June 17, 2021

NOTICE TO ALL BIDDERS

Re: Building 200, 300 and 800 Modernization
RFP No 20-21-18
Addendum #4

This addendum forms a part of the contract documents and modifies the original bidding documents. Addenda shall be noted as received and acknowledged on the Bid Proposal Form when submitted as outlined in the Bid Package referenced above.

Document Additions, Revisions and Clarifications

1. The Bid Proposal, found within the CUPCCAA Formal Bid and Contract Documents, shall be deleted and replaced with the following attachment “Bid Proposal (Addendum #4)”.

2. Corrections and/or clarifications to the contract documents, are hereby modified, based on following attachment by the Sanders, Inc. (AOR), dated June 17, 2021.

3. RFI answers have been addressed, based on the following attachment “RFI Questions and Responses”.

END OF ADDENDUM NO. 04

BID PROPOSAL

Project: BUILDING 200, 300 and 800 MODERNIZATION

Bidder Name	_____	
Bidder Representative(s)	_____ Name and Title _____ Name and Title	
Bidder Representative(s) Contact Information	Email Address(es) _____ _____	Phone/Cell Phone (_____)_____ Telephone (_____)_____ Cell Phone
Bidder Mailing Address	_____ Address _____ City/State/Zip Code	

California Contractors' License _____ Number _____ Classification(s) and Expiration Date	DIR Contractor Registration _____ Number

1. Bid Proposal.

1.1. Bid Proposal Amount. The undersigned Bidder proposes and agrees to furnish and install the Work including, without limitation, providing and furnishing any and all labor, materials, tools, equipment and services necessary to complete, in a workmanlike manner in accordance with the Contract Documents for the sum of_____Dollars ($_____). The Bid Proposal Amount includes all Allowances set forth in Paragraph 1.3. The Bidder confirms that it has checked all of the above figures and understands that neither the District nor any of its agents, employees or representatives shall be responsible for any assumptions, errors or omissions on the part of the undersigned Bidder in preparing and submitting this Bid Proposal.

1.2. Acknowledgment of Bid Addenda. The Bidder confirms that this Bid Proposal incorporates and is inclusive of, all items or other matters contained in Bid Addenda, if any, issued by or on behalf of the District.

_____ **Addenda Nos._____**received, acknowledged
(initial) and incorporated into this Bid Proposal.

1.3. Allowance. The Bidder and District acknowledge that the Bid Proposal Price set forth above includes an Allowance Amount in the aggregate amount of Four Hundred Fifty Thousand Dollars ($574,000.00) for unforeseen conditions.

Although included in the Bid Proposal Price, Allowances belong solely to the District and shall be expended only upon written direction by the District, to be granted or denied in its sole discretion. Any Allowance amount not fully consumed shall belong solely to the District and shall be refunded to the District by a deductive change order. By submitting this Bid Proposal, the Bidder confirms that the Bid Price proposed in Paragraph 1.1 is inclusive of all Allowances.

1.4. Alternate Bid Items. The Bidder's proposed pricing for each Alternate Bid Item, if any, are set forth in the accompanying form of Alternate Bid Items Proposal, Attachment A. Failure of a

Bidder to propose pricing for each Alternate Bid Item set forth in the accompanying Alternate Bid Items Proposal will result in the Bid Proposal being deemed non-responsive and rejected.

2. **Documents Accompanying Bid Proposal**. The Bidder has submitted with this Bid Proposal the following:

Bid Security	Statement of Qualifications
Subcontractors List	Non-Collusion Affidavit

The Bidder acknowledges that if this Bid Proposal and the foregoing documents are not fully in compliance with applicable requirements set forth in the Call for Bids, the Instructions for Bidders and in each of the foregoing documents, the Bid Proposal may be rejected as non-responsive.

3. **Award of Contract**. If the Bidder submitting this Bid Proposal is awarded the Contract, the undersigned will execute and deliver to the District the Agreement in the form attached hereto within Seven (7) calendar days after notification of award of the Contract. Concurrently with delivery of the executed Agreement to the District, the Bidder awarded the Contract shall deliver to the District: (i) Performance Bond; (ii) Labor and Material Payment Bond; (iii) Drug-Free Workplace Certificate; and (iv) Certificates of Insurance evidencing all insurance coverages required under the Contract Documents. Failure of the Bidder awarded the Contract to strictly comply with the preceding may result in the District's rescinding award of the Contract and/or forfeiture of the Bidder's Bid Security. In such event, the District may, in its sole and exclusive discretion elect to award the Contract to the responsible Bidder submitting the next lowest priced Bid Proposal or to reject all Bid Proposals.

4. **Contractors' License**. The Bidder certifies that: (i) it is possesses a valid and in good standing Contractors' License, in the necessary class(es), for performing the Work as set for in the Call for Bids; (ii) that such license shall be in full force and effect throughout the duration of the performance of the Work; and (iii) that all Subcontractors providing or performing any portion of the Work are properly licensed to perform their respective portions of the Work at the time of submitting this Bid Proposal and will remain so properly licensed at all times during their performance of the Work.

5. **Agreement to Bidding Requirements and Attorneys' Fees**. The undersigned Bidder acknowledges and confirms its receipt, review and agreement with, the contractual requirements set forth in this Bid Proposal and the Contract Documents. By executing this Bid Proposal hereinbelow, the Bidder expressly acknowledges and agrees that if the Bidder institutes any legal or equitable proceedings in connection with this Bid Proposal and the District is named as a party thereto, the prevailing party(ies) shall recover from the other party(ies), as costs, all attorneys' fees and costs incurred in connection with any such proceeding, including any appeal arising therefrom. This provision shall constitute a binding attorneys' fee agreement in accordance with and pursuant to California Civil Code §1717 which shall be enforceable against the Bidder and the District. This attorneys' fee provision shall be solely limited to legal or equitable proceedings arising out of a bid protest or the bidding process and shall not extend to or have any force and effect on the Contract for the Work or to modify the terms of the Contract Documents for the Work.

6. **Acknowledgment and Confirmation**. The undersigned Bidder acknowledges its receipt, review and understanding of the Drawings, the Specifications and other Contract Documents pertaining to the proposed Work. The undersigned Bidder certifies that the Contract Documents are, in its opinion, adequate, feasible and complete for providing, performing and constructing the Work in a sound and suitable manner for the use specified and intended by the Contract Documents. The undersigned Bidder certifies that it has, or has available, all necessary equipment, personnel, materials, facilities and technical and financial ability to complete the Work for the amount bid herein within the Contract Time and in accordance with the Contract Documents.

By: _____
(Signature of Bidder's Authorized Officer or Representative)

_____
(Typed or Printed Name)

Title: _____

June 17, 2021

IMPERIAL COMMUNITY COLLEGE DISTRICT
IMPERIAL VALLEY COLLEGE
BUILDING 200, 300 AND 800 MODERNIZATION

ADDENDUM #04

THE FOLLOWING ITEMS ARE LISTED AS CORRECTIONS OR CLARIFICATIONS TO THE CONSTRUCTION DOCUMENTS.

PROJECT CONTRACT DOCUMENTS (Posted to IVC Website)

1. Document 2020 – IVC_04118720 – Modernization 200 300 800 Building Project Manual includes Division 00, Introductory Information, Procurement Requirements, Contracting Requirements and Conditions of Contract in error. Delete Division 00, Introductory Information, Procurement Requirements, Contracting Requirements and Conditions of Contract from the Project Manual. The correct Division 00 documents are included in Document Bid No. 20-21-18 Modernization 200 300 800_06.10.21.
2. Division 00: The correct Division 00 for this project is included in Document Bid No. 20-21-18 Modernization 200 300 800_06.10.21 available on IVC Website.

ADDENDUM 01

1. Section 02 82 16 Universal Waster Removal. The correct number designation for Universal Waster Removal in the Project Manual is Section 02 82 33.

SECTION 07 21 16 THERMAL BLANKET INSULATION

1. Paragraph 2.02.A describes R-38 insulation at ceiling in error. The insulation at the ceiling (bottom of roof deck) is 4" of Sprayed Insulation per Section 07 21 29.

SECTION 08 34 73 SOUND DOORS and WINDOWS

1. Section 08 34 73 was omitted from the Project Manual in error. Section 08 43 73 is attached to this addendum. Provide sound doors at Building 300, Door 6, 7, 9, 10, 17 - 19, 21 and 23 as per Door Schedule, Door Type S-4. Provide Sound Windows at Building 300, Windows 29-36 per Window Schedule.

SECTION 08 42 29.23 SLIDING AUTOMATIC ALUMINUM FRAMED ENTRANCES

1. Section 08 42 29.23 was included in the Project Manual in error. There are no sliding automatic aluminum framed entrances in this project.

SECTION 08 71 00 DOOR HARDWARE

1. Specification Section 08 71 00 included in the Project Manual is in error. The correct Section 08 71 00 is included in this addendum.

SECTION 09 30 13 CERAMIC TILE

1. The floor tile described in Paragraph 2.01 E is in error. The correct tile is:
    a. Field Tile: DALTILE Colorbody Porcelain Stone Attache Collection, Haut Monde
        i. Composition: Porcelain
        ii. Module Size: 12”x24”, cut to 12”x12” at drains
        iii. Nominal Thickness: 3/8”
        iv. Color: Leisure Beige HM04, Unpolished
        v. Pattern: Stacked Grid
        vi. Grout: Laticrete #27 Hemp, 1/8”
2. The wall tile described in Paragraph 2.01 F is in error. The correct tile is:
    a. Wall Tile: Daltile Field
        i. Module Size: 12”x24”
        ii. Nominal Thickness: 3/8”
        iii. Color: Leisure Beige HM04, Unpolished
        iv. Pattern: Offset
        v. Grout: Laticrete #27 Hemp, 1/8”
    b. Wall Tile: Daltile Accent
        i. Module Size: 12”x24”
        ii. Nominal Thickness: 3/8”
        iii. Color: Empire Black HM06, Unpolished
        iv. Pattern: (2) 12”X24” Rows with Stacked Grid pattern
        v. Grout: Laticrete #53 Twilight Blue, 1/8”

SECTION 09 30 33 NATURAL STONE TILE

3. Section 09 30 33 was included in the Project Manual in error. There is no natural stone tile in this project.

SECTION 09 68 13 CARPET TILES

1. The carpet tile specified in Paragraph 2.02 is in error. The correct carpet tile is:
    a. Mohawk Style: Live & Learn Collection, Side Stripe
        i. Color: 965 Westpoint
        ii. Backing: Carpet Tile, Solid Rubber Backing

SECTION 09 68 16 SHEET CARPET

1. The carpet tile specified in Paragraph 2.02 is in error. The correct carpet tile is:
    a. Mohawk Style: Live & Learn Collection, Side Stripe
        i. Color: 965 Westpoint
        ii. Backing: Carpet Tile, Solid Rubber Backing
2. Provide sheet carpet at Building 300, Platform 14 and adjacent ramp.

SECTION 10 11 39 VISUAL DISPLAY RAILS

1. The wall mounted track system to support the flat panel monitors shall be provided as per SHEET AD-2_S1.0 and Keynote 12, SHEET AD-2_A2.1.3, A3.1.3 and A8.1.3.
2. The Basis for Design is Diversitrack System by TRACK TECHNOLOGY SYSTEMS, INC.
   Contact Information:
   Kevin Burkett
   5543 West State Road 234
   McCordsville, IN 46055
   317 841 3722 office
   kevin@diversistrack.com
3. Visual Display Rail Contractor shall provide a $12,800.00 Allowance for Structural Engineer to

design and secure DSA approval of wall mounted track system. Allowance shall be paid direct to Structural Engineer.

SECTION 10 82 00 ROOF SCREENS

1. Roof Screen Contractor shall provide a $16,400.00 Allowance for Structural Engineer to design and secure DSA approval of Roof Screen system. Allowance shall be paid direct to Structural Engineer.

SECTION 11 52 13 PROJECTION SCREENS

1. Section 11 52 13 is included in the Project Manual in error. There are no projection screens in this project.

SECTION 11 52 19 PROJECTORS AND MONITORS

1. Section 11 52 19 included in the Project Manual is in error. The correct Section 11 52 00 Audio Visual Equipment is included in the addendum. Provide Audio Visual Equipment per Section 11 52 00 attached to this addendum.
2. See Paragraph 2.01 and 2.02 for Contractor Provided AV items and Owner Furnished, Contractor Installed AV items.
3. Contractor shall provide a complete and operational AV system incorporating all Owner Furnished AV equipment.

SECTION 12 21 23 ROLL-UP WINDOW BLINDS

1. The location of window blinds per Paragraph 3.01.A is in error. Provide window blinds at sidelites of all exterior Door Type A-2 at Classrooms, Laboratories and Reception Rooms.

SECTION 13 48 000 SOUND CONTROL SYSTEMS

1. Section 13 48 00 was included in Addendum 1 in error. Section 13 48 00 shall be replaced by 08 34 73 Sound Doors and Windows. Section 08 34 73 is included in this addendum.

SECTION 23 09 13 BUILDING MANAGEMENT SYSTEM

1. Section 23 09 00 included in the Project Manual is in error. The correct Section 23 09 13 is included in this addendum. Provide Building Management System per Section 23 09 13 attached to this addendum. The exterior lighting control is added to Section 28 09 13.

SECTION 28 13 00 ACCESS CONTROL

1. Part 2 Products describes the DNA Fusion Access Control and Security Management System by Open Options in error. The existing card access system at Imperial Valley College is DSX Access Systems.
   a. All card access for this project shall be supported by the current DSX card access system.
   b. This project shall extend the existing DSX system to Building 200, 300 and 800.
   c. Contractor shall coordinate and extend the existing DSX system as required to provide a complete and operational system.
2. All AD-300 locks, electrified panic hardware, electric strikes, MT11 readers and power supplies shall be provided by Section 28 13 00.

SECTION 31 23 00 EXCAVATION AND FILL

1. Section 32 84 00 references engineered fill for structures in error. There are no new structures in this project. Section 32 84 00 is included in the Project Manual to provide the specification for granular material at site concrete.

SECTION 32 84 00 LANDSCAPE IRRICATION SYSTEMS

1. Section 32 84 00 is included in the Project Manual for required repairs to existing irrigation system as required to complete the installation of new utilities. There is no new irrigation systems included in this project.

SECTION 32 84 91 00 PLANTING PREPARATIONS

1. Section 32 91 00 is included in the Project Manual for required repairs to existing grass turf as required to complete the installation of new utilities. There are no new plants included in this project.

SECTION 32 92 00 HYDRO-SEEDING

1. Section 32 92 00 is included in the Project Manual for required repairs to grass turf as required to complete the installation of new utilities. There is no new grass turf areas included in this project.

SECTION 32 93 00 LANDSCAPE PLANTING

1. Section 32 300 is included in the Project Manual in error. There is no landscape planting in this project.

SECTION 32 97 00 LANDSCAPE ESTABLISHMENT AND MAINTENANCE

1. Section 32 97 00 is included in the Project Manual in error. There is no landscape establishment and maintenance in this project.

DRAWINGS ARCHITECTURAL SITE

1. SHEET AS5 – SITE UTILITIES PLAN
    a. Sheet AS5 includes new storm drain line in error. Delete new storm drain line from Legend.
2. SHEET ASX1 SITE DETAILS
    a. Detail 1 SITE CONCRETE requires Class II Base below site concrete in error. Provide imported granular fill material per Section 31 23 00.

DRAWINGS ARCHITECTURAL

1. SHEET AD-1_A3.1.3 FLOOR PLANS – ARCHITECTURAL
    a. Sheet AD-1_3.1.3 was described in Addendum 01 as Sheet AD-1_A2.1.3 replacing Sheet A2.1.3 in error. The correct sheet number is AD-1_A3.1.3 and the correct reference sheet number is A3.1.3.
2. SHEET AD-2_A2.1.3, A3.1.3 and A8.1.3 FLOOR PLANS - ARCHITECTURAL
    a. The lecterns marked by Keynote 5 are a mobile lectern Furnished by Owner and Installed by Contractor per Section 11 52 00 Audio Visual Equipment.
    b. Keynote 12 shows a detail reference to Sheet S1.0 in error. The correct sheet number is AD-2_S1.0.
    c. Sheet AD-1_A8.1.3 was labeled in error. The correct sheet number is AD-2_A8.1.3 and the correct reference sheet number is AD-1_A8.1.3.
3. SHEET A2.2 ARCHITECTURAL SECTION
    a. The existing exterior wall above the CMU wall at Classroom 3, marked by Keynote 4 does not require new insulation.
4. SHEET A2.2, A3.2 and A8.2 ARCHITECTURAL SECTIONS
    a. Keynote 9 requires R-19 insulation at all new exterior wall furring in error. Provide R-19 at 6” wall furring and R-11 at 4” wall furring.

5. SHEET A2.5, A3.5 and A8.5 EXTERIOR ELEVATIONS.
    a. The existing CMU columns are marked by Keynote 6. Contractor shall replace a total of (8) face shells at each existing CMU column. Contractor shall grind the existing outside corners of each CMU column to provide a ¾" smooth radius. There are a total of (38) columns at each Building.
6. SHEET A2.6, A3.6 and A8.6 ROOF PLAN
    a. Contractor shall patch the existing PVC membrane roof as required to install the new mechanical equipment, new roof screen and all new roof penetrations.
    b. Contractor shall patch existing PVC membrane roof as required to provide water-tight membrane where existing equipment is removed or where existing roofing penetrations are removed.
7. SHEET AD-1_A2.1.1, A3.1.1 and A8.1.1 DEMOLITION PLANS
    a. Keynote B requires removal of PCB light ballast and mercury light tube removal. The quantity of fixtures requiring PCB light ballast removal and mercury light tube removal is not shown or provided in error. The owner has replaced light ballast with non PCB's and replaced light tubes with LED lighting in recent years. Section 02 82 33 is included in the Project Manual in the event that a PCB light ballast or old light tube containing mercury is discovered. For purposes of bidding, contractor shall provide for the removal of (6) PCB containing ballast and (6) mercury light tubes per building.
8. SHEET AD-1_A2.3 – REFLECTED CEILING PLAN
    a. Sheet AD-1_A2.3 shall be replaced by Drawing AD-4_A2.3 attached to this addendum: changes are clouded.
9. SHEET AD-1_A2.4.1 – INTERIOR ELEVATIONS
    a. Sheet AD-1_A2.4.1 shall be replaced by Drawing AD-4_A2.4.1 attached to this addendum: changes are clouded.
10. SHEET AD-1_A2.4.2 – INTERIOR ELEVATIONS
    a. Sheet AD-1_A2.4.2 shall be replaced by Drawing AD-4_A2.4.2 attached to this addendum: changes are clouded.
11. SHEET AD-1_A3.3 – REFLECTED CEILING PLAN
    a. Sheet AD-1_A3.3 shall be replaced by Drawing AD-4_A3.3 attached to this addendum: changes are clouded.
12. SHEET AD-1_A3.4.1 – INTERIOR ELEVATIONS
    a. Sheet AD-1_A3.4.1 shall be replaced by Drawing AD-4_A3.4.1 attached to this addendum: changes are clouded.
13. SHEET AD-1_A3.4.2 – INTERIOR ELEVATIONS
    a. Sheet AD-1_A3.4.2 shall be replaced by Drawing AD-4_A3.4.2 attached to this addendum: changes are clouded.
14. SHEET AD-1_A8.3 – REFLECTED CEILING PLAN
    a. Sheet AD-1_A8.3 shall be replaced by Drawing AD-4_A8.3 attached to this addendum: changes are clouded.
15. SHEET AD-1_A8.4.1 – INTERIOR ELEVATIONS
    a. Sheet AD-1_A8.4.1 was labeled as AD-1_A3.4.1 in error. The correct sheet number is AD-1_ A8.4.1.
    b. Sheet AD-1_A8.4.1 shall be replaced by Drawing AD-4_A8.4.1 attached to this addendum: changes are clouded.
16. SHEET AD-1_A8.4.2 – INTERIOR ELEVATIONS
    a. Sheet AD-1_A8.4.2 was labeled as AD-1_A3.4.2 in error. The correct sheet number is AD-1_ A8.4.2.
    b. Sheet AD-1_A8.4.2 shall be replaced by Drawing AD-4_A8.4.2 attached to this addendum: changes are clouded.

17. SHEET AD-1_A8.4.3 – INTERIOR ELEVATIONS
    a. Sheet AD-1_A8.4.3 was labeled as AD-1_A3.4.3 in error. The correct sheet number is AD-1_ A8.4.3.
    b. Sheet AD-1_A8.4.3 shall be replaced by Drawing AD-4_A8.4.3 attached to this addendum: changes are clouded.
18. SHEET AX1.2 – DOOR SCHEDULES
    a. Sheet AX1.2, Building 300 shows Doors #17 and #19 as type S-6 in error. The correct door type is S-4, sound door.
19. SHEET AX1.3 – WINDOW SCHEDULES
    a. Sheet AX1.3, Building 300 shows Window #25 as a sound window in error. The correct window type is A, "Solotube" skylight.
20. SHEET AX1.4 – DOOR AND WINDOW TYPES
    a. Sheet AX1.4, Detail C shows Type "B" Window height dimensions in error. The correct height dimensions shall be 3'-5" AFF to bottom of window frame and 6'-11" AFF to top of window frame.
21. SHEET AX5.2 – NON-BEARING METAL FRAMING
    a. Detail 15 does not specify clip attachment from CMU wall to furring stud. The correct furring clip is: Simpson Strong-Tie LSSC4.25, 4 ½" 16GA.
22. SHEETAD-1_RS-4 – ROOF SCREEN FRAMING DETAILS
    a. Sheet AD-1_RS-4 was labeled as AD-1_RS-5 in error. The correct sheet number is AD-1_RS-4.

DRAWINGS ELECTRICAL

1. SHEET ES1.1 SITE ELECTRICAL
    a. Keynote 1 and 2 mark the conduit required for IID Primary Electrical service. Contractor shall provide the conduit. IID shall provide the conductors.
    b. Keynote 10: Contractor shall remove and replace all concrete hardscape as required to install new concrete new conduit. Install new conduit under existing footing. Penetrate existing concrete slab below or adjacent to existing panel. Remove and replace existing slab as required to install new conduit

DRAWINGS COMMUNICATIONS

2. SHEET CM0.2 – COMMUNICATIONS DETAILS
    a. Sheet CM0.2 shall be replaced by Drawing AD-4_CM0.2 attached to this addendum: changes are clouded.
3. SHEET CM0.3 – COMMUNICATIONS DETAILS
    a. Sheet CM0.3 includes Details 1, 2 and 4 in error. Details 1, 2 and 4 shall be deleted.
4. SHEET CM2 – COMMUNICATIONS PLAN
    a. Sheet CM2 shall be replaced by Drawing AD-4_CM2 attached to this addendum: changes are clouded.
5. SHEET CM3 – COMMUNICATIONS PLAN
    a. Sheet CM3 shall be replaced by Drawing AD-4_CM3 attached to this addendum: changes are clouded.
6. SHEET CM8 – COMMUNICATIONS PLAN
    a. Sheet CM3 shall be replaced by Drawing AD-4_CM8 attached to this addendum: changes are clouded.

END OF ADDENDUM #04

Jimmie A. Sanders

SECTION 01 21 00 - ALLOWANCES

PART 1 - GENERAL

1.01 SUMMARY

A. Contractor shall provide the following Allowances for the exclusive use of the owner and / or their representatives. The allowances shall be carried as a separate line item included in the bid.

B. Types of allowances required include the following:

1. Lump-sum allowances.

C. Any portion of Allowances not used shall be returned to the owner via deductive change order

D. Provide Lump-sum allowances for the following items:

1.	Additional Hazardous Material Abatement:	$ 68,000.00
2.	Additional site utility / IID work:	$ 78,000.00
3.	Additional Structural / Seismic Modifications:	$ 164,000.00
4.	Additional site concrete work:	$ 62,000.00
5.	Additional Data and AV work:	$ 120,000.00
6.	Additional Architectural Finishes:	$ 82,000.00

PART 2 - PRODUCTS (Not Applicable)

PART 3 – EXECUTION (Not Applicable)

END OF SECTION 01 21 00

SECTION 08 34 73 – SOUND CONTROL DOOR AND WINDOW ASSEMBLIES

PART 1 – GENERAL

1.01 SUMMARY

A. Scope of work: The work under this section includes furnishing all labor, materials, and equipment, and performing all operations in connection with Sound Control Door Assemblies, as indicated on the Drawings, specified herein, or reasonably required to complete the work. The work includes, but is not limited to the following.

1. Provide sound-isolating doors.
2. Provide sound-isolating windows.
2. Provide all finish hardware for sound-isolating doors with the exception of mortise lock.

B. References:

1. American Society for Testing and Materials (ASTM).

a. ASTM E90 – 97: Test Method for Laboratory Measurement of Airborne Sound Transmission of Building Partitions.
b. ASTM E336 – 97: Test Method for Measurement of Sound Insulation in Buildings.
c. ASTM E413 – 87: Classification for Rating Sound Insulation.
d. ASTM E1408 – 91: Test Method for Laboratory Measurement of the Sound Transmission Loss of Door Panels and Door Systems.
e. ASTM E152: Standard Methods of Fire Tests of Door Assemblies.

2. National Fire Protection Association (NFPA)

a. NFPA 252: Standard Methods of Fire Tests of Door Assemblies.
b. NFPA 80: Standard for Fire Doors and Fire Windows.

3. Underwriters Laboratories (UL).

a. UL 10C: Fire Tests of Door Assemblies.
b. UL 14C: Swinging Hardware for Standard Tin-Clad Fire Doors Mounted Singly and in Pairs.

C. Definitions:

1. Sound Transmission Class (STC): A single number rating used to compare the sound isolation properties of walls, floors, ceilings, windows or doors. The sound transmission class derived from measurements in the 16 test bands.

D. System Description:

1. Design Requirements: Provide pre-hung, pre-engineering, sound isolating doors in a split frame design. The doorframe is an integral part of the sound-isolating door. Also integral to the doorframe is the provision for the required sill plate (supplied). Doors and frames are provided with integrated gasket systems, continuous cam lift hinge and Teflon coated sweep seal. Door leafs are provided with a standard mortise pocket and frames with a strike plate.

2. Performance Requirements:

   a. Sound Transmission Class (measured in accordance with ASTM E90 – 97 and ASTM
   E413 – 87):

Fire Rating	Door Type	STC
Non Rated	3570 with 1,296 sq. in. window	52

   b. Transmission Loss (dB) by octave band (measured in accordance with ASTM E90 – 97 and ASTM E413 – 87):

Fire Rating	Door Type	Transmission Loss (dB)
Non Rated	3570 with 1,296 sq. in. window	36 45 52 55 56 56

E. SUBMITTALS

1. Submit as per Section 01 33 00
2. Product Data: Submit applicable reference standards, current performance data, application recommendations and product limitations.
3. Shop Drawings: Submit assembly and installation drawings showing door opening criteria, sizes, types swings and elevations.
4. Contract Closeout Submittals:

   a. Operation and Maintenance Data.
   b. Warranty.

F. QUALITY ASSURANCE

1. Test Reports:

   a. Certified test reports by an accredited independent laboratory showing one-third octave band airborne sound transmission loss data and classification (STC) to indicate manufacturer's capability of meeting performance requirements of this specification with production doors and frames. Test data shall include type of hardware used on the door during testing.
   b. Test reports by an independent acoustical consultant who is a member of the National Council of Acoustical Consultants (NCAC) certifying a Field Sound Transmission Class (FSTC) or Noise Isolation Class (NIC) in conformance with the requirements of test method ASTM E336-97 performance of no more than five points below the laboratory STC performance on similar installations.

2. Installation:

   a. Installer's Qualifications: Installation shall be done in accordance with approved shop drawings and manufacturer's printed installation instructions.
   b. All frame installations must be plumb and square to insure proper acoustical performance.

G. DELIVERY, STORAGE AND HANDLING

1. Pack and ship to avoid damage according to manufacturer's recommendations.

   a. Finish and assemble all components in the factory before shipment.
   b. Ship components in individual, sealed, labeled cartons.

c. Deliver components to room designated for installation.

2. Do not accept damaged products at the site. Do no install damaged products.
3. Store products in heated, indoor storage near point of installation. Retain protective packaging until installing.

H. PROJECT CONDITIONS

1. Field Measurements: Obtain required field measurements from contractor and indicate on shop drawings.

I. WARRANTY

1. Provide manufacturer's written warranty that products found to be not in accordance wi the requirements of the contract documents within a period of three years after date of commencement of warranties shall be corrected promptly after receipt of written notice from owner.

PART 2 - PRODUCTS

A. ACCEPTABLE MANUFACTURERS

1. Wenger Corporation, Owatonna, MN.

B. SUBSTITUTIONS

1. The materials and products of the manufacturer listed above establish the standard for this project.
2. Materials or products of another manufacturer must be approved by architect. The burden of demonstrating the merit of the proposed substitute is on the proposer.

C. STANDARD MANUFACTURED COMPONENTS

1. Door Leaf

a. Size: 3'-2" x 7'-0"
b. Fire Rating: None.
c. Two and one-half inches thick made of 14-gauge on one face and 12-gauge steel on the opposite face.
d. Internal section of door filled with sound absorbing material.
e. Steel faces crimped together around a neoprene gasket to minimize acoustical coupling between the surfaces and acoustically seal the faces together.
f. Internal door face stiffening provided for each face independently.
g. Adjustable sweep seal made of fiberglass reinforced Teflon over Naugahyde on a contoured steel channel.
h. Continuous cam-lift hinge integrated into the door-leaf assembly.
i. Factory mortised, reinforced and fitted for SCHLAGE L Series heavy-duty locksets.
j. Internal door reinforcement provided for door closers.
k. Underwriter's Laboratory (UL) label if required.

2. Door Frame

a. Split frame design in four sizes to allow wall thickness of 4.5" to 12.5".

b. Frame constructed of 14-gauge steel.
c. Integrated dual magnetic gaskets with protective coating over the gaskets. (Protective coating to be removed after installation.)
d. Acoustical-absorptive material shall be provided between the frame and the magnetic gasket mountings.
e. Integral 3" doorstop on the hinge side and 2.5" doorstops on latch and top of frame.
f. Integrated support for sill plate included in the frame.
g. Ramped (1/2") metal threshold 16-gauge, 304 stainless steel.
h. Door leaf attachment points and shims as needed for hanging.
i. Jamb anchors constructed of 18-gauge steel for masonry walls and 18-gauge for steel-stud contraction.
j. Door frame shall include integrated strike plate.

3. Vision lites

a. Factory assembled lights in doors using 3/8" safety glass on one surface and ¼" safety glass on the opposite surface separated by a 2.75" air space.
b. Window Size: 20" x 64".
c. Absorptive material provided behind perforated metal separators between the glass panes.
d. Fabricated dual-glazed lights are individually removable.

4. Finishes

a. Factory-applied iron phosphate pre-coat and epoxy powder thermo set (baked) primer. Provide custom color to match project door color.

5. Finish Hardware

a. Mortise Lockset: Provided by Section 08 71 00.
b. Closers: LCN 4040/4041 Super Smoothee, hinge-face, pull side, UL LISTED ANSI A1564, GRADE 1. Closer Adapter Plates: LCN 4041-18/18DSI (Required for hinge-face mounting only.)
c. Hold Open: Ives number 452-4" PA28 (stainless steel).

5. Windows

a. Size: per Schedule
b. 3/8" safety glass on one surface and ¼" safety glass on the opposite surface separated by a 2.75" air space.
c. Frame constructed of 14-gauge steel.

PART 3 - EXECUTION

A. EXAMINATION

1. Verification of Conditions

a. Prior to installation, check and correct frames for squareness, alignment, twist, plumb, size and swing.
b. Frame Installation per Steel Door Institute (SDI) and the American National Standards Institute (ANSI) recommendations in SDI-100 and ANSI A250.8 respectively, "Recommended Specifications for Standard Steel Doors and Frames".

c. Frames shall be installed plumb, level, rigid and in true alignment as recommended in SDI 105: "Recommended Erection Instructions for Steel Frames". Frames must be plumb and in plane to within 1/8" top to bottom of frame.

B. ADJUSTING

1. Use supplied door leaf shims during installation for correct leaf fit in frame for maximum acoustic performance.
2. Adjust sweep seal for maximum acoustic performance.
3. ADA may require adjustment to sweep seal and spacer material applied to the door leaf for reduced magnetic force. For optimum performance, a powered closer is recommended.

C. CLEANING

1. Clean all surfaces according to manufacturer's recommendations.
2. Remove all packaging and construction rubbish and debris.

END OF SECTION 08 34 73

SECTION 08 71 00 - DOOR HARDWARE

PART 1 - GENERAL

1.01 SUMMARY

A. Provisions of General Conditions, Supplementary Conditions, and Division One apply to this section.

B. Scope of work: The work under this section includes furnishing all labor, materials, and equipment and performing all operations in connection with Door Hardware, as indicated on the drawings, specified herein, or reasonably required to complete the work. The work includes, but is not limited to the following:

1. Provide door hardware.

1.02 SUBMITTALS

A. Submit hardware schedule organized by hardware set numbers in accordance with Division One, Section 01 33 00.

1. Submit manufacturers' catalog cut sheets of all hardware items scheduled.
2. Furnish templates to each fabricator of doors and frames as required for hardware preparation.

1.03 QUALITY ASSURANCE

A. Regulatory Requirements

3. Door Hardware:

a. Mounting height of latching hardware shall be 34" to 44" above finish floor per CBC Section 11B-404.2.7
b. Doors/doorways as part of an accessible route shall comply with CBC Sections 11B-404.
c. The clear opening width for a door shall be 32" minimum. For a swinging door it shall be measured between the face of the door and the stop, with the door open 90 degrees. There shall be no projections into it below 34" and 4" maximum projections into it between 34" and 80" above the finish floor or ground. Door closers and stops shall be permitted to be 78" minimum above the finish floor or ground. CBC Section 11B-404.2.3
d. Handles, pulls, latches, locks, and operable parts on accessible doors shall compy with CBC Section 11B-309.4 and shall be operable with one hand and shall not require tight grasping, punching, or twisting of the wrist. Operable parts of such hardware shall be 34" minimum and 44" maximum above finish floor or ground. Where sliding doors are in the fully open position, operationg hardware shall be exposed and usable from both sides.
e. The force for pushing or pulling open a door shall be as follows: CBC Section 11B-404.2.9.

i. Interior hinged doors, sliding or folding doors, and exterior hinged doors: 5 pounds maximum.
ii. Required fire doors: the minimum opening force allowable by the DSA authority, not to exceed 15 pounds.
iii. These forces do not apply to the force required to retract latch bolts or diesengage other devices that hold the door in a closed position.
iv. The force required for activationg any operable parts, such as lever hardware, or disngaging other devices shall be 5 pounds maximum to comply with CBC Section 11B-309.4

f. Door closing speed shall be as follows: CBC Section 11B-404.2.8

i. Closer shall be adjusted so that the required time to move a door from an open position of 90 degrees to a position of 12 degrees from the latch is 5 seconds minium
ii. Spring hinges shall be adjusted so that the required time to move a door from an open position of 70 degrees to the closed position is 1.5 seconds minimum.

g. Thresholds shall compy with CBC Section 1008.1.7 and 11B-404.2.5
h. Floor stops shall not be located in the path and 4" maximum from walls. DSA policy 99-08.
i. Hardware shall not be provided with "Night Latch" (NL) function for any accessible doors or gates unless the following conditions are met per DSA Interpretation 10-08 DSA / AC (External) revised 4/28/09. Such conditions must be clearly demonstrated and indicated in the specifications:

i. Such hardware has a dogging feature.
ii. It is dogged during the time the facility is open.
iii. Such "dogging" operation is performed only by employees as their job function (non-public use).

j. Pair of doors: limit swing of one leaf to 90 degrees so tha a clear floor space is provided beyond the arc of the swing for the wall-mounted tactile sign. CBC Section 11B-703.4.2.1.
k. All Hardware shall meet the requirements of CBC Sections 11B-404.2.7, 11B-404.2.9 and 1010.1.9.

4. Exit Devices:

a. Panic hardware shall comply with CBC Section 1010.1.10, (consider that if the device is mounted lower than 36" AFF, the clear opening may be restricted to less than the 32" required clear opening). Panic Bar shall be mounted above 36" to 44" above finished floor surface.
b. The unlatching force shall not exceed 5 lbs applied in the direction of travel.
c. Panic hardware shall not be provided with "Night Latch" (NL) function for any accessible doors or gates unless the following conditions are met per DSA Interpretation 10-08 DSA / AC (External) revised 4/28/09. Such conditions must be clearly demonstrated and indicated in the specifications:

i. Such hardware has a dogging feature.
ii. It is dogged during the time the facility is open.
iii. Such "dogging" operation is performed only by employees as their job function (non-public use).

B. Keying Schedule:

1. Submit (3) copies of detailed keying schedule with schematic layout to Contractor.
2. Keying schedule shall specify number of each door opening and associated key identification number stamped on each key. The number of each opening shall match the door and building number on the architectural floor plans.

C. Samples: If requested by the Architect, submit physical sample of each item of hardware proposed in work. Samples will be returned on the request of Contractor.

D. It shall be the responsibility of the hardware supplier to examine the plans and specifications and furnish proper hardware for all openings. If there are any omissions in hardware groups, they shall be called to the attention of the Architect prior to bid opening and the omission will be corrected with an addendum. Hardware supplier shall be responsible to provide all hardware for a complete job.

E. Doors and Frames: Hollow metal doors and frames shall be manufacturered to templates. Provide backing / reinforcement as required for each hardware item. If required physical hardware items shall be furnished to related manufacturers.

1.04 DELIVERY, STORAGE AND HANDLING

A. Packaging: Each unit of hardware shall be indivudually packaged in the manufacturer's original containers.

B. Wrapping: Wrap and cushion each item to prevent scratches and dents during delivery and storage.

C. Markings: Each package shall be clearly marked on the outside, identfying the contents with specific opening number corresponding to those listed in the hardware schedule. Include door and item number for each product.

1.05 WARRANTY

A. All door hardware shall be supplied with a one year warranty against defects in materials and workmanship, commencing with substantial completion of job. Contractor shall provide adjustment to all finish hardware one year after completion of project. The one year adjustment shall be performed by a finish hardware manufacturer's representative.

PART 2 - PRODUCTS

2.01 GENERAL

A. All doors and gates with locking hardware shall be openable from the inside without the use of a key or any special knowledge or effort.

B. All locks at all passage doors shall have lever type hardware or approved control devices for access compliance.

C. All hardware exposed to the exterior shall be set with non-removable fastenings, sex bolts, special head screws or similar fastenings.

D. Fire rated openings: Provide hardware for fire rated openings in compliance with the California Code of Regulations (CCR) Title 24, Part 2, California Building Code and NFPA Standard No. 80.

E. Keying:

1. Keying System: SCHLAGE PRIMUS HIGH SECURITY SYSTEM, EVEREST Keyway. No other keying system will be accepted. The PRIMUS system shall support a great grandmaster, grandmaster and master keying system.
2. Contractor shall provide construction key cores for the course of construction. Contractor shall remove construciton cores and install permanent cores when building is substantially complete.
3. All keys shall be stamped "DO NOT DUPLICATE". All keys shall be stamped with identification number to match keying schedule.
4. All cores shall be full size interchangable with Schlage Logo.

5. All cylinders and keys shall be properly tagged to indicate their intended location and to enable the Owner, with a minimum of effort, to establish key control.
6. Provide complete bitting list of key cuts.
7. Supply keys in the following quantities:

    a. Great Grand Master: four
    b. GrandMaster: four
    c. Master: four
    d. Four keys per lock

F. Key Cabinet: Provide LUND 1204 KEY CABINET.

PART 3 - EXECUTION

3.01 INSPECTION

A. Hardware Supplier's Inspection: Before final inspection of the work under this contract and acceptance of the project, the hardware supplier shall inspect all items supplied under this section for conformance to the specifications, proper functioning, appearance, finish and installation. Check operation and adjustment of all hardware items. Hardware supplier shall notify in writing any deficiences to the Architect and Contractor.

3.02 INSTALLATION

A. Installation of finish hardware is specified under ofther sections. However, the following requirements apply to the work as follows:

1. Hardware shall be installed by a Qualified Mechanic skilled in the application of institutional grade builders hardware.
2. Install all hardware in full compliance with manufacturer's instructions.
3. When cutting and fitting is required to install hardware onto or into surfaces which are to be painted or finished, install each item completely and then remove during application of paint. After completion of painting application, reinstall each item.
4. Install hardware after application of paint.
5. Provide adequate backing in stud walls as required for proper attachment of each hardware item.

B. Hardware Mounting Locations: As recommended by the Door and Hardware Institute, unless indicated otherwise. All lever hardware to be mounted between 34 inches and 44 inches.

C. Thresholds: Set thresholds for exterior doors in full bed of butyl-rubber or polyisobutylene mastic sealant. Remove excess sealant and clean adjacent surfaces. Cut and fit threshold to jamb with hairline joints.

3.03 GENERAL

A. Instruct Owner's personnel in proper maintenance and adjustment of each hardware item.

B. Furnish to Owner all keys and extra keys orgonized neatly in key cabinet furnished for this project.

C. Hardware Schedule: Provide hardware for each door as in the following list of hardware sets:

HARDWARE GROUP NO. 01 -
PERIMETER SEALS BY STOREFRONT MANUFACTURER
For use on Door #(s):

200-10	200-11		200-15	200-3	200-4
200-6	200-7	200-8	200-9	300-1	300-11
300-13	300-14	300-15	300-16	300-17	300-2
300-5	800-1	800-10	800-11	800-12	800-13
800-2		800-5	800-9		

Provide each SGL door(s) with the following:

QTY		DESCRIPTION	CATALOG NUMBER		ITEMID	FINISH	MFR
1	EA	CONT. HINGE	224HD EPT			628	IVE
1	EA	POWER TRANSFER	EPT10	✓		689	VON
1	EA	ELEC PANIC HARDWARE	RX-QEL-99-NL-OP-110MD 24 VDC	✓		626	VON
1	EA	RIM CYLINDER	20-057 ICX			626	SCH
1	EA	PRIMUS CORE	20-740-XP			626	SCH
1	EA	DOOR PULL	VR910 NL			630	IVE
1	EA	SURFACE CLOSER	4040XP EDA TBWMS			689	LCN
1	EA	FLOOR STOP	FS439			630	IVE
1	EA	DOOR SWEEP	315CN (per foot)			AL	PEM
1	EA	THRESHOLD	276A MSES10 (per foot)			AL	PEM
1	EA	WEATHERSTRIP	Per Aluminum Storefront Manufactuer				
2	EA	MULTITECH READER	MT11 (BY ACCESS CONTROL SYSTEM PROVIDER)	✓		BLK	SCE
1	EA	POWER SUPPLY	PS904 900-4R - WORK OF DIVISION 28	✓		LGR	VON

HARDWARE GROUP NO. 01A
Main Entrance doors
For use on Door #(s) 200-12 and 800-4

PERIMETER SEALS BY STOREFRONT MANUFACTURER
For use on Door #(s):
Provide each SGL door(s) with the following:

QTY		DESCRIPTION	CATALOG NUMBER		ITEMID	FINISH	MFR
1	EA	CONT. HINGE	224HD EPT			628	IVE
1	EA	POWER TRANSFER	EPT10	✓		689	VON
1	EA	ELEC PANIC HARDWARE	RX-QEL-99-NL-OP-110MD 24 VDC	✓		626	VON
1	EA	RIM CYLINDER	20-057 ICX			626	SCH
1	EA	PRIMUS CORE	20-740-XP			626	SCH
1	EA	SOLID WIRE PULL	8190-12			630	IVE
1	EA	SURFACE CLOSER	4040XP EDA TBWMS			689	LCN
1	EA	FLOOR STOP	FS439			630	IVE
1	EA	DOOR SWEEP	315CN (per foot)			AL	PEM
1	EA	THRESHOLD	276A MSES10 (per foot)			AL	PEM
1	EA	WEATHERSTRIP	Per Aluminum Storefront Manufacturer				
2	EA	MULTITECH READER	MT11 (BY ACCESS CONTROL SYSTEM PROVIDER)	✓		BLK	SCE

QTY		DESCRIPTION	CATALOG NUMBER		ITEMID	FINISH	MFR
1	EA	POWER SUPPLY	PS904 900-4R - WORK OF DIVISION 28	✓		LGR	VON

HARDWARE GROUP NO. 02
For use on Door #(s):
200-5 300-12 800-3
Provide each SGL door(s) with the following:

QTY		DESCRIPTION	CATALOG NUMBER		ITEMID	FINISH	MFR
3	EA	HW HINGE	5BB1HW 4.5 X 4.5			630	IVE
1	EA	POWER TRANSFER	EPT10	✓		689	VON
1	EA	ELEC OFFICE LOCK	AD-300-MS-50-MT-RHO-J 12/24 VDC	✓		626	SCE
1	EA	PRIMUS CORE	20-740-XP			626	SCH
1	EA	SURFACE CLOSER	4040XP REG OR PA AS REQ TBWMS			689	LCN
1	EA	WALL STOP	WS406/407CCV			630	IVE
2	EA	JAMB SEAL	2891AS			AL	PEM
1	EA	DOOR SWEEP	315CN (per foot)			AL	PEM
1	EA	THRESHOLD	276A MSES10 (per foot)			AL	PEM
3	EA	SILENCER	SR64			GRY	IVE

AD300 LOCK SHOWN FOR TEMPLATING PURPOSE ONLY.
AD300 LOCK TO BE SUPPLIED BY DIVISION 28

HARDWARE GROUP NO. 03
For use on Door #(s):
200-1 200-2 800-6 800-8
Provide each SGL door(s) with the following:

QTY		DESCRIPTION	CATALOG NUMBER		ITEMID	FINISH	MFR
3	EA	HW HINGE	5BB1HW 4.5 X 4.5			630	IVE
1	EA	STOREROOM LOCK	L9080T LLLA 06A			626	SCH
1	EA	PRIMUS CORE	20-740-XP			626	SCH
1	EA	ELECTRIC STRIKE	6212 FSE DS CON 12/16/24/28 VAC/VDC	✓		630	VON
1	EA	PULL PLATE	8302 10" 4" X 16"			630	IVE
1	EA	SURFACE CLOSER	4040XP REG OR PA AS REQ TBWMS			689	LCN
1	EA	WALL STOP	WS406/407CCV			630	IVE
2	EA	JAMB SEAL	2891AS			AL	PEM
1	EA	DOOR SWEEP	315CN (per foot)			AL	PEM
1	EA	THRESHOLD	276A MSES10 (per foot)			AL	PEM
3	EA	SILENCER	SR64			GRY	IVE

HARDWARE GROUP NO. 04
PERIMETER SEALS BY STOREFRONT MANUFACTURER
For use on Door #(s):

200-13	200-14	300-10	300-3	300-4	300-6
300-7	300-8	300-9	800-7		

Provide each SGL door(s) with the following:

QTY		DESCRIPTION	CATALOG NUMBER		ITEMID	FINISH	MFR
1	EA	CONT. HINGE	224HD EPT			628	IVE
1	EA	POWER TRANSFER	EPT10	✓		689	VON
1	EA	ELEC OFFICE LOCK	AD-300-MS-50-MT-RHO-J 12/24 VDC	✓		626	SCE
1	EA	PRIMUS CORE	20-740-XP			626	SCH
1	EA	SURFACE CLOSER	4040XP REG OR PA AS REQ TBWMS			689	LCN
1	EA	WALL STOP	WS406/407CCV			630	IVE
1	EA	DOOR SWEEP	315CN (per foot)			AL	PEM
1	EA	THRESHOLD	276A MSES10 (per foot)			AL	PEM

AD300 LOCK SHOWN FOR TEMPLATING PURPOSE ONLY.
AD300 LOCK TO BE SUPPLIED BY DIVISION 28

HARDWARE GROUP NO. 05
For use on Door #(s):

200-16	300-25	800-14

Provide each SGL door(s) with the following:

QTY		DESCRIPTION	CATALOG NUMBER		ITEMID	FINISH	MFR
3	EA	HW HINGE	5BB1HW 4.5 X 4.5			630	IVE
1	EA	POWER TRANSFER	EPT10	✓		689	VON
1	EA	ELEC OFFICE LOCK	AD-300-MS-50-MT-RHO-J 12/24 VDC	✓		626	SCE
1	EA	PRIMUS CORE	20-740-XP			626	SCH
1	EA	SURFACE CLOSER	4040XP REG OR PA AS REQ TBWMS			689	LCN
1	EA	WALL STOP	WS406/407CCV			630	IVE
2	EA	JAMB SEAL	2891AS			AL	PEM
1	EA	DOOR SWEEP	315CN (per foot)			AL	PEM
1	EA	THRESHOLD	276A MSES10 (per foot)			AL	PEM
3	EA	SILENCER	SR64			GRY	IVE

AD300 LOCK SHOWN FOR TEMPLATING PURPOSE ONLY.
AD300 LOCK TO BE SUPPLIED BY DIVISION 28

HARDWARE GROUP NO. 06
For use on Door #(s):

200-17	200-18	200-19	200-20	200-21	200-22
200-23	200-24	200-25	200-26	300-18	300-19
300-20	300-21	300-23	800-15	800-16	800-17
800-18	800-19				

Provide each SGL door(s) with the following:

QTY		DESCRIPTION	CATALOG NUMBER		ITEMID	FINISH	MFR
3	EA	HW HINGE	5BB1HW 4.5 X 4.5			630	IVE
1	EA	POWER TRANSFER	EPT10	✓		689	VON
1	EA	ELEC OFFICE LOCK	AD-300-MS-50-MT-RHO-J 12/24 VDC	✓		626	SCE
1	EA	PRIMUS CORE	20-740-XP			626	SCH
1	EA	WALL STOP	WS406/407CCV			630	IVE
3	EA	SILENCER	SR64			GRY	IVE

AD300 LOCK SHOWN FOR TEMPLATING PURPOSE ONLY.
AD300 LOCK TO BE SUPPLIED BY DIVISION 28

HARDWARE GROUP NO. 07
For use on Door #(s):

300-22	300-24

Provide each SGL door(s) with the following:

QTY		DESCRIPTION	CATALOG NUMBER	ITEMID	FINISH	MFR
3	EA	HW HINGE	5BB1HW 4.5 X 4.5		630	IVE
1	EA	PANIC HARDWARE	CD-PA-AX-99-NL-OP-110MD		626	VON
1	EA	RIM CYLINDER	20-057 ICX		626	SCH
1	EA	MORTISE CYLINDER	20-059 X K510-730 XQ11-948		626	SCH
2	EA	PRIMUS CORE	20-740-XP		626	SCH
1	EA	SOLID WIRE PULL PULL	8190-12		630	IVE
1	EA	SURFACE CLOSER	4040XP REG OR PA AS REQ TBWMS		689	LCN
1	EA	WALL STOP	WS406/407CCV		630	IVE
3	EA	SILENCER	SR64		GRY	IVE

END OF SECTION 08 71 00

SECTION 11 52 00 AUDIO-VISUAL EQUIPMENT

PART 1 – GENERAL

1.01 SUMMARY

A. Provisions of General Conditions, Supplementary Conditions, and Division 01 apply to this section.

B. Scope of Work: The work under this section includes furnishing all labor, materials, and equipment, and performing all operations in connection with video components as indicated on the drawings, specified herein, or reasonably required to complete the work. The work includes, but is not limited to the following:

1. Audio-Visual Control System
2. Flat Panel Monitors – Interactive
3. Visualizers / Document Cameras
4. Players and Recorders
5. Autio-Visual Equipment Enclosures and Accessories

C. Related Sections:

1. Section 09 22 16 – Non Structural Metal Framing: Wall backing for monitor mounts.
2. Section 09 53 00 – Acoustical Ceiling Suspension Assemblies: T-bar ceiling grid and supports for video projector ceiling mount; coordination of installation of projector mount and acoustical ceiling grid and panels.
3. Section 27 10 00 – Structured Cabling

1.02 REFERENCES

A. Building Code: California Building Code (CBC), Chapter 16 – Structural Forces.

1.03 SUBMITTALS

A. Shop Drawings: Indicate wall mount locations, rough-in and anchor placement dimensions, tolerances and clearances required.

B. Product Data: Provide dimensions and construction, platform load capacity and physical dimensions.

C. Samples: Submit three samples of exposed finish surfaces, illustrating color and finish.

D. Manufacturer’s Installation Instructions: Indicate special installation requirements.

1.04 QUALITY ASSURANCE

A. Regulatory Requirements: Conform to Table 16-B California Building Code (CBC) for Seismic Anchorage Requirements.

B. Coordination: Coordinate projector mount installation with size, location and installation of projector screens specified.

PART 2 - PRODUCTS

2.01 ACCEPTABLE MANUFACTURERS

A. Audio-Visual Control System

1. Extron Electronics https://www.extron.com

B. Flat Panel Monitors – Interactive

1. Touchboards (InterWorld Highway, LLC) https://www.touchboards.com

C. Visualizers / Document Cameras

1. Pathway Innovations and Technologies https://www.hovercam.com

D. Players and Recorders

1. Denon Professional (inMusic Brands, Inc.) https://www.denonpro.com

E. Audio-Visual Equipment Enclosures and Accessories

1. Spectrum Industries, Inc. https://www.spectrumfurniture.com

2.02 CONTRACTOR PROVIDED AUDIO-VISUAL EQUIPMENT

A. Contractor shall provide the following AV Equipment

1. Audio-Visual Control System
    a. AV Switcher: Extron Matrix DTP CrossPoint 84 IPCP MA 70.
    a. User Interface: Extron TLP Pro 725T Touch Panel.
    b. Power Injector: Extron XTP PI 100 Single Port Power Injector.
    c. AV Scaler: Extron RGB-HDMI 300 A.
    d. Speakers: Extron SoundField FF 220T ceiling mounted 2x2 drop-in, Xfmr.
        a. Qty: (4) per system.
    e. AV Inputs: Extron DTP R HWP 4K 231 D HDMI decorator-style Rx, white 230ft.
        a. Qty: (2) per system.
    f. USB Extender-T: Extron USB Extender Plus T, 60-1471-12.
        a. Qty: (2) per system.
    g. USB Extender-D: Extron USB Extender Plus D R, 60-1473-23.
        a. Qty: (2) per system.
    h. Line Conditioner: Furman M8LX Power Conditioner.
    i. UPS: Tripp Lite UPS 2200VA 1900W Smart Rackmount AVR 120V USB DB9 4U for Telecom.

2.03 OWNER FURNISHED CONTRACTOR INSTALLED AUDIO-VISUAL EQUIPMENT

A. Owner shall furnish and Contractor shall install the following AV Equipment

1. Flat Panel Monitors – Interactive 75”
    a. NewLine TruTouch 750VN.
        i. Qty: (2) per system
        ii. Mounted on sliding rail system.
2. Visualizers / Document Cameras
    a. HoverCam Ultra 8.
3. Players and Recorders
    a. Blu-Ray Player: DN-500BDMKII blu-ray player.
4. Autio-Visual Equipment Enclosures and Accessories

a. Lectern: Spectrum Elite Lecturn Media Manager Series
b. Accessories:
    i. 55197 Rack Cube
    ii. 95537 Keyboard Tray
    iii. 55198 Removable Toe Kick
    iv. 99051 Cooling Fan for Media Manager Series Lecturn
    v. 96513 Overbridge Insert Panel
    vi. 99058 Power Module
    vii. Ergotron LX Single Monitor Arm

PART 3 - EXECUTION

3.01 EXAMINATION

A. Verify that field measurements are as indicated on shop drawings or instructed by the manufacturer.

B. Verify rough-in conditions.

C. Verify that anchors and supports are accurately placed.

3.02 INSTALLATION

A. Installation, General: Install audio-visual mounting assemblies in compliance with manufacturer's instructions and requirements of listing authorities.

1. Anchor equipment securely in place. Conform to California Building Code (CBC), Table 16-0, for horizontal force factor.
2. Touch-up minor damaged surfaces caused during installation. Replace damaged components.

B. Flat Panel Monitor Mounts

1. Install per manufacturer's instructions and recommendations.
2. Coordinate installation location of mount with wall backing.
3. Completed assembly shall be ready for installation of wiring.

3.03 ADJUSTING AND CLEANING

A. Adjusting: Adjust operating elements for proper alignments and operation.

B. Cleaning: Clean components to dust-free condition for substantial completion review.

END OF SECTION 11 52 00

SECTION 23 09 13
BUILDING MANAGEMENT SYSTEM

PART 1 GENERAL

1.1 SECTION INCLUDES

A. Building Management System (BMS), utilizing direct digital controls.

1.2 RELATED WORK SPECIFIED ELSEWHERE

1.3 Products Supplied But Not Installed Under This Section:

1. Airflow measuring stations.
2. Terminal unit controllers and actuators, when installed by terminal unit manufacturer.
3. KMC DDC Exterior Lighting Control Panels Built by Building Automation Systems, Inc.
   a. Panel mounted in Electrical Room by Division 23. All wiring by Div. 26.

B. Products Installed But Not Supplied Under This Section:

1. None.

C. Products Not Furnished or Installed But Integrated with the Work of This Section:

1. VRF, VRV, DOAS control systems, components and BACnet IP interface(s).
2. In-line meters (gas, water, power).
3. Exterior Lighting Control Sensors. (Motion sensors, photocells, switches, etc.)
4. WattMaster BACnet integration for interior lighting controls by Electrical Division 26.

D. Work Required Under Other Divisions Related to This Section:

1. Power wiring to line side of motor starters, disconnects or variable frequency drives.
2. 120v Power wiring to all control panels. All wiring & conduit above 120v.
3. Provision and wiring of smoke detectors and other devices relating to fire alarm system.
4. Campus LAN (Ethernet) connections to all HVAC devices requiring CAT6 Ethernet.
5. High and Low Voltage wiring (all wiring) associated with Lighting Control Panels.
6. BACnet Integration for INTERIOR LIGHTING control panels furnished by Div. 26.
   a. WattMaster BACnet ms/tp interface furnished & installed by Electrical Div. 26.

1.4 SYSTEM DESCRIPTION

A. Scope: Furnish all labor, materials and equipment necessary for a complete and operating Building Management System (BMS), utilizing Direct Digital Controls as shown on the drawings and as described herein. Drawings are diagrammatic only. All controllers furnished in this section shall communicate on a peer-to-peer bus over the BACnet IP protocol.

1. The existing Imperial Valley College campus DDC System is KMC BACnet IP and CATnet CH-2 BASview Operator Workstation. All DDC Controls shall be furnished and installed by Building Automation Systems, Inc. 858-309-2022.
2. Any OWS software requiring licensing fees or software programming tool ownership fees is SPECIFICALLY PROHIBITED and will be rejected.
3. The intent of this specification is to provide a system consistent with existing KMC BMS system throughout the owner's facilities running the CH-2 BASview Framework.
4. System architecture shall fully support a multi-vendor environment and be able to integrate third party systems via existing vendor protocols including BACnet
5. System architecture shall provide secure Web access using any of the current versions of Microsoft Internet Explorer, Mozilla Firefox, or Google Chrome browsers from any computer on the owner's LAN.
6. All control devices furnished with this Section shall be programmable directly from the

EXISTING KMC and CATnet Ch-2 BASview software upon completion of this project. The use of configurable or programmable controllers that require additional software tools or tools that require a specific license brand to operate for post-installation maintenance shall not be acceptable.

7. Any control vendor who provides additional BMS software shall be UNACCEPTABLE. Only systems that utilize the CATnet CH-2 BASview Framework shall satisfy the requirements of this section.
8. The BMS server shall host all graphic files for the control system. All graphics and navigation schemes for this project shall match those that are on the existing campus CATnet CH-2 BASview server.
9. Owner shall receive all Administrator level login and passwords for engineering toolset at first training session. The Owner shall have full licensing and full access rights for all network management, operating system server, engineering and programming software required for the ongoing maintenance & operation of the BMS indefinitely.
10. All BASview, CH-2 & CATnet hardware SHALL NOT REQUIRE licenses and related certificates.
11. To ensure quality, all CATnet CH-2 BASview products used on this project shall be provided by Building Automation Systems, Inc. ph:858-309-2022. Hardware products not meeting this requirement WILL NOT be allowed.

1.5 SPECIFICATION NOMENCLATURE

A. Acronyms used in this specification are as follows:

1. Actuator: Control device that opens or closes valve or damper in response to control signal.
2. AI: Analog Input.
3. AO: Analog Output.
4. Analog: Continuously variable state over stated range of values.
5. BMS: Building Management System.
6. DDC: Direct Digital Control.
7. Discrete: Binary or digital state.
8. DI: Discrete Input.
9. DO: Discrete Output.
10. FC: Fail Closed position of control device or actuator. Device moves to closed position on loss of control signal or energy source.
11. FO: Fail open (position of control device or actuator). Device moves to open position on loss of control signal or energy source.
12. GUI: Graphical User Interface.
13. HVAC: Heating, Ventilating and Air Conditioning.
14. IDC: Interoperable Digital Controller.
15. ILC: Interoperable Lon Controller.
16. LAN: Local Area Network.
17. Modulating: Movement of a control device through an entire range of values, proportional to an infinitely variable input value.
18. Motorized: Control device with actuator.
19. NAC: Network Area Controller.
20. NC: Normally closed position of switch after control signal is removed or normally closed position of manually operated valves or dampers.
21. NO: Normally open position of switch after control signal is removed; or the open position of a controlled valve or damper after the control signal is removed; or the usual position of a manually operated valve.
22. OSS: Operating System Server, host for system graphics, alarms, trends, etc.
23. Operator: Same as actuator.
24. PC: Personal Computer.
25. Peer-to-Peer: Mode of communication between controllers in which each device connected to network has equal status and each shares its database values with all

other devices connected to network.

26. P: Proportional control; control mode with continuous linear relationship between observed input signal and final controlled output element.
27. PI: Proportional-Integral control, control mode with continuous proportional output plus additional change in output based on both amount and duration of change in controller variable (reset control).
28. PICS: BACnet Product Interoperability Compliance Statement.
29. PID: Proportional-Integral-Derivative control, control mode with continuous correction of final controller output element versus input signal based on proportional error, its time history (reset) and rate at which it's changing (derivative).
30. Point: Analog or discrete instrument with addressable database value.
31. WAN: Wide Area Network.

1.6 SUBMITTALS

A. Product Data: Manufacturer's data sheets on each product to be used, including:
   1. Preparation instructions and recommendations.
   2. Storage and handling requirements and recommendations.
   3. Installation methods.

B. Submit documentation of contractor qualifications, including those indicated in "Quality Assurance" if requested by the A-E.

C. 4 copies of shop drawings of the entire control system shall be submitted and shall consist of a complete list of equipment and materials, including manufacturers' catalog data sheets and installation instructions. Submit in printed electronic format. Samples of written Controller Checkout Sheets and Performance Verification Procedures for applications similar in scope shall be included for approval.

D. Shop drawings shall also contain complete wiring and schematic diagrams, sequences of operation, control system bus layout and any other details required to demonstrate that the system has been coordinated and will properly function as a system. Terminal identification for all control wiring shall be shown on the shop drawings.

E. Upon completion of the work, provide 2 complete sets of ' as-built' drawings and other project-specific documentation in 3-ring hard-backed binders and on Flash media.

1.7 QUALITY ASSURANCE

A. Single Source Responsibility of Supplier: Building Automation Systems, Inc., shall be responsible for the complete installation and proper operation of the control system. Building Automation Systems, Inc. is exclusively in the regular and customary business of design, installation and service of computerized building management systems similar in size and complexity to the system specified. The Control System Contractor shall be the manufacturer of the primary DDC system components or shall have been the authorized representative for the primary DDC components manufacturer for at least 15 years.

B. Equipment and Materials: Equipment and materials shall be cataloged products of manufacturers regularly engaged in the production and installation of HVAC control systems.

1.8 MANUFACTURERS

A. KMC Controls & CATnet Systems CH-2 BASview furnished & installed by Building Automation Systems, Inc., 858-309-2022. The existing, campus-wide DDC system is manufactured by KMC and CATnet System Servers and Operator Workstation.

B. Substitutions: Not permitted.

1.9 GENERAL

A. The Building Management System (BMS) shall be comprised of a network of interoperable, stand-alone digital controllers, a network area controller, graphics and programming and other control devices for a complete system as specified herein.

B. The installed hardware & software shall be identical to the existing installed system utilizing the same hardware & software as the existing campus system as installed by Building Automation Systems, Inc., utilizing the existing DDC System network components.

1.10 OPEN, INTEROPERABLE, INTEGRATED ARCHITECTURE

A. The intent of this specification is to provide a peer-to-peer networked, stand-alone, distributed control system utilizing Open protocols in one open, interoperable system.

B. Physical connection of any BACnet control equipment, such as VRF systems, shall be via Ethernet or IP. Any VRF BACnet IP interface(s) shall be furnished & installed by others.

C. All components and controllers supplied under this contract shall be true "peer-to-peer" communicating devices. Components or controllers requiring "polling" by a host to pass data shall not be acceptable. System shall utilize BACnet IP communications.

D. The supplied system shall incorporate the ability to access all data using HTML5 enabled browsers without requiring proprietary operator interface and configuration programs or browser plug-ins. Servers and data shall reside on the Operating System Server located in Building 400 BMS wall mounted Server Rack on the LAN. Systems requiring proprietary database and user interface programs shall not be acceptable.

1.11 BAS SERVER HARDWARE

A. Minimum Server Configuration:
1. Central Web Server. Contractor shall provide a dedicated Web Graphics server for each of the (3) buildings in this project. (3) Servers total. Servers by CATnet only.
2. Memory: 1 GB or more recommended for large systems, 8 GB or more recommended for the Windows 64-bit version.
3. Network Support: Ethernet adapter (10/100 Mb with RJ-45 connector).

B. Standard Client Browser: Windows Chrome, Android: Chrome, iPhone/iPad/Mac: Safari, Linux: Chrome.

1.12 SYSTEM NETWORK CONTROLLER (SNC)

A. These controllers are designed to manage communications between the programmable equipment controllers (PEC), application specific controllers (ASC) and advanced unitary controllers (AUC) which are connected to its BACnet Ethernet Network, manage communications between itself and other system network controllers (SNC) and with any operator workstations (OWS) that are part of the BAS.

B. The controllers shall be capable of peer-to-peer communications with other SNC's and with any OWS connected to the BAS, whether the OWS is directly connected, connected via cellular modem or connected via the Internet.

C. The communication protocols utilized for peer-to-peer communications between SNC's will be BACnet TCP/IP. Use of a proprietary communication protocol for peer-to-peer communications between SNC's is NOT ALLOWED.

D. The SNC shall be enabled to support and shall be licensed with the following Open protocol drivers (client and server) by default:

1. BACnet

E. The SNC shall be capable of executing application control programs to provide:
   1. Calendar functions.
   2. Scheduling.
   3. Trending.
   4. Alarm monitoring and routing.
   5. Time synchronization.
   6. Integration of BACnet IP, ms/tp, LonWorks, MAMAC & MODBUS controller data.

F. The SNC shall provide the following hardware features as a minimum:
   1. One 10/100 Mbps Ethernet port.
   2. 1 GB SDRAM
   3. USB Flash Drive
   4. Plugin 120V to 24 VAC/DC Power Supply

G. The SNC shall support standard Web browser access via the Intranet/Internet. It shall support a minimum of 100 simultaneous users.

H. The SNC shall provide alarm recognition, storage, routing, management and analysis to supplement distributed capabilities of equipment or application specific controllers.

I. The SNC shall be able to route any alarm condition to any defined user location whether connected to a local network or remote via cellular modem, or wide-area network.
   1. Alarm generation shall be selectable for annunciation type and acknowledgement requirements including but not limited to:
      a. Alarm.
      b. Return to normal.
      c. To default.
   2. Alarms shall be annunciated in any of the following manners as defined by the user:
      a. Screen message text.
      b. Email of complete alarm message to multiple recipients.
      c. Pagers via paging services that initiate a page on receipt of email message.
      d. Graphics with flashing alarm object(s).
   3. The following shall be recorded by the SNC for each alarm (at a minimum):
      a. Time and date.
      b. Equipment (air handler #, access way, etc.).
      c. Acknowledge time, date, and user who issued acknowledgement.

J. Programming software and all controller "Setup Wizards" shall be embedded into the SNC.

K. The SNC shall employ template functionality. Templates are a containerized set of configured data tags, graphics, histories, alarms... that are set to be deployed as a unit based upon manufacturer’s controller and relationships. All lower level communicating controllers (PEC, AUC, AVAV, VFD…) shall have an associated template file for reuse on future project additions.

L. The SNC shall be provided with a NO COST Software License. NO LICENSING FEES OF ANY KIND IS ACCEPTABLE.

1.13 PROGRAMMABLE EQUIPMENT CONTROLLERS (PEC) BY KMC CONTROLS

A. General: Controllers shall be responsible for monitoring and controlling directly connected HVAC equipment such as RTUs, HPUs, AHUs, Chillers, Boilers, VAV Terminals, FCU Terminals, Cooling Towers, Pump Systems, and/or other building automation systems as required. Each controller shall be classified as a “native” BACnet device, supporting the BACnet Advanced Application Controllers (B-AAC) profile. Controllers that support a lesser

profile such as B-ASC are not acceptable. Controllers shall conform to the BACnet Advanced Application Controller (B-AAC) profile.

B. Software Specifications

1. General: The controller shall contain non-volatile memory to store both the resident operating system and application programming. Any program may affect the operation of any other program. This execution of control function shall not be interrupted due to normal user communications including interrogation, program entry, extraction of the program for storage, routing communications, etc.

2. Automatic Restart after Power Failure: Upon restoration of power after an outage, the controller shall automatically and without human intervention update all monitored functions; resume operation based on current synchronized time and status, and implement special start-up strategies as required.

3. User Programming Language: The application software shall be user programmable. This includes all strategies, sequences of operation, control algorithms, parameters, and setpoints. Controllers shall be capable of utilizing both line code based programming and Graphical Function Block programming interfaces.
   a. Programs shall be generated by an English-language based (line) editor or a Graphical Function Block interface.
   b. The language shall be structured to allow for the easy configuration of control programs and mathematical calculations.
   c. Controllers that use non-editable factory programming only method will not be accepted.

4. Energy Management Applications: The controller shall have the ability to perform any or all of the following energy management routines:
   . Time of Day Scheduling
   . Calendar Based Scheduling
   . Holiday Scheduling
   Exception Scheduling
   . Temporary Schedule Overrides
   . Optimal Start
   . Optimal Stop
   . Night Setback Control
   Enthalpy Switchover (Economizer)
   . Temperature Compensated Duty Cycling
   . CFM Tracking
   . Demand Ventilation

C. History Logging: Each controller shall be capable of locally logging any input, output, calculated value, etc. over user defined time intervals (1 second minimum time).

D. Alarm Management: For each system point, alarms can be created based on high/low limits or conditional expressions. A minimum of 255 priority levels shall be provided. If communication with the Operator Workstation is temporarily interrupted, the alarm will be time-stamped and buffered in the controller. When communications return, the alarm will be

transmitted to the Operator Workstation.

E. Communications: The controllers shall be a native BACnet communications, available as EIA-485 (MS/TP) or Ethernet/IP physical connections as required. The controller shall be capable of communication to both the Workstation(s) and the field buses.
   1. MS/TP Devices: For devices with MS/TP connectivity, baud rates between 9600 and 115.2k baud shall be selectable.

F. Dedicated Room Sensor Port: The controller shall have a Dedicated Room Sensor port for direct interface to a Digital Room Sensor or Discrete Room Sensor. The controller shall have the ability of detecting if a sensor has been connected to the port and identify its type.

G. Firmware Upgrades: The controller firmware shall be upgradeable for updates as future enhancements and expanded functionality. Firmware updates shall be supported via BACnet communications (over-the-network) and ALWAYS offered at NO COST.

H. Hardware Platform Features:
   1. Processor: The controller shall employ at minimum a 32-bit microprocessor.
   2. Memory: The operating system and the application programs for the controller shall be stored in non-volatile FLASH memory. The controller shall support up to 8 MB Flash memory and up to 2 MB of RAM. The controller shall include an on-board capacitor to back up the controller's RAM memory for a period of at least six hours. In the case of a power failure, the controller shall first try to restart from the RAM memory. If that memory is corrupted or unusable, then the controller shall restart itself from its application program stored in its FLASH memory.
   3. Network Communication Ports: The controller shall have on-board, dual 10/100bT Ethernet port or an EIA-485 port. The dual Ethernet connections shall function as an Ethernet hub, allowing daisy-chained Ethernet topologies. The EIA-485 port shall have network protection bulbs and integrated end-of-line (EOL) terminations.
   4. Dedicated Room Sensor Port: The controller shall have a dedicated room sensor port to directly connect a Digital Room Sensor or Discrete Room Sensor (supporting both room temperature and room setpoint). Sensors shall be hot-swappable without powering down the controller.
   5. Inputs: The controller shall have on-board universal inputs with a minimum of 16-bit analog to digital conversion. Each universal input shall have over-voltage protection. Universal inputs shall have the following integrated, software selectable terminations: 1K pullup, 10K pullup, 0-12VDC, 0-20mA. Each universal input shall be software selectable as analog or binary. Manually set, hardware configuration jumpers shall not be necessary.
   6. Outputs: The controller shall have on-board universal outputs with a 12-bit digital to analog conversion. Analog outputs shall be capable of sourcing 100 mA per channel and be short circuit protected. Each universal outputs shall be software selectable as analog or binary.
   7. Local Status Indicator Lamps: Provide as a minimum, LED indication of CPU status, Ethernet LAN status, MS/TP LAN Status, and Expansion I/O field bus status. For each output module with an optional override card, provide an LED that gives a visual indication of what state it is in (ON/OFF) and markings to indicate the switch setting (H-O-A).
   8. Real Time Clock (RTC): Each controller shall have an integrated real-time clock, accurate to 1.5 minutes per month. The system shall automatically correct for daylight savings time and leap years.
   9. Power Supply: The power supply for the controller shall be 24 volts AC (-15%, +20%) power. Voltage below the operating range of the system shall be considered an outage.

1.14 DIGITAL ROOM SENSOR

A. General: The Digital Room Sensors shall provide the following types of functions and be field programmable:
   1. Space condition measurements and indications, including temperature, humidity, local motion/occupancy, and CO2.
   2. User setpoint adjustments
   3. Equipment status and mode indication
   4. Outside air temperature indication
   5. Capability to view the value of any input or output in the system
   6. Capability to change the value of any input, output or software point in the system

B. Interface to Controller: The Digital Room Sensor shall connect directly to the controller and shall not utilize any of the hardware I/O points of the controller. The Digital Room Sensor shall be able to be located up to 150' from the controller.

C. Temporary Network Interface: The Digital Room Sensor shall provide a Temporary Network Interface jack, field accessible without uninstalling the sensor, for connection to the BACnet MS/TP communication trunk to which the BACnet AAC is connected. The Digital Room Sensor, the connected controller, and all other devices on the BACnet network shall be accessible through the temporary communication jack. Microprocessor based sensors whose port only allows communication with the controller to which it is connected shall not be acceptable.

D. Integrated Sensors: The Digital Room Sensor shall have integrated sensors for temperature, humidity, motion/occupancy, and CO2.

E. User Indicators: The Digital Room Sensor shall be capable of indicating the following:
   1. Fahrenheit, Celsius
   2. CFM, LPS
   3. Fan Status, Fan Speed (Low, Medium, High), Auto Fan, Heat Mode, Cool Mode, Auto Mode, Occupancy Mode, Override Mode
   4. Outside Air Temperature, Part Per Million, %, % Relative Humidity, Time (AM/PM)
   5. Rotational Values – Multiple values may be configured for display in the numberic display fields. If multiple values are configured, the display shall rotate through each point as a configurable rate.

F. User Setpoints: User/Occupant setpoints may be manipulated via the Digital Room Sensor. Single and/or multiple setpoints shall be supported and field configurable. Unique setpoint sequences shall be configurable and presented to the user based on a mode condition.

G. Configuration Menus: The Digital Room Sensor shall have configuration menus allowing access to communication and application parameters.

H. Password Protection: The DIGITAL ROOM SENSOR shall have two levels of password protection: one level to protect user setpoint adjustment, and one level to protect configuration menu parameters. Passwords shall be at least 4 digits in length.

1.15 BACnet ROUTER

A. General: The BACnet router shall router BACnet traffic between BACnet networks, virtual and/or physical. The router shall be designed for both permanent installations as well as temporary use for BACnet device configuration and BACnet network troubleshooting.

B. Connections:
   1. Power: The router shall be powered wither from 24VAC AC (-15%, +20%) or from USB. The 24VAC connections shall be a removable terminal block accepting 12 to 22 AWG wire.
   2. USB: A micro USB connections shall be provided, supporting both temporary device power and device communications.
   3. Network Communication Ports: The controller shall have an on-board, 10/100bT Ethernet port and an EIA-485 port. The EIA-485 port shall be optically isolated and have integrated end-of-line (EOL) terminations. The EIA-485 port shall be a removable terminal block accepting 12 to 22 AWG wire.

C. Mounting: The router shall be capable of being flush mounted via mounting holes on 1" centers, or DIN rail, without the use of additional mounting accessories.

D. Configuration: The router shall be fully configured via integrated HTML5 based webpages, without the need for any specialized or PC based software. The router configuration may be exported to/imported from a local file via the configuration webpages.

E. Communications: The router shall be a native BACnet device, available as EIA-485 (MS/TP) or Ethernet/IP physical connections as required.
   1. MSTP: MSTP network baud rates between shall be selectable between 9600 and 115.2k baud. Segmentation shall be supported.
   2. Ethernet/IP: The following BACnet For devices enabled with Ethernet/IP connectivity, the user shall be able to select BACnet 8802-3, BACnet IP, BACnet BBMD, or BACnet Foreign Device. Segmentation shall be supported.

F. Routing: The router shall support: one BACnet MSTP network, one BACnet 8802-3 network, and two BACnet IP networks, the IP networks selected able as IP, foreign devices or BBMD. The BBMD Foreign Devices table shall support up to 128 entries.

G. Diagnostics
   1. Device Status: The router shall report the status of each MSTP device that is detected on the MSTP network. MSTP MAC address status shall be indicated with the following color coded categories: no devices detected (white), offline (grey), router MAC (blue), active device (green), errors or duplicate (red). Metrics shall indicate the total device count online, average token cycle time, and the average token time per device.
   2. Token Use: The router shall report state of the MSTP token. The status of the token as it is passed between MSTP devices shall be indicated with the following color-coded categories: passed in less than 100ms (normal, green), passed in more than 100 ms but less than the APDU timeout (slow, yellow), passed in longer than the APDU timeout (red). Poll for Master (PFM) shall be indicated in light blue.
   3. Route Status: The router shall report all the known BACnet networks, both directly connected and remote connected. The status of each BACnet network should be identified, indicating the following network states: active, busy, down/gone, or

duplicated network, duplicated MSTP MAC, sole MSTP master, BBMD: Unknown, BBMD: Multiple, Foreign Devices NAK.

H. Time Master: The router shall be a BACnet time sync master, capable of syncing BACnet network time to either local (PC) or a SNTP Time server. Both UTC and local time shall be supported.

I. Firmware Upgrades: The router firmware shall be upgradeable for updates as future enhancements and expanded functionality. Firmware updates shall be supported via BACnet communications (over-the-network) and through the integrated configuration webpages.

1.16 OTHER CONTROL SYSTEM HARDWARE

A. Control damper actuators shall be furnished by the Control System Contractor. Two-position or proportional electric actuators shall be direct-mount type sized to provide a minimum of 5 in-lb torque per square foot of damper area. Damper actuators shall be capacitor-driven fail-safe with switch-selectable direction providing consistent torque in both powered and fail-safe modes. The fail-safe option, on proportional models, can be turned off temporarily for testing purposes or permanently if desired. Damper actuators shall have gear disengagement button, and adjustable mechanical end stop. Proportional models shall include “anti-jitter” circuitry, optional auto-mapping of the full input signal range over a reduced actuator stroke, and switch selectable 0/1–5 or 0/2–10 VDC feedback. Operators shall be heavy-duty electronic type for positioning automatic dampers in response to a control signal. Motor shall be of sufficient size to operate damper positively and smoothly to obtain correct sequence as indicated. All applications requiring proportional operation shall utilize truly proportional electric actuators. KMC & Belimo are acceptable only.

B. Control Valves: Control valves shall be 2-way or 3-way pattern as shown and constructed for tight shutoff at the pump shut-off head or steam relief valve pressure. Control valves shall operate satisfactorily against system pressures and differentials. Two-position valves shall be ' line' size. Proportional control valves shall be sized for a maximum pressure drop of 5.0 psi at rated flow (unless otherwise noted or scheduled on the drawings). Valves with sizes up to and including 3 inches shall be "screwed" configuration and 4 inches and larger valves shall be "flanged" configuration. Electrically-actuated control valves shall include capacitor-driven fail-safe actuators with switch-selectable direction providing consistent torque in both powered and fail-safe modes sized for tight shut-off against system pressures (as specified above) and, when specified, shall be furnished with integral switches or positive feedback for indication of valve position. Pneumatic actuators for valves, when utilized, shall be sized for tight shut-off against system pressures (as specified above). KMC is basis of design, Belimo is also acceptable. Alternate manufacturers shall be rejected.

C. Control Valve Actuators: Actuators for VAV terminal unit heating coils shall be "proportional" type. All actuators shall have inherent current limiting motor protection. Valve actuators shall be 24-volt, electronic type, modulating or two-position as required for the correct operating sequence. Actuators on valves needing ' fail-safe' operation shall have capacitor-driven fail-safe actuators with switch-selectable direction. Modulating valves shall be positive positioning in response to the signal. All valve actuators shall be UL listed. KMC is basis of design. Belimo is also acceptable. Alternate manufacturers shall be rejected.

D. All hot water control valves shall be Normally-Open arrangement; all chilled water control valves shall be Normally-Closed arrangement. KMC & Belimo is basis of design only.

E. Non-Digital Wall Mount Room Temperature sensors: Each room temperature sensor shall provide temperature indication to the digital controller, provide the capability for a software-

limited occupant set point adjustment (warmer-cooler dial or slider bar) and limited operation override capability. Room Temperature Sensors shall be Type II 10,000-ohm @ 77 degree thermistor type with a temperature range of -40 to 121 degrees F (-38 to 49 degrees C). These devices shall have an accuracy of -/+ 0.5 degrees F (.024 degrees C) over the entire range. KMC is basis of design.

F. Duct-mounted and Outside Air Temperature Sensors: Type III 10,000-ohm @ 77 degree thermistor temperature sensors with an accuracy of -/+ 0.5 degrees F (.024 degrees C) over the entire range. Outside air sensors shall include an integral sun shield. Duct-mounted sensors shall have an insertion measuring probe of a length appropriate for the duct size, with a temperature range of -4 to 221 degrees F(-20 to 105 degrees C) The sensor shall include a utility box and a gasket to prevent air leakage and vibration noise. For all mixed air and preheat air applications, install bendable averaging duct sensors with a minimum 6 feet long sensor element. These devices shall have accuracy of -/+ 0.5 degrees F (.024 degrees C) over the entire range. KMC is basis of design.

G. Humidity sensors shall be a CMOS chip sensor providing excellent linearity, sensitivity, and reliability, accuracy to plus or minus two percent (2%) over the 10 to 90% RH, 10 - 15 VDC input voltage, analog output (0 – 5 VDC output). Operating range shall be 0 to 100% RH and 40 to 120 degrees F (4 to 49 degrees C). Sensors shall be selected for wall, duct or outdoor type installation as appropriate. KMC is basis of design.

H. Carbon Dioxide Sensors (CO2): NDIR (Non-Dispersive Infrared) sensor, single beam with a patented self-calibration algorithm. Five year calibration guarantee (in auto-calibration mode), in compliance with CA Title 24, Section 121(c). Sensor default range shall be 0 - 2000 PPM but configurable up to 7,500 PPM. Accuracy shall be plus or minus 75 PPM @ 1000PPM @ 72 Degrees Fahrenheit. Response shall be less than two minutes. Input voltage shall be 20 to 28 VAC or DC. Choice of field-adjustable analog current or voltage output signals (4–20 mA, 0–5 VDC, or 0–10 VDC), linearized over full range. Sensor shall be wall or duct mounted type, as appropriate for the application, housed in a high impact plastic enclosure. KMC is basis of design.

I. Current Sensitive Switches: Solid state, split core current switch that operates when the current level (sensed by the internal current transformer) exceeds the adjustable trip point. Current switch to include an integral LED for indication of trip condition and a current level below trip set point.

J. Differential Analog (duct) Static Pressure Transmitters: Provide a pressure transmitter with six switch-selectable pressure ranges (inches water column or pascals). Accuracy shall be plus or minus 1% of full scale range. Provide push button auto zero capability. Device shall have integral static pickup tube. Device shall have three switch-selectable voltage/current outputs of 4–20 mA (2-wire), 0–5 VDC (3-wire), or 0–10 VDC (3-wire). Powered by 20 to 28 VAC or VDC. KMC & MAMAC & VERIS are allowed.

K. Differential Air Pressure Switches: Provide SPDT type, UL-approved, and selected for the appropriate operating range where applied. Switches shall have adjustable set points and barbed pressure tips or compression fittings.

L. Water Flow Switches: Provide a SPST type contact switch with bronze paddle blade, sized for the actual pipe size at the location. If installed outdoors, provide a NEMA-4 enclosure. Flow switch shall be UL listed.

M. Temperature Control Panels: Furnish temperature control panels of code gauge steel with locking doors for mounting all devices as shown. All electrical devices within a control panel shall be factory wired. Control panel shall be assembled by the BMS in a UL-Certified 508A panel shop. A complete set of ' as-built' control drawings (relating to the controls within that panel) shall be furnished within each control panel.

N. Pipe and Duct Temperature sensing elements: Type III 10,000 ohm thermistor encapsulated temperature sensors with an accuracy of -/+ 0.36 Degrees F (-/+ 0.20 Degrees C). Their range shall be -4 to 221 degrees F (-20 to 105 degrees C). Thermal wells with heat conductive gel shall be included. KMC is basis of design.

O. Low Air Temperature Sensors: Provide SPDT type switch, with 34 to 70 degrees F (1.1 to 21 degrees C) range, vapor-charged temperature sensor. KMC model CTE-3017, or approved equivalent.

P. Variable Frequency Drives: The variable frequency drive (VFD) shall be designed specifically for use in Heating, Ventilation, and Air Conditioning (HVAC) applications in which speed control of the motor can be applied. The VFD, including all factory installed options, shall have UL & CSA approval. VFD's shall include communications capability with DDC BMS via built-in interface card (BACnet). Typically furnished by the Mechanical Contractor.

Q. Relays: Start/stop relay model shall provide either momentary or maintained switching action as appropriate for the motor being started. All relays shall have indicating lamp. Relays installed outside of controlled devices shall be enclosed in a NEMA enclosure suitable for the location. Relays shall be labeled with UR symbol. RIB-style relays are acceptable for remote enable/disable.

1.17 BAS SERVER & CATnet BASview CH-2 WEB BROWSER GUI - SYSTEM OVERVIEW

A. The BAS Contractor shall provide system software based on server/thin-client architecture, designed around the open standards of web technology. The BAS server shall communicate using Ethernet and TCP. Server shall be accessed using a web browser over Owner intranet and remotely over the Internet. Server shall be manufactured by CATnet CH-2 BASview.

B. The intent of the thin-client architecture is to provide the operator(s) complete access to the BAS system via a web browser. The thin-client web browser Graphical User Interface (GUI) shall be browser and operating system agnostic, meaning it will support HTML5 enabled browsers without requiring proprietary operator interface and configuration programs or browser plug-ins. Microsoft, Firefox, and Chrome browsers (current released versions), and Windows as well as non-Window operating systems.

C. The web browser GUI shall provide a completely interactive user interface and shall provide a HTML5 experience that supports the following features as a minimum:
1. Trending.
2. Scheduling.
3. Electrical demand limiting.
4. Duty Cycling.
5. Downloading Memory to field devices.
6. Real time 'live' Graphic Programs.
7. Tree Navigation.
8. Parameter change of properties.
9. Set point adjustments.
10. Alarm / event information.
11. Configuration of operators.
12. Execution of global commands.
13. Add, delete, and modify graphics and displayed data.

1.18 EXTERIOR LIGHTING CONTROL PANELS FOR 200, 300 & 800 BUILDINGS

A. Panels to be fabricated, assembled & wired at a Certified UL 508A Panel Assembly Shop Panel provided with appropriate UL & NEC "As Assembly" Certification decal.

B. Panels to be NEMA-1 rated.

C. Panels to accept dry contact inputs from lighting control input devices. F&I by others.
   1. Local Override button/switch (dry contact on/off)
   2. Photocell Sensors (dry contact on/off)
   3. Other input devices (dry contact on/off)

D. Panels to provide 277V relay contact outputs utilizing standard products (same product as installed in buildings 3100 & 3200 Vocational Studies).

E. Panels to include KMC DDC BACnet IP (Ethernet) Controllers (BAC-5901CE).

F. Panels to connect to the IVC Campus Wide DDC System.
   1. Graphical Displays of Exterior Lighting Zones similar to buildings 3100 & 3200.

G. Panel programming includes Load-Shedding Demand Response input from others.
   1. Load Shedding Sequence of Operation (written, provided by others).

H. Panel furnished & mounted (on wall) under direction of Mechanical Contractor Scope.

I. Low and High Voltage wiring & terminations by Division 26 (Electrical) scope.

1.19 WEB BROWSER GRAPHICAL USER INTERFACE

A. Web Browser Navigation: The Thin Client web browser GUI shall provide a comprehensive user interface. Using a collection of web pages, it shall be constructed to "feel" like a single application, and provide a complete and intuitive mouse/menu driven operator interface. It shall be possible to navigate through the system using a web browser to accomplish requirements of this specification. The Web Browser GUI shall (as a minimum) provide for navigation, and for display of animated graphics, schedules, alarms/events, live graphic programs, active graphic set point controls, configuration menus for operator access, reports and reporting actions for events. All graphics shall 100% replicate the existing system in functionality, 3-D displays and operation.

B. Login: On launching the web browser and selecting the appropriate domain name or IP address, the operator shall be presented with a login page that will require a login name and strong password. Navigation in the system shall be dependent on the operator's role-based application control privileges.

C. 3-D Color Graphics: The Web Browser GUI shall make extensive use of color in the graphic pane to communicate information related to set points and comfort. Graphics tools used to create Web Browser graphics shall be non-proprietary.
   1. 3-D Color Floor Plans: Floor plan graphics shall show heating and cooling zones throughout the buildings in a range of colors. Provide a visual display of temperature relative to their respective set points.
   2. Mechanical Components: Mechanical system graphics shall show the type of mechanical system components serving any zone through the use of a pictorial representation of components. Selected I/O points being controlled or monitored for each piece of equipment shall be displayed with the appropriate engineering units. Animation shall be used for rotation or moving mechanical components to enhance usability.

D. Hierarchical Schedules: Utilizing the Navigation Tree displayed in the web browser GUI, an operator (with proper access credentials) shall be able to define a Normal, Holiday or Override schedule for an individual piece of equipment or room, or choose to apply a hierarchical schedule to the entire system, site or floor area.
   1. Schedules: Schedules shall comply with the BACnet standards, (Schedule Object, Calendar Object, Weekly Schedule property and Exception Schedule property) and shall allow events to be scheduled based on:
      a. Types of schedule shall be Normal, Holiday or Override.

b. A specific date.
c. A range of dates.
d. Any combination of Month of Year (1-12, any), Week of Month (1-5, last, any), Day of Week (M-Sun, Any).
e. Wildcard (example, allow combinations like second Tuesday of every month).

E. Alarms: Alarms associated with a specific system, area, or equipment selected in the Navigation Tree, shall be displayed in the Alarm Pane by selecting an ' Alarms' view. Alarms, and reporting actions shall have the following capabilities:
1. Alarms View: Each Alarm shall display an Alarms Category, date/time of occurrence, current status, alarm report and a link to the associated graphic for the selected system, area or equipment.
2. Alarm Time/Date Stamp: All events shall be generated at the DDC control module level and comprise the Time/Date Stamp using the standalone control module time and date.
3. Alarm Reporting Actions: Alarm Reporting Actions specified shall be automatically launched (under certain conditions) after an Alarm is received by the BAS server software. Reporting Actions shall be as follows:
a. Print: Alarm information shall be printed to the BAS server's PC or a networked printer.
b. Email: Email shall be sent via compatible e-mail server. Email messages may be copied to several email accounts.

F. Trends: As system is engineered, all points shall be enabled to trend. Trends shall both be displayed and user configurable through the Web Browser GUI. Trends shall comprise analog, digital or calculated points simultaneously. A trend log's properties shall be editable using the Navigation Tree and Graphic Pane.
1. Viewing Trends: The operator shall have the ability to view trends by using the Navigation Tree and selecting a Trends button in the Graphic Pane.
2. Local Trends: Trend data shall be collected locally by Multi-Equipment/Single Equipment general-purpose controllers, and periodically uploaded to the BAS server if historical trending is enabled for the object. Systems that rely on a gateway/router to run trends are NOT acceptable.
3. Zoom/Pan. It shall be possible to zoom-in on a particular section of a trend for more detailed examination and ' pan through' historical data by simply scrolling the mouse.

G. Security Access: Systems that Security access from the web browser GUI to BAS server shall require a Login Name and Strong Password.

PART 2 EXECUTION

2.1 GENERAL

A. Line and low voltage electrical connections to control equipment shown specified or shown on the control diagrams shall be furnished and installed by the Control System Contractor in accordance with these specifications. VRF System control wiring furnished by others.

B. Equipment furnished by the Mechanical Contractor that is normally wired before installation shall be furnished completely wired. Control wiring normally performed in the field will be furnished and installed by Building Automation Systems, Inc. 858-309-2022.

2.2 WIRING

A. All low voltage electrical control wiring to the control panels shall be the responsibility of the Control System Contractor. All high voltage (120v or higher) furnished & installed by others.

B. All wiring shall be in accordance with the Project Electrical Specifications (Division 26), the National Electrical Code and any applicable local codes. All control wiring shall be installed in raceways were exposed to damage. Plenum rated cabling allowed in concealed, accessible areas.

C. Campus standard DDC System color coded wiring is required.

D. Use manufacturer-specified wire for all network connections.

2.3 ACCEPTANCE TESTING

A. Upon completion of the installation, the Control System Contractor shall load all system software and start-up the system. The Control System Contractor shall perform all necessary calibration, testing and de-bugging and perform all required operational checks to insure that the system is functioning in full accordance with these specifications.

B. System Acceptance: Satisfactory completion is when the Control System Contractor has performed successfully all the required testing to show performance compliance with the requirements of the Contract Documents to the satisfaction of the Owner's Representative. System acceptance shall be contingent upon completion and review of all corrected deficiencies.

2.4 OPERATOR TRAINING

A. During system commissioning and at such time acceptable performance of the Control System hardware and software has been established, the Control System Contractor shall provide on-site operator instruction to the owner's operating personnel. Operator instruction shall be done during normal working hours and shall be performed by a competent representative familiar with the system hardware, software and accessories.

B. The Control System Contractor shall provide 16 total hours of training for system orientation, product maintenance and troubleshooting, programming and engineering.

2.5 WARRANTY PERIOD SERVICES

A. Equipment, materials and workmanship incorporated into the work shall be warranted for a period of one year from the time of system acceptance.

B. Within this period, upon notice by the Owner, any defects in the BMS due to faulty materials, methods of installation or workmanship shall be promptly repaired or replaced by the Control System Contractor at no expense to the Owner.

C. Maintenance of Computer Software Programs: The Control System Contractor shall maintain all software during the standard first year warranty period. In addition, all factory or sub-vendor upgrades to software during the first year warranty period shall be added to the systems, when they become available, at no additional cost. In addition to first year standard warranty. NO SOFTWARE MAINTENANCE FEES OR AGREEMENTS NECESSARY FOR AN INDEFINITE TIME PERIOD. All SNC and BAS Servers are included in this coverage.

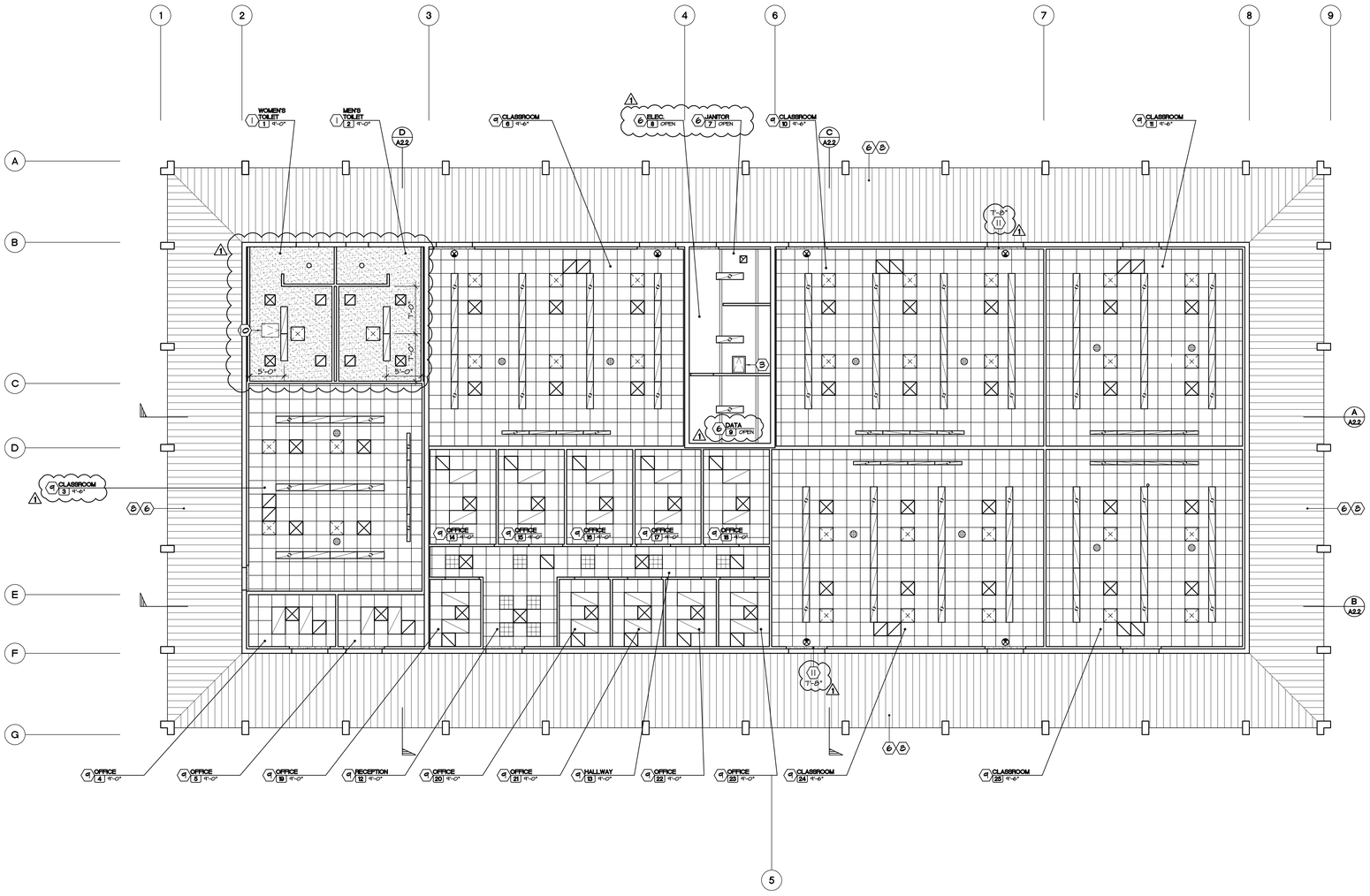
D. Maintenance of Control Hardware: The Control System Contractor shall inspect, repair, replace, adjust, and calibrate, as required, the controllers, control devices and associated peripheral units during the warranty period.

E. Service Period: Calls for service by the Owner shall be addressed either remotely or on-site within 24 hours and are not to be considered as part of routine maintenance.

2.6 OPERATION & MAINTENANCE MANUALS

A. See Division 1 for requirements. O&M manuals shall include the following elements, as a minimum:
   1. As-built control drawings for all equipment.
   2. As-built Network Communications Diagram.
   3. General description and specifications for all components.
   4. Completed Controller Checkout/Calibration Sheets.

END OF SECTION



FLOOR PLAN

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

A

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Addendum

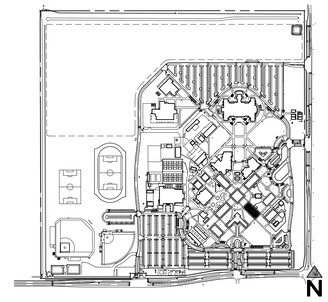
Engineer of Record

Division of the State Architect

DSA Application No. 04-118720

DSA File No. 13-01

APPROVALS



KEY PLAN - BLDG 200

KEYNOTES:

1. GYPSUM BOARD - PAINT PRIME COLOR, TEXTURE TO MATCH WALLS (11 AX5.2) (12 AX5.2)
2. GYPSUM BOARD - PAINT ACCENT COLOR, TEXTURE TO MATCH WALLS
3. ROOF ACCESS HATCH (10 AX5.1)
4. NOT USED
5. NOT USED
6. EXISTING EXPOSED METAL DECK - PRESSURE WASH CLEAN, ABRASIVE BLAST ALL RUST, PRIME AND PAINT
7. NOT USED
8. TRIM EXISTING EXPOSED SCREWS (MIN. 3 EXPOSED THREADS) AND PROVIDE METAL PUSH CAP
9. 24"x24" LAY-IN ACOUSTICAL CEILING TILE (1 AX5.1) (2 AX5.1)
10. 24 x 30 CEILING ACCESS PANEL
11. GYPSUM BOARD HEADER (7 AX5.2) (8 AX5.2)

LEGEND:

- LED LIGHT FIXTURE SEE ELECTRICAL DRAWINGS
- LED LIGHT FIXTURE SEE ELECTRICAL DRAWINGS
- PENDENT LED LIGHT FIXTURE SEE ELECTRICAL DRAWINGS
- LED LIGHT FIXTURE SEE ELECTRICAL DRAWINGS
- LIGHT FIXTURE - SEE ELECTRICAL DRAWINGS
- PENDENT LIGHT FIXTURE - SEE ELECTRICAL DRAWINGS
- RECESSED LIGHT FIXTURE - SEE ELECTRICAL DRAWINGS
- RECESSED LIGHT FIXTURE - SEE ELECTRICAL DRAWINGS
- SURFACE MOUNT LIGHT FIXTURE - SEE ELECTRICAL DRAWINGS
- WALL MOUNT LIGHT FIXTURE - SEE ELECTRICAL DRAWINGS
- TUBULAR SKYLIGHT DIFFUSER - SEE SPECIFICATIONS (16 AX1.5)
- TUBULAR SKYLIGHT DIFFUSER - SEE SPECIFICATIONS (16 AX1.5)
- CEILING DIFFUSER - SUPPLY AIR SEE MECHANICAL DRAWINGS
- RETURN AIR REGISTER SEE MECHANICAL DRAWINGS
- EXHAUST REGISTER SEE MECHANICAL DRAWINGS
- RECESSED CEILING MOUNTED SPEAKER - SEE COMMUNICATION DRAWINGS
- WALL MOUNTED ILLUMINATED EXIT SIGN - SEE ELECTRICAL DRAWINGS
- CEILING MOUNTED ILLUMINATED EXIT SIGN - SEE ELECTRICAL DRAWINGS
- CEILING ACCESS PANEL

NOTES:

1. SEE SHEET AX5.1 FOR NOTES AND DETAILS.
2. SEE ELECTRICAL AND MECHANICAL DRAWINGS FOR FIXTURES AND EQUIPMENT.
3. SEE (12 AX5.1) FOR PENDANT LIGHT FIXTURE.

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Project Title

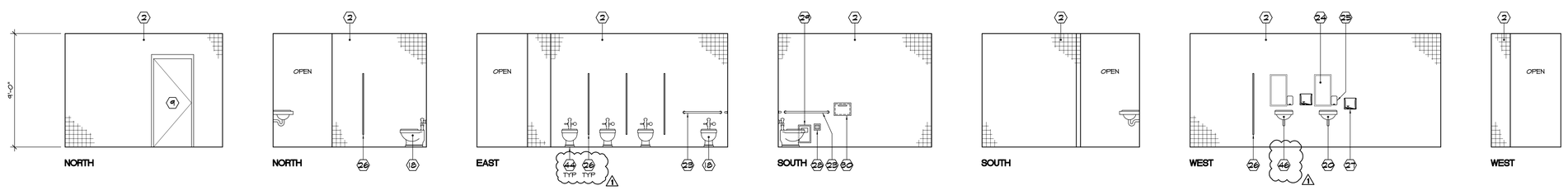
IMPERIAL VALLEY COLLEGE
BUILDING 200, 300 AND 800 MODERNIZATION

Sheet Title

REFLECTED CEILING PLAN

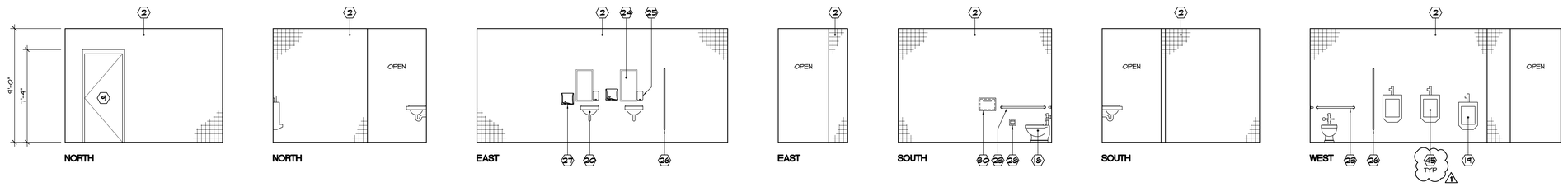
LICENSED ARCHITECT JIMMIE LEE SANDERS No. C-17644 RENEWAL DATE 08-31-21 STATE OF CALIFORNIA

Document Date	Project Number
09-13-19	19-121V
Date Last Revised	Reference Sheet
1 01-20-21	AD-1_A2.3
4 06-17-21	Sheet Number AD-4_A2.3



WOMEN'S TOILET 1

SCALE: 1/4" = 1'-0" A



MEN'S TOILET 2

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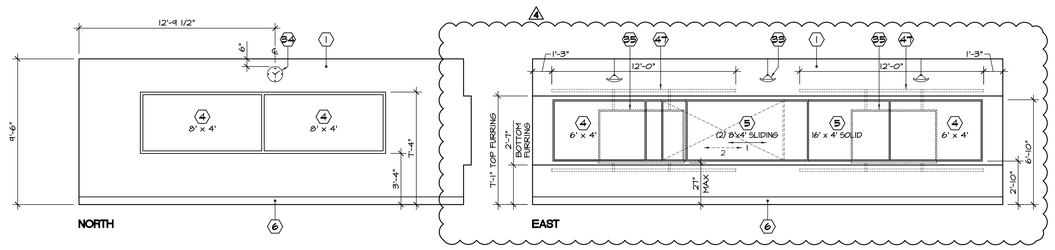
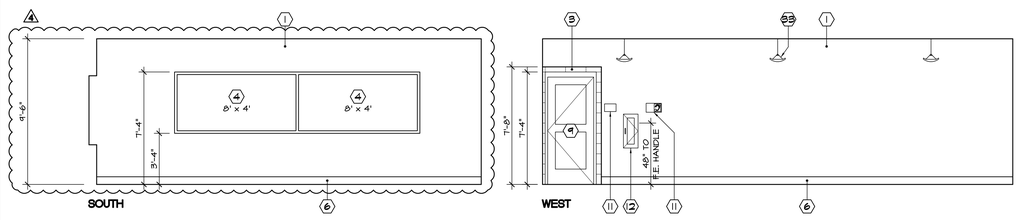
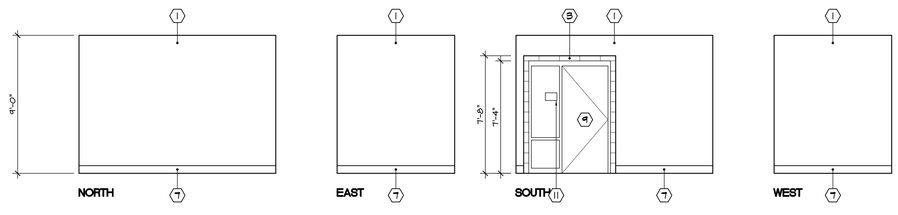




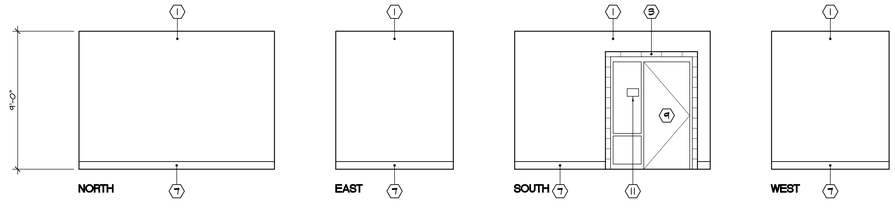
CLASSROOM 3

SCALE: 1/4" = 1'-0" C



OFFICE 4

SCALE: 1/4" = 1'-0" D



OFFICE 5

SCALE: 1/4" = 1'-0" E

Addendum

Engineer of Record

Division of the State Architect

DSA Application No. 04-118720

DSA File No. 13-01

APPROVALS

N

KEY PLAN - BLDG 200

KEYNOTES:

1. GYPSUM BOARD - TEXTURE, PAINT
2. CERAMIC TILE (18 / AX5.1)
3. SMOOTH FACE CONCRETE MASONRY - CLEAN, SANDBLAST OLD PAINT
4. TACK BOARD - SIZE NOTED (D / AX4.1)
5. MARKER BOARD W/ TRAY - SIZE NOTED (D / AX4.1) SIM 1
6. 6" RUBBER BASE TYPICAL, 4" @ CABINET TOE KICK
7. 6" CARPET BASE TYPICAL, 4" @ CABINET TOE KICK
8. NOT USED
9. DOOR / WINDOW PER PLAN
10. ILLUMINATED EXIT SIGN - SEE ELECTRICAL DRAWINGS
11. SIGNAGE - PER SIGNAGE PLAN
12. RECESSED FIRE EXTINGUISHER CABINET W/ TEMPERED GLASS - 48" TO EXTINGUISHER HANDLE W/ 4" MAX PROJECTION TO CABINET HANDLE
13. HPL MODULAR CASEWORK - SEE DETAILS (G / AX4.1) (H / AX4.1) UNO
14. HPL TOP AND 6" SPLASH, SPLASH @ END OF COUNTER
15. HPL MODULAR CASEWORK W/ ADJUSTABLE OPEN SHELVES
16. HPL ADJUSTABLE SHELVES
17. NOT USED 1
18. ACCESSIBLE WATER CLOSET - SEE PLUMBING DRAWINGS
19. ACCESSIBLE URINAL (B / AX3.1) - SEE PLUMBING DRAWINGS
20. ACCESSIBLE LAVATORY (B / AX3.1) - SEE PLUMBING DRAWINGS
21. MOP SERVICE BASIN W/ STAINLESS STEEL WALL GUARD - SEE PLUMBING DRAWINGS
22. BROOM / MOP RACK - VERIFY MOUNTING HEIGHT - SEE SPECIFICATIONS
23. GRAB BARS - FOR ANCHORAGE SEE (B / AX3.1) (E / AX3.1)
24. MIRROR W/ STAINLESS STEEL FRAME (B / AX3.1)
25. SOAP DISPENSER (B / AX3.1)
26. TYP HEAVY DUTY TOILET PARTITION, HEAD RAIL BRACES - FOR ANCHORAGE SEE (21 / AX5.2)
27. HAND DRYER (MAX 4" PROJECTION) (B / AX3.1)
28. RECESSED TOILET PAPER HOLDER (B / AX3.1) (K / AX3.1)
29. RECESSED FEMININE NAPKIN DISPOSAL (B / AX3.1)
30. RECESSED TOILET SEAT COVER DISPENSER (B / AX3.1)
31. WATER HEATER - SEE PLUMBING DRAWINGS
32. WATER HEATER SHELF (4 / P0.2) (5 / P0.2) 1
33. PENDANT LIGHT FIXTURE - SEE ELECTRICAL DRAWINGS (12 / AX5.1)
34. 12"Ø WALL CLOCK - SEE SPECIFICATIONS
35. FLAT PANEL MONITOR - SEE SPECIFICATIONS 1
36. 4' x 8' x 3/4" PLYWOOD, PAINT
37. ELECTRICAL EQUIPMENT - SEE ELECTRICAL DRAWINGS
38. COMMUNICATIONS EQUIPMENT - SEE COMMUNICATIONS DRAWINGS
39. ALUMINUM ROOF ACCESS SHIP'S LADDER - SEE SPECIFICATIONS (10 / AX5.1)
40. FRP PANEL - SEE SPECIFICATIONS 1
41. FURNITURE ITEM - SEE SPECIFICATIONS
42. MECHANICAL PIPING - SEE MECHANICAL DRAWINGS
43. 1-1/2"ø STAINLESS STEEL HANDRAIL (E / AX3.1) 1
44. WATER CLOSET PER SEE PLUMBING DRAWINGS
45. URINAL PER SEE PLUMBING DRAWINGS
46. LAVATORY PER SEE PLUMBING DRAWINGS
47. WALL-MOUNTED TRACK SYSTEM FOR FLAT PANEL MONITOR - SEE SPECIFICATIONS AND SHEET (sht / AD-2_SH) 1

NOTES:

1. FOR FIXTURE MOUNTING HEIGHTS SEE (B / AX3.1)
2. FOR TOILET ROOM ACCESSORIES SEE SPECIFICATIONS.

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Project Title

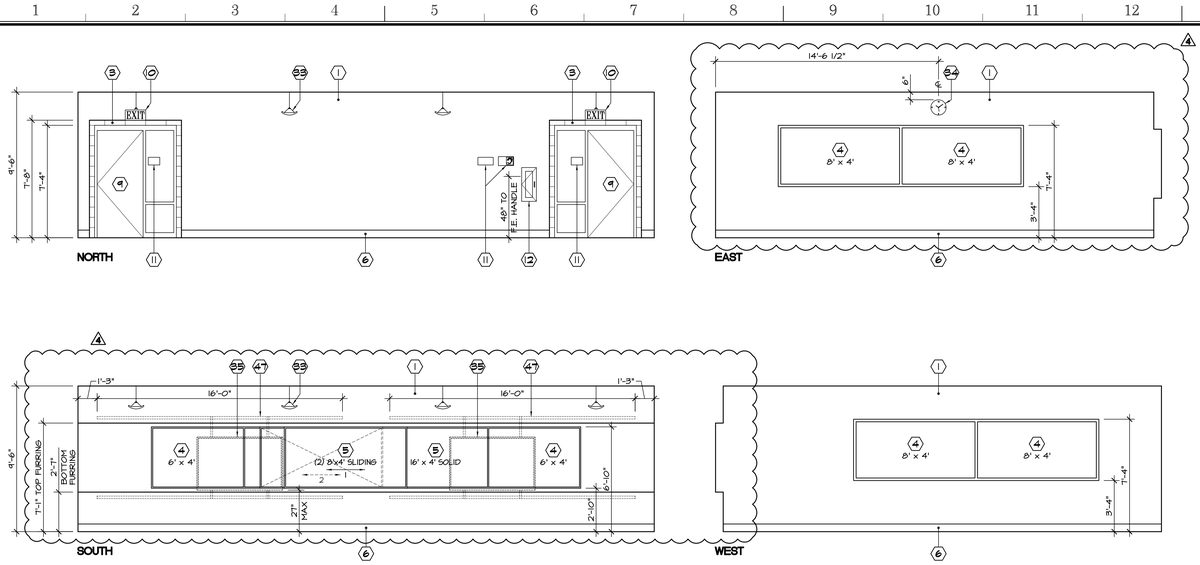
IMPERIAL VALLEY COLLEGE
BUILDING 200, 300 AND 800 MODERNIZATION

Sheet Title

INTERIOR ELEVATIONS

LICENSED ARCHITECT JIMMIE D. SANDERS No. C-17644 RENEWAL DATE 11-30-21 STATE OF CALIFORNIA

Document Date	Project Number
09-13-19	19-121V
Date Last Revised	**Reference Sheet**
1 01-20-21	AD-1_A2.4.1
4 06-17-21	**Sheet Number** AD-4_A2.4.1



CLASSROOM 6 (10 24 SIMILAR)

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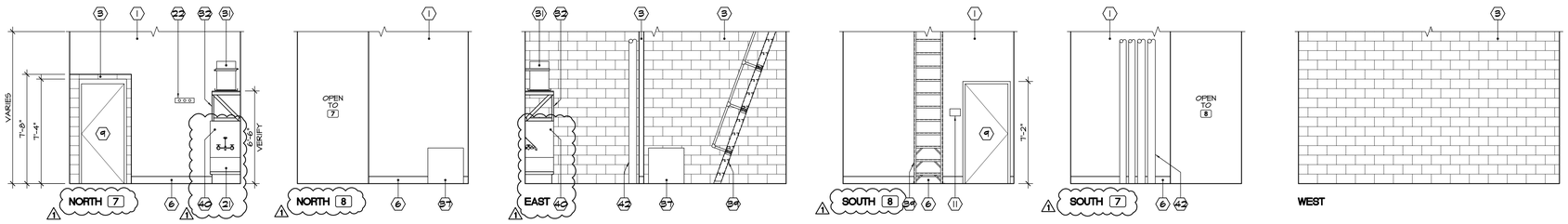

JANITOR 7 / ELECTRICAL 8

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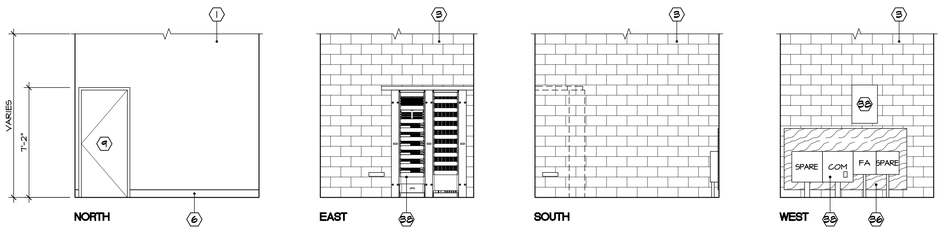

DATA 9

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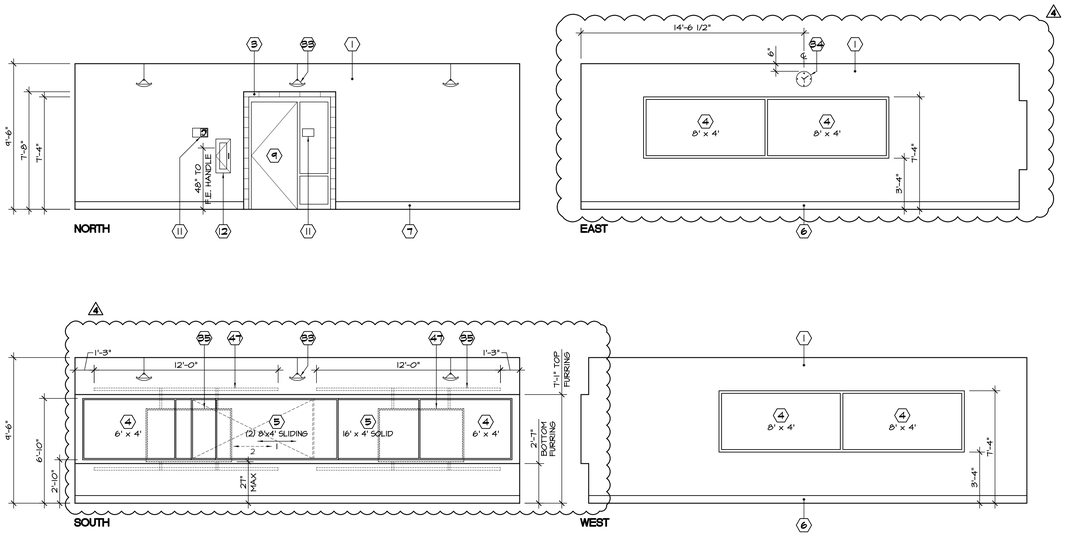

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SCALE: 1/4" = 1'-0" | D

Addendum

Engineer of Record	Division of the State Architect
	DSA Application No. 04-118720 / DSA File No. 13-01

APPROVALS

N

KEY PLAN - BLDG 200

KEYNOTES:

1. GYPSUM BOARD - TEXTURE, PAINT
2. CERAMIC TILE (16 / AX5.1)
3. SMOOTH FACE CONCRETE MASONRY - CLEAN, SANDBLAST OLD PAINT
4. TACK BOARD - SIZE NOTED (D / AX4.1)
5. MARKER BOARD W/ TRAY - SIZE NOTED (D / AX4.1) SIM 1
6. 6" RUBBER BASE TYPICAL, 4" @ CABINET TOE KICK
7. 6" CARPET BASE TYPICAL, 4" @ CABINET TOE KICK
8. NOT USED
9. DOOR / WINDOW PER PLAN
10. ILLUMINATED EXIT SIGN - SEE ELECTRICAL DRAWINGS
11. SIGNAGE - PER SIGNAGE PLAN
12. RECESSED FIRE EXTINGUISHER CABINET W/ TEMPERED GLASS - 48" TO EXTINGUISHER HANDLE W/ 4" MAX PROJECTION TO CABINET HANDLE
13. HPL MODULAR CASEWORK - SEE DETAILS (G / AX4.1) (H / AX4.1) UNO
14. HPL TOP AND 6" SPLASH, SPLASH @ END OF COUNTER
15. HPL MODULAR CASEWORK W/ ADJUSTABLE OPEN SHELVES
16. HPL ADJUSTABLE SHELVES
17. NOT USED 1
18. ACCESSIBLE WATER CLOSET - SEE PLUMBING DRAWINGS
19. ACCESSIBLE URINAL (B / AX3.1) - SEE PLUMBING DRAWINGS
20. ACCESSIBLE LAVATORY (B / AX3.1) - SEE PLUMBING DRAWINGS
21. MOP SERVICE BASIN W/ STAINLESS STEEL WALL GUARD - SEE PLUMBING DRAWINGS
22. BROOM / MOP RACK - VERIFY MOUNTING HEIGHT - SEE SPECIFICATIONS
23. GRAB BARS - FOR ANCHORAGE SEE (B / AX3.1) (E / AX3.1)
24. MIRROR W/ STAINLESS STEEL FRAME (B / AX3.1)
25. SOAP DISPENSER (B / AX3.1)
26. TYP HEAVY DUTY TOILET PARTITION, HEAD RAIL BRACES - FOR ANCHORAGE SEE (21 / AX5.2)
27. HAND DRYER (MAX 4" PROJECTION) (B / AX3.1)
28. RECESSED TOILET PAPER HOLDER (B / AX3.1) (K / AX3.1)
29. RECESSED FEMININE NAPKIN DISPOSAL (B / AX3.1)
30. RECESSED TOILET SEAT COVER DISPENSER (B / AX3.1)
31. WATER HEATER - SEE PLUMBING DRAWINGS
32. WATER HEATER SHELF (4 / P0.2) (5 / P0.2) 1
33. PENDANT LIGHT FIXTURE - SEE ELECTRICAL DRAWINGS (12 / AX5.1)
34. 12"Ø WALL CLOCK - SEE SPECIFICATIONS
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36. 4' x 8' x 3/4" PLYWOOD, PAINT
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38. COMMUNICATIONS EQUIPMENT - SEE COMMUNICATIONS DRAWINGS
39. ALUMINUM ROOF ACCESS SHIP'S LADDER - SEE SPECIFICATIONS (10 / AX5.1)
40. FRP PANEL - SEE SPECIFICATIONS 1
41. FURNITURE ITEM - SEE SPECIFICATIONS
42. MECHANICAL PIPING - SEE MECHANICAL DRAWINGS
43. 1-1/2"Ø STAINLESS STEEL HANDRAIL (E / AX3.1) 1
44. WATER CLOSET PER SEE PLUMBING DRAWINGS
45. URINAL PER SEE PLUMBING DRAWINGS
46. LAVATORY PER SEE PLUMBING DRAWINGS
47. WALL-MOUNTED TRACK SYSTEM FOR FLAT PANEL MONITOR - SEE SPECIFICATIONS AND SHEET (sht / A0-2_SH) 4

NOTES:

1. FOR FIXTURE MOUNTING HEIGHTS SEE (B / AX3.1)
2. FOR TOILET ROOM ACCESSORIES SEE SPECIFICATIONS.

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Project Title
IMPERIAL VALLEY COLLEGE
BUILDING 200, 300 AND 800 MODERNIZATION

Sheet Title
INTERIOR ELEVATIONS

LICENSED ARCHITECT JIMMIE D. SANDERS No. C-17644 RENEWAL DATE 08-31-21 STATE OF CALIFORNIA

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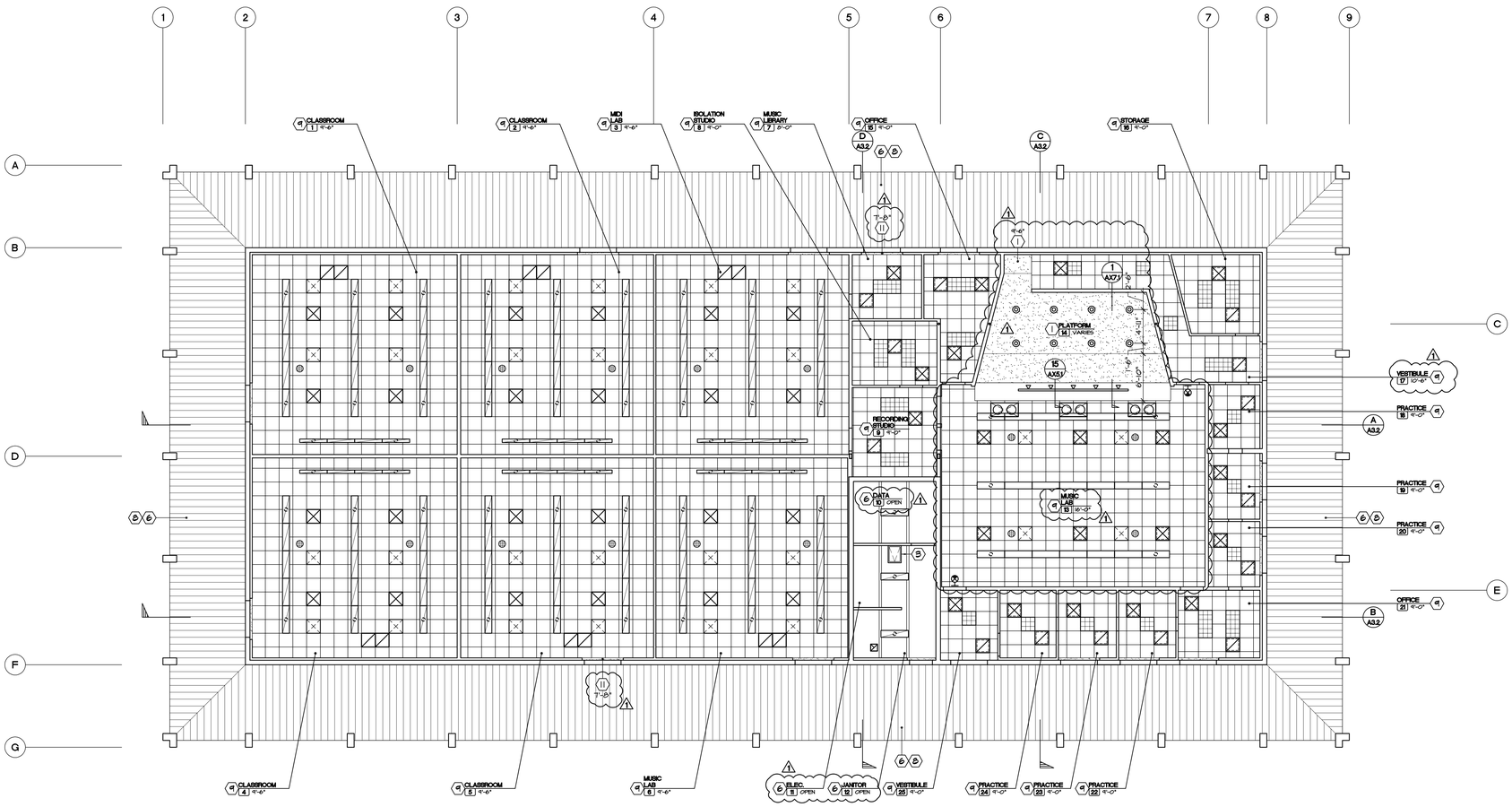
09-13-19	19-121V
Date Last Revised	**Reference Sheet**
1 01-20-21	AD-1_A2.4.2
4 06-17-21	**Sheet Number** AD-4_A2.4.2



REFLECTED CEILING PLAN

SCALE: 1/8" = 1'-0" | A

Addendum

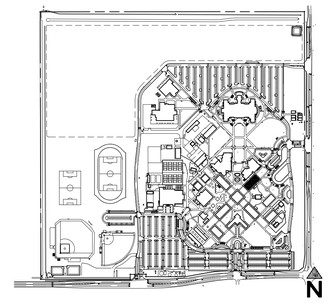
Engineer of Record

Division of the State Architect

DSA Application No. 04-118720

DSA File No. 13-01

APPROVALS



KEY PLAN - BLDG 300

KEYNOTES:

1. GYPSUM BOARD - PAINT PRIME COLOR, TEXTURE TO MATCH WALLS (11 AX5.2) (12 AX5.2)
2. GYPSUM BOARD - PAINT ACCENT COLOR, TEXTURE TO MATCH WALLS
3. ROOF ACCESS HATCH (10 AX5.1)
4. NOT USED
5. NOT USED
6. EXISTING EXPOSED METAL DECK - PRESSURE WASH CLEAN, ABRASIVE BLAST ALL RUST, PRIME AND PAINT
7. NOT USED
8. TRIM EXISTING EXPOSED SCREWS (MIN. 3 EXPOSED THREADS) AND PROVIDE METAL PUSH CAP
9. 24"x24" LAY-IN ACOUSTICAL CEILING TILE (1 AX5.1) (2 AX5.1)
10. 24 x 30 CEILING ACCESS PANEL
11. GYPSUM BOARD HEADER (7 8 AX5.2) (AX5.2)

LEGEND:

- LED LIGHT FIXTURE SEE ELECTRICAL DRAWINGS
- LED LIGHT FIXTURE SEE ELECTRICAL DRAWINGS
- PENDENT LED LIGHT FIXTURE SEE ELECTRICAL DRAWINGS
- LED LIGHT FIXTURE SEE ELECTRICAL DRAWINGS (4)
- LED LIGHT FIXTURE SEE ELECTRICAL DRAWINGS
- LIGHT FIXTURE - SEE ELECTRICAL DRAWINGS
- PENDENT LIGHT FIXTURE - SEE ELECTRICAL DRAWINGS
- RECESSED LIGHT FIXTURE - SEE ELECTRICAL DRAWINGS
- RECESSED LIGHT FIXTURE - SEE ELECTRICAL DRAWINGS
- SURFACE MOUNT LIGHT FIXTURE - SEE ELECTRICAL DRAWINGS
- WALL MOUNT LIGHT FIXTURE - SEE ELECTRICAL DRAWINGS
- TUBULAR SKYLIGHT DIFFUSER - SEE SPECIFICATIONS (16 AX1.5) (16 AX1.5)
- TUBULAR SKYLIGHT DIFFUSER - SEE SPECIFICATIONS
- CEILING DIFFUSER - SUPPLY AIR SEE MECHANICAL DRAWINGS
- RETURN AIR REGISTER SEE MECHANICAL DRAWINGS
- EXHAUST REGISTER SEE MECHANICAL DRAWINGS
- RECESSED CEILING MOUNTED SPEAKER - SEE COMMUNICATION DRAWINGS
- WALL MOUNTED ILLUMINATED EXIT SIGN - SEE ELECTRICAL DRAWINGS
- CEILING MOUNTED ILLUMINATED EXIT SIGN - SEE ELECTRICAL DRAWINGS

NOTES:

1. SEE SHEET AX5.1 FOR NOTES AND DETAILS.
2. SEE ELECTRICAL AND MECHANICAL DRAWINGS FOR FIXTURES AND EQUIPMENT.
3. SEE (12 AX5.1) FOR PENDANT LIGHT FIXTURE.

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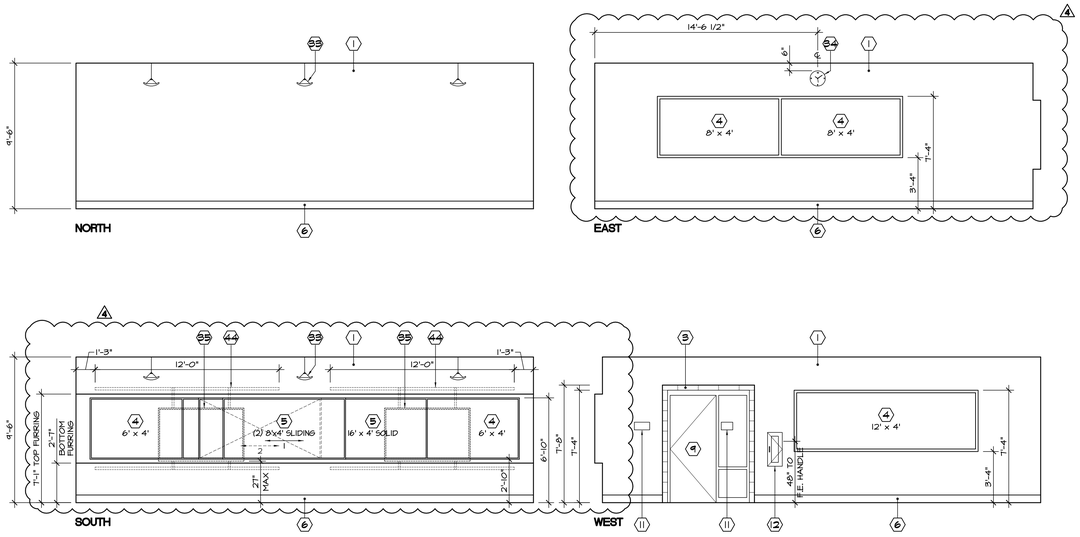
Project Title
IMPERIAL VALLEY COLLEGE
BUILDING 200, 300 AND 800 MODERNIZATION

Sheet Title
REFLECTED CEILING PLAN

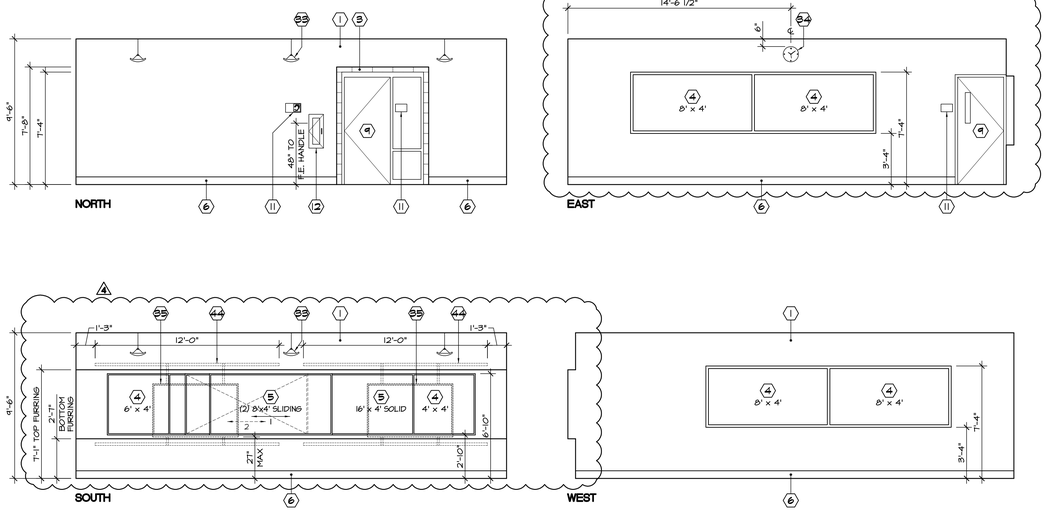
LICENSED ARCHITECT JIMMIE L. SANDERS No. C-17644 RENEWAL 08-31-21 STATE OF CALIFORNIA

Document Date	Project Number
09-13-19	19-121V
Date Last Revised	**Reference Sheet**
1 01-20-21	AD-4_A3.3
4 06-17-21	**Sheet Number** AD-1_A3.3



CLASSROOM 1 (4 SIMILAR)

SCALE: 1/4" = 1'-0" | A



CLASSROOM 2 (3 5 6 SIMILAR)

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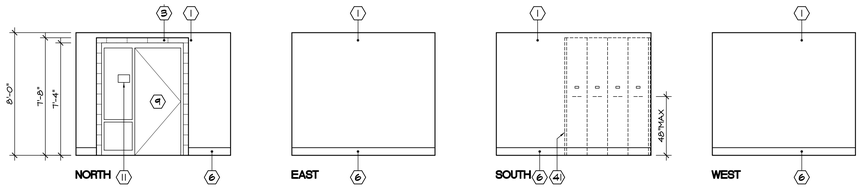
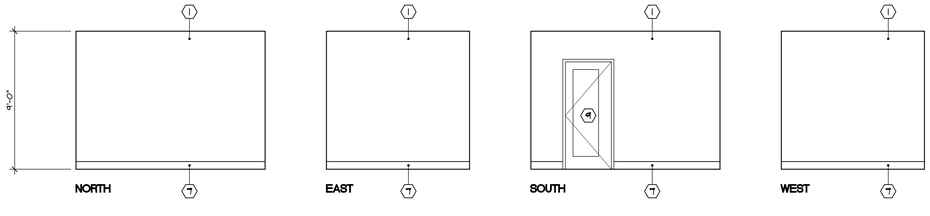


MUSIC LIBRARY 7

SCALE: 1/4" = 1'-0" | C



ISOLATION STUDIO 8

SCALE: 1/4" = 1'-0" | D

Addendum

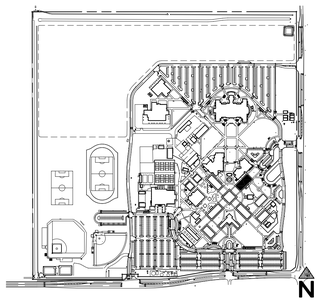
Engineer of Record

Division of the State Architect

DSA Application No. 04-118720

DSA File No. 13-01

APPROVALS



KEY PLAN - BLDG 300

KEYNOTES:

1. GYPSUM BOARD - TEXTURE, PAINT
2. CERAMIC TILE (16 / AX5.1)
3. SMOOTH FACE CONCRETE MASONRY - CLEAN, SANDBLAST OLD PAINT
4. TACK BOARD - SIZE NOTED (D / AX4.1)
5. MARKER BOARD W/ TRAY - SIZE NOTED (D / AX4.1) SIM 1
6. 6" RUBBER BASE TYPICAL, 4" @ CABINET TOE KICK
7. 6" CARPET BASE TYPICAL, 4" @ CABINET TOE KICK
8. NOT USED
9. DOOR / WINDOW PER PLAN
10. ILLUMINATED EXIT SIGN - SEE ELECTRICAL DRAWINGS
11. SIGNAGE - PER SIGNAGE PLAN
12. RECESSED FIRE EXTINGUISHER CABINET W/ TEMPERED GLASS - 48" TO EXTINGUISHER HANDLE W/ 4" MAX PROJECTION TO CABINET HANDLE
13. HPL MODULAR CASEWORK - SEE DETAILS (G / AX4.1) (H / AX4.1) UNO
14. HPL TOP AND 6" SPLASH, SPLASH @ END OF COUNTER
15. HPL MODULAR CASEWORK W/ ADJUSTABLE OPEN SHELVES
16. HPL ADJUSTABLE SHELVES
17. NOT USED 1
18. ACCESSIBLE WATER CLOSET - SEE PLUMBING DRAWINGS
19. ACCESSIBLE URINAL (B / AX3.1) - SEE PLUMBING DRAWINGS
20. ACCESSIBLE LAVATORY (B / AX3.1) - SEE PLUMBING DRAWINGS
21. MOP SERVICE BASIN W/ STAINLESS STEEL WALL GUARD - SEE PLUMBING DRAWINGS
22. BROOM / MOP RACK - VERIFY MOUNTING HEIGHT - SEE SPECIFICATIONS
23. GRAB BARS - FOR ANCHORAGE SEE (B / AX3.1) (E / AX3.1)
24. MIRROR W/ STAINLESS STEEL FRAME (B / AX3.1)
25. SOAP DISPENSER (B / AX3.1)
26. TYP HEAVY DUTY TOILET PARTITION, HEAD RAIL BRACES - FOR ANCHORAGE SEE (21 / AX5.2)
27. HAND DRYER (MAX 4" PROJECTION) (B / AX3.1)
28. RECESSED TOILET PAPER HOLDER (B / AX3.1) (K / AX3.1)
29. RECESSED FEMININE NAPKIN DISPOSAL (B / AX3.1)
30. RECESSED TOILET SEAT COVER DISPENSER (B / AX3.1)
31. WATER HEATER - SEE PLUMBING DRAWINGS
32. WATER HEATER SHELF (4 / P0.2) (5 / P0.2) 1
33. PENDANT LIGHT FIXTURE - SEE ELECTRICAL DRAWINGS (12 / AX5.1)
34. 12"Ø WALL CLOCK - SEE SPECIFICATIONS
35. FLAT PANEL MONITOR - SEE SPECIFICATIONS 1
36. 4' x 8' x 3/4" PLYWOOD, PAINT
37. ELECTRICAL EQUIPMENT - SEE ELECTRICAL DRAWINGS
38. COMMUNICATIONS EQUIPMENT - SEE COMMUNICATIONS DRAWINGS
39. ALUMINUM ROOF ACCESS SHIP'S LADDER - SEE SPECIFICATIONS (10 / AX5.1)
40. FRP PANEL - SEE SPECIFICATIONS
41. MUSIC FILING CABINET - OWNER FURNISHED, OWNER INSTALLED 1
42. MECHANICAL PIPING - SEE MECHANICAL DRAWINGS
43. 1-1/2"Ø STAINLESS STEEL HANDRAIL (E / AX3.1)
44. WALL-MOUNTED TRACK SYSTEM FOR FLAT PANEL MONITOR - SEE SPECIFICATIONS AND SHEET (sht / AD-2.5) 4

NOTES:

1. FOR FIXTURE MOUNTING HEIGHTS SEE (B / AX3.1)
2. FOR TOILET ROOM ACCESSORIES SEE SPECIFICATIONS.

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Project Title

IMPERIAL VALLEY COLLEGE
BUILDING 200, 300 AND 800 MODERNIZATION

Sheet Title

INTERIOR ELEVATIONS

LICENSED ARCHITECT JIMMIE D. SANDERS No. C-17644 RENEWAL DATE 07-31-21 STATE OF CALIFORNIA

Document Date	Project Number
09-13-19	19-121V
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1 01-20-21	AD-1_A3.4.1
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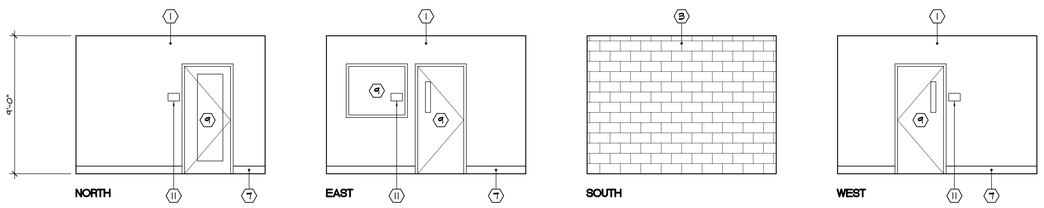

RECORDING STUDIO 9

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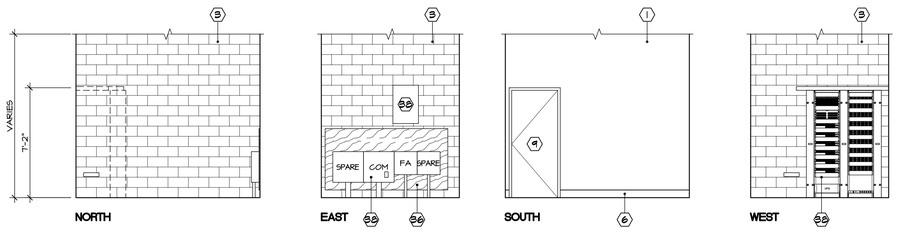

DATA 10

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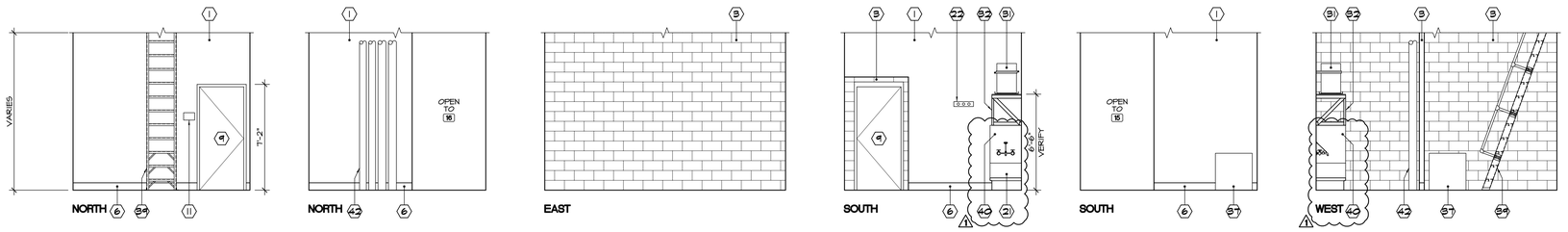
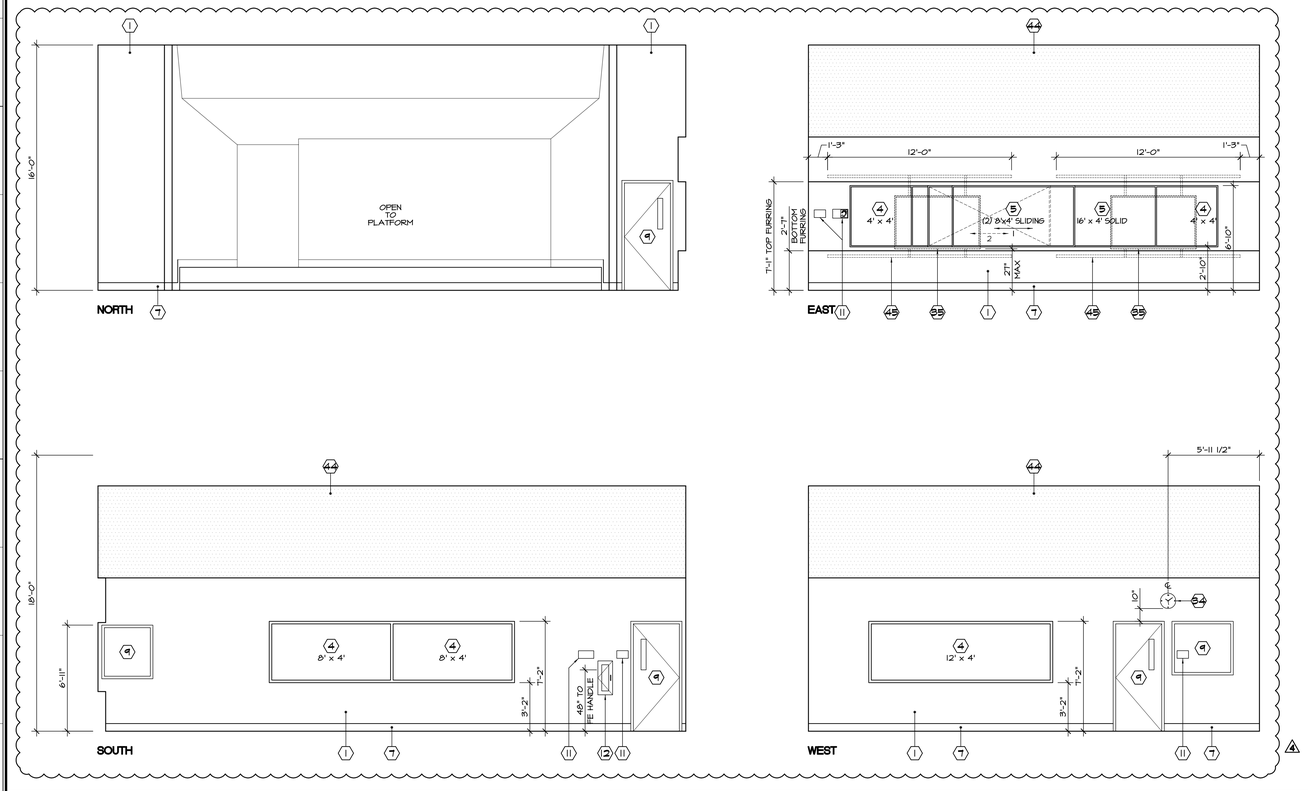


ELECTRICAL 11 /JANITOR 12

SCALE: 1/4" = 1'-0" | C



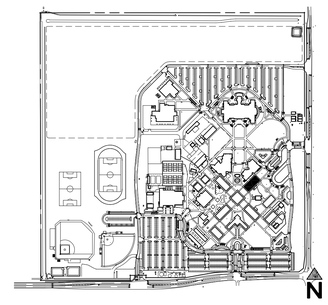
MUSIC LAB 13

SCALE: 1/4" = 1'-0" | F

Addendum

Engineer of Record	Division of the State Architect
	DSA Application No. 04-118720 / DSA File No. 13-01

APPROVALS



KEY PLAN - BLDG 300

KEYNOTES:

1. GYPSUM BOARD - TEXTURE, PAINT
2. CERAMIC TILE (16 / AX5.1)
3. SMOOTH FACE CONCRETE MASONRY - CLEAN, SANDBLAST OLD PAINT
4. TACK BOARD - SIZE NOTED (D / AX4.1)
5. MARKER BOARD W/ TRAY - SIZE NOTED (D / AX4.1) SIM 1
6. 6" RUBBER BASE TYPICAL, 4" @ CABINET TOE KICK
7. 6" CARPET BASE TYPICAL, 4" @ CABINET TOE KICK
8. NOT USED
9. DOOR / WINDOW PER PLAN
10. ILLUMINATED EXIT SIGN - SEE ELECTRICAL DRAWINGS
11. SIGNAGE - PER SIGNAGE PLAN
12. RECESSED FIRE EXTINGUISHER CABINET W/ TEMPERED GLASS - 48" TO EXTINGUISHER HANDLE W/ 4" MAX PROJECTION TO CABINET HANDLE
13. HPL MODULAR CASEWORK - SEE DETAILS (G / AX4.1) (H / AX4.1) UNO
14. HPL TOP AND 6" SPLASH, SPLASH @ END OF COUNTER
15. HPL MODULAR CASEWORK W/ ADJUSTABLE OPEN SHELVES
16. HPL ADJUSTABLE SHELVES
17. NOT USED 1
18. ACCESSIBLE WATER CLOSET - SEE PLUMBING DRAWINGS
19. ACCESSIBLE URINAL (B / AX3.1) - SEE PLUMBING DRAWINGS
20. ACCESSIBLE LAVATORY (B / AX3.1) - SEE PLUMBING DRAWINGS
21. MOP SERVICE BASIN W/ STAINLESS STEEL WALL GUARD - SEE PLUMBING DRAWINGS
22. BROOM / MOP RACK - VERIFY MOUNTING HEIGHT - SEE SPECIFICATIONS
23. GRAB BARS - FOR ANCHORAGE SEE (B / AX3.1) (E / AX3.1)
24. MIRROR W/ STAINLESS STEEL FRAME (B / AX3.1)
25. SOAP DISPENSER (B / AX3.1)
26. TYP HEAVY DUTY TOILET PARTITION, HEAD RAIL BRACES - FOR ANCHORAGE SEE (21 / AX5.2)
27. HAND DRYER (MAX 4" PROJECTION) (B / AX3.1)
28. RECESSED TOILET PAPER HOLDER (B / AX3.1) (K / AX3.1)
29. RECESSED FEMININE NAPKIN DISPOSAL (B / AX3.1)
30. RECESSED TOILET SEAT COVER DISPENSER (B / AX3.1)
31. WATER HEATER - SEE PLUMBING DRAWINGS
32. WATER HEATER SHELF (4 / P0.2) (5 / P0.2) 1
33. PENDANT LIGHT FIXTURE - SEE ELECTRICAL DRAWINGS (12 / AX5.1)
34. 12"Ø WALL CLOCK - SEE SPECIFICATIONS
35. FLAT PANEL MONITOR - SEE SPECIFICATIONS 1
36. 4' x 8' x 3/4" PLYWOOD, PAINT
37. ELECTRICAL EQUIPMENT - SEE ELECTRICAL DRAWINGS
38. COMMUNICATIONS EQUIPMENT - SEE COMMUNICATIONS DRAWINGS
39. ALUMINUM ROOF ACCESS SHIP'S LADDER - SEE SPECIFICATIONS (10 / AX5.1)
40. FRP PANEL - SEE SPECIFICATIONS
41. MUSIC FILING CABINET - OWNER FURNISHED, OWNER INSTALLED 1
42. MECHANICAL PIPING - SEE MECHANICAL DRAWINGS
43. 1-1/2"ø STAINLESS STEEL HANDRAIL (E / AX3.1) 1
44. SOUND ATTENUATION PANELS - SEE SPECIFICATIONS
45. WALL-MOUNTED TRACK SYSTEM FOR FLAT PANEL MONITOR - SEE SPECIFICATIONS AND SHEET (sht / AD-2.3) 4

NOTES:

1. FOR FIXTURE MOUNTING HEIGHTS SEE (B / AX3.1)
2. FOR TOILET ROOM ACCESSORIES SEE SPECIFICATIONS.

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Sheet Title
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LICENSED ARCHITECT JIMMIE R. SANDERS No. C-17644 RENEWAL DATE 08-31-21 STATE OF CALIFORNIA

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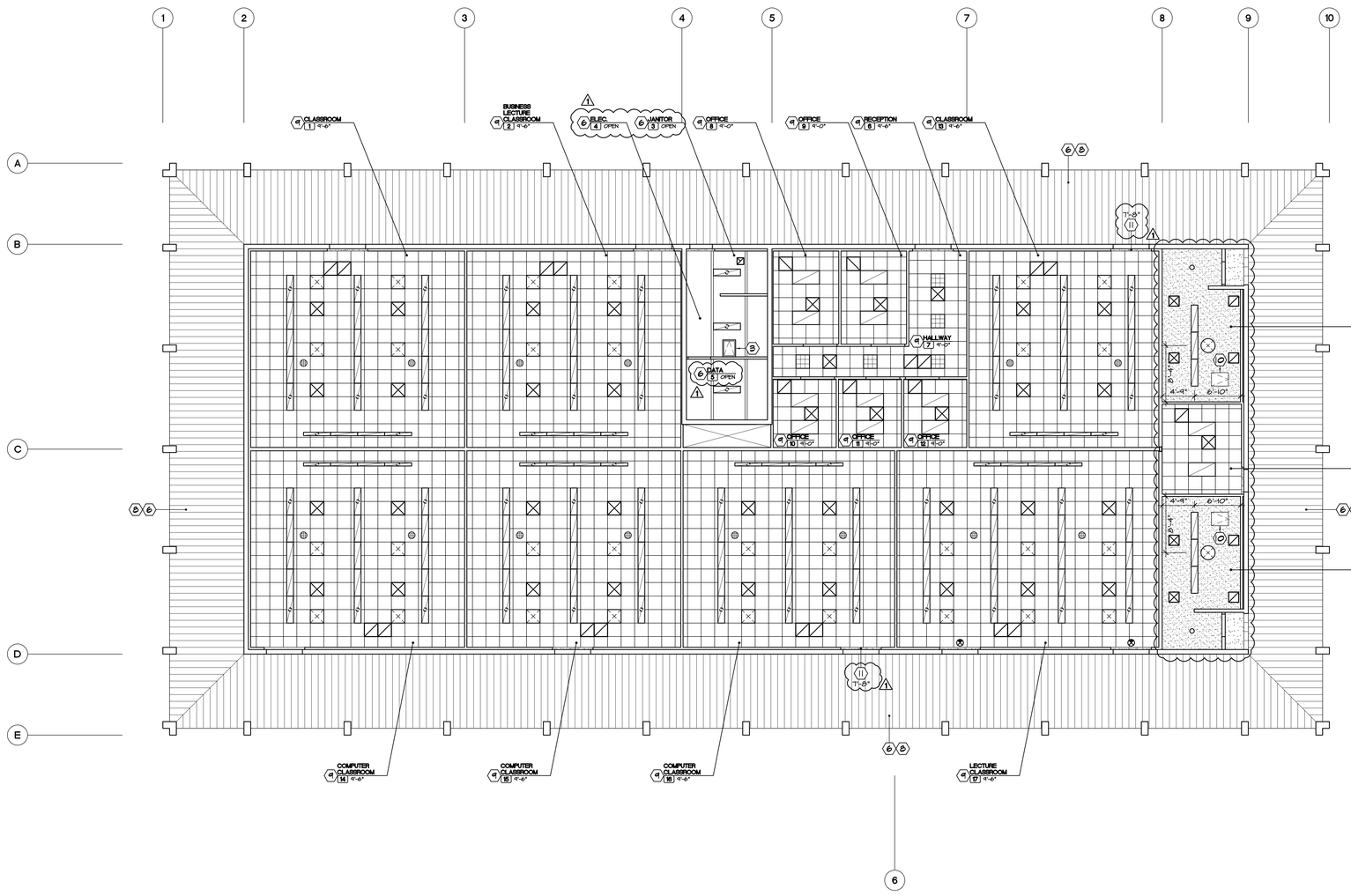

REFLECTED CEILING PLAN

SCALE: 1/8" = 1'-0" | A

Addendum

Engineer of Record

Division of the State Architect

DSA Application No. 04-118720

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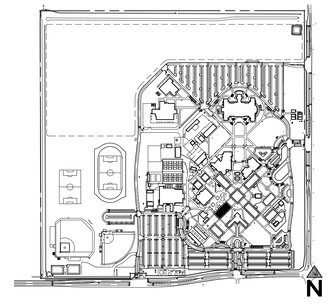
APPROVALS



KEY PLAN - BLDG 800

KEYNOTES:

1. GYPSUM BOARD - PAINT PRIME COLOR, TEXTURE TO MATCH WALLS (11 AX5.2) (12 AX5.2)
2. GYPSUM BOARD - PAINT ACCENT COLOR, TEXTURE TO MATCH WALLS
3. ROOF ACCESS HATCH (10 AX5.1)
4. NOT USED
5. NOT USED
6. EXISTING EXPOSED METAL DECK - PRESSURE WASH CLEAN, ABRASIVE BLAST ALL RUST, PRIME AND PAINT
7. NOT USED
8. TRIM EXISTING EXPOSED SCREWS (MIN. 3 EXPOSED THREADS) AND PROVIDE METAL PUSH CAP
9. 24"x24" LAY-IN ACOUSTICAL CEILING TILE (1 AX5.1) (2 AX5.1)
10. 24 x 30 CEILING ACCESS PANEL
11. GYPSUM BOARD HEADER (7 AX5.2) (8 AX5.2)

LEGEND:

- LED LIGHT FIXTURE SEE ELECTRICAL DRAWINGS
- LED LIGHT FIXTURE SEE ELECTRICAL DRAWINGS
- PENDENT LED LIGHT FIXTURE SEE ELECTRICAL DRAWINGS
- LED LIGHT FIXTURE SEE ELECTRICAL DRAWINGS (4)
- LIGHT FIXTURE - SEE ELECTRICAL DRAWINGS
- PENDENT LIGHT FIXTURE - SEE ELECTRICAL DRAWINGS
- RECESSED LIGHT FIXTURE - SEE ELECTRICAL DRAWINGS
- RECESSED LIGHT FIXTURE - SEE ELECTRICAL DRAWINGS
- SURFACE MOUNT LIGHT FIXTURE - SEE ELECTRICAL DRAWINGS
- WALL MOUNT LIGHT FIXTURE - SEE ELECTRICAL DRAWINGS
- TUBULAR SKYLIGHT DIFFUSER - SEE SPECIFICATIONS (16 AX1.5)
- TUBULAR SKYLIGHT DIFFUSER - SEE SPECIFICATIONS (16 AX1.5)
- CEILING DIFFUSER - SUPPLY AIR SEE MECHANICAL DRAWINGS
- RETURN AIR REGISTER SEE MECHANICAL DRAWINGS
- EXHAUST REGISTER SEE MECHANICAL DRAWINGS
- RECESSED CEILING MOUNTED SPEAKER - SEE COMMUNICATION DRAWINGS
- WALL MOUNTED ILLUMINATED EXIT SIGN - SEE ELECTRICAL DRAWINGS
- CEILING MOUNTED ILLUMINATED EXIT SIGN - SEE ELECTRICAL DRAWINGS
- CEILING ACCESS PANEL (1)

NOTES:

1. SEE SHEET AX5.1 FOR NOTES AND DETAILS.
2. SEE ELECTRICAL AND MECHANICAL DRAWINGS FOR FIXTURES AND EQUIPMENT.
3. SEE (12 AX5.1) FOR PENDANT LIGHT FIXTURE.

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LICENSED ARCHITECT JIMMIE LEE SANDERS No. C-17644 RENEWAL DATE 08-31-21 STATE OF CALIFORNIA

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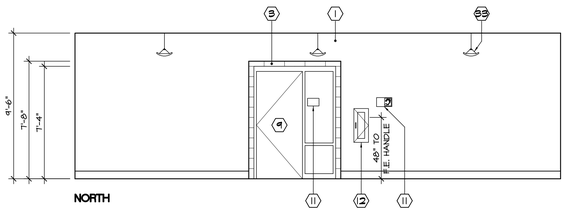
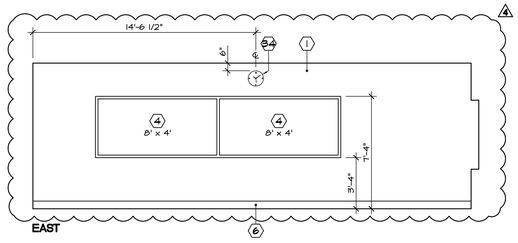
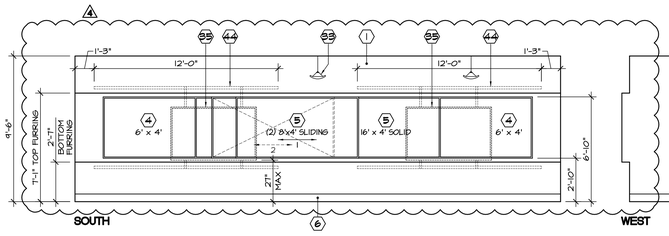
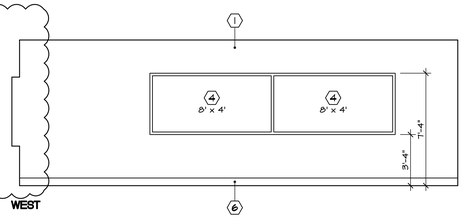


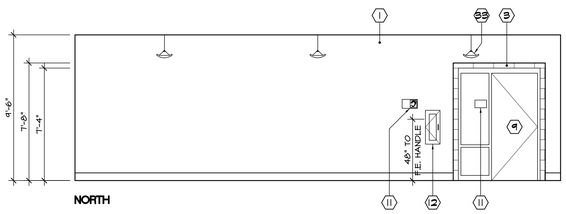


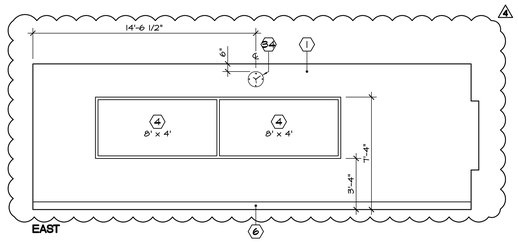


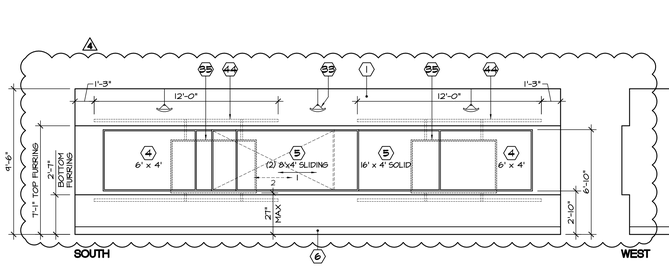


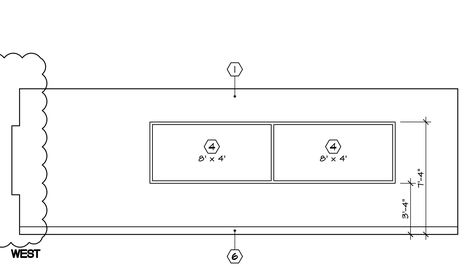
CLASSROOM 1 (15 SIMILAR)

SCALE: 1/4" = 1'-0" | A



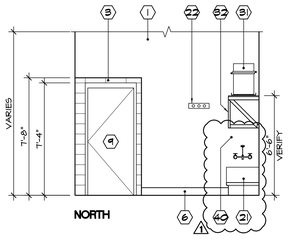


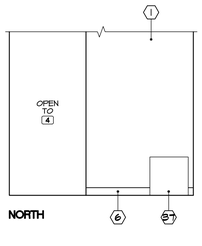


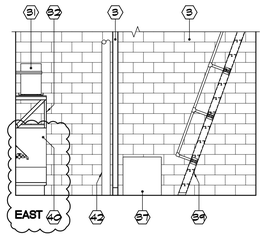


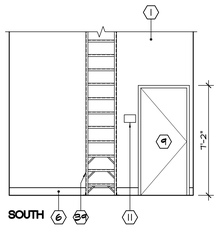
CLASSROOM 2 (14 16 SIMILAR)

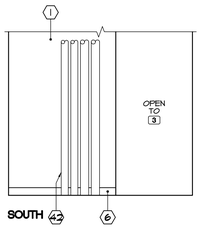
SCALE: 1/4" = 1'-0" | B

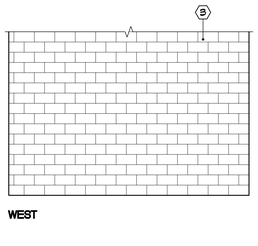






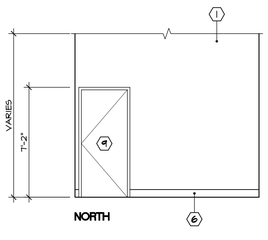


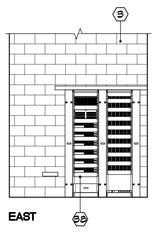


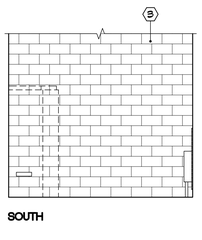


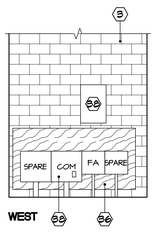
JANITOR 3 / ELECTRICAL 4

SCALE: 1/4" = 1'-0" | C









DATA 5

SCALE: 1/4" = 1'-0" | D

Addendum

Engineer of Record

Division of the State Architect

DSA Application No. 04-118720

DSA File No. 13-01

APPROVALS

N

KEY PLAN - BLDG 800

KEYNOTES:

1. GYPSUM BOARD - TEXTURE, PAINT
2. CERAMIC TILE (16/AX5.1)
3. SMOOTH FACE CONCRETE MASONRY - CLEAN, SANDBLAST OLD PAINT
4. TACK BOARD - SIZE NOTED (D/AX4.1)
5. MARKER BOARD W/ TRAY - SIZE NOTED (D/AX4.1) SIM 1
6. 6" RUBBER BASE TYPICAL, 4" @ CABINET TOE KICK
7. 6" CARPET BASE TYPICAL, 4" @ CABINET TOE KICK
8. NOT USED
9. DOOR / WINDOW PER PLAN
10. ILLUMINATED EXIT SIGN - SEE ELECTRICAL DRAWINGS
11. SIGNAGE - PER SIGNAGE PLAN
12. RECESSED FIRE EXTINGUISHER CABINET W/ TEMPERED GLASS - 48" TO EXTINGUISHER HANDLE W/ 4" MAX PROJECTION TO CABINET HANDLE
13. HPL MODULAR CASEWORK - SEE DETAILS (G/AX4.1) (H/AX4.1) UNO
14. HPL TOP AND 6" SPLASH, SPLASH @ END OF COUNTER
15. HPL MODULAR CASEWORK W/ ADJUSTABLE OPEN SHELVES
16. HPL ADJUSTABLE SHELVES
17. NOT USED 1
18. ACCESSIBLE WATER CLOSET - SEE PLUMBING DRAWINGS
19. ACCESSIBLE URINAL (B/AX3.1) - SEE PLUMBING DRAWINGS
20. ACCESSIBLE LAVATORY (B/AX3.1) - SEE PLUMBING DRAWINGS
21. MOP SERVICE BASIN W/ STAINLESS STEEL WALL GUARD - SEE PLUMBING DRAWINGS
22. BROOM / MOP RACK - VERIFY MOUNTING HEIGHT - SEE SPECIFICATIONS
23. GRAB BARS - FOR ANCHORAGE SEE (B/AX3.1) (E/AX3.1)
24. MIRROR W/ STAINLESS STEEL FRAME (B/AX3.1)
25. SOAP DISPENSER (B/AX3.1)
26. TYP HEAVY DUTY TOILET PARTITION, HEAD RAIL BRACES - FOR ANCHORAGE SEE (21/AX5.2)
27. HAND DRYER (MAX 4" PROJECTION) (B/AX3.1)
28. RECESSED TOILET PAPER HOLDER (B/AX3.1) (K/AX3.1)
29. RECESSED FEMININE NAPKIN DISPOSAL (B/AX3.1)
30. RECESSED TOILET SEAT COVER DISPENSER (B/AX3.1)
31. WATER HEATER - SEE PLUMBING DRAWINGS
32. WATER HEATER SHELF (4/P0.2) (5/P0.2) 1
33. PENDANT LIGHT FIXTURE - SEE ELECTRICAL DRAWINGS (12/AX5.1)
34. 12"Ø WALL CLOCK - SEE SPECIFICATIONS
35. FLAT PANEL MONITOR - SEE SPECIFICATIONS 1
36. 4' x 8' x 3/4" PLYWOOD, PAINT
37. ELECTRICAL EQUIPMENT - SEE ELECTRICAL DRAWINGS
38. COMMUNICATIONS EQUIPMENT - SEE COMMUNICATIONS DRAWINGS
39. ALUMINUM ROOF ACCESS SHIP'S LADDER - SEE SPECIFICATIONS (10/AX5.1)
40. FRP PANEL - SEE SPECIFICATIONS 1
41. FURNITURE ITEM - SEE SPECIFICATIONS
42. MECHANICAL PIPING - SEE MECHANICAL DRAWINGS
43. 1-1/2"Ø STAINLESS STEEL HANDRAIL (E/AX3.1)
44. WALL-MOUNTED TRACK SYSTEM FOR FLAT PANEL MONITOR - SEE SPECIFICATIONS AND SHEET (SHT A0-2.5B) 4

NOTES:

1. FOR FIXTURE MOUNTING HEIGHTS SEE (B/AX3.1)
2. FOR TOILET ROOM ACCESSORIES SEE SPECIFICATIONS.

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Project Title

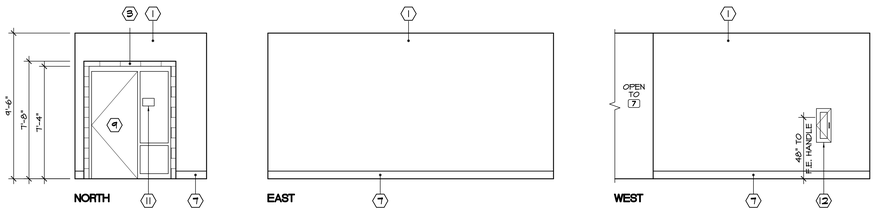
IMPERIAL VALLEY COLLEGE
BUILDING 200, 300 AND 800 MODERNIZATION

Sheet Title

INTERIOR ELEVATIONS

LICENSED ARCHITECT JIMMIE D. SANDERS No. C-17644 RENEWAL DATE 08-31-21 STATE OF CALIFORNIA

Document Date	Project Number
09-13-19	19-121V
Date Last Revised	Reference Sheet
1 01-20-21	AD-1_A8.4.1
4 06-17-21	Sheet Number AD-4_A8.4.1



RECEPTION 6

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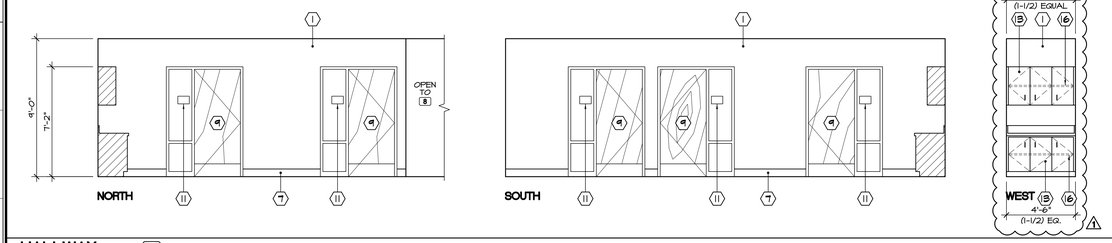
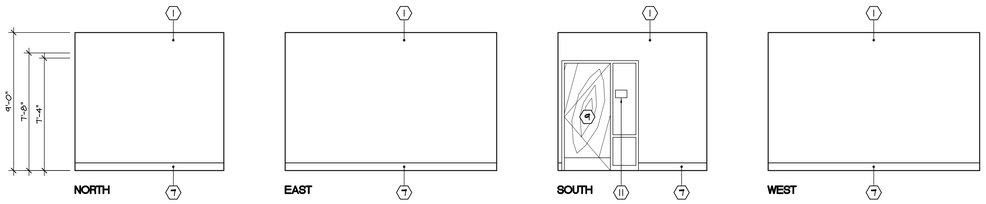


HALLWAY 7

SCALE: 1/4" = 1'-0" | B



OFFICE 8 (9 SIMILAR)

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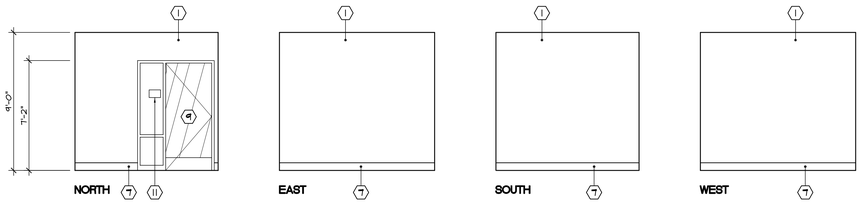

OFFICE 10 (11 12 SIMILAR)

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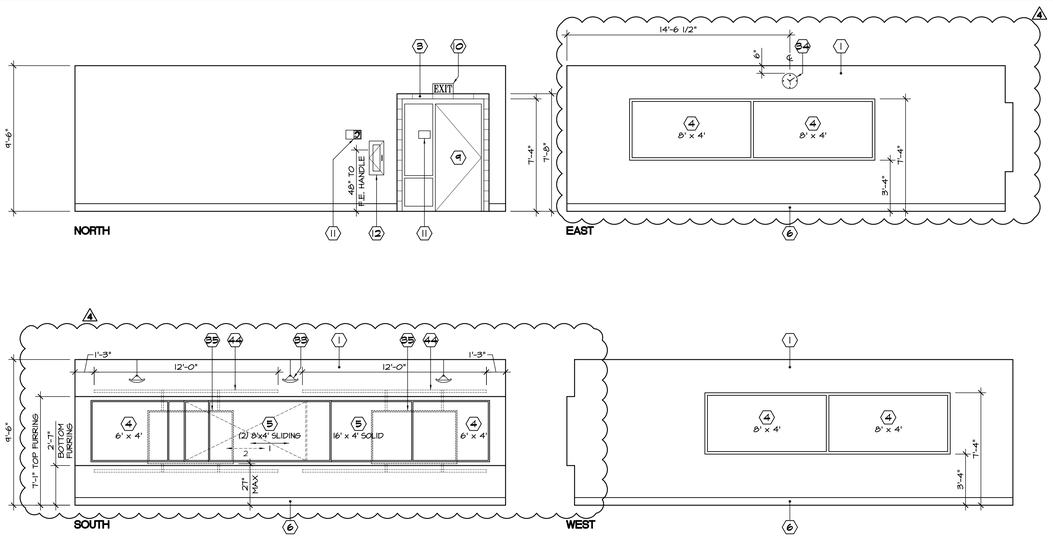

CLASSROOM 13

SCALE: 1/4" = 1'-0" | E

Addendum

Engineer of Record

Division of the State Architect

DSA Application No. 04-118720

DSA File No. 13-01

APPROVALS

N

KEY PLAN - BLDG 800

KEYNOTES:

1. GYPSUM BOARD - TEXTURE, PAINT
2. CERAMIC TILE (16 / AX5.1)
3. SMOOTH FACE CONCRETE MASONRY - CLEAN, SANDBLAST OLD PAINT
4. TACK BOARD - SIZE NOTED (D / AX4.1)
5. MARKER BOARD W/ TRAY - SIZE NOTED (D / AX4.1) SIM
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7. 6" CARPET BASE TYPICAL, 4" @ CABINET TOE KICK
8. NOT USED
9. DOOR / WINDOW PER PLAN
10. ILLUMINATED EXIT SIGN - SEE ELECTRICAL DRAWINGS
11. SIGNAGE - PER SIGNAGE PLAN
12. RECESSED FIRE EXTINGUISHER CABINET W/ TEMPERED GLASS - 48" TO EXTINGUISHER HANDLE W/ 4" MAX PROJECTION TO CABINET HANDLE
13. HPL MODULAR CASEWORK - SEE DETAILS (G / AX4.1) (H / AX4.1) UNO
14. HPL TOP AND 6" SPLASH, SPLASH @ END OF COUNTER
15. HPL MODULAR CASEWORK W/ ADJUSTABLE OPEN SHELVES
16. HPL ADJUSTABLE SHELVES
17. NOT USED
18. ACCESSIBLE WATER CLOSET - SEE PLUMBING DRAWINGS
19. ACCESSIBLE URINAL (B / AX3.1) - SEE PLUMBING DRAWINGS
20. ACCESSIBLE LAVATORY (B / AX3.1) - SEE PLUMBING DRAWINGS
21. MOP SERVICE BASIN W/ STAINLESS STEEL WALL GUARD - SEE PLUMBING DRAWINGS
22. BROOM / MOP RACK - VERIFY MOUNTING HEIGHT - SEE SPECIFICATIONS
23. GRAB BARS - FOR ANCHORAGE SEE (B / AX3.1) (E / AX3.1)
24. MIRROR W/ STAINLESS STEEL FRAME (B / AX3.1)
25. SOAP DISPENSER (B / AX3.1)
26. TYP HEAVY DUTY TOILET PARTITION, HEAD RAIL BRACES - FOR ANCHORAGE SEE (21 / AX5.2)
27. HAND DRYER (MAX 4" PROJECTION) (B / AX3.1)
28. RECESSED TOILET PAPER HOLDER (B / AX3.1) (K / AX3.1)
29. RECESSED FEMININE NAPKIN DISPOSAL (B / AX3.1)
30. RECESSED TOILET SEAT COVER DISPENSER (B / AX3.1)
31. WATER HEATER - SEE PLUMBING DRAWINGS
32. WATER HEATER SHELF (4 / P0.2) (5 / P0.2)
33. PENDANT LIGHT FIXTURE - SEE ELECTRICAL DRAWINGS (12 / AX5.1)
34. 12"Ø WALL CLOCK - SEE SPECIFICATIONS
35. FLAT PANEL MONITOR - SEE SPECIFICATIONS
36. 4' x 8' x 3/4" PLYWOOD, PAINT
37. ELECTRICAL EQUIPMENT - SEE ELECTRICAL DRAWINGS
38. COMMUNICATIONS EQUIPMENT - SEE COMMUNICATIONS DRAWINGS
39. ALUMINUM ROOF ACCESS SHIP'S LADDER - SEE SPECIFICATIONS (10 / AX5.1)
40. FRP PANEL - SEE SPECIFICATIONS
41. FURNITURE ITEM - SEE SPECIFICATIONS
42. MECHANICAL PIPING - SEE MECHANICAL DRAWINGS
43. 1-1/2"Ø STAINLESS STEEL HANDRAIL (E / AX3.1)
44. WALL-MOUNTED TRACK SYSTEM FOR FLAT PANEL MONITOR - SEE SPECIFICATIONS AND SHEET (sht / A0-2.5)

NOTES:

1. FOR FIXTURE MOUNTING HEIGHTS SEE (B / AX3.1)
2. FOR TOILET ROOM ACCESSORIES SEE SPECIFICATIONS.

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EL CENTRO, CA 92243
760 353 5440 FAX 760 353 5442

Project Title

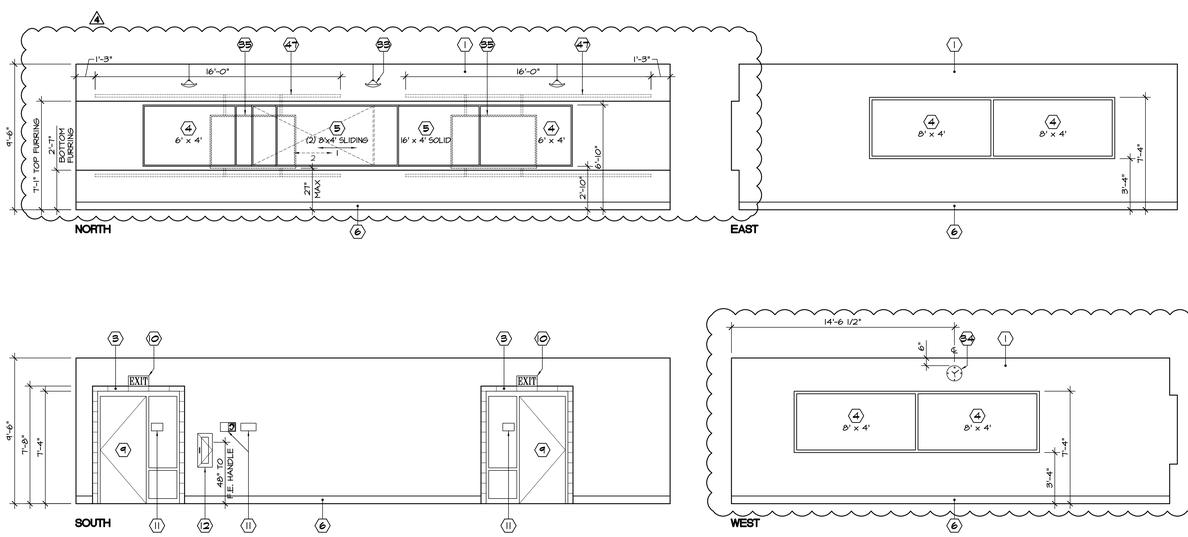
IMPERIAL VALLEY COLLEGE
BUILDING 200, 300 AND 800 MODERNIZATION

Sheet Title

INTERIOR ELEVATIONS

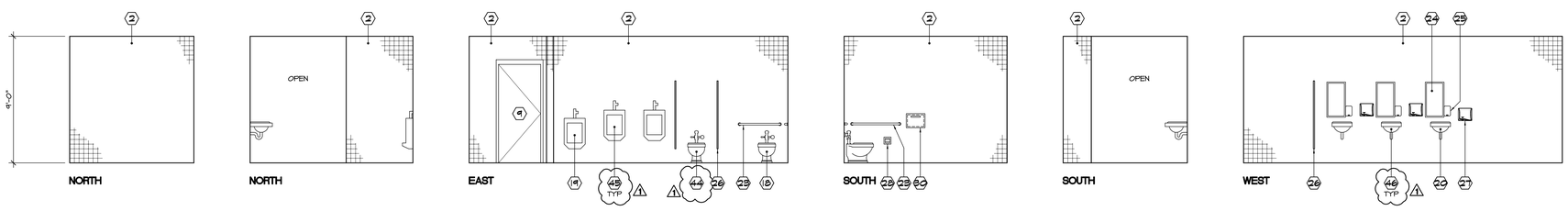
LICENSED ARCHITECT JIMMIE R. SANDERS No. C-17644 RENEWAL DATE 07-31-21 STATE OF CALIFORNIA

Document Date	Project Number
09-13-19	19-121V
Date Last Revised	**Reference Sheet**
1 01-20-21	AD-1_A8.4.2
4 06-17-21	**Sheet Number** AD-4_A8.4.2



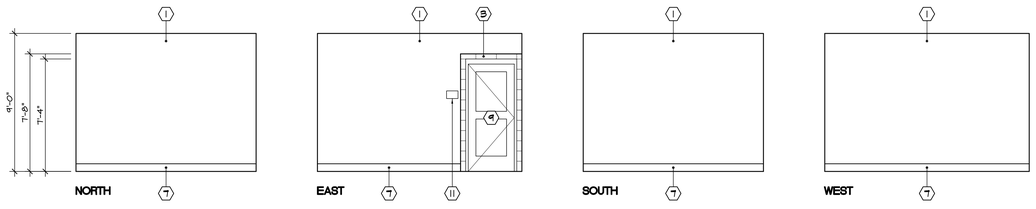
LECTURE CLASSROOM 17

SCALE: 1/4" = 1'-0" | A



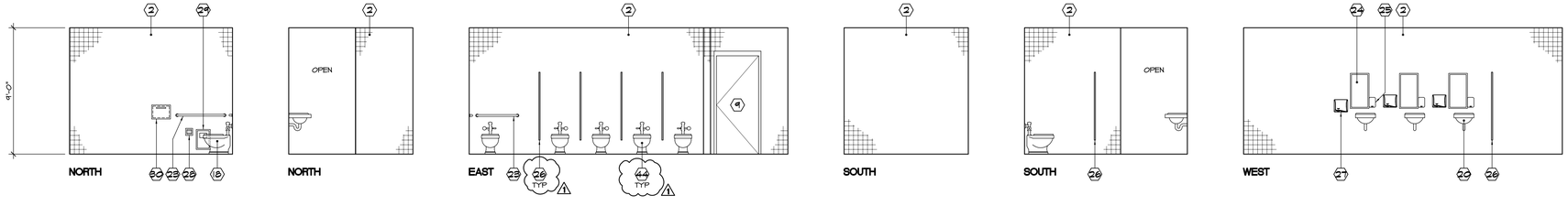
MEN'S TOILET 18

SCALE: 1/4" = 1'-0" | B



OFFICE 19

SCALE: 1/4" = 1'-0" | C



WOMEN'S TOILET 20

SCALE: 1/4" = 1'-0" | D

Addendum

Engineer of Record	Division of the State Architect
	DSA Application No. 04-118720
	DSA File No. 13-01

APPROVALS

N

KEY PLAN - BLDG 800

KEYNOTES:

1. GYPSUM BOARD - TEXTURE, PAINT
2. CERAMIC TILE (16/AX5.1)
3. SMOOTH FACE CONCRETE MASONRY - CLEAN, SANDBLAST OLD PAINT
4. TACK BOARD - SIZE NOTED (D/AX4.1)
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7. 6" CARPET BASE TYPICAL, 4" @ CABINET TOE KICK
8. NOT USED
9. DOOR / WINDOW PER PLAN
10. ILLUMINATED EXIT SIGN - SEE ELECTRICAL DRAWINGS
11. SIGNAGE - PER SIGNAGE PLAN
12. RECESSED FIRE EXTINGUISHER CABINET W/ TEMPERED GLASS - 48" TO EXTINGUISHER HANDLE W/ 4" MAX PROJECTION TO CABINET HANDLE
13. HPL MODULAR CASEWORK - SEE DETAILS (G/AX4.1) (H/AX4.1) UNO
14. HPL TOP AND 6" SPLASH, SPLASH @ END OF COUNTER
15. HPL MODULAR CASEWORK W/ ADJUSTABLE OPEN SHELVES
16. HPL ADJUSTABLE SHELVES
17. NOT USED
18. ACCESSIBLE WATER CLOSET - SEE PLUMBING DRAWINGS
19. ACCESSIBLE URINAL (B/AX3.1) - SEE PLUMBING DRAWINGS
20. ACCESSIBLE LAVATORY (B/AX3.1) - SEE PLUMBING DRAWINGS
21. MOP SERVICE BASIN W/ STAINLESS STEEL WALL GUARD - SEE PLUMBING DRAWINGS
22. BROOM / MOP RACK - VERIFY MOUNTING HEIGHT - SEE SPECIFICATIONS
23. GRAB BARS - FOR ANCHORAGE SEE (B/AX3.1) (E/AX3.1)
24. MIRROR W/ STAINLESS STEEL FRAME (B/AX3.1)
25. SOAP DISPENSER (B/AX3.1)
26. TYP HEAVY DUTY TOILET PARTITION, HEAD RAIL BRACES - FOR ANCHORAGE SEE (21/AX5.2)
27. HAND DRYER (MAX 4" PROJECTION) (B/AX3.1)
28. RECESSED TOILET PAPER HOLDER (B/AX3.1) (K/AX3.1)
29. RECESSED FEMININE NAPKIN DISPOSAL (B/AX3.1)
30. RECESSED TOILET SEAT COVER DISPENSER (B/AX3.1)
31. WATER HEATER - SEE PLUMBING DRAWINGS
32. WATER HEATER SHELF (4/P0.2) (5/P0.2)
33. PENDANT LIGHT FIXTURE - SEE ELECTRICAL DRAWINGS (12/AX5.1)
34. 12"Ø WALL CLOCK - SEE SPECIFICATIONS
35. FLAT PANEL MONITOR - SEE SPECIFICATIONS
36. 4' x 8' x 3/4" PLYWOOD, PAINT
37. ELECTRICAL EQUIPMENT - SEE ELECTRICAL DRAWINGS
38. COMMUNICATIONS EQUIPMENT - SEE COMMUNICATIONS DRAWINGS
39. ALUMINUM ROOF ACCESS SHIP'S LADDER - SEE SPECIFICATIONS (10/AX5.1)
40. FRP PANEL - SEE SPECIFICATIONS
41. FURNITURE ITEM - SEE SPECIFICATIONS
42. MECHANICAL PIPING - SEE MECHANICAL DRAWINGS
43. 1-1/2"Ø STAINLESS STEEL HANDRAIL (E/AX3.1)
44. WATER CLOSET PER SEE PLUMBING DRAWINGS
45. URINAL PER SEE PLUMBING DRAWINGS
46. LAVATORY PER SEE PLUMBING DRAWINGS
47. WALL-MOUNTED TRACK SYSTEM FOR FLAT PANEL MONITOR - SEE SPECIFICATIONS AND SHEET (sht/AD-2.2B)

NOTES:

1. FOR FIXTURE MOUNTING HEIGHTS SEE (B/AX3.1)
2. FOR TOILET ROOM ACCESSORIES SEE SPECIFICATIONS.

Sanders, INC.
Architecture/Engineering
1102 INDUSTRY WAY, SUITE A
EL CENTRO, CA 92243
760 353 5440 FAX 760 353 5442

Project Title
IMPERIAL VALLEY COLLEGE
BUILDING 200, 300 AND 800 MODERNIZATION

Sheet Title
INTERIOR ELEVATIONS

LICENSED ARCHITECT JIMMIE D. SANDERS No. C-17644 RENEWAL 08-31-21 STATE OF CALIFORNIA

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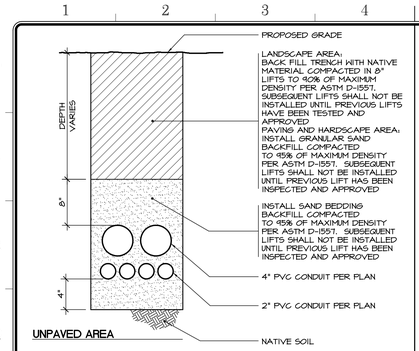
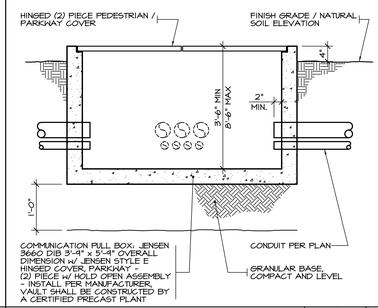
4 06-17-21	Sheet Number AD-4_A8.4.3



TYPICAL TRENCH DETAIL

SCALE: NO SCALE | 1

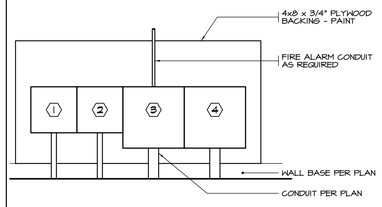


VAULT DETAIL

SCALE: NTS | 2

KEYNOTES / LEGEND

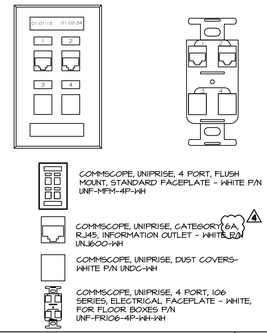
1. SPARE CONDUIT / JUNCTION BOX
2. CONDUIT / JUNCTION BOX FOR FIRE ALARM
3. CONDUIT / JUNCTION BOX FOR BACKBONE CABLING
4. SPARE CONDUIT / JUNCTION BOX



NOTE : LABEL ALL JUNCTION BOXES.

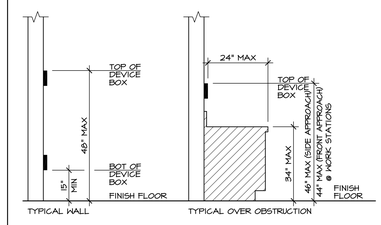
J-BOX MOUNTING DIAGRAM

SCALE: NTS | 3



FACEPLATE LAYOUT

SCALE: NTS | 4



NOTE:
FORWARD OR FRONT APPROACH FOR DEVICES MOUNTED ABOVE COUNTERS ASSUMES THAT DIRECTLY BELOW THE DEVICE, THE COUNTER HAS A 30" MIN HIGH BY 19" MIN DEEP CLEAR OPENING.

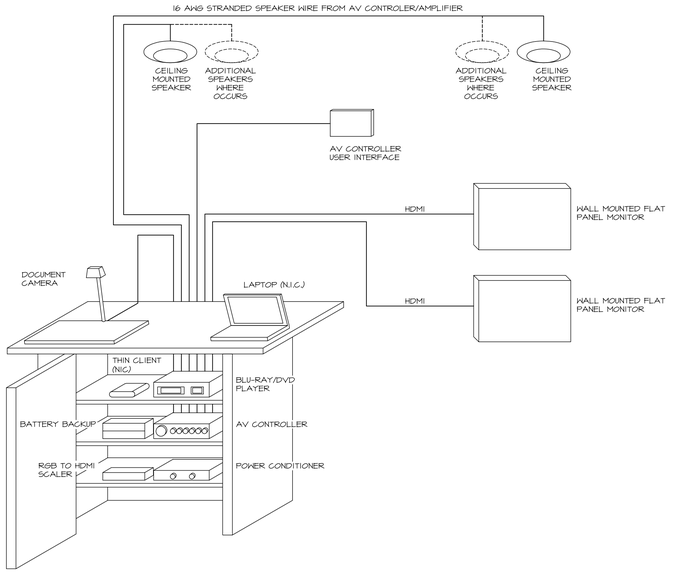
TYPICAL MOUNTING HEIGHTS

SCALE: NTS | 5

Addendum

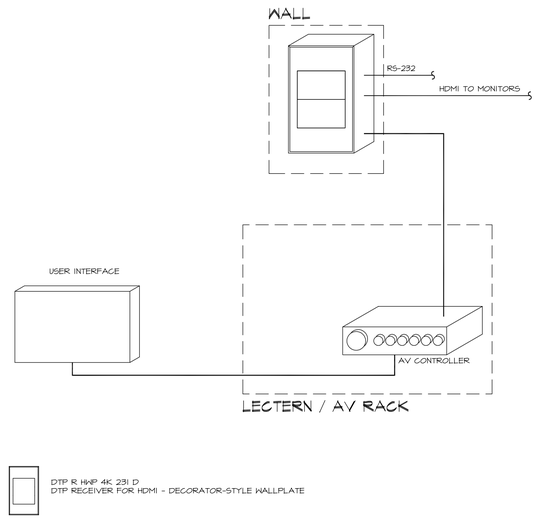
Engineer of Record	Division of the State Architect
	DSA Application No. 04-118720 / DSA File No. 13-01

APPROVALS



CLASSROOM LOGICAL DESIGN

SCALE: NTS | 6



DTP R HNP 4K 231 D
DTP RECEIVER FOR HDMI - DECORATOR-STYLE WALLPLATE

CLASSROOM WIRING DETAILS

SCALE: NTS | 7

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Architecture/Engineering
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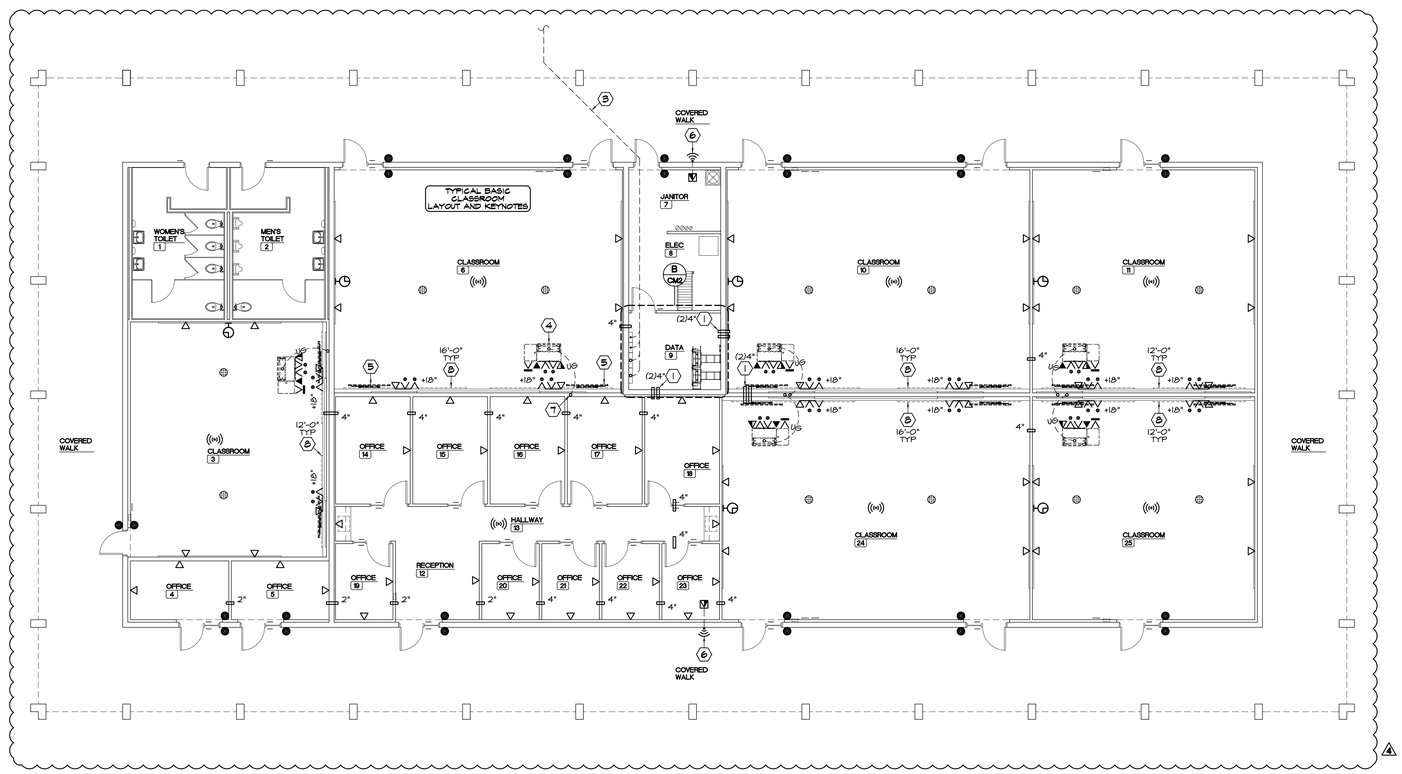
BUILDING 200, 300 AND 800 MODERNIZATION

Sheet Title
COMMUNICATIONS DETAILS

LICENSED ARCHITECT JIMMIE D. SANDERS No. C-17644 RENEW: 08-31-21 STATE OF CALIFORNIA

Document Date	Project Number
09-13-19	19-121V
Date Last Revised: 4 06-17-21	Reference Sheet: CM0.2
	Sheet Number: AD-4__CM0.2



COMMUNICATIONS PLAN - BUILDING 200 4

SCALE: 1/8" = 1'-0" | A

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Addendum

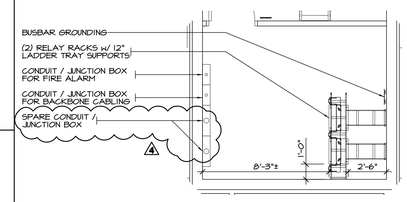
Engineer of Record

Division of the State Architect

DSA Application No. 04-118720

DSA File No. 13-01

APPROVALS



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DATA 9

SCALE: 1/4" = 1'-0" | B

KEYNOTES:

1. PVC WALL SLEEVE ABOVE CEILING - SIZE NOTED
2. CONDUIT ABOVE HARD LID CEILING - PROVIDED BY ELECTRICAL - SIZE NOTED
3. CONDUIT FOR BACKBONE CABLING - FOR CONTINUATION SEE SITE PLAN
4. LECTERN WITH INTEGRATED AV EQUIPMENT - SEE SPECIFICATIONS 4
5. INTERACTIVE FLAT PANEL MONITOR - SEE SPECIFICATIONS
6. EXTERIOR WIRELESS ACCESS POINT - PROVIDE CAT6A CABLES, DUAL UNO
7. (1) 1" AND (1) 2" PVC CONDUIT DOWN IN WALL TO BELOW FLOOR AND STUBBED UP TO LECTERN
8. WALL-MOUNTED TRACK SYSTEM FOR FLAT PANEL MONITOR, WIDTH NOTED - SEE SPECIFICATIONS AND SHEET sht A2.2, shh 4

LEGEND:

- WALL PORT FOR TELEPHONE/INTERCOM - CAT6A DATA
- WALL PORT - CAT6A DATA, DUAL UNO
- ISLAND PORT IN MOBILE LECTERN - CAT6A DATA, QUAD UNO
- DUAL FLOOR PORT - CAT 6A DATA
- CEILING PORT WIRELESS ACCESS ABOVE CEILING - CAT6A DATA, DUAL UNO
- SINGLE PORT WIRELESS ACCESS ABOVE CEILING - CAT6A DATA (VERIFY LOCATIONS)
- AUDIO-VIDEO INPUT - CAT6A SF/UTP TO ROOM AV SYSTEM
- AUDIO-VIDEO OUTPUT - CAT6A SF/UTP TO ROOM AV SYSTEM
- AUDIO-VIDEO USER INTERFACE - CAT6A SF/UTP TO ROOM AV SYSTEM
- WIRELESS ACCESS POINT, CEILING MOUNT - CAT6A DATA, DUAL UNO (WEATHERPROOF WHERE NOTED)
- WIRELESS ACCESS POINT, WALL MOUNT - CAT6A DATA (WEATHERPROOF WHERE NOTED)
- DOOR LOCK CARD READER
  1. SHALL OPERATE BOTH SWING DOORS
  2. SHALL OPERATE SWING DOOR AND ADJACENT SLIDING DOOR(S)
- CONDUIT FOR FUTURE DOOR LOCK CARD READER
- SLEEVE THRU WALL FOR STRUCTURED CABLING - SIZE NOTED
- -US- STRUCTURED CABLING CONDUIT UNDERGROUND
- RECESSED CEILING MOUNTED SPEAKER
- 12" WALL CLOCK (110 VOLT SYSTEM) - SEE SPECIFICATIONS

NOTES:

1. LABEL ALL PORTS ON FACE PLATES.
2. ALL CONDUIT BY ELECTRICAL CONTRACTOR.
3. FILL ALL VOID SPACE OF WALL SLEEVES AND EACH END OF CONDUIT ABOVE HARD LIDS WITH SOUND ATTENUATION BATT INSULATION.
4. ALL PBX SYSTEMS / PATCH PANELS TO BE INSTALLED IN RACK SYSTEM.
5. FOR ALL THROUGH-PENETRATION FIRESTOP DETAILS SEE SHEET shh AX5.9

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EL CENTRO, CA 92243
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Project Title
IMPERIAL VALLEY COLLEGE
BUILDING 200, 300 AND 800 MODERNIZATION

Sheet Title
COMMUNICATIONS PLAN

LICENSED ARCHITECT JIMMIE SANDERS No. 17644 RENEWAL 08-31-21 STATE OF CALIFORNIA

Document Date	Project Number
08-11-20	19-121V
Date Last Revised	Reference Sheet
4 06-17-21	CM2
	Sheet Number
	AD-4_CM2

Addendum

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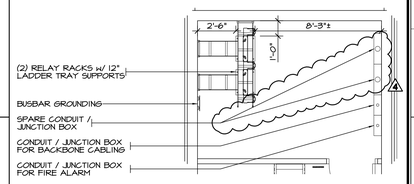
Division of the State Architect

DSA Application No. 04-118720

DSA File No. 13-01

APPROVALS



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DATA 14

SCALE: 1/4" = 1'-0" | B

KEYNOTES:

1. PVC WALL SLEEVE ABOVE CEILING - SIZE NOTED
2. CONDUIT ABOVE HARD LID CEILING - PROVIDED BY ELECTRICAL - SIZE NOTED
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4. LECTERN WITH INTEGRATED AV EQUIPMENT - SEE SPECIFICATIONS 4
5. INTERACTIVE FLAT PANEL MONITOR - SEE SPECIFICATIONS
6. EXTERIOR WIRELESS ACCESS POINT - PROVIDE CAT6A CABLES, DUAL UNO
7. (1) 1" AND (1) 2" PVC CONDUIT DOWN IN WALL TO BELOW FLOOR AND STUBBED UP TO LECTERN 4
8. PVC CONDUIT IN WALL UP TO CEILING - SIZE NOTED
9. WALL-MOUNTED TRACK SYSTEM FOR FLAT PANEL MONITOR, WIDTH NOTED - SEE SPECIFICATIONS AND SHEET AM1 AD-2_SD

LEGEND:

- ▼ WALL PORT FOR TELEPHONE/INTERCOM - CAT6A DATA
- ▽ WALL PORT - CAT6A DATA, DUAL UNO
- ▼ ISLAND PORT IN MOBILE LECTERN - CAT6A DATA, QUAD UNO
- ◎ DUAL FLOOR PORT - CAT 6A DATA
- Ⓦ CEILING PORT WIRELESS ACCESS ABOVE CEILING - CAT6A DATA, DUAL UNO
- ☒ SINGLE PORT WIRELESS ACCESS ABOVE CEILING - CAT6A DATA (VERIFY LOCATIONS)
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  1. SHALL OPERATE BOTH SWING DOORS
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- ○ CONDUIT FOR FUTURE DOOR LOCK CARD READER
- SLEEVE THRU WALL FOR STRUCTURED CABLING - SIZE NOTED
- -U6- STRUCTURED CABLING CONDUIT UNDERGROUND
- ◍ RECESSED CEILING MOUNTED SPEAKER
- 12" WALL CLOCK (110 VOLT SYSTEM) - SEE SPECIFICATIONS

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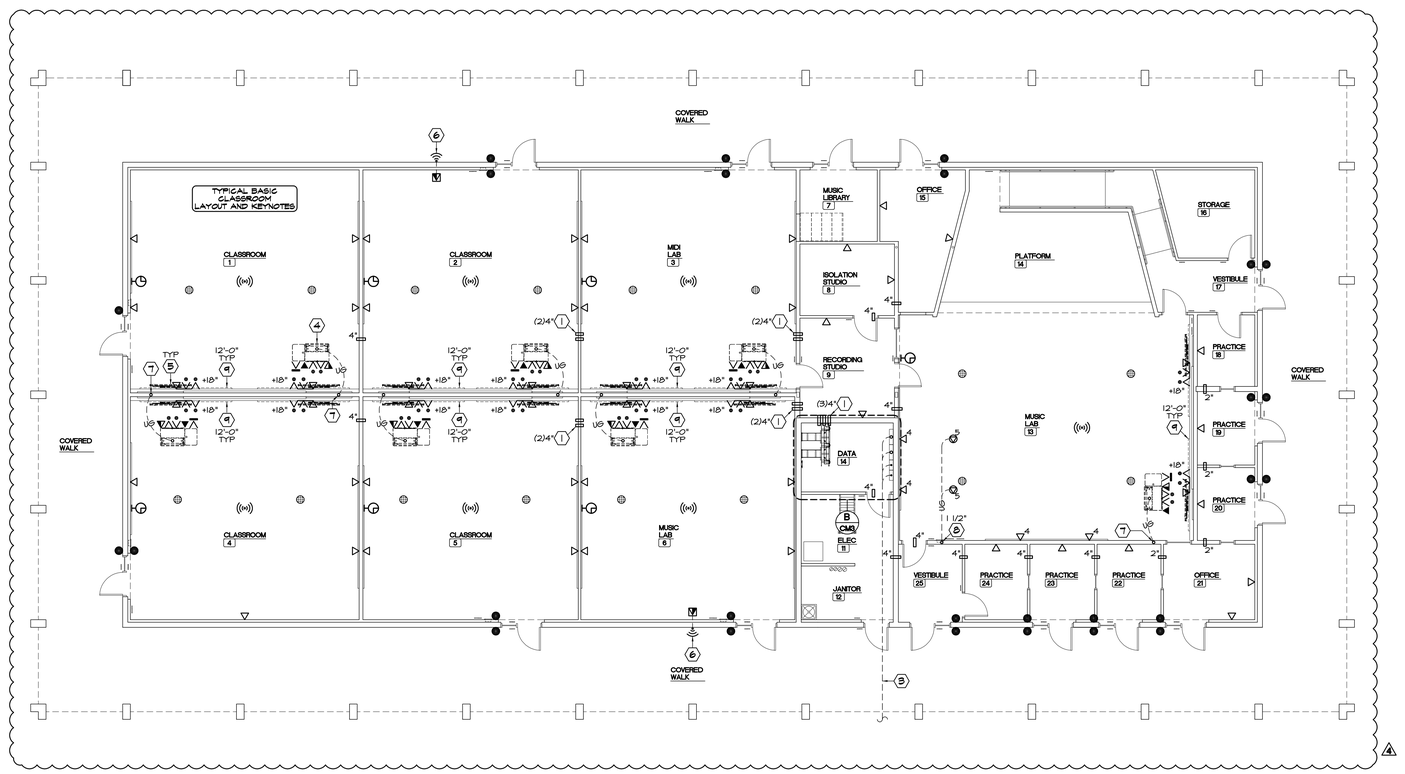
4. ALL PBX SYSTEMS / PATCH PANELS TO BE INSTALLED IN RACK SYSTEM.
5. FOR ALL THROUGH-PENETRATION FIRESTOP DETAILS SEE SHEET AM1 AX5.9



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COMMUNICATIONS PLAN - BUILDING 300 4

SCALE: 1/8" = 1'-0" | A

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Project Title

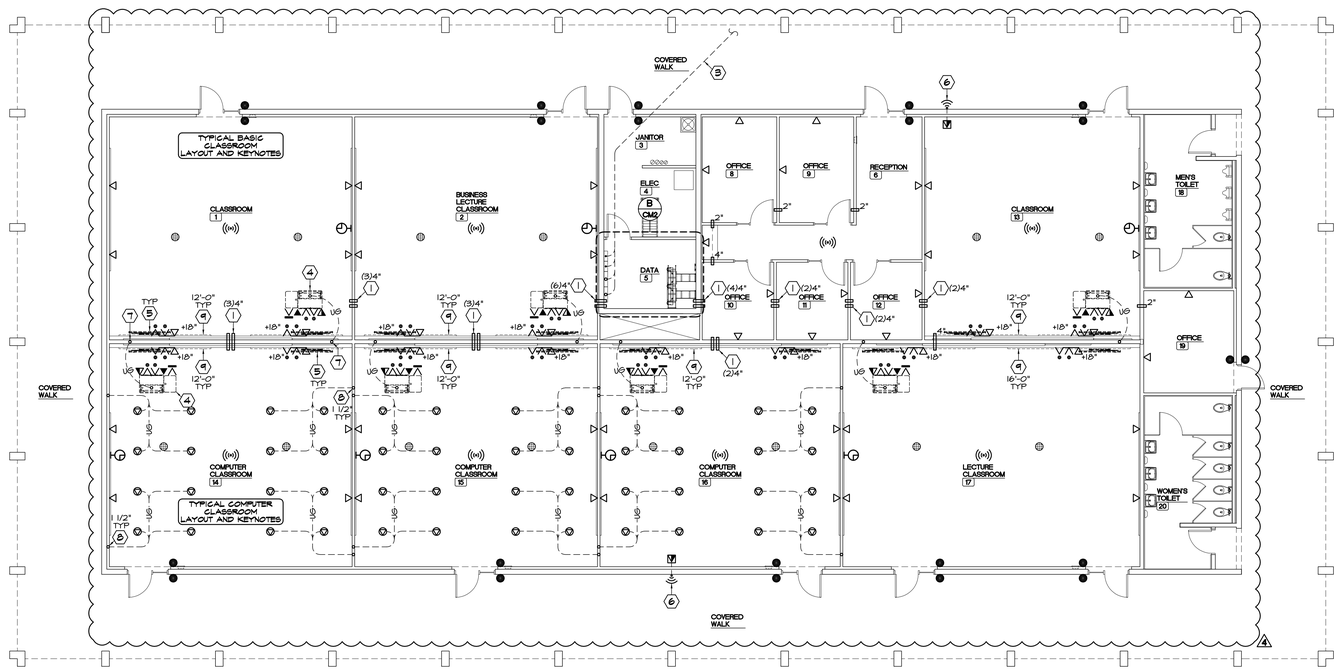
IMPERIAL VALLEY COLLEGE
BUILDING 200, 300 AND 800 MODERNIZATION

Sheet Title

COMMUNICATIONS PLAN

LICENSED ARCHITECT JIMMIE L. SANDERS No. C-17644 RENEWAL DATE 08-31-21 STATE OF CALIFORNIA

Document Date	Project Number
09-13-19	19-121V
Date Last Revised	Reference Sheet
4 06-17-21	CM3
	Sheet Number
	AD-4_CM3



COMMUNICATIONS PLAN - BUILDING 800 4

SCALE: 1/8" = 1'-0" | A

Addendum

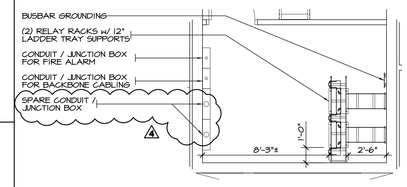
Engineer of Record

Division of the State Architect

DSA Application No. 04-118720

DSA File No. 13-01

APPROVALS



N

DATA 5

SCALE: 1/4" = 1'-0" | B

KEYNOTES:

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9. WALL-MOUNTED TRACK SYSTEM FOR FLAT PANEL MONITOR, WIDTH NOTED - SEE SPECIFICATIONS AND SHEET AV3.3

LEGEND:

- WALL PORT FOR TELEPHONE/INTERCOM - CAT6A DATA
- WALL PORT - CAT6A DATA, DUAL UNO
- ISLAND PORT IN MOBILE LECTERN - CAT6A DATA, QUAD UNO
- DUAL FLOOR PORT - CAT 6A DATA
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- CONDUIT FOR FUTURE DOOR LOCK CARD READER
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- -UG- STRUCTURED CABLING CONDUIT UNDERGROUND
- RECESSED CEILING MOUNTED SPEAKER
- 12" WALL CLOCK (110 VOLT SYSTEM) - SEE SPECIFICATIONS

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Project Title
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BUILDING 200, 300 AND 800 MODERNIZATION

Sheet Title
COMMUNICATIONS PLAN

LICENSED ARCHITECT JIMMIE D. SANDERS No. C-17644 RENEWAL DATE 08-31-21 STATE OF CALIFORNIA

Document Date	Project Number
09-13-19	19-121V
Date Last Revised	Reference Sheet
4 06-17-21	CM8
	Sheet Number
	AD-4_CM8

Imperial Valley College RFP No 20-21-18		**200, 300, 800 Modernization** RFI Questions and Responses
Question	Respondent	Answer
1. We received the bid documents for the above referenced project but were unable to locate the engineer's estimate. If possible, please reply back to this email with the engineer's estimate or kindly forward this to the person best able to provide this information.	DISTRICT	The current construction estimate is $14,500,000
2. There's a bid for Buildings 200 & 300 along with modernization. Can someone please confirm if new modular construction will be part of the bid / modernization.	DISTRICT	No, new modular construction will not be part of this project.
3. Is this project a re-bid?	DISTRICT	Yes, this is a re-bid. The project was originally advertised as Bid No 20-21-05 in September 2020.
4. Will a hazardous materials report be provided? Will quantities be provided in the report?	DISTRICT	See attached hazardous materials report. Quantities are not provided in the report.
5. Are there any union labor requirements beyond prevailing wage (PLA, PSA, CWA, etc.) on this project?	Sanders	No
6. Sheet CM0.2 has an AV schematic for a "Band Room" however when looking at the floor plans there are no room called "Band room" but there is a "Music Lab" room. Please clarify if 11/CM0.2, 10/CM0.2 and 9/CM0 should apply to the Music Lab room?	Sanders	See Addendum 04

7.	Sheet CM0.2 has an AV schematic for a "Conference Room" however when looking at the floor plans there are no conference rooms shown. Please clarify if there are any conference rooms on this project.	Sanders	See Addendum 04
8.	The NEC NP3250W projector that was called out in spec section 115219 has been discontinued a long time ago. Please provide a current model number.	Sanders	See Addendum 04
9.	The NEC LCD4620-2-AV flat panel has been discontinued and the manufacturer does not have a direct replacement. Please provide a current model number.	Sanders	See Addendum 04
10.	The WolfVision Eye-12 has been discontinued. The current model is Eye-14. Please confirm if the WoflVision Eye-14 is acceptable.	Sanders	See Addendum 04
11.	The Panasonic DMP-BDT110 Blu-ray player is discontinued. Will a Panasonic DP-UB420-K be an acceptable replacement? If not, then please provide an updated model number.	Sanders	See Addnedum 04
12.	The Crestron MPS-250 switcher is discontinued and the manufacturer does not have a direct replacement. Please provide an updated model number	Sanders	See Addendum 04
13.	The Crestron C2N-FT-TPS4 flip top touch panel is discontinued and the manufacturer does not have a direct replacement. Please provide an updated model number.	Sanders	See Addendum 04

14.	The Crestron QuickMedia (QM-RX) product line has been discontinued a long time ago and the manufacturer does not have a direct replacement. Please provide an updated model number.	Sanders	See Addendum 04
15.	The Crestron CEN-UPS1250 uninterruptible power supply is discontinued and the manufacturer does not have a direct replacement. Please provide an updated model number.	Sanders	See Addendum 04
16.	Spec section 275126 calls out for Assisted Listening Systems in a Gym and Conference rooms however when looking at the floor plans those rooms are not found. Please clarify if there are any Gyms or Conference rooms that will need assisted listening for this project.	Sanders	See Addendum 04
17.	Please clarify how many Assisted Listening receivers should be provided. The specs say "as per drawings, (2) minimum" however when looking at the drawings there is no additional info for this. Does "(2) minimum" mean 2 in EACH class or 2 for whole school.	Sanders	See Addendum 04
18.	I noticed that our TF1099 waste containers were spec'd for the project but that waste container has since been discontinued. Just wondering if the project is back on and if one of our other waste containers could be considered for the project. (Wausau Tile)	Sanders	This item shall be addressed during the submittal process.

19.	AS1 calls for "Proposed Accessible Parking" and references details on sheet ASX3. Sheet ASX3 was revised in Addendum 1 and seems to indicate that this work is existing. Please review and clarify if these ADA upgrades have already been completed.	Sanders	The ADA upgrades have already been completed.
20.	ASX3 was revised in Addendum 1 to add the word "Existing" to a few of the details that show ADA parking upgrades. These details however, reference sign details that do not indicate that they are existing. Is any of the work in details 7, 8, 9, 10 or 11 / ASX3 new?	Sanders	The ADA upgrades have already been completed.
21.	Spec section 12 21 23 Roll-Up Window Blinds, specifies Mecho Slimline Bracket hardware which has been discontinued. According to MechoShade, the Mecho5 or Mecho5x would be equal replacements. Please let us know if this is acceptable.	Sanders	This item shall be addressed during the submittal process.
22.	Spec section 12 21 23 Roll-Up Window Blinds do not specify the material openness. MechoShade has recommended Soho 1600 3%. Please let us know if this is acceptable.	Sanders	This item shall be addressed during the submittal process.
23.	Rubber-resilient tile flooring spec 09 65 19.13 part 2.3 lists Multi colored tiles, Solid color tiles and Patterned tiles. The spec section lists Multi colored and Solid colored as 35.5" tiles and patterned tiles as 12" tiles. The material legend A2.7, A3.7 and A8.7 shows rubber tiles as 18". Please clarify which tiles and sizes we are to figure.	Sanders	See Addnedum 02

24.	The phasing plans do not incorporate the site utility work. Per the pre-bid meeting and RFP, the site electrical work is to be completed during phase 1 but no mention on wet utilities. We will assume that they happen at the same time. Please advise us if there have been any directives on when or how the work outside of the temp fence areas are to be completed.	Sanders	See Addendum 02
25.	Structured Cabling specification section 27 10 00 calls for copper communication cabling to be Cat6. Plan sheets CM2-CM8 call for communication cabling to be CATGA. Details on CM0.2 call for the cabling to be CATS. Please clarify if CATS or CAT6A is required for the copper communication cabling.	Sanders	See Addendum 04
26.	Please provide reflective ceiling demo plans or provide as-built drawings. The ceiling demolition and hazardous abatement scope is unclear. The abatement report does not include quantities for items such as the light ballasts that are to be removed. The classrooms have a variety of different ceiling types which are also not called out in the hazmat report.	Sanders	See Addendum 04
27.	Unless instructed otherwise, we will assume that all classrooms and offices will be completely empty of furniture and equipment prior to demo and abatement. Plans do not specifically call for removal or salvage of any white boards or other classroom furnishings.	DISTRICT	Yes, all classrooms and offices will be completely empty of furniture and equipment including white boards prior to demo and abatement.

28.	Please advise if we are to salvage and turn over to the district existing door hardware that is being removed.	DISTRICT	All lock sets & door hardware to be returned to the district.
29.	Please provide the previous hazmat report by Western Environmental dated 12/16/19 that is mentioned in the current report.	DISTRICT	See Addnedum 02
30.	The Asbestos Abatement Plan dated April 2021 from Western Environmental indicates that the contractor is to field verify the number of layers of flooring prior to bid submittal. The demo plans do not indicate quantities or types of flooring to be removed. It is not practical for us to perform destructive testing prior to bid to determine the appropriate amount of flooring layers and locations. Please provide a quantity of flooring removal to be included in our bid, or advise if this will be handled by an allowance?	Sanders	Assume a single layer of asbestos flooring and mastic to be removed at every room.
31.	Page 28 of the RFP, section 00 45 19 contains the Non-Collusion Declaration. At the top, there are three lines to fill out and two of which are for the bidder's name. Please clarify if this is correct or if one of these line items should be for something else.	DISTRICT	The top lines of the Non-Collusion Declaration page should be completed as follows: Line 1 (Under signee's Title), Line 2 (Companies Name), Line 3 (Companies Name Again)

32.	The Hazmat report states that all material not sampled within the asbestos & lead paint sampling report dated 12/16/19 are assumed asbestos. We do not have a report with that date nor do we have the lab results from the current report dated April 2021. We have no way of knowing what was tested or has not been tested. Please consider handling abatement of unknown materials with an allowance. If we are to assume that everything is hazardous, it will be much more expensive and bidders will not make the same assumptions.	Sanders	See Addnedum 02
33.	Bldg. 300 Music Lab 13 on A3. 7 is hatched as carpet according to the legend on the same page but finish schedule AX1 .1 shows the Music lab as Rubber Tile. Please clarify which is correct.	Sanders	See Addnedum 02
34.	Bldg. 200 Offices 15 - 23 on A2.7 are hatched as carpet according to the legend on the same page but finish schedule AX1 .1 shows those offices as Rubber Tile. Please clarify which is correct.	Sanders	See Addnedum 02
35.	Please provide the Imperial Irrigation District plans and identify the scope of work that will be the responsibility of IID and the scope of work that should be assumed by the electrician.	Sanders	See sheet ES1.1 and Addendum 04
36.	On page 2 of the RFP (Notice Calling for Bids), it states that the bid submission is to be emailed to construction-facilities@imperial.edu on Bid Day at 2:00 PM. However, on page 4 (Instructions to Bidders), section 1.2 states that bids are to be submitted in a sealed envelope. Please clarify which is correct.	DISTRICT	All bid submission is to be emailed to construction-facilities@imperial.edu on Bid Day at 2:00 PM. All bidders shall disregard section 1.2 on page 4.

37.	The subcontractor listings request Name, Address, Trade, License, & DIR. Is it acceptable to list the company name, trade, & city instead?	DISTRICT	See Addendum 02
38.	The following items are discontinued. Please provide an alternate: NEC NP3250W - Projector is a discontinued item, Crestron CEN UPS 1250 is discontinued, Crestron QM-RX is discontinued, NEC LCD462-2 AV Monitor is discontinued	Sanders	See Addendum04
39.	Sheets S2.2, S3.2, & SB.2 contain a keynote 2 that references 6/S02. This keynote is supposed to indicate how to fill in penetrations into the existing roof deck. The detail that is referenced is for a slab infill. Please clarify the correct detail.	Sanders	See Addendum 02
40.	Provide wall type for Building #200 West furred out wall. Location: Offices 14 and 19, Hallway 13.	Sanders	See Addendum 02
41.	Specify clip size for furred out wall attachment to CMU per detail AX5.2/15	Sanders	See Addendum 04
42.	Wall type D shows 2" metal stud wall. Is it acceptable to use the typical 2 1/2" metal stud?	Sanders	Yes, See Addendum 04
43.	Det. AX5.2/22 shows double nested track for metal stud wall top connection, is it acceptable to use slotted top track? If not acceptable, please provide sizes for deep leg double nested tracks.	Sanders	This is a field question to be addressed during construction
44.	Is the metal stud bridging per Det. AX5.2/23 required on furred out walls attached with clips to existing CMU wall per AX5.2/15?	Sanders	Yes

45.	Det. AX5.2/7 shows backing to be 12" minimum from edge of stud punch-out to edge of 6" notched track backing. Does it apply to MEP framed penetrations?	Sanders	Yes, it applies to MEP
46.	Det. AX5.2/5 shows bottom track connection with Hilti HIT-HY200. Please provide washer plate size.	Sanders	This is a field question to be addressed during construction
47.	Are the RFI's from the Original Bid Solicitation going to be answered? Please see the attached	DISTRICT	No
48.	The project manual does not contain contracting documents such as the specs distributed during the bid invite, 00 11 13 – 00 73 00.	DISTRICT	See Addendum 04
49.	And specs for division 07 42 13 – Metal Wall Panels appears to be in a preliminary phase due to the text in red, is this the complete spec	Sanders	This no longer exists in the latest specs and addendums
50.	Fiber Backbone Cable: Sheet CM0.1, confirm fiber backbone cable is required for this project? If so, please confirm where new fiber cable is required? Also confirm type of fiber cable required?	Sanders	See Addendum 04
51.	Telephone Backbone Cable: Sheet CM0.1, Confirm Telephone backbone cable is required for this project? Also, confirm type of telephone cable required?	Sanders	See Addendum 04
52.	Existing MDF: Sheet CM0.1, Sheet Note-3 identifies the exist MDF in Bldg. 900. Please confirm location of MDF and pathway to MDF for new fiber if required?	Sanders	See Addendum 01

53.	Innerduct: Sheet CM0.1. Please confirm if new innerduct is required?	Sanders	See Addendum 01
54.	Reconnecting existing cables. Sheet CM0.1, Sheet Note-11 indicates to pull back existing fiber and copper cables and reconnect after new conduit is installed. Please confirm how manty existing fiber and copper cables have to be removed and reconnected? Also, I do not see Note-11 shown on the site plan?	Sanders	See Addendum 01
55.	Please provide mounting detail for flush wall mounted Lecture hall screen if applicable	Sanders	See Addendum 02
56.	CM0.2 seems be to be overlapping with another sheet. Please provide clean CM0.2 sheet.	Sanders	See Addendum 04
57.	Basic Classroom: No AV inputs or Outputs are shown on layout. Please specify quantity and location for each.	Sanders	See Addendum 04
58.	No AV inputs or Outputs are shown on layout. Please specify quantity and location for each.	Sanders	See Addendum 04
59.	Please supply the Asbestos report to verify that all areas to be worked on were tested is needed.	Sanders	See Addendum 02
60.	Please supply the project manual for procurement and contracting spec.	Sanders	See Addendum 04
61.	Please supply the material identification of existing walls in music room.	Sanders	See Addendum 02

62.	2.2 - A & B, 2.3 - A & B: There are several different profiles, sizes, solid and multi-color options listed. Please clarify	Sanders	Please specify sheet or page
63.	All Classrooms are drawn with two different types of rubber floor. Please direct on the material selections for each Material selection needed at Data Rooms.	Sanders	See Addendum 02
64.	The material legend as drawn does not match the floor finishes on AX1.1 Finish Schedule. Please clarify.	Sanders	See Addendum 04
65.	The foundation plans, nor the demo plans or the architectural plans show the bathroom floors recessed although page AX5.1 detail 16 shows a mortar bed at the bathroom floors. A mortar bed is only needed if the slab is recessed to achieve a slope to drain effect. Please clarify.	Sanders	16/AX5.1 is a typical detail. Bathroom floors are not recessed.
66.	There is some conflicting information regarding the Construction Schedule in the documents: The IVC Request for Bids states the following on Pages 31 and 83: 569 days to Substantial Completion with 60 days for Contract Completion = 629 days. The Presentation contained the following information which totals 629 days. Additionally, The Presentation also stated the following timelines which do not line up with the same schedule (see formulas below) based on the following:	DISTRICT	The IVC request for bids state the following on pages 31 and 83: The Contractor shall achieve Substantial Completion of the Work within Five Hundred Sixty- Nine (569) calendar days after the date established in the Notice to Proceed issued by or on behalf of the District for commencement of the Work. There is no mention of 60 additional day for contract completion. Regarding the presentation that was handed out at the bid walk, the following was shown for the schedule: Construction 509 Days, Closeout 60 Days for a total Duration of 569 Calendar Days.

67.	There is conflicting information regarding the Allowances: Section 01 21 00 (1.01) - total allowance $484,000. IVC request for bids shows $450,000 on pages 12 and 31.	Sanders	See Addendum 04
68.	Sheet AS5 does not appear to show all the new utilities, only existing. Please provide a clear drawing depicting the scope of work for the Site Utilities other than referring to the other drawings. This is important for coordination of all utility trenching and patching.	Sanders	See Addendum 01, plumbing, electrical and communications site plans.
69.	Sheet AS5 refers to Hardscape Sheet AS4 for the New Storm Drain Line – nothing is shown for Storm Drain on AS4.	Sanders	See Addendum 04
70.	a. Key Notes 3,4,5,9, 11 are not shown on the drawing. b. Key Note #16 is mislabeled on the drawing as Key Note 21 (shown twice).	Sanders	Please specify which sheet
71.	Keynote #11 is missing from plan.	Sanders	Please specify which sheet
72.	Key Note E refers to 30,000 sf Safe Dispersal Area; plan shows Key Note E as FACP & Annun. @ 3100 & FACP @ 3200.	Sanders	See Addendum 01
73.	Key Notes D and H are not shown on plan.	Sanders	Please specify which sheet
74.	Sheet P0.3 - Keynotes 12, 13. 19. 20 & 21 are not shown on drawing.	Sanders	See Addendum 04
75.	Detail 1/ASX2 shows a single 4'6" wide gate but refers to Note 8 Steel Gate per 12/ASX2 which is a 6' wide double gate.	Sanders	See Addendum 01

76.	Sheet A2.1.3 calls for Insulation at exterior furred walls (R-19 at 6", R-11 at 4"); A2.2 Keynote 9 calls for R-19 in all exterior furred walls.	Sanders	See Addendum 04
77.	Sheet A2.3 Reflected Ceiling Plan shows the below snapshot in the corridor where the offices are at Grids 3-6 & F-D but there is no note or symbol to identify what these are.	Sanders	See Addendum 04
78.	Section D/A2.2 is not shown on the RCP A2.3	Sanders	Section cut is shown on A2.3, next to name designation for Men's Toilet (Rm 2)
79.	Detail A/AX6.1 (which may not be job specific) states the existing roof is 1 5/8" corrugated metal deck. Details 1&4/SX4 show a "standard" metal pan deck and detail 3/SX4 shows a 3" metal pan deck. It is very important to know which is correct in order to calculate the correct amount of spray foam. Please confirm which type of metal deck is existing and what the depth of the flutes is.	Sanders	Detail A/AX6.1 is specific to this job and the existing metal roof deck.
80.	Please confirm detail 15/AX5.1 is a "standard" stage lighting detail and that there is no batt insulation required at the roof, only spray foam.	Sanders	See Addendum 04
81.	STRUCTURED CABLING 27 10 00 - 1.07 PERFORMANCE STANDARDS Voice and Data Category 6, to TIA/EIA Category 6, 2.02 COPPER COMMUNICATIONS CABLING: CAT6 UTP and Drawings CM0.2 Detail 4 and CM2, CM3 and CM8 Legend are in conflict. Will the requirement be Category 6 or Category 6A?	Sanders	See Addendum 04

82.	The window schedule on sheet AX1.3 shows windows # 25, 29-36 as “Sound Window-See Specifications”. Are these to be hollow metal window frames? What is the STC rating required?	Sanders	See Addendum 04
83.	There is no specification for sound rated windows. Please advise	Sanders	See Addendum 04
84.	Window # 29 is in the same wall and adjacent to door # 19. Door # 19 is not listed as a sound door in the door schedule. Is it supposed to be a sound door?	Sanders	See Addendum 04
85.	Doors # 18, 21, 23 are listed as “Sound Door-See Specifications” in the door schedule. There is no specification for sound rated doors. Is there a required STC rating for these doors?	Sanders	See Addendum 04
86.	Window #25 in Building 300 is not shown, but Solatube #25 is shown on the roof plan. Should #25 be a Solatube and not a sound rated window? Please confirm.	Sanders	See Addendum 04
87.	The Bid Form in the ITB has one (1) Alternate, but the Bid Form in the Specifications has three (3) Alternates. Which form are we to use? How many Alternates are there?	Sanders	See Addendum 04

88.	The finish legend and the finish floor plan show a 18x18 rubber tile, but the specs are calling for 36x36 and 12x12. Also, there's walk off Carpet or mats called out in the specs which are not on the finish plan, and there is a Spec section for Carpet Tile and a Spec Section for Stone, which isn't on the plans. What specs are correct or are we doing a V.E. off of the finish legend?	Sanders	See Addendum 02
89.	What is the extent of the exterior paint and please clarify the interior paint to be used.	Sanders	See Reflected Ceiling Plans for exterior paint and Interior Elevations for interior paint, as well as spec section 09 91 00.
90.	Addendum 2 states that the bid form has the wrong dollar amount for the unforeseen conditions allowance. It says that the amount included in the 01 24 00 Allowances Specification Section is correct. This spec section is not included in the project manual. It was included during the 2020 bid but has since been removed from the project manual. Please provide the spec section or clarify the allowance amount.	Sanders	See Addendum 04
91.	Please consider providing an updated bid form with the correct allowance amount.	Sanders	See Addendum 04
92.	Addendum 2 stated that Building 200 Rooms 15-23 as well as Building 300 Room 13 should be carpet tile. The flooring plans for these buildings still show all of these rooms to be sheet carpet and they were not replaced in the addendum. Nor was the finish schedule. Please review and clarify if these rooms are sheet carpet or carpet tiles.	Sanders	See Addendum 02

93.	Information Requested: Edwards EST3 Voice/System is an Acceptable Manufacturer or Approve Equivalent Equal product substitution replacement for the Simplex FACP. Please note ENKO Systems is an Edwards Authorized U.L listed Fire & Life safety Strategic partner.	Sanders	School campus uses Johnson Controls / Simplex FACP. This project is an extension of that system and cannot be subsituted.