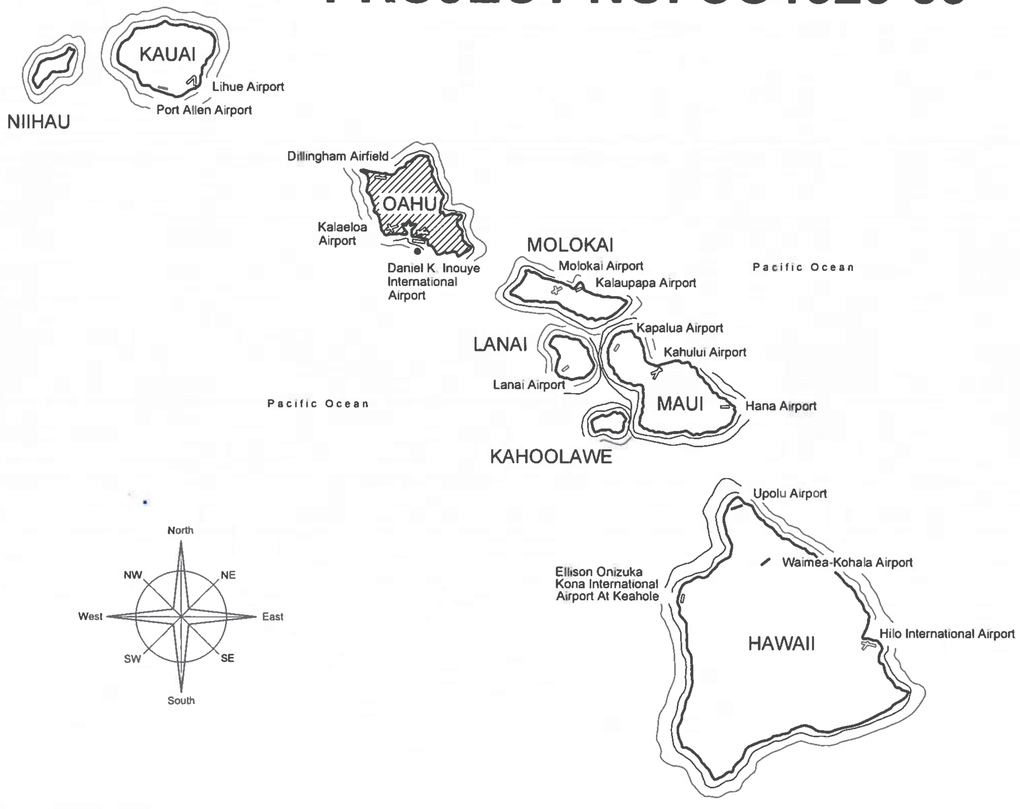
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
AIRPORTS

PLANS FOR

CONVERT CARGO BUILDING TO WORKSHOP

AT

DANIEL K. INOUYE INTERNATIONAL AIRPORT
HONOLULU, OAHU, HAWAII
PROJECT NO. CO1325-33



PROJECT TEAM

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LLOYD M. HIGA ARCHITECT

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OWEN CRABTREE MECHANICAL ENGINEER

FIRE PROTECTION:
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HONOLULU, HI 96813
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OWEN CRABTREE MECHANICAL ENGINEER

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HONOLULU, HI 96814
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AIRPORT VICINITY MAP

BUILDING LOCATION

DEPARTMENT OF TRANSPORTATION
STATE OF HAWAII

APPROVED:

DIRECTOR OF TRANSPORTATION — DATE 5/12/23

Airports Division
DEPARTMENT OF TRANSPORTATION
STATE OF HAWAII

LLOYD M. HIGA LICENSED PROFESSIONAL ARCHITECT No. AR-6093 HAWAII, U.S.A.

04/30/24
Licensed Expiration Date

This work was prepared by me or under my supervision.

DSGN.	DRWN.	CHKD.	APPD.
JM	KN	JM	

NO.	DATE	REVISIONS

DATE

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SHEET TITLE:

COVER SHEET, ISLAND MAP, VICINITY MAP

DATE	DWG. NO.
05/10/23	G000
SHEET	
1 OF 84 SHEETS	

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TYPICAL SYMBOLS

1 / A-4 — BUILDING SECTION USE SYMBOL AT BOTH ENDS OF CUT (5/8" DIAMETER)

1 / A-4 — WALL OR DETAIL SECTION (5/8" DIAMETER)

1 / A-4 — DETAIL (5/8" DIAMETER)

SIZE OR SHAPE AS REQUIRED

1 / A-4 — DETAIL ALTERNATE (5/8" DIAMETER)

N / W / NORTH / E / S — EXTERIOR, INTERIOR AND NORTH POINT REFERENCE ON PLANS (5/8" DIAMOND)

A / AD / AB / D / INT. ELEV. KEY / B / CD / BC / C — KEY TO INTERIOR ELEVATIONS (USE WHEN MORE THAN FOUR SIDES)

OFFICE (ROOM NAME) / 1208 (ROOM NUMBER) — ROOM IDENTIFICATION (1/4" X 5/8" BOX)

MATCH LINE SHADED PORTION IS THE SIDE CONSIDERED (3/8" DIAMETER)

WORKING POINT, CONTROL POINT, OR DATUM POINT (1/4" DIAMETER)

655.0 — NEW POINT ELEVATION (1/4" X 5/8" BOX)

655.0 — EXISTING POINT ELEVATION

1 / A — COLUMN LINE (3/8" DIAMETER)

100 — NEW CONTOURS

EXISTING CONTOURS

1B — PARTITION TYPE (3/8" DIAMOND)

PROPERTY LINE

13 / D — W OR L — DOOR, WINDOW OR LOUVER MARK (5/8" HEXAGON)

TYPICAL MATERIAL SECTIONS

EARTH

CONCRETE MASONRY UNIT

CONCRETE

SAND, MORTAR, PLASTER

BASE COURSE, CUSHION FILL, SUB BASE GRAVEL, CRUSHED ROCK

STEEL

WOOD, FINISH

PLYWOOD

WOOD FRAMING, BLOCKING

WOOD FRAMING, CONTINUOUS

CERAMIC TILE, QUARRY TILE, OR RESILIENT FLOORING

STATE OF HAWAII 1959

Airports Division
DEPARTMENT OF TRANSPORTATION
STATE OF HAWAII

LLOYD M. HIGA
LICENSED PROFESSIONAL ARCHITECT
No.AR-6093
HAWAII, U.S.A.

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INDEX TO DRAWINGS SYMBOLS

DATE : **05/10/23**

SHEET : 2 OF 84 SHEETS

DWG. NO. **G001**

C:\USERS\NAKAZAWA\ONEDRIVE - YAMASATO HIGA ARCHITECTS\2021-063 DOTA CONTINENTAL CARGO BLDG\CONTINENTAL WAREHOUSE - HNL\DRAWINGS\WORKING DWGS\802_G001 INDEX.DWG

A/C	AIR CONDITIONING
A.B.	ANCHOR BOLT
ABV.	ABOVE
AC	ASPHALTIC CONCRETE; ASPHALTIC PAVING
ACOUS.	ACOUSTICAL
A.D.	AREA DRAIN
ADD.	ADDENDUM
ADJ.	ADJUSTABLE
ADJA.	ADJACENT
A.F.F.	ABOVE FINISH FLOOR
AGGR.	AGGREGATE
AL.	ALUMINUM
ALT.	ALTER; ALTERNATE
ANOD.	ANODIZED
A.P.	ACCESS PANEL
APPROX.	APPROXIMATE
ARCH.	ARCHITECTURAL
ARROW	ARROW
A.T.	ACOUSTICAL TILE
BLDG.	BUILDING
BLK.	BLOCK
BLKG.	BLOCKING
B.M.	BENCH MARK
BM.	BEAM
B.O.C.	BOTTOM OF CURB
BOT.	BOTTOM
B.O.W.	BOTTOM OF WALL
BPU	BACKFLOW PREVENTER UNIT
BR.	BEDROOM
BRKT.	BRACKET
B.S.	BOTH SIDES
BSMT.	BASEMENT
BTWN.	BETWEEN
B.U.R.	BUILT-UP ROOFING
CAB.	CABINET
C.B.	CATCH BASIN
CEM.	CEMENT
CEM. PLAS.	CEMENT PLASTER
CER.	CERAMIC
C.G.	CORNER GUARD
C.I.	CAST IRON
C.I.P.	CAST-IN-PLACE
C.J.	CONTROL JOINT
C.L.F.	CHAIN LINK FENCE
CLG.	CEILING
CLO.	CLOSET
CLR.	CLEAR
CMU	CONCRETE MASONRY UNIT
CNTR.	COUNTER
C/O	CLEAN OUT, SEWER
C.O.	CASED OPENING
COL.	COLUMN
COMP.	COMPARTMENT
CONC.	CONCRETE
COND.	CONDITION
CONN.	CONNECTION
CONSTR.	CONSTRUCTION
CONT.	CONTINUOUS
CONTR.	CONTRACTOR
COORD.	COORDINATE
COP.	COPPER
CORR.	CORRIDOR
CPT.	CARPET
C.T.	CERAMIC TILE
CTR.	CENTER
C.W.	COLD WATER
D	DRAIN LINE
DBL.	DOUBLE
D/C	DROP CURB
D.D.	DECK DRAIN
DEPT.	DEPARTMENT
DET.	DETAIL
D.F.	DRINKING FOUNTAIN
DI	DRAIN INTAKE
DIA.	DIAMETER
DIAG.	DIAGONAL
DIM.	DIMENSION
DISP.	DISPENSER
DN.	DOWN
D.O.	DOOR OPENING
DR.	DOOR
D.S.	DOWNSPOUT
D.S.P.	DRY STANDPIPE
DWG.	DRAWING
DWR.	DRAWER
(E) OR EXST.	EXISTING
E	EAST OR ELECTRICAL LINE
EA.	EACH
E.C.	ELASTOMERIC COATING; EXPOSED CONSTRUCTION
E.F.S.	EXTERIOR FINISH SYSTEM
EHH	ELECTRICAL HANDHOLE
E.J.	EXPANSION JOINT
EL.	ELEVATION
ELAS.	ELASTOMERIC
ELEC.	ELECTRICAL
EMH	ELECTRICAL MANHOLE
ENCL.	ENCLOSURE
E.O.P.	EDGE OF PAVEMENT
E.O.S.	EDGE OF SLAB
E.P.	ELECTRICAL PANEL BOARD
E.P.B.	ELECTRICAL PULLBOX
EQ.	EQUAL
EQPT.	EQUIPMENT
E.W.	EACH WAY
E.W.C.	ELECTRICAL WATER COOLER
EXH.	EXHAUST
EXP.	EXPANSION
EXPO.	EXPOSED
EXT.	EXTERIOR
F.	FEMALE
F.A.	FIRE ALARM
F.B.	FLAT BAR
F.D.	FLOOR DRAIN
FDN.	FOUNDATION
F.G.	FINISH GRADE
FH	FIRE HYDRANT
FIN.	FINISH
FIXT.	FIXTURE
FL.	FLOOR
FLASH.	FLASHING
FLDG.	FOLDING
FLG.	FLOORING
FLUOR.	FLUORESCENT
F.O.C.	FACE OF CONCRETE
F.O.F.	FACE OF FINISH
F.O.M.	FACE OF MASONRY
F.O.S.	FACE OF STUD; SLAB; STRUCTURE
F.O.W.	FACE OF WALL
FR.	FRAME
F.R.P.	FIBERGLASS REINFORCED POLYESTER PANEL
F.S.	FLOOR SINK
FT.	FOOT; FEET
F.T.D.	FACIAL TISSUE DISPENSER
FTG.	FOOTING
FURR.	FURRING; FURRED
FUT.	FUTURE
GA.	GAUGE
GALV.	GALVANIZED
G.B.	GRAB BAR
GL.	GLASS
GLU-LAM	GLU-LAMINATED WOOD
GND.	GROUND
GR.	GRADE
GRD.	GROUND
G.S.	GYPSUM SHEATHING
G.S.B.	GYPSUM SHEATHING BOARD
G.W.B.	GYPSUM WALLBOARD
GYP.	GYPSUM
H.	HIGH
H.B.	HOSE BIBB
H.C.	HOLLOW CORE
HD.	HEAD
HDCP.	HANDICAPPED
HDWD.	HARDWOOD
HDWE.	HARDWARE
H.M.	HOLLOW METAL
HORIZ.	HORIZONTAL
H.S.	HAND SINK
HT.	HEIGHT
HVAC	HEATING, VENTILATION AND AIR CONDITIONING
H.W.	HOT WATER
HWM	HIGH WATER MARK
I	IRRIGATION LINE
I.D.	INSIDE DIAMETER
IN.	INCH
INCL.	INCLUSIVE; INCLUDED; INCLUDING
INSUL.	INSULATION
INT.	INTERIOR
INTEG.	INTEGRATED
INV.	INVERT
IW	IRRIGATION WATER
JAN.	JANITOR
J.B.	JUNCTION BOX
J.C.	JANITORS CLOSET
JST.	JOIST
JT.	JOINT
K.D.	KNOCK DOWN
KO.	KNOCK OUT
L.	LENGTH; LONG
LAB.	LABORATORY
LAM.	LAMINATE; LAMINATED
LAV.	LAVATORY
LB.	POUND
LDG.	LANDING
L.F.	LINEAL FOOT
L.H.	LEFT HAND
LIQ.	LIQUOR
LKR.	LOCKER
LOC.	LOCATION
L.R.	LIVING ROOM
LT.	LIGHT
LVR.	LOUVER
M.	MALE
MAR.	MARBLE
MAS.	MASONRY
MAX.	MAXIMUM
M.B.	MACHINE BOLT
M.C.	MEDICINE CABINET
MECH.	MECHANICAL
MEMB.	MEMBRANE
MET.	METAL
MFR.	MANUFACTURER
MH.	MANHOLE
MIR.	MIRROR
MISC.	MISCELLANEOUS
MLDG.	MOULDING; MOLDING
M.O.	MASONRY OPENING
M.R.	MOISTURE RESISTANT
MTD.	MOUNTED
MTG.	MOUNTING
MTL.	MATERIAL
MUL.	MULLION
MUN.	MUNTIN
N	NORTH
N.I.C.	NOT IN CONTRACT
NO.	NUMBER
NOM.	NOMINAL
N.T.S.	NOT TO SCALE
OA.	OVERALL
OBS.	OBSCURE
O.C.	ON CENTER
O.D.	OUTSIDE DIAMETER (DIMENSION)
O.F.C.I.	OWNER FURNISHED CONTRACTOR INSTALLED
OF. D.	OVERFLOW DRAIN
OFF.	OFFICE
O.F.O.I.	OWNER FURNISHED OWNER INSTALLED
OH.	OVERHANG
O.I.	OWNER INSTALLED
OPNG.	OPENING
OPP.	OPPOSITE
OPP.HAND	OPPOSITE HAND
OPR.	OPERABLE
O/T	OVERHEAD TELEPHONE
OVHD.	OVERHEAD
P	PROPERTY LINE
P.A.	PUBLIC ACCESS SYSTEM
PC.	PIECE; POST CONTRACT
P.D.	PLANTER DRAIN
PERIM.	PERIMETER
PH.	PENTHOUSE
PL.	PLATE
P.LAM.	PLASTIC LAMINATE
PLAS.	PLASTER
PLBG.	PLUMBING
PLYWD.	PLYWOOD
PNL.	PANEL
PR.	PAIR
PRCST.	PRECAST
PREFAB.	PREFABRICATE
PREP.	PREPARATION
PROP.	PROPERTY
PRV.	PRESSURE REDUCING VALVE
P.S.F.	POUNDS PER FOOT
PT.	POINT; PAINT
P.T.D.	PAPER TOWEL DISPENSER
PTD.	PAINTED
P.T.D.R.	PAPER TOWEL DISPENSER & WATER RECEPTACLE
PTN.	PARTITION
P.T.R.	PAPER TOWEL RECEPTACLE
PVC	WHITE PLASTIC PIPE
PVMT.	PAVEMENT
QCV	QUICK COUPLING VALVE
Q.T.	QUARRY TILE
R.	RADIUS
R.B.	RESILIENT BASE
RCP	REINFORCED CONCRETE PIPE
R.D.	ROOF DRAIN
REBAR.	REINFORCING BAR
REF.	REFERENCE
REFL.	REFLECTED
REFR.	REINFORCED; REINFORCING
REQ.	REQUIRED
RESIL.	RESILIENT
REST.	RESTROOM
REV.	REVISED; REVISION
RF.	ROOF
R.F.	RESILIENT FLOORING
RFG.	ROOFING
RGH.	ROUGH
RLG.	RAILING
RM.	ROOM
RND.	ROUND
R.O.	ROUGH OPENING
R.W.C.	RAIN WATER CONDUCTOR
S	SEWER LINE
S.	SOUTH
S.A.	SINGLE ACTING
SC	SCALE
S.C.	SOLID CORE
S.C.D.	SEAT COVER DISPENSER
SCHED.	SCHEDULE
SCP.	SCUPPER
SCR.	SCREEN
S.C.R.	SHOWER CURTAIN ROD
SCV.	SPRINKLER CONTROL VALVE
S.D.	SMOKE DETECTOR; SOAP DISPENSER
S.DISH	SOAP DISH
SDMH	STORM DRAIN MANHOLE
SECT.	SECTION
S.F.	SQUARE FOOT
SH.	SHELF
SHR.	SHOWER
SHT.	SHEET
SHTG.	SHEATHING
SIM.	SIMILAR
SL.	SLOPE
SLDG.	SLIDING
SLGT.	STREET LIGHT
SLNT	SEALANT
S.M.	SHEET METAL
SMH	SEWER MANHOLE
S.N.D.	SANITARY NAPKIN DISPENSER
S.N.R.	SANITARY NAPKIN RECEPTACLE
SP	SIGN POST
SP.	SPACE
SPEC.	SPECIFICATION
SPKR.	SPEAKER
SPRH.	SPRINKLER HEAD
SQ.	SQUARE
S.SK.	SERVICE SINK
S.ST.	STAINLESS STEEL
ST.	STONE
STA.	STATION
STD.	STANDARD
STL.	STEEL
STN.	STAIN
STOR.	STORAGE
STRL.	STRUCTURAL
SURR.	SURROUND
SUSP.	SUSPENDED
SVC.	SERVICE
SW.	SWITCH
S/W	SIDEWALK
SYM.	SYMMETRICAL
SYS.	SYSTEM
T&G	TONGUE AND GROOVE
TACKBD.	TACKBOARD
T.B.	TOWEL BAR
T.B.B.	TILE BACKER BOARD
TBL.	TABLE
TCRP	TRASH CAN RETAINER POST
TCRT	TENNIS COURT
T.D.	TRENCH DRAIN
TEL.	TELEPHONE
TEMP.	TEMPERED; TEMPORARY
TER.	TERRAZZO
THK.	THICK; THICKNESS
THR.	THRESHOLD
THRU.	THROUGH
TLT.	TOILET
TMH.	TELEPHONE MANHOLE
T.M.K.	TAX MAP KEY
T.O.()	TOP OF (ITEM)
T.O.C.	TOP OF CURB
T.O.P.	TOP OF PAVEMENT
T.O.S.	TOP OF SLAB
T.O.W.	TOP OF WALL
T.P.D.	TOILET PAPER DISPENSER
T.P.H.	TOILET PAPER HOLDER
T.PT.	TEXTURED PAINT
TRAN.	TRANSITION
TRD.	TREAD
T.S.	TOWEL SHELF
TSWL	TOP SWALE (LEFT)
TSWR	TOP SWALE (RIGHT)
TV.	TELEVISION
TYP.	TYPICAL
UC.	UNDERCUT
U/E	UNDERGROUND ELECTRICAL
U.L.	UNDERWRITERS LABORATORY
UNK.	UNFINISHED
U.O.N.	UNLESS OTHERWISE NOTED
UR.	URINAL
U/T	UNDERGROUND TELEPHONE
VAL.	VALANCE
VAR.	VARIES
VBU	VACUUM BREAKER UNIT
VERT.	VERTICAL
VEST.	VESTIBULE
VOL.	VOLUME
V.P.	VENEER PLASTER
V.T.R.	VENT THROUGH ROOF
V.I.F.	VERIFY IN FIELD
W	WATER LINE
W.	WIDE; WIDTH; WEST
W/	WITH
W/O	WITHOUT
W.C.	WALL COVERING; WATER CLOSET
WD.	WOOD
WDW.	WINDOW
WFL	WOODEN FENCE LINE
W.GL.	WIRE GLASS
W.H.	WATER HEATER
WMB	WATER METER BOX
W.O.	WHERE OCCURS
W.P.	WATERPROOFING
WP.MEMB.	WATERPROOF MEMBRANE
W.R.	WATER RESISTANT
WRB.	WARDROBE
WSCT.	WAINSCOT
W.S.P.	WET STAND PIPE
WT.	WEIGHT
W.W.F.	WELDED WIRE FABRIC
WV	WATER VALVE
WV_A	WATER VALVE BOX (DIA=0.9')
WVMH	WATER VALVE MANHOLE
&	AND
∠	ANGLE
@	AT
℄	CENTERLINE
[	CHANNEL
'	FLOOR; FEET
"	INCH; INCHES
%	PERCENT
#	POUND; NUMBER
ℙ	PROPERTY LINE

STATE OF HAWAII
1959
STATEHOOD

Airports Division
DEPARTMENT OF TRANSPORTATION
STATE OF HAWAII

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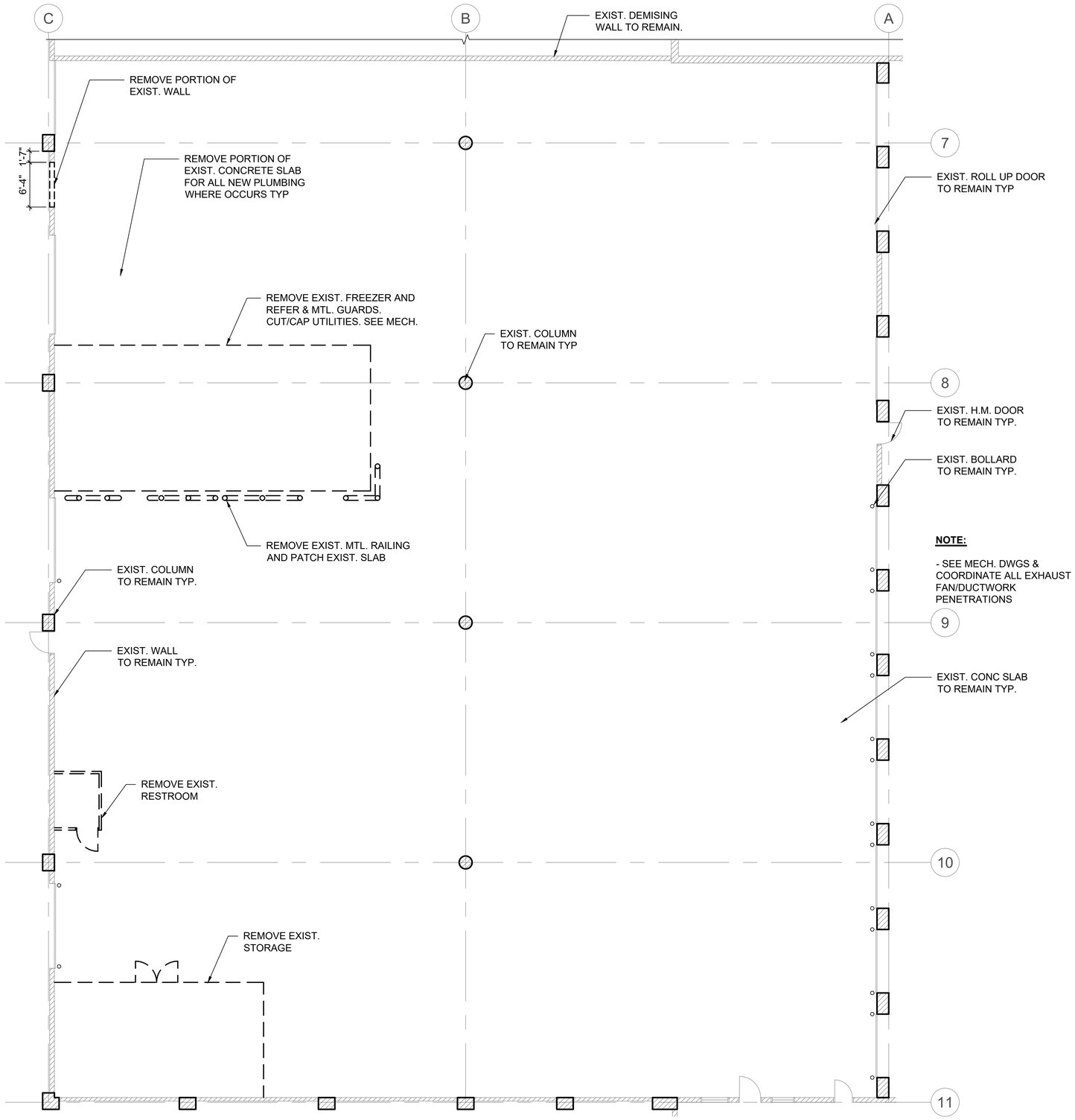
3 OF 84 SHEETS	

C:\USERS\NAKAZAWA\ONEDRIVE - YAMASATO HIGA ARCHITECTS\2021-063 DOT\A CONTINENTAL CARGO BLDG\CONTINENTAL WAREHOUSE - HNL\DRAWINGS\WORKING DWGS\063_G002 ABBR.DWG



NOTE:

- SEE MECH. DWGS & COORDINATE ALL EXHAUST FAN/DUCTWORK PENETRATIONS

1 / A-001.1 EXISTING/DEMOLITION PLAN

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

2' 0 2' 4' 6' 10' 14'

STATE OF HAWAII 1959

Airports Division

DEPARTMENT OF TRANSPORTATION
STATE OF HAWAII

LLOYD M. HIGA
LICENSED PROFESSIONAL ARCHITECT
No.AR-6093
HAWAII, U.S.A.

04/30/24
Licensed Expiration Date

This work was prepared by me or under my supervision.

DSGN.	DRWN.	CHKD.	APPD.
JM	KN	JM	

NO.	DATE	REVISIONS

DATE

PROJECT TITLE :

CONVERT CARGO BUILDING TO WORKSHOP

AT
DANIEL K. INOUYE INTERNATIONAL AIRPORT
HONOLULU, OAHU, HAWAII

PROJECT NO.:

CO1325-33

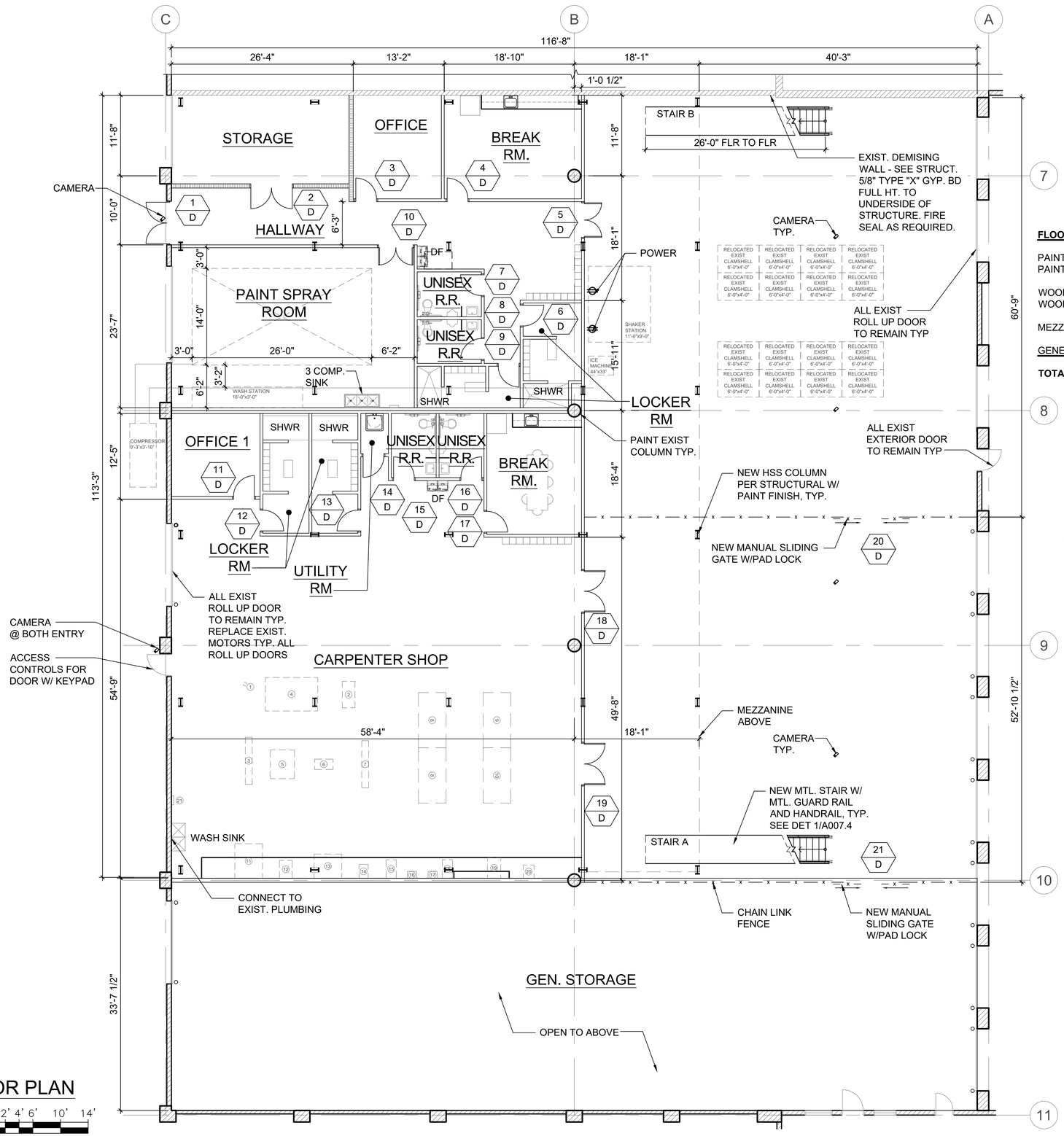
SHEET TITLE:

EXISTING/DEMOLITION PLAN

DATE :
05/10/23
SHEET :
4 OF 84 SHEETS

DWG. NO.
A001.1

C:\USERS\NAKAZAWA\ONEDRIVE - YAMASATO HIGA ARCHITECTS\2021-063 DOT\A CONTINENTAL CARGO BLDG\CONTINENTAL WAREHOUSE_HNL\DRAWINGS\WORKING DWGS\004 A001.1 DEMO PLAN.DWG



EQUIPMENT LIST	
1	DISC. SANDER
2	24" SURFACE PLANER
3	8" JOINTER
4	10" TABLE SAW
5	10" TABLE SAW
6	18" SURFACE PLANER
7	8" JOINTER
8	4' X 8" ROLLING WORK TABLE
9	4' X 8" ROLLING WORK TABLE
10	4' X 8" ROLLING WORK TABLE
11	16" RADIAL ARM SAW
12	8 1/2" CHOPSAW
13	24" BAND SAW
14	14" BAND SAW
15	16 1/2" DRILL PRESS
16	6" BENCH GRINDER
17	6" BUFFER
18	16 1/2" DRILL PRESS
19	12" RADIAL ARM SAW
20	10" SLD.CHOPSAW
21	EMERGENCY EYE WASH PORTABLE, SELF CONTAINTED

1 / A-002.1 RENOVATED FLOOR PLAN

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

2' 0 2' 4' 6' 10' 14'

FLOOR AREA CALCULATION:

PAINT SHOP = 2,674 SF
PAINT SHOP STOR = 3,618 SF

WOOD SHOP - 3,890 SF
WOOD SHOP STOR = 3,067 SF

MEZZANINE = 2,093 SF

GENERAL AIRPORT STOR = 3,938 SF

TOTAL BUILDING FLOOR AREA = 19,280 SF

WALL LEGEND

EXIST WALL TO REMAIN

3 5/8" METAL STUD @ 16" O.C. W/ 5/8" TYPE "X" GYPBD. BOTH SIDE

STATE OF HAWAII 1959 STATEHOOD

Airports Division
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STATE OF HAWAII

LLOYD M. HIGA
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HAWAII, U.S.A.

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DATE

PROJECT TITLE :

CONVERT CARGO BUILDING TO WORKSHOP

AT
DANIEL K. INOUYE INTERNATIONAL AIRPORT
HONOLULU, OAHU, HAWAII

PROJECT NO.:

CO1325-33

SHEET TITLE:

RENOVATED FLOOR PLAN

DATE :
05/10/23
SHEET :
5 OF 84 SHEETS

DWG. NO.
A002.1

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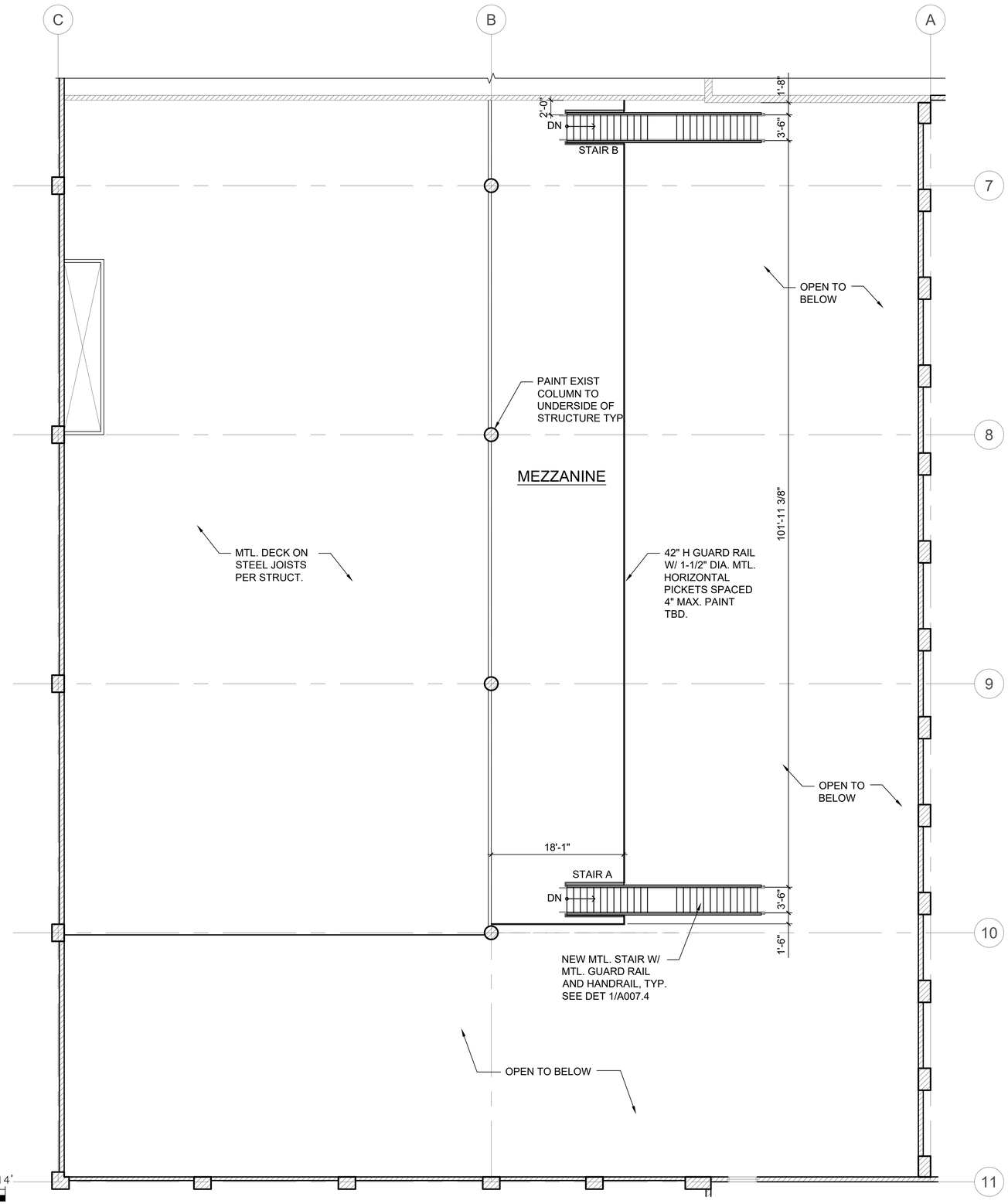

1 / A-002.2 MEZZANINE FLOOR PLAN

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

2' 0 2' 4' 6' 10' 14'

STATE OF HAWAII 1959

Airports Division

DEPARTMENT OF TRANSPORTATION
STATE OF HAWAII

LLOYD M. HIGA
LICENSED PROFESSIONAL ARCHITECT
No.AR-6093
HAWAII, U.S.A.

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JM	KN	JM	

NO.	DATE	REVISIONS

DATE

PROJECT TITLE :

CONVERT CARGO BUILDING TO WORKSHOP

AT
DANIEL K. INOUYE INTERNATIONAL AIRPORT
HONOLULU, OAHU, HAWAII

PROJECT NO.:

CO1325-33

SHEET TITLE:

MEZZANINE FLOOR PLAN

DATE :
05/10/23

SHEET :
6 OF 84 SHEETS

DWG. NO.
A002.2

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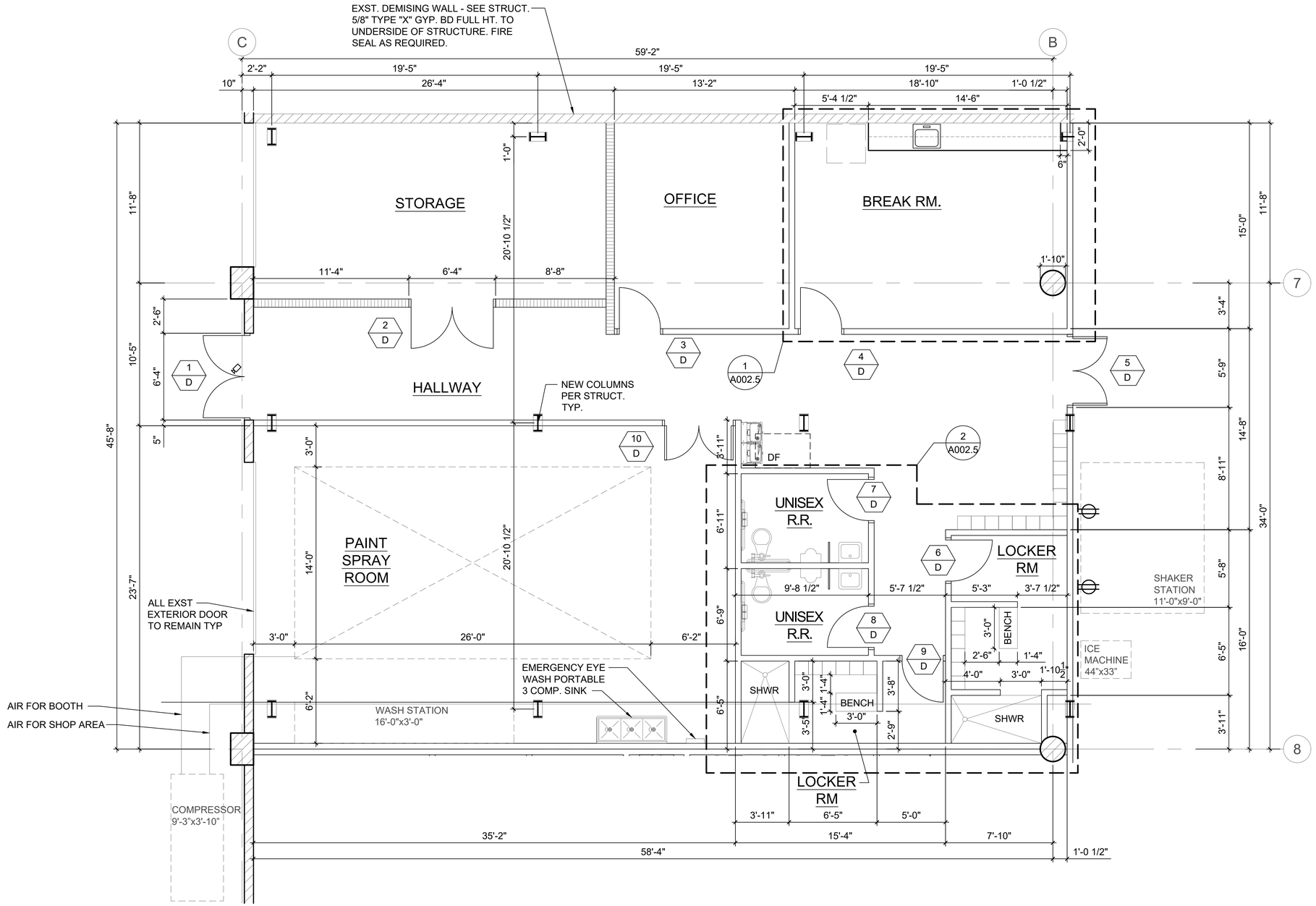

1 / A-002.2 PAINT SHOP PLAN

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

1' 0 2' 4' 8'

Airports Division
DEPARTMENT OF TRANSPORTATION
STATE OF HAWAII

LLOYD M. HIGA
LICENSED PROFESSIONAL ARCHITECT
No.AR-6093
HAWAII, U.S.A.

04/30/24
Licensed Expiration Date

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JM	KN	JM	

NO.	DATE	REVISIONS

DATE

PROJECT TITLE :

CONVERT CARGO BUILDING TO WORKSHOP

AT
DANIEL K. INOUYE INTERNATIONAL AIRPORT
HONOLULU, OAHU, HAWAII

PROJECT NO.:

CO1325-33

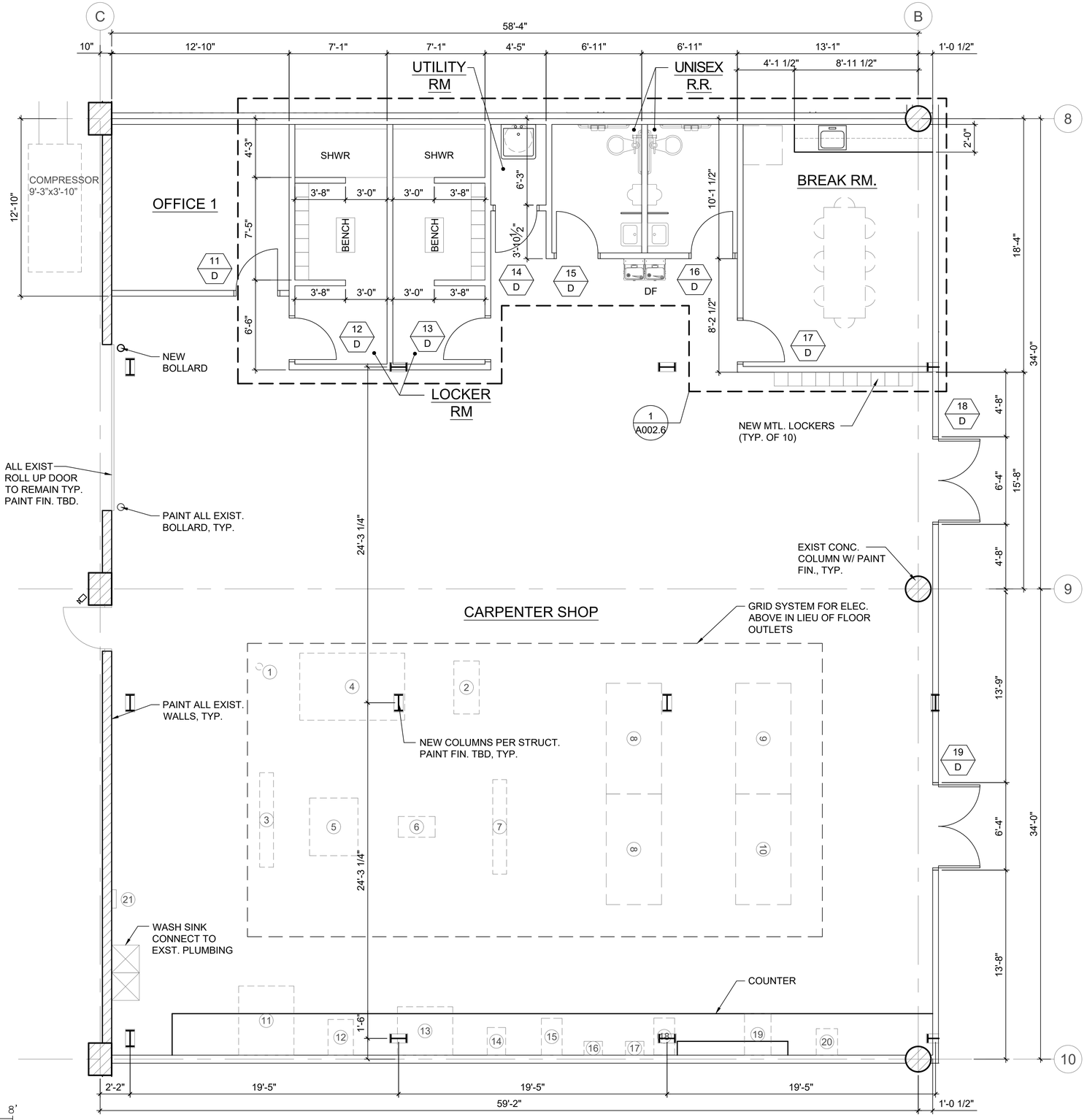
SHEET TITLE:

PAINT SHOP PLAN

DATE :
05/10/23
SHEET :
7 OF 84 SHEETS

DWG. NO.
A002.3

C:\USERS\NAKAZAWA\ONEDRIVE - YAMASATO HIGA ARCHITECTS\2021-063 DOTA CONTINENTAL CARGO BLDG\CONTINENTAL WAREHOUSE - HNL\DRAWINGS\WORKING DWGS\A002.3_REND PAINT PLAN.DWG



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2	24" SURFACE PLANER
3	8" JOINTER
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18	16 1/2" DRILL PRESS
19	12" RADIAL ARM SAW
20	10" SLD.CHOPSAW
21	EMERGENCY EYE WASH PORTABLE, SELF CONTAINTED

1 / A-002.2 CARPENTER SHOP PLAN

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

1' 0 2' 4' 8'

STATE OF HAWAII 1959

Airports Division
DEPARTMENT OF TRANSPORTATION
STATE OF HAWAII

LLOYD M. HIGA
LICENSED PROFESSIONAL ARCHITECT
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JM	KN	JM	

NO.	DATE	REVISIONS

DATE

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CONVERT CARGO BUILDING TO WORKSHOP

AT
DANIEL K. INOUYE INTERNATIONAL AIRPORT
HONOLULU, OAHU, HAWAII

PROJECT NO.:

CO1325-33

SHEET TITLE:

CARPENTER SHOP PLAN

DATE :
05/10/23

SHEET :
8 OF 84 SHEETS

DWG. NO.
A002.4

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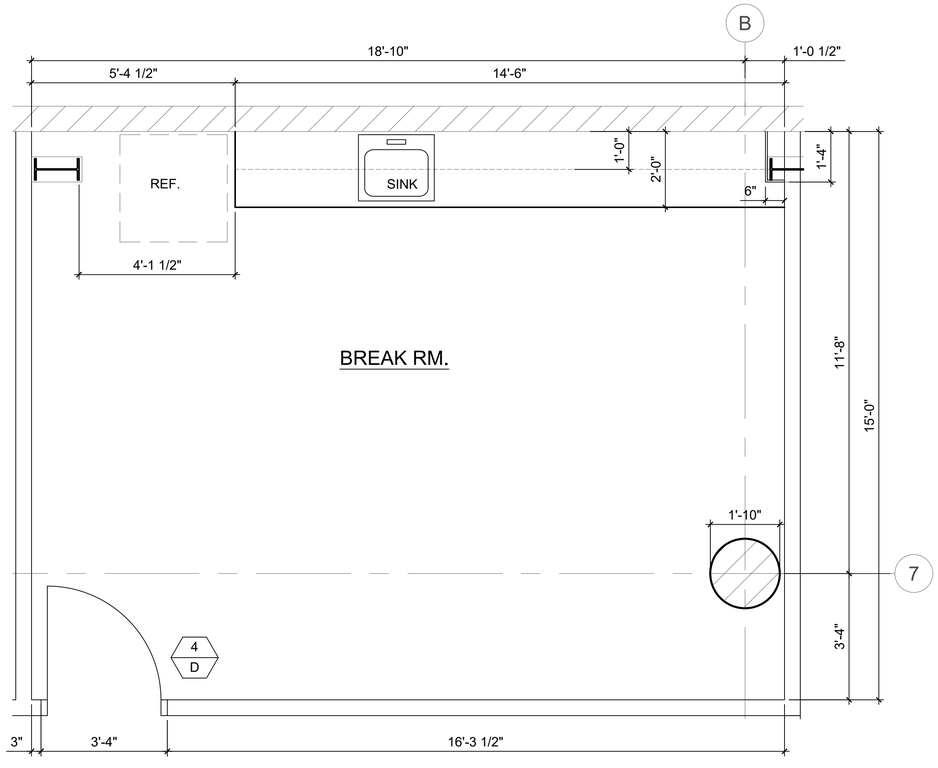
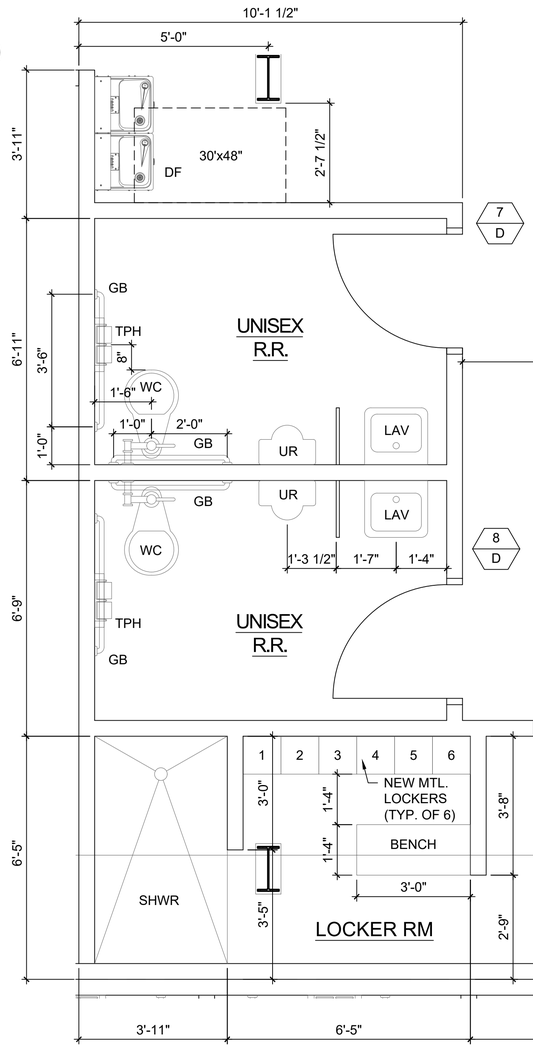


1 A-002.5 **BREAK RM @ PAINT SHOP**

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

1' 0 2' 4'



2 A-002.5 **ENLARGED PLAN @ PAINT SHOP**

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

1' 0 2' 4'

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LLOYD M. HIGA
LICENSED PROFESSIONAL ARCHITECT
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JM	KN	JM	

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CONVERT CARGO BUILDING TO WORKSHOP

AT
DANIEL K. INOUYE INTERNATIONAL AIRPORT
HONOLULU, OAHU, HAWAII

PROJECT NO.:

CO1325-33

SHEET TITLE:

ENLARGED PLAN @ PAINT SHOP

DATE :	DWG. NO.
05/10/23	A002.5
SHEET :	
9 OF 84 SHEETS	

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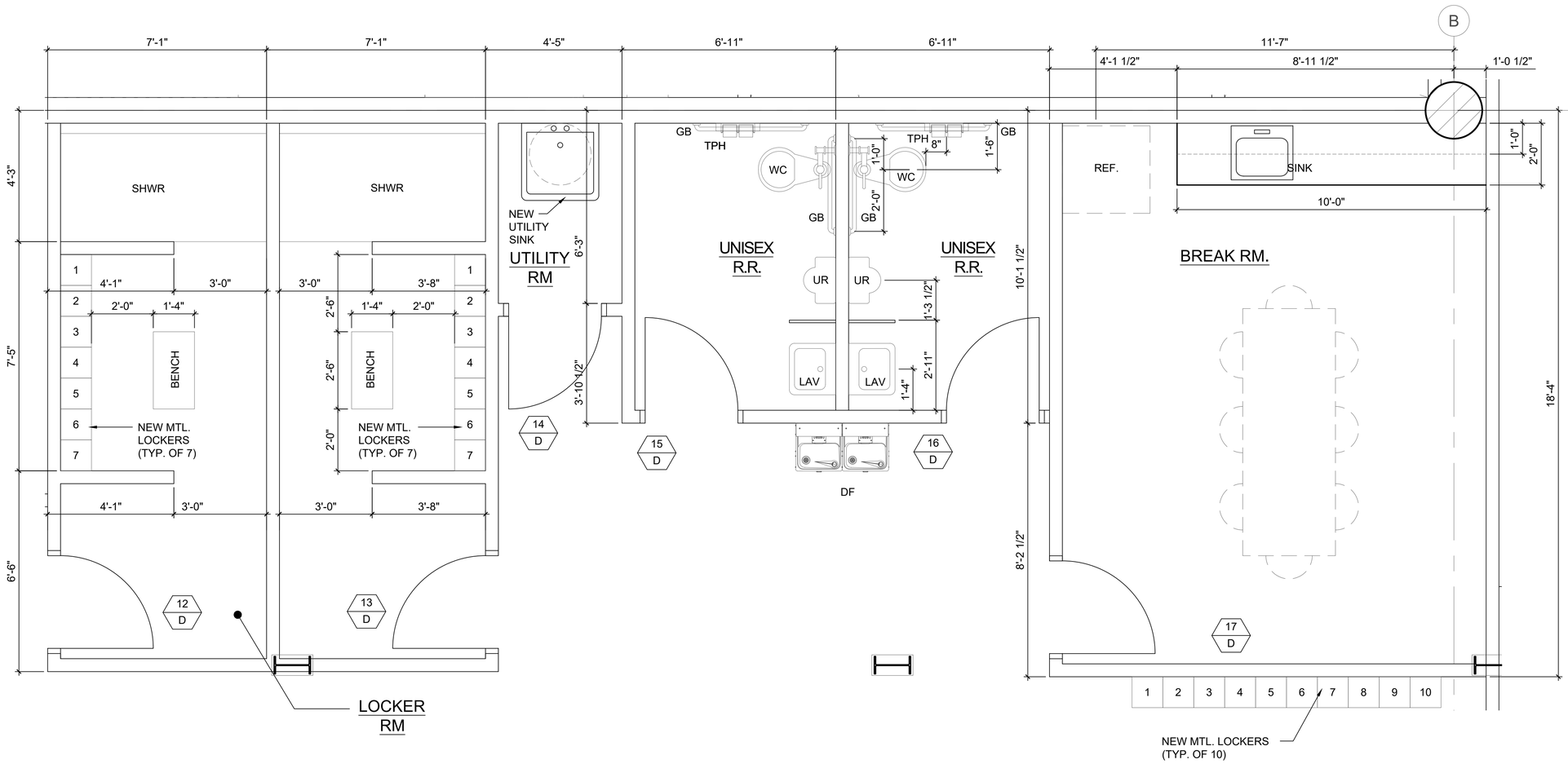

1 A-002.6 ENLARGED PLAN @ CARPENTER SHOP

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

1' 0 2' 4'

Airports Division
DEPARTMENT OF TRANSPORTATION
STATE OF HAWAII

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LICENSED PROFESSIONAL ARCHITECT
No.AR-6093
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DATE

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CONVERT CARGO BUILDING TO WORKSHOP

AT
DANIEL K. INOUYE INTERNATIONAL AIRPORT
HONOLULU, OAHU, HAWAII

PROJECT NO.:

CO1325-33

SHEET TITLE:

ENLARGED PLAN @ CARPENTER SHOP

DATE :
05/10/23
SHEET :
10 OF 84 SHEETS

DWG. NO.
A002.6

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INTERIOR FINISH LIST

CODE	MATERIAL	MANUFACTURER	SYTLE/PATTERN/COLOR	REMARKS
ACT-1	ACOUSTICAL CEILING PANEL	ARMSTRONG	STYLE: CALLA SIZE: 2X2 COLOR: WHITE GRID: 15/16" PRELUDE, SQUARE LAY-IN	CONF RMS, LOBBY, COMP LAB
CL-1	PAINT	SHERWIN WILLIAMS	COLOR: PURE WHITE SHEEN FLAT	GYP BD CEILINGS/SOFFITS
VT-1	VINYL TILE	MOHAWK	STYLE: PREMIUM WOOD, LIVING LOCAL (C0194) COLOR: TAN TONE SIZE: 8 X 52	HALLWAYS, SUPPLY RM, IT RM, BREAK RM
VT-2	VINYL TILE	MOHAWK	STYLE: STONEWORK, LIVING LOCAL (C0179) COLOR: IGNEOUS 950 SIZE: 12 X 24	LOCKER RMS
CPT-1	CARPET TILE	OBEX	STYLE: CUT/CROSS COLOR: DARK GREY	MAIN ENTRY ALCOVE, BACK HALLWAY
CPT-2	CARPET TILE	OBEX	STYLE: CUT/CROSS COLOR: BLUE	LOBBY
CPT-3	CARPET TILE	MOHAWK	STYLE: ENLIVEDED, ART EXPOSURE (BT455) COLOR: ECRU, 958 SIZE: 24 X 24	BADGING, COMPUTER LAB, CONF ROOMS
CPT-4	CARPET TILE	MOHAWK	STYLE: cHILLD, RELAXING FLOORS (GT424) COLOR: FOCUS, 829 SIZE: 12 X 36	OFFICES, WELLNESS ROOM
CS-1	CONCRETE SEALER	SCOFIELD	STYLE: SCOFIELD FORMULA ONE LITHIUM CONCRETE DENSIFIER MP	BACK HALLWAY TO RR'S
B-1	RUBBER BASE 4"	MOHAWK	COLOR: AIRCRAFT CARRIER, 073	LOBBY AREA, BADGING AREA, SUPPLY RM, HALLWAY, BREAK, WELLNESS, CONF RMS, COMP LAB
B-2	RUBBER BASE 4"	MOHAWK	COLOR: DOVE, 053	OFFICES
PL-1	PLASTIC LAMINATE	WILSONART	COLOR: NEO WALNUT, #7991 FINISH: 38 FINE VELVET	LOBBY RECEPTION COUNTER PANELS
PL-2	PLASTIC LAMINATE	WILSONART	COLOR: TAILORED LINEN, #4992 FINISH: 38 FINE VELVET	BREAK RM, WELLNESS RM
PT-1	PAINT	SHERWIN WILLIAMS	COLOR: CEILING BRIGHT WHITE, SW7007 SHEEN: FLAT	BYP BD CEILINGS/SOFFITS THROUGHOUT
PT-2	PAINT	SHERWIN WILLIAMS	COLOR: ICE CUBE, SW6252 SHEEN: SATEEN	LOBBY, BADGING AREA WALLS, CONF RMS, COMP LAB., HALLWAYS
PT-3	PAINT	SHERWIN WILLIAMS	COLOR: MEDITATIVE, SW6227 SHEEN: SATEEN	WELLNESS RM
PT-4	PAINT	SHERWIN WILLIAMS	COLOR: SILVERPOINTE, SW7653 SHEEN: SATEEN	OFFICE
PT-5	PAINT	SHERWIN WILLIAMS	COLOR: NEBULOUSE WHITE, SW7063 SHEEN: SATEEN,(SEMI-GLOSS AT BREAK/SHOWER)	BREAK RM, LOCKER RMS, SHOWER RM
T-1	PORCELAIN TILE	DALTILE	STYLE: STONE ATACHE COLOR: EMINENCE GREY SIZE: 24X48 FINISH: MATTE	SHOWER ROOM FLOOR
T-2	PORCELAIN TILE	DALTILE	STYLE: STONE ATACHE COLOR: EMINENCE GREY SIZE: 12X24 FINISH: MATTE	SHOWER STALL WALLS/WAINSCOT
T-3	PORCELAIN TILE	DALTILE	STYLE: STONE ATACHE COLOR: EMINENCE GREY SIZE: ABSTRACT FINISH: MATTE	SHOWER STALL FLOOR
SS-1	SOLID SURFACE	CORIAN	COLOR: RAIN CLOUD	LOBBY RECEPTION COUNTER
SS-2	SOLID SURFACE	CORIAN	COLOR: PEBBLE TERRAZZO	BREAK RM, WELLNESS RM COUNTERS
SS-3	SOLID SURFACE	CORIAN	COLOR: DOVE	SHOWER RM BENCH
SP-1	SOLID POLYMER RESIN PANEL	3-FORM	STYLE: SAVU COLOR: OFF SHORE SIZE: 1/4" MOUNT: STAND OFFS	LOBBY RECEPTION COUNTER FRONT PANEL

STATE OF HAWAII 1959

Airports Division
DEPARTMENT OF TRANSPORTATION
STATE OF HAWAII

LLOYD M. HIGA
LICENSED PROFESSIONAL ARCHITECT
No.AR-6093
HAWAII, U.S.A.

04/30/24
Licensed Expiration Date

This work was prepared by me or under my supervision.

DSGN.	DRWN.	CHKD.	APPD.
JM	KN	JM	

NO.	DATE	REVISIONS

DATE

PROJECT TITLE :

CONVERT CARGO BUILDING TO WORKSHOP

AT
DANIEL K. INOUYE INTERNATIONAL AIRPORT
HONOLULU, OAHU, HAWAII

PROJECT NO.:

CO1325-33

SHEET TITLE:

INTERIOR FINISH SCHEDULE

DATE :
05/10/23
SHEET :
11 OF 84 SHEETS

DWG. NO.
A002.7

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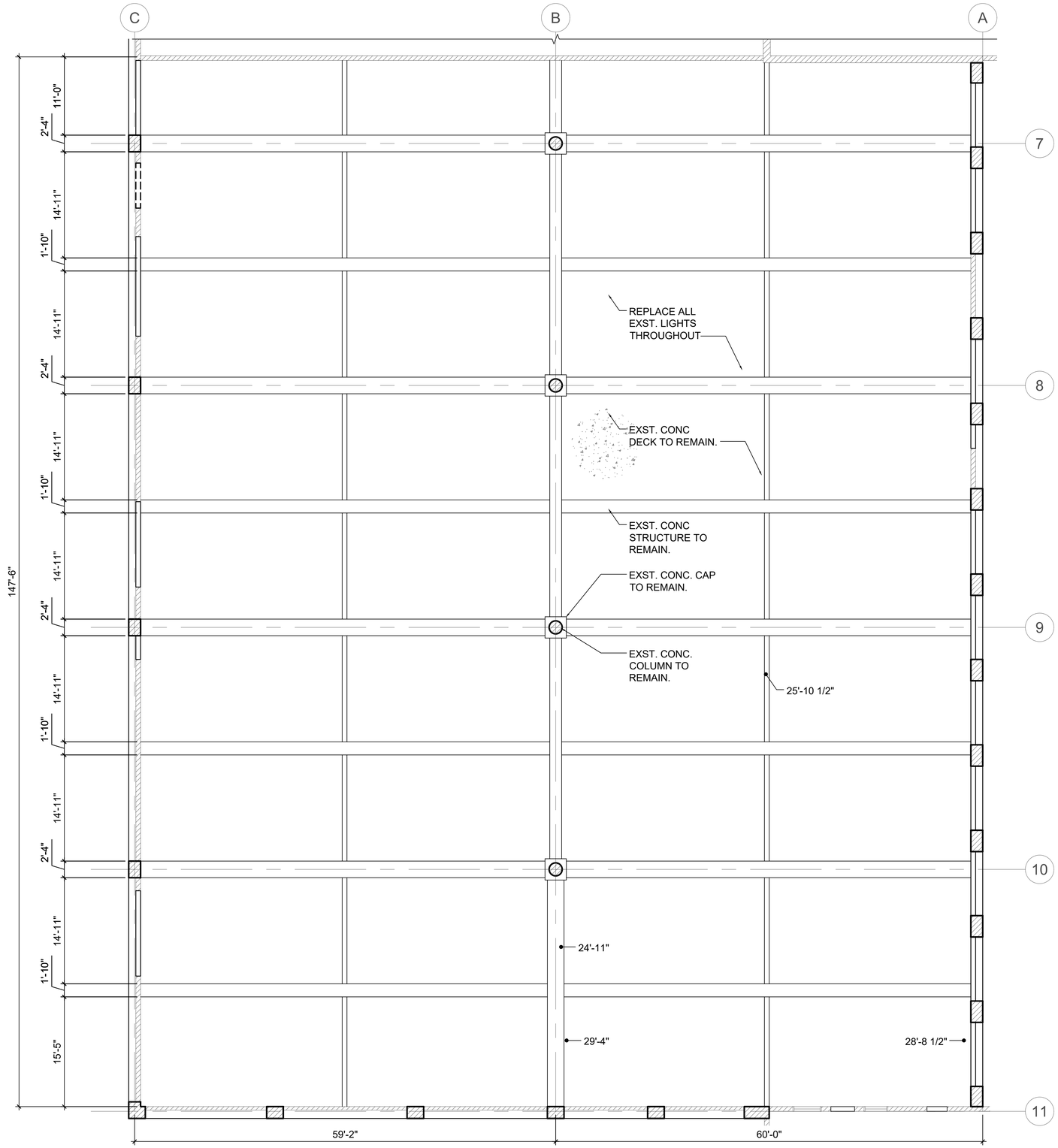

1 A-003.1 EXISTING/DEMOLITION REFLECTED CEILING PLAN

SCALE: 1/8"= 1'-0" 2' 0 2' 4' 6' 10' 14'

Airports Division
DEPARTMENT OF TRANSPORTATION
STATE OF HAWAII

LLOYD M. HIGA
LICENSED PROFESSIONAL ARCHITECT
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HAWAII, U.S.A.

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AT
DANIEL K. INOUYE INTERNATIONAL AIRPORT
HONOLULU, OAHU, HAWAII

PROJECT NO.:

CO1325-33

SHEET TITLE:

EXISTING/DEMOLITION REFLECTED CEILING PLAN

DATE :	DWG. NO.
05/10/23	A003.1
SHEET :	
12 OF 84 SHEETS	

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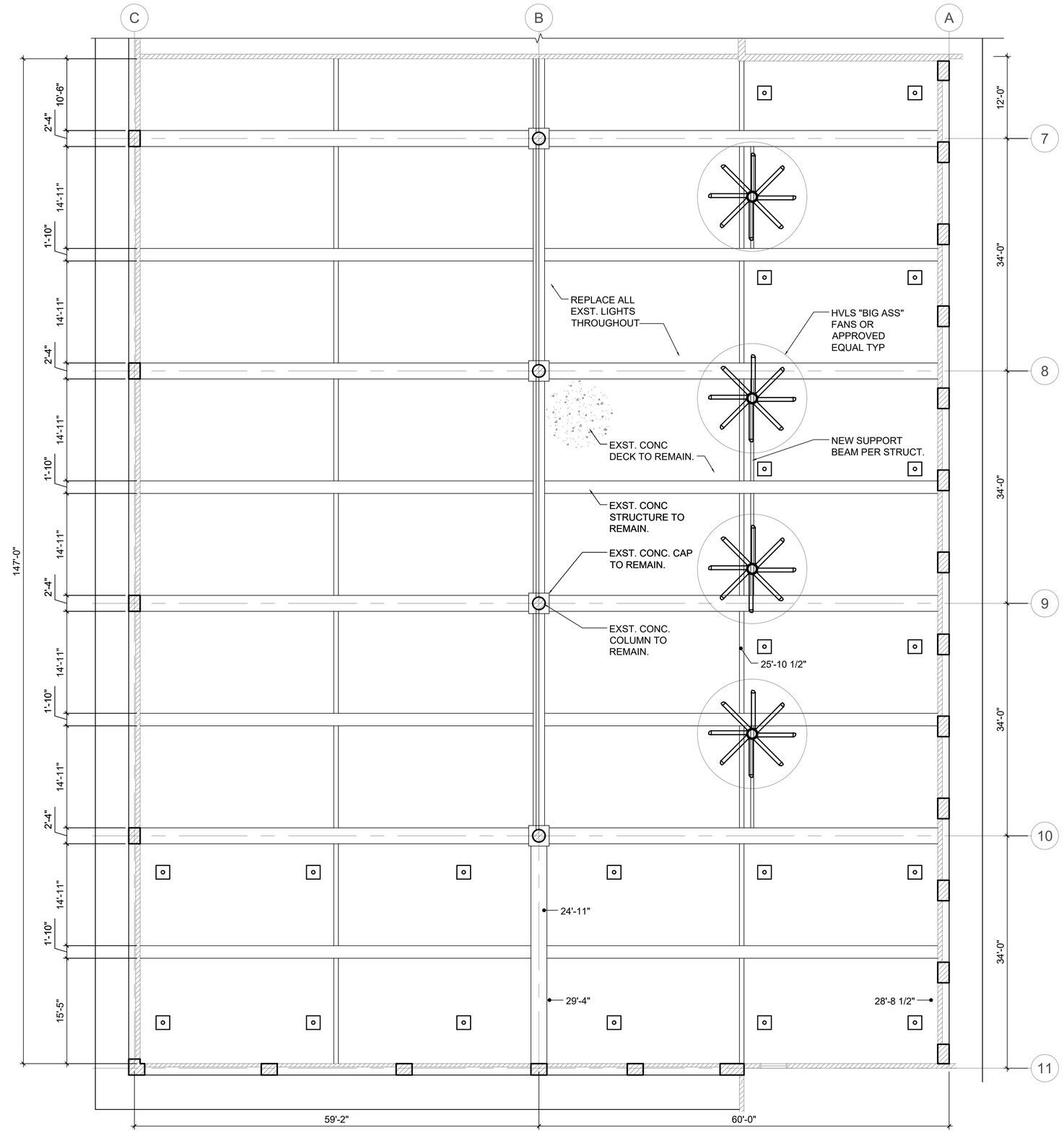

1 A-004.1

RENOVATED
REFLECTED CEILING PLAN

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

2' 0 2' 4' 6' 10' 14'

STATE OF HAWAII 1959

Airports Division
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STATE OF HAWAII

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PROJECT TITLE :

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AT
DANIEL K. INOUYE INTERNATIONAL AIRPORT
HONOLULU, OAHU, HAWAII

PROJECT NO.:

CO1325-33

SHEET TITLE:

RENOVATED REFLECTED CEILING PLAN

DATE :
05/10/23
SHEET :
13 OF 84 SHEETS

DWG. NO.
A004.1

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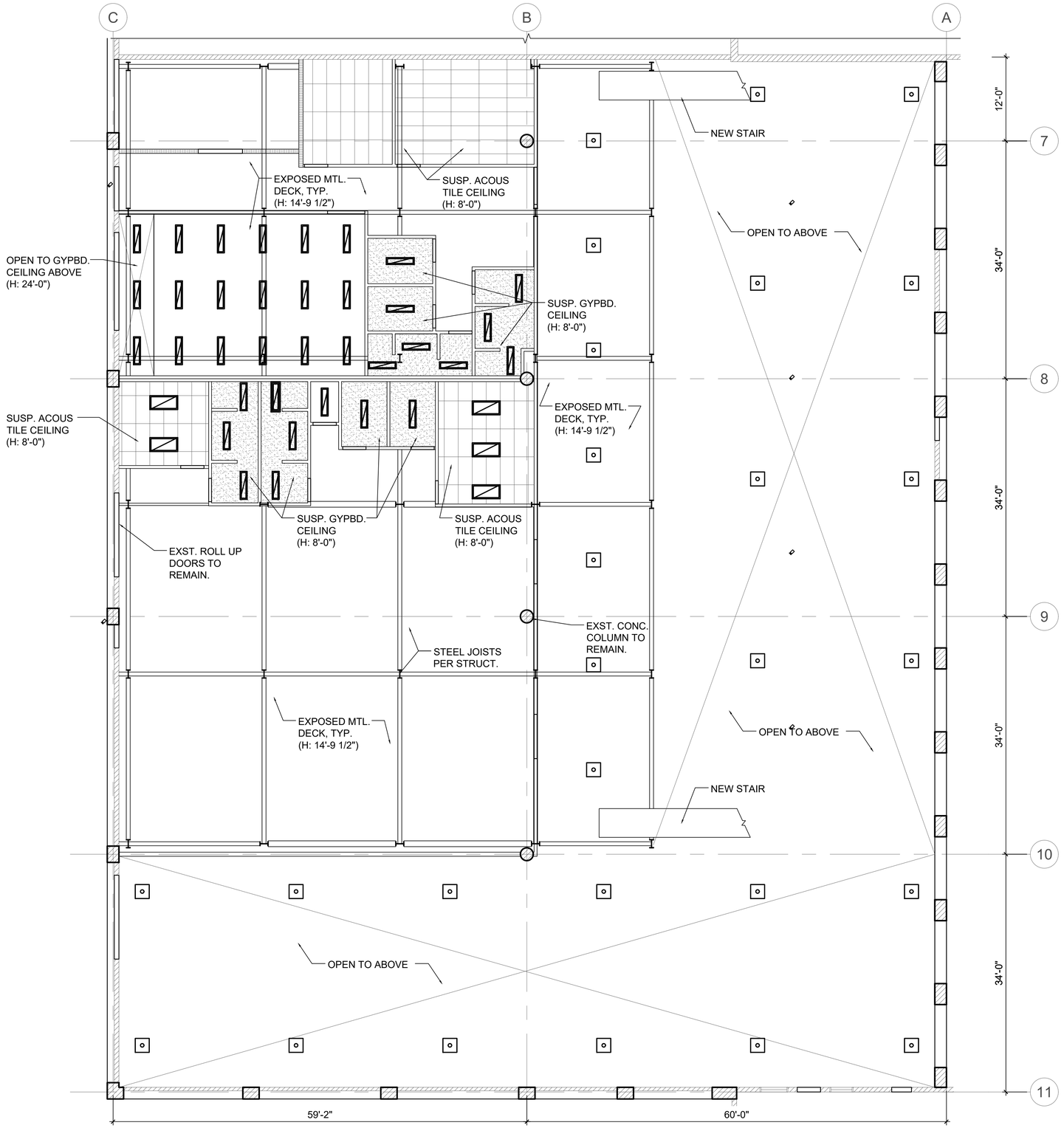

2' 0 2' 4' 6' 10' 14'

1 / A-004.2 REFLECTED CEILING PLAN

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

STATE OF HAWAII 1959

Airports Division

DEPARTMENT OF TRANSPORTATION
STATE OF HAWAII

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HAWAII, U.S.A.

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HONOLULU, OAHU, HAWAII

PROJECT NO.:

CO1325-33

SHEET TITLE:

REFLECTED CEILING PLAN

DATE :	DWG. NO.
05/10/23	A004.2
SHEET :	
14 OF 84 SHEETS	

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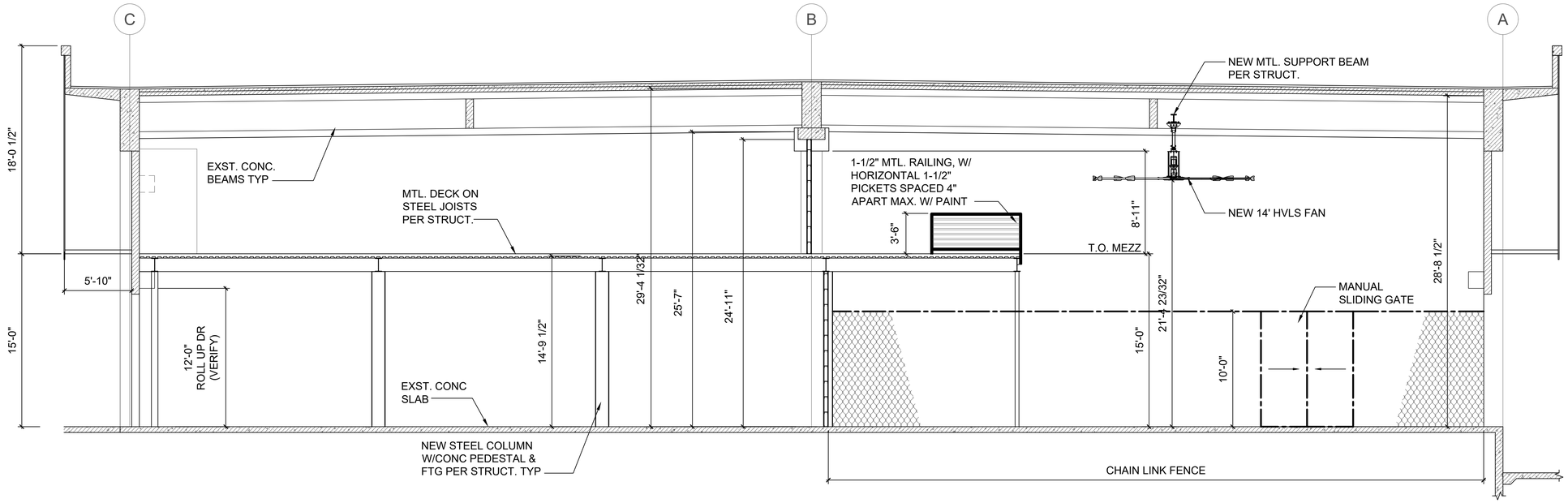

1 / A-004 CROSS SECTION

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

1' 0 2' 4' 6' 10'

Airports Division
DEPARTMENT OF TRANSPORTATION
STATE OF HAWAII

LLOYD M. HIGA
LICENSED PROFESSIONAL ARCHITECT
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HAWAII, U.S.A.

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AT
DANIEL K. INOUYE INTERNATIONAL AIRPORT
HONOLULU, OAHU, HAWAII

PROJECT NO.:

CO1325-33

SHEET TITLE:

BUILDING SECTIONS

DATE :
05/10/23
SHEET :
15 OF 84 SHEETS

DWG. NO.
A005

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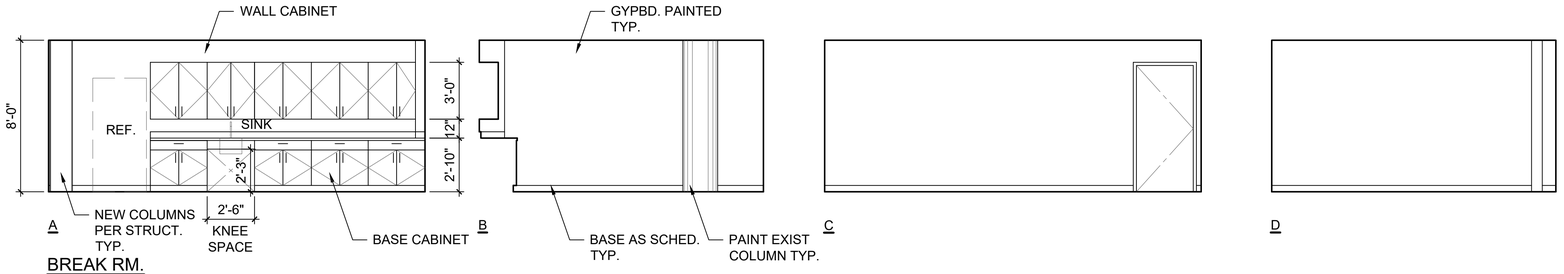
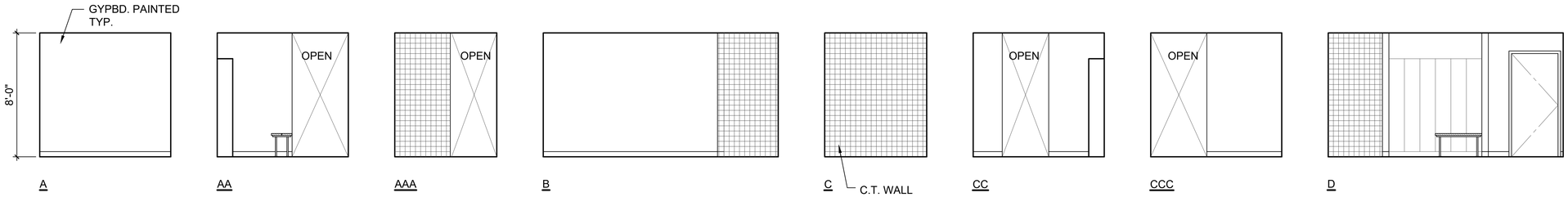


BREAK RM.



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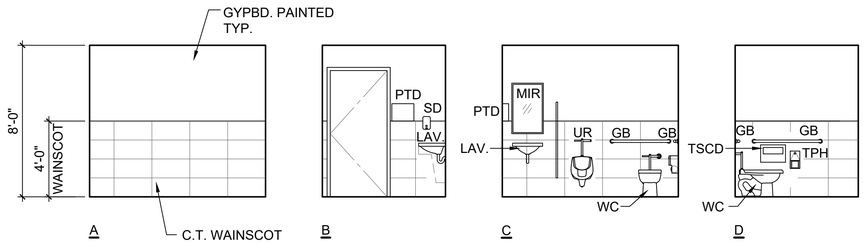


TYPICAL UNISEX R.R.

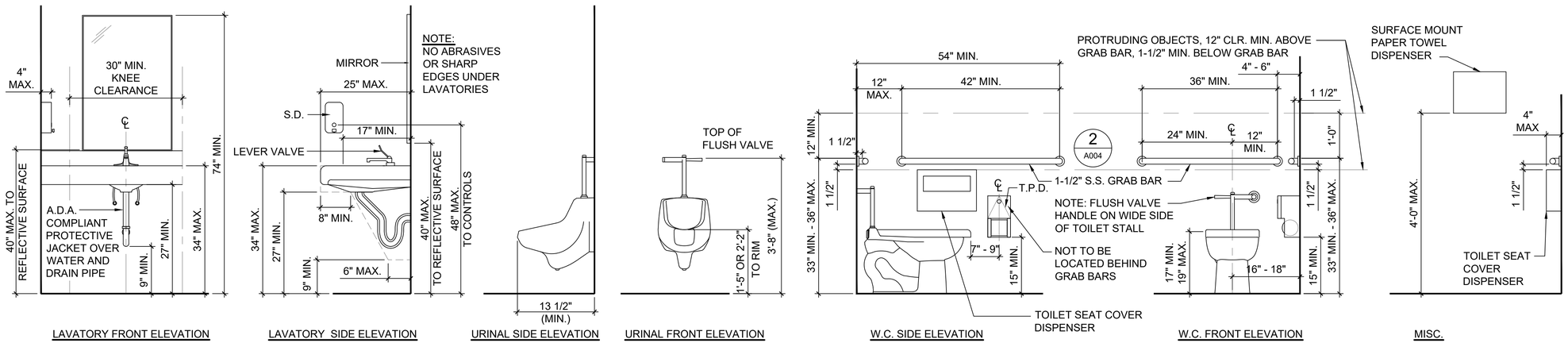
NOTES:

1. SEE 2/A006.1 FOR ACCESSORY MOUNTING HEIGHT DETAIL
2. WATER CLOSET SHALL BE ELONGATED TYPES WITH OPEN FRONT SEAT

1 A-006.1 INTERIOR ELEVATION @ PAINT SHOP

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

1' 0 2' 4' 8'



2 A004

2 A-006.1 MOUNTING HEIGHT DETAIL

SCALE: 3/4"= 1'-0"

1' 0 1' 2'

NOTE:
CONTRACTOR TO VERIFY AND COORDINATE CONFLICTS IN HEIGHTS WITH SWITCHES, ACCESSORIES AND WAINSCOT PRIOR TO INSTALLATION.

STATE OF HAWAII 1959

Airports Division
DEPARTMENT OF TRANSPORTATION
STATE OF HAWAII

LLOYD M. HIGA
LICENSED PROFESSIONAL ARCHITECT
No.AR-6093
HAWAII, U.S.A.

04/30/24
Licensed Expiration Date

This work was prepared by me or under my supervision.

DSGN.	DRWN.	CHKD.	APPD.
JM	KN	JM	

NO.	DATE	REVISIONS

DATE

PROJECT TITLE :

CONVERT CARGO BUILDING TO WORKSHOP

AT
DANIEL K. INOUYE INTERNATIONAL AIRPORT
HONOLULU, OAHU, HAWAII

PROJECT NO.:

CO1325-33

SHEET TITLE:

INTERIOR ELEVATIONS @ PAINT SHOP, MOUNTING HEIGHT DETAIL

DATE :	DWG. NO.
05/10/23	A006.1
SHEET :	
16 OF 84 SHEETS	

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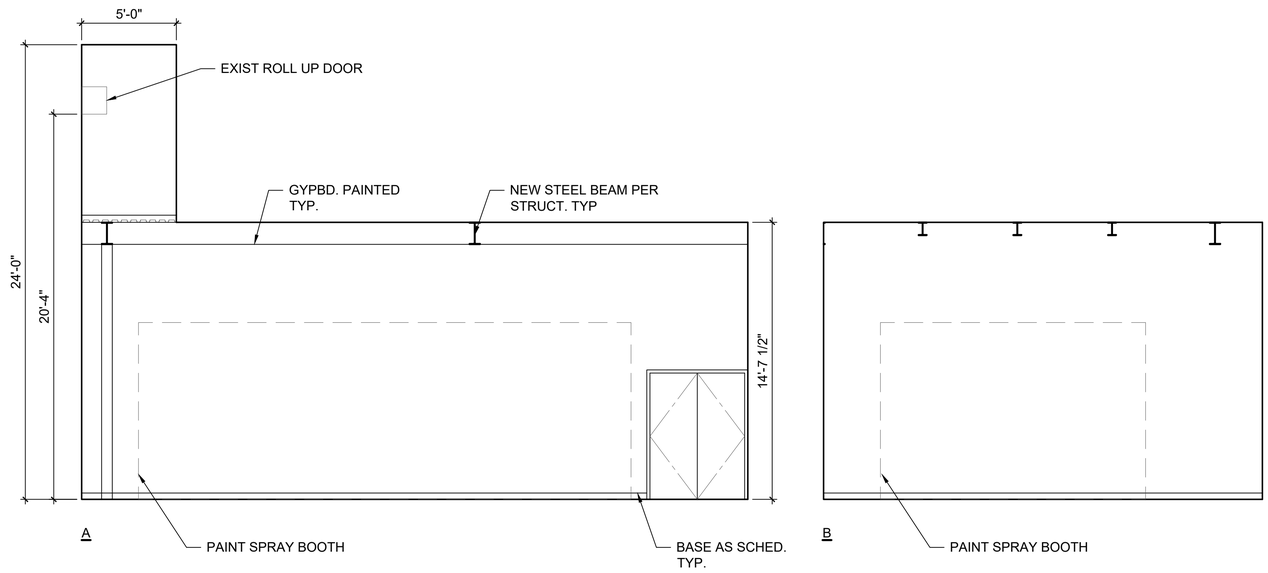

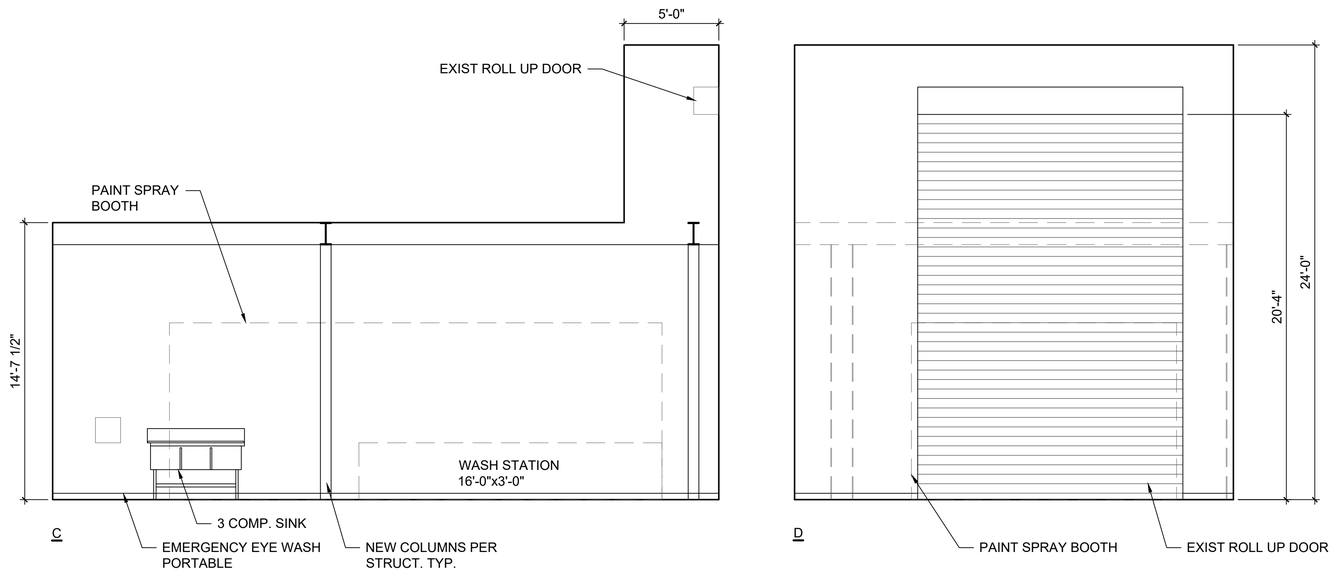

PAINT SPRAY RM.

1 / A-006.2 INTERIOR ELEVATION @ PAINT SPRAY ROOM

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

1' 0 2' 4' 8'

Airports Division
DEPARTMENT OF TRANSPORTATION
STATE OF HAWAII

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LICENSED PROFESSIONAL ARCHITECT
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DATE

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CONVERT CARGO BUILDING TO WORKSHOP

AT
DANIEL K. INOUYE INTERNATIONAL AIRPORT
HONOLULU, OAHU, HAWAII

PROJECT NO.:

CO1325-33

SHEET TITLE:

INTERIOR ELEVATIONS @ PAINT SHOP,

DATE :
05/10/23
SHEET :
17 OF 84 SHEETS

DWG. NO.
A006.2

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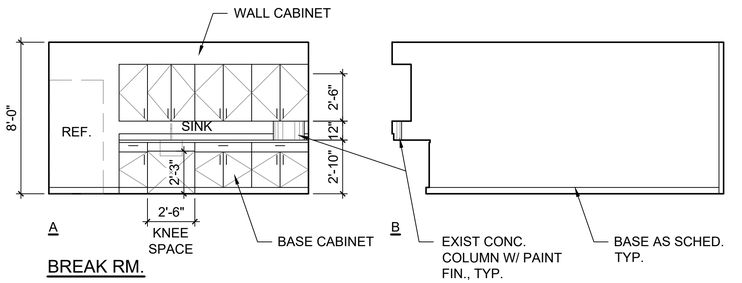

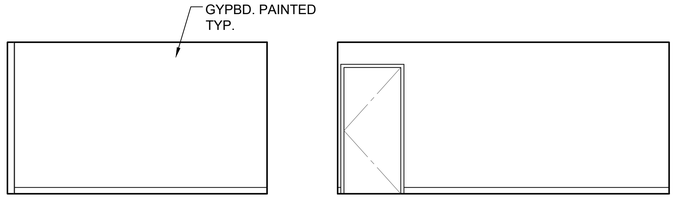

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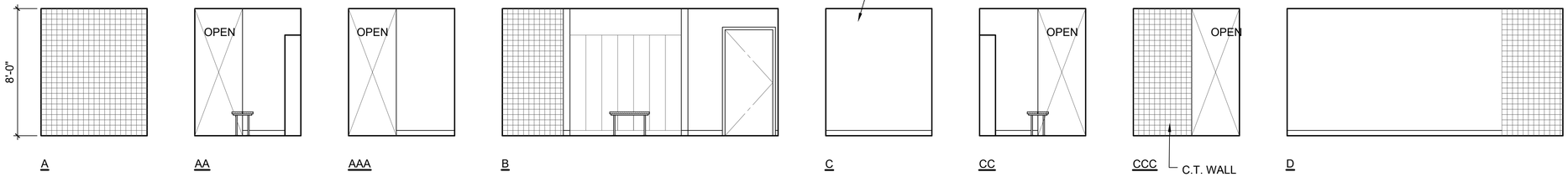

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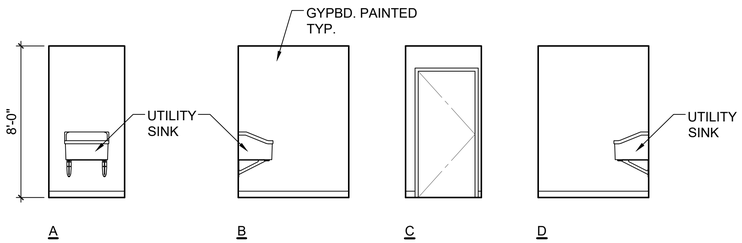
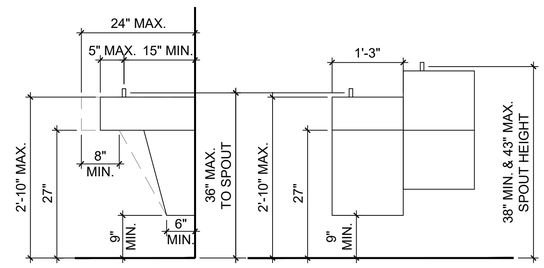


UTILITY RM

1 A-006.3 INTERIOR ELEVATION @ CARPENTER SHOP

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

1' 0 2' 4' 8'



SIDE ELEVATION

FRONT ELEVATION

SPOUT FLOW
1) 4" HIGH MIN. WATER FLOW
2) 15° MAX. ANGLE

NOTE:
CONTRACTOR TO VERIFY AND COORDINATE CONFLICTS IN HEIGHTS WITH SWITCHES, ACCESSORIES AND WAINSCOT PRIOR TO INSTALLATION.

2 A-006.3 ELEC. WATER COOLER DETAIL

SCALE: 3/4"= 1'-0"

1' 0 1' 2'

STATE OF HAWAII 1959 STATEHOOD

Airports Division
DEPARTMENT OF TRANSPORTATION
STATE OF HAWAII

LLOYD M. HIGA
LICENSED PROFESSIONAL ARCHITECT
No.AR-6093
HAWAII, U.S.A.

04/30/24
Licensed Expiration Date

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JM	KN	JM	

NO.	DATE	REVISIONS

DATE

PROJECT TITLE :

CONVERT CARGO BUILDING TO WORKSHOP

AT
DANIEL K. INOUYE INTERNATIONAL AIRPORT
HONOLULU, OAHU, HAWAII

PROJECT NO.:

CO1325-33

SHEET TITLE:

INTERIOR ELEVATIONS @ CARPENTER SHOP

DATE :	DWG. NO.
05/10/23	A006.3
SHEET :	
18 OF 84 SHEETS	

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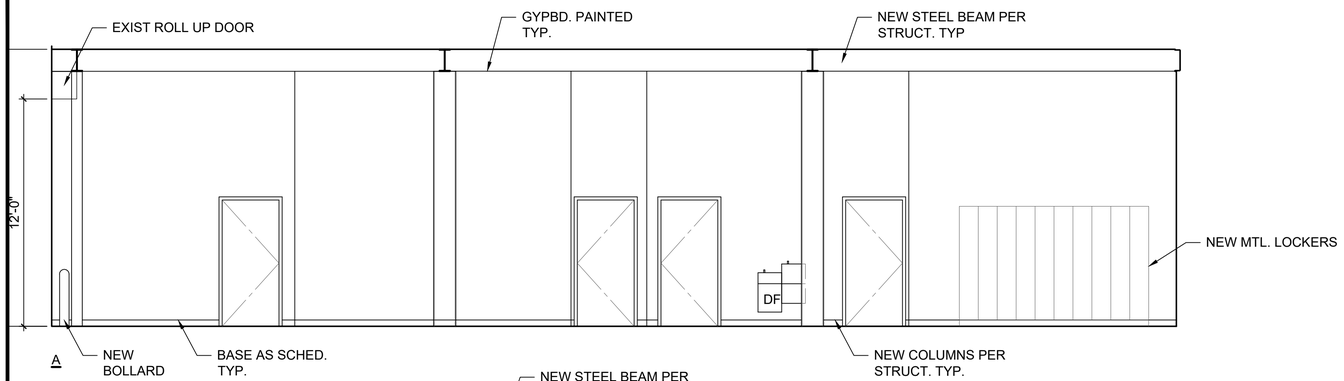

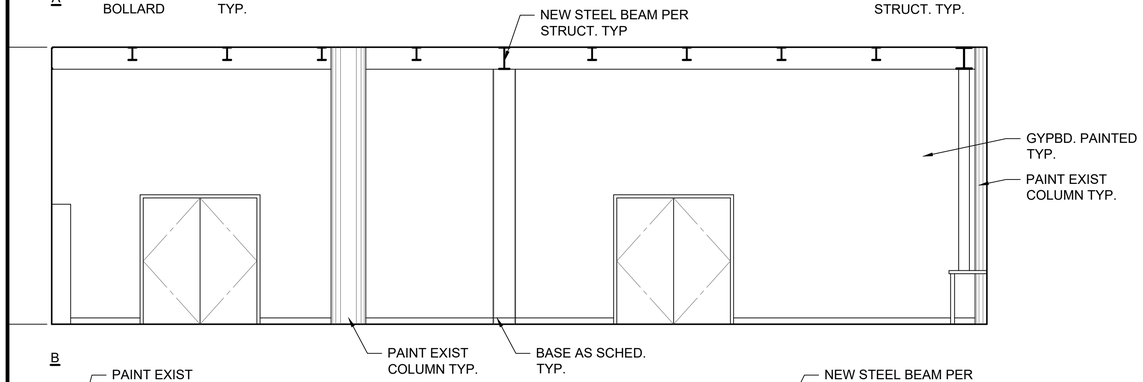

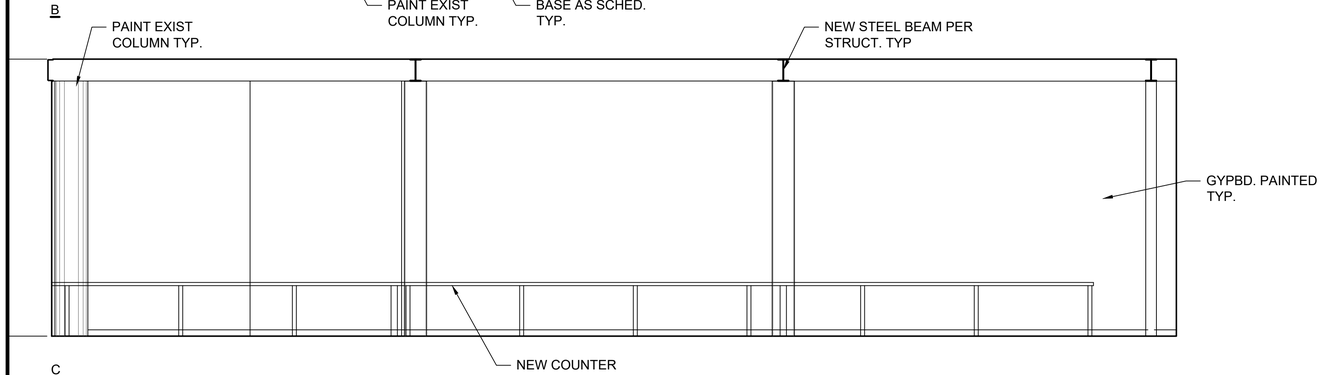

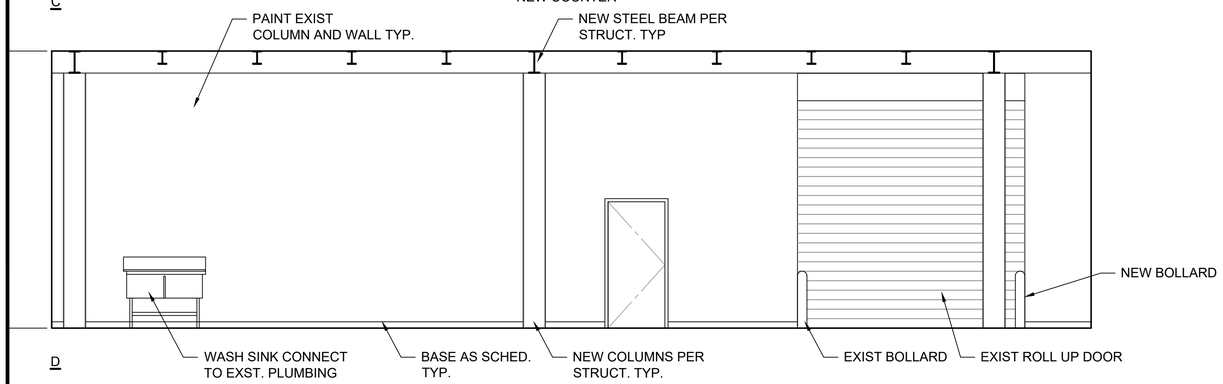

CARPENTER SHOP

1 / A-006.4 INTERIOR ELEVATION @ CARPENTER SHOP

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

1' 0 2' 4' 8'

STATE OF HAWAII 1959 AIRPORTS DIVISION DEPARTMENT OF TRANSPORTATION

Airports Division

DEPARTMENT OF TRANSPORTATION
STATE OF HAWAII

LLOYD M. HIGA
LICENSED PROFESSIONAL ARCHITECT
No.AR-6093
HAWAII, U.S.A.

04/30/24
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JM	KN	JM	

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DATE

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CONVERT CARGO BUILDING TO WORKSHOP

AT
DANIEL K. INOUYE INTERNATIONAL AIRPORT
HONOLULU, OAHU, HAWAII

PROJECT NO.:

CO1325-33

SHEET TITLE:

INTERIOR ELEVATIONS @ CARPENTER SHOP

DATE :
05/10/23

SHEET :
19 OF 84 SHEETS

DWG. NO.
A006.4

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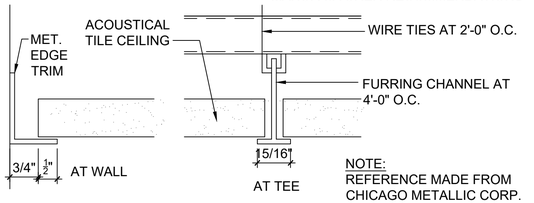
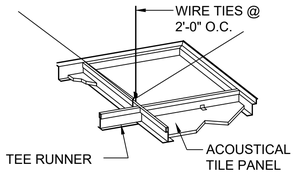
NOTE:
PROVIDE SEISMIC REINFORCEMENT PER MANUFACTURER RECOMMENDATIONS



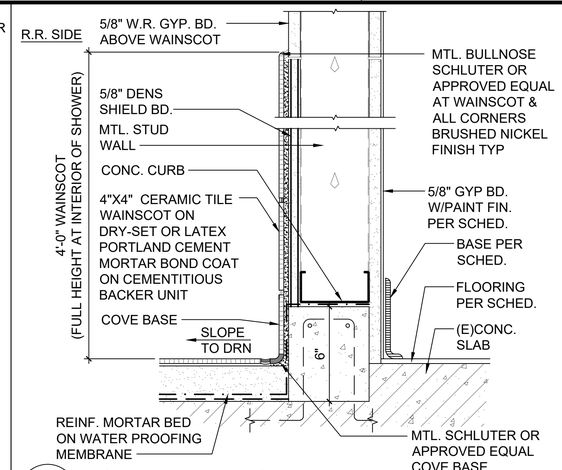
NOTE:
REFERENCE MADE FROM CHICAGO METALLIC CORP. FOR SELECTION GUIDE PURPOSE ONLY. CONTRACTOR MAY SUBMIT OTHER MANUFACTURER FOR APPROVAL AS PER SPECIFICATIONS



ISOMETRIC

1 A007.1 ACOUSTICAL CEILING TILE

SCALE: 6"=1'-0"



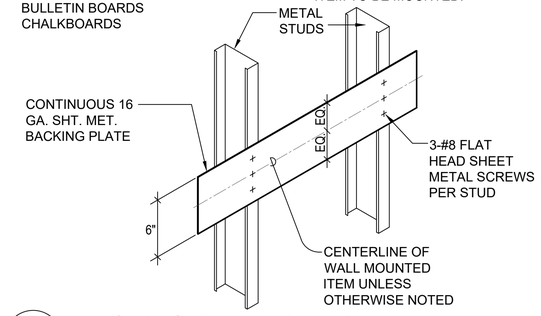
4 A007.1 TILE WALL DETAIL

SCALE: 3"=1'-0"

ITEMS NOT DETAILED REQUIRING TYPE A BACKING PLATES:

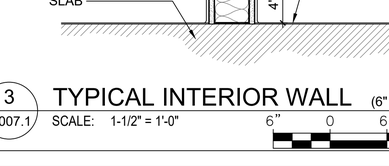
FRAMED MIRRORS
MOP RACKS
TOILET PAPER DISPENSERS
PAPER TOWEL DISPENSERS
CLOTHES HOOOKS
SURFACE MOUNTED FILM ILLUMINATORS
TOWEL BARS
BULLETIN BOARDS
CHALKBOARDS

NOTES:
1. BACKING PLATE TO BE PROVIDED FOR ALL ITEMS LISTED.
2. VERIFY LENGTH, HEIGHT AND LOCATION OF BACKING PLATE AND NUMBER REQUIRED FOR ITEM TO BE MOUNTED.



7 A007.1 BACKING PLATE DETAIL

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



ISOMETRIC

NOTE: REFERENCE MADE FROM CHICAGO METALLIC CORP. FOR SELECTION GUIDE PURPOSE ONLY. CONTRACTOR MAY SUBMIT OTHER MANUFACTURER FOR APPROVAL AS PER SPECIFICATIONS

NOTE:
PROVIDE SEISMIC REINFORCEMENT

2 A007.1 SUSPENDED GYP. BOARD CEILING

SCALE: 6"=1'-0"

NOTE:
- MOISTURE TEST CONCRETE SLAB PRIOR TO INSTALLATION OF ANY KIND.

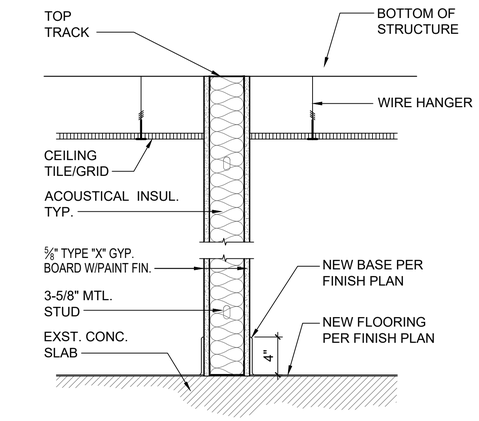
5 A007.1 TYPICAL TILE DETAIL

SCALE: 3"=1'-0"

NOTE:
PROVIDE ANCHORS AS APPROPRIATE FOR MASONRY CONDITION.

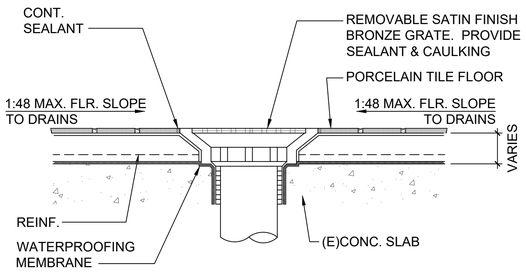
8 A007.1 GRAB BAR MOUNTING DETAIL

SCALE: 3/4" = 1'-0"



3 A007.1 TYPICAL INTERIOR WALL (6" STUD WALL SIM.)

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



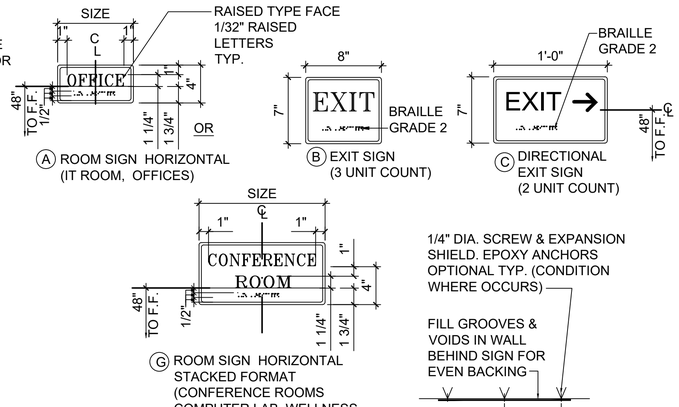
NOTE:
SEE PLUMBING SHTS. FOR PIPE DRAIN SIZE ETC.

6 A007.1 FLOOR DRAIN DETAIL

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

NOTE:
- ALL EDGES OF SIGN SHALL BE 9" FROM ALL FACE OF BLDGS OR DOOR FRAMES

- SIGNS HEIGHTS SHALL BE PROVIDED SUCH THAT THE BOTTOM OF LETTERS ARE NO LESS THAN 48" A.F.F. & NOT TO EXCEED 60" A.F.F.



(A) ROOM SIGN HORIZONTAL (IT ROOM, OFFICES)

(B) EXIT SIGN (3 UNIT COUNT)

(C) DIRECTIONAL EXIT SIGN (2 UNIT COUNT)

(D) RESTROOM SIGN (1 UNIT COUNT - UNISEX)

(G) ROOM SIGN HORIZONTAL STACKED FORMAT (CONFERENCE ROOMS COMPUTER LAB, WELLNESS ROOM, BREAK ROOM, SUPPLY ROOM)

PLAN

9 A007.1 SIGNAGE DETAIL

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

STATE OF HAWAII 1959

Airports Division
DEPARTMENT OF TRANSPORTATION
STATE OF HAWAII

LLOYD M. HIGA
LICENSED PROFESSIONAL ARCHITECT
No.AR-6093
HAWAII, U.S.A.

04/30/24
Licensed Expiration Date

This work was prepared by me or under my supervision.

DSGN.	DRWN.	CHKD.	APPD.
JM	KN	JM	

NO.	DATE	REVISIONS

DATE

PROJECT TITLE :

CONVERT CARGO BUILDING TO WORKSHOP

AT
DANIEL K. INOUYE INTERNATIONAL AIRPORT
HONOLULU, OAHU, HAWAII

PROJECT NO.:

CO1325-33

SHEET TITLE:

MISC DETAILS

DATE :	DWG. NO.
05/10/23	A007.1
SHEET :	
20 OF 84 SHEETS	

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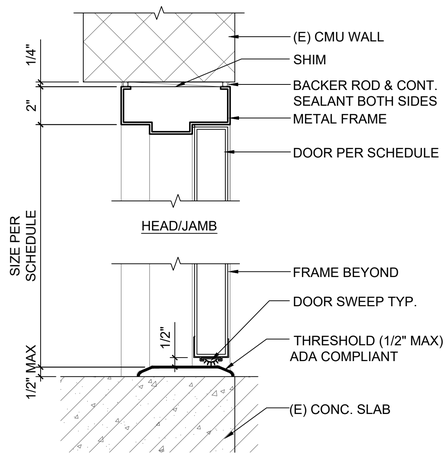
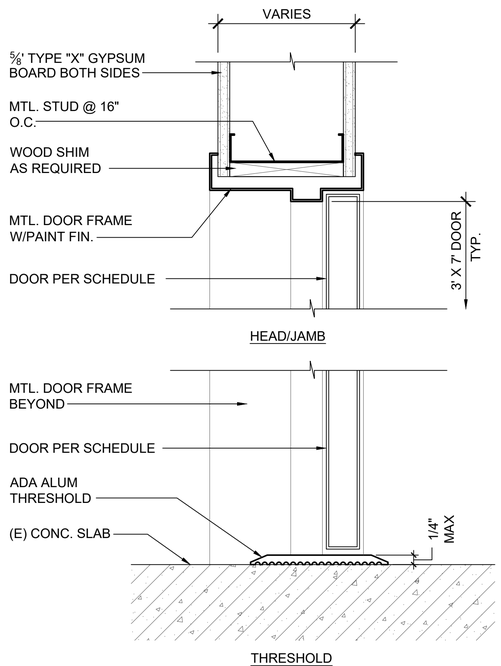


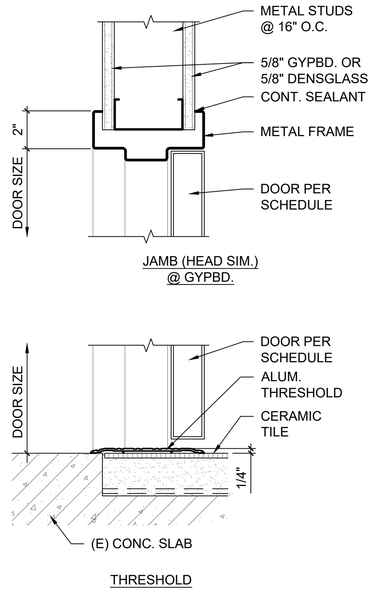
1 A007.2 TYPICAL FLUSH HOLLOW METAL EXTERIOR DOOR DETAIL

SCALE: 3"=1'-0"



2 A007.2 TYPICAL HOLLOW METAL INTERIOR DOOR DETAIL

SCALE: 3"=1'-0"



3 A007.2 THRESHOLD DETAIL AT LOCKER AND R.R.

SCALE: 3"=1'-0"

3" 0 3" 6" 9"

Airports Division
DEPARTMENT OF TRANSPORTATION
STATE OF HAWAII

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DANIEL K. INOUYE INTERNATIONAL AIRPORT
HONOLULU, OAHU, HAWAII

PROJECT NO.:

CO1325-33

SHEET TITLE:

MISC DETAILS

DATE :
05/10/23
SHEET :
21 OF 84 SHEETS

DWG. NO.
A007.2

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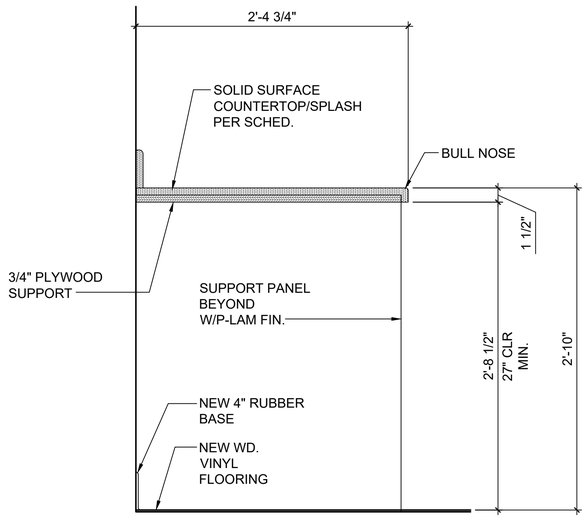
NOTE:

- ALL DOOR PULLS
TO BE BRUSHED NICKEL FINISH

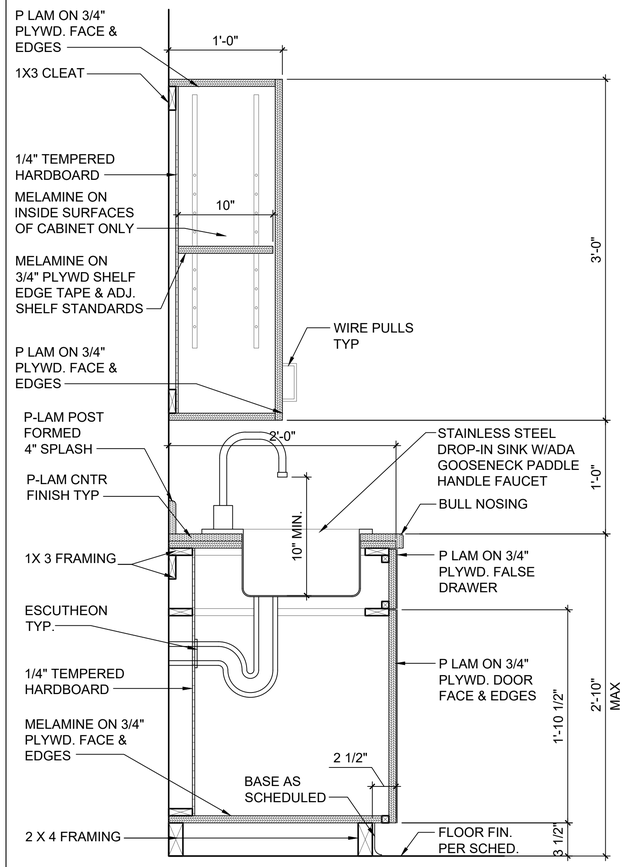
- ENSURE P-LAM ON ALL EXPOSED FACES AND EDGES.

-ALL WOODS SHALL BE PRESSURE TREATED.



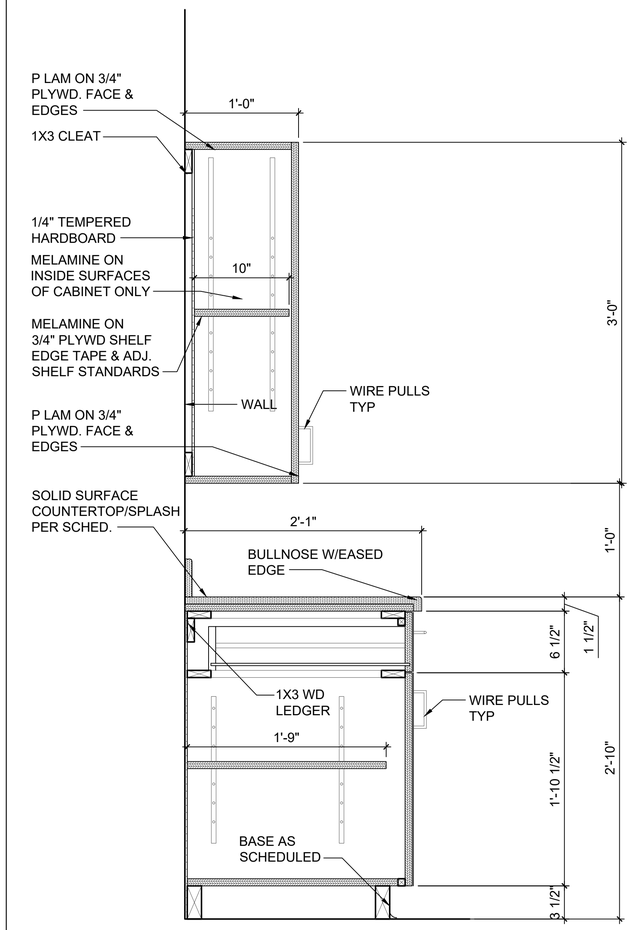
1 A007.3 TYPICAL OPEN COUNTER DETAIL

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



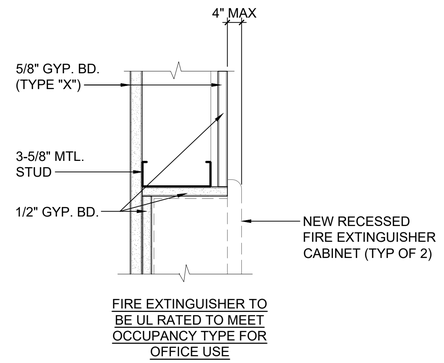
2 A007.3 TYPICAL SINK BASE CABINET

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



3 A007.3 TYPICAL CABINET/DRAWER DETAIL

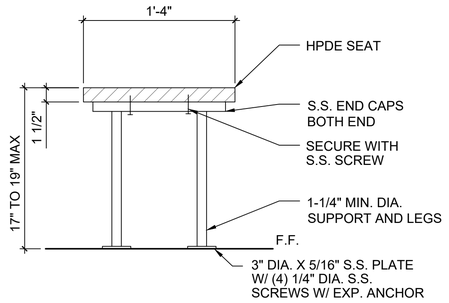
SCALE: 1-1/2" = 1'-0"



FIRE EXTINGUISHER TO BE UL RATED TO MEET OCCUPANCY TYPE FOR OFFICE USE

4 A007.3 FIRE EXTINGUISHER CABINET DET

SCALE: 3"=1'-0"



5 A007.3 TYPICAL BENCH DETAIL

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

STATE OF HAWAII 1959

Airports Division
DEPARTMENT OF TRANSPORTATION
STATE OF HAWAII

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HAWAII, U.S.A.

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DANIEL K. INOUYE INTERNATIONAL AIRPORT
HONOLULU, OAHU, HAWAII

PROJECT NO.:

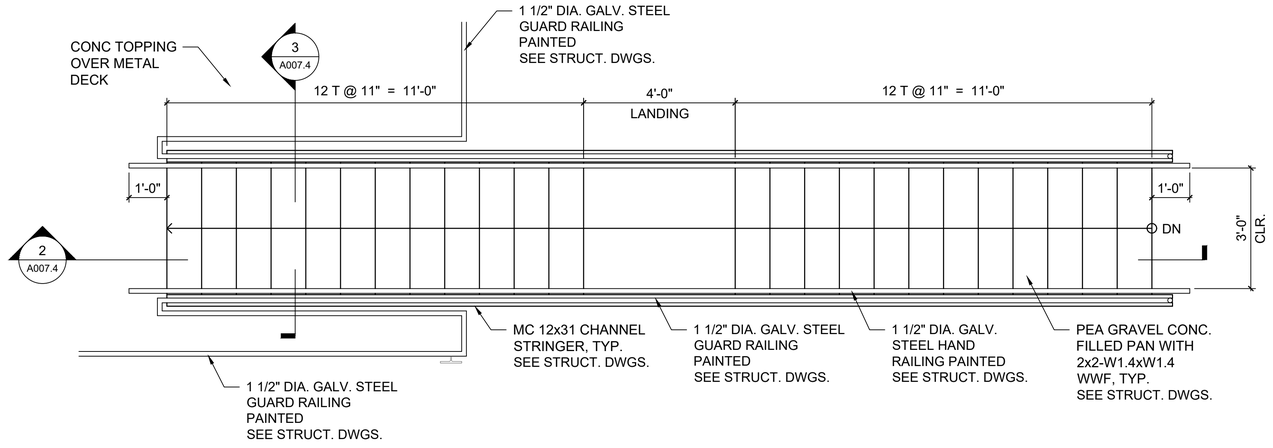
CO1325-33

SHEET TITLE:

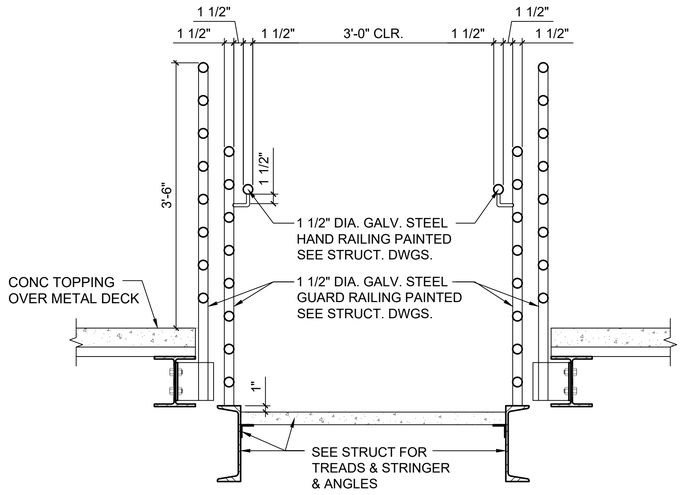
CABINETRY DETAILS

DATE :	DWG. NO.
05/10/23	A007.3
SHEET :	
22 OF 84 SHEETS	

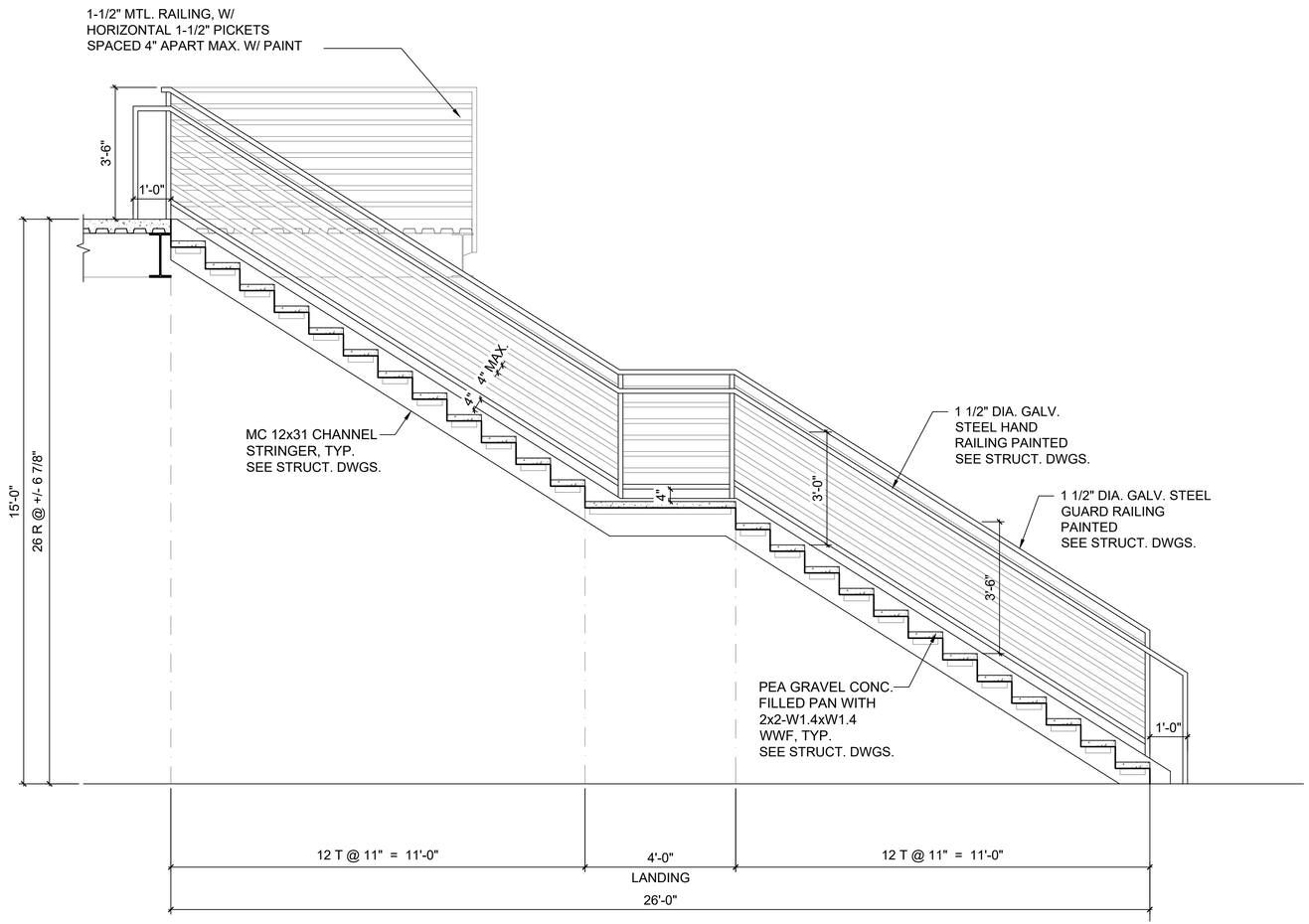
C:\USERS\NAKAZAWA\ONEDRIVE - YAMASATO HIGA ARCHITECTS\2021-063 DOTA CONTINENTAL CARGO BLDG\CONTINENTAL WAREHOUSE- HNL\DRAWINGS\WORKING DWGS\022 A007.3 CABINETRY DET.DWG



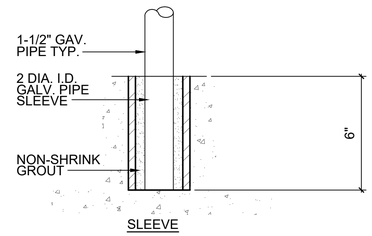
1 A007.4 **STAIR PLAN**
SCALE: 1/2"= 1'-0"



3 A007.4 **STAIR SECTION**
SCALE: 1"= 1'-0"



2 A007.4 **STAIR SECTION**
SCALE: 1/2"= 1'-0"



4 A007.4 **PIPE RAIL EMBEDMENT DETAIL**
SCALE: 3"= 1'-0"

STATE OF HAWAII 1959 KINGDOM

Airports Division
DEPARTMENT OF TRANSPORTATION
STATE OF HAWAII

LLOYD M. HIGA LICENSED PROFESSIONAL ARCHITECT No.AR-6093 HAWAII, U.S.A.

04/30/24
Licensed Expiration Date

This work was prepared by me or under my supervision.

DSGN.	DRWN.	CHKD.	APPD.
JM	KN	JM	

NO.	DATE	REVISIONS

DATE

PROJECT TITLE :

CONVERT CARGO BUILDING TO WORKSHOP

AT
DANIEL K. INOUYE INTERNATIONAL AIRPORT
HONOLULU, OAHU, HAWAII

PROJECT NO.:

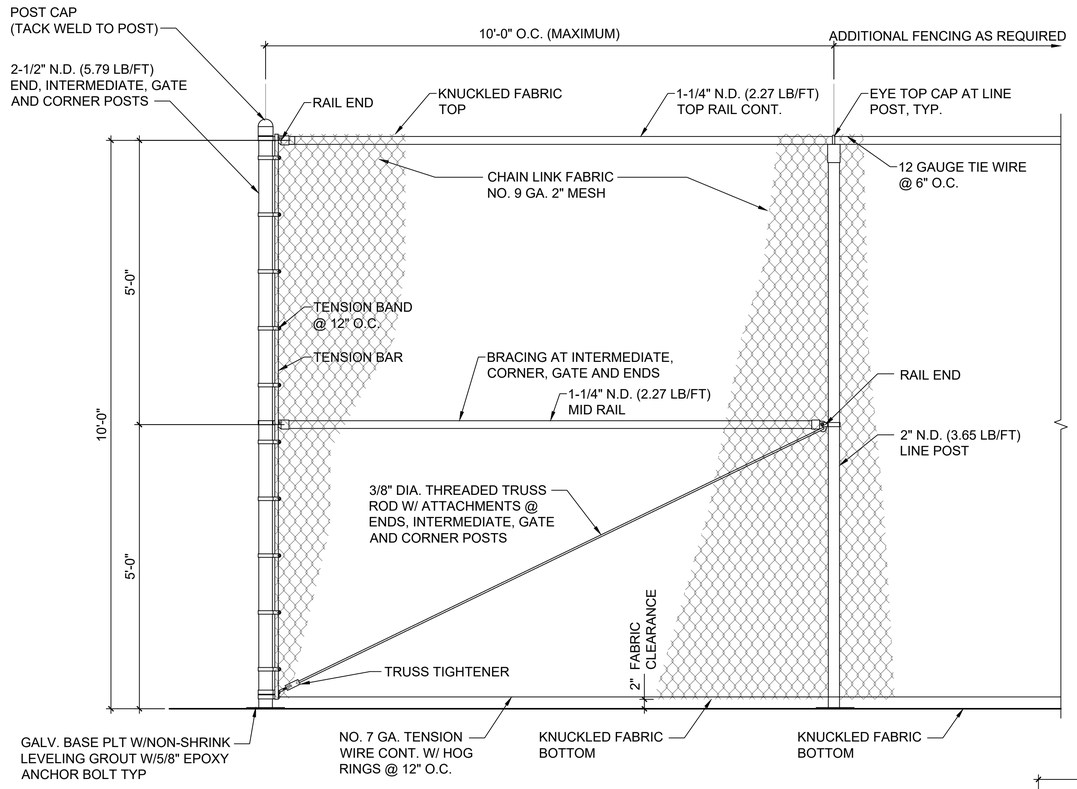
CO1325-33

SHEET TITLE:

RAMP & RAILING DETAILS

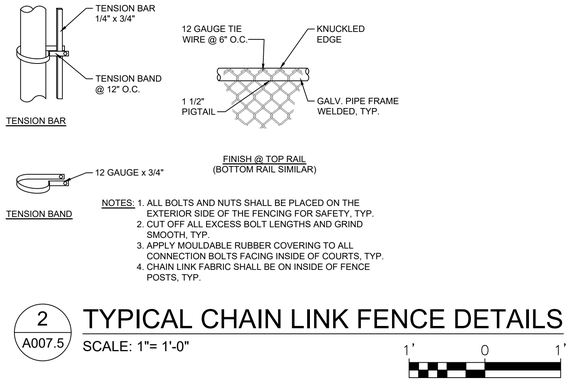
DATE :	DWG. NO.
05/10/23	A007.4
SHEET :	
23 OF 84 SHEETS	

C:\USERS\NAKAZAWA\ONEDRIVE - YAMASATO HIGA ARCHITECTS\2021-063 DOTA CONTINENTAL CARGO BLDG\CONTINENTAL WAREHOUSE - HNL\DRAWINGS\WORKING DWGS\2023 A007.4_STAIR & RAIL DETAILS.DWG



1 A007.5 CHAIN LINK FENCE DETAIL

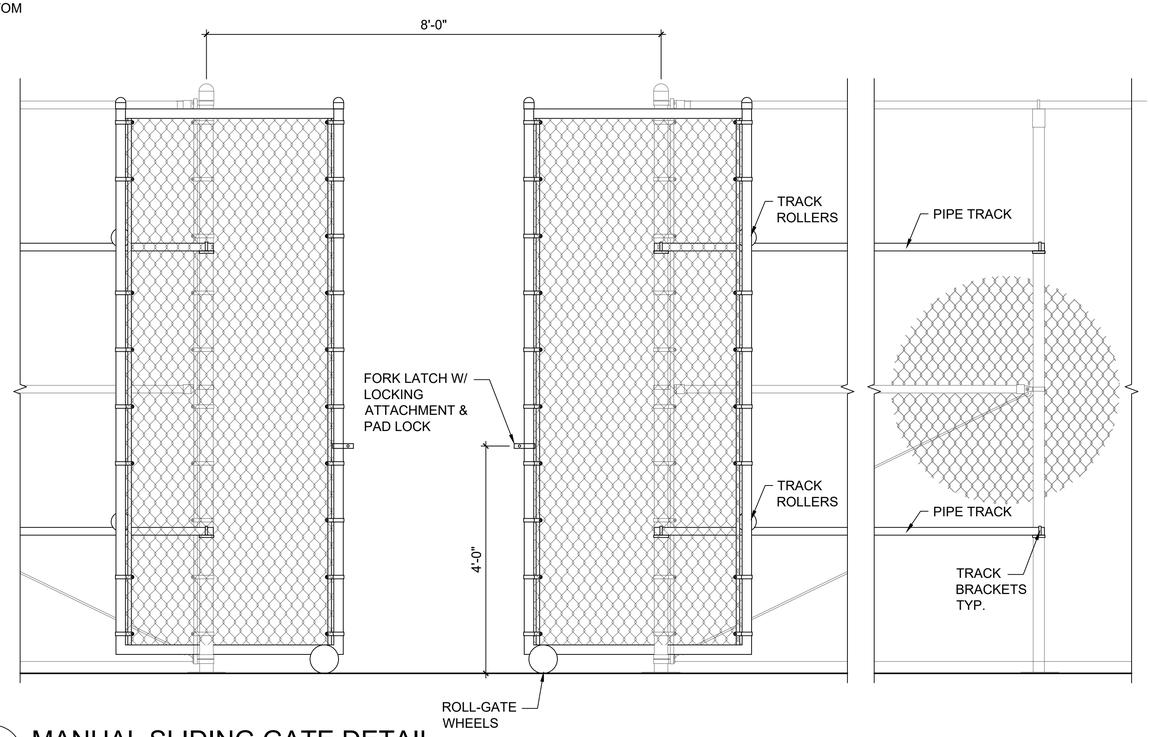
SCALE: 3/4"= 1'-0"



NOTES:
1. ALL BOLTS AND NUTS SHALL BE PLACED ON THE EXTERIOR SIDE OF THE FENCING FOR SAFETY, TYP.
2. CUT OFF ALL EXCESS BOLT LENGTHS AND GRIND SMOOTH, TYP.
3. APPLY MOULDABLE RUBBER COVERING TO ALL CONNECTION BOLTS FACING INSIDE OF COURTS, TYP.
4. CHAIN LINK FABRIC SHALL BE ON INSIDE OF FENCE POSTS, TYP.

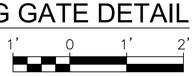
2 A007.5 TYPICAL CHAIN LINK FENCE DETAILS

SCALE: 1"= 1'-0"



3 A007.5 MANUAL SLIDING GATE DETAIL

SCALE: 3/4"= 1'-0"



STATE OF HAWAII 1959

Airports Division
DEPARTMENT OF TRANSPORTATION
STATE OF HAWAII

LLOYD M. HIGA
LICENSED PROFESSIONAL ARCHITECT
No.AR-6093
HAWAII, U.S.A.

04/30/24
Licensed Expiration Date

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JM	KN	JM	

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PROJECT TITLE :

CONVERT CARGO BUILDING TO WORKSHOP

AT
DANIEL K. INOUYE INTERNATIONAL AIRPORT
HONOLULU, OAHU, HAWAII

PROJECT NO.:

CO1325-33

SHEET TITLE:

CHAIN LINK FENCE DETAILS

DATE :	DWG. NO.
05/10/23	A007.5
SHEET :	
24 OF 84 SHEETS	

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DOOR TYPES

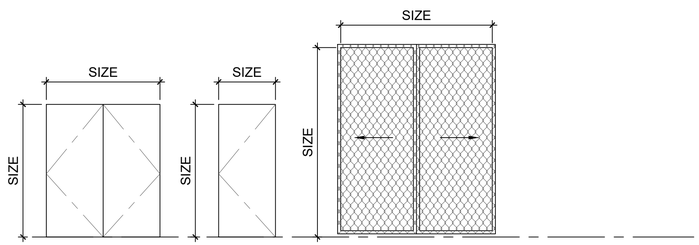
DOOR NOTES

*ALL DOORS SHALL BE FINISHED ON ALL 6 SIDES.

*ALL FLOOR TRANSITIONS AND/OR THRESHOLDS SHALL BE 1/4" MAX WHERE/IF THEY OCCUR.

*ALL EXTERIOR DOORS SHALL BE EQUIPPED W/FULL WEATHER STRIPPING/SEALING.

DOOR TYPES



A
FLUSH HOLLOW
MTL. DOUBLE

B
FLUSH
HOLLOW MTL.

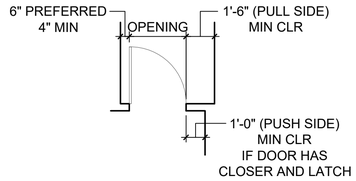
C
CHAIN LINK
SLIDING GATE

FRAME TYPES

A
HOLLOW METAL
DOUBLE

B
HOLLOW
METAL

DOOR PLAN DESIGNATION



DOOR OPENING LOCATION

A. DOORS SHOWN ADJACENT TO A FLANKING WALL OR OTHER FIXED OBSTRUCTION, SHALL BE LOCATED AS SHOWN ABOVE.

B. OTHER LOCATIONS SHALL BE ON CENTERLINE OF ROOM OR AS SPECIFICALLY DIMENSIONED.

DOOR SCHEDULE

DOOR				HDWR	FIRE	DOOR		FRAME			DETAIL	GLASS		REMARKS
#	WIDTH	HEIGHT	TYPE	SET	RATING	MATERIAL	FINISH	MATERIAL	FINISH	TYPE		THK	TYPE	
1	6'-0"	7'-0"	A	-	-	METAL	PAINT	METAL	PAINT	A	1/A007.1	-	-	-
2	6'-0"	7'-0"	A	-	-	METAL	PAINT	METAL	PAINT	A	2/A007.1	-	-	-
3	3'-0"	7'-0"	B	-	-	METAL	PAINT	METAL	PAINT	B	2/A007.1	-	-	-
4	3'-0"	7'-0"	B	-	-	METAL	PAINT	METAL	PAINT	B	2/A007.1	-	-	-
5	6'-0"	7'-0"	A	-	-	METAL	PAINT	METAL	PAINT	A	2/A007.1	-	-	-
6	3'-0"	7'-0"	B	-	-	METAL	PAINT	METAL	PAINT	B	3/A007.1	-	-	-
7	3'-0"	7'-0"	B	-	-	METAL	PAINT	METAL	PAINT	B	3/A007.1	-	-	-
8	3'-0"	7'-0"	B	-	-	METAL	PAINT	METAL	PAINT	B	3/A007.1	-	-	-
9	3'-0"	7'-0"	B	-	-	METAL	PAINT	METAL	PAINT	B	3/A007.1	-	-	-
10	5'-0"	7'-0"	A	-	-	METAL	PAINT	METAL	PAINT	A	2/A007.1	-	-	-
11	3'-0"	7'-0"	B	-	-	METAL	PAINT	METAL	PAINT	B	2/A007.1	-	-	-
12	3'-0"	7'-0"	B	-	-	METAL	PAINT	METAL	PAINT	B	3/A007.1	-	-	-
13	3'-0"	7'-0"	B	-	-	METAL	PAINT	METAL	PAINT	B	3/A007.1	-	-	-
14	3'-0"	7'-0"	B	-	-	METAL	PAINT	METAL	PAINT	B	3/A007.1	-	-	-
15	3'-0"	7'-0"	B	-	-	METAL	PAINT	METAL	PAINT	B	3/A007.1	-	-	-
16	3'-0"	7'-0"	B	-	-	METAL	PAINT	METAL	PAINT	B	3/A007.1	-	-	-
17	3'-0"	7'-0"	B	-	-	METAL	PAINT	METAL	PAINT	B	2/A007.1	-	-	-
18	6'-0"	7'-0"	A	-	-	METAL	PAINT	METAL	PAINT	A	2/A007.1	-	-	-
19	6'-0"	7'-0"	A	-	-	METAL	PAINT	METAL	PAINT	A	2/A007.1	-	-	-
20	8'-0"	10'-0"	C	-	-	METAL	PAINT	METAL	PAINT	-	3/A007.5	-	-	PAD LOCK
21	8'-0"	10'-0"	C	-	-	METAL	PAINT	METAL	PAINT	-	3/A007.5	-	-	PAD LOCK

Airports Division
DEPARTMENT OF TRANSPORTATION
STATE OF HAWAII

LLOYD M. HIGA
LICENSED PROFESSIONAL ARCHITECT
No.AR-6093
HAWAII, U.S.A.

04/30/24
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DSGN.	DRWN.	CHKD.	APPD.
JM	KN	JM	

NO.	DATE	REVISIONS

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PROJECT TITLE :

CONVERT CARGO BUILDING TO WORKSHOP

AT
DANIEL K. INOUYE INTERNATIONAL AIRPORT
HONOLULU, OAHU, HAWAII

PROJECT NO.:

CO1325-33

SHEET TITLE:

DOOR SCHEDULE

DATE :
05/10/23
SHEET :
25 OF 84 SHEETS

DWG. NO.
A008

C:\USERS\NAKAZAWA\ONEDRIVE - YAMASATO HIGA ARCHITECTS\2021-063 DOTA CONTINENTAL CARGO BLDG\CONTINENTAL WAREHOUSE - HNL\DRAWINGS\WORKING DWGS\025 A008_DOOR SCHED.DWG

GENERAL NOTES

A. SEE ALSO: SPECIFICATIONS□SPECIAL NOTES ON DRAWINGS□AND OTHER CONTRACT DOCUMENTS.

B. DISCREPANCIES - CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CONDITIONS AND SHALL REPORT ANY DISCREPANCIES IN WRITING TO ENGINEER OF RECORD BEFORE COMMENCING WORK OR ORDERING MATERIALS.

C. MATERIALS AND WORKMANSHIP SHALL CONFORM TO THE 2018 INTERNATIONAL BUILDING CODE.

D. DETAILS SHOWN ON THE DRAWINGS SHALL BE TYPICAL FOR ALL SIMILAR CONDITIONS. MODIFY DETAILS FOR SPECIAL CONDITIONS AS DIRECTED BY THE ENGINEER.

E. SEE ARCHITECTURAL DRAWINGS FOR CHAMFERS□EDGE RADII□DRIPS□REGLETS□ FINISHES□AND OTHER NON-STRUCTURAL ITEMS NOT SHOWN OR SPECIFIED ON STRUCTURAL DRAWINGS. ALL DIMENSIONS ARE IN FEET AND INCHES□UNLESS NOTED OTHERWISE.

CONSTRUCTION NOTES

A. THE CONTRACTOR SHALL NOTIFY THE CONTRACTING OFFICER AT LEAST 48 HOURS IN ADVANCE FOR REVIEW AND OBSERVATION OF REINFORCING AND CONCRETE POURS.

B. CONSTRUCTION LOADING SHALL NOT EXCEED THE DESIGN LIVE LOAD UNLESS SPECIAL SHORING IS PROVIDED. ALLOWABLE LOADS SHALL BE REDUCED IN AREAS WHERE THE STRUCTURE HAS NOT ATTAINED ITS FULL DESIGN STRENGTH.

C. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR MEANS□METHODS□TECHNI□UES□ SE□UENCES□WORKMANSHIP AND JOB SAFETY□INCLUDING FALSEWORK□BRACINGS□MUD SILLS□OTHER TEMPORARY ITEMS USED FOR THE CONSTRUCTION OF THE PROJECT AND PROCEDURES NECESSARY FOR PERFORMING□SUPERINTENDING OR COORDINATING ALL PORTIONS OF THE WORK OF CONSTRUCTION IN ACCORDANCE WITH THE CONTRACT DOCUMENTS AND ANY HEALTH OR SAFETY PRECAUTIONS RE□UIRED BY REGULATORY AGENCIES

EARTHWORK NOTES

A. SHALLOW FOUNDATION DESIGN IS BASED ON A BEARING CAPACITY OF 5□000 PSF FOR TYPICAL FOUNDATIONS FOUNDED ON DENSE FILL.

B. CLEAN AND MOISTEN FOOTING TRENCHES PRIOR TO POURING CONCRETE. WHERE SHRINKAGE CRACKS ARE NOTED AFTER COMPACTION OF THE FOOTING SUBGRADE□THE SOIL SHALL BE MOISTENED TO CLOSE ALL CRACKS.

C. ALL FOOTING EXCAVATIONS□FILL AND BACKFILL OPERATIONS SHALL BE MONITORED BY AND APPROVED BY A GEOTECHNICAL ENGINEER PRIOR TO THE PLACEMENT OF ANY REINFORCING STEEL OR CONCRETE. CONTRACTOR SHALL MAKE APPROPRIATE ARRANGEMENTS FOR OBSERVATIONS A MINIMUM OF 48 HOURS IN ADVANCE.

STRUCTURAL STEEL NOTES

A. UNLESS OTHERWISE NOTED□ALL STRUCTURAL STEEL MEMBERS□BOLTS□ANCHOR BOLTS□SHALL CONFORM TO:

1.	W-SHAPES:	ASTM A□□2 □Fy □ 50 KSI□
2.	ANGLES□PLATES□CHANNELS□RODS:	ASTM A3□ □Fy □ 3□ KSI□
3.	HOLLOW STRUCTURAL SECTIONS □HSS□	ASTM A500□GRADE B □Fy □ 42 KSI□
4.	ERECTION BOLTS:	ASTM A307
5.	BOLTS:	ASTM A325
□.	ANCHOR BOLTS:	ASTM F1554

B. WELDING□WHETHER SHOP OR FIELD□SHALL BE BY CERTIFIED WELDERS ONLY.

C. WELDING ELECTRODES SHALL BE GRADE E-70XX IN ACCORDANCE WITH AWS D1.1.

D. ALL STRUCTURAL STEEL SURFACES SHALL BE HOT-DIP GALVANI□ED. UNLESS OTHERWISE SHOWN□ALL EMBEDDED BOLTS□ANCHORS□PLATES□INSERTS□ETC. SHALL BE HOT-DIP GALVANI□ED AFTER FABRICATION.

CONCRETE NOTES

A. ALL STRUCTURAL CONCRETE SHALL HAVE A MINIMUM ULTIMATE COMPRESSIVE STRENGTH OF 4□000 PSI AT 28 DAYS□AND A MAXIMUM WATER/CEMENT RATIO OF 0.50 AND A MAXIMUM AGGREGATE SI□E OF 3/4".

B. ALL LIGHT-WEIGHT CELLULAR CONCRETE USED FOR BACKFILL SHALL HAVE A MAXIMUM UNIT WEIGHT OF 45 PCF AND MINIMUM COMPRESSIVE STRENGTH OF 80 PSI AT 28 DAYS. USE MIX NUMBER 01IL35CN BY ISLAND READY MIX OR AN APPROVED E□UAL.

C. ADMIXTURES MAY BE USED AS CONTRACTORS OPTION□BUT SUBJECT TO ENGINEERS APPROVAL.

D. THE USE OF ANY CALCIUM CHLORIDE IN ANY CONCRETE IS PROHIBITED.

REINFORCING STEEL NOTES

A. UNLESS OTHERWISE NOTED ON PLANS□ALL REINFORCING BARS SHALL BE ASTM A□15□GRADE □0. WHERE WELDING OF REINFORCING STEEL IS RE□UIRED□ASTM A70□□GRADE □0 SHALL BE USED.

B. SPLICES SHALL BE IN ACCORDANCE WITH ACI 318-14. SPLICE LENGTH SHALL NOT BE LESS THAN 48 BAR DIAM. OR 24"□WHICHEVER GREATER. STAGGER SPLICES.

C. MINIMUM CONCRETE CLEAR COVER:
1. CONCRETE POURED AGAINST EARTH ---------- 3"
2. CONCRETE POURED AGAINST FORMS AND LATER EXPOSED TO WEATHER OR GROUND
   a. □5 BAR OR SMALLER ---------- 1 1/2"
   b. □□ BAR OR LARGER ---------- 2"
3. CONCRETE NOT EXPOSED TO WEATHER OR GROUND ---------- 1 1/2"

D. BAR BENDS□HOOKS□AND OFFSETS SHALL BE IN ACCORDANCE WITH THE ACI RECOMMENDATIONS.

COLD-FORMED METAL FRAMING NOTES

A. LIGHT GAUGE□COLD FORMED STEEL MEMBERS ARE TO BE MANUFACTURED BE A MEMBER OF THE STEEL STUD MANUFACTURER'S ASSOCIATION □SSMA□ ALL MEMBERS ARE DESIGNATED PER SSMA STANDARDS.

B. ALL LIGHT GAGE METAL FRAMING CONSTRUCTION SHALL BE IN ACCORDANCE WITH AISI "SPECIFICATIONS FOR DESIGN OF COLD FORMED STEEL STRUCTURAL MEMBERS"□AND ASTM A1003□LATEST EDITION.

C. MEMBERS ARE TO COMPLY WITH ICC EVALUATION REPORT NO. 4□43P.

D. MEMBERS ARE TO BE GALVANI□ED IN ACCORDANCE WITH ASTM A525.

E. SHOP DRAWINGS SUBMITTALS SHALL BE ACCOMPANIED BY MANUFACTURER'S PRODUCT INFORMATION AND OTHER DATA NEEDED TO VERIFY COMPLIANCE WITH THE SPECIFIED RE□UIREMENTS.

F. UNLESS OTHERWISE NOTED□ALL LIGHT-GAGE METAL FRAMING SHALL CONFORM WITH THE FOLLOWING:
1. GALVANI□ED STUDS □10 - 1□ GAUGE□ ASTM A□53□GRADE 50□G□0 COATING
2. GALVANI□ED STUDS □18 OR 20 GAUGE□ ASTM A□53□GRADE 33□G□0 COATING
3. GALVANI□ED TRACK□END CLOSURES□ ASTM A□53□GRADE 50□G□0 COATING BRIDGING AND ACCESSORIES

G. LIGHT-GAGE FRAMING SHALL BE THE SI□E AND GAUGE INDICATED ON THE DRAWINGS.

H. ALL SHEET METAL SCREWS SHALL PROTRUDE A MINIMUM OF 1/4" THRU METAL FRAMING.

EPOXY ANCHOR BOLT ADHESIVE

A. EPOXY ANCHOR BOLT ADHESIVES SHALL BE TWO-COMPONENT HIGH-SOLIDS□EPOXY BASED SYSTEM SUPPLIED SUPPLIED THROUGH A MIXING NO□□LE PROVIDED BY THE MANUFACTURER. THE ADHESIVE ANCHOR SHALL HAVE BEEN TESTED AND □UALIFIED FOR PERFORMANCE IN UNCRACKED CONCRETE□CRACKED CONCRETE OR MASONRY □WHICHEVER IS APPLICABLE□IN ACCORDANCE WITH ICC-ES.

B. THE ADHESIVE SHALL BE DESIGNED FOR SEISMIC APPLICATIONS.

C. ALL MANUFACTURERS PREPARATION□INSTALLATION AND SETTING PROCEDURES SHALL BE FOLLOWED IN STRICT ACCORDANCE.

SPECIAL INSPECTION NOTES

A. SPECIAL INSPECTION PROVISIONS OF CHAPTER 17 OF THE 2018 INTERNATIONAL BUILDING CODE GOVERNS PORTIONS OF THE STRUCTURAL WORK AS DESCRIBED IN THE CONSTRUCTION DOCUMENTS. THE SPECIAL INSPECTOR SHALL BE HIRED BY THE OWNER.

B. THE MINIMUM RESPONSIBILITIES OF THE SPECIAL INSPECTOR SHALL BE OUTLINED IN THE "SPECIAL INSPECTION RECOMMENDED STANDARD OF PRACTICE"□2ND EDITION□PUBLISHED BY THE STRUCTURAL ENGINEERS ASSOCIATION OF HAWAII.

C. IT SHALL BE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR TO NOTIFY THE SPECIAL INSPECTOR FOR ALL ITEMS RE□UIRING SPECIAL INSPECTION A MINIMUM OF 48 HOURS IN ADVANCE.

D. SPECIAL INSPECTIONS DO NOT RELIEVE THE GENERAL CONTRACTOR OF HIS RESPONSIBILITIES TO COMPLETE THE PROJECT IN ACCORDANCE WITH THE CONSTRUCTION DOCUMENTS AND TO BE RESPONSIBLE FOR THE SAFETY OF THE JOB SITE.

E. THE SPECIAL INSPECTOR SHALL SUBMIT A FINAL REPORT TO THE BUILDING DEPARTMENT□ ARCHITECT□STRUCTURAL ENGINEER AND OWNER STATING WHETHER THE WORK RE□UIRING SPECIAL INSPECTION WAS□TO THE BEST OF HIS/HER KNOWLEDGE IN CONFORMANCE WITH THE CONSTRUCTION DOCUMENTS AND THE APPLICABLE WORKMANSHIP PROVISIONS OF THE BUILDING CODE.

F. THE SPECIAL INSPECTOR SHALL BE CERTIFIED AS A SPECIAL INSPECTOR BY THE BUILDING DEPARTMENT OF THE INTERNATIONAL CONFERENCE OF BUILDING OFFICIALS □ICBO□

G. THE FOLLOWING STRUCTURAL WORK FOR THIS PROJECT RE□UIRE SPECIAL INSPECTIONS AS NOTED BELOW:
1. CONCRETE AND CONCRETE REINFORCING STEEL
2. BOLTS AND EMBEDS INSTALLED IN CONCRETE
3. STRUCTURAL STEEL
4. EXPANSION ANCHORS AND ADHESIVE BOLT□BAR OR DOWEL INSTALLATION

DESIGN DATA

A. BUILDING RISK CATEGORY----------II

B. LIVE LOADS:
1. OFFICES ----------50 PSF

C. SUPERIMPOSED DEAD LOADS:
1. MECHANICAL□ELECTRICAL□PLUMBING----------5 PSF
2. CEILING----------5 PSF

D. SEISMIC LOADS:
1. RISK CATEGORY----------II
2. SEISMIC IMPORTANCE FACTOR----------1.00
3. SEISMIC SITE CLASS----------D □ASSUMED□
4. Ss----------0.570□
5. S1----------0.1□4□
□. Sds----------0.511□
7. Sd1----------0.248□
8. SEISMIC RESISTING SYSTEM: INTERMEDIATE STEEL MOMENT FRAME
□. RESPONSE MODIFICATION FACTOR□R----------4.5
10. SYSTEM OVERSTRENGTH FACTOR----------3
11. DEFLECTION AMPLIFICATION FACTOR----------4
12. SEISMIC DESIGN CATEGORY----------D

E. WIND LOADS:
1. RISK CATEGORY----------II
2. BASIC WIND SPEED----------131 MPH
3. WIND IMPORTANCE FACTOR----------1.0
4. WIND EXPOSURE----------C
5. ENCLOSED BUILDING

F. FOUNDATION PARAMETERS - PER AS-BUILT DRAWINGS□"CONTINENTAL AIRLINES CARGO BUILDING" DATED FEB. 8□1□74:
1. SHALLOW FOUNDATION BEARING CAPACITY----------5□000 PSF

STANDARDS AND REFERENCES

A. INTERNATIONAL BUILDING CODE□INTERNATIONAL CODE COUNCIL□2018 EDITION AS AMENDED BY STATE OF HAWAII.

B. ASCE 7-1□□MINIMUM DESIGN LOADS FOR BUILDINGS AND OTHER STRUCTURES.

C. ACI 318-14□AMERICAN CONCRETE INSTITUTE□BUILDING CODE RE□UIREMENTS FOR STRUCTURAL CONCRETE.

D. AISC 3□0-1□□AMERICAN INSTITUTE OF STEEL CONSTRUCTION□SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS.

E. ANSI/AISC 358-18W - PRE□UALIFIED CONNECTIONS FOR SPECIAL AND INTERMEDIATE STEEL MOMENT FRAMES FOR SEISMIC APPLICATIONS INCLUDING SUPPLEMENT NO. 1

F. AWS D1.1 - 2017□STRUCTURAL WELDING CODE - STEEL

STATE OF HAWAII 1959

Airports Division
DEPARTMENT OF TRANSPORTATION
STATE OF HAWAII

KATHLEEN Y. WONG
LICENSED PROFESSIONAL ENGINEER
NO. 10469-S
HAWAII USA

04/30/2024
Licensed Expiration Date

This work was prepared by me or under my supervision.

DSGN.	DRWN.	CHKD.	APPD.
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CO1325-33

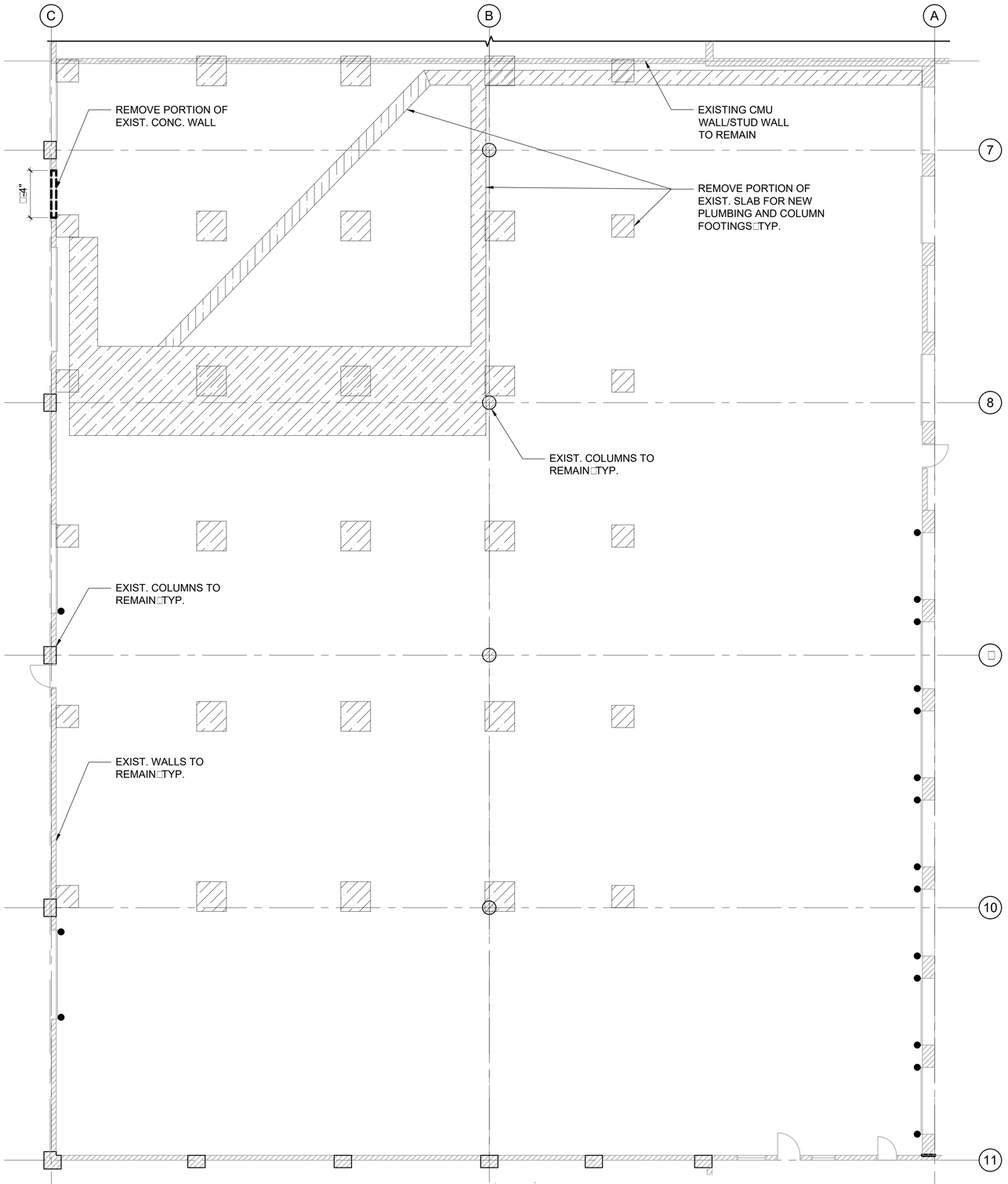
SHEET TITLE:

STRUCTURAL GENERAL NOTES

DATE :
05/10/23
SHEET :
26 OF 84 SHEETS

DWG. NO.
S001

M:\2022\2022_010.000 YPH HNL CARGO WAREHOUSE\G DWGS\STRUCTURAL\INDIVIDUAL SHEETS\S001 STRUCTURAL GENERAL NOTES.DWG



1 SD101 DEMOLITION FLOOR PLAN

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

DEMOLITION NOTES:

A. THE CONTRACTOR SHALL VISIT THE SITE PRIOR TO BIDDING AND SHALL FAMILIARIZE HIMSELF AND VERIFY THE ACTUAL EXISTING CONDITIONS OF THE EXTERIOR AND INTERIOR BUILDING.

B. CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS SHOWN. NOTIFY THE ENGINEER IF ANY DISCREPANCIES ARE FOUND.

C. DEMOLITION OF EXISTING CONCRETE SLAB SHALL BE COORDINATED WITH THE ARCHITECTURAL, MECHANICAL, FIRE PROTECTION, AND ELECTRICAL WORK.

D. DEMOLITION OF EXISTING CONCRETE SLAB SHALL BE HANDLED IN A MANNER SO AS NOT TO DISTURB OR DAMAGE THE INTEGRITY OF THE EXISTING STRUCTURES.

E. NOT ALL NEW PENETRATIONS REQUIRED FOR CONSTRUCTION ARE SHOWN ON THE CONTRACT DOCUMENTS. CONTRACTOR SHALL COORDINATE, LOCATE, AND PROVIDE ALL NEW PENETRATIONS REQUIRED.

F. THE CONTRACTOR SHALL BE RESPONSIBLE TO PROTECT THE EXISTING FLOOR FROM DAMAGE AND OVERLOAD.

G. CONTRACTOR SHALL CUT THE DEMOLISHED SLABS INTO SMALL PIECES AND REMOVE FROM SITE.

LEGEND:

EXISTING STAIR AND SLAB TO BE DEMOLISHED

EXISTING WALL AND SLAB TO REMAIN

2' 0 2' 4' 6' 10' 14'

STATE OF HAWAII 1959

Airports Division

DEPARTMENT OF TRANSPORTATION
STATE OF HAWAII

KATHLEEN Y. WONG
LICENSED PROFESSIONAL ENGINEER
NO. 10469-S
HAWAII USA

04/30/2024
Licensed Expiration Date

This work was prepared by me or under my supervision.

DSGN.	DRWN.	CHKD.	APPD.
JP	JP	KW	

NO.	DATE	REVISIONS

DATE

PROJECT TITLE :

CONVERT CARGO BUILDING TO WORKSHOP

AT
DANIEL K. INOUYE INTERNATIONAL AIRPORT
HONOLULU, OAHU, HAWAII

PROJECT NO.:

CO1325-33

SHEET TITLE:

DEMOLITION FLOOR PLAN

DATE :
05/10/23

SHEET :
27 OF 84 SHEETS

DWG. NO.
SD101

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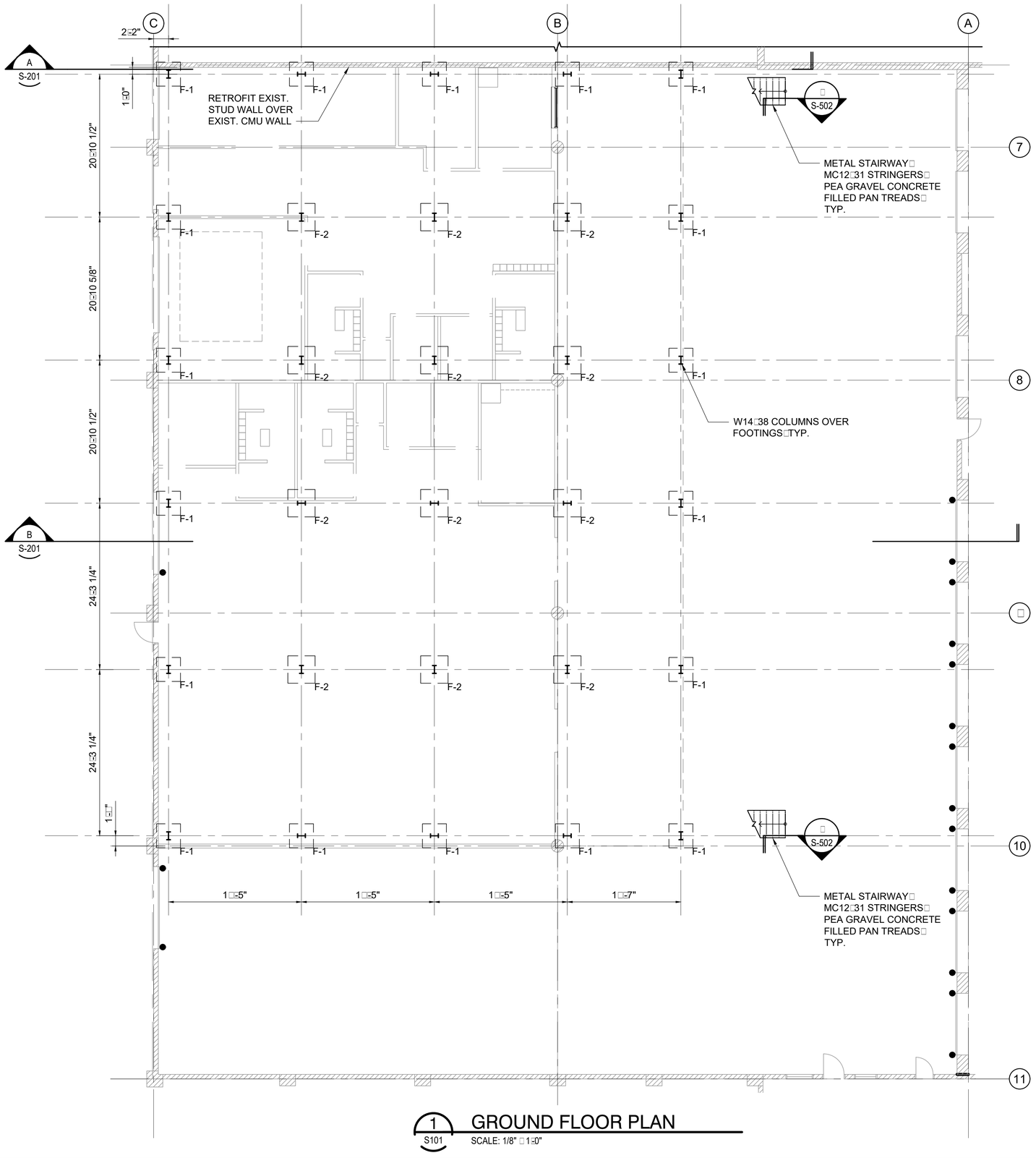

1 S101 GROUND FLOOR PLAN
SCALE: 1/8" = 1'-0"

LEGEND:

F1: 3'-0"x3'-0"x12" CONCRETE FOOTING (SEE SHEET S501)
F2: 4'-0"x4'-0"x14" CONCRETE FOOTING (SEE SHEET S501)

2' 0 2' 4' 6' 10' 14'

STATE OF HAWAII 1959

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DEPARTMENT OF TRANSPORTATION
STATE OF HAWAII

KATHLEEN Y. WONG
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HONOLULU, OAHU, HAWAII

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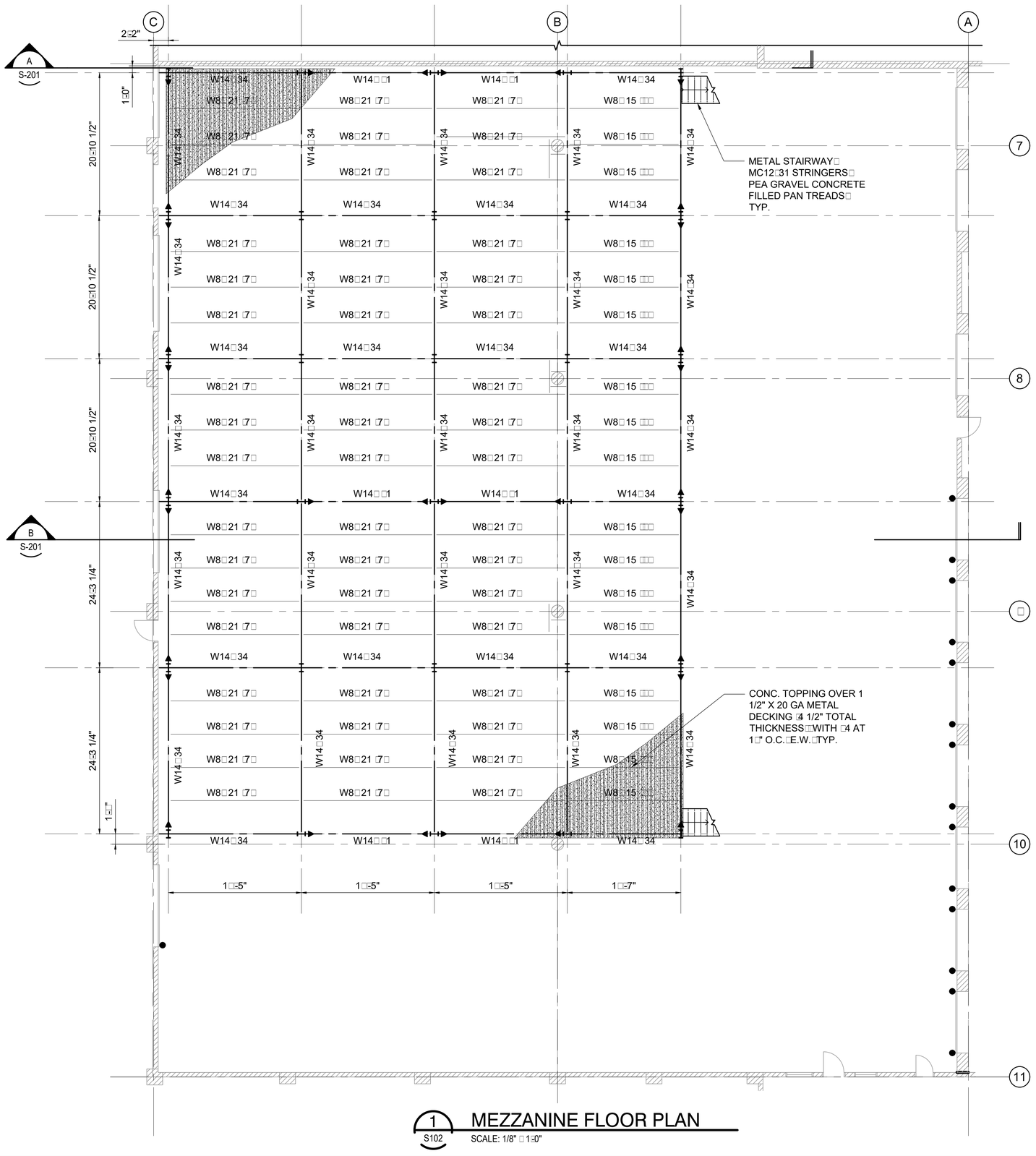
CO1325-33

SHEET TITLE:

GROUND FLOOR PLAN

DATE :	DWG. NO.
05/10/23	S101
SHEET :	
28 OF 84 SHEETS	

M:\2022\2022_010.000 YFH HNL CARGO WAREHOUSE\G DWGS\STRUCTURAL\INDIVIDUAL SHEETS\S101 GROUND FLOOR PLAN.DWG



1 S102 MEZZANINE FLOOR PLAN

SCALE: 1/8" □1□0"

LEGEND:

STEEL MOMENT FRAME

W8□15 □□□ W8□15 FRAMING BEAM WITH □STUDS SPACED E□UALLY

2' 0 2' 4' 6' 10' 14'

STATE OF HAWAII 1959

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STATE OF HAWAII

KATHLEEN Y. WONG
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PROJECT NO.:

CO1325-33

SHEET TITLE:

MEZZANINE FLOOR PLAN

DATE :	DWG. NO.
05/10/23	S102
SHEET :	
29 OF 84 SHEETS	

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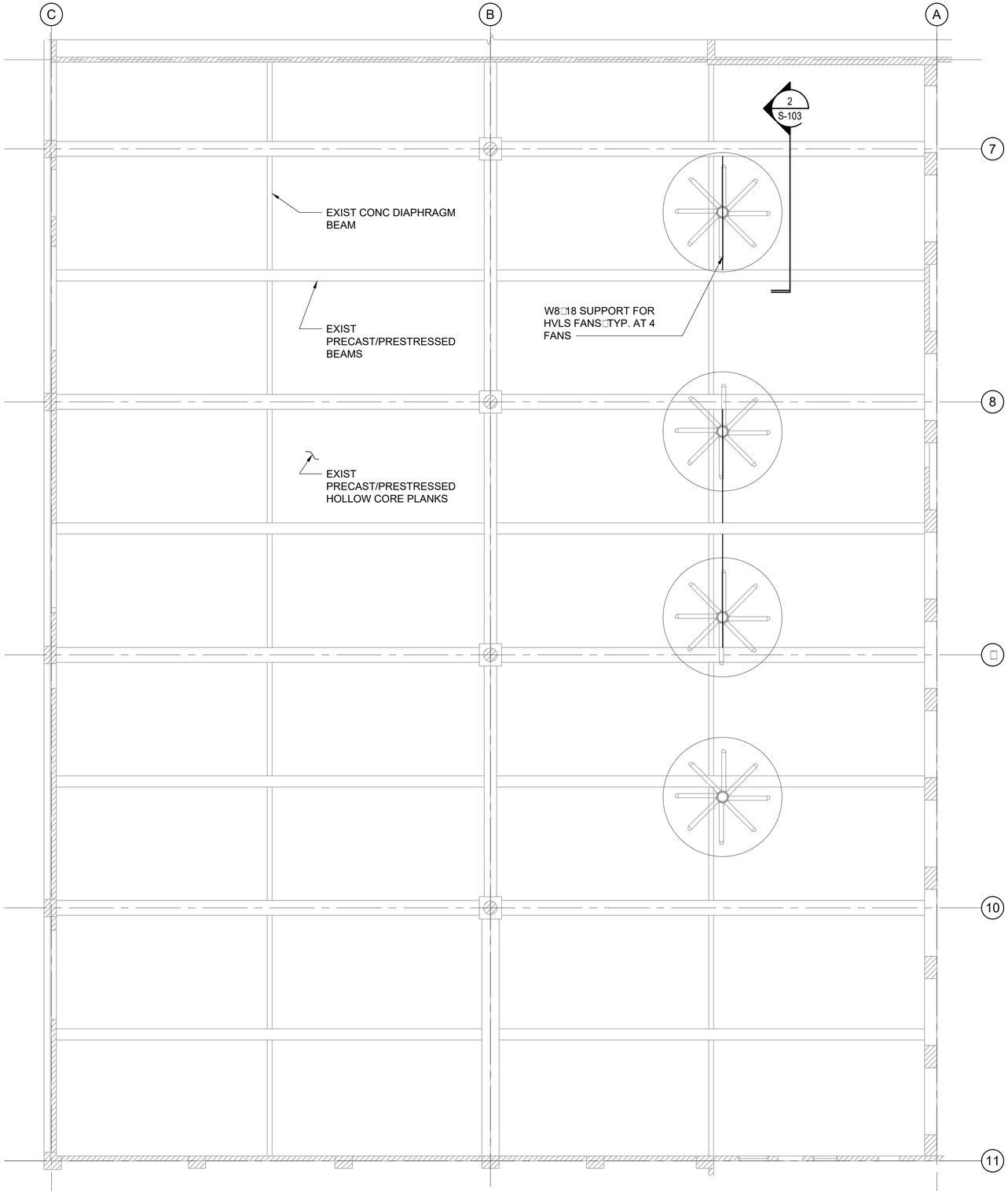
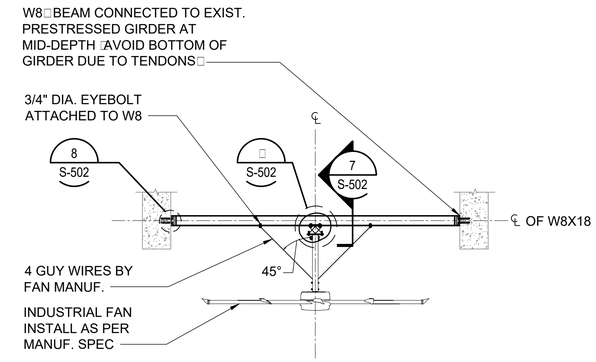


1 S103 REFLECTED CEILING PLAN

SCALE: 1/8" □ 1□0"



2 S103 FAN SUPPORT SECTION

SCALE: 1/4" □ 1□0"

1' 0 2' 4' 8'

2' 0 2' 4' 6' 10' 14'

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AT
DANIEL K. INOUYE INTERNATIONAL AIRPORT
HONOLULU, OAHU, HAWAII

PROJECT NO.:

CO1325-33

SHEET TITLE:

REFLECTED CEILING PLAN

DATE :
05/10/23

SHEET :
30 OF 84 SHEETS

DWG. NO.
S103

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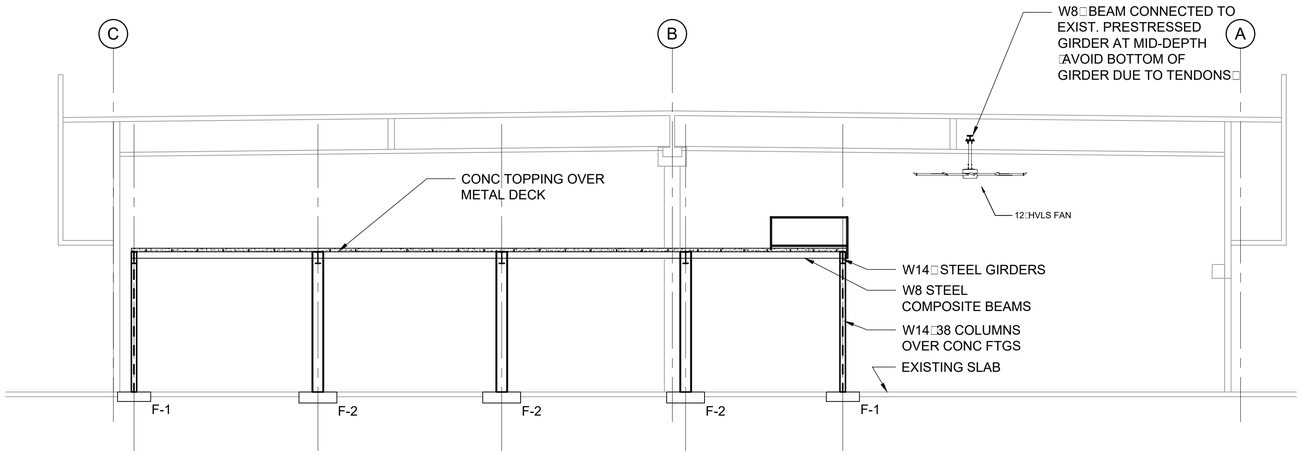
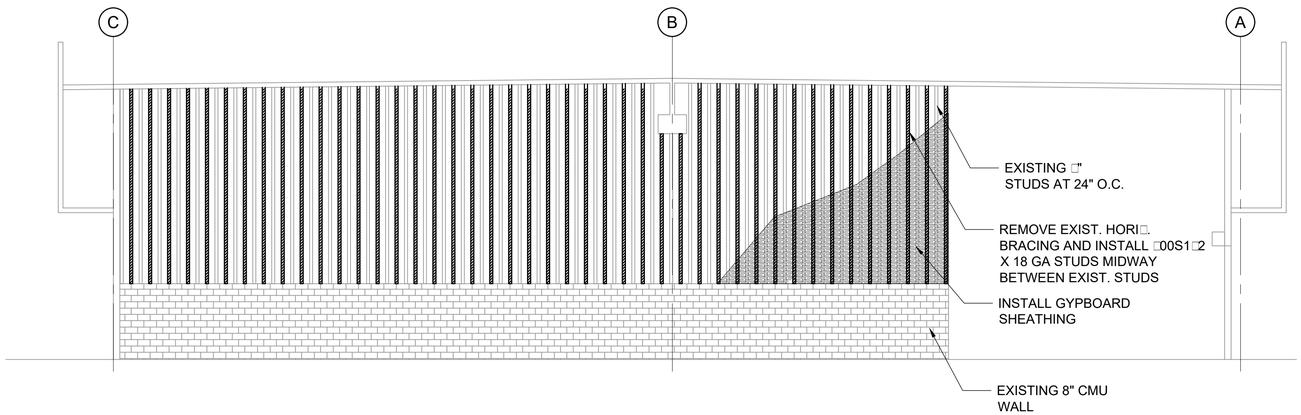


B BUILDING SECTION
S201

SCALE: 1/8" □1□0"



A DEMISING WALL ELEVATION
S201

SCALE: 1/8" □1□0"

2' 0 2' 4' 6' 10' 14'

STATE OF HAWAII 1959

Airports Division
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STATE OF HAWAII

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HONOLULU, OAHU, HAWAII

PROJECT NO.:

CO1325-33

SHEET TITLE:

BUILDNG SECTIONS

DATE :	DWG. NO.
05/10/23	S201
SHEET :	
31 OF 84 SHEETS	

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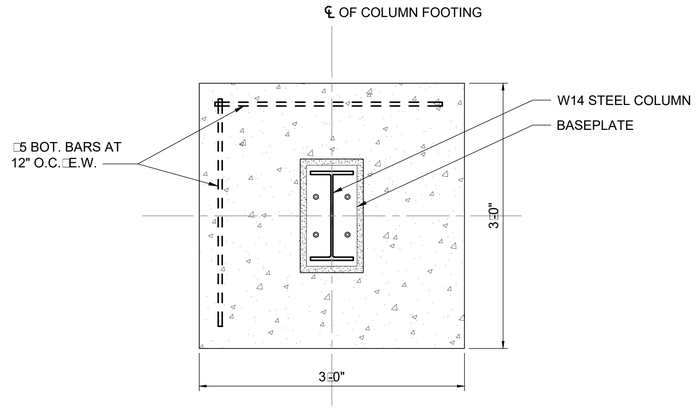
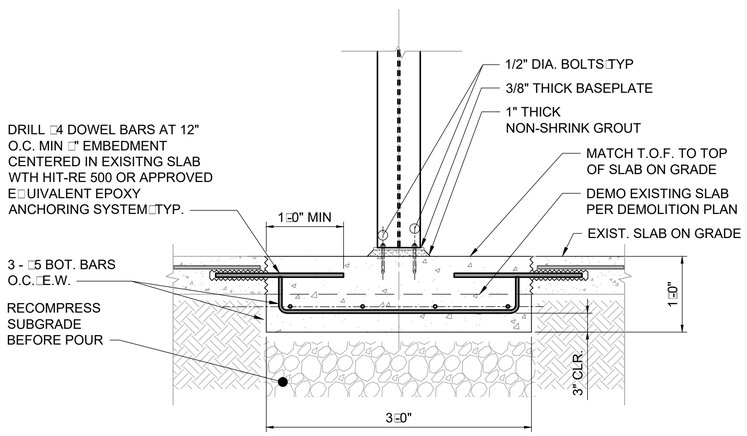


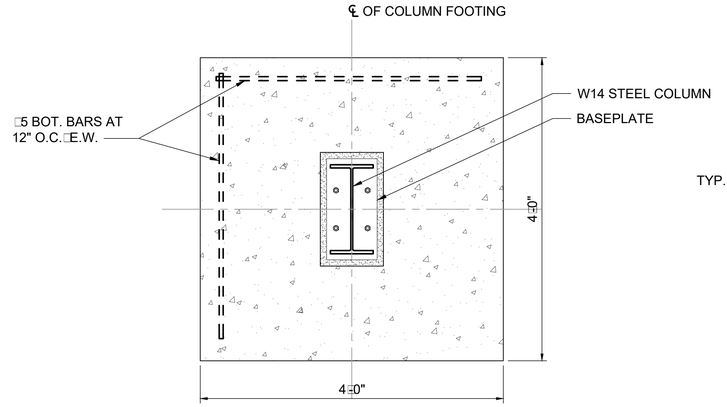
PLAN



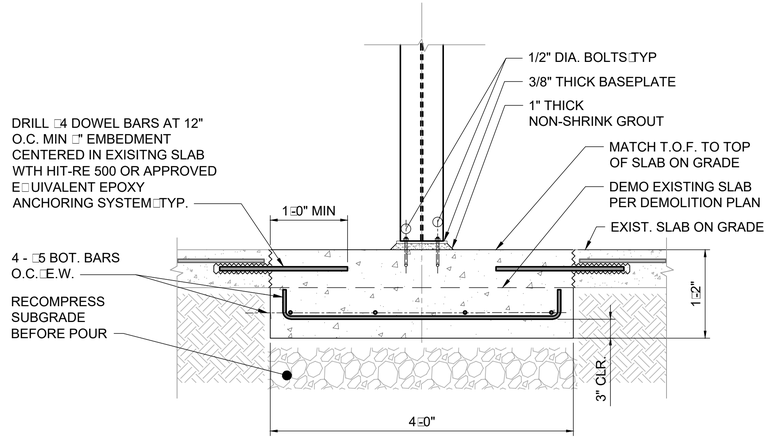
SECTION

1 S501 F1 FOOTING DETAIL

SCALE: 1" □ 1□0"



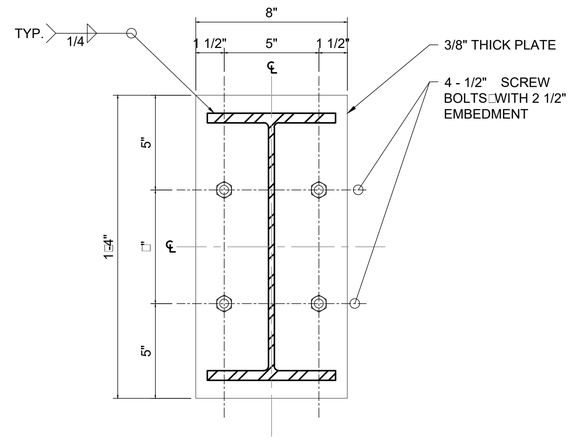
PLAN



SECTION

2 S501 F2 FOOTING DETAIL

SCALE: 1" □ 1□0"



3 S501 BASE PLATE DETAIL

SCALE: 3" □ 1□0"

1' 0 1'

3" 0 3" 6" 9"

STATE OF HAWAII 1959

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CONVERT CARGO BUILDING TO WORKSHOP

AT
DANIEL K. INOUYE INTERNATIONAL AIRPORT
HONOLULU, OAHU, HAWAII

PROJECT NO.:

CO1325-33

SHEET TITLE:

FOUNDATION SECTIONS AND DETAILS

DATE :	DWG. NO.
05/10/23	S501
SHEET :	
32 OF 84 SHEETS	

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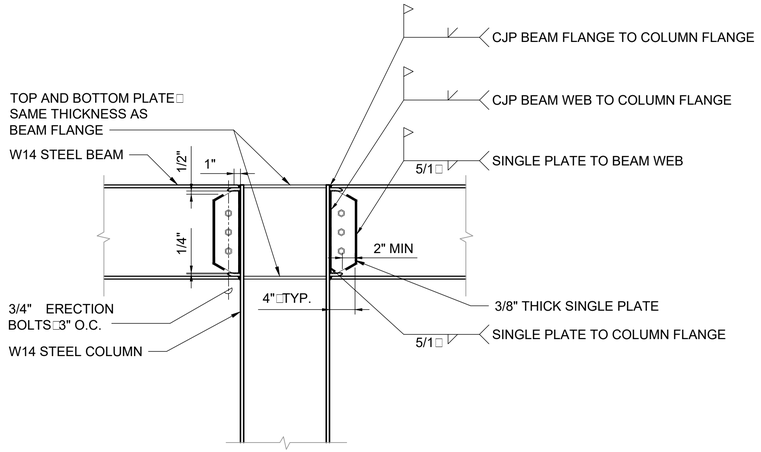
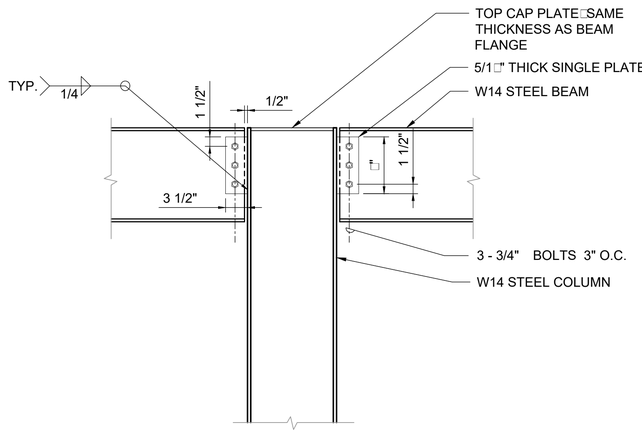


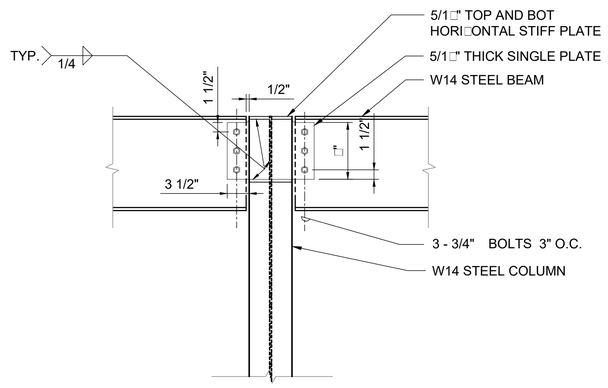
1 S502 MOMENT FRAME BEAM TO COLUMN CONNECTION

SCALE: 1" = 1'-0"



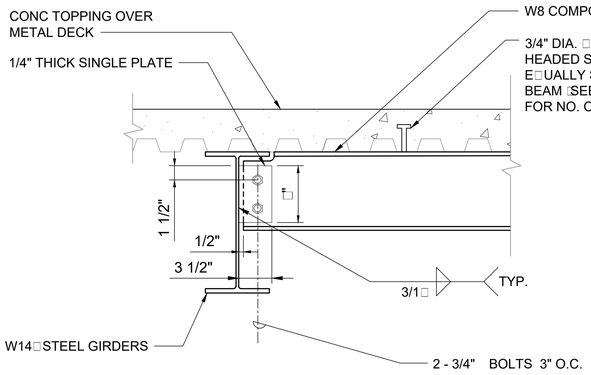
2 S502 BEAM TO COLUMN FLANGE CONNECTION

SCALE: 1" = 1'-0"



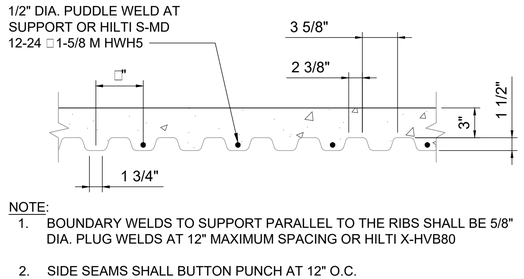
3 S502 BEAM TO COLUMN WEB CONNECTION

SCALE: 1" = 1'-0"



4 S502 BEAM TO BEAM CONNECTION

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

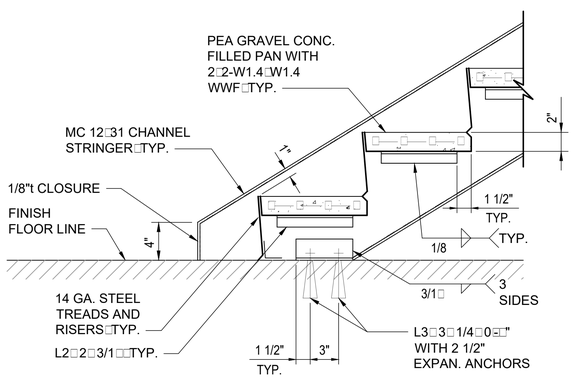


NOTE:

1. BOUNDARY WELDS TO SUPPORT PARALLEL TO THE RIBS SHALL BE 5/8" DIA. PLUG WELDS AT 12" MAXIMUM SPACING OR HILTI X-HVB80
2. SIDE SEAMS SHALL BUTTON PUNCH AT 12" O.C.

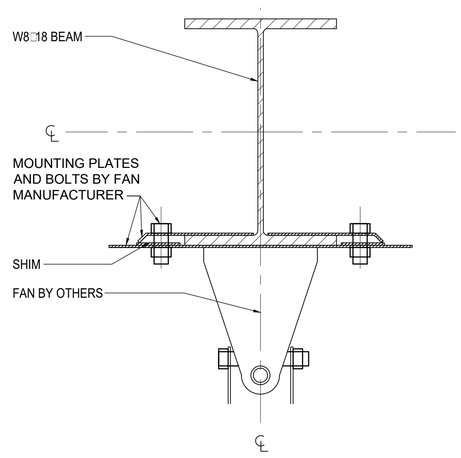
5 S502 TYPICAL METAL DECKING DETAIL

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



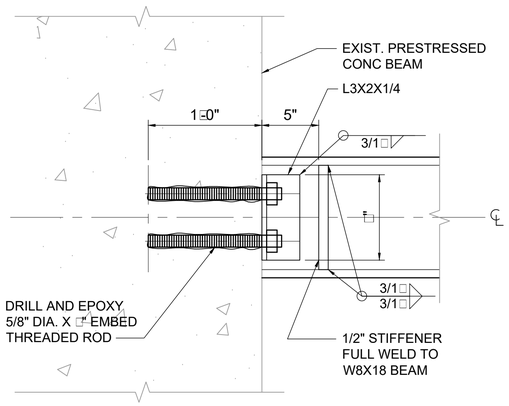
6 S502 STEEL STAIR DETAIL

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



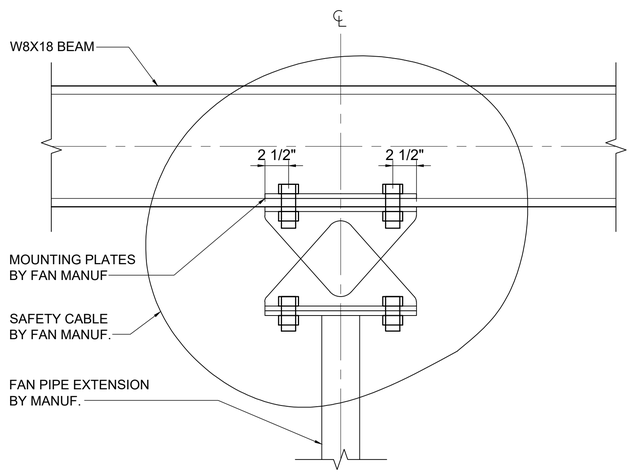
7 S502 FAN SUPPORT DETAIL

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



8 S502 FAN SUPPORT DETAIL

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



9 S502 FAN SUPPORT DETAIL

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

1' 0 1'

6" 0 6" 12" 18"

Airports Division
DEPARTMENT OF TRANSPORTATION
STATE OF HAWAII

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DATE

PROJECT TITLE :

CONVERT CARGO BUILDING TO WORKSHOP

AT
DANIEL K. INOUYE INTERNATIONAL AIRPORT
HONOLULU, OAHU, HAWAII

PROJECT NO.:

CO1325-33

SHEET TITLE:

STEEL DETAILS

DATE :	DWG. NO.
05/10/23	S502
SHEET :	
33 OF 84 SHEETS	

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MECHANICAL LEGEND

SYMBOL	ABBRV.	DESCRIPTION	SYMBOL	ABBRV.	DESCRIPTION
	AFF	ABOVE FINISHED FLOOR		TC	TIMECLOCK
	AHU	AIR HANDLING UNIT		TD	TIME DELAY
	BV	BALL VALVE		TEMP	TEMPERATURE
	BD	BACK DRAFT DAMPER		TS	TEMPERATURE SENSOR
	BFV	BUTTERFLY VALVE		THERM.	THERMOMETER
CD	CD	CONDENSATE DRAIN		THERM.	THERMOMETER
	CV	CHECK VALVE		VFD	VARIABLE FREQUENCY DRIVE
	CFCU	CHILLED WATER FAN COIL UNIT			CAPPED/STUBOUT PIPE
	CR	CONTACT RELAY		CW	COLD WATER
	CV	CONTROL VALVE		FD	FLOOR DRAIN
	DP	DIFFERENTIAL PRESSURE		POC	POINT OF CONNECTION
SD		DUCT SMOKE DETECTOR		POR	POINT OF REMOVAL
	EA/OA	EXHAUST AIR/OUTSIDE AIR		RPBFP	REDUCED PRESS. BACKFLOW PREVENT
	EAG	EXHAUST AIR GRILLE		SS	START STOP
	EF	EXHAUST FAN		SW	SWITCH
	EMCS/EMS	ENERGY MNGMT CONTROL SYSTEM		S OR W	SOIL OR WASTE
	EXH.	EXHAUST			STRAINER
FS	FS	FLOW SWITCH		T & P	TEMP. AND PRESS. RELIEF VALVE
	GV	GATE VALVE		TYP.	TYPICAL
	H-O-A	HAND-OFF-AUTO			PRESSURE GAUGE
		MANUAL AIR VENT			UNION
M		MOTOR (ELECTRIC)		VAV	VARIABLE AIR VOLUME
	NO	NORMALLY OPEN		V	VENT
	NC	NORMALLY CLOSED		FSR	FLOW SENSOR
	NPT	NATIONAL PIPE THREAD SIZE			FIRE DAMPER

MECHANICAL GENERAL NOTES:

1. EXAMINE THE PROJECT SITE AND BECOME FAMILIAR WITH ALL EXISTING CONDITIONS AND THE EXTENT OF REMOVAL, RELOCATION, RECONNECTION AND/OR NEW WORK PRIOR TO BIDDING. NOTIFY AND COORDINATE WITH THE ARCHITECT FOR ANY MAJOR DEVIATIONS OR DISCREPANCIES DISCOVERED IN THE PLANS AND SPECIFICATIONS DUE TO UNFORESEEN OR VARYING FIELD CONDITIONS. BID SUBMISSION SHALL BE CONSIDERED AS EVIDENCE THAT THE CONTRACTOR HAS VISITED THE SITE AND HAS RESOLVED ALL DISCREPANCIES AND QUESTIONS AND NO EXTRA PAYMENT WILL BE AUTHORIZED FOR WORK MADE NECESSARY BY THE CONTRACTOR'S FAILURE TO DO SO.

2. THE ENTIRE INSTALLATION SHALL COMPLY WITH ALL APPLICABLE REQUIREMENTS OF THE BUILDING CODE OF THE STATE OF HAWAII, STATE DEPARTMENT OF HEALTH REGULATIONS, 2018 UNIFORM PLUMBING CODE AS ADOPTED BY THE STATE PLUMBING CODE, 2017 NATIONAL ELECTRICAL CODE AS ADOPTED BY THE STATE ELECTRICAL CODE, ASME BOILER AND PRESSURE VESSEL CODE, ASME PRESSURE PIPING CODE, 2018 IECC INTERNATIONAL ENERGY CONSERVATION CODE AS ADOPTED BY THE HAWAII STATE MODEL ENERGY CODE, 2018 NFPA 1 AS ADOPTED BY THE STATE FIRE CODE, 2018 INTERNATIONAL BUILDING CODE (IBC) AS ADOPTED BY THE STATE BUILDING CODE, AND ALL OTHER AGENCIES HAVING JURISDICTION.

3. THE DRAWINGS AND SPECIFICATIONS ARE INTENDED TO COVER THE COMPLETE INSTALLATION OF SYSTEMS TO FUNCTION AS DESCRIBED AND SPECIFIED. THE OMISSION OF REFERENCE TO ANY NECESSARY ITEM OF LABOR OR MATERIAL SHALL NOT RELIEVE THE CONTRACTOR FROM PROVIDING SUCH LABOR AND MATERIAL.

4. ALL EQUIPMENT SHALL BE CAPABLE OF FITTING INTO THE SPACES ALLOCATED WHILE MEETING THE MANUFACTURER'S RECOMMENDED ACCESS REQUIREMENTS. REVIEW ALL SPACES WHERE EQUIPMENT IS TO BE INSTALLED PRIOR TO ORDERING OF EQUIPMENT AND NOTIFY THE ENGINEER OF ANY INADEQUATE CLEARANCES OR CONDITIONS THAT WILL PREVENT THE PROPER INSTALLATION, MAINTENANCE, AND OPERATION OF THE EQUIPMENT.

5. PROVIDE SHOP DRAWINGS FOR THE LAYOUT OF EQUIPMENT, PIPING, AND DUCTWORK SHOWING COORDINATION OF ALL WORK WITH ALL OTHER TRADES, INCLUDING PLUMBING, MED GAS, FIRE SPRINKLER, FIRE ALARM, CONTROLS, ELECTRICAL, AND COMMUNICATION SYSTEMS. COORDINATION DRAWINGS SHALL OVERLAY HVAC, PLUMBING, POL, FIRE SPRINKLER, ELECTRICAL, AND FIRE ALARM SYSTEMS, AND ALL CONFLICTS BETWEEN TRADES SHALL BE NOTED AND RESOLVED.

6. VERIFY AND COORDINATE ALL ROOF, WALL, AND FLOOR PENETRATIONS WITH THE STRUCTURAL AND ARCHITECTURAL DRAWINGS PRIOR TO THE START OF CONSTRUCTION.

7. OBTAIN APPROVAL FROM THE ARCHITECT BEFORE MAKING ANY PENETRATIONS THROUGH STRUCTURAL MEMBERS, WALLS, AND SLABS.

8. VERIFY THE EXACT LOCATION, SIZE, AND INVERT OF ALL EXISTING SEWER, STORM DRAIN, AND WATER LINES AT THE NEW POINT OF CONNECTION PRIOR TO THE START OF CONSTRUCTION.

9. DRAWINGS DO NOT ATTEMPT TO SHOW EXACT DETAILS OF PIPING AND DUCTWORK. PROVIDE OFFSETS AS NECESSARY TO AVOID LOCAL OBSTRUCTIONS OR INTERFERENCE WITH OTHER TRADES. REVIEW ALL PIPING AND DUCT RUNS PRIOR TO FABRICATION AND IMMEDIATELY NOTIFY THE ARCHITECT OF ANY INTERFERENCE AND/OR LACK OF ADEQUATE CLEARANCES.

10. SHOULD PROJECT CONDITIONS REQUIRE REARRANGEMENT OF WORK, MARK SUCH CHANGES ON THE AS-BUILT DRAWINGS. IF THESE CHANGES REQUIRE ALTERNATE METHODS TO THOSE APPROVED BY THE CONTRACT DOCUMENTS, SUBMIT SHOP DRAWINGS SHOWING THE PROPOSED ALTERNATE METHODS TO THE ARCHITECT FOR REVIEW. DO NOT PROCEED UNTIL REVIEWED.

11. PATCH AND PAINT ALL EXPOSED MATERIAL, INCLUDING DUCTWORK, TO MATCH ADJACENT SURFACES OR AS INDICATED.

12. REPAIR ANY DAMAGE TO EXISTING CONSTRUCTION RESULTING FROM THE INSTALLATION OF MECHANICAL ITEMS. THE AREAS REPAIRED SHALL MATCH THE ADJACENT SURFACES IN TEXTURE AND COLOR.

13. PROPERLY FIRESTOP ALL PENETRATIONS THROUGH FIRE RATED WALLS, FLOORS, OR PARTITIONS WITH A UL APPROVED SYSTEM APPROPRIATE FOR THE PENETRATION TYPE AND FIRE RATING. FIRESTOP ALL PENETRATIONS BETWEEN FLOORS.

14. PROVIDE ACCESS PANELS TO ALL CONCEALED VALVES, DAMPERS, AND EQUIPMENT. PANELS SHALL BE MILCOR OR EQUAL. COORDINATE THE LOCATION OF ACCESS PANELS TO INSURE THAT THE EQUIPMENT CAN BE MAINTAINED ADEQUATELY.

15. PROVIDE SMOKE, FIRE, OR SMOKE/FIRE DAMPERS IN DUCTS AND AIR DEVICES AT ALL FIRE RATED WALLS, CEILINGS, AND PARTITIONS AS REQUIRED BY THE IBC.

16. PROVIDE ISOLATION VALVES ON PIPING BRANCH LINES AND VOLUME DAMPERS ON DUCTWORK BRANCH LINES WHETHER SHOWN ON THE DRAWINGS OR NOT.

17. PROVIDE MANUAL AIR VENTS AT ALL HIGH POINTS IN HOT WATER, COLD WATER, HOT WATER RETURN, AND CHILLED WATER PIPES.

18. SEISMICALLY BRACE ALL EQUIPMENT, PIPING, AND DUCTWORK IN ACCORDANCE WITH THE CURRENT CITY AND COUNTY OF HONOLULU BUILDING CODE FOR SEISMIC ZONE 2A.

19. INSTALL CONDENSATE DRAINS AT A MINIMUM SLOPE OF 1/4" PER FOOT. INDIVIDUAL UNIT CONDENSATE DRAINS SHALL BE 1" DIAMETER LINES AND 1 1/4" FOR COMBINED LINES UNLESS OTHERWISE INDICATED.

20. INSULATE ALL SEWER PIPING RECEIVING AIR CONDITIONING CONDENSATE DRAINS, ICE DRAINS, OR ANY OTHER COLD LIQUID WHICH MAY CREATE CONDENSATION, FROM POINT OF CONNECTION TO TOP OF CONCRETE SLAB-ON-GRADE. INSULATE FLOOR DRAIN AND FLOOR SINK BODIES EXPOSED TO AIR BELOW THE FLOOR.

21. ROUTE ALL CONTROL AND MOTOR STARTER WIRING IN CONDUIT.

22. MOUNT ALL ROOM THERMOSTATS AT 4'-0" ABOVE FINISHED FLOOR UNLESS OTHERWISE INDICATED.

23. ALL DUCT DIMENSIONS SHOWN ARE NET DIMENSIONS.

24. NEW OPENINGS ARE NOT ALLOWED IN CONCRETE BEAMS, GIRDERS OR COLUMNS.

25. CONTRACTOR SHALL LOCATE ALL EXISTING REINFORCING IN PRESTRESSED CONCRETE SLABS BY NON-DESTRUCTIVE METHODS PRIOR TO DRILLING AND/OR CUTTING NEW HOLES AND OPENINGS IN SLABS. EXISTING PRESTRESSED TENDONS SHALL NOT BE DAMAGED.

26. NEW PIPES AND CONDUITS SHALL NOT BE EMBEDDED IN EXISTING CONCRETE AND CMU WALLS OR SLABS.

27. NEW OPENINGS SHALL NOT BE OVERCUT.

28. SIGNAL FROM ALL NEW DUCT SMOKE DETECTORS SHALL BE CONNECTED TO EXISTING FIRE ALARM SYSTEM.

29. PROVIDE PREMIUM EFFICIENCY MOTORS FOR ALL MECHANICAL EQUIPMENT.

30. CONTRACTOR TO INCLUDE TWO YEARS EXTENDED MAINTENANCE PER MANUFACTURER'S RECOMMENDATIONS FOR ALL NEW A/C EQUIPMENT.

31. PROVIDE ACCESS PANEL FOR ALL DAMPERS AND VAV BOXES WHERE SHOWN ON THE DRAWINGS OR NOT.

STATE OF HAWAII
1959
DEPARTMENT OF TRANSPORTATION

Airports Division
DEPARTMENT OF TRANSPORTATION
STATE OF HAWAII

OWEN CRABTREE
LICENSED PROFESSIONAL ENGINEER
No. 14306-M
HAWAII, U.S.A.

EXP. 4/30/2024

This work was prepared by me or under my supervision.

DSGN.	DRWN.	CHKD.	APPD.
WJ	WJ	OC	

NO.	DATE	REVISIONS

DATE

PROJECT TITLE :

CONVERT CARGO BUILDING TO WORKSHOP

AT
DANIEL K. INOUYE INTERNATIONAL AIRPORT
HONOLULU, OAHU, HAWAII

PROJECT NO.:

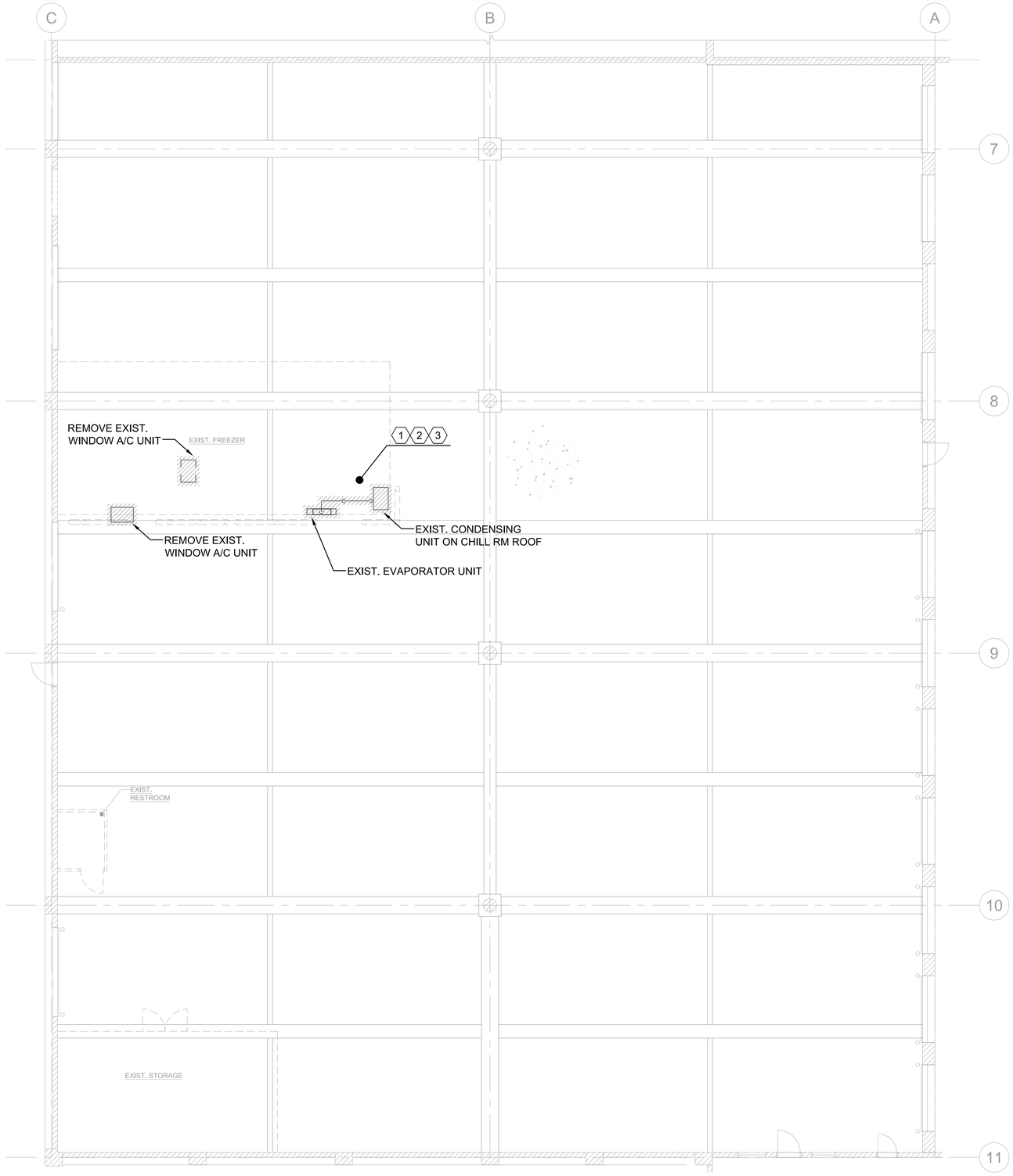
CO1325-33

SHEET TITLE:

MECHANICAL NOTES AND LEGEND

DATE :
05/10/23
SHEET :
34 OF 84 SHEETS

DWG. NO.
M001



DEMO KEY NOTES:

1. REMOVE EXISTING WINDOW AIR CONDITIONS AND ASSOCIATED PIPING.
2. REMOVE WALK-IN FREEZER CONDENSING UNIT AND ASSOCIATED PIPING.
3. REMOVE EXISTING REFRIGERATION SYSTEM AND EVAPORATOR COILS.

1 / M101 MECHANICAL REMOVAL PLAN
SCALE: 1/8" = 1'-0"

0 2' 4' 8' 12' 16' 20' 24'
SCALE: 1/8" = 1'-0"

Airports Division
DEPARTMENT OF TRANSPORTATION
STATE OF HAWAII

OWEN CRABTREE
LICENSED PROFESSIONAL ENGINEER
No. 14306-M
HAWAII, U.S.A.
EXP. 4/30/2024

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HONOLULU, OAHU, HAWAII

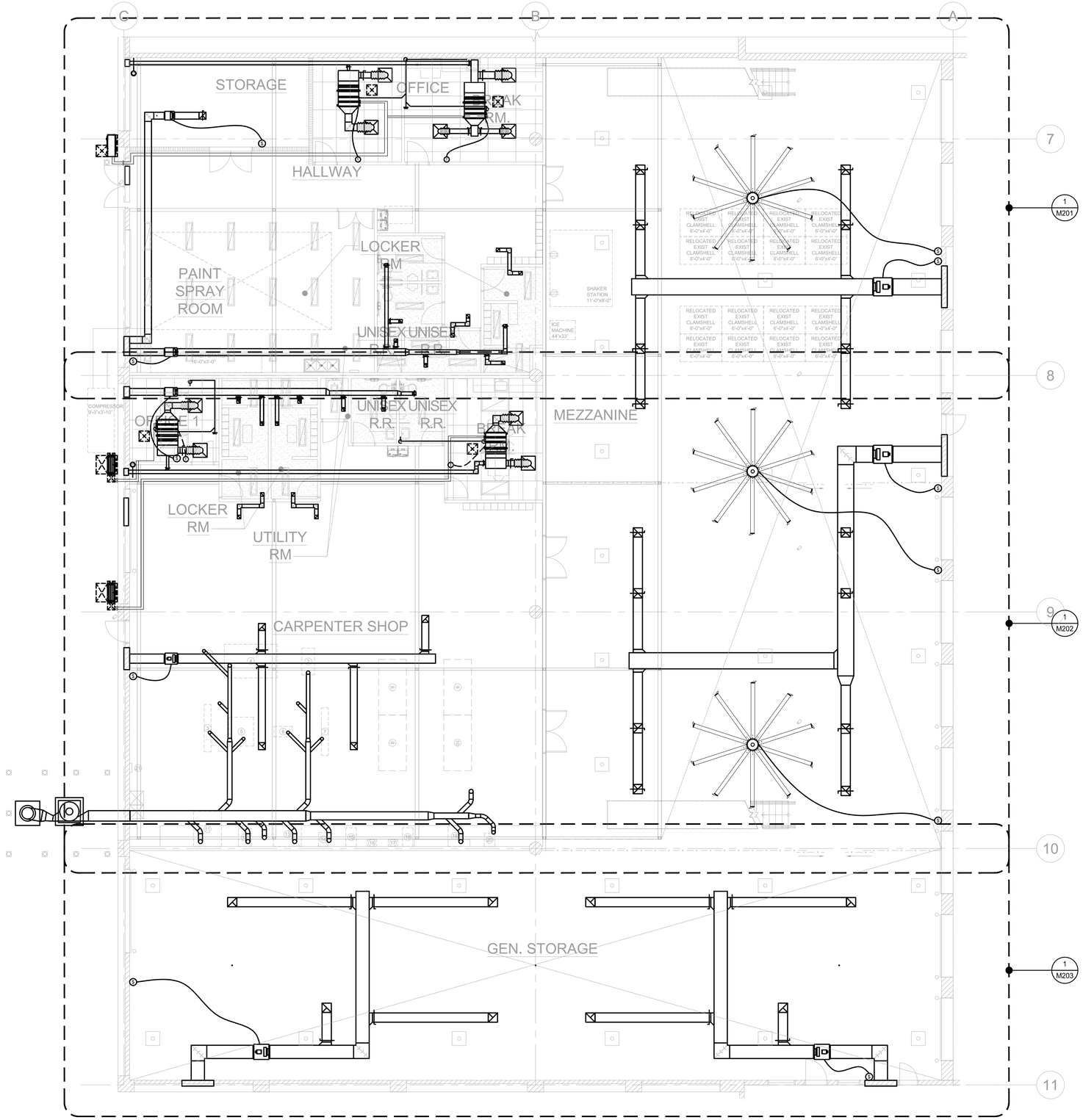
PROJECT NO.:

CO1325-33

SHEET TITLE:

MECHANICAL REMOVAL PLAN

DATE :	DWG. NO.
05/10/23	M101
SHEET :	
35 OF 84 SHEETS	



1 M102 OVERALL MECHANICAL PLAN
SCALE: 1/8" = 1'-0"

0 2' 4' 8' 12' 16' 20' 24'
SCALE: 1/8" = 1'-0"

STATE OF HAWAII 1959

Airports Division
DEPARTMENT OF TRANSPORTATION
STATE OF HAWAII

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HONOLULU, OAHU, HAWAII

PROJECT NO.:

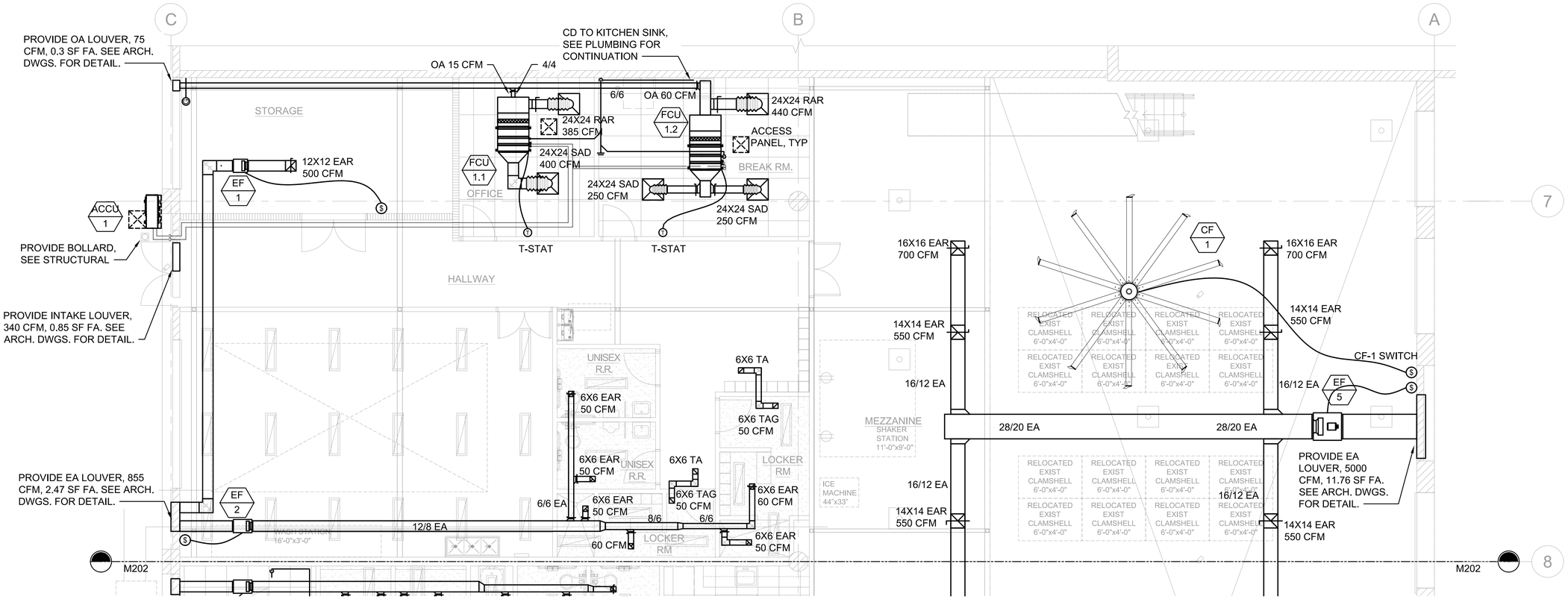
CO1325-33

SHEET TITLE:

OVERALL MECHANICAL PLAN

DATE :
05/10/23
SHEET :
36 OF 84 SHEETS

DWG. NO.
M102



1 / M201 ENLARGED MECHANICAL PLAN - 01

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

0 4' 8' 12' 16'

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

Airports Division

DEPARTMENT OF TRANSPORTATION
STATE OF HAWAII

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PROJECT NO.:

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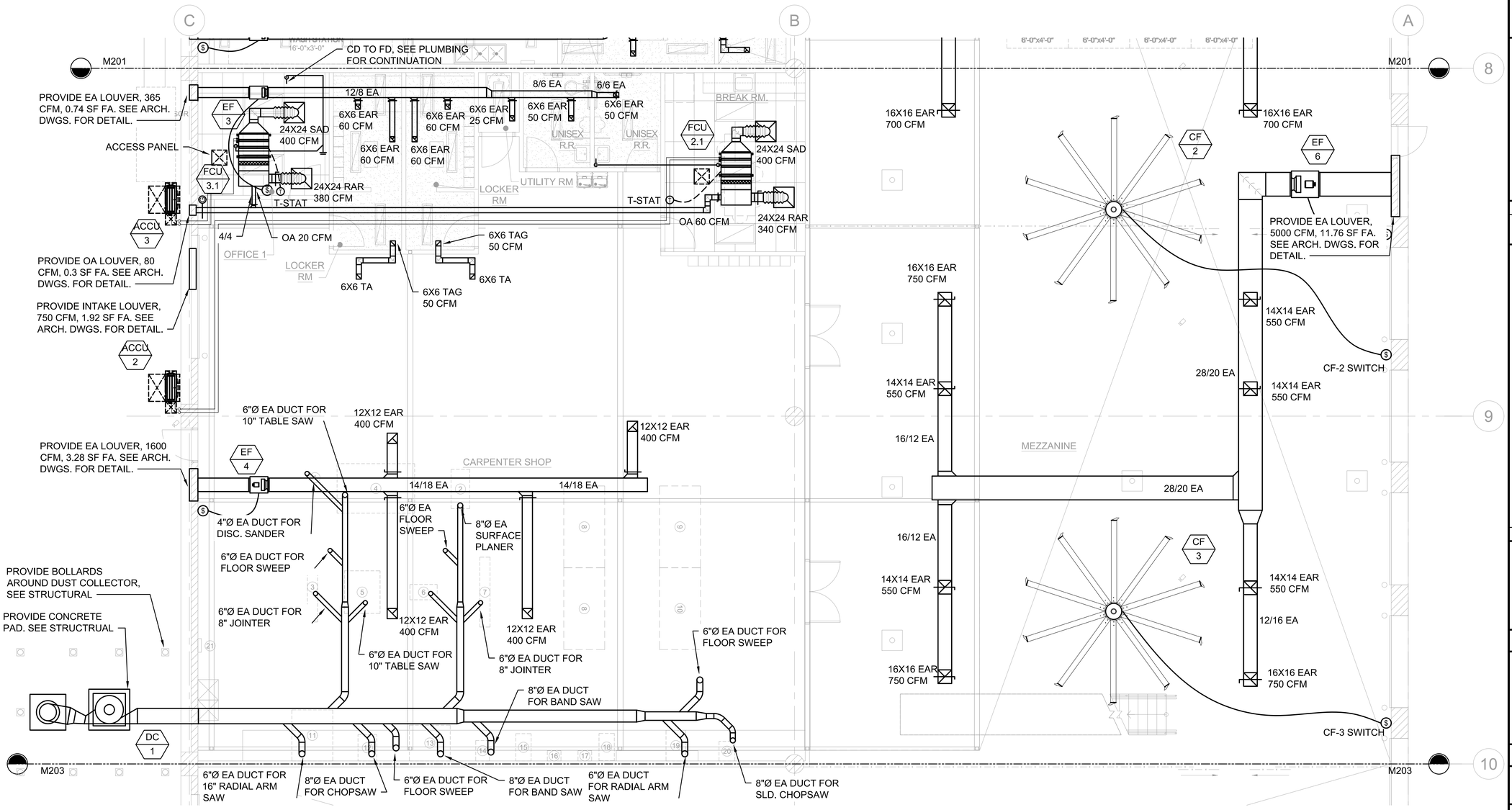
SHEET TITLE:

ENLARGED MECHANICAL PLAN - 01

DATE :	DWG. NO.
05/10/23	M201
SHEET :	
37 OF 84 SHEETS	



1 / M202 ENLARGED MECHANICAL PLAN - 02

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

0 4' 8' 12' 16'

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

Airports Division

DEPARTMENT OF TRANSPORTATION
STATE OF HAWAII

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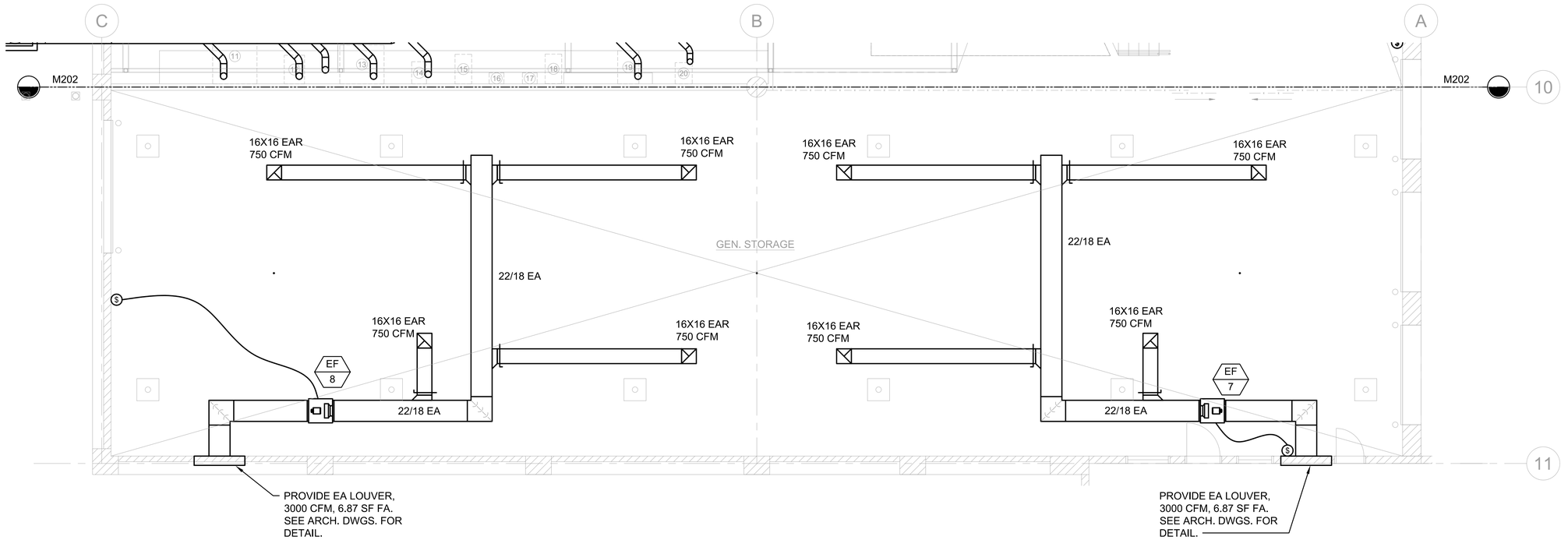
SHEET TITLE:

ENLARGED MECHANICAL PLAN - 02

DATE :
05/10/23

SHEET :
38 OF 84 SHEETS

DWG. NO.
M202



1 / M203 ENLARGED MECHANICAL PLAN - 03

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

0 4' 8' 12' 16'

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

Airports Division
DEPARTMENT OF TRANSPORTATION
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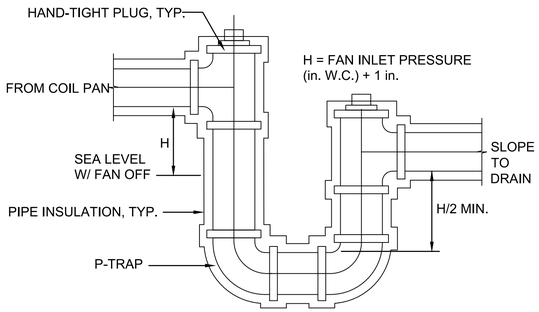
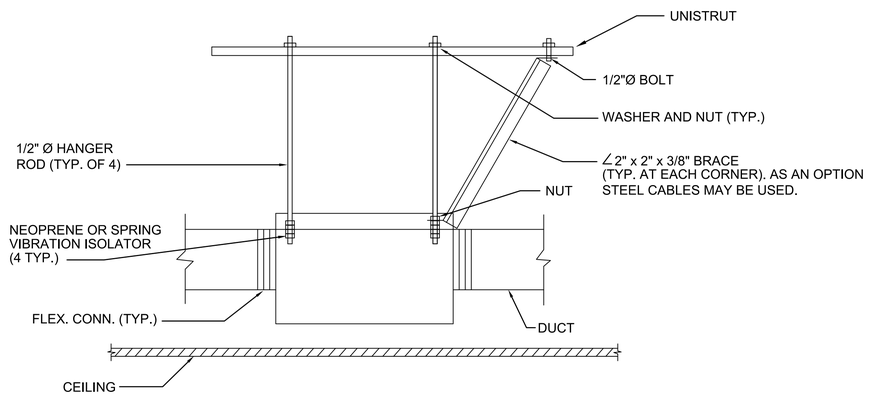
SHEET TITLE:

ENLARGED MECHANICAL PLAN - 03

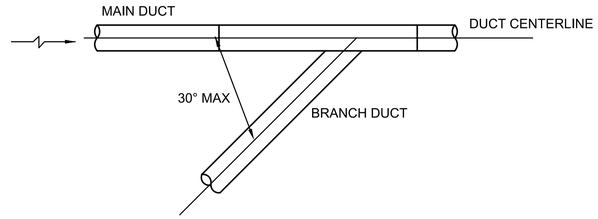
DATE :	DWG. NO.
05/10/23	M203
SHEET :	
39 OF 84 SHEETS	



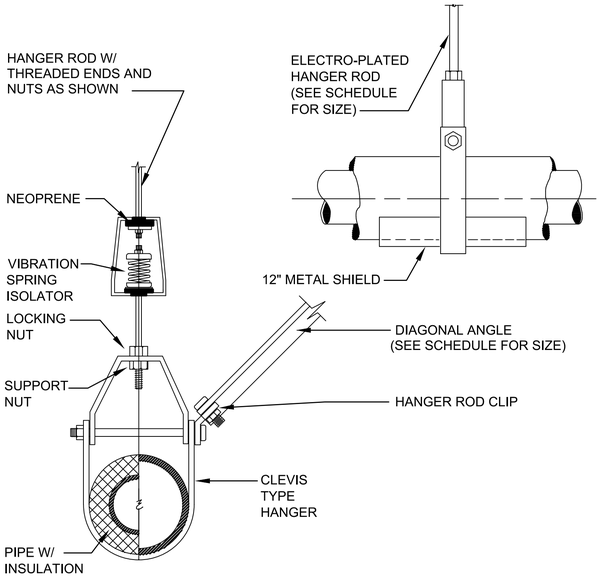
1 TYPICAL CONDENSATE TRAP DETAIL
SCALE: NOT TO SCALE



2 INLINE EXHAUST FAN SUPPORT
NOT TO SCALE

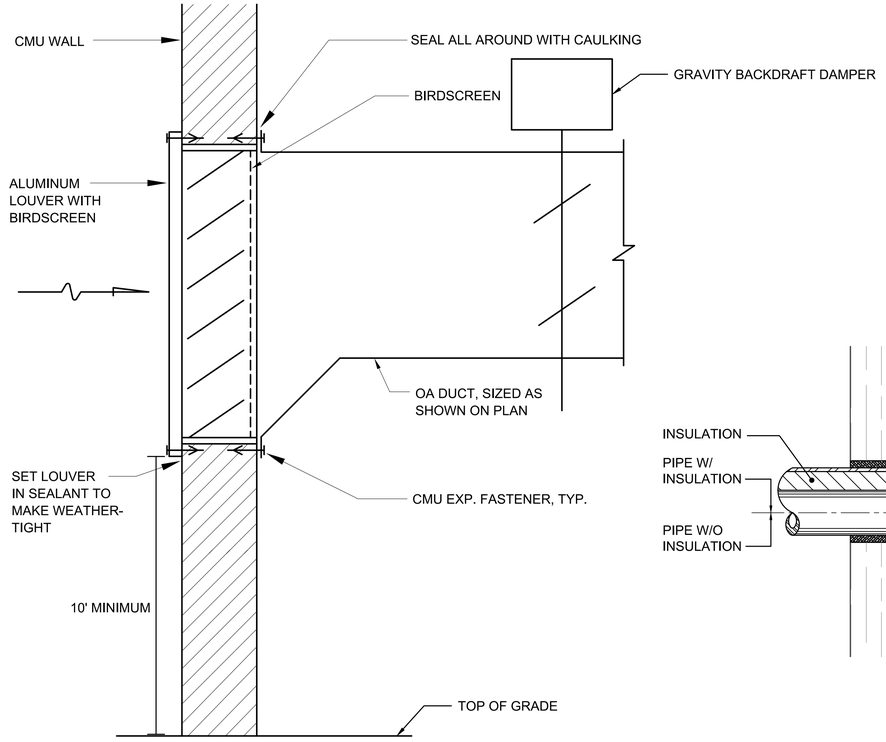


3 TYPICAL DUST COLLECTION DUCT ENTRY
SCALE: NOT TO SCALE

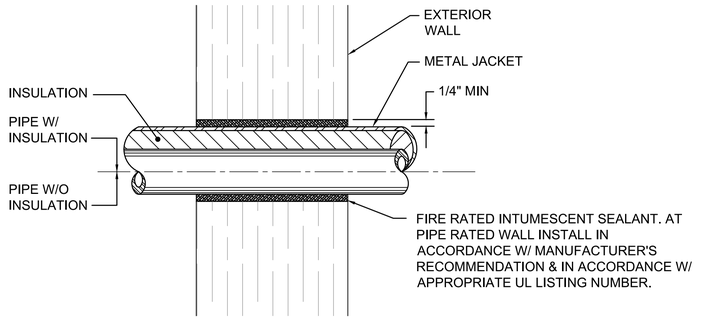


HANGER ROD SCHEDULE		
PIPE SIZE	ROD SIZE	ANGLE SIZE
1/2" - 2"	3/8"	2x2x16 GA.
2 1/2 - 3"	1/2"	2x2x16 GA.
4" - 5"	5/8"	2x2x16 GA.
6"	3/4"	2x2x16 GA.

4 TYPICAL PIPE HANGER DETAIL
SCALE: NOT TO SCALE



5 LOUVER DETAIL
SCALE: NOT TO SCALE



6 PIPE PENETRATION THRU WALL DETAIL
NOT TO SCALE

STATE OF HAWAII
Airports Division
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STATE OF HAWAII

OWEN CRABTREE
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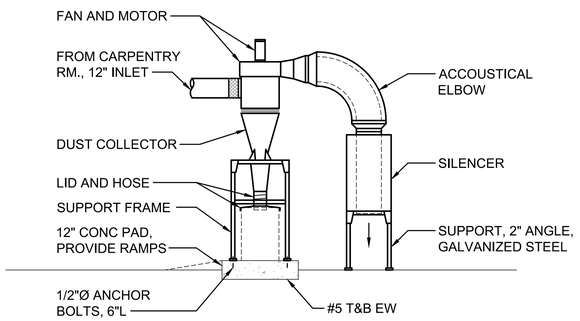
PROJECT NO.:

CO1325-33

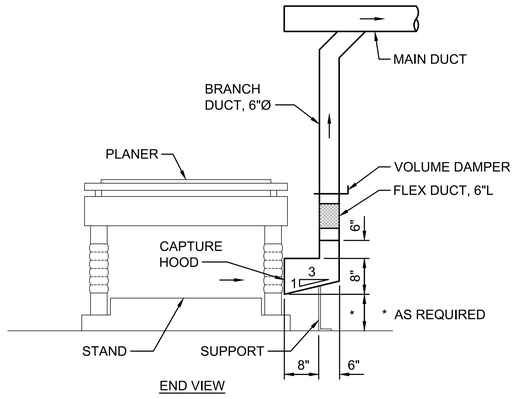
SHEET TITLE:

MECHANICAL DETAILS

DATE :	DWG. NO.
05/10/23	M501
SHEET :	
40 OF 84 SHEETS	

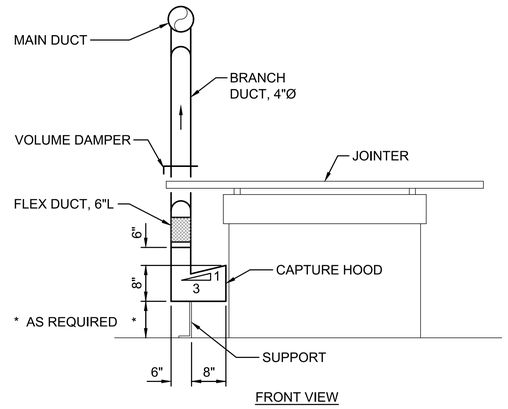


1 DUST COLLECTOR DETAIL
SCALE: NOT TO SCALE



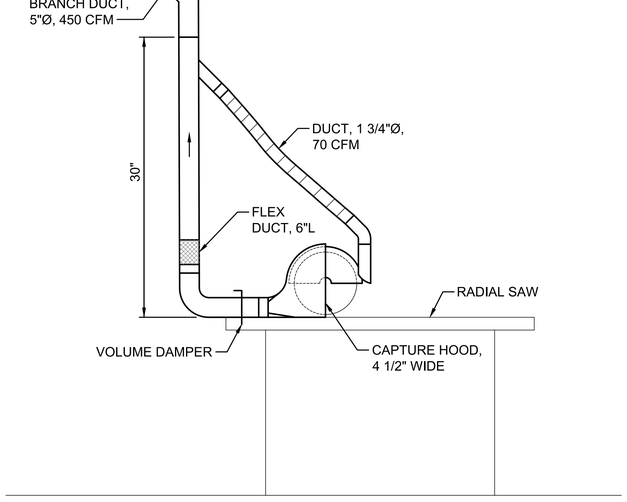
END VIEW

2 PLANER VENTILATION
SCALE: NOT TO SCALE



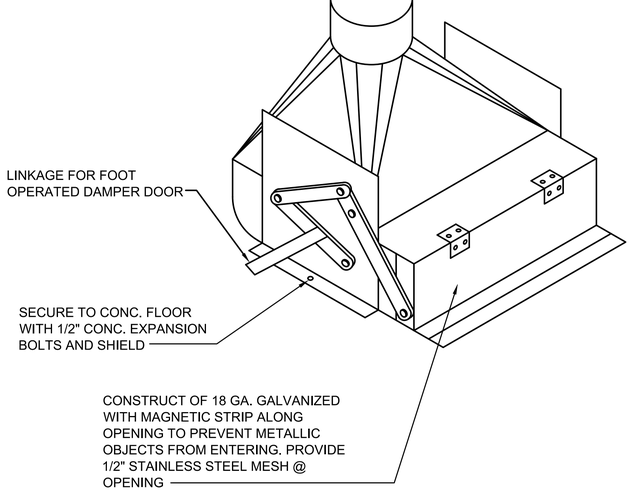
FRONT VIEW

3 JOINTER VENTILATION
SCALE: NOT TO SCALE

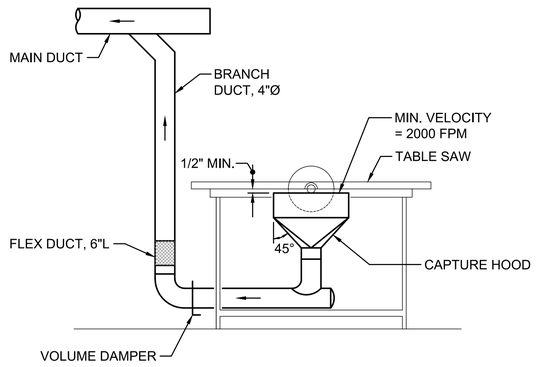


END VIEW

4 RADIAL SAW VENTILATION
SCALE: NOT TO SCALE



5 FLOOR SWEEP
SCALE: NOT TO SCALE



END VIEW

6 TABLE SAW VENTILATION
SCALE: NOT TO SCALE

Airports Division
DEPARTMENT OF TRANSPORTATION
STATE OF HAWAII

OWEN CRABTREE
LICENSED PROFESSIONAL ENGINEER
No. 14306-M
HAWAII, U.S.A.
EXP. 4/30/2024

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DANIEL K. INOUYE INTERNATIONAL AIRPORT
HONOLULU, OAHU, HAWAII

PROJECT NO.:

CO1325-33

SHEET TITLE:

MECHANICAL DETAILS

DATE :
05/10/23
SHEET :
41 OF 84 SHEETS

DWG. NO.
M502

AIR COOLED CONDENSING UNIT (ACCU) SCHEDULE

ACCU NO.	LOCATION	AREA SERVED	COOLING NOMINAL TONS	REFRIG. TYPE	COND. FANS (NO.)	COMP. (NO.)	ELECTRICAL			SEER/EER	SIZE HxWxD (IN)	UNIT WT. (LB)	SOUND LEVEL (DBA)	BASIS OF DESIGN	REMARKS
							MCA	MOCP	V/PH/HZ						
ACCU-1	PAINT SHOP BREAK ROOM	BREAK ROOM / OFFICE	3.00	-	2	1	29	40	208/1/60	21.2/12.2	53 x 42 x 13	271	49	MXZ-SM36NAM	1, 2
ACCU-2	CARPENTER SHOP	BREAK ROOM	1.0	-	1	1	11	28	208/1/60	21/13.3	25 x 32 x12	92	44	PUY-A12NKA7	1, 2
ACCU-3	CARPENTER SHOP	OFFICE	1.0	-	1	1	11	28	208/1/60	21/13.3	25 x 32 x12	92	44	PUY-A12NKA7	1, 2

MECHANICAL NOTES:
1. REFRIGERANT PIPE QUANTITIES AND SIZE TO BE PER MANUFACTURER'S PIPING SCHEMATIC.
2. COAT UNIT CASING AND COILS WITH COATING RATED FOR COASTAL ENVIRONMENT

FAN COIL UNIT (FCU) SCHEDULE

FCU NO.	AREA SERVED	TYPE	COOLING CAPACITY			SUPPLY FAN		ELECTRICAL			SOUND LEVEL (DBA)	SIZE WxDxH (IN)	UNIT WEIGHT (LBS)	BASIS OF DESIGN	REMARKS
			TOTAL (BTUH)	EAT DB°F	LAT DB°F	SA (CFM)	OA (CFM)	MCA	FLA	V/PH/HZ					
FCU-1.1	PAINT SHOP OFFICE	HORIZONTAL DUCTED	15,000	75.0	55.0	400	15	2.44	1.95	208/1/60	29-34-37	36 x 29 x 10	60	MITSUBISHI PEAD-A15AA8	PROVIDE WITH ROOM MOUNT WIRELESS WALL CONTROLLER
FCU-1.2	PAINT SHOP BREAK ROOM	HORIZONTAL DUCTED	18,000	75.0	55.0	500	60	1.69	1.35	208/1/60	30-33-37	36 x 29 x 10	60	MITSUBISHI PEAD-A18AA7	PROVIDE WITH ROOM MOUNT WIRELESS WALL CONTROLLER
FCU-2.1	CARPENTER SHOP OFFICE	HORIZONTAL DUCTED	12,000	75.0	55.0	400	20	5	2.23	POWERED FROM ACCU-2	27-31-34	36 x 29 x 10	60	MITSUBISHI PEAD-A12AA8	PROVIDE WITH ROOM MOUNT WIRELESS WALL CONTROLLER
FCU-3.1	CARPENTER SHOP BREAK ROOM	HORIZONTAL DUCTED	12,000	75.0	55.0	400	60	5	2.23	POWERED FROM ACCU-3	27-31-34	36 x 29 x 10	60	MITSUBISHI PEAD-A12AA8	PROVIDE WITH ROOM MOUNT WIRELESS WALL CONTROLLER

EXHAUST FAN (EF) SCHEDULE

UNIT TAG	LOCATION	AREA SERVED	TYPE	AIRFLOW (CFM)	ESP (IN. WG)	FAN RPM	ELECTRICAL					SIZE LxWxH (IN)	OPERATING WEIGHT (LBS)	INLET NOISE (dBA)	INLET NOISE (SONES)	BASIS OF DESIGN	REMARKS
							MOTOR (BHP)	MOTOR SIZE (HP)	FLA (AMPS)	MCA	V/PH/Hz						
EF-1	WAREHOUSE	PAINT SHOP STORAGE	INLINE DUCTED - DIRECT DRIVE	500	0.56	1,406	0.14	0.25	3.50	4.00	115/1/60	16 x 15 x 15	47	58	10.1	GREENHECK SQ-99-VG	1, 2
EF-2	WAREHOUSE	PAINT SHOP LOCKER RM / UNISEX R.R	INLINE DUCTED - DIRECT DRIVE	355	0.78	1,594	0.17	0.25	2.85	4.00	115/1/60	21 x 15 x 15	47	60	11.5	GREENHECK SQ-98-VG	1, 2, 3 CONNECT TO TIMECLOCK
EF-3	WAREHOUSE	CARPENTER LOCKER RM / UTILITY RM / UNISEX R.R	INLINE DUCTED - DIRECT DRIVE	365	0.78	1,606	0.17	0.25	3.50	4.00	115/1/60	21 x 15 x 15	47	60	11.5	GREENHECK SQ-98-VG	1, 2, 3 CONNECT TO TIMECLOCK
EF-4	WAREHOUSE	CARPENTER SHOP	CENTRIFUGAL INLINE DUCTED - BELT DRIVE	1,600	1.30	1,527	0.68	1.00	11.50	14.00	115/1/60	21 x 19 x 32	104	65	13.5	GREENHECK SQ-140-VG	1, 2, 3 CONNECT TO TIMECLOCK
EF-5	WAREHOUSE	MEZZANINE	CENTRIFUGAL INLINE DUCTED - BELT DRIVE	5,000	1.67	1,556	2.14	3.00	9.70	12.00	208/3/60	32 x 31 x 47	218	69	18.8	GREENHECK SQ-18-VG	1, 2, 3, 4 CONNECT TO T-STAT IN SPACE SET TO 85F
EF-6	WAREHOUSE	MEZZANINE	CENTRIFUGAL INLINE DUCTED - BELT DRIVE	5,000	1.67	1,556	2.14	3.00	9.70	12.00	208/3/60	32 x 31 x 47	218	69	18.8	GREENHECK SQ-18-VG	1, 2, 3, 4 CONNECT TO T-STAT IN SPACE SET TO 85F
EF-7	WAREHOUSE	GEN. STORAGE	CENTRIFUGAL INLINE DUCTED - BELT DRIVE	3,000	1.11	1,409	1.06	2.00	12.50	16.00	208/1/60	26 x 26 x 39	144	69	16.3	GREENHECK SQ-160-VG	1, 2, 3, 4 CONNECT TO T-STAT IN SPACE SET TO 85F
EF-8	WAREHOUSE	GEN. STORAGE	CENTRIFUGAL INLINE DUCTED - BELT DRIVE	3,000	1.11	1,409	1.06	2.00	12.50	16.00	208/1/60	26 x 26 x 39	144	69	16.3	GREENHECK SQ-160-VG	1, 2, 3, 4 CONNECT TO T-STAT IN SPACE SET TO 85F

NOTES
1. PROVIDE WITH INTEGRAL BACKDRAFT DAMPER
2. PROVIDE INTEGRAL DISCONNECT SWITCH
3. PROVIDE SPEED CONTROLLER
4. PROVIDE DUCT SMOKE DETECTOR
5. PROVIDE SPARK RESISTANT CONSTRUCTION

STATE OF HAWAII
1959
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EXP. 4/30/2024

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AT
DANIEL K. INOUYE INTERNATIONAL AIRPORT
HONOLULU, OAHU, HAWAII

PROJECT NO.:

CO1325-33

SHEET TITLE:

MECHANICAL SCHEDULES

DATE :
05/10/23
SHEET :
42 OF 84 SHEETS

DWG. NO.
M601

DUST COLLECTOR (DC) SCHEDULE

UNIT TAG	LOCATION	AREA SERVED	TYPE	CAPACITY (CFM)	EXTERNAL STATIC PRESSURE (IN. WG.)	MOTOR (HP)	EFFICIENCY (%)	DRUM STORAGE (GAL)	V/PH/Hz	OPERATING WEIGHT (LBS)	BASIS OF DESIGN	REMARKS
DC-1	OUTSIDE OF WAREHOUSE BUILDING	CARPENTER SHOP	CYCLONE TYPE, TAPERING CONE DESIGN	12,410	-	50	-	165	460/3/60	1,745	UNITED AIR SPECIALIST C SERIES MODEL C-4450	1

NOTES
1. PROVIDE WITH SILENCER PACKAGE.

HVLS CEILING FAN (CF) SCHEDULE

UNIT NO	SERVES	QTY	TYPE	FAN DIAMETER (FT)	FAN SPEED (RPM)	ELECTRICAL				MOUNTING HT	HANGING WEIGHT (LBS)	BASIS OF DESIGN	REMARKS
						VOLTS	PH	HZ	A				
CF-1	STORAGE	1	AIRFOIL BLADE	12	145	208	1	60	10	29 FT	227	POWERFOIL D OR APPROVED EQUAL	FURNISH WITH CEILING FAN WALL-MOUNTED CONTROLLER
CF-2	STORAGE	1	AIRFOIL BLADE	12	145	208	1	60	10	29 FT	227	POWERFOIL D OR APPROVED EQUAL	FURNISH WITH CEILING FAN WALL-MOUNTED CONTROLLER
CF-3	STORAGE	1	AIRFOIL BLADE	12	145	208	1	60	10	29 FT	227	POWERFOIL D OR APPROVED EQUAL	FURNISH WITH CEILING FAN WALL-MOUNTED CONTROLLER

TYPICAL AIR DIFFUSER AND REGISTER SCHEDULE

A — CEILING DIFFUSER: PER SPECIFICATIONS. DIRECTIONAL FLOW SHALL BE 4-WAY UNLESS SHOWN OTHERWISE.

CFM RANGE - SUPPLY	OUTSIDE FRAME DIMENSIONS	ROUND NECK SIZE	SQUARE NECK SIZE
0-150	24"x24"	6" ⌀	6"x6"
151-250	24"x24"	10" ⌀	10"x10"
251-500	24"x24"	12" ⌀	12"x12"
501-700	24"x24"	14" ⌀	16"x16"
701-900	24"x24"	16" ⌀	18"x18"

B — SUPPLY AND RETURN TRANSFER GRILLE: SAME AS SYMBOL C

C — CEILING EXHAUST REGISTER: PER SPECIFCATIONS.

CFM RANGE - RETURN/EXHAUST	FACE SIZE	MINIMUM NECK SIZE	NC RATING
0 - 200	6"x6"	6"x6"	30
201 - 300	8"x8"	8"x8"	30
301 - 400	10"x10"	10"x10"	30
401 - 700	12"x12"	12"x12"	30
701 - 1100	16"x16"	14"x14"	30
1101 - 1800	20"x20"	16"x16"	30
1801 - 2,250	24"x24"	18"x18"	30

CEILING DIFFUSER AND REGISTER KEY

SUPPLY:
THROW DIRECTIONS
DIFFUSER TYPE → A4-300 ← AIRFLOW (CFM)

RETURN/EXHAUST:
REGISTER TYPE → C-200 ← AIRFLOW (CFM)

STATE OF HAWAII
Airports Division
DEPARTMENT OF TRANSPORTATION
STATE OF HAWAII

OWEN CRABTREE
LICENSED PROFESSIONAL ENGINEER
No. 14306-M
HAWAII, U.S.A.
EXP. 4/30/2024

This work was prepared by me or under my supervision.

DSGN.	DRWN.	CHKD.	APPD.
WJ	WJ	OC	

NO.	DATE	REVISIONS

DATE

PROJECT TITLE :

CONVERT CARGO BUILDING TO WORKSHOP

AT
DANIEL K. INOUYE INTERNATIONAL AIRPORT
HONOLULU, OAHU, HAWAII

PROJECT NO.:

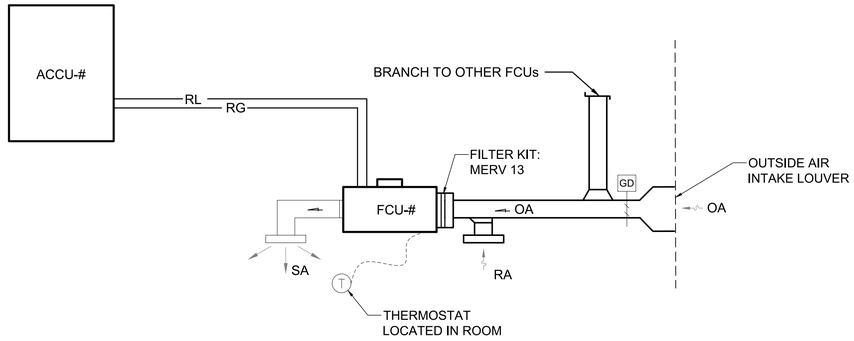
CO1325-33

SHEET TITLE:

MECHANICAL SCHEDULES

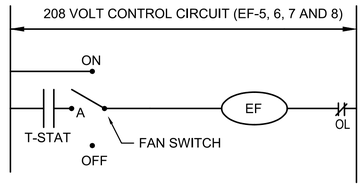
DATE :
05/10/23
SHEET :
43 OF 84 SHEETS

DWG. NO.
M602

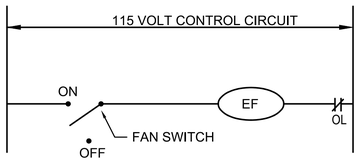


1 FAN COIL CONTROL DIAGRAM
NOT TO SCALE

EXHAUST FAN SERVING CONCESSION (BACK OF HOUSE) SHALL BE CONNECTED TO H-O-A SWITCH. IN AUTO MODE, EF SHALL BE CONTROLLED BY A PROGRAMMABLE THERMOSTAT SET AT 85°F.



2 EF-5, 6, 7 AND EF-8 CONTROL DIAGRAM - TEMPERATURE CONTROLLED
NOT TO SCALE



3 EF-1, 2, 3 AND EF-4 CONTROL DIAGRAM - SWITCH CONTROLLED
NOT TO SCALE

FCU AND ACCU SEQUENCE:

THE DX MULTISPLIT SYSTEM CONTROLS SHALL BE STAND ALONE. THE DX MULTISPLIT SYSTEM SHALL TURN ON AND OFF VIA A SCHEDULED TIMER SET BY THE USER. TIMER SHALL BE CAPABLE OF CHANGING ROOM TEMPERATURE DEPENDENT ON UNOCCUPIED/OCCUPIED SCHEDULE. INITIAL SCHEDULE SHALL BE PROGRAMMED FOR OCCUPIED MODE DURING 0630 - 1700.

ACCU-1 CONNECTED SYSTEM

1. PAINT SHOP OFFICE AND BREAK ROOM WILL BE SERVED BY TWO FCU'S WITH OUTSIDE AIR . EACH FAN COIL UNIT SHALL BE CONTROLLED VIA ITS OWN THERMOSTAT MOUNTED ON THE WALL WHERE INDICATED ON THE DRAWINGS.
2. THE SYSTEM SHALL MAINTAIN THE ROOM TEMPERATURE AT 76 DEGREES F DURING OCCUPIED HOURS AND 83 DEGREES F DURING UNOCCUPIED HOURS. TEMPERATURE WILL BE SAMPLED AT T-STAT.

ACCU-2 CONNECTED SYSTEM

1. CARPENTER SHOP OFFICE WILL BE SERVED BY A FCU. THE FAN COIL UNIT SHALL BE CONTROLLED VIA ITS OWN THERMOSTAT MOUNTED ON THE WALL WHERE INDICATED ON THE DRAWINGS.
2. THE SYSTEM SHALL MAINTAIN THE ROOM TEMPERATURE AT 76 DEGREES F DURING OCCUPIED HOURS AND 83 DEGREES F DURING UNOCCUPIED HOURS. TEMPERATURE WILL BE SAMPLED AT T-STAT.

ACCU-3 CONNECTED SYSTEM

1. CARPENTER SHOP BREAK ROOM WILL BE SERVED BY A FCU. THE FAN COIL UNIT SHALL BE CONTROLLED VIA ITS OWN THERMOSTAT MOUNTED ON THE WALL WHERE INDICATED ON THE DRAWINGS.
2. THE SYSTEM SHALL MAINTAIN THE ROOM TEMPERATURE AT 76 DEGREES F DURING OCCUPIED HOURS AND 83 DEGREES F DURING UNOCCUPIED HOURS. TEMPERATURE WILL BE SAMPLED AT T-STAT.

GENERAL HVAC SCHEDULING AND SEQUENCE

SEQUENCE OF OPERATION: UNLESS OTHERWISE INDICATED, THE BUILDING SHALL OPERATE UNDER THESE GENERAL SCHEDULING CONDITIONS.

A. ALL HVAC SYSTEMS SHALL BE PROVIDED WITH OPTIMAL START AND STOP TO WARM UP AND COOL DOWN THE BUILDING PRIOR TO AND AT THE END OF NORMAL OCCUPIED HOURS. TEMPERATURE OVERRIDE SHALL BE AVAILABLE AT THE ROOM T-STAT FOR EACH OCCUPANT.

B. SCHEDULING SHALL BE FULLY ADJUSTABLE AND COORDINATED WITH THE USERS.

C. THERMOSTAT SET POINTS SHALL IN GENERAL BE 76 °F.

D. CEILING FANS: CEILING FANS SHALL BE ON DURING BUSINESS HOURS. UPON ACTIVATION OF FIRE ALARM SYSTEM, CEILINGS FANS SHALL BE TURNED OFF. THE FANS SHALL AUTOMATICALLY TURN ON WHEN ALL ALARM SIGNALS HAVE BEEN CLEARED.

STATE OF HAWAII 1959
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DATE

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DANIEL K. INOUYE INTERNATIONAL AIRPORT
HONOLULU, OAHU, HAWAII

PROJECT NO.:

CO1325-33

SHEET TITLE:

MECHANICAL SEQUENCING

DATE :
05/10/23
SHEET :
44 OF 84 SHEETS

DWG. NO.
M901

PLUMBING LEGEND

SYMBOL	ABBRV.	DESCRIPTION
	BV	BALL VALVE
	BFV	BUTTERFLY VALVE
— CD —	CD	CONDENSATE DRAIN
	CO	CLEAN OUT
	COTG	CLEAN OUT TO GRADE
	CV	CHECK VALVE
	GV	GATE VALVE
		CAPPED/STUBOUT PIPE
— · —	CW	COLD WATER
	DF	DRINKING FOUNTAIN
	EEW	EMERGENCY EYEWASH
	(E)	EXISTING
	FCO	FLOOR CLEANOUT
	FD	FLOOR DRAIN
	HB	HOSE BIBB
— · —	HW	HOT WATER
	(N)	NEW
	PD	PLANTER DRAIN
	POC	POINT OF CONNECTION
	POR	POINT OF REMOVAL
		PRESSURE GAUGE
	RD	ROOF DRAIN
	REF	REFRIGERATOR
	RPBFP	REDUCED PRESS. BACKFLOW PREVENT
	S	LAVATORY SINK
	SAN OR W	SANITARY OR WASTE
	SD	STORM DRAIN
	SH	SHOWER
	SK	SINK
	SS	SERVICE SINK
		STRAINER
	T & P	TEMP. AND PRESS. RELIEF VALVE
		THERMOMETER
		UNION
	U	URINAL
— — —	V	VENT
	VTR	VENT TO ROOF
	WC	WATER CLOSET
	WCO	WALL CLEAN OUT
	WH	WATER HEATER
	WHA	WATER HAMMER ARRESTOR

BOARD OF WATER SUPPLY NOTE:

THE AIR CONDITIONING WORK WILL NOT AFFECT THE WATER DEMAND.

BOARD OF WATER SUPPLY NOTE:

PREMISE ID#: HONOLULU INTERNATIONAL AIRPORT

METER NUMBER (M/N): -

BWS FLOW REQUIREMENTS:

DESCRIPTION	FU	GPM	GPD
A. PROPOSED DOMESTIC (ALL FIXTURES BEING INSTALLED)	46.8	27.4	--
B. PROPOSED IRRIGATION	0	0	0
C. OTHER	0	0	0
D. TOTAL PROPOSED	46.8	27.4	--
E. DEMOLITION (ALL FIXTURES BEING REMOVED)	2.3	2.0	--
F. NET CHANGE: (SUBTRACT "E" FROM "D" ABOVE)	44.5	26.6	--
G. EXISTING TO REMAIN:	0	0	--
H. GRAND TOTAL (ADD "D" AND "G" ABOVE)	46.8	27.4	--

WATER DEMAND FIXTURE UNIT CALCULATIONS

NEW

FIXTURE UNIT	QTY	FU (EA)	FU (TOTAL)
WC (FLUSH VALVE)	4	3.4	13.60
UR	4	1.7	6.80
LAV	4	0.6	2.40
DF	4	1.6	6.40
SH	4	1.6	6.40
SK	2	1.6	3.20
SS	4	2.0	8.00
			TOTAL:46.8

DEMO

FIXTURE UNIT	QTY	FU (EA)	FU (TOTAL)
UR	1	1.7	1.70
LAV	1	0.6	0.60
			TOTAL:2.3

THE EXISTING DOMESTIC WATER METER DOES NOT SERVE ANY AUTOMATIC FIRE SPRINKLER SYSTEM. THIS WATER METER DOES SERVE AN IRRIGATION SYSTEM.

PLUMBING GENERAL NOTES:

1. THE ENTIRE INSTALLATION SHALL COMPLY WITH ALL APPLICABLE REQUIREMENTS OF THE NATIONAL FIRE PROTECTION ASSOCIATION (NFPT) CODE (INCLUDING NFPA 1, AS ADOPTED BY THE STATE FIRE CODE), NATIONAL ELECTRICAL CODE, STATE PLUMBING CODE (2018 UNIFORM PLUMBING CODE AS ADOPTED), STATE BUILDING CODE (2018 IBC, AS ADOPTED) AND ALL OTHER LOCAL AGENCIES HAVING JURISDICTION.
2. THE DRAWINGS AND SPECIFICATIONS ARE INTENDED TO COVER THE COMPLETE INSTALLATION OF SYSTEMS TO FUNCTION AS DESCRIBED AND SPECIFIED. THE OMISSION OF REFERENCE TO ANY NECESSARY ITEM OF LABOR OR MATERIAL SHALL NOT RELIEVE THE CONTRACTOR FROM PROVIDING SUCH LABOR AND MATERIAL.
3. ALL EQUIPMENT SHALL BE CAPABLE OF FITTING INTO THE SPACES ALLOCATED WHILE MEETING THE MANUFACTURER'S RECOMMENDED ACCESS REQUIREMENTS. REVIEW ALL SPACES WHERE EQUIPMENT IS TO BE INSTALLED PRIOR TO ORDERING OF EQUIPMENT AND NOTIFY THE ENGINEER OF ANY INADEQUATE CLEARANCES OR CONDITIONS THAT WILL PREVENT THE PROPER INSTALLATION, MAINTENANCE, AND OPERATION OF THE EQUIPMENT.
4. COORDINATE WITH OTHER TRADES PRIOR TO COMMENCING AND DURING CONSTRUCTION. OVERLAY PLANS AND CHECK FOR ANY DISCREPANCIES OR CONFLICTS WITH OTHER TRADES.
5. VERIFY AND COORDINATE ALL ROOF, WALL AND FLOOR PENETRATIONS WITH THE STRUCTURAL AND ARCHITECTURAL DRAWINGS AND NOTIFY THE ENGINEER OF ANY CONFLICTS PRIOR TO START OF CONSTRUCTION.
6. NO PENETRATATIONS SHALL BE MADE THROUGH STRUCTURAL MEMBERS, WALLS AND SLABS WITHOUT FIRST COORDINATING WITH STRUCTURAL ENGINEER.
7. VERIFY THE EXACT LOCATION , SIZE, AND INVERT OF ALL EXISTING SEWER, AND WATER LINES AT THE POINT OF CONNECTION TO CIVIL UTILITIES PRIOR TO THE START OF CONSTRUCTION.
8. DRAWINGS DO NOT ATTEMPT TO SHOW EXACT DETAILS OF PIPING. PROVIDE OFFSETS AS NECESSARY TO AVOID LOCAL OBSTRUCTIONS OR INTERFERENCE WITH OTHER TRADES. REVIEW ALL PIPING AND DUCT RUNS PRIOR TO FABRICATION AND IMMEDIATELY NOTIFY THE ENGINEER OF ANY INTERFERENCE AND/OR LACK OF ADEQUATE CLEARANCES.
9. SHOULD PROJECT CONDITIONS REQUIRE REARRANGEMENT OF WORK, MARK SUCH CHANGES ON THE AS-BUILT DRAWINGS AND NOTIFY THE ENGINEER. IF THESE CHANGES REQUIRE ALTERNATE METHODS TO THOSE APPROVED BY THE CONTRACT DOCUMENTS, SUBMIT SHOP DRAWINGS SHOWING THE PROPOSED ALTERNATE METHODS TO THE ENGINEER FOR REVIEW. DO NOT PROCEED UNTIL REVIEWED.
10. PATCH AND PAINT ALL EXPOSED MATERIAL, INCLUDING PIPING, TO MATCH ADJACENT SURFACES OR AS INDICATED.
11. PROPERLY FIRE STOP ALL PENETRATIONS THROUGH FIRE RATED WALLS, FLOORS, OR PARTITIONS WITH A UL APPROVED SYSTEM APPROPRIATE FOR THE PENETRATION TYPE AND FIRE RATING IN ACCORDANCE WITH MANUFACTURER'S INSTALLATION INSTRUCTIONS. FIRE STOP ALL PENETRATIONS BETWEEN FLOORS.
12. PROVIDE ACCESS PANELS TO ALL CONCEALED VALVES, DAMPERS, AND EQUIPMENT. COORDINATE THE LOCATION OF ACCESS PANELS TO INSURE THAT THE EQUIPMENT CAN BE MAINTAINED ADEQUATELY.
13. SEISMICALLY BRACE ALL EQUIPMENT AND PIPING IN ACCORDANCE WITH THE SPECIFICATIONS FOR SEISMIC 2A.
14. INSTALL CONDENSATE DRAINS AT A MINIMUM SLOPE OF 2%. INDIVIDUAL UNIT CONDENSATE DRAINS SHALL BE 1" DIAMETER LINES AND 1-1/4" FOR COMBINED LINES UNLESS OTHERWISE INDICATED.
15. INSULATE ALL SEWER PIPING RECEIVING AIR CONDITIONING CONDENSATE DRAINS, OR ANY OTHER COLD LIQUID WHICH MAY CREATE CONDENSATION, FROM POINT OF CONNECTION TO TOP OF CONCRETE SLAB-ON-GRADE. INSULATE FLOOR DRAIN AND FLOOR SINK BODIES EXPOSED TO AIR BELOW THE FLOOR.
16. ROUTE ALL CONTROL AND MOTOR STARTER WIRING IN CONDUIT.
17. PROVIDE AND INSTALL WALL CLEANOUTS AT THE BASE OF ALL WASTE RISERS, UNLESS NOTED OTHERWISE.
18. SLOPE SANITARY SEWER 1/4" PER FOOT UNLESS NOTED OTHERWISE.
19. ALL EXPOSED WASTE AND SUPPLY PIPING IN FINISHED AREAS SHALL BE CHROME PLATED OR COPPER.

STATE OF HAWAII 1959

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EXP. 4/30/2024

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AT
DANIEL K. INOUYE INTERNATIONAL AIRPORT
HONOLULU, OAHU, HAWAII

PROJECT NO.:

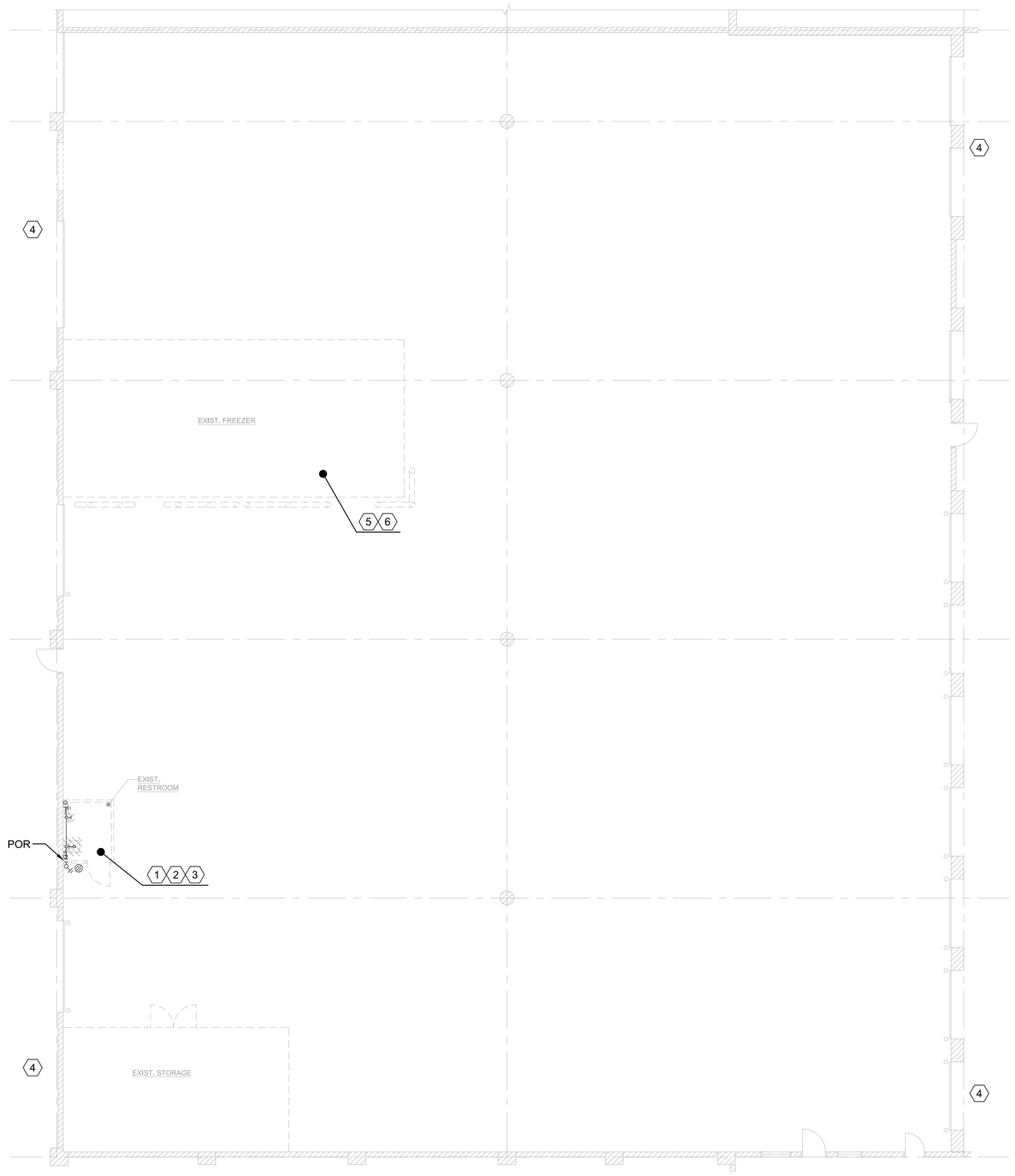
CO1325-33

SHEET TITLE:

PLUMBING NOTES AND LEGEND

DATE :
05/10/23
SHEET :
45 OF 84 SHEETS

DWG. NO.
P001



GENERAL NOTES:

1. CONTRACTOR TO FIELD VERIFY ALL EXISTING COLD WATER CONDITIONS AND ALL EXISTING SANITARY SEWER LINES.

DEMO KEY NOTES:

1. REMOVE EXISTING URINAL AND ASSOCIATED PIPING AND APPURTENANCES.
2. REMOVE EXISTING LAVATORY AND ASSOCIATED PIPING AND APPURTENANCES.
3. REMOVE EXISTING FLOOR DRAIN AND WALL CLEANOUT.
4. REMAIN ALL EXISTING HOSE BIBS. CONTRACTOR TO FIELD VERIFY.
5. REMOVE ALL EXISTING PLUMBING FIXTURES AND ASSOCIATED PIPING AND APPURTENANCES IN EXISTING FREEZER AREA.
6. REMOVE WATER PIPING CONNECTION LINES AND SANITARY SEWER LINES TO BELOW GRADE AND CAP STUB PIPES AND CONCEAL ALL WORK IN EXSITING FREEZER AREA.

1 / P101 PLUMBING REMOVAL PLAN
SCALE: 1/8" = 1'-0"

0 2' 4' 8' 12' 16' 20' 24'
SCALE: 1/8" = 1'-0"

STATE OF HAWAII
1959
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DEPARTMENT OF TRANSPORTATION
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PROJECT NO.:

CO1325-33

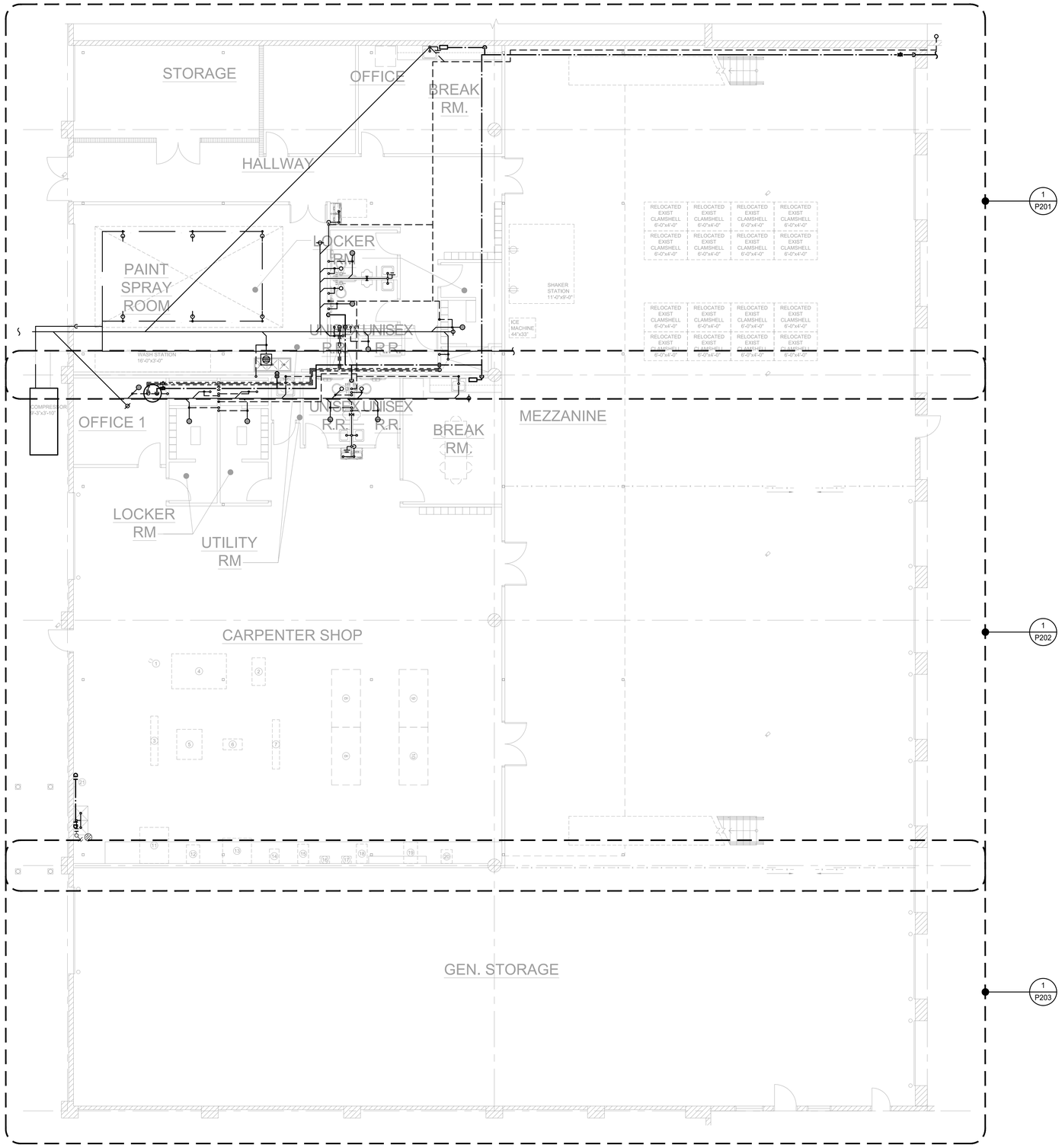
SHEET TITLE:

PLUMBING REMOVAL PLAN

DATE :
05/10/23

SHEET :
46 OF 84 SHEETS

DWG. NO.
P101



1 P102 OVERALL PLUMBING PLAN
SCALE: 1/8" = 1'-0"

0 2' 4' 8' 12' 16' 20' 24'
SCALE: 1/8" = 1'-0"

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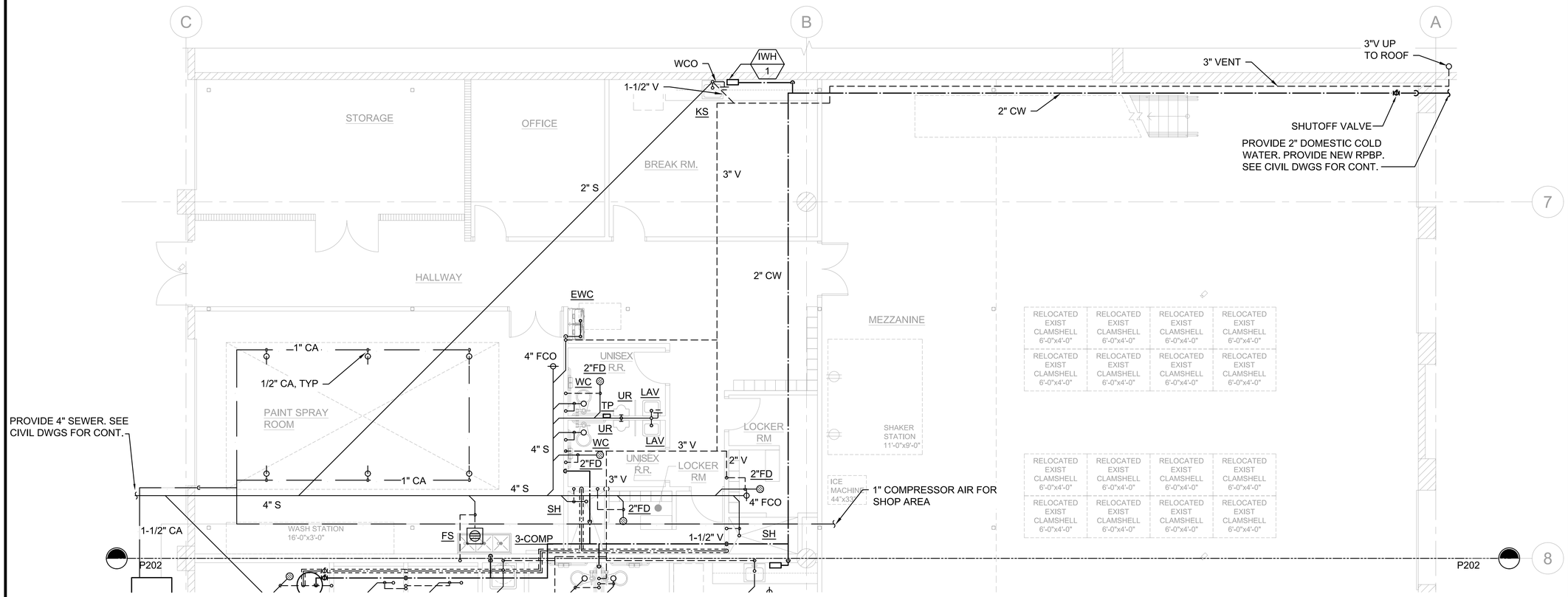
SHEET TITLE:

OVERALL PLUMBING PLAN

DATE :	DWG. NO.
05/10/23	P102
SHEET :	
47 OF 84 SHEETS	



1 / P201 ENLARGED PLUMBING PLAN - 01

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

0 4' 8' 12' 16'

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

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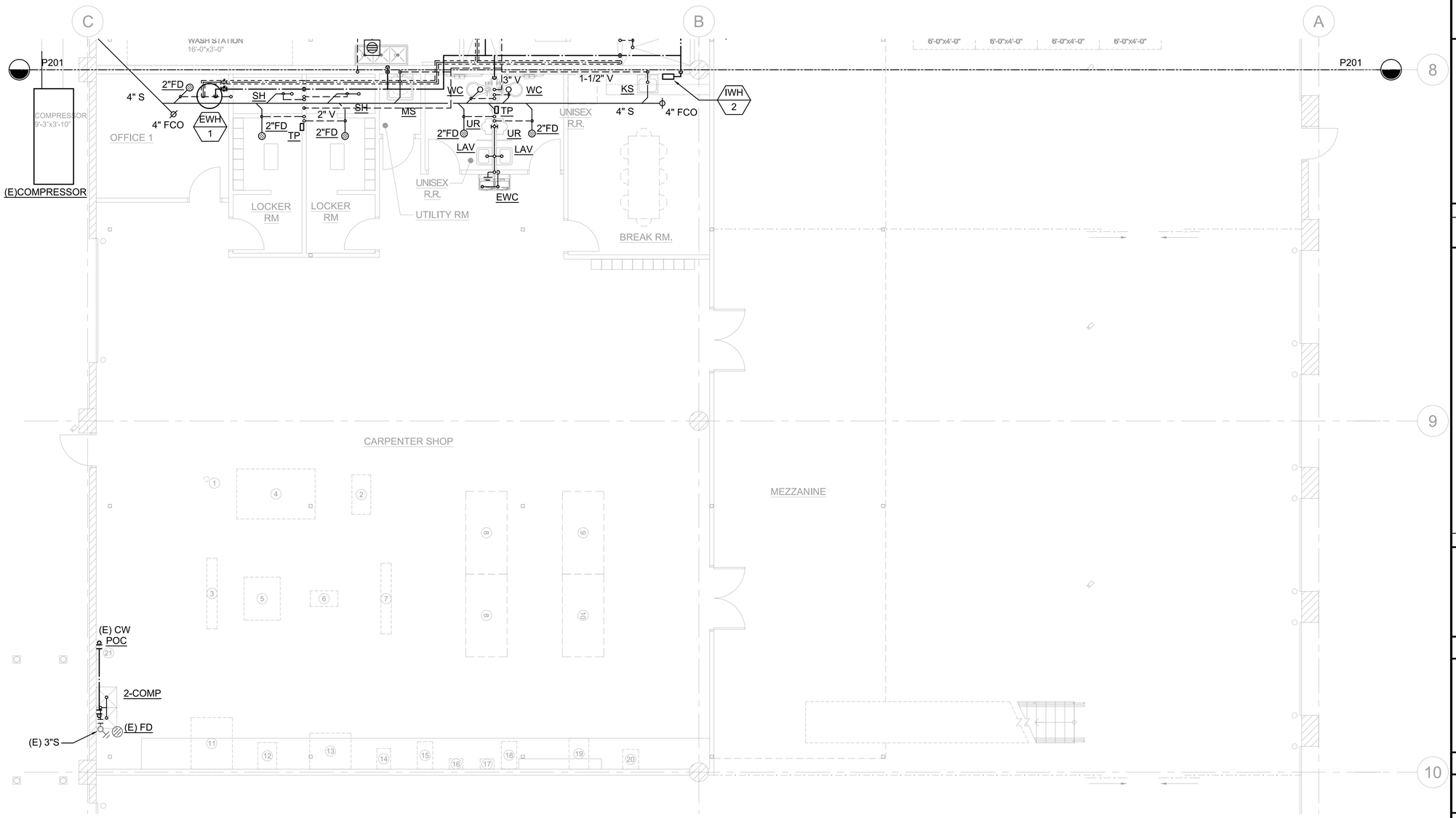
ENLARGED PLUMBING PLAN - 01

DATE :
05/10/23

SHEET :
48 OF 84 SHEETS

DWG. NO.
P201



1 / P202 ENLARGED PLUMBING PLAN - 02
SCALE: 3/16" = 1'-0"

0 4' 8' 12' 16'
SCALE: 3/16" = 1'-0"

STATE OF HAWAII
1959
Airports Division
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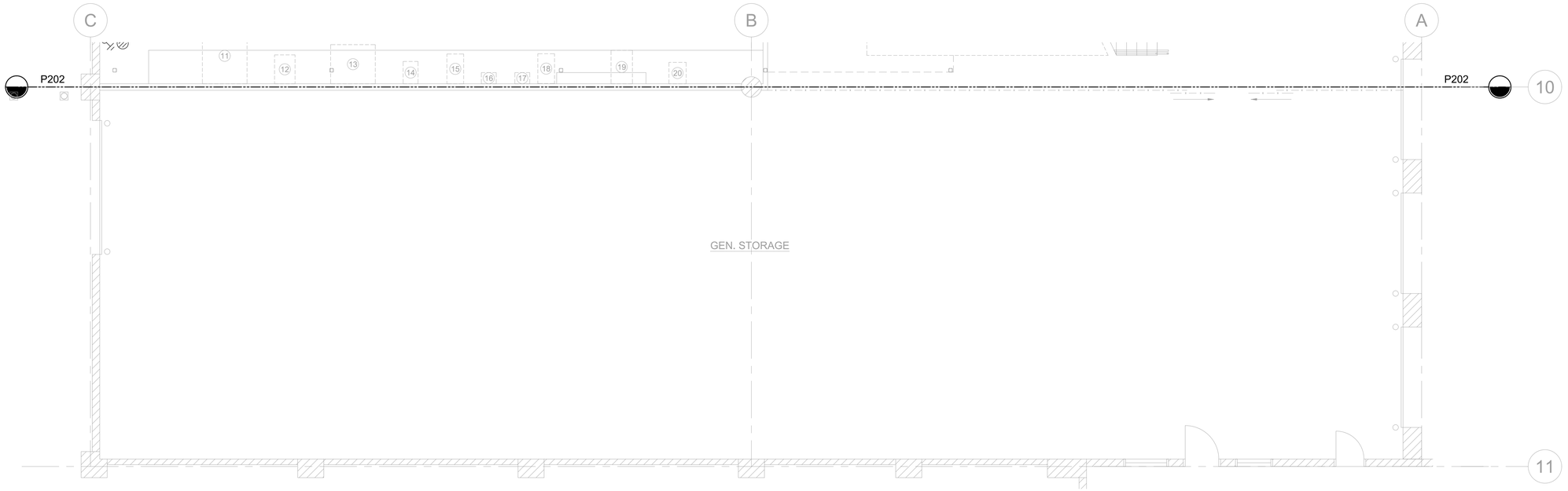
SHEET TITLE:

ENLARGED PLUMBING PLAN - 02

DATE :
05/10/23

SHEET :
49 OF 84 SHEETS

DWG. NO.
P202



1 / P203 ENLARGED PLUMBING PLAN - 03
SCALE: 3/16" = 1'-0"

0 4' 8' 12' 16'
SCALE: 3/16" = 1'-0"

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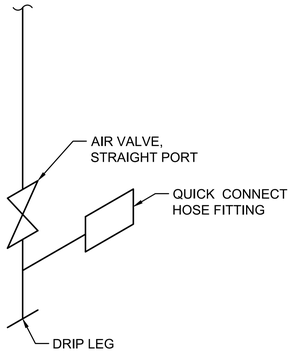
SHEET TITLE:

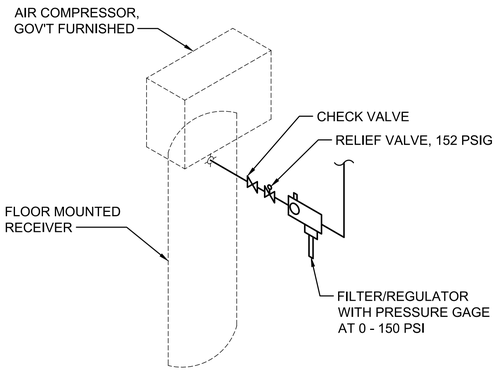
ENLARGED PLUMBING PLAN - 03

DATE :
05/10/23
SHEET :
50 OF 84 SHEETS

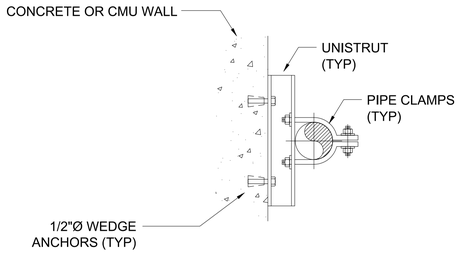
DWG. NO.
P203



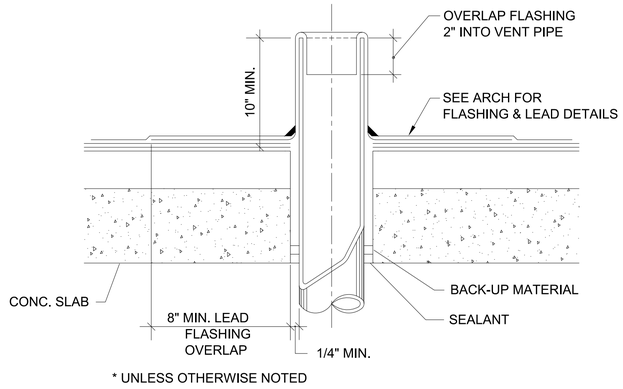
1 TYP. WORK STATION
NOT TO SCALE



2 AIR COMPRESSOR PIPING
NOT TO SCALE

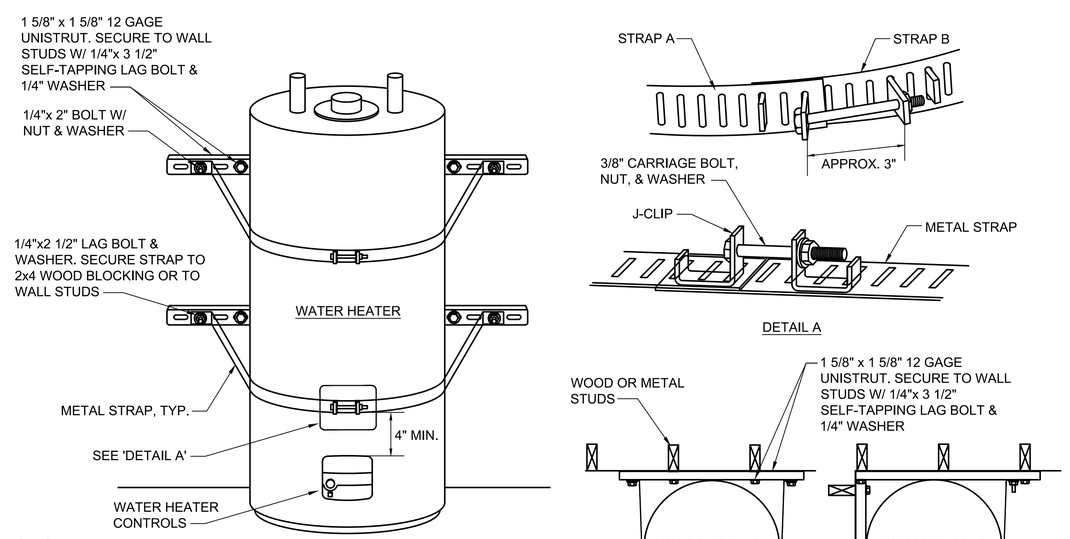


3 WALL MOUNT PIPE SUPPORT DETAIL
NOT TO SCALE



* UNLESS OTHERWISE NOTED

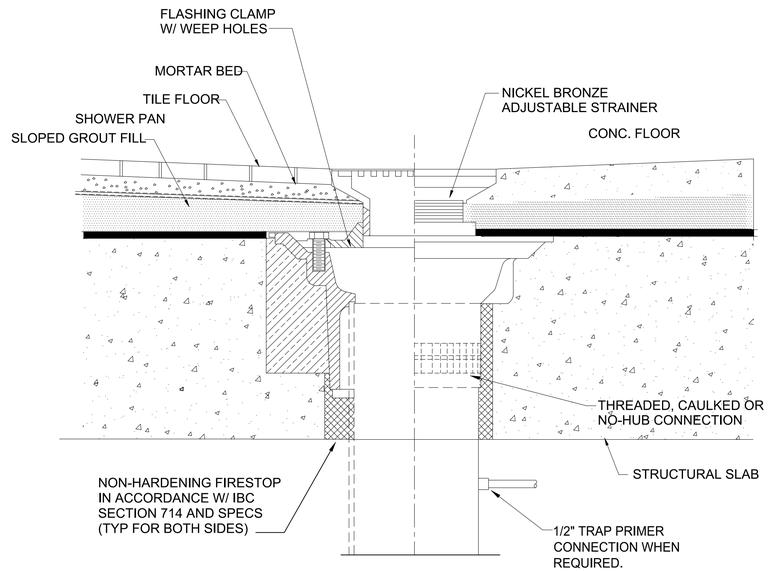
4 VENT THRU ROOF DETAIL
NOT TO SCALE



NOTES:

1. STRAPS MUST BE INSTALLED IN THE UPPER AND LOWER 1/3 OF THE WATER HEATER. THE LOWER STRAP MUST BE MIN. 4" ABOVE THE WATER HEATER CONTROLS.
2. SECURE STRAPS TO WALL STUDS OR WOOD BLOCKING IF STUD LOCATIONS DO NOT LINE UP.
3. PROVIDE WITH QUICK STRAP WATER HEATER RESTRAIN BRACKETS OR APPROVED EQUAL.

5 WATER HEATER SEISMIC RESTRAINT
NOT TO SCALE



NOTE: SEE PLUMBING SCHEDULE FOR FLOOR DRAIN TYPE.

6 TYP. FLOOR DRAIN DETAIL
NOT TO SCALE

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DATE

PROJECT TITLE :

CONVERT CARGO BUILDING TO WORKSHOP

AT
DANIEL K. INOUYE INTERNATIONAL AIRPORT
HONOLULU, OAHU, HAWAII

PROJECT NO.:

CO1325-33

SHEET TITLE:

PLUMBING DETAILS

DATE :
05/10/23

SHEET :
51 OF 84 SHEETS

DWG. NO.
P501

INSTANTANEOUS TANKLESS WATER HEATER (IWH)

MARK	LOCATION	SERVICE	FLOW (GPM)	ELECTRICAL			BASIS OF DESIGN
				kW	A	V	
IWH-1	PAINT SHOP BREAK ROOM	BREAK ROOM KITCHEN SHINK	UP TO 2.0 FOR SINKS	8.3	40	208	EEMAX SPEX8208T
IWH-2	CARPENTER SHOP BREAK ROOM	BREAK ROOM KITCHEN SHINK	UP TO 2.0 FOR SINKS	8.3	40	208	EEMAX SPEX8208T

HOT WATER HEAT PUMP SCHEDULE

UNIT	LOCATION	SERVICE	RECOVERY RATE AT 70°F (GPH)	TANK STORAGE (GAL)	ELECTRICAL - HEATER			INPUT (KW)	MAX. DIA (INCH)	BASIS OF DESIGN	REMARK
					V	PH	HZ				
EWH-1	CARPENTER SHOP OFFICE	PAINT/CARPENTER LOCKER RMS/UTILITY RM	50	120	240	1	60	6.0	28	LOCHINVAR CHPA120PD	MIXING VALVE, VACUUM RELIEF VALVE AND ISOLATION VALVES ON CW IN & HW OUT.

EXPANSION TANK (ET) SCHEDULE

UNIT	LOCATION	SYSTEM SERVED	TYPE	ACCEPT. VOLUME (GAL)	TEMP. RANGE (DEG F)		TANK VOL. (GAL.)
					MIN.	MAX.	
ET-1	PAINT SHOP LOCKER RM	LOCKER RMS/UTILITY RM	DIAPHRAGM	5.3	70	120	6

EXISTING AIR COMPRESSOR SCHEDULE

UNIT	LOCATION	TYPE	CFM	COMPRESSOR		FAN		ELECTRICAL				WEIGHT (LBS)	BASIS OF DESIGN	REMARK
				NO.	HP	NO.	HP (WATT)	FLA	V	PH	HZ			
(E) AC-1	-		40	1	1/3	1	16	19	115	1	60	650	PNEUMATECH ADA-40	1

NOTES:
1. OWENER FURNISHED, CONTRACTOR INSTALLED.

PLUMBING FIXTURE SCHEDULE

SYMBOL	DESCRIPTION	TRAP SIZE	WASTE	VENT	HOT WATER	COLD WATER	NOTES
WC	PUBLIC WATER CLOSET, FLOOR MOUNTED FLUSH VALVE	INTEGRAL	4"	2"	-	1"	ELONGATED WITH OPEN FRONT, HEAVY DUTY WAX RING, 1.28 GPF QUARTER TURN BALL VALVE
UR	URINAL, WALL MOUNTED	INTEGRAL	2"	2"	-	3/4"	VITREOUS CHINA, MANUAL FLUSH VALVE. 0.5 GPF. QUARTER TURN BALL VALVE
LAV	LAVATORY, UNDERCOUNTER	1-1/2"	1-1/2"	2"	1/2"	1/2"	SINGLE HOLE CENTERSET, 0.5 GPM QUARTER TURN BALL VALVE
KS	KITCHEN SINK	1-1/2"	1-1/2"	2"	1/2"	1/2"	STAINLESS STEEL, 1.5 GPM FAUCET PROVIDE WITH 1/2 HP GARBAGE DISPOSAL. QUARTER TURN BALL VALVE.
SHWR	SHOWER	2"	2"	2"	1/2"	1/2"	PROVIDE 1.5 GPM LOW FLOW SHOWER HEAD, THERMOSTATIC TYPE MIXING VALVE TO ALLOW, MAXIMUM 120°F HOT WATER AT SHOWER HEAD.
EWC	ELECTRIC WATER COOLER	2"	2"	2"	-	1/2"	DOUBLE BASIN WITH BOTTLE FILLER.
MS	MOP SINK	2"	2"	2"	-	1/2"	2.0 GPM, CAST IRON, FLOOR MOUNT
FS	FLOOR SINK	2"/3"/4"	2"/3"/4"	2"	-	-	REFER TO DRAWINGS FOR SIZES
FD	FLOOR DRAIN	2"	2"	2"	-	-	PROVIDE TRAP PRIMER.
TP	TRAP PRIMER	-	-	-	-	1/2"	PROVIDE WITH ACCESS PANEL WHEN INSTALLED IN CONCEALED LOCATION

NOTES:
1. REFER TO ARCHITECTURAL DRAWINGS FOR PLUMBING FIXTURES PRODUCT DATA
2. ALL POTABLE WATER FIXTURE TO BE CERTIFIED LEAD FREE

STATE OF HAWAII 1959

Airports Division
DEPARTMENT OF TRANSPORTATION
STATE OF HAWAII

OWEN CRABTREE
LICENSED PROFESSIONAL ENGINEER
No. 14306-M
HAWAII, U.S.A.

EXP. 4/30/2024

This work was prepared by me or under my supervision.

DSGN.	DRWN.	CHKD.	APPD.
WJ	WJ	OC	

NO.	DATE	REVISIONS

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PLUMBING SCHEDULES

DATE :
05/10/23
SHEET :
52 OF 84 SHEETS

DWG. NO.
P601

FIRE PROTECTION GENERAL NOTES:

1. THE ENTIRE INSTALLATION SHALL COMPLY WITH ALL APPLICABLE REQUIREMENTS OF THE HAWAII STATE FIRE CODE, UNIFORM FIRE CODE, NATIONAL FIRE PROTECTION ASSOCIATION CODE, NATIONAL ELECTRICAL CODE, AND ALL OTHER AGENCIES HAVING JURISDICTION.

2. THE DRAWINGS AND SPECIFICATIONS ARE INTENDED TO COVER THE COMPLETE INSTALLATION OF SYSTEMS TO FUNCTION AS DESCRIBED AND SPECIFIED. THE OMISSION OF REFERENCE TO ANY NECESSARY ITEM OF LABOR OR MATERIAL SHALL NOT RELIEVE THE CONTRACTOR FROM PROVIDING SUCH LABOR AND MATERIAL.

3. ALL EQUIPMENT SHALL BE CAPABLE OF FITTING INTO THE SPACES ALLOCATED WHILE MEETING THE MANUFACTURER'S RECOMMENDED ACCESS REQUIREMENTS. REVIEW ALL SPACES WHERE EQUIPMENT IS TO BE INSTALLED PRIOR TO ORDERING OF EQUIPMENT AND NOTIFY THE ENGINEER OF ANY INADEQUATE CLEARANCES OR CONDITIONS THAT WILL PREVENT THE PROPER INSTALLATION, MAINTENANCE, AND OPERATION OF THE EQUIPMENT.

4. PROVIDE SHOP DRAWINGS FOR THE LAYOUT OF FIRE SPRINKLER AND FIRE ALARM SYSTEMS SHOWING COORDINATION OF ALL WORK WITH ALL OTHER TRADES, INCLUDING PLUMBING, AIR CONDITIONING, CONTROLS, ELECTRICAL AND COMMUNICATION SYSTEMS. COORDINATION DRAWINGS SHALL OVERLAY HVAC, PLUMBING, FIRE SPRINKLER, ELECTRICAL AND FIRE ALARM SYSTEMS, AND ALL CONFLICTS BETWEEN TRADES SHALL BE NOTED AND RESOLVED.

5. VERIFY AND COORDINATE ALL ROOF, WALL AND FLOOR PENETRATIONS WITH THE STRUCTURAL AND ARCHITECTURAL DRAWINGS AND NOTIFY THE ENGINEER OF ANY CONFLICTS PRIOR TO START OF CONSTRUCTION.

6. OBTAIN APPROVAL FROM THE STRUCTURAL ENGINEER BEFORE MAKING ANY PENETRATIONS THROUGH STRUCTURAL MEMBERS, WALLS AND SLABS.

7. TONE AND LOCATE ALL UTILITY LINES OR OTHER INTERFERENCES IN AREAS OF PROPOSED TRENCH WORK PRIOR TO START OF EXCAVATION. REPAIR OR PAY FOR ALL DAMAGES TO EXISTING UTILITIES.

8. DRAWINGS DO NOT ATTEMPT TO SHOW EXACT DETAILS OF PIPING. PROVIDE OFFSETS AS NECESSARY TO AVOID LOCAL OBSTRUCTIONS OR INTERFERENCE WITH OTHER TRADES. REVIEW ALL PIPING AND DUCT RUNS PRIOR TO FABRICATION AND IMMEDIATELY NOTIFY THE GENERAL CONTRACTOR OF ANY INTERFERENCE AND/OR LACK OF ADEQUATE CLEARANCES.

9. SHOULD PROJECT CONDITIONS REQUIRE REARRANGEMENT OF WORK, MARK SUCH CHANGES ON THE AS-BUILT DRAWINGS AND NOTIFY THE ENGINEER. IF THESE CHANGES REQUIRE ALTERNATE METHODS TO THOSE APPROVED BY THE CONTRACT DOCUMENTS, SUBMIT SHOP DRAWINGS SHOWING THE PROPOSED ALTERNATE METHODS TO THE ENGINEER FOR REVIEW. DO NOT PROCEED UNTIL REVIEWED.

10. REPAIR ANY DAMAGE TO EXISTING CONSTRUCTION RESULTING FROM THE INSTALLATION OF MECHANICAL ITEMS. THE AREAS REPAIRED SHALL MATCH THE ADJACENT SURFACES IN TEXTURE AND COLOR.

11. PROPERLY FIRE STOP ALL PENETRATIONS THROUGH FIRE RATED WALLS, FLOORS, OR PARTITIONS WITH A UL APPROVED SYSTEM APPROPRIATE FOR THE PENETRATION TYPE AND FIRE RATING IN ACCORDANCE WITH MANUFACTURER'S INSTALLATION INSTRUCTIONS. FIRE STOP ALL PENETRATIONS BETWEEN FLOORS.

12. SEISMICALLY BRACE ALL EQUIPMENT AND PIPING IN ACCORDANCE WITH THE SPECIFICATIONS. PROVIDE ZONE-OF-INFLUENCE CALCULATIONS.

13. TWO SETS (2) OF COMPLETE WORKING PLANS AND HYDRAULIC CALCULATIONS STAMPED AND SIGNED BY A HAWAII LICENSED MECHANICAL ENGINEER SHALL BE SUBMITTED, AS APPLICABLE, TO THE FIRE PROTECTION SPECIAL INSPECTOR (FPSI) FOR CODE COMPLIANCE REVIEW. ONE (1) SET WITH THE FPSI APPROVAL STAMP SHALL BE SUBMITTED TO THE DPP BUILDING DIVISION ALONG WITH THE FPSI FINAL REPORT/LETTER PRIOR TO CLOSING OF THE BUILDING PERMIT.

14. COORDINATE WITH OTHER TRADES AND CONFIRM THE EXACT EQUIPMENT LOCATIONS AND MOUNTING HEIGHT OF THE MECHANICAL EQUIPMENTS, FIRE ALARM DEVICES, PLUMBING WORK, ELECTRICAL WORK. LIGHT FIXTURES, AND AIR CONDITIONING DUCTS.

15. SEAL ALL PENETRATIONS THROUGH FIRE RATED WALLS AND SLABS USING A U.L. LISTED FIRE RATED SEALANT TO MAINTAIN THE INTEGRITY OF THE FIRE RATING.

FIRE PROTECTION UNDERGROUND NOTES:

1. UNDERGROUND FIRE PROTECTION WATER LINE DESIGN AND INSTALLATION SHALL BE IN ACCORDANCE WITH NFPA 24 AND SPECIFICATIONS.

2. ALL DEVICES AND EQUIPMENT SHALL BE LISTED IN UL FPED OR FM P7825a FOR UNDERGROUND FIRE SERVICE.

3. PIPING SHALL BE DUCTILE IRON WITH A RATED WORKING PRESSURE OF 175 PSI CONFORMING TO AWWA C151, WITH CEMENT MORTAR LINING CONFORMING TO AWWA C104. MINIMUM BURIAL DEPTH OF PIPE SHALL BE 36".

4. PROVIDE PROPER THRUST RESTRAINT AT ALL CHANGES IN DIRECTION OF PIPE.

FIRE SPRINKLER SYSTEM NOTES:

1. FIRE SPRINKLER SYSTEM SHALL COMPLY WITH NFPA 13, NFPA 24, AND THE SPECIFICATIONS.

2. THE FIRE SPRINKLER SYSTEM SHOWN IS CONCEPTUAL. THE EQUIPMENT IS SHOWN IN SUGGESTED LOCATIONS, FINAL QUANTITY AND LAYOUT SHALL BE IN ACCORDANCE WITH APPLICABLE CODES, MANUFACTURES'S RECOMMENDATIONS, AND EQUIPMENT LISTING. SHOP SUBMITTALS SHALL SHOW SPRINKLER DETAILS IN ACCORDANCE WITH NFPA 13 AND THE MANUFACTURER'S EQUIPMENT LISTING INSTALLATION REQUIREMENTS.

3. AUTOMATIC SPRINKLER PROTECTION IS REQUIRED THROUGHOUT THE ENTIRE BUILDING IN ACCORDANCE WITH NFPA 13.

4. FIRE SPRINKLER SHALL BE SERVED BY WATER SUPPLY SOURCE SERVING THE MAINTENANCE FACILITY. THE FLOW TEST INFORMATION BELOW IS USED AS INFORMATION ONLY FOR THE AIRPORT WATER DEMAND AND SHALL NOT BE USED FOR THE HYDRAULIC INFORMATION FOR THE SHOP DRAWINGS. THE CONTRACTOR SHALL CONDUCT A NEW FLOW TEST PRIOR TO CONSTRUCTION AND USE THE LATEST FLOW TEST FOR THEIR SHOP DRAWINGS.

LOCATION:	NEAR THE MAINTENANCE FACILITY
FLOW:	893 GPM
STATIC:	58 PSI
RESIDUAL:	52 PSI

CONTRACTOR SHALL CONDUCT A FLOW TEST BEFORE THE START OF CONSTRUCTION. THE CONTRACTOR SHALL USE THE LATEST FLOW TEST DEMAND FOR THEIR HYDRAULIC CALCULATION TO SIZE THE FIRE SPRINKLER SYSTEM.

5. SPRINKLER DESIGN REQUIRED PRESSURE (RESIDUAL) SHALL BE BASED ON A MINIMUM 10 PSI SAFETY FACTOR.

6. THE WET-PIPE SYSTEM SHALL BE HYDRAULICALLY DESIGNED AND INSTALLED IN ACCORDANCE WITH THE FOLLOWING CRITERIA:

OFFICES, RESTROOMS, HALLWAYS, TOILETS, AND BREAK ROOMS

OCCUPANCY CLASSIFICATION:	LIGHT HAZARD
DESIGN METHOD:	AREA/ DENSITY
SPRINKLER:	QUICK RESPONSE
TEMP RATING:	ORDINARY
DESIGN DENSITY:	0.1 GPM/SF
DESIGN AREA:	1500 SF (SPACED AT 225 SF FS COVERAGE)
HOSE STREAM:	150 GPM
DURATION:	30 MIN.
K-FACTOR:	5.6K MINIMUM

ROOM DESIGN METHOD SHALL BE ALLOWABLE PER NFPA 13

UTILITY ROOM, LOCKER ROOM, AND STORAGE ROOM

OCCUPANCY CLASSIFICATION:	ORDINARY GROUP 2 HAZARD
DESIGN METHOD:	AREA/DENSITY
SPRINKLER:	STANDARD
TEMP RATING:	INTERMEDIATE (200 DEGREES F)
DESIGN DENSITY:	0.2 GPM/SF
DESIGN AREA:	1500 SF (SPACED AT 130 SF FS COVERAGE)
HOSE STREAM:	250 GPM
DURATION:	60 MIN.
K-FACTOR:	8.0K MINIMUM

CARPENTER SHOP, PAINT SPRAY BOOTH ROOM, GEN STORAGE, ABOVE AND BELOW MEZZANINE

OCCUPANCY CLASSIFICATION:	EXTRA HAZARD GROUP 2 HAZARD
DESIGN METHOD:	AREA/DENSITY
SPRINKLER:	STANDARD
TEMP RATING:	INTERMEDIATE (200 DEGREES F)
DESIGN DENSITY:	0.4 GPM/SF
DESIGN AREA:	2500 SF (SPACED AT 100 SF FS COVERAGE)
HOSE STREAM:	500 GPM
DURATION:	60 MIN.
K-FACTOR:	8.0K MINIMUM

7. PROVIDE EARTHQUAKE PROTECTION (SWAY BRACING) IN ACCORDANCE WITH NFPA 13. USE A HORIZONTAL FORCE FACTOR OF HALF THE WEIGHT OF THE WATER FILLED PIPE. PROVIDE SURGE RESTRAINT CLIPS ON ALL HANGAR RINGS. PROVIDE END OF BRANCH RESTRAINT FOR ALL BRANCH LINES OVER 4 FEET OR WHERE SUBJECT TO DAMAGE OR WHERE UPWARD OR LATERAL MOVEMENT OF THE SYSTEM PIPING WOULD RESULT IN DAMAGE TO THE SPRINKLER THROUGH IMPACT AGAINST THE BUILDING STRUCTURE, EQUIPMENT, OR FINISH MATERIALS.

8. SPRINKLER PIPING SHALL BE SCHEDULE 40 BLACK STEEL

ALL FIRE SPRINKLER PIPING, FITTINGS, VALVES, SUPPORTS, HANGERS SHALL BE PAINTED PRIMED AND PAINTED RED WITH ALKYD COATING TO PREVENT CORROSION.

9. ALL DEVICES AND EQUIPMENT SHALL BE UL LISTED OR FM APPROVED.

10. PROVIDE UL LISTED FS EXPANSION/SEISMIC JOINTS AT THE BUILDINGS EXPANSION JOINT TO ACCOMMODATE UP TO 4" OF MOVEMENT.

LEGEND	OCCUPANCY CLASSIFICATION	DESIGN DENSITY	DESIGN AREA	MAX. SPRINKLER SPACING	HOSE ALLOWANCE	DURATION	FS K-FACTOR
	LIGHT HAZARD: OFFICES, RESTROOMS, HALLWAYS, TOILETS, AND BREAK ROOMS	.10 GPM/SF	1500 SF	225 SF	250 GPM	60 MIN.	5.6K MIN.
	ORDINARY HAZARD: UTILITY ROOM, LOCKER ROOM, AND STORAGE ROOM	.20 GPM/SF	2500 SF	130 SF	250 GPM	60 MIN.	8.0K MIN.
	EXTRA HAZARD: CARPENTER SHOP, PAINT SPRAY BOOTH ROOM, GEN STORAGE, ABOVE AND BELOW MEZZANINE	.40 GPM/SF	2500 SF	100 SF	500 GPM	60 MIN.	8.0K MIN.

11. TEMPERATURE RATINGS FOR ALL SPRINKLERS SHALL BE APPROPRIATE FOR THE LOCATION IN ACCORDANCE WITH NFPA 13. PROVIDE QUICK RESPONSE SPRINKLERS THROUGHOUT THE FACILITY UNLESS OTHERWISE NOTED. SPRINKLERS WITH O-RINGS ARE NOT PERMITTED.

12. THE CONTRACTOR SHALL COMPLY WITH OSHA 29 CFR 1910.36 AND 29 CFR 1910.37.

13. PROVIDE INSPECTION AND HYDROSTATIC TEST AND SUBMIT CONTRACTOR'S MATERIAL AND TEST CERTIFICATES FOR ABOVE GROUND AND UNDERGROUND PIPING IN ACCORDANCE WITH NPFA 13. PRIOR TO HYDROSTATIC TEST, THE CONTRACTOR SHALL PERFORM AN AIR PRESSURE TEST TO LOCATE ANY POTENTIAL LEAKAGE.

14. PROVIDE LABELS AND VISIBLE IDENTIFICATION INDICATING LOCATION OF ALL FLOOR CONTROL VALVES, INSPECTOR'S TEST STATIONS; AND FIRE DEPARTMENT CONNECTIONS.

15. COORDINATE SPRINKLER LINE ROUTING WITH CEILING HEIGHTS AND OTHER EQUIPMENT, DUCTS, AND PIPING IN THE CEILING. CONTRACTOR SHALL FOLLOW THE PROPOSED MAIN ROUTING AS MUCH AS POSSIBLE.

16. ALL WATER FLOW SWITCHES AND CONTROL VALVES SHALL BE ELECTRICALLY SUPERVISED BY THE FIRE ALARM PANEL.

17. LOCATE FS HEADS PER NFPA 13 TO AVOID ANY OBSTRUCTIONS. COORDINATE WITH SOFFIT, LIGHT FIXTURE, AND DUCTWORK LOCATIONS.

18. ALL FIRE SPRINKLER PIPING SHALL BE CONCEALED EXCEPT IN UNFINISHED AREAS WHERE THERE ARE NO CEILING SPACES. ANY PROPOSED EXPOSED PIPING SHALL BE CLEARLY NOTED ON THE SHOP DRAWINGS AND APPROVED BY THE ENGINEER AND THE ARCHITECT PRIOR TO INSTALLATION.

19. PROVIDE INSPECTIONS AND HYDROSTATIC TESTS IN ACCORDANCE WITH NFPA 13. PRIOR TO HYDROSTATIC TEST, CONTRACTOR SHALL PERFORM AN AIR PRESSURE TEST TO LOCATE POTENTIAL LEAKAGE POINTS.

20. ALL SPRINKLER CONTROL VALVES SHALL BE MONITORED BY TAMPER SWITCHES. COORDINATE INTERFACE WITH FIRE ALARM SYSTEM WITH THE FIRE ALARM CONTRACTOR.

21. ALL VALVES CONTROLLING THE WATER SUPPLY FOR AUTOMATIC SPRINKLER SYSTEMS AND WATER FLOW SWITCHES ON ALL SPRINKLER SYSTEMS SHALL BE ELECTRONICALLY MONITORED WHERE THE NUMBERS OF SPRINKLERS ARE:
1) TWENTY OR MORE IN A GROUP I, DIVISIONS 1.1 AND 1.2 OCCUPANCIES.
2) ONE HUNDRED OR MORE IN ALL OTHER OCCUPANCIES.

26. VALVE MONITORING AND WATER FLOW ALARM AND TROUBLE SIGNALS SHALL BE DISTINCTLY DIFFERENT AND SHALL BE AUTOMATICALLY TRANSMITTED TO AN APPROVED CENTRAL STATION, REMOTE STATION OR PROPRIETARY MONITORING STATION AS DEFINED BY UFC STANDARD 10-2 OR, WHEN APPROVED BY THE BUILDING OFFICIAL WITH THE CONCURRENCE OF THE CHIEF, SHALL SOUND AN AUDIBLE SIGNAL AT A CONSTANTLY ATTENDED LOCATION. VALVE MONITORING, WATER FLOW AND TROUBLE SIGNALS SHALL BE MONITORED ON THE ISLAND OF OAHU. EXCEPTION: UNDERGROUND KEY OR HUB VALVES IN ROADWAY BOXES PROVIDED BY THE MUNICIPALITY OR PUBLIC UTILITY NEED NOT BE MONITORED. 2012 UFC, SECTION 1003.3.1 AS AMENDED.

27. SPARE SPRINKLER HEADS SHALL BE PROVIDED AND STORED IN A CABINET IN A LOCATION APPROVED BY THE CHIEF AS FOLLOWS:
1) 1-300 SPRINKLERS 06 HEADS
2) 301-1000 SPRINKLERS 12 HEADS
3) OVER 100 SPRINKLERS 24 HEADS
IN ADDITION, THREE SPRINKLER STOPPERS AND A SPECIAL SPRINKLER WRENCH SHALL BE PROVIDED AND KEPT IN THE CABINET TO BE USED IN THE REMOVAL AND INSTALLATION OF SPRINKLER HEADS. 2012 UFC, SECTION 1003.1.1 AS AMENDED.

28. FLEXIBLE FIRE SPRINKLER DROPS SHALL NOT BE ALLOWED FOR THIS PROJECT.

29. ALL FIRE SPRINKLER HEADS SHALL BE ELECTROLESS NICKEL PTFE (ENT) FINISH.

30. ACTIVATION OF WATER FLOW SWITCH SHALL SHUT OFF THE HIGH VOLUME FANS IN THE MEZZANINE AND GENERAL STORAGE ROOMS.

31. THE PAINT ROOM SHALL BE EQUIPPED WITH FIRE SPRINKLER CAGE GUARDS AND PROTECTIVE CELLOPHANE BAGS HAVING A THICKNESS OF 0.0003 IN. (0.08mm) OR LESS SHALL BE USED. CONTRACTOR SHALL ALSO PROVIDE 50 SPARE BAGS.

FIRE SPRINKLER LEGEND

SYMBOL	ABBRV.	DESCRIPTION
FS	FS	FLOW SWITCH
	GV	GATE VALVE
	OS&Y	OUTSIDE STEM AND YOKE
	-	INDICATING BUTTERFLY VALVE
	POC	POINT OF CONNECTION
	POR	POINT OF REMOVAL
TS	TS	TAMPER SWITCH
		WET-PIPE FS RISER/STANDPIPE RISER
	TYP.	TYPICAL
	FDC	FIRE DEPARTMENT CONNECTION
		FIRE SPRINKLER HEAD - PENDANT
		FIRE SPRINKLER HEAD - UPRIGHT

STATE OF HAWAII 1959

Airports Division
DEPARTMENT OF TRANSPORTATION
STATE OF HAWAII

BARRY G. S. JIM ON
LICENSED PROFESSIONAL ENGINEER
No. 9546-M
HAWAII, U.S.A.

EXP. 4/30/2024

This work was prepared by me or under my supervision.

DSGN.	DRWN.	CHKD.	APPD.

NO.	DATE	REVISIONS

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CONVERT CARGO BUILDING TO WORKSHOP

AT
DANIEL K. INOUYE INTERNATIONAL AIRPORT
HONOLULU, OAHU, HAWAII

PROJECT NO.:

CO1325-33

SHEET TITLE:

FIRE SPRINKLER NOTES AND LEGEND

DATE : 05/10/23

SHEET : 53 OF 84 SHEETS

DWG. NO. F001

FIRE ALARM GENERAL NOTES:

1. THE FIRE ALARM SYSTEM DEMOLITION AND INSTALLATION SHALL COMPLY WITH ALL APPLICABLE CODES AND STANDARDS WITH STATE OF HAWAII AMENDMENTS INCLUDING, BUT NOT LIMITED TO:
   - 2018 INTERNATIONAL BUILDING CODE (IBC)
   - 2018 NFPA 1: FIRE CODE (NFPA 1)
   - 2017 NFPA 70: NATIONAL ELECTRICAL CODE (NEC)
   - 2016 NFPA 72: NATIONAL FIRE ALARM AND SIGNALING CODE (NFPA 72)
   - 2010 AMERICANS WITH DISABILITIES ACT (ADA)
2. THE DRAWINGS AND SPECIFICATIONS ARE INTENDED TO COVER THE COMPLETE INSTALLATION OF SYSTEMS TO FUNCTION AS DESCRIBED AND SPECIFIED. THE OMISSION OF REFERENCE TO ANY NECESSARY ITEM OF LABOR OR MATERIAL SHALL NOT RELIEVE THE CONTRACTOR FROM PROVIDING SUCH LABOR AND MATERIAL.
3. ALL EQUIPMENT SHALL BE CAPABLE OF FITTING INTO THE SPACES ALLOCATED WHILE MEETING THE MANUFACTURER'S RECOMMENDED ACCESS REQUIREMENTS. REVIEW ALL SPACES WHERE EQUIPMENT IS TO BE INSTALLED PRIOR TO ORDERING OF EQUIPMENT AND NOTIFY THE ENGINEER OF ANY INADEQUATE CLEARANCES OR CONDITIONS THAT WILL PREVENT THE PROPER INSTALLATION, MAINTENANCE, AND OPERATION OF THE EQUIPMENT.
4. PROVIDE SHOP DRAWINGS FOR THE LAYOUT OF THE FIRE ALARM SYSTEMS SHOWING COORDINATION OF ALL WORK WITH ALL OTHER TRADES INCLUDING, BUT NOT LIMITED TO: PLUMBING, HVAC, CONTROLS, ELECTRICAL, COMMUNICATION, AND OTHER FIRE PROTECTION SYSTEMS. COORDINATION DRAWINGS SHALL OVERLAY HVAC, PLUMBING, FIRE SPRINKLER, ELECTRICAL AND FIRE ALARM SYSTEMS, AND ALL CONFLICTS BETWEEN TRADES SHALL BE NOTED AND RESOLVED.
5. VERIFY AND COORDINATE ALL ROOF, WALL AND FLOOR PENETRATIONS WITH THE STRUCTURAL AND ARCHITECTURAL DRAWINGS AND NOTIFY THE ENGINEER OF ANY CONFLICTS PRIOR TO START OF CONSTRUCTION.
6. OBTAIN APPROVAL FROM THE STRUCTURAL ENGINEER BEFORE MAKING ANY PENETRATIONS THROUGH STRUCTURAL MEMBERS, WALLS AND SLABS.
7. TONE AND LOCATE ALL UTILITY LINES OR OTHER INTERFERENCES IN AREAS OF PROPOSED TRENCH WORK PRIOR TO START OF EXCAVATION. REPAIR OR PAY FOR ALL DAMAGES TO EXISTING UTILITIES.
8. DRAWINGS DO NOT ATTEMPT TO SHOW EXACT DETAILS OF CONDUIT ROUTING. PROVIDE OFFSETS AS NECESSARY TO AVOID LOCAL OBSTRUCTIONS OR INTERFERENCE WITH OTHER TRADES. REVIEW ALL PIPING AND DUCT RUNS PRIOR TO FABRICATION AND IMMEDIATELY NOTIFY THE GENERAL CONTRACTOR OF ANY INTERFERENCE AND/OR LACK OF ADEQUATE CLEARANCES.
9. SHOULD PROJECT CONDITIONS REQUIRE REARRANGEMENT OF WORK, MARK SUCH CHANGES ON THE AS-BUILT DRAWINGS AND NOTIFY THE ENGINEER. IF THESE CHANGES REQUIRE ALTERNATE METHODS TO THOSE APPROVED BY THE CONTRACT DOCUMENTS, SUBMIT SHOP DRAWINGS SHOWING THE PROPOSED ALTERNATE METHODS TO THE ENGINEER FOR REVIEW. DO NOT PROCEED UNTIL REVIEWED.
10. REPAIR ANY DAMAGE TO EXISTING CONSTRUCTION RESULTING FROM THE INSTALLATION OF ELECTRICAL ITEMS. THE AREAS REPAIRED SHALL MATCH THE ADJACENT SURFACES IN TEXTURE AND COLOR.
11. PROPERLY FIRE STOP ALL PENETRATIONS THROUGH FIRE RATED WALLS, FLOORS, OR PARTITIONS WITH A U.L. APPROVED SYSTEM APPROPRIATE FOR THE PENETRATION TYPE AND FIRE RATING IN ACCORDANCE WITH MANUFACTURER'S INSTALLATION INSTRUCTIONS.
12. TWO SETS (2) OF COMPLETE WORKING PLANS AND VOLTAGE LOAD AND BATTERY CALCULATIONS STAMPED AND SIGNED BY A HAWAII LICENSED ELECTRICAL ENGINEER SHALL BE SUBMITTED, AS APPLICABLE, TO THE FIRE PROTECTION SPECIAL INSPECTOR (FPSI) FOR CODE COMPLIANCE REVIEW. ONE (1) SET WITH THE FPSI APPROVAL STAMP SHALL BE SUBMITTED TO THE DPP BUILDING DIVISION ALONG WITH THE FPSI FINAL REPORT/LETTER PRIOR TO CLOSING OF THE BUILDING PERMIT.
13. WEATHERPROOF-TYPE DEVICES SHALL BE PROVIDED IN WET LOCATIONS AND WHERE INDICATED ON THE DRAWINGS.
14. COORDINATE WITH THE FIRE SPRINKLER CONTRACTOR TO PROVIDE THE LOCATION AND AMOUNT OF FIRE ALARM DEVICES FOR THE FIRE SPRINKLER AND STANDPIPE SYSTEMS. ALL SYSTEM WATER SUPPLY VALVES AND CONTROL VALVES SHALL BE ELECTRONICALLY SUPERVISED.
15. SMOKE DETECTORS SMOKE ALARMS SHALL BE INSTALLED AT LEAST 5 FEET FROM SUPPLY AIR DIFFUSERS AND AIR CONDITIONING UNITS.
16. THE FIRE ALARM SYSTEM SHALL BE TIED INTO THE PHONE SYSTEM USING AN AUTODIALER OR 3RD PARTY SECURITY SYSTEM TO MONITOR THE FIRE ALARM SYSTEM 24/7. ACTIVATION OF THE FIRE ALARM SYSTEM SHALL SEND SIGNAL TO THE SECURITY SYSTEM.

ELECTRICAL GENERAL NOTES:

1. WORK INCLUDES INSTALLATION OF ALL ELECTRICAL SYSTEMS COMPLETE AND OPERATIONAL AS LIMITED BY THE INTENT OF THE CONTRACT DOCUMENTS.
2. PERFORM ELECTRICAL WORK IN ACCORDANCE WITH THE LATEST EDITION OF THE NATIONAL ELECTRICAL CODE (NFPA 70), NATIONAL ELECTRICAL SAFETY CODE, AND ALL LOCAL RULES AND REGULATIONS.
3. OBTAIN ALL NECESSARY PERMITS AS REQUIRED.
4. PROVIDE THREADED TYPE FITTINGS FOR GALVANIZED CONDUITS. ALL CONDUITS INSTALLED SHALL BE GALVANIZED TYPE AND THE FITTINGS, JUNCTION BOXES INSTALLED IN THE BUILDING SHALL BE WATER TIGHT.
5. SIZE ALL CONDUIT PER THE NEC REQUIREMENTS UNLESS NOTED OTHERWISE.
6. PROVIDE SOLID COPPER, 600 VOLT INSULATION TYPE THHN, THWN POWER CONDUCTORS.
7. PROVIDE AN INSULATED GREEN GROUNDING CONDUCTOR, SIZED PER NEC TABLE 250-122, FOR ALL CIRCUITS. INSTALL THIS CONDUCTOR IN ALL RACEWAYS INCLUDING THOSE INSTALLED FOR SWITCH LEGS AND ATTACH TO THE DEVICE, LUMINAIRE, OR EQUIPMENT USING A SUITABLE GROUNDING LUG.
8. PROVIDE AND INSTALL ALL JUNCTION AND PULLBOXES REQUIRED FOR THE INSTALLATION OF ELECTRICAL DEVICES AND EQUIPMENT, WHETHER OR NOT SPECIFICALLY INDICATED ON THE PLANS. SIZE BOXES PER THE NEC.
9. SEAL ALL PENETRATIONS THROUGH FIRE RATED WALLS AND SLABS USING A U.L. LISTED FIRE RATED SEALANT TO MAINTAIN THE INTEGRITY OF THE FIRE RATED CONSTRUCTION PENETRATED.
10. SHOULD PROJECT CONDITIONS REQUIRE REARRANGEMENT OF WORK, INDICATE SUCH CHANGES ON THE AS-BUILT DRAWINGS.
11. SUBMIT SHOP DRAWINGS TO THE CONTRACTING OFFICER FOR ALL LUMINAIRES, EQUIPMENT AND DEVICES COVERED BY THIS CONTRACT FOR APPROVAL PRIOR TO ORDERING.
12. THE MINIMUM CONDUIT SIZE IS 3/4 INCH FOR INTERIOR ABOVE GRADE USE AND 1" FOR EXTERIOR UNDERGROUND USE. ACCEPTABLE CONDUITS FOR INTERIOR USE ARE EMT WITH COMPRESSION FITTINGS, GRS, IMC, LIQUID TIGHT FLEXIBLE METAL AND FLEXIBLE METAL CONDUITS. ACCEPTABLE CONDUITS FOR EXTERIOR USE ARE PVC SCH40, PVC SCH80, GRS, IMC.
13. TONE AND LOCATE ALL UTILITY LINES WITHIN THE PROJECT AREA PRIOR TO START OF EXCAVATION. REPAIR OR PAY FOR ALL DAMAGES TO EXISTING UTILITIES.
14. AFTER INSTALLATION OF CABLES, CONDUITS SHALL BE SEALED WITH CAULKING COMPOUND TO PREVENT ENTRANCE OF MOISTURE OR GASES INTO BUILDINGS.
15. SURFACE MOUNT PANELS IN ELECTRICAL AND MECHANICAL ROOMS. FINISH MOUNT PANELS IN ALL PUBLIC SPACES.

FIRE ALARM SYSTEM NOTES

1. THE EXISTING FIRE ALARM SYSTEM WITHIN THE BUILDING SHALL BE REMOVED AND REPLACED WITH A NEW FIRE ALARM SYSTEM WITH EMERGENCY VOICE ALARM COMMUNICATION SYSTEMS (EVACS) DESIGNED AND INSTALLED IN ACCORDANCE WITH NFPA 72, NEC, AND THE SPECIFICATIONS. ALL DEVICES AND EQUIPMENT SHALL BE U.L. LISTED OR FM APPROVED.
2. THE NEW BUILDING FIRE ALARM SYSTEM WILL BE INTERFACED WITH THE EXISTING CAMPUS FIRE ALARM SYSTEM. ACTIVATION OF THE BUILDING FIRE ALARM SYSTEM WILL ACTIVATE THE CAMPUS FIRE ALARM SYSTEM.
3. THE FIRE ALARM DESIGN SHOWN IS CONCEPTUAL. THE EQUIPMENT IS SHOWN IN SUGGESTED LOCATIONS. FINAL QUANTITY AND LAYOUT SHALL BE IN ACCORDANCE WITH APPLICABLE CODES, MANUFACTURE'S RECOMMENDATIONS, AND EQUIPMENT LISTING. SHOP DRAWINGS SUBMITTALS SHALL INCLUDE FIRE ALARM DETAILS IN ACCORDANCE WITH NFPA 72, NEC AND THE MANUFACTURER'S EQUIPMENT LISTING INSTALLATION REQUIREMENTS.
4. AUDIBLE AND VISIBLE NOTIFICATION SHALL COMPLY WITH ALL APPLICABLE NFPA 72, A117.1, AND ADA REQUIREMENTS.

AUDIBLE NOTIFICATION REQUIREMENTS

1. WALL-MOUNTED AUDIBLE NOTIFICATION APPLIANCES SHALL BE INSTALLED WITH THEIR TOPS NOT LESS THAN 90 INCHES ABOVE THE FINISHED FLOOR AND NOT LESS THAN 6 INCHES BELOW THE FINISHED CEILING.
2. IF ANY BARRIER, SUCH AS A DOOR, CURTAIN, OR RETRACTABLE PARTITION, IS LOCATED BETWEEN THE NOTIFICATION APPLIANCE AND THE AREA SERVED, THE SOUND PRESSURE LEVEL SHALL BE MEASURED WITH THE BARRIER IN PLACE.
3. AUDIBLE NOTIFICATION IN PUBLIC AREAS SHALL BE AT LEAST 15dB ABOVE THE AVERAGE AMBIENT SOUND LEVEL OR 5dB ABOVE THE MAXIMUM SOUND LEVEL HAVING A DURATION AT LEAST 60 SECONDS, WHICHEVER IS GREATER, MEASURED 5 FEET ABOVE THE FLOOR OF THE AREA SERVED.
4. AUDIBLE NOTIFICATION IN SLEEPING AREAS SHALL BE AT LEAST 15 DB ABOVE THE AVERAGE AMBIENT SOUND LEVEL OR 5 dB ABOVE MAXIMUM SOUND LEVEL HAVING A DURATION OF 60 SECONDS, OR A SOUND LEVEL OF AT LEAST 75 dB, WHICHEVER IS GREATER, MEASURED AT THE PILLOW LEVEL OF THE AREA SERVED.
5. IN AREAS WHERE THE AVERAGE AMBIENT SOUND LEVELS EXCEED 105 dBA, VISIBLE NOTIFICATION SHALL BE PERMITTED.
6. AUDIBLE NOTIFICATION APPLIANCES INSTALLED IN DWELLING AND SLEEPING AREAS SHALL PRODUCE A 520 HZ LOW-FREQUENCY ALERT TONE.

VISIBLE NOTIFICATION REQUIREMENTS

1. WALL-MOUNTED APPLIANCES SHALL BE MOUNTED SUCH THAT THE ENTIRE LENS IS NOT LESS THAN 80 IN. AND NOT GREATER THAN 96 IN. ABOVE THE FINISHED FLOOR.
2. WHERE TWO OR MORE VISIBLE NOTIFICATION APPLIANCES ARE INSTALLED IN THE SAME FIELD OF VIEW, THE FLASHES SHALL BE SYNCHRONIZED.

MANUAL FIRE ALARM BOXES

1. A MANUAL FIRE ALARM BOX SHALL BE PROVIDED ON EVERY LEVEL WITHIN 5 FEET OF THE OPENING TO EACH EXIT, UNLESS OTHERWISE APPROVED BY THE AHJ.
2. WHERE GROUPED OPENINGS EXCEED 40 FEET IN WIDTH, MANUAL FIRE ALARM BOXES SHALL BE PROVIDED WITHIN 5 FEET OF EACH SIDE OF THE OPENING.
3. ADDITIONAL MANUAL FIRE ALARM BOXES SHALL BE LOCATED SO THAT, ON ANY GIVEN FLOOR IN ANY PART OF THE BUILDING, NO HORIZONTAL DISTANCE ON THAT FLOOR EXCEEDING 200 FEET SHALL NEED TO BE TRAVERSED TO REACH A MANUAL FIRE ALARM BOX.
4. EACH MANUAL FIRE ALARM BOX ON A SYSTEM SHALL BE ACCESSIBLE, UNOBSTRUCTED, AND VISIBLE.
5. THE OPERABLE PART OF EACH MANUAL FIRE ALARM BOX SHALL BE NOT LESS THAN 42 INCHES AND NOT MORE THAN 48 INCHES ABOVE FLOOR LEVEL.

AUTOMATIC SMOKE DETECTION

1. AUTOMATIC SMOKE DETECTION SHALL BE PROVIDED IN EACH MECHANICAL EQUIPMENT, ELECTRICAL, TRANSFORMER, TELEPHONE EQUIPMENT, OR SIMILAR ROOM WHICH IS NOT PROVIDED WITH AUTOMATIC SPRINKLER PROTECTION.
2. SMOKE DETECTORS SHALL BE INSTALLED AT EACH ELEVATOR LOBBY AND INSIDE EACH ELEVATOR MACHINE ROOM, WHERE PROVIDED.
3. DUCT SMOKE DETECTORS SHALL BE PROVIDED ON HVAC SYSTEMS WITH A CAPACITY GREATER THAN 2,000 CFM AND INSTALLED DOWNSTREAM ON THE LAST DUCT INLET.
4. SMOKE DETECTORS SHALL BE INSTALLED WHERE REQUIRED TO INITIATE AUTOMATIC CLOSING OR RELEASE OF HOLD-OPEN DEVICES ON DOORS IN SMOKE-RATED AND FIRE-RATED CONSTRUCTION.
5. SMOKE DETECTORS SHALL BE INSTALLED WHERE REQUIRED TO INITIATE AUTOMATIC CLOSING OF SMOKE AND FIRE/SMOKE DAMPERS.
6. UNLESS CONTINUOUSLY OCCUPIED, AUTOMATIC SMOKE DETECTION SHALL BE PROVIDED AT THE LOCATION OF EACH FIRE ALARM CONTROL UNIT, NOTIFICATION APPLIANCE CIRCUIT POWER EXTENDERS, AND SUPERVISING STATION TRANSMITTING EQUIPMENT. WHERE AMBIENT CONDITIONS PROHIBIT INSTALLATION OF AUTOMATIC SMOKE DETECTION, AUTOMATIC HEAT DETECTION SHALL BE PERMITTED.

FIRE ALARM LEGEND

SYMBOL	DESCRIPTION
S	ADDRESSABLE SMOKE DETECTOR
S	ADDRESSABLE IN-DUCT SMOKE DETECTOR
CO	ADDRESSABLE CARBON MONOXIDE DETECTOR
W	ADDRESSABLE SPEAKER
cd W	ADDRESSABLE SPEAKER-STROBE
F	MANUAL PULL STATION
FP	MANUAL PULL STATION SIGNAGE, MOUNTED 88" AFF
M	ADDRESSABLE MONITOR MODULE
C	ADDRESSABLE CONTROL MODULE
DH	MAGNETIC DOOR HOLD-OPEN DEVICE
FACP	FIRE ALARM CONTROL PANEL
ANN	FIRE ALARM ANNUNCIATOR PANEL
RPS	REMOTE POWER SUPPLY
WF	SPRINKLER WATERFLOW SWITCH
VS	SPRINKLER VALVE SUPERVISORY (TAMPER) SWITCH
LF	LOW-FREQUENCY (520 HZ) ALERT TONE
C	CEILING MOUNTED
WP	WEATHER-PROOF

STATE OF HAWAII
1959
DEPARTMENT OF TRANSPORTATION

Airports Division
DEPARTMENT OF TRANSPORTATION
STATE OF HAWAII

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EXP. 4/30/2024

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This work was prepared by me or under my supervision.

DSGN.	DRWN.	CHKD.	APPD.

NO.	DATE	REVISIONS

DATE

PROJECT TITLE :

CONVERT CARGO BUILDING TO WORKSHOP

AT
DANIEL K. INOUYE INTERNATIONAL AIRPORT
HONOLULU, OAHU, HAWAII

PROJECT NO.:

CO1325-33

SHEET TITLE:

FIRE ALARM NOTES AND LEGEND

DATE :
05/10/23
SHEET :
54 OF 84 SHEETS

DWG. NO.
F002

FIRE DEPARTMENT NOTES:

FIRE SAFETY NOTE

1. STRUCTURES UNDERGOING CONSTRUCTION, ALTERATION, OR DEMOLITION OPERATIONS, INCLUDING THOSE IN UNDERGROUND LOCATIONS, SHALL COMPLY WITH NFPA 241, STANDARD FOR SAFEGUARDING CONSTRUCTION, ALTERATION, AND DEMOLITION OPERATIONS, AND THIS CHAPTER. 2012 NFPA 1.

FIRE SAFETY DURING ALTERATION

2. 16.4.4.1 WHERE THE BUILDING IS PROTECTED BY FIRE PROTECTION SYSTEMS, SUCH SYSTEMS SHALL BE MAINTAINED OPERATIONAL AT ALL TIMES DURING ALTERATION.

3. 16.4.4.2 WHERE ALTERATION REQUIRES MODIFICATION OF A PORTION OF THE FIRE PROTECTION SYSTEM, THE REMAINDER OF THE SYSTEM SHALL BE KEPT IN SERVICE AND THE FIRE DEPARTMENT SHALL BE NOTIFIED.

4. 16.4.4.3 WHEN IT IS NECESSARY TO SHUT DOWN THE SYSTEM, THE AHJ SHALL HAVE THE AUTHORITYTO REQUIRE ALTERNATE MEASURES OF PROTECTION UNTIL THE SYSTEM IS RETURNED TO SERVICE.

5. 10.8.1.1 AS NECESSARY DURING EMERGENCIES, MAINTENANCE, DRILLS, PRESCRIBED TESTING,ALTERATIONS, OR RENOVATIONS, PORTABLE OR FIXED FIRE-EXTINGUISHING SYSTEMS OR DEVICES OR ANY FIRE-WARNING SYSTEM SHALL BE PERMITTED TO BE MADE INOPERATIVE OR INACCESSIBLE. A FIRE WATCH SHALL BE REQUIRED AS SPECIFIED IN SECTIONS 13.3.4.3.5.2(3), 13.7.1.4.4, 16.5.4, 20.2.3.6, 34.6.3.3, 41.2.2.5, 41.2.2.6, 41.2.4, 41.3.4, 41.4.1, 34.5.4.3, AND 25.1.8 AT NO COST TO THE AHJ. NFPA 1 2012, AS AMENDED.

AHJ APPROVAL

6. 13.1.1 THE AHJ SHALL HAVE THE AUTHORITY TO REQUIRE THAT CONSTRUCTION DOCUMENTS FOR ALL FIRE PROTECTION SYSTEMS BE SUBMITTED FOR REVIEW AND APPROVAL AND A PERMIT BE ISSUED PRIOR TO THE INSTALLATION, REHABILITATION, OR MODIFICATION. FURTHER, THE AHJ SHALL HAVE THE AUTHORITY TO REQUIRE THAT FULL ACCEPTANCE TESTS OF THE SYSTEMS BE PERFORMED IN THE AHJ'S PRESENCE PRIOR REQUIRE THAT FULL ACCEPTANCE TESTS OF THE SYSTEMS BE PERFORMED IN THE AHJ'S PRESENCE PRIOR TO FINAL SYSTEM CERTIFICATION.

7. FIRE ALARM SYSTEMS; FIRE HYDRANT SYSTEMS; FIRE-EXTINGUISHING SYSTEMS; STANDPIPES; AND OTHER FIRE-PROTECTION SYSTEMS AND APPURTENANCES REQUIRED BY THIS CODE SHALL BE APPROVED BY THE AHJ AS TO INSTALLATION AND LOCATION AND SHALL BE SUBJECT TO ACCEPTANCE TESTS REQUIRED BY THE APPROPRIATE COUNTY AGENCY. NFPA 1, CHAPTER 13 AS AMENDED.

13.7.3.2.1 APPROVAL AND ACCEPTANCE.

8. 13.7.3.2.1.2 BEFORE REQUESTING FINAL APPROVAL OF THE INSTALLATION, IF REQUIRED BY THE AHJ, THE INSTALLING CONTRACTOR SHALL FURNISH A WRITTEN STATEMENT STATING THAT THE SYSTEM HAS BEEN INSTALLED IN ACCORDANCE WITH APPROVED PLANS AND TESTED IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS AND THE APPROPRIATE NFPA REQUIREMENTS. [72:4.5.1.2] 13.7.3.2.1.3* THE RECORD OF COMPLETION FORM, FIGURE 4.5.2.1 OF NFPA 72, SHALL BE PERMITTED TO BE A PART OF THE WRITTEN STATEMENT REQUIRED IN 13.7.3.2.1.2. WHEN MORE THAN ONE CONTRACTOR HAS BEEN RESPONSIBLE FOR THE INSTALLATION, EACH CONTRACTOR SHALL COMPLETE THE PORTIONS OF THE FORM FOR WHICH THAT CONTRACTOR HAD RESPONSIBILITY.

9. 13.7.3.2.1.4 THE RECORD OF COMPLETION FORM, FIGURE 4.5.2.1 OF NFPA 72, SHALL BE PERMITTED TO BE A PART OF THE DOCUMENTS THAT SUPPORT THE REQUIREMENTS OF 13.7.3.2.1.3. 2012 NFPA 1.

10. ENSURE AUDIBILITY IS MET THROUGH ALL OCCUPIABLE AREAS AND SPACES. THIS WILL BE THOROUGHLY CHECKED AT TIME OF THE ALARM ACCEPTANCE TEST.

FIRE DEPARTMENT NOTES CONTINUED:

ACCESS AND WATER SUPPLY

12. 16.4.3.1.3- WHERE UNDERGROUND WATER MAINS AND HYDRANTS ARE TO BE PROVIDED, THEY SHALL BE INSTALLED, COMPLETED, AND IN SERVICE PRIOR TO CONSTRUCTION. NFPA 1, CHAPTER 16.16.1.4 FIRE DEPARTMENT ACCESS ROADS PROVIDED IN ACCORDANCE WITH 18.2.3 SHALL BE PROVIDED AT THE START OF A PROJECT AND SHALL BE MAINTAINED THROUGHOUT CONSTRUCTION.

13. 16.1.5 PERMANENT FIRE DEPARTMENT ACCESS ROAD MARKINGS SHALL NOT BE REQUIRED UNTIL THE BUILDING IS COMPLETE OR OCCUPIED FOR USE.

18.2.3.2 ACCESS TO BUILDING.

14. 18.2.3.2.1 A FIRE DEPARTMENT ACCESS ROAD SHALL EXTEND TO WITHIN 50 FT (15 M) OF AT LEAST ONE EXTERIOR DOOR THAT CAN BE OPENED FROM THE OUTSIDE AND THAT PROVIDES ACCESS TO THE INTERIOR OF THE BUILDING.

15. 18.2.3.2.2 PROVIDE A FIRE APPARATUS ACCESS ROAD FOR EVERY FACILITY, BUILDING, OR PORTION OF A BUILDING HEREAFTER CONSTRUCTED OR MOVED INTO OR WITHIN THE JURISDICTION WHEN ANY PORTION OF THE FACILITY OR ANY PORTION OF AN EXTERIOR WALL OF THE FIRST STORY OF THE BUILDING IS LOCATED MORE THAN 150 FEET (45 720 MM) FROM A FIRE APPARATUS ACCESS ROAD AS MEASURED BY AN APPROVED ROUTE AROUND THE EXTERIOR OF THE BUILDING OR FACILITY. (2012 NFPA 1, SECTION 18.2.3.2.2)

16. 18.2.3.2.2.1- WHEN BUILDINGS ARE PROTECTED THROUGHOUT WITH AN APPROVED AUTOMATIC SPRINKLER SYSTEM THAT IS INSTALLED IN ACCORDANCE WITH NFPA 13, NFPA 13D, OR NFPA 13R, THE DISTANCE IN 18.2.3.2.2 SHALL BE PERMITTED TO BE INCREASED TO 450FT.

17. 18.2.3.4.1.1- FIRE ACCESS ROADS SHALL HAVE AN UNOBSTRUCTED WIDTH OF NOT LESS THAN 20FT. AND AN UNOBSTRUCTED VERTICAL CLEARANCE OF 13 FT. 6 IN. NFPA 1, CHAPTER 18.

18. 18.2.3.4.2 SURFACE. FIRE DEPARTMENT ACCESS ROADS SHALL BE DESIGNED AND MAINTAINED TO SUPPORT THE IMPOSED LOADS OF FIRE APPARATUS AND SHALL BE PROVIDED WITH AN ALL-WEATHER DRIVING SURFACE.

19. 18.2.3.4.3.1 THE TURNING RADIUS OF A FIRE APPARATUS ACCESS ROAD SHALL MEET COUNTY REQUIREMENTS.

20. 18.2.3.4.3.2 TURNS IN FIRE DEPARTMENT ACCESS ROADS SHALL MAINTAIN THE MINIMUM ROAD WIDTH. A FIRE DEPARTMENT ACCESS ROAD SHALL EXTEND TO WITHIN 50 FT (15 M) OF AT LEAST ONE EXTERIOR DOOR THAT CAN BE OPENED FROM THE OUTSIDE AND THAT PROVIDES ACCESS TO THE INTERIOR OF THE BUILDING (2012 NFPA 1, SECTION 18.2.3.2.1)

21. PROVIDE A WATER SUPPLY, APPROVED BY THE COUNTY, CAPABLE OF SUPPLYING THE REQUIRED FIRE FLOW FOR FIRE PROTECTION TO ALL PREMISES UPON WHICH FACILITIES OR BUILDINGS, OR PORTIONS THEREOF, ARE HEREAFTER CONSTRUCTED OR MOVED INTO OR WITHIN THE COUNTY.

22. ON-SITE FIRE HYDRANTS AND MAINS CAPABLE OF SUPPLYING THE REQUIRED FIRE FLOW SHALL BE PROVIDED WHEN ANY PORTION OF THE FACILITY OR BUILDING IS IN EXCESS OF 150 FEET (45 720 MM) FROM A WATER SUPPLY ON A FIRE APPARATUS ACCESS ROAD, AS MEASURED BY AN APPROVED ROUTE AROUND THE EXTERIOR OF THE FACILITY OR BUILDING. (2012 NFPA 1, SECTION 18.3.1, AS AMENDED).

23. FIRE DEPARTMENT HOSE CONNECTIONS SHALL BE LOCATED WITHIN 20 FEET OF A FIRE APPARATUS ACCESS ROAD, NOT LESS THAN 18 INCHES AND NOT MORE THAN 4 FEET ABOVE GRADE, OR AS APPROVED BY THE AHJ. APPROPRIATE IDENTIFICATION SIGNS SHALL BE PROVIDED AS REQUIRED BY THE AHJ. SECTION 13.2.2.2 AND 13.3.1.2.1 OF NFPA 1 2012, AS AMENDED.

1.14 PLAN REVIEW

1.14.4 REVIEW AND APPROVAL BY THE AHJ SHALL NOT RELIEVE THE APPLICANT OF THE RESPONSIBILITY OF COMPLIANCE WITH THIS CODE.

FIRE DEPARTMENT NOTES

DETECTION, ALARM, AND COMMUNICATION SYSTEMS

13.7.1.1 WHERE BUILDING FIRE ALARM SYSTEMS OR AUTOMATIC FIRE DETECTORS ARE REQUIRED BY OTHER SECTIONS OF THIS CODE, THEY SHALL BE PROVIDED AND INSTALLED IN ACCORDANCE WITH NFPA 70, NFPA 72, NATIONAL FIRE ALARM CODE, AND SECTION 13.7. 2012 NFPA 1. FIRE ALARM SYSTEM INSTALLATION AND MAINTENANCE SHALL BE IN ACCORDANCE WITH NFPA 72, NATIONAL FIRE ALARM CODE, AND 2012 NFPA 1

AUDIBILITY

13.7.1.4.10.8 AUDIBLE ALARM NOTIFICATION APPLIANCES SHALL PRODUCE SIGNALS THAT ARE DISTINCTIVE FROM AUDIBLE SIGNALS USED FOR OTHER PURPOSES IN A GIVEN BUILDING. [101:9.6.3.8] ENSURE AUDIBILITY IS MET THROUGH ALL OCCUPIABLE AREAS AND SPACES.
THIS WILL BE THOROUGHLY CHECKED AT TIME OF THE ALARM

TAG

13.7.3.2.5 A TAG SHALL BE PLACED ON THE FIRE ALARM PANEL WHEN TESTED IN ACCORDANCE WITH SECTION 13.7.3.2. INFORMATION ON THE TAG SHALL INCLUDE THE DATE OF TESTING, TESTING COMPANY, AND CONTACT INFORMATION, TECHNICIAN PERFORMING THE TEST, AND THAT THE TEST WAS SATISFACTORY. NFPA 1, CHAPTER 13 AS AMENDED.

13.7.3.2.1 APPROVAL AND ACCEPTANCE.
13.7.3.2.1.1 THE AHJ SHALL BE NOTIFIED PRIOR TO INSTALLATION OR ALTERATION OF EQUIPMENT OR WIRING.
13.7.3.2.1.2 AT THE AHJ'S REQUEST, COMPLETE INFORMATION REGARDING THE SYSTEM OR SYSTEM ALTERATIONS, INCLUDING SPECIFICATIONS, TYPE OF SYSTEM OR SERVICE, SHOP DRAWINGS, INPUT/OUTPUT MATRIX, BATTERY CALCULATIONS, AND NOTIFICATION APPLIANCE CIRCUIT VOLTAGE DROP CALCULATIONS, SHALL BE SUBMITTED FOR APPROVAL.

13.7.3.2.1.3 BEFORE REQUESTING FINAL APPROVAL OF THE INSTALLATION, IF REQUIRED BY THE AHJ, THE INSTALLING CONTRACTOR SHALL FURNISH A WRITTEN STATEMENT STATING THAT THE SYSTEM HAS BEEN INSTALLED IN ACCORDANCE WITH APPROVED PLANS AND TESTED IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS AND THE APPROPRIATE NFPA REQUIREMENTS. [72:10.18.1.3]

13.7.3.2.1.4* THE RECORD OF COMPLETION FORM, FIGURE 10.18.2.1.1 OF NFPA 72, SHALL BE PERMITTED TO BE A PART OF THE WRITTEN STATEMENT REQUIRED IN 13.7.3.2.1.3. WHEN MORE THAN ONE CONTRACTOR HAS BEEN RESPONSIBLE FOR THE INSTALLATION, EACH CONTRACTOR SHALL COMPLETE THE PORTIONS OF THE FORM FOR WHICH THAT CONTRACTOR HAD RESPONSIBILITY. [72:10.18.1.4]

13.7.3.2.1.5 THE RECORD OF COMPLETION FORM, FIGURE 10.18.2.1.1 OF NFPA 72, SHALL BE PERMITTED TO BE A PART OF THE DOCUMENTS THAT SUPPORT THE REQUIREMENTS OF 13.7.3.2.2.4.[72:10.18.1.5].

NOTIFICATION DEVICES

13.7.1.4.10.5 UNLESS OTHERWISE PROVIDED IN 13.7.1.4.10.5.1 THROUGH 13.7.1.4.10.5.8, NOTIFICATION SIGNALS FOR OCCUPANTS TO EVACUATE SHALL BE AUDIBLE AND VISIBLE SIGNALS IN ACCORDANCE WITH NFPA 72 AND ICC/ANSI A117.1, AMERICAN STANDARD FOR ACCESSIBLE AND USABLE BUILDINGS AND FACILITIES, OR OTHER MEANS OF NOTIFICATION ACCEPTABLE TO THE AHJ SHALL BE PROVIDED. [101:9.6.3.5]

MANUAL FIRE ALARM BOXES

13.7.1.4.8.3 A MANUAL FIRE ALARM BOX SHALL BE PROVIDED AS FOLLOWS, UNLESS MODIFIED BY ANOTHER SECTION OF THIS CODE:

(1)FOR NEW ALARM SYSTEM INSTALLATIONS, THE MANUAL FIRE ALARM BOX SHALL BE LOCATED WITHIN 5FT (1.5 M) OF EXIT DOORWAYS.

(2)FOR EXISTING ALARM SYSTEM INSTALLATIONS, THE MANUAL FIRE ALARM BOX EITHER SHALL BE PROVIDED IN THE NATURAL EXIT ACCESS PATH NEAR EACH REQUIRED EXIT OR WITHIN 5 FT (1.5 M) OF EXIT DOORWAYS.

APPROVAL AND ACCEPTANCE

1. BEFORE REQUESTING FINAL APPROVAL OF THE INSTALLATION, IF REQUIRED BY THE AHJ, THE INSTALLING CONTRACTOR SHALL FURNISH A WRITTEN STATEMENT STATING THAT THE SYSTEM HAS BEEN INSTALLED IN ACCORDANCE WITH APPROVED PLANS AND TESTED IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS AND APPLICABLE CODE REQUIREMENTS.

2. THE RECORD OF COMPLETION FORM (NFPA 72 FIGURE 4.5.2.1) SHALL BE PERMITTED TO BE A PART OF THE WRITTEN STATEMENT. WHEN MORE THAN ONE CONTRACTOR HAS BEEN RESPONSIBLE FOR THE INSTALLATION, EACH CONTRACTOR SHALL COMPLETE THE PORTIONS OF THE FORM FOR WHICH THAT CONTRACTOR HAD RESPONSIBILITY.

3. ENSURE AUDIBILITY IS MET THROUGH ALL OCCUPIABLE AREAS AND SPACES. THIS WILL BE THOROUGHLY CHECKED AT TIME OF THE ACCEPTANCE TEST.

4. ONE SET OF APPROVED PLANS, SPECIFICATIONS, AND COMPUTATIONS SHALL BE RETAINED BY THE BUILDING OFFICIAL FOR A PERIOD OF NOT LESS THAN 90 DAYS FROM DATE OF COMPLETION OF THE WORK COVERED THEREIN, AND ONE SET OF APPROVED PLANS SHALL BE RETURNED TO THE APPLICANT, AND SAID SET SHALL BE KEPT ON THE SITE OF THE BUILDING OR WORK AT ALL TIMES DURING WHICH THE WORK AUTHORIZED THEREBY IS IN PROGRESS.

5. A TAG SHALL BE PLACED ON THE FIRE ALARM PANEL WHEN TESTED IN ACCORDANCE WITH NFPA 1 SECTION 13.7.3.2. INFORMATION ON THE TAG SHALL INCLUDE THE DATE OF TESTING, TESTING COMPANY, AND CONTACT INFORMATION, TECHNICIAN PERFORMING THE TEST, AND THAT THE TEST WAS SATISFACTORY.

6. THIS CODE (NFPA 1) SHALL NOT BE CONSTRUED TO RELIEVE FROM OR LESSEN THE RESPONSIBILITY OF ANY PERSON OWNING, OPERATING, OR CONTROLLING ANY BUILDING OR STRUCTURE FOR ANY DAMAGES TO PERSONS OR PROPERTY CAUSED BY DEFECTS, NOR SHALL THE CODE ENOFREMENT AGENCY OR ITS PARENT JURISDICTION BE HELD AS ASSUMING ANY SUCH LIABILITY BY REASON OF THE INSPECTIONS AUTHORIZED BY THIS CODE OR ANY PERMITS OR CERTIFICATES ISSUED UNDER THIS CODE.

STATE OF HAWAII
1959
DEPARTMENT OF TRANSPORTATION

Airports Division
DEPARTMENT OF TRANSPORTATION
STATE OF HAWAII

BARRY G. S. JIM ON
LICENSED PROFESSIONAL ENGINEER
No. 9546-M
HAWAII, U.S.A.

EXP. 4/30/2024

This work was prepared by me or under my supervision.

DSGN.	DRWN.	CHKD.	APPD.

NO.	DATE	REVISIONS

DATE

PROJECT TITLE :

CONVERT CARGO BUILDING TO WORKSHOP

AT
DANIEL K. INOUYE INTERNATIONAL AIRPORT
HONOLULU, OAHU, HAWAII

PROJECT NO.:

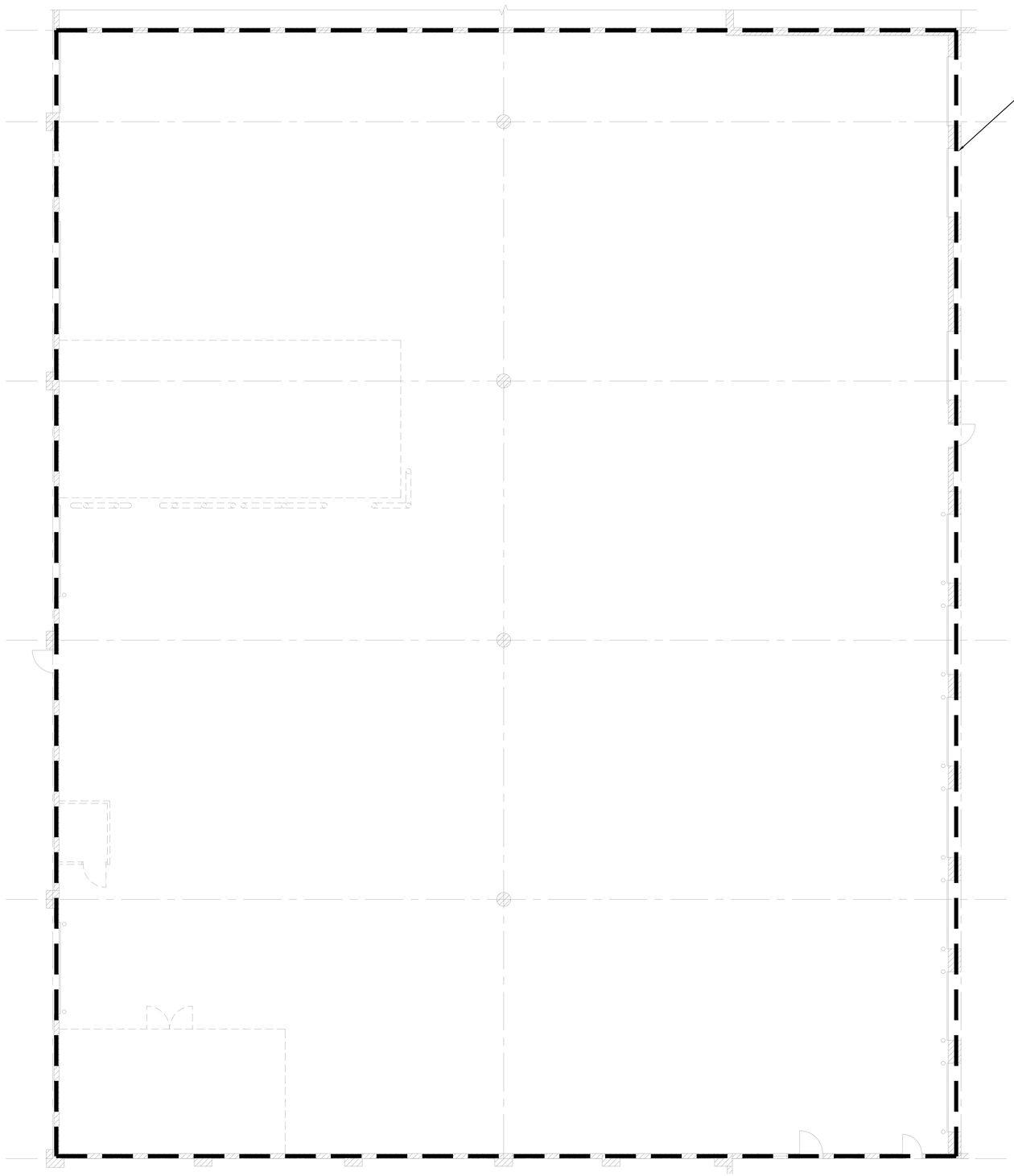
CO1325-33

SHEET TITLE:

FIRE DEPARTMENT NOTES

DATE :
05/10/23
SHEET :
55 OF 84 SHEETS

DWG. NO.
F003



1 / F101 FIRE PROTECTION REMOVAL PLAN
SCALE: 1/8" = 1'-0"

0 2' 4' 8' 12' 16' 20' 24'
SCALE: 1/8" = 1'-0"

STATE OF HAWAII
1959

Airports Division
DEPARTMENT OF TRANSPORTATION
STATE OF HAWAII

BARRY G. S. JIM ON
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No. 9546-M
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DANIEL K. INOUYE INTERNATIONAL AIRPORT
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CO1325-33

SHEET TITLE:

FIRE PROTECTION REMOVAL PLAN

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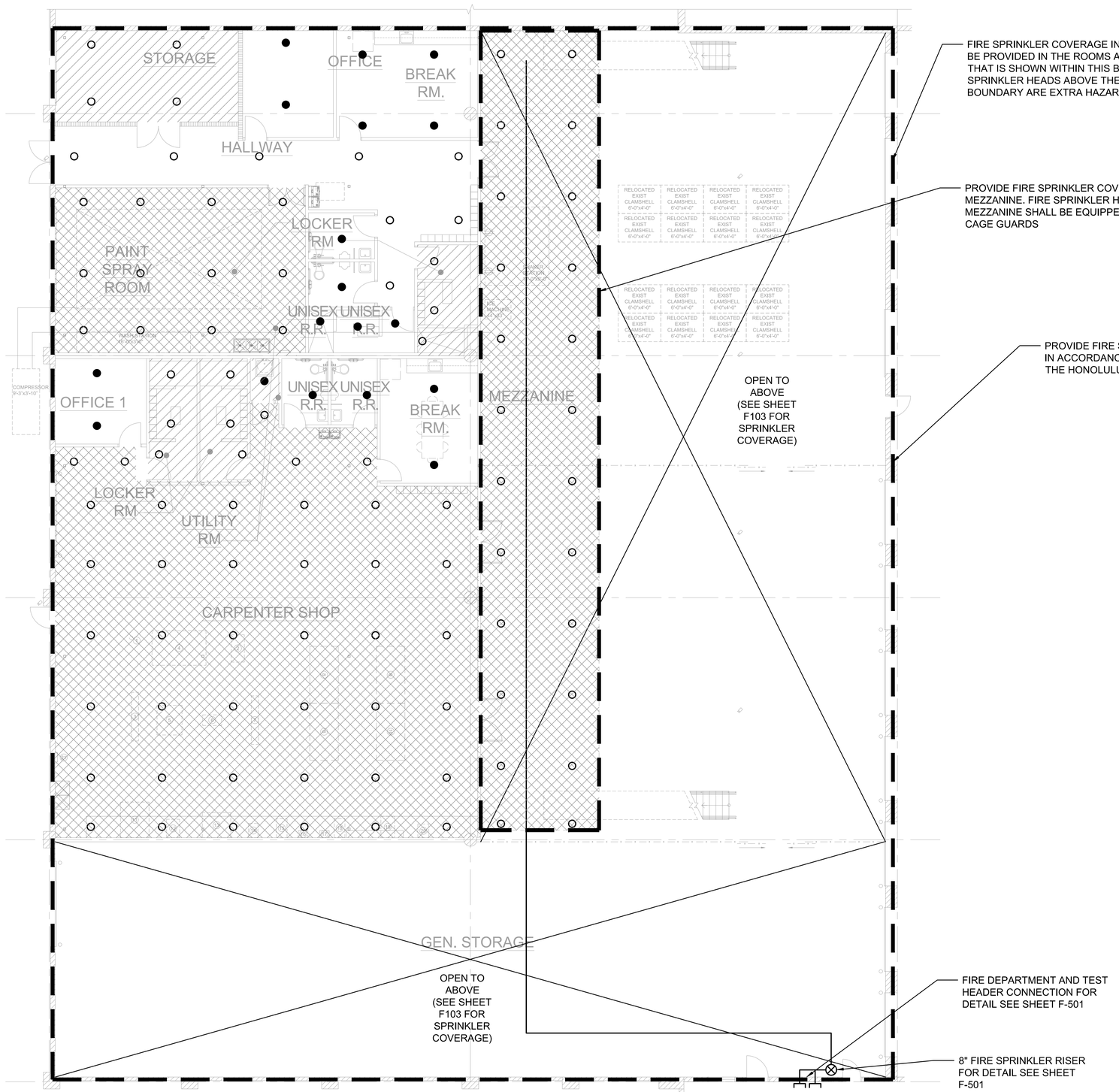
F101



1 / F102 FIRE SPRINKLER PLAN

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

0 2' 4' 8' 12' 16' 20' 24'

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

STATE OF HAWAII 1959

Airports Division

DEPARTMENT OF TRANSPORTATION
STATE OF HAWAII

BARRY G. S. JIM ON
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No. 9546-M
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FIRE SPRINKLER PLAN

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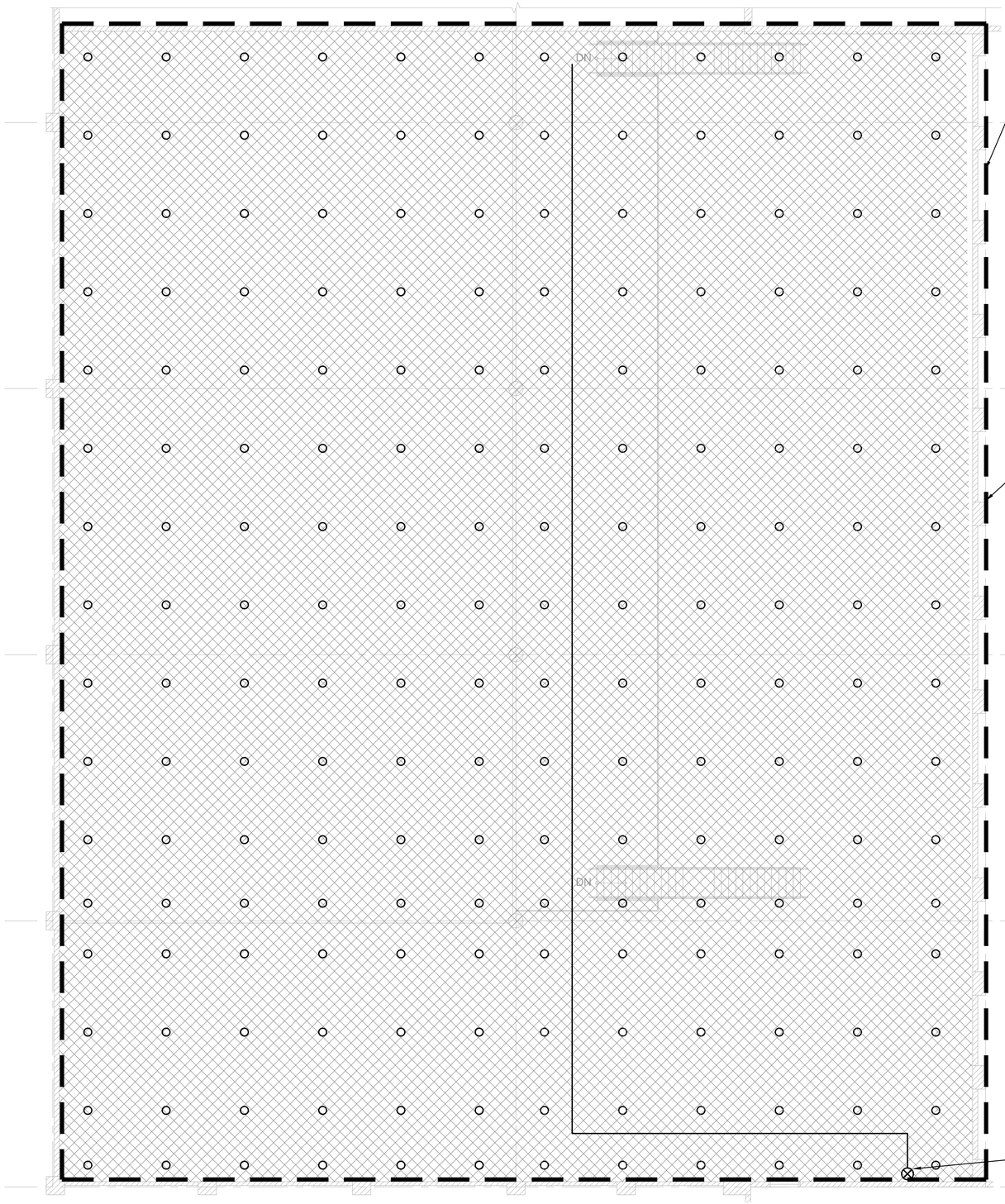
57 OF 84 SHEETS

DWG. NO.
F102



1 / F102 FIRE SPRINKLER PLAN - MEZZANINE

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

0 2' 4' 8' 12' 16' 20' 24'

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

STATE OF HAWAII

Airports Division

DEPARTMENT OF TRANSPORTATION
STATE OF HAWAII

BARRY G. S. JIM ON
LICENSED PROFESSIONAL ENGINEER
No. 9546-M
HAWAII, U.S.A.

EXP. 4/30/2024

This work was prepared by me or under my supervision.

DSGN.	DRWN.	CHKD.	APPD.

NO.	DATE	REVISIONS

DATE

PROJECT TITLE :

CONVERT CARGO BUILDING TO WORKSHOP

AT
DANIEL K. INOUYE INTERNATIONAL AIRPORT
HONOLULU, OAHU, HAWAII

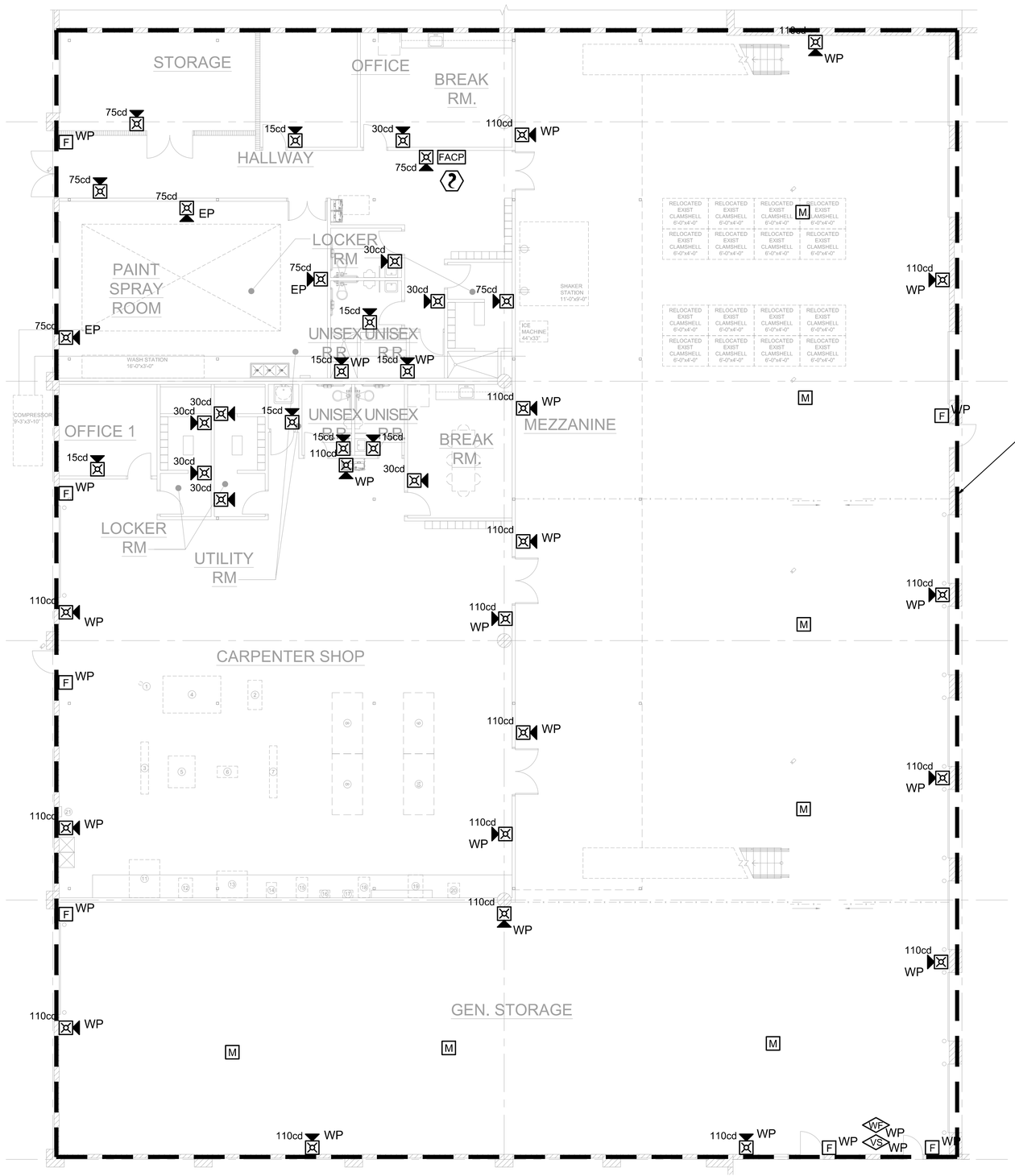
PROJECT NO.:

CO1325-33

SHEET TITLE:

FIRE SPRINKLER PLAN

DATE :	DWG. NO.
05/10/23	F103
SHEET :	
58 OF 84 SHEETS	



PROVIDE FIRE ALARM COVERAGE IN ACCORDANCE WITH NFPA 72 AND THE HONOLULU COUNTY FIRE CODE

1 / F103 FIRE ALARM PLAN
SCALE: 1/8" = 1'-0"

0 2' 4' 8' 12' 16' 20' 24'
SCALE: 1/8" = 1'-0"

STATE OF HAWAII 1959

Airports Division
DEPARTMENT OF TRANSPORTATION
STATE OF HAWAII

GARRET A. MASUDA
LICENSED PROFESSIONAL ENGINEER
No. 9756-E
HAWAII, U.S.A.

EXP. 4/30/2024

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AT
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PROJECT NO.:

CO1325-33

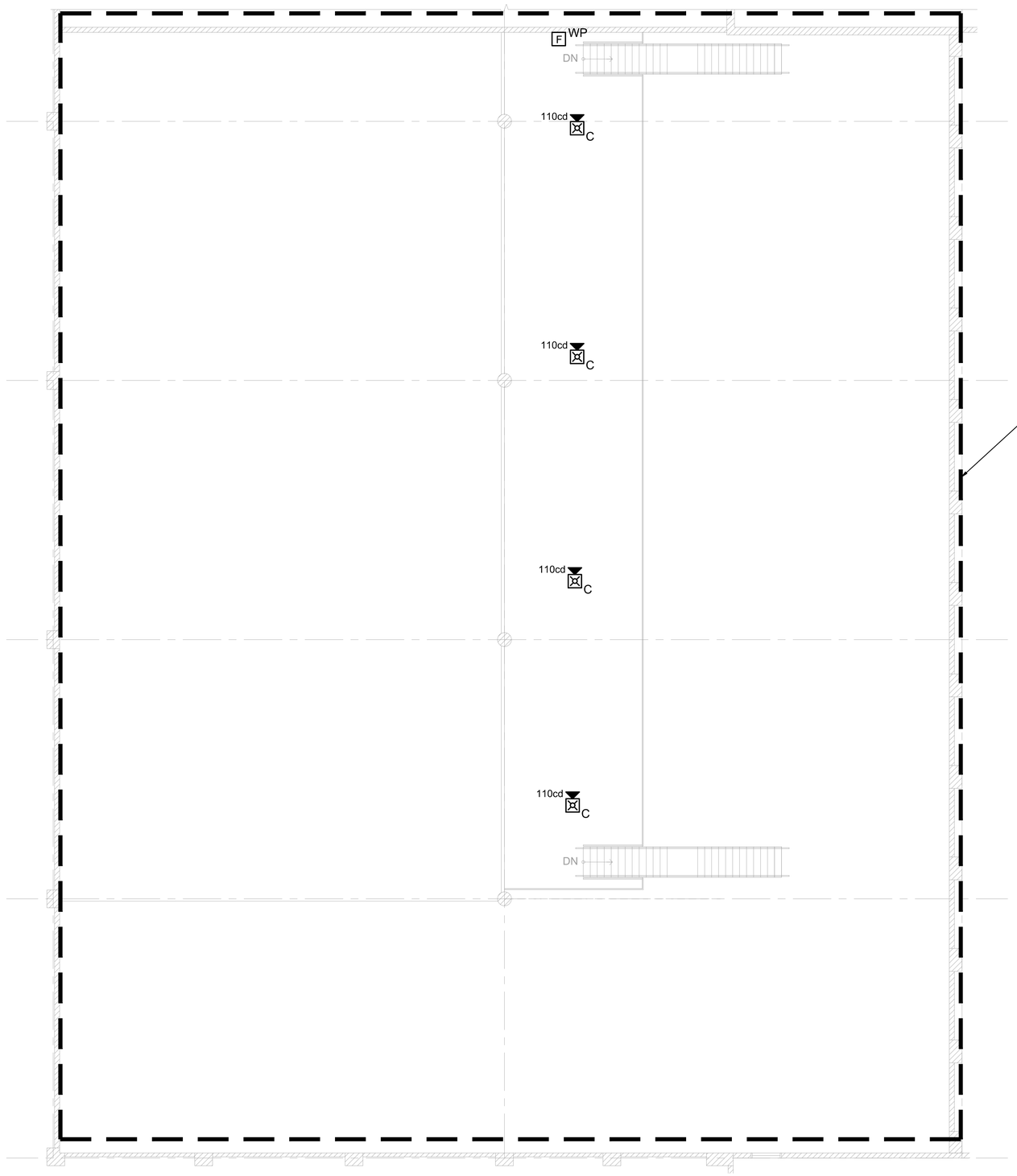
SHEET TITLE:

FIRE ALARM PLAN

DATE :
05/10/23

SHEET :
59 OF 84 SHEETS

DWG. NO.
F104



1 F103 FIRE ALARM MEZZANINE PLAN
SCALE: 1/8" = 1'-0"

0 2' 4' 8' 12' 16' 20' 24'
SCALE: 1/8" = 1'-0"

STATE OF HAWAII 1959

Airports Division
DEPARTMENT OF TRANSPORTATION
STATE OF HAWAII

GARRET A. MASUDA
LICENSED PROFESSIONAL ENGINEER
No. 9756-E
HAWAII, U.S.A.

EXP. 4/30/2024

Garret A. Masuda

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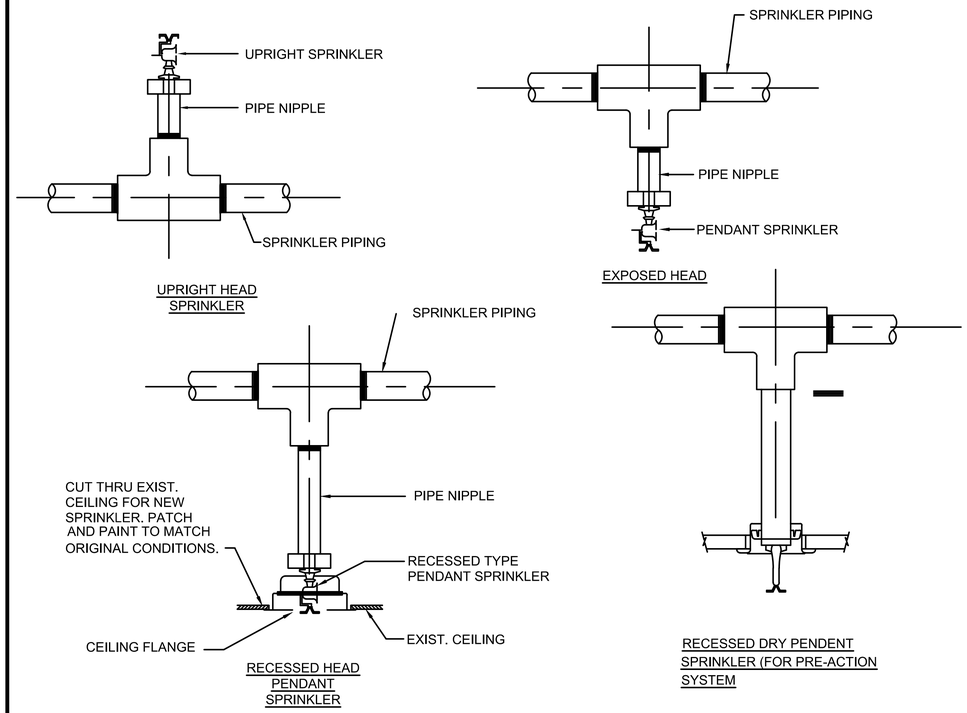
SHEET TITLE:

FIRE ALARM PLAN

DATE :
05/10/23

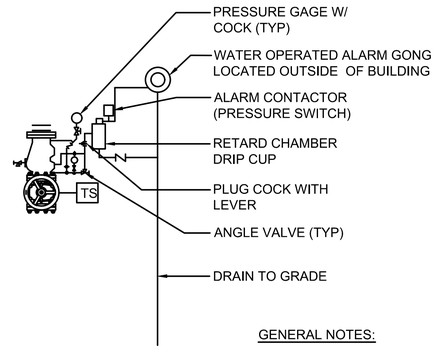
SHEET :
60 OF 84 SHEETS

DWG. NO.
F105



3 F501 TYPICAL SPRINKLER DETAILS

NOT TO SCALE

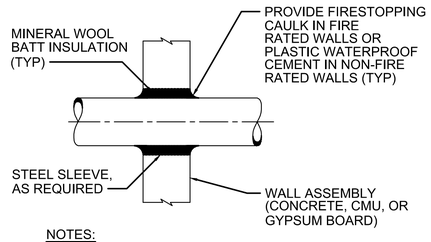


GENERAL NOTES:

1. ALL GATE VALVES AND BUTTERFLY VALVES SHALL BE PROVIDED WITH TAMPER SWITCHES AND SHALL BE ELECTRONICALLY MONITORED BY THE FIRE ALARM SYSTEM.

4 F501 ALARM CHECK VALVE ASSEMBLY DETAIL

NOT TO SCALE

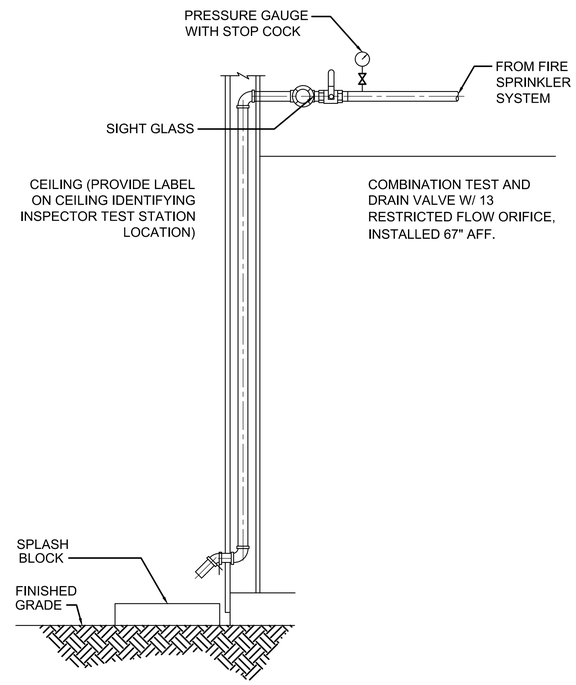


NOTES:

1. CONTRACTOR SHALL PROVIDE A UL LISTED THROUGH PENETRATION FIRESTOP SYSTEM FOR FIRE RATED WALLS.
2. PROVIDE SPRINKLER PIPE CLEARANCES IN ACCORDANCE WITH NFPA 13.

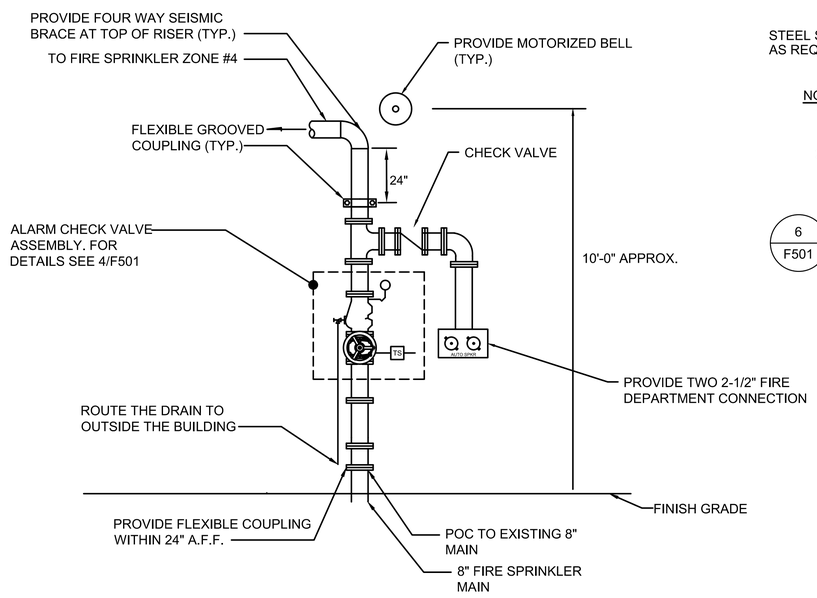
6 F501 TYPICAL PIPE CONDUIT THRU WALL

NOT TO SCALE



1 F501 INSPECTOR'S TEST CONNECTION

NOT TO SCALE



GENERAL NOTES:

1. ALL FIRE SPRINKLER RISERS SHALL BE 8".
2. THE FIRE SPRINKLER RISER, SUPPORTS, FITTINGS AND VALVES SHALL BE PRIMED AND PAINTED RED WITH 2 COATS OF EPOXY COATING.
3. ALL WATERFLOW/PRESSURE SWITCHES AND TAMPER SWITCHES SHALL BE ELECTRONICALLY MONITORED BY THE FIRE ALARM SYSTEM.

2 F501 FIRE SPRINKLER RISER DETAIL

NOT TO SCALE

STATE OF HAWAII 1959

Airports Division
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STATE OF HAWAII

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HAWAII, U.S.A.

EXP. 4/30/2024

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AT
DANIEL K. INOUYE INTERNATIONAL AIRPORT
HONOLULU, OAHU, HAWAII

PROJECT NO.:

CO1325-33

SHEET TITLE:

FIRE SPRINKLER DETAILS

DATE :
05/10/23
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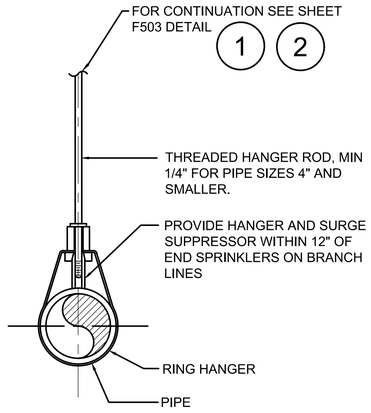
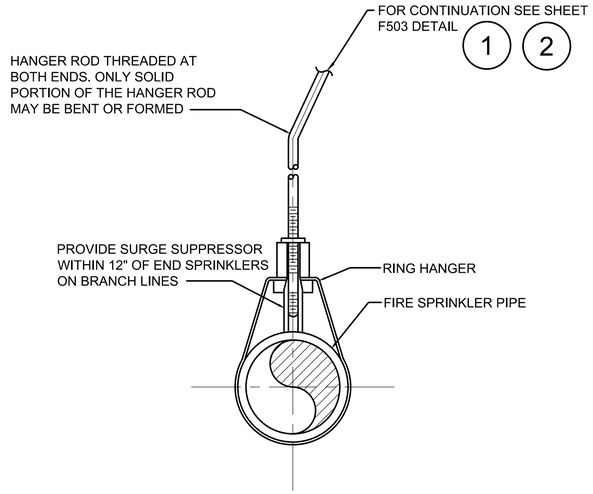
61 OF 84 SHEETS

DWG. NO.
F501



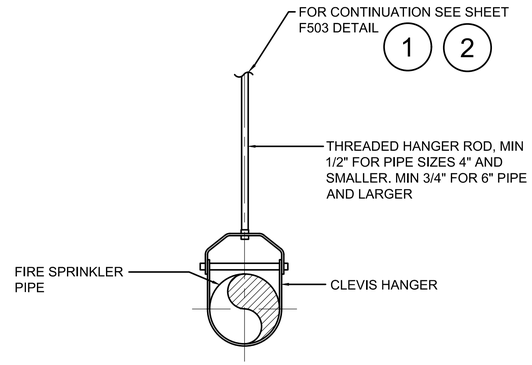
1 F502 PIPE HANGER WITH SURGE SUPPRESSOR

NOT TO SCALE



2 F502 PIPE HANGER DETAIL

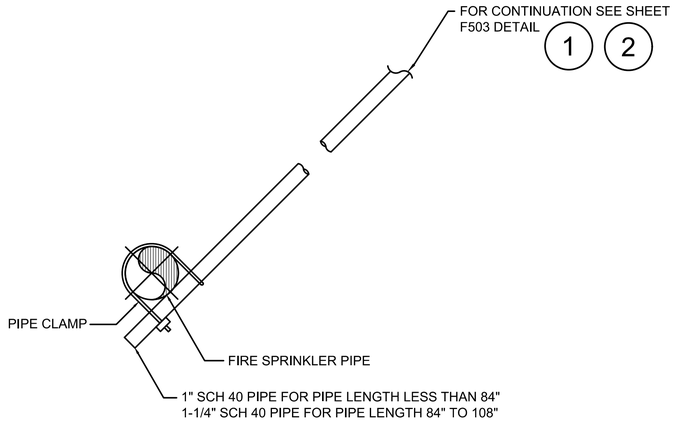
NOT TO SCALE



NOTE:
EXPANSION SHIELDS PERMITTED TO BE INSTALLED IN THE VERTICAL POSITION WHEN NOT SPACED OVER 10 FEET APART.

3 F502 STANDARD CLEVIS HANGER FOR 4" PIPE AND LARGER

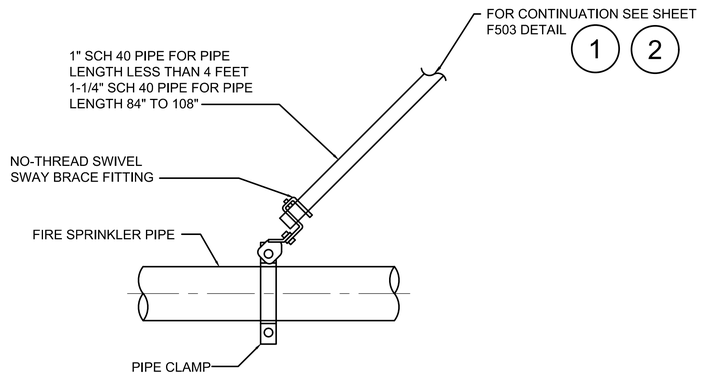
NOT TO SCALE



NOTES:
1. LATERAL SWAY BRACING SHALL BE SPACED AT A MAXIMUM OF 40 FEET APART.
2. LATERAL SWAY BRACING MAY BE USED FOR BRANCH LINE RESTRAINTS.

4 F502 LATERAL SWAY BRACE DETAIL

NOT TO SCALE



NOTE:
LONGITUDINAL BRACING SHALL BE SPACED AT A MAXIMUM OF 80 FEET APART.

5 F502 LONGITUDINAL SWAY BRACE DETAIL

NOT TO SCALE

STATE OF HAWAII 1959

Airports Division
DEPARTMENT OF TRANSPORTATION
STATE OF HAWAII

BARRY G. S. JIM ON
LICENSED PROFESSIONAL ENGINEER
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HAWAII, U.S.A.

EXP. 4/30/2024

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AT
DANIEL K. INOUYE INTERNATIONAL AIRPORT
HONOLULU, OAHU, HAWAII

PROJECT NO.:

CO1325-33

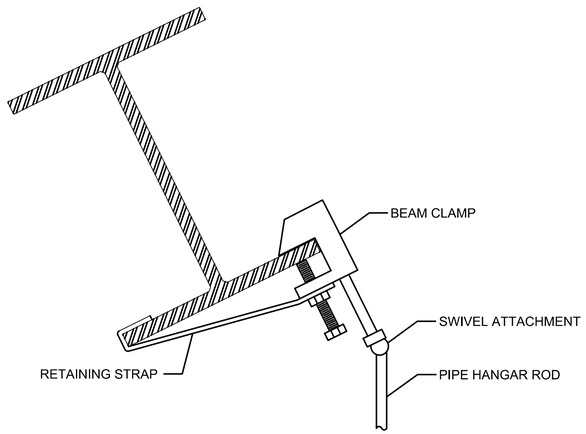
SHEET TITLE:

FIRE SPRINKLER DETAILS

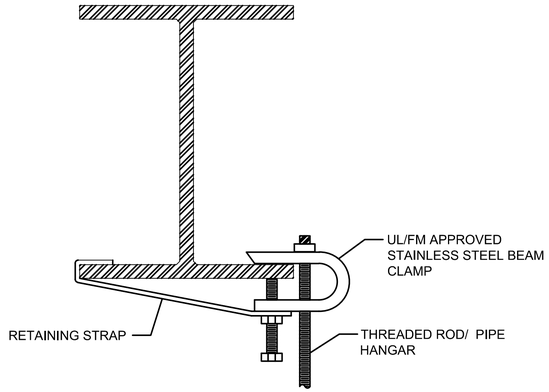
DATE :
05/10/23

SHEET :
62 OF 84 SHEETS

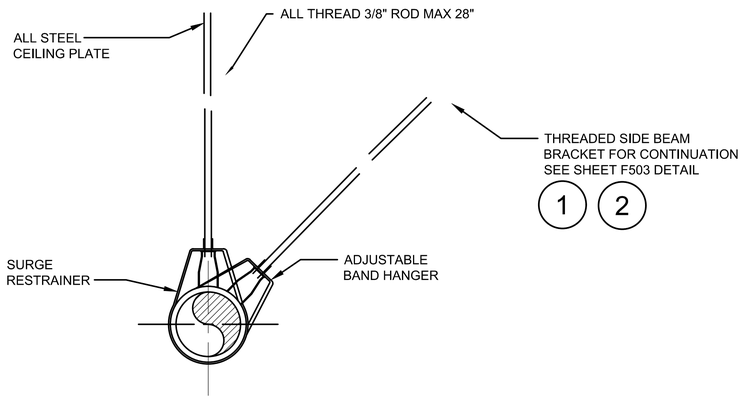
DWG. NO.
F502



1 / F503 PITCH ROOF BEAM
NOT TO SCALE

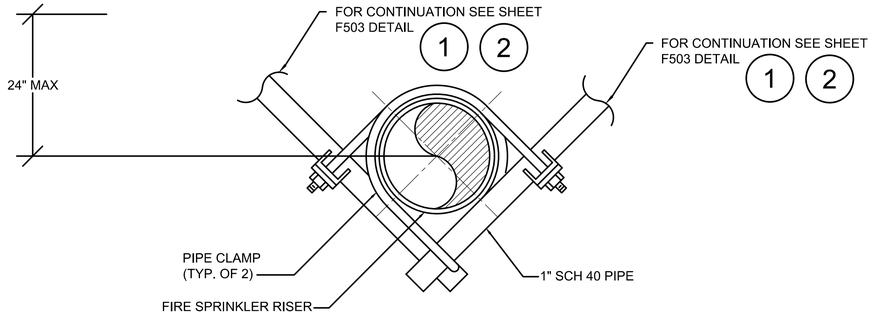


2 / F503 STEEL ATTACHMENT/SUPPORT
NOT TO SCALE



NOTE:
FOR END OF LINE WHERE HANGER SUPPORT ROD IS LONGER THAN 6" IN LENGTH, LOCATE WITHIN 2 FT OF THE HANGER

3 / F503 TYPICAL END OF LINE RESTRAINT
NOT TO SCALE



4 / F503 4-WAY SWAY BRACE DETAIL
NOT TO SCALE

STATE OF HAWAII
1959

Airports Division
DEPARTMENT OF TRANSPORTATION
STATE OF HAWAII

BARRY G. S. JIM ON
LICENSED PROFESSIONAL ENGINEER
No. 9546-M
HAWAII, U.S.A.

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HONOLULU, OAHU, HAWAII

PROJECT NO.:

CO1325-33

SHEET TITLE:

FIRE SPRINKLER DETAILS

DATE :
05/10/23
SHEET :
63 OF 84 SHEETS

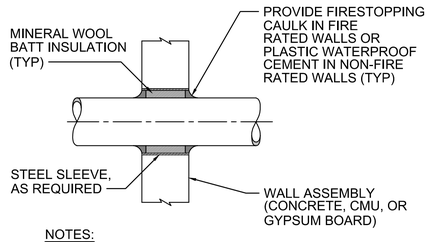
DWG. NO.
F503

		TRANSMIT SIGNALS TO THE FIRE DEPARTMENT						ANNUNCIATION AT PANEL				AUXILIARY FUNCTIONS		
	FIRE ALARM SYSTEM INPUT	SYSTEM OUTPUT	COMMON SMOKE OR HEAT GENERAL ALARM SIGNAL PER BUILDING	COMMON MANUAL PULL STATION ACTIVATION ALARM SIGNAL PER BUILDING	COMMON SUPERVISORY SIGNAL	COMMON TROUBLE SIGNAL	SPRINKLER FLOW SIGNAL	ACTIVATE VISIBLE AND AUDIBLE ALARM ANNUNCIATOR	ACTIVATE VISIBLE AND AUDIBLE SUPERVISORY ANNUNCIATOR	ACTIVATE VISIBLE AND AUDIBLE TROUBLE ANNUNCIATOR	INITIATION DEVICE AND OCCUPANT NOTIFICATION APPLIANCES OPERATION MAINTAINED	SHUT DOWN THE HIGH VOLUME LOW SPEED FANS	ACTIVATE THE AUDIBLE/VISUAL FIRE ALARM DEVICE THROUGHOUT THE BUILDING
INITIATION	SPRINKLER RISER OR FLOOR WATER FLOW OR PRESSURE SWITCH					X		X				X	X	X
	SINGLE BREAK OR GROUND FAULT IN FIRE ALARM CIRCUIT				X					X		X		
	SMOKE DETECTOR AT PANEL	X						X						X
	LOW BATTERY				X			X						
	POWER FAILURE				X									
	PULL STATION ACTIVATION			X					X					X

* IN THE EVENT OF A CONFLICT BETWEEN THE SPECIFICATIONS AND THE MATRIX, THE MATRIX SEQUENCE WILL TAKE PRECEDENCE.

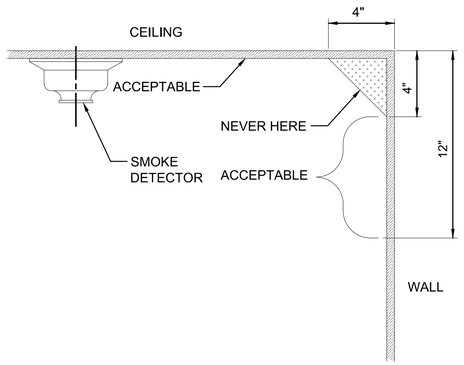
NOTE:
1. THE CLIENT SHALL BE RESPONSIBLE IN PROVIDING A SERVICE/COMPANY THAT WILL MONITOR THE TELEPHONE AUTO DIALER. THE COMPANY SHALL BE CAPABLE OF A 24 HOURS AND 7 DAYS A WEEK MONITORING AT A CENTRAL STATION AND CAPABLE OF NOTIFYING THE FIRE DEPARTMENT AS REQUIRED BY NFPA 72.
2. THE CONTRACTOR SHALL PROVIDE THE AUTO DIALER TO MONITOR THE FIRE ALARM SYSTEM THE AUTO DIALER SHALL BE CAPABLE OF SENDING AN ALARM, SUPERVISORY AND TROUBLE SIGNAL. CONTRACTOR SHALL PROVIDE A NUMBER OF AUTO DIALERS NEEDED TO SEND ALL 3 SIGNALS IF THE AUTO DIALER IS CAPABLE OF SENDING ONLY ONE SIGNAL AT A TIME.
3. THE FIRE ALARM SYSTEM SHALL SHUT POWER TO THE HIGH VOLUME LOW SPEED FANS (BIG FANS) INSIDE THE WAREHOUSE UPON ACTIVATION OF THE FIRE SPRINKLER FLOW SWITCH REFER TO THE ELECTRICAL SHEETS FOR THE LOCATION OF THE ELECTRICAL PANEL LOCATIONS SERVING THE FANS.

1 / F504 FIRE PROTECTION MATRIX OF OPERATIONS
NOT TO SCALE



NOTES:
1. CONTRACTOR SHALL PROVIDE A UL LISTED THROUGH PENETRATION FIRESTOP SYSTEM FOR FIRE RATED WALLS.

2 / F504 TYOICAL PIPE AND CONDUIT THRU WALL DETAIL
NOT TO SCALE



3 / F504 SMOKE DETECTOR MOUNTING DETAIL
NOT TO SCALE

Airports Division
DEPARTMENT OF TRANSPORTATION
STATE OF HAWAII

GARRET A. MASUDA
LICENSED PROFESSIONAL ENGINEER
No. 9756-E
HAWAII, U.S.A.

EXP. 4/30/2024

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DSGN.	DRWN.	CHKD.	APPD.

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PROJECT TITLE :

CONVERT CARGO BUILDING TO WORKSHOP

AT
DANIEL K. INOUYE INTERNATIONAL AIRPORT
HONOLULU, OAHU, HAWAII

PROJECT NO.:

CO1325-33

SHEET TITLE:

FIRE ALARM DETAILS

DATE :	DWG. NO.
05/10/23	F504
SHEET :	
64 OF 84 SHEETS	

ELECTRICAL SYMBOL LIST / MOUNTING HEIGHT SCHEDULE

MOUNTING HEIGHT FROM FLOOR TO		(SPECIAL MOUNTING HEIGHTS INDICATED ON PLAN)		
		SYMBOL		DESCRIPTION
TOP	℄	EXISTING	NEW	
				LUMINAIRE LED, CEILING RECESSED MOUNTED
				LUMINAIRE LED, CEILING RECESSED MOUNTED, EMERGENCY FUNCTION
				LUMINAIRE LED, WALL SCONCE, NIGHT LIGHT
				LUMINAIRE LED, RECESSED DOWNLIGHT, NIGHT LIGHT
				LUMINAIRE, STEP LIGHT, NIGHT LIGHT
				ILLUMINATED EXIT SIGN, WALL MOUNTED, DIRECTIONAL ARROWS AS INDICATED
		$	$	LIGHT SWITCH, FLUSH WALL MOUNTED, 1P20A, 120/277V, 1HP MAX
			$M	SWITCH, 120/277V, MOTOR RATED SWITCH
				RECEPTACLE, DUPLEX, GROUNDING TYPE, 125V, NEMA TYPE 5-20R
				RECEPTACLE, DUPLEX, GFCI TYPE, 125V, NEMA TYPE 5-20R
				DATA/COMM OUTLET, WALL MOUNTED, WITH BLANK COVER PLATE
			T	TIME SWITCH, 120/277V, MULTICHANNEL
				MOTOR STARTER
				DISCONNECT SWITCH
				CONCEALED CONDUIT (NO HASHMARKS INDICATE 2-WIRES WITHIN).
			A	LUMINAIRE DESIGNATOR, "A" INDICATES TYPE
		J	J J	JUNCTION BOX, HORIZONTALLY MOUNTED
			J	JUNCTION BOX, WALL MOUNTED
			E	EQUIPMENT CONNECTION
				PANELBOARD
				TELEPHONE CABINET OR CATV CABINET
				TELEPHONE OUTLET BOX, WALL MOUNTED WITH BLANK DEVICE PLATE
			V	CATV OUTLET, WALL MOUNTED
				FIRE PROTECTION EQUIPMENT CABINET, TYPE AS INDICATED
		P	P	FIRE ALARM MANUAL PULL STATION
			cd W C	FIRE ALARM AUDIO/VISUAL SIGNALING DEVICE, CEILING MOUNTED (W=WATTAGE CD=CANDELA RATING)
		CD		FIRE ALARM WALL INDICATED VISUAL ONLY DEVICE (CD=CANDELA RATING)
				SMOKE DETECTOR
		FACP		FIRE ALARM CONTROL PANEL
			FEP	FIRE ALARM EXTENDER PANEL
		A-1,3	A-1,3	HOMERUN ARROW TO PANELBOARD. LETTER INDICATES PANELBOARD, NUMBERS INDICATES CIRCUITS.
				FLEXIBLE CONUIT
		F	F	FIRE ALARM RACEWAY, 3/4" MINIMUM CONDUIT, CONDUCTORS AS REQUIRED
		T	T	TELEPHONE SYSTEM RACEWAY, 3/4" MINIMUM CONDUIT WITH PULL SYSTEM
		D	D	DATA/COM SYSTEM RACEWAY, 1" MINIMUM CONDUIT WITH PULL STRING
		V	V	TV SYSTEM RACEWAY, 3/4" MINIMUM CONDUIT WITH PULL STRING

LEGEND NOTES:

1. LIGHTENED SYMBOLS AND LINES INDICATE EXISTING. BOLD SYMBOLS AND LINES INDICATE NEW WORK

ELECTRICAL ABBREVIATIONS

AIC	AMPERE-INTERRUPTING CAPACITY	HHG	HANDHOLE GROUP	V	VOLTS
AFF	ABOVE FINISH FLOOR	HTCO	HAWAIIAN TELCOM CO.	W	WIRE, WIDE, WATTS, WITH
AMP, A	AMPERE	JB	JUNCTION BOX	WP	WEATHERPROOF
AWG	AMERICAN WIRE GAUGE	KV	KILO-VOLT	XFMR	TRANSFORMER
BKR	BREAKER	KVA	KILO-VOLT AMPERE	'	FOOT, FEET
BLDG	BUILDING	L	LONG, LENGTH	"	INCH, INCHES
BKBD	BACKBOARD	MLO	MAIN LUGS ONLY	FEP	FIRE ALARM EXTENDER PANEL
C	CONDUIT, CONDUCTOR	MTD	MOUNT OR MOUNTED		
CATV	CABLE TELEVISION	MTG	MOUNTING		
CKT	CIRCUIT	(N)	NEW		
CL	CENTER LINE	NEC	NATIONAL ELECTRICAL CODE		
D	DEEP	NEMA	NATIONAL ELECTRICAL MANUFACTURE'S ASSOCIATION		
ECB	ENCLOSED CIRCUIT BREAKER	NO.,#	NUMBER		
EQUIP	EQUIPMENT	PFB	PROVISION FOR FUTURE BREAKER		
(E)	EXISTING	PNL	PANEL		
FA	FIRE ALARM	Ø	PHASE		
FACP	FIRE ALARM CONTROL PANEL	RM	ROOM		
FLA	FULL LOAD AMPERE	S/S	STAINLESS STEEL		
GND	GROUND	THK	THICK		
H	HIGH, HEIGHT	TYP	TYPICAL		
HH	HANDHOLE	UON	UNLESS OTHERWISE NOTED		

CITY AND COUNTY OF HONOLULU
REVISED ORDINANCES OF HONOLULU 1990
CHAPTER 32

TO THE BEST OF MY KNOWLEDGE, THIS PROJECT'S DESIGN SUBSTANTIALLY CONFORMS TO THE BUILDING ENERGY CONSERVATION CODE FOR:

X ELECTRICAL COMPONENT SYSTEMS

SIGNATURE: _____ DATE: 08-31-22
NAME: GARRET A. MASUDA
TITLE: ELECTRICAL ENGINEER
LICENSE No.: 15968-E

STATE OF HAWAII 1959
Airports Division
DEPARTMENT OF TRANSPORTATION
STATE OF HAWAII

GARRET A. MASUDA
LICENSED PROFESSIONAL ENGINEER
No. 9756-E
HAWAII, U.S.A.

EXP. 4/30/2024

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DSGN.	DRWN.	CHKD.	APPD.

NO.	DATE	REVISIONS

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CONVERT CARGO BUILDING TO WORKSHOP

AT
DANIEL K. INOUYE INTERNATIONAL AIRPORT
HONOLULU, OAHU, HAWAII

PROJECT NO.:

CO1325-33

SHEET TITLE:

ELECTRICAL LEGEND

DATE :	DWG. NO.
05/10/23	E-001
SHEET :	
65 OF 84 SHEETS	

C:\USERS\MARC\DESKTOP\D-_BINS\2022\2208\05-10-2023\MAA\E-001.DWG

ELECTRICAL GENERAL NOTES:

1. ALL WORK SHOWN ON THE ELECTRICAL DRAWINGS IS NEW UNLESS OTHERWISE NOTED. ALL MATERIALS SHALL BE NEW AND "LISTED" OR "LABELED" AS DEFINED BY THE NATIONAL ELECTRIC CODE (NEC). WORK INCLUDES INSTALLATION OF ALL ELECTRICAL SYSTEMS COMPLETE AND OPERATIONAL AS LIMITED BY THE INTENT OF THE CONTRACT DOCUMENTS.
2. ALL WORK SHALL COMPLY WITH THE NATIONAL ELECTRIC CODE (NEC), NATIONAL ELECTRIC SAFETY CODE AND BUILDING ORDINANCES OF THE CITY AND COUNTY OF HAWAII. CONSTRUCTION PRACTICES SHALL CONFORM TO THE LATEST EDITION OF AMERICAN ELECTRICIANS' HANDBOOK BY CROFT, AND APPLICABLE INSTRUCTIONS OF MANUFACTURERS OF EQUIPMENT AND MATERIAL SUPPLIED FOR THIS PROJECT.
3. OBTAIN AND PAY FOR BUILDING / ELECTRICAL PERMIT, ARRANGE FOR PERIODIC INSPECTION BY LOCAL AUTHORITIES, AND DELIVER CERTIFICATE OF FINAL INSPECTION TO THE CONTRACTING OFFICER.
4. CONTACT THE ELECTRIC, TELEPHONE AND CABLE TELEVISION UTILITY COMPANIES AND COORDINATE ALL WORK WITH THEM. PAY ALL UTILITY COMPANY CHARGES RELATED TO THIS PROJECT UNLESS OTHERWISE DIRECTED. THE DRAWINGS DEPICT ANTICIPATED UTILITY COMPANY REQUIREMENTS. DO NOT PROCEED WITH THE UTILITY COMPANY RELATED WORK WITHOUT VERIFYING THEIR EXACT REQUIREMENTS. NOTIFY THE CONTRACTING OFFICER OF ANY DIFFERENCES BETWEEN WHAT IS SHOWN ON THE CONTRACT DRAWINGS AND WHAT IS REQUIRED BY THE UTILITY COMPANIES. ARRANGE FOR PERIODIC INSPECTIONS BY THE UTILITY COMPANIES AND PERFORM ALL WORK IN ACCORDANCE WITH THE UTILITY COMPANY STANDARDS.
5. C&C OF HONOLULU, ROH SEC. 18-5.2 RETENTION OF PLANS: ONE SET OF APPROVED PLANS, SPECIFICATIONS, AND COMPUTATIONS SHALL BE RETAINED BY THE BUILDING OFFICIAL FOR A PERIOD OF NOT LESS THAN 90 DAYS FROM DATE OF COMPLETION OF THE WORK COVERED THEREIN, AND ONE SET OF APPROVED PLANS SHALL BE RETURNED TO THE APPLICANT, AND SAID SET SHALL BE KEPT ON THE SITE OF THE BUILDING OR WORK AT ALL TIMES DURING WHICH THE WORK AUTHORIZED THEREBY IS IN PROGRESS. (SEC. 18-5.2 R.0 1978 (1983 ED.); AM. ORD. 93-59).
6. STRUCTURES UNDERGOING CONSTRUCTION, ALTERATION, OR DEMOLITION OPERATIONS, INCLUDING THOSE IN UNDERGROUND LOCATIONS, SHALL COMPLY WITH NFPA 241, STANDARD FOR SAFEGUARDING CONSTRUCTION, ALTERATION, AND DEMOLITION OPERATIONS, AND NFPA 1 2012, AS AMENDED.
7. FIRE SAFETY DURING ALTERATION:
   a. NFPA 1, 16.4.4.1 WHERE THE BUILDING IS PROTECTED BY FIRE PROTECTION SYSTEMS, SUCH SYSTEMS SHALL BE MAINTAINED OPERATIONAL AT ALL TIMES DURING ALTERATION.
   b. NFPA 1, 16.4.4.2 WHERE ALTERATION REQUIRES MODIFICATION OF A PORTION OF THE FIRE PROTECTION SYSTEM, THE REMAINDER OF THE SYSTEM SHALL BE KEPT IN SERVICE AND THE FIRE DEPARTMENT SHALL BE NOTIFIED.
   c. NFPA 1, 16.4.4.3 WHEN IT IS NECESSARY TO SHUT DOWN THE SYSTEM, THE AHJ SHALL HAVE THE AUTHORITY TO REQUIRE ALTERNATE MEASURES OF PROTECTION UNTIL THE SYSTEM IS RETURNED TO SERVICE.
   d. NFPA 1, 10.8.1.1 AS NECESSARY DURING EMERGENCIES, MAINTENANCE, DRILLS, PRESCRIBED TESTING, ALTERATIONS, OR RENOVATIONS, PORTABLE OR FIXED FIRE-EXTINGUISHING SYSTEMS OR DEVICES OR ANY FIRE-WARNING SYSTEM SHALL BE PERMITTED TO BE MADE INOPERATIVE OR INACCESSIBLE. A FIRE WATCH SHALL BE REQUIRED AS SPECIFIED IN SECTIONS 13.3.3.6.5.2(4)(b), 13.7.1.4.4, 16.5.4, 34.6.3.3, 41.2.2.6, 41.2.2.7, 41.2.4, 41.3.5, 41.4.1, 34.5.4.3, AND 25.1.8 AT NO COST TO THE AHJ. NFPA 1 2012, AS AMENDED.
8. THE DRAWINGS DO NOT REFLECT ALL THE EXISTING CONDITIONS THAT MAY BE ENCOUNTERED DURING CONSTRUCTION. VISIT THE PROJECT SITE AND BECOME FAMILIAR WITH THE READILY OBSERVABLE EXISTING CONDITIONS, THE EXTENT OF ANY DEMOLITION, RELOCATION, RECONNECTION, AND THE NEW WORK PRIOR TO BIDDING. REPORT ANY READILY OBSERVABLE DISCREPANCIES AND/OR DIFFERENCES BETWEEN THE EXISTING CONDITIONS AND THE CONSTRUCTION DOCUMENTS TO THE [ARCHITECT] [CONTRACTING OFFICER] [UNIVERSITY] [OWNER]. RESOLVE ALL READILY OBSERVABLE DISCREPANCIES AND QUESTIONS PRIOR TO THE START OF WORK. BID SUBMISSION SHALL BE CONSIDERED AS EVIDENCE THAT THE CONTRACTOR HAS VISITED THE SITE AND RESOLVED ALL READILY OBSERVABLE DISCREPANCIES AND QUESTIONS AND NO EXTRA PAYMENT WILL BE AUTHORIZED FOR WORK REQUIRED BY THE CONTRACTOR'S FAILURE TO DO SO.
9. COORDINATE ALL ELECTRICAL WORK WITH THE WORK OF THE OTHER TRADES AND SCHEDULE WORK TO MINIMIZE THE NUMBER AND DURATION OF ELECTRICAL OUTAGES AND IMPACT TO THE OPERATIONS IN OR ADJACENT TO THE PROJECT AREA. COORDINATE ACCESS TO THE PROJECT AREA AND SCHEDULE ALL REQUIRED SYSTEM OUTAGES WITH THE CONTRACTING OFFICER.
10. VERIFY AND COORDINATE ALL PENETRATIONS WITH THE STRUCTURAL AND ARCHITECTURAL DRAWINGS PRIOR TO THE START OF CONSTRUCTION. OBTAIN APPROVAL BEFORE MAKING ANY PENETRATIONS THROUGH STRUCTURAL MEMBERS OR FIRE RATED WALLS AND CEILINGS.
11. SCAN (E.G. X-RAY, ELECTROMAGNETIC, ETC.) ALL CONCRETE WALLS OR FLOOR STRUCTURES PRIOR TO COMMENCING WITH CORING/DRILLING WORK FOR PENETRATIONS TO AVOID DAMAGING THE EXISTING REINFORCING STEEL.
12. COORDINATE AND PROVIDE ACCESS PANELS FOR ALL CONCEALED ELECTRICAL EQUIPMENT, DEVICES, BOXES AND CONDUIT BODIES SO THAT THEY ARE ACCESSIBLE.
13. EXISTING DEVICE AND EQUIPMENT LOCATIONS, CIRCUIT ASSIGNMENTS, WIRING CONNECTIONS, AND CONDUIT RUNS INDICATED WERE DERIVED FROM AVAILABLE REFERENCE DOCUMENTS AND LIMITED FIELD INVESTIGATION. FIELD VERIFY ALL EXISTING CONDITIONS AND MAKE ANY NECESSARY ADJUSTMENTS TO SATISFY THE INTENT OF THE DRAWINGS AND SPECIFICATIONS.
14. RE-ROUTE ALL EXISTING CONDUIT, WIRING AND CABLING TO REMAIN WITHIN THE PROJECT AREA AS NECESSARY TO FACILITATE THE REMOVAL OF EXISTING EQUIPMENT AS WELL AS THE INSTALLATION OF ALL NEW EQUIPMENT. REMOVE AND RE-INSTALL ELECTRICAL EQUIPMENT, INCLUDING LIGHTS, TO REMAIN AS REQUIRED.
15. WORK INCIDENTAL TO THE CONTRACT AND NECESSARY TO COMPLETE THE PROJECT, ALTHOUGH NOT SPECIFICALLY REFERRED TO IN THE CONTRACT DOCUMENTS, SHALL BE FURNISHED AND PERFORMED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE PROJECT. AN EXAMPLE OF SUCH INCIDENTAL WORK ARE OUTLET BOXES, JUNCTION BOXES AND PULL BOXES REQUIRED FOR THE INSTALLATION OF ELECTRICAL DEVICES, LIGHTING FIXTURES AND EQUIPMENT. ALL INCIDENTAL WORK SHALL BE FURNISHED AND INSTALLED IN ACCORDANCE WITH THE NATIONAL ELECTRIC CODE.
16. ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE TO PROVIDE ALL CONDUIT AND WIRING FOR THE POWER CONNECTION TO ALL EQUIPMENT AS INDICATED IN THE DRAWINGS AND SPECIFICATIONS. ALL INCIDENTAL CONDUIT AND WIRING REQUIRED FOR A COMPLETE AND OPERATIONAL SYSTEM MAY NOT BE SHOWN IN THE DRAWINGS OR SPECIFICATIONS. CONTRACTOR SHALL COORDINATE INCIDENTAL CONDUIT AND WIRING REQUIREMENTS BETWEEN ALL TRADES TO ENSURE THE INCIDENTAL CONDUIT AND WIRING IS PROVIDED AND THE AFFECTED SYSTEMS OPERATE AS INTENDED.
17. THE LOCATION OF ALL ELECTRICAL APPARATUS AND DEVICES SHOWN ON THE DRAWINGS ARE APPROXIMATE AND BEFORE INSTALLING, STUDY THE ARCHITECTURAL, STRUCTURAL, AND MECHANICAL DETAILS AND MAKE INSTALLATION IN THE MOST LOGICAL MANNER. CIRCUIT ROUTING IS TYPICAL AND MAY BE VARIED IN ANY MANNER. ANY PIECE OF EQUIPMENT/DEVICE MAY BE RELOCATED WITHIN 10' BEFORE INSTALLATION AT THE DIRECTION OF THE CONTRACTING OFFICER WITHOUT ADDITIONAL CHARGE TO THE PROJECT.
18. SHOULD PROJECT CONDITIONS REQUIRE REARRANGEMENT OF THE PROJECT'S WORK, THE CONTRACTOR SHALL MARK SUCH CHANGES ON THE AS-BUILT DRAWINGS. IF THESE CHANGES REQUIRE AN ALTERNATE METHOD TO THOSE SPECIFIED IN THE CONTRACT DOCUMENTS, THE CONTRACTOR SHALL SUBMIT DRAWINGS TO REFLECT THE PROPOSED ALTERNATE METHODS TO THE CONTRACTING OFFICER FOR REVIEW AND APPROVAL. THE CONTRACTOR SHALL NOT PROCEED UNTIL APPROVAL IS OBTAINED. REARRANGEMENT OF WORK FOR THE PURPOSE OF COORDINATION SHALL NOT BE CONSIDERED AN ITEM FOR EXTRA COST.
19. DISCONNECT AND REMOVE ALL ELECTRICAL APPARATUS, LIGHT FIXTURES, WIRING DEVICES, JUNCTION BOXES, AND ASSOCIATED FEEDER AND BRANCH CIRCUIT WIRING IN THE PROJECT AREA, UNLESS OTHERWISE NOTED. THE DEMOLITION DRAWINGS ARE INTENDED TO SHOW THE GENERAL LIMITS OF THE SCOPE OF WORK AND MAY NOT SHOW ALL THE EXISTING DEVICES, CONDUIT RUNS, ETC. FEEDER AND BRANCH CIRCUIT WIRING TO BE REMOVED SHALL BE DISCONNECTED FROM ITS SOURCE. REMOVE ALL CONDUCTORS AND CONDUIT AND CONDUIT SUPPORT STRUCTURES WHERE ACCESSIBLE. PATCH/REPAIR WALL, FLOOR AND CEILING DAMAGES AS A RESULT OF THE REMOVAL WORK.
20. THE ACCESSIBLE PORTIONS OF ABANDONED COMMUNICATIONS AND FIRE ALARM CABLES SHALL BE REMOVED IN ACCORDANCE WITH THE NEC.
21. THE EXISTING ELECTRICAL, TELECOM, FIRE ALARM, AND OTHER ELECTRICALLY-RELATED SYSTEMS IN AREAS ADJACENT TO, OUTSIDE OF, AND/OR OTHERWISE PASSING THROUGH THE PROJECT LIMITS, MUST REMAIN OPERATIONAL DURING THE CONSTRUCTION PERIOD AND POST-CONSTRUCTION. THE CONTRACTOR SHALL EXERCISE DUE CARE AND CAUTION WHEN WORKING NEAR ANY EXISTING EQUIPMENT, DEVICES, OR CABLING/CIRCUITING. PROVIDE NEW JUNCTION BOXES, CONDUITS & WIRING, AND THE LABOR REQUIRED TO FACILITATE THE REQUIRED OPERATIONAL CONTINUITY. BOXES, CONDUITS AND WIRING SHALL BE IN ACCORDANCE WITH THE NEC. ANY DAMAGE TO THE EXISTING EQUIPMENT, DEVICES OR CABLING/CIRCUITING RESULTING FROM THE CONTRACTOR'S OPERATIONS SHALL BE IMMEDIATELY REPAIRED OR OTHERWISE RESTORED TO ITS ORIGINAL WORKING CONDITION AT NO ADDITIONAL COST TO THE PROJECT.
22. THE ELECTRICAL DRAWINGS ARE BASED ON PROPOSED EQUIPMENT. VERIFY ALL SYSTEM REQUIREMENTS (ELECTRICAL, MECHANICAL, FIRE ALARM, SPECIALTY SYSTEMS, ETC.) WITH THE SELECTED SYSTEM'S MANUFACTURER OR AUTHORIZED REPRESENTATIVE PRIOR TO COMMENCING WITH ANY WORK. COORDINATE RATINGS OF OVERCURRENT PROTECTION DEVICES, DISCONNECT SWITCHES, CONDUIT & WIRING TO MATCH THE ACTUAL EQUIPMENT SUPPLIED FOR THE PROJECT. CORRECT ALL DISCREPANCIES SO AS TO PROVIDE A COMPLETE AND OPERATIONAL SYSTEM. RECORD CHANGES ON THE AS-BUILT DRAWINGS.
23. ALL EQUIPMENT AND APPARATUS SHALL BE CAPABLE OF FITTING IN THE SPACES SHOWN WHILE MEETING THE MANUFACTURER'S RECOMMENDED ACCESS REQUIREMENTS AND APPLICABLE CODE REQUIREMENTS. REVIEW ALL SPACES WHERE EQUIPMENT IS TO BE INSTALLED PRIOR TO ORDERING OF EQUIPMENT AND NOTIFY THE CONTRACTING OFFICER OF ANY INADEQUATE CLEARANCES OR CONDITIONS THAT WILL PREVENT THE PROPER INSTALLATION, MAINTENANCE, AND OPERATION OF THE EQUIPMENT.
24. CONFIRM THE TYPE OF CEILING BEING INSTALLED PRIOR TO ORDERING LUMINAIRES AND TRIMS FOR PROPER COORDINATION. LUMINAIRES INDICATED MAY NOT EXPRESSLY CONFORM TO THE TYPE OF CEILING OR OPENING PROVIDED BY OTHER TRADES.
25. CONCEAL ALL CONDUIT WHEREVER REASONABLY POSSIBLE; EXPOSED CONDUITS ARE PERMITTED ONLY WHERE SPECIFICALLY SHOWN ON THE DRAWINGS. ALL EXPOSED CONDUITS IN FINISHED AREAS SHALL BE INSTALLED IN THE LEAST VISIBLE LOCATIONS. CARE SHALL BE TAKEN TO INSTALL CONDUIT IN THE MOST AESTHETICALLY PLEASING MANNER.
26. WIRING DEVICES AND CONDUITS SHALL BE FLUSH MOUNTED, WHEREVER REASONABLY POSSIBLE. WHERE NEW DEVICES ARE INDICATED TO BE INSTALLED IN EXISTING WALLS, FISH THE CONDUIT DOWN INTO THE EXISTING WALL CAVITY AND KEEP DISTURBANCES TO THE EXISTING WALLS TO A MINIMUM. WHERE OBSTRUCTIONS ARE ENCOUNTERED OR CUTTING OF THE WALL TO ACCOMPLISH THE WIRING DEVICE AND CONDUIT INSTALLATION IS UNAVOIDABLE, CONSULT WITH THE CONTRACTING OFFICER PRIOR TO COMMENCING ANY WORK.
27. PROVIDE TYPEWRITTEN CIRCUIT DIRECTORIES FOR ALL PANELS, NEW OR MODIFIED, REFLECTING THE CIRCUIT ARRANGEMENTS AS THEY WERE ACTUALLY INSTALLED.
28. AN ADHESIVE VINYL NAMEPLATE SHALL BE PROVIDED FOR ALL SWITCHES, RECEPTACLES AND MISCELLANEOUS DEVICES REQUIRING POWER. THE NAMEPLATE SHALL INDICATE THE PANELBOARD SERVING THE DEVICE AND THE CORRESPONDING CIRCUIT ASSIGNMENT. LETTERING SHALL BE A MINIMUM OF 1/4" HIGH. UTILIZE BROTHER "P-TOUCH" LABEL MAKER OR APPROVED SUBSTITUTE.
29. A GREEN, EQUIPMENT GROUND CONDUCTOR SIZED IN ACCORDANCE WITH THE NEC ARTICLE 250 SHALL BE INSTALLED IN ALL FEEDER AND BRANCH CIRCUITS WHETHER INDICATED ON CONTRACT DRAWINGS OR NOT. INSTALL THIS CONDUCTOR IN ALL RACEWAYS INCLUDING THOSE INSTALLED FOR SWITCH LEGS AND ATTACH TO THE DEVICE, LUMINAIRE, OR EQUIPMENT USING A SUITABLE GROUNDING LUG.
30. DO NOT USE A COMMON NEUTRAL FOR MULTIPLE BRANCH CIRCUITS INSTALLED IN A COMMON CONDUIT. PROVIDE A DEDICATED NEUTRAL FOR EACH INDIVIDUAL CIRCUIT. WHERE MULTIPLE DEDICATED NEUTRALS ARE INSTALLED IN A COMMON CONDUIT, PROVIDE COLOR CODING OF THE DIFFERENT NEUTRAL CONDUCTORS IN ACCORDANCE WITH NEC 2014 ARTICLE 200.6 (WHITE, GRAY, THREE CONTINUOUS WHITE OR GRAY STRIPES, ETC.)
31. PROVIDE NYLON PULLSTRINGS IN ALL EMPTY CONDUITS UNLESS OTHERWISE INDICATED.
32. THE TELECOMMUNICATIONS RACEWAY SYSTEM INSTALLATION SHALL COMPLY WITH TIA/EIA-569-A UNLESS OTHERWISE NOTED.
33. CONDUIT BODIES (e.g. LB, LR, etc.) SHALL NOT BE PERMITTED IN THE TELECOMMUNICATIONS RACEWAY SYSTEMS UNLESS SPECIFICALLY INDICATED TO BE UTILIZED AND LISTED FOR TELECOMMUNICATIONS SYSTEM USE.
34. PROVIDE INSULATED BUSHINGS AT ALL TELECOMMUNICATIONS CONDUIT TERMINATIONS AT ALL BOXES, BACKBOARDS, AND CONDUIT STUBS.
35. ALL SURFACE MOUNTED DEVICES SHALL BE INSTALLED UTILIZING FACTORY PAINTED SURFACE MOUNTING ACCESSORIES AND MATCHING DEVICE BOXES FOR THE MOST AESTHETICALLY PLEASING INSTALLATION.
36. PROVIDE KNOCK-OUT PLUGS FOR ALL UNUSED CONDUIT PENETRATIONS IN BOXES AND ENCLOSURES DUE TO CONDUIT REMOVAL.
37. PENETRATIONS THROUGH FIRE-RATED WALLS, CEILINGS AND FLOORS SHALL BE SEALED TO MAINTAIN FIRE RATINGS. UTILIZE 3M CP25, PUTTY 303 OR OTHER SUITABLE UL-LISTED SEALING SYSTEM.
38. PATCH, REFINISH, AND PAINT ALL PENETRATIONS THROUGH WALLS AND SLABS TO MATCH FINISH OF ADJACENT SURFACES.
39. RESTORE/REPAIR ANY DAMAGE TO EXISTING SURFACES RESULTING FROM THE INSTALLATION OF NEW ELECTRICAL ITEMS. THE AREAS REPAIRED SHALL MATCH THE ADJACENT SURFACES IN TEXTURE, FINISH, AND COLOR.
40. PAINTING OF ELECTRICAL EQUIPMENT:
   a. INTERIOR LOCATIONS - PRIME AND PAINT ALL EXPOSED CONDUITS, BOXES, FITTINGS, SUPPORT CHANNELS, MOUNTING HARDWARE AND ACCESSORIES WITH TWO FINISH COATS TO MATCH THE SURFACE ON WHICH THEY ARE MOUNTED OR TO MATCH THE FINISH OF THE ADJACENT SURFACES. EQUIPMENT SURFACES/COMPONENTS WITH A FACTORY-APPLIED PAINT FINISH NEED NOT BE PAINTED.
   b. EXTERIOR LOCATIONS - PRIME ALL EXPOSED CONDUITS, BOXES, FITTINGS, SUPPORT CHANNELS, MOUNTING HARDWARE AND ACCESSORIES WITH A 2-PART EPOXY PRIMER AND FINISH WITH 2 COATS OF AN ALIPHATIC ACRYLIC URETHANE PAINT. PAINT FINISH TO MATCH THE SURFACE ON WHICH THEY ARE MOUNTED OR TO MATCH THE FINISH OF THE ADJACENT SURFACES. STAINLESS STEEL MATERIALS NEED NOT BE PAINTED.

STATE OF HAWAII 1959

Airports Division
DEPARTMENT OF TRANSPORTATION
STATE OF HAWAII

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LICENSED PROFESSIONAL ENGINEER
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EXP. 4/30/2024

Garret A. Masuda

This work was prepared by me or under my supervision.

DSGN.	DRWN.	CHKD.	APPD.

NO.	DATE	REVISIONS

DATE

PROJECT TITLE :

CONVERT CARGO BUILDING TO WORKSHOP

AT
DANIEL K. INOUYE INTERNATIONAL AIRPORT
HONOLULU, OAHU, HAWAII

PROJECT NO.:

CO1325-33

SHEET TITLE:

ELECTRICAL GENERAL NOTES

DATE :	DWG. NO.
05/10/23	E-002
SHEET :	
66 OF 84 SHEETS	

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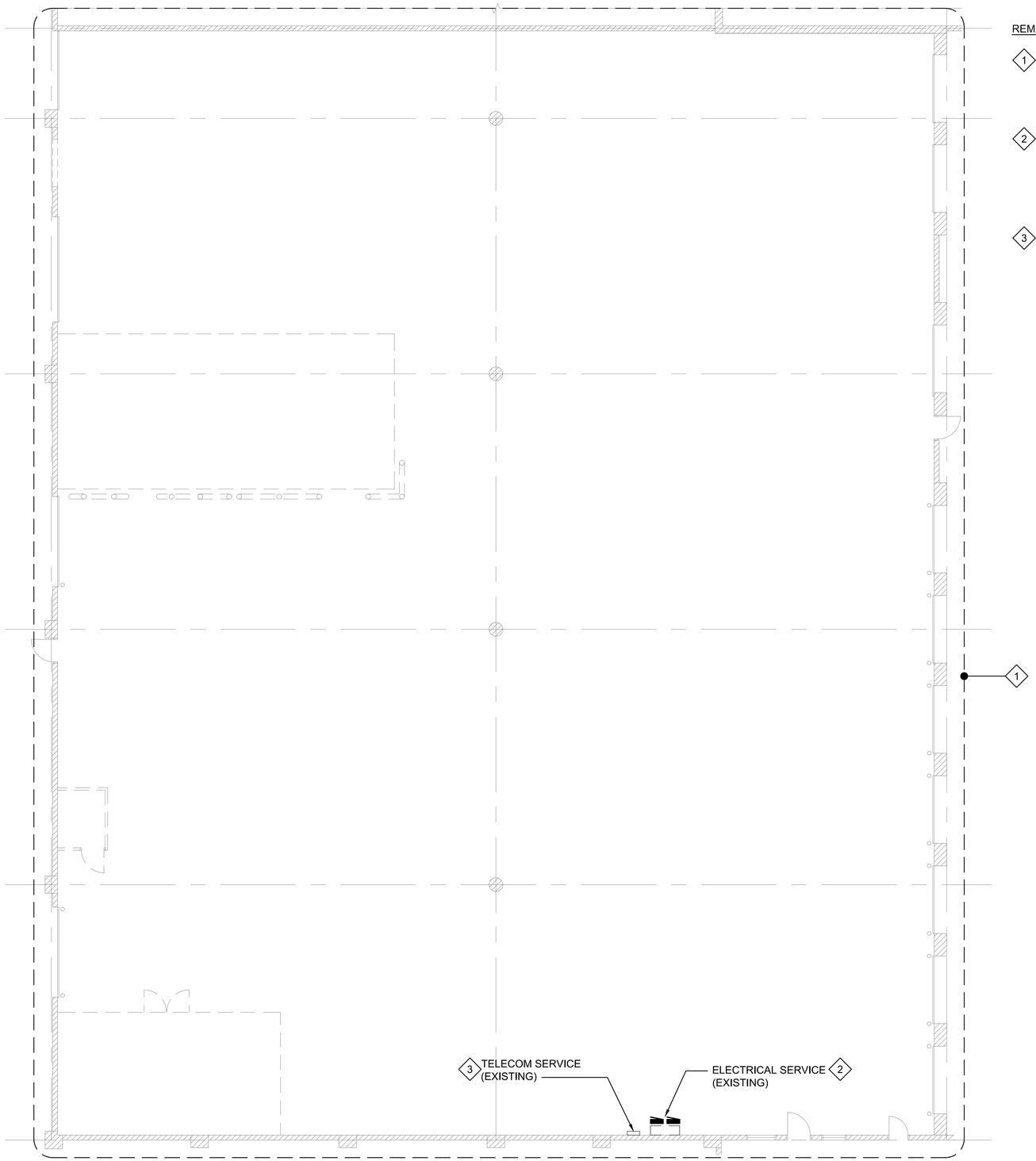

REMOVAL NOTES:

1. REMOVE ALL ELECTRICAL DEVICES, LUMINAIRES, TEL/COMM DEVICES AND ASSOCIATED CONDUIT AND WIRING, AND APPURTENANCES, UNLESS NOTED TO REMAIN OR OTHERWISE.
   REFERENCE ARCHITECTURAL PLANS.
2. EXISTING ELECTRICAL SERVICE
   REMOVE EXISTING ELECTRICAL PANELBOARDS AND MAINTAIN EXISTING CIRCUITS TO REMAIN FOR REUSE. EXISTING WIREWAY AND FEEDER FROM UNIT SUB-STATION SHALL REMAIN. MAINTAIN LIGHTING CONTACTORS, TIMESWITCH, AND APPURTENANCES AS REQUIRED. SEE E-601 AND E-602.
3. EXISTING TELECOM SERVICE
   MAINTAIN EXISTING TELECOM SERVICE FOR REUSE AND SHALL REMAIN.

GENERAL NOTES:

1. VERIFY ALL EXISTING ELECTRICAL EQUIPMENT CONDITIONS AT FIELD

1 / ED101 OVERALL ELECTRICAL DEMO PLAN
SCALE: 1/8" = 1'-0"

0 2' 4' 8' 12' 16' 20' 24'
SCALE: 1/8" = 1'-0"

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HONOLULU, OAHU, HAWAII

PROJECT NO.:

CO1325-33

SHEET TITLE:

OVERALL ELECTRICAL DEMO PLAN

DATE :	DWG. NO.
05/10/23	ED101
SHEET :	
67 OF 84 SHEETS	

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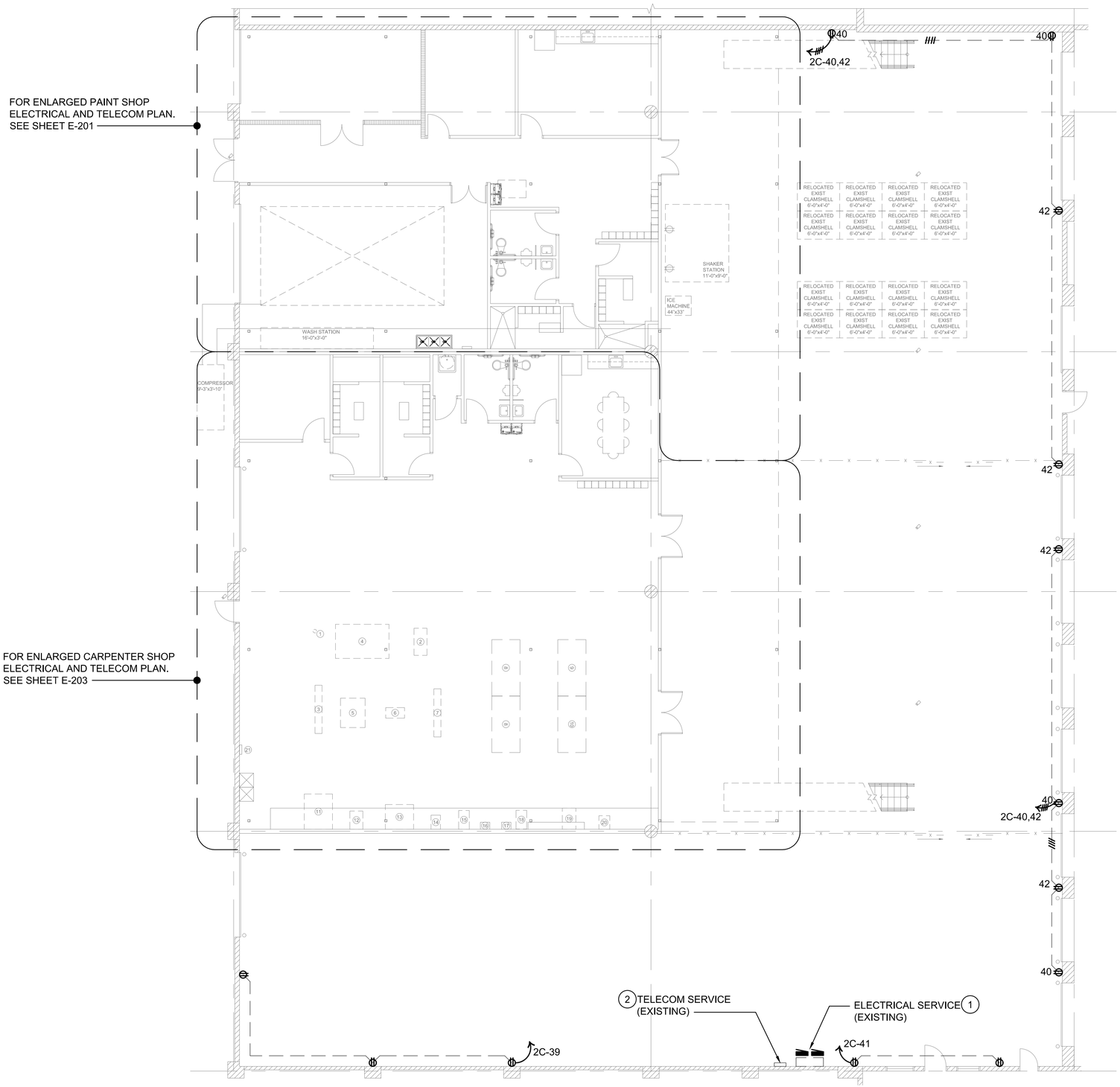

1 / E-101 OVERALL NEW ELECTRICAL PLAN
SCALE: 1/8" = 1'-0"

CONSTRUCTION NOTES

1. ELECTRICAL SERVICE (EXISTING) SEE ONE-LINE DIAGRAMS ON SHEETS E-601 AND E-602
2. TELECOM SERVICE (EXISTING) SHOWN FOR LOCATION.

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HONOLULU, OAHU, HAWAII

PROJECT NO.:

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SHEET TITLE:

OVERALL NEW ELECTRICAL PLAN

DATE :	DWG. NO.
05/10/23	E-101
SHEET : 68 OF 84 SHEETS	

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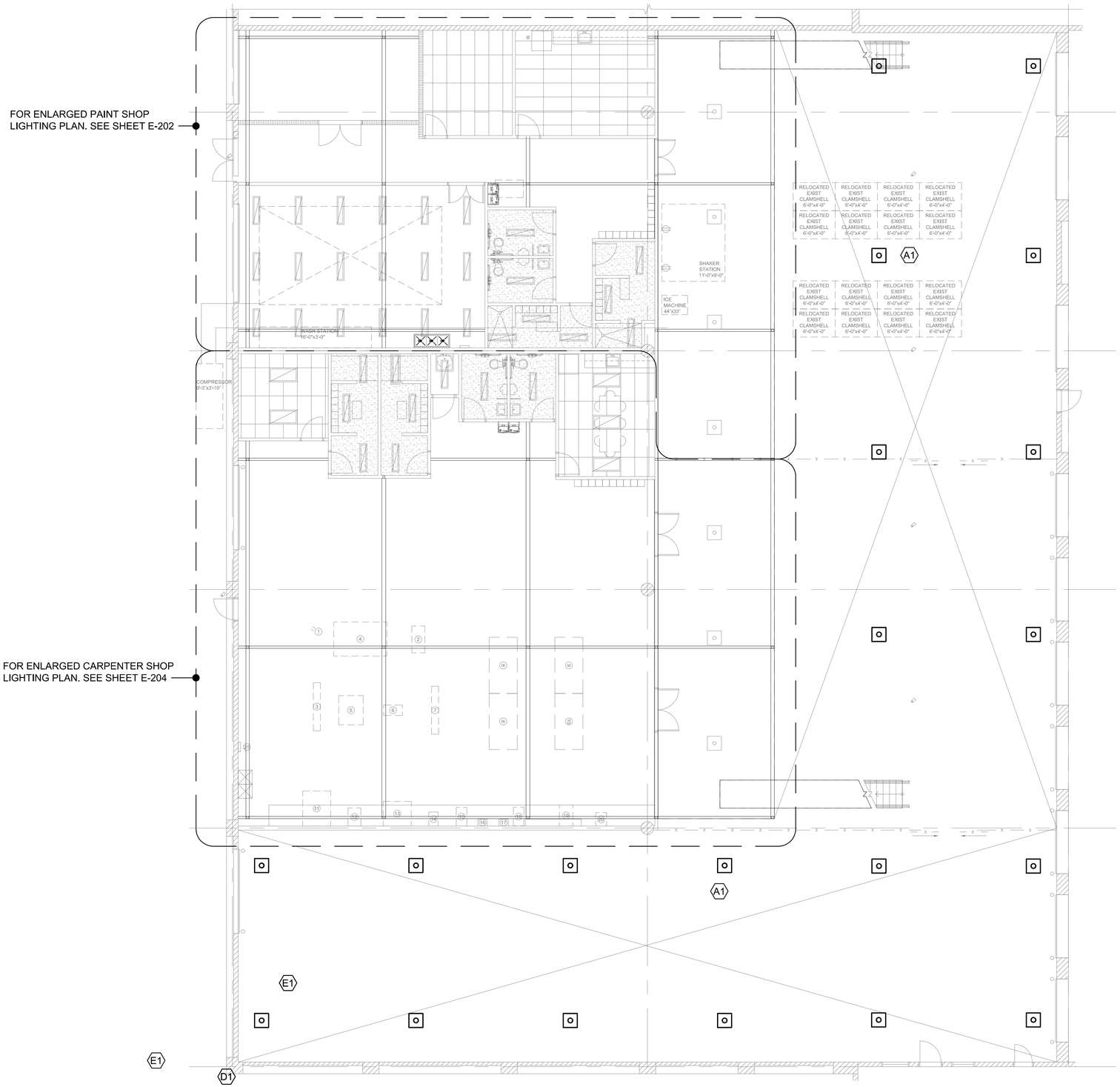

1 / E-102 OVERALL NEW LIGHTING PLAN
SCALE: 1/8" = 1'-0"

0 2' 4' 8' 12' 16' 20' 24'
SCALE: 1/8" = 1'-0"

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PROJECT NO.:

CO1325-33

SHEET TITLE:

OVERALL NEW LIGHTING PLAN

DATE :	DWG. NO.
05/10/23	E-102
SHEET : 69 OF 84 SHEETS	

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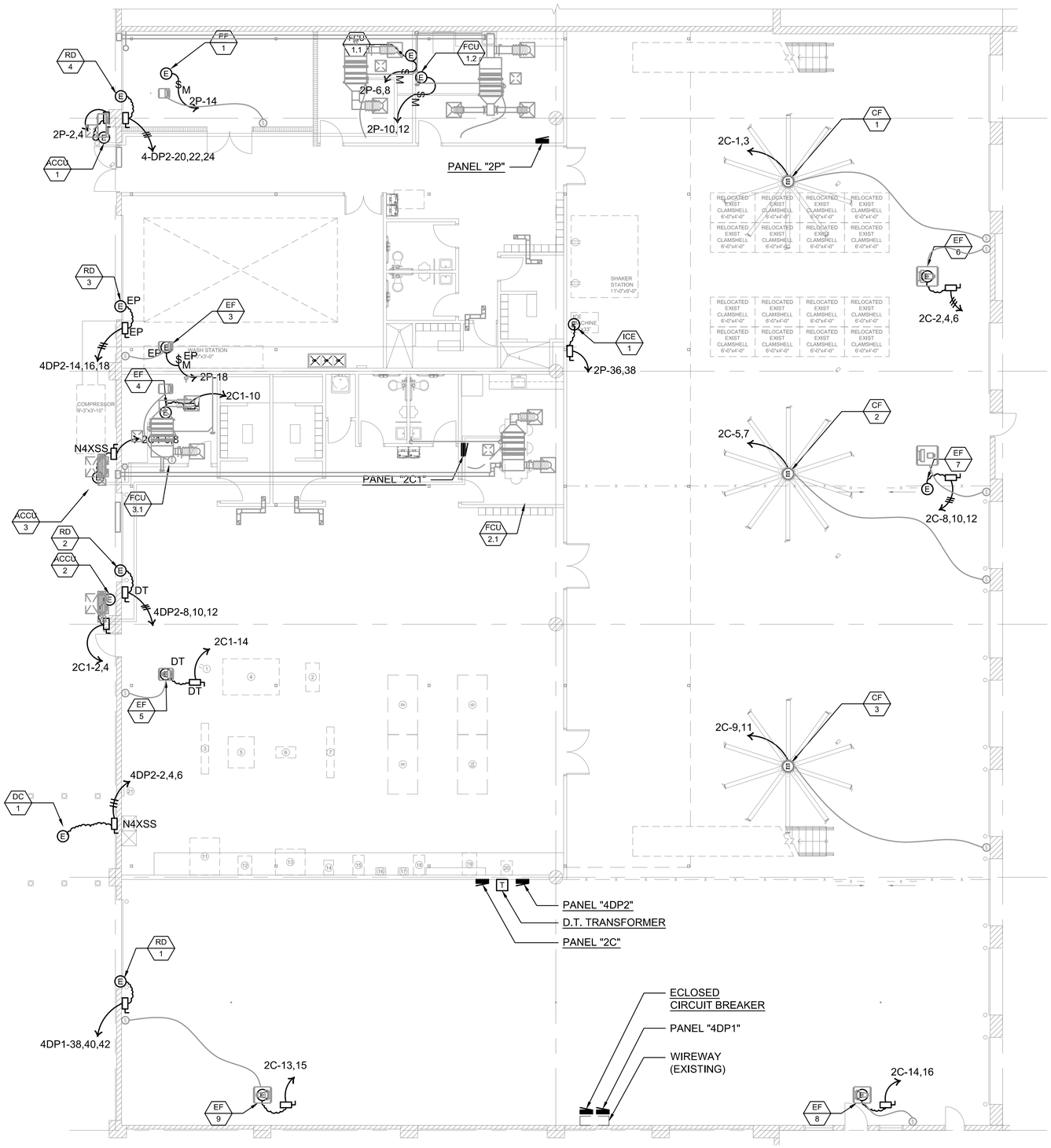

1 / E-103 OVERALL NEW MECHANICAL EQUIPMENT PLAN

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

0 2' 4' 8' 12' 16' 20' 24'

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

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PROJECT NO.:

CO1325-33

SHEET TITLE:

OVERALL NEW MECHANICAL EQUIPMENT PLAN

DATE :	DWG. NO.
05/10/23	E-103
SHEET :	
70 OF 84 SHEETS	

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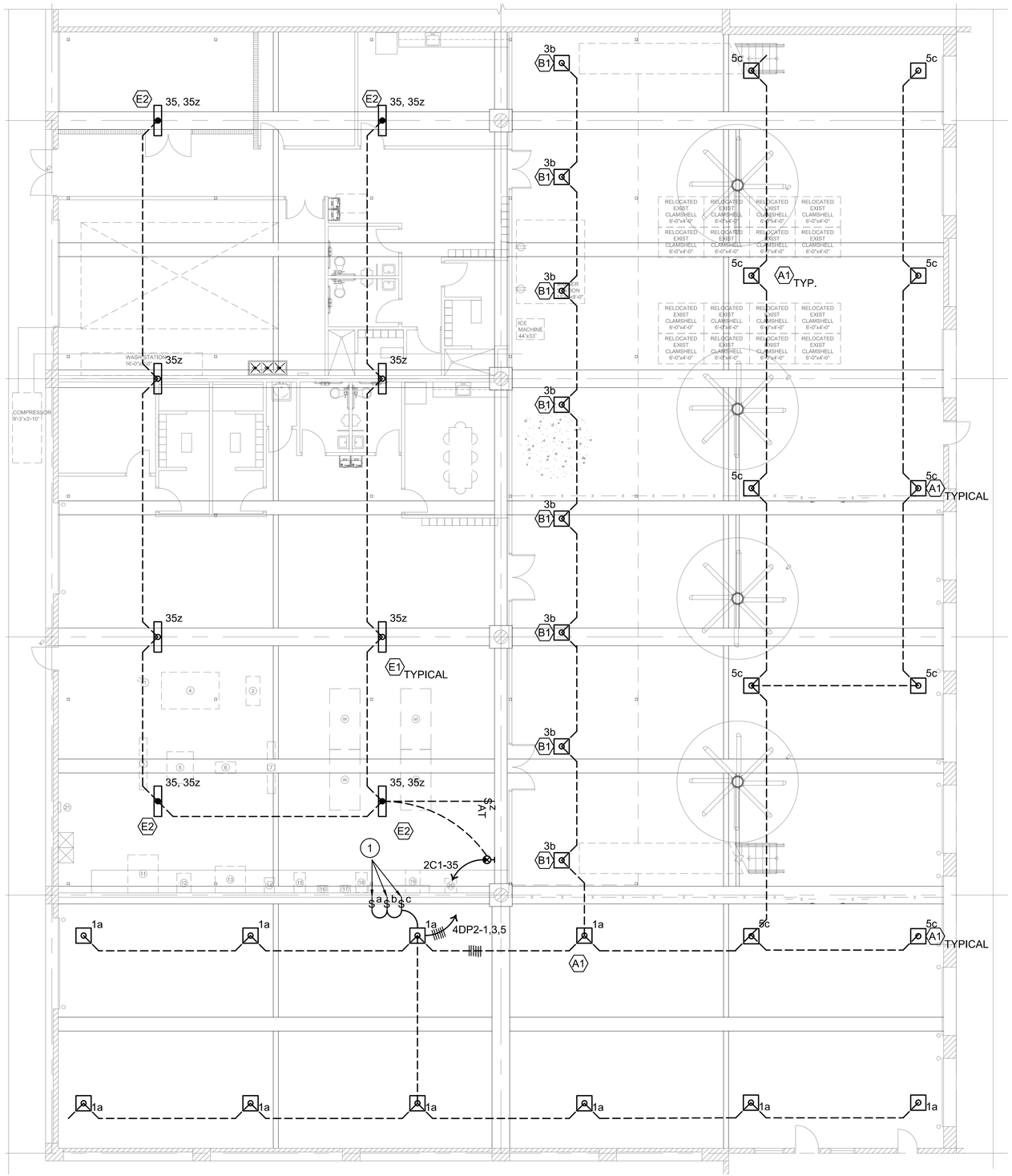

1 E-105 HIGH CEILING LIGHTING PLAN - NEW WORK

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

0 2' 4' 8' 12' 16' 20' 24'

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

CONSTRUCTION NOTES

1 OVERRIDE SWITCHES
LUMINAIRE TYPE A1 AND B1 HAVE INDIVIDUAL OCCUPANCY SENSORS, OVERRIDE SWITCHES ARE ONLY FOR LONG PERIODS OF VACANCY.

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CONVERT CARGO BUILDING TO WORKSHOP

AT
DANIEL K. INOUYE INTERNATIONAL AIRPORT
HONOLULU, OAHU, HAWAII

PROJECT NO.:

CO1325-33

SHEET TITLE:

HIGH CEILING LIGHTING PLAN - NEW WORK

DATE :	DWG. NO.
05/10/23	E-104
SHEET :	
71 OF 84 SHEETS	

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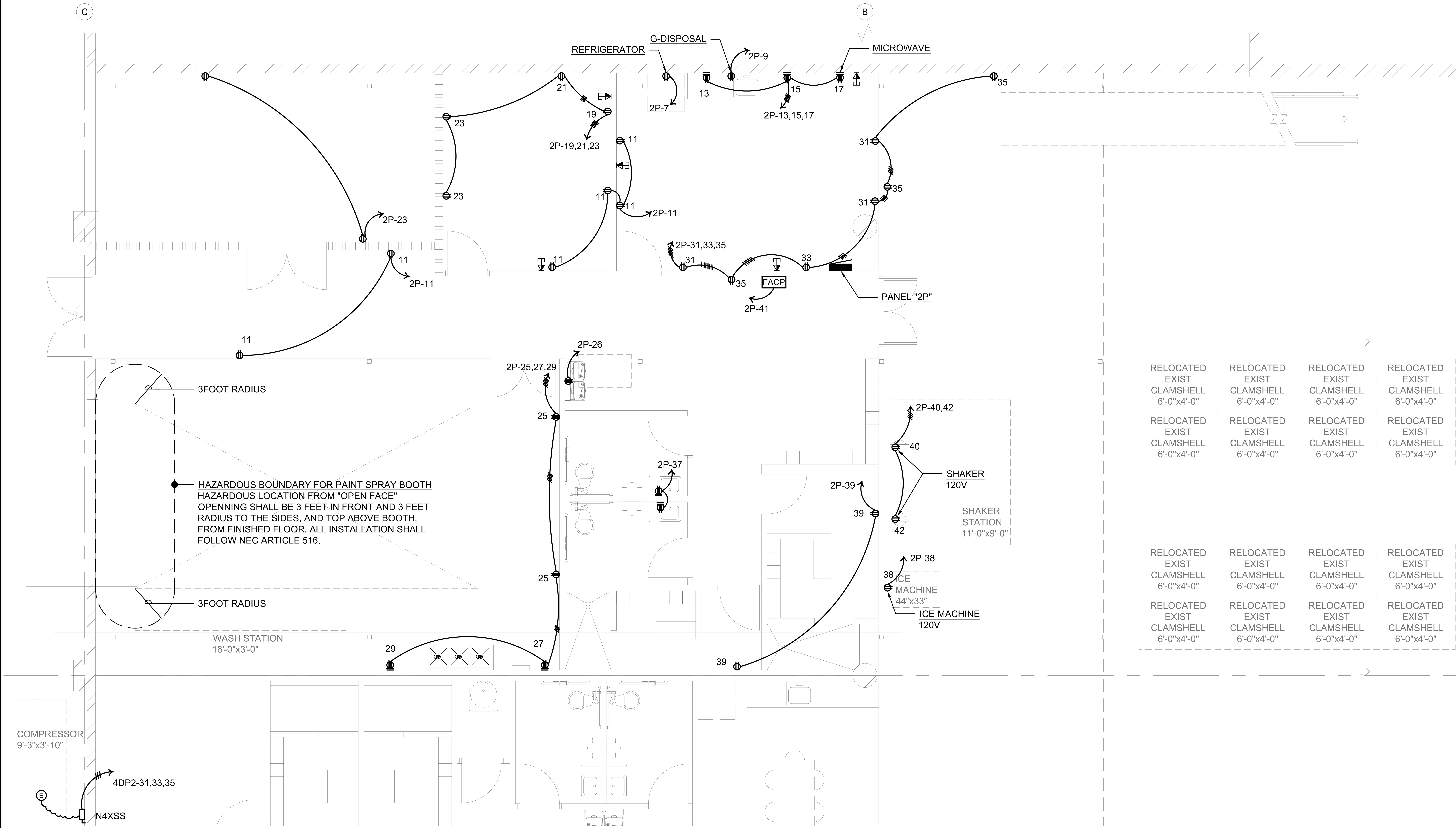

0 2' 4' 6' 8' 10' 12'
SCALE: 1/4" = 1'-0"

1
E-201

PAINT SHOP PLAN - NEW ELECTRICAL AND TELECOM PLAN

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

Airports Division
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DATE

PROJECT TITLE :

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AT
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HONOLULU, OAHU, HAWAII

PROJECT NO.:

CO1325-33

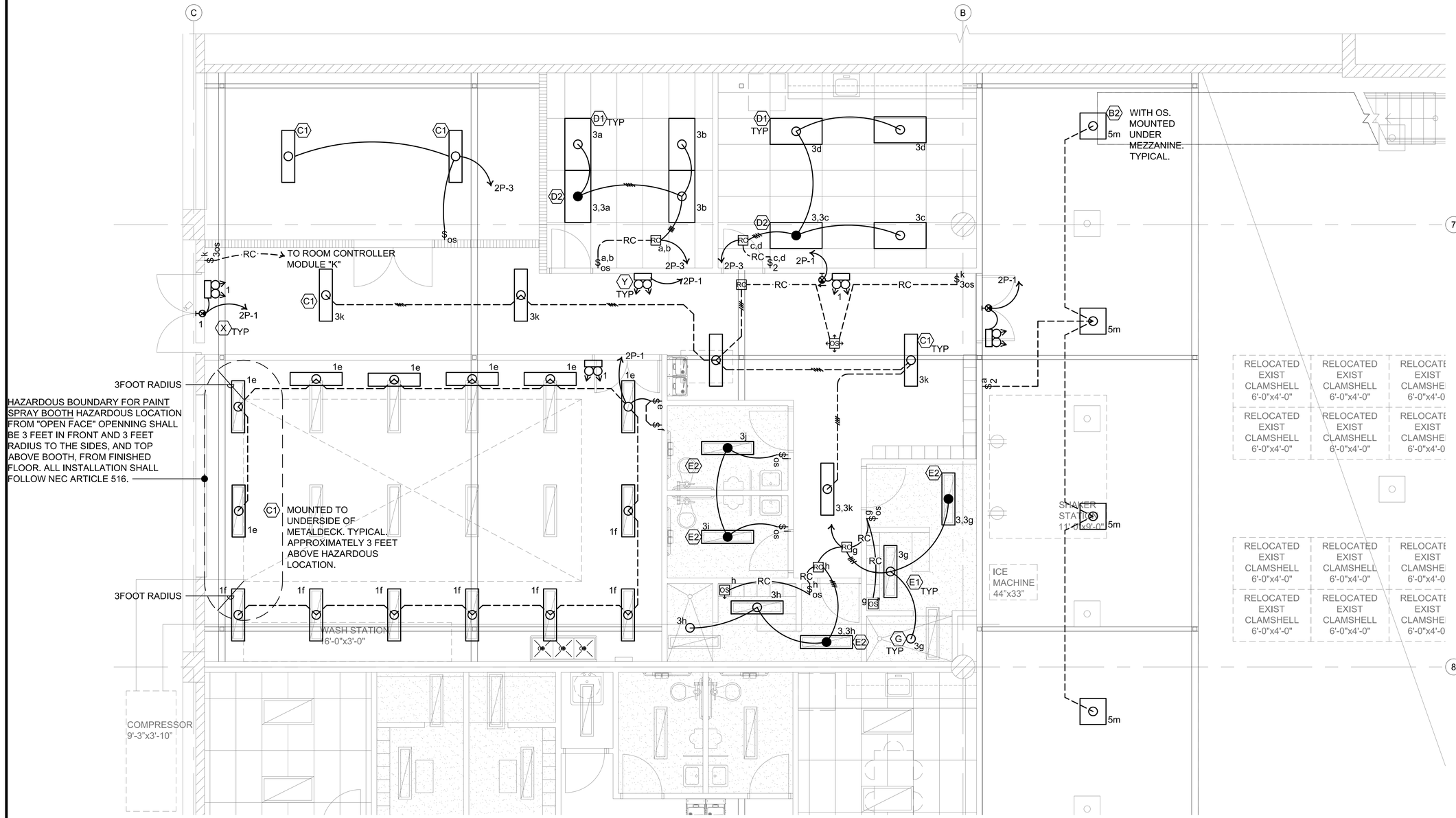
SHEET TITLE:

PAINT SHOP PLAN - NEW ELECTRICAL AND TELECOM PLAN

DATE : **05/10/23**

DWG. NO. E-201

SHEET : 72 OF 84 SHEETS



1 / E-202 PAINT SHOP PLAN - NEW LIGHTING PLAN

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

0 2' 4' 6' 8' 10' 12'

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

Airports Division
DEPARTMENT OF TRANSPORTATION
STATE OF HAWAII

GARRET A. MASUDA
LICENSED PROFESSIONAL ENGINEER
No. 9756-E
HAWAII, U.S.A.

EXP. 4/30/2024

This work was prepared by me or under my supervision.

DSGN.	DRWN.	CHKD.	APPD.

NO.	DATE	REVISIONS

DATE

PROJECT TITLE :

CONVERT CARGO BUILDING TO WORKSHOP

AT
DANIEL K. INOUYE INTERNATIONAL AIRPORT
HONOLULU, OAHU, HAWAII

PROJECT NO.:

CO1325-33

SHEET TITLE:

PAINT SHOP PLAN - NEW LIGHTING PLAN

DATE :	DWG. NO.
05/10/23	E-202
SHEET :	
73 OF 84 SHEETS	

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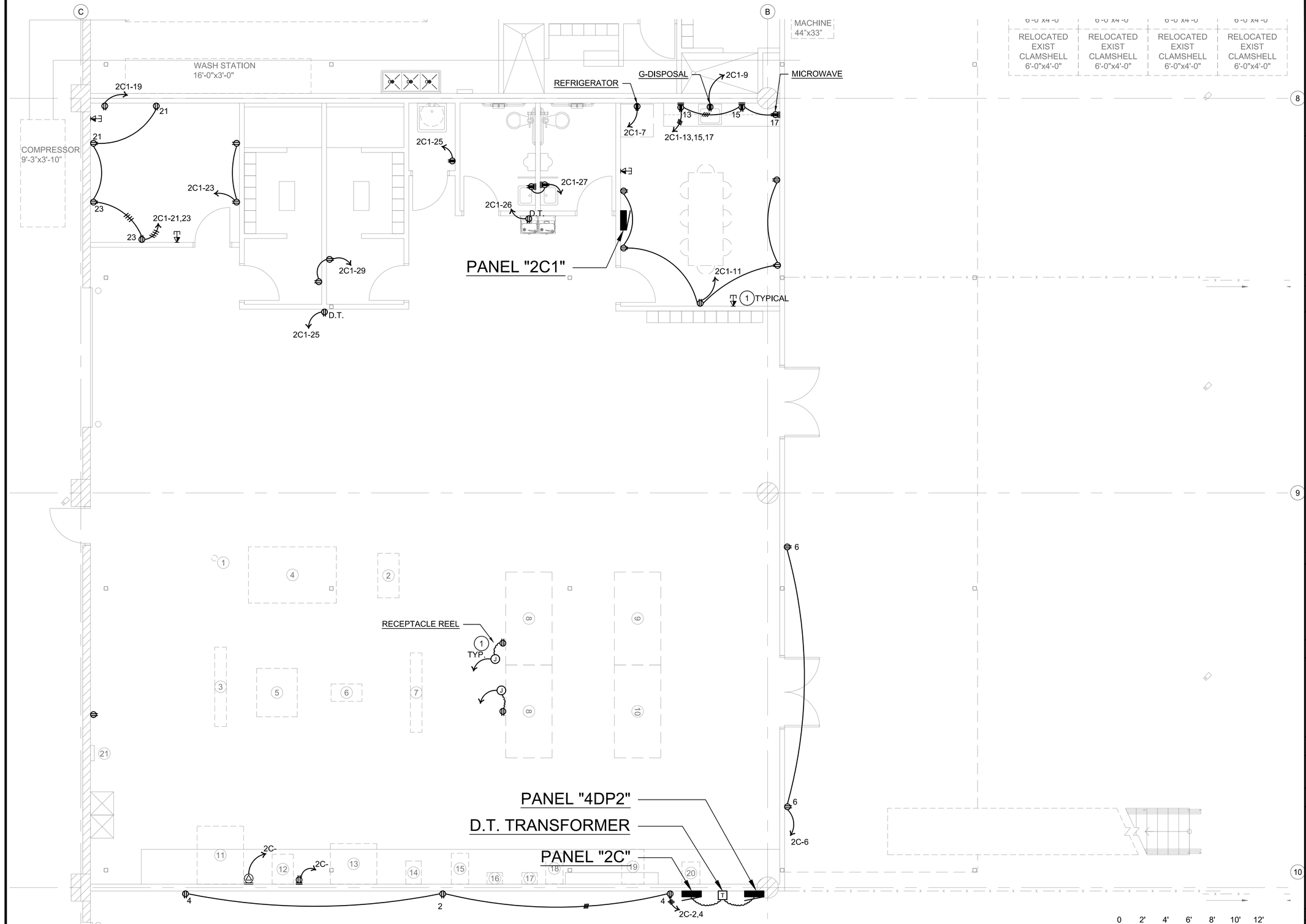

1 E-203 CARPENTER SHOP PLAN - NEW ELECTRICAL AND TELECOM PLAN

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

Airports Division
DEPARTMENT OF TRANSPORTATION
STATE OF HAWAII

GARRET A. MASUDA
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CONVERT CARGO BUILDING TO WORKSHOP

AT
DANIEL K. INOUYE INTERNATIONAL AIRPORT
HONOLULU, OAHU, HAWAII

PROJECT NO.:

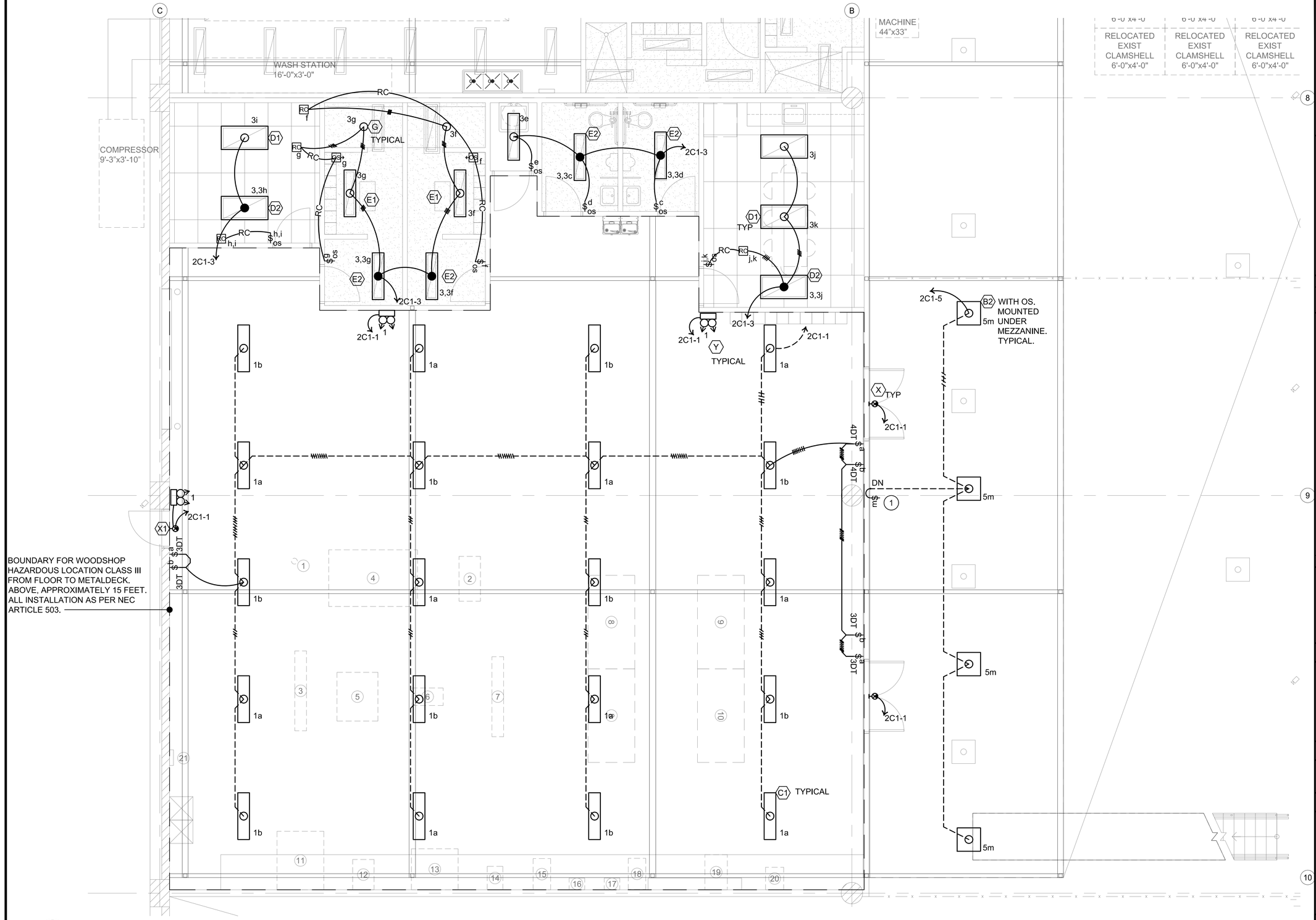
CO1325-33

SHEET TITLE:

CARPENTER SHOP PLAN - NEW ELECTRICAL AND TELECOM PLAN

DATE :	DWG. NO.
05/10/23	E-203
SHEET :	
74 OF 84 SHEETS	

C:\USERS\MARC\DESKTOP\D-_-BIN\2022\2208705-10-2023\MAA\E-203.DWG



BOUNDARY FOR WOODSHOP HAZARDOUS LOCATION CLASS III FROM FLOOR TO METALDECK. ABOVE, APPROXIMATELY 15 FEET. ALL INSTALLATION AS PER NEC ARTICLE 503.

① E-204 CARPENTER SHOP PLAN - NEW ELECTRICAL AND TELECOM PLAN

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

0 2' 4' 6' 8' 10' 12'

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

Airports Division
DEPARTMENT OF TRANSPORTATION
STATE OF HAWAII

GARRET A. MASUDA
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No. 9756-E

EXP. 4/30/2024

Garret A. Masuda

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DSGN.	DRWN.	CHKD.	APPD.

NO.	DATE	REVISIONS

DATE

PROJECT TITLE :

CONVERT CARGO BUILDING TO WORKSHOP

AT
DANIEL K. INOUYE INTERNATIONAL AIRPORT
HONOLULU, OAHU, HAWAII

PROJECT NO.:

CO1325-33

SHEET TITLE:

CARPENTER SHOP PLAN - NEW ELECTRICAL AND TELECOM PLAN

DATE : 05/10/23

SHEET : 75 OF 84 SHEETS

DWG. NO. E-204

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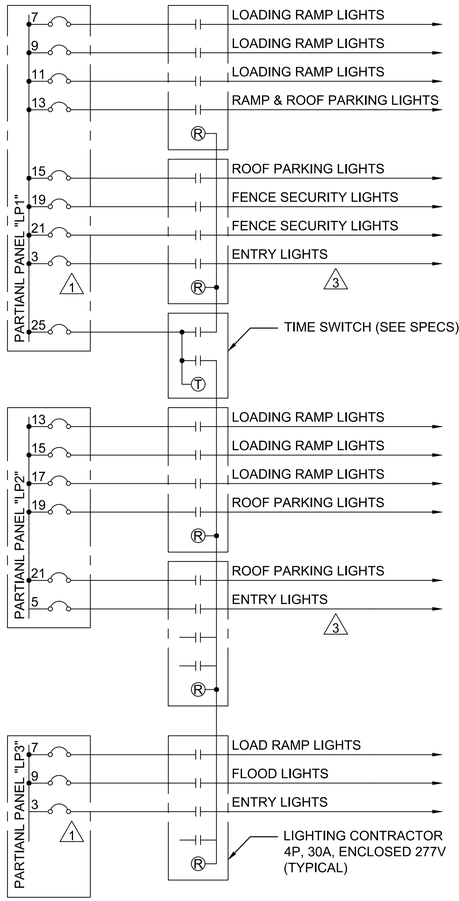
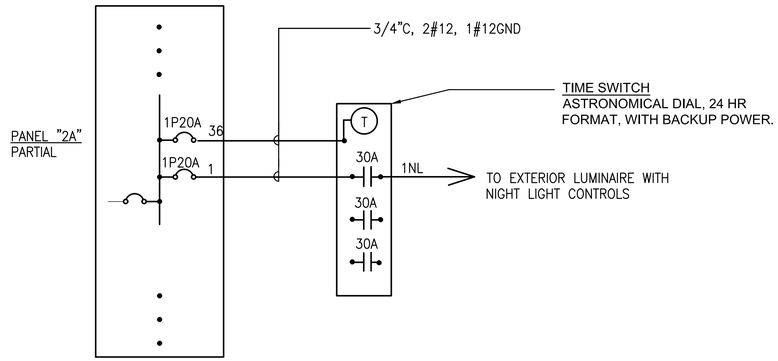


LIGHTING CONTACTOR DIAGRAM - EXISTING

NOTE: MAINTAIN EXISTING LUMINAIRES AND LIGHTING CONTROLS



4 / E-501 NIGHT LIGHT CONTROL WIRING DIAGRAM

SCALE : NTS

Airports Division
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STATE OF HAWAII

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EXP. 4/30/2024

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DSGN.	DRWN.	CHKD.	APPD.

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DATE

PROJECT TITLE :

CONVERT CARGO BUILDING TO WORKSHOP

AT
DANIEL K. INOUYE INTERNATIONAL AIRPORT
HONOLULU, OAHU, HAWAII

PROJECT NO.:

CO1325-33

SHEET TITLE:

LIGHTING CONTROL DETAILS 1

DATE :	DWG. NO.
05/10/23	E-501
SHEET :	
76 OF 84 SHEETS	

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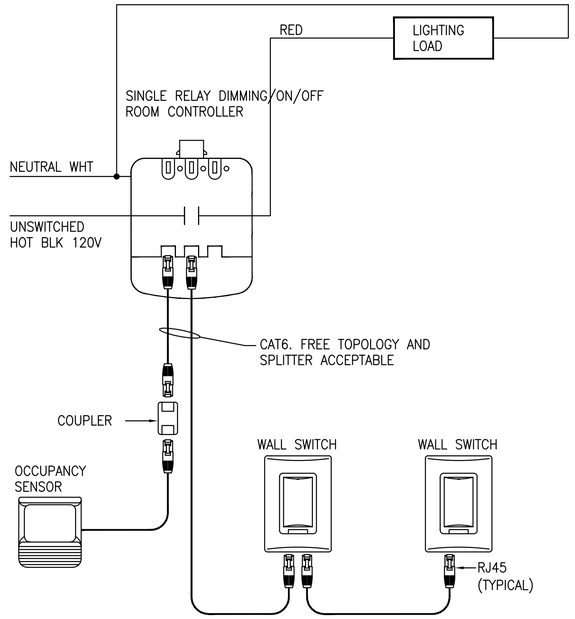
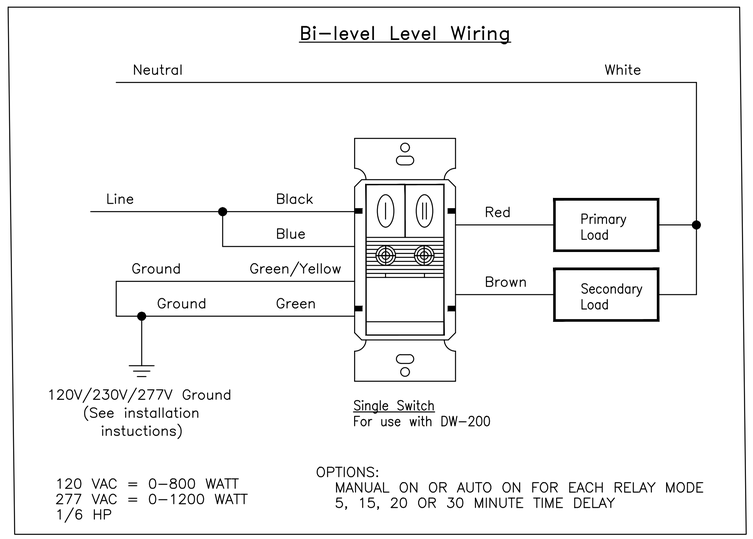


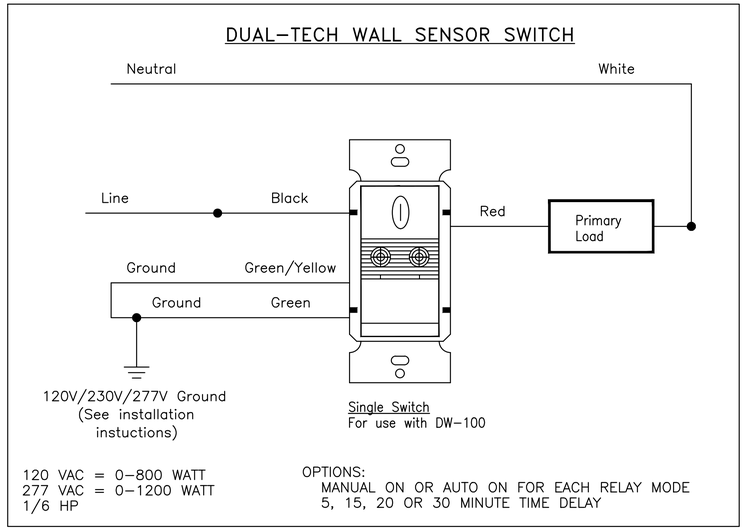
NOTES:

1. OCCUPANCY SENSORS SHALL BE SET TO AUTO FOR BASEMENT STORAGE AREA.

2. PROVIDE NON-DIMMING ROOM CONTROLLERS AND OCCUPANCY SENSOR, AND WALL SWITCHES. EXAMPLE FOR BASEMENT STORAGE AREA. NOT SHOWN EXACTLY.

1 / E-501 LIGHTING CONTROL WIRING DIAGRAM-TYPICAL
SCALE : NTS





3 / E-502 LIGHTING CONTROL WIRING DIAGRAM-SWITCHES
SCALE NTS

STATE OF HAWAII 1959

Airports Division
DEPARTMENT OF TRANSPORTATION
STATE OF HAWAII

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EXP. 4/30/2024

Garret A. Masuda

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DSGN.	DRWN.	CHKD.	APPD.

NO.	DATE	REVISIONS

DATE

PROJECT TITLE :

CONVERT CARGO BUILDING TO WORKSHOP

AT
DANIEL K. INOUYE INTERNATIONAL AIRPORT
HONOLULU, OAHU, HAWAII

PROJECT NO.:

CO1325-33

SHEET TITLE:

LIGHTING CONTROL DETAILS 2

DATE :	DWG. NO.
05/10/23	E-502
SHEET :	
77 OF 84 SHEETS	

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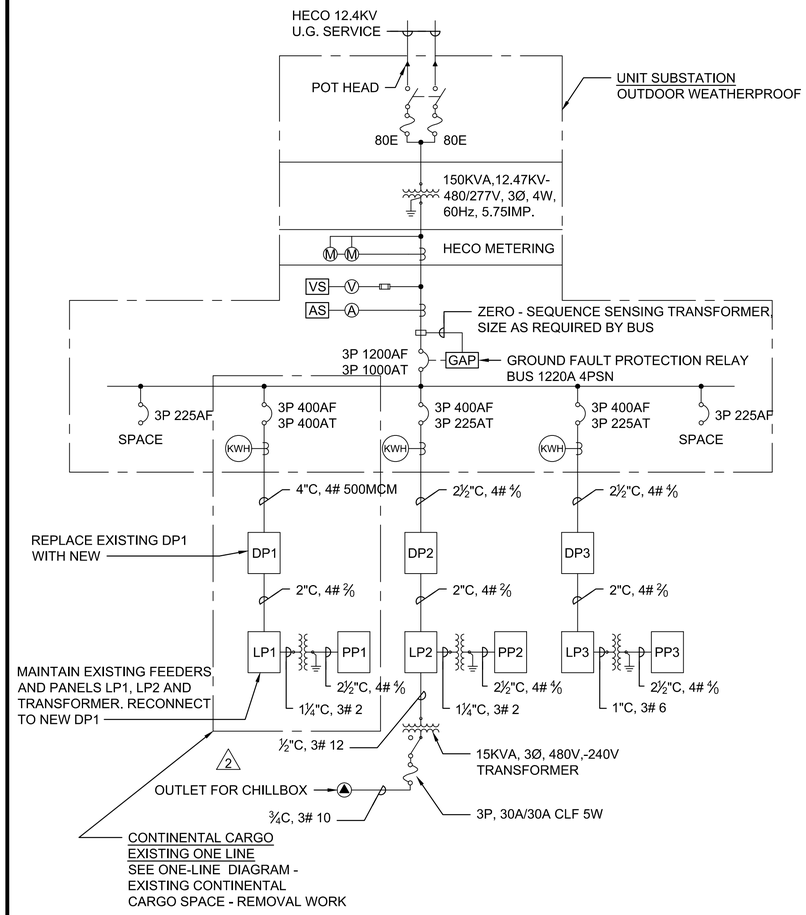
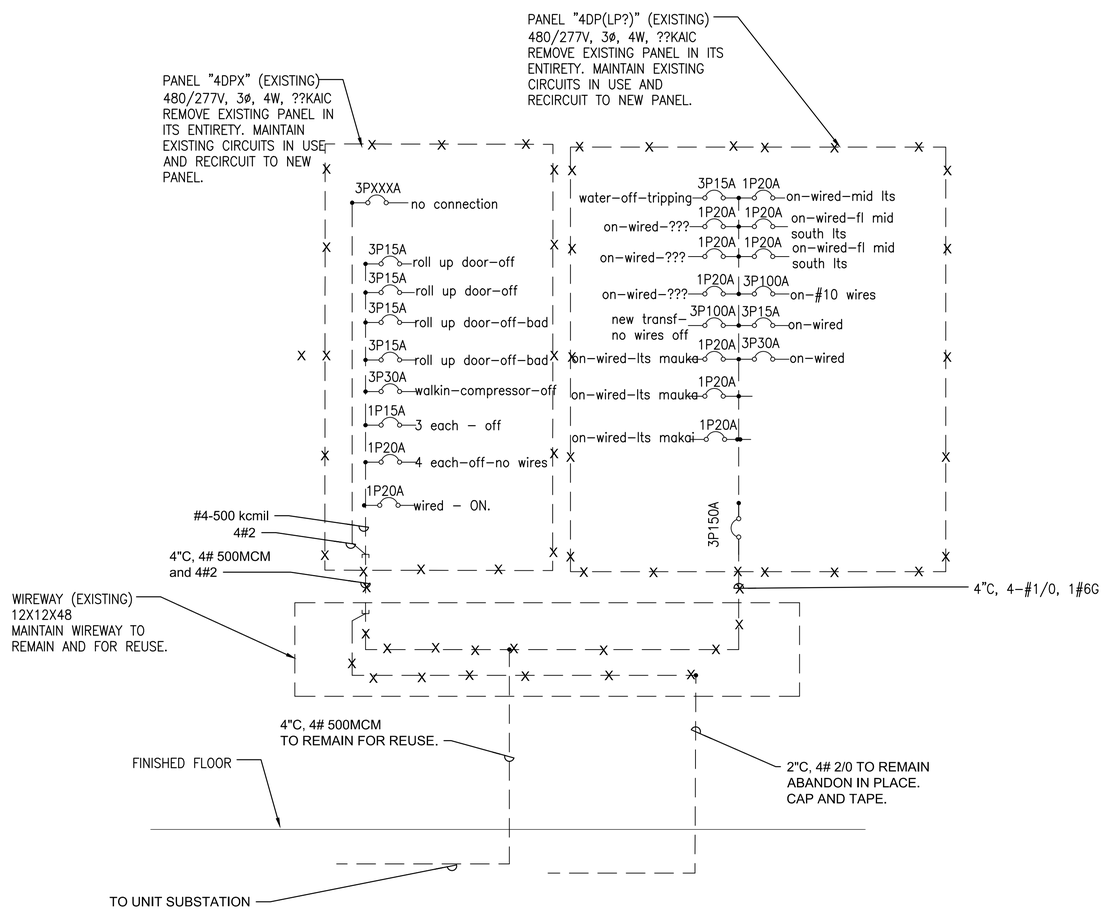


OVERALL ONE - LINE DIAGRAM - EXISTING



ONE - LINE DIAGRAM - EXISTING - CONTINENTAL CARGO SPACE - REMOVAL WORK

Airports Division
DEPARTMENT OF TRANSPORTATION
STATE OF HAWAII

GARRET A. MASUDA
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No. 9756-E
HAWAII, U.S.A.

EXP. 4/30/2024

This work was prepared by me or under my supervision.

DSGN.	DRWN.	CHKD.	APPD.

NO.	DATE	REVISIONS

DATE

PROJECT TITLE :

CONVERT CARGO BUILDING TO WORKSHOP

AT
DANIEL K. INOUYE INTERNATIONAL AIRPORT
HONOLULU, OAHU, HAWAII

PROJECT NO.:

CO1325-33

SHEET TITLE:

ELECTRICAL
ONE-LINE DIAGRAM
AND SCHEDULES

DATE :	DWG. NO.
05/10/23	E-601
SHEET :	
78 OF 84 SHEETS	

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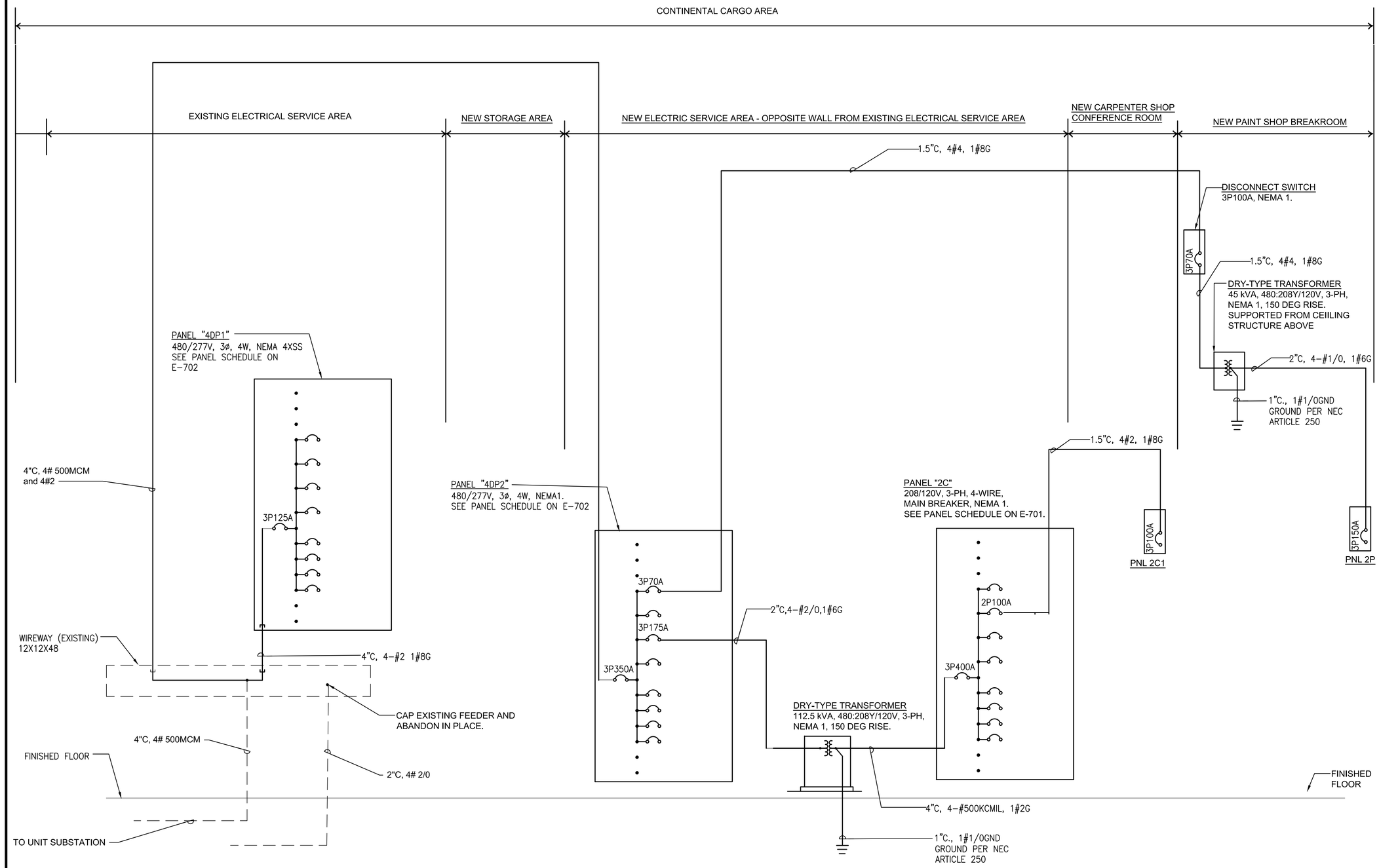

ONE - LINE DIAGRAM - EXISTING - CONTINENTAL CARGO SPACE - NEW WORK

STATE OF HAWAII 1959

Airports Division
DEPARTMENT OF TRANSPORTATION
STATE OF HAWAII

GARRET A. MASUDA
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EXP. 4/30/2024

Garret A. Masuda

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DSGN.	DRWN.	CHKD.	APPD.

NO.	DATE	REVISIONS

DATE

PROJECT TITLE :

CONVERT CARGO BUILDING TO WORKSHOP

AT
DANIEL K. INOUYE INTERNATIONAL AIRPORT
HONOLULU, OAHU, HAWAII

PROJECT NO.:

CO1325-33

SHEET TITLE:

ONE-LINE DIAGRAM -CONTINENTAL CARGO- NEW WORK

DATE :	DWG. NO.
05/10/23	E-602
SHEET : 79 OF 84 SHEETS	

C:\USERS\MARC\DESKTOP\D_-_BINS\20222208705-10-2023\MAA\E-602.DWG

PANELBOARD: 2C

LOCATION: ROOM 231
SUPPLY FROM: PANEL 2CH1
MOUNTING: SURFACE
ENCLOSURE: NEMA 1

VOLTS: 208Y/120
PHASES: 3
WIRES: 4
CABINET WIDTH: 20"

A.I.C RATING: 10,000
MAINS TYPE: MAIN BREAKER
BUS RATING: 225A
MCB RATING: 150A

GND	WIRE	CKT	CIRCUIT DESCRIPTION	ID	TRIP	POLES	A		B		C		POLES	TRIP	ID	CIRCUIT DESCRIPTION	CKT	WIRE	GND
12	12	1	**H - CF-1**		20	2	1.0	1.2					3	20		**H - EF-6**	2	12	12
12	12	3	**H - CF-1**		-	-			1.0	1.2			-	-		**H - EF-6**	4	12	12
12	12	5	**H - CF-2**		20	2					1.0	1.2	-	-		**H - EF-6**	6	12	12
12	12	7	**H - CF-2**		-	-	1.0	1.1					3	20		**H - EF-7**	8	12	12
12	12	9	**H - CF-3**		20	2			1.0	1.2			-	-		**H - EF-7**	10	12	12
12	12	11	**H - CF-3**		-	-					1.0	1.2	-	-		**H - EF-7**	12	12	12
12	10	13	**H - EF-9**		25	2	1.3	1.3					2	25		**H - EF-8**	14	10	12
12	10	15	**H - EF-9**		-	-			1.3	1.3			-	-		**H - EF-8**	16	10	12
E	E	17	SPARE		20	1					0.0	0.0	1	20		SPARE	18	-	-
E	E	19	SPARE		20	1	0.0	0.0					1	20		SPARE	20	-	-
E	E	21	SPARE		20	1			0.0	0.0			1	20		SPARE	22	-	-
E	E	23	SPARE		20	1					0.0	0.0	1	20		SPARE	24	-	-
E	E	25	PFB		20	1	0.0	0.0					1	20		PFB	26	-	-
E	E	27	PFB		20	1			0.0	0.0			1	20		PFB	28	-	-
E	E	29	PFB		20	1					0.0	0.0	1	20		PFB	30	-	-
E	E	31	PFB		30	2	0.0	0.0					2	30		PFB	32	-	-
E	E	33	PFB		-	-			0.0	0.0			-	-		PFB	34	-	-
-	-	35	PFB		-	-					0.0	0.0	1	20		PFB	36	-	-
E	E	37	**O - PANEL 2C1**		100	3	12.0	0.0					-	-		PFB	38	-	-
E	E	39	**O - PANEL 2C1**		-	-			12.0	0.0			2	20		PFB	40	-	-
E	E	41	**O - PANEL 2C1**		-	-					12.0	0.0	-	-		PFB	42	-	-
						TOTAL LOAD:	19.0	KVA	19.0	KVA	16.4	KVA							
						TOTAL AMPS:	52.7	A	52.8	A	45.6	A							

ID LEGEND:

LOAD CLASSIFICATION	CONNECTED LOAD	DEMAND FACTOR	DEMAND LOAD	PANEL TOTALS	
LIGHTING	0.0 KVA	100.0%	0.0 KVA		
RECEPTACLES	0.0 KVA	#DIV/0!	0.0 KVA	**TOTAL CONNECTED LOAD:**	54.4 KVA
HVAC	18.4 KVA	100.0%	18.4 KVA	**TOTAL DEMAND LOAD:**	54.4 KVA
MOTOR LOAD	0.0 KVA	100.0%	0.0 KVA	**TOTAL CONNECTED CURRENT:**	151.0 A
FIRE ALARM	0.0 KVA	100.0%	0.0 KVA	**TOTAL DEMAND CURRENT:**	151.0 A
KITCHEN EQUIPMENT	0.0 KVA	65.0%	0.0 KVA		
OTHER LOADS	36.0 KVA	100.0%	36.0 KVA		

NOTES:

PANELBOARD: 2C1

LOCATION: ROOM 231
SUPPLY FROM: PANEL 2CH1
MOUNTING: RECESSED
ENCLOSURE: NEMA 1

VOLTS: 208Y/120
PHASES: 3
WIRES: 4
CABINET WIDTH: 20"

A.I.C RATING: 10,000
MAINS TYPE: MAIN BREAKER
BUS RATING: 225A
MCB RATING: 125A

GND	WIRE	CKT	CIRCUIT DESCRIPTION	ID	TRIP	POLES	A		B		C		POLES	TRIP	ID	CIRCUIT DESCRIPTION	CKT	WIRE	GND
12	12	1	**L - CARPENTER WORK /EXIT/EMER**		20	1	1.6	1.2					2	15		**H - ACCU2**	2	12	12
12	12	3	**L - OFFICE/RESTROOM/LOCKER**		20	1			0.5	1.2			-	-		**H - ACCU2**	4	12	12
12	12	5	**L - BELOW MEZZANINE**		20	1					0.3	1.2	2	15		**H - ACCU3**	6	12	12
12	12	7	**R - REFRIG**	G	20	1	1.0	1.2					-	-		**H - ACCU3**	8	12	12
12	12	9	**R - G. DISPOSAL**		20	1			1.0	0.5			1	15		**H - EF4**	10	12	12
12	12	11	**R - CONV - 5R**		20	1					1.0	1.0	1	20		**SPARE**	12	-	-
12	12	13	**R - COUNTER 1**		20	1	1.0	1.4					1	20		**H - EF5**	14	12	12
12	12	15	**R - COUNTER 2**		20	1			1.0	0.0			1	20		**SPARE**	16	-	-
12	12	17	**R - MICROWAVE**		20	1					1.5	0.0	1	20		**SPARE**	18	-	-
12	12	19	**R -COMPUTER**		20	1	1.0	0.0					-	-		**PFB**	20	-	-
12	12	21	**R - OFFICE**		20	1			1.0	4.2			2	50		**O - IWH2**	22	8	10
12	12	23	**R - CONV - OFFICE - 4R**		20	1					0.8	4.2	-	-		**O - IWH2**	24	8	10
12	12	25	**R - CONV - 1R / JANITOR**		20	1	0.4	1.0					1	20	G	**R - EWC**	26	12	12
12	12	27	**R - RESTRM GFCI**		20	1			1.0	0.0			1	20		**SPARE**	28	-	-
12	12	29	**R - LOCKER 2R**		20	1					1.0	0.0	1	20		**SPARE**	30	-	-
12	12	31	**SPARE**		20	1	0.0	0.0					1	20		**SPARE**	32	-	-
12	12	33	**SPARE**		20	1			0.0	0.0			1	20		**SPARE**	34	-	-
12	12	35	**L - AREA ABOVE MEZZ**		20	1					0.3	0.0	1	20		**SPARE**	36	-	-
12	12	37	**SPARE**		20	1	0.0	0.0					1	20		**SPARE**	38	-	-
12	12	39	**SPARE**		20	1			0.0	0.0			1	20		**SPARE**	40	-	-
12	12	41	**SPARE**		20	1					0.0	0.0	1	20		**SPARE**	42	-	-
						TOTAL LOAD:	9.8	KVA	10.4	KVA	11.3	KVA							
						TOTAL AMPS:	27.1	A	28.9	A	31.4	A							

ID LEGEND:

LOAD CLASSIFICATION	CONNECTED LOAD	DEMAND FACTOR	DEMAND LOAD	PANEL TOTALS	
LIGHTING	2.7 KVA	100.0%	2.7 KVA		
RECEPTACLES	12.7 KVA	89.4%	11.4 KVA	**TOTAL CONNECTED LOAD:**	31.5 KVA
HVAC	6.7 KVA	100.0%	6.7 KVA	**TOTAL DEMAND LOAD:**	29.2 KVA
MOTOR LOAD	0.0 KVA	100.0%	0.0 KVA	**TOTAL CONNECTED CURRENT:**	87.4 A
FIRE ALARM	0.0 KVA	100.0%	0.0 KVA	**TOTAL DEMAND CURRENT:**	80.9 A
KITCHEN EQUIPMENT	0.0 KVA	65.0%	0.0 KVA		
OTHER LOADS	8.4 KVA	100.0%	8.4 KVA		

NOTES:

PANELBOARD: 2P

LOCATION: ROOM 231
SUPPLY FROM: PANEL 2CH1
MOUNTING: RECESSED
ENCLOSURE: NEMA 1

VOLTS: 208Y/120
PHASES: 3
WIRES: 4
CABINET WIDTH: 20"

A.I.C RATING: 10,000
MAINS TYPE: MAIN BREAKER
BUS RATING: 225A
MCB RATING: 150A

GND	WIRE	CKT	CIRCUIT DESCRIPTION	ID	TRIP	POLES	A		B		C		POLES	TRIP	ID	CIRCUIT DESCRIPTION	CKT	WIRE	GND
12	12	1	L - PAINT SPRAY BOOTH/EXIT/EMER		20	1	1.3	2.0					2	25		**H - ACCU1**	2	6	10
12	12	3	L - OFFICE/RESTROOM/LOCKER		20	1			1.1	2.0			-	-		**H - ACCU1**	4	6	10
12	12	5	L - BELOW MEZZANINE		20	1					0..3	0.1	2	15		**H - FCU 1.1**	6	12	12
12	12	7	R - REFRIG	G	20	1	1.0	0.1					-	-		**H - FCU 1.1**	8	12	12
12	12	9	R - G. DISPOSAL		20	1			1.0	0.1			2	15		**H - FCU 1.2**	10	12	12
12	12	11	R - CONV - 6R		20	1					1.2	0.1	-	-		**H - FCU 1.2**	12	12	12
12	12	13	R - COUNTER 1		20	1	1.0	0.5					1	15		**H - EF1**	14	12	12
12	12	15	R - COUNTER 2		20	1			1.0	0.0			-	-		**PFB**	16	-	-
12	12	17	R - MICROWAVE		20	1					1.5	0.5	1	15		**H - EF3**	18	12	12
12	12	19	R -COMPUTER		20	1	1.0	0.0					-	-		**PFB**	20	-	-
12	12	21	R - OFFICE		20	1			1.0	4.2			2	50		**O - IWH1**	22	8	10
12	12	23	R - CONV - OFFICE - 4R		20	1					0.8	4.2	-	-		**O - IWH1**	24	8	10
12	12	25	R - CONV -PAINT BOOTH 2R		20	1	0.4	1.0					1	20	G	**R - EWC**	26	12	12
12	12	27	R - PAINT BOOTH WORK AREA		20	1			1.0	0.0			-	-		**PFB**	28	-	-
12	12	29	R - PAINT BOOTH WORK AREA		20	1					1.0	0.0	1	20		**SPARE**	30	-	-
12	12	31	R - CONV - 3R		20	1	0.6	0.0					1	20		**SPARE**	32	-	-
12	12	33	R - TV		20	1			1.0	0.0			1	20		**SPARE**	34	-	-
12	12	35	R - CONV 3R		20	1					0.6	1.0	1	20		**PFB (POSSIBLE FOR 2P ICE MACH)**	36	12	12
12	12	37	R - RESTRM GFCI		20	1	0.4	1.0					1	20	G	**R - ICE MACHINE**	38	12	12
12	12	39	R - LOCKER 2R		20	1			0.4	1.0			1	20		R - SHAKER 1	40	12	12
12	12	41	F - FACP - RED CIRCUIT BREAKER		20	1					1.2	1.0	1	20		R - SHAKER 2	42	12	12
						TOTAL LOAD:	10.3	KVA	13.8	KVA	13.1	KVA							
						TOTAL AMPS:	28.5	A	38.2	A	36.4	A							

ID LEGEND:
*G DENOTES GFCI BREAKER

LOAD CLASSIFICATION	CONNECTED LOAD	DEMAND FACTOR	DEMAND LOAD	PANEL TOTALS	
LIGHTING	2.4 KVA	100.0%	2.4 KVA		
RECEPTACLES	18.9 KVA	76.5%	14.5 KVA	**TOTAL CONNECTED LOAD:**	37.1 KVA
HVAC	5.2 KVA	100.0%	5.2 KVA	**TOTAL DEMAND LOAD:**	31.7 KVA
MOTOR LOAD	0.0 KVA	100.0%	0.0 KVA	**TOTAL CONNECTED CURRENT:**	103.0 A
FIRE ALARM	1.2 KVA	100.0%	1.2 KVA	**TOTAL DEMAND CURRENT:**	87.9 A
KITCHEN EQUIPMENT	0.0 KVA	65.0%	0.0 KVA		
OTHER LOADS	8.4 KVA	100.0%	8.4 KVA		

NOTES:

STATE OF HAWAII
Airports Division
DEPARTMENT OF TRANSPORTATION
STATE OF HAWAII

GARRET A. MASUDA
LICENSED PROFESSIONAL ENGINEER
No. 9756-E
HAWAII, U.S.A.
EXP. 4/30/2024

This work was prepared by me or under my supervision.

DSGN.	DRWN.	CHKD.	APPD.

NO.	DATE	REVISIONS

DATE

PROJECT TITLE :

CONVERT CARGO BUILDING TO WORKSHOP

AT
DANIEL K. INOUYE INTERNATIONAL AIRPORT
HONOLULU, OAHU, HAWAII

PROJECT NO.:

CO1325-33

SHEET TITLE:

ELECTRICAL PANEL SCHEDULE

DATE : **05/10/23**

SHEET : 80 OF 84 SHEETS

DWG. NO. **E-701**

PANELBOARD: 4DP2

LOCATION: ROOM 231 | **VOLTS:** 480Y/277 | **A.I.C RATING:** 35,000
SUPPLY FROM: PANEL 2CH1 | **PHASES:** 3 | **MAINS TYPE:** MAIN BREAKER
MOUNTING: SURFACE | **WIRES:** 4 | **BUS RATING:** 400A
ENCLOSURE: NEMA 1 | **CABINET WIDTH:** 20" | **MCB RATING:** 300A

GND	WIRE	CKT	CIRCUIT DESCRIPTION	ID	TRIP	POLES	A		B		C		POLES	TRIP	ID	CIRCUIT DESCRIPTION	CKT	WIRE	GND
12	12	1	**L - STORAGE 1**		20	1	0.9	18.0					3	100		**M - DUST COLLECTOR**	2	2	8
12	12	3	**L - MEZZANINE**		20	1			0.4	18.0			-	-		**M - DUST COLLECTOR**	4	2	8
12	12	5	**L - STORAGE 2**		20	1					0.9	18.0	-	-		**M - DUST COLLECTOR**	6	2	8
-	-	7	**SPARE**		20	1	1.3	2.0					3	15		**M - ROLL-UP DOOR 2**	8	12	12
-	-	9	**SPARE**		20	1			1.3	2.0			-	-		**M - ROLL-UP DOOR 2**	10	12	12
-	-	11	**SPARE**		20	1					1.3	2.0	-	-		**M - ROLL-UP DOOR 2**	12	12	12
-	-	13	**SPARE**		20	1	1.3	2.0					3	15		**M - ROLL-UP DOOR 3**	14	12	12
-	-	15	**SPARE**		20	1			1.3	2.0			-	-		**M - ROLL-UP DOOR 3**	16	12	12
-	-	17	**SPARE**		20	1					1.3	2.0	-	-		**M - ROLL-UP DOOR 3**	18	12	12
-	-	19	**PFB**		-	-	0.0	2.0					3	15		**M - ROLL-UP DOOR 4**	20	12	12
-	-	21	**PFB**		-	-			0.0	2.0			-	-		**M - ROLL-UP DOOR 4**	22	12	12
-	-	23	**PFB**		-	-					0.0	2.0	-	-		**M - ROLL-UP DOOR 4**	24	12	12
-	-	25	**PFB**		-	-	0.0	0.0					-	-		**PFB**	26	-	-
-	-	27	**PFB**		-	-			0.0	0.0			-	-		**PFB**	28	-	-
-	-	29	**PFB**		-	-					0.0	0.0	-	-		**PFB**	30	-	-
-	-	31	**PFB**		-	-	0.0	0.0					-	-		**PFB**	32	-	-
-	-	33	**PFB**		-	-			0.0	0.0			-	-		**PFB**	34	-	-
-	-	35	**PFB**		-	-					0.0	0.0	-	-		**PFB**	36	-	-
8	4	37	**O - PANEL 2P**		70	3	15.0	37.5					175	3		**O - PANEL 2C**	38	2/0	6
8	4	39	**O - PANEL 2P**		-	-			15.0	37.5			-	-		**O - PANEL 2C**	40	2/0	6
8	4	41	**O - PANEL 2P**		-	-					15.0	37.5	-	-		**O - PANEL 2C**	42	2/0	6
				TOTAL LOAD:			80.0 KVA		79.6 KVA		80.0 KVA								
				TOTAL AMPS:			96.3 A		95.7 A		96.3 A								

ID LEGEND:

LOAD CLASSIFICATION	CONNECTED LOAD	DEMAND FACTOR	DEMAND LOAD	PANEL TOTALS	
LIGHTING	2.2 KVA	100.0%	2.2 KVA		
RECEPTACLES	0.0 KVA	#DIV/0!	0.0 KVA	**TOTAL CONNECTED LOAD:**	239.6 KVA
HVAC	0.0 KVA	100.0%	0.0 KVA	**TOTAL DEMAND LOAD:**	231.7 KVA
MOTOR LOAD	72.0 KVA	100.0%	72.0 KVA	**TOTAL CONNECTED CURRENT:**	288.3 A
FIRE ALARM	0.0 KVA	100.0%	0.0 KVA	**TOTAL DEMAND CURRENT:**	278.7 A
KITCHEN EQUIPMENT	0.0 KVA	65.0%	0.0 KVA		
OTHER LOADS	157.5 KVA	100.0%	157.5 KVA		

NOTES:

PANELBOARD: 4DP1

LOCATION: ROOM 231 | **VOLTS:** 480Y/277 | **A.I.C RATING:** 35,000
SUPPLY FROM: PANEL 2CH1 | **PHASES:** 3 | **MAINS TYPE:** MAIN BREAKER
MOUNTING: SURFACE | **WIRES:** 4 | **BUS RATING:** 225A
ENCLOSURE: NEMA 1 | **CABINET WIDTH:** 20" | **MCB RATING:** 100A

GND	WIRE	CKT	CIRCUIT DESCRIPTION	ID	TRIP	POLES	A		B		C		POLES	TRIP	ID	CIRCUIT DESCRIPTION	CKT	WIRE	GND
12	12	1	**L - EXISTING FROM DP1 CKT 21**		20	1	2.0	2.4					1	20		**L - EXISTING FROM LP1 CKT 2**	2	12	12
12	12	3	**SPARE**		20	1			0.0	1.1			1	20		**L - EXISTING FROM LP1 CKT 4**	4	12	12
12	12	5	**SPARE**		20	1					0.0	2.4	1	20		**L - EXISTING FROM LP1 CKT 6**	6	12	12
12	12	7	**L - EXISTING FROM LP1 - LOAD RAMP**		20	1	0.7	0.0					1	20		**SPARE**	8	-	-
12	12	9	**L - EXISTING FROM LP1 - LOAD RAMP**		20	1			1.1	0.0			1	20		**SPARE**	10	-	-
12	12	11	**L - EXISTING FROM LP1 - LOAD RAMP**		20	1					1.1	0.0	-	-		PFB	12	-	-
-	-	13	SPARE		20	1	0.0	0.0					-	-		PFB	14	-	-
-	-	15	SPARE		20	1			0.0	0.0			-	-		PFB	16	-	-
-	-	17	PFB		-	-					0.0	0.0	-	-		PFB	18	-	-
-	-	19	PFB		-	-	0.0	0.0					-	-		PFB	20	-	-
-	-	21	PFB		-	-			0.0	0.0			-	-		PFB	22	-	-
-	-	23	PFB		-	-					0.0	0.0	-	-		PFB	24	-	-
-	-	25	PFB		-	-	0.0	0.0					-	-		PFB	26	-	-
-	-	27	PFB		-	-			0.0	0.0			-	-		PFB	28	-	-
-	-	29	PFB		-	-					0.0	0.0	-	-		PFB	30	-	-
-	-	31	PFB		-	-	0.9	0.0					-	-		PFB	32	-	-
-	-	33	PFB		-	-			0.9	0.0			-	-		PFB	34	-	-
-	-	35	PFB		-	-					0.0	0.0	-	-		PFB	36	-	-
-	-	37	PFB		-	-	0.0	2.0					3	15		**M - ROLL-UP DOOR 1**	38	12	12
-	-	39	PFB		-	-			0.0	2.0			-	-		**M - ROLL-UP DOOR 1**	40	12	12
-	-	41	PFB		-	-					0.0	2.0	-	-		**M - ROLL-UP DOOR 1**	42	12	12
				TOTAL LOAD:			8.0 KVA		5.0 KVA		5.5 KVA								
				TOTAL AMPS:			9.7 A		6.0 A		6.6 A								

ID LEGEND:

LOAD CLASSIFICATION	CONNECTED LOAD	DEMAND FACTOR	DEMAND LOAD	PANEL TOTALS	
LIGHTING	10.7 KVA	100.0%	10.7 KVA		
RECEPTACLES	0.0 KVA	#DIV/0!	0.0 KVA	**TOTAL CONNECTED LOAD:**	18.5 KVA
HVAC	0.0 KVA	100.0%	0.0 KVA	**TOTAL DEMAND LOAD:**	16.7 KVA
MOTOR LOAD	6.0 KVA	100.0%	6.0 KVA	**TOTAL CONNECTED CURRENT:**	22.3 A
FIRE ALARM	0.0 KVA	100.0%	0.0 KVA	**TOTAL DEMAND CURRENT:**	20.1 A
KITCHEN EQUIPMENT	0.0 KVA	65.0%	0.0 KVA		
OTHER LOADS	0.0 KVA	100.0%	0.0 KVA		

NOTES:

STATE OF HAWAII 1959

Airports Division
DEPARTMENT OF TRANSPORTATION
STATE OF HAWAII

GARRET A. MASUDA
LICENSED PROFESSIONAL ENGINEER
No. 9756-E
HAWAII, U.S.A.

EXP. 4/30/2024

This work was prepared by me or under my supervision.

DSGN.	DRWN.	CHKD.	APPD.

NO.	DATE	REVISIONS

DATE

PROJECT TITLE :

CONVERT CARGO BUILDING TO WORKSHOP

AT
DANIEL K. INOUYE INTERNATIONAL AIRPORT
HONOLULU, OAHU, HAWAII

PROJECT NO.:

CO1325-33

SHEET TITLE:

ELECTRICAL PANEL SCHEDULE

DATE :	DWG. NO.
05/10/23	E-702
SHEET :	
81 OF 84 SHEETS	

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MECHANICAL EQUIPMENT SCHEDULE

EQUIPMENT ID	EQUIPMENT DESCRIPTION	SPECIFIED RATING (HP / KW)	VOLTAGE / PHASE	FLA / RLA	MOCP	MCA	TERMINATION TYPE	DISCONNECT SWITCH		BRANCH CIRCUIT REQUIREMENT	REMARKS
								POLES / AMPS	ENCLOSURE		
EF-1	PAINT SHOP STORAGE	0.25	120V / 1PH	3.5		4.0	HARDWIRED		NEMA 1		
EF-2	NOT USED	0.17	120V/1PH	-		-	HARDWIRED		EP		
EF-3	PAINT SHOP LOCKER RM / UNISEX RR	0.25	120V/1PH	2.85		4.0	HARDWIRED		EP		
EF-4	CARPENTER LOCKER RM / UTILITY RM / UNISEX RR	0.25	120V/1PH	3.5		4.0	HARDWIRED		NEMA 1		
EF-5	CARPENTER SHOP	1	120V/1PH	11.5		14.0	HARDWIRED		DUST TIGHT		
EF-6	*MEZZANINE*	*3*	*208V / 3PH*	*9.7*		*12.0*	*HARDWIRED*		*NEMA 1*		
EF-7	*MEZZANINE*	*3*	*208V / 3PH*	*9.7*		*12.0*	*HARDWIRED*		*NEMA 1*		
EF-8	*GEN STORAGE*	*2*	*208V / 1PH*	*12.5*		*16.0*	*HARDWIRED*		*NEMA 1*		
EF-9	*GEN STORAGE*	*2*	*208V / 1PH*	*12.5*		*16.0*	*HARDWIRED*		*NEMA 1*		
ACCU 1	PAINT SHOP BREAK ROOM OFFICE		208V / 1PH	7 FAN 0.4	25	19.0		2P30A	NEMA 1		PUY-A24NHA7
ACCU 2	CARPENTER SHOP BREAK ROOM		208V / 1PH	15	15	11.0		2P30A	NEMA 1		PUY-A12NKA7
ACCU 3	CAPENTER SHOP OFFICE		208V / 1PH	15	15	11.0		2P30A	NEMA 4XSS		PUY-A12NKA7
FCU 1.1	*PAINT SHOP OFFICE*		*208V / 1PH*	*0.19*	*15*	*1.0*		*2P30A*	*NEMA 1*		*PKA-A12LA*
FCU 1.2	*PAINT SHOP BREAK ROOM*		*208V / 1PH*	*0.19*	*15*	-		*2P30A*	*NEMA 1*		*PKA-A18LA*
FCU 2.1	CAPENTER SHOP OFFICE		208V / 1PH	0.19	*	1.0	-	-	-	-	PKA-A12LA POWERED FROM ACCU
FCU 3.1	CAPENTER SHOP BREAK ROOM		208V / 1PH	0.19	*	1	-	-	-	-	PKA-A12LA POWERED FROM ACCU
DC-1	*DUST COLLECTOR*	*50HP*	*480V / 3PH*						*NEMA 4XSS*		
CF-1	*STORAGE*		208V / 1PH	*10A*	*2P20A*						
CF-2	*STORAGE*		208V / 1PH	*10A*	*2P20A*						
CF-3	*STORAGE*		208V / 1PH	*10A*	*2P20A*						
AC-1 (E)	*AIR COMPRESSOR (E)*	*1/3HP*	*120V / 1PH*	*19A*	*1P40A*						
IWH-1	*PAINT SHOP BREAK ROOM*	*8.3 KW*	*208V/1PH*	*40A*	*2P50A*						
IWH-2	*CARPENTER SHOP BREAK ROOM*	*8.3 KW*	*208V/1PH*	*40A*	*2P50A*						
EWH-1	*CARPENTER SHOP OFFICE*	*6KW*	*208V /1-PH*	*28.8A*	*36.1A*						

Airports Division
DEPARTMENT OF TRANSPORTATION
STATE OF HAWAII

GARRET A. MASUDA
LICENSED PROFESSIONAL ENGINEER
No. 9756-E
HAWAII, U.S.A.

EXP. 4/30/2024

This work was prepared by me or under my supervision.

DSGN.	DRWN.	CHKD.	APPD.

NO.	DATE	REVISIONS

DATE

PROJECT TITLE :

CONVERT CARGO BUILDING TO WORKSHOP

AT
DANIEL K. INOUYE INTERNATIONAL AIRPORT
HONOLULU, OAHU, HAWAII

PROJECT NO.:

CO1325-33

SHEET TITLE:

MECHANICAL SCHEDULE

DATE :
05/10/23
SHEET :
82 OF 84 SHEETS

DWG. NO.
E-703

C:\USERS\MARC\DESKTOP\D_-_B\INS\2022\220870\5-10-2023\MMAE-703.DWG

CARPENTER SHOP EQUIPMENT SCHEDULE

EQUIPMENT ID	EQUIPMENT DESCRIPTION	SPECIFIED RATING (HP / KW)	VOLTAGE / PHASE	FLA / RLA	MOCP	MCA	TERMINATION TYPE	DISCONNECT SWITCH		BRANCH CIRCUIT REQUIREMENT	REMARKS
								POLES / AMPS	ENCLOSURE		
1	DISC SANDER										
2	24" SURFACE PLANER										
3	8" JOINTER										
4	10" TABLE SAW										
5	10" TABLE SAW										
6	18" SURFACE PLANER										
7	8" JOINTER										
8	4'X8" ROLLING WORK TABLE										
9	4'X8" ROLLING WORK TABLE										
10	4'X8" ROLLING WORK TABLE										
11	16" RADIAL ARM SAW										
12	8-1/2" CHOPSAW										
13	24" BAND SAW										
14	14" BAND SAW										
15	16-1/2" DRILL PRESS										
16	6" BENCH GRINDER										
17	6" BUFFER										
18	16-1/2" DRILL PRESS										
19	12" RADIAL ARM SAW										
20	10" SLD. CHOPSAW										
21	EMERGENCY EYE WASH PORTABLE, SELF CONTAINTED.										
22											

STATE OF HAWAII
1959
STATEHOOD

Airports Division
DEPARTMENT OF TRANSPORTATION
STATE OF HAWAII

GARRET A. MASUDA
LICENSED PROFESSIONAL ENGINEER
No. 9756-E
HAWAII, U.S.A.

EXP. 4/30/2024

Garret A. Masuda

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DSGN.	DRWN.	CHKD.	APPD.

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PROJECT TITLE :

CONVERT CARGO BUILDING TO WORKSHOP

AT
DANIEL K. INOUYE INTERNATIONAL AIRPORT
HONOLULU, OAHU, HAWAII

PROJECT NO.:

CO1325-33

SHEET TITLE:

CARPENTER SHOP EQUIPMENT SCHEDULE

DATE :	DWG. NO.
05/10/23	E-704
SHEET :	
83 OF 84 SHEETS	

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LIGHT FIXTURE SCHEDULE

TYPE	GENERAL DESCRIPTION	MOUNTING STYLE	CHASSIS / FINISH	DRIVER / BALLAST	SHIELDING / REFLECTOR	NOMINAL DIMENSIONS	LAMP TYPE	INPUT WATTS	LUMEN OUTPUT	COLOR TEMP	CRI	VOLTAGE	MANUFACTURER + MODEL NUMBER	REMARKS
A1	HEAVY INDUSTRIAL HIGH BAY/LOW BAY	CEILING PENDANT					LED				80 CRI	120V	GE ABR2-0-15-H-47-1D-QV-23-K-Q-R	
B1	HEAVY INDUSTRIAL HIGH BAY/LOW BAY	CEILING PENDANT					LED				84 CRI	120-277V	GE ABR2-0-09-H-47-1D-QV-23-K-Q-R	
B2	HEAVY INDUSTRIAL HIGH BAY/LOW BAY	CEILING PENDANT					LED				82 CRI	120-277V	GE ABR2-0-09-H-47-1D-QV-23-K-Q-R	
C1	LINEAR INDUSTRIAL 1X4 GASKETED	CEILING PENDANT					LED				82 CRI	120-277V	GE ALR2-0-4T-10-T-48-1D-S-Q-V-Q-21-K-Q-W	
D1	2X4 TROEFFER	CEILING RECESSED					LED				82 CRI	120-277V	COLUMBIA: CBT24-LSCS	
E1	LINEAR WRAP AROUND - REVALUME	CEILING SURFACE MOUNTED					LED				90 CRI	120V	COLUMBIA: RLW-4-40-ML-FA-W-EDU	
FF	EXPLOSION-PROOF LINEAR LED	CEILING PENDANT					LED				80 CRI	120V	PHOENIX: LFXB-LED-4-CW (5000K, CLASS1, DIVISION 1)	
KIM	EXTERIOR WALL MOUNTED SCONCE WALL DIRECTOR	WALL MOUNTED					LED				80 CRI	120V	KIM LIGHTING WDS-D-24L-40-3K7-RW-UNV-GTT-SCP/8F-SCM2	(SENSOR HIGH/LOW at night, surface conduit entry type 4W distribution)
X	EXIT SIGN	CEILING RECESSED					LED				80 CRI	120V	EVENLITE CHY-1-WW-CN-PC1	
Y	EMERGENCY LIGHT WET LOCATION TUFFLITE IX	WALL SURFACE					LED				80 CRI	120V	EVENLITE IX-2N42-L127-SD	

Airports Division
DEPARTMENT OF TRANSPORTATION
STATE OF HAWAII

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EXP. 4/30/2024

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CONVERT CARGO BUILDING TO WORKSHOP

AT
DANIEL K. INOUYE INTERNATIONAL AIRPORT
HONOLULU, OAHU, HAWAII

PROJECT NO.:

CO1325-33

SHEET TITLE:

LUMINAIRE SCHEDULE

DATE :
05/10/23

SHEET :
84 OF 84 SHEETS

DWG. NO.
E-705

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