CIVIC-RECREATIONAL-INDUSTRIAL AUTHORITY REGULAR MEETING AGENDA

NOVEMBER 12, 2025 AT 9:00 AM

CHAIRMAN ERIC BENAVIDEZ
V. CHAIRMAN RONALD WHITTEMORE
BOARD MEMBER SEAN LEE
BOARD MEMBER ALEX BAUMAN
BOARD MEMBER RONALD MCPEAK

LOCATION: City Council Chambers, 15651 Mayor Dave Way
City of Industry, California

Agenda Items: Members of the public may address the Authority on any matter listed on the Agenda. In order to conduct a timely meeting, there will be a one-minute time limit per person for any matter listed on the Agenda. Anyone wishing to speak to the Authority is asked to complete a Speaker's Card which can be found at the back of the room and at each podium. The completed card should be submitted to the City Clerk prior to the Agenda item being called and prior to the individual being heard by the Authority.

Public Comments (Non-Agenda Items): Anyone wishing to address the Authority on an item not on the Agenda may do so during the "Public Comments" period. In order to conduct a timely meeting, there will be a one-minute time limit per person for the Public Comments portion of the Agenda. State law prohibits the Authority from taking action on a specific item unless it appears on the posted Agenda. Anyone wishing to speak to the Authority is asked to complete a Speaker's Card which can be found at the back of the room and at each podium. The completed card should be submitted to the City Clerk prior to the Agenda item being called by the City Clerk and prior to the individual being heard by the Authority.

At the time of publication, no Board Member intends to take part in the meeting remotely under the provisions of AB 2449. Should that change between the time of publication and the start of the meeting, a live webcasting of the meeting will be accessible via the link, meeting ID, and meeting passcode listed below. Whenever possible, an announcement will be made at the start of the meeting via the live webcast to confirm whether or not a Board Member will join remotely. If they will not be joining remotely, then the live webcast will terminate after the announcement.

www.microsoft.com/microsoft-teams/join-a-meeting
Meeting ID: 224 994 557 732 67
Passcode: 362RL32M

Download Teams | Join on the web
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+1 657-204-3264
Phone Conference ID: 571 821 180#

AMERICANS WITH DISABILITIES ACT:

In compliance with the ADA, if you need special assistance to participate in any Public meeting (including assisted listening devices), please contact the City Clerk's Office (626) 333-2211. Notification of at least 48 hours prior to the meeting will assist staff in assuring that reasonable arrangements can be made to provide accessibility to the meeting.

AGENDAS AND OTHER WRITINGS:

In compliance with SB 343, staff reports and other public records permissible for disclosure related to open session agenda items are available at City Hall, 15625 Mayor Dave Way, City of Industry, California, at the office of the City Clerk during regular business hours, Monday through Thursday 8:00 a.m. to 5:00 p.m., Fridays 8:00 a.m. to 4:00 p.m. Any person with a question concerning any agenda item may call the City Clerk's Office at (626) 333-2211.

1. Call to Order

2. Flag Salute

3. AB 2449 Vote on Emergency Circumstances (if necessary)

4. Roll Call

5. Presentations

6. CONSENT CALENDAR

6.1. Consideration of the Register of Demands submitted by the Finance Department for November 12, 2025

RECOMMENDED ACTION: Approve the Register of Demands and authorize the appropriate personnel to pay the bills.

6.2. Consideration of the Register of Demands submitted by CNC Equestrian Management Services for Industry Hills Expo Center for September 2025

RECOMMENDED ACTION: Receive and file.

6.3. Consideration of Resolution No. CRIA 2025-06, Confirming the Continued Existence of an Emergency Condition at the EXPO Center, and Declaring that the Public Interest and Necessity Require Certain Work to be Performed without formal Competitive Bidding Pursuant to California Public Contract Code Section 22050 and Section 3.52.110 of the City's Municipal Code

RECOMMENDED ACTION: Adopt Resolution No. CRIA 2025-06.

6.4. Consideration of authorization to advertise for public bids for Contract No. EXPO-2145, Audio, Video and Lighting Upgrades at Grand Arena, for an estimated cost of $9,266,425.00 (MP 01-34 #33)

RECOMMENDED ACTION: Approve the plans and specifications and authorize the solicitation of public bids.

7. ACTION ITEMS

7.1. Presentation and discussion regarding the Civic-Recreational-Industrial Authority's Financial Report for September 30, 2025

RECOMMENDED ACTION: Receive and file the report.

7.2. Update on the Expo Center

RECOMMENDED ACTION: Receive and file.

8. PUBLIC HEARINGS-NONE

9. CLOSED SESSION-NONE

10. EXECUTIVE DIRECTOR COMMUNICATIONS

11. AB 1234 REPORTS

12. BOARD MEMBER COMMUNICATIONS

13. PUBLIC COMMENTS

14. Adjournment. The next regular Civic-Recreational-Industrial Authority Meeting is Wednesday, December 10, 2025, at 9:00 AM.

ITEM NO. 6.1

CIVIC-RECREATIONAL-INDUSTRIAL AUTHORITY

AUTHORIZATION FOR PAYMENT OF BILLS

Board Meeting November 12, 2025

FUND	DESCRIPTION	DISBURSEMENTS
121	CRIA - CAPITAL IMPROVEMENT	455,420.46
360	INDUSTRY HILLS EXPO OPERATING ACCOUNT	198,908.40
TOTAL ALL FUNDS		654,328.86

BANK	DESCRIPTION	DISBURSEMENTS
WFCK	WELLS FARGO CHECKING	654,328.86
TOTAL ALL BANKS		654,328.86

APPROVED PER EXECUTIVE DIRECTOR _____

DATE 11/6/25

Civic-Recreational-Industrial Authority
Board Meeting
November 12, 2025

Check	Date			Payee Name	Check Amount
CRIA.WF.CHK - CRIA Wells Fargo Checking					
12313	10/22/2025			**VALLEY VISTA SERVICES, INC**	$3,118.61
	Invoice	Date	Description	Amount	
	2898804	10/01/2025	ORGANIC BINS/LANDSCAPE MAINT - CRIA	$2,627.16	
	2898564	10/01/2025	IH RODEO/STORAGE BOXES - OCT 2025	$491.45	
12314	10/29/2025			**CRIA-EQUESTRIAN CENTER**	$75,000.00
	Invoice	Date	Description	Amount	
	SEPT-25	10/28/2025	REIMBURSEMENT FOR SEPTEMBER 2025 OPERATING	$75,000.00	
12315	11/12/2025			**ACTUM-E, LLC**	$6,000.00
	Invoice	Date	Description	Amount	
	202509-0279	09/30/2025	PUBLIC RELATIONS CONSULTING SVC-EXPO SEPT 20:	$6,000.00	
12316	11/12/2025			**BLAKE AIR CONDITIONING COMPANY**	$601.35
	Invoice	Date	Description	Amount	
	69376	09/30/2025	CONTINGENCY/NON ROUTINE HVAC MAINT@EXPO CI	$206.10	
	69261	09/10/2025	INSPECTING HVAC SYSTEM RECEPTION AREA@EXPC	$395.25	
12317	11/12/2025			**CITY OF INDUSTRY**	$705.09
	Invoice	Date	Description	Amount	
	2026-00000647	09/30/2025	SEPT 2025 FUEL COSTS	$705.09	
12318	11/12/2025			**CNC ENGINEERING**	$135,776.25
	Invoice	Date	Description	Amount	
	513690	10/30/2025	EXPO CENTER - STANDARDS OF FACILITIES MAINTEN	$31,920.00	
	513676	10/30/2025	PAVILION UPGRADES	$45,910.00	
	513677	10/30/2025	PAVILION UPGRADES	$615.00	

Civic-Recreational-Industrial Authority
Board Meeting
November 12, 2025

Check	Date		Payee Name	Check Amount
CRIA.WF.CHK - CRIA Wells Fargo Checking				
	513678	10/30/2025	EXPO CENTER ALARM SYSTEM UPGRADES	$34,503.75
	513679	10/30/2025	EXPO CENTER AUDIO/VIDEO UPGRADES	$9,095.00
	513680	10/30/2025	EXPO CENTER OFFICE IMPROVEMENTS	$435.00
	513681	10/30/2025	MISCELLANEOUS TRAILS LIGHTING IMPROVEMENTS /	$10,933.75
	513682	10/30/2025	SECURITY CAMERA INSTALLATION AT EXPO CENTER	$2,363.75
12319	11/12/2025		**CRIA-PAYROLL ACCOUNT**	$5,000.00
	Invoice	Date	Description	Amount
	OCT-25	10/14/2025	REPLENISH PAYROLL ACCT FOR OCTOBER 2025	$5,000.00
12320	11/12/2025		**FEC FUTURE CONTRACTORS AND EN**	$308,771.14
	Invoice	Date	Description	Amount
	#3-EXPO-2139	11/01/2025	EXPO CNTR PAVILION BLDG UPGRADES	$325,022.25
12321	11/12/2025		**FRAZER, LLP**	$2,753.00
	Invoice	Date	Description	Amount
	195601	09/30/2025	PROFESSIONAL SVC-SEPT 2025	$2,753.00
12322	11/12/2025		**GARCIA'S FENCE CORP**	$2,278.00
	Invoice	Date	Description	Amount
	092525	09/25/2025	RESET GATE POST LOCATED TOP OF EXPO TOWARD	$2,278.00
12323	11/12/2025		**INDUSTRY SECURITY SERVICES**	$53,752.33
	Invoice	Date	Description	Amount
	SG-ECGP-2059	10/03/2025	9/26-10/2/25 SECURITY SVC-EXPO CNTR	$13,283.22
	SG-ECGP-2060	10/10/2025	10/3-10/9/25 SECURITY SVC-EXPO CNTR	$12,899.31
	SG-ECGP-2061	10/17/2025	10/10-10/16/25 SECURITY SVC-EXPO CNTR	$14,791.72

Civic-Recreational-Industrial Authority
Board Meeting
November 12, 2025

Check	Date			Payee Name	Check Amount
CRIA.WF.CHK - CRIA Wells Fargo Checking					
	SG-ECGP-2062	10/24/2025	10/17-1/23/25 SECURITY SVC-EXPO CNTR	$12,778.08	
12324	11/12/2025			**KLINE'S PLUMBING, INC.**	$1,455.00
	Invoice	Date	Description	Amount	
	14369	09/17/2025	RESTROOM REPAIRS-PATIO CAFE/COWBOY CAFE	$1,455.00	
12325	11/12/2025			**MORTISE & TENON BUILDING CORP**	$3,060.55
	Invoice	Date	Description	Amount	
	412	10/09/2025	HANDYMAN MAINT SVC-CRIA	$950.00	
	414	10/16/2025	CLEAN ELECTRICAL ROOMS & SHAVING OFFICE @ EX	$2,110.55	
12326	11/12/2025			**MX GRAPHICS, INC.**	$461.77
	Invoice	Date	Description	Amount	
	35509	10/02/2025	PLANS/SPECS FOR MISC TRAIL LIGHTING IMPROVEME	$461.77	
12327	11/12/2025			**NINYO & MOORE GEOTECHNICAL COI**	$532.50
	Invoice	Date	Description	Amount	
	310329	10/15/2025	GEOTECHNICAL SVC-PAVILION @ EXPO CNTR	$532.50	
12328	11/12/2025			**PACIFIC UTILITY INSTALLATION**	$8,258.50
	Invoice	Date	Description	Amount	
	33647	09/30/2025	ELECTRICAL DISTRIBUTION & STREET LIGHT SYSTEM	$8,258.50	
12329	11/12/2025			**ROGERS, ANDERSON, MALODY & SCC**	$2,500.00
	Invoice	Date	Description	Amount	
	78766	09/30/2025	AUDITING SVC FOR CRIA FY 24/25	$2,500.00	

Civic-Recreational-Industrial Authority
Board Meeting
November 12, 2025

Check	Date	Payee Name	Check Amount

CRIA.WF.CHK - CRIA Wells Fargo Checking

12330	11/12/2025		**SO CAL INDUSTRIES**		$37,216.15
	Invoice	Date	Description	Amount	
	765307	09/24/2025	PROVIDE 3 RESTROOM TRAILERS DURING PAVILION l	$10,811.80	
	769154	10/21/2025	PROVIDE 3 RESTROOM TRAILERS DURING PAVILION l	$1,350.00	
	768757	10/17/2025	PROVIDE 3 RESTROOM TRAILERS DURING PAVILION l	$2,900.00	
	768930	10/20/2025	PROVIDE 3 RESTROOM TRAILERS DURING PAVILION l	$22,154.35	
12331	11/12/2025		**SOUTHERN TIRE MART LLC - DEPT 14**		$519.25
	Invoice	Date	Description	Amount	
	7080032033	10/27/2025	VEHICLE MAINT SVC-CRIA	$519.25	
12332	11/12/2025		**VENEKLASEN ASSOCIATES, INC.**		$4,582.65
	Invoice	Date	Description	Amount	
	79582	10/08/2025	DESIGN SVC-EXPO CNTR GRAND ARENA-AV UPGRAD	$4,582.65	
12333	11/12/2025		**WALNUT VALLEY WATER DISTRICT**		$286.72
	Invoice	Date	Description	Amount	
	CRIA FY 25/26	10/07/2025	ASSESSMENT/SPECIALTY TAX FY 25/26	$286.72	
12334	11/12/2025		**WEST COAST ARBORISTS, INC.**		$1,700.00
	Invoice	Date	Description	Amount	
	235216	10/15/2025	TREE MAINT SVC - INDUSTRY HILLS EXPO	$1,700.00	

Checks	Status	Count	Transaction Amount

Civic-Recreational-Industrial Authority
Board Meeting
November 12, 2025

Check	Date	Payee Name	Check Amount
CRIA.WF.CHK - CRIA Wells Fargo Checking			
	Total	**22**	**$654,328.86**

ITEM NO. 6.2

Backup Material will be distributed prior to Meeting

ITEM NO. 6.3

CIVIC-RECREATIONAL-INDUSTRIAL AUTHORITY

MEMORANDUM

TO: Honorable Chairperson and Members of the Board

FROM: Joshua Nelson, Executive Director

STAFF: Mathew Hudson, Director of Public Works
Dev Birla, Contract Electric Utility Director
James Cramsie, Sr. Director of Engineering

DATE: November 12, 2025

SUBJECT: Consideration of Resolution No. CRIA 2025-06, Confirming the Continued Existence of an Emergency Condition at the EXPO Center, and Declaring that the Public Interest and Necessity Require Certain Work to be Performed without formal Competitive Bidding Pursuant to California Public Contract Code Section 22050 and Section 3.52.110 of the City's Municipal Code

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Background:

In June of 2019, the Industry Trail Lighting Improvements project was completed in an amount of $613,795.10. The scope of work included installation of conduits, pull boxes, junction boxes, wires and lighting fixtures along Temple Avenue and Azusa Avenue and three metering pedestals for electric services from Southern California Edison to provide lighting along the existing trail, where no previous lighting was present.

Cities and utilities have faced incidents of copper wire thefts recently. As of the past few weeks, approximately 90 percent of the copper wiring for the trail lighting has been stolen and they are currently out of service. Additionally, several locations have been identified where the thieves have entered the property at the Expo Center. Emergency work is necessary to fix the lighting because the trail lights provide safety to the public before and after daylight hours. This situation will worsen once daylight saving time ends on November 2nd. The work required for the restoration of the trail lighting system consists of the items noted below:

- Removal of the existing 178 plastic junction boxes and remaining copper wires, with any copper wire remaining to be salvaged.
- Furnish and install 178 new pad lockable weatherproof metal junction boxes
- Minor replacement of conduits near junction boxes, if required

- Furnish and install 60,100 LF of #2 XHHW Aluminum Wire
- Furnish and install 14,700 LF of #4 XHHW Aluminum Ground Wire
- Furnish and install 1128 UTILCO PED4-350 SSP, or approved equal, Wire Junctions
- Testing and restoring all trail lights back to service

Additionally, Staff have investigated the various areas of entry where thieves have accessed the property and identified certain locations that would be ideal for new security cameras. Security cameras can be a deterrent for thieves approaching the property and will provide the security team instant alerts if the motion sensors are activated. This will ensure that the security team can respond promptly and alert the proper authorities.

On September 10, 2025, the CRIA Board adopted Resolution No. CRIA 2025-04, making the findings needed pursuant to the California Public Contract Code Section 22050 to allow the Executive Director to immediately retain the services necessary to complete the work. Additionally, a notice of exemption was adopted for the project. The trail lighting project was awarded to Fullerton Electric, in an amount of $244,310.00 and the security camera installation project was awarded to Portola Systems for the equipment and licensing and BEI Construction for the installation, in an amount of $164,990.42.

On October 7, 2025, the CRIA Board adopted Resolution No. CRIA 2025-05, confirming the continued existence of the emergency condition at Expo Center. The trail lighting was project updates included finalized contract documents were obtained, the preconstruction meeting was held on September 18, and the project materials were to be ordered by the contractor. The security camera project updates included finalized purchase order for the equipment was processed and the equipment would be ordered.

Discussion:

Pursuant to California Public Contracts Code Section 22050, the CRIA Board must find that an emergency still exists, and that the emergency action is necessary to address the issue. Further, the Board will be provided project updates at every regularly scheduled Board meeting until the projects are completed. The emergency work has been ongoing. The work completed for the trail lighting project with Fullerton Electric includes:

- Work at Expo Center began October 20, 2025
- Over 230 junction boxes have been demolished
- Over 85 new junction boxes have been installed
- Aluminum wire delivered week of November 3, 2025
- Estimated date of completion and trail lights back in service is by November 30, 2025

The work completed for the security cameras installation project with Portola Systems and BEI Construction includes:

- All the equipment has been ordered to be delivered to contractor
- Contractor will provide a schedule once the equipment is received
- Preconstruction meeting to be determined, once all equipment is received

Further project updates will be provided at the next CRIA meeting.

Fiscal Impact:

The ongoing fiscal impact for the trail lighting project is $244,310.00 (Account No. 121-713-5205, MP 01-34 #51) and $194,000.00 for the security camera installation project (Account No. 121-713-5205, MP 01-34 #52). While these projects were not originally accounted for in the FY 25-26 Capital Improvement Project budget, the funds have been allocated for this work.

Recommendation:

Staff recommends that the Board adopt Resolution No. CRIA 2025-06

Exhibits:

1. Resolution No. CRIA 2025-06

RESOLUTION NO. CRIA 2025-06

RESOLUTION OF THE CIVIC-RECREATIONAL-INDUSTRIAL AUTHORITY CONFIRMING THE CONTINUED EXISTENCE OF AN EMERGENCY CONDITION AT THE EXPO CENTER, AND DECLARING THAT THE PUBLIC INTEREST AND NECESSITY REQUIRE CERTAIN WORK TO BE PERFORMED WITHOUT FORMAL COMPETITIVE BIDDING PURSUANT TO CALIFORNIA PUBLIC CONTRACT CODE SECTION 22050 AND SECTION 3.52.110 OF THE CITY'S MUNICIPAL CODE

WHEREAS, in June of 2019, the Industry Trail Lighting Improvements project was completed and the public has utilized the trails with adequate lighting for safety outside of daylight hours within and around the Expo Center and Industry Hills areas; and

WHEREAS, cities and utilities have faced incidents of copper wire thefts recently. Over the past few months, approximately 90 percent of the copper wiring for the trail lighting has been stolen, and most of the 169 trail lights are currently out of service. Additionally, several locations have been identified where the thieves have entered the property at the Expo Center; and

WHEREAS, due to shorter daylight periods as a result of the upcoming ending of daylight savings, an emergency declaration for public safety is needed in order to complete two identified projects that will address public safety issues expediently; and

WHEREAS, Staff have identified two essential projects to respond to the emergency which involve the restoration of the trail lighting system and installation of security cameras in Expo Center where thieves have been identified entering the property; and

WHEREAS, the City has adopted the Uniform Public Construction Cost Accounting Act ("Act"), and under the provisions of the Act (California Public Contract Code Section 22035(b)), and Section 3.52.110 of the City's Code, in the event of an emergency, upon a four-fifths vote by the Civic Recreational Industrial Authority ("CRIA") Board of Directors, CRIA may procure any necessary equipment, services and supplies for the emergency without engaging in the competitive bidding process. Further, pursuant to Public Contract Code Section 22050(a)(1), the Board may take any directly related and immediate action requried by that emergency. In accordance with the provisions of Section 22050(a)(2) of the Public Contract Code, it is necessary for the Board to make a finding that the emergency will not permit a delay resulting from a competitive solicitation for bids, and that the action is necessary to respond to the emergency; and

WHEREAS, due to the public safety issues created by a lack of lighting along the trail, the emergency will not permit a delay resulting from a competitive solicitation for bids, and immediate action is necessary to respond to the emergency.

NOW, THEREFORE, THE BOARD OF DIRECTORS OF THE CIVIC RECREATIONAL-INDUSTRIAL AUTHORITY DOES HEREBY FIND, DETERMINE, AND RESOLVE AS FOLLOWS:

Section 1. The above recitals are true and correct and are incorporated herein by reference.

Section 2. The emergency work is necessary for public safety throughout Expo Center and the Industry Hills trails.

Section 3. Based on the foregoing, pursuant to California Public Contract Code Section and 22050 and Section 3.52.110 of the City's Municipal Code, the Board of Directors hereby finds that an emergency situation exists, and also existed on October 7, 2025, and declares that the public interest and necessity demand the immediate expenditure of public money for such repair work to safeguard life, health, and property without complying with the competitive bidding requirements of the California Public Contract Code. The emergency will not permit a delay resulting from a competitive solicitation for bids, and the action is necessary to respond to the emergency. The Board of Directors hereby waives competitive bidding under Public Contract Code 22050, and Section 3.52.110 of the City's Municipal Code.

Section 4. In accordance with Public Contract Code Section 22050(a)(1), the Board of Directors hereby confirms the agreement between the CRIA and Fullerton Electric to perform the required emergency services for the trail lighting restoration project, and authorizes the Executive Director to execute all necessary contracts and documents with a qualified contractor(s) or vendor(s) in addition to the aforementioned agreement, for the Industry Hills trail lighting restoration project.

Section 5. In accordance with Public Contract Code Section 22050(a)(1), the Board of Directors hereby confirms the agreement between the CRIA and Portola Systems and BEI Construction, to perform the required emergency services for the security camera installation safety project, and authorizes the Executive Director to execute all necessary contracts and documents with a qualified contractor(s) or vendor(s) in addition to the aforementioned agreement, for the security cameras installation safety project.

Section 6. The Board of Directors shall review the emergency action at every regularly scheduled meeting until the action is terminated, to determine, by a four-fifths vote, that there is a need to continue the action.

Section 7. The provisions of this Resolution are severable and if any provision, clause, sentence, word or part thereof is held illegal, invalid, unconstitutional, or inapplicable to any person or circumstances, such illegality, invalidity, unconstitutionality, or inapplicability shall not affect or impair any of the remaining provisions, clauses, sentences, sections, words or parts thereof of the Resolution or their applicability to other persons or circumstances.

Section 8. The Board Secretary shall certify to the passage and adoption of this resolution and the same shall be in full force and effect.

PASSED, APPROVED AND ADOPTED by the Board of Directors of the Civic-Recreational-Industrial Authority at a reuglar meeting held on November 12, 2025, by the following vote:

AYES: BOARD MEMBERS:

NOES: BOARD MEMBERS:

ABSTAIN: BOARD MEMBERS:

ABSENT: BOARD MEMBERS:

_____
Eric Benavidez, Chairman

ATTEST:

_____
Julie Gutierrez-Robles, Secretary

ITEM NO. 6.4

CIVIC-RECREATIONAL-INDUSTRIAL AUTHORITY

MEMORANDUM

TO: Honorable Chairperson and Members of the Board

FROM: Joshua Nelson, Executive Director

STAFF: Mathew Hudson, Director of Public Works
James Cramsie, Sr. Director of Engineering
Dev Birla, Contract Electric Utility Director

DATE: November 12, 2025

SUBJECT: Consideration of authorization to advertise for public bids for Contract No. EXPO-2145, Audio, Video and Lighting Upgrades at Grand Arena, for an estimated cost of $9,266,425.00 (MP 01-34 #33)

Background:

The Grand Arena Building was originally constructed in 2000. For the past 25 years this building has been used for rodeos and other events. Only minor upgrades have been made to the building to keep it in operation. In the past few years, the audio and visual system have had operating issues, including with the amplifiers, speakers, wireless microphone system and the lighting fixtures. These have had to be replaced on an interim basis to keep the Grand Arena in operation for the events. Since 2000, the California Building Codes ("CBC") and Los Angeles County Building Codes have been updated, and the building is in need of major upgrades to comply with new codes.

Staff has worked with Veneklasen Associates, Inc. ("Veneklasen") and its subconsultant IDS Group ("IDS") on the plans and specification and will be implemented under Contract No. EXPO- 2145 Audio, Video and Lighting Upgrades at Grand Arena pending Board approval. This upgrade includes the following scope of work:

- Renovation of Announcer Booth with rearrangement and layout of upgraded audio/visual equipment in the operators room to allow more working space, equipment rack with cable tray, replacement of doors and windows and other related improvements
- Upgrade amplifiers, wireless microphone system and digital mixer with antennas, speakers and other related equipment and addition of 8 Video displays, 4 inside and 4 outside of the Grand Arena

- Upgrade Information technology (IT) network and telecommunication system
- Add Electronic Security System – Video Surveillance and Intrusion Detection
- New HVAC for Announcer Booth for cooling of amplifiers and other A/V equipment and fans for airflow in the bleachers area of arena
- Electrical work – photometric analysis and LED lighting upgrade for normal and emergency lighting to comply with current codes, clean power for audio/visual equipment and video displays, back-up power from emergency stand by generator, being installed as part of the Pavilion Building Upgrades project, for any loss of power during the event

Discussion:

The scope of work of the project includes the complete rearrangement of upgraded audio and visual equipment in the operator's room such as monitors, cameras, camera control, digital audio mixer, wireless microphone systems with antennas, keyboard mouse, tabletop touch panel and equipment rack with cable tray for amplifiers and other telecommunication data equipment with 10-ton HVAC for cooling of equipment and air conditioning of rest of Announcer Booth and replacement of door and windows. It includes new speakers throughout the Grand Arena, and 8 video displays (4 inside - two on north side and two on south side above bleachers and 4 outside on south side of Grand Arena). The other improvements include installation of five 12 feet diameter electric fans, hanging from the rafters, for better air flow in the bleacher area.

Video Surveillance System include 31 cameras (9 fixed, 16 -180 degree coverage and 6 – 360 degree coverage), Network Video Recorder and video management license; Intrusion Detective System include motion detectors, glass break detectors, door position switch, intrusion detection switch and detection control panel, alarm sounder and panic buttons, etc. Telecommunication Infrastructure includes backbone fiber optics cable network, wall cabinet, UPS, Wi-Fi Infrastructure with access points.

Electrical improvements include photometric analysis to comply with current codes and LED Lighting upgrade for normal and emergency lighting. New audio and visual equipment at Announcer Booth require high power quality and clean power, installation of new conduits, wires and an isolation transformer for providing power to electric fans and video displays. Installation of new conduits, wires from emergency generator at Pavilion Building to one of the columns of the northside with automatic transfer switches and other related equipment inside for back-up power to allow events to continue during a power outage and audio/visual receptacle outside the column for provisions to plug in power for any events inside the Grand Arena. Exterior lighting on the north side of the Grand Arena will be upgraded to improve illumination on the staging below it.

Fiscal Impact:

The estimated cost of this project is $9,266,425.00 (MP 01-34 #33).

Recommendation:

It is hereby recommended that the CRIA Board approve the plans and specifications and authorize the solicitation of public bids.

Exhibits:

1. Notice Inviting Bids
2. Engineers Estimate
3. Section A Pages A-1 through A-8
4. Reduced Set of Project Plans

FOR PUBLICATION

NOTICE INVITING BIDS FOR:

CIVIC RECREATIONAL INDUSTRIAL AUTHORITY
PROJECT NO. 145

Audio, Video and Lighting Upgrades at Grand Arena

CONTRACT NO. EXPO-2145

The **CIVIC RECREATIONAL INDUSTRIAL AUTHORITY**, hereinafter referred to as the **CRIA**, will receive bids for the construction of the above project until **10:00 A.M.** on **Thursday, February 5, 2026,** via the City of Industry's PlanetBids™ vendor portal. Bids are to be submitted through https://www.planetbids.com/portal/portal.cfm?CompanyID=29042.

Postmarks, mailed, emailed, or hard copy bids will not be accepted. Late bids will not be accepted.

It is the responsibility of the bidder to be sure the bid is submitted prior to the date and time indicated above. Free digital versions of the plans and specifications are available on the vendor portal. Hard copies are no longer available for purchase.

At the time of submission of the bid and thereafter, each bidder must be licensed as a **Class C-10 Electrical** as defined in Sections 7055-7058 of the Business and Professions Code. Each bidder shall set forth on the Bidder's Information Sheet and the Contractor's License Affidavit the classification and number of the requisite license which that bidder holds.

The **CRIA** reserves the right to award the contract to the contractor with another license class if the **CRIA** determines that the license class is proper for the proposed work.

A contractor or subcontractor shall not be qualified to bid on, be listed in a bid proposal, subject to the requirements of Section 4104 of the Public Contract Code, or engage in the performance of any contract for public work, as defined in this chapter, unless currently registered and qualified to perform public work pursuant to Section 1725.5. ***Please note:*** *It is not a violation of this section for an unregistered contractor to submit a bid that is authorized by Section 7029.1 of the Business and Professions Code or by Section 10164 or 20103.5 of the Public Contract Code, provided the contractor is registered to perform public work pursuant to Section 1725.5 at the time the contract is awarded.* Any bids submitted without proof that bidder and any listed subcontractor(s) are currently registered and qualified to perform public work, pursuant to Labor Code Section 1725.5, may not be accepted by the CRIA.

The Scope of Work is as follows: Upgrades to the existing audio, video and lighting system at the Grand Arena. Work included the replacement of audio equipment within the Announcers Booth and speakers throughout the arena. Video upgrades include the replacement of the existing video display with four (4) new video displays inside the arena and four (4) outside the

arena. In addtion to audio and video upgrades, the existing lighting system will be upgraded to LED fixtures with that capability to provide colored lighting. Additional upgrades include the addition of ceiling fans to inprove air circulation, various IT upgrades, connection of the electrical system to a backup generator and improved emergency lighting and notification.

Two pre-bid meetings will be conducted by the CRIA Engineer at the job site on **Thursday, January 8, 2026 at 10:00 A.M.** and **Tuesday, January 13, 2026 at 10:00 A.M.** All bidders are required to attend; it is mandatory to attend one of the pre-bid meetings. Attendees will meet at **16200 Temple Avenue, City of Industry.** For bidders who are not able to attend the scheduled job walks and desire to provide a bid, arrangements may be made by contacting the project manager at CNC Engineering, (626) 333-0336, to see the site. Job walks may be scheduled between 10 AM and 2 PM, Monday through Friday. The bidder shall allow 48 hour advance notice to allow for coordination and scheduling access to the site. Job walks requested in the last 72 hours prior to the bid time may not be possible but will be accommodated if possible.

Online Questions and Answers will be due via the City of Industry's PlanetBids™ vendor portal on **Friday, January 23, 2026 at 5:00 P.M.**

CIVIC RECREATIONAL INDUSTRIAL AUTHORITY
PROJECT NO. 145

Audio, Video and Lighting Upgrades at Grand Arena

CONTRACT NO. EXPO-2145

Each bid shall be accompanied by a bid guarantee in the form of a Cashier's Check or Bidder's Bond for not less than ten percent (10%) of the total amount of the bid, made payable to the **CIVIC RECREATIONAL INDUSTRIAL AUTHORITY**.

The contractor may, at his own expense, substitute securities for monies to be withheld to ensure performance under the contract.

By the order of the **CIVIC RECREATIONAL INDUSTRIAL AUTHORITY** dated **November 12, 2025**

_____
Julie Gutierrez-Robles, Secretary

ESTIMATE FOR:

CIVIC RECREATIONAL INDUSTRIAL AUTHORITY

PROJECT NO. 145

Audio, Video and Lighting Upgrades at Grand Arena

CONTRACT NO. EXPO-2145

ENGINEER'S ESTIMATE
$9,266,425.00

SECTION A

CIVIC RECREATIONAL INDUSTRIAL AUTHORITY
PROJECT NO. 145

Audio, Video and Lighting Upgrades at Grand Arena

CONTRACT NO. EXPO-2145

The **CIVIC RECREATIONAL INDUSTRIAL AUTHORITY**, hereinafter referred to as the **CRIA**, will receive bids for the construction of the above project until **10:00 A.M.** on **Thursday, February 5, 2026,** via the City of Industry's PlanetBids™ vendor portal. Bids are to be submitted through https://www.planetbids.com/portal/portal.cfm?CompanyID=29042.

Postmarks, mailed, emailed, or hard copy bids will not be accepted. Late bids will not be accepted.

It is the responsibility of the bidder to be sure the bid is submitted prior to the date and time indicated above. Free digital versions of the plans and specifications are available on the vendor portal. Hard copies are no longer available for purchase.

At the time of submission of the bid and thereafter, each bidder must be licensed as a **Class C-10 Electrical** as defined in Sections 7055-7058 of the Business and Professions Code. Each bidder shall set forth on the Bidder's Information Sheet and the Contractor's License Affidavit the classification and number of the requisite license which that bidder holds.

The **CRIA** reserves the right to award the contract to the contractor with another license class if the **CRIA** determines that the license class is proper for the proposed work.

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Online Questions and Answers will be due via the City of Industry's PlanetBids™ vendor portal on **Friday, January 23, 2026 at 5:00 P.M.**

The bid shall be accompanied by a bid guarantee in the form of a Cashier's Check or Bidder's Bond for not less than ten percent (10%) of the total amount of the bid, payable to the **CIVIC RECREATIONAL INDUSTRIAL AUTHORITY**. The bid guarantee is to insure that the bidder, if awarded the work, will enter into a contract with the CRIA. Failure of a contractor to enter into a contract within ten (10) days following award will cause the bid guarantee to be forfeited. If the bid guarantee is a Cashier's Check it must be delivered to City Hall prior to the bid opening date and time. The Cashier's Check shall be sealed in an envelope, endorsed as follows: EXPO-2145 - Audio, Video and Lighting Upgrades at Grand Arena, City of Industry City Hall, 15625 Mayor Dave Way, City of Industry, California 91744. If a bid bond is chosen, a scanned PDF will be accepted through PlanetBids™, however, the three apparent low bidders will be contacted to submit the original bid bond and signed bid package to the CRIA and will be given a deadline to submit.

The CRIA may, upon refusal or failure of a successful responsible bidder to accept the contract, award it to the next lowest bidder. If the CRIA awards the contract to the second lowest bidder, the amount of the lowest bidder's bid guarantee shall be applied by the CRIA to the difference between the low bid and the second lowest bid; the surplus, if any, shall be returned to the lowest bidder if cash is used, or to the surety company if a bond is used.

The successful bidder will be required to furnish a labor and materials bond in an amount equal to one hundred percent (100%) of the contract price and a faithful performance bond in an amount equal to one hundred percent (100%) of the contract price. A maintenance bond equal to ten percent (10%) of the total bid price amount is to remain in force for one (1) year after the date of completion of work, shall be submitted prior to execution of contract. The above bonds shall be secured by a surety company satisfactory to the CRIA, and licensed as a Surety Insurer in the State of California and

rated at least B+:V in the latest "Best's Insurance Guide." The attached bond forms shall be used without exception.

CONTRACTOR

INSURANCE

Prior to the beginning of and throughout the duration of the Project, Contractor and its subcontractors shall maintain insurance in conformance with the requirements set forth below. Contractor will use existing coverage to comply with these requirements. If that existing coverage does not meet the requirements set forth herein, Contractor agrees to amend, supplement or endorse the existing coverage to do so.

Contractor acknowledges that the insurance coverage and policy limits set forth in this section constitute the minimum amount of coverage required. Any insurance proceeds available to Contractor or its subcontractors in excess of the limits and coverage identified in this Agreement and which is applicable to a given loss, claim or demand, will be equally available to the CRIA.

Contractor shall provide the following types and amounts of insurance:

Without limiting Contractor's indemnification of CRIA, and prior to commencement of the Project, Contractor shall obtain, provide and maintain at its own expense during the term of this Agreement, policies of insurance of the type and amounts described below and in a form satisfactory to the CRIA.

General Liability Insurance. Contractor shall maintain commercial general liability insurance with coverage at least as broad as Insurance Services Office form CG 00 01, in an amount not less than $5,000,000 per occurrence, $10,000,000 general aggregate, for bodily injury, personal injury, and property damage, and a $5,000,000 completed operations aggregate. The policy must include contractual liability that has not been amended. Any endorsement restricting standard ISO "insured contract" language will not be accepted.

Automobile Liability Insurance. Contractor shall maintain automobile insurance at least as broad as Insurance Services Office form CA 00 01 covering bodily injury and property damage for all activities of the Contractor arising out of or in connection with work to be performed under this Agreement, including coverage for any owned, hired, non-owned or rented vehicles, in an amount not less than $1,000,000 combined single limit for each accident.

Umbrella or Excess CGL Insurance. If the CONTRACTOR elects to include an umbrella or excess policy to cover any of the total limits required beyond the primary commercial general liability ("CGL") policy limits and/or the primary commercial automobile liability policy limits, then the policy must include the following:

- The umbrella or excess policy shall follow form over the CONTRACTOR's primary general liability coverage and shall provide a separate aggregate limit for products and completed operations coverage.
- The umbrella or excess policy shall not contain any restrictions or exclusions beyond what is contained in the primary policy.
- The umbrella or excess policy shall contain a clause stating that it takes effect (drops down) in the event the primary limits are impaired or exhausted.
- The umbrella or excess policy must also extend coverage over the automobile policy if it is to be used in combination with the primary automobile policy to meet the total insurance requirement limits.

Workers' Compensation Insurance. Contractor shall maintain Workers' Compensation Insurance (Statutory Limits) and Employer's Liability Insurance (with limits of at least $1,000,000) for Contractor 's employees in accordance with the laws of the State of California, Section 3700 of the Labor Code In addition, Contractor shall require each subcontractor to similarly maintain Workers' Compensation Insurance and Employer's Liability Insurance in accordance with the laws of the State of California, Section 3700 for all of the subcontractor's employees.

Contractor shall submit to the CRIA, along with the certificate of insurance, a Waiver of Subrogation endorsement in favor of the CRIA, its officers, agents, employees and volunteers.

Pollution Liability Insurance. Environmental Impairment Liability Insurance shall be written on a Contractor's Pollution Liability form or other form acceptable to the CRIA providing coverage for liability arising out of sudden, accidental and gradual pollution and remediation. The policy limit shall be no less than $1,000,000 dollars per claim and in the aggregate. All activities contemplated in this agreement shall be specifically scheduled on the policy as "covered operations." The policy shall provide coverage for the hauling of waste from the project site to the final disposal location, including non-owned disposal sites.

Completed Operations Coverage. Products/completed operations coverage shall extend a minimum of ten years after project completion. Coverage shall be included on behalf of the insured for covered claims arising out of the actions of independent contractors. If the insured is using subcontractors, the Policy must include work performed "by or on behalf" of the insured. Policy shall contain no language that would invalidate or remove the insurer's duty to defend or indemnify for claims or suits expressly excluded from coverage. Policy shall specifically provide for a duty to defend on the part of the insurer. The CRIA, its officials, officers, agents, and employees, shall be included as insureds under the policy.

Other provisions or requirements:

Proof of Insurance. Contractor shall provide certificates of insurance to the CRIA as evidence of the insurance coverage required herein, along with a waiver of subrogation endorsement for workers' compensation. Insurance certificates and endorsements must

be approved by the CRIA's risk manager prior to commencement of performance. Current certification of insurance shall be kept on file with the CRIA at all times during the term of this contract. The CRIA reserves the right to require complete, certified copies of all required insurance policies, at any time.

Duration of Coverage. Contractor shall procure and maintain for the duration of the contract insurance against claims for injuries to persons or damages to property, which may arise from or in connection with the performance of the work hereunder by Contractor, his agents, representatives, employees or subcontractors. Contractor must maintain general liability and umbrella or excess liability insurance for as long as there is a statutory exposure to completed operations claims. The CRIA and its officers, officials, employees, and agents shall continue as additional insureds under such policies.

Primary/Noncontributing. Coverage provided by Contractor shall be primary and any insurance or self-insurance procured or maintained by the CRIA shall not be required to contribute with it. The limits of insurance required herein may be satisfied by a combination of primary and umbrella or excess insurance. Any umbrella or excess insurance shall contain or be endorsed to contain a provision that such coverage shall also apply on a primary and non-contributory basis for the benefit of the CRIA before the CRIA's own insurance or self-insurance shall be called upon to protect it as a named insured.

CRIA's Rights of Enforcement. In the event any policy of insurance required under this Agreement does not comply with these requirements or is canceled and not replaced, the CRIA has the right but not the duty to obtain the insurance it deems necessary and any premium paid by the CRIA will be promptly reimbursed by Contractor or the CRIA will withhold amounts sufficient to pay premium from Contractor payments. In the alternative, the CRIA may cancel this Agreement.

Acceptable Insurers. All insurance policies shall be issued by an insurance company currently authorized by the Insurance Commissioner to transact business of insurance or is on the List of Approved Surplus Line Insurers in the State of California, with an assigned policyholders' Rating of A- (or higher) and Financial Size Category Class VII (or larger) in accordance with the latest edition of Best's Key Rating Guide, unless otherwise approved by the CRIA's risk manager.

Waiver of Subrogation. All insurance coverage maintained or procured pursuant to this agreement shall be endorsed to waive subrogation against CRIA, its elected or appointed officers, agents, officials, employees and volunteers or shall specifically allow Contractor or others providing insurance evidence in compliance with these specifications to waive their right of recovery prior to a loss. Contractor hereby waives its own right of recovery against CRIA, and shall require similar written express waivers and insurance clauses from each of its subconsultants.

Enforcement of Contract Provisions (non estoppel). Contractor acknowledges and agrees that any actual or alleged failure on the part of the CRIA to inform Contractor of non-compliance with any requirement imposes no additional obligations on the CRIA nor does it waive any rights hereunder.

Requirements Not Limiting. Requirements of specific coverage features or limits contained in this Section are not intended as a limitation on coverage, limits or other requirements, or a waiver of any coverage normally provided by any insurance. Specific reference to a given coverage feature is for purposes of clarification only as it pertains to a given issue and is not intended by any party or insured to be all inclusive, or to the exclusion of other coverage, or a waiver of any type. If the Contractor maintains higher limits than the minimums shown above, the CRIA requires and shall be entitled to coverage for the higher limits maintained by the Contractor. Any available insurance proceeds in excess of the specified minimum limits of insurance and coverage shall be available to the CRIA.

Notice of Cancellation. Contractor agrees to oblige its insurance agent or broker and insurers to provide to CRIA with a thirty (30) day notice of cancellation (except for nonpayment for which a ten (10) day notice is required) or nonrenewal of coverage for each required coverage.

Additional Insured Status. General liability policies shall provide or be endorsed to provide that CRIA and its officers, officials, employees, agents, and volunteers shall be additional insureds under such policies. This provision shall also apply to any excess/umbrella liability policies.

Prohibition of Undisclosed Coverage Limitations. None of the coverages required herein will be in compliance with these requirements if they include any limiting endorsement of any kind that has not been first submitted to CRIA and approved of in writing.

Separation of Insureds. A severability of interests provision must apply for all additional insureds ensuring that Contractor's insurance shall apply separately to each insured against whom claim is made or suit is brought, except with respect to the insurer's limits of liability. The policy(ies) shall not contain any cross-liability exclusions.

Pass Through Clause. Contractor agrees to ensure that its subconsultants, subcontractors, and any other party involved with the project who is brought onto or involved in the project by Contractor, provide the same minimum insurance coverage and endorsements required of Contractor. Contractor agrees to monitor and review all such coverage and assumes all responsibility for ensuring that such coverage is provided in conformity with the requirements of this section. Contractor agrees that upon request, all agreements with consultants, subcontractors, and others engaged in the project will be submitted to CRIA for review.

CRIA's Right to Revise Requirements. The CRIA reserves the right at any time during the term of the contract to change the amounts and types of insurance required by giving the Contractor a ninety (90)-day advance written notice of such change. If such change results in substantial additional cost to the Contractor, the CRIA and Contractor may renegotiate Contractor's compensation.

Self-insured Retentions. Any self-insured retentions must be declared to and approved by CRIA. CRIA reserves the right to require that self-insured retentions be eliminated, lowered, or replaced by a deductible. Self-insurance will not be considered to comply with these specifications unless approved by the CRIA.

Timely Notice of Claims. Contractor shall give CRIA prompt and timely notice of claims made or suits instituted that arise out of or result from Contractor's performance under this Agreement, and that involve or may involve coverage under any of the required liability policies.

Additional Insurance. Contractor shall also procure and maintain, at its own cost and expense, any additional kinds of insurance, which in its own judgment may be necessary for its proper protection and prosecution of the work.

EXPERIENCE AND SAFETY

The successful bidder may be required to submit a statement attesting to its financial responsibility, technical ability, experience, and safety record.

PREVAILING WAGES

A. Wage rates for this Project shall be in accordance with the "General Wage Determination Made by the Director of Industrial Relations Pursuant To California Labor Code, Part 7, Chapter 1, Article 2, Sections 1770, 1773 and 1773.1 ", for Los Angeles County. Wage rates shall conform to those on file at City Hall and the Project site.

B. The following Labor Code sections are hereby referenced and made a part of this Agreement:

(i) Section 1775, Penalty for Failure to Comply with Prevailing Wage Rates.

(ii) Section 1777.4, Apprenticeship Requirements.

(iii) Section 1777.5, Apprenticeship Requirements.

(iv) Section 1813, Penalty for Failure to Pay Overtime.

(v) Section 1810 and 1811, Working Hour Restrictions.

(vi) Section 1775, Payroll Records.

(vii) Section 1773.8, Travel and Subsistence Pay.

CONTRACTOR REGISTRATION PROGRAM

A contractor or subcontractor shall not be qualified to bid on, be listed in a bid proposal, subject to the requirements of Section 4104 of the Public Contract Code, or engage in

the performance of any contract for public work, as defined in this chapter, unless currently registered and qualified to perform public work pursuant to Section 1725.5. ***Please note:*** *It is not a violation of this section for an unregistered contractor to submit a bid that is authorized by Section 7029.1 of the Business and Professions Code or by Section 10164 or 20103.5 of the Public Contract Code, provided the contractor is registered to perform public work pursuant to Section 1725.5 at the time the contract is awarded.* Any bids submitted without proof that bidder and any listed subcontractor(s) are currently registered and qualified to perform public work, pursuant to Labor Code Section 1725.5, may not be accepted by the CRIA.

LABOR COMPLIANCE MONITORING AND ENFORCEMENT

The project is subject to compliance monitoring and enforcement by the Department of Industrial Relations (California Labor Code Section 1771.4).

AGREEMENT

When the award of a contract is made to a corporation, the Agreement must be signed by the Secretary/Treasurer of the corporation in addition to the signature of the President/Vice President, or the public agency needs to receive a copy of a resolution adopted by the Board of Directors of the corporation indicating that the party executing the contract has the authority to bind the corporation.

SURETY BONDS

All surety bonds issued in connection with projects for public works must be accompanied by a power of attorney from the surety company authorizing the person executing the bond to sign on behalf of the company. The power of attorney and the bonds must be executed by the same person, and such signatures shall be notarized.

By the order of the **CIVIC RECREATIONAL INDUSTRIAL AUTHORITY** dated **November 12, 2025**

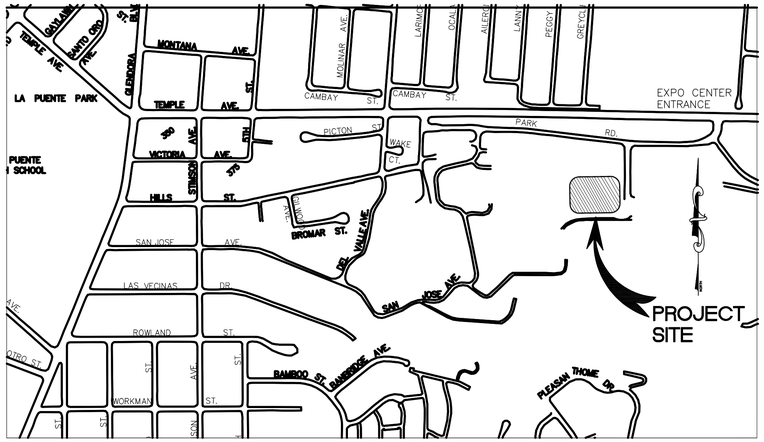
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Julie Gutierrez-Robles, Secretary

CIVIC-RECREATIONAL-INDUSTRIAL AUTHORITY
IMPROVEMENT PROJECT NO. EXPO-142
AUDIO UPGRADES AT THE GRAND ARENA
CONTRACT NO. EXPO-2142

INDEX OF DRAWINGS

CONTRACT DWG. NO.	SHEET NO.	NAME	DESCRIPTION
OVERALL PROJECT INFORMATION			
1 OF 113	1 OF 1	CT-001	CONTRACT TITLE SHEET
ARCHITECTURAL DRAWINGS			
2 OF 113	1 OF 9	G-000	COVER SHEET
3 OF 113	2 OF 9	A-001	SITE PLAN
4 OF 113	3 OF 9	A-111	OVERALL LEVEL 1 PLAN
5 OF 113	4 OF 9	A-121	OVERALL RCP
6 OF 113	5 OF 9	A-122	BUILDING SECTIONS
7 OF 113	6 OF 9	A-123	CUST SHEETS – POWERFOIL X4 FANS
8 OF 113	7 OF 9	A-211	ENLARGED FLOOR PLANS
9 OF 113	8 OF 9	A-311	ELEVATIONS
10 OF 113	9 OF 9	A-312	DOOR / WINDOW SCHEDULE & DETAILS
STRUCTURAL DRAWINGS (GRAND ARENA STRUCTURE AND ANNOUNCER BOOTH)			
11 OF 113	1 OF 15	S-001	GENERAL NOTES
12 OF 113	2 OF 15	S-209	FLOOR PLAN
13 OF 113	3 OF 15	S-210	MAIN ROOF FRAMING PLAN
14 OF 113	4 OF 15	S-210.1	MAIN ROOF FRAMING PLAN (FANS AND LCD MONITORS)
15 OF 113	5 OF 15	S-211	CLERESTORY ROOF FRAMING PLAN
16 OF 113	6 OF 15	S-410	TRUSS FRAMING ELEVATION
17 OF 113	7 OF 15	S-411	TRUSS FRAMING ELEVATION
18 OF 113	8 OF 15	S-412	TRUSS FRAMING ELEVATION
19 OF 113	9 OF 15	S-413	TRUSS FRAMING ELEVATION
20 OF 113	10 OF 15	S-414	TRUSS FRAMING ELEVATION
21 OF 113	11 OF 15	S-415	TRUSS FRAMING ELEVATION
22 OF 113	12 OF 15	S-500	SECTIONS AND DETAILS
23 OF 113	13 OF 15	S-500.1	SECTIONS AND DETAILS (NEW FANS AND MONITORS)
24 OF 113	14 OF 15	S-501	SECTIONS AND DETAILS
25 OF 113	15 OF 15	S-501.1	SECTIONS AND DETAILS (NEW FANS AND MONITORS)
MECHANICAL			
26 OF 113	1 OF 7	M-001	GENERAL NOTES, LEGEND AND ABBREVIATIONS
27 OF 113	2 OF 7	M-002	SCHEDULES
28 OF 113	3 OF 7	M-003	SPECIFICATIONS
29 OF 113	4 OF 7	M-201	OVERALL GROUND FLOOR PLAN
30 OF 113	5 OF 7	M-202	BOOTH 2ND FLOOR PLAN – DEMO AND NEW
31 OF 113	6 OF 7	M-501	DETAILS
32 OF 113	7 OF 7	M-601	TITLE 24
ELECTRICAL			
33 OF 113	1 OF 24	E-001	GENERAL NOTES, ABBREVIATIONS, SYMBOLS AND SHEET INDEX
34 OF 113	2 OF 24	E-101	SINGLE LINE DIAGRAM
35 OF 113	3 OF 24	E-102	GRAND ARENA BOOTH 2ND AND 3RD FLOOR PLANS
36 OF 113	4 OF 24	E-200	GRAND ARENA OVERALL SITE PLAN
37 OF 113	5 OF 24	E-201	GRAND ARENA EXISTING/DEMOLITION LIGHTING LAYOUT
38 OF 113	6 OF 24	E-202	GRAND ARENA REPLACEMENT LIGHTING PLAN
39 OF 113	7 OF 24	E-203	GRAND ARENA EMERGENCY STANDBY LIGHTING LAYOUT
40 OF 113	8 OF 24	E-204	GRAND ARENA EMERGENCY STANDBY PHOTOMETRIC STUDY
41 OF 113	9 OF 24	E-205	GRAND ARENA OVERALL PHOTOMETRIC LIGHT STUDY
42 OF 113	10 OF 24	E-206	GRAND ARENA REPLACEMENT LIGHTING CONTROL PLAN
43 OF 113	11 OF 24	E-207	GRAND ARENA REPLACEMENT EXISTING OUTDOOR LIGHTING
44 OF 113	12 OF 24	E-208	GRAND ARENA GROUND POWER PLAN
45 OF 113	13 OF 24	E-208.1	GRAND ARENA UPPER POWER PLAN
46 OF 113	14 OF 24	E-209	GRAND ARENA FIXTURE SCHEDULE AND CUT SHEETS
47 OF 113	15 OF 24	E-210	GRAND ARENA FIXTURE SCHEDULE AND CUT SHEETS
48 OF 113	16 OF 24	E-211	GRAND ARENA LIGHTING CONTROL PLAN
49 OF 113	17 OF 24	E-212	GRAND ARENA LIGHTING CONTROL PLAN
50 OF 113	18 OF 24	E-301	ELECTRICAL DETAILS
51 OF 113	19 OF 24	E-401	GRAND ARENA TITLE 24 COMPLIANCE FORMS
52 OF 113	20 OF 24	E-402	GRAND ARENA TITLE 24 COMPLIANCE FORMS
53 OF 113	21 OF 24	E-4.0	ENLARGED GRAND ARENA AREA PLAN
54 OF 113	22 OF 24	E-4.1	GRAND ARENA SINGLE LINE DIAGRAM
55 OF 113	23 OF 24	E-4.2	GRAND ARENA ATS DIAGRAM DETAILS
56 OF 113	24 OF 24	E-4.3	GRAND ARENA ATS DIAGRAM DETAILS
AUDIO/VISUAL DRAWINGS			
57 OF 113	1 OF 31	AV001	AV GENERAL NOTES AND SHEET INDEX
58 OF 113	2 OF 31	AV002	AV ABBREVIATIONS, NOTES, AND SYMBOLS
59 OF 113	3 OF 31	AV003	AV JUNCTION BOX SCHEDULE
60 OF 113	4 OF 31	AV100	AV SITE PLAN
61 OF 113	5 OF 31	AV101	AV ARENA FLOOR PLAN
62 OF 113	6 OF 31	AV101EQ	AV ARENA FLOOR EQUIPMENT PLAN
63 OF 113	7 OF 31	AV102	AV CONTROL ROOM PLAN
64 OF 113	8 OF 31	AV201	AV ARENA REFLECTIVE CEILING PLAN
65 OF 113	9 OF 31	AV201EQ	AV ARENA REFLECTIVE CEILING PLAN – EQUIPMENT
66 OF 113	10 OF 31	AV202	AV BARN REFLECTIVE CEILING PLAN
67 OF 113	11 OF 31	AV202EQ	AV BARN EQUIPMENT PLAN
68 OF 113	12 OF 31	AV251	AV SECTIONS AND ELEVATIONS
69 OF 113	13 OF 31	AV252	AV SECTIONS AND ELEVATIONS
70 OF 113	14 OF 31	AV253	AV SECTIONS AND ELEVATIONS
71 OF 113	15 OF 31	AV254	AV SECTIONS AND ELEVATIONS
72 OF 113	16 OF 31	AV271	AV EQUIPMENT ROOM LAYOUTS
73 OF 113	17 OF 31	AV291	AV RISER DIAGRAM
74 OF 113	18 OF 31	AV292	AV RISER DIAGRAM
75 OF 113	19 OF 31	AV300	AV WIRING SCHEME AND SYMBOL KEY
76 OF 113	20 OF 31	AV301	AV AUDIO ONELINES
77 OF 113	21 OF 31	AV302	AV AUDIO ONELINES
78 OF 113	22 OF 31	AV303	AV AUDIO ONELINES
79 OF 113	23 OF 31	AV304	AV AUDIO ONELINES
80 OF 113	24 OF 31	AV305	AV TIE LINES ONELINES
81 OF 113	25 OF 31	AV351	AV BROADCAST ONELINES
82 OF 113	26 OF 31	AV352	AV INTERCOM ONELINES
83 OF 113	27 OF 31	AV501	AV TYPICAL SEISMIC AND GROUNDING DETAILS
84 OF 113	28 OF 31	AV502	AV RACK ELEVATIONS
85 OF 113	29 OF 31	AV601	AV DETAILS
86 OF 113	30 OF 31	AV602	AV DETAILS
87 OF 113	31 OF 31	AV651	AV FACILITY PANEL DETAILS
SECURITY DRAWINGS			
88 OF 113	1 OF 12	SC001	SECURITY GENERAL NOTES AND SHEET INDEX
89 OF 113	2 OF 12	SC002	SECURITY ABBREVIATIONS, NOTES AND SYMBOLS
90 OF 113	3 OF 12	SC100	SECURITY SITE PLAN
91 OF 113	4 OF 12	SC101	SECURITY GRAND ARENA FLOOR PLAN
92 OF 113	5 OF 12	SC102	SECURITY BARN FLOOR PLANS
93 OF 113	6 OF 12	SC103	SECURITY PATIO CAFE / SNACK BAR & RESTROOMS FLOOR PLANS
94 OF 113	7 OF 12	SC104	SECURITY CONTROL BOOTH FLOOR PLANS
95 OF 113	8 OF 12	SC201	SECURITY ARENA REFLECTED CEILING PLAN
96 OF 113	9 OF 12	SC401	SECURITY RISER DIAGRAMS
97 OF 113	10 OF 12	SC451	SECURITY EQUIPMENT LAYOUTS
98 OF 113	11 OF 12	SC601	SECURITY DETAILS
99 OF 113	12 OF 12	SC602	SECURITY DETAILS
TELECOM DRAWINGS			
100 OF 113	1 OF 14	T001	TELECOM GENERAL NOTES AND SHEET INDEX
101 OF 113	2 OF 14	T002	TELECOM ABBREVIATIONS, NOTES AND SYMBOLS
102 OF 113	3 OF 14	T100	TELECOM SITE PLAN
103 OF 113	4 OF 14	T101	TELECOM GRAND ARENA FLOOR PLAN
104 OF 113	5 OF 14	T102	TELECOM BARN FLOOR PLANS
105 OF 113	6 OF 14	T103	TELECOM PATIO CAFE / SNACK BAR & RESTROOMS FLOOR PLANS
106 OF 113	7 OF 14	T104	TELECOM CONTROL BOOTH FLOOR PLANS
107 OF 113	8 OF 14	T201	TELECOM GRAND ARENA REFLECTED CEILING PLAN
108 OF 113	9 OF 14	T401	TELECOM CAMPUS NETWORK SCHEMATIC DIAGRAM
109 OF 113	10 OF 14	T451	TELECOM EQUIPMENT LAYOUTS
110 OF 113	11 OF 14	T452	TELECOM EQUIPMENT LAYOUTS
111 OF 113	12 OF 14	T471	TELECOM RACK ELEVATIONS
112 OF 113	13 OF 14	T601	TELECOM DETAILS
113 OF 113	14 OF 14	T602	TELECOM DETAILS



VICINITY MAP
NOT TO SCALE

NOTICE TO CONTRACTOR

APPROVAL OF THIS PLAN BY THE ENGINEER AND CITY ENGINEER DOES NOT CONSTITUTE A REPRESENTATION AS TO THE ACCURACY OF THE LOCATION OF OR THE EXISTENCE OR NON-EXISTENCE OF ANY UNDERGROUND UTILITY PIPE OR STRUCTURE WITHIN THE LIMITS OF THIS PROJECT. THE EXISTENCE AND LOCATION OF ANY UNDERGROUND UTILITY PIPES OR STRUCTURES SHOWN ON THESE PLANS WERE OBTAINED BY A SEARCH OF AVAILABLE RECORDS.

DIGALERT
DIAL TOLL FREE
1-800-422-4133
AT LEAST TWO DAYS BEFORE YOU DIG
UNDERGROUND SERVICE ALERT OF SOUTHERN CALIFORNIA

BENCH MARK
B.M. T-61 ELEV. 402.794
(NGVD 29 DATUM)
CITY OF INDUSTRY B.M. – BRASS CAP ON N. C.B. OF SERVICE ROAD OF TEMPLE AVENUE AT N.E. RETURN AT LANNY AVENUE ± 5FT. E. OF B.C.R.

NO.	DATE	REVISIONS	CK. BY

CITY OF INDUSTRY
INCORPORATED JUNE 18, 1957
P.O. Box 3366, City of Industry, California 91744
Administrative Offices: 15625 Mayor Dave Way
(626) 333-2211

Prepared by:
REGISTERED PROFESSIONAL ENGINEER JAMES ROBERT CRAMSIE C 059785 CIVIL STATE OF CALIFORNIA
JAMES CRAMSIE, P.E. 59785 DATE

CNC ENGINEERING
255 N Hacienda Blvd I Ste 222
City of Industry I CA I 91744
P I 626.333.0336
www.cnc-eng.com

CIVIC-RECREATON-INDUSTRIAL AUTHORITY

APPROVED BY:

CLEMENT N. CALVILLO, PE, RCE 27743 CONTRACT DEPUTY CRA ENGINEER DATE

JOSHUA L. NELSON, PE, RCE 66959 EXECUTIVE DIRECTOR DATE

AUDIO UPGRADES AT THE GRAND ARENA

CONTRACT TITLE SHEET, VICINITY MAP AND TABLE OF DRAWINGS

DESIGNED BY:	W.Y.	CHECKED BY:	J.C.	JOB NO.	MP 01-34#33
DRAFTED BY:	W.Y.	DATE:	OCTOBER 2025	DRAWING NO.	CT-001

SHEET 1 OF 1

CONTRACT DRAWING 1 OF 113

CONTRACT NO. EXPO-2142

K:\Mscpro\01\34#33 Grand Arena Audio-Video Upgrades\Drawings\Sheets\Expo-2142 Title Sheet.dwg
10/31/2025 5:23 PM

EXPO CENTER, CITY OF INDUSTRY

16200 TEMPLE AVENUE
CITY OF INDUSTRY, CA 91744

GRAND ARENA & ANNOUNCER BOOTH

SHEET INDEX

GENERAL:

G-000	COVER SHEET

ARCHITECTURAL:

A-001	SITE PLAN
A-111	OVERALL LEVEL 1 PLAN
A-121	OVERALL RCP
A-122	BUILDING SECTIONS
A-123	CUT SHEETS - POWERFOIL X4 FANS
A-211	ENLARGED FLOOR PLANS
A-311	ELEVATIONS
A-312	DOOR / WINDOW SCHEDULE & DETAILS

STRUCTURAL:

S-001	GENERAL NOTES
S-210	MAIN ROOF FRAMING PLAN
S-211	CLERESTORY ROOF FARMING PLAN
S-410	TRUSS FRAMING ELEVATION
S-411	TRUSS FRAMING ELEVATION
S-412	TRUSS FRAMING ELEVATION
S-413	TRUSS FRAMING ELEVATION
S-414	TRUSS FRAMING ELEVATION
S-415	TRUSS FRAMING ELEVATION
S-500	SECTIONS AND DETAILS
S-501	SECTIONS AND DETAILS

STRUCTURAL:

S-001	GENERAL NOTES
S-210	MAIN ROOF FRAMING PLAN
S-211	FLOOR PLAN
S-410	TRUSS FRAMING ELEVATION
S-500	SECTIONS AND DETAILS
S-501	SECTION AND DETAILS

MECHANICAL:

M-001	GENERAL NOTES, LEGEND AND ABBREVIATIONS
M-002	SCHEDULES
M-201	OVERALL GROUND FLOOR PLAN
M-202	BOOTH 2ND AND 3RD FLOOR PLANS - DEMO AND NEW
M-501	MECHANICAL DETAILS
M-601	TITLE 24

ELECTRICAL

E-001	GENERAL NOTES, ABBREVIATIONS SYMBOLS AND SHEET INDEX
E-101	GRAND ARENAS SINGLE LINE DIAGRAM
E-102	GRAND ARENAS ANNOUNCERS BOOTH POWER PLAN
E-200	GRAND ARENA OVERALL REFERENCE SITE PLAN
E-201	GRAND ARENA EXISTING LIGHTING LAYOUT
E-202	GRAND ARENA REPLACEMENT LIGHT FIXTURE PLAN
E-203	GRAND ARENA EMERGENCY STANDBY LIGHTING PLAN
E-204	GRAND ARENA EMERGENCY STANDBY PHOTOMETRIC STUDY
E-205	GRAND ARENA OVERALL PHOTOMETRIC STUDY
E-206	GRAND ARENAS REPLACEMENT LIGHTING CONTROL DETAILS
E-207	GRAND ARENAS REPLACEMENT EXISTING OUT LIGHTING
E-208	GRAND ARENAS NEW GROUND POWER PLAN
E-208.1	GRAND ARENAS NEW UPPER POWER PLAN
E-209	GRAND ARENAS FIXTURE CUT SHEETS
E-210	GRAND ARENAS FIXTURE CUT SHEETS
E-211	GRAND ARENAS CONTROL DETAILS
E-212	GRAND ARENAS CONTROL DETAILS
E-213	GRAND ARENAS TITLE 24 COMPLIANCE FORMS
E-301	ELECTRICAL DETAILS
E-302	ELECTRICAL DETAILS
E-400	GRAND ARENAS OVERALL SITE PLAN
E-401	GRAND ARENAS SINGLE LINE DIAGRAM
E-402	GRAND ARENAS ATS DETAILS
E-403	GRAND ARENAS ATS DETAILS

SCOPE OF WORK

TENANT IMPROVEMENT OF EXISTING ANNOUCER BOOTH AV ROOM. INCLUDING RELATED MECHANICAL AND ELECTRICAL WORK.

NEW A/V EQUIPMENT TO GRAND ARENA STRUCTURE. INCLUDING RELATED ELECTRICAL AND STRUCTURAL WORK.

REPLACE EXISTING LIGHTING FIXTURES WITH NEW FIXTURES. INCLUDING RELATED ELECTRICAL AND STRUCTURAL WORK.

NEW MECHANICAL EQUIPMENT TO GRAND ARENA STRUCTURE. INCLUDING RELATED ELECTRICAL AND STRUCTURAL WORK.

APPLICABLE CODES

- 2022 CALIFORNIA BUILDING CODE
- 2022 CALIFORNIA MECHANICAL CODE
- 2022 CALIFORNIA ELECTRICAL CODE
- 2022 CALIFORNIA GREEN BUILDING STANDARDS CODE
- 2022 CALIFORNIA BUILDING ENERFY EFFICIENCY STANDARDS
- 2022 CALIFORNIA EXISTING BUILDING CODE
- 2020 LOS ANGELES COUNTY CODES
- ANY OTHER LOCAL AND STATE LAWS AND REGULATIONS

PROJECT INFORMATION

PROJECT ADDRESS:	16200 TEMPLE AVENUE CITY OF INDUSTRY, CA 91744
TYPE:	ASSEMBLY BUILDING
APPLICABLE CODE:	2022 CALIFORNIA BUILDING CODE (CBC)

CONTACTS / CONSULTANTS

CLIENT REPRESENTATIVE

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PROJECT MANAGER

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PHONE: (949) 387-8500

ANNIE N. BACTOL, PROJECT MANAGER
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APPROVAL

CLIENT

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CITY OF INDUSTRY, CA 91744
PHONE: 626-333-2211

PROJECT NAME

CITY OF INDUSTRY EXPO CENTER GRAND ARENA STRUCTURE AND ANNOUNCER BOOTH

16200 TEMPLE AVENUE
CITY OF INDUSTRY, CA 91744

ENGINEER/ARCHITECT

IDS GROUP

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IRVINE, CA. 92606
TEL: 949-387-8500, FAX: 949-387-0800

STAMP

REGISTERED ARCHITECT JOSEPH SILBER No. C-15573 REN. 7-31-25 STATE OF CALIFORNIA

STAMP

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	95% CD SET	08/04/25
	100% CD SET	08/29/25

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DRAWN BY	DP
CHECKED BY	JS
APPROVED BY	JS

SHEET TITLE

COVER SHEET

SHEET NUMBER

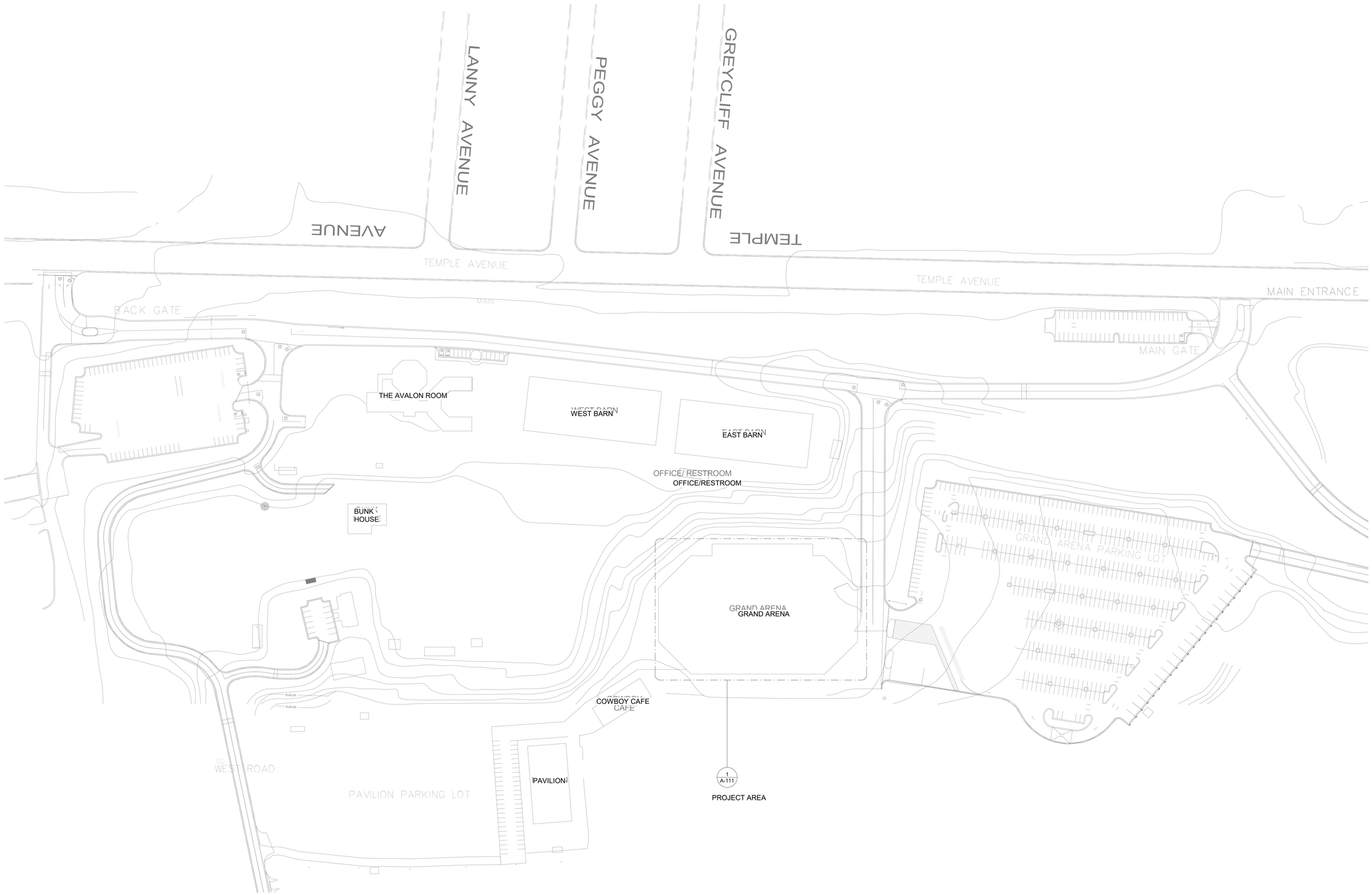
G-000

PLAN CHECK SET - NOT FOR CONSTRUCTION

USER:

PLOT DATE:

IDS GROUP - FILE LOCATION:



SITE PLAN | 1" = 80'-0" | 1

APPROVAL

CLIENT

CITY OF INDUSTRY
15625 MAYOR DAVE WAY
CITY OF INDUSTRY, CA 91744
PHONE: 626-333-2211

PROJECT NAME

CITY OF INDUSTRY EXPO CENTER GRAND ARENA STRUCTURE AND ANNOUNCER BOOTH

16200 TEMPLE AVENUE
CITY OF INDUSTRY, CA 91744

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JOSEPH SCHILLER
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REN. 7-31-25
STATE OF CALIFORNIA

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DRAWN BY	DP
CHECKED BY	JS
APPROVED BY	JS

SHEET TITLE

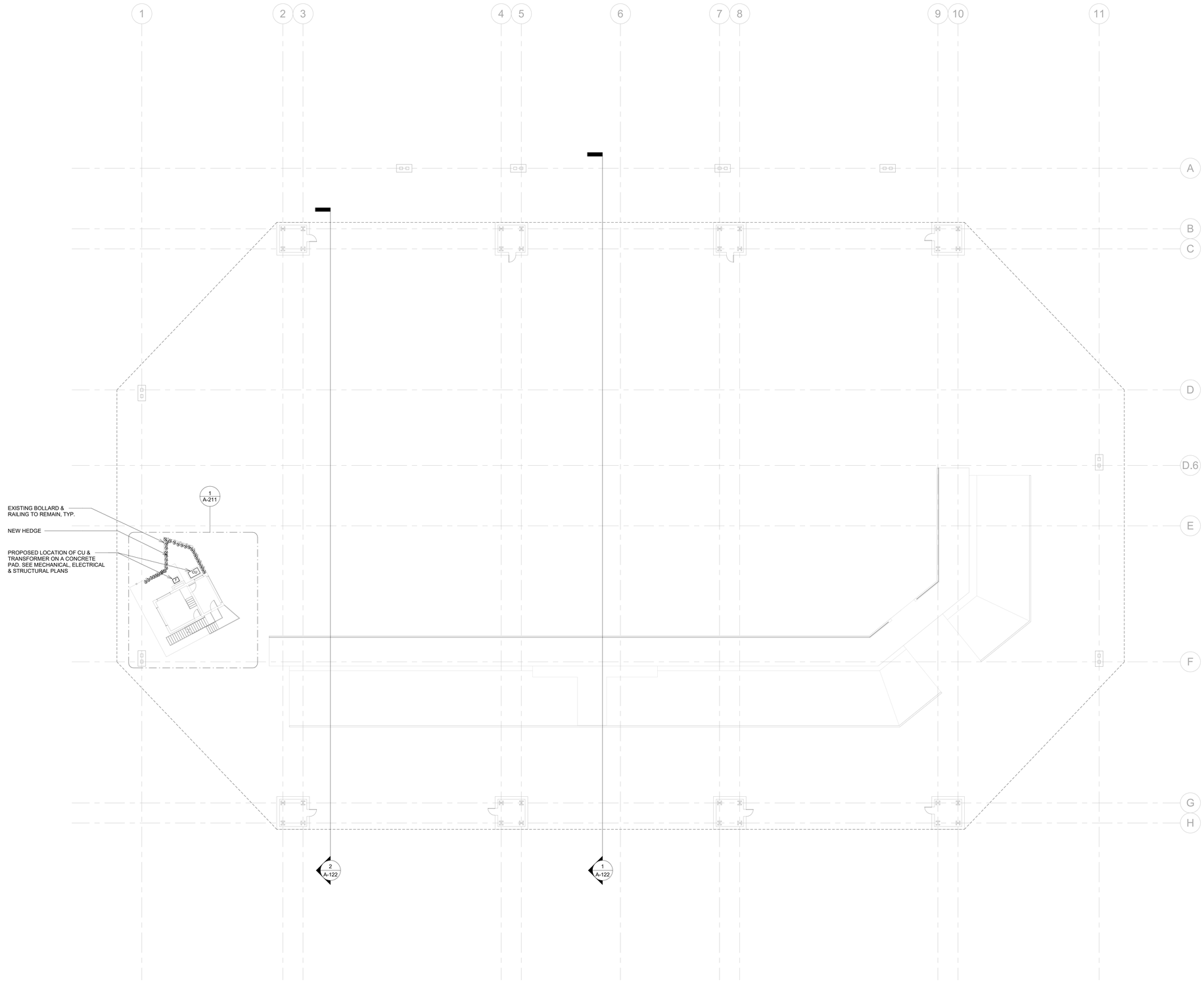
SITE PLAN

SHEET NUMBER

A-001

PLAN CHECK SET - NOT FOR CONSTRUCTION

USER:
PLOT DATE:
IDS GROUP - FILE LOCATION:



OVERALL ARENA GROUND LEVEL FLOOR PLAN | 1/16" = 1'-0" | 1

USER:

PLOT DATE:

IDS GROUP - FILE LOCATION:

APPROVAL

CLIENT

CITY OF INDUSTRY
15625 MAYOR DAVE WAY
CITY OF INDUSTRY, CA 91744
PHONE: 626-333-2211

PROJECT NAME

CITY OF INDUSTRY EXPO CENTER GRAND ARENA STRUCTURE AND ANNOUNCER BOOTH

16200 TEMPLE AVENUE
CITY OF INDUSTRY, CA 91744

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REGISTERED ARCHITECT
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No. C-35573
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IDS PROJECT NO.	22X060.00
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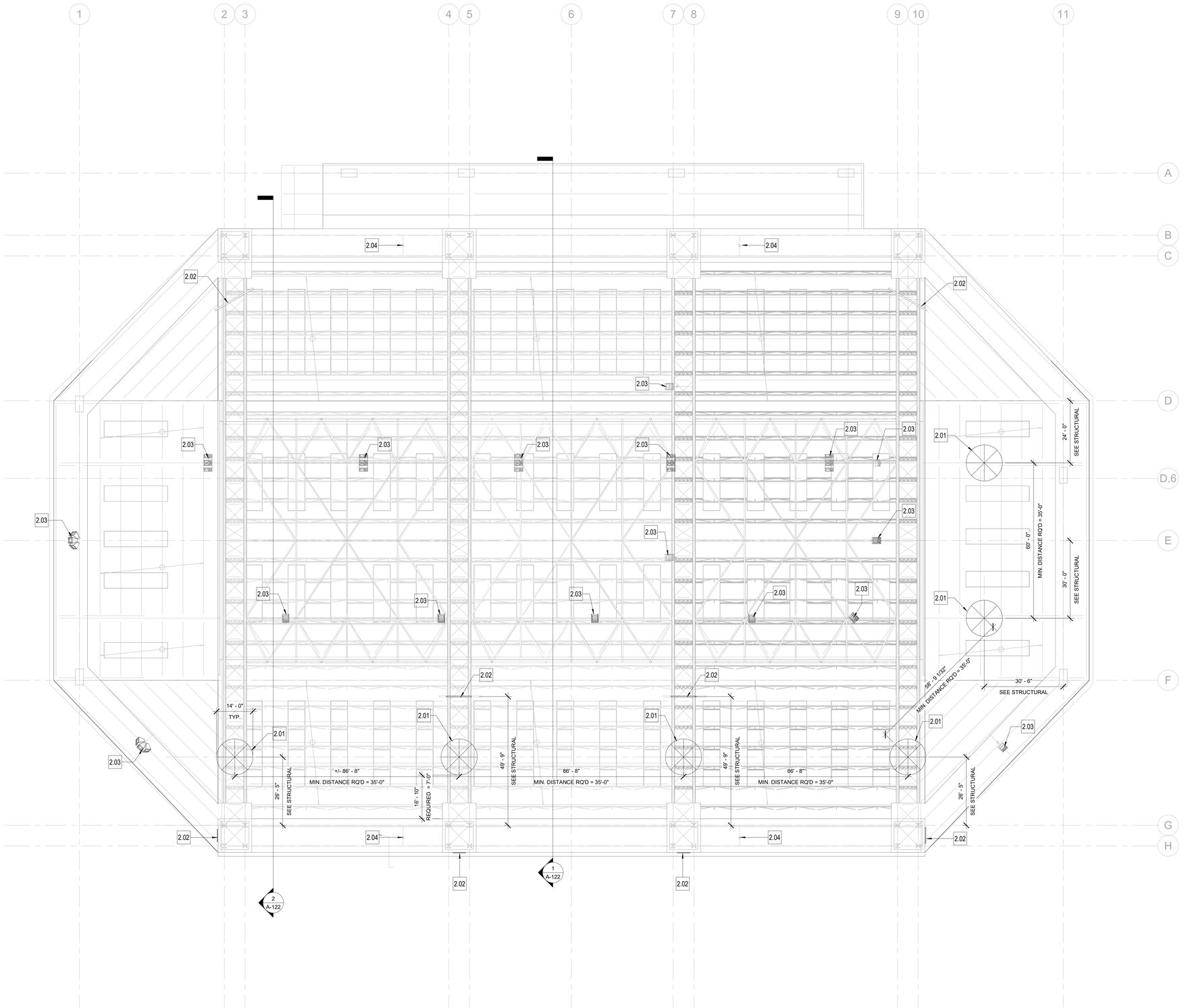
SHEET TITLE

OVERALL LEVEL 1 PLAN

SHEET NUMBER

A-111

PLAN CHECK SET - NOT FOR CONSTRUCTION



RCP OVERALL | 1/16" = 1'-0" | 1

KEYNOTES

2.01	NEW 14'-0" DIAMETER LOW VELOCITY FANS BY BIG ASS FANS, POWERFOIL X4, MODEL NO. PFX4-14(STANDARD) OR APPROVED EQUAL. SEE STRUCTURAL DRAWINGS FOR BRACING AND SUPPORT DETAILS. FANS TO BE INSTALLED PER MANUFACTURER'S SPECIFICATIONS & REQUIREMENTS. SEE SHEET A-123
2.02	NEW DISPLAY MONITOR PER AV DRAWINGS, TYP. SEE STRUCTURAL DRAWINGS FOR DETAILS
2.03	NEW SPEAKERS PER AV DRAWINGS, TYP. SEE STRUCTURAL DRAWINGS FOR DETAILS
2.04	NEW CAMERA PER AV DRAWINGS, TYP. SEE STRUCTURAL DRAWINGS FOR DETAILS

APPROVAL

CLIENT

CITY OF INDUSTRY 1957 LOS ANGELES COUNTY

15625 MAYOR DAVE WAY
CITY OF INDUSTRY, CA 91744
PHONE: 626-333-2211

PROJECT NAME

CITY OF INDUSTRY EXPO CENTER GRAND ARENA STRUCTURE AND ANNOUNCER BOOTH

16200 TEMPLE AVENUE
CITY OF INDUSTRY, CA 91744

ENGINEER/ARCHITECT

IDS

IDS GROUP

1 PETERS CANYON ROAD, SUITE 130
IRVINE, CA. 92606
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STAMP

REGISTERED ARCHITECT JOSEPH SHIN No. C-35573 REN. 7-31-25 STATE OF CALIFORNIA

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IDS PROJECT NO.	22X060.00
DRAWN BY	DP
CHECKED BY	JS
APPROVED BY	JS

SHEET TITLE

OVERALL RCP

SHEET NUMBER

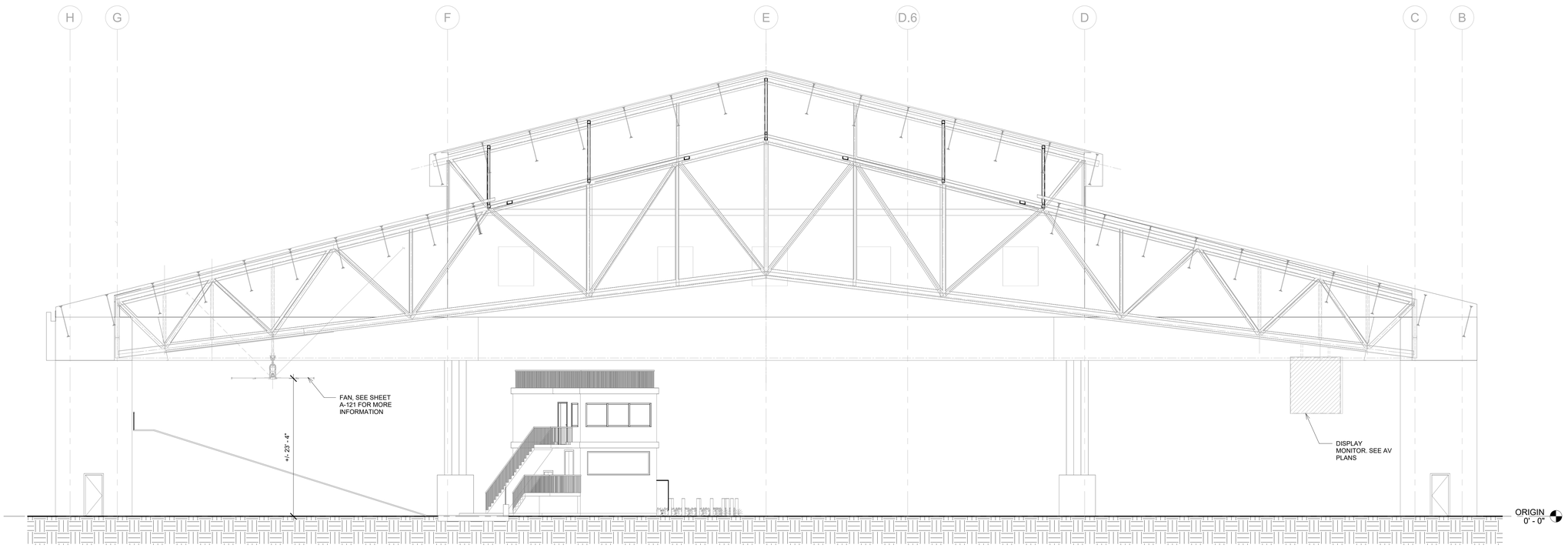
A-121

PLAN CHECK SET - NOT FOR CONSTRUCTION

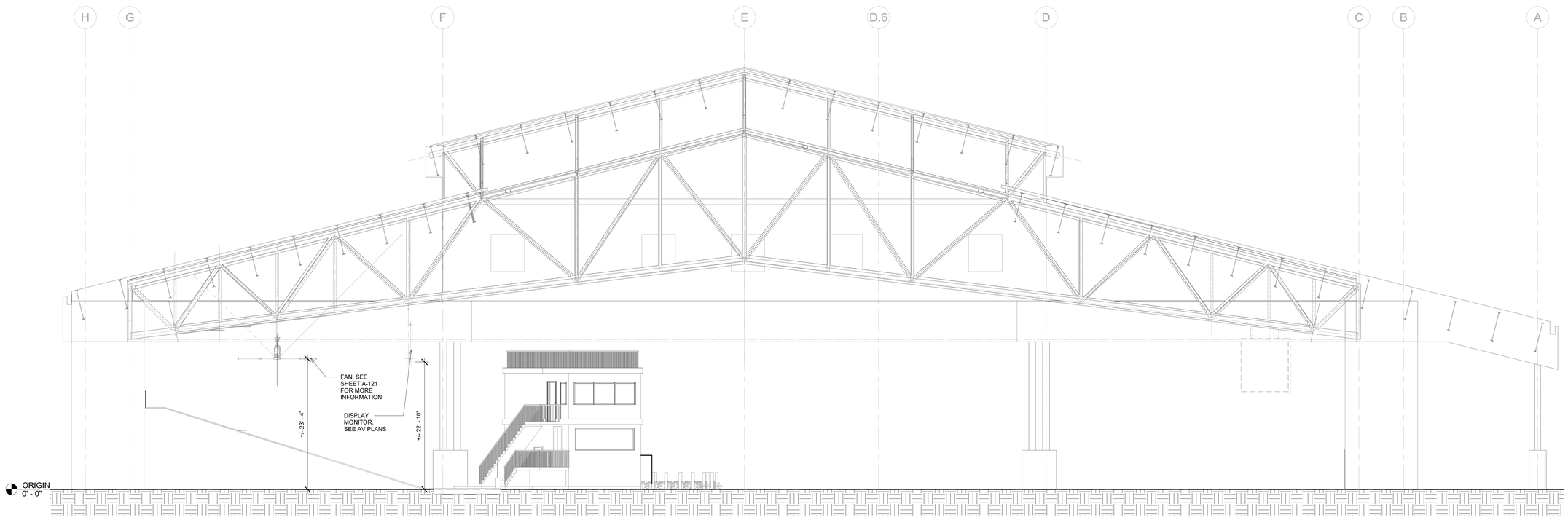
USER:

PLOT DATE:

IDS GROUP - FILE LOCATION:



SECTIONAL ELEVATION #02 | 1/8" = 1'-0" | 2



SECTIONAL ELEVATION #01 | 1/8" = 1'-0" | 1

USER:

PLOT DATE:

IDS GROUP - FILE LOCATION:

APPROVAL

CLIENT

CITY OF INDUSTRY
15625 MAYOR DAVE WAY
CITY OF INDUSTRY, CA 91744
PHONE: 626-333-2211

PROJECT NAME

CITY OF INDUSTRY EXPO CENTER GRAND ARENA STRUCTURE AND ANNOUNCER BOOTH

16200 TEMPLE AVENUE
CITY OF INDUSTRY, CA 91744

ENGINEER/ARCHITECT

IDS GROUP
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STAMP

LICENSED ARCHITECT
JOSEPH SILBERG
No. C-15573
REN. 7-31-25
STATE OF CALIFORNIA

STAMP

ISSUE		
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	90% CD SET	04/30/25
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IDS PROJECT NO.	22X060.00
DRAWN BY	DP
CHECKED BY	JS
APPROVED BY	JS

SHEET TITLE

BUILDING SECTIONS

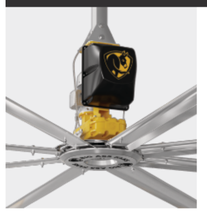
SHEET NUMBER

A-122

PLAN CHECK SET - NOT FOR CONSTRUCTION

POWERFOIL X4

What do you do after making the best industrial fan in the world? You make it better. Driven by this spirit of innovation, Powerfoil X4 has the industry-leading airflow, safety, and performance needed to transform harsh industrial environments into comfortable conditions. Featuring a high-efficiency motor, full-fan IP56 rating, and multiple redundant safety features, Powerfoil X4 is engineered to improve indoor air quality and occupant comfort far longer than the competition.



KEY FEATURES

- **Eight aluminum airfoils** with advanced winglets, safety restraints, and AirFence® system
- **NitroSeal® gearbox** hermetically sealed for durability and longevity
- **Best-in-class safety features** including aircraft-grade steel safety cables and patented dual-axis mounting system
- **Largest diameter and airflow coverage area** of any fan on the market
- **Standard IP56 rating for the entire fan** makes it perfect for harsh environments
- **Available upgrades** include control systems, Plus winglets, occupancy sensor, LED kit, and more

DIAMETER	MOTOR	MOUNTING	WARRANTY
12–30' FEET (3.7–9.1 METERS)	NITROSEAL DRIVE SYSTEM	I-BEAMS, BAR JOISTS, SOLID BEAMS, AND PURLINS	UP TO 15 YEARS MECHANICAL / UP TO 15 YEARS ELECTRICAL

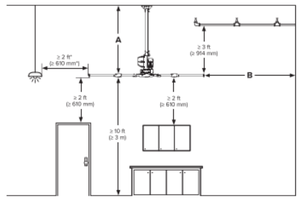
*The 30' diameter option is NOT available for any buildings with an existing sprinkler system (including an ESFR system) or where such system may be installed, in accordance with applicable NFPA standards.

BIG ASS FANS
EXCEPTIONALLY ENGINEERED

DISCOVER MORE ABOUT POWERFOIL X4

Learn more at **bigassfans.com/powerfoil-x4** or call **877.BIG.FANS** for a free custom quote.

CLEARANCES *DÉGAGEMENTS | ESPACIOS LIBRE*



For the minimum clearance to combustibles, see the manufacturer's requirements.
Respectez les distances minimales recommandées par les fabricants de matériaux combustibles.
Consulte los requisitos del fabricante del calefactor sobre las distancias mínimas a los combustibles.

* When possible, lights should be level with the fan's airfoils. We recommend turning lights off if located above the fan's rotating airfoils.
* Dans la mesure du possible, les luminaires doivent se trouver au même niveau que les pales du ventilateur. Nous vous recommandons d'éteindre les luminaires qui se trouvent au-dessus des pales du ventilateur lorsque celles-ci sont en rotation.
* De ser posible, las luces deben estar a nivel con las aspas aerodinámicas del ventilador. Se recomienda apagar las luces si están ubicadas por encima de las aspas aerodinámicas en movimiento.

Powerfoil® Winglets *Winglets Powerfoil® | Aletas Powerfoil®*

Fan Diameter *Diamètre du ventilateur* *Diámetro del ventilador*	Distance from Ceiling (A)* *Distance ventilateur-plafond (A)* *Distancia del techo (A)**	Distance from Wall (B)** *Distance ventilateur-mur (B)*** *Distancia de la pared (B)***
12 ft (3.7 m)	≥ 5 ft (≥ 1.5 m)	≥ 6 ft (≥ 1.8 m)
14 ft (4.3 m)	≥ 5 ft (≥ 1.5 m)	≥ 7 ft (≥ 2.1 m)
16 ft (4.9 m)	≥ 6 ft (≥ 1.8 m)	≥ 8 ft (≥ 2.4 m)
18 ft (5.5 m)	≥ 6 ft (≥ 1.8 m)	≥ 9 ft (≥ 2.7 m)
20 ft (6.1 m)	≥ 7 ft (≥ 2.1 m)	≥ 10 ft (≥ 3.0 m)
24 ft (7.3 m)	≥ 7 ft (≥ 2.1 m)	≥ 12 ft (≥ 3.7 m)
30 ft. (9.1 m)***	≥ 10 ft (≥ 3.0 m)	≥ 15 ft (≥ 4.6 m)

PowerfoilPlus Winglets *Winglets PowerfoilPlus | Aletas PowerfoilPlus*

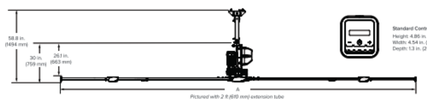
Fan Diameter *Diamètre du ventilateur* *Diámetro del ventilador*	Distance from Ceiling (A)* *Distance ventilateur-plafond (A)* *Distancia del techo (A)**	Distance from Wall (B)** *Distance ventilateur-mur (B)*** *Distancia de la pared (B)***
14 ft (4.3 m)	≥ 6 ft (≥ 1.8 m)	≥ 7 ft (≥ 2.1 m)
16 ft (4.9 m)	≥ 6 ft (≥ 1.8 m)	≥ 8 ft (≥ 2.4 m)
18 ft (5.5 m)	≥ 7 ft (≥ 2.1 m)	≥ 9 ft (≥ 2.7 m)
20 ft (6.1 m)	≥ 7 ft (≥ 2.1 m)	≥ 10 ft (≥ 3.0 m)
22 ft (6.7 m)	≥ 8 ft (≥ 2.4 m)	≥ 11 ft (≥ 3.4 m)
24 ft (7.3 m)	≥ 8 ft (≥ 2.4 m)	≥ 12 ft (≥ 3.7 m)

* The distance from the ceiling should be measured from the top of the winglets to the ceiling.
* *Cette distance se mesure entre le haut des winglets et le plafond.*
* *La distancia al techo se debe medir desde la parte superior de las aletas hasta el techo.*
** The distance from the wall should be measured from the outer edge of the winglets to the wall.
** *La distance du mur doit être mesurée du bord extérieur des winglets au mur.*
** *La distancia de la pared se debe medir desde el borde exterior de las aletas hasta la pared.*
*** The 30 ft (9.1 m) diameter option is NOT available for any buildings with an existing sprinkler system (including an ESFR system) or where such a system may be installed, in accordance with applicable NFPA standards.
*** *L'option de diamètre de 30 ft (9,1 m) n'est PAS disponible pour les bâtiments avec un système de gicleurs existant (y compris un système ESFR) ou lorsqu'un tel système peut être installé, conformément aux normes NFPA applicables.*
*** *La opción de 30 ft (9,1 m) de diámetro NO está disponible para ningún edificio con un sistema de rociadores existente (incluido un sistema ESFR) o donde se pueda instalar dicho sistema, de acuerdo con las normas NFPA aplicables.*

TECHNICAL SPECIFICATIONS

POWERFOIL® X4

BIGGER. STRONGER. TOUGHER. THE NEXT LEVEL OF INNOVATION IS HERE.



Pictured with 2 ft (610 mm) extension tube

Standard Controller
Height: 4.85 in. (123 mm)
Width: 4.54 in. (115 mm)
Depth: 1.3 in. (29 mm)

Technical Specifications

Diameter (A)[1]	Fan Model[2]	Max Weight[3]	Max Speed	Input Power and Required Breaker	Motor Horsepower	Airfoil Clearances[4]	Max Operating Temperature
12 ft (3.66 m)	PFX4-12 (Standard)	245 lb (111 kg)	130 RPM	200–240 VAC, 50/60 Hz, 1 Ø, 20 A 200–240 VAC, 50/60 Hz, 3 Ø, 15 A 400–480 VAC, 50/60 Hz, 3 Ø, 10 A 575–600 VAC, 50/60 Hz, 3 Ø, 10 A	1.9 hp (1.4 kW) 2.5 hp (1.85 kW)	2 ft (0.6 m) on sides 5 ft (1.5 m) below ceiling	122°F (50°C)
	PFX4-12 (Plus)		111 RPM				
14 ft (4.3 m)	PFX4-14 (Standard)	254 lb (115 kg)	116 RPM				
	PFX4-14 (Plus)		97 RPM				
16 ft (4.9 m)	PFX4-16 (Standard)	264 lb (120 kg)	99 RPM			2 ft (0.6 m) on sides 6 ft (1.8 m) below ceiling	
	PFX4-16 (Plus)		87 RPM				
18 ft (5.5 m)	PFX4-18 (Standard)	281 lb (127 kg)	90 RPM				
	PFX4-18 (Plus)		81 RPM				
20 ft (6.1 m)	PFX4-20 (Standard)	290 lb (132 kg)	76 RPM			2 ft (0.6 m) on sides 7 ft (2.1 m) below ceiling	
	PFX4-20 (Plus)		76 RPM				
24 ft (7.3 m)	PFX4-24 (Standard)	347 lb (157 kg)	62 RPM				
	PFX4-24 (Plus)		62 RPM				
30 ft (9.1 m)	PFX4-30 (Standard)	374 lb (170 kg)	46 RPM			2 ft (0.6 m) on sides 10 ft (3 m) below ceiling	

Construction Features

Airfoils	Motor and Gearbox	Onboard VFD and Functional Platform	Mounting	Multi-Point Safety[4]	Colors
Eight custom-engineered aluminum airfoils with winglets (BAF Tested for optimum airflow Plus winglet upgrade available (PFX)	Rated IP56 Fully vented NitroSeal® Drive gearbox (STOBER®) reduces heat buildup and resists corrosion for extended life	Housed in spacious ABS/PVC based enclosure with built-in heatsink Functional platform integrates NJRS, security cameras, speakers, or other devices	Standard upper mount installs to 4 in. (102 mm) J-box Extension tubes available in 2, 5, or 10 ft (0.6, 1.5, or 3 m) lengths Optional kits allow for mounting to solid beams and purlins	Double safety cable system w/mid retainers, hub safety clips, Grade 8 hardware, fire-relay, guy wires, and airfoil restraint system	Standard colors are silver and white Individualize your fan with one of our classic color upgrades, or create a shade that's all your own

Controls

Standard Controller	Integrations	BAFCon Upgrade®
Made from durable UV-resistant materials Rated IP55 Intuitive touchscreen interface On/Off and variable speed control Powered by fan drive	Building automation systems (Modbus RTU protocol or BACnet MS/TP) 0–10 V control Fire suppression systems	Integrated SmartSense technology automatically adjusts fan speed based on seasonal conditions 24-bit color LCD display with resistive touchscreen protected in black metal and ABS housing Powered by fan drive

Standard Controller



Powerfoil Winglet



Powerfoil Plus Winglet



* For 30 ft (9.1 m) diameter is NOT available for buildings with an existing sprinkler system (including an ESFR system) or where such a system may be installed, in accordance with applicable NFPA standards. Powerfoil Plus models are rated with a PFX motor number.
** Maximum fan diameter is 24 ft (7.3 m) for fans with a BAFCon upgrade.
*** Reduces the distance from the tip of the winglet to the ceiling or wall by approximately 1 in. (25 mm). Winglets are included with fans that have extension tubes 4 ft (1.2 m) or larger.
**** Optional upgrade available, ships separately.

CSA C22.2 No. 113-18 (R2023)
cULus Listed (Guard) File #E474810
CE Mark
See IDS Manual for full coverage information

BIG ASS FANS

USA
844.BIGASSFANS.COM
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1300 244 277

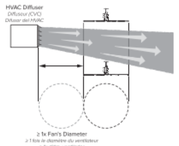
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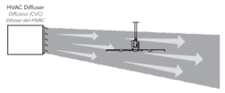
Specifications subject to change without notice.

CLEARANCES *DÉGAGEMENTS | ESPACIOS LIBRE*

Above or Below HVAC Diffuser
Au-dessus ou en dessous d'une bouche de CVC
Más alto que o debajo de un difusor de un sistema de HVAC

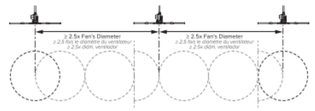


Same Level as HVAC Diffuser
À la hauteur d'une bouche de CVC
A la misma altura que un difusor de un sistema de HVAC



Contact Customer Service for assistance.
Veuillez contacter le service à la clientèle pour obtenir des conseils.
Comuníquese con el Servicio de Atención al Cliente para solicitar asistencia.

Multiple Fans
Plusieurs ventilateurs
Múltiples ventiladores



HARDWARE *VISSERIE | ACCESORIOS*

If the hardware is stainless steel, do not use power tools.
N'utilisez pas d'outils électriques si la visserie est en inox.
Si los accesorios son de acero inoxidable, no utilice herramientas eléctricas.

x4	1/2-13 x 2" Bolts *Vis 1/2-13 x 2 po* *Pernos de 1/2-13 x 2 in.*	x16	5/16-18 x 2" Bolts *Vis 5/16-18 x 2 po* *Pernos de 5/16-18 x 2 in.*
x26	1/2" Flat Washers *Rondelles plates 1/2 po* *Arandelas planas de 1/2 in.*	x32	5/16" Flat Washers *Rondelles plates 5/16 po* *Arandelas planas de 5/16 in.*
x13	1/2-13 Nylock Nuts *Écrous à bague nylon 1/2-13* *Tuercas Nylock de 1/2-13*	x16	5/16-18 Nylock Nuts *Écrous à bague nylon 5/16-18* *Tuercas Nylock de 5/16-18*
x6	1/2-13 x 5" Bolts *Vis 1/2-13 x 5 po* *Pernos de 1/2-13 x 5 in.*	x8	10-24 x 3/4" Barrels *Manchons 10-24 x 3/4 po* *Cilindros de 10-24 x 3/4 in.*
x1	Shackle *Manille* *Grillete*	x8	10-24 x 1/2" Bolts *Vis 10-24 x 1/2 po* *Pernos de 10-24 x 1/2 in.*
x4	1/2-13 x 1-3/4" Bolts *Vis 1/2-13 x 1-3/4 po* *Pernos de 1/2-13 x 1-3/4 in.*	x4	10-16 x 1/2" Pan Head Screws *Vis à tête cylindrique bombée 10-16 x 1/2 po* *Tornillos de cabeza plana 10-16 x 1/2 in.*
x1	1/2-13 x 4-3/4" Bolt *Vis 1/2-13 x 4-3/4 po* *Perno de 1/2-13 x 4-3/4 in.*		

Operating Instructions and Maintenance:
Instructions d'utilisation et entretien :
Instrucciones de operación y mantenimiento:
bigassfans.com/support

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INSTALLATION CHECKLIST

A suitable means for lifting the weight of the fan and at least two installation personnel will be required.
Prévoyez un moyen de levage adapté au poids du ventilateur et au moins deux installateurs.
Para levantar el peso del ventilador necesitará un mecanismo de izaje adecuado y al menos dos instaladores.

TOOLS *OUTILS | HERRAMIENTAS*



Additional tools may be required. If the hardware is stainless steel, do not use power tools.
D'autres outils peuvent également être nécessaires. N'utilisez pas d'outils électriques si la visserie est en inox.
Puede que necesite algunas otras herramientas. Si los accesorios son de acero inoxidable, no utilice herramientas eléctricas.

ELECTRICAL *ÉLECTRIQUE | ELÉCTRICO*

- Make sure the supply power circuit is the appropriate size and voltage and that power wiring is routed to the fan's Variable Frequency Drive (VFD) installation site. Refer to the provided electrical installation instructions for supply circuit requirements.
- The VFD output circuit cannot share conduit with any other fan controller's input or output circuits, or with the input circuit to the same VFD.
- We do not provide additional means of disconnect. If required, a local disconnect should be installed per all national and local codes.
- To satisfy some local code requirements, it may be necessary to install a manual disconnect at the fan motor location when the fan is not within 50 ft (15.2 m)/line-of-sight of the VFD.
- If you need to extend the VFD output circuit to the motor, use 600 V, 75°C rated THHN stranded wire in metallic conduit, VFD rated tray cable. Do not use Metal Clad (MC) cable or solid core wire between the VFD and the motor.
- Powerfoil® X4 Washdown is suitable for use in wet locations and outdoor use when installed in a GFCI protected branch circuit.

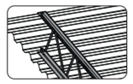
- *Assurez-vous que le circuit d'alimentation a la tension et le calibre requis et les fils d'alimentation ont été tirés jusqu'au site de montage du variateur de fréquence (VFD) du ventilateur. Reportez-vous aux instructions d'installation électrique fournies pour connaître les caractéristiques du circuit d'alimentation.*
- *Le circuit de sortie du VFD ne peut pas passer par le même conduit que le circuit d'entrée ou de sortie d'un autre contrôleur du ventilateur, ni par le même conduit que le circuit d'entrée du VFD.*
- *Nous ne fournissons pas de dispositif de sectionnement supplémentaire. Un sectionneur local doit être installé si la réglementation locale ou nationale l'exige.*
- *La réglementation locale peut exiger l'installation d'un sectionneur manuel au niveau du moteur du ventilateur si le ventilateur ne se trouve pas dans un rayon de 15,2 m (50 pi) du VFD ou n'est pas visible depuis celui-ci.*
- *Si vous avez besoin d'étendre le circuit de sortie du variateur de fréquence (VFD) jusqu'au moteur, utilisez un câble tronné THHN de 600 V, 75 °C dans un conduit métallique, sur un plateau de câble homologué VFD. N'utilisez pas de câbles à revêtement métallique (MC) ni de conducteurs à âme massive entre le VFD et le moteur.*
- *Le ventilateur Powerfoil® X4 Washdown est utilisable en lieux humides et en extérieur. Pour cela, il doit être monté sur un circuit de dérivation protégé par un disjoncteur différentiel.*

- *Asegúrese de que el circuito de alimentación eléctrica tiene el tamaño y la tensión apropiados, y el cableado eléctrico llega hasta el lugar donde se instalará el regulador de frecuencia variable (VFD, por su sigla en inglés) del ventilador. En las instrucciones de instalación eléctrica provistas encontrará los requisitos para el circuito de alimentación.*
- *El circuito de salida del regulador de frecuencia variable (VFD) no puede compartir el mismo conducto con los circuitos de entrada o salida del controlador de cualquier otro ventilador, ni con el circuito de entrada al mismo VFD.*
- *No ofrecemos medios de desconexión adicionales. Si corresponde, se debe instalar una desconexión local de acuerdo con todos los códigos locales.*
- *Para satisfacer los requisitos de ciertos códigos locales, si el ventilador no está a menos de 50 ft (15,2 m)/dentro de la línea de vista del VFD, puede ser necesario instalar una desconexión manual en el lugar donde se encuentra el motor del ventilador.*
- *Si necesita extender el circuito de salida del VFD al motor, use cable trenzado THHN de 600 V, 75 °C en conducto metálico y bandeja de cables de VFD. No use un cable con revestimiento metálico ni un cable de núcleo macizo entre el VFD y el motor.*
- *El ventilador Powerfoil® X4 Washdown es apto para uso en lugares húmedos y en aplicaciones exteriores si se instala en un circuito secundario protegido con un interruptor diferencial.*

MOUNTING *INSTALLATION | MONTURA*

A structural engineer should approve the mounting structure prior to installation. The mounting structure must be able to withstand the torque forces generated by the fan. The largest fan generates up to 300 ft·lb (406.7 N·m) of torque during operation. We recommend using guy wires if the fan's extension tube is 4 ft (1.2 m) or longer, if the fan is exposed to high winds or similar conditions, if the fan is installed outdoors, or if the fan is close to any building fixtures.
Avant l'installation, la structure d'ancrage doit être approuvée par un ingénieur en bâtiment. La structure d'ancrage doit pouvoir supporter les efforts de couple exercés par le ventilateur. En fonctionnement, le plus grand ventilateur exerce un couple allant jusqu'à 406,7 N·m (300 pi-lb). Il est recommandé d'utiliser des haubans lorsque la longueur de la tige de prolongation est supérieure ou égale à 1,2 m (4 pi), lorsque le ventilateur est exposé à de forts courants d'air ou à des conditions similaires, lorsqu'il est installé en extérieur ou lorsqu'il se trouve à proximité d'installations fixes.
Antes de realizar la instalación, un ingeniero estructural debe aprobar la estructura de montaje. La estructura de montaje debe ser capaz de soportar las fuerzas de torsión que genera el ventilador. El ventilador más grande genera un par de torsión de hasta 300 ft·lb (406,7 N·m) durante su operación. Se recomienda utilizar cables de sujeción si el tubo de extensión del ventilador tiene una longitud de 4 ft (1,2 m) o más, si el ventilador está expuesto a fuertes vientos o condiciones similares, si se lo instala al aire libre o si está cerca de algún elemento del edificio.

Bar Joists
Poutrelles
Vigas de celosía

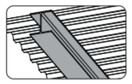


- The installer must supply angle irons and suitable 1/2-13 Grade 8 mounting hardware. Do **NOT** use strut channel (Unistrut) in place of angle irons. The use of any mounting materials other than angle irons without a structural engineering analysis showing that the alternative design exceeds the performance (in terms of limiting deflection and exceeding strength) of the prescribed angle irons **will constitute a breach of and will void all warranties.** See the Bar Joist Preparation Instructions included with the fan for angle iron sizing and configuration details.
- Do not install the fan from a single purlin, truss, or bar joist.
- Angle iron spans should not exceed 12 ft (3.7 m).
- The angle irons must be fastened to the roof structure at each end.
- Do not use beam clamps on angle irons.

- *L'installateur doit fournir des cornières métalliques et des boulons de qualité 8 de 1/2-13 adaptés. Ne PAS utiliser d'entretoise (Unistrut) à la place des cornières. L'utilisation d'autres matériaux de fixation que des cornières, sans analyse d'ingénierie structurelle démontrant que la conception alternative surpasse les exigences des cornières prescrites (en termes de limitation de la flèche et de dépassement de la résistance), **constituera un manquement à la garantie et annulera toutes les garanties.** Consultez les instructions de préparation des poutrelles incluses avec le ventilateur concernant le dimensionnement des cornières et les détails de configuration.*
- *Ne installez ne pas le ventilateur à une seule panne, ferme ou poutrelle.*
- *La portée des cornières métalliques ne doit pas excéder 12 m (12 pi).*
- *Les cornières métalliques doivent être fixées à la charpente du toit à chaque extrémité.*
- *N'utilisez jamais de attache-poutres sur des cornières métalliques.*

- *El instalador debe proveer perfiles angulares y accesorios de montaje adecuados de 1/2-in 13 de grado 8. No utilice canales de estructura (Unistrut) en lugar de perfiles angulares. El uso de cualquier material de montaje que no sean hierros angulares sin un análisis de ingeniería estructural previo que demuestre que el diseño alternativo excede el desempeño (en términos de límite de flecha y superar la resistencia) de los hierros angulares prescritos **constituirá un incumplimiento y anulará todas las garantías**. Consulte las pautas de dimensionamiento y configuración de los hierros angulares en las Instrucciones de preparación de vigas de celosía incluidas con el ventilador.*
- *No instale el ventilador en una sola viga, viga en armazón ni viga de celosía.*
- *La longitud de los perfiles angulares no debe exceder los 12 ft (3,7 m).*
- *Los hierros angulares deben estar sujetados a la estructura del techo en cada extremo.*
- *Nunca use abrazaderas para viga en los perfiles angulares.*

I-Beam
Poutre en I
Viga doble T

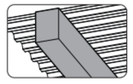


- We do not recommend mounting the fan to a fabricated I-beam.
- The I-beam must be part of the existing building structure.
- Install spacers if the flange thickness exceeds 3/8 in. (10 mm).
- For an angled I-beam or pitched roof, the beam flange width must be 5 to 9-7/8 in. (127 to 251 mm).

- *Nous vous déconseillons de fixer le ventilateur à une poutre en I soudée.*
- *La poutre en I doit faire partie intégrante de la charpente existante.*
- *Ajoutez des entretoises si l'âme mesure plus de 10 mm (3/8 po) d'épaisseur.*
- *Pour les poutres en I ou les poutres inclinées, la largeur de l'aile doit mesurer 127 mm à 251 mm (5 po à 9-7/8 po).*

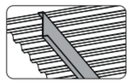
- *No recomendamos instalar el ventilador en una viga doble T armada.*
- *La viga doble T debe ser parte de la estructura existente del edificio.*
- *Instale espaciadores si el espesor del ala de la viga es superior a 3/8 in (10 mm).*
- *En el caso de una viga doble T o de un techo inclinado, el ancho del ala de la viga debe ser de 5 in. a 9-7/8 in. (127 a 251 mm).*

Solid Beam
Poutre pleine
Viga maciza



See the instructions included with the solid beam (L-bracket) mounting kit.
Reportez-vous aux instructions fournies avec le kit pour montage sur poutre pleine (équerres).
Consulte las instrucciones incluidas con el kit de instalación en viga maciza (soportes en L).

Z-Purlins
Pannes en Z
Vigas Z



The installer must supply angle irons. See the instructions included with the Z-purlin installation kit. Do **NOT** use strut channel (Unistrut) in place of angle irons. The use of any mounting materials other than angle irons without a structural engineering analysis showing that the alternative design exceeds the performance (in terms of limiting deflection and exceeding strength) of the prescribed angle irons **will constitute a breach of and will void all warranties**. See the Bar Joist Preparation Instructions included with the fan for angle iron sizing and configuration details.

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*L'installateur doit fournir des cornières métalliques. Reportez-vous aux instructions fournies avec le kit de montage pour pannes en Z. Ne **PAS** utiliser d'entretoise (Unistrut) à la place des cornières. L'utilisation d'autres matériaux de fixation que des cornières, sans analyse d'ingénierie structurelle démontrant que la conception alternative surpasse les exigences des cornières prescrites (en termes de résistance et de limitation du fléchissement), **constituera une rupture de garantie qu'elle rendra invalide**. Consultez les instructions de préparation des poutrelles incluses avec le ventilateur concernant le dimensionnement des cornières et les détails de configuration.*

---

*El instalador debe proveer perfiles angulares. Consulte las instrucciones incluidas con el kit de instalación del adaptador para viga en Z. **NO** utilice perfiles canal para estructuras (Unistrut) en lugar de perfiles angulares. El uso de cualquier material de montaje que no sean hierros angulares sin un análisis de ingeniería estructural previo que demuestre que el diseño alternativo supera el desempeño (en términos de límite de flecha y superar la resistencia) de los hierros angulares prescritos **constituirá un incumplimiento y anulará todas las garantías**. Consulte las pautas de dimensionamiento y configuración de los hierros angulares en las instrucciones para la preparación de vigas de celosía incluidas con el ventilador.*

USER:
PLOT DATE:
IDS GROUP - FILE LOCATION:

APPROVAL

CLIENT

CITY OF INDUSTRY
EXPO CENTER
GRAND ARENA
STRUCTURE AND
ANNOUNCER
BOOTH

16200 TEMPLE AVENUE
CITY OF INDUSTRY, CA 91744

PROJECT NAME

CITY OF INDUSTRY
EXPO CENTER
GRAND ARENA
STRUCTURE AND
ANNOUNCER
BOOTH

16200 TEMPLE AVENUE
CITY OF INDUSTRY, CA 91744

ENGINEER/ARCHITECT

IDS

IDS GROUP

1 PETERS CANYON ROAD, SUITE 130
IRVINE, CA. 92606
TEL: 949-387-8500, FAX: 949-387-0800

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REN. 7-31-25
STATE OF CALIFORNIA

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ISSUE

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	95% CD SET	08/04/25
	100% CD SET	08/29/25

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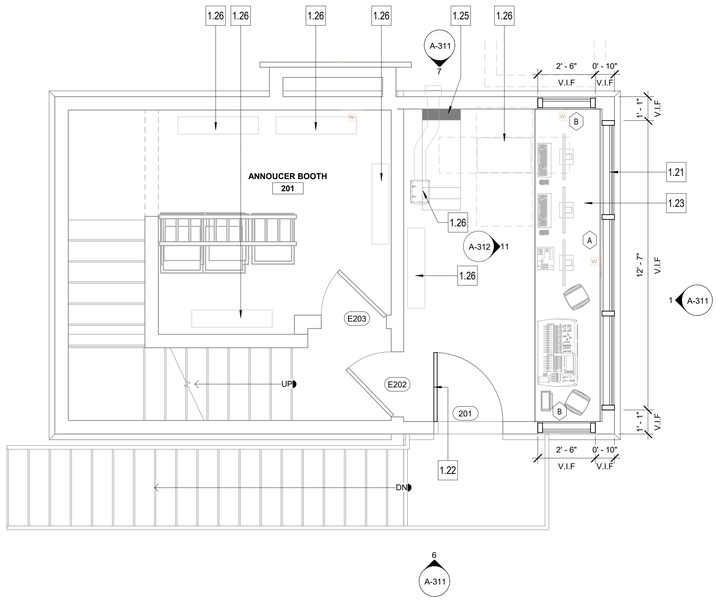
CUT SHEETS - POWERFOIL X4 FANS

SHEET NUMBER

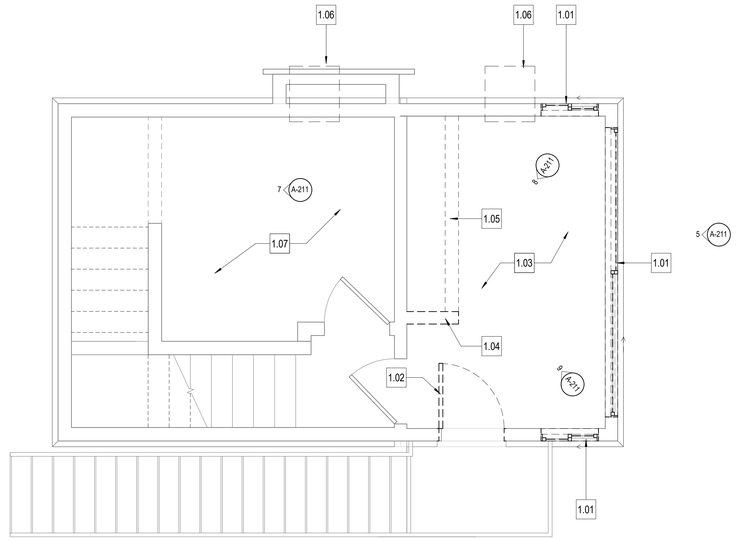
A-123



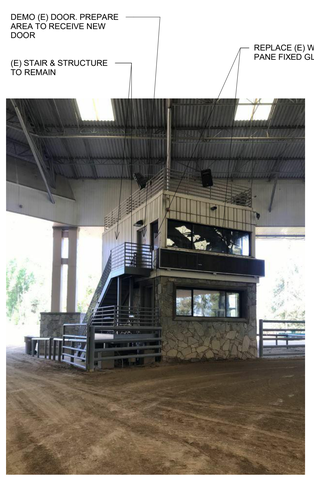
ENLARGED PLAN - OB BOOTH LEVEL 3 | 3/8" = 1'-0" | 4



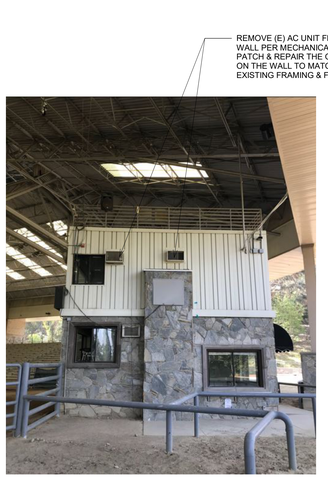
ENLARGED PLAN - OB BOOTH LEVEL 2 | 3/8" = 1'-0" | 3



ENLARGED PLAN - EXISTING /DEMO OB BOOTH LEVEL 2 | 3/8" = 1'-0" | 1



5 EXTERIOR PHOTO 01
12" = 1'-0"



6 EXTERIOR PHOTO 02
12" = 1'-0"



9 INTERIOR PHOTO 03
12" = 1'-0"



7 INTERIOR PHOTO 01
12" = 1'-0"



8 INTERIOR PHOTO 02
12" = 1'-0"

KEYNOTES

1.01	DEMO (E) SLIDING WINDOW. PREPARE TO RECEIVE NEW WINDOW
1.02	DEMO (E) DOOR & FRAME. COORDINATE WITH OWNER FOR STORAGE OR DISPOSAL. PREPARE AREA TO RECEIVE NEW DOOR
1.03	(E) CEILING & LIGHTS TO REMAIN. PATCH & REPAIR CEILING TO MATCH EXISTING CONDITIONS
1.04	REMOVE (E) WALL. PATCH & REPAIR AFFECTED WALLS, CEILING AND FLOORS AS REQUIRED TO MATCH THE EXISTING CONDITIONS
1.05	REMOVE (E) SOFFIT WALL. PATCH & REPAIR CEILING / AFFECTED WALL TO MATCH EXISTING CONDITIONS
1.06	REMOVE (E) AC UNIT FROM WALL PER MECHANICAL PLANS. PATCH & REPAIR THE OPENING ON THE WALL TO MATCH THE EXISTING FRAMING & FINISHES
1.07	REMOVE (E) CEILING IN THE IT ROOM. REPLACE EXISTING LIGHT FIXTURE AS NECESSARY. PATCH & REPAIR AFFECTED WALLS AS REQUIRED TO MATCH EXISTING CONDITIONS
1.21	INSTALL NEW FIXED EXTERIOR DOUBLE PANE ACOUSTIC WINDOW BY ACOUSTICAL SURFACES, INC; STUDIO 5 MODEL
1.22	INSTALL NEW DOOR, DOOR FRAME & DOOR HARDWARE
1.23	INSTALL WALL MOUNTED TABLE SURFACE. PROVIDE BRACKET SUPPORT 24" O.C. ALLOW 1" GAP FROM THE WALL FOR CABLING ACCESS. SEE AV PLANS
1.24	NEW AV EQUIPMENT (TYP). SEE AV DRAWINGS
1.25	ELECTRICAL PANEL. SEE ELECTRICAL DRAWINGS
1.26	NEW MECHANICAL EQUIPMENT PER MECHANICAL DRAWINGS

LEGEND

- EXISTING CONSTRUCTION TO BE DEMOLISHED
- EXISTING CONSTRUCTION TO REMAIN
- NEW DOOR
- A-211 › 1 PHOTO REFERENCE

SHEET NOTES

1. SEE G-000 SHEET FOR ADDITIONAL NOTES AND ABBREVIATIONS.
2. ALL EXISTING WORK TO REMAIN UNLESS OTHERWISE NOTED.
3. WHERE EXISTING CERAMIC TILE, FABRIC OR VINYL WALL COVERING IS SCHEDULED TO BE REMOVED, AND THE GYPSUM BOARD PAPER IS DAMAGED IN THE PROCESS, REMOVE EXISTING LAYER OF GYPSUM BOARD TO EXPOSE EXISTING METAL STUD FRAMING. PROVIDE NEW GYPSUM BOARD TO MATCH EXISTING, AND AT RATED ASSEMBLIES, PROTECT AND MAINTAIN EXISTING UL COMPONENTS AS REQUIRED TO RETAIN UL RATING.
4. PROTECT WORK AREA INCLUDING NEW AND EXISTING MATERIALS AND FINISHES FROM DAMAGE WHICH MAY OCCUR FROM CONSTRUCTION, DEMOLITION, DUST, WATER, ETC. PROVIDE AND MAINTAIN TEMPORARY BARRICADES, CLOSURE WALLS, AS REQUIRED TO PROTECT THE PUBLIC AND BUILDING OCCUPANTS DURING CONSTRUCTION. DAMAGE TO NEW AND EXISTING STRUCTURES, EQUIPMENT, MATERIALS AND FINISHES SHALL BE REPAIRED OR REPLACED TO THE SATISFACTION OF THE OWNER AT THE SOLE EXPENSE OF THE CONTRACTOR.
5. REMOVE EXISTING FINISH MATERIALS (INCLUDING WALLCOVERING, FLOOR FINISHES, WALL BASE, ETC) THROUGHOUT, U.O.N. PREPARE SURFACES FOR NEW FINISHES.
6. REMOVE AND DISCARD ALL FLOOR FINISHES AND WALL BASE AS WELL AS FLASH PATCH, MASTIC AND ADHESIVES DOWN TO THE STRUCTURAL CONCRETE FLOOR SLAB AND PREPARE FOR NEW FINISHES.
7. REMOVE ALL EXISTING MATERIALS CREATING UNEVEN, OUT OF TOLERANCE SUBSTRATE INCLUDING BUT NOT LIMITED TO FASTENERS, COVER PLATES, RESILIENT FLOORING, CARPET PAD, ETC.
8. ALL LIFE SAFETY DEVICES SHALL REMAIN ACTIVE DURING DEMOLITION AND CONSTRUCTION.

APPROVAL

CLIENT

15625 MAYOR DAVE WAY
CITY OF INDUSTRY, CA 91744
PHONE: 626-333-2211

PROJECT NAME

CITY OF INDUSTRY EXPO CENTER GRAND ARENA STRUCTURE AND ANNOUNCER BOOTH

16200 TEMPLE AVENUE
CITY OF INDUSTRY, CA 91744

ENGINEER/ARCHITECT

IDS GROUP

1 PETERS CANYON ROAD, SUITE 130
IRVINE, CA. 92606
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STAMP

REGISTERED ARCHITECT JOSEPH SERRANO JR. No. C-5573 REN. 7-31-25 STATE OF CALIFORNIA

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ISSUE		
REV.	DESCRIPTION	DATE
	90% CD SET	04/30/25
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IDS PROJECT NO.	22X060.00
DRAWN BY	DP
CHECKED BY	JS
APPROVED BY	JS

SHEET TITLE

ENLARGED FLOOR PLANS

SHEET NUMBER

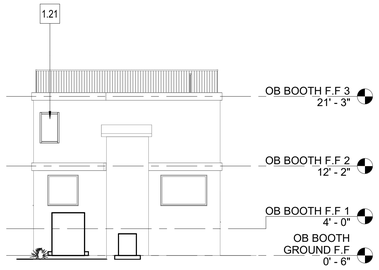
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PLAN CHECK SET - NOT FOR CONSTRUCTION

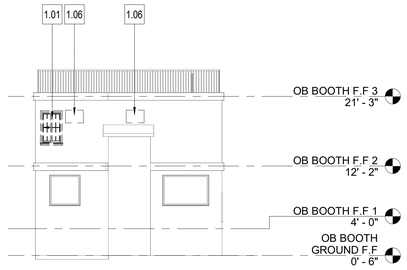
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PLOT DATE:

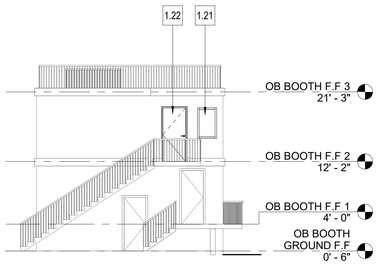
IDS GROUP - FILE LOCATION:



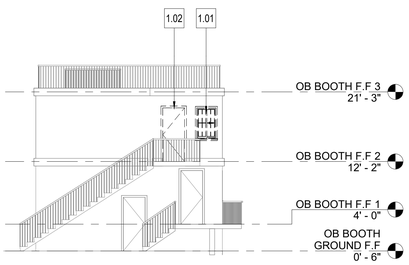
PROPOSED - ANNOUNCER BOOTH ELEVATION #3 | 1/8" = 1'-0" | 7



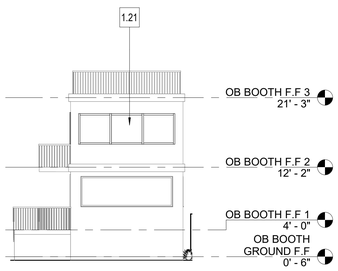
DEMO - ANNOUNCER BOOTH ELEVATION #3 | 1/8" = 1'-0" | 3



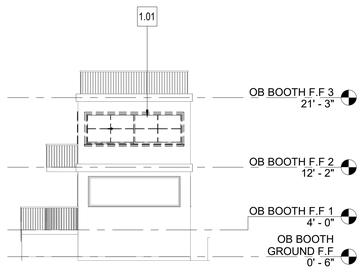
PROPOSED - ANNOUNCER BOOTH ELEVATION #2 | 1/8" = 1'-0" | 6



DEMO - ANNOUNCER BOOTH ELEVATION #2 | 1/8" = 1'-0" | 2



PROPOSED - ANNOUNCER BOOTH ELEVATION #1 | 1/8" = 1'-0" | 5



DEMO - ANNOUNCER BOOTH ELEVATION #1 | 1/8" = 1'-0" | 1

KEYNOTES

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APPROVAL

CLIENT

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15625 MAYOR DAVE WAY
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DRAWN BY	DP
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APPROVED BY	JS

SHEET TITLE

ELEVATIONS

SHEET NUMBER

A-311

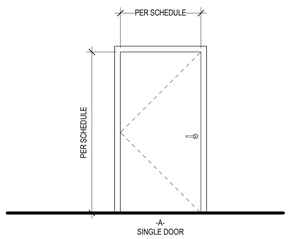
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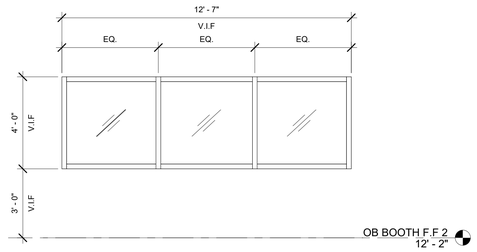
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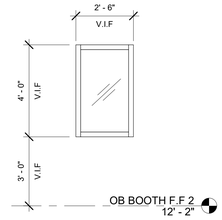
IDS GROUP - FILE LOCATION:

DOOR & WINDOW TYPES





A FIXED WINDOW TYPE A
3/8" = 1'-0"



B FIXED WINDOW TYPE B
3/8" = 1'-0"

DOOR SCHEDULE

DOOR #	FROM ROOM:	TO ROOM:	TYPE	DOOR DIMENSION W	H	T	DOOR MATERIAL & FINISH MATERIAL	FINISH	GLASS FINISH	FRAME MATERIAL & FINISH MATERIAL	FINISH	HDW SET	FIRE RATED	EXIT DEVICE	COMMENTS
201			A	3' - 0"	7' - 0"	1 3/4"	H.M.	MATCH (E)	-	H.M.	PAINT TO MATCH (E)	001			
E202			-	2' - 10"	7' - 0"	1 3/4"	(E)	(E)	-	(E)	(E)	-			
E203		ANNOUCER BOOTH	-	2' - 10"	7' - 0"	1 3/4"	(E)	(E)	-	(E)	(E)	-			

WINDOW SCHEDULE

WINDOW TYPE	QTY	WIDTH	HEIGHT	FRAME MATERIAL	FRAME FINISH	GLAZING
A	1	12' - 7"	4' - 0"	ALUM.	MATCH (E)	CLEAR
B	2	2' - 6"	4' - 0"	ALUM.	MATCH (E)	CLEAR

DOOR HARDWARE NOTES

1. ALL KEYING SHALL BE COORDINATED WITH OWNER DURING SUBMITTAL PROCESS
2. DOOR HARDWARE LOCATION PER DETAILS 16 / A - 312 AND 16 / A - 312
3. NOT USED
4. PROVIDE NON-REMOVABLE PINS ON ALL HINGES WHICH ARE ACCESSIBLE FROM THE EXTERIOR WHEN THE DOOR IS CLOSED.
5. THE SWEEP OF A DOOR CLOSER SHALL BE ADJUSTED SO THAT FROM AN OPEN POSITION OF 70 DEGREES, THE DOOR WILL TAKE AT LEAST 3 SECONDS TO MOVE TO A POINT 3" FROM THE LATCH AS MEASURED FROM THE LEADING EDGE OF THE DOOR.
6. THE "WIDTH", "HEIGHT" AND "THICK." INDICATE NOMINAL DIMENSIONS OF THE WIDTH, HEIGHT AND THICKNESS OF EACH DOOR. FIELD VERIFY ALL DIMENSIONS FOR DOORS AND FRAMES.
7. THE FLOOR OR LANDING SHALL NOT BE MORE THAN 1/2" LOWER THAN THE THRESHOLD OF THE DOORWAY. BEVEL (1:2 MAX. SLOPE) WHERE THE THRESHOLD EXCEEDS 1/4" IN HEIGHT
8. RAISED THRESHOLDS AND FLOOR LEVEL CHANGES GREATER THAN 1/4-IN. AT DOORWAYS SHALL BE BEVELED WITH A SLOPE NOT GREATER THAN ONE UNIT VERTICAL IN TWO UNITS HORIZONTAL (50% SLOPE).
9. DOORS SHALL BE READILY OPENABLE FROM THE EGRESS SIDE WITHOUT THE USE OF A KEY OR SPECIAL KNOWLEDGE OR EFFORT
10. DOOR HARDWARE SET PER DOOR SCHEDULE AND SPECIFICATION. ALL HARDWARE LISTED IN THE HARDWARE SETS AND ITEMS NOTED AS "BY OTHERS" SHALL BE PROCURED AND INSTALLED AS PART OF THE GENERAL CONTRACT
11. ALL FIRE RATED DOORS MUST BE SELF OR AUTOMATIC CLOSING
12. WHEN A DOOR HAS A CLOSER, THE SWEEP PERIOD OF THE CLOSER SHALL BE ADJUSTED SO THAT FROM AN OPEN POSITION OF 70 DEGREES, THE DOOR WILL TAKE AT LEAST THREE SECONDS TO MOVE A POINT 3" FROM THE LATCH, MEASURED TO THE LANDING EDGE OF THE DOOR.
13. GLASS LITE DIMENSIONS ARE TO EDGE OF EXPOSED GLASS, LOUVER DIMENSIONS ARE TO EDGE OF EXPOSED LOUVER.
14. PROVIDE FLOOR MOUNTED DOOR STOPS AT ALL DOORS
15. FIELD VERIFY ALL OPENING DIMENSIONS FOR DOORS AND FRAMES
16. ALL MEANS OF EGRESS DOORS SHALL COMPLY WITH THE REQUIREMENTS OF SECTION 1008.1.
17. DOOR HARDWARE: HANDLES, PULLS, LATCHES, LOCKS AND OTHER OPERATING DEVICES ON ACCESSIBLE DOORS SHALL HAVE A SHAPE THAT IS EASY TO GRASP WITH ONE HAND AND DOES NOT REQUIRE TIGHT GRASPING, TIGHT PINCHING, OR TWISTING OF THE WRIST TO OPERATE.
18. EGRESS DOORS OR GATES SHALL BE OPENABLE FROM THE EGRESS SIDE WITHOUT THE USE OF A KEY, SPECIAL KNOWLEDGE, OR EFFORT. DOOR HANDLES, PULLS, LATCHES, LOCKS, AND OTHER OPERATING DEVICES SHALL BE INSTALLED 34 TO 48 IN ABOVE THE FINISHED FLOOR. MANUALLY OPERATED FLUSH BOLTS OR SURFACE BOLTS ARE NOT PERMITTED. THE UNLATCHING OF ANY DOOR OR LEAF SHALL NOT REQUIRE MORE THAN ONE OPERATION.
19. PROVIDE A SIGN AT THE TRANSOM WITH 1" HIGH LETTERS OF CONTRASTING COLOR TO THE BACKGROUND STATING 'THIS DOOR TO REMAIN UNLOCKED DURING BUSINESS HOURS.
20. WIDTH AND HEIGHT OF REQUIRED EXIT DOORS SHALL COMPLY WITH CBC 1003.3.1 AND 1005.1.

ABBREVIATIONS

HM	HOLLOW METAL DOOR PER SPECIFICATION SECTION
GLASS/ALUM	ALUMINUM DOOR WITH GLASS OPENING PER SPECIFICATION
SCW	SOLID CORE WOOD DOOR PER SPECIFICATION
SGP	SEMI-GLOSS PAINT
FF	FACTORY FINISH, COLOR PER ARCHITECTS DIRECTION
ALUM	ALUMINUM
TG	TEMPERED GLAZING
TLG	TEMPERED AND LAMINATED GLASS
PT	PAINTED FINISH, COLOR PER ARCHITECTS DIRECTION

WINDOW GENERAL NOTES

1. EACH LITE SHALL BEAR THE MANUFACTURER'S LABEL DESIGNATING THE TYPE AND THICKNESS OF THE GLASS.
2. GLASS SHALL BE FIRMLY SUPPORTED ON ALL FOUR SIDES.
3. FIELD MEASURE ALL OPENINGS PRIOR TO FABRICATIONS.
4. ALL GLAZING WITHIN A 24" ARC OF EITHER EDGE OF A DOOR AND WITHIN 60" OF THE FLOOR SHALL BE TEMPERED.

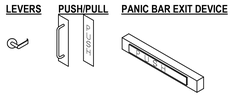
HARDWARE SETS

SET: 001

3	STANDARD HINGE	MCKINNEY TA2314 4 1/2" X 4 1/2" (NRP)
1	LOCKSET	YALE B-PB-R8840FL CT/SD
1	SURFACE CLOSER W/STOP	YALE UNI-4400
1	THRESHOLD	PEMKO 171AK
1	WEATHERSTRIPPING	PEMKO 2891APK (TKSP8)
1	DOOR BOTTOM	PEMKO 2221APK (TKSP8)
1	RAIN GUARD	PEMKO 346C X FULL FRAME WIDTH

ALL DOOR HARDWARE TO MATCH CITY STANDARDS

LEVERS PUSH/PULL PANIC BAR EXIT DEVICE

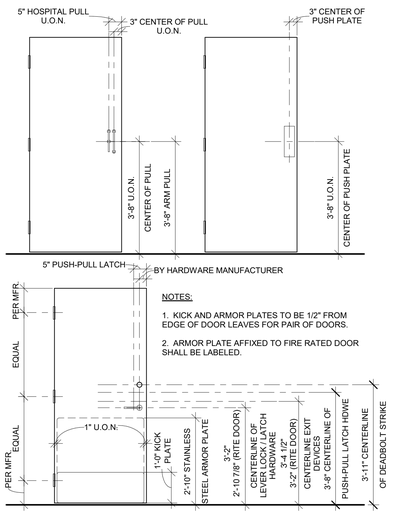


NOTE: DOOR HARDWARE IS MOUNTED 34" MIN - 44" MAX FROM FINISH FLOOR TO TOP OF THE DEVICE.

LATCHING & LOCKING DOORS THAT ARE HAND OPERATED AND WHICH ARE IN A PATH OF TRAVEL ARE OPERABLE WITH A SINGLE EFFORT (LEVER, PUSH/PULL, PANIC BAR OR OTHER HARDWARE ASSIGNED TO PROVIDE PASSAGE WITHOUT REQUIRING THE ABILITY TO GRASP, PINCH, OR TWIST THE OPENING HARDWARE)

MAXIMUM EFFORT TO OPERATE DOORS SHALL NOT EXCEED 5 LBF, WHEN FIRE DOORS ARE REQUIRED THE MAX EFFORT TO OPERATE THE DOOR MAY BE INCREASED TO THE MINIMUM ALLOWABLE BY THE APPROPRIATE AUTHORITY , NOT TO EXCEED 15 LBF.

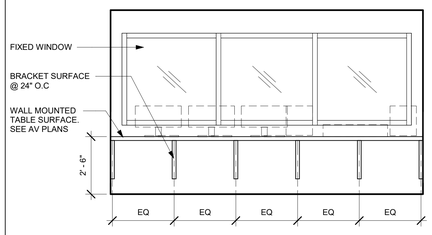
DOOR ACCESSIBLE HARDWARE | 1/2" = 1'-0" | 17



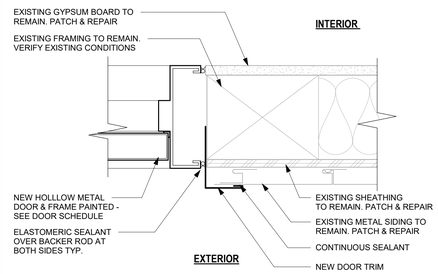
NOTES:

1. KICK AND ARMOR PLATES TO BE 1/2" FROM EDGE OF DOOR LEAVES FOR PAIR OF DOORS.
2. ARMOR PLATE AFFIXED TO FIRE RATED DOOR SHALL BE LABELED.

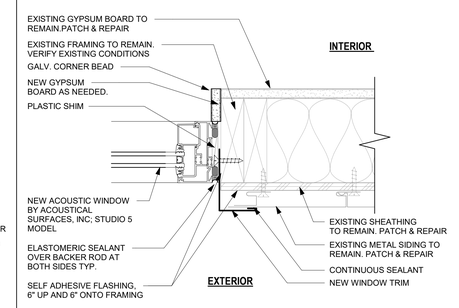
FINISH HARDWARE LOCATIONS | 1/2" = 1'-0" | 16



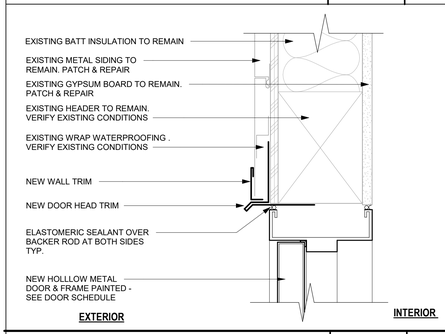
INTERIOR ELEVATION | 3/8" = 1'-0" | 11



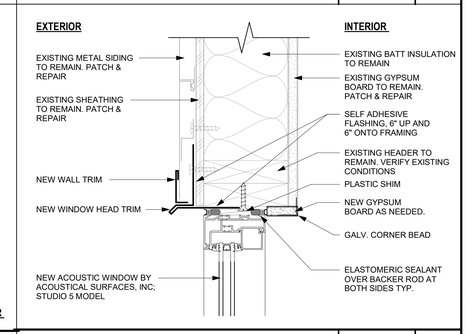
DOOR JAMB | 3" = 1'-0" | 8



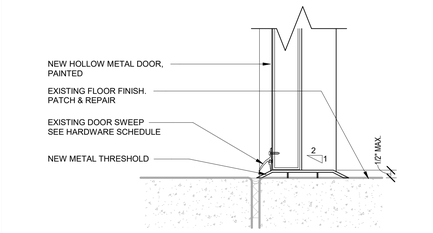
WINDOW JAMB | 3" = 1'-0" | 3



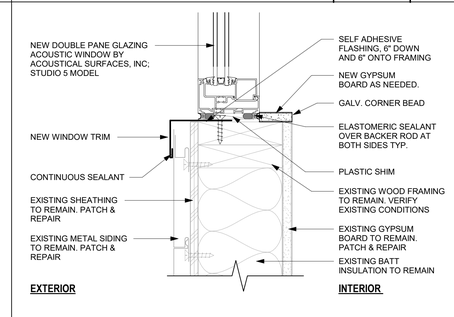
DOOR HEAD | 3" = 1'-0" | 7



WINDOW HEAD | 3" = 1'-0" | 2



DOOR THRESHOLD | 3" = 1'-0" | 6



WINDOW SILL | 3" = 1'-0" | 1

APPROVAL

CLIENT

CITY OF INDUSTRY
15625 MAYOR DAVE WAY
CITY OF INDUSTRY, CA 91744
PHONE: 626-333-2211

PROJECT NAME

CITY OF INDUSTRY
EXPO CENTER
GRAND ARENA
STRUCTURE AND
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BOOTH

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IDS PROJECT NO.	22X060.00
DRAWN BY	DP
CHECKED BY	JS
APPROVED BY	JS

SHEET TITLE

DOOR / WINDOW SCHEDULE & DETAILS

SHEET NUMBER

A-312

PLAN CHECK SET - NOT FOR CONSTRUCTION

USER:

PLOT DATE:

IDS GROUP - FILE LOCATION:

ABBREVIATIONS

@	AT	K	KIPS; 1000
&	AND	K.P.	KING POST
A.B.	ANCHOR BOLT		
ABV.	ABOVE		
ADD'L. (ADDL.)	ADDITIONAL	LAT.	LATERAL
ADJ.	ADJACENT	L.B.	LAG BOLT
ALT.	ALTERNATE	LB (#)	POUND
ALUM.	ALUMINUM	L.F.	LINEAL FEET (FOOT)
APPRX. (APPROX.)	APPROXIMATE(LY)	LDGR.	LEDGER
ARCH.	ARCHITECT(URAL)	LLH	LONG LEG HORIZONTAL
		LLV	LONG LEG VERTICAL
BLDG.	BUILDING	LT.WT.	LIGHT WEIGHT
BLKG.	BLOCKING		
BLW.	BELOW	MAX.	MAXIMUM
BM.	BEAM	M.B.	MACHINE BOLT
B.N.	BOUNDARY NAILING	MECH.	MECHANICAL
BNDRY.	BOUNDARY	M.E.P.	MECHANICAL, ELECTRICAL
B.O.C.	BOTTOM OF CONCRETE		AND PLUMBING
B.O.F.	BOTTOM OF FOOTING	MEZZ.	MEZZANINE
BOT. (B)	BOTTOM	MFR.	MANUFACTURER
BRCG.	BRACING	MIN.	MINIMUM
BRDG.	BRIDGE (ING)	MISC.	MISCELLANEOUS
BRG.	BEARING	MTL.	METAL
BTWN.	BETWEEN		
		(N)	NEW
CAMB. (C)	CAMBER(ED)	N.O.(#)	NUMBER
CBC	CALIFORNIA BUILDING CODE	N.S.	NEAR SIDE
CANT.	CANTILEVER(ED)	N.T.S.	NOT TO SCALE
C.F.	CUBIC FEET (FOOT)		
C.I.P.	CAST-IN-PLACE		
C.I.D.H.	CAST-IN-DRILLED HOLE	O/C (O.C.)	ON CENTER
C.J.	CONTROL JOINT;	O.D.	OUTSIDE DIAMETER
	CONSTRUCTION JOINT	O.H.	OPPOSITE HAND
C.L. (℄)	CENTER LINE	OPNG.	OPENING
CLG.	CEILING	OPP.	OPPOSITE
CLR.	CLEAR	ORTH.	ORTHOGONAL
COL.	COLUMN	O.W.J.	OPEN WEB JOIST
CONC.	CONCRETE		
CONN.	CONNECTION	PC	PILE CAP
CONST.	CONSTRUCTION	PCF	POUNDS PER CU.FT.
CONT.	CONTINUOUS	PL.	PLATE
C.P.	COMPLETE-PENETRATION	PLYWD.	PLYWOOD
		P.P.	PARTIAL-PENETRATION
CTSK.	COUNTERSINK		
CTR.	CENTER(ED)	P.S.F.	POUNDS PER SQUARE FOOT
C.P.	CUBIC YARD	P.S.I.	POUNDS PER SQUARE INCH
		PT	PRETENSIONED
		P.T.	PRESSURE TREATED
d	d PENNY NAIL		
DBA	DEFORMED BAR ANCHOR	QTY.	QUANTITY
DBL.	DOUBLE		
DEPT.	DEPARTMENT	RAD.(R)	RADIUS
D.F.	DOUGLAS FIR	RBS	REDUCED BEAM SECTION
DIA. (Ø)	DIAMETER	REF.	REFERENCE
DIAG.	DIAGONAL	REINF.	REINFORCEMENT (ING)
DIAPH.	DIAPHRAGM	REQ'D. (REQD.)	REQUIRED
DIM.	DIMENSION	RF.	ROOF
DN.	DOWN	R.O.	ROUGH OPENING
DO	DITTO (REPEAT)		
DWG. (DWGS.)	DRAWING(S)	S.A.D.	SEE ARCHITECTURAL DRAWINGS
DWL.	DOWEL		
EA.	EACH	SC.	SLIP-CRITICAL
E.F.	EACH FACE	S.C.D.	SEE CIVIL DRAWINGS
E.J.	EXPANSION JOINT	SCH.	SCHEDULE
EL.	ELEVATION	SEP.	SEPARATION
ELEC.	ELECTRICAL	SHT.	SHEET
ELEV.	ELEVATOR	SIM.	SIMILAR
EMB.	EMBED(MENT)	SKW.	SKEW(ED)
E.N.	EDGE NAIL	S..G.	SLAB-ON-GRADE
ENG.	ENGINEER	SPEC.	SPECIFICATION
EQ.	EQUAL	SQ.	SQUARE
EQPT.	EQUIPMENT	ST	SNUG-TIGHTENED
EQUIV.	EQUIVALENT	STD.	STANDARD
EXP.	EXPANSION	STAGG.	STAGGER(ED)
EXIST. (E)	EXISTING	STIFF.	STIFFENER
EXT.	EXTERIOR	STIR.	STIRRUP
		STRUC(T).	STRUCTURAL
FDN.	FOUNDATION	SUSP.	SUSPENDED
FIN.	FINISH(ED)	SYMM.	SYMMETRICAL
FLR.	FLOOR	T&B	TOP AND BOTTOM
F.N.	FIELD NAIL; FACE NAIL	T&G	TONGUE AND GROOVE
F.O.C.	FACE OF CONCRETE	TEMP.	TEMPORARY
F.O.M.	FACE OF MASONRY	THK.	THICK(NESS)
F.O.S.	FACE OF STUD	T.N.	TOE NAIL
F.O.W.	FACE OF WALL	T.O.	TOP OF
F.P.	FULL PENETRATION	T.O.C.	TOP OF CONCRETE
FRP	FIBER REINFORCED POLYMER	T.O.S.	TOP OF STEEL; TOP OF SHEATHING
		T.O.W.	TOP OF WALL
FRT	FIRE-RETARDANT-TREATED	TRANS.	TRANSVERSE
F.S.	FAR SIDE	T.S.G.	TAPERED STEEL GIRDER
FT. (')	FOOT (FEET)	TYP.	TYPICAL
FTG.	FOOTING		
F.V.	FIELD VERIFY	U.N.O.	UNLESS OTHERWISE NOTED
		UTIL.	UTILITY
GA.	GAUGE		
GALV.	GALVANIZE(D)	VERT. (V)	VERTICAL
GLB.	GLUED LAMINATED BEAM (GLU-LAM)	V.I.F.	VERIFY IN FIELD
GRD.	GRADE	W/	WITH
GYP.	GYPSUM	(W)	WIDE; WIDTH
		WD.	WOOD
HD.	HOLDOWN; HAND	W.P.	WORK POINT
HDR.	HEADER	WT.	WEIGHT
HGR.	HANGER	W.W.F.	WELDED WIRE FABRIC
HORIZ.	(H) HORIZONTAL		
H.S.	HEADED STUD	X-STG	EXTRA STRONG
H.S.B.	HIGH STRENGTH BOLT	XX-STG	DOUBLE EXTRA STRONG
HT.	HEIGHT		
I.D.	INSIDE DIAMETER		
IN.	(") INCH(ES)		
INFO.	INFORMATION		
JST.	JOIST		
JT.	JOINT		

STRUCTURAL STEEL

1. THE CONTRACTOR SHALL SUBMIT ALL STRUCTURAL STEEL AND MISCELLANEOUS STEEL SHOP DRAWINGS TO THE ENGINEER FOR REVIEW PRIOR TO FABRICATION.
2. MATERIAL TEST OR REPORTS FOR HOT-ROLLED STRUCTURAL SHAPES, PLATES, AND BARS SHALL BE MADE IN ACCORDANCE WITH ASTM A6. FOR SHEET MATERIAL, TEST SHALL BE MADE IN ACCORDANCE WITH ASTM A568. FOR TUBING AND PIPE, SUCH TEST SHALL BE MADE IN ACCORDANCE WITH REQUIREMENTS OF THE APPLICABLE ASTM STANDARDS.
3. HOT ROLLED SHAPES WITH FLANGES 1½" THICK AND THICKER AND BASE PLATE 1½" THICK AND THICKER SHALL HAVE A MINIMUM CHARPY V-NOTCH TOUGHNESS OF 20 FL-LB AT 70° F.
4. STEEL MATERIALS SHALL CONFORM TO THE FOLLOWING, UNLESS OTHERWISE NOTED:
   A. ANGLES, PLATES AND BARS: ASTM A36 (Fy=36ksi, Fu=58ksi)
   B. W AND WT: ASTM A992 (Fy=50ksi, Fu=65ksi)
   C. RECTANGULAR AND SQUARE HSS: ASTM A1085 (Fy=50ksi, Fu=65ksi)
   D. ROUND HSS: ASTM A1085 (Fy=50ksi, Fu=65ksi)
   E. PIPES: ASTM A53, GRADE B (Fy=35ksi, Fu=60ksi)
   F. BOLTS AT STEEL-TO-STEEL CONNECTIONS: ASTM A325 ST (SNUG-TIGHTENED), TYPE 1; ⅞"Ø TYP. U.O.N.
   G. BOLTS AT OTHER APPLICATIONS: ASTM A307
   H. ANCHOR RODS: ASTM F1554, GRADE 36, U.N.O.
   I. THREADED RODS: ASTM A36
   J. NUTS: ASTM A563
   K. WASHERS: ASTM F436
   L. TWIST-OFF-TYPE TENSION-CONTROL BOLT ASSEMBLIES: ASTM F1852
   M. COMPRESSIBLE-WASHER-TYPE DIRECT-TENSION INDICATORS: ASTM F959
   N. STEEL STUD SHEAR CONNECTORS: ASTM A29/A108, AWS D1.1
   O. STRUT CHANNEL: ASTM A653 SS GRADE 33 AT 12 GA. THICKNESS
   P. TELESPAR: ASTM A653 SS GRADE 50, CLASS 2 MIN. AT 12 GA. THICKNESS
   Q. CHANNEL & TELESPAR FITTINGS: ASTM A1011 SS GRADE 33 MIN. AT ¼" OR THICKER, OR ASTM A1011 HSLAS GRADE 45 MIN. AT 0.220" OR THICKER
   R. THREADED ROD" Fy = 36 KSI MIN.
   S. AIRCRAFT CABLE AND CONTROL ASSEMBLIES: COMPLIED WITH SPECIFICATION MIL-DTL-83420 QPL-83420 - JACKETED AIRCRAFT CABLE, MINIMUM 7x19 WITH 3/16 DIAMETER AND ¼ O.D. JACKET, STAINLESS STEEL, WITH MINIMUM BREAK STRENCTH = 3,700 LBS
5. ALL WELDING OF STEEL SHALL CONFORM TO AWS D1.1 AND SHALL BE PERFORMED BY AWS CERTIFIED WELDERS USING E-70XX LOW HYDROGEN MOISTURE RESISTING ELECTRODES UNLESS OTHERWISE NOTED.
6. USE THE MINIMUM SIZE OF WELDS IN ACCORDANCE WITH AISC MANUAL OF STEEL CONSTRUCTION AT STEEL TO STEEL JOINTS UNLESS A LARGER WELDING SIZE IS SPECIFIED ON THE PLANS.
7. ALL STEEL (EXCEPT STAINLESS STEEL) SHALL BE SHOP PRIMED WITH ZINC OXIDE PRIMER UNLESS OTHERWISE NOTED.
8. PAINT ALL STRUCTURAL STEEL WITH WEATHER/RUST RESISTANT PAINT IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS AND ARCHITECTURAL DETAILS UNLESS OTHERWISE NOTED.
9. DIAMETER OF BOLT HOLE SHALL BE 1/16" LARGER THAN THE BOLT'S DIAMETER UNLESS OTHERWISE NOTED.
10. IF DRILLING HOLES AT STEEL MEMBERS TO ACCOMMODATE THE CONCRETE OR MASONRY ANCHORS IS REQUIRED, THE DRILLING MUST BE DONE AFTER THE ANCHORS HAVE BEEN INSTALLED. THE HOLES AT STEEL MEMBERS SHALL MATCH THE LOCATION OF INSTALLED ANCHORS.
11. PROVIDE BEVELED WASHERS ON SLOPING SURFACE OF CONNECTIONS FOR FULL BEARING.
12. WHERE LENGTH OF WELDING IS NOT SHOWN, IT SHALL BE FULL LENGTH OF JOINT. ALL BUTT WELDS SHALL BE COMPLETE PENETRATION WELDS UNLESS OTHERWISE NOTED.
13. WHERE SO INDICATED ON THE DRAWINGS, STEEL EXPOSED TO VIEW IS DEFINED AS "ARCHITECTURALLY EXPOSED STRUCTURAL STEEL" (AESS). SEE SPECIFICATIONS.
14. MINIMUM BOLT SPACING FROM CENTER OF STANDARD AISC HOLE AS FOLLOWS, U.N.O.:
    CENTER-TO-CENTER = 3 BOLT DIAMETER
    CENTER-TO-ROLLED EDGE = 1.5 BOLT DIAMETER
    CENTER-TO-SHEARED EDGE = 1.75 BOLT DIAMETER
15. THE NATURAL CAMBER IN BEAMS SHALL BE ORIENTED UP, UNLESS NOTED OTHERWISE. AT CANTILEVERS, THE NATURAL CAMBER SHALL BE ORIENTED SO THAT THE FREE END IS ABOVE THE CONNECTED END. THE TOP OF ALL MEMBERS SHALL BE CLEARLY IDENTIFIED. ALL BEAM CAMBERS SHOWN ON THE PLANS SHALL INCLUDE NATURAL CAMBER.
16. PROVIDE UPWARD CAMBER TO MEMBERS INDICATED TO HAVE CAMBER. AMOUNT MEASURED IN THE FIELD PRIOR TO ERECTION SHALL NOT DEVIATE BY MORE THAN ALLOWED BY THE AISC SPECIFICATION. DO NOT CAMBER MEMBERS OCCURRING BELOW ELEVATOR ENTRANCE DOORS.
17. GALVANIZE ALL STEEL EXPOSED TO WEATHER, UNLESS OTHERWISE NOTED.
18. UNDER NO CIRCUMSTANCES SHALL DRAWINGS BE SCALED OR REFERENCE ELECTRONIC BUILDING INFORMATION BE USED TO DETERMINE ELEVATIONS OR DIMENSIONS.
19. THE CONTRACTOR SHALL ESTABLISH A MASTER SET OF TOP-OF-STEEL DRAWINGS FOR ALL AREAS OF THE BUILDING OR STRUCTURE FOR APPROVAL BY THE ARCHITECT BEFORE BEGINNING FABRICATION OF STRUCTURAL STEEL. THE CONTRACTOR'S MASTER SET OF TOP-OF-STEEL DRAWINGS SHALL BE SUBMITTED AT THE BEGINNING OF THE SHOP DRAWING SUBMITTAL PROCESS. THIS SET OF DRAWINGS SHALL SHOW ALL TOP-OF-STEEL ELEVATIONS, ALL EDGE OF STEEL INFORMATION FOR FLOOR AND ROOF LEVELS, AND ALL STEEL FRAMING DIMENSIONS AT FLOOR AND WALL OPENINGS.

STRUCTURAL STEEL WELDING

1. ALL WELDING SHALL BE IN CONFORMANCE WITH THE AWS D1.1
2. ALL WELDING MUST BE APPROVED BY AN AWS CERTIFIED INSPECTOR APPROVED BY GOVERNING CODE AUTHORITY.
3. ALL WELDING OF STEEL SHALL CONFORM TO AWS D1.1 AND SHALL BE PERFORMED BY AWS CERTIFIED WELDERS USING E-70XX LOW HYDROGEN MOISTURE RESISTING ELECTRODES UNLESS OTHERWISE NOTED.
4. USE THE MINIMUM SIZE OF WELDING IN ACCORDANCE WITH AISC MANUAL OF STEEL CONSTRUCTION AT STEEL-TO-STEEL JOINTS UNLESS A LARGER WELDING SIZE IS SPECIFIED ON THE PLANS.
5. WHERE LENGTH OF WELDING IS NOT SHOWN, IT SHALL BE FULL LENGTH OF JOINT. ALL BUTT WELDS SHALL BE COMPLETE PENETRATION WELDS UNLESS OTHERWISE NOTED.
6. THE CONTRACTOR SHALL PROVIDE WELDING PROCEDURE SPECIFICATION (WPS) AND DETAILED SEQUENCE OF WELDING SKETCH FOR REVIEW PRIOR TO STARTING FABRICATION. THE SEQUENCE OF WELDING SHALL BE PLANNED TO MINIMIZE LOCKED IN STRESSES AND DISTORTION. EACH WPS SHALL BE STAMPED WITH AN AWS INSPECTOR'S STAMP INDICATING THAT INSPECTOR'S CERTIFICATION THAT THE WPS CONFORMS TO AWS D1.1 AND ALL REQUIREMENTS SET FORTH IN THE DRAWINGS AND SPECIFICATIONS. EACH WPS SHALL BE FORMATTED TO FIT ON LETTER SIZED PAPER BUT SHALL BE SUBMITTED ON THE UPPER PORTION OF LEGAL SIZED PAPER ALLOWING FOR AWS INSPECTOR, CONTRACTOR REVIEW, AND DESIGNER REVIEW STAMPS TO BE PLACED ON THE BLANK BOTTOM PORTION OF EACH LEGAL SIZED SHEET.
7. COMPLETE PENETRATION GROOVE WELDS SHALL HAVE A FILLER METAL WITH CHARPY V-NOTCH TOUGHNESS OF 20 FT-LBS AVERAGE AT -20 DEGREES FAHRENHEIT. FOR DEMAND CRITICAL WELDS OF THE SEISMIC LOAD RESISTING SYSTEM SUBJECTED TO SERVICE TEMPERATURES BELOW +50 °F, THE MINIMUM CHARPY V-NOTCH OF 40 FT/LBS SHALL BE PROVIDED AT A SERVICE TEMPERATURE NOT MORE THAN 20 °F ABOVE THE LOWEST ANTICIPATED SERVICE TEMPERATURE.
8. FACES OF FILLET WELDS NOT EXPOSED TO VIEW SHALL HAVE AS-WELDED SURFACES THAT ARE REASONABLY SMOOTH AND UNIFORM. NO FINISHING OR GRINDING SHALL BE REQUIRED EXCEPT WHERE CLEARANCES OR FIT OF OTHER ITEMS MAY SO NECESSITATE.
9. ALL COMPLETE AND PARTIAL PENETRATION WELDS WHICH ARE EXPOSED TO VIEW SHALL BE GROUND SMOOTH AND FLUSH WITH FINISH SURFACE OF STEEL. HOLES SHALL BE FILLED WITH WELD METAL AND SMOOTHED BY GRINDING OR FILING.
10. FINISH GROOVE PREPARATION THERMAL CUTS BY GRINDING.
11. WELDS SHALL BE TERMINATED AT THE END OF A JOINT IN A MANNER THAT WILL ENSURE SOUND WELDS. THIS SHALL BE DONE BY USE OF EXTENSION BARS AND RUN OFF TABS IF NECESSARY.
12. TO ASSURE THE PROPER AMPERAGE AND VOLTAGE OF THE WELDING PROCESS, A HAND HELD CALIBRATED AMP AND VOLT METER SHALL BE USED. AMPERAGE AND VOLTAGE SHALL BE MEASURED AT THE ARC WITH THIS EQUIPMENT. TRAVEL SPEED AND ELECTRODE STICK OUT SHALL BE VERIFIED TO BE IN COMPLIANCE WITH THE ELECTRODE MANUFACTURER'S RECOMMENDATIONS AND WITH THE APPROVED WELDING PROCEDURE SPECIFICATION.

DESIGN CRITERIA

DESIGN CONFORMS TO THE 2022 CALIFORNIA BUILDING CODE AND COUNTY OF LOS ANGELES ON AMENDMENTS.

1. DEAD LOADS:
   - ROOF: 18 PSF
2. LIVE LOADS:
   - ROOF: 20 PSF
3. WIND ANALYSIS: WIND LOADS ARE BASED ON CBC WITH THE FOLLOWING FACTORS:
   - EXPOSURE CATEGORY = C
   - V = 95 MPH
   - Kzt = 1.13
   - RISK CATEGORY = II
4. SEISMIC ANALYSIS: NON-STRUCTURAL COMPONENTS - ASCE 7-16 CHAPTER 13
   - SITE CLASS = D-DEFAULT
   - RISK OCCUPANCY CATEGORY = II
   - I_e = 1.0
   - S_s = 1.743 g
   - S_1 = 0.623 g
   - F_a = 1.2
   - S_{DS} = 1.395 g

EQUIPMENT ANCHORAGE

1. ALL MECHANICAL AND ELECTRICAL EQUIPMENT (AND OTHER ITEMS NOTED BELOW) SHALL BE ANCHORED OR BRACED TO MEET THE HORIZONTAL AND VERTICAL FORCES PRESCRIBED IN THE CBC AND ASCE.
2. THE ATTACHMENT OF THE FOLLOWING ITEMS SHALL BE DESIGNED TO RESIST THE FORCES PRESCRIBED ABOVE, BUT NEED NOT BE DETAILED ON THE PLANS, AND THE PROJECT INSPECTOR WILL VERIFY THAT THESE ITEMS HAVE ANCHORAGE:
   A. EQUIPMENT WEIGHING LESS THAN 400 POUNDS SUPPORTED DIRECTLY ON THE FLOOR OR ROOF.
   B. FURNITURE REQUIRED TO BE ATTACHED IN ACCORDANCE WITH ASCE.
   C. TEMPORARY OR MOVABLE EQUIPMENT WITH FLEXIBLE CONNECTIONS TO POWER OR UTILITIES.
   D. EQUIPMENT WEIGHING LESS THAN 20 POUNDS SUPPORTED BY VIBRATION ISOLATORS.
   E. EQUIPMENT WEIGHING LESS THAN 20 POUNDS SUSPENDED FROM A ROOF OR FLOOR OR HUNG FROM A WALL.
3. FOR THOSE ELEMENTS THAT DO NOT REQUIRE DETAILS ON THE APPROVED DRAWINGS, THE INSTALLATION SHALL BE SUBJECT TO THE APPROVAL OF THE RESPONSIBLE DESIGN PROFESSIONAL.

HORIZONTAL AND VERTICAL CONTROL

1. HORIZONTAL AND VERTICAL CONTROL MEANS ELEVATIONS AND HORIZONTAL AND VERTICAL DIMENSIONS SHOWN ON THE CONTRACT DOCUMENTS THAT DEFINE THE PLACEMENT OF THE CONSTRUCTION SHOWN ON THE DRAWINGS.
2. THE CONTRACTOR SHALL NOT CONSIDER ANY ELEVATIONS OR DIMENSIONS SHOWN ON THE STRUCTURAL DRAWINGS AS ESTABLISHING HORIZONTAL AND VERTICAL CONTROL. HORIZONTAL AND VERTICAL CONTROL ARE ESTABLISHED BY CERTIFIED AND APPROVED SURVEY INFORMATION PROVIDED BY THE OWNER AND/OR CONTRACTOR, AS WELL AS INFORMATION SHOWN ON THE APPROVED ARCHITECTURAL AND CIVIL DRAWINGS. IF THERE ARE ANY DISCREPANCIES IN ELEVATIONS OR HORIZONTAL AND VERTICAL DIMENSIONS BETWEEN THE STRUCTURAL DRAWINGS AND THE ARCHITECTURAL AND/OR CIVIL DRAWINGS, THE ARCHITECTURAL AND/OR CIVIL DRAWINGS SHALL GOVERN, AND SUCH DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR RESOLUTION PRIOR TO PERFORMING THE WORK.
3. IN SOME CASES BELOW GRADE ELEVATIONS, AND/OR DIMENSIONS SHOWING DEPTH OR THICKNESS BELOW REFERENCE POINT OR ELEVATION, ARE SHOWN FOR FOUNDATION ITEMS INCLUDING, BUT NOT LIMITED TO, COLUMN FOUNDATION PADS, WALL FOOTINGS, PILE CAPS, PILES, BASEMENT SLABS, ETC. IN ALL SUCH CASES THE CONTRACTOR SHALL VERIFY THE CONSTRUCTABILITY OF THESE STRUCTURAL COMPONENTS AT THE ELEVATIONS AND/OR DIMENSIONED DEPTHS SHOWN ON THE DRAWINGS BEFORE BEGINNING CONSTRUCTION OF THE PARTICULAR STRUCTURAL ITEM. THE CONTRACTOR'S VERIFICATION PROCESS SHALL INCLUDE, BUT NOT BE LIMITED TO, REVIEW OF THE FOLLOWING: FLOOR OR OTHER PROJECT ELEVATIONS SHOWN FOR THE SAME AREA ON THE ARCHITECTURAL AND CIVIL DRAWINGS; MECHANICAL, ELECTRICAL, PLUMBING AND OTHER DISCIPLINE DRAWINGS; RECORD DRAWINGS OF UTILITIES AND OTHER BELOW GRADE ITEMS OBTAINED FROM THE OWNER AND OTHER AGENCIES; AND ANY CERTIFIED AND APPROVED SURVEY INFORMATION MADE A PART OF THIS PROJECT. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT AND OWNER BEFORE BEGINNING WORK.
4. ALL TOP OF STEEL, MASONRY AND CONCRETE ELEVATIONS-AS WELL AS DIMENSIONS TO STRUCTURAL STEEL AND CONCRETE AT THE EDGE OF SLABS AND METAL DECKS; DIMENSIONS TO STRUCTURAL STEEL AND CONCRETE AT OPENINGS IN CONCRETE SLAB OR METAL DECK FLOOR AND ROOF AREAS; AND DIMENSIONS TO OPENINGS IN STEEL FRAMED, CONCRETE AND MASONRY WALL AREAS-SHALL BE ESTABLISHED BY THE CONTRACTOR BASED ON THE ARCHITECTURAL DESIGN AND DESIGN INTENT AND SUBMITTED TO THE ARCHITECT FOR VERIFICATION AND APPROVAL PRIOR TO BEGINNING FABRICATION AND INSTALLATION OF THE WORK.

TOLERANCE

1. PERMITTED TOLERANCE SHALL BE ACCORDING TO THE CBC.

STRUCTURAL TESTS AND INSPECTIONS

1. STRUCTURAL TESTS AND INSPECTIONS SHALL BE ACCORDING TO CBC, AND PROJECT SPECIFICATIONS.
2. CONSTANT PRESENCE AND INSPECTION BY THE PROJECT OR SPECIAL INSPECTOR ARE REQUIRED FOR THE FOLLOWING TYPES OF WORK:
   A. STRUCTURAL WELDING
   B. HIGH-STRENGTH BOLTING

SHEET INDEX

SHEET NO.	SHEET NAME
S-001	GENERAL NOTES
S-209	FLOOR PLAN
S-210	MAIN ROOF FRAMING PLAN (NEW A/V EQUIPMENTS)
S-210.1	MAIN ROOF FRAMING PLAN (NEW FANS AND LCD MONITORS)
S-211	CLERESTORY ROOF FRAMING PLAN
S-410	TRUSS FRAMING ELEVATION
S-410.1	TRUSS FRAMING ELEVATIONS
S-411	TRUSS FRAMING ELEVATION
S-412	TRUSS FRAMING ELEVATION
S-413	TRUSS FRAMING ELEVATION
S-414	TRUSS FRAMING ELEVATION
S-415	TRUSS FRAMING ELEVATION
S-500	SECTIONS AND DETAILS
S-500.1	SECTION AND DETAILS (NEW FANS AND LCD MONITORS)
S-501	SECTIONS AND DETAILS
S-501.1	SECTIONS AND DETAILS (NEW FANS AND LCD MONITORS)

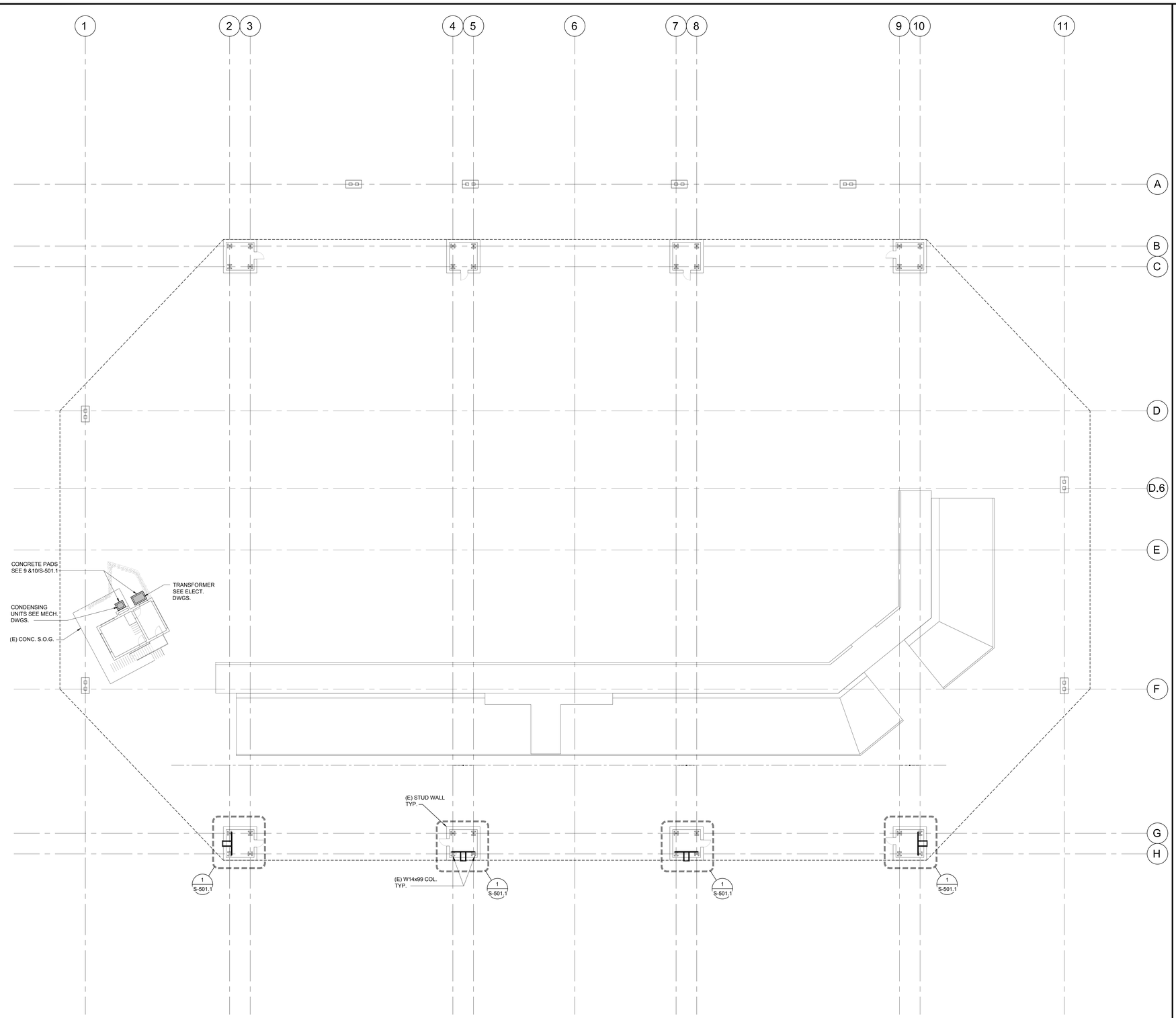
SCOPE OF WORK

STRUCTURAL SUPPORT AND BRACING FOR NEW A/V EQUIPMENT, NEW FANS AND LCD MONITORS AND STRENGTHENING EXISTING ROOF STRUCTURES AS REQUIRED FOR NEW EQUIPMENT LOADS.

GENERAL

1. REFER TO PROJECT SPECIFICATIONS FOR PROJECT REQUIREMENTS.
2. ALL CONSTRUCTION AND WORKMANSHIP, INCLUDING MATERIALS, SHALL CONFORM TO THESE DRAWINGS AND THE CBC.
3. GOVERNING CODE AUTHORITY: LOS ANGELES COUNTY BUILDING AND SAFETY DEPARTMENT.
4. COMPLY FULLY WITH ALL CODES HAVING JURISDICTION OVER THE WORK. IF ANY WORK SHOWN OR INDICATED ON THE DRAWINGS IS IN CONFLICT WITH ANY CODE HAVING JURISDICTION, BRING IT TO THE ATTENTION OF THE OWNER PRIOR TO THE COMMENCEMENT OF ANY WORK WHICH WOULD BE AFFECTED BY IT.
5. WHERE NOT INDICATED OTHERWISE, THE LATEST EDITION OF ALL CITED DOCUMENTS SHALL GOVERN.
6. THE TERM CBC IN THESE DRAWINGS MEANS 2019 CALIFORNIA BUILDING CODE, CALIFORNIA CODE OF REGULATIONS, TITLE 24, ALL PARTS AND VOLUMES.
7. ALL INFORMATION, DIMENSIONS, AND ELEVATIONS SHOWN OR NOTED TO EXISTING STRUCTURE ARE BASED ON BEST INFORMATION CURRENTLY AVAILABLE AT THE TIME OF THE PREPARATION OF THESE DRAWINGS. NO WARRANTY IS IMPLIED AS TO THE ACCURACY OF EXISTING CONDITIONS. THE CONTRACTOR SHALL REFER TO THE ORIGINAL CONSTRUCTION DOCUMENTS FOR INFORMATION REGARDING EXISTING CONSTRUCTION AND SHALL FIELD VERIFY ALL CONDITIONS. IF CONDITIONS BECOME APPARENT WHICH DIFFER FROM THE CONDITIONS SHOWN HEREIN, THEY SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE OWNER. HOWEVER, ANY SIGNIFICANT CONFLICTS SHALL BE RESOLVED AS NOTED.
8. THE CONTRACTOR SHALL:
   A. BECOME FAMILIAR WITH ALL CONTRACT DOCUMENTS.
   B. CHECK ALL DIMENSIONS.
   C. BE RESPONSIBLE FOR COORDINATION OF ALL TRADES TO ASSURE PROPER CONSTRUCTION OF THE PROJECT.

   ALL DISCREPANCIES SHALL BE CALLED TO THE ATTENTION OF THE ENGINEER AND SHALL BE RESOLVED BEFORE PROCEEDING WITH THE WORK.
9. DIMENSIONS; DIMENSIONS TAKE PRECEDENCE OVER SCALE OF DRAWING. RELY ON WRITTEN DIMENSIONS GIVEN AND FIELD VERIFICATION. IF DISCREPANCIES ARE FOUND, NOTIFY THE OWNER BEFORE THE COMMENCEMENT OR RESUMPTION OF WORK. IF NO DIMENSION ARE GIVEN, NOTIFY THE OWNER FOR CLARIFICATIONS. ALL NOTIFICATIONS SHALL BE BY "RFI".
10. DRAWINGS INDICATE GENERAL AND TYPICAL DETAILS OF CONSTRUCTION. NOTES AND DETAILS ON DRAWINGS TAKE PRECEDENCE OVER "GENERAL NOTES" AND TYPICAL DETAILS. WHERE CONDITIONS ARE NOT SPECIFICALLY INDICATED BUT ARE OF SIMILAR CHARACTER TO DETAILS SHOWN, SIMILAR DETAILS OF CONSTRUCTION SHALL BE USED SUBJECT TO PRIOR REVIEW BY THE ENGINEER.
11. CONDITIONS NOTED AS "EXISTING" OR (E) ARE TO REMAIN U.N.O. PROTECT AS REQUIRED. "EXISTING" CONSTRUCTION REMOVED BY THE CONTRACTOR FOR ANY REASON SHALL BE REPLACED TO MATCH EXISTING AT NO ADDITIONAL COST TO THE OWNER. ALL MATERIALS, FEATURES OR CONDITIONS NOT SPECIFICALLY IDENTIFIED AS "EXISTING" OR (E) ARE CONSIDERED NEW WORK AND ARE PART OF THE PROJECT SCOPE OF WORK.
12. ALL EXISTING CONDITIONS, WHETHER OR NOT SPECIFICALLY NOTED ON THE DRAWINGS, SHALL BE VERIFIED PRIOR TO THE COMMENCEMENT OF ANY WORK. DO NOT PROCEED WITH ANY ITEM OR WORK THAT IS REASONABLY QUESTIONABLE WITHOUT ADVISING THE OWNER. OBTAIN DIRECTION FROM THE OWNER AS TO HOW TO PROCEED. SUBMIT ALL QUESTIONS ON "RFI" FORM.
13. ANY DISCREPANCIES FOUND IN THE CONTRACT DOCUMENTS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER FOR RESOLUTION PRIOR TO COMMENCING ANY WORK.
14. SHOP DRAWINGS REQUIRED BY THE PROJECT SPECIFICATIONS SHALL BE SUBMITTED TO THE ENGINEER FOR REVIEW PRIOR TO FABRICATION. DRAWINGS ARE REVIEWED BY THE ENGINEER FOR GENERAL CONFORMANCE TO THE DESIGN. REGARDLESS OF THE ENGINEER'S REVIEW, THE CONTRACTOR IS FULLY AND SOLELY RESPONSIBLE FOR COMPLETE AND SATISFACTORY SUBMITTAL AND CONFORMANCE TO THE CONTRACT DOCUMENTS. SHOP DRAWINGS WILL BE REJECTED FOR INCOMPLETENESS, LACK OF CALCULATIONS (IF REQUIRED) OR CHANGES WITHOUT PRE-APPROVAL. ALL STRUCTURAL CALCULATIONS AND DRAWINGS AS PART OF SHOP DRAWINGS SUBMITTAL SHALL BE SIGNED AND STAMPED BY A CALIFORNIA REGISTERED ENGINEER. FOR RESUBMITTALS, ALL CHANGES FROM THE PRIOR SUBMITTAL SHALL BE TIGHTLY ENCLOSED BY A "CLOUD" SO AS TO INDICATE ONLY THOSE AREAS CHANGED. WHEN THE CLOUDED DRAWINGS ARE RESUBMITTED, ONLY THE CLOUDED AREAS WILL BE REVIEWED.
15. THE CONTRACTOR SHALL SUPERVISE AND DIRECT THE WORK, AND SHALL BE SOLELY RESPONSIBLE FOR ALL CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES AND PROCEDURES. THE SUPPORTING SERVICES BY THE ENGINEER, WHETHER PERFORMED PRIOR TO, DURING, OR AFTER CONSTRUCTION, ARE PERFORMED SOLELY FOR THE PURPOSE OF ASSISTING IN QUALITY CONTROL AND IN ACHIEVING CONFORMANCE WITH CONTRACT DRAWINGS AND PROJECT SPECIFICATIONS; BUT THEY DO NOT GUARANTEE THE CONTRACTOR'S PERFORMANCE AND SHALL NOT BE CONSIDERED AS SUPERVISION OF CONSTRUCTION.
16. THE CONTRACTOR IS FULLY AND SOLELY RESPONSIBLE FOR ALL SHORING REQUIRED IN ORDER TO SAFELY ACHIEVE THE FINAL CONSTRUCTION SHOWN ON THE DRAWINGS. THIS INCLUDES, BUT IS NOT LIMITED TO, ANY TYPES OF SHORING REQUIRED FOR SOILS EXCAVATION AND BACKFILL WORK; SUPPORT OF STRUCTURAL ELEMENTS UNTIL THEY HAVE ACHIEVED THE NECESSARY STRENGTH TO PERFORM IN THE FINAL POSITION AND MANNER SHOWN ON THE DRAWINGS; AND SUPPORT OF STRUCTURAL ELEMENTS THAT ARE MODIFIED AND THEREBY REDUCED IN STRENGTH IN ANY WAY DURING CONSTRUCTION AS REQUIRED TO ACHIEVE THE FINAL CONSTRUCTION AS SHOWN ON THE DRAWINGS. ALL SHORING CALCULATIONS AND DRAWINGS SHALL BE STAMPED BY A CALIFORNIA REGISTERED ENGINEER AND SUBMITTED FOR REVIEW PRIOR TO PERFORMING THE WORK.
17. THE CONTRACTOR SHALL COORDINATE ALL UTILITY LOCATIONS WITH OTHER DRAWINGS AND SHALL CONDUCT A DETAILED SURVEY OF EXISTING UTILITIES TO IDENTIFY INTERFERENCES WITH THE NEW CONSTRUCTION. PROMPTLY NOTIFY THE ENGINEER OF ANY INTERFERENCES PRIOR TO PERFORMING THE WORK.
18. IN THE EVENT THAT THERE ARE ANY UTILITIES AFFECTED, ANY MODIFICATIONS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND NOT THAT OF THE OWNER. ALL OUTLETS EITHER ELECTRICAL OR MECHANICAL, OR ANY ASSOCIATED REWORK OR MODIFICATIONS WILL BE A PART OF THE BID AND NOT TO BE CONSTRUED AS THE WORK OF THE OWNER. SUFFICIENT DUE DILIGENCE ON THE PART OF THE CONTRACTOR WILL ELIMINATE ANY POTENTIAL ISSUES AND ACCEPTANC



FLOOR PLAN | 1/16" = 1'-0" | 1

APPROVAL

CLIENT

15625 MAYOR DAVE WAY
CITY OF INDUSTRY, CA 91744
PHONE: 626-333-2211

PROJECT NAME

CITY OF INDUSTRY EXPO CENTER GRAND ARENA STRUCTURE AND ANNOUNCER BOOTH

16200 TEMPLE AVENUE
CITY OF INDUSTRY, CA 91744

ENGINEER/ARCHITECT

IDS GROUP

1 PETERS CANYON ROAD, SUITE 130
IRVINE, CA. 92606
TEL: 949-387-8500, FAX: 949-387-0800

STAMP

REGISTERED PROFESSIONAL ENGINEER
SAID L. NILMI
No. 3680
STRUCTURAL
STATE OF CALIFORNIA

STAMP

ISSUE

REV.	DESCRIPTION	DATE
	90% CD SET	04/30/25
	95% CD SET	08/04/25
	100% CD SET	08/29/25

PROJECT IDENTIFICATION

THIS DRAWING WAS CREATED IN AUTODESK AUTOCAD V. 2021 UNLESS OTHERWISE NOTED.

THE ORIGINAL SIZE OF THIS SHEET IS 30" X 42"

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IDS PROJECT NO.	22X060.00
DRAWN BY	
CHECKED BY	
APPROVED BY	

SHEET TITLE

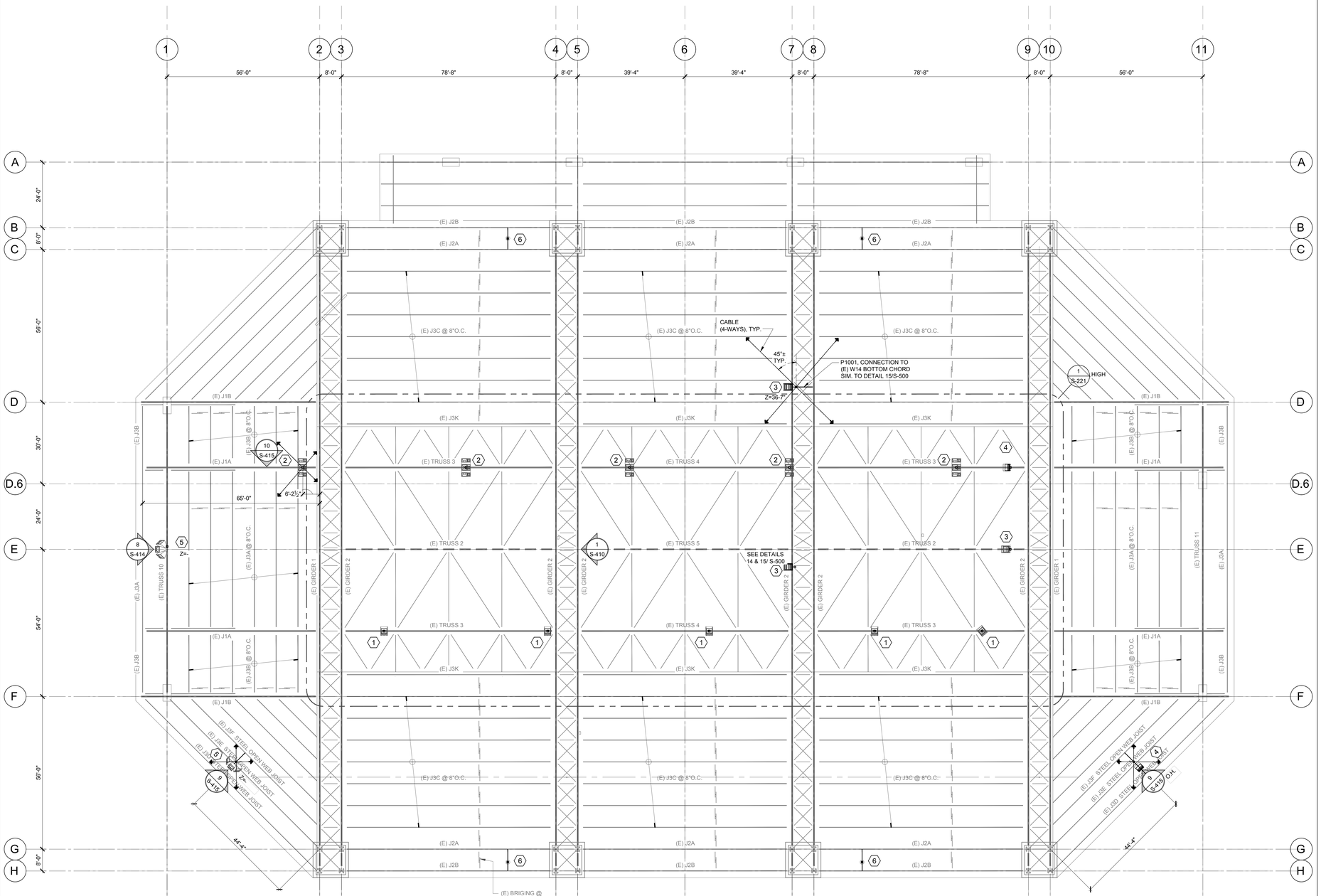
FLOOR PLAN

SHEET NUMBER

S-209

PLAN CHECK SET - NOT FOR CONSTRUCTION

IDS GROUP - FILE LOCATION: S:\PROJECTS\2022\SHARED\22X060.00 CITY OF INDUSTRY - EXPO CENTER - GRAND ARENA STRUCTURE & ANNOUNCER BOOTH\05 CAD\03 STRUC\22X060.00-S-209_FLOOR PLAN MAIN PLOT DATE: 9/10/2021 5:52:45 PM USER: CALI.NGUYEN



NOTES:

1. CABLE INSTALLATION IS TO BE SEQUENCED SUCH THAT CABLE TENSION IS ESSENTIALLY IN BALANCE THAT THE VERTICAL HANGER RODS AND THEIR STIFFENERS ARE NOT SUBJECTED TO BENDING. CABLES ARE TO BE HAND-PULLED TO TIGHT WITHOUT SLACK, BUT NOT OVER-TIGHTENED TO CREATE SIGNIFICANT PRE-TENTIONED STRESS.
2. REFER TO SCHEDULE ON 13/ S-501 FOR ROD SIZE, STIFFENER SIZE AND CLIP/BOLT SPACING, AND CABLE SIZE FOR HANGING A/V UNITS.

AV EQUIPMENT SCHEDULE

KEYNOTE	DESCRIPTION	MAX. WEIGHT (LBS)	(Z) ELEV.	DETAIL	REMARK
1	LOUDSPEAKER ARRAY - GUESTS AREA *(2) 18" ARRAYABLE SUBWOOFERS *(6) DUAL 8" LINE ARRAY LOUDSPEAKERS	750	SEE PLAN, COORDINATE WITH AV DRAWINGS	3/ S-500	
2	LOUDSPEAKERS - ARENA AREA *(3) 12" 2-WAY HORN-LOADED LOUDSPEAKERS	500	SEE PLAN, COORDINATE WITH AV DRAWINGS	1 OR 2 / S-500	
3	LOUDSPEAKER ARRAY - VIP SEATING *(6) DUAL 8" LINE ARRAY LOUDSPEAKERS	450	SEE PLAN, COORDINATE WITH AV DRAWINGS	3/ S-500	
4	LOUDSPEAKER ARRAY - BAR AREA *(1) 18" ARRAYABLE SUBWOOFER *(3) DUAL 8" LINE ARRAY LOUDSPEAKERS	400	SEE PLAN, COORDINATE WITH AV DRAWINGS	3/ S-500	
5	LOUDSPEAKERS - RIDER AREA *(3) 12" 2-WAY HORN-LOADED LOUDSPEAKERS	500	SEE PLAN, COORDINATE WITH AV DRAWINGS	1 OR 2 / S-500	
6	PAN / TILT / ZOOM CAMERA - IN ENVIRONMENTAL ENCLOSURE	20	SEE PLAN, COORDINATE WITH AV DRAWINGS		ATTACHED TO STRUCTURE PER MANUFACTURER RECOMMENDATION

MAIN ROOF FRAMING PLAN | 1/16" = 1'-0" | 1

APPROVAL

CLIENT

15625 MAYOR DAVE WAY
CITY OF INDUSTRY, CA 91744
PHONE: 626-333-2211

PROJECT NAME

CITY OF INDUSTRY EXPO CENTER GRAND ARENA STRUCTURE AND ANNOUNCER BOOTH

16200 TEMPLE AVENUE
CITY OF INDUSTRY, CA 91744

ENGINEER/ARCHITECT

IDS GROUP

1 PETERS CANYON ROAD, SUITE 130
IRVINE, CA. 92606
TEL: 949-387-8500, FAX: 949-387-0800

STAMP

REGISTERED PROFESSIONAL ENGINEER
DAVID L. RILEY
No. 3680
STRUCTURAL
STATE OF CALIFORNIA

STAMP

ISSUE

REV.	DESCRIPTION	DATE
	90% CD SET	04/30/25
	95% CD SET	08/04/25
	100% CD SET	08/29/25

PROJECT IDENTIFICATION

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IDS PROJECT NO.	22X060.00
DRAWN BY	
CHECKED BY	
APPROVED BY	

SHEET TITLE

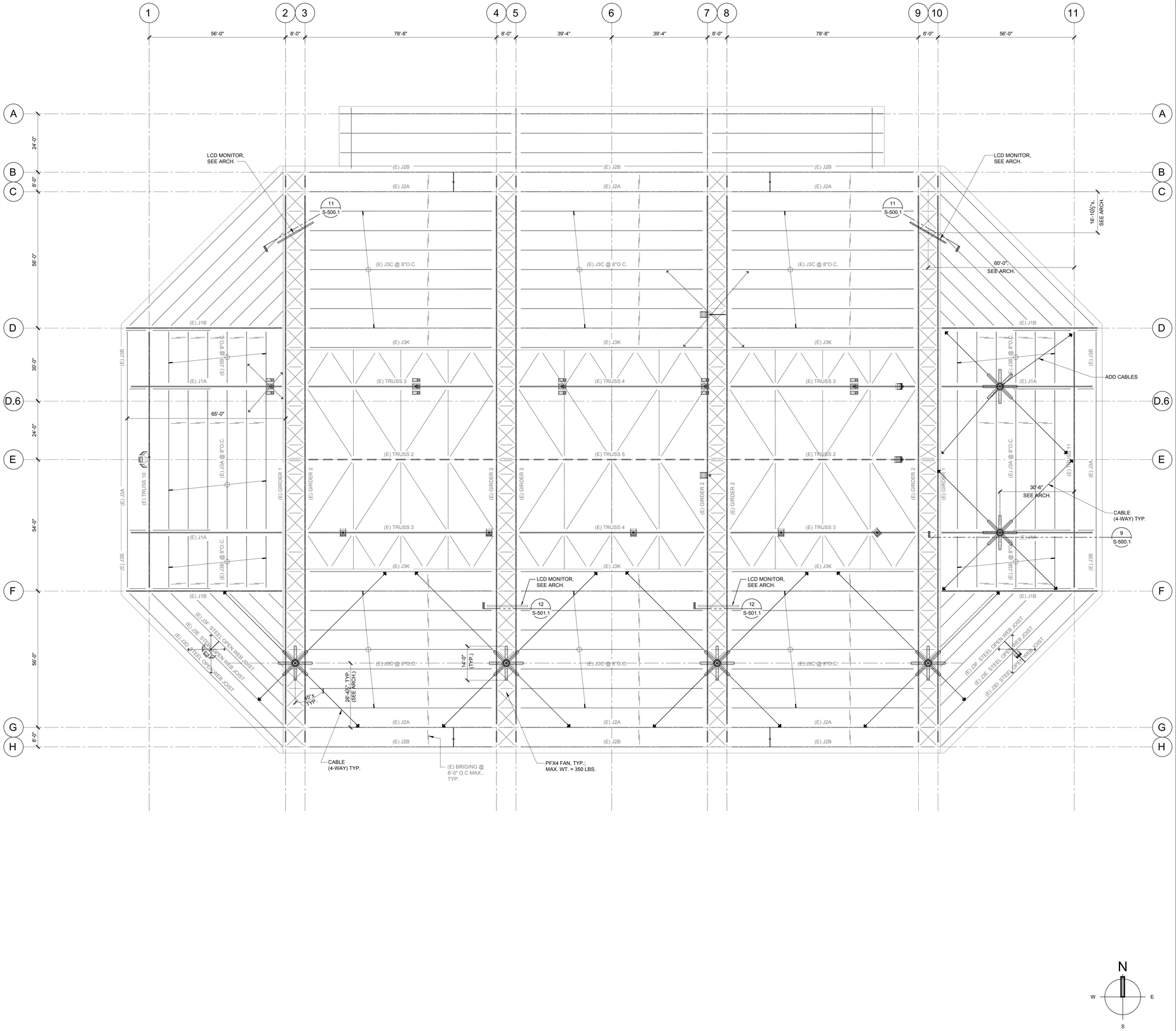
MAIN ROOF FRAMING PLAN

SHEET NUMBER

S-210

PLAN CHECK SET - NOT FOR CONSTRUCTION

IDS GROUP - FILE LOCATION: S:\PROJECTS\2022\SHARED\22X060.00 CITY OF INDUSTRY - EXPO CENTER - GRAND ARENA STRUCTURE & ANNOUNCER BOOTH\05 CAD\03 STRUC\22X060.00-S-210_ROOF FRMG PLAN MAIN PLOT DATE: 9/10/2021 5:52:45 PM USER: CALI.NGUYEN



MAIN ROOF FRAMING PLAN W/ NEW FANS AND LCD MONITORS | 1/16" = 1'-0" | 1

APPROVAL

CLIENT

15625 MAYOR DAVE WAY
CITY OF INDUSTRY, CA 91744
PHONE: 626-333-2211

PROJECT NAME

CITY OF INDUSTRY EXPO CENTER GRAND ARENA STRUCTURE AND ANNOUNCER BOOTH

16200 TEMPLE AVENUE
CITY OF INDUSTRY, CA 91744

ENGINEER/ARCHITECT

IDS GROUP

1 PETERS CANYON ROAD, SUITE 130
IRVINE, CA. 92606
TEL: 949-387-8500, FAX: 949-387-0800

STAMP

REGISTERED PROFESSIONAL ENGINEER
SAID L. RILMI
No. 3680
STRUCTURAL
STATE OF CALIFORNIA

STAMP

ISSUE

REV.	DESCRIPTION	DATE
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IDS PROJECT NO.	22X060.00
DRAWN BY	
CHECKED BY	
APPROVED BY	

SHEET TITLE

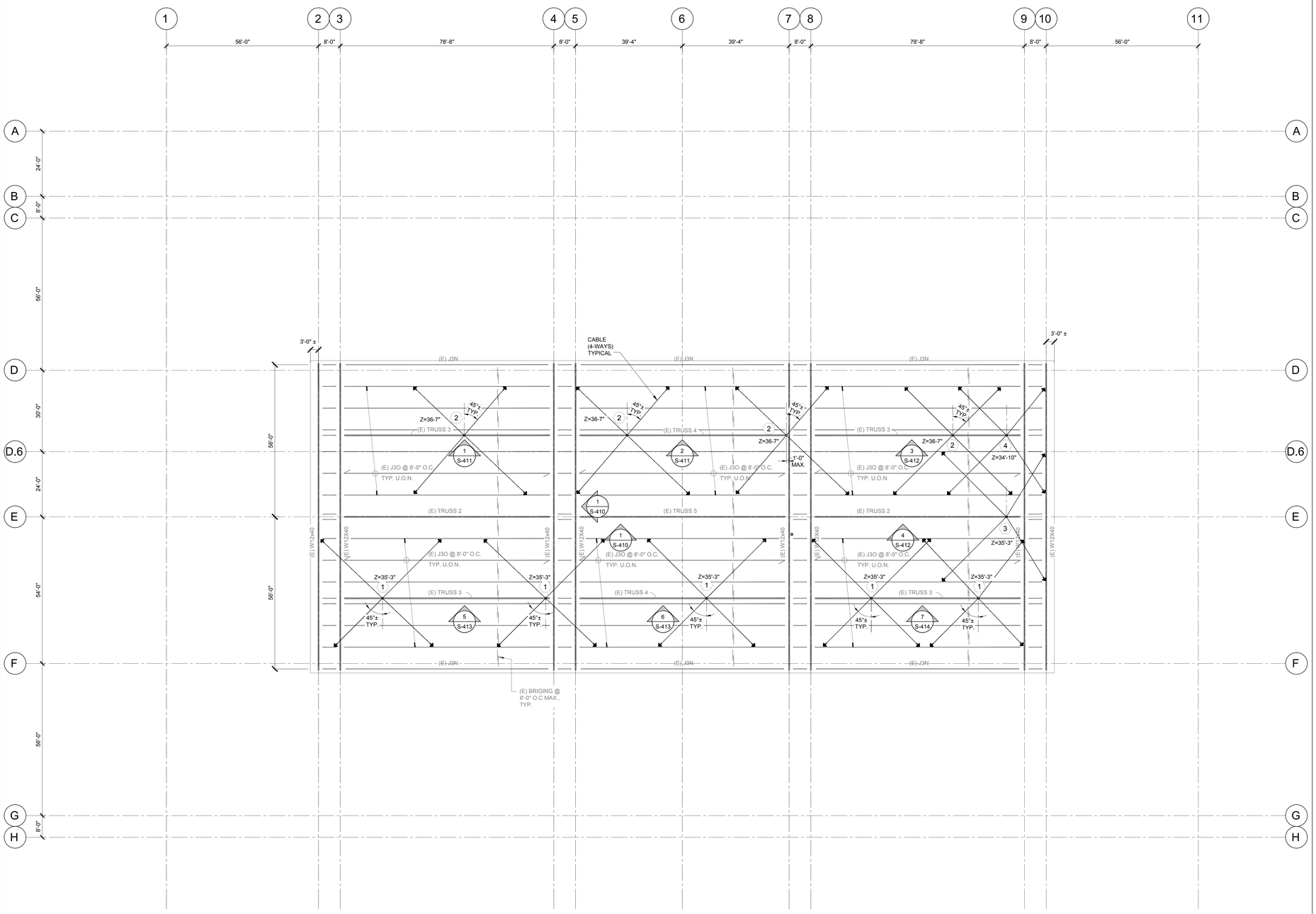
MAIN ROOF FRAMING PLAN (FANS AND LCD MONITORS)

SHEET NUMBER

S-210.1

PLAN CHECK SET - NOT FOR CONSTRUCTION

IDS GROUP - FILE LOCATION: S:\PROJECTS\2022\SHARED\22X060.00 CITY OF INDUSTRY - EXPO CENTER - GRAND ARENA STRUCTURE & ANNOUNCER BOOTH\05 CAD\09 XREF\22X060_TITLE BLOCK_30X42 PLOT DATE: 9/10/2021 5:52:45 PM USER: MARGARITA.PASAYE



NOTES:

1. CABLE INSTALLATION IS TO BE SEQUENCED SUCH THAT CABLE TENSION IS ESSENTIALLY IN BALANCE THAT THE VERTICAL HANGER RODS AND THEIR STIFFENERS ARE NOT SUBJECTED TO BENDING. CABLES ARE TO BE HAND-PULLED TO TIGHT WITHOUT SLACK, BUT NOT OVER-TIGHTENED TO CREATE SIGNIFICANT PRE-TENTIONED STRESS.
2. REFER TO SCHEDULE ON 13/ S-501 FOR ROD SIZE, STIFFENER SIZE AND CLIP/BOLT SPACING, AND CABLE SIZE FOR HANGING A/V UNITS.

AV EQUIPMENT SCHEDULE

KEYNOTE	DESCRIPTION	MAX. WEIGHT (LBS)	(Z) ELEV.	DETAIL	REMARK
1	LOUDSPEAKER ARRAY - GUESTS AREA *(2) 18" ARRAYABLE SUBWOOFERS *(6) DUAL 8" LINE ARRAY LOUDSPEAKERS	750	SEE PLAN, COORDINATE WITH AV DRAWINGS	3/ S-500	
2	LOUDSPEAKERS - ARENA AREA *(3) 12" 2-WAY HORN-LOADED LOUDSPEAKERS	500	SEE PLAN, COORDINATE WITH AV DRAWINGS	1 OR 2 / S-500	
3	LOUDSPEAKER ARRAY - VIP SEATING *(6) DUAL 8" LINE ARRAY LOUDSPEAKERS	450	SEE PLAN, COORDINATE WITH AV DRAWINGS	3/ S-500	
4	LOUDSPEAKER ARRAY - BAR AREA *(1) 18" ARRAYABLE SUBWOOFER *(3) DUAL 8" LINE ARRAY LOUDSPEAKERS	400	SEE PLAN, COORDINATE WITH AV DRAWINGS	3/ S-500	
5	LOUDSPEAKERS - RIDER AREA *(3) 12" 2-WAY HORN-LOADED LOUDSPEAKERS	500	SEE PLAN, COORDINATE WITH AV DRAWINGS	1 OR 2 / S-500	
6	PAN / TILT / ZOOM CAMERA - IN ENVIRONMENTAL ENCLOSURE	20	SEE PLAN, COORDINATE WITH AV DRAWINGS		ATTACHED TO STRUCTURE PER MANUFACTURER RECOMMENDATION

CLERESTORY FRAMING PLAN 1/16" = 1'-0" 1

APPROVAL

CLIENT

CITY OF INDUSTRY
15625 MAYOR DAVE WAY
CITY OF INDUSTRY, CA 91744
PHONE: 626-333-2211

PROJECT NAME

CITY OF INDUSTRY
EXPO CENTER
GRAND ARENA
STRUCTURE AND
ANNOUNCER
BOOTH

16200 TEMPLE AVENUE
CITY OF INDUSTRY, CA 91744

ENGINEER/ARCHITECT

IDS GROUP
1 PETERS CANYON ROAD, SUITE 130
IRVINE, CA. 92606
TEL: 949-387-8500, FAX: 949-387-0800

STAMP

REGISTERED PROFESSIONAL ENGINEER
SAID I. NIJMEH
No. 3680
STRUCTURAL
STATE OF CALIFORNIA

STAMP

ISSUE

REV.	DESCRIPTION	DATE
	90% CD SET	04/30/25
	95% CD SET	08/04/25
	100% CD SET	08/29/25

PROJECT IDENTIFICATION

THIS DRAWING WAS CREATED IN AUTODESK AUTOCAD V. 2021 UNLESS OTHERWISE NOTED.

THE ORIGINAL SIZE OF THIS SHEET IS 30" X 42"

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IDS PROJECT NO.	22X060.00
DRAWN BY	
CHECKED BY	
APPROVED BY	

SHEET TITLE

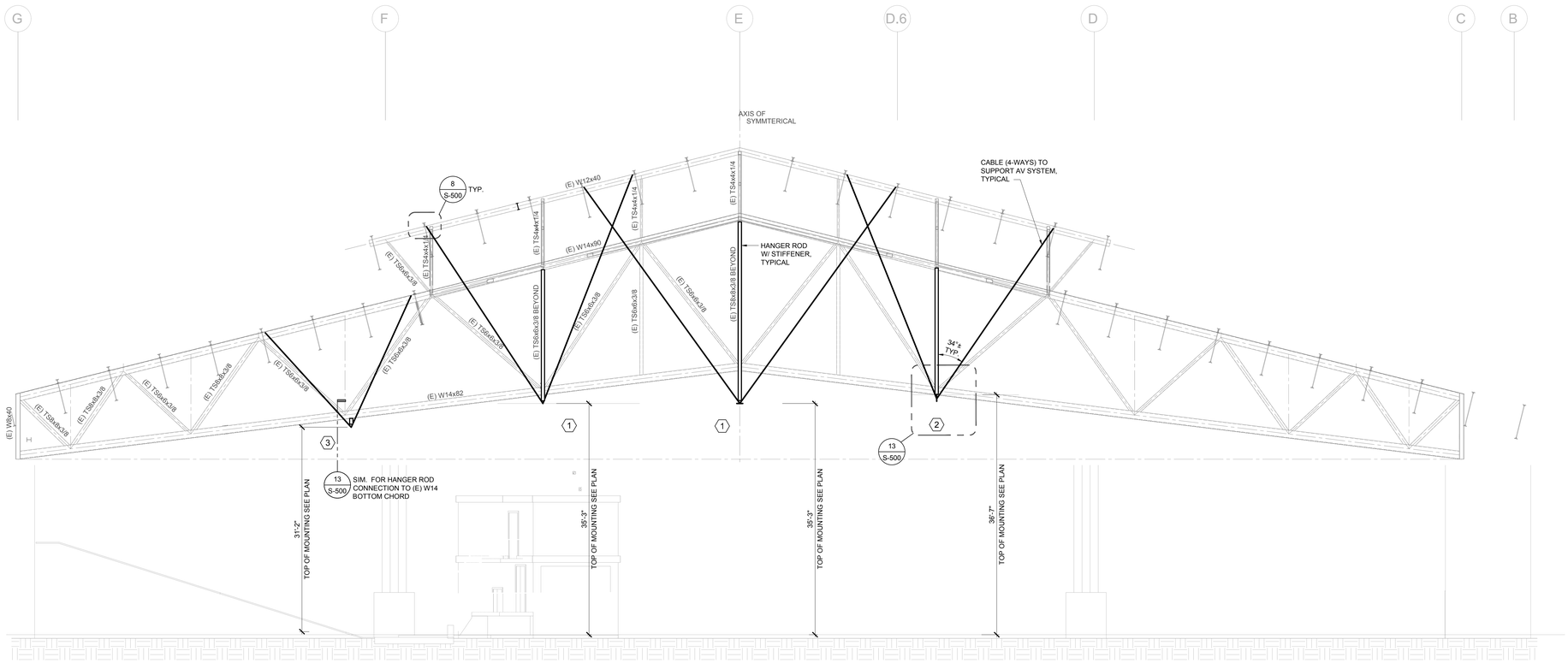
CLERESTORY ROOF FRAMING PLAN

SHEET NUMBER

S-211

PLAN CHECK SET - NOT FOR CONSTRUCTION

IDS GROUP - FILE LOCATION: S:\PROJECTS\2022\SHARED\22X060.00 CITY OF INDUSTRY - EXPO CENTER - GRAND ARENA STRUCTURE & ANNOUNCER BOOTH\05 CAD\03 STRUC\22X060.00-S-211_ROOF FRMG PLAN CLERESTORY
PLOT DATE: 9/10/2021 5:52:45 PM USER: CALI.NGUYEN



NOTES:

1. CABLE INSTALLATION IS TO BE SEQUENCED SUCH THAT CABLE TENSION IS ESSENTIALLY IN BALANCE THAT THE VERTICAL HANGER RODS AND THEIR STIFFENERS ARE NOT SUBJECTED TO BENDING. CABLES ARE TO BE HAND-PULLED TO TIGHT WITHOUT SLACK, BUT NOT OVER-TIGHTENED TO CREATE SIGNIFICANT PRE-TENTIONED STRESS.
2. REFER TO SCHEDULE ON 13/ S-501 FOR ROD SIZE, STIFFENER SIZE AND CLIP/BOLT SPACING, AND CABLE SIZE FOR HANGING A/V UNITS.

AV EQUIPMENT SCHEDULE

KEYNOTE	DESCRIPTION	MAX. WEIGHT (LBS)	(Z) ELEV.	DETAIL	REMARK
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2	LOUDSPEAKERS - ARENA AREA *(3) 12" 2-WAY HORN-LOADED LOUDSPEAKERS	500	SEE PLAN, COORDINATE WITH AV DRAWINGS	1 OR 2 / S-500	
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6	PAN / TILT / ZOOM CAMERA - IN ENVIRONMENTAL ENCLOSURE	20	SEE PLAN, COORDINATE WITH AV DRAWINGS		ATTACHED TO STRUCTURE PER MANUFACTURER RECOMMENDATION

TRUSS FRAMING _ TYPICAL TRANSVERSE ELEVATION | 1/8" = 1'-0" | 1

APPROVAL

CLIENT

CITY OF INDUSTRY
15625 MAYOR DAVE WAY
CITY OF INDUSTRY, CA 91744
PHONE: 626-333-2211

PROJECT NAME

CITY OF INDUSTRY
EXPO CENTER
GRAND ARENA
STRUCTURE AND
ANNOUNCER
BOOTH

16200 TEMPLE AVENUE
CITY OF INDUSTRY, CA 91744

ENGINEER/ARCHITECT

IDS

IDS GROUP
1 PETERS CANYON ROAD, SUITE 130
IRVINE, CA. 92606
TEL: 949-387-8500, FAX: 949-387-0800

STAMP

REGISTERED PROFESSIONAL ENGINEER
DAVID I. RITLAN
No. 3680
STRUCTURAL
STATE OF CALIFORNIA

STAMP

ISSUE

REV.	DESCRIPTION	DATE
	90% CD SET	04/30/25
	95% CD SET	08/04/25
	100% CD SET	08/29/25

PROJECT IDENTIFICATION

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IDS PROJECT NO.	22X060.00
DRAWN BY	
CHECKED BY	
APPROVED BY	

SHEET TITLE

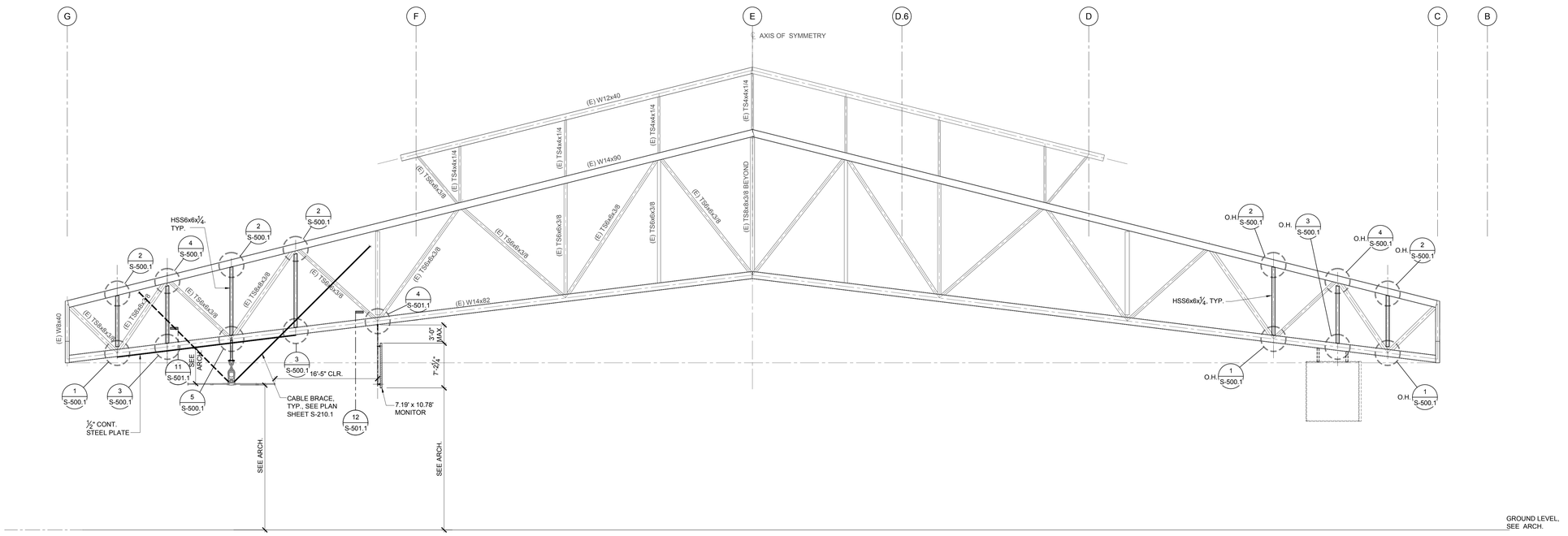
TRUSS FRAMING ELEVATION

SHEET NUMBER

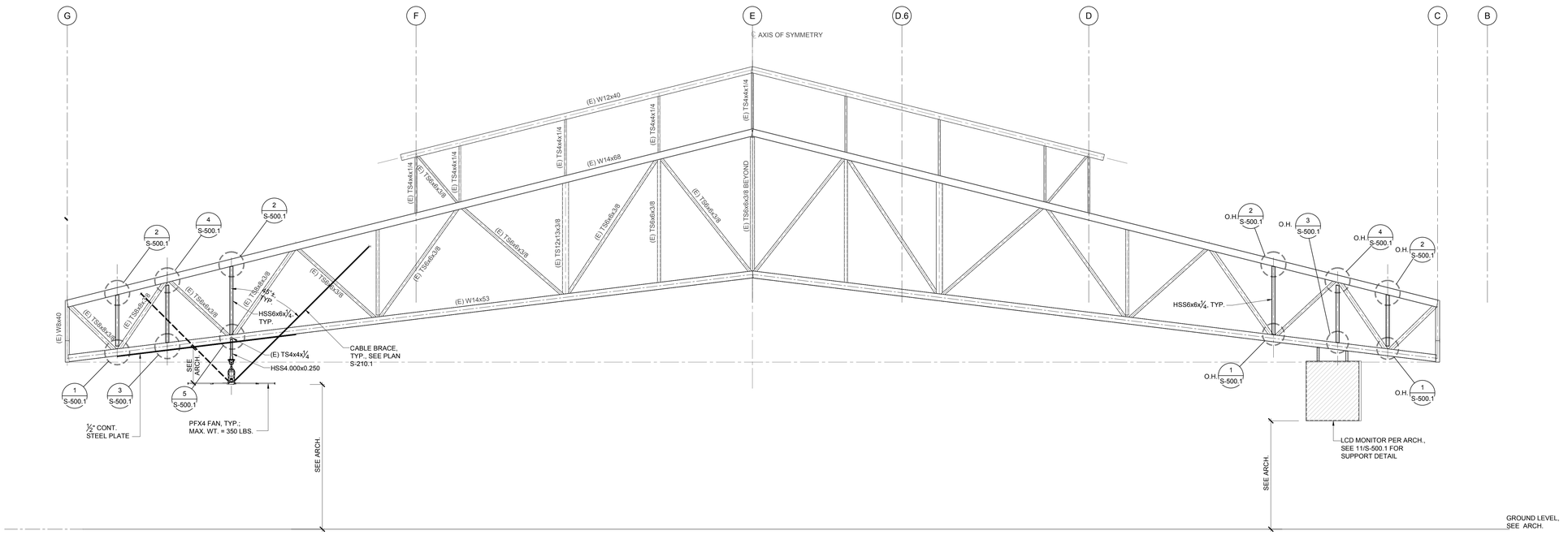
S-410

PLAN CHECK SET - NOT FOR CONSTRUCTION

IDS GROUP - FILE LOCATION: S:\PROJECTS\2022\SHARED\22X060.00 CITY OF INDUSTRY - EXPO CENTER - GRAND ARENA STRUCTURE & ANNOUNCER BOOTH\05 CAD\03 STRUC\22X060.00-S-410_TRUSS ELEVATION PLOT DATE: 9/10/2021 5:52:45 PM USER: JANE.KIGUTA



TYPICAL (E) TRUSS GIRDER #2 ELEVATION | 1/8" = 1'-0" | 2



NOTE:
1. VERTICAL BRACES HSS6x6x1/4 ARE ADDED ONLY TO (E) TRUSS GIRDER #1 AND #2 AT GRIDLINES 2, 3, 9 AND 10.

TYPICAL (E) TRUSS GIRDER #1 ELEVATION | 1/8" = 1'-0" | 1

APPROVAL

CLIENT

CITY OF INDUSTRY
15625 MAYOR DAVE WAY
CITY OF INDUSTRY, CA 91744
PHONE: 626-333-2211

PROJECT NAME

CITY OF INDUSTRY
EXPO CENTER
GRAND ARENA
STRUCTURE AND
ANNOUNCER
BOOTH

16200 TEMPLE AVENUE
CITY OF INDUSTRY, CA 91744

ENGINEER/ARCHITECT

IDS GROUP
1 PETERS CANYON ROAD, SUITE 130
IRVINE, CA. 92606
TEL: 949-387-8500, FAX: 949-387-0800

STAMP

REGISTERED PROFESSIONAL ENGINEER
SAID I. AHLMI
No. 3680
STRUCTURAL
STATE OF CALIFORNIA

STAMP

ISSUE

REV.	DESCRIPTION	DATE
	90% CD SET	04/30/25
	95% CD SET	08/04/25
	100% CD SET	08/29/25

PROJECT IDENTIFICATION

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IDS PROJECT NO.	22X060.00
DRAWN BY	
CHECKED BY	
APPROVED BY	

SHEET TITLE

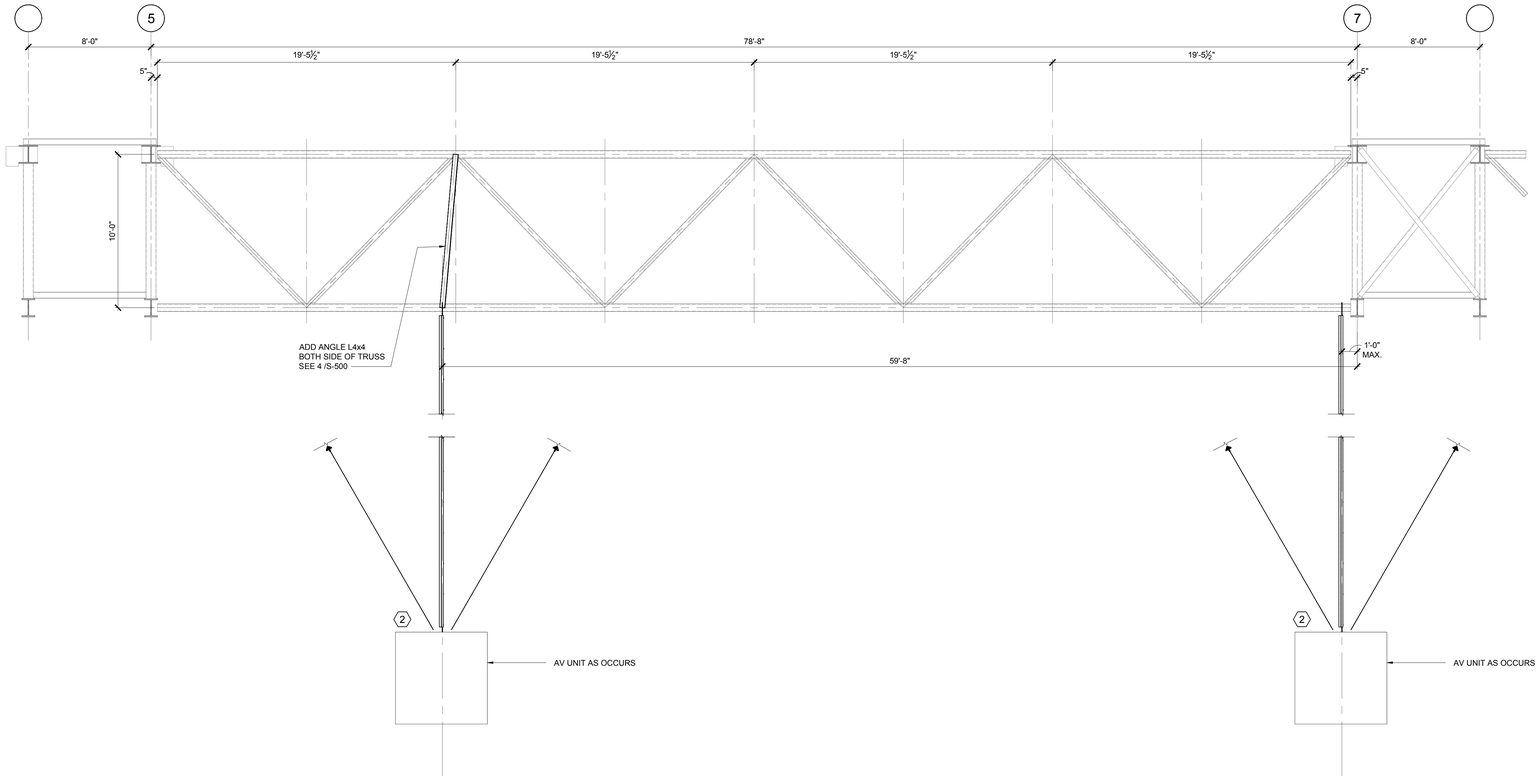
TRUSS FRAMING ELEVATION

SHEET NUMBER

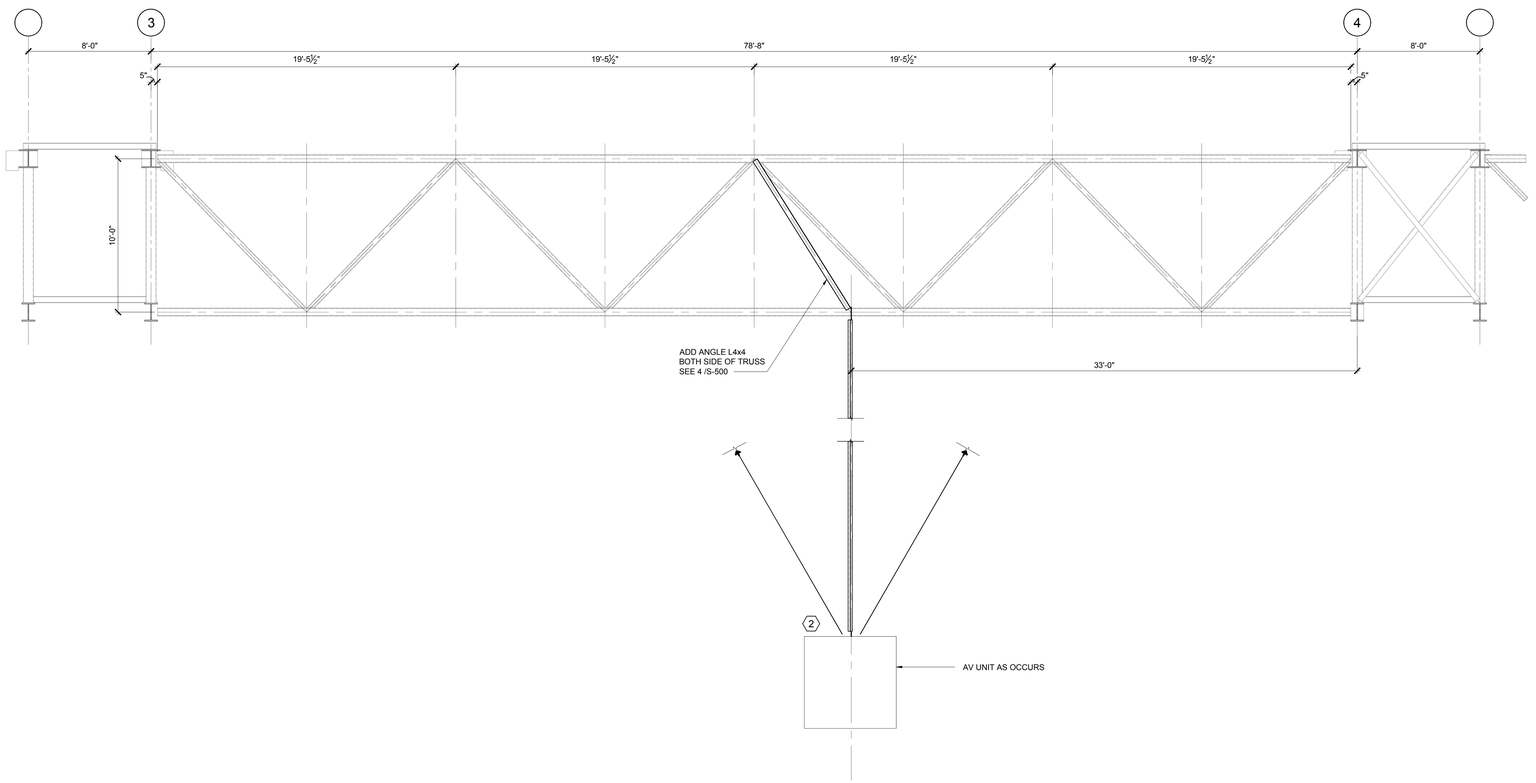
S-410.1

PLAN CHECK SET - NOT FOR CONSTRUCTION

IDS GROUP - FILE LOCATION: S:\PROJECTS\2022\SHARED\22X060.00 CITY OF INDUSTRY - EXPO CENTER - GRAND ARENA STRUCTURE & ANNOUNCER BOOTH\05 CAD\09 XREF\22X060_TITLE BLOCK_30X42 PLOT DATE: 9/10/2021 5:52:45 PM USER: CALI.NGUYEN



TRUSS FRAMING ELEVATION | 1/4" = 1'-0" | 2



TRUSS FRAMING ELEVATION | 1/4" = 1'-0" | 1

APPROVAL

CLIENT

CITY OF INDUSTRY
15625 MAYOR DAVE WAY
CITY OF INDUSTRY, CA 91744
PHONE: 626-333-2211

PROJECT NAME

CITY OF INDUSTRY EXPO CENTER GRAND ARENA STRUCTURE AND ANNOUNCER BOOTH

16200 TEMPLE AVENUE
CITY OF INDUSTRY, CA 91744

ENGINEER/ARCHITECT

IDS GROUP
1 PETERS CANYON ROAD, SUITE 130
IRVINE, CA. 92606
TEL: 949-387-8500, FAX: 949-387-0800

STAMP

REGISTERED PROFESSIONAL ENGINEER
SAID I. WILMI
No. 3680
STRUCTURAL
STATE OF CALIFORNIA

STAMP

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IDS PROJECT NO.	22X060.00
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CHECKED BY	
APPROVED BY	

SHEET TITLE

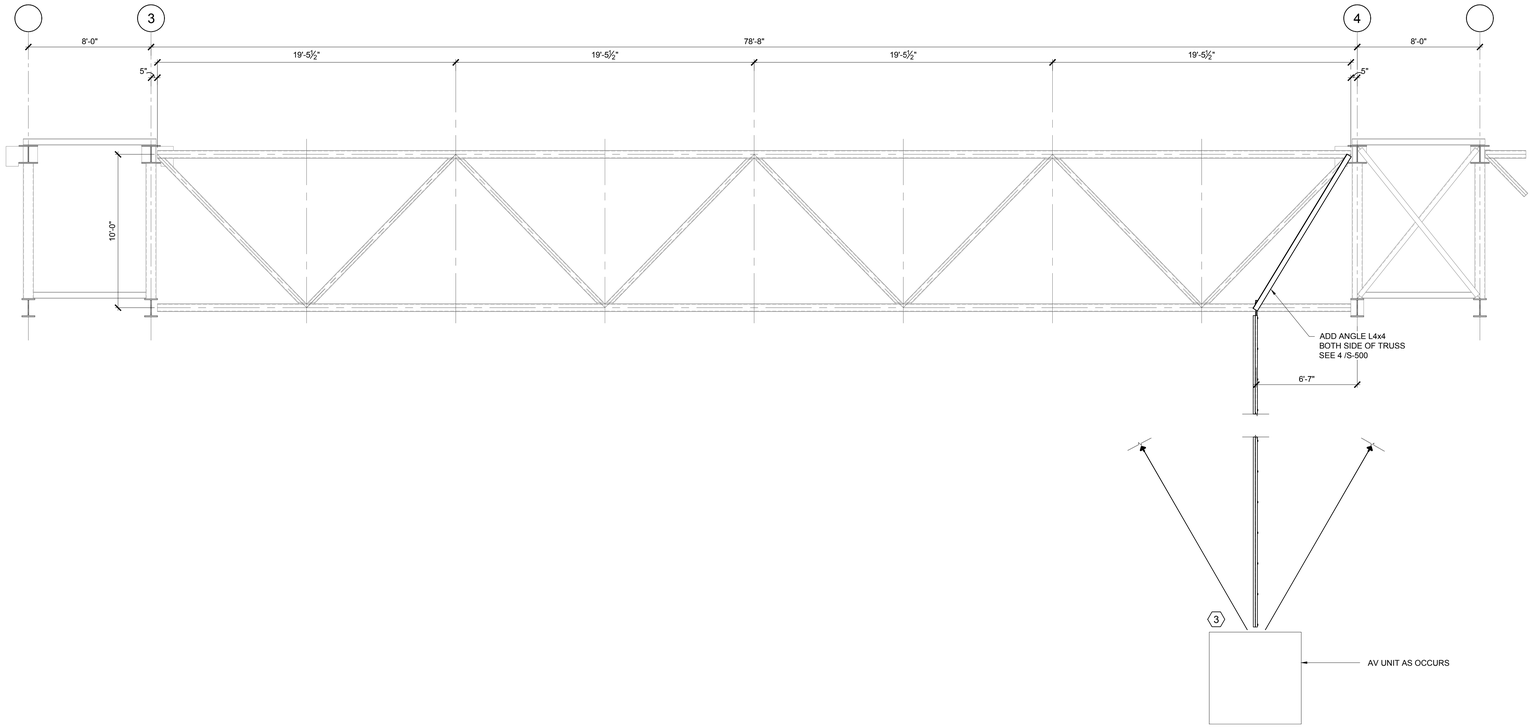
TRUSS FRAMING ELEVATION

SHEET NUMBER

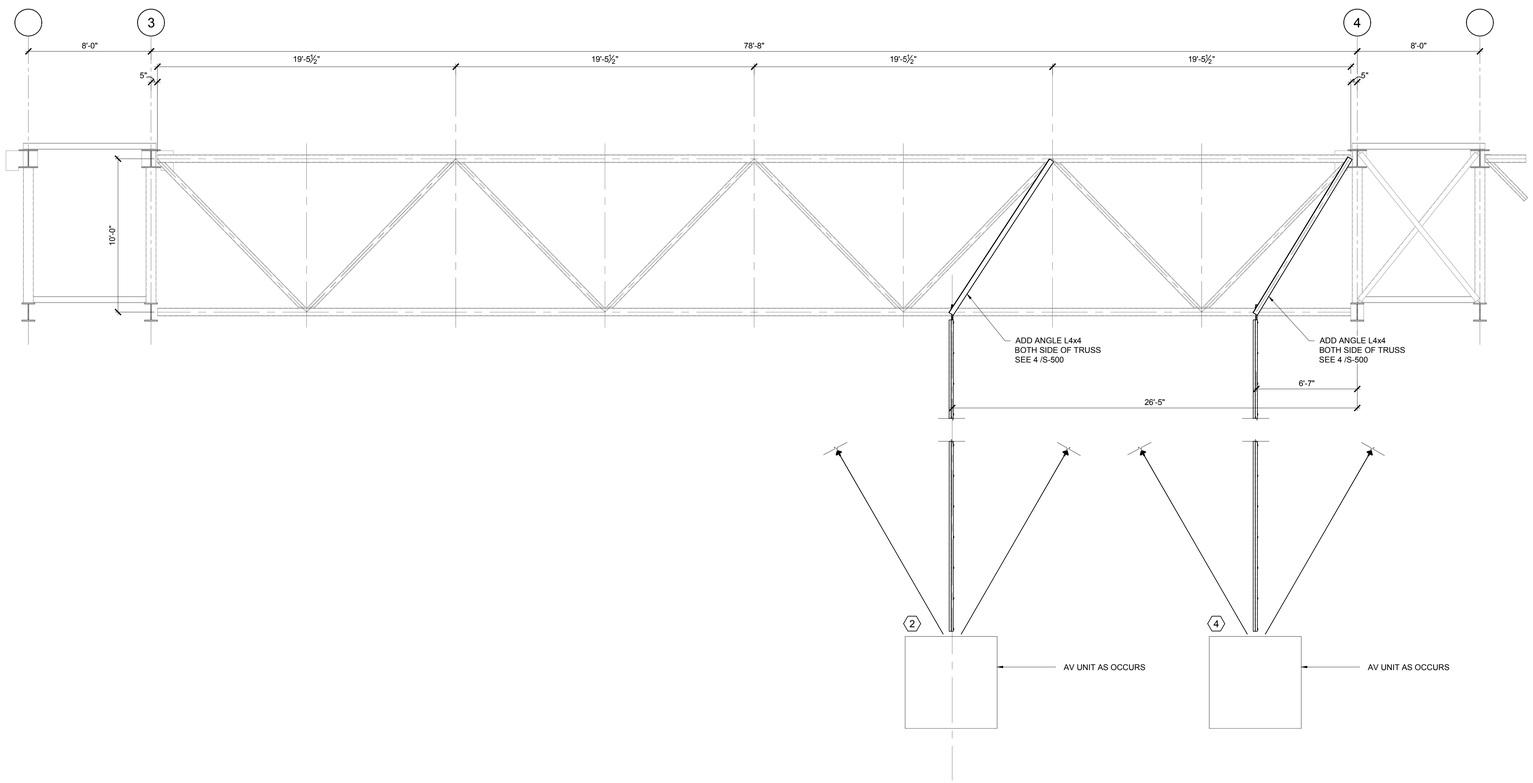
S-411

PLAN CHECK SET - NOT FOR CONSTRUCTION

IDS GROUP - FILE LOCATION: S:\PROJECTS\2022\SHARED\22X060.00 CITY OF INDUSTRY - EXPO CENTER - GRAND ARENA STRUCTURE & ANNOUNCER BOOTH\05 CAD\03 STRUC\22X060.00-S-411_TRUSS ELEVATION PLOT DATE: 9/10/2021 5:52:45 PM USER: CALI.NGUYEN



TRUSS FRAMING ELEVATION | 1/4" = 1'-0" | 4



TRUSS FRAMING ELEVATION | 1/4" = 1'-0" | 3

APPROVAL

CLIENT

CITY OF INDUSTRY
15625 MAYOR DAVE WAY
CITY OF INDUSTRY, CA 91744
PHONE: 626-333-2211

PROJECT NAME

CITY OF INDUSTRY
EXPO CENTER
GRAND ARENA
STRUCTURE AND
ANNOUNCER
BOOTH

16200 TEMPLE AVENUE
CITY OF INDUSTRY, CA 91744

ENGINEER/ARCHITECT

IDS GROUP

1 PETERS CANYON ROAD, SUITE 130
IRVINE, CA. 92606
TEL: 949-387-8500, FAX: 949-387-0800

STAMP

REGISTERED PROFESSIONAL ENGINEER
SAID I. WILMI
No. 3680
STRUCTURAL
STATE OF CALIFORNIA

STAMP

ISSUE

REV.	DESCRIPTION	DATE
	90% CD SET	04/30/25
	95% CD SET	08/04/25
	100% CD SET	08/29/25

PROJECT IDENTIFICATION

THIS DRAWING WAS CREATED IN AUTODESK AUTOCAD V. 2021 UNLESS OTHERWISE NOTED.

THE ORIGINAL SIZE OF THIS SHEET IS 30" X 42"

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IDS PROJECT NO.	22X060.00
DRAWN BY	
CHECKED BY	
APPROVED BY	

SHEET TITLE

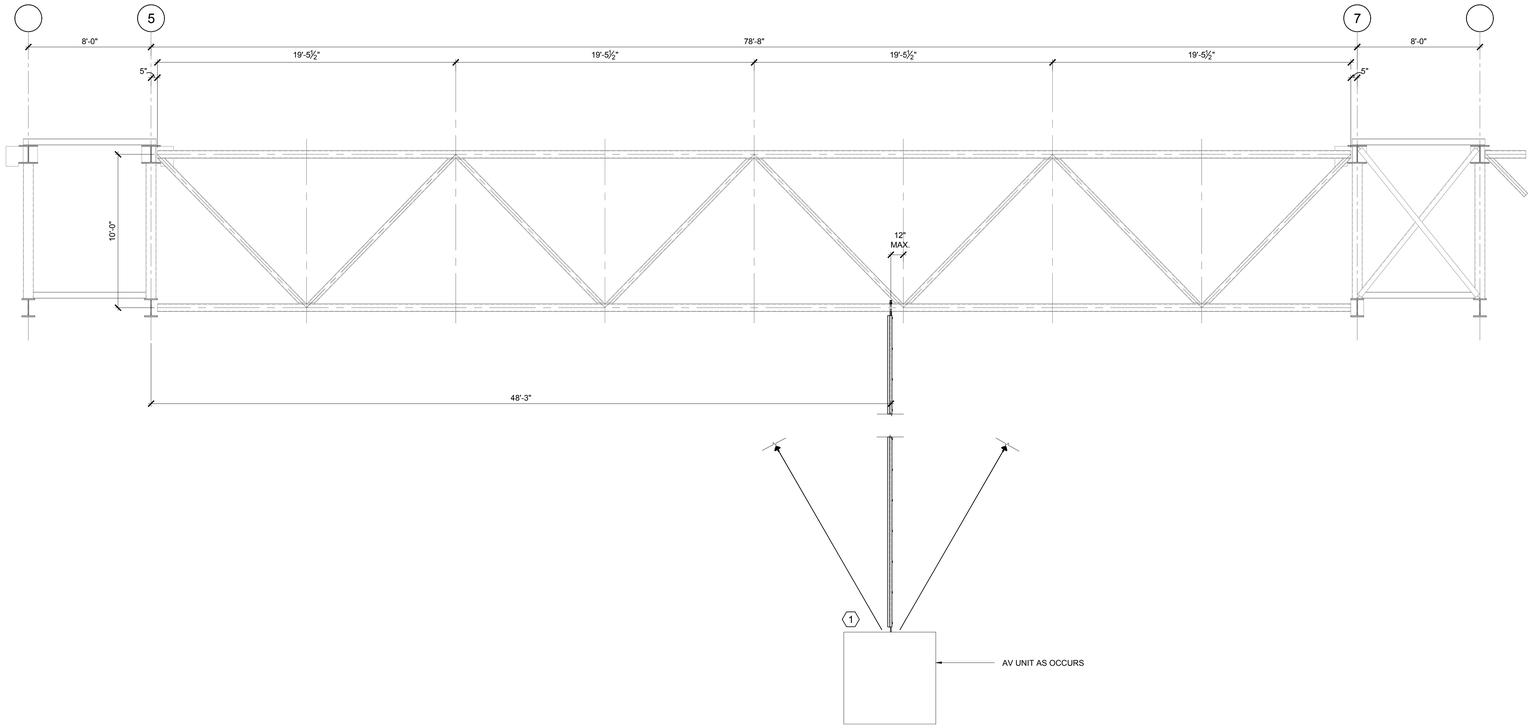
TRUSS FRAMING ELEVATION

SHEET NUMBER

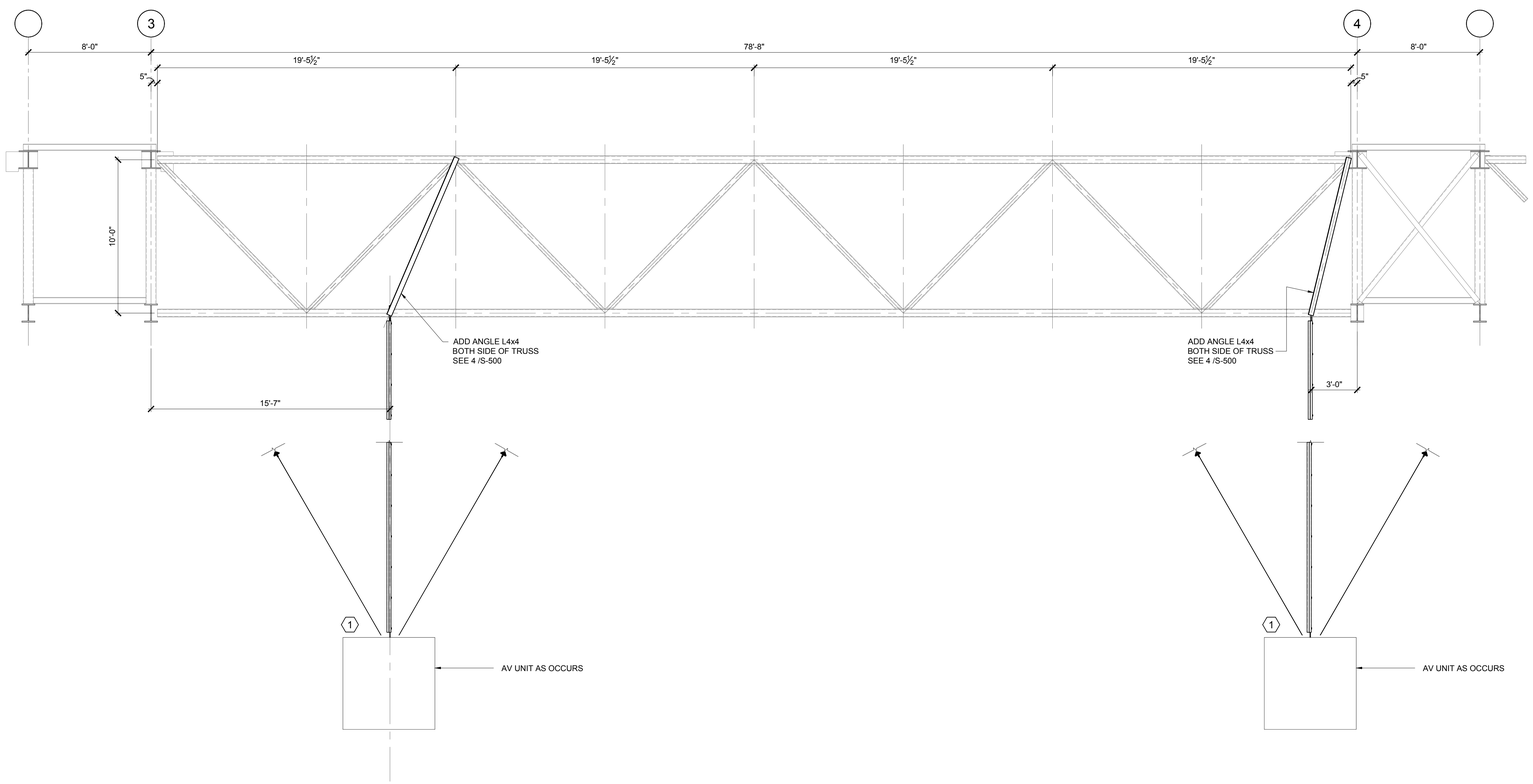
S-412

PLAN CHECK SET - NOT FOR CONSTRUCTION

IDS GROUP - FILE LOCATION: S:\PROJECTS\2022\SHARED\22X060.00 CITY OF INDUSTRY - EXPO CENTER - GRAND ARENA STRUCTURE & ANNOUNCER BOOTH\05 CAD\03 STRUC\22X060.00-S-412_TRUSS ELEVATION PLOT DATE: 9/10/2021 5:52:45 PM USER: CALI.NGUYEN



TRUSS FRAMING ELEVATION | 1/4" = 1'-0" | 6



TRUSS FRAMING ELEVATION | 1/4" = 1'-0" | 5

APPROVAL

CLIENT

CITY OF INDUSTRY
15625 MAYOR DAVE WAY
CITY OF INDUSTRY, CA 91744
PHONE: 626-333-2211

PROJECT NAME

CITY OF INDUSTRY EXPO CENTER GRAND ARENA STRUCTURE AND ANNOUNCER BOOTH

16200 TEMPLE AVENUE
CITY OF INDUSTRY, CA 91744

ENGINEER/ARCHITECT

IDS GROUP

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IRVINE, CA. 92606
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IDS PROJECT NO.	22X060.00
DRAWN BY	
CHECKED BY	
APPROVED BY	

PLAN CHECK SET - NOT FOR CONSTRUCTION

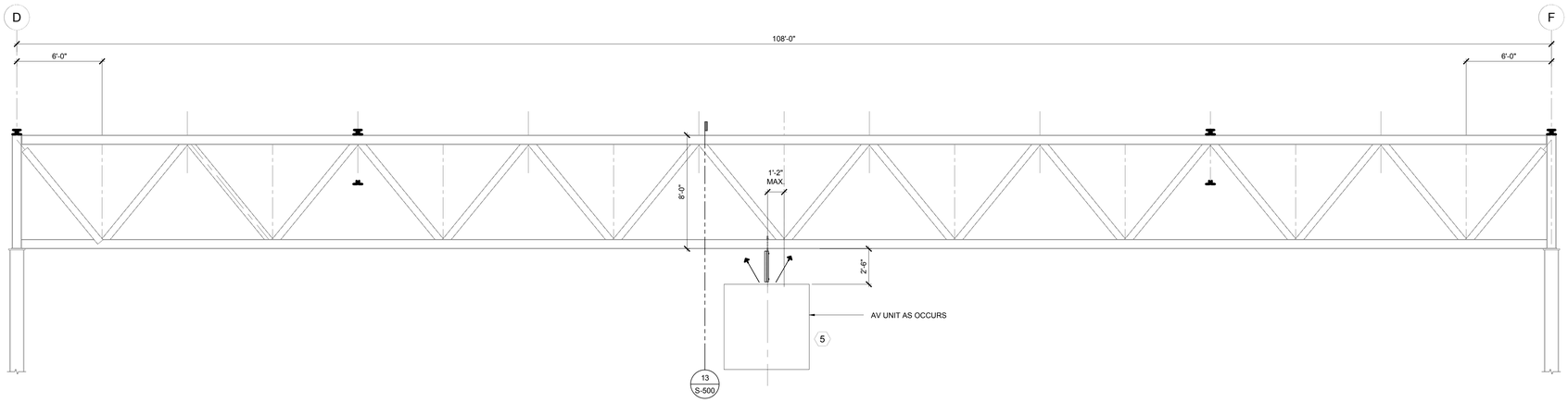
SHEET TITLE

TRUSS FRAMIING ELEVATION

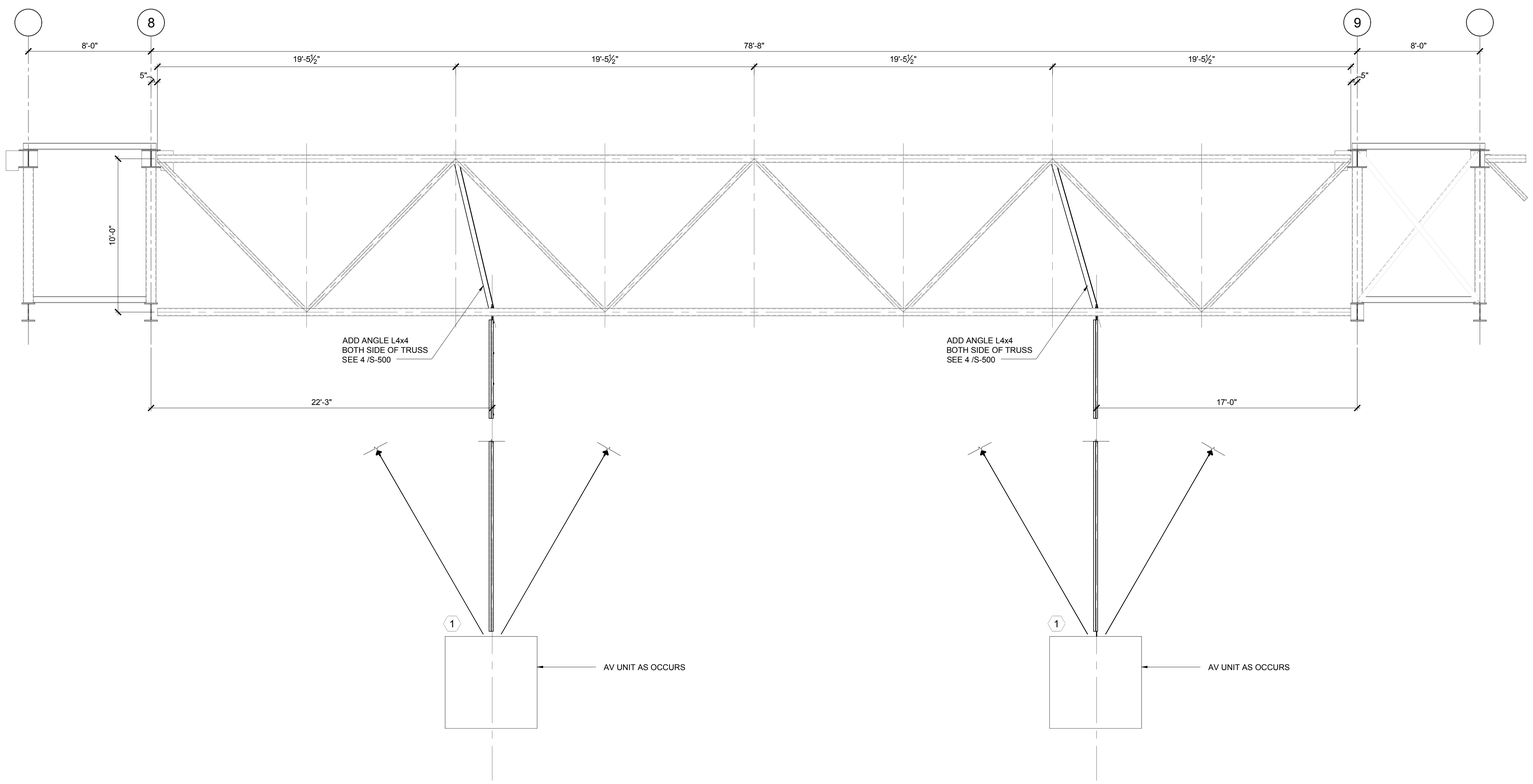
SHEET NUMBER

S-413

IDS GROUP - FILE LOCATION: S:\PROJECTS\2022\SHARED\22X060.00 CITY OF INDUSTRY - EXPO CENTER - GRAND ARENA STRUCTURE & ANNOUNCER BOOTH\05 CAD\03 STRUC\22X060.00-S-413_TRUSS ELEVATION PLOT DATE: 9/10/2021 5:52:45 PM USER: CALI.NGUYEN



TRUSS FRAMING ELEVATION | 1/4" = 1'-0" | 8



TRUSS FRAMING ELEVATION | 1/4" = 1'-0" | 7

APPROVAL

CLIENT

15625 MAYOR DAVE WAY
CITY OF INDUSTRY, CA 91744
PHONE: 626-333-2211

PROJECT NAME

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16200 TEMPLE AVENUE
CITY OF INDUSTRY, CA 91744

ENGINEER/ARCHITECT

IDS GROUP

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TEL: 949-387-8500, FAX: 949-387-0800

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SAID I. WILMI
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CHECKED BY	
APPROVED BY	

PLAN CHECK SET - NOT FOR CONSTRUCTION

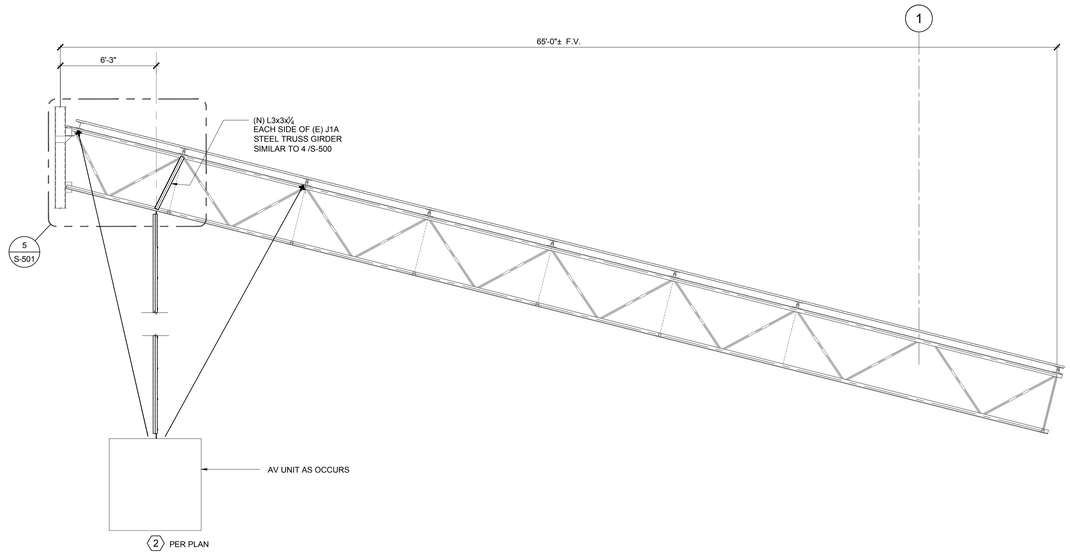
SHEET TITLE

TRUSS FRAMING PLAN

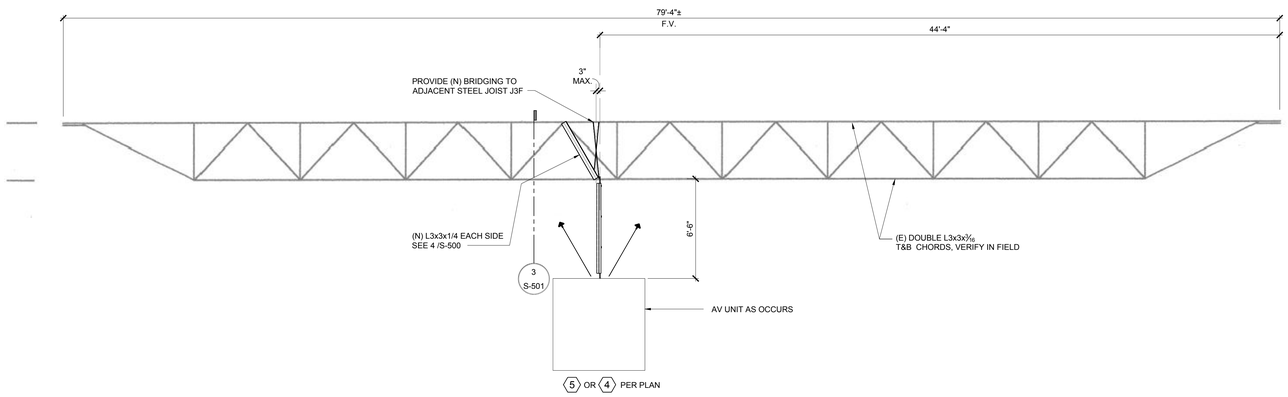
SHEET NUMBER

S-414

IDS GROUP - FILE LOCATION: S:\PROJECTS\2022\SHARED\22X060.00 CITY OF INDUSTRY - EXPO CENTER - GRAND ARENA STRUCTURE & ANNOUNCER BOOTH\05 CAD\03 STRUC\22X060.00-S-414_TRUSS ELEVATION PLOT DATE: 9/10/2021 5:52:45 PM USER: CALI.NGUYEN



TRUSS FRAMING ELEVATION | 1/4" = 1'-0" | 10



TRUSS FRAMING ELEVATION | 1/4" = 1'-0" | 9

APPROVAL

CLIENT

15625 MAYOR DAVE WAY
CITY OF INDUSTRY, CA 91744
PHONE: 626-333-2211

PROJECT NAME

CITY OF INDUSTRY
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ANNOUNCER
BOOTH

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ENGINEER/ARCHITECT

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IRVINE, CA. 92606
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DAVID I. RITLAY
No. 3680
STRUCTURAL
STATE OF CALIFORNIA

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IDS PROJECT NO.	22X060.00
DRAWN BY	
CHECKED BY	
APPROVED BY	

SHEET TITLE

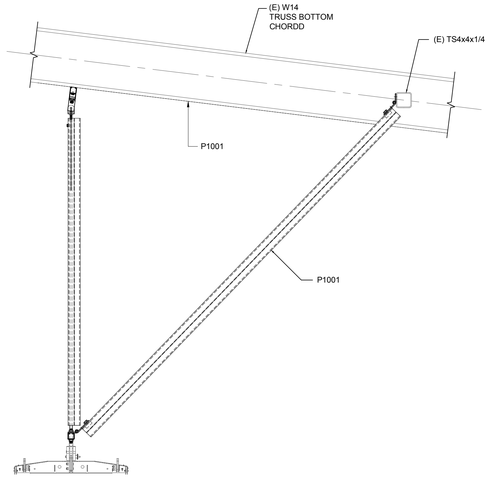
TRUSS FRAMING ELEVATION

SHEET NUMBER

S-415

PLAN CHECK SET - NOT FOR CONSTRUCTION

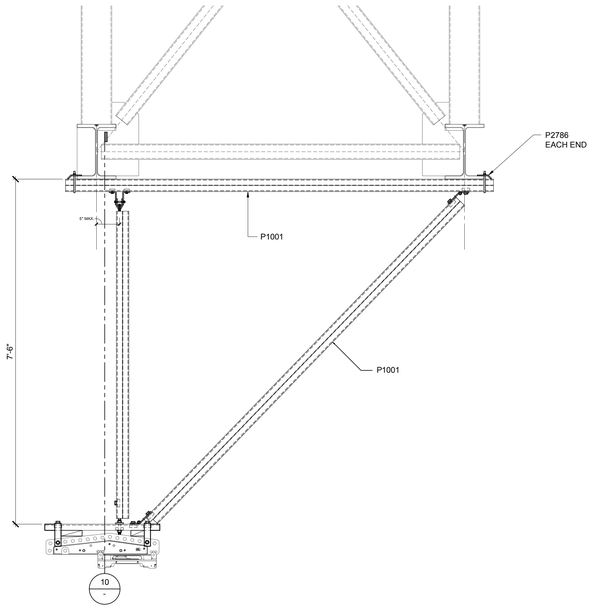
IDS GROUP - FILE LOCATION: S:\PROJECTS\2022\SHARED\22X060.00 CITY OF INDUSTRY - EXPO CENTER - GRAND ARENA STRUCTURE & ANNOUNCER BOOTH\05 CAD\03 STRUC\22X060.00-S-415_TRUSS ELEVATION PLOT DATE: 9/10/2021 5:52:45 PM USER: CALI.NGUYEN



-

N.T.S.

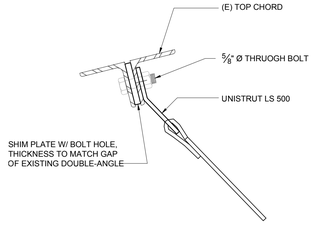
19



-

N.T.S.

11



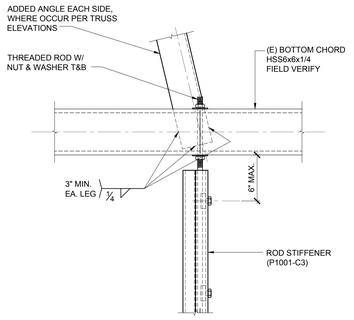
NOTES:

1. CABLE CONNECTION TO BE NO MORE THAN 6" AWAY FROM A ROOF TRUSS PANEL POINT WITH OUT-OF-PLANE BRACING
2. DRILL BOLT HOLES WITH CARE IN EXISTING DOUBLE-ANGLE TOP CHORD, NOT TO OVERSIZE HOLES, NOR TO DAMAGE OTHER ADJACENT EXISTING STEEL COMPONENTS. PROVIDE TEMPORARY SHORING IF REQUIRED.

DETAIL

N.T.S.

8



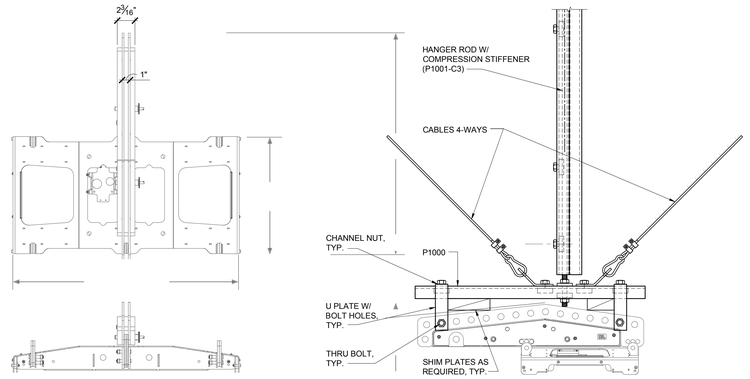
NOTE:

1. DRILL BOLT HOLES WITH CARE IN EXISTING HSS BOTTOM CHORD, NOT TO OVERSIZE HOLES, NOR TO DAMAGE OTHER ADJACENT EXISTING STEEL COMPONENTS. PROVIDE TEMPORARY SHORING IF REQUIRED.

CONNECTION DETAIL OF HANGER ROD
(E) TRUSS BOTTOM CHORD

N.T.S.

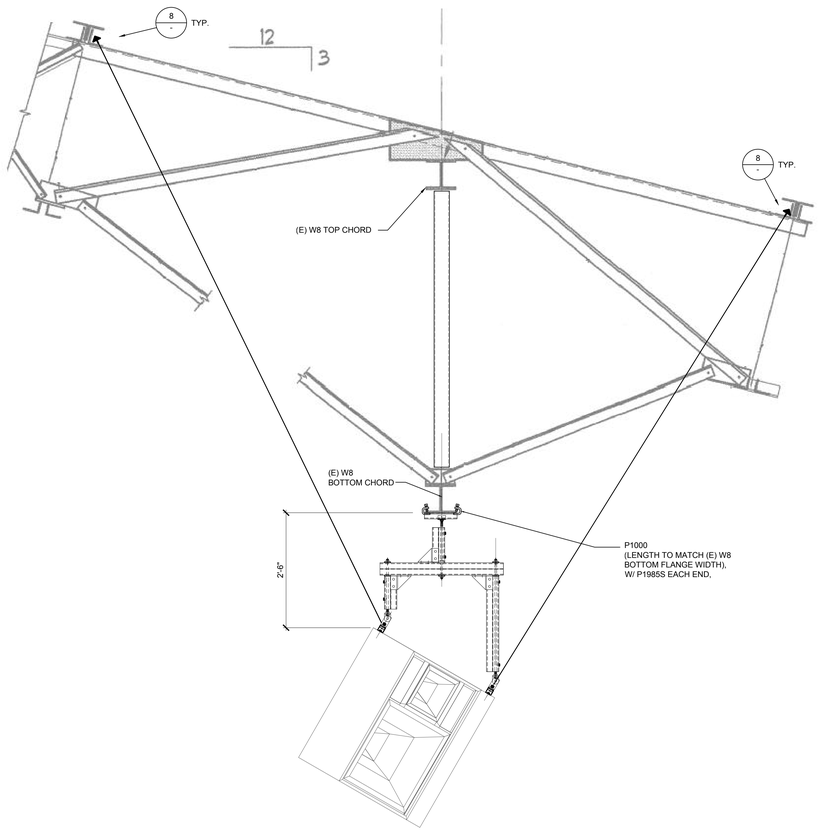
4



CONNECTION DETAIL TO MANUFACTURER MOUNTING FRAME VTX A8 AF

N.T.S.

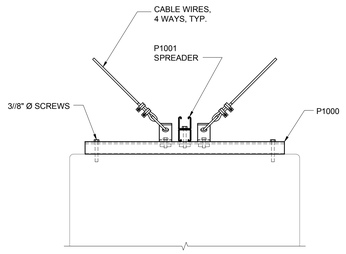
3



-

N.T.S.

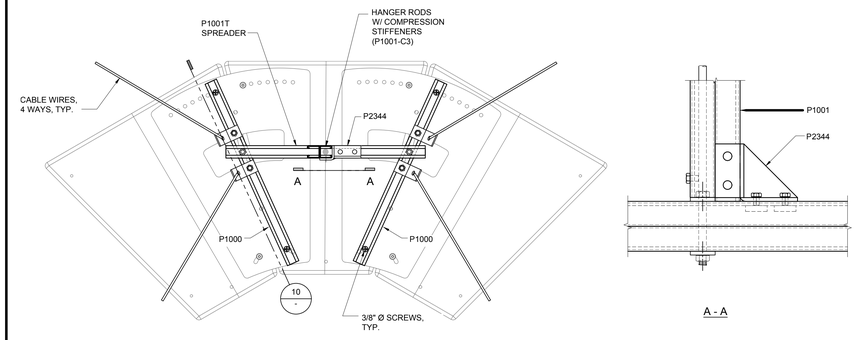
13



-

N.T.S.

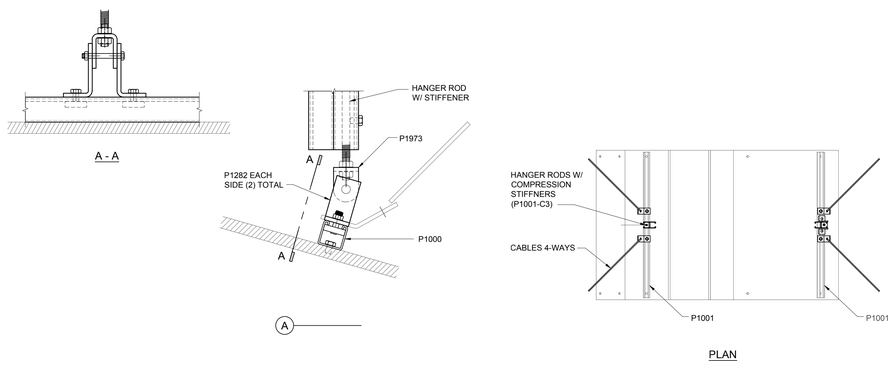
10



CONNECTION DETAIL TO MANUFACTURER MOUNTING PLATE FASPAC - CASE A

N.T.S.

2



-

N.T.S.

1

APPROVAL

CLIENT

CITY OF INDUSTRY
15625 MAYOR DAVE WAY
CITY OF INDUSTRY, CA 91744
PHONE: 626-333-2211

PROJECT NAME

CITY OF INDUSTRY EXPO CENTER GRAND ARENA STRUCTURE AND ANNOUNCER BOOTH

16200 TEMPLE AVENUE
CITY OF INDUSTRY, CA 91744

ENGINEER/ARCHITECT

IDS GROUP
1 PETERS CANYON ROAD, SUITE 130
IRVINE, CA. 92606
TEL: 949-387-8500, FAX: 949-387-0800

STAMP

REGISTERED PROFESSIONAL ENGINEER
SAID I. WILMI
No. 3680
STRUCTURAL
STATE OF CALIFORNIA

STAMP

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IDS PROJECT NO.	22X060.00
DRAWN BY	
CHECKED BY	XX
APPROVED BY	XX

SHEET TITLE

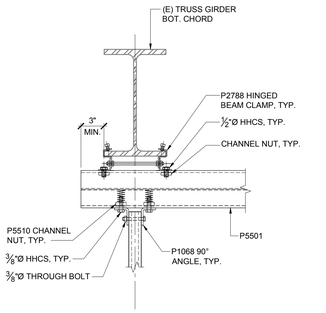
SECTIONS AND DETAILS

SHEET NUMBER

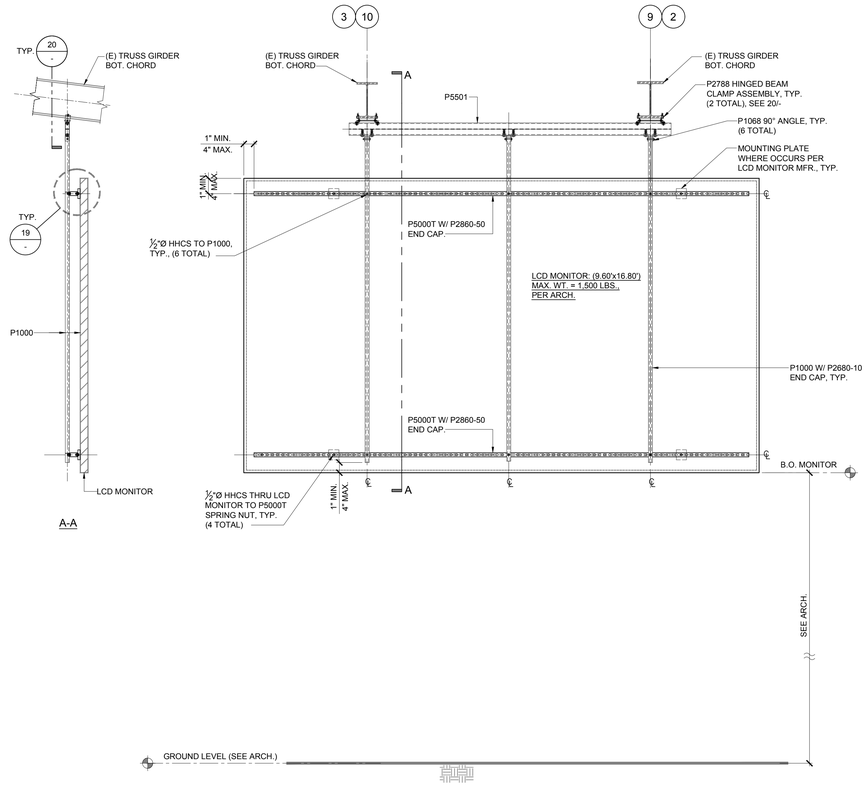
S-500

PLAN CHECK SET - NOT FOR CONSTRUCTION

IDS GROUP - FILE LOCATION: S:\PROJECTS\2022\SHARED\22X060.00 CITY OF INDUSTRY - EXPO CENTER - GRAND ARENA STRUCTURE & ANNOUNCER BOOTH\05 CAD\03 STRUCT\22X060.00-S-500_DETAILS PLOT DATE: 8/29/2025 2:25:45 PM USER: CALI NGUYEN

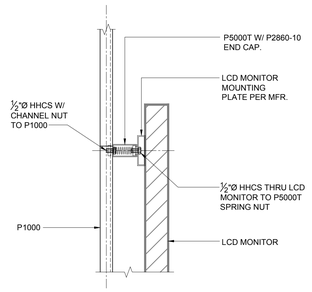


DETAIL | 1 1/2" = 1'-0" | 20

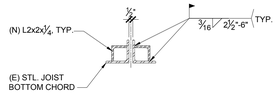


NOTE:
1. ALL LCD MONITOR FRAMING AND HARDWARE ARE UNISTRUT.

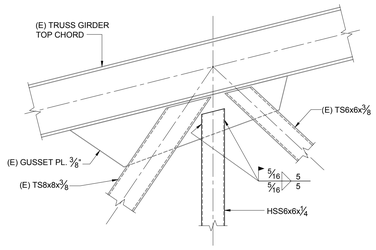
DETAIL | 1/2" = 1'-0" | 11



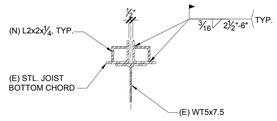
DETAIL | 1 1/2" = 1'-0" | 19



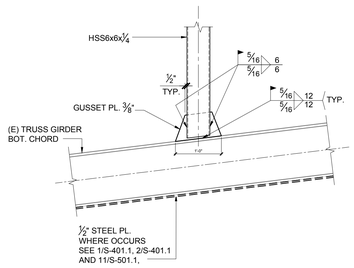
DETAIL | 1 1/2" = 1'-0" | 8



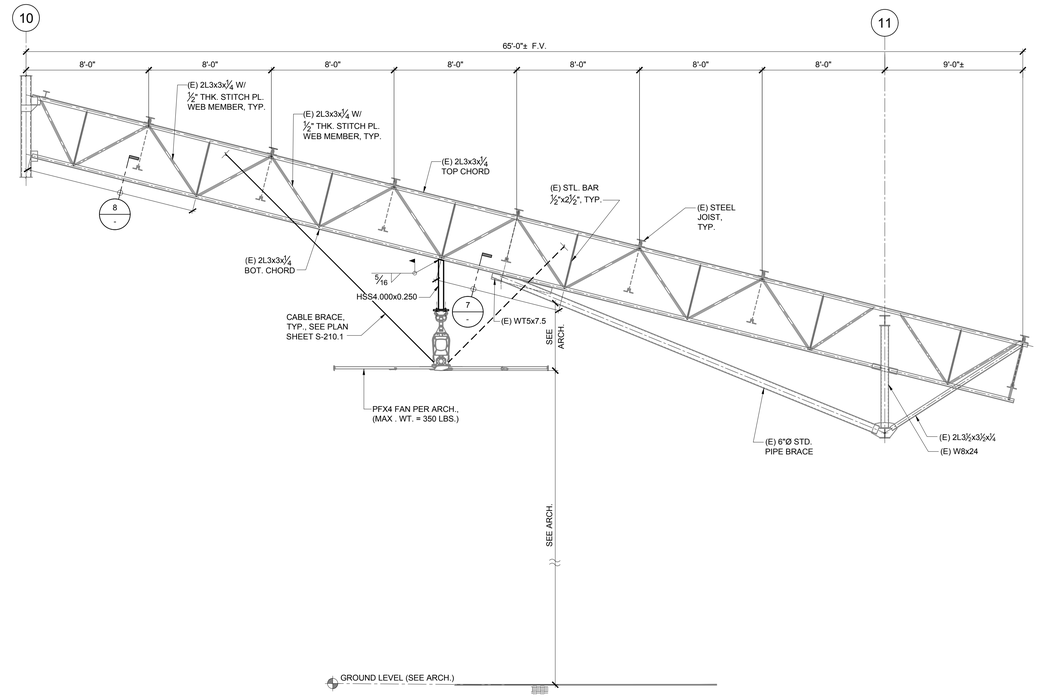
DETAIL | 3/4" = 1'-0" | 4



DETAIL | 1 1/2" = 1'-0" | 7

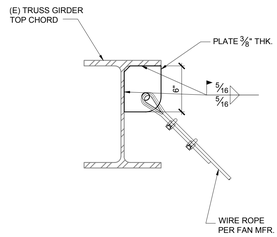


DETAIL | 3/4" = 1'-0" | 3

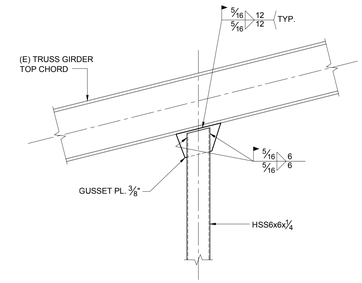


NOTE:
1. VERIFY ALL EXISTING PRIOR TO CONSTRUCTION.

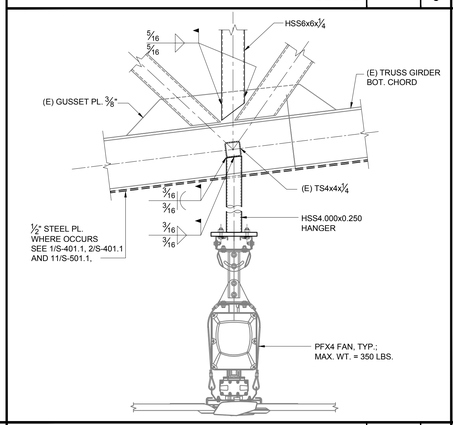
DETAIL | 1/4" = 1'-0" | 9



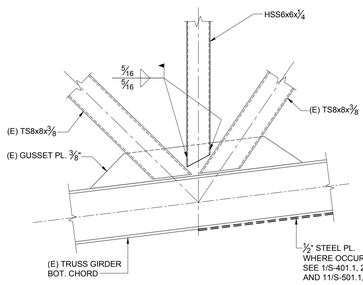
DETAIL | 1 1/2" = 1'-0" | 6



DETAIL | 3/4" = 1'-0" | 2



DETAIL | 3/4" = 1'-0" | 5



DETAIL | 3/4" = 1'-0" | 1

APPROVAL

CLIENT

15625 MAYOR DAVE WAY
CITY OF INDUSTRY, CA 91744
PHONE: 626-333-2211

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IDS PROJECT NO.	22X060.00
DRAWN BY	
CHECKED BY	
APPROVED BY	

SHEET TITLE

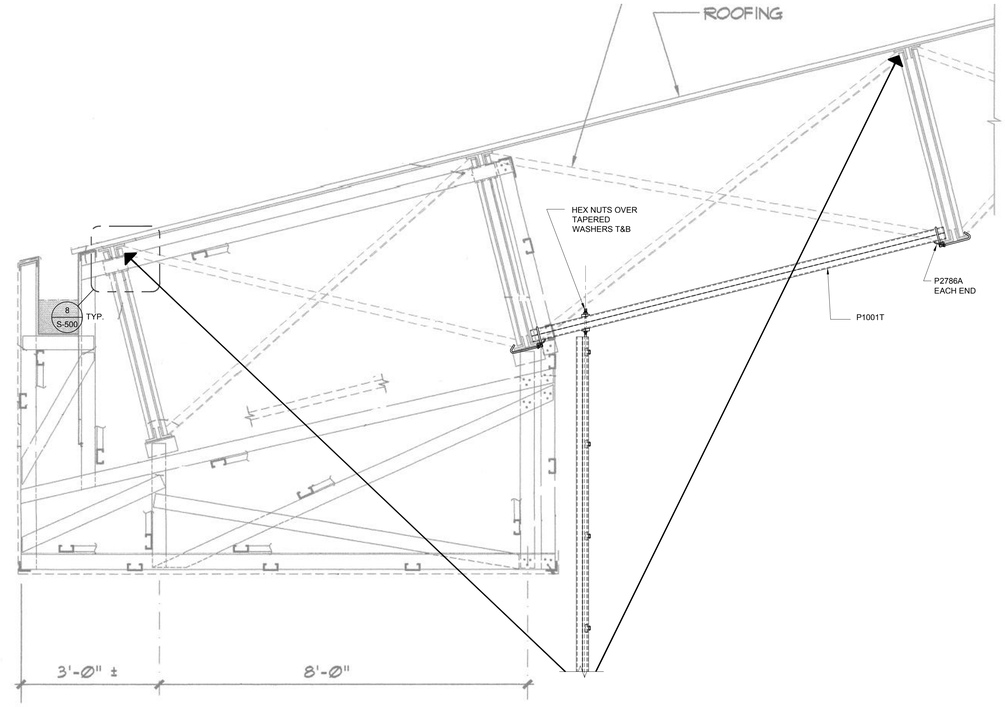
SECTIONS AND DETAILS (NEW FANS AND MONITORS)

SHEET NUMBER

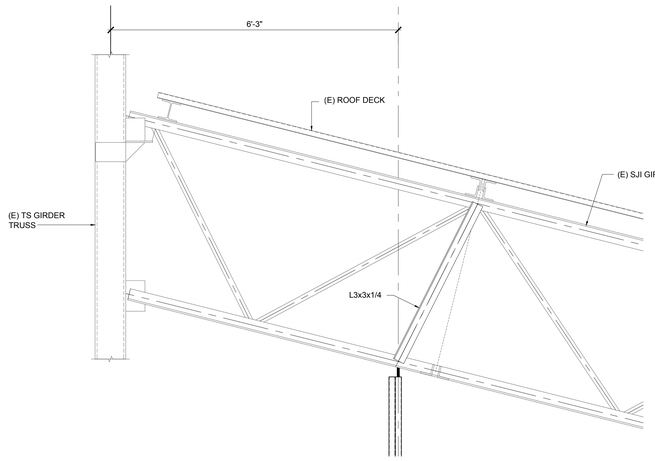
S-500.1

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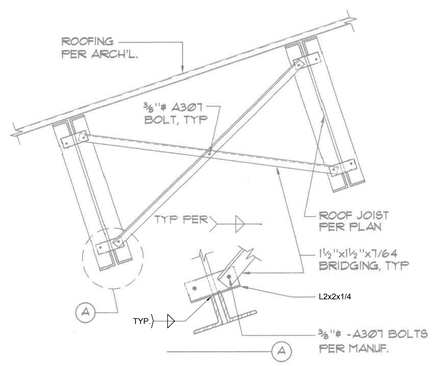
IDS GROUP - FILE LOCATION: S:\PROJECTS\2022\SHARED\22X060.00 CITY OF INDUSTRY - EXPO CENTER - GRAND ARENA STRUCTURE & ANNOUNCER BOOTH\05 CAD\03 STRUC\22X060.00-S-500.1_DETAILS PLOT DATE: 8/29/2025 2:22:42 PM USER: CALI.NGUYEN



DETAIL | N.T.S. | 3



\- | N.T.S. | 2



TYP. DIAG.BRIDGING BETWEEN JOISTS | N.T.S. | 1

ROD, ROD STIFFENER AND CABLE SCHEDULE

HANGING A/V UNIT WEIGHT (LBS)	THREADED ROD (F1554 GR. 36) DIAMETER (IN)	ROD STIFFENERS		AIRCRAFT CABLES
		MEMBER SIZE	MAX. ROD RESTRAINT CLIP/ BOLT SPACING (IN)	
> 500, UP TO 750	3/4	UNISTRUT P1001 C3	36	JACKETED AIRCRAFT CABLE, MINIMUM 7x19 WITH 3/16" DIAMETER AND 1/4 O.D.
UP TO 500	1/2	UNISTRUT P1001 C3	20	JACKETED AIRCRAFT CABLE, MINIMUM 7x19 WITH 3/16" DIAMETER AND 1/4 O.D.

ROD, ROD STIFFENER AND CABLE SCHEDULE | N.T.S. | 13

DETAIL | N.T.S. | 5

APPROVAL

CLIENT

15625 MAYOR DAVE WAY
CITY OF INDUSTRY, CA 91744
PHONE: 626-333-2211

PROJECT NAME

CITY OF INDUSTRY EXPO CENTER GRAND ARENA STRUCTURE AND ANNOUNCER BOOTH

16200 TEMPLE AVENUE
CITY OF INDUSTRY, CA 91744

ENGINEER/ARCHITECT

IDS GROUP

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IRVINE, CA. 92606
TEL: 949-387-8500, FAX: 949-387-0800

STAMP

REGISTERED PROFESSIONAL ENGINEER — DAVID L. HILMO — No. 3680 — STRUCTURAL — STATE OF CALIFORNIA

STAMP

ISSUE

REV.	DESCRIPTION	DATE
	90% CD SET	04/30/25
	95% CD SET	08/04/25
	100% CD SET	08/29/25

PROJECT IDENTIFICATION

THIS DRAWING WAS CREATED IN AUTODESK AUTOCAD V. 2021 UNLESS OTHERWISE NOTED.

THE ORIGINAL SIZE OF THIS SHEET IS 30" X 42"

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IDS PROJECT NO.	22X060.00
DRAWN BY	XX
CHECKED BY	XX
APPROVED BY	

SHEET TITLE

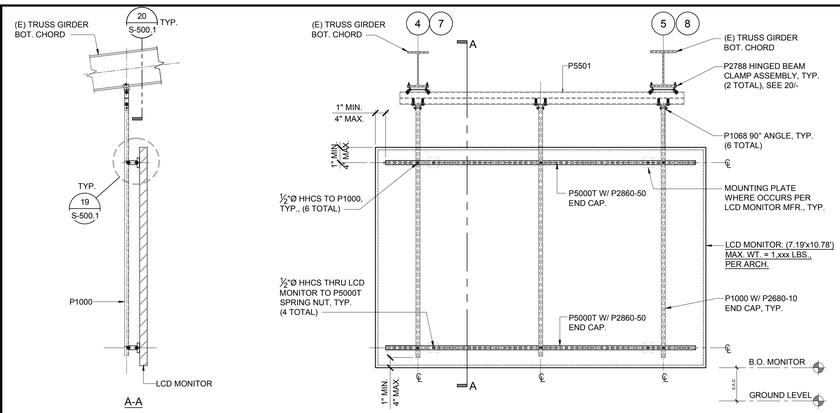
SECTIONS AND DETAILS

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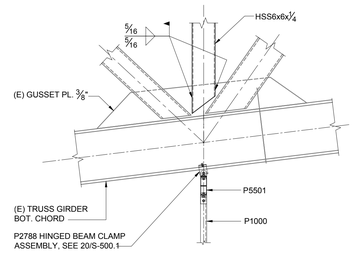
S-501

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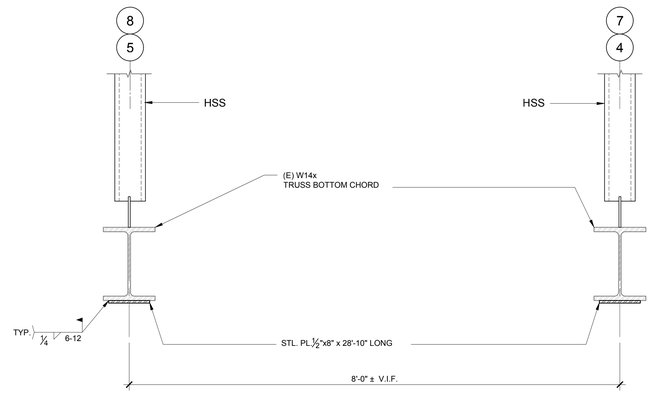
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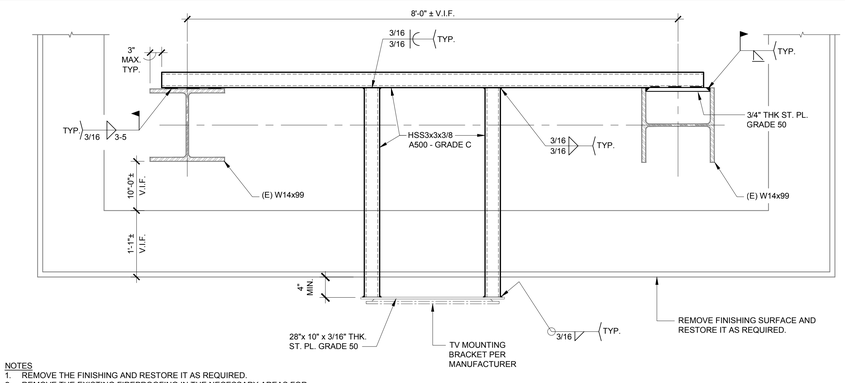
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DETAIL | N.T.S. | 4

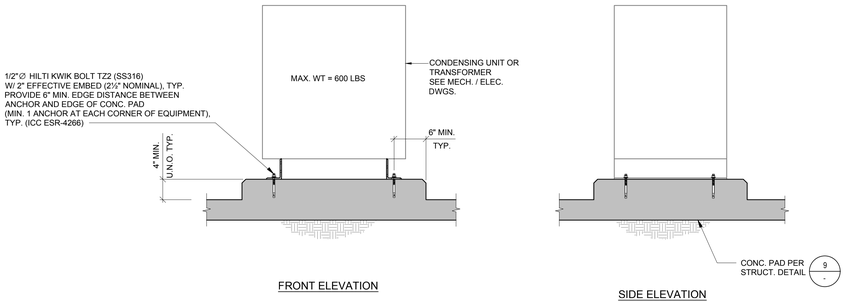


DETAIL | N.T.S. | 11

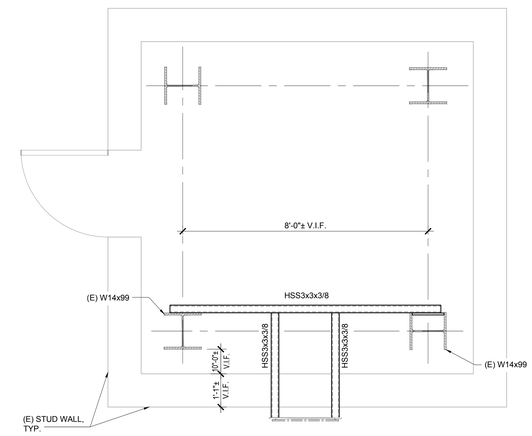


NOTES:
1. REMOVE THE FINISHING AND RESTORE IT AS REQUIRED.
2. REMOVE THE EXISTING FIREPROOFING IN THE NECESSARY AREAS FOR INSTALLATION AND REAPPLY IT AFTER CONSTRUCTION IS COMPLETED.

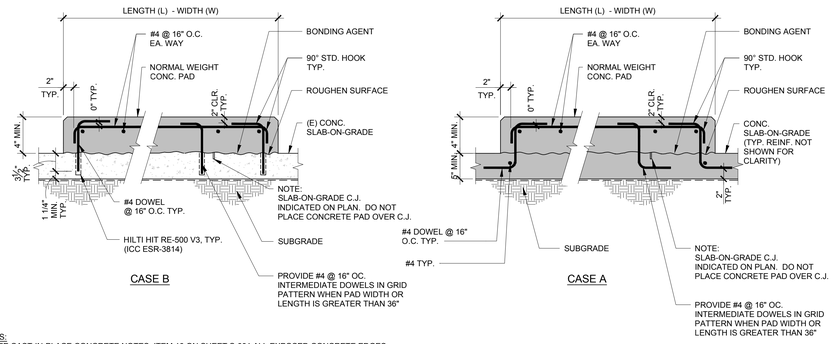
DETAIL | 1"=1'-0" | 3



CONDENSING UNIT AND TRANSFORMER ANCHORAGE | N.T.S. | 10



PARITAL PLAN | 1/2"=1'-0" | 1



NOTES:
1. SEE CAST-IN-PLACE CONCRETE NOTES, ITEM 10 ON SHEET S-001 ALL EXPOSED CONCRETE EDGES SHALL BE FORMED WITH A 3/4" CHAMFER U.O.N.

TYP. CONCRETE PAD AT S.O.G. | N.T.S. | 9

APPROVAL

CLIENT

CITY OF INDUSTRY 1957 LOS ANGELES COUNTY

15625 MAYOR DAVE WAY
CITY OF INDUSTRY, CA 91744
PHONE: 626-333-2211

PROJECT NAME

CITY OF INDUSTRY EXPO CENTER GRAND ARENA STRUCTURE AND ANNOUNCER BOOTH

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CHECKED BY	
APPROVED BY	

SHEET TITLE

SECTIONS AND DETAILS (NEW FANS AND MONITORS)

SHEET NUMBER

S-501.1

PLAN CHECK SET - NOT FOR CONSTRUCTION

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PLOT DATE: 8/29/2025 2:26:20 PM USER: CALINGUYEN

GENERAL NOTES

1. ALL WORK SHALL COMPLY WITH CALIFORNIA CODE OF REGULATIONS TITLE 24 PART 6 (2022) CALIFORNIA ENERGY CODE, THE LATEST CALIFORNIA MECHANICAL AND BUILDING CODES, 2019 CAL GREEN CODE, ALL OTHER APPLICABLE CODES AND REGULATIONS, AND LOCAL CODES. ALL EQUIPMENT AND SYSTEMS SHALL BE U.L. LISTED.
2. HVAC EQUIPMENT SHALL BE CERTIFIED BY THE CALIFORNIA ENERGY COMMISSION TO COMPLY WITH EFFICIENCY STANDARDS PER TITLE-24, PART 6.
3. CONTRACTOR SHALL CAREFULLY REVIEW THESE PLANS AND SPECIFICATIONS PRIOR TO BID. CONTRACTOR SHALL ADDITIONALLY REVIEW PLANS AND SPECIFICATIONS OF OTHER RELATED TRADES INCLUDING ARCHITECTURAL, STRUCTURAL, ELECTRICAL, FIRE PROTECTION AND PLUMBING PRIOR TO SUBMITTING BID.
4. CONTRACTOR SHALL COORDINATE THEIR INSTALLATION WITH ALL OTHER TRADES PRIOR TO INSTALLATION OF EQUIPMENT OR MATERIALS, INCLUDING BUT NOT LIMITED TO, STRUCTURAL, ARCHITECT, ELECTRICAL, AND PLUMBING.
5. THE CONTRACTOR SHALL VISIT THE SITE, VERIFY THE EXACT CONDITIONS RELATING TO THE WORK AND SHALL OBTAIN SUCH INFORMATION AS MAY BE NECESSARY TO PRESENT A CONCLUSIVE BID. NO ALLOWANCE SHALL BE MADE FOR ANY EXTRA EXPENSE DUE TO FAILURE OF THE CONTRACTOR TO MAKE SUCH A FIELD VERIFICATION. BY SUBMITTING A PROPOSAL FOR THE WORK INCLUDED IN THE CONTRACT, THE CONTRACTOR SHALL BE DEEMED TO HAVE MADE THE FIELD VERIFICATION AND ACCEPTS ALL JOB SITE CONDITIONS.
6. THESE DRAWINGS ARE DIAGRAMMATIC ONLY AND NOT INTENDED TO INDICATE ALL REQUIRED OFFSETS, BENDS, ELBOWS, TRANSITIONS, FITTINGS AS REQUIRED TO CONFORM TO THE BUILDING STRUCTURE, CLEARANCE INSIDE CEILINGS, AVOIDANCE OF OBSTRUCTIONS, AND MAINTAINING HEAD CLEARANCE. THE CONTRACTOR SHALL FOLLOW THE PLANS AS CLOSELY AS POSSIBLE.
7. CONTRACTOR SHALL PROVIDE ALL LABOR, MATERIAL, INSURANCE, EQUIPMENT, INSTALLATION, CONSTRUCTION TOOLS, TRANSPORTATION, ETC. FOR A COMPLETE AND PROPERLY OPERATING MECHANICAL SYSTEM.
8. USE ONLY COMPETENT SKILLED PERSONNEL. PERFORM ALL WORK CONSISTENT WITH THE BEST POSSIBLE TRADE PRACTICES.
9. MATERIALS SHALL BE NEW AND OF THE SAME MANUFACTURER FOR EACH CLASS OR GROUP OF EQUIPMENT. EQUIPMENT SHALL BE LISTED AND APPROVED BY UNDERWRITER'S LABORATORIES, AND SHALL BEAR THE INSPECTION LABEL WHERE SUBJECT TO SUCH APPROVAL. MATERIALS SHALL MEET WITH THE APPROVAL OF THE GOVERNING BODIES HAVING JURISDICTION. MATERIALS SHALL BE MANUFACTURED AND INSTALLED IN ACCORDANCE WITH APPLICABLE STANDARDS ESTABLISHED BY THE LATEST EDITION OF CMC, CBC U.L., SMACNA AND ASHRAE GUIDELINES. INSTALL PER MANUFACTURERS' RECOMMENDATIONS, AND INSTALLATION INSTRUCTIONS.
10. CONTRACTOR SHALL SECURE AND PAY FOR ALL NECESSARY BUILDING PERMITS AND VARIANCES. COORDINATE TEMPORARY CONSTRUCTION REQUIREMENTS WITH ALL TRADES PRIOR TO CONSTRUCTION. INCLUDE ALL COSTS IN THE BID.
11. THE JOB SHALL BE GUARANTEED FOR A PERIOD OF ONE (1) YEAR AFTER DATE OF ACCEPTANCE BY OWNER. ANY WORK, MATERIAL OR EQUIPMENT FOUND TO BE FAULTY DURING THAT PERIOD SHALL BE CORRECTED AT ONCE, UPON WRITTEN NOTIFICATION AT THE EXPENSE OF THE MECHANICAL CONTRACTOR.
12. THE EQUIPMENT AS INSTALLED, INCLUDING ALL EQUIPMENT AND MATERIALS SHALL BE GUARANTEED FOR A PERIOD OF ONE YEAR FROM THE DATE THE INSTALLATION IS ACCEPTED. COMPRESSORS SHALL HAVE A FIVE YEAR GUARANTEE.
13. IF ALTERNATE EQUIPMENT OR MATERIALS ARE PROPOSED BY THE CONTRACTOR, IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN ALL BUILDING DEPARTMENT APPROVALS, PAY ALL RELATED FEES AND OBTAIN APPROVAL FROM OWNER & ENGINEER OF RECORD.
14. IF ALTERNATE EQUIPMENT OR SYSTEMS ARE PROPOSED BY THE CONTRACTOR, IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE TITLE-24 COMPLIANCE CERTIFICATION AND ALL ASSOCIATED FEES REQUIRED. CONTRACTOR MUST ALSO COORDINATE SUBMITTED EQUIPMENT WITH OTHER TRADES.
15. EQUIPMENT SUBMITTED FOR APPROVAL WITH A DIFFERENT PHYSICAL SIZE OR ARRANGEMENT FROM THAT SHOWN ON THE PLANS SHALL INCLUDE SHOP DRAWINGS. MECHANICAL CONTRACTOR SHALL PROVIDE AND SHOW COORDINATED PLANS WITH ALL OTHER TRADES.
16. PROVIDE SIX COPIES OF ALL MANUFACTURER'S PRODUCT DATA CLEARLY INDICATING MODEL NUMBERS, CAPACITIES, CONSTRUCTION, ELECTRICAL INFORMATION, AND OPTIONAL ACCESSORIES, WITHIN 45 DAYS OF AWARD OF CONTRACT AND PRIOR TO THE START OF WORK. THESE NEED TO BE APPROVED BY ARCHITECT PRIOR TO PURCHASING.
17. ALL BROCHURES, OPERATING MANUALS, CATALOGS, SHOP DRAWINGS, "AS-BUILTS". ETC. SHALL BE TURNED OVER TO THE OWNER AT THE COMPLETION OF THE JOB. PROVIDE THE OWNER WITH ONE (1) SET OF COMPLETE MECHANICAL "AS-BUILTS" INDICATING FINAL EQUIPMENT LOCATIONS, DUCTWORK AND PIPE ROUTING, ETC. MECHANICAL CONTRACTOR SHALL SUBMIT AS-BUILTS IN CAD FORMAT.
18. ADDENDA AND CHANGE ORDERS SHALL BE APPROVED BY OWNER.
19. EQUIPMENT, ACCESSORIES, AND MATERIAL SHALL BE INSTALLED IN STRICT ACCORDANCE WITH THE MANUFACTURER'S INSTALLATION INSTRUCTIONS AND RECOMMENDATIONS.
20. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS FOR ALL MAJOR PIECES OF MECHANICAL EQUIPMENT, INCLUDING, BUT NOT LIMITED TO FAN COILS, CONDENSING UNITS, EXHAUST FANS, DUCTWORK, AND PIPING. SUBMITTALS SHALL BE MADE TO THE ARCHITECT AS SOON AS PRACTICABLE AFTER AWARD OF CONTRACT.
21. CONTRACTOR SHALL ARRANGE AND PAY FOR ALL NECESSARY PERMITS, INSPECTOR'S EXAMINATIONS, AND FEES REQUIRED BY THE AHJ.
22. ANY MATERIAL EXPOSED WITHIN A PLENUM OR DUCT MUST HAVE A FLAME SPREAD INDEX OF NOT MORE THAN 25, AND A SMOKE DEVELOPED RATING OF NOT MORE THAN 50, AND A MOLD/HUMIDITY RESISTANCE PER U.L. 181.
23. EQUIPMENT SHALL BE LOCATED SUCH THAT CODE REQUIRED ACCESS IS MAINTAINED, INCLUDING N.E.C. REQUIREMENTS. ACCESS PANELS WHERE REQUIRED, SHALL BE COORDINATED WITH ARCHITECT, AND PROVIDED BY FACTORY OR BE FIELD-PROVIDED. FOR ATTIC EQUIPMENT, G.C. TO PROVIDE A CATWALK & LIGHT PER CMC FOR ATTIC EQUIPMENT. ALSO COORDINATE REQUIRED ACCESS WITH THE BUILDING ENGINEER.
24. PROVIDE VIBRATION ISOLATION TO ALL ROTATING EQUIPMENT TO PREVENT TRANSMISSION OF VIBRATION TO BUILDING STRUCTURE. PROVIDE FLEXIBLE DUCT OR PIPE CONNECTIONS TO ALL ROTATING EQUIPMENT.
25. AIR MOVING SYSTEMS SUPPLYING AIR IN EXCESS OF 2,000 CUBIC FEET PER MINUTE TO ENCLOSED SPACES IN THIS PROJECT SHALL BE EQUIPPED WITH CODE-REQUIRED DUCT MOUNTED AUTOMATIC SHUTOFF SMOKE DETECTORS. AUTO SHUTOFF SHALL BE ACCOMPLISHED BY INTERRUPTING THE POWER SOURCE OF THE AIR-MOVING EQUIPMENT UPON DETECTION OF SMOKE IN THE MAIN SUPPLY DUCT (OR AREA DETECTORS AT THE AHU'S APPROVAL). THESE DETECTORS SHALL BE SUPERVISED BY THE BUILDING FIRE ALARM SYSTEM AND THE DETECTORS SHALL ACTIVATE THIS SYSTEM. REFER TO CMC SECTION 609.
26. REFER TO SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS AS THESE ARE PART OF THE CONTRACT DOCUMENTS.
27. WHERE A CONFLICT OCCURS BETWEEN THIS SPECIFICATION AND OTHER SPECIFICATIONS ISSUED AS A PART OF THE CONTRACT DOCUMENTS, THE MORE STRINGENT REQUIREMENT SHALL PREVAIL.
28. AIR FILTERS SHALL BE STATE FIRE MARSHAL APPROVED AND LISTED. PREFORMED FILTERS HAVING COMBUSTIBLE FRAMING SHALL BE TESTED AS A COMPLETE ASSEMBLY. AIR FILTERS IN ALL OCCUPANCIES SHALL BE PER TITLE-24 PART 6 AND APPLICABLE ASHRAE REQUIREMENTS. LOW-RISE RESIDENTIAL (3-STORIES AND BELOW) SHALL COMPLY WITH OUTSIDE AIR INTAKE FILTRATION REQUIREMENTS AS REQUIRED. FILTERS SHALL BE ACCESSIBLE FOR CLEANING OR REPLACEMENT.
29. ALL APPLIANCES DESIGNED TO BE FIXED IN POSITION SHALL BE SECURELY FASTENED IN PLACE PER BUILDING CODE REQUIREMENTS OR APPLICABLE MANUFACTURER INSTALLATION REQUIREMENTS.
30. IT SHALL BE THE TEST AND BALANCE AGENCY'S RESPONSIBILITY TO PERFORM THE REQUIRED TESTING PROCEDURES, COMPLY, FILL-OUT, AND SIGN ALL THE CERTIFICATE OF COMPLIANCE FORMS MECH-1C THROUGH MECH-4C REQUIRED BY THE BUILDING INSPECTOR. HE SHALL COORDINATE AND WORK WITH THE EQUIPMENT AND CONTROLS INSTALLERS TO COMPLY WITH THESE REQUIREMENTS IN A TIMELY MANNER WITHIN THE PROJECT SCHEDULE.
31. IT SHALL BE THE TEST AND BALANCE CONTRACTOR'S RESPONSIBILITY TO PERFORM THE TESTING PROCEDURES, REQUIRED BY THE MECH-2A THROUGH MECH-11A CERTIFICATE OF ACCEPTANCE FORMS, AS APPLICABLE FOR ALL NEWLY INSTALLED HEATING AND COOLING SYSTEMS, AS CHECKED-OFF IN FORM MECH-1C ON THE PLANS. THE TEST AND BALANCE CONTRACTOR IS RESPONSIBLE FOR OBTAINING THE CERTIFICATE OF ACCEPTANCE FORMS REQUIRED BY THE BUILDING INSPECTOR. THE TEST AND BALANCE AGENCY SHALL BE WELL VERSED WITH ALL THE REQUIREMENTS OF THESE CERTIFICATE OF ACCEPTANCE FORMS, AND SHALL COORDINATE AND WORK WITH THE EQUIPMENT AND CONTROLS INSTALLERS TO COMPLY WITH THESE REQUIREMENTS IN A TIMELY MANNER WITHIN THE PROJECT SCHEDULE.
32. ALL WORK COVERED BY THIS DESIGN SHOULD CONFIRM TO LATEST CODE REQUIREMENT, 2019 CBC, CMC, ALONG WITH 2019 T-24 ENERGY STANDARDS.
33. IN MIXED OCCUPANCY BUILDINGS, EACH PORTION OF A BUILDING SHALL COMPLY WITH SPECIFIC GREEN BUILDING MEASURES APPLICABLE TO EACH SPECIFIC OCCUPANCY.
34. CONVERING OF NEW DUCT OPENING AND PROTECTION OF MECHANICAL EQUIPMENT DURING CONSTRUCTION. AT THE TIME OF ROUGH INSTALLATION, DURING STORAGE ON THE CONSTRUCTION SITE AND UNTIL FINAL STARTUP OF THE HEATING, COOLING AND VENTILATION EQUIPMENT, ALL DUCT AND OTHER RELATED AIR DISTRIBUTION COMPONENT OPENINGS SHALL BE COVERED WITH TAPE, PLASTIC, SHEATMETAL OR OTHER METHODS ACCEPTABLE BY THE AHJ TO REDUCE THE AMOUNT OF WATER, DUST AND DEBRIS, WHICH MAY ENTER THE SYSTEM.
35. ALL HVAC UNITS OR SYSTEMS SERVING A COMMON AIR SPACE MUST BE INTERCONNECTED TO SHUT DOWN IMMEDIATELY UPON ALARM CONDITION FROM DUCT DETECTORS (OR FIRM ALARM SYSTEM WHEN USING AREA SMOKE DETECTORS IN LIEU OF DUCT DETECTORS) WITHOUT INTERFERENCE FROM EMS OR CALIFORNIA STATE FIRE MARSHAL LISTED FOR RELEASING SERVICE.

LEGEND & ABBREVIATIONS

SYMBOL	ABB.	DESCRIPTION	SYMBOL	ABB.	DESCRIPTION
	SAD	SUPPLY AIR DUCT		S/S	STAINLESS STEEL
	RAD	RETURN AIR DUCT		AC	AIR CONDITIONING UNIT
	OSA	OUTSIDE AIR		AP	ACCESS PANEL
	EAD	EXHAUST AIR DUCT		B.D.D.	BACK DRAFT DAMPER
	CA	COMBUSTION AIR		CB	CIRCUIT BREAKER
	(L)	LINED DUCTWORK		CFM	CUBIC FEET PER MINUTE
	CD	CEILING DIFFUSER		CONC.	CONCRETE
	RG	RETURN GRILLE		COND.	CONDENSATE
	EG	EXHAUST GRILLE		D.B.	DRY BULB
	TG	TRANSFER GRILLE		DN.	DOWN
	SWS	SIDEWALL SUPPLY REGISTER		ENT.	ENTERING
	SWG	SIDEWALL RETURN GRILL		EF	EXHAUST FAN
	SWR	SIDEWALL EXHAUST REGISTER		E.S.P.	EXTERNAL STATIC PRESSURE (INCHES OF WATER)
	FC	FLEXIBLE CONNECTION		TYP.	TYPICAL
	MVD	MANUAL VOLUME DAMPER		A.F.F	ABOVE FINISHED FLOOR
S	QBD	QUADRANT BALANCING DAMPER		FLA.	FULL LOAD AMPS
	OBD	OPPOSED BALANCING DAMPER		FT.	FEET
DL	DL	DOOR LOUVER		GC	GENERAL CONTRACTOR
UC	UC	UNDERCUT DOOR		HP	HORSEPOWER
T	TSTAT	ROOM THERMOSTAT		BHP	BRAKE HORSEPOWER
C	CO2	CARBON DIOXIDE SENSOR		IN.	INCHES
	VFD	VARIABLE FREQUENCY DRIVE		KW	KILOWATTS
	S.A.	SUPPLY AIR		L.R.A.	LOCKED ROTOR AMPS
	R.A.	RETURN AIR		M.C.A.	MINIMUM CIRCUIT AMPS
	E.A.	EXHAUST AIR		R.L.A.	RATED LOAD AMPS
	T.A.	TRANSFER AIR		M.O.C.P.	MAX. OVER CURRENT PROTEC. AMPS
	O.S.A.	OUTSIDE AIR		PH	PHASE
	TYP.	TYPICAL		FD	FUSED DISCONNECT
SFD	SFD	COMBINATION SMOKE-FIRE DAMPER		NFD	NON-FUSED DISCONNECT
MBD	MBD	MOTORIZED BACKDRAFT DAMPER		PRESS.	PRESSURE
	HVAC	HEATING, VENTILATION, AND AIR CONDITIONING		RPM	REVOLUTIONS PER MINUTE
	VAV	VARIABLE AIR VOLUME FLOW		MIN.	MINIMUM
	CAV	CONSTANT AIR VOLUME FLOW		B.O.D.	BOTTOM OF SHEET METAL DUCT
	DCV	DEMAND CONTROL VENTILATION		A.F.F.	ABOVE FINISHED FLOOR
	ECM	ELECTRONICALLY COMMUTATED MOTOR		UTR	UP THRU ROOF
				DTR	DOWN THRU ROOF

DUCT LINERS AND INSULATION

COMPLY WITH 2019 CALIFORNIA ENERGY CODE (CEC) STANDARDS SUB CHAPTER 3, SECTION 124: REQUIREMENTS FOR AIR DISTRIBUTION SYSTEM DUCTS AND PLENUMS CONVEYING HEATED AND/OR COOLED AIR SHALL BE INSTALLED PER REQUIREMENTS OF 2019 CMC CHAPTER 6.

1. PORTIONS OF SUPPLY-AIR AND RETURN-AIR CONVEYING HEATED OR COOLED AIR LOCATED OUTDOORS, SPACES BETWEEN ROOF AND INSULATED CEILINGS, SPACES UNDER A ROOF WITH FIXED VENTS OR OPENINGS TO THE OUTSIDE OR UNCONDITIONED SPACES, UNCONDITIONED CRAWL SPACE, AND OTHER UNCONDITIONED CRAWL SPACE SHALL BE INSULATED TO A MINIMUM INSTALLED LEVEL OF R-8.
2. PORTIONS OF THE SAME DUCTS THAT ARE NOT IN ONE OF THE SPACES ENUMERATED ABOVE, DUCTS IN INDIRECTLY CONDITIONED SPACES SUCH AS DUCT SPACE ABOVE THE CEILING, SHALL BE INSULATED TO A MINIMUM INSTALLED LEVEL OF R-4.2 (OR ANY HIGHER LEVEL REQUIRED BY CMC SECTION 605.0.
3. COMBINATION DUCT LINER AND DUCT WRAP INSULATION MAY BE USED TO ACHIEVE THE INSTALLED MINIMUM R-VALUES DESCRIBED ABOVE.
4. DUCT WRAP INSULATION SHALL BE JOHNS MANNVILE MICROLITE EQ TYPE 75 WITH FSK ALUMINUM FOIL, 1-1/2 THICK R-4.2.
5. DUCT LINER SHALL BE JOHNS MANNVILE LINACOUSTIC RC FOR RECTANGULAR DUCTS, AND SPIRACOUSTIC PLUS FOR ROUND SPIRAL DUCTS. UNLESS OTHERWISE EXPLICITLY INDICATED ON PLANS, OUTDOOR LINED DUCTS SHALL BE INSTALLED WITH 2" THICK DUCT LINER R-8, AND INDOOR LINED DUCTS SHALL BE INSTALLED WITH 1" THICK DUCT LINER R-4.2.
6. DUCTS CARRYING UNTEMPERED MAKE UP AIR SHALL BE INSULATED WITH DUCT WRAP INSULATION WITH VAPOR BARRIER TO PREVENT CONDENSATION.

CODES AND STANDARDS

2022 CALIFORNIA BUILDING STANDARDS ADMINISTRATIVE CODE, TITLE 24 C.C.R.
2022 CALIFORNIA BUILDING CODE (CBC), TITLE 24 C.C.R.
2022 CALIFORNIA ELECTRICAL CODE (CEC), TITLE 24 C.C.R.
2022 CALIFORNIA MECHANICAL CODE (CMC), TITLE 24 C.C.R.
2022 CALIFORNIA PLUMBING CODE (CPC), TITLE 24 C.C.R.
2022 CALIFORNIA GREEN BUILDING CODE (CGBC)
2022 CALIFORNIA ENERGY CODE
2022 NATIONAL FIRE PROTECTION ASSOCIATION (NFPA)
ANY OTHER LOCAL AND STATE LAWS AND REGULATIONS

SEISMIC NOTES

1. ALL ANCHORAGE AND/OR SEISMIC RESTRAINTS SHALL BE DESIGNED BY A REGISTERED PROFESSIONAL STRUCTURAL ENGINEER LICENSED IN THE STATE OF CALIFORNIA.
2. THE ANCHORAGE AND/OR SEISMIC RESTRAINT OF PERMANENT EQUIPMENT AND ASSOCIATED SYSTEMS LISTED BELOW SHALL BE DESIGNED TO RESIST THE TOTAL DESIGN SEISMIC FORCES PRESCRIBED IN SECTION 1632.2A OF THE 2019 CALIFORNIA BUILDING CODE.
3. SEISMIC RESTRAINTS ARE REQUIRED FOR THE FOLLOWING INSTALLATIONS:
   - A) ALL FLOOR OR ROOF MOUNTED EQUIPMENT WEIGHING 400 LBS. OR GREATER.
   - B) ALL SUSPENDED OR WALL MOUNTED EQUIPMENT WEIGHING 20 LBS. OR GREATER.
   - C) ALL VIBRATION ISOLATION EQUIPMENT WEIGHING 20 LBS. OR GREATER.
   - D) ALL PIPING 1-1/4 INCHES NOMINAL DIAMETER AND LARGER LOCATED IN BOILER, MECHANICAL EQUIPMENT AND REFRIGERATION MECHANICAL ROOMS.
   - E) ALL PIPING 2-1/2 INCHES NOMINAL DIAMETER AND LARGER.
   - F) ALL DUCTWORK 6 SQUARE FEET AND LARGER IN CROSS SECTIONAL AREA.
   - G) ALL ROUND DUCTWORK 28" IN DIAMETER AND GREATER.
   - H) PIPES AND DUCTS SUPPORTED BY A TRAPEZE WHERE NONE OF THOSE ELEMENTS WOULD INDIVIDUALLY REQUIRE BRACING NEED NOT BE BRACED IF CONNECTIONS TO THE PIPE/DUCT OR DIRECTIONAL CHANGES DO NOT RESTRICT MOVEMENT OF THE TRAPEZE. IF THIS FLEXIBILITY IS NOT PROVIDED, BRACING IS REQUIRED WHEN THE COMBINED OPERATING WEIGHT OF ALL ELEMENTS SUPPORTED BY THE TRAPEZE IS 10 LBS/FT OR GREATER.

MECHANICAL SHEET INDEX

S.No.	SHEET NUMBER	SHEET TITLE	SCALE
1	M-001	GENERAL NOTES, LEGEND AND ABBREVIATIONS	NO SCALE
2	M-002	SCHEDULES	NO SCALE
4	M-201	OVERALL GROUND FLOOR PLAN	1/16"=1'-0"
5	M-202	BOOTH 2ND AND 3RD FLOOR PLANS - DEMO AND NEW	1/4" = 1'-0"
6	M-501	MECHANICAL DETAILS	NO SCALE
7	M-601	TITLE 24	NO SCALE

APPROVAL

CLIENT

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CITY OF INDUSTRY, CA 91744
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PROJECT NAME

CITY OF INDUSTRY EXPO CENTER GRAND ARENA STRUCTURE AND ANNOUNCER BOOTH

16200 TEMPLE AVENUE
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STAMP

STAMP

REGISTERED PROFESSIONAL ENGINEER — STEVEN M. COLLINS — No. E22808 — ELECTRICAL — STATE OF CALIFORNIA
DATE SIGNED 08/27/2025

ISSUE

REV.	DESCRIPTION	DATE
	90% CD SET	04/30/25
	95% CD SET	08/04/25
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CHECKED BY	RJ
APPROVED BY	DS

SHEET TITLE

GENERAL NOTES, LEGEND AND ABBREVIATIONS

SHEET NUMBER

M-001

SHEET NO. OF

PLAN CHECK SET - NOT FOR CONSTRUCTION

IDS GROUP - FILE LOCATION: S:\PROJECTS\2022\SHARED\22X060.00 CITY OF INDUSTRY - EXPO CENTER - GRAND ARENA STRUCTURE & ANNOUNCER BOOTH\05 CAD\04 MECH\22X060.00-M001_GEN PLOT DATE: 8/28/2025 3:18:16 PM
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OUTDOOR HEAT PUMP UNIT SCHEDULE (SPLIT SYSTEM)

TAG	BASIS OF DESIGN MANUF. MODEL No.	NOM. TON	LOCATION	SERVICE	PERFORMANCE				COOLING			HEATING		ELECTRICAL				REFRIGERANT PIPE SIZE			DIMENSIONS W" X H" X D"	OP. WT. (LBS.)	MOUNTING DETAIL	NOTES
					EFFICIENCY				CAP TOTAL MBH	AMB DB °F	REFRIG	CAP TOTAL MBH	AMB DB °F	FLA	MCA	MOCP	V-PH-Hz	GAS	HIGH PRESS. GAS	LIQUID				
					COOLING		HEAT																	
					IEER	EER	COP	HSPF																
CU 1	SAMSUNG AM120BXVGJR/AA	10	GROUND	FC-1, FC-2, FC-3	23.95	11.9	3.82	-	120	95	R410A	135	47	-	19.4	25	460-3-60	1-1/8"	3/4"	1/2"	51"x67"x30"	600	3 / M-501	1 2 3

NOTES:

1. POWER AND CONTROL WIRING SHALL BE PER MANUFACTURER'S RECOMMENDATIONS. REFER TO POWER AND WIRING SCHEMATICS.
2. PROVIDE FUSED DISCONNECT SWITCH BY ELECTRICAL CONTRACTOR.
3. COMPRESSORS SHALL BE INVERTER-DRIVEN.

BRANCH BOX HEAT RECOVERY UNIT

TAG	MANUFACTURER AND MODEL NO.	CONDENSING UNIT SERVED	LOCATION	NO. OF PORTS	ELECTRICAL					W x D x H INCHES	NET WT. (LBS.)	MOUNTING DETAIL	REMARKS:
					MCA	MOP	V	PH	HZ				
BC 1	SAMSUNG MCU-S6NEKZUN	CU-1	ANNOUNCER ROOM	6	2	15	208	1	60	29 x 19 x 8	65	5 / M-501	1 2 3 4

REMARKS:

1. POWER WIRING SHALL BE FIELD PROVIDED BY ELECTRICAL, AND MUST COMPLY WITH THE APPLICABLE LOCAL AND NATIONAL CODES. PROVIDE SEPARATE DISCONNECT SWITCH FOR EACH HEAT RECOVERY UNIT.
2. PROVIDE ISOLATION BALL VALVES LOCATED AT HEAT RECOVERY UNIT FOR EACH PORT.
3. INSTALLATION SHALL BE PER MANUFACTURER'S GUIDELINES.
4. SEE SCHEMATIC DIAGRAM ON SHEET M-601

FRESH AIR FAN WITH FILTER SCHEDULE

UNIT TAG	STATUS	MAKE	MODEL	TYPE	LOCATION	SERVICE	PERFORMANCE					ELECTRICAL						FILTER BOX			PHYSICAL					ANCHORAGE DETAIL	NOTES
							CFM	DP " WG	RPM	WATT	EFF.%	HP	FLA	AMPS	MOCP	V	PH	W x D x H INCHES	QTY	FILTER SIZE	DAMPER	L	W	H	WEIGHT (LBS)		
FAF 1	NEW	AIRKING	QFAMD	INLINE FAN / FILTER UNIT	CEILING	OSA FOR BOOTH ANNOUNCER	30	0.3	-	13	-	-	-	0.30	-	120	1	15 x12 x11	1	10 x10 x2	YES	23	11	13	20	5 / M-501	1

NOTES:

1. FAN SHALL INTERLOCK WITH FAN COIL FC-3.

INDOOR FAN COIL UNIT SCHEDULE (SPLIT SYSTEM)

UNIT TAG	MANUFACTURER & MODEL NO.	NOMINAL CAPACITY (MBH)	TYPE	SERVING ZONE:	AIRFLOW (CFM)	OSA (CFM)	FAN MOTOR	COOLING CAPACITY (BTUH)	HEATING CAPACITY (BTUH)	UNIT POWER			REFRIGERANT PIPE SIZE		DRAIN PIPE O.D.	DIMENSIONS W" X H" X D"	OP. WT. (LBS.)	SERVED BY:	NOTES	MOUNTING DETAIL
										V-PH-Hz	MCA	MOCP	SUCTION	LIQUID						
FC 1A	SAMSUNG AM028TNVDCH/AA	2.8	HIGH WALL	EQUIPMENT ROOM	615	NOT REQUIRED	27 WATTS	28,000	29,000	208/230-1-60	0.54	15	5/8"	3/8"	3/4"	42" x 12" x 9"	30	CU 1	1 2 3	4 / M-501
FC 1B	SAMSUNG AM028TNVDCH/AA	2.8	HIGH WALL	EQUIPMENT ROOM	615	NOT REQUIRED	27 WATTS	28,000	29,000	208/230-1-60	0.54	15	5/8"	3/8"	3/4"	42" x 12" x 9"	30	CU 1	1 2 3	4 / M-501
FC 2A	SAMSUNG AM028TNVDCH/AA	2.8	HIGH WALL	EQUIPMENT ROOM	615	NOT REQUIRED	27 WATTS	28,000	29,000	208/230-1-60	0.54	15	5/8"	3/8"	3/4"	42" x 12" x 9"	30	CU 1	1 2 3	4 / M-501
FC 2B	SAMSUNG AM028TNVDCH/AA	2.8	HIGH WALL	EQUIPMENT ROOM	615	NOT REQUIRED	27 WATTS	28,000	29,000	208/230-1-60	0.54	15	5/8"	3/8"	3/4"	42" x 12" x 9"	30	CU 1	1 2 3	4 / M-501
FC 3	SAMSUNG AM018TNVDCH/AA	1.5	HIGH WALL	ANNOUNCER BOOTH 201	525	4	27 WATTS	18,000	20,000	208/230-1-60	0.44	15	1/2"	1/4"	3/4"	47"x27.5"x9.84"	77.2	CU 1	1 2 3 4	4 / M-501

NOTES:

1. REFRIGERANT PIPING ROUTING SHALL BE FINALIZED BY A CERTIFIED SAMSUNG INSTALLER / CONTRACTOR. SUBMIT SHOP DRAWINGS FOR REVIEW.
2. PROVIDE DISCONNECT SWITCH.
3. PROVIDE PROGRAMMABLE THERMOSTAT.
4. OSA PROVIDED BY FAN FILTER UNIT FAF-1. SEE FAN SCHEDULE.

APPROVAL

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PROJECT NAME

CITY OF INDUSTRY
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DRAWN BY	TT
CHECKED BY	RJ
APPROVED BY	DS

SHEET TITLE

SCHEDULES

SHEET NUMBER

M-002

SHEET NO. OF

PLAN CHECK SET - NOT FOR CONSTRUCTION

IDS GROUP - FILE LOCATION: S:\PROJECTS\2022\SHARED\22X060.00 CITY OF INDUSTRY - EXPO CENTER - GRAND ARENA STRUCTURE & ANNOUNCER BOOTH\05 CAD\04 MECH\22X060.00-M002_SCHEDULE PLOT DATE: 8/28/2025 3:19:12 PM USER: TRAVIS.TRAN

PACKAGED TERMINAL AIR-CONDITIONERS, THROUGH-WALL UNITS238113.11 - 1

SECTION 238113.11 - THROUGH-WALL UNITS

1.1 FIELD QUALITY CONTROL
- A. TESTING AGENCY: OWNER WILL ENGAGE A QUALIFIED TESTING AGENCY TO PERFORM TESTS AND INSPECTIONS.
- B. MANUFACTURER'S FIELD SERVICE: ENGAGE A FACTORY-AUTHORIZED SERVICE REPRESENTATIVE TO TEST AND INSPECT COMPONENTS, ASSEMBLIES, AND EQUIPMENT INSTALLATIONS, INCLUDING CONNECTIONS.
- C. PERFORM THE FOLLOWING TESTS AND INSPECTIONS WITH THE ASSISTANCE OF A FACTORY-AUTHORIZED SERVICE REPRESENTATIVE:
  1. INSPECT FOR AND REMOVE SHIPPING BOLTS, BLOCKS, AND TIE-DOWN STRAPS.
  2. AFTER INSTALLING TERMINAL AIR CONDITIONERS AND AFTER ELECTRICAL CIRCUITRY HAS BEEN ENERGIZED, TEST FOR COMPLIANCE WITH REQUIREMENTS.
  3. UNIT IS LEVEL ON BASE AND IS FLASHED IN EXTERIOR WALL.
  4. UNIT CASING HAS NO VISIBLE DAMAGE.
  5. COMPRESSOR, AIR-COOLED CONDENSER COIL, AND FANS HAVE NO VISIBLE DAMAGE.
  6. LABELS ARE CLEARLY VISIBLE.
  7. CONTROLS ARE CONNECTED AND OPERABLE.
  8. SHIPPING BOLTS, BLOCKS, AND TIE-DOWN STRAPS ARE REMOVED.
  9. FILTERS ARE INSTALLED AND CLEAN.
  10. DRAIN PAN AND DRAIN LINE ARE INSTALLED CORRECTLY.
  11. ELECTRICAL WIRING INSTALLATION COMPLIES WITH MANUFACTURER'S SUBMITTAL AND INSTALLATION REQUIREMENTS IN ELECTRICAL SECTIONS.
  12. INSTALLATION: PERFORM STARTUP CHECKS ACCORDING TO MANUFACTURER'S WRITTEN INSTRUCTIONS, INCLUDING THE FOLLOWING:
- A. LUBRICATE BEARINGS ON FAN.
- B. CHECK FAN WHEEL ROTATION FOR CORRECT DIRECTION WITHOUT VIBRATION AND BINDING.
  13. OPERATIONAL TEST: AFTER ELECTRICAL CIRCUITRY HAS BEEN ENERGIZED, START UNITS TO CONFIRM PROPER MOTOR ROTATION AND UNIT OPERATION.
  14. TEST AND ADJUST CONTROLS AND SAFETIES. REPLACE DAMAGED AND MALFUNCTIONING CONTROLS AND EQUIPMENT.
- D. AFTER OPERATIONAL TEST, CHANGE FILTERS.
- E. TERMINAL AIR CONDITIONERS WILL BE CONSIDERED DEFECTIVE IF THEY DO NOT PASS TESTS AND INSPECTIONS.
- F. PREPARE TEST AND INSPECTION REPORTS.

1.2 ADJUSTING
- A. ADJUST INITIAL TEMPERATURE SET POINTS.
- B. SET FIELD-ADJUSTABLE SWITCHES AND CIRCUIT-BREAKER TRIP RANGES AS INDICATED.

1.3 DEMONSTRATION
- A. ENGAGE A FACTORY-AUTHORIZED SERVICE REPRESENTATIVE TO TRAIN OWNER'S MAINTENANCE PERSONNEL TO ADJUST, OPERATE, AND MAINTAIN PACKAGED, TERMINAL AIR CONDITIONERS.

END OF SECTION 238113.11

AXIAL HVAC FANS - 233413 - 1

1.1 MIXED-FLOW FANS
- A. SOURCE LIMITATIONS: OBTAIN MIXED-FLOW FANS FROM SINGLE MANUFACTURER.
- B. DESCRIPTION: FAN WHEEL AND HOUSING, FACTORY-MOUNTED MOTOR WITH DIRECT DRIVE, AND ACCESSORIES.
- C. HOUSINGS: STEEL
  1. INLET AND OUTLET CONNECTIONS: OUTER MOUNTING FRAME AND COMPANION FLANGES.
  2. GUIDE VANE SECTION: INTEGRAL GUIDE VANES DOWNSTREAM FROM FAN WHEEL DESIGNED TO STRAIGHTEN AIRFLOW.
  3. BACKDRAFT DAMPERS: BUTTERFLY STYLE, FOR MOUNTING WITH FLEXIBLE CONNECTION TO FAN DISCHARGE OR DIRECT MOUNTED TO DISCHARGE DIFFUSER SECTION, OF SAME MATERIAL AS HOUSING.
  4. MOTOR COVER: COVER WITH SIDE VENTS TO DISSIPATE MOTOR HEAT, OF SAME MATERIAL AS HOUSING.
  5. INLET BELL: CURVED INLET FOR WHEN FAN IS NOT ATTACHED TO DUCT, OF SAME MATERIAL AS HOUSING.
  6. INLET CONES: ROUND-TO-ROUND TRANSITION, OF SAME MATERIAL AS HOUSING.
  7. OUTLET CONES: ROUND-TO-ROUND TRANSITION, OF SAME MATERIAL AS HOUSING.
  8. STACK CAP: VERTICAL DISCHARGE ASSEMBLY WITH BACKDRAFT DAMPERS, OF SAME MATERIAL AS HOUSING.
  9. DIRECT-DRIVEN UNITS: ENCASE MOTOR IN HOUSING OUTSIDE OF AIRSTREAM.
  10. FACTORY-WIRED MOTOR DISCONNECT SWITCH LOCATED ON OUTSIDE OF FAN HOUSING.
  11. FACTORY FINISHES:
  12. SHEET METAL PARTS: PRIME COAT BEFORE FINAL ASSEMBLY.
  13. EXTERIOR SURFACES: BAKED-ENAMEL FINISH COAT AFTER ASSEMBLY.
  14. FAN OPERATING LIMITS: CLASSIFY FANS IN ACCORDANCE WITH AMCA 99, SECTION 14.

PART 2 - EXECUTION

2.1 INSTALLATION, GENERAL
- A. INSTALL AXIAL FANS LEVEL.
- B. DISASSEMBLE AND REASSEMBLE UNITS, AS REQUIRED FOR MOVING TO THE FINAL LOCATION, IN ACCORDANCE WITH MANUFACTURER'S WRITTEN INSTRUCTIONS.
- C. LIFT AND SUPPORT UNITS WITH MANUFACTURER'S DESIGNATED LIFTING OR SUPPORTING POINTS.
- D. EQUIPMENT MOUNTING:
  1. SUPPORT DUCT-MOUNTED AND OTHER HANGING AXIAL FANS DIRECTLY FROM THE BUILDING STRUCTURE, USING SUITABLE HANGING SYSTEMS AS SPECIFIED IN SECTION 230529 "HANGERS AND SUPPORTS FOR HVAC PIPING AND EQUIPMENT."
  2. INSTALL UNITS WITH ADEQUATE CLEARANCES FOR SERVICE AND MAINTENANCE.
- E. LABEL FANS IN ACCORDANCE WITH REQUIREMENTS SPECIFIED IN SECTION 230553 "IDENTIFICATION FOR HVAC PIPING AND EQUIPMENT."
- F. ELECTRICAL CONNECTIONS
- G. CONNECT WIRING IN ACCORDANCE WITH SECTION 260519 "LOW-VOLTAGE ELECTRICAL POWER CONDUCTORS AND CABLES."
- H. GROUND EQUIPMENT IN ACCORDANCE WITH SECTION 260526 "GROUNDING AND BONDING FOR ELECTRICAL SYSTEMS."
- I. INSTALL ELECTRICAL DEVICES FURNISHED BY MANUFACTURER, BUT NOT FACTORY MOUNTED, IN ACCORDANCE WITH NFPA 70 AND NECA 1.
- J. INSTALL NAMEPLATE FOR EACH ELECTRICAL CONNECTION, INDICATING ELECTRICAL EQUIPMENT DESIGNATION AND CIRCUIT NUMBER FEEDING CONNECTION.
  1. NAMEPLATE SHALL BE LAMINATED ACRYLIC OR MELAMINE PLASTIC SIGNS WITH A BLACK BACKGROUND AND ENGRAVED WHITE LETTERS AT LEAST 1/2 INCH (13 MM) HIGH.

2.2 CONTROL CONNECTIONS
- A. INSTALL CONTROL AND ELECTRICAL POWER WIRING TO FIELD-MOUNTED CONTROL DEVICES.
- B. CONNECT WIRING IN ACCORDANCE WITH SECTION 260519 "LOW-VOLTAGE ELECTRICAL POWER CONDUCTORS AND CABLES."
- C. STARTUP SERVICE:
- D. PERFORM STARTUP SERVICE.
  1. COMPLETE INSTALLATION AND STARTUP CHECKS IN ACCORDANCE WITH MANUFACTURER'S WRITTEN INSTRUCTIONS.
  2. VERIFY THAT SHIPPING, BLOCKING, AND BRACING ARE REMOVED.
  3. VERIFY THAT UNIT IS SECURE ON MOUNTINGS AND SUPPORTING DEVICES AND THAT CONNECTIONS TO DUCTS AND ELECTRICAL COMPONENTS ARE COMPLETE. VERIFY THAT PROPER THERMAL-OVERLOAD PROTECTION IS INSTALLED IN MOTORS, STARTERS, AND DISCONNECT SWITCHES.
  4. VERIFY THAT CLEANING AND ADJUSTING ARE COMPLETE.
  5. FOR DIRECT-DRIVE FANS, VERIFY PROPER MOTOR ROTATION DIRECTION AND VERIFY FAN WHEEL FREE ROTATION AND SMOOTH BEARING OPERATION.
  6. ADJUST DAMPER LINKAGES FOR PROPER DAMPER OPERATION.
  7. VERIFY LUBRICATION FOR BEARINGS AND OTHER MOVING PARTS.
  8. VERIFY THAT MANUAL AND AUTOMATIC VOLUME CONTROL AND FIRE AND SMOKE DAMPERS IN CONNECTED DUCTWORK SYSTEMS ARE IN FULLY OPEN POSITION.
  9. DISABLE AUTOMATIC TEMPERATURE-CONTROL OPERATORS, ENERGIZE MOTOR AND CONFIRM PROPER MOTOR ROTATION AND UNIT OPERATION, ADJUST FAN TO INDICATED RPM, AND MEASURE AND RECORD MOTOR VOLTAGE AND AMPERAGE.
  10. SHUT UNIT DOWN AND RECONNECT AUTOMATIC TEMPERATURE-CONTROL OPERATORS.
  11. REMOVE AND REPLACE MALFUNCTIONING UNITS AND RETEST AS SPECIFIED ABOVE.

2.3 ADJUSTING
- A. ADJUST DAMPER LINKAGES FOR PROPER DAMPER OPERATION.
- B. ADJUST BELT TENSION.
- C. LUBRICATE BEARINGS.
- D. COMPLY WITH REQUIREMENTS IN SECTION 230593 "TESTING, ADJUSTING, AND BALANCING FOR HVAC."
- E. CLEANING
- F. AFTER COMPLETING SYSTEM INSTALLATION AND TESTING, ADJUSTING, AND BALANCING AND AFTER COMPLETING STARTUP SERVICE, CLEAN FANS INTERNALLY TO REMOVE FOREIGN MATERIAL AND CONSTRUCTION DIRT AND DUST.
- G. FIELD QUALITY CONTROL
- H. TESTING AGENCY: CONTRACTOR WILL ENGAGE A QUALIFIED TESTING AGENCY TO PERFORM TESTS AND INSPECTIONS.
- I. DEMONSTRATION
- J. TRAIN OWNER'S MAINTENANCE PERSONNEL TO ADJUST, OPERATE, AND MAINTAIN AXIAL HVAC FANS.

END OF SECTION 233413

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PROJECT NAME

CITY OF INDUSTRY
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IDS PROJECT NO.	22X060.00
DRAWN BY	XX
CHECKED BY	AY
APPROVED BY	AY

SHEET TITLE

SPECIFICATIONS

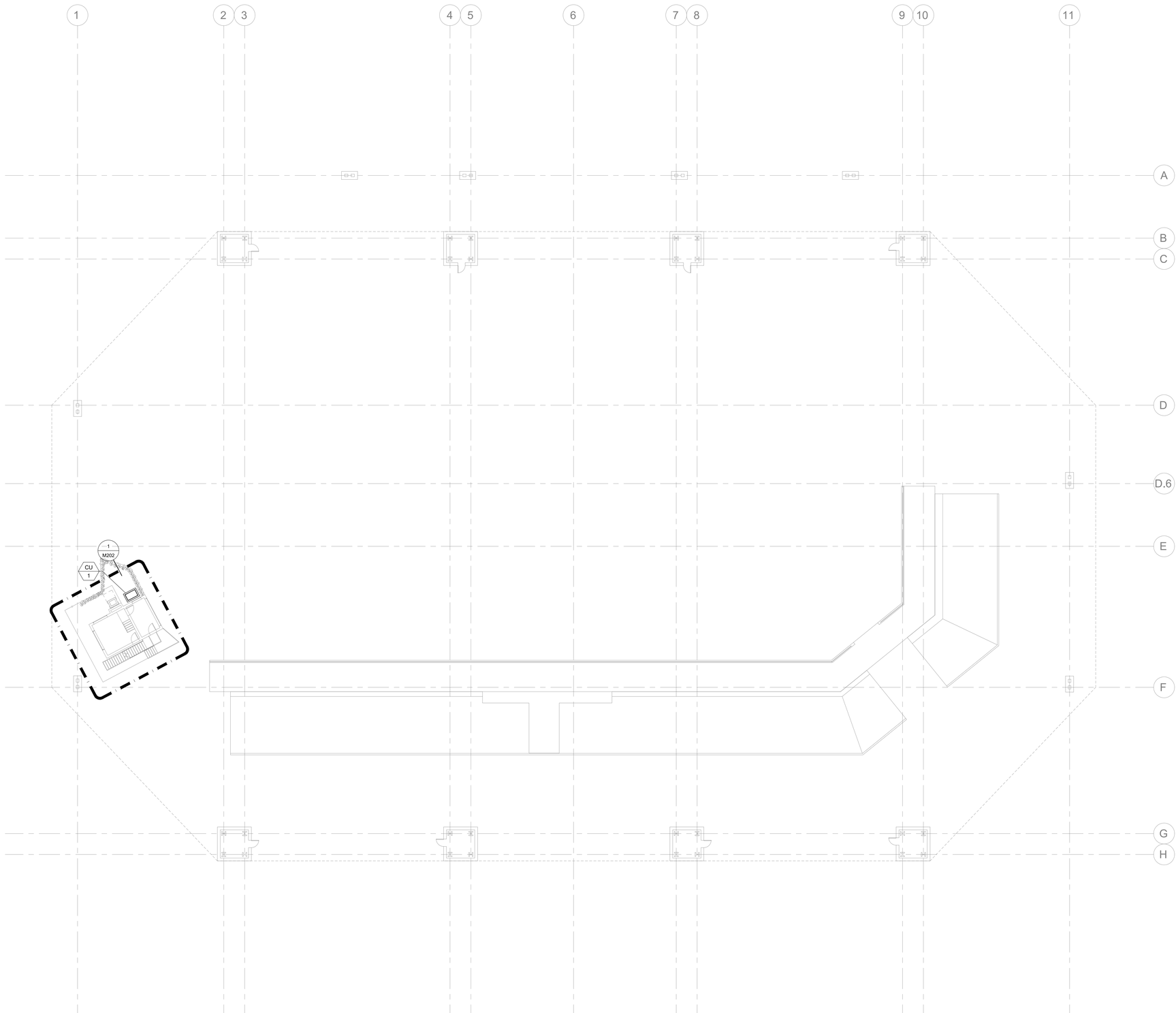
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M-003

SHEET NO. OF

PLAN CHECK SET - NOT FOR CONSTRUCTION

IDS GROUP - FILE LOCATION: S:\PROJECTS\2022\SHARED\22X060.00 CITY OF INDUSTRY - EXPO CENTER - GRAND ARENA STRUCTURE & ANNOUNCER BOOTH\05 CAD\04 MECH\22X060.00-M003_SPEC PLOT DATE: 8/28/2025 3:19:37 PM
USER: TRAVIS TRAN



OVERALL GROUND FLOOR PLAN | 1/16"=1'-0" | 1

KEYNOTES

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IDS PROJECT NO.	22X060.00
DRAWN BY	TT
CHECKED BY	RJ
APPROVED BY	DS

SHEET TITLE

OVERALL GROUND FLOOR PLAN

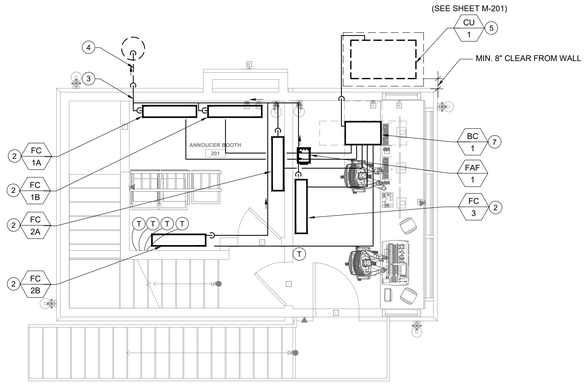
SHEET NUMBER

M-201

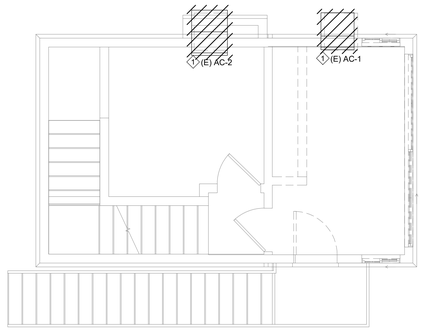
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PLAN CHECK SET - NOT FOR CONSTRUCTION

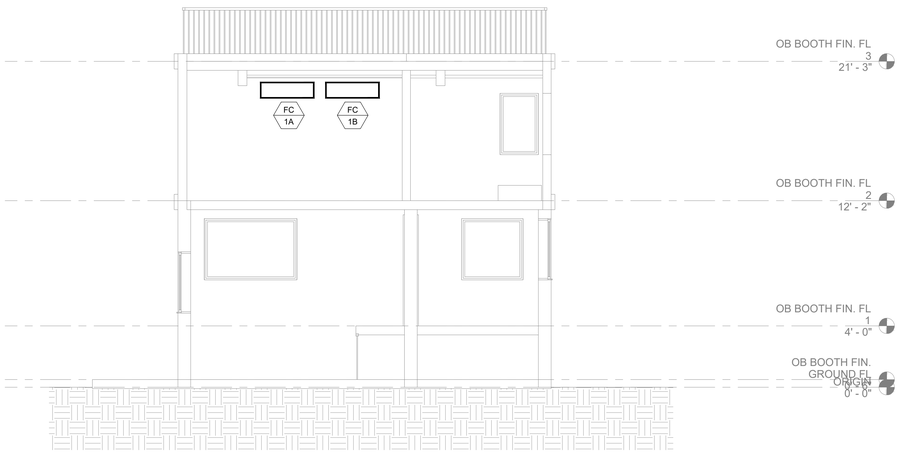
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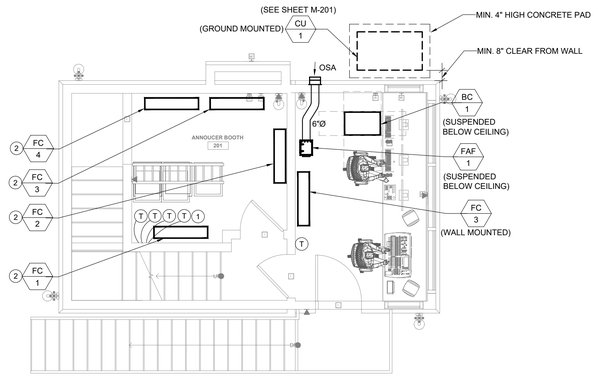
BOOTH SECOND FLOOR PLAN - PIPING | 1/4"=1'-0" | 4



BOOTH SECOND FLOOR PLAN - DEMOLITION | 1/4"=1'-0" | 2



SECTION | 1/4"=1'-0" | 3



BOOTH SECOND FLOOR PLAN - NEW WORK | 1/4"=1'-0" | 1

DEMOLITON KEYNOTES

1. DEMOLISH AND REMOVE EXISTING AC UNIT FROM WALL. PATCH WALL OPENING WITH SAME EXISTING WALL MATERIAL AND PAINT TO MATCH.

NEW WORK KEYNOTES

1. SET T-STAT AT 72°F FOR FC-1, FC-2 AND 74°F FOR FC-3, FC-4 (ADJUSTABLE).
2. HIGH WALL DUCTLESS FAN COIL UNIT. SEE DETAIL 7 & 8 M-501 FOR VRF SYSTEM PIPING AND WIRING DIAGRAM.
3. 3/4" Ø INDIVIDUAL AND 3/4"Ø COMMON CONDENSATE LINE WITH MINIMUM 1/8" SLOPE TOWARD DRY WELL.
4. 3/4" Ø CONDENSATE DRAIN BELOW GRADE TO DRY WELL
5. SEE DETAIL 7 & 8 M-501 FOR VRF SYSTEM PIPING AND WIRING DIAGRAM.

APPROVAL

CLIENT

CITY OF INDUSTRY
15625 MAYOR DAVE WAY
CITY OF INDUSTRY, CA 91744
PHONE: 626-333-2211

PROJECT NAME

CITY OF INDUSTRY EXPO CENTER GRAND ARENA STRUCTURE AND ANNOUNCER BOOTH

16200 TEMPLE AVENUE
CITY OF INDUSTRY, CA 91744

ENGINEER/ARCHITECT

IDS GROUP
1 PETERS CANYON ROAD, SUITE 130
IRVINE, CA. 92606
TEL: 949-387-8500, FAX: 949-387-0800

STAMP

STAMP

REGISTERED PROFESSIONAL ENGINEER
STEVEN M. COLLINS
No. E22808
ELECTRICAL
STATE OF CALIFORNIA
DATE SIGNED 08/27/2025

ISSUE		
REV.	DESCRIPTION	DATE
	90% CD SET	04/30/25
	95% CD SET	08/04/25
	100% CD SET	08/29/25

PROJECT IDENTIFICATION

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DRAWN BY	TT
CHECKED BY	RJ
APPROVED BY	DS

SHEET TITLE

BOOTH 2ND FLOOR PLAN DEMO AND NEW

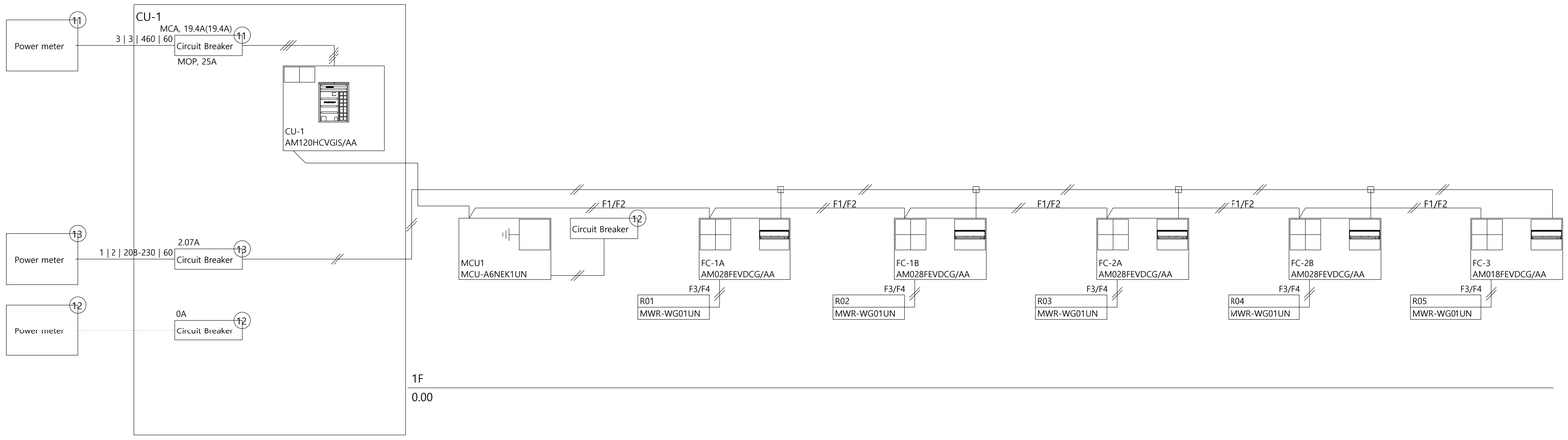
SHEET NUMBER

M-202

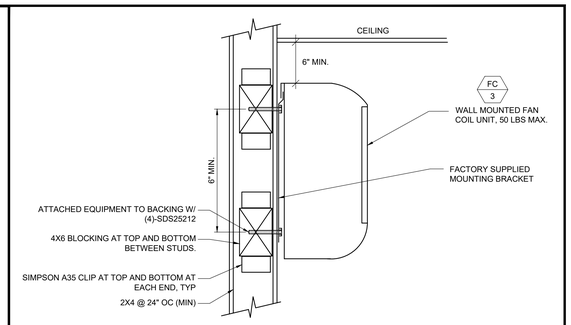
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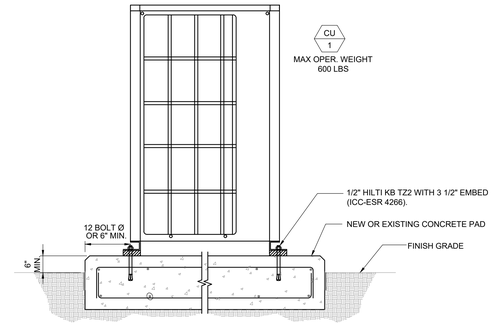


VRF AC SYSTEM WIRING DIAGRAM | NO SCALE | 7

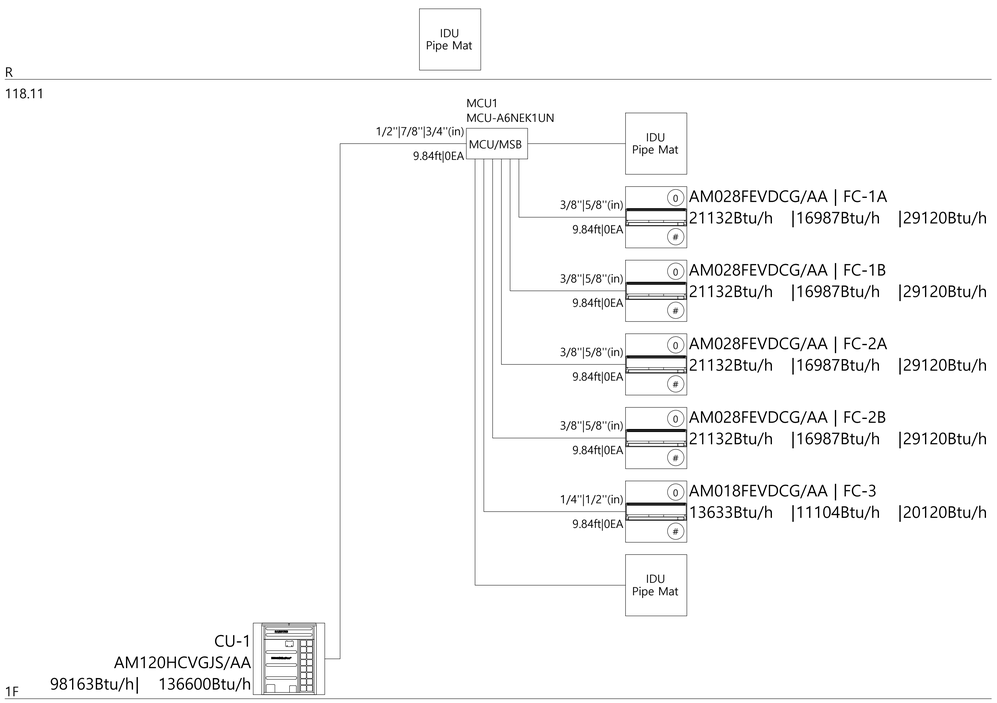


INDOOR FAN COIL UNIT:
SECURE TO STRUCTURE USING FACTORY MOUNTING BRACKET & TEMPLATE PER MANUFACTURER'S INSTALLATION INSTRUCTIONS

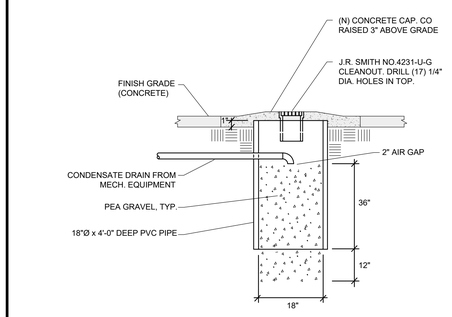
TYPICAL WALL MOUNTED FAN COIL UNIT | NO SCALE | 4



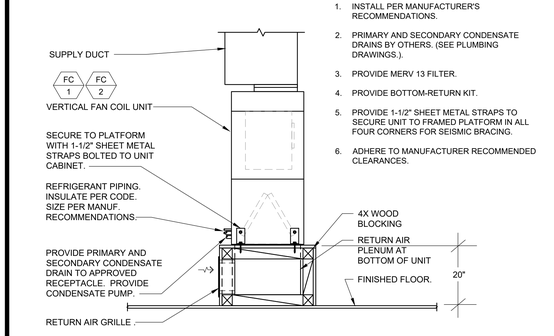
OUTDOOR UNIT MOUNTING ON CONCRETE PAD | NO SCALE | 3



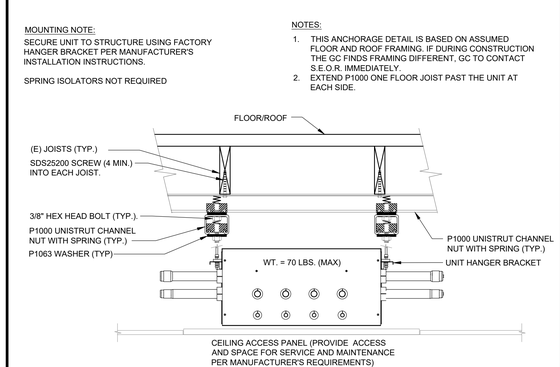
VRF AC SYSTEM REFRIGERANT PIPING DIAGRAM | NO SCALE | 8



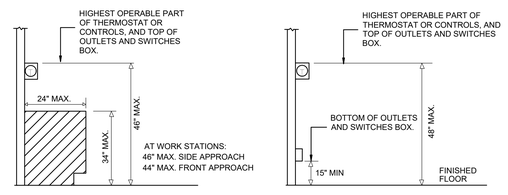
DRYWELL | NO SCALE | 6



TYPICAL VERTICAL FAN COIL FOR FLOOR MOUNTING UNIT | NO SCALE | 2



VRF BRANCH BOX MODE CONTROL UNIT (MCU) | NO SCALE | 5



ADA REQUIREMENTS:

1.) T'STATS AND SENSORS ARE TO BE LOCATED NO MORE THAN 48" A.F.F.
2.) 46" MAXIMUM HEIGHT IF LOCATED OVER A COUNTER.
3.) 44" MAXIMUM HEIGHT IF LOCATED OVER A COUNTER WHERE SIDE APPROACH IS NOT POSSIBLE.
4.) 24" MAXIMUM REACH DEPTH @ COUNTER.
5.) PROVIDE MINIMUM 30"WIDE 48" DEEP CLEAR FLOOR SPACE FOR PERPENDICULAR APPROACH IN FRONT OF THERMOSTAT.
6.) COORDINATE LOCATION OF THERMOSTAT AND SENSORS WITH THE LATEST ARCHITECTURAL FURNITURE PLANS.

T'STATS, SENSORS AND SWITCHES ADA MOUNTING | NO SCALE | 1

APPROVAL

CLIENT

CITY OF INDUSTRY
15625 MAYOR DAVE WAY
CITY OF INDUSTRY, CA 91744
PHONE: 626-333-2211

PROJECT NAME

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DRAWN BY	TT
CHECKED BY	RJ
APPROVED BY	DS

SHEET TITLE

DETAILS

SHEET NUMBER

M-501

SHEET NO. OF

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STATE OF CALIFORNIA
Mechanical Systems
CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE		NRCC-MCH-E
Project Name: Expo Center Grand Arena HVAC Replacement	Report Page:	(Page 1 of 11)
Project Address: 16200 Temple Ave	Date Prepared:	4/29/2025

This document is used to demonstrate compliance for mechanical systems that are within the scope of the permit application and are demonstrating compliance using the prescriptive path outlined in 140.4, or 141.0(b)2 for alterations.

A. GENERAL INFORMATION

01	Project Location (city)	City of Industry	04	Total Conditioned Floor Area	231
02	Climate Zone	9	05	Total Unconditioned Floor Area	0
03	Occupancy Types Within Project:		06	# of Stories (Habitable Above Grade)	1

● Office ★ All Other Occupancies

B. PROJECT SCOPE

This table includes mechanical systems or components that are within the scope of the permit application and are demonstrating compliance using the prescriptive path outlined in 140.4, 170.2(b) or 141.0(b)2 and 180.2(b)2 for alterations.

01	02	03
Air System(s)	Wet System Components	Dry System Components
☒ Heating Air System	☐ Water Economizer	☐ Air Economizer
☒ Cooling Air System	☐ Pumps	☐ Electric Resistance Heat
Mechanical Controls	☐ System Piping	☒ Fan Systems
☒ Mechanical Controls (existing to remain, altered or new)	☐ Cooling Towers	☒ Ductwork (existing to remain, altered or new)
	☐ Chillers	☒ Ventilation
	☐ Boilers	☐ Zonal Systems/ Terminal Boxes

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STATE OF CALIFORNIA
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CERTIFICATE OF COMPLIANCE		NRCC-MCH-E
Project Name: Expo Center Grand Arena HVAC Replacement	Report Page:	(Page 2 of 11)
	Date Prepared:	4/29/2025

C. COMPLIANCE RESULTS

Table C will indicate if the project data input into the compliance document is compliant with mechanical requirements. This table is not editable by the user. If this table says "DOES NOT COMPLY" or "COMPLIES with Exceptional Conditions" refer to Table D., or the table indicated as not compliant for guidance.

01		02		03		04		05		06		07		08	09
System Summary 110.1, 110.2, 140.4, 170.2(c)	AND	Pumps 140.4(k), 170.2(c)4i	AND	Fans/ Economizers 140.4(c), 140.4(e), 170.2(c)	AND	System Controls 110.2, 120.2, 140.4(f), 170.2(c)	AND	Ventilation 120.1, 160.2	AND	Terminal Box Controls 140.4(d), 170.2(c)4B	AND	Distribution 120.3, 140.4(l), 160.2, 160.3	AND	Cooling Towers 110.2(e)2	Compliance Results
(See Table F)		(See Table G)		(See Table H)		(See Table I)		(See Table J)		(See Table K)		(See Table L)		(See Table M)	
Yes	AND		AND	Yes	AND	Yes	AND	Yes	AND		AND	Yes	AND		COMPLIES
Mandatory Measures Compliance (See Table C for Details)												COMPLIES			

D. EXCEPTIONAL CONDITIONS

This table is auto-filled with uneditable comments because of selections made or data entered in tables throughout the form.

E. ADDITIONAL REMARKS

This table includes remarks made by the permit applicant to the Authority Having Jurisdiction.

F. HVAC SYSTEM SUMMARY (DRY & WET SYSTEMS)

Space Conditioning System Information

01	02	03	04	05	06
System Name	Quantity	System Serving	System Status	Space Type	Utilizing Recovered Heat
10 T VRF	1	Multi-zone	Alteration		☐

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STATE OF CALIFORNIA
Mechanical Systems
CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE		NRCC-MCH-E
Project Name: Expo Center Grand Arena HVAC Replacement	Report Page:	(Page 3 of 11)
	Date Prepared:	4/29/2025

F. HVAC SYSTEM SUMMARY (DRY & WET SYSTEMS)

Dry System Equipment Sizing (includes air conditioners, condensers, heat pumps, VRF, furnaces and unit heaters and DOAS systems)

01	02	03	04	05	06	07	08	09	10	11
				Equipment Sizing per Mechanical Schedule (kBtu/h) 140.4(a&b), 170.2(c)1 & 170.2(c)2						
					Heating Output[2,3]		Cooling Output[2,3]		Load Calculations[3,4]	
Name or Item Tag	Equipment Category per Tables 110.2, 140.4(a)2 and 170.2(c)3ai	Equipment Type per Tables 110.2 and Title 20	Smallest Size Available[1] 140.4(a) and 170.2(c)1	Per Design (kBtu/h)	Rated (kBtu/h)	Supp. Heating Output (kBtu/h)	Sensible Per Design (kBtu/h)	Rated (kBtu/h)	Total Heating Load (kBtu/h)	Total Sensible Cooling Load (kBtu/h)
10 T VRF	Variable Refrigerant Flow	VRF heat pump, air cooled	NA; Altered per 141.0(b)2E and 180.2(b)2	125.4	135	0	108.01	110	25.12	96.98

[1]FOOTNOTES: Equipment shall be the smallest size, within the available options of the desired equipment line, necessary to meet the design heating and cooling loads of the building per 140.4(b) and 170.2(c)1. Healthcare facilities are excepted.
[2]It is common practice to show rated output capacity on the equipment schedule. Sensible cooling output comes from specification sheet tables.
[3] If equipment is heating only, leave cooling output and load blank. If equipment is cooling only, leave heating output and load blank.
[4] Authority Having Jurisdiction may ask for load calculations used for compliance per 140.4(b) and 170.2(c).

Dry System Equipment Efficiency (other than Package Terminal Air Conditioners (PTAC) and Package Terminal Heat Pumps (PTHP), DX-DOAS and Dual Fuel Heat Pumps)

01	02	03	04	05	06	07	08	09
				Heating Mode			Cooling Mode	
Name or Item Tag	Size Category (Btu/h)	Rating Condition (°F)	Efficiency Unit	Minimum Efficiency Required per Tables 110.2 / Title 20	Design Efficiency	Efficiency Unit	Minimum Efficiency Required per Tables 110.2 / Title 20	Design Efficiency
10 T VRF	>=65,000 and <135,000	47 °Fdb/ 43 °Fwb OSA	COP	3.3	3.8	EER IEER	11.0 14.6	11.9 24

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Mechanical Systems
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CERTIFICATE OF COMPLIANCE		NRCC-MCH-E
Project Name: Expo Center Grand Arena HVAC Replacement	Report Page:	(Page 4 of 11)
	Date Prepared:	4/29/2025

G. PUMPS

This section does not apply to this project.

H. FAN SYSTEMS & AIR ECONOMIZERS

This table is used to demonstrate compliance with prescriptive requirements found in 140.4(c), 140.4(e), 140.4(m), 170.2(c)3, and 170.2(c)4A for fan systems. Fan systems serving only process loads are exempt from these requirements and do not need to be included in Table H.

System Name	VRF FAN COIL S.T	Quantity	1	Fan System Status	New	System Zoning	all other systems	Serving Dwelling Units	Not Serving Dwelling Units	Fan System Airflow (cfm)	3,500	Site Elevation	550	Economizer	NA: Efficiency per Table 140.4-F
01	02	03	04			05		06	07	08	09			10	11
									Allowance		Design				
Fan Name or Item Tag	Fan Type	Qty	Component			Airflow through Component (%)		Water Gauge (w.g)	Component Allowance	Fan Allowance (watt/cfm)[1]	Design Electrical Input Power Method			Motor Nameplate Horsepower	Design Electrical Input Power (kW)
VRF	Supply	2												Manufacturer provided	0.03
Supply Fan Base Allowance (kW)			Exhaust/Return/Relief/Transfer Fan Base Allowance(kW)							Fan System Allowance (kW)[1]				Fan System Electrical Output (kW)	1.35

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Project Name: Expo Center Grand Arena HVAC Replacement	Report Page:	(Page 5 of 11)
	Date Prepared:	4/29/2025

H. FAN SYSTEMS & AIR ECONOMIZERS

System Name	VRF FAN COIL S.T	Quantity	1	Fan System Status	New	System Zoning	all other systems	Serving Dwelling Units	Not Serving Dwelling Units	Fan System Airflow (cfm)	550	Site Elevation	550	Economizer	NA: <=33 kBtu/h cooling
01	02	03	04			05		06	07	08	09			10	11
									Allowance		Design				
Fan Name or Item Tag	Fan Type	Qty	Component			Airflow through Component (%)		Water Gauge (w.g)	Component Allowance	Fan Allowance (watt/cfm)[1]	Design Electrical Input Power Method			Motor Nameplate Horsepower	Design Electrical Input Power (kW)
VRF	Supply	1												Manufacturer provided	0.03
Supply Fan Base Allowance (kW)			Exhaust/Return/Relief/Transfer Fan Base Allowance(kW)							Fan System Allowance (kW)[1]				Fan System Electrical Output (kW)	0.03

[1] FOOTNOTES: Fans serving spaces with design background noise goals below NC35
[2] Low-turndown single-zone VAV fan system must be capable of and configured to reduce airflow to 50 percent of design airflow and use no more than 30 percent of the design wattage at that airflow. No more than 10 percent of the design load served by the equipment shall have fixed loads.
[3] Fan system allowance includes fan system base allowance.
[4] Filter pressure loss can only be counted once per fan system.
[5] Complex Fan System means a fan system that combines a single cabinet fan system with other supply fans, exhaust fans, or both.
[6] Computer room economizers must meet requirements of 140.9(a) and will be documented on the NRCC-PRC-E document.

H. EXHAUST AIR HEAT RECOVERY 140.4(q), 170.2(c)4O

01	02	03	04	05	06	07	08	09	10	11

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	Date Prepared:	4/29/2025

H. EXHAUST AIR HEAT RECOVERY 140.4(q), 170.2(c)4O

Fan System Name	Qty	Hours of Operation per Year	Design Supply Airflow Rate	Design Outdoor Airflow	% Outdoor Air at Full Design Airflow	Exemptions to Exhaust Air Heat Recovery Requirement per 140.4(q) & 170.2(c)4O	Exhaust Air Heat Recovery 140.4(q) & 170.2(c)4O	Type Of Heat Recovery Rating	Required Recovery Ratio	Energy Recovery Bypass

Fan Energy Index (FEI)

01	02	03
Name or Item Tag	FEI Exception	FEI
10 T VRF	Altered Fan System	

I. SYSTEM CONTROLS

This table is used to demonstrate compliance with mandatory controls in 110.2 and 120.2 and prescriptive controls in 140.4(f) and (n), 170.2(c)4D 170.2(c)4L or requirements in 141.0(b)2E 180.2(b)2 for altered space conditioning systems.

01	02	03	04	05	06	07	08	09
System Name	System Zoning	Conditioned Floor Area Being Served (ft^2)	Thermostats 110.2(b) & (c)[1], 120.2(a) 160.3(a)2A or 141.0(b)2E & 180.2(b)2	Shut-Off Controls 120.2(e) & 160.3(a)2D	Isolation Zone Controls 120.2(g) & 160.3(a)2F	Demand Response 110.12 120.2(b) & 160.3(a)2B	Supply Air Temp. Reset 140.4(f) & 170.2(c)4D	Window Interlocks per 140.4(n) & 170.2(c)4D
10 T VRF	Multi-zone w/ DDC to zone	<= 25,000 ft^2	Setback	Auto Timer Switch	4 Hour Timer	EMCS	NA: Healthcare only	NA; HRR dwelling unit

[1]FOOTNOTES: Gravity gas wall heaters, gravity floor heaters, gravity room heaters, non-central electric heaters, fireplaces or decorative gas appliances, wood stoves are not required to have setback thermostats.

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Project Name: Expo Center Grand Arena HVAC Replacement	Report Page:	(Page 7 of 11)
	Date Prepared:	4/29/2025

J. VENTILATION AND INDOOR AIR QUALITY

This table is used to demonstrate compliance with mandatory ventilation requirements in 120.1 120.2(c)3B 140.4(g) and 140.4(q) for all nonresidential and hotel/motel and d:\24refinolink\7160.2_160.3(q)3D, 170.2(e)4N, 170.2(q)4O for high-rise residential occupancies. For alterations, only ventilation systems being altered within the scope of the permit application need to be documented in this table. In lieu of this table, the required outdoor ventilation rates and airflows may be shown on the plans or the calculations can be presented in a spreadsheet.

01	☐	Check the box if the project is showing ventilation calculations on the plans, or attaching the calculations instead of completing this table.
02	☒	Check this box if the project included Nonresidential, Hotel/Motel Spaces or Multifamily Common Use Spaces
03	☐	Check the box if the project is using natural ventilation in any nonresidential or hotel/motel spaces to meet required ventilation rates per 120.1(c)2.

Nonresidential and Hotel/ Motel Multifamily Common Use Ventilation Systems

04	05			06		07
System Name	10 T VRF	System Design OA CFM Airflow[1]	69	System Design Transfer Air CFM	0	Air Filtration per 120.1(c) 141.0(b)2 and 160.2(c)21[2]
08	09	10	11	12	13	14	15	Provided	16
Space Name or Item Tag	Mechanical Ventilation Required per 120.1(c)3[3] & 160.2(c)3					Exh. Vent per 120.1(c)4 & 160.2(c)4		DCV or Sensor Controls per 120.1(d)3, 120.1(d)5, and 120.1(e)3[4] 160.2(c)5D 160.2(c)5E 160.2(c)5D	
	Occupancy Type[4]	Conditioned Floor Area (ft^2)	# of Shower heads/ toilets	# of people[5]	Required Min OA CFM	Provided Min CFM	Provided per Design CFM		
FC-1, FC-2	All others	114			0	0	0	DCV	NA: Not required per §120.1(d)3
								Occ Sensor	NA: Not required space type
FC-3	Office space	117			17.6	0	0	DCV	NA: Not required per §120.1(d)3
								Occ Sensor	NA: Not required space type
17	Total System Required Min OA CFM				18	18	Ventilation for this System Complies?		Yes

[1] FOOTNOTES: System CFM should include both mechanical and natural ventilation for the zone/system

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	Date Prepared:	4/29/2025

J. VENTILATION AND INDOOR AIR QUALITY

[2] Air filtration requirements apply to the following three system types per 120.1(c)1A: space conditioning systems utilizing ducts to supply air to occupiable space; supply-only ventilation systems providing outside air to occupiable space; supply side of balanced ventilation systems including heat recovery and energy recovery ventilation systems providing outside air to occupiable space.
[3] Uniform Mechanical Code may have more stringent ventilation requirements; the most stringent code requirement takes precedence.
[4] See Standards Tables 120.1-A and 120.1-B.
[5] For lecture halls with fixed seating, the expected number of occupants shall be determined in accordance with the California Building Code.
[6] 120.2(e)3 requires systems serving rooms that are required by 130.1(c) to have lighting occupancy sensing controls to also have occupancy sensing zone controls for ventilation. Examples of spaces which require lighting occupancy sensors include offices 250ft^2 or smaller, multipurpose rooms less than 1,000 ft^2, classrooms, conference rooms, restrooms, aisles and open areas in warehouses, library book stack aisles, corridors, stairwells, parking garages, and loading and unloading zones, unless excepted by 130.1(c).

K. TERMINAL BOX CONTROLS

This section does not apply to this project.

L. DISTRIBUTION (DUCTWORK and PIPING)

This table is used to show compliance with mandatory pipe insulation requirements found in 120.3 and mandatory requirements found in 120.4(g) for duct sealing.

01	☐	Insulation shall be protected from damage, including that due to sunlight, moisture, equipment maintenance, and wind. Insulation exposed to weather shall be installed with a cover suitable for outdoor service. Insulation covering chilled water piping and refrigerant suction piping located outside the conditioned space shall have a Class I or Class II vapor retarder. All penetrations and joints of which shall be sealed.

Duct Leakage Testing

The answers to the questions below apply to the following duct systems:	10 T VRF	**NR/ Common Use:** Duct leakage testing shall not exceed 6% per NA7.5.3 required for these systems?	No

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Project Name: Expo Center Grand Arena HVAC Replacement	Report Page:	(Page 9 of 11)
	Date Prepared:	4/29/2025

L. DISTRIBUTION (DUCTWORK and PIPING)

		Dwelling Units: Total duct leakage of duct system shall not exceed 12% or duct system to outside shall not exceed 6% per RA3.1.4 required for systems?	No
		Duct leakage testing per CMC Section 603.10.1 required for these systems?	Yes
11	No	The scope of the project includes only duct systems serving healthcare facilities	
12	No	Duct system provides conditioned air to an occupiable space for a constant volume, single zone, space-conditioning system.	
13	Yes	The space conditioning system serves less than 5,000 ft^2 of conditioned floor area.	
14	No	The combined surface area of the ducts is more than 25% of the total surface area of the entire duct system:	
15		The scope of the project includes extending an existing duct system, which is constructed, insulated or sealed with asbestos.	
16	No	The scope of the project includes an existing duct system that is documented to have been previously sealed as confirmed through field verification and diagnostic testing in accordance with procedures in the Reference Nonresidential Appendix NA2.	
17		All Ductwork and plenums with pressure class ratings shall be constructed to Seal Class A	
18		All ductwork is an extension of an existing duct system	
19		Ductwork serving individual dwelling unit	
20		< 25 ft of new or replacement space conditioning ducts installed	
21	R-8	Duct Insulation R-value	
22			
23			

M. COOLING TOWERS

This section does not apply to this project.

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STATE OF CALIFORNIA
Mechanical Systems
CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE		NRCC-MCH-E
Project Name: Expo Center Grand Arena HVAC Replacement	Report Page:	(Page 10 of 11)
	Date Prepared:	4/29/2025

N. DECLARATION OF REQUIRED CERTIFICATES OF INSTALLATION

Selections have been made based on information provided in previous tables of this document. If any selection needs to be changed, please explain why in Table E Additional Remarks. These documents must be provided to the building inspector during construction and can be found online at https://www.energy.ca.gov/title24/2019standards/2019_compliance_documents/Nonresidential_Documents/NRCI/

Form/Title
NRCI-MCH-01-E - Must be submitted for all buildings

O. DECLARATION OF REQUIRED CERTIFICATES OF ACCEPTANCE

Selections have been made based on information provided in previous tables of this document. If any selection needs to be changed, please explain why in Table E Additional Remarks. These documents must be provided to the building inspector during construction and can be found online at https://www.energy.ca.gov/title24/2019standards/2019_compliance_documents/Nonresidential_Documents/NRCA/

Form/Title	Systems/Spaces To Be Field Verified
NRCA-MCH-02-A - Outdoor Air must be submitted for all newly installed HVAC units. Note: MCH-02-A can be performed in conjunction with MCH-07-A Supply Fan VFD Acceptance (if applicable) since testing activities overlap.	10T VRF CU AM120BVGJR/AA;
NRCA-MCH-11-A Automatic Demand Shed Controls	10T VRF CU AM120BVGJR/AA;
NRCA-MCH-18-A Energy Management Control Systems	10T VRF CU AM120BVGJR/AA;

P. DECLARATION OF REQUIRED CERTIFICATES OF VERIFICATION

There are no NRCV forms required for this project.

Q. MANDATORY MEASURES DOCUMENTATION LOCATION

This table is used to indicate where mandatory measures are documented in the plan set or construction documentation.

	01	02
Compliance with Mandatory Measures documented through MCH	Yes	Plan sheet or construction document location
Mandatory Measures Note Block		M-Sheets

Generated Date/Time: Documentation Software: EnergyPro

STATE OF CALIFORNIA
Mechanical Systems
CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE		NRCC-MCH-E
Project Name: Expo Center Grand Arena HVAC Replacement	Report Page:	(Page 11 of 11)
Project Address: 16200 Temple Ave	Date Prepared:	4/29/2025

DOCUMENTATION AUTHOR'S DECLARATION STATEMENT

I certify that this Certificate of Compliance documentation is accurate and complete.

Documentation Author Name:	Documentation Author Signature:
Company: IDS	Signature Date:
Address:	CEA/ HERS Certification Identification (If applicable):
City/State/Zip:	Phone:

RESPONSIBLE PERSON'S DECLARATION STATEMENT

I certify the following under penalty of perjury, under the laws of the State of California:
1. The information provided on this Certificate of Compliance is true and correct.
2. I am eligible under Division 3 of the Business and Professions Code to accept responsibility for the building design or system design identified on this Certificate of Compliance (responsible designer)
3. The energy features and performance specifications, materials, components, and manufactured devices for the building design or system design identified on this Certificate of Compliance conform to the requirements of Title 24, Part 1 and Part 6 of the California Code of Regulations.
4. The building design features or system design features identified on this Certificate of Compliance are consistent with the information provided on other applicable compliance documents, worksheets, calculations, plans and specifications submitted to the enforcement agency for approval with this building permit application.
5. I will ensure that a completed signed copy of this Certificate of Compliance shall be made available with the building permit(s) issued for the building, and made available to the enforcement agency for all applicable inspections. I understand that a completed signed copy of this Certificate of Compliance is required to be included with the documentation the builder provides to the building owner at occupancy.

Responsible Designer Name: Darren Smith	Responsible Designer Signature:
Company: IDS Mechnaical Engineers, Inc.	Date Signed: 2025-04-29
Address: 1 Peters Canyon Road, Suite 130	License: M30841
City/State/Zip: Irvine CA 92606	Phone: 949-387-8500

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STATE OF CALIFORNIA
Process Systems
CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE		NRCC-PRC-E
Project Name: Expo Center Grand Arena HVAC Replacement	Report Page:	(Page 1 of 5)
Project Address: 16200 Temple Ave	Date Prepared:	4/29/2025

This form is used to document any process systems that are within the scope of the permit application and are demonstrating compliance with mandatory requirements in 120.6/ 160.7 or prescriptive requirements in 140.9. This compliance document is used for newly constructed, addition and alteration projects.

A. GENERAL INFORMATION

01	Project Location (city)	City of Industry	04	Total Conditioned Floor Area	231
02	Climate Zone	9	05	Total Unconditioned Floor Area	0
03	Occupancy Types Within Project:		06	# of Stories (Habitable Above Grade)	1

● Office ★ All Other Occupancies

B. PROJECT SCOPE

This table includes process systems that are within the scope of the permit application and are demonstrating compliance with mandatory requirements in 120.6 / 160.7 or prescriptive requirements in 140.9.

My project consists of: (check all that apply):

01	02
☐ Refrigerated Spaces <3,000 ft^2 Total (no Title 24, PI6 requirements)	☐ Escalator & Moving Walkway Speed Controls (mandatory 120.6(g))
☐ Refrigerated Spaces >=3,000 ft^2 Total (mandatory 120.6(a))	☐ Computer Rooms (mandatory 120.6(j) and prescriptive 140.9(a))[1]
☐ Food /Beverage Stores >8,000 ft^2 cfa (mandatory 120.6(b))	☐ Commercial Kitchen Ventilation/Exhaust (prescriptive 140.9(b))[1]
☐ Enclosed Parking Garage Exhaust >=10,000 cfm (mandatory 120.6(c))	☐ Laboratory Exhaust/Factory Exhaust & Fume Hood (prescriptive 140.9(c))[1]
☐ Newly Installed Process Boilers (mandatory 120.6(d))	☐ Pool/Spa (mandatory 110..4 / 160.7)
☐ Compressed Air Systems Combined HP >= 25 (mandatory 120.6(e))	☐ Controlled Environment Horticulture (mandatory 120.6(h))
☐ Elevator Lighting & Ventilation Controls (mandatory 120.6(f) / 160.7)	☐ New Steam Traps (mandatory 120.6(i))

[1] FOOTNOTES: These building features can comply using the performance method. If using the performance method for these features, compliance should be demonstrated on the NRCC-PRF-E.

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STATE OF CALIFORNIA
Process Systems
CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE		NRCC-PRC-E
Project Name: Expo Center Grand Arena HVAC Replacement	Report Page:	(Page 2 of 5)
	Date Prepared:	4/29/2025

C. COMPLIANCE RESULTS

Results in this table are automatically calculated from data input and calculations in Tables F through R. Note: If any cell on this table says "COMPLIES with Exceptional Conditions" refer to Table D. Exceptional Conditions for guidance or see applicable Table referenced below.

01	02	03	04	05	06	07	08	09	10	11	12	13	14
Refrigerated Warehouse / Space 120.6(a) (See Table F)	Commercial Refrigeration 120.6(b) (See Table G)	Parking Garage Exhaust 120.6(c) (See Table H)	Process Boilers 120.6(d) (See Table I)	Compressed Air Systems 120.6(e) (See Table J)	Elevators 120.6(f) / 160.7 (See Table K)	Escalators & Moving Walkways 120.6(g) (See Table L)	Computer Rooms 140.9(a) (See Table M)	Commercial Kitchens 140.9(b) (See Table N)	Laboratory/ Factory Exhaust 140.9(c) (See Table O)	Controlled Environment Horticulture 120.6(h) (See Table P)	Steam Traps 120.6(i) (See Table Q)	Multifamily Pool/Spa 160.7 (See Table R)	**Compliance Results**
													COMPLIES

D. EXCEPTIONAL CONDITIONS

This table is auto-filled with uneditable comments because of selections made or data entered in tables throughout the form.

E. ADDITIONAL REMARKS

This table includes remarks made by the permit applicant to the Authority Having Jurisdiction.

F. REFRIGERATED WAREHOUSES/SPACES

This section does not apply to this project.

G. COMMERCIAL REFRIGERATION

This section does not apply to this project.

H. ENCLOSED PARKING GARAGE EXHAUST

This section does not apply to this project.

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STATE OF CALIFORNIA
Process Systems
CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE		NRCC-PRC-E
Project Name: Expo Center Grand Arena HVAC Replacement	Report Page:	(Page 3 of 5)
	Date Prepared:	4/29/2025

I. PROCESS BOILER

This section does not apply to this project.

J. COMPRESSED AIR SYSTEMS

This section does not apply to this project.

K. ELEVATOR LIGHTING AND VENTILATION

This section does not apply to this project.

L. ESCALATORS AND MOVING WALKWAYS SPEED CONTROLS

This section does not apply to this project.

M. COMPUTER ROOM SYSTEM SUMMARY

This section does not apply to this project.

N. COMMERCIAL KITCHEN EXHAUST AND VENTILATION

O. LABORATORY AND FACTORY EXHAUST AND FUME HOODS

This section does not apply to this project.

P. CONTROLLED ENVIRONMENT HORTICULTURE

This section does not apply to this project.

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STATE OF CALIFORNIA
Process Systems
CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE		NRCC-PRC-E
Project Name: Expo Center Grand Arena HVAC Replacement	Report Page:	(Page 4 of 5)
	Date Prepared:	4/29/2025

Q. STEAM TRAPS IN INDUSTRIAL FACILITIES

This section does not apply to this project.

R. Pool & SPAs

This section does not apply to this project.

S. DECLARATION OF REQUIRED CERTIFICATES OF INSTALLATION

Selections have been made based on information provided in this document. If any selections have been changed by permit applicant, an explanation should be included in Table E. Additional Remarks. These documents must be provided to the building inspector during construction and can be found online at https://www.energy.ca.gov/title24/2019standards/2019_compliance_documents/Nonresidential_Documents/NRCI/

Form/Title
NRCI-PRC-01-E - Covered Process

T. DECLARATION OF REQUIRED CERTIFICATES OF ACCEPTANCE

There are no NRCA forms required for this project.

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GENERAL ELECTRICAL NOTES

1. SYMBOLS ARE NOT NECESSARILY USED IN THIS PROJECT.
2. IT IS THE INTENT OF THESE DRAWINGS AND SPECIFICATIONS TO ESTABLISH A STANDARD OF QUALITY. THE ENGINEER RESERVES THE RIGHT TO ALLOW OTHER METHODS AND MATERIALS NOT REFLECTED HEREIN. THE CONTRACTOR SHALL BE RESPONSIBLE TO REQUEST THE ENGINEER WAIVE THE STANDARDS TO ALLOW ALTERNATE MEANS AND METHODS PRIOR TO BEGINNING THE PROJECT. CONTRACT DOCUMENT REVISIONS TO ACCOMMODATE INSTALLED CONDITIONS, WITHOUT PRIOR APPROVAL, WILL RESULT IN ADDITIONAL DESIGN CHARGES TO THE CONTRACTOR.
3. ELECTRICAL WORK SHALL BE PERFORMED IN A WORKMANLIKE MANNER IN ACCORDANCE WITH THE NECA INSTALLATION STANDARDS TO THE SATISFACTION OF THE ARCHITECT AND ENGINEER.
4. WORK, MATERIALS AND EQUIPMENT SHALL CONFORM TO THE CURRENTLY ACCEPTED EDITION OF APPLICABLE NATIONAL, STATE AND CITY CODES AND ORDINANCES.
5. ELECTRICAL SYSTEM COMPONENTS SHALL BE LISTED OR LABELED BY UL OR OTHER RECOGNIZED TESTING FACILITY AS ALLOWED BY AUTHORITY HAVING JURISDICTION.
6. WHERE AN APPARENT DISCREPANCY EXISTS BETWEEN THE REQUIREMENTS OF THE GENERAL NOTES AND INFORMATION PORTRAYED IN THE ELECTRICAL DRAWINGS, THE CONTRACTOR SHALL INCLUDE IN HIS BID THE COST OF THE GREATER QUALITY OR QUANTITY.
7. CONTRACTOR SHALL VISIT JOB SITE PRIOR TO BID AND VERIFY EXISTING CONDITIONS. CONTRACTOR SHALL INCLUDE IN BASE BID COSTS REQUIRED FOR PERMITS AND INSPECTIONS.
8. CONTRACTOR SHALL VERIFY, WITH OWNER'S REPRESENTATIVE PRIOR TO SUBMITTING BID, ALLOWABLE WORKING HOURS, EMPLOYEE PARKING AREAS, MATERIAL DELIVERY, STORAGE REQUIREMENTS, DEMOLITION AND REMOVAL OF CONSTRUCTION DEBRIS, AS WELL AS DAILY CLEAN UP REQUIREMENTS. INCLUDE COSTS IN BID FOR DUST BARRIERS, DUMPSTERS ETC. AS REQUIRED FOR THE DURATION OF THE PROJECT. PERFORM WORK AS DIRECTED BY OWNER'S REPRESENTATIVE AND ARCHITECT.
9. ELECTRICAL SYSTEMS SHALL BE TESTED FOR PROPER OPERATION. IF TESTS SHOW THAT WORK IS DEFECTIVE, CONTRACTOR SHALL MAKE NECESSARY CORRECTIONS.
10. CONTRACTOR SHALL GUARANTEE WORK AGAINST DEFECTS IN MATERIALS AND WORKMANSHIP WHICH MAY OCCUR UNDER NORMAL USE FOR A PERIOD OF ONE YEAR AFTER OWNER'S ACCEPTANCE. DEFECTS SHALL BE PROMPTLY CORRECTED BY CONTRACTOR WITHOUT ADDITIONAL CHARGE TO OWNER.
11. PROVIDE AS-BUILT DRAWINGS TO ARCHITECT. DRAWINGS SHALL INCLUDE ACCURATE CONDUIT AND DEVICE LOCATIONS DIMENSIONED FROM PERMANENT LANDMARKS SUCH AS BUILDING WALLS.
12. DO NOT SCALE ELECTRICAL DRAWINGS. VERIFY EXACT LOCATION OF ALL DEVICES, JUNCTION BOXES, LIGHTING FIXTURES, WITH ARCHITECTURAL AND INTERIOR DESIGN DRAWINGS PRIOR TO INSTALLATION. CONTRACTOR SHALL VERIFY THE EXACT LOCATION OF MECHANICAL EQUIPMENT AND OTHER EQUIPMENT REQUIRING ELECTRICAL CONNECTION PRIOR TO ROUGH-IN. EVERY OUTLET HEIGHT SHALL BE VERIFIED ON EACH WALL WITH THE INTERIOR PLANNING AND DESIGN DRAWINGS. COORDINATE WITH CABINET SHOP DRAWINGS TO ENSURE PROPER HEIGHT AND LOCATION WITH RESPECT TO MILLWORK, EQUIPMENT.
13. THESE DRAWINGS INDICATE THE FINISHED REQUIREMENTS FOR THE ELECTRICAL SYSTEMS, EQUIPMENT, LIGHTING FIXTURES, OUTLETS AND DEVICES. DUE TO STRUCTURAL CONDITIONS, MECHANICAL DUCT, PIPING CONFLICTS, OR OTHER LEGITIMATE REASONS, THE CONTRACTOR MAY DESIRE TO INSTALL THE WORK INDICATED IN A MANNER DIFFERENT FROM THAT SHOWN. SUCH CHANGES SHALL BE PRESENTED TO THE OWNER'S REPRESENTATIVE FOR REVIEW AND APPROVAL PRIOR TO PROCEEDING. UPON APPROVAL, THE WORK SHALL BE PERFORMED AND THE AS-BUILT DRAWINGS SHALL BE REVISED TO ACCURATELY REFLECT THE WORK AS ACTUALLY INSTALLED.
14. RACEWAY SYSTEMS ARE SHOWN DIAGRAMMATICALLY. ACTUAL LOCATION AND ROUTING SHALL BE DETERMINED BY CONTRACTOR TO SUIT FIELD CONDITIONS.
15. PROVIDE DEDICATED NEUTRAL FOR EACH NEW CIRCUIT. HOME RUN CONDUCTORS MAY BE COMBINED INTO ONE CONDUIT. NO RACEWAY OR CABLE SHALL CONTAIN MORE THAN NINE (9) CURRENT CARRYING CONDUCTORS. WHERE MULTIPLE CONDUCTORS IN EXCESS OF THREE (3) ARE INDICATED ON THESE DRAWINGS, THEY HAVE BEEN DERATED AS REQUIRED BY NEC ARTICLE 310 REQUIREMENTS.
16. WHERE ALLOWED, MC CABLE MAY BE INSTALLED PER NEC ARTICLE 330. WHERE MULTIPLE CABLES ARE ROUTED ADJACENT TO EACH OTHER (BUNDLED), A MINIMUM SEPARATION OF ONE (1) CABLE DIAMETER (LARGEST) SHALL BE REQUIRED.
17. PLASTIC CABLE TIES SHALL NOT BE USED AS A MEANS OF SUPPORT FOR MC CABLE. USE ONLY APPROVED CABLE SUPPORTS PER CABLE MANUFACTURER'S INSTALLATION REQUIREMENTS.
18. RACEWAYS SHALL BE INSTALLED CONCEALED (IN CMU OR OTHER WALL) WHENEVER POSSIBLE. RACEWAYS INSTALLED EXPOSED SHALL BE ROUTED OUT OF PUBLIC VIEW AS MUCH AS POSSIBLE. RACEWAYS SHALL BE RUN PARALLEL WITH, OR AT RIGHT ANGLE TO WALLS.
19. PROVIDE APPROVED EXPANSION FITTINGS WHERE RACEWAYS CROSS BUILDING EXPANSION JOINTS. PROVIDE BONDING JUMPER(S) SIZED PER CODE WHERE REQUIRED. PROVIDE FITTINGS REQUIRED FOR A COMPLETE INSTALLATION. REFER TO ARCHITECTURAL DRAWINGS FOR EXPANSION JOINT LOCATION(S).
20. MINIMUM RACEWAY SIZE SHALL BE 1/2". MINIMUM HOMERUN SIZE SHALL BE 3/4". MINIMUM CONDUCTOR SIZE SHALL BE #12 AWG U.N.O. TYPICAL. POWER RELATED CONDUITS SHALL HAVE A CODE SIZE GROUND WIRE INSTALLED IN EACH RUN.
21. CONTRACTOR SHALL PROVIDE PULL CORDS IN ALL EMPTY CONDUITS. WHERE MORE THAN ONE CONDUIT TERMINATES IN A JUNCTION BOX, THE CONTRACTOR SHALL IDENTIFY EACH CONDUIT AND JUNCTION BOX IN A MANNER ALLOWING IDENTIFICATION AFTER WALL FINISHES HAVE BEEN APPLIED.
22. CONTRACTOR SHALL PROVIDE RACEWAY SYSTEMS INDICATED ON THE DRAWING PER NEC REQUIREMENTS AND GENERAL NOTES. ANY DEVIATION FROM THE WIRING METHODS INDICATED SHALL BE ALLOWED ONLY BY SPECIFIC WRITTEN APPROVAL FROM EITHER THE ARCHITECT, ENGINEER OR OWNER. CONTRACTOR'S BID SHALL INCLUDE COSTS FOR RACEWAY SYSTEMS AS SPECIFIED UNLESS SPECIFIC WRITTEN APPROVAL FOR AN ALTERNATIVE WIRING METHOD IS OBTAINED FROM EITHER THE ARCHITECT, ENGINEER OR OWNER AND IS SUBMITTED AS PART OF CONTRACTOR'S FORMAL BID PROPOSAL.
23. CONTRACTOR SHALL BE RESPONSIBLE FOR CORRECT SIZE AND INSTALLATION OF OUTLET, PULL AND JUNCTION BOXES IN ACCORDANCE WITH NEC 314-16. BOXES SHALL BE MINIMUM 4" SQUARE BY 1-1/2" DEEP OR AS INDICATED ON THE DRAWINGS. BOXES SHALL BE RECESSED WITH COVER PLATE TO SUIT THE INTENDED APPLICATION.
24. REFER TO THE ARCHITECTURAL REFLECTED CEILING PLAN(S) FOR EXACT LOCATION OF CEILING MOUNTED LIGHTING FIXTURES. ARCHITECTURAL DRAWINGS SHALL GOVERN IN CASE OF CONFLICT WITH THESE DRAWINGS.
25. PRIOR TO INSTALLATION, CONTRACTOR SHALL REVIEW THE COMPLETE SET OF CONSTRUCTION DOCUMENTS FOR CONFLICTS WITH OTHER TRADES. CONTRACTOR SHALL BE RESPONSIBLE TO COORDINATE WORK WITH OTHER TRADES TO AVOID CONFLICT DURING INSTALLATION. CONTRACTOR SHALL MAKE MINOR ADJUSTMENTS IN EQUIPMENT LOCATION AND ROUTING AS NECESSARY.
26. CONTRACTOR SHALL BE RESPONSIBLE TO PROPERLY CUT AND PATCH EXISTING CONSTRUCTION AS REQUIRED TO INSTALL NEW ELECTRICAL WORK PATCHING SHALL BE OF THE SAME MATERIALS, WORKMANSHIP AND FINISH AS THE EXISTING WORK AND SHALL ACCURATELY MATCH SURROUNDING WORK TO THE SATISFACTION OF THE ARCHITECT.
27. ELECTRICAL EQUIPMENT SHALL HAVE SUFFICIENT GUTTER SPACE AND LUGS TO ACCOMMODATE QUANTITY AND SIZE OF CONDUCTORS REQUIRED. CONTRACTORS SHALL PROVIDE EQUIPMENT WITH OVERSIZED ENCLOSURES WHERE REQUIRED.
28. NEW PANELBOARDS AND SWITCHBOARDS SHALL BE OF THE SAME MANUFACTURER AND HAVE LOCKING DOORS AND BE KEYED THE SAME U.N.O.
29. PROVIDE TYPE WRITTEN UPDATED PANEL DIRECTORY TO BE MOUNTED ON INSIDE OF PANEL DOOR COVERS. DIRECTORY SHALL REFLECT ADDITIONS OR MODIFICATIONS TO EXISTING PANELS AND SHALL REFLECT ACTUAL "AS-BUILT" CONDITIONS.
30. VERIFY DEVICE COLOR AND MOUNTING ORIENTATION (VERTICAL OR HORIZONTAL) WITH ARCHITECTURAL AND INTERIOR DESIGN DRAWINGS PRIOR TO ORDERING ANY EQUIPMENT AND PROVIDE DEVICES AS REQUIRED. UNLESS NOTED OTHERWISE, DEVICES AND DEVICE PLATES SHALL BE WHITE IN COLOR.
31. WHERE MOTORS ARE INSTALLED IN SUSPENDED CEILINGS, CONTRACTOR SHALL PROVIDE DISCONNECT SWITCH IN SUSPENDED CEILING WITHIN REACH FROM ACCESS POINT.
32. SIZING OF MOTOR-RELATED ELECTRICAL COMPONENTS, INCLUDING FEEDER AND/ OR BRANCH CIRCUITS (WIRE AND CONDUIT) AND OVERCURRENT PROTECTION (BREAKER AND/ OR FUSES) IS BASED ON RATINGS INDICATED IN THE CONTRACT DOCUMENTS AS WELL AS NEC APPROXIMATED LOADS FOR A GIVEN MOTOR HORSEPOWER, VOLTAGE AND PHASE. IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ACTUAL MOTOR AND APPLIANCE RATING AND LOADS. CONTRACTOR TO PROVIDE CORRECTLY SIZED MOTOR OVERLOAD ELECTRICAL COMPONENTS BASED ON NAMEPLATE RATING. REFLECT CHANGES IN THE AS-BUILT DRAWINGS.
33. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS TO ARCHITECT FOR REVIEW OF THE FOLLOWING EQUIPMENT:
    a. ELECTRICAL SWITCHGEAR: SWITCHBOARDS, WITH PANELS, MOTOR CONTROL
    b. CENTERS AND SAFETY DEVICES.
    c. OVERCURRENT DEVICES: CIRCUIT BREAKERS AND FUSES INCLUDING
    d. TIME/CURRENT TRIP CURVES.
    e. LIGHTING FIXTURES: INDOOR/OUTDOOR AS SPECIFIED, PHOTOMETRIC
    f. PERFORMANCE DATA AND LAMPS.
    g. DEVICES: SWITCHES, RECEPTACLES, MOTOR CONTROLLERS AND
    h. DEVICE PLATES.
    i. LIFE SAFTY/FIRE ALARM SYSTEM: CONTROL PANEL, ANNUNCIATOR PANEL,
    j. INITIATION AND NOTIFICATION DEVICES/APPLIANCES, SYSTEM WIRING
    k. REQUIREMENTS AND DIAGRAM, SYSTEM LOAD CALCS, STANDARD BATTERY
    l. CALCULATIONS, AND AUXILIARY POWER SUPPLY.
34. EQUIPMENT ELECTRICAL TERMINATIONS TO UNDERGO A TORQUE TEST. ELECTRICAL CONTRACTOR IS RESPONSIBLE FOR MANUFACTURER'S RECOMMENDED TORQUE DOCUMENTATION AND TOOLS TO PERFORM TORQUE TEST.
35. UNDERGROUND SERVICE CONDUITS SHALL BE SEALED PER NEC ARTICLE 230-8.
36. FLOOR MOUNTED ELECTRICAL EQUIPMENT SHALL BE MOUNTED ON A 4" HIGH CONCRETE PAD.
37. INSTALL TRANSFORMER FOLLOWING MANUFACTURER'S RECOMMENDATIONS FOR VENTILATION CLEARANCES.
38. COORDINATE ELECTRICAL REQUIREMENTS FOR PLUMBING AND MECHANICAL EQUIPMENT WITH FINAL CONTRACTOR SELECTION. THE CONTRACTOR SHALL SIZE DISCONNECTS BASED UPON CIRCUIT BREAKER RATINGS AND PROVIDE FUSING AS REQUIRED PER EQUIPMENT MANUFACTURER RECOMMENDATIONS AND U.L. LISTING REQUIREMENTS.
39. PROVIDE 10 AWG CONDUCTORS FOR 20 AMPERE, 120V BRANCH CIRCUITS LONGER THAN 75' AND 8 AWG CONDUCTORS FOR 20 AMPERE, 120V BRANCH CIRCUITS LONGER THAN 120'. PROVIDE 10 AWG CONDUCTORS FOR 20 AMPERE, 277V BRANCH CIRCUITS LONGER THAN 200'.
40. ALL ELECTRICAL EQUIPMENT SHALL BE LABELED, LISTED, OR CERTIFIED BY A NATIONALLY RECOGNIZED TESTING LABORATORY ACCREDITED BY THE UNITED STATES OCCUPATIONAL SAFETY HEALTH ADMINISTRATION.
41. ALL NEW CIRCUIT BREAKERS INSTALLED IN PANELS SHALL MATCH THE HIGHEST EXISTING AIC RATED CIRCUIT BREAKER WITHIN THAT BOARD. INSPECTOR TO VERIFY HIGHEST AIC RATING AT THE SITE."

SCOPE OF WORK

-REPLACE ALL STADIUM LIGHTING WITH NEW LED LIGHT FIXTURES PER PLANS.

-REPLACE EXISTING HID AND HALOGEN EMERGENCY LIGHT FIXTURES WITH NEW LED LIGHTING FIXTURES WHILE ADDING NEW LED EMERGENCY LIGHT FIXTURES TO AREAS WITHOUT, CONNECTING THEM ALL THE THE EXISTING EMERGENCY LIGHTING INVERTER.

-REPLACE ALL STADIUM LIGHTING CONTROL SWITCHES WITH A NEW CONTROL SYSTEM I.E. CONTROL DIMMERS, SENSORS AND STADIUM ZONES PER PLAN.

-PROVIDE POWER TO ALL NEW MONITORS THROUGHOUT THE ARENA PER PLANS.

-PROVIDE LOW VOLTAGE CONDUIT PATHS FOR SPEAKERS AND MONITOR ETC. THROUGHOUT THE ARENA PER PLAN.

-PROVIDE POWER TO NEW DEVICE LOCATIONS THROUGHOUT THE ARENA PER PLANS.

-REPLACE ALL OUTDOOR OUTLETS WITH WEATHER / TAMPER PROOF OUTLET COVERS.

-PROVIDE NEW FEEDERS AND POWER CONNECTIONS AS REQUIRED TO THE NEW TRANSFORMER AND NEW SUB PANEL LOCATED AT AND FOR THE ANNOUNCERS BOTH.

-PROVIDE NEW POWER CONNECTIONS AS REQUIRED FOR THE NEW I.T. / AV ROOM AT THE ANNOUNCERS BOTH.

-PROVIDE NEW POWER CONNECTIONS AS REQUIRED TO THE NEW AC, FC AND MINI SPLIT UNITS FOR THE ANNOUNCERS BOTH.

SINGLE LINE DIAGRAM

	CIRCUIT BREAKER
	UTILITY COMPANY SERVICE CABLE TERMINATION
	FUSE
	FUSED DISCONNECT SWITCH
	SWITCH
TVSS	TRANSIENT VOLTAGE SURGE SUPPRESSOR
	CURRENT TRANSFORMER (CT)
	POTENTIAL TRANSFORMER
	GROUNDING ELECTRODE
M	UTILITY COMPANY POWER METER
#	MOTOR (# INDICATED HP)
M	CUSTOMER OWNED POWER METER
G	GENERATOR
ST	SHUNT TRIP
GFPD	GROUND FAULT PROTECTION DEVICE
	TRANSFER SWITCH ATS OR MTS AND NUMBER OF POLES AS NOTED
	CONTACTOR (NORMALLY OPEN)
	CONTACTOR (NORMALLY CLOSED)
	TIME SWITCH
	CONTROL SWITCH
	PUSH BUTTON
T AC-1	THERMOSTAT OUTLET AT +54" (HVAC UNIT DESIGNATION)
	ENCLOSED CIRCUIT BREAKER
R	RELAY
C	CONTACTOR

ELECTRICAL SYMBOL LIST

LIGHTING

	LINEAR LED FIXTURE RECESSED MOUNT
	LINEAR LED FIXTURE SUSPENDED OR PENDANT
	LED WALL MOUNT FIXTURE
	LINEAR LED STRIP FIXTURE
	LED DOWNLIGHT RECESSED OR SURFACE
	PENDANT FIXTURE
	LED WALL MOUNTED LIGHT FIXTURE
	LED WALL SCONCE
	LED WALL WASHER
	MONO-POINT LIGHT FIXTURE
	PARKING LOT POLE MOUNTED LIGHT FIXTURE
	BOLLARD LIGHT FIXTURE
	EXIT SIGN - CEILING MOUNTED (SHADE INDICATES FACE)
	EXIT SIGN - WALL MOUNTED (SHADE INDICATES FACE)
	EXIT SIGN - W/ARROWS INDICATE DIRECTION
	EMERGENCY BUG EYE FIXTURE WITH 90 MIN BATTERY BACKUP
A 1b	LIGHTING FIXTURE NOTATION A, 1, b INDICATES: A = FIXTURE TYPE, REFER TO SCHEDULE 1 = CIRCUIT NUMBER b = SWITCH CONTROLLING FIXTURE ab =BI-LEVEL/DUAL SWITCH CONTROL
	HALF SHADED LINEAR LED OR SOLID DOWNLIGHT FIXTURE FURNISHED ON EMERGENCY POWER.
D,K abcd 2,3,4	WALL SWITCH, +48" OR AS NOTED: SUBSCRIPTS AT SYMBOL INDICATE THE FOLLOWING: 2 - DOUBLE POLE (20A, 120/277V) 3 - THREE WAY (20A, 120/277V) 4 - FOUR WAY (20A, 120/277V) D - DIMMER SWITCH (20A, 120/277V) K - KEY OPERATED (20A, 120/277V) M - MOTOR STARTING SWITCH (20A, 120/277V) P - PILOT LIGHT (20A, 120/277V) R - REMOTE CONTROL SWITCH (20A, 120/277V) T - TIMER SWITCH (0-60 MIN.) (20A, 120/277V)
OS	OCCUPANCY SENSOR - CEILING
OS	OCCUPANCY SENSOR - WALL MOUNTED
OS D	OCCUPANCY SENSOR w/DIMMER- WALL MOUNTED
LC	LIGHTING CONTACTOR
PC	PHOTOCELL
PP	LIGHTING CONTROL POWER PACK

POWER

	SINGLE RECEPTACLE, NEMA 5-20R, 20A, 125V, MOUNT CENTER OF OUTLET AT 18" A.F.F. U.N.O.
	DUPLEX RECEPTACLE, NEMA 5-20R, 20A, 125V RATED, MOUNT CENTER OF OUTLET AT 18" A.F.F. U.N.O.
	DUPLEX RECEPTACLE NEMA 5-20R, 20A, 125V GFCI TYPE
C	DUPLEX RECEPTACLE / HALF-SWITCHED "C" INDICATES CONTROLLED VIA MOTION SENSOR/TIME CLOCK, MOUNT CENTER OF OUTLET AT 18" A.F.F. U.N.O.
	DUPLEX RECEPTACLE NEMA 5-20R 125V RATED MOUNTED 6" ABOVE COUNTER SPLASH
	DUPLEX RECEPTACLE NEMA 5-20R, 20A, 125V GFCI TYPE, MOUNTED 6" ABOVE COUNTER SPLASH
	QUADPLEX RECEPTACLE, NEMA 5-20R, 20A, 125V, MOUNT CENTER OF OUTLET AT 18" A.F.F. U.N.O.
	QUADPLEX RECEPTACLE, NEMA 5-20R, 20A, 125V, MOUNT CENTER OF OUTLET AT 18" A.F.F. U.N.O. GFCI TYPE
	SPECIAL RECEPTACLE 480V RATED w/GROUND AS NOTED
	SPECIAL RECEPTACLE, 250V RATED AS NOTED
	DUPLEX RECEPTACLE NEMA 5-20R, 20A, 125V - FLUSH MOUNT CEILING
	POWER FLOOR OUTLET w/ DEVICE AS INDICATED
	COMBINATION POWER / DATA FLOOR OUTLET AS INDICATED
	COMBINATION USB/DUPLEX NEMA 5-20R, 125V, MOUNTED 18" A.F.F. U.N.O.
	COMBINATION USB/DUPLEX NEMA 5-20R, 125V, MOUNTED 6" ABOVE COUNTER SPLASH
J	JUNCTION BOX
J	JUNCTION BOX - WALL MOUNT
J	JUNCTION BOX - FLUSH FLOOR MOUNT
	MULTI-OUTLET SURFACE RACEWAY w/ NEMA 5-20R, 20A, 125V AT 12" ON CENTER., U.N.O.
PB	PULLBOX - EXTERIOR OR INTERIOR AS INDICATED
	LIGHTING AND APPLIANCE PANELBOARD - SURFACE MOUNT
	LIGHTING AND APPLIANCE PANELBOARD - FLUSH MOUNT
	SWITCHBOARD OR DISTRIBUTION BOARD
ATS	AUTOMATIC TRANSFER SWITCH
VFD	VARIABLE FREQUENCY DRIVE
	METER SERVICE PEDESTAL
	PUSH BUTTON CONTROL STATION
2P M	MOTOR RATED MANUAL DISCONNECT SWITCH
	NON-FUSED DISCONNECT SWITCH (WITH SEALTITE RACEWAY CONNECTION
F	FUSED DISCONNECT SWITCH
	MOTOR CONTROLLER OR STARTER
F	COMBINATION FUSIBLE DISCONNECT W/MOTOR STARTER AS NOTES

SIGNAL

	COMBINATION TELE/DATA OUTLET AT +18"
	TELEPHONE OUTLET AT +18"
	DATA OUTLET AT +18"
	TELE/DATA OUTLET MOUNTED 6" ABOVE COUNTER SPLASH
	TELEPHONE OUTLET MOUNTED 6" ABOVE COUNTER SPLASH
	DATA OUTLET MOUNTED 6" ABOVE COUNTER SPLASH
	TELE/DATA CEILING OUTLET
	DATA CEILING OUTLET
CR	CARD READER
S	CEILING MOUNTED SPEAKER
C	CAMERA (CCTV)
	FLUSH FLOOR BOX WITH COMBINATION TELE/DATA OUTLET
TV	TELEVISION OUTLET
TS	TIME SWITCH
T	POWER TRANSFORMER. SIZE AND TYPE NOTED ON PLANS AND SPECIFICATIONS
	TELEPHONE BACKBOARD

FIRE ALARM

FACP	FIRE ALARM CONTROL PANEL 120V
FATC	FIRE ALARM TERMINAL CABINET
ANN	FIRE ALARM ANNUNCIATOR
FS	FLOW SWITCH
TS	TAMPER SWITCH
DD	DUCT MOUNTED SMOKE DETECTOR
CSFD	COMBINATION SMOKE FIRE DAMPER
	FIRE ALARM PULL STATION
DH	ELECTROMAGNETIC DOOR HOLDER
	WALL MOUNTED FIRE ALARM HORN SPEAKER DEVICE "CD" INDICATES CANDELA; "cb" INDICATES DECIBEL LEVEL
15cd 30cd 75cd	WALL MOUNTED HORN STROBE DEVICE "cd" INDICATES CANDELA; "db" INDICATES DECIBEL LEVEL
	WALL MOUNTED STROBE DEVICE "cd" INDICATES CANDELA
	CEILING MOUNTED STROBE DEVICE "CD" INDICATES CANDELA
SD	FIRE ALARM SMOKE DETECTOR DEVICE
	HEAT DETECTOR
CO	CARBON MONOXIDE DETECTOR
	FIRE ALARM BELL MOUNTED +90"A.F.F. PER NFPA72 18.4.8.1

WIRING

	CONDUIT ROUTED EXPOSED
	CONDUIT ROUTED UNDER FLOOR/UNDERGROUND
	RACEWAY CONCEALED IN WALL OR CEILING 1/2"C, 2#12 AND 1#12 GND - TYPICAL U.N.O.
	RACEWAY TURNED UP 1/2"C, 2#12 AND 1#12 GND - TYPICAL U.N.O.
	RACEWAY TURNED DOWN 1/2"C, 2#12 AND 1#12 GND - TYPICAL U.N.O.
	MIN. 3/4"C- HOMERUN TO PANELBOARD
	CONDUIT CAP-OFF

MISCELLANEOUS

UNIT #	MECHANICAL EQUIPMENT TAG
# SHEET	DIAGRAM TAG
1	KEYNOTE PLAN SYMBOL
1	DEMOLITION KEYNOTE PLAN SYMBOL
1	REVISION SYMBOL
XXX	FEEDER SCHEDULED EQUIPMENT
XXXX	ELECTRICAL EQUIPMENT TAG

APPLICABLE CODES

- 2022 CALIFORNIA ELECTRICAL CODE (CEC) PART 3, TITLE 24, CALIFORNIA CODE OF REGULATIONS (CCR)
- 2020 NATIONAL ELECTRICAL CODE (NEC) NFPA 70
- 2022 CALIFORNIA ADMINISTRATIVE CODE (CAC) PART 1, TITLE 24, CALIFORNIA CODE OF REGULATIONS (CCR)
- 2022 CALIFORNIA BUILDING CODE (CBC) PART 2, TITLE 24, CALIFORNIA CODE OF REGULATIONS (CCR)
- 2022 CALIFORNIA MECHANICAL CODE (CMC) PART 4, TITLE 24, CALIFORNIA CODE OF REGULATIONS (CCR)
- 2022 CALIFORNIA PLUMBING CODE (CPC) PART 5, TITLE 24, CALIFORNIA CODE OF REGULATIONS (CCR)
- 2022 CALIFORNIA ENERGY CODE (CEC) PART 6, TITLE 24, CALIFORNIA CODE OF REGULATIONS (CCR)
- 2022 CALIFORNIA FIRE CODE (CFC) PART 9, TITLE 24, CALIFORNIA CODE OF REGULATIONS (CCR)
- 2022 CALIFORNIA GREEN BUILDING CODE (CGBC) PART 11, TITLE 24, CALIFORNIA CODE OF REGULATIONS (CCR)

STANDARD ABBREVIATIONS

- A -

A	AMPERE
AB	ABOVE BACK SPLASH
ADA	AMERICANS w/DISABILITIES ACT
A.F.F.	ABOVE FINISHED FLOOR
AF	ARC FAULT,
AMP	FUSE
AFG	ABOVE FINISHED GRADE
AIC	AMPERE INTERRUPTING CAPACITY
AL	ALUMINUM
ARCH'L	ARCHITECTURAL as AMP SWITCH
AWG	AMERICAN WIRE GAUGE

- B -

BC	BARE COPPER
BLDG	BUILDING BLDG

- C -

C	CONDUIT
CAB	CABINET
CAT	CATALOG/CATEGORY
CB	CIRCUIT BREAKER
CKT	CIRCUIT
CLG	CEILING
CO	CONDUIT ONLY
CC	COMM COMMUNICATION
CU	COPPER
CTEP	CALIFORNIA TYPE EVALUATION PROGRAM

- D -

DEMO,(D)	DEMOLITION/DEMOLISH
DISC.	DISCONNECT
DN	DOWN
DWG	DRAWING

- E -

EA	EACH
EG	EQUIPMENT GROUND
ELEC.	ELECTRICAL
ELEV	ELEVATOR
EM	EMERGENCY
EMT	ELECTRICAL METALLIC TUBING
EQUIP	EQUIPMENT
(E)	EXISTING TO REMAIN
EVCS	ELECTRICAL VEHICLE CHARGING STATION

- F -

FBO	FURNISHED BY OTHERS
FF	FINISHED FLOOR
FIXT	FIXTURE
FLEX	FLEXIBLE METALLIC CONDUIT(STEEL)
FLUOR	FLUORESCENT
FT	FEET OR FOOT

- G -

GFA	GROUND FAULT ALARM
GFCI	GROUND FAULT CIRCUIT INTERRUPTER
GND	GROUND

- H -

HP	HORSEPOWER
HVAC	HEATING, VENTILATING & AIR CONDITIONING

- I -

IBC	INTERNATIONAL BUILDING CODE
IMC	INTERMEDIATE METAL CONDUIT
IN	INCH(ES)
IRC	INTERNATIONAL RESIDENTIAL CODE
ISC	SHORT CIRCUIT AMPERES

- J -

JB, J-BOX	JUNCTION BOX

- K -

KCMIL & MCM	THOUSAND CIRCULAR MILS
KVA	KILOVOLT AMPERE
KW	KILOWATT

- L -

LTG	LIGHTING
LOTO	LOCK OUT TAG OUT

- M -

MAX.	MAXIMUM
MCB	MAIN CIRCUIT BREAKER
MECH.	MECHANICAL
MIN.	MINIMUM
MLO	MAIN LUGS ONLY
MTD	MOUNTED

- N -

NC	NORMALLY CLOSED
NEC	NATIONAL ELECTRICAL CODE
NECA	NATIONAL ELECTRICAL CONTRACTOR'S ASSOCIATION
NEMA	NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION
NEUT	NEUTRAL
NFC	NATIONAL FIRE CODE
NF	NON-FUSIBLE
NFPA	NATIONAL FIRE PROTECTION ASSOCIATION
NIC	NOT IN CONTRACT
NO	NORMALLY OPEN
NTS	NOT TO SCALE

- O -

OCPD	OVER CURRENT PROTECTION DEVICE

- P -

P	POLE
PH	PHASE
PNL	PANEL
PV	PHOTOVOLTAIC
PVC	POLYVINYL CHLORIDE
PWR	POWER

- Q -

QTY	QUANTITY

- R -

(R)	RELOCATE
RECEP	RECEPTACLE
REQ'D	REQUIRED
RSC	RIGID STEEL CONDUIT

- S -

SCHED	SCHEDULE
SECT	SECTION
SP	SINGLE POLE
SN	SOLID NEUTRAL
SPEC	SPECIFICATION
SW	SWITCH
SWBD	SWITCHBOARD
SWGR	SWITCHGEAR
SYS	SYSTEM

- T -

TEMP	TEMPORARY
TELE	TELEPHONE
T-STAT	THERMOSTAT
TTB	TELEPHONE TERMINAL BACKBOARD
TTC	TELEPHONE TERMINAL CABINET
TYP.	TYPICAL

- U -

UBC	UNIFORM BUILDING CODE
UL	UNDERWRITERS LABORATORY
U.N.O.	UNLESS NOTED OTHERWISE

- V -

V	VOLT OR VOLTAGE
VA	VOLT AMPERE
VD	VOLTAGE DROP
VP	VAPOR PROOF

- W -

W	WATT, WIRE
WP	WEATHERPROOF, NEMA 3R

- X -

XFMR	TRANSFORMER

SHEET INDEX

SHEET NUMBER	SHEET TITLES
E-001	GENERAL NOTES, ABBREVIATIONS SYMBOLS AND SHEET INDEX
E-101	GRAND ARENAS SINGLE LINE DIAGRAM
E-102	GRAND ARENAS ANNOUNCERS BOOTH POWER PLAN
E-200	GRAND AREAN OVERALL REFERENCE SITE PLAN
E-201	GRAND ARENA EXISTING/ DEMOLITION LIGHTING LAYOUT
E-202	GRAND ARENA REPLACEMENT LIGHT FIXTURE PLAN
E-203	GRAND ARENA EMERGENCY STANDBY LIGHTING PLAN
E-204	GRAND ARENA EMERGENCY STANDBY PHOTOMETRIC STUDY
E-205	GRAND ARENA OVERALL PHOTOMETRIC STUDY
E-206	GRAND ARENAS REPLACEMENT LIGHTING CONTROL DETAILS
E-207	GRAND ARENAS REPLACEMENT EXISTING OUT LIGHTING
E-208	GRAND ARENAS NEW GROUND POWER PLAN
E-208.1	GRAND ARENAS NEW UPPER POWER PLAN
E-209	GRAND ARENA FIXTURE CUT SHEETS
E-210	GRAND ARENA FIXTURE CUT SHEETS
E-211	GRAND ARENA CONTROL DETAILS
E-212	GRAND ARENA CONTROL DETAILS
E-301	ELECTRICAL DETAILS
E-302	ELECTRICAL DETAILS
E-401	GRAND ARENAS TITLE 24 COMPLIANCE FORMS
E-402	GRAND

IDS GROUP - FILE LOCATION: S:\PROJECTS\2022\SHARED\22X060.00-E-101 SINGLE LINE DIAGRAM PLOT DATE: 8/27/2025 11:30:29 AM USER: MARGARITA.PASAYE

EXISTING INVERTER PANEL "INVE"

Volts: 120V | Phases: 1 | Wires: 2 | MAIN 100 MCB | BUS 100 | A.I.C. 10,000

NOTES	LOADS	CIRC	TRIP AMPS	POLES	A
	C	1	20A	1	595
	C	2	20A	1	595
	C	3	20A	1	680
	C	4	20A	1	680
	R	5	20A	1	510
	C	6	20A	1	595
	C	7	20A	1	595
	C	8	20A	1	595

ØA: 4845 VA

PANEL LOADS

TOTAL CONN. LOAD (VA):	4845
TOTAL CONN. (AMPS):	40
AL EST. DEMAND (AMPS):	40A

EXISTING PANEL "AB"

MOUNTING SURFACE | NEMA 3R NO | FEED THRU NO | DOUBLE LUG NO | 200% NO | I/G BUS NO | Volts: 120/208V | Phases: 1 | Wires: 3 | MAIN 150A MCB | BUS 225 | A.I.C. 10,000

NOTES	CIRC	LOCATION	TRIP	POLES	A	B	A	B	POLES	TRIP	LOCATION	CIRC	LOADS	NOTES
	1	(E) CONCRETE WALL	20A	2	540				1	20A	(E) FIRST FLOOR	2	C	
	3		--	--		540			1	20A	(E) OUTSIDE	4	C	
	5	(E) CONCRETE WALL	20A	1	540				1	20A	(E) FAXP	6	C	
	7	(E) EXISTING OFFICE	20A	1					1	30A	(E) RECEPTACLE IN BLEACHERS	8		
	9	(E) OFFICE	20A	1			113		2	15A	(N) FC - 1A & 1B	10	M	E
	11	(E) OFFICE	20A	1				113	--	--	--	12	M	E
	13	(E) CHECK IN	20A	1			113		2	15A	(N) FC - 2A & 2B	14	M	E
	15	(E) OUTSIDE	20A	1				113	--	--	--	16	M	E
	17	(E) OFFICE	20A	1			46		2	15A	(N) FC - 3	18	M	E
	19	(E) ROOF	20A	1				46	--	--	--	20	M	E
	21	(E) OFFICE	20A	1			36		1	15A	(N) FAF - 1	22	M	E
	23	(E) DATA RACK	20A	1					1	20A	SPARE	24		
	25	(E) EQUIPMENT ROOM	20A	1	540				1	30A	(E) EXISTING LOAD	26		
	27	(E) EQUIPMENT ROOM	20A	1	720			208	2	15A	(N) BC - 3	28	M	E
	29	(E) SLUSH MAGAINE	30A	2	2700		208		--	--	--	30	M	E
	31	--	--	--		2700			2	20A	SPARE	32		
	33	(E) 2ND FLOOR	20A	1	510							34		
	35	(E) EXISTING LOAD	20A	1				1100	1	20A	(E) SCOREBOARD	36		
	37	(E) EXISTING LOAD	30A	1					1	20A	(E) SCOREBOARD	38		
	39	(E) NORTH FENCE RECEP	30A	1					1	20A	(E) SCOREBOARD	40		
	41	(E) CONCRETE WALL	20A	1					1	20A	(E) EXISTING LOAD	42		

	ØA	ØB
TOTAL DEMAND LOAD:	5346	5592
TOTAL DEMAND AMPS:	45	47

96% PERCENT BALANCE

LOAD CLASSIFICATION	CONNECTED LOAD	DEMAND FACTOR	ESTIMATED DEMAND	PANEL LOADS	
CONTINUOUS LOAD = C	0	125%	0		
KITCHEN EQUIPMENT LOAD = K	0	100%	0	TOTAL CONN. LOAD (VA):	996
LIGHTING LOAD = L	0	125%	0	TOTAL EST. DEMAND (VA):	1100
MOTOR LOAD = M	996	100%	1100	TOTAL CONN. (AMPS):	5
NON-CONTINUOUS LOAD = N	0	100%	0	TOTAL EST. DEMAND (AMPS):	5
PANEL LOAD = P	0	100%	0		
RECEPTACLE LOAD = R	0	100%	0		

PANEL SCHEDULE NOTES:
1. PROVIDE LOCK-ON DEVICE.
2. PROVIDE LOCK-OFF DEVICE.
3. CIRCUIT BREAKER CONTROLLED BY ANSUL SYSTEM. REFER TO HOOD FIRE SYSTEM INTERLOCK DIAGRAM.
4. PROVIDE GFCI TYPE DEVICE.
5. PROVIDE A RED CIRCUIT BREAKER.
6. PROVIDE A NEW BREAKER TO EXISTING TYPE AND A.I.C. RATING IN PANEL.
7. PROVIDE "HACR" TYPE CIRCUIT BREAKER FOR HVAC EQUIPMENT.
8. PROVIDE PHOTOCELL AND TIME CLOCK CLOCK WITH RELAYS FOR EXTERIO LIGHTING CONTROL. REFER TO EXTERIOR LIGHTING CONTROL DIAGRAM.
9. EXISTING BREAKER
10. CIRCUIT MADE AVAILABLE THROUGH DEMOLITION

EXISTING PANEL "HW"

MOUNTING SURFACE | NEMA 3R NO | FEED THRU NO | DOUBLE LUG NO | 200% NO | I/G BUS NO | Volts: 480Y/277V | Phases: 3 | Wires: 4 | MAIN 175A MCB | BUS 225 | A.I.C. 14,000

NOTES	LOADS	CIRC	DESCRIPTION	TRIP AMPS	POLES	A	B	C	A	B	C	POLES	TRIP AMPS	DESCRIPTION	CIRC	LOADS	NOTES
	C	1	(N) WEST LED ARENA	20A	2	1220			1220			2	20A	(N) WEST LED ARENA	2	C	
	C	3		--	--		1220			1220		--	--		4	C	
	C	5	(N) WEST LED ARENA	20A	2			1220			1220	2	20A	(N) WEST LED ARENA	6	C	
	C	7		--	--	1220			1220			--	--	--	8	C	
	C	9	SPARE	20A	2							2	20A	SPARE	10	C	
	C	11	--	--	--							--	--	--	12	C	
	C	13	(N) WEST LED ARENA	20A	2	1220					1464	2	20A	(N) WEST LED ARENA	14	C	
	C	15	--	--	--		1220			1464		--	--	--	16	C	
	C	17	(N) WEST LED ARENA	20A	2			1220			1464	2	20A	(N) WEST LED ARENA	18	C	
	C	19	--	--	--	1220					1464	--	--	--	20	C	
	C	21	SPARE	20A	2							2	20A	SPARE	22	C	
	C	23		--	--							--	--		24	C	
	C	25	(N) LID UPLIGHT	20A	2	384			2700			1	20A	(N) INDIRECT LED WEST	26	C	
	C	27	--	--	--		384			2700		1	20A	(N) INDIRECT LED WEST	28	C	
	M	29	(N) FAN BAF #1 & #2	15A	3			1884			2700	1	20A	(N) INDIRECT LED WEST	30	C	
	M	31	--	--	--	1884			1350			1	20A	(N) INDIRECT LED WEST	32	C	
	M	33	--	--	--		1884			1884		3	15A	(N) FAN BAF #3 & #4	34	M	
	M	35	SPARE	20A	1						1884	--	--	--	36	M	
	P	37	(N) ANOUNSIBRS BOOTH (WIRE GUTTER)	90A	3	17380			1884			--	--	--	38	M	
	P	39	--	--	--		17380			10000		2	125A	(E) SUB PANEL LW	40	P	
	P	41	--	--	--			17380			10000	--	--	--	42	P	

	ØA	ØB	ØC
TOTAL LOAD DEMAND:	39972	41979	41399
TOTAL DEMAND AMPS:	144 A	151 A	149 A

95% PERCENT BALANCE

LOAD CLASSIFICATION	CONNECTED LOAD	DEMAND FACTOR	ESTIMATED DEMAND	PANEL LOADS	
CONTINUOUS LOAD = C	50714	125%	38393		
KITCHEN EQUIPMENT LOAD = K	0	100%	0	TOTAL CONN. LOAD (VA)	114158
LIGHTING LOAD = L	0	125%	0	TOTAL EST. DEMAND (VA)	125250
MOTOR LOAD = M	11304	100%	12717	TOTAL CONN. (AMPS)	137
NON-CONTINUOUS LOAD = N	0	100%	0	TOTAL EST. DEMAND (AMPS)	148
PANEL LOAD = P	72140	100%	72140		
RECEPTACLE LOAD = R	0	100%	0		

PANEL SCHEDULE NOTES:
1. PROVIDE LOCK-ON DEVICE.
2. PROVIDE LOCK-OFF DEVICE.
3. CIRCUIT BREAKER CONTROLLED BY ANSUL SYSTEM. REFER TO HOOD FIRE SYSTEM INTERLOCK DIAGRAM.
4. PROVIDE GFCI TYPE DEVICE.
5. PROVIDE A RED CIRCUIT BREAKER.
6. PROVIDE A NEW BREAKER TO EXISTING TYPE AND A.I.C. RATING IN PANEL.
7. PROVIDE "HACR" TYPE CIRCUIT BREAKER FOR HVAC EQUIPMENT.
8. PROVIDE PHOTOCELL AND TIME CLOCK CLOCK WITH RELAYS FOR EXTERIO LIGHTING CONTROL. REFER TO EXTERIOR LIGHTING CONTROL DIAGRAM.
9. EXISTING BREAKER
10. CIRCUIT MADE AVAILABLE THROUGH DEMOLITION

EXISTING PANEL "HE"

MOUNTING SURFACE | NEMA 3R NO | FEED THRU NO | DOUBLE LUG NO | 200% NO | I/G BUS NO | Volts: 480Y/277V | Phases: 3 | Wires: 4 | MAIN 400A MCB | BUS 400 | A.I.C. 14,000

NOTES	LOADS	CIRC	DESCRIPTION	TRIP AMPS	POLES	A	B	C	A	B	C	POLES	TRIP AMPS	DESCRIPTION	CIRC	LOADS	NOTES
	C	1	(N) EAST LED ARENA LIGHTING	20A	2	1220			1220			2	20A	(N) EAST LED ARENA LIGHTING	2	C	
	C	3		--	--		1220			1220		--	--		4	C	
	C	5	(N) EAST LED ARENA LIGHTING	20A	2			1220			1220	2	20A	(N) EAST LED ARENA LIGHTING	6	C	
	C	7		--	--	1220			732			--	--	--	8	C	
	C	9	(N) EAST LED ARENA LIGHTING	20A	2		1220					2	20A	SPARE	10	C	
	C	11	--	--	--			1220				--	--	--	12	C	
	C	13	(N) EAST LED ARENA LIGHTING	20A	2	1220			732			2	20A	(N) EAST LED ARENA LIGHTING	14	C	
	C	15	--	--	--		1220			732		--	--	--	16	C	
	M	17	(N) FAN BAF #5 & #6	15A	3			1884			732	2	20A	(N) EAST LED ARENA LIGHTING	18	C	
	M	19	--	--	--	1884			732			--	--	--	20	C	
	M	21	--	--	--		1884			732		2	20A	SPARE	22	C	
		23	SPACE									--	--		24	C	
	C	25	(N) LID UPLIGHT ARENA LIGHTING	20A	1	768			2700			1	20A	(N) INDIRECT EAST LED ARENA LIGHTING	26	C	
	C	27	(N) LID UPLIGHT ARENA LIGHTING	20A	1		768			2700		1	20A	(N) INDIRECT EAST LED ARENA LIGHTING	28	C	
		29	SPARE	20A	1			768			2700	1	20A	(N) INDIRECT EAST LED ARENA LIGHTING	30	C	
		31	(E) SUB PANEL BB	40A	3	5499			2700			1	20A	(N) INDIRECT EAST LED ARENA LIGHTING	32	C	
		33	--	--	--		C							SPACE ONLY	34		
	P	35	--	--	--			6024			32220	2	200A	(E) SUB PANEL BB	36	P	
	P	37	(E) SUB PANEL HW	175A	3	39972			30780			--	--	--	38	P	
	P	39	--	--	--		41879			36267		2	225A	(E) SUB PANEL LE	40	P	
	P	41	--	--	--			41399			35613	--	--	--	42	P	

	ØA	ØB	ØC
TOTAL LOAD DEMAND:	90771	91851	126486
TOTAL DEMAND AMPS:	360 A	331 A	456 A

73% PERCENT BALANCE

LOAD CLASSIFICATION	CONNECTED LOAD	DEMAND FACTOR	ESTIMATED DEMAND	PANEL LOADS	
CONTINUOUS LOAD = C	29804	125%	37303		
KITCHEN EQUIPMENT LOAD = K	0	100%	0	TOTAL CONN. LOAD (VA)	293686
LIGHTING LOAD = L	0	125%	0	TOTAL EST. DEMAND (VA)	302575
MOTOR LOAD = M	5652	100%	7065	TOTAL CONN. (AMPS)	353
NON-CONTINUOUS LOAD = N	0	100%	0	TOTAL EST. DEMAND (AMPS)	364
PANEL LOAD = P	258130	100%	258130		
RECEPTACLE LOAD = R	0	100%	0		

PANEL SCHEDULE NOTES:
1. PROVIDE LOCK-ON DEMCE.
2. PROVIDE LOCK-OFF DEVICE.
3. CIRCUIT BREAKER CONTROLLED BY ANSUL SYSTEM. REFER TO HOOD FIRE SYSTEM INTERLOCK DIAGRAM.
4. PROVIDE GFCI TYPE DEVICE.
5. PROVIDE A RED CIRCUIT BREAKER.
6. PROVIDE A NEW BREAKER TO EXISTING TYPE AND A.I.C. RATING IN PANEL.
7. PROVIDE "HACR" TYPE CIRCUIT BREAKER FOR HVAC EQUIPMENT.
8. PROVIDE PHOTOCELL AND TIME CLOCK CLOCK WITH RELAYS FOR EXTERIO LIGHTING CONTROL. REFER TO EXTERIOR LIGHTING CONTROL DIAGRAM.
9. EXISTING BREAKER
10. CIRCUIT MADE AVAILABLE THROUGH DEMOLITION

EXISTING PANEL "LE"

MOUNTING SURFACE | NEMA 3R NO | FEED THRU NO | DOUBLE LUG NO | 200% NO | I/G BUS NO | Volts: 120/240V | Phases: 1 | Wires: 3 | MAIN 600A MCB | BUS 600 | A.I.C. 10,000

NOTES	CIRC	LOCATION	TRIP	POLES	A	B	A	B	POLES	TRIP	LOCATION	CIRC	LOADS	NOTES
	1	(E) INVERTER 'E'	90A	2	2403				1	20A	SPARE	2		
	3		--	--		2403			1	20A	SPARE	4		
	5	SPARE	20A	1					1	20A	SPARE	6		
	7	SPARE	20A	1				1080	1	20A	(E) ELECTRICAL RM	8	N	E
N	9	(E) PEC SYSTEM	20A	1	500				1	20A	SPARE	10		
P	11	(E) SUB PANEL A/3	150A	2		16686			1	20A	SPARE	12		
	13	--	--	--			17242		1	20A	SPARE	14		
	15	SPARE	20A	1							SPARE	16		
R	17	(E) SCOREBOARD/CLOCK	20A	2	600				2	30A	(E) SCOREBOARD CLOCK	18	R	E
R	19	--	--	--		600			--	--	--	20	R	E
R	21	(E) SCOREBOARD/CLOCK	20A	2	600				2	30A	(E) SCOREBOARD CLOCK	22	R	E
R	23		--	--		600			--	--	--	24	R	E
R	25	(N) STAGE POWER OUTLETS	30A	1	1440				2	45A	(N) PROJECTORS	26	R	E
R	27	(N) STAGE POWER OUTLETS	30A	1		1440			--	--	--	28	R	E
L	29	(E) NEON LIGHTS	30A	1	1000				2	45A	(N) PROJECTORS	30	R	E
L	31	(E) NEON LIGHTS	30A	1		1000			--	--	--	32	R	E
M	33	(E) HOIST MOTOR	30A	1	1800				2	50A	(N) STAGE POWER OUTLETS	34	R	E
M	35	(E) HOIST MOTOR	30A	1		1800			--	--	--	36	R	E
	37	SPARE	40A	2					2	50A	(N) STAGE POWER OUTLETS	38	R	E
	39	--	--	--					--	--	--	40	R	E
	41	SPACE									SPACE	42		

	ØA	ØB
TOTAL DEMAND LOAD:	35257	35613
TOTAL DEMAND AMPS:	302	297

96% PERCENT BALANCE

LOAD CLASSIFICATION	CONNECTED LOAD	DEMAND FACTOR	ESTIMATED DEMAND	PANEL LOADS	
CONTINUOUS LOAD = C	0	125%	0		
KITCHEN EQUIPMENT LOAD = K	0	100%	0	TOTAL CONN. LOAD (VA)	83482
LIGHTING LOAD = L	6546	125%	8558	TOTAL EST. DEMAND (VA)	71880
MOTOR LOAD = M	3600	100%	4050	TOTAL CONN. (AMPS)	348
NON-CONTINUOUS LOAD = N	1580	100%	1580	TOTAL EST. DEMAND (AMPS)	299
PANEL LOAD = P	33928	100%	33928		
RECEPTACLE LOAD = R	37528	63%	23764		

PANEL SCHEDULE NOTES:
1. PROVIDE LOCK-ON DEVICE.
2. PROVIDE LOCK-OFF DEVICE.
3. CIRCUIT BREAKER CONTROLLED BY ANSUL SYSTEM. REFER TO HOOD FIRE SYSTEM INTERLOCK DIAGRAM.
4. PROVIDE GFCI TYPE DEVICE.
5. PROVIDE A RED CIRCUIT BREAKER.
6. PROVIDE A NEW BREAKER TO EXISTING TYPE AND A.I.C. RATING IN PANEL.
7. PROVIDE "HACR" TYPE CIRCUIT BREAKER FOR HVAC EQUIPMENT.
8. PROVIDE PHOTOCELL AND TIME CLOCK CLOCK WITH RELAYS FOR EXTERIO LIGHTING CONTROL. REFER TO EXTERIOR LIGHTING CONTROL DIAGRAM.
9. EXISTING BREAKER
10. CIRCUIT MADE AVAILABLE THROUGH DEMOLITION

NEW PANEL "A1"

MOUNTING RECESSED | NEMA 3R NO | FEED THRU NO | DOUBLE LUG NO | 200% NO | I/G BUS NO | Volts: 208Y/120V | Phases: 3 | Wires: 4 | MAIN 100A MCB | BUS 125 | A.I.C. 10,000

NOTES	LOADS	CIRC	DESCRIPTION	TRIP AMPS	POLES	A	B	C	A	B	C	POLES	TRIP AMPS	DESCRIPTION	CIRC	LOADS	NOTES
	R	1	(N) GRAND ARENA RECEPTACLE 1	20A	1	1440			1440			1	20A	(N) GRAND ARENA RECEPTACLE 4	2	R	
	R	3	(N) GRAND ARENA RECEPTACLE 1	20A	1		1440			1440		1	20A	(N) GRAND ARENA RECEPTACLE 4	4	R	
	R	5	(N) GRAND ARENA RECEPTACLE 2	20A	1			1440			1440	1	20A	(N) GRAND ARENA RECEPTACLE 5	6	R	
	R	7	(N) GRAND ARENA RECEPTACLE 2	20A	1	1440						1	20A	(N) GRAND ARENA RECEPTACLE 5	8	R	
	R	9	(N) GRAND ARENA RECEPTACLE 3	20A	1		1440					1	20A	SPARE	10		
	R	11	(N) GRAND ARENA RECEPTACLE 3	20A	1							1	20A	SPARE	12		
		13	SPARE	30A	1									SPARE	14		
		15	SPACE ONLY						5464			3	70A	(N) PANEL "A2"	16	P	
		17	SPACE ONLY							3344		--	--	--	18	P	
		19	SPACE ONLY								3344	--	--	--	20	P	

	ØA	ØB	ØC
TOTAL LOAD DEMAND:	9499	7379	6024
TOTAL DEMAND AMPS:	79 A	61 A	50 A

64% PERCENT BALANCE

LOAD CLASSIFICATION	CONNECTED LOAD	DEMAND FACTOR	ESTIMATED DEMAND	PANEL LOADS	
CONTINUOUS LOAD = C	0	125%	0		
KITCHEN EQUIPMENT LOAD = K	0	100%	0	TOTAL CONN. LOAD (VA)	23672
LIGHTING LOAD = L	0	125%	0	TOTAL EST. DEMAND (VA)	22912
MOTOR LOAD = M	0	100%	0	TOTAL CONN. (AMPS)	66
NON-CONTINUOUS LOAD = N	0	100%	0	TOTAL EST. DEMAND (AMPS)	64
PANEL LOAD = P	12152	100%	12152		
RECEPTACLE LOAD = R	11520	93%	10760		

PANEL SCHEDULE NOTES:
1. PROVIDE LOCK-ON DEVICE.
2. PROVIDE LOCK-OFF DEVICE.
3. CIRCUIT BREAKER CONTROLLED BY ANSUL SYSTEM. REFER TO HOOD FIRE SYSTEM INTERLOCK DIAGRAM.
4. PROVIDE GFCI TYPE DEVICE.
5. PROVIDE A RED CIRCUIT BREAKER.
6. PROVIDE A NEW BREAKER TO EXISTING TYPE AND A.I.C. RATING IN PANEL.
7. PROVIDE "HACR" TYPE CIRCUIT BREAKER FOR HVAC EQUIPMENT.
8. PROVIDE PHOTOCELL AND TIME CLOCK CLOCK WITH RELAYS FOR EXTERIO LIGHTING CONTROL. REFER TO EXTERIOR LIGHTING CONTROL DIAGRAM.
9. EXISTING BREAKER
10. CIRCUIT MADE AVAILABLE THROUGH DEMOLITION

NEW PANEL "A2"

MOUNTING SURFACE | NEMA 3R NO | FEED THRU NO | DOUBLE LUG NO | 200% NO | I/G BUS NO | Volts: 208Y/120V | Phases: 3 | Wires: 4 | MAIN MLO | BUS 100 | A.I.C. 10,000

NOTES	LOADS	CIRC	DESCRIPTION	TRIP AMPS	POLES	A	B	C	A	B	C	POLES	TRIP AMPS	DESCRIPTION	CIRC	LOADS	NOTES
	R	1	(N) ROOF RECEPTACLE	20A	1	1440			2496			2	30A	(N) RECEPTACLE 1	2	R	
	R	3	(N) BOOTH RECEPTACLE 1	20A	1		1440			2496		--	--	--	4	R	
	R	5	(N) BOOTH RECEPTACLE 2	20A	1			1440			2496	2	30A	(N) RECEPTACLE 2	6	R	
		7	SPARE	20A	1				2496			--	--	--	8	R	
		9	SPARE	20A	1							1	20A	SPARE	10		
		11	SPARE	20A	1							1	20A	SPARE	12		
		13	SPARE	20A	1							1	20A	SPARE	14		
		15	SPARE	20A	1							1	20A	SPARE	16		
		17	SPARE	20A	1							1	20A	SPARE	18		
		19	SPACE ONLY											SPACE ONLY	20		
		21	SPACE ONLY											SPACE ONLY	22		
		23	SPACE ONLY											SPACE ONLY	24		

	ØA	ØB	ØC
TOTAL LOAD DEMAND:	5464	3344	3344
TOTAL DEMAND AMPS:	45 A	28 A	28 A

61% PERCENT BALANCE

LOAD CLASSIFICATION	CONNECTED LOAD	DEMAND FACTOR	ESTIMATED DEMAND	PANEL LOADS	
CONTINUOUS LOAD = C	0	125%	0		
KITCHEN EQUIPMENT LOAD = K	0	100%	0	TOTAL CONN. LOAD (VA)	14304
LIGHTING LOAD = L	0	125%	0	TOTAL EST. DEMAND (VA)	12152
MOTOR LOAD = M	0	100%	0	TOTAL CONN. (AMPS)	40
NON-CONTINUOUS LOAD = N	0	100%	0	TOTAL EST. DEMAND (AMPS)	34
PANEL LOAD = P	0	100%	0		
RECEPTACLE LOAD = R	14304	85%	12152		

PANEL SCHEDULE NOTES:
1. PROVIDE LOCK-ON DEVICE.
2. PROVIDE LOCK-OFF DEVICE.
3. CIRCUIT BREAKER CONTROLLED BY ANSUL SYSTEM. REFER TO HOOD FIRE SYSTEM INTERLOCK DIAGRAM.
4. PROVIDE GFCI TYPE DEVICE.
5. PROVIDE A RED CIRCUIT BREAKER.
6. PROVIDE A NEW BREAKER TO EXISTING TYPE AND A.I.C. RATING IN PANEL.
7. PROVIDE "HACR" TYPE CIRCUIT BREAKER FOR HVAC EQUIPMENT.
8. PROVIDE PHOTOCELL AND TIME CLOCK CLOCK WITH RELAYS FOR EXTERIO LIGHTING CONTROL. REFER TO EXTERIOR LIGHTING CONTROL DIAGRAM.
9. EXISTING BREAKER
10. CIRCUIT MADE AVAILABLE THROUGH DEMOLITION

C.E.C. GROUNDING NOTES

(***) COMMUNICATIONS GROUND CONDUCTOR SHALL BE SIZED BASED ON DISTANCE BETWEEN TELECOMMUNICATIONS ROOM AND SYSTEM GROUNDED BUS BAR AS FOLLOWS:

0-200 FT.	#1/0
OVER 200 FT.	#3/0

(**) MAIN BONDING JUMPER SHALL BE SIZED AS FOLLOWS:

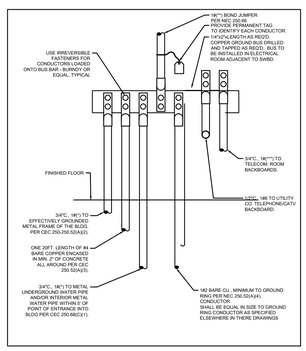
SERVICE SIZE	M.B.J. SIZE
0-1,000A	#3/0
1,200A	#4/0
1,600A	250KCMIL
2,000A	300KCMIL
2,500A	500KCMIL
3,000A	500KCMIL
4,000A	600KCMIL

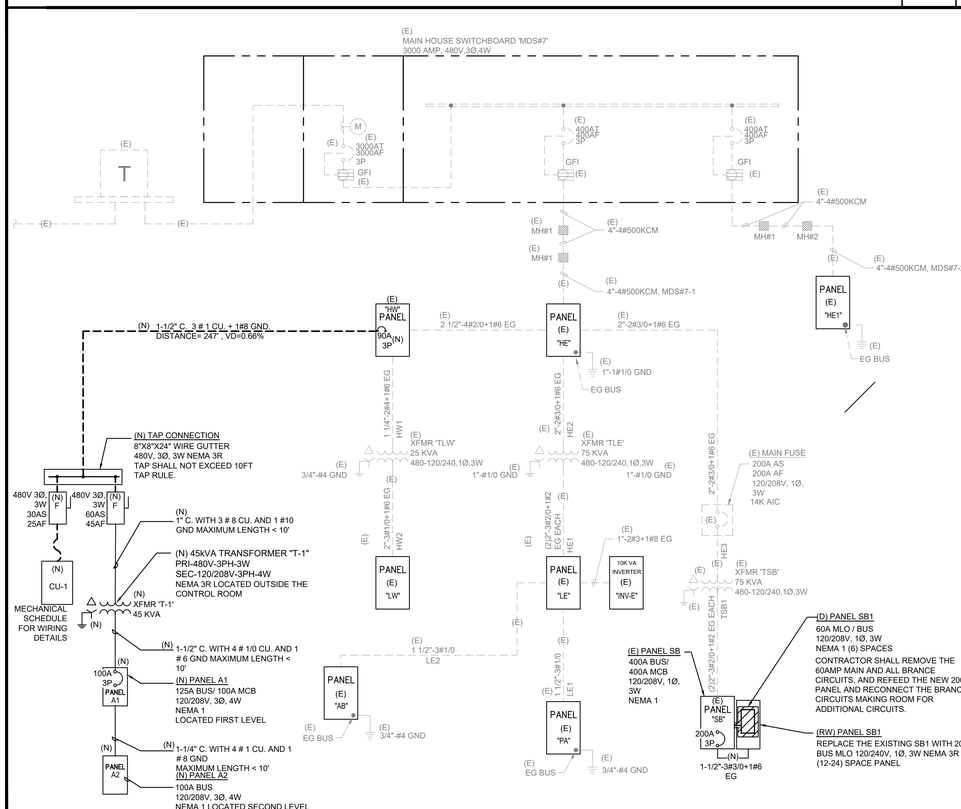
(*) GROUNDING ELECTRODE CONDUCTOR SHALL BE SIZED AS FOLLOWS:

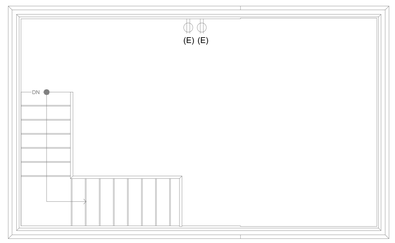
SERVICE SIZE	G.E.C. SIZE
0-200A	#4
201-400A	#1/0
OVER 400A	#3/0

NOTES:

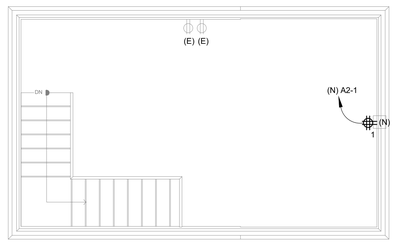
1. THE ELECTRICAL CONTRACTOR SHALL PROVIDE A GROUNDING ELECTRODE SYSTEM IN ACCORDANCE WITH NEC 250.52(A)(1) THROUGH (A)(6).
2. IF NONE OF THESE SYSTEMS ARE AVAILABLE, THEN THE ELECTRODES SPECIFIED IN NEC 250.52(A)(4) THROUGH (A)(7) SHALL BE PROVIDED.
3. IF NO EQUIPMENT GROUNDED CONDUCTOR IS PULLED IN WITH THE SERVICE CONDUCTORS THE GROUND AND NEUTRAL MUST BE ISOLATED. IF IN THE CASE WHERE A EGC IS RAN WITH THE SERVICE CONDUCTORS THE GROUND AND NEUTRAL MUST BE BONDED TOGETHER RE SECTION SECTION 250.32(B)(1)



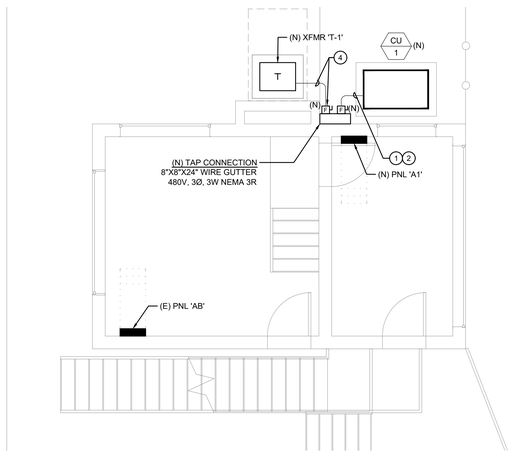

(E) MAIN HOUSE SWITCHBOARD 'MDS#7' 3000 AMP, 480V, 3Ø,4W
(E) 3000AT 3000AF 3P
GFI
(E) 400AT 300AF 3P
(E) 4"-4#500KCM
(E) MHH#1
MHH#1
MHH#2
(E) 4"-4#500KCM, MDS#7-2
(E) 4"-4#500KCM, MDS#7-1
(E) "HW" PANEL 90A 3P
(N) 1-1/2" C. 3 # 1 CU. + 1#8 GND DISTANCE= 247' , VD=0.66%
(E) 2 1/2"-4#2/0+1#6 EG
(E) PANEL "HE"
(E) 2"-2#3/0+1#6 EG
(E) 1"-1#1/0 GND
EG BUS
(E) PANEL "HE1"
(N) TAP CONNECTION 8"X8"X24" WIRE GUTTER 480V, 3Ø, 3W NEMA 3R TAP SHALL NOT EXCEED 10FT TAP RULE.
480V 3Ø, 3W 30AS 25AF
480V 3Ø, 3W 60AS 45AF
(N) CU-1
MECHANICAL SCHEDULE FOR WIRING DETAILS
(N) 1" C. WITH 3 # 8 CU. AND 1 #10 GND MAXIMUM LENGTH < 10'
(N) 45kVA TRANSFORMER "T-1" PRI-480V-3PH-3W SEC-120/208V-3PH-4W NEMA 3R LOCATED OUTSIDE THE CONTROL ROOM
(N) XFMR 'T-1' 45 KVA
(N) 1-1/2" C. WITH 4 # 1/0 CU. AND 1 # 6 GND MAXIMUM LENGTH < 10'
(N) PANEL A1 125A BUS/ 100A MCB 120/208V, 3Ø, 4W NEMA 1 LOCATED FIRST LEVEL
100A 3P
PANEL A1
(N) 1-1/4" C. WITH 4 # 1 CU. AND 1 # 8 GND MAXIMUM LENGTH < 10'
(N) PANEL A2 100A BUS 120/208V, 3Ø, 4W NEMA 1 LOCATED SECOND LEVEL
PANEL A2
1 1/4"-2#4+1#6 EG
HW1
(E) XFMR 'TLW' 25 KVA 480-120/240,1Ø,3W
(E) 3/4"-#4 GND
(E) 1"-1#1/0 GND
2"-2#3/0+1#6 EG
HE2
(E) XFMR 'TLE' 75 KVA 480-120/240,1



ELECTRICAL GRAND ARENA BOOTH THIRD FLOOR PLAN - DEMOLITION | 1/4"=1'-0" | 5

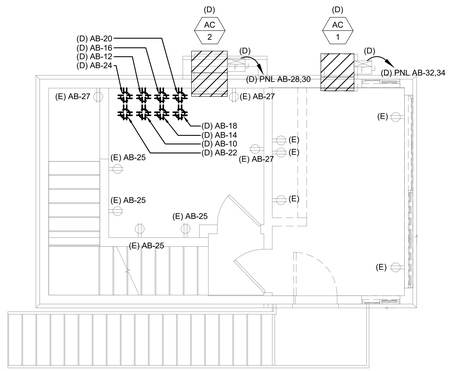


ELECTRICAL GRAND ARENA BOOTH THIRD FLOOR PLAN - NEW WORK | 1/4"=1'-0" | 4

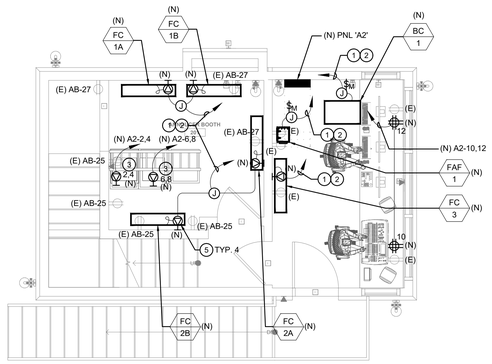


ELECTRICAL GRAND ARENA BOOTH FIRST FLOOR PLAN - NEW WORK | 1/4"=1'-0" | 3

NOTES:
1. AS-BUILT PLANS HAVE BEEN DERIVED FROM ON SITE OBSERVATION/ CONDITION AND AS-BUILT DOCUMENTS.



ELECTRICAL GRAND ARENA BOOTH SECOND FLOOR PLAN - DEMOLITION | 1/4"=1'-0" | 2



NOTE:
ALL SHOWN EQUIPMENT IS EXISTING UNLESS MARKED AS 'NEW'.

ELECTRICAL GRAND ARENA BOOTH SECOND FLOOR PLAN - NEW WORK | 1/4"=1'-0" | 1

GENERAL NOTES

1. RECEPTACLES ON COMMON WALLS SHALL BE SEPARATE BOXES AND OFFSET 12" MINIMUM. FIRE RATED WALLS SHALL HAVE AN OFFSET OF 24" MINIMUM. COORDINATE W/ ARCH'L FIRE RATED WALL DETAILS.
2. PENETRATIONS THROUGH FIRE RATED WALLS SHALL BE PROTECTED FROM THE SPREAD OF FIRE W/ AN APPROVED FIRESTOP SYSTEM EQUAL OR GREATER THAN THE FIRE RATING OF THE WALL.
3. HEIGHT OF RECEPTACLES AT COUNTER SHELVES, ETC., SHALL BE VERIFIED W/ OWNER PRIOR TO ROUGH-IN. PROVIDE G.F.C.I. TYPE RECEPTACLE WITHIN 6 FEET OF ANY SINK.
4. UNDERGROUND CONDUITS SHALL BE PVC SCHED. 40, MINIMUM 3/4"C. RUN CODE SIZE INSULATED EQUIPMENT GROUND CONDUCTOR.
5. EACH AND EVERY 15 AND 20 AMP, 120 VOLT RECEPTACLE IN KITCHEN, FOOD PREPARATION, BAR AREAS AND RESTROOMS SHALL BE GFCI TYPE PROTECTION.
6. REFER TO SINGLE LINE DIAGRAM FOR CONDUIT AND WIRE SIZES FOR PANEL BOARDS AND TRANSFORMERS.
7. 3/4" C.O. FOR EACH THERMOSTAT BACK TO EACH CORRESPONDING HVAC UNIT AND BETWEEN MECHANICAL UNITS AS NEEDED FOR CONTROLS. REFER TO MECHANICAL DRAWINGS FOR EXACT QUANTITY AND LOCATION.
8. 3/4" C.O. HOME RUN FOR EACH TELE/DATA OUTLET 6" IN THE CEILING SPACE, U.N.O.
9. 1-1/4" C.O. HOME RUN FOR EACH TELE/DATA OUTLET 6" IN THE CEILING SPACE, U.N.O.
10. COORDINATE EXACT LOCATION OF MECHANICAL EQUIPMENT AND POWER CONNECTION LOCATION WITH MECHANICAL CONTRACTOR PRIOR TO INSTALLATION. SEE MECHANICAL EQUIPMENT SCHEDULE FOR CIRCUIT DESIGNATION, CONDUIT AND WIRE SIZES ON SHEET E4.2.

DEMOLITON KEYNOTES

1 CONTRACTOR TO DISCONNECT AND REMOVE EXISTING MOTOR RATED SWITCHES AND DISCONNECTS AS SHOWN ON THE PLANS AND REUSE THE EXISTING CIRCUITRY AS REQUIRED.

KEYNOTES

1. CONTRACTOR SHALL PROVIDE NEW MOTOR-RATED SWITCHES, FUSE DISCONNECTS, SWITCHES AND CONNECTION TO HVAC EQUIPMENT. REFER TO MOTORIZED EQUIPMENT SCHEDULE.
2. REFER TO MOTORIZED EQUIPMENT SCHEDULE FOR MOTOR FEEDER/BRANCH CIRCUIT INFORMATION. GALVANIZED RIGID CONDUITS SHALL BE RAN EXPOSED AND PROTECTED PER NEC REQUIREMENTS.
3. INSTALL A 208V,2P, 30A, NEMA L6-30R OUTLET.
4. REFER TO SINGLE LINE DIAGRAM ON SHEET E-101 FOR FEEDER AND DISCONNECT INFORMATION.
5. INSTALL A 208V,2P, 15A, NEMA L6-15R OUTLET. PROVIDE 208V POWER CORD. VERIFY EXACT REQUIREMENTS WITH FAN COIL MANUFACTURER.

MECHANICAL EQUIPMENT SCHEDULE

MOTORIZED EQUIPMENT SCHEDULE

ITEM NO.	EQUIPMENT RATING VOLTS	PH.	WATT	FLA	MCA	MOCP	DISC. SW. SIZE STARTER SIZE	BR. CKT. DATA COND. - WIRE
CU 1	480	3	-	-	19.4	25	30 AS - 25 AF	SEE SINGLE LINE 3/4" C. WITH 3# 10 CU AND 1 # 10 GND
FC 1A	208	1	-	-	0.54	15	208V 2P NEMA L6-15R	PNL AB - 10,12 3/4" C. WITH 2 # 12 CU AND 1 # 12 GND
FC 1B	208	1	-	-	0.54	15	208V 2P NEMA L6-15R	PNL AB - 10,12 3/4" C. WITH 2 # 12 CU AND 1 # 12 GND
2A 1B	208	1	-	-	0.54	15	208V 2P NEMA L6-15R	PNL AB - 14,16 3/4" C. WITH 2 # 12 CU AND 1 # 12 GND
FC 2B	208	1	-	-	0.54	15	208V 2P NEMA L6-15R	PNL AB - 14,16 3/4" C. WITH 2 # 12 CU AND 1 # 12 GND
FC 3	208	1	-	-	0.44	15	208V 2P NEMA L6-15R	PNL AB - 18,20 3/4" C. WITH 2 # 12 CU AND 1 # 12 GND
BC 1	208	1	-	-	2	15	20A MOTOR RATED SWITCH	PNL AB - 28,30 3/4" C. WITH 2 # 12 CU AND 1 # 12 GND
FAF 1	120	1	-	0.30	-	15	20A MOTOR RATED SWITCH	PNL AB - 22 3/4" C. WITH 2 # 12 CU AND 1 # 12 GND

APPROVAL

CLIENT

CITY OF INDUSTRY 1957 LOS ANGELES COUNTY

15625 MAYOR DAVE WAY
CITY OF INDUSTRY, CA 91744
PHONE: 626-333-2211

PROJECT NAME

CITY OF INDUSTRY EXPO CENTER GRAND ARENA STRUCTURE AND ANNOUNCER BOOTH

16200 TEMPLE AVENUE
CITY OF INDUSTRY, CA 91744

ENGINEER/ARCHITECT

IDS GROUP

1 PETERS CANYON ROAD, SUITE 130
IRVINE, CA. 92606
TEL: 949-387-8500, FAX: 949-387-0800

STAMP

STAMP

REGISTERED PROFESSIONAL ENGINEER STEVEN M. COLLINS No. E22808 ELECTRICAL STATE OF CALIFORNIA
DATE SIGNED 08/27/2025

ISSUE

REV.	DESCRIPTION	DATE
	90% CD SET	04/30/25
	95% CD SET	08/04/25
	100% CD SET	08/29/25

PROJECT IDENTIFICATION

THIS DRAWING WAS CREATED IN AUTODESK AUTOCAD V. 2021 UNLESS OTHERWISE NOTED.

THE ORIGINAL SIZE OF THIS SHEET IS 30" X 42"

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IDS PROJECT NO.	22X060.00
DRAWN BY	NG
CHECKED BY	SM
APPROVED BY	MO

PLAN CHECK SET - NOT FOR CONSTRUCTION

SHEET TITLE

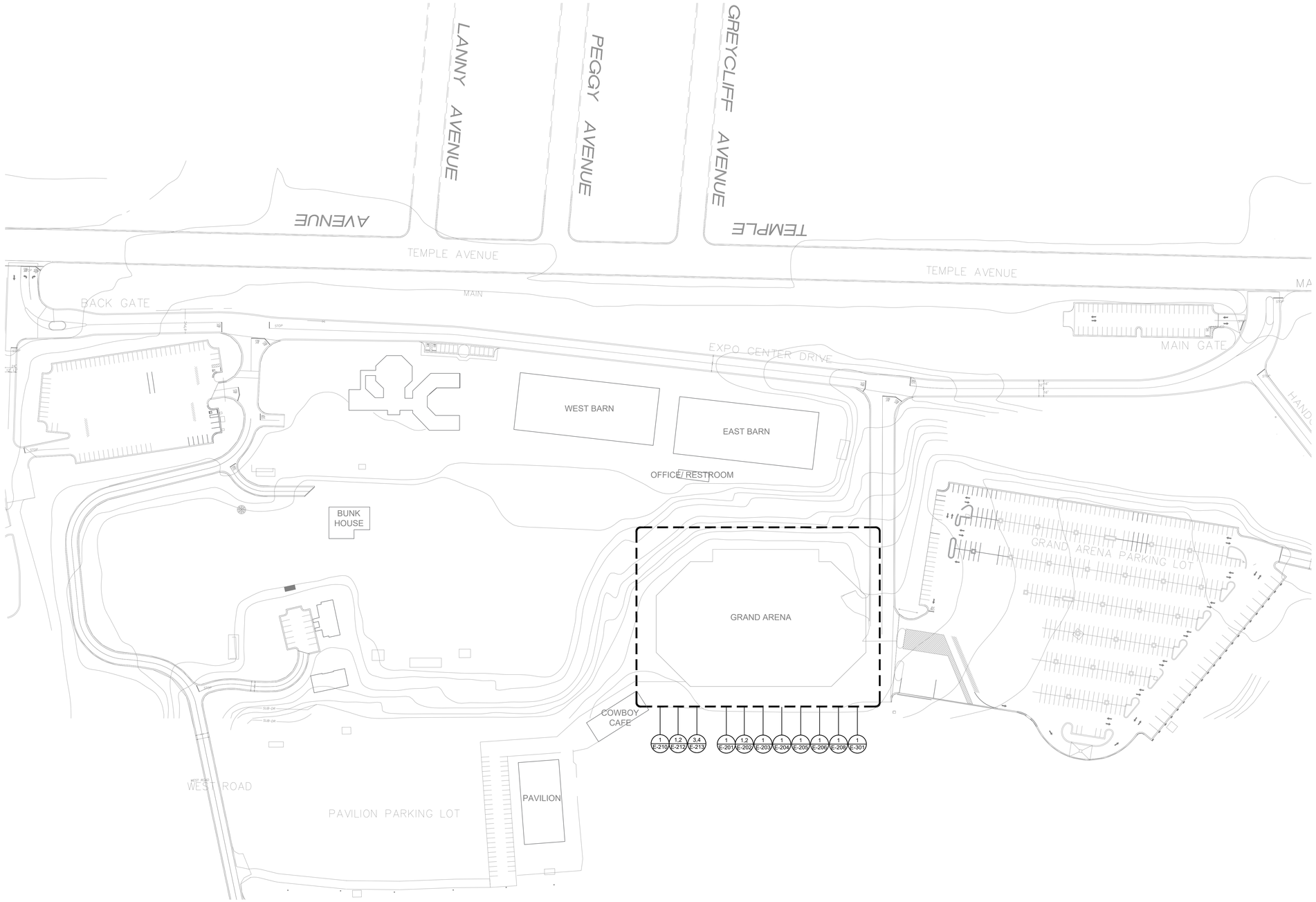
GRAND ARENA BOOTH 2ND AND 3RD FLOOR PLANS

SHEET NUMBER

E-102

SHEET NO. OF

IDS GROUP - FILE LOCATION: S:\PROJECTS\2022\SHARED\22X060.00 CITY OF INDUSTRY - EXPO CENTER - GRAND ARENA STRUCTURE & ANNOUNCER BOOTH\05 CAD\05 ELEC\22X060.00-E-102_DEMO AND NEW 2FP PLOT DATE: 8/27/2025 11:30:29 AM USER: MARGARITA.PASAYE



OVERALL SITE PLAN | 1" = 80' | 1

APPROVAL

CLIENT

15625 MAYOR DAVE WAY
CITY OF INDUSTRY, CA 91744
PHONE: 626-333-2211

PROJECT NAME

CITY OF INDUSTRY EXPO CENTER GRAND ARENA STRUCTURE AND ANNOUNCER BOOTH

16200 TEMPLE AVENUE
CITY OF INDUSTRY, CA 91744

ENGINEER/ARCHITECT

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STAMP

STAMP

REGISTERED PROFESSIONAL ENGINEER
STEVEN M. COLLINS
No. E22808
Exp. 06/30/27
ELECTRICAL
STATE OF CALIFORNIA
DATE SIGNED 08/27/2025

ISSUE		
REV.	DESCRIPTION	DATE
	90% CD SET	04/30/25
	95% CD SET	08/04/25
	100% CD SET	08/29/25

PROJECT IDENTIFICATION

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THE ORIGINAL SIZE OF THIS SHEET IS 30" X 42"

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IDS PROJECT NO.	22X060.00
DRAWN BY	NG
CHECKED BY	SM
APPROVED BY	MO

SHEET TITLE

OVERALL SITE PLAN

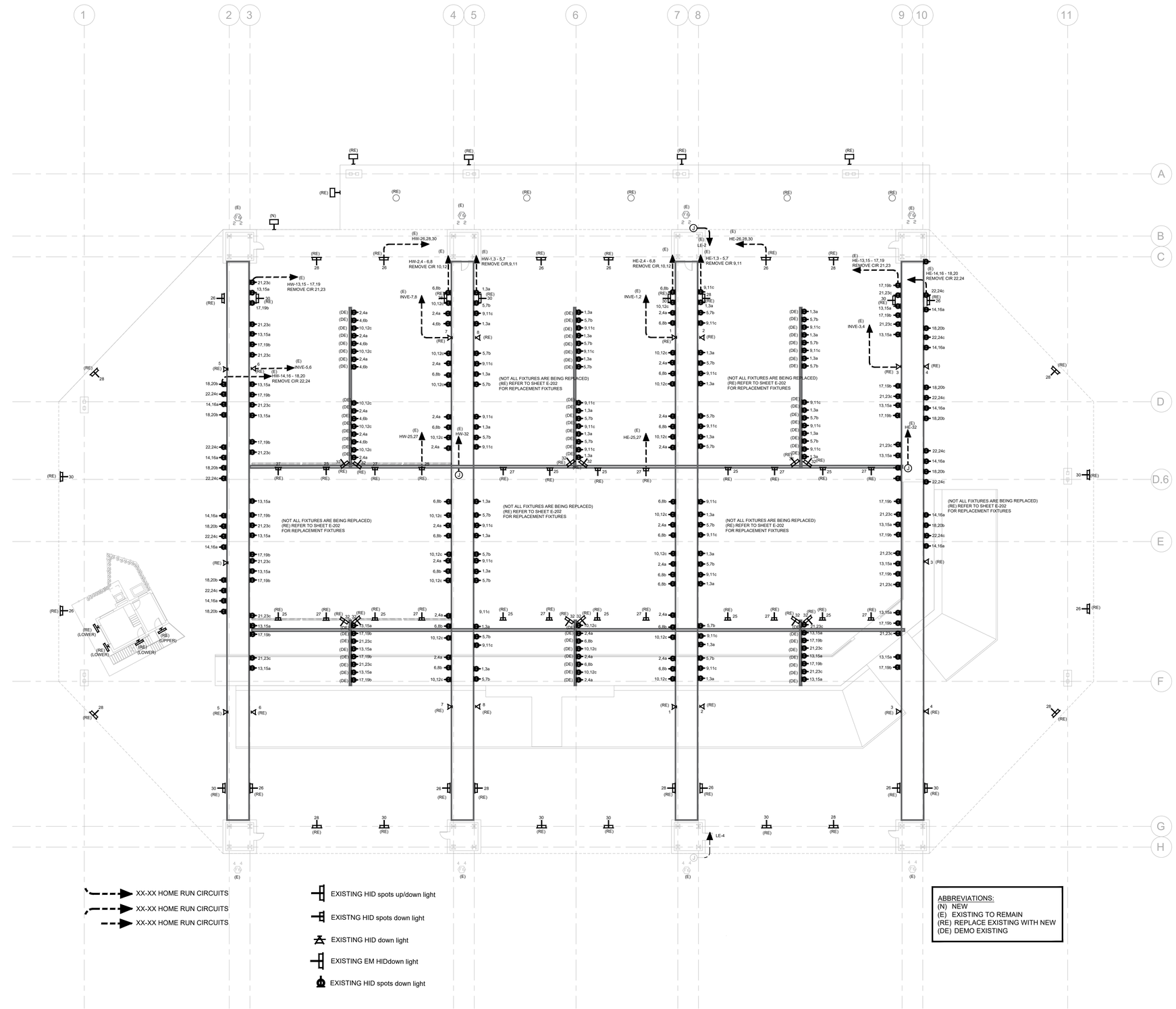
SHEET NUMBER

E-200

SHEET NO. OF

PLAN CHECK SET - NOT FOR CONSTRUCTION

IDS GROUP - FILE LOCATION: S:\PROJECTS\2022\SHARED\22X060.00 CITY OF INDUSTRY - EXPO CENTER - GRAND ARENA STRUCTURE & ANNOUNCER BOOTH\05 CAD\05 ELEC\22X060.00-E-200_OVERALL SITE PLAN PLOT DATE: 8/27/2025 11:30:49 AM USER: MARGARITA.PASAYE



ABBREVIATIONS:
(N) NEW
(E) EXISTING TO REMAIN
(RE) REPLACE EXISTING WITH NEW
(DE) DEMO EXISTING

NOTE:
ALL SHOWN EQUIPMENT IS EXISTING UNLESS MARKED AS 'NEW'.

EXISTING/ DEMOLITION LIGHTING LAYOUT FOR GRAND ARENA | 1/16"=1'-0" | 1

GENERAL NOTES

1. WORK INCLUDED: LABOR, MATERIAL, APPLIANCES, TOOLS, EQUIPMENT, FACILITIES, TRANSPORTATION AND SERVICES NECESSARY AND INCIDENTAL TO PERFORMING OPERATIONS IN CONNECTION WITH THE DEMOLITION, DISPOSAL, TRANSPORTATION AND RECONNECTION OF EXISTING REMAINING EQUIPMENT/DEVICES. COMPLETE AS INDICATED IN THE CONTRACT DOCUMENTS AS SPECIFIED HEREIN.
2. THE FOLLOWING IS INTENDED TO COVER THE COMPLETE DEMOLITION, DISPOSAL, TRANSPORTATION AND RECONNECTION OF EXISTING ELECTRICAL EQUIPMENT. THE OMISSION OF EXPRESSED REFERENCE TO ANY ITEM OF LABOR OR MATERIAL FOR THE PROPER EXECUTION OF THE WORK IN ACCORDANCE WITH PRESENT PRACTICE OF THE TRADE SHALL NOT RELIEVE THE CONTRACTOR FROM PROVIDING SUCH ADDITIONAL LABOR AND MATERIALS.
3. REFER TO THE CONTRACT DOCUMENTS FOR ADDITIONAL DEMOLITION REQUIREMENTS WHICH AFFECT THE PROPER EXECUTION OF THIS WORK. DIAGRAMS AND SYMBOLS SHOWING ELECTRICAL CONNECTIONS ARE DIAGRAMMATIC ONLY. WIRING DIAGRAMS DO NOT NECESSARILY SHOW THE EXACT PHYSICAL ARRANGEMENT OF THE EQUIPMENT.
4. IT IS THE CONTRACTOR'S RESPONSIBILITY TO VISIT THE SITE AND BECOME THOROUGHLY FAMILIAR WITH FEATURES OF THE BUILDING AND SITE WHICH MAY AFFECT THE PROPER PERFORMANCE OF THIS WORK.
5. PORTIONS OF THESE PLANS HAVE BEEN DERIVED FROM INFORMATION TAKEN FROM ORIGINAL ELECTRICAL PLANS. THE INTENT OF THE DRAWINGS AND SPECIFICATIONS IS TO PROVIDE FOR THE REMOVAL AND DISPOSAL OF ELECTRICAL EQUIPMENT, LIGHTING FIXTURES, DEVICES, OUTLET BOXES, CONDUIT, WIRING AS DEFINED HEREIN AND AS INDICATED ELSEWHERE IN THE CONTRACT DOCUMENTS.
6. IT IS UNDERSTOOD AND AGREED THAT THIS CONTRACT DOES NOT CONTEMPLATE THE HANDLING OF ASBESTOS, PCB OR ANY HAZARDOUS WASTE MATERIAL. IF ASBESTOS, PCB OR ANY HAZARDOUS WASTE MATERIAL IS ENCOUNTERED, NOTIFY THE ARCHITECT IMMEDIATELY. DO NOT DISTURB, HANDLE OR ATTEMPT TO REMOVE.
7. THE SCOPE OF DEMOLITION WORK SHALL INCLUDE, BUT IS NOT LIMITED TO THE FOLLOWING:
   a. SUBMIT PROPOSED OUTAGE SCHEDULE. PROVIDE A SEQUENCE OF DEMOLITION TO INSURE THE UNINTERRUPTED USE OF OCCUPIED PORTIONS OF THE FACILITY WHICH ARE TO REMAIN OPERATIONAL DURING THE CONTRACT PERIOD.
   b. SYSTEM OUTAGES SHALL BE PERMITTED ONLY AT TIMES APPROVED BY OWNER, IN WRITING. WORK WHICH COULD RESULT IN A ACCIDENTAL OUTAGE (BEYOND BRANCH CIRCUITS) SHALL BE PERFORMED WITH THE OWNER'S MAINTENANCE PERSONNEL ADVISED OF SUCH WORK.
   c. COORDINATE WITH THE OWNER AND DESIGNATE A PORTION OF THE FACILITY FOR SAFELY STORING REMOVED AND SALVAGED MATERIALS.
   d. REMOVED MATERIALS AND EQUIPMENT WHICH IN THE OPINION OF THE OWNER/ARCHITECT ARE SALVAGEABLE, SHALL REMAIN THE PROPERTY OF THE OWNER. DELIVER SUCH SALVAGED MATERIALS AND EQUIPMENT ON PREMISES AS DIRECTED, NEATLY PILE OR STORE THEM AND PROTECT FROM DAMAGE. DO NOT REUSE MATERIALS AND EQUIPMENT UNLESS SPECIFICALLY INDICATED ON PLANS OR SPECIFIED. REMOVE FROM PREMISES AND DISPOSE OF MATERIALS CONSIDERED BY THE OWNER/ARCHITECT TO BE SCRAP.
   e. PERFORM CUTTING AND PATCHING OF THE CONSTRUCTION WORK WHICH MAY BE REQUIRED FOR THE PROPER DEMOLITION OF THE ELECTRICAL WORK. PATCHING SHALL BE OF THE SAME MATERIAL, THICKNESS, WORKMANSHIP AND FINISH AS EXISTING AND ACCURATELY MATCH SURROUNDING WORK TO THE SATISFACTION OF THE ARCHITECT. CUTTING OF STRUCTURAL MEMBERS SHALL NOT BE DONE WITHOUT FIRST OBTAINING APPROVAL FROM THE ARCHITECT AND/OR STRUCTURAL ENGINEER OF RECORD.
   f. PATCHING OF OPENINGS IN RATED PARTITIONS, BARRIERS, FLOORS, CEILINGS SHALL BE EXECUTED USING UL AND NFPA FIRE STOP MATERIAL EQUAL TO THE FIRE RATINGS OF THE PENETRATED SURFACE.
   g. WHERE MATERIALS AND EQUIPMENT HAVE BEEN REMOVED AND NOT REPLACED THE EXPOSED SURFACE SHALL BE PAINTED TO MATCH SURROUNDING SURFACE COLOR.
   h. AS INDICATED, DISCONNECT AND REMOVE EXISTING LIGHTING FIXTURES, LIGHTING CONTROL DEVICES, HARDWARE, SUPPORT DEVICES AND ASSOCIATED RACEWAYS, CONDUCTORS AND OUTLET BOXES. WHERE OUTLET BOXES ARE FLUSH AND CONDUITS ARE CONCEALED IN EXISTING REMAINING WALLS, REMOVE WIRING, AND ABANDON CONDUIT IN PLACE.
   i. AS INDICATED, DISCONNECT AND REMOVE EXISTING ELECTRICAL EQUIPMENT, DISCONNECT SWITCHES, RECEPTACLES, MOUNTING HARDWARE AND ASSOCIATED RACEWAYS, CONDUCTORS AND OUTLET BOXES. WHERE OUTLET BOXES ARE FLUSH AND CONDUITS ARE CONCEALED IN EXISTING REMAINING WALLS, REMOVE WIRING AND ABANDON CONDUIT IN PLACE.
   j. EXCEPT AS NOTED OTHERWISE DISCONNECT AND REMOVE EXISTING FIRE ALARM SYSTEM EQUIPMENT, DEVICES, MOUNTING HARDWARE AND ASSOCIATED RACEWAYS, CONDUCTORS AND OUTLET BOXES. WHERE OUTLET BOXES ARE FLUSH AND CONDUITS ARE CONCEALED IN EXISTING REMAINING WALLS, REMOVE WIRING AND ABANDON CONDUITS IN PLACE.
   k. EXCEPT AS NOTED OTHERWISE DISCONNECT AND REMOVE EXISTING TELEPHONE SYSTEM EQUIPMENT, OUTLETS, BACKBOARDS AND ASSOCIATED RACEWAYS, CABLING AND OUTLET BOXES. WHERE OUTLET BOXES ARE FLUSH AND CONDUITS ARE CONCEALED IN EXISTING REMAINING WALLS, REMOVE CABLING AND ABANDON CONDUIT IN PLACE. MAIN TELEPHONE SERVICE BACKBOARD AND EQUIPMENT TO REMAIN UNLESS OTHERWISE NOTED.
   l. PANEL BATTERIES ARE FUNCTIONAL AND FULLY CHARGED
8. THE EXISTING FIRE ALARM SYSTEM SHALL REMAIN OPERATIONAL DURING CONSTRUCTION. VERIFY EXISTING FIRE ALARM SYSTEM REFER TO THE DRAWINGS FOR EQUIPMENT TO BE RELOCATED AND REUSED.
9. THE CONTRACTOR SHALL FIELD VERIFY EXISTING EQUIPMENT, DEVICES, AND/OR CIRCUITS THAT ARE REMAINING. CIRCUITS SHALL BE RECONNECTED TO NEW OR EXISTING POWER DISTRIBUTION EQUIPMENT AND FUNCTION IN THE MANNER THEY WERE ORIGINALLY DESIGNED. PROVIDE ADDITIONAL EQUIPMENT, DEVICES, OUTLET BOXES, CONDUIT, WIRING AS REQUIRED TO RESTORE CONTINUITY TO THESE CIRCUITS.
10. WHERE FIXTURES, EQUIPMENT, DEVICES ARE SPECIFIED BY THE CONTRACT DOCUMENTS FOR REMOVAL, THE CONTRACTOR SHALL REMOVE CIRCUIT CONDUCTORS/CABLING BACK TO THE NEAREST REMAINING JUNCTION BOX AND/OR POINT OF TERMINATION.
11. RELOCATE EXISTING CONDUITS AND/OR CONDUCTORS/CABLING ROUTING THROUGH AREAS WHERE NEW PLENUMS AND/OR ROOF OPENINGS ARE SPECIFIED.
12. PROVIDE ADDITIONAL CONDUIT, CONDUCTORS, CABLING, OUTLET BOXES AS REQUIRED FOR THE RELOCATION OF ELECTRICAL APPARATUS.
13. RELOCATION AND/OR REMOVAL OF EXISTING EQUIPMENT, DEVICES, OUTLET BOXES, CONDUIT, WIRING MAY AFFECT THE OPERATION OF EXISTING, REMAINING ELECTRICAL EQUIPMENT/DEVICES. THE CONTRACTOR SHALL PROVIDE ADDITIONAL MATERIALS AS REQUIRED TO MAINTAIN AND/OR RESTORE CONTINUITY OF SERVICE TO EXISTING, REMAINING ELECTRICAL/DEVICES.
14. PROVIDE NECESSARY DEMOLITION TO REMOVE EXISTING UNUSED RACEWAYS, CONDUCTORS, CABLING, OUTLET BOXES, RECEPTACLES, SWITCHES, EQUIPMENT.
15. WHERE IT IS NOT FEASIBLE TO REMOVE UNUSED FLUSH MOUNTED OUTLET BOXES AND CONCEALED RACEWAYS IN EXISTING, REMAINING WALLS AND/OR CEILINGS REMOVE WIRING AND PROVIDE BLANK COVER PLATES OVER OUTLET BOXES.
16. COVER UNUSED AND/OR ABANDONED OUTLETS WITH BLANK COVER PLATES.
17. SEAL ABANDONED FLOOR PENETRATIONS IN A MANNER ACCEPTABLE TO THE ARCHITECT.
18. DISCONNECT ABANDONED CIRCUITS AT EXISTING PANELBOARDS AND REMOVE WIRE TO LAST REMAINING DEVICE. LABEL ABANDONED CIRCUIT BREAKERS "SPARE".
19. EXISTING EXTERIOR LIGHTING FIXTURES, CONVENIENCE OUTLETS, SPRINKLER CONTROLLERS SHALL REMAIN. TAG EXISTING CIRCUIT CONDUCTORS FOR RECONNECTION TO NEW OR RELOCATED PANELBOARDS.
20. REFER TO THE MECHANICAL/PLUMBING DRAWINGS AND SPECIFICATIONS FOR EQUIPMENT TO BE REMOVED, DISCONNECT AND REMOVE EXISTING SAFETY/DISCONNECT SWITCHES, CONDUIT, CONDUCTORS, OUTLET BOXES, CONTROL DEVICES, RELAYS, ELECTRICAL MOUNTING HARDWARE, ETC. FOR THE PROPER DEMOLITION OF THE EQUIPMENT INDICATED FOR REMOVAL.
21. PROVIDE NEW TYPEWRITTEN DIRECTORIES FOR RE-USED PANELBOARDS THAT ARE ALTERED AS PART OF THE DEMOLITION.
22. EXISTING CIRCUITS THAT ARE REMOVED AND ARE NOT RE-USED SHALL BE IDENTIFIED ON THE PANEL DIRECTORY AS 'SPARE'.
23. THE CONTRACTOR SHALL PROVIDE CIRCUIT NUMBERS AND LOADS FOR ALL EXISTING REMAINING EQUIPMENT. PRIOR TO RECONNECTION, REASSIGN CIRCUITS AS REQUIRED. TO BALANCE LOADS EVENLY ACROSS PHASES WHEN RECONNECTED. PROVIDE COMPLETE 'AS-BUILT' DRAWINGS.

APPROVAL

CLIENT

CITY OF INDUSTRY
15625 MAYOR DAVE WAY
CITY OF INDUSTRY, CA 91744
PHONE: 626-333-2211

PROJECT NAME

CITY OF INDUSTRY EXPO CENTER GRAND ARENA STRUCTURE AND ANNOUNCER BOOTH

16200 TEMPLE AVENUE
CITY OF INDUSTRY, CA 91744

ENGINEER/ARCHITECT

IDS GROUP
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STAMP

STAMP

REGISTERED PROFESSIONAL ENGINEER
STEVEN M. COLTON
No. E22808
ELECTRICAL
STATE OF CALIFORNIA
DATE SIGNED 08/27/2025

ISSUE

REV.	DESCRIPTION	DATE
	90% CD SET	04/30/25
	95% CD SET	08/04/25
	100% CD SET	08/29/25

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IDS PROJECT NO.	22X060.00
DRAWN BY	NG
CHECKED BY	SM
APPROVED BY	MO

SHEET TITLE

GRAND ARENA EXISTING/ DEMOLITION LIGHTING LAYOUT

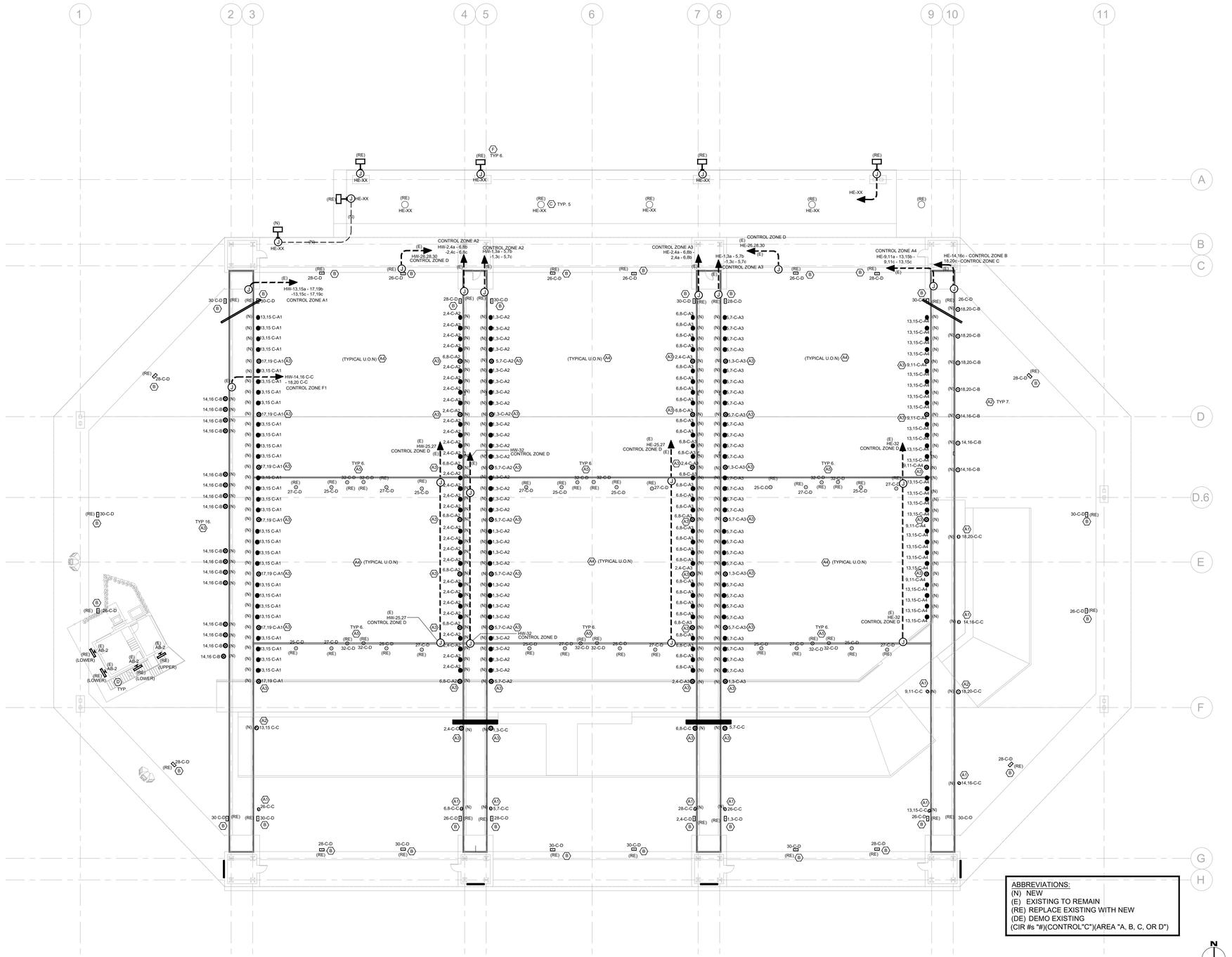
SHEET NUMBER

E-201

SHEET NO. OF

PLAN CHECK SET - NOT FOR CONSTRUCTION

IDS GROUP - FILE LOCATION: S:\PROJECTS\2022\SHARED\22X060.00 CITY OF INDUSTRY - EXPO CENTER - GRAND ARENA STRUCTURE & ANNOUNCER BOOTH\05 CAD\05 ELEC\22X060.00-E-201_212 OVERALL 1FP PLOT DATE: 8/27/2025
11:30:44 AM USER: MARGARITA.PASAYE



ABBREVIATIONS:
(N) NEW
(E) EXISTING TO REMAIN
(RE) REPLACE EXISTING WITH NEW
(DE) DEMO EXISTING
(CIR #s "#)(CONTROL"C")(AREA "A, B, C, OR D")

N

LIGHTING GENERAL NOTES

1. PROVIDE A DISCONNECTING MEANS FOR EACH MULTI-WIRE LIGHTING BRANCH CIRCUIT IN ACCORDANCE W/ NEC 410.130(G)(1) THRU (3). DISCONNECTING MEANS SHALL BE LOCATED AT POINT WHERE CIRCUIT ORIGINATES AND SHALL SIMULTANEOUSLY DISCONNECT UNGROUNDED CONDUCTORS.
2. REFER TO ARCH'L REFLECTED CEILING PLAN FOR EXACT LOCATION OF LIGHTING FIXTURES.
3. VERIFY EXACT CEILING CONSTRUCTION W/ ARCH'L REFLECTED CEILING PLAN AND PROVIDE LIGHTING FIXTURES W/ NECESSARY MOUNTING HARDWARE.
4. COORDINATE EXACT LIGHTING FIXTURE LOCATIONS W/ MECHANICAL EQUIPMENT AND DUCT WORK PRIOR TO ROUGH-IN.
5. RECESSED FIXTURES SHALL BE PROVIDED W/ REQUIRED STRUCTURAL SUPPORTS AS REQUIRED BY CURRENTLY ACCEPTED EDITION OF APPLICABLE NATIONAL, STATE, AND CITY CODES, ORDINANCES, AND AMENDMENTS.
6. DIMMING BRANCH CIRCUITS SHALL BE PROVIDED W/ A DEDICATED NEUTRAL CONDUCTOR FOR EACH ZONE/CHANNEL.
7. DIMMING ZONES/CHANNELS SHALL BE PROVIDED W/ 3 LINE VOLTAGE CONDUCTORS (NEUTRAL, DIMMED HOT, SWITCHED HOT) OR 2 LINE VOLTAGE CONDUCTORS/2 CONTROL CONDUCTORS AS REQUIRED BY THE CONTROL/BALLAST TYPE.
8. EMERGENCY BATTERY PACK FIXTURES SHALL BE PROVIDED WITH AN UNSWITCHED CONSTANT HOT CONNECTION TO THE CHARGING LEAD.
9. REFER TO ARCHITECTURAL REFLECTED CEILING PLANS FOR EXIT SIGN CHEVRONS AND NUMBER OF FACES PER EXIT SIGN. ANY DISCREPANCIES BETWEEN EXIT SIGNS SHOWN ON THE ELECTRICAL AND ARCHITECTURAL PLANS SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT PRIOR TO ORDERING EXIT SIGNS.
10. ELECTRICAL EQUIPMENT LOCATED OUTSIDE SHALL BE WEATHERPROOF.
11. LOW VOLTAGE WIRING NOT RUN IN CONDUIT SHALL BE PLENUM RATED.
12. *****PROVIDE UNIFORM DUAL LEVEL SWITCHING OF LIGHTS IN ROOMS WHERE TWO SWITCHES ARE SHOWN CONNECTED TOGETHER. CONTRACTOR TO PROVIDE NECESSARY CONDUCTORS FOR DUAL SWITCHING APPLICATIONS AS SHOWN ON PLAN.******
13. CONTRACTOR TO PROVIDE NECESSARY TRAVELER CONDUCTORS FOR 3 AND 4 WAY SWITCHING APPLICATIONS.
14. EXTERIOR BUILDING MOUNTED LIGHTING SHALL BE 2#8, 1#8 GND IN A 3/4"C, U.N.O.
15. GENERAL CONTRACTOR SHALL VERIFY CEILING FIRE RATING WITH ARCHITECT, AND BOX OR TENT RECESSED LIGHT FIXTURES, IF REQUIRED, TO MAINTAIN CEILING FIRE RATING.
16. PENETRATIONS THROUGH FIRE RATED WALLS SHALL BE PROTECTED FROM THE SPREAD OF FIRE WITH AN APPROVED FIRESTOP SYSTEM EQUAL OR GREATER THAN THE FIRE RATING OF THE WALL.

LIGHTING CONTROL

1. THE CALIFORNIA ENERGY CODE SECTION 10-103 REQUIRES ACCEPTANCE TESTING ON ALL NEWLY INSTALLED LIGHTING CONTROLS, MECHANICAL SYSTEMS, ENVELOPES, AND PROCESS EQUIPMENT AFTER INSTALLATION AND BEFORE PROJECT COMPLETION. AN ACCEPTANCE TEST IS A FUNCTIONAL PERFORMANCE TEST TO HELP ENSURE THAT NEWLY INSTALLED EQUIPMENT IS OPERATING AND IN COMPLIANCE WITH THE ENERGY CODE.
2. LIGHTING CONTROLS ACCEPTANCE TESTS MUST BE PERFORMED BY A CERTIFIED LIGHTING CONTROLS ACCEPTANCE TEST TECHNICIAN (ATT).
3. MECHANICAL SYSTEM ACCEPTANCE TESTS MUST BE PERFORMED BY A CERTIFIED MECHANICAL ATT FOR PROJECTS SUBMITTED ON OR AFTER OCTOBER 1, 2021.
4. A LISTING OF CERTIFIED ATT CAN BE FOUND AT HTTPS://WWW.ENERGY.CA.GOV/PROGRAMS-AND-TOPICS/PROGRAMS /ACCEPTANCE-TEST-TECHNICIAN-CERTIFICATION-PROVIDER-PROGRAM/ACCEPTANCE .
5. THE ACCEPTANCE TESTING PROCEDURES MUST BE REPEATED, AND DEFICIENCIES MUST BE CORRECTED BY THE BUILDER OR INSTALLING CONTRACTOR UNTIL THE CONSTRUCTION / INSTALLATION OF THE SPECIFIED SYSTEMS CONFORM AND PASS THE REQUIRED ACCEPTANCE CRITERIA.
6. PROJECT INSPECTORS WILL BE COLLECTING THE FORMS TO CONFIRM THAT THE REQUIRED ACCEPTANCE TESTS HAVE BEEN COMPLETED.

NOTE:
ALL SHOWN EQUIPMENT IS EXISTING UNLESS MARKED AS 'NEW'.

REPLACEMENT LIGHTING PLAN FOR GRAND ARENA | 1/16"=1'-0" | 1

APPROVAL

CLIENT

CITY OF INDUSTRY 1957 LOS ANGELES COUNTY

15625 MAYOR DAVE WAY
CITY OF INDUSTRY, CA 91744
PHONE: 626-333-2211

PROJECT NAME

CITY OF INDUSTRY EXPO CENTER GRAND ARENA STRUCTURE AND ANNOUNCER BOOTH

16200 TEMPLE AVENUE
CITY OF INDUSTRY, CA 91744

ENGINEER/ARCHITECT

IDS

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STAMP

STAMP

REGISTERED PROFESSIONAL ENGINEER STEVEN M. COLLINS No. E22808 ELECTRICAL STATE OF CALIFORNIA

DATE SIGNED 08/27/2025

ISSUE

REV.	DESCRIPTION	DATE
	90% CD SET	04/30/25
	95% CD SET	08/04/25
	100% CD SET	08/29/25

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IDS PROJECT NO.	22X060.00
DRAWN BY	NG
CHECKED BY	SM
APPROVED BY	MO

SHEET TITLE

GRAND ARENA REPLACEMENT LIGHTING PLAN

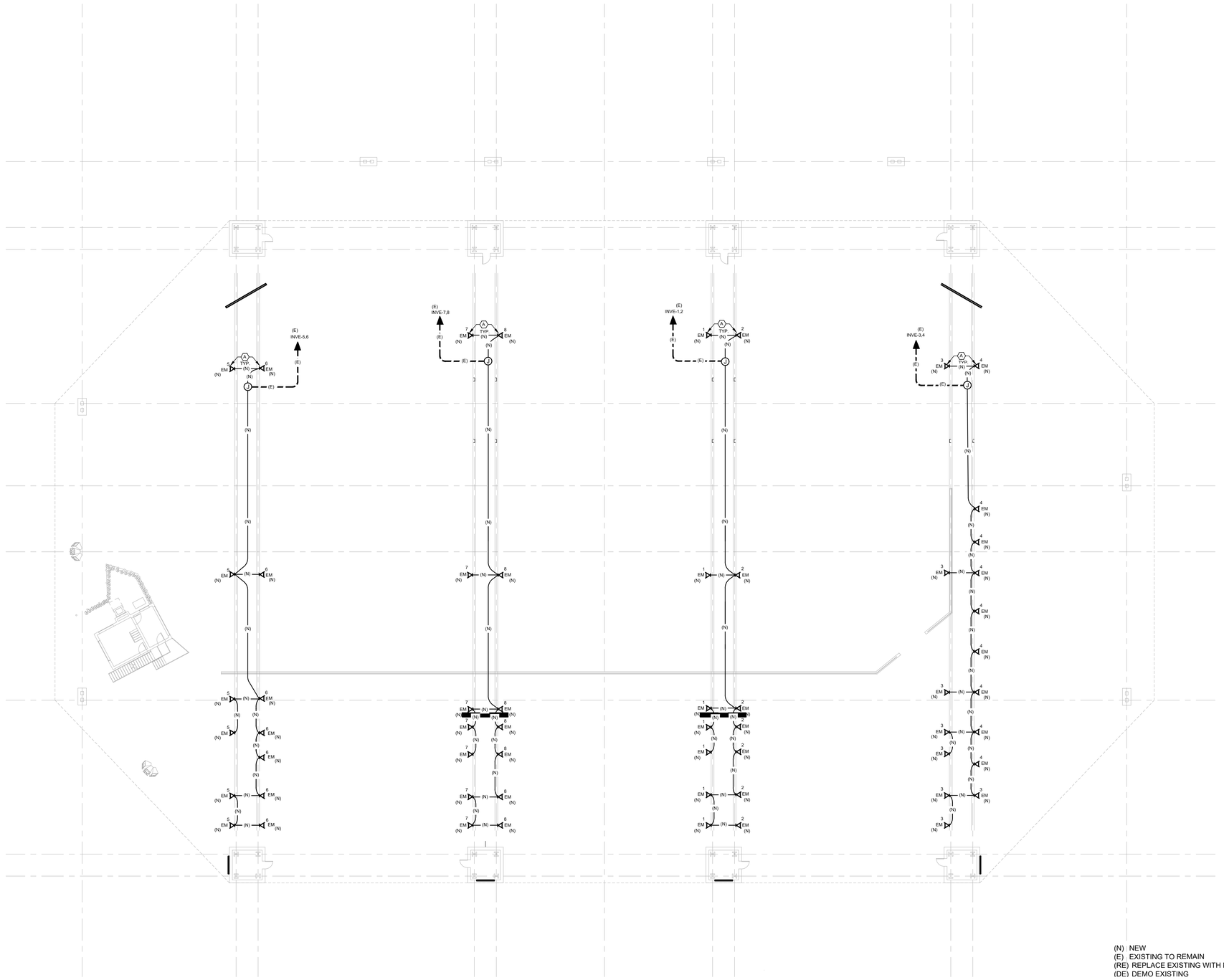
SHEET NUMBER

E-202

SHEET NO. OF

PLAN CHECK SET - NOT FOR CONSTRUCTION

IDS GROUP - FILE LOCATION: S:\PROJECTS\2022\SHARED\22X060.00 CITY OF INDUSTRY - EXPO CENTER - GRAND ARENA STRUCTURE & ANNOUNCER BOOTH\05 CAD\05 ELEC\22X060.00-E-202 OVERALL 1FP PLOT DATE: 8/27/2025 11:30:53 AM USER: MARGARITA.PASAYE



(N) NEW
(E) EXISTING TO REMAIN
(RE) REPLACE EXISTING WITH NEW
(DE) DEMO EXISTING

N

EMERGENCY LIGHTING PLAN FOR GRAND ARENA | 1/16"=1'-0" | 1

LIGHTING GENERAL NOTES

1. PROVIDE A DISCONNECTING MEANS FOR EACH MULTI-WIRE LIGHTING F1RANCH CIRCUIT IN ACCORDANCE W/ NEC 410.130(G)(1) THRU (3). DISCONNECTING MEANS SHALL F1E LOCATED AT POINT WHERE CIRCUIT ORIGINATES AND SHALL SIMULTANEOUSLY DISCONNECT UNGROUNDED CONDUCTORS.
2. REFER TO ARCH'L REFLECTED CEILING PLAN FOR EXACT LOCATION OF LIGHTING FIXTURES.
3. VERIFY EXACT CEILING CONSTRUCTION W/ ARCH'L REFLECTED CEILING PLAN AND PROVIDE LIGHTING FIXTURES W/ NECESSARY MOUNTING HARDWARE.
4. COORDINATE EXACT LIGHTING FIXTURE LOCATIONS W/ MECHANICAL EQUIPMENT AND DUCT WORK PRIOR TO ROUGH-IN.
5. RECESSED FIXTURES SHALL F1E PROVIDED W/ REQUIRED STRUCTURAL SUPPORTS AS REQUIRED F1Y CURRENTLY ACCEPTED EDITION OF APPLICAF1LE NATIONAL, STATE, AND CITY CODES, ORDINANCES, AND AMENDMENTS.
6. DIMMING F1RANCH CIRCUITS SHALL F1E PROVIDED W/ A DEDICATED NEUTRAL CONDUCTOR FOR EACH ZONE/CHANNEL.
7. DIMMING ZONES/CHANNELS SHALL F1E PROVIDED W/ 3 LINE VOLTAGE CONDUCTORS (NEUTRAL, DIMMED HOT, SWITCHED HOT) OR 2 LINE VOLTAGE CONDUCTORS/2 CONTROL CONDUCTORS AS REQUIRED F1Y THE CONTROL/F1ALLAST TYPE.
8. EMERGENCY F1ATTERY PACK FIXTURES SHALL F1E PROVIDED WITH AN UNSWITCHED CONSTANT HOT CONNECTION TO THE CHARGING LEAD.
9. REFER TO ARCHITECTURAL REFLECTED CEILING PLANS FOR EXIT SIGN CHEVRONS AND NUMF1ER OF FACES PER EXIT SIGN. ANY DISCREPANCIES F1ETWEEN EXIT SIGNS SHOWN ON THE ELECTRICAL AND ARCHITECTURAL PLANS SHALL F1E F1ROUGHT TO THE ATTENTION OF THE ARCHITECT PRIOR TO ORDERING EXIT SIGNS.
10. ELECTRICAL EQUIPMENT LOCATED OUTSIDE SHALL F1E WEATHERPROOF.
11. LOW VOLTAGE WIRING NOT RUN IN CONDUIT SHALL F1E PLENUM RATED.
12. *****PROVIDE UNIFORM DUAL LEVEL SWITCHING OF LIGHTS IN ROOMS WHERE TWO SWITCHES ARE SHOWN CONNECTED TOGETHER. CONTRACTOR TO PROVIDE NECESSARY CONDUCTORS FOR DUAL SWITCHING APPLICATIONS AS SHOWN ON PLAN.******
13. CONTRACTOR TO PROVIDE NECESSARY TRAVELER CONDUCTORS FOR 3 AND 4 WAY SWITCHING APPLICATIONS.
14. EXTERIOR F1UILDING MOUNTED LIGHTING SHALL F1E 2#8, 1#8 GND IN A 3/4"C, U.N.O.
15. GENERAL CONTRACTOR SHALL VERIFY CEILING FIRE RATING WITH ARCHITECT, AND F1OX OR TENT RECESSED LIGHT FIXTURES, IF REQUIRED, TO MAINTAIN CEILING FIRE RATING.
16. PENETRATIONS THROUGH FIRE RATED WALLS SHALL F1E PROTECTED FROM THE SPREAD OF FIRE WITH AN APPROVED FIRESTOP SYSTEM EQUAL OR GREATER THAN THE FIRE RATING OF THE WALL.

LIGHTING CONTROL

1. THE CALIFORNIA ENERGY CODE SECTION 10-103 REQUIRES ACCEPTANCE TESTING ON ALL NEWLY INSTALLED LIGHTING CONTROLS, MECHANICAL SYSTEMS, ENVELOPES, AND PROCESS EQUIPMENT AFTER INSTALLATION AND F1EFORE PROJECT COMPLETION. AN ACCEPTANCE TEST IS A FUNCTIONAL PERFORMANCE TEST TO HELP ENSURE THAT NEWLY INSTALLED EQUIPMENT IS OPERATING AND IN COMPLIANCE WITH THE ENERGY CODE.
2. LIGHTING CONTROLS ACCEPTANCE TESTS MUST F1E PERFORMED F1Y A CERTIFIED LIGHTING CONTROLS ACCEPTANCE TEST TECHNICIAN (ATT).
3. MECHANICAL SYSTEM ACCEPTANCE TESTS MUST F1E PERFORMED F1Y A CERTIFIED MECHANICAL ATT FOR PROJECTS SUF1MITTED ON OR AFTER OCTOF1ER 1, 2021.
4. A LISTING OF CERTIFIED ATT CAN F1E FOUND AT HTTPS://WWW.ENERGY.CA.GOV/PROGRAMS-AND-TOPICS/PROGRAMS /ACCEPTANCE-TEST-TECHNICIAN-CERTIFICATION-PROVIDER-PROGRAM/ACCEPTANCE .
5. THE ACCEPTANCE TESTING PROCEDURES MUST F1E REPEATED, AND DEFICIENCIES MUST F1E CORRECTED F1Y THE F1UILDER OR INSTALLING CONTRACTOR UNTIL THE CONSTRUCTION / INSTALLATION OF THE SPECIFIED SYSTEMS CONFORM AND PASS THE REQUIRED ACCEPTANCE CRITERIA.
6. PROJECT INSPECTORS WILL F1E COLLECTING THE FORMS TO CONFIRM THAT THE REQUIRED ACCEPTANCE TESTS HAVE F1EEN COMPLETED.

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APPROVAL

CLIENT

CITY OF INDUSTRY
15625 MAYOR DAVE WAY
CITY OF INDUSTRY, CA 91744
PHONE: 626-333-2211

PROJECT NAME

CITY OF INDUSTRY EXPO CENTER GRAND ARENA STRUCTURE AND ANNOUNCER BOOTH

16200 TEMPLE AVENUE
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ENGINEER/ARCHITECT

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DRAWN BY	NG
CHECKED BY	SM
APPROVED BY	MO

SHEET TITLE

GRAND ARENA EMERGENCY STANDBY LIGHTING LAYOUT

SHEET NUMBER

E-203

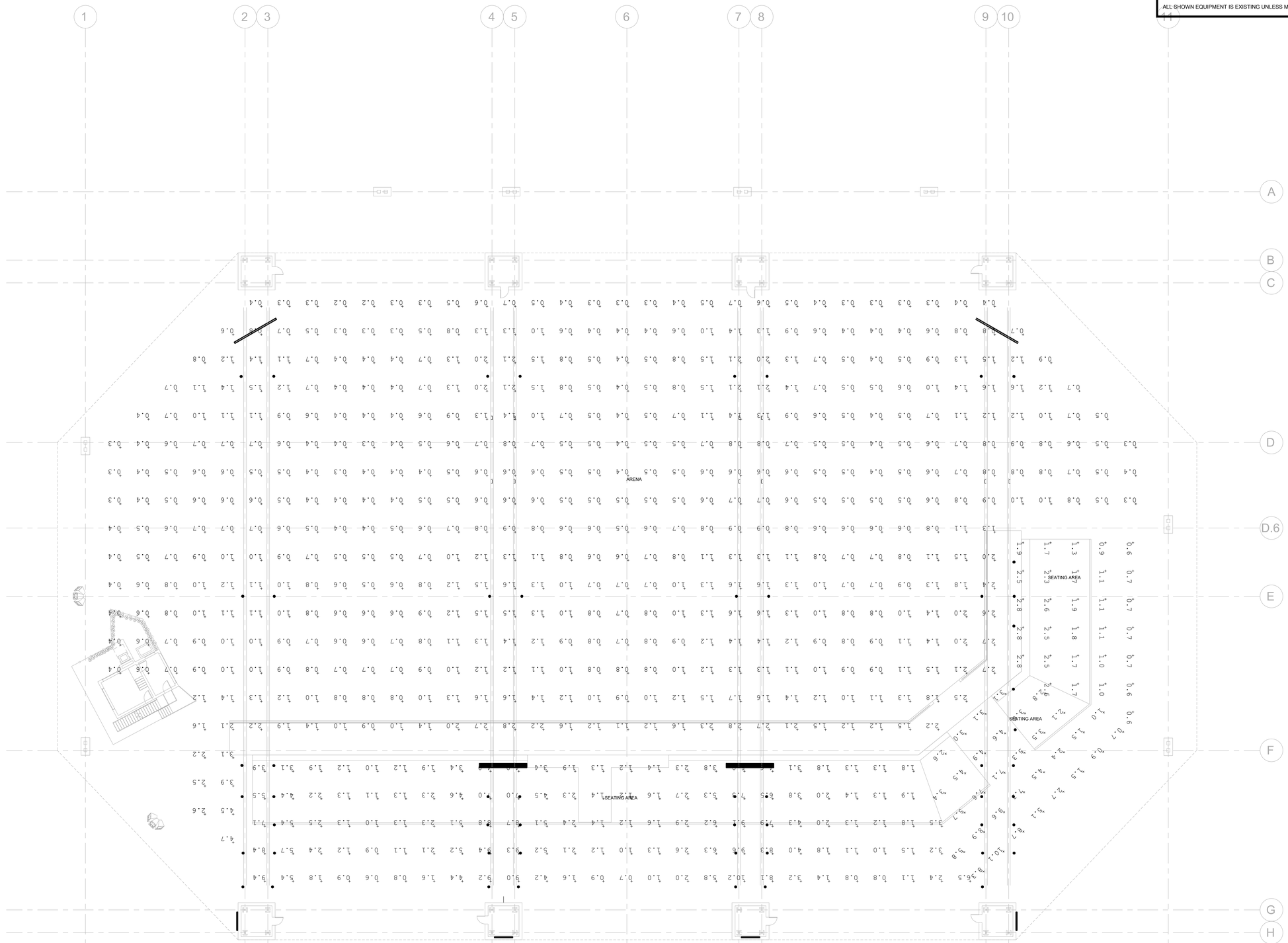
SHEET NO. OF

PLAN CHECK SET - NOT FOR CONSTRUCTION

IDS GROUP - FILE LOCATION: S:\PROJECTS\2022\SHARED\22X060.00 CITY OF INDUSTRY - EXPO CENTER - GRAND ARENA STRUCTURE & ANNOUNCER BOOTH\05 CAD\05 ELEC\22X060.00-E-201_212 OVERALL 1FP PLOT DATE: 8/27/2025
11:30:40 AM USER: MARGARITA.PASAYE

NOTE:

ALL SHOWN EQUIPMENT IS EXISTING UNLESS MARKED OTHERWISE



Calculation Summary							
Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min
Seating Area_East	Illuminance	Fc	1.60	2.8	0.6	2.67	4.67
Seating Area_South	Illuminance	Fc	3.44	10.2	0.6	5.73	17.00
Seating Area_Southeast	Illuminance	Fc	4.56	10.1	0.7	6.51	14.43
WHOLE ARENA	Illuminance	Fc	0.92	4.7	0.2	N.A.	23.50

EM LIGHTING PHOTOMETRIC STUDY FOR GRAND ARENA | 1/16"=1'-0" | 1

APPROVAL

CLIENT

CITY OF INDUSTRY
15625 MAYOR DAVE WAY
CITY OF INDUSTRY, CA 91744
PHONE: 626-333-2211

PROJECT NAME

CITY OF INDUSTRY EXPO CENTER GRAND ARENA STRUCTURE AND ANNOUNCER BOOTH

16200 TEMPLE AVENUE
CITY OF INDUSTRY, CA 91744

ENGINEER/ARCHITECT

IDS GROUP

1 PETERS CANYON ROAD, SUITE 130
IRVINE, CA. 92606
TEL: 949-387-8500, FAX: 949-387-0800

STAMP

STAMP

REGISTERED PROFESSIONAL ENGINEER
STEVEN M. COLLINS
No. E22808
ELECTRICAL
STATE OF CALIFORNIA
DATE SIGNED 08/27/2025

ISSUE

REV.	DESCRIPTION	DATE
	90% CD SET	04/30/25
	95% CD SET	08/04/25
	100% CD SET	08/29/25

PROJECT IDENTIFICATION

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IDS PROJECT NO.	22X060.00
DRAWN BY	NG
CHECKED BY	SM
APPROVED BY	MO

SHEET TITLE

GRAND ARENA EMERGENCY STANDBY PHOTOMETRIC STUDY

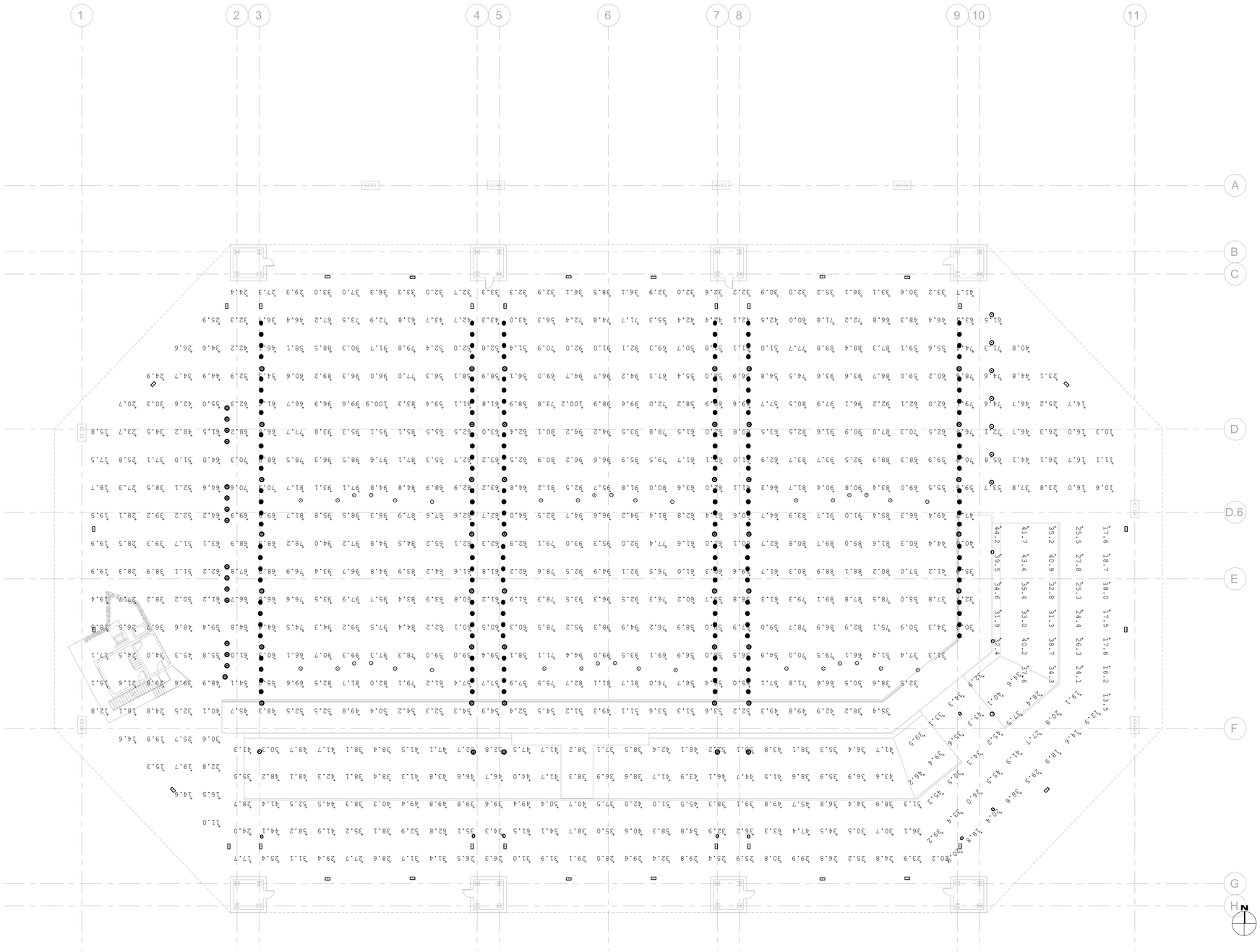
SHEET NUMBER

E-204

SHEET NO. OF

PLAN CHECK SET - NOT FOR CONSTRUCTION

IDS GROUP - FILE LOCATION: S:\PROJECTS\2022\SHARED\22X060.00 CITY OF INDUSTRY - EXPO CENTER - GRAND ARENA STRUCTURE & ANNOUNCER BOOTH\05 CAD\05 ELEC\22X060.00-E-201_212 OVERALL 1FP PLOT DATE: 8/27/2025
11:30:38 AM USER: MARGARITA.PASAYE



Calculation Summary							
Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min
Arena	Illuminance	Fc	61.98	100.9	10.3	6.02	9.80
Seating Area_East	Illuminance	Fc	29.99	44.2	13.5	2.22	3.27
Seating Area_South	Illuminance	Fc	39.69	63.3	17.7	2.24	3.58
Seating Area_Southeast	Illuminance	Fc	32.14	46.2	12.9	2.49	3.58

Luminaire Schedule					
Symbol	Qty	Label	Luminaire Lumens	Luminaire Watts	Total Watts
⊙	10	PS17-HO-40K-40	21040	224	2240
▯	34	D2X-380W-40K-ASY	38174	381	12954
⊙	9	PS17-HO-40K-60	20926	225.4	2028.6
⊙	60	PS17-HO-40K-100°	21431	224.6	13476
⊙	164	PS17-48v-HO-XQE-RGBW-20°_IESN	9255	224.7	36850.799
⊙	36	PS17-HO-XQE-RGBW-100°_1	8879	225.7	8125.2

NOTE:
ALL SHOWN EQUIPMENT IS EXISTING UNLESS MARKED NOTED

OVERALL PHOTOMETRIC STUDY FOR GRAND ARENA | 1/16"=1'-0" | 1

APPROVAL

CLIENT

CITY OF INDUSTRY
1957
LOS ANGELES COUNTY

15625 MAYOR DAVE WAY
CITY OF INDUSTRY, CA 91744
PHONE: 626-333-2211

PROJECT NAME

CITY OF INDUSTRY EXPO CENTER GRAND ARENA STRUCTURE AND ANNOUNCER BOOTH

16200 TEMPLE AVENUE
CITY OF INDUSTRY, CA 91744

ENGINEER/ARCHITECT

IDS

IDS GROUP
1 PETERS CANYON ROAD, SUITE 130
IRVINE, CA. 92606
TEL: 949-387-8500, FAX: 949-387-0800

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No. E22808
CIVIL
STATE OF CALIFORNIA

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IDS PROJECT NO.	22X060.00
DRAWN BY	NG
CHECKED BY	SM
APPROVED BY	MO

SHEET TITLE

GRAND ARENA OVERALL PHOTOMETRIC LIGHT STUDY

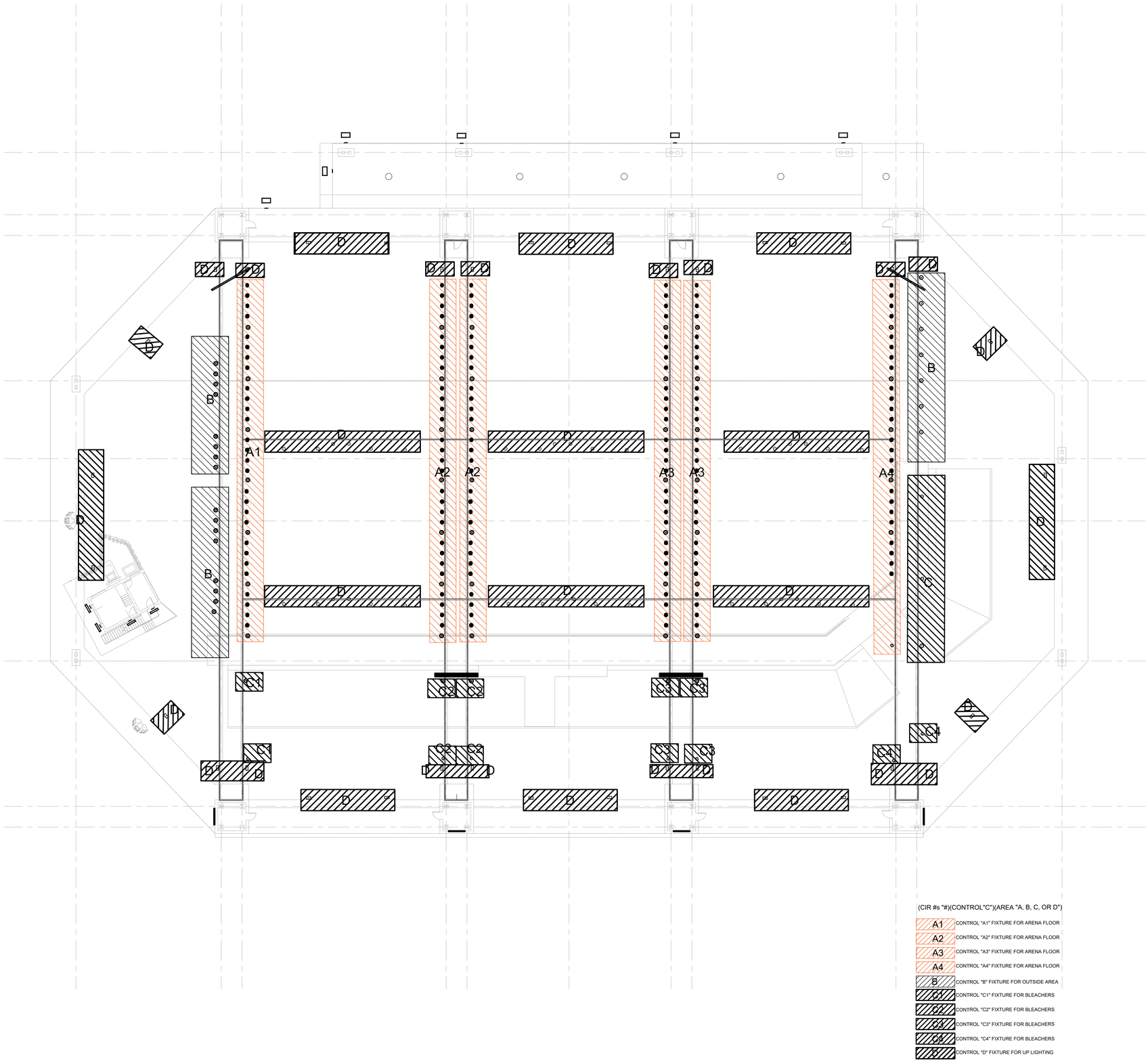
SHEET NUMBER

E-205

SHEET NO. OF

PLAN CHECK SET - NOT FOR CONSTRUCTION

IDS GROUP - FILE LOCATION: S:\PROJECTS\2022\SHARED\22X060.00 CITY OF INDUSTRY - EXPO CENTER - GRAND ARENA STRUCTURE & ANNOUNCER BOOTH\05 CAD\05 ELEC\22X060.00-E-201_212 OVERALL 1FP PLOT DATE: 8/27/2025
11:31:01 AM USER: MARGARITA.PASAYE



(CIR #s "#)(CONTROL"C")(AREA "A, B, C, OR D")

A1	CONTROL "A1" FIXTURE FOR ARENA FLOOR
A2	CONTROL "A2" FIXTURE FOR ARENA FLOOR
A3	CONTROL "A3" FIXTURE FOR ARENA FLOOR
A4	CONTROL "A4" FIXTURE FOR ARENA FLOOR
B	CONTROL "B" FIXTURE FOR OUTSIDE AREA
C1	CONTROL "C1" FIXTURE FOR BLEACHERS
C2	CONTROL "C2" FIXTURE FOR BLEACHERS
C3	CONTROL "C3" FIXTURE FOR BLEACHERS
C4	CONTROL "C4" FIXTURE FOR BLEACHERS
D	CONTROL "D" FIXTURE FOR UP LIGHTING

N

REPLACEMENT LIGHTING PLAN FOR GRAND ARENA | 1/16"=1'-0" | 1

LIGHTING GENERAL NOTES

1. PROVIDE A DISCONNECTING MEANS FOR EACH MULTI-WIRE LIGHTING BRANCH CIRCUIT IN ACCORDANCE W/ NEC 410.130(G)(1) THRU (3). DISCONNECTING MEANS SHALL BE LOCATED AT POINT WHERE CIRCUIT ORIGINATES AND SHALL SIMULTANEOUSLY DISCONNECT UNGROUNDED CONDUCTORS.
2. REFER TO ARCH'L REFLECTED CEILING PLAN FOR EXACT LOCATION OF LIGHTING FIXTURES.
3. VERIFY EXACT CEILING CONSTRUCTION W/ ARCH'L REFLECTED CEILING PLAN AND PROVIDE LIGHTING FIXTURES W/ NECESSARY MOUNTING HARDWARE.
4. COORDINATE EXACT LIGHTING FIXTURE LOCATIONS W/ MECHANICAL EQUIPMENT AND DUCT WORK PRIOR TO ROUGH-IN.
5. RECESSED FIXTURES SHALL BE PROVIDED W/ REQUIRED STRUCTURAL SUPPORTS AS REQUIRED BY CURRENTLY ACCEPTED EDITION OF APPLICABLE NATIONAL, STATE, AND CITY CODES, ORDINANCES, AND AMENDMENTS.
6. DIMMING BRANCH CIRCUITS SHALL BE PROVIDED W/ A DEDICATED NEUTRAL CONDUCTOR FOR EACH ZONE/CHANNEL.
7. DIMMING ZONES/CHANNELS SHALL BE PROVIDED W/ 3 LINE VOLTAGE CONDUCTORS (NEUTRAL, DIMMED HOT, SWITCHED HOT) OR 2 LINE VOLTAGE CONDUCTORS/2 CONTROL CONDUCTORS AS REQUIRED BY THE CONTROL/BALLAST TYPE.
8. EMERGENCY BATTERY PACK FIXTURES SHALL BE PROVIDED WITH AN UNSWITCHED CONSTANT HOT CONNECTION TO THE CHARGING LEAD.
9. REFER TO ARCHITECTURAL REFLECTED CEILING PLANS FOR EXIT SIGN CHEVRONS AND NUMBER OF FACES PER EXIT SIGN. ANY DISCREPANCIES BETWEEN EXIT SIGNS SHOWN ON THE ELECTRICAL AND ARCHITECTURAL PLANS SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT PRIOR TO ORDERING EXIT SIGNS.
10. ELECTRICAL EQUIPMENT LOCATED OUTSIDE SHALL BE WEATHERPROOF.
11. LOW VOLTAGE WIRING NOT RUN IN CONDUIT SHALL BE PLENUM RATED.
12. *****PROVIDE UNIFORM DUAL LEVEL SWITCHING OF LIGHTS IN ROOMS WHERE TWO SWITCHES ARE SHOWN CONNECTED TOGETHER. CONTRACTOR TO PROVIDE NECESSARY CONDUCTORS FOR DUAL SWITCHING APPLICATIONS AS SHOWN ON PLAN.******
13. CONTRACTOR TO PROVIDE NECESSARY TRAVELER CONDUCTORS FOR 3 AND 4 WAY SWITCHING APPLICATIONS.
14. EXTERIOR BUILDING MOUNTED LIGHTING SHALL BE 2#8, 1#8 GND IN A 3/4"C, U.N.O.
15. GENERAL CONTRACTOR SHALL VERIFY CEILING FIRE RATING WITH ARCHITECT, AND BOX OR TENT RECESSED LIGHT FIXTURES, IF REQUIRED, TO MAINTAIN CEILING FIRE RATING.
16. PENETRATIONS THROUGH FIRE RATED WALLS SHALL BE PROTECTED FROM THE SPREAD OF FIRE WITH AN APPROVED FIRESTOP SYSTEM EQUAL OR GREATER THAN THE FIRE RATING OF THE WALL.

LIGHTING CONTROL

1. THE CALIFORNIA ENERGY CODE SECTION 10-103 REQUIRES ACCEPTANCE TESTING ON ALL NEWLY INSTALLED LIGHTING CONTROLS, MECHANICAL SYSTEMS, ENVELOPES, AND PROCESS EQUIPMENT AFTER INSTALLATION AND BEFORE PROJECT COMPLETION. AN ACCEPTANCE TEST IS A FUNCTIONAL PERFORMANCE TEST TO HELP ENSURE THAT NEWLY INSTALLED EQUIPMENT IS OPERATING AND IN COMPLIANCE WITH THE ENERGY CODE.
2. LIGHTING CONTROLS ACCEPTANCE TESTS MUST BE PERFORMED BY A CERTIFIED LIGHTING CONTROLS ACCEPTANCE TEST TECHNICIAN (ATT).
3. MECHANICAL SYSTEM ACCEPTANCE TESTS MUST BE PERFORMED BY A CERTIFIED MECHANICAL ATT FOR PROJECTS SUBMITTED ON OR AFTER OCTOBER 1, 2021.
4. A LISTING OF CERTIFIED ATT CAN BE FOUND AT HTTPS://WWW.ENERGY.CA.GOV/PROGRAMS-AND-TOPICS/PROGRAMS /ACCEPTANCE-TEST-TECHNICIAN-CERTIFICATION-PROVIDER-PROGRAM/ ACCEPTANCE.
5. THE ACCEPTANCE TESTING PROCEDURES MUST BE REPEATED, AND DEFICIENCIES MUST BE CORRECTED BY THE BUILDER OR INSTALLING CONTRACTOR UNTIL THE CONSTRUCTION / INSTALLATION OF THE SPECIFIED SYSTEMS CONFORM AND PASS THE REQUIRED ACCEPTANCE CRITERIA.
6. PROJECT INSPECTORS WILL BE COLLECTING THE FORMS TO CONFIRM THAT THE REQUIRED ACCEPTANCE TESTS HAVE BEEN COMPLETED.

NOTE:
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APPROVAL

CLIENT

15625 MAYOR DAVE WAY
CITY OF INDUSTRY, CA 91744
PHONE: 626-333-2211

PROJECT NAME

CITY OF INDUSTRY EXPO CENTER GRAND ARENA STRUCTURE AND ANNOUNCER BOOTH

16200 TEMPLE AVENUE
CITY OF INDUSTRY, CA 91744

ENGINEER/ARCHITECT

IDS GROUP

1 PETERS CANYON ROAD, SUITE 130
IRVINE, CA. 92606
TEL: 949-387-8500, FAX: 949-387-0800

STAMP

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REGISTERED PROFESSIONAL ENGINEER STEVEN M. COLLINS No. E22808 ELECTRICAL STATE OF CALIFORNIA
DATE SIGNED 08/27/2025

ISSUE

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PROJECT IDENTIFICATION

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IDS PROJECT NO.	22X060.00
DRAWN BY	NG
CHECKED BY	SM
APPROVED BY	MO

SHEET TITLE

GRAND ARENA REPLACEMENT LIGHTING CONTROL PLAN

SHEET NUMBER

E-206

SHEET NO. OF

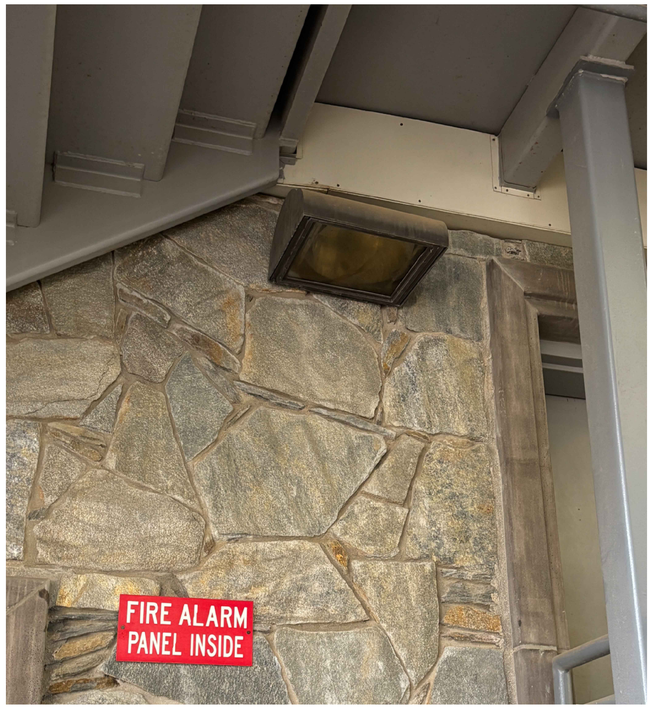
PLAN CHECK SET - NOT FOR CONSTRUCTION

IDS GROUP - FILE LOCATION: S:\PROJECTS\2022\SHARED\22X060.00 CITY OF INDUSTRY - EXPO CENTER - GRAND ARENA STRUCTURE & ANNOUNCER BOOTH\05 CAD\05 ELEC\22X060.00-E-201_212 OVERALL 1FP PLOT DATE: 8/27/2025
11:30:33 AM USER: MARGARITA.PASAYE

ANNOUNCERS BOOTH REPLACE 4.







BACK DIRT PATH AROND ARENA REPLACE 5, ADD 1.





REPLACE 5-6 DOWN LIGHTS



LIGHTING GENERAL NOTES

1. PROVIDE A DISCONNECTING MEANS FOR EACH MULTI-WIRE LIGHTING BRANCH CIRCUIT IN ACCORDANCE W/ NEC 410.130(G)(1) THRU (3). DISCONNECTING MEANS SHALL BE LOCATED AT POINT WHERE CIRCUIT ORIGINATES AND SHALL SIMULTANEOUSLY DISCONNECT UNGROUNDED CONDUCTORS.
2. REFER TO ARCH'L REFLECTED CEILING PLAN FOR EXACT LOCATION OF LIGHTING FIXTURES.
3. VERIFY EXACT CEILING CONSTRUCTION W/ ARCH'L REFLECTED CEILING PLAN AND PROVIDE LIGHTING FIXTURES W/ NECESSARY MOUNTING HARDWARE.
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LIGHTING CONTROL

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6. PROJECT INSPECTORS WILL BE COLLECTING THE FORMS TO CONFIRM THAT THE REQUIRED ACCEPTANCE TESTS HAVE BEEN COMPLETED.

NOTE:
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REPLACEMENT LIGHTING PLAN FOR GRAND ARENA | 1/16"=1'-0" | 1

APPROVAL

CLIENT

CITY OF INDUSTRY
15625 MAYOR DAVE WAY
CITY OF INDUSTRY, CA 91744
PHONE: 626-333-2211

PROJECT NAME

CITY OF INDUSTRY
EXPO CENTER
GRAND ARENA
STRUCTURE AND
ANNOUNCER
BOOTH

16200 TEMPLE AVENUE
CITY OF INDUSTRY, CA 91744

ENGINEER/ARCHITECT

IDS GROUP
1 PETERS CANYON ROAD, SUITE 130
IRVINE, CA. 92606
TEL: 949-387-8500, FAX: 949-387-0800

STAMP

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REGISTERED PROFESSIONAL ENGINEER STEVEN M. COLLINS No. E22808 ELECTRICAL STATE OF CALIFORNIA
DATE SIGNED 08/27/2025

ISSUE

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IDS PROJECT NO.	22X060.00
DRAWN BY	NG
CHECKED BY	SM
APPROVED BY	MO

SHEET TITLE

GRAND ARENA
REPLACEMENT
EXISTING OUTDOOR
LIGHTING

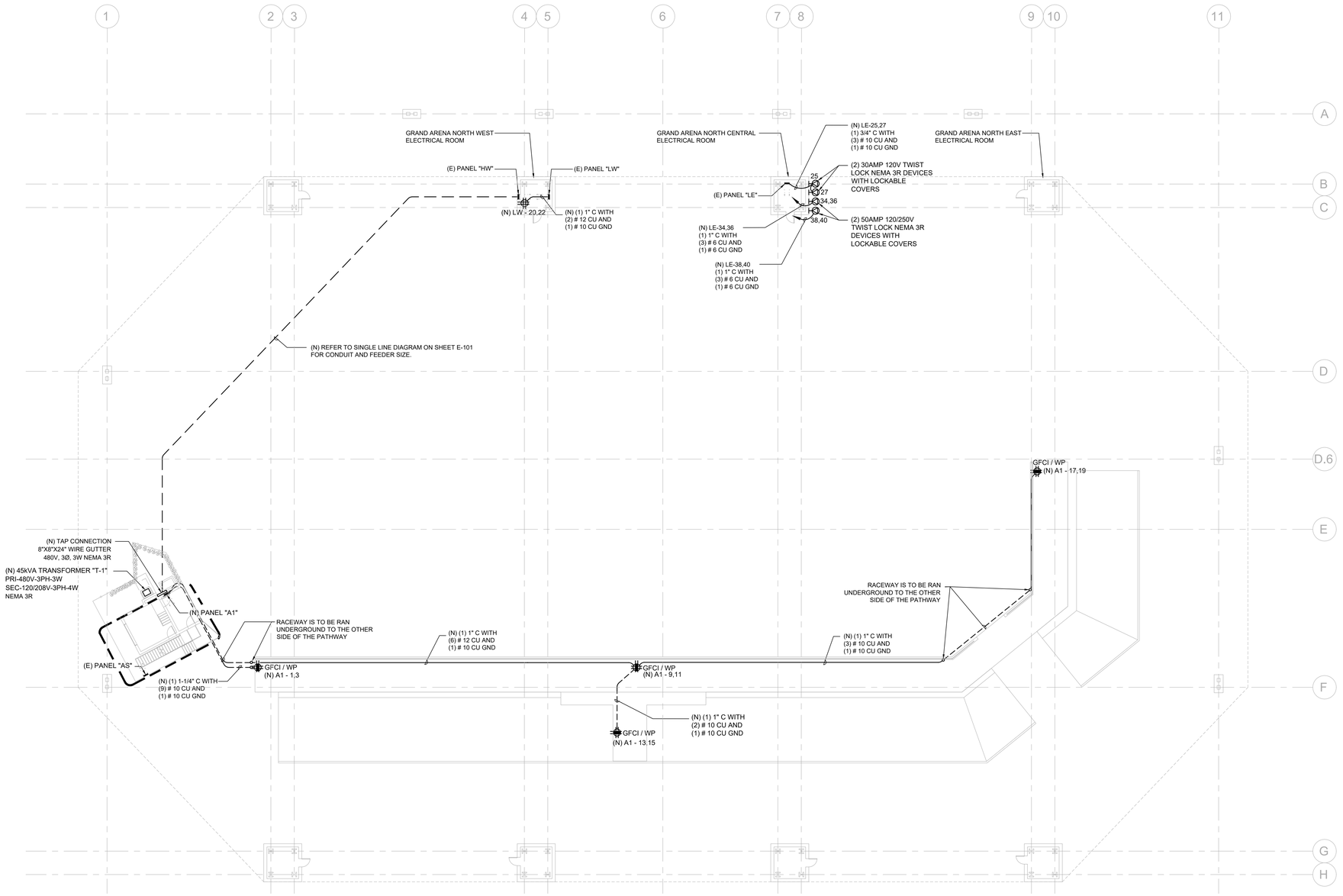
SHEET NUMBER

E-207

SHEET NO. OF

PLAN CHECK SET - NOT FOR CONSTRUCTION

IDS GROUP - FILE LOCATION: S:\PROJECTS\2022\SHARED\22X060.00 CITY OF INDUSTRY - EXPO CENTER - GRAND ARENA STRUCTURE & ANNOUNCER BOOTH\05 CAD\05 ELEC\22X060.00-E-201_212 OVERALL 1.FP PLOT DATE: 8/27/2025
11:30:56 AM USER: MARGARITA.PASAYE



POWER PLAN GENERAL NOTES

1. RECEPTACLES ON COMMON WALLS SHALL F1E SEPARATE F1OXES AND OFFSET 12" MINIMUM. FIRE RATED WALLS SHALL HAVE AN OFFSET OF 24" MINIMUM. COORDINATE W/ ARCH'L FIRE RATED WALL DETAILS.
2. PENETRATIONS THROUGH FIRE RATED WALLS SHALL F1E PROTECTED FROM THE SPREAD OF FIRE W/ AN APPROVED FIRESTOP SYSTEM EQUAL OR GREATER THAN THE FIRE RATING OF THE WALL.
3. HEIGHT OF RECEPTACLES AT COUNTER SHELVES, ETC., SHALL F1E VERIFIED W/ OWNER PRIOR TO ROUGH-IN. PROVIDE G.F.C.I. TYPE RECEPTACLE WITHIN 6 FEET OF ANY SINK.
4. UNDERGROUND CONDUITS SHALL F1E PVC SCHED. 40, MINIMUM 3/4"C. RUN CODE SIZE INSULATED EQUIPMENT GROUND CONDUCTOR.
5. EACH AND EVERY 15 AND 20 AMP, 120 VOLT RECEPTACLE IN KITCHEN, FOOD PREPARATION, F1AR AREAS AND RESTROOMS SHALL F1E GFCI TYPE PROTECTION.
6. REFER TO SINGLE LINE DIAGRAM FOR CONDUIT AND WIRE SIZES FOR PANEL F1OARDS AND TRANSFORMERS.
7. 3/4" C.O. FOR EACH THERMOSTAT F1ACK TO EACH CORRESPONDING HVAC UNIT AND F1ETWEEN MECHANICAL UNITS AS NEEDED FOR CONTROLS. REFER TO MECHANICAL DRAWINGS FOR EXACT QUANTITY AND LOCATION.
8. 3/4" C.O. HOME RUN FOR EACH TELE/DATA OUTLET 6" IN THE CEILING SPACE, U.N.O.
9. 1-1/4" C.O. HOME RUN FOR EACH TELE/DATA OUTLET 6" IN THE CEILING SPACE, U.N.O.
10. COORDINATE EXACT LOCATION OF MECHANICAL EQUIPMENT AND POWER CONNECTION LOCATION WITH MECHANICAL CONTRACTOR PRIOR TO INSTALLATION. SEE MECHANICAL EQUIPMENT SCHEDULE FOR CIRCUIT DESIGNATION, CONDUIT AND WIRE SIZES ON SHEET E4.2.

NOTE:
ALL SHOWN EQUIPMENT IS EXISTING UNLESS MARKED AS 'NEW'.

N

POWER PLAN FOR GRAND ARENA | 1/16"=1'-0" | 1

APPROVAL

CLIENT

CITY OF INDUSTRY
15625 MAYOR DAVE WAY
CITY OF INDUSTRY, CA 91744
PHONE: 626-333-2211

PROJECT NAME

CITY OF INDUSTRY EXPO CENTER GRAND ARENA STRUCTURE AND ANNOUNCER BOOTH

16200 TEMPLE AVENUE
CITY OF INDUSTRY, CA 91744

ENGINEER/ARCHITECT

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IDS PROJECT NO.	22X060.00
DRAWN BY	NG
CHECKED BY	SM
APPROVED BY	MO

SHEET TITLE

GRAND ARENA GROUND POWER PLAN

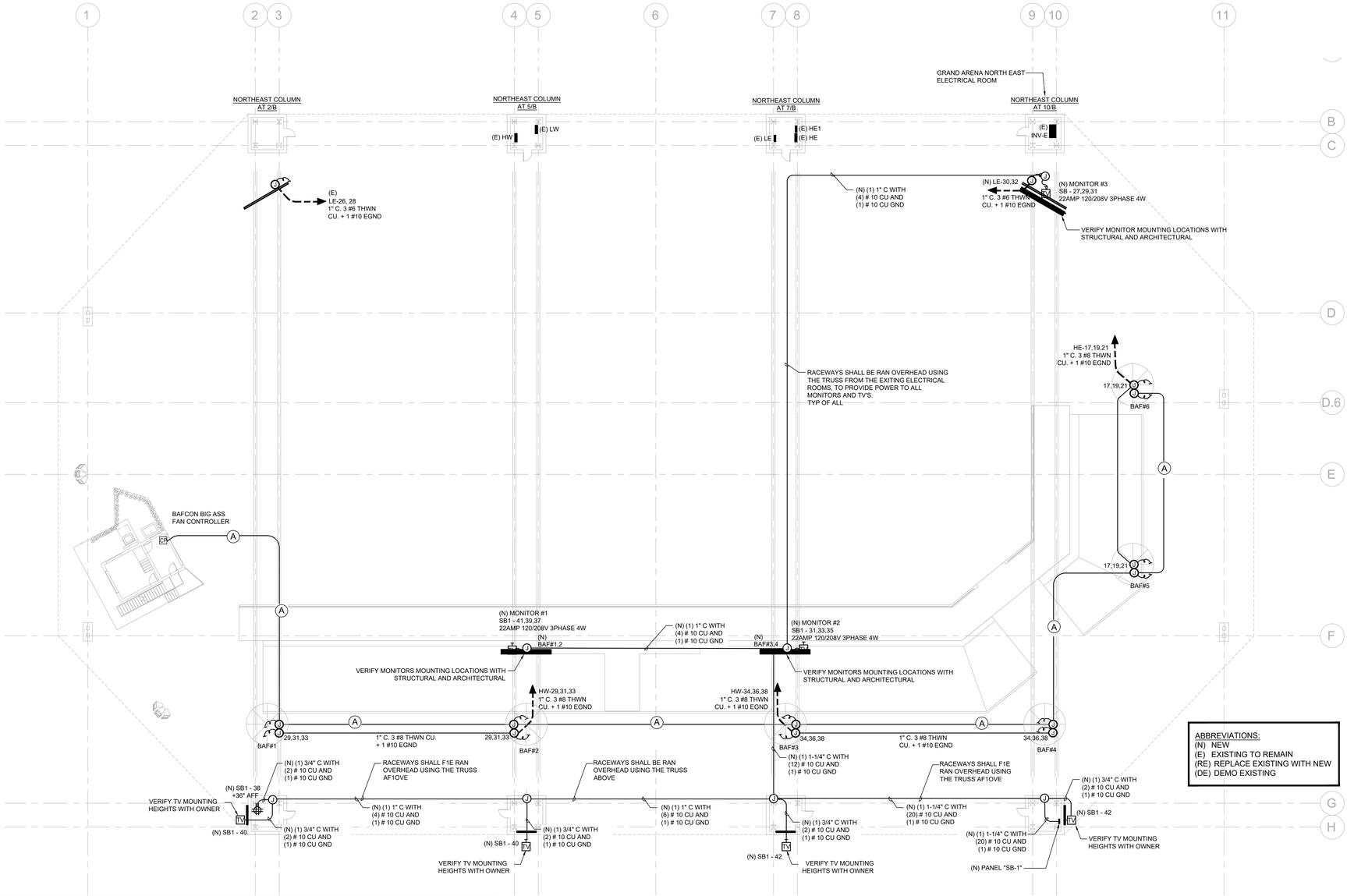
SHEET NUMBER

E-208

SHEET NO. OF

PLAN CHECK SET - NOT FOR CONSTRUCTION

IDS GROUP - FILE LOCATION: S:\PROJECTS\2022\SHARED\22X060.00 CITY OF INDUSTRY - EXPO CENTER - GRAND ARENA STRUCTURE & ANNOUNCER BOOTH\05 CAD\05 ELEC\22X060.00-E-201_212 OVERALL 1FP PLOT DATE: 8/27/2025 11:30:47 AM USER: MARGARITA.PASAYE



EXISTING PANEL "SB"

MOUNTING SURFACE | DOUBLE LUG NO | Volts: 120/208V | MAIN 400A MCB
NEMA 3R NO | 200% NO | Phases: 1 | BUS 400
FEED THRU NO | I/G BUS NO | Wires: 3 | A.I.C. 10,000

NOTES	LOADS	CIRC	LOCATION	TRIP	POLES	A	B	A	B	POLES	TRIP	LOCATION	CIRC	LOADS	NOTES
	L	1	(E) LED WALL	20A	1	900		900		1	20A	(E) LED WALL	2	L	
	L	3	(E) LED WALL	20A	1		900		900	1	20A	(E) LED WALL	4	L	
	R	5	(E) EXISTING LOAD POLE	20A	1	900		900		1	20A	(E) LED WALL	6	L	
	R	7	(E) EXISTING LOAD POLE	20A	1		900		900	1	20A	(E) LED WALL	8	L	
	R	9	(E) EXISTING LOAD POLE	20A	1	900		900		1	20A	(E) LED WALL	10	L	
	R	11	(E) EXISTING LOAD POLE	20A	1		900		1080	1	20A	(E) ELECTRIC ROOM	12	R	
	R	13	(E) EXISTING LOAD POLE	20A	1	900		900		1	20A	(E) ELECTRIC ROOM	14	R	
	R	15	(E) EXISTING LOAD POLE	20A	1		900		900	2	30A	(E) EXISTING FUTURE RECEPTICAL LOAD	16	R	
	R	17	(E) EXISTING LOAD COLUMN	20A	1	900		900					18	R	
	R	19	(E) EXISTING FUTURE RECEPTICAL LOAD	30A	2		900		900	2	30A	(E) EXISTING FUTURE RECEPTICAL LOAD	20	R	
	R	21				900		1080					22	R	
	R	23	(E) EXISTING FUTURE RECEPTICAL LOAD	30A	2		2440		1440	2	30A	(E) EXISTING FUTURE RECEPTICAL LOAD	24	R	
	R	25				2440		1440					26	R	
	R	27	(E) EXISTING FUTURE RECEPTICAL LOAD	30A	2		2440		1440	1	20A	(E) ELECTRC ROOM	28	R	
	R	29				2440		1440		2	30A	(E) EXISTING FUTURE RECEPTICAL LOAD	30	R	
	R	31	(E) EXISTING FUTURE RECEPTICAL LOAD	30A	2		2440		1440				32	R	
	R	33				2440		1440				(E) ELECTRC ROOM	34	R	
	R	35	(E) EXISTING FUTURE RECEPTICAL LOAD	30A	2		2440		4160	2	50A	(E) EXISTING FUTURE RECEPTICAL LOAD	36	R	
	R	37				2440		4160					38	R	
	R	39	(E) EXISTING FUTURE RECEPTICAL LOAD	60A	3		4992		**16918**	2	200A	**New Sub Panel SB-1**	40	P	
	R	41				4992		**17418**					42	P	

	ØA	ØB
TOTAL DEMAND LOAD:	39761	37612
TOTAL DEMAND AMPS:	331	313

95% PERCENT BALANCE

LOAD CLASSIFICATION	CONNECTED LOAD	DEMAND FACTOR	ESTIMATED DEMAND	PANEL LOADS	
CONTINUOUS LOAD = C	0	125%	0		
KITCHEN EQUIPMENT LOAD = K	0	100%	0	TOTAL CONN. LOAD (VA):	100960
LIGHTING LOAD = L	6300	125%	7875	TOTAL EST. DEMAND (VA):	77373
MOTOR LOAD = M	0	100%	0	TOTAL CONN. (AMPS):	485
NON-CONTINUOUS LOAD = N	0	100%	0	TOTAL EST. DEMAND (AMPS):	372
PANEL LOAD = P	34336	100%	34336		
RECEPTACLE LOAD = R	60324	58%	35162		

PANEL SCHEDULE NOTES:

1. PROVIDE LOCK-ON DEVICE.
2. PROVIDE LOCK-OFF DEVICE.
3. CIRCUIT BREAKER CONTROLLED BY ANSUL SYSTEM. REFER TO HOOD FIRE SYSTEM INTERLOCK DIAGRAM.
4. PROVIDE GFCI TYPE DEVICE.
5. PROVIDE A RED CIRCUIT BREAKER.
6. PROVIDE A NEW BREAKER TO EXISTING TYPE AND A.I.C. RATING IN PANEL
7. PROVIDE "HACR" TYPE CIRCUIT BREAKER. FOR HVAC EQUIPMENT.
8. PROVIDE PHOTOCELL AND TIME CLOCK CLOCK WITH RELAYS FOR EXTERIO LIGHITNG CONTROL. REFER TO EXTERIOR LIGHTING CONTROL DIAGRAM.
9. EXISTING BREAKER
10. CIRCUIT MADE AVAILABLE THROUGH DEMOLITION

EXISTING PANEL "SB-1"

MOUNTING SURFACE | DOUBLE LUG NO | Volts: 120/208V | MAIN 200A MLO
NEMA 3R NO | 200% NO | Phases: 1 | BUS 200
FEED THRU NO | I/G BUS NO | Wires: 3 | A.I.C. 10,000

NOTES	LOADS	CIRC	LOCATION	TRIP	POLES	A	B	A	B	POLES	TRIP	LOCATION	CIRC	LOADS	NOTES
	P	1	(E) FIRE SYSTEM	20A	1	500		4992		2	60A	(E) FREEZER AND STORAGE	2	P	
	P	3	(E) RECEPT. TEMP	30A	2		1446		4992				4	P	
	P	5				1446							6		
	P	7	(E) RECEPT. TEMP	20A	1		900						8		
	P	9	(E) RECEPT. TEMP	20A	1	900		**500**		1	20A	**NEW - OUTDOOR TV MONITOR GFCI**	10	P	
	C	11	**NEW DISLAY MONITORS**	**40A**	**2**		**3432**		**500**	1	20A	**NEW - OUTDOOR TV MONITOR GFCI**	12	P	
	C	13				**3432**		**500**		1	20A	**NEW - OUTDOOR TV MONITOR GFCI**	14	P	
	C	15	**NEW DISLAY MONITORS**	**40A**	**3**		**3432**		**500**	1	20A	**NEW - OUTDOOR TV MONITOR GFCI**	16	P	
	C	17				**3432**							18		
		19											20		
		21											22		
		23											24		

	ØA	ØB
TOTAL DEMAND LOAD:	17418	16918
TOTAL DEMAND AMPS:	145	141

97% PERCENT BALANCE

LOAD CLASSIFICATION	CONNECTED LOAD	DEMAND FACTOR	ESTIMATED DEMAND	PANEL LOADS	
CONTINUOUS LOAD = C	13728	125%	17160		
KITCHEN EQUIPMENT LOAD = K	0	100%	0	TOTAL CONN. LOAD (VA):	30904
LIGHTING LOAD = L	0	125%	0	TOTAL EST. DEMAND (VA):	34336
MOTOR LOAD = M	0	100%	0	TOTAL CONN. (AMPS):	149
NON-CONTINUOUS LOAD = N	0	100%	0	TOTAL EST. DEMAND (AMPS):	165
PANEL LOAD = P	17176	100%	17176		
RECEPTACLE LOAD = R	0	100%	0		

PANEL SCHEDULE NOTES:

1. PROVIDE LOCK-ON DEVICE.
2. PROVIDE LOCK-OFF DEVICE.
3. CIRCUIT BREAKER CONTROLLED BY ANSUL SYSTEM. REFER TO HOOD FIRE SYSTEM INTERLOCK DIAGRAM.
4. PROVIDE GFCI TYPE DEVICE.
5. PROVIDE A RED CIRCUIT BREAKER.
6. PROVIDE A NEW BREAKER TO EXISTING TYPE AND A.I.C. RATING IN PANEL
7. PROVIDE "HACR" TYPE CIRCUIT BREAKER. FOR HVAC EQUIPMENT.
8. PROVIDE PHOTOCELL AND TIME CLOCK CLOCK WITH RELAYS FOR EXTERIO LIGHITNG CONTROL. REFER TO EXTERIOR LIGHTING CONTROL DIAGRAM.
9. EXISTING BREAKER
10. CIRCUIT MADE AVAILABLE THROUGH DEMOLITION

ABBREVIATIONS:
(N) NEW
(E) EXISTING TO REMAIN
(RE) REPLACE EXISTING WITH NEW
(DE) DEMO EXISTING

NOTE:
ALL SHOWN EQUIPMENT IS EXISTING UNLESS MARKED AS 'NEW'.

POWER PLAN GENERAL NOTES

1. RECEPTACLES ON COMMON WALLS SHALL BE SEPARATE BOXES AND OFFSET 12" MINIMUM. FIRE RATED WALLS SHALL HAVE AN OFFSET OF 24" MINIMUM. COORDINATE W/ ARCH'L FIRE RATED WALL DETAILS.
2. PENETRATIONS THROUGH FIRE RATED WALLS SHALL BE PROTECTED FROM THE SPREAD OF FIRE W/ AN APPROVED FIRESTOP SYSTEM EQUAL OR GREATER THAN THE FIRE RATING OF THE WALL.
3. HEIGHT OF RECEPTACLES AT COUNTER SHELVES, ETC., SHALL BE VERIFIED W/ OWNER PRIOR TO ROUGH-IN. PROVIDE G.F.C.I. TYPE RECEPTACLE WITHIN 6 FEET OF ANY SINK.
4. UNDERGROUND CONDUITS SHALL BE PVC SCHED. 40, MINIMUM 3/4"C. RUN CODE SIZE INSULATED EQUIPMENT GROUND CONDUCTOR.
5. EACH AND EVERY 15 AND 20 AMP, 120 VOLT RECEPTACLE IN KITCHEN, FOOD PREPARATION, BAR AREAS AND RESTROOMS SHALL BE GFCI TYPE PROTECTION.
6. REFER TO SINGLE LINE DIAGRAM FOR CONDUIT AND WIRE SIZES FOR PANEL BOARDS AND TRANSFORMERS.
7. 3/4" C.O. FOR EACH THERMOSTAT BACK TO EACH CORRESPONDING HVAC UNIT AND BETWEEN MECHANICAL UNITS AS NEEDED FOR CONTROLS. REFER TO MECHANICAL DRAWINGS FOR EXACT QUANTITY AND LOCATION.
8. 3/4" C.O. HOME RUN FOR EACH TELE/DATA OUTLET 6" IN THE CEILING SPACE, U.N.O.
9. 1-1/4" C.O. HOME RUN FOR EACH TELE/DATA OUTLET 6" IN THE CEILING SPACE, U.N.O.
10. COORDINATE EXACT LOCATION OF MECHANICAL EQUIPMENT AND POWER CONNECTION LOCATION WITH MECHANICAL CONTRACTOR PRIOR TO INSTALLATION. SEE MECHANICAL EQUIPMENT SCHEDULE FOR CIRCUIT DESIGNATION, CONDUIT AND WIRE SIZES ON SHEET E4.2.

KEY NOTES

(A) THE BAFCON CONTROLLER SHALL BE USED TO DAISY CHAIN EACH PFX4 BACK TO ONE CONTROLLER WHILE STILL RETAINING INDIVIDUAL CONTROL OVER EACH FAN AND TYING INTO BUILDING AUTOMATION.

THE STANDARD CAT5 PROVIDED IS ACCEPTABLE UP TO 150'. FOR RUNS LONGER THAN 150', USE A 568B CAT5.

CONTRACTOR SHALL INSTALL 3/4" C.WITH CAT5 CABLE.

SEE SHEET E-301 FOR PFX4 FAN CUT SHEET. SEE SHEET E-211 FOR PFX4 FAN CONTROL PANEL 'ARP16 FANS'.

POWER PLAN FOR GRAND ARENA | 1/16"=1'-0" | 1

APPROVAL

CLIENT

CITY OF INDUSTRY
15625 MAYOR DAVE WAY
CITY OF INDUSTRY, CA 91744
PHONE: 626-333-2211

PROJECT NAME

CITY OF INDUSTRY EXPO CENTER GRAND ARENA STRUCTURE AND ANNOUNCER BOOTH

16200 TEMPLE AVENUE
CITY OF INDUSTRY, CA 91744

ENGINEER/ARCHITECT

IDS GROUP
1 PETERS CANYON ROAD, SUITE 130
IRVINE, CA. 92606
TEL: 949-387-8500, FAX: 949-387-0800

STAMP

STAMP

REGISTERED PROFESSIONAL ENGINEER STEVEN M. COLLINS No. E22808 ELECTRICAL STATE OF CALIFORNIA
DATE SIGNED 08/27/2025

ISSUE

REV.	DESCRIPTION	DATE
	90% CD SET	04/30/25
	95% CD SET	08/04/25
	100% CD SET	08/29/25

PROJECT IDENTIFICATION

THIS DRAWING WAS CREATED IN AUTODESK AUTOCAD V. 2021 UNLESS OTHERWISE NOTED.

THE ORIGINAL SIZE OF THIS SHEET IS 30" X 42"

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IDS PROJECT NO.	22X060.00
DRAWN BY	NG
CHECKED BY	SM
APPROVED BY	MO

SHEET TITLE

GRAND ARENA UPPER POWER PLAN

SHEET NUMBER

E-208.1

SHEET NO. OF

PLAN CHECK SET - NOT FOR CONSTRUCTION

IDS GROUP - FILE LOCATION: S:\PROJECTS\2022\SHARED\22X060.00 CITY OF INDUSTRY - EXPO CENTER - GRAND ARENA STRUCTURE & ANNOUNCER BOOTH\05 CAD\05 ELEC\22X060.00-E-201_212 OVERALL 1FP PLOT DATE: 8/27/2025
11:30:42 AM USER: MARGARITA.PASAYE

CAD/05 ELEC\22X060.00-E-201_212 OVERALL 1FP PLOT DATE: 8/27/2025

IDS GROUP - FILE LOCATION: S:\PROJECTS\2022\SHARED\22X060.00 CITY OF INDUSTRY - EXPO CENTER - GRAND ARENA STRUCTURE & ANNOUNCER BOOTH\05 CAD\E LE
11:30:57 AM USER: MARGARITA.PASAYE

insight lighting AEM

PROSPOT 6

PERFORMANCE PROJECTOR | WHITE LIGHT + STATIC COLORS

PROJECT: TYPE: CAT. #: PS6 Q DMXFX

PROFILE

LIGHT SOURCE	MEDIUM (15 W), HIGH (30 W)
OPTICS	5°, 10°, 20°, 40°, 60°, 100°, WALL WASH HSL
WHITE CCT	2200K, 2700K, 3000K, 3500K, 4000K
STATIC COLOR	RED, GREEN, BLUE, AMBER
HORTICULTURE	LIFTED FULL SPECTRUM
PERFORMANCE	UP TO 85.5 LM/W, 92,427 PEAK CANDELA
VOLTAGE	120V OR 277V
POWER	INTEGRATED POWER SUPPLY
CABLE COLOR	BLACK, WHITE OPTION
CONTROL	0-10V, DMX
WEIGHT	7 LBS
EPA (NO ACCESSORY)	FRONT: 0.27 FT², SIDE: 0.16 FT²
HOUSING	HEAVY DUTY A380 DIE-CAST ALUMINUM
LENS	TEMPERED GLASS
FINISH	HIGH DURABILITY POWDER COATING
WARRANTY	5-YEAR LIMITED
OPERATING TEMP	-40° C TO 50° C
LUMEN MAINTENANCE	100,000 HOURS
CERTIFICATION	ETL, CETL IP66, IK09; 3G OPTION - COMPLIES WITH 3LY AMERICAN ACT OPTION



FINISHES

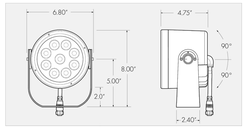
TEXTURED WHITE · TEXTURED BLACK · TEXTURED BRONZE · TEXTURED L BRONZE · TEXTURED GRAY · TEXTURED S.STONE

OPTICS

Not all available optics shown

5° · 10° · 20° · 40° · 60° · 100° · ASYMMETRIC WALL WASH · HSL

PROFILE



OPTIONS



VISOR · SNOOT · WIREGUARD

Revised January 20, 2025
Specifications subject to change without notice

1/10

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PROSPOT 17

PERFORMANCE PROJECTOR | WHITE LIGHT + STATIC COLORS

PROJECT: TYPE: CATALOG #: PS17

PERFORMANCE

OPTIC	CCT	MEDIUM OUTPUT (150 W) LUMENS (LM)	MEDIUM OUTPUT (150 W) EFFICACY (LM/W)	MEDIUM OUTPUT (150 W) PEAK CANDELA CBCP	HIGH OUTPUT (225 W) LUMENS (LM)	HIGH OUTPUT (225 W) EFFICACY (LM/W)	HIGH OUTPUT (225 W) PEAK CANDELA CBCP
4°	4000K	17,723 LM	114.3 LM/W	885866 CBCP	22,816 LM	102.5 LM/W	1,202,507 CBCP
10°	4000K	14,570 LM	93.2 LM/W	451144 CBCP	19,144 LM	85.9 LM/W	599,248 CBCP
20°	4000K	15,222 LM	99.1 LM/W	134,448 CBCP	17,881 LM	72.0 LM/W	138,493 CBCP
40°	4000K	15,584 LM	101.5 LM/W	27,164 CBCP	20,647 LM	91.7 LM/W	182,794 CBCP
60°	4000K	15,878 LM	103.7 LM/W	5,978 CBCP	21,427 LM	95.4 LM/W	8,077 CBCP
100°	4000K	12,948 LM	84.56 LM/W	61,283 CBCP	19,688 LM	87.8 LM/W	93,089 CBCP

THE ABOVE DATA IS FOR 0-10V DIMMING. MULTIPLY THE 0-10V DATA BY 0.80 (LU) FOR DMX DIMMING ON ALL WHITE LIGHT.

ALL INSIGHT WHITE LIGHT IES FILES ARE CALCULATED WITH 4000K. FOR ESTIMATIONS OF ADDITIONAL CCTS, PLEASE USE THE FOLLOWING MULTIPLIERS:

	2700K MULTIPLIER	3000K MULTIPLIER	3500K MULTIPLIER
LUMEN MULTIPLIERS	0.87	0.90	0.95

MULTIPLY THE 4000K LUMEN DATA BY THE ABOVE MULTIPLIERS

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PROSPOT 17

PERFORMANCE PROJECTOR | WHITE LIGHT + STATIC COLORS

PROJECT: TYPE: CATALOG #: PS17

SPECIFICATION

Separate options with dashes

PS17 [ ] [2] [3] [4] [5] [6] [7] [8] [9]

[1] FIXTURE
PROSPOT 17 PS17

[2] WATTAGE
MEDIUM OUTPUT 150W MO
HIGH OUTPUT 225W HO

[3] CCT
2200K 22K
2700K 27K
3000K 30K
3500K 35K
4000K 40K
RED R
GREEN G
BLUE B
AMBER A
LIFTED FULL SPECTRUM LFS
For horticulture applications only.
LFS is only available with 0-10V dimming.

[4] OPTICAL DISTRIBUTION
4° 4
10° 10
20° 20
30° 30
40° 40
60° 60
100° 100
4"X60° 460
10"X60° 1060
60°X10° 6010
20"X60° 2060
60°X20° 6020
40"X60° 4060
60"X40° 6040
WALL WASH WW
Wall Wash is not available with DMX Dimming

[5] MOUNTING
TRUNNION TR
30 AND 136.37 rated
EXTENDED ARM EXA-X
Extended arm (wall or ground mount).
For arm length, see page 5 for details
TR and EXA require a leader cable.
Must order separately. See below for details
PENDANT PNS-X
Ceiling canopy is painted to match fixture unless otherwise specified.
X= pendant length, see page 5 for details

[6] VOLTAGE
120V 120
208V 208
220V 220
240V 240
277V 277
347V 347
Contact factory for 347V black cable/flying lead only

[7] CONTROLS
0 - 10V DIMMING DIM
Dimming controls to be supplied by others
DMX DIMMING DMXDM
All fixtures are shipped from the factory with default set at address 1.
Fixtures are not pre-addressed or labeled at the factory. A DMXCAT tool is required for on-site fixture resolution and addressing. Must be ordered separately. See control options below.
A CDS/RDM Distribution Kit is required. Must be ordered separately. See control options below.
Contact factory for 347V black cable/flying lead only
DMX controls are required. Must be ordered separately.

[8] FINISH
TEXTURED WHITE TW
TEXTURED GREY TGR
TEXTURED BLACK TB
TEXTURED BRONZE TBR
TEXTURED LIGHT BRONZE TLB
TEXTURED NATURAL TN
TEXTURED SANDSTONE TS
CUSTOM COLOR CC
Contact factory for custom color. Additional charges will apply.

[9] OPTIONS
VISOR ACCESSORY VS
Field installable
SNOOT ACCESSORY SN
Field installable
WIRE GUARD ACCESSORY WG
2.38" DIA. POLE ADAPTOR PA2
Field installable. Available with Trunnion mount only.
4"-6.5" POLE MOUNT PM-X
Field installable for Ø4.0" - Ø6.5" O.D. poles.
Available with Trunnion mount only.
X = Specify outside pole diameter. See list below.
- PM-4.0-4.5 (Ø4.0"-4.5" O.D. poles)
- PM-4.5-5.0 (Ø4.5"-5.0" O.D. poles)
- PM-5.0-5.5 (Ø5.00"-5.5" O.D. poles)
- PM-5.5-6.0 (Ø5.50"-6.0" O.D. poles)
- PM-6.0-6.5 (Ø6.0"-6.5" O.D. poles)

2.38" TENON ADAPTOR TA2
Field installable. Available with Trunnion mount only.
4.00" TENON ADAPTOR TA4
Field installable. Available with Trunnion mount only.
CORROSION RES. FINISH CRF
CRF Complies with ASTM B117. CRF is suggested for coastal or extreme exterior environments.
SWIVEL CANOPY SC
For use with indoor pendant mount only
WHITE CABLES WC
White fixtures are provided with white cables as standard. Black fixtures are provided with black cables unless WC option is specified. Not available with 347V or 480V.
TAMPER PROOF HARDWARE TP

DMX TOOLS & CABLE OPTIONS (ORDER SEPARATELY)

DMX DISTRIBUTION KIT & ADDRESSING TOOL - REQUIRED FOR DMX DIMMING
DMX/RDM DISTRIBUTION KIT - IP67 CDS-RDM
DMX/RDM Distribution Kit consists of four outputs.
Each output is limited to (1) 1 set per output - up to 32 fixtures max
Four terminators are included for end of line termination.

REMOTE DMX/RDM ADDRESSING AND MONITORING TOOL DMXCAT
DMXCAT Remote Addressing and Monitoring Tool uses Bluetooth LE technology for communication with the smart-phone/applications (up to 30' range). Allows for on-site fixture resolution and addressing.
Contact factory for Wireless DMX/RDM.

LEADER CABLES - REQUIRED FOR TR AND EXA MOUNTINGS See page 8.1
5.0 FT LEADER CABLE LC-5
10.0 FT LEADER CABLE LC-10

EXTERIOR T-CONNECTORS - REQUIRED FOR PLUG & PLAY
PLUG AND PLAY CONNECTION T-CONNECTOR EL11899-2-B

EXTERIOR JUMPER CABLES (FOR LINE VOLTAGE ONLY) - OPTIONAL
1.0 FT JUMPER CABLE EL11899-1
2.0 FT JUMPER CABLE EL11899-2
5.0 FT JUMPER CABLE EL11899-5
10.0 FT JUMPER CABLE EL11899-10
25.0 FT JUMPER CABLE EL11899-25
White fixtures are provided with white cables. Black cables are provided for all other finishes unless WC option is specified.
Cables are not rated for direct burial. See local codes for installation. Cables are not available with 347V or 480V.

Revised January 20, 2025
Specifications subject to change without notice

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PROSPOT 17

PERFORMANCE PROJECTOR | WHITE LIGHT + STATIC COLORS

PROJECT: TYPE: CATALOG #: PS17

PROFILE

LIGHT SOURCE	MEDIUM (150W), HIGH (225 W)
OPTICS	4°, 10°, 30°, 20°, 40°, 60°, 100°, WALL WASH 4"X60°, 10"X60°, 20"X60°, 40"X60°
WHITE CCT	2200K, 2700K, 3000K, 3500K, 4000K
STATIC COLOR	RED, GREEN, BLUE, AMBER, FULL SPECTRUM
PERFORMANCE	UP TO 1,202,507 PEAK CANDELA
VOLTAGE	120V, 208V, 220V, 240V, 277V
POWER	INTEGRATED POWER SUPPLY
CABLE COLOR	WHITE OR BLACK
DIMMING	0-10V, DMX
WEIGHT	56 LBS (23.4 KG)
EPA	FRONT: 1.958 FT², SIDE:0.748 FT², SIDE WITH SNOOT: 1.299 FT² (TOTAL), SIDE WITH VISOR: 1.012 FT² (TOTAL)
HOUSING	HEAVY DUTY A380 DIE-CAST ALUMINUM
LENS	TEMPERED GLASS
FINISH	HIGH DURABILITY POWDER COATING
WARRANTY	5-YEAR LIMITED
OPERATING TEMP	-40° C TO 50° C
LUMEN MAINTENANCE	100,000 HOURS
CERTIFICATION	ETL , CETL, IP66, IK09; OPTIONAL 3G



STANDARD FINISHES

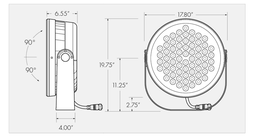
TEXTURED WHITE · TEXTURED BLACK · TEXTURED BRONZE · TEXTURED L BRONZE · TEXTURED GRAY · TEXTURED S. STONE

OPTICS

Not all available optics shown

4° · 10° · 20° · 30° · 40° · 60° · 80° · WALL WASH · 3"X60° · 10"X90° · 20"X90° · 40"X90° · CENTRAL BEAM · LATERAL BEAM

PROFILE



OPTIONS



VISOR · SNOOT · WIREGUARD

Revised January 20, 2025
Specifications subject to change without notice

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insight lighting B D2

INDIRECT ASYMMETRIC | WHITE LIGHT

PROJECT: TYPE: CAT. #: D2

PROFILE

OUTPUT	200 W, 300 W, 380 W
DISTRIBUTION	ASYMMETRIC INDIRECT
CCT	2700K, 3000K, 3500K, 4000K
CRI	80 CRI
VOLTAGE	UNIVERSAL 120-277V (347V OPTIONAL)
POWER	INTEGRATED POWER SUPPLY
CONTROL	0-10V (DIMS DOWN TO 10%)
WEIGHT	40 LBS (18.1 KG)
HOUSING	EXTRUDED ALUMINUM HOUSING
LENS	TEMPERED GLASS
FINISH	HIGH DURABILITY POWDER COATING
WARRANTY	5-YEAR LIMITED
OPERATING TEMP	-40° C TO 50° C (380W -40° TO 40°C)
LUMEN MAINTENANCE	84,000 HOURS
CERTIFICATION	ETL AND cETL FOR DRY LOCATION IP66 OPTION



FINISHES

TEXTURED WHITE · TEXTURED BLACK · TEXTURED BRONZE · TEXTURED L BRONZE · TEXTURED GRAY · TEXTURED S. STONE

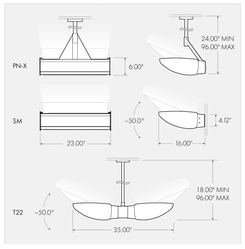
OPTICS

ASYMMETRIC

PERFORMANCE SUMMARY

4000K	LUMENS	EFFICACY
200.0 W	20145 LM	103.01 LM/W
300.0 W	34084 LM	110.01 LM/W
380.0 W	38174 LM	100.01 LM/W

DIMENSIONS



Revised Rev.02/20/25
Specifications subject to change without notice

1/1

insight lighting
4341 Fulcrum Way NE, Rio Rancho New Mexico 87144
P: 505.345.0888 | insightlighting.com

insight lighting B D2

INDIRECT ASYMMETRIC | WHITE LIGHT

PROJECT: TYPE: CAT. #: D2

SPECIFICATION

Separate options with dashes

D2 [ ] [2] [3] [4] [5] [6] [7] [8]

[1] FIXTURE
D2 INTERIOR D2
For exterior use see IP66 option
For use in natatorium applications use CRF and IP66 options

[2] WATTAGE
200 W 200
300 W 300
380 W 380
380 W maximum 40°C ambient temperature
See D1 for lower wattages

[3] CCT
2700K 27K
3000K 30K
3500K 35K
4000K 40K

[4] MOUNTING
SURFACE/WALL SM
PENDANT SINGLE FIXTURE PN-X
X = specify pendant length (24" min, 96" max)
PENDANT TWIN FIXTURE T22-X
X = specify pendant length (24" min, 90° max)
See options for Swivel Canopy
Ceiling canopies are painted semi-gloss white

[5] VOLTAGE
120V 120
277V 277
347V 347
Contact factory for 347V

[6] CONTROLS
NON-DIMMING NO
0-10V DIMMING DIM
Dims to 10%. Contact factory for 1% dimming.
Dimming controls to be supplied by others.
Dimming controls to be supplied by others.

[7] FINISH
TEXTURED WHITE TW
TEXTURED BLACK TB
TEXTURED BRONZE TBR
TEXTURED LIGHT BRONZE TLB
TEXTURED GRAY TG
TEXTURED SANDSTONE TS
CUSTOM COLOR CC
Contact factory for custom color - additional charges will apply

[8] OPTIONS
SWIVEL CANOPY SC
For use with PN and T22 mounting options
COLUMN MOUNT CM-X
Contact factory for column mount
IP66 RATING IP66
For exterior use
CORROSION RESISTANT FINISH CRF
CRF is recommended for natatorium applications, coastal, and extreme exterior environments

Revised Rev.02/20/25
Specifications subject to change without notice

2/3

insight lighting
4341 Fulcrum Way NE, Rio Rancho New Mexico 87144
P: 505.345.0888 | insightlighting.com

alphabet

C

PROJECT INFORMATION
JOB NAME TYPE
ORDERING CODE

NU6

6" Round Downlight Standard White

NSF · AT airtight · DF dead-front · PR prismcore · wet-rated



Trim

eldoLED · CASAMBI · ELIGHT

30° - 70° BEAM
(Note: Specifications are subject to change without notice)
29mm COB PERFORMANCE DATA

LED LIGHT ENGINE	NOMINAL DELIVERED LUMENS	SYSTEM WATTAGE
10LM	880LM @30K/80CRI	9W
15LM	1200LM @30K/80CRI	14W
20LM	1660LM @30K/80CRI	17W
25LM	2000LM @30K/80CRI	20W
40LM	3180LM @30K/80CRI	32W
50LM	4225LM @30K/80CRI	43W
10LM	740LM @30K/90CRI	9W
15LM	1014LM @30K/90CRI	14W
20LM	1402LM @30K/90CRI	17W
25LM	1690LM @30K/90CRI	20W
35LM	2168LM @30K/90CRI	29W
40LM	2687LM @30K/90CRI	32W
50LM	3570LM @30K/90CRI	43W
Notes	Delivered lumens based on HE60 optic, (see page 2)	

10° BEAM
(Note: Specifications are subject to change without notice)
9mm COB PERFORMANCE DATA

LED LIGHT ENGINE	NOMINAL DELIVERED LUMENS	SYSTEM WATTAGE
10LM	855LM @30K/80CRI	11W
15LM	1265LM @30K/80CRI	15W
20LM	1600LM @30K/80CRI	22W
25LM	1985LM @30K/80CRI	27W
30LM	2490LM @30K/80CRI	35W
35LM	2840LM @30K/80CRI	43W
40LM	3290LM @30K/80CRI	54W
10LM	722LM @30K/90CRI	11W
15LM	1070LM @30K/90CRI	15W
20LM	1350LM @30K/90CRI	22W
25LM	1677LM @30K/90CRI	27W
30LM	2105LM @30K/90CRI	35W
35LM	2400LM @30K/90CRI	43W
40LM	2780LM @30K/90CRI	54W
Notes	Delivered lumens based on S10 optic, (see page 2)	

FEATURES

- Thermally optimized for longevity
- 1-3/8" bezel regress with 1/16" micro flange
- 10° to 70° optical beam control
- UGR <12
- Glare control, specialty optics, trim options, and custom finishes available
- Microban® antimicrobial finish available on all exposed painted surfaces

DIMMING AND CONTROLS

- eldoLED flicker free 0-10V dimming to 0% and 1%
- eldoLED DI flicker free DALI dimming to 0% and 1%
- DMX dim to zero
- Lutron Hi-lume (Eco System) dimming to 0.0% and 1%
- Lutron Hi-lume 1% 3-wire/Ecosystem
- Leading & trailing edge (Triac/ELV) dimming to 1%
- Casambi bluetooth dimming to 1%
- NLight control interface dimming to 0%

CONSTRUCTION

- Lexan® (PC) highly resistant to impact and heat (240°F)
- Optimal material for wireless BLE signal connectivity
- Shatter proof acrylic bezel lens
- Electrocoated 16-gauge cold-rolled steel construction
- Accommodates ceiling thickness from 1/8" to 1-5/8"

LED

- 90 CRI: 5DCM = 2-step MacAdam Ellipse, Lumen Maintenance: L_{70} > 66,000 hrs
- 80 CRI: 5DCM = 2-step MacAdam Ellipse, Lumen Maintenance: L_{70} > 66,000 hrs

LISTING

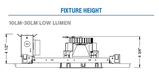
- cULus Listed to UL1598 & UL2108; c UL Listed to CSA C22.2 #250.0
- IP65 with lens - Suitable for wet locations with lens - Suitable for damp locations without lens
- Non-conductive, dead-front construction (shower approved)
- NSF/ANSI-2 with lens (Non-Food and Splash Zones)
- 5 Year Limited warranty

ELECTRICAL

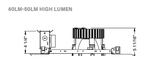
- 120V-277V, 120 only Triac / ELV
- Power factor ≥ 0.9
- 2kV driver input surge protection
- Remote and Integral (ITE) emergency test switch
- 7W, 10W (720 CEC) and 12W EM 90min battery
- Max. ambient installation temperature 95°F (35°C)

FIXTURE HEIGHT

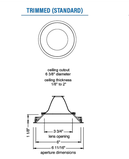
10LM-30LM LOW LUMEN



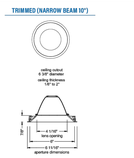
40LM-90LM HIGH LUMEN



TRIMMED (STANDARD)



TRIMMED (NARROW BEAM 10°)



WDGE4 LED

Architectural Wall Sconce

D



Catalog Number
Notes
Type

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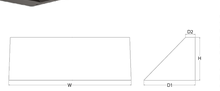
Introduction

The WDGE LED family is designed to meet specifier's every wall-mounted lighting need in a widely accepted shape that blends with any architecture. The clean rectilinear design comes in four sizes with lumen packages ranging from 1,200 to 25,000 lumens, providing a true site-wide solution. Embedded with nLight® AIR wireless controls, the WDGE family provides additional energy savings and code compliance.

WDGE4 has been designed to deliver up to 25,000 lumens through a precision refractive lens with wide distribution, perfect for augmenting the lighting from post-mounted luminaires.

Specifications

Depth (D1):	10"
Depth (D2):	2"
Height:	9"
Width:	25"
Weight: (without options)	30.5 lbs



design select — Items marked by a shaded background qualify for the Design Select program and ship in 15 days or less. To learn more about Design Select, visit www.acuitybrands.com/designselect. *See ordering tree for details.

WDGE LED Family Overview

Luminaire	Optics	Standard EM, 0° C	Cold EM, -20°C	Sensor	Approximate Lumens (4000K, 80CRI) P6	P5	P4	P3	P2	P1
WDGE1 LED	Visual Comfort	4W		--	750	1,200	2,000	--	--	--
WDGE2 LED	Visual Comfort	10W	18W	Standalone / nLight	--	1,200	2,000	3,000	4,500	6,000
WDGE2 LED	Precision Refractive	10W	18W	Standalone / nLight	700	1,200	2,000	3,200	4,200	--
WDGE3 LED	Precision Refractive	15W	18W	Standalone / nLight	6,000	7,500	8,500	10,000	12,000	--
WDGE4 LED	Precision Refractive			Standalone / nLight	--	12,000	16,000	18,000	20,000	22,000	25,000

Ordering Information

EXAMPLE: WDGE4 LED P3 40K 70CRI R3 MVOLT SRM DDBXD

Series	Package	Color Temperature	CRI	Distribution	Voltage	Mounting
WDGE4 LED	P1 P4 P2 P5 P3 P6	30K 3000K 40K 4000K 50K 5000K	70CRI 80CRI	R2 Type 2 R3 Type 3 R4 Type 4 RFT Forward Throw	MVOLT 347 480	**Shipped included** SRM Surface mounting bracket ICW Indirect Canopy/Ceiling Washer bracket (dry damp locations only)[1] **Shipped separately** AWS 3/8 inch Architectural wall spacer[2] PBBW Surface-mounted back box (top, left, right conduit entry). Use when there is no junction box available.[3]

Options		Finish	
PE	Photocell, Button Type[4]	DDBXD	Dark bronze
DS	Dual-switching (comes with 2 drivers and 2 light engines)[5]	DBLXD	Black
DMG	0-10V dimming wires pulled outside fixture (for use with an external control, ordered separately)[5]	DNAXD	Natural aluminum
		DWHXD	White
BCE	Bottom conduit entry for back box (PBBW). Total of 4 entry points.	DSSXD	Sandstone
SPD10KV	10kV Surge pack	DDBTXD	Textured dark bronze
CCE	Coastal Construction[1]	DBLBXD	Textured black
		DNATXD	Textured natural aluminum
		DWHGXD	Textured white
		DSSTXD	Textured sandstone

Standalone Sensors/Controls
PIR Bi-level (100/35%) motion sensor for 8-15' mounting heights. Intended for use on switched circuits with external dusk to dawn switching.
PIRH Bi-level (100/35%) motion sensor for 15-30' mounting heights. Intended for use on switched circuits with external dusk to dawn switching.
PIR1FC3V Bi-level (100/35%) motion sensor for 8-15' mounting heights with photocell pre-programmed for dusk to dawn operation.
PIRH1FC3V Bi-level (100/35%) motion sensor for 15-30' mounting heights with photocell pre-programmed for dusk to dawn operation.

Networked Sensors/Controls
NLTAIR2 PIR Embedded wireless controls by nLight with Passive Infrared Occ sensor and on/off photocell for 8-15' mounting heights.
NLTAIR2 PIRH Embedded wireless controls by nLight with Passive Infrared Occ sensor and on/off photocell for 15'-30' mounting heights.
NLTAIRE2 PIR Embedded wireless controls by nLight with UL924 listed emergency operation, Passive Infrared Occ sensor and on/off photocell for 8-15' mounting heights
NLTAIRE2 PIRH Embedded wireless controls by nLight with UL924 listed emergency operation, Passive Infrared Occ sensor and on/off photocell for 15'-30' mounting heights

See page 3 for out of box functionality

Accessories
Ordered and shipped separately.
WDGEAWS DDBXD WDGE 3/8inch Architectural Wall Spacer (specify finish)
WDGEPBBW DDBXD U WDGE4 surface-mounted back box (specify finish)

NOTES
1. 347V and 480V not available with DS.
2. Not qualified for DLC.
3. For PBBW and AWS with CCE option, require an 8PAL.
4. PE not available in 480V and with sensors/controls.
5. DS and DMG not available with sensors/controls.

LITHONIA LIGHTING. COMMERCIAL OUTDOOR
One Lithonia Way • Conyers, Georgia 30012 • Phone: 1-800-705-SERV (7378) • www.lithonia.com
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WDGE4 LED
Rev. 02/24/25

LIGHT FIXTURE SCHEDULE

TYPE	LOCATION	MANUFACTURER & CATALOG#	TOTAL WATTS	LUMENS	VOLTS	REMARKS
INDOOR						
A1	INSIGHT LIGHTING	PS17 HO 40K 40 TRUNNION VOLT 0-10 TR	224 W	21040 LM	MVOLT	MAIN ARENA SPORT LIGHITNG - DIE CAST - WET LOCATION
A2	INSIGHT LIGHTING	PS17 HO 40K 60 TRUNNION VOLT 0-10 TR	224 W	21041 LM	MVOLT	MAIN ARENA SPORT LIGHITNG - DIE CAST - WET LOCATION
A3	INSIGHT LIGHTING	PS17 HO 40K 100 TRUNNION VOLT 0-10 TR	224 W	21042 LM	MVOLT	MAIN ARENA SPORT LIGHITNG - DIE CAST - WET LOCATION
A4	INSIGHT LIGHTING	PS17 48V HO XQE RGBW 20 TRUNNION VOLT 0-10 TR	226 W	9255 LM	MVOLT	MAIN ARENA SPORT LIGHITNG - DIE CAST - WET LOCATION
A5	INSIGHT LIGHTING	PS17 48V HO XQE RGBW 100 TRUNNION VOLT 0-10 TR	226 W	8879 LM	MVOLT	MAIN ARENA SPORT LIGHITNG - DIE CAST - WET LOCATION
A EM	INSIGHT LIGHTING	PS6 HO 40K 100 TR TGR	185 W	1877 LM	MVOLT	EME EGRESS LIGHITNG - DIE CAST - WET LOCATION
B	INSIGHT LIGHTING	D2 380 40K SM VOLT 0-10 TG IP66	381 W	26700 LM	MVOLT	WALL MOUNT UP LIGHT - WET LOCATION
C	ALPHABET LIGHTING	NU6 RD SW 40LM 40K H260 WH NC/RET DIM10	54 W	38174 LM	MVOLT	RETROFIT AND NEW 6 INCH DOWNLIGHT
D	LITHONIA	WDGE4 P6 40K 80CRI R3 SRM PIRH COLOR	185 W	25000 LM	MVOLT	WALL MOUNT CUT OFF - WET LOCATION
F	LITHONIA	DSXF3 LED 6 P4 40K WFL MVOLT PE COLOR EXTENDED ARM BRACKET	189 W	26700 LM	MVOLT	FLOOD LIGHT MOUNTED ON EXTENDED ARM BRACKET
X	SIGNTEX	EMA 20 1 R DA	N/A	N/A	NA	SELF ILLUMINATING EXIT SIGN - 20 YEARS LIFE

APPROVAL

CLIENT

CITY OF INDUSTRY EXPO CENTER GRAND ARENA STRUCTURE AND ANNOUNCER BOOTH
16200 TEMPLE AVENUE
CITY OF INDUSTRY, CA 91744

15625 MAYOR DAVE WAY
CITY OF INDUSTRY, CA 91744
PHONE: 626-333-2211

PROJECT NAME

CITY OF INDUSTRY
EXPO CENTER
GRAND ARENA
STRUCTURE AND
ANNOUNCER
BOOTH
16200 TEMPLE AVENUE
CITY OF INDUSTRY, CA 91744

ENGINEER/ARCHITECT

IDS GROUP
1 PETERS CANYON ROAD, SUITE 130
IRVINE, CA. 92606
TEL: 949-387-8500, FAX: 949-387-0800

STAMP

STAMP

REGISTERED PROFESSIONAL ENGINEER STEVEN M. OCTTEN CIVIL STATE OF CALIFORNIA
No. E22808
DATE SIGNED 08/27/2025

ISSUE

REV.	DESCRIPTION	DATE
	90% CD SET	04/30/25
	95% CD SET	08/04/25
	100% CD SET	08/29/25

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GRAND ARENA
FIXTURE SCHEDULE
AND CUT SHEETS

SHEET NUMBER

E-209

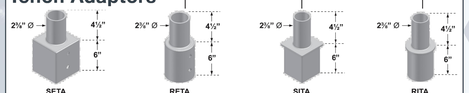
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PLAN CHECK SET - NOT FOR CONSTRUCTION

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Tenon Adaptors

Project Name: | Catalog Number: | Type



All steel tenon adaptors are constructed of square or round steel tubing with 2½" diameter tenons. Designed for the following applications:

SETA – Square external tenon adaptor to slip-fit over 3" to 5" square poles.
RETA – Round external tenon adaptor to slip-fit over 3" to 5"diameter round poles.
SITA – Square internal tenon adaptor to slip inside 4" or 5" square poles.
RITA – Round internal tenon adaptor to slip inside 4" or 5" diameter round poles.

Model	Pole or Tenon Size	Finish
SETA	3" dia. (3) 3½" dia. (3½) 4" dia. (4) 4½" dia. (4½) 5" dia. (5)	Bronze **(BZ)** Black **(BK)** White **(WH)** Forest Green **(FG)** Grey **(GY)** Silver Metallic **(SL)** Custom Color **(CC)**
RETA	3" dia. (3) 3½" dia. (3½) 4" dia. (4) 4½" dia. (4½) 5" dia. (5)	

Model	Pole or Tenon Size	Finish
SITA	4" x 4" (4) 5" x 5" (5)	Bronze **(BZ)** Black **(BK)** White **(WH)** Forest Green **(FG)** Grey **(GY)** Silver Metallic **(SL)** Custom Color **(CC)**
RITA	4" x 4" (4) 5" x 5" (5)	

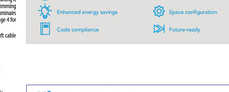
Bolt-On Arm Adaptors



All cast adaptors for bolt-on arms are constructed of durable cast aluminum. Designed for the following applications: **BOAA** Square and **RBOAA** Round adaptors slip-fit over a 2¾" diameter tenon, and attach with hex set screws. May be drilled for single or twin 180°, twin 90°, triple 90° and Quad mounting configurations. To assure proper drill pattern, please specify accompanying fixture.

Model	Pole or Tenon Size	Finish
BOAA *Specify fixture	Single **(S1)** Double **(D2)** Triple 90° **(T9)** Triple 120° **(T1)** Quad **(QD)**	Bronze **(BZ)** Black **(BK)** White **(WH)** Forest Green **(FG)** Grey **(GY)** Silver Metallic **(SL)** Custom Color **(CC)**
RBOAA *Specify fixture		

Wall Brackets



The **WP-S1** wall mount bracket is constructed of a 9" square, 3/16" thick steel wall plate and a 2¾" diameter welded steel bull-horn with 90º bend.
The **BAWP** wall mounting plate measures 6½" x 10", and is constructed of durable cast aluminum; with an internal plate, and comes with locking set screws. Designed to attach to a Visionaire extruded aluminum bolt-on arm. To assure proper drill pattern, please specify accompanying fixture.

Model	Finish
WP-S1	Bronze **(BZ)** Black **(BK)** White **(WH)** Forest Green **(FG)** Grey **(GY)** Silver Metallic **(SL)** Custom Color **(CC)**
BAWP *Specify fixture	

MOUNTING ARMS

For more detailed information on mounting, wiring or installation instructions, please consult factory. If plans are not ordered with fixtures, please specify mounting requirements. This document contains proprietary information of Visionaire Lighting, LLC. Any use of this information requires the written approval of Visionaire Lighting, LLC. In keeping with our TQM policy of continuous improvement, Visionaire reserves the right to change any specifications contained herein without prior notice.

VISIONAIRE LIGHTING
Performance In A Whole New Light™

F

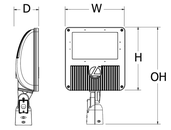


D-Series DSXF3
LED Floodlight

Catalog Number
Notes
Type
Hit the Tab key or mouse over the page to see all interactive elements.

Specifications

EPA @ 90°:	1.4 ft² (0.13 m²)
Depth:	4.89" (12.4 cm)
Width:	12.90" (32.8 cm)
Height:	13.58" (34.5 cm)
Overall Height	20.80" (52.8 cm)
Weight:	21 lbs (9.5 kg)



Introduction

The D-Series floodlights feature a site-wide offering to meet specifier's every floodlighting need in application. The D-Series flood offers three sizes delivering 3,000 to 27,000 lumens. Available with seven precision optics, three mountings and three color temperatures, D-Series floodlights offer vast design capabilities while delivering significant energy savings and long life.
The DSXF3 delivers 12,000 to 27,000 lumens, meeting a large breadth of illumination requirements for design and renovation when replacing 400W HID floodlights. All configurations are made in North America allowing for quick delivery.

Ordering Information

EXAMPLE: DSXF3 LED 6 P2 40K 70CRI FL MVOLT THK DDBXD

DSXF3 LED

Series	Light Engines	Performance Package	Color Temperature	CRI	Distribution	Voltage	Mounting
DSXF3 LED	6 1x12B engines	P1 P2 P3 [1] P4 [1]	30K 3000K 40K 4000K 50K 5000K	70CRI	WFL Wide flood (6x6) FL Flood (5x5) MFL Medium flood (4x4) WFR Wide flood rectangular (6x5) HMF Horizontal medium flood (6x4) MSP Medium Spot (4x4) NSP Narrow Spot (3x3)	MVOLT [2] 120 208 240 277 347 480	**Shipped included** IS Integral slipfitter (fits 2-3/8" O.D. tenon) YKX62 Yoke with 2ft, 16-3 SO cord THK Knuckle with 3/4" NPT threaded pipe

Options		Finish (required)
Shipped installed PE Photocontrol, button style [3] PER Photocontrol external, swivel [4] PER7 Seven-wire receptacle only (controls ordered separately) [3,4] DMG 0-10v dimming wires pulled outside fixture (for use with an external control, ordered separately) CCE Coastal Construction [5]	**Shipped separately** [6] UBV Upper/bottom visor (universal) FV Full visor VG Vandal guard WG Wire guard	DDBXD Dark bronze DBLXD Black DNAXD Natural aluminum DWHXD White

Accessories
Ordered and shipped separately.

FTS CSA 3DDXD U	Slipfitter for 2-3/8" to 2-7/8" OD tenons, mates with yoke mount (specify finish)
FRHXD 3DDXD U	Radius wall bracket, 2-3/8" OD tenon (specify finish)
FSPX 3DDXD U	Steel square pole bracket, 2-3/8" OD tenon (specify finish)
DSXF3UBV 3DDXD U	Upper/bottom visor accessory (specify finish)
DSXF3FV 3DDXD U	Full visor accessory (specify finish)
DSXF3VG U	Vandal guard accessory
DSXF3WG DBLXD U	Wire guard accessory
DLL127F 1.5 JU	Photocell - SSL twist-lock (120-277V)
DLL347F 1.5 CUL JU	Photocell - SSL twist-lock (347V)
DLL480F 1.5 CUL JU	Photocell - SSL twist-lock (480V)
DSHORT SBK U	Shorting cap [7]

For more mounting options, visit our Floodlighting Accessories pages.

NOTES
1. Performance packages P3 and P4 are not available with HMF, MFL, MSP, NSP.
2. MVOLT driver operates on any line voltage from 120-277V.
3. Requires MVOLT or 347V.
4. Requires 120V, 208V, 240V, 277V or 347V.
5. For units with a photocontrol receptacle, the mounting must be restricted to a 45° from horizontal aim per ANSI C136.10-2010.
6. Compatible with standard twist-lock photocells for dusk-to-dawn operation or advanced control nodes that provide 0-10V dimming signals. Wire 4AWire 5 wired to dimming leads. Not available with PE, PER, PER7 or DMG. Suitable luminaire, (PER and PER5 are also available.)
7. CCE option not available with FTS CSA.
8. Also available as seperate accessories; see Accessories information at left.
9. Requires luminaire to be specified with PER option.

Mountings/External Shields/Accessories

F

Mountings


IS – Adjustable Slipfitter (fits 2-3/8" O.D. tenon)


YKX62 - Yoke with 16-3 SO cord, 2ft


THK - Threaded Knuckle with 3/4" NPT threaded pipe

External Shields


UBV Visor Top Mounted


UBV Visor Bottom Mounted


FV - Full Visor

Accessories


WG - Wire Guard


VG - Vandal Guard


Yoke with FTS CSA (Yoke tenon adaptor accessory)

LITHONIA LIGHTING®

Catalog Number
Notes
Type

F

DIGITAL NAVIGATION
Ordering Tree nLight Platform Controls Photometrics Performance Data

FEATURES & SPECIFICATIONS

INTENDED USE — The BLTX Surface Mount LED luminaire features a popular center basket design that offers a clean, versatile style and volumetric distribution. High efficacy LED light engines deliver energy savings and low maintenance compared to traditional sources. An extensive selection of configurations and options make the BLTX the perfect choice for many lighting applications including schools, offices and other commercial spaces, retail, hospitals and healthcare facilities.

CONSTRUCTION — BLTX enclosure components are die-formed for dimensional consistency and painted after fabrication with a polyester powder paint for improved performance and protection.
The reflector is finished with a high reflective matte white powder paint for improved aesthetics and increased light diffusion.
Diffusers are extruded from impact modified acrylic for increased durability.
LED boards and driver are accessible from below.

OPTICS — Volumetric illumination is achieved by creating an optimal mix of light to walls, partitions and vertical and horizontal work surfaces – rendering the interior space, objects and occupants in a more balanced, complimentary luminous environment. High performance extruded acrylic diffusers conceal LEDs and efficiently deliver light in a volumetric distribution. Four diffuser choices available - curved and square designs with linear prisms or a smooth frosted finish.

ELECTRICAL — Long-life LEDs, coupled with high-efficiency drivers, provide superior quantity and quality of illumination for extended service life. 80% LED lumen maintenance at 60,000 hours (L80/60,000).

Configurable BLTX: Available in High Efficiency (HE) versions for applications where a lower wattage (over the standard product) is required. The High Efficiency versions deliver >130 LPW and can be specified via the Lumen Package designations in the Ordering Information on page 2.

eldoLED driver options deliver choice of dimming range, and choices for control, while assuring flicker-free, low-current inrush, 89% efficiency and low EMI.

Optional integrated nLight®controls make each luminaire addressable - allowing it to digitally communicate with other nLight enabled controls such as dimmers, switches, occupancy sensors and photocontrols. Connection to nLight is simple. It can be accomplished with integrated nLight AIR wireless or through standard Cat-5 cabling. nLight offers unique plug-and-play convenience as devices and luminaires automatically discover each other and self-commission, while nLight AIR is commissioned easily through an intuitive mobile app.

Lumen Management: Unique lumen management system (option N3K) provides on board intelligence that actively manages the LED light source so that constant lumen output is maintained over the system life, preventing the energy waste created by the traditional practice of over-lighting.

Step-level dimming option allows system to be switched to 50% power for compliance with common energy codes while maintaining fixture appearance.

Driven disconnect provided where required to comply with US and Canadian codes.

SENSOR — Integrated sensor (individual control): Sensor Switch MSDTADCK (Passive infrared (PIR) or MSDRTUADCK (PIR/Microphonics Dual Tech (PDT)) integrated occupancy sensor/automatic dimming photocell allows the luminaire to power off when the space is unoccupied or enough ambient light is entering the space. See page 4 for more details on the integrated sensor.

Integrated Sensor (nLight Wired Networking): This sensor is nLight-enabled, meaning it has the ability to communicate over an nLight network. When wired, using CAT-5 cabling, with other nLight-enabled sensors, power packs, or WallPods, an nLight control zone is created. Once linked to a Gateway, directly or via a Bridge, the zone becomes capable of remote status monitoring and control via SensorView software. See page 4 for the nLight sensor options.

Integrated Smart Sensor (nLight AIR Wireless Platform): The sES7 sensor is nLight AIR enabled, meaning it has the ability to communicate over the wireless nLight control platform. It is available with an automatic dimming photocell, and either a digital PIR or a microphonics (PDT) dual technology occupancy sensor. It pairs to other luminaires and wall switches through our mobile app, CLAIRITY+, which allows for simple sensor adjustment. See page 4 for more details on the Integrated Smart Sensor.

INSTALLATION — The BLTX is designed to be surface-mounted on a level ceiling. The BLTX can be aircraft cable suspended. See Mounting Data section on page 6.
Suitable for damp location.

LISTINGS — UL Listed to meet U.S. and Canadian standards.

BUY AMERICAN — Product with the BAA option is assembled in the USA and meets the Buy America(n) government procurement requirements under FAR, DFARS and DOT.
Please refer to www.acuitybrands.com/buy-american for additional information.

WARRANTY — 5-year limited warranty. This is the only warranty provided and no other statements in this specification sheet create any warranty of any kind. All other express and implied warranties are disclaimed. Complete warranty terms located at: www.acuitybrands.com/support/warranty/terms-and-conditions

NOTE: Actual performance may differ as a result of end-user environment and application.
All values are design or typical values, measured under laboratory conditions at 25 °C.
The product images shown are for illustration purposes only and may not be an exact representation of the product.
Specifications subject to change without notice.

BLT Series LED

2BLTX4

Surface Mount
2' x 4'
LED



Buy American | eldoLED | nLIGHT

Specifications
Length: 48 3/4 (123.8)
Width: 24 3/4 (62.9)
Depth: 3 1/2 (8.9)



All dimensions are inches (centimeters) unless otherwise specified.

Embed nLight controls today. Prepare for tomorrow.

Now	Tomorrow
User-friendly install	Scalability
Enhanced energy savings	Space configuration
Code compliance	Future-ready

A+ Capable Luminaire

This item is an A+ capable luminaire, which has been designed and tested to provide consistent color appearance and out-of-the-box control compatibility with simple commissioning.

- All configurations of this luminaire meet the Acuity Brands' specification for chromatic consistency
- This luminaire is part of an A+ Certified solution for nLight® control networks when ordered with drivers marked by a shaded background*
- This luminaire is part of an A+ Certified solution for nLight control networks, providing advanced control functionality at the luminaire level, when selection includes driver and control options marked by a shaded background*

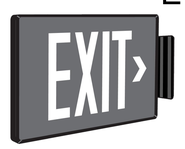
To learn more about A+, visit www.acuitybrands.com/aplus.
*See ordering tree for details.

Emergence
Self- Luminous Signs

Aluminum Housing
Series EMA
EMA.08.07.06

E





LIGHTING

• Internally illuminated by self- luminous tritium gas lamps with guaranteed luminous life up to 20 years, as specified.

• Observation tested for visibility up to 125 ft in complete darkness.

• No electrical connections, no heat generated, and no maintenance required for the life specified, up to 20 years. Suitable for use in wet locations.

• Output at 525 nanometer wavelength (green) provides maximum visibility in low ambient brightness.

• No external light required for activation.

CODES & APPROVALS

• Manufactured and tested to UL Standard 924 and Life Safety Code NFPA 101 and National Electrical Code Article 500, Class I and II conditions. Sealed source and device registered with USNRC for distribution to general licensees.

CONSTRUCTION

• Double- wall housing of extruded aluminum with minimum wall thickness of .09" (2.3mm). No visible mounting hardware.

• Standard finish: satin anodized brushed aluminum; Optional finishes available in painted enamel color.

• Polycarbonate faceplate window of .125 (3 mm) minimum thickness.

• Universal field adjustable chevron arrows and universal mounting brackets.

WARRANTIES

• Unconditional warranty is provided against failure to meet required standards of illuminated life, as specified on the product label.

Designed & Manufactured in the USA

Intertek CONFORMS TO UL 924/ CSA 22.2 #141

FIXTURE SCHEDULE

MODEL	**CATALOG NO**
APPROVAL	**JOB INFORMATION**

Signtex Inc LIGHTING
SPECIFIED EMERGENCY LIGHTING

Emergence
Self- Luminous Signs

Aluminum Housing
Series EMA
EMA.08.07.06

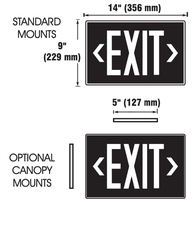
SUGGESTED SPECIFICATIONS:
Supply and install Signtex, Inc EMERGENCE Series EMA self luminous EXIT signs illuminated by tritium gas lamps. The housing shall be fabricated from extruded aluminum with overall dimensions of 14" x 9" x 3/4", having a minimum external wall thickness of .09" and a polycarbonate window of .125" minimum thickness. Universal mounting brackets shall be supplied. For signs specified with a luminous life of 10 years, the minimum initial brightness measured at any point on the external surface shall be 0.12 ft L (.21 cd/m²); for any other specified lifetime, the minimum surface brightness shall be 0.012 ft L (.021 cd/m²)per year of specified luminous life.

OPTIONS & ACCESSORIES:

DESCRIPTION	CODE
Pendant Mount Kit	PEN
Canopy Mount Kit	CAN
White Housing	W
Black Housing	B

E

MOUNTING DATA & DIMENSIONS:



ORDERING INFORMATION: ***EXAMPLE:*** EMA101GBA-PEN

MODEL SERIES	USEFUL LIFE	NO. OF FACES	FACE COLOR	HOUSING COLOR	OPTIONS/ ACCESSORIES
EMA	10=10 YRS 20=20 YRS	1=1 2=2	R=RED G=GREEN *COLOR*=CUSTOM COLOR	BA= BRUSHED ALUMINUM	SEE ABOVE

Signtex Inc LIGHTING
220 VFW Avenue, Grasonville, MD 21638
TEL:(410)827-8300 Fax:(410)827-8866
sales@signtexinc.com www.signtexinc.com

DISTRIBUTOR:

APPROVAL

CLIENT

CITY OF INDUSTRY
15625 MAYOR DAVE WAY
CITY OF INDUSTRY, CA 91744
PHONE: 626-333-2211

PROJECT NAME

CITY OF INDUSTRY
EXPO CENTER
GRAND ARENA
STRUCTURE AND
ANNOUNCER
Bbooth

16200 TEMPLE AVENUE
CITY OF INDUSTRY, CA 91744

ENGINEER/ARCHITECT

IDS GROUP
1 PETERS CANYON ROAD, SUITE 130
IRVINE, CA. 92606
TEL: 949-387-8500, FAX: 949-387-0800

STAMP

STAMP

REGISTERED PROFESSIONAL ENGINEER
STEVEN M. COLLINS
No. E22808
EXP. 06/30/2027
STATE OF CALIFORNIA
DATE SIGNED 08/27/2025

ISSUE

REV.	DESCRIPTION	DATE
	90% CD SET	04/30/25
	95% CD SET	08/04/25
	100% CD SET	08/29/25

PROJECT IDENTIFICATION

THIS DRAWING WAS CREATED IN AUTODESK AUTOCAD V. 2021 UNLESS OTHERWISE NOTED.

THE ORIGINAL SIZE OF THIS SHEET IS 30" X 42"

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IDS PROJECT NO.	22X060.00
DRAWN BY	NG
CHECKED BY	SM
APPROVED BY	MO

SHEET TITLE

GRAND ARENA
FIXTURE SCHEDULE
AND CUT SHEETS

SHEET NUMBER

E-210

SHEET NO. OF

PLAN CHECK SET - NOT FOR CONSTRUCTION

IDS GROUP - FILE LOCATION: S:\PROJECTS\2022\SHARED\22X060.00 CITY OF INDUSTRY - EXPO CENTER - GRAND ARENA STRUCTURE & ANNOUNCER BOOTH\05 CAD\05 ELEC\22X060.00-E-201_212 OVERALL 1FP PLOT DATE: 8/27/2025
11:30:57 AM USER: MARGARITA.PASAYE

Panel Schedule

Location: LC1.0 (E-202)
Catalog: ARP INTENC48 NLT 48FCR MVOLT 1VB HLK SM
Name: ARP48 HE

Supply Circuit:
Voltage:
Enclosure Dims:
Mounting:

Row	Line	Feed	Poles	Catalog	Voltage	EM	Zone	Phase	VA Est	VA Max
1	HE	1	2	2FCR	480V	☐	A3	1	0	0
3	HE	3a							0	0
5	HE	1	2	2FCR	480V	☐	A3	1	0	0
7	HE	3c							0	0
9	HE	5	2	2FCR	480V	☐	A3	1	0	0
11	HE	7a							0	0
13	HE	7	2	2FCR	480V	☐	A3	1	0	0
15	HE	7c							0	0
17	HE	2	2	2FCR	480V	☐	A3	1	0	0
19	HE	4a							0	0
21	HE	2	2	2FCR	480V	☐	A3	1	0	0
23	HE	4c							0	0
25	HE	6	2	2FCR	480V	☐	A3	1	0	0
27	HE	8b							0	0
29	HE	6	2	2FCR	480V	☐	A3	1	0	0
31	HE	8c							0	0
33	HE	25	1	1FCR	277V	☐	D	1	0	0
35	HE	27	1	1FCR	277V	☐	D	1	0	0
37	HE	26	1	1FCR	277V	☐	D	1	0	0
39	HE	28	1	1FCR	277V	☐	D	1	0	0
41	HE	30	1	1FCR	277V	☐	D	1	0	0
43	HE	32	1	1FCR	277V	☐	D	1	0	0
45	HE	XXX	1	1FCR	277V	☐	EXISTING F5	1	0	0
47	HE	XX	1	1FCR	277V	☐	EXISTING F6	1	0	0

Row	Line	Feed	Poles	Catalog	Voltage	EM	Zone	Phase	VA Est	VA Max
2	HE	9	2	2FCR	480V	☐	A4	1	0	0
4	HE	11a							0	0
6	HE	9	2	2FCR	480V	☐	A4	1	0	0
8	HE	11c							0	0
10	HE	13	2	2FCR	480V	☐	A4	1	0	0
12	HE	17b							0	0
14	HE	13	2	2FCR	480V	☐	A4	1	0	0
16	HE	17c							0	0
18	HE	14	2	2FCR	480V	☐	B	1	0	0
20	HE	16c							0	0
22	HE	18	2	2FCR	480V	☐	B	1	0	0
24	HE	20c							0	0
26			1	1FCR		☐		1	0	0
28			1	1FCR		☐		1	0	0
30			1	1FCR		☐		1	0	0
32			1	1FCR		☐		1	0	0
34			1	1FCR		☐		1	0	0
36			1	1FCR		☐		1	0	0
38			1	1FCR		☐		1	0	0
40			1	1FCR		☐		1	0	0
42			1	1FCR		☐		1	0	0
44			1	1FCR		☐		1	0	0
46			1	1FCR		☐		1	0	0
48			1	1FCR		☐		1	0	0

Relay Summary
Active: 48
Spare: 0
Spaces: 0

Panel Schedule

Location: LC1.0 (E-202)
Catalog: ARP INTENC48 NLT 48FCR MVOLT 1VB HLK SM
Name: ARP48 HW

Supply Circuit:
Voltage:
Enclosure Dims:
Mounting:

Row	Line	Feed	Poles	Catalog	Voltage	EM	Zone	Phase	VA Est	VA Max
1	HW	1	2	2FCR	480V	☐	A2	1	0	0
3	HW	3a	1			☐		1	0	0
5	HW	1	2	2FCR	480V	☐	A2	1	0	0
7	HW	3c	1			☐		1	0	0
9	HW	5	2	2FCR	480V	☐	A2	1	0	0
11	HW	7a	1			☐		1	0	0
13	HW	7	2	2FCR	480V	☐	A2	1	0	0
15	HW	7c	1			☐		1	0	0
17	HW	2	2	2FCR	480V	☐	A2	1	0	0
19	HW	4a	1			☐		1	0	0
21	HW	2	2	2FCR	480V	☐	A2	1	0	0
23	HW	4c	1			☐		1	0	0
25	HW	6	2	2FCR	480V	☐	A2	1	0	0
27	HW	8b	1			☐		1	0	0
29	HW	6	2	2FCR	480V	☐	A2	1	0	0
31	HW	8c	1			☐		1	0	0
33	HW	25	1	1FCR	277V	☐	D	1	0	0
35	HW	27	1	1FCR	277V	☐	D	1	0	0
37	HW	26	1	1FCR	277V	☐	D	1	0	0
39	HW	28	1	1FCR	277V	☐	D	1	0	0
41	HW	30	1	1FCR	277V	☐	D	1	0	0
43	HW	32	1	1FCR	277V	☐	D	1	0	0
45	TBD	TBD	1	1FCR	277V	☐	EXISTING F7	1	0	0
47			1	1FCR		☐		1	0	0

Row	Line	Feed	Poles	Catalog	Voltage	EM	Zone	Phase	VA Est	VA Max
2	HW	13	2	2FCR	480V	☐	A1	1	0	0
4	HW	15a	1			☐		1	0	0
6	HW	13	2	2FCR	480V	☐	A1	1	0	0
8	HW	15c	1			☐		1	0	0
10	HW	17	2	2FCR	480V	☐	A1	1	0	0
12	HW	19b	1			☐		1	0	0
14	HW	17	2	2FCR	480V	☐	A1	1	0	0
16	HW	19c	1			☐		1	0	0
18	HW	14	2	2FCR	480V	☐	B	1	0	0
20	HW	16c	1			☐		1	0	0
22	HW	18	2	2FCR	480V	☐	B	1	0	0
24	HW	20c	1			☐		1	0	0
26			1	1FCR		☐		1	0	0
28			1	1FCR		☐		1	0	0
30			1	1FCR		☐		1	0	0
32			1	1FCR		☐		1	0	0
34			1	1FCR		☐		1	0	0
36			1	1FCR		☐		1	0	0
38			1	1FCR		☐		1	0	0
40			1	1FCR		☐		1	0	0
42			1	1FCR		☐		1	0	0
44			1	1FCR		☐		1	0	0
46			1	1FCR		☐		1	0	0
48			1	1FCR		☐		1	0	0

Relay Summary
Active: 62
Spare: 0
Spaces: 0

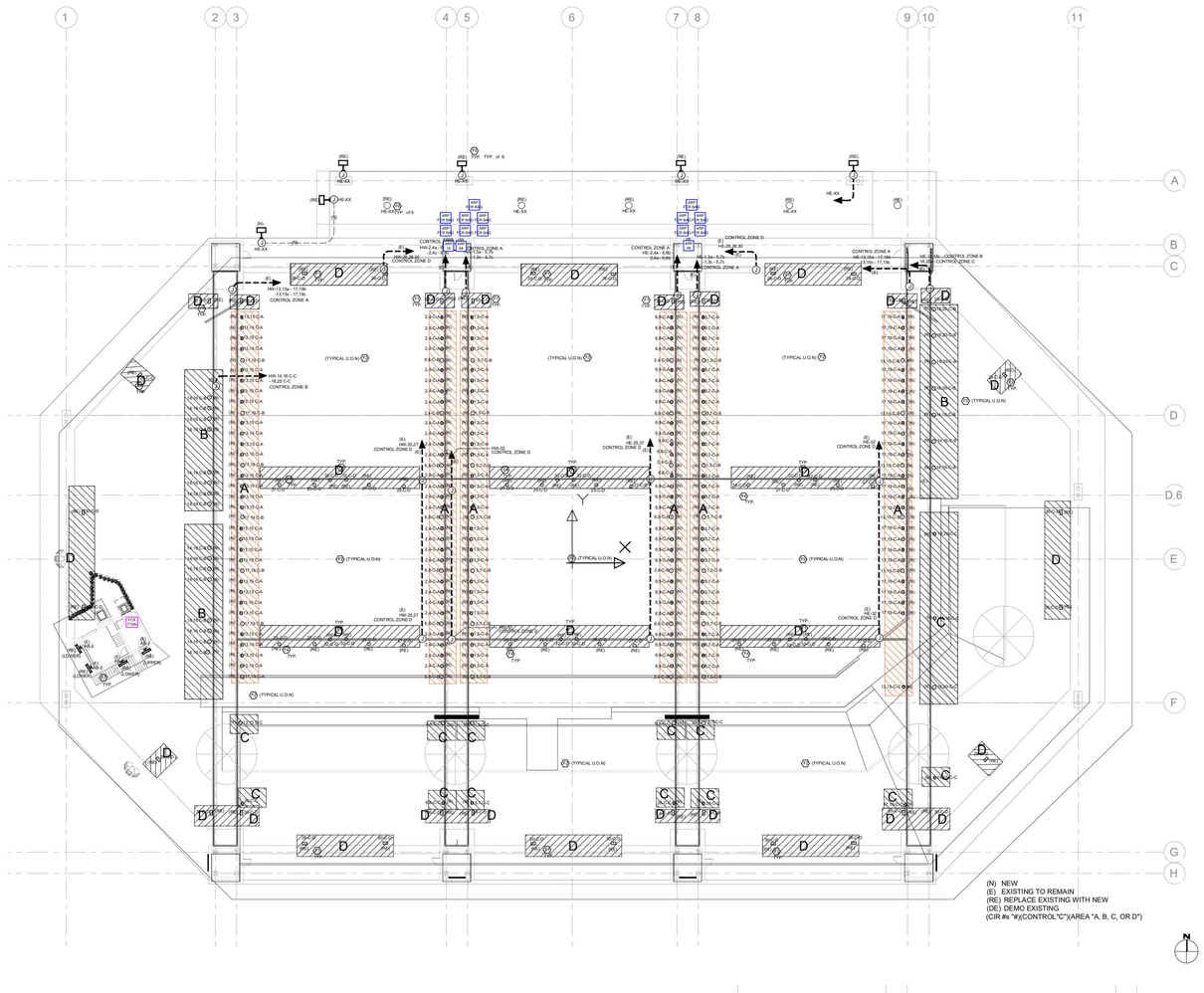
Panel Schedule

Location: LC1.0 (E-202)
Catalog: ARP INTENC16 NLT 16FCR MVOLT 1VB SC SM
Name: ARP16 FANS

Supply Circuit:
Voltage:
Enclosure Dims:
Mounting:

Row	Line	Feed	Poles	Catalog	Voltage	EM	Zone	Phase	VA Est	VA Max
1	TBD	TBD	3	3FCR	480V	☐	FAN 1	1	0	0
2									0	0
3									0	0
4	TBD	TBD	3	3FCR	480V	☐	FAN 2	1	0	0
5									0	0
6									0	0
7	TBD	TBD	3	3FCR	480V	☐	FAN 3	1	0	0
8									0	0
9									0	0
10	TBD	TBD	3	3FCR	480V	☐	FAN 4	1	0	0
11									0	0
12									0	0
13			1	FCR		☐		1	0	0
14			1	FCR		☐		1	0	0
15			1	FCR		☐		1	0	0
16			1	FCR		☐		1	0	0

Relay Summary
Active: 16
Spare: 0
Spaces: 0



1 LIGHTING PLAN
NOT TO SCALE

**CRITICAL NOTES (PLEASE READ) **
PROJECT SPECIFIC NOTES
**CIRCUITS HIGHLIGHTED ARE CONTROLLED BY ARP. LOCATION OF PANELS AND TOUCHSCREEN CONTROLLERS HAVE BEEN ESTIMATED AND TO CONFIRMED BASED ON SITE CONDITIONS.
*COMPLETE SET OF ELECTRICAL DOCUMENTS (DRAWINGS AND SPECIFICATIONS) NOT PROVIDED AT TIME OF LAYOUT/QUOTE REQUEST. VERIFY THIS LAYOUT/QUOTE MEETS PROJECT'S SPECIFIC REQUIREMENTS SUCH AS, BUT NOT LIMITED TO, STARTUP DAYS, SPARE PARTS, WARRANTY PERIOD, GRAPHIC PAGES, ETC. PRIOR TO PLACING BID WITH CONTRACTOR.
*THIS DESIGN IS BASED ON SHEET E-202, DATED 4/1/2025
*EXHAUST FAN CONTROLS IN RESTROOMS ARE NOT PROVIDED. IF REQUIRED, PLEASE SPECIFY AND NOTE THAT THE FAN IS LIMITED TO 1/2HP.
*ASTRONOMICAL TIME CLOCK HAS BEEN PROVIDED FOR TIMECLOCK CAPABILITIES, OUTDOOR PHOTOCELL NOT INCLUDED. OUTDOOR PHOTOCELL AVAILABLE UPON REQUEST.

THIS DESIGN IS SUBJECT TO CHANGE DEPENDING ON
*SEQUENCE OF OPERATION
*FIXTURE SUBMITTAL INDICATING DIMMING TYPES
*UPDATED ELECTRICAL SET WITH CHANGES TO LIGHTING AND POWER CIRCUITING
*ENGINEER/CONTRACTOR'S REVIEW. PLEASE PROVIDE FULL INFORMATION AND ASK FOR A REVISED B.O.M.
*PROJECT SPECIFICATION DOCUMENTS

EMERGENCY SYSTEM
*EM SYSTEM IS CONSIDERED TO BE BATTERY PACK.

OCCUPANCY SENSOR NOTES
*OCCUPANCY SENSORS HAVE NOT BEEN PROVIDED AS THEY ARE NOT SHOWN, PLEASE VERIFY IF OCCUPANCY SENSORS ARE REQUIRED.

PLUGLOAD
*PLUG LOADS HAVE BEEN EXCLUDED FROM THIS DESIGN. IF PLUG LOADS ARE REQUIRED PROVIDE POWER PLANS INDICATING CONTROLLED RECEPTACLES AND REQUEST A REVISED DESIGN.

SYSTEMS AND COMPONENTS TO BE PROVIDED BY OTHERS
*ALL CATS CABLE SHOWN IN THIS DESIGN IS TO BE SUPPLIED BY OTHERS. CONTRACTOR TO VERIFY LENGTH AND QUANTITY PRIOR TO PLACING ORDER.
*LINE VOLTAGE TOGGLE SWITCHES TO BE PROVIDED BY OTHERS
*WEATHERPROOF AND OUTDOOR RATED SWITCH ENCLOSURE AND PANEL ENCLOSURE TO BE PROVIDED BY OTHERS
*ALL ENCLOSURES THAT REQUIRE GREATER THAN NEMA 1 RATING TO BE PROVIDED BY OTHERS

FIXTURE DIMMING NOTES
*PLEASE PROVIDE AN APPROVED FIXTURE SUBMITTAL PRIOR TO RELEASING CONTROLS AS DIMMING STYLES NEED TO BE VERIFIED
*POWER PACKS ARE PROVIDED BASED ON THE FOLLOWING FIXTURE DIMMING SYSTEMS.
*ALL FIXTURES ARE ASSUMED TO BE 0-10V.

DAYLIGHT HARVESTING
*DAYLIGHT HARVESTING IS NOT PROVIDED. PLANS DO NOT INDICATE GLAZING. IF DAYLIGHT HARVESTING IS REQUIRED, PLEASE PROVIDE PLANS INDICATING WINDOW PLACEMENT AND DAYLIGHT ZONES.

DEMAND RESPONSE
*AUTOMATIC DEMAND RESPONSE HAS NOT BEEN PROVIDED.

PROGRAMMING AND 3RD PARTY INTEGRATION
*LIGHTING CONTROL SYSTEM SHALL HAVE ON SITE START-UP PERFORMED BY THE MANUFACTURER'S TRAINED TECHNICIAN. CONTRACTOR SHALL COORDINATE WITH MANUFACTURER FOR START-UP REQUIREMENTS.
*INTEGRATION WITH BUILDING AUTOMATION SYSTEMS HAS NOT BEEN PROVIDED VIA BACNET-IP, MODBUS, CONTACT CLOSURE.
*GRAPHICAL PAGES NOT INCLUDED

NLIGHT WIRED SPECIFIC NOTES
*BUS POWER REQUIREMENTS HAVE BEEN TAKEN INTO ACCOUNT, ANY DEVIATION FROM CAT 5 DAISY CHAIN DEVICE ORDER SHOWN, MAY REQUIRE ADDITIONAL EQUIPMENT
*BRIDGES, RELAYS, POWER PACKS, WALLPODS, AND SENSORS ON DRAWINGS WERE PLACED WITH INFORMATION PROVIDED AT TIME OF DESIGN. ADDITIONAL BRIDGES AND/OR SENSORS MAY BE REQUIRED DEPENDING ON BUILDING CHANGES, FINAL PARTITION HEIGHT/PLACEMENT, FURNITURE PLACEMENT, EQUIPMENT HEIGHT/PLACEMENT AND SHELVING HEIGHT/PLACEMENT.
*A LIGHTING ZONE CANNOT EXCEED 1500 FT. IN CATS. IF EXCEEDING THIS LENGTH, THE ZONE WILL NEED TO BE BROKEN INTO SMALLER ZONES AND MAY REQUIRED ADDITIONAL MATERIAL AND/OR GLOBAL CHANNEL PROGRAMMING TO MEET THE SPECIFIED SEQUENCE OF OPERATIONS.
*POWER PACK PLACEMENT ON DRAWINGS IS FOR REFERENCE ONLY. FINAL PLACEMENT IS AT THE DISCRETION OF CONTRACTOR/ENGINEER.
*COORDINATE INSTALL LOCATIONS WITH PERFORMANCE LIGHTING SYSTEMS AND RECHECK COUNTS TO VERIFY THE NUMBER OF RELAYS NEEDED TO SWITCH ALL DESIRED LOADS.

**FRESCO SPECIFIC NOTES
*A FRESCO TOUCH SCREEN IS CAPABLE OF UP TO 72 INDIVIDUAL DIMMING SLIDERS.
*THE SYSTEM IS FULLY NETWORKED THROUGH THE FRESCO TOUCH SCREEN AND OFFERS CENTRALIZED TIME CLOCK PROGRAMMING AND CONTROL CAPABILITIES
*ALL DEVICES REQUIRED TO BE ON TIME-CLOCK MUST BE CONNECTED TO THE FRESCO TOUCH SCREEN.
*A MAXIMUM OF 128 DEVICES CAN BE DAISY CHAINED TO A FRESCO TOUCH SCREEN ON A SINGLE DAISY CHAIN.
*4 SCENE SWITCHES HAVE BEEN ADDED TO ALL OCCUPANCY SENSOR SWITCHES.
*FCS NETWORK CABLE CAN BE A MAXIMUM OF 1,000 FT. BETWEEN DEVICES.

PRODUCT LEGEND
LC1.0 (E-202)

ARP	FCR BAG	ARP FCR CONFIG HARDWARE BAG 2x2 Pole Relay, 1x3 Pole Relay
ARP	16	ARP INTENC16 NLT 16FCR MVOLT 1VB SC SM Acuity Relay Panel, Include INT and ENC, 16-Size, nLight, 16-field configurable relays, 120-277 VAC, Screw Cover, Surface Mount
ARP	48	ARP INTENC48 NLT 48FCR MVOLT 1VB HLK SM Acuity Relay Panel, Include INC and ENC, 48-size, nLight, 48-relays (40A), 120-277 VAC, Hinge Locking, Surface Mount
FCS	7TSN	FCS 7TSN XXX FRESCO DEVICE, 7" TOUCH SCREEN

Disclaimer

THIS CONTROLS SYSTEM LAYOUT DIAGRAM IS NOT A PROFESSIONAL ENGINEERING DRAWING, AND IS PROVIDED ONLY FOR INFORMATIONAL PURPOSES AND TO HELP THE CUSTOMER OR END-USER (AS APPLICABLE) UNDERSTAND HOW VARIOUS CONTROLS DEVICES ARE ARRANGED AND CONNECT TO EACH OTHER. THIS CONTROLS SYSTEM LAYOUT DIAGRAM IS STRICTLY BASED ON THE INFORMATION PROVIDED TO ACUITY BRANDS, AND IS PROVIDED WITHOUT WARRANTY AS TO ACCURACY, COMPLETENESS, RELIABILITY OR OTHERWISE. IF THE INFORMATION (INCLUDING BUT NOT LIMITED TO FLOOR-PLANS, REFLECTED CEILING PLANS, ELECTRICAL PLANS AND SPECIFICATIONS) PROVIDED TO ACUITY BRANDS IS INCOMPLETE OR NOT CURRENT (I.E., NEWER VERSIONS EXIST), THE ACCURACY OF THE LAYOUT DIAGRAM MAY BE ADVERSELY AFFECTED. ONCE THIS CONTROLS SYSTEM LAYOUT DIAGRAM IS RECEIVED BY THE CUSTOMER OR END-USER (AS APPLICABLE), IT IS THE OBLIGATION OF THE CUSTOMER OR END-USER (AS APPLICABLE) TO CONSULT WITH A PROFESSIONAL ENGINEERING ADVISOR TO DETERMINE WHETHER THE PROPOSED DESIGN MEETS THE APPLICABLE PROJECT REQUIREMENTS FOR THE CONTROLS SYSTEM'S PERFORMANCE, CODE COMPLIANCE, SAFETY, SUITABILITY AND EFFECTIVENESS FOR USE IN A PARTICULAR APPLICATION. IN NO EVENT WILL ACUITY BRANDS BE RESPONSIBLE FOR ANY LOSS RESULTING FROM ANY USE OF THIS CONTROLS SYSTEM LAYOUT DIAGRAM.

APPROVAL

CLIENT

CITY OF INDUSTRY
15625 MAYOR DAVE WAY
CITY OF INDUSTRY, CA 91744
PHONE: 626-333-2211

PROJECT NAME

CITY OF INDUSTRY
EXPO CENTER
GRAND ARENA
STRUCTURE AND
ANNOUNCER
BOOTH

16200 TEMPLE AVENUE
CITY OF INDUSTRY, CA 91744

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STAMP

STAMP

REGISTERED PROFESSIONAL ENGINEER STEVEN M. COLLINS No. E22808 ELECTRICAL STATE OF CALIFORNIA
DATE SIGNED 08/27/2025

ISSUE

REV.	DESCRIPTION	DATE
	90% CD SET	04/30/25
	95% CD SET	08/04/25
	100% CD SET	08/29/25

PROJECT IDENTIFICATION

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IDS PROJECT NO.	22X060.00
DRAWN BY	NG
CHECKED BY	SM
APPROVED BY	MO

SHEET TITLE

GRAND ARENA
LIGHTING CONTROL
PLAN

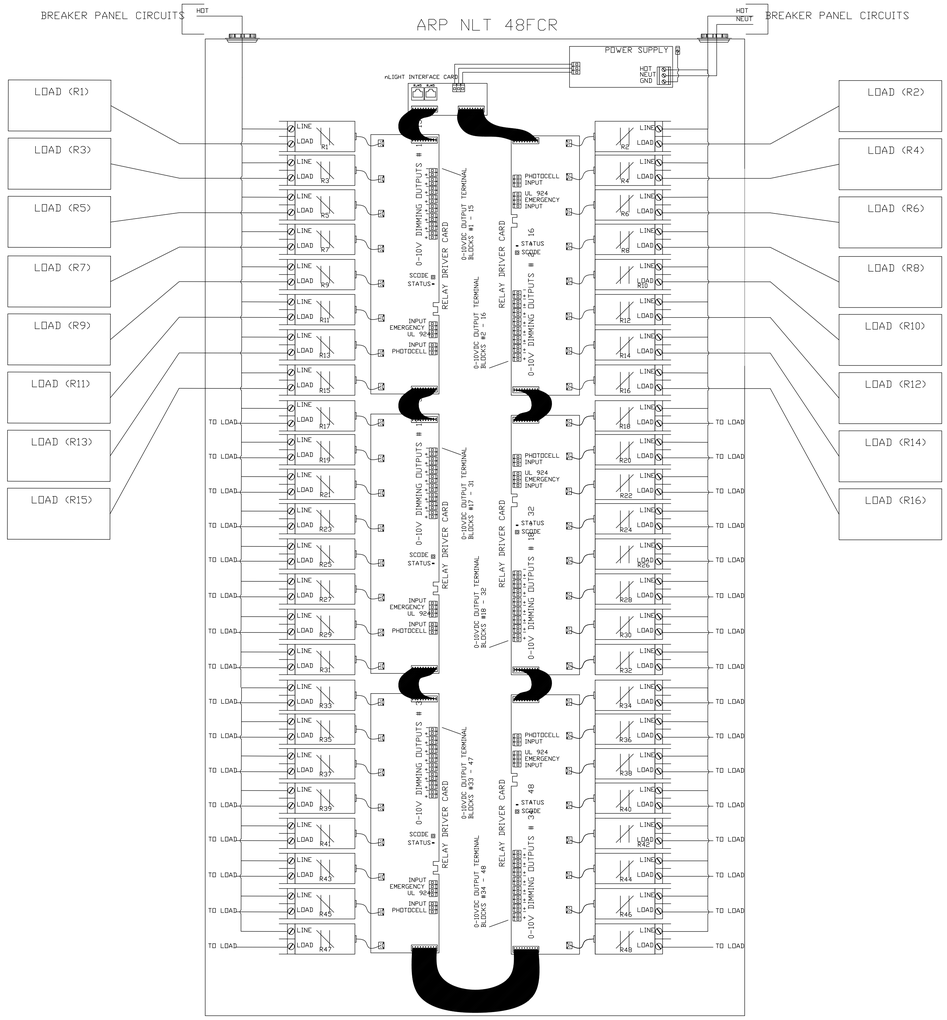
SHEET NUMBER

E-211

SHEET NO. OF

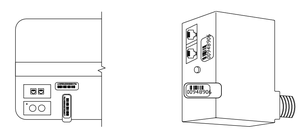
PLAN CHECK SET - NOT FOR CONSTRUCTION

IDS GROUP - FILE LOCATION: S:\PROJECTS\2022\SHARED\22X060.00 CITY OF INDUSTRY - EXPO CENTER - GRAND ARENA STRUCTURE & ANNOUNCER BOOTH\05 CAD\05 ELEC\22X060.00-E-201_212 OVERALL 1FP PLOT DATE: 8/27/2025
11:30:37 AM USER: MARGARITA.PASAYE



TYPICAL DIAGRAM: ARP NLT 48FCR

N.T.S.



BAR CODE ON NLIGHT ENABLED FIXTURE
TOP VIEW

BAR CODE ON NLIGHT DEVICE

NOTES:

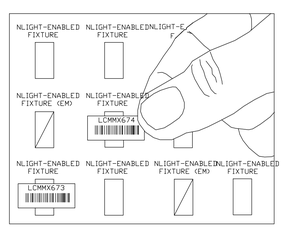
EVERY NLIGHT ENABLED DEVICE (INCLUDING NLIGHT EANABLED FIXTURES) IS FURNISHED WITH (1) PERMANENTLY ADHERED ID TAG AND (1) MATCHING, PARTIALLY ADHERED ID TAG TO BE PLACED ON THE RISER DIAGRAM SHEET PROVIDED AS PART OF AN NLIGHT SUBMITTAL DURING INSTALLATION AND PRIOR TO FACTORY STARTUP, CONTRACTOR SHALL PLACE EACH ID TAG BELOW EACH CORRESPONDING DEVICE SHOWN ON RISER DIAGRAM TO FACILITATE FACTORY STARTUP. FAILURE TO COMPLY MAY RESULT IN STARTUP DELAYS AND ADDITIONAL COSTS AT THE CONTRACTOR'S EXPENSE. DO NOT PLACE DEVICE ID STICKERS ON FLOOR PLAN UNLESS REQUIRED TO EXECUTE NFLOORPLAN SERVICES. REFERENCE NFLOORPLAN SERVICE NOTES ON THIS SHEET FOR SPECIFIC REQUIREMENTS.

THE SMALL BARCODE LABELS INCLUDED WITH ALL NLIGHT DEVICES AND NLIGHT ENABLED FIXTURES MUST BE PLACED ON A PRINTED PLAN BY THE INSTALLER PRIOR TO ONSITE SYSTEM STARTUP.

THE BARCODE INDICATES THE UNIQUE ID OF EACH NLIGHT DEVICE. THIS ID IS USED DURING SYSTEM STARTUP TO PROGRAM DEVICES WITH THE CORRECT GROUPINGS AND SETTINGS. WITHOUT THIS, SYSTEM STARTUP WILL REQUIRE ADDITIONAL DAYS ON THE JOB TO LOCATE DEVICE IDS.

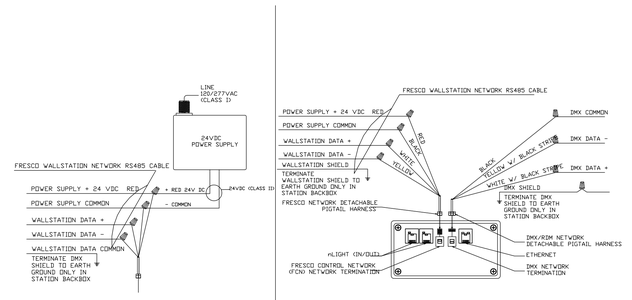
BARCODE INSTRUCTIONS:

1. PRINT A PLAN OF THE INSTALLATION AREA TO A MINIMUM D SIZE (24"X 36"). THE PLAN MAY BE A REFLECTED CEILING PLAN, LIGHTING PLAN, OR ELECTRICAL PLAN, SO LONG AS ALL DEVICES CAN BE LOCATED BY THE FIELD SUPPORT ENGINEER.
2. PLACE THE SMALL BARCODE LABEL (0.875" LONG) FROM EACH LUMINAIRE AND DEVICE ON THE FLOORPLAN. THE LARGE BARCODE LABEL (1.25" LONG) CAN BE USED ON THE OUTSIDE OF ANY HOUSING OR JUNCTION BOX THAT OBSCURES THE ID NUMBER SHOWN ON THE DEVICE ITSELF.
3. SAVE THE PLAN AT THE JOB SITE, AND HAND OVER TO ACUITY FIELD SUPPORT ENGINEER OR OTHER PERSONNEL RESPONSIBLE FOR ONSITE SYSTEM STARTUP. IT IS ALSO ACCEPTABLE TO PROVIDE THE BARCODE PLAN AS SCANNED PDF FILES, EMAILED TO YOUR LOCAL LIGHTING AGENCY. IF YOU DO NOT KNOW YOUR LOCAL LIGHTING AGENCY, PLEASE REACH OUT TO TECH SUPPORT AT 1 (800) 535-2465, OPTION 1 FOR NLIGHT. THEY WILL BE ABLE TO IDENTIFY YOUR LOCAL REP.
4. DRAW ON PLAN ANY LOCATION CHANGES FOR A FIXTURE OR DEVICES, IF DIFFERENT THAN SHOWN ON PLAN.



NLIGHT BARCODE INSTRUCTIONS

N.T.S.



FRESCO POWER SUPPLY DETAIL

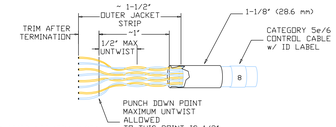
FRESCO TERMINATION DETAIL

FRESCO POWER SUPPLY & TERMINATION DETAIL

N.T.S.

TIA / EIA-568-B CABLING STANDARD TERMINATION

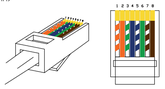
Function	#	PAIR PIN OUT (T568B)	Wire Color
(T1) (R1)	1	5 4	WHITE w/ BLUE BLUE
Tx + (T2) Tx - (R2)	2	1 2	WHITE w/ ORANGE ORANGE
Rx + (T3) Rx - (R3)	3	3 6	WHITE w/ GREEN GREEN
(T4) (R4)	4	7 8	WHITE w/ BROWN BROWN



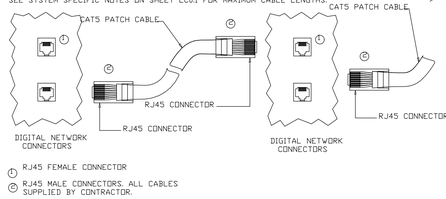
TERMINATION & TESTING OF CAT5 CABLES MUST BE DONE BY A QUALIFIED NETWORK INSTALLER

Cable termination requirements

1. Strip off outer jacket - approximately 1-1/2" (37.6 mm)
2. Terminate approximately 1/2" (12.2 mm) from end of conductors on type 110 punch down block or connector per schedule (T568b) - maximum untwist of conductors to terminations is 1/2" (12.2 mm) - trim excess leads.



SEE SYSTEM SPECIFIC NOTES ON SHEET LC0.1 FOR MAXIMUM CABLE LENGTHS.



1. WHITE w/ ORANGE
2. ORANGE
3. WHITE w/ GREEN
4. BLUE
5. WHITE w/ BLUE
6. GREEN
7. WHITE w/ BROWN
8. BROWN

Notes:

Daisy-chain CAT5 patch cable with RJ45 connectors from digital device to digital device.

Refer to manufacturers instructions for long distance runs between digital devices.

Crimp and test each cable with a LAN circuit tester prior to installation.

(1) RJ45 FEMALE CONNECTOR
(2) RJ45 MALE CONNECTORS. ALL CABLES SUPPLIED BY CONTRACTOR.

CAT5E/6 CABLE TERMINATION

N.T.S.

APPROVAL

CLIENT

CITY OF INDUSTRY
15625 MAYOR DAVE WAY
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PHONE: 626-333-2211

PROJECT NAME

CITY OF INDUSTRY
EXPO CENTER
GRAND ARENA
STRUCTURE AND
ANNOUNCER
BOOTH

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ENGINEER/ARCHITECT

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DATE SIGNED 08/27/2025

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IDS PROJECT NO.	22X060.00
DRAWN BY	NG
CHECKED BY	SM
APPROVED BY	MO

SHEET TITLE

GRAND ARENA LIGHTING CONTROL PLAN

SHEET NUMBER

E-212

SHEET NO. OF

PLAN CHECK SET - NOT FOR CONSTRUCTION

IDS GROUP - FILE LOCATION: S:\PROJECTS\2022\SHARED\22X060.00 CITY OF INDUSTRY - EXPO CENTER - GRAND ARENA STRUCTURE & ANNOUNCER BOOTH\05 CAD\05 ELEC\22X060.00-E-201_212 OVERALL 1FP PLOT DATE: 8/27/2025 11:30:46 AM USER: MARGARITA.PASAYE

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TITLE | X"=X'-X" | 19

TITLE | X"=X'-X" | 18

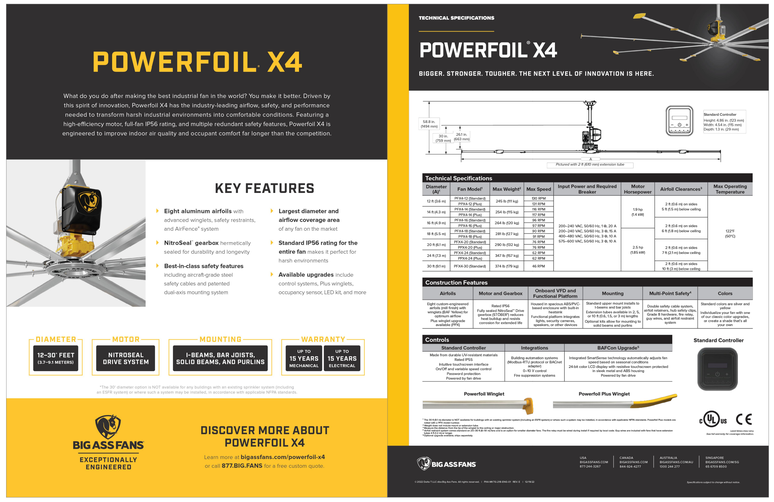
TITLE | X"=X'-X" | 17

TITLE | X"=X'-X" | 16

TITLE | X"=X'-X" | 15

TITLE | X"=X'-X" | 14

TITLE | X"=X'-X" | 13



BIG ASS FANS PFX4 CUT SHEETS | N.T.S. | 7

SINGLE CONDUIT PENETRATION DETAIL | N.T.S. | 3

SYSTEM NO. WL1001
(FORMERLY SYSTEM NO. 147)
F RATINGS - 1,2,3, AND 4 HR (SEE ITEMS 2 AND 3)
T RATINGS - 0,1,2,3, AND 4 HR (SEE ITEM 3)
L RATING AT AMBIENT - LESS THAN 1 CFM/SQ FT (SEE ITEM 3)
L RATING AT 400 F - LESS THAN 1 CFM/SQ FT (SEE ITEM 3)

1. WALL ASSEMBLY - THE 1,2,3 OR 4 HR FIRE -RATED GYPSUM WALL BOARD/STUD WALL ASSEMBLY SHALL BE CONSTRUCTED OF THE MATERIALS AND IN THE MANNER DESCRIBED IN THE INDIVIDUAL U300 OR U400 SERIES WALL OR PARTITION DESIGN IN THE UL FIRE RESISTANCE DIRECTORY AND SHALL INCLUDE THE FOLLOWING CONSTRUCTION FEATURES :

A. STUDS - WALL FRAMING MAY CONSIST OR EITHER WOOD STUDS (MAX.2 HR FIRE RATED ASSEMBLIES) OR STEEL CHANNEL STUDS. WOOD STUDS TO CONSIST OF NOM 2 BY 4 IN. LUMBER SPACED IN 18 IN. OC WIT NOM 2 BY 4 IN. LUMBER AND PLATES AND CROSS BRACES. STEEL STUDS TO BE MIN 3-8/8 IN. WIDE BY 1-3/8 IN. DEEP CHANNELS SPACED MAX 24 IN. CC

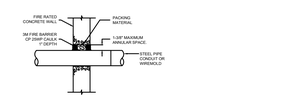
B. WALLBOARD, GYPSUM - NOM 1/2 OR 8/8 IN.THICK , 4 FT.WIDE WITH SQUARE OR TAPERED EDGES, THE GYPSUM WALLBOARD RYPS, THICKNESS,NUMBER OF LAYERS, FASTENER TYPE AND SHEET ORIENTATION SHALL BE SPECIFIED IN THE INDIVIDUAL U300 OR U400 SERIES DESIGN IN THE UL FIRE RESISTANCE DIRECTORY . MAX DIA. OF OPENING IS 13-1/2 IN.

2. PIPE OR CONDUIT - NOM 12 IN.DIA.(OR SMALLER) SCHEDULE 10(OR HAVIER)STEEL PIPE NOM 6 IN.DIA.(OR SMALLER) STEEL CONDUIT, NOM.4 IN. DIA. (OR SMALLER) STEEL ELECTRICAL METALLIC TUBING OR TYPE L OR (OR HEAVIER) COPPER TUBING NOM1 IN.DIA. (OR SMALLER) FLEXIBLE STEEL CONDUIT . WHEN COPPER PIPE OR FLEXIBLE STEEL CONDUIT IS USED , MAX F RATING OF FIRESTOP SYSTEM (ITEM STRUCTED USING STEEL CHANNEL STUDS. A MAX OF ONE PIPE OR CONDUIT IS PERMITTED IN THE FIRESTOP SYSTEM. PIPE OR CONDUIT TO BE INSTALLED NEAR CENTER OF STUD CAVITY WIDTH AND TO BE RIGIDLY SUPPORTED ON BOTH SIDES OF WALL ASSEMBLY .

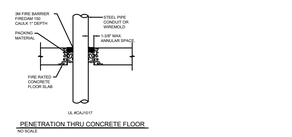
3. FILL, VOID OR CAVITY MATERIAL - CAULK - CAULK FILL MATERIAL INSTALLED TO COMPLETELY FILL ANNULAR SPACE BETWEEN PIPE OR CONDUIT AND GYPSUM WALLBOARD AND WITH A MIN 1/4 IN. DIA. BOARD OF CAULK APPLIED TO PERIMETER OF PIPE OR CONDUIT AT ITS EGRESS FROM THE WALL. CAULK INSTALLED SYMMETRICALLY ON BOTH SIDES OF WALL ASSEMBLY. THE HOURLY F RATING OF THE FIRESTOP SYSTEM IS DEPENDENT UPON THE HOURLY FIRE RATING OF THE WALL ASSEMBLY IN WHICH IT IS INSTALLED, AS SHOWN IN THE FOLLOWING TABLE. THE HOURLY T RATING OF THE FIRESTOP SYSTEM IS DEPENDENT UPON THE TYPE OR SIZE OF THE PIPE OR CONDUIT AND THE HOURLY FIRE RATING OF THE WALL ASSEMBLY IN WHICH IT IS INSTALLED, AS TABULATED BELOW :

MAX PIPE OR CONDUIT DIA., IN	ANNULAR SPACE IN	RATING HR	RATING HR
1	0 TO 3/16	1 OR 2	3 OR 4
1	1/4 TO 1/2	1 OR 2	3 OR 4
4	0 TO 1/4	1 OR 2	0
6	1/4 TO 1/2	1 OR 2	0
12	3/16 TO 3/8	1 OR 2	0

+ WHEN COPPER PIPE IS USED , T RATING IS O NOM.
MINNESSOTA MINING & MFG. CO. - TYPES CP-25 S/L, CP-25 N/8 , CP-25 WS, CP-25 WS + (NOTE: L RATINGS APPLY WHEN TYPE CP-25 WS+ CAULK IS USED.)



PENETRATION THRU CONCRETE WALL
NO SCALE



PENETRATION THRU CONCRETE FLOOR
NO SCALE

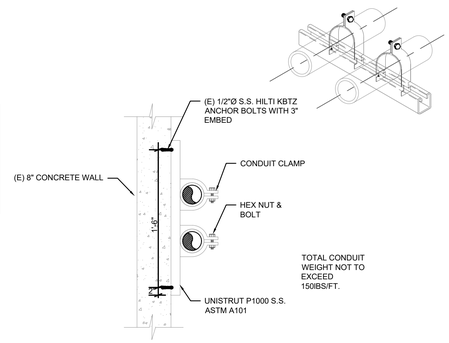
CONDUIT SUPPORT TO CMU WALL | N.T.S. | 2

CONDUIT TRADE SIZE	SIZE AND EMBEDMENT OF ANCHOR BOLTS
½"C - 2 ½"C	¼" X 1 ¾
3"C - 4"C	⅜" X 1 ½"

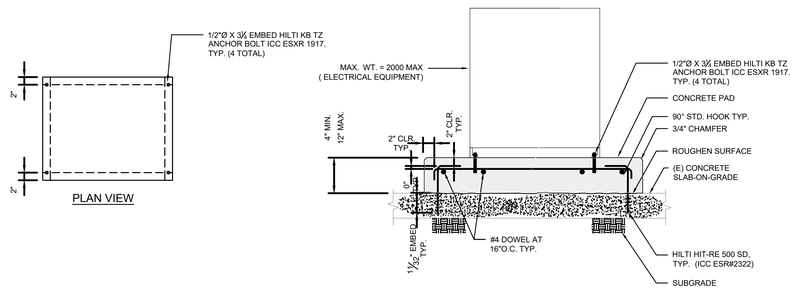
TABLE 344.30(B) (2) SUPPORT FOR RIGID METAL CONDUIT

CONDUIT SIZE		MAXIMUM DISTANCE BETWEEN RIGID METAL CONDUIT SUPPORTS	
METRIC DESIGNER	TRADE SIZE	METERS	FEET
16-21	1/2-3/4	3	10
27	1	3.7	12
35-41	1 1/4 - 1 1/2	4.3	14
53-63	2 - 2 1/2	4.9	16

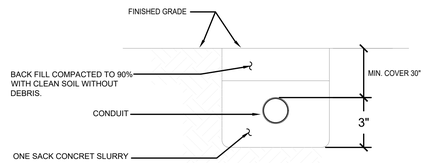
EMT SHALL BE SECURELY FASTENED IN PLACE AT LEAST EVERY 3 m (10 FT).



PAD MOUNTED TRANSFORMER | N.T.S. | 5



CONDUIT TRENCH DETAIL | N.T.S. | 1



APPROVAL

CLIENT

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15625 MAYOR DAVE WAY
CITY OF INDUSTRY, CA 91744
PHONE: 626-333-2211

PROJECT NAME

CITY OF INDUSTRY
EXPO CENTER
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STRUCTURE AND
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Bbooth

16200 TEMPLE AVENUE
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ENGINEER/ARCHITECT

IDS GROUP
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STAMP

STAMP

REGISTERED PROFESSIONAL ENGINEER
STEVEN M. COLTON
No. E22808
EXP. 06/30/2026
CIVIL
STATE OF CALIFORNIA
DATE SIGNED 08/27/2025

ISSUE

REV.	DESCRIPTION	DATE
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IDS PROJECT NO.	22X060.00
DRAWN BY	NG
CHECKED BY	SM
APPROVED BY	MO

SHEET TITLE

ELECTRICAL DETAILS

SHEET NUMBER

E-301

SHEET NO. OF

PLAN CHECK SET - NOT FOR CONSTRUCTION

IDS GROUP - FILE LOCATION: S:\PROJECTS\2022\SHARED\22X060.00 CITY OF INDUSTRY - EXPO CENTER - GRAND ARENA STRUCTURE & ANNOUNCER BOOTH\05 CAD\05 ELEC\22X060.00-E-301_ELECTRICAL DETAILS PLOT DATE: 8/27/2025 11:30:39 AM USER: MARGARITA.PASAYE

STATE OF CALIFORNIA
Indoor Lighting
CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE			NRCC-LTI-E
This document is used to demonstrate compliance with requirements in 110.9, 110.12(c), 130.0, 130.1, 140.6 and 141.0(b)2 for indoor lighting scopes using the prescriptive path for nonresidential and hotel/motel occupancies. It is also used to document compliance with requirements in 160.5, 170.2(e) and 180.2(b)4 for indoor lighting scopes using the prescriptive path for multifamily occupancies. Multifamily includes dormitory and senior living facilities.			
Project Name:	City of Industry Expo Center	**Report Page:**	**(Page 1 of 8)**
Project Address:	16200 Temple Avenue	**Date Prepared:**	7/14/2025

A. GENERAL INFORMATION

01	Project Location (city)	City of Industry	04	Total Conditioned Floor Area (ft²)	0
02	Climate Zone	9	05	Total Unconditioned Floor Area (ft²)	73,257
03	Occupancy Types Within Project (select all that apply):		06	# of Stories (Habitable Above Grade)	1

● Auditorium ● Sports Arena

B. PROJECT SCOPE

This table includes any lighting systems that are within the scope of the permit application and are demonstrating compliance using the prescriptive path outlined in 140.6 / 170.2(e) or 141.0(b)2 / 180.2(b)4 for alterations.

Scope of Work	Conditioned Spaces		Unconditioned Spaces	
01	02	03	04	05
My Project Consists of (check all that apply):	Calculation Method	Area (ft²)	Calculation Method	Area (ft²)
☐ New Lighting System				
☐ New Lighting System - Parking Garage				
☒ Altered Lighting System	Area Category Method	0	Area Category Method	73257
Total Area of Work (ft²)	0		73257	

STATE OF CALIFORNIA
Indoor Lighting
CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE			NRCC-LTI-E
Project Name:	City of Industry Expo Center	**Report Page:**	**(Page 2 of 8)**
		Date Prepared:	7/14/2025

C. COMPLIANCE RESULTS

If any cell on this table says "DOES NOT COMPLY" or "COMPLIES with Exceptional Conditions" refer to Table D. for guidance.

Lighting in conditioned and unconditioned spaces must not be combined for compliance per 140.6(b)1 / 170.2(e)	Allowed Lighting Power per 140.6(b) / 170.2(e) (Watts)						Adjusted Lighting Power per 140.6(a) / 170.2(e) (Watts)				Compliance Results
	01	02	03	04	05		06	07		08	09
	Complete Building 140.6(c)1	Area Category 140.6(c)2 / 170.2(e)4	Area Category Additional 140.6(c)2G / 170.2(e)4Av (+)	Tailored 140.6(c)3 / 170.2(e)4B (+)			Total Designed (Watts)	Adjustments PAF Lighting Control Credits 140.6(a)2 / 170.2(e)1B (-)		Total Adjusted (Watts) *Includes Adjustments	05 must be >= 08 140.6 / 170.2(e)
	(See Table I)	(See Table I)	(See Table J)	(See Table K)			(See Table F)	(See Table P)			
Conditioned					=	≥			=		
Unconditioned		120,060.6	0		= 120,061	≥	75,694	0	=	75694	COMPLIES
Controls Compliance (See Table H for Details)											COMPLIES
Rated Power Reduction Compliance (See Table Q for Details)											

D. EXCEPTIONAL CONDITIONS

This table is auto-filled with uneditable comments because of selections made or data entered in tables throughout the form.

E. ADDITIONAL REMARKS

This table includes remarks made by the permit applicant to the Authority Having Jurisdiction.

STATE OF CALIFORNIA
Indoor Lighting
CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE			NRCC-LTI-E
Project Name:	City of Industry Expo Center	**Report Page:**	**(Page 3 of 8)**
		Date Prepared:	7/14/2025

F. INDOOR LIGHTING FIXTURE SCHEDULE

This table includes all planned permanent and portable lighting other than dwelling unit/ hotel/ motel room lighting. Multifamily dwelling unit and hotel/motel room lighting is documented in Table T. If using Table T to document lighting in multifamily common use areas providing shared provisions for living, eating, cooking or sanitation, those luminaires are not included here.

Designed Wattage: Unconditioned Spaces

01	02	03	04	05	06	07	08	09	10	
Name or Item Tag	Complete Luminaire Description	Modular (Track) Fixture	Small Aperture & Color Change[1]	Watts per luminaire[2]	How is Wattage determined	Total Number of Luminaires	Excluded per 140.6(a)3 / 170.2(e)2C	Design Watts	Field Inspector	
									Pass	Fail
A1	A1_LED spotlight 40°	No	NA	224	Mfr. Spec	10	No	2,240	☐	☐
A2	A2_LED spotlight 60°	No	NA	224	Mfr. Spec	9	No	2,016	☐	☐
A3	A3_LED spotlight 100°	No	NA	224	Mfr. Spec	56	No	12,544	☐	☐
A4	A4_LED spotlight RGBW 20°	No	NA	226	Mfr. Spec	164	No	37,064	☐	☐
A5	A5_LED spotlight RGBW 20°	No	NA	226	Mfr. Spec	36	No	8,136	☐	☐
B	B_Asymmetric Indirect LED	No	NA	381	Mfr. Spec	34	No	12,954	☐	☐
D	D_LED wall light	No	NA	185	Mfr. Spec	4	No	740	☐	☐
					Total Designed Watts: UNCONDITIONED SPACES			75,694		

[1]*FOOTNOTE: Design Watts for small aperture and color changing luminaires which qualify per 140.6(a)4B / 170.2(e)2D is adjusted to be 75% /80% of their rated wattage. Table F automatically makes this adjustment, the permit applicant should enter full rated wattage in column 05.*

[2]*Authority Having Jurisdiction may ask for Luminaire cut sheets to confirm wattage used for compliance per 130.0(c) / 160.5(b). Wattage used must be the maximum rated for the luminaire, not the lamp.*

G. MODULAR LIGHTING SYSTEMS

This section does not apply to this project.

STATE OF CALIFORNIA
Indoor Lighting
CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE			NRCC-LTI-E
Project Name:	City of Industry Expo Center	**Report Page:**	**(Page 4 of 8)**
		Date Prepared:	7/14/2025

H. INDOOR LIGHTING CONTROLS (Not including PAFs)

This table includes lighting controls for conditioned and unconditioned spaces.

Building Level Controls

01	02	03	
		Field Inspector	
Mandatory Demand Response 110.12(c)	Shut-off controls 130.1(c) / 160.5(b)4C	Pass	Fail
Required >= 4,000W subject to multilevel	Whole Building EMCS	☐	☐

Area Level Controls

04	05	06	07	08	09	10	11	12	
Area Description	Complete Building or Area Category Primary Function Area	Manual Area Controls 130.1(a) / 160.5(b)4A	Multi-Level Controls 130.1(b) / 160.5(b)4B	Shut-Off Controls 130.1(c) // 160.5(b)4C	Primary/Sky lit Daylighting 130.1(d) / 160.5(b)4D	Secondary Daylighting 130.1(d) / 160.5(b)4D	Interlocked Systems 140.6(a)1/ 170.2(e)2A	Field Inspector	
								Pass	Fail
Arena, Seating Area	All Other Space Types	Readily Accessible	Dimmer	EMCS	Included	NA: Rm < 24sf Glazing	No	☐	☐
					13				
					Plan Sheet Showing Daylit Zones:				

I. LIGHTING POWER ALLOWANCE: COMPLETE BUILDING OR AREA CATEGORY METHODS

Each area complying using the Complete Building or Area Category Methods per 140.6(b) are included in this table. Column 06 indicates if additional lighting power allowances per 140.6(c) or adjustments per 140.6(a) are being used .

Unconditioned Spaces

01	02	03	04	05	06	
Area Description	Complete Building or Area Category Primary Function Area	Allowed Density (W/ft²)	Area (ft²)	Allowed Wattage (Watts)	Additional Allowance / Adjustment	
					Area Category	PAF
Sports Arena	All Other Space Types	2.25	47,707	107,340.8	No	No

STATE OF CALIFORNIA
Indoor Lighting
CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE			NRCC-LTI-E
Project Name:	City of Industry Expo Center	**Report Page:**	**(Page 5 of 8)**
		Date Prepared:	7/14/2025

I. LIGHTING POWER ALLOWANCE: COMPLETE BUILDING OR AREA CATEGORY METHODS

Arena Seating Area	Audience Seating Area	0.5	24,998	12,499	No	No
All Others	All Other Space Types	0.4	552	220.8	No	No
		TOTALS:	73,257	120,060.6	See Tables J, or P for detail	

J. ADDITIONAL ALLOWANCE: AREA CATEGORY METHOD QUALIFYING LIGHTING SYSTEM

This section does not apply to this project.

K. TAILORED METHOD GENERAL LIGHTING POWER ALLOWANCE

This section does not apply to this project.

L. ADDITIONAL LIGHTING ALLOWANCE: TAILORED WALL DISPLAY

This section does not apply to this project.

M. ADDITIONAL LIGHTING ALLOWANCE: TAILORED FLOOR AND TASK LIGHTING

This section does not apply to this project.

N. ADDITIONAL LIGHTING ALLOWANCE: TAILORED DECORATIVE /SPECIAL EFFECTS

This section does not apply to this project.

O. ADDITIONAL LIGHTING ALLOWANCE: TAILORED VERY VALUABLE MERCHANDISE

This section does not apply to this project.

P. POWER ADJUSTMENT: LIGHTING CONTROL CREDIT (POWER ADJUSTMENT FACTOR (PAF))

This section does not apply to this project.

STATE OF CALIFORNIA
Indoor Lighting
CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE			NRCC-LTI-E
Project Name:	City of Industry Expo Center	**Report Page:**	**(Page 6 of 8)**
		Date Prepared:	7/14/2025

Q. RATED POWER REDUCTION COMPLIANCE FOR ONE-FOR-ONE ALTERATIONS

This section does not apply to this project.

R. 80% LIGHTING POWER FOR ALL ALTERATIONS - CONTROLS EXCEPTIONS

This section does not apply to this project.

S. DAYLIGHT DESIGN POWER ADJUSTMENT FACTOR (PAF)

This section does not apply to this project.

T. DWELLING UNIT LIGHTING

This section does not apply to this project.

U. DECLARATION OF REQUIRED CERTIFICATES OF INSTALLATION

Selections have been made based on information provided in this document. If any selections have been changed by permit applicant, an explanation should be included in Table E. Additional Remarks. These documents must be provided to the building inspector during construction and can be found online

Form/Title
NRCI-LTI-E - Must be submitted for all buildings

STATE OF CALIFORNIA
Indoor Lighting
CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE			NRCC-LTI-E
Project Name:	City of Industry Expo Center	**Report Page:**	**(Page 7 of 8)**
		Date Prepared:	7/14/2025

V. DECLARATION OF REQUIRED CERTIFICATES OF ACCEPTANCE

Selections have been made based on information provided in this document. If any selections have been changed by the permit applicant, an explanation should be included in Table E. Additional Remarks. These documents must be provided to the building inspector during construction and any with "-A" in the form name must be completed through an Acceptance Test Technician Certification Provider (ATTCP). For more information visit: http://www.energy.ca.gov/title24/attcp/providers.html

Form/Title	Systems/Spaces To Be Field Verified
NRCA-LTI-02-A - Must be submitted for occupancy sensors and automatic time switch controls.	Whole Building EMCS;
NRCA-LTI-03-A - Must be submitted for automatic daylight controls.	Arena, Seating Area;
NRCA-LTI-04-A - Must be submitted for demand responsive lighting controls.	Whole Building Demand Response;

STATE OF CALIFORNIA
Indoor Lighting
CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE			NRCC-LTI-E
Project Name:	City of Industry Expo Center	**Report Page:**	**(Page 8 of 8)**
Project Address:	16200 Temple Avenue	**Date Prepared:**	7/14/2025

DOCUMENTATION AUTHOR'S DECLARATION STATEMENT

I certify that this Certificate of Compliance documentation is accurate and complete.

Documentation Author Name: Margarita Pasaye	Documentation Author Signature: Margarita Pasaye
Company: IDS	Signature Date:
Address: 1 Peters Canyon Road	CEA/ HERS Certification Identification (if applicable):
City/State/Zip: Suite 130 CA 92606	Phone: (949) 387-8500

RESPONSIBLE PERSON'S DECLARATION STATEMENT

I certify the following under penalty of perjury, under the laws of the State of California:

1. The information provided on this Certificate of Compliance is true and correct.
2. I am eligible under Division 3 of the Business and Professions Code to accept responsibility for the building design or system design identified on this Certificate of Compliance (responsible designer)
3. The energy features and performance specifications, materials, components, and manufactured devices for the building design or system design identified on this Certificate of Compliance conform to the requirements of Title 24, Part 1 and Part 6 of the California Code of Regulations.
4. The building design features or system design features identified on this Certificate of Compliance are consistent with the information provided on other applicable compliance documents, worksheets, calculations, plans and specifications submitted to the enforcement agency for approval with this building permit application.
5. I will ensure that a completed signed copy of this Certificate of Compliance shall be made available with the building permit(s) issued for the building, and made available to the enforcement agency for all applicable inspections. I understand that a completed signed copy of this Certificate of Compliance is required to be included with the documentation the builder provides to the building owner at occupancy.

Responsible Designer Name: Steven M. Collins	Responsible Designer Signature:
Company: IDS Group	Date Signed: 2025-07-14
Address: 1 Peters Canyon	License: E22808
City/State/Zip: Irvine CA 92606	Phone: (949) 387-8500

APPROVAL

CLIENT

15625 MAYOR DAVE WAY
CITY OF INDUSTRY, CA 91744
PHONE: 626-333-2211

PROJECT NAME

CITY OF INDUSTRY
EXPO CENTER
GRAND ARENA
STRUCTURE AND
ANNOUNCER
BOOTH

16200 TEMPLE AVENUE
CITY OF INDUSTRY, CA 91744

ENGINEER/ARCHITECT

IDS GROUP
1 PETERS CANYON ROAD, SUITE 130
IRVINE, CA 92606
TEL: 949-387-8500, FAX: 949-387-0800

STAMP

STAMP

REGISTERED PROFESSIONAL ENGINEER STEVEN M. COLLINS No. E22808 ELECTRICAL STATE OF CALIFORNIA

DATE SIGNED 08/27/2025

ISSUE

REV.	DESCRIPTION	DATE
	90% CD SET	04/30/25
	95% CD SET	08/04/25
	100% CD SET	08/29/25

PROJECT IDENTIFICATION

THIS DRAWING WAS CREATED IN AUTODESK AUTOCAD V. 2021 UNLESS OTHERWISE NOTED.

THE ORIGINAL SIZE OF THIS SHEET IS 30" X 42"

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IDS PROJECT NO.	22X060.00
DRAWN BY	NG
CHECKED BY	SM
APPROVED BY	MO

SHEET TITLE

GRAND ARENA
TITLE 24
COMPLIANCE FORMS

SHEET NUMBER

E-401

SHEET NO. OF

PLAN CHECK SET - NOT FOR CONSTRUCTION

IDS GROUP - FILE LOCATION: S:\PROJECTS\2022\SHARED\22X060.00 CITY OF INDUSTRY - EXPO CENTER - GRAND ARENA STRUCTURE & ANNOUNCER BOOTH\05 CAD\05 ELEC\22X060.00-E-401 TITLE 24 CALCULATIONS PLOT DATE: 8/27/2025 11:30:32 AM USER: MARGARITA.PASAYE

STATE OF CALIFORNIA
Outdoor Lighting CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-LTO-E
This document is used to demonstrate compliance with requirements in 110.9, 130.0, 130.2, 140.7, and 141.0(b)2L for outdoor lighting scopes using the prescriptive path for nonresidential and hotel/motel occupancies. It is also used to document compliance with requirements in 160.5, 170.2(e)6, 180.1(a) and 180.2(b)4Bv for outdoor lighting scopes using the prescriptive path for multifamily and mixed-use occupancies. Multifamily includes dormitory and senior living facilities.	
Project Name: City of Industry Expo Center	**Report Page:** (Page 1 of 8)
Project Address: 16200 Temple Avenue	**Date Prepared:** 7/14/2025

A. GENERAL INFORMATION

01	Project Location (city)	City of Industry	04	Total Illuminated Hardscape Area (ft²)	32804
02	Climate Zone	9			
03	Outdoor Lighting Zone per Title 24 Part 1 10.114 or as designated by Authority Having Jurisdiction (AHJ):				
☐	LZ-0: Very Low - Undeveloped Parkland	☐ LZ-2: Moderate - Urban Clusters	☐ LZ-4: High - Must be reviewed by CA Energy Commission for Approval		
☐	LZ-1: Low - Rural Areas	☒ LZ-3: Moderately High - Urban Areas			
05	Occupancy Types within Project				
● Auditorium ● Sports Arena					

B. PROJECT SCOPE

This table includes outdoor lighting systems that are within the scope of the permit application and are demonstrating compliance using the prescriptive path outlined in 140.7 / 170.2(e)6 or 141.0(b)2L / 180.2(b)4Bv for alterations.

My Project Consists of:

01	02	
☐ New Lighting System	Must Comply with Allowances from 140.7 / 170.2(e)6	
☒ Altered Lighting System	Is your alteration increasing the connected lighting load (Watts)?	○ Yes ● No
03	**04**	**05**
% of Existing Luminaires Being Altered[1]	Sum Total of Luminaires Being Added or Altered	Calculation Method
☐ < 10% ☐ >= 10% and < 50% ☒ >= 50%	11	Calculated Allowance per 140.7 / 170.2(e)6

[1] *FOOTNOTES: % of Existing Luminaires Being Altered = (Sum Total of Luminaires Being Added or Altered / Existing Luminaires within the Scope of the Permit Application) x 100.*

STATE OF CALIFORNIA
Outdoor Lighting CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-LTO-E
Project Name: City of Industry Expo Center	**Report Page:** (Page 2 of 8)
	Date Prepared: 7/14/2025

C. COMPLIANCE RESULTS

Results in this table are automatically calculated from data input and calculations in Tables F through N. Note: If any cell on this table says "COMPLIES with Exceptional Conditions" refer to Table D. Exceptional Conditions for guidance or see applicable Table referenced below.

Calculations of Total Allowed Lighting Power (Watts) 140.7 / 170.2(e)6 or 141.0(b)2L / 180.2(b)4Bv												Compliance Results		
01		02		03		04		05		06		07	08	09
General Hardscape Allowance 140.7(d)1 / 170.2(e)6 (See Table I)	+	Per Application 140.7(d)2 / 170.2(e)6 (See Table J)	+	Sales Frontage 140.7(d)2 (See Table K)	+	Ornamental 140.7(d)2 / 170.2(e)6 (See Table L)	+	Per Specific Area 140.7(d)2 / 170.2(e)6 (See Table M)	OR	Existing Power Allowance 141.0(b)2L / 180.2(b)4Bv (See Table N)	=	**Total Allowed** (Watts)	≥	**Total Actual** (Watts)	**07 must be >= 08**
1,142	+	---	+	---	+	---	+	270	OR	---	=	1,412	≥	1,404	COMPLIES
Shielding Compliance (See Table G for Details)															N/A
Controls Compliance (See Table H for Details)															COMPLIES

D. EXCEPTIONAL CONDITIONS

This table is auto-filled with uneditable comments because of selections made or data entered in tables throughout the form.

E. ADDITIONAL REMARKS

This table includes remarks made by the permit applicant to the Authority Having Jurisdiction.

STATE OF CALIFORNIA
Outdoor Lighting CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-LTO-E
Project Name: City of Industry Expo Center	**Report Page:** (Page 3 of 8)
	Date Prepared: 7/14/2025

F. OUTDOOR LIGHTING FIXTURE SCHEDULE

For new or altered lighting systems demonstrating compliance with 140.7 / 170.2(e)6 all new luminaires being installed and any existing luminaires remaining or being moved within the spaces covered by the permit application are included in the Table below. For altered lighting systems using the Existing Power method per 141.0(b)2L only new luminaires being installed and replacement luminaires being installed as part of the project scope are included (ie, existing luminaires remaining or existing luminaires being moved are not included). Outdoor lighting attached to multifamily buildings and controlled from the inside of a dwelling unit are included in Table H. and are not included here. All other multifamily outdoor lighting is included here.

Designed Wattage:

01	02		03	04	05	06	07	08	09	10	
Name or Item Tag	Complete Luminaire Description		Watts per luminaire[1, 2]	How is Wattage determined	Total Number Luminaires[2]	Luminaire Status[3]	Excluded per 140.7(a) / 170.2(e)6A	Design Watts	Cutoff Req. > 6,200 initial lumen output: 130.2(b) / 160.5(c)[4]	Field Inspector	
										Pass	Fail
C	C_LED Downlight	☐ Linear	54	Mfr. Spec	5	Existing Alteration	☐	270	NA: < 6200 lumens	☐	☐
F	F_LED floodlight	☐ Linear	189	Mfr. Spec	6	Existing Alteration	☐	1,134	NA: < 6200 lumens	☐	☐
						Total Design Watts:		1404			

* NOTES: Selections with a * require a note in the space below explaining how compliance is achieved.
EX: Luminaire is lighting a statue; EXCEPTION 2 to 130.2(b)

[1] *FOOTNOTES: Authority Having Jurisdiction may ask for Luminaire cut sheets to confirm wattage used for compliance per 130.0(c) / 160.5(b)*
[2] *For linear luminaires, wattage should be indicated as W/lf instead of Watts/luminaire. Total linear feet should be indicated in column 05 instead of number of luminaires.*
[3] *Select "New" for new luminaires in a new outdoor lighting project, or for added luminaires in an alteration. Select "Altered" for replacement luminaires in an alteration. Select "Existing to Remain" for existing luminaires within the project scope that are not being altered and are remaining. Select "Existing Reinstalled" for existing luminaires which are being removed and reinstalled as part of the project scope.*
[4] *Compliance with mandatory shielding requirements is required for luminaires with initial lumen output >= 6,200 unless exempted by 130.2(b)/ 160.5(c)*

G. SHIELDING REQUIREMENTS (BUG)

This section does not apply to this project.

STATE OF CALIFORNIA
Outdoor Lighting CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-LTO-E
Project Name: City of Industry Expo Center	**Report Page:** (Page 4 of 8)
	Date Prepared: 7/14/2025

H. OUTDOOR LIGHTING CONTROLS

This table demonstrates compliance with controls requirements for all new or altered luminaires installed as part of the permit application. For alteration projects, luminaires which are existing to remain (ie untouched) and luminaires which are removed and reinstalled (wiring only) do not need to be included in this table even if they are within the spaces covered by the permit application.
Outdoor lighting for nonresidential buildings, parking garages and common service areas in multifamily buildings must be documented separately from outdoor lighting attached to multifamily buildings and controlled from the inside of a dwelling unit

Mandatory Controls for Nonresidential Occupancies, Parking Garages & Common Areas in Multifamily Buildings

01	02	03	04	05	
Area Description	Shut-Off 130.2(c)1 / 160.5(c)	Auto-Schedule 130.2(c)2 / 160.5(c)	Motion Sensor 130.2(c)3 / 160.5(c)	Field Inspector	
				Pass	Fail
Type C, F	Astronomical Timer	Provided	NA: >=24 ft	☐	☐
Type D	Astronomical Timer	Provided	Provided	☐	☐

[1] *FOOTNOTE: Text has been abbreviated, please refer to Table 160.5-A to confirm compliance with the specific light source technologies listed.*
[2] *Authority having jurisdiction may ask for cutsheets or other documentation to confirm compliance of light source.*
[3] *Recessed luminaires marked for use in fire-rated installations, and recessed luminaires installed in non-insulated ceilings are excepted from ii and iii.*

STATE OF CALIFORNIA
Outdoor Lighting CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-LTO-E
Project Name: City of Industry Expo Center	**Report Page:** (Page 5 of 8)
	Date Prepared: 7/14/2025

I. LIGHTING POWER ALLOWANCE (per 140.7 / 170.2(e))

This table includes areas using allowance calculations per 140.7 / 170.2(e). General Hardscape Allowance is per Table 140.7-A/Table 170.2-A while "Use it or lose it" Allowances are per Table 140.7-B /Table 170.2-S. Indicate which allowances are being used to expand sections for user input. Luminaires that qualify for one of the "Use it or lose it" allowances shall not qualify for another "Use it or lose it" allowance.
Outdoor lighting attached to multifamily buildings and controlled from the inside of a dwelling unit are included in Table H. and are not included here. All other multifamily outdoor lighting is included here.

	01			
	"Use it or lose it" Allowance (select all that apply) (select all that apply)			
☒ General Hardscape Allowance Table I (below)	☐ Per Application Table J	☐ Sales Frontage Table K	☐ Ornamental Table L	☒ Per Specific Area Table M

Calculated General Hardscape Lighting Power Allowance per Table 140.7-A for Nonresidential & Hotel/Motel

02	03	04	05	06	07	08	09
Area Description	Area Wattage Allowance (AWA)			Linear Wattage Allowance (LWA)			Total General AWA + LWA (Watts)
	Illuminated Area (ft²)	Allowed Density (W/ft²)	Area Allowance (Watts)	Perimeter Length (lf)	Allowed Density (W/lf)	Linear Allowance (Watts)	
Automotive Hardscape	32804	0.021	688.9	1015	0.2	203	892
					Initial Wattage Allowance for Entire Site (Watts):		250
					Instances of Initial Wattage Allowance (LZ 0 only)[1]		
					Total General Hardscape Allowance (Watts):		1142

J. LIGHTING ALLOWANCE: PER APPLICATION

This section does not apply to this project.

K. LIGHTING ALLOWANCE: SALES FRONTAGE

This section does not apply to this project.

L. LIGHTING ALLOWANCE: ORNAMENTAL

This section does not apply to this project.

STATE OF CALIFORNIA
Outdoor Lighting CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-LTO-E
Project Name: City of Industry Expo Center	**Report Page:** (Page 6 of 8)
	Date Prepared: 7/14/2025

M. LIGHTING ALLOWANCE: PER SPECIFIC AREA

This table includes areas using the wattage allowance per specific area from Table 140.7-B /Table 170.2-S. More than one specific area allowance may be taken in a single project, if applicable. However, multiple specific area allowances may not be taken for the exact same area on the site.

01	02	03	04	05	06	07	08	09	10
Area Description	Specific Area Type per Table 140.7-B	CALCULATED ALLOWANCE (Watts)			DESIGN WATTS				Additional Allowance (Watts)
		Specific Area (ft²)[1]	Allowed Density (W/ft²)	Extra Allowance (Watts)	Luminaire Name or Item Tag	Watts per Luminaire	# of Luminaires	Design Watts	
Canopy	NonSalesCanopy	5834	0.3	1575.2	C	54	5	270	270
					Total Design Watts for this Area:			270	
					Total Allowance (Watts) All Areas:				270

[1] *FOOTNOTES: See Table 140.7-B /Table 170.2-S for rules for calculating the specific areas (ft² for these additional lighting allowances.*
[2] *For luminaires indicated in Table F as linear, wattage in column 07 is W/lf instead of Watts/luminaire. Total linear feet should be indicated in column 08 instead of number of luminaires.*

N. EXISTING CONDITIONS POWER ALLOWANCE (alterations only)

This section does not apply to this project.

O. DECLARATION OF REQUIRED CERTIFICATES OF INSTALLATION

Selections have been made based on information provided in this document. If any selection has been changed by permit applicant, an explanation should be included in Table E. Additional Remarks. These documents must be provided to the building inspector during construction and can be found online

Form/Title
NRCI-LTO-E - Must be submitted for all buildings

STATE OF CALIFORNIA
Outdoor Lighting CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-LTO-E
Project Name: City of Industry Expo Center	**Report Page:** (Page 7 of 8)
	Date Prepared: 7/14/2025

P. DECLARATION OF REQUIRED CERTIFICATES OF ACCEPTANCE

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Form/Title	Systems/Spaces To Be Field Verified
NRCA-LTO-02-A - Must be submitted for all outdoor lighting controls except for alterations where controls are added to <= 20 luminaires.	Type C, F; Type D;

STATE OF CALIFORNIA
Outdoor Lighting CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-LTO-E
Project Name: City of Industry Expo Center	**Report Page:** (Page 8 of 8)
Project Address: 16200 Temple Avenue	**Date Prepared:** 7/14/2025

DOCUMENTATION AUTHOR'S DECLARATION STATEMENT

I certify that this Certificate of Compliance documentation is accurate and complete.

Documentation Author Name: Margarita Pasaye	Documentation Author Signature: Margarita Pasaye
Company: IDS	Signature Date:
Address: 1 Peters Canyon Road	CEA/ HERS Certification Identification (if applicable):
City/State/Zip: Suite 130 CA 92606	Phone: (949) 387-8500

RESPONSIBLE PERSON'S DECLARATION STATEMENT

I certify the following under penalty of perjury, under the laws of the State of California:
1. The information provided on this Certificate of Compliance is true and correct.
2. I am eligible under Division 3 of the Business and Professions Code to accept responsibility for the building design or system design identified on this Certificate of Compliance (responsible designer)
3. The energy features and performance specifications, materials, components, and manufactured devices for the building design or system design identified on this Certificate of Compliance conform to the requirements of Title 24, Part 1 and Part 6 of the California Code of Regulations.
4. The building design features or system design features identified on this Certificate of Compliance are consistent with the information provided on other applicable compliance documents, worksheets, calculations, plans and specifications submitted to the enforcement agency for approval with this building permit application.
5. I will ensure that a completed signed copy of this Certificate of Compliance shall be made available with the building permit(s) issued for the building, and made available to the enforcement agency for all applicable inspections. I understand that a completed signed copy of this Certificate of Compliance is required to be included with the documentation the builder provides to the building owner at occupancy.

Responsible Designer Name: Steven M. Collins	Responsible Designer Signature:
Company: IDS Group	Date Signed: 2025-07-14
Address: 1 Peters Canyon	License: E22808
City/State/Zip: Irvine CA 92606	Phone: (949) 387-8500

APPROVAL

CLIENT

15625 MAYOR DAVE WAY
CITY OF INDUSTRY, CA 91744
PHONE: 626-333-2211

PROJECT NAME

CITY OF INDUSTRY
EXPO CENTER
GRAND ARENA
STRUCTURE AND
ANNOUNCER
BOOTH

16200 TEMPLE AVENUE
CITY OF INDUSTRY, CA 91744

ENGINEER/ARCHITECT

IDS GROUP
1 PETERS CANYON ROAD, SUITE 130
IRVINE, CA 92606
TEL: 949-387-8500, FAX: 949-387-0800

STAMP

STAMP

REGISTERED PROFESSIONAL ENGINEER STEVEN M. COLLINS No. E22808 ELECTRICAL STATE OF CALIFORNIA
DATE SIGNED 08/27/2025

ISSUE

REV.	DESCRIPTION	DATE
	90% CD SET	04/30/25
	95% CD SET	08/04/25
	100% CD SET	08/29/25

PROJECT IDENTIFICATION

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THE ORIGINAL SIZE OF THIS SHEET IS 30" X 42"

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IDS PROJECT NO.	22X060.00
DRAWN BY	NG
CHECKED BY	SM
APPROVED BY	MO

SHEET TITLE

GRAND ARENA
TITLE 24
COMPLIANCE FORMS

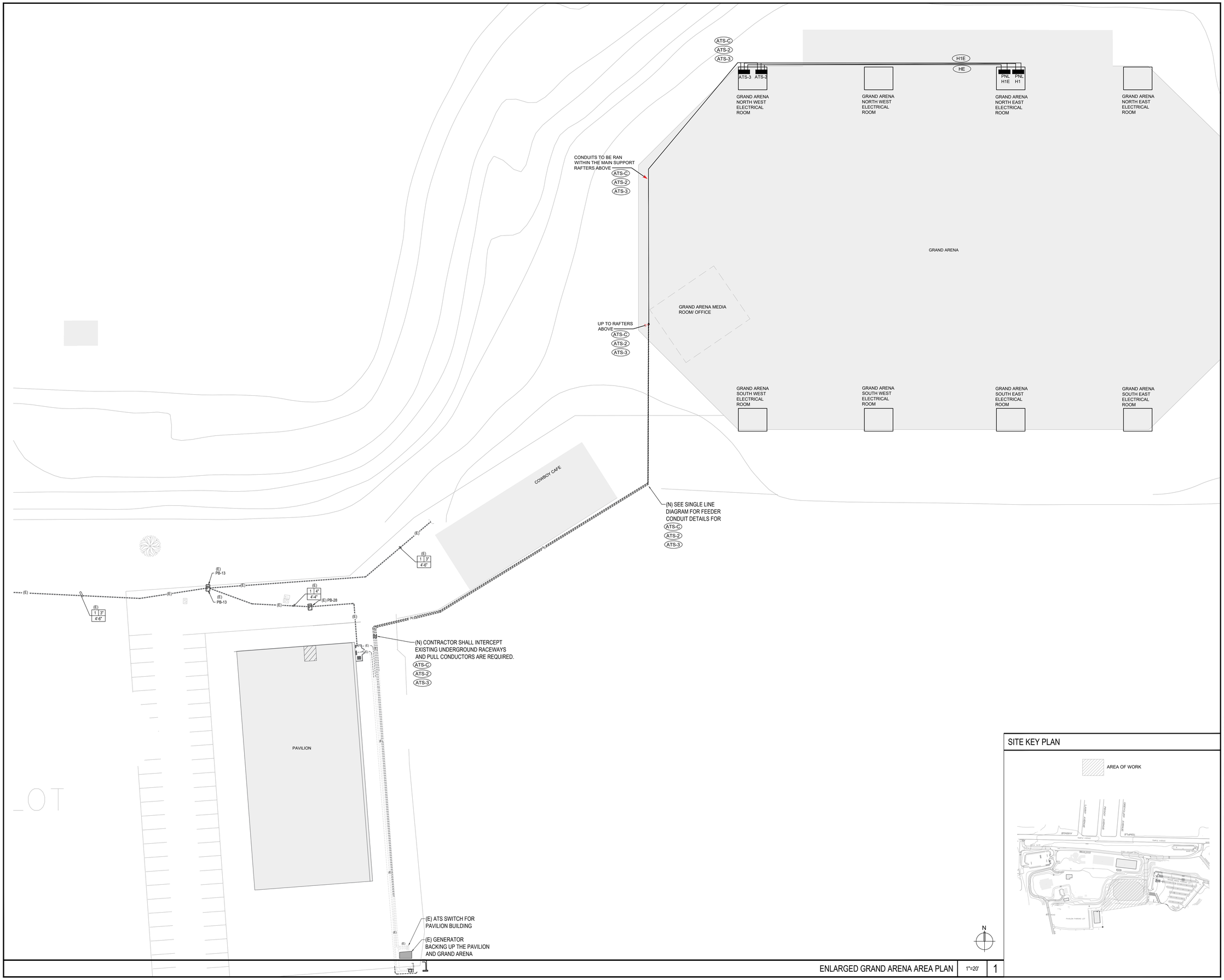
SHEET NUMBER

E-402

SHEET NO. OF

PLAN CHECK SET - NOT FOR CONSTRUCTION

IDS GROUP - FILE LOCATION: S:\PROJECTS\2022\SHARED\22X060.00 CITY OF INDUSTRY - EXPO CENTER - GRAND ARENA STRUCTURE & ANNOUNCER BOOTH\05 CAD\05 ELEC\22X060.00-E-402 TITLE 24 CALCULATIONS PLOT DATE: 8/27/2025 11:30:31 AM USER: MARGARITA.PASAYE



SITE KEY PLAN

ENLARGED GRAND ARENA AREA PLAN | 1"=20' | 1

APPROVAL

CLIENT

CITY OF INDUSTRY
15625 MAYOR DAVE WAY
CITY OF INDUSTRY, CA 91744
PHONE: 626-333-2211

PROJECT NAME

CITY OF INDUSTRY EXPO CENTER GRAND ARENA STRUCTURE AND ANNOUNCER BOOTH

16200 TEMPLE AVENUE
CITY OF INDUSTRY, CA 91744

ENGINEER/ARCHITECT

IDS GROUP
1 PETERS CANYON ROAD, SUITE 130
IRVINE, CA. 92606
TEL: 949-387-8500, FAX: 949-387-0800

STAMP

STAMP

REGISTERED PROFESSIONAL ENGINEER
STEVEN M. COLTON
No. E22808
ELECTRICAL
STATE OF CALIFORNIA
DATE SIGNED 08/27/2025

ISSUE

REV.	DESCRIPTION	DATE
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IDS PROJECT NO.	22X060.00
DRAWN BY	
CHECKED BY	
APPROVED BY	

SHEET TITLE

ENLARGED GRAND ARENA AREA PLAN

SHEET NUMBER

E-4.0

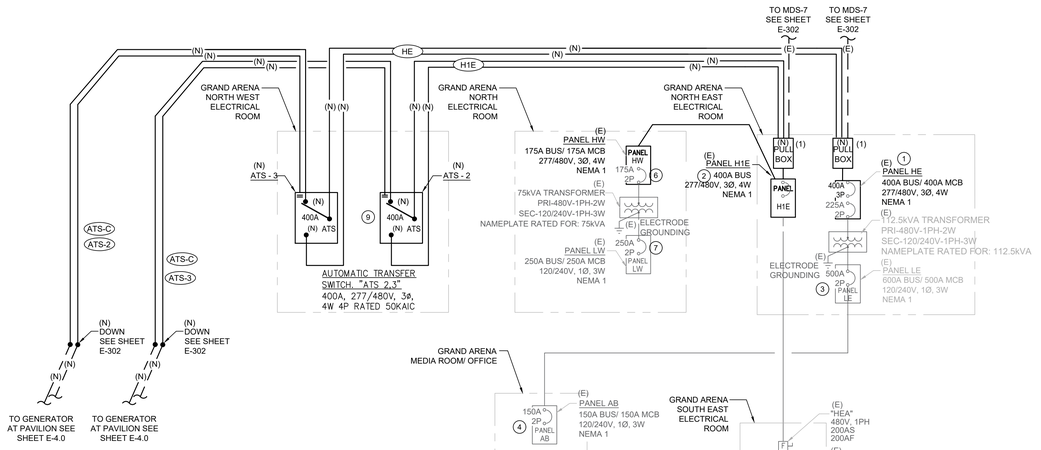
SHEET NO. OF

PLAN CHECK SET - NOT FOR CONSTRUCTION

IDS GROUP - FILE LOCATION: S:\PROJECTS\2022\SHARED\22X060.00 CITY OF INDUSTRY - EXPO CENTER - GRAND ARENA STRUCTURE & ANNOUNCER BOOTH\05 CAD\05 ELEC\22X060.00-E-4.0_4.3 SLD GRAND ARENA PLOT DATE: 8/27/2025 11:30:52 AM USER: MARGARITA.PASAYE

GRAND ARENA ELECTRICAL ROOMS

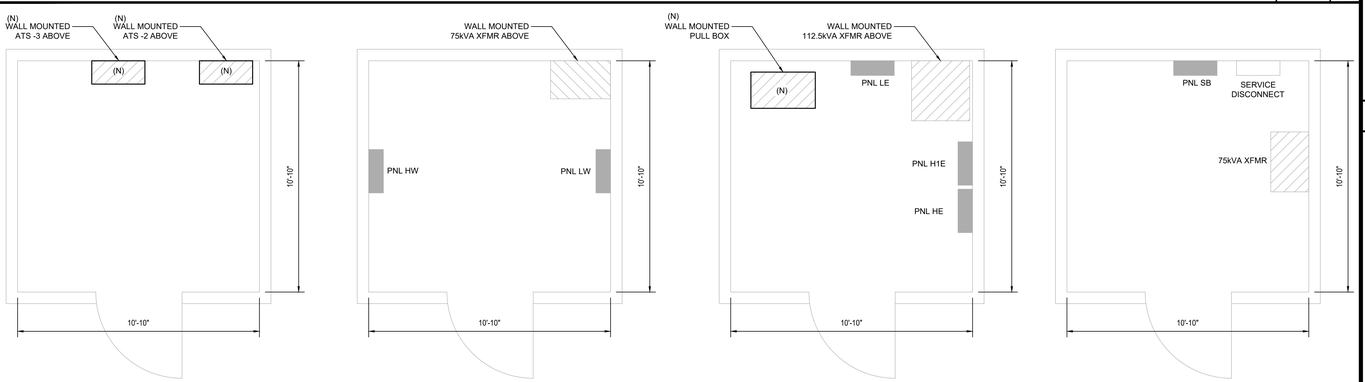
FEEDER SCHEDULE FOR MS AND GENERATOR						
TAG	CONDUIT AND CONDUCTORS	LOAD	DISTANCE	V.D.	A.I.C.	FEED TO AND FROM
HE	(2)4"C.-4#4/0 THWN CU. AND 1-#3/0 GND.	266kW 320A	200FT.	0.89%	65K	STUB FROM PANEL HE TO GRAND ARENAS ATS-3
H1E	(2)4"C.-4#4/0 THWN CU. AND 1-#3/0 GND.	269kW 324A	180FT.	0.81%	65K	STUB FROM PANEL H1E GRAND ARENAS ATS-2
ATS-2	(2)4"C.-4#4/0 THWN CU. AND 1-#3/0 GND.	269kW 324A	RACEWAY 610FT CONDUCTORS 850FT	2.70%	65K	STUB FROM GENERATOR TO GRAND ARENAS "ATS-2
ATS-3	(2)4"C.-4#4/0 THWN CU. AND 1-#3/0 GND.	269kW 320A	RACEWAY 610FT CONDUCTORS 850FT	2.71%	65K	STUB FROM GENERATOR TO GRAND ARENAS ATS-3
C1	(1)1"C.-2#4 THWN CU. AND 1-#4 GND.	5.5kW	RACEWAY 610FT CONDUCTORS 850FT	3.58%	10K	FROM GENERATOR TO ATS-2 AND ATS-3 FOR CONTROLS



GRAND ARENA SINGLE LINE DIAGRAM | NTS | 1

CIRCUIT BREAKERS INFORMATION				
CB NUMBER	MANUFACTURER	TYPE	AMP-TRIP RATING	AIC RATING
1	EATON	KD3400	400A	35,000A
2	EATON	FD2225	400A	25,000A
3	EATON	LT2500T	500A	65,000A
4	EATON	ED3150	150A	65,000A
5	EATON	KD2400F	350A	65,000A
6	EATON	FD3175	175A	25,000A
7	EATON	JD2250F	250A	65,000A

INFORMATION TABLES | NTS | 2



GRAND ARENA ELECTRICAL ROOM NORTH WEST

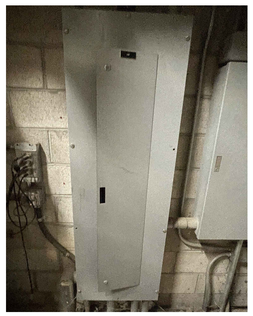
GRAND ARENA ELECTRICAL ROOM NORTH

GRAND ARENA MAIN ELECTRICAL ROOM NORTH EAST

GRAND ARENA ELECTRICAL ROOM SOUTH EAST

N

ELECTRICAL EQUIPMENT LAYOUT | NTS | 3



PANEL "HW"



PANELS "HE" & "H1E"



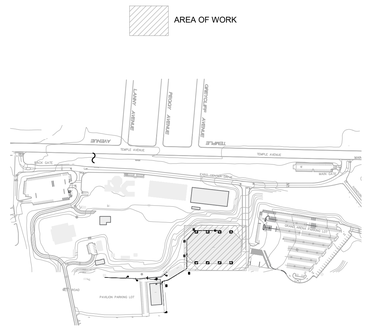
FUSE DISCONNECT "HEA"

EQUIPMENT PHOTOS | NTS | 4

GENERAL NOTES

1. CONTRACTOR SHALL PROVIDE A TAP INTO THE EXISTING MAIN FEEDERS IN PANELS HE AND H1E FOR GENERATOR BACKUP CONNECTIONS.

SITE KEY PLAN



APPROVAL

CLIENT

CITY OF INDUSTRY 1957 LOS ANGELES COUNTY

15625 MAYOR DAVE WAY
CITY OF INDUSTRY, CA 91744
PHONE: 626-333-2211

PROJECT NAME

CITY OF INDUSTRY
EXPO CENTER
GRAND ARENA
STRUCTURE AND
ANNOUNCER
BOOTH

16200 TEMPLE AVENUE
CITY OF INDUSTRY, CA 91744

ENGINEER/ARCHITECT

IDS

IDS GROUP

1 PETERS CANYON ROAD, SUITE 130
IRVINE, CA. 92606
TEL: 949-387-8500, FAX: 949-387-0800

STAMP

STAMP

REGISTERED PROFESSIONAL ENGINEER STEVEN M. COLVIN No. E22808 EXP. 06/30/27 ELECTRICAL STATE OF CALIFORNIA

DATE SIGNED 08/27/2025

ISSUE

REV.	DESCRIPTION	DATE
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IDS PROJECT NO.	22X060.00
DRAWN BY	
CHECKED BY	
APPROVED BY	

SHEET TITLE

GRAND ARENA
SINGLE LINE
DIAGRAM

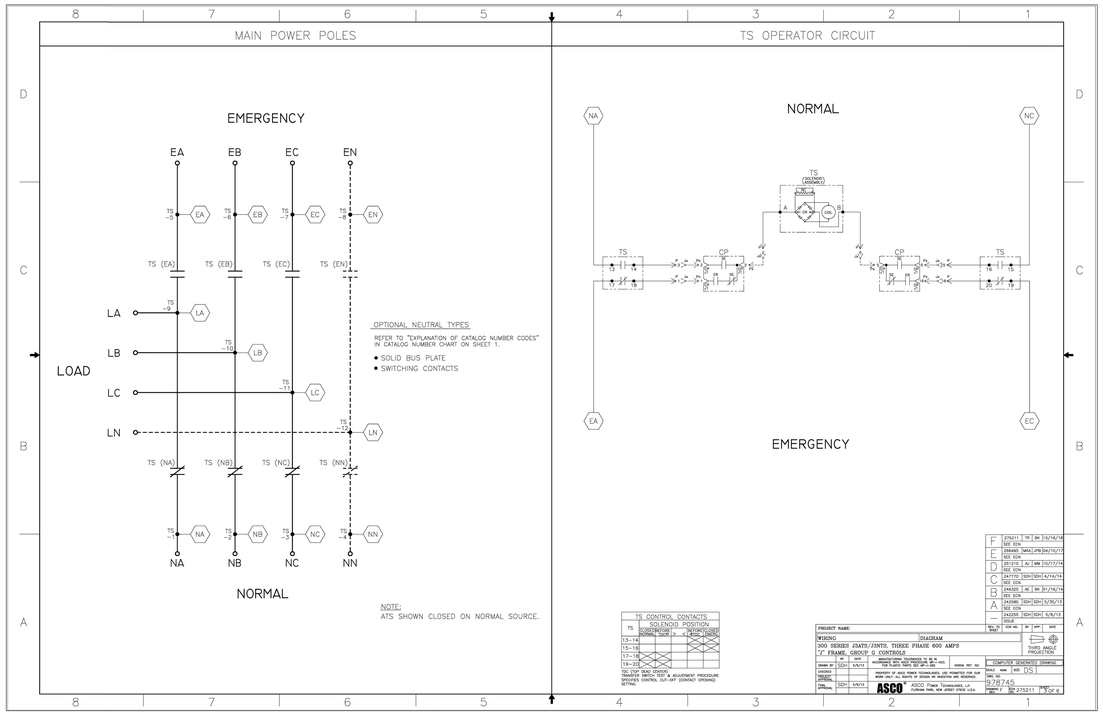
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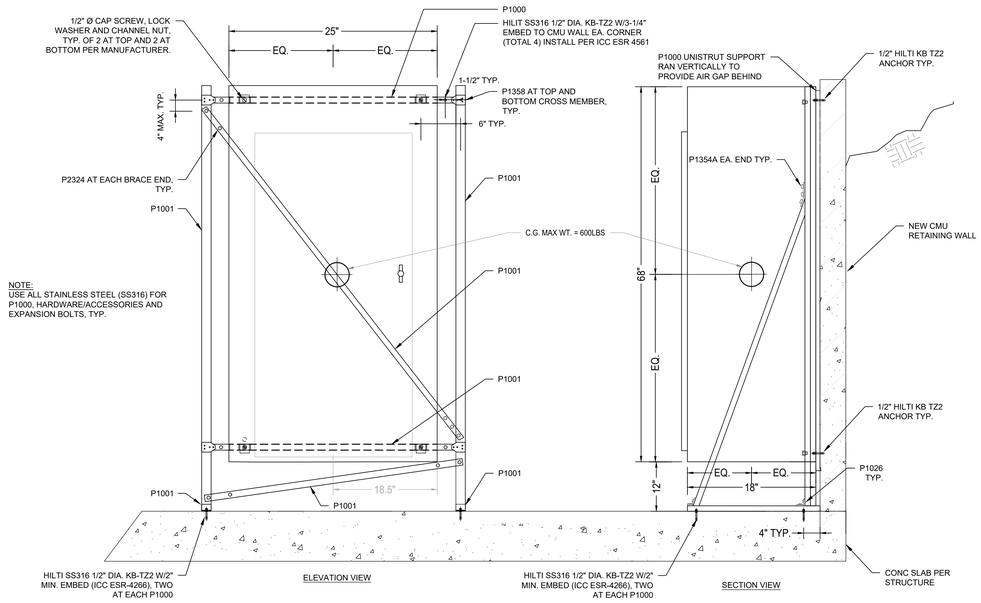
E-4.1

SHEET NO. OF

PLAN CHECK SET - NOT FOR CONSTRUCTION

IDS GROUP - FILE LOCATION: S:\PROJECTS\2022\SHARED\22X060.00 CITY OF INDUSTRY - EXPO CENTER - GRAND ARENA STRUCTURE & ANNOUNCER BOOTH\05 CAD\05 ELEC\22X060.00-E-4.0_4.3 SLD GRAND ARENA PLOT DATE: 8/27/2025 11:31:06 AM USER: MARGARITA.PASAYE





ATS SWITCH MOUNTINIG DETAILS | NO SCALE | 2

SERIES 300 Transfer Switch Dimensions and Shipping Weights

UL Type 3R, 4 or 12 Enclosure

SWITCH RATING AMPS	PHASE POLES	NEUTRAL CODE[1]	DIMENSIONS, IN. (MM)[2]			APPROX. SHIPPING WEIGHT LB. (KG)
			WIDTH	HEIGHT	DEPTH	
30[3], 70[3], 104[3] 150[3], 200[3] (Non-Secure Enclosure)	2	A	17.5 (445)	35 (886)	11.625 (295)	84 (38)
	2	B	17.5 (445)	35 (886)	11.625 (295)	87 (40)
	3	A	17.5 (445)	35 (886)	11.625 (295)	87 (40)
	3	B	17.5 (445)	35 (886)	11.625 (295)	90 (41)
230 (Non-Secure Enclosure)	2	A	18 (458)	50.5 (1284)	14.33 (364)	90 (41)
	2	B[4] or C	18 (458)	50.5 (1284)	14.33 (364)	132 (60)
	3	A	18 (458)	50.5 (1284)	14.33 (364)	140 (63)
	3	B[4] or C	18 (458)	50.5 (1284)	14.33 (364)	148 (67)
260, 400	2	A	24 (610)	63 (1600)	18.2 (462)	320 (146)
	2	B	24 (610)	63 (1600)	18.2 (462)	340 (155)
	3	A	24 (610)	63 (1600)	18.2 (462)	340 (155)
	3	B	24 (610)	63 (1600)	18.2 (462)	350 (160)
150, 200, 230 SERIES 3ADTS/3NTS only (Non-Secure Enclosure)	2	A	24 (610)	63 (1600)	18.2 (462)	320 (146)
	2	B	24 (610)	63 (1600)	18.2 (462)	340 (155)
	3	A	24 (610)	63 (1600)	18.2 (462)	340 (155)
	3	B	24 (610)	63 (1600)	18.2 (462)	350 (160)
600 (Non-Secure Enclosure)	2	A	24 (610)	63 (1600)	18.2 (462)	320 (146)
	2	B	24 (610)	63 (1600)	18.2 (462)	340 (155)
	3	A	24 (610)	63 (1600)	18.2 (462)	340 (155)
	3	B	24 (610)	63 (1600)	18.2 (462)	350 (160)
800, 1000	2	A	34 (859)	72 (1821)	20 (508)	519 (236)
	2	B	34 (859)	72 (1821)	20 (506)	543 (246)
	3	A	34 (859)	72 (1821)	20 (506)	543 (246)
	3	B	34 (859)	72 (1821)	20 (506)	565 (257)
1200 (Secure Enclosure)	2	A	41 (1037)	95.5 (2415)	33.5 (848)	1131 (513)
	2	B	41 (1037)	95.5 (2415)	33.5 (848)	1160 (526)
	3	A	41 (1037)	95.5 (2415)	33.5 (848)	1160 (526)
	3	B	41 (1037)	95.5 (2415)	33.5 (848)	1189 (539)
1600, 2000 (Secure Enclosure)	3	A	42.5 (1074)	95.5 (2529)	47 (1189)	1705 (775)
	3	B	42.5 (1074)	95.5 (2529)	47 (1189)	1830 (832)
2600, 3000 (Secure Enclosure)	3	A	41 (1037)	95.5 (2529)	74 (1872)	2150 (976)
	3	B	41 (1037)	95.5 (2529)	74 (1872)	2230 (1012)

Notes:

When climate conditions at installation site present condensation risk, special precautions should be taken, such as the inclusion of space heaters, to prevent interior condensation and freezing of this condensation.

1. Neutral Codes: 0=None, A=Solid, B=Switched, C=Overlapping
2. Dimensional data is approximate and subject to change. Certified dimensions available upon request.
3. Dimensions for 30-200 ampere models when furnished with a power meter are 18"W x 48"H x 13"D.
4. 30-1000 ampere switches are available in secure type enclosures, contact ASCO for details.

Withstand and Closing Ratings

FRAME	RATING/3 AMPERES	CURRENT LIMITING FUSES				SPECIFIC BREAKER		
		480V MAX.	600V MAX.	MAX. SIZE AMPS	CLASS	240V MAX.	480V MAX.	600V MAX.
D	30	200kA	35kA	200	J	22kA	22kA	10kA
		35kA	35kA	200	RK1			
	70-100	35kA	35kA	200	RK1	150kA	85kA	25kA
		200kA	35kA	200	J			
	150	35kA	35kA	200	RK1	150kA	85kA	25kA
		200kA	35kA	200	J			
	200	200kA	35kA	200	J	200kA	85kA	14kA
		35kA	35kA	200	RK1			
	230	100kA	-	300	J	200kA	85kA	14kA
E	260, 400	200kA	-	600	J	65kA	42kA	22kA
J	150, 200, 260	200kA	200kA	600	J	200kA	200kA	42kA
				800	L			
	400	200kA	200kA	600	J	65kA	50kA	42kA
				800	L			
	600	200kA	200kA	600	J	65kA	85kA	42kA
				800	L			
H	800-1200*	200kA	200kA	1200	L	65kA	150kA	65kA
G	1600-2000	200kA	200kA	2500	L	85kA	85kA	85kA
	2600-3000	200kA	200kA	4000	L	125kA	125kA	100kA
	4000	200kA	200kA	5000	L	100kA	100kA	100kA

Notes:

* Front connection only

All units are RMS Symmetrical Amperes

All Withstand and Closing Rating values are tested in accordance with UL 1008. See **ASCO Publication 1128** for more information.

Application requirements may permit higher WCR for certain switch sizes.

EXTENDED WARRANTIES FOR SERIES 300 TRANSFER SWITCHES (3ATS/3NTS/3ADTS/3NDTS)

DESCRIPTION
1 Year Extension (Total of 3 Years)
2 Year Extension (Total of 4 Years)
3 Year Extension (Total of 5 Years)

Notes:

Standard warranty is (24) months, 2 years from date of shipment, extended warranty is in addition to the two years, for a total of, 3, 4, or 5 years.

Refer to Publication 3223 for warranty terms and conditions.

For more details, please contact customercare@ascopower.com

ASCO SERIES 300 ORDERING INFORMATION

To order an ASCO SERIES 300 Power Transfer Switch, complete the following catalog number:

J + 03ATS + A + 3 + 0600 + N + GX + C

FRAME	TRANSITION TYPE	NEUTRAL CODE	PHASE POLES	AMPERES	VOLTAGE CODE	GROUP CODE	ENCLOSURE
Open Transition D = 30A - 230A Open/Delayed Transition J = 150A - 600A H = 800A - 1200A G = 1600A - 3000A	Automatic 03ATS Open Transition 3ADTS Delayed Transition Non Automatic 03NTS Open Transition 3NDTS Delayed Transition	A = Solid Neutral B = Switched Neutral	2 3	0030[1] 0070[1] 0104[1] 0150[1,4] 0200[1,3,4] 0230[1,4] 0260[1,4] 0400[1,4] 0600[1] 0800[4] 1000[4] 1200[4,5] 1600[4,5] 2000[4,5] 2600[4,5] 3000[4,5]	A[2] = 115 B[2] = 120 C = 208 D = 220 E = 230 F = 240 H = 380 J = 400 K = 415 L = 440 M = 460 N = 480 P = 550 Q = 575 R = 600	G0 No Optional Accessories GX Optional Accessories	0 = Open Type (zero) C = Type 1 Enclosure F = Type 3R[2,3] Enclosure G = Type 4[2] Enclosure H = Type 4X[2] Enclosure (304 Stainless Steel) L = Type 12 Enclosure M = Type 3R[2,6] Secure Double-Door Enclosure N = Type 4[2] Secure Double-Door Enclosure Q = Type 12 Secure Double-Door Enclosure R = Type 3RX[2,6] Secure Double-Door Enclosure (304 Stainless Steel) S = Type 3RX[2,6] Secure Double-Door Enclosure (316 Stainless Steel) U = Type 4X[2] Enclosure (316 Stainless Steel) V = Type 4X[2] Secure Double-Door Enclosure (316 Stainless Steel)

Notes:

1. Switch sizes 30-600 amperes supplied in non-secure enclosures as standard.
2. 115-120 volt available for 30-400 amperes only. For other voltages contact ASCO.
3. 200 and 230 amperes rated switches for use with copper cable only.
4. Switch sizes 800-3000 amperes, and 150-400 amperes 3ADTS/3NDTS provided in secure type outdoor enclosures when required.
5. Use Type 3R secure for 1200, 2000, 2600, and 3000.
6. Type 304 stainless steel is standard. Suitable for indoor or outdoor use where there may be caustic or alkali chemicals in use. To provide an improved reduction in corrosion of salt and some chemicals, optional type 316 stainless steel is recommended. This is the preferred choice for marine environments.
7. Available on switches rated 1200, 2000, 2600, and 3000 amperes.
8. When temperatures below 32°F can be experienced, special precautions should be taken, such as the inclusion of strip heaters, to prevent condensation and freezing of this condensation. This is particularly important when environmental enclosures (Type 3R, 4) are ordered for outdoor applications.
9. Type 3R enclosures are not suitable for installations subject to wind blown rain or snow. Use Type 4 enclosures where available or install supplemental shelter protection around the 3R enclosure.

SERIES 300 EXTERNAL POWER CONNECTIONS

Size UL Listed Solderless Screw-Type Terminals

SWITCH RATING (AMPERES)	RANGES OF AL-CU WIRE SIZES (UNLESS SPECIFIED COPPER ONLY)
30-230[1] ATS and NTS only	One #14 to 4/0 AWG
150[2], 260, 400	Two 1/0 AWG to 250 MCM or One #4 AWG to 600 MCM
600	Two 2/0 AWG to 600 MCM
800, 1000, 1200	Four 1/0 to 600 MCM
1600, 2000	Six 1/0 to 600 MCM
2600, 3000	Twelve 1/0 to 750 MCM

Notes:

All SERIES 300 switches are furnished with a solid neutral plate (unless switched neutral configuration is specified) and terminal lugs.
Use wire rated 75°C minimum for all power connections.

1. 200 and 230 amperes rated switches for use with copper cable only. Refer to paragraph 310.15 of the NEC for additional information.
2. 150 for DTS only.

SERIES 300 Transfer Switch Dimensions and Shipping Weights

UL Type 1 Enclosure*

SWITCH RATING AMPS	PHASE POLES	NEUTRAL CODE[1]	DIMENSIONS, IN. (MM)[2]			APPROX. SHIPPING WEIGHT LB. (KG)
			WIDTH	HEIGHT	DEPTH	
30[3], 70[3], 104[3] 150[3], 200[3]	2	A	18 (457)	31 (787)	13 (330)	69 (32)
	2	B	18 (457)	31 (787)	13 (330)	72 (33)
	3	A	18 (457)	31 (787)	13 (330)	72 (33)
	3	B	18 (457)	31 (787)	13 (330)	75 (34)
230	2	A	18 (457)	48 (1219)	13 (330)	117 (53)
	2	B	18 (457)	48 (1219)	13 (330)	125 (57)
	3	A	18 (457)	48 (1219)	13 (330)	125 (57)
	3	B	18 (457)	48 (1219)	13 (330)	133 (61)
260, 400	2	A	24 (610)	56 (1422)	14 (356)	250 (113)
	2	B	24 (610)	56 (1422)	14 (356)	260 (118)
	3	A	24 (610)	56 (1422)	14 (356)	260 (118)
	3	B	24 (610)	56 (1422)	14 (356)	270 (123)
150, 200, 230 SERIES 3ADTS/3NTS only	2	A	24 (610)	56 (1422)	14 (356)	250 (113)
	2	B	24 (610)	56 (1422)	14 (356)	260 (118)
	3	A	24 (610)	56 (1422)	14 (356)	260 (118)
	3	B	24 (610)	56 (1422)	14 (356)	270 (123)
600	2	A	24 (610)	63 (1600)	17 (432)	300 (137)
	2	B	24 (610)	63 (1600)	17 (432)	320 (146)
	3	A	24 (610)	63 (1600)	17 (432)	320 (146)
	3	B	24 (610)	63 (1600)	17 (432)	320 (151)
800, 1000	2	A	34 (864)	72 (1829)	20 (508)	431 (196)
	2	B	34 (864)	72 (1829)	20 (508)	460 (209)
	3	A	34 (864)	72 (1829)	20 (508)	460 (209)
	3	B	34 (864)	72 (1829)	20 (508)	489 (222)
1200	2	A	38 (965)	87 (2210)	23 (584)	581 (264)
	2	B	38 (965)	87 (2210)	23 (584)	611 (277)
	3	A	38 (965)	87 (2210)	23 (584)	611 (277)
	3	B	38 (965)	87 (2210)	23 (584)	639 (290)
1600, 2000	3	A	38 (965)	87 (2210)	23 (584)	1160 (525)
	3	B	38 (965)	87 (2210)	23 (584)	1160 (525)
2600, 3000*	3	A	38 (965)	91 (2311)	72 (1829)	1430 (649)
	3	B	38 (965)	91 (2311)	72 (1829)	1495 (679)

Notes:

1. Neutral Codes: 0=None, A=Solid, B=Switched
2. Dimensional data is approximate and subject to change. Certified dimensions available upon request.
3. Dimensions for 30-200 ampere models when furnished with accessory 136, power meter are 18"W x 41"H x 13"D.
4. Enclosures for 2600, 3000 amperes are free-standing with removable top, sides and back.

* Unit is designed for top cable entry of emergency and load, and bottom entry of normal.
A cable pull box is also available for all top or bottom cable access when required (optional accessory kit #K009027).
Not required for type 3R, 4X, and 12 enclosures where available.

GRAND ARENA ATS SWITCH CUT SHEET DETAILS | NTS | 1

APPROVAL

CLIENT

CITY OF INDUSTRY
15625 MAYOR DAVE WAY
CITY OF INDUSTRY, CA 91744
PHONE: 626-333-2211

PROJECT NAME

CITY OF INDUSTRY EXPO CENTER GRAND ARENA STRUCTURE AND ANNOUNCER BOOTH

16200 TEMPLE AVENUE
CITY OF INDUSTRY, CA 91744

ENGINEER/ARCHITECT

IDS GROUP
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STAMP

STAMP

REGISTERED PROFESSIONAL ENGINEER STEVEN M. COLLINS No. E22808 ELECTRICAL STATE OF CALIFORNIA
DATE SIGNED 08/27/2025

ISSUE

REV.	DESCRIPTION	DATE
	90% CD SET	04/30/25
	95% CD SET	08/04/25
	100% CD SET	08/29/25

PROJECT IDENTIFICATION

THIS DRAWING WAS CREATED IN AUTODESK AUTOCAD V. 2021 UNLESS OTHERWISE NOTED.

THE ORIGINAL SIZE OF THIS SHEET IS 30" X 42"

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IDS PROJECT NO. 22X060.00
DRAWN BY
CHECKED BY
APPROVED BY

SHEET TITLE

GRAND ARENA ATS DIAGRAM DETAILS

SHEET NUMBER

E-4.2

SHEET NO. OF

PLAN CHECK SET - NOT FOR CONSTRUCTION

IDS GROUP - FILE LOCATION: S:\PROJECTS\2022\SHARED\22X060.00 CITY OF INDUSTRY - EXPO CENTER - GRAND ARENA STRUCTURE & ANNOUNCER BOOTH\05 CAD\05 ELEC\22X060.00-E-4.0_4.3 SLD GRAND ARENA PLOT DATE: 8/27/2025 11:30:46 AM USER: MARGARITA.PASAYE

THREE PHASE WIRING FOR ASCO® 300 SERIES TRANSFER SWITCHES (J3ATS/J3NTS) 600 AMPERES WITH GROUP G CONTROLS

GENERAL INFORMATION

THIS WIRING APPLIES TO 300 SERIES TRANSFER SWITCHES THAT UTILIZE THE "J" FRAME POWER TRANSFER SWITCH RATED 600 AMPERES.

THE GROUP G CONTROLLER PROVIDES EITHER AUTOMATIC (J3ATS) OR NON–AUTOMATIC [MANUAL] (J3NTS) OPERATION BASED ON ITS FACTORY SETTING ACCORDING TO THE CUSTOMER ORDER REQUIREMENTS.

THE TYPE OF TRANSFER SWITCH PROVIDED CAN BE DETERMINED FROM THE PRODUCT IDENTIFICATION MARKINGS LOCATED ON BOTH THE POWER TRANSFER SWITCH AND THE COVER OF THE GROUP G CONTROLLER.

ALL OPERATIONAL SETTINGS AND SEQUENCES OF THE GROUP G CONTROLLER AND ITS RELATED OPTIONAL ACCESSORIES (1UP, 18RX, 23G) ARE PROVIDED IN THE USER'S GUIDE, ASCO GROUP G CONTROLLER FOR AUTOMATIC & NON–AUTOMATIC TRANSFER SWITCHES, PART NUMBER 381333–400.

INFORMATION FOR INSTALLATION AND TESTING OF THE TRANSFER SWITCH IS PROVIDED IN THE INSTALLATION MANUAL, ASCO 3ATS, 3ADTS, 3NTS & 3NDTS, J–DESIGN 150–600 A TRANSFER SWITCHES, PART NUMBER 381333–404.

ENGINE CONTROL CONTACTS

FEATURE 7 & FEATURE 8:
ONE SET OF FORM C CONTACTS "NR" (FEAT. 7 N/C, FEAT. 8 N/O) THAT CHANGE POSITION ON EXPIRATION OF THE FEATURE 1C, OVERRIDE MOMENTARY NORMAL SOURCE OUTAGES TIME DELAY, AND RESET ON EXPIRATION OF THE FEATURE 2E ENGINE COOLDOWN TIME DELAY.
AN AUXILIARY CONTACT THAT IS CLOSED WHEN THE TRANSFER SWITCH IS CONNECTED TO THE EMERGENCY SOURCE, IS CONNECTED ACROSS THE N/C CONTACT (FEATURE 7).

AN ADDITIONAL SET OF ENGINE STARTING CONTACTS ARE AVAILABLE ON THE GROUP G CONTROLLER WHEN THE FEATURE SETTING OF THE CONTROLLER OUTPUT CONTACTS "OP1" IS SET TO OPERATE AS "NR2".

ADDITIONAL OPTIONAL ENGINE STARTING CONTACTS "NR2" ARE AVAILABLE WHEN OPTIONAL ACCESSORY 18RX (RELAY EXPANSION MODULE) IS INCLUDED IN THE TRANSFER SWITCH ASSEMBLY. OUTPUT CONTACTS "OP2" AND/OR "OP3" PROVIDE THE ENGINE STARTING FUNCTION WHEN THE FEATURE SETTING OF EACH IS SET TO OPERATE AS "NR2".

CONTACTS ARE RATED 5 AMPS RESISTIVE AT 30 VDC MAXIMUM, 100 mA AT 5 VDC MINIMUM.

REFER TO USER'S GUIDE, ASCO GROUP G CONTROLLER FOR AUTOMATIC & NON–AUTOMATIC TRANSFER SWITCHES, PART NUMBER 381333–400 FOR SETTING INFORMATION.

LOAD DISCONNECT FEATURE

FEATURE 31: INCLUDES SUB–FEATURES 31F, 31G, 31M, 31N
A SET OF FORM C CONTACTS ARE PROVIDED ON THE GROUP G CONTROLLER AS "OP1". WHEN THE FEATURE SETTING OF "OP1" IS SET TO OPERATE THE CONTACTS AS "FEATURE 31", THE TIME DELAY SETTINGS OF THE SUB–FEATURES ARE AVAILABLE.

"OP1" CAN BE SET TO OPERATE TO PROVIDE THE FOLLOWING FUNCTIONS USING THE TIME DELAY SETTINGS ASSOCIATED WITH EACH SUB–FEATURE;

31F – NORMAL TO EMERGENCY PRE–TRANSFER SIGNAL
31G – EMERGENCY TO NORMAL PRE–TRANSFER SIGNAL
31M – NORMAL TO EMERGENCY POST–TRANSFER SIGNAL
31N – EMERGENCY TO NORMAL POST TRANSFER SIGNAL

THE "OP1" OUTPUT CONTACTS CHANGE POSITION FOLLOWING EACH OF THE ABOVE TIME DELAYS.

ADDITIONAL LOAD DISCONNECT CONTACTS: "FEATURE 31" ARE AVAILABLE WHEN OPTIONAL ACCESSORY 18RX (RELAY EXPANSION MODULE) IS INCLUDED IN THE TRANSFER SWITCH ASSEMBLY. OUTPUT CONTACTS "OP2 AND/OR "OP3" WILL PROVIDE LOAD DISCONNECT FUNCTIONS WHEN THE FEATURE SETTING OF EACH IS SET TO OPERATE AS "FEATURE 31".

ALL OUTPUT CONTACTS ("OP1", "OP2", "OP3") SET TO OPERATE AS "FEATURE 31", SHARE THE COMMON TIME DELAY SETTINGS OF SUB–FEATURES 31F, 31G, 31M, AND 31N.

CONTACTS ARE RATED 5 AMPS RESISTIVE AT 30 VDC MAXIMUM, 100 mA AT 5 VDC MINIMUM.

REFER TO USER'S GUIDE, ASCO GROUP G CONTROLLER FOR AUTOMATIC & NON–AUTOMATIC TRANSFER SWITCHES, PART NUMBER 381333–400 FOR SETTING INFORMATION.

INPHASE TRANSFER FEATURE FOR LOAD TRANSFER

INPHASE TRANSFER CONTROL INITIATES AN INPHASE TRANSFER OF LOADS BETWEEN LIVE SOURCES. THIS IS USED TO PREVENT NUISANCE TRIPPING OF DISTRIBUTION CIRCUIT BREAKERS AND POSSIBLE DAMAGE TO MECHANICAL LOADS ASSOCIATED WITH OUT OF PHASE TRANSFER.

REFER TO USER'S GUIDE, ASCO GROUP G CONTROLLER FOR AUTOMATIC & NON–AUTOMATIC TRANSFER SWITCHES, PART NUMBER 381333–400 FOR SETTING INFORMATION.

SOURCE AVAILABILITY SIGNALS

SIGNALS INDICATING THE AVAILABILITY OF THE NORMAL & EMERGENCY SOURCES IS PROVIDED WHEN OPTIONAL ACCESSORY 18RX (RELAY EXPANSION MODULE) IS INCLUDED IN THE TRANSFER SWITCH ASSEMBLY. OUTPUT CONTACTS "RL5" (EMERGENCY SOURCE AVAILABLE) AND "RL6" (NORMAL SOURCE AVAILABLE) CHANGE POSITION WHEN THE SOURCE IS ACCEPTABLE.

CONTACTS ARE RATED 5 AMPS RESISTIVE AT 30 VDC MAXIMUM, 100 mA AT 5 VDC MINIMUM.

COMMON ALARM & NOT IN AUTO SIGNALING FEATURES

A SET OF FORM C CONTACTS IS PROVIDED ON THE GROUP G CONTROLLER AS "OP1". THE FEATURE SETTING OF "OP1" CAN BE SET TO OPERATE THE CONTACTS AS A "NOT IN AUTO" SIGNAL.

WHEN "OP1" IS SET FOR "NOT IN AUTO", THE OUTPUT CONTACTS CHANGE POSITION WHEN THE TRANSFER IS BEING INHIBITED FROM TRANSFERRING TO THE EMERGENCY SOURCE (FEATURE 34B) OR THE TRANSFER SWITCH HAS BEEN SET FOR NON–AUTOMATIC (MANUAL) OPERATION.

WHEN OPTIONAL ACCESSORY 11BE "SOFTWARE BUNDLE" IS PART OF THE TRANSFER SWITCH ASSEMBLY, "OP1" MAY ALTERNATIVELY SET FOR A "COMMON ALARM" SIGNAL. THE OUTPUT CONTACTS CHANGE POSITION WHEN A "COMMON ALARM" IS NOT PRESENT AND RESET WHEN A "COMMON ALARM" CONDITION IS PRESENT. THE "COMMON ALARM" SIGNAL CONDITIONS ARE SELECTABLE.

ADDITIONAL "COMMON ALARM" AND "NOT IN AUTO" CONTACTS ARE AVAILABLE WHEN OPTIONAL ACCESSORY 18RX (RELAY EXPANSION MODULE) IS INCLUDED IN THE TRANSFER SWITCH ASSEMBLY. OUTPUT CONTACTS "OP2 AND/OR "OP3" WILL PROVIDE SIGNAL FUNCTIONS WHEN THE FEATURE SETTING OF EACH IS SET TO OPERATE AS "COMMON ALARM" OR "NOT IN AUTO".

CONTACTS ARE RATED 5 AMPS RESISTIVE AT 30 VDC MAXIMUM, 100 mA AT 5 VDC MINIMUM.

REFER TO USER'S GUIDE, ASCO GROUP G CONTROLLER FOR AUTOMATIC & NON–AUTOMATIC TRANSFER SWITCHES, PART NUMBER 381333–400 FOR SETTING INFORMATION.

EXTERNAL POWER SUPPLY COMPATIBILITY

USE OF AN EXTERNAL POWER SUPPLY IS USEFUL WHEN REQUIRED TO EXTEND THE FOLLOWING CONTROLLER TIME DELAYS BEYOND 6 SECONDS;

FEATURE 1C – OVERRIDE MOMENTARY NORMAL SOURCE OUTAGES
FEATURE 1F – OVERRIDE MOMENTARY EMERGENCY SOURCE OUTAGES

AN EXTERNAL POWER SUPPLY IS ALSO USEFUL WHEN THE TRANSFER SWITCH IS USED WITH COMMUNICATIONS FEATURES BY ENABLING THE CONTROLLER TO CONTINUE COMMUNICATING.

AN EXTERNAL POWER SOURCE MAY BE PROVIDED TO THE CONTROLLER, UNTIL THE NORMAL SOURCE OR EMERGENCY SOURCE IS AVAILABLE, BY USE OF;

– AN EXTERNAL 24 VDC POWER SUPPLY WITH ACCESSORY 18RX (RELAY EXPANSION MODULE)
OR
– OPTIONAL ACCESSORY 1UP (UNINTERRUPTIBLE POWER SUPPLY MODULE)

EXTERNAL 24 VDC POWER SUPPLY "1G":
AN EXTERNAL 24 VDC POWER SUPPLY MAY BE USED TO POWER THE CONTROLLER WHEN ACCESSORY 18RX (RELAY EXPANSION MODULE) IS INCLUDED IN THE TRANSFER SWITCH ASSEMBLY. OUTPUT CONTACTS "OP2" WILL PROVIDE EXTERNAL 24 VDC POWER SUPPLY FUNCTIONALITY WHEN ITS FEATURE SETTING IS SET TO OPERATE AS "1G". ADDITIONALLY, JUMPERS MUST BE RECONFIGURED ON ACCESSORY 18RX (RELAY EXPANSION MODULE) TO ENABLE THIS FUNCTION AS FOLLOWS;

REMOVE JUMPERS "J1" 1–2 & "J1" 3–4
CONNECT JUMPERS "J1" 5–7 & "J1" 6–8

THE OUTPUT CONTACTS CHANGE POSITION WHEN EITHER THE NORMAL SOURCE OR EMERGENCY SOURCE IS AVAILABLE AND RESET WHEN NEITHER SOURCE IS AVAILABLE. THE "OP2" N/C CONTACT SWITCHES CUSTOMER PROVIDED +24 VDC FROM THE EXTERNAL POWER SUPPLY TO THE CONTROLLER.

REFER TO USER'S GUIDE, ASCO GROUP G CONTROLLER FOR AUTOMATIC & NON–AUTOMATIC TRANSFER SWITCHES, PART NUMBER 381333–400 FOR SETTING INFORMATION.

ACCESSORY 1UP (UNINTERRUPTIBLE POWER SUPPLY):
WHEN OPTIONAL ACCESSORY 1UP IS INCLUDED IN THE TRANSFER SWITCH ASSEMBLY, THE CONTROLLER IS PROVIDED WITH LIMITED RESERVE POWER (APPROXIMATELY 3 MINUTES).

LOAD CURRENT METERING

WHEN OPTIONAL ACCESSORY 23GB IS PART OF THE TRANSFER SWITCH ASSEMBLY, THREE PHASE CURRENT MEASUREMENTS ARE AVAILABLE FOR DISPLAY ON THE GROUP G CONTROLLER.

REFER TO USER'S GUIDE, ASCO GROUP G CONTROLLER FOR AUTOMATIC & NON–AUTOMATIC TRANSFER SWITCHES, PART NUMBER 381333–400 FOR INFORMATION ON USE.

ADVANCED-FUNCTION SOFTWARE BUNDLE

WHEN OPTIONAL ACCESSORY 11BE IS PART OF THE TRANSFER SWITCH ASSEMBLY, AN ADVANCED–FUNCTION SOFTWARE BUNDLE IS AVAILABLE TO PERFORM THE FOLLOWING FUNCTIONS;

– SERIAL COMMUNICATIONS (RS–485)
– PROGRAMMABLE ENGINE EXERCISER
– EVENT LOG
– COMMON ALARM SIGNAL CAPABILITY ON GROUP G CONTROLLER "OP1" OUTPUT.

(3 PHASE SENSING ONLY)
– 3 PHASE EMERGENCY SOURCE SENSING.
– PHASE ROTATION SENSING.
– EMERGENCY VOLTAGE UNBALANCE SENSING.

REFER TO USER'S GUIDE, ASCO GROUP G CONTROLLER FOR AUTOMATIC & NON–AUTOMATIC TRANSFER SWITCHES, PART NUMBER 381333–400 FOR INFORMATION ON THESE FUNCTIONS.

NON-AUTOMATIC (MANUAL) OPERATION

TRANSFER SWITCH ASSEMBLIES FACTORY SET FOR NON–AUTOMATIC OPERATION PROVIDE USER INITIATED, ELECTRICAL OPERATION OF THE TRANSFER SWITCH TO EITHER AVAILABLE SOURCE. THE TRANSFER SWITCH ASSEMBLY IS PHYSICALLY IDENTICAL TO THAT OF THE AUTOMATIC TYPE.

WHEN THE TRANSFER SWITCH IS SET FOR NON–AUTOMATIC OPERATION, A CUSTOMER PROVIDED SELECTOR SWITCH MAY BE USED TO OPERATE IT FROM A REMOTE LOCATION.

REMOTE CONTROL FEATURES

THE FOLLOWING CONTROL PANEL INPUTS PROVIDE REMOTE CONTROL FUNCTIONS FOR THE TRANSFER SWITCH. EACH FUNCTION CAN BE IMPLEMENTED BY THE CUSTOMER PROVIDING THE FORM OF CONTROL DESCRIBED. EACH CONTROL CONTACT MUST BE SUITABLE FOR A 5 VDC LOW ENERGY CIRCUIT.

EXTERNAL FEATURE 17: REMOTE TRANSFER TO EMERGENCY FEATURE (FOR AUTOMATIC TRANSFER TYPE ONLY) – REQUIRES A CUSTOMER SUPPLIED, NORMALLY CLOSED CONTACT. OPENING OF THE CONTACT CAUSES ENGINE START AND TRANSFER TO THE EMERGENCY SOURCE. RE–CLOSURE OF THE CONTACT ACTIVATES THE FEATURE 3A "RETRANSFER TO NORMAL (IF JUST TEST) TIME DELAY PRIOR TO RETRANSFER. IN THE EVENT THAT THE EMERGENCY SOURCE FAILS WHILE THE TRANSFER SWITCH IS CONNECTED TO EMERGENCY AND THE CUSTOMER SUPPLIED CONTACT IS OPEN, THE TRANSFER SWITCH WILL AUTOMATICALLY RETRANSFER TO THE NORMAL SOURCE.

EXTERNAL FEATURE 6R: REMOTE BYPASS OF RETRANSFER TO NORMAL TIME DELAY – REQUIRES A CUSTOMER SUPPLIED, NORMALLY CLOSED CONTACT. OPENING OF THE CONTACT BYPASSES FEATURE 3A RETRANSFER TO NORMAL DELAY IF ACTIVE.

REFER TO USER'S GUIDE, ASCO GROUP G CONTROLLER FOR AUTOMATIC & NON–AUTOMATIC TRANSFER SWITCHES, PART NUMBER 381333–400 FOR SETTING INFORMATION.

NOTES

1. SWITCH SHOWN DE–ENERGIZED CONNECTED TO NORMAL SOURCE.
2. DEVICE SYMBOLS AND DESIGNATIONS ARE IN ACCORDANCE WITH NEMA PUB. ICS 1, PART 1–101A.
3. ALL WIRING IS #16 AWG, TINNED, STRANDED COPPER UNLESS OTHERWISE INDICATED.
4. O INDICATES CUSTOMER CONNECTION POINTS.
5. ● INDICATES FACTORY CONNECTION POINTS.
6. CONNECTION POINTS THAT HAVE BOTH CUSTOMER CONNECTIONS AND FACTORY CONNECTIONS ARE SHOWN OPEN AS CUSTOMER CONNECTION POINTS.
7. THE TRANSFER UNIT IS MOUNTED ON THE BACK INSIDE SURFACE OF THE ENCLOSURE. THE CONTROL PANEL AND ANY OPTIONAL ACCESSORIES ARE MOUNTED ON THE INSIDE SURFACE OF THE DOOR.
8. AN OPERATOR'S MANUAL IS FURNISHED WITH EACH AUTOMATIC TRANSFER SWITCH. REFER TO THIS PUBLICATION PRIOR TO INSTALLATION AND OPERATION OF THE SWITCH.
8. GROUND STRAP ON CONTROL PANEL IS AFFIXED TO CHASSIS (ENCLOSURE) AT LOWER LEFT CONTROL PANEL MOUNTING STUD.

CATALOG NUMBER SUFFIXES

TS FRAME	CATALOG TYPE	NEUTRAL TYPE	PHASE POLES	AMPS	VOLT CODE	CONTROLLER	OPTIONAL ACCESSORY	ENCLOSURE CODE
J	3ATS 3NTS	A B	3	600	C D E F G H J K L M N P Q R	G	X BLANK FOR NONE	C F G H L M N P Q BLANK FOR OPEN TYPE

EXPLANATION OF CATALOG NUMBER CODES

NEUTRAL TYPE CODE	NEUTRAL TYPE DESCRIPTION	VOLTAGE CODES 3 PHASE (3 OR 4 WIRE) 50 OR 60 Hz CODE	VOLTAGE CODES 3 PHASE (3 OR 4 WIRE) 50 OR 60 Hz NOMINAL VOLTAGE	ENCLOSURE CODES CODE	ENCLOSURE CODES TYPE	ENCLOSURE CODES DESCRIPTION
A	SOLID			BLANK		OPEN TYPE (NO ENCLOSURE)
B	SWITCHING			C	1	GENERAL PURPOSE, INDOOR
		C	208			
		D	220	F	3R	OUTDOOR, RAINPROOF, SLEET & ICE RESISTANT
		E	230	G	4	INDOOR/OUTDOOR, WATERTIGHT & DUSTTIGHT
		F	240	H	4X	TYPE 4 PLUS CORROSION RESISTANCE (STAINLESS STEEL)
		G	277	L	12	INDOOR, INDUSTRIAL ENVIRONMENTS, OILTIGHT & DUSTTIGHT
		H	380			
		J	400			(SECURE ENCLOSURES)
		K	415			
		L	440	M	3R	OUTDOOR, RAINPROOF, SLEET & ICE RESISTANT
		M	460	N	4	INDOOR/OUTDOOR, WATERTIGHT & DUSTTIGHT
		N	480	P	4X	TYPE 4 PLUS CORROSION RESISTANCE (STAINLESS STEEL)
		P	550*	Q	12	INDOOR, INDUSTRIAL ENVIRONMENTS, OILTIGHT & DUSTTIGHT
		Q	575*			
		R	600*			

CATALOG NUMBER _____
ASCO® CERTIFIED TO S.O. _____
BY _____
DATE _____
FORM REV F

REV. TO SHEET	ECN NO.	BY	APP.	DATE
F	275211	TR	BK	10/16/18
	SEE ECN			
E	266495	MKA	JPB	04/10/17
	SEE ECN			
D	251210	AJ	MM	10/17/14
	SEE ECN			
C	247770	SDH	SDH	4/14/14
	SEE ECN			
B	246325	AE	BK	01/16/14
	SEE ECN			
A	242580	SDH	SDH	5/30/13
	SEE ECN			
—	242255	SDH	SDH	5/6/13
	ISSUE			

PROJECT NAME: WIRING DIAGRAM
300 SERIES J3ATS/J3NTS, THREE PHASE 600 AMPS
"J" FRAME, GROUP G CONTROLS

THIRD ANGLE PROJECTION

	BY	DATE
DRAWN BY	SDH	5/6/13
CHECKED		
PROJECT APPROVAL		
FINAL APPROVAL	SDH	5/6/13

MANUFACTURING TOLERANCES TO BE IN ACCORDANCE WITH ASCO PROCEDURE MP–I–003. FOR PLASTIC PARTS SEE MP–I–055

ASSEM. REF. NO.

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ASCO® ASCO POWER TECHNOLOGIES, L.P. FLORHAM PARK, NEW JERSEY 07932 U.S.A.

COMPUTER GENERATED DRAWING
SCALE NONE SIZE DS
DWG. NO. 978745
DRAWING REV. F ECN NO. 275211 SHEET 1 OF 6

GRAND ARENA ATS SWITCH CUT SHEET DETAILS | NTS | 1

APPROVAL

CLIENT

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PROJECT NAME
CITY OF INDUSTRY
EXPO CENTER
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STAMP

STAMP
REGISTERED PROFESSIONAL ENGINEER STEVEN M. COLLINS ELECTRICAL STATE OF CALIFORNIA
No. E22808
DATE SIGNED 08/27/2025

ISSUE

REV.	DESCRIPTION	DATE
	90% CD SET	04/30/25
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	100% CD SET	08/29/25

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IDS PROJECT NO. 22X060.00
DRAWN BY
CHECKED BY
APPROVED BY

SHEET TITLE
GRAND ARENA ATS
DIAGRAM DETAILS

SHEET NUMBER
E-4.3
SHEET NO. OF

PLAN CHECK SET - NOT FOR CONSTRUCTION

IDS GROUP - FILE LOCATION: S:\PROJECTS\2022\SHARED\22X060.00 CITY OF INDUSTRY - EXPO CENTER - GRAND ARENA STRUCTURE & ANNOUNCER BOOTH\05 CAD\05 ELEC\22X060.00-E-4.0_4.3 SLD GRAND ARENA_PLOT DATE: 8/27/2025 11:30:53 AM USER: MARGARITA.PASAYE

INDUSTRY HILLS
THE GRAND ARENA
CITY OF INDUSTRY, CALIFORNIA

GENERAL NOTES

REFER TO SPECIFICATIONS FOR COMPLETE REQUIREMENTS.

1. ELECTRICAL

   A. ALL CONDUITS, JUNCTION BOXES, BACK BOXES, PULL STRING AND POWER OUTLETS BY DIVISION 26 CONTRACTOR AS REQUIRED.
   B. ELECTRICAL CONTRACTOR TO PROVIDE PULLSTRING ON ALL AV CONDUIT.
   C. ALL POWER TO AV EQUIPMENT TO ORIGINATE FROM DEDICATED AUDIO VIDEO LOAD CENTER IN ACCORDANCE WITH THE LATEST LOCAL AND NATIONAL CODES REFERENCING "TECHNICAL POWER SYSTEMS", NEC ARTICLE 640.
   D. BRANCH CIRCUITS FEEDING AUDIO-VISUAL EQUIPMENT MUST NOT ORIGINATE FROM LOAD CENTERS CONNECTED TO INDUCTIVE LOADS.
   E. PROVIDE ALL AV CIRCUITS WITH ISOLATED GROUND, DEDICATED NEUTRAL

2. COORDINATE

   A. COORDINATE WITH THE WORK OF ALL SECTIONS. COORDINATE THE LOCATION OF BLOCKING AND BACKING REQUIRED BY THIS SECTION. MAKE REASONABLE MINOR ADJUSTMENTS TO PRESERVE ARCHITECTURAL SYMMETRY AND ALIGNMENT WITH ADJACENT FEATURES AT NO CLAIM FOR ADDITIONAL COST OR TIME. PRESENT CONFLICTS IN TIMELY MANNER FOR RESOLUTION.
   B. RELOCATION, REVISION OR CORRECTION CAUSED BY FAILURE OF THE CONTRACTOR TO COORDINATE THE WORK SHALL NOT BE SUBJECT TO CLAIM FOR ADDITIONAL COST OR TIME.
   C. POWER RECEPTACLES SHOWN ON THE AV DRAWINGS OUTSIDE OF EQUIPMENT RACKS ARE SHOWN FOR COORDINATION INFORMATION ONLY. REFER TO DIVISION 26 DOCUMENTS FOR CONSTRUCTION.
   D. THESE DRAWINGS SHOW SCOPE. THE EXACT LOCATION & ELEVATIONS OF LOUDSPEAKERS, RECEPTACLES AND DEVICES MUST BE COORDINATED WITH THE ARCHITECTURAL DRAWINGS.
   E. CONDUIT, BACK BOXES AND PULL BOXES SUPPLIED AND INSTALLED BY ELECTRICAL CONTRACTOR UNDER SUPERVISION OF AV CONTRACTOR.
   F. GENERAL CONTRACTOR SHALL COORDINATE THE CONDUIT, DEVICES, PATHWAYS AND JUNCTION BOXES FOR THE AV WITH OTHER TRADE TO AVOID ANY CONFLICTS.

3. LOCATIONS AND DIMENSIONS

   A. LOCATIONS AND DIMENSIONS SHOWN ON ARCHITECTURAL DRAWINGS TAKE PRECEDENCE OVER THESE AV DRAWINGS. IN CASE OF APPARENT CONFLICT OR AMBIGUITY, SUBMIT TO THE ARCHITECT IN TIMELY MANNER FOR RESOLUTION.
   B. DIMENSIONS TAKE PRECEDENCE OVER SCALE. LARGE SCALE DRAWINGS TAKE PRECEDENCE OVER SMALL. REPORT ALL CONFLICTS BEFORE INSTALLATION.
   C. UNLESS OTHERWISE NOTED, DIMENSIONS ARE SHOWN HEIGHT x WIDTH x DEPTH.
   D. VERIFY ALL DIMENSIONS, LOCATIONS AND CONDITIONS IN THE FIELD PRIOR TO STARTING WORK. NOTIFY ARCHITECT OF ANY APPARENT DISCREPANCIES.

4. SUPPORT

   PROVIDE ALL BLOCKING, BRIDGING, TIES, FASTENERS AND RELATED SUPPORT PROVISIONS FOR ALL WORK OF THIS SECTION. COMPLY WITH APPLICABLE CODE REQUIREMENTS FOR MEANS OF SUPPORT OF ELECTRICAL EQUIPMENT OF THE SAME WEIGHT UNDER THE SAME MOUNTING CONDITIONS. DO NOT APPLY ANY LOAD TO BUILDING STRUCTURE WITHOUT FIRST OBTAINING WRITTEN APPROVAL OF THE PROJECT STRUCTURAL ENGINEER. OBTAIN PER PROJECT PROCEDURES. SUPPORTS FOR RACEWAY SYSTEM BY DIVISION 26 CONTRACTOR.

5. BOX, PANEL AND ENCLOSURE INSTALLATION

   A. COORDINATE THE LOCATION OF ALL BOXES, PANELS, ENCLOSURES AND RELATED RACEWAY WITH THE WORK OF OTHER SECTIONS.
   B. VERIFY ACCESS TO BOXES, PANELS AND ENCLOSURES COMPLY WITH APPLICABLE CODE.
   C. COORDINATE AND CORRECT ALL CONDITIONS OF OCCLUSION OF ALL LOUDSPEAKER ASSEMBLIES. WHERE MORE THAN ONE (1) FLUSH MOUNTED CEILING LOUDSPEAKER HAS BEEN SCHEDULED, NONE SHALL BE LOCATED CLOSER TO ANY FIXED WALL THAN ONE-HALF (1/2) OF THE ADJACENT CLEAR HEIGHT, EXCEPT AT CEILING DISCONTINUITIES, OR WHERE SPECIFICALLY SHOWN ON THE DRAWINGS.
   D. INSTALL BOXES, PANELS AND ENCLOSURES SQUARE AND PLUMB. SET FLUSH MOUNTED UNITS SO THAT THE FACE OF THE COVER, BEZEL OR ESCUTCHEON, IS IN THE SAME PLANE AS THE SURROUNDING FINISHED SURFACE. MOUNT BOXES, PANELS AND TRIM SO THAT THERE ARE NO GAPS, CRACKS OR OBVIOUS LINES BETWEEN THE TRIM AND THE ADJACENT FINISHED SURFACE.
   E. UNLESS OTHERWISE NEED, PROVIDE STEEL BOXES, PANELS AND ENCLOSURES. COMPLY WITH DIVISION 26 REQUIREMENTS AND APPLICABLE CODE.
   F. UNLESS OTHERWISE NOTED, BOXES AND ENCLOSURES SHALL BE NOT LESS THAN 2-1/8 INCHES DEEP. PROVIDE THE LARGER OF THE SIZE REQUIRED BY APPLICABLE CODE OR AS SHOWN ON DRAWINGS. COORDINATE WIRE AND CABLE BEND RADIUS WITH BOX AND ENCLOSURE SIZE.
   G. PULL BOXES: PROVIDE AS REQUIRED BY THE MOST RESTRICTIVE OF APPLICABLE CODE OR THE PROVISIONS OF DIVISION 26. COORDINATE WITH WIRE AND CABLE BEND RADIUS.
   H. PROVIDE REQUIRED FIRE RATED JUNCTION BOXES OR FIRE STOP GUARDS AT ALL RATED WALLS.
   I. CONDUIT AND ACCESSORIES MUST BE INSTALLED PLUMB AND TRUE WITH UNIFORM FASTENING, FULLY DRESSED AND FINISHED.

6. RACEWAY

   A. FOR ALL WORK OF THIS SECTION, RACEWAY ABOVE GROUND SHALL BE EMT, RACEWAY BELOW GROUND SHALL BE PVC.
   B. RACEWAY SHALL BE ¾ INCH DIAMETER TRADE SIZE UNLESS OTHERWISE NOTED.
   C. ALL CONDUIT RUNS OVER 100 FT. MUST HAVE LARGE RADIUS BENDS.
   D. A MAXIMUM OF TWO 90 DEGREE ELBOWS IN EACH CONDUIT RUN.
   E. CONDUIT WITH FIBER OPTIC CABLE INSTALLED, MUST CONFORM TO THE MINIMUM BEND RADIUS AS SPECIFIED BY THE MANUFACTURER OF THE CABLE. DIVISION 26 CONTRACTOR IS TO APPLY RADIUS BENDS WHERE NEEDED. FIBER BEND RADIUS SHALL BE A MINIMUM LONG-TERM LOW-STRESS RADIUS NOT LESS THAN 20 TIMES THE CABLE DIAMETER.
   F. KEEP A MINIMUM OF 12" CLEAR BETWEEN ELECTRICAL CONDUIT AND LOW VOLTAGE CONDUIT.
   G. PROVIDE FIRE RATED CONDUIT PENETRATION SEALS AT ALL FIRE RATED WALLS.
   H. CONDUIT AND ACCESSORIES MUST BE INSTALLED PLUMB AND TRUE WITH UNIFORM FASTENING, FULLY DRESSED AND FINISHED.

7. GROUNDING AND BONDING

   A. COMPLY WITH COMPLY WITH NATIONAL ELECTRICAL CODE SECTION 250.
   B. BOND RACEWAY AND RELATED BOXES, PANELS, ENCLOSURES AND CABINETS AS REQUIRED BY APPLICABLE CODE AND DIVISION 26.
   C. MAKE RACEWAY CONNECTIONS TO EQUIPMENT RACKS AND SIMILAR EQUIPMENT ENCLOSURES CONTAINING POWERED EQUIPMENT WITH ISOLATED FITTINGS.
   D. GROUND AND BOND EQUIPMENT RACKS AND SIMILAR EQUIPMENT ENCLOSURES CONTAINING POWERED EQUIPMENT EXCLUSIVELY VIA THE ISOLATED EQUIPMENT GROUNDING CONDUCTORS PROVIDED UNDER DIVISION 26. SIZE SUCH CONDUCTORS ACCORDING TO APPLICABLE CODE. FOR EACH TECHNICAL BRANCH CIRCUIT, THE ISOLATED EQUIPMENT GROUNDING CONDUCTOR SHALL BE COPPER OF THE SAME GAUGE AS SUPPLY AND NEUTRAL CONDUCTORS. MAIN ISOLATED EQUIPMENT GROUNDING CONDUCTOR TO EACH ENSEMBLE OF EQUIPMENT RACKS SHALL BE COPPER, SIZED AS REQUIRED BY APPLICABLE CODE.
   E. D.C. RESISTANCE BETWEEN THE ISOLATED EQUIPMENT GROUNDING BUS AT EQUIPMENT ROOM TECHNICAL POWER PANELS AND THE MAIN PROJECT GROUND FIELD SHALL NOT EXCEED 0.15 OHMS.
   F. FOR COMMUNITY ANTENNA TELEVISION AND MASTER ANTENNA TELEVISION SYSTEMS AND RELATED PROVISIONS, COMPLY WITH ARTICLE 800, NATIONAL ELECTRICAL CODE.

8. CABLE AND WIRE

   A. ALL LOW VOLTAGE CABLE AND WIRE BY AUDIO-VISUAL CONTRACTOR.
   B. USE PLENUM RATED WIRE WHERE REQUIRED BY CODE.
   C. CABLE SPLICING NOT ALLOWED IN ANY PULLBOXES.

9. GENERAL

   A. IN THE EVENT THAT THESE PLANS, NOTES OR DETAILS OR ANY PART OR PORTION THEREOF ARE USED BY ANY THIRD-PARTY WITHOUT THE EXPRESS AUTHORIZED PERMISSION OF VENEKLASEN ASSOCIATES, THE UNAUTHORIZED USER AND ANYONE BENEFITING THEREFROM, SHALL DEFEND, INDEMNIFY AND HOLD HARMLESS VENEKLASEN ASSOCIATES AND ITS AGENTS, PRINCIPALS, EMPLOYEES AND CONSULTANTS FROM AND AGAINST ANY AND ALL CLAIMS, INCLUDING ATTORNEYS' FEES ARISING OUT OF SAID UNAUTHORIZED USE.
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   D. DRAWINGS ARE DIAGRAMMATIC AND ARE INTENDED TO CONVEY SCOPE OF WORK AND TO INDICATE GENERAL ARRANGEMENT. THERE ARE NOT INTENDED TO SHOW EVERY DETAIL INCLUDING OFFSET OR FITTING OR EVERY STRUCTURAL DIFFICULTY THAT MAY BE ENCOUNTERED DURING THE WORK. EXCEPT AS OTHERWISE INDICATED, LOCATIONS OF ITEMS ARE APPROXIMATE ONLY. EXACT LOCATIONS NECESSARY TO SECURE PROPER CONDITIONS AND RESULTS MUST BE DETERMINED AT PROJECT SITE AND MUST BE APPROVED BY THE OWNER'S REPRESENTATIVE.
   E. EXCEPT AS OTHERWISE INDICATED, MAKE REASONABLE MODIFICATIONS IN LAYOUT AS NEEDED TO PREVENT CONFLICT WITH OTHER WORK OR PROPER EXECUTION OF WORK.
   F. INCLUDE WORK NOT USUALLY SHOWN OR SPECIFIED, BUT NECESSARY FOR PROPER INSTALLATION AND OPERATION OF A SYSTEM OR PIECE OF EQUIPMENT IN WORK.
   G. COMPLY WITH APPLICABLE BUILDING CODES FOR ACCESS AND STANDARD MOUNTING REQUIREMENTS INCLUDING BUT NOT LIMITED TO CALIFONICA BUILDING CODES.

SHEET INDEX

Sheet Number	Sheet Name	60% REVIEW SUBMITTAL - 10/13/2023	90% REVIEW SUBMITTAL - 02/16/2023	90% CONSTRUCTION DOCUMENTS - 04/30/2025	95% FOR REVIEW - 08/01/2025	100% CONSTRUCTION DOCUMENTS - 08/29/2025
AV001	AV GENERAL NOTES AND SHEET INDEX	X	X	X	X	X
AV002	AV ABBREVIATIONS, NOTES, AND SYMBOLS	X	X	X	X	X
AV003	AV JUNCTION BOX SCHEDULE	X	X	X	X	X
AV100	AV SITE PLAN	X	X	X	X	X
AV101	AV ARENA FLOOR PLAN	X	X	X	X	X
AV101EQ	AV ARENA FLOOR EQUIPMENT PLAN	X	X	X	X	X
AV102	AV CONTROL ROOM PLAN				X	X
AV201	AV ARENA REFLECTIVE CEILING PLAN	X	X	X	X	X
AV201EQ	AV ARENA REFLECTIVE CEILING PLAN - EQUIPMENT	X	X	X	X	X
AV202	AV BARN REFLECTIVE CEILING PLAN	X	X	X	X	X
AV202EQ	AV BARN EQUIPMENT PLAN	X	X	X	X	X
AV251	AV SECTIONS AND ELEVATIONS				X	X
AV252	AV SECTIONS AND ELEVATIONS				X	X
AV253	AV SECTIONS AND ELEVATIONS				X	X
AV254	AV SECTIONS AND ELEVATIONS				X	X
AV271	AV EQUIPMENT ROOM LAYOUTS	X	X	X	X	X
AV291	AV RISER DIAGRAM			X	X	X
AV292	AV RISER DIAGRAM			X	X	X
AV300	AV WIRING SCHEME AND SYMBOL KEY	X	X	X	X	X
AV301	AV AUDIO ONELINES	X	X	X	X	X
AV302	AV AUDIO ONELINES	X	X	X	X	X
AV303	AV AUDIO ONELINES	X	X	X	X	X
AV304	AV AUDIO ONELINES	X	X	X	X	X
AV305	AV TIE LINES ONELINES	X	X	X	X	X
AV351	AV BROADCAST ONELINES	X	X	X	X	X
AV352	AV INTERCOM ONELINES	X	X	X	X	X
AV501	AV TYPICAL SEISMIC AND GROUNDING DETAILS	X	X	X	X	X
AV502	AV RACK ELEVATIONS			X	X	X
AV601	AV DETAILS	X	X	X	X	X
AV602	AV DETAILS	X	X	X	X	X
AV651	AV FACILITY PANEL DETAILS	X	X	X	X	X

: 31

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THE GRAND ARENA
CITY OF INDUSTRY, CALIFORNIA

REGISTRATION STAMP

ISSUE

MARK	DATE	DESCRIPTION
	04/30/25	90% CD SET
	08/04/25	95% CD SET
	08/29/25	100% CD SET

PROJ. NO.	7913-001
DRAWN BY:	JB
CHECKED BY:	PA
SCALE:	12" = 1'-0"

SHEET TITLE

AV GENERAL NOTES AND SHEET INDEX

SHEET NUMBER

AV001

DEVICE / BOX ID

Device ID	Description
1GMR	1 Gang Mud Ring
2GMR	2 Gang Mud Ring
3DTV	3D Television
3GMR	3 Gang Mud Ring
4GMR	4 Gang Mud Ring
A	Audio
ABA	Audio Buffer Amplifier
AC	Audio Combiner
ACM	Audio Card Module
ACN	Audio Control Network
ACR	Audio Control Relay
ACS	Audio Conferencing System
ADA	Audio Distribution Amplifier
ADB	Audio Distribution Box
ADI	Analog to Digital Input
ADK	Audio Ducker
ADP	Adaptor
AE	Audio Extractor
AFT	AM/FM Tuner
AIM	Audio Input Module
AIP	Audio Input Panel
AIU	Analog Interface Unit
AL	Audio Left
ALA	Assistive Listening Antenna
ALR	Assistive Listening Receiver
ALS	Assistive Listening System
ALT	Assistive Listening Transmitter
AM	Audio Monitor
AMS	Audio Monitor Speaker
AMX	Auto Mixer
ANT	Antenna
AOB	Analog Output Bridge
AOP	Audio Output Panel
AP	Access Point
APB	Audio Patch Bay
APD	Antenna Power Distribution
APM	Audio Program Monitor
AR	Audio Right
ART	Auto Router
ASP	Antenna Splitter
ASV	Audio Server
ASW	Audio Switcher
AT	Audio Tie Line
ATI	Audio Teleconference Interface
ATN	Attenuator
AV	Audio Video
AVC	Auto Volume Controller
AVD	Audio Video Distribution
AVI	Audio Video Interface
AVIM	Audio Video Input Module
AVN	Audio Video Network
AVP	Audio Video Panel
AVR	Audio Video Router
AXF	Auto Transformer
BAT	Battery
BC	Battery Charge
BDP	Blu-Ray Disc Player
BOB	Break Out Box
BP	Belt Pack
C	Conduit
CAM	Video Camera
CAS	Cassette Deck
CASR	Cassette Deck Recorder
CATV	Community Antenna Television
CBD	Curve Bender
CBT	Cable Tray
CC	Contact Closure
CCC	Contact Closure Card
CCF	Card Cage Frame
CCP	Camera Connectivity Panel
CCU	Camera Control Unit
CDB	Crestron Distribution Block
CDC	Compact Disc Changer
CDP	Compact Disc Player
CG	Character Generator
CIM	Control Interface Module
CIU	Computer Interface Unit
CL	Camera Lens
CM	Card Module
CME	Control Module Extended
CMIC	Ceiling Microphone
CMP	CD/Media Player
CN	CobraNet
CNT	Control Network
COD	Codec Unit
COM	Compressor
CON	Converter
CP	Conduit Pocket
CPIS	Control Plug In Station
CPL	Compressor/Limiter
CPP	Central Paging Processor
CPU	Central Processing Unit
CRC	Camera Remote Control
CRK	Control Rack
CS	Conference Station
CSF	Call Signal Flasher
CT	Control
CTM	Control Module
CTN	Cable Tuner
CTR	Controller
CTS	Computer Training System
CVM	Computer Video Monitor
DA	Distribution Amp
DAB	Digital Audio Bus
DAO	Digital to Analog Output

DAR	Digital Audio Recorder
DAS	Digital Audio Source
DAT	Digital Audio Tape Unit
DB	Direct Box
DC	Document Camera
DCA	Digital Controlled Amplifier
DCC	Data Control Card
DCM	Digital Cart Machine
DCN	Divider Combiner Network
DCPU	Digital Central Processing Unit
DCR	Digital Capture Recorder
DD	Dimmer Doubler
DDL	Digital Delay
DEB	De-Embedder
DEC	Decoder
DEQ	Dynamic Equalizer
DFR	Digital File Recorder
DIM	Dimmer Module
DIU	Digital Interface Unit
DJCC	Digital Joystick Camera Control
DM	Digital Mixer
DMR	Dimmer Rack
DMX	DMX
DMXC	DMX Control Cable
DMXN	DMX Node
DPB	Disc Publisher
DRC	Door Control
DREC	Digtial Recorder
DSD	Data Stroage Device
DSMP	Digital Signage Media Player
DSP	Digital Signal Processor
DSS	Digital Satellite System
DTP	Digital Twisted Pair
DVC	DVD/VCR Combo
DVD	Digital Versatile Device
DVHS	Digital Cassette Recorder
DVP	Digital Video Processor
DVR	Digital Video Recorder
DVS	Digital Video Scaler
DWR	Drawer
EBD	Embedder
EBF	Expanded Beam Fiber Connector
EC	Expansion Card
EDB	Electrical Distribution Box
EFX	Effects Processor
ELTC	Emergency Lighting Transfer Cabinet
EN	Ethernet
ENC	Encoder
ENG	Electronic News Gathering
EQ	Equalizer
ERK	Equipment Rack
ERT	Ethernet Router
EXG	Expander/Gate
EXT	Extender
F	Fiber
FB	Floor Box
FBS	Feed Back Suppresser
FLM	Floor Monitor
FMA	FM Antenna
FMR	FM Receiver
FMT	FM Tuner
FMTA	FM Transmitting Antenna
FMTR	FM Transmitter
FOH	Front Of House
FP	Facility Panel
FPL	Floor Panel
FPP	Fiber Patch Panel
FREC	Fiber Receiver
FSC	File System Controller
FT	Fiber Tie Line
FTP	Fiber Tie Panel
FW	Firewire
GEQ	Graphic Equalizer
GNM	Gooseneck Microphone
HP	Headphone
HDTV	High Definition Television
HDW	Hardware
HFS	High Frequency Speaker
HHM	Hand Held Microphone
HPR	Headphone Remote Station
HRB	Headset Remote Box
HS	Headset
HTS	Home Theater System
IAA	Integrated Audio Amplifier
IBP	Intercom Belt Pack
IBS	Intercom Base Station
IC	Intercom
ICS	Intercom Station
ID	Interactive Display
IFC	Interface Card
IH	Intercom Handset
IHS	Intercom Head Set
IMS	Intercom Main Station
IOP	Input/Output Panel
IPC	IP Camera
IR	Infrared
IRB	IR Broadcast
IRE	IR Emitter
IRM	IR Modulator
IRR	IR Receiver
IRS	Intercom Remote Station
IRT	IR Transmitter
ISDN	Integrated Service Digital Network
ITR	Isolation Transformer

JB	Junction Box
KB	Keyboard
KM	Keyboard & Mouse
KMI	Keyboard & Mouse Interface
KMK	Keyboard & Mouse Kit
KVM	Keyboard, Video & Mouse
KVME	Keyboard, Video & Mouse Extender
LAN	Local Area Network
LC	Lighting Console
LD	Line Doubler
LDP	Laser Disc Player
LDR	Line Driver
LEC	Lectern
LED	Light Emitting Panel
LFS	Low Frequency Speaker
LI	Lighting Interface
LL	Line Level
LM	Line Module
LP	Lectern Panel
LPM	Lapel Microphone
LPT	Laptop
LTF	Line Transformer
LTP	LCD Touch Panel
LVR	Line Voltage Regulator
MA	Mixer Amplifier
MAL	Media Archive Library
MATV	Master Antenna Television
MCS	Media Collaboration System
MCT	Main Cabler Tray
MCV	Media Converter
MD	Mini Disc
MDCF	Matrix Digital Card Frame
MDR	Motion Detector
MFP	Microphone Facility Panel
MFS	Mid Frequency Speaker
MI	Midi Interface
MIC	Microphone
MIDI	MIDI
MIX	Mixer
MKB	Monitor Keyboard Sliding Shelf
MM	Microphone Module
MMC	Media Matrix Computer
MMP	Monitor Mix Panel
MMPA	Measurement Mix Pre Amplifier
MNP	Masking Noise Processor
MOB	Monitor Out Box
MOD	Modulator
MON	Monitor
MOU	Mouse
MP	Media Panel
MPA	Microphone Pre-Amplifier
MPL	Music Player
MPN	Monitor Panel
MPS	Motorized Projection Screen
MPY	Media Player
MR	Message Repeater
MRP	MD Recorder Player
MSC	Main System Controller
MSF	Master Fader
MSP	Microphone Splitter
MSR	Microphone Splitter Rack
MSV	Media Server
MSW	Matrix Switcher
MXP	Mixer Pre-Amplifier
NADU	Network Audio Distribution Amp
NET	Network Outlet
NHB	Network Hub
NI	Network Interface
NMCPU	Network Manager CPU
NSG	Noise Gate
NSS	Network Source Switch
NT	Network Terminator
NWS	Network Switch
OPJ	Optical Projector
P	Power
PA	Power Amplifier
PAD	Pad
PB	Push Button
PBR	Play Back Rack
PC	Personal Computer
PCB	Patch Cable
PCC	Personal Computer Control
PCD	Power Conditioner
PCLD	Projector Controller With Line Doubler
PCT	Portable Cart
PD	Plasma Display
PDL	Plasma Display Lift
PEC	Portable Equipment Case
PEQ	Parametric Equalizer
PGM	Program Monitor
PGS	Paging System
PI	Power Injector
PJL	Projector Lift
PJS	Projection Screen
PM	Paging Microphone
PMIC	Presentation Microphone
PMP	Podium Microphone Panel
PNWS	Power Network Switch
POD	Podium
PP	Podium Panel
PPS	Phantom Power Supply
PRE	Pre Amplifier

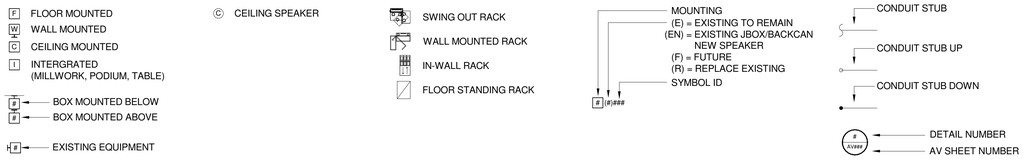
PRK	Portable Rack
PS	Power Supply
PSB	Powered Subwoofer
PSC	Projection Screen Control
PSD	Paging Station Desk Mount
PSLR	Program Select & Level Remote
PSP	Powered Speaker
PSQ	Power Sequencer
PSR	Paging Station Rack Mount
PSW	Paging Station Wall Mount
PTC	Pan & Tilt Camera
PVM	Preview Video Monitor
PWS	Power Strip
PXS	Proximity Switch
PZM	Pressure Zone Microphone
RAS	RGB Auto Switcher
RC	Remote Control
RDA	RGB Distribution Amp
REC	Record
REV	Reverb
RF	Radio Frequency
RFA	RF Amplifier
RFAS	RF Antenna Splitter
RFDA	RF Distribution Amplifier
RFS	RF Splitter
RFT	RF Transmitter
RFTA	RF Transmitting Antenna
RGB	RGBHV
RIP	Rack Input Panel
RK	Rack Lights
RKM	Rack Mount
RM	Relay Module
RMS	RGB Matrix Switcher
RPM	Retractable Projector Mount
RPN	Rack Panel
RPT	Repeater
RSC	RGB System Controller
RSI	RGB Switching Interface
RSRS	Rotating Sliding Rail System
RSW	RGB Switcher
RTP	Remote Truck Panel
RX	Receiver
S	Speaker Level
SA	Aquatic Speaker
SAN	Storage Area Network
SAT	Satellite Receiver
SB	Bass Speaker
SC	Ceiling Speaker
SCB	Cinema Speaker Bass
SCD	Speaker Control Distribution
SCF	SC Fiber Connector
SCN	Cinema Speaker
SCP	System Control Pad
SDA	SDI Distribution Amplifier
SDB	Speaker Distribution Box
SDD	Solid State Disk Dock
SE	Effects Speaker
SER	Serial
SES	Sound Enhancement Speaker
SFF	Front Fill Speaker
SG	Ground Speaker
SGEN	Sync Generator
SGMR	Single Gang Mud Ring
SGP	Signal Processor
SGS	Signage Server
SH	Horn Speaker
SHF	Shelf
SI	Sensor Interface
SIS	Set Integrated Speaker
SIW	In-Wall Speaker
SJB	Speaker Junction Box
SLA	Speaker Line Array
SMP	Stage Manager Panel
SMR	Stage Manager Rack
SMS	Scaling Matrix Switcher
SMSW	Satellite Multiswitch
SMX	Splitter Mixer
SO	Speaker Overhead
SP	Speaker
SPCL	Speaker Cluster
SPG	Program Speaker
SPJ	Slide Projector
SPL	Splitter
SPN	Stage Panel
SPP	Speaker Patch Panel
SPR	Speaker Processor
SPT	Speaker Portable
SR#	Surround Rear
SRA	Stereo Receiver Amp
SS	Surround Sound Speaker
SS#	Surround Sound Side
SSA	Solid State Audio Source
SSF	Sliding Shelf
SSV	Streaming Server
SSW	Serve Switch
ST#	Surround Top
STB	Stage Box
SUM	Summing Amplifier
SV	S-Video
SVC	Slide to Video Converter
SVD	Signage Video Display
SVDA	S-Video Distribution Amp
SVHS	S-Video Cassette Recorder
SVMS	S-Video Matrix Switcher
SVS	S-Video Switcher
SVSS	S-Video Separator Switcher
SW	Wall Mounted Speaker
SWG	Switch Glass

SWH	Sound Web Hub
SYSW	System Switcher
TAM	Telephone Access Module
TB	Terminal Box
TBC	Time Base Corrector
TBU	Tape Backup
TC	Programmable Time Clock
TCB	Terminal Cabinet
TCR	Transceiver
TCS	Teleconferencing System
TEL	Telephone Output
TI	Telephone Interface
TJB	Transformer Junction Box
TM	Table Microphone
TMB	Table Microphone Box
TP	Twisted Pair
TPC	Touch Panel Control
TPM	Telepromptor
TPR	Twisted Pair Receiver
TPT	Twisted Pair Transmitter
TR	Talent Receiver
TRC	Transceiver
TS	Touch Screen
TT	Turn Table
TTP	Table Top Panel
TV	Television
TVP	TV Panel
TVT	TV/RF Tuner
TX	Transmitter
UBC	Unbalance to Balance Converter
UC	Up Converter
UCD	Unified Communication Device
UP	Usher Panel
UPS	Uninterruptible Power Supply
USB	Univeral Serial Bus
USBX	Universal Serial Bus Extender
V	Video
VC/SS	Volume Control / Selector Switch
VCA	Voltage Controlled Amplifier
VCC	Video Conference Camera
VCM	Video Card Module
VCR	Video Cassette Recorder
VCS	Video Conferencing System
VCU	Video Conferencing Unit
VD	Video Display
VDA	Video Distribution Amplifier
VDR	Video Disk Recorder
VE	Video Encoder
VEH	Video Encoder Hub
VF	View Finder
VFX	Video Effects Processor
VIC	Visual Concert
VIP	Video Input Panel
VL	Voice Lift
VLCF	Voice Lift Card Cage Frame
VM	Video Monitor
VMS	Video Matrix Switcher
VOL	Volume Control
VOP	Voice Over Paging Module
VPB	Video Patch Bay
VPJ	Video Projector
VPJRM	Video Projector Rotating Mount
VPM	Video Program Monitor
VPS	Video Production Switcher
VSC	Video Scan Converter
VSL	Video Scaler
VSP	Video Signal Processor
VSPC	Video Screen Panel Control
VSS	Video System Switcher
VSV	Video Server
VSW	Video Switcher
VT	Video Tie Line
VW	Video Wall
VWP	Video Wall Processor
WAA	Wireless Antenna Amplifier
WAD	Wireless Antenna Distribution
WAS	Wireless Antenna Splitter
WB	White Board
WBC	Window Blind Control
WBP	Wireless Belt Pack
WC	Word Clock
WER	Wireless Ethernet Router
WFM	Waveform Monitor
WGA	Wireless Gateway Antenna
WGW	Wireless Gateway
WIA	Wireless Intercom Antenna
WLM	Wireless Microphone
WLU	Wireless Unit
WM	Wireless Mouse
WMA	Wireless Mic Antenna
WMAP	Wireless Mic Antenna Panel
WMG	Wire Manager
WMKA	Wireless Mic Keyboard Antenna
WMKS	Wireless Mouse Keyboard Antenna
WMR	Wireless Mic Receiver
WP	Wall Plate
WPG	Wireless Presentation Gateway
WPN	Wall Panel
WSI	Work Station Interface
WTA	Wireless Touch Panel Adapter
WTP	Wireless Touch Panel
WTPR	Wireless Touch Panel Receiver
XFR	Transformer
XKVM	Extended KVM
XLRP	XLR Panel
XOV	Crossover

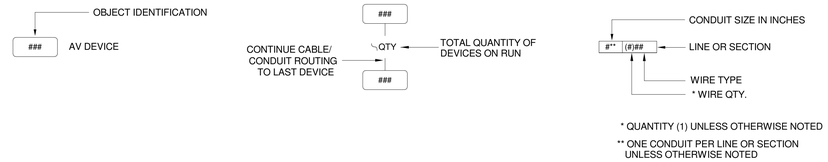
ABBREVIATIONS

(E)###	Existing	CLG	Ceiling			NTS	Not To Scale		
(F)	Future	CM	Construction Manager	GC	General Contractor			SECT	Section
		CO	Conduit Only			OC	On Center	SHP	Shielded Pair
A 0	Above Zero Floor Level			HR	Home Run	OD	Outer Diameter	SIM	Similar
ACT	Above Counter Top	DIA	Diameter			OFCI	Owner Furnished Contractor Installed	SM	Stage Manager
AFB	Above Floor Below	DR	Door	IW	In Wall	OFE	Owner Furnished Equipment	STD	Standard
AFC	Above Finished Ceiling					OFOI	Owner Furnished Owner Installed		
AFF	Above Finished Floor	E.C.	Empty Conduit	LP	Lightning Protector			TPD	Tripod
AH	Above Header	EC	Electrical Contractor	LRR	Lightning Room Rack	P/O	Part Of	TST	Test Set
AS	Above Slab	EL	Elevation	LTG	Lighting	PF	Press Feed	TYP	Typical
		ELEC	Electrical			POC	Point of Connection		
BFC	Below Finished Ceiling	EOL	End Of Line	MISC	Miscellaneous	PRG	Program	UBC	Uniform Building Code
BGM	Background Music	EQUIP	Equipment	MOM	Momentary	PROJ	Project	UON	Unless Otherwise Noted
BOH	Back Of House			MTD	Mounted	PSCH	Project Standard Control Height		
BTU	British Thermal Units	FAN	Fan Panel	MTF	Mounting Termination Fabrication	PSRH	Project Standard Receptacle Height	VIF	Verify In Field
		FBO	Furnished By Owner	MTL	Metal	PSSH	Project Standard Switch Height		
CAB	Cabinet	FCA	Finished Ceiling Above			PST	Pull String	WP	Weather Proof
CATV	Cable TV	FIN	Finished	NC	Normally Closed	PWR	Power		
CBC	California Building Code	FOH	Front Of House	NIC	Not In Contract				
CL	Center Line	FSF	Folding Shelf	NO	Normally Open	RCP	Reflected Ceiling Plan		

FACILITY INPUT SYMBOL SCHEDULE AND DESCRIPTIONS FOR FLOOR AND CEILING PLANS



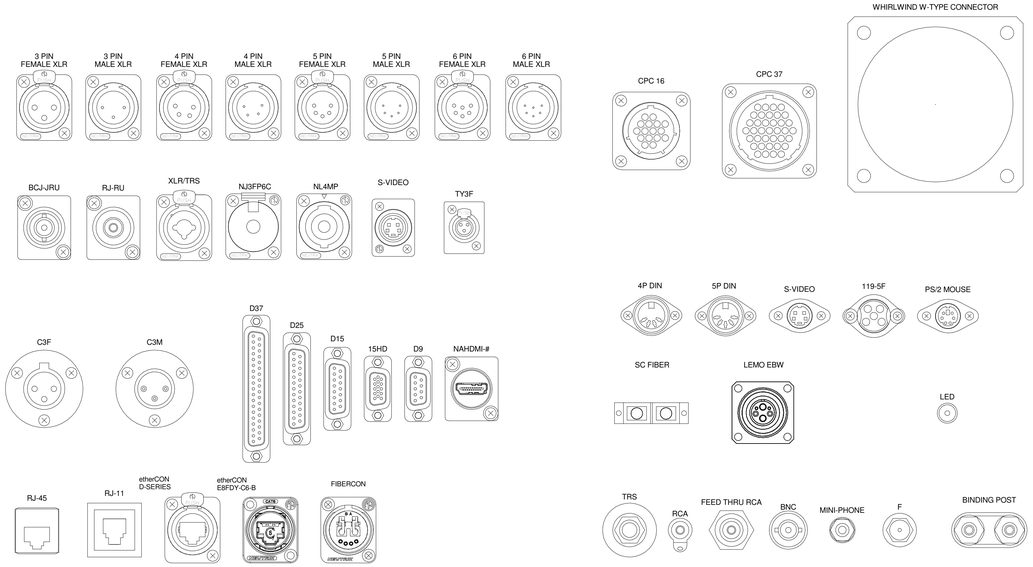
RISER SYMBOL SCHEDULE AND DESCRIPTIONS



* QUANTITY (1) UNLESS OTHERWISE NOTED

** ONE CONDUIT PER LINE OR SECTION UNLESS OTHERWISE NOTED

FACILITY PANEL CONNECTOR LEGEND



WIRE SCHEDULE

NOTES:
1. CONTRACTOR TO USE PLENUM RATED CABLE WHERE REQUIRED BY CODE.
2. WIRING TO BE INSTALLED BY AV CONTRACTOR

TYPE	APPLICATION	DESCRIPTION (FIXED INSTALL CABLE)	O.D.	MANUF.	PART NO.
A1	AUDIO ANALOG/DIGITAL CABLE	ANALOG/DIGITAL AUDIO CABLE, MICROPHONE AND LINE LEVEL WIRING, LESS THAN +24 dBu, FROM 20Hz TO 20kHz, 24 AWG, IMPEDANCE 110\U+2126 ±20%, CAPACITANCE 26pF/FT, 100% SHIELDED, STRANDED TWISTED PAIR	0.177	BELDEN	1800B
D8	CAT 6A UNSHIELDED TWISTED PAIR	CATEGORY 6A (500MHz) DATA CABLE, 23 AWG, 4-UNBONDED PAIR, SOLID BARE COPPER, MAX DELAY SKEW 45ns/100m, MUTUAL CAPACITANCE (nominal) 17 pF/ft	0.250	BELDEN	10GXW13
F1.2	SINGLE MODE FIBER OPTICS	SINGLE MODE FIBER 62.5/125/900 MICRON, 2 CONDUCTORS, PVC JACKET, MAX. ATTENUATION 1.25dB/km @ 1300nm,	0.184	BELDEN	FISD002R9
F2.4	MULTI MODE FIBER OPTICS	MULTI MODE FIBER 62.5/125/900 MICRON, 4 CONDUCTORS, PVC JACKET, MAX. ATTENUATION 1.25dB/km @ 1300nm	0.200	BELDEN	FI1D004R9
F2.6	MULTI MODE FIBER OPTICS	MULTI MODE FIBER 62.5/125/900 MICRON, 6 CONDUCTORS, PVC JACKET, MAX. ATTENUATION 1.25dB/km @ 1300nm	0.220	BELDEN	FI1D006R9
I3	INTERCOM UNDER 500 FT	20 AWG, PVC JACKET, SHIELDED STRANDED (7x28) TC CONDUCTORS, (4) TWISTED PAIRED	0.345	BELDEN	8725
R1	LOW LOSS 50\U+2126 WIRELESS	RG58C/U, 20 AWG, 50\U+2126, 95% BRAIDED SHIELD, NOM ATTN -21.5dB/100ft @ 1GHz	0.195	BELDEN	8262
S3	SPEAKER	LOUDSPEAKER LEVEL OR CIRCUIT WIRING GREATER THAN +24dBu, FROM 20Hz TO 20kHz, 12 AWG, STRANDED, TWISTED PAIR WITH PVC JACKET.	0.302	BELDEN	5000UP
S4	SPEAKER	LOUDSPEAKER LEVEL OR CIRCUIT WIRING GREATER THAN +24dBu, FROM 20Hz TO 20kHz, 10 AWG, STRANDED, TWISTED PAIR WITH PVC JACKET.	0.356	BELDEN	5T00UP
S5	SPEAKER	8 AWG, THHN, STRANDED, CONTRACTOR TO TWIST CABLE INTO PAIRS MANUALLY, 4 TWIST PER FOOT. (BLK/RED)	0.218	ANY	----------
V8	VIDEO (DIGITAL)	RG-6, LOW LOSS COAX, 75\U+2126, 18AWG, NOM ATTN -13.7dB/100ft @ 3GHz	0.274	BELDEN	4694R

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SCALE:	12" = 1'-0"

SHEET TITLE

AV ABBREVIATIONS, NOTES, AND SYMBOLS

SHEET NUMBER

AV002

AV JUNCTION BOX SCHEDULE

LOCATION	DEVICE ID	DESCRIPTION	BOX TYPE	BOX SIZE	INSTALL METHOD	ELEVATION
ANNOUNCER BOOTH	(E)AVD	AUDIO VIDEO DISTRIBUTION JUNCTION BOX				
ANNOUNCER BOOTH	ALA	ASSISTIVE LISTENING ANTENNA JUNCTION BOX	1 GANG BOX DEEP, NEMA 3R	4-11/16 x 4-11/16 x 2-1/8	EXISTING RAIL	
ANNOUNCER BOOTH	AVD1	AUDIO VIDEO DISTRIBUTION JUNCTION BOX	HOFFMAN A-SG16X12X6	16 x 12 x 6	WALL	6" AFF
ANNOUNCER BOOTH	CCP	CAMERA CONNECTIVITY PANEL JUNCTION BOX	1 GANG BOX DEEP, NEMA 3R	4-11/16 x 4-11/16 x 2-1/8	CEILING	N/A
ANNOUNCER BOOTH	ERK1.#	EQUIPMENT RACK	N/A	N/A	N/A	N/A
ANNOUNCER BOOTH	FP5	AV FACILITY JUNCTION BOX	FSR INC OWB-500P-SM	12 x 10.03 x 6.5	WALL	18" AFF
ARENA	CAM1.#	CAMERA JUNCTION BOX	1 GANG BOX DEEP, NEMA 3R	4-11/16 x 4-11/16 x 2-1/8	WALL	FIELD COORDINATE EXACT LOCATION
ARENA	ERK2	EQUIPMENT RACK	N/A	N/A	N/A	48" AFF
ARENA	FP1.#	AV FACILITY JUNCTION BOX	FSR INC OWB-500P-SM	12 x 10.03 x 6.5	WALL	18" AFF
ARENA	FP2	AV FACILITY JUNCTION BOX	FSR INC OWB-500P-SM	12 x 10.03 x 6.5	WALL	18" AFF
ARENA	FP3	AV FACILITY JUNCTION BOX	FSR INC OWB-500P-SM	12 x 10.03 x 6.5	WALL	18" AFF
ARENA	FP4.1	AV FACILITY JUNCTION BOX	FSR INC OWB-500P-SM	12 x 10.03 x 6.5	WALL	18" AFF
ARENA	FP4.2	AV FACILITY JUNCTION BOX	FSR INC OWB-500P-SM	12 x 10.03 x 6.5	STRUCTURE ABOVE	N/A
ARENA	MP1	MEDIA PANEL JUNCTION BOX	FSR INC OWB-500P-SM	12 x 10.03 x 6.5	WALL	18" AFF
ARENA	SPCL1.#	SPEAKER JUNCTION BOX	HOFFMAN A664GSC, NEMA 3	6 x 6 x 4	STRUCTURE ABOVE	N/A
ARENA	SPCL2.#	SPEAKER JUNCTION BOX	HOFFMAN A664GSC, NEMA 3	6 x 6 x 4	STRUCTURE ABOVE	N/A
ARENA	SPCL3.#	SPEAKER JUNCTION BOX	HOFFMAN A664GSC, NEMA 3	6 x 6 x 4	STRUCTURE ABOVE	N/A
ARENA	SPCL4.#	SPEAKER JUNCTION BOX	HOFFMAN A664GSC, NEMA 3	6 x 6 x 4	STRUCTURE ABOVE	N/A
ARENA	SPCL5.#	SPEAKER JUNCTION BOX	HOFFMAN A664GSC, NEMA 3	6 x 6 x 4	STRUCTURE ABOVE	N/A
ARENA	VD1.#	VIDEO DISPLAY JUNCTION BOX	HOFFMAN A664GSC, NEMA 3	6 x 6 x 4	STRUCTURE ABOVE	N/A
ARENA	VD2.#	VIDEO DISPLAY JUNCTION BOX	HOFFMAN A664GSC, NEMA 3	6 x 6 x 4	STRUCTURE ABOVE	N/A
ARENA	VD65	VIDEO DISPLAY JUNCTION BOX	2 GANG BOX DEEP, NEMA 3R	7.10 x 14.25 x 2.88	WALL	100" AFF
ARENA	VD85	VIDEO DISPLAY JUNCTION BOX	2 GANG BOX DEEP, NEMA 3R	7.10 x 14.25 x 2.88	WALL	105" AFF
EAST BARN	SH1.#	SPEAKER JUNCTION BOX	FSR INC OWB-500P-SM	12 x 10.03 x 6.5	CEILING	N/A
WEST BARN	SH1.#	SPEAKER JUNCTION BOX	FSR INC OWB-500P-SM	12 x 10.03 x 6.5	CEILING	N/A

NOTE: CONTRACTOR IS TO PROVIDE BLANK PANELS FOR ALL BOXES THAT ARE DESIGNATED FOR FUTURE USE. BOXES THAT ARE ABLE TO ACCEPT STANDARD SIZE BLANK PANELS SHALL BE PROVIDED WITH SAME (SGMR, 2GMR, SWITCH BOXES, ETC). NON STANDARD SIZE BOXES (I.E. TOUCH PANELS) WILL BE PROVIDED WITH ANODIZED ALUMINUM BLANK PANELS. SEE SPECIFICATION FOR REQUIREMENTS (I.E. COLOR COORDINATION). CONTRACTOR TO LABEL ALL CONDUIT STUBS AND FUTURE BACK BOXES WITH PERMANENT MARKER. SEE SPECIFICATION FOR DETAILS.

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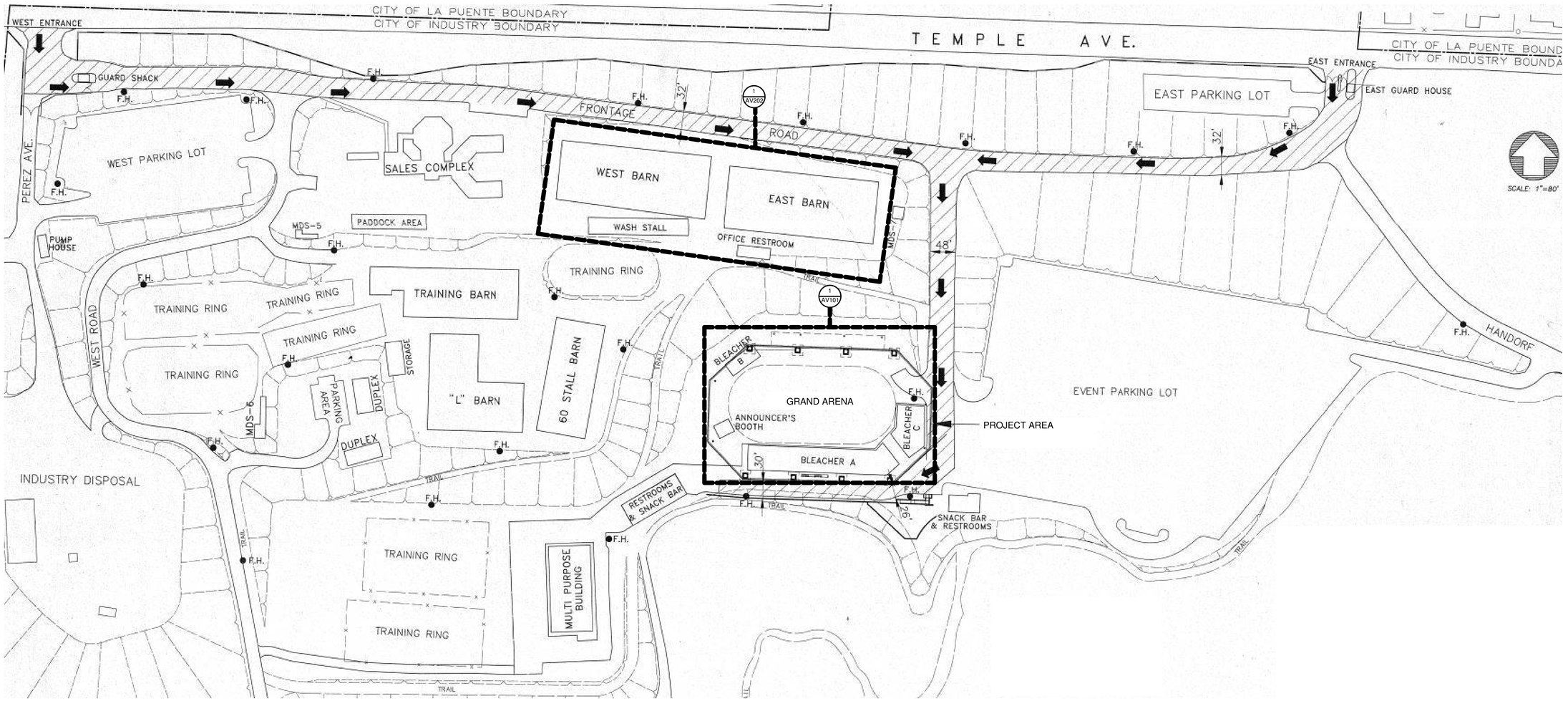
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SHEET TITLE

AV JUNCTION BOX SCHEDULE

SHEET NUMBER

AV003



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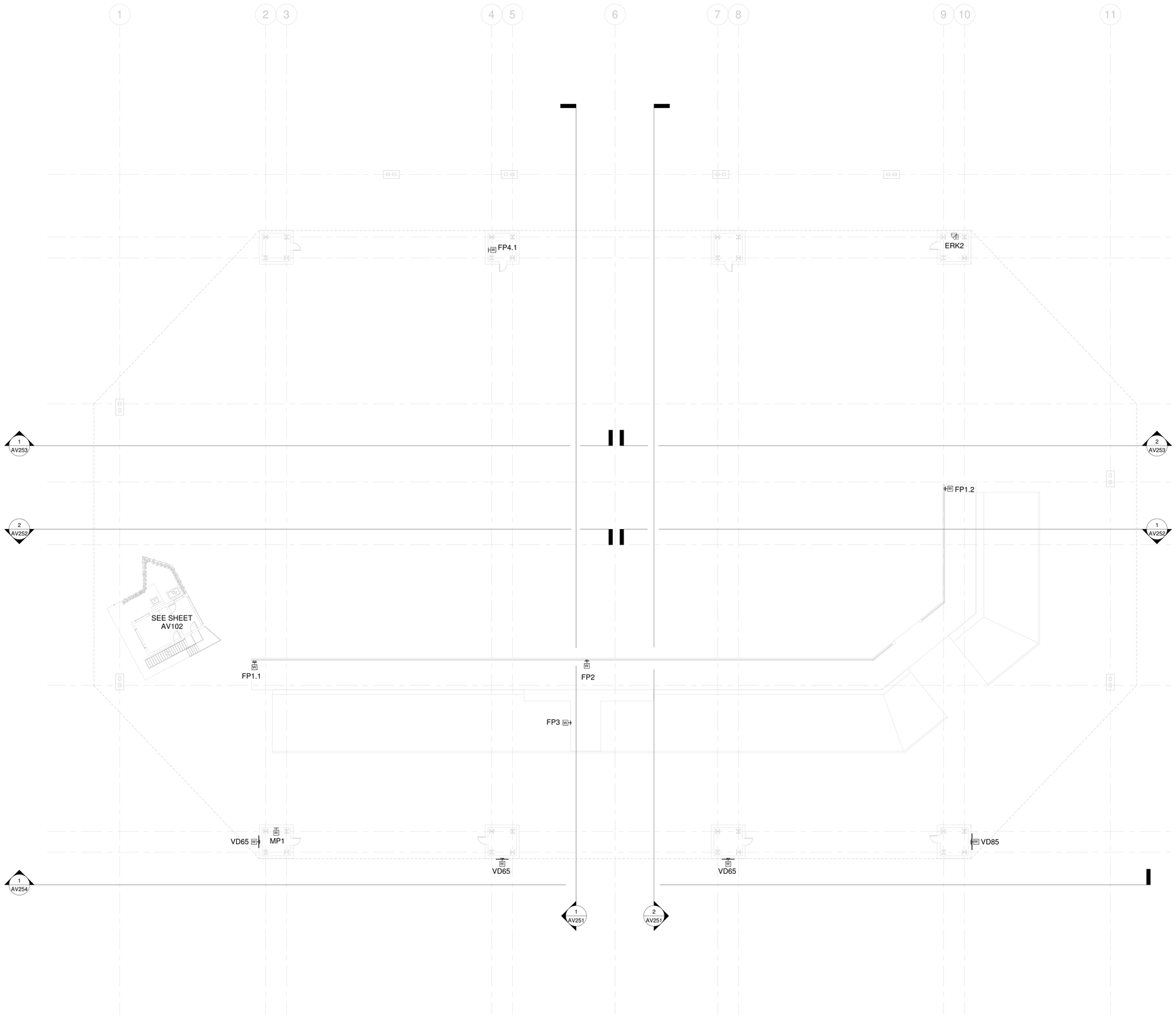
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SHEET TITLE

AV SITE PLAN

SHEET NUMBER

AV100



1 ARENA FLOOR PLAN
1/16" = 1'-0"

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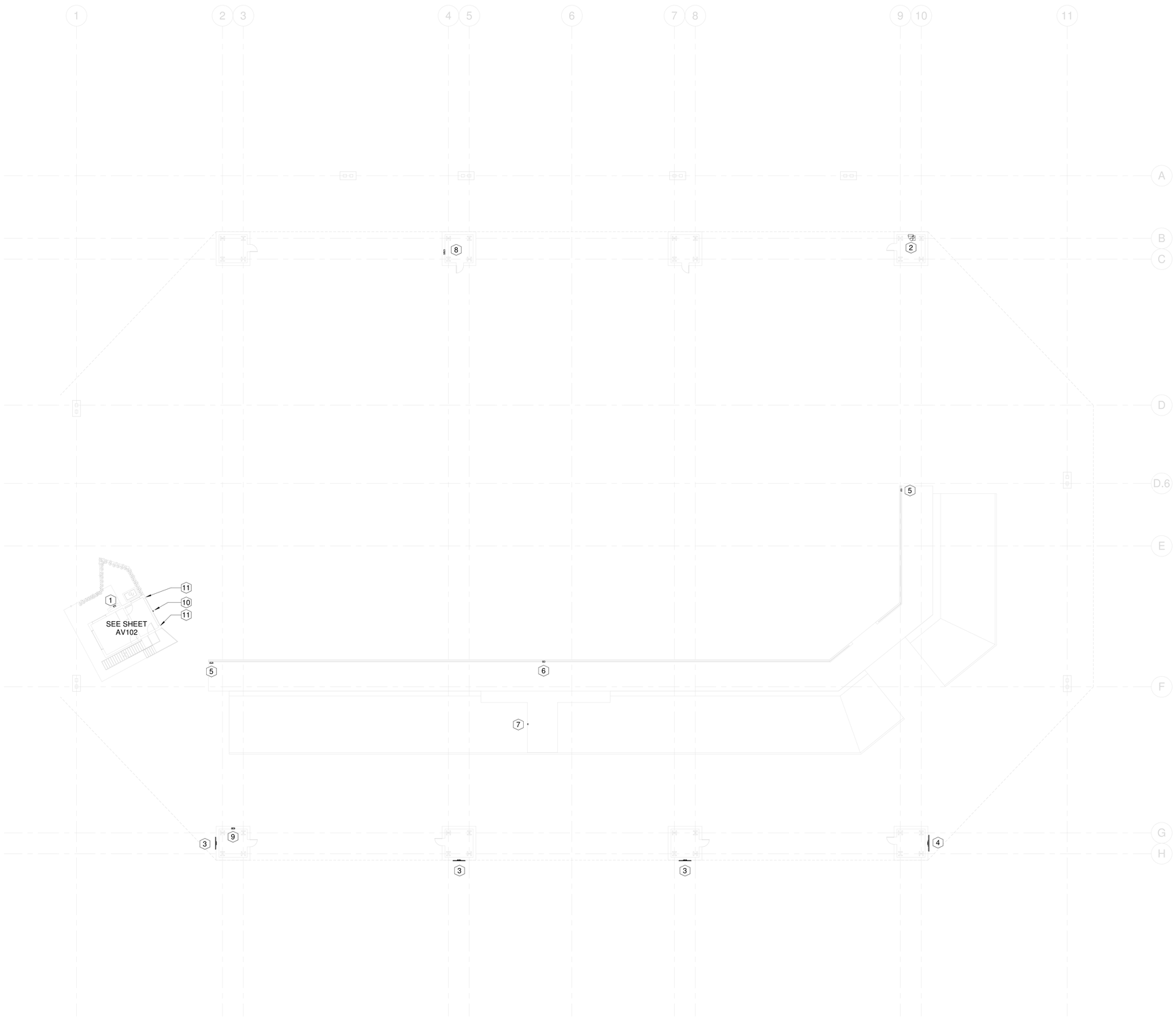
SHEET TITLE

AV ARENA FLOOR PLAN

SHEET NUMBER

AV101

AV KEYNOTE LEGEND - FLOOR PLAN	
KEYNOTE	DESCRIPTION
1	EXISTING AUDIO / VIDEO DISTRIBUTION PANEL - (E)AVD
2	AV EQUIPMENT RACK - (ERK#)
3	LARGE VIDEO DISPLAY - WALL MOUNTED - (VD65)
4	LARGE VIDEO DISPLAY - WALL MOUNTED - (VD85)
5	FACILITY PANEL - (FP1.#) *HD-SDI *AUDIO TIE *CAT6A TIE - AV AND GENERAL PURPOSE *INTERCOM *AV OVER IP *POWER *DATA
6	FACILITY PANEL - (FP2) *HD-SDI *(2) AUDIO TIES *CAT6A - AV AND GENERAL PURPOSE *INTERCOM *AV OVER IP *POWER *DATA
7	FACILITY PANEL - (FP3) *HD-SDI *(2) MIC *(2) LINE *AUDIO TIE *CAT6A - AV AND GENERAL PURPOSE *INTERCOM *AV OVER IP *POWER *DATA
8	FACILITY PANEL - (FP4) *HD-SDI *AUDIO TIE *CAT6A - AV AND GENERAL PURPOSE *INTERCOM *AV OVER IP *POWER *DATA
9	PRESS FEED LOCATION - (MP1)
10	CAMERA PANEL- LOCATED ON ROOF - (CAM1) *HD-SDI *POWER
11	WIRELESS MIC ANTENA - LOCATED ON ROOF - (WMA1.#)



1 ARENA FLOOR PLAN - EQUIPMENT PLAN
1/16" = 1'-0"

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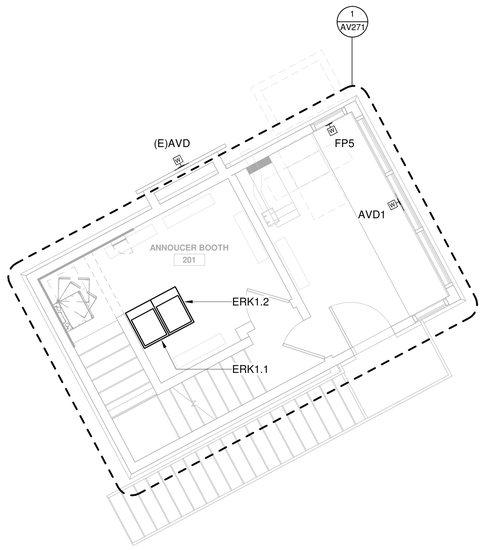
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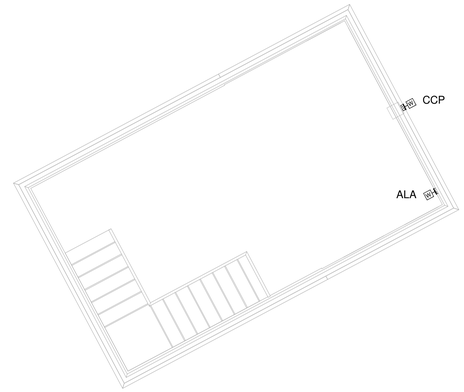
AV ARENA FLOOR EQUIPMENT PLAN

SHEET NUMBER

AV101EQ



1 CONTROL ROOM - LEVEL 2
1/4" = 1'-0"



2 CONTROL ROOM - LEVEL 3
1/4" = 1'-0"

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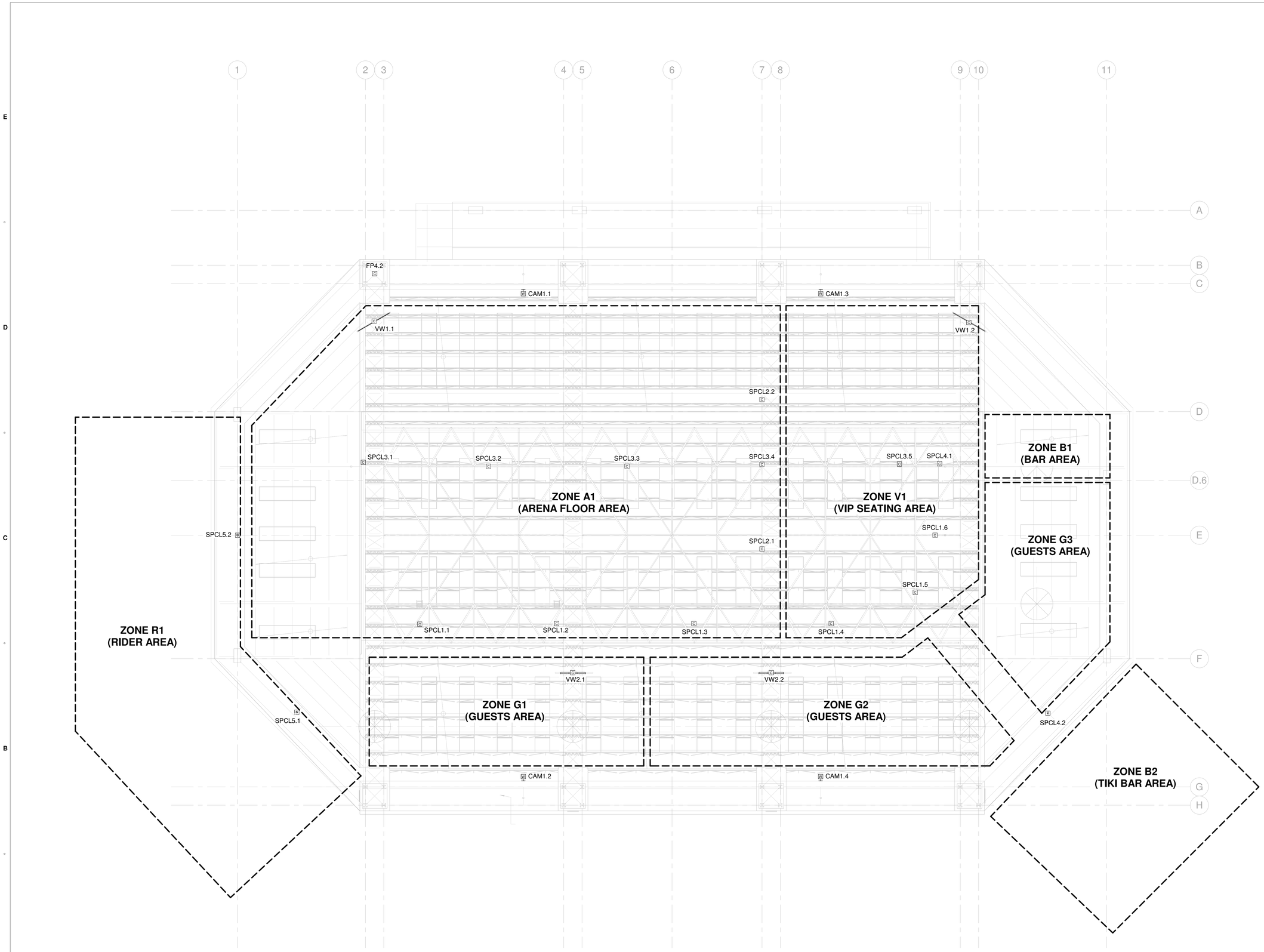
PROJ. NO.	**7913-001**
DRAWN BY:	**JB**
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SCALE:	**1/4" = 1'-0"**

SHEET TITLE

AV CONTROL ROOM PLAN

SHEET NUMBER

AV102



1 ARENA REFLECTIVE CEILING PLAN
1/16" = 1'-0"

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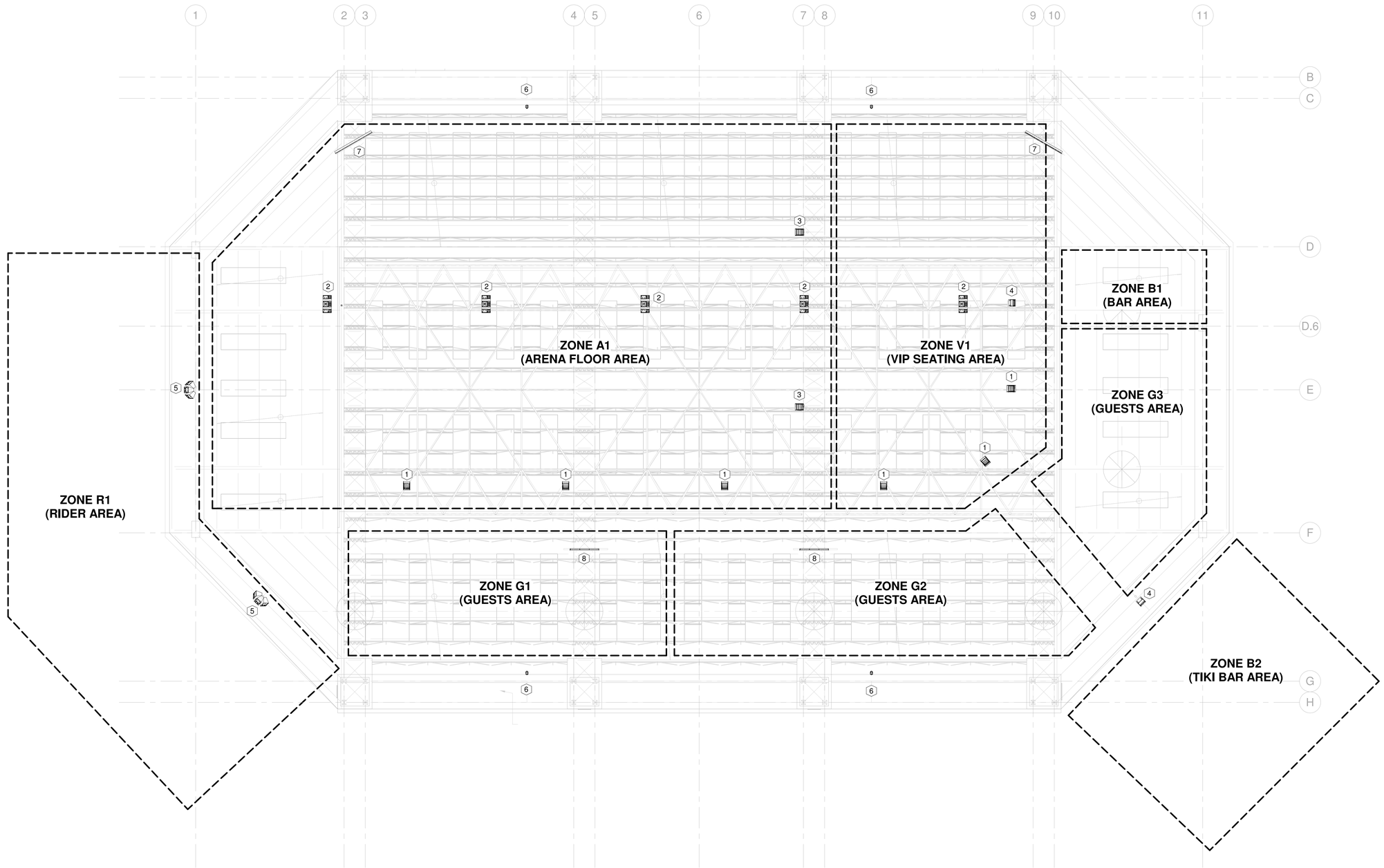
SHEET TITLE

AV ARENA REFLECTIVE CEILING PLAN

SHEET NUMBER

AV201

AV KEYNOTE LEGEND - RCP					
KEYNOTE	DESCRIPTION	KEYNOTE	DESCRIPTION	KEYNOTE	DESCRIPTION
1 (SPCL1.#)	LOUDSPEAKER ARRAY - GUESTS AREA *(2) 18" ARRAYABLE SUBWOOFERS *(6) DUAL 8" LINE ARRAY LOUDSPEAKERS (SEE DETAIL 2/AV601)	4 (SPCL4.#)	LOUDSPEAKER ARRAY - BAR AREA *(1) 18" ARRAYABLE SUBWOOFER *(3) DUAL 8" LINE ARRAY LOUDSPEAKERS (SEE DETAIL 5/AV601)	7 (VD1.#)	LED VIDEO WALL (TYPE 1) *CAT6 (SEE DETAIL 11/S-500)
2 (SPCL3.#)	LOUDSPEAKERS - ARENA AREA *(3) 12" 2-WAY HORN-LOADED LOUDSPEAKERS (SEE DETAIL 4/AV601)	5 (SPCL5.#)	LOUDSPEAKERS - RIDER AREA *(3) 12" 2-WAY HORN-LOADED LOUDSPEAKERS (SEE DETAIL 6/AV601)	8 (VD2.#)	LED VIDEO WALL (TYPE 2) *CAT6 (SEE DETAIL 12/S-501)
3 (SPCL2.#)	LOUDSPEAKER ARRAY - VIP SEATING *(6) DUAL 8" LINE ARRAY LOUDSPEAKERS (SEE DETAIL 3/AV601)	6 (CAM1.#)	PAN / TILT / ZOOM CAMERA - IN ENVIRONMENTAL ENCLOSURE (SEE DETAIL 1/AV602)		



1 ARENA REFLECTIVE CEILING PLAN -EQUIPMENT PLAN
1/16" = 1'-0"

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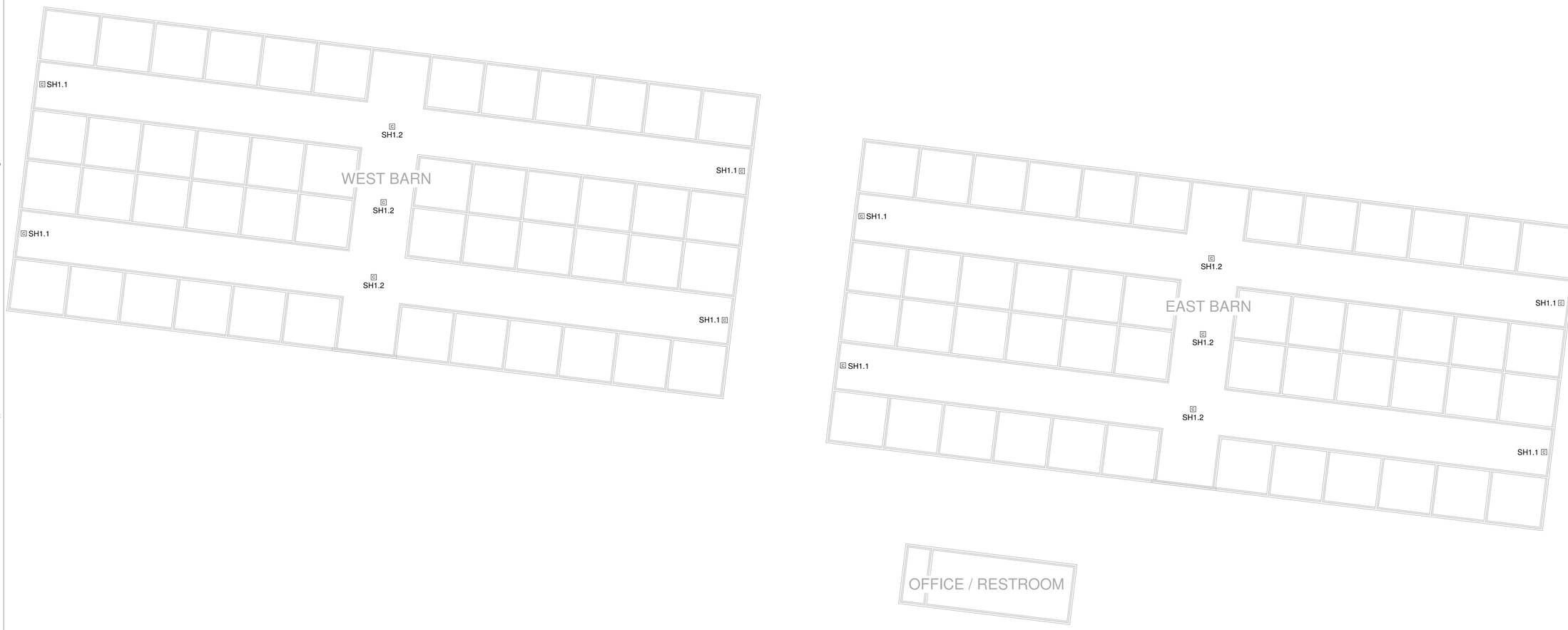
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SHEET TITLE

AV ARENA REFLECTIVE CEILING PLAN - EQUIPMENT

SHEET NUMBER

AV201EQ



1 BARN REFLECTIVE CEILING PLAN
1/16" = 1'-0"

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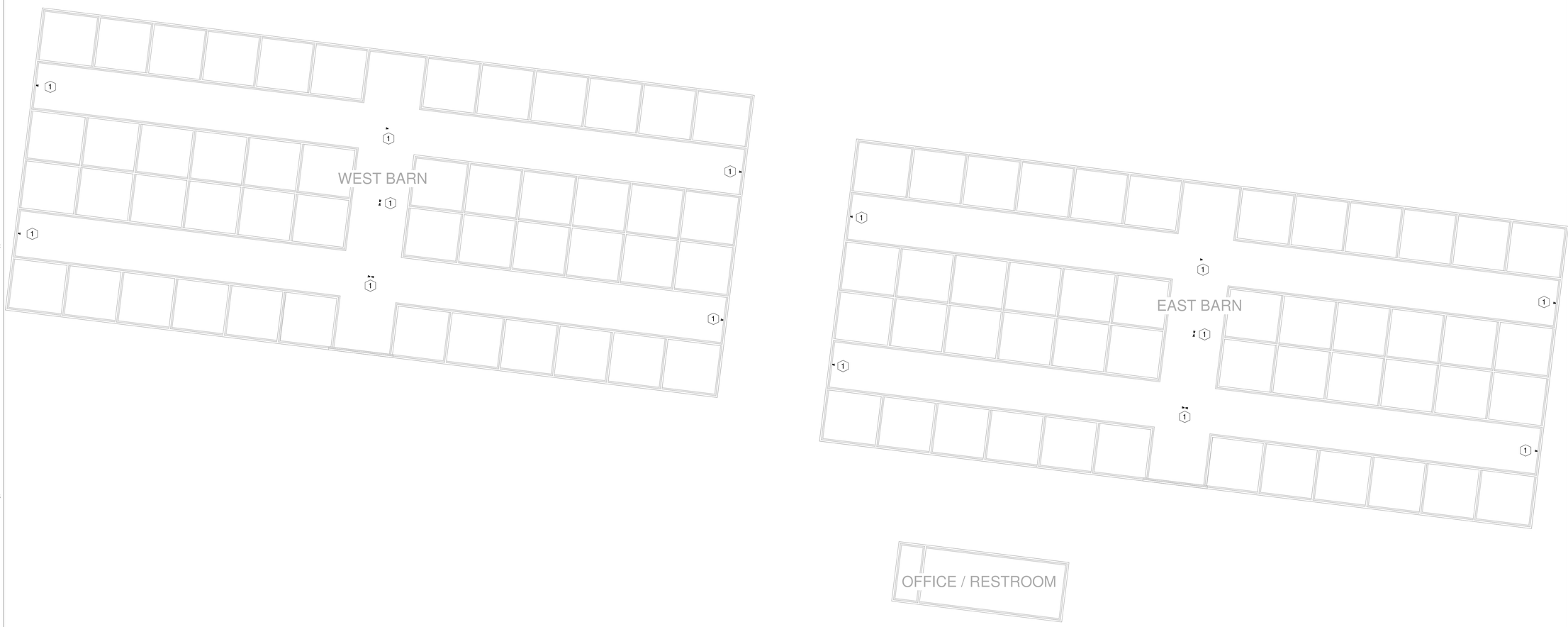
SHEET TITLE

AV BARN REFLECTIVE CEILING PLAN

SHEET NUMBER

AV202

AV KEYNOTE LEGEND - BARN	
KEYNOTE	DESCRIPTION
1 (SH1.#)	PAGING SPEAKERS - CEILING MOUNTED



1 BARN FLOOR PLAN - EQUIPMENT PLAN
1/16" = 1'-0"

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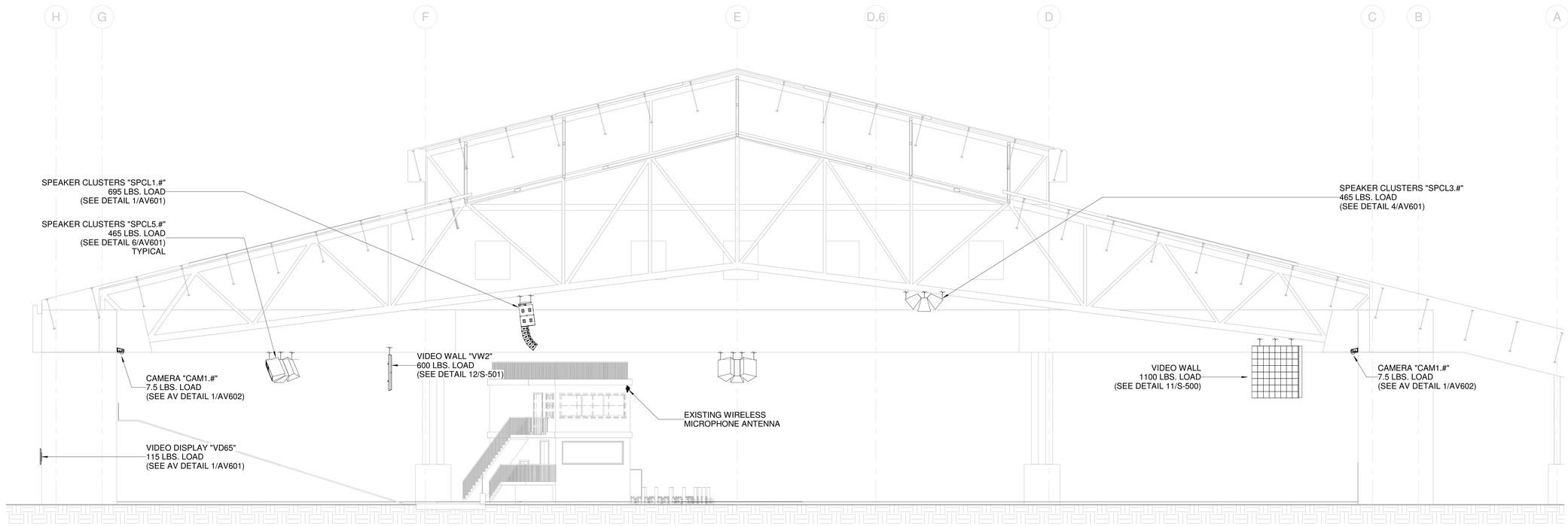
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SHEET TITLE

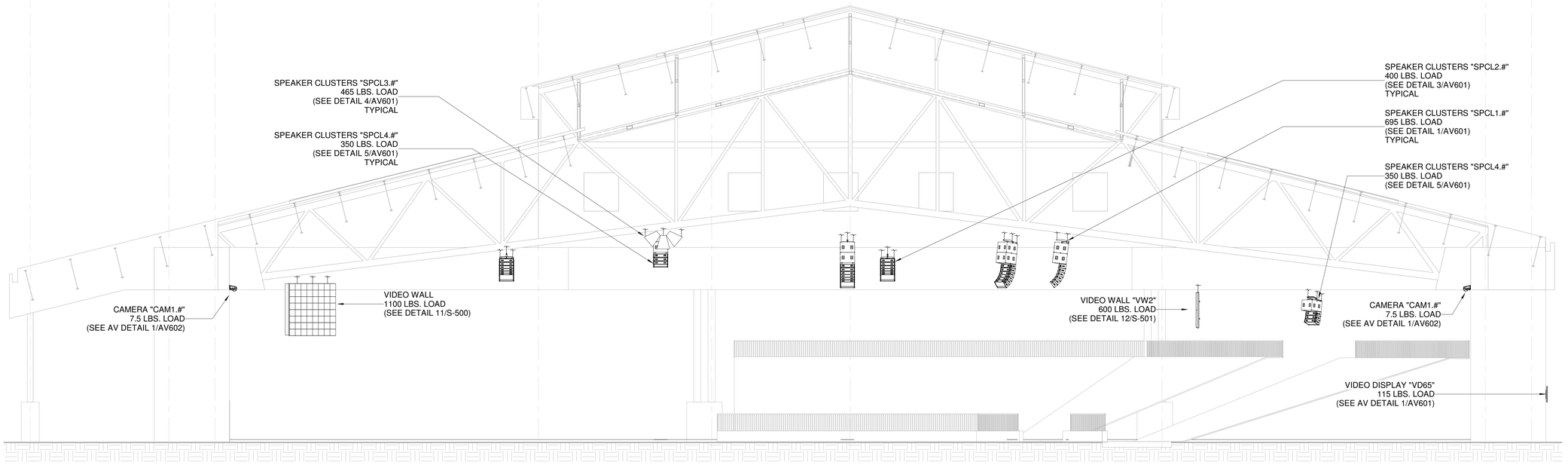
AV BARN EQUIPMENT PLAN

SHEET NUMBER

AV202EQ



1 ARENA - WEST AV SECTION
1/8" = 1'-0"



2 ARENA - EAST AV SECTION
1/8" = 1'-0"

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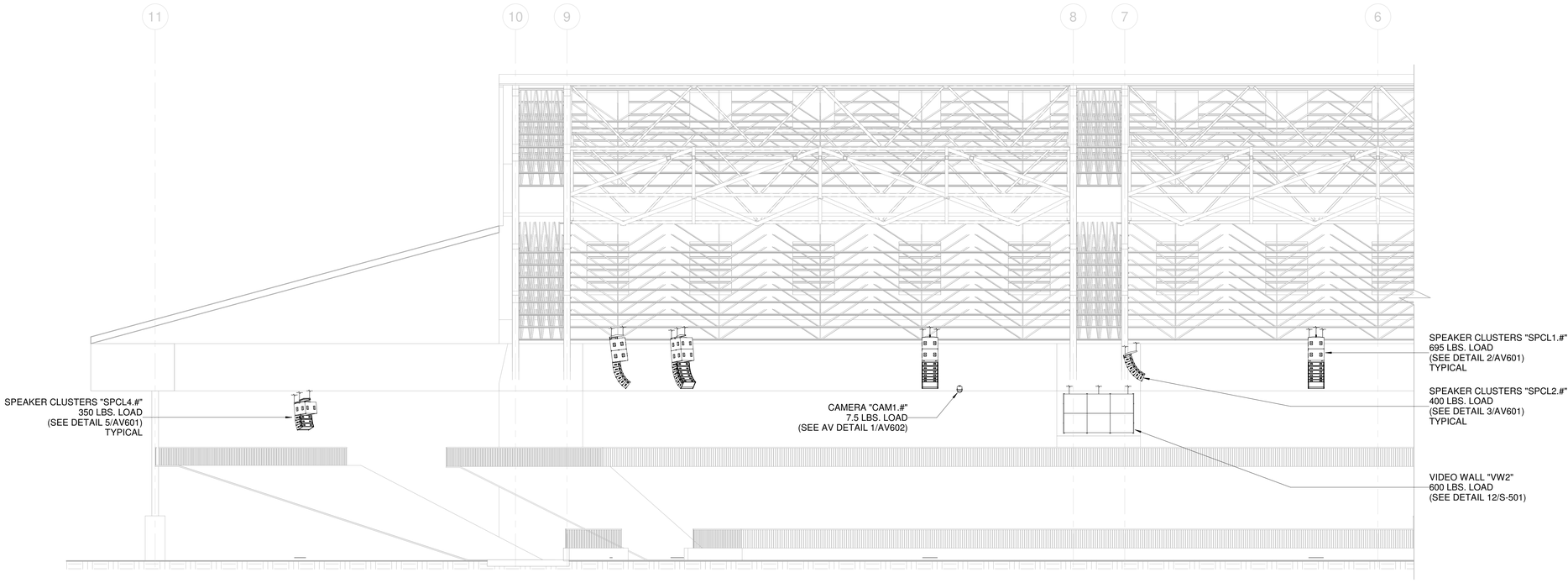
PROJ. NO.	7913-001
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SCALE:	1/8" = 1'-0"

SHEET TITLE

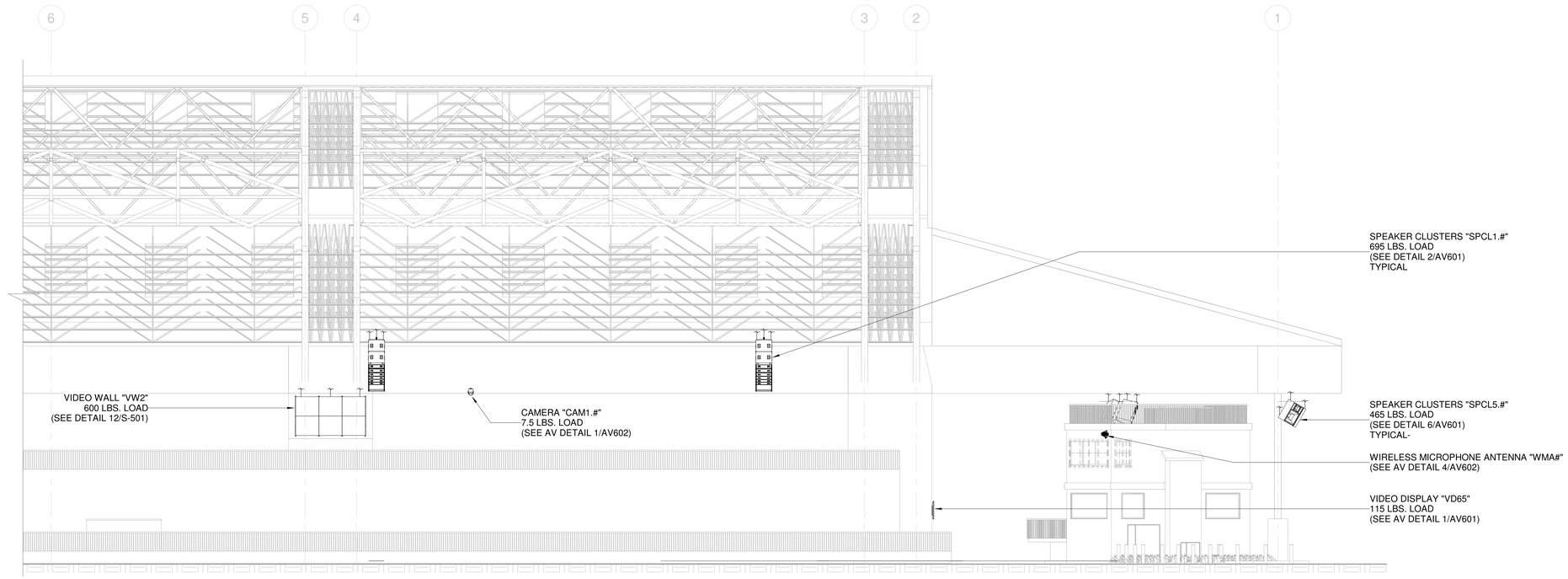
AV SECTIONS AND ELEVATIONS

SHEET NUMBER

AV251



1 ARENA SECTION 3A
1/8" = 1'-0"



2 ARENA SECTION 3B
1/8" = 1'-0"

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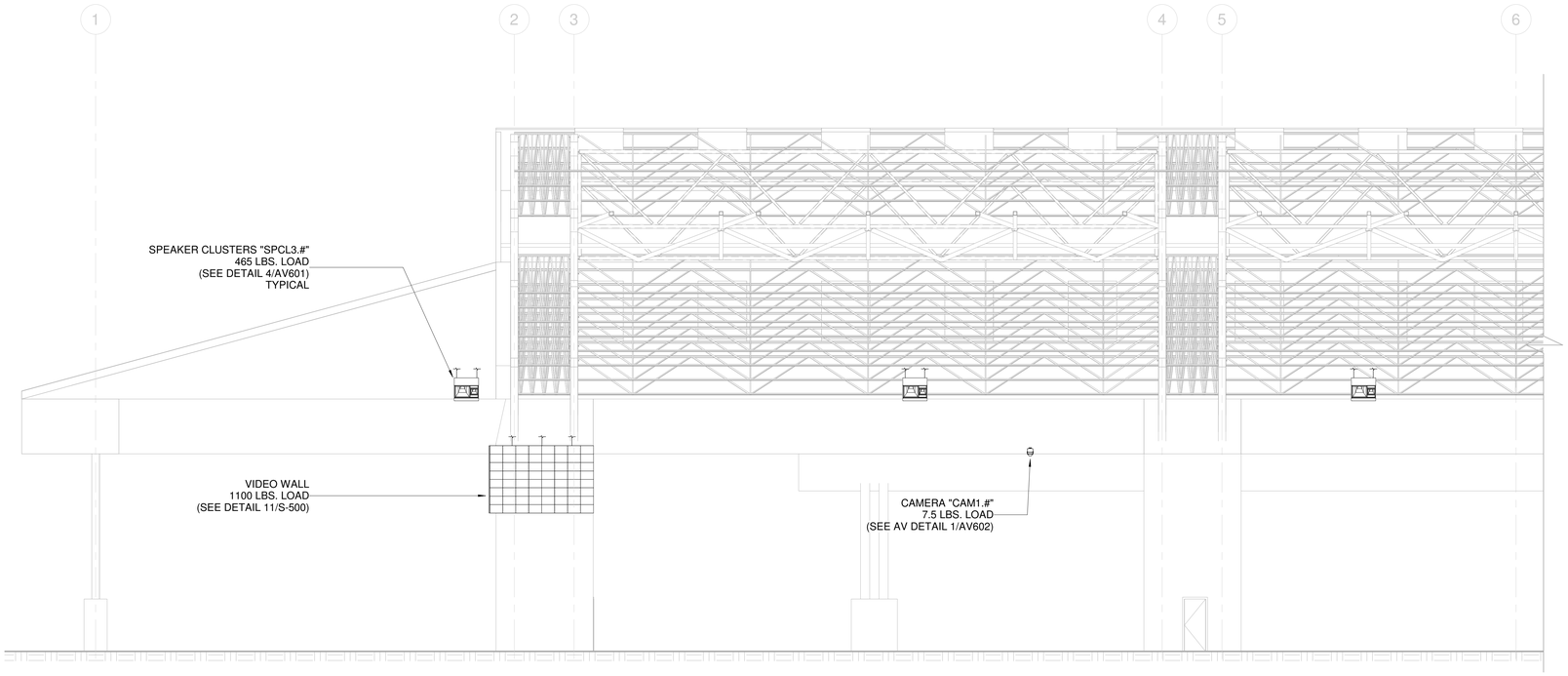
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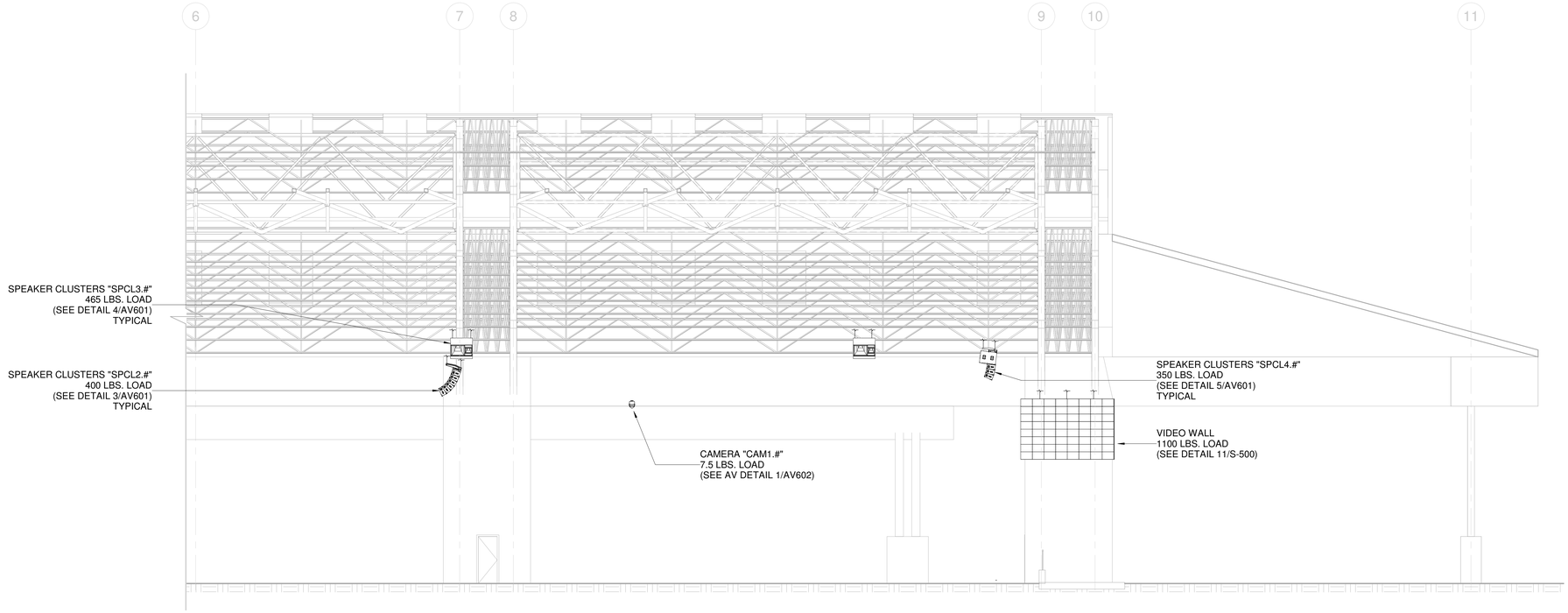
AV SECTIONS AND ELEVATIONS

SHEET NUMBER

AV252



1 ARENA SECTION 4A
1/8" = 1'-0"



2 ARENA SECTION 4B
1/8" = 1'-0"

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REGISTRATION STAMP

ISSUE

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	08/04/25	95% CD SET
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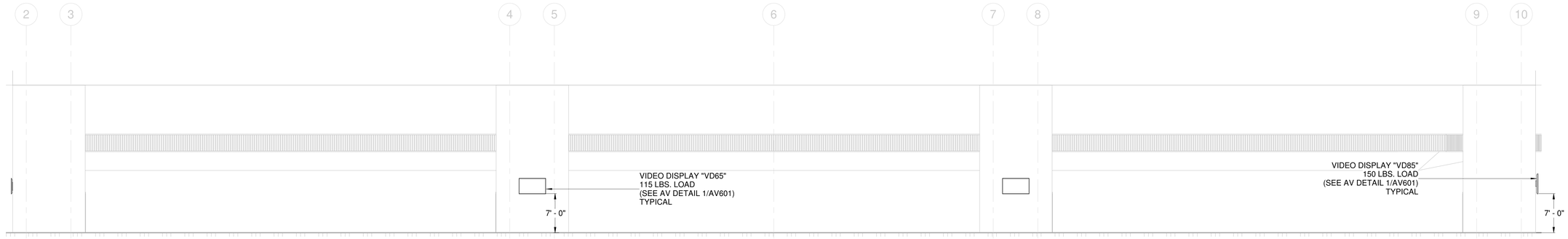
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SHEET TITLE

AV SECTIONS AND ELEVATIONS

SHEET NUMBER

AV253



1 ARENA - REAR AV SECTION
1/8" = 1'-0"

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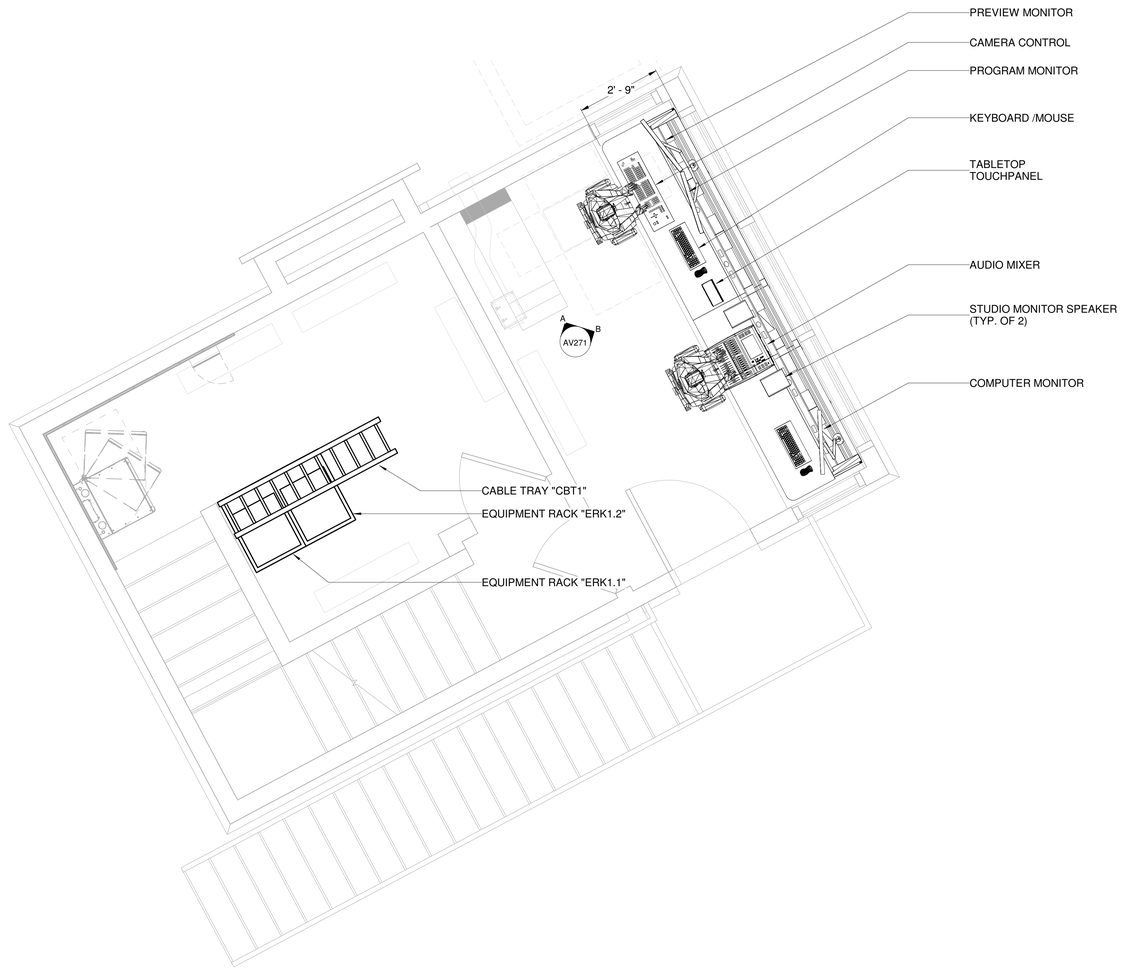
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SHEET TITLE

AV SECTIONS AND ELEVATIONS

SHEET NUMBER

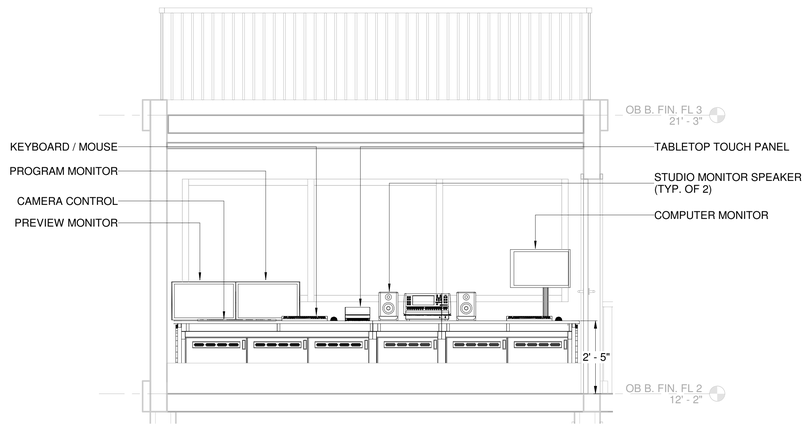
AV254



1 CONTROL ROOM EQUIPMENT PLAN - LEVEL 2
1/2" = 1'-0"



A AV EQUIPMENT ROOM - SECTION
1/2" = 1'-0"



B AV EQUIPMENT ROOM - ELEVATION
1/2" = 1'-0"

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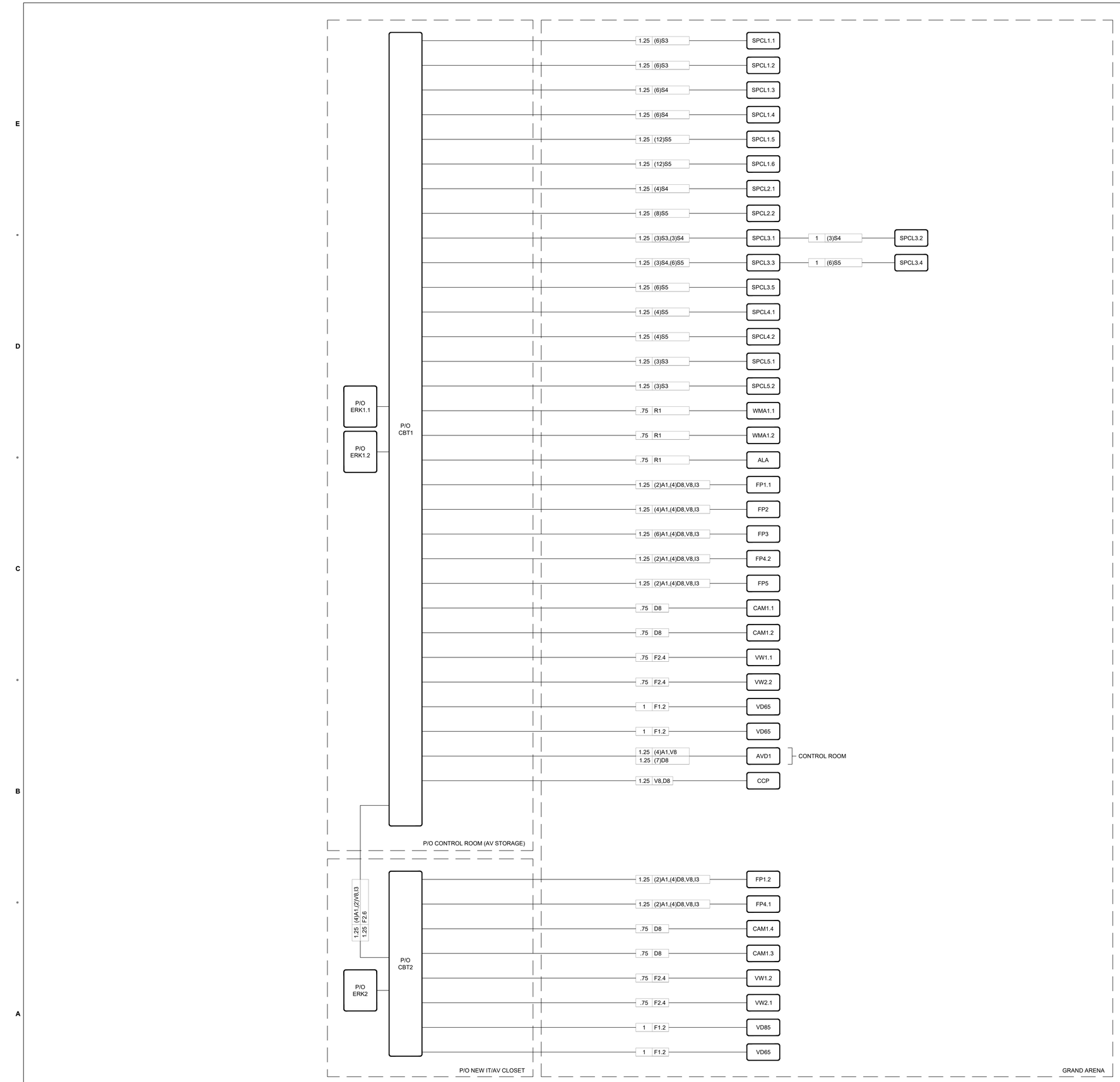
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SCALE:	**1/2" = 1'-0"**

SHEET TITLE

AV EQUIPMENT ROOM LAYOUTS

SHEET NUMBER

AV271



AV RISER DIAGRAM - ARENA

SCALE: NTS

1

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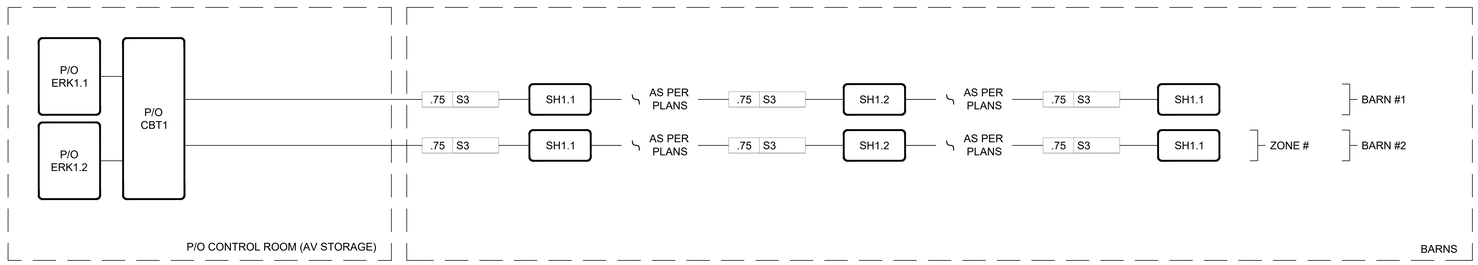
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CHECKED BY:	PA
SCALE:	NTS

SHEET TITLE

AV RISER DIAGRAM

SHEET NUMBER

AV291



AV RISER DIAGRAM - BARNS

SCALE: NTS

1

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	08/29/25	100% CD SET

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CHECKED BY:	PA
SCALE:	NTS

SHEET TITLE

AV RISER DIAGRAM

SHEET NUMBER

AV292

SPEAKERS

CEILING SPEAKER



CEILING SPEAKER W/TRANSFORMER



MONITOR SPEAKER



HORN



OVERHEAD SPEAKER



OVERHEAD SPEAKER W/TRANSFORMER



MID & LOW SPEAKER



2 WAY SPEAKER



3 WAY SPEAKER



HORN W/TRANSFORMER



SINGLE SUB WOOFER



DUAL SUB WOOFER



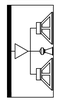
QUAD SUBWOOFER



SELF POWERED SPEAKER



3-WAY POWERED SPEAKER



3-WAY SPEAKER



IN-WALL SPEAKER



PLASMA SPEAKER



POWERED LINE ARRAY SPEAKER



LINE ARRAY SPEAKER



PLANTER SPEAKER



AMPLIFIERS

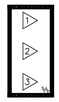
SINGLE CHANNEL



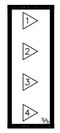
DUAL CHANNEL



3 CHANNEL



4 CHANNEL



BRIDGE



TOP HALF



MIDDLE HALF



BOTTOM HALF



VIDEO

VIDEO PROJECTOR



PAN & TILT CAMERA



VIDEO CAMERA

DOCUMENT CAMERA



VIDEO / TV DISPLAY



PROJECTION SCREEN



SATELLITE



DEVICES

DEVICE



TOP HALF



BOTTOM HALF



MIDDLE HALF



JUNCTION BOXES

J-BOX



MISCELLANEOUS SYMBOLS

FULL COMPUTER



COMPUTER MONITOR



CPU



KEYBOARD



MOUSE



LAPTOP PC



KEYBOARD VIDEO MOUSE



WIRELESS MOUSE



TOUCH PANEL



WIRELESS TOUCH PANEL



DOCK ABLE TOUCH PANEL

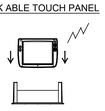


TABLE TOP MICROPHONE



HAND HELD MICROPHONE



WIRELESS HAND HELD MICROPHONE



LAVALIERE MICROPHONE

CEILING MICROPHONE



GOOSENECK MICROPHONE



PAGING MICRHOPHONE



BELT PACK



HEADSET BELTPACK



HEADSET PLUGIN



NECK LOOP



ANTENNA



INFRA RED EMITTER



MICROPHONE ARRAY



ATTENUATOR



TRANSFORMER



10K POT



LIGHTING PROTECTION



SYMBOL KEY

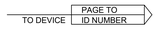
SCALE: NTS

1

LINE CONVENTIONS

- AREA
- AUDIO LINE
- CONTROL LINE
- DATA
- INTERCOM
- MULTI
- SPEAKER
- RACK
- RF
- VIDEO LINE
- WIRE BUSS
- "Y" CONNECTION

DRAWING AND SIGNAL NAVIGATION



PAGE TO



PAGE FROM

- FROM EXTERNAL SYSTEM
- TO EXTERNAL SYSTEM

AUDIO PATCH POINTS

- HALF NORMAL BRIDGING
- HALF NORMAL
- FULL NORMAL
- IN (LEFT ON PATCH BAY)
- OUT (LEFT ON PATCH BAY)

I/O CONNECTIONS

- SCREW TERMINAL
- TERMINAL DEVICE INPUT
- TERMINAL DEVICE OUTPUT
- CONNECTOR/CONNECTION POINT

WIRING KEY

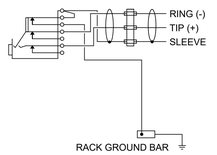
SCALE: NTS

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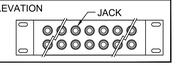
JACK SINGLE, MICROPHONE TRUNK

GRAPHIC SYMBOL

SCHEMATIC DIAGRAM



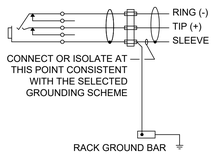
JACK BAY ELEVATION



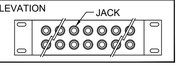
JACK SINGLE

GRAPHIC SYMBOL

SCHEMATIC DIAGRAM

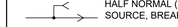


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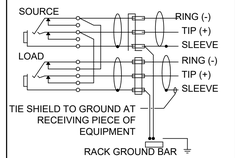


JACK PAIR

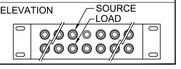
GRAPHIC SYMBOL



SCHEMATIC DIAGRAM



JACK BAY ELEVATION

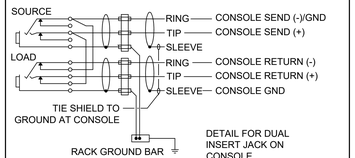


JACK PAIR, CONSOLE INSERT

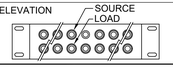
GRAPHIC SYMBOL



SCHEMATIC DIAGRAM



JACK BAY ELEVATION

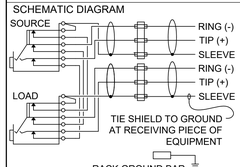


JACK PAIR, MICROPHONE TRUNK

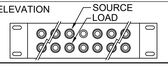
GRAPHIC SYMBOL



SCHEMATIC DIAGRAM



JACK BAY ELEVATION

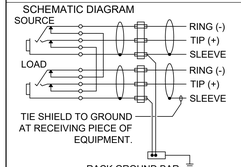


JACK DOUBLE

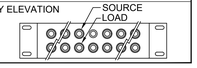
GRAPHIC SYMBOL



SCHEMATIC DIAGRAM



JACK BAY ELEVATION

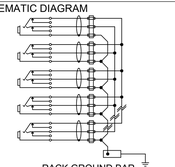


JACK MULTIPLE, (MULT)

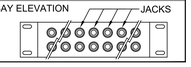
GRAPHIC SYMBOL



SCHEMATIC DIAGRAM

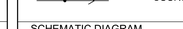


JACK BAY ELEVATION

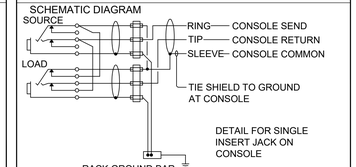


JACK PAIR, CONSOLE INSERT

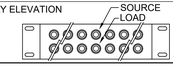
GRAPHIC SYMBOL



SCHEMATIC DIAGRAM



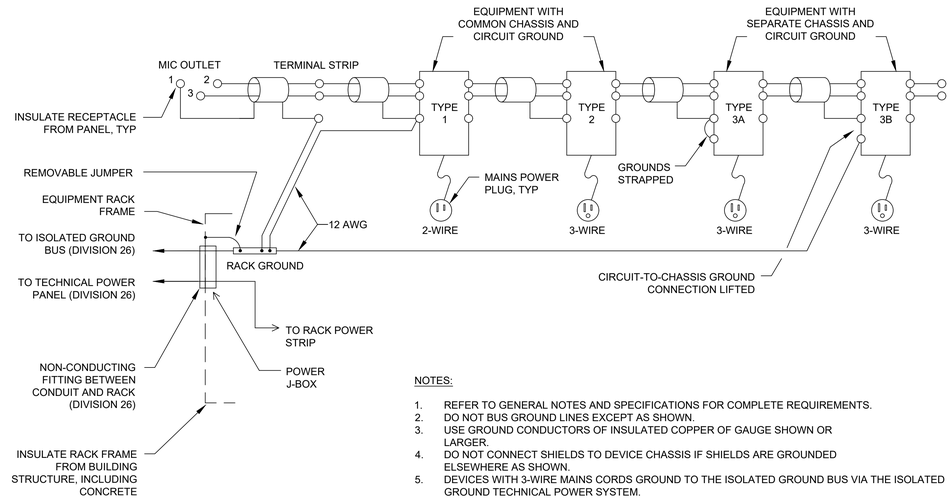
JACK BAY ELEVATION



GROUNDING DIAGRAM SCHEMES

SCALE:

3



NOTES:

1. REFER TO GENERAL NOTES AND SPECIFICATIONS FOR COMPLETE REQUIREMENTS.
2. DO NOT BUS GROUND LINES EXCEPT AS SHOWN.
3. USE GROUND CONDUCTORS OF INSULATED COPPER OF GAUGE SHOWN OR LARGER.
4. DO NOT CONNECT SHIELDS TO DEVICE CHASSIS IF SHIELDS ARE GROUNDED ELSEWHERE AS SHOWN.
5. DEVICES WITH 3-WIRE MAINS CORDS GROUND TO THE ISOLATED GROUND BUS VIA THE ISOLATED GROUND TECHNICAL POWER SYSTEM.

GROUNDING DETAIL

SCALE: NTS

4

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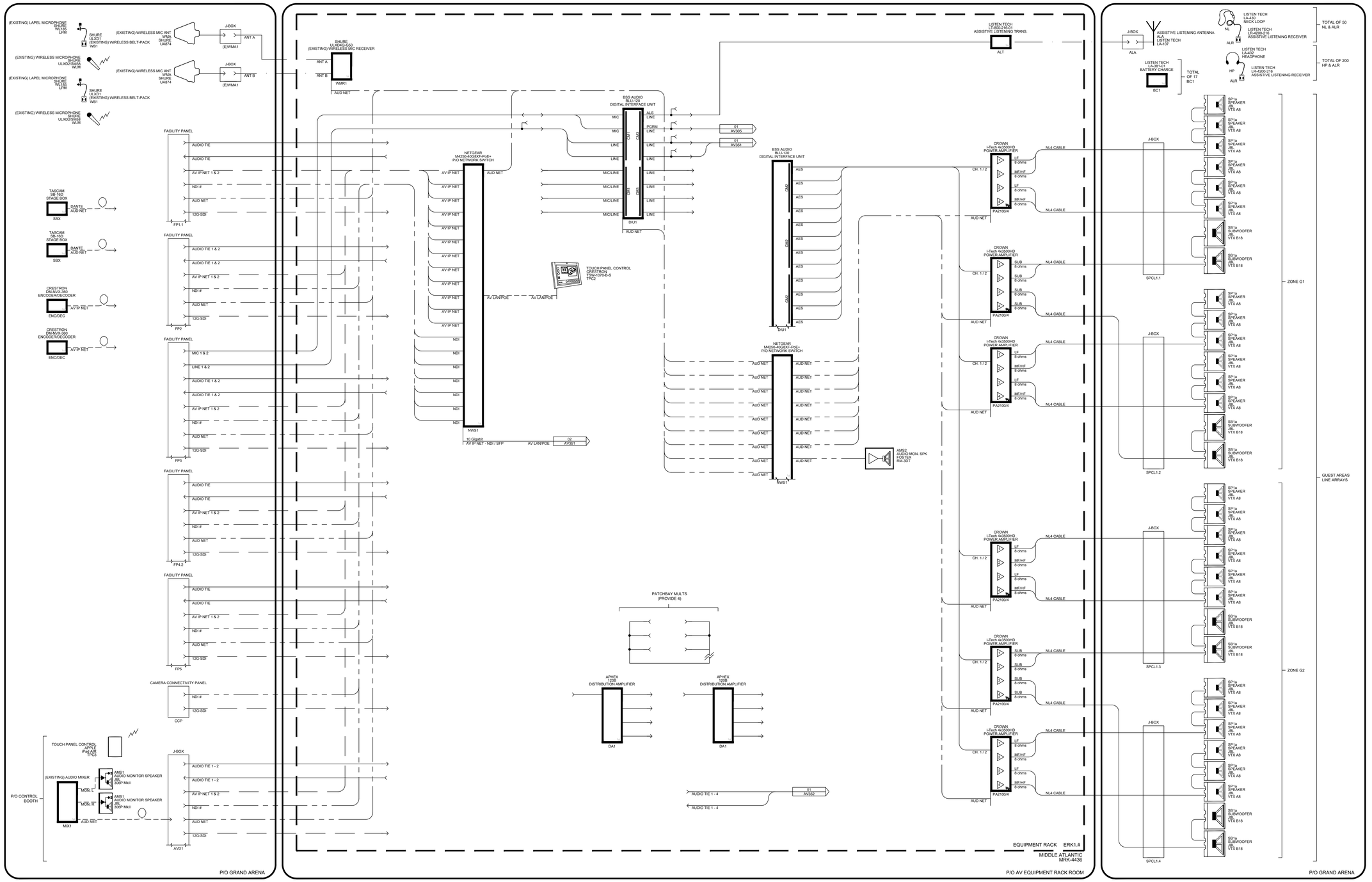
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DRAWN BY:	**JB**
CHECKED BY:	**PA**
SCALE:	**NTS**

SHEET TITLE

AV WIRING SCHEME AND SYMBOL KEY

SHEET NUMBER

AV300



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SHEET TITLE

AV AUDIO ONELINES

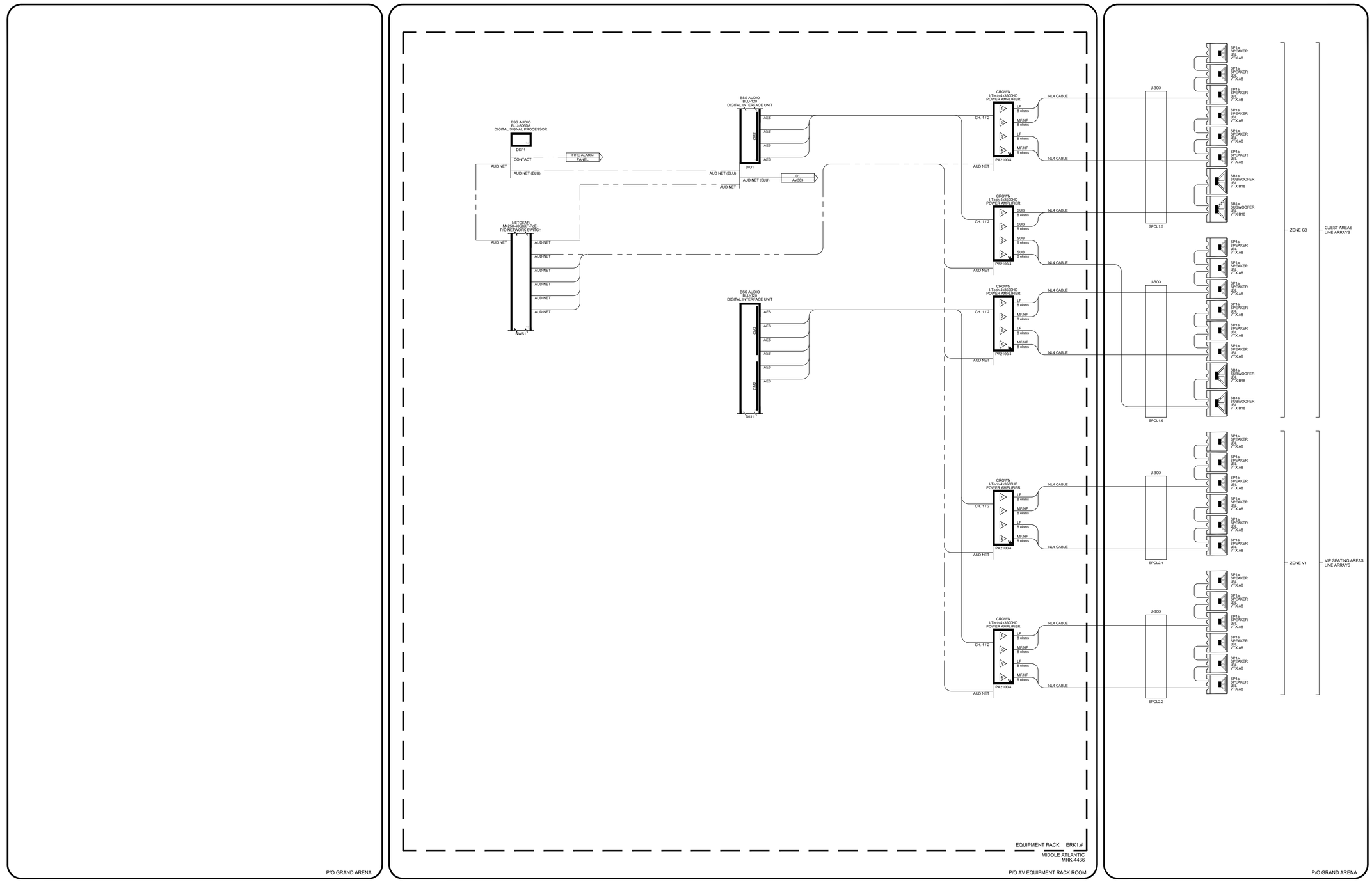
SHEET NUMBER

AV301

AV AUDIO ONELINES

SCALE: NTS

1



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SCALE:	**NTS**

SHEET TITLE

AV AUDIO ONELINES

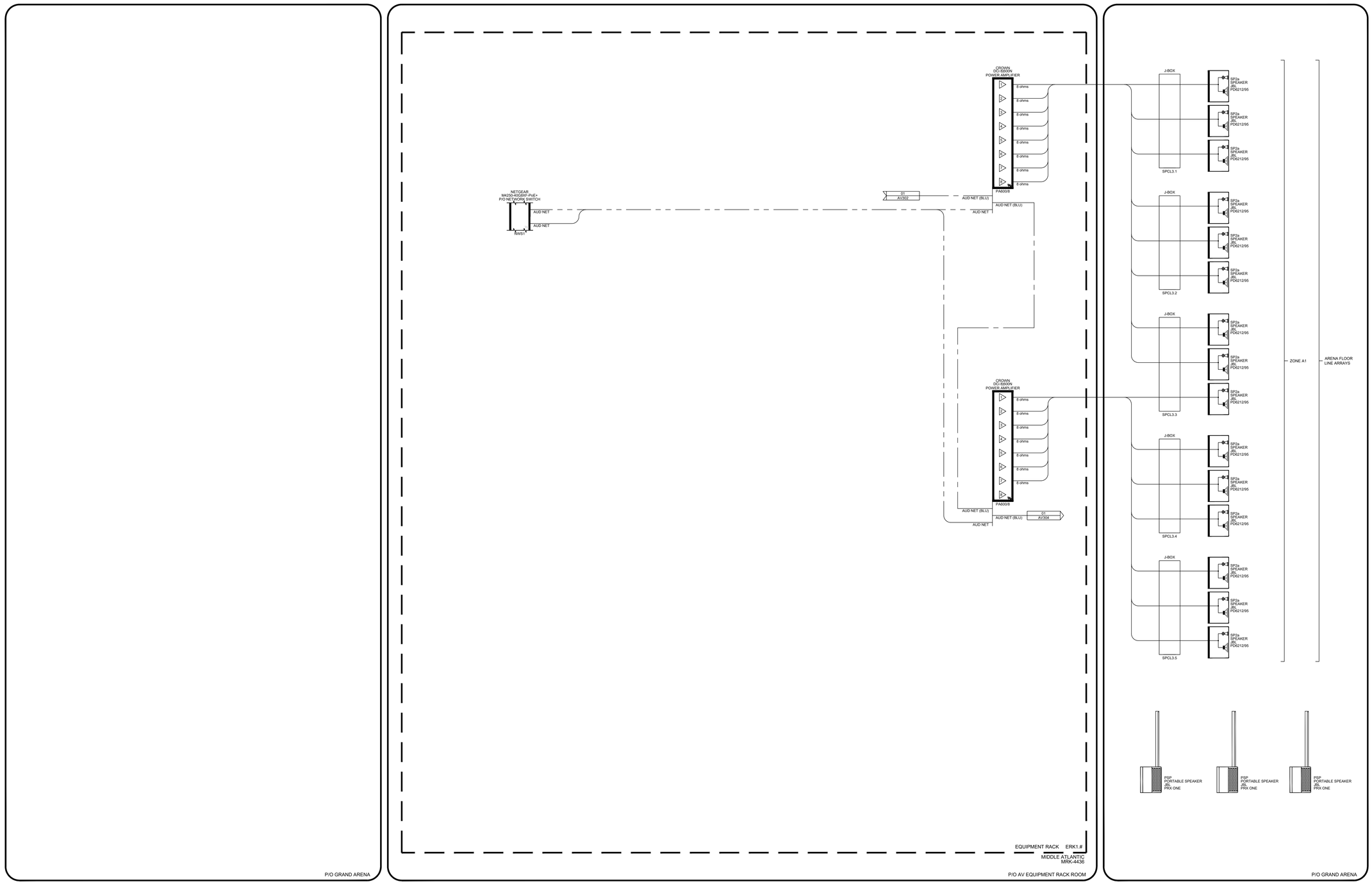
SHEET NUMBER

AV302

AV AUDIO ONELINES

SCALE: NTS

1



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MARK	DATE	DESCRIPTION

PROJ. NO.	**7913-001**
DRAWN BY:	**JB**
CHECKED BY:	**PA**
SCALE:	**NTS**

SHEET TITLE

AV AUDIO ONELINES

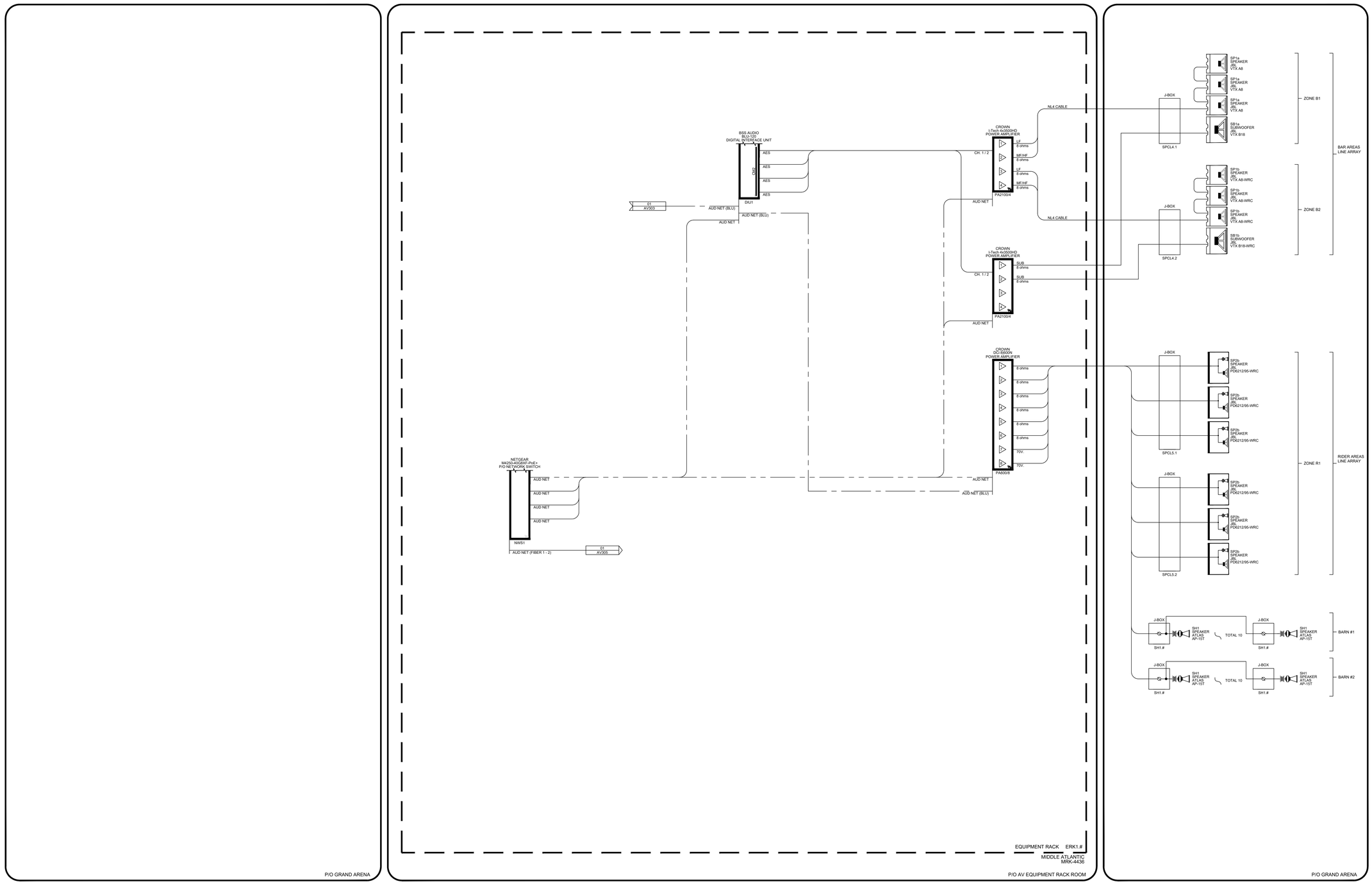
SHEET NUMBER

AV303

AV AUDIO ONELINES

SCALE: NTS

1



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CHECKED BY:	**PA**
SCALE:	**NTS**

SHEET TITLE

AV AUDIO ONELINES

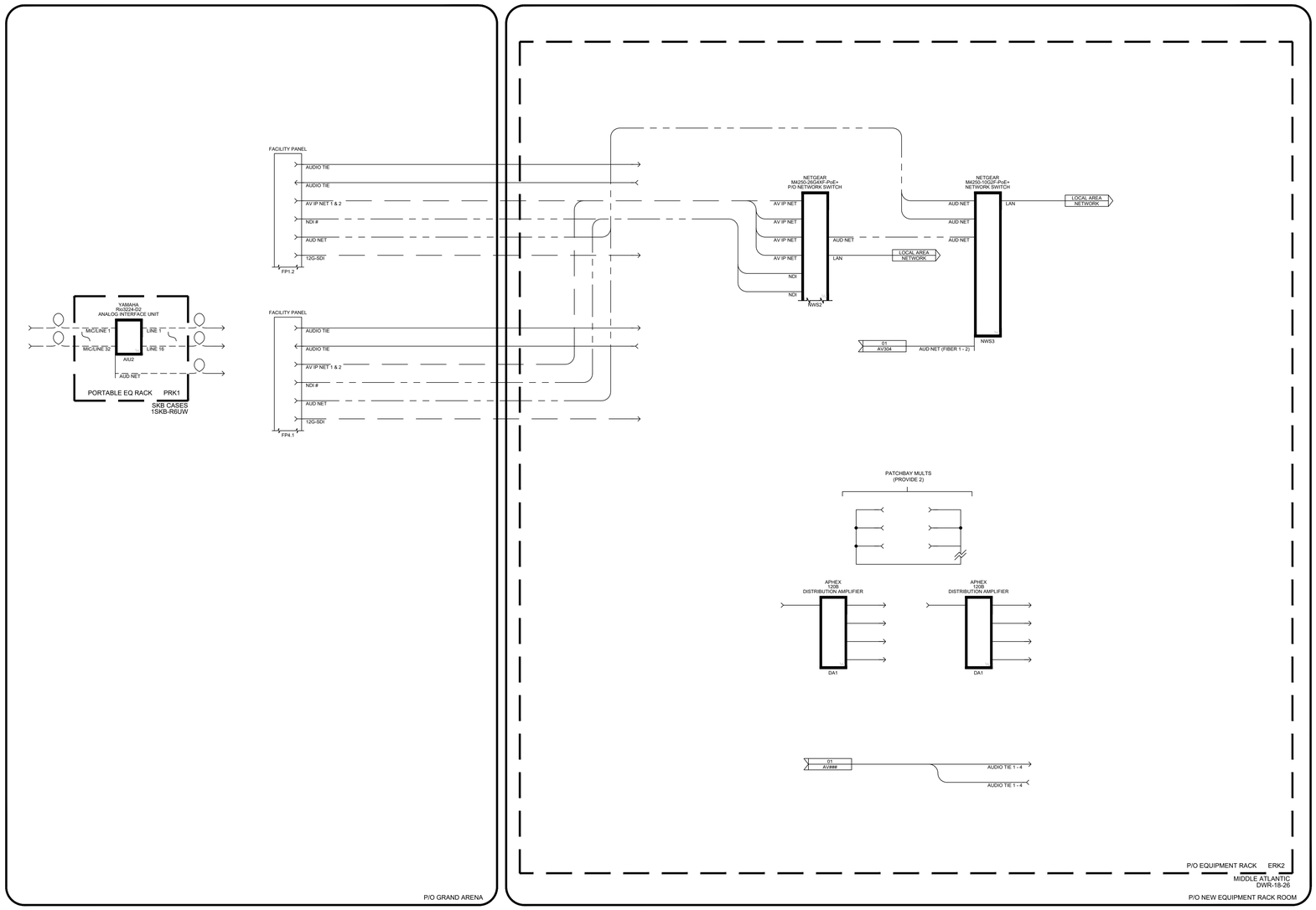
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AV304

AV AUDIO ONELINES

SCALE: NTS

1



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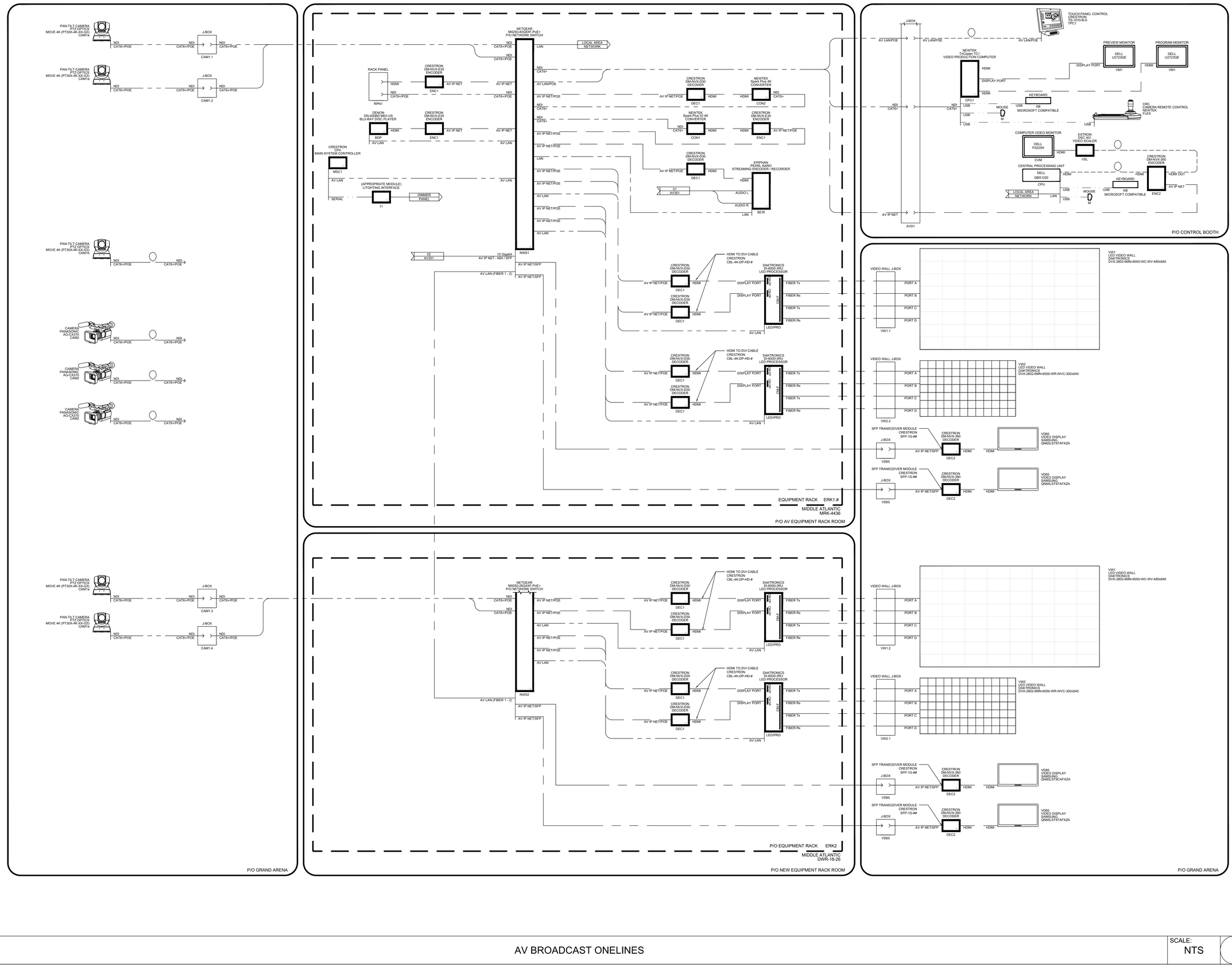
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SCALE:	NTS

SHEET TITLE

AV TIE LINES ONELINES

SHEET NUMBER

AV305



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SHEET TITLE

AV BROADCAST ONELINES

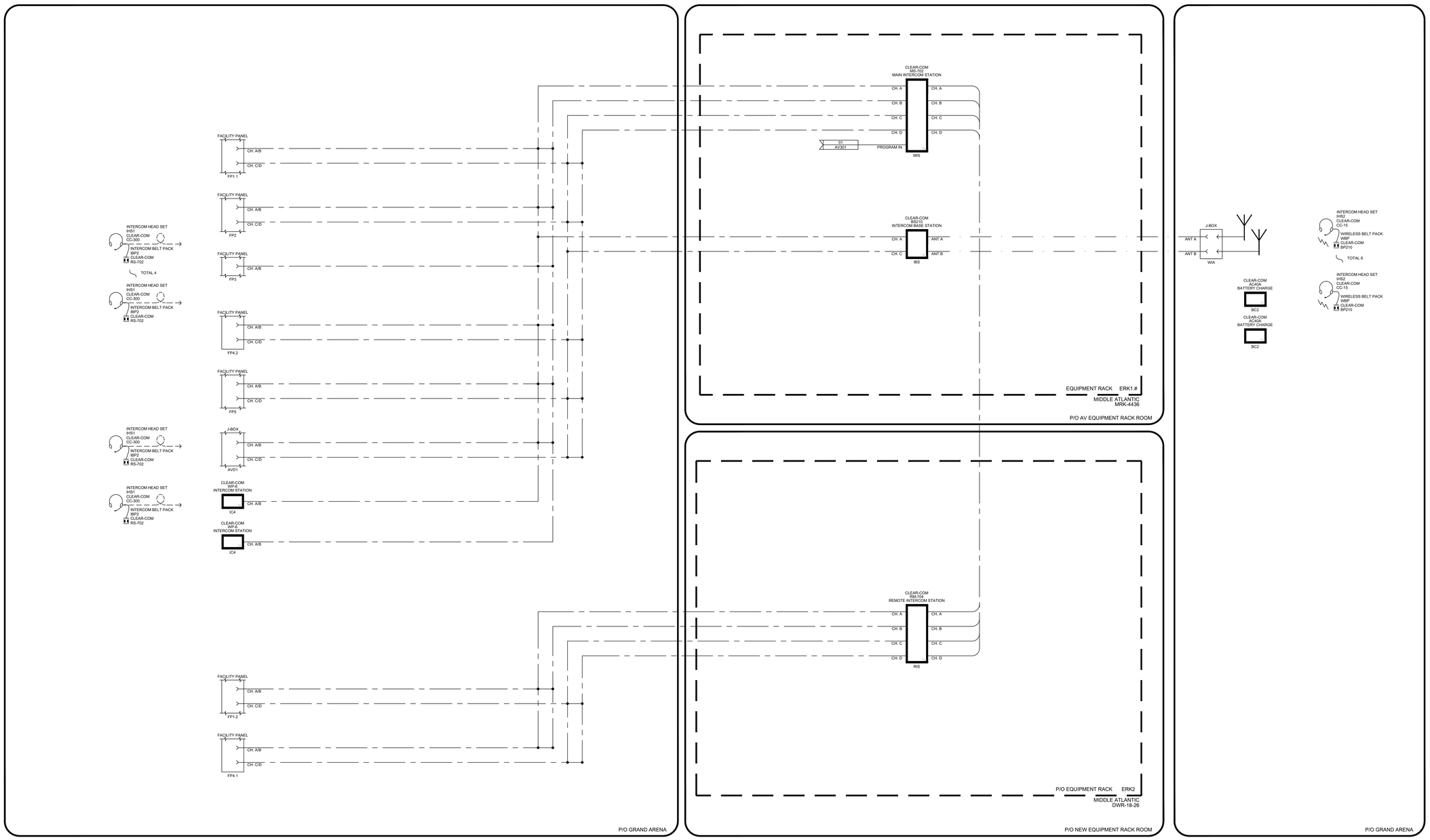
SHEET NUMBER

AV351

AV BROADCAST ONELINES

SCALE: NTS

1



AV INTERCOM ONELINES

SCALE: NTS

1

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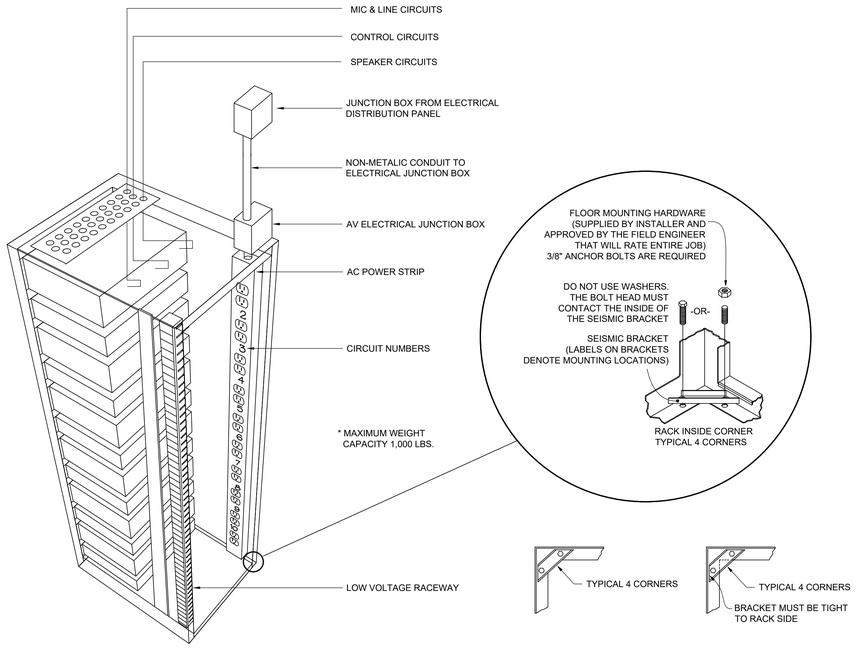
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SCALE:	**NTS**

SHEET TITLE

AV INTERCOM ONELINES

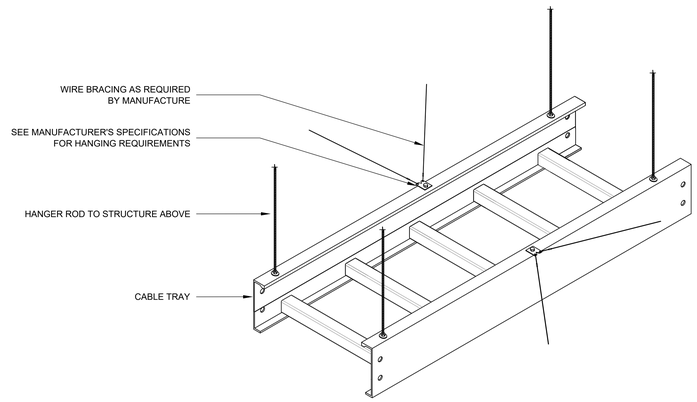
SHEET NUMBER

AV352



NOTE:
THE LEVELING FOOT RIV-NUT LOCATED IN THE CORNER DOES NOT NEED TO BE REMOVED. TIGHTEN THE FLOOR ANCHOR COMPLETELY. DEFLECTION WILL OCCUR AROUND THE RIV-NUT. THIS IS REQUIRED, IT PRE-LOADS THE CORNER IN COMPRESSION

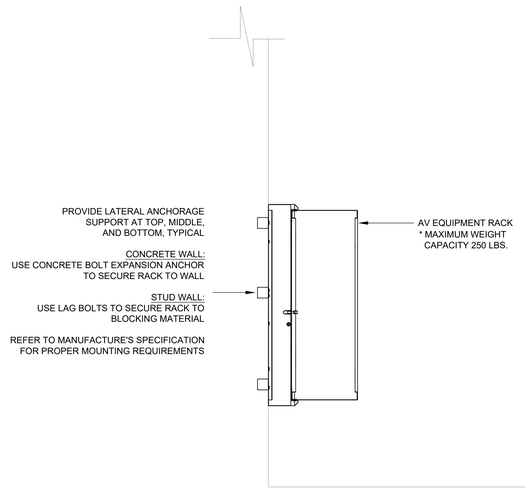
TYPICAL FREE STANDING AV EQUIPMENT RACK DETAIL | SCALE: NTS | 1



NOTE:

THESE PLANS ARE CONCEPTUAL ONLY. THEY MUST BE FULLY ENGINEERED BY A LICENSED STRUCTURAL ENGINEER.

TYPICAL CABLE TRAY BRACING DETAIL | SCALE: NTS | 2



NOTE:

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TYPICAL WALL MOUNTED AV EQUIPMENT RACK DETAIL | SCALE: NTS | 3

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SCALE:	NTS

SHEET TITLE

AV TYPICAL SEISMIC AND GROUNDING DETAILS

SHEET NUMBER

AV501

RU	ERK1.1		ERK1.2	
40	BLANK PANEL		BLANK PANEL	
39	NETWORK SWITCH	NWS1	WIRELESS MIC REC.	WMR1
38	BRUSH PANEL		BLANK PANEL	
37	NETWORK SWITCH	NWS1	ALT	BLANK
36	NETWORK SWITCH	NWS1	BLANK PANEL	
35	BLANK PANEL		IC BASE STATION	IBS
34	AUDIO PATCH BAY	APB	MAIN SYS. CNTRLR	MSC1
33			DEC1	BLANK
32	AUDIO PATCH BAY	APB	STREAM ENC / REC	SE/R
31				
30	AUDIO PATCH BAY	APB	TOUCH PANEL CONTROL	TPC2
29				
28	DA1	DA1		
27	DIGITAL SIG. PRO.	DSP1		
26	DIGITAL INT. UNIT	DIU1	MAIN IC STATION	MIS
25	DIGITAL INT. UNIT	DIU1	AUDIO MONITOR	AMS2
24	DIGITAL INT. UNIT	DIU1	BLANK PANEL	
23	BLANK PANEL		DEC1	CON2
22	POWER AMPLIFIER	PA2100/4	CON1	ENC1
21			DEC1	DEC1
20	POWER AMPLIFIER	PA2100/4	LED PROCESSOR	LED/PRO
19				
18	POWER AMPLIFIER	PA2100/4	DEC1	DEC1
17				
16	POWER AMPLIFIER	PA2100/4	LED PROCESSOR	LED/PRO
15				
14	POWER AMPLIFIER	PA2100/4		
13			BLANK PANEL	
12	POWER AMPLIFIER	PA2100/4		
11				
10	POWER AMPLIFIER	PA2100/4	POWER AMPLIFIER	PA600/8
09				
08	POWER AMPLIFIER	PA2100/4	POWER AMPLIFIER	PA600/8
07				
06	POWER AMPLIFIER	PA2100/4	POWER AMPLIFIER	PA2100/4
05				
04	POWER AMPLIFIER	PA2100/4	POWER AMPLIFIER	PA2100/4
03				
02	POWER AMPLIFIER	PA2100/4	POWER AMPLIFIER	PA600/8
01				

EQUIPMENT RACK "ERK1.#" ELEVATION

SCALE: NTS

1

RU	ERK2	
18	NETWORK SWITCH	NWS2
17	BRUSH PANEL	
16	NETWORK SWITCH	NWS3
15	BRUSH PANEL	
14	AUDIO PATCH BAY	APB
13		
12	DA1	DA1
11	REMOTE IC STATION	RIS
10	BLANK PANEL	
09		
08	DEC1	DEC1
07	LED PROCESSOR	LED/PRO
06		
05		
04	DEC1	DEC1
03	LED PROCESSOR	LED/PRO
02		
01		

AV EQUIPMENT LOCATED IN TELECOM CABINET COORDINATE EXACT LOCATION WITH TELECOM CONTRACTOR

36" AFF.

EQUIPMENT RACK "ERK2" ELEVATION

SCALE: NTS

2

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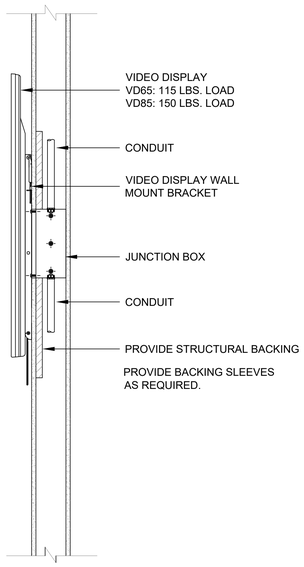
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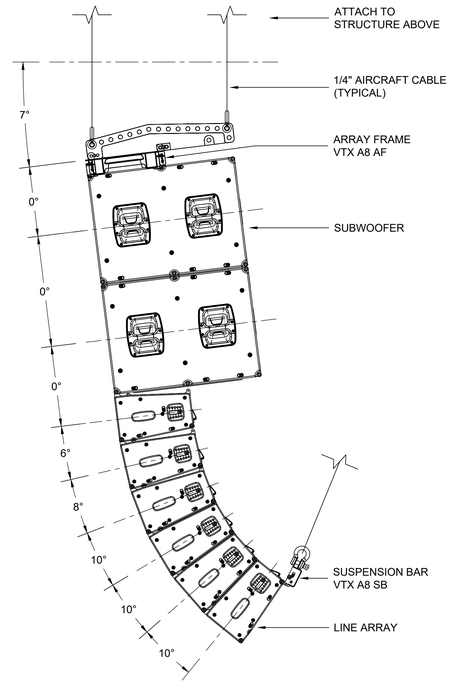
AV RACK ELEVATIONS

SHEET NUMBER

AV502



TYPICAL VIDEO DISPLAY "VD##" WALL MOUNTING DETAIL | SCALE: NTS | 1

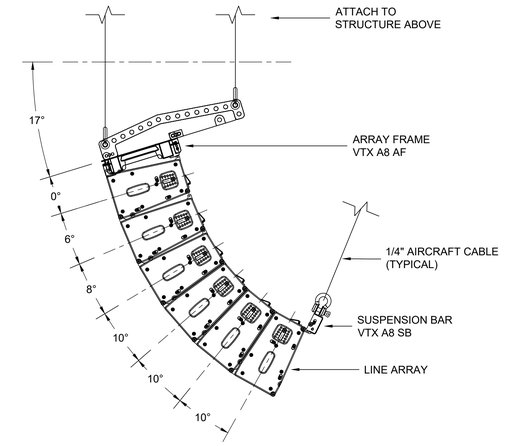


SIDE VIEW

NOTE:
1. THESE PLANS ARE CONCEPTUAL ONLY. THEY MUST BE FULLY ENGINEERED BY A LICENSED STRUCTURAL ENGINEER.

WEIGHT:
695 LBS LOAD

LOUDSPEAKERS "SPCL1.#" ARRAY DETAIL | SCALE: NTS | 2

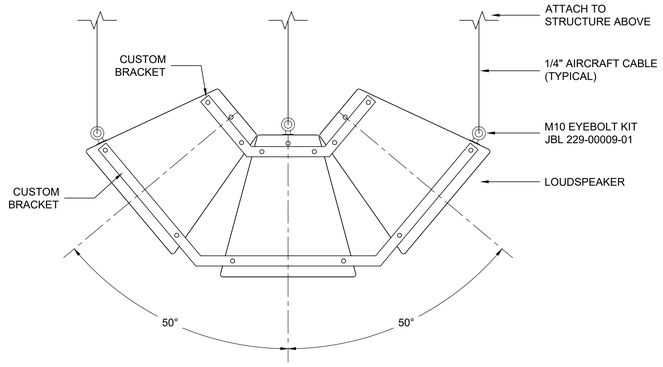


SIDE VIEW

NOTE:
1. THESE PLANS ARE CONCEPTUAL ONLY. THEY MUST BE FULLY ENGINEERED BY A LICENSED STRUCTURAL ENGINEER.

WEIGHT:
400 LBS LOAD

LOUDSPEAKERS "SPCL2.#" ARRAY DETAIL | SCALE: NTS | 3

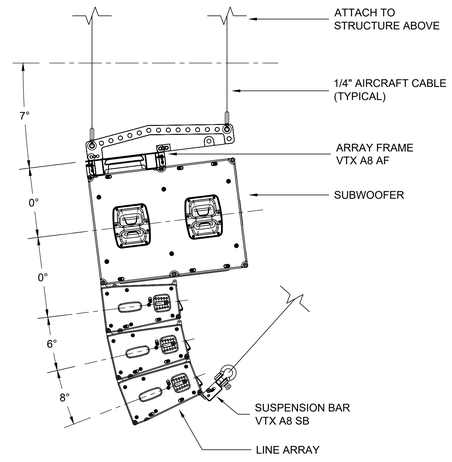


SIDE VIEW

NOTE:
1. THESE PLANS ARE CONCEPTUAL ONLY. THEY MUST BE FULLY ENGINEERED BY A LICENSED STRUCTURAL ENGINEER.

WEIGHT:
465 LBS LOAD

LOUDSPEAKERS CLUSTER "SPCL3.#" DETAIL | SCALE: NTS | 4

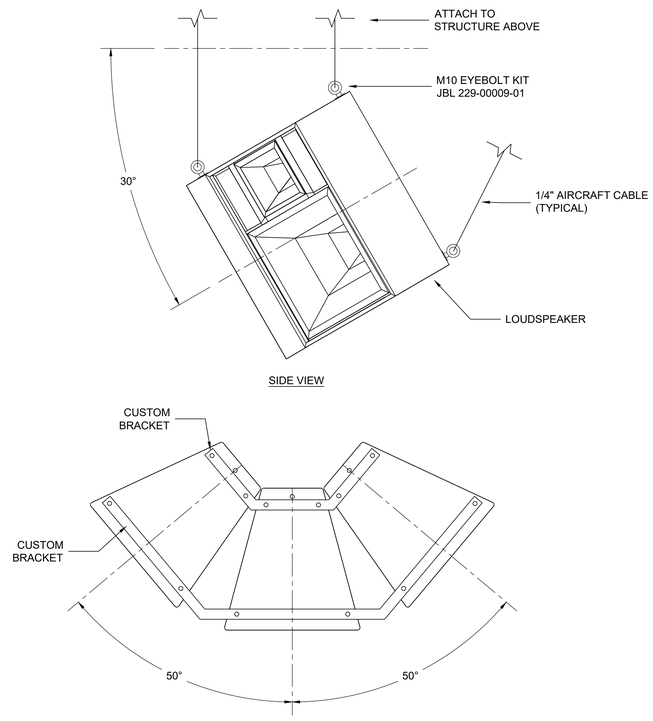


SIDE VIEW

NOTE:
1. THESE PLANS ARE CONCEPTUAL ONLY. THEY MUST BE FULLY ENGINEERED BY A LICENSED STRUCTURAL ENGINEER.

WEIGHT:
350 LBS LOAD

LOUDSPEAKERS "SPCL4.#" ARRAY DETAIL | SCALE: NTS | 5



SIDE VIEW

PLAN VIEW

NOTE:
1. THESE PLANS ARE CONCEPTUAL ONLY. THEY MUST BE FULLY ENGINEERED BY A LICENSED STRUCTURAL ENGINEER.

WEIGHT:
465 LBS LOAD

LOUDSPEAKERS CLUSTER "SPCL5.#" DETAIL | SCALE: NTS | 6

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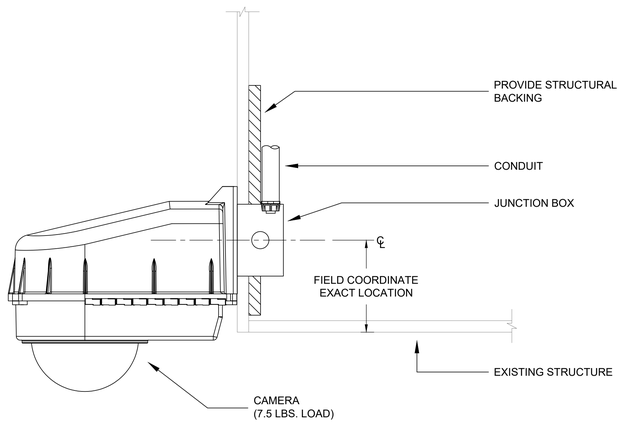
PROJ. NO.	7913-001
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SCALE:	NTS

SHEET TITLE

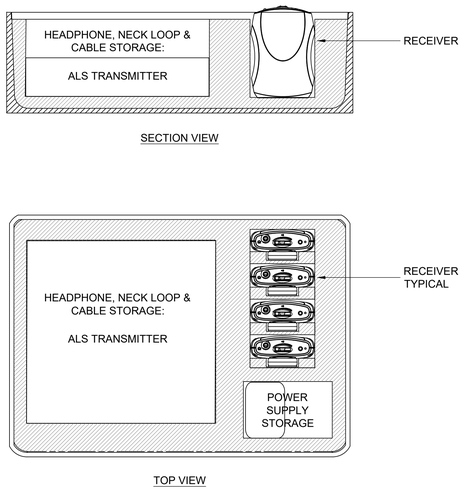
AV DETAILS

SHEET NUMBER

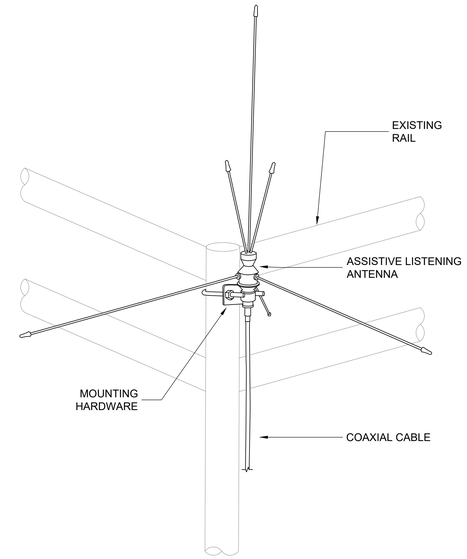
AV601



WALL MOUNTED CAMERA "CAM1.#" DETAIL | SCALE: NTS | 1



PORTABLE CASE DETAIL | SCALE: NTS | 2



TYPICAL ASSISTIVE LISTENING ANTENNA "ALA" DETAIL | SCALE: NTS | 3

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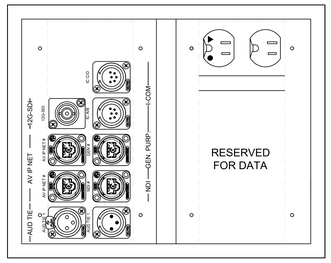
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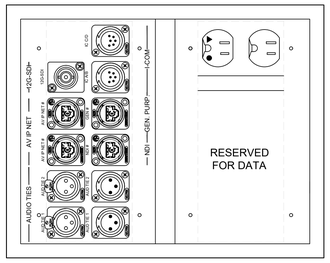
AV DETAILS

SHEET NUMBER

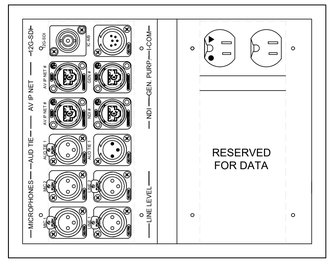
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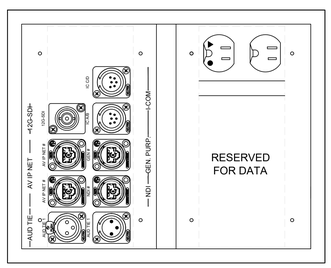
FACILITY PANEL "FP1.#" LAYOUT | SCALE: NTS | 1



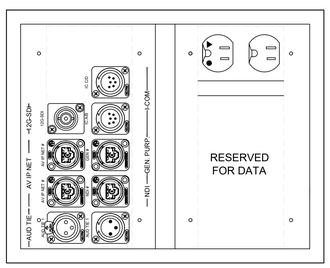
FACILITY PANEL "FP2" LAYOUT | SCALE: NTS | 2



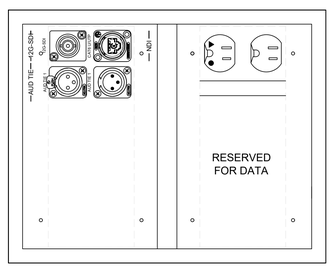
FACILITY PANEL "FP3" LAYOUT | SCALE: NTS | 3



FACILITY PANEL "FP4.#" LAYOUT | SCALE: NTS | 4



FACILITY PANEL "FP5" LAYOUT | SCALE: NTS | 5



MEDIA PANEL "MP1" LAYOUT | SCALE: NTS | 6



CAMERA PANEL "CAM1" LAYOUT | SCALE: NTS | 7



ASSISTIVE LISTENING ANTENNA PANEL "ALA" LAYOUT | SCALE: NTS | 8



CAMERA CONNECTIVITY PANEL "CCP" LAYOUT | SCALE: NTS | 9

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AV FACILITY PANEL DETAILS

SHEET NUMBER

AV651

INDUSTRY HILLS
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CITY OF INDUSTRY, CA

GENERAL NOTES

REFER TO SPECIFICATIONS FOR COMPLETE REQUIREMENTS.

1. SECURITY

A. SECURITY SYSTEM CONSISTS OF BUT ARE NOT LIMITED TO:
B. PROVIDE ALL LABOR, MATERIALS, TRANSPORTATION AND EQUIPMENT TO COMPLETE THE FURNISHING, INSTALLATION, ASSEMBLY, SET UP, AND TESTING OF THE SECURITY SYSTEM WORK INDICATED ON THE REQUEST FOR PROPOSAL (RFP) AND SPECIFIED HEREIN. NOT WITHSTANDING ANY DETAILED INFORMATION IN THIS SECTION, PROVIDE COMPLETE, WORKING SYSTEMS. GENERAL SCOPE OF WORK FOR THIS PROJECT IS OUTLINED ON THE RFP AND DESCRIBED IN THE SPECIFICATION.
C. ALL COMPONENTS SHALL BE PROVIDED / INSTALLED BY CONTRACTOR PER DRAWINGS. PROGRAMMING CONTRACTOR IS RESPONSIBLE FOR ALL NECESSARY COMPONENTS, CABLE, HARDWARE, ETC. TO FURNISH COMPLETE AND OPERATIONAL SYSTEM.
D. CONTRACTOR IS RESPONSIBLE FOR PROVIDING TRAINING TO OPERATOR PERSONNEL AS REQUIRED TO ENSURE PERSONNEL ARE FAMILIAR WITH OPERATING AND PROGRAMMING OF SECURITY SYSTEM.
E. TRAINING SESSIONS TO BE COORDINATED WITH OWNER / OPERATOR PRIOR TO COMPLETION OF SYSTEM INSTALLATION.
F. ALL CONDUITS, JUNCTION BOXES, FLOOR BOXES, BACK BOXES, PULL STRING AND POWER OUTLETS BY DIVISION 26 CONTRACTOR AS REQUIRED

2. ELECTRICAL AND MECHANICAL NOTES

A. ALL WORK SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE NATIONAL ELECTRICAL CODE AND ALL APPLICABLE LOCAL CODES, THE CONTRACTOR SHALL NOT INTERMIX ANY LINE VOLTAGE POWER WIRES (120VAC) WITH ANY LOW VOLTAGE SIGNAL OR CONTROL WIRES IN ANY CONDUIT.
B. ALL NEW ELECTRICAL POWER SUPPLIED TO SECURITY EQUIPMENT OR DEVICES SHALL BE ON A AN EMERGENCY SYSTEM INCLUDING UPS WHERE AVAILABLE. ALL CONDUCTORS AND CIRCUIT BREAKERS SHALL BE SIZED IN ACCORDANCE WITH THEIR CONNECTED LOADS (20 AMP MINIMUM). ALL CIRCUITS SHALL BE DEDICATED. A GROUND CONDUCTOR SHALL ALWAYS BE INSTALLED IN ANY POWER WIRING. ALL SECURITY EQUIPMENT UTILIZING ELECTRICAL POWER SHALL ALSO BE ADEQUATELY GROUNDED.
C. ESTIMATED HEAT LOADS ARE SHOWN FOR REFERENCE ONLY, THEY ARE INTENDED FOR INCORPORATION IN THE PROJECT AS PART OF THE MECHANICAL DESIGN.
D. ALL IDF, MDF, AND AV ROOMS TO MAINTAIN 70°F (MAX) AND 50% RH (RELATIVE HUMIDITY)

3. COORDINATE

A. COORDINATE WITH THE WORK OF ALL SECTIONS. COORDINATE THE LOCATION OF BLOCKING AND BACKING REQUIRED BY THIS SECTION. MAKE REASONABLE MINOR ADJUSTMENTS TO PRESERVE ARCHITECTURAL SYMMETRY AND ALIGNMENT WITH ADJACENT FEATURES AT NO CLAIM FOR ADDITIONAL COST OR TIME. PRESENT CONFLICTS IN TIMELY MANNER FOR RESOLUTION.
B. RELOCATION, REVISION OR CORRECTION CAUSED BY FAILURE OF THE CONTRACTOR TO COORDINATE THE WORK SHALL NOT BE SUBJECT TO CLAIM FOR ADDITIONAL COST OR TIME.
C. POWER RECEPTACLES SHOWN ON THE SECURITY DRAWINGS OUTSIDE OF EQUIPMENT RACKS ARE SHOWN FOR COORDINATION INFORMATION ONLY. REFER TO DIVISION 26 DOCUMENTS FOR CONSTRUCTION.
D. THESE DRAWINGS SHOW SCOPE. THE EXACT LOCATION & ELEVATIONS OF CEILING AND WALL MOUNTED SECURITY DEVICES MUST BE COORDINATED WITH THE ARCHITECTURAL DRAWINGS.
E. CABLE TRAY, CONDUIT, DEVICE BOX, BACK BOXES AND PULL BOXES SUPPLIED AND INSTALLED BY ELECTRICAL CONTRACTOR UNDER SUPERVISION OF SECURITY CONTRACTOR.
F. GENERAL CONTRACTOR SHALL COORDINATE THE CONDUIT, DEVICES, PATHWAYS, CONTROL PANELS, AND JUNCTION BOXES FOR THE SECURITY SYSTEM WITH OTHER TRADE TO AVOID ANY CONFLICTS. ALL BOX OPENINGS SHALL BE ACCESSIBLE.
G. DOOR LOCKS AND HARDWARE ARE PROVIDED BY DIVISION 8, WITH CONNECTION TO THIS HARDWARE BY SECURITY CONTRACTOR (DIVISION 280500).

4. LOCATIONS AND DIMENSIONS

A. LOCATIONS AND DIMENSIONS SHOWN ON ARCHITECTURAL DRAWINGS TAKE PRECEDENCE OVER THE SECURITY DRAWINGS. IN CASE OF APPARENT CONFLICT OR AMBIGUITY, SUBMIT TO THE ARCHITECT IN TIMELY MANNER FOR RESOLUTION.
B. DIMENSIONS TAKE PRECEDENCE OVER SCALE. LARGE SCALE DRAWINGS TAKE PRECEDENCE OVER SMALL. REPORT ALL CONFLICTS BEFORE INSTALLATION.
C. UNLESS OTHERWISE NOTED, DIMENSIONS ARE SHOWN HEIGHT X WIDTH X DEPTH.
D. VERIFY ALL DIMENSIONS, LOCATIONS AND CONDITIONS IN THE FIELD PRIOR TO STARTING WORK. NOTIFY ARCHITECT OF ANY APPARENT DISCREPANCIES.

5. PATHWAYS AND SUPPORT

A. PROVIDE ALL BLOCKING, BRIDGING, TIES, FASTENERS AND RELATED SUPPORT PROVISIONS FOR ALL WORK OF THIS SECTION. COMPLY WITH APPLICABLE CODE REQUIREMENTS FOR MEANS OF SUPPORT OF ELECTRICAL EQUIPMENT OF THE SAME WEIGHT UNDER THE SAME MOUNTING CONDITIONS. DO NOT APPLY ANY LOAD TO BUILDING STRUCTURE WITHOUT FIRST OBTAINING WRITTEN APPROVAL OF THE PROJECT STRUCTURAL ENGINEER. OBTAIN PER PROJECT PROCEDURES.
B. ANY CABLING PATHWAYS SHOWN REPRESENT A POTENTIAL ROUTE AS DETERMINED AT THE TIME OF DESIGN AND MAY NOT NECESSARILY BE THE OPTIMAL PATHWAY. DEPENDING UPON THE ACTUAL FIELD CONDITIONS ALL CABLING PATHWAYS MUST BE FIELD VERIFIED. IT IS ULTIMATELY THE RESPONSIBILITY OF THE CONTRACTOR TO DETERMINE THE OPTIMAL CABLING PATHWAYS BASED UPON FIELD CONDITIONS, CODE COMPLIANCE AND COORDINATED WITH OTHER TRADES. IT IS IMPERATIVE THAT THE CONTRACTOR VERIFIES ALL CABLING PATHWAYS PRIOR TO SUBMITTING THEIR BID. THE OWNER WILL NOT BE RESPONSIBLE FOR TIME ASSOCIATED WITH FIELD VERIFICATION EFFORTS FOR DETERMINING MOST VIABLE CABLING PATHWAYS.
C. PROVIDE SEPARATE PATHWAYS FOR EACH SECURITY SYSTEM (CCTV, ACCESS CONTROL, INTRUSION DETECTION, VIDEO INTERCOM).

6. BOX, PANEL AND ENCLOSURE INSTALLATION

A. COORDINATE THE LOCATION OF ALL BOXES, PANELS, ENCLOSURES AND RELATED RACEWAY WITH THE WORK OF OTHER SECTIONS.
B. VERIFY ACCESS TO BOXES, PANELS AND ENCLOSURES COMPLY WITH APPLICABLE CODE.
C. INSTALL BOXES, PANELS AND ENCLOSURES SQUARE AND PLUMB. SET FLUSH MOUNTED UNITS SO THAT THE FACE OF THE COVER, BEZEL OR ESCUTCHEON, IS IN THE SAME PLANE AS THE SURROUNDING FINISHED SURFACE. MOUNT BOXES, PANELS AND TRIM SO THAT THERE ARE NO GAPS, CRACKS OR OBVIOUS LINES BETWEEN THE TRIM AND THE ADJACENT FINISHED SURFACE. THIS APPLIES TO ALL HORIZONTAL AND VERTICAL SURFACES. PULLBOX LOCATED IN THE CEILING SPACE SHALL BE ACCESSIBLE, IN CASE A PULLBOX HAS TO BE LOCATED IN A DRY WALL OR INACCESSIBLE CEILING. THE CONTRACTOR SHALL COORDINATE WITH THE ARCHITECT THE INSTALL OF CEILING HATCH.
D. UNLESS OTHERWISE NOTED, PROVIDE STEEL BOXES, PANELS AND ENCLOSURES. COMPLY WITH DIVISION 26 REQUIREMENTS AND APPLICABLE CODE.
E. UNLESS OTHERWISE NOTED, BOXES AND ENCLOSURES SHALL BE NOT LESS THAN 2-1/8 INCHES DEEP. PROVIDE THE LARGER OF THE SIZE REQUIRED BY APPLICABLE CODE OR AS SHOWN ON DRAWINGS. COORDINATE WIRE AND CABLE BEND RADIUS WITH BOX AND ENCLOSURE SIZE.
F. PULL BOXES: PROVIDE AS REQUIRED BY THE MOST RESTRICTIVE OF APPLICABLE CODE OR THE PROVISIONS OF DIVISION 16. COORDINATE WITH WIRE AND CABLE BEND RADIUS.
G. PULLBOXES SHALL NOT BE USED IN LIEU OF CONDUIT BEND.

7. RACEWAY

A. RACEWAY FOR ALL WORK IN THIS SECTION SHALL BE EMT.
B. CCTV RACEWAY SHALL BE 1" DIAMETER TRADE SIZE UNLESS OTHERWISE NOTED. ACCESS CONTROL AND INTRUSION DETECTION RACEWAY SHALL BE 3/4" DIAMETER TRADE SIZE UNLESS OTHERWISE NOTED.
C. CONDUIT WITH FIBER OPTIC CABLE INSTALLED, MUST CONFORM TO THE MINIMUM BEND RADIUS AS SPECIFIED BY THE MANUFACTURER OF THE CABLE. DIVISION 26 CONTRACTOR IS TO APPLY RADIUS BENDS WHERE NEEDED. FIBER BEND RADIUS SHALL BE A MINIMUM LONG-TERM LOW-STRESS RADIUS NOT LESS THAN 20 TIMES THE CABLE DIAMETER.
D. KEEP A MINIMUM OF 12" CLEAR BETWEEN ELECTRICAL CONDUIT AND LOW VOLTAGE CONDUIT.
E. CONDUITS ARE NOT ACCEPTABLE FOR SECURITY SYSTEM INSTALLATION

8. GROUNDING AND BONDING

COMPLY WITH ALL APPLICABLE CODES AND ORDINANCES. REFER TO 2019 CALIFORNIA BUILDING CODE, 2019 CALIFORNIA ELECTRICAL CODE.

A. BOND RACEWAY AND RELATED BOXES, PANELS, ENCLOSURES AND CABINETS AS REQUIRED BY APPLICABLE CODE AND DIVISION 26.
B. MAKE RACEWAY CONNECTIONS TO EQUIPMENT RACKS AND SIMILAR EQUIPMENT ENCLOSURES CONTAINING POWERED EQUIPMENT WITH ISOLATED FITTINGS.
C. GROUND AND BOND EQUIPMENT RACKS AND SIMILAR EQUIPMENT ENCLOSURES CONTAINING POWERED EQUIPMENT EXCLUSIVELY VIA THE ISOLATED EQUIPMENT GROUNDING CONDUCTORS PROVIDED UNDER DIVISION 16. SIZE SUCH CONDUCTORS ACCORDING TO APPLICABLE CODE.
D. D.C. RESISTANCE BETWEEN THE ISOLATED EQUIPMENT GROUNDING BUS AT EQUIPMENT ROOM TECHNICAL POWER PANELS AND THE MAIN PROJECT GROUND FIELD SHALL NOT EXCEED 0.15 OHMS.

9. CABLE AND WIRE

A. USE PLENUM RATED WIRE WHERE REQUIRED BY CODE.
B. ALL WIRE DISTRIBUTION TO EQUIPMENT RACK TO BE PLENUM RATED AS NEEDED.
C. CABLE SPLICING NOT ALLOWED IN ANY PULLBOXES.

10. GENERAL

A. IN THE EVENT THAT THESE PLANS, NOTES OR DETAILS OR ANY PART OR PORTION THEREOF ARE USED BY ANY THIRD-PARTY WITHOUT THE EXPRESS AUTHORIZED PERMISSION OF VENEKLASEN ASSOCIATES, THE UNAUTHORIZED USER AND ANYONE BENEFITING THEREFROM, SHALL DEFEND, INDEMNIFY AND HOLD HARMLESS VENEKLASEN ASSOCIATES AND ITS AGENTS, PRINCIPALS, EMPLOYEES AND CONSULTANTS FROM AND AGAINST ANY AND ALL CLAIMS, INCLUDING ATTORNEYS' FEES ARISING OUT OF SAID UNAUTHORIZED USE.
B. FURTHERMORE, THE UNAUTHORIZED USE OF THESE PLANS, NOTES, DETAILS OR ANY PART OR PORTION THEREFORE IS EXPRESSLY PROHIBITED AND VENEKLASEN ASSOCIATES RETAINS A COPYRIGHT OVER ANY AND ALL DOCUMENTS PREPARED BY VENEKLASEN ASSOCIATES.
C. IN THE EVENT THAT THE INSTALLER DEVIATES FROM THE PLANS AND SPECIFICATIONS PREPARED BY VENEKLASEN ASSOCIATES WHICH RESULTS IN DAMAGE TO PERSONS OR PROPERTY OF ANY KIND, INSTALLER HEREBY AGREES TO DEFEND, INDEMNIFY AND HOLD HARMLESS VENEKLASEN ASSOCIATES, ITS AGENTS, PRINCIPALS, EMPLOYEES AND CONSULTANTS FROM AND AGAINST ANY AND ALL CLAIMS, INCLUDING ATTORNEYS' FEES CAUSED BY SUCH FAILURE TO FOLLOW THE PLANS AND SPECIFICATIONS PREPARED BY VENEKLASEN ASSOCIATES, EXCEPTING ONLY THE DAMAGES TO PERSONS OR PROPERTY WHICH ARE CAUSED BY THE SOLE NEGLIGENCE OR WILLFUL MISCONDUCT OF VENEKLASEN ASSOCIATES.
D. DRAWINGS ARE DIAGRAMMATIC AND ARE INTENDED TO CONVEY SCOPE OF WORK AND TO INDICATE GENERAL ARRANGEMENT. THESE ARE NOT INTENDED TO SHOW EVERY DETAIL INCLUDING OFFSET OR FITTING OR EVERY STRUCTURAL DIFFICULTY THAT MAY BE ENCOUNTERED DURING THE WORK. EXCEPT AS OTHERWISE INDICATED, LOCATIONS OF ITEMS ARE APPROXIMATE ONLY. EXACT LOCATIONS NECESSARY TO SECURE PROPER CONDITIONS AND RESULTS MUST BE DETERMINED AT PROJECT SITE AND MUST BE APPROVED BY THE OWNER'S REPRESENTATIVE.
E. EXCEPT AS OTHERWISE INDICATED, MAKE REASONABLE MODIFICATIONS IN LAYOUT AS NEEDED TO PREVENT CONFLICT WITH OTHER WORK OR PROPER EXECUTION OF WORK.
F. INCLUDE WORK NOT USUALLY SHOWN OR SPECIFIED, BUT NECESSARY FOR PROPER INSTALLATION AND OPERATION OF A SYSTEM OR PIECE OF EQUIPMENT IN WORK.

SHEET INDEX

SHEET NUMBER	SHEET NAME	60% REVIEW SUBMITTAL - 10/13/2023	90% CD REVIEW SUBMITTAL - 02/16/2024	90% CONSTRUCTION DOCUMENTS - 4/30/2025	95% FOR REVIEW - 8/04/2025	100% CONSTRUCTION DOCUMENTS - 8/29/2025
SC001	SECURITY GENERAL NOTES AND SHEET INDEX	X	X	X	X	X
SC002	SECURITY ABBREVIATIONS, NOTES AND SYMBOLS	X	X	X	X	X
SC100	SECURITY SITE PLAN	X	X	X	X	X
SC101	SECURITY GRAND ARENA FLOOR PLAN	X	X	X	X	X
SC102	SECURITY BARN FLOOR PLANS	X	X	X	X	X
SC103	SECURITY PATIO CAFE / SNACK BAR & RESTROOMS FLOOR PLANS	X	X	X	X	X
SC104	SECURITY CONTROL BOOTH FLOOR PLANS	X	X	X	X	X
SC201	SECURITY ARENA REFLECTED CEILING PLAN	X	X	X	X	X
SC401	SECURITY RISER DIAGRAMS		X	X	X	X
SC451	SECURITY EQUIPMENT LAYOUTS			X	X	X
SC601	SECURITY DETAILS	X	X	X	X	X
SC602	SECURITY DETAILS	X	X	X	X	X

: 12

GENERAL CONTRACTOR - RESPONSIBILITY MATRIX

ELECTRICAL CONTRACTOR TO PROVIDE:	CABLING CONTRACTOR TO PROVIDE:	SECURITY CONTRACTOR TO PROVIDE:
• BACK BOXES • CONDUITS • SLEEVES • FIRESTOPPING • PULL STRING • KNOX BOX • MISC: PANELS, CABLE, MOUNTING HARDWARE, SOFTWARE, JACKS, LADDER RACK, ETC. AND ANY OTHER RELATED COMPONENT TO DELIVER A COMPLETE SYSTEM TO THE CLIENT.	• CAT 6A CABLES • CAT 6A JACKS • COAX CABLES • FACE PLATE • PATCH PANEL • WALL MOUNT RACK • WIRE MANAGER • COMPRESSION CONNECTOR • J-HOOKS • MISC: PANELS, CABLE, MOUNTING HARDWARE, SOFTWARE, JACKS, LADDER RACK, ETC. AND ANY OTHER RELATED COMPONENT TO DELIVER A COMPLETE SYSTEM TO THE CLIENT.	• DOOR CONTACTS • SECURITY SYSTEM • ALL CABLES FOR SECURITY SYSTEM • CCTV CAMERAS • CCTV CAMERA MOUNTS • SECURITY PoE SWITCH • TAMPER SWITCH • MISC: PANELS, CABLE, MOUNTING HARDWARE, SOFTWARE, JACKS, LADDER RACK, ETC. AND ANY OTHER RELATED COMPONENT TO DELIVER A COMPLETE SYSTEM TO THE CLIENT.

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SECURITY GENERAL NOTES AND SHEET INDEX

SHEET NUMBER

SC001

ABBREVIATIONS

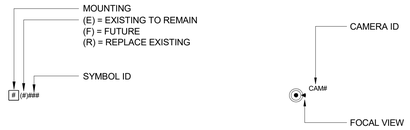
℄	CENTER LINE
AAB	ADDITIVE ALTERNATIVE BID
ABB	ABBREVIATION
ACT	ABOVE COUNTER TOP
ACP	ACCESS CONTROL PANEL
ADM	ADMINISTRATION
AFB	ABOVE FLOOR BELOW
AFC	ABOVE FINISHED CEILING
AFF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
AH	ABOVE HEADER
AHJ	AUTHORITY HAVING JURSIDICTION
ASB	ABOVE SLAB
AWG	AMERICAN WIRE GAUGE
BAF	BELOW ACCESS FLOOR
BC	BONDING CONDUCTOR
BDF	BUILDING DISTRIBUTION FRAME
BFC	BELOW FINSIHED CEILING
BMS	BUILDING MANAGEMENT SYSTEM
BTU	BRITISH THERMAL UNITS
CAB	CABLE
CBN	CABINET
CBT	CABLE TRAY
CCT	CIRCUIT
CCTV	CLOSED CIRCUIT TELEVISION
CM	CONSTRUCTION MANAGER
CNDR	CONDUCTOR
CO	CONDUIT ONLY
CON	CONNECTOR
CU	COPPER
C/W	COMPLETE WITH
DC	DOOR CONTACT
DEV	DEVICE
DHC	DOOR HARDWARE CONTRACTOR
DIA	DIAMETER
DP	DOOR POSITION SWITCH
DR	DOOR HARDWARE CONTRACTOR
DWG	DRAWING
DWR	DRAWER
(E)###	EXISTING
E.C.	EMPTY CONDUIT
EBC	EQUIPMENT BONDING CONDUCTOR
EC	ELECTRICAL CONTRACTOR
EF	ENTRANCE FACILITY
EL	ELEVATION
ELB	ELECTRICAL BOX
ELEC	ELECTRICAL
EMT	ELECTRICAL METALLIC TUBING
ENC	ENCLOSURE
ENT	ELECTRICAL NONMETALLIC TUBING
EOL	END OF LINE
EQ	EQUIPMENT
ER	EQUIPMENT ROOM (MAIN COMPUTER ROOM)
EXT	EXTERNAL
(F)	FUTURE
FACP	FIRE ALARM CONTROL PANEL
FAN	FAN PANEL
FBEC	FURNISH BY ELECTRICAL CONTRACTOR
FBGC	FURNISH BY GENERAL CONTRACTOR
FBO	FURNISH BY OTHER
FBSC	FURNISH BY SECURITY CONTRACTOR
FC	FLEXIBLE CONDUIT
FLSC	FIRE LIFE SAFETY CONTRACTOR
FOC	FIBER OPTIC CABLE
FOV	FIELD OF VIEW
FT	FOOT OR FEET
G	GROUND
GC	GENERAL CONTRACTOR
GRC	GALVANIZED RIGID CONDUIT
HT	HEIGHT
HNG	HINGE
HR	HOME RUN
HFOV	HORIZONTAL FIELD OF VIEW
IAP	INTRUSION ALARM PANEL
I.D	INSIDE DIMENSION
ID	IDENTIFICATION
IDF	INTERMEDIATE DISTRIBUTION FRAME
INC	INCLUDED
IOR	INSPECTOR OF RECORD
IW	IN WALL
JB	JUNCTION BOX
KSW	KEY SWITCH
LA	LOCAL ALARM
LAN	LOCAL AREA NETWORK

LK	LOCK
LP	LIGHTNING PROTECTOR
MAG	MAGNET
MATV	MASTER ANTENNA TV
MAX	MAXIMUM
MDF	MAIN DISTRIBUTION FRAME
MIN	MINIMUM
MISC	MISCELLANEOUS
MM	MULTIMODE (OPTICAL FIBER)
MOM	MOMENTARY
MORT	MORTISE
MTD	MOUNTED
NC	NORMALLY CLOSED
NCC	NURSE CALL CONTRACTOR
NCS	NURSE CALL SYSTEM
NEC	NATIONAL ELECTRICAL CODE
NIC	NOT IN CONTRACT
NO	NORMALLY OPEN
NTS	NOT TO SCALE
OC	ON CENTER
OD	OUTER DIAMETER
OF	OPTICAL FIBER
OFCI	OWNER FURNISHED CONTRACTOR INSTALLED
OFE	OWNER FURNISHED EQUIPMENT
OFOI	OWNER FURNISHED OWNER INSTALLED
OSP	OUTSIDE PLANT
P/O	PART OF
PB	PULL BOX
PBX	PRIVATE BRANCH EXCHANGE
PH	PHASE
PLM	PLENUM
PNL	PANEL
POE	POWER OVER ETHERNET
POS	POINT OF SALE
PREP	PREPARATION
PROJ	PROJECT
PROT	PROTECTED TERMINAL
PSCH	PROJECT STANDARD CONTROL HEIGHT
PSRH	PROJECT STANDARD RECEPTACLE HEIGHT
PSSH	PROJECT STANDARD SWITCH HEIGHT
PVC	POLYVINYL CARBONATE
PWR	POWER
PWS	POWER SUPPLY
RCP	REFLECTED CEILING PLAN
RCWY	RACEWAY
RES	RESISTOR
REX	REQUEST TO EXIT
RF	RADIO FREQUENCY
RLY	RELAY
RM	ROOM
SC	SECURITY CONTRACTOR
SECT	SECTION
SHP	SHIELDED PAIR
SHLD	SHIELDED
SM	SINGLE MODE (OPTICAL FIBER)
SQ	SQUARE
STD	STANDARD
STP	SHIELDED TWISTED PAIR
SW	SWITCH
SYM	SYMBOL
TBB	TELECOMMUNICATIONS BONDING BACKBONE
TBD	TO BE DETERMINED
TC	TELECOMMUNICATIONS CLOSET
TE	TELECOMMUNICATIONS ENCLOSURE
TEF	TELECOMMUNICATIONS ENTRANCE FACILITY
TER	TELECOMMUNICATIONS EQUIPMENT ROOM (PBX)
TGB	TELECOMMUNICATIONS GROUNDING BUSBAR
TMGB	TELECOMMUNICATIONS MAIN GROUNDING BUSBAR
TR	TELECOMMUNICATIONS ROOM
TTB	TELEPHONE TERMINAL BOARD
TYP	TYPICAL
UBC	UNIFORM BUILDING CODE
UG	UNDERGROUND
UON	UNLESS OTHERWISE NOTED
UPS	UNINTERRUPTIBLE POWER SUPPLY
UTP	UNSHIELDED TWISTED PAIR
V	VOLTS / VOLTAGE
VIF	VERIFY IN FIELD
W	WATTS
W/	WITH
W/ O	WITH OUT
WAP	WIRELESS ACCESS POINT
WP	WEATHER PROOF
WT	WATER TIGHT

SECURITY SYMBOLS SCHEDULE

- F — FLOOR MOUNTED
- W — WALL MOUNTED
- C — CEILING MOUNTED
- D — DOOR TOP MOUNTED
- I — INTERGRATED (MILLWORK, PODIUM, TABLE)
- # — BOX MOUNTED BELOW
- # — BOX MOUNTED ABOVE
- # — EXISTING EQUIPMENT
- FIXED CAMERA
- CAM1 — FIXED DOME CAMERA - CEILING MOUNTED
- CAM2 — 180 DOME CAMERA - CEILING MOUNTED
- CAM3 — 360 DOME CAMERA - CEILING MOUNTED
- CAM4 — PTZ DOME CAMERA - CEILING MOUNTED
- CAM1 — FIXED DOME CAMERA - WALL MOUNTED
- CAM2 — 180 DOME CAMERA - WALL MOUNTED
- CAM3 — 360 DOME CAMERA - WALL MOUNTED
- CAM4 — PTZ DOME CAMERA - WALL MOUNTED

TYPICAL SECURITY SYMBOL DESCRIPTIONS





MISC SYMBOLS

- # — KEYNOTE
- # ### — ELEVATION CALLOUT

TYPICAL SECURITY DEVICE ID ABBREVIATIONS

CARD READERS (CR)

CR1 - CONTACTLESS SMART CARD READER
CR2 - CONTACTLESS SMART CARD READER WITH KEYPAD
CR3 - MULLION CONTACTLESS SMART CARD READER
CR4 - CONTACTLESS SMART CARD READER W/BUZZER TO ACCESS THE DOOR

COMMUNICATION SYSTEMS (CS)

ECB - EMERGENCY CALL BOX
EP - EMERGENCY PHONE
IC - INTERCOM
GT - GUARD TOUR
VI - VIDEO INTERCOM DOOR STATION SURFACE MOUNT
SOC - SECURITY OPERATION CENTER VIDEO INTERCOM MASTER STATION
VM - VIDEO MOINTORING STATION

ACCESS CONTROL SYSTEMS (ACS)

ACP - ACCESS CONTROL PANEL
AD - ACCESS CONTROL DOOR CONTROLLER
ADO - AUTOMATIC DOOR OPENER
BGS - BADGING SYSTEM
BD - BIOMETRIC DEVICE
BUZ - BUZZER TO OPEN ACCESS DOOR
CR - CARD READER
DO - DOOR OPERATOR
DP - DOOR POSITION SWITCH
EC - ELEVATOR CONTROL UNIT
EIP - ELEVATOR INTERFACE PANEL
EL - ELECTRIFIED LOCK (SHOWN FOR COORDINATION, SEE DIVISION 8)
HB - HANDICAP PUSH BUTTON
KFR - KEYFOB READER
KP - KEYPAD
LPS - ACCESS CONTROL LOCKING POWER SUPPLY
MFC - MULTI FLOOR ELEVATOR CONTROLLER
ML - MAGNETIC LOCK
PS - POWER SUPPLY
RAR - REMOTE ACCESS READER
REX - REQUEST TO EXIT
RR - REMOTE RELEASE
WL - WIRELESS LOCK
WT - WIRELESS LOCK TRANSCEIVER

INTRUSION DETECTION SYSTEMS (IDS)

AS - ALARM SOUNDER
DP - DOOR POSITION SWITCH
DB - DURESS BUTTON
GB - GLASS BREAK
MD - MOTION DETECTOR

WIRE TYPE SCHEDULE

TYPE	APPLICATION	DESCRIPTION (FIXED INSTALL CABLE)	O.D.	MANUF.	PART NO.
SE1	ACS DOOR CONTROL	ACS DOOR MULTI CONDUCTOR CONTROL CABLE SE1.A - 18AWG / 4 COND - LOCK POWER - .180" O.D. SE1.B - 22AWG / 3 PAIR - CARD READER - .190" O.D. SE1.C - 22AWG / 2 COND - DOOR CONTACT - .120" O.D. SE1.D - 22AWG / 4 COND - REX MOTION - .140" O.D.	0.420	BELDEN	558AFS
SE2	ACS CARD READER	18 AWG / 6 COND OVERALL SHIELDED, PLENUM JACKET	0.226	BELDEN	6304FE
SE3	IDS DEVICE	18 AWG / 2 COND, PP INSULATION, UNSHIELDED, PLENUM JACKET	0.154	BELDEN	6300UE
SE4	IDS DEVICE	22 AWG / 1TW PAIR, SHIELDED, PLENUM JACKET	0.128	BELDEN	6500FE
SE5	RFG CABLE	18 AWG / 4 COND - RFG GATEWAY - .245" O.D.	0.245	BELDEN	9418
SE6	CONTROL/PWR SUPPLY	CONTROL CABLE AC/DC, 22 AWG, 2 PAIR, TWISTED,TINNED COPPER	0.233	BELDEN	9744
SE7	IDS DEVICE	22 AWG / 4 COND TINNED COPPER, PVC OUTER JACKET	0.180	BELDEN	8444

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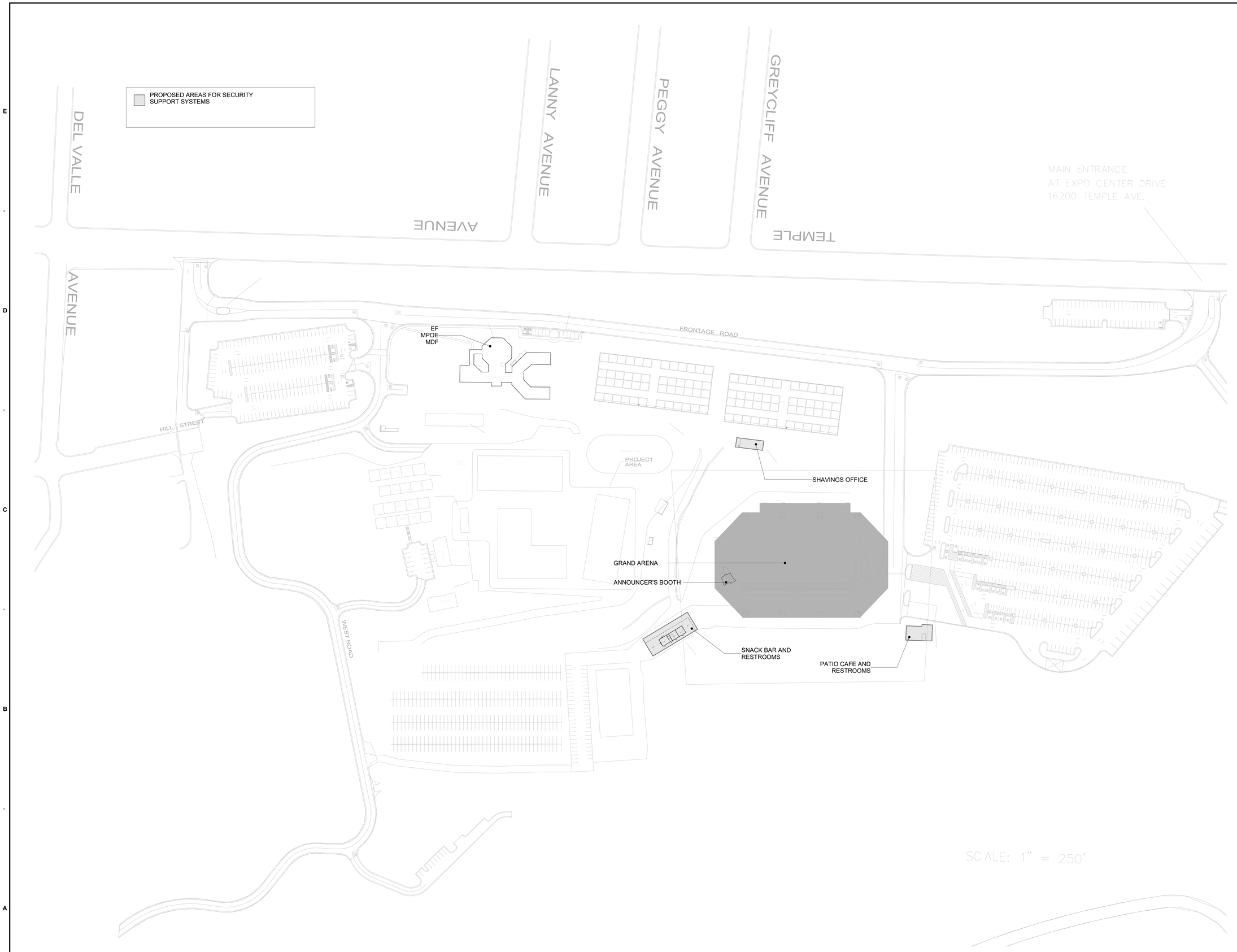
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SHEET TITLE

SECURITY ABBREVIATIONS, NOTES AND SYMBOLS

SHEET NUMBER

SC002



SECURITY SITE PLAN

SCALE: 1/16"=1'-0"

1

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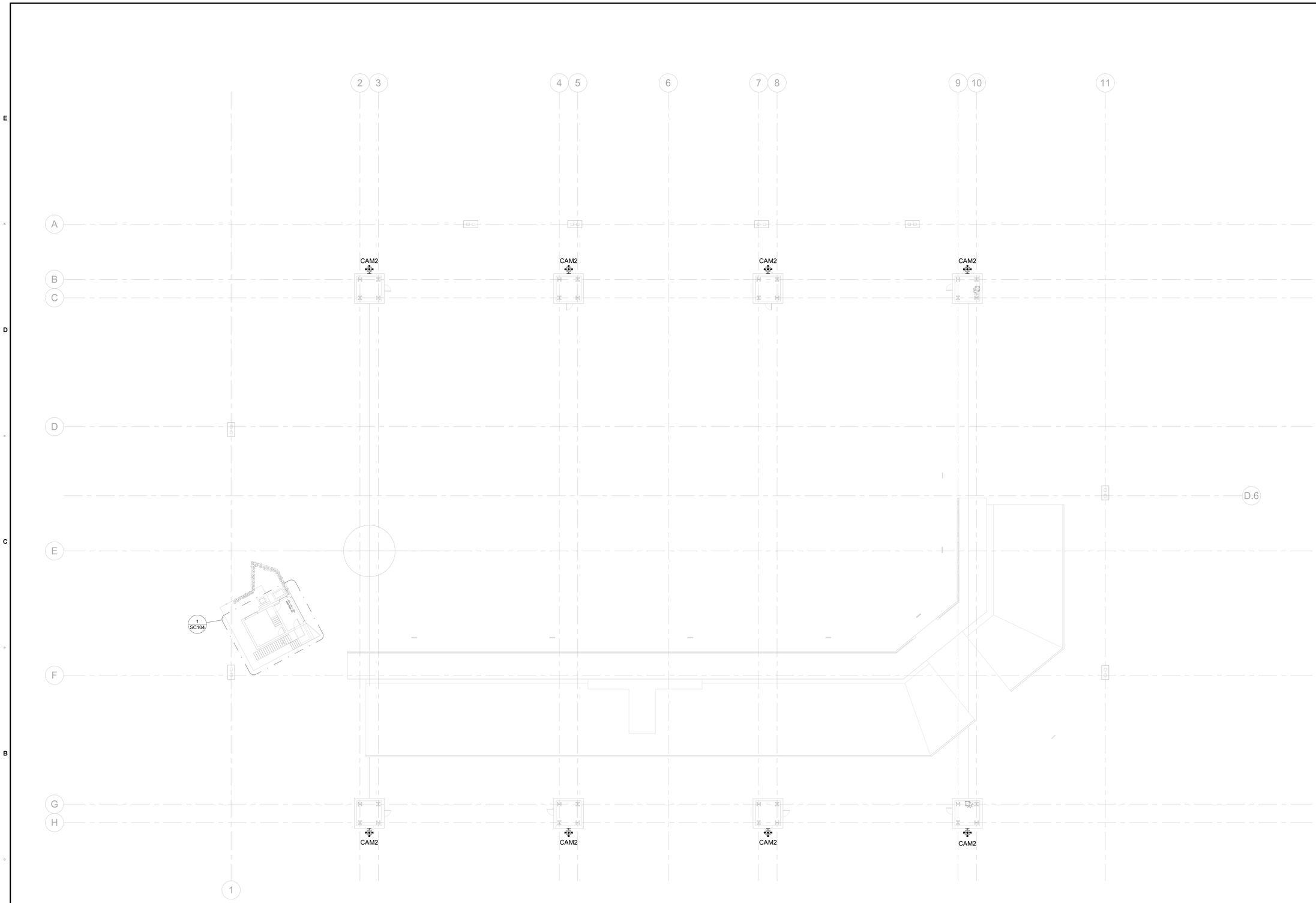
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SCALE:	**1" = 80'-0"**

SHEET TITLE

SECURITY SITE PLAN

SHEET NUMBER

SC100



ARENA FLOOR SECURITY PLAN

SCALE: 1/16"=1'-0"

1

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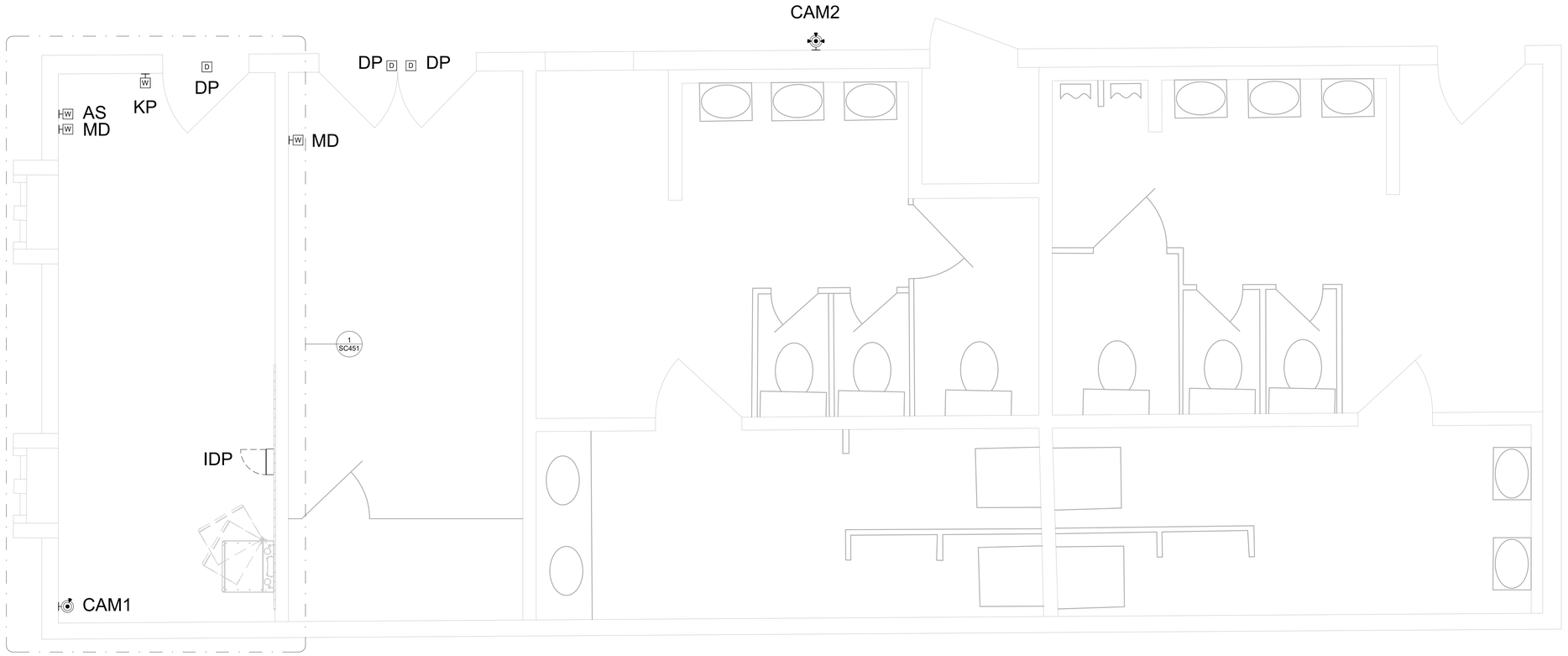
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SHEET TITLE

SECURITY GRAND ARENA FLOOR PLAN

SHEET NUMBER

SC101



SHAVINGS OFFICE

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

1

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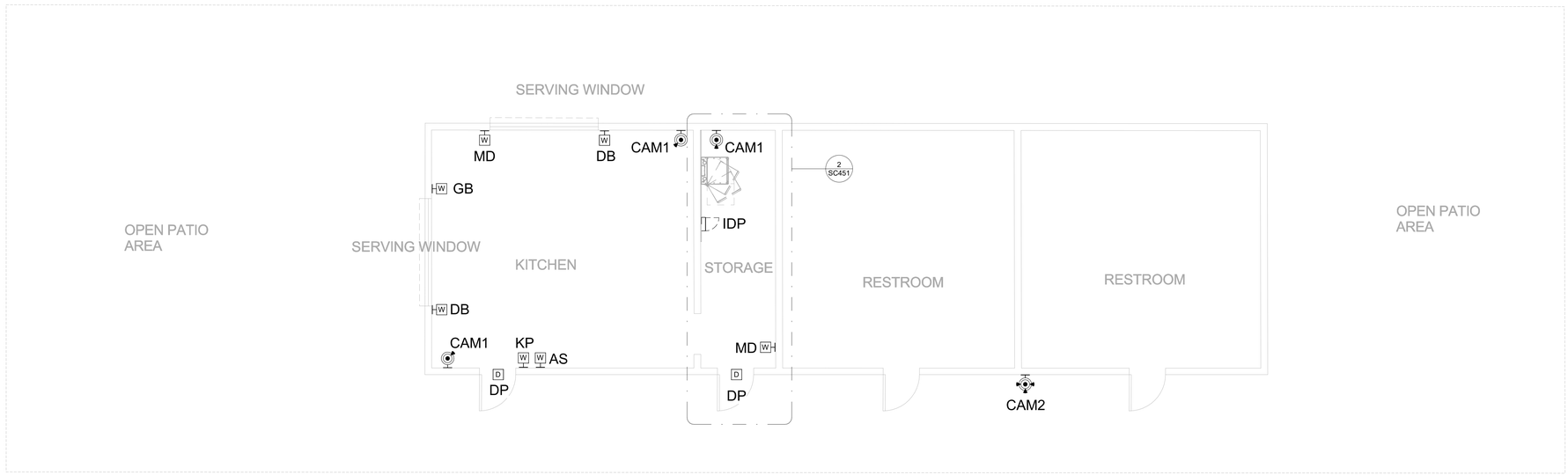
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SHEET TITLE

SECURITY BARN FLOOR PLANS

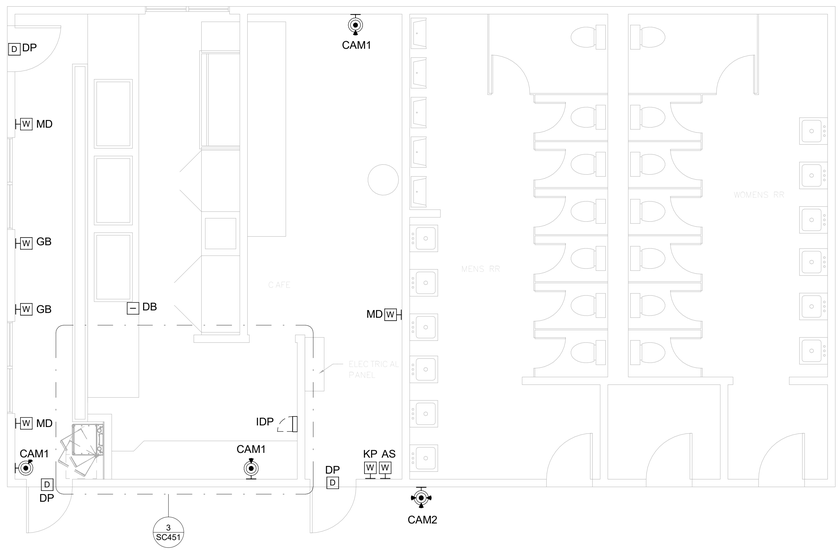
SHEET NUMBER

SC102



SNACK BAR AND RESTROOMS

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



PATIO CAFE AND RESTROOMS

SCALE: 1/4"=1'-0" | 2

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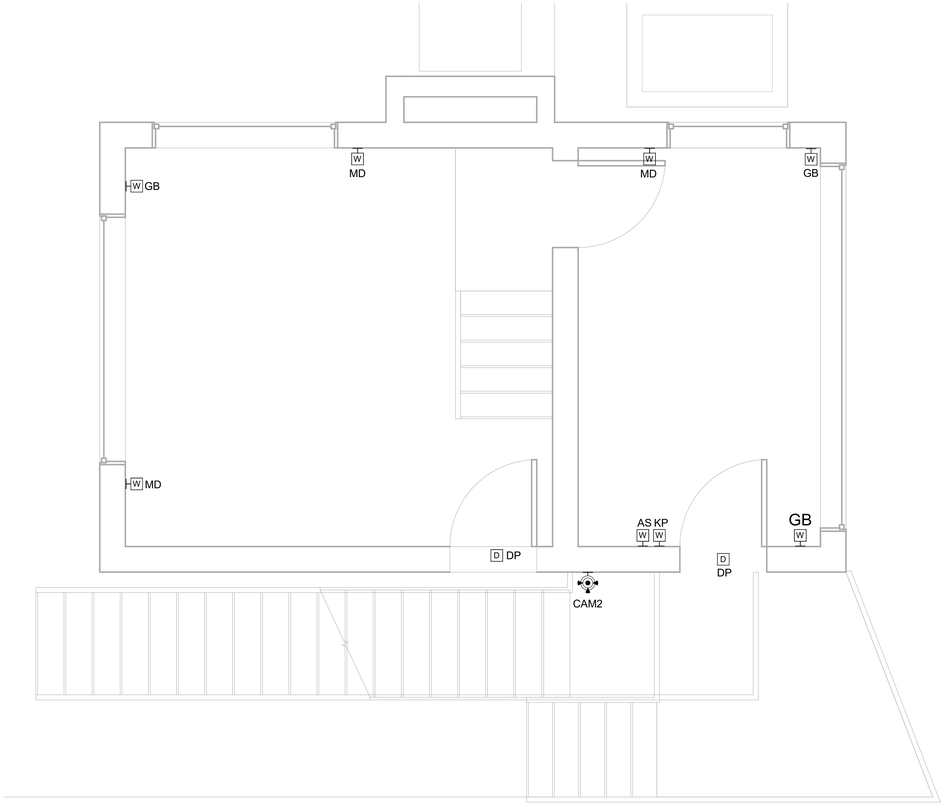
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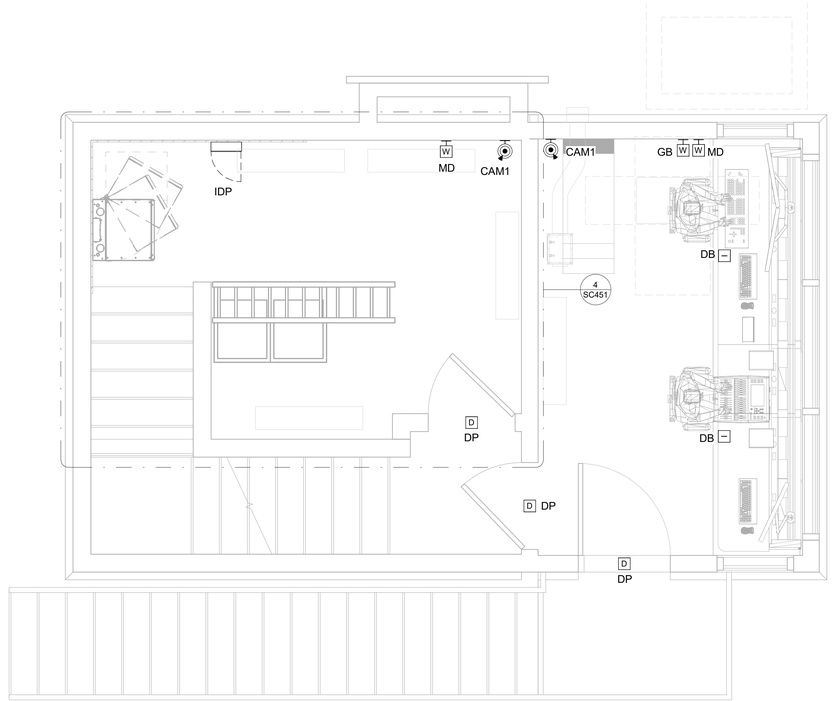
SECURITY PATIO CAFE / SNACK BAR & RESTROOMS FLOOR PLANS

SHEET NUMBER

SC103



CONTROL ROOM LEVEL 1 SECURITY PLAN | SCALE: 1/2"=1'-0" | 1



CONTROL ROOM LEVEL 2 SECURITY PLAN | SCALE: 1/2"=1'-0" | 2



CONTROL ROOM LEVEL 3 SECURITY PLAN | SCALE: 1/2"=1'-0" | 3

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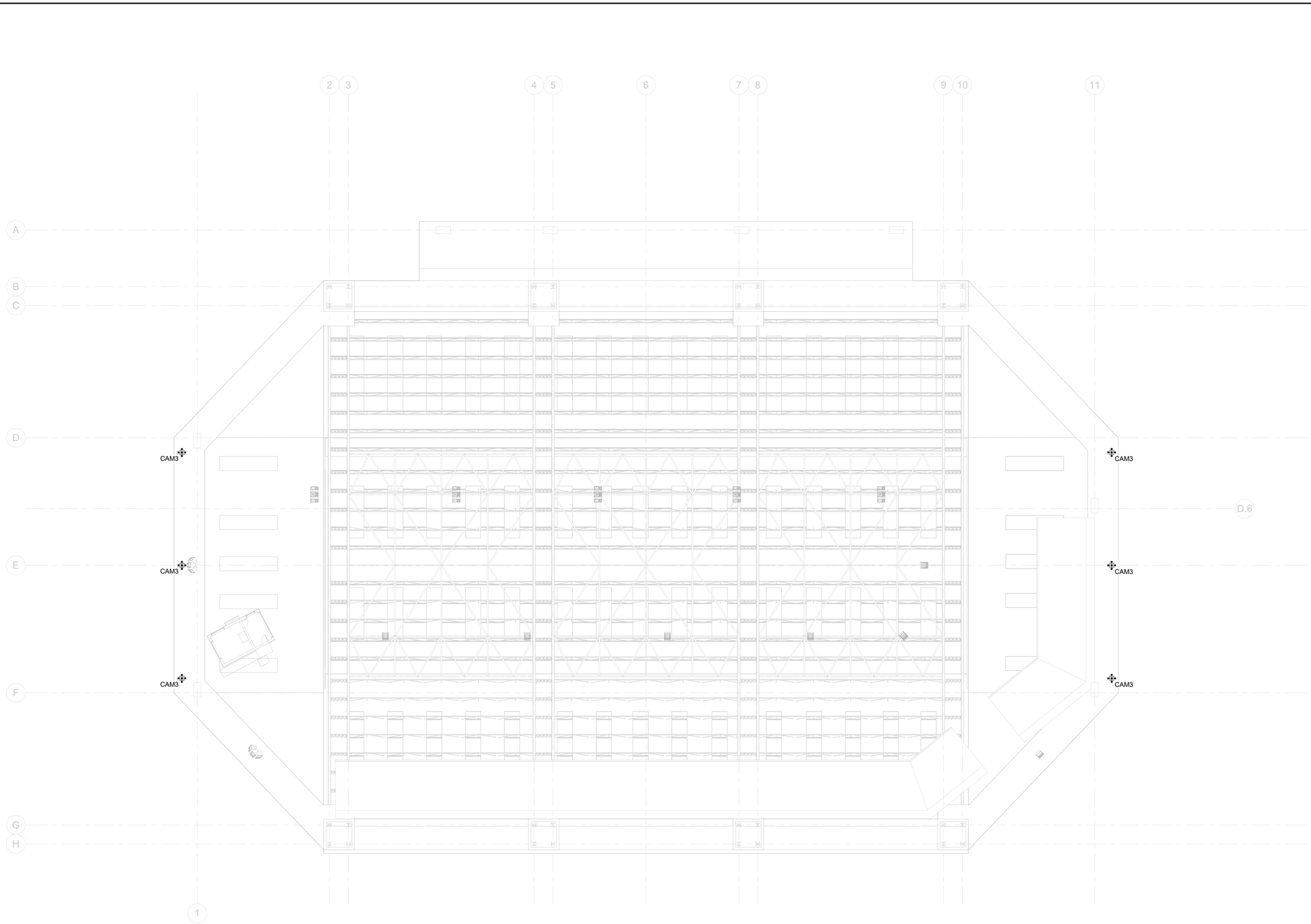
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SCALE:	1/2" = 1'-0"

SHEET TITLE

SECURITY CONTROL BOOTH FLOOR PLANS

SHEET NUMBER

SC104



ARENA SECURITY REFLECTED CEILING PLAN

SCALE: 1/16"=1'-0"

1

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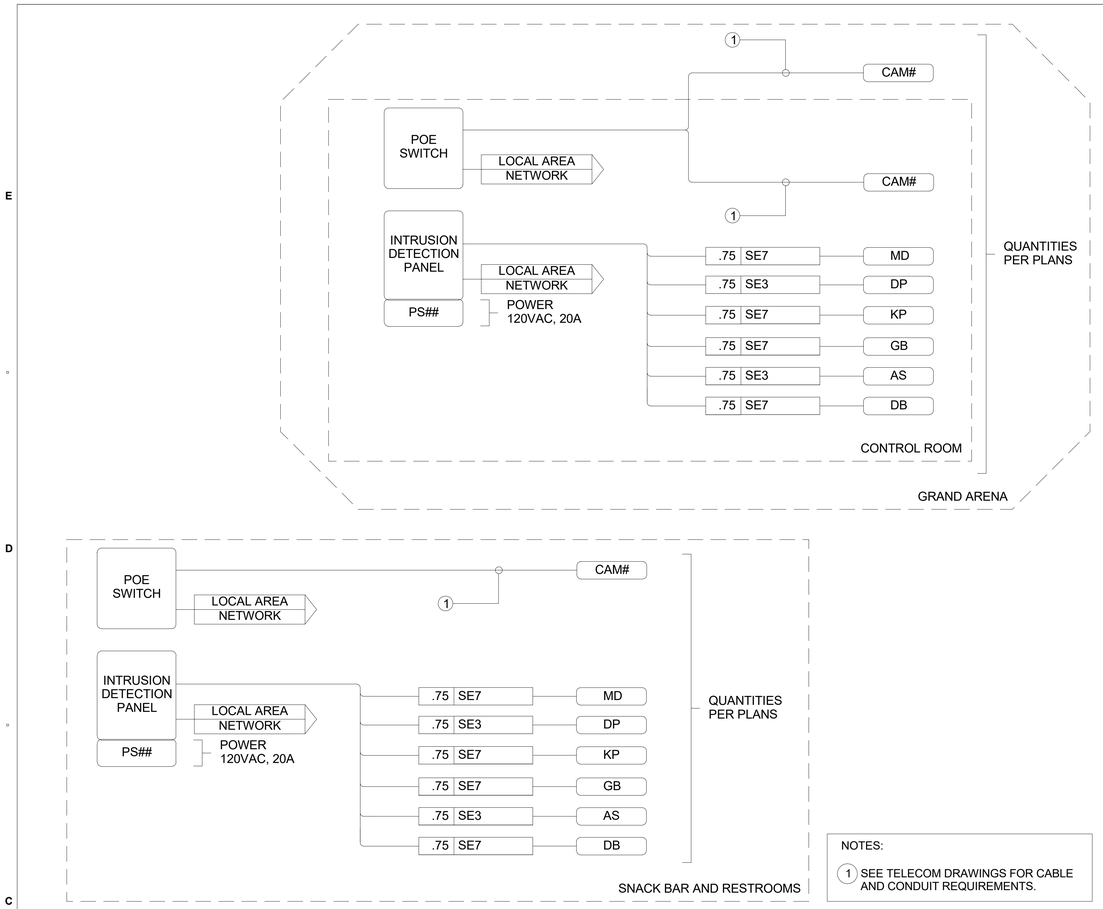
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SCALE: 1/16" = 1'-0"

SHEET TITLE

SECURITY ARENA
REFLECTED CEILING PLAN

SHEET NUMBER

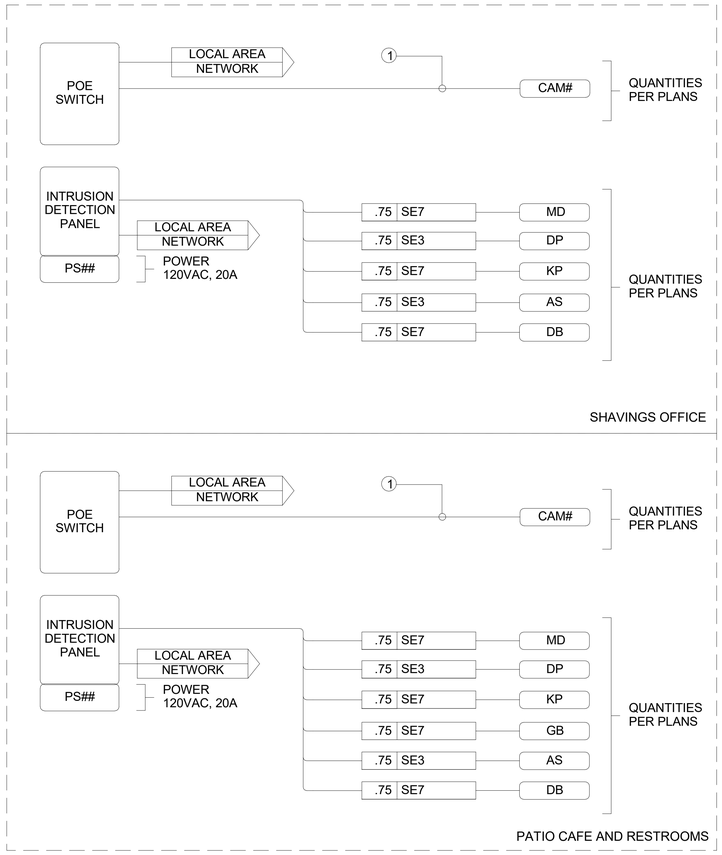
SC201



NOTES:

1. SEE TELECOM DRAWINGS FOR CABLE AND CONDUIT REQUIREMENTS.

SECURITY RISER DIAGRAM — SCALE: NTS — 1



NOTES:

1. SEE TELECOM DRAWINGS FOR CABLE AND CONDUIT REQUIREMENTS.

SECURITY RISER DIAGRAM — SCALE: NTS — 2

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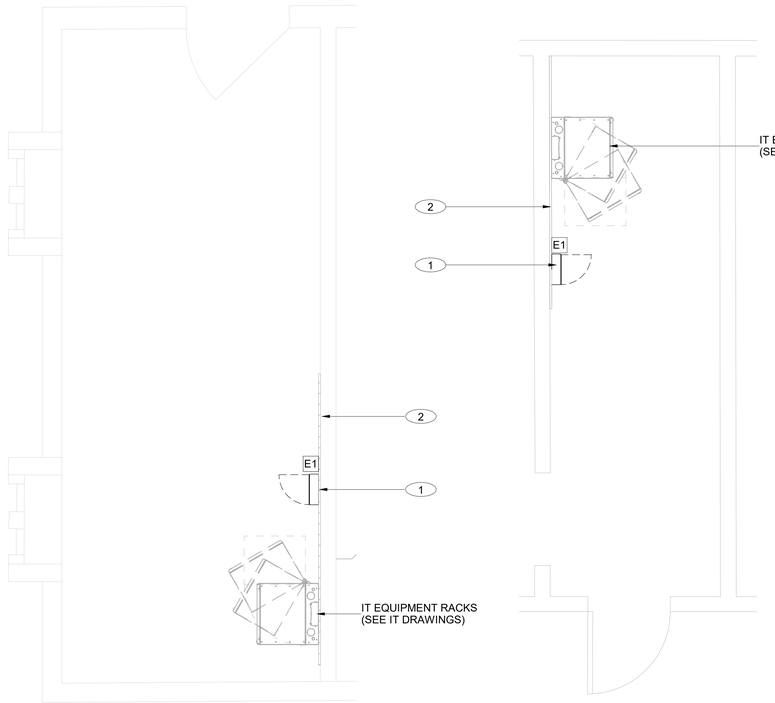
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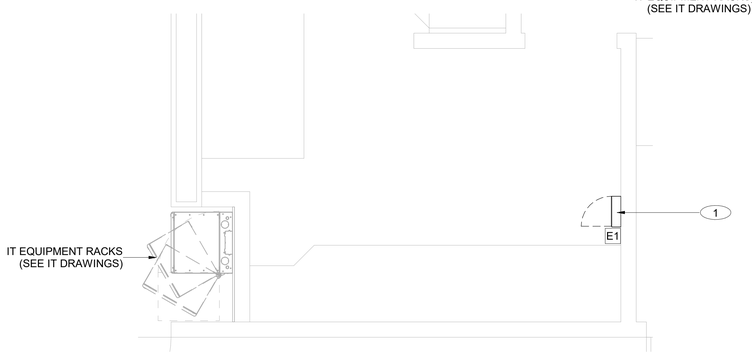
SECURITY RISER DIAGRAMS

SHEET NUMBER

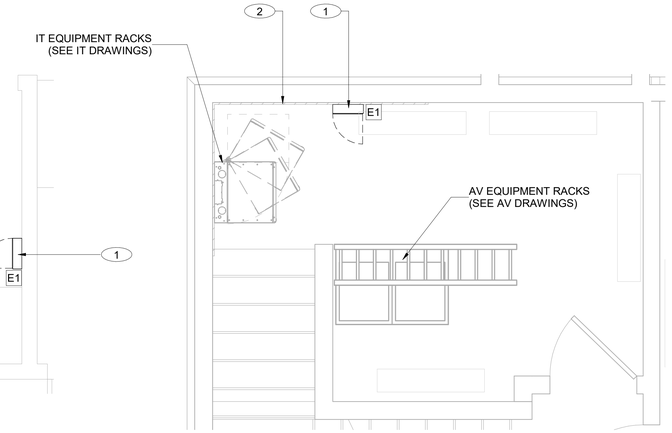
SC401



1 SHAVINGS OFFICE - SECURITY EQUIPMENT LAYOUT
1/2" = 1'-0"



3 PATIO CAFE AND RESTROOMS - SECURITY EQUIPMENT LAYOUT
1/2" = 1'-0"

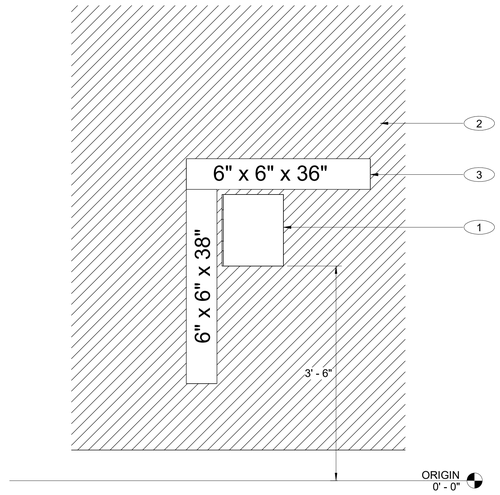


4 CONTROL ROOM - SECURITY EQUIPMENT LAYOUT
1/2" = 1'-0"

SECURITY KEYNOTES	
KEYNOTE	DESCRIPTION
1	INTRUSION DETECTION PANEL - (12"H x 12"W x 4"D)
2	3/4" FIRE-TREATED PLYWOOD
3	WIREWAY TROUGH - MILBANK GSC1 SERIES TYPE 1 METAL TROUGH OR APPROVED EQUAL

SECURITY ELECTRICAL KEYNOTES	
KEYNOTE	DESCRIPTION
E1	(1) 120V/20A - 5-20R / DEDICATED OUTLET (PSRH)

*FOR ELECTRICAL COORDINATION ONLY



5 TYPICAL SECURITY ELEVATION
1" = 1'-0"

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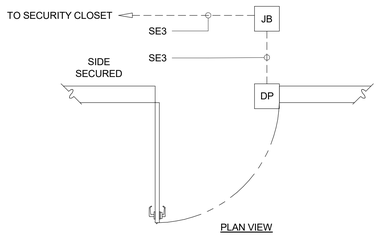
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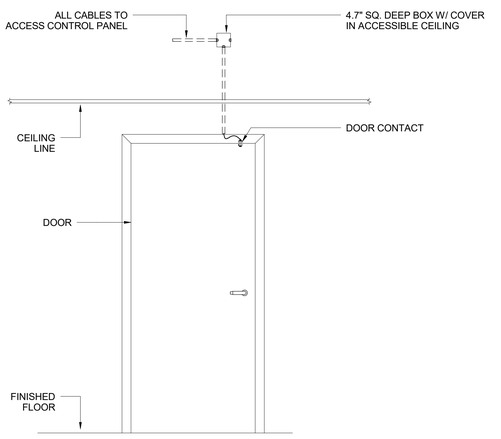
SECURITY EQUIPMENT LAYOUTS

SHEET NUMBER

SC451



PLAN VIEW

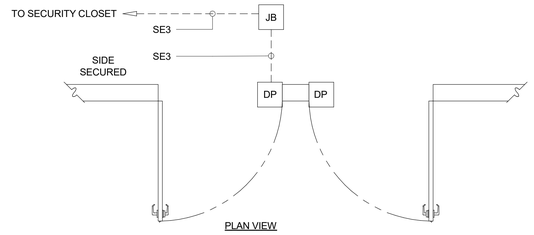


ELEVATION - PUBLIC SIDE SHOWN

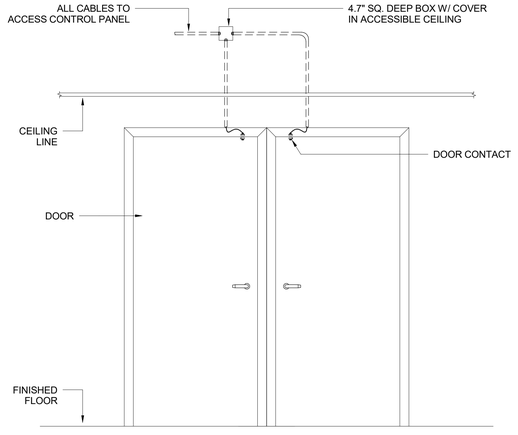
TYPICAL DOOR TYPE 3 DETAIL

SCALE: NTS

1



PLAN VIEW

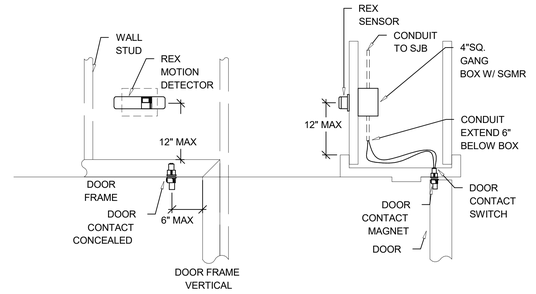


ELEVATION - PUBLIC SIDE SHOWN

TYPICAL DOOR TYPE 5 DETAIL

SCALE: NTS

2



FRONT VIEW SECTION

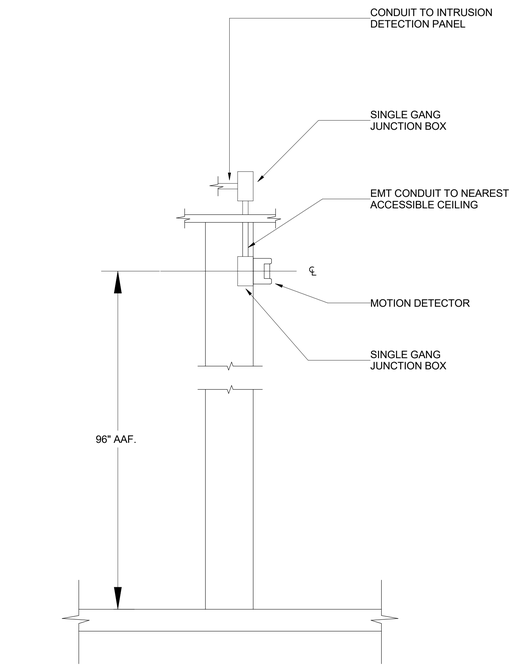
NOTES:

1. SEE HARDWARE SECTION FOR THE ELECTRIFIED DOOR HARDWARE TO BE USED AT THIS OPENING, COORDINATE CONNECTIONS TO DOOR HARDWARE WITH THE INSTALLER.
2. DETAILS ARE FOR REFERENCE ONLY. SEE FLOOR PLANS FOR LEFT OR RIGHT HAND PLACEMENT OF DEVICES.
3. DOOR SHALL BE PREPPED AT THE FACTORY BEFORE UL LABEL IS APPLIED.
4. IF DOOR HAS A RR (REMOTE RELEASE) ASSOCIATED TO IT THE RR WILL TRIGGER AN INPUT ON THE ACCESS CONTROL PANEL WHICH WILL ACTIVATE AN OUTPUT ON THE ACCESS CONTROL PANEL FOR THE EL (ELECTRIC LOCK).
5. REX MOUNTED ON SECURE SIDE OF DOOR.

TYPICAL REX AND DOOR CONTACT ENLARGED DETAIL

SCALE: NTS

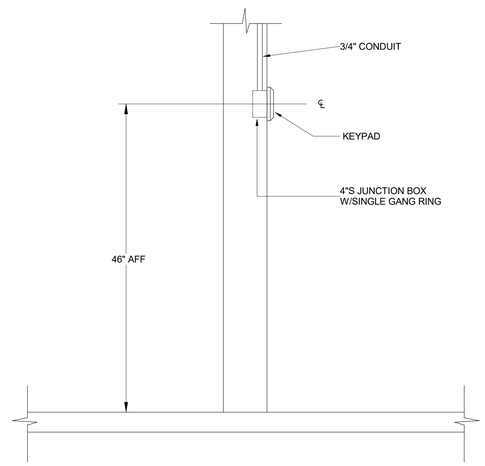
3



TYPICAL MOTION DETECTOR 'MD' DETAIL

SCALE: NTS

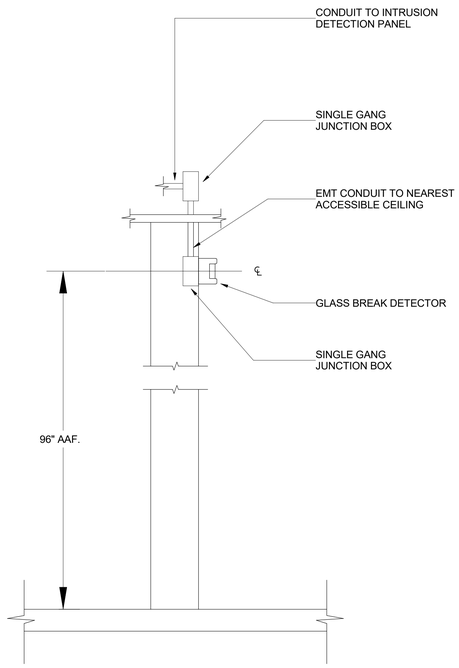
4



TYPICAL KEYPAD 'KP' DETAIL

SCALE: NTS

5



TYPICAL GLASS BREAK DETECTOR 'GB' DETAIL

SCALE: NTS

6

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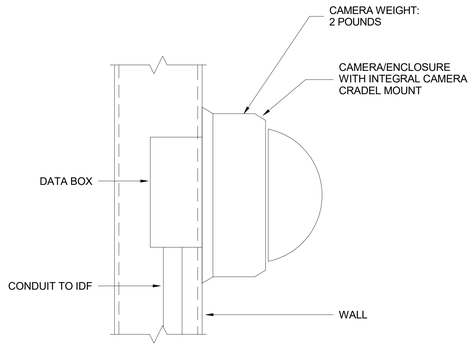
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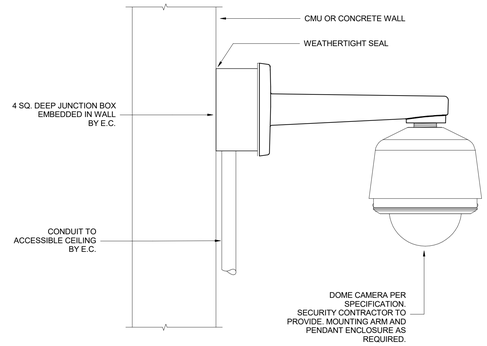
SECURITY DETAILS

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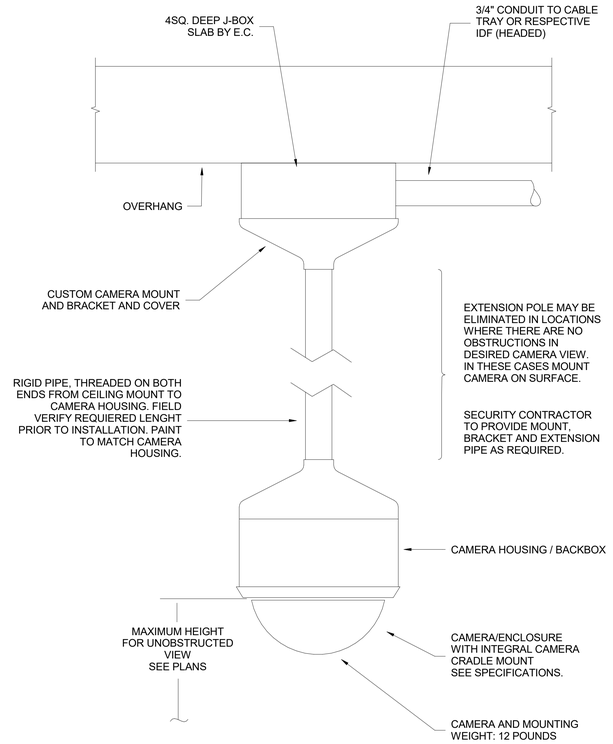
SC601



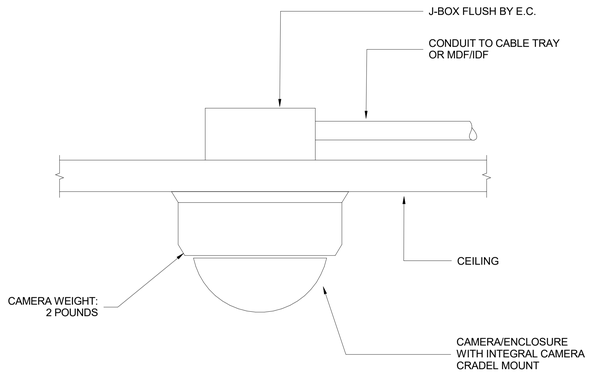
FLUSH CAMERA WALL MOUNTING DETAIL — SCALE: NTS — 1



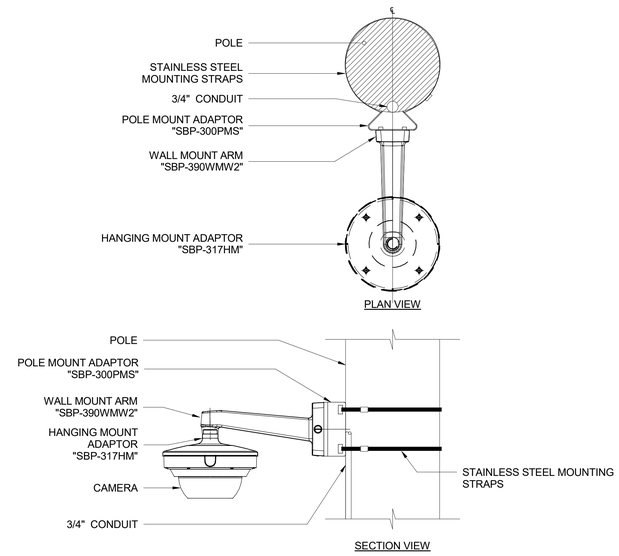
PENDANT ARM EXTERIOR CAMERA DETAIL — SCALE: NTS — 2



SURFACE MOUNTED CAMERA WITH POLE MOUNTING DETAIL — SCALE: NTS — 3



FLUSH CEILING CAMERA MOUNTING DETAIL — SCALE: NTS — 4



NOTE:
TYPICALLY, FOR OUTDOOR SURVEILLANCE CAMERAS IN URBAN SETTINGS, A HEIGHT OF ABOUT 11.5 FEET TO 13 FEET (ABOUT 3.5 TO 4 METERS) IS STANDARD. THIS HEIGHT IS USUALLY A GOOD COMPROMISE BETWEEN PROVIDING A WIDE FIELD OF VIEW AND CAPTURING SUFFICIENT DETAIL, WHILE ALSO KEEPING THE CAMERAS OUT OF EASY REACH FROM VANDALISM. TAKE INTO CONSIDERATION OBSTACLES WHEN DETERMINING FINAL HEIGHT.

TYPICAL POLE MOUNTED CAMERA DETAIL — SCALE: NTS — 5

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GENERAL NOTES

REFER TO SPECIFICATIONS FOR COMPLETE REQUIREMENTS.

1. ELECTRICAL

A. ALL CONDUITS, JUNCTION BOXES, FLOOR BOXES, BACK BOXES, PULL STRING AND POWER OUTLETS BY DIVISION 26 CONTRACTOR AS REQUIRED.

2. COORDINATE

A. COORDINATE WITH THE WORK OF ALL SECTIONS. COORDINATE THE LOCATION OF BLOCKING AND BACKING REQUIRED BY THIS SECTION. MAKE REASONABLE MINOR ADJUSTMENTS TO PRESERVE ARCHITECTURAL SYMMETRY AND ALIGNMENT WITH ADJACENT FEATURES AT NO CLAIM FOR ADDITIONAL COST OR TIME. PRESENT CONFLICTS IN TIMELY MANNER FOR RESOLUTION.
B. RELOCATION, REVISION OR CORRECTION CAUSED BY FAILURE OF THE CONTRACTOR TO COORDINATE THE WORK SHALL NOT BE SUBJECT TO CLAIM FOR ADDITIONAL COST OR TIME.
C. POWER RECEPTACLES SHOWN ON THE IT DRAWINGS OUTSIDE OF EQUIPMENT RACKS ARE SHOWN FOR COORDINATION INFORMATION ONLY. REFER TO DIVISION 26 DOCUMENTS FOR CONSTRUCTION.
D. THESE DRAWINGS SHOW SCOPE. THE EXACT LOCATION & ELEVATIONS OF WORK AREA OUTLETS, FLOOR MONUMENTS, AND DEVICES MUST BE COORDINATED WITH THE ARCHITECTURAL DRAWINGS.
E. CONDUIT, BACK BOXES AND PULL BOXES SUPPLIED AND INSTALLED BY ELECTRICAL CONTRACTOR UNDER SUPERVISION OF IT CONTRACTOR.
F. GENERAL CONTRACTOR SHALL COORDINATE THE CONDUIT, DEVICES, PATHWAYS AND JUNCTION BOXES FOR THE IT SYSTEM WITH OTHER TRADE TO AVOID ANY CONFLICTS.

3. LOCATIONS AND DIMENSIONS

A. LOCATIONS AND DIMENSIONS SHOWN ON ARCHITECTURAL DRAWINGS TAKE PRECEDENCE OVER THESE IT DRAWINGS. IN CASE OF APPARENT CONFLICT OR AMBIGUITY, SUBMIT TO THE ARCHITECT IN TIMELY MANNER FOR RESOLUTION.
B. DIMENSIONS TAKE PRECEDENCE OVER SCALE. LARGE SCALE DRAWINGS TAKE PRECEDENCE OVER SMALL. REPORT ALL CONFLICTS BEFORE INSTALLATION.
C. UNLESS OTHERWISE NOTED, DIMENSIONS ARE SHOWN HEIGHT X WIDTH X DEPTH.
D. VERIFY ALL DIMENSIONS, LOCATIONS AND CONDITIONS IN THE FIELD PRIOR TO STARTING WORK. NOTIFY ARCHITECT OF ANY APPARENT DISCREPANCIES.

4. SUPPORT

PROVIDE ALL BLOCKING, BRIDGING, TIES, FASTENERS AND RELATED SUPPORT PROVISIONS FOR ALL WORK OF THIS SECTION. COMPLY WITH APPLICABLE CODE REQUIREMENTS FOR MEANS OF SUPPORT OF ELECTRICAL EQUIPMENT OF THE SAME WEIGHT UNDER THE SAME MOUNTING CONDITIONS. DO NOT APPLY ANY LOAD TO BUILDING STRUCTURE WITHOUT FIRST OBTAINING WRITTEN APPROVAL OF THE PROJECT STRUCTURAL ENGINEER. OBTAIN PER PROJECT PROCEDURES.

5. BOX, PANEL AND ENCLOSURE INSTALLATION

A. COORDINATE THE LOCATION OF ALL BOXES, PANELS, ENCLOSURES AND RELATED RACEWAY WITH THE WORK OF OTHER SECTIONS.
B. VERIFY ACCESS TO BOXES, PANELS AND ENCLOSURES COMPLY WITH APPLICABLE CODE.
C. INSTALL BOXES, PANELS AND ENCLOSURES SQUARE AND PLUMB. SET FLUSH MOUNTED UNITS SO THAT THE FACE OF THE COVER, BEZEL OR ESCUTCHEON, IS IN THE SAME PLANE AS THE SURROUNDING FINISHED SURFACE. MOUNT BOXES, PANELS AND TRIM SO THAT THERE ARE NO GAPS, CRACKS OR OBVIOUS LINES BETWEEN THE TRIM AND THE ADJACENT FINISHED SURFACE. THIS APPLIES TO ALL HORIZONTAL AND VERTICAL SURFACES.
D. UNLESS OTHERWISE NOTED, PROVIDE STEEL BOXES, PANELS AND ENCLOSURES. COMPLY WITH DIVISION 26 REQUIREMENTS AND APPLICABLE CODE.
E. UNLESS OTHERWISE NOTED, BOXES AND ENCLOSURES SHALL BE NOT LESS THAN 2-1/8 INCHES DEEP. PROVIDE THE LARGER OF THE SIZE REQUIRED BY APPLICABLE CODE OR AS SHOWN ON DRAWINGS. COORDINATE WIRE AND CABLE BEND RADIUS WITH BOX AND ENCLOSURE SIZE.
F. PULL BOXES: PROVIDE AS REQUIRED BY THE MOST RESTRICTIVE OF APPLICABLE CODE OR THE PROVISIONS OF DIVISION 16. COORDINATE WITH WIRE AND CABLE BEND RADIUS.

6. RACEWAY

A. FOR ALL WORK OF THIS SECTION, RACEWAY ABOVE GROUND SHALL BE EMT, RACEWAY BELOW GROUND SHALL BE PVC.
B. RACEWAY SHALL BE 1-1/4" INCH DIAMETER TRADE SIZE UNLESS OTHERWISE NOTED.
C. ALL CONDUIT RUNS OVER 100 FT. MUST HAVE LARGE RADIUS BENDS.
D. A MAXIMUM OF TWO 90 DEGREE ELBOWS IN EACH CONDUIT RUN.
E. CONDUIT WITH FIBER OPTIC CABLE INSTALLED, MUST CONFORM TO THE MINIMUM BEND RADIUS AS SPECIFIED BY THE MANUFACTURER OF THE CABLE. DIVISION 26 CONTRACTOR IS TO APPLY RADIUS BENDS WHERE NEEDED. FIBER BEND RADIUS SHALL BE A MINIMUM LONG-TERM LOW-STRESS RADIUS NOT LESS THAN 20 TIMES THE CABLE DIAMETER.
F. KEEP A MINIMUM OF 12" CLEAR BETWEEN ELECTRICAL CONDUIT AND LOW VOLTAGE CONDUIT.
G. PROVIDE UL APPROVED FIRE RATED CONDUIT PENETRATION SEALS AT ALL FIRE RATED WALLS.
H. CONDUIT AND ACCESSORIES MUST BE INSTALLED PLUMB AND TRUE WITH UNIFORM FASTENING, FULLY DRESSED AND FINISHED.

7. GROUNDING AND BONDING

COMPLY WITH ALL APPLICABLE CODES AND ORDINANCES. REFER TO NATIONAL ELECTRICAL CODE SECTION 250.

A. BOND RACEWAY AND RELATED BOXES, PANELS, ENCLOSURES AND CABINETS AS REQUIRED BY APPLICABLE CODE AND DIVISION 16.
B. MAKE RACEWAY CONNECTIONS TO EQUIPMENT RACKS AND SIMILAR EQUIPMENT ENCLOSURES CONTAINING POWERED EQUIPMENT WITH ISOLATED FITTINGS.
C. GROUND AND BOND EQUIPMENT RACKS AND SIMILAR EQUIPMENT ENCLOSURES CONTAINING POWERED EQUIPMENT EXCLUSIVELY VIA THE ISOLATED EQUIPMENT GROUNDING CONDUCTORS PROVIDED UNDER DIVISION 26. SIZE SUCH CONDUCTORS ACCORDING TO APPLICABLE CODE. FOR EACH TECHNICAL BRANCH CIRCUIT, THE ISOLATED EQUIPMENT GROUNDING CONDUCTOR SHALL BE COPPER OF THE SAME GAUGE AS SUPPLY AND NEUTRAL CONDUCTORS. MAIN ISOLATED EQUIPMENT GROUNDING CONDUCTOR TO EACH ENSEMBLE OF EQUIPMENT RACKS SHALL BE COPPER, SIZED AS REQUIRED BY APPLICABLE CODE.
D. D.C. RESISTANCE BETWEEN THE ISOLATED EQUIPMENT GROUNDING BUS AT EQUIPMENT ROOM TECHNICAL POWER PANELS AND THE MAIN PROJECT GROUND FIELD SHALL NOT EXCEED 0.15 OHMS.
E. FOR COMMUNITY ANTENNA TELEVISION AND MASTER ANTENNA TELEVISION SYSTEMS AND RELATED PROVISIONS, COMPLY WITH ARTICLE 800, NATIONAL ELECTRICAL CODE.

8. CABLE AND WIRE

A. ALL LOW VOLTAGE CABLE AND WIRE BY STRUCTURED CABLING CONTRACTOR.
B. USE PLENUM RATED WIRE WHERE REQUIRED BY CODE.

9. GENERAL

A. IN THE EVENT THAT THESE PLANS, NOTES OR DETAILS OR ANY PART OR PORTION THEREOF ARE USED BY ANY THIRD-PARTY WITHOUT THE EXPRESS AUTHORIZED PERMISSION OF VENEKLASEN ASSOCIATES, THE UNAUTHORIZED USER AND ANYONE BENEFITING THEREFROM, SHALL DEFEND, INDEMNIFY AND HOLD HARMLESS VENEKLASEN ASSOCIATES AND ITS AGENTS, PRINCIPALS, EMPLOYEES AND CONSULTANTS FROM AND AGAINST ANY AND ALL CLAIMS, INCLUDING ATTORNEYS' FEES ARISING OUT OF SAID UNAUTHORIZED USE.
B. FURTHERMORE, THE UNAUTHORIZED USE OF THESE PLANS, NOTES, DETAILS OR ANY PART OR PORTION THEREFORE IS EXPRESSLY PROHIBITED AND VENEKLASEN ASSOCIATES RETAINS A COPYRIGHT OVER ANY AND ALL DOCUMENTS PREPARED BY VENEKLASEN ASSOCIATES.
C. IN THE EVENT THAT THE INSTALLER DEVIATES FROM THE PLANS AND SPECIFICATIONS PREPARED BY VENEKLASEN ASSOCIATES WHICH RESULTS IN DAMAGE TO PERSONS OR PROPERTY OF ANY KIND, INSTALLER HEREBY AGREES TO DEFEND, INDEMNIFY AND HOLD HARMLESS VENEKLASEN ASSOCIATES, ITS AGENTS, PRINCIPALS, EMPLOYEES AND CONSULTANTS FROM AND AGAINST ANY AND ALL CLAIMS, INCLUDING ATTORNEYS' FEES CAUSED BY SUCH FAILURE TO FOLLOW THE PLANS AND SPECIFICATIONS PREPARED BY VENEKLASEN ASSOCIATES, EXCEPTING ONLY THE DAMAGES TO PERSONS OR PROPERTY WHICH ARE CAUSED BY THE SOLE NEGLIGENCE OR WILLFUL MISCONDUCT OF VENEKLASEN ASSOCIATES.
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E. EXCEPT AS OTHERWISE INDICATED, MAKE REASONABLE MODIFICATIONS IN LAYOUT AS NEEDED TO PREVENT CONFLICT WITH OTHER WORK OR PROPER EXECUTION OF WORK.
F. INCLUDE WORK NOT USUALLY SHOWN OR SPECIFIED, BUT NECESSARY FOR PROPER INSTALLATION AND OPERATION OF A SYSTEM OR PIECE OF EQUIPMENT IN WORK.

10. T-SHEET SCOPE CONSIDERATION / GENERAL

A. PROVIDE FOR A COMPLETE PASSIVE "SCS" STRUCTURED CABLING SYSTEM. SCS SHALL INCLUDE ALL COMMONLY INCLUDED MATERIAL AND LABOR ITEMS OF A FULLY COMMISIONED PASSIVE SCS. TO INCLUDE: HORIZONTAL CABLING (ALL OTHER CABLING UNDER SEPARATE CONTRACT),, TERMINATION BLOCKS, PATCH PANELS AND ENCLOSURES, USER OUTLET ASSEMBLIES AND SUPPORT PRODUCTS, AND SUPPORT WITHIN TELECOM SPACES, HORIZONTAL CONDUIT SLEEVES ACCESSING TELECOM SPACES, CODE COMPLIANT FIRESTOPPING OF ALL TELECOMMUNICATIONS CONDUITS ASSOCIATED WITH T-SHEETS. PROVIDE CODE COMPLIANT GROUNDING AND BONDING OF COMPONENTS WITHIN TELECOMMUNICATIONS SPACES.

SHEET INDEX

SHEET NUMBER	SHEET NAME	60% REVIEW SUBMITTAL - 10/13/2023	90% REVIEW SUBMITTAL - 2/16/2024	90% CONSTRUCTION DOCUMENTS - 4/30/2025	95% FOR REVIEW - 8/4/2025	100% CONSTRUCTION DOCUMENTS - 8/29/2025
T001	TELECOM GENERAL NOTES AND SHEET INDEX	X	X	X	X	X
T002	TELECOM ABBREVIATIONS, NOTES AND SYMBOLS	X	X	X	X	X
T100	TELECOM SITE PLAN	X	X	X	X	X
T101	TELECOM GRAND ARENA FLOOR PLAN	X	X	X	X	X
T102	TELECOM BARN FLOOR PLANS	X	X	X	X	X
T103	TELECOM PATIO CAFE / SNACK BAR & RESTROOMS FLOOR PLANS	X	X	X	X	X
T104	TELECOM CONTROL BOOTH FLOOR PLANS	X	X	X	X	X
T201	TELECOM GRAND ARENA REFLECTED CEILING PLAN	X	X	X	X	X
T401	TELECOM CAMPUS NETWORK SCHEMATIC DIAGRAM	X	X	X	X	X
T451	TELECOM EQUIPMENT LAYOUTS	X	X	X	X	X
T452	TELECOM EQUIPMENT LAYOUTS		X	X	X	X
T471	TELECOM RACK ELEVATIONS	X	X	X	X	X
T601	TELECOM DETAILS	X	X	X	X	X
T602	TELECOM DETAILS	X	X	X	X	X

: 14

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SHEET TITLE

TELECOM GENERAL NOTES AND SHEET INDEX

SHEET NUMBER

T001

ABBREVIATIONS

℄	Center Line
A 0	Above Zero Floor Level
ACT	Above Counter Top
AFB	Above Floor Below
AFC	Above Finished Ceiling
AFF	Above Finished Floor
AH	Above Header
AP	Acces Point (Wireless)
AS	Above Slab
ATR	All Threaded Rod
AV	Audio/Video
AWG	American Wire Gauge
BAF	Below Access Floor
BC	Bonding Conductor
BDF	Building Distribution Frame
BFC	Below Finished Ceiling
BMS	Building Management System
BTU	British Thermal Units
CAB	Cabinet
CATV	Cable TV
CCTV	Closed Circuit Television
CL	Closet
CLG	Ceiling
CM	Construction Manager
CO	Conduit Only
COAX	Coaxial Cable
CT	Cable Tray
CU	Copper
DIA	Diameter
DR	Door
DWR	Drawer
(E)###	Existing
E.C.	Empty Conduit
EBC	Equipment Bonding Conductor
EC	Electrical Contractor
EF	Entrance Facility
EL	Elevation
ELEC	Electrical
EMI	Electromagnetic Interference
EMT	Electrical Metalic Tubing
ENT	Electrical Nonmetalic Tubing
EOL	End Of Line
EQUIP	Equipment
ER	Equipment Room (Main Computer Room)
(F)	Future
FAN	Fan Panel
FBO	Furnished By Others
FCA	Finished Ceiling Above
FIN	Finished
FOC	Fiber Optic Cable
FSF	Folding Shelf
G	Ground
GC	General Contractor
GRC	Galvanized Rigid Conduit
HR	Home Run
I.D	Inside Dimension
IDF	Intermediate Distribution Frame
ISDN	Integrated Services Digital Network
IW	In Wall
JB	Junction Box
LAN	Local Area Network
LP	Lightning Protector
LRR	Lightning Room Rack
LTG	Lighting

MDF	Main Distribution Frame
MISC	Miscellaneous
MM	Multimode (Optical Fiber)
MOM	Momentary
MTD	Mounted
MTL	Metal
NC	Normally Closed
NIC	Not In Contract
NO	Normally Open
NTS	Not To Scale
OC	On Center
OD	Outer Diameter
OF	Optical Fiber
OFCI	Owner Furnished Contractor Installed
OFE	Owner Furnished Equipment
OFOI	Owner Furnished Owner Installed
OSP	Outside Plant
P/O	Part Of
PB	Pull Box
PBX	Private Branch Exchange
PH	Phase
PNL	Panel
POC	Point of Connection
POE	Power Over Ethernet
POS	Point Of Sale
PRO	Protected Terminal
PROJ	Project
PSCH	Project Standard Control Height
PSRH	Project Standard Receptacle Height
PSSH	Project Standard Switch Height
PWR	Power
RCP	Reflected Ceiling Plan
RM	Room
SC	Ceiling Speaker
SECT	Section
SHP	Shielded Pair
SM	Single Mode (Optical Fiber)
STD	Standard
STP	Shielded Twisted Pair
SW	Switch
TBB	Telecommunications Bonding Backbone
TBD	To Be Determined
TC	Telecommunications Closet
TE	Telecommunications Enclosure
TEF	Telecommunications Entrance Facility
TER	Telecommunications Equipment Room (PBX)
TGB	Telecommunications Grounding Busbar
TMGB	Telecommunications Main Grounding Busbar
TR	Telecommunications Room
TST	Test Set
TTB	Telephone Terminal Board
TYP	Typical
UBC	Uniform Building Code
UG	Underground
UON	Unless Otherwise Noted
UPS	Uninterruptible Power Supply
UTP	Unshielded Twisted Pair
V	Volts
VIF	Verify In Field
W	Watts
W/	With
WAP	Wireless Access Point
WP	Weather Proof
WT	Water Tight

COMMUNICATIONS SYMBOLS

- FLOOR OUTLET VOICE
- FLOOR OUTLET DATA
- FLOOR OUTLET VOICE / DATA
- WALL OUTLET VOICE
- WALL OUTLET DATA
- WALL OUTLET VOICE / DATA
- VOICE / DATA FURNITURE FEED
- W — WALL TELEPHONE
- ONT — OPTICAL NETWORK TERMINATION
- TV — DIGITAL SIGNAGE
- CEILING OUTLET VOICE
- CEILING OUTLET DATA
- CEILING OUTLET VOICE / DATA
- AP# — ACCESS POINT
- AP# — WALL ACCESS POINT
- TV# — CEILING DIGITAL SIGNAGE
- C PS — CEILING SPEAKER

EQUIPMENT RACK AND CABINET SYMBOLS

- FLOOR STANDING CABINET
- WALL MOUNTED SWING-OUT CABINET
- TWO POST RACK
- SWING GATE RACK
- WALL MOUNTED CUBE-IT RACK
- MASTER CABLING SECTION
- TELECOMMUNICATIONS (MAIN) GROUNDING BUSBAR

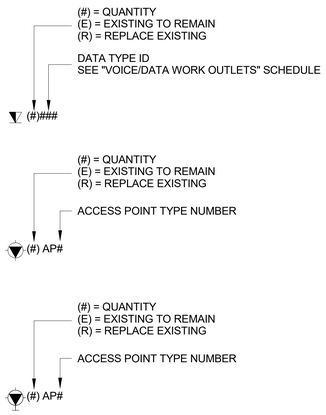
MISC SYMBOLS

- # — KEYNOTE
- # / ### — ELEVATION CALLOUT

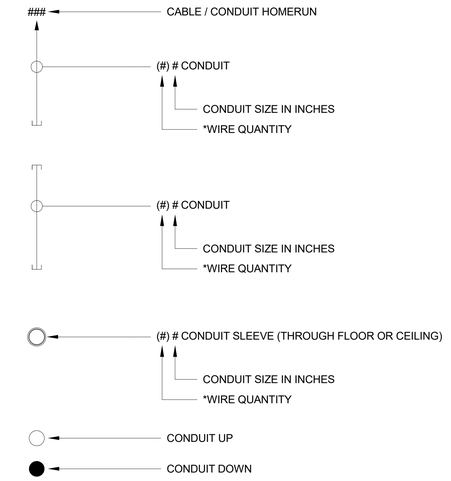
PATHWAYS AND SPACES SYMBOLS

- CABLE TRAY (AFC)
- WIRE MESH TRAY (BAF)
- LADDER RACK
- OPEN WIRE MESH TRAY
- CABLE TRAY CORNER BRACKET
- CABLE TRAY / WIRE MESH BENDS
- CROSS CONNECT
- SLEEVE
- RISER SLOT
- CONDUIT BANK, SECTION VIEW
- CONDUIT BANK, CONCRETE ENCASED, SECTION VIEW
- PLYWOOD
- ACCESS PANEL

TYPICAL COMMUNICATION SYMBOL DESCRIPTIONS



TYPICAL CONDUIT SYMBOLS AND DESCRIPTIONS



DATA TYPE SCHEDULE

DATA TYPE ID	CAT6A CABLES	ELEVATION (U.O.N)	GANG SIZE	CONDUIT SIZE	DESCRIPTION
2	2	TBD	1	BY DIV 26	(2) CAT6A CABLES FOR DATA
2A	2	TBD	1	BY DIV 26	(2) CAT6A CABLES FOR AV JUNCTION BOX (INSIDE AV JUNCTION BOX, REFER TO AV DRAWINGS FOR EXACT LOCATION / ELEVATION)
2B	2	TBD	1	BY DIV 26	(2) CAT6A CABLES FOR AV DISPLAY (INSIDE VIDEO DISPLAY JUNCTION BOX, REFER TO AV DRAWINGS FOR EXACT LOCATION / ELEVATION)
AP	2	TBD	1	BY DIV 26	(2) CAT6A CABLES FOR WIRELESS ACCESS POINT
S1	2	TBD	1	BY DIV 26	(2) CAT6A CABLE FOR SECURITY CAMERAS (REFER TO SECURITY DRAWINGS FOR EXACT LOCATION / ELEVATION)

NOTE:
EVERY COMMUNICATIONS OUTLET POSITION SHALL BE HOME RUN IN CONDUIT TO THE NEAREST LIFT OUT CEILING AREA, TELECOMMUNICATIONS PULL BOX OR TELECOMMUNICATIONS CABLE TRAY. THE USE OF J-HOOKS WILL BE PERMISSABLE ONLY IN LIFT-OUT CEILING ENVIRONMENTS.

TOTAL DATA OUTLET AND CABLE QUANTITES SCHEDULE

DATA TYPE ID	OUTLET DATAPORTS	OUTLET CAT6A CABLES	TOTAL OUTLET COUNTS	TOTAL CAT6A CABLES
2	2	2	10	20
2A	2	2	12	24
2B	2	2	8	16
AP	2	2	4	8
S1	2	2	32	64
TOTAL OUTLET AND CABLE COUNTS:			66	132

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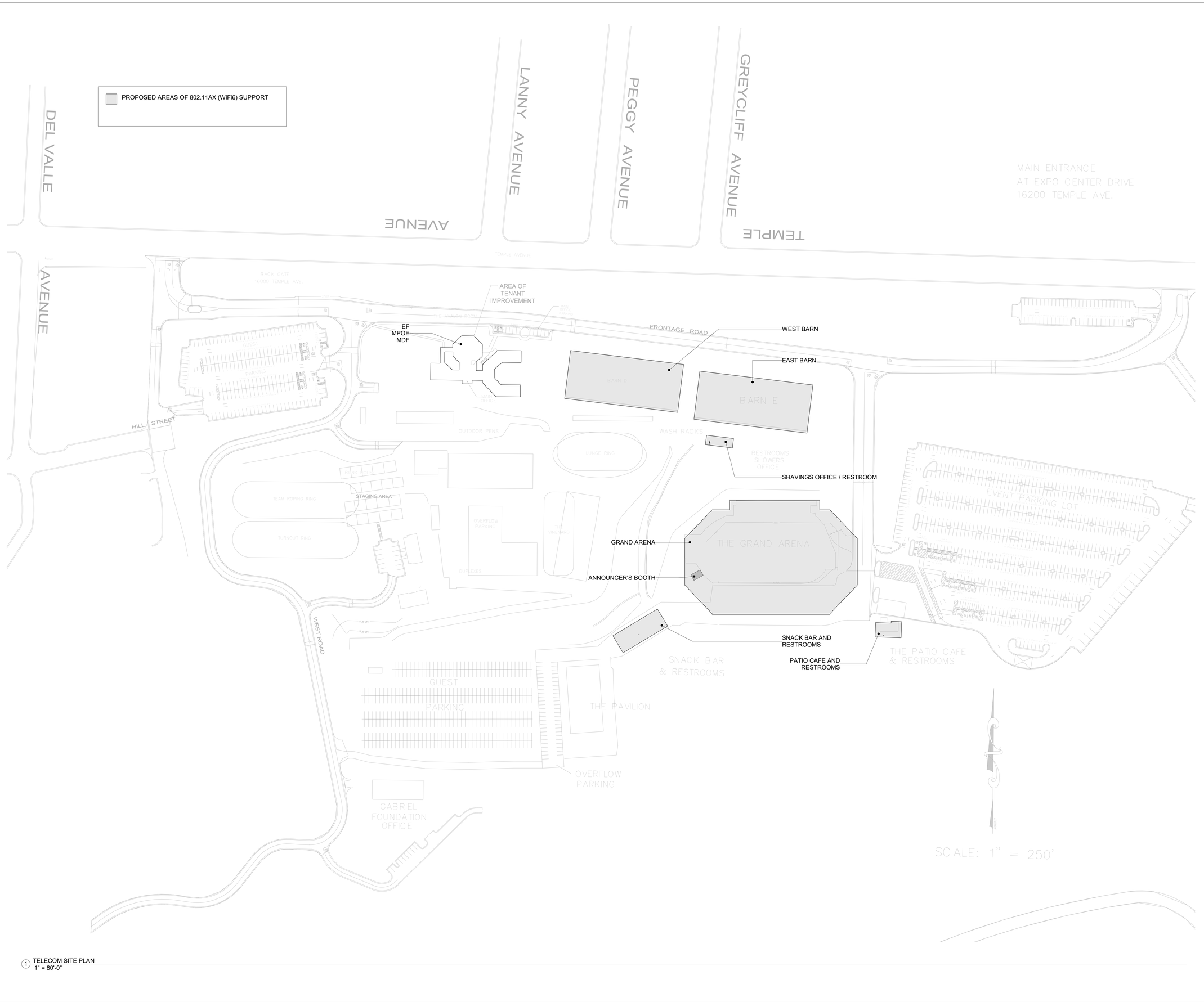
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SHEET TITLE

TELECOM ABBREVIATIONS, NOTES AND SYMBOLS

SHEET NUMBER

T002



1 TELECOM SITE PLAN
1" = 80'-0"

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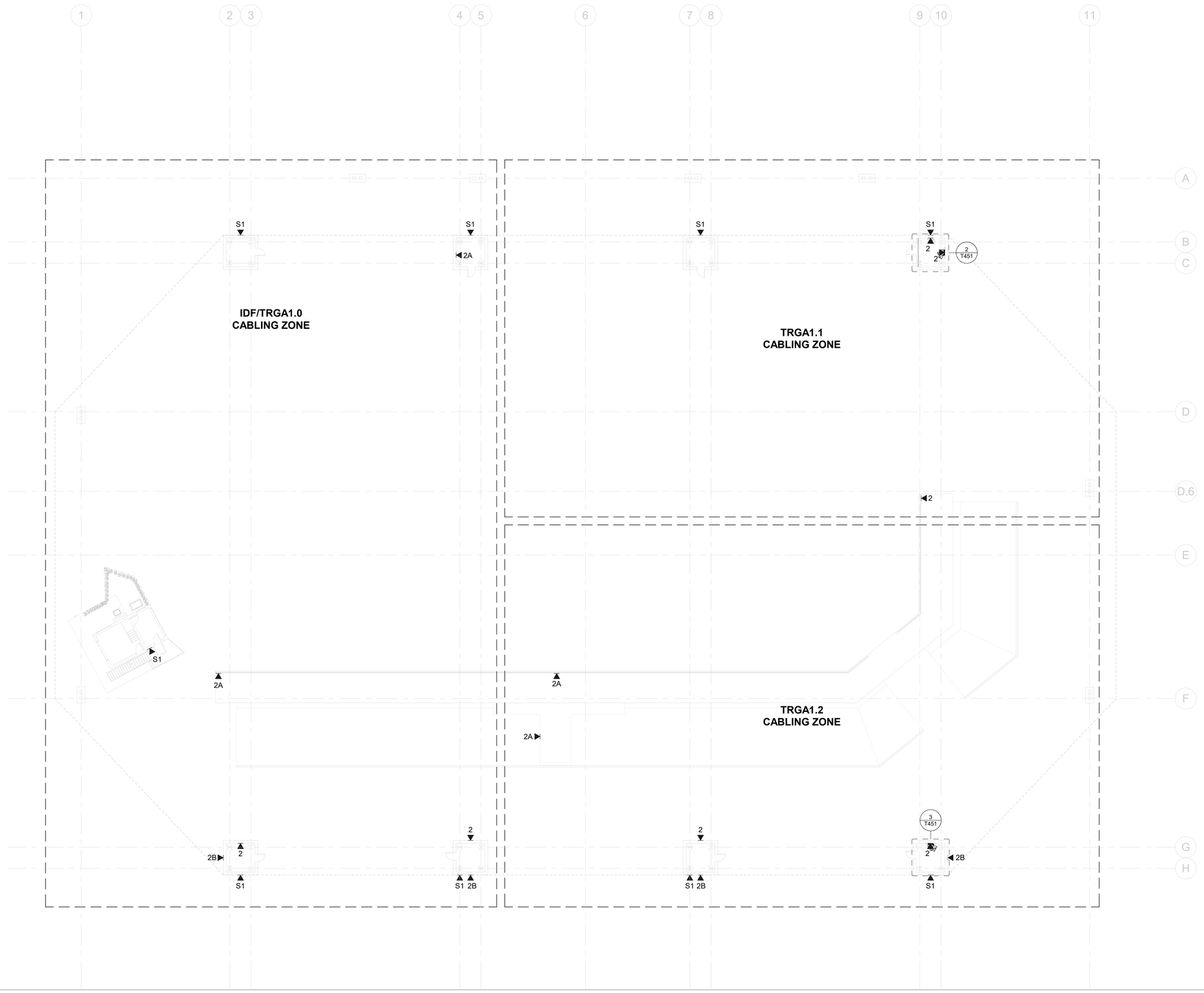
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SCALE:	**1" = 80'-0"**

SHEET TITLE

TELECOM SITE PLAN

SHEET NUMBER

T100



1 ARENA FLOOR TELECOM PLAN
1/16" = 1'-0"

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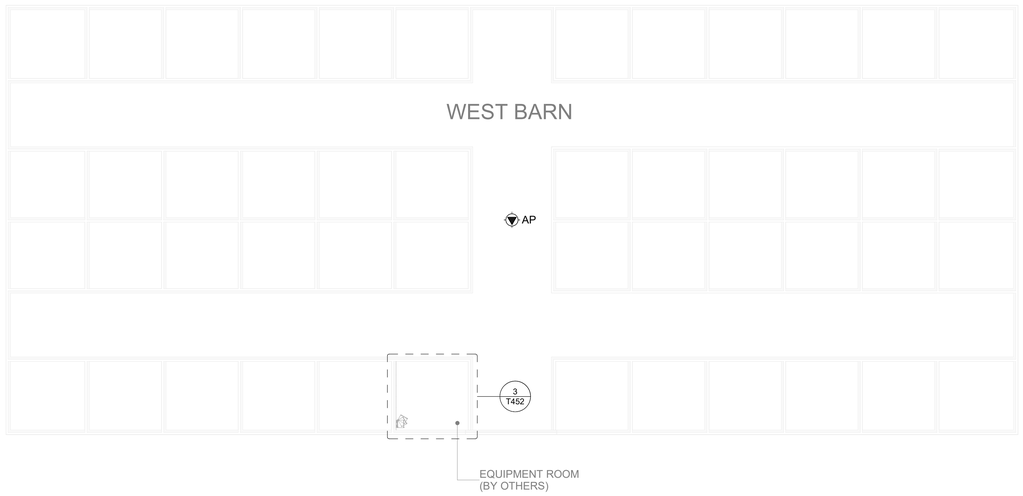
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SCALE:	1/16" = 1'-0"

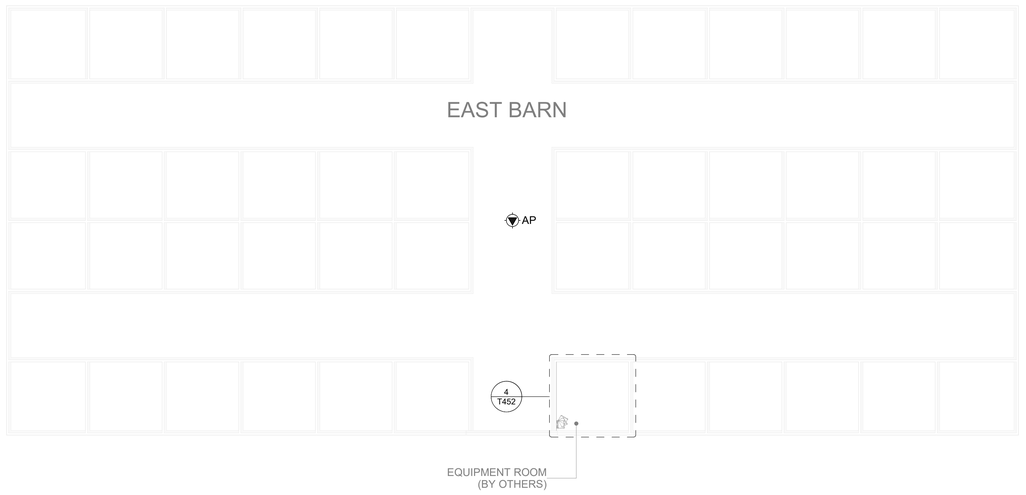
SHEET TITLE

TELECOM GRAND ARENA
FLOOR PLAN

SHEET NUMBER

T101







1 BARN FLOOR TELECOM PLAN
1/16" = 1'-0"

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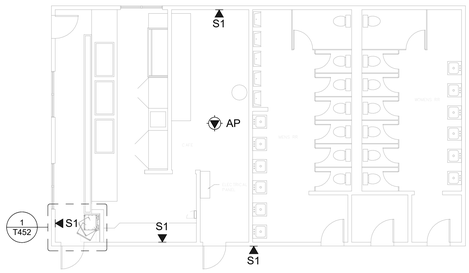
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DRAWN BY:	
CHECKED BY:	
SCALE:	**1/16" = 1'-0"**

SHEET TITLE

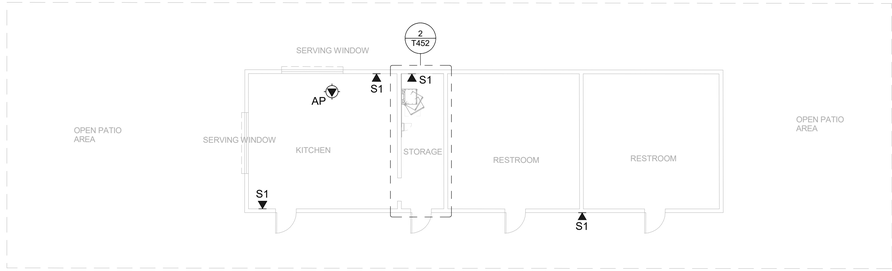
TELECOM BARN FLOOR PLANS

SHEET NUMBER

T102



1 PATIO CAFE AND RESTROOMS TELECOM PLAN
1/8" = 1'-0"



2 SNACK BAR AND RESTROOMS TELECOM PLAN
1/8" = 1'-0"

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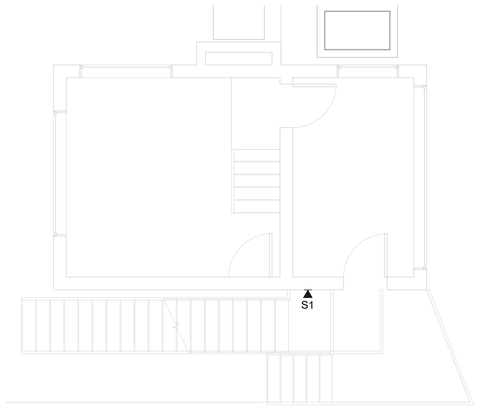
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SCALE:	**1/8" = 1'-0"**

SHEET TITLE

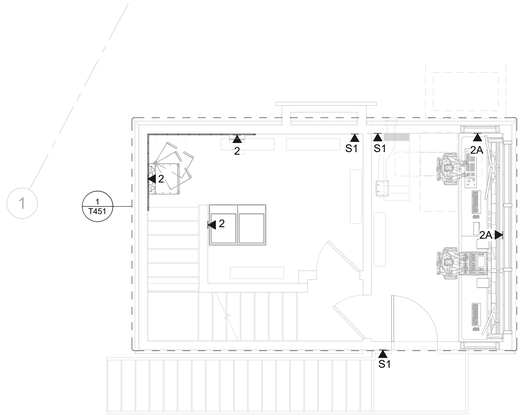
TELECOM PATIO CAFE / SNACK BAR & RESTROOMS FLOOR PLANS

SHEET NUMBER

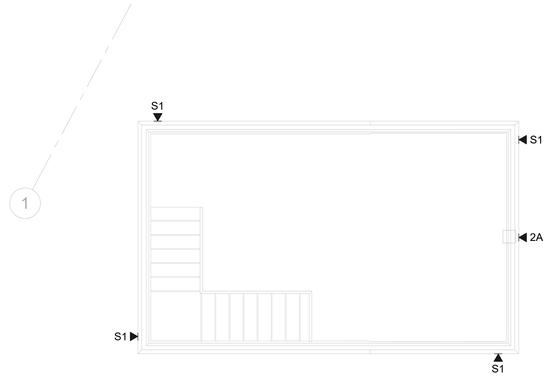
T103



1 CONTROL ROOM LEVEL 1 TELECOM PLAN
1/4" = 1'-0"



2 CONTROL ROOM LEVEL 2 TELECOM PLAN
1/4" = 1'-0"



3 CONTROL ROOM LEVEL 3 TELECOM PLAN
1/4" = 1'-0"

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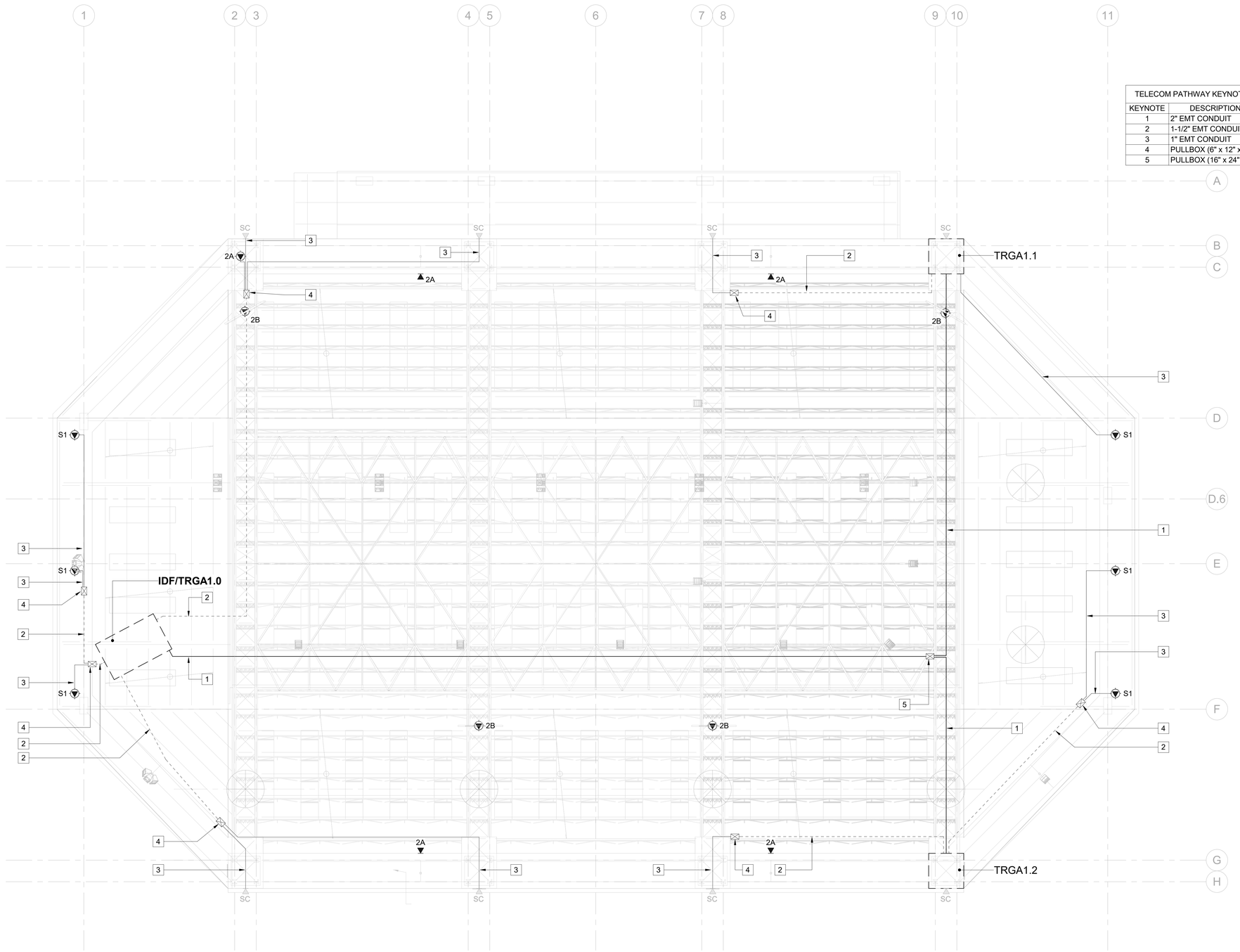
SHEET TITLE

TELECOM CONTROL BOOTH FLOOR PLANS

SHEET NUMBER

T104

TELECOM PATHWAY KEYNOTES	
KEYNOTE	DESCRIPTION
1	2" EMT CONDUIT
2	1-1/2" EMT CONDUIT
3	1" EMT CONDUIT
4	PULLBOX (6" x 12" x 4")
5	PULLBOX (16" x 24" x 8")



1 ARENA TELECOM REFLECTED CEILING PLAN
1/16" = 1'-0"

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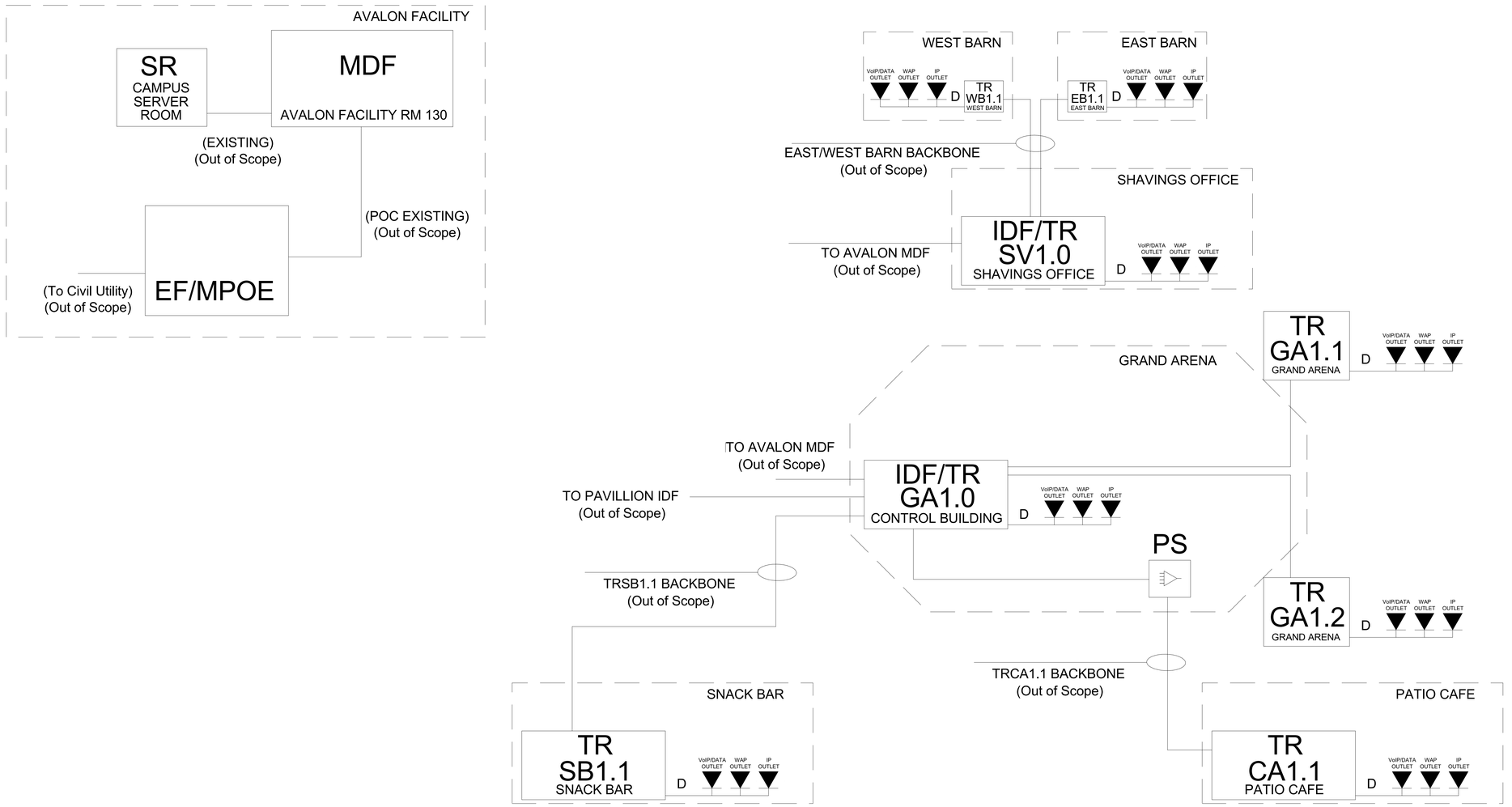
TELECOM GRAND ARENA REFLECTED CEILING PLAN

SHEET NUMBER

T201

CAMPUS CABLING LEGEND
A = (1) 12STR/SM(OS2)/12STR/MM (EXISTING)
B = (1) 06STR/SM(OS2)-(EXISTING)
C = (1) 24STR/SM(OS2) (NEW)
D = CATEGORY 6A / 4 PAIR / 10GBPS

TELECOMMUNICATIONS SPACE LEGEND
"MPOE" = MINIMUM POINT OF ENTRY (DEMARC)
"MDF" = MAIN DISTRIBUTION FRAME
"IDF" = INTERMEDIATE DISTRIBUTION FRAME
"TR" = TELECOMMUNICATIONS ROOM
"SR" = SERVER ROOM
"PS" = PASSIVE SPLICE (OPTICAL FIBER)



TELECOM SITE PLAN - PARTIAL CAMPUS NETWORK SCHEMATIC (GRAND ARENA PROJECT SCOPE ONLY)

SCALE: NTS

1

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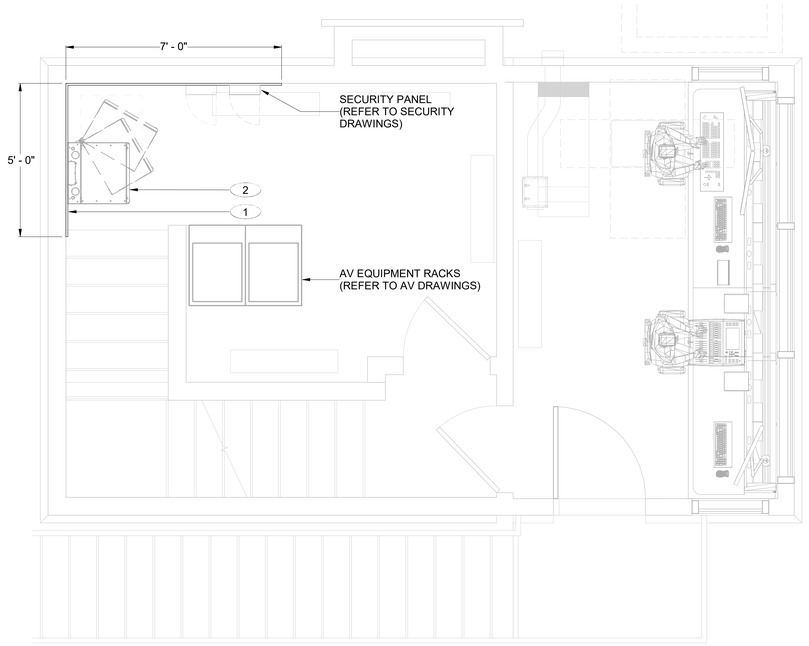
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SCALE:	NTS

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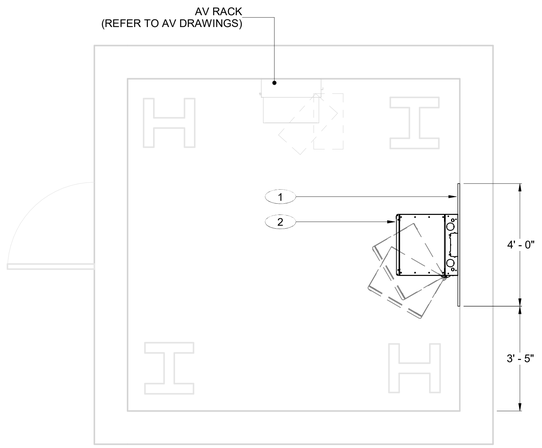
TELECOM CAMPUS NETWORK SCHEMATIC DIAGRAM

SHEET NUMBER

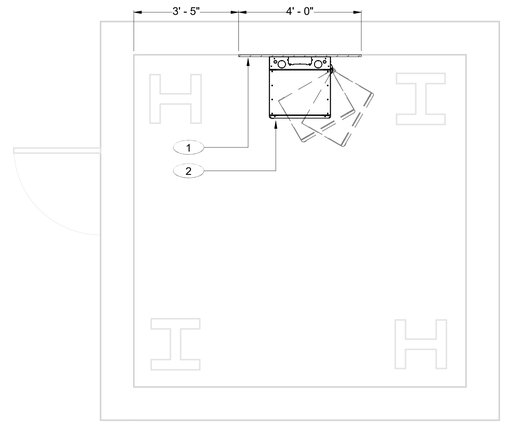
T401



1 IDF/TRGA1.1 - EQUIPMENT PLANT LAYOUT (CABINET BY OTHERS)
1/2" = 1'-0"



2 TRGA1.1 - EQUIPMENT PLAN LAYOUT
1/2" = 1'-0"



3 TRGA1.2 - EQUIPMENT PLAN LAYOUT
1/2" = 1'-0"

TELECOMMUNICATIONS KEYNOTES	
KEYNOTE	DESCRIPTION
1	3/4" FIRE-TREATED PLYWOOD
2	WALL MOUNTED SWINGING CABINET (24"H x 24"W x 24"D)

DEVICE ID	DESCRIPTION	BOX TYPE	BOX SIZE	INSTALL METHOD	ELEVATION	VOLTAGE	WATTAGE	CIRCUITS	RECEPTICAL TYPE	RECEPTICAL LOCATION	DATA DROP	DATA LOCATION	BTUs/HR	UTILIZATION	ADJ-BTU
UPS/GA1.1.1	RACKMOUNTABLE UPS / 2RU / TRGA1.1 / CABINET	4SD	4"X4"X2-1/2"	INSIDE CABINET	7'-6" AFF	120	2400	1	5-20R	TRGA1.1 / CABINET	1	UPS-NIC	8200	70%	5740
	TRGA1.1 ROOM TOTALS						2400	1			1		8200		5740
DEVICE ID	DESCRIPTION	BOX TYPE	BOX SIZE	INSTALL METHOD	ELEVATION	VOLTAGE	WATTAGE	CIRCUITS	RECEPTICAL TYPE	RECEPTICAL LOCATION	DATA DROP	DATA LOCATION	BTUs/HR	UTILIZATION	ADJ-BTU
UPS/GA1.2.1	RACKMOUNTABLE UPS / 2RU / TRGA1.2 / CABINET	4SD	4"X4"X2-1/2"	INSIDE CABINET	7'-6" AFF	120	2400	1	5-20R	TRGA1.2 / CABINET	1	UPS-NIC	8200	70%	5740
	TRGA1.2 ROOM TOTALS						2400	1			1		8200		5740

*FOR ELECTRICAL COORDINATION ONLY

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	08/04/25	95% CD SET
	08/29/25	100% CD SET

PROJ. NO. 7913-001
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CHECKED BY:
SCALE: 1/2" = 1'-0"

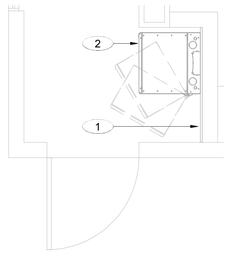
SHEET TITLE

TELECOM EQUIPMENT LAYOUTS

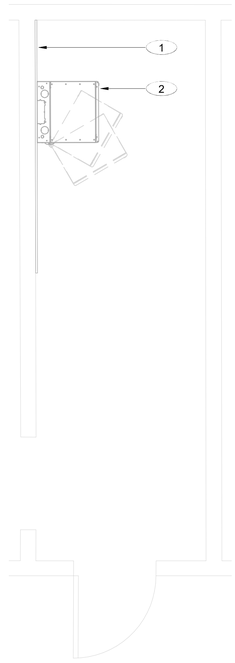
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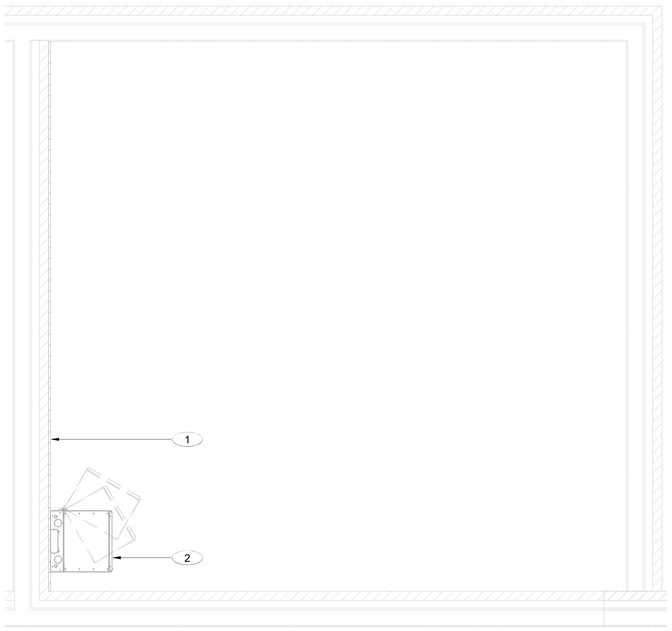
TELECOMMUNICATIONS KEYNOTES	
KEYNOTE	DESCRIPTION
1	3/4" FIRE-TREATED PLYWOOD
2	WALL MOUNTED SWINGING CABINET (24"H x 24"W x 24"D)



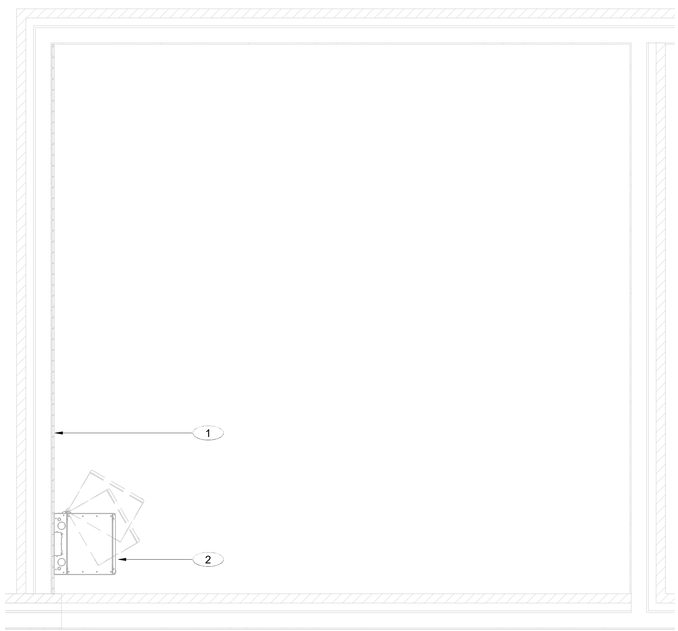
1 TRCA1.1 (PATIO CAFE AND RESTROOMS)- EQUIPMENT PLAN LAYOUT (CABINET BY OTHERS)
1/2" = 1'-0"



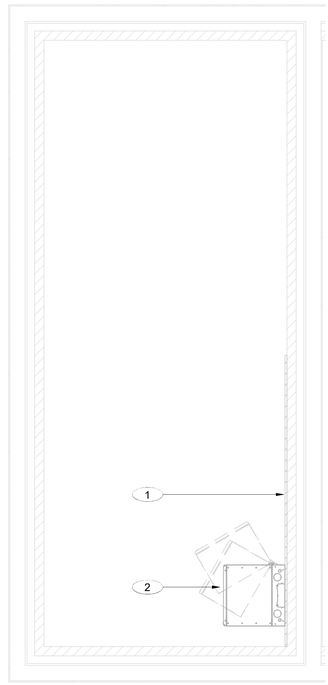
2 TRSB1.1 (SNACK BAR AND RESTROOMS)- EQUIPMENT PLAN LAYOUT (CABINET BY OTHERS)
1/2" = 1'-0"



3 TRWB1.1 (WEST BARN) - EQUIPMENT PLAN LAYOUT (CABINET BY OTHERS)
1/2" = 1'-0"



4 TREB1.1 (EAST BARN) - EQUIPMENT PLAN LAYOUT (CABINET BY OTHERS)
1/2" = 1'-0"



5 IDF/TRSV1.0 (SHAVINGS OFFICE AND RESTROOM) - EQUIPMENT PLAN LAYOUT (CABINET BY OTHERS)
1/2" = 1'-0"

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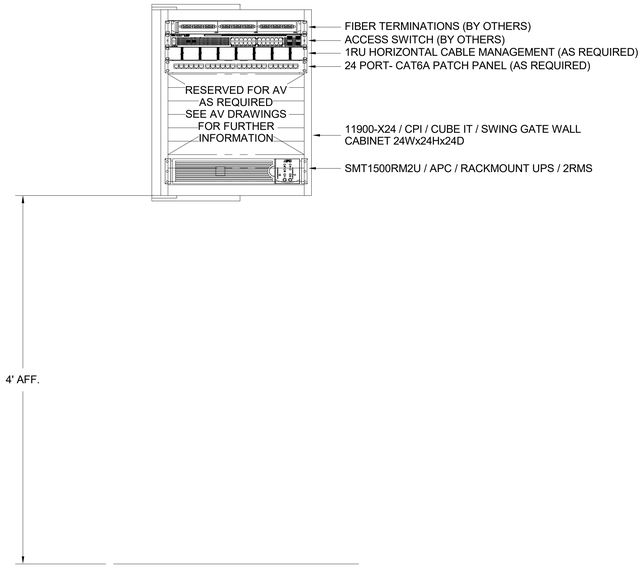
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DRAWN BY:	**Author**
CHECKED BY:	**Checker**
SCALE:	**1/2" = 1'-0"**

SHEET TITLE

TELECOM EQUIPMENT LAYOUTS

SHEET NUMBER

T452



TYPICAL IDF/TR CABINET ELEVATION

SCALE: NTS

1

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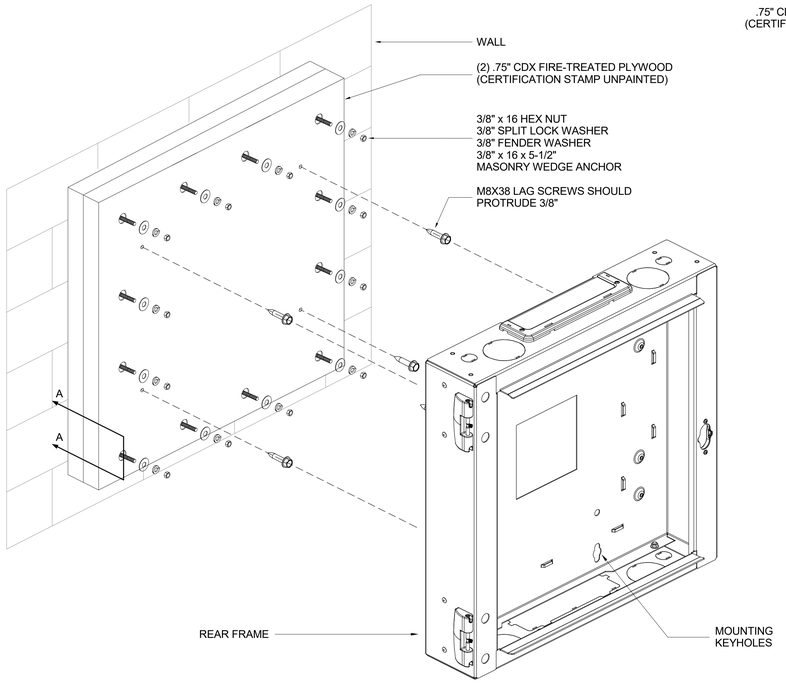
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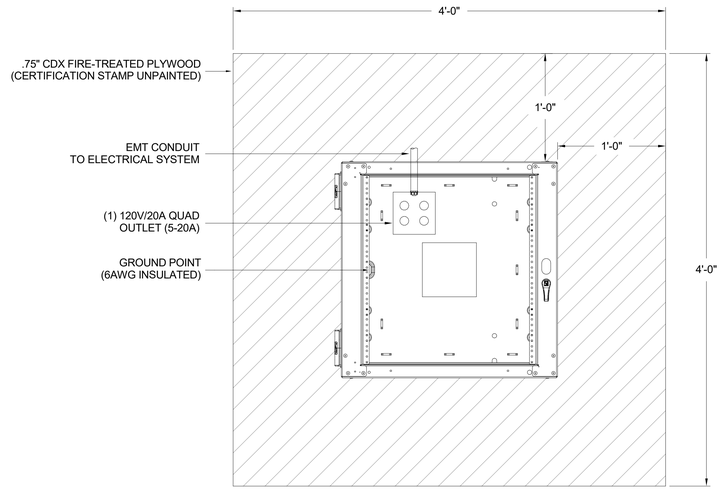
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TELECOM RACK ELEVATIONS

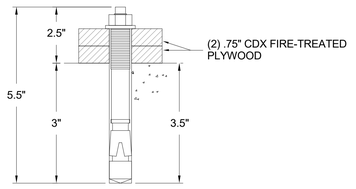
SHEET NUMBER

T471





FRONT VIEW



SECTION A - BOLT WEDGE ANCHOR

MOUNTING REAR PANEL TO WALL

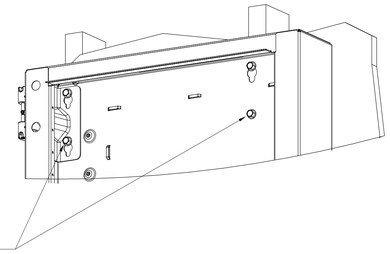
STEP 1. INSURE THAT THE WALL OR MOUNTING SURFACE HAS SUFFICIENT STRENGTH TO SUPPORT THE CABINET AND THE EXPECTED CABINET PAYLOAD. THE MOUNTING SURFACE MUST ALSO BE FLAT AND EXTEND BEYOND THE TOP, BOTTOM, LEFT, AND RIGHT EDGES OF THE REAR PANEL.

STEP 2. DRILL 5/32" PILOT HOLES FOR THE FOUR M8X38mm LAG SCREWS TO THE DIMENSIONS SHOWN ON THE DRAWING. THE SCREWS SHOULD GO DIRECTLY INTO THE PLYWOOD BACKBOARD.

STEP 3. INSTALL THE LAG SCREWS INTO THE HOLES. THE SCREW HEAD SHOULD PROTRUDE ABOUT 3/8" FROM THE WALL.

STEP 4. MOUNT THE REAR FRAME TO THE WALL BY HOOKING THE KEYHOLES OVER THE SCREWS. TIGHTEN THE SCREWS SECURELY.

STEP 5. INSTALL THE REMAINING 2 LAG SCREWS IN THE HOLES BELOW THE TOP TWO KEYHOLES.



NOTES:

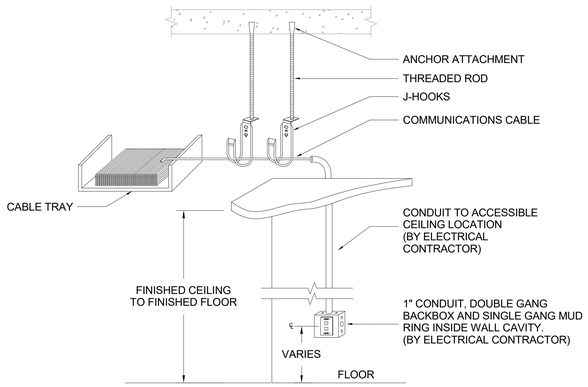
THE REAR FRAME MUST BE SECURED TO WALL USING ALL 6 LAG SCREWS PROVIDED. THE SCREWS ARE INTENDED TO GO THROUGH 3/4" PLYWOOD BACK-BOARD AND THEN INTO WOOD WALL STUDS. FOR MASONRY SURFACE, THE INSTALLER MUST PROVIDE APPROPRIATE HARDWARE.

SEE FULL LENGTH INSTALLATION INSTRUCTION FOR A COMPLETE, SAFE COMPLIANT INSTALLATION.

WALL CABINET MOUNTING DETAIL

SCALE: NTS

1



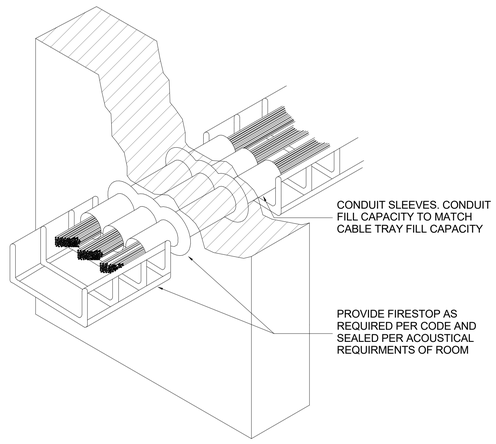
NOTE:

CONDUIT, BACKBOXES & PULL STRING TO BE INSTALLED BY ELECTRICAL CONTRACTOR, ITEMS SHOWN FOR REFERENCE ONLY.

TYPICAL OUTLET CONNECTION TO CABLE TRAY DETAIL

SCALE: NTS

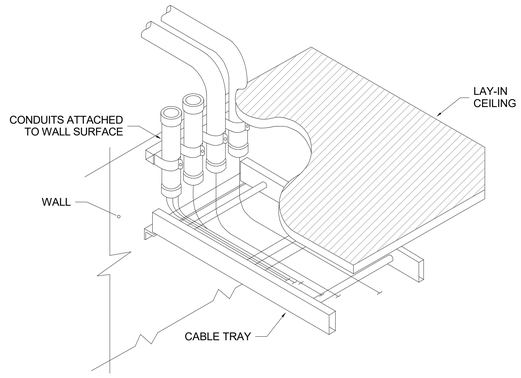
2



TYPICAL CABLE TRAY THROUGH WALL DETAIL

SCALE: NTS

3



NOTE:

DETAIL TYPICAL FOR WIRING ROOMS FEATURING LAY-IN CEILING

TYPICAL CONDUIT TRANSITION ONTO CABLE RUNWAY

SCALE: NTS

4

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SHEET TITLE

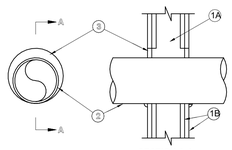
TELECOM DETAILS

SHEET NUMBER

T601

System No. W-L-1054

ANSI/UL1479 (ASTM E814)	CAN/ULC S115
F Ratings — 1 and 2 Hr (See Items 1 and 3)	F Ratings — 1 and 2 Hr (See Items 1 and 3)
T Rating — 0 Hr	FT Rating — 0 Hr
L Rating (Without Movement) at Ambient — Less Than 1 CFM/sq ft	FH Ratings —1 and 2 Hr (See Items 1 and 3)
L Rating (Without Movement) at 400°F — Less Than 1 CFM/sq ft	FTH Rating — 0 Hr
M Rating (Movement) — See Table 1	FTH Rating — 0 Hr
	L Rating at Ambient — Less Than 5.1 L/s/m2
	L Rating at 204°C — Less Than 5.1 L/s/m2



SECTION A-A

1. Wall Assembly — The 1 or 2 hr fire-rated gypsum wallboard/stud wall assembly shall be constructed of the materials and in the manner specified in the individual U300 or U400 Series Wall and Partition Designs in the UL Fire Resistance Directory and shall include the following construction features:
   A. Studs — Wall framing may consist of either wood studs or steel channel studs. Wood studs to consist of nom 2 by 4 in. (51 by 102 mm) lumber spaced 16 in. (406 mm) OC. Steel studs to be min 2-1/2 in. (64 mm) wide and spaced max 24 in. (610 mm) OC. For M Rating, steel studs to be min 3-5/8 in. (92 mm) wide. When steel studs are used and the diam of opening exceeds the width of stud cavity, the opening shall be framed on all sides using lengths of steel stud installed between the vertical studs and screw-attached to the steel studs at each end. The framed opening in the wall shall be 4 to 6 in. (102 to 152 mm) wider and 4 to 6 in. (102 to 152 mm) higher than the diam of the penetrating item such that, when the penetrating item is installed in the opening, a 2 to 3 in. (51 to 76 mm) clearance is present between the penetrating item and the framing on all four sides.
   B. Gypsum Board* — 5/8 in. (16 mm) thick, 4 ft (122 cm) wide with square or tapered edges. The gypsum board type, thickness, number of layers, fastener type and sheet orientation shall be as specified in the individual U300 or U400 Series Design in the UL Fire Resistance Directory. Max diam of opening is 32-1/4 in. (819 mm) for steel stud walls. Max diam of opening is 14-1/2 in. (368 mm) for wood stud walls. The F and FH Ratings of the firestop system are equal to the fire rating of the wall assembly. The M Rating is applicable only to 1 hr rated walls.
2. Through-Penetrants — One metallic pipe, conduit or tubing to be installed either concentrically or eccentrically within the firestop system. The annular space shall be min 0 in. to max 2-1/4 in. (57 mm). Pipe may be installed with continuous point contact. Pipe, conduit or tubing to be rigidly supported on both sides of wall assembly. The following types and sizes of metallic pipes, conduits or tubing may be used:
   A. Steel Pipe — Nom 30 in. (762 mm) diam (or smaller) Schedule 10 (or heavier) steel pipe.
   B. Iron Pipe — Nom 30 in. (762 mm) diam (or smaller) cast or ductile iron pipe.
   C. Conduit — Nom 4 in. (102 mm) diam (or smaller) steel electrical metallic tubing or 6 in. (152 mm) . diam steel conduit.
   D. Copper Tubing — Nom 6 in. (152 mm) diam (or smaller) Type L (or heavier) copper tubing.
   E. Copper Pipe — Nom 6 in. (152 mm) diam (or smaller) regular (or heavier) copper pipe.
3. Fill, Void or Cavity Material* — Sealant — Min 5/8 in. (16 mm) thickness of fill material applied within the annulus, flush with both surfaces of wall. At the point or continuous contact locations between pipe and wall, a min 1/2 in. (13 mm) diam bead of fill material shall be applied at the pipe wall interface on both surfaces of wall.

   HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC — FS-ONE MAX Intumescent Sealant

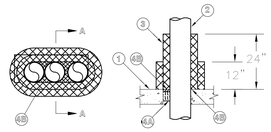
Movement Direction	Penetrant Item	Nominal Penetrant Diameter	Annular Space	Movement	Sealant Depth	F-Rating	L Rating with Movement
Y	2A, 2C*	2 in.	Max 2-1/4 in.	5%	5/8 in.	1 hr	N/A
Z	2A, 2C*	2 in.	2-1/4 in.	0.25 in.	5/8 in.	1 hr	N/A

* Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification (such as Canada), respectively.

TYPICAL FIRE STOP ASSEMBLY DETAIL | SCALE: NTS | 1

System No. F-A-1127

ANSI/UL1479 (ASTM E814)	CAN/ULC S115
F Rating — 2 Hr	F Rating — 2 Hr
T Rating — 2 Hr	FT Rating — 2 Hr
	FH Rating — 2 Hr
	FTH Rating — 2 Hr



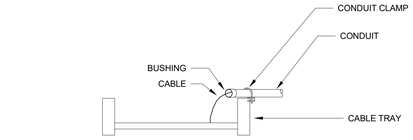
SECTION A-A

1. Floor Assembly — Min 4-1/2 in. (114 mm) thick reinforced lightweight or normal weight (100-150 pcf or 1600-2400 kg/m3) concrete. As an alternate, any min 2 hr fire rated D700, D800 or D900 Series Floor-Ceiling Design in the UL Fire Resistance Directory having a min 2-1/2 in. (64 thickness of lightweight or normal weight (100-150 pcf or 1600-2400 kg/m3) concrete topping over the steel deck may be used. Floor may also be constructed of any min 6 in. (152 mm) thick hollow core UL Classified Precast Concrete Units*. Max area of opening is 96 sq in. with a max dim of 16 in. Max are of opening in floor constructed of hollow-core precast concrete units is 49 in.2 (316 cm2) with a max dim of 7 in. (178 mm). See Precast Concrete Units (CFW) category in Fire Resistance Directory for names of manufacturers.
2. Through-Penetrant — One or more metallic pipes, conduits or tubing installed concentrically or eccentrically within opening. Pipes, conduits, or tubing spaced min 0 in. (point contact) to max 1/2 in. (13 mm) apart. Annular space between penetrant and periphery of opening shall be min 0 in. (point contact) to max 2 in. (51 mm). Penetrants to be rigidly supported on both sides of floor assembly. The following types and sizes of penetrants may be used:
   A. Steel Pipe — Nom 4 in. (102 mm) diam (or smaller) Schedule 10 (or heavier) steel pipe.
   B. Iron Pipe — Nom 4 in. (102 mm) diam (or smaller) cast or ductile iron pipe.
   C. Conduit — Nom 4 in. (152 mm) diam (or smaller) steel conduit or steel electrical metallic tubing (EMT) or nom 1 in. (25 mm) diam (or smaller) flexible steel conduit.
3. Duct Wrap Material* — Min 1-1/2 in. (38 mm) thick duct wrap tightly wrapped around penetrants to extend 24 in. (610 mm) above floor. An additional layer of min 1-1/2 in. (38 mm) thick duct wrap tightly wrapped around the first layer of duct wrap to extend 12 in. (305 mm) above floor. The spaces between penetrants at the top of the duct wrap are to be tightly-packed with a nominal 2 in. (51 mm) depth of duct wrap material, flush with the top of the inner layer of duct wrap. All longitudinal seams of both layers of duct wrap are sealed with foil tape.
   THERMAL CERAMICS INC — FireMaster FastWrap+, FireMaster FastWrap XL, or Pyrosat Duct Wrap XL.
   UNIFRAX | L L C — FyreWrap Duct Insulation or FyreWrap Duct 1.5 Insulation
4. Firestop System — The details of the firestop system shall be as follows:
   A. Packing Material — Min 2 in. thick min 4 pcf (64 kg/m3) mineral wool batt insulation firmly packed into opening as a permanent form. Packing material to be recessed at top surface of floor to accommodate the required thickness of fill material. In hollow-core floors, an additional min 2 in. thick min 4 pcf (64 kg/m3) mineral wool batt insulation firmly packed into opening, flush with the bottom of the floor.
   B. Fill, Void or Cavity Materials* - Sealant — Min 1/2 in. (13 mm) thickness of sealant applied within the annulus, flush with top surface of floor. At point contact, apply min 1/4 in. (6 mm) bead at penetrant/concrete interface on top surface of floor.

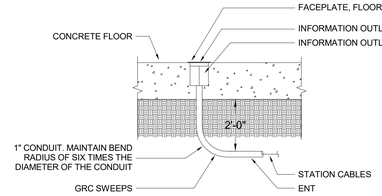
   HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC — FS-ONE Sealant or FS-ONE MAX Intumescent Sealant.

*Indicates such products shall bear the UL or cUL Certification Mark forjurisdictions employing the UL or cUL Certification (such as Canada), respectively.

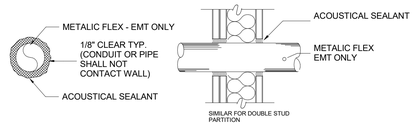
TYPICAL FIRE STOP ASSEMBLY DETAIL | SCALE: NTS | 2



CONDUIT TO CABLE TRAY DETAIL | SCALE: NTS | 3



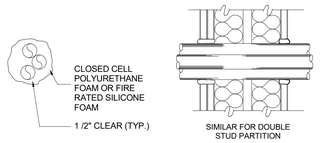
TYPICAL FLOOR OUTLET UNDERSLAB PATHWAY DETAIL | SCALE: NTS | 4



NOTE:

PENETRATIONS OF ACOUSTICAL PARTITIONS BY CONDUIT, CABLE, PIPES ETC, SHALL BE ACOUSTICALLY SEALED AS SHOWN. ANY GAP LARGER THAN 1/2" SHALL BE COVERED WITH GYPSUM BOARD, LAPPED A MINIMUM OF 2" AND SCREWED BEFORE USING ACOUSTICAL SEALANT.

PARTITION PENETRATION DETAIL - SINGLE CONDUIT, CABLE OR PIPE | SCALE: NTS | 5



NOTE:

PENETRATIONS OF ACOUSTICAL PARTITIONS BY CONDUIT, CABLE, PIPES ETC, SHALL BE ACOUSTICALLY SEALED AS SHOWN. ANY GAP LARGER THAN 1/2" SHALL BE COVERED WITH GYPSUM BOARD, LAPPED A MINIMUM OF 2" AND SCREWED BEFORE USING ACOUSTICAL SEALANT.

PARTITION PENETRATION DETAIL - MULTIPLE CONDUIT | SCALE: NTS | 6

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	08/29/25	100% CD SET

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CHECKED BY:
SCALE: 12" = 1'-0"

SHEET TITLE

TELECOM DETAILS

SHEET NUMBER

T602

ITEM NO. 7.1

CIVIC-RECREATIONAL-INDUSTRIAL AUTHORITY

MEMORANDUM

TO: Honorable Chairman and Board Members

STAFF: Yamini Pathak, Director of Finance
Dean Yamagata, Financial Consultant – Frazer, LLP

DATE: November 12, 2025

SUBJECT: Civic-Recreational-Industrial Authority September 30, 2025 Financial Report

Executive Summary:

Management is continuing to book and hold events depending upon availability of the venue. Prime dates are always in demand.

Expo Center:

For the month ended September 30, 2025, the Expo Center generated revenues of $266,067 and expenses of $276,504 resulting in a net operating loss of $10,437.

Year-to-date revenues amounted to $608,789, which represents approximately 34% of the budgeted revenues of $1,817,000 for the year ended June 30, 2026.

Year-to-date operating expenses through September 30, 2025 amounted to $788,645, which represents approximately 29% of the budgeted expenses of $2,726,000 for the year ended June 30, 2026.

Revenues and expenses are in line with the budgeted amounts for the year ended June 30, 2026.

The Expo Center received year-to-date net transfers of $85,000 from the Capital Project fund through September 30, 2025.

Capital Projects Fund:

This fund is accounting for the general operating activities of CRIA. Total budgeted expenditures for the year ended June 30, 2026 amount to $2,715,000. The Fund has incurred $296,124 of year-to-date expenditures through September 30, 2025 which represents approximately 11% of budgeted expenditures. Year-to-date transfers from the City of Industry amounted to $652,989 of which $85,000 was transferred to the Expo Center resulting in net transfers of $567,989 retained in the fund.

Capital Improvement Fund:

This fund is accounting for the capital improvement projects that are budgeted for the year ending June 30, 2026. The budget is $8,855,000. From the month ended September 30, 2025, expenditures for capital improvements amounted to $1,289,922 with the year-to-date expenditures of $1,488,607. This represents 17% of total budgeted expenditures for the year ended June 30, 2026.

Description of Reports:

The monthly financial statements, as shown in Exhibit A, are a comprehensive document reflecting the financial position and the result of operations of the Authority at September 30, 2025.

Fiscal Impact:

There is no fiscal impact as result of this action.

Recommendation:

Receive and file.

EXHIBIT A

CIVIC-RECREATIONAL-INDUSTRIAL-AUTHORITY

FINANCIAL REPORT

September 30, 2025

CIVIC-RECREATIONAL-INDUSTRIAL-AUTHORITY

FINANCIAL STATEMENTS

September 30, 2025

TABLE OF CONTENTS

	Pages
Executive Summary	1 – 4
Balance Sheet as of September 30, 2025	5
Statement of Operations for the month and year to date ended September 30, 2025	6
Industry Hills Expo Center – Statement of Cash Flows for the year to date ended September 30, 2025	7
Industry Hills Expo Center – Schedule of Revenues and Expenses for the month and year to date ended September 30, 2025 and 2024 – Schedule 1	8
Capital Projects Fund – Schedule of Revenues and Expenditures for the month and year to date ended September 30, 2025 – Schedule 2	9
Capital Improvements Fund – Schedule of Expenditures for the month and year to date ended September 30, 2025 – Schedule 3	10

Note: The presentation of these financial statements do not conform with Governmental Accounting Standards Board statement number 34 – Basic Financial Statements – and Management Discussion and Analysis – for State and Local Governments and do not include all the disclosures required by this pronouncement.

EXECUTIVE SUMMARY
FINANCIAL STATEMENTS
September 30, 2025

Expo Center Operations

During the month ended September 30, 2025 total revenues for the Facilities and Grand Arena revenues amounted to $266,067. There were four events held in the Pavilion and three events in the Avalon Room, generating $34,073 in Facilities revenues. Four events were held in the Grand Arena, generating $231,994 in Grand Arena revenues.

At September 30, 2025, our financial statements reflect the following activity:

Expo Center Operations	Month Ended 9/30/2025	Year To Date 9/30/2025	Annual Budget 2025-2026	% of Annual Budget	Month Ended 09/30/2024	Year To Date 09/30/2024
Total revenues	$ 266,067	$ 608,789	$ 1,817,000	34%	$ 253,299	$ 574,560
Expenses:						
Direct Expo Center expenses	141,632	379,432	1,182,000	32%	146,092	372,115
General and administrative expenses	134,872	409,213	1,544,000	27%	151,150	411,319
Total direct Expo Center expenses	276,504	788,645	2,726,000	29%	297,242	783,434
Net (loss) income from operations	(10,437)	(179,856)	(909,000)	20%	(43,943)	(208,874)
Net (loss) income	$ (10,437)	$ (179,856)	$ (909,000)	20%	$ (43,943)	$ (208,874)

Summarized financial information by department for the month ending September 30, 2025 and 2024:

Expo Center Operations	Month Ended 9/30/2025 Facilities	Month Ended 9/30/2025 Grand Arena	Month Ended 9/30/2025 General and Admin.	Month Ended 9/30/2025 Totals
Total revenues	$ 34,073	$ 231,994	$ -	$ 266,067
Expenses:				
Direct Expo Center expenses	44,294	97,338	-	141,632
General and administrative expenses	-	-	134,872	134,872
Total direct Expo Center expenses	44,294	97,338	134,872	276,504
Net (loss) income from operations	(10,221)	134,656	(134,872)	(10,437)
Net (loss) income for the month ended	$ (10,221)	$ 134,656	$ (134,872)	$ (10,437)

Expo Center Operations	Month Ended 9/30/2024 Facilities	Month Ended 9/30/2024 Grand Arena	Month Ended 9/30/2024 General and Admin.	Month Ended 9/30/2024 Totals
Total revenues	$ 58,587	$ 194,712	$ -	$ 253,299
Expenses:				
Direct Expo Center expenses	50,361	95,731	-	146,092
General and administrative expenses	-	-	151,150	151,150
Total direct Expo Center expenses	50,361	95,731	151,150	297,242
Net (loss) income from operations	8,226	98,981	(151,150)	(43,943)
Net (loss) income for the month ended	$ 8,226	$ 98,981	$ (151,150)	$ (43,943)

EXECUTIVE SUMMARY
FINANCIAL STATEMENTS
September 30, 2025

Summarized financial information by department year to date period ending September 30, 2025 and 2024:

Expo Center Operations	Year To Date 9/30/2025 Facilities	Year To Date 9/30/2025 Grand Arena	Year To Date 9/30/2025 General and Admin.	Year To Date 9/30/2025 Totals
Total revenues	$ 152,671	$ 456,077	$ 41	$ 608,789
Expenses:				
Direct Expo Center expenses	151,790	227,642	-	379,432
General and administrative expenses	-	-	409,213	409,213
Total direct Expo Center expenses	151,790	227,642	409,213	788,645
Net (loss) income from operations	881	228,435	(409,172)	(179,856)
Net (loss) income year to date	$ 881	$ 228,435	$ (409,172)	$ (179,856)

Expo Center Operations	Year To Date 9/30/2024 Facilities	Year To Date 9/30/2024 Grand Arena	Year To Date 9/30/2024 General and Admin.	Year To Date 9/30/2024 Totals
Total revenues	$ 159,922	$ 414,638	$ -	$ 574,560
Expenses:				
Direct Expo Center expenses	143,625	228,490	-	372,115
General and administrative expenses	-	-	411,319	411,319
Total direct Expo Center expenses	143,625	228,490	411,319	783,434
Net (loss) income from operations	16,297	186,148	(411,319)	(208,874)
Net (loss) income year to date	$ 16,297	$ 186,148	$ (411,319)	$ (208,874)

CRIA Capital Assets

In accordance with GASB 34, the Civic-Recreational-Industrial-Authority (referred to as “CRIA”) is required to capitalize and depreciate their capital assets. The capital assets net of accumulated depreciation at September 30, 2025 amounted to $16,010,565 with $2,173,674 representing construction in progress. This amount represents the cost of capital assets purchased or constructed over the years at the Industry Hills Expo Center and surrounding areas. No depreciation expense has been recorded in the statement of operations for the period ended September 30, 2025. It is the accounting policy of CRIA to record annual depreciation expense subsequent to the completion of the June 30, 2025 annual audit.

EXECUTIVE SUMMARY
FINANCIAL STATEMENTS
September 30, 2025

Capital Projects

The capital projects fund reflects expenditures for general and administrative costs and operational costs. General and administrative costs include board and staff salaries, professional services, and miscellaneous items. Operational costs include planning costs, survey costs, design costs, construction costs, small equipment, and supplies.

At September 30, 2025, our financial statements reflect the following activity:

Capital Projects Fund	Month Ended 9/30/2025	Year To Date 9/30/2025	Annual Budget 2025-2026	% of Annual Budget
Total revenues	$ -	$ -	$ 5,000	0%
Expenditures:				
General and administrative expenses	78,224	296,124	2,715,000	11%
Total expenses	78,224	296,124	2,715,000	11%
Excess of expenditures over revenues	$ (78,224)	$ (296,124)	$ (2,710,000)	11%

Capital Improvements Fund

The capital improvements fund is to account for expenditures incurred for capital improvement projects that have been budgeted for the year. Costs include planning costs, survey costs, design costs, construction costs, small equipment, and supplies. Below is a summary of the proposed Capital Improvement Program that was approved.

Capital Improvement Program (CRIA)

#	Project Name	FY 25-26 Annual Budget
1	Sewer Upgrades at Expo Center	15,000
2	Pavilion Building Upgrades	5,500,000
3	Expo Center Patio Café Improvements	5,000
4	Expo Center Fire Alarm System	1,400,000
5	Expo Center A/V upgrades to the Grand Arena	1,700,000
6	Expo Center Signage Improvements	5,000
7	New Banquet Facility	100,000
8	Expo Center ADA Upgrades	5,000
9	Expo Center Barn Improvements	25,000
10	Expo Center Office Improvements	100,000
	Total	**$8,855,000**
	TOTALS - CRIA	**$8,855,000**

EXECUTIVE SUMMARY
FINANCIAL STATEMENTS
September 30, 2025

At September 30, 2025, our financial statements reflect the following activity:

Capital Improvements Fund	Month Ended 9/30/2025	Year To Date 9/30/2025	Annual Budget 2025-2026	% of Annual Budget
Equestrian Center Capital Improvements:				
Planning, Survey and Design	$ 153,429	$ 163,133	$ 1,150,000	14%
Construction Costs	1,136,493	1,289,984	7,700,000	17%
Small Equipment & Supplies	-	35,490	5,000	710%
Total expenditures	1,289,922	1,488,607	8,855,000	17%
Excess of expenditures over revenues	$ 1,289,922	$ 1,488,607	$ 8,855,000	17%

BALANCE SHEET
AS OF SEPTEMBER 30, 2025

	Capital Projects	Expo Center	Capital Improvements
ASSETS			
CURRENT ASSETS:			
Cash and cash equivalents	$ 205,670	$ 111,532	$ -
Investments	94,674	-	-
Accounts receivable, net	-	85,459	-
Prepaid insurance	-	5,672	-
Inventories	-	48,751	-
Deposits	-	3,000	-
Total current assets	300,344	254,414	-
CAPITAL ASSETS, net	-	16,010,565	-
Total assets	$ 300,344	$ 16,264,979	$ -
LIABILITIES AND FUND BALANCE			
CURRENT LIABILITIES:			
Accounts payable	$ 28,863	$ 70,604	$ 63,592
Sales tax payable	-	11,772	-
Advance rental payments	-	50,369	-
Security deposits	-	26,700	-
Total current liabilities	28,863	159,445	63,592
FUND BALANCE:			
Fund balance	271,481	16,105,534	(63,592)
Total liabilities and fund balance	$ 300,344	$ 16,264,979	$ -

CIVIC-RECREATIONAL-INDUSTRIAL-AUTHORITY

STATEMENT OF OPERATIONS
FOR THE MONTH AND YEAR TO DATE ENDED SEPTEMBER 30, 2025

	Capital Projects				Expo Center				Capital Improvements			
	MONTH ENDED 9/30/2025	YEAR TO DATE 9/30/2025	2025-2026 ANNUAL BUDGET	% OF ANNUAL BUDGET	MONTH ENDED 9/30/2025	YEAR TO DATE 9/30/2025	2025-2026 ANNUAL BUDGET	% OF ANNUAL BUDGET	MONTH ENDED 9/30/2025	YEAR TO DATE 9/30/2025	2025-2026 ANNUAL BUDGET	% OF ANNUAL BUDGET
REVENUES:												
Expo center revenues	$ -	$ -	$ -	0%	$ 266,067	$ 608,789	$ 1,817,000	34%	$ -	$ -	$ -	0%
Other revenues	-	-	5,000	0%	-	-	-	0%	-	-	-	0%
Total revenues	-	-	5,000	0%	266,067	608,789	1,817,000	34%	-	-	-	0%
EXPENDITURES:												
Operating expenses	-	-	-	0%	141,632	379,432	1,182,000	32%	1,289,922	1,488,607	8,855,000	17%
General and administrative expenses	78,224	296,124	2,715,000	11%	134,872	409,213	1,544,000	27%	-	-	-	0%
Total expenses	78,224	296,124	2,715,000	11%	276,504	788,645	2,726,000	29%	1,289,922	1,488,607	8,855,000	17%
EXCESS OF EXPENDITURES OVER REVENUES	(78,224)	(296,124)	(2,710,000)	11%	(10,437)	(179,856)	(909,000)	20%	(1,289,922)	(1,488,607)	(8,855,000)	17%
OTHER FINANCING SOURCES, NET	213,989	567,989	2,665,400	21%	-	85,000	909,000	9%	1,237,299	1,610,852	8,855,000	18%
EXCESS OF REVENUES AND OTHER FINANCING SOURCES OVER EXPENDITURES	135,765	271,865	$ (44,600)	-610%	(10,437)	(94,856)	$ -	0%	(52,623)	122,245	$ -	0%
Fund balance, beginning	135,716	(384)			16,115,971	16,200,390			(10,969)	(185,837)		
Fund balance, ending	$ 271,481	$ 271,481			$ 16,105,534	$ 16,105,534			(63,592)	$ (63,592)		

CIVIC-RECREATIONAL-INDUSTRIAL-AUTHORITY

INDUSTRY HILL EXPO CENTER
STATEMENT OF CASH FLOWS
FOR THE YEAR TO DATE ENDED SEPTEMBER 30, 2025

		AMOUNT
CASH FLOWS FROM OPERATING ACTIVITIES		
Net loss before transfers and other credits	$	(179,856)
Change in operating assets and liabilities:		
Accounts receivable, net		3,609
Due from other funds		85,000
Prepaid insurance		3,402
Inventories		2,068
Accounts payable		53,049
Sales tax payable		8,704
Advance rental payments		(70,472)
Security deposits		(12,300)
Other current liabilities		(486)
Net cash used by operating activities		(107,282)
CASH FLOWS FROM NON-CAPITAL FINANCING ACTIVITIES		
Other financing sources		85,000
NET CHANGE IN CASH		(22,282)
Cash at July 1, 2025		133,814
Cash at September 30, 2025	$	111,532

INDUSTRY HILLS EXPO CENTER
SCHEDULE OF REVENUES AND EXPENSES
FOR THE MONTH AND YEAR TO DATE ENDED SEPTEMBER 30, 2025

Expo Center Operations	MONTH ENDED 9/30/2025	YEAR TO DATE 9/30/2025	ANNUAL BUDGET 2025-2026	% OF ANNUAL BUDGET 2025-2026	MONTH ENDED 09/30/2024	YEAR TO DATE 09/30/2024
Expo revenues						
Facilities rentals	$ 14,499	$ 71,580	$ 253,000	28%	$ 29,885	$ 88,730
Facilities rentals - bar sales	13,689	57,849	224,000	26%	21,232	52,930
Facilities - security	4,350	15,497	59,000	26%	5,674	14,364
Facilities - food	-	-	2,000	0%	-	-
Facilities - insurance	200	900	11,000	8%	1,200	2,900
Facilities - other	1,335	6,809	6,000	113%	450	450
Facilities - concessions	-	36	-	0%	146	548
Grand Arena - special events rentals	26,000	51,500	187,000	28%	24,000	51,500
Grand Arena - outdoor arena rentals	-	-	7,000	0%	2,400	2,400
Grand Arena - show barn stall rentals	11,638	19,388	58,000	33%	16,580	26,740
Grand Arena - shaving sales	-	1,019	5,000	20%	164	1,595
Grand Arena - security	24,412	42,219	106,000	40%	15,200	32,787
Grand Arena - trailer parking	4,815	9,595	68,000	14%	3,375	8,375
Grand Arena - bar sales	107,134	194,227	391,000	50%	81,826	166,034
Grand Arena - parking	30,110	86,408	277,000	31%	21,870	65,238
Grand Arena - other	27,885	51,721	162,000	32%	29,297	59,969
Total revenues	266,067	608,748	1,816,000	34%	253,299	574,560
Direct general and administrative revenues						
G&A- Other	-	41	1,000	4%	-	-
Expo expenses						
Cost of sales	30,489	66,491	187,000	36%	25,743	69,819
Bar supplies	4,335	6,159	8,000	77%	1,869	4,146
Promotional banquet	-	286	-	0%	-	-
Contract labor/wages	66,484	207,252	627,000	33%	81,501	194,511
Furniture/fixtures & equipment	-	171	55,000	0%	428	11,661
Facilities - insurance	-	259	-	0%	-	-
Miscellaneous	2,296	6,728	13,000	52%	-	-
Promotional	-	-	10,000	0%	-	-
Property maintenance	-	550	17,000	3%	10,124	10,639
Repairs and maintenance	-	-	-	0%	-	930
Racer purse payout	23,619	50,697	-	0%	13,287	37,773
Sales tax	692	932	2,000	47%	97	627
Security - Grand Arena	-	-	115,000	0%	-	-
Security - Facilities	5,403	17,175	59,000	29%	6,825	15,723
Shavings	96	848	4,000	21%	644	1,764
Supplies	3,967	12,594	52,000	24%	2,621	14,929
Equipment rental	4,251	9,290	33,000	28%	2,953	9,593
Total Expo expenses	141,632	379,432	1,182,000	32%	146,092	372,115
Operating net income before direct G & A and CRIA indirect expenses	124,435	229,357	635,000	36%	107,207	202,445
Direct general and administrative expenses						
Office supplies	-	2,683	18,000	15%	35	195
Travel and meetings	-	130	-	0%	-	-
Dues, subscriptions, books, etc.	1,067	3,542	17,000	21%	2,066	5,579
Equipment rental/lease	582	2,034	11,000	18%	1,059	2,851
Furniture/fixtures & equipment	-	-	5,000	0%	-	2,520
Telephone	946	4,571	19,000	24%	1,524	4,544
Postage	12	767	3,000	26%	-	428
Miscellaneous	2,137	8,329	39,000	21%	2,249	9,451
Professional services	39,907	94,571	354,000	27%	39,836	100,178
Repairs and equipment	-	-	4,000	0%	-	219
Vehicle expenses	951	9,700	30,000	32%	948	9,682
Insurance and bonds	1,134	3,403	14,000	24%	1,124	3,631
Supplies	4,483	11,999	42,000	29%	3,602	11,339
Contract labor/administrative wages	47,290	157,398	525,000	30%	57,983	137,368
Property maintenance	9,559	35,542	166,000	21%	8,674	29,752
Utilities	26,804	74,544	297,000	25%	32,050	93,582
Total direct general and administrative expenses	134,872	409,213	1,544,000	27%	151,150	411,319
EXCESS OF EXPENDITURES OVER REVENUES	$ (10,437)	$ (179,856)	$ (909,000)	20%	$ (43,943)	$ (208,874)

CAPTIAL PROJECTS FUND
SCHEDULE OF REVENUES AND EXPENDITURES
FOR THE MONTH AND YEAR TO DATE ENDED SEPTEMBER 30, 2025

REVENUES:	MONTH ENDED 9/30/2025	YEAR TO DATE 9/30/2025	ANNUAL BUDGET 2025-2026	% OF ANNUAL BUDGET
Other revenues	$ -	$ -	$ 5,000	0%
GENERAL AND ADMINISTRATIVE EXPENDITURES:				
Salaries - board	3,949	11,848	47,000	25%
Payroll taxes	-	-	2,000	0%
Life insurance, state comp, and LTC	-	-	1,000	0%
Medicare/disability	57	172	1,000	17%
PARS - ARS	148	444	2,000	22%
Landscaping	(67,278)	(67,278)	950,000	-7%
Legal	-	-	16,000	0%
Professional services	28,476	129,424	335,000	39%
Accounting	123	386	2,000	19%
Small equipment and supplies	147	292	2,000	15%
Vehicle expenses	1,010	1,010	10,000	10%
General engineering	32,755	66,806	200,000	33%
Printing/photography	-	-	1,000	0%
Security	51,087	116,738	679,000	17%
Property maintenance	21,792	30,324	400,000	8%
Furniture, equipment & fixtures	-	-	2,000	0%
Utilities	5,958	5,958	28,000	21%
Reclaimed water	-	-	22,000	0%
Other	-	-	15,000	0%
Total general and administrative expenditures	78,224	296,124	2,715,000	11%
EXCESS OF EXPENDITURES OVER REVENUES	$ (78,224)	$ (296,124)	$ (2,710,000)	11%

CAPTIAL IMPROVEMENT FUND
SCHEDULE OF EXPENDITURES
FOR THE MONTH AND YEAR TO DATE ENDED SEPTEMBER 30, 2025

EXPENDITURES	MONTH ENDED 9/30/2025	YEAR TO DATE 9/30/2025	ANNUAL BUDGET 2025-2026	% OF ANNUAL BUDGET
Equestrian center capital improvements:				
Planning, survey and design	$ 153,429	$ 163,133	$ 1,150,000	14%
Construction costs	1,136,493	1,289,984	7,700,000	17%
Small equipment & supplies	-	35,490	5,000	710%
Total expenditures	1,289,922	1,488,607	8,855,000	17%
EXCESS OF EXPENDITURES OVER REVENUES	$ 1,289,922	$ 1,488,607	$ 8,855,000	17%

ITEM NO. 7.2

Verbal Presentation