CLINIC IN A CAN

YOLO COUNTY VETERINARY CLINIC

2640 East Gibson Road

YOLO COUNTY

00168

3/27/2025

CONSTRUCTION DOCUMENTS

NOTE:

A separate utilities permit will be required for Foundation, Water, Sewer, and Power connections.

Chris Rice Digitally signed by Chris Rice Date: 2025.05.22 11:04:45 -07'00'

FOR ELECTRONIC APPROVALS: PLEASE PRINT YOUR PLANS AND INSPECTION CARD AND HAVE THEM ON SITE FOR ALL INSPECTIONS.

YOLO COUNTY BUIDING DIVISION
REVIEWED FOR CODE COMPLIANCE: APPROVED
SUBJECT TO FIELD INSPECTION

PERMIT ISSUANCE SHALL NOT BE CONSIDERED APPROVAL OF ANY VIOLATION OF THE BUILDING CODE. ANY CHANGES TO THE PLANS OR SCOPE OF WORK MUST BE SUBMITTED TO THE BUILDING DIVISION AND APPROVED PRIOR TO INSPECTION.

SYMBOLS

ROOM NAME XXXXX — ROOM NAME/NUMBER

X — COLUMN CENTERLINE

X — KEYNOTES

01 / A0.XX — BUILDING WALL SECTION

A0.X / X — ELEVATION

01 / A0.X / X — SECTION DETAIL

01 / A0.X / X — PLAN, BLOW-UP DETAIL

MATERIALS

CONCRETE/ PRECAST CONCRETE

SOIL

SAND, EIFS FINISH COAT

STEEL

CMU

STONE

XPS RIGID INSULATION

ccSPF - CLOSED CELL SPRAY POLYISO FOAM INSULATION

DRAWING ABBREVIATIONS

AB	ANCHOR BOLT
ACT	ACOUSTICAL TILE CEILING
AFF	ABOVE FINISH FLOOR
ALUM	ALUMINUM
AP	ACCESS PANEL
APPROX	APPROXIMATE
ARCH	ARCHITECTURE
ASSOC	ASSOCIATED
BD	BOARD
BLDG	BUILDING
BLK	BLOCK
BO	BOTTOM OF
BOT	BOTTOM
BRG	BEARING
BSMT	BASEMENT
CJ	CONTROL JOINT
CL	CENTERLINE
CLG	CEILING
CLR	CLEAR
CMU	CONCRETE MASONRY UNIT
COL	COLUMN
CONC	CONCRETE
CONT	CONTINUOUS
COVR	COVER
CPT	CARPET
CT	CERAMIC TILE
CTR	CENTER
DEC	DETENTION EQUIPMENT CONTRACTOR
DET	DETENTION
DEMO	DEMOLITION
DIA	DIAMETER
DIM	DIMENSION
DF	DRINKING FOUNTAIN
DGB	DETENTION GRAB BAR
DR	DOOR
DWG	DRAWING
EA	EACH
EJ	EXPANSION JOINT
ELEC	ELECTRICAL
ELEV	ELEVATOR
EQ	EQUAL
EQUIP	EQUIPMENT
ER	EPOXY RESIN
EXT	EXTERIOR
FD	FLOOR DRAIN
FDN	FOUNDATION
FE	FIRE EXTINGUISHER
FF EL	FINISH FLOOR ELEVATION
FIN	FINISH
FRT	FIRE RESISTANT TREATED
FLR	FLOOR
FS	FOOD SERVICE
FT	FOOT
FTG	FOOTING
FUT	FUTURE
GA	GUAGE
GC	GENERAL CONTRACTOR
GL	GLASS
GR	GRADE
GYP BD	GYPSUM BOARD
HC	HOLLOW CORE
HT	HEIGHT
HM	HOLLOW METAL
HORIZ	HORIZONTAL
INT	INTERIOR
INSUL	INSULTATION
JAN	JANITOR
JST	JOIST
LAV	LAVATORY
MAX	MAXIMUM
MECH	MECHANICAL
MEM	MEMBRANE
MFR	MANUFACTURER
MIN	MINIMUM
MR	MOISTURE RESISTANT
MTL	METAL
NIC	NOT IN CONTRACT
NO	NUMBER
NOM	NOMINAL
NTS	NOT TO SCALE
OA	OVERALL
OAM	OVERALL MASONRY
OC	ON CENTER
OH	OVERHEAD
ORD	OVERFLOW ROOF DRAIN
OS	OVERFLOW SCUPPER
OPG	OPENING
OPOI	OWNER PROVIDED OWNER INSTALLED
OPCI	OWNER PROVIDED CONTRACTOR INSTALLED
PC	PRECAST
PF	PREFINISHED
PJ	PANEL JOINT
PL	PLATE
PLAM	PLASTIC LAMINATE
PLMG	PLUMBING
PNL	PANEL
PT	PRESSURE TREATED
PTD	PAPER TOWEL DISPENSER
REINF	REINFORCED
REQ	REQUIRED
REV	REVISED
RD	ROOF DRAIN
RM	ROOM
RO	ROUGH OPENING
SAP	SECURE PANEL ACCESS
SC	SEALED CONCRETE
SCHED	SCHEDULED
SEC	SECURITY
SECT	SECTION
SHT	SHEET
SHWR	SHOWER
SK	SINK
SPEC	SPECIFICATIONS
SS	STAINLESS STEEL
STL	STEEL
STIFF	STIFFENER
STRUCT	STRUCTURAL
T&G	TONGUE AND GROOVE
TO	TOP OF
TOF	TOP OF FOOTING
TPH	TOILET PAPER HOLDER
TS	TUBE STEEL
TYP	TYPICAL
UNO	UNLESS NOTED OTHERWISE
VAR	VARIES
VB	VAPOR BARRIER
VCT	VINYL COMPOSITE TILE
VERT	VERTICAL
VIF	VERIFY IN FIELD
VT	VINYL TILE
VTR	VENT THROUGH ROOF
VWC	VINYL WALL COVERING
W	WITH
WC	WATER CLOSET
WD	WOOD
WDW	WINDOW
WP	WATERPROOF
WT	WALL TYPE
WWF	WELDED WIRE FABRIC

GENERAL NOTES

PROJECT NOTES

1. BUILDING AREA: 280 SQ. FT.
2. LOCATION OF THE BUILDING WILL BE DETERMINED ON SITE AFTER DELIVERY. NECESSARY PERMITS, OPTIONAL FOUNDATION & STRUCTURAL DESIGNS, AND ALL SITE UTILITY COORDINATION WILL BE THE RESPONSIBILITY OF OWNER/INSTALLER. OWNER/ INSTALLER TO VERIFY SUITABLE SOIL FOR BUILDING LOCATION. FINAL GRADE TO PROVIDE POSITIVE DRAINAGE AWAY FROM STRUCTURE.
3. THE GENERAL CONTRACTOR WILL COORDINATE ALL REQUIRED PERMIT SUBMITTALS AND INSPECTIONS THROUGH THE AUTHORITY HAVING JURISDICTION FOR ANY NEEDED SITE WORK, INSTALLATION AND UTILITY CONNECTIONS.
4. PROVIDE AN ACCESSIBLE ROUTE TO THE ENTRY. CHANGES IN LEVEL UP TO 1/4 IN MAY BE VERTICAL AND WITHOUT EDGE TREATMENT. CHANGES IN LEVEL BETWEEN 1/4 IN AND 1/2 IN SHALL BE BEVELED WITH A SLOPE NO GREATER THAN 1:2. CHANGES IN LEVEL GREATER THAN 1/2 IN SHALL BE ACCOMPLISHED BY MEANS OF A RAMP. SLOPE OF ROUTE NOT TO EXCEED 4.99%. CROSS SLOPE NOT TO EXCEED 1.99%.
5. CLINIC IS FOR PRIVATE USE ONLY. ADA RESTROOM LOCATED WITHIN 300 FT ON CAMPUS.
6. RAMP AND LANDING DETAILS SHOWN FOR REFERENCE ONLY. FINAL DESIGN, MATERIALS AND CONSTRUCTION OF LANDING/RAMP INCLUDING HANDRAIL, WARNING CURB, GRADING, ARE TO BE DESIGNED AND PROVIDED BY OTHERS IN ACCORDANCE WITH CHAPTER 11B 2022 CALIFORNIA BUILDING CODE.
7. SITE WORK SUBJECT TO LOCAL REVIEW AND APPROVAL.
8. BUILDING NOT TO BE PLACE IN FLOOD HAZARD ZONE.
9. DATA PLATE/INSIGNIA PROVIDED ON INTERIOR OF ELECTRICAL PANEL DOOR SEEN ON A1.11 (1)
10. A LOCAL ELECTRICAL CONTRACTOR IS RESPONSIBLE TO DO THE FINAL LIVE CONNECTION AND BRING POWER TO UNITS
11. CLIENT TO HIRE SUBCONTRACTOR TO CONNECT APPROPRIATELY DESIGNED WASTE SYSTEM TO CLINIC.
12. CLIENT IS RESPONSIBILE FOR WIND BORNE DEBRIS PROTECTION.

BUILDING CODES

PART 1 2022 CALIFORNIA ADMINISTRATIVE CODE
PART 2 2022 CALIFORNIA BUILDING CODE
PART 3 2022 CALIFORNIA ELECTRICAL CODE
PART 4 2022 CALIFORNIA MECHANICAL CODE
PART 5 2022 CALIFORNIA PLUMBING CODE
PART 6 2022 CALIFORNIA ENERGY CODE
PART 9 2022 CALIFORNIA FIRE CODE

STATEMENT OF GENERAL CONFORMANCE

APPLICATION NO. 02-123126
THE DRAWINGS IDENTIFIED AS FOLLOWS:
ALL DRAWING SHEETS INCLUDED IN THIS SET NOT BEARING MY STAMP AND SIGNATURE HAVE BEEN PREPARED BY OTHER DESIGN PROFESSIONALS OR CONSULTANTS WHO ARE LICENSED AND AUTHORIZED TO PREPARE SUCH DRAWINGS (PLANS) IN THIS STATE. THEY HAVE BEEN EXAMINED BY ME FOR:
1) DESIGN INTENT AND APPEAR TO MEET THE APPROPRIATE REQUIREMENTS OF TITLE 24, CALIFORNIA CODE OF REGULATIONS AND THE PROJECT SPECIFICATIONS AND
2) COORDINATION WITH MY DRAWINGS (PLANS) AND SPECIFICATIONS AND ARE ACCEPTABLE FOR INCORPORATION INTO THE CONSTRUCTION OF THIS PROJECT.
PER TITLE 24, PART 1, SECTION 4-316(B): THIS STATEMENT OF GENERAL CONFORMANCE SHALL NOT BE CONSTRUED AS RELIEVING ME OF MY RIGHTS, DUTIES, AND RESPONSIBILITIES UNDER SECTIONS 17302 ADN 81138 OF THE EDUCATION CODE AND SECTIONS 4-336, 4-341 AND 4-344 OF TITLE 24, PART 1.

SIGNATURE 04-02-2025 DATE

NABIL TAHA #:C60802
PRINTED NAME LICENSE NUMBER

STRUCTURAL GENERAL NOTES AND LOADING

LIVE FLOOR LOAD	100 psf.	DEAD FLOOR LOAD	15 psf.
ROOF LIVE LOAD	20 psf.	ROOF DEAD LOAD	20 psf.
GROUND SNOW LOAD	Pg = 7 psf.	FLAT ROOF SNOW LOAD	20 psf.
SNOW EXPOSURE FACTOR	Ce = 1.0	SNOW LOAD IMPORTANCE FACTOR	Is = 1.0
THERMAL FACTOR	Ct = 1.0	BASIC WIND SPEED (3 SEC. GUST)	95 mph
RISK CATEGORY	II	WIND EXPOSURE	C
INTERNAL PRESSURE COEFFICIENT	0.18	COMPONENTS AND CLADDING STUDS	19.29 psf
SEISMIC IMPORTANCE FACTOR	Ie = 1.0	SITE CLASS	D
Ss	0.877	S1	0.325
Sms	1.052	Sm1	0.642
Sds	0.702	Sd1	0.428
SEISMIC DESIGN CATEGORY	D	BASIC SEISMIC FORCE RESISTING SYSTEM	(STEEL MOD CONTAINER/ISBU)
DESIGN BASE SHEAR	0.351 * W	APPROXIMATE FUNDAMENTAL PERIOD	T = 0.108
RESPONSE MODIFICATION FACTOR	R = 2	ANALYSIS PROCEDURE USED	EQUIVALENT LATERAL FORCE PROCEDURE

ACCEPTANCE EVALUATION

HVAC SYSTEM TESTING
1. VISUAL BUBBLE TESTING AT EACH CONNECTION.
2. SPECIAL HVAC BLUE SPRAY ON SOLUTION TO DETECT LEAKS. TESTING TO BE DONE BY CERTIFIED TECHNICIANS

WATER SYSTEM TESTING
1. WATER AND AIR PRESSURE TESTS WILL BE PERFORMED. PRESSURE TEST SUPPLY LINES UP TO 60 PSI, IF ANY DROPS IN 60 MINUTES, IT IS REASSESSED.

ELECTRICAL SYSTEM TESTING
1. WIRING CONNECTIONS WILL BE INSPECTED TO NEC STANDARDS.
2. OUTLETS, LIGHT FIXTURES AND EMERGENCY LIGHTING WILL BE TESTED FOR FUNCTIONALITY.

STRUCTURAL INTEGRITY TESTING
1. VISUAL INSPECTION OF WALLS, ROOF AND FLOORING FOR DAMAGE OR MISALIGNMENTS
2.DOOR AND WINDOW SEAL TESTS PERFORMED USING SMOKE PEN OR SIMILAR DEVICE TO DETECT AIR LEAKS

EQUIPMENT TESTING
1. ALL EQUIPMENT WILL BE POWERED UP WITH PERFORMANCE TESTING AND CALIBRATION DONE IF NECESSARY.

LOCATION

Yolo County Animal Services
2640 East Gibson Rd
Woodland, CA 95776

PROJECT INFORMATION

PROJECT DESCRIPTION

THE VETERINARY CLINIC IN A CAN IS A NEW CONSTRUCTION, RE-LOCATABLE VETERINARY CLINIC BUILT WITHIN ONE - 40 FOOT ISO SHIPPING CONTAINER. CLINIC TO BE PLACED ON EXISTING CONCRETE LOT ADJACENT TO EXISTING YOLO COUNTY ANIMAL SHELTER BUILDING. THIS UNIT WILL SERVE AS A WORKSTATION FOR YOLO COUNTY ANIMAL SHELTER EMPLOYEES.

GROSS SQUARE FOOTAGE: 272 SF

OCCUPANCY: BUSINESS GROUP B

BUSINESS GROUP B OCCUPANCY INCLUDES, AMOUNG OTHERS, THE USE OF A BUILDING OR STRUCTURE, OR A PORTION THEREOF, FOR OFFICE, PROFESSIONAL OR SERVICE-TYPE TRANSACTIONS, INCLUDING STORAGE OF RECORDS AND ACCOUNTS. BUSINESS OCCUPANCIES SHALL INCLUDE, BUT NOT BE LIMITED TO, THE FOLLOWS:
ANIMAL HOSPITALS, KENNELS AND POUNDS

TYPE OF CONSTRUCTION: V-B

- PREFABRICATED SHIPPING CONTAINER WITH METAL STUD/OSB/FINISHES ON INTERIOR
- METAL STUD INFILL WALLS
- METAL ROOFING AND PHOTOVOLTAIC PANELS

ALLOWABLE BUILDING AREA: Type V-B. A_a = 9,000 x 2 = 18,000 SF MAX TOTAL/ 2 STORIES
- ACTUAL BUILDING AREA: 320 SF

ALLOWABLE BUILDING HEIGHT: A_h = 40'-0" AND 2 STORIES
- ACTUAL HEIGHT = 9'-6"
- ACTUAL STORIES = 1

OCCUPANT LOAD: 3
OUTPATIENT AREA WITH OCCUPANT LOAD FACTOR OF 150 SF/1 OCCUPANT =
OCCUPANT LOAD OF 1.76 PERSONS

REQUESTING OCCUPANT LOAD TO BE 50 SF/1 OCCUPANT PER ROOM. SEE LIFE SAFETY PLAN.

PROJECT TEAM

OWNER
YOLO COUNTY ANIMAL SHELTER
2640 E GIBSON RD
WOODLAND, CA 95776
CONTACT: STEPHANIE AMATO
EMAIL: STEPHANIE.AMATO@YOLOCOUNTY.GOV
PHONE: (530) 668-5287

GENERAL CONTRACTOR
CLINIC IN A CAN
9745 E 50TH ST N
BEL AIRE, KS 67226
CONTACT: MIKE WAWRZEWSKI
EMAIL: MIKE@CLINICINACAN.COM
PHONE: (316) 262-0953

MEP ENGINEERS
MONTEREY ENERGY GROUP
26465 Carmel Rancho Blvd, Suite 8
Carmel, CA 93923
CONTACT: Abe Stallcup
EMAIL: abe@MEG4.COM
PHONE: (831) 250-0322

ENGINEER IN GENERAL RESPONSIBLE CHARGE
PSE ENGINEERING
Klamath Falls, OR 97601
CONTACT: Nabil "Bill" Taha
EMAIL: Bill@structure1.com
PHONE: (541) 850-6300

STRUCTURAL ENGINEERS
PSE ENGINEERING
Klamath Falls, OR 97601
CONTACT: Nabil "Bill" Taha
EMAIL: Bill@structure1.com
PHONE: (541) 850-6300

INDEX OF DRAWINGS 36 PAGES

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-123126 INC:
REVIEWED FOR
SS ☐ FLS ☐ ACS ☑
DATE: 4/3/2025

CLINIC IN A CAN

4-2-25
Exp 12-31-26

YOLO COUNTY VETERINARY CLINIC
2640 East Gibson Road

No. Description Date

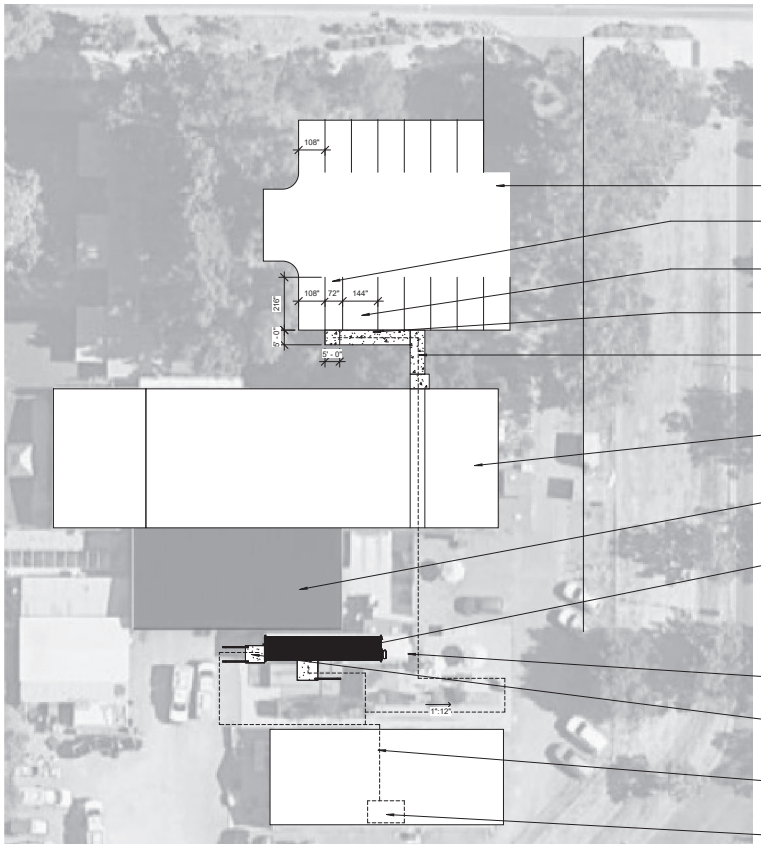
BB24-089
Reviewed for
Code Compliance
Approved:CR

CONSTRUCTION DOCUMENTS

COVER SHEET

A0.00

3/28/2025 11:02:31 AM



EXISTING YOLO COUNTY ANIMAL SHELTER PARKING LOT

EXISTING VAN AISLE @ 60" WIDE, MARKED AS NEEDED

(1) EXISTING ACCESSIBLE PARKING AND PRIMARY ENTRANCE APPROVED BY YOLO COUNTY FEB 8, 2024

ACCESSIBLE PARKING SIGN

ACCESSIBLE PATH OF TRAVEL TO NEW WORKSTATION WILL BE THROUGH CURRENT BUILDING OPEN CORRIDOR AS NEW 40 FT CLINIC IS ONLY FOR EMPLOYEE ACCESS; SEE ORIGINAL FL PLANS 'EXISTING ADOPTION BLDG_V1' PG 22.

EXISTING YOLO COUNTY ANIMAL SHELTER; SEE ORIGINAL FL PLANS 'EXISTING ADOPTION BLDG'

EXISTING ROOFING SHELTER

40FT VETERINARY CLINIC
USE: WORKSTATION
OCCUPANCY: BUSINESS
CONSTRUCTION TYPE: V-B
SPRINKLER SYSTEM: NO
DSA APPLICATION NUMBER: 02-123126

EXISTING FENCE BLOCKING PUBLIC FROM ACCESSING EAST SIDE OF CONTAINER/HVAC, SEE EXISTING ACCESSIBLE RESTROOMS_V1 FILE

ACCESSIBLE PATH OF TRAVEL TO NEW WORKSTATION; ALL SITE WORK TO BE DESIGNED AND COMPLETED BY OWNER/CONTRACTOR HIRED BY OWNER

ACCESSIBLE PATH OF TRAVEL TO ACCESSIBLE RESTROOMS.

EXISTING ACCESSIBLE RESTROOMS APPROVED BY YOLO COUNTY. VERIFIED TO COMPLY WITH CURRENT CODE.

1 SITE
1" = 20'-0"

SITE PLAN LEGEND

---------- ACCESSIBLE PATH OF TRAVEL

NOTES:
1. 40 FT VETERINARY WORKSTATION DOES NOT ADD ENOUGH SQUARE FOOTAGE (272 SF) TO WARRANT MORE PARKING SPACES ACCORDING TO YOLO COUNTY ZONING TABLE 8-2.1306 THAT STATES 1 PARKING SPACE IS REQUIRED FOR EVERY 350 SQ FT OF GROSS FLOOR AREA.
2. SITE DOES NOT FALL INTO WILDLAND URBAN INTERFACE AREA.
3. DESIGN PROFESSIONAL IN GENERAL RESPONSIBLE CHARGE STATEMENT: THE POT IDENTIFIED IN THESE CONSTRUCTION DOCUMENTS MEETS THE REQUIREMENTS OF THE CURRENT APPLICABLE CALIFORNIA BUILDING CODE (CBC) ACCESSIBILITY PROVISIONS FOR PATH OF TRAVEL REQUIREMENTS FOR ALTERATIONS, ADDITIONS AND STRUCTURAL REPAIRS. AS PART OF THE DESIGN OF THIS PROJECT, THE POT WAS EXAMINED AND ANY ELEMENTS, COMPONENTS OR PORTIONS OF THE POT THAT WERE DETERMINED TO BE NON-COMPLIANT WITH THE CBC HAVE BEEN IDENTIFIED AND 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 INTO THESE CONSTRUCTION DOCUMENTS. ANY NONCOMPLIANT ELEMENTS, COMPONENTS OR PORTIONS OF THE POT THAT WILL NOT BE CORRECTED BY THIS PROJECT BASED ON VALUATION THRESHOLD LIMITATIONS OR A FINDING OF UNREASONABLE HARDSHIP ARE INDICATED IN THESE CONSTRUCTION DOCUMENTS.
DURING CONSTRUCTION, IF POT ITEMS WITHIN SCOPE OF THE PROJECT REPRESENTED AS CBC COMPLIANT ARE FOUND TO BE NONCONFORMING BEYOND REASONABLE CONSTRUCTION TOLERANCES, THE ITEMS SHALL BE BROUGHT INTO COMPLIANCE WITH THE CBC AS A PART OF THIS PROJECT BY MEANS OF A CONSTRUCTION CHANGE DOCUMENT.
4. ACCESSIBLE PATH OF TRAVEL AS INDICATED ON PLAN IS A BARRIER-FREE ACCESS ROUTE WITHOUT ABRUPT LEVEL CHANGES EXCEEDING 1/2" BEVELED AT 1:2 MAXIMUM SLOPE OR VERTICAL LEVEL CHANGES NOT EXCEEDING 1/4" MAXIMUM AND AT LEAST 48" IN WIDTH. SURFACE IS STABLE, FIRM, AND SLIP-RESISTANT. CROSS-SLOPE SHALL NOT BE STEEPER THAN 1:48 AND SLOPE IN THE DIRECTION OF TRAVEL SHALL NOT BE STEEPER THAN 1:20. ACCESSIBLE PATH OF TRAVEL SHALL BE MAINTAINED FREE OF OVERHANGING OBSTRUCTIONS TO 80" MINIMUM AND FREE OF OBJECTS PROTRUDING MORE THAN 4" FROM THE WALL, ABOVE 27" AND LESS THAN 80" ABOVE THE FLOOR. ARCHITECT SHALL VERIFY THERE ARE NO BARRIERS IN THE PATH OF TRAVEL.
5. ALL DOORWAYS, LANDINGS, WALKWAYS, ETC IN THE ACCESSIBLE PATH OF TRAVEL COMPLY WITH CBC CHAPTER 11B.
6. NO EXISTING DRINKING FOUNTAINS ON CAMPUS

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-123126 INC:
REVIEWED FOR
SS ☐ FLS ☐ ACS ☑
DATE: 4/3/2025

MANUFACTURER
CLINIC IN A CAN

DISCIPLINE STAMP
Exp 12-31-26

PROJECT INFORMATION
YOLO COUNTY VETERINARY CLINIC
2640 East Gibson Road

No.	Description	Date

BB24-089
Reviewed for Code Compliance
Approved:CR

PROJECT NUMBER 00169
ISSUE DATE 04/7/2025
ISSUE
CONSTRUCTION DOCUMENTS

SHEET TITLE
SITE PLAN

SHEET NO.
A1.00

3/28/2025 11:02:35 AM

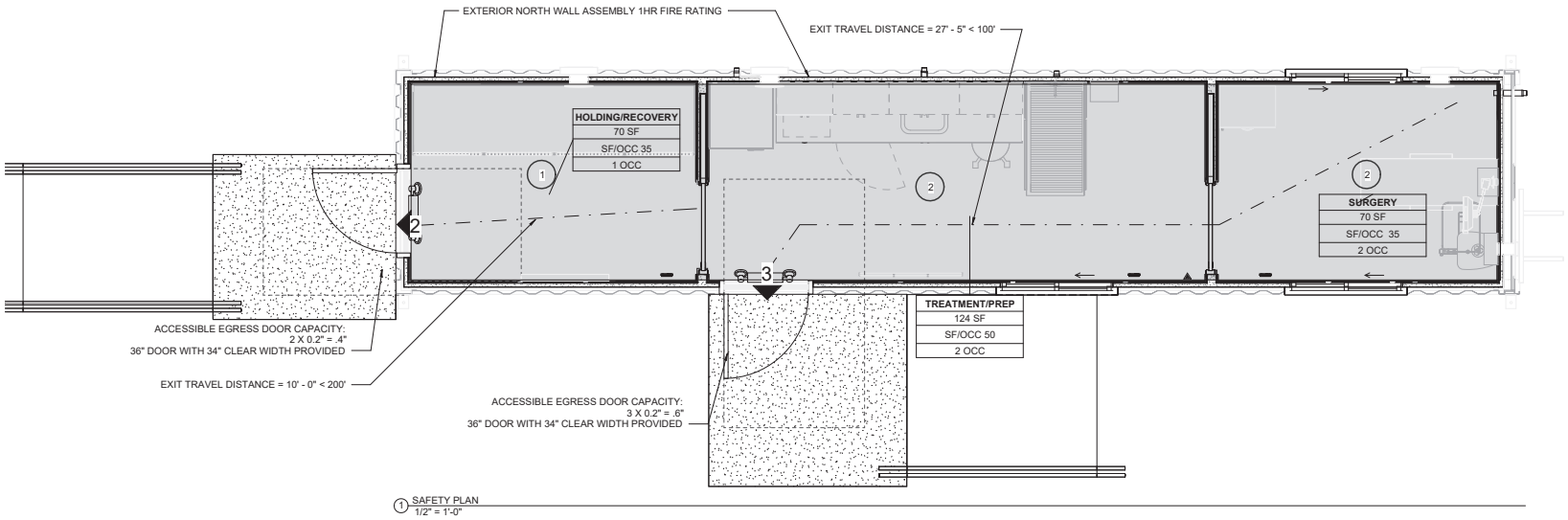
CODE LEGEND

— · —	EXIT TRAVEL DISTANCE
◀ #	NUMBER OF OCCUPANTS EXITING
(#)	OCCUPANT LOAD

LIFE SAFETY AREA TAG

NAME	INDICATES ROOM NAME
150 SF	INDICATES ROOM SQUARE FOOTAGE
SF/OCC 20	INDICATES ROOM SQ FT PER OCCUPANT
10 OCC	INDICATES OCCUPANCY

CODE PLAN NOTES:
1. OCCUPANCY AT 150 SF PER 1 OCCUPANCY IS TOO LOW FOR THIS SPACE, REQUESTED OCCUPANCY AT 50 FT PER 1 OCCUPANT ALLOWS FOR A MAXIMUM OF 5 OCCUPANTS. THIS ALLOWS FOR A MAXIMUM OF 2 OCCUPANTS TO BE IN SURGERY, 2 IN PREP AND 1 IN RECOVERY/HOLDING.
2. CLINIC IS A SINGLE WORKSTATION, EACH ROOM IS USED BY ALL OCCUPANTS. WORK WILL BE FLUID BETWEEN THE THREE ROOMS.
3. AN ACCESSIBLE ROUTE TO THE WORKSTATION IS PROVIDED.



1 SAFETY PLAN
1/2" = 1'-0"

0' 1' 2' 4' 8'
0' 1/2" 1" 2" 4"

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CLINIC IN A CAN

Exp 12-31-26

YOLO COUNTY VETERINARY CLINIC
2640 East Gibson Road

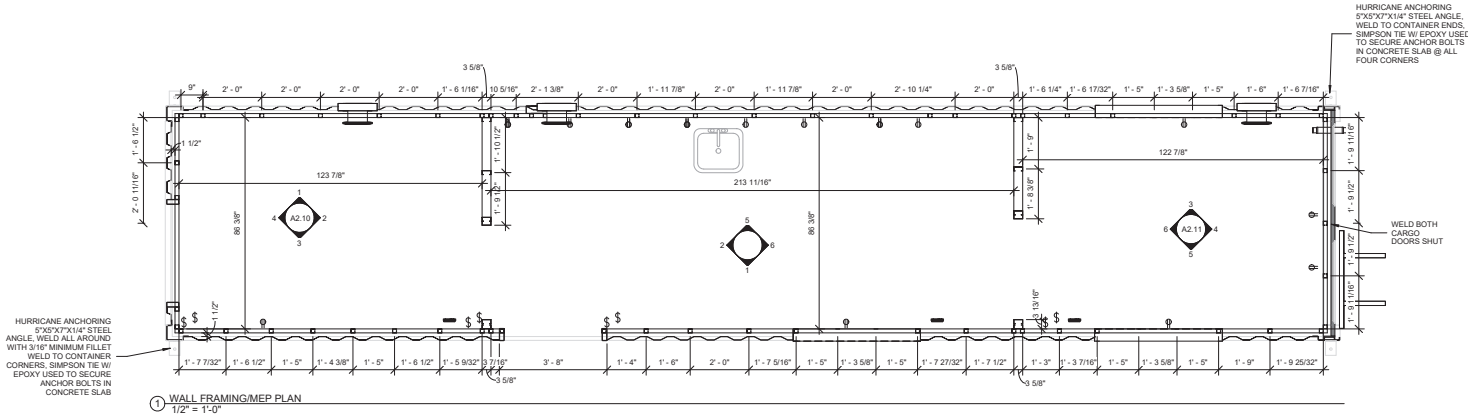
BB24-089
Reviewed for
Code Compliance
Approved:CR

No	Description	Date

CONSTRUCTION DOCUMENTS

LIFE SAFETY/CODE PLAN

A1.01



1 WALL FRAMING/MEP PLAN
1/2" = 1'-0"

0' 1' 2' 4' 8'
0' 1/2" 1" 2" 4"

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MANUFACTURER

CLINIC IN A CAN

DISCIPLINE STAMP

Exp 12-31-26

PROJECT INFORMATION

YOLO COUNTY VETERINARY CLINIC

2640 East Gibson Road

BB24-089
Reviewed for
Code Compliance
Approved:CR

No.	Description	Date

PROJECT NUMBER 25105
ISSUE DATE 04/7/2025
ISSUE

CONSTRUCTION DOCUMENTS

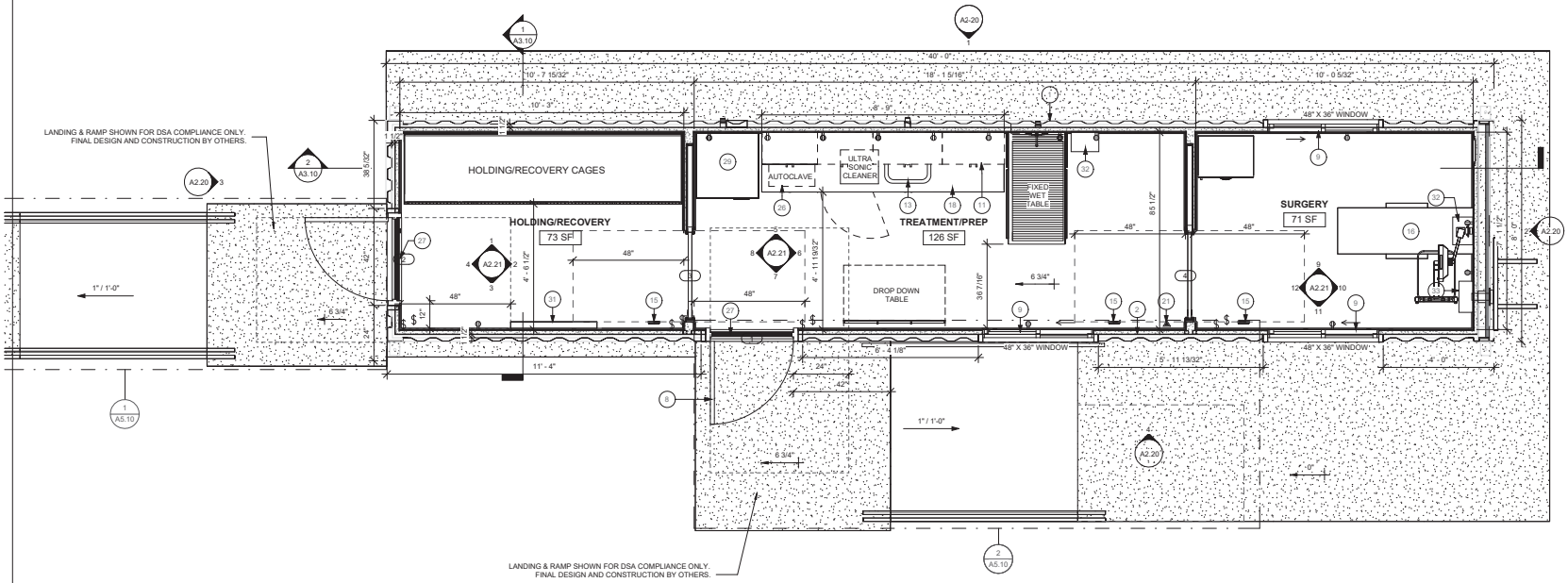
SHEET TITLE

FRAMING/MEP PLANS

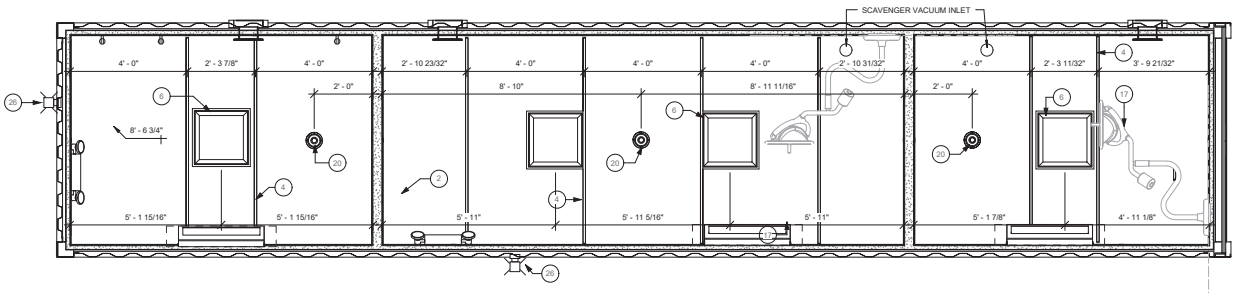
SHEET NO.

A1.10

3/28/2025 11:02:15 AM



1 FINISH FLOOR PLAN
1/2" = 1'-0"



2 REFLECTED CEILING PLAN
1/2" = 1'-0"

Keynote Legend	
Key Value	Keynote Text
1	40 FOOT NON CSC (CERTIFIED SHIPPING CONTAINER), EXTERIOR 2 PART PAINT: WILKO PAINT INDUSTRIAL FINISH - 711.60 WILKOTHANE G SG WHITE (PART A) & 050.06 WILKOTHANE G ACTIVATOR.
2	INTERIOR WALLS FRAMED WITH 1 5/8" 20 GAUGE GALVANIZED STEEL STUDS. A TOTAL OF 3.125 INCHES OF CLOSED CELL 2 LB. ICYCYENE FOAM INSULATION IS SPRAYED INSIDE THE WALL AND 3.5 INCHES OF C.I. INSULATION SPRAYED IN THE CEILING WITH 3 5/8 INCHES CLOSED CELL 2LB INSULATION SPRAYED IN STUD CAVITY. THE INSULATION EXPANDS TO EFFECTIVELY SEAL THE CONTAINER. WALLS (WHITE) & CEILINGS (WHITE) ARE COVERED WITH 0.55MM FULL COLOR THICKNESS NON-FRP WASHABLE SURFACE & PRE-LAMINATED ON 7/16 INCH OSB.
3	WALL JOINTS ARE COVERED WITH NUDO V-29 WHITE TRIM
4	CEILING JOINTS ARE COVERED WITH NUDO V-29 WHITE TRIM
5	OPTIONAL COMMUNICATION & TELEMEDICINE READY INCLUDING (3) CAT 5 INTERNAL ACCESS POINTS, (1) COAX, (1 OPTIONAL) STANDARD TELEPHONE WITH EXTERIOR COMMUNICATION PORT ACCESS PANEL
6	ENERGY EFFICIENT 2'-0" X 2'-0" FLAT PANEL LED LIGHT
7	EXTERNAL WATER SUPPLY CONNECTION OF 3/4" & EXTERNAL GREY WATER WASTE CONNECTION OF 2"; ROUGH & FINISHED PLUMBING IS COMPRISED OF 1/2" PEX TUBING WITH BRASS FITTINGS.
8	COMMERCIAL STEEL ENTRY DOOR WITH ENTRANCE LEVER DOOR HANDLES & M-SERIES HEAVY DUTY MORTISE LOCK WITH 1" STAINLESS STEEL ANTI-FRICTION 1 1/8" X 1/2" THICK DEAD-BOLT LOCKING MECHANISM WITH DOOR SWEEP, KICK DOWN DOOR HOLD & AUTO CLOSURE. SECURITY GATE AS REQUIRED.
9	48" X 36" VINYL SLIDING GLASS UV WINDOW WITH INTEGRATED BUG SCREEN
10	MEDICAL GRADE SEAMLESS HETEROGENOUS VINYL FLOORING WITH 4 INCHES OF FLASH COVING
11	MIDMARK RENEW STYLE STEEL PRESSED, POWDER COATED 36"H X 24"D BASE & 24" TALL WALL CABINETS WITH INTEGRATED LOCKS, STAINLESS STEEL SINK & GOOSENECK FAUCET, TRASH CAN WITH INTEGRATED DOOR
12	MIDMARK 18" CART CABINET
13	STAINLESS STEEL SINK & GOOSENECK FAUCET
14	HVAC UNIT W HEAT PUMP
15	THERMOSTAT, HARDWIRED
16	SURGERY TABLE WITH HYDRAULIC COLUMN, HEATED TOP, ON CASTERS
17	MIDMARK 255 LED PROCEDURE LIGHT
18	CORIAN COUNTERTOP WITH INTEGRAL BACKSPLASH & SINK OPENING
19	ELECTRICAL PANEL WITH DATA PLATE/STATE INSIGNIA/THIRD PARTY LOGO PLACED ON INTERIOR OF ELECTRICAL PANEL DOOR; INTERIOR ELECTRICAL CONNECTIONS ARE COMPRISED OF HCFMC BLACK/WHITE/GREEN HOSPITAL GRADE METAL CLAD #12/2 SOLID COPPER WIRES, GALVANIZED METAL BOXES & UL GFI BREAKERS.
20	CEILING MOUNTED SMOKE DETECTOR
21	FIRE EXTINGUISHER 2.2 KG CLASS ABC RECHARGEABLE AT 55" ABOVE FINISHED FLOOR
22	4 CU.FT. UNDERCOUNTER MEDICAL REFRIGERATOR
23	WET TREATMENT TABLE
24	ANIMAL HOLDING CAGES
25	MULTIPARAMETER WITH PRINTER
26	EXTERIOR LED LIGHT ABOVE DOOR
27	5" WIDE ALUMINUM DOOR THRESHOLD
28	PULL-DOWN MULTIPURPOSE WALL MOUNTED PROCEDURE TABLE
29	STACKED WASHER/DRYER
30	ROOF SLOPE @ 0/12
31	FOLD DOWN ANIMAL SCALE
32	VMS ANESTHESIA WALL MOUNTED W VIP VAPORIZER
33	CENTRAL SCAVENGER

NOTES:
1.NO FIRE ALARM INCLUDED, FIRE ALARM NOT REQUIRED PER 907.2.2

0' 1' 2' 4' 8'
0' 1/2" 1" 2" 4"

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-123126 INC:
REVIEWED FOR
SS ☐ FLS ☐ ACS ☑
DATE: 4/3/2025

CLINIC IN A CAN

Exp 12-31-26

YOLO COUNTY VETERINARY CLINIC
2640 East Gibson Road

No.	Description	Date

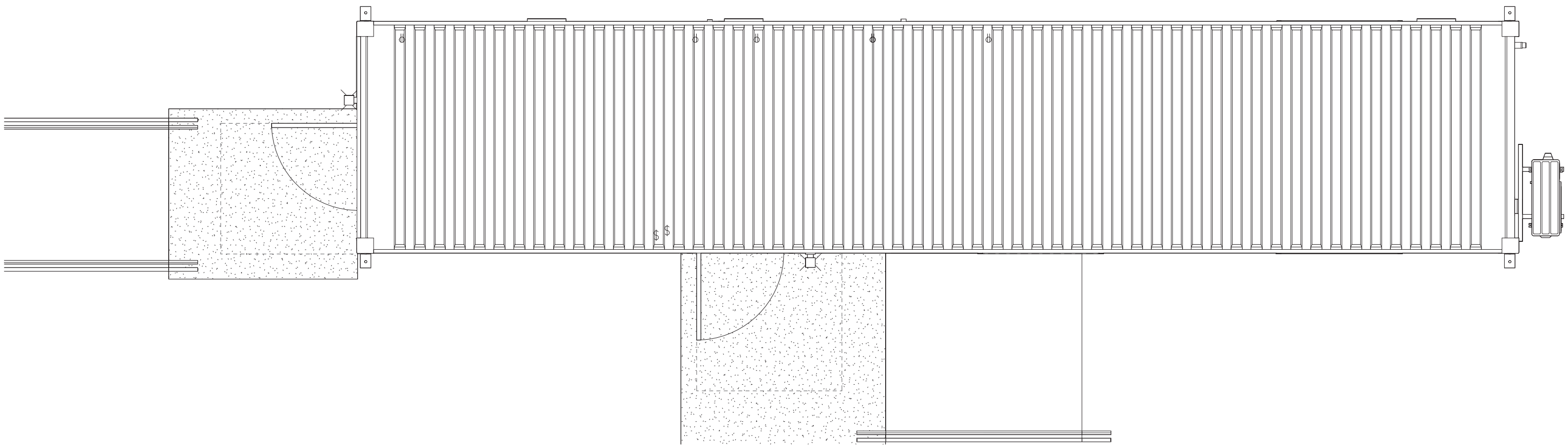
BB24-089
Reviewed for
Code Compliance
Approved:CR

CONSTRUCTION DOCUMENTS

FINISH FLOOR PLAN

A1.20

3/28/2025 11:03:11 AM



1 ROOF PLAN
1/2" = 1'-0"

3/28/2025 10:02:12 AM

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-123126 INC:
REVIEWED FOR
SS ☐ FLS ☐ ACS ☑
DATE: 4/3/2025

MANUFACTURER

CLINIC IN A CAN

CLINIC IN A CAN
9745 E 50TH ST N
BEL AIRE, KS 67226
316.262.0953
www.clinicinacan.com

DISCIPLINE STAMP

4-4-25

LICENSED PROFESSIONAL ENGINEER
NABIL TAHA
NO. C60802
CIVIL
STATE OF CALIFORNIA

Exp 12-31-26

DISCIPLINE STAMP

PROJECT INFORMATION

YOLO COUNTY VETERINARY CLINIC

2640 East Gibson Road

REVISIONS

No.	Description	Date

BB24-089
Reviewed for
Code Compliance
Approved:CR

PROJECT NUMBER	00168
ISSUE DATE	3/27/2025

ISSUE

CONSTRUCTION DOCUMENTS

SHEET TITLE

ROOF PLAN

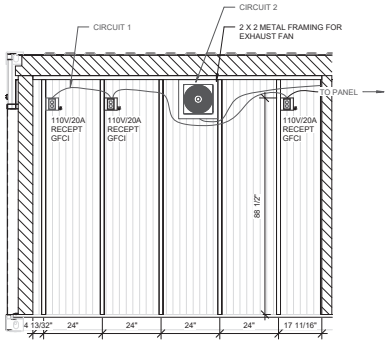
SHEET NO.

A1.30

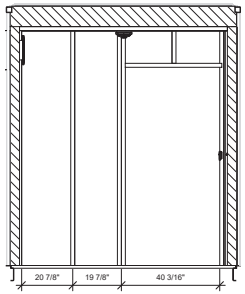
LEGEND

INDICATES DEDICATED RECEPTACLES INTENDED TO UTILIZE EXCEPTION IN 11B-203.9

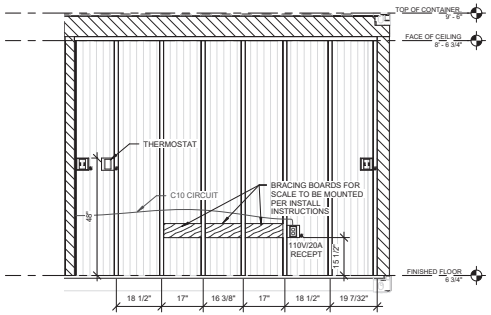
NOTES:
C1 - 20 AMP
C3 - ALL LIGHTING (INTERIOR AND EXTERIOR) AND EXIT SIGNS
C8 - 30 AMP TWO POLE BREAKER
C9 - 20 AMP TWO POLE BREAKER
C13 - 30 AMP TWO POLE BREAKER; FOR THE HVAC UNIT



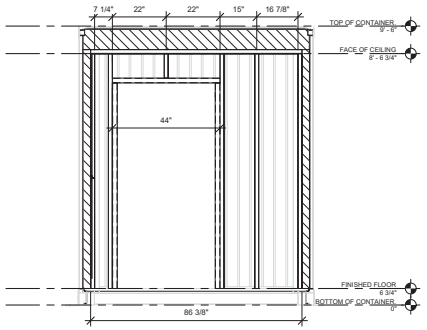
1 HOLDING NORTH FRAMING WALL
1/2" = 1'-0"



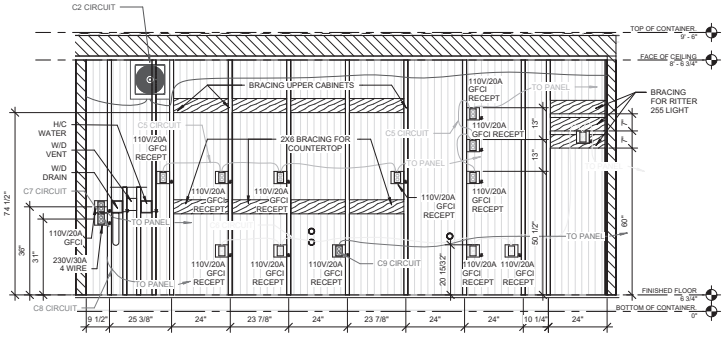
2 HOLDING EAST FRAMING WALL
1/2" = 1'-0"



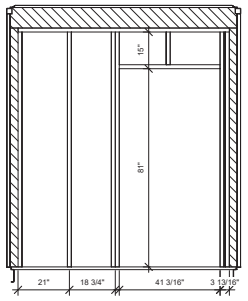
3 HOLDING SOUTH FRAMING WALL
1/2" = 1'-0"



4 HOLDING WEST FRAMING WALL
1/2" = 1'-0"



5 TREATMENT/PREP NORTH FRAMING WALL
1/2" = 1'-0"



6 TREATMENT/PREP EAST FRAMING WALL
1/2" = 1'-0"

0' 1' 2' 4' 8'
0' 1/2" 1" 2" 4"

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-123126 INC:
REVIEWED FOR
SS ☐ FLS ☐ ACS ☑
DATE: 4/3/2025

MANUFACTURER
CLINIC IN A CAN

DISCIPLINE STAMP
PROFESSIONAL ENGINEER
CIVIL
STATE OF CALIFORNIA
Exp 12-31-26

PROJECT INFORMATION

YOLO COUNTY VETERINARY CLINIC
2640 East Gibson Road

BB24-089
Reviewed for Code Compliance
Approved:CR

No.	Description	Date

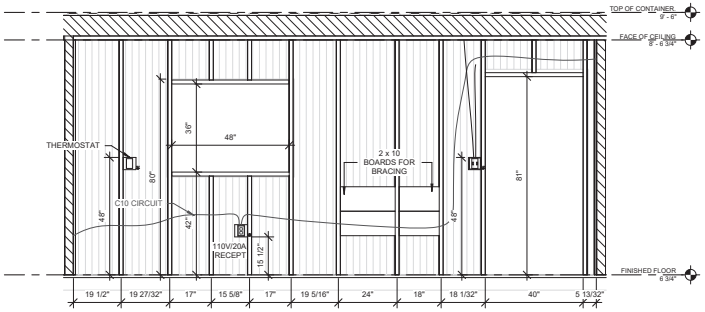
PROJECT NUMBER 22155
ISSUE DATE 4/3/2025
ISSUE
CONSTRUCTION DOCUMENTS
SHEET TITLE
FRAMING ELEVATIONS
SHEET NO.
A2.10

3/28/2025 10:03:15 AM

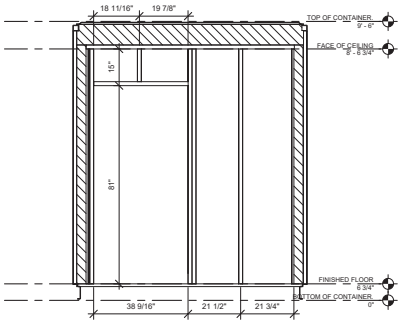
LEGEND

INDICATES DEDICATED RECEPTACLES INTENDED TO UTILIZE EXCEPTION IN 11B-203.9

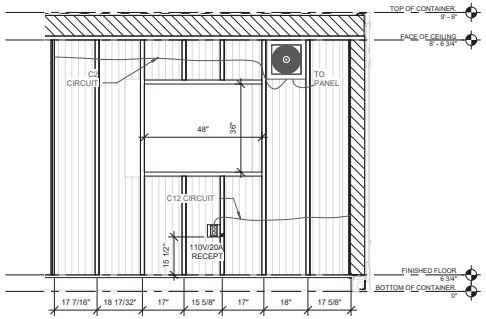
NOTES:
C1 - 20 AMP TWO POLE BREAKER
C3 - ALL LIGHTING (INTERIOR AND EXTERIOR) AND EXIT SIGNS
C8 - 30 AMP TWO POLE BREAKER
C9 - 40 AMP TWO POLE BREAKER
C13 - 30 AMP TWO POLE BREAKER; FOR THE HVAC UNIT



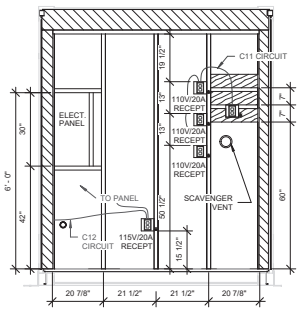
1 TREATMENT/PREP SOUTH FRAMING WALL
1/2" = 1'-0"



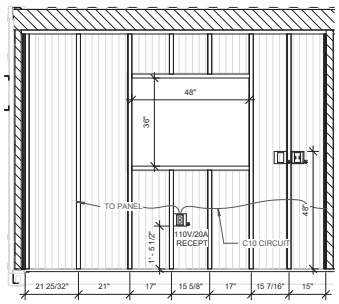
2 TREATMENT/PREP WEST FRAMING WALL
1/2" = 1'-0"



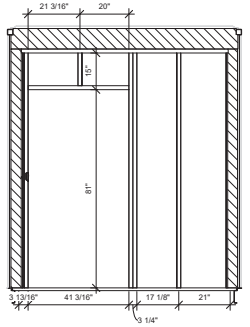
3 SURGERY NORTH FRAMING WALL
1/2" = 1'-0"



4 SURGERY EAST FRAMING WALL
1/2" = 1'-0"



5 SURGERY SOUTH FRAMING WALL
1/2" = 1'-0"



6 SURGERY WEST FRAMING WALL
1/2" = 1'-0"

0' 1' 2' 4' 8'
0' 1/2" 1" 2" 4"

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-123126 INC:
REVIEWED FOR
SS ☐ FLS ☐ ACS ☑
DATE: 4/3/2025

MANUFACTURER

CLINIC IN A CAN

DISCIPLINE STAMP

PROJECT INFORMATION

YOLO COUNTY VETERINARY CLINIC
2640 East Gibson Road

BB24-089
Reviewed for
Code Compliance
Approved:CR

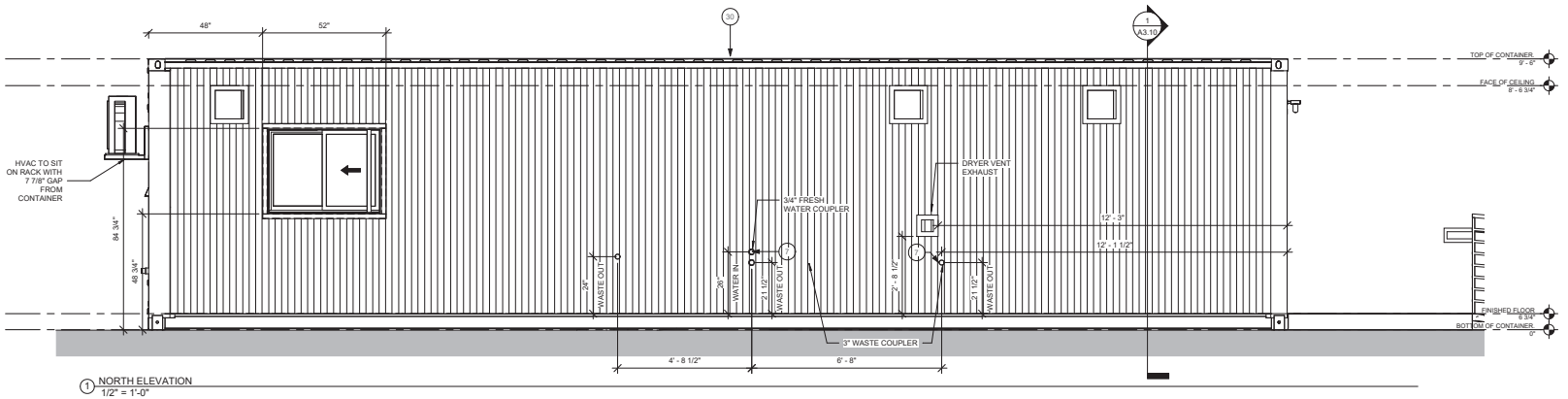
No.	Description	Date

PROJECT NUMBER 22103
ISSUE DATE 4/3/2025
ISSUE CONSTRUCTION DOCUMENTS

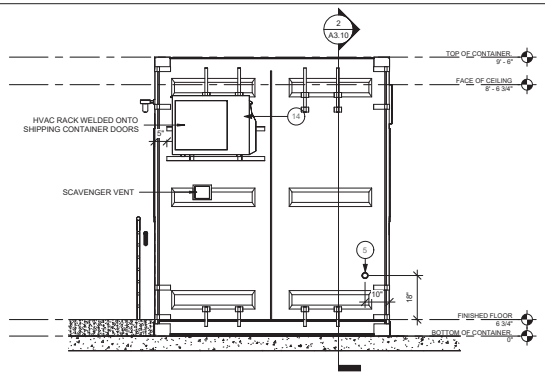
SHEET TITLE
FRAMING ELEVATIONS

SHEET NO.
A2.11

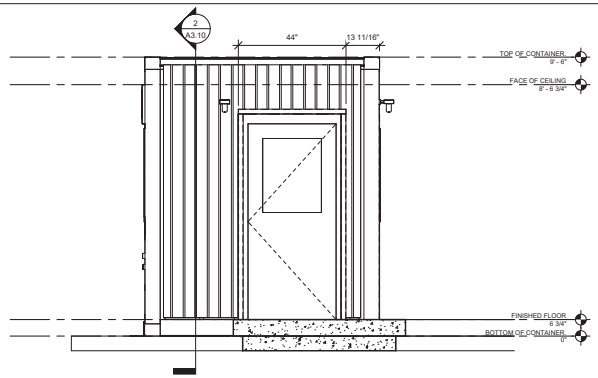
3/28/2025 11:02:16 AM



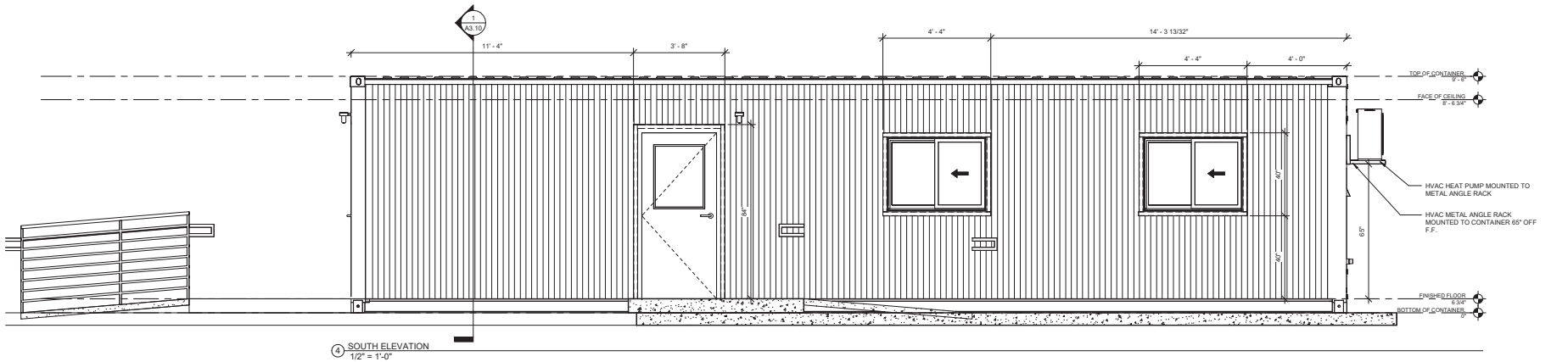
1 NORTH ELEVATION
1/2" = 1'-0"



2 EAST ELEVATION
1/2" = 1'-0"



3 WEST ELEVATION
1/2" = 1'-0"



4 SOUTH ELEVATION
1/2" = 1'-0"

0' 1' 2' 4' 8'
0' 1/2" 1" 2" 4"

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-123126 INC:
REVIEWED FOR
SS ☐ FLS ☐ ACS ☑
DATE: 4/3/2025

MANUFACTURER

CLINIC IN A CAN

DISCIPLINE STAMP

Exp 12-31-26

PROJECT INFORMATION

YOLO COUNTY VETERINARY CLINIC
2640 East Gibson Road

No.	Description	Date

BB24-089
Reviewed for Code Compliance
Approved:CR

PROJECT NUMBER 00100
ISSUE DATE 3/27/2025
ISSUE

CONSTRUCTION DOCUMENTS

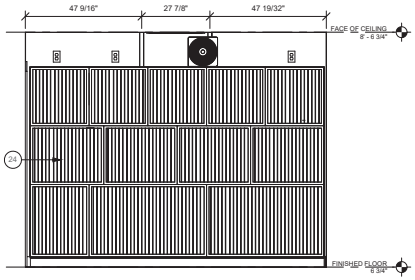
SHEET TITLE

BUILDING ELEVATIONS

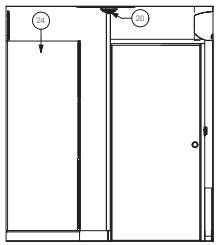
SHEET NO.

A2.20

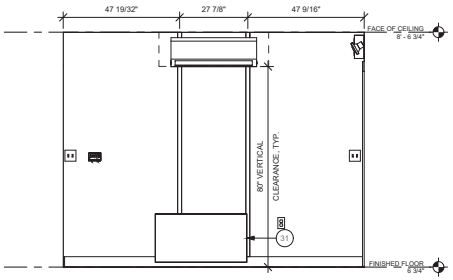
3/28/2025 11:02:17 AM



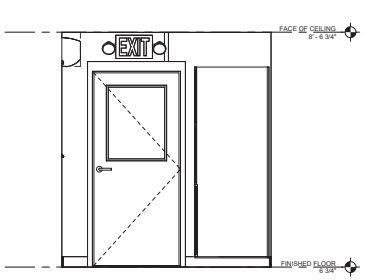
1 HOLDING NORTH WALL
1/2" = 1'-0"



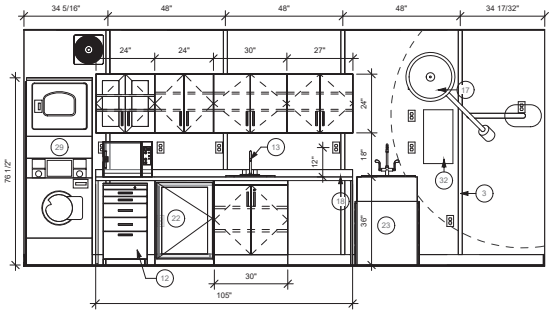
2 HOLDING EAST WALL
1/2" = 1'-0"



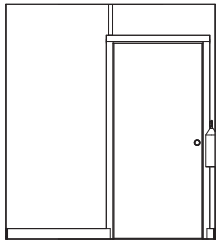
3 HOLDING SOUTH WALL
1/2" = 1'-0"



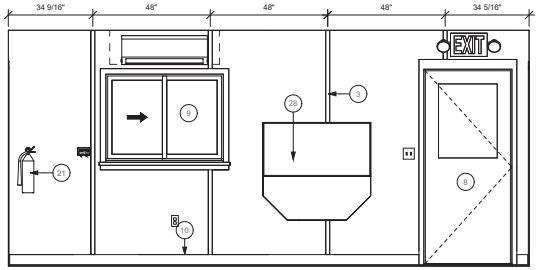
4 HOLDING WEST WALL
1/2" = 1'-0"



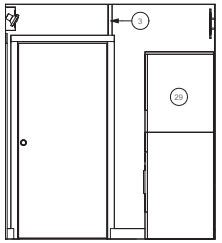
5 EXAM NORTH WALL
1/2" = 1'-0"



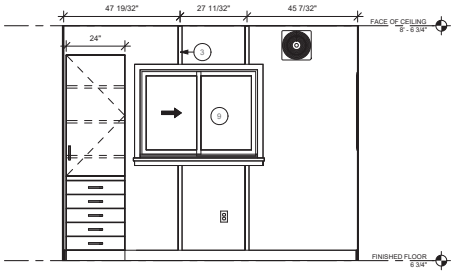
6 EXAM EAST WALL
1/2" = 1'-0"



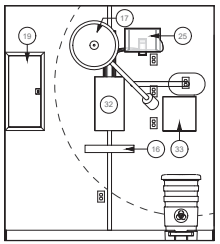
7 EXAM SOUTH WALL
1/2" = 1'-0"



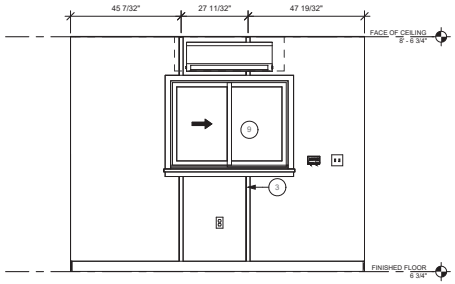
8 EXAM WEST WALL
1/2" = 1'-0"



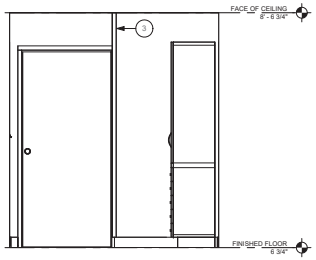
9 SURGERY NORTH WALL
1/2" = 1'-0"



10 SURGERY EAST WALL
1/2" = 1'-0"



11 SURGERY SOUTH WALL
1/2" = 1'-0"



12 SURGERY WEST WALL
1/2" = 1'-0"

Keynote Legend	
Key Value	Keynote Text
1	40 FOOT NON CSC (CERTIFIED SHIPPING CONTAINER). EXTERIOR 2 PART PAINT: WILKO PAINT INDUSTRIAL FINISH - 711.60 WILKOTHANE G SG WHITE (PART A) & 050.06 WILKOTHANE G ACTIVATOR.
2	INTERIOR WALLS FRAMED WITH 1 5/8" 20 GAUGE GALVANIZED STEEL STUDS. A TOTAL OF 3.125 INCHES OF CLOSED CELL 2 LB. ICYCYENE FOAM INSULATION IS SPRAYED INSIDE THE WALL AND 3.5 INCHES OF C.I. INSULATION SPRAYED IN THE CEILING WITH 3 5/8 INCHES CLOSED CELL 2LB INSULATION SPRAYED IN STUD CAVITY. THE INSULATION EXPANDS TO EFFECTIVELY SEAL THE CONTAINER. WALLS (WHITE) & CEILINGS (WHITE) ARE COVERED WITH 0.55MM FULL COLOR THICKNESS NON-FRP WASHABLE SURFACE & PRE-LAMINATED ON 7/16 INCH OSB.
3	WALL JOINTS ARE COVERED WITH NUDO V-29 WHITE TRIM
4	CEILING JOINTS ARE COVERED WITH NUDO V-29 WHITE TRIM
5	OPTIONAL COMMUNICATION & TELEMEDICINE READY INCLUDING (3) CAT 5 INTERNAL ACCESS POINTS, (1) COAX, (1 OPTIONAL) STANDARD TELEPHONE WITH EXTERIOR COMMUNICATION PORT ACCESS PANEL
6	ENERGY EFFICIENT 2'-0" X 2'-0" FLAT PANEL LED LIGHT
7	EXTERNAL WATER SUPPLY CONNECTION OF 3/4" & EXTERNAL GREY WATER WASTE CONNECTION OF 2"; ROUGH & FINISHED PLUMBING IS COMPRISED OF 1/2" PEX TUBING WITH BRASS FITTINGS.
8	COMMERCIAL STEEL ENTRY DOOR WITH ENTRANCE LEVER DOOR HANDLES & M-SERIES HEAVY DUTY MORTISE LOCK WITH 1" STAINLESS STEEL ANTI-FRICTION 1 1/8" X 1/2" THICK DEAD-BOLT LOCKING MECHANISM WITH DOOR SWEEP, KICK DOWN DOOR HOLD & AUTO CLOSURE. SECURITY GATE AS REQUIRED.
9	48" X 36" VINYL SLIDING GLASS UV WINDOW WITH INTEGRATED BUG SCREEN
10	MEDICAL GRADE SEAMLESS HETEROGENOUS VINYL FLOORING WITH 4 INCHES OF FLASH COVING
11	MIDMARK RENEW STYLE STEEL PRESSED, POWDER COATED 36"H X 24"D BASE & 24" TALL WALL CABINETS WITH INTEGRATED LOCKS, STAINLESS STEEL SINK & GOOSENECK FAUCET, TRASH CAN WITH INTEGRATED DOOR
12	MIDMARK 18" CART CABINET
13	STAINLESS STEEL SINK & GOOSENECK FAUCET
14	HVAC UNIT W HEAT PUMP
15	THERMOSTAT, HARDWIRED
16	SURGERY TABLE WITH HYDRAULIC COLUMN, HEATED TOP, ON CASTERS
17	MIDMARK 255 LED PROCEDURE LIGHT
18	CORIAN COUNTERTOP WITH INTEGRAL BACKSPLASH & SINK OPENING
19	ELECTRICAL PANEL WITH DATA PLATE/STATE INSIGNIA/THIRD PARTY LOGO PLACED ON INTERIOR OF ELECTRICAL PANEL DOOR; INTERIOR ELECTRICAL CONNECTIONS ARE COMPRISED OF HCFMC BLACK/WHITE/GREEN HOSPITAL GRADE METAL CLAD #12/2 SOLID COPPER WIRES, GALVANIZED METAL BOXES & UL GFI BREAKERS.
20	CEILING MOUNTED SMOKE DETECTOR
21	FIRE EXTINGUISHER 2.2 KG CLASS ABC RECHARGEABLE AT 55" ABOVE FINISHED FLOOR
22	4 CU.FT. UNDERCOUNTER MEDICAL REFRIGERATOR
23	WET TREATMENT TABLE
24	ANIMAL HOLDING CAGES
25	MULTIPARAMETER WITH PRINTER
26	EXTERIOR LED LIGHT ABOVE DOOR
27	5" WIDE ALUMINUM DOOR THRESHOLD
28	PULL-DOWN MULTIPURPOSE WALL MOUNTED PROCEDURE TABLE
29	STACKED WASHER/DRYER
30	ROOF SLOPE @ 0/12
31	FOLD DOWN ANIMAL SCALE
32	VMS ANESTHESIA WALL MOUNTED W VIP VAPORIZER
33	CENTRAL SCAVENGER

NOTE: ALL RECEPTABLES ARE INTEGRAL & PART OF WORKSTATION EXCEPTION 11B-203.9

0' 1' 2' 4' 8'
0' 1/2" 1" 2" 4"

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-123126 INC:
REVIEWED FOR
SS ☐ FLS ☐ ACS ☑
DATE: 4/3/2025

CLINIC IN A CAN

Exp 12-31-26

YOLO COUNTY VETERINARY CLINIC
2640 East Gibson Road

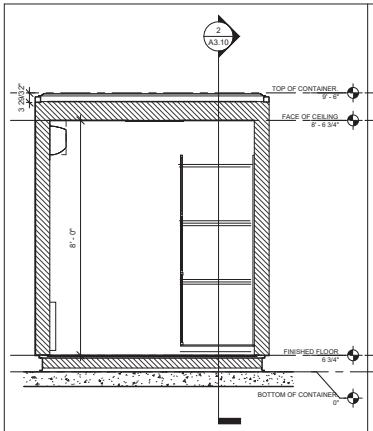
No.	Description	Date
	BB24-089 Reviewed for Code Compliance Approved:CR	

CONSTRUCTION DOCUMENTS

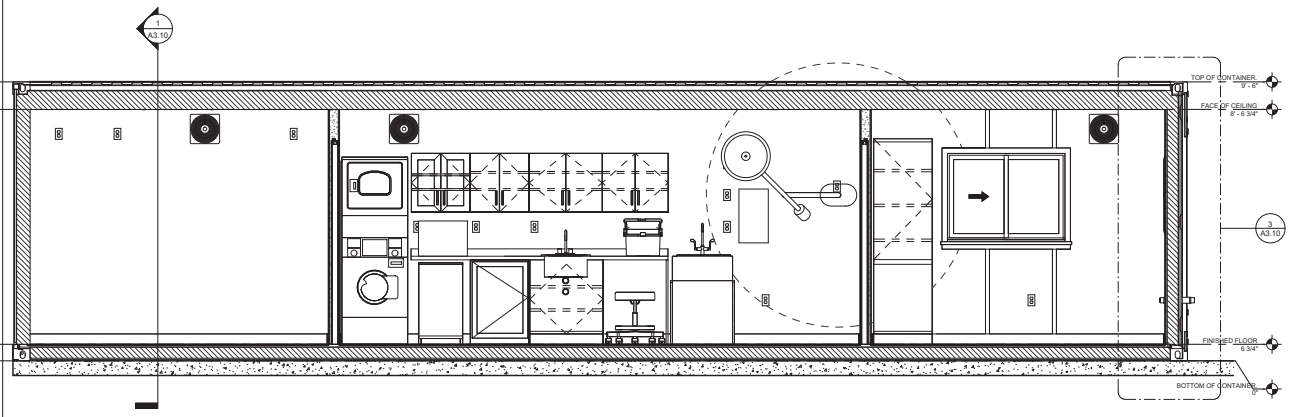
INTERIOR ELEVATIONS

A2.21

3/28/2025 10:03:16 AM



1 BUILDING SECTION 1
1/2" = 1'-0"

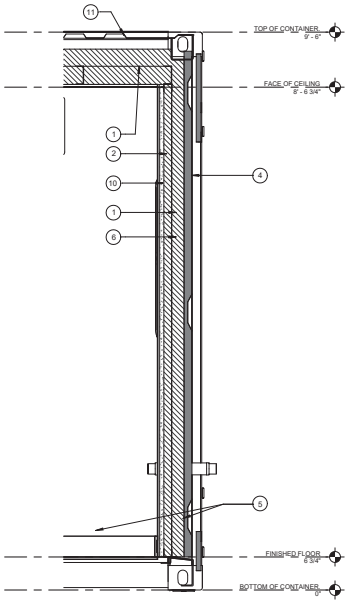


2 BUILDING SECTION 2
1/2" = 1'-0"

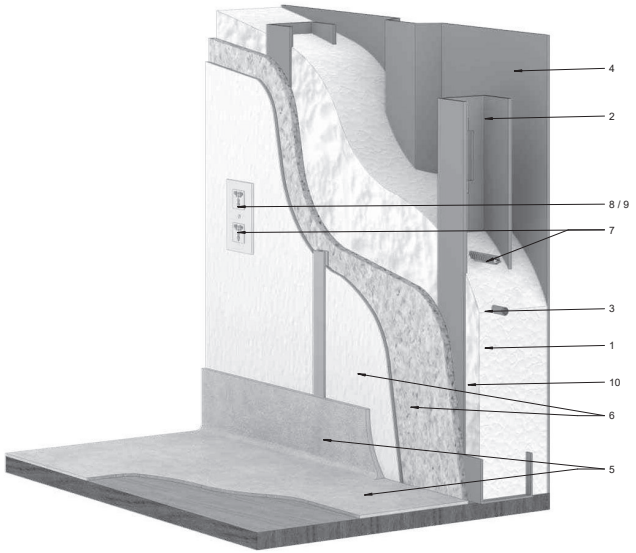
0' 1' 2' 4' 8'
0' 1/2" 1" 2" 4"

KEYNOTES:

1. 3.125"/10.48 cm OF 2 LB / .91 kg CLOSED CELL ICYNENE FOAM INSULATION SPRAYED IN THE WALLS & CEILING.
2. INTERIOR WALLS FRAMED WITH 20 GAUGE GALVANIZED STEEL STRUCTURAL STUDS.
3. ROUGH PLUMBING IS 1/2"/1.26cm PEX TUBING WITH BRASS FITTINGS.
4. NON-CSC CERTIFIED SHIPPING CONTAINER EXTERIOR WALL SURFACE. MADE FROM 12 GAUGE MILD STEEL PAINTED WITH A TWO-PART EPOXY WHITE EXTERIOR - RESISTS RUST & REFLECTS SOLAR GAIN.
5. HETEROGENEOUS MEDICAL GRADE SEAMLESS VINYL FLOORING & WALL BASE WITH 4" FLASH COVING.
6. WALLS & CEILING ARE COVERED WITH A 0.55mm FULL COLOR THICKNESS NON-FRP WASHABLE SURFACE WHICH HAS BEEN PRE-LAMINATED TO A 3/8" / 1.0cm OSB BOARD. THE OSB BOARD TO BE TREATED WITH A ANTI-TERMITE MINERAL. WALLS & CEILING TO BE SECURED USING BOTH LIQUID NAILS HEAVY DUTY CONSTRUCTION ADHESIVE & 1-1/4" DRY WALL SCREWS.
7. ROUGH ELECTRICAL USES UL LISTED METAL CLAD #12/2 SOLID COPPER WIRES & GALVANIZED METAL BOXES.
8. US UL ELECTRICAL OUTLETS.
9. GFCI DUPLEX OUTLET OR CIRCUIT IF AN OUTLET IS LOCATED WITHIN 6 FEET OF A WATER SOURCE.
10. DC-315 INTUMESCENT PAINT TO BE APPLIED ON BACK OF OSB ON WALLS & CEILING AT THICKNESS TO MEET THERMAL BARRIER REQUIREMENTS.
11. ROOF SLOPE AT 0/12



3 TYP. WALL SECTION
1" = 1'-0"



4 WALL SECTION CUT AWAY
3/4" = 1'-0"

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APP: 02-123126 INC:
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DATE: 4/3/2025

MANUFACTURER

CLINIC IN A CAN

DISCIPLINE STAMP

PROJECT INFORMATION

YOLO COUNTY VETERINARY CLINIC
2640 East Gibson Road

BB24-089
Reviewed for
Code Compliance
Approved:CR

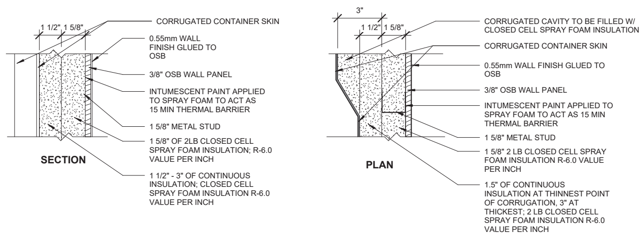
No	Description	Date

PROJECT NUMBER 22103
ISSUE DATE 3/27/2025
ISSUE
CONSTRUCTION DOCUMENTS

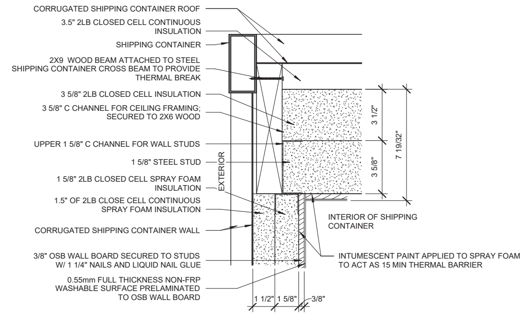
SHEET TITLE
BUILDING SECTIONS

SHEET NO.
A3.10

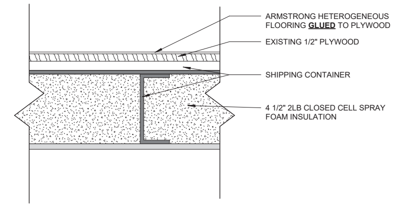
3/28/2025 11:02:28 AM



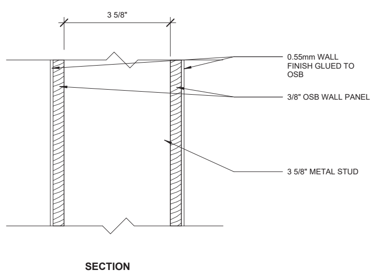
1 TYP. EXTERIOR WALL DETAIL
3" = 1'-0"



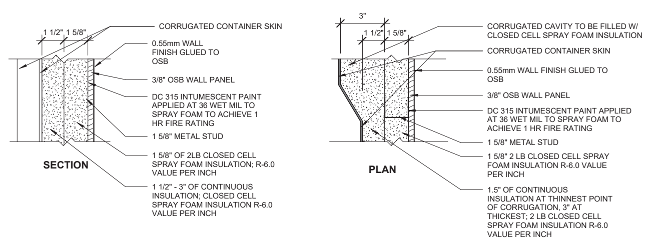
2 TYP. EXTERIOR WALL/ROOF SECTION
3" = 1'-0"



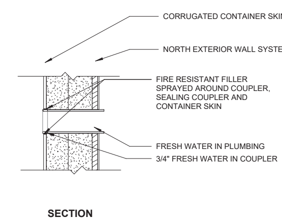
3 FLOOR SECTION
3" = 1'-0"



4 INTERIOR WALL
6" = 1'-0"



5 NORTH WALL EXTERIOR DETAIL
3" = 1'-0"



6 EXTERIOR WALL PENETRATION
3" = 1'-0"

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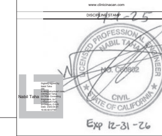
DIV. OF THE STATE ARCHITECT
APP: 02-123126 INC:
REVIEWED FOR
SS ☐ FLS ☐ ACS ☑
DATE: 4/3/2025

MANUFACTURER

CLINIC IN A CAN
CLINIC IN A CAN
9745 E 50TH ST N
BEL AIRE, KS 67226
316.262.0953
www.clinicinacan.com

DISCIPLINE STAMP



DISCIPLINE STAMP

PROJECT INFORMATION

YOLO COUNTY VETERINARY CLINIC
2640 East Gibson Road

REVISIONS

No.	Description	Date

BB24-089
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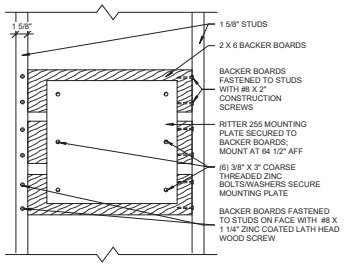
Code Compliance
Approved:CR

PROJECT NUMBER 00168
ISSUE DATE 3/27/2025
ISSUE
CONSTRUCTION DOCUMENTS

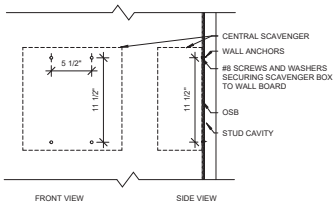
SHEET TITLE
BUILDING DETAILS

SHEET NO.
A4.10

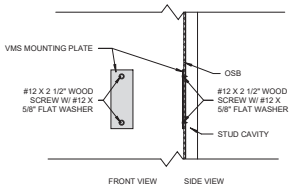
3/28/2025 10:02:21 AM



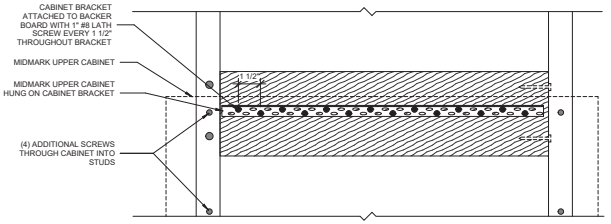
1 RITTER 255 MOUNTING
1 1/2" = 1'-0"

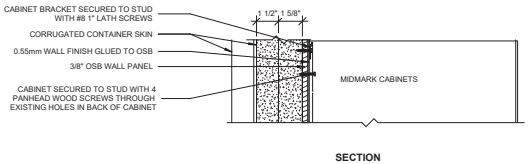


2 SCAVENGER MOUNTING
1 1/2" = 1'-0"

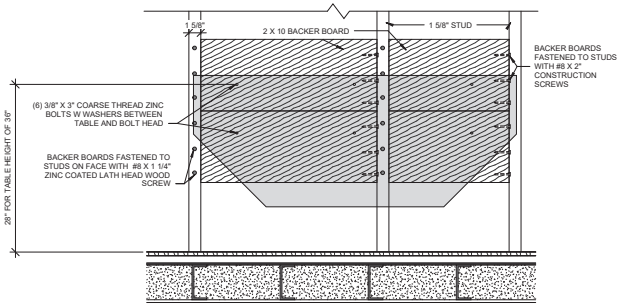


3 VMS ANESTHESIA MOUNTING
1 1/2" = 1'-0"

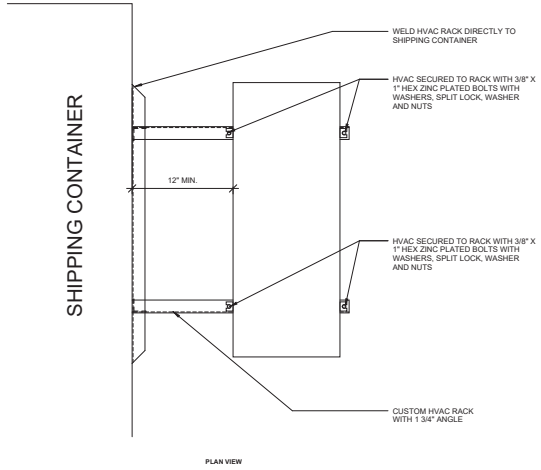




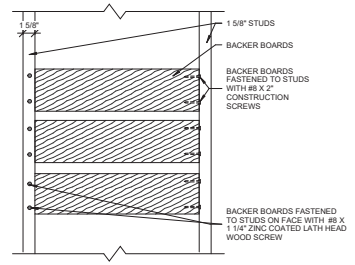
6 CABINET ANCHORING
3" = 1'-0"



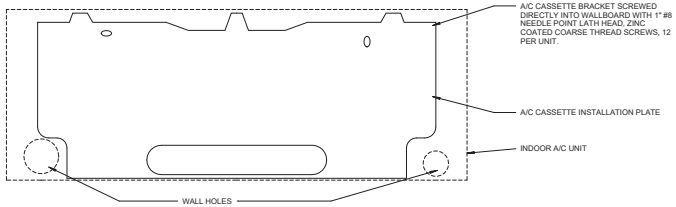
4 DROP DOWN TABLE MOUNTING
1 1/2" = 1'-0"



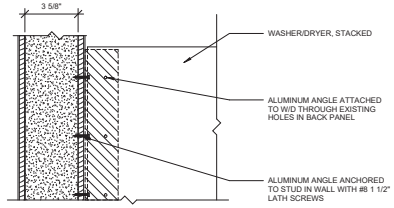
5 HVAC MOUNTING
1 1/2" = 1'-0"



7 TYPICAL BACKER BOARD MOUNTING
1 1/2" = 1'-0"



8 A/C CASSETTE MOUNTING
3" = 1'-0"



9 W/D MOUNTING DETAIL
3" = 1'-0"

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APP: 02-123126 INC:
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DATE: 4/3/2025

MANUFACTURER

CLINIC IN A CAN

DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE
CIVIL
STATE OF CALIFORNIA
Exp 12-31-26

DISCIPLINE STAMP

PROJECT INFORMATION

YOLO COUNTY VETERINARY CLINIC
2640 East Gibson Road

No.	Description	Date

BB24-089
Reviewed for Code Compliance
Approved:CR

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ISSUE

CONSTRUCTION DOCUMENTS

SHEET TITLE

EQUIPMENT MOUNTING DETAILS

SHEET NO.

A4.11

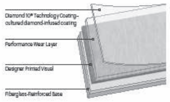
3/28/2025 11:02:28 AM

ArmstrongFlooring | Diamond 10 Technology

HETEROGENEOUS SHEET FLOORING — **Nidra™ | Zenscape™**

Product Information

Construction - Heterogeneous
International Specifications - ASTM F1303, Type I, Grade 1, Class B
Overall Thickness - 0.080 in. (2.0 mm)
Wear Layer Thickness - 0.022 in. (0.55 mm)
Factory Finish - Diamond 10® Technology
Installation - S-995 Adhesive, Flip® Spray Adhesive, Heat Weld or S-763 Seam Adhesive
Maintenance Options - Polish Optional



Packaging

Roll Length	Roll Width	Shipping Weight per Roll
Up to 75.5 ft. (23 m)	6.56 ft. (2.0 m)	5.90 lbs./sq. yd (30 kg/m²)

Testing

Performance	Test Method	Requirement	Performance vs. Requirement
Total Thickness	ASTM F386	≥ 0.040 in.	Meets
Residual Indentation	ASTM F1914	≤ 0.012 in.	Meets
Static Load Resistance @ 175 psi	ASTM F970	≤ 0.005 in.	Meets
Flexibility	ASTM F137	1/4 in. mandrel no cracks or breaks in wear surface	Meets
Resistance to Chemicals	ASTM F925	No more than slight change in surface dulling, attack or staining	Meets
Resistance to Heat	ASTM F1514	ΔE ≤ 8	Meets
Resistance to Light	ASTM F1515	ΔE ≤ 8	Meets
Additional Testing			
Fire Test Data – Flame Spread	ASTM E648	0.45 W/cm² or more Class 1	Meets
Fire Test Data – Smoke Evolution	ASTM E662	450 or less	Meets
Fire Test Data – Canada	CAN/ULC S-102.2	Use dependent	Flame Spread - 5 Smoke Developed - 70
Static Load Resistance	ASTM F970*	< 0.005 in.	2000 psi
Wear Group Classification per EN649-volume loss	EN660-2	–	Wear Group T ≤ 2.0mm³
Bacteria Resistance	ISO 846: PART C	–	No Observed Growth
ADA Standards for Accessible Design	CHAPTER 3 SECTION 302.1	Floor surfaces shall be stable, firm and slip-resistant	Meets
Antistatic Properties	EN 1815	≤ 2.0 kV	Meets (antistatic)
Static Coefficient of Friction**	ASTM D2047/ UL 410	≥ 0.5 in.	Meets

ArmstrongFlooring | Diamond 10 Technology

HETEROGENEOUS SHEET FLOORING — **Nidra™ | Zenscape™**

Sustainability

WELL v1 Feature		Nidra / Zenscape	Contribution
Air	Feature 04 - VOC Reduction	✓	Tested and third party certified by FloorScore as complying with CDPH v1.2
	Feature 11 - Fundamental Material Safety	✓	Product is free of asbestos and added lead (Part 1)
	Feature 25 - Toxic Material Reduction	✓	Free of flame retardants (Part 2) and phthalates (Part 3)
Mind	Feature 97 - Material Transparency	✓	Readily available Health Product Declaration (HPD) to 1000 ppm
	Feature 88 (Part 2) Biophilia I - Qualitative	✓	Products available that incorporate nature patterns
	Feature 99 - Beauty and Design II	✓	Provided patterns and colors to aid in wayfinding and spatial familiarity (Part 3)

WELL v2 Feature		Nidra / Zenscape	Contribution
Materials	Feature X01.1 Material Restrictions	✓	Product is free of asbestos
	Feature X05.1 Enhanced Material Restrictions	✓	Free of flame retardants (Part 2) and phthalates (Part 3)
	Feature X06.1 VOC Restrictions	✓	Adhesives associated with product are tested and third party certified by FloorScore as complying with CDPH v1.2
	Feature X06.2 VOC Restrictions	✓	Flooring is tested and third party certified by FloorScore as complying with CDPH v1.2
	Feature X07.1 Material Transparency	✓	Readily available Health Product Declaration (HPD) to 1000 ppm
Mind	Feature M02.1 Nature and Place	✓	Products available that incorporate nature patterns
Community	Feature C13 (Part 2) Accessibility and Universal Design	✓	Provided patterns and colors to aid in wayfinding and spatial familiarity

LEED® v4.1	Nidra / Zenscape
BPDO - EPD	Product Specific
BPDO - Material Ingredient	HPD
BPDO - Sourcing	13% pre-consumer recycled content
Location of Manufacture	China
Low Emitting Flooring	Tested and third party certified by FloorScore as complying with CDPH v1.2
Low Emitting Adhesives	Tested and compliant to CDPH v1.2; Methylene Chloride and Perchloroethylene not intentionally added, FloorScore Certified
SCAQMD #1168 Compliant. Adhesives meet <50 g/L requirement.	Flip® Spray = 0 g/L S-995 = 0 g/L S-763 = 136 g/L

Carbon Footprint	Nidra / Zenscape
Global Warming Potential, excluding Biogenic Carbon Raw Materials (A1) through Production (A3)	0.80 kg CO² eq. / square foot (8.57 kg CO² eq. / square meter)

Limited Warranty

10-year Commercial Warranty when installed in strict accordance with the detailed instructions.
A 10-year underbed warranty applies when installed with S-995 Adhesive

Visit ArmstrongFlooring.com
for complete Product, Technical, Adhesives, Installation & Maintenance recommendations.

*Testing at loads above 250 psi is outside the scope of the test method. Since testing is conducted on uninstalled flooring, results do not consider the performance of the adhesive, underlayment, or subfloor. These test results are not an indicator of the installed flooring system performance. **Using the James Machine as described in D2047 and as directed in UL 410 for floor covering materials (FCM) using a leather foot under dry conditions. The application of site-applied floor sealers, polishes and other types of finishes routinely used to maintain resilient flooring materials will change the walking surface and consequently the SCOF value.

NATURAL POLYMERS

NATURAL-THERM™ 2.0 IBS/IBW CLOSED CELL SPF

Natural-Therm™ 2.0 Series is summer (IBS) and winter (IBW) versions of a Zero ODP, two-component, semi-rigid spray polyurethane foam insulation with a zero ozone depleting blowing agent and a nominal 2.0 PCF in-place density. These products provide energy efficiency and air infiltration control as a high-performance building envelope insulation system. Natural-Therm™ 2.0 Series offers a self-adhering, seamless insulation that can be used in many areas of the building envelope, including open wall cavities, crawl spaces, perimeter rim joists, cathedral ceilings, and garage ceilings.

Features
- Low VOC[1]
- R-Value 6/inch (Nominal)
- Air Seal
- FEMA Class 5 Flood Resistance[2]

[illegible]

Standards, Codes Compliance
- Meets ICC-ES AC377 Type V-B
- Code Evaluation Report IAPMO ER-[illegible]
- UL GREENGUARD GOLD

Applications
- Wall Cavities
- Vented Attics
- Unvented Attics
- Ceilings
- Unvented Crawl Spaces
- Vented Crawl Spaces
- Rim Joists
- Floors

Packaging, Storage and Shelf Life
A Component: 55 US Gallons, Closed-Top Steel Drum – 500 lb. net wt.
B Component: 55 US Gallons, Closed-Top Steel Drum – 475 lb. net wt.

Store containers between 60°F and 90°F. Containers should be opened carefully to allow any pressure buildup to be vented safely while wearing full safety protection. Excessive venting of the B Component may result in higher density foam and reduced yield.

Shelf Life: Excessive low or high temperatures may decrease shelf life. When stored in the original unopened container at 50°F–90°F:

B Component is 6 months
A Component is 12 months

Equipment
The proportioning equipment must be manufactured specifically for heating, mixing, and spray application of polyurethane foam and be able to maintain 1:1 metering with a ±2% variance and adequate main heating capacity to deliver heated and pressurized materials up to 160°F.

Physical Properties

PROPERTY	TEST METHOD	VALUE
Thermal Resistance	See Table Below	
R-Value at 1 inch[1]	ASTM C518	[illegible]
R-Value at 3.5 inches		21
Core Density	ASTM D1622	Nominal 2.0 PCF
Compressive Strength[2]	ASTM D1621	[illegible] psi
Tensile Strength[2]	ASTM D1623	[illegible] psi
Dimensional Stability 158°F 98% RH (28 d)	ASTM D2126	[illegible]
Air Permeance (1 inch)	ASTM E2178	Meets criteria
Vapor Permeance (≥1 inch)	ASTM E96	<1.0 perms (Class II)
Closed Cell Content	ASTM D6226	> 90%
Surface Burning Characteristics[4]		
Flame Spread	ASTM E84 (Complies with Class 1)[4]	< 25
Smoke Developed		< 450
Thermal Barrier	NFPA 286	Pass with 1/4 mil [illegible]
Ignition Barrier	NFPA 286 AC 377 Appendix X	Pass without an intumescent coating

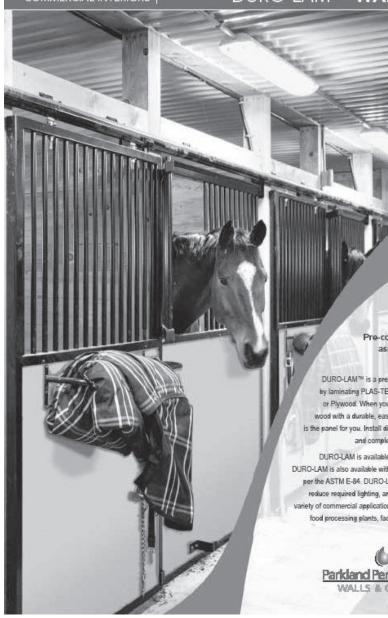
[illegible]

Thermal Resistance - R-Values

THICKNESS (INCHES)	[illegible]
1	[illegible]
2	[illegible]
3.5	[illegible]
4	[illegible]
5	[illegible]
5.5	[illegible]
6	[illegible]
7	[illegible]
7.5	[illegible]
8	[illegible]
9	[illegible]
9.5	[illegible]
10	[illegible]

[illegible]

Product Data Sheet | Natural-Therm™ 2.0 IBS/IBW Closed Cell SPF | February 20[illegible]



COMMERCIAL INTERIORS | DURO-LAM™ **WALL PANELS**

Pre-constructed wall panels assure performance and simplify installation.

DURO-LAM™ is a pre-constructed wall panel created by laminating PLAS-TEX® to the surface of either OSB or Plywood. When you need the structural strength of wood with a durable, easy to clean surface, DURO-LAM is the panel for you. Install directly to steel or wooden studs, and complete your project in no time at all.

DURO-LAM is available in various colors and textures. DURO-LAM is also available with a Class A Fire Rated laminate per the ASTM E-84. DURO-LAM can brighten surroundings, reduce required lighting, and is the perfect wall panel for a variety of commercial applications such as convenience stores, food processing plants, factories, retail stores, and animal housing facilities.

Parkland Performance™ WALLS & CEILINGS

WOOD ENHANCED PERFORMANCE

DURO-LAM™ combines the structural strength of wood with the exceptional durability of a top layer of PLAS-TEX® laminate. DURO-LAM has a Class C Fire Rating per the ASTM E-84, but is also available with a Class A Fire Rated laminate. For applications where a solid substrate is already present, DURO-LAM LITE is the perfect solution to a quickly installed durable barrier on your walls! The panels are rigid and will not flex with studs placed 16" or 24" on center. They are easy to install using our 2-piece molding system and mechanical fasteners, or our specially designed adhesive. A waterproof construction is easily achieved by using a silicone caulk to seal the joints. All of the mechanical fasteners can be hidden using our innovative method of installation! Create a beautiful wall system in no time at all!

FEATURES & BENEFITS

100% WATERPROOF LAMINATE
- Non-absorbent surface
- Mold and mildew resistant
- Available in 3 textures on OSB or plywood
- Easy to install

EXCEPTIONAL PROPERTIES IN A STRUCTURAL PANEL
- Structural strength of wood enhanced by the water and chemical resistance of a thick plastic skin
- Excellent for renovation
- Dual lamination available for panels where both sides are visible

LAMINATE IS CHEMICALLY RESISTANT
- Impervious to most chemicals
- Use cleaners of all types without damage
- No yellowing or color change with corrosive environments
- Unaffected by petroleum products

PRODUCT USES
- Animal confinement
- Food processing
- Commercial kitchens and restaurants
- Industrial wall coverings
- Portable classrooms and offices

PRODUCT SPECIFICATIONS - LAMINATE ONLY

PROPERTY	TEST METHOD	UNIT	VALUE
Compressive strength	ASTM D695	psi	5293
Coefficient of lineal thermal expansion	ASTM D696	in/in/degree F	N/A
Flexural modulus	ASTM D790	psi	78,000 +/- 3,800
Shore hardness	ASTM D2240	D scale	51
Dart drop impact strength	ASTM D3029	inch-pounds	21 @ 71° F
Surface flame spread and smoke development	ASTM E84	NA	Class A or Class C

STANDARD PRODUCT RANGE
Available on Plywood & OSB*

SIZE	FINISH	COLOR	PCS PER UNIT
3/16" x 4' x 8', 10' 5/16" x 4' x 8', 10' Class A & C	Matte, Cracked-Ice, Silk	White	25
15/32" x 4' x 8', 10' Class A & C	Matte, Cracked-Ice, Silk	White	25

*Almond and other colors may be available as a special order with minimum ordering requirements. Almond is only available in Class C fire rating.

Parkland Performance™ WALLS & CEILINGS

P.O. Box 339, 104 Yoder Drive, Middlebury, IN 46540 • Toll Free: 800.835.4110 • Phone: 574.825.4336 • www.parklandplastics.com

Safety and Handling
Exposure — Read and understand the Safety Data Sheet (SDS) for this product before use. Personnel must use appropriate respiratory, skin, and eye Personal Protective Equipment (PPE) when handling and applying polyurethane spray foam systems. Both Components A and B can cause severe irritation and skin sensitization. For interior applications: full body protection required. A comprehensive review of SPF safety and handling can be found on the CPI website.

Fire — Polyurethane foam may present a fire hazard if exposed to fire or excessive heat (i.e. cutting torches). Polyurethane foam systems should not be left exposed and must be protected by a minimum 15-minute thermal barrier or other code-compliant material as prescribed by applicable building code(s). Proper authorities with jurisdiction over a particular area should always be consulted for additional or specific requirements prior to beginning any project.

Job Site Ventilation
During SPF application, a minimum of 10 ACH is required. Cross ventilation is required with negative pressure in the spray area and exhaust to a secured empty area. For more detailed information, please visit American Chemistry Council.

Temperature and Humidity
Recommended substrate temperatures:

	2.0 IBS	2.0 IBW
Minimum	40°F	20°F
Maximum	95°F	77°F

Moisture in the form of rain, dew, and frost can seriously affect the quality and adhesion of the Natural-Therm™ 2.0 Series to the substrate or itself. Natural Polymers does not recommend the spraying of this system when the relative humidity (RH) exceeds 85% or within 5°F of the dew point. When heating the interior of a building, the relative humidity can change dramatically and should be constantly monitored to ensure proper application.

Surface Preparation
Natural-Therm™ 2.0 Series must be applied to surfaces that are clean and dry and free of dirt, oil, solvent, grease, loose particulates, frost, ice, and other foreign matter that could inhibit adhesion.

[illegible]

Processing Guidance

[illegible]

Spraying
Natural-Therm™ 2.0 Series is designed to provide optimal yield when sprayed in 2-inch to 4-inch-thick passes. Excessive pass thickness above 4 inches can reduce physical properties and cause local overheating and possible fire. Additional thickness may be applied with a 5 to 10 second waiting period between lifts. Natural-Therm™ 2.0 Series will cool down fast, so you may spray multiple passes over the same lift. Yield and in-place density is dependent upon the temperature of the substrate, ambient air temperature, gun speed of application, gun tip size, and the output of the proportioner to provide maximum yield when sprayed in 4-inch-thick passes. In freezing conditions, jobsite air temperature must be consistently maintained above 62 degrees to ensure proper curing.

Certifications and Sustainable Features

Environmental and Sustainability
Owens Corning is a worldwide leader in building material systems, insulation, and composite solutions, delivering a broad range of high-quality products and services. Owens Corning is committed to driving sustainability by delivering solutions, transforming markets, and enhancing lives. More information can be found at www.owenscorning.com.

[illegible]

For more information visit: [illegible]

NATURAL POLYMERS, LLC
14496 E. NORTH AVE., CORTLAND, IL 60112
[illegible]
www.owenscorning.com
[illegible]

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DATE: 4/3/2025

MANUFACTURER

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9745 E 50TH ST N
BEL AIRE, KS 67226
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www.clinicinacan.com

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4-1-25
LICENSED PROFESSIONAL ENGINEER
NABIL TAHA
NO. C60802
CIVIL
STATE OF CALIFORNIA
Exp 12-31-26
Nabil Taha — Digitally signed by Nabil Taha

DISCIPLINE STAMP

PROJECT INFORMATION

YOLO COUNTY VETERINARY CLINIC
2640 East Gibson Road

REVISIONS

No.	Description	Date

BB24-089
Reviewed for
Code Compliance
Approved:CR

PROJECT NUMBER 00168
ISSUE DATE 3/27/2025
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SHEET TITLE
PROJECT MATERIAL SPECIFICATIONS

SHEET NO.
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Distributed by RDR Technologies, LLC
835 SE 30th Street, Suite C
Oklahoma City OK 73129
rdrtechnologies.com .. 405-702-0085

DC315 Intumescent Coating

Description

DC315 is a single component, water based intumescent coating tested to meet Building Code requirements for the fire protection of Spray Polyurethane Foam (SPF). Tested and evaluated in the USA by UL and ICC-ES, and in Canada by ULC and CCMC.

DC315 is fully AC456 Compliant and satisfies the International Building Code (IBC), International Residential Code (IRC), National Building Code of Canada (NBCC) and many other National and International building codes.

DC315 offers more tested systems to meet interior thermal and ignition barrier requirements AND DC315 has been tested as a component of exterior wall systems in accordance with the NFPA 285 and meets IBC Section 2603.5 with various architectural cladding options.

The Choice is clear, DC315 is the most tested and approved fire protective coating for SPF insulation on the market today!

DC315 Tested Solutions for Spray Polyurethane Foam

- More certified full scale alternative Thermal and Ignition Barrier tests over SPF
- Code Compliance Evaluated by IAPMO ER-499 and ICC-ESR 3702 for the **USA market**
- Code Compliance Evaluated by CCMC #14036-R and ULC ER39793 for the **Canadian market**
- NFPA 285 Tested and Listed by UL File R40018 as a component of exterior wall systems with various architectural claddings
- DC315 manufacturing facilities are 3rd party Listed and Inspected
- Tested useful life, fire performance not compromised after 50 years.
- Topcoat for color, weather and moisture protection, tested full scale via NFPA 286
- ANSI 51 testing for incidental food contact
- Passed CA-1350 - qualifies DC315 as a low-emitting material for LEEDS and Green Building standards
- Passed strict EPA – VOC and AQMD air emission requirements
- No formaldehyde, RoHS
- "Single Coat Coverage" on walls and ceilings
- Meets Life Safety Code NFPA 101

Specifications:

Finish:	Flat
Color:	Ice Gray, White and Charcoal Black
V.O.C.:	18.3 g/l VOC 18.6 g/l VOC Less Water
Volume Solids:	67%
Drying Time: at 77F & 50% RH	To Touch: 1-2 hours recoat: 4 to 8 hours
Type of Cure:	Coalescence
Flash Point:	None
Reducer/Cleaner:	Water
Shelf Life:	18-24 months (unopened)
Packaging:	5- & 55-gallon containers 5-gallon pail - 58 lbs. 55-gallon drum - 640 lbs.
Shipping weight:	
Application:	Brush, roller, airless spray
QAI Listed:	File #1117

***FOR USA ONLY -View our online Testing Matrix for a complete list of all foams DC315 has been tested and approved with as Thermal or Ignition barriers.**

International Building Code Fire Performance Requirements for SPF: The International Building Code (IBC) mandates that SPF be separated from the interior of the building by a 15-minute thermal barrier, or other approved covering. DC315 passed certified **NFPA 286** testing over all major brands and types of open and closed cell spray applied polyurethane foams. This finished assembly testing, conducted by IAS certified testing facilities, complies with the requirements of 2012 IBC Section 803.1.2 and Section 2603.10., 2015 IBC Section 2603.9 and Section 803.1.

Alternative Ignition Barrier Assemblies: DC315 meets the requirements for ignition barrier protection in unoccupied spaces as per **AC 377, Appendix X.**

Exterior Wall Systems: DC315 has been tested as a component of exterior wall systems in accordance with the NFPA 285 and meets 2015 IBC Section 2603.5 with various architectural cladding options.

National Building Code of Canada: DC315 prevents flashover for 10 minutes for Combustible Construction or 20 minutes for Non-Combustible construction when tested to the CAN/ULC S-145 Standard. This testing has been shown to exceed the protection of CAN/ULC S-124 tested materials and meets the Intent of NBC Section 3.1.5.12 for the protection of foamed plastics.

European Union: DC315 has been tested over both medium density and low-density spray polyurethane foam and provides an EN13501- 1 Fire Classification of B-S2-D0.

Australia and New Zealand: DC315 has been tested to the AUS ISO- 9705 standard over spray polyurethane foam and meets Group 2 Classification. ISO5660 (part 1 and 2) tests confirm Group number classification as 1 which allows for the addition of the thermal barrier coating to upgrade the fire rating of the underlying spray foam.

END USE APPLICATIONS: DC315 is designed as an interior Fire Protective Coating used to protect spray foam insulation from the interior conditioned space of a building. DC315 can also be used in many different applications such as cold storage, parking garages and agricultural buildings by following a few additional steps to address these types of environments. When installing DC315 in unconditioned spaces the coating and the SPF are exposed to variations in environment that needs to be accounted for by the installer/end user, when designing the full system. Care needs to be taken to ensure that the correct products are specified based on the expected service or environmental conditions. Topcoats are not required to meet the certified fire testing however should be considered for use where/when conditions warrant. Suitability for a particular end use condition shall be determined by code and inspection authorities, architects, specifiers, contractors, installers or any end user of DC315. This guide does not purport to address all unconditioned or conditioned environmental concerns if any, associated with a specific project.

Testing

USA

- **ASTM E84** - Flame Spread 0 Smoke 10
- **NFPA 286** - Complies with Acceptance Criteria of IBC/IRC
- **ASTM E2768** - 30-minute Ignition Resistant Material
- **NFPA 285** - Exterior Wall System with various claddings

Canada

- **CAN/ULC S102** - FSR 0 SDC 25
- **CAN/ULC S 101** – up to 1 hr assembly rating
- **CAN/ULC S705** - 10- and 20-minute testing
- **CAN/ULC S-145** – 20 Minute Rating

European Union

- **BS 476 Part 6 & 7**
- **BS EN ISO 11925-2**
- **EN 13823**
- **EN 13501** Classification B-S2-d0

Australia/New Zealand

- **AUS ISO 9705**
- **AS/NZS 1530.3**
- **AS 5637.1** Group Classification 2, NZBC Group 2-S
- **ISO 5660** Parts 1 and 2

Physical Properties Testing

- **ASTM D522** Flexibility, Mandrel Bend
- **ASTM D4541** Adhesion pull off strength
- **ASTM D4585** Moisture resistance for 100 hours
- **ASTM D4587 / ASTM G154** Accelerated Weather QUV 1000 hours
- **ASTM D3359** Tape Adhesion
- **ASTM D2486** Scrub Resistance
- **ASTM E661** Durability, Impact, Concentrated load

Rev: 10/29/2020

International Fireproof Technology Inc.
17321 Von Karman Ave, Irvine, CA 92614

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Exp 12-31-26

PROJECT INFORMATION

YOLO COUNTY VETERINARY CLINIC
2640 East Gibson Road

BB24-089
Reviewed for
Code Compliance
Approved:CR

No	Description	Date

PROJECT NUMBER 25105
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ISSUE

CONSTRUCTION DOCUMENTS

SHEET TITLE

PROJECT MATERIAL SPECIFICATIONS

SHEET NO.

A4.13

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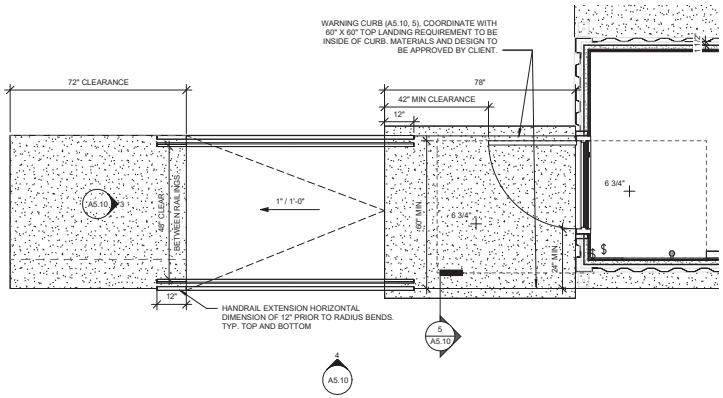
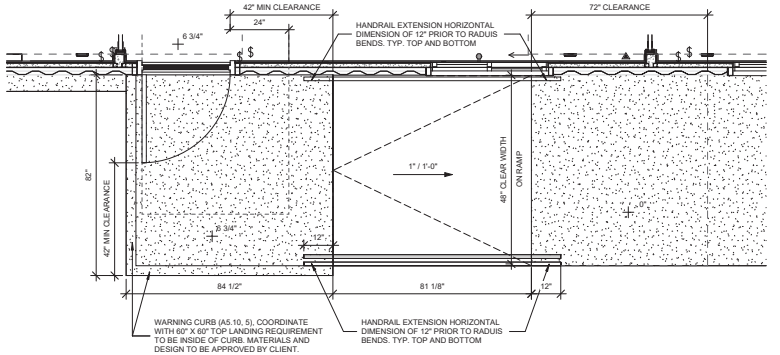
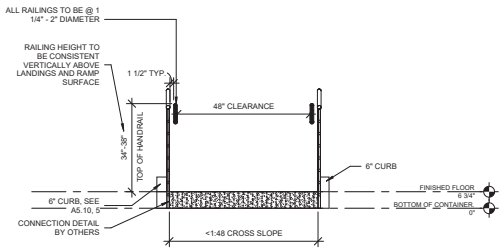


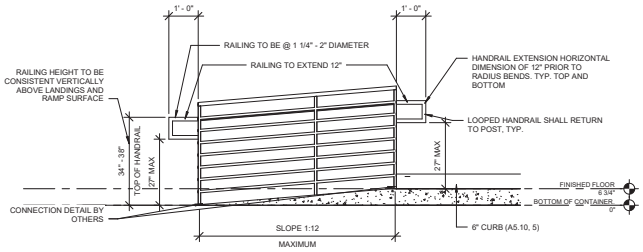
1 RAMP/LANDING 1
1/2" = 1'-0"



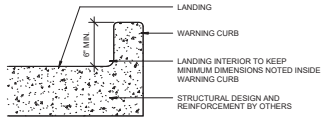
2 RAMP/LANDING 2
1/2" = 1'-0"



3 TYP. RAMP ELEVATION
1/2" = 1'-0"



4 TYP. RAMP SIDE ELEVATION
1/2" = 1'-0"



5 WARNING CURB
1 1/2" = 1'-0"

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DATE: 4/3/2025

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PROJECT INFORMATION

YOLO COUNTY VETERINARY CLINIC
2640 East Gibson Road

BB24-089
Reviewed for
Code Compliance
Approved:CR

No.	Description	Date

PROJECT NUMBER: 22103
ISSUE DATE: 3/27/2025
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CONSTRUCTION DOCUMENTS

SHEET TITLE

RAMP/LANDING PLAN & DETAILS

SHEET NO.

A5.10

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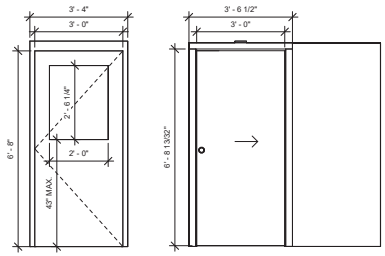
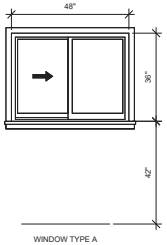


DOOR LEGEND
1/2" = 1'-0"

Door Schedule

Mark	Type Comments	Height	Width	Finish	Frame Material	Fire Rating	U-Factor	Closer Y/N	Pull	Lock	Threshold	Sweep	Hinges	Clear Width	Comments
1	A	6' - 8"	3' - 0"	METAL	METAL	N/R	0.42	Y	(2) Augusta AU X CN	Yale 8800 Exit Lock	Aluminum Saddle	Aluminum Pemko 345_PK	Steel STD NRP	2' - 8"	
2	A	6' - 8"	3' - 0"	METAL	METAL	N/R	0.42	Y	(2) Augusta AU X CN	Yale 8800 Exit Lock	Aluminum Saddle	Aluminum Pemko 345_PK	Steel STD NRP	2' - 8"	
3	B	6' - 11 15/16"	6' - 3 5/32"	METAL	METAL	N/R	0.42	N	N/A	Rockwood 891	Aluminum Saddle	N/A	N/A	2' - 8"	SLIDING POCKET DOOR
4	B	6' - 11 15/16"	6' - 3 5/32"	METAL	METAL	N/R	0.42	N	N/A	Rockwood 891	Aluminum Saddle	N/A	N/A	2' - 8"	SLIDING POCKET DOOR



WINDOW LEGEND
1/2" = 1'-0"

Window Schedule

Mark	Type Mark	Sill Height	Height	Width	Manufacturer	Model	OPERATION
001	A	3' - 6"	3' - 0"	4' - 0"	JELD-WEN	CUSTOM	SLIDING
003	A	3' - 6"	3' - 0"	4' - 0"	JELD-WEN	CUSTOM	SLIDING
004	A	3' - 6"	3' - 0"	4' - 0"	JELD-WEN	CUSTOM	SLIDING

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DATE: 4/3/2025

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PROFESSIONAL ENGINEER
CIVIL
STATE OF CALIFORNIA
Exp 12-31-26

PROJECT INFORMATION

YOLO COUNTY VETERINARY CLINIC
2640 East Gibson Road

No.	Description	Date

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CONSTRUCTION DOCUMENTS

SHEET TITLE
DOOR/WINDOW SCHEDULE

SHEET NO.
A6.10

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STRUCTURAL GENERAL NOTES – APPLICABLE TO ALL CONSTRUCTION UNLESS OTHERWISE NOTED ON THE PLANS

A. DESIGN SCOPE BY PSE CONSULTING ENGINEERING (PSE):

1. Design Shown on drawings by PSE is for the following items.
   a. Foundation and framing.
2. Design Shown on PSE drawings does not include: finishes, architectural items, windows, doors, moisture barriers, water proofing, mechanical units, plumbing, or electrical items.

B. GENERAL REQUIREMENT:

1. Furnish all labor, materials, and equipment necessary to complete the work shown or inferred by these drawings.
2. Where construction details are not shown or noted for any part of the work, such details shall be the same as for similar work shown on the drawings.
3. Notes and details on the drawings take precedence over the general notes and typical details in case of conflict.
4. Provide manufacturer's approved product evaluation reports (ICC reports) and a list of all proposed substitutions to the Engineer for review and written approval before fabrication.
5. Pipes, ducts, sleeves, chases, etc. shall not be placed in slabs, beams, or walls unless specifically shown or noted nor shall any structural member be cut for pipe, ducts, etc., unless specifically shown. Obtain prior written approval for installation of any additional holes, ducts, etc.
6. Locate and protect underground or concealed conduit, plumbing or other utilities where new work is being performed.
7. The contract drawings and specifications represent the finished structure and do not indicate methods, procedures or sequence of construction. The contractor shall take necessary precautions to maintain and insure the integrity of the new and any existing structures during construction. The design stresses shall not be exceeded during construction based on the age of each element . Neither the owner nor Architect/Engineer will enforce safety measure regulations. Contractor shall design, construct and maintain all safety devices, including shoring and bracing for the new and any existing structures and shall be solely responsible for conforming to all local, state and federal safety and health standards, laws and regulations. Observation visits to the site by the engineer shall not include inspection of the above items.
8. Obtain prior written approval for any changes to the drawings.
9. The contractor shall review and compare the structural drawings with all other Construction Documents, such as Architectural, Mechanical and Electrical drawings, specifications, etc. Do not scale drawings. The contractor shall verify dimensions, elevations and all information. Report, in writing, any inconsistencies, errors, or omissions to the Architect/Engineer of record before proceeding with the work.
10. All existing constructions shown are schematic only. Contractor is responsible to verify actual conditions and allow for them in his bid. Notify the Architect/Engineer, in writing, in case of any discrepancy between actual conditions and what is shown on the structural drawings before proceeding with the work.
11. See Architectural, Mechanical, Electrical and other drawings for embedded items.
12. Camber shall be provided for all members with 30 feet or more of span. Check beam table and contact the Structural Engineer for the amount of camber.
13. Shop drawings:
    a) Shop drawings shall be submitted in the form of two copies.
    b) Prior to submittals, the general contractor shall review all submittals for conformance with the Construction Documents and shall stamp submittals as being "Reviewed for Conformance".
    c) Any detail on the shop drawing that deviates from the Construction Documents shall be marked with the note "This is a change"
    d) Shop drawing submittals processed by the Structural Engineer are not Change Orders.
    e) Shop drawings shall be submitted to the Architect/Engineer prior to fabrication and construction regarding all structural items including:
    -Concrete and masonry reinforcement, drawings shall conform to ACI 315 and ACI 318.
    -Structural steel, drawings to conform to AISC.
    -Glued-Laminated members, drawings to conform to AITC.
    -Prefabricated wood joists and trusses, drawings to conform to ICC product evaluation report.
    -Wood trusses, drawings to conform to IBC.
    f) Shop drawings or calculations submitted for review that require re-submittal for re-review, as determined by the Structural Engineer, shall be billed hourly to the general contractor. Re-review will not proceed without written approval from the general contractor for additional engineering services.
14. Submit seismic anchorage calculations stamped by a licensed Professional Engineer for all equipment and components weighing more than 400 lb.
15. Submit structural drawings signed and sealed by a professional Engineer licensed in the State where the project is located for any structural member needed for this project that is not designed by P.S.E.
17. Any substitutions for structural members, hardware or details shall be reviewed by the Architect and Structural Engineer. Such review will be billed on a time and materials basis to the General Contractor with no guarantee that the substitution will be allowed.
18. All communication shall be in writing. No verbal communications, decisions, instructions or approvals shall be valid.

C. CODE AND LOADS:

1. All design, material, and construction work for this project shall conform to the 2022 CALIFORNIA State Building Code based on the 2021 International Building Code (IBC).
2. Design parameters.

a. Floor Live Load = 100 psf.	b. Floor Dead Load = 15 psf.
c. Roof Live Load = 20 psf.	d. Roof dead load = 20 psf.
e. Ground Snow Load, Pg = 7 psf.	f. Flat Roof snow load = 20 psf.
g. Snow Exposure Factor, Ce = 1.0	h. Snow Load Importance Factor, Is = 1.0
i. Thermal Factor, Ct = 1.0	j. Basic Wind Speed (3 second gust) = 95 mph
k. Risk Category = II	l. Wind Exposure = C
m. Internal Pressure Coefficient = 0.18	n. Components and Cladding studs = 19.29 psf
o. Seismic Importance Factor, Ie = 1.0	p. Site Class = D
q. Ss = 0.877	r. S1 = 0.325
s. Sms = 1.052	t. Sm1 = 0.642
u. Sds = 0.702	v. Sd1 = 0.428
w. Seismic Design Category = D	x. Basic Seismic Force Resisting System = (STEEL MOD CONTAINER/ISBU)
y. Design Base Shear = 0.351 * W	z. Approximate Fundamental Period, T = 0.108
aa. Response Modification Factor, R = 2	bb. Analysis Procedure Used = Equivalent Lateral Force Procedure

D. INSPECTION:

1. All construction shall be inspected by the building officials according to the above Code.
2. It is recommended that the owner or the contractor hire PSE or other Qualified Licensed inspectors to provide inspection during construction.

E. CONCRETE:

1. All concrete work shall conform to the American Concrete Institute's Standard Building Code Requirements for Structural Concrete, ACI 318, the edition specified in IBC. Place concrete in accordance with ACI 301.
2. Materials shall comply with:
   a) Cement, ASTM C150 Type I or II. c) Water, Potable.
   b) Aggregate, ASTM C33. d) Anchor bolts ASTM A-307 headed machine bolts.
3. Concrete shall develop 28-days minimum compressive strengths of 4000 PSI.
4. All exposed exterior concrete shall contain the proper admixtures to obtain 5% to 7% Air Entrainment.
5. Contractor shall submit three copies of the mix design for review. Concrete mixes shall be designed and tested by a testing laboratory. The mix design shall establish the quantity of all ingredients including water to produce concrete of the required strengths, slump and durability.
6. Reinforcing Steel:
   a. All reinforcing steel shall be ASTM A615 Grade 60.
   b. Where welding of rebar is required by these drawings, steel shall be pre-heated or steel grade 60-W, ASTMA706 shall be used.
   c. All welded wire mesh reinforcing shall be ASTM A185 cold drawn wire. Lap 1 mesh spacing minimum at all splices.
   d. Bars marked continuous and all vertical steel shall be lapped 48 bar diameters at splices UON on the drawings.
   e. Vertical bars shall be doweled to supporting members with the same size and spacing of reinforcement shown in the drawing or general notes.
   f. All reinforcing in grade beams shall be continuous. Lap top steel at midspan. Lap bottom steel at supports. Splices shall be 48 bar diameters or 30 inches whichever is greater UON. Stagger bottom splices at least 5'-0" from splices in other bottom reinforcement, stagger splices for top reinforcement similarly.
   g. Clear distance between parallel reinforcement in a layer shall not be less than 1-1/2 times the diameter of the reinforcement, or 1-1/3 times maximum size aggregate, not less than 1-1/2".
   h. Tack welding, welding, heating or cutting of bars is not permitted UON.
   i. All reinforcing bars shall be in the correct place, tied and secured prior to concrete placement. Use chairs, spacers and sand plates as required.
7. Execution:
   a. All concrete is reinforced concrete unless specifically called out as "Unreinforced". Reinforce all concrete not otherwise shown with same steel as in similar sections or areas.
   b. At all openings in concrete walls and slabs, add 2-# 5 bars (opening dimension plus 60 bar diameters long) at each of the four sides and 2-#5 X 5'-0" long diagonally at each of the four corners.
8. Standard concrete cover of bars unless otherwise noted shall be:
   a. Where earth formed: 3 inches.
   b. Board formed then permanently exposed to earth or weather: 2 inches.
   c. Slabs not exposed to earth or weather: 1 inch.
   d. Beams and columns not exposed to earth or weather: 1-1/2 inches.
   e. Others: 2 inches.
9. Slump shall not be more than 4 inches.
10. Water/Cement ratio shall not exceed 0.45.
11. All concrete shall be consolidated with mechanical vibrators.
12. The unit of pour for foundation walls and footings shall not exceed 80 linear feet in any one direction. Construction joints shall be doweled and keyed.
13. Construction joints in beams, slabs, and grade beams shall occur at middle one third of the span. Provide (1) 2X4 inch horizontal key per foot of depth at construction joint. Location of joints to be reviewed by the Engineer. Wait 48 hours between placements.
14. Location of control, expansion and construction joints shall be approved by the Architect/Engineer.
15. Coordinate concrete work with architectural drawings and specifications for any architectural finished concrete, recessed area, embedded items, or special control joint patterns.
16. No Aluminum or galvanized steel items shall be embedded in concrete.
17. All exposed edges not in contact with masonry mortar shall be beveled 3/4 inch.
18. All concrete work shall be cured and maintained above 50 degrees Fahrenheit for at least seven days according to the Standard Practice for Curing Concrete, ACI 308, ACI 318 and as approved by the Engineer.
19. When air temperature is above 80 degrees Fahrenheit, Hot Weather Concreting, ACI 305R shall apply. When the average air temperature is below 40 degree Fahrenheit, Cold Weather Concreting, ACI 306R shall apply.
20. Reference the specifications for additional requirements.

F. FOUNDATION:

1. Due to the lack of specific GEOTECHNICAL information for this site, foundation was designed on an assumed bearing capacity of 1500 PSF. PSE is not responsible for any future defects resulting from unreported condition mitigating the above assumption. PSE recommends that the owner/contractor order geotechnical/soil investigation & foundation recommendation report. Submit copy of this report to PSE.
2. Soft soil or fill material shall be removed and replaced with competent granular engineering fill or lean concrete. The new fill shall be compacted in 8" layers to gain 98% of its maximum dry density according to ASTM D-698 standard proctor, and be capable of supporting the above bearing capacity.
3. Footing shall be stepped as required to maintain minimum required frost depth, below finished grade.
4. Use light weight equipment to compact the soil within 2 feet around foundation/basement wall.
5. Excavation shall be properly back filled Back fill for walls shall be pervious material. Do not place back fill behind walls before they have attained their design strength. Shore and protect walls from lateral loads until the supporting members are in place and have developed specified strength.
6. When the finished crawl space elevation is lower than the outside finished grade, or when it is required by the Geotechnical investigative report or building department, provide 4 inch diam. perforated drain pipe below the top of the footing. Encase the pipe in 18x18 inches free-drain crushed stone and fabric at the perimeter of the crushed stone.
7. Roof and area drainage shall be directed away from the foundation.

G. FROST DEPTH:

FROST DEPTH PER LOCAL JURISDICTION: 5" &. SAME USED FOR DESIGN. (VERIFY WITH LOCAL BUILDING DEPARTMENT)

H. SHIPPING / CARGO CONTAINER SPECIFICATION:

1. The shipping / cargo container(s) shall be:
   a) Undamaged (Free of rust, dents, cracks, et cetera that affect the structural integrity of the container).
   b) Made from steel.
   c) Design and tested according to the International Organization for Standardization (ISO) specifications.
   d) Certified for compliance to the Rules for Certification of Cargo Containers and the International Convention for Safe Containers (CSC) for use as shipping containers by the American Bureau of Shipping (ABS) or other approved Certified Inspection and Testing Agency (CITA).
   e) Container shall have a CSC safety approval placard (CSC Plate) and CITA logo prior to any modification.
   f) Walls and roof are continuously welded around its entire periphery and is itself made from sheets of corrugated 14ga. Cor-Ten steel also continuously welded together. This steel, also used for the side and end walls has a minimum yield strength of 50ksi and tensile of 70ksi.
2. Prior to construction/modification, Client / Owner / Contractor shall:
   a) Provide pictures of high/good quality to PSE showing the following of each container:
      - All four sides
      - Roof
      - Under framing
      - Top Rails
      - Bottom Rails
      - Interior
      - CSC Plate
   b) Visually inspect all existing welds for consistency and undamaged.
   c) Confirm existing plywood floor sheathing is:
      - Not damaged, cracked, deformed, delaminated, or showing any other signs that structural integrity has been compromised
      - Free of hazardous materials, liquids, and/or stains, or shall be encapsulated.
      - Fully fastened to container floor joists per original construction.
      - If existing plywood floor sheathing needs to be replaced, inform PSE prior to replacing with equivalent pressure/preservative treated OSB or ¾" steel plate with equivalent or better fastening to container floor joists.
   d) If possible, provide manufacturer drawings of container to PSE.

I. STRUCTURAL STEEL:

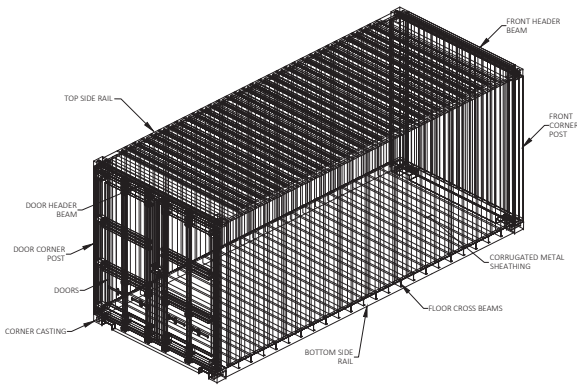
1. Unless noted otherwise on plans, all structural steel shall be per Table 2-3 of AISC Manual of Steel Construction, Thirteenth Edition, as shown below:

Shape	Steel, Typ	Yield Strength Fy, KSI
W-shape	A 992	50-65
Angles	A 36	36
Rectangular Tube, HSS	A 500, Gr C	50
Round Tube, HSS	A 500, Gr C	46
Pipe	A53, Gr B	35

2. Fabrication and erection shall be in accordance with the American Institute of Steel Construction (AISC).
3. All beam connections shall be bolted or shop welded as detailed on the drawing or designed by fabricator per AISC Manual of Steel Construction allowable Stress Design, "Framed Beam Connections." Bolts shall be 3/4 inch. diameter ASTM A325, load indicator bolts. All bolts shall be tightened to the minimum tension specified in the specification for structural joints using A325 or A490 bolts.
4. All welding shall conform to the current American Welding Society (AWS) Specifications and be performed by certified welders.
5. Column anchor bolts shall have minimum yield strength of 36 KSI.
6. Metal deck shall be the type as indicated on the drawings. The deck shall be welded to the supporting members per manufacturer's recommendations or as indicated on the drawings whichever is more restricting or stringent.
7. All openings in metal deck to have 4" X 4" X ¼" angle frames set between joists.
8. All structural steel and bar joists shall have one shop coat of rust inhibitor primer paint conforming to specification. Field touch up all unpainted areas and weld areas.
9. Grout for base plates shall be nonmetallic, non-shrinkage cementitious grout having a minimum 3-days compressive strength of 4000 PSI.
10. Reference specifications for additional requirements.

J. ABBREVIATIONS:

AB	ANCHOR BOLT	EQ	EQUAL	LL	LIVE LOAD	RFT	RAFTERS
ADDL	ADDITIONAL	ES	EACH SIDE	MATL	MATERIAL	SGN	STRUCTURAL GENERAL NOTES
ALT	ALTERNATE	EW	EACH WAY	MAX	MAXIMUM	SEP	SEPARATION
APA	AMERICAN PLYWOOD ASSOCIATION	FA	FRAMING ANCHOR	MB	MACHINE BOLT	SIM	SIMILAR
		FD	FROST DEPTH	MFR	MANUFACTURER	SN	SHEAR NAIL
ARCH	ARCHITECTURAL	FEN	FLOOR EDGE NAILING	MIN.	MINIMUM	SNL	SNOW LOAD
B	BOTTOM	FF	FINISHED FLOOR	MTL	METAL	SPEC	SPECIFICATION
BLKG	BLOCKING	FN	FIELD/INTERMEDIATE NAILING	NO.	NUMBER	STD	STANDARD
BN	BOUNDARY NAIL			NS	NEAR SIDE	STGR	STAGGER
BOF	BOTTOM OF FOOTING	FS	FAR SIDE	NTS	NOT TO SCALE	STIFF	STIFFENERS
IBC	INTERNATIONAL BUILDING CODE	FTG	FOOTING	OC	ON CENTER	T	TOP
		GALV	GALVANIZED	OD	OUTSIDE DIAMETER	TB	TOP & BOTTOM
CJ	CONSTRUCTION JOINT OR CONTROL JOINT	GC	GENERAL CONTRACTOR	ORSC	OREGON RESIDENTIAL SPECIALTY CODE	TD	TYPICAL DETAILS
		GIR	GEOTECHNICAL INVESTIGATION REPORT			TG	TONGUE & GROOVE
CL	CENTER LINE			OH	OPPOSITE HAND	THK	THICKNESS/THICK
CLR	CLEAR	GLB	GLUED LAMINATED BEAM	OSB	ORIENTED STRAND BOARD	TN	TOENAIL
CONN	CONNECTION	GR	GRADE	OSSC	OREGON STRUCTURAL SPECIALTY CODE	TOB	TOP OF BEAM
CONT	CONTINUOUS	HDR	HEADER			TOF	TOP OF FOOTING
DBL	DOUBLE	HGR	HANGER	OSV	ON SITE VERIFY	TOW	TOP OF WALL
DIM	DIMENSION	HORIZ	HORIZONTAL	OTOB	OUT TO OUT OF BEARING	TYP	TYPICAL
DL	DEAD LOAD	HSH	HORIZONTALLY SLOTTED HOLES	PERP	PERPENDICULAR	UON	UNLESS OTHERWISE NOTED
DO	DITTO (REPEAT)	IBC	INTERNATIONAL BUILDING CODE	PL	PLATE	VERT	VERTICAL
DWG	DRAWING			PLF	POUND PER LINEAR FOOT	VSH	VERTICAL SLOTTED HOLES
DWL	DOWEL	ICC	INTERNATIONAL CODE COUNCIL	PSE	PSE CONSULTING ENGINEERS, INC.	WD	WOOD
E	EXISTING	ID	INSIDE DIAMETER			WEN	WALL EDGE NAILING
EA	EACH	INT	INTERIOR	PT	PRESSURE TREATED	WWM	WELDED WIRE MESH
EF	EACH FACE	JT	JOINT	PW	PLATE WASHER	W/	WITH
EL	ELEVATION	LDGR	LEDGER	REF	REFERENCE	W/O	WITHOUT
EMBED	EMBEDMENT	LGST	LIGHT GAUGE STEEL, COLD-FORMED STEEL	REN	ROOF EDGE NAILING		
EN	EDGE NAIL			REINF	REINFORCEMENT		
EOR	ENGINEER OF RECORD						



1 STANDARD SHIPPING CONTAINER MEMBER NOMENCLATURE
N.T.S.

SHEET INDEX:		REV.
S1	GENERAL STRUCTURAL NOTES	
S2	FOUNDATION, FLOOR & CEILING FRAMING PLAN & DETAILS	
S2.1	ADDITIONAL FRAMING DETAILS	

Structural details for this project are for illustration only. They are not drawn to scale unless noted otherwise. Contractor must verify all dimensions before fabrication or construction. Do not scale drawings.

caleb.sale 1/30/2025 9:00 AM 2025-01-30 Clinic in a can 224-001 CA YOLO Clinic Struct Set.dwg

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-123126 INC:
REVIEWED FOR
SS ☐ FLS ☐ ACS ☑
DATE: 4/3/2025

PSE CONSULTING ENGINEERS, INC.
250 Main St. Suite A
Klamath Falls, OR 97601
www.structure1.com
Phone: (541) 850-6300
info@structure1.com

Project:
YOLO CLINIC - 40' CONTAINER VETERINARY CLINIC
2640 East Gibson Rd,
Woodland, CA 95776.

Owner:
CLINIC IN A CAN

Stamp:
4-1-25
REGISTERED PROFESSIONAL ENGINEER
NABIL TAHA
No. C091603
CIVIL
STATE OF CALIFORNIA
Exp 12-31-26
Digitally signed by Nabil Taha
DN: E=Nt@structure1.com, CN=Nabil Taha, O=PSE Consulting Engineers, Inc., L=Klamath Falls, S=Oregon, C=US
Date: 2025.04.01 15:06:16-07'07'
Nabil Taha

Revision Table		
MARK	DESCRIPTION	DATE

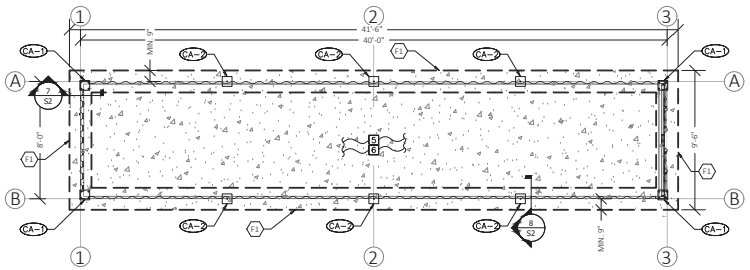
BE24-089
Reviewed for Code Compliance
Approved:CK

DRAWN BY: AMH
DESIGNED BY: CRS
CHECKED BY: NT
Date: 2025-01-30

Project #:
CLINIC IN A CAN
224-001

Title:
GENERAL STRUCTURAL NOTES

Page:
S1



1 FOUNDATION PLAN
Approximate Scale: 1/4" = 1'-0"

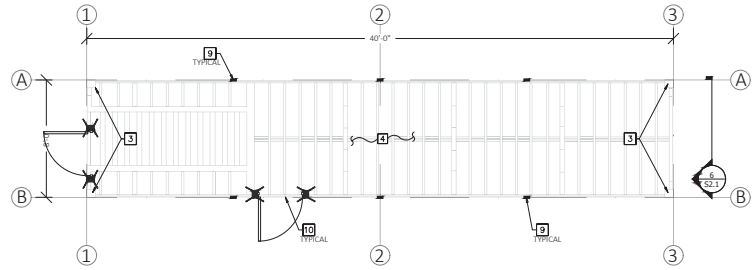
MARK	DIMENSION			BOTTOM REINFORCEMENT		TOP REINFORCEMENT		
	LENGTH "A"	WIDTH "B"	THICKNESS "D"	LONGITUDINAL	TRANSVERSE	LONGITUDINAL	TRANSVERSE	DETAIL NO./ REMARKS
F1	CONT.	18"	24"	2-#4	-	2-#4	-	-

BOTTOM OF FOOTING SHALL BEAR ON FIRM NATURAL UNDISTURBED SOIL, COMPACTED STRUCTURAL FILL, OR UNDISTURBED SOLID BEDROCK, AS APPLICABLE, AT LEAST 1'-6" OR FROST DEPTH BELOW PAD SUBGRADE (LOWEST ADJACENT GRADE). REFER TO SHEET S1 FOR ADDITIONAL INFORMATION.

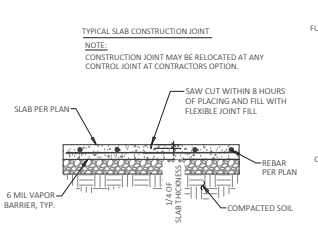
4 FOOTING SCHEDULE
N.T.S.

ANCHOR CALLOUT	ANCHOR BRACKET	EMBED DEPTH	CONNECTING MEMBER	NOTES
CA-1	(4) 3/4" Ø HILTI HIT-HY 200 V3 + HAS-V-36 (ASTM F1554 GR.36) OR HILTI KWIKBOLT TZ2 - CS 1 EXPANSION ANCHOR OR F1554 HEADED STUD OR J BOLT OR HEAVY HEX BOLT	4"	CONTAINER CORNER CASTING COLUMNS TO BASE PLATE	10 / S2
CA-2	(1) 3/4" Ø HILTI HIT-HY 200 V3 + HAS-V-36 (ASTM F1554 GR.36) OR HILTI KWIKBOLT TZ2 - CS 1 EXPANSION ANCHOR OR F1554 HEADED STUD OR J BOLT OR HEAVY HEX BOLT	4"	CONTAINER BOTTOM RAIL TO BASE PLATE	10 / S2

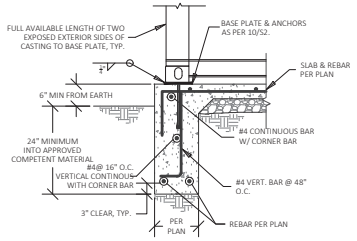
5 ANCHOR BOLT SCHEDULE
Scale: N/A



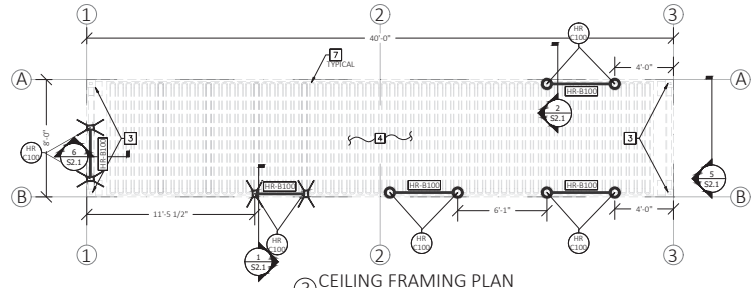
2 FLOOR FRAMING PLAN
Approximate Scale: 1/4" = 1'-0"



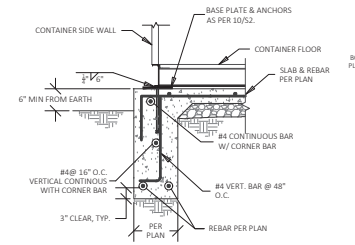
6 TYPICAL SLAB CONTROL JOINT
Scale: N.T.S.



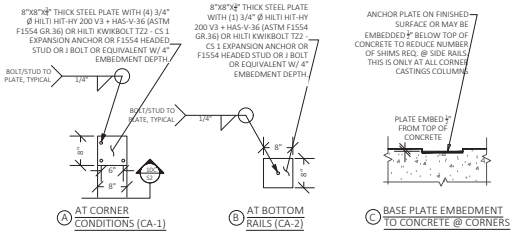
7 FOUNDATION DETAIL @ TURN-DOWN
SCALE: N.T.S.



3 CEILING FRAMING PLAN
Approximate Scale: 1/4" = 1'-0"



8 FOUNDATION DETAIL @ TURN-DOWN
SCALE: N.T.S.



9 BASE PLATE & ANCHOR BOLT DETAILS
N.T.S.

MARK	SIZE	MATERIAL	CAMBER (INCH)	REMARKS
HR-B100	HSS 5X2X¼"	A500 GR.C	–	LLH - (LONG LEG HORIZONTAL) DOOR / WINDOW FRAME

10 STEEL BEAM SCHEDULE
N.T.S.

MARK	COLUMN DESIGNATION	STEEL TYPE	BASE CONNECTION	TOP CONNECTION	REMARKS
HR-C100	HSS 5X2X¼"	A500 GR.C	1 & 2 / S2.1	1 & 2 / S2.1	DOOR / WINDOW FRAME

11 STEEL COLUMN SCHEDULE
N.T.S.

Graphic Scale
0ft 10ft
1/4 Inch = 1 Foot

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IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-123126 INC:
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SS ☐ FLS ☐ ACS ☑
DATE: 4/3/2025

LEGEND:

- NON-LOAD BEARING WALL ABOVE THIS FLOOR.
- COLUMN SUPPORTING NEXT FLOOR/ROOF UP.
- DISCONTINUOUS COLUMN SUPPORTING THIS FLOOR/ROOF.
- STUB, SHORT POST FOR WINDOW FRAME (NOT FULL HEIGHT).
- [n] INDICATES SHEET NOTES.
- (Cn) INDICATES COLUMN MARK, REFER TO COLUMN SCHEDULE ON SHEET S4.
- (HDNn) INDICATES ANCHOR BOLT OR HOLD-DOWN MARK, REFER TO HOLD-DOWN SCHEDULE & ANCHOR BOLT SCHEDULE ON SHEET 4 / S2.
- n NUMERICAL VALUE, 1, 2, 3 ETC.

SHEET NOTES:

1. REFER TO S1 FOR STRUCTURAL GENERAL NOTES AND TO OTHER SHEETS FOR DETAILS.
2. VERIFY ALL DIMENSIONS WITH THE ARCHITECTURAL DRAWINGS. DO NOT SCALE DRAWINGS. [[[DIMENSIONS PROVIDED MAY BE THE NOMINAL DIMENSIONS OF THE CONTAINER. CONTRACTOR/FABRICATOR, OWNER, AND/OR ARCHITECT TO VERIFY ACTUAL DIMENSION BEFORE CONSTRUCTION]]].
3. THE EXISTING CONTAINER COLUMN IS TO REMAIN UNMODIFIED UNLESS OTHERWISE NOTED ON STRUCTURAL DRAWINGS, TYP.
4. EXISTING CONTAINER FLOOR AND ROOF ARE TO REMAIN.
5. 6" THICK CONCRETE SLAB-ON-GRADE OVER 4" OF FREE DRAINING 3/4" ROCK. DRAIN ROCK SHALL CONTAIN NO FINES TO PROVIDE A CAPILLARY MOISTURE BREAK. PROVIDE A 10 MIL VAPOR BARRIER UNDER LIVING AREAS, BASEMENT, USABLE AREAS, AND BELOW-GRADE AREAS. VAPOR BARRIER IS NOT REQUIRED IN ABOVE-GRADE GARAGES, CHECK WITH THE OWNER FOR HIS/HER PREFERENCES.
   REINFORCE SLAB WITH #4 BARS @ 12" O.C. BOTH WAYS AT SLAB MID-THICKNESS.
6. SLAB-ON-GRADE CONTROL JOINT @ 10' MAX. SPACING AS PER 6/S2.
7. STEEL MODULAR CONTAINER EXISTING WALLS / FRAME USED AS LATERAL FORCE RESISTING SYSTEM, LENGTHS PER PLAN.
8. THE ARCHITECT AND FABRICATOR SHALL REVIEW THE DIMENSIONS SHOWN ON THE STRUCTURAL PLANS TO MAKE SURE IT IS IN COMPLIANCE WITH BOTH THE ARCHITECTURAL DRAWINGS AND WITH THE MAXIMUM WIDTH ALLOWED FOR TRANSPORTING.
9. NEW STEEL SHIM PLATES UNDER CONTAINER BOTTOM RAIL INTO FOUNDATION AT THESE LOCATIONS & ALSO ANCHOR BOLT LOCATIONS AS NEEDED. SEE 9/S2.
10. THE CONTAINER BOTTOM RAIL SHOULD BE REINFORCED WITH ¼" THICK STEEL FLAT BAR OR BENT PLATE AS PER DETAIL 3&4/S2.1 AT THIS LOCATION.
11. CENTER FOOTING UNDER WALLS AND POSTS UNLESS OTHERWISE NOTED ON PLANS AND/OR DETAILS.
12. LIMIT LIVE LOAD DEFLECTION TO SPAN OVER 480 FOR JOISTS, RAFTERS, BEAMS, FLOOR TRUSSES AND ALL STRUCTURAL MEMBERS.
13. USE LIGHT WEIGHT EQUIPMENT TO COMPACT THE SOIL WITHIN 2 FEET AROUND FOUNDATION/BASEMENT WALL.
14. ROOF DRAINAGE SHALL BE DIRECTED AWAY FROM FOUNDATION.

PSE CONSULTING ENGINEERS, INC.
250 Main St. Suite A
Klamath Falls, OR 97601
www.structure1.com
Phone: (541) 850-6300
info@structure1.com

Project:
YOLO CLINIC - 40' CONTAINER VETERINARY CLINIC
2640 East Gibson Rd,
Woodland, CA 95776.

Owner:
CLINIC IN A CAN

Stamp:
4-1-25
REGISTERED PROFESSIONAL ENGINEER
CIVIL
STATE OF CALIFORNIA
Exp 12-31-26
Nabil Taha
Digitally signed by Nabil Taha
DN: E=NTaha@structure1.com, CN=Nabil Taha, O="PSE Consulting Engineers, Inc.", L=Klamath Falls, S=Oregon, C=US
Date: 2025.04.01 15:06:24-07'00'

Revision Table		
MARK	DESCRIPTION	DATE

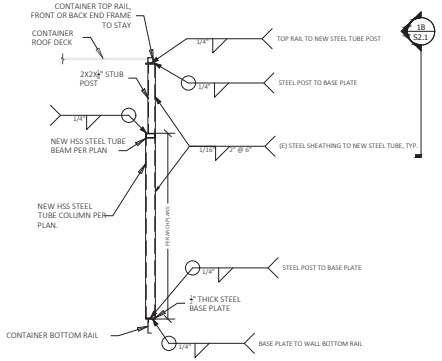
BE24-089
Reviewed for Code Compliance
Approved:CR

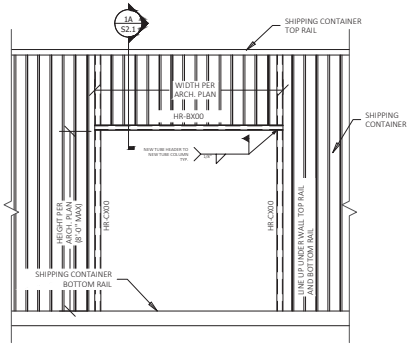
DRAWN BY: AKPS
DESIGNED BY: AKPS
CHECKED BY: NT
Date: 2025-01-30

Project #:
CLINIC IN A CAN
224-001

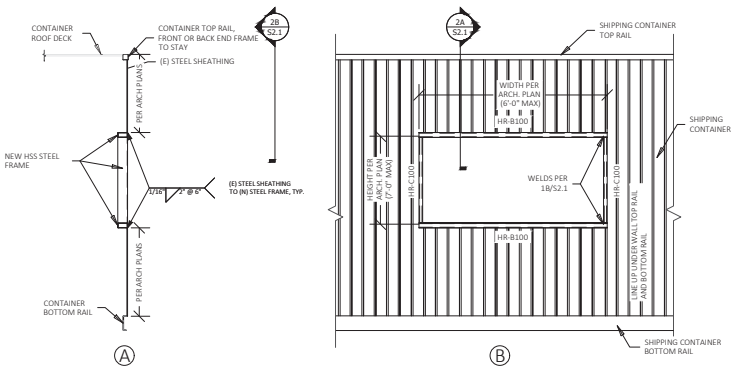
Title:
FOUNDATION,FLOOR FRAMING PLAN & DETAILS

Page:
S2

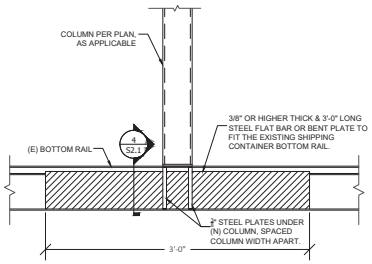




1 TYPICAL DOOR FRAMING
NTS



2 TYPICAL WINDOW FRAMING DETAILS
N.T.S.



3 BOTTOM RAIL REINFORCEMENT
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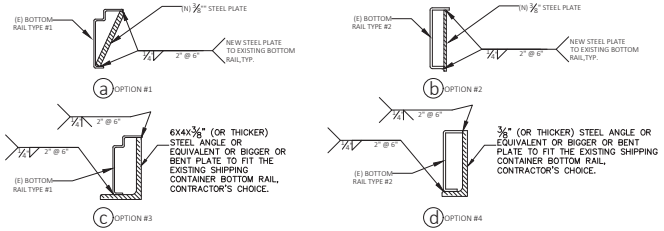

4 BOTTOM RAIL REINFORCEMENT SECTION
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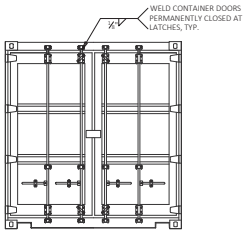
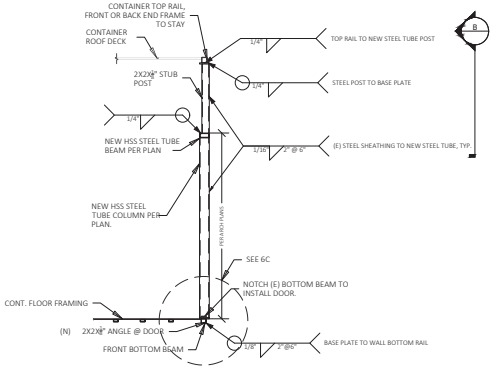
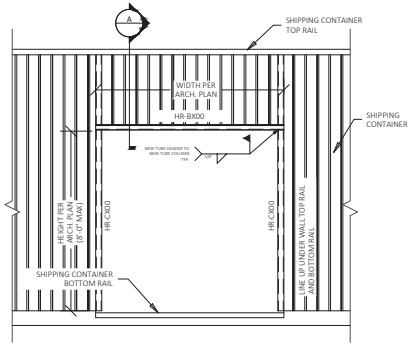
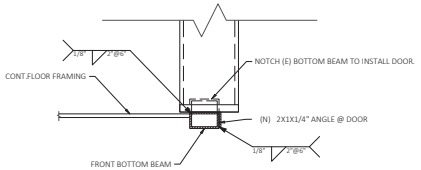


5 CONTAINER DOOR WELDING DETAIL
N.T.S.







6 DOOR FRAMING @ END WALL
NTS

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Nabil Taha

DATE	DESCRIPTION	BY
	Revision Table	

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CLINIC IN A CAN
224-001

Title:
TYPICAL FRAMING DETAILS

Page:
S2.1

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SPLIT SYSTEM HEATING & COOLING UNITS

MARK	COOL KBH	HEAT KBH		CFM	ESP	MOTOR		UNIT MCA	WT LBS	SEER	EER	HSPF	LINE SIZE		MANUFACTURER AND MODEL	COMMENTS
	TC	HIGH(47)	LOW (17)			HP	V/PH						GAS	LIQ		
HP-1	22	24.6	14	–	–	–	230/1	22.1	137	20	13.6	9.8	–	–	MITSUBISHI MXZ-3C24NA2-U1	(1) (6)
AH-1A	6	7.2	–	400	0.1	–	230/1	1.	22	–	–	–	3/8	1/4	MITSUBISHI MSZ-GL06NA-U2	(2) (3) (4) (6)
AH-1B	6	7.2	–	400	0.1	–	230/1	1.	22	–	–	–	3/8	1/4	MITSUBISHI MSZ-GL06NA-U2	(2) (3) (4) (6)
AH-1C	6	7.2	–	400	0.1	–	230/1	1.	22	–	–	–	3/8	1/4	MITSUBISHI MSZ-GL06NA-U2	(2) (3) (4) (6)

(1) MOUNT OUTDOOR UNIT ON VIBRATION PAD AND PROVIDE CLEARANCES PER MANF. GUIDELINES
(2) PROVIDE A CONDENSATE DRAIN LINE FOR EACH INDOOR UNIT.
(3) PROVIDE 16/2 STRANDED AND SHIELDED WIRE TO ALL CONTROLLERS
(4) PROVIDE FILTER RACKS AND MERV 13 FILTERS
(5) ROUTE ANY UNDERSLAB REFRIGERANT LINES IN PVC SLEEVE PER MANF GUIDELINES
(6) EQUIPMENT SIZES APPROVED BY ACCA TO MEET ALL REQUIREMENTS OF MANUAL S 8TH EDITION

FANS

MARK	LOCATION	CFM	ESP	CFM CONT.	SONES OR TIP SPEED	MOTOR		FAN RPM	MAX AMPS	WATTS	CFM/ WATTS	MANUFACTURER MODEL	COMMENTS
						HP	V/PH						
EF-1	HOLDING/ RECOVERY	200	0.25"	--	0.3	NA	120/1	908	1.8	9.2	8.8	BROAN 509	(1) (2)
EF-2	TREATMENT/ PREP	200	0.25"	--	0.3	NA	120/1	908	1.8	9.2	8.8	BROAN 509	(1) (2)
EF-3	SURGERY	200	0.25"	--	0.3	NA	120/1	908	1.8	9.2	8.8	BROAN 509	(1) (2)

(1) CEC IAQ REQUIRED VENTILATION-DO NOT MODIFY. PROVIDE MULTI SPEED AND TIME DELAY MODULE
(2) FAN SHALL HAVE BUILT IN BACKDRAFT DAMPER

ABBREVIATIONS

AC	AIR CONDITIONING UNIT
AD	ACCESS DOOR
AFF	ABOVE FINISHED FLOOR
AHU	AIR HANDLING UNIT
AL	ACOUSTICAL LINING
ALD	AUTOMATIC LOUVER DAMPER
BDD	BACKDRAFT DAMPER
BI	BLACK IRON
BRD	BAROMETRIC RELIEF DAMPER (PRESSURE REGULATING DAMPER)
CAV	CONSTANT AIR VOLUME
CC	COOLING COIL
CD	CEILING DIFFUSER
CHWR	CHILLED WATER RETURN
CHWS	CHILLED WATER SUPPLY
CR(G)	CEILING REGISTER OR GRILLE
CWR	CONDENSER WATER RETURN
CWS	CONDENSER WATER SUPPLY
DB	DRY BULB TEMPERATURE
EAT	ENTERING AIR TEMPERATURE
EJ	EXPANSION JOINT
EXH	EXHAUST
EWT	ENTERING WATER TEMPERATURE
FAI	FRESH AIR INTAKE
FC	FLEXIBLE CONNECTION
FCU	FAN COIL UNIT
FD	FLOOR DIFFUSER
FRD	FIRE DAMPER
FPM	FEET PER MINUTE
H	HUMIDIFIER
HC	HEATING COIL
HRC	HEAT RECOVERY COIL
HRV	HEATING RECOVERY AND VENTILATING UNIT
HWR	HOT WATER RETURN
HWS	HOT WATER SUPPLY
HX	HEAT EXCHANGER
KW	KILOWATTS
LAT	LEAVING AIR TEMPERATURE
LWT	LEAVING WATER TEMPERATURE
M	MOTOR
MLWS	METAL LOUVER WITH WIRE MESH SCREEN
MO	MASONRY OR WALL OPENING
NC	NORMALLY CLOSED
NIC	NOT IN CONTRACT
NK	NECK SIZE
NO	NORMALLY OPEN
NTS	NOT TO SCALE
OAI	OUTSIDE AIR INTAKE
OBD	OPPOSED BLADE DAMPER
P	PUMP
PC	PUMPED CONDENSATE
PHC	PRE HEAT COIL
PRV	PRESSURE REDUCING VALVE
RA	RETURN AIR
RHC	REHEAT COIL
SA	SUPPLY AIR
SD	SMOKE DAMPER
SF	SQUARE FEET
ST	SOUND TRAP
S/S	STAINLESS STEEL
TF	TRANSFER FAN
TR(G)	TOP REGISTER OR GRILLE
UC	UNDERCUT DOOR (1")
UH	UNIT HEATER
UON	UNLESS OTHERWISE NOTED
V	VENTILATION
VAV	VARIABLE AIR VOLUME REGULATOR
VD	VOLUME DAMPER
VFD	VARIABLE FREQUENCY DRIVE
VI	VIBRATION ISOLATOR
WB	WET BULB TEMPERATURE
WMS	WIRE MESH SCREEN
WP	WEATHER PROOF
W/SQ.FT	WATTS PER SQUARE FOOT

MECHANICAL LEGEND

SYMBOL	DESCRIPTION
	DISTRIBUTION MANIFOLD
	HYDRONIC BASEBOARD (SEE HEAT SOURCE SCHEMATIC FOR LENGTH AND HEIGHT)
55	AIR SUPPLY FLOOR/CEILING REGISTER (CFM AS SHOWN ON PLAN)
55	AIR SUPPLY WALL REGISTER (CFM AS SHOWN ON PLAN)
55	AIR SUPPLY TOE SPACE REGISTER (CFM AS SHOWN ON PLAN)
55	AIR RETURN WALL GRILLE (CFM AS SHOWN ON PLAN)
	AIR EXHAUST IN-LINE FAN
	AIR EXHAUST FAN RECESSED FAN
	DOOR GRILLE OR TRANSFER GRILLE
	THERMOSTAT +60"FF
	NEW DUCT ROUND (SUPPLY)
	NEW DUCT ROUND (RETURN)
	NEW DUCT SQUARE (SUPPLY)
	NEW DUCT SQUARE (RETURN)
	MITERED ELBOW WITH TURNING VANES
	DUCT TRANSITION (ROUND OR SQUARE)
	DUCT TRANSITION (RECTANGULAR TO ROUND)
	MANUAL AIR VOLUME DAMPER

REGISTERS

MARK	TYPE	MANUFACTURER MODEL	COMMENTS
CR	CEILING RETURN	TITUS CT-480 3 26 N 00-000 0	(1)
CD	CEILING DIFFUSER	TITUS CT-480 3 26 N 00-000 0	(1)
HSR	HIGH SIDE RETURN	TITUS CT-480 3 26 N 00-000 0	(1)
HSS	HIGH SIDE SUPPLY	TITUS CT-480 3 26 N 00-000 0	(1)
TK	TOE KICK	TITUS CT-480 4 26 N 00-000 0	(1)
LSR	LOW SIDE RETURN	TITUS CT-480 3 26 N 00-000 0	(1)
FD	FLOOR DIFFUSER	TITUS CT-480 6 26 N 00-000 H	(1)

(1) PROVIDE MILL FINISH OR CUSTOM PAINT COLOR SPECIFIED BY ARCH.

DUCT SYSTEM INSTALLATION

1. Duct installation shall be in conformance with chapter 6 of the 2022 CMC or as recommended by ACCA manuals D, J, S, SMACNA manuals, and/or the ASHRAE handbook if approved by officials having jurisdiction. Care shall be exercised to seal all joints and seams to prevent air leakage.
2. Where shown on the mechanical plan and if necessary for other locations, provide rectangular duct of equivalent cross sectional area to the round duct shown to clear obstructions. Provide smooth transitions when the duct shape changes.
3. Flexible vibration isolation connectors shall be installed in sheet metal ductwork at the unit in both the supply and air intake; these shall not exceed 10.0 inches in length. Ductwork shall be properly aligned at these connectors without any offset.
4. Metal ductwork shall be installed in a workman-like manner in accordance with acceptable practice given in the ASHRAE handbook or the SMACNA "low pressure duct construction standards" manual. Rigid sheet metal ducts shall be at least the minimum thickness required for their largest dimension and/or the static pressure to which they shall be subjected; they shall be provided with turning vanes or long radius bends both to reduce the pressure loss and to provide a more uniform velocity distribution downstream from the bend. All duct seams and joints shall be airtight and smooth fitting. These shall be sealed with products such as mastic and/or foil-backed tape recommended by the manufacturer for the location where they will be used.
5. Rigid ductwork exposed to view shall be installed in such a manner as to present a neat appearance. The ducts shall be parallel to adjacent architectural surfaces and have as few joints as possible.
6. All metal ducts shall be securely supported, hung, or suspended by metal hangers, straps, or brackets and the support material in contact with the duct, or external insulation, shall not be less than 0.75 inches wide. The hanger spacing for metal duct shall not be more than 10 feet for rectangular duct or 12 feet for round duct. Hangers exposed to view shall be plumb and neat in appearance. All rectangular metal ducts 24 inches or wider and all exterior ducts shall be cross broken or beaded to provide additional support. Ducts shall be insulated with fiberglass duct insulation to provide a minimum duct insulation value of r-6. Wye branches and diffuser boots shall be insulated on their exterior surfaces unless they are exposed to the weather, are exposed to view, or could be damaged during occupancy of the building. Any insulating material used shall meet the appropriate specifications required by ASTM e-84, c-553; NEPA 90b; and UL 181. Such insulation shall have 100% coverage and be installed in accordance with the manufacturer's instructions.
7. Flexible air duct shall be UL listed class 1 air duct made with a polyester interior, a moisture impervious sleeve and insulation having an overall r-value no less than 6. Foil covered duct shall be used in locations where high radiant heat loads may be expected. Performance and assembly shall be in strict accordance with details listed in the flexible ductwork manufacturer's applications manual or the SMACNA "flexible duct performance standards and flexible duct installation standards". Tight fitting mechanical clamps and mastic recommended for the location shall be used to seal all joints. Particular attention shall be taken to avoid kinks, sharp bends, or other such obstructions in the duct. Factory made flexible air ducts shall be installed according to their installation instructions and standards set by the code. Duct work shall use pressure-sensitive tapes, mastics, aerosol sealants or other closure systems meeting applicable UL 181A and B requirements. Drawbands used with flexible ducts shall be either stainless-steel, worm driven hose clamps or UV-resistant nylon duct ties. In addition, drawbands must have a minimum tensile strength rating of 150 pounds an db tightened as recommended by the manufacturer.
8. Flexible air duct shall be supported at the manufacturer's recommended intervals but in no case shall the intervals between hangers exceed 4.0 ft.The hanger material shall be not less than 2.0 inch wide. The maximum permissible sag shall be 0.5 inch per foot of spacing between supports. Collars shall be used to attach flexible duct and shall be a minimum of 2.0 inches in length. Collars shall be inserted into the flexible duct a minimum of 1.0 inch before fastening.
9. Readily accessible balancing or volume control dampers with outside locking devices shall be provided as shown on the mechanical plans and/or as needed to regulate the air flow to each register.
10. Supply and return plenums shall be covered with insulation having a value of r-6 or greater on their internal surfaces. Any insulating material used shall meet the appropriated specifications required by ASTM e-84, c-553; NEPA 90b; and UL 181. Such insulation shall have 100% coverage and be installed in accordance with the manufacturer's instructions.
11. Ductwork shall be installed so that it will not contact the ground.
12. Return air grill may be substituted, as desired, based on equal face area.
13. Boot area shall match grill area in all cases. If necessary, boots should be lined with acoustical lining to reduce noise transmission.
14. Plenum shall be lined with acoustical lining.
15. Flat ducts for wall registers shall be 3-1/4"x14" unless shown on the plans.
16. Termination of all environmental air ducts including direct vent termination kits shall be a minimum of 3 feet from or any openings into the building (i.e., dryers, bath and utility fans, etc., must be 3 feet away from doors, windows, opening skylights or attic vents).
17. Mechanical equipment and duct openings shall be protected during storage and rough installation per 2022 CAL Green section 4.504.1 to reduce the amount of dust or debris which may collect in the system.
18. Heating, ventilating and air conditioning systems (including hydronic systems) shall be balanced in accordance 2022 CMC Section 317.1 using the ACCA Manual B method.

Air for combustion

1. Air quantities shall be based on the 2022 California Mechanical Code. If located in a confined space, that space shall be provided with two permanent openings one within 12 inches of the top and one within 12 inches of the bottom of the enclosure. The openings shall communicate directly, or by ducts with the outdoors. When communication with the outdoors is through vertical ducts, each opening shall have a minimum free area of 1.0 square inch per 4000 BTU per hour of total input rating of all equipment in the enclosure. When communication with the outdoors is through horizontal ducts, each opening shall have a minimum free area of 1.0 square inch per 2000 BTU per hour of total input rating of all equipment in the enclosure. If approved by the administrative authority having jurisdiction, communication directly through an exterior wall may be considered as a vertical duct.
2. Duct openings shall be screened with metal mesh having openings of 1/4 inch. Provisions shall be made for the reduction in duct area due to the effects of screens, louvers, etc.

Gas lines

1. Piping shall be new, standard weight wrought iron or steel (exterior-only galvanized or black), with malleable iron fittings. Approved PE (poly-ethylene) pipe may be used in exterior buried piping systems.
2. Exterior piping shall be protected by approved, machine applied protective coating. Field wrapping shall be limited to sections at joints and shall provide equivalent protection to the machine applied coating.
3. Gas lines may not be installed on or under the ground under buildings; they must be at least 6 inches above the ground.
4. Gas lines shall be wrapped with insulation and sleeved where passing through concrete. Piping shall be protected where passing through framing using metal straps designed for the purpose.

MAJOR EQUIPMENT INSTALLATION

1. Installation shall meet all local and national codes pertaining to the installation and operation of plumbing equipment. Unless otherwise required by these standards, the equipment shall be installed in accordance with the equipment manufacturer's recommendations.
2. If "or equal" equipment is to be used, it must meet the performance specifications for the equipment listed, and shall receive prior approval from the mechanical engineer. All requests for substitution shall be furnished with sufficient engineering data to demonstrate that the proposed equipment full meets all the performance levels of the equipment originally specified. The contractor shall be responsible for all costs associated with the engineering for structural, electrical, duct sizing, etc. Caused by any substitution.
3. Units shall be installed to provide the clearance or clearances specified by the manufacturer or required by the authority having jurisdiction.
4. Units shall have suitable support to prevent transmission of objectionable noise or vibration generated by the equipment to the structure. Outdoor, ground mounted, units shall be located on a level, one piece, concrete pad.
5. Provide and install low voltage control wiring in conduit installed by the mechanical or plumbing contractor using methods contained in the electrical specifications. All wiring of line voltage controls to be accomplished by the electrical contractor.
6. Contractors shall co-ordinate with the electrical contractor to ensure that all electrical accessories such as motor starters, control relays, circuit breakers, etc. Required to make a fully functional systems are provided.

REVISIONS: | BY:

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MECHANICAL
STATE OF CALIFORNIA

YOLO COUNTY
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2640 EAST GIBSON ROAD
WOODLAND, CA

BB24-089
Reviewed for
Code Compliance
Approved: CR

DATE: 01/21/25
SCALE: AS NOTED
DRAWN: MEG
CHECKED:
CHECKED:
FILE NAME:

SHEET:
M0.1
SHEET OF SHEETS

CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD	NRCC-PRF-E
Nonresidential Performance Compliance Method	(Page 1 of 18)
Project Name: Yolo County Veterinary Clinic	Date Prepared: 2024-12-17

A. General Information

1	Project Name	Yolo County Veterinary Clinic			
2	Run Title	Title 24 Analysis			
3	Project Location	2640 East Gibson Road			
4	City	Woodland	5	Standards Version	Compliance 2022
6	Zip code	99999	7	Compliance Software (version)	EnergyPro 9.2
8	Climate Zone	12	9	Building Orientation (deg)	0
10	Building Type(s)	• Nonresidential	11	Weather File	SACRAMENTO INTL_ STYP20.epw
12	Project Scope	• New complete scope	13	Number of Dwelling Units	0
14	Total Conditioned Floor Area in Scope (ft²)	266	15	Total # of hotel/motel rooms	0
16	Total Unconditioned Floor Area (ft²)	0	17	Fuel Type	Natural gas
18	Nonresidential Conditioned Floor Area	266	19	Total # of Stories (Habitable Above Grade)	1
20	Residential Conditioned Floor Area	0			

CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD	NRCC-PRF-E
Nonresidential Performance Compliance Method	(Page 2 of 18)

B. PROJECT SUMMARY

Table 1 shows which building components are included in the performance calculation. If indicated as not included, the project must show compliance prescriptively if within the permit application.

Building Components complying via Performance						Building Components Complying Prescriptively	
Envelope (See Table G)	Nonres	Perfomance	Solar Thermal Water Heating (See Table I3)	☐	Performance	The following building components are ONLY eligible for prescriptive compliance and should be documented on the NRCC form listed if within the scope of the permit application (i.e. compliance will not be shown on the NRCC-PRF-E).	
	MultiFam	Not Included		☒	Not Included		
Mechanical (see Table H)	Nonres	Perfomance	Covered Process: Commercial Kitchens (see Table J)	☐	Performance	Indoor Lighting (Unconditioned) 140.6 & 170.2(e)	NRCC-LTI-E is required
	MultiFam	Not Included		☒	Not Included	Outdoor Lighting 140.7 & 170.2(e)	NRCC-LTO-E is required
Domestic Hot Water (See Table I)	Nonres	Perfomance	Covered Process: Laboratory Exhaust (see Table J)	☐	Performance	Sign Lighting 140.8 & 170.2(e)	NRCC-LTS-E is required
	MultiFam	Not Included		☒	Not Included	**Building Components Complying with Mandatory Measures**	
Lighting (Indoor Conditioned, see Table K)	Nonres	Perfomance	Photovoltaics (see Table F)	☐	Performance	Electrical power systems, commissioning, solar ready, elevator and escalator requirements are mandatory and should be documented on the NRCC form listed if applicable (i.e. compliance will not be shown on the NRCC-PRF-E.)	
	MultiFam	Not Included		☒	Not Included	Electrical Power Distribution 110.11	NRCC-ELC-E is required
			Battery (see Table F)	☐	Performance	Commissioning 120.8	NRCC-CXR-E is required
				☒	Not Included	Solar and Battery 118.10	NRCC-SAB-E is required

CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD	NRCC-PRF-E
Nonresidential Performance Compliance Method	(Page 3 of 18)

C1. COMPLIANCE SUMMARY

	COMPLIES[3]		
	Time Dependent Valuation (TDV)		Source Energy Use
	Efficiency[1] (kBtu/ft² - yr)	Total[2] (kBtu/ft² - yr)	Total[2] (kBtu/ft² - yr)
Standard Design	492.96	492.96	61
Proposed Design	399.78	399.78	34.1
Compliance Margins	93.18	93.18	26.9
	Pass	Pass	Pass

[1] *Efficiency measures include improvements like a better building envelope and more efficient equipment*
[2] *Compliance Totals include efficiency, photovoltaics and batteries*
[3] *New Construction, Complete Addition Scope: Building complies when all efficiency and total compliance margins are greater than or equal to zero and unmet load hour limits are not exceeded*
Existing, Addition and Alteration Scope: Building complies when efficiency compliance margin is greater than or equal to zero and unmet load hour limits are not exceeded

CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD	NRCC-PRF-E
Nonresidential Performance Compliance Method	(Page 4 of 18)

C2. TDV ENERGY COMPLIANCE RESULTS FOR PERFORMANCE COMPONENTS (Annual TDV Energy Use, kBtu/ft² - yr)

	COMPLIES[2]		
Energy Component	Standard Design (TDV)	Proposed Design (TDV)	Compliance Margin (TDV)[1]
Space Heating	75.26	94.29	-19.03
Space Cooling	94.87	114.36	-19.49
Indoor Fans	208.07	123.15	84.92
Heat Rejection	0	0	0
Pumps & Misc.	0	0	0
Domestic Hot Water	35.08	26.31	8.77
Indoor Lighting	79.68	41.67	38.01
Flexibility	---	---	---
EFFICIENCY COMPLIANCE TOTAL	**492.96**	**399.78**	**93.18 (18.9%)**
Photovoltaics	---	---	---
Batteries	---	---	---
TOTAL COMPLIANCE	**492.96**	**399.78**	**93.18 (18.9%)**

[1] *Note: This number in parenthesis following the Compliance Margin in column 4, represents the Percent Better than Standard.*

CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD	NRCC-PRF-E
Nonresidential Performance Compliance Method	(Page 5 of 18)

C3. TDV ENERGY RESULTS FOR NON-REGULATED COMPONENTS[1]

Non-Regulated Energy Component	Standard Design (TDV)	Proposed Design (TDV)	Compliance Margin (TDV)[1]
Receptacle	135.97	135.97	---
Process	---	---	---
Other Ltg	---	---	---
Process Motors	---	---	---
TOTAL (TOTAL COMPLIANCE + NON-REGULATED COMPONENTS)	628.93	535.75	93.18 (14.8%)

[1] *Note: This table is not used for Energy Code Compliance.*

CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD	NRCC-PRF-E
Nonresidential Performance Compliance Method	(Page 6 of 18)

C4. SOURCE ENERGY COMPLIANCE RESULTS FOR PERFORMANCE COMPONENTS (Annual SOURCE Energy Use, kBtu/ft² /yr)

	COMPLIES[2]		
Energy Component	Standard Design (SOURCE)	Proposed Design (SOURCE)	Compliance Margin (SOURCE)[1]
Space Heating	25.05	13.39	11.66
Space Cooling	4.42	4.84	-0.42
Indoor Fans	21.79	10.08	11.98
Heat Rejection	0	0	0
Pumps & Misc.	0	0	0
Domestic Hot Water	3.28	2.39	0.89
Indoor Lighting	6.49	3.4	3.09
Flexiblity	---	---	---
EFFICIENCY COMPLIANCE TOTAL	**61**	**34.1**	**26.9 (44.1%)**
Photovoltaics	---	---	---
Batteries	---	---	---
TOTAL COMPLIANCE	**61**	**34.1**	**26.9 (44.1%)**

[1] *Note: This number in parenthesis following the Compliance Margin in column 4, represents the Percent Better than Standard.*

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ENERGY COMPLIANCE

BB24-089
Reviewed for
Code Compliance
Approved DCR

DATE: 01/21/25
SCALE: AS NOTED
DRAWN: MEG
CHECKED:
CHECKED:
FILE NAME:
SHEET:
M0.2
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C5. SOURCE ENERGY RESULTS FOR NON-REGULATED COMPONENTS[1]

Non-Regulated Energy Component	Standard Design (SOURCE)	Proposed Design (SOURCE)	Compliance Margin (SOURCE)[1]
Receptacle	18.04	18.04	---
Process	---	---	---
Other Ltg	---	---	---
Process Motors	---	---	---
TOTAL (TOTAL COMPLIANCE + NON-REGULATED COMPONENTS)	**79.04**	**52.14**	**26.9 (34%)**

[1] *Notes: This table is not used for Energy Code Compliance.*

C6. 'ABOVE CODE' QUALIFICATIONS

☐ This project is pursuing CalGreen Tier 1 ☐ This project is pursuing CalGreen Tier 2

C8. ENERGY USE INTENSITY (EUI)

	Standard Design (kBtu/ft² / yr)	Proposed Design (kBtu/ft² / yr)	Margin (kBtu/ft² / yr)	Margin Percentage
GROSS EUI[1]	102.26	67.5	34.76	33.99
NET EUI[1]	102.26	67.5	34.76	33.99

[1] *Notes: Gross EUI is Energy Use Total (not including PV)/Total Building Area. Net EUI is Energy Use Total (including PV)/Total Building Area.*

D1. EXCEPTIONAL CONDITIONS

- The aged solar reflectance and aged thermal emittance must be listed in the Cool Roof Rating Council database of certified products. For projects where initial reflectance is used, the initial reflectance must be listed, and the aged reflectance is calculated by the software program and used in the compliance model.
- The project uses the Simplified Geometry Performance Modeling Approach which is not capable of modeling daylighting controls and assumes the prescriptive Secondary Daylit Control requirements are met. PRESCRIPTIVE COMPLIANCE documentation (form NRCC-LTI-02-E) for the requirements of section 140.6(d) Automatic Daylighting Controls in Secondary Daylit Zones is required.
- Project is claiming Exception 2 to Section 140.10(a): No PV system is required where the required PV system size is less than 4 kWdc.
- PV/Battery Building Type has been modified from software defaults for one or more spaces. Review project's PV/Battery Building Type(s) with documentation author. Refer to Energy Code section 140.10 for Nonresidential or 170.2(g) for more information.

G1. ENVELOPE GENERAL INFORMATION (conditioned spaces only)

01	02	03	04
Opaque Surfaces & Orientation	Total Gross Surface Area (ft²)	Total Fenestration Area (ft²)	Window to Wall Ratio (%)
North-Facing[1]	246	0	0
East-Facing[2]	56	0	0
South-Facing[3]	305.3	73	23.91

Notes
[1]*North-Facing is oriented to within 45 degrees of true north, including 45 00'00" east of north (NE), but excluding 45 00'00" west of north (NW),*
[2]*East-Facing is oriented to within 45 degrees of true east, including 45 00'00" south of east (SE), but excluding 45 00'00" north of east (NE),*
[3]*South-Facing is oriented to within 45 degrees of true south, including 45 00'00" west of south (SW), but excluding 45 00'00" east of south (SE),*
[4]*West-Facing is oriented to within 45 degrees of true west, including 45 00'00" north of west (NW), but excluding 45 00'00" south of west (SW),*

G5. OPAQUE SURFACE ASSEMBLY SUMMARY

01	02	03	04	05	06		07	08	09	10
Surface Name	Construction Type	Area (ft²)	Framing Type	Cavity R-Value	Continuous R-Value		Units	Value	Description of Assembly Layers	Status[1]
					Interior	Exterior				
Slab On Grade12	Underground Floor	266	N/A	0	N/A	N/A	F-factor	0.73	Slab Type =Unheated slab on grade Insulation Orientation =None Insulation R-Value =none	N
Metal Framed Roof14	Roof	266	N/A	0	N/A	32.5	U-factor	0.0296	Metal Standing Seam - 1/16 in. Spray applied - Polyurethane foam - 3.0 lb/ft3 - 6 1/2 in. Gypsum Board - 1/2 in.	N
R-19 Wall Metal Stud16	Exterior Wall	663.3	N/A	0	N/A	17.5	U-factor	0.0511	Metal Siding - 1/16 in. Air - Wall - 1/2 in. Spray applied - Polyurethane foam - 3.0 lb/ft3 - 3 1/2 in. Gypsum Board - 1/2 in.	N

[1] *Status: N - New, A - Altered, E - Existing*

C7. ENERGY USE SUMMARY

Energy Component	Standard Design Site (MWh)	Proposed Design Site (MWh)	Margin (MWh)	Standard Design Site (MBtu)	Proposed Design Site (MBtu)	Margin (MBtu)
Space Heating	---	0.9	---	7.2	---	---
Space Cooling	0.7	0.6	0.1	---	---	---
Indoor Fans	2	1.1	0.9	---	---	---
Heat Rejection	---	---	---	---	---	---
Pumps & Misc.	---	---	---	---	---	---
Domestic Hot Water	0.3	0.3	0	---	---	---
Indoor Lighting	0.9	0.4	0.5	---	---	---
Flexibility	---	---	---	---	---	---
EFFICIENCY TOTAL	**3.9**	**3.3**	**0.6**	**7.2**	**0**	**7.2**
Photovoltaics	---	---	---	---	---	---
Batteries	---	---	---	---	---	---
ENERGY USE SUBTOTAL	**3.9**	**3.3**	**0.6**	**7.2**	**0**	**7.2**
Receptacle	1.2	1.2	0	2.6	2.6	0
Process	---	---	---	---	---	---
Other Ltg	---	---	---	---	---	---
Process Motors	---	---	---	---	---	---
ENERGY USE TOTAL	**5.1**	**4.5**	**0.6**	**9.8**	**2.6**	**7.2**

G1. ENVELOPE GENERAL INFORMATION (conditioned spaces only)

01	02	03	04
Opaque Surfaces & Orientation	Total Gross Surface Area (ft²)	Total Fenestration Area (ft²)	Window to Wall Ratio (%)
West-Facing[4]	56	0	0
Total	**663.3**	**73**	**11.01**
Roof	266	0	0

Notes
[1]*North-Facing is oriented to within 45 degrees of true north, including 45 00'00" east of north (NE), but excluding 45 00'00" west of north (NW),*
[2]*East-Facing is oriented to within 45 degrees of true east, including 45 00'00" south of east (SE), but excluding 45 00'00" north of east (NE),*
[3]*South-Facing is oriented to within 45 degrees of true south, including 45 00'00" west of south (SW), but excluding 45 00'00" east of south (SE),*
[4]*West-Facing is oriented to within 45 degrees of true west, including 45 00'00" north of west (NW), but excluding 45 00'00" south of west (SW),*

G2A. ROOFING PRODUCT SUMMARY (NONRESIDENTIAL)

01	02	03	04	05	06
Assembly Name	Roof Pitch	Roof Rise (x in 12)	Aged Solar Reflectance	Thermal Emittance	SRI
Metal Framed Roof14	LowSlope	N/A	0.63	0.75	N/A

G4. NONRESIDENTIAL AIR BARRIER

01	02
Building Story Name	Air Barrier
Com-Floor 1	No air barrier

G7A. FENESTRATION ASSEMBLY SUMMARY (NONRESIDENTIAL)

01	02	03	04	05	06	07	08	09
Fenestration Assembly Name	Fenestration Type/ Product Type / Frame Type	Certification Method[1]	Assembly Method	Area (ft²)	Overall U-factor	Overall SHGC	Overall VT	Status[2]
New Window	Vertical fenestration Fixed window N/A	NFRC	Manufactured	33	0.34	0.22	0.5	N
Glass Door	Vertical fenestration Glazed door N/A	NFRC	Manufactured	40	0.45	0.23	0.5	N

[1] *Notes: Newly installed fenestration shall have a certified NFRC Label Certificate or use the CEC default tables found in Table 110.6-A and Table 110.6-B. Center of Glass (COG) values are for the glass-only, determined by the manufacturer, and are shown for ease of verification. Site-built fenestration values are calculated per Nonresidential Appendix NA6 and are used in the analysis.*
[2] *Status: N - New, A - Altered, E - Existing*

H1. DRY SYSTEM EQUIPMENT (FURNACES, AIR HANDLING UNITS, HEAT PUMPS, VRF, ECONOMIZERS ETC.)

01	02	03	04	05	06	07	08	09	10	11	12
			Heating				Cooling				
Equipment Name	Equipment Type	Qty	Total Heating Output (kBtu/h)	Supp Heat Output (kBtu/h)	Efficiency Unit	Efficiency	Total Cooling Output (kBtu/h)	Efficiency Unit	Efficiency	Economizer Type (if present)	Status[1]
Undefined System	Variable Refrigerant Flow	1	25	N/A	COP HSPF	8.8 8.8	24	EER SEER	12.7 19.5	N/A	N

[1] *Status: N - New, A - Altered, E - Existing*

REVISIONS: BY:

IDENTIFICATION STAMP
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SS ☐ FLS ☐ ACS ☑
DATE: 4/3/2025

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REGISTERED PROFESSIONAL ENGINEER
GRAHAM STALLCUP
No. M31607
EXP. MAR 31, 2025
MECHANICAL
STATE OF CALIFORNIA

YOLO COUNTY VETERINARY CLINIC
2640 EAST GIBSON ROAD

ENERGY COMPLIANCE

BB24-089
Reviewed for
Code Compliance
Approved:CR

DATE: 01/21/25
SCALE: AS NOTED
DRAWN: MEG
CHECKED:
CHECKED:
FILE NAME:
SHEET:
M0.3
SHEET OF SHEETS

CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD — NRCC-PRF-E

Nonresidential Performance Compliance Method — (Page 13 of 18)

H3. NONRESIDENTIAL / COMMON USE AREA FAN SYSTEMS SUMMARY

01	02	03	04	05	06	07	08	09	10	11	12	13
Name or Item Tag	Qty	Design OA CFM	Supply Fan				Return / Relief Fan					Status[1]
			CFM	Power	Power Units	Control	Fan Type	CFM	Power	Power Units	Control	
2-Vet Clinic-VRF	3	0	427	0.1	BHP	VSD	N/A	N/A	N/A	N/A	N/A	N

[1] Status: N - New, A - Altered, E - Existing

H5. GENERAL EXHAUST FAN SUMMARY

01	02	03	04	05	06	07	08
System ID	Zone Name	Qty	CFM	Power	Power Units	Continuous Operation?	Status[1]
Vet Clinic3	1-Vet Clinic	3	100	0.05	BHP	No	N

[1] Status: N - New, A - Altered, E - Existing

H8. SYSTEM SPECIAL FEATURES

01	02	03	04
System Name	Equipment Type	Interlocks per 140.4(n)[1]	Other Special Features and Controls
Undefined Plant1 - SHW	Service Hot Water	N/A	Fixed Temperature Control

Notes: This table includes controls related to the performance path only. For projects using the prescriptive path, mandatory and prescriptive controls requirements are documented on the NRCC-MCH-E.

[1] Yes = interlocks are provided, No = interlocks are not provided, NA means no operable openings.

H9. NONRESIDENTIAL / COMMON USE AREA & HOTEL/MOTEL VENTILATION

01	02	03	04	05	06	07
Zone Name	Mechanical Ventilation				Conditioned Area (sf)	DCV or Occupant Sensor Controls, or Both
	Ventilation Function	# of People	Supply OA CFM	Exhaust CFM		
1-Vet Clinic	Misc - All others	1.33	39.9	300	266	N/A

CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD — NRCC-PRF-E

Nonresidential Performance Compliance Method — (Page 14 of 18)

H11. ZONAL SYSTEM AND TERMINAL UNIT SUMMARY

01	02	03	04	05	06	07	08	09	10	11	12
System ID	System Type	Qty	Rated Capacity (kBtuh)		Airflow (cfm)			Fan			VSD
			Heating	Cooling	Design	Min.	Min. Ratio	Power	Power Units	Control	
2-Vet Clinic-VRF	Variable Refrigerant Flow	3	11	9	427	250	0.59	0.1	BHP	Cycling	☒

I1. WATER HEATER EQUIPMENT SUMMARY

01	02	03	04	05	06	07	08	09	10	11	12	13	14
Name	Heater Element Type	Tank Type	Qty	Tank Vol (gal)	Rated Input	Rated Input Unit	Efficienc	Efficiency Unit	Tank Insulation R-value Int/Ext	Standby Loss Fraction	1st Hr. Rating or Flow Rate (gal)	Heat Pump Type	Tank Location or Ambient Condition
Instantaneous Electric2	Electricity	Instantaneous	2	1	3.5	kW	0.98	UEF	N/A	N/A	8	N/A	N/A

K1. INDOOR CONDITIONED LIGHTING GENERAL INFO

01	02	03	04	05	06
Occupancy Type[1]	Conditioned Floor Area[2] (ft²)	Installed Lighting Power (Watts)	Lighting Control Credits (Watts)	Additional (Custom) Allowance	
				Area Category Footnotes (Watts)	Area Category Footnotes (Watts)
Hospital - Exam/Treatment	266	160	0	0	0
Building Totals:	**266**	**160**	**0**	**0**	**0**

[1] See Table 140.6-C
[2] See NRCC-LTI-E for unconditioned spaces
[3] Lighting information for existing spaces modeled is not included in this table

CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD — NRCC-PRF-E

Nonresidential Performance Compliance Method — (Page 15 of 18)

K2. INDOOR CONDITIONED LIGHTING SCHEDULE

Luminaire Schedule (includes all permanent installed lighting in conditioned space, and portable lighting over 0.3 w/ft² in offices)

01	02	03	04	05	06
Name or Item Tag	Complete Luminaire Description (i.e. 3-lamp fluorescent troffer, FIXTR, one dimmable electronic ballast)	Installed Watts (Conditioned)			
		Watts per luminaire	How is Wattage determined	Total Number of Luminaires	Installed Watts
5	2X2 LED	40	According to	4	160

[1] If lighting power densities were used in the compliance model Building Departments will need to check pre-criptive forms for Luminaire Schedule details.

K3. INDOOR CONDITIONED LIGHTING CONTROL CREDITS

Lighting Control Credits Schedule (includes all lighting controls installed in conditioned space for compliance credit per 140.6(a)2 and Table 140.6-A)

01	02	03	04	05	06	07	08	09
Area Description	Primary Function Area (must meet requirements of Table 140.6-A and 170.2-L)	Type of Lighting Control	Power Adjustment Factor (PAF)	Luminaire Item Tag	Watts per Luminaire	# of Luminaires	Lighting Controlled (Watts)	Control Credit (Watts)
5-1-Vet Clinic	Hospital - Exam/Treatment	N/A	N/A	6	40	1	40	0
5-1-Vet Clinic	Hospital - Exam/Treatment	N/A	N/A	6	40	2	80	0
5-1-Vet Clinic	Hospital - Exam/Treatment	N/A	N/A	6	40	1	40	0
						Lighting Control Credits (Conditioned) Total (Watts)		0

K4. INDOOR CONDITIONED LIGHTING MANDATORY LIGHTING CONTROL

Building Level Controls

01	02
Mandatory Demand Response 110..2(c)	Shut-Off Controls 130.1(c) & 160.5(b)4C
NA	NA

Area Level Controls (includes all lighting controls installed in conditioned space to meet mandatory requirements per 130.1)

CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD — NRCC-PRF-E

Nonresidential Performance Compliance Method — (Page 16 of 18)

03	04	05	06	07	08	09
Area Description	Area Category Primary Function Area	Area Controls 130.1(a) & 160.5(b)4A	Multi-Level Controls 130.1(b) & 160.5(b)4B	Shut-Off Controls 130.1(c) & 160.5(b)4C	Primary Daylighting 130.1(d) & 160.5(b)4D	Secondary Daylighting 140.5(d) & 160.5(b)4D
Vet Clinic	All Other Space Types	Required	Required	Required	NA	NA

L. DECLARATION OF REQUIRED CERTIFICATES OF INSTALLATION

Selections made by Documentation Author indicate which Certificates of Installation must be submitted for the features to be recognized for compliance. These documents must be retained and provided to the building inspector during construction and can be found online

Building Component	Form/Title
Envelope	NRCI-ENV-01-E -Must be submitted for all buildings
Envelope	NRCI-ENV-E - Envelope (for all buildings)
Mechanical	NRCI-MCH-01-E - Must be submitted for all buildings
Mechanical	NRCI-MCH-E - For all buildings with Mechanical Systems
Plumbing	NRCI-PLB-01-E - Must be submitted for all buildings
Plumbing	NRCI-PLB-E - For all buildings with Plumbing Systems
Indoor Lighting	NRCI-LTI-01-E - Must be submitted for all buildings
Indoor Lighting	NRCI-LTI-E - Indoor Lighting (for all buildings)

M. DECLARATION OF REQUIRED CERTIFICATES OF ACCEPTANCE

Selections made by Documentation Author indicate which Certificates of Acceptance must be submitted for the features to be recognized for compliance. These documents must be provided to the building inspector during construction and must be completed through an Acceptance Test Technician Certification Provider (ATTCP).

Building Component	Form/Title
Envelope	NRCA-ENV-02-F NRFC label verification for fenestration
Indoor Lighting	NRCA-LTI-02-A - Occupancy Sensors and Automatic Time Switch Controls.

N. DECLARATION OF REQUIRED CERTIFICATES OF VERIFICATION

Selections made by Documentation Author indicate which Certificates of Verification must be submitted for the features to be recognized for compliance. These documents must be retained and provided to the building inspector during construction and can be found online

There are no Certificates of Verification applicable to this project

CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD — NRCC-PRF-E

Nonresidential Performance Compliance Method — (Page 17 of 18)

Documentation Author's Declaration Statement

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

Documentation Author Name: Ryan Knight	Documentation Author Signature:
Company: Monterey Energy Group, Inc.	Signature Date:
Address: 26465 Carmel Rancho Blvd, Suite 8	CEA/HERS Certification Identification (if applicable):
City/State/Zip: Carmel, CA 93923	Phone: 8312509095

Responsible Person's Declaration Statement

I certify the following under penalty of perjury, under the laws of the State of California:

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

Responsible Designer Name: Clinic In A Can	Responsible Designer Signature:	
Company: Clinic In A Can		
Address: 9745 E 50th St. North	Date Signed:	
City/State/Zip: Wichita, KS 67226	License #:	
Phone:316.262.0953	Title:	Scope:
Responsible Designer Name: Clinic In A Can	Responsible Designer Signature:	
Company: Clinic In A Can		
Address: 9745 E 50th St. North	Date Signed:	
City/State/Zip: Wichita, KS 67226	License #:	
Phone:316.262.0953	Title:	Scope:

CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD — NRCC-PRF-E

Nonresidential Performance Compliance Method — (Page 18 of 18)

Responsible Designer Name: Ryan Knight	Responsible Designer Signature:	
Company: Monterey Energy Group		
Address: 26465 Carmel Rancho Blvd. Suite 8	Date Signed:	
City/State/Zip: Carmel, CA 93923	License #:	
Phone:	Title:	Scope:

REVISIONS: | BY:

IDENTIFICATION STAMP
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DATE: 4/3/2025

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REGISTERED PROFESSIONAL ENGINEER
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NO. M31607
EXP. MAR 31, 2025
MECHANICAL
STATE OF CALIFORNIA

YOLO COUNTY
VETERINARY CLINIC
2640 EAST GIBSON ROAD

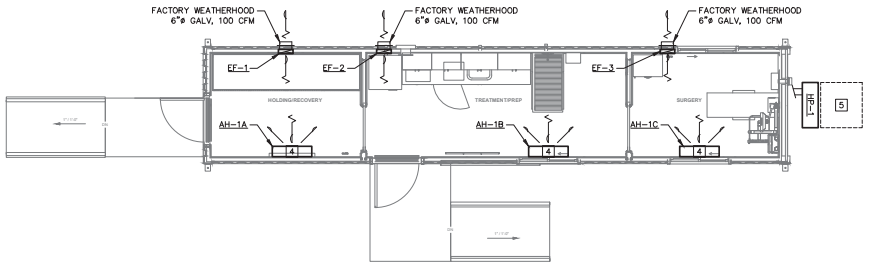
ENERGY COMPLIANCE

DATE: 01/21/25
SCALE: AS NOTED
DRAWN: MEG
CHECKED:
CHECKED:
FILE NAME:
SHEET: M0.4
SHEET OF SHEETS

BB24-029
Reviewed for
Code Compliance
Approved:CR

SHEET NOTES

1. ALL WORK SHALL COMPLY WITH 2022 CBC, CMC, CEC & CPC.
2. ALL EXHAUST OUTLETS SHALL MAINTAIN A MIN. 3' CLEARANCE FROM ANY OPERABLE OPENING AND PROPERTY LINES. EXHAUST DUCTS SHALL BE EQUIPPED WITH BACK-DRAFT DAMPER PER SEC. 504.1.1 CMC
3. ALL EXHAUST FANS SHALL BE EQUIPPED WITH FACTORY OR FIELD INSTALLED BACKDRAFT DAMPERS PER CMC 504.1. WHERE EXHAUST FAN DUCTS ARE COMBINED TO SERVE A SINGLE OUTLET, AN ADDITIONAL FIELD INSTALLED BACKDRAFT DAMPER SHALL BE USED TO PROVIDE GREATER PROTECTION
4. A. PROVIDE CONDENSATE DRAIN LINE IN ACCORDANCE WITH CMC 802.9
   B. PROVIDE ACCESS PANEL AND CLEARANCE REQUIREMENTS PER MANUFACTURERS INSTALLATION REQUIREMENTS
   C. CONNECT REFRIGERANT LINES TO OUTDOOR COMPRESSOR UNITS
   D. PROVIDE FILTER RACK AND FILTER FOR ALL UNITS
5. WALL MOUNT CONDENSER COORD EXACT LOCATION W/ ARCH. PROVIDE 1 FT CLEARANCE OFF STRUCTURE.



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

REVISIONS: | BY:

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2640 EAST GIBSON ROAD

BB24-089
Reviewed for
Code Compliance
Approved:GR

HVAC PLAN

DATE: 01/21/25
SCALE: AS NOTED
DRAWN: MEG
CHECKED:
CHECKED:
FILE NAME:
SHEET:
M2.1
SHEET OF SHEETS

PIPE INSULATION THICKNESS TABLE

FLUID TEMPERATURE RANGE (°F)	CONDUCTIVITY RANGE (IN BTU-INCH PER HOUR SQUARE FOOT PER °F)	INSULATION MEAN RATING TEMPERATURE (°F)	NOMINAL PIPE DIAMETER (IN INCHES)				
			< 1	1 TO< 1.5	1.5 TO< 4.5	4 TO< 8	8 AND LARGER
			INSULATION THICKNESS REQUIRED (IN INCHES)				
SPACE HEATING, HOT WATER SYSTEMS (STEAM, STEAM CONDENSATE AND HOT WATER) AND SERVICE WATER HEATING SYSTEMS							
ABOVE 350	0.32-0.34	250	4.5	5.0	5.0	5.0	5.0
251-350	0.29-0.32	200	3.0	4.0	4.5	4.5	4.5
201-250	0.27-0.30	150	2.5	2.5	2.5	3.0	3.0
141-200	0.25-0.29	125	1.5	1.5	2.0	2.0	2.0
105-140	0.22-0.28	100	1.0	1.5	1.5	1.5	1.5
SPACE COOLING SYSTEMS (CHILLED WATER, REFRIGERANT AND BRINE)							
40-60	0.21-0.27	75	0.75	0.75	1.0	1.0	1.0
BELOW 40	0.20-0.26	50	1.0	1.5	1.5	1.5	1.5

FROM TABLE 120.3-A 2022 CEC

CAL GREEN FIXTURE CONNECTION TABLE

DESCRIPTION	MIN BRANCH SIZE				TRAP	MAX GPM	COMMENTS
	W	V	CW	HW			
WATER CLOSET	3"	2"	1/2"	NA	3"		1
KITCHEN/LAUNDRY SINK	2"	1-1/2"	1/2"	1/2"	1-1/2"	1.8 @ 60 PSI	
TUB/SHOWER COMBO	2"	1-1/2"	3/4"	3/4"	1-1/2"	1.8 @ 80 PSI	2 4
BATH TUB ONLY	2"	1-1/2"	3/4"	3/4"	1-1/2"		
LAVATORY	1-1/2"	1-1/2"	1/2"	1/2"	1-1/2"	1.2 @ 60 PSI	
CLOTHES WASHER	2"	1-1/2"	3/4"	3/4"	2"		
SHOWER	2"	1-1/2"	3/4"	3/4"	2"	1.8 @ 80 PSI	2 4

NOTES:
1. Dual-Flush or equal to or less than 1.28 gallon per flush
2. Individual control valves of the pressure balance or thermostatic mixing valve type shall be provided.
3. Plumbing fixtures shall meet the standard referenced in CGBSC Table 4.303.3
4. When a shower is served by more than one showerhead, the combined flow rate of all showerheads and/or other shower outlets controlled by a single valve shall not exceed 1.8 gallons per minute at 80 psi, or the shower shall be designed to allow only one shower to be in operation at a time. (Note: hand-held shower is to be considered a showerhead)

ELECTRIC WATER HEATERS

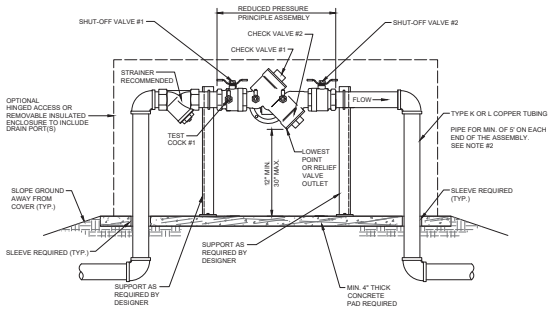
MARK	LOCATION	GAL CAP	KBH IN	ELECT KW	ELECT V/PH	RECOVERY AT 90°T RISE	LBS FULL	MANUFACTURER AND MODEL	COMMENTS
EWH-1	SINK CABINET	1.5	N/A	8	240/1	6.8 GPM	12.5	RHEEM RETEX-08	

PLUMBING ABBREVIATIONS

ARCH — ARCHITECT
AFS — AUTOMATIC FIRE SPRINKLERS
BTU/H — BRITISH THERMAL UNITS PER HOUR
CD — CONDENSATE DRAIN
CIRC — CIRCULATION
CLG — CEILING
CONC — CONCRETE
CONT — CONTINUATION
COORD — COORDINATION
COTG — CLEAN-OUT TO GRADE
CW — COLD WATER
ø — DIAMETER
DF — DRINKING FOUNTAIN
DN — DOWN
DWGS — DRAWINGS
(E) — EXISTING
ELECT — ELECTRICAL
°F — DEGREES FAHRENHEIT
FCW — FILTERED COLD WATER
FLA — FULL LOAD AMPS
FLEX — FLEXIBLE
FPM — FEET PER MINUTE
FS — FLOOR SINK
FTR — FLUE THRU ROOF
G — GAS
GALV — GALVANIZED
GPM — GALLONS PER MINUTE
HB — HOSE BIBB
HP — HORSE POWER
HPG — HIGH PRESSURE GAS
HW — HOT WATER
HWR — HOT WATER RETURN
KBTUH — 1000 BTU/H
LAV — LAVATORY
LBS — POUNDS
LRA — LOCKED ROTOR AMPS
MAX — MAXIMUM
MPG — MEDIUM PRESSURE GAS
MFR — MANUFACTURER
MIN — MINIMUM
(N) — NEW
NC — NORMALLY CLOSED
NIC — NOT IN CONTRACT
NO — NORMALLY OPEN
POC — POINT OF CONNECTION
PSI — POUNDS PER SQUARE INCH
REQS — REQUIREMENTS
RM — ROOM
RPM — REVOLUTIONS PER MINUTE
SH — SHOWER
STM — STEAM
STRUCT — STRUCTURAL
$ SW — SWITCH
SS — SANITARY SEWER
TYP — TYPICAL
UL — UNDERWRITERS LABORATORY
UON — UNLESS OTHERWISE NOTED
V — VENT
VTR — VENT THRU ROOF
W — WASTE
W/ — WITH
WC — WATER CLOSET
WT — WEIGHT

SYMBOLS

SYMBOL	ABREVIATION	IDENTIFICATION
		MANIFOLD
	WCO	WALL C.O.
	COTG/FCO	C.O. TO GRADE/FLOOR C.O.
	GC	GAS COCK
		PRESSURE/TEMPERATURE PLUG
	BV	BALL VALVE
	CHVA	CHECK VALVE
	OS&Y	OUTSIDE SCREW & YOKE GATE VALVE
	BV/SOV	BALANCING/SHUT-OFF VALVE
	GV	GATE VALVE
	T&PRV	TEMP & PRESS RELIEF VALVE
	WHA	WATER HAMMER ARRESTOR
		SOLENOID VALVE
	DCBP	DOUBLE CHECK BACKFLOW PREVENTER
		UNION
		PRESSURE GAUGE
		CENTRIFUGAL WATER PUMP
	FC	FLEXIBLE CONNECTION
		HYDROSTATIC RELIEF VALVE
	RPBP	REDUCE PRESS BACKFLOW PREVENTER
	HB	HOSE BIB
	MH	MANHOLE
		THERMOMETER
	P.O.C.	POINT OF CONNECTION
		CENTERLINE
	GPR	GAS REDUCING VALVE



1 DOUBLE BACK FLOW PREVENTION DEVICE
SCALE: [NONE]

PLUMBING SPECIFICATIONS

A. General Conditions
1. All work shall be in conformance with the 2022 CPC, NFPA and all applicable codes, local jurisdictional amendments and agencies.
2. Work Included:
   A. Domestic hot and cold water systems.
   B. Fuel gas piping.
   C. Installation of all new plumbing fixtures.
   D. Complete waste and vent piping system.
3. It shall be the contractors responsibility to visit the project site and acquaint himself with all existing conditions, as well as ascertain the extent of the work involved. By submitting a bid, the contractor shall be deemed to have made such an examination, to have accepted such conditions and to have made all necessary allowances in preparing his proposal.
4. A structural member wakened or impaired by cutting, notching, or otherwise shall be reinforced, repaired, or replaced so as to be left in a safe structural condition in accordance with the requirements of the building code.
5. All work and materials shall comply with governing codes, safety orders and regulations.
6. Plumbing contractor shall deliver to the architect a written one year guarantee on all workmanship, equipment and materials; repair or replace any such defective items during this period.
7. Provide Hanger and supports per table 313.3 2022 CPC

Horizontal		Vertical
Cast Iron	18" of joint	Each Floor max 15'
Copper Pipe	< 1- 1/2 " 6' > 10'	Each Floor max 10'
PVC and ABS	all max 4'	Base, each floor, mid story guideline
Pex	< 1' at 32' > 4'	Base, each floor, mid story guideline
Steel for gas ½ - 6":	¾" to 1'-8 >10'	Same

B. Utilities and Site Work:
1. Prior to commencing work, plumbing contractor shall consult representatives of local utilities concerning locations and availability of utilities. Plumbing contractor shall be responsible for any damage to existing utility lines.
2. Plumbing contractor shall reroute any existing utility lines in conflict with new construction.
3. Plumbing contractor shall confirm locations and elevations of all existing new and rerouted mains and meters on job record drawings.
4. Piping in the ground shall be laid on a firm bed for its entire length.
5. Backfilling trenches with piping shall be made with clean earth, no stones, boulders, cinder fill, frozen earth, construction debris, or other materials that will damage or cause corrosion.

C. Drain, Waste and Vent:
1. All waste piping below 1st floor shall be schedule 40 ABS or schedule 40 PVC DWV.
2. All waste piping serving 2nd floor fixtures shall be no-hub cast-iron. (Note: p-trap and trap-arm shall be cast-iron. Note: transitions from ABS to no-hub piping for upstairs baths shall be beneath floor at 1st floor and transitions back to ABS shall be above 2nd floor plate line.)
3. All vent piping shall be schedule 40 ABS or schedule 40 PVC DWV.
4. Vents shall be combined to minimize roof penetration where possible. Confirm roof penetration locations with architect prior to installing.
5. Cleanouts shall be installed at upper terminals of all horizontal waste runs as per CPC.
6. Plumber shall provide waste for softener location.
7. Domestic dishwashing machines shall discharge indirectly through an air gap fitting in accordance with section 807.3 into a waste receptor, a wye branch fitting on the tailpiece of a kitchen sink, or dishwashing food waste grinder.
8. Cleanouts are required at drainage piping upper terminal; each branch line over 5 feet from main, no greater than 100 feet in developed length from each cleanout; Over 135 degrees in horizontal change of direction.
9. Sinks and urinals shall require cleanouts.
10. Cleanout clearances in front shall be <=2" – 12 inches. <2"- 18 inches. Cleanouts shall extend to finished floor or outside the building.
11. No clothes washer standpipe shall extend more than 30 inches or not less than 18 inches above its trap. The trap shall be roughed in not less than 6 inches nor greater than 18 inches above the floor.
12. Condensate waste from air conditioning coils discharges by direct connection to a lavi or approved bathtub overflow, the connection shall be located in the area controlled by the same person controlling the air conditioning space.
13. No domestic dishwashing machine shall be direct connected to the drainage system or a food waste disposer without the use of an approved dishwasher air gap fitting on the discharge side of the dishwashing machine. Listed air gaps shall be installed with the flood level marking at or above the flood level of the sink or drain board whichever is higher.

PLUMBING SPECIFICATIONS

D. Water Supply Piping:
1. All underground water supply piping shall be schedule 40 PVC. Provide tracer wire at all underground utilities.
2. Water service line to dwelling shall be buried at a minimum depth of 18 inches. Where service enters building, service shall have a stop (ball valve), waste (drain cock), and pressure regulating valve if necessary.
3. Plastic and copper piping penetrating framing members within 1 inch of the exposed framing shall be protected by a steel nail plated not less than 18 gauge in thickness. Extend nail plate 1 ½ inched beyond the outside diameter of the pipe
4. Plumber shall provide water treatment loop.
5. All water supply piping within building shall be approved PEX.
6. Hot and cold supplies to all tubs shall be 3/4" minimum.
7. The maximum hot water temperature of discharging from the bathtub and whirlpool bathtub filler shall be limited to 120 degrees F by a device that is in accordance with ASSE 1070 or CSA B 125.3. Water heater thermostats do not comply.
8. Discharge from a relief valve into a water heater pan shall be prohibited.
9. Plastic water supply piping, underground outside a building, shall have a blue insulated copper tracer wire installed adjacent to the piping. The tracer wire shall terminate above grade and be not less than 18 awg.
10. Pex piping shall not be installed within the first 18 inches of piping connected to a water heater. Water heater flexes shall not be greater than 24 inches.
11. Where water pressure exceeds 80 Psi an approved type pressure regulator shall be installed. An approved expansion shall be installed in the cold water distribution piping downstream of each regulator.
12. All piping in hot water system shall be insulated per CPC insulation schedule.
13. All copper tubing shall be isolated from framing members with polyethylene isolators or 1/4" felt.
14. Water supply to refrigerators shall be ½" PEX.
15. Stub out height for water closet supplies to be coordinated with baseboard detail; confirm with architect before installation.
16. No (2) fixtures shall be served with 1/2" supply piping.
17. Water supply system mains and branches shall be properly sized to deliver adequate water pressure and volume as per the CPC, and to minimize friction generated noise; no 1/2" ID piping shall be installed in walls or ceilings adjacent to living or sleeping areas; piping shall be sized so that flow velocities do not exceed 6'/second.
18. All building water systems in which quick acting valves are installed shall be provided with water hammer arrestors per 609.11. Arrestors shall be installed as close as possible to these valve types.
19. Automatic fire sprinkler demand has not been included in sizing of the site main domestic water supply. Coord W/FS contractor for upsizing requirements for combination feed from single meters.

F. Tub, Shower and Pan Installation:
1. Plumbing contractor shall receive written specification for tile & float thickness for tubs and showers; rough-in valve accordingly.
2. Shower drains shall be Frank Pattern #20SD.
3. Roman tub shall be set in mortarbase with 15# paper beneath mortar with 6 mil visqueen between mortar and tub.

G. Trim:
1. Plumbing contractor shall be responsible for protection of all finished work by other trades; plumbers working on finished floors shall use clean quilted drops.
2. Hot and cold water stubouts beneath sinks shall have brass T's and separate stops when supplies are to be run to dishwasher, refrigerator or other accessory.
3. Recirc system shall be properly balanced with Nibco globe valves; circulation return shall have a check valve installed in the line, before its connection back to the hot water source.
4. Water heaters: indirect by radiant heating contractor
5. Plumbing contractor shall thoroughly flush all water supply lines.

REVISIONS: BY:

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-123126 INC:
REVIEWED FOR
SS ☐ FLS ☐ ACS ☑
DATE: 4/3/2025

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No. M31600
EXP. MAR 31, 2025
MECHANICAL
STATE OF CALIFORNIA

YOLO COUNTY
VETERINAY CLINIC
2640 EAST GIBSON ROAD

LEGENDS, SCHEDULES, NOTES

BB24-0809
Reviewed for
Code Compliance
Approved: CR

DATE: 01/21/25
SCALE: AS NOTED
DRAWN: MEG
CHECKED:
CHECKED:
FILE NAME:
SHEET:
P0.1
SHEET OF SHEETS

PLUMBING SPECIFICATIONS

PART ONE - GENERAL

A. Contract Documents: The Contract Documents (CDs) consist of a full set of Drawings and These Specifications. Contractor's bid shall include all requirements of all Drawings and all Specifications. Contractor shall coordinate necessary adjustments in the work of various trades to provide a complete project. Contractor shall visit site. No change in cost will be considered for failure to review and coordinate.

B. Complete Working Installation: The intent of the Contract Documents is to produce a complete project. Provide connection to all equipment requiring service from systems installed in this Section. Where labor or material is needed for satisfactory operation, required by the equipment manufacturer or accepted as good practice, provide at no change in Contract cost.

C. Utilities and Site Work:. Prior to commencing work, plumbing contractor shall consult representatives of local utilities concerning locations and availability of utilities. Plumbing contractor shall be responsible for any damage to existing utility lines. Plumbing contractor shall reroute any existing utility lines in conflict with new construction. Plumbing contractor shall confirm locations and elevations of all existing new and rerouted mains and meters on job record drawings.

Scope Includes:

D. Plumbing: Furnishing and installing complete plumbing and piping systems.

E. Contractor Furnished Items: Contractor shall rough-in, install and connect items including:

1. Water Closets
2. Sinks
3. Lavatories
4. Dishwashers
5. Showers
6. Tubs
7. Hose Bibs
8. Floor Drains
9. Floor Sinks
10. Clothes Washers

F. Coordination: Coordinate with all other trades on requirements for proper connections to equipment, devices and systems

G. Repair Damages: Repair any damage to equipment, building or site, which is caused by work. Repair damage caused by pipe leaks or breaks, malfunctions of equipment provided or installed

H. Reference: Refer to other Drawings and Specifications for related work.

Coordination

A. Review and Site Visit Report: Contractor shall review the entire set of CDs, Drawings and Specifications, and become familiar with related work of other trades. Contractor shall visit site and issue a written "Site Visit Report"

B. Owner Coordination: Public will be using portions of the premises during construction. Schedule the Work to allow public's procedures to continue. Limit construction noise close to sensitive areas or during quiet periods.

C. Experience: Contractor is assumed to be experienced in this work. After award of contract, no additional costs will be considered for payment for work that must be altered due to conflicts with other trades; claims of ignorance of the intent of the CDs will not be allowed.

D. Insurance: Contractor shall possess proper insurance in accordance with the General Specifications.

E. Inspections: Contractor shall coordinate the exact times of required inspections. Inspection schedule shall include rough-in, pre-final, final and others if required by the building inspector. Construction shall be complete and ready at time of inspection.

F. Safety: Contractor shall conduct safety meetings and provide safety training to all company personal on site. Design team construction support services do not imply review or approval of Contractor's safety procedures.

G. Shop Drawings: Coordinate with the General Contractor and the work of other trades on Shop Drawing submittals.

H. Record Drawings and Record Set: Coordinate with the General Contractor and the work of other trades on production of Record Drawings and the final Record Set and submittal of same. Give to design team for review prior to incorporating comments into "Record Set".

I. Submittals:

1. Equipment details shall be submitted for coordination with other trades and for review and approval by the Owner and designated representatives prior to purchase. Provide submittals organized in electronic format. Submittal data shall be provided in a timely manner to allow sufficient review time without delaying construction. Submittals shall contain descriptive materials such as catalog cuts, diagrams, performance curves and charts published by the manufacturer; model numbers alone will not be acceptable. All literature shall clearly indicate the specified model number, dimensions, weights, arrangement, rating and characteristics of the proposed equipment. All motor driven equipment shall include start-up procedures and tests recommended by the manufacturer. Contractor testing procedures may be considered as an alternative. All powered equipment shall include electrical ratings and wiring information. All items requiring architectural approval, such as air outlets, shall include photographs of equipment. Shop drawings shall be submitted for each piece of purchased equipment and materials including pipes, valves, and fittings.

2. Submission Requirements:

   1) Initial submittal:

      a. Submit electronic format of product data.

      b. Make any corrections or change in submittals as required.

      c. Resubmit for review until no exceptions are taken.

      d. The cost of Monterey Energy Group review of submittals after first resubmittal will be borne by Contractor at the Monterey Energy Group standard billing rates.

   2) Final approval: Once submission is accepted, Contactor shall print two bound sets of submittals for make photocopies for coordination with other trades, as required by the General Contractor. Photocopies will serve as submittal for record and coordination.

Substitutions

A. Substitutions: No substitute material or equipment may be installed without the written consent of the Architect and Engineer. The Contractor shall pay all additional costs incurred by any substitution, whether costs are architectural, structural, electrical, plumbing or mechanical.

B. Shop Drawings: Provide Shop Drawings and detailed descriptions for any equipment fabricated specifically for this project. Provide Shop Drawings of any suggested changes to designed piping layouts. Shop Drawings shall be 24-inch by 36-inch, minimum. Quality of drawings shall be equal to Contract Documents. Provide copies of a portfolio with a description of fixtures and trim. Provide a complete materials list.

Building Codes

A. Conformance: Work shall comply with requirements of building inspectors and all local, state and federal codes including 2022 CPC, CMC, CBC, CEC, CRC, CFC, NFPA, T-24 Energy Code and California Green Building Standards Code. Work shall also conform to SMACNA and OSHA standards. Installation of equipment and materials shall comply with manufacturer's installation instructions and industry standards.

B. Conflicts: Nothing in the Specifications or Drawings shall be construed as permitting a departure from any applicable code, ordinance or regulation. If any conflicts exist between CDs and Codes, Codes shall govern. Where CDs require superior quality, better construction methods or greater capacity than Codes, CDs shall govern. Minor changes required by Codes shall be included in Contractor's bid.

PART TWO - MATERIALS

Soil, Waste, Drain, Vent Systems

A. General: Pipe and fittings shall be the product of a single manufacturer and shall conform to Table 604.1 of the 2022 CPC.

B. Soil, Waste and Drain Piping Above Grade: Soil, waste, drain piping above grade shall be service weight hubless cast iron per CISPI 301 with neoprene sleeves and stainless steel clamps with a stainless steel shield which shall completely cover the neoprene. All cast iron piping shall have a standard rust inhibiting coating. Schedule 40 ABS may be used, when approved by the local authority, below slab and in locations where sound transmission in not an issue. Contractor shall obtain approval of all ABS locations from the architect/owner prior to installation.

C. Vent Piping Above Grade: Vent piping above grade shall be ABS-DWV schedule 40, ASTM d-2661, IAPMO approved.

Potable Water Piping System

A. General: Pipe and fittings shall be the product of a single manufacturer and shall conform to Table 701.2 of the 2022 CPC.

B. Copper Piping: Hard copper water tube, conforming to ASTM B88 (Type "K" underground, Type "L" above ground) with wrought copper fittings.

C. PEX Piping: Non Barrier PEX water tube, conforming to ASTM F 876 and F 877 with fittings per ASTM F1960 Standard Specification for Cold Expansion Fittings with PEX Reinforcing Rings for Use with Cross-linked Polyethylene (PEX) Tubing

D. Polyvinyl Chloride (PVC) and Chlorinated Polyvinyl Chloride (CPVC) Piping: Rigid PVC and CPVC piping shall be Schedule 40, Schedule 80 or Schedule 120 pressure piping as specified and as described in ASTM D-1785. PVC piping shall be Type I, Grade I compound Cell classification 12454-B per ASTM D-1784. SDR Pressure Rated PVC Piping shall be as described in ASTM D-2241. Plastic piping below grade shall be CPVC material.

E. Valves: All valves shall be the product of a single manufacturer such as Milwaukee, NIBCO, Stockham, or Crane; 125-psig steam service rated and 200 psig air and water rated.

1. Gate Valves: Milwaukee 1152 screwed, rising stem, union bonnet, bronze valve with integral tapered seats.
2. Ball Valves: Milwaukee BA100 standard port, screwed, bronze valve.
3. Check Valves: Milwaukee 509T screwed, bronze, swing check valve. Provide non-slam check on pumped equipment or quick closing fixtures.

F. Unions: Mueller C-107, in copper piping systems. Stockham Figure 694, galvanized malleable iron, brass seat, in steel piping systems. Crane dielectric unions where copper connects to steel piping systems.

G. Thermometers: Thermometers shall be H.O. Trerice Company with separable wells, straight or angle mounted, installed to be easily read from floor. Temperature range 30 to 180 degrees Fahrenheit for domestic hot water, 30 to 240 for heating water, 0 to 100 for chilled water, all with 2 degree divisions.

H. Pressure gauges: Pressure gauges shall be H.O. Trerice, grade 2a, bourdon tube spring type with 4.5-inch dials and calibrating screws. Provide anderson-greenwood type h-5 with Teflon packing shutoff needle valves and Trerice 872 pressure snubbers. Install where easily read from floor and only after systems are cleaned. Select pressure range to position indicator at half way point during normal operation.

I. Shock Absorbers: Provide on cold water lines at quick closing valves such as flush valves, solenoid valves, etc. Sized and located in accordance with Plumbing and Drainage Institute Manual WH 201. Provide access panels at locations where shock absorbers are not accessible. See applicable paragraph for types. Locations to be submitted to and approved by Architect

J. Insulation:

A. Insulation shall:
   1. Be of one manufacturer – Commercial Spaces, Certainteed, Owens Corning, Manville, Knauf, or equal. Residential Spaces Nomaco Thermocel, Armaflex or equal.
   2. Meet minimum thickness requirements of Ch. of Title 24
   3. Meet mold, humidity, and erosion resistance requirements of CMC Standard 6-1
   4. Have flame spread not more than 25 and smoke density of not more than 50 when tested as a composite installation per CBC

B. Exposed insulation: Insulation exposed to weather shall be protected by a smooth or corrugated aluminum jacket or colored plastic jacket approved for outdoor installation, minimum 0.016 inch thick, secured 3" on center, overlapped at joints and sealed watertight.

K. Access Panels: Karp style DSC214M with prime coat for field painting, size determined by items requiring service or access. Access panels in restrooms shall be stainless steel.

Pipe Hangers, Supports and Seismic Restraints

General: Hangers and supports shall be the product of a single manufacturer. Provide additional supports where necessary at sufficiently close intervals to prevent sagging and to keep it in alignment and at maximum 24-inches from each fitting and change of direction. Anchor vertical risers with hooks, brackets or clamps to make them rigid.

A. Provide seismic restraints to meet the more stringent requirements of the CBC or the local building code.
B. Restraints shall not short-circuit vibration isolation systems under normal operation.
C. Design and provide restraints to prevent permanent displacement in any direction caused by lateral motion, overturning, or uplift of Plumbing equipment, and piping. Restraints shall meet requirements of the CBC.
D. Published specifications standards, tests or recommended methods of trade, industry or governmental organizations apply to work in this section:
   1. "Guidelines for Seismic Restraints of Mechanical Systems and Plumbing Piping Systems"
      a. Published by SMACNA and PPIC
      b. Approved by the State of California
   2. CBC – 2022 California Building Code
   3. CPC – 2022 California Plumbing Code
   4. CRC – 2022 California Residential Code
E. Manufacturers:
   1. Hangers: Any manufacturer who can verify compliance with the CBC standards
   2. Strut - Channel Framing: Any manufacturer who can verify compliance with the CBC standards
   3. Anchors:
      a. Poured in place: Any manufacturer within the CBC standards
      b. Drill In: Any manufacturer within the CBC standards
F. Anchors, Inserts and Fasteners:
   1. General:
      a. Capable of safely accepting indicated external forces without failure
      b. Maintain equipment, piping and ducts in a captive position
   2. All anchors and inserts shall be installed according to the CBC standards

Pipe Sizes to Equipment

A. General: Pipe sizes indicated, including required valves and fittings, shall be carried full size to the equipment served. Any changes in size to match equipment connection shall be made within 1-foot of equipment. All temperature control valves with sizes smaller that connected lines shall have reduction made immediately adjacent to the valves.

Clean-Outs

A. General: Provide Zurn, Wade or Jay R. Smith clean-outs where indicated and required by Code. Same size as main with a maximum size of 4-inches.

1. Floor Clean-Outs (FCO): Zurn ZN1400-2 round top floor clean-out with nickel-bronze head.
2. Wall Clean-Outs (WCO): Zurn ZN1460-B clean-out, cast brass counter-sunk plug, stainless steel access cover plate secured to plug with counter-sunk screw. For No-Hub piping, Zurn ZN1440-1.
3. Clean-Outs To Grade(COTG): In unfinished areas, use Zurn ZN1420-25 cast iron clean-out, fitted with brass counter-sunk plug. For No-Hub piping, ZN1440.
4. Clean-Outs (CO): For grass or planted areas, Zurn 1449 located in concrete box with cover.

Unions

A. General: Provide unions at each soldered or threaded connection to equipment, tanks and valves; on one threaded connection to each manually operated threaded valve and cock and on one threaded connection to each check valve; at both threaded connections to threaded or soldered automatic valves. Provide where required by service whether indicated or not.

Traps

A. General: Provide traps on all fixtures connected to soil systems, except for fixtures having integral traps. Arrange so discharge form any fixture will not pass through more than one trap before reaching sewer. All traps shall have seal of not less than 2-inches and not more than 4-inches.

B. Exposed Pipe: Exposed traps shall be 17-gauge chromium plated cast brass.

C. Cast Iron Traps: Traps installed in connection with cast iron piping shall be same quality and grade as pipe.

Trap Primers

A. General: Provide trap primers on all drains with infrequent usage and as follows:

1. Water Closets: When connecting to water closets, provide Sloan F72-A primer complete with fitting and accessories.
2. Trap Primer Valve: Automatic trap primer valve shall be Precision Plumbing Products Primer Valve No.1 non-adjusting, for a maximum of two drains.

Hose Bibbs

A. General: Provide all hose bibbs or hydrants with vacuum breakers. All hose bibbs shall have removable metallic handles and lock-shield.

Drains

A. General: Provide Zurn, Wade, or Jay R. Smith drains of sizes indicated. Coordinate installation methods with surfaces where installed. Provide any sleeves, seals, gaskets, rings or other appurtenances required for a complete installation. Drains inside caulked or threaded outlet as required. Provide clamping collars for drains in areas except slab on grade. Provide trap primers where required by Code.

B. Floor Drain: Zurn ZN415-B-6 cast iron floor drain, 2-piece body with double drainage flange, reversible flashing collar, wisp-holes, bottom outlet, and adjustable polished nickaloy 6-inch diameter round strainer, Z419-B-6 polished chrome for showers.

C. Floor sinks: Shall be complete with cast iron with acid-resisting porcelain enameled interior, double drainage flange, internal dome, half grate, nickel-bronze frame and trap priming connection. Set top of floor sink to be flush with finished floor. Unless otherwise noted all floor sinks shall be a minimum of 8-1/2" square x 6¼"4" deep, with ½ grate.

Fixtures

A. General: See fixture schedule on Architectural Drawings. Coordinate with Architectural Drawings for fixtures requiring connection. Verify fixtures are properly set and level prior to connection.

PART THREE - METHODS

Excavation and Backfilling

A. General: Perform all necessary excavation and backfilling required for installation of mechanical and plumbing work. Any work damaged during excavation and backfilling shall be repaired at the Contractor's expense.

B. Verify Conditions: Examine the site to determine the character of the materials to be encountered and existing conditions affecting the Work. Excavation shall be unclassified and shall include the removal of all buried obstructions within the area to be excavated.

C. Trenching: Trenching for underground pipe shall be to the required depths. Maintain excavations free of water while installing pipe and until completion of backfill operation.

D. Tamping: Tamp bottom of trenches to uniform grade and excavate bell holes where necessary to insure that pipe rests for entire length on solid ground. Should rock be encountered, excavate to 6-inches below bottom of pipe and fill with well tamped and compacted 0.5-inch to 1.5-inch broken stone or gravel-sand before laying pipe.

E. Backfill: After pipe has been installed, tested, inspected and approved, backfill excavations with clean earth from excavation or with imported sandy soil in layers not exceeding 8-inches. Moisten and machine tamp and restore ground or paving to original condition. Backfill shall be compacted to a density of 90-percent as determined by laboratory test procedure in ASTM D1557.

F. Owner Tests: During progress of Work, Owner may have compaction tests made under direction of testing laboratory for all compacted fill. If found not to meet Specifications, Contractor shall excavate and re-compact fill at no additional cost to Owner.

G. Grading: After backfilling, grade all trenches to level of surrounding sub-grade. All excess soil shall be removed from site and disposed of in accordance with local Codes.

Pipe Installation

A. General: Install piping approximately as indicated, direct as possible without unnecessary offsets or fittings, parallel with building lines. Locate valves for accessibility. If a location indicated on Drawings for an item requiring access is blocked by an obstacle, point out location to Architect prior to installing item for direction on new location.

B. Layout: Maintain maximum headroom under piping. Contractor to coordinate line locations with beams, windows, columns, etc, to provide maximum clearance. From Drawings, ascertain heights of suspended ceilings and size of pipe shafts, in which piping is concealed, and location and size of structural members in and adjacent to pipe shafts. Coordinate piping installation with ductwork, lighting and equipment. If sufficient space above ceilings or in soffits, shafts and chases is not available, obtain clarification from Architect prior to beginning work.

C. Slope: Horizontal piping shall slope uniformly without sags or humps to provide for complete drainage of systems and elimination of air. Low points in closed systems shall have drain valves accessibly located. Drainage piping shall slope as required by Code or as indicated.

D. Cleaning Piping: Clean all piping prior to assembly. Maintain in clean condition during construction, temporarily capping or plugging ends of pipe when not being worked on.

E. Sizes: Water piping is sized at maximum 8-foot per second velocity for cold water piping and 5-feet per second velocity in hot water piping. Do not reduce pipe sizes shown on Drawings.

F. Cutting: Cut pipe accurately to measurements established on site and work into place without springing or undue forcing and out of the way of openings, ductwork and equipment. Ream ends of pipe and tubing to original bore before connection. Support pipe during cutting. Do not cut plastic piping with tools that generate heat.

G. Expansion: Install piping to allow for expansion and contraction with damage to pipe, supports or building. Provide expansion loops or other devices where required even if not shown on Drawings. Provide swing joints or run-outs to equipment with swing connections or expansion loops to eliminate stress on equipment connections.

H. Cutting Structure: Cutting of structural elements to facilitate pipe installation is strictly prohibited without the written permission of the Structural Engineer.

I. Concealed Pipe: Run piping concealed, except as otherwise noted, with vertical pipe plumb and horizontal pipe installed to maintain uniform slope.

J. Exposed Pipe: All exposed pipe and trim at fixtures shall be chrome-plated.

K. Protection: Protect all piping located in sensitive areas such as over switchboards, electrical machinery or equipment against condensation.

L. Prohibited Locations: Do not install piping in locations prohibited by Code or by Specification Section 15050 Mechanical General.

M. Isolate: Isolate water piping from hangers, walls, structure, etc. with 0.25-inch thick felt pad or Acousto-Plumb Systems. Alleviate noise transmission when water is flowing.

N. Joints: Make all joints in accordance with manufacturer's recommendations and local Codes.

1. Cast Iron: Joints in cast iron piping with neoprene compound applied to male threads only.
2. Threaded Joints: Make screw joints with approved pipe joint compound applied to male threads only. Threaded joints shall not be made in Schedule 40 PVC piping.
3. Copper: Solder joints in copper tubing with lead free soft solder and flux. All joints to be cleaned bright before soldering. Wipe excess solder from joints while molten.
4. PVC Joints: Joints in PVC piping systems shall be solvent weld compatible with the type of materials being handled. Plastic to plastic, plastic to metal, victaulic and flanged fittings shall be made in accordance with the manufacturer's recommendations.

O. Connections: Piping at tanks, converters, generators, pumps, etc shall be supported independently so pipe weight is not supported by equipment. Provide shut off valves, balancing valves, unions, flanges as required by service in supply and return to each item of equipment. Installation shall allow for proper service, balance, testing, maintenance and removal of equipment and associated apparatus. Provide temporary connections, valves, over-sized flushing connections, pipe extensions, etc. as required to test and balance systems.

P. Drains: Drain piping from pump glands, relief valves, etc. Shall spill over open-sight drains, floor drains, floor sinks or other acceptable locations which shall be readily observable. Terminate drainpipe with plain unthreaded pipe with minimum 1-inch air gap.

Q. Unions: Provide screwed unions or flanges in locations required for disconnecting all equipment, traps, by-passes, tanks, etc.

R. Flashing: Coordinate with flashing methods detailed on Architectural Drawings for a uniform appearance. Flash roof vent piping through roof with 24-gauge or heavier galvanized flashing. Make watertight with black fibrous mastic. Extend flashing into roofing felts minimum 12-inches from pipes.

S. Anchorage: equipment and piping shall be accurately set and leveled, anchored to structure as indicated and according to CCR Title 24, CBC and SMACNA "Guidelines For Seismic Restraint Of Plumbing Systems And Mechanical Systems". Supplemental supports to span structural elements shall be provided. Shop drawings shall be approved by the design team prior to installation. Items requiring vibration isolation shall have Mason SSLFH isolators.

T. Pipe Penetrations:

1. Sleeves: Pipe runs in masonry and concrete floors shall be sleeved for protection. Use standard sleeves or black steel piping at least one size larger than piping run. Chase or sleeve all pipes rising in footings and where running concealed through walls. Caulk space between pipes and sleeves in exterior walls and concrete slabs with graphite packing and waterproof plastic compound.
2. Fire Barrier Penetrations: Provide full copy of UL listed fire resistive detail where piping passes through rated barriers. Fire resistive penetration detail shall be coordinated with listing of fire resistive assembly where pipe passes.
3. Slabs: Coordinate water proofing seals where pipes pass through slabs with waterproofing consultant/contractor.
4. Foundation Walls: Pipes penetrating below grade foundation walls shall be protect with Linkseal Systems.
5. Escutcheons: Place escutcheon, stamped with 16-gauge steel and chromium plated, on pipes passing through sleeves in walls, floors or ceilings where exposed to view in finished areas. Grout in all other pipes.

Soil, Waste, Drain And Vent Pipe Installation

A. General: Run piping in approximate location shown on the Drawings, graded one unit in forty-eight (1/4-inch per foot) in buildings. Lay sewers in straight lines at a uniform grade of one unit in forty-eight (1/4-inch per foot) or as noted on Drawings. 1/8" slope on pipe sizes 4"–6" shall be permitted with approval from the authority having jurisdiction.

B. Plug Ends: Keep stopper in mouth of pipe when pipe work is not in progress.

C. Connection Schedule: Contractor shall coordinate with Owner on preferred schedule of system shutdown. Prior to starting any new pipe replacement work, run new waste piping adjacent to existing piping and make connections during off hours so as to maintain service to buildings.

D. Vents: Extend vents through roof. Vents may be combined in accordance with the CPC. Combination of cross-section of all venting within each building shall equal waste pipe size cross-section leaving that building.

E. Traps: All drains shall be properly trapped and vented and supplied with water where required by Code. Give special attention to drains located in areas that are pitched for drainage so that uniform slope will be obtained.

F. Clean-Outs: Cleanouts shall be installed per CPC 707.0 and Table 707.1, every 100-feet of horizontal runs. Make-up clean-out plugs with graphite and oil to facilitate easy removal. Take necessary precautions to protect clean-outs during construction. Replace damaged clean-outs.

Clean Up

A. General: Daily clear construction debris and trash from work areas and dispose of off site. Sweep building floors weekly. Clean all portions of site to the satisfaction of Owner and Architect. See individual Specification Sections for additional requirements.

B. Site: Layout construction tools, work areas, materials and supplies to promote a clean and safe project site. Clean tools and sweep work areas daily.

C. Pipe Cleaning: Flush thoroughly and submit documentation that all water distribution systems have been properly cleaned.

D. Strainers: Remove strainer screens and flush clean before replacing.

E. Equipment: Wipe down equipment, removing dust, grease, marks from shipping or installation. Coordinate any repair, refurbish or touch-up painting required.

Final Inspection

A. Final Inspection: Furnish Architect with all certificates of final inspection and approval from inspection authorities. Coordinate with design team and building inspectors on inspection schedule.

Limited Field Visits

A. Site Visits: Engineer's responsibility is limited to normal construction support services only. Engineer will provide office consultation and, upon approval, will visit site at rough-in, pre-final and final stages only. Contractor shall pay all costs for additional site visits required to re-inspect incomplete work or due to poor coordination or supervision by the Contractor.

Field Instructions

A. Field Instructions: At project completion, provide services of engineer to instruct Owner's maintenance personnel in operation and maintenance of each system. Cover all items in the bound instruction books. Instruction service shall be of sufficient length with enough detail to insure safe and efficient operation.

Guarantee

A. Guarantee: Plumbing Contractor shall guarantee the following:

1. Sub-contractor will replace or repair any defect in equipment, materials, and/or installation within the warranty period, which shall be on year from substantial completion.

2. That all equipment and material will produce the results specified.

3. The Plumbing Contractor shall furnish written guarantee to replace all defective work and materials furnished under this Section, at no cost to the Owner, for this one (1) year period.

REVISIONS: | BY:

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-123126 INC:
REVIEWED FOR
SS ☐ FLS ☐ ACS ☑
DATE: 4/3/2025

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REGISTERED PROFESSIONAL ENGINEER
Eric Talley
No. M31607
EXP. MAR 31, 2025
MECHANICAL
STATE OF CALIFORNIA

YOLO COUNTY
VETERINAY CLINIC
2640 EAST GIBSON ROAD

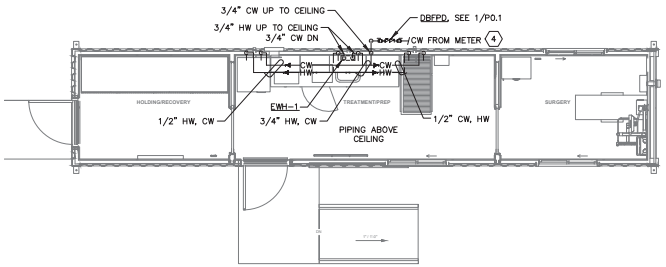
BB24-089
Reviewed for
Code Compliance
Approved CR

PLUMBING SPECIFICATIONS

DATE: 01/21/25
SCALE: AS NOTED
DRAWN: MEG
CHECKED:
CHECKED:
FILE NAME:
SHEET: P0.2
SHEET OF SHEETS

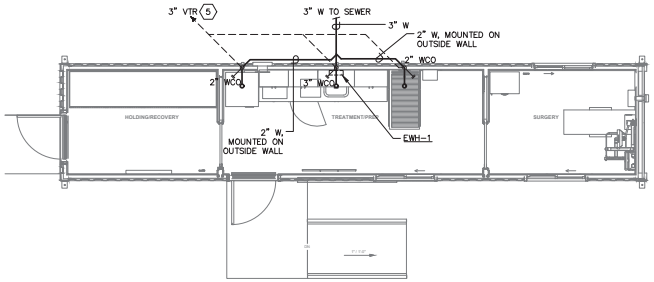
SHEET NOTES

1. PROVIDE TRAP PRIMERS AT ALL FLOOR DRAINS & FLOOR SINKS.
2. COORD ALL PIPING LAYOUTS W/DUCT SYSTEM AND ALL TRADES
3. NOTE: ALL HOT AND COLD WATER PIPING BELOW SLAB SHALL BE TYPE K SOFT COPPER OR APPROVED PEX. NO JOINTS SHALL BE PERMITED BELOW SLAB. INSULATE WITH APPROVED BELOW SLAB INSULATION.
4. DOMESTIC DEMAND = 7 GPM @ 46 TO 60 PSI. SIZING IS BELOW 200FT THEREFORE SIZING IS BASEI ON VELOCITY LIMITS FOR COPPER PIPING, 8 FT/SEC FOR CW AND 5 FT/SEC FOR HW. SYSTEM ASSUMES SEPARATE FIRE SPRINKLER SYSTEM. COORDINATE WITH ALL TRADES.
5. NOTE: GROUP ALL VENTS WHERE PRACTICAL TO MINIMIZE PENETRATIONS THROUGH ROOF.PLUMBING CONTRACTOR SHALL OBTAIN APPROVAL FROM ARCHITECT FOR ALL VENT TERMINATION
6. PROVIDE TRAP PRIMERS AT ALL FLOOR DRAINS & FLOOR SINKS.
7. COORD FOUNDATION PENETRATIONS.



2 DOMESTIC WATER PLAN

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



1 WASTE & VENT PLAN

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

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PLUMBING PLAN

DATE: 01/21/25
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FILE NAME:
SHEET:
P2.1
SHEET OF SHEETS

LIGHTING NOTES

1. REFER TO ARCHITECTURAL DRAWINGS FOR THE EXACT LOCATION, QUANTITIES, TYPES, AND MOUNTING HEIGHTS OF LIGHT FIXTURES, EXIT SIGNS, SWITCHES, DIMMERS, ETC.
2. PRIOR TO ORDERING LIGHTING FIXTURES, COORDINATE WITH ARCHITECTURAL AND ENGINEERING INFORMATION, OBTAIN CLARIFICATION OF ANY QUESTIONS PRIOR TO PROCEEDING.
3. ELECTRICAL CONTRACTOR SHALL PROVIDE AND INSTALL ALL NEW LIGHT FIXTURES AS INDICATED AND INSTALL NEW SWITCHES, DIMMERS, ETC. FOR CONTROL OF LIGHT FIXTURES AS SHOWN ON ARCHITECTURAL DRAWINGS. VERIFY AND COORDINATE SWITCHING CONTROL WITH ARCHITECT/CLIENT REPRESENTATIVES.
4. LIGHTING FIXTURES SHALL BE CIRCUITED IN ACCORDANCE WITH CIRCUIT NUMBER INDICATED ADJACENT TO EACH LIGHTING FIXTURE. CIRCUITRY MAY BE SHOWN IN CERTAIN INSTANCES AND ONLY UNDER SPECIAL CIRCUMSTANCES. PROVIDE ALL CONDUITS, WIRES AND BOXES AS WELL AS CEILING OUTLETS AND FIXTURES WHIPS REQUIRED FOR CIRCUITRY INCLUDING WIRING FOR SWITCHING OF THE FIXTURES.
5. ALL LIGHTING BRANCH CIRCUITS SERVING DIMMABLE FIXTURES SHALL HAVE SEPARATE NEUTRAL CONDUCTORS.
6. CONTRACTOR TO MAINTAIN THE CONTINUITY OF EXISTING SERVICES AND SYSTEMS IN THE CORE AREAS OF THE FLOOR THAT ARE TO REMAIN. COORDINATE EXISTING WIRE AND CIRCUITING WITH NEW PANELS AND SCHEDULES.
7. ALL JUNCTION OR OUTLET BOXES SHALL BE ACCESSIBLE. WHERE UNOBSTRUCTED ACCESS TO A BOX OR OUTLET IS NOT POSSIBLE, PROVIDE ACCESS PANEL. COORDINATE WITH THE ARCHITECT AND OBTAIN APPROVAL FROM ARCHITECT PRIOR TO INSTALLATION OF JUNCTION OR OUTLET BOXES.
8. WHERE MULTIPLE SWITCHES ARE GROUPED TOGETHER AT ONE LOCATION, THEY SHALL BE MOUNTED IN A SINGLE OUTLET BOX WITH A COMMON FACEPLATE. BUTTED OUTLET BOXES AND SWITCHPLATES ARE NOT PERMITTED. PROVIDE DIVIDER FOR SEPARATION OF SERVICE.
9. SUPPORT CEILING MOUNTED FIXTURES DIRECTLY FROM THE BUILDING STRUCTURE. DO NOT SUPPORT FIXTURES FROM PIPING, EQUIPMENT, OR SOLELY FROM THE SUSPENDED CEILING

POWER NOTES

1. REFER TO ARCHITECTURAL DRAWINGS FOR THE EXACT LOCATIONS AND MOUNTING HEIGHTS OF ALL DEVICES (i.e. RECEPTACLES, DATA/TELEPHONE OUTLETS, SECURITY DEVICES, PANELS, SPEAKER/STROBE, ETC.
2. ELECTRICAL CONTRACTOR SHALL MAINTAIN THE CONTINUITY OF CIRCUITING IN AREAS WHICH ARE CONNECTED TO EXISTING ELECTRICAL DEVICES AND ELECTRICAL SERVICES STILL IN USE.
3. PROVIDE TIE BARS ON ALL SINGLE POLE CIRCUIT BREAKERS SERVING MULTI-WIRE BRANCH CIRCUITS IN COMPLIANCE WITH CEC ARTICLE 210.4(B). EXISTING CIRCUIT BREAKERS REQUIRING TIE HANDLES SHALL BE REPLACED WITH NEW TRIP FREE HANDLE BREAKERS. NEW BREAKERS SHALL MATCH BASE BUILDING STANDARDS, SHALL BE FROM SAME MANUFACTURER OF EXISTING BREAKERS THAT ARE TO REMAIN IN PANEL, AND SHALL BE COMPATIBLE WITH PANELBOARD. CONTRACTOR SHALL COORDINATE REQUIREMENTS IN FIELD WITH EXISTING EQUIPMENT.
4. THIS CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING EXACT RATING AND NEMA CONFIGURATION OF ALL SPECIAL RECEPTACLES.
5. REFER TO TELECOMMUNICATIONS AND AUDIO VISUAL DRAWINGS FOR ALL CONDUIT REQUIREMENTS.
6. ALL TELEPHONE/DATA CONDUIT STUB-UPS, WHERE GYPBOARD CEILINGS OCCUR, SHALL RUN INTO ACCESSIBLE CEILING AREAS.
7. CONTRACTOR SHALL PROVIDE AN EMPTY CONDUIT SYSTEM AND OUTLET BOXES FOR INSTALLATION OF SECURITY SYSTEM. AS APPLICABLE ALL SECURITY DEVICES AND EQUIPMENT AND WIRING ARE BY OTHERS. PROVIDE JUNCTION BOX AND 1"EMPTY CONDUIT WITH DRAG WIRE STUB-UP TO ACCESSIBLE HUNG CEILING. COORDINATE WITH OWNER'S VENDOR FOR WIRING REQUIREMENTS, UNLESS OTHERWISE NOTED ON RESPECTIVE DESIGN DRAWINGS.
8. A/V RECEPTACLES, AS INDICATED, SHALL BE CONNECTED ON THE SAME PHASE. ALL A/V RECEPTACLES SHALL BE IDENTIFIED ON AND COORDINATED WITH CONSULTANT'S DRAWINGS COORDINATE QUANTITY AND LOCATIONS WITH A/V CONSULTANT'S DRAWINGS.
9. ANY DISCREPANCIES SHALL BE DIRECTED TO ARCHITECT PRIOR TO BIDDING. WHERE DISCREPANCIES CANNOT BE RESOLVED PRIOR TO SUBMITTING BIDS, CONTRACTOR SHALL PROCEED BASED ON MORE COSTLY OR RESTRICTIVE INTERPRETATIONS.
10. MECHANICAL EQUIPMENT IS LOCATED ABOVE THE HUNG CEILING UNLESS OTHERWISE NOTED. EXACT LOCATION SHALL BE DETERMINED FROM MECHANICAL DRAWINGS.
11. ALL MECHANICAL EQUIPMENT SHALL BE FURNISHED AND INSTALLED BY THE HVAC CONTRACTOR, WIRED BY THE ELECTRICAL CONTRACTOR. ELECTRICAL CONTRACTOR SHALL WIRE MECHANICAL EQUIPMENT AS PER AN APPROVED MANUFACTURER'S WIRING DIAGRAM. ALL CONTROL WIRING BY THE HVAC CONTRACTOR.
12. CONTRACTOR SHALL PROVIDE DISCONNECT SWITCHES FOR ALL MECHANICAL EQUIPMENT THAT IS NOT FACTORY SUPPLIED UNLESS OTHERWISE NOTED ON MECHANICAL DRAWINGS. CONTRACTOR SHALL COORDINATE SIZE WITH MECHANICAL EQUIPMENT SPECIFICATIONS AND MECHANICAL CONTRACTOR.

SCOPE OF WORK

NEW 200AMP 120/240V, 1PH ELECTRICAL PANEL FROM EXISTING MAINS FOR YOLO COUNTY VETERINARY CLINIC.

CODE DISCLAIMER

THE CONSTRUCTION OF THIS PROJECT SHALL CONFORM TO THE REQUIREMENTS OF BELOW CODES.

- 2022 BUILDING STANDARD ADMINISTRATIVE CODE
- 2022 CALIFORNIA BUILDING CODE (2021 IBC)
- 2022 CALIFORNIA ELECTRICAL CODE (2020 NEC)
- 2022 CALIFORNIA MECHANICAL CODE (2021 UMC)
- 2022 CALIFORNIA PLUMBING CODE (2021 UPC)
- 2022 CALIFORNIA FIRE CODE (2021 IFC)
- 2022 ENERGY EFFICIENCY STANDARD (TITLE 24)
- 2022 GREEN BUILDING CODE (TITLE 24)

VOLTAGE DROP

THIS PROJECT IS COMPLIANCE WITH CEC 210.19(A). FEEDER CONDUCTORS ARE SIZED FOR A MAXIMUM VOLTAGE DROP OF 2 PERCENTAGE AT DESIGN LOAD. BRACH CIRCUIT CONDUCTORS ARE SIZED FOR MAXIMUM VOLTAGE DROP OF 3 PERCENTAGE AT DESIGN LOAD. THE MAXIMUM TOTAL VOLTAGE DROP ON BOTH FEEDERS AND BRANCH CIRCUITS TO THE FARTHEST OUTLET SHALL NOT EXCEED 5 PERCENT.

SHEET INDEX

GENERAL NOTES

1. ALL WORK SHALL COMPLY WITH THE 2022 CALIFORNIA ELECTRICAL CODE, 2022 CALIFORNIA ENERGY CODE AND ALL OTHER GOVERNING CODES AND ORDINANCES.
2. ALL MATERIALS SHALL BE NEW AND BEAR THE UNDERWRITERS LABEL (OR EQUIVALENT TESTING AGENCY).
3. ELECTRICAL DRAWINGS ARE DIAGRAMMATIC. SIZES AND LOCATION OF EQUIPMENT AND WIRING ARE SHOWN TO SCALE WHERE POSSIBLE, BUT MAY BE DISTORTED FOR CLARITY ON THE DRAWINGS. FINAL LOCATION OF OUTLETS AND EQUIPMENT SHALL BE AS APPROVED BY THE ARCHITECT. IT IS NOT WITHIN THE SCOPE OF THE DRAWINGS TO SHOW ALL NECESSARY BENDS, OFFSET, PULL BOXES AND OBSTRUCTIONS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO INSTALL HIS WORK TO CONFORM TO THE STRUCTURE, PRESERVE HEADROOM AND KEEP OPENINGS AND PASSAGEWAYS CLEAN.
4. REFER TO SPECIFICATIONS COVERING HVAC, PLUMBING AND FIRE PROTECTION WORK FOR POSSIBLE ADDITIONAL WORK TO BE PERFORMED UNDER THE ELECTRICAL CONTRACT.
5. THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR REVIEWING THE FULL SET OF BID DOCUMENTS TO BE AWARE OF THE TOTAL SCOPE PRIOR TO SUBMITTING BID.
6. THE ELECTRICAL CONTRACTOR SHALL COORDINATE WORK WITH HVAC, PLUMBING AND OTHER TRADES FOR EXACT LOCATION OF ALL CONTROL DEVICES. LOCATION AS SHOWN ON THE ELECTRICAL PLANS ARE APPROXIMATE. ALL FINAL CONNECTIONS TO MOTOR TERMINALS SHALL BE DONE WITH A MINIMUM 18" OF LIQUID TIGHT FLEXIBLE CONDUIT USING THE APPROPRIATE FITTINGS.
7. ALL NOTATIONS OF "SCALE: ARE INTENDED AS APPROXIMATIONS. THE CONTRACTOR SHALL BE RESPONSIBLE TO ASCERTAIN THE EXACT LOCATIONS OF ALL EQUIPMENT AND VERIFYING REQUIRED CLEARANCES.
8. THE CONTRACTOR SHALL FURNISH AND INSTALL ALL LABOR AND MATERIALS REQUIRED TO PRODUCE COMPLETE AND WORKING SYSTEMS. EC SHALL FURNISH AND INSTALL COMPLETE WIRING FOR LIGHTING, POWER, HVAC EQUIPMENT, ETC.
9. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL FIELD MEASUREMENTS AND VERIFICATION OF FIELD CONDITIONS PRIOR TO PERFORMING HIS WORK. ANY CHANGES IN WORK NECESSITATED BY FAILURE OF THIS CONTRACTOR TO COMPLY WITH THIS CONDITION SHALL BE UNDERTAKEN BY THIS CONTRACTOR AT HIS OWN EXPENSE.
10. ALL AREAS ABOVE PANELBOARDS SHALL BE FREE FROM WORK OF OTHER TRADES.
11. NUMERAL INDICATED ADJACENT TO LIGHT FIXTURES, RECEPTACLES, DEVICES AND EQUIPMENT INDICATES CIRCUIT NUMBER IN PANEL. PROVIDE WIRE AND CONDUIT TO INTERCONNECT THE AFOREMENTIONED, ASSOCIATED SWITCHES, AND CONTROL DEVICES WITH SAME CIRCUIT NUMBERS. ROUTE TO PANEL VIA CONDUIT HOMERUNS SHOWN.
12. PROVIDE TIE BARS ON ALL SINGLE POLE CIRCUIT BREAKERS SERVING MULTI-WIRE BRANCH CIRCUITS IN COMPLIANCE WITH NEC/CEC ARTICLE 210.4 (B). EXISTING CIRCUIT BREAKERS REQUIRING TIE HANDLES SHALL BE REPLACED WITH NEW TRIP FREE HANDLE BREAKERS. NEW BREAKERS SHALL MATCH BASE BUILDING STANDARDS, SHALL BE FROM SAME MANUFACTURER OF EXISTING BREAKERS THAT ARE TO REMAIN IN PANEL, AND SHALL BE COMPATIBLE WITH PANELBOARD. CONTRACTOR SHALL COORDINATE REQUIREMENTS IN FIELD WITH EXISTING EQUIPMENT.
13. THE CONTRACTOR SHALL DO NECESSARY CUTTING, CORCING AND PATCHING FOR WORK UNDER THIS CONTRACT. ALL CORCING, ETC. SHALL BE PERFORMED AFTER HOURS AND COORDINATED WITH BUILDING MANAGEMENT.
14. THE ARCHITECT SHALL VERIFY MOUNTING HEIGHTS OF ALL DEVICES. FINISHES OF ALL RECEPTACLES, SWITCHES, TELEPHONE OUTLETS, ETC. TO BE SELECTED BY ARCHITECT. REFER TO ARCHITECTURAL DRAWINGS FOR LOCATIONS OF ALL RECEPTACLES, TELEPHONE OUTLETS, FLOOR BOXES, ETC. CONSTRUCTION DOCUMENTS SHALL NOT BE SCALED.
15. VERTICALLY ALIGN ALL LIGHT SWITCHES, STROBE DEVICES AND THERMOSTATS IN ALL AREAS.
16. ALL DEVICES GANGED TOGETHER SHALL BE MOUNTED UNDER A SINGLE COVER PLATE.
17. PROVIDE UNFUSED DISCONNECT SWITCHES FOR ALL MECHANICAL EQUIPMENT UNLESS OTHERWISE NOTED ON CONSTRUCTION DOCUMENTS OF HVAC SCHEDULES.
18. THE MINIMUM RATING OF DISCONNECT SWITCHES SHALL BE EQUAL TO OR GREATER THAN THE RATING OF THE PROTECTIVE DEVICE ON THE SUPPLY SIDE OF THE DISCONNECT SWITCH. MINIMUM DISCONNECT SWITCH SIZE IS 30 AMPERES.
19. FURNISH AND INSTALL WIRING FOR EQUIPMENT FURNISHED BY OTHERS AS SHOWN ON ARCHITECTURAL, MECHANICAL, PLUMBING, AND/OR ELECTRICAL DRAWINGS. COORDINATE WITH OTHER TRADES FOR DETAILS OF INSTALLATION AND WIRING REQUIREMENTS.
20. PROVIDE FIRESTOPPING ON ALL NEW PENETRATIONS THROUGH THE WALL AND FLOOR DUE TO DEMOLITION OR NEW CONSTRUCTION. THE FIRE RATING OF THE PENETRATION SEALING METHOD SHALL MATCH THE RATING OF THE WALL OR FLOOR. USE A UL LISTED SEALING METHOD WHICH IS ACCEPTABLE TO BUILDING MANAGEMENT.
21. HANGING OF ALL TRANSFORMERS SHALL INCLUDE SEISMIC BRACING.
22. FLOOR STANDING ELECTRICAL EQUIPMENT SHALL BE MOUNTED ON 4" HOUSEKEEPING PAD.
23. BRANCH CIRCUIT HOMERUN CONDUCTORS SHALL BE INCREASED ONE SIZE TO COMPENSATE FOR VOLTAGE DROP WHEN 120V CIRCUITING EXCEEDS 100 FEET.
24. UPON COMPLETION OF ALL ELECTRICAL WORK, THE ELECTRICAL CONTRACTOR SHALL ADJUST AND TEST ALL CIRCUITS, RECEPTACLES, SWITCHES, LIGHTS, MOTORS AND ANY OTHER ELECTRICAL ITEMS INSTALLED. ANY DEFECTIVE ITEMS SHALL BE IMMEDIATELY REPAIRED OR REPLACED WITH NEW AND THAT PORTION OF THE SYSTEM RETESTED. ALL SUCH REMEDIAL WORK SHALL BE PERFORMED AT NO ADDITIONAL COST TO THE OWNER
25. COORDINATE WITH BUILDING MANAGER FOR ANY SERVICE INTERRUPTION OF EXISTING LIGHTING AND POWER PANELS AND GIVE NOTICE FIVE DAYS PRIOR TO ANY WORK.
26. 110.26(F)(1)(A) DEDICATED ELECTRICAL SPACE: THE SPACE EQUAL TO THE WIDTH AND DEPTH OF THE EQUIPMENT AND EXTENDING FROM THE FLOOR TO A HEIGHT OF 6 FEET ABOVE THE EQUIPMENT OR TO THE STRUCTURAL CEILING SHALL BE DEDICATED TO ELECTRICAL INSTALLATIONS. NO PIPING, DUCTS, LEAK PROTECTION APPARATUS OR OTHER FOREIGH EQUIPMENT SHALL BE LOCATED IN THE SPACE. PER SECTION 110.26(F)(1)(A)
27. ALL ELECTRICAL EQUIPMENT SHALL BE LISTED BY UL OR A COUNTY APPROVED THIRD PARTY TESTING FACILITY
28. THE CONTRACTOR SHALL PROVIDE PULL CORDS IN ALL EMPTY CONDUITS. WHERE MORE THAN ONE CONDUIT TERMINATES IN A JUNCTION BOX, THE ELECTRICAL CONTRACTOR SHALL IDENTIFY EACH JUNCTION BOX AND CONDUIT IN A MANNER ALLOWING IDENTIFICATION OF JUNCTION BOXES AND CONDUITS AFTER ALL WALL FINISHES HAVE BEEN APPLIED.
29. ALL SWITCHBOARDS AND PANELBOARDS SHALL BE MARKED WITH IDENTIFYING NAMEPLATES TO INDICATE THE DESIGNATIONS USED ON THESE DRAWINGS. PROVIDE NEW PANELBOARD SCHEDULES, CORRECTLY FILLED OUT FOR EVERY PANEL.
30. PROVIDE TYPEWRITTEN PANEL SCHEDULES TO BE MOUNTED ON INSIDE OF ALL PANEL COVER DOORS, REFLECTING THE AS-BUILT CIRCUITS FOR THE ENTIRE PROJECT.
31. SUBMIT SHOP DRAWINGS AND PRODUCT DATA ACCORDING TO SPECIFICATIONS. CONTRACTOR SHALL PROVIDE COMPLETE AS-BUILT DRAWINGS IN AUTOCAD PRIOR TO COMPLETION OF PROJECT FOR REVIEW BY ARCHITECT/ENGINEER.
32. EQUIPMENT GROUNDING CONDUCTORS SHALL BE INSTALLED IN ALL CONDUITS, RACEWAYS, UNDERGROUND PULL BOXES, JUNCTION CANS, LIGHT BASES AND TRANSFORMER HOUSINGS. SIZE OF CONDUCTOR SHALL BE IN ACCORDANCE WITH CEC ARTICLE 250.
33. THE MINIMUM SIZE OF CONDUITS SHALL BE 3/4". THE MINIMUM SIZE OF CONDUCTORS SHALL BE #12 AWG, UNLESS OTHERWISE NOTED.

LEGEND

WIRING AND WIRING DEVICES

WIRING

BRANCH CIRCUIT HOMERUN TO PANEL. NUMBER OF ARROWHEADS INDICATE NUMBER OF CIRCUITS. THREE CIRCUITS OF ALTERNATING PHASES MAY BE COMBINED IN ONE CONDUIT, HOWEVER THEY SHALL EITHER BE EQUIPPED w/ DEDICATED NEUTRALS, COMMON TRIP CIRCUIT BREAKERS, OR HANDLE-TIES ON THEIR BREAKERS.

MOTOR PROVIDED AND INSTALLED BY MECH. CONTRACTOR, WIRED BY ELEC. CONTRACTOR, NUMERALS INDICATE HORSEPOWER.

JUNCTION BOX, CEILING AND WALL MOUNTED.
- 'P' INDICATES SYSTEMS FURNITURE POWER WHIP, SEE DETAILS.
- 'C' INDICATES SYSTEMS FURNITURE COMMUNICATIONS WHIP, SEE DETAILS.

SINGLE SERVICE FLOORBOX / POKE-THROUGH, JUNCTION BOX.
- ON-GRADE: HUBBELL B2536 SERIES BOX OR APPROVED EQUAL, UON.
- ABOVE GRADE: HUBBELL S1PT4X4-J BOX SERIES OR APPROVED EQUAL, UON.
- 'P' INDICATES SYSTEMS FURNITURE POWER WHIP, SEE DETAILS.
- 'C' INDICATES SYSTEMS FURNITURE COMMUNICATIONS WHIP, SEE DETAILS.

RECEPTACLES

ALL RECEPTACLES SHALL BE A MINIMUM RATING OF 120 VOLT, 20 AMP, UON. VERTICAL MOUNTED BOX HEIGHTS SHALL BE TO CENTER, HORIZONTAL MOUNTED BOX HEIGHTS SHALL BE TO TOP, UON.
- 'GFI' INDICATES GROUND FAULT CIRCUIT INTERRUPTER.
- 'WP' INDICATES WEATHERPROOF IN USE, WEATHER-RESISTANT RECEPTACLE w/ IN-USE EXTRA DUTY COVER. RECEPTACLES LOCATED IN WET OR DAMP LOCATIONS SHALL BE WP, WHETHER INDICATED OR NOT.
- 'EWC' INDICATES ELECTRIC WATER COOLER.
- 'EX' INDICATES EXISTING TO BE REUSED.
- 'HD' INDICATES HAND DRYER CONNECTION.
- 'TR' INDICATES TAMPER RESISTANT (INTEGRAL TO RECEPTACLE). ALL DWELLING UNIT DUPLEX RECEPTACLES SHALL BE LISTED TAMPER RESISTANT TYPE. ALL NON-LOCKING, 120V, 15A AND 20A RECEPTACLES SHALL BE TAMPER-RESISTANT, EXCEPT IN MECHANICAL ROOMS, ELECTRICAL ROOMS, AND JANITORS CLOSETS, WHETHER INDICATED OR NOT.
- 'CH' INDICATES HALF CONTROLLED.
- 'CF' INDICATES FULL CONTROLLED (BOTH PLUGS OF DUPLEX).
- 'SB' INDICATES RECEPTACLE FOR SMARTBOARD, SEE DETAIL.
- 'USB' INDICATES POWER/USB CHARGING.

SHADING:
- CENTER SHADING INDICATES DEVICE MOUNTED ABOVE COUNTER TOP 3'-8" AFF, UON.
- 1/2 SHADING INDICATES DEVICE TO BE SWITCHED.

SIMPLEX RECEPTACLE, CEILING, FLOOR AND WALL MOUNTED.

DUPLEX RECEPTACLE, CEILING, FLOOR AND WALL MOUNTED. FLOOR IS SINGLE SERVICE FLOORBOX / POKE-THROUGH, ONE DUPLEX RECEPTACLE.
- ON-GRADE: HUBBELL B2536 SERIES BOX OR APPROVED EQUAL, UON.
- ABOVE GRADE: HUBBELL S1PT4X4-J SERIES BOX OR APPROVED EQUAL, UON.

DOUBLE DUPLEX RECEPTACLE, CEILING, FLOOR AND WALL MOUNTED.

220V RECEPTACLE, CEILING, FLOOR AND WALL MOUNTED.
- 'DRYER' INDICATES NEMA 14-30R.

SPECIAL RECEPTACLE (AS INDICATED), CEILING, FLOOR AND WALL MOUNTED.

COMMUNICATIONS

OUTLETS SHALL BE MOUNTED AT SAME HEIGHT AS ADJACENT RECEPTACLE, w/ CONDUIT STUBBED OUT ABOVE ACCESSIBLE CEILING.
- 'W' INDICATES 48" AFF MOUNTING.
- 'INT' INDICATES INTERCOM OUTLET.

TELEPHONE OUTLET w/ 3/4"C, CEILING, FLOOR AND WALL MOUNTED.

DATA OUTLET w/ 1"C, CEILING, FLOOR AND WALL MOUNTED.

COMBINATION TEL / DATA OUTLET w/ 1"C, CEILING, FLOOR AND WALL MOUNTED.

TV — WALL MOUNTED TV OUTLET w/ 1"C, UON, SEE ARCH PLANS FOR MOUNTING HEIGHT.

RECEPTACLE (SIMPLEX, DUPLEX, DOUBLE DUPLEX, 220V OR SPECIAL), COMBINATION TEL/DATA OUTLET w/ 1"C, AND INTERCOM OUTLET IN FLOOR / WALL BOX, WIREMOLD FB-SERIES OR APPROVED EQUAL, UON.

SWITCHING

20A, 120/277 VOLT, +48" AFF TO TOP, UON.
- '2' INDICATES 2-POLE.
- '3' INDICATES 3-WAY.
- '4' INDICATES 4-WAY.
- 'D' INDICATES 0-10V DIMMER SWITCH. COORDINATE EXACT TYPE AND RATING w/ LIGHTING CONTROLLED.
- 'T' INDICATES 0-60 MINUTE TIMER SWITCH.
- 'K' INDICATES KEY OPERATED SWITCH.
- 'LV' INDICATES LOW VOLTAGE SWITCH.
- 'LV2' INDICATES 2-RELAY LOW VOLTAGE SWITCH.
- '[#]' INDICATES LIGHTING CONTROL ZONE. SEE LIGHTING CONTROL SCHEDULE FOR DETAILS.

$ — SINGLE POLE SWITCH.

$VS — WALL MOUNTED, VACANCY SENSOR SWITCH, MANUAL-ON / AUTO-OFF, DUAL-TECHNOLOGY, PROVIDE COMPLETE ROOM COVERAGE.

$OS — WALL MOUNTED, OCCUPANCY SENSOR SWITCH, AUTO-ON / AUTO-OFF, DUAL-TECHNOLOGY, PROVIDE COMPLETE ROOM COVERAGE.

$M — MOTOR RATED DISCONNECT SWITCH

OS — CEILING MOUNTED, OCCUPANCY SENSOR SWITCH, AUTO-ON / AUTO-OFF, DUAL-TECHNOLOGY, PROVIDE COMPLETE ROOM COVERAGE.

TC — TIMECLOCK, REFER TO LIGHTING CONTROL DIAGRAM.

F — LOW VOLTAGE ELECTRIC PULL STATION WITH BATTERY BACKUP 48" AFF, 10'-20' FROM HAZARD, IN THE PATH OF EGRESS.

DISTRIBUTION DEVICES

- DASHED LINES ADJACET TO EQUIPMENT INDICATES CLEARANCES.

30/3/20 — HEAVY DUTY DISCONNECT SWITCH. PROVIDE NEMA 3R ENCLOSURES FOR EXTERIOR DISCONNECTS.
- NUMBERS INDICATE AMP FRAME / # POLES / AMP FUSE.
- 'NF' INDICATES NON-FUSIBLE.

120 / 240V PANELBOARD, SURFACE OR RECESS MOUNTED. SEE SCHEDULE FOR DETAILS.

COMBINATION UTILITY METER AND MAIN CIRCUIT BREAKER.

LIGHTING FIXTURES

SEE FIXTURE SCHEDULE FOR DETAILS.
- 'N/L' INDICATES FIXTURE UNSWITCHED (NIGHT LIGHT).
- LOWER CASE LETTERING DENOTES SWITCH / RELAY CONTROLLING THE FIXTURE.

SHADING:
- 1/2 SHADING INDICATES FIXTURE TO BE PROVIDED w/ 90-MINUTE, MINIMUM BATTERY BACKUP.

CEILING MOUNT RECESSED SINGLE LED LIGHT BULB

STRIP LED LIGHT

WALL SCOUNCE LED

WALL MOUNTED EMERGENCY BUG EYE.

CEILING MOUNTED EMERGENCY EXIT SIGN W/ DIRECTION AND BUG EYE.

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IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-123126 INC:
REVIEWED FOR
SS ☐ FLS ☐ ACS ☑
DATE: 4/3/2025

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REGISTERED PROFESSIONAL ENGINEER
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ELECTRICAL
STATE OF CALIFORNIA
EXP: 12/31/2025

YOLO COUNTY VETERINARY CLINIC
2640 EAST GIBSON ROAD

GENERAL NOTES & LEGENDS

BB24-089
Reviewed for
Code Compliance
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ABBREVIATIONS

ABBREVIATION	DESCRIPTION
&	AND
1/C	SINGLE CONDUCTOR
@	AT
A OR AMP	AMPERES
A.C.	ASPHALT CONCRETE
ABV	ABOVE
AF	AMPERE FUSE RATING
AFC	AVAILABLE FAULT CURRENT
AFF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
AIC	AMPERE INTERRUPTING CAPACITY
AL	ALUMINUM
APPROX.	APPROXIMATE
ARCH.	ARCHITECT; ARCHITECTURAL
AS	AMPERE SWITCH RATING
ASCC	AVAILABLE SHORT CIRCUIT CURRENT
ATC	AIR TERMINAL CHAMBER
ATO	AUTOMATIC THROW-OVER (SWITCH)
ATS	AUTOMATIC TRANSFER SWITCH
AUTO	AUTOMATIC
AUX	AUXILIARY
AWG	AMERICAN WIRE GAUGE
B.S.	BARE STRANDED
BAT	BATTERY
BEL	BELOW
BKBD	BACKBOARD
BKR	BREAKER
BLDG	BUILDING
C	CONDUIT
C.O.	CONDUIT ONLY WITH PULL WIRE
CB	CIRCUIT BREAKER
CEC	CALIFORNIA ELECTRICAL CODE
CKT	CIRCUIT
CL	CENTER LINE
CLG	CEILING
CMU	CONCRETE MASONRY UNIT
COL	COLUMN
CP	COMMUNICATION PROCESSOR
CPT	CONTROL POWER TRANSFORMER
CR	CONTROL RELAY
CSFD	COMBINATION SMOKE FIRE DAMPER
CT	CURRENT TRANSFORMER
CU	COPPER
CW	COLD WATER
DIAG	DIAGRAM
DIS	DISCONNECT
DIST.	DISTANCE
DL	DAMP LOCATION LISTING
DM	DIGITAL METER
DMM	DIGITAL METER MODULE
DP	DISTRIBUTION PANEL
DWG	DRAWING
DWP	DEPARTMENT OF WATER & POWER
EA	EACH
EC	ELECTRICAL CONTRACTOR
ELEC.	ELECTRICAL
EM	EMERGENCY
EMH	ELECTRICAL MANHOLE
EMT	ELECTRICAL METALLIC TUBING
EPO	EMERGENCY POWER OFF
EPR	ETHYLENE PROPYLENE RUBBER
EQUIP	EQUIPMENT
ERR	EXISTING TO BE RELOCATED AND RECONNECTED
ETL	ELECTRICAL TESTING LABORATORIES
EXIST/(E)	EXISTING
EXP	EXPLOSION PROOF
FA	FIRE ALARM
FACP	FIRE ALARM CONTROL PANEL
FATC	FIRE ALARM TERMINAL CABINET
FFE	FINISHED FLOOR ELEVATION
FIN.	FINISH
FIP.	FIELD INTERFACE PANEL
FIXT	FIXTURE
FLA	FULL LOAD AMPS
FLR	FLOOR
FLUOR	FLUORESCENT
FMC	FLEXIBLE METAL CONDUIT
FO	FIBER OBTIC
FT	FEET
FTG	FOOTING
GEN	GENERATOR
GFI	GROUND FAULT INTERRUPTER
GFR	GROUND FAULT RELAY
GG	GREEN GROUND
GND	GROUND
HOA	HAND-OFF-AUTOMATIC
HP	HORSEPOWER
HT	HEIGHT
HTR	HEATER
HV	HIGH VOLTAGE
HZ	HERTZ
IC	INSULATION CONTACT
ICON	INTEGRATED COMMUNICATIONS OPTICAL NETWORK
IE	INVERT ELEVATION
IED	INTELLEGENT ELECTRONIC DEVICE
IMC	INTERMEDIATE METAL CONDUIT
INCAND	INCANDESCENT
ISC	SHORT CIRCUIT CURRENT
J, JB, J-BOX	JUNCTION BOX
KCMIL	THOUSAND CIRCULAR MILS
KV	KILOVOLT
KVA	KILOVOLT-AMPERES
KW	KILOWATT
LF	LINEAR FEET
LFMC	LIQUIDTIGHT FLEXIBLE METAL CONDUIT
LGST	LARGEST
LIS	LOAD INTERRUPTER SWITCH
LOC.	LOCATION
LOTO	LOCK-OUT & TAG-OUT
LSI	LONG TERM, SHORT TERM, INSTANTANEOUS
LSIG	LONG TERM, SHORT TERM, INSTANTANEOUS GROUNDING
LTG	LIGHTING
LV	LOW VOLTAGE
M	METER
MAX	MAXIMUM
MCA	MINIMUM CIRCUIT AMPS
MCC	MOTOR CONTROL CENTER
MCP	MOTOR CIRCUIT PROTECTOR
MFGR. MFR	MANUFACTURER
MH	MANHOLE
MI.	MECHANICAL INTERLOCK
MIN	MINIMUM
MOCP	MAXIMUM OVERCURRENT PROTECTION
MRCT	MULTI-RATIO CURRENT TRANSFORMER
MTD	MOUNTED
MTG	MOUNTING
MTR	MOTOR
MTTB	MAIN TELEPHONE TERMINAL BOARD
MV	MEDIUM VOLTAGE
N	NORTH
NAC	NOTIFICATION APPLIANCE CIRCUIT
NC	NORMALLY CLOSED
NEC	NATIONAL ELECTRICAL CODE
NF	NON-FUSED
NIC	NOT IN CONTRACT
NL	NIGHT LIGHT- 24HRS ON
NO.	NUMBER
OC	ON CENTER
OCPD	OVERCURRENT PROTECTIVE DEVICE
OD	OUTSIDE DIAMETER
OE	OVERHEAD ELECTRICAL
OFC	OIL FUSED CUTOUT
OH	OVER HEAD
OL	OIL LEVER SWITCH
P	POLE
PAC	PROGRAMMABLE AUTOMATION CONTROLLER
PB	PULL BOX
PC	PHOTOCELL
PCB	POLYCHLORINATED BIPHENYL
PDS	PRESSURE DIFFERENTIAL SWITCH
PF	POWER FACTOR
PH OR Ø	PHASE
PILC	PAPER INSULATED, LEAD COVER
PIV	POST INDICATING VALVE
PL	PLATE
PLC	PROGRAMMABLE LOGIC CONTROLLER
PNL	PANEL
POC	POINT OF CONNECTION
PREF.	PREFERRED
PRI	PRIMARY
PVC	POLY-VINYL CHLORIDE
PWR	POWER
REC/RECEPT	RECEPTACLE
REQD	REQUIRED
RGS	RIGID GALVANIZED STEEL
RM	ROOM
RMC	RIGID METAL CONDUIT
RPBP	REDUCED PRESSURE BACK FLOW PREVENTER
RTAC	REAL TIME AUTOMATION CONTROLLER
SCCR	SHORT CIRCUIT CURRENT RATING
SCE	SOUTHERN CALIFORNIA EDISON
SF	SQUARE FEET
SHT	SHEET
SIG.	SIGNAL
SP	SPARE
SPECS	SPECIFICATIONS
ST	STREET
STD	STANDARD
STP	SHIELDED TWISTED PAIR
SW	SWITCH
SWBD	SWITCHBOARD
SWGR	SWITCHGEAR
SWST	SWITCHING STATION
T.O.D.	TOP OF DUCTBANK
T.O.M.	TOP OF MANHOLE
TB	TERMINAL BLOCK
TEL./TELE	TELEPHONE
TMH	TELEPHONE MANHOLE
TPS	TWISTED SHIELDED PAIR
TRANSF, XFMR	TRANSFORMER
TS	TAMPER SWITCH
TYP	TYPICAL
UG	UNDERGROUND
UON	UNLESS OTHERWISE NOTED
V	VOLTS
VA	VOLT-AMPERES
VB	VIBRATION SWITCH
VFD	VARIABLE FREQUENCY DRIVE
W	WATTS
W/	WITH
W/O	WITHOUT
WP	WEATHERPROOF
Z	IMPEDANCE

NOT ALL ABBREVIATIONS ARE USED IN EVERY DESIGN

DIVISION 26 - ELECTRICAL SPECIFICATIONS

GENERAL ELECTRICAL REQUIREMENTS

A. "FURNISH AND INSTALL' AND 'PROVIDE' ARE EQUIVALENT TERMS WHICH INDICATE MATERIAL AND/OR EQUIPMENT SUPPLIED AND INSTALLED BY THIS CONTRACTOR. FURNISHED' DENOTES MATERIAL OR EQUIPMENT SUPPLIED BUT NOT INSTALLED BY THIS CONTRACTOR. 'INSTALLED' DENOTES THE SETTING IN POSITION OR CONNECTION OF MATERIAL OR EQUIPMENT BY THIS CONTRACTOR BUT SUPPLIED BY OTHERS.

B. IT IS THE REQUIREMENT OF THESE CONTRACT DOCUMENTS TO HAVE THE CONTRACTOR PROVIDE SYSTEMS AND COMPONENTS THAT ARE FULLY COMPLETE AND OPERATIONAL AND FULLY SUITABLE FOR THE INTENDED USE.

C. DRAWINGS ARE DIAGRAMMATIC AND SHOULD NOT BE SCALED TO DETERMINE EXACT LOCATIONS. VERIFY ALL LOCATIONS A REQUIREMENTS OF EQUIPMENT FURNISHED AND/OR INSTALLED BY OTHERS BEFORE ROUGHING IN.

D. ELECTRICAL SYSTEMS SHALL BE INSTALLED AS A COMPLETE INSTALLATION. INCIDENTAL DETAILS NOT USUALLY SHOWN OR SPECIFIED, BUT NECESSARY FOR PROPER INSTALLATION AND OPERATION SHALL BE INCLUDED IN THE WORK OF THIS CONTRACTOR.

E. PRE-BID SURVEY.
1.THIS CONTRACTOR SHALL SURVEY THE JOBSITE PRIOR TO SUBMITTING THEIR BID TO DETERMINE THE FOLLOWING:
1.1. AREAS REQUIRING DEMOLITION, TEMPORARY POWER, RELOCATING, ETC. WHICH ARE INADVERTENTLY NOT SHOWN ON THE DRAWINGS.
1.2. PROBLEMS WITH WORK SEQUENCE.
2. ANY UNUSUAL CONDITIONS NOT SHOWN ON THE DRAWINGS SHALL BE REPORTED TO THE ENGINEER PRIOR TO BIDDING.

F. ACCEPTABLE MANUFACTURERS: THE LISTING OF A MANUFACTURER AS "ACCEPTABLE" UNDER ANY DIVISION 26 REQUIREMENTS DOES NOT IMPLY AUTOMATIC APPROVAL. IT IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO ENSURE THAT ANY SUBMITTALS MADE ARE FOR PRODUCTS THAT MEET OR EXCEED THE SPECIFICATIONS INCLUDED HERE.

G. UPON COMPLETION OF THE WORK, BUT BEFORE FINAL ACCEPTANCE OF THE SYSTEM AND REQUEST FOR FINAL PAYMENT,FURNISH THE OWNER, FOR APPROVAL, OPERATION AND MAINTENANCE MANUALS IN LOOSE-LEAF BINDERS. PROVIDE A MINIMUM OF 6 SETS. MANUAL SHALL INCLUDE:
1. SUBMITTAL DATA STATING EQUIPMENT RATING AND SELECTED OPTIONS FOR EACH PIECE OF EQUIPMENT REQUIRING MAINTENANCE.
2. OPERATION MANUALS AND MAINTENANCE MANUALS FOR EACH PIECE OF EQUIPMENT REQUIRING MAINTENANCE. REQUIRED ROUTINE MAINTENANCE ACTIONS SHALL BE CLEARLY IDENTIFIED.
3. NAMES AND ADDRESSES OF AT LEAST ONE QUALIFIED SERVICE AGENCY.

H. PROVIDE OWNER WITH A RECORD SET OF AS-BUILT DRAWINGS WITHIN 30 DAYS AFTER THE DATE OF SYSTEM ACCEPTANCE FROM A DESIGNATED MARKED-UP SET OF BLUELINES INCLUDING:
1. A SINGLE-LINE DIAGRAM OF THE BUILDING ELECTRICAL DISTRIBUTION SYSTEM AND
2. FLOOR PLANS INDICATING LOCATION AND AREA SERVED FOR ALL DISTRIBUTION.

I. PROVIDE TEMPORARY ELECTRICAL POWER TO JOBSITE FOR THE DURATION OF THE PROJECT.

J. PROVIDE 4" HIGH CONCRETE HOUSEKEEPING PADS FOR ALL FLOOR MOUNTED ELECTRICAL EQUIPMENT (SWITCHBOARDS, TRANSFORMERS, ETC.).

K. DIVISION 26 SUB-CONTRACTOR REVIEW DIVISION 15 SHOP DRAWINGS AND VERIFY EQUIPMENT VOLTAGE, PHASE AND AMPS PRIOR TO ROUGH-IN OF ALL EQUIPMENT.

L. ALL EQUIPMENT, DEVICES, ETC. FURNISHED BY ELECTRICAL CONTRACTOR SHALL BE U.L. LISTED (OR EQUIVALENT NATIONAL TESTING AGENCY) FOR IT'S INTENDED PURPOSE. INFORM OWNER THAT ALL OWNER FURNISHED EQUIPMENT, DEVICES, ETC. MUST ALSO HAVE A U.L. LISTING (OR EQUIVALENT LISTING).

O. ALL ELECTRICAL COMPONENTS (CONDUIT, WIRE, FITTINGS, SUPPORTS, CIRCUIT BREAKERS,LAMPS, ETC.) PROVIDED AND INSTALLED IN THIS PROJECT SHALL BE BRAND NEW. RE-USE OF EXISTING COMPONENTS WILL NOT BE APPROVED.

P. UTILITY COORDINATION: CONTRACTOR SHALL SUBMIT COMPLETE SET OF CONSTRUCTION DOCUMENTS TO UTILITY COMPANY IMMEDIATELY AFTER RECEIVING NOTICE TO PROCEED OR PRIOR TO ANY SITE OR BUILDING ROUGH- IN. COORDINATE EASEMENT LOCATIONS BETWEEN OWNER AND UTILITY COMPANY. VERIFY WITH UTILITY COMPANY: PROPOSED VOLTAGE, PHASE, POLE/ PAD-MOUNT TRANSFORMER LOCATIONS, METERING, UTILITY PRIMARY ROUTING AND CONDUIT REQUIREMENTS, ETC.

ELECTRICAL IDENTIFICATION

A. PROVIDE CABLE/CONDUCTOR IDENTIFICATION BANDS.

B. PROVIDE ENGRAVED PLASTIC LAMINATE SIGNS, WHITE LETTERING ON A BLACK BACKGROUND, FOR EACH UNIT OF THE FOLLOWING CATEGORIES OF ELECTRICAL WORK: SWITCHBOARDS, MOTOR STARTERS, TRANSFORMERS, PANELBOARDS, DISCONNECTS, AND JUNCTION BOXES. NAME PLATES SHALL IDENTIFY PANEL DESIGNATION (NAME), VOLTAGE, PHASE AND WIRE CONFIGURATION.

C. UNDERGROUND CABLE/CONDUIT IDENTIFICATION PLASTIC LINE MARKERS SHALL BE PROVIDED THE CONTINUOUS TRENCH LENGTH.

ELECTRICAL DEMOLITION AND ALTERATIONS

A. ANY EXISTING CIRCUITS OR EQUIPMENT NOT SHOWN ON DRAWINGS AND WHICH ARE LOGICALLY EXPECTED TO BE CONTINUED IN SERVICE SHALL BE RECONNECTED IN AN APPROVED MANNER.

B. WIRING TO ELECTRICAL EQUIPMENT BEING DISCONNECTED SHALL BE REMOVED BACK TO THEIR OVERCURRENT DEVICE OR BACK TO NEAREST ACTIVE JUNCTION BOX.

C. CONTRACTOR SHALL PROVIDE SUPPORT FOR EXISTING CONDUIT IN REMODELED AREA THAT IS TO REMAIN AND IS NOT PROPERLY SUPPORTED IN ACCORDANCE WITH NEC/CEC REQUIREMENTS.

D. EXCEPT FOR CONDUIT, CONDUCTORS AND MISCELLANEOUS HARDWARE, ALL ELECTRICAL EQUIPMENT SHALL REMAIN THE PROPERTY OF THE OWNER AND SHALL BE STORED OR DISPOSED OF AS DIRECTED BY OWNER.

CONDUIT & RACEWAYS

A. MINIMUM SIZE CONDUIT SHALL BE 1/2". DOES NOT APPLY TO MC CABLE.

B. CONDUIT SHALL BE MC CABLE, ELECTRICAL METALLIC TUBING, OR RIGID GALVANIZED STEEL CONDUIT. SCHEDULE 40 PVC CONDUIT IS ALLOWED FOR CONDUITS UNDER THE SLAB AND UNDERGROUND. MC CABLE MAY NOT BE USED FOR ANY HOMERUN.

C. ALL CONDUIT SHALL BE CONCEALED. CONDUIT SHALL BE EMT IN INTERIOR AREAS, AND RIGID GALVANIZED STEEL CONDUIT IN EXTERIOR AREAS.

D. COORDINATE ROUTING (LOCATION) OF CONDUIT WITH HVAC DUCTWORK, PLUMBING PIPING AND SPRINKLER PIPING.

E. SECURE CONDUIT IN PLACE WITH CORROSION-PROOF ALLOY STRAPS AT SPACING AS REQUIRED BY CEC CONDUIT SHALL BE SECURED TO BUILDING STRUCTURE.

F. INSTALL FLEXIBLE STEEL CONDUIT NOT OVER 3' LONG TO MOTORS, TRANSFORMERS AND EQUIPMENT SUBJECT TO VIBRATION.

G. INSTALL LIQUID-TIGHT FLEXIBLE CONDUIT NOT OVER 3' LONG WHERE SUBJECT TO MOISTURE, DIRT OR FUMES.

H. TYPE MC CABLE SHALL BE OF THE INTERLOCKING JACKET TYPE. CABLE SHALL BE SUPPORTED AT NOT MORE THAN SIX-FOOT INTERVALS, AND ALL FITTINGS SHALL BE IDENTIFIED FOR USE WITH SAID CABLE. MC CABLE SHALL NOT BE USED FOR SERVICE ENTRANCE OR IN EXPOSED AREAS. MC CABLE MAY BE USED ABOVE DROP CEILINGS AND IN INTERIOR PARTITIONS.

I. CONTRACTOR SHALL MINIMIZE FLOOR SLAB PENETRATIONS.

J. ALL CONDUIT RUNS SHALL BE DESIGNED TO PRESENT A NEAT AND ORDERLY APPEARANCE.RUNNING LINES PARALLEL WITH BUILDING STRUCTURE OR WALLS.

K. ROOFTOP UNITS AND EXHAUST FANS ARE TO BE WIRED THROUGH THE ROOF CURBS OR UTILIZE FACTORY-FABRICATED ROOF PIPING CURBS. PITCH POCKETS ARE NOT ALLOWED.

L. ROMEX CABLE IS PERMITTED.

M. CONDUIT SHALL BE ROUTED PERPENDICULAR THROUGH RATED WALLS. PROVIDE PROPER SLEEVES AND FIRE SAFING/SEALANTS.

N. PROVIDE UL APPROVED FIRE SEALS FOR ALL FIRE RATED WALL AND FLOOR PENETRATIONS.

WIRES, CABLES AND CONNECTORS

A. ALL CONDUCTORS SHALL BE COPPER WITH 600V 60°C/75°C WITH THHN/THWN/THWN-2 INSULATION FOR USE WITHIN BUILDING CONFINES. WHERE INSTALLED BEYOND THE BUILDING CONFINES, SUCH AS IN UNDERGROUND FEEDER BANKS OR CIRCUITRY TO SITE LUMINAIRES IT SHALL BE COPPER WITH 600V, 75°, XHHW-2 INSULATION.

B. ALL TERMINALS/LUGS SHALL BE 60 DEGREE/75 DEGREE RATED.

C. USE SOLID CONDUCTOR, SINGLE CONDUCTOR, NO. 12 AWG MINIMUM FOR GENERAL USE WIRING.

D. USE STRANDED CONDUCTOR, SINGLE CONDUCTOR NO. 12 AWG AND LARGER, FOR MOTORS AND OTHER INSTALLATIONS WHERE VIBRATION IS GENERATED.

E. COLOR-CODING SHALL IDENTIFY THE SAME PHASE THROUGHOUT THE SYSTEM. FROM SERVICE SWITCH OR TRANSFORMER THROUGH ALL BRANCH CIRCUITRY. ALL WIRING SHALL BE COLOR-CODED AS FOLLOWS:

208/120 VOLT (240/120 VOLT)
PHASE A-BLACK
PHASE B-RED
PHASE C-BLUE
NEUTRAL-WHITE

F. A STANDARD 500V MEGGER INSULATION TEST SHALL BE MADE AND RECORDED FOR ALL FEEDER CIRCUITS. PROVIDE A COPY OF TEST RESULTS TO ENGINEER FOR REVIEW.

G. NM(ROMEX) CABLE SHALL BE USED FOR RESIDENTIAL BUILDINGS INTERNAL CONCEALED LOCATION ONLY.

H. PROVIDE LUGS FOR FEEDER SIZES INDICATED ON DRAWINGS OR AS REQUIRED.

I. WIRE SIZE FOR 120V BRANCH CIRCUITS SHALL BE PER THE FOLLOWING LENGTH OF RUNS:
1. 0 TO 50 FT: RUN FROM PANELBOARD TO FIRST OUTLET; NO.12 AWG MINIMUM.
2. 51 TO 200 FT RUN: INCREASE ONE WIRE SIZE, I.E.NO.12 AWG BECOMES NO.10 AWG TO FIRST OUTLET.
3. 201 TO 325 FT RUN: INCREASE TWO WIRE SIZES, I.E.NO.12 AWG BECOMES NO.8 AWG TO FIRST OUTLET.
4. 326 AND ABOVE: WIRING SHALL BE SIZED FOR 3% MAXIMUM VOLTAGE DROP.

BOXES

A. WALL OUTLET BOXES SHALL BE 4 INCH SQUARE WITH A TOTAL DEPTH OF LESS THAN 2-1/2" GALVANIZED PRESSED STEEL WITH PLASTER RINGS OR GANG COVER, OR SIZED AS REQUIRED.

B. WHERE MORE THAN TWO SWITCHES OR DEVICES ARE LOCATED AT ONE POINT, USE GANGED BOXES AND COVERS.

C. ALL BOXES FOR ELECTRICAL EQUIPMENT SHALL HAVE COVERS.

D. DO NOT INSTALL BOXES BACK TO BACK OR THROUGH WALL. OFFSET OUTLET BOXES ON OPPOSITE SIDES OF WALL A MINIMUM OF 12" OR ON OPPOSITE SIDES OF STUD IN PARTITION WALLS. WHERE BACK TO BACK BOXES CANNOT BE AVOIDED, PROVIDE GYPSUM BOARD BETWEEN BOXES. PROVIDE PUTTY PADS ON ALL BOXES WHERE REQUIRED.

E. IF A K.O. IS AVAILABLE IN THE BASE JUNCTION BOX, THEN NO TERMINATIONS ARE ALLOWED IN THE EXTENSION RINGS.

CONDUIT FITTING

A. COMPRESSION TYPE STEEL OR STEEL SETSCREW TYPE SHALL BE UTILIZED WITH METALLIC BOXES.

B. PROVIDE PROPER EXPANSION FITTINGS WHEN CROSSING BUILDING EXPANSION LINES.

MOTOR AND CIRCUIT DISCONNECTS

A. DISCONNECT SWITCHES MAY BE GENERAL DUTY FOR 240V.

B. PROVIDE RAIN-TIGHT HUBS FOR EXTERIOR DISCONNECTS.

C. PROVIDE CLASS R REJECTION FUSE CLIPS & CLASS R FUSES.

D. FUSES SHALL BE MANUFACTURED BY BUSSMANN, LITTLE OR GOULD-SHAWMUT.

E. SERVICE DISCONNECT SWITCH SHALL BE HEAVY DUTY TYPE.

WIRING DEVICES

A. WIRING DEVICES SHALL BE MANUFACTURED BY LEVITON OR APPROVED EQUAL.

B. RECEPTACLES SHALL BE GENERAL DUTY DUPLEX, 2 POLE, 3W, GROUNDING, 20A, 125V, DESIGNED FOR SIDE AND BACK WIRING WITH NEMA CONFIGURATION 5-20R. DESIGN SELECTION : LEVITON OR APPROVED EQUAL.

C. ALL RECEPTACLE SHALL BE #FCI UNLESS OTHERWISE NOTED.

D. ALL DWELLING UNIT RECEPTACLE SHALL BE TAMPER RESISTANT.

E. GROUND FAULT CIRCUIT INTERRUPTER RECEPTACLES SHALL BE NEMA 5-20R. DESIGN SELECTION: LEVITON OR APPROVED EQUAL.

F. SWITCHES SHALL BE GENERAL DUTY SINGLE POLE AC QUIET SWITCHES 15A. DESIGN SELECTION : LEVITON OR APPROVED EQUAL.

G. PROVIDE SMOOTH NYLON COVERS FOR ALL DEVICES.

PANELBOARDS

A. PROVIDE LIGHTING & APPLIANCE PANELBOARDS & POWER DISTRIBUTION PANELBOARDS WITH DEAD FRONT COVERS, FULL SIZE NEUTRAL & BOLT-ON HEAVY DUTY, QUICK MAKE, QUICK BREAK CIRCUIT BREAKERS. PANEL BOARDS SHALL BE U.L. LISTED.

B. INSTALL PANELBOARDS SO TOP BREAKER IS NOT HIGHER THAN 6'-0" ABOVE FLOOR.

C. CONTRACTOR SHALL BALANCE PHASES IN PANELBOARD SO THAT LOAD IMBALANCE DOES NOT EXCEED 10%.

D. PANELBOARD SHALL INCLUDE COMPLETE TYPEWRITTEN DIRECTORY.

E. PROVIDE SPARE CONDUITS TO CEILING CAVITY FOR SPARES/SPACES IN RECESSED PANELBOARDS. PROVIDE (1) 3/4". FOR EVERY 3 SPACES.

F. PROVIDE 120V POWER TO 480V CIRCUIT BREAKER SHUNT-TRIPS FROM NEAREST 120V PANELBOARD.

G. LOAD CENTERS SHALL BE DEAD FRONT, FACTORY ASSEMBLED, FULL-SIZE NEUTRAL AND GROUND BAR. NOTE: IF LOAD CENTERS CANNOT BE FABRICATED TO MEET THE MINIMUM REQUIREMENTS SPECIFIED, PROVIDE LIGHTING & APPLIANCE PANELBOARDS WITH BOLT-ON BREAKERS.

H. NON-LINEAR PANELBOARDS SHALL BE PROVIDED WHERE INDICATED ON PLANS. EQUIP WITH 200% RATED NEUTRAL.

I. PROVIDE U.L. LISTED BREAKERS FOR EXISTING PANELBOARDS TO MATCH MANUFACTURER & AIC RATING.

J. PROVIDE AFCI (ARC FAULT CIRCUIT INTERRUPTER) BREAKERS FOR ALL CIRCUITS SERVING BEDROOMS OF DWELLING UNITS PER NEC/CEC 210.12.

K. ALL BREAKERS SERVING MECHANICAL, REFRIGERATION, OR OTHER EQUIPMENT WHERE REQUIRED, SHALL BE HACR RATED.

L. BREAKERS WITH HID LIGHTING LOADS SHALL BE HID RATED.

M. BREAKERS SERVING ELEVATOR SHALL BE SHUNT-TRIP TYPE.

N. BREAKERS SERVING CIRCUITS UNDER KITCHEN HOODS SHALL BE SHUNT-TRIP TYPE.

LIGHTING

A. U.L. LABELS MUST APPEAR ON ALL NEW LIGHTING FIXTURES. FLEXIBLE CONDUIT TAILS, UP TO 6' IN LENGTH, MAY BE USED BETWEEN JUNCTION BOXES & RECESSED LIGHTING FIXTURES. OUTLET BOXES MAY SERVE UP TO FOUR SEPARATELY RECESSED FIXTURES. ALL LED SHALL BE ELECTRONIC HIGH-POWER FACTOR CRI LABELED.

B. PROVIDE PROPER TRIM PER REFLECTED CEILING PLAN OR ACTUAL CEILING INSTALLED.

C. PROVIDE NEW LAMPS IN ALL NEW FIXTURES.

D. PROVIDE FOUNDATIONS FOR ALL SITE LIGHTING FIXTURES/POLES AS RECOMMENDED BY MANUFACTURER. REFER SITE PACK FOR DETAIL.

E. SITE LIGHTING POLE FIXTURES SHALL BE RATED FOR 120 mph WINDS WITH 1.3 GUST FACTOR FOR 3SEC.

F. SITE LIGHTING FIXTURES LOCATED BETWEEN PARKING SPACES OR SUBJECT TO BEING DAMAGED BY VEHICLES, SHALL BE PROVIDED WITH 2' HIGH X 2' DIAMETER CONCRETE BASES.

G. LIGHTING FIXTURES IN MECHANICAL ROOMS, ETC., SHALL BE COORDINATED WITH EQUIPMENT.

H. LAMPS SHALL BE MANUFACTURED BY OSRAM-SYLVANIA, G.E., PHILLIPS OR VENTURE OR EQUAL.

I. BALLASTS SHALL BE MANUFACTURED BY OSRAM-SYLVANIA, MAGNETIC UNIVERSAL, ADVANCE, ESI OR VENTURE.

J. EMERGENCY BATTERY BALLASTS SHALL BE 1400 LUMENS MINIMUM.

K. PROVIDE ADDITIONAL BALLAST IN ALL FIXTURES INDICATED ON DRAWINGS AS BEING CONTROLLED VIA 'DUAL LEVEL SWITCHING.'

L. ALL INTERIOR LAMPS SHALL BE 3000°K, 3500°K, 4100°K KELVIN TEMPERATURE AS NOTED. COORDINATE WITH ARCHITECT FOR EXACT COLOR REQUIRED.

M. EMERGENCY BATTERY BALLASTS AND BATTERY OPERATED EXIT SIGNS AND/OR EMERGENCY LIGHTS SHALL BE WIRED AHEAD OF LOCAL SWITCHING MEANS.

N. EMERGENCY LIGHTING AND/OR EXIT LIGHTS SHALL BE INSTALLED WHERE DESIGNATED BY THE BUILDING OFFICIAL AS PER CEC.

GROUNDING

A. PROVIDE INSULATED GROUND CONDUCTORS IN ALL CONDUITS.

B. PROVIDE GROUNDING BUSHINGS FOR FEEDER CONDUITS.

C. TRANSFORMERS SHALL BE GROUNDED TO BUILDING STEEL WITH EXOTHERMIC CONNECTIONS.

D. SERVICE GROUND RESISTANCE SHALL BE MEASURED WITHOUT DEPENDING ON WATER PIPING SYSTEM & SHALL BE 25Ω OR LESS. IF GREATER THAN 25Ω, DRIVE ADDITIONAL GROUND RODS TO OBTAIN REQUIRED RESISTANCE.

E. GROUND METAL LIGHTING POLES AS REQUIRED BY NEC/CEC.

SWITCHBOARDS

A. SWITCHBOARDS SHALL BE MULTI-SECTION I-LINE SWITCHBOARDS.

B. SWITCHBOARDS SHALL BE DEAD-FRONT AND TOTALLY FRONT ACCESSIBLE.

C. PROVIDE STAND ALONE, MICROPROCESSOR BASED, 3-PH POWER METERING DEVICE MOUNTED RECESSED IN FRONT OF SWITCHBOARD. PROVIDE CURRENT-TRANSFORMERS & RELAYING IN SIZES AS REQUIRED.

D. MAIN BREAKER SHALL BE 100% CURRENT RATED & INCLUDE GROUND FAULT & SHUNT-TRIP.

E. MEGGER CHECK PHASE-TO-PHASE & PHASE-TO-GROUND INSULATION LEVELS PRIOR TO ENERGIZATION.

SUPPORTING DEVICES

A. LIGHTING FIXTURES SHALL BE SUPPORTED FROM BUILDING STRUCTURE & NOT FROM CEILING GRID. SECURE A MINIMUM OF TWO CORNERS (OPPOSITE) TO STRUCTURE ABOVE WITH CHAIN OR WIRE.

B. FASTEN CONDUIT TO STRUCTURAL PARTS OF BUILDING.

REVISIONS: | BY:

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SS ☐ FLS ☐ ACS ☑
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SEAL

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Code Compliance
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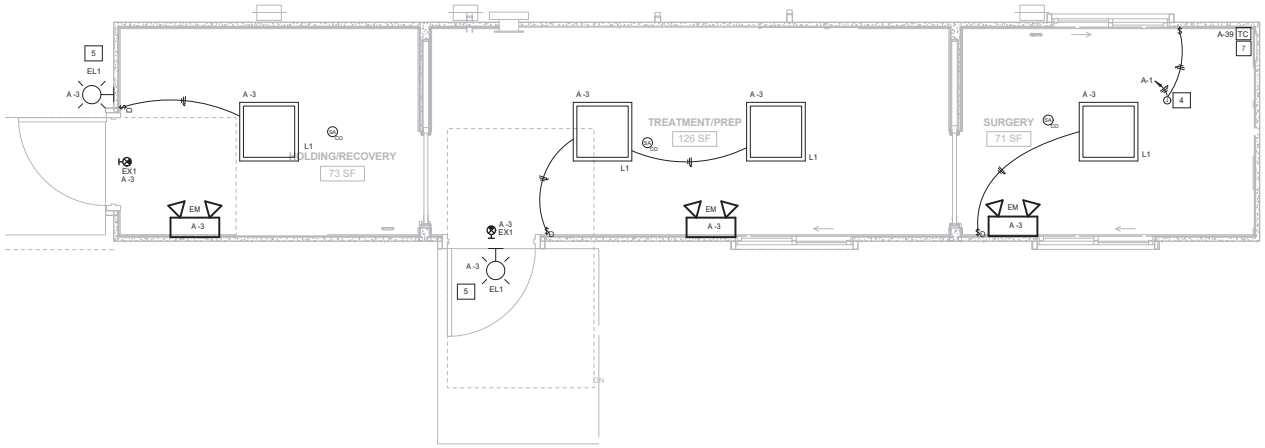
ELECTRICAL SPECIFICATIONS & ABBREVIATIONS

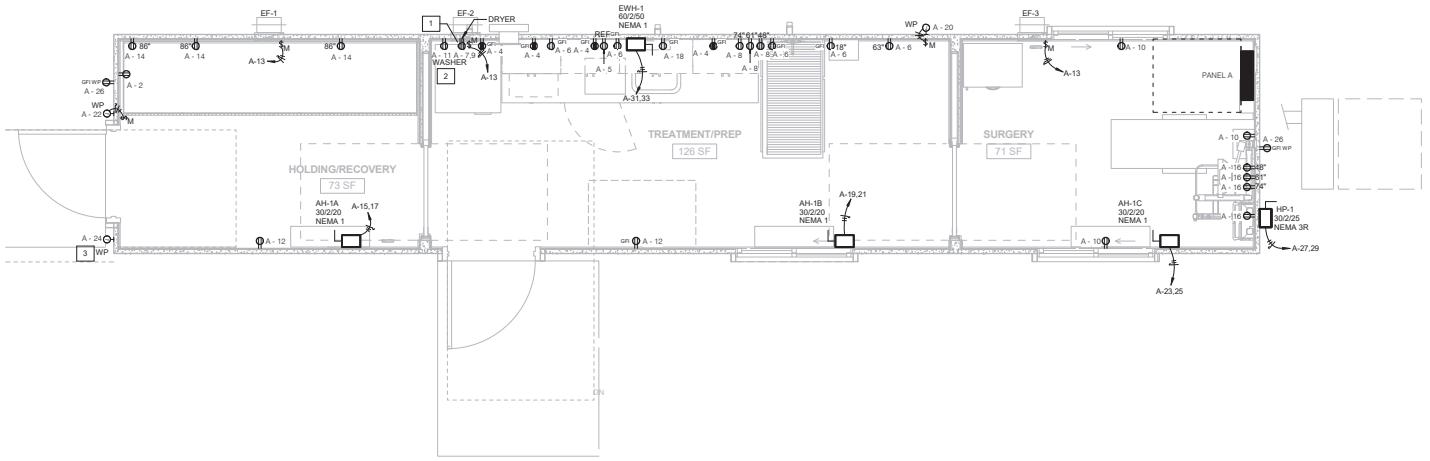
DATE: 01/18/25
SCALE: AS NOTED
DRAWN: DB
CHECKED: DB
APPROVED: DB
FILE NAME:

SHEET: E0.2



2 ELECTRICAL LIGHTING FLOOR PLAN

SCALE: 1/2" = 1'-0"



1 ELECTRICAL POWER FLOOR PLAN

SCALE: 1/2" = 1'-0"

GENERAL NOTES

1. REFER TO MECHANICAL DRAWINGS FOR THE EXACT HVAC EQUIPMENT LOCATIONS.
2. REFER TO PLUMBING DRAWINGS FOR THE EXACT PLUMBING EQUIPMENT LOCATIONS.
3. COORDINATE ALL LOW VOLTAGE (COMMUNICATION, ACCESS, SECURITY, CCTV) CONDUIT AND WIRING REQUIREMENTS WITH LOW-VOLTAGE CONTRACTOR AND PROVIDE CONDUITS AND WIRES AS REQUIRED FOR COMPLETE INSTALLATION. PROVIDE ALL REQUIRED LOW VOLTAGE ELECTRICAL CONNECTION FOR A COMPLETE FUNCTIONAL SYSTEM.
4. COORDINATE WITH FIRE ALARM CONTRACTOR FOR THE FIRE ALARM DRAWINGS. FIRE ALARM SHALL BE DESIGN BUILD ON A SEPARATE PERMIT.
5. ALL OUTDOOR LIGHTING FIXTURE EXPOSED TO WET LOCATIONS SHALL BE WEATHERPROOF RATED. OUTDOOR FIXTURES LOCATED ON THE COVERED CEILING SPACES SHALL BE DAMP RATED FIXTURES.
6. REFER TO THE LATEST ARCHITECTURAL AND/OR INTERIOR DESIGNER AND/OR KITCHEN EQUIPMENT CONSULTANT DRAWINGS FOR DIMENSIONS AND FINAL LOCATION AND MOUNTING INFORMATION FOR KITCHEN EQUIPMENTS AND LIGHTS FIXTURES.
7. VERIFY EXACT SWITCH LOCATION AND MOUNTING HEIGHTS PRIOR TO INSTALLATION.
8. LOWER CASE LETTER INDICATES THE SWITCHING DESIGNATION.
9. CONDUIT RUNS ARE DIAGRAMMATIC ONLY. E.C. TO VERIFY FEASIBLE CONDUIT ROUTING.
10. OBSERVE CLEAN ELECTRICAL INSTALLATION ALL THROUGHOUT THE SPACE.
11. NO CONDUIT AND FEEDER WILL BE INSTALLED EXPOSE AREA. CONDUIT SHALL BE INSTALLED ABOVE CEILING SPACE AND/OR CONCEALED TO WALL SPACES.
12. ALL FEEDER WIRES SHALL BE COPPER (CU), UNLESS NOTED OTHERWISE.
13. FOR 15A, 20A, 25A AND 30A BRANCH CIRCUIT, THE EQUIPMENT GROUNDING CONDUCTORS SHALL BE THE SAME AWG AS THE UNGROUNDED CONDUCTOR. (CEC 250.122 (A)(B))
14. LOCATION AND ROUTING OF ALL EXPOSED EQUIPMENT, PIPING, DUCTWORK, AND CONDUIT SHALL BE APPROVED BY THE ARCHITECT PRIOR TO START OF ANY WORK.
15. NO PIPING, DUCTS, OR EQUIPMENT FOREIGN TO THE ELECTRICAL EQUIPMENT SHALL BE PERMITTED TO BE LOCATED ABOVE THE ELECTRICAL EQUIPMENT.
16. ALL EXTERIOR RECEPTACLES SHALL BE WEATHERPROOF, GFCI TYPE.
17. ALL RECEPTACLE DUPLEX OUTLET SHALL BE RECESSED OR FLUSH MOUNTED TO WALL. NO EXCEPTION.
18. ALL ELECTRICAL OUTLETS LOCATED ABOVE COUNTERTOP INCLUDING BATHROOM COUNTERTOP SHALL BE GFCI DUPLEX OUTLET. GFCI OUTLET SHALL BE SELF-TEST, SELF-DIAGNOSTIC TYPE HUBBELL AUTOGUARD SERIES OR EQUAL.
19. ALL THE BRANCH CIRCUITS SHALL BE (1)3/4"C. - 2#12CU+ 1#12CU G. UNLESS OTHERWISE NOTED.
20. ALL EXTERIOR ELECTRICAL DISCONNECT AND ELECTRICAL EQUIPMENT SHALL BE WEATHER PROOF (WP) AND NEMA 3R RATED.
21. REFER TO ARCHITECTURAL PLAN FOR RECEPTACLE HEIGHT AND LOCATION PRIOR TO ROUGH IN.
22. ALL DEDICATED RECEPTACLE OUTLET SHALL HAVE SEPARATE CIRCUIT.
23. ALL RECEPTACLE SHALL BE HOSPITAL GRADE TYPE.
24. ALL RECEPTACLE TO COMPLY PER CEC 250.118 AND 250.122.
25. ALL 120V, 15 AND 20 AMPERE REEPTACLE SHALL BE TEMPER RESISTANCE AS PER CEC 406.12.

REFERENCE NOTES

1. PROVIDE 240V/30A/3PH OUTLET FOR DRYER. COORDINATE PLUG CONFIGURATION AND LOCATION WITH EQUIPMENT INSTALLER PRIOR TO ROUGH-IN.
2. PROVIDE 120V OUTLET FOR WASHER, 36" AFF.
3. JUNCTION BOX FOR EXTERIOR SIGNAGE BOARD. COORDINATE EXACT LOCATION WITH ARCHITECT AND THE SIGN INSTALLER PRIOR TO ROUGH-IN. SIGNAGE SHOULD BE CONTROLLED THROUGH TIMECLOCK.
4. PROVIDE 120V/1PH POWER FOR MIDMARK 255 LED PROCEDURE LIGHT . EC TO VERIFY EXACT REQUIREMENT WITH MANUFACTURER PRIOR TO ROUGH IN.
5. EXTERIOR LIGHTS TO BE CONTROLLED THROUGH TIMECLOCK.
6. PROVIDE 120V/1PH POWER FOR HEAT LAMP . EC TO VERIFY EXACT REQUIREMENT WITH MANUFACTURER PRIOR TO ROUGH IN.
7. ALL SIGNAGE AND EXTERIOR LIGHTS SHALL BE ROUTED THROUGH CONTACTORS OR RELAYS FOR TIMECLOCK CONTROL. REFER TO DETAIL 5/E3.1.

REVISIONS: | BY:

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-123126 INC:
REVIEWED FOR
SS ☐ FLS ☐ ACS ☑
DATE: 4/3/2025

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SEAL

YOLO COUNTY
VETERINARY CLINIC
2640 EAST GIBSON ROAD

ELECTRICAL FLOOR PLANS

BB24-089
Reviewed for
Code Compliance
Approved: GR

DATE:	01/18/25
SCALE:	AS NOTED
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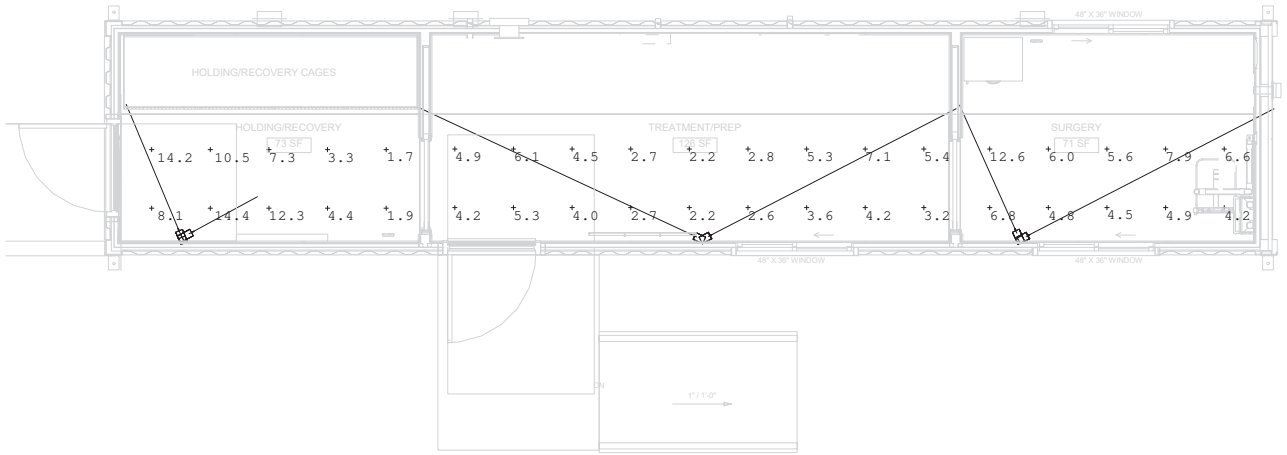
SHEET:	E1.1

Calculation Summary

Calculation Summary							
Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min
HOLDING_Workplane	Illuminance	Fc	7.81	14.4	1.7	4.59	8.47
SURGERY_Workplane	Illuminance	Fc	6.39	12.6	4.2	1.52	3.00
TREATMENT_Workplane	Illuminance	Fc	4.06	7.1	2.2	1.85	3.23



1 PHOTOMETRIC EGRESS PATH PLAN

SCALE: 1/2" = 1'-0"

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PHOTOMETRIC EGRESS PATH PLAN

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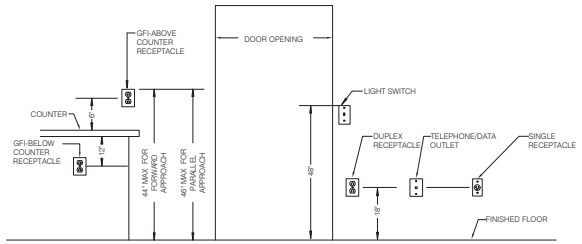
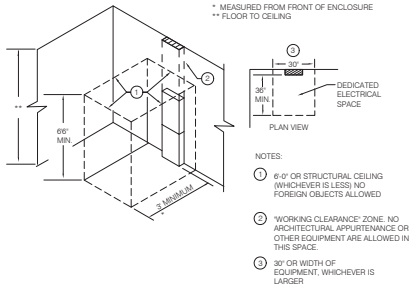


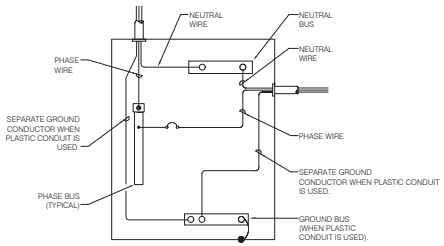
1 MOUNTING HEIGHT DETAIL

SCALE: NTS



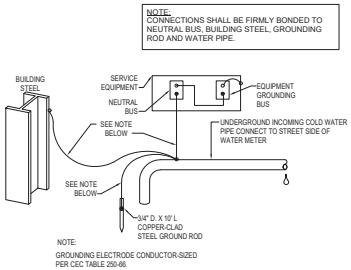
2 PANEL CLEARANCE DETAIL

SCALE: NTS



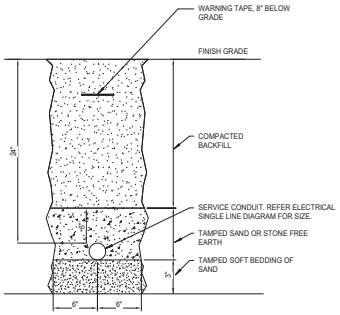
3 TYPICAL ELECTRICAL PANEL DETAIL

SCALE: NTS



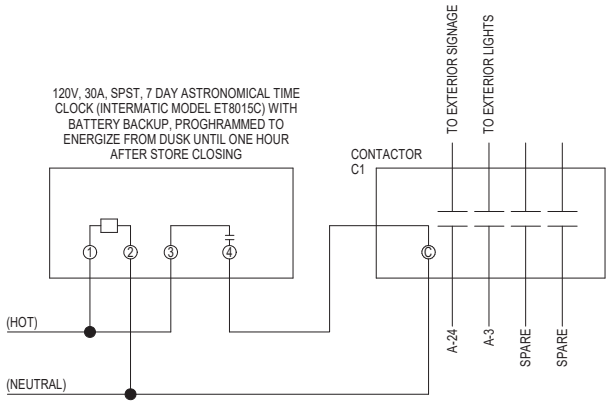
4 GROUNDING SYSTEM DETAIL

SCALE: NTS



5 UNDERGROUND CONDUIT INSTALLATION DETAIL

SCALE: NTS



6 EXTERIOR SIGNAGE -LIGHTING CONTROLS

SCALE: NTS

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SEAL

YOLO COUNTY VETERINARY CLINIC

2640 EAST GIBSON ROAD

ELECTRICAL DETAILS

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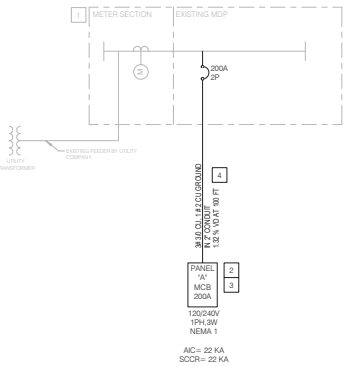

1 SINGLE LINE DIAGRAM

SCALE: NTS

Branch Panel: A

Location: SURGERY
Supply From: EXISTING MDP
Mounting: SURFACE MOUNTED
Enclosure: NEMA 1

Volts: 120/240V SINGLE
Phases: 1
Wires: 3

A.I.C. Rating: SEE SINGLE LINE DIAGRAM
Mains Type: MCB
Mains Rating: 200 A
MCB Rating: 200 A

Notes:

CKT	Circuit Description	Wire Size	Breaker	Note	A	B	Note	Breaker	Wire Size	Circuit Description	CKT
1	PROCEDURE LIGHT	1-#12, 1-#12, 1-#12	20 A/1		81 VA	180 VA		20 A/1	1-#12, 1-#12, 1-#12	REC HOLDING CAGES 1	2
3	LTG INTERIOR AND...	1-#12, 1-#12, 1-#12	20 A/1		274 VA	720 VA		20 A/1	1-#12, 1-#12, 1-#12	REC TREATMENT 1	4
5	REC REFRIGERATOR	1-#12, 1-#12, 1-#12	20 A/1	G	1000 VA	900 VA		20 A/1	1-#12, 1-#12, 1-#12	REC TREATMENT 2	6
7	DRYER	2-#10, 1-#10, 1-#10	30 A/2	G	2500 VA	540 VA		20 A/1	1-#12, 1-#12, 1-#12	REC TREATMENT 3	8
9						2500 VA	540 VA	20 A/1	1-#12, 1-#12, 1-#12	REC TREAT./HOLDING	10
11	WASHER	1-#12, 1-#12, 1-#12	20 A/1	G		1200 VA	360 VA	20 A/1	1-#12, 1-#12, 1-#12	REC SURGERY 1	12
13	EF-1,2,3	1-#12, 1-#12, 1-#12	20 A/1	H	28 VA	540 VA		20 A/1	1-#12, 1-#12, 1-#12	REC HOLDING 2	14
15	AH-1A	2-#12, 1-#12	20 A/2	H				20 A/1	1-#12, 1-#12, 1-#12	REC SURGERY 2	16
17					120 VA	500 VA		20 A/1	1-#12, 1-#12, 1-#12	REC TREATMENT 4	18
19	AH-1B	2-#12, 1-#12	20 A/2	H				20 A/1	1-#12, 1-#12, 1-#12	REC HEAT LAMP 1	20
21					120 VA	500 VA		20 A/1	1-#12, 1-#12, 1-#12	REC HEAT LAMP 2	22
23	AH-1C	2-#12, 1-#12	20 A/2	H		120 VA	1200 VA	20 A/1	1-#10, 1-#10, 1-#10	REC SIGNAGE	24
25					120 VA	360 VA		20 A/1	1-#12, 1-#12, 1-#12	REC EXTERIOR	26
27	HP-1	2-#10, 1-#10	25 A/2	H		2542 VA	--	/1	--	SPACE	28
29					2542 VA	--		/1	--	SPACE	30
31	EWH-1	2-#6, 1-#10	50 A/2	G		4000 VA	--	/1	--	SPACE	32
33					4000 VA	--		/1	--	SPACE	34
35	SPARE	--	20 A/1			0 VA	--	/1	--	SPACE	36
37	FACP	1-#12, 1-#12, 1-#12	20 A/1		180 VA	--		/1	--	SPACE	38
39	TIMECLOCK	1-#10, 1-#10, 1-#10	30 A/1			100 VA	0 VA	30 A/2	--	SPD	40
41	SMOKE DETECTOR CIRCUIT	1-#12, 1-#12, 1-#12	20 A/1		180 VA	0 VA					42
			Total Load:		14390 VA	15016 VA					
			Total Amps:		120 A	125 A					

Legend:

* OCPD FEATURES: A. AFCI BREAKER B. LSIG C. COMBO GFCI-AFCI BREAKER D. RED LOCK-ON E. LOCK-OFF F. L.S.I. G. GFCI BREAKER H. HACR I. SHUNT-TRIP

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals
LIGHTING LOAD	455 VA	125.00%	569 VA	
RECEPTACLE LOAD	8920 VA	100.00%	8920 VA	Total Conn. Load: 29406 VA
EQUIPMENT LOAD	6200 VA	100.00%	6200 VA	Total Est. Demand: 29519 VA
HVAC LOAD	5831 VA	100.00%	5831 VA	Total Conn.: 123 A
WATER HEATING	8000 VA	100.00%	8000 VA	Total Est. Demand: 123 A

NOTES:

GENERAL NOTES:

1. ASSUMED WORST CASE AVAILABLE FAULT CURRENT FROM UTILITY COMPANY IS: 22,000 A.
2. ALL EQUIPMENT BUSSING AND GROUNDING ELECTRODE SHALL BE COPPER AND ALL WIRES SHALL BE COPPER, THWN / THHN UNLESS NOTED OTHERWISE.
3. THE MAIN SWITCHBOARD AND PANEL BOARDS SHALL BE BY ONE MANUFACTURER ONLY.
4. ALL FUSES SHALL BE PROVIDED WITH REJECTION TYPE FUSE HOLDER.
5. ALL ELECTRICAL EQUIPMENT SHALL BE FULLY RATED FOR THE AVAILABLE FAULT CURRENT.
6. ALL CIRCUIT BREAKER SHALL BE LABELED TO CLEARLY INDICATE AREA BEING SERVED.
7. ALL PANEL WILL BE REGULAR (80% RATED) RATED PANEL.
8. ALL CIRCUIT BREAKER SHALL BE LABELED TO CLEARLY INDICATE AREA BEING SERVED.
9. UNDERGROUND CONDUIT SHALL BE MINIMUM OF PVC SCHEDULE 40. REFER TO 2019 CEC TABLE 300.5 FOR THE MINIMUM COVER REQUIREMENTS OF DIRECT BURIAL CABLE.
10. ALL METAL PIPING & STRUCTURES INCLUDING GAS PIPING THAT IS LIKELY TO BE ENERGIZED SHALL BE BONDED TO THE SERVICE GROUNDING POINT AS DESCRIBED IN CEC SECTION 250.104. FIELD VERIFY & PROVIDE BONDING JUMPERS AS REQUIRED.
11. ALL TERMINATIONS AND CIRCUIT BREAKERS SHALL BE RATED FOR 75 DEGREES CENTIGRADE.
12. ALL ELECTRICAL EQUIPMENT, PANELS, FEEDERS, ETC. ARE NEW UNLESS NOTED OTHERWISE.
13. ALL THE ELECTRICAL SERVICES AND REQUIREMENTS ARE SUBJECT TO THE APPROVAL BY THE UTILITY COMPANY AND THE DEPARTMENT OF BUILDING AND SAFETY. VERIFY EXACT REQUIREMENTS PRIOR TO ROUGH-INS.
14. ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE TO COORDINATE WITH UTILITY SERVICE PLANNER FOR THE PRIMARY ELECTRICAL SERVICE PRIOR TO ANY WORK.
15. FEEDER LENGTH IS FOR CALCULATION ONLY NOT FOR BIDDING PURPOSES.
16. THE MAIN SERVICE SHALL BE TESTED BY A THIRD PARTY NRTL TESTING LABORATORY AND SHALL BE CERTIFIED FOR SERVICE GROUND FAULT PROTECTION. THE MAIN SERVICE SHALL NOT BE ENERGIZED PRIOR TO BUILDING INSPECTORS' RECEIPT OF THE THIRD PARTY TESTING REPORT.
17. UNLESS LISTED OTHERWISE, THE AMPACITY OF 600V OR LESS CONDUCTORS SHALL BE BASED ON THE TERMINALS NOT TO EXCEED 60°C (140°F) FOR CONDUCTOR SIZE 14 THROUGH 1 AWG OR 75°C (167°F) FOR CONDUCTOR SIZES OVER 1 AWG.
18. THE CONTRACTOR SHALL REFER TO ALL THE ELECTRICAL CONTRACT DOCUMENTS, NOTES, DETAILS, SCHEDULES, RISERS, OTHER DISCIPLINE CONTRACT DOCUMENTS FOR A COMPLETE SCOPE OF WORK.
19. EC TO COORDINATE WITH UTILITY COMPANY FOR NEW SERVICE.
20. COORDINATE WITH MANUFACTURER FOR THE EXACT REQUIREMENTS PRIOR TO BID AND START OF WORK.

REFERENCE NOTES

1. HALFTONE INDICATES EXISTING WORK. EXISTING WORK SHOWN HERE IS ONLY FOR REFERENCE. REFER AS BUILT OF SHELL BUILDING FOR MORE INFORMATION.
2. ALL CIRCUIT BREAKER IN THIS PANEL SHALL BE FULLY RATED AND UL LISTED FOR AN INTERRUPTING CURRENT OF MINIMUM 22,000 A AND PANEL SHALL BE BRACED FOR MINIMUM 22,000 A.
3. PROVIDE A SURGE PROTECTIVE DEVICE (SPD) AT THE MAIN SERVICE PANEL. THE SPD MAY BE INTEGRAL TO OR IMMEDIATELY ADJACENT TO THE SERVICE EQUIPMENT, AND MUST BE TYPE 2 SPD. [CEC 230.67(A) TO (C)].
4. EC TO CHECK LENGTH OF WIRE FROM EXISTING MDP TO THE NEW PANEL. NOTIFY ENGINEER IF DISTANCE IF MORE THAN INDICATED. EC TO UPSIZE WIRE TO OVERCOME VOLTAGE DROP IF NEEDED.

WIRE IDENTIFICATION

ELECTRICAL OUTLET, APPLIANCE, LIGHTING , EQUIPMENT

1P - 1#P, 1#N, 1#G
2P - 2#P, 1#N, 1#G
3P - 3#P, 1#N, 1#G

WHERE , P= HOT/PHASE WIRE, N= NEUTRAL WIRE, G= GROUND WIRE

HVAC AND PLUMBING QUIPMENT

1P - 1#P, 1#N, 1#G
2P - 2#P, 1#G
3P - 3#P, 1#G

WHERE , P= HOT/PHASE WIRE, N= NEUTRAL WIRE, G= GROUND WIRE

LIGHT FIXTURE SCHEDULE

TYPE	DESCRIPTION	COUNT	TOTAL VA	VOLTAGE	MTG	MANUFACTURER/REMARK
L1	2X2 LED FLAT LIGHT	4	45 VA	120V	RECESSED	PATRIOT LIGHTING/4200L-5000K-120V
EL1	EXTERIOR LIGHT	2	35 VA	120V	WALL	RAB LIGHINTG X34S
EM1	BUG EYE	3	3.15 VA	120V	SURFACE	LITHONIA- ELM4L
EX1	EXIT SIGN	2	4.5	120V	SURFACE	BEST LIGHTING/CLPU-MVOLT

GENERAL NOTES:

1. ALL FINISH/TRIM TYPE(S) FOR LIGHT FIXTURE(S) TO BE COORDINATED WITH ARCHITECT PRIOR TO ORDER/BID.
2. FOR LED FIXTURES REQUIRING REMOTE DRIVERS, THE REMOTE DRIVER MUST BE LOCATED IN AN ACCESSIBLE, VENTILATED LOCATION.
3. COORDINATE AND VERIFY WITH THE OWNER PRIOR TO ORDERING.
4. RECESSED MOUNTED FIXTURES SHALL BE IC RATED AND AIR-TIGHT RATED.
5. ALL FIXTURE SHALL BE UL LISTED AND/OR ETL LISTED.
6. EMERGENCY LIGHTING SHALL HAVE BATTERY PACKS MINIMUM OF 90-MINUTES.
7. COORDINATE ALL LOCATIONS WITH ARCHITECT.
8. ALL LAMPS SHALL BE HIGH EFFICACY ACCORDING TO TITLE 24 REQUIREMENTS.
9. FOR CEILING AREAS WITH INSULATION WHERE RECESSED LIGHT CANS ARE SHOWN, PROVIDE AT-RATED FIXTURES ONLY AND INSULATION CONTACT WITH IC-RATING.
10. ALL LIGHT FIXTURES TO BE POSITIVELY ATTACHED TO SUSPENDED CEILING GRID ABOVE.
11. LIGHT FIXTURES LESS THAN 10 POUNDS, PROVIDE ONE #12 GAUGE WIRE (MAY BE SLACK).
12. LIGHT FIXTURES 11-55 POUNDS, PROVIDE TWO #12 GAUGE WIRES (MAY BE SLACK).
13. LIGHT FIXTURE OVER 56 POUNDS, SHALL BE SUPPORTED DIRECTLY FROM THE STRUCTURE ABOVE WITHOUT USING THE SUSPENDED CEILING SYSTEM FOR DIRECT SUPPORT.
14. ALL PENDANT LIGHT FIXTURES SHALL BE SUPPORTED DIRECTLY FROM THE STRUCTURE ABOVE USING #9 GAUGE WIRE.

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ELECTRICAL SINGLE LINE DIAGRAM & PANEL SCHEDULE

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CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD — NRCC-PRF-E

Nonresidential Performance Compliance Method — (Page 1 of 16)

Project Name: Koret Vet. Clinic (2024.1126) Envelope + Lighting — **Date Prepared:** 2024-12-02

A. General Information

1	Project Name	Koret Vet. Clinic (2024.1126) Envelope + Lighting			
2	Run Title	Title 24 Analysis			
3	Project Location	2640 East Gibson Rd.			
4	City	Woodland	5	Standards Version	Compliance 2022
6	Zip code	95776	7	Compliance Software (version)	EnergyPro 9.3
8	Climate Zone	12	9	Building Orientation (deg)	180
10	Building Type(s)	• Nonresidential	11	Weather File	SACRAMENTO-INTL_STYP20.epw
12	Project Scope	• New envelope and lighting	13	Number of Dwelling Units	0
14	Total Conditioned Floor Area in Scope (ft²)	320	15	Total # of hotel/motel rooms	0
15	Total Unconditioned Floor Area (ft²)	0	17	Fuel Type	Natural gas
18	Nonresidential Conditioned Floor Area	320	19	Total # of Stories (Habitable Above Grade)	1
20	Residential Conditioned Floor Area	0			

CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD — NRCC-PRF-E

Nonresidential Performance Compliance Method — (Page 2 of 16)

B. PROJECT SUMMARY

Table B shows which building components are included in the performance calculation. If indicated as not included, the project must show compliance prescriptively if within the permit application.

Building Components Complying via Performance					Building Components Complying Prescriptively	
Envelope (See Table G)	Nonres	Performance	Solar Thermal Water Heating (See Table I3)	☐ Performance	The following building components are ONLY eligible for prescriptive compliance and should be documented on the NRCC form listed if within the scope of the permit application (i.e. compliance will not be shown on the NRCC-PRF-E).	
	MultiFam	Not Included		☒ Not Included		
Mechanical (See Table H)	Nonres	Not Included	Covered Process: Commercial Kitchens (see Table J)	☐ Performance	Indoor Lighting (Unconditioned) 140.6 & 170.2(e)	NRCC-LTI-E is required
	MultiFam	Not Included		☒ Not Included	Outdoor Lighting 140.7 & 170.2(e)	NRCC-LTD-E is required
Domestic Hot Water (See Table I)	Nonres	Not Included	Covered Process: Laboratory Exhaust (see Table J)	☐ Performance	Sign Lighting 140.8 & 170.2(e)	NRCC-LTS-E is required
	MultiFam	Not Included		☒ Not Included	**Building Components Complying with Mandatory Measures**	
Lighting (Indoor Conditioned, see Table K)	Nonres	Performance	Photovoltaics (see Table F)	☐ Performance	Electrical power systems, commissioning, solar ready, elevator and escalator requirements are mandatory and should be documented on the NRCC form listed if applicable (i.e. compliance will not be shown on the NRCC-PRF-E.)	
	MultiFam	Not Included		☒ Not Included	Electrical Power Distribution 110.11	NRCC-ELC-E is required
			Battery (see Table F)	☐ Performance	Commissioning 120.8	NRCC-CXR-E is required
				☒ Not Included	Solar and Battery 110.10	NRCC-SAB-E is required

CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD — NRCC-PRF-E

Nonresidential Performance Compliance Method — (Page 3 of 16)

C1. COMPLIANCE SUMMARY

COMPLIES[3]	Time Dependent Valuation (TDV)		Source Energy Use
	Efficiency[1] (kBtu/ft² - yr)	Total[2] (kBtu/ft² - yr)	Total[2] (kBtu/ft² - yr)
Standard Design	531.55	531.55	66.33
Proposed Design	495.71	495.71	66.19
Compliance Margins	**35.84**	**35.84**	**0.14**
	Pass	**Pass**	**Pass**

[1] Efficiency measures include improvements like a better building envelope and more efficient equipment
[2] Compliance Totals include efficiency, photovoltaics and batteries
[3] New Construction, Complete Addition Scope: Building complies when all efficiency and total compliance margins are greater than or equal to zero and unmet load hour limits are not exceeded
Existing, Addition and Alteration Scope: Building complies when efficiency compliance margin is greater than or equal to zero and unmet load hour limits are not exceeded

Information for Installers

§10-103(b)1.B: Compliance builder/installers shall [illegible] copies of the complete documents for the buil[illegible] rise residential building tion shall include copi[illegible] tificate of Installation, [illegible] of Verification documen[illegible] shall be in paper or electr[illegible] the applicable requirements of Section 10-103(a).

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-123126 INC:
REVIEWED FOR
SS ☐ FLS ☐ ACS ☑
DATE: 4/3/2025

§10-103(b)2: Operating Information. At occupancy, builder/installers shall leave in the building, or with the owner, operating information for all applicable features, materials, components, and mechanical devices installed in the building. Operating information shall include instructions on how to operate the features, materials, components, and mechanical devices correctly and efficiently. For buildings or tenant spaces that are not individually owned and operated, or are centrally operated, such information shall be provided to the person(s) responsible for operating the feature, material, component or mechanical device installed in the building. This operating information shall be in paper or electronic format.

§10-103(b)3: Maintenance Information. At occupancy, builder/installers shall leave in the building, or with the owner, maintenance information for all features, materials, components, and manufactured devices that require routine maintenance for efficient operation. Required routine maintenance actions shall be clearly stated and incorporated on a readily accessible label. The label may be limited to identifying, by title and/or publication number, the operation and maintenance manual for that particular model and type of feature, material, component or manufactured device. For buildings or tenant spaces that are not individually owned and operated, or are centrally operated, such information shall be provided to the person(s) responsible for operating the feature, material, component or mechanical device installed in the building. This operating information shall be in paper or electronic format.

Installation and Acceptance forms can be completed or downloaded from appropriate links here: https://energycodeace.com/nonresidentialforms. Energycodeace uses the "Compliance ID" printed in the footer of the NRCC-PRF-E to determine the required forms.

Please note that this report only states *some* of the more significant compliance requirements and criteria. It does not purport to state how those requirements can be met, nor what equipment to install. More detailed construction requirements can be found on indicated Installation (NRCI) and Acceptance (NRCA) forms. There are generally many installation options available; although most equipment must be California Certified. In addition, "acceptance" criteria must be understood prior to installation. For this reason, we recommend that affected contractors employ a California Certified Acceptance Test Technician for consultation prior to, during, and after installation. Those technicians are searchable from links here: https://www.energy.ca.gov/programs-and-topics/programs/acceptance-test-technician-certification-provider-program/

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654 Oakland Avenue, Oakland, CA 94611

Koret VETERINARY CLINIC 2024.1126
2640 East Gibson Road

BP24-089
Reviewed for
Code Compliance
Approved:CR

California Building Energy Efficiency Certificates of Compliance

Filed on the Plans pursuant to California Code of Regulations, Title 24, Part 1, Article 1, Section 10-103(a)2.A.

CZ 12

Project No.: 42224

Date: 12-2-2024

Sheet No.: T24.1

Title 24 Energy Compliance

CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD — NRCC-PRF-E

Nonresidential Performance Compliance Method — (Page 4 of 16)

C2. TDV ENERGY COMPLIANCE RESULTS FOR PERFORMANCE COMPONENTS (Annual TDV Energy Use, kBtu/ft² - yr)

COMPLIES[2]			
Energy Component	Standard Design (TDV)	Proposed Design (TDV)	Compliance Margin (TDV)[1]
Space Heating	84.05	94.52	-10.47
Space Cooling	117.19	119.51	-2.32
Indoor Fans	251.44	246.6	4.84
Heat Rejection	0	0	0
Pumps & Misc.	0	0	0
Domestic Hot Water	0	0	0
Indoor Lighting	78.87	35.08	43.79
Flexibility	---	---	---
EFFICIENCY COMPLIANCE TOTAL	**531.55**	**495.71**	**35.84 (6.7%)**
Photovoltaics	---	---	---
Batteries	---	---	---
TOTAL COMPLIANCE	**531.55**	**495.71**	**35.84 (6.7%)**

[1] Notes: This number in parenthesis following the Compliance Margin in column 4, represents the Percent Better than Standard.

CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD — NRCC-PRF-E

Nonresidential Performance Compliance Method — (Page 5 of 16)

C3. TDV ENERGY RESULTS FOR NON-REGULATED COMPONENTS[1]

Non-Regulated Energy Component	Standard Design (TDV)	Proposed Design (TDV)	Compliance Margin (TDV)[1]
Receptacle	111.93	111.93	---
Process	74.03	74.03	---
Other Ltg	---	---	---
Process Motors	---	---	---
TOTAL (TOTAL COMPLIANCE + NON-REGULATED COMPONENTS)	**717.51**	**681.67**	**35.84 (5%)**

[1] Notes: This table is not used for Energy Code Compliance.

CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD — NRCC-PRF-E

Nonresidential Performance Compliance Method — (Page 6 of 16)

C4. SOURCE ENERGY COMPLIANCE RESULTS FOR PERFORMANCE COMPONENTS (Annual SOURCE Energy Use, kBtu/ft² /yr)

COMPLIES[2]			
Energy Component	Standard Design (SOURCE)	Proposed Design (SOURCE)	Compliance Margin (SOURCE)[1]
Space Heating	28.03	31.76	-3.73
Space Cooling	5.48	5.64	-0.16
Indoor Fans	26.39	25.93	0.46
Heat Rejection	0	0	0
Pumps & Misc.	0	0	0
Domestic Hot Water	0	0	0
Indoor Lighting	6.43	2.86	3.57
Flexibility	---	---	---
EFFICIENCY COMPLIANCE TOTAL	**66.33**	**66.19**	**0.14 (0.2%)**
Photovoltaics	---	---	---
Batteries	---	---	---
TOTAL COMPLIANCE	**66.33**	**66.19**	**0.14 (0.2%)**

[1] Notes: This number in parenthesis following the Compliance Margin in column 4, represents the Percent Better than Standard.

CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD — NRCC-PRF-E

Nonresidential Performance Compliance Method — (Page 7 of 16)

C5. SOURCE ENERGY RESULTS FOR NON-REGULATED COMPONENTS[1]

Non-Regulated Energy Component	Standard Design (SOURCE)	Proposed Design (SOURCE)	Compliance Margin (SOURCE)[1]
Receptacle	12.19	12.19	---
Process	5.9	5.9	---
Other Ltg	---	---	---
Process Motors	---	---	---
TOTAL (TOTAL COMPLIANCE + NON-REGULATED COMPONENTS)	**84.42**	**84.28**	**0.14 (0.2%)**

[1] Notes: This table is not used for Energy Code Compliance.

C6. 'ABOVE CODE' QUALIFICATIONS

☐ This project is pursuing CalGreen Tier 1 ☐ This project is pursuing CalGreen Tier 2

CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD — NRCC-PRF-E

Nonresidential Performance Compliance Method — (Page 8 of 16)

C7. ENERGY USE SUMMARY

Energy Component	Standard Design Site (MWh)	Proposed Design Site (MWh)	Margin (MWh)	Standard Design Site (MBtu)	Proposed Design Site (MBtu)	Margin (MBtu)
Space Heating	---	---	---	9.6	10.9	-1.3
Space Cooling	1	1.1	-0.1	---	---	---
Indoor Fans	2.9	2.8	0.1	---	---	---
Heat Rejection	---	---	---	---	---	---
Pumps & Misc.	---	---	---	---	---	---
Domestic Hot Water	---	---	---	---	---	---
Indoor Lighting	1	0.5	0.5	---	---	---
Flexibility	---	---	---	---	---	---
EFFICIENCY TOTAL	**4.9**	**4.4**	**0.5**	**9.6**	**10.9**	**-1.3**
Photovoltaics	---	---	---	---	---	---
Batteries	---	---	---	---	---	---
ENERGY USE SUBTOTAL	**4.9**	**4.4**	**0.5**	**9.6**	**10.9**	**-1.3**
Receptacle	1.3	1.3	0	1.4	1.4	0
Process	1	1	0	---	---	---
Other Ltg	---	---	---	---	---	---
Process Motors	---	---	---	---	---	---
ENERGY USE TOTAL	**7.2**	**6.7**	**0.5**	**11**	**12.3**	**-1.3**

CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD — NRCC-PRF-E

Nonresidential Performance Compliance Method — (Page 9 of 16)

C8. ENERGY USE INTENSITY (EUI)

	Standard Design (kBtu/ft² / yr)	Proposed Design (kBtu/ft² / yr)	Margin (kBtu/ft² / yr)	Margin Percentage
GROSS EUI[1]	111.15	109.88	1.27	1.14
NET EUI[1]	111.15	109.88	1.27	1.14

[1] Notes: Gross EUI is Energy Use Total (not including PV)/Total Building Area. Net EUI is Energy Use Total (including PV)/Total Building Area.

D1. EXCEPTIONAL CONDITIONS

- The proposed building claims credit for non-mandatory lighting control credits via Power Adjustment Factors (PAFs) as outlined in Standards Table 140.6-A. Review NRCC-PRF-LTI DETAILS Table A to ensure that credit is not claimed for mandatory controls.
- The project uses the Simplified Geometry Performance Modeling Approach which is not capable of modeling daylighting controls and assumes the prescriptive Secondary Daylit Control requirements are met. PRESCRIPTIVE COMPLIANCE documentation (form NRCC-LTI-02-E) for the requirements of section 140.6(d) Automatic Daylighting Controls in Secondary Daylit Zones is required.
- The building does not include service water heating. Verify that service water heating is not required and is not included in the design.
- The project has thermal zones with operable openings modeled without mechanical compliance selected. Compliance with Section 140.4(n) Mechanical System Shutoff should be considered.
- The proposed building includes space(s) that are modeled with unknown HVAC system(s). Verify that the spaces modeled with unknown HVAC system(s) are either part of core and shell analysis which will be permitted for mechanical compliance in the future, or the spaces have an existing HVAC system not modeled for compliance, or the compliance scope does not include mechanical.
- Project is claiming Exception 2 to Section 140.10(a): No PV system is required where the required PV system size is less than 4 kWdc.
- PV/Battery Building Type has been modified from software defaults for one or more spaces. Review project's PV/Battery Building Type(s) with documentation author. Refer to Energy Code section 140.10 for Nonresidential or 170.2(g) for more information.

E4. ADDITIONAL REMARKS

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

Doors may have up to 24.9% glazing before they are considered "fenestration." Proposed wall stud size is not a choice in the CBECC-Com layers database. The closest available system R-value is modeled.

G1. ENVELOPE GENERAL INFORMATION (conditioned spaces only)

01	02	03	04
Opaque Surfaces & Orientation	Total Gross Surface Area (ft²)	Total Fenestration Area (ft²)	Window to Wall Ratio (%)
North-Facing[1]	379	12	3.17
East-Facing[2]	76	0	0
South-Facing[3]	379	36	9.5
West-Facing[4]	76	0	0
Total	**910**	**48**	**5.27**
Roof	320	0	0

Notes
[1]North-Facing is oriented to within 45 degrees of true north, including 45 00'00" east of north (NE), but excluding 45 00'00" west of north (NW),
[2]East-Facing is oriented to within 45 degrees of true east, including 45 00'00" south of east (SE), but excluding 45 00'00" north of east (NE),
[3]South-Facing is oriented to within 45 degrees of true south, including 45 00'00" west of south (SW), but excluding 45 00'00" east of south (SE),
[4]West-Facing is oriented to within 45 degrees of true west, including 45 00'00" north of west (NW), but excluding 45 00'00" south of west (SW),

G4. NONRESIDENTIAL AIR BARRIER

01	02
Building Story Name	Air Barrier
Com-Floor 1	No air barrier

G5. OPAQUE SURFACE ASSEMBLY SUMMARY

01	02	03	04	05	06		07	08	09	10
Surface Name	Construction Type	Area (ft²)	Framing Type	Cavity R-Value	Continuous R-Value		Units	Value	Description of Assembly Layers	Status[1]
					Interior	Exterior				
Metal Roof w/Closed Cells	Roof	320	Metal	15	N/A	20.54	U-factor	0.0328	Metal Standing Seam - 1/16 in. Cellular polyisocyanurate (unfaced) - 3 1/2 in. R21 Composite-1 Plywood - 3/8 in.	N
1.5 to 3 SPFcc o/1.625 57	Exterior Wall	910	Metal	9.75	N/A	13.5	U-factor	0.0564	Metal Siding - 1/16 in. Compliance Insulation R13.50 Composite-2 Plywood - 3/8 in.	N
Slab On Grade14	Underground Floor	320	N/A	0	N/A	N/A	F-factor	0.73	Slab Type =Unheated slab on grade Insulation Orientation =None Insulation R-Value =none	N

[1] *Status: N - New, A - Altered, E - Existing*

G6A. OPAQUE DOOR SUMMARY (NONRESIDENTIAL)

01	02	03	04
Assembly Name	Area (ft²)	Overall U-factor	Status[1]
Insulated Door10	46.6	0.2	N

[1] *Status: N - New, A - Altered, E - Existing*

G7A. FENESTRATION ASSEMBLY SUMMARY (NONRESIDENTIAL)

01	02	03	04	05	06	07	08	09
Fenestration Assembly Name	Fenestration Type/ Product Type / Frame Type	Certification Method[1]	Assembly Method	Area (ft²)	Overall U-factor	Overall SHGC	Overall VT	Status[2]
Jeld Wen Better Slider	Vertical fenestration Operable window N/A	NFRC	Manufactured	48	0.3	0.51	0.62	N

[1] *Notes: Newly installed fenestration shall have a certified NFRC Label Certificate or use the CEC default tables found in Table 110.6-A and Table 110.6-B. Center of Glass (COG) values are for the glass-only, determined by the manufacturer, and are shown for ease of verification. Site-built fenestration values are calculated per Nonresidential Appendix NA6 and are used in the analysis.*
[2] *Status: N - New, A - Altered, E - Existing*

K1. INDOOR CONDITIONED LIGHTING GENERAL INFO

01	02	03	04	05	06
Occupancy Type[1]	Conditioned Floor Area[2] (ft²)	Installed Lighting Power (Watts)	Lighting Control Credits (Watts)	Additional (Custom) Allowance	
				Area Category Footnotes (Watts)	Area Category Footnotes (Watts)
All Other Space Types	90	45	4.5	0	0
Hospital - Exam/Treatment	145	90	9	0	0
Hospital - Operating Rm	85	45	4.5	0	0
Building Totals:	**320**	**180**	**18**	**0**	**0**

[1] *See Table 140.6-C*
[2] *See NRCC-LTI-E for unconditioned spaces*
[3] *Lighting information for existing spaces modeled is not included in this table*

K2. INDOOR CONDITIONED LIGHTING SCHEDULE

Luminaire Schedule (includes all permanent installed lighting in conditioned space, and portable lighting over 0.3 w/ft² in offices)

01	02	03	04	05	06
Name or Item Tag	Complete Luminaire Description (i.e. 3-lamp fluorescent troffer, F32T8, one dimmable electronic ballast)	Installed Watts (Conditioned)			
		Watts per luminaire	How is Wattage determined	Total Number of Luminaires	Installed Watts
6	4200 Lumen Integrated LED Panel	45	According to	4	180

[1] *If lighting power densities were used in the compliance model Building Departments will need to check prescriptive forms for Luminaire Schedule details.*

K3. INDOOR CONDITIONED LIGHTING CONTROL CREDITS

Lighting Control Credits Schedule (includes all lighting controls installed in conditioned space for compliance credit per 140.6(a)2 and Table 140.6-A)

01	02	03	04	05	06	07	08	09
Area Description	Primary Function Area (must meet requirements of Table 140.6-A and 170.2.c)	Type of Lighting Control	Power Adjustment Factor (PAF)	Luminaire Item Tag	Watts per Luminaire	# of Luminaires	Lighting Controlled (Watts)	Control Credit (Watts)
S-1-Holding/Recovery	All Other Space Types	PAF Credit 1	0.1	6	45	1	45	4.5
S-2-Treatment	Hospital - Exam/Treatment	PAF Credit 1	0.1	6	45	2	90	9
S-3-Surgery	Hospital - Operating Rm	PAF Credit 1	0.1	6	45	1	45	4.5
							Lighting Control Credits (Conditioned) Total (Watts)	18

K4. INDOOR CONDITIONED LIGHTING MANDATORY LIGHTING CONTROL

Building Level Controls

01	02
Mandatory Demand Response 110.12(c)	Shut-Off Controls 130.1(c) & 160.5(b)4C
NA	NA

Area Level Controls (includes all lighting controls installed in conditioned space to meet mandatory requirements per 130.1)

03	04	05	06	07	08	09
Area Description	Area Category Primary Function Area	Area Controls 130.1(a) & 160.5(b)4A	Multi-Level Controls 130.1(b) & 160.5(b)4B	Shut-Off Controls 130.1(c) & 160.5(b)4C	Primary Daylighting 130.1(d) & 160.5(b)4D	Secondary Daylighting 140.5(d) & 160.5(b)4D
Treatment/Prep	Hospital - Exam/Treatment	Required	Required	Exempt	Required	NA
Remainder	Hospital - Operating Rm	Required	Exempt	Exempt	Required	NA

L. DECLARATION OF REQUIRED CERTIFICATES OF INSTALLATION

Selections made by Documentation Author indicate which Certificates of Installation must be submitted for the features to be recognized for compliance. These documents must be retained and provided to the building inspector during construction and can be found online

Building Component	Form/Title
Envelope	NRCI-ENV-01-E - Must be submitted for all buildings
Envelope	NRCI-ENV-E - Envelope (for all buildings)
Indoor Lighting	NRCI-LTI-01-E - Must be submitted for all buildings
Indoor Lighting	NRCI-LTI-E - Indoor Lighting (for all buildings)
Indoor Lighting	NRCI-LTI-05-E- Must be submitted for a Power Adjustment Factor (PAF) to be recognized for compliance.
Covered Process	NRCI-PRC-01-E - Must be submitted for all Covered Processes

M. DECLARATION OF REQUIRED CERTIFICATES OF ACCEPTANCE

Selections made by Documentation Author indicate which Certificates of Acceptance must be submitted for the features to be recognized for compliance. These documents must be provided to the building inspector during construction and must be completed through an Acceptance Test Technician Certification Provider (ATTCP).

Building Component	Form/Title & System Name(s)
Envelope	NRCA-ENV-02-F - NRFC label verification for fenestration
Indoor Lighting	NRCA-LTI-02-A - Occupancy Sensors and Automatic Time Switch Controls.
Indoor Lighting	NRCA-LTI-03-A - Automatic Daylight Controls.
Covered Process	NRCA-PRC-03-F Garage Exhaust
Covered Process	NRCA-PRC-12-F Elevator Lighting & Ventilation Controls
Covered Process	NRCA-PRC-13-F Escalators & Moving Walkways Speed Controls

N. DECLARATION OF REQUIRED CERTIFICATES OF VERIFICATION

Selections made by Documentation Author indicate which Certificates of Verification must be submitted for the features to be recognized for compliance. These documents must be retained and provided to the building inspector during construction and can be found online

There are no Certificates of Verification applicable to this project

REMARKS
Doors may have up to 24.9% glazing before they are considered "fenestration."
Proposed wall stud size is not a choice in the CBECC-Com layers database. The closest available system R-value is modeled.

Documentation Author's Declaration Statement

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

Documentation Author Name: Steve K. Means, CEA	Documentation Author Signature: Steve K. Means
Company: EasyTitle24	Signature Date: 12/2/2024
Address: 654 Oakland Avenue	CEA/HERS Certification Identification (if applicable): NR19-90-30004
City/State/Zip: Oakland, CA 94611	Phone: (925) 671-4789

Responsible Person's Declaration statement

I certify the following under penalty of perjury, under the laws of the State of California:

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

Responsible Designer Name: Teresa Owens	Responsible Designer Signature: Teresa Owens
Company: Clinic In A Can	Date Signed: 12/2/2024
Address: 9745 E 50th Street North	License #: Non-Sturctural/Non-Seismic
City/State/Zip: Wichita, KS 67226	Title: Designer Scope: Envelope
Phone: (316) 262-0953	
Responsible Designer Name: Teresa Owens	Responsible Designer Signature: Teresa Owens
Company: Clinic In A Can	Date Signed: 12/2/2024
Address: 9745 E 50th Street North	License #: Non-Sturctural/Non-Seismic
City/State/Zip: Wichita, KS 67226	Title: Designer Scope: Lighting
Phone: (316) 262-0953	

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-123126 INC:
REVIEWED FOR
SS ☐ FLS ☐ ACS ☑
DATE: 4/3/2025

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654 Oakland Avenue, Oakland, CA 94611

COUNTY VETERINARY CLINIC 2024.1126
2640 East Gibson Road

BB24-089
Reviewed for
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California Building Energy Efficiency Certificates of Compliance

Filed on the Plans pursuant to California Code of Regulations, Title 24, Part 1, Article 1, Section 10-103(a)2.A.

CZ 12

Project No.: 42224

Date: 12-2-2024

Sheet No.: T24.2

Title 24 Energy Compliance