

DSA 1-RUH
REQUEST FOR FINDING OF UNREASONABLE HARDSHIP

STATEMENT OF COSTS WORKSHEET
(This table is to be placed in the approved project drawings.)

ADJUSTED CONSTRUCTION COST:					
Adjusted construction cost for the project (not including costs of the path of travel improvements to the area of alteration):				822,158.00	(A)
PATH OF TRAVEL IMPROVEMENT COSTS:					
Accessible elements serving the area of alteration	(B)	Is element in compliance with current or preceding CBC Chapter 11B? (Y/N)	If no, will element be made fully compliant to current CBC Chapter 11B? (Y/N)	Estimated cost of full compliance of element with current CBC Chapter 11B	Proposed cost to the greatest extent feasible.
1. A primary entrance to the building and/or facility.		N	Y	\$ 107,105.00	\$ 107,105.00
2. An accessible route to the altered area (for parking use item 6).		N	Y	\$ 77,971.00	\$ 77,971.00
3. At least one restroom for each gender or an all-gender restroom for each user group.		N	N	\$ 81,084.00	\$
4. Public telephones		N/A	N/A	\$ 0.00	\$
5. Drinking fountains		N	N	\$ 18553.00	\$
6. Parking		N	N	\$ 9,276.00	\$
7. Signs		N	N	\$ 7,988.00	\$
Total cost of providing full compliance of path of travel elements:				\$ 301,957.00	(C)
Total cost of providing compliance of path of travel elements to the greatest extent feasible:				\$ 185,076.00	(D)
COST OF PATH OF TRAVEL UPGRADES AS A PERCENTAGE OF ADJUSTED CONSTRUCTION COST:					
Full compliance of path of travel as a percent (%) of the current project's adjusted construction cost: (E)% = (C) / (A) x 100				% 37	(E)
Partial compliance of path of travel as percent (%) of current adjusted construction cost: (F)% = (D) / (A) x 100				% 23	(F)

DSA 1-RUH
REQUEST FOR FINDING OF UNREASONABLE HARDSHIP

DESCRIPTION OF REQUEST FOR UNREASONABLE HARDSHIP

(This page is to be placed in the approved project drawings and is a summary of the specific descriptions provided on pages 6 and 7 of this document.)

DESCRIPTION OF THE REQUESTED UNREASONABLE HARDSHIP.
<p>Note: In the space below (approximately 500 words or less), provide a summary description of the elements of the path of travel serving the area of alteration, and identify if the elements are in compliance with current accessibility standards. For elements not in compliance with current accessibility standards, describe the improvement needed, and identify if the improvements are, or are not, included as part of the project. If equivalent facilitation is the method of compliance provided in lieu of path of travel improvements, provide a summary of the equivalent facilitation which demonstrates equivalent or greater accessibility than current accessibility standards.</p> <p>There are two entrances to the existing district warehouse which houses the existing walk-in freezer that is to be replaced in kind. One of the entrances, at the loading dock, is lacking code compliant hardware and room ID signage. The other entrance into the existing warehouse has code compliant hardware, but does not provide code required clear floor space at the exterior side and is accessed by two stairs at the exterior side. Neither of the doors are part of the initial freezer replacement but the second door is part of the path of travel upgrades.</p> <p>The pathway to the altered area is currently non-compliant. The warehouse sits at a higher elevation than the adjacent office building and the parking spaces in front of the office building. A ramp and stair with handrails will need to be installed to provide access to the entrance door of the office building. A level landing will need to be provided at the office entrance door. The pathway inside the office building leads to a side door which exits to an exterior space between the office building and warehouse. Currently, the slope up to the stair access to the warehouse is greater than 5%. In order to connect the office building with the warehouse, the existing stairs and landing will need to be removed and a new ramp, stair and handrails will need to be provided. The ramp will terminate at the level landing at the warehouse door. The door will need to be reinstalled to swing in to provide the code compliant clear floor space to enter the warehouse.</p> <p>There are no existing restrooms in the warehouse, but there are two existing restrooms in the office building. By installing the new ramp to connect the warehouse to the office building, one of the existing restrooms can be modified to meet current code requirements. This includes removing the current lavatory and re-locating it to the side wall so that it does not impede into the water closet clearance and reinstalling grab bars, soap dispenser, mirror and other accessories to meet code.</p> <p>There are no public pay or public courtesy telephones provided on site. The warehouse has an office telephone for receiving. There is no drinking fountain provided at the warehouse. The warehouse has a bottle filler that is provided at an accessible height. The bottle filler would need to be removed and replaced with a drinking fountain/bottle filler combo at an accessible height.</p> <p>Parking is provided in front of the office building without any accessible stalls. The area in front of the office will need to be re-graded to provide a level accessible van stall with access aisle to connect to the new ramp.</p> <p>Doors currently do not have code compliant signs. Each door along the path of travel will require code compliant braille for identifying, and accessible symbol and exit signage where applicable.</p>

PREPARED FOR THE

BOARD OF EDUCATION
NATIONAL SCHOOL DISTRICT
NATIONAL CITY, CALIFORNIA

PREPARED BY

SGPA ARCHITECTURE
AND PLANNING

REQUEST FOR UNREASONABLE HARDSHIP

CENTRAL WAREHOUSE
FREEZER REPLACEMENT
FREEZER REPLACEMENT
1400 N AVENUE
NATIONAL CITY, CA 91950

SUBMITTALS / REVISIONS		
#	ISSUE	DATE
DSA SUBMITTAL V1		03/19/2025
DSA BACKCHECK		04/30/2025
BID SET 5/1/2025 NOT FOR CONSTRUCTION PROJECT STILL IN REVIEW		
PROJECT NO. 22439-E-02		
SHEET NO.		

TS-2

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DSA
CONSULTANT
STAMP

PATH OF TRAVEL IMPROVEMENTS

1. PRIMARY ENTRANCE TO THE BUILDING FACILITY
THERE ARE TWO ENTRANCES TO THE EXISTING DISTRICT WAREHOUSE WHICH CONTAINS THE EXISTING WALK-IN FREEZER THAT IS TO BE REPLACED IN KIND. ONE OF THE ENTRANCES, AT THE LOADING DOCK, IS LACKING CODE COMPLIANT HARDWARE AND ROOM ID SIGNAGE. THE OTHER ENTRANCE INTO THE EXISTING WAREHOUSE HAS CODE COMPLIANT HARDWARE, BUT DOES NOT PROVIDE CODE REQUIRED CLEAR FLOOR SPACE AT THE EXTERIOR SIDE AND IS ACCESSED BY TWO STAIRS AT THE EXTERIOR SIDE. THIS DOOR CAN HAVE ITS DOOR SWING REVERSED TO COMPLY WITH CLEAR FLOOR SPACE REQUIREMENTS.



EXISTING EXTERIOR MAN DOOR AT LOADING DOCK - EXTERIOR SIDE
TAKEN 03/12/25



EXISTING EXTERIOR MAN DOOR TO WAREHOUSE FROM BREEZEWAY - INTERIOR SIDE
TAKEN 03/12/25



EXISTING EXTERIOR MAN DOOR TO WAREHOUSE FROM BREEZEWAY - EXTERIOR SIDE
TAKEN 03/12/25



EXISTING EXTERIOR MAN DOOR TO WAREHOUSE FROM BREEZEWAY - INTERIOR SIDE
TAKEN 03/12/25

2. AN ACCESSIBLE ROUTE TO THE ALTERED AREA
THE PATHWAY TO THE ALTERED AREA IS CURRENTLY NON-COMPLIANT. THE WAREHOUSE SITS AT A HIGHER ELEVATION THAN THE ADJACENT OFFICE BUILDING AND THE PARKING SPACES IN FRONT OF THE OFFICE BUILDING. A RAMP AND STAIR WITH HANDRAILS WILL NEED TO BE INSTALLED TO PROVIDE ACCESS TO THE ENTRANCE DOOR OF THE OFFICE BUILDING. A LEVEL LANDING WILL NEED TO BE PROVIDED AT THE OFFICE ENTRANCE DOOR, THE PATHWAY INSIDE THE OFFICE BUILDING LEADS TO A SIDE DOOR WHICH EXISTS TO AN EXTERIOR SPACE (BREEZEWAY) BETWEEN THE OFFICE BUILDING AND WAREHOUSE. CURRENTLY, THE SLOPE UP TO THE STAIR ACCESS TO THE WAREHOUSE IS GREATER THAN 5%. IN ORDER TO CONNECT THE OFFICE BUILDING WITH THE WAREHOUSE, THE EXISTING STAIRS AND LANDING WILL NEED TO BE REMOVED AND A NEW RAMP, STAIR AND HANDRAILS WILL NEED TO BE PROVIDED. THE RAMP WILL TERMINATE AT THE LEVEL LANDING AT THE WAREHOUSE DOOR. THE DOOR WILL NEED TO BE REINSTALLED TO SWING IN TO PROVIDE THE CODE COMPLIANT CLEAR FLOOR SPACE TO ENTER THE WAREHOUSE.



ENTRANCE TO LOWER OFFICE BUILDING - ENTRANCE DOOR'S LEVEL LANDING IS TOO STEEP AND DOES NOT PROVIDE COMPLIANT CLEAR FLOOR SPACE
TAKEN 03/12/25



ENTRANCE TO LOWER OFFICE BUILDING - ENTRANCE DOOR'S LEVEL LANDING IS TOO STEEP AND DOES NOT PROVIDE COMPLIANT CLEAR FLOOR SPACE
TAKEN 03/12/25



EXISTING OFFICE DOOR TO WAREHOUSE EXTERIOR SIDE - LEVEL LANDING IS TOO STEEP AND EXISTING COLUMN IMPEDES INTO CLEAR FLOOR SPACE
TAKEN 03/12/25



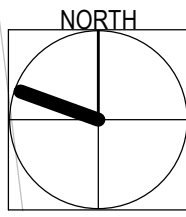
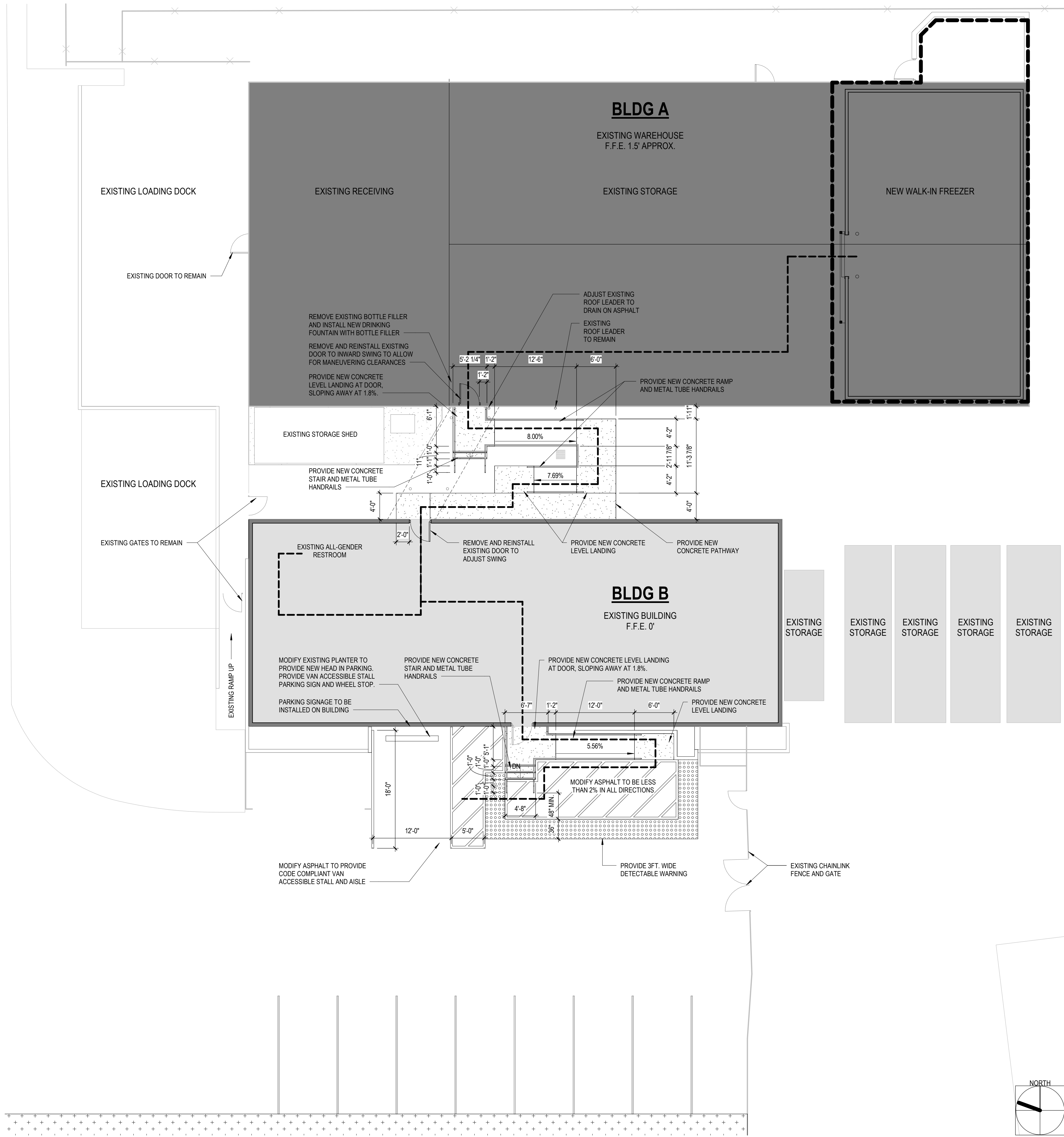
EXISTING OFFICE DOOR TO WAREHOUSE INTERIOR SIDE - DOOR SWING CAN BE REVERSED TO CORRECT CLEAR FLOOR SPACE ISSUE
TAKEN 03/12/25



BREEZEWAY BETWEEN OFFICE BUILDING AND WAREHOUSE - LOOKING SOUTH - RAMP WILL NEED TO BE PROVIDED TO CONNECT THE TWO BUILDINGS
TAKEN 03/19/25



BREEZEWAY BETWEEN OFFICE BUILDING AND WAREHOUSE - LOOKING NORTH - RAMP WILL NEED TO BE PROVIDED TO CONNECT THE TWO BUILDINGS
TAKEN 03/19/25



FULL COMPLIANCE P.O.T. PLAN

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

1

REQUEST FOR UNREASONABLE HARDSHIP

BOARD OF EDUCATION
NATIONAL SCHOOL DISTRICT
NATIONAL CITY, CALIFORNIA

PREPARED BY
SGPA ARCHITECTURE
AND PLANNING

1400 N AVENUE
NATIONAL CITY, CA 91950

CENTRAL WAREHOUSE
FREEZER REPLACEMENT

FREEZER REPLACEMENT

SUBMITTALS / REVISIONS		
#	ISSUE	DATE
1	DSA SUBMITTAL V1	03/19/2025
2	DSA BACKCHECK	04/30/2025

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SHEET NO.

TS-3



EXISTING RAMP UP TO WAREHOUSE AND DOCK - BREEZEWAY ENTRANCE BETWEEN OFFICE AND WAREHOUSE
TAKEN 03/19/25



INTERIOR OF WAREHOUSE LOOKING OUT TOWARDS DOCK
TAKEN 03/12/25



EXISTING FREEZER ENTRANCE
TAKEN 03/12/25



EXISTING FREEZER AND WAREHOUSE STORAGE
TAKEN 03/12/25

4. PUBLIC TELEPHONES
THERE ARE NO PUBLIC PAY OR PUBLIC COURTESY TELEPHONES PROVIDED ON SITE. THE WAREHOUSE HAS AN OFFICE TELEPHONE FOR RECEIVING.

5. DRINKING FOUNTAINS
THERE IS NO DRINKING FOUNTAIN PROVIDED AT THE WAREHOUSE. THE WAREHOUSE HAS A BOTTLE FILLER THAT IS PROVIDED AT AN ACCESSIBLE HEIGHT. THE BOTTLE FILLER WOULD NEED TO BE REMOVED AND REPLACED WITH A DRINKING FOUNTAIN/BOTTLE FILLER COMBO AT AN ACCESSIBLE HEIGHT.



EXISTING WATER BOTTLE FILLER IN WAREHOUSE - A CODE COMPLIANT DRINKING FOUNTAIN AND BOTTLE FILLER TO BE INSTALLED
TAKEN 03/12/25

6. PARKING
PARKING IS PROVIDED IN FRONT OF THE OFFICE BUILDING WITHOUT ANY ACCESSIBLE STALLS. THE AREA IN FRONT OF THE OFFICE WILL NEED TO BE RE-GRADED TO PROVIDE A LEVEL ACCESSIBLE VAN STALL WITH ACCESS AISLE TO CONNECT TO THE NEW RAMP.



ENTRANCE TO LOWER OFFICE BUILDING - CURRENTLY THERE ARE NO ACCESSIBLE PARKING IN FRONT OF THE OFFICE BUILDING - ASPHALT WILL NEED TO BE MODIFIED TO PROVIDE LEVEL PARKING AND AISLE
TAKEN 03/12/25



ENTRANCE TO LOWER OFFICE BUILDING - CURRENTLY THERE ARE NO ACCESSIBLE PARKING IN FRONT OF THE OFFICE BUILDING - ASPHALT WILL NEED TO BE MODIFIED TO PROVIDE LEVEL PARKING AND AISLE
TAKEN 03/12/25

7. SIGNS
DOORS CURRENTLY DO NOT HAVE CODE COMPLIANT SIGNS. EACH DOOR ALONG THE PATH OF TRAVEL WILL REQUIRE CODE COMPLIANT BRAILLE FOR IDENTIFYING, AND ACCESSIBLE SYMBOL AND EXIT SIGNAGE WHERE APPLICABLE - REFER TO IMAGES OF DOORS IN PHOTOS.

PATH OF TRAVEL IMPROVEMENTS - CONT'D.

3. AT LEAST ONE RESTROOM FOR EACH GENDER OR ALL-GENDER RESTROOM FOR EACH USER GROUP
THERE ARE NO EXISTING RESTROOMS IN THE WAREHOUSE, BUT THERE ARE TWO EXISTING RESTROOMS IN THE OFFICE BUILDING. BY INSTALLING THE NEW RAMP TO CONNECT THE WAREHOUSE TO THE OFFICE BUILDING, ONE OF THE EXISTING RESTROOMS CAN BE MODIFIED TO MEET CURRENT CODE REQUIREMENTS. THIS INCLUDES REMOVING THE CURRENT LAVATORY AND RE-LOCATING IT TO THE SIDE WALL SO THAT IT DOES NOT IMPEDE INTO THE WATER CLOSET CLEARANCE AND REINSTALLING GRAB BARS, SOAP DISPENSER, MIRROR AND OTHER ACCESSORIES TO MEET CODE. THE EXISTING WATER CLOSET IS CURRENTLY COMPLIANT. THE EXISTING DOOR WILL NEED TO BE MODIFIED TO SWING INTO THE RESTROOM INSTEAD OF OUT. AN EXISTING WALL POP OUT IN THE CORRIDOR WILL NEED TO BE REMOVED.



EXISTING RESTROOM DOOR ENTRANCE - DOOR SWING TO BE MODIFIED TO SWING IN - WALL POP OUT IN CORRIDOR TO BE REMOVED - DOOR IS MISSING CODE REQUIRED ROOM ID SIGNAGE
TAKEN 03/12/25



EXISTING RESTROOM DOOR ENTRANCE - DOOR SWING TO BE MODIFIED TO SWING IN - WALL POP OUT IN CORRIDOR TO BE REMOVED
TAKEN 03/12/25



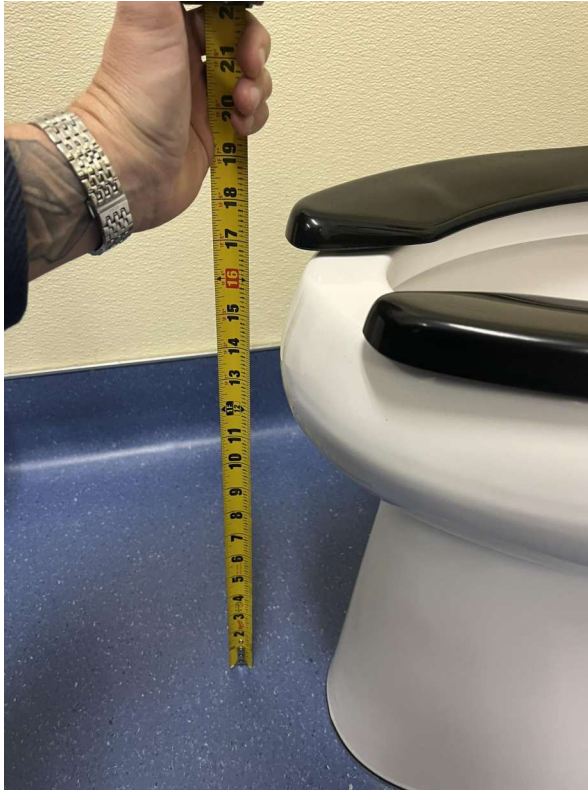
EXISTING RESTROOM - LAVATORY IMPEDES INTO THE WATER CLOSET CLEAR FLOOR SPACE AND WILL NEED TO MOVE TO SIDE WALL. RESTROOM ACCESSORIES WILL NEED TO BE REINSTALLED TO MEET CODE DIMENSIONS. WATER CLOSET LOCATION IS COMPLIANT.
TAKEN 03/12/25



EXISTING RESTROOM - LAVATORY IMPEDES INTO THE WATER CLOSET CLEAR FLOOR SPACE AND WILL NEED TO BE REINSTALLED AT SIDE WALL. RESTROOM ACCESSORIES WILL NEED TO BE REINSTALLED TO MEET CODE DIMENSIONS. WATER CLOSET LOCATION IS COMPLIANT.
TAKEN 03/12/25



EXISTING WATER CLOSET LOCATION
TAKEN 03/12/25



EXISTING WATER CLOSET LOCATION
TAKEN 03/12/25

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REQUEST FOR UNREASONABLE HARDSHIP

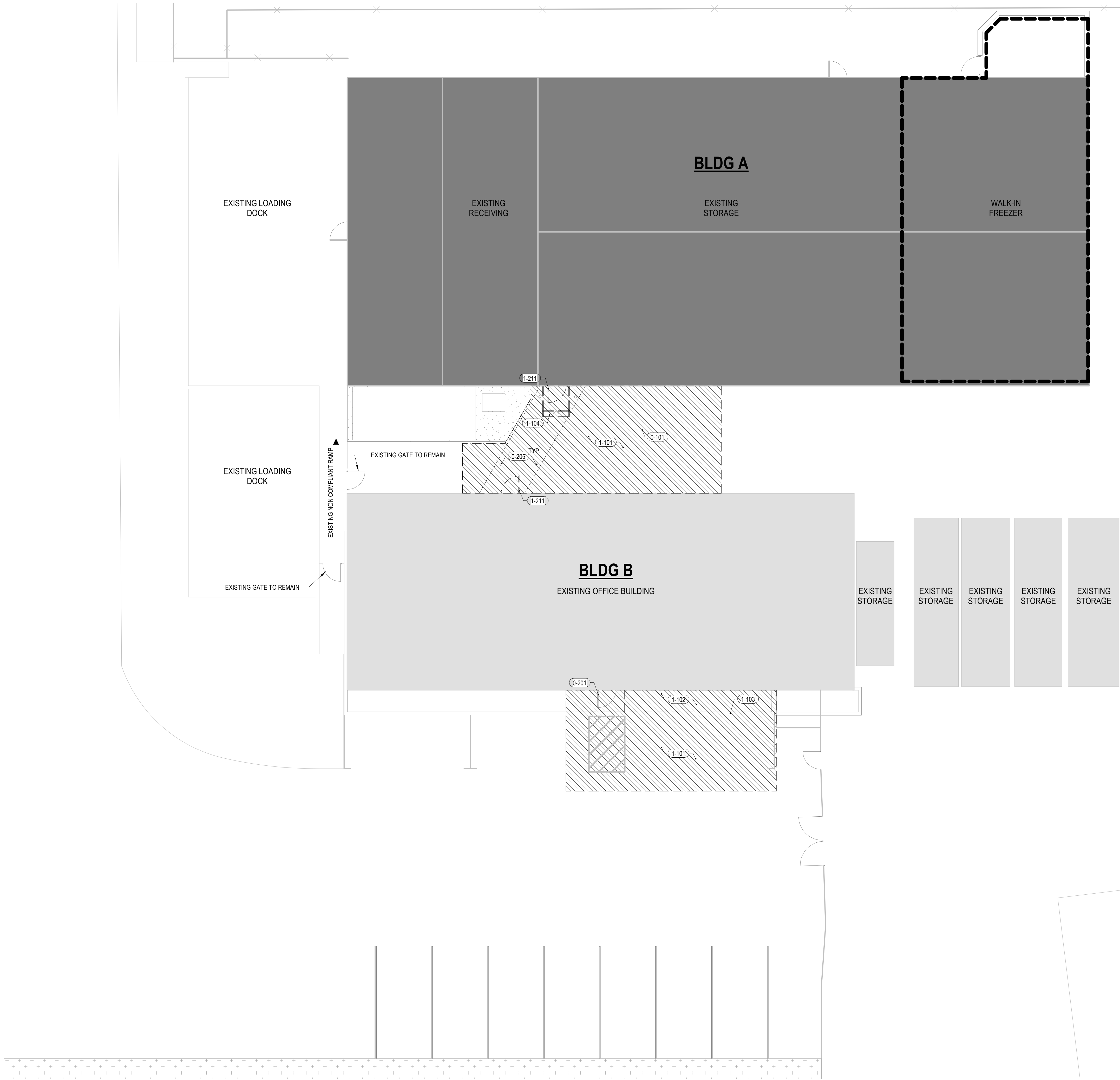
**CENTRAL WAREHOUSE
FREEZER REPLACEMENT**
FREEZER REPLACEMENT
1400 N AVENUE
NATIONAL CITY, CA 91950

SUBMITTALS / REVISIONS		
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SHEET NO.		

TS-4

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LEGEND

- BLDG A**
- BUILDING IDENTIFICATION DESIGNATION
 - EXISTING WORK TO REMAIN
 - EXISTING WORK TO BE DEMOLISHED
 - EXISTING FENCE
 - LIMIT OF WORK
 - AREA TO BE DEMOLISHED
 - BUILDING IN SCOPE
 - BUILDING NOT IN SCOPE
 - EXISTING LANDSCAPE
 - EXISTING CONCRETE PAVING
 - EXISTING ACCESS AISLE

ACCESSIBLTY NOTES

- NO DEMOLITION SHALL BEGIN UNTIL PLANS, INCLUDING DEMO WORK, HAVE BEEN APPROVED BY DSA.
- EXISTING TREES TO REMAIN, U.N.O.
- CONTRACTOR TO VERIFY EXISTING CONDITIONS AND DIMENSIONS ON FIELD BEFORE STARTING WORK.

KEYNOTES

- 0-101 EXISTING SITE AREA DRAIN TO REMAIN.
0-201 EXISTING DOOR TO REMAIN. PROTECT IN PLACE. VERIFY DOOR MEETS CBC 11B-404.2.9 FOR OPENING FORCE AND CBC 11B-404.2.8 FOR CLOSING SPEED. DOOR HARDWARE TO BE REPLACED TO MAKE COMPLIANT.
0-205 EXISTING HOLLOW METAL COLUMN TO REMAIN.
1-101 DEMOLISH EXISTING CONCRETE AND ASPHALT FOR NEW STAIRS/RAMP.
1-102 DEMOLISH EXISTING LANDSCAPE FOR NEW STAIRS/RAMP.
1-103 DEMOLISH EXISTING CURB FOR NEW STAIRS/RAMP.
1-104 DEMOLISH EXISTING STAIRS FOR NEW STAIRS/RAMP.
1-211 REMOVE AND REINSTALL EXISTING DOOR TO REVERSE SWING TO SWING OUT TO MEET ACCESSIBLE MANEUVERING CLEARANCES. VERIFY DOOR MEETS CBC 11B-404.2.9 FOR OPENING FORCE AND CBC 11B-404.2.8 FOR CLOSING SPEED. DOOR HARDWARE TO BE REPLACED TO MAKE COMPLIANT.

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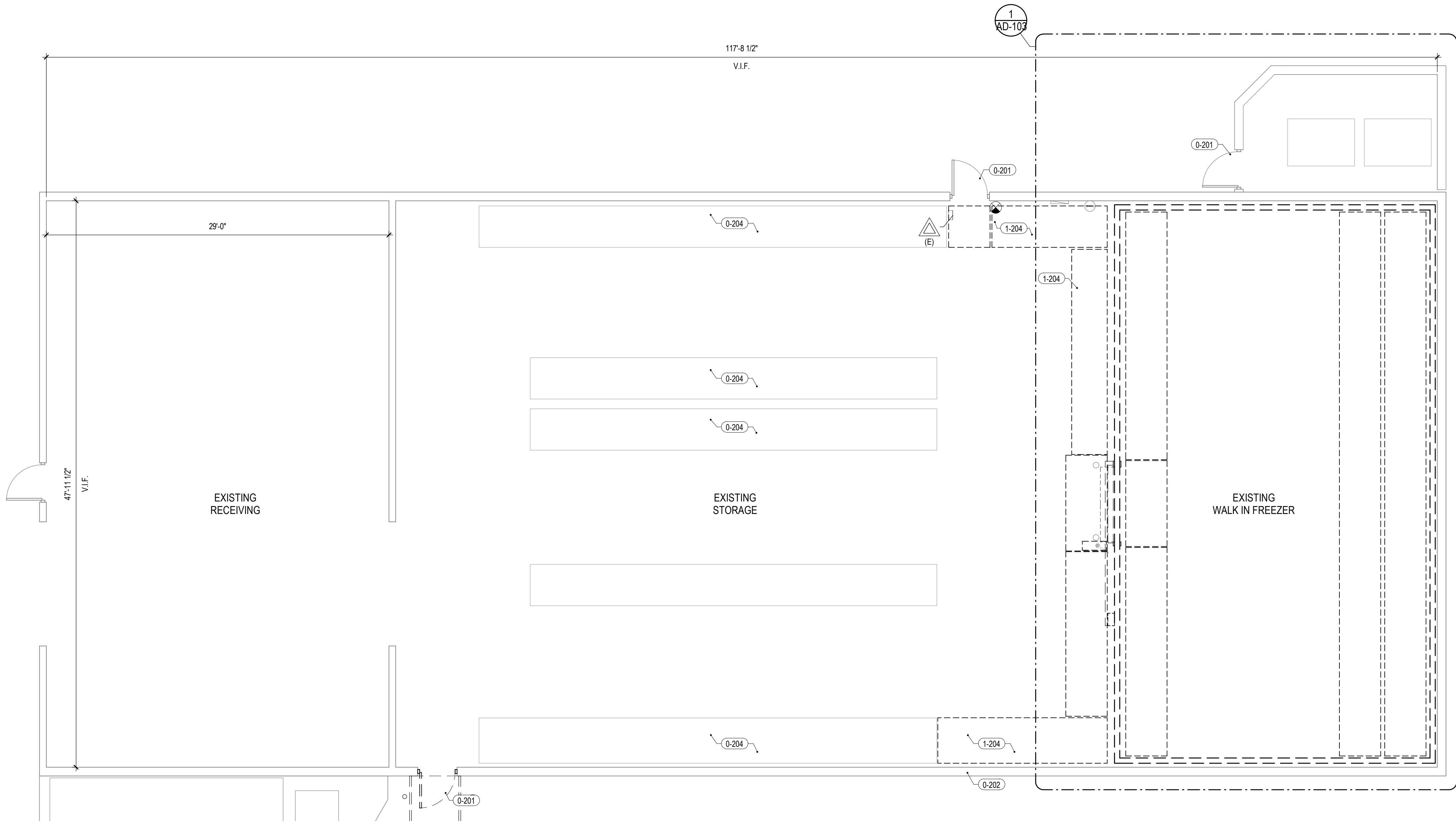
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DEMOLITION ENLARGED SITE PLAN
CENTRAL WAREHOUSE
FREEZER REPLACEMENT
1400 N AVENUE
NATIONAL CITY, CA 91960

SUBMITTALS / REVISIONS		
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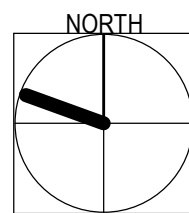
BID SET 5/1/2025
NOT FOR
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PROJECT STILL IN
REVIEW

PROJECT NO. 22439-E-02
SHEET NO.



DEMOLITION WAREHOUSE FLOOR PLAN

SCALE:
3/16" = 1'-0"



1

LEGEND

- EXISTING WORK TO REMAIN
- EXISTING WORK TO BE DEMOLISHED
- EXISTING FIRE EXTINGUISHER
- EXIT SIGN
- EXISTING FLOOR DRAIN
- EXITING BOLLARD
- EXISTING ELECTRICAL PANEL
- EXISTING EYEWASH STATION
- EXISTING FIRE EXTINGUISHER (E)

KEYNOTES

- 0-201 EXISTING DOOR TO REMAIN, PROTECT IN PLACE. VERIFY DOOR MEETS CBC 11B-404.2.9 FOR OPENING FORCE AND CBC 11B-404.2.8 FOR CLOSING SPEED. DOOR HARDWARE TO BE REPLACED TO MAKE COMPLIANT.
- 0-202 EXISTING WAREHOUSE WALLS TO REMAIN, PROTECT IN PLACE.
- 0-204 EXISTING STORAGE RACKS TO REMAIN, PROTECT IN PLACE.
- 1-204 EXISTING STORAGE RACKS ADJACENT TO FREEZER TO BE CAREFULLY DISASSEMBLED AND REMOVED, STORE FOR RE-USE.

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DEMOLITION WAREHOUSE FLOOR PLANS

**CENTRAL WAREHOUSE
FREEZER REPLACEMENT**

1400 N AVENUE
NATIONAL CITY, CA 91960

#	SUBMITTALS / REVISIONS	
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PROJECT NO. 22439-E-02
SHEET NO.

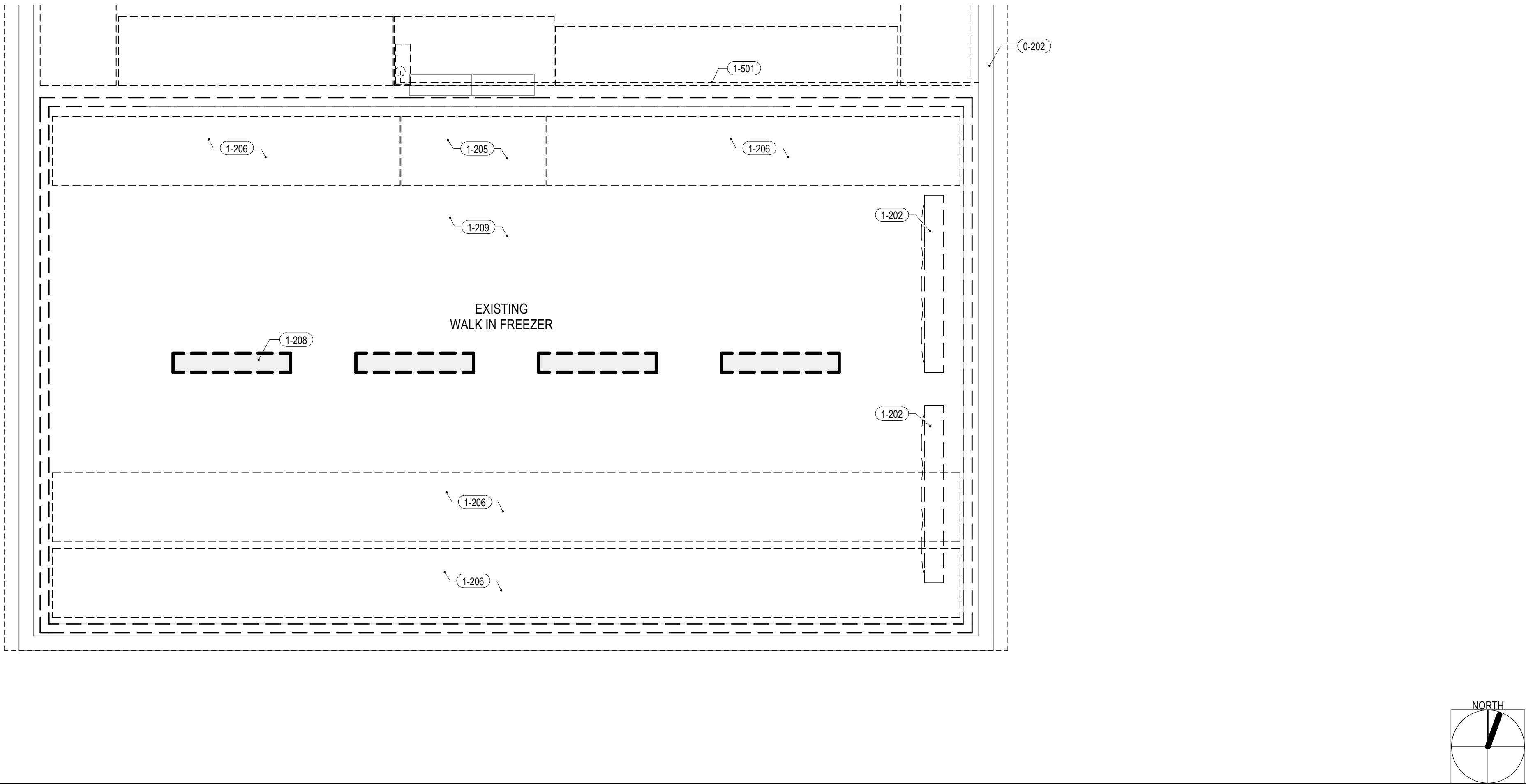
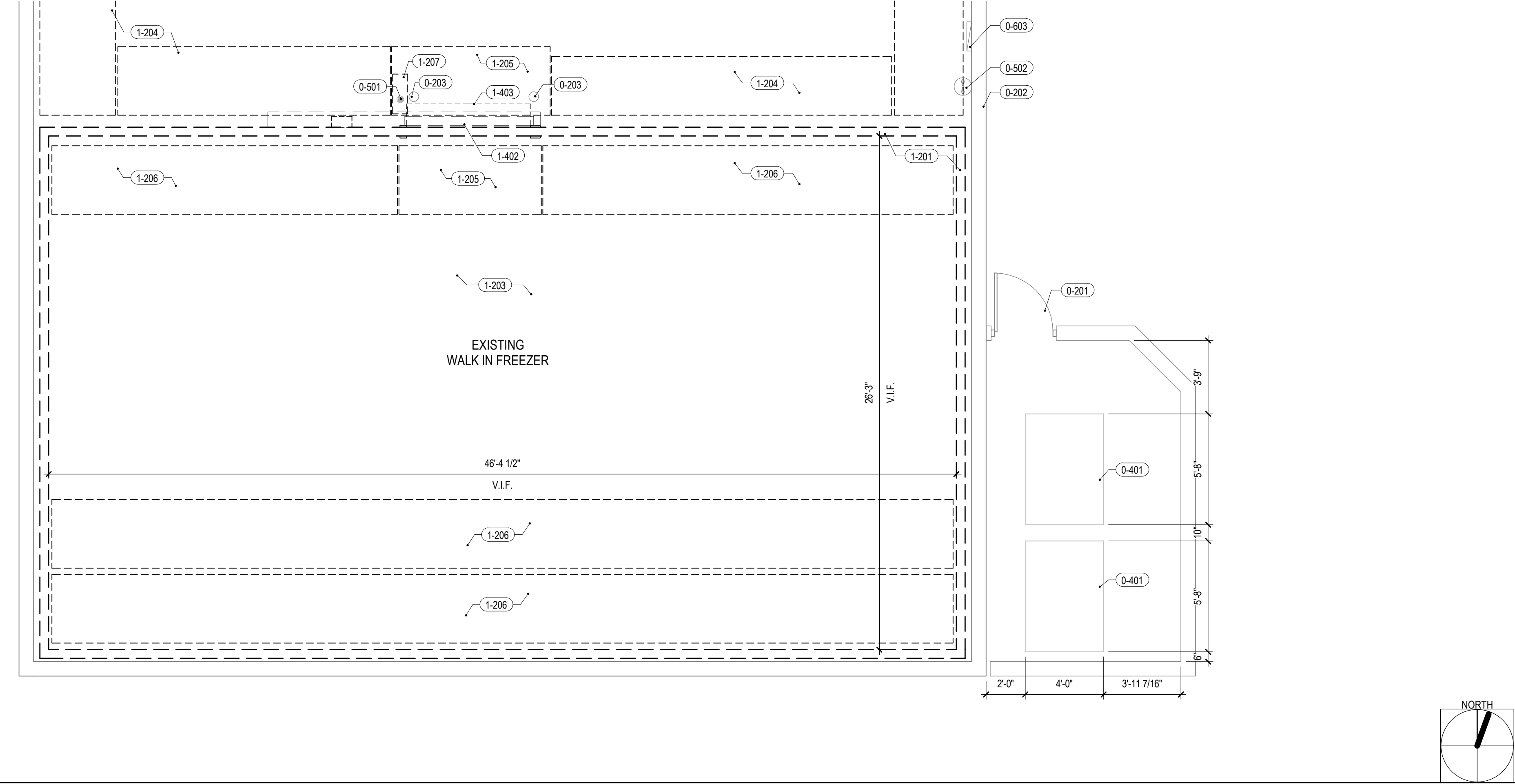
AD-102

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LEGEND	
	EXISTING WORK TO REMAIN
	EXISTING WORK TO BE DEMOLISHED
	EXISTING FLOOR DRAIN
	EXISTING BOLLARD
	EXISTING ELECTRICAL PANEL
	EXISTING EYEWASH STATION
	LIGHT FIXTURE TO BE DEMOLISHED
	EXISTING AIR CURTAIN FREEZER

- GENERAL NOTES
- NO DEMOLITION SHALL BEGIN UNTIL PLANS, INCLUDING THE DEMOLITION WORK, HAVE BEEN APPROVED BY DSA.
 - REFER TO TITLE SHEET TS-1 FOR SYMBOLS LEGEND NOT SHOWN ABOVE.
 - REFER TO ELECTRICAL, PLUMBING AND FOOD SERVICE FOR ADDITIONAL INFORMATION.

- KEYNOTES
- 0-201 EXISTING DOOR TO REMAIN, PROTECT IN PLACE. VERIFY DOOR MEETS CBC 11B-404.2.9 FOR OPENING FORCE AND CBC 11B-404.2.8 FOR CLOSING SPEED. DOOR HARDWARE TO BE REPLACED TO MAKE COMPLIANT.
- 0-202 EXISTING WAREHOUSE WALLS TO REMAIN, PROTECT IN PLACE.
- 0-203 EXISTING BOLLARD TO REMAIN, PROTECT IN PLACE.
- 0-401 EXISTING CONDENSING UNIT TO REMAIN, PROTECT IN PLACE.
- 0-501 EXISTING FLOOR DRAIN TO REMAIN, PROTECT IN PLACE.
- 0-502 EXISTING EYEWASH STATION TO REMAIN, PROTECT IN PLACE.
- 0-603 EXISTING ELECTRICAL PANEL TO REMAIN, PROTECT IN PLACE.
- 1-201 DISCONNECT AND REMOVE EXISTING FREEZER TO REPLACE WITH NEW FREEZER.
- 1-202 EXISTING EVAPORATOR COILS, CONDUIT, REFRIGERANT PIPE AND CONDENSATE DRAIN TO BE REMOVED AND REPLACED WITH NEW. FOOD SERVICE CONTRACTOR SHALL RECOVER ALL EXISTING REFRIGERANT CHARGE IN THE EXISTING SYSTEM PRIOR TO EVAPORATOR REPLACEMENT. REFRIGERANT SHALL BE DISPOSED OF IN ACCORDANCE WITH STATE AND LOCAL ORDINANCES.
- 1-203 EXISTING WEAR SLAB AND INSULATION TO BE REMOVED AND PREP SUB-SLAB.
- 1-204 EXISTING STORAGE RACKS ADJACENT TO FREEZER TO BE CAREFULLY DISASSEMBLED AND REMOVED; STORE FOR RE-USE.
- 1-205 EXISTING OVERHEAD STORAGE RACK TO BE CAREFULLY DISASSEMBLED AND STORED BY DISTRICT FOR RE-USE, TYPICAL.
- 1-206 EXISTING FREEZER STORAGE RACKS TO BE CAREFULLY DISASSEMBLED AND REMOVED; DISTRICT TO STORE FOR RE-USE, TYPICAL.
- 1-207 EXISTING STANDALONE CASEWORK TO BE REMOVED AND STORED FOR RE-INSTALLATION.
- 1-208 EXISTING LIGHT FIXTURES TO BE REMOVED AND REPLACED WITH NEW. REFER TO ELECTRICAL DRAWINGS FOR ADDITIONAL INFORMATION.
- 1-209 REMOVE EXISTING FREEZER CEILING AND CEILING SUPPORTS.
- 1-402 REMOVE EXISTING FREEZER DOOR AND REPLACE WITH NEW. SEE FOOD SERVICE AND ELECTRICAL DRAWINGS FOR ADDITIONAL INFORMATION.
- 1-403 REMOVE AND REINSTALL EXISTING FREEZER AIR CURTAIN. REFER TO FOOD SERVICE DRAWINGS FOR ADDITIONAL INFORMATION.
- 1-501 REMOVE EXISTING CONDENSATE DRAIN PIPE, REFER TO PLUMBING FOR ADDITIONAL INFORMATION.

PREPARED FOR THE

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NATIONAL SCHOOL DISTRICT
NATIONAL CITY, CALIFORNIA

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DEMOLITION ENLARGED FREEZER PLANS

**CENTRAL WAREHOUSE
FREEZER REPLACEMENT**

FREEZER REPLACEMENT
1400 N AVENUE
NATIONAL CITY, CA 91960

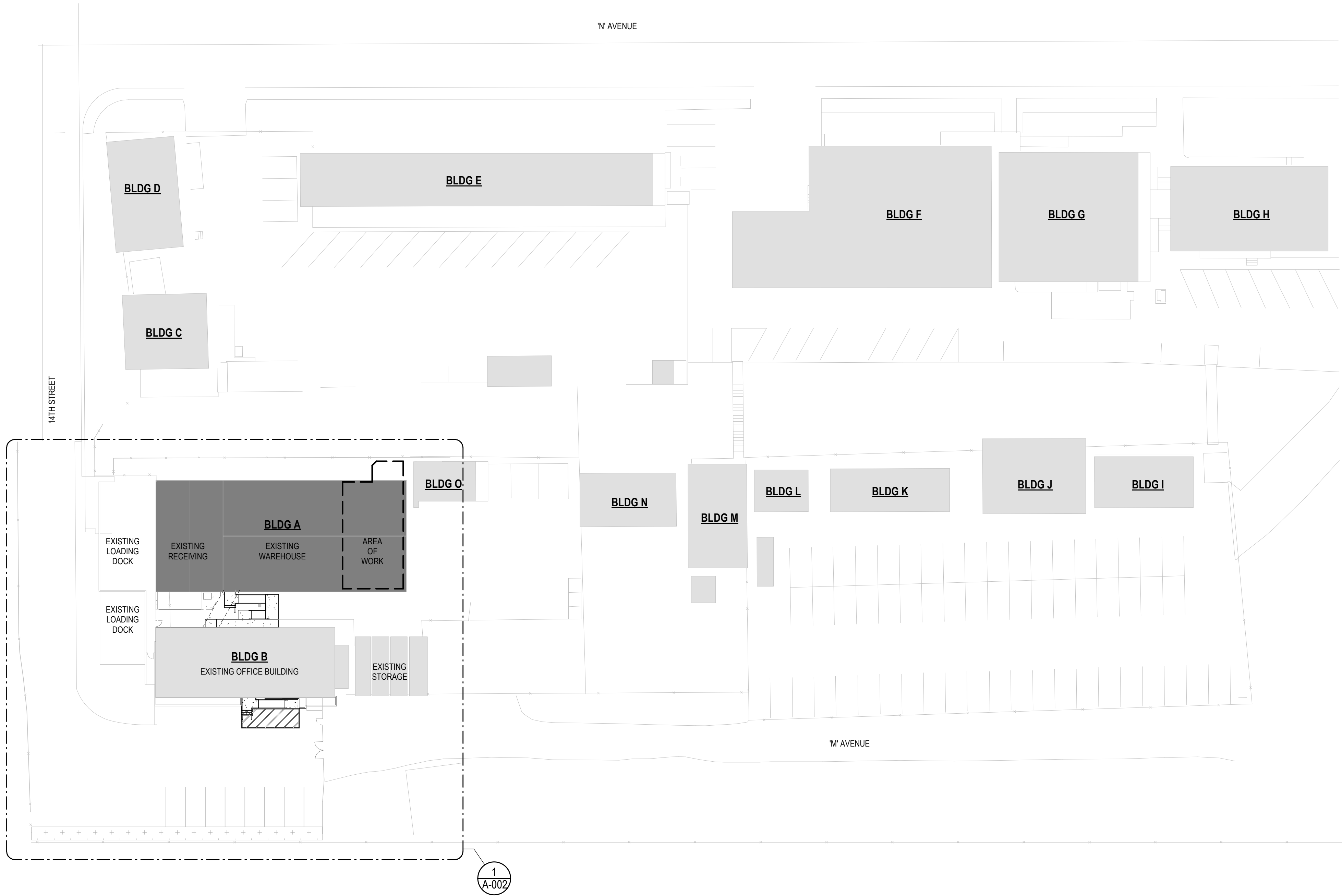
SUBMITTALS / REVISIONS		
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**BID SET 5/1/2025
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CONSTRUCTION
PROJECT STILL IN
REVIEW**

PROJECT NO. 22439-E-02

SHEET NO.

AD-103



SITE PLAN

SCALE:
1" = 30'-0"

1

LEGEND

BLDG A	BUILDING IDENTIFICATION DESIGNATION
	EXISTING WORK TO REMAIN
	NEW WORK
	EXISTING FENCE
	LIMIT OF WORK
	BUILDING IN SCOPE
	BUILDINGS NOT IN SCOPE
	EXISTING LANDSCAPE
	EXISTING CONCRETE PAVING
	NEW CONCRETE PAVING
	EXISTING SITE DRAIN

ACCESSIBILITY NOTES

1. ALL HARDSCAPE WITHIN AREA OF WORK TO BE REMOVED AND REPLACED TO CORRECT PATH OF TRAVEL ISSUES INCLUDING ALL EXTERIOR DOOR THRESHOLDS.
2. NEW HARDSCAPE TO BE FLUSH WITH EXISTING HARDSCAPE WHERE ABUTS, U.N.O.

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OVERALL SITE PLAN

**CENTRAL WAREHOUSE
FREEZER REPLACEMENT**
FREEZER REPLACEMENT
1400 N AVENUE
NATIONAL CITY, CA 91950

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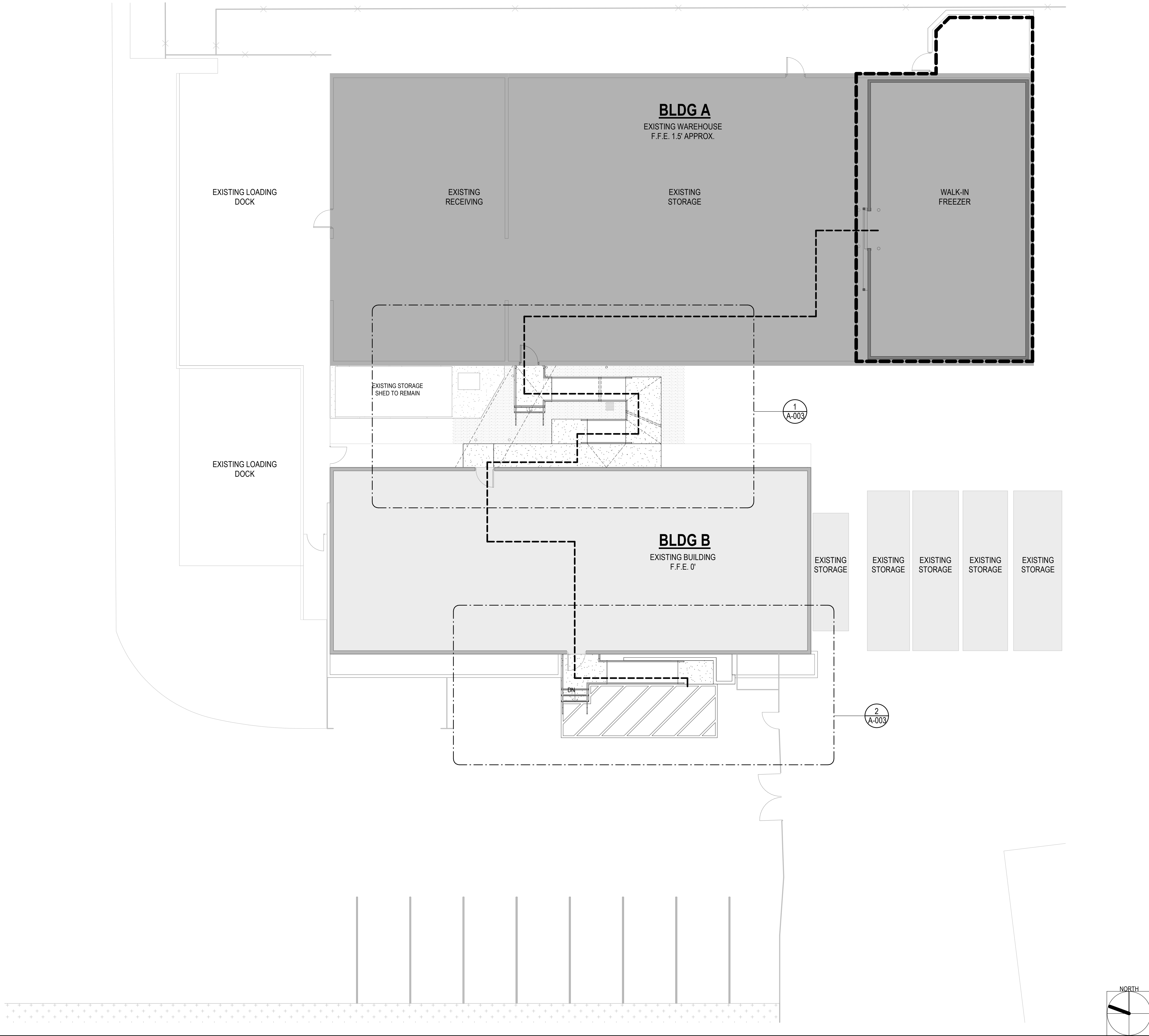
A-001

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ENLARGED SITE PLAN SCALE: 1/8" = 1'-0"

LEGEND

BLDG A

	BUILDING IDENTIFICATION DESIGNATION
	EXISTING WORK TO REMAIN
	NEW WORK
	ACCESSIBLE PATH OF TRAVEL 4'-0" WIDE MIN. CONCRETE OR A.C. PAVED.
	EXISTING FENCE
	LIMIT OF FREEZER REPLACEMENT WORK
	BUILDING IN SCOPE
	BUILDINGS NOT IN SCOPE
	EXISTING LANDSCAPE
	EXISTING CONCRETE PAVING
	NEW CONCRETE PAVING
	NEW ASPHALT PAVING
	EXISTING SITE DRAIN
	EXISTING STEEL COLUMN

ACCESSIBILTY NOTES

1. PATH OF TRAVEL (P.O.T.) AS INDICATED IS A BARRIER FREE ACCESS WITHOUT ANY ABRUPT VERTICAL CHANGES EXCEEDING 1/2" BEVELED AT 1:2 MAXIMUM SLOPE, EXCEPT THAT LEVEL CHANGES DO NOT EXCEED 1/4" VERTICAL AND IS AT LEAST 48" WIDE. SURFACE IS SLIP RESISTANT, STABLE, FIRM, AND SMOOTH. CROSS-SLOPE DOES NOT EXCEED 2% AND SLOPE IN THE DIRECTION OF TRAVEL IS LESS THAN 5% UNLESS OTHERWISE INDICATED. (P.O.T.) SHALL MAINTAIN FREE OF OVERHANGING OBSTRUCTIONS TO 80" MINIMUM (11B-307.4) AND PROTRUDING OBJECTS GREATER THAN 4" PROJECTION FROM THE WALL AND ABOVE 27" AND LESS THAN 80" (11B-307.2). CONTRACTOR TO VERIFY THAT ALL BARRIERS IN THE PATH OF TRAVEL HAVE BEEN REMOVED OR WILL BE REMOVED UNDER THIS PROJECT, AND PATH OF TRAVEL COMPLIES WITH CBC 11B-DIVISION 4
2. DESIGN PROFESSIONAL IN GENERAL RESPONSIBLE CHARGE STATEMENT: THE P.O.T. IDENTIFIED IN THESE CONSTRUCTION DOCUMENTS IS COMPLIANT WITH THE CURRENT APPLICABLE CALIFORNIA BUILDING CODE ACCESSIBILITY PROVISIONS FOR PATH OF TRAVEL REQUIREMENTS FOR ALTERATIONS, ADDITIONS AND STRUCTURAL REPAIRS. AS PART OF THE DESIGN OF THIS PROJECT, THE P.O.T. WAS EXAMINED AND ANY ELEMENTS, COMPONENTS OR PORTIONS OF THE P.O.T. THAT WERE DETERMINED TO BE NONCOMPLIANT 1) HAVE BEEN IDENTIFIED AND 2) THE CORRECTIVE WORK NECESSARY TO BRING THEM INTO COMPLIANCE HAS BEEN INCLUDED WITHIN THE SCOPE OF THIS PROJECT'S WORK THROUGH DETAILS, DRAWINGS AND SPECIFICATIONS INCORPORATED OR PORTIONS OF THE P.O.T. THAT NOT BE CORRECTED BY THIS PROJECT BASED ON VALUATION THRESHOLD LIMITATIONS OR A FINDING OF UNREASONABLE HARDSHIP ARE SO INDICATED IN THESE CONSTRUCTION DOCUMENTS.
3. DURING CONSTRUCTION, IF P.O.T. ITEMS WITHIN THE SCOPE OF THE PROJECT REPRESENTED AS CODE COMPLIANT ARE FOUND TO BE NONCONFORMING BEYOND REASONABLE CONSTRUCTION TOLERANCES, THEY SHALL BE BROUGHT IN TO COMPLIANCE WITH THE CBC AS A PART OF THIS PROJECT BY MEANS OF A CONSTRUCTION CHANGE DOCUMENT.

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ENLARGED SITE PLAN

**CENTRAL WAREHOUSE
FREEZER REPLACEMENT**
FREEZER REPLACEMENT
1400 N AVENUE
NATIONAL CITY, CA 91950

SUBMITTALS / REVISIONS

#	ISSUE	DATE
1	DSA SUBMITTAL V1	03/19/2025
2	DSA BACKCHECK	04/30/2025

**BID SET 5/1/2025
NOT FOR
CONSTRUCTION
PROJECT STILL IN
REVIEW**

PROJECT NO. 22439-E-02

SHEET NO.

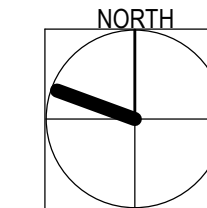
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DSA

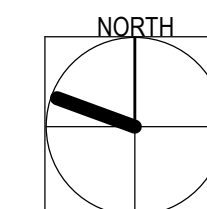
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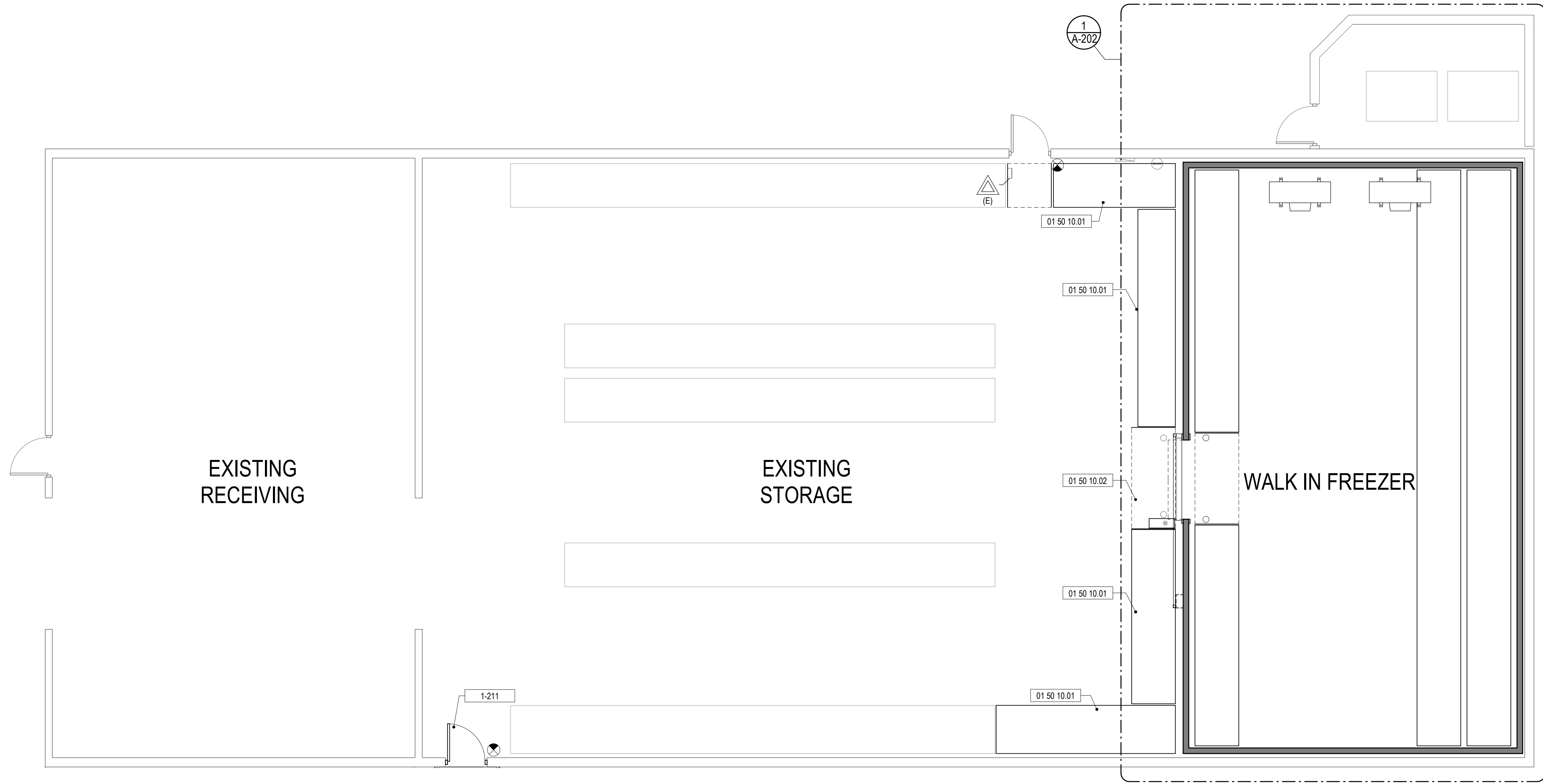


SCALE:
1/4" = 1'-0"



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

A-003



WAREHOUSE FLOOR PLAN SCALE: 3/16" = 1'-0"

LEGEND

- EXISTING WORK TO REMAIN
- NEW WORK
- EXISTING FLOOR DRAIN
- NEW HSS STEEL COLUMN
- EXISTING BOLLARD
- NEW BOLLARD
- EXISTING ELECTRICAL PANEL
- EXISTING EYEWASH STATION
- EXIT SIGN
- EXISTING FIRE EXTINGUISHER
- NEW COIL UNIT

KEYNOTES

- 01 50 10.01 RE-ASSEMBLE STORAGE RACKS TO MATCH EXISTING CONDITIONS.
- 01 50 10.02 RE-ASSEMBLE OVERHEAD STORAGE RACK TO MATCH EXISTING CONDITIONS.
- 1-211 REMOVE AND REINSTALL EXISTING DOOR TO REVERSE SWING TO SWING OUT TO MEET ACCESSIBLE MANEUVERING CLEARANCES. VERIFY DOOR MEETS CBC 11B-404.2.9 FOR OPENING FORCE AND CBC 11B-404.2.8 FOR CLOSING SPEED. DOOR HARDWARE TO BE REPLACED TO MAKE COMPLIANT.

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NEW ENLARGED WAREHOUSE LEGEND

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FREEZER REPLACEMENT
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NATIONAL CITY, CA 91960

SUBMITTALS / REVISIONS #	ISSUE	DATE
	DSA SUBMITTAL V1 DSA BACKCHECK	03/19/2025 04/30/2025

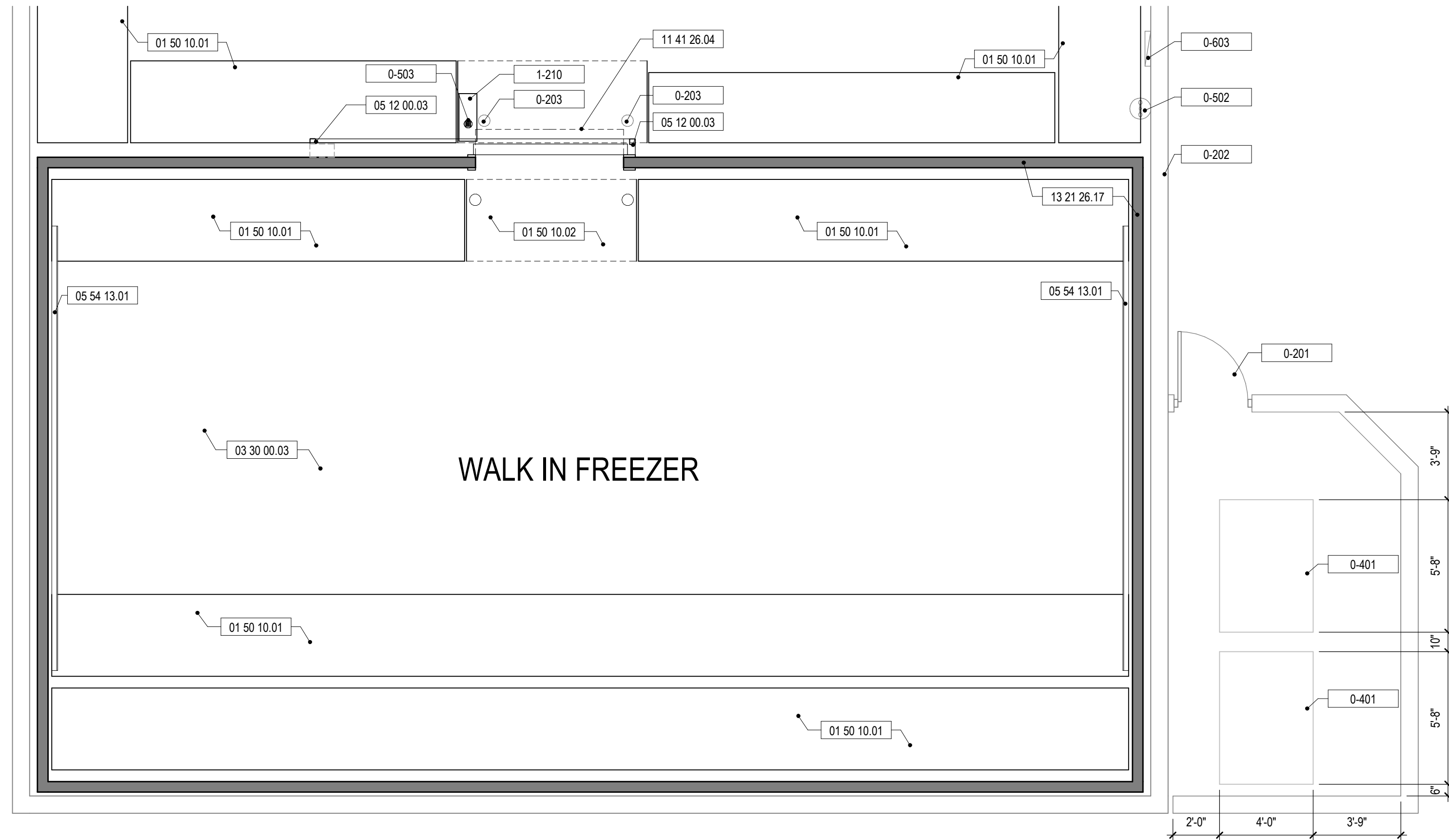
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PROJECT NO. 22439-E-02
SHEET NO.

A-201

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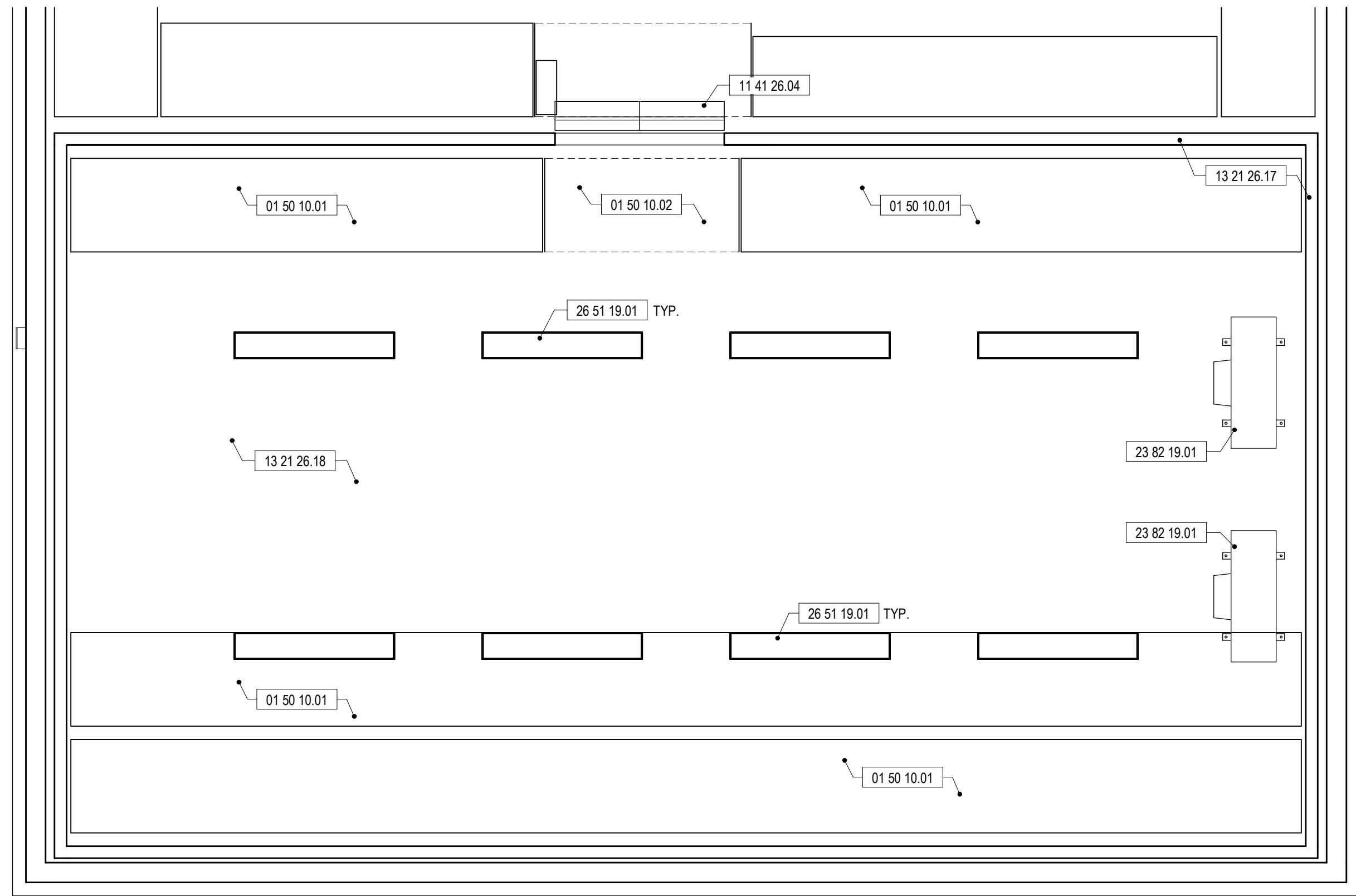
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ENLARGED FREEZER PLAN

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

1



ENLARGED FREEZER CEILING PLAN

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

2

LEGEND

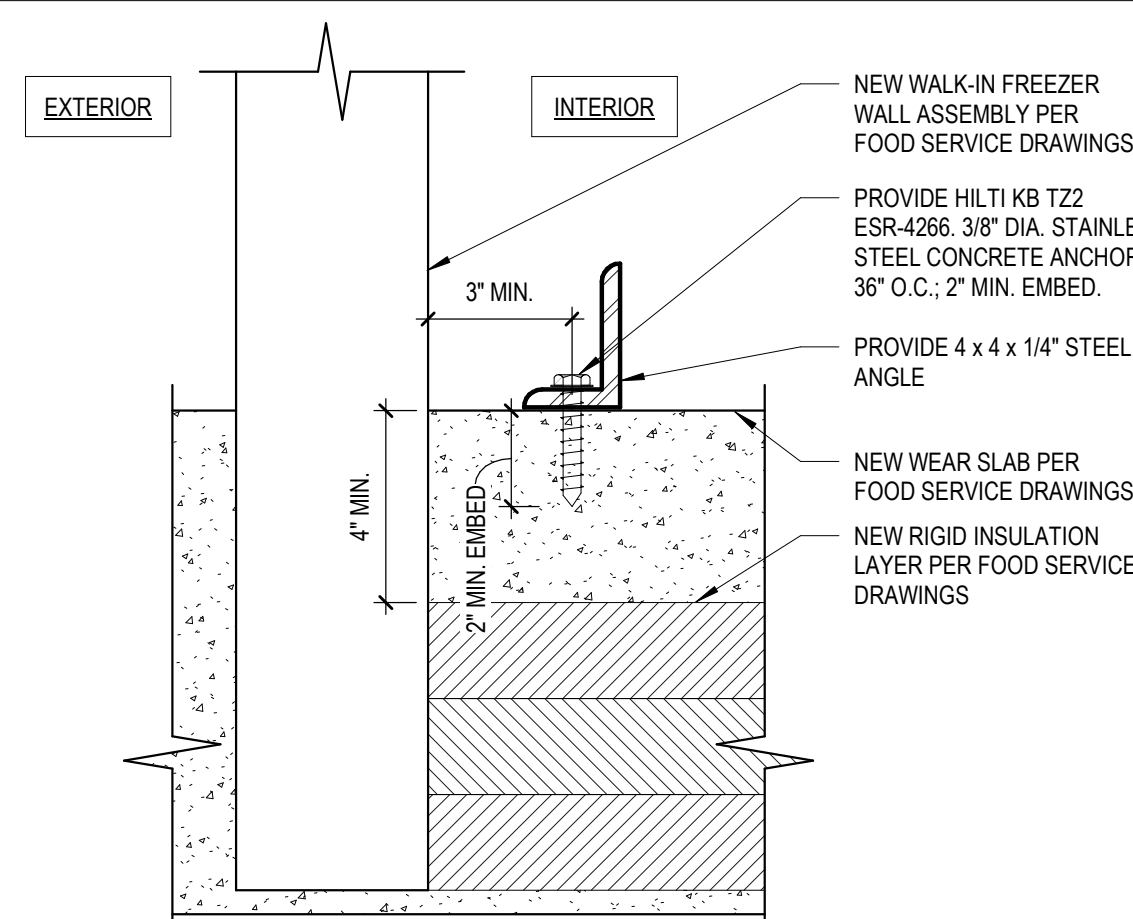
- EXISTING WORK TO REMAIN
- NEW WORK
- EXISTING FLOOR DRAIN
- NEW HSS STEEL COLUMN
- EXISTING BOLLARD
- NEW BOLLARD
- EXISTING ELECTRICAL PANEL
- EXISTING EYEWASH STATION
- NEW LIGHT FIXTURE
- NEW AIR CURTAIN FREEZER
- NEW COIL UNIT

GENERAL NOTES

- ALL PENETRATIONS TO BE SEALED AT NEW WALK-IN FREEZER AND EXISTING WAREHOUSE WALLS.

KEYNOTES

- 0-201 EXISTING DOOR TO REMAIN, PROTECT IN PLACE. VERIFY DOOR MEETS CBC 11B-404.2.9 FOR OPENING FORCE AND CBC 11B-404.2.8 FOR CLOSING SPEED. DOOR HARDWARE TO BE REPLACED TO MAKE COMPLIANT.
- 0-202 EXISTING WAREHOUSE WALLS TO REMAIN, PROTECT IN PLACE.
- 0-203 EXISTING BOLLARD TO REMAIN, PROTECT IN PLACE.
- 0-401 EXISTING CONDENSING UNIT TO REMAIN, PROTECT IN PLACE.
- 0-502 EXISTING EYEWASH STATION TO REMAIN, PROTECT IN PLACE.
- 0-503 EXISTING FLOOR SINK TO REMAIN, PROTECT IN PLACE.
- 0-603 EXISTING ELECTRICAL PANEL TO REMAIN, PROTECT IN PLACE.
- 01 50 10.01 RE-ASSEMBLE OVERHEAD STORAGE RACK TO MATCH EXISTING CONDITIONS.
- 01 50 10.02 RE-ASSEMBLE OVERHEAD STORAGE RACK TO MATCH EXISTING CONDITIONS.
- 1-210 REMOVE AND REINSTALL EXISTING CASEWORK, ADJACENT TO NEW WALK-IN FREEZER DOOR.
- 03 30 00.03 PROVIDE WEAR SLAB AND INSULATION LAYER, REFER TO FOOD SERVICE DRAWINGS FOR ADDITIONAL INFORMATION.
- 05 12 00.03 NEW HSS STEEL COLUMN, 3X3X1/16. SEE FOOD SERVICE DRAWINGS FOR ADDITIONAL INFORMATION.
- 05 54 13.01 NEW WALK-IN FREEZER METAL ANGLE WALL PROTECTION, SEE DETAIL 3/A-202
- 11 41 26.04 NEW WALK-IN FREEZER AIR CURTAIN, PER FOOD SERVICE DRAWINGS.
- 13 21 26.17 NEW WALK-IN FREEZER UNIT, REFER TO FOOD SERVICE DRAWINGS FOR ADDITIONAL INFORMATION.
- 13 21 26.18 NEW WALK-IN FREEZER CEILING, REFER TO FOOD SERVICE DRAWINGS FOR ADDITIONAL INFORMATION.
- 23 82 19.01 NEW EVAPORATION COILS, PER FOOD SERVICE DRAWINGS, REFER TO ELECTRICAL FOR POWER INFORMATION AND PLUMBING DRAWINGS FOR REFRIGERANT AND CONDENSATE PIPE INFORMATION.
- 26 51 19.01 NEW STRIP LIGHTS TO MATCH EXISTING TYPICAL, REFER TO ELECTRICAL DRAWINGS FOR ADDITIONAL INFORMATION.



WALK-IN FREEZER ANGLE
DETAIL

SCALE:
3" = 1'-0"

3

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**CENTRAL WAREHOUSE
FREEZER REPLACEMENT**

NEW ENLARGED FREEZER PLANS

SUBMITTALS / REVISIONS		
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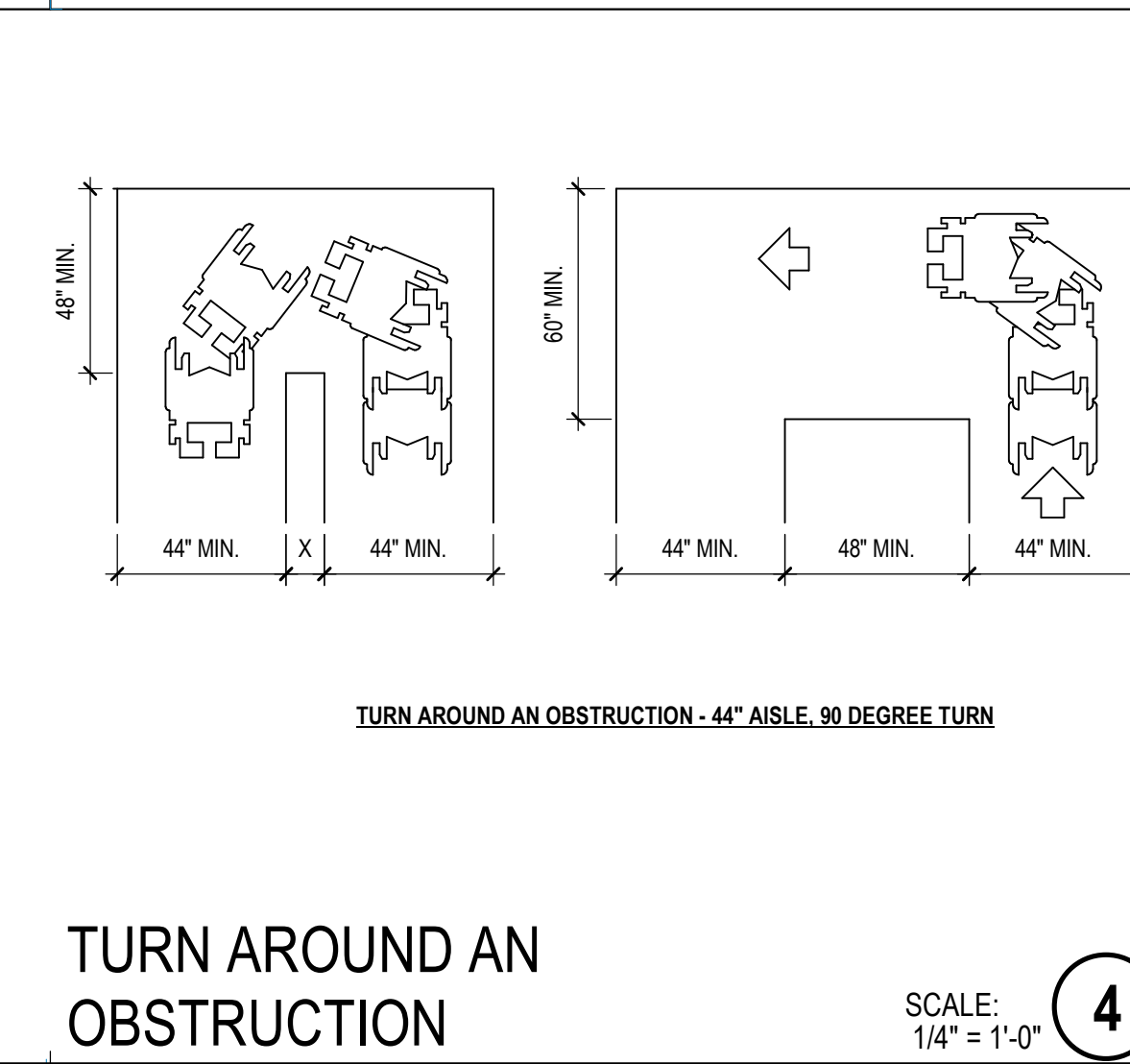
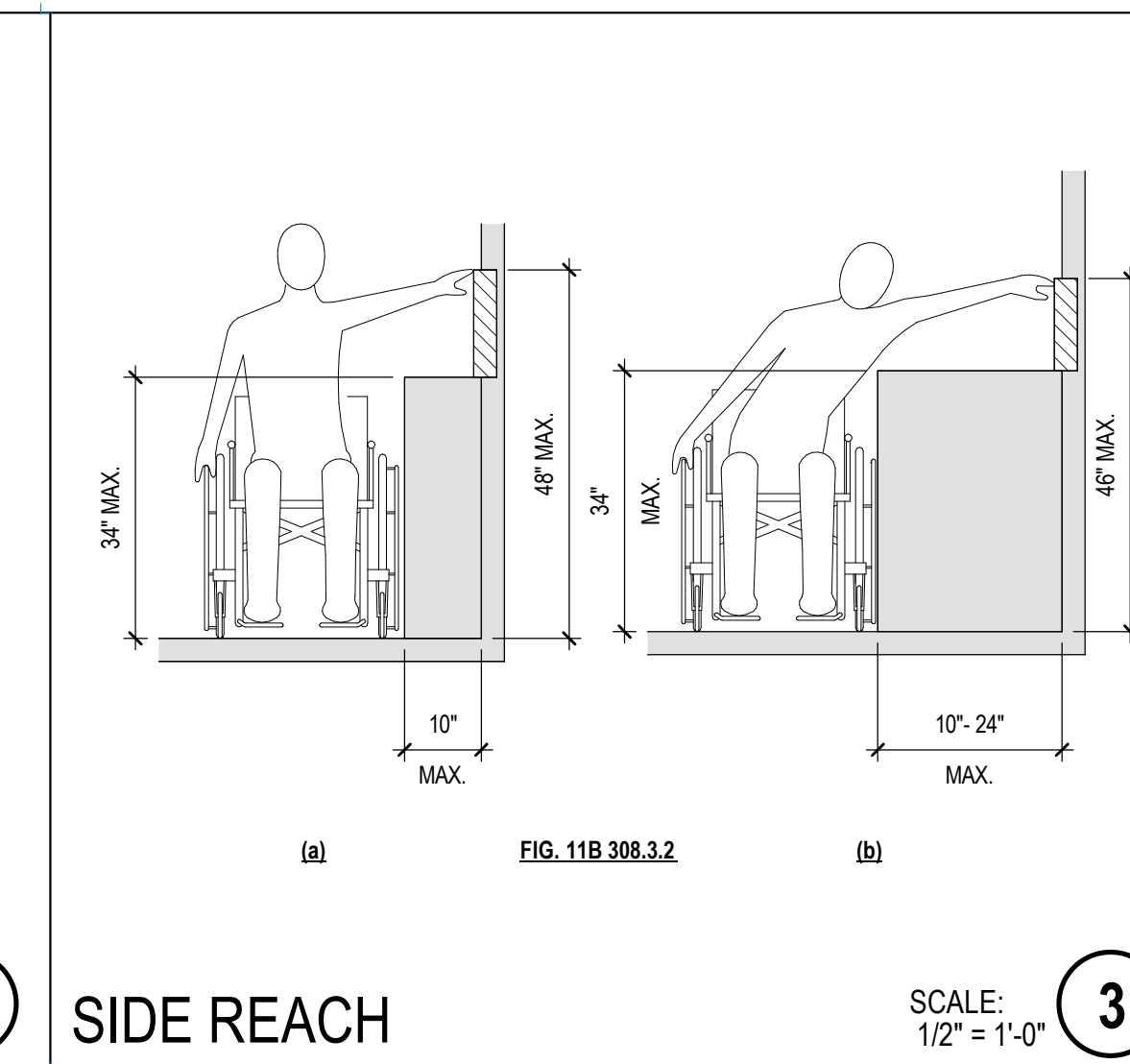
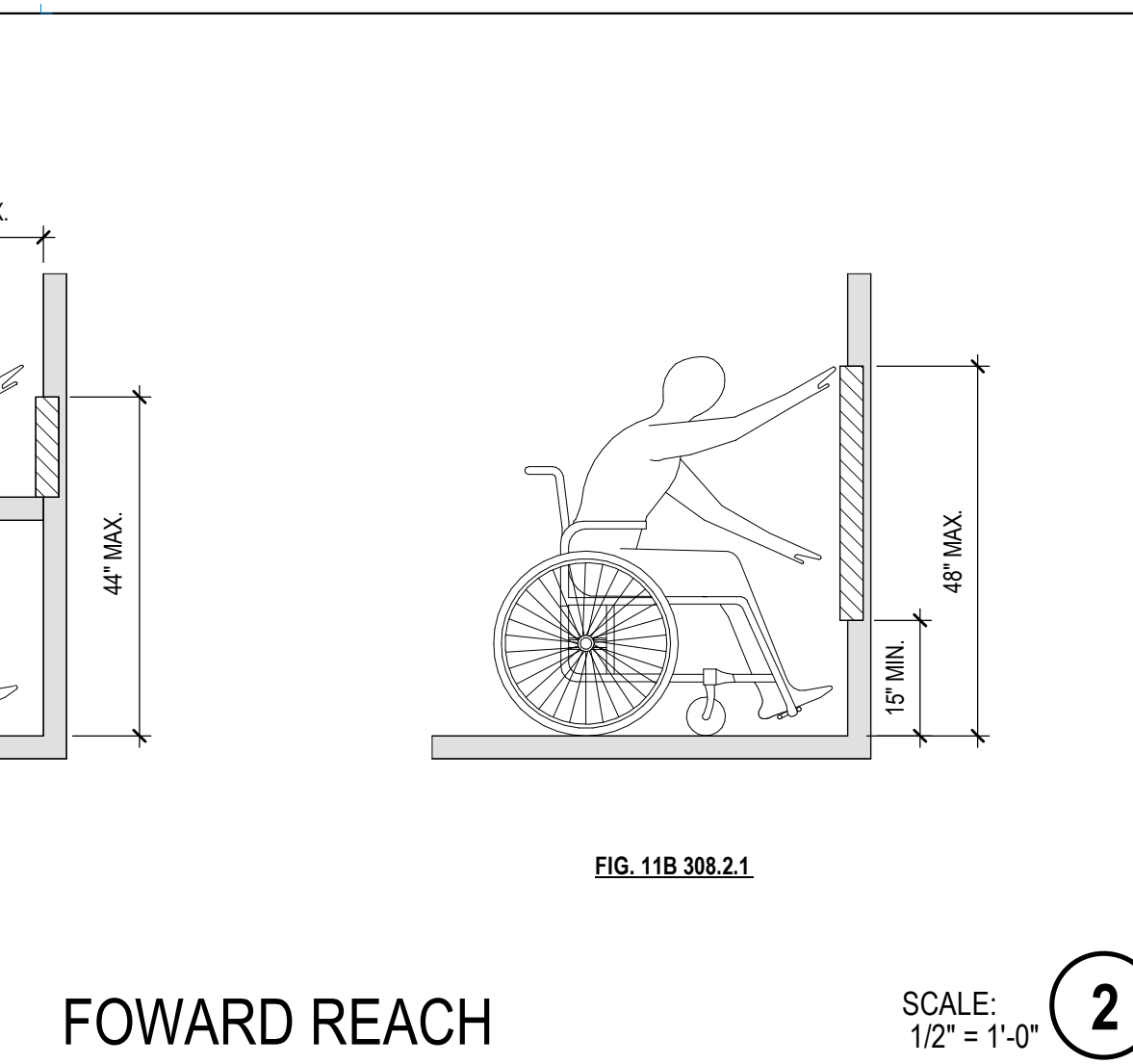
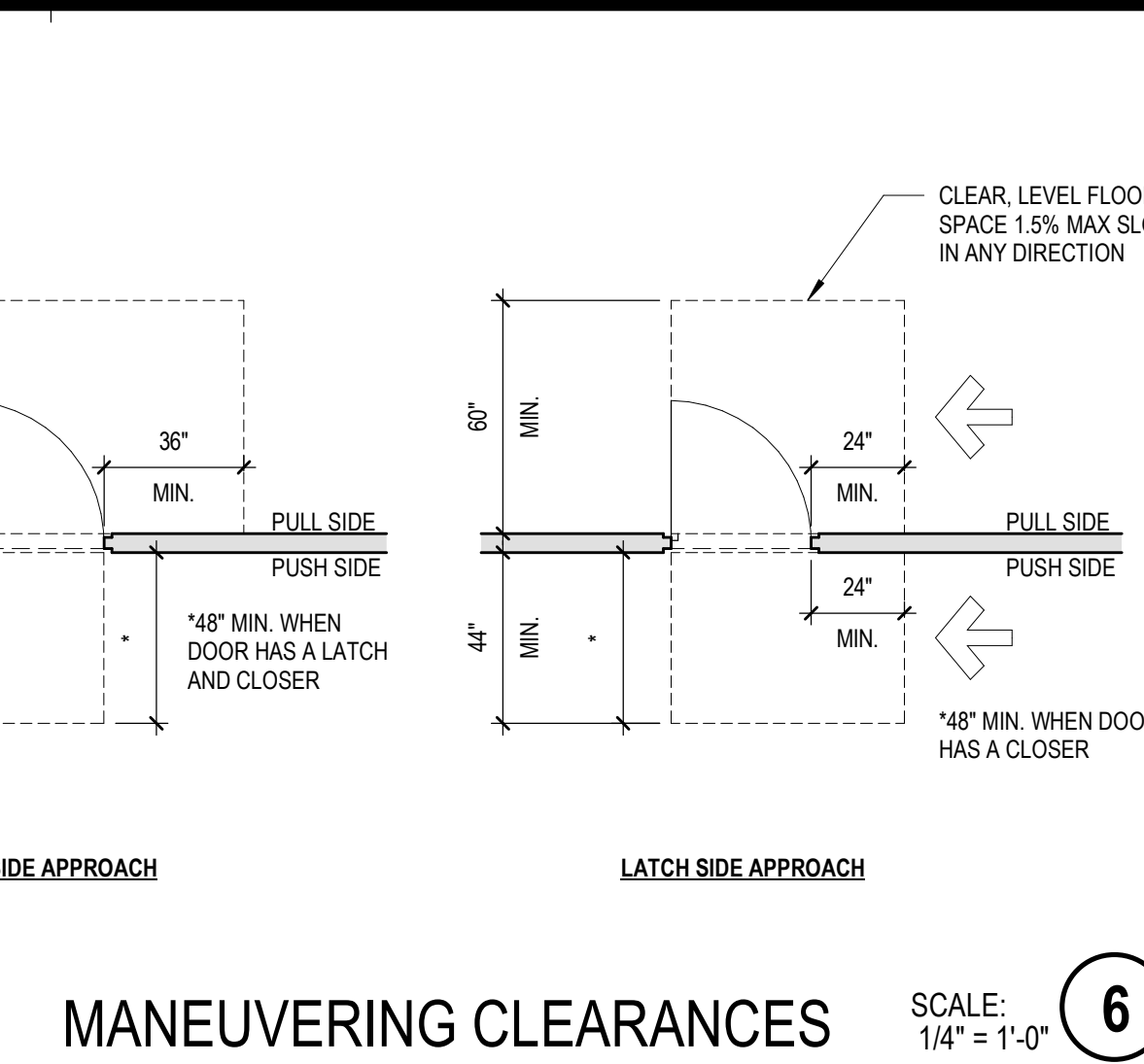
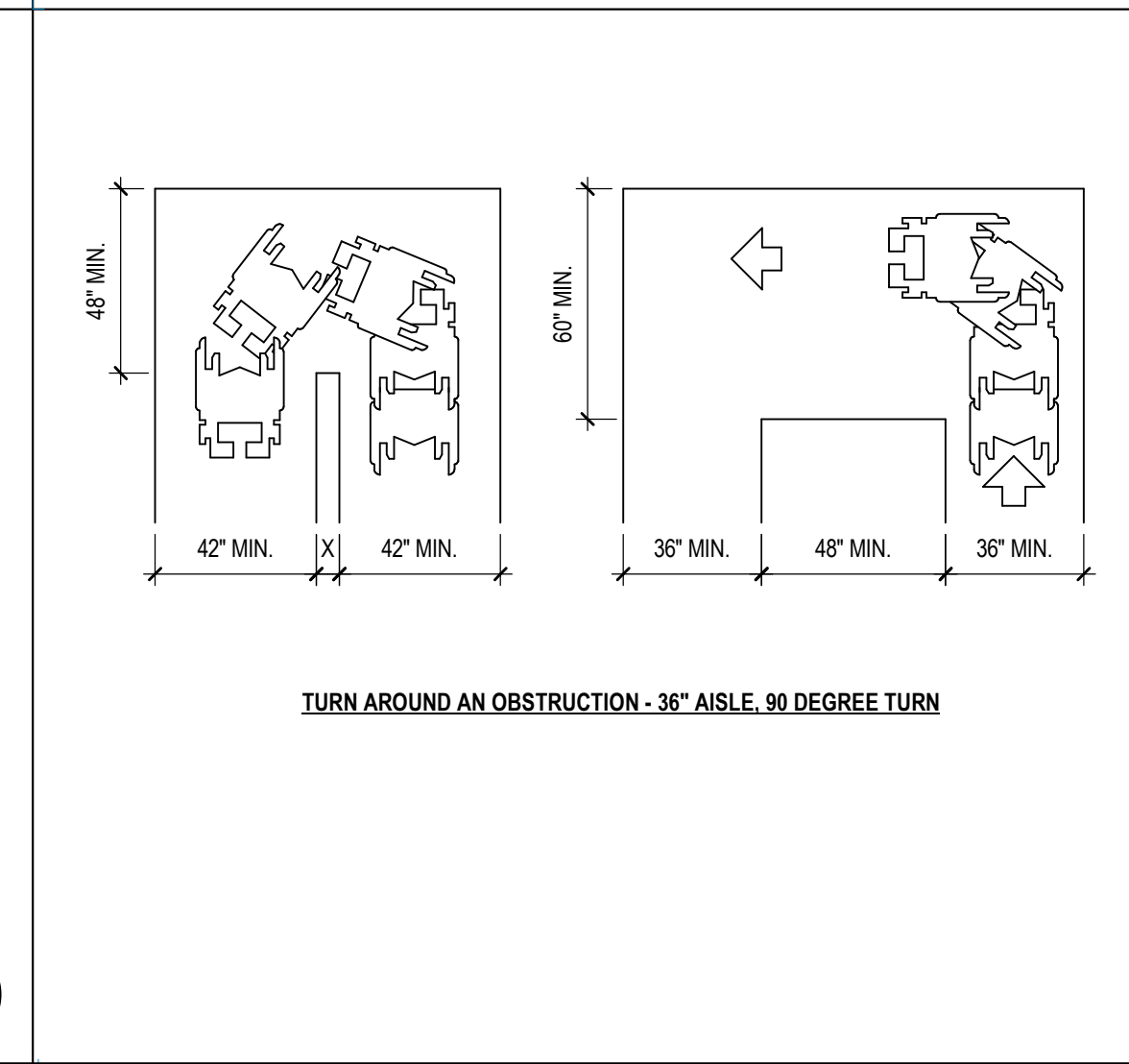
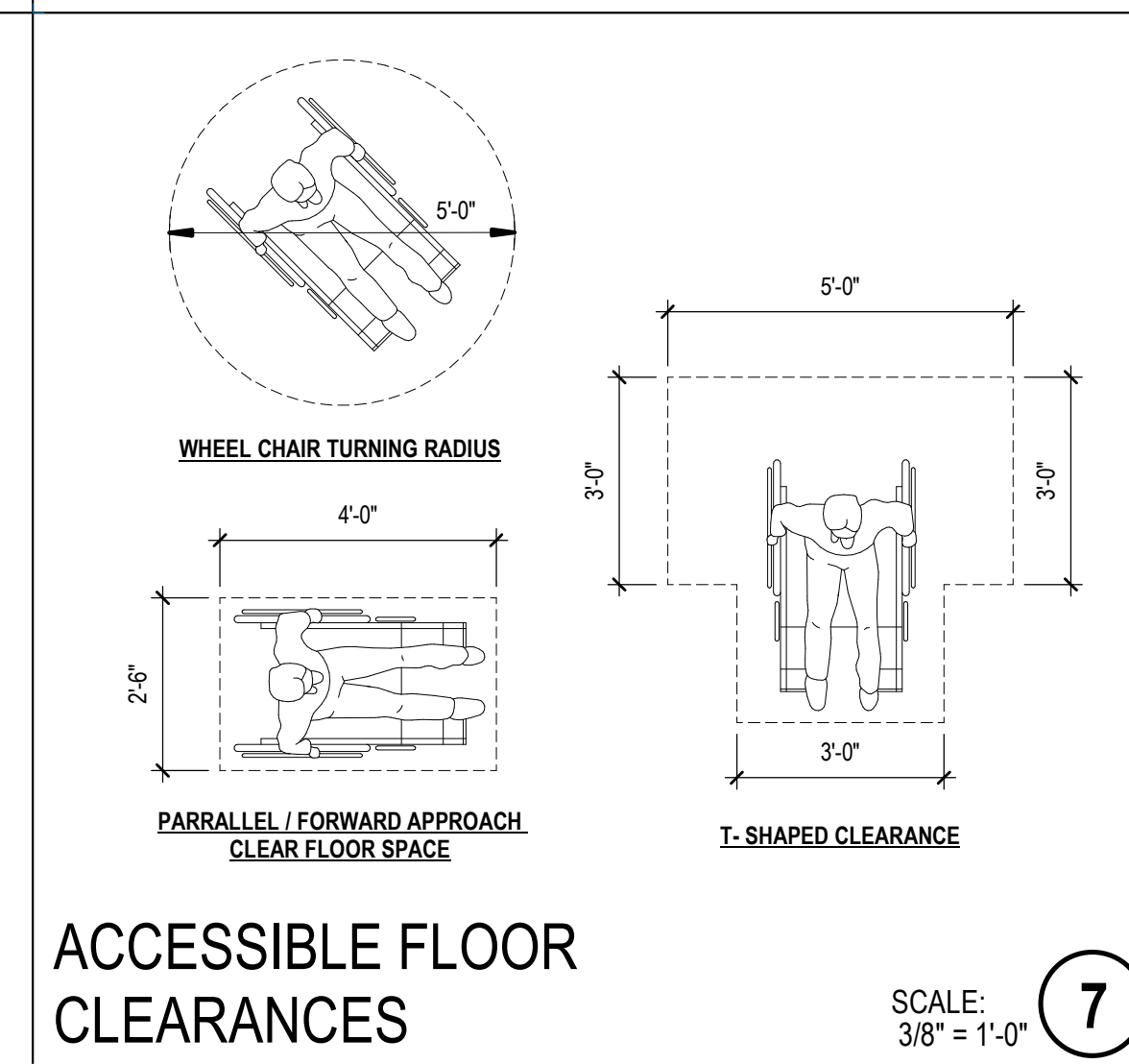
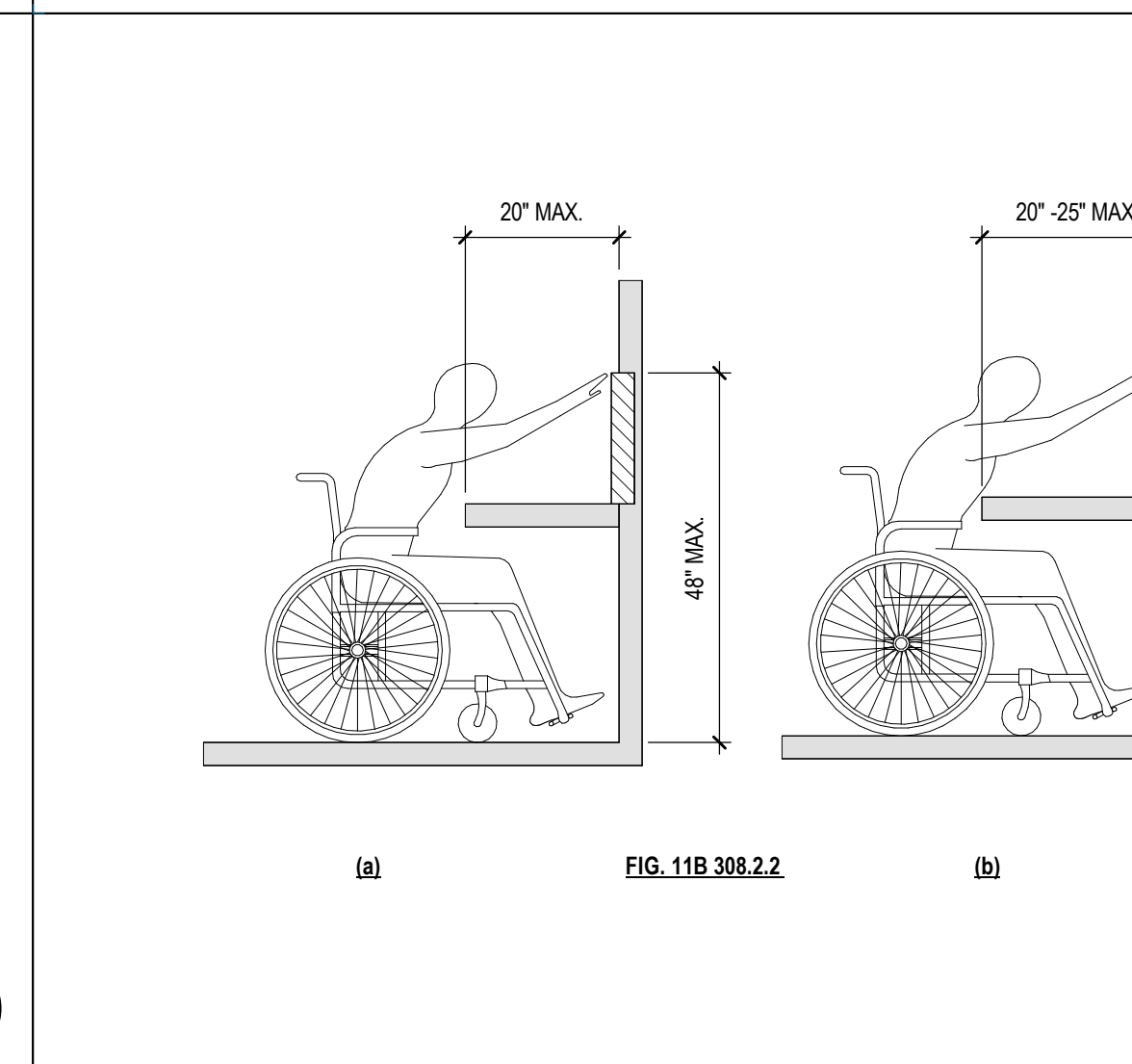
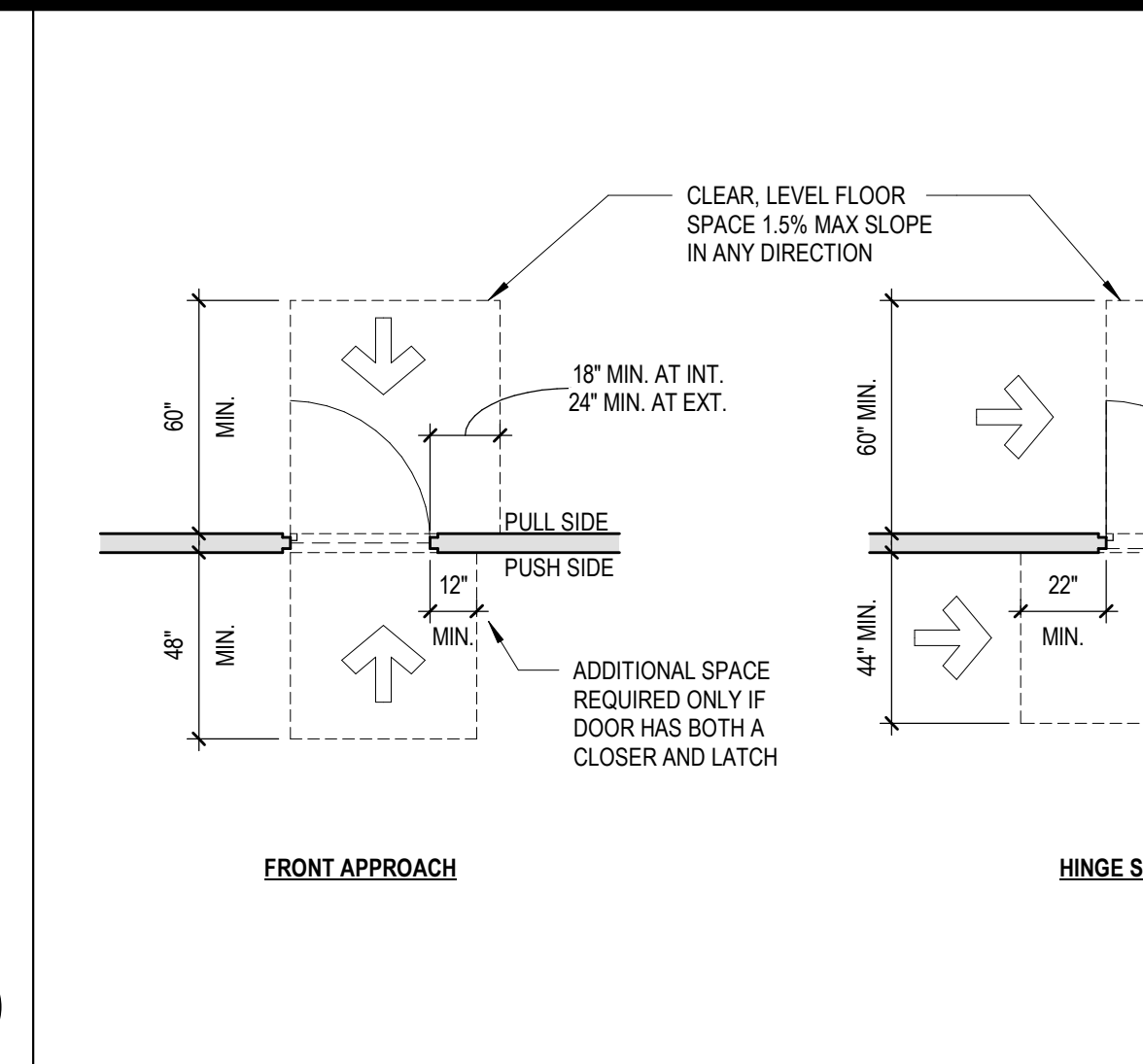
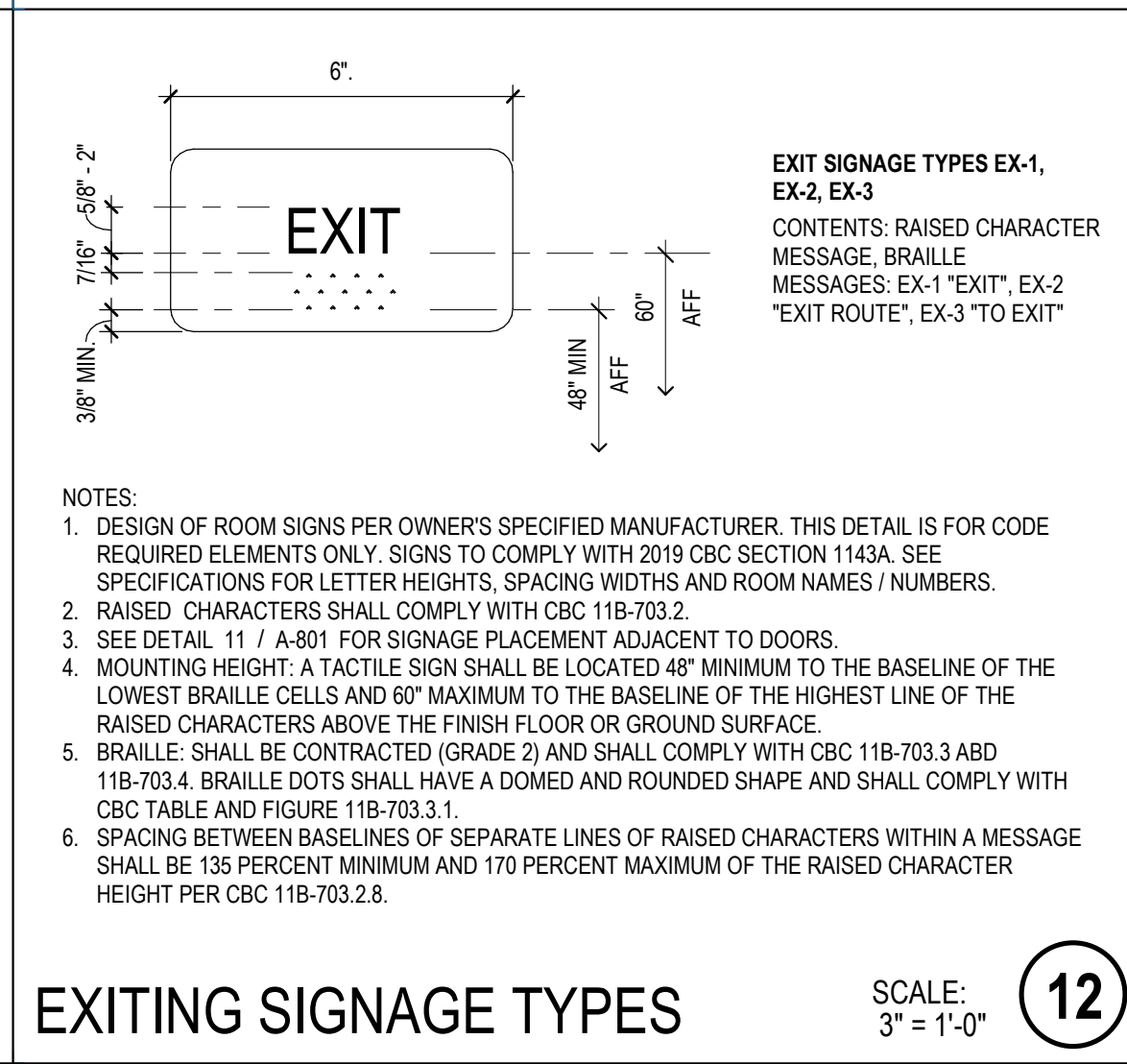
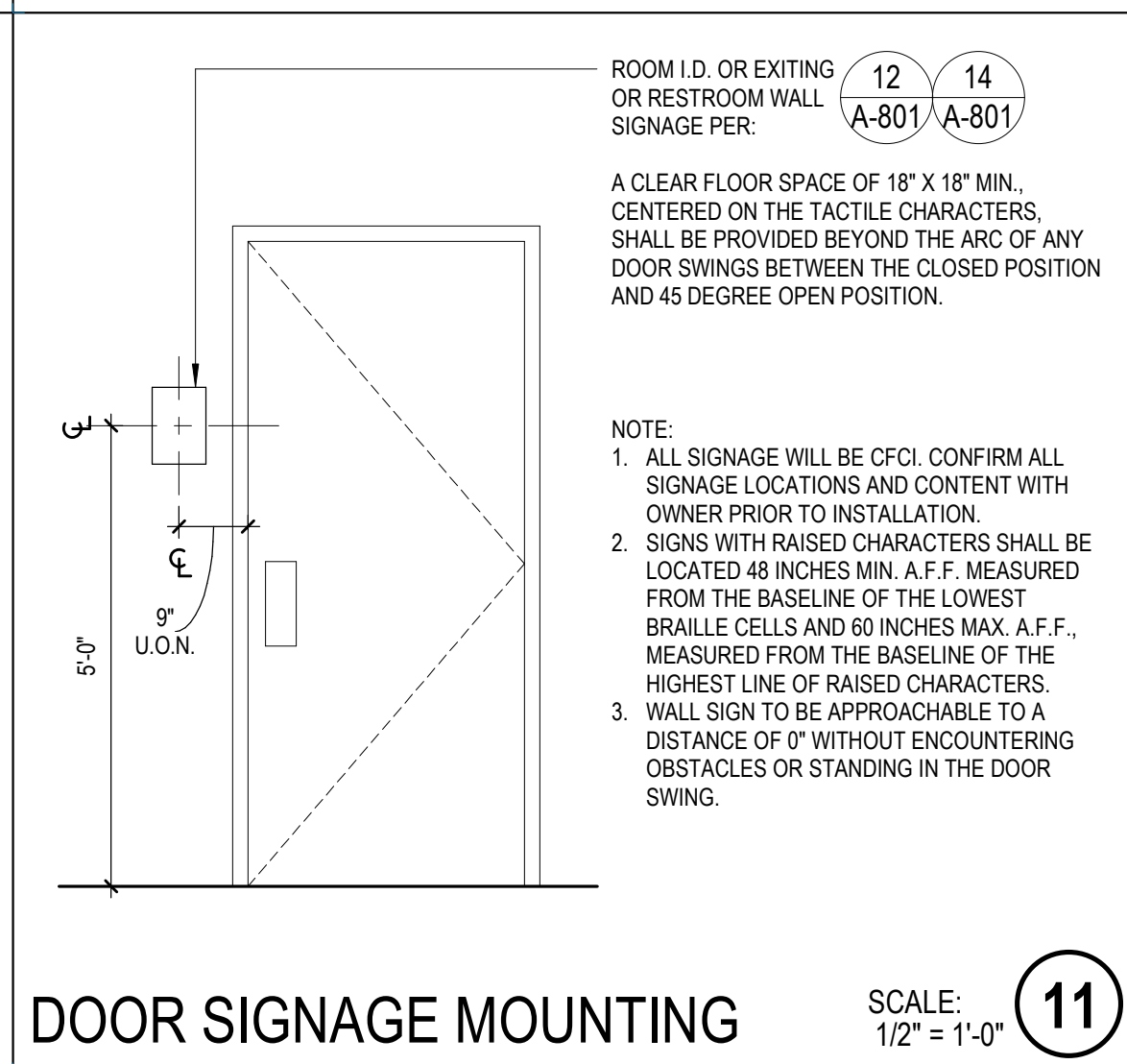
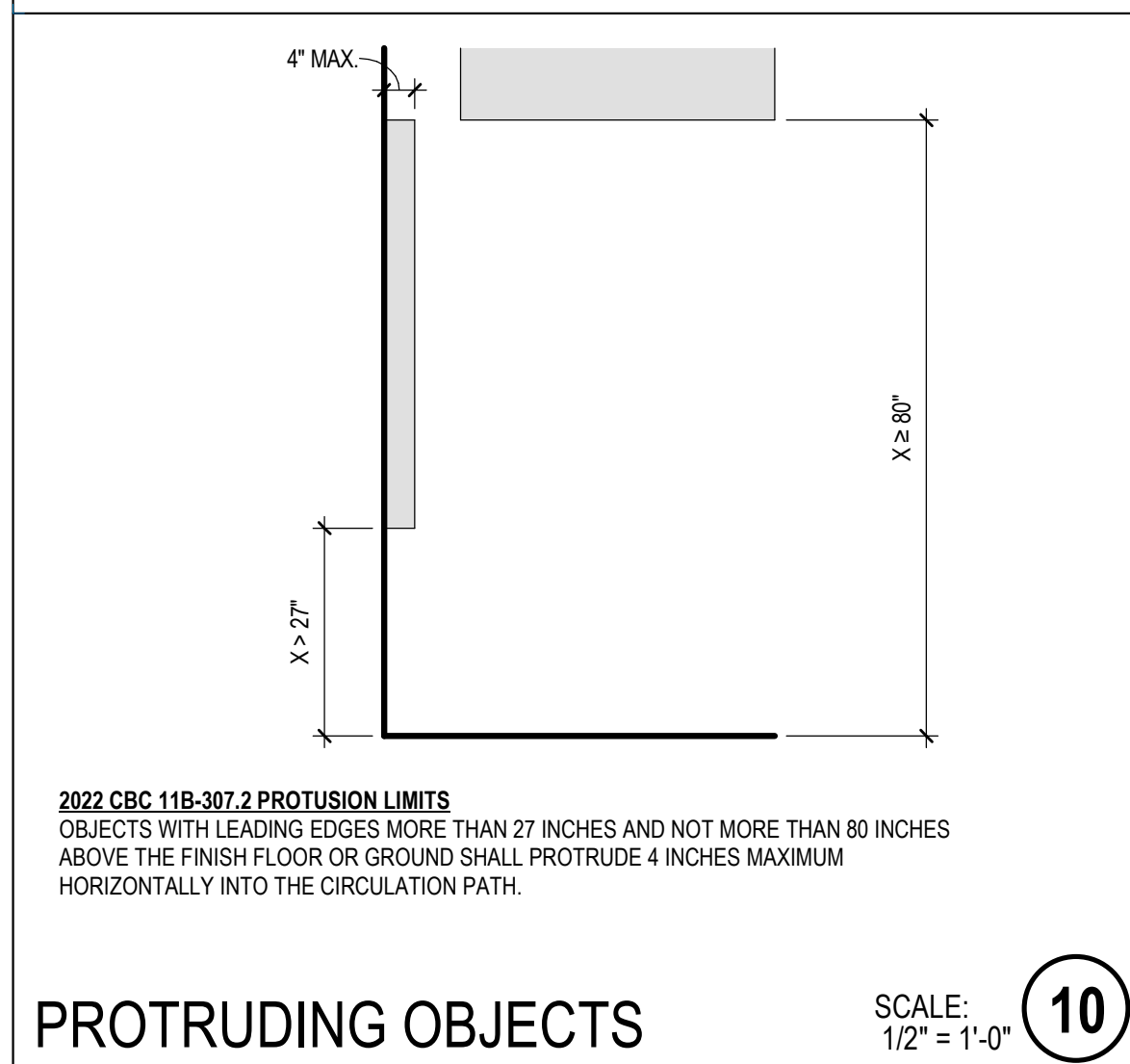
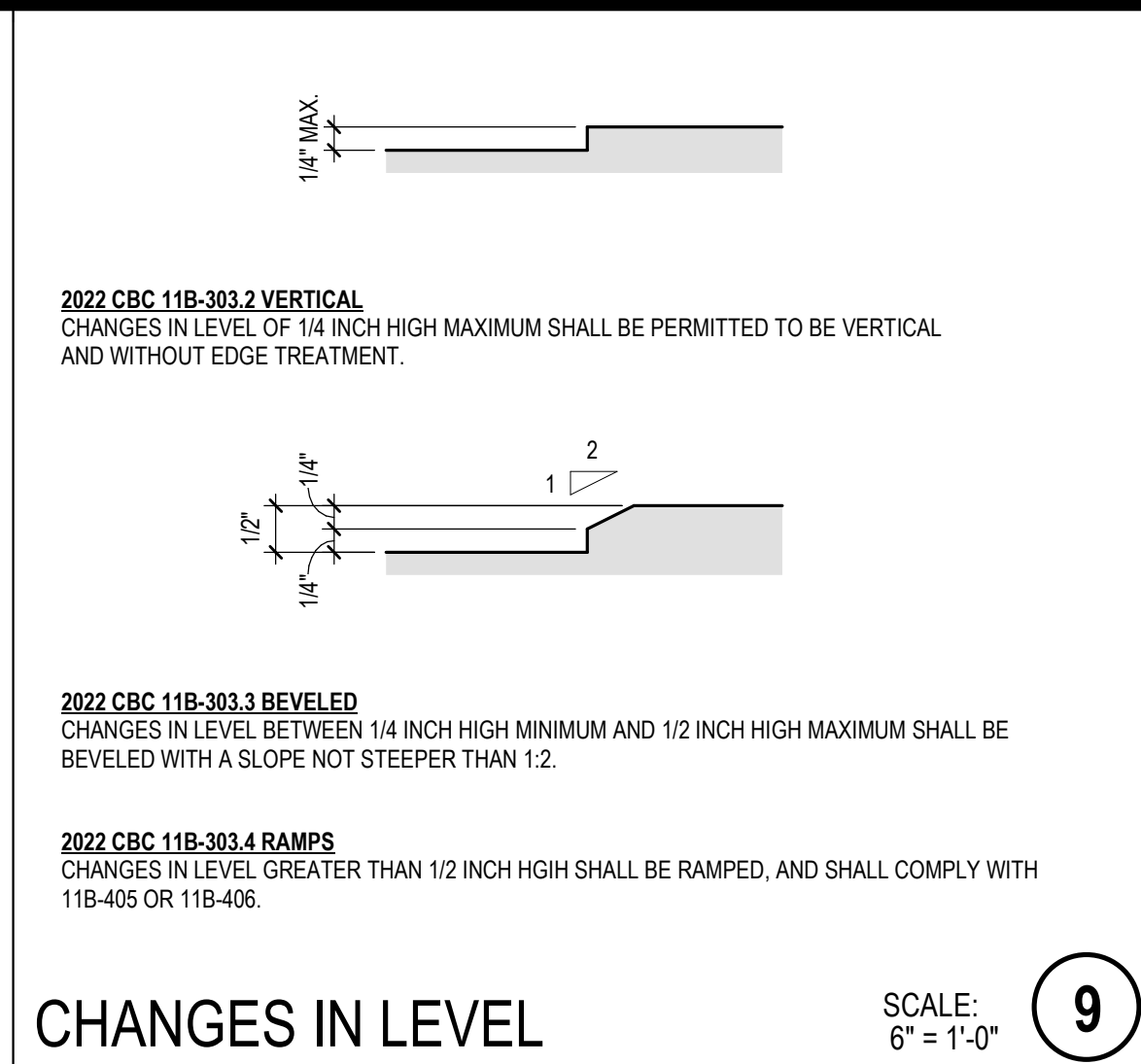
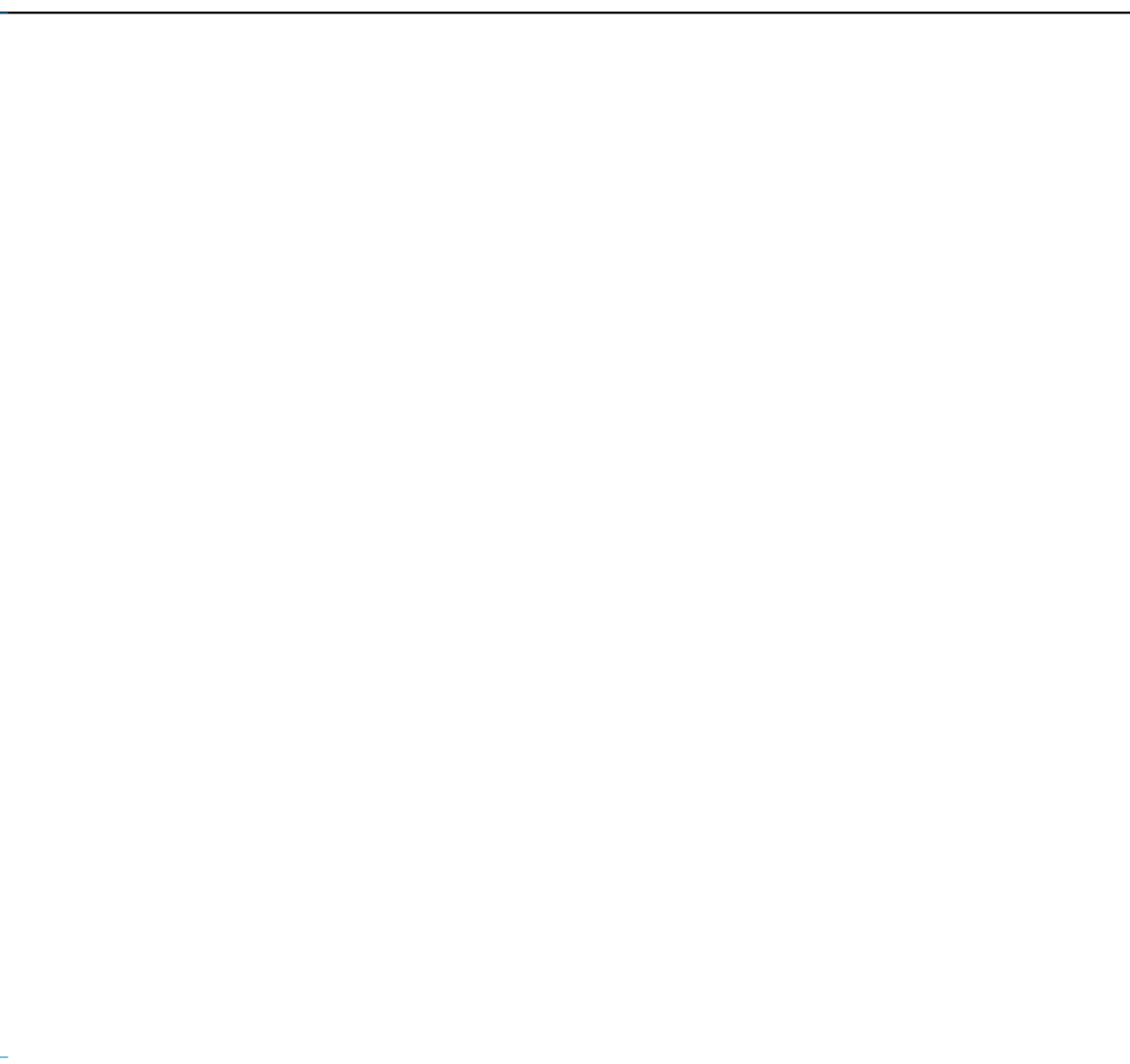
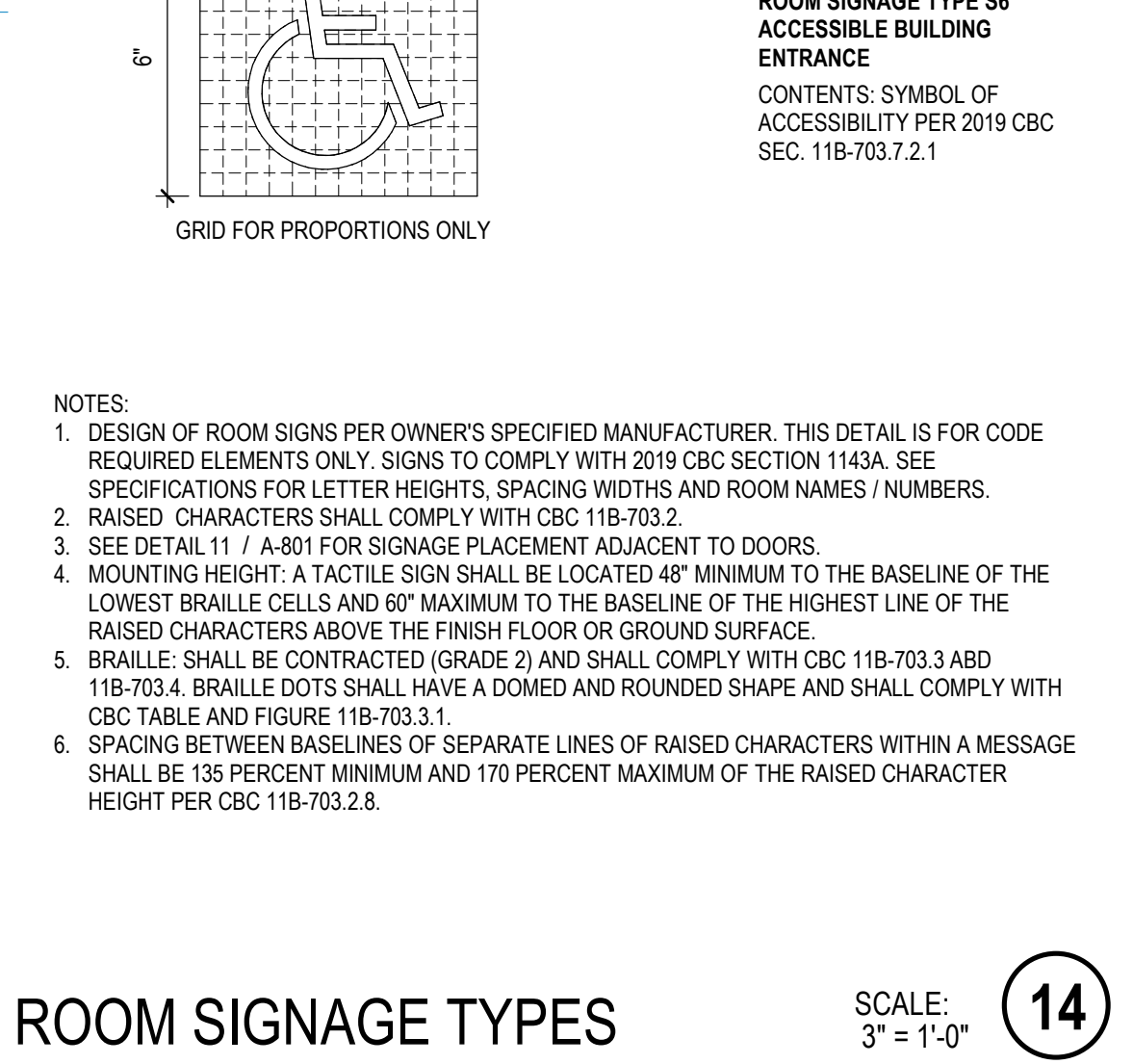
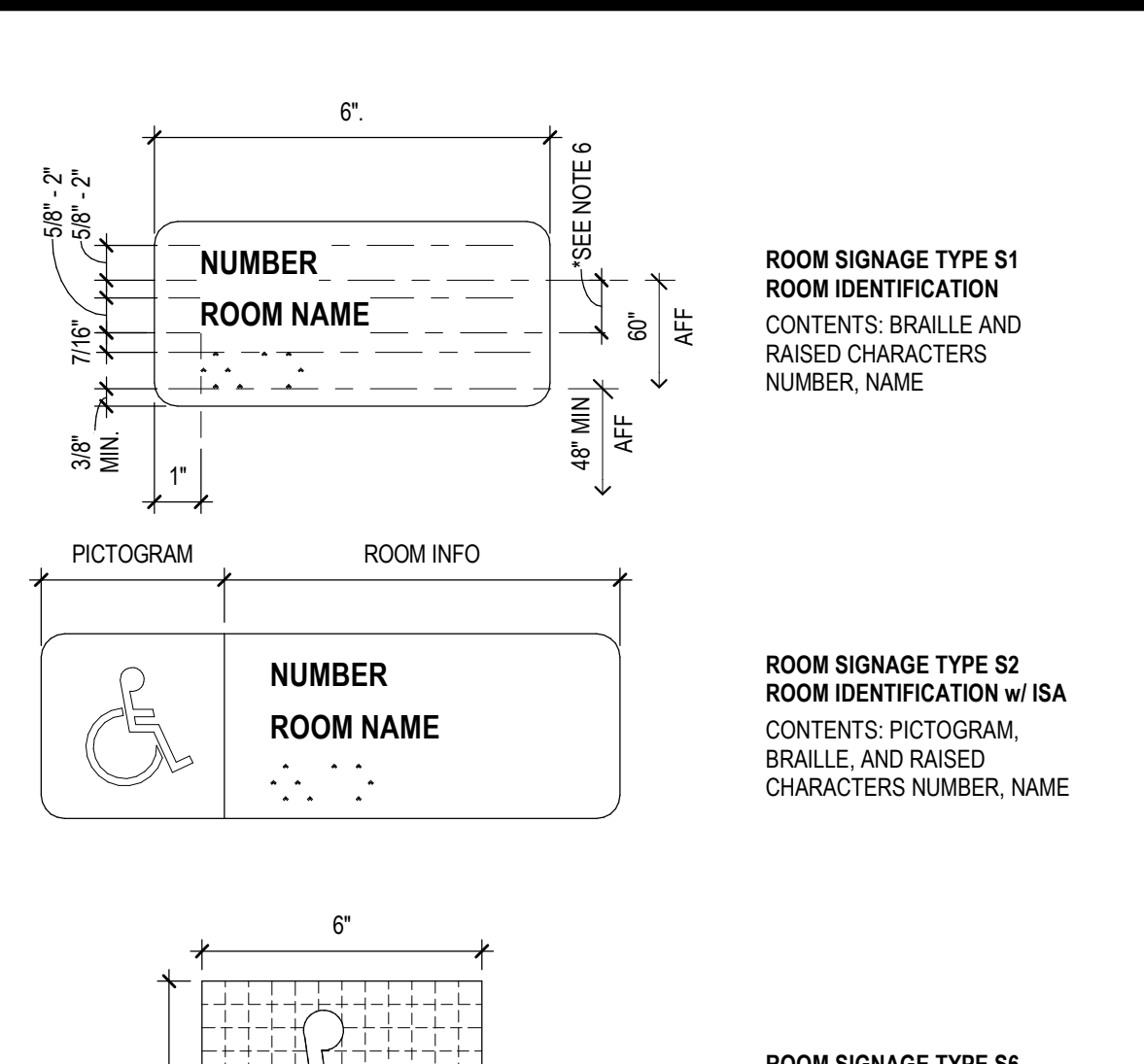
A-202

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SUBMITTALS / REVISIONS

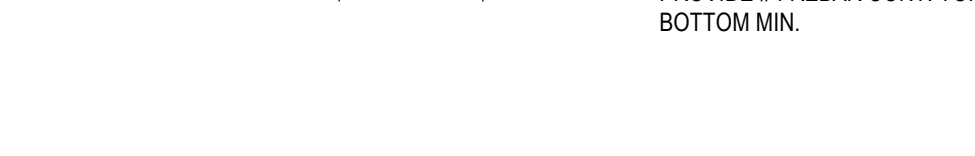
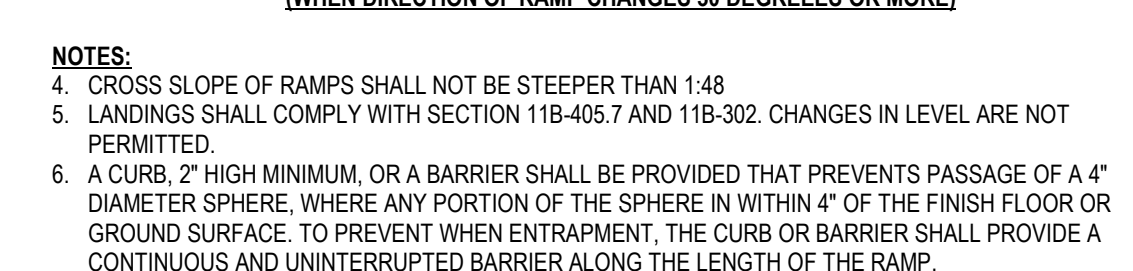
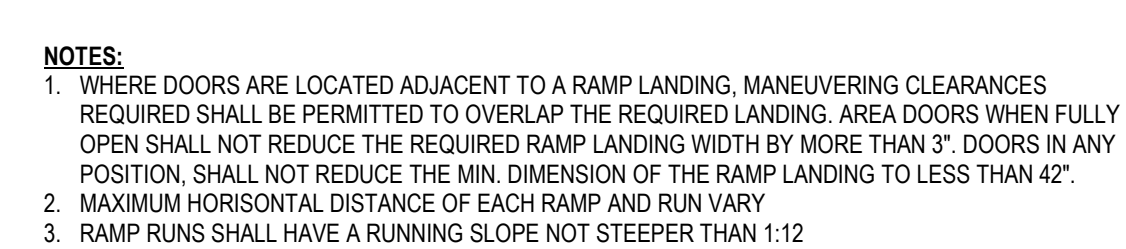
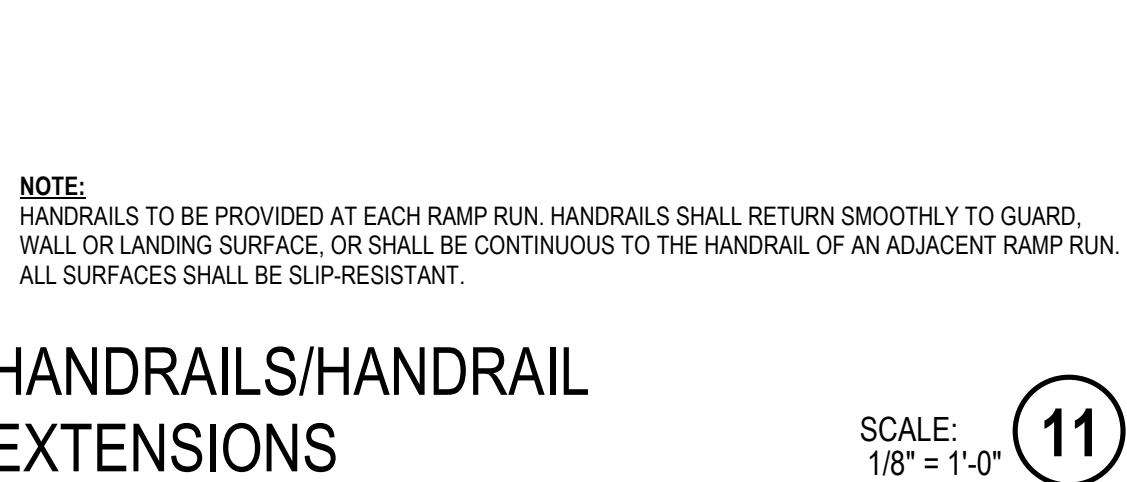
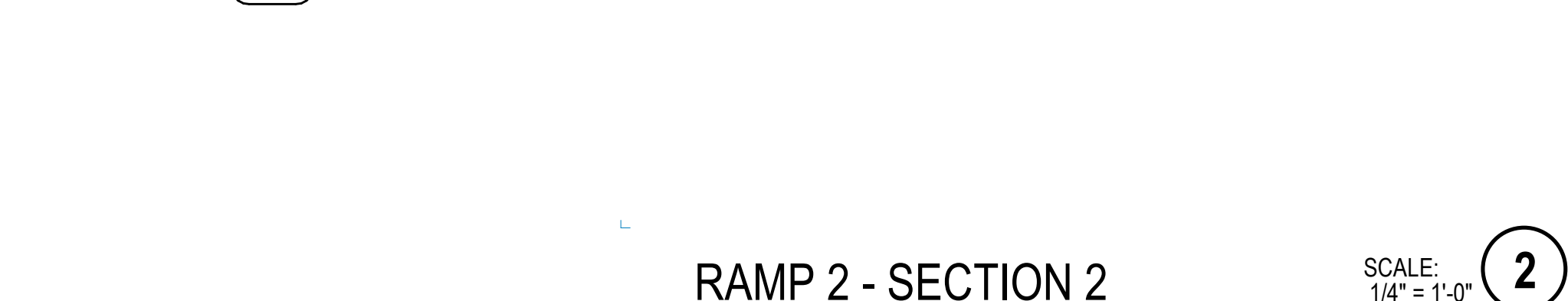
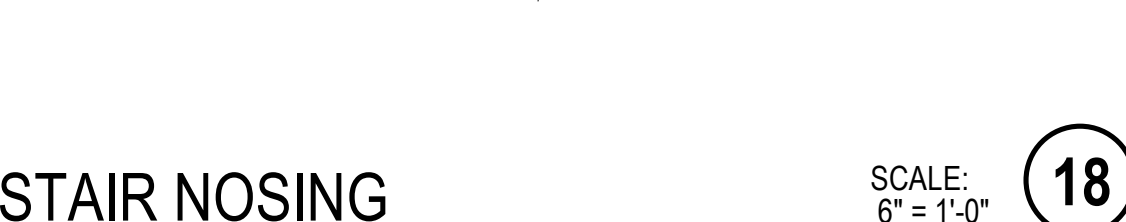
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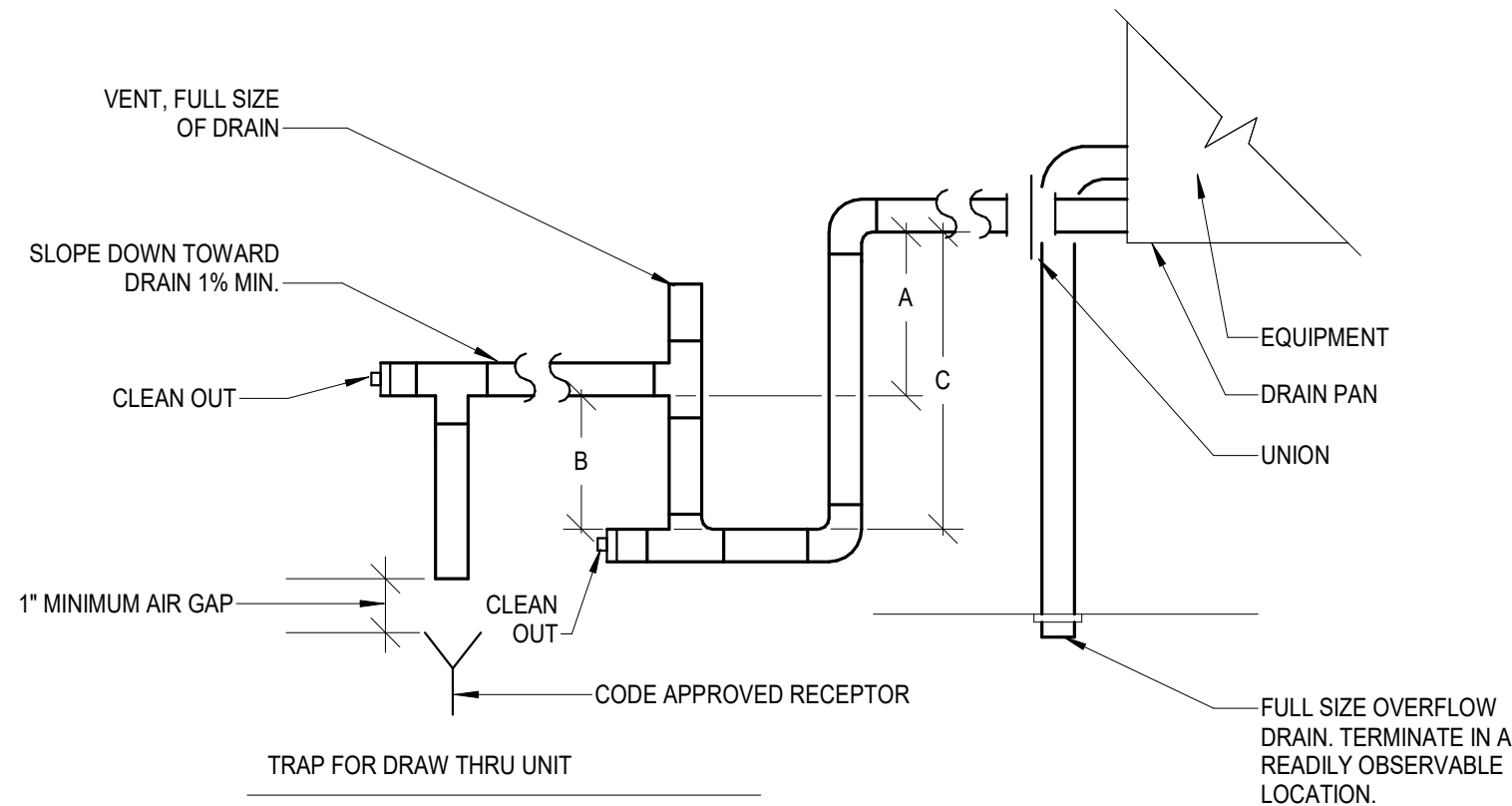
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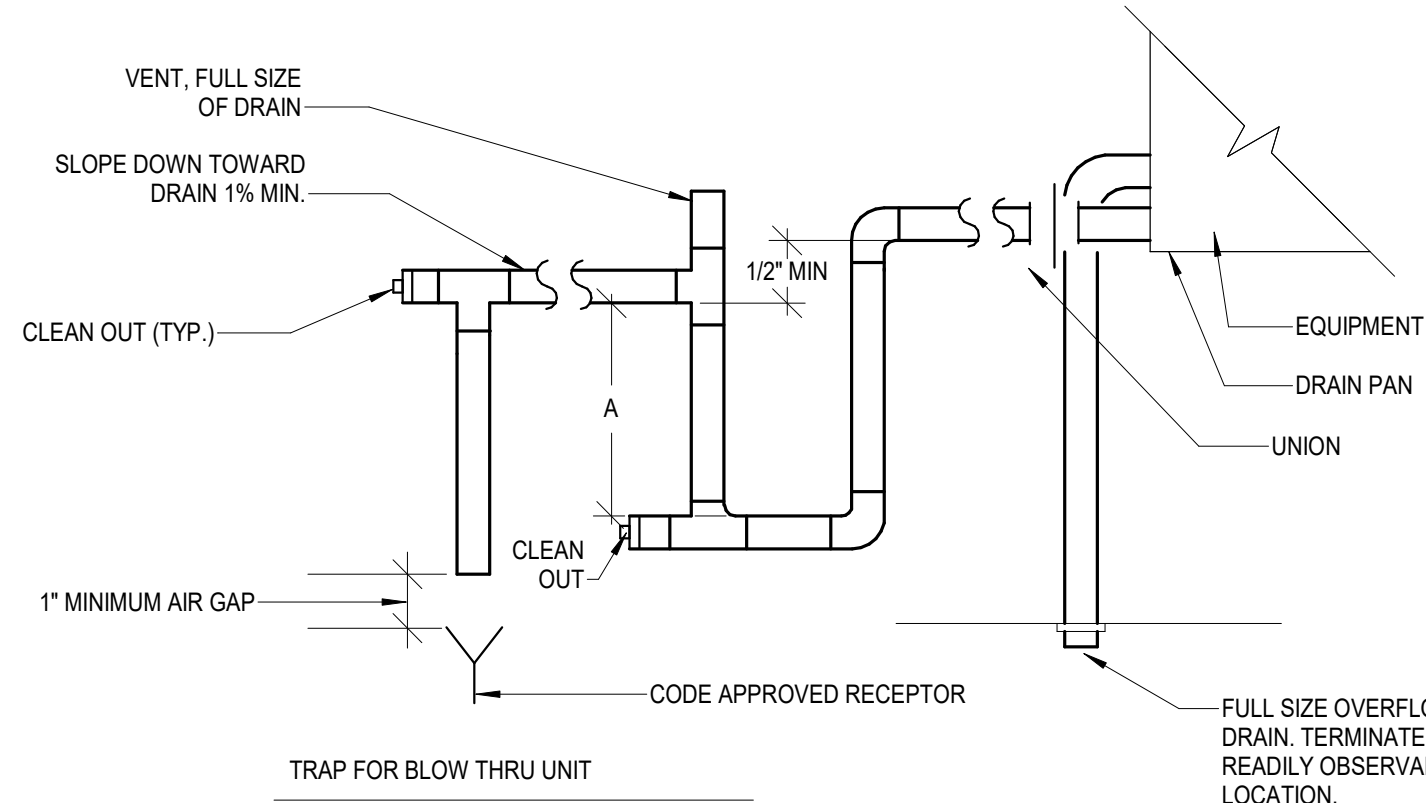
DRAIN LINE SIZES
UP TO 20 TONS = 3/4"
21 - 40 TONS = 1"
41 - 90 TONS = 1 1/4"
91 - 125 TONS = 1 1/2"
126 - 250 TONS = 2"

A = S.P. + 1"
B = A / 2
C = A + B



DRAIN LINE SIZES
UP TO 20 TONS = 3/4"
21 - 40 TONS = 1"
41 - 90 TONS = 1 1/4"
91 - 125 TONS = 1 1/2"
126 - 250 TONS = 2"

A = S.P. + 1/2"



1 TYPICAL CONDENSATE DRAIN DETAIL
NO SCALE

PLUMBING LEGEND AND ABBREVIATIONS

SYMBOL	ABBREV.	DESCRIPTION	ABBREV.	DESCRIPTION
	POC	POINT OF CONNECTION	ABV	ABOVE
	POD	POINT OF DISCONNECTION	A/C	ABOVE CEILING
	CD	CONDENSATE DRAIN	ADA	AMERICANS WITH DISABILITIES ACT
	SOV	SHUT OFF VALVE	A.F.F.	ABOVE FINISH FLOOR
	PRV	PRESSURE REDUCING VALVE	A.F.G.	ABOVE FINISH GRADE
	FS	FLOOR SINK	A/G	ABOVE GRADE
	FD	FLOOR DRAIN	A.P.	ACCESS PANEL
	FCO	FLOOR CLEAN-OUT	B/F	BELOW FLOOR
	WCO	WALL CLEAN-OUT	B.F.F.	BELOW FINISH FLOOR
	2WGCO	2 WAY GRADE CLEAN-OUT	B/G	BELOW GRADE
	DN	DOWN OR DROP	CFH	CUBIC FEET PER HOUR
	UP	RISE OR RISER	DWGS.	DRAWINGS
	HB	HOSE BIBB	EA.	EACH
		VALVE ON RISE OR DROP	EXIST.	EXISTING
	U	UNION	(E)	EXISTING
	RV	TEMPERATURE & PRESSURE RELIEF VALVE	FT.	FEET OR FOOT
	FDC	FIRE DEPARTMENT CONNECTION	FDC	FIRE DEPARTMENT CONNECTION
	CP	CIRCULATING PUMP	F	FIRE RISER
	CV	CHECK VALVE	FLR.	FLOOR
	TP	TRAP PRIMER	G.P.F.	GALLONS PER FLUSH
	WHA	WATER HAMMER ARRESTOR	G.P.H.	GALLONS PER HOUR
	REG	GAS REGULATOR W/SHUT-OFF VALVE	G.P.M.	GALLONS PER MINUTE
	RBP	REDUCED PRESSURE BACKFLOW PREVENTER	I.E.	INVERT ELEVATION
	GC	GAS COCK	KG	KILOGRAMS
	EQV	EARTHQUAKE VALVE	KPq	KILOPASCALS
			L.P.F.	LITERS PER FLUSH
			L/S	LITERS PER SECOND
			LBS	POUNDS
			MSA	MEDIUM PRESSURE GAS METER
			NTS	NOT TO SCALE
			ORD	OVERFLOW ROOF DRAIN
			O/H	OVERHEAD
			LB	POUNDS
			PSI	POUNDS PER SQUARE INCH
			RD	ROOF DRAIN
			SF	SQUARE FEET
			SIM.	SIMILAR
			T.D.H.	TOTAL DEVELOPED HEAD
			U/G	UNDERGROUND
			V.T.R.	VENT THROUGH ROOF
			W.C.	WATER COLUMN
			WHA	WATER HAMMER ARRESTOR

SLOPE OF PIPING SYSTEMS

- | | | |
|----|--------------------------|----------------------------|
| 1. | CONDENSATE DRAIN PIPING: | 1% UNLESS NOTED OTHERWISE. |
|----|--------------------------|----------------------------|

GENERAL NOTES

- THESE DRAWINGS ARE A GENERAL GRAPHIC PRESENTATION OF THE WORK, PIPING AND EQUIPMENT, AS SHOWN, ARE SCHEMATIC, FABRICATE AND INSTALL BASED ON ACTUAL FIELD MEASUREMENT. COORDINATE WITH OTHER TRADES. PROVIDE A COMPLETE SET OF SHOP DRAWINGS REFLECTING ACTUAL INSTALL, ACCESS REQUIREMENTS, AND DETAILS BASED UPON THE ACTUAL EQUIPMENT PROCURED. MAINTAIN AN UP TO DATE SET OF AS-BUILT DRAWINGS AT THE JOB SITE.
- THESE DRAWINGS ARE TO BE CONSIDERED NOT FOR CONSTRUCTION UNTIL THEY ARE STAMPED, SIGNED, AND PERMITTED. UNTIL THEN THEY ARE SUBJECT TO CHANGE WITHOUT NOTICE.
- COMPLY WITH CALIFORNIA MECHANICAL CODE (CMC), CALIFORNIA PLUMBING CODE (CPC), AND NATIONAL FIRE PROTECTION AGENCY (NFPA), AND GOVERNING CODES. THERE SHALL BE NO EXCEPTION. REPORT DEFICIENCIES WITHIN THIRTY (30) DAYS UPON AUTHORIZATION TO PROCEED.
- PROVIDE ACCESS AND CLEARANCE FOR MAINTENANCE FOR MECHANICAL & PLUMBING EQUIPMENT AND COMPONENTS AS RECOMMENDED BY THE EQUIPMENT MANUFACTURER AND APPLICABLE CODES.
- HANDLE, STORE AND INSTALL EQUIPMENT PER MANUFACTURERS INSTRUCTIONS.
- NO PLUMBING SHALL BE INSTALLED UNTIL ALL REQUIRED PLUMBING PLAN CHECK PERMITS AND APPROVALS HAVE BEEN OBTAINED FROM ALL REQUIRED AGENCIES.
- COORDINATE WITH THE ARCHITECTURAL DRAWINGS FOR EXACT LOCATION OF PLUMBING FIXTURES AND DRAINS.
- COORDINATE AND VERIFY SIZES, LOCATIONS, DEPTHS AND PRESSURIZED PIPING PRESSURES OF ALL BUILDING UTILITIES WITH CIVIL.
- COORDINATE AND SCHEDULE TIMING FOR UTILITY SERVICE CONNECTION.
- ALL LINES BELOW SLAB ON GRADE TO BE LOCATED AWAY FROM ALL LOAD BEARING FOOTINGS.
- ALL LINES RUNNING BELOW GRADE BEAMS OR PENETRATING, SEE STRUCTURAL DRAWINGS FOR CONSTRUCTION.
- ALL VENTS THRU ROOF SHALL BE MINIMUM OF 18 INCHES VERTICAL AND FIFTEEN FEET HORIZONTAL AWAY FROM ALL AIR CONDITIONING FRESH AIR INTAKES AND PROVIDED WITH VANDAL PROOF HOODS.
- CONTRACTOR SHALL BE RESPONSIBLE FOR ALL CUTTING AND PATCHING OF WALLS, ROOFS, FOOTINGS, FLOORS, INCLUDING ALL SAW CUTTING AND CORE DRILLING. COORDINATE ALL SAW CUTTING AND CORE DRILLING WITH STRUCTURALLY DRAWINGS. ANY CUTTING AND DRILLING REQUIRED OF STRUCTURAL ELEMENTS THAT IS NOT SPECIFICALLY SHOWN ON THE PLANS SHALL BE BROUGHT TO THE ARCHITECTS ATTENTION PRIOR TO CUTTING AND DRILLING. CONTRACTOR SHALL SUBMIT PROPOSED LOCATION AND SIZES OF SUCH CUTTING AND DRILLING FOR THE ARCHITECTS AND STRUCTURAL ENGINEERS APPROVAL.
- COORDINATE ALL EQUIPMENT LOCATIONS, PIPE PENETRATIONS AND EQUIPMENT PAD LOCATIONS WITH STRUCTURAL DRAWINGS PRIOR TO WORK.
- COORDINATE INSTALLATION OF ALL EQUIPMENT AND PIPING WITH OTHER TRADES PRIOR TO INSTALLATION. ENSURE THAT ALL CONTROL DEVICES, SHUT-OFF VALVES, ETC. ARE ACCESSIBLE FOR MAINTENANCE. WHERE ACCESS PANELS IN FINISHED SPACES, OTHER THAN THAT SHOWN, CONTRACTOR SHALL PROVIDE AND COORDINATE EXACT LOCATION OF PANELS WITH ARCHITECT PRIOR TO INSTALLATION.
- INSTALL VALVES WITH UNIONS OR FLANGES AT EACH PIECE OF EQUIPMENT ARRANGED TO ALLOW SERVICE, MAINTENANCE, AND EQUIPMENT REMOVAL WITHOUT SYSTEM SHUT-DOWN.
- ANY STRUCTURAL FIREPROOFING DAMAGED DURING INSTALLATION OF PLUMBING EQUIPMENT, PIPING, ETC. SHALL BE REPAIRED AT NO COST TO THE OWNER. REPAIRS SHALL BE AS DIRECTED BY THE ARCHITECT.
- CROSS CONNECTION PROTECTION SHALL BE PROVIDED AT ALL POTABLE WATER SUPPLIED APPLIANCES AND EQUIPMENT.
- COORDINATE WITH ELECTRICAL AND CONTROL CONTRACTORS FOR ALL POWER REQUIREMENTS PRIOR TO BID.
- COORDINATE WITH ELECTRICAL AND CONTROL CONTRACTORS FOR ALL POWER REQUIREMENTS PRIOR TO ORDERING ANY EQUIPMENT.
- UPON INSTALLATION OF ALL EQUIPMENT, DEVICES, VIBRATION ISOLATION, ETC., PROVIDE WRITTEN CONFIRMATION BY EQUIPMENT MANUFACTURER'S REPRESENTATIVES TO ENSURE COMPLIANCE WITH MANUFACTURER'S REQUIREMENTS.
- PROVIDE DETAILS AND SEISMIC CALCULATIONS FOR ALL EQUIPMENT ON VIBRATION ISOLATION. ALL DETAILS SHALL BE STAMPED BY A STRUCTURAL ENGINEER FROM VIBRATION ISOLATIONS MANUFACTURER.
- FOR EACH SUBMITTAL, THE CONTRACTOR SHALL PROVIDE A LETTER (ON COMPANY LETTERHEAD) AND SIGNED BY THE PROJECT MANAGER INDICATING THE SUBMITTAL HAS BEEN FULLY IN HOUSE REVIEWED TO ENSURE FULL COMPLIANCE WITH THE CONTRACT DOCUMENTS AND COORDINATION WITH OTHER TRADES. ANY EXCEPTIONS TO THE CONTRACT DOCUMENTS SHALL BE CLEARLY INDICATED ON THIS LETTER. ANY DISCREPANCIES/EXCEPTIONS NOT IDENTIFIED IN WRITING SHALL BE CORRECTED AT THE SOLE EXPENSE OF THE CONTRACTOR AND AT NO EXPENSE TO THE OWNER AND ENGINEER.

PIPE MATERIALS

- | | |
|----|--|
| 1. | CONDENSATE PIPING: COPPER TYPE "M" HARD DRAWN WITH WROUGHT COPPER SOLDERED |
|----|--|

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PLUMBING LEGEND AND GENERAL NOTES

**CENTRAL
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FREEZER REPLACEMENT
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NATIONAL CITY, CA 91950

SUBMITTALS / REVISIONS

#	ISSUE	DATE
1	DSA SUBMITTAL V1	03/19/2025
2	DSA BACKCHECK	04/30/2025

**BID SET 5/1/2025
NOT FOR
CONSTRUCTION
PROJECT STILL IN
REVIEW**

PROJECT NO. 22439-E-02

SHEET NO.

P-001

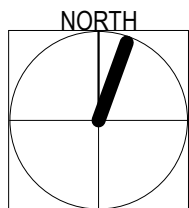
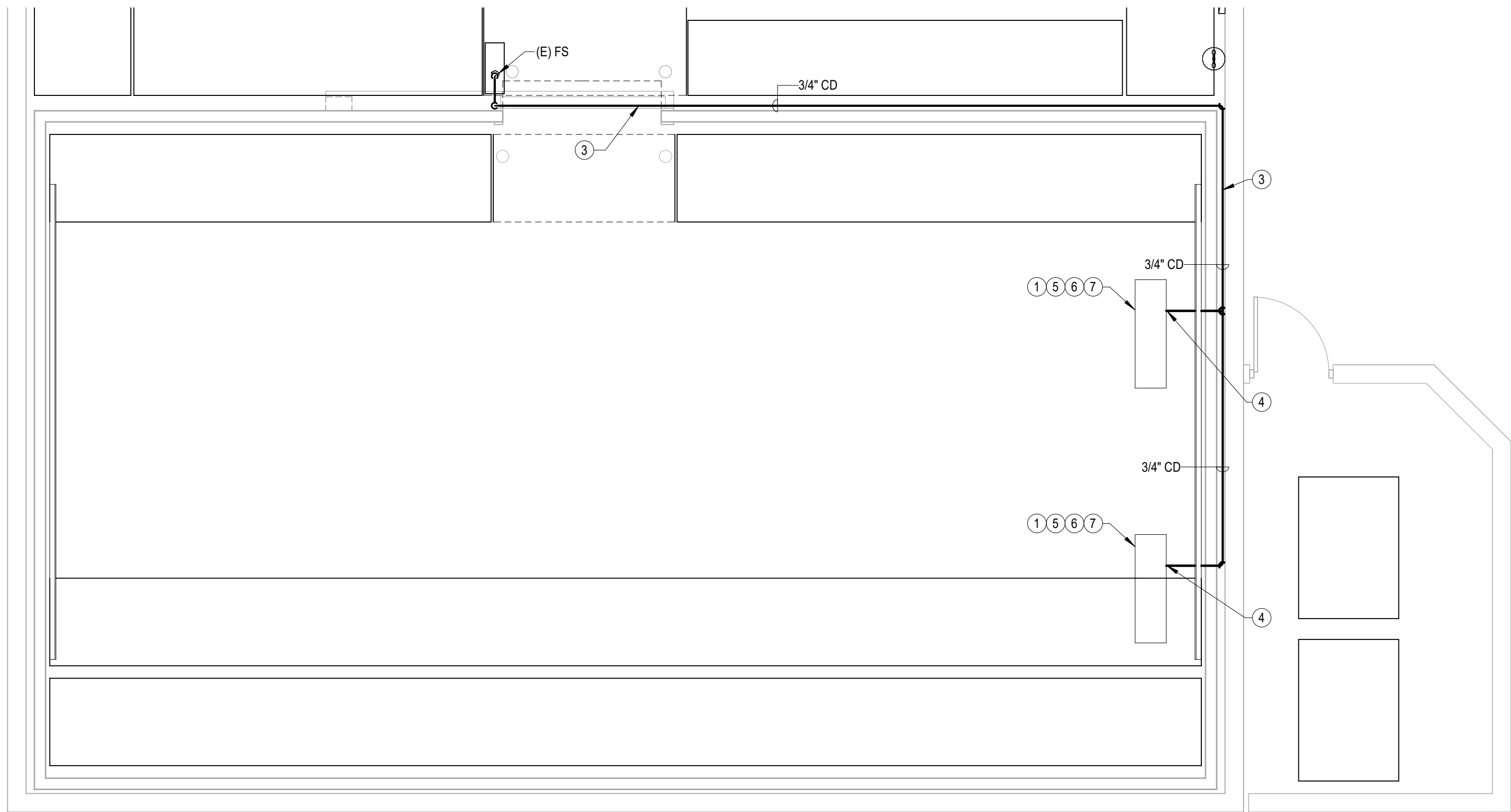
DSA

CONSULTANT

STAMP

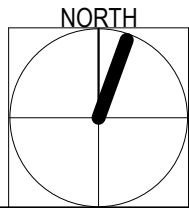
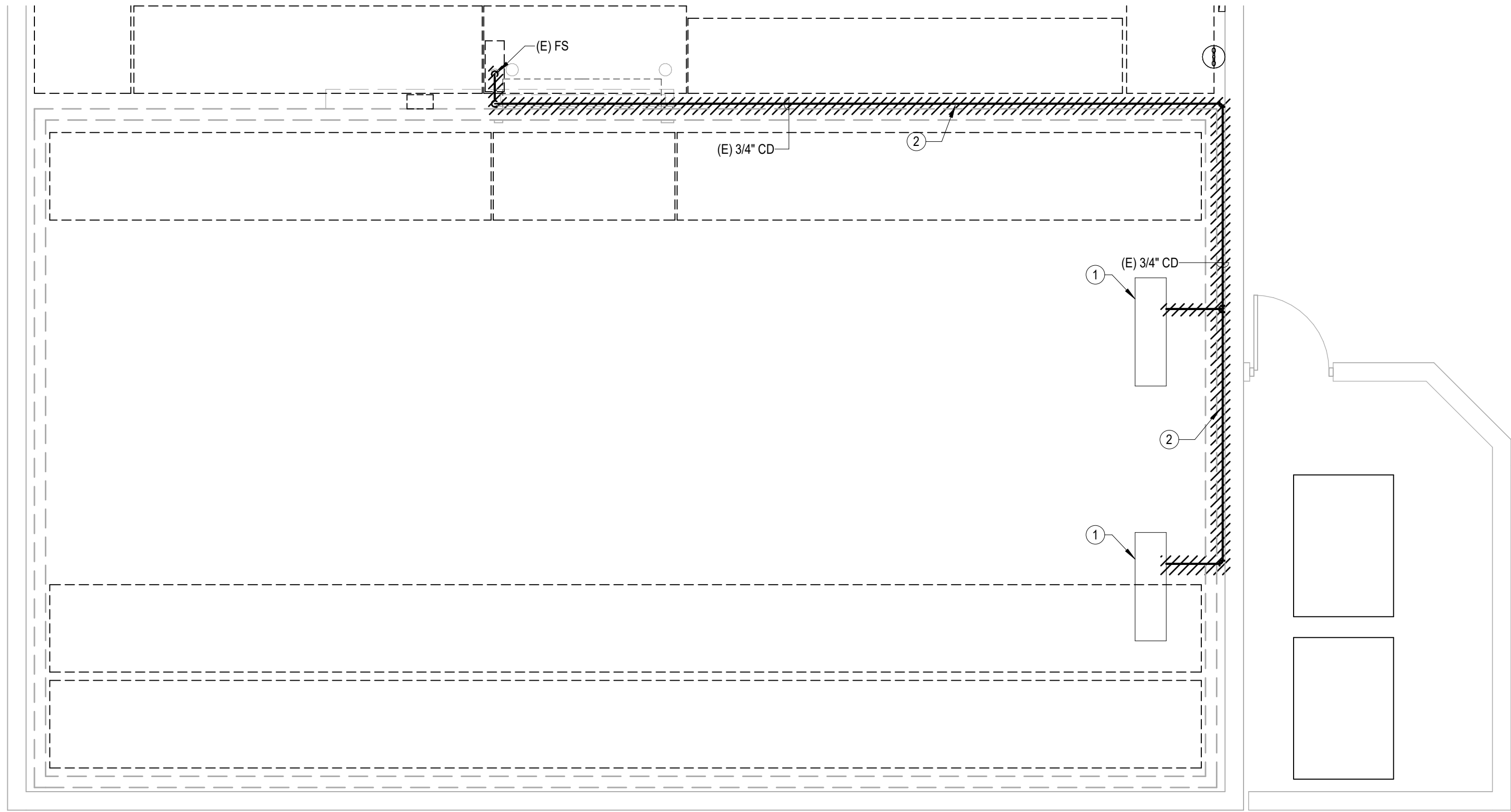
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4/23/2025 2:27:35 PM Autodesk Docs\NSD Facilities - Freezer Replacement\NSD - Freezer Replacement_Ping_R25.vrt



PLUMBING NEW WORK PLAN
SCALE: 1/4" = 1'-0"

2



PLUMBING DEMO PLAN
SCALE: 1/4" = 1'-0"

1

GENERAL NOTES

- THESE DRAWINGS ARE TO BE CONSIDERED NOT FOR CONSTRUCTION UNTIL THEY ARE STAMPED, SIGNED AND PERMITTED. UNTIL THEN THEY ARE CONSIDERED SUBJECT TO CHANGE WITHOUT NOTICE.
- PROVIDE ACCESS AND CLEARANCE FOR MAINTENANCE FOR MECHANICAL AND PLUMBING EQUIPMENT AND COMPONENTS AS RECOMMENDED BY THE EQUIPMENT MANUFACTURER AND APPLICABLE CODE.
- COORDINATE WITH THE ARCHITECTURAL DRAWINGS FOR EXACT LOCATION OF PLUMBING FIXTURES AND DRAINS.
- DRAWINGS ARE BASED ON AS-BUILTS PROVIDED. CONTRACTOR SHALL FIELD VERIFY EXISTING CONDITIONS AND BRING ATTENTION TO ANY DISCREPANCIES THAT WILL IMPACT CONSTRUCTION TO THE EOR IN WRITING PRIOR TO CONTINUATION OF WORK.
- CONTRACTOR TO REPAIR ANY DAMAGE AS A RESULT OF DEMOLITION PLAN AT NO ADDED COSTS TO OWNER. USE ARCHITECTURAL DESIGN STANDARDS WHEN REPAIRING DAMAGE.

KEYNOTES

- FREEZER EQUIPMENT SHOWN FOR REFERENCE ONLY.
- DEMO (E) 3/4" CONDENSATE DRAIN FROM FREEZER FAN COILS TO (E) FLOOR SINK.
- ROUTE 3/4" CONDENSATE TO (E) FLOOR SINK.
- PROVIDE CONDENSATE TRAP, PER DETAIL 11P-001.
- FOOD SERVICE CONTRACTOR TO PROVIDE FINAL CONNECTION TO NEW EVAPORATORS.
- CONTRACTOR TO FIELD VERIFY REFRIGERANT LINE SIZES AND ENSURE COMPATIBILITY WITH NEW EVAPORATORS PRIOR TO INSTALLATION.
- CONTRACTOR TO MAKE FINAL REFRIGERANT LINE CONNECTION TO NEW EVAPORATORS.



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NATIONAL SCHOOL DISTRICT
NATIONAL CITY, CALIFORNIA

PREPARED BY
SGPA ARCHITECTURE
AND PLANNING

PLUMBING FLOOR PLANS

**CENTRAL
WAREHOUSE
FREEZER REPLACEMENT**
1400 N AVENUE
NATIONAL CITY, CA 91950

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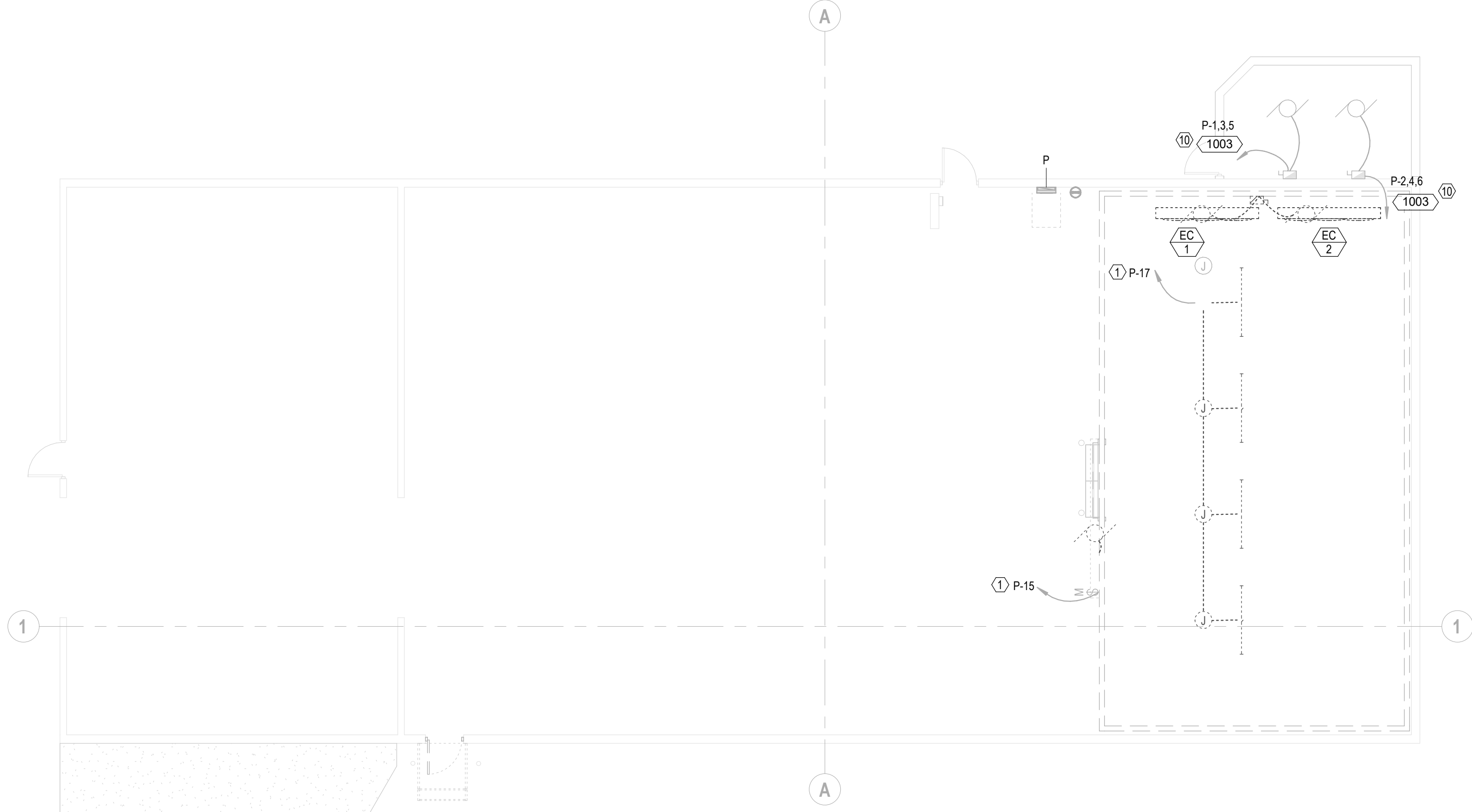
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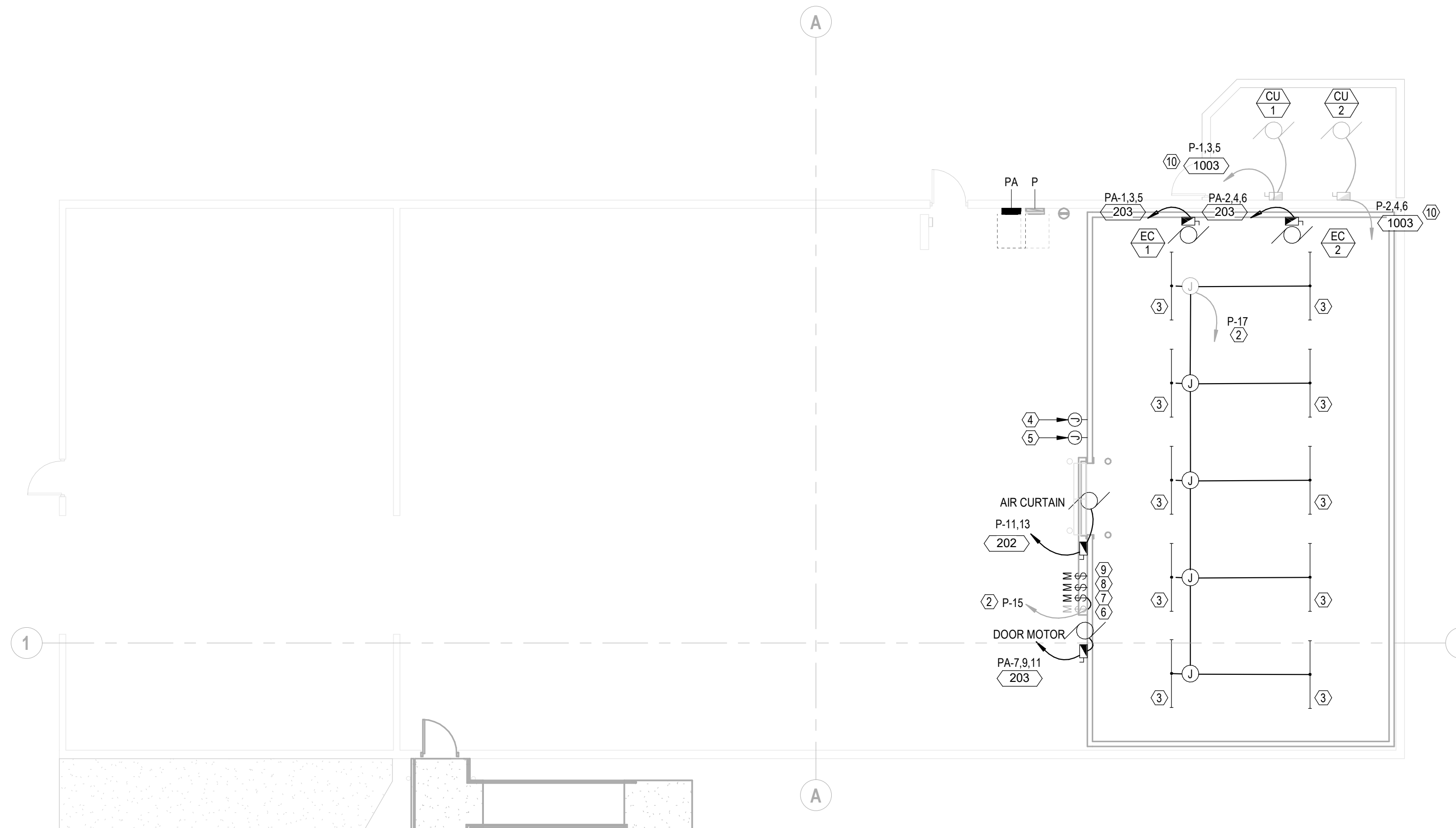
P-201

Electrical Abbreviations		
1P A, Amp AC ADA ADO AF AF/AT AFF AFG AFI AHJ AHJ AIC AL ALT ANNUN APPROX ARCH AS ASIAF AT ATS AUTO AUX AV Ave AWG BATT BD BLDG BMS C CAB CATV CB CCTV CEC CFCI CKT CLG COMB CMPR CONN CONST CONT CO CPT CT CU DEPT DET DIA DISC DIST DS DWG E EB EC EG EGC EI EL ELEC ELEV ELU EM EMS EMT EN EQUIP ER EV EVCS FABP FAC FACP FC FCU FLA FLR GA GAL GALV GC GID GEN GEC GFI GND GRS GYP HOA HP HT HTR HV HVAC IDF IG IMC INV J-B-BOX KOMIL KV KVA KW KWH LCL LTG LV LVL	1 Pole (2P, 3P, 4P, ETC.) Ampere Above Counter Americans with Disabilities Act Automatic Door Opener Amp Frame, Amp Fuse Amp Frame, Amp Trip Above Finished Floor Above Finished Grade Arc Fault Circuit Interrupter Air Handling Unit Authority Having Jurisdiction Ampere Interrupting Capacity Aluminum Alternate Annunciator Approximately Architect, Architectural Amp Switch Amp Switch, Amp Frame Amp Trip Automatic Transfer Switch Automatic Auxiliary Audio Visual Average American Wire Gauge Battery Board Building Building Management System Conduit Cabinet Cable Television Circuit Breaker Closed Circuit Television California Electrical Code Contractor Furnished, Contractor Installed Circuit Ceiling Combination Compressor Connection Construction Continuation Or Continuous Conduit Only Control Power Transformer Current Transformer Copper Department Detail Diameter Disconnect Distribution Safety Disconnect Switch Drawing Existing Emergency Battery Electrical Contractor Emergency Generator Equipment Grounding Conductor Emergency Inverter Existing To Be Relocated Electric, Electrical Elevator Emergency Lighting Unit Emergency Energy Management System Electrical Metallic Tubing New Location Of Relocated Emergency Power Off Equipment Existing To Be Removed Electric Vehicle Electric Vehicle Charging Station Fire Alarm Fire Alarm Booster Power Supply Panel Fire Alarm Control Panel Footcandle Fan Coil Unit Full Load Amps Floor Gauge Gallon Galvanized General Contractor Garbage Disposal Generator Grounding Electrode Conductor Ground Fault Circuit Interrupter Ground Galvanized Rigid Steel (Conduit) Gypsum Board Hands-Off-Automatic Switch Horsepower Height Heater High Voltage Heating, Ventilating And Air Conditioning Intermediate Distribution Frame Isolated Ground Intermediate Metal Conduit Inverter Junction Box Thousand Circular Mils Kilovolt Kilovolt-Ampere Kilowatt Kilowatt Hour Long Continuous Load Lighting Low Voltage Level	M Meter M/M Meter / Main MAX Maximum M/C Momentary Contact MC Mechanical Contractor MCB Main Circuit Breaker MDF Main Distribution Frame MCC Motor Control Center MFR Manufacturer MH Manhole MIC Microphone MIN Minimum MCA Minimum Circuit Amps MISC Miscellaneous MLO Main Lugs Only MOCP Maximum Overcurrent Protection MT Mount MTD Mounted MTS Manual Transfer Switch MTR Motor, Motorized MW Microwave N.C. Normally Closed NEC National Electrical Code NEMA National Electrical Manufacturer's Association NIC Not In Contract NL Night Light N.O. Normally Open NTS Not To Scale OC On Center OFCI Owner Furnished, Contractor Installed OH Overhead OL Overloads PS Pull Section PA Public Address PB Pull Box Or Pushbutton PC Photocell PF Power Factor PH Phase PIV Post Indicating Valve PNL Panel PP Power Pole PR Pair PRI Primary PROJ Projection PT Potential Transformer PVC Polyvinyl Chloride (Conduit) PWR Power REC Receptacle REF Refrigerator RGS Rigid Galvanized Steel (Conduit) RM Room RSC Rigid Steel Conduit RTU Roof Top Unit SC Surface Conduit SCCR Short Circuit Current Rating SEC Secondary SFD Smoke Fire Damper SHT Sheet SIM Similar SLD Single-Line Diagram SPD Surge Protective Device SPEC Specification SS Stainless Steel STD Standard SW Elevator SWBD Switchboard SYS System TEL Telephone TR Tampor Resistant TV Television TYP Typical UC Under Counter UG Underground UGPS Underground Pull Section UNO Unless Noted Otherwise (or UNO Unless Otherwise Noted) UPS Uninterruptible Power Supply UT Underground Telephone UTIL Utility V Volt VA Volt-Amperes VD Voltage Drop VFD Variable Frequency Drive W Watt W/ With WH Water Heater W/O Without WP Weatherproof XFMR Transformer
ALT ANNUN APPROX ARCH AS ASIAF AT ATS AUTO AUX AV Ave AWG BATT BD BLDG BMS C CAB CATV CB CCTV CEC CFCI CKT CLG COMB CMPR CONN CONST CONT CO CPT CT CU DEPT DET DIA DISC DIST DS DWG E EB EC EG EGC EI EL ELEC ELEV ELU EM EMS EMT EN EQUIP ER EV EVCS FABP FAC FACP FC FCU FLA FLR GA GAL GALV GC GID GEN GEC GFI GND GRS GYP HOA HP HT HTR HV HVAC IDF IG IMC INV J-B-BOX KOMIL KV KVA KW KWH LCL LTG LV LVL	1 Pole (2P, 3P, 4P, ETC.) Ampere Above Counter Americans with Disabilities Act Automatic Door Opener Amp Frame, Amp Fuse Amp Frame, Amp Trip Above Finished Floor Above Finished Grade Arc Fault Circuit Interrupter Air Handling Unit Authority Having Jurisdiction Ampere Interrupting Capacity Aluminum Alternate Annunciator Approximately Architect, Architectural Amp Switch Amp Switch, Amp Frame Amp Trip Automatic Transfer Switch Automatic Auxiliary Audio Visual Average American Wire Gauge Battery Board Building Building Management System Conduit Cabinet Cable Television Circuit Breaker Closed Circuit Television California Electrical Code Contractor Furnished, Contractor Installed Circuit Ceiling Combination Compressor Connection Construction Continuation Or Continuous Conduit Only Control Power Transformer Current Transformer Copper Department Detail Diameter Disconnect Distribution Safety Disconnect Switch Drawing Existing Emergency Battery Electrical Contractor Emergency Generator Equipment Grounding Conductor Emergency Inverter Existing To Be Relocated Electric, Electrical Elevator Emergency Lighting Unit Emergency Energy Management System Electrical Metallic Tubing New Location Of Relocated Emergency Power Off Equipment Existing To Be Removed Electric Vehicle Electric Vehicle Charging Station Fire Alarm Fire Alarm Booster Power Supply Panel Fire Alarm Control Panel Footcandle Fan Coil Unit Full Load Amps Floor Gauge Gallon Galvanized General Contractor Garbage Disposal Generator Grounding Electrode Conductor Ground Fault Circuit Interrupter Ground Galvanized Rigid Steel (Conduit) Gypsum Board Hands-Off-Automatic Switch Horsepower Height Heater High Voltage Heating, Ventilating And Air Conditioning Intermediate Distribution Frame Isolated Ground Intermediate Metal Conduit Inverter Junction Box Thousand Circular Mils Kilovolt Kilovolt-Ampere Kilowatt Kilowatt Hour Long Continuous Load Lighting Low Voltage Level	M Meter M/M Meter / Main MAX Maximum M/C Momentary Contact MC Mechanical Contractor MCB Main Circuit Breaker MDF Main Distribution Frame MCC Motor Control Center MFR Manufacturer MH Manhole MIC Microphone MIN Minimum MCA Minimum Circuit Amps MISC Miscellaneous MLO Main Lugs Only MOCP Maximum Overcurrent Protection MT Mount MTD Mounted MTS Manual Transfer Switch MTR Motor, Motorized MW Microwave N.C. Normally Closed NEC National Electrical Code NEMA National Electrical Manufacturer's Association NIC Not In Contract NL Night Light N.O. Normally Open NTS Not To Scale OC On Center OFCI Owner Furnished, Contractor Installed OH Overhead OL Overloads PS Pull Section PA Public Address PB Pull Box Or Pushbutton PC Photocell PF Power Factor PH Phase PIV Post Indicating Valve PNL Panel PP Power Pole PR Pair PRI Primary PROJ Projection PT Potential Transformer PVC Polyvinyl Chloride (Conduit) PWR Power REC Receptacle REF Refrigerator RGS Rigid Galvanized Steel (Conduit) RM Room RSC Rigid Steel Conduit RTU Roof Top Unit SC Surface Conduit SCCR Short Circuit Current Rating SEC Secondary SFD Smoke Fire Damper SHT Sheet SIM Similar SLD Single-Line Diagram SPD Surge Protective Device SPEC Specification SS Stainless Steel STD Standard SW Elevator SWBD Switchboard SYS System TEL Telephone TR Tampor Resistant TV Television TYP Typical UC Under Counter UG Underground UGPS Underground Pull Section UNO Unless Noted Otherwise (or UNO Unless Otherwise Noted) UPS Uninterruptible Power Supply UT Underground Telephone UTIL Utility V Volt VA Volt-Amperes VD Voltage Drop VFD Variable Frequency Drive W Watt W/ With WH Water Heater W/O Without WP Weatherproof XFMR Transformer

Electrical Symbol Legend		
Lighting Symbols		
	Lighting Fixtures, Typical, Rectangular (Various Symbols) Filled circles indicate recessed. Open circles indicate surface-mounted. Diagonal line indicates lensed. Outer dots indicate suspended.	
	Lighting Fixtures, Typical, Round (Various Symbols) Center dot indicates pendant. Diagonal line indicates lensed. Chevron indicates wall wash.	
	Strip Fixture	
	Directional Light, Track Light, Flood Light	
	Linear Light, Tape Light	
	Emergency Lighting Unit, Ceiling-Mounted, Integral Battery	
	Emergency Lighting Unit, Ceiling-Mounted, Remote Battery	
	Emergency Lighting Unit, Wall-Mounted, Integral Battery	
	Emergency Lighting Unit, Wall-Mounted, Remote Battery	
	Exit Light, Ceiling-Mounted. Shading and arrows indicate faces and directional chevrons.	
	Exit Light, Wall-Mounted. Shading and arrows indicate faces and directional chevrons.	
	Exit/ELU Combo	
	Pole/Area Lights	
	Post-Top Area Light	
	Bollard Light	
	Diagonal hatch indicates light on a critical circuit.	
	Solid hatch indicates light on an emergency or life safety circuit.	
	Single-Pole Switch (for lighting)	
Switch Modifiers:		
	3: 3-Way	OS: Occupancy Sensor
	4: 4-Way	Sensor
	K: Keyed	VS: Vacancy Sensor
	D: Dimming	AC: Above-Counter
	T: Timer	LV: Low-Voltage
	OS	M: Motor-Rated
	Daylight Harvesting Sensor	
	1 Button Dimming Switch, With Occupancy Sensor	
	0-10V Dimming Controller With Integral Relays	
	Emergency Lighting Control Unit	
	Low Voltage Wall Switch With Dimming Zones # = Zone	
Lighting Tags		
	Top Value: Fixture Type ID (Underlined) Bottom Value, Lowercase Letter: Switch ID Bottom Value, Number(s): Circuit Number Bottom Value, Uppercase Letter(s): Panel ID Indicates Source of Emergency Power: EG: Emergency Generator EB: Emergency Battery EI: Emergency Inverter	
Absence of a switch designation on a lighting fixture indicates fixture is controlled by the only switch in the space. An "x" in place of the switch designation indicates unswitched.		
	a Switch ID indicated by a lowercase letter. Switch IDs are unique per space. A switch with an ID "a" controls all devices within the space in which it is located tagged with "a". A switch without a tagged ID controls all lighting fixtures within a space. ID tags may be used on control devices other than switches, such as occupancy sensors or contactors.	
Telecom Symbols		
	Wall	
	Ceiling	
	Floor	
	Data Outlet	
	Telephone Outlet	
	Data/Telephone Outlet	
Outlet Modifiers:		
	##: Height AFF OC	
	AC: Above Counter	
	Wireless Access Point	
	TV Outlet	
	Communication System Call Station	
Power Symbols		
	Wall	
	Ceiling	
	Floor	
	Simplex Receptacle	
	Duplex Receptacle	
	Quadplex Receptacle	
	Special Receptacle, Type as Indicated	
Receptacle Modifiers:		
	##: Height AFF OC	
	AC: Above Counter	
	GFI: Ground-Fault Circuit Interrupter	
	WP: Weatherproof In-Use Cover	
	Half shading indicates split (typically switched)	
	Outside shading indicates emergency circuit	
	Title-24 Compliant Controlled Receptacle	
	Poke-Thru Flush	
	Poke-Thru Surface	
	Slab	
	Slab Recessed	
	Single-Pole Switch (for power)	
Switch Modifiers:		
	K: Keyed	
	T: Timer	
	AC: Above-Counter	
	M: Motor-Rated	
	Multitoutlet Assembly Filled squares indicate 120V outlet Open squares indicate with USB	
	Cord Reel, Device Varies	
	Drop Cord, Device Varies	
	Furniture Feed Ceiling	
	Furniture Feed Wall	
	Furniture Feed Floor Box	
	Junction Box Ceiling	
	Junction Box Wall	
	Seismic Sensor	
	Power Pack Ceiling	
	Emergency Power Off	
	Door Opener Push Plate	
	Power Meter	
	Safety Switch, Fused	
	Safety Switch, Unfused	
	Motor Starter	
	Combination Starter/Disconnect Contactor	
	Smoke Fire Damper (Provide With Motor Rated Switch)	
	Motorized Damper (Provide With Motor Rated Switch)	
	Plug Load Controller	
	Media Panel	
	Single Or Dual Electric Vehicle Charging Station - Installed Complete With Wiring	
	Single Or Dual Electric Vehicle Charging Station - Provide J-Box With 1" C.O.	
	Low Power Level 2 Electric Vehicle Charger Station - Provide Level 2 Outlet By Orange Charger (or Equal)	
Power Device and Equipment Tags		
	Electrical Device Tags: Uppercase letter(s) indicates Panel ID and circuit number. Lowercase letter indicates designation of controlling switch (where applicable).	
	Equipment Tags: Equipment ID is indicated by an underlined tag adjacent to the equipment. See the equipment connection schedule for description, electrical requirements, and panel and circuit number. Symbols/graphic appearance of equipment varies.	
	Wiring	
	Wiring Turned Up	
	Wiring Turned Down	
	Concealed EMT conduit with wire 2#12AWG and 1#12AWG green ground, 3/4" minimum.	
	Concealed EMT conduit with wire 3#12AWG and 1#12AWG green ground, 3/4" minimum.	
	Concealed EMT conduit with wire 3#10AWG and 1#10AWG green ground, 3/4" minimum.	
	Underground conduit and #10 wire, unless noted otherwise 3/4" PVC minimum.	
	Home run to branch circuit panelboard. The equipment name and circuit number(s) are indicated, separated by a hyphen. Home runs are only intended to indicate panel and circuit number. Actual homerun location shall be field-determined by the contractor.	
Power Distribution Equipment		
	SB1	
	MDP	
	HP1A	
	LP1A	
	Dry Type Transformer: See Single-Line Diagram for description and requirements.	
Security Symbols		
	Security Camera PTZ: Pan/Tilt/Zoom 360°: 360 Degree. Provide J-Box with 3/4\"C. and CAT-5E back to closest IDF Room. 180°: 180 Degree. Provide J-Box with 3/4\"C. and CAT-5E back to closest IDF Room.	
	Card Reader	
	Card Reader with Keypad	
	Security Keypad	
	Lockdown Button	
	Closed Circuit TV Outlet	
	Door Contact	
	Electric Strike	
	Intercom	
	Magnetic Lock	
	Request to Exit Button	
	Request to Exit Sensor	
	Motion Detector	
	Security Control Unit SCP: Security Control Panel SPS: Security Power Supply Unit	
	On-Line Lock. Locks shall be Salto. Provide complete system.	
	Off-Line Lock. Locks shall be Salto. Provide complete system.	
Fire Alarm Symbols		
	Door Holder	
	Smoke Detector	
	Combination Smoke and CO2 Sensor	
	Fire Alarm Control Unit EVAC: Voice Evacuation Control Panel FAA: Fire Alarm Annunciator FACP: Fire Alarm Control Panel FATC: Fire Alarm Terminal Cabinet NACP: Notification Appliance Circuit Panel FAMN: Fire Alarm Mass Notification Control Panel	
Construction Phasing (Typical AI Symbols and Equipment)		
	(E) Existing	
	(EL) Existing to Be Relocated	
	(EN) New Location Of Relocated	
	(ER) Existing to Be Removed	
	Existing to Be Demolished	
Miscellaneous		
	Area Not in Contract	
	# or # Keynote	
	Underground Line Type	
Singleline Symbols and Descriptions		
	Through Feed Lugs	
	Panelboard	
	Transformer	
	Grounding Electrode and Conductor	
	Circuit Breaker	
	Utility Meter with C.T.S.	
	Automatic Transfer Switch	
	Circuit Breaker with Electronic Sensing, Timing and Tripping Control with Field Interchangeable with Discrete Field Adjustable Setting Independent of Other Adjustments A. Arch Flash Reduction L. Short Time Overcurrent Trip I. Instantaneous Trip G. Ground Fault Trio, Ground Fault Sensing Integral with Circuit Breaker	
	Surge Protective Device	
	Digital Submeter Revenue Grade	
	Shunt Trip	



1 ELECTRICAL PLAN - DEMO
1/8" = 1'-0"



2 ELECTRICAL PLAN - NEW WORK
1/8" = 1'-0"

KEYNOTES (X)

- 1 DISCONNECT AND REMOVE EQUIPMENT. MAINTAIN CONDUIT, WIRING AND DISCONNECT FOR RECONNECTION.
- 2 CONNECT EXISTING CIRCUIT TO NEW EQUIPMENT.
- 3 NEW LIGHT FIXTURES PROVIDED BY FREEZER MANUFACTURER. PROVIDE NEW JUNCTION BOXES, CONDUIT, AND WIRE.
- 4 PROVIDE JUNCTION BOX FOR HIGH-VOLTAGE TEMPERATURE ALARM.
- 5 PROVIDE JUNCTION BOX FOR LOW-VOLTAGE TEMPERATURE ALARM.
- 6 POWER FOR HEATED DOOR LEAF (SLIDER).
- 7 POWER FOR HEATED DOOR LEAF (PERSONNEL).
- 8 POWER FOR HEATED THRESHOLD.
- 9 POWER FOR HEATED WINDOW.
- 10 EXISTING MECHANICAL EQUIPMENT, DISCONNECT, AND FEEDER TO REMAIN.

GENERAL NOTES

1. ALL PENETRATIONS THROUGH FREEZER WALLS SHALL BE SEALED.
2. ALL ELECTRICAL RACEWAYS SHALL BE SEALED.



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ELECTRICAL PLANS

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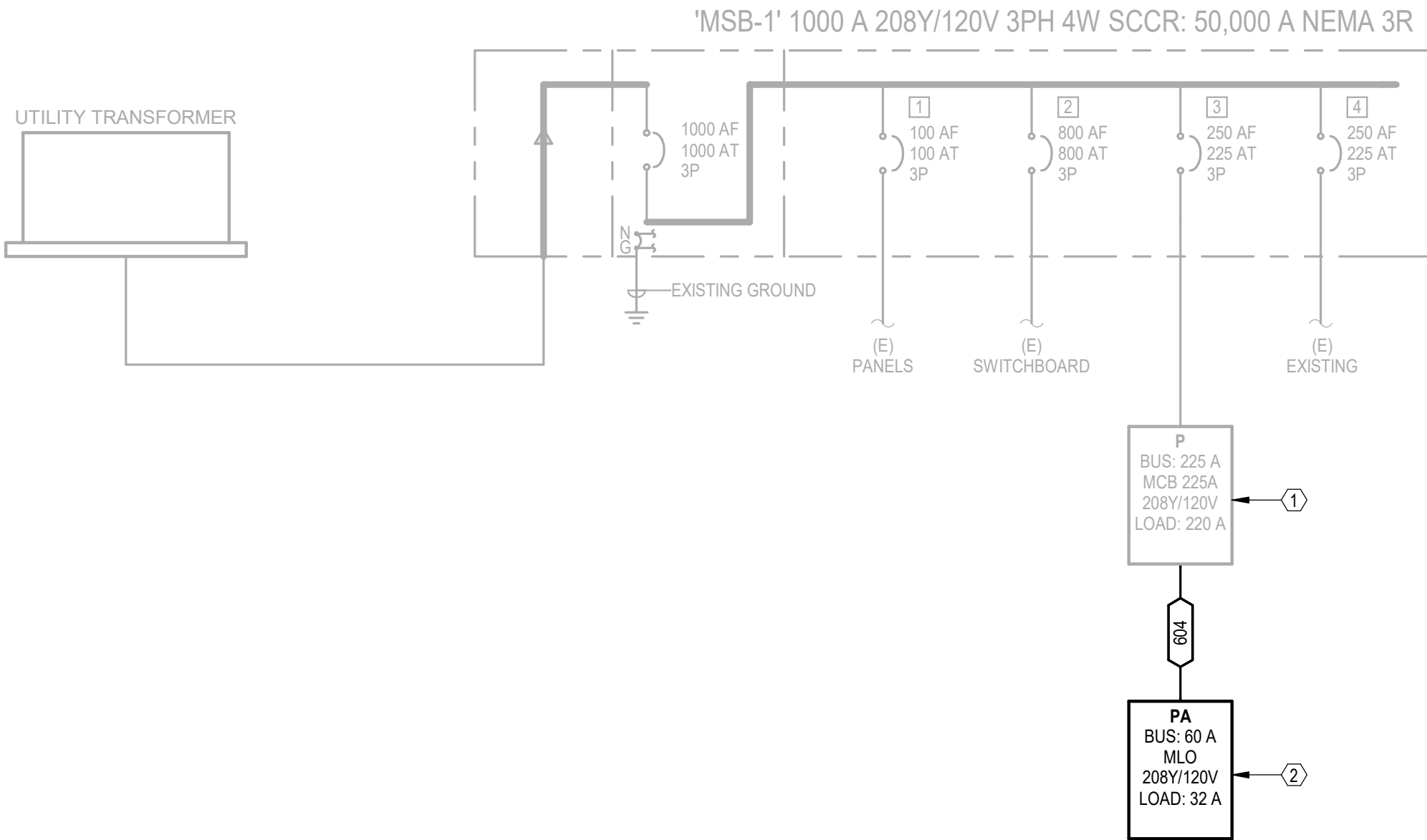
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E-101

VOLTAGE DROP SCHEDULE							
DEVICE	FEEDER			BRANCH CIRCUIT			TOTAL VOLTAGE DROP
	VOLTAGE DROP	WIRE SIZE	LENGTH	MAX VOLTAGE DROP	CIRCUIT NUMBER	WIRE SIZE	
UTILITY TRANSFORMER	0.00%						0.00%
MSB-1	0.23%	(3)500kcmil	36'	0.01%	1	#1	0.25%
P	!!! 3.06% !!!	4/0	249'	1.62%	8	#12	4.69%
PA	!!! 3.16% !!!	#4	12'	0.59%	2,4,6	#12	3.76%



1 SINGLE-LINE DIAGRAM

NONE

PANELBOARD: PA

LOCATION:
SUPPLY: P
MOUNTING: SURFACE
ENCLOSURE: NEMA 1

VOLTAGE: 208Y/120V, 3PH, 4W
BUS RATING: 60 A
NEUTRAL: 100%
FEED-THRU LUGS: NO
FEATURES & MODIFICATIONS -

MAINS TYPE: MLO
MAINS FN/NOTE: -
SCCR: 10,000 A
AVAILABLE FAULT: 4,974 A

CKT	DESCRIPTION	TRIP (A)	POLES	FN/NOTE	PHASE A LOAD (VA)	PHASE B LOAD (VA)	PHASE C LOAD (VA)	FN/NOTE	POLES	TRIP (A)	DESCRIPTION	CKT			
1	EC-1	15	3	2	1574	1574					EC-2	2			
3							1574	1574					4		
5									1574	1574				6	
7							720	0			--	1	20	SPARE	8
9	DOOR SLIDER	20	3			720	0		--	1	20	SPARE	10		
11							720	0	--	1	20	SPARE	12		
CONNECTED LOAD:					4 kVA	4 kVA	4 kVA								
CONNECTED CURRENT:					32 A	32 A	32 A								
LOAD CLASSIFICATION		CONNECTED		FACTOR		DEMAND									
MOTOR		11606 VA		100.00%		11606 VA									

THE FOLLOWING ARE THE MINIMUM STANDARDS FOR COMPLIANCE WITH HEALTH DEPARTMENT REQUIREMENTS. THE G.C. AND KEC CONTRACTOR SHALL COMPLY WITH THESE MINIMUM STANDARDS, DRAWINGS AND SPECIFICATIONS.

1. A CONCRETE SLAB IS PROVIDED FOR TRASH, GARBAGE, AND GREASE CONTAINER. IF WALLS ENCLOSE THIS AREA, THE INTERIOR WALL SURFACE WILL BE SMOOTH, SEALED AND WASHABLE (i.e., PLASTERED SMOOTH AND PAINTED, ETC.)
2. ALL FOOD-RELATED AND UTENSIL-RELATED EQUIPMENT SHALL MEET OR BE EQUIVALENT TO SANITATION STANDARDS ESTABLISHED BY AN AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI) ACCREDITED PROGRAM.
3. ALL FLOOR MOUNTED EQUIPMENT WILL BE INSTALLED ON MINIMUM 6" SANITARY LEGS, CASTERS OR COMPLETELY SEALED IN POSITION ON A 4" HIGH CURB WITH CONTINUOUSLY COVED BASE. COUNTERTOP EQUIPMENT WILL BE ON 4" SANITARY LEGS OR SEALED TO THE COUNTER UNLESS READILY MOVABLE.
4. FOR ALL SELF-SERVICE SODA, ICE AND OTHER DISPENSERS WHERE REFILLS ARE PROVIDED THEY MUST BE PUSH BUTTON TYPES, OR LEVER TYPE WHERE THE LEVER CONTACTS THE CONTAINER AT LEAST ONE INCH BELOW THE RIM.
5. ANY OPERABLE WINDOWS, VENT OPENING, OR OTHER SIMILAR OPENINGS MUST BE PROVIDED WITH TIGHT FITTING SCREENS OF MINIMUM 16 MESH TO THE INCH. WINDOWS SHALL BE FIXED AT FOOD PREP, UTENSIL-WASHING, OPEN FOOD AND UTENSIL STORAGE AREAS.
6. ALL EXTERIOR DOORS SHALL OPEN OUTWARD, BE SELF-CLOSING AND TIGHT FITTING.
7. BI-FOLD, FRENCH, ACCORDION STYLE AND ROLL-UP DOORS CANNOT OPEN INTO THE FOOD PREP, UTENSIL WASHING OR UNPACKAGED FOOD SERVICE AREAS.
8. TOILET ROOM AND DRESSING ROOM DOORS MUST BE SELF-CLOSING AND TIGHT FITTING.
9. DELIVERY DOORS SHALL HAVE AIR CURTAIN FANS THAT SPAN THE WIDTH OVER THE DOOR. THE FAN MUST ACTIVATE VIA A MICROSWITCH PROVIDING A MINIMUM VELOCITY OF 1600 FPM MEASURED 3 FEET ABOVE THE GROUND.
10. A MINIMUM OF 10 FOOT-CANDLES OF LIGHT MEASURED 30" OFF FLOOR SHALL BE PROVIDED IN WALK-IN REFRIGERATED STORAGE AND DRY STORAGE AREAS.
11. A MINIMUM OF 20-FOOT CANDLES OF LIGHT SHALL BE PROVIDED WHERE FOOD, FRESH PRODUCE OR PRE-PACKAGED ITEMS ARE PROVIDED FOR CONSUMER SELF-SERVICE AND SOLD OR OFFERED FOR CONSUMPTION INSIDE EQUIPMENT, IN AREAS USED FOR HAND WASHING, WAREWASHING, UTENSIL STORAGE, AND TOILET ROOMS.
12. A MINIMUM OF 50 FOOT-CANDLES OF LIGHT MEASURED 30" OFF FLOOR SHALL BE PROVIDED WHEN WORKING WITH FOOD, UTENSILS, EQUIPMENT SUCH AS KNIVES, SLICERS, GRINDERS, AREAS WHERE EMPLOYEE SAFETY IS A FACTOR AND IN ALL AREAS DURING PERIODS OF CLEANING.
13. SHATTER SHIELDS SHALL BE PROVIDED FOR ALL LIGHTS ABOVE FOOD PREPARATION, WORK, AND STORAGE AREAS.
14. ALL WAREWASHING SINKS TO HAVE 3 COMPARTMENTS THAT ARE A MINIMUM SIZE OF AT LEAST 18"X18"X12" DEEP (OR 16"X20"X12" DEEP) WITH A MINIMUM 18" DRAINBOARD AT EACH END. IF AGAINST A WALL, IT MUST HAVE AN 8" INTEGRAL BACKLASH. HOWEVER, IT MUST BE CAPABLE OF ACCOMMODATING THE LARGEST UTENSIL TO BE WASHED. A WAREWASHING MACHINE DOES NOT SUBSTITUTE FOR SINK REQUIREMENT. 3 OR 4 COMPARTMENT BAR SINKS TO BE AT LEAST 12"X12"X10" DEEP (OR 10"X14"X10" DEEP) WITH A MINIMUM 18" DRAINBOARD AT EACH END.
15. ALL SINKS SHALL HAVE SPOUT(S) CAPABLE OF REACHING EACH COMPARTMENT.
16. FOOD PREP SINK COMPARTMENT(S) TO BE AT LEAST 18"X18"X12" DEEP (OR 16"X20"X12" DEEP) WITH A MINIMUM 18" DRAINBOARD. SEPARATE FOOD PREP SINKS SHALL BE PROVIDED FOR MEATS AND PRODUCE.
17. A SEPARATE WET WASTE DUMP FIXTURE SHALL BE PROVIDED FOR DISPOSAL OF DRINK OR ICE WASTE.
18. EACH HAND WASHING SINK MUST HAVE PERMANENTLY MOUNTED SINGLE-SERVICE SOAP AND PAPER TOWEL DISPENSERS.
19. THE HOT WATER HEATER WILL BE A COMMERCIAL TYPE CAPABLE OF CONSTANTLY SUPPLYING HOT WATER AT A TEMPERATURE OF 120° F TO ALL SINKS. IN SIZING THE WATER HEATER, THE PEAK HOURLY DEMAND FOR ALL SINKS, ETC., ARE ADDED TOGETHER TO DETERMINE THE MINIMUM REQUIRED RECOVERY RATE.
20. ALL LAVATORIES OR HAND SINKS WILL HAVE A COMBINATION FAUCET OR PREMIXING FAUCET CAPABLE OF SUPPLYING WATER TEMPERED TO 100°-108°F. SELF-CLOSING OR METERED FAUCET TO PROVIDE AT LEAST 15 SECONDS OF WATER WITHOUT REACTIVATION.
21. ALL PLUMBING, ELECTRICAL AND GAS LINES SHALL BE CONCEALED WITHIN THE BUILDING STRUCTURE TO GREAT AN EXTENT AS POSSIBLE. ALL EXPOSED CONDUITS, PLUMBING, ETC. SHALL BE INSTALLED AT LEAST 6" OFF FLOOR AND 3/4" FROM WALLS USING STANDAFF BRACKETS.
22. CONDUITS, PLUMBING OR PIPING CANNOT BE INSTALLED ACROSS ANY AISLE WAY, TRAFFIC AREA OR DOOR OPENING.
23. MULTIPLE RUNS OR CLUSTERS OF CONDUIT OR PIPELINES SHALL BE FURRED IN OR ENCASED IN AN APPROVED SEALED ENCLOSURE.
24. ALL LIQUID WASTE SHALL BE DRAINED BE MEANS OF INDIRECT WASTE PIPES INTO A FLOOR SINK. FLOOR SINKS ARE TO BE INSTALLED FLUSH WITH THE FINISHED FLOOR SURFACE AND HAVE SUITABLE EASILY REMOVABLE SAFETY COVER GRATES.
25. FLOOR SINK TO BE 50% EXPOSED WHEN NO ACCESS IS PROVIDED FOR CLEANING OR BE IN LINE WITH THE FRONT FACE OF ELEVATED FREESTANDING EQUIPMENT.
26. APPROVED BACKFLOW PREVENTION DEVICES SHALL BE PROPERLY INSTALLED UPSTREAM OF ANY POTENTIAL HAZARD BETWEEN THE POTABLE WATER SUPPLY AND A SOURCE OF CONTAMINATION. HOSES SHALL NOT BE ATTACHED TO A FAUCET OR HOSE BIBB UNLESS AN APPROVED BACKFLOW PREVENTER IS PROVIDED.
27. WATER SUPPLY TO CARBONATORS SHALL BE PROTECTED BY AN APPROVED REDUCED PRESSURE PRINCIPLE BACKFLOW PREVENTER. THE RELIEF VALVE SHALL DRAIN INDIRECTLY TO SEWER WITH A LEGAL AIR GAP.
28. FOR CLEANING FLOOR MATS, THE JANITORIAL SINK SHALL BE A MINIMUM 24" BY 36" FLOOR-MOUNTED TYPE. MOPS SHALL BE PLACED IN A POSITION THAT ALLOWS THEM TO AIR-DRY WITHOUT SOILING WALLS, EQUIPMENT, OR SUPPLIES.
29. THE JANITORIAL SINK FAUCET WILL HAVE A THREADED OUTER LIP FOR HOSE ATTACHMENT AND AN APPROVED BACKFLOW PREVENTION DEVICE. NO CHEMICAL DISPENSING SYSTEMS OR SHUTOFF VALVES TO BE ATTACHED TO MOP SINK FAUCET OUTLET UNLESS A "SIDEKICK" PLUMBING DEVICE IS INSTALLED).
30. NO CONDENSATE OR WASTEWATER INCLUDING HVAC WILL DRAIN INTO THE JANITORIAL SINK.
31. GREASE TRAP TO BE LOCATED OUTSIDE THE FOOD SERVICE ACTIVITY AREA. FLUSH WITH THE FINISHED FLOOR WHEN INDOORS. LOCAL WASTEWATER DISTRICT OR BUILDING DEPARTMENT TO BE CONTACTED FOR GREASE REMOVAL REQUIREMENTS.
32. FLOOR DRAINS SHALL BE INSTALLED IN FLOORS THAT ARE WATER-FLUSHED FOR CLEANING AND IN AREAS WHERE PRESSURE SPRAY METHODS FOR CLEANING EQUIPMENT ARE USED, IN RESTROOMS, JANITORIAL ROOMS, SCULLERIES, AND AT BARS WITH WAREWASHING. FLOOR SURFACES IN AREAS PURSUANT TO THIS SHALL BE SLOPED 1.50 TO THE FLOOR DRAINS.
33. ADEQUATE VENTILATION SHALL BE PROVIDED TO ALL TOILET ROOMS, JANITOR CLOSETS WITH MOP SINKS, INDOOR TRASH ROOMS AND IN DRESSING/ CHANGING ROOM(S).
34. THE FLOOR FINISH SHALL HAVE A SMOOTH SURFACE UNDER ALL EQUIPMENT AND WALKWAYS WILL HAVE A LIGHT TEXTURE ONLY.
35. THE PAINT USED ON WALLS AND CEILINGS OF ALL KITCHEN, FOOD PREPARATION, WORK, STORAGE AREAS SHALL BE GLOSS OR SEMI-GLOSS ENAMEL. FINISH MATERIAL SHALL BE LIGHT COLOR IN FOOD PREP AREAS FOR EASY CLEANING.
36. PRIOR TO INSTALLATION, SAMPLES OF FINISHES SHALL BE SUBMITTED TO ENVIRONMENTAL HEALTH FOR APPROVAL AS NEEDED.
37. COLD STORAGE ROOMS SHALL BE PROVIDED WITH A SECTION OF SHELVING INSTALLED TO HOLD SHALLOW COOL DOWN PANS - NOT TO EXCEED 4" IN HEIGHT. SPACE BETWEEN SHELVING TO BE AT LEAST 8" HIGH.
38. BACKUP DRY STORAGE SHELVING SHALL BE A MINIMUM OF 6 LINEAR FEET (MEASURED WITH TIERS) OR 25% OF KITCHEN, FOOD PREP, AND WORK AREAS, WHICHEVER IS GREATER. SHELVING SHALL BE AT LEAST 18 INCHES DEEP AND START A MINIMUM SIX INCHES OFF THE FLOOR SURFACE.
39. SHELVING OVER WET AREAS (SINKS, MOP SINKS ETC.) AND FOOD PREP SURFACES SHALL BE METAL.
40. ALL SEAMS, GAPS, OPENINGS SHALL BE PROPERLY SEALED PER CODE.
41. ALL EMPLOYEE RESTROOMS SHALL BE PROVIDED WITH SOAP & TOWEL DISPENSERS.

1. SEISMIC DETAILS, ENGINEERING, SUPPLY AND INSTALLATION ARE NOT INCLUDED BY FOOD SERVICE CONSULTANT OR KITCHEN EQUIPMENT SUPPLIER.

1400 N AVENUE
NATIONAL CITY, CA 91950

FINISH SCHEDULE

AREA	FLOOR	BASE	WALL	CEILING	REMARKS
	<div>STAINED SEALED CONCRETE</div> <div></div> <div></div> <div></div>	<div>MIN 6" STAINLESS STEEL</div> <div></div> <div></div> <div></div>	<div>PREFABRICATED GALVALUME PANEL</div> <div></div> <div></div> <div></div>	<div>PREFABRICATED GALVALUME PANEL</div> <div></div> <div></div> <div></div>	
WALK-IN FREEZER	<div>•</div> <div></div> <div></div> <div></div>	<div>•</div> <div></div> <div></div> <div></div>	<div>•</div> <div></div> <div></div> <div></div>	<div>•</div> <div></div> <div></div> <div></div>	

OWNER INFORMATION

OPERATOR/OWNER: NATIONAL SCHOOL DISTRICT

CONTACT PERSON: JOHN HANSEN

EMAIL: JHANSEN@NSD.US

VICINITY MAP

SHEET INDEX

K-T FOOD SERVICE TITLE SHEET AND FINISH SCHEDULE

K-1.0 FOOD SERVICE EQUIPMENT PLAN AND SCHEDULE

K-2.0 FOOD SERVICE EQUIPMENT ELECTRICAL AND PLUMBING ROUGH-INS PLAN

K-3.0 FOOD SERVICE WALK-IN FREEZER DRAWINGS

K-3.1 FOOD SERVICE WALK-IN FREEZER DRAWINGS

K-3.2 FOOD SERVICE WALK-IN FREEZER DRAWINGS

K-3.3 FOOD SERVICE WALK-IN FREEZER DRAWINGS

K-3.4 FOOD SERVICE WALK-IN FREEZER DRAWINGS

K-3.5 FOOD SERVICE WALK-IN FREEZER DRAWINGS

K-3.6 FOOD SERVICE WALK-IN FREEZER DRAWINGS - SLAB DETAILS

K-3.7 FOOD SERVICE WALK-IN FREEZER DRAWINGS - SLAB DETAILS

K-3.8 FOOD SERVICE WALK-IN FREEZER DRAWINGS - SLAB DETAILS

K-3.9 FOOD SERVICE WALK-IN FREEZER DRAWINGS - SLAB DETAILS

K-3.10 FOOD SERVICE WALK-IN FREEZER DRAWINGS - SLAB DETAILS

FINISH NOTES

1. ALL BASES IN ABOVE FINISH SCHEDULE SHALL BE A CONTINUOUS COVE BASE MINIMUM 4" HIGH W/ 3/8" RADIUS.

2. ALL PAINTED AREAS SHALL BE ENAMEL SEMI-GLOSS LIGHT-COLORED, SMOOTH AND EASILY CLEANABLE, W/ 75% REFLECTANCE OR GREATER.

3. ACOUSTIC PANEL SHALL BE ARMSTRONG CLEAN ROOM OR EQUAL.

4. SLIM FOOT TO BE HUNTINGTON PACIFIC CERAMIC MODEL # S3619T.

5. GENERAL CONTRACTOR MAY BE REQUIRED TO SUBMIT A SAMPLE OF CEILING TILE AND SLIM FOOT TO HEALTH DEPARTMENT FOR APPROVAL PRIOR TO CONSTRUCTION.

6. STAINED SEALED CONCRETE TO BE ACID AND GREASE RESISTANT AND USDA APPROVED.

TRASH DUMPSTER LOCATION

NOTE:
TRASH DUMPSTER LOCATION. ALL ENCLOSURE WALLS TO BE SEALED, SMOOTH AND PAINTED WITH SEMI-GLOSS ENAMEL OR EQUAL AND WITH 70% REFLECTANCE

GENERAL NOTES

SCOPE OF WORK: REPLACEMENT OF WALK-IN FREEZER AT THE NATIONAL SCHOOL DISTRICT SERVICES CENTER WAREHOUSE . ALL OTHER AREAS OF THE FACILITY ARE EXISTING TO REMAIN. THIS FACILITY IS FOR STORAGE PURPOSES ONLY. THERE IS NO COOKING OR FOOD PREPARATION DONE IN THIS BUILDING.

SCOPE OF WORK SQUARE FEET: 1,300 SQ. FT.

1. ALCOHOL NOT SOLD ON PREMISES

2. SNEEZE GUARDS ARE NOT REQUIRED


3. MAXIMUM NUMBER OF EMPLOYEES PER SHIFT: 5

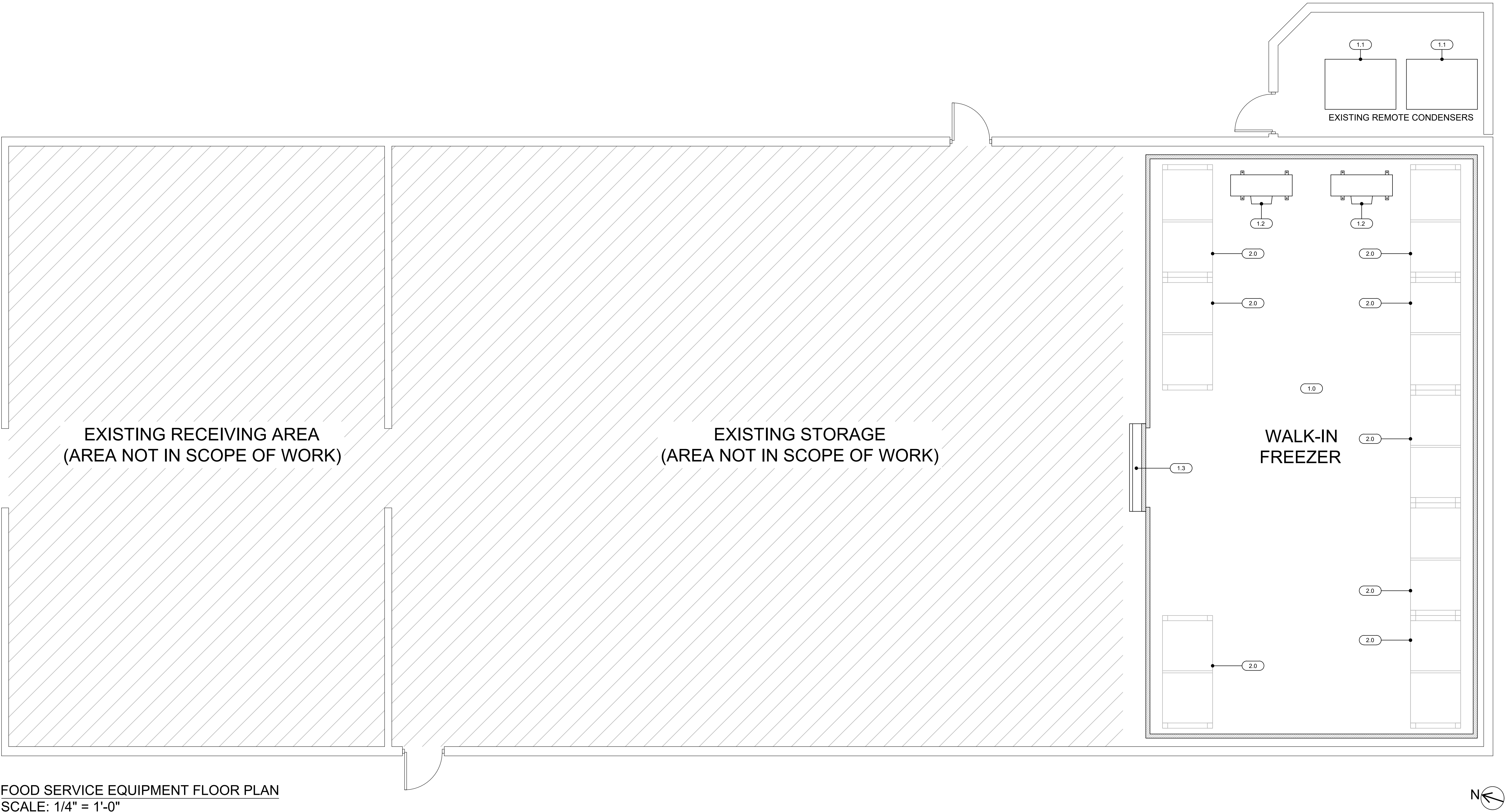
4. WATER DISTRICT: CITY OF NATIONAL CITY

5. SEWER DISTRICT: CITY OF NATIONAL CITY

6. ONLY PREPACKAGED FOOD ITEMS IN THEIR HERMETICALLY SEAL WILL BE STORED INSIDE THE WALK-IN FREEZER

[illegible]

<p>FOOD SERVICE DESIGN GROUP</p>  <p>INNOVATIVE FOOD SERVICE DESIGN</p>		<p>DSA</p>							
<p>CONSULTANT</p>		<p>STAMP</p>							
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<p>PREPARED FOR THE</p> <p>BOARD OF EDUCATION NATIONAL SCHOOL DISTRICT NATIONAL CITY, CALIFORNIA</p>		<p>PREPARED BY</p> <p>SGPA ARCHITECTURE AND PLANNING</p>							
<p>FOOD SERVICE TITLE SHEET AND FINISH SCHEDULE</p>		<p>CENTRAL WAREHOUSE FREEZER REPLACEMENT</p> <p>FREEZER REPLACEMENT 1400 N AVENUE NATIONAL CITY, CA 91950</p>							
<p>SUBMITTALS / REVISIONS</p> <table border="1"> <thead> <tr> <th>ISSUE</th> <th>DATE</th> </tr> </thead> <tbody> <tr> <td>DSA SUBMITTAL V1</td> <td>03/19/2025</td> </tr> <tr> <td>DSA SUBMITTAL V2</td> <td>04/30/2025</td> </tr> </tbody> </table> <p>RED SET 5/1/2025 NOT FOR CONSTRUCTION PROJECT STILL IN REVIEW</p> <p>PROJECT NO. 2239-E-02</p> <p>SHEET NO.</p> <p>K-T</p>				ISSUE	DATE	DSA SUBMITTAL V1	03/19/2025	DSA SUBMITTAL V2	04/30/2025
ISSUE	DATE								
DSA SUBMITTAL V1	03/19/2025								
DSA SUBMITTAL V2	04/30/2025								



FOOD SERVICE EQUIPMENT FLOOR PLAN
SCALE: 1/4" = 1'-0"

EQUIPMENT SCHEDULE																						
EQUIPMENT						ELECTRICAL						PLUMBING						REMARKS				
NO.	QTY	EXISTING TO REMAIN	DESCRIPTION	MANUFACTURER	MODEL #	V	PH	AMP	KW	HP	CONNECT		SUPPLY P.O.C.		WASTE					GAS		REMARKS
											WIRED DR	CORD/ PLUG	HOT	COLD	SIZE	DIR	FD	FS	TD	SIZE	MBH	
1.0	1		WALK-IN FREEZER W/ LIGHTS AND ELECTRIC SLIDING DOOR	IMPERIAL BROWN		SEE WALK-IN DRAWINGS ON K-3.0					X											
1.1	2	X	WALK-IN FREEZER REMOTE CONDENSER	TRENTON	TESA100L8-HT3D-2FK	EXISTING TO REMAIN																
1.2	2		WALK-IN FREEZER EVAPORATOR COIL	IMPERIAL BROWN		SEE WALK-IN DRAWINGS ON K-3.0					X				1/2"			X				
1.3	1		WALK-IN FREEZER AIR CURTAIN	IMPERIAL BROWN		SEE WALK-IN DRAWINGS ON K-3.0					X											
2.0	LOT	X	WALK-IN FREEZER STORAGE SHELVING	BY OWNER																		

DSA

FOOD SERVICE DESIGN GROUP

FSDG

INNOVATIVE FOOD SERVICE DESIGN

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FOOD SERVICE EQUIPMENT FLOOR PLAN
AND SCHEDULE

CENTRAL WAREHOUSE
FREEZER REPLACEMENT

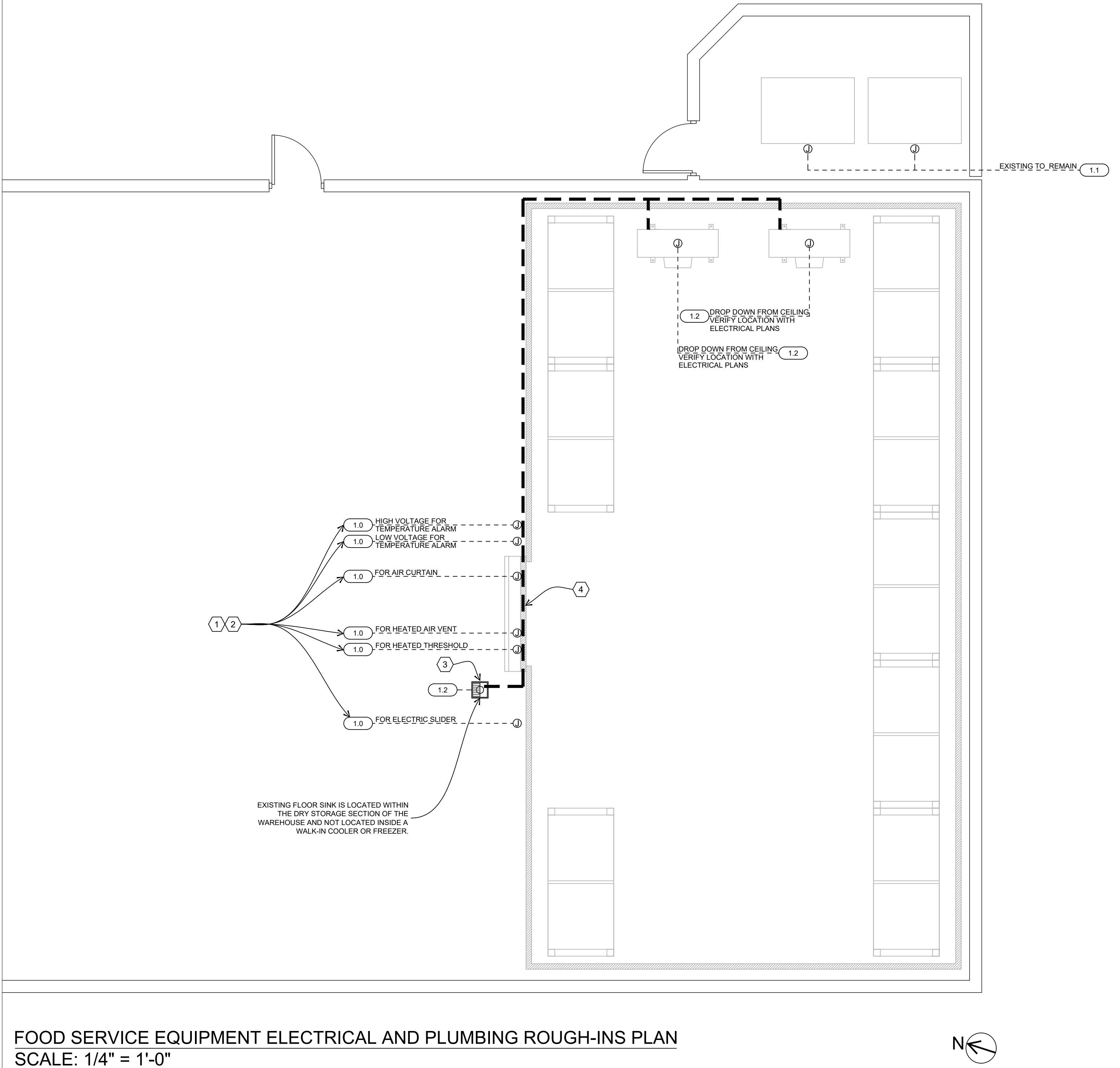
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SUBMITTALS / REVISIONS

#	ISSUE	DATE
1	DSA SUBMITTAL V1	03/19/2025
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SHEET NO.
K-1.0



FOOD SERVICE EQUIPMENT ELECTRICAL AND PLUMBING ROUGH-INS PLAN
SCALE: 1/4" = 1'-0"

GENERAL ELECTRICAL NOTES

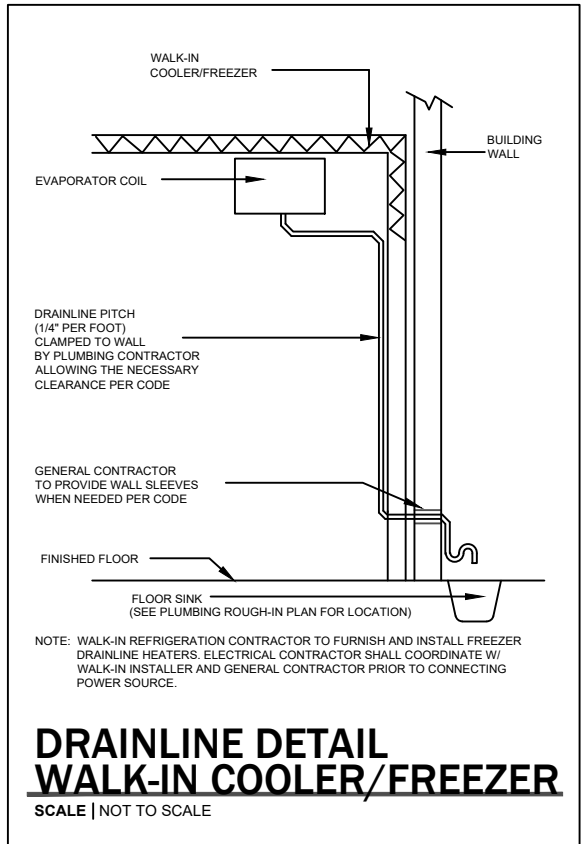
- ALL ELECTRICAL ROUGH-INS SHOWN ON THIS PLAN ARE FOR FIXTURES AND EQUIPMENT SPECIFIED AS FURNISHED BY THE KITCHEN EQUIPMENT CONTRACTOR. UNLESS OTHERWISE NOTED, FOR ANY ADDITIONAL CONVENIENCE OUTLETS AND POWER NEEDED FOR NON FOOD SERVICE EQUIPMENT REFER TO ALL OTHER ELECTRICAL DRAWINGS & REQUIREMENTS.
- ELECTRICAL CONTRACTOR MUST VERIFY EQUIPMENT BEING USED SO THAT THE SERVICE REQUIREMENTS ARE ADEQUATELY SIZED AND ROUGHED-IN PROPERLY (LOCATION & HEIGHT) SO AS TO MINIMIZE THE AMOUNT OF MATERIALS & FITTINGS NEEDED FOR FINAL HOOKUP RESULTING IN A NEAT AND ORDERLY LOOKING JOB. ALL DIMENSIONS FOR ITEMS RUNNING UNDER SLAB ARE FROM CENTER LINE OF COLUMN, OR OUTSIDE EDGE OF SLAB, TO CENTER OF ROUGH-INS. ALL OTHER DIMENSIONS ARE FROM FACE OF STUD.
- ALL OUTLETS & J-BOXES ARE TO BE SET HORIZONTALLY, MOUNTED FLUSH UNLESS NOTED OTHERWISE. ALL 120V OUTLETS NOT DESIGNATED WITH SPECIFIC LOADS, TO BE RATED AT 15 AMPS WITH MINIMUM LOOPING.
- ALL SERVICES SHOWN WITH SYMBOLS CENTERED ON FACE OF WALL, SHOULD BE BROUGHT TO THAT POINT CONCEALED IN WALL AND STUBBED OUT OF WALL CENTERED AT HEIGHT SHOWN. DO NOT STUB OUT OF FLOOR AND RUN EXPOSED UP FACE OF WALL.
- ELECTRICAL CONTRACTOR SHALL BRANCH TO CONNECTIONS WHERE REQUIRED AND CONNECT ALL ELECTRICAL EQUIPMENT, FIXTURES, INCLUDING INTERNAL WIRING REQUIRED IN FIXTURES AND APPLIANCES AS REQUIRED BY CODE, SPECIFICATIONS AND/OR DRAWINGS.
- ALL LABOR, SWITCHES, STARTERS, DISCONNECTS & FITTINGS REQUIRED FOR FOR FINAL CONNECTION OF EQUIPMENT AS NECESSARY TO COMPLY WITH ALL CODES, INCLUDING ALL WIRE WIRING TO BE FURNISHED BY ELECTRICAL CONTRACTOR UNLESS SPECIFIED OTHERWISE IN FOOD SERVICE EQUIPMENT CONTRACT.
- ALL ELECTRICAL OUTLET COVER PLATES ARE TO BE STAINLESS STEEL. THOSE REQUIRED IN BUILDING STRUCTURE ARE TO BE FURNISHED BY THE ELECTRICAL CONTRACTOR WITH RECEPTACLE. ALL MAIN BREAKER PANELS AND DISCONNECT SWITCHES REQUIRED BY OTHER ELECTRICAL DRAWINGS ARE TO BE FURNISHED AND INSTALLED BY THE ELECTRICAL CONTRACTOR AT TIME OF INSTALLATION.
- ELECTRICAL CONTRACTOR TO PROVIDE TIE-IN WIRING BETWEEN FIRE PROTECTION SYSTEM BOTTLE CONTROL HEAD, MICRO-SWITCH AND COOKING EQUIPMENT TO COMPLY WITH APPLICABLE LOCAL CODE REQUIREMENTS FOR EMERGENCY SHUTDOWN OF ENTIRE COOKLINE EQUIPMENT AND ELECTRICAL POWER. SHUNT TRIP CIRCUITRY MAY BE REQUIRED, REFER TO ALL OTHER ELECTRICAL DRAWINGS & REQUIREMENTS.
- ALL THREE (3) PHASE POWER CONNECTIONS TO BE ON A FOUR (4) WIRE SYSTEM. ALL SINGLE (1) PHASE POWER CONNECTIONS TO BE ON A THREE (3) WIRE SYSTEM UNLESS NOTED OTHERWISE.
- ELECTRICAL CONTRACTOR SHALL RUN CONTROL WIRING BETWEEN WALK-IN COOLERS/ FREEZERS CONDENSER & EVAPORATOR, PULL WIRES FROM WALK-INS EVAPORATOR TO PANEL, SET ONE DISCONNECT PER EACH CONDENSING UNIT. INSTALL AND WIRE EXTRA LIGHTS IN WALK-IN COOLERS AND FREEZERS AS REQUIRED THRU DOOR SWITCH, WIRE HEAT STRIP TO SAME CIRCUIT AS WALK-IN LIGHTS AND PROVIDE WRAP AROUND HEATER CABLE ON ALL EVAPORATOR DRAIN LINES.
- ELECTRICAL CONTRACTOR TO INSTALL HOOD LIGHTING, INTERCONNECT LIGHTS WHEN MORE THAN ONE LIGHT IS PROVIDED AND MAKE FINAL ELECTRICAL CONNECTIONS PER CODE.

ELECTRICAL LEGEND	
	SINGLE OUTLET
	DUPLEX OUTLET
	QUAD OUTLET
	I.G. (ISOLATED GROUND) DUPLEX OUTLET
	J-BX (JUNCTION BOX)
	DATA
	FLOOR RECEPTACLE
	CONDUIT STUB-UP FROM FLOOR
	DISCONNECT SWITCH
	TELEPHONE
	REMOTE SWITCH
	+12" A.F.F. - ABOVE FINISHED FLOOR TO CENTER OF ROUGH-IN
	E.C. ELECTRICAL CONTRACTOR
	CONV CONVENIENCE OUTLET
	5 MIN. AIR EXCHANGE FAN, 12 EXCHANGES / HOUR VENTILATION IN ROOM IS LIGHT SWITCH ACTIVATED
	FIRE PULL STATION
	HOOD LIGHT

GENERAL PLUMBING NOTES

- PLUMBING CONTRACTOR MUST VERIFY EQUIPMENT BEING USED SO THAT THE SERVICE REQUIREMENTS ARE ADEQUATELY SIZED AND ROUGHED-IN PROPERLY (LOCATION & HEIGHT), SO AS TO MINIMIZE THE AMOUNT OF MATERIALS AND FITTINGS NEEDED FOR FINAL HOOKUP RESULTING IN A NEAT & ORDERLY LOOKING JOB. ALL DIMENSIONS FOR ITEMS RUNNING UNDER SLAB ARE FROM CENTER LINE OF COLUMN TO CENTER OF ROUGH-INS. ALL OTHER DIMENSIONS ARE FROM FACE OF STUD.
- ALL PLUMBING ROUGH-INS AND REQUIREMENTS SHOWN ON THIS SHEET ARE FOR FIXTURES AND EQUIPMENT FURNISHED BY THE KITCHEN EQUIPMENT SUPPLIER. UNLESS OTHERWISE NOTED, FOR ANY ADDITIONAL BUILDING PLUMBING REQUIREMENTS REFER TO ALL OTHER PLUMBING SHEETS.
- PLUMBING SHALL NOT INTERFERE WITH OPERATION OR FUNCTION OF EQUIPMENT. SECURE TO EQUIPMENT, WALLS OR FLOOR AS REQUIRED BY CODE. ALL ROUGH-INS SHOWN ARE TO BE RUN INSIDE WALLS, (EXCEPT STUB-UPS). LOCATIONS INDICATE POINT OF EXIT FROM WALLS, CEILING OR FLOOR. ALL FLOOR & WALL PENETRATIONS MUST BE SEALED WATER TIGHT AND VERMIN PROOF.
- D. ALL SERVICES SHOWN WITH SYMBOLS CENTERED ON FACE OF STUD WALL SHOULD BROUGHT TO THAT POINT CONCEALED IN WALL AND STUBBED OUT OF WALL CENTERED AT HEIGHT SHOWN. DO NOT STUB OUT OF FLOOR AND RUN EXPOSED UP FACE OF WALL.
- PLUMBING CONTRACTOR SHALL RUN CONDENSATE LINES FROM UNITS TO DRAINS AS SHOWN, THIS LINE SHALL BE NO SMALLER THAN THE STUB OUT OF THE FIXTURE. CONDENSATE DRAIN LINES ARE TO BE INSULATED THEIR ENTIRE LENGTH. FOR SPECIFIC TYPE OF CONNECTION AND LOCATIONS REFER TO THE KITCHEN EQUIPMENT BROCHURES AND DRAWINGS.
- ALL LABOR, VALVES, TRAPS, TAILPIECES, STRAINERS, WATER LINES, GAS LINES, CUT OFFS, TRAPS, HYDROSTATIC SHOCK ELIMINATORS, INDIVIDUAL SHUT OFF VALVES, PRESSURE - REDUCING VALVES & FITTINGS REQUIRED FOR FINAL CONNECTIONS OF EQUIPMENT AS NECESSARY TO COMPLY WITH ALL CODES, INCLUDING ALL INTERCONNECTIONS, SHALL BE FURNISHED & INSTALLED BY PLUMBING CONTRACTOR UNLESS STATED OTHERWISE IN FOOD SERVICE EQUIPMENT CONTRACT OR GENERAL SPECIFICATIONS.
- ALL GAS LINES TO BE PAINTED BLACK.
- ALL FLOOR DRAINS ARE TO BE SET 1/2" BELOW FINISHED FLOOR UNLESS OTHERWISE NOTED. DO NOT SLOPE FLOORS SO CLOSE TO DRAINS AS TO CREATE "PITS" OR "DIPS" IN FLOOR. MINIMUM RADIUS OF SLOPE TO BE 24" FROM CENTERLINE OF DRAIN.
- ALL FLOOR SINKS SHOWN ARE TO BE SET FLUSH WITH FINISHED FLOOR, TRAPPED WITH LEGAL AIR GAP.
- IF ELECTROLYSIS CONDITIONS EXIST, A DIELECTRIC COUPLING SHOULD BE USED IN FINAL PLUMBING CONNECTION TO ALL WATER COOLED EQUIPMENT.
- KITCHEN EQUIPMENT SUPPLIER TO PROVIDE ALL FAUCETS, DRAIN OUTLET FITTINGS IN FIXTURES AND SPECIALTY ITEMS AS OUTLINED IN THE ITEM AND GENERAL PRODUCT SPECIFICATIONS.
- ALL WORK RELATING TO THE INSTALLATION & HOOKUP OF THE SPECIFIED EQUIPMENT IS TO BE PERFORMED IN FULL ACCORDANCE WITH ALL AUTHORITY HAVING JURISDICTION.
- WALL PENETRATIONS FOR DRAIN LINES REQUIRE ESCUTCHEON PLATES.
- ALL SERVICES SHOWN WITH SYMBOLS AWAY FROM ANY WALL OR COLUMN SHOULD BE STUBBED OUT OF FLOOR OR CEILING TO MAXIMUM OVERALL HEIGHT AS SHOWN.
- PLUMBING CONTRACTOR SHALL PROVIDE & INSTALL ALL ROUGH-INS. FINAL CONNECTIONS FOR KITCHEN EQUIPMENT FURNISHED BY OTHERS OR THE CONTRACTOR.
- PLUMBING CONTRACTOR TO PROVIDE & INSTALL ALL NECESSARY BACKFLOW PREVENTION DEVICES.

PLUMBING LEGEND	
	DIRECT WASTE
	TRENCH DRAIN (TD)
	FLOOR DRAIN (FD)
	FLOOR DRAIN W/ 4" HIGH FUNNEL (FF)
	FLOOR SINK (FS)
	HUB DRAIN (HD)
	FS 12"x12" FLOOR SINK
	COLD WATER (C.W.)
	HOT WATER (H.W.)
	GAS LINE
	SODA, BEER, WINE LINE CHASE
	INDIRECT DRAIN LINE AS REQUIRED
	+12" A.F.F. - ABOVE FINISHED FLOOR TO CENTER OF ROUGH-IN
	P.C. PLUMBING CONTRACTOR



KEYED NOTES

- ELECTRICAL CONNECTIONS TO BE DROPPED DOWN FROM CEILING. VERIFY EXACT LOCATIONS WITH ELECTRICAL ENGINEER PLANS.
- THE HEATED AIR VENT AND HEATED THRESHOLD SHOULD BE ON ONE CIRCUIT. ALL OTHER ITEMS SHOULD BE ON SEPARATE CIRCUITS.
- FLOOR SINK IS EXISTING TO REMAIN.
- CONDENSATE LINE TO RUN ABOVE SLIDING DOOR AND AIR CURTAIN.

FOOD SERVICE EQUIPMENT ELECTRICAL AND
PLUMBING ROUGH-INS PLAN

CENTRAL WAREHOUSE
FREEZER REPLACEMENT

1400 N AVENUE
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BOARD OF EDUCATION
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1	DSA SUBMITTAL V1	03/19/2025
2	DSA SUBMITTAL V2	04/30/2025

BID SET 5/1/2025
NOT FOR
CONSTRUCTION
PROJECT STILL IN
REVIEW

PROJECT NO. 2239-E-02

SHEET NO.

K-2.0

SPECIFICATIONS

Indoor freezer (-10°F) (no floor)
Vinyl foam NSF gasket (1/16" joint thickness), Cam-lock layout #4

SPECIAL INSTRUCTIONS

Standard crating
Logo Plate Special Location: (Imperial Brown)

WALL PANELS

Construction: 4" high density urethane (R-32)
Exterior Finish: 26 ga. stucco galvalume (Rigidized)
Interior Finish: 26 ga. stucco galvalume (Rigidized)
Ceiling connections: Lag down
Floor connections: Angle screed

CEILING PANELS

Construction: 4" high density urethane (R-32)
Exterior Finish: 26 ga. stucco galvalume
Interior Finish: 26 ga. stucco galvalume
Ceiling Caps: Loose ceiling trim
Live Load: 10 psf

DOORS

[A]: 76" x 122" R-Plus Doors single leaf horizontal electric sliding freezer door
(RIGHT SLIDE) door
Liners: 26 ga. stucco galvalume
Frame: None

PARTS

(10) ea. LED high bay light fixture for cooler or freezer application (Kason #1820 - 60W, 120-277V, 0.5A) (Fixture ships loose for field installation.)
(21) ea. IB cove base-6" x 96" x 26 ga. stucco galvalume
(81) lf. External roof support-C-Channel w/ beam spreaders
(2) runs of 26'-11"
(2) pair Beam spreader, 6" x 3 1/2" x 1/2" x 90" long
(1) Set Pit Material-VERIFY PIT DEPTH
Pit size = 323" x 564 1/2" x 10" deep
Insulation thickness = 6"
Includes R-Max 48" x 96" x 2" stock board urethane, 6 mil. Visqueen vapor barrier, 15# building felt and asphalt emulsion
(21) ea. Interior seismic tie-down @ floor level-(3" x 2") x 96" x 16 ga. smooth galvanized (w/ HILTI KBTZ2)
(23) ea. Interior seismic tie-down @ ceiling level-(2" x 2") x 96" x 26 ga. stucco galvalume
(1) ea. Mars air curtain-#HV284-2UG-TS, unheated, 208/1ph/60Hz, 10A
Includes adjustable time delay, mounting bracket, humidistat (24VAC), and magnetic reed switch (surface mount)

REFRIGERATION

Russell RH6E053EDA Evaporator
Heavy Duty with EcoNet
208-230V, 3ph, 60Hz; Fan Amps: 6.3A; Heater Amps: 14.4A; MCA: 16.4, MOPD: 20
Dimensions: 59 7/8" x 27 3/8" x 46 1/8"H

SPECIAL PANELS

W36 w/ (1) ea. Modularm 75LC multi-monitor temperature alarm w/1P-1 illuminated push button
W36, V1.A w/ (3) ea. Electrical components to be pre-wired-Temperature alarm and air vent only
Includes terminal J-boxes
NOTE: Some exceptions apply, like for components in a circuit that span multiple panels.
V1.A w/ (1) ea. Kason 1847 magnum flow heated air vent (56W, 120V, .5A)

NOTES

STANDARD NOTES

To prevent condensation, a minimum 2" from the walk-in exterior surface is required. High humidity conditions may require force ventilation in addition to clearance.

Installation site floor must be true and level within 3/16" per 10' or additional costs may be incurred.

R-Plus Doors sliding and vertical lift doors shall not be considered means of egress. Check code egress requirements for your application.

INSULATED PIT

Insulated pit plan is provided to locate thermal break and door notch locations and size. Pit depth, concrete floor above and below insulation, design, reinforcement, thickness & construction of concrete should be designed by a Qualified Professional Engineer familiar with cold storage design, the site conditions and end users application. See project contract documents. All concrete and excavation work & design is by others.

RECESSED PIT

Recess plan is provided to set min. size to allow panel installation. Recess depth, concrete floor above and below insulation, design, reinforcement, thickness & construction of concrete should be designed by a Qualified Professional Engineer familiar with cold storage design, the site conditions and end users application. See project contract documents. All concrete and excavation work & design is by others.

ELECTRICAL

Field electrician to verify maximum acceptable load for light switches.If load is too high, then relay type controls should be used.
After wiring devices, ALL conduits must be sealed to stop moisture transfer through electrical raceways.
Failure to seal device per NEC codes WILL VOID WARRANTY.

REVISIONS

01 01/10/2025 Add radio set to sliding door.
02 01/31/2025 Reduce footprint of walk-in to fit within existing pit (estimated), change ceiling support to self-supporting, add air curtain, add evaporators.
03 03/19/2025 Update air curtain specs (unheated).
04 03/24/2025 Updated drawing per ENO redlines

3. SPECIAL INSPECTIONS & TESTING (QUALITY ASSURANCE PLAN):

A. GENERAL:

1. INDEPENDENT TESTING LAB SHALL BE RETAINED BY OWNER TO PROVIDE INSPECTIONS AND SPECIAL INSPECTIONS AS DESCRIBED HEREIN.
2. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING AND PROVIDING ON SITE ACCESS TO ALL REQUIRED INSPECTIONS AND NOTIFIES TESTING LAB IN TIME TO PERFORM SUCH INSPECTIONS PRIOR.
3. DO NOT COVER WORK REQUIRED TO BE INSPECTED PRIOR TO INSPECTION BEING MADE. IF WORK IS COVERED, CONTRACTOR WILL BE RESPONSIBLE FOR UNCOVERING AS NECESSARY.
4. THE CONTRACTOR SHALL CORRECT ALL DEFICIENCIES AS NOTED WITHIN THE SPECIAL INSPECTION REPORTS AND/OR THE ENGINEER OF RECORD'S FIELD OBSERVATION (STRUCTURAL OBSERVATIONS) REPORTS TO BRING THE CONSTRUCTION INTO COMPLIANCE WITH THE CONTRACT DOCUMENTS, ADDENDUMS, REVISIONS, RFIS AND/OR WRITTEN INSTRUCTIONS. THE CONTRACTOR IS RESPONSIBLE TO REQUEST SUMMARY REPORTS FROM THE SPECIAL INSPECTOR AND ENGINEER OF RECORD AT THE TIME OF THE PROJECT SUBSTANTIAL COMPLETION. PRIOR TO REQUESTING THE SUMMARY OF STRUCTURAL OBSERVATION REPORTS FROM THE ENGINEER OF RECORD, THE CONTRACTOR SHALL SUBMIT TO THE ARCHITECT AND ENGINEER OF RECORD A LETTER STATING THAT ALL OUTSTANDING ITEMS NOTED ON PREVIOUS STRUCTURAL OBSERVATION REPORTS HAVE BEEN COMPLETED IN ACCORDANCE WITH THE CONTRACT DOCUMENTS, ADDENDUMS, REVISIONS, RFIS AND/OR WRITTEN INSTRUCTIONS.

B. SPECIAL INSPECTIONS

1. ALL SPECIAL INSPECTIONS SHALL BE PERFORMED TO MEET THE REQUIREMENTS OF THE 2022 CALIFORNIA BUILDING CODE (CBC) AS RECOMMENDED BY THE LOCAL BUILDING JURISDICTION.
2. REQUIRED SPECIAL INSPECTIONS SHALL BE PERFORMED BY AN INDEPENDENT CERTIFIED TESTING LABORATORY EMPLOYED BY THE OWNER PER SECTION 1704 OF THE 2022 CBC FOR THE AREAS INDICATED IN THE SPECIAL INSPECTION PROGRAM.
3. THE INDEPENDENT CERTIFIED TESTING LABORATORY AND INSPECTORS SHALL BE A QUALIFIED PERSON WHO SHALL SHOW COMPETENCE TO THE SATISFACTION OF THE LOCAL BUILDING OFFICIAL, OWNER, ARCHITECT AND ENGINEER OF RECORD FOR THE PARTICULAR OPERATION. ALL SPECIAL INSPECTION REPORTS SHALL BE SUBMITTED TO THE BUILDING DEPARTMENT, ARCHITECT AND ENGINEER OF RECORD STATING THE PROJECT NAME AND ADDRESS.
4. THE CONTRACTOR AND SPECIAL INSPECTOR SHALL NOTIFY THE ENGINEER OF RECORD OF ANY ITEMS NOT COMPLYING WITH THE PROJECT SPECIFICATIONS, CONTRACT DOCUMENTS AND/OR APPLICABLE CODES BEFORE PROCEEDING WITH ANY WORK INVOLVING THAT ITEM. THE ENGINEER OF RECORD WILL REVIEW THE ITEM AND DETERMINE ITS ACCEPTABILITY. IF WORK INVOLVING THAT ITEM PROCEEDS WITHOUT PRIOR APPROVAL FROM THE ENGINEER OF RECORD, THEN THE WORK WILL BE CONSIDERED NON-COMPLIANT.

SPECIAL INSPECTIONS PROGRAM			
ESTABLISHED PER 2022 CBC			
	CONTINUOUS	PERIODIC	COMMENTS
GENERAL STRUCTURAL INSPECTIONS AS REQUIRED BY SECTION 1704			
CONCRETE CONSTRUCTION: CBC 1705A.3			
EPOXY OR ADHESIVE ANCHOR PLACEMENT		X	BY BUILDING OFFICIAL
EXPANSION OR SCREW ANCHOR PLACEMENT		X	ACI 318: 17.8.2

POST-INSTALLED ANCHORS

A. MECHANICAL ANCHORS

1. APPROVED EXPANSION ANCHORS FOR CONCRETE:
 - a. HILTI KWIK BOLTS T22 (ICC ESR-4266)
2. FOLLOW ALL MANUFACTURER'S RECOMMENDATIONS AND CERTIFICATION TESTING REPORTS FOR EXPANSION ANCHOR INSTALLATION.
3. ALTERNATIVE EXPANSION ANCHORS IN CONCRETE APPLICATION MAY BE USED IF AN (ICC-ES ESR) OR (IAPMO-UES ER) APPROVAL FOR USE IN CRACKED CONCRETE IS SUBMITTED TO THE E.O.R. AND APPROVED PRIOR TO USE.
4. ALTERNATIVE EXPANSION ANCHORS IN GROUTED MASONRY APPLICATION MAY BE USED IF AN (ICC-ES ESR) OR (IAPMO-UES ER) APPROVAL FOR USE IN GROUTED MASONRY IS SUBMITTED TO THE E.O.R. AND APPROVED PRIOR TO USE.

B. ANCHOR CAPACITY USED IN DESIGN SHALL BE BASED ON THE TECHNICAL DATA PUBLISHED BY MANUFACTURER OR SUCH OTHER METHOD AS APPROVED BY THE E.O.R. SUBSTITUTION REQUESTS FOR ALTERNATE PRODUCTS MUST BE APPROVED IN WRITING BY THE E.O.R. PRIOR TO USE. SUBSTITUTIONS WILL BE EVALUATED BY THEIR HAVING AN ICC ESR SHOWING COMPLIANCE WITH THE RELEVANT BUILDING CODE FOR SEISMIC USES, LOAD RESISTANCE, INSTALLATION CATEGORY, AND AVAILABILITY OF COMPREHENSIVE INSTALLATION INSTRUCTIONS. ADHESIVE ANCHOR EVALUATION WILL ALSO CONSIDER CREEP, IN-SERVICE TEMPERATURE AND INSTALLATION TEMPERATURE.

C. REFER TO STRUCTURAL DRAWINGS FOR EMBEDMENT DEPTH, ROD TYPE AND SIZE, AND OTHER SPECIFIC INFORMATION.

D. DO NOT APPLY LOAD TO ANCHOR UNTIL CONCRETE OR GROUT HAS REACHED FULL DESIGN STRENGTH.

E. ALL HOLES SHALL BE DRILLED WITH ANSI STANDARD BIT DESIGNED FOR CONCRETE OR HOLLOW DRILL BIT, DIAMOND CORED HOLES ARE NOT ALLOWED UNLESS INDICATED IN DESIGN DETAIL OR PRE-APPROVED BY THE E.O.R.

F. ABANDONED HOLES – NO ANCHOR SHALL BE INSTALLED WITHIN 1.5 ROD DIAMETERS OF AN ABANDONED HOLE THAT HAS BEEN GROUT FILLED, (3.0 ROD DIAMETERS FOR UN-GROUTED HOLES).

G. OVER DRILL BAR DIAMETER BY ¼" U.N.O. BY THE MANUFACTURER AND TO THE REQUIRED DEPTH AS INDICATED ON THE STRUCTURAL DRAWINGS.

H. REMOVE ALL DIRT, DUST, WATER AND ICE FROM DRILLED HOLES BEFORE INSTALLATION.

I. REMOVE ANY DIRT, DUST, RUST OR OIL ON BAR OR ROD BEFORE INSTALLATION U.N.O.

J. ALL MANUFACTURERS RECOMMENDATIONS SHALL BE FOLLOWED EXACTLY.

L. TESTING:

- A. FOR VERIFYING SATISFACTORY INSTALLATION WORKMANSHIP, PERFORM JOB SITE TESTING IN ACCORDANCE WITH THE TEST LOAD AS INDICATED IN THE ANCHOR DETAILS. TEST 50% OF THE INSTALLED ANCHORS. FOR TENSION TESTION TESTING, A TEST LOAD OF 2500 LBF MAY BE APPLIED BY ANY METHOD THAT WILL EFFECTIVELY MEASURE THE TENSION IN THE ANCHOR SUCH AS DIRECT PULL WITH A HYDRAULIC JACK OR CALIBRATED SPRING LOADING DEVICES TO ALL 3/8" X 3 1/2" HILTI KB-T22 & 1/2" X 3 3/4" HILTI KB-T22 ANCHORS PER ESR 4266. FOR TORQUE TESTING, A TEST LOAD OF 30 FT-LBF & 50 FT-LBF SHALL BE APPLIED WITH A CALIBRATED TORQUE WRENCH TO ALL 3/8" X 3 1/2" HILTI KB-T22 & 1/2" X 3 3/4" HILTI KB-T22 ANCHORS RESPECTIVELY PER ESR 4266.
ALL TESTS SHALL BE CONDUCTED IN THE PRESENCE OF THE INSPECTOR OF RECORD. IF ANY ANCHOR FAILS THE TEST, TEST ALL ANCHORS. THE TEST SHALL BE PERFORMED 24 HOURS OR MORE AFTER INSTALLATION. TESTING MAY BE DONE PRIOR TO EQUIPMENT INSTALLATION.
ALSO REFER TO CBS 1910A.5 "TEST FOR POST INSTALLED ANCHORS IN CONCRETE"

M. FAILURE/ACCEPTANCE CRITERIA:

THE FOLLOWING CRITERIA APPLY FOR THE ACCEPTANCE OF INSTALLED ANCHORS:

- A. HYDRAULIC RAM METHOD: APPLY AND HOLD TEST LOAD FOR A MINIMUM OF 15 SECONDS. THE ANCHOR SHOULD HAVE NO OBSERVABLE MOVEMENT AT THE APPLICABLE TEST LOAD WHERE WASHERS ARE USED. A PRACTICAL WAY TO DETERMINE OBSERVABLE MOVEMENT IS THAT THE WASHER UNDER THE NUT BECOMES LOOSE OR BY A CONTINUOUS LOSS OF JACKING PRESSURE.
- B. TORQUE WRENCH METHOD: THE APPLICABLE TEST TORQUE MUST BE REACHED WITHIN THE FOLLOWING LIMITS:
EXPANSION TYPE: ONE-HALF (1/2) TURN OF THE NUT 3/8" SLEEVE ANCHOR ONLY: ONE-QUARTER (1/4) TURN SCREW TYPE: ONE-QUARTER (1/4) TURN OF THE SCREW AFTER INITIAL SEATING OF THE SCREW HEAD



NSF LABEL
N.S.F. LISTED (STD #7)
N.S.F. GASKET @ ALL PANEL JOINTS

THE MINIMUM BTU'S SHOWN ARE BASED ON NSF STANDARD #7, SECTION 5, PARAGRAPH 5.36.7, REQUIREMENTS (REF. TABLE 1). THESE NUMBERS ARE NOT INTENDED TO BE USED FOR SIZING OF REFRIGERATION UNITS FOR THIS WALK-IN. THE MANUFACTURER RECOMMENDS CONSULTING WITH A QUALIFIED ENGINEER OR REFRIGERATION CONTRACTOR.

LARR #25184

DESIGN CRITERIA:

BASIC DESIGN LOADS:

CEILING DL = 5 PSF
CEILING LL = 10 PSF
MINIMUM INDOOR LATERAL LOAD = 5 PSF

SEISMIC DESIGN DATA:

Ss = 1.137 g
S1 = 0.385 g
Sds = 0.909 g
SDC = D
SITE CLASS = D-DEFAULT
RISK CATEGORY = IV
IMPORTANCE FACTOR, I = 1.5
RESPONSE MODIFICATION FACTOR, R = 1.0 (SHEAR WALL)
R = 1.0 (MOMENT FRAME)

*ANY FUTURE ROOF/CEILING LID MOUNTED EQUIPMENT NOT CURRENTLY SHOWN ON THE APPROVED SHOP DRAWINGS SHALL BE COORDINATED WITH THE EOR PRIOR TO ANY INSTALLATION, TYP.

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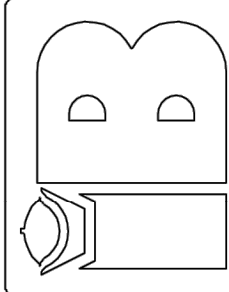
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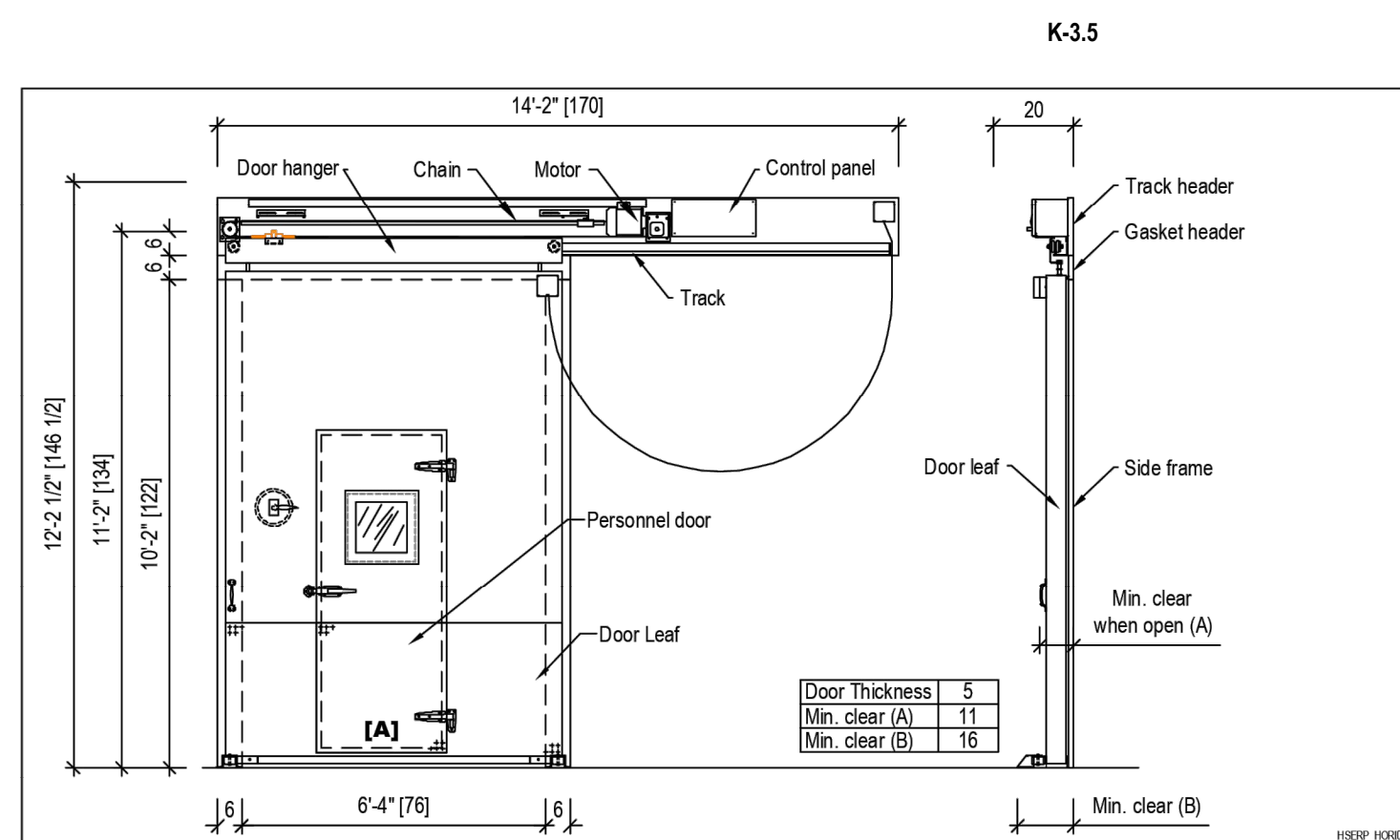
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Estimated Walk-in Weight: 16,924 lbs.
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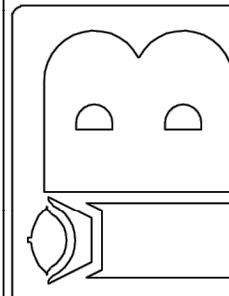
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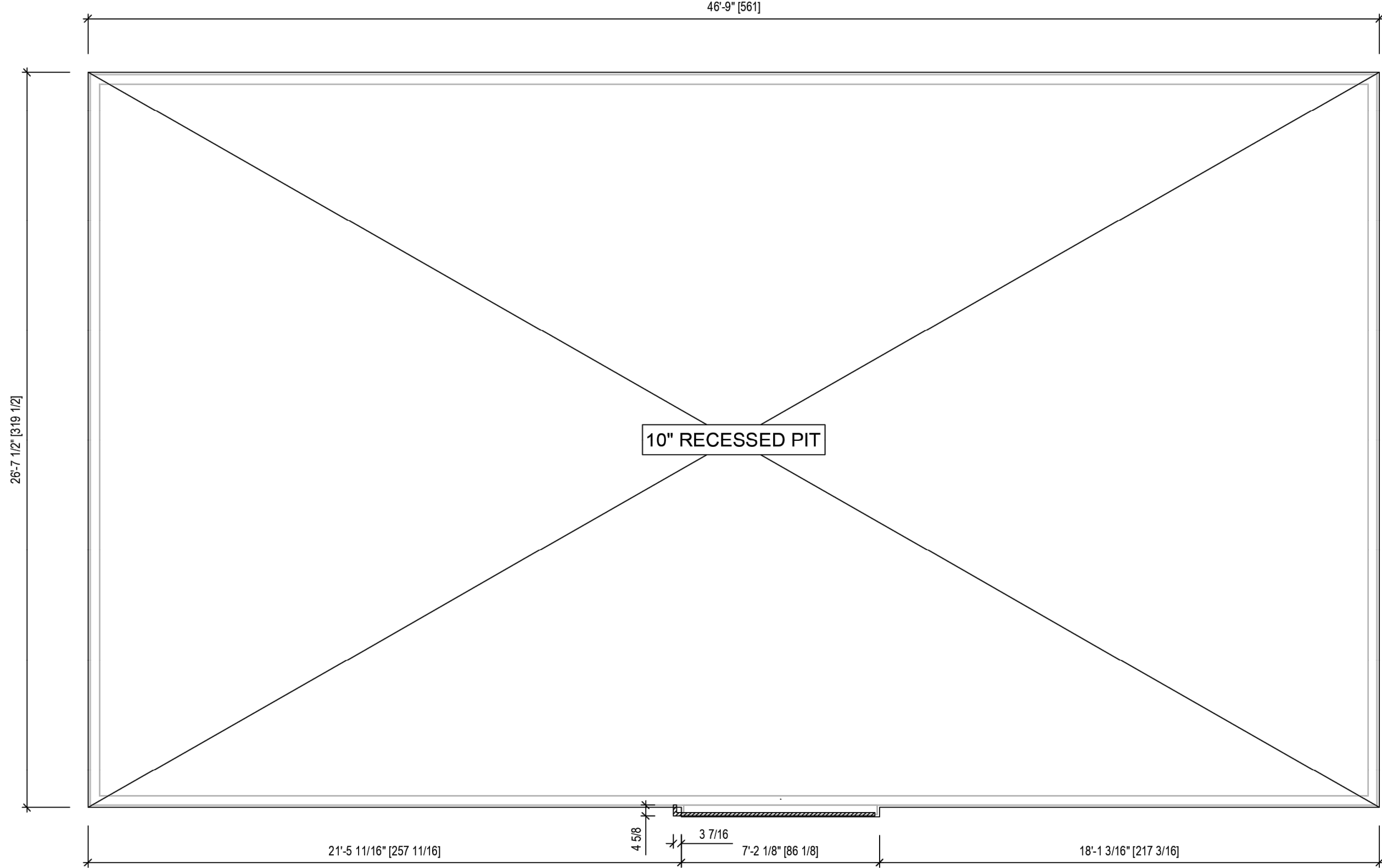
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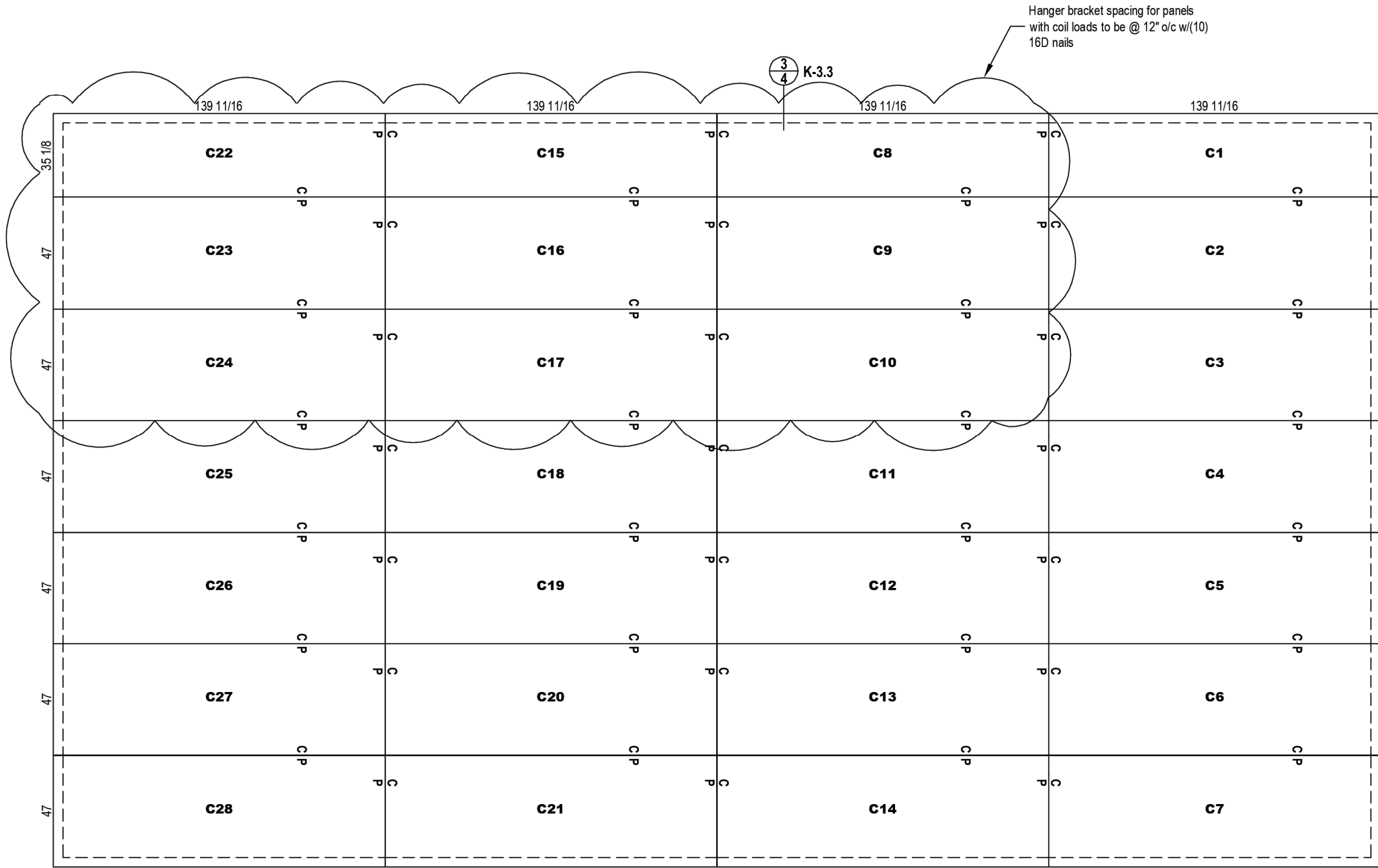
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PIT PLAN



CEILING PANELS

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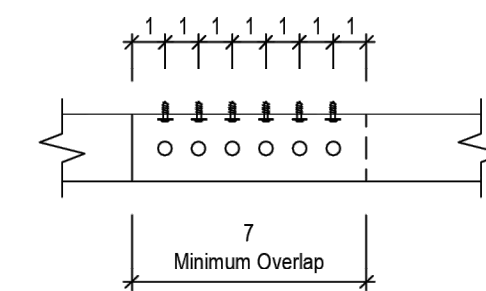
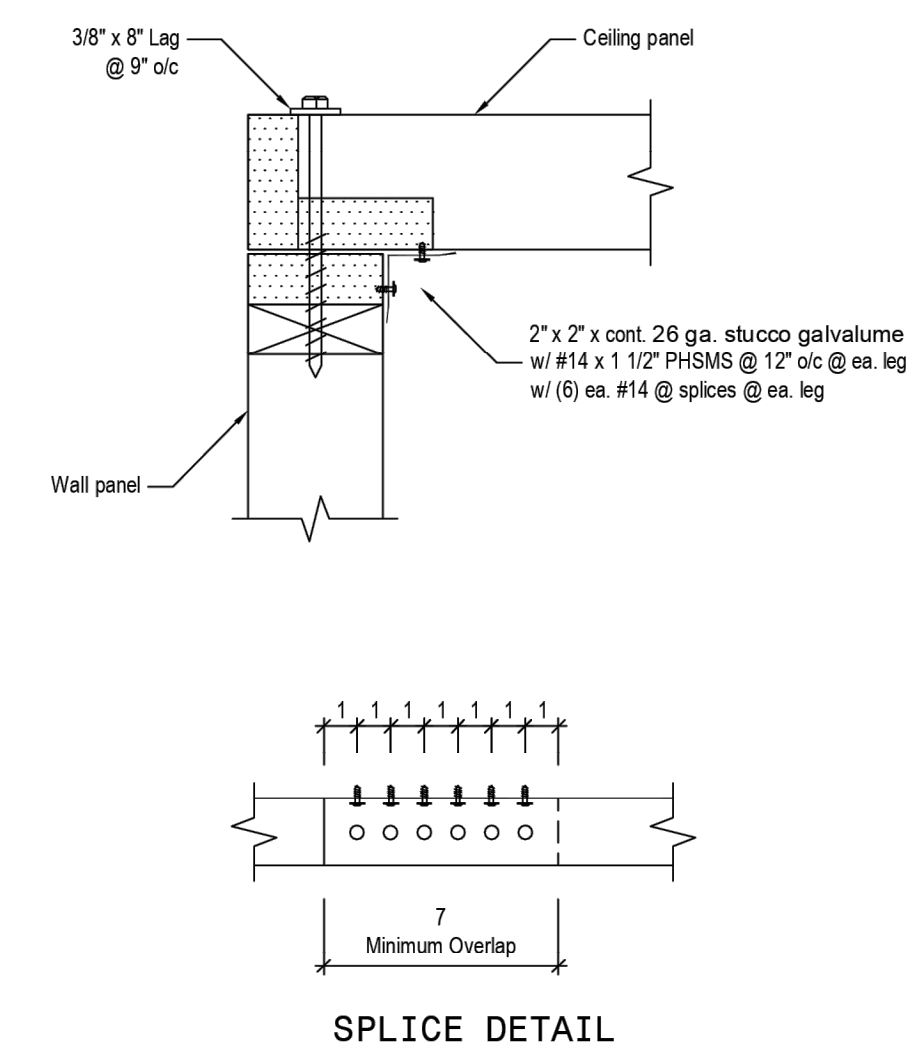
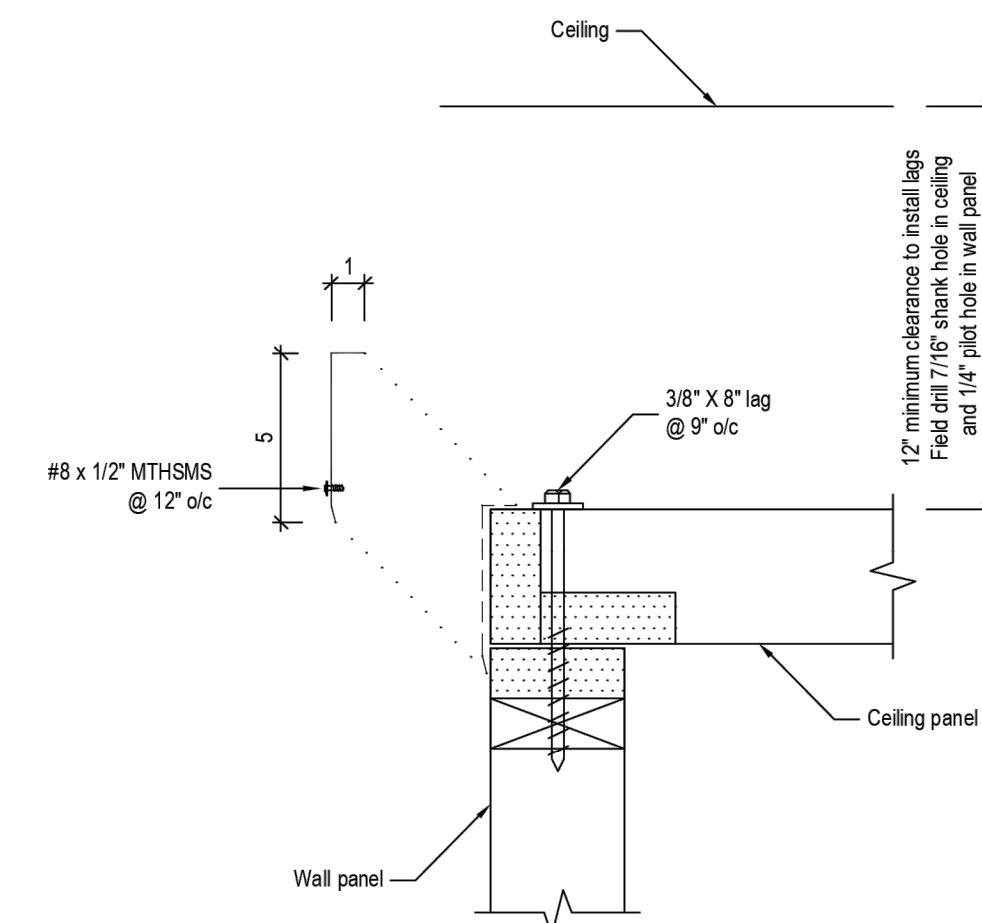
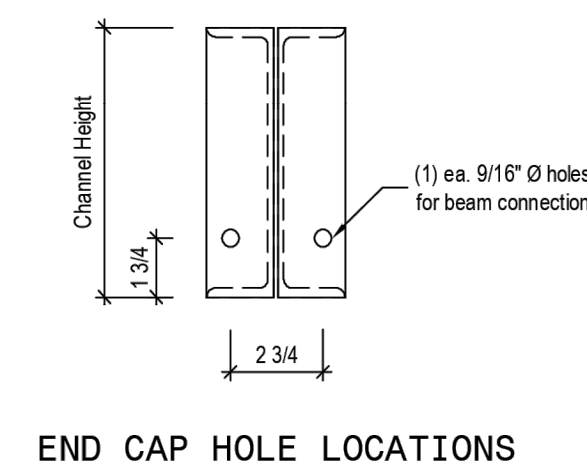
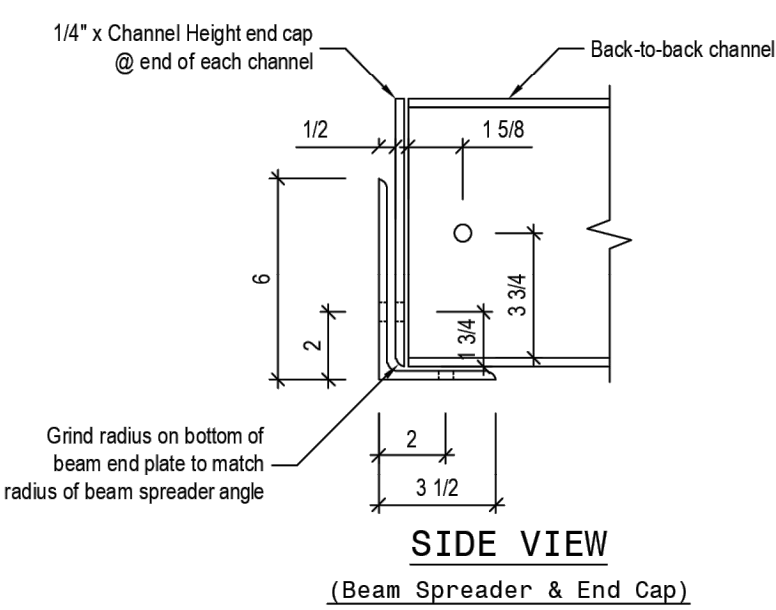
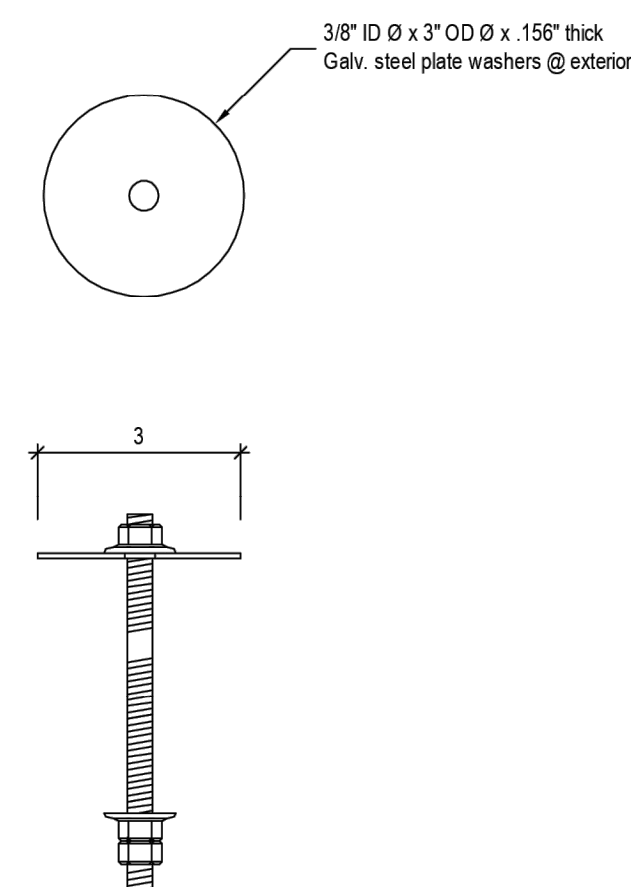
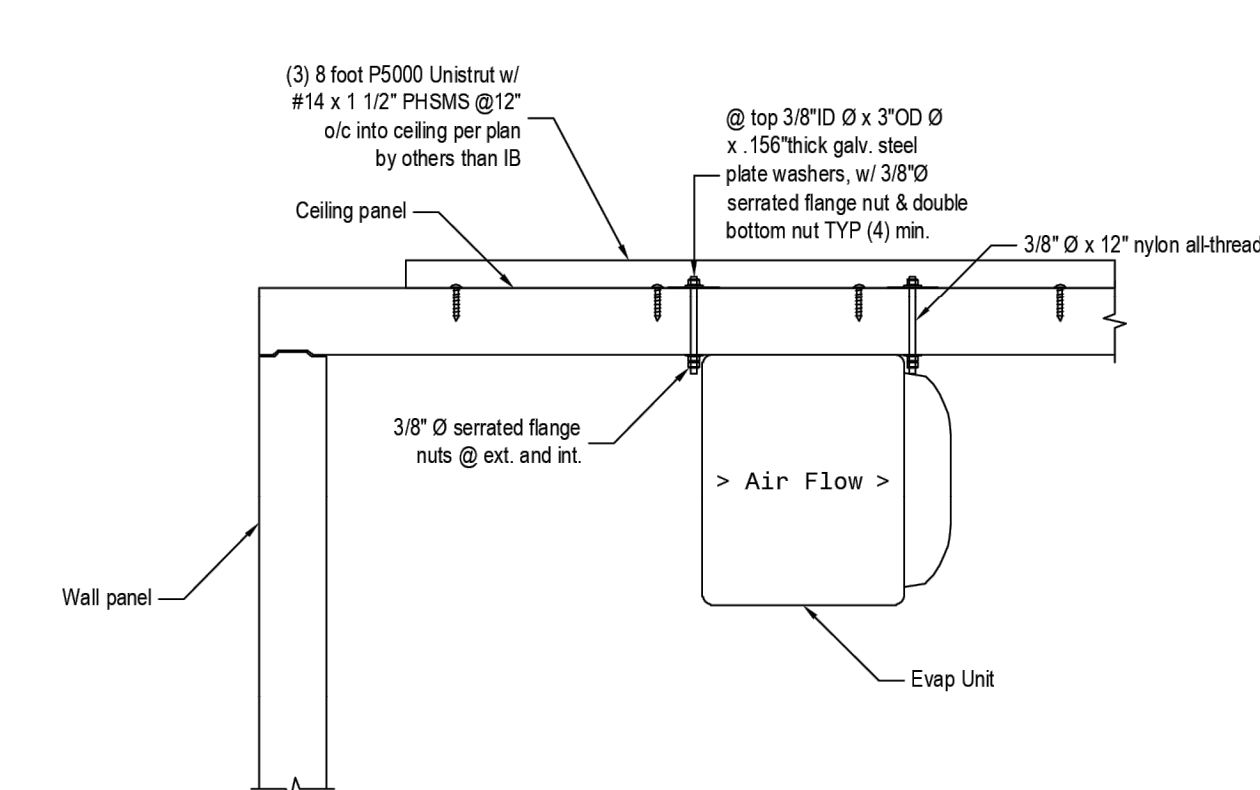
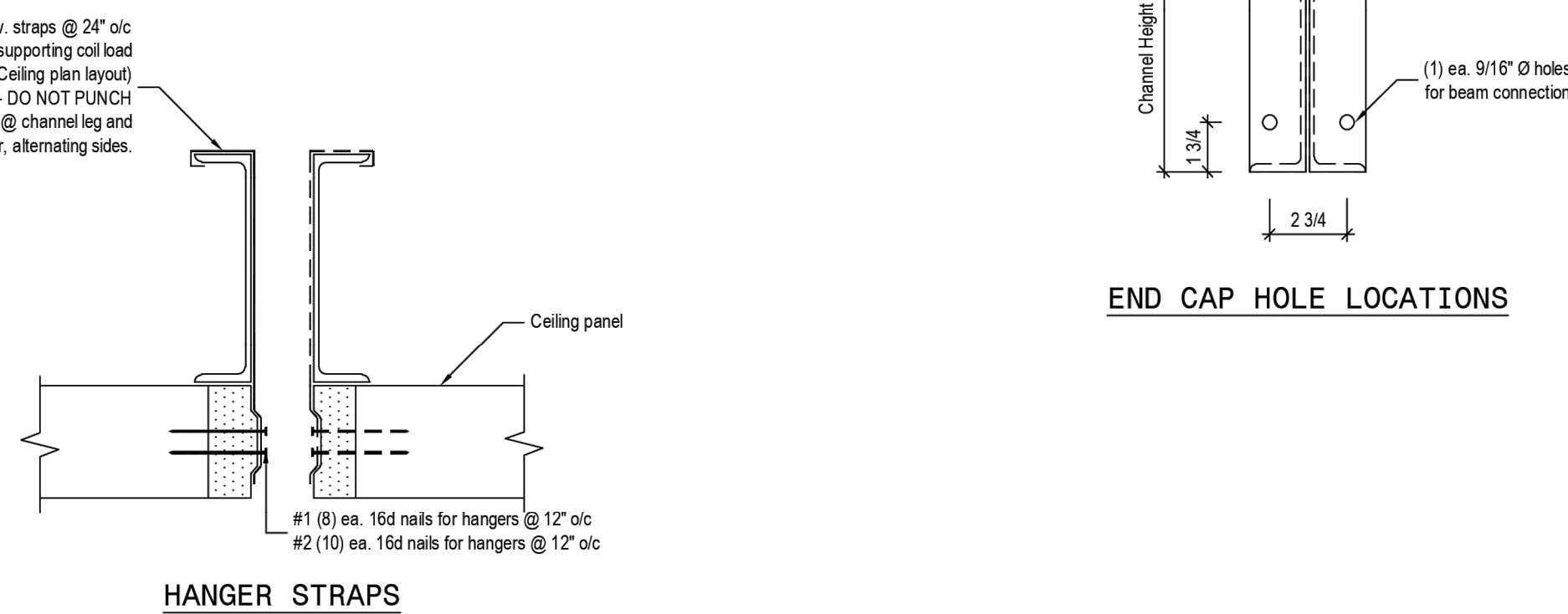
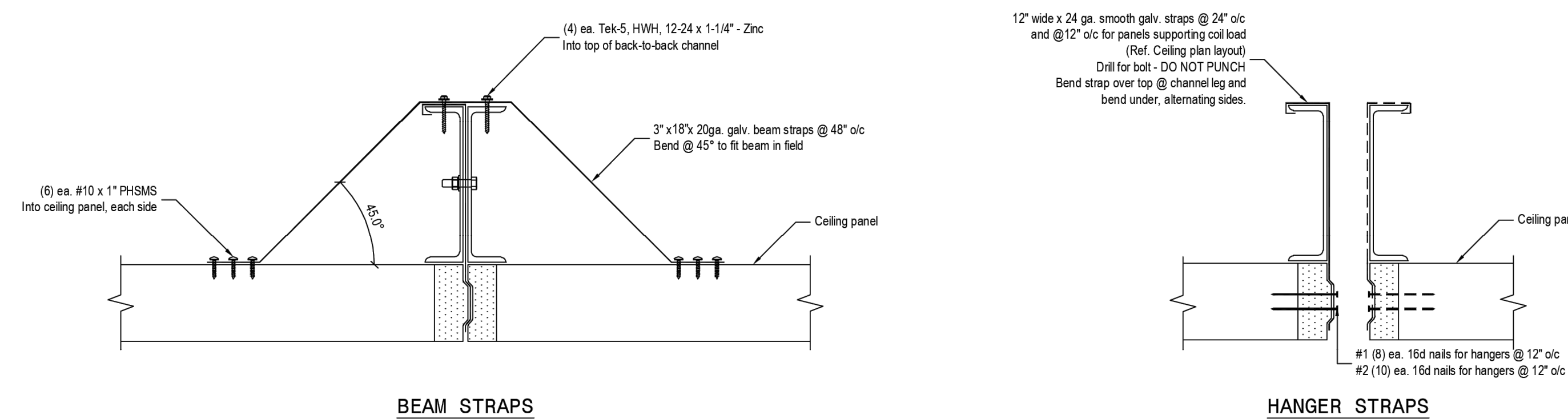
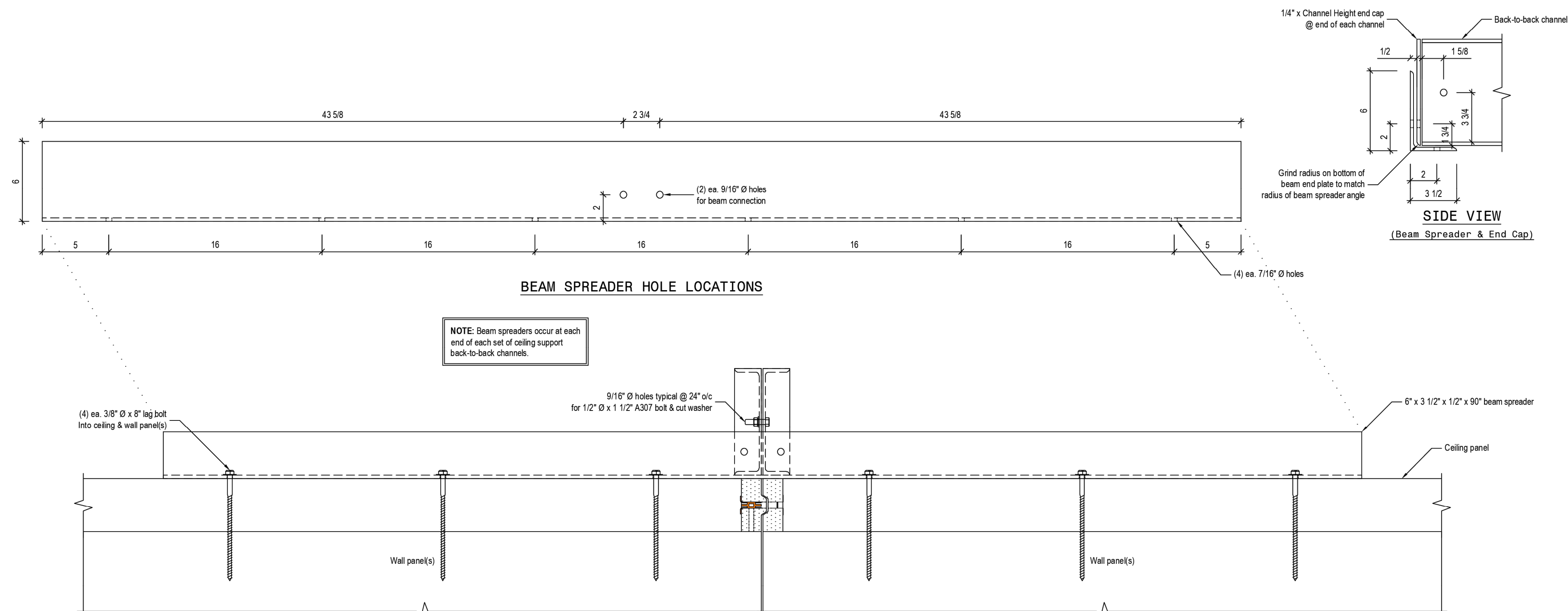
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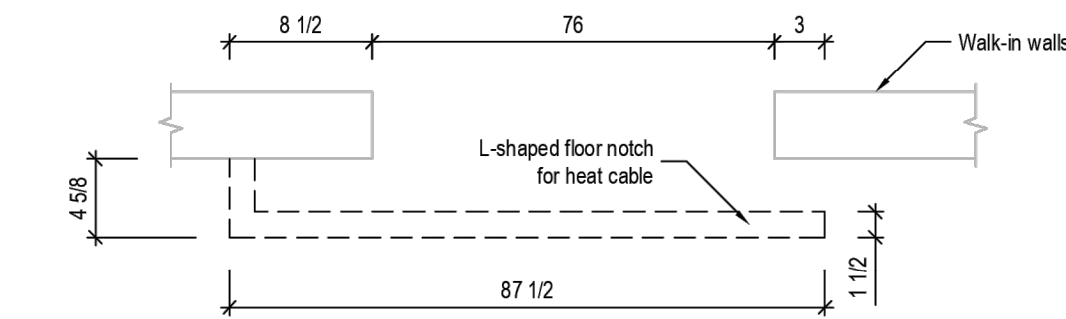
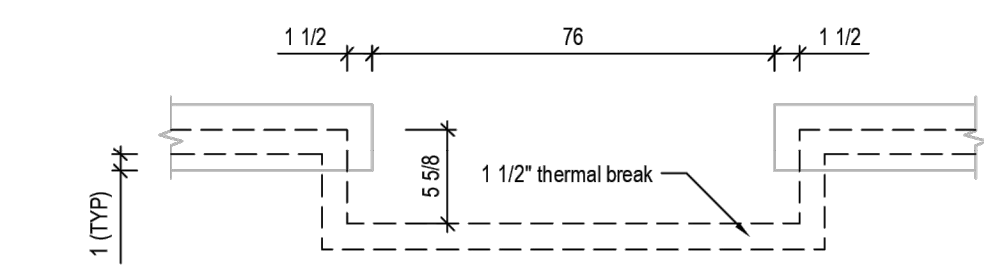
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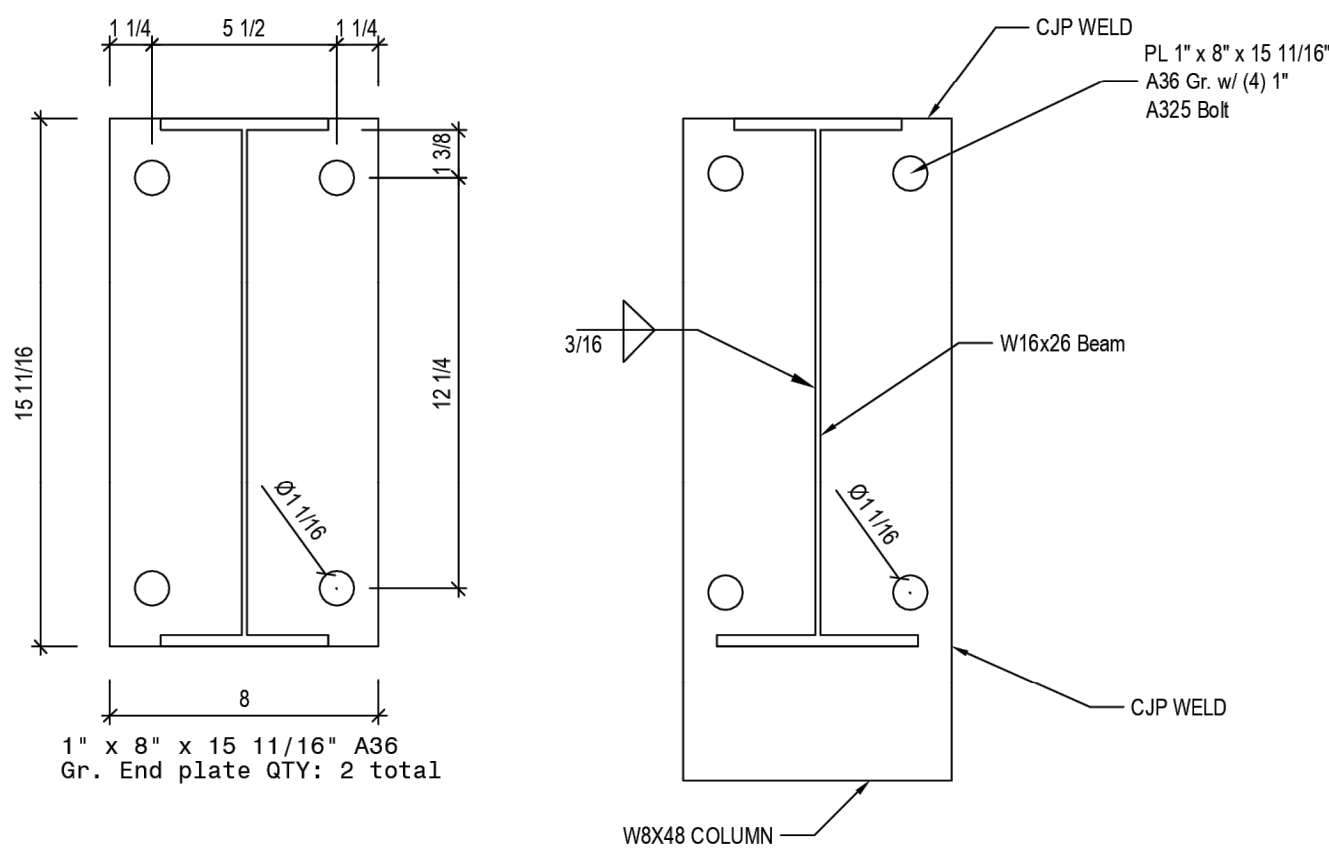
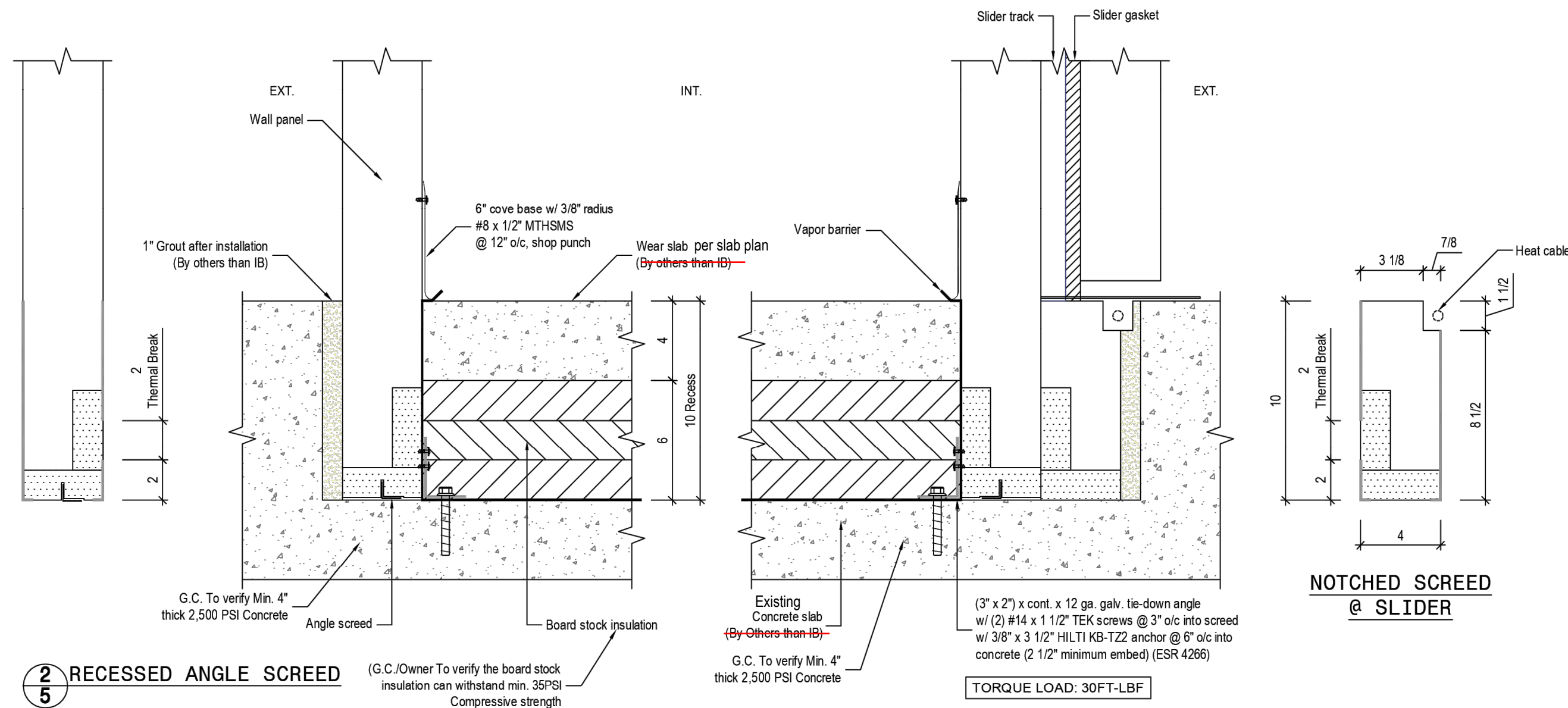
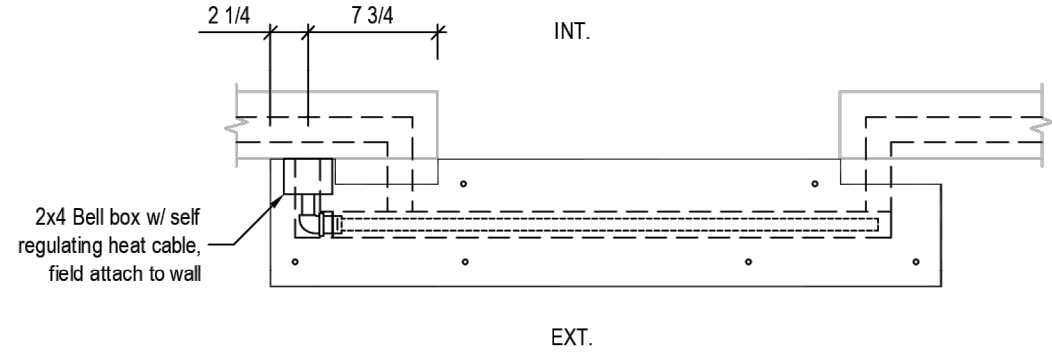
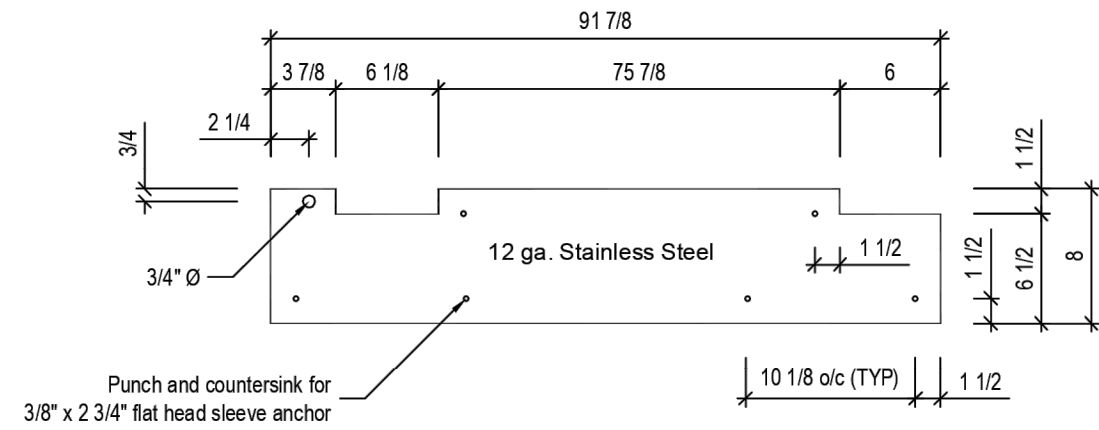
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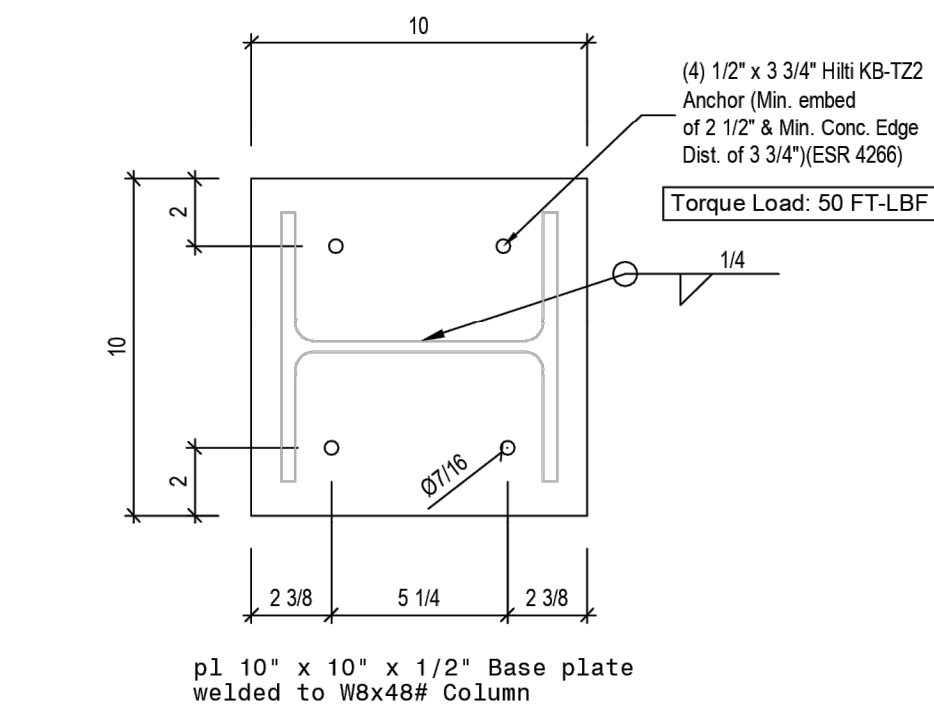
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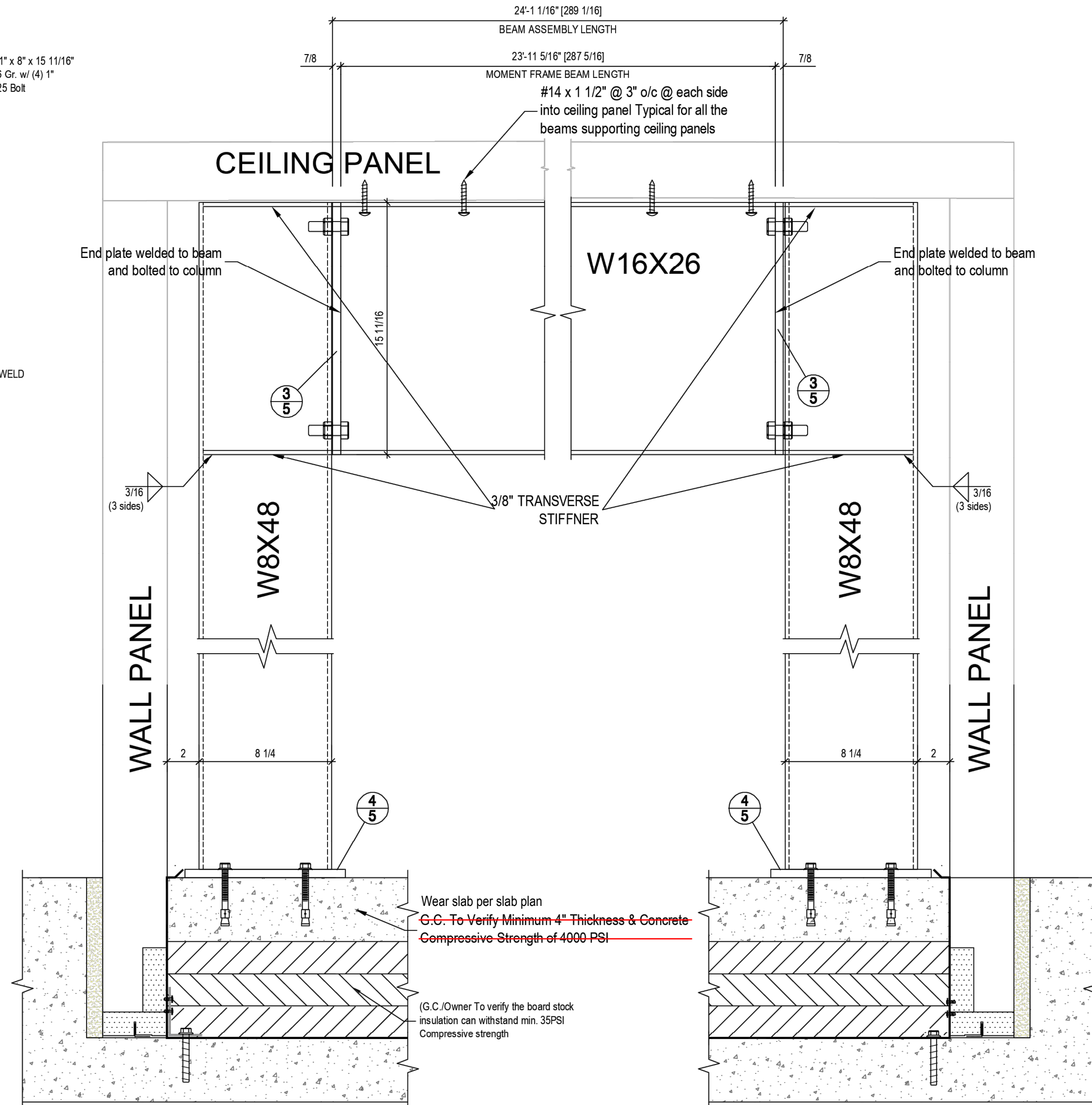
1 FLAT THRESHOLD
5 Heated Horizontal Slider



3 MOMENT FRAME END PLATE DETAIL



4 MOMENT FRAME BASE PLATE DETAIL



5 CEILING PANEL TO STEEL BEAM CONNECTION DETAIL

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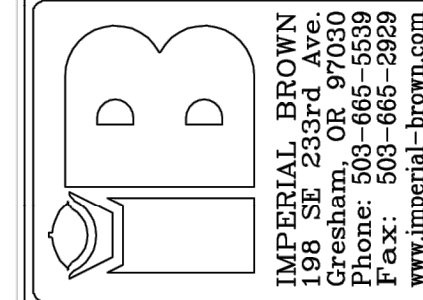
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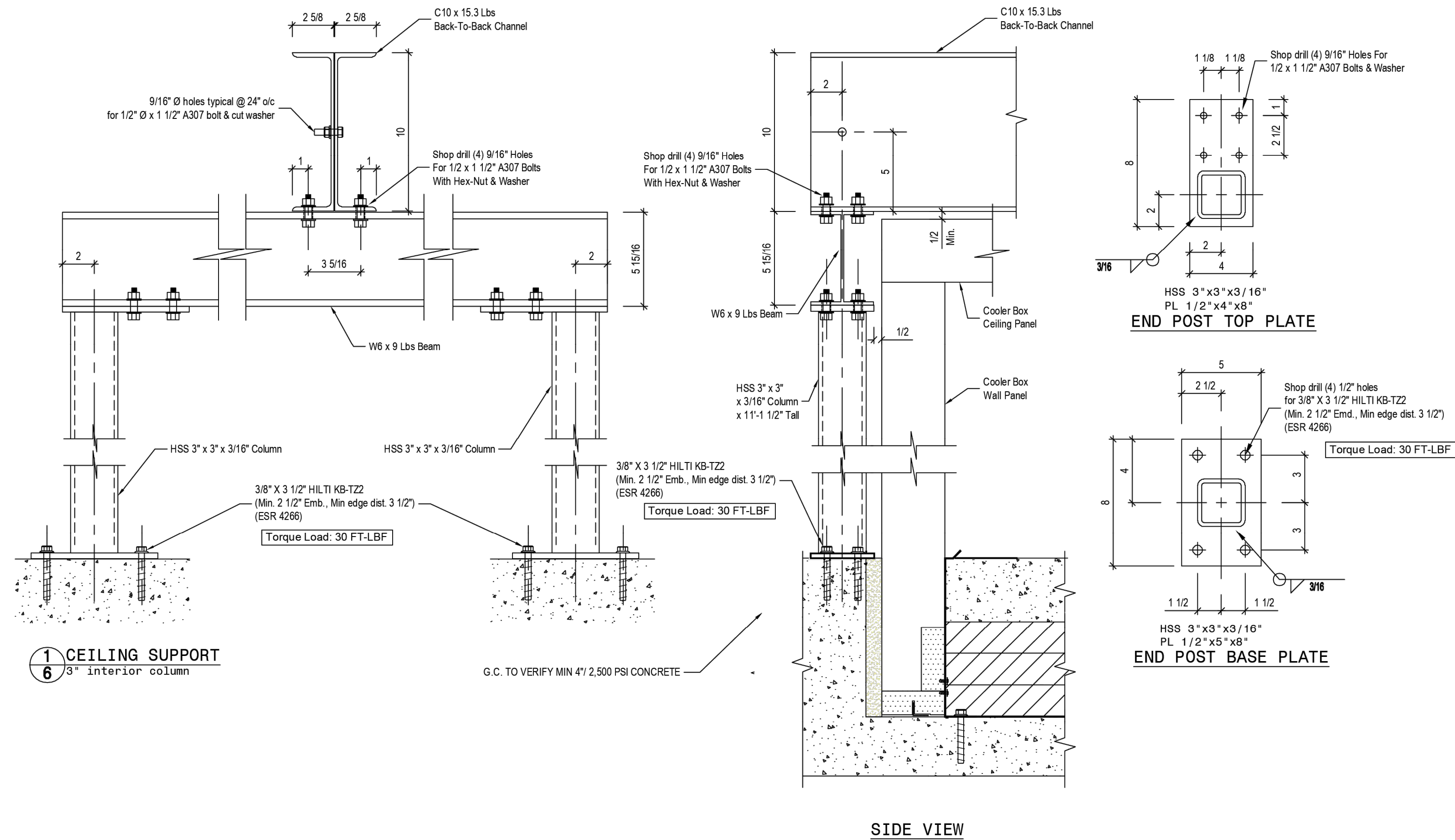
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LICENSED PROFESSIONAL ENGINEER

BIKASH SIGDEL

25573

EXP. 12/31/2025

STRUCTURAL

STATE OF CALIFORNIA

04/17/2025

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Project #:

25-25952

DO NOT SCALE THIS DRAWING

SCALE: 3/16" = 1'-0"

DATE DRAWN: 1/9/2025

DATE PRINTED: 4/16/2025

BY: Kyle Lewis

CHK'D BY:

DRW#: 25-IB-14381-01

BOX: 1 OF 1

SHEET: 6 OF 6

FOOD SERVICE DESIGN GROUP

SAN DIEGO, CA

NATIONAL CITY SCHOOL DISTRICT WAREHOUSE

NATIONAL CITY, CA

25-IB-14381-01

25-IB-14381.0001-05

IMPERIAL BROWN

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FOOD SERVICE WALK-IN FREEZER DRAWING

CENTRAL WAREHOUSE

FREEZER REPLACEMENT

FREEZER REPLACEMENT

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SUBMITTALS / REVISIONS

#	ISSUE	DATE
1	DSA SUBMITTAL V1	03/19/2025
2	DSA SUBMITTAL V2	04/30/2025

BID SET 5/1/2025

NOT FOR CONSTRUCTION

PROJECT STILL IN REVIEW

PROJECT NO. 2239-E-02

SHEET NO.

K-3.5

FOOD SERVICE DESIGN GROUP

FSDG

INNOVATIVE FOOD SERVICE DESIGN

CONSULTANT

STAMP

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PREPARED FOR THE

BOARD OF EDUCATION

NATIONAL SCHOOL DISTRICT

NATIONAL CITY, CALIFORNIA

PREPARED BY

SGPA ARCHITECTURE

AND PLANNING

- 1 STRUCTURAL DESIGN CRITERIA**
1. THE DESIGN AND CONSTRUCTION OF THIS PROJECT IS GOVERNED BY THE CALIFORNIA BUILDING CODE 2022 EDITION, AS MODIFIED BY THE STATE AND LOCAL JURISDICTION REQUIREMENTS, AND IS HEREAFTER REFERRED TO AS THE "GOVERNING CODE". WHERE A STATE SPECIFIC CODE IS THE GOVERNING CODE, ALL REFERENCES TO THE IBC ARE SUPERSEDED BY THE APPLICABLE STATE CODE CHAPTERS/SECTIONS.
- a. ALL DESIGN AND CONSTRUCTION CODES AND REFERENCED STANDARDS REFER TO THE EDITIONS REFERENCED BY THE GOVERNING BUILDING CODE AT THE TIME OF APPROVAL. REFER TO CHAPTER 35 OF THE GOVERNING CODE FOR THE REFERENCED STANDARDS.
- b. RISK CATEGORY: IV
- A. ROOF DESIGN DATA
- a. ROOF DEAD LOAD: 5 PSF
- b. ROOF LIVE LOAD: 10 PSF
- B. FLOOR DESIGN DATA
- a. FLOOR LIVE LOAD: 250 PSF
- C. EARTHQUAKE DESIGN DATA
- a. MAPPED SPECTRAL RESPONSE ACC. FOR SHORT PERIOD, (S_s): 1.137 G
- b. MAPPED SPECTRAL RESPONSE ACC. FOR 1-SEC PERIOD, (S₁): 0.385 G
- c. DESIGN SPECTRAL RESPONSE ACC. FOR SHORT PERIOD, (S_s): 0.909 G
- d. DESIGN SPECTRAL RESPONSE ACC. FOR 1-SEC PERIOD, (S₁): 0.492 G
- e. SITE CLASS: D-DEFAULT
- f. SEISMIC DESIGN CATEGORY: D
- g. SEISMIC IMPORTANCE FACTOR, (I_s): 1.5
- D. SOILS DESIGN DATA
- a. ALLOWABLE SOIL BEARING PRESSURE: 1500 PSF (ASSUMED)
- 2 GENERAL STRUCTURAL NOTES**
- A. GENERAL REQUIREMENTS
1. THE TERM CONTRACTOR (C.C.) AS USED IN THESE DOCUMENTS REFERS TO THE CONTRACTOR / CONSTRUCTION MANAGER IN RESPONSIBLE CHARGE OF THE PROJECT IN TERMS OF COORDINATION, SCHEDULING, SUBCONTRACTOR COORDINATION, ETC. THE TERM IS REFERRING THE ENTITY THAT COORDINATES THE WORK OF OTHER TRADES.
2. ALL REFERENCED STANDARDS, SUCH AS CODES, SPECIFICATIONS, AND OTHER PUBLICATIONS NOTED HEREIN, ARE INTENDED TO REFER TO THE EDITION OF SAID STANDARD AS REFERENCED BY THE GOVERNING CODE OR THE LATEST EDITION PUBLISHED AS OF THE DATE ON THE CONSTRUCTION DOCUMENTS.
3. THE CONSTRUCTION DOCUMENTS ARE INTENDED TO SHOW THE GENERAL CHARACTER AND EXTENT OF THE PROJECT ARE NOT INTENDED TO SHOW ALL DETAILS OF WORK. DETAILS, SECTIONS AND NOTES SHOWN ON DRAWINGS ARE INTENDED TO BE TYPICAL AND SHALL APPLY TO SIMILAR CONDITIONS ELSEWHERE. U.N.O. IF LOCATIONS ARE FOUND WHERE NO TYPICAL DETAIL, TYPICAL SCHEDULE OR SPECIFIC DETAIL APPLIES, NOTIFY E.O.R.
4. DIMENSIONS ARE NOT TO BE DERIVED BY SCALING THE CONSTRUCTION DOCUMENTS FOR LOCATIONS, QUANTITY TAKEOFFS, MATERIAL SIZES, ETC. IF THERE IS A QUESTION ABOUT DIMENSIONS, CONTACT THE ARCHITECT OR E.O.R. FOR CLARIFICATION.
5. WHERE CONFLICTS EXIST BETWEEN CONSTRUCTION DOCUMENTS, THE STRICTEST REQUIREMENTS AS INDICATED BY THE E.O.R. SHALL GOVERN. THE CONTRACTOR SHALL COORDINATE ARCHITECTURAL, MECHANICAL, ELECTRICAL, CIVIL, PLUMBING AND DEFERRED SUBMITTAL DRAWINGS TO HAVE A COMPLETE SCOPE OF WORK INVOLVED IN THIS PROJECT. REFER TO PROJECT SPECIFICATIONS ISSUED AS PART OF THE CONSTRUCTION DOCUMENTS FOR INFORMATION SUPPLEMENTAL TO THESE DRAWINGS.
6. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CONDITIONS AT THE SITE. CONFLICTS BETWEEN THE CONSTRUCTION DOCUMENTS AND ACTUAL SITE CONDITIONS SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT AND E.O.R. PRIOR TO PROCEEDING WITH CONSTRUCTION.
7. THE CONTRACTOR IS RESPONSIBLE FOR ANY DEVIATIONS FROM THE CONSTRUCTION DOCUMENTS, UNLESS SUCH CHANGES ARE AUTHORIZED IN WRITING BY THE E.O.R.
8. THE CONTRACTOR SHALL PERFORM ALL CONSTRUCTION FOR THE PROJECT IN A MANNER AND SEQUENCE THAT ARE BASED ON ACCEPTED INDUSTRY STANDARDS THAT RECOGNIZE THE INTERACTION OF THE COMPONENTS THAT COMPRISE THE STRUCTURE WITHOUT CAUSING DISTRESS, UNANTICIPATED MOVEMENTS OR IRREGULAR LOAD PATHS AS A RESULT OF THE CONSTRUCTION MEANS AND METHODS EMPLOYED. THE CONTRACTOR IS RESPONSIBLE FOR THE MEANS OF CONSTRUCTION AND THE STRENGTH AND STABILITY OF THE STRUCTURE DURING CONSTRUCTION. THE CONTRACTOR SHALL PROVIDE SAFE AND ADEQUATE SHORING, BRACING AND TEMPORARY STRUCTURAL STABILITY THROUGHOUT CONSTRUCTION. E.O.R. IS RESPONSIBLE ONLY FOR THE PRIMARY STRUCTURE IN ITS COMPLETED FORM.
9. FALL PROTECTION SUPPORT FROM PERIMETER OF THE STRUCTURE SHALL BE PROVIDED IN ACCORDANCE WITH OSHA REQUIREMENTS AS REQUIRED.
10. THE CONTRACTOR IS RESPONSIBLE TO ENFORCE ALL APPLICABLE SAFETY CODES AND REGULATIONS DURING ALL PHASES OF CONSTRUCTION. NO STRUCTURAL MEMBER SHALL BE CUT OR NOTCHED OR OTHERWISE REDUCED IN STRENGTH UNLESS APPROVED BY THE E.O.R.
11. CONSTRUCTION LOADS AND MATERIALS SHALL BE SPREAD OUT WHEN PLACED ON FRAMED FLOORS OR ROOFS. LOADS ON THE STRUCTURE DURING CONSTRUCTION SHALL NOT EXCEED THE DESIGN LOADS AS NOTED IN THE DESIGN CRITERIA.
12. ALTERNATE PRODUCTS OF SIMILAR STRENGTH, NATURE AND FORM FOR SPECIFIED ITEMS MAY BE SUBMITTED WITH ADEQUATE TECHNICAL DOCUMENTATION TO THE E.O.R. FOR REVIEW. ALTERNATE MATERIALS THAT ARE SUBMITTED WITHOUT ADEQUATE TECHNICAL DOCUMENTATION OR THAT SIGNIFICANTLY DEVIATE FROM THE DESIGN INTENT OF MATERIALS SPECIFIED MAY BE RETURNED WITHOUT REVIEW. ALTERNATES THAT REQUIRE SUBSTANTIAL EFFORT TO REVIEW WILL NOT BE REVIEWED UNLESS AUTHORIZED BY THE OWNER, ANCHORAGE AND SUPPORT OF MECHANICAL AND ELECTRICAL EQUIPMENT, DUCTWORK AND PIPING IS TO BE DESIGN BY OTHERS. ALL SUSPENDED EQUIPMENT IS TO BE SECURED WITH LATERAL BRACING BY OTHERS.
13. SITE VISITS BY REPRESENTATIVES OF THE E.O.R. DO NOT INCLUDE INSPECTION OF CONSTRUCTION MEANS AND METHODS. SITE VISIT DURING CONSTRUCTION ARE NOT CONTINUOUS AND DETAILED INSPECTION SERVICES, (WHICH ARE TO BE PERFORMED BY OTHERS). OBSERVATIONS DO NOT GUARANTEE CONTRACTORS PERFORMANCE AND ARE NOT TO BE CONSTRUED AS SUPERVISION OR VERIFICATION OF CONSTRUCTION.
- B. SHOP DRAWING AND DEFERRED SUBMITTAL REQUIREMENTS
- A. ALL SHOP DRAWINGS AND DEFERRED SUBMITTAL DOCUMENTS SHALL BE SUBMITTED TO THE E.O.R. FOR REVIEW AND APPROVAL. SUBMITTED DOCUMENTS SHALL BEAR THE CONTRACTORS REVIEW STAMP WITH THE CHECKERS INITIALS BEFORE BEING SUBMITTED TO E.O.R. FOR APPROVAL.
- B. ALL DEFERRED SUBMITTALS SHALL BE STAMPED AND SIGNED BY AN ENGINEER REGISTERED IN THE APPROPRIATE JURISDICTION OF THE PROJECT AND IT SHALL BE THE SOLE RESPONSIBILITY OF THE SPECIALTY ENGINEER INCLUDING, BUT NOT LIMITED TO, DESIGN, COORDINATION, DIMENSIONS AND INTENDED PURPOSE.
- C. REVIEW OF SUBMITTED DOCUMENTS BY THE E.O.R. SHALL BE FOR GENERAL CONFORMANCE TO THE DESIGN SET FORTH ON THE CONSTRUCTION DOCUMENTS AND SPECIFICATIONS.
- D. DEFERRED SUBMITTAL ITEMS SHALL NOT BE FABRICATED OR INSTALLED UNTIL THE DESIGN AND SUBMITTAL DOCUMENTS HAVE BEEN REVIEWED AND APPROVED BY THE E.O.R. AND BUILDING OFFICIAL.
- E. WHERE DIMENSIONS AND ELEVATIONS OF EXISTING CONSTRUCTION COULD AFFECT THE NEW CONSTRUCTION, IT IS THE CONTRACTORS RESPONSIBILITY TO MAKE FIELD MEASUREMENTS IN TIME FOR THEIR INCORPORATION INTO THE SHOP DRAWINGS.
- F. ALL DEFERRED SUBMITTAL DOCUMENTS SHALL INCLUDE A QUALITY ASSURANCE PROGRAM FOR SPECIAL INSPECTIONS WHERE REQUIRED BY THE GOVERNING CODE.
- C. STRUCTURAL OBSERVATION REQUIREMENTS
- A. WHERE REQUIRED BY THE PROVISIONS OF THE GOVERNING CODE, THE OWNER OR OWNER'S AUTHORIZED AGENT SHALL EMPLOY A REGISTERED DESIGN PROFESSIONAL TO PERFORM STRUCTURAL OBSERVATIONS. THE STRUCTURAL OBSERVER SHALL VISUALLY OBSERVE REPRESENTATIVE LOCATIONS OF STRUCTURAL SYSTEMS, DETAILS AND LOAD PATHS FOR GENERAL CONFORMANCE TO THE APPROVED CONSTRUCTION DOCUMENTS. STRUCTURAL OBSERVATION DOES NOT INCLUDE OR WAIVE THE RESPONSIBILITY OF THE INSPECTIONS OR SPECIAL INSPECTIONS LISTED IN THE GOVERNING CODE.
- B. FREQUENCY AND EXTENT OF THE STRUCTURAL OBSERVATIONS SHALL BE SET AND SUBMITTED TO THE BUILDING OFFICIAL.
- C. STRUCTURAL OBSERVATIONS SHALL BE PROVIDED FOR THOSE STRUCTURES WHERE ONE OR MORE OF THE FOLLOWING CONDITIONS EXIST:
- a. THE STRUCTURE IS CLASSIFIED AS RISK CATEGORY (III) OR (IV).
- b. THE STRUCTURE IS A HIGH-RISE BUILDING.
- c. THE STRUCTURE IS ASSIGNED TO SEISMIC DESIGN CATEGORY (E) AND IS GREATER THAN TWO STORIES ABOVE THE GRADE PLANE.
- d. SUCH OBSERVATION IS REQUIRED BY THE E.O.R. RESPONSIBLE FOR THE STRUCTURAL DESIGN.
- e. SUCH OBSERVATION IS SPECIFICALLY REQUIRED BY THE BUILDING OFFICIAL.
- D. EXISTING CONDITIONS
- a. CONTRACTOR SHALL VERIFY ANY AND ALL APPLICABLE EXISTING CONDITIONS, CONSTRUCTION, DIMENSIONS AND ELEVATIONS AND IMMEDIATELY NOTIFY ARCH. AND EOR OF ANY DISCREPANCIES BEFORE PROCEEDING WITH ANY CONSTRUCTION.

- 3 FOUNDATIONS AND SLABS**
- A. SOIL PREPARATION:
1. IT IS RECOMMENDED THAT ALL GRADING, EXCAVATION, PLACEMENT AND INSTALLATION OF STRUCTURAL FILL AND FOUNDATIONS BE PERFORMED UNDER THE INSPECTION AND TESTING OF A QUALIFIED GEOTECHNICAL CONSULTANT DURING THE CRITICAL STAGES OF CONSTRUCTION.
2. IF A GEOTECHNICAL REPORT HAS BEEN CONDUCTED FOR THE SITE, THE CONTRACTOR SHALL FULLY REVIEW THE REPORT FOR ADDITIONAL REQUIREMENTS AND INFORMATION PRIOR TO CONSTRUCTION.
3. THE CONTRACTOR SHALL INVESTIGATE THE SITE DURING CLEARING AND EARTHWORK OPERATION FOR FILLED EXCAVATIONS OR BURIED STRUCTURES AND NOTIFY THE E.O.R. IF ANY STRUCTURES ARE FOUND PRIOR TO CONSTRUCTION.
4. DURING EXCAVATION, LOCATE AND PROTECT UNDERGROUND OR CONCEALED UTILITIES WHERE WORK IS BEING PERFORMED. WHEN OVERSIZE MATERIALS, CONCRETE, OR ASPHALT ARE ENCOUNTERED, THESE MATERIALS SHOULD BE HAULED OFF SITE AND DISPOSED OF IN ACCORDANCE WITH APPLICABLE CODES AND REGULATIONS.
5. ALL SHALLOW SPREAD FOUNDATIONS SYSTEMS SHALL BEAR ON COMPETENT NATIVE SOILS OR STRUCTURAL FILL PLACED PER THE GEOTECHNICAL REPORT RECOMMENDATIONS. IF THE SITE HAS A LOWER BEARING CAPACITY THAN LISTED, THEN THE FOUNDATION PLAN WILL NEED TO BE REDESIGNED.
6. MINIMUM FROST DEPTH LISTED IS FROM LOWEST ADJACENT FINISH GRADE TO BOTTOM OF THE FOOTING. THE MINIMUM FROST DEPTH SHALL BE MAINTAINED FOR ALL EXTERIOR FOOTINGS. THE CONTRACTOR SHALL COORDINATE AND VERIFY WITH ENGINEER OF RECORD PRIOR TO THE PLACEMENT OF FOUNDATIONS.
7. ALL STRUCTURAL FILL BELOW FOOTINGS SHALL EXTEND OUT PAST THE EDGE OF THE FOOTING AND SLOPE AT 2 TO 1 (2 VERTICAL TO 1 HORIZONTAL) UNTIL REACHING COMPETENT SOILS.
8. ALL WATER SHALL BE REMOVED FROM FOUNDATION EXCAVATIONS PRIOR TO THE PLACEMENT OF CONCRETE. THE CONTRACTOR IS RESPONSIBLE FOR THE GROUND WATER CONTROL SYSTEM DESIGN.
9. ALL STRUCTURAL FILL MATERIAL SHOULD BE PLACED IN UNIFORM 12" THICK LOOSE LIFTS AND COMPACTED TO 95% OF ITS MAXIMUM DRY DENSITY AS DETERMINED BY A STANDARD PROCTOR AT OPTIMUM MOISTURE CONTENT, IN ACCORDANCE WITH ASTM D1557. IN RESTRICTED AREAS WHERE ONLY HAND-OPERATED EQUIPMENT IS PERMITTED, THE MAXIMUM LOOSE LIFT SHALL BE 8".
- B. SLAB REQUIREMENTS:
1. ALL CONCRETE SLABS SHALL HAVE A MINIMUM 4" THICKNESS AND CONTROL JOINTS AT 10'-0" O.C. MAX SPACING.
2. WHERE RECOMMENDED INTERIOR CONCRETE SLABS SHALL HAVE A PLASTIC VAPOR RETARDER PER ASTM E1745 UNDER A MINIMUM OF 6" OF COMPACTED CLEAN GRANULAR STRUCTURAL FILL.
3. SEAL ALL VAPOR RETARDER COMPLETELY AROUND ALL PIPES AND CONDUITS. INSPECT VAPOR RETARDER THOROUGHLY AND REPAIR ALL PUNCTURES AND TEARS PRIOR TO PLACING CONCRETE. ALL ALPS SHALL BE 18" MINIMUM AND SEALED CONTINUOUSLY WITH PRESSURE SENSITIVE TAPE.
4. ALL SLAB SAWN CONTROL AND CONSTRUCTION JOINTS SHALL BE MADE AS SOON AS POSSIBLE WITHOUT DAMAGE TO THE SURFACE. FILLING OF SAWN JOINTS WHERE REQUIRED SHALL BE DELAYED AS LONG AS POSSIBLE TO ALLOW MAXIMUM SHRINKAGE TO OCCUR IN SLABS.
5. SEE ARCHITECTURAL PLANS FOR LOCATIONS OF SLAB SLOPES, DEPRESSIONS, CURBS, DRAINS, NON-STRUCTURAL PARTITIONS AND OTHER EMBEDDED ITEMS NOT SHOWN ON THE FOUNDATION PLAN.
- C. RETAINING WALL REQUIREMENTS:
1. ALL FILL MATERIALS BEHIND RETAINING WALLS SHALL BE FULLY DRAINED BY MEANS OF SUB-DRAIN, WEEP HOLES, OR FREE DRAINING AGGREGATE. BACKFILL FINISHED GRADE SHALL BE SLOPED AWAY FROM THE BACKFACE OF RETAINING WALL. THE DESIGN OF RETAINING WALLS AND SUBTERRANEAN BUILDING WALLS ARE BASED ON DRAINED SOILS.
2. DO NOT PLACE BACKFILL BEHIND WALLS BEFORE THEY HAVE ATTAINED THEIR DESIGN STRENGTH.
3. ANY SUPERIMPOSED LOADS, OTHER THAN RETAINED EARTH, SHALL BE CONSIDERED AS SURCHARGES AND ACCOUNTED FOR IN DESIGN. LOADS APPLIED WITHIN A HORIZONTAL DISTANCE EQUAL TO WALL STEM HEIGHT AS MEASURED FROM BACK FACE OF THE WALL SHALL BE CONSIDERED AS SURCHARGE. TEMPORARY CONSTRUCTION LOADS SHALL NOT BE APPLIED WITHIN A HORIZONTAL DISTANCE EQUAL TO STEM WALL HEIGHT FROM THE BACK FACE OF THE WALL. NOTIFY EOR IF TEMPORARY CONSTRUCTION LOADS WILL BE APPLIED WITHIN THE SPECIFIED HORIZONTAL ZONE PRIOR TO CONSTRUCTION.
4. THE CONTRACTOR IS RESPONSIBLE TO ADEQUATELY PROTECT ALL EXCAVATION SLOPES, WHERE NECESSARY, SHEET PILES AND SHORING OF EXCAVATION SHALL BE PROVIDED WITH ALL REQUIRED TIEBACKS AND BRACING.
5. APPROPRIATE FOUNDATION WATERPROOFING METHODS SHALL BE PROVIDED ON BACKSIDE OF SUB-SURFACE RETAINING WALLS FROM BASE OF WALL TO FINISHED GRADE.

ABBREVIATIONS

(E) EXISTING	HVAC HEATING VENTILATING AND AIR
(F) FUTURE	CONDITIONING
(N) NEW	I.D. INSIDE DIAMETER
(R) REPAIR	INCH INCH
Ø CENTERLINE	INT. INTERIOR
Ø DIAMETER OR ROUND	JT. JOINT
⊥ PERPENDICULAR	K.O. KNOCKOUT
□ SQUARE	L.F. LINEAL FEET OR FOOT
# NUMBER OR POUND	L.L.V. LONG LEG VERTICAL
@ AT	L.L.H. LONG LEG HORIZONTAL
A.B. ANCHOR BOLT	LSL LAMINATED STRAND LUMBER
A.F.F. ABOVE FINISH FLOOR	LAM. LAMINATE
ABV. ABOVE	LVL LAMINATED VENEER LUMBER
ADJ. ADJUSTABLE	LBS. POUNDS
AGG. AGGREGATE	M.B. MACHINE BOLT
ALT. ALTERNATIVE	M.H. MANHOLE
ALUM. ALUMINUM	M.O. MASONRY OPENING
APPROX. APPROXIMATE	MAX. MAXIMUM
ARCH. ARCHITECTURAL	MECH. MECHANICAL
B.O. BOTTOM OF	MET. METAL
B.O.C. BOTTOM OF CONCRETE	MFR. MANUFACTURER
B/T BETWEEN	MIN. MINIMUM
B.N. BOUNDARY NAIL(ING)	MISC. MISCELLANEOUS
B.U. BUILT-UP	MTR. MATERIAL
BD. BOARD	N. NORTH
BLOG. BUILDING	N.I.C. NOT IN CONTRACT
BLK. BLOCK	N.S. NEAR SIDE
BM. BEAM	N.T.S. NOT TO SCALE
BOT. BOTTOM	NO. NUMBER
C.C. CENTER TO CENTER	NOM. NOMINAL
C.I. CAST IRON	N.S. NEAR SIDE
C.P. CAST IN PLACE	O/H OVERHEAD
CMU CONCRETE MASONRY UNIT	O. OVER
C.O. CONCRETE OPENING	O.A. OVER ALL
CLG. CEILING	O.C. ON CENTER
CL. CLEAR	O. OUTSIDE DIAMETER
CNTRSK. COUNTERSUNK	O.H. OPPOSITE HAND
COL. COLUMN	OPENING OPENING
CONC. CONCRETE	OP. OPPOSITE
CONT. CONTINUOUS	OZ. OUNCE
CORR. CORRIDOR	P.A.F. POWDER ACTUATED FASTENER
CW/ COORDINATE WITH	P. PARTICLE
D. DEEP	P/L. PROPERTY LINE
D.B.A. DEFORMED BAR ANCHOR	P.L. PLATE
D.F. DOLGUS FIR	P.W.D. PLYWOOD
DET. DETAIL	PRE-ENG. PRE-ENGINEERED METAL BUILDING
DIA. DIAMETER	PT. POINT
DIAG. DIAGONAL	P.S.L. PARALLEL STRAND LUMBER
DIM. DIMENSION	R. RADIUS OR RISER
DN. DOWN	R.O. ROUGH OPENING
DWG. DRAWING	REF. REFERENCE (CW/)
E.B. EXPANSION BOLT	REIN. REINFORCE(D)
E.B.E. ECCENTRICALLY BRACED FRAME	REQD. REQUIRED
E.C. EXPANSION JOINT	RM. ROOM
E.N. EDGE NAIL(ING)	R.O.P. ROOF TOP UNIT
E.L. EACH	S.C. SOLID CORE
EL. ELEVATION	S.F. SQUARE FEET OR FOOT
ELEC. ELECTRICAL	S.S. STAINLESS STEEL
ELEV. ELEVATOR	SCHED. SCHEDULE
EQ. EQUIPMENT	SECT. SECTION
EQUIP. EQUIPMENT	SHEET SHEET
E.S. EDGE SCREW(ING)	SIM. SIMILAR OR SIMILAR TO
EXP. EXTERIOR	SPEC. SPECIFICATIONS
EXT. EXTERIOR	SQ. SQUARE
F.B. FLAT BAR	STD. STANDARD
F.D. FLUOR DRAIN	STRUC. STRUCTURAL
F.O. FACE OF	SUSP. SUSPENDED
F.O.C. FACE OF CURB/CONCRETE	SYM. SYMMETRICAL
F.O.F. FACE OF FINISH	T&G. TONGUE & GROOVE
F.O.M. FACE OF MASONRY	T.O.B. TOP OF BEAM
F.O.S. FACE OF STUDS	T.O.C. TOP OF CURB/CONCRETE
F.O.T. FACE OF TREAD	T.O.D. TOP OF DECK
FIN. FINISH	T.O.M. TOP OF MASONRY
FIN. FOUNDATION	T.O.S. TOP OF SLAB
FL. FLOOR(ING)	T.O.W. TOP OF WALL
FLASH. FLASHING	THK. THICKNESS
F.S. FAR SIDE	TJ. TRUSS JOIST I-JOIST
FT. FOOT OR FEET	TYP. TYPICAL
FTG. FOOTING	U.B.C. UNIFORM BUILDING CODE
FTW. FIRE TREATED WOOD	U.O.N. UNLESS OTHERWISE NOTED
FUR. FURRING	U.N.O. UNLESS NOTED OTHERWISE
FUR. GAUGE OR GAGE	VERT. VERTICAL
GALV. GALVANIZED	W/ WITH
GEN. GENERAL STRUCTURAL NOTES	W/O WITHOUT
GYP. GYPSUM	WO. WOOD
H. HIGH	W. WIDE
H.C.A. HEADED CONCRETE ANCHOR	W.P. WORK POINT
H.S.S. HOLLOW STRUCTURAL STEEL	W.W.F. WELDED WIRE FABRIC
H.P. HIGH POINT	
HORIZ. HORIZONTAL	
HR. HOUR	
HT. HEIGHT	

SHEET LIST

SHEET NUMBER	SHEET NAME
S0.0	GENERAL STRUCTURAL NOTES
S0.1	GENERAL STRUCTURAL NOTES
S0.2	GENERAL STRUCTURAL NOTES
S1.0	FLOOR PLAN
S2.0	STRUCTURAL DETAILS



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04/28/2025

NATIONAL CITY SCHOOL DIST. WAREHOUSE

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PREPARED FOR THE

FOOD SERVICE WALK-IN FREEZER DRAWING -
SLAB DETAILS

BOARD OF EDUCATION
NATIONAL SCHOOL DISTRICT
NATIONAL CITY, CALIFORNIA

CENTRAL WAREHOUSE
FREEZER REPLACEMENT

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1400 N AVENUE
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SUBMITTALS / REVISIONS

#	ISSUE	DATE
1	DSA SUBMITTAL V1	03/19/2025
2	DSA SUBMITTAL V2	04/30/2025

**BID SET 5/1/2025
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PROJECT STILL IN
REVIEW**

PROJECT NO. 2239-E-02

SHEET NO.

K-3.6

DSA

CONSULTANT

STAMP

2 STRUCTURAL STEEL

- A. GENERAL REQUIREMENTS
- ALL STEEL CONSTRUCTION SHALL CONFORM TO THE REQUIREMENTS LISTED IN THE IN THE LATEST EDITION OF "AMERICAN INSTITUTE OF STEEL CONSTRUCTION" (AISC) AISC-341 AND AISC-360.
 - ALL STEEL FABRICATION SHALL BE PERFORMED BY A LICENSED FABRICATOR.
 - ALL STRUCTURAL STEEL MATERIALS SHALL MEET THE FOLLOWING MINIMUM REQUIREMENTS:
 - (W) SHAPES AND (WT) SHAPES: = ASTM A992, FY = 50 KSI
 - (HP) SHAPES: = ASTM A572, FY = 50 KSI
 - (HSS) SHAPES – SQUARE/RECTANGLE: = ASTM A500 GRADE C, FY = 50 KSI
 - (HSS) SHAPES – ROUND: = ASTM A500 GRADE C, FY = 46 KSI
 - (S) AND (ST) SHAPES, (M) AND (MT) SHAPES = ASTM A36, FY = 36 KSI
 - (C) SHAPES AND (MC) SHAPES: = ASTM A36, FY = 36 KSI
 - (L) SHAPES AND (PL) SHAPES: = ASTM A36, FY = 36 KSI
 - (P) PIPE: = ASTM A53 (TYPE E OR S), GRADE B, FY = 35 KSI
 - HIGH STRENGTH BOLTS: = ASTM F3125, GRADE A325
 - ANCHOR RODS: = ASTM F1554, GRADE 36 TYPE 1
 - DEFORMED BAR ANCHORS (DBA): = ASTM A496
 - WELDED HEADED STUDS: = ASTM A108
 - MACHINE BOLTS: = ASTM A307, GRADE A
 - NUTS: = ASTM A563, GRADE C
 - WASHERS - FLAT OR BEVELED: = ASTM F436
 - ALL STEEL COLUMNS SHALL BE MILLED WITH EACH END TO FIT FLUSH WITH BASEPLATE, CAP OR END TO END.
 - PAINT ALL STRUCTURAL STEEL IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS. DO NOT PAINT STEEL SURFACES TO BE ENCASED IN CONCRETE, SURFACES TO RECEIVE FIREPROOFING, CONNECTIONS DESIGNED AS FRICTION TYPE, SURFACES TO BE WELDED, OR SURFACES RECEIVING WELDED STUDS OR DBA'S IN THE FIELD.
 - ALL SHOP AND FIELD CONNECTIONS NOT SPECIFICALLY DETAILED ON THE CONSTRUCTION DOCUMENTS SHALL BE BOLTED OR WELDED. PROVIDE A MINIMUM (2) 1/2" DIAMETER BOLTS PER CONNECTION AND/OR MINIMUM WELD SIZE OF 3/16" FILLET ALL AROUND, U.N.O.
 - ALL STRUCTURAL STEEL EXPOSED TO WEATHER SHALL BE PRIME COATED AND PAINTED OR HOT DIPPED GALVANIZED PER ASTM-A123. USE ASTM A325 BOLTS IN HOT DIPPED GALVANIZED WITH GALVANIZED HARDENED WASHERS AND HEAVY HEX NUTS FOR BOLTING OF GALVANIZED ITEMS.
 - ALL TUBE AND PIPE SECTIONS EXPOSED TO WEATHER SHALL HAVE OPEN ENDS CAPPED WITH A 1/2" PLATE.
 - OVER SIZED OR SLOTTED HOLES SHALL NOT BE USED FOR ANY CONNECTIONS UNLESS SPECIFICALLY INDICATED ON THE CONSTRUCTION DOCUMENTS.
- B. EXECUTION REQUIREMENTS
- ALL HOLES AND CUTS SHALL BE SHOWN ON THE SHOP DRAWINGS AND MADE IN THE SHOP. FIELD BURNING IN STRUCTURAL STEEL MEMBERS IS NOT PERMITTED WITHOUT COORDINATION WITH EOR. DO NOT USE GAS CUTTING TORCHES TO CORRECT FABRICATION ERRORS IN STRUCTURAL STEEL FRAMING.
 - ALL BOLTS, ANCHOR BOLTS, ETC, SHALL BE INSTALLED WITH THE APPROPRIATE STEEL WASHERS AND TIGHTENED NUTS FOR THE SPECIFIED BOLTS.
 - ALL BEARING ELEVATIONS AND SLOPES FOR BEAMS, GIRDERS AND COLUMN HEIGHTS SHALL BE COORDINATED AND VERIFIED BY THE CONTRACTOR.
 - THE CONTRACTOR TO INSTALL ALL BEAMS AND GIRDERS TRUE, PLUMB AND SECURELY AT EACH END.
 - THE CONTRACTOR IS RESPONSIBLE FOR NOTIFYING THE STEEL FABRICATOR AND E.O.R. IMMEDIATELY OF ANY STRUCTURAL STEEL MEMBER DAMAGE OBSERVED. EACH DAMAGED AREA MUST BE REPAIRED OR REPLACED BY THE STEEL FABRICATOR AND SUBMITTED TO E.O.R. BEFORE FINAL INSPECTION.
 - ALL BOLTS SHALL BE TIGHTENED WITH A PRE-TENSIONED FORCE TO "SNUG-TIGHT" CONDITION AS DEFINED BY AISC, U.N.O.
 - ALL SLIP CRITICAL BOLTS (SC) SHALL BE USED WHERE DESIGNATED ON THE CONSTRUCTION DOCUMENTS. TIGHTEN SLIP CRITICAL BOLTS USING ONE OF THE FOLLOWING: TWIST-OFF BOLTS, TENSION CONTROL CALIBRATED WRENCH OR DIRECT TENSION INDICATORS.
 - ALL BOLTS SHALL BE INSTALLED AS BEARING-TYPE CONNECTIONS WITH THREADS EXCLUDED FROM THE SHEAR PLANE U.N.O.
 - ALL CONTACT SURFACES OF BOLTS PARTS SHALL BE DESCALED AND FREE OF DIRT, OIL, BURRS, PITS AND OTHER DEFECTS WHICH WOULD PREVENT SOLID SEATING OF PARTS.
 - NATURAL CAMBER IN BEAMS MUST BE INSTALLED CROWN UP.
- C. WELDING REQUIREMENTS
- ALL WELDING SHALL BE IN ACCORDANCE WITH THE "STRUCTURAL WELDING CODE", OF THE AMERICAN WELDING SOCIETY (AWS) AND ALL SHOP AND FIELD WELDING SHALL BE DONE BY CERTIFIED WELDERS QUALIFIED IN ACCORDANCE WITH AWS STANDARDS.
 - ALL WELDS ON MEMBERS COMPRISING THE LATERAL-RESISTING SYSTEM (MOMENT AND BRACE FRAMES) SHALL CONFORM TO THE DETAILING, MATERIALS, WORKMANSHIP, TESTING, AND INSPECTION REQUIREMENTS PER AWS D1.8 AND EMPLOY WELD FILLER METALS CLASSIFIED FOR NOMINAL 70 KSI TENSILE STRENGTH, REFERRED TO AS E70 ELECTRODES, MEETING THE FOLLOWING MINIMUM MECHANICAL PROPERTY REQUIREMENTS:
 - CVN TOUGHNESS OF 20 FT-LB AT -20°F, USING AWS A5 CLASSIFICATION TEST METHOD.
 - CVN TOUGHNESS OF 40 FT-LB AT 70°F, USING TEST PROCEDURES PRESCRIBED IN AWS D1.8 – APPENDIX A.
 - YIELD STRENGTH: 58 KSI MINIMUM, USING BOTH THE AWS AS CLASSIFICATION TEST (FOR E70 CLASSIFICATION ELECTRODES) AND THE TEST PROCEDURES PRESCRIBED IN AWS D1.8 – APPENDIX A.
 - TENSILE STRENGTH: 70 KSI MINIMUM, USING BOTH THE AWS AS CLASSIFICATION TEST (FOR E70 CLASSIFICATION ELECTRODES) AND THE TEST PROCEDURES PRESCRIBED IN AWS D1.8 – APPENDIX A.
 - ELONGATION: 22% MINIMUM, USING BOTH THE AWS AS CLASSIFICATION TEST AND THE TEST PROCEDURES PRESCRIBED IN AWS D1.8 – APPENDIX A.
 - ALL WELDING OF STRUCTURAL STEEL SHALL BE PERFORMED PER AWS A1.1 USING E70XX ELECTRODES U.N.O., BARE ELECTRODES AND GRANULAR FLUX SHALL CONFORM TO AWS.
 - ALL GROOVE OR BUTT WELDS SHALL BE COMPLETE PENETRATION WELDS. ALL EXPOSED BUTT WELDS SHALL BE GROUND SMOOTH.
 - ALL WELDING OF METAL DECK AND LIGHT GAGE STEEL SHALL BE IN ACCORDANCE WITH AWS D1.3.
 - ALL WELDING OF REINFORCING BARS SHALL BE PERFORMED PER AWS D1.4 USING E60XX ELECTRODES.
 - ALL EXPOSED WELDS ON ARCHITECTURALLY EXPOSED STRUCTURAL STEEL (AESS) SHALL COMPLY WITH AISC CODE OF STANDARD PRACTICE.
 - ALL HSS TO HSS WELDS SHALL BE ACHIEVED BY ALL AROUND FILLET AND FLARE BEVEL WELDS TO PROVIDE 1/4" MINIMUM EFFECTIVE THROAT UNLESS A LARGER AMOUNT IS INDICATED OTHERWISE. PROVIDE ERECTION AIDS FOR FIELD ASSEMBLED HSS TO HSS CONNECTION AS REQUIRED. ERECTION AIDS SHALL BE REMOVED AND HSS SURFACES GROUND SMOOTH WHERE LOCATION IS TO BE EXPOSED IN FINAL CONSTRUCTION OR WHERE ERECTION AIDS WILL CONFLICT WITH OTHER CONSTRUCTION.
 - ALL WELD BACK UP BARS SHALL BE REMOVED AND GROUND SMOOTH AFTER WELD IS COMPLETED, U.N.O.
 - ALL WELD LENGTHS NOT NOTED SHALL BE FULL LENGTH. TERMINATE WELDS IN ACCORDANCE WITH AISC AND AWS.

- D. BASEPLATE AND ANCHORAGES REQUIREMENTS
- ALL GROUT UNDER STEEL BASEPLATES SHALL BE NON-SHRINK, CEMENT-BASED, NON-METALLIC GROUT OR DRYPACK GROUT WITH A MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 5,000 PSI. ALLOW GROUT TO FULLY CURE BEFORE APPLYING LOADS.
 - ALL ANCHOR RODS AT STEEL COLUMN BASEPLATES SHALL BE RODS WITH THREADS ON BOTH ENDS WITH HEAVY HEX NUT FULLY THREADED ONTO EMBEDDED END. TO PREVENT ANCHOR NUT FROM BACKING OFF, THE CONTRACTOR SHALL PERFORM ONE OF THE FOLLOWING:
 - TACK WELD NUT TO ROD.
 - SPOOL THREADS.
 - NYLOC NUTS.
 - APPROPRIATE CORROSION RESISTANT ADHESIVE.
 - ALL HEADED ANCHOR BOLTS WITH THE SAME PROPERTIES AND CAPACITIES MAY BE USED AS AN ALTERNATIVE TO ANCHOR RODS.
- E. SHOP DRAWING AND DIFFERED SUBMITTAL REQUIREMENTS
- ALL STEEL SHALL BE FABRICATED IN ACCORDANCE WITH AISC 303 AND SHALL BE COMPLETED BY AND APPROVED STEEL FABRICATOR.
 - SHOP DRAWINGS SHALL BE PREPARED IN ACCORDANCE WITH AISC 326. PROVIDE COMPLETE WELDING INFORMATION USING AWS SYMBOLS. USE PREQUALIFIED WELDED JOISTS PER AISC AND AWS D1.1 "STRUCTURAL WELDING CODE."
 - SUBMIT SHOP DRAWINGS SHOWING STEEL ELEVATIONS, PLAN AND SECTIONS, SIZES AND GRADE OF STEEL TO BE USED; PITCH, SPAN, CAMBER, SUPPORT CONFIGURATION AND SPACING FOR EACH TYPE OF BEAM, JOIST, GIRDER, COLUMN, ETC.; AND CONNECTION AND ANCHORAGE DETAILS.



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04/28/2025

NATIONAL CITY SCHOOL DIST. WAREHOUSE

1400 N AVE, NATIONAL CITY, CA 91950

Delta	Revision	Date

Sheet Title:

GENERAL
STRUCTURAL
NOTES

Job No: 25-25952
Dwg Date: 4-24-25
Drawn By: TSR
Checked By: DDH

S0.2

FOOD SERVICE DESIGN GROUP



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PREPARED FOR THE
BOARD OF EDUCATION
NATIONAL SCHOOL DISTRICT
NATIONAL CITY, CALIFORNIA

PREPARED BY
SGPA ARCHITECTURE
AND PLANNING

FOOD SERVICE WALK-IN FREEZER DRAWING -
SLAB DETAILS

**CENTRAL WAREHOUSE
FREEZER REPLACEMENT**
FREEZER REPLACEMENT
1400 N AVENUE
NATIONAL CITY, CA 91950

SUBMITTALS / REVISIONS

#	ISSUE	DATE

DSA SUBMITTAL V1 03/19/2025
DSA SUBMITTAL V2 04/30/2025

**BID SET 5/1/2025
NOT FOR
CONSTRUCTION
PROJECT STILL IN
REVIEW**

PROJECT NO. 2239-E-02

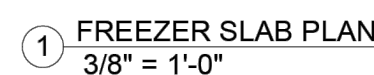
SHEET NO.

K-3.8

DSA

CONSULTANT

STAMP



FOUNDATION PLAN NOTES:

1. FOR ALL TYPICAL DETAILS NOT CUT ON PLAN, RE: SHEET S2.0.
2. FOR ALL BUILDING STRUCTURAL DESIGN INFORMATION, RE: BUILDING E.O.R. CONSTRUCTION DOCUMENTS
3. COORDINATE ALL DIMENSIONS WITH ARCHITECTURAL, STRUCTURAL AND MEP DRAWINGS.



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04/28/2025

NATIONAL CITY SCHOOL DIST. WAREHOUSE

1400 N AVE, NATIONAL CITY, CA
91950

Delta	Revision	Date

Sheet Title:

FLOOR PLAN

Job No: 25-25952

Dwg Date

Drawn By

Checked	
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S1.0



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Delta	Revision	Date

Sheet Title

STRUCTURAL DETAILS

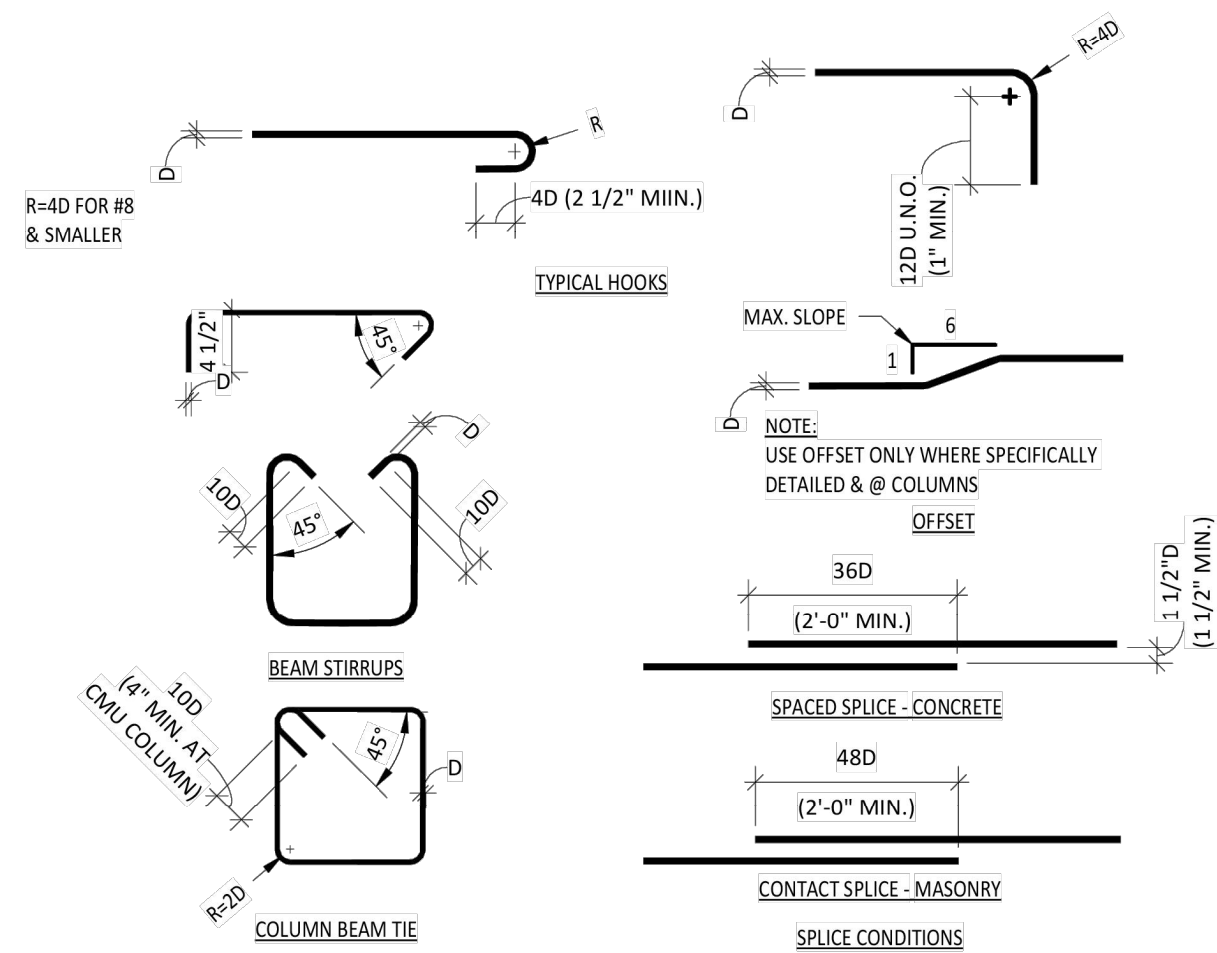
Job No: 25-25952

Dwg Date: 4-24-25

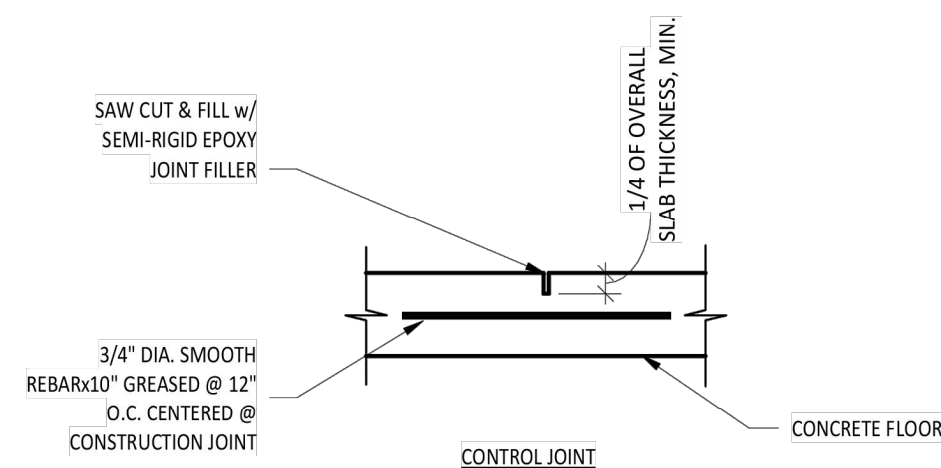
Drawn By: TSB

Checked By: DDH

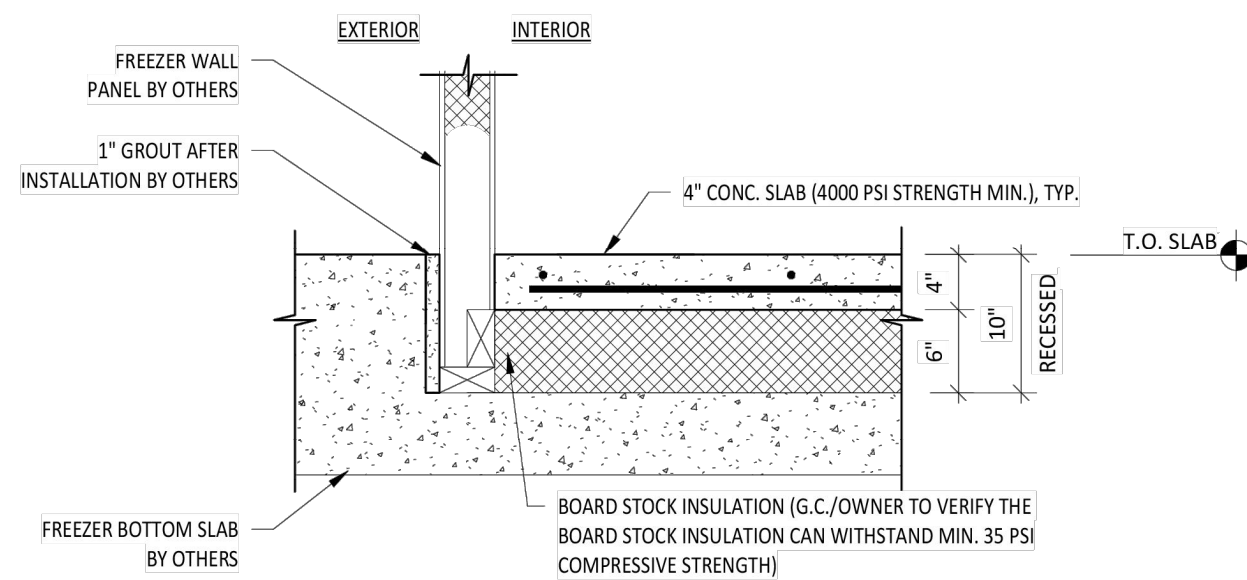
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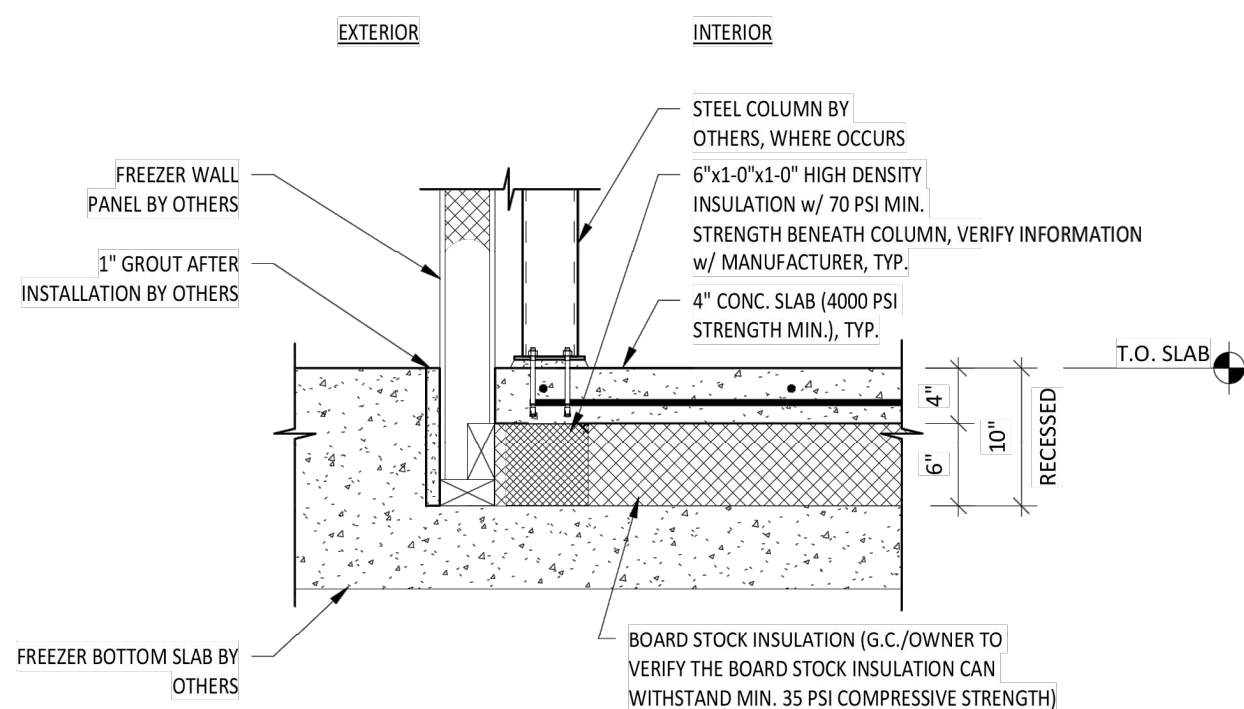
① REINFORCING BENDS
1" = 1'-0"



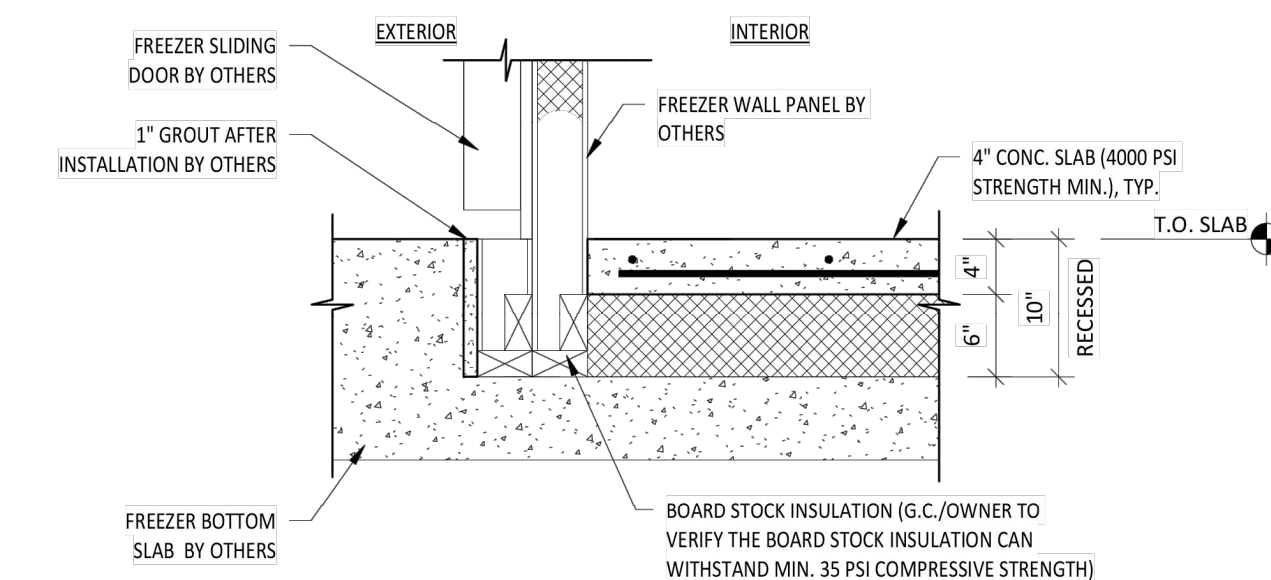
② SLAB ON GRADE w/ CONTROL JOINT
1 1/2" = 1'-0"



③ FREEZER SLAB @ FREEZER WALL
1" = 1'-0"



4 FREEZER SLAB @ MOMENT FRAME
1" = 1'-0"



5 FREEZER SLAB @ SLIDING DOOR OPENING
1" = 1'-0"

Sheet Title:	
STRUCTURAL DETAILS	
Job No:	25-25952
Dwg Date:	4-24-25
Drawn By:	TSR
Checked By:	DDH