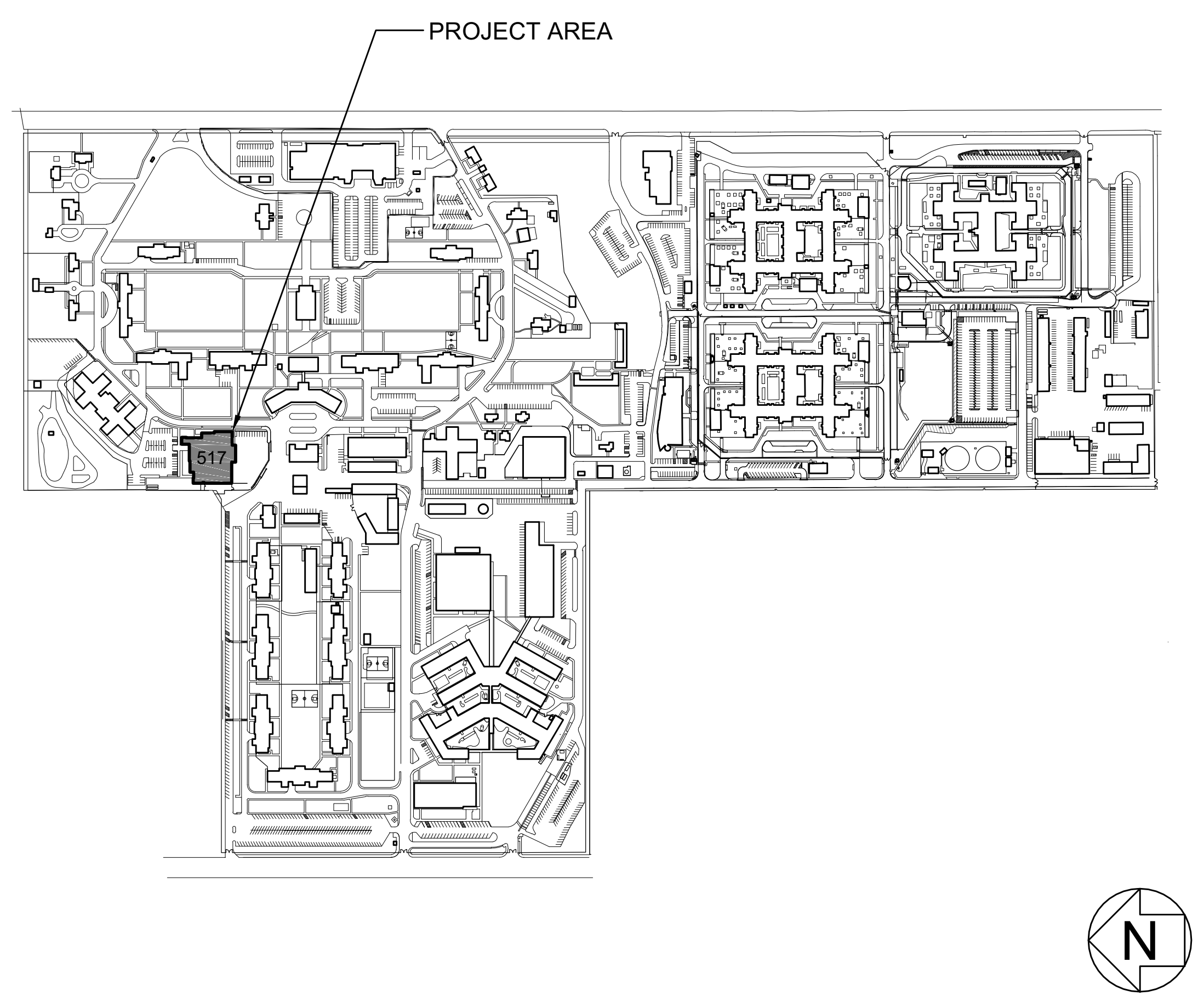
DEPARTMENT OF STATE HOSPITALS

SUPPLEMENTAL HVAC
517 CENTRAL KITCHEN

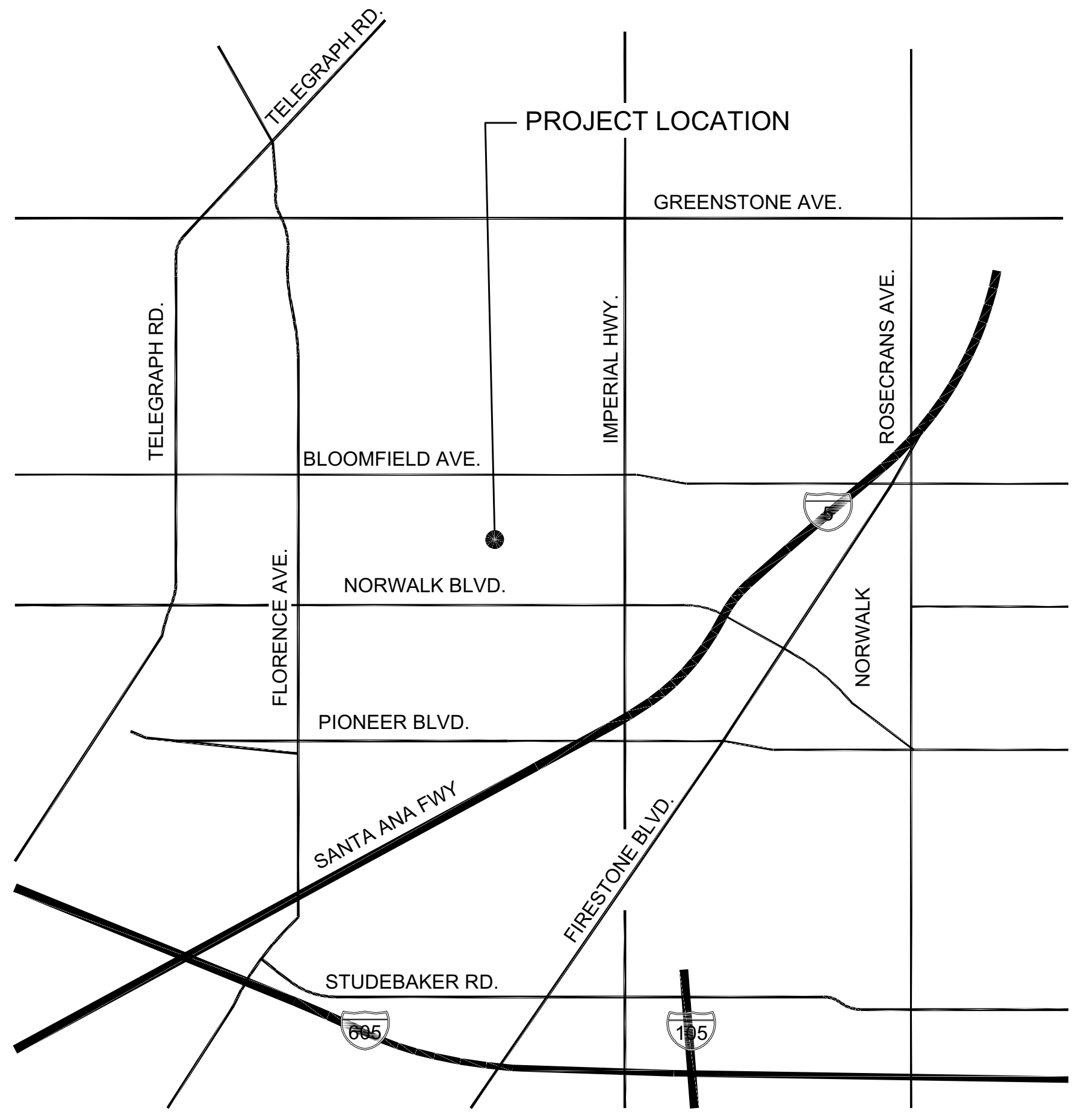
DEPARTMENT OF STATE HOSPITALS - METROPOLITAN
11401 BLOOMFIELD AVENUE, NORWALK, CALIFORNIA 90650

OSFM PERMIT NUMBER: 25-1380

SITE PLAN



VICINITY MAP



BUILDING PHOTO

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PROJECT INFORMATION

PREPARED FOR:

DEPARTMENT OF STATE HOSPITALS
METROPOLITAN (DSH-M)
11401 BLOOMFIELD AVENUE
NORWALK, CA 90650

DEPARTMENT OF STATE HOSPITALS (DSH)
1215 O STREET
SACRAMENTO, CA 95814

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PREPARED BY:

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MECHANICAL ENGINEER OF RECORD
ROBERT NOLAN
LIC. NO. 31684
385 VAN NESS AVE. #208
TORRANCE, CALIFORNIA 90501

ELECTRICAL ENGINEER OF RECORD
HECTOR LACSA
LIC. NO. E18399
385 VAN NESS AVE. #208
TORRANCE, CALIFORNIA 90501

APPLICABLE CODES AND STANDARDS

1. 2022 BUILDING STANDARDS ADMINISTRATIVE CODE, PART 1, TITLE 24 C.C.R.
2. 2022 CALIFORNIA BUILDING CODE (CBC), PART 2, TITLE 24 C.C.R.
3. 2022 CALIFORNIA ELECTRICAL CODE (CEC), PART 3, TITLE 24 C.C.R.
4. 2022 CALIFORNIA MECHANICAL CODE (CMC), PART 4, TITLE 24 C.C.R.
5. 2022 CALIFORNIA PLUMBING CODE (CPC), PART 5, TITLE 24 C.C.R.
6. 2022 CALIFORNIA ENERGY CODE (CEC), PART 6, TITLE 24 C.C.R.
7. 2022 CALIFORNIA FIRE CODE, PART 9, TITLE 24 C.C.R.
8. 2022 CALIFORNIA GREEN BUILDING STANDARDS CODE (CALGREEN), PART 11, TITLE 24 C.C.R.
9. 2022 CALIFORNIA REFERENCED STANDARDS, PART 12, TITLE 24 C.C.R.
10. TITLE 19 C.C.R., PUBLIC SAFETY, STATE FIRE MARSHAL REGULATIONS.

PARTIAL LIST OF APPLICABLE STANDARDS

1.	NFPA 13	AUTOMATIC SPRINKLER SYSTEMS (CA AMENDED)	2022 EDITION
2.	NFPA 14	STANDPIPE SYSTEM (CA AMENDED)	2022 EDITION
3.	NFPA 17a	WET CHEMICAL SYSTEMS	2022 EDITION
4.	NFPA 20	STATIONARY PUMPS	2022 EDITION
5.	NFPA 24	PRIVATE FIRE MAINS (CA AMENDED)	2022 EDITION
6.	NFPA 72	NATIONAL FIRE ALARM CODE (CA AMENDED)	2022 EDITION
7.	NFPA 2001	CLEAN AGENT FIRE EXTINGUISHING SYSTEMS W/ CA AMENDMENTS	2022 EDITION
8.	NFPA 101 LIFE SAFETY CODE		2022 EDITION
9.	REFERENCE CODE SECTION FOR NFPA STANDARDS		2022 CBC (SFM) CHAPTER 35

REFERENCE CODE SECTION FOR NFPA STANDARDS ARE IN 2022 CBC CHAPTER 35 OR 2022 CFC CHAPTER 80. SEE CHAPTER 35 FOR STATE OF CALIFORNIA AMENDMENTS TO NFPA STANDARDS

SCOPE OF WORK (NOT LIMITED TO)

THE SCOPE OF WORK INCLUDES, BUT NOT LIMITED TO:

MECHANICAL SCOPE:

1. PROVIDE AND INSTALL SUPPLEMENTAL COOLING FOR THE CENTRAL KITCHEN.
   - 1.1. TWO (2) NEW OUTDOOR AIR CONDITIONING UNITS WITH PIPING AND SUPPORTS
   - 1.2. EIGHT (8) NEW INDOOR MINI-SPLIT UNITS WALL-MOUNTED OVERHEAD.
   - 1.3. NEW REFRIGERANT AND CONDENSATE PIPING

ELECTRICAL SCOPE:

1. PROVIDE AND INSTALL ALL ELECTRICAL ITEMS REQUIRED TO POWER NEW MECHANICAL EQUIPMENT.
2. PROVIDE CONDUIT AND CONDUCTORS AS REQUIRED BY MECHANICAL PLANS.

SEISMIC NOTES

SEE MECHANICAL SHEETS & T0.2 FOR SEISMIC NOTES.

DEFERRED APPROVALS

1. NO DEFERRED APPROVAL ON THIS PROJECT

FIRE SAFETY DURING CONSTRUCTION

1. CONTRACTOR SHALL COMPLY WITH THE REQUIREMENTS OF CHAPTER 33 - FIRE SAFETY DURING CONSTRUCTION OF THE 2022 CALIFORNIA FIRE CODE.

PROJECT MILESTONES

PROJECT'S MAJOR MILESTONES:

A. PROJECT MOBILIZATION
B. OBTAIN PERMIT TO INSTALL HVAC EQUIPMENT
C. EQUIPMENT SUBMITTALS
D. INSTALLATION OF HVAC EQUIPMENT

DSA EXEMPTION NOTES

1. THIS PROJECT IS UNDERTAKEN SOLELY FOR THE PURPOSE OF ADDING SUPPLEMENTAL AIR CONDITIONING TO THE KITCHEN AREA. THIS PROJECT IS EXEMPT PER ACCESSIBILITY CODE PROVISION AND DOES NOT REQUIRE DSA ACCESS COMPLIANCE REVIEW OR APPROVAL UNDER DSA IR 11B-6. THIS PROVISION INCLUDES MECHANICAL ONLY PROJECTS THAT CONTAIN INCIDENTAL STRUCTURAL UPGRADES REQUIRED SOLELY FOR THE PURPOSE OF PERFORMING MECHANICAL ONLY WORK. HOWEVER, COMPLIANCE WITH THE CALIFORNIA BUILDING CODE IS STILL REQUIRED AND PROVIDED.

FIRE APPARATUS ACCESS

REFERENCE: 2022 CALIFORNIA FIRE CODE

1. SEE OVERALL SITE PLAN FOR SITE ACCESS FOR BOTH PUBLIC RIGHT OF WAY AND DSH FIRE DEPARTMENT.
2. TURNAROUND CAN BE ACCOMPLISHED BY USING EXISTING SITE ROADS. SEE T0.3.

DSA STAMP

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APPROVED FIRE AND PANIC ONLY
12/04/25
25-1380
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DSH

Client Agency
DEPARTMENT OF STATE HOSPITALS

JCCA
Architects · Engineers
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P: 310.212.7644 | F:310.212.5272

JCCA #: 24793-9

ROBERT R. NOLAN
31684
Exp. 6/30/25
MECHANICAL

No.

Issue	Date	Description
-	-	-

Project
SUPPLEMENTAL HVAC - CENTRAL KITCHEN

DEPARTMENT OF STATE HOSPITALS, METROPOLITAN
11401 BLOOMFIELD AVENUE
NORWALK, CALIFORNIA 90650

DEPARTMENT OF STATE HOSPITALS (DSH)

Supervisor	Designed	Drawn	Checked
	-	-	-

Issue Date: 11/27/2024
Vault File Number:

Sheet Title
TITLE SHEET

Project Number
00000000000XXXX

Reference North

Sheet Scale
AS SHOWN

Sheet Number
T0.1

V3
100% SUBMITTAL

DATE/ TIME: 15 Oct 2025, 9:53 AM
FILE: L:\2024\24793-9 Central Kitchen AC, DSH-M\CAD\247939_T01
JCCA

SEISMIC PROTECTION NOTES

1. ONLY ONE PRE-APPROVED BRACING SYSTEM SHALL BE USED FOR A RUN OF PIPE, DUCT, OR CONDUIT. COMPONENTS OF TWO OR MORE BRACING SYSTEMS SHALL NOT BE MIXED. A COPY OF THE CHOSEN BRACING SYSTEM(S) INSTALLATION GUIDE/MANUAL SHALL BE ON THE JOBSITE PRIOR TO STARTING THE INSTALLATION OF HANGERS AND/OR BRACES. IT IS THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN COPIES OF HCAI PEER REVIEW PRE-APPROVALS AND FURNISH THE OWNER WITH A COPY OF EACH.

2. IF AN HCAI PEER REVIEW PRE-APPROVED BRACING SYSTEM IS UTILIZED, PROVIDE COPIES OF PRE-APPROVED DETAILS ON JOB SITE PRIOR TO STARTING INSTALLATION OF THE COMPONENT OR SYSTEM.

3. IN NEW WORK AREAS AND LIMITED NEW WORK AREAS ALL NEW PIPING, CONDUIT, DUCTWORK, EQUIPMENT, PANELS, ETC. SHALL BE SEISMICALLY BRACED (SEE NOTE 4 BELOW).

4. SEISMIC ANCHORAGE OF ALL NEW PIPING, CONDUIT, DUCTWORK, EQUIPMENT, PANELS, ETC. SHALL BE BY ONE OF THE FOLLOWING MANUFACTURERS IN ACCORDANCE WITH THE 2022 CBC AND THE LATEST ISSUE OF "ENGINEERED SEISMIC BRACING OF SUSPENDED UTILITIES" AS PUBLISHED BY THE INTERNATIONAL SEISMIC APPLICATION TECHNOLOGY (ISAT). APPROVED MANUFACTURERS INCLUDE: ISAT OPM-0403-13, MASON INDUSTRIES OPM-0043-13, B-LINE/TOLCO OPM-0052-13, OR EQUAL.

5. DEFERRED APPROVAL - LAYOUT DRAWINGS, SHOWING THE BRACING/SUPPORT LOCATIONS AND REFERENCES TO DETAILS FROM THE RELEVANT HCAI PEER REVIEW PRE-APPROVALS FOR PIPING/DUCTS/CONDUITS EXCEPT FIRE SPRINKLERS, NEED TO BE SUBMITTED FOR USE BY THE INSPECTOR IF RECORD (IOR) (IF APPLICABLE FOR THIS PROJECT) AND OWNER. THE LAYOUT DRAWINGS, PREPARED PER ASCE 7 CHAPTER 13 AS MODIFIED BY CBC SECTIONS 1613A/1615A, NEED TO BE REVIEWED AND ACCEPTED BY THE OWNER PRIOR TO STARTING INSTALLATION OF THE BRACING/SUPPORT. IOR (IF APPLICABLE FOR THIS PROJECT) SHALL ENSURE THE ABOVE REQUIREMENTS ARE SATISFIED.

6. FOR ALL NEW SEISMIC BRACING OF PIPING, CONDUIT, DUCTWORK, EQUIPMENT, PANELS, ETC., A COPY OF EACH BRACING SYSTEM INSTALLATION GUIDE/MANUAL SHALL BE ON THE JOBSITE PRIOR TO STARTING THE INSTALLATION.

7. CONTRACTOR SHALL PROVIDE CALCULATIONS AND DETAILS FOR THE SUPPORT AND BRACING OF ALL PIPES, DUCTS, EQUIPMENT AND CONDUITS. SHOP DRAWINGS SHALL INCLUDE ALL BRACING AND SUPPORT LOCATIONS AND REFERENCES TO DETAILS FROM RELEVANT HCAI PEER REVIEW PRE-APPROVALS AND SHALL BE SUBMITTED TO THE IOR (IF APPLICABLE FOR THIS PROJECT) AND OWNER.

8. THE IOR (IF APPLICABLE FOR THIS PROJECT) SHALL ASSURE THAT THE FIELD INSTALLATION CONFORMS TO APPROVED SUBMITTED DETAILS.

9. ONCE EXACT LOCATIONS OF ALL CONDUIT HAVE BEEN ESTABLISHED, THE ENGINEER OF RECORD (EOR) MUST CHECK THE ADEQUACY OF THE SUPPORTING STRUCTURE TO ENSURE THAT THE ORIGINAL DESIGN IS STILL ADEQUATE. THE INSPECTOR OF RECORD SHALL ENSURE THAT ALL WORK IS PROPERLY INSTALLED PER THE APPLICABLE HCAI PEER REVIEW PRE-APPROVAL.

10. SPECIAL INSPECTION SHALL BE PERFORMED BY SPECIAL INSPECTOR IN ACCORDANCE WITH CBC 1705A.12.4 FOR SPECIAL SEISMIC CERTIFICATION.

PRE-APPROVED COMPONENT AND SYSTEM LIMITATIONS:

A. SOME PRE-APPROVALS HAVE LIMITATIONS THAT REQUIRE EITHER A DEFERRED SUBMITTAL COMMENT ON LAYOUT DRAWINGS AND COMPONENT DESIGN OR A PRE-ENGINEERED DESIGN THAT IS A PART OF THE CONTRACT DOCUMENTS. ALL OF THE PRE-APPROVED SYSTEMS REQUIRE THAT THE SEISMIC LATERAL FORCE, Fp, INCLUDING CONSIDERATION OF Ap AND Rp BE DETERMINED AT EACH LEVEL OF THE BUILDING SO THAT BRACE SPACING AND ANCHORAGE REQUIREMENTS CAN BE DETERMINED. PROVIDE ALL PARAMETERS REQUIRED TO COMPUTE Fp (e.g. Ap,Rp,Sps,Ip,h AND z AT EACH LEVEL) ON THE SHOP DRAWINGS.

PRE-APPROVED PIPE, DUCT, AND CONDUIT BRACING:

A. SHOP DRAWINGS OF THE SUPPORT AND BRACING SYSTEMS PER THE PRE-APPROVAL SHALL BE SUBMITTED TO THE DISCIPLINE IN RESPONSIBLE CHARGE OF THE PROJECT FOR REVIEW TO VERIFY THAT THE DETAILS ARE IN CONFORMANCE WITH ALL CODE REQUIREMENTS. THE SHOP DRAWINGS SHALL BE IN ACCORDANCE WITH ASCE 7-16 SECTION 13.6.

   a) A "SHOP DRAWING STAMP" MAY BE USED TO INDICATE COMPLIANCE WITH THIS REQUIREMENT.

   b) THE REGISTERED DESIGN PROFESSIONAL (OTHER THAN SEOR) MAY PROVIDE THE SHOP DRAWING STAMP FOR SMALL INSTALLATIONS AT THE DISCRETION OF THE SEOR.

B. THE CONTRACTORS STRUCTURAL ENGINEER SHALL DESIGN ANY SUPPLEMENTARY FRAMING THAT IS NEEDED TO RESIST THE LOADS, MAINTAIN STABILITY AND/OR IS REQUIRED FOR INSTALLATION OF PRE-APPROVED SYSTEM. THE SUPPLEMENTARY FRAMING SHALL BE SUBMITTED TO THE SEOR PRIOR TO CONSTRUCTION FOR REVIEW.

C. THE SHOP DRAWINGS (WITH THE SHOP DRAWING STAMP) SHALL BE KEPT ON THE JOBSITE AND CAN THEN BE USED FOR INSTALLATION OF THE SUPPORT AND BRACING.

DSA STAMP

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25-1380
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DSH

Client Agency
DEPARTMENT OF STATE HOSPITALS

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JCCA #: 24793-9

ROBERT R. NOLAN
31684
Exp. 6/30/25
MECHANICAL

No.

Issue	Date	Description
-	-	-

Project

SUPPLEMENTAL
HVAC - CENTRAL
KITCHEN

DEPARTMENT OF STATE
HOSPITALS, METROPOLITAN
11401 BLOOMFIELD AVENUE
NORWALK, CALIFORNIA 90650

DEPARTMENT OF
STATE HOSPITALS
(DSH)

Supervisor	Designed	Drawn	Checked
	-	-	-

Issue Date
11/27/2024

Vault File Number

Sheet Title
SEISMIC PROTECTION
NOTES

Project Number
00000000000XXXX

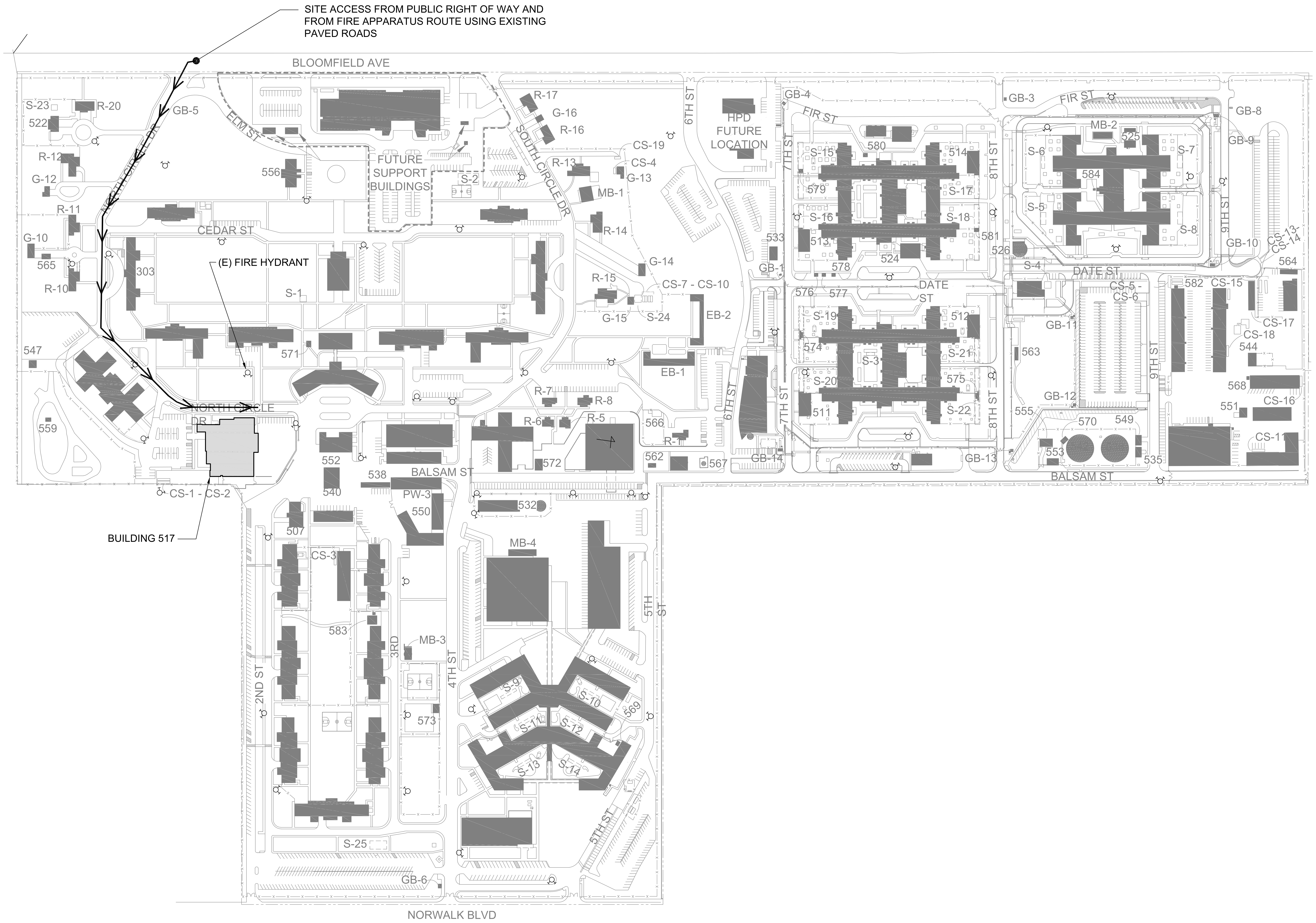
Reference North

Sheet Scale
AS SHOWN

Sheet Number
T0.2

V3
100% SUBMITTAL

JCCA
DATE/ TIME: 11 Mar 2025, 11:22 AM
FILE: L:\2024\24793-9 Central Kitchen AC, DSH-M\CAD\247939_T02



FOR REFERENCE ONLY

FIRE ACCESS SITE PLAN

SCALE: 0 20 60 120 FEET 240
1" = 120'

N

GENERAL NOTE:

1. PROTECT 20FT FIRE LANES DURING CONSTRUCTION.

LEGEND:

←	FIRE TRUCK ROUTE
⚲	(E) FIRE HYDRANT

DATE/ TIME: 11 Jun 2025, 2:59 PM
FILE: L:\2024\24793-9 Central Kitchen AC, DSH-M\CAD\247939_T03
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31684
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Issue	Date	Description
-	-	-

Project

SUPPLEMENTAL
HVAC - CENTRAL
KITCHEN

DEPARTMENT OF STATE
HOSPITALS, METROPOLITAN
11401 BLOOMFIELD AVENUE
NORWALK, CALIFORNIA 90650

DEPARTMENT OF
STATE HOSPITALS
(DSH)

Supervisor	Designed	Drawn	Checked
	-	-	-

Issue Date
11/27/2024

Vault File Number

Sheet Title
FIRE ACCESS SITE PLAN

Project Number
00000000000XXXX

Reference North

Sheet Scale
AS SHOWN

Sheet Number
T0.3

V3
100% SUBMITTAL

GENERAL

ITEM	SUBMITTAL REQUIREMENTS	SUBMITTAL RESPONSE	REFERENCE
1	SEE FOR SPECIFIC SECTION COMMENTS	NOT APPLICABLE	-
2	PROVIDE A COMPLETE PLAN REVIEW APPLICATION	TWO (2) PLAN REVIEW APPLICATIONS PROVIDED WITH SUBMITTAL	-
3	SUBMIT PLANS SUFFICIENT SIZE	SHEET SIZE: 42"X30"	ALL RELEVANT SHEETS
4	PROVIDE SITE ADDRESS	3102 HIGHLAND AVE., PATTON, CA 92369	T0.1
5	PROVIDE NAME OF OWNER AND OCCUPANT	OWNER: DEPARTMENT OF STATE HOSPITALS OCCUPANT: DEPARTMENT OF STATE HOSPITALS	T0.1
6	IDENTIFY IF NEW CONSTRUCTION OR T.I	BUILDING 517: TENANT IMPROVEMENT	-
7	IDENTIFY IF NEW OR EXISTING TENANT SPACE	BUILDING 517: EXISTING TENANT SPACE	-
8	IDENTIFY IF DEFERRED SUBMITTAL	NOT APPLICABLE	-
9	ADD OSFM FILE NUMBER TO TITLE SHEET	OSFM NO IS NOTED ON THE TITLE SHEET	T0.1
10	PROJECT IS A PHASED SUBMITTAL	PROJECT IS NOT PHASED	-
11	SLIP SHEETS SHALL BE BOUND TO SET	NOT APPLICABLE	-
12	SHEET INDEX	SHEET INDEX IS ON T0.1	T0.1
13	WET STAMP AND SIGN SHEETS	ELECTRONIC SIGNATURE PROVIDED ON DOCUMENT	ALL SHEETS
14	SCOPE OF WORK	SCOPE OF WORK IS INCLUDED ON TITLE SHEET	T0.1
15	PROVIDE A KEY PLAN COORDINATED TO EACH SHEET	SITE KEY PLAN IS PROVIDED	ALL RELEVANT SHEETS
16	PROVIDE A NORTH ORIENTED SITE MAP	NORTH ORIENTED SITE PLAN IS PROVIDED	T0.3
17	ORIENTATE ALL SHEETS TO NORTH	SITE PLAN IS ORIENTED TO NORTH, INDIVIDUAL DRAWINGS HAVE KEYPLAN	ALL RELEVANT SHEETS
18	PROVIDE ADOPTED CODE CYCLE LISTINGS AND STANDARDS	ADOPTED CODE CYCLE LISTINGS ARE INCLUDED ON TITLE SHEET	T0.1
19	PROVIDE A LEGIBLE SCALE. TYPICALLY 1/8"	ALL FLOOR PLANS ARE 1/8" SCALE MINIMUM. ALL SITE PLANS ARE 1"=30'	ALL RELEVANT SHEETS
20	PROVIDE APPROVED REFERENCE PLANS/DOCUMENTATION	NOT APPLICABLE	-

ACCESS AND WATER SUPPLY

ITEM	SUBMITTAL REQUIREMENTS	SUBMITTAL RESPONSE	REFERENCE
1	PROVIDE LOCAL FIRE AUTHORITY APPROVAL LETTER	NOT APPLICABLE	T0.4
2	FIRE DEPARTMENT ACCESS	PROVIDED ON FIRE ACCESS SITE PLAN	T0.3
3	FIRE DEPARTMENT CONNECTION	NOT AVAILABLE - USE FIRE HYDRANTS	-
4	FIRE HYDRANTS	PROVIDED ON FIRE ACCESS SITE PLAN	T0.3
5	FIRE ALARM ANNUNCIATOR	NOT APPLICABLE	-
6	FIRE ALARM CONTROL PANEL	NOT APPLICABLE	-
7	KNOX BOX/KEY SWITCH	NOT AVAILABLE	-
8	EMERGENCY RESPONDER RADIO COVERAGE	LOCAL FIRE DEPARTMENT SHOWN ON SITE PLAN	T0.3
9	ELEVATOR GURNEY ACCOMODATION	NOT APPLICABLE	-
10	PROVIDE A COMPLETE FIRE ACCESS PLAN	ALL BUILDINGS ARE FIRE TRUCK ACCESSIBLE USING EXISTING ROADS	T0.3
11	PROVIDE 6 MO. CURRENT SITE FIRE FLOW INFORMATION	NOT APPLICABLE	-

JCCA DATE/ TIME: 11 Jun 2025, 4:16 PM
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25-1380
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JCCA #: 24793-9

ROBERT R. NOLAN
31684
Exp. 6/30/25
MECHANICAL

No.

Issue	Date	Description
-	-	-

Project
SUPPLEMENTAL HVAC - CENTRAL KITCHEN

DEPARTMENT OF STATE HOSPITALS, METROPOLITAN
11401 BLOOMFIELD AVENUE
NORWALK, CALIFORNIA 90650

DEPARTMENT OF STATE HOSPITALS (DSH)

Supervisor	Designed	Drawn	Checked
	-	-	-

Issue Date: 11/27/2024
Vault File Number:

Sheet Title
STATE FIRE MARSHAL TRIAGE LIST

Project Number
00000000000XXXX

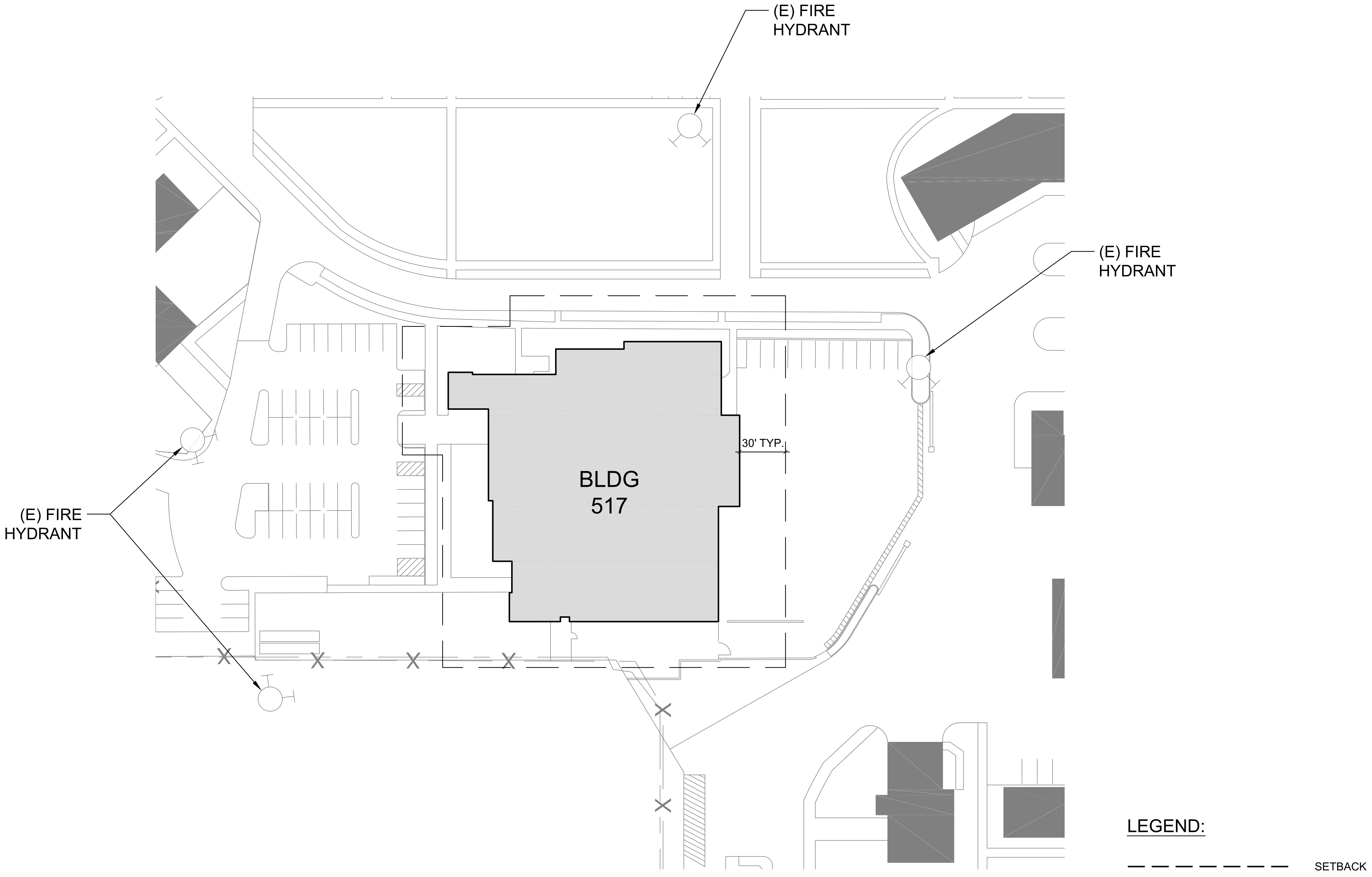
Reference North

Sheet Scale: AS SHOWN
Sheet Number: T0.4

V3
100% SUBMITTAL

BUILDING INFORMATION

BUILDING NAME	OCCUPANCY GROUP	CONSTRUCTION TYPE	NUMBER OF STORIES	BUILDING HEIGHT	BUILDING AREA IN SQ. FT.	AREA OF PROJECT	USE	ALLOWABLE AREA (CBC TABLE 506.2)	ALLOWABLE STOREY (CBC TABLE 504.4)	SEPARATED / NONSEPARATED	SPRINKLER COVERAGE	FIRE ALARM	OTHER PROTECTION SYSTEM	SMOKE CONTROL SYSTEM	OCCUPANT LOAD	YEAR BUILDING CONSTRUCTED	HIGH FIRE HAZARD SEVERITY ZONE	SEISMIC JOINT	EMERGENCY RESPONDER RADIO COVERAGE
BUILDING 517	B S-2	V-B	1	38'	27,232	605	KITCHEN STORAGE OFFICE	27,000	3	NONSEPARATED	YES	YES	NO	NO	161	2007	NO	NO	YES



BUILDING 517 SITE PLAN

SCALE: 0 5 25 50 FEET 100

1" = 50'

N

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	-	-	-

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Vault File Number:

Sheet Title
BUILDING INFORMATION
BLDG. 517 SITE PLAN

Project Number
00000000000XXXX

Reference North

Sheet Scale
AS SHOWN

Sheet Number
T0.5

V3
100% SUBMITTAL

DATE/ TIME: 14 Oct 2025, 5:06 PM
FILE: L:\2024\24793-9 Central Kitchen AC, DSH-M\CAD\247939_T05
JCCA

GENERAL NOTES

1. ALL WORK SHALL COMPLY WITH THE 2022 EDITIONS OF THE CALIFORNIA BUILDING, MECHANICAL, PLUMBING, AND OTHER APPLICABLE FEDERAL, STATE AS ADOPTED AND ENFORCED BY THE AUTHORITY HAVING JURISDICTION (AHJ). IN CASE THE PLANS SHOW MORE STRINGENT REQUIREMENTS, THE PLANS SHALL GOVERN THE DESIGN, YET NOTHING ON THE DESIGN DOCUMENTS SHALL BE INTERPRETED AS AUTHORITY TO VIOLATE CODE(S) OR REGULATION(S).
2. SUBMISSION OF BID IN CONNECTION WITH THIS WORK SHALL IMPLY THAT THE BIDDER HAS EXAMINED THE JOB SITE UNDER WHICH THE CONTRACTOR WILL BE OBLIGATED TO OPERATE UNDER THIS CONTRACT. NO EXTRA CHARGE WILL BE ALLOWED FOR FAILURE OF ANY BIDDER TO EXAMINE THE SITE PRIOR TO BID.
3. WHERE USED, THE TERM "PROVIDE" SHALL MEAN "FURNISH AND INSTALL".
4. CONTRACTOR AND SUBCONTRACTORS SHALL VERIFY ALL DIMENSIONS AT THE JOB SITE PRIOR TO COMMENCEMENT OF ANY CONSTRUCTION. THE CONSULTANTS AND OWNER SHALL IMMEDIATELY BE NOTIFIED OF ANY DISCREPANCIES.
5. THE CONTRACTOR SHALL UNCONDITIONALLY GUARANTEE ALL WORK PERFORMED AND ALL EQUIPMENT AND MATERIALS FURNISHED FOR A PERIOD OF ONE YEAR FROM THE DATE OF FINAL ACCEPTANCE OF THE WORK BY THE OWNER'S REPRESENTATIVE.
6. DIMENSIONS SHALL TAKE PRECEDENCE OVER SCALES SHOWN ON THE DRAWINGS. TYPICAL DETAILS AND GENERAL NOTES ARE MINIMUM REQUIREMENTS TO BE USED WHEN CONDITIONS ARE NOT SHOWN OTHERWISE.
7. NOTES AND DETAILS ON THE DRAWINGS SHALL TAKE PRECEDENCE OVER GENERAL NOTES AND TYPICAL DETAILS. WHERE NO DETAILS ARE SHOWN, CONSTRUCTION SHALL CONFORM TO SIMILAR ON PROJECT.
8. IN THE EVENT OF A CONFLICT OR INCONSISTENCY BETWEEN ITEMS INDICATED ON DESIGN PLANS WITH CODE REQUIREMENTS, THE MORE STRINGENT STANDARD SHALL PREVAIL.
9. CONTRACTOR SHALL FURNISH LABOR, MATERIALS, EQUIPMENT, AND TRANSPORTATION AS REQUIRED TO PROPERLY INSTALL ALL NEW HVAC SYSTEMS OR RELATED COMPONENTS AS INDICATED ON PLANS AND SPECIFIED HEREIN.
10. ALL NEW EQUIPMENT AND MATERIAL TO BE INSTALLED AS PART OF THE RENOVATION SHALL BEAR AN UNDERWRITERS LABORATORIES LABEL (UL), AND INSTALLED IN THE APPROVED MANNER FOR WHICH THEY ARE DESIGNED.
11. CONTRACTOR SHALL DOCUMENT AND RELAY ANY MAJOR DEVIATIONS FROM THE DESIGN DOCUMENTS, AND ATTAIN APPROVAL FROM THE E.O.R. BEFORE PROCEEDING. AS-BUILT COPIES SHALL BE PROVIDED INDICATING ALL CHANGES AND DEVIATIONS MADE DURING CONSTRUCTION. CONTRACTOR SHALL PROVIDE COMPLETED AS-BUILT DRAWINGS TO E.O.R. FOR RECORD AND PUBLISHING.
12. ALL WORK SHALL BE PERFORMED IN A CLEAN AND WORKMANLIKE MANNER. CARE SHALL BE EXERCISED TO MINIMIZE ANY INCONVENIENCE OR DISTURBANCE TO OTHER AREAS OF THE BUILDING WHICH ARE TO REMAIN IN OPERATION. ISOLATE WORK AREAS BY MEANS TO KEEP DUST AND DIRT WITHIN THE CONSTRUCTION AREA.
13. NO PIPING, EQUIPMENT, ETC. SHALL BE REMOVED, DISCONNECTED OR SHUT DOWN WITHOUT PRIOR REVIEW WITH THE OWNER'S REPRESENTATIVE TO CONFIRM THAT AREAS TO REMAIN IN OPERATION WILL NOT BE AFFECTED. IF ANY AREAS NOT WITHIN THE SCOPE OF WORK SHALL BE AFFECTED BY ANY SHUTDOWN, REMOVAL OR DISCONNECTION, THE OWNER NEEDS ADVANCE NOTICE PER APPROVAL SCHEDULE.
14. THE ARRANGEMENT OF EQUIPMENT, DUCTWORK, AND PIPING SHOWN ON THE DRAWINGS IS BASED UPON INFORMATION AVAILABLE TO THE ENGINEER AT THE TIME OF DESIGN AND IS NOT INTENDED TO SHOW EXACT DIMENSIONS PECULIAR TO A SPECIFIC MANUFACTURER. THE DRAWINGS ARE, IN PART, DIAGRAMMATIC AND SOME FEATURES OF THE ILLUSTRATED EQUIPMENT INSTALLATION MAY REQUIRE REVISION TO MEET ACTUAL EQUIPMENT INSTALLATION REQUIREMENTS. STRUCTURAL SUPPORTS, FOUNDATIONS, CONNECTED PIPING, VALVES, PIPE SUPPORTS AND ELECTRICAL CONDUIT SPECIFIED MAY HAVE TO BE ALTERED OR ADDITIONAL ITEMS REQUIRED TO ACCOMMODATE THE EQUIPMENT PROVIDED. NO ADDITIONAL PAYMENT WILL BE MADE FOR SUCH REVISIONS, ALTERATIONS AND ADDITIONS.
15. CONTRACTOR SHALL VERIFY ALL DIMENSIONS AT THE SITE MAKING FIELD MEASUREMENTS AND SHOP DRAWINGS NECESSARY FOR FABRICATION AND INSTALLATION OF HVAC SYSTEMS. MAKE ALLOWANCE FOR BEAMS, PIPES AND OTHER OBSTRUCTIONS IN BUILDING CONSTRUCTION. CHECK DRAWINGS SHOWING WORK OF OTHER TRADES AND CONSULT WITH THE STATE'S REPRESENTATIVE IN THE EVENT OF POTENTIAL INTERFERENCE. SHOP DRAWINGS SHALL BE MINIMUM 1/4"=1'-0" SCALE, INDICATING FITTINGS, SIZES, WELDS AND CONFIGURATIONS AND SUBMITTED TO ENGINEER FOR REVIEW.
16. CONTRACTOR SHALL COORDINATE HIS WORK WITH ALL OTHER TRADES PRIOR TO FABRICATION, PURCHASE AND/OR INSTALLATION OF HIS WORK.
17. BEFORE COMMENCEMENT OF WORK, CONTRACTOR SHALL VERIFY THE EXACT LOCATIONS, ELEVATIONS, AND CHARACTERISTICS OF ALL UTILITIES.
18. THE CONTRACTOR SHALL SECURE AND PAY ALL FEES AND PERMITS PERTAINING TO THE CONTRACT.
19. EXISTING MATERIALS THAT ARE REMOVED SHALL NOT BE REUSED IN NEW SYSTEMS, EXCEPT WHERE INDICATED AS BEING RELOCATED.
20. ALL EQUIPMENT SHALL BE INSTALLED IN STRICT COMPLIANCE WITH THE MANUFACTURER'S WRITTEN INSTALLATION INSTRUCTIONS.
21. GALVANIZED SHEET METAL SHALL BE PROVIDED FOR ALL HVAC DUCT SYSTEMS, AND CONSTRUCTED, SUPPORTED AND INSTALLED IN ACCORDANCE WITH THE 2022 CALIFORNIA MECHANICAL CODE AND THE LATEST SMACNA STANDARDS.
22. ALL PIPING SHALL BE INSTALLED IN A NEAT WORKMANSHIP-LIKE MANNER AND BE SUPPORTED AS REQUIRED BY CODES. PIPING SHALL BE SET UP AND DOWN AND OFFSET AS REQUIRED TO SUIT FIELD CONDITIONS. DIELECTRIC COUPLINGS SHALL BE USED WHERE DISSIMILAR METALS ARE JOINED.
23. CONTRACTOR SHALL PROVIDE ALL NECESSARY SUPPORTS FOR FIXTURES, DUCTWORK, PIPING, AND MECHANICAL EQUIPMENT, IN ORDER TO COMPLY WITH SEISMIC REQUIREMENTS AS OUTLINED BY THE LATEST EDITION(S) OF THE CALIFORNIA BUILDING CODE, SMACNA INSTALLATION STANDARDS.
24. ALL VALVES, UNIONS, ETC. TO BE LINE SIZE UNLESS OTHERWISE INDICATED ON DRAWINGS.
25. UNIONS SHALL BE PROVIDED AND INSTALLED AFTER EACH THREADED TYPE VALVE AND PRIOR TO EQUIPMENT CONNECTIONS.
26. ALL BRACING OF DUCTS AND PIPING SHALL BE
    A. INSTALLED IN ACCORDANCE WITH SMACNA GUIDELINES, OR AS DETAILED AND SPECIFIED HEREIN. SEE SEISMIC PROTECTION NOTE SHEET FOR MORE INFORMATION.
    B. WHERE BRACING DETAILS ARE NOT SHOWN ON THE DRAWINGS OR IN THE GUIDELINES, THE FIELD INSTALLATION SHALL BE SUBJECT TO THE APPROVAL OF THE STRUCTURAL ENGINEER
27. A COPY OF THE GUIDELINES PUBLISHED BY SMACNA SHALL BE PROVIDED BY THE CONTRACTOR AND KEPT ON THE JOB AT ALL TIMES.
28. CONTRACTOR SHALL NOT BORE, NOTCH, CUT, OR PENETRATE INTO A STRUCTURAL MEMBER WITHOUT WRITTEN APPROVAL FROM THE STRUCTURAL ENGINEER OF RECORD AND STATE'S REPRESENTATIVE.
29. ALL CONDUIT AND WIRE REQUIRED FOR THE DIRECT DIGITAL CONTROL SYSTEM SHALL BE PROVIDED AND INSTALLED BY THE CONTRACTOR. THE CONTROLS CONTRACTOR SHALL BE RESPONSIBLE TO PROVIDE ALL ELECTRICAL ITEMS REQUIRED FOR AN OPERATIONAL CONTROLS SYSTEM.
30. ALL DUCTWORK AND PIPING INSULATION SHALL MEET FIRE AND SMOKE HAZARD RATING AS TESTED UNDER PROCEDURE ASTM E-84, NFPA 255 AND UL 723 AND SHALL NOT EXCEED FLAME SPREAD RATING OF 25 AND MAXIMUM SMOKE DEVELOPED RATING OF 50.
31. MECHANICAL CONTRACTOR SHALL FIELD VERIFY ROUTING OF ALL DUCTWORK AND PIPING AND SUBMIT DETAILED, CLEARLY LEGIBLE, FULL SIZE (MINIMUM 30"x42") DUCT AND PIPING SHOP DRAWINGS IN AUTOCAD FORMAT FOR APPROVAL FROM THE ENGINEER PRIOR TO FABRICATION, CONSTRUCTION AND INSTALLATION OF DUCTWORK AND PIPING.
32. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS OF COMPONENTS AT LEAST TWO WEEKS PRIOR TO INSTALLATION.
33. OWNER'S REPRESENTATIVE SHALL INSPECT AND APPROVE OF ALL WORK BEFORE COVERING WITH INSULATION OR INSTALLATION WITHIN CEILING SPACE.
34. APPROVAL OR DISAPPROVAL BY THE INSPECTOR OF RECORD DOES MEAN APPROVAL OR FAILURE TO COMPLY WITH THE REQUIREMENTS OF THE PLANS AND SPECIFICATIONS. ANY DESIGN WHICH IS NOT CLEAR OR IS AMBIGUOUS SHALL BE REFERRED TO THE EOR AND OWNER FOR INTERPRETATION OR CLARIFICATION.
35. CONTRACTOR SHALL USE ALL NECESSARY APPROVED MEANS TO PROTECT HIS PORTION OF THE WORK BEFORE, DURING, AND AFTER INSTALLATION, UNTIL ACCEPTED, AND TO PROTECT THE INSTALLED WORK AND MATERIALS OF OTHER TRADES IN A LIKE MANNER. IN THE EVENT OF ANY DAMAGE, CONTRACTOR SHALL MAKE ALL REQUIRED REPAIRS AND REPLACEMENTS TO THE SATISFACTION OF THE EOR AND OWNER AND AT NO ADDITIONAL COST TO THE OWNER.
36. NEITHER THE E.O.R. OR OWNER SHALL BE RESPONSIBLE FOR THE CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES OR PROCEDURES, OR FOR THE SAFETY PRECAUTIONS AND PROGRAMS IN CONNECTION WITH THE WORK. ALL SUCH MATTERS ARE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
37. A MINIMUM OF 36" CLEAR WORKING SPACE, NOT LESS THAN 30" WIDE, SHALL BE MAINTAINED IN FRONT OF ALL SWITCHES, OVERCURRENT PROTECTION DEVICES, AND ELECTRICAL CONTROL COMPONENTS.
38. CONTRACTOR SHALL OBTAIN AND FOLLOW ALL REQUIREMENTS, GUIDELINES, RULES, AND PROCEDURES FOR CONSTRUCTION.
39. DEMOLITION OF ANY EXISTING AC UNITS, DUCTWORK, AND PIPING SHALL BE COORDINATED WITH FACILITIES AND OPERATIONS. CONTRACTOR SHALL SCHEDULE WORK TO MINIMIZE SHUT-DOWN OF EXISTING UNITS.
40. EXISTING SURFACES AND AREAS NOT INCLUDED IN THE WORK AREA SHALL BE PROTECTED FROM DAMAGE BY APPROVED MEANS. IF DAMAGE OCCURS, THE DAMAGE SHALL BE REPAIRED BY THE CONTRACTOR TO SATISFACTION OF THE E.O.R. AND OWNER AND AT NO ADDITIONAL COST TO THE OWNER.
41. REMOVE ALL SURPLUS MATERIALS, EQUIPMENT AND DEBRIS INCIDENTAL TO THIS PROJECT AND LEAVE THE PREMISES CLEAN AND ORDERLY UPON COMPLETION OF WORK.
42. UPON COMPLETION OF PIPING, BUT PRIOR TO APPLICATION OF INSULATION, THE CONTRACTOR SHALL TEST THE PIPING SYSTEMS FOR LEAKS. EQUIPMENT WHICH MAY BE DAMAGED BY THE SPECIFIED TEST CONDITIONS SHALL BE ISOLATED.
43. ON INSULATED PIPING: ALL VALVES HANDLES, AIR VENTS AND PRESSURE/ TEMPERATURE READOUT PORTS TO BE PROVIDED WITH 2" EXTENSION TO CLEAR PIPING INSULATION.
44. ALL EXISTING DUCTING TO REMAIN SHALL BE CLEANED
45. CONTRACTOR SHALL COORDINATE WITH OWNER TO SCHEDULE INSTALLATION OF INDOOR UNITS DURING OFF-HOURS. NO HEAVY EQUIPMENT SHALL BE USED DURING INSTALLATION.
46. REFRIGERANT PIPING AND ALL JOINTS INSTALLED ON THE PREMISES SHALL BE LEFT EXPOSED TO VIEW FOR VISUAL INSPECTION AND SHALL NOT BE COVERED OR ENCLOSED UNTIL THE REQUIRED INSPECTION HAS BEEN COMPLETED AND APPROVED BY THE AUTHORITY HAVING JURISDICTION, IN ACCORDANCE WITH CMC SECTION 1109.8.
47. PIPING AND TUBING SHALL BE SECURELY FASTENED TO A PERMANENT SUPPORT WITHIN 6 FEET FOLLOWING THE FIRST BEND IN SUCH TUBING FROM THE COMPRESSOR AND WITHIN 2 FEET OF EACH SUBSEQUENT BEND OR ANGLE.
48. BASIS OF DESIGN CONTACT:

LENNOX COMMERCIAL
RAMIRO RODRIGUEZ
PH: 951-491-9195
EMAIL: RAMIRO.RODRIGUEZ@LENNOX.COM

REFRIGERANT CONCENTRATION LIMIT

REFRIGERANT: R-410A
ALLOWABLE QUANTITY PER CMC 1102.3: 26-LBS PER1,000 CF OF SPACE

SMALLEST AREA FOR POTENTIAL LEAK

ROOM: 107 - WOMEN'S RESTROOM
DIMENSIONS (LxWxH): 20' 8" X 9' 6" X 9'
VOLUME (CF): 1,767
ALLOWABLE REFRIGERANT QTY: **45.942-LBS**

POUNDS (LBS) OF REFRIGERANT IN SYSTEM

REFRIGERANT LOCATION	LINEAR DENSITY (LBS/FT)	LENGTH (FT)	QTY (LBS)
EQUIPMENT CHARGE:			23.100
PIPE - 1/2" LIQUID	0.098	85	8.345
PIPE - 3/8" LIQUID	0.055	40	2.209
PIPE - 1-1/8" SUCTION	0.002	85	0.153
PIPE - 5/8" SUCTION	0.001	40	0.022
ACCESSORIES/BUFFER			2.000
TOTAL			**35.829**

SYSTEM OK

ABBREVIATIONS

SYMBOL	DESCRIPTION
AFF	ABOVE FINISHED FLOOR
BDD	BACKDRAFT DAMPER
BSC	BIOSAFETY CABINET
CD	CEILING DIFFUSER
CFM	CUBIC FEET PER MINUTE
CFSD	COMBINATION FIRE/SMOKE DAMPER
CV	CONTROL VALVE
(A)	EXISTING
EA	EXHAUST AIR
EAT	ENTERING AIR TEMPERATURE
ESP	EXTERNAL STATIC PRESSURE
EWT	ENTERING WATER TEMP.
°F	FAHRENHEIT
FC	FAN COIL UNIT
FLA	FULL LOAD AMPS
FPM	FEET PER MINUTE
FS	FIRE SPRINKLER
FT	FEET
GPM	GALLONS PER MINUTE
HHWS	HEATING HOT WATER SUPPLY
HHWR	HEATING HOT WATER RETURN
HTS	HIGH TEMP. WATER SUPPLY
HTR	HIGH TEMP. WATER RETURN
HOA	HAND/OFF/AUTO SWITCH
HP	HORSEPOWER
HR	HOUR
IN	INCHES
IN. W.C.	INCHES OF WATER COLUMN
KW	KILOWATT
L	LENGTH
(L)	LINER
LAT	LEAVING AIR TEMPERATURE
LBS	POUNDS
LWT	LEAVING WATER TEMP.
MAX	MAXIMUM
MIN	MINIMUM
MUA	MAKEUP AIR
(N)	NEW
OSA	OUTSIDE AIR
dP	DIFFERENTIAL PRESSURE
PH	PHASE
QTY	QUANTITY
RA	RETURN AIR
RF	RETURN FAN
RG	RETURN GRILLE
RH	RELATIVE HUMIDITY
SA	SUPPLY AIR
SD	SMOKE DETECTOR
SF	SUPPLY FAN
SR	SUPPLY REGISTER
SQFT.	SQUARE FEET
TI	TEMPERATURE INDICATOR
TT	TEMPERATURE TRANSDUCER
TYP	TYPICAL
TSP	TOTAL STATIC PRESSURE
V	VOLTS
VAV	VARIABLE AIR VOLUME
VEL	VELOOWNER
VFD	VARIABLE FREQUENCY DRIVE
VIF	VERIFY IN FIELD
VP	VELOOWNER PRESSURE
WG	WATER GAUGE
WT	WEIGHT

MECHANICAL SYMBOL LIST

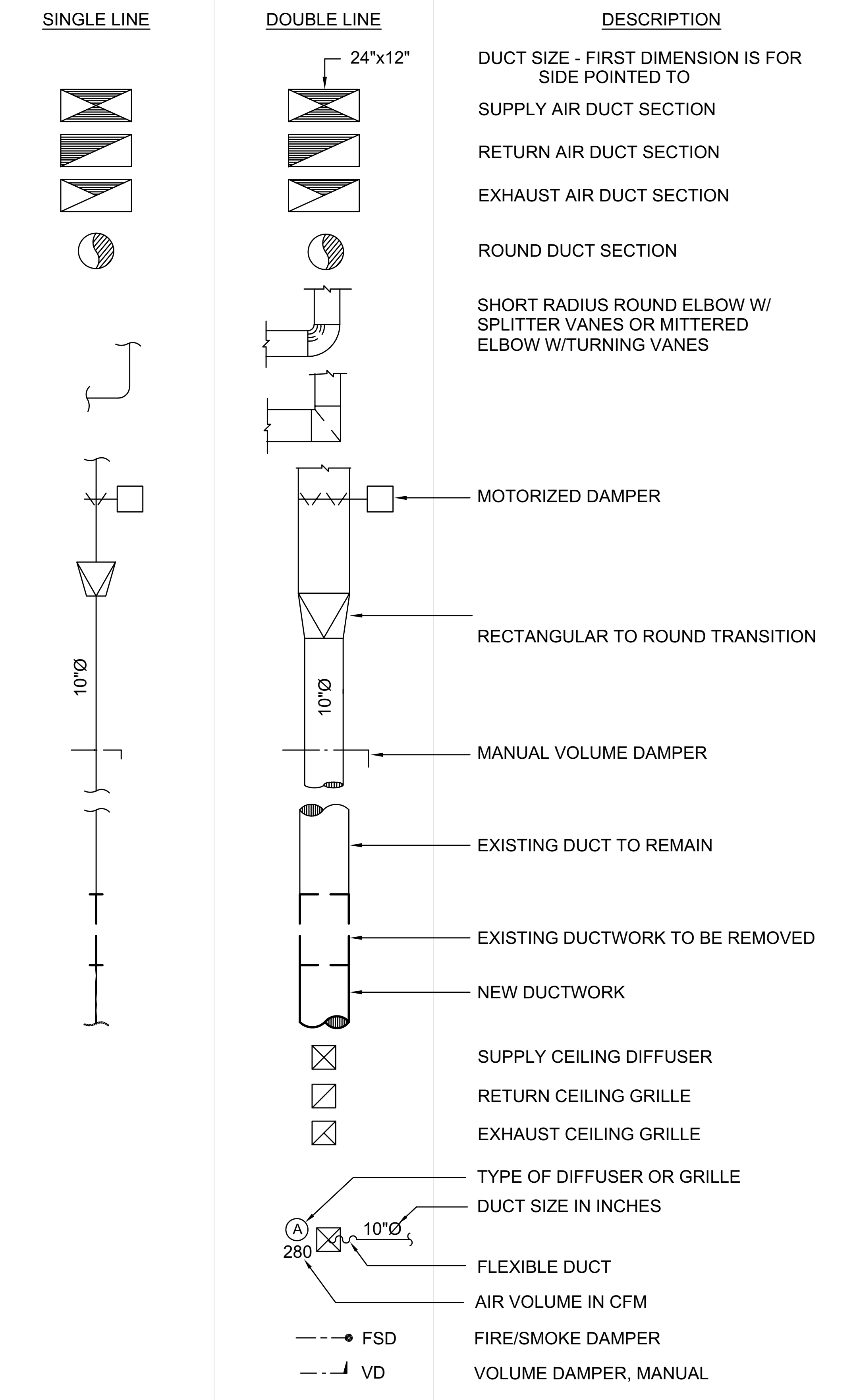
SYMBOL	DESCRIPTION
⊕	POINT OF CONNECTION
◒	POINT OF DISCONNECTION
☐1	NEW WORK KEYNOTE
◇1	DEMOLITION KEYNOTE
CP	CONTROL PANEL
HS	HUMIDITY SENSOR
TS	THERMOSTAT SENSOR
T	THERMOSTAT
SD	DUCT SMOKE DECTOR
AD	AIR TIGHT DAMPER

TYPICAL PLAN LEGEND

SYMBOL	DESCRIPTION
───	LIGHT, THIN LINES INDICATE EXISTING.
━━━	HEAVY, THICK LINES INDICATE NEW.
━ ━ ━	HEAVY, SHORT DASHED INDICATE DEMOLITION OR REMOVAL.

THIS SYMBOLOGY TO BE USED BY MECHANICAL AND LAYOUT FOR ALL FLOOR PLANS, EQUIPMENT, DEVICES, UTILITIES, ETC., SHOWN ON DRAWINGS.

HVAC SYMBOLS



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Client Agency
DEPARTMENT OF STATE HOSPITALS

JCCA
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JCCA #: 24793-9

ROBERT R. NOLAN
31684
Exp. 6/30/25
MECHANICAL

No.

Issue	Date	Description
-	-	-

Project
SUPPLEMENTAL
HVAC - CENTRAL
KITCHEN

DEPARTMENT OF STATE
HOSPITALS, METROPOLITAN
11401 BLOOMFIELD AVENUE
NORWALK, CALIFORNIA 90650

DEPARTMENT OF
STATE HOSPITALS
(DSH)

Supervisor	Designed	Drawn	Checked
	-	-	-

Issue Date: 11/27/2024
Vault File Number:

Sheet Title
MECHANICAL GENERAL NOTES

Project Number
00000000000XXXX

Reference North

Sheet Scale
AS SHOWN

Sheet Number
M0.1

V3 100% SUBMITTAL

DATE/ TIME: 15 Oct 2025, 10:34 PM
FILE: L:\2024\24793-9 Central Kitchen AC, DSH-M\CAD\247939_M01
JCCA

VARIABLE REFRIGERANT FLOW (VRF) INDOOR UNIT SCHEDULE

EQUIPMENT TAG	MANUFACTURER MODEL NO.	REFRIGERANT	RATED PERFORMANCE			NOMINAL COOLING		NOMINAL HEATING		FAN			ELECTRICAL						NOISE (dB(A))	REFRIGERANT		PRODUCT WEIGHT	REMARKS
			MBH	COOLING (BTU/H)	HEATING (BTU/H)	INDOOR TEMP	OUTDOOR TEMP	INDOOR TEMP	OUTDOOR TEMP	AIRFLOW			VOLT	PHASE	HZ	MCA	MOP	FAN FLA		LIQUID PIPE (IN.)	GAS PIPE (IN.)		
										LOW (CFM)	MID (CFM)	HIGH (CFM)											
IU 1 THRU IU 8	SAMSUNG AM024TNVDCH/AA	R410A	24	23,200	23,800	80°F DB 67°F WB	95°F DB 75°F WB	70°F DB 60°F WB	47°F DB 43°F WB	466.20	529.70	593.30	208/230	1	60	0.50	15.00	0.40	43.00	3/8	5/8	26.46	1 2 3 4 5 6 7 8 9 10 11

NOTES:

1 SELECTION BASED ON EQUIPMENT MANUFACTURED BY SAMSUNG.

2 SEE OUTDOOR CONDENSING UNIT SCHEDULE FOR DETAILS REGARDING CONNECTION CAPACITY, OUTDOOR CONDITIONS AND OTHER FACTORS ASSOCIATED WITH CORRECTED CAPACITIES.

3 INDOOR (AIR HANDLING) UNITS SHALL BE OF THE SAME MANUFACTURER AND SHALL BE CERTIFIED FOR USE WITH EACH OTHER. REMOTE CONDENSING UNITS SHALL BE SECURELY MOUNTED AS DETAILED IN THE MANUFACTURERS INSTALLATION MANUAL.

4 SIZE REFRIGERANT LINES IN ACCORDANCE WITH MANUFACTURER DESIGN SOFTWARE AFTER ESTIMATED LINE LENGTHS THAT ARE PROVIDED AND INCLUDED IN THE REPORT.

5 MECHANICAL CONTRACTOR SHALL SIZE REFRIGERANT LINES PER MANUFACTURER'S RECOMMENDATIONS BASED ON ACTUAL ROUTING OF REFRIGERANT LINES.

6 CORRECTED CAPACITIES ARE BASED ON THE ENTERING AIR CONDITIONS AS NOTED IN THE ABOVE TABLE.

7 LOCAL ZONE CONTROLLERS ARE NOTED ABOVE IN THE "LOCAL CONTROLLER" COLUMN.

8 THE SYSTEM SHALL CONNECT TO SAMSUNG CENTRAL CONTROL SOLUTIONS.

9 NOTE INDOOR UNIT SERIAL NUMBERS ON PLANS DURING INSTALL FOR FUTURE REFERENCE DURING COMMISSIONING. FOR HEAT RECOVERY SYSTEMS, ALSO NOTE WHICH PORT(S) EACH INDOOR IS CONNECTED TO.

10 UNIT SHALL BE MOUNTED PER MANUFACTURE'S RECOMMENDATION.

11 PROVIDE WITH LIQUID LEVEL SENSOR / FLOAT SWITCH AND CONTR4OL MODULE FOR UNIT SHUTDOWN IN THE EVENT OF CONDENSATE OVERFLOW.

BASIS OF DESIGN CONTACT:
LENNOX COMMERCIAL
RAMIRO RODRIGUEZ
PH: 951-491-9195
EMAIL: RAMIRO.RODRIGUEZ@LENNOX.COM

VARIABLE REFRIGERANT FLOW (VRF) OUTDOOR UNIT SCHEDULE

EQUIPMENT TAG	MANUFACTURER MODEL NO.	TYPE	REFRIGERANT	RATED PERFORMANCE			FAN	ELECTRICAL						NOISE (dB(A))	REFRIGERANT		PRODUCT WEIGHT	REMARKS
				TON	COOLING (BTU/H)	HEATING (BTU/H)	AIRFLOW (CFM)	VOLT	PHASE	HZ	MCA	MOP	SCCR		LIQUID PIPE (IN.)	GAS PIPE (IN.)		
OU 1	SAMSUNG AM048TXMDCH/AA	DVM S ECO, HEAT PUMP	R410A	4	48,000	54,000	3884.76	208/230	1	60	29.00	50.00	-	51.00	3/8	3/4	213.85	1 2 3 4 5 6 7 8 9
OU 2	SAMSUNG AM144BXVGFH/AA	DVM S2, HEAT PUMP	R410A	12	144,000	162,000	10170.00	208/230	3	60	52.60	60.00	5	60.00	1/2	1 1/8	612.89	1 2 3 4 5 6 7 8 9

NOTES:

1 SELECTION BASED ON EQUIPMENT MANUFACTURED BY SAMSUNG.

2 CORRECTED CAPACITIES ARE BASED ON THE ENTERING AIR CONDITIONS AS NOTED IN THE ABOVE TABLE ALONG WITH PIPE LENGTH AND VERTICAL SEPARATION.

3 SYSTEM MUST BE CAPABLE OF SIMULTANEOUS HEATING AND COOLING.

4 REFER TO THE MANUFACTURER'S ENGINEERING TECHNICAL DATA BOOK FOR SOUND RATING DETAILS.

5 SIZE REFRIGERANT LINES IN ACCORDANCE WITH MANUFACTURER DESIGN SOFTWARE AFTER ESTIMATED LINE LENGTHS ARE PROVIDED AND INCLUDED IN THE REPORT.

6 AIR SOURCE CONDENSING UNITS SHALL HAVE RATED CAPACITY DATA FROM -13°F - 120°F (-25°C - 48.9°C).

7 PROVIDE DEDICATED 16/2 STRANDED, SHIELDED COMMUNICATION WIRE BETWEEN CONDENSING UNIT, INDOOR UNIT(S), AND HEAT RECOVERY MODE CONTROL UNIT(S) (MCU).

8 NOTE OUTDOOR UNIT SERIAL NUMBERS ON PLANS DURING INSTALL FOR FUTURE REFERENCE DURING COMMISSIONING.

9 THE SYSTEM SHALL CONNECT TO SAMSUNG CENTRAL CONTROL SOLUTIONS. PROVIDE WITH SAMSUNG THERMOSTAT MODEL MWR-WG00UN.

BASIS OF DESIGN CONTACT:
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EMAIL: RAMIRO.RODRIGUEZ@LENNOX.COM

DATE/ TIME: 15 Oct 2025, 10:34 PM
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JCCA #: 24793-9

ROBERT R. NOLAN
31684
Exp. 6/30/25

No.		
Issue	Date	Description
-	-	-

Project
SUPPLEMENTAL HVAC - CENTRAL KITCHEN

DEPARTMENT OF STATE HOSPITALS, METROPOLITAN
11401 BLOOMFIELD AVENUE
NORWALK, CALIFORNIA 90650

DEPARTMENT OF STATE HOSPITALS (DSH)

Supervisor	Designed	Drawn	Checked
	-	-	-

Issue Date
11/27/2024

Vault File Number

Sheet Title
MECHANICAL EQUIPMENT SCHEDULES

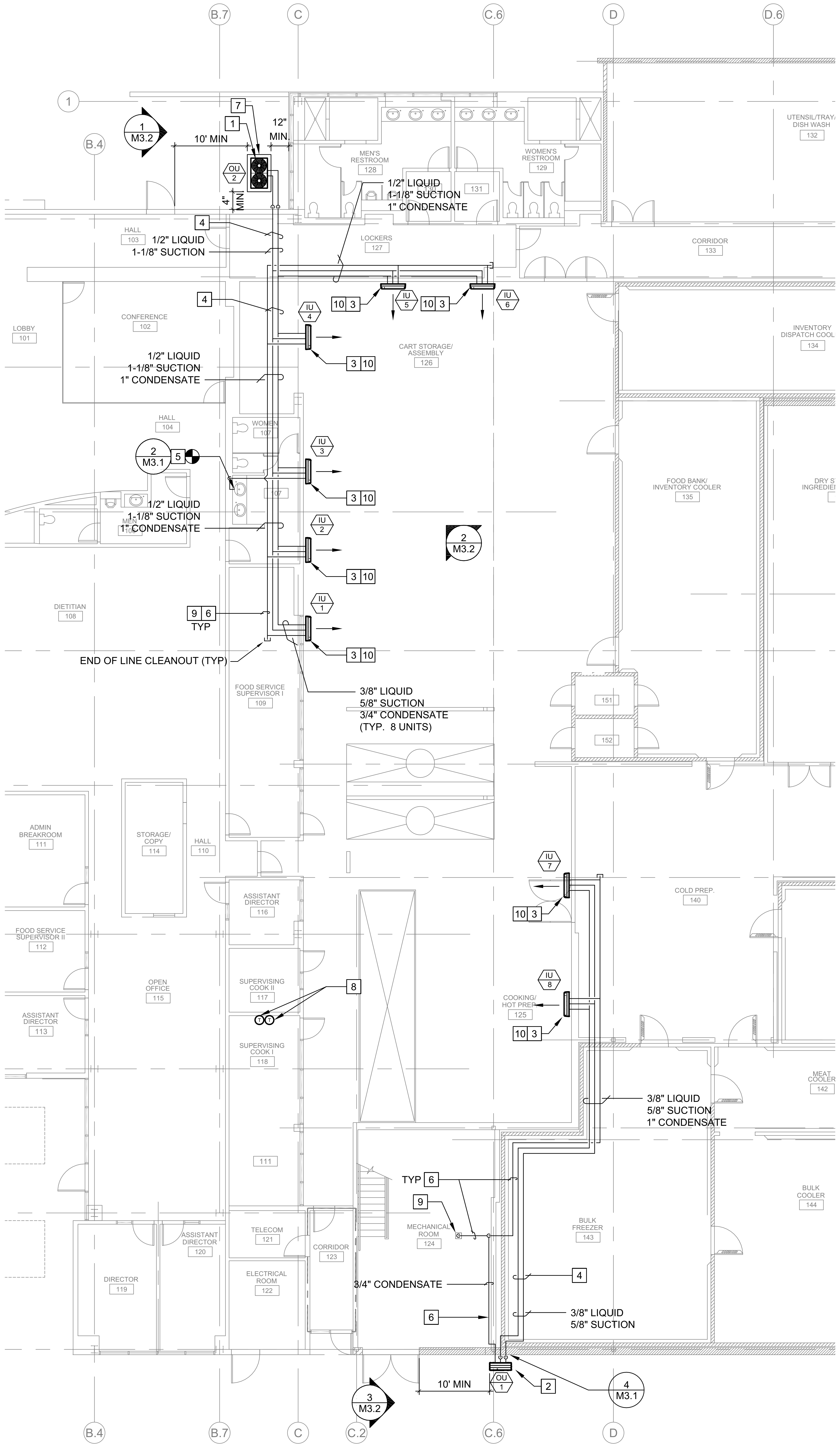
Project Number
00000000000XXXX

Reference North

Sheet Scale
AS SHOWN

Sheet Number
M0.2

V3
100% SUBMITTAL



MECHANICAL NEW WORK PLAN

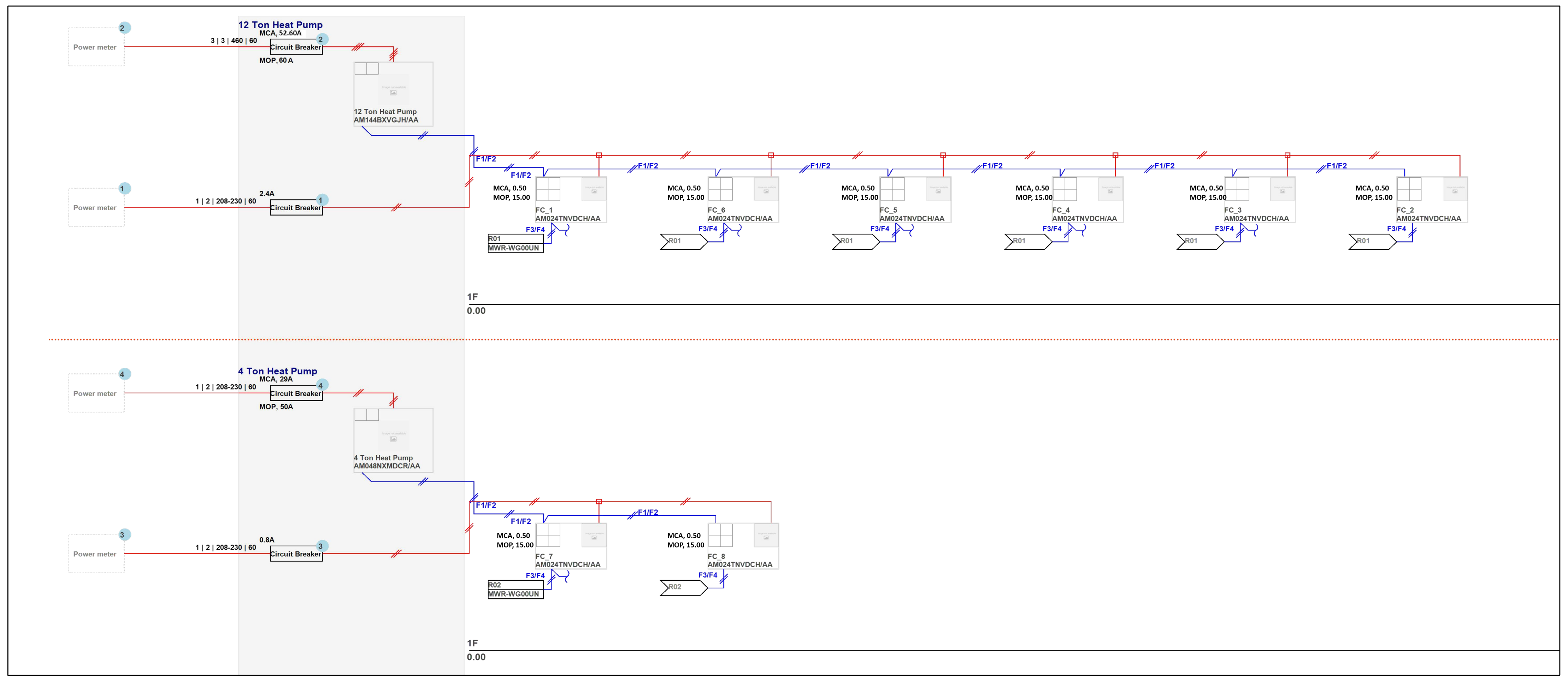
SCALE: 0 4 8 FEET 16

1/8" = 1'-0"

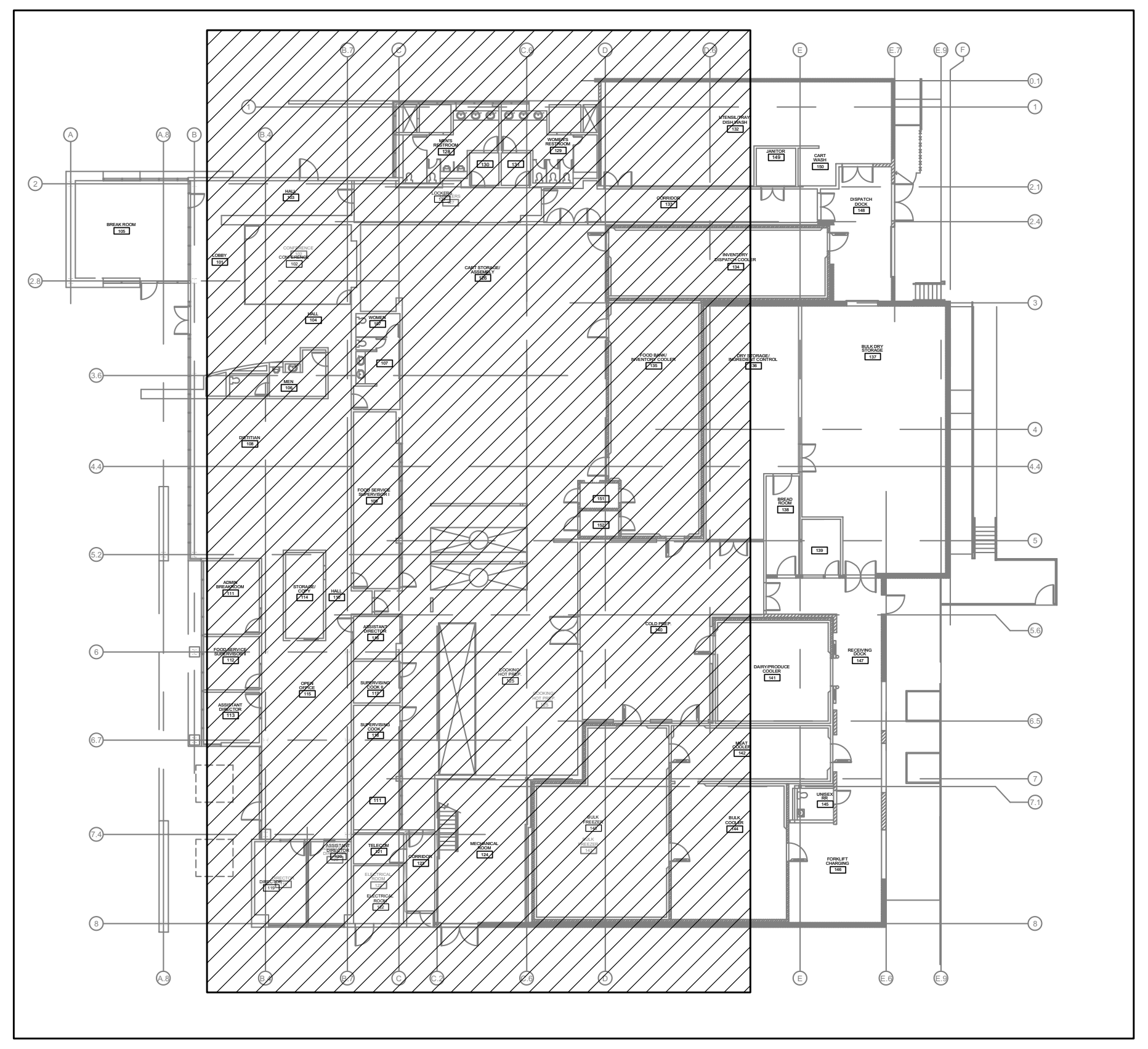
N

NEW WORK KEYNOTES:

1. (N) 12 TON VRF OUTDOOR UNIT. SEE DETAIL 1/M3.1 FOR MOUNTING.
2. (N) 4 TON VRF OUTDOOR UNIT. SEE DETAIL 5/M3.1 FOR WALL MOUNT.
3. (N) VRF INDOOR UNIT 10' AFF.
4. (N) REFRIGERANT PIPING. SEE 1/M3.1.
5. CONNECT CONDENSATE DRAIN TO (E) SEWER. SEE 2/M3.1
6. (N) CONDENSATE DRAIN PIPING. ROUTE TO NEAREST DRAIN. CONDENSATE PIPING SHALL NOT SLANT UPWARD. SEE 2/M3.1 AND 3/M3.1
7. (N) EQUIPMENT PAD. SEE DETAIL 1/M3.1.
8. (N) THERMOSTAT W/ LOCKING COVER. COVER SHALL BE APPROVED BY OWNER PRIOR TO INSTALLATION. PROVIDE AND INSTALL ALL CONDUIT, WIRING, AND CONNECTIONS FOR FULL OPERATION AND CONTROL OF EQUIPMENT. THERMOSTAT FOR SET-POINT AND ON/OFF OPERATION. LOCATION SHOWN FOR OFFICE REFERENCE. CONTRACTOR SHALL COORDINATE EXACT LOCATION WITH OWNER PRIOR TO INSTALL.
9. INDIRECT DRAIN TERMINATION AT FLOOR SINK
10. (N) LEVEL SENSOR IN CONDENSATE LINE AND CONTROL MODULE INTERLOCKED WITH VRF INDOOR UNIT POWER. VRF SHALL POWER OFF IN THE EVENT OF CONDENSATE OVERFLOW PER CMC 310.2



CONTROL WIRING



KEY PLAN

N

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DEPARTMENT OF STATE HOSPITALS, METROPOLITAN
11401 BLOOMFIELD AVENUE
NORWALK, CALIFORNIA 90650

DEPARTMENT OF STATE HOSPITALS (DSH)

Supervisor	Designed	Drawn	Checked
	-	-	-

Issue Date
11/27/2024

Vault File Number

Sheet Title
MECHANICAL NEW WORK PLAN

Project Number
00000000000XXXX

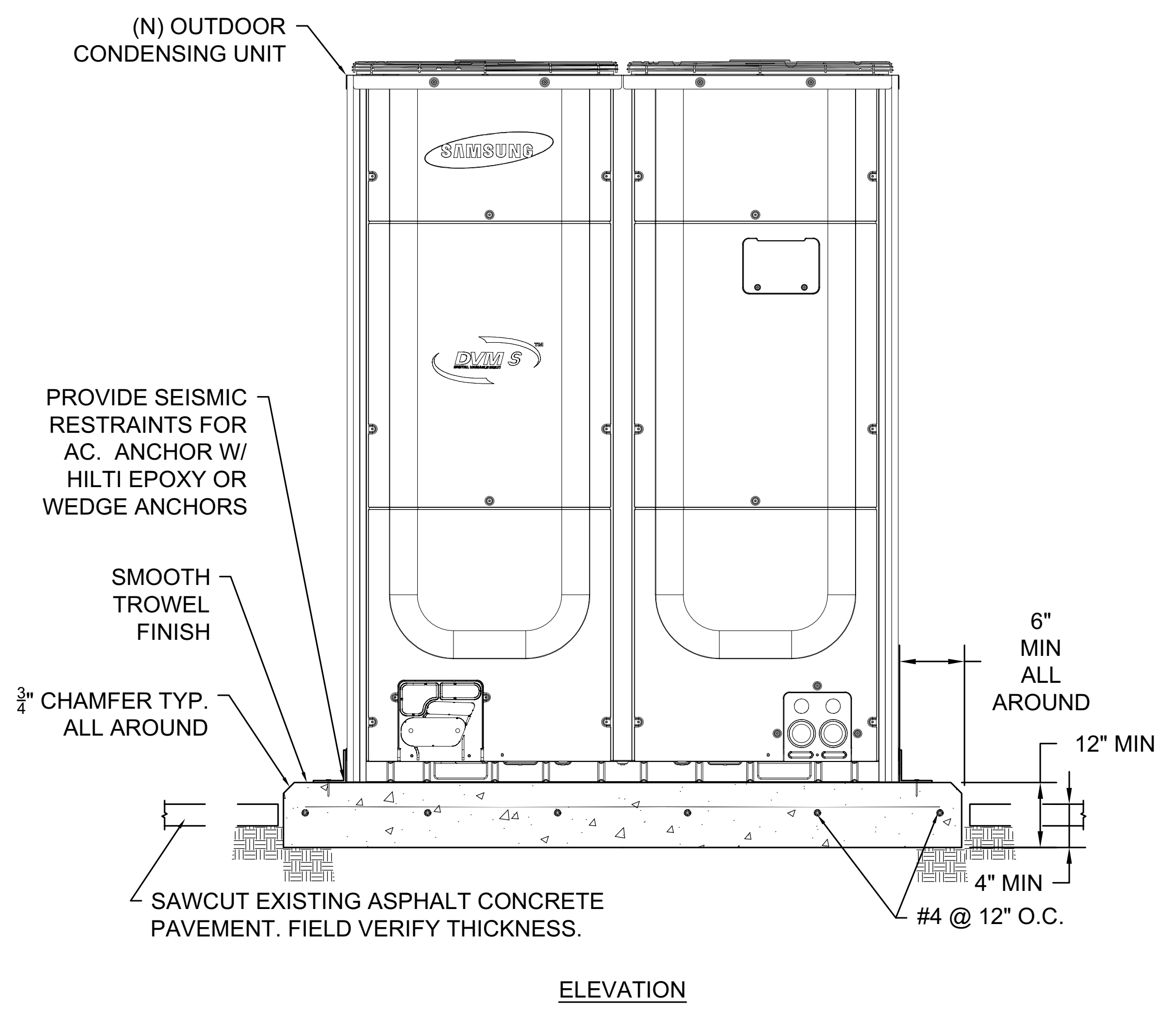
Reference North

Sheet Scale
AS SHOWN

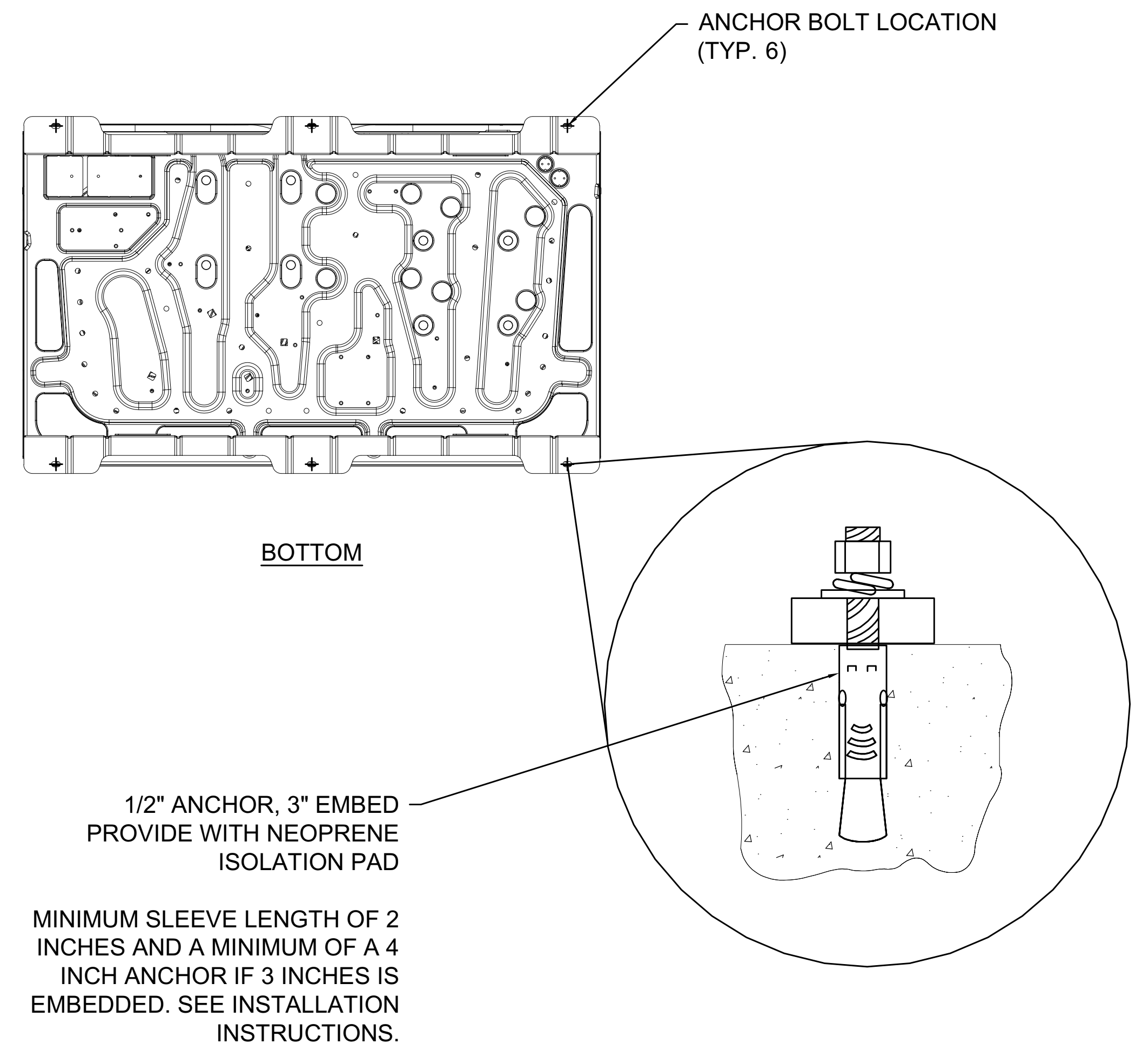
Sheet Number
M2.1

V3
100% SUBMITTAL

DATE/ TIME: 15 Oct 2025, 10:34 PM
FILE: L:\2024\24793-9 Central Kitchen AC, DSH-M\CAD\247939_M21
JCCA

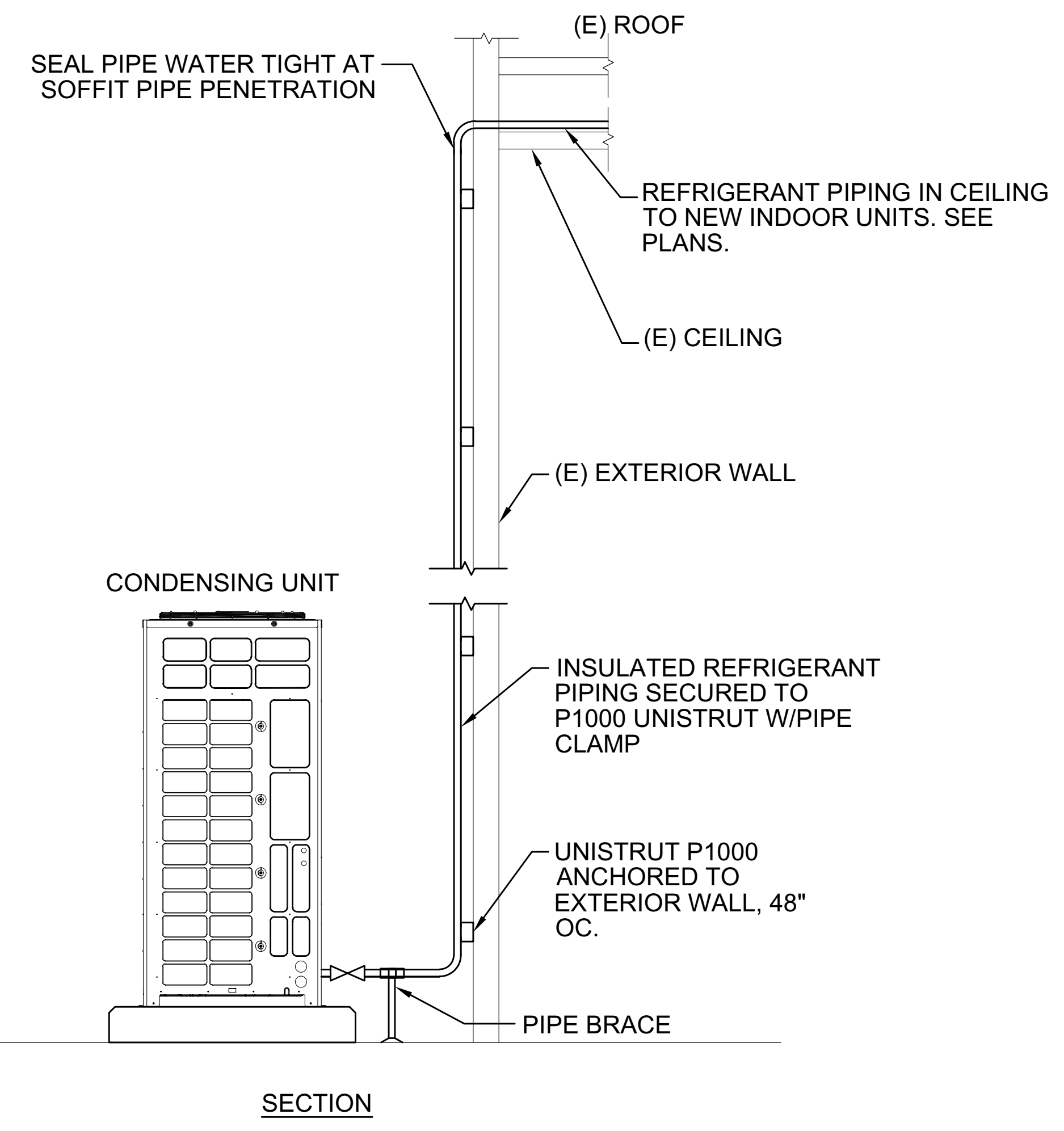

(N) OUTDOOR CONDENSING UNIT
PROVIDE SEISMIC RESTRAINTS FOR AC. ANCHOR W/ HILTI EPOXY OR WEDGE ANCHORS
SMOOTH TROWEL FINISH
¾" CHAMFER TYP. ALL AROUND
6" MIN ALL AROUND
12" MIN
4" MIN
#4 @ 12" O.C.
SAWCUT EXISTING ASPHALT CONCRETE PAVEMENT. FIELD VERIFY THICKNESS.

ELEVATION


ANCHOR BOLT LOCATION (TYP. 6)
1/2" ANCHOR, 3" EMBED PROVIDE WITH NEOPRENE ISOLATION PAD

BOTTOM

MINIMUM SLEEVE LENGTH OF 2 INCHES AND A MINIMUM OF A 4 INCH ANCHOR IF 3 INCHES IS EMBEDDED. SEE INSTALLATION INSTRUCTIONS.


SEAL PIPE WATER TIGHT AT SOFFIT PIPE PENETRATION
(E) ROOF
REFRIGERANT PIPING IN CEILING TO NEW INDOOR UNITS. SEE PLANS.
(E) CEILING
(E) EXTERIOR WALL
CONDENSING UNIT
INSULATED REFRIGERANT PIPING SECURED TO P1000 UNISTRUT W/PIPE CLAMP
UNISTRUT P1000 ANCHORED TO EXTERIOR WALL, 48" OC.
PIPE BRACE

SECTION

NOTES:

1. GENERAL CONTRACTOR SHALL SUBMIT CUT SHEETS FOR APPROVAL.

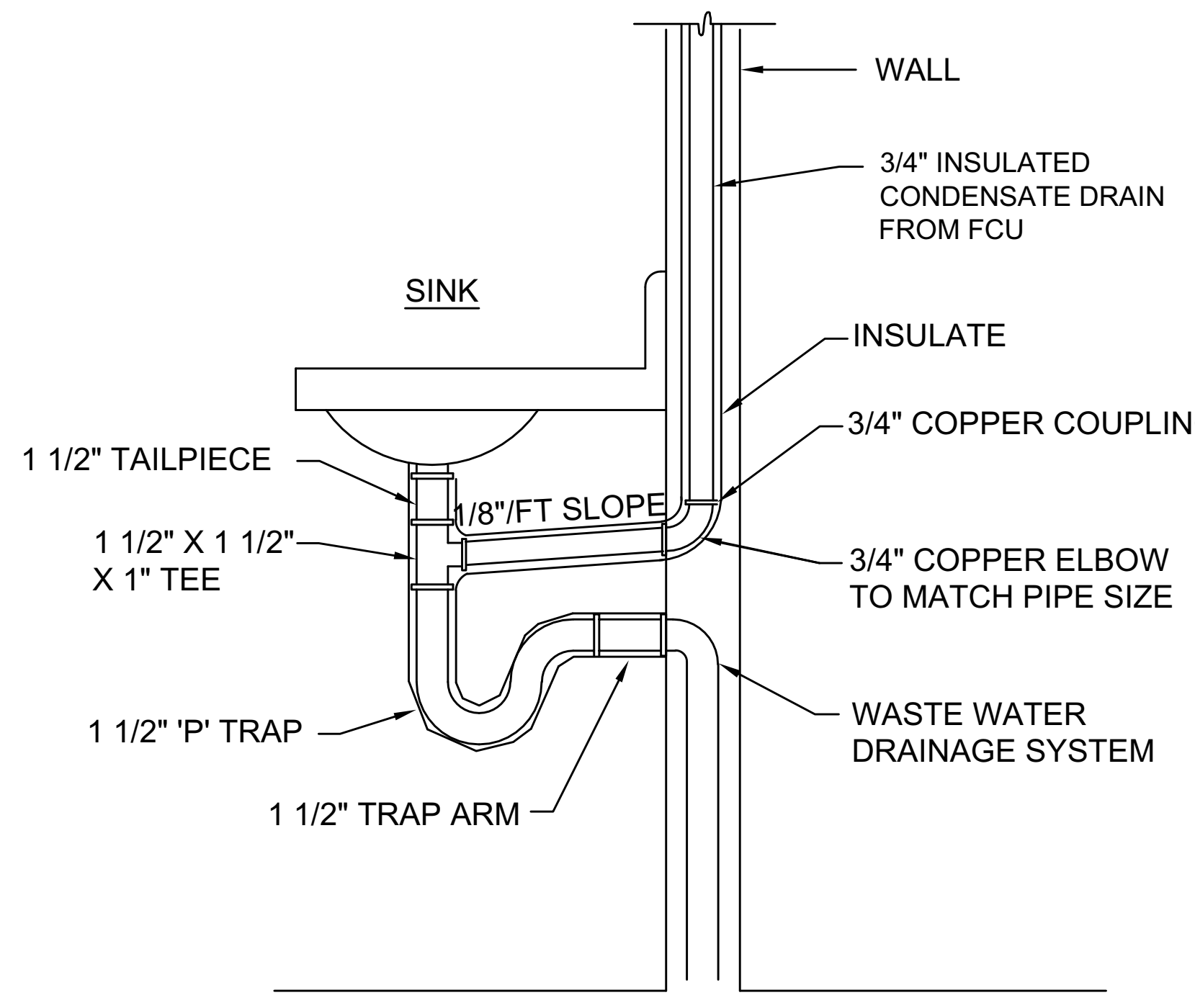
2. PROVIDE PIPE SLEEVES WHERE PIPE PENETRATES THROUGH FIRE RATED FLOOR OR WALLS.

3. PIPING AND TUBING SHALL BE SECURELY FASTENED TO A PERMANENT SUPPORT WITHIN 6 FEET FOLLOWING THE FIRST BEND IN SUCH TUBING FROM THE COMPRESSOR AND WITHIN 2 FEET OF EACH SUBSEQUENT BEND OR ANGLE.

1
M3.1

OUTDOOR CONDENSING UNIT DETAIL

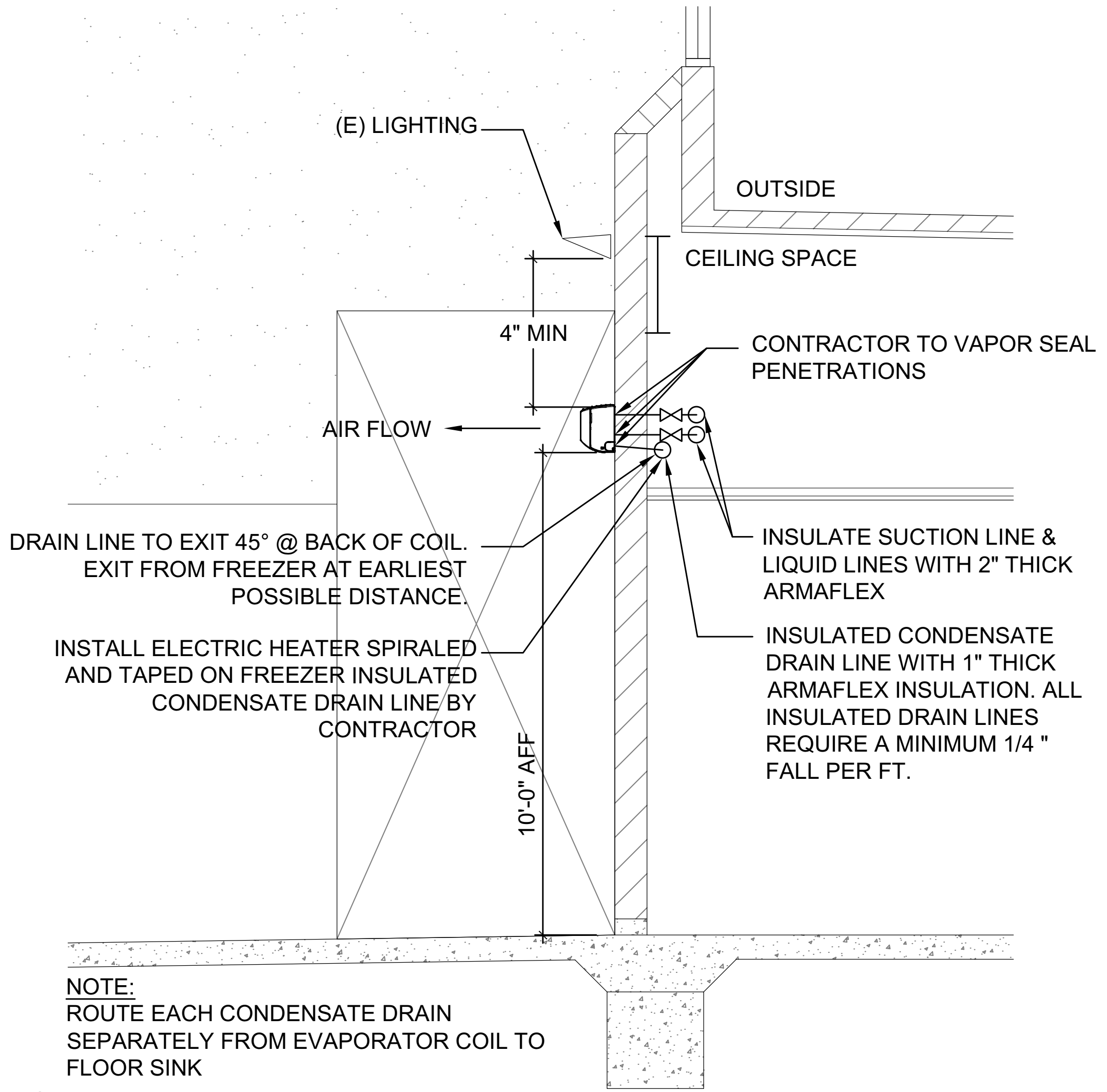
NO SCALE



2
M3.1

CONDENSATE TO TAILPIECE

NO SCALE

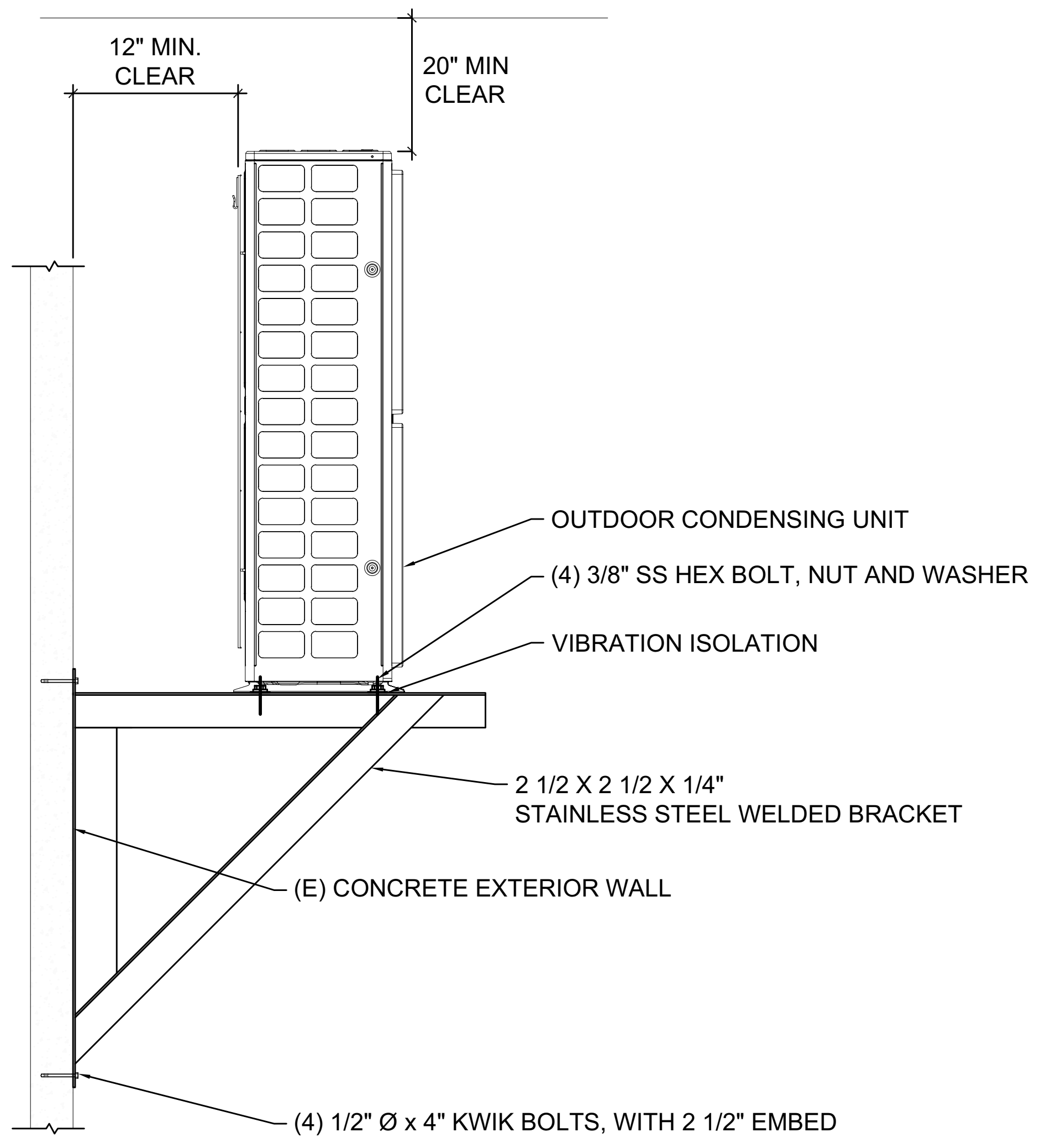

(E) LIGHTING
OUTSIDE
CEILING SPACE
4" MIN
CONTRACTOR TO VAPOR SEAL PENETRATIONS
AIR FLOW
DRAIN LINE TO EXIT 45° @ BACK OF COIL. EXIT FROM FREEZER AT EARLIEST POSSIBLE DISTANCE.
INSULATE SUCTION LINE & LIQUID LINES WITH 2" THICK ARMAFLEX
INSTALL ELECTRIC HEATER SPIRALED AND TAPED ON FREEZER INSULATED CONDENSATE DRAIN LINE BY CONTRACTOR
INSULATED CONDENSATE DRAIN LINE WITH 1" THICK ARMAFLEX INSULATION. ALL INSULATED DRAIN LINES REQUIRE A MINIMUM 1/4 " FALL PER FT.
10'-0" AFF

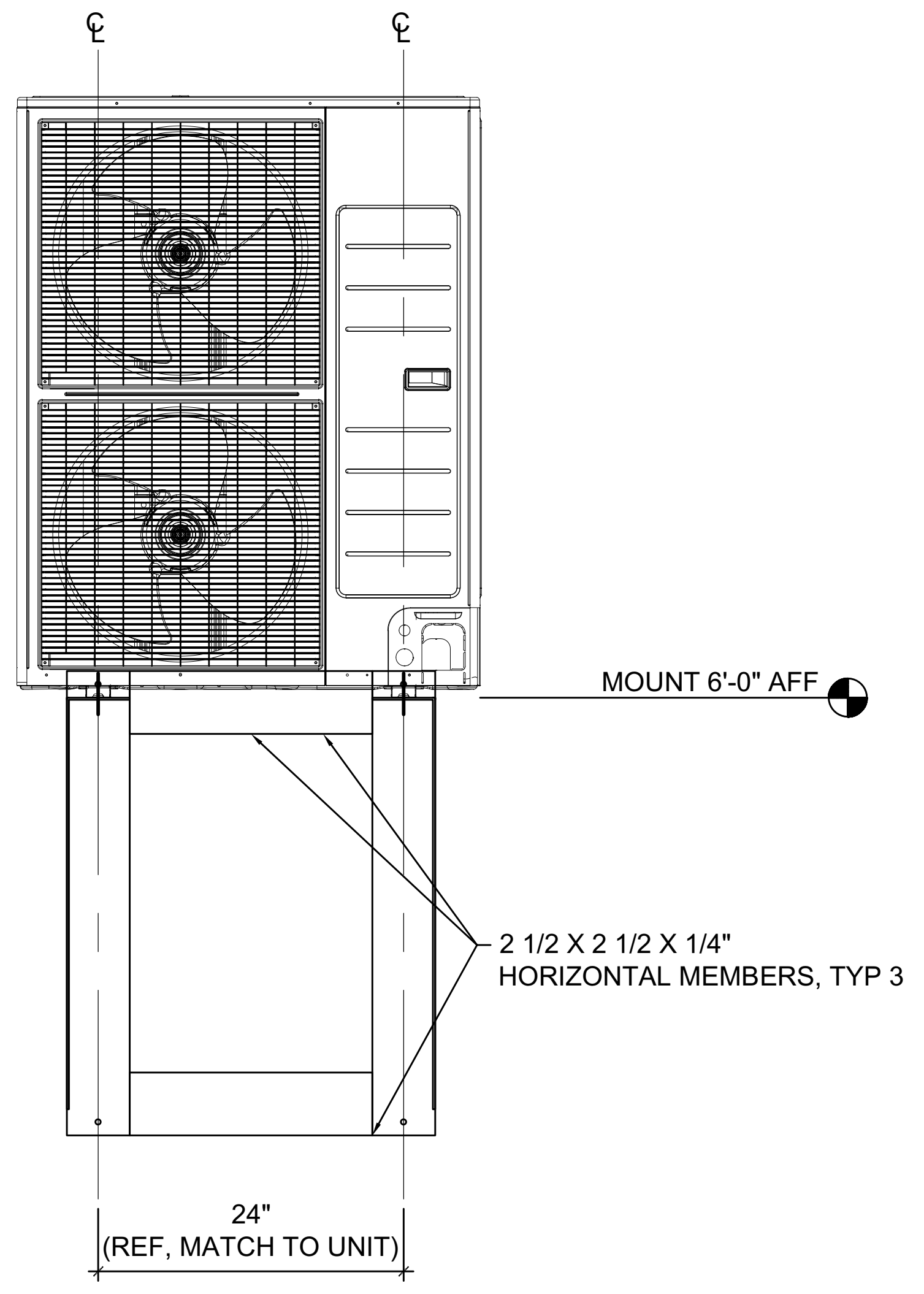
NOTE:
ROUTE EACH CONDENSATE DRAIN SEPARATELY FROM EVAPORATOR COIL TO FLOOR SINK

3
M3.1

TYPICAL CONDENSATE DRAIN LINE

NO SCALE

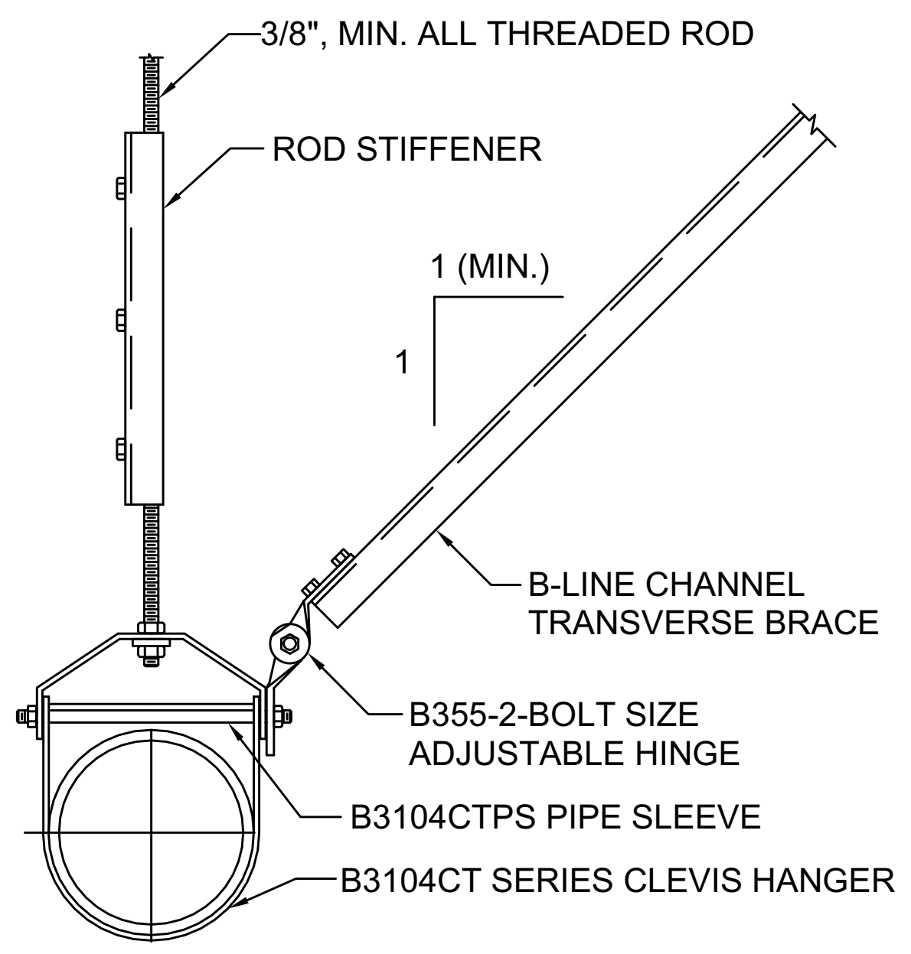

12" MIN. CLEAR
20" MIN CLEAR
OUTDOOR CONDENSING UNIT
(4) 3/8" SS HEX BOLT, NUT AND WASHER
VIBRATION ISOLATION
2 1/2 X 2 1/2 X 1/4" STAINLESS STEEL WELDED BRACKET
(E) CONCRETE EXTERIOR WALL
(4) 1/2" Ø x 4" KWIK BOLTS, WITH 2 1/2" EMBED



5
M3.1

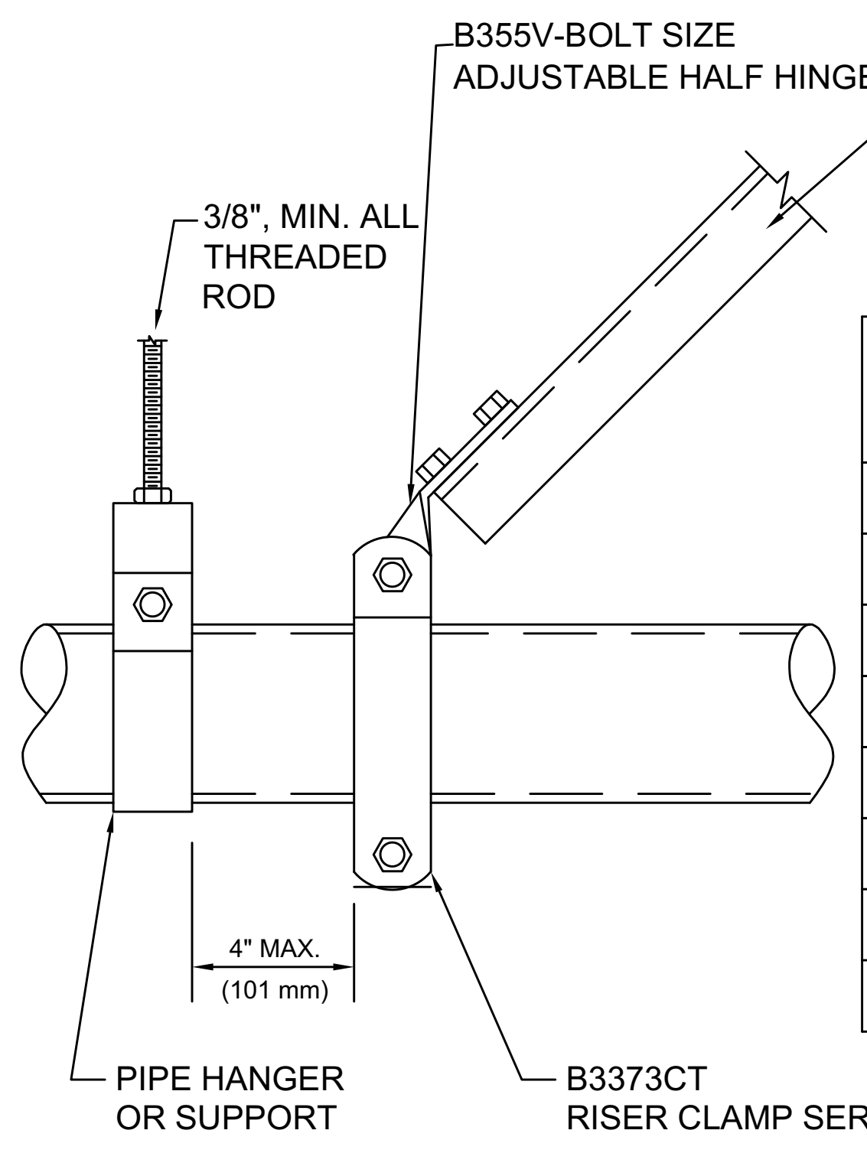
WALL MOUNTED CONDENSING UNIT

NO SCALE


3/8", MIN. ALL THREADED ROD
ROD STIFFENER
1 (MIN.)
1
B-LINE CHANNEL TRANSVERSE BRACE
B355-2-BOLT SIZE ADJUSTABLE HINGE
B3104CTPS PIPE SLEEVE
B3104CT SERIES CLEVIS HANGER

COPPER TUBING SIZE IN.	CLEVIS HANGER PART NO.	ADJUSTABLE HINGE PART NO.	PIPE SLEEVE PART NO.*
½"	B3104CT-½	N/A	N/A
¾"	B3104CT- ¾	N/A	N/A
1"	B3104CT-1	B335-2- ⅜"	B3104CTPS-1
1¼"	B3104CT-1¼	B335-2- ⅜"	B3104CTPS-1¼
1½"	B3104CT-1½	B335-2- ⅜"	B3104CTPS-1½
2"	B3104CT-2	B335-2- ⅜"	B3104CTPS-2
2½"	B3104CT-2½	B335-2- ⅜"	B3104CTPS-2½
3"	B3104CT-3	B335-2- ⅜"	B3104CTPS-3
3½"	B3104CT-3½	B335-2- ⅜"	B3104CTPS-3½
4"	B3104CT-4	B335-2- ⅜"	B3104CTPS-4

*NOT INCLUDED WHEN ORDERING STANDARD B1304CT SERIES CLEVIS HANGER.


B355V-BOLT SIZE ADJUSTABLE HALF HINGE
B-LINE CHANNEL LONGITUDINAL BRACE
3/8", MIN. ALL THREADED ROD
4" MAX. (101 mm)
PIPE HANGER OR SUPPORT
B3373CT RISER CLAMP SERIES

COPPER TUBING SIZE IN.	RISER CLAMP PART NO.	ADJUSTABLE HALF HINGE PART NO.
1"	B3373CT-1	B335V-½
1¼"	B3373CT-1¼	B335V-½
1½"	B3373CT-1½	B335V-½
2"	B3373CT-2	B335V-½
2½"	B3373CT-2½	B335V-½
3"	B3373CT-3	B335V-½
3½"	B3373CT-3½	B335V-½
4"	B3373CT-4	B335V-½

NOTES:

INSTALL HANGER AT 6' MAX INTERVALS. INSTALL BRACES AT 20' MAX INTERVALS STRUCTURAL SUPPORT FOR PIPING SEISMIC BRACING SHALL BE IN ACCORDANCE WITH OSHPD PRE-APPROVAL DETAILS OF B-LINE SEISMIC RESTRAINTS No. OPM-0052-13, OPM-0043-13 OR APPROVED EQUAL.

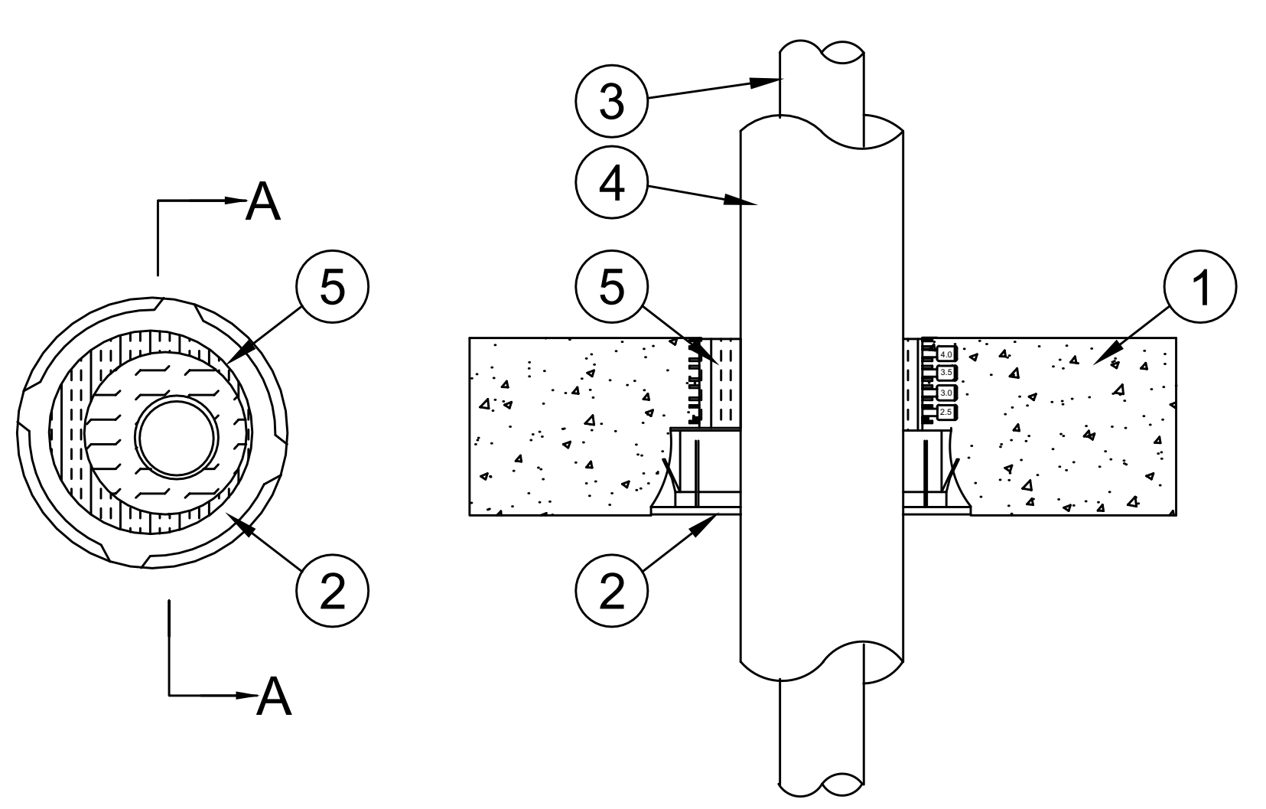
6
M3.1

PIPE HANGER DETAIL

NO SCALE

SYSTEM NO. F-A-5028
APRIL 12, 2017
F RATING - 3 HR

T RATING - 1/2, 3/4, 1-3/4, 2-3/4 and 3 Hr (SEE ITEM 4)
L RATING AT AMBIENT - LESS THAN 1 CFM/SQ FT (SEE ITEM 5A)
L RATING AT 400° F - LESS THAN 1 CFM/SQ FT (SEE ITEM 5A)
W RATING - CLASS 1 (SEE ITEMS 4B AND 5A)



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.

2. FIRESTOP DEVICE* -- CAST IN PLACE FIRESTOP DEVICE PERMANENTLY EMBEDDED DURING CONCRETE PLACEMENT OR GROUTED IN CONCRETE ASSEMBLY IN ACCORDANCE WITH ACCOMPANYING INSTALLATION INSTRUCTIONS. THE DEVICE MAY BE TRIMMED FLUSH WITH TOP SURFACE OF FLOOR OR MAY PROJECT UP TO MAX 3-1/2 IN. (89 MM) ABOVE TOP SURFACE OF FLOOR.

   3M COMPANY -- 3M FIRE BARRIER CAST-IN DEVICE 2MCID, 3MCID, 4MCID

   2A. FIRESTOP DEVICE - HEIGHT ADAPTER* -- (NOT SHOWN) - FOR USE IN FLOORS GREATER THAN 8 IN. (203 MM) THICK. ADAPTER SNAPS ONTO TOP OF FIRESTOP DEVICE (ITEM 2).

   3M COMPANY -- 3M FIRE BARRIER CAST-IN DEVICE HEIGHT ADAPTER, 2HA, 3HA, 4HA

3. THROUGH PENETRANTS -- ONE METALLIC PIPE OR TUBING TO BE INSTALLED CONCENTRICALLY OR ECCENTRICALLY WITHIN OPENING. PENETRANT TO BE RIGIDLY SUPPORTED ON BOTH SIDES OF FLOOR OR WALL ASSEMBLY. THE FOLLOWING TYPES AND SIZES OF METALLIC PIPES OR TUBES MAY BE USED:
   - A. STEEL PIPE -- NOM 2 IN. (51 MM) DIAM (OR SMALLER) SCHEDULE 5 (OR HEAVIER) STEEL PIPE.
   - B. IRON PIPE -- NOM 2 IN. (51 MM) DIAM (OR SMALLER) CAST OR DUCTILE IRON PIPE.
   - C. COPPER TUBING -- NOM 2 IN. (51 MM) DIAM (OR SMALLER) TYPE L (OR HEAVIER) COPPER TUBING.
   - D. COPPER PIPE -- NOM 2 IN. (51 MM) DIAM (OR SMALLER) REGULAR (OR HEAVIER) COPPER PIPE.

4. PIPE COVERING -- THE FOLLOWING TYPES AND SIZES OF PIPE COVERINGS MAY BE USED WITH THE METALLIC PIPES:
   - A. PIPE COVERING -- NOM 1-1/2 IN. (38 MM) THICK (OR LESS) HOLLOW CYLINDRICAL HEAVY DENSITY GLASS FIBER UNITS JACKETED ON THE OUTSIDE WITH AN ALL SERVICE JACKET. LONGITUDINAL JOINTS SEALED WITH METAL FASTENERS OR FACTORY-APPLIED SELF-SEALING LAP TAPE. TRANSVERSE JOINTS SECURED WITH METAL FASTENERS OR WITH BUTT TAPE SUPPLIED WITH PRODUCT. ANNULAR SPACE BETWEEN THE PIPE COVERING AND PERIPHERY OF OPENING OR SLEEVE SHALL BE MIN 0 IN. (0 MM, POINT CONTACT) TO MAX 1 IN. (25 MM).

     SEE PIPE AND EQUIPMENT COVERING - MATERIALS(BRGU) CATEGORY IN THE BUILDING MATERIALS DIRECTORY FOR NAMES OF MANUFACTURERS. ANY PIPE COVERING MATERIAL MEETING THE ABOVE SPECIFICATIONS AND BEARING THE UL CLASSIFICATION MARKING WITH A FLAME SPREAD INDEX OF 25 OR LESS AND A SMOKE DEVELOPED INDEX OF 50 OR LESS MAY BE USED.
   - B. PVC JACKET++ -- (OPTIONAL, NOT SHOWN) -- AN ADDITIONAL PVC JACKET, SUPPLIED IN SHEET FORM, SHALL BE TIGHTLY WRAPPED AROUND THE ALL SERVICE JACKET ON THE PIPE COVERING (ITEM 4A) WITH THE LONGITUDINAL SEAM CONTINUOUSLY SEALED USING THE SELF-SEALING LAP TAPE OR ADHESIVE SUPPLIED WITH THE JACKET. THE JACKET IS TO BE NOM 48 IN. (1.22 M) WIDE BY NOM 20 OR 30 MIL (0.5 OR 0.8 MM) THICK. THE JACKET SHALL EXTEND DOWNWARD INTO AND/OR THROUGH THE OPENING FROM A POINT 36 TO 40 IN. (0.91 TO 1.02 M) ABOVE THE TOP SURFACE OF THE FLOOR ASSEMBLY. THE PVC JACKET MUST BE USED FOR THE W RATING TO APPLY.

     SEE PLASTICS (QMFZ2) CATEGORY IN THE PLASTICS RECOGNIZED COMPONENT DIRECTORY FOR NAMES OF MANUFACTURERS. ANY RECOGNIZED COMPONENT PLASTIC MATERIAL MEETING THE ABOVE SPECIFICATIONS AND HAVING A UL 94 FLAMMABILITY CLASSIFICATION OF 94-5VA MAY BE USED.
   - C. TUBE INSULATION-PLASTICS++ -- NOM 1 IN. (25 MM) THICK (OR LESS) ACRYLONITRILE BUTADIENE/POLYVINYL CHLORIDE (AB/PVC) FLEXIBLE FOAM FURNISHED IN THE FORM OF TUBING. ANNULAR SPACE BETWEEN THE INSULATED PENETRATING ITEM AND THE PERIPHERY OF THE OPENING SHALL BE MIN 0 IN. (0 MM) (POINT CONTACT) TO MAX 1 IN. (25 MM).

     SEE PLASTICS (QMFZ2) CATEGORY IN THE PLASTICS RECOGNIZED COMPONENT DIRECTORY FOR NAMES OF MANUFACTURERS. ANY RECOGNIZED COMPONENT TUBE INSULATION MATERIAL MEETING THE ABOVE SPECIFICATIONS AND HAVING A UL 94 FLAMMABILITY CLASSIFICATION OF 94-5A MAY BE USED.

     THE HOURLY T RATINGS ARE DEPENDENT ON THE SIZE OF PIPE OR TUBE AND THE NOM THICKNESS OF THE PIPE COVERING, AS SHOWN BELOW:

NOM PENETRANT SIZE, IN (mm)	NOM PIPE COVERING THICKNESS, IN (mm)	T RATING, HR
1/2 & 3/4 (13 & 19)	1/2 & 3/4 (13 & 19)	1-3/4
1/2 & 3/4 (13 & 19)	1 & 1-1/2 (25 & 38)	3
1 (25)	1/2 & 3/4 (13 & 19)	1/2
1 (25)	1 (25)	2-3/4
1 (25)	1-1/2 (38)	3
1-1/4 TO 2 (32 TO 51)	1/2 (13)	1/4
1-1/4 TO 2 (32 TO 51)	3/4, 1 & 1-1/2 (19, 25 & 38)	1/2

5. PACKING MATERIAL -- NOT REQUIRED IF ANNULAR SPACE IS 1/4 IN. (6 MM) OR LESS. IF ANNULAR SPACE IS GREATER THAN 1/4 IN. (6 MM), MIN 2 IN. (51 MM) THICKNESS OF MIN 4 PCF (64 KG/M3) MINERAL WOOL BATT INSULATION FIRMLY PACKED WITHIN ANNULUS, FLUSH WITH THE TOP SURFACE OF FLOOR.

   5A. FILL, VOID OR CAVITY MATERIALS - SEALANT, CAULK OR PUTTY* -- (OPTIONAL, NOT SHOWN) - AS AN OPTION, THE PACKING MATERIAL (ITEM 5) MAY BE REDUCED IN THICKNESS BY 1/4 TO 1/2 IN. (6 MM TO 13 MM) AND RECESSED FROM THE TOP SURFACE OF FLOOR TO ACCOMMODATE A 1/4 TO 1/2 IN. (6 MM TO 13 MM) THICKNESS OF SEALANT, CAULK OR PUTTY, INSTALLED WITHIN ANNULUS, FLUSH WITH THE TOP SURFACE OF FLOOR. IF ANNULAR SPACES ARE LESS THAN 1/4 IN. (6 MM) AND PACKING MATERIAL IS NOT USED, SEALANT, CAULK OR PUTTY MAY BE INSTALLED WITHIN ANNULUS, FLUSH WITH THE TOP SURFACE OF FLOOR, BUT IS NOT REQUIRED. FOR W AND L RATINGS, A MIN 1/4 IN. (6 MM) BEAD OF SEALANT IS REQUIRED AT THE DEVICE/CONCRETE INTERFACE ON THE TOP SURFACE OF THE FLOOR AND A MIN 1/4 IN. (6 MM) DEPTH OF SEALANT IS REQUIRED ATOP A MIN 1-3/4 IN. (44 MM) THICKNESS OF MINERAL WOOL PACKING MATERIAL IN THE ANNULAR SPACE BETWEEN THE PIPE AND THE INSIDE OF THE DEVICE.

   3M COMPANY -- FB-1000 NS SEALANT, FB-1003 SL SEALANT, FB-3000 WT SEALANT, CP 25WB+ CAULK, FIREDAM 150+ CAULK, IC 15WB+ CAULK OR MP+ STIX PUTTY

   (NOTE - W AND L RATINGS APPLY ONLY WHEN FB-1000 NS, FB-1003 SL OR FB-3000 WT SEALANTS ARE USED.)

* INDICATES SUCH PRODUCTS SHALL BEAR THE UL OR CUL CERTIFICATION MARK FOR JURISDICTIONS EMPLOYING THE UL OR CUL CERTIFICATION (SUCH AS CANADA), RESPECTIVELY.

++- BEARING THE UL RECOGNIZED COMPONENT MARK.

LAST UPDATED ON 2017-04-12

ACTION SUBMITTALS
1. PRODUCT DATA: FOR EACH TYPE OF PRODUCT.
2. UNLISTED FIRESTOPPING SYSTEMS: OBTAIN AN ENGINEERING JUDGMENT (EJ) FROM FIRESTOPPING MANUFACTURER WHERE NO UL, FM APPROVALS, OR OTHER LISTED ASSEMBLY IS AVAILABLE FOR PARTICULAR FIRESTOP CONFIGURATION. FOLLOW INTERNATIONAL FIRESTOP COUNCIL (IFC) RECOMMENDED GUIDELINES FOR EVALUATING FIRESTOPPING SYSTEMS IN EJS.
3. PRODUCT SCHEDULE: FOR EACH PENETRATION FIRESTOPPING SYSTEM. INCLUDE LOCATION, ILLUSTRATION OF FIRESTOPPING SYSTEM, AND DESIGN DESIGNATION OF QUALIFIED TESTING AND INSPECTING AGENCY.
   - A. ENGINEERING JUDGEMENTS: WHERE PROJECT CONDITIONS REQUIRE MODIFICATION TO A QUALIFIED TESTING AND INSPECTING AGENCY'S ILLUSTRATION FOR A PARTICULAR PENETRATION FIRESTOPPING SYSTEM, SUBMIT ILLUSTRATION, WITH MODIFICATIONS MARKED, APPROVED BY PENETRATION FIRESTOPPING SYSTEM MANUFACTURER'S FIRE-PROTECTION ENGINEER AS AN ENGINEERING JUDGEMENT OR EQUIVALENT FIRE-RESISTANCE-RATED ASSEMBLY DEVELOPED IN ACCORDANCE WITH CURRENT INTERNATIONAL FIRESTOP COUNCIL (IFC) GUIDELINES. OBTAIN APPROVAL OF AUTHORITIES HAVING JURISDICTION PRIOR TO SUBMITTAL.

4
M3.1

FIRE RATED PIPE PENETRATION

NO SCALE

DSA STAMP

OFFICE OF THE STATE FIRE MARSHAL
APPROVED FIRE AND PANIC ONLY
12/04/25
25-1380
Approval of this plan does not authorize or approve any omission or deviation from applicable regulations. Final approval is subject to field inspection. One set of approved plans shall be available on the project site at all times.

DSH

Client Agency
DEPARTMENT OF STATE HOSPITALS

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P: 310.212.7644 | F:310.212.5272

JCCA #: 24793-9

ROBERT R. NOLAN
31684
Exp. 6/30/25

No.

Issue	Date	Description
-	-	-

Project

SUPPLEMENTAL
HVAC - CENTRAL
KITCHEN

DEPARTMENT OF STATE
HOSPITALS, METROPOLITAN
11401 BLOOMFIELD AVENUE
NORWALK, CALIFORNIA 90650

DEPARTMENT OF
STATE HOSPITALS
(DSH)

Supervisor	Designed	Drawn	Checked
	-	-	-

Issue Date
11/27/2024

Vault File Number

Sheet Title
MECHANICAL DETAILS

Project Number
00000000000XXXX

Reference North

Sheet Scale
AS SHOWN

Sheet Number
M3.1

V3
100% SUBMITTAL

DATE/ TIME: 15 Oct 2025, 3:51 PM
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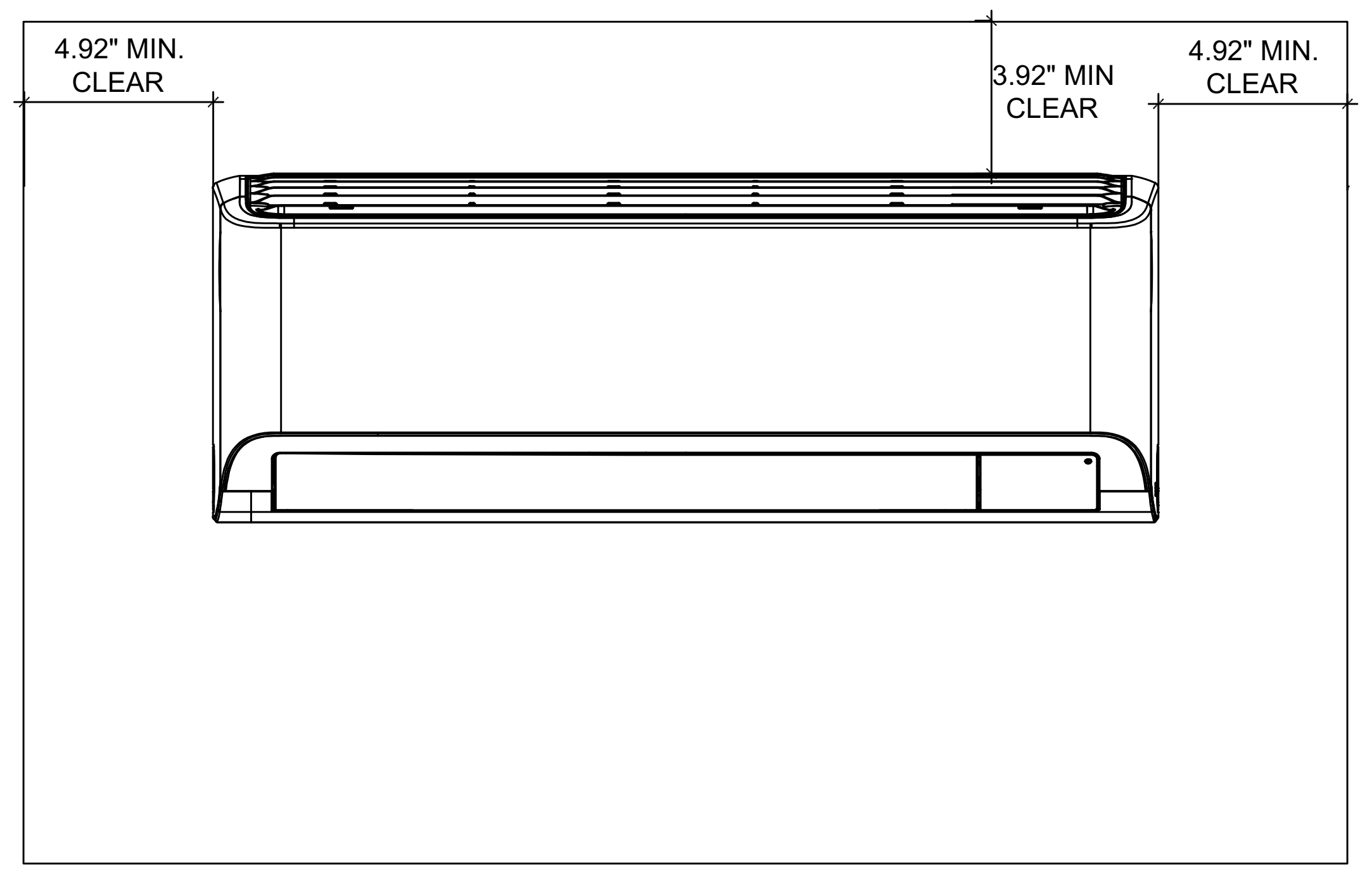

NOTES:

INSTALL MEETING ALL MANUFACTURER CLEARANCES AND MAXIMUM LENGTHS.
SEE M0.2 VARIABLE REFRIGERANT FLOW (VRF) INDOOR UNIT SCHEDULE FOR ADDITIONAL REQUIREMENTS

1 M3.2 ELEVATION VIEW - INDOOR UNIT CLEARANCE REQUIREMENT

NO SCALE

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12/04/25
25-1380
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JCCA #: 24793-9

ROBERT R. NOLAN
31684
Exp. 6/30/25
MECHANICAL

No.

Issue	Date	Description
-	-	-

Project
SUPPLEMENTAL HVAC - CENTRAL KITCHEN

DEPARTMENT OF STATE
HOSPITALS, METROPOLITAN
11401 BLOOMFIELD AVENUE
NORWALK, CALIFORNIA 90650

DEPARTMENT OF STATE HOSPITALS (DSH)

Supervisor	Designed	Drawn	Checked
	-	-	-

Issue Date
11/27/2024

Vault File Number

Sheet Title
MECHANICAL DETAILS

Project Number
00000000000XXXX

Reference North

Sheet Scale
AS SHOWN

Sheet Number
M3.2

V3 100% SUBMITTAL

DATE/ TIME: 15 Oct 2025, 3:51 PM
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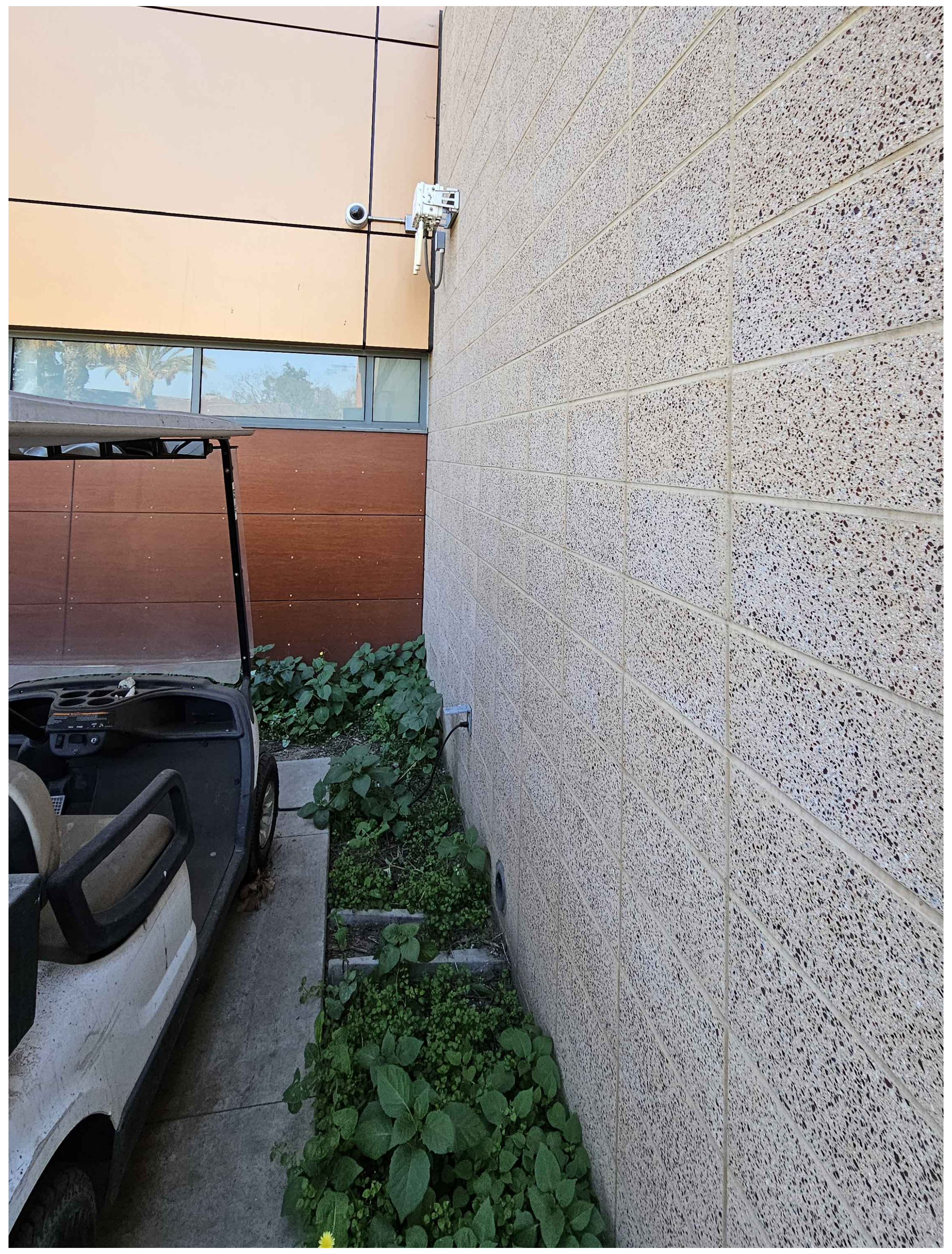

1
M3.2 PHOTO REFERENCE - OUTDOOR UNIT 2
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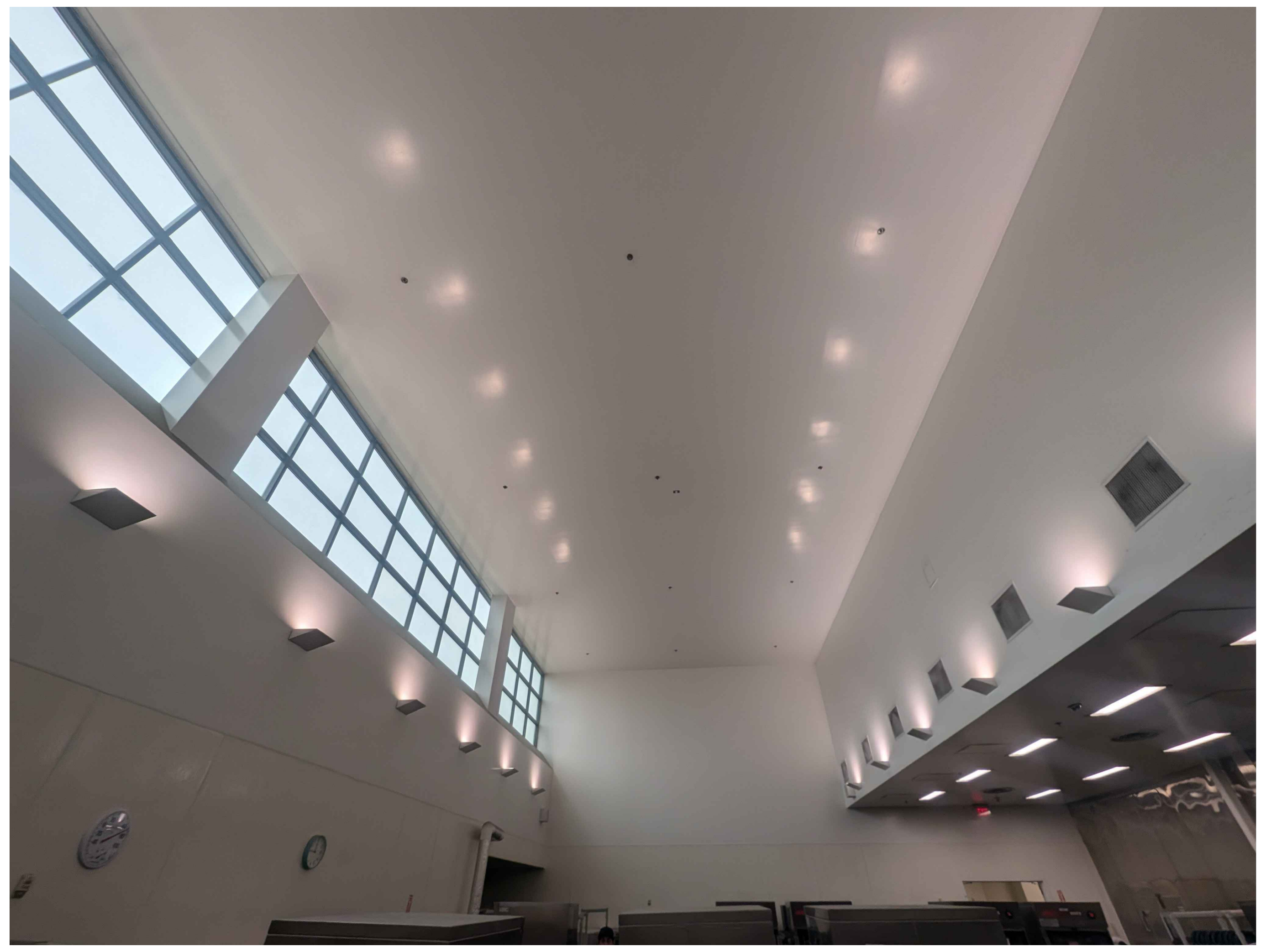
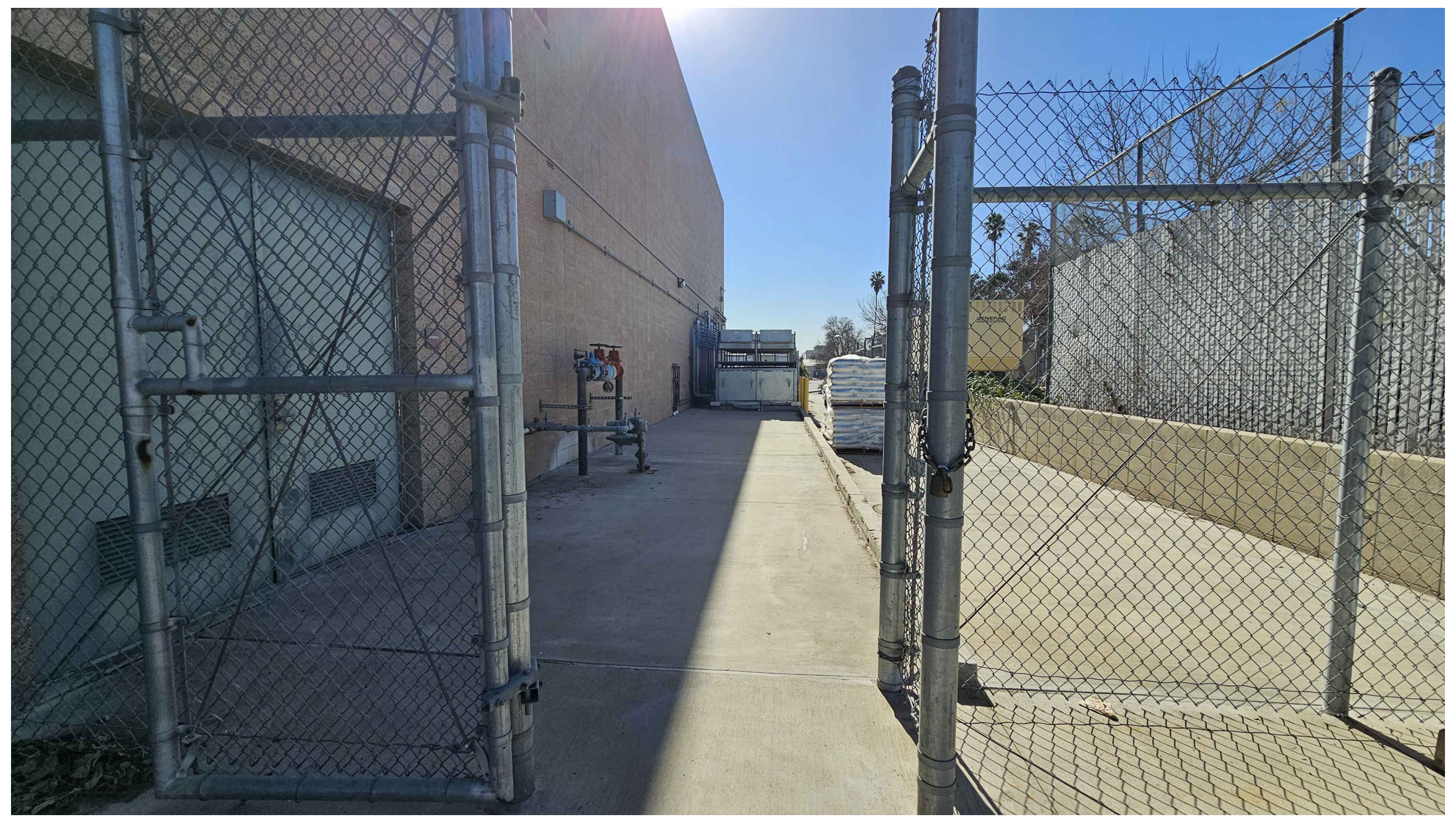


2
M3.2 PHOTO REFERENCE - KITCHEN HIGH CEILING
NO SCALE



3
M3.2 PHOTO REFERENCE - OUTDOOR UNIT 1
NO SCALE

DSA STAMP

OFFICE OF THE STATE FIRE MARSHAL
APPROVED FIRE AND PANIC ONLY
12/04/25
25-1380
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JCCA #: 24793-9

REGISTERED PROFESSIONAL ENGINEER
ROBERT R. NOLAN
31684
Exp. 6/30/25
MECHANICAL
STATE OF CALIFORNIA

No.

Issue	Date	Description
-	-	-

Project
SUPPLEMENTAL
HVAC - CENTRAL
KITCHEN

DEPARTMENT OF STATE
HOSPITALS, METROPOLITAN
11401 BLOOMFIELD AVENUE
NORWALK, CALIFORNIA 90650

DEPARTMENT OF
STATE HOSPITALS
(DSH)

Supervisor	Designed	Drawn	Checked
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Issue Date
11/27/2024

Vault File Number

Sheet Title
MECHANICAL REFERENCE
PHOTOS

Project Number
00000000000XXXX

Reference North

Sheet Scale
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Sheet Number
M3.3

V3
100% SUBMITTAL

DATE/ TIME: 15 Oct 2025, 9:55 AM
FILE: L:\2024\24793-9 Central Kitchen AC, DSH-M\CAD\247939_M33
JCCA

Space Conditioning Mandatory Measures:

110.2 CERTIFICATION BY MANUFACTURERS
ANY SPACE CONDITIONING EQUIPMENT LISTED IN §110.2 SHALL ONLY BE INSTALLED IF CERTIFIED TO THE ENERGY COMMISSION TO MEET ALL APPLICABLE §110.2 REQUIREMENTS.

110.2(a) SPACE CONDITIONING EQUIPMENT EFFICIENCY
EQUIPMENT SHALL MEET APPLICABLE EFFICIENCY REQUIREMENTS IN TABLE 110.2-A THROUGH TABLE 110.2-N.

110.5 PILOT LIGHTS PROHIBITED FOR NATURAL GAS EQUIPMENT
PILOT LIGHTS ARE PROHIBITED ON NATURAL GAS FAN-TYPE CENTRAL FURNACES, POOL HEATERS, SPA HEATERS, AND FIREPLACES.

110.8(a) INSULATION CERTIFICATION
INSTALLED INSULATION SHALL BE CERTIFIED BY THE DEPARTMENT OF CONSUMER AFFAIRS PER TITLE 24, PART 12, CHAPTERS 12-13, ARTICLE 3 "STANDARDS FOR INSULATING MATERIAL."

110.8(b) UREA FORMALDEHYDE INSULATION
UREA FORMALDEHYDE INSULATION SHALL NOT BE INSTALLED UNLESS IN EXTERIOR SIDE WALLS WITH A FOUR-MIL-THICK PLASTIC POLYETHYLENE VAPOR RETARDER OR EQUIVALENT PLASTIC SHEATHING VAPOR RETARDER INSTALLED BETWEEN THE UREA FORMALDEHYDE FOAM INSULATION AND THE INTERIOR SPACE.

110.8(c) INSULATING MATERIAL
ALL INSULATING MATERIALS SHALL BE INSTALLED IN COMPLIANCE WITH THE FLAME SPREAD RATING AND SMOKE DENSITY REQUIREMENTS OF THE CALIFORNIA BUILDING CODE.

110.8(d) DUCTS
IF INSULATION IS INSTALLED ON AN EXISTING SPACE-CONDITIONING DUCT, IT SHALL COMPLY WITH SECTION 604.0 OF THE CMC.

120.1(d)3 REQUIRED DEMAND CONTROL VENTILATION
DCV CONTROLS ARE REQUIRED FOR A SPACE WITH A DESIGN OCCUPANCY DENSITY >= 25 PEOPLE/1,000 FT2 IF THE SYSTEM SERVING THE SPACE HAS ONE OR MORE OF THE FOLLOWING

- AN AIR ECONOMIZER
- MODULATING OUTSIDE AIR CONTROL
- DESIGN OUTDOOR AIRFLOW RATE > 3,000 CFM

120.2(a) THERMOSTAT CONTROLS
HEATING AND COOLING SUPPLY TO EACH SPACE-CONDITIONING ZONE OR DWELLING UNIT SHALL BE CONTROLLED BY AN INDIVIDUAL THERMOSTATIC CONTROL THAT RESPONDS TO TEMPERATURE IN THE ZONE AND MEETS 120.2(b) REQUIREMENTS.

120.2(b) ZONAL THERMOSTAT CONTROLS

120.2(b)4 THERMOSTATIC CONTROLS FOR ALL SINGLE ZONE AIR CONDITIONERS AND HEAT PUMPS SHALL COMPLY WITH THE REQUIREMENTS OF 110.2(c) AND 110.12(a) AND, IF EQUIPPED WITH DDC TO THE ZONE LEVEL WITH THE AUTOMATIC DEMAND SHED CONTROLS OF 110.12(b).

Space Conditioning Mandatory Measures:

120.2(e)1 AUTOMATIC SHUT-OFF FOR SPACE-CONDITIONING SYSTEMS
EACH SPACE-CONDITIONING SYSTEM SHALL BE INSTALLED WITH ONE OF THE FOLLOWING CONTROLS CAPABLE OF AUTOMATICALLY SHUTTING OFF THE SYSTEM DURING PERIODS OF NONUSE:

- AUTOMATIC TIME SWITCH CONTROL PER 110.9, WITH ACCESSIBLE MANUAL OVERRIDE ALLOWING SYSTEM OPERATION FOR UP TO 4 HOURS, OR
- AN OCCUPANCY SENSOR, OR
- A 4-HOUR TIMER THAT CAN BE MANUALLY OPERATED.

120.2(e)2 AUTOMATIC RESTART FOR SPACE-CONDITIONING SYSTEMS
EACH SPACE-CONDITIONING SYSTEM SHALL BE INSTALLED WITH CONTROLS THAT SHALL AUTOMATICALLY RESTART AND TEMPORARILY OPERATE THE SYSTEM AS REQUIRED TO MAINTAIN:

- 120.2(e)2A A SETBACK HEATING THERMOSTAT SETPOINT IF THE SYSTEM PROVIDES MECHANICAL HEATING, AND
- 120.2(e)2B A SETUP COOLING THERMOSTAT SETPOINT IF THE SYSTEM PROVIDES MECHANICAL COOLING.

120.2(f) DAMPERS FOR AIR SUPPLY AND EXHAUST EQUIPMENT
OUTDOOR AIR SUPPLY AND EXHAUST EQUIPMENT SHALL BE INSTALLED WITH DAMPERS THAT AUTOMATICALLY CLOSE UPON FAN SHUTDOWN.

120.2(h) AUTOMATIC DEMAND SHED CONTROLS
SHALL MEET REQUIREMENTS IN 110.12
110.12(a) DEMAND RESPONSIVE (DR) CONTROL REQUIREMENTS:

1. EITHER CERTIFIED OPENADR 2.0a, OPENADR 2.0b VIRTUAL END NODE (VEN); OR CERTIFIED BY THE MANUFACTURER AS BEING CAPABLE OF RESPONDING TO A DR SIGNAL FROM A CERTIFIED OPENADR 2.0b VIRTUAL END NODE BY AUTOMATICALLY IMPLEMENTING THE CONTROL FUNCTIONS REQUESTED BY THE VIRTUAL END NODE FOR THE EQUIPMENT IT CONTROLS.
2. CAPABLE OF COMMUNICATING USING WI-FI, ZIGBEE, BACNET, ETHERNET, AND/OR HARD-WIRING.
3. MAY INCORPORATE AND USE ADDITIONAL PROTOCOLS BEYOND THOSE SPECIFIED IN 110.12(a)1 AND 2.
4. SHALL CONTINUE TO PERFORM ALL OTHER CONTROL FUNCTIONS PROVIDED BY THE CONTROL WHEN COMMUNICATIONS ARE DISABLED.
5. THERMOSTATS SHALL COMPLY WITH REFERENCE JOINT APPENDIX 5 (JA5)

110.12(b) NONRESIDENTIAL HVAC SYSTEMS WITH DDC TO THE ZONE LEVEL SHALL BE PROGRAMMED TO ALLOW CENTRALIZED DEMAND SHED FOR NON-CRITICAL ZONES. CONTROLS SHALL BE CAPABLE OF:

1. REMOTELY INCREASING THE OPERATING COOLING TEMPERATURE SETPOINTS BY 4 DEGREES OR MORE IN ALL NON-CRITICAL ZONES ON SIGNAL FROM A CENTRALIZED CONTACT OR SOFTWARE POINT WITHIN AN EMCS
2. REMOTELY DECREASING THE OPERATING HEATING TEMPERATURE SETPOINTS BY 4 DEGREES OR MORE IN ALL NON-CRITICAL ZONES ON SIGNAL FROM A CENTRALIZED CONTACT OR SOFTWARE POINT WITHIN AN EMCS
3. REMOTELY RESETTING THE TEMPERATURES IN ALL NON-CRITICAL ZONES TO ORIGINAL OPERATING LEVELS ON SIGNAL FROM A CENTRALIZED CONTACT OR SOFTWARE POINT WITHIN AN EMCS
4. PROVIDING AN ADJUSTABLE RATE OF CHANGE FOR THE TEMPERATURE INCREASE, DECREASE, AND RESET
5. THE FOLLOWING FEATURES:
   A. DISABLED BY AUTHORIZED FACILITY OPERATORS
   B. MANUAL CONTROL BY AUTHORIZED FACILITY OPERATORS
   C. UPON RECEIPT OF A DR SIGNAL, SPACE-CONDITIONING SYSTEMS SHALL CONDUCT A CENTRALIZED DEMAND SHED, AS SPECIFIED IN 110.12(b)1 AND 110.12(b)2, FOR NON-CRITICAL ZONES DURING THE DR PERIOD

Space Conditioning Mandatory Measures:

120.2(j) DIRECT DIGITAL CONTROLS (DDC)
DDC TO THE ZONE SHALL BE PROVIDED AS SPECIFIED BY TABLE 120.2-A. THE DDC SYSTEM SHALL MEET CONTROL LOGIC REQUIREMENTS OF 120.1(D), 110.12(a) AND 110.12(b) AND BE CAPABLE OF ALL OF THE FOLLOWING:

1. MONITORING ZONE AND SYSTEM DEMAND FOR FAN PRESSURE, PUMP PRESSURE, HEATING AND COOLING
2. TRANSFERRING ZONE AND SYSTEM DEMAND INFORMATION FROM ZONES TO AIR DISTRIBUTION SYSTEM CONTROLLERS AND FROM AIR DISTRIBUTION SYSTEMS TO HEATING AND COOLING PLANT CONTROLLERS
3. AUTOMATICALLY DETECTING THE ZONES AND SYSTEMS THAT MAY BE EXCESSIVELY DRIVING THE RESET LOGIC AND GENERATE AN ALARM OR OTHER INDICATION TO THE SYSTEM OPERATOR
4. READILY ALLOW OPERATOR REMOVAL OF ZONE(S) FROM THE RESET ALGORITHM
5. FOR NEW BUILDINGS, TRENDING AND GRAPHICALLY DISPLAYING INPUT AND OUTPUT POINTS
6. RESETTING HEATING AND COOLING SETPOINTS IN ALL NON-CRITICAL ZONES UPON RECEIPT OF A SIGNAL FROM A CENTRALIZED CONTACT OR SOFTWARE POINT AS DESCRIBED IN 110.12(b).

120.2(k) OPTIMUM START/STOP CONTROLS
SPACE-CONDITIONING SYSTEMS WITH DDC TO THE ZONE SHALL HAVE OPTIMUM START/STOP CONTROLS. CONTROL ALGORITHM SHALL, AS A MINIMUM, BE A FUNCTION OF THE DIFFERENCE BETWEEN SPACE TEMPERATURE AND OCCUPIED SETPOINT, OUTDOOR AIR TEMP, AND AMOUNT OF TIME PRIOR TO SCHEDULED OCCUPANCY.

MASS RADIANT FLOOR SLAB SYSTEMS SHALL INCORPORATE FLOOR TEMPERATURE ONTO THE OPTIMUM START ALGORITHM.

120.3 PIPE INSULATION
PIPE INSULATION IS REQUIRED FOR:

- SPACE COOLING SYSTEM: REFRIGERANT SUCTION, CHILLED WATER, AND BRINE FLUID DISTRIBUTION SYSTEMS; AND
- SPACE HEATING SYSTEM: REFRIGERANT, STEAM, STEAM CONDENSATE, AND HOT WATER FLUID DISTRIBUTION SYSTEMS.

THIS PIPE INSULATION MUST SHOW COMPLIANCE WITH EITHER TABLE 120.3-A BASED ON FLUID NORMAL OPERATING TEMPERATURE RANGES AND PIPE DIAMETERS, OR THE INSULATION THICKNESS EQUATION IN 120.3(c).

PIPE INSULATION SHALL BE PROTECTED FROM DAMAGE, INCLUDING THAT DUE TO SUNLIGHT, MOISTURE, EQUIPMENT MAINTENANCE, AND WIND. PROTECTION SHALL INCLUDE BUT NOT BE LIMITED TO THE FOLLOWING:

- INSULATION EXPOSED TO WEATHER SHALL BE PROTECTED BY A COVER SUITABLE FOR OUTDOOR SERVICE. THE COVER SHALL BE WATER RETARDANT AND PROVIDE SHIELDING FROM SOLAR RADIATION THAT CAN CAUSE DEGRADATION OF THE MATERIAL. ADHESIVE TAPE SHALL NOT BE USED TO PROVIDE THIS PROTECTION.
- INSULATION COVERING CHILLED WATER PIPING AND REFRIGERANT SUCTION PIPING LOCATED OUTSIDE THE CONDITIONED SPACE SHALL INCLUDE, OR BE PROTECTED BY, A CLASS I OR CLASS II VAPOR RETARDER. ALL VAPOR RETARDER PENETRATIONS AND JOINTS SHALL BE SEALED.
- PIPE INSULATION BURIED BELOW GRADE MUST BE INSTALLED IN A WATER PROOF AND NON-CRUSHABLE CASING OR SLEEVE.

DSA STAMP

OFFICE OF THE STATE FIRE MARSHAL
APPROVED FIRE AND PANIC ONLY
12/04/25
25-1380
Approval of this plan does not authorize or approve any omission or deviation from applicable regulations. Final approval is subject to field inspection. One set of approved plans shall be available on the project site at all times.

DSH

Client Agency
DEPARTMENT OF STATE HOSPITALS

JCCA
Architects • Engineers
385 VAN NESS AVE., SUITE 208, TORRANCE, CA 90501
P: 310.212.7644 | F:310.212.5272

JCCA #: 24793-9

ROBERT R. NOLAN
31684
Exp. 6/30/25
MECHANICAL

No.

Issue	Date	Description
-	-	-

Project
SUPPLEMENTAL HVAC - CENTRAL KITCHEN

DEPARTMENT OF STATE
HOSPITALS, METROPOLITAN
11401 BLOOMFIELD AVENUE
NORWALK, CALIFORNIA 90650

DEPARTMENT OF STATE HOSPITALS (DSH)

Supervisor	Designed	Drawn	Checked
	-	-	-

Issue Date: 11/27/2024
Vault File Number:

Sheet Title
TITLE 24 MANDATORY MEASURES

Project Number
00000000000XXXX

Reference North

Sheet Scale
AS SHOWN

Sheet Number
M5.1

V3
100% SUBMITTAL

DATE/ TIME: 19 Mar 2025, 6:19 PM
FILE: L:\2024\24793-9 Central Kitchen AC, DSH-M\CAD\247939_M51
JCCA

STATE OF CALIFORNIA
Mechanical Systems
CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	**NRCC-MCH-E**

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.

Project Name:	HVAC Upgrade - Central Kitchen	**Report Page:**	**(Page 1 of 8)**
Project Address:		**Date Prepared:**	2025-02-03T17:42:11-05:00

A. GENERAL INFORMATION

01	Project Location (city)	Norwalk	04	Total Conditioned Floor Area	605
02	Climate Zone	8	05	Total Unconditioned Floor Area	605
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

STATE OF CALIFORNIA
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CERTIFICATE OF COMPLIANCE			**NRCC-MCH-E**
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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		AND	Yes	AND		AND		AND	Yes	AND		COMPLIES
Mandatory Measures Compliance (See Table Q 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
IU	8	Single zone	New/ Addition	All Other Occupancies	☐
OU-1	1	Single zone	New/ Addition	All Other Occupancies	☐
OU-2	1	Single zone	New/ Addition	All Other Occupancies	☐

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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
Name or Item Tag	Equipment Category per Tables 110.2, 140.4(a)2 and 170.2(c)3aii	Equipment Type per Tables 110.2 and Title 20	Smallest Size Available[1] 140.4(a) and 170.2(c)1	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]	
				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)
IU	Variable Refrigerant Flow	VRF heat pump, air cooled	Yes	23.8	23.8	0	15.7	23.2	71.3	51.3
OU-1	Variable Refrigerant Flow (with heat recovery)		Yes	54	34.1	0	28.7	48	71.3	51.3
OU-2	Variable Refrigerant Flow	VRF heat pump, air cooled	Yes	162	154	0	51.3	138	162	144

[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(a) 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
Name or Item Tag	Size Category (Btu/h)	Heating Mode				Cooling Mode		
		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
IU	<65,000	47 °Fdb/ 43 °Fwb OSA	HSPF	7.7	10	SEER	13	20.5
OU-1			HSPF		10	SEER	12.8	20.5

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F. HVAC SYSTEM SUMMARY (DRY & WET SYSTEMS)

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
Name or Item Tag	Size Category (Btu/h)	Heating Mode				Cooling Mode		
		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
OU-2	>=135,000 and <240,000	47 °Fdb/ 43 °Fwb OSA	COP	3.2	3.85	EER IEER	10.6 13.9	12 29.3

G. PUMPS

This section does not apply to this project.

H. FAN SYSTEMS & AIR ECONOMIZERS

This section does not apply to this project.

STATE OF CALIFORNIA
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CERTIFICATE OF COMPLIANCE			**NRCC-MCH-E**
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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	10
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	Direct Digital Control (DDC) per 120.2
IU	Single zone	<= 25,000 ft^2	EMCS	EMCS	EMCS	EMCS	NA: Would increase energy use	NA: No operable windows	Provided
OU-1	Single zone	<= 25,000 ft^2	EMCS	EMCS	EMCS	EMCS	Included	NA: No operable windows	Provided
OU-2	Single zone	<= 25,000 ft^2	EMCS	EMCS	EMCS	EMCS	Included	NA: No operable windows	Provided

[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.

J. VENTILATION AND INDOOR AIR QUALITY

This section does not apply to this project.

K. TERMINAL BOX CONTROLS

This section does not apply to this project.

STATE OF CALIFORNIA
Mechanical Systems
CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE			**NRCC-MCH-E**
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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.

Mandatory Pipe Insulation

02	03	04	05	06	07	08	09	10	10a
System Type	Nominal Pipe Diameter (in)	Fluid Temperature Range (°F)	Conductivity Range (Btu-in per hr per ft^2 per °F)	Insulation Mean Rating Temp. (°F)	Min. Insulation Thickness Required per Table 120.3-A (in)	Min. Insulation Thickness Required per 120.3(c)2 & 160.3(c)1dii (in)	Insulation Thickness per Design (in)	Exception to 120.3 & 160.3(c) (if applicable)	Serving Res or NR Space?
Space cooling	<1	40-60	0.21 - 0.27	75	0.5		0.75	No exception taken	Nonresidential
Space heating	<1	105-140	0.22 - 0.28	100	1		1	No exception taken	Nonresidential

M. COOLING TOWERS

This section does not apply to this project.

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/programs-and-topics/programs/building-energy-efficiency-standards/2022-building-energy-efficiency-4

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

STATE OF CALIFORNIA
Mechanical Systems
CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE			**NRCC-MCH-E**
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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/programs-and-topics/programs/building-energy-efficiency-standards/2022-building-energy-efficiency-4

Form/Title	Systems/Spaces To Be Field Verified
NRCA-MCH-11-A Automatic Demand Shed Controls	IU; OU-1; OU-2
NRCA-MCH-16-A Supply Air Temperature Reset Controls	OU-1; OU-2
NRCA-MCH-18-A Energy Management Control Systems	IU; OU-1; OU-2

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 Mandatory Measures Note Block	Yes	Plan sheet or construction document location
		M5.1

STATE OF CALIFORNIA
Mechanical Systems
CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE			**NRCC-MCH-E**
Project Name:	HVAC Upgrade - Central Kitchen	**Report Page:**	**(Page 8 of 8)**
Project Address:		**Date Prepared:**	2025-02-03T17:42:11-05:00

DOCUMENTATION AUTHOR'S DECLARATION STATEMENT

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

Documentation Author Name: Kregg Maruyama	Documentation Author Signature:
Company:	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:	Robert Nolan	Responsible Designer Signature:	
Company:	JC Chang & Assoc.	Date Signed:	2/14/2025
Address:	385 Van Ness Ave, Ste 208	License:	m31684
City/State/Zip:	Torrance, CA 90501	Phone:	310-212-7644

DSA STAMP

OFFICE OF THE STATE FIRE MARSHAL
APPROVED FIRE AND PANIC ONLY
12/04/25
25-1380
Approval of this plan does not authorize or approve any omission or deviation from applicable regulations. Final approval is subject to field inspection. One set of approved plans shall be available on the project site at all times.

DSH

Client Agency
DEPARTMENT OF STATE HOSPITALS

JCCA
Architects · Engineers
385 VAN NESS AVE., SUITE 208, TORRANCE, CA 90501
P: 310.212.7644 | F:310.212.5272

JCCA #: 24793-9

REGISTERED PROFESSIONAL ENGINEER
ROBERT R. NOLAN
31684
Exp. 6/30/25
MECHANICAL
STATE OF CALIFORNIA

No.

Issue	Date	Description
-	-	-

Project
SUPPLEMENTAL
HVAC - CENTRAL
KITCHEN

DEPARTMENT OF STATE
HOSPITALS, METROPOLITAN
11401 BLOOMFIELD AVENUE
NORWALK, CALIFORNIA 90650

DEPARTMENT OF
STATE HOSPITALS
(DSH)

Supervisor	Designed	Drawn	Checked
	-	-	-

Issue Date: 11/27/2024
Vault File Number:

Sheet Title
TITLE 24

Project Number
00000000000XXXX

Reference North

Sheet Scale
AS SHOWN

Sheet Number
M5.2

V3 100% SUBMITTAL

DATE/ TIME: 14 Feb 2025, 12:05 PM
FILE: L:\2024\24793-9 Central Kitchen AC, DSH-M\CAD\247939_M52
JCCA

ELECTRICAL GENERAL NOTES

A. SCOPE

1. FURNISH AND INSTALL ALL REQUIRED MATERIALS AND EQUIPMENT FOR COMPLETE OPERATING SYSTEMS AS SHOWN AND AS SPECIFIED.

B. SITE VISIT

1. CONTRACTOR SHALL VISIT THE JOB SITE AND BECOME FAMILIAR WITH THE EXISTING CONDITIONS THAT WILL AFFECT HIS WORK AND MAKE THE NECESSARY ALLOWANCES IN HIS BID TO COMPENSATE FOR THESE CONDITIONS. BY THE ACT OF SUBMITTING A BID FOR THIS PROJECT, THE CONTRACTOR ACCEPTS ALL CONDITIONS AT THE SITE. NO REQUEST FOR ADDITIONAL PAYMENT SHALL BE CONSIDERED AS VALID, DUE TO FAILURE TO ALLOW FOR CONDITIONS WHICH MAY EXIST.

C. CLEANING PREMISES

1. KEEP JOB SITE, BUILDING AND SITE FREE FROM RUBBISH AND WASTE MATERIALS, REMOVE SAME FROM SITE ON A DAILY BASIS.

D. EXAMINATION OF DRAWINGS

1. CONTRACTOR SHALL STUDY ALL DRAWINGS AND SPECIFICATIONS. SHOULD ANY OF THE WORK SHOWN OR INDICATED BY THE DRAWINGS BE CONTRARY TO OR IN CONFLICT WITH ANY CODE REQUIREMENTS, THE SAME SHALL BE REPORTED TO THE OWNER BEFORE SUBMITTING A BID. CONTRACTOR WILL BE ADVISED AS TO HOW TO PROCEED.

E. COORDINATION

1. COORDINATE ALL WORK WITH OTHER TRADES. OBTAIN ALL DRAWINGS THAT WILL REQUIRE COORDINATION AND PROVIDE ALL ELECTRICAL CONNECTIONS REQUIRED WHETHER SHOWN ON ELECTRICAL DRAWINGS OR NOT.
2. ELECTRICAL EQUIPMENT LOCATIONS INDICATED ARE SHOWN DIAGRAMMATICALLY, EXACT LOCATION SHALL BE VERIFIED AND DETERMINED IN FIELD, AND APPROVED BY THE OWNER.

F. SHOP DRAWINGS

1. ALL EQUIPMENT TO BEAR U.L. LABEL OR CERTIFIED BY NATIONALLY RECOGNIZED TESTING LABORATORY. SHOP DRAWINGS MUST BE STAMPED BY THE CONTRACTOR FOR CONFORMANCE PRIOR TO SUBMITTAL. SUBMIT SHOP DRAWINGS FOR REVIEW PRIOR TO PURCHASING. SHOP DRAWINGS ARE REQUIRED FOR ALL PANEL BOARDS, RECEPTACLES, DISCONNECT SWITCHES, GENERATOR, LOAD BANK SWITCHGEAR AND TRANSFORMERS.

G. CONTRACTOR BID

1. CONTRACTOR'S BID SHALL BE BASED ON ALL WORK SHOWN ON THE PLANS AND AS SPECIFIED. ALL PREMIUM, TIME COSTS REQUIRED SHALL BE INCLUDED IN THE BID. NO OBSOLETE OR OUT OF MANUFACTURING EQUIPMENT SHALL BE ACCEPTED. ALL SUBSTITUTIONS MUST BE REVIEWED BY THE ENGINEER IN WRITING. SUCH A REVIEW SHALL NOT RELIEVE THE CONTRACTOR FROM COMPLYING WITH THE REQUIREMENTS OF THE DRAWINGS AND SPECIFICATION, THE CONTRACTOR SHALL BE RESPONSIBLE, AT HIS OWN EXPENSE, FOR ANY CHANGES RESULTING FROM HIS PROPOSED SUBSTITUTIONS WHICH AFFECT OTHER PARTS OF HIS OWN WORK OR THE WORK OF OTHER CONTRACTORS.

H. "AS-BUILT" DRAWINGS

1. CONTRACTOR SHALL KEEP A SET OF PRINTS WHICH SHALL BE CORRECTED DAILY TO SHOW EVERY CHANGE FROM THE ORIGINAL DRAWINGS AND SPECIFICATIONS. UNDERGROUND RUNS SHALL BE ACCURATELY DIMENSIONED ON THESE PRINTS (REFERENCED TO BUILDING WALLS OR COLUMNS). ADDENDA AND CHANGE ORDERS SHALL ALSO BE INCLUDED ON THESE PRINTS. DELIVER "AS- BUILT" PRINTS TO OWNER PRIOR TO ACCEPTANCE OF THE JOB. "AS-BUILT" PRINTS SHALL BE SIGNED AND DATED BY CONTRACTOR.
2. THESE DRAWINGS SHALL BE SUBMITTED TO THE OWNER FOR APPROVAL. AFTER APPROVAL, THEY SHALL BECOME THE PROPERTY OF THE OWNER. FINAL PAYMENT WILL BE WITHHELD UNTIL RECEIPT OF THE APPROVED DRAWINGS.

I. DEMOLITION

1. PERFORM ALL DEMOLITION WORK AS NOTED ON THE DRAWINGS AND/OR AS REQUIRED TO CLEAR THE AREA FOR THE NEW WORK. DELIVER ALL SALVABLE EQUIPMENT TO THE OWNER AS DIRECTED.
2. FOR ALL EQUIPMENT TO BE REMOVED, REMOVE ALL WIRING BACK TO THE POWER SUPPLY OR TO THE LAST DEVICE TO REMAIN. MAINTAIN CIRCUIT CONTINUITY TO ALL DEVICES AND EQUIPMENT TO REMAIN. REMOVE ALL UNUSED CONDUIT AND WIRES.
3. OVERCURRENT PROTECTIVE DEVICES VACATED SHALL BE LABELED "SPARE". UPDATE ALL PANEL AND SWITCHBOARD DIRECTORIES TO CLEARLY REFLECT NEW CONDITIONS.

J. PROTECTION & SAFEGUARDS

1. THE CONTRACTOR SHALL ERECT AND MAINTAIN SUITABLE BARRIERS, PROTECTIVE DEVICES, LIGHT AND WARNING SIGNS WHERE REQUIRED FOR THE PROTECTION OF THE PUBLIC AND EMPLOYEES ABOUT THE BUILDING. HE SHALL BE FULLY RESPONSIBLE FOR ANY LOSS OR INJURY TO PERSON OR PROPERTY RESULTING FROM HIS NEGLECT OF THESE PRECAUTIONS, HIS OWN CARELESSNESS, OR THE CARELESSNESS OR NEGLECT OF HIS EMPLOYEES, OR HIS SUB-CONTRACTOR AND/OR THEIR EMPLOYEES.

K. POWER SHUTDOWN

1. POWER SHUTDOWN WHEN REQUIRED FOR THE EXECUTION OF NEW WORK SHALL BE DONE AFTER NORMAL WORKING HOURS, AND SHALL BE PROPERLY COORDINATED IN ADVANCE. CONTRACTOR SHALL INCLUDE IN HIS BID ALL COST TO COVER OVERTIME.
2. ANY POWER OUTAGES SHALL BE APPROVED BY THE USER OF THE FACILITY. A ONE WEEK WRITTEN NOTICE SHALL BE GIVEN FOR ANY OUTAGE REQUEST.

L. EQUIPMENT AND DEVICES

1. THE ELECTRICAL CONSTRUCTION DRAWINGS PROVIDED HEREIN ARE DIAGRAMMATIC AND SYMBOLIC IN REPRESENTATION. LOCATIONS DEPICTED ON THE DRAWINGS FOR ELECTRICAL EQUIPMENT/DEVICES (MOTORS, STARTERS, DISCONNECT SWITCHES, RECEPTACLES, JUNCTION/OUTLET BOXES, CONTROL SWITCHES, ETC.. ARE ONLY APPROXIMATE. FURTHERMORE, THE EQUIPMENT/DEVICE DEPICTIONS ARE GENERALLY SYMBOLIC AND NOT TO SCALE.
2. ELECTRICAL DRAWINGS INDICATE NEW MATERIALS AND NEW WORK, UNLESS OTHERWISE NOTED. EXISTING ELECTRICAL SYSTEMS ARE NOT SHOWN EXCEPT WHERE INTERFACE IS REQUIRED.
3. ALL NEW BOXES, PANELS, OUTLET COVERS, ENCLOSURES, ETC. MOUNTED ON THE EXTERIOR OF ANY STRUCTURE SHALL BE WEATHERPROOF (NEMA 3R MIN) & ALSO PAINTED TO MATCH THE EXISTING BUILDING/STRUCTURE.
4. USE "DYMO" LABEL ON FACE OF RECEPTACLE AND SWITCH COVER PLATE AND JUNCTION BOXES INDICATING THE SOURCE PANEL AND CIRCUIT USED. DYMO LABEL TAPE SHALL MATCH THE COLOR OF THE COVER PLATE ON RECEPTACLES AND SWITCHES.
5. ALL DEVICE SHALL BE WHITE U.O.N.

M. RACEWAYS AND WIRING

1. ALL CABLE/WIRE, CONDUIT RUNS ARE SHOWN DIAGRAMMATICALLY & THEY SHALL BE ROUTED TO SUIT ACTUAL FIELD CONDITIONS, EXCEPT WHERE LOCATION ARE EXPLICITLY DIMENSIONED ON THE DWGS.
2. CONTRACTOR TO LIMIT THE NUMBER OF 90° BENDS BETWEEN PULL POINTS TO COMPLY WITH THE REQUIREMENTS OF THE CALIFORNIA ELECTRICAL CODE, CEC.
3. FLEXIBLE CONDUIT SHALL BE USED ONLY FOR SHORT CONNECTIONS TO LIGHT FIXTURES OR IN EXISTING WALLS.
4. WATERTIGHT FLEXIBLE CONDUIT (TYPE "UA") SHALL BE USED FOR CONNECTIONS TO MOTORS, TRANSFORMERS OR OTHER EQUIPMENT THAT MAY VIBRATE DURING OPERATION.
5. MAXIMUM LENGTH OF FLEXIBLE CONDUIT SHALL BE LIMITED TO 6 FT.
6. RIGID GALVANIZED STEEL (RGS) SHALL BE USED FOR OUTDOOR WIRING, UNLESS OTHERWISE NOTED.
7. EMT MAYBE USED INDOOR AND WITH COMPRESSION COUPLING CONNECTIONS.
8. MINIMUM SIZE OF EMT SHALL BE 3/4".
9. THE MINIMUM SIZE OF CONDUITS INSTALLED BELOW GRADE SHALL BE 1", UON. THE MINIMUM SIZE OF ALL HOME RUN CONDUITS SHALL BE 3/4", UON. 1/2" CONDUIT SHALL ONLY BE ALLOWED AT FINAL INDIVIDUAL CONNECTIONS EQUIPMENT/DEVICES.
10. ALL CONDUITS PENETRATING SLABS SHALL BE WATERPROOF.
11. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ALL SLEEVES & OPENINGS REQUIRED FOR THE PASSAGE OF ELECTRICAL RACEWAYS EVEN WHEN THESE OPENINGS OR SLEEVES ARE NOT SPECIFICALLY SHOWN ON THE DRAWINGS. ALL EXCESS OPENINGS SHALL BE PROPERLY SEALED WITH EQUIVALENT FIRE RATING. CONDUITS SHALL NOT REQUIRED SLEEVES IF IT IS APPROVED FOR THROUGH PENETRANTS.
12. CONDUITS TERMINATED AT PANEL BOARDS, CONTROL CABINETS, ETC. SHALL BE EQUIPPED WITH GROUNDING BUSHINGS AND SHALL BE EFFECTIVELY BONDED TO THEIR SOURCE GROUND BUS.
13. ALL BENDS IN CABLES SHALL BE MADE SO THAT THE PROTECTIVE COVERING ON THE CABLE WILL NOT BE INJURED. NO BEND SHALL HAVE A RADIUS LESS THAN THE MINIMUM RECOMMENDED BY THE CABLE MANUFACTURER.

N. CONDUCTORS

1. UL LISTED. CONDUCTORS SHALL BE COPPER, 600 VOLT, "THHN/THWN-2" INSULATION, STRANDED, MINIMUM SIZE #12 EXCEPT FOR CONTROLS. CONTRACTOR TO VERIFY ROTATION AND PHASING.

   COLOR CODES

   NEUTRAL - WHITE

a) 208/120VOLT SYSTEM	b) 480/277VOLT SYSTEM
PHASE A - BLACK	PHASE A - BROWN
PHASE B - RED	PHASE B - ORANGE
PHASE C - BLUE	PHASE C - YELLOW

O. BOXES

1. OUTLET, JUNCTION AND PULL BOXES SHALL BE SIZED PER APPLICABLE VERSION OF CALIFORNIA ELECTRICAL CODE ARTICLE 314, TABLES 314.16 (a) AND (b) AND 314.28.

P. GROUNDING AND BONDING

1. ALL NEW (ADDITIONAL) METALLIC STRUCTURES AND EQUIPMENT FABRICATED WITH METALLIC MATERIALS SUCH AS MOTOR FRAMES, ENCLOSURES, CABINETS, MISC. ELECTRIC EQUIPMENT, METALLIC RACEWAYS, STAIRS, FENCES & HANDRAILS ETC.. SHALL ALL BE PERMANENTLY & EFFECTIVELY GROUNDED.
2. ALL ABOVE GROUNDING CONDUCTORS SHALL BE INSULATED STRANDED SOFT DRAWN COPPER, CLASS B, UON. THE GROUNDING CONDUCTORS WHEREVER POSSIBLE, SHALL BE ROUTED BENEATH SLABS, ATTACHED TO THE BUILDING STEEL, OR RUN IN RACEWAYS AS SHOWN.
3. CONDUIT RUNS AND EQUIPMENT/DEVICE ENCLOSURES SHALL BE BONDED TOGETHER TO FORM A CONTINUOUS ELECTRICAL CONDUCTOR. NON-METALLIC RACEWAYS & ENCLOSURES SHALL INCLUDE BONDING JUMPERS,
4. ALL SYSTEM GROUNDING CONDUCTORS SHALL BE COPPER. ALL GROUND CONNECTIONS SHALL BE ACCESSIBLE AND MADE WITH COPPER ALLOY FITTINGS.
5. A GROUND WIRE IS REQUIRED FOR ALL CONDUITS.

Q. FEEDERS AND BRANCH CIRCUITS IDENTIFICATION

1. IDENTIFY FEEDERS WITH THE CORRESPONDING CIRCUIT DESIGNATION AT THE OVER-CURRENT DEVICE, LOAD END, AND IN PULL BOXES WITH E-Z CODE OR OTHER APPROVED WIRE MARKER.
2. IDENTIFY BRANCH CIRCUITS WITH I.D. MARKERS, THE CORRESPONDING CIRCUIT DESIGNATION AT THE OVER-CURRENT DEVICE, AT ALL SPLICES, AND IN JUNCTION BOXES, AND IN OUTLETS. USE PLASTIC COATED SELF-STICKING MARKERS SUCH AS THOMAS & BETTS E-Z CODE FOR IDENTIFICATION OF CONDUCTORS.
3. CIRCUIT DESIGNATION MEANS PANEL AND CIRCUIT NUMBER, I.E. 4ALR-3.
4. ALL EQUIPMENT SHALL BE LABELED WITH PHENOLIC PERMANENT MARKER ENGRAVED LABEL AND MOUNT WITH SCREWS. ADHESIVE MOUNTING IS NOT ACCEPTABLE.
5. LARGER DISTRIBUTION PANELS SHALL HAVE PHENOLIC NAMEPLATES MADE FOR EACH BREAKER. BLACK BACKGROUND WITH WHITE LETTERS.
6. CHECK PANEL SCHEDULES IDENTIFICATION FOR VALIDITY. REIDENTIFY ANY OR ALL CHANGES IN PANEL ON PANEL SCHEDULE CARD. WHILE PANEL COVER IS REMOVED TURN OFF ANY SPARE BREAKERS AND VERIFY SPARES ARE INDICATED ON PANEL SCHEDULE CARD.

R. EXECUTION

1. CAREFULLY PROTECT ALL WALLS, TRIM, FLOORS, EQUIPMENT, UTILITY LINES AND MATERIALS. WHEN WORKING ON FINISHED SURFACES, LIMIT DAMAGE TO THE CONFINED SPACE AS POSSIBLE AND RESTORE TO THE ORIGINAL CONDITION ALL SURFACES WHICH ARE DAMAGED BECAUSE OF THE INSTALLATION OF THIS WORK.
2. EQUIPMENT, MATERIALS AND SUPPLIES REMOVED FOR PROTECTION SHALL BE REPLACED IN ORIGINAL LOCATIONS. ANY MATERIALS DAMAGED SHALL BE REPLACED WITH NEW MATERIALS OF LIKE KIND AND QUALITY.
3. DO ALL DRILLING, CUTTING, CHANNELING AND PATCHING REQUIRED TO INSTALL ELECTRICAL WORK, AS INDICATED OR HEREIN SPECIFIED. ALL HOLES, CURBS, ETC., IN FLOORS, CEILINGS AND WALLS SHALL BE PATCHED TO MATCH ADJACENT SURFACE, UNLESS INDICATED OTHERWISE. PAINT ALL NEW ELECTRICAL RACEWAYS, CABINETS, ENCLOSURES AND FITTINGS TO MATCH COLOR OF ADJACENT SURFACES.
4. SEAL ALL PENETRATIONS THROUGH FIRE RATED WALLS, CEILINGS, FLOORS, ETC., TO MAINTAIN THE FIRE RATING. FURNISH AND INSTALL FIRE RATED ENCLOSURES FOR ALL EQUIPMENT PENETRATING INTO FIRE RATED ENVELOPES, SPACES, ETC.
5. ALL DISCONNECT AND TRANSFORMERS SHALL BE LABELED WITH PERMANENT ENGRAVED LABELS WITH PANEL DESIGNATION FED FROM AND ROOM LOCATION.
6. CHECK PANEL SCHEDULES IDENTIFICATION FOR VALIDITY. REIDENTIFY ANY OR ALL CHANGES IN PANEL ON PANEL SCHEDULE CARD. WHILE PANEL COVER IS REMOVED TURN OFF ANY SPARE BREAKERS AND VERIFY SPARES ARE INDICATED ON PANEL SCHEDULE CARD.
7. UNUSED KNOCKOUT OR OPENINGS SHALL BE SECURED AND PROVIDE WITH PLUG.

S. MISCELLANEOUS

1. CONTRACTOR SHALL PROVIDE ALL MATERIAL UNLESS NOTED OTHERWISE IN THE CONTRACT AND/OR CONSTRUCTION DOCUMENT. ALL MATERIAL SHALL BE NEW AND NOTED BY UNDERWRITER'S LABORATORIES, FACTORY MUTUAL, OR TESTED BY THE APPROVED THIRD PARTY TESTING FACILITY.
2. CONVENIENCE OUTLET RECEPTACLES SHALL BE INSTALLED AS CLOSE AS POSSIBLE TO LOCATIONS SHOWN ON PLANS. CONTRACTOR RESPONSIBLE FOR EXACT LOCATION BASED ON FIELD CONDITIONS.
3. DURING CONSTRUCTION, DO NOT INTERRUPT OR IMPEDE OPERATION AND WORK IN ADJACENT AREAS.
4. UPON COMPLETION OF WORK, REPLACE SURFACE MATERIAL, PAVING AND PAVING BASE, COURSE TO MATCH ORIGINAL. ALL CONDUIT PENETRATIONS SHALL BE SEALED WITH AN APPROPRIATE RATED SEALANT. PENETRATIONS EXPOSED TO WEATHER AND THROUGH ROOF SHALL BE FLASHED AND CAULKED TO FORM A FIRE RATED AND WATERTIGHT PENETRATION.
5. UPON COMPLETION OF ALL WORK, THOROUGHLY CLEAN ALL EQUIPMENT AND DUCTS FROM INSIDE AND OUTSIDE OF EQUIPMENT. REMOVE ALL TRACES OF SOIL, DUST, LABELS, GREASE, OIL AND FOREIGN MATERIALS. CLEANUP AND REMOVE FROM THE PREMISES ALL DEBRIS AND SURPLUS MATERIAL CAUSED BY THIS WORK.
6. ALL EXISTING SURFACES DAMAGED BY NEW CONSTRUCTION, SHALL BE PATCHED, OR REPAINTED TO MATCH EXISTING CONDITIONS, PAINTED SURFACE SHALL BE PAINTED FROM BREAK TO BREAK. IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO PATCH & REPAIR ALL DAMAGE TO EXISTING SURFACES AND FINISHES FURTHERMORE, THE AFFECTED AREA(S) OF WORK SHALL BE REPAIRED TO MATCH THE FINISH THAT WAS PREVIOUSLY EXISTING, PRIOR TO THE COMMENCEMENT OF WORK.
7. THE CONTRACTOR SHALL VERIFY ALL LOCATIONS, WHICH REQUIRE PENETRATIONS, SUCH AS ROOFS, HAZARDOUS AREAS, MASONRY AND FIRE RATED WALLS, ETC.. THE CONTRACTOR SHALL PROVIDE ALL REQUIRED OPENINGS & CORE DRILL AS REQUIRED FOR NEW ELECTRICAL WORK. THE CONTRACTOR SHALL PATCH & FIRE STOP (SEAL) ALL PENETRATIONS (BOTH SIDES) PER SPECIFICATIONS.
8. WHERE THERE IS A CONFLICT BETWEEN THE DRAWINGS & ANY RELEVANT CODES, THE CODES SHALL GOVERN, EXCEPT WHERE THE DRAWINGS INDICATE A QUALITY LEVEL SUPERIOR TO THAT SPECIFIED BY THE CODES.
9. IN THE EVENT OF CONFLICT OR DISCREPANCY IN DRAWINGS/PLANS, IN SPECIFICATIONS, BETWEEN DRAWINGS AND SPECIFICATIONS, BETWEEN SITE CONDITIONS AND DRAWINGS, THE CONTRACTOR SHALL PROVIDE THE MORE STRINGENT REQUIREMENTS.

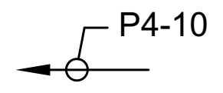
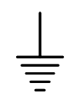
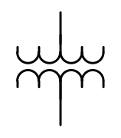
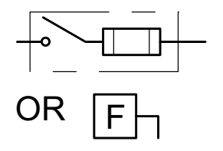
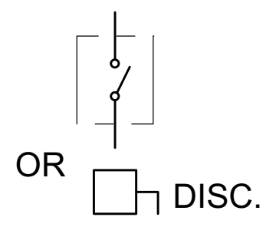
T. ACCEPTANCE TESTING AND COMMISSIONING.

1. THE CONTRACTOR SHALL PROVIDE A THIRD PARTY TESTING
2. CONTRACTOR SHALL PROVIDE DOCUMENTATION THAT THE CONDUCTOR, PANELBOARDS, AND DEVICES HAVE BEEN COMMISSIONED AND PASSED THE ACCEPTANCE TESTING AND READY FOR OPERATION PRIOR TO HANDOVER TO END USER.

ABBREVIATIONS

A	AMPERE
ADMIN.	ADMINISTRATION
AIC	AMPERE INTERRUPTING CAPACITY
AF	AMPERE FRAME
AFF	ABOVE FINISHED FLOOR
AWG	AMERICAN WIRE GAUGE
AH	AMPERE HOUR
A/C	AIR CONDITIONING
ANN.	ANNUNCIATOR
BLDG	BUILDING
BKR	BREAKER
CD	CANDELA
CB	CIRCUIT BREAKER
C	CONDUIT
C.O.	CONDUIT ONLY
CKT	CIRCUIT
CKT. BKR.	CIRCUIT BREAKER
CSFM	CALIFORNIA STATE FIRE MARSHAL
COM	COMMUNICATION
CONC.	CONCRETE
CORR.	CORRIDOR
CU	COPPER
DWG	DRAWINGS
DHPS	DOOR HOLDER POWER SUPPLY
DD	DUCT DETECTOR (SMOKE)
D	DISTANCE
(D)	DEMOLITION
EA.	EACH
(E)	EXISTING TO REMAIN
EOL	END OF LINE RESISTOR
EQUIPT.	EQUIPMENT
ELECT.	ELECTRICAL
EMERG.	EMERGENCY
EXT.	EXTERNAL
FAA	FIRE ALARM ANNUNCIATOR
FATC	FIRE ALARM TERMINAL CABINET
F.A. OR FA	FIRE ALARM
FACP/U	FIRE ALARM CONTROL PANEL/UNIT
FAPB	FIRE ALARM PULL BOX
FD	FIRE DAMPER
FIN	FINISHED
FL	FLOOR
FLEX.	FLEXIBLE
FT.	FEET
G, GND	GROUND
H: ##'-#"	HEIGHT: FT-IN
HRS	HOURS
HVAC	HEATING VENTILATING AIR CONDITIONING
IOR	INSPECTOR OF RECORD
INFO.	INFORMATION
KVA	KILOVOLR-AMPERE
KW	KILOWATTS
LV	LOW VOLTAGE
MECH.	MECHANICAL
MISC.	MISCELLANEOUS
(N)	NEW
N.I.C.	NOT IN CONTRACT
NO.	NUMBER
N/0	NORMALLY OPEN
N/C	NORMALLY CLOSE
NAC	NOTIFICATION APPLIANCE CIRCUIT
NEGL	NEGLIGIBLE
NTS	NOT TO SCALE
P	POLE, PHASE
PB	PULL BOX
PR	PAIR
PNL	PANELBOARD
PVC	POLY VINYL CHLORIDE
(R)	RELOCATED
RES.	RESISTOR
SCHED	SCHEDULE
SFD	SMOKE FIRE DAMPER
SFM	STATE FIRE MARSHAL
SLC	SIGNALING LINE CIRCUIT
SLD	SINGLE LINE DIAGRAM
STP	SHIELDED TWISTED PAIR
SW	SWITCH
SWBD	SWITCHBOARD
SYNC.	SYNCHRONIZE
TD	TIME DELAY
TYP	TYPICAL
U.N.O.	UNLESS NOTED OTHERWISE
UG	UNDERGROUND
UTP	UNSHIELDED TWISTED PAIR
UL	UNDERWRITER LABORATORIES
VD	VOLTAGE DROP
VOLT	VOLTAGE
W/	WITH
WP	WEATHER PROOF
W	WIDTH
XFMR, TRANSF.	TRANSFORMER

ELECTRICAL SYMBOL LIST

 P4-10	BRANCH CIRCUIT DESTINATION (PANEL NAME-CIRCUIT NUMBER) HOMERUN INDICATES PROVIDING CONDUIT AND CONDUCTORS MINIMUM CONDUIT SIZE: 3/4" MINIMUM CONDUCTOR SIZE: #12AWG PROVIDE 3/4"C-2#12+1#12G WHERE NO CONDUIT/WIRE SIZE IS STATED. PROVIDE DEDICATED NEUTRAL FOR ALL BRANCH CIRCUIT WIRING. CONTRACTOR RESPONSIBLE FOR DE-RATING CONDUIT WITH MORE THAN SIX CURRENT CARRYING CONDUCTORS PER CEC 310. #12 AWG FOR CIRCUITS UP TO 100' #10 AWG FOR CIRCUITS FROM 100' TO 200' #8 AWG FOR CIRCUIT GREATER THAN 200'
	GROUNDING
	TRANSFORMER
 OR F	FUSE W/DISCONNECT SWITCH AS INDICATED ON DWGS. CONTRACTOR TO CONFIRM FUSE SIZING BASED ON EQUIPMENT MANUFACTURER RECOMMENDATION
 OR DISC.	UNFUSED DISCONNECT SIZED AS INDICATED ON DWGS.
	CIRCUIT BREAKER
	120/208V, 3Ø, 4W OR 240/120V, 1Ø, 3W PANELBOARD
	20A, 125V DUPLEX RECEPTACLE (NEMA 5-20R) SUBSCRIPTS DENOTE THE FOLLOWING: "WP" - WEATHERPROOFED
$	SINGLE POLE SWITCH
$	DOUBLE POLE SWITCH

SEQUENCE OF CONSTRUCTION

1. CONTRACTOR SHALL PROVIDE SEQUENCE OF CONSTRUCTION TO MINIMIZE DOWNTIME/POWER OUTAGE.
2. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO PROVIDE TEMPORARY POWER SUPPLY IN PERFORMING THEIR WORK TO AVOID DISRUPTION ON CLIENT OPERATION.
3. POWER SHUTDOWN WHEN REQUIRED FOR THE EXECUTION OF NEW WORK SHALL BE DONE AFTER NORMAL WORKING HOURS OR WEEKENDS, AND SHALL BE PROPERLY COORDINATED IN ADVANCE. CONTRACTOR SHALL INCLUDE IN HIS BID ALL COST TO COVER OVERTIME.

VOLTAGE DROP NOTE

APPLICABLE FOR ALL NEW, ALTERED, OR RELOCATED FEEDER AND BRANCH CIRCUIT CONDUCTORS.

"130.5(C) VOLTAGE DROP: THE MAXIMUM COMBINED VOLTAGE DROP ON BOTH INSTALLED FEEDER CONDUCTORS AND BRANCH CIRCUIT CONDUCTORS TO THE FARTHEST CONNECTED LOAD OR OUTLET SHALL NOT EXCEED 5 PERCENT."

DEFINITION

PROVIDE IS DEFINED TO MEAN THAT THE CONTRACTOR SHALL FURNISH, INSTALL, ADJUST, TEST AND INTEGRATE INTO A COMPLETE SYSTEM THE ITEM INDICATED INCLUDING ALL HARDWARE, WIRING, AND MISCELLANEOUS ITEMS AS NECESSARY FOR A COMPLETE AND OPERATIONAL SYSTEM.

TYPICAL PLAN LEGEND

—	LIGHT, THIN LINES INDICATE EXISTING.
━	HEAVY, THICK LINES INDICATE NEW
‒ ‒ ‒ ‒	HEAVY, SHORT DASHED LINES DEMOLITION OR REMOVAL

THIS SYMBOLOGY TO BE USED BY ELECTRICAL AND LAYOUT FOR ALL FLOOR PLANS, EQUIPMENT, DEVICES, UTILITIES, ETC..., SHOWN ON DRAWINGS.

UL LISTING

ALL ELECTRICAL EQUIPMENT SHALL BE UL LISTED OR APPROVED BY NATIONALLY RECOGNIZED TESTING LABORATORY.

DSA STAMP

OFFICE OF THE STATE FIRE MARSHAL
APPROVED FIRE AND PANIC ONLY
12/04/25
25-1380
Approval of this plan does not authorize or approve any omission or deviation from applicable regulations. Final approval is subject to field inspection. One set of approved plans shall be available on the project site at all times.

DSH

Client Agency
DEPARTMENT OF STATE HOSPITALS

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REGISTERED PROFESSIONAL ENGINEER
HECTOR JANORAS LACSA
No. E18399
Exp. 6/30/26
ELECTRICAL
STATE OF CALIFORNIA

No.

Issue	Date	Description
-	-	-

Project
SUPPLEMENTAL HVAC - CENTRAL KITCHEN

DEPARTMENT OF STATE HOSPITALS, METROPOLITAN
11401 BLOOMFIELD AVENUE
NORWALK, CALIFORNIA 90650

DEPARTMENT OF STATE HOSPITALS (DSH)

Supervisor	Designed	Drawn	Checked
	HJL	JDLC	SA

Issue Date: 11/27/2024
Vault File Number

Sheet Title
ELECTRICAL COVER SHEET

Project Number
00000000000XXXX

Reference North

Sheet Scale
AS SHOWN

Sheet Number
E0.1

V3 100% SUBMITTAL

SUPPLY FROM : (E)NDB
LOCATION : INDOOR
MOUNTING : SURFACE
ENCLOSURE : NEMA 1

PANELBOARD : (E)KP3 3
BUS AMP : 225A
KAIC RATING : 10,000 AIC

VOLTAGE: 208 / 120
MAIN: 225A, 3P
FEEDER: 4#4/0+1#4GND

	DESCRIPTION	VOLT-AMPERE			LIGHTS	RECEP.	MISC.	CIRC. NO.	CIRC. BKR.		Ø			CIRC. BKR.		CIRC. NO.	MISC.	RECEP.	LIGHTS	VOLT-AMPERE			DESCRIPTION	
		ØA	ØB	ØC					A	P	A	B	C	A	P					ØA	ØB	ØC		
	FOOD SERVICE DISPOSER	1,056						1	20		●			20		2				1,520			THROUVEYOR #272	
			1,056					3				●				4					1,520			
				1,056				5		3			●		3	6						1,520		
	SPARE							7	40		●			50		8				1,040			DISWASHER	
								9				●				10					1,040			
								11		3			●		3	12						1,040		
	PORTABLE SPRAY CLEANING #292 REC	1,000						13	20	1	●			60		14							SPARE	
	PORTABLE SPRAY CLEANING #292 REC		1,000					15	20	1		●				16								
	MOBILE FLOOR SCRUBBER #291			1,920				17	20	1			●		3	18								
	RADIANT HEATER, RH-1	400						19	20	1	●			40		20				3,590			3 SINK WASHER	
	SPARE							21	20	1		●				22					3,590			
2	**(N)SERVICE RECEPTACLE**			**180**				23	20	1			●		3	24						3,590		
1	**(N)OUTDOOR CONDENSING UNIT, OU-2**	**5,724**						25	60		●			20		26				1,665			AIR SCREEN #11	
			5,724					27				●			2	28					1,665			
				5,724				29		3			●	20		30						1,665	AIR SCREEN #11 (OFF)	
	EXHAUST FAN EF-9	667						31	20	1	●				2	32				1,665				
	EXHAUST FAN EF-8		528					33	20	1		●		20	1	34							SPARE	
	EXHAUST FAN EF-7			667				35	20	1			●	15		36						**250**	**(N)FAN COIL INDOOR UNIT, IU-1 THRU 6**	1
	EXHAUST FAN EF-6	667						37	20	1	●				2	38				**250**				
	EXHAUST FAN EF-15		1,176					39	20	1		●		20	1	40					667		FAN POWERED VAV BOX FPB-2	
	EXHAUST FAN EF-16			1,556				41	20	1			●	20	1	42						667	FAN POWERED VAV BOX FPB-1	
	SUBTOTAL	9,514	9,484	11,103															SUBTOTAL	9,730	8,482	8,732		

Load Classification	Connected Load	Demand Factor	Total Demand Load	Total Load		Load and Current per Phase		
HVAC	24,666	100%	24,666	TOTAL CONNECTED LOAD, VA :	57,044	ØA	19,244 VA,	160 A
INTERIOR & EXTERIOR LIGHTING	0	125%	0	TOTAL DEMAND LOAD, VA :	50,068	ØB	17,966 VA,	150 A
CONVENIENCE RECEPTACLE	180	100%	180	TOTAL CONNECTED AMPS, A :	158	ØC	19,835 VA,	165 A
KITCHEN EQUIPMENT	32,198	65%	20,929	TOTAL DEMAND AMPS, A :	139			
HIGHEST MOTOR LOAD	17,172	25%	4,293					
OTHERS :	0	100%	0					

NEW WORK KEYNOTES:

1 PROVIDE NEW CIRCUIT BREAKER AS SHOWN.

2 USE SPARE CIRCUIT BREAKER.

3 VERIFY EXISTING CIRCUITS, AND PROVIDE NEW UPDATED PANEL DIRECTORY. HAND WRITTEN IS NOT ACCEPTABLE.

SUPPLY FROM : (E)NDB
LOCATION : INDOOR
MOUNTING : SURFACE
ENCLOSURE : NEMA 1

PANELBOARD : (E)PP1 3
BUS AMP : 225A
KAIC RATING : 10,000 AIC

VOLTAGE: 208 / 120
MAIN: 225A, 3P
FEEDER: 4#4/0+1#4GND

	DESCRIPTION	VOLT-AMPERE			LIGHTS	RECEP.	MISC.	CIRC. NO.	CIRC. BKR.		Ø			CIRC. BKR.		CIRC. NO.	MISC.	RECEP.	LIGHTS	VOLT-AMPERE			DESCRIPTION	
		ØA	ØB	ØC					A	P	A	B	C	A	P					ØA	ØB	ØC		
	OFFICE RM 119 RECEPTACLES	900						1	20	1	●			20	1	2				50			FAX IN SUPERVISING COOK I RM 118	
	OFFICE RM 120 RECEPTACLES		900					3	20	1		●		20	1	4					180		OPEN OFFICE RM 115 CONV RECEPT	
	RM 118 MODULAR FURNITURE RECEPT			540				5	20	1			●	20	1	6						1,260	SUPERVISING COOK I AND II	
	RM 118 MODULAR FURNITURE RECEPT	720						7	20	1	●			20	1	8				720			RM 112 RECEPTACLES	
	RM 118 MODULAR FURNITURE RECEPT		540					9	20	1		●		20	1	10					540		ADMIN BREAKROOM RM 111 RECEPT	
	RM 115 MODULAR FURNITURE RECEPT			540				11	20	1			●	20	1	12						120	BREAKROOM RM 111 REFRIGERATOR	
	RM 115 MODULAR FURNITURE RECEPT	540						13	20	1	●			20	1	14				1,000			BREAKROOM RM 111 OFFICES	
	RM 115 MODULAR FURNITURE RECEPT		540					15	20	1		●		20	1	16					600		BREAKRM RM 111 GARBAGE DISPOSAL	
	RM 115 MODULAR FURNITURE RECEPT			720				17	20	1			●	20	1	18						1,664	BATTERY CHARGING STATION #1 (S)	
	FAX IN COPY ROOM 114	600						19	15	1	●			20	1	20				1,664			BATTERY CHARGING STATION #1 (S)	
	COPY ROOM 114 RECEPTACLES		720					21	15	1		●		20	1	22							SPARE	
	ELECTRICAL RM LIGHTING			62				23	15	1			●	20	1	24							SPARE	
	MOTORIZED SCREEN @ CONF. RM 102	30						25	20	1	●			20	1	26				400			FIRE SMOKE DAMPERS	
	SPARE							27	20	1		●		20		28					1,664		BATTERY CHARGING STATION	
	SPARE							29	20	1			●		2	30						1,664		
	GENERATOR CONTROL PANEL	1,200						31	15		●			20		32				1,664			BATTERY CHARGING STATION #2	
			1,200					33		2		●			2	34					1,664			
	GENERATOR RECEPTACLE			180				35	20	1			●	50		36						**2,442**	**(N)OUTDOOR CONDENSING UNIT, OU-1**	1
1	**(N)FAN COIL INDOOR UNIT, IU-7,8**	**83**					2	37	15		●				2	38				**2,442**				
			83					39		2		●		20	1	40					**180**		**(N)SERVICE RECEPTACLE**	1
	SPACE			0				41					●			42						0	SPACE	
	SUBTOTAL	4,073	3,983	2,042															SUBTOTAL	7,940	4,828	7,150		

Load Classification	Connected Load	Demand Factor	Total Demand Load	Total Load		Load and Current per Phase		
HVAC	5,450	100%	5,450	TOTAL CONNECTED LOAD, VA :	30,016	ØA	12,013 VA,	100 A
INTERIOR & EXTERIOR LIGHTING	62	125%	78	TOTAL DEMAND LOAD, VA :	31,253	ØB	8,811 VA,	73 A
CONVENIENCE RECEPTACLE	11,910	100%	11,910	TOTAL CONNECTED AMPS, A :	83	ØC	9,192 VA,	77 A
KITCHEN EQUIPMENT	0	100%	0	TOTAL DEMAND AMPS, A :	87			
HIGHEST MOTOR LOAD	4,884	25%	1,221					
OTHERS :	12,594	100%	12,594					

NEW WORK KEYNOTES:

1 PROVIDE NEW CIRCUIT BREAKER AS SHOWN.

3 VERIFY EXISTING CIRCUITS, AND PROVIDE NEW UPDATED PANEL DIRECTORY. HAND WRITTEN IS NOT ACCEPTABLE.

PANEL SCHEDULES

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12/04/25
25-1380
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DSH

Client Agency
DEPARTMENT OF STATE HOSPITALS

JCCA
Architects · Engineers
385 VAN NESS AVE., SUITE 208, TORRANCE, CA 90501
P: 310.212.7644 | F:310.212.5272

JCCA #: 24793-9

HECTOR JANORAS LACSA
No. E18399
Exp. 6/30/26
ELECTRICAL

No.

Issue	Date	Description
-	-	-

Project

SUPPLEMENTAL
HVAC - CENTRAL
KITCHEN

DEPARTMENT OF STATE
HOSPITALS, METROPOLITAN
11401 BLOOMFIELD AVENUE
NORWALK, CALIFORNIA 90650

DEPARTMENT OF
STATE HOSPITALS
(DSH)

Supervisor	Designed	Drawn	Checked
	HJL	JDLC	SA

Issue Date
11/27/2024

Vault File Number

Sheet Title
ELECTRICAL PANEL
SCHEDULES

Project Number
00000000000XXXX

Reference North

Sheet Scale
AS SHOWN

Sheet Number
E0.2

V3
100% SUBMITTAL

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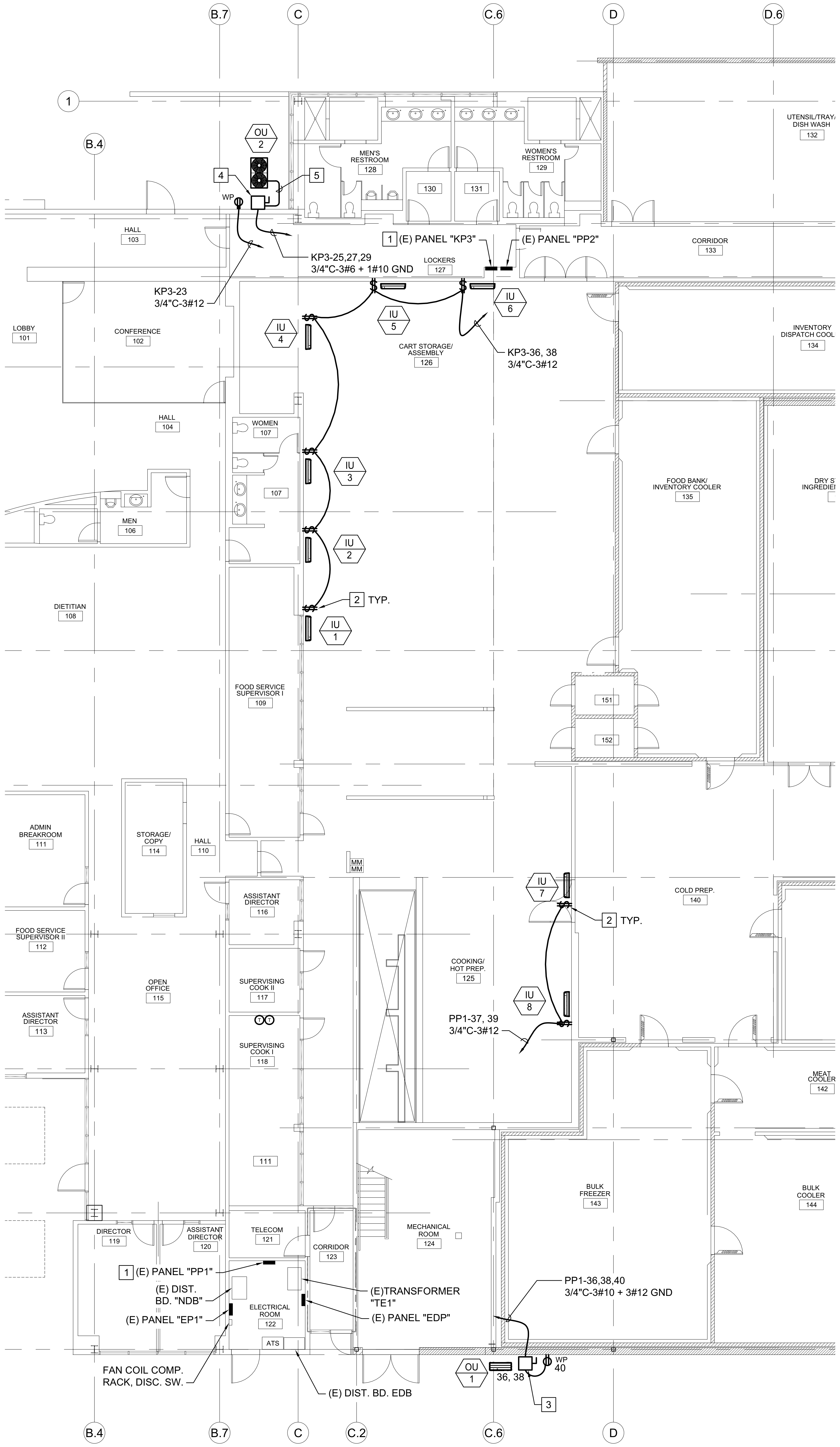


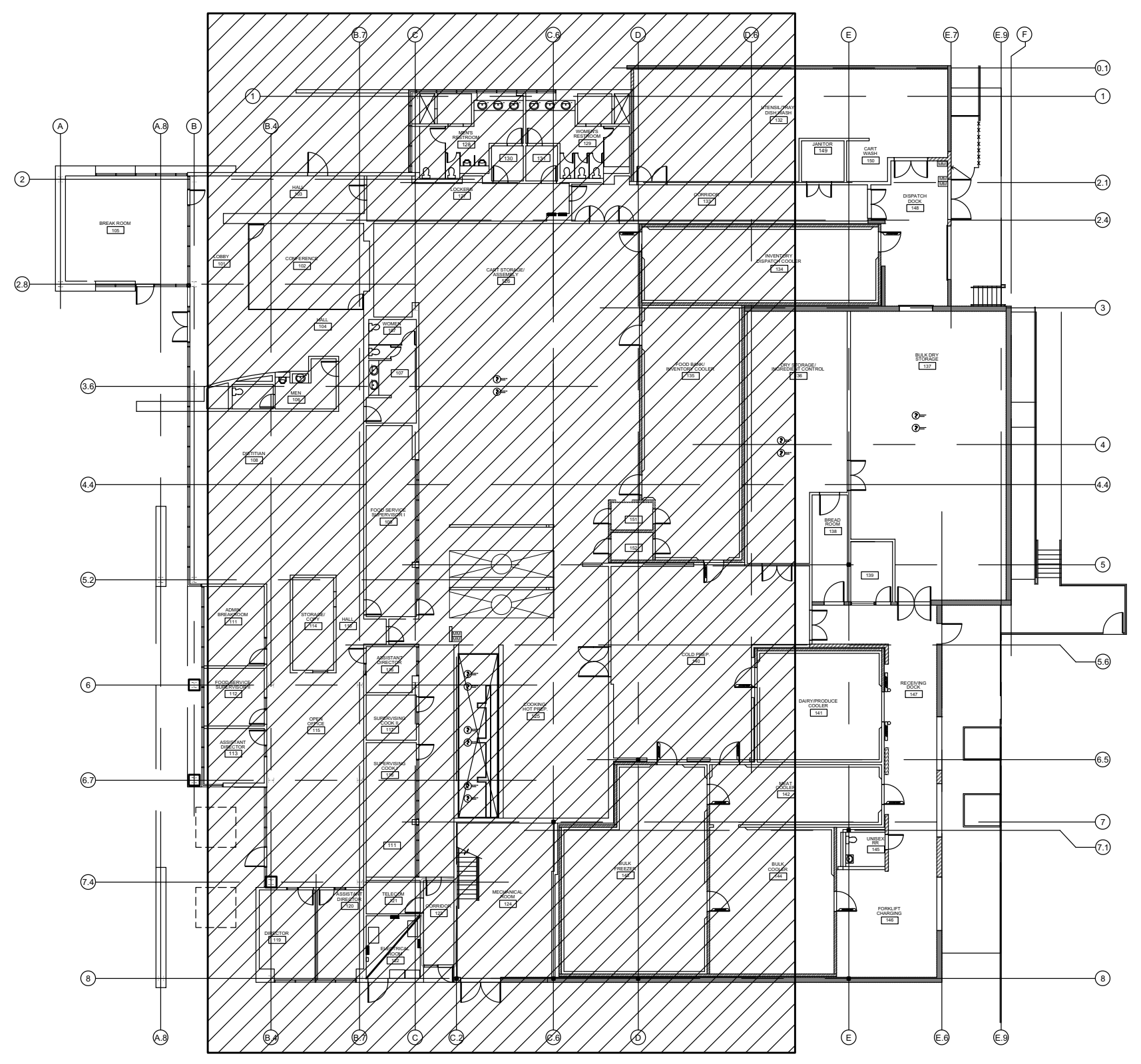
ELECTRICAL NEW WORK PLAN

SCALE: 0 4 8 FEET 16
1/8" = 1'-0"

N

NEW WORK KEYNOTES:

1. SEE PANEL SCHEDULE FOR NEW CIRCUIT BREAKERS
2. 20A, 2P, TOGGLE SWITCH SIMILAR TO HUBBELL 1222I INDUSTRIAL SERIES.
3. LOCKABLE NON- FUSED DISCONNECT SWITCH, 2P, 240V, 60A, NEMA 3R SIMILAR TO DH222UR.
4. LOCKABLE NON- FUSED DISCONNECT SWITCH, 3P, 240V, 60A, NEMA 3R SIMILAR TO DH323UR.
5. 3/4"C-3#6 + 1#10 GND.



KEY PLAN

N

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Issue	Date	Description
-	-	-

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HVAC - CENTRAL
KITCHEN

DEPARTMENT OF STATE
HOSPITALS, METROPOLITAN
11401 BLOOMFIELD AVENUE
NORWALK, CALIFORNIA 90650

DEPARTMENT OF
STATE HOSPITALS
(DSH)

Supervisor	Designed	Drawn	Checked
	HJL	JDLC	SA

Issue Date
11/27/2024

Vault File Number

Sheet Title
ELECTRICAL NEW WORK
PLAN

Project Number
00000000000XXXX

Reference North

Sheet Scale
AS SHOWN

Sheet Number
E2.1

V3
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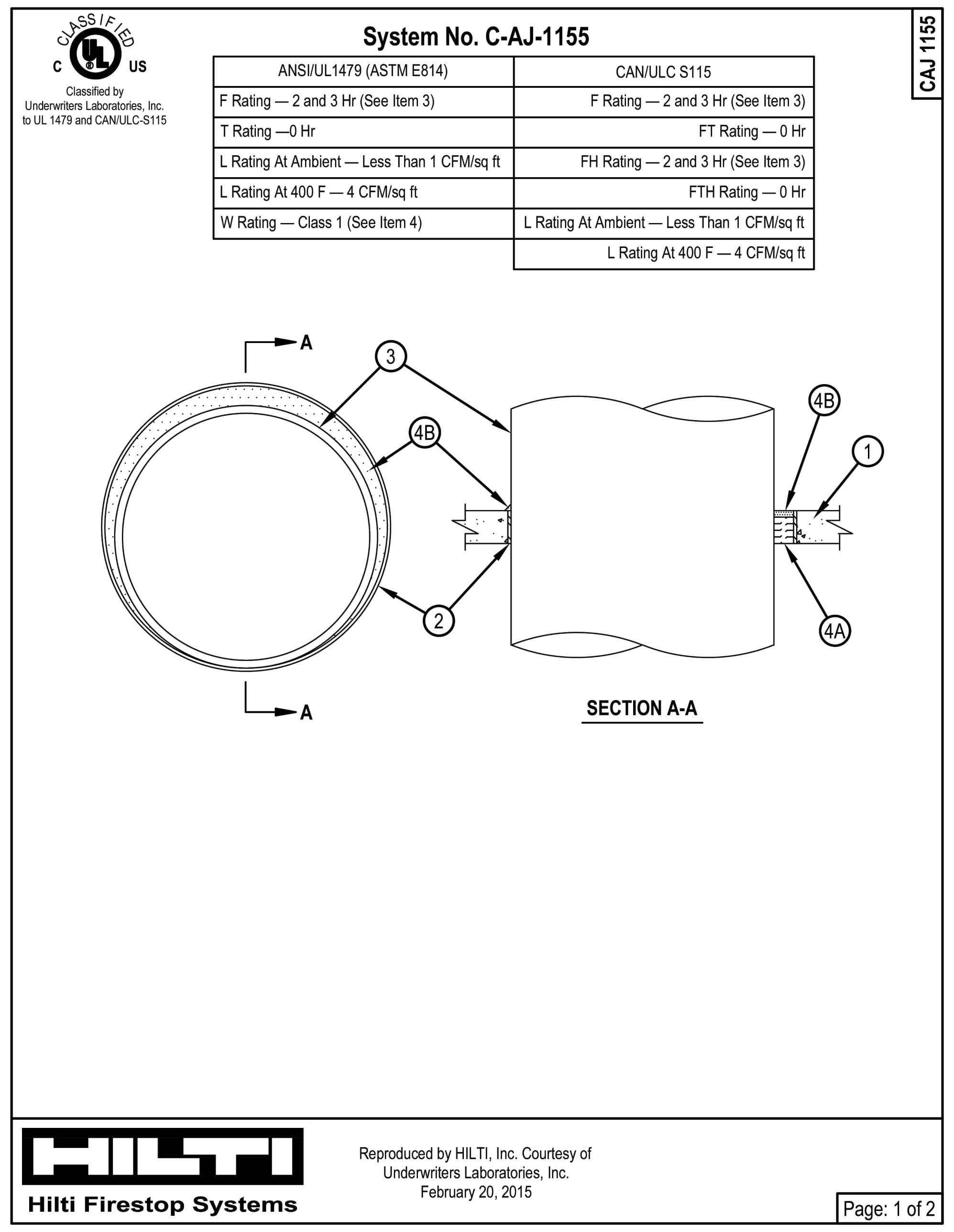

System No. C-AJ-1155

CAJ 1155

Classified by
Underwriters Laboratories, Inc.
to UL 1479 and CAN/ULC-S115

ANSI/UL1479 (ASTM E814)	CAN/ULC S115
F Rating — 2 and 3 Hr (See Item 3)	F Rating — 2 and 3 Hr (See Item 3)
T Rating —0 Hr	FT Rating — 0 Hr
L Rating At Ambient — Less Than 1 CFM/sq ft	FH Rating — 2 and 3 Hr (See Item 3)
L Rating At 400 F — 4 CFM/sq ft	FTH Rating — 0 Hr
W Rating — Class 1 (See Item 4)	L Rating At Ambient — Less Than 1 CFM/sq ft
	L Rating At 400 F — 4 CFM/sq ft

SECTION A-A

Hilti Firestop Systems

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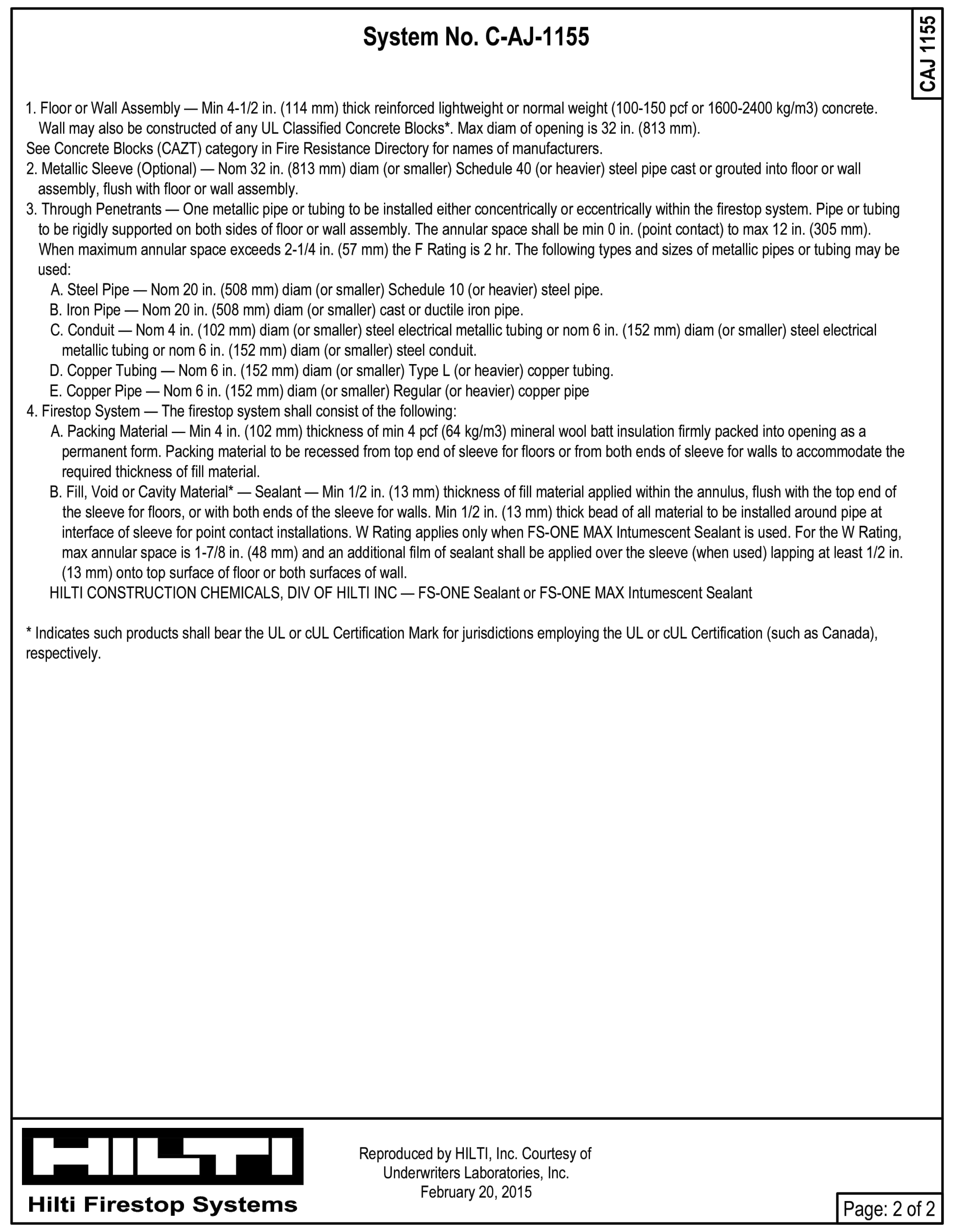
February 20, 2015

Page: 1 of 2



System No. C-AJ-1155

CAJ 1155

1. Floor or Wall Assembly — Min 4-1/2 in. (114 mm) thick reinforced lightweight or normal weight (100-150 pcf or 1600-2400 kg/m3) concrete. Wall may also be constructed of any UL Classified Concrete Blocks*. Max diam of opening is 32 in. (813 mm).
See Concrete Blocks (CAZT) category in Fire Resistance Directory for names of manufacturers.
2. Metallic Sleeve (Optional) — Nom 32 in. (813 mm) diam (or smaller) Schedule 40 (or heavier) steel pipe cast or grouted into floor or wall assembly, flush with floor or wall assembly.
3. Through Penetrants — One metallic pipe or tubing to be installed either concentrically or eccentrically within the firestop system. Pipe or tubing to be rigidly supported on both sides of floor or wall assembly. The annular space shall be min 0 in. (point contact) to max 12 in. (305 mm). When maximum annular space exceeds 2-1/4 in. (57 mm) the F Rating is 2 hr. The following types and sizes of metallic pipes or tubing may be used:
   A. Steel Pipe — Nom 20 in. (508 mm) diam (or smaller) Schedule 10 (or heavier) steel pipe.
   B. Iron Pipe — Nom 20 in. (508 mm) diam (or smaller) cast or ductile iron pipe.
   C. Conduit — Nom 4 in. (102 mm) diam (or smaller) steel electrical metallic tubing or nom 6 in. (152 mm) diam (or smaller) steel electrical metallic tubing or nom 6 in. (152 mm) diam (or smaller) 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
4. Firestop System — The firestop system shall consist of the following:
   A. Packing Material — Min 4 in. (102 mm) thickness of min 4 pcf (64 kg/m3) mineral wool batt insulation firmly packed into opening as a permanent form. Packing material to be recessed from top end of sleeve for floors or from both ends of sleeve for walls to accommodate the required thickness of fill material.
   B. Fill, Void or Cavity Material* — Sealant — Min 1/2 in. (13 mm) thickness of fill material applied within the annulus, flush with the top end of the sleeve for floors, or with both ends of the sleeve for walls. Min 1/2 in. (13 mm) thick bead of all material to be installed around pipe at interface of sleeve for point contact installations. W Rating applies only when FS-ONE MAX Intumescent Sealant is used. For the W Rating, max annular space is 1-7/8 in. (48 mm) and an additional film of sealant shall be applied over the sleeve (when used) lapping at least 1/2 in. (13 mm) onto top surface of floor or both surfaces of wall.
   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 for jurisdictions employing the UL or cUL Certification (such as Canada), respectively.

Hilti Firestop Systems

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February 20, 2015

Page: 2 of 2

① FIRE RATED PENETRATION DETAILS

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Client Agency
DEPARTMENT OF STATE HOSPITALS

JCCA
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JCCA #: 24793-9

HECTOR JANORAS LACSA
No. E18399
Exp. 6/30/26
ELECTRICAL

No.

Issue	Date	Description
-	-	-

Project
SUPPLEMENTAL
HVAC - CENTRAL
KITCHEN

DEPARTMENT OF STATE
HOSPITALS, METROPOLITAN
11401 BLOOMFIELD AVENUE
NORWALK, CALIFORNIA 90650

DEPARTMENT OF
STATE HOSPITALS
(DSH)

Supervisor	Designed	Drawn	Checked
	-	-	-

Issue Date
11/27/2024

Vault File Number

Sheet Title
FIRE RATED PENETRATION DETAILS

Project Number
00000000000XXXX

Reference North

Sheet Scale
AS SHOWN

Sheet Number
E3.1

V3
100% SUBMITTAL