

NOTES /

OPTIONS

NOTES & OPTIONS:

CONDENSING UNIT ONLY GROSS COOLING CAPACITY RATE AT 45 F SATURATED SUCTION TEMPERATURE AND AT 95 F AMBIENT. RATINGS SHOWN ARE TESTED AND CERTIFIED IN ACCORDANCE WITH AHRI

STANDARD 340/360 OR 365 CERTIFICATION PROGRAM.

2. ADDED FIELD CHARGE IS IN ADDITION TO FACTORY CHARGE, THIS MUST BE UPDATED BASED UPON FINAL AS-BUILT PIPING LAYOUT.

	TRANE VRF MODE CHANGE UNITS														
UNIT TAG	LOCATION	SERVES	'TRANE' MODEL NUMBER	REFRIGERANT TYPE	DRAIN PIPE	MAXIMUM NUMBER OF CONNECTED INDOOR UNITS	VOLTAGE / PHASE	POWER INPUT (W)	WEIGHT (LBS)	NOTES / OPTIONS					
MC1-1	BREAKOUT/CLOSED SESSION ROOM	FC1-1, FC1-2	MCUCUY2NCE000	R410A	1"	2	208/230V/1-PHASE	55	55	1, 2					
MC1-2	BREAKOUT/CLOSED SESSION ROOM	FC2-1, FC2-2	MCUCUY2NCE000	R410A	1"	2	208/230V/1-PHASE	55	55	1, 2					
MC3-3	BREAKOUT/CLOSED SESSION ROOM	FC3-2, FC3-1, FC2-3	MCUCUY6NCE000	R410A	1"	6	208/230V/1-PHASE	55	60	1, 2					
MC2-4	BREAKOUT/CLOSED SESSION ROOM	FC2-4, FC5-1	MCUCUY4NCE000	R410A	1"	4	208/230V/1-PHASE	55	55	1, 2					

NOTES & OPTIONS:

1. LIQUID PIPE CONNECTION FROM OUTDOOR UNIT 1/2' FLARE, SUCTION PIPE CONNECTION FROM THE OUTDOOR UNIT 1-1/8" BRAZE, HIGH PRESSURE GAS CONNECTION FROM THE OUTDOOR UNIT 3/4" BRAZE.

2. LIQUID PIPE CONNECTION TO INDOOR UNITS 3/8" FLARE AND SUCTION PIPE CONNECTION TO INDOOR UNITS 5/8" FLARE.

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Capital Expenditure Managers 2750 Gateway Oaks Drive Suite 300 Sacramento, CA. 95833

(916) 648-9700

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CH EGIONAL CE

PROJECT STATUS:

BID SET

SHEET TITLE:

BUILDINGS:

MECHANICAL SCHEDULES

REVISIONS

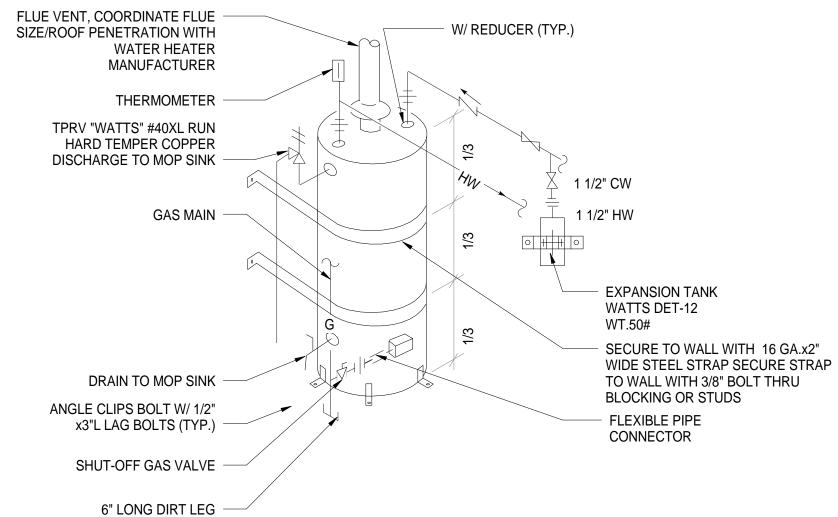
	NO.	DESCRIPTION	DATE
	1	ADDENDUM 1	1/4/16
·			

JOB NO. SHEET 5006A3 12/3/15

1 CONNECT 1-1/2" CW TO EXISTING CW LINE OUTSIDE OF BUILDING. FIELD VERIFY POINT OF CONNECTION.

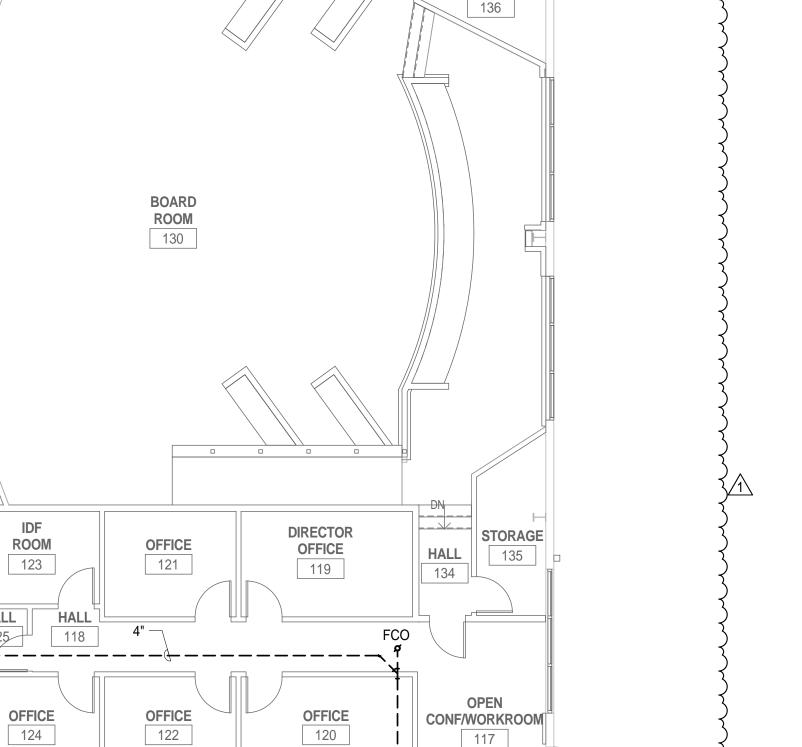
GENERAL NOTES:

- 1. PLUMBING PIPES SHOWN OUT OF WALL FOR CLARITY PURPOSES.
- 2. EXISTING PLUMBING PIPE LOCATIONS ARE ESTIMATE FROM FIELD SURVEY, CONTRACTOR SHALL VISIT THE SITE TO VERIFY ALL EXISTING CONDITIONS PRIOR TO SHOP DRAWING PREPARATION.
- 3. ALL PIPING LOCATED IN WALLS OR ABOVE CEILING HAVING SHUT OFF VALVES OR OTHER DEVICES REQUIRING ACCESS FOR OPERATION OR MAINTENANCE SHALL BE PROVIDED WITH ACCESS DOORS OF ADEQUATE SIZE FOR SERVICE.
- 4. DESIGN DRAWINGS ARE DIAGRAMMATIC AND DO NOT SHOW ALL OFFSETS, BENDS, ELBOWS AND OTHER ELEMENTS THAT MAY BE REQUIRED. THE DRAWINGS SHOW THE GENERAL ARRANGEMENT OF EQUIPMENT, PIPE, ETC., AND SHALL BE FOLLOWED AS CLOSELY TO THE ACTUAL BUILDING CONSTRUCTION AND THE WORK FROM OTHER TRADES SHALL PERMIT. CONTRACTOR WILL PROVIDE ALL NECESSARY ACCESSORIES REQUIRED FOR A COMPLETE INSTALLATION.
- 5. FOR SAW CUTTING EXISTING SLAB, SEE AD201.



- 2. ALLOW SPACE/CLEARANCE FOR MAIN WATER LINE AND GAS WITHIN THE ROOM.
- 3. ALLOW FOR 24" SERVICE CLEARANCE AT SERVICEABLE

GAS WATER HEATER DETAIL



116

OPEN

CONF/WORKROOM

111

113

108

MGMT

OFFICE

110

1-1/2" CW UP TO ABOVE CEILING

[∖]— ABC, TYP.

OFFICE

114

MGMT

OFFICE

109

ROOM 132

CHAIR STORAGE 131

106

LOBBY

101

107

BREAKOUT/CLOSED SESSION **ROOM** 133

3/4" CW -

OVERFLOW 129

FD-1

CONF.

ROOM 128

COPY/WORK

ROOM

104

2" VTR

1/2" GAS ABC

(E) GAS

MÉTER

HB-1 -

1. OFFSET FLUE TO CLEAR COMB. AIR DUCTS AND CAP.

PARTS

KITCHELL Capital Expenditure Managers

2750 Gateway Oaks Drive Suite 300 Sacramento, CA. 95833 (916) 648-9700



MOIL

OUNT

PROJECT STATUS:

BID SET

BUILDINGS:

SHEET TITLE: PLUMBING FLOOR PLAN WITH PLUMBING FIXTURES LOCATED

REVISIONS

	NO.	DESCRIPTION	DATE
	1	ADDENDUM 1	1/4/16
			•

JOB NO. SHEET 5006A3 12/3/15