Washington State Department of Health contact
WWW.doh.wa.gov – (360) 236-2970

CLINICS REQUIRE DOH APPROVAL

INDIGO - PUYALLUP

4505 S MERIDIAN
PUYALLUP, WA 98373
PERMIT AND CONSTRUCTION SET - 05.09.2024

City of Puyallup
Development & Permitting Services
ISSUED PERMIT
Building | Planning
Engineering | Public Works
Fire | Traffic

City of Puyallup
Building
ACCEPTED
JMontgomery
06/07/2024
11:47:28 AM

City of Puyallup
Development Engineering
APPROVED
See permit conditions.
ycharitou
06/06/2024
8:40:11 AM

City of Puyallup
Planning Division
APPROVED
See permit conditions.
NComstock
05/23/2024
8:57:19 AM

ARCHITECTURAL SYMBOLS

TRUE NORTH / PLAN NORTH — NORTH ARROW

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

1 / 4 A-211 2 / 3 — INTERIOR ELEVATION

SIM 1 A-591 — DETAIL CALLOUT - SECTION

SIM 1 A-591 — DETAIL CALLOUT - PLAN

101 — DOOR NUMBER CALLOUT

CPT / VCT — FLOOR FINISH TRANSITION

ROOM NAME 101 — ROOM NAME/NUMBER

11'-0" — CEILING HEIGHT

DATUM POINT

NAME ELEVATION — ELEVATION MARKER

CENTER LINE

CUT LINE

6W1 — WALL TYPE CALLOUT

W1 — WINDOW TYPE CALLOUT

R1 — RELITE TYPE CALLOUT

SF1 — STOREFRONT TYPE CALLOUT

1 — SHEET NOTE - DEMOLITION

1 — SHEET NOTE

1 — REVISION

ABBREVIATIONS

A	----------
ACT	ACOUSTICAL CEILING TILE SUSPENDED ACOUSTICAL CEILING
ADA	AMERICANS WITH DISABILITIES ACT
AFF	ABOVE FINISH FLOOR
ALT	ALTERNATE
B	----------
BOD	BOTTOM OF DECK
C	----------
CF	CLEAR FINISH
CFCI	CONSTRACTOR FURNISH, CONTRACTOR INSTALLED
CG	CORNER GUARD
CL	CENTER LINE
CLG	CEILING
CTR	CENTER
D	----------
DIA	DIAMETER
DN	DOWN
DR	DOOR
DWG(S)	DRAWING(S)
E	----------
E	EAST
EA	EACH
EQ	EQUAL / EQUIVALENT
EQUIP	EQUIPMENT
EXIST (E)	EXISTING
F	----------
FA	FIRE ALARM
FD	FLOOR DRAIN / FOOTING DRAIN
FE	FIRE EXTINGUISHER
FEB	FIRE EXTINGUISHER IN BRACKET
FEC	FIRE EXTINGUISHER IN CABINET
FF	FACTORY FINISH / FINISH FLOOR
FLR	FLOOR
FO	FACE OF / FINISHED OPENING
FOC	FACE OF CONCTRETE
FOM	FACE OF MASONRY
FOS	FACE OF STUD
FRP	FIBERGLASS REINFORCED PANEL
FT	FOOT
G	----------
GA	GAUGE
GALV	GALVANIZED
GB	GYPSUM BOARD
GL	GLAZING / GLASS
GWB	GYPSUM WALL BOARD
H	----------
H	HIGH
HC	HOLLOW CORE
HDF	HIGH DENSITY FIBERBOARD
HM	HOLLOW METEL
HORIZ	HORIZONTAL
HR	HOUR
HT	HEIGHT
HVAC	HEATING, VENTILATION, AIR CONDITIONING
HW	HOT WATER
I	----------
IN	INCHES
INS/INSUL	INSULATION
J	----------
K	----------
KDHM	KNOCK DOWN HOLLOW METAL
L	----------
LB(S)	POUNDS
LF	LINEAR FEET
M	----------
MATL (MAT'L)	MATERIAL
MAX	MAXIMUM
MDF	MEDIUM DENSITY FIBERBOARD
MECH	MECHANICAL
MEP	MECHANICAL,, ELECTRICAL, PLUMBING
MFR	MANUFACTURER
MIN	MINIMUM
MISC	MISCELLANOUS
N	----------
N	NORTH
N/A	NOT APPLICABLE
NIC	NOT IN CONTRACT
NO	NUMBER
NOM	NOMINAL
NTS	NOT TO SCALE
O	----------
O/	OVER
OC (oc)	ON CENTER
OCC	OCCUPANT
OFCI	OWNER FURNISHED, CONTRACTOR INSTALLED
OFOI	OWNER FURNISHED, OWNER INSTALLED
OFVI	OWNER FURNISHED, VENDOR INSTALLED
OH	OVERHEAD
OPP	OPPOSITE
P	----------
PLAM	PLASTIC LAMINATE
PR	PAIR
PRE-FIN	PRE-FINISHED
PT	PAINT
PTILE	PORCELAIN TILE
Q	----------
QRT	QUARTZ REINFORCED TILE
QTY	QUANTITY
R	----------
RAD	RADIUS
RB	RUBBER BASE
RCP	REFLECTED CEILING PLAN
REFR	REFRIDGERATOR
REINF	REINFORCED
REQ'D	REQUIRED
REV	REVISION
RM	ROOM
RO	ROUGH OPENING
RUB	RUBBER
S	----------
S	SOUTH
SCHED	SCHEDULE
SF	STOREFRONT / SQUARE FOOT
SHWR	SHOWER
SIM	SIMILAR
SLR	SEALER
SQ	SQUARE
SQFT	SQUARE FEET
SS	STAINLESS STEEL
ST	STAIN(ED)
STC	SOUND TRANSMISSION CLASS
STD	STANDARD
STOR	STORAGE
STRUCT	STRUCTURE / STRUCTURAL
SV	SHEET VINYL
T	----------
T	TILE
t	TREAD
TBB	TILE BACKER BOARD
TEMP	TEMPORARY
THK	THICK
TLT	TOILET
TO	TOP OF
TOS	TOP OF SLAB / TOP OF STRUCTURE
TPD	TOILET PAPER DISPENSER
TRTD	TREATED
TYP	TYPICAL
U	----------
U/	UNDER
UNO	UNLESS NOTED OTHERWISE
V	----------
VACT	VINYL FACED ACOUSTICAL CEILING TILE
VCT	VINYL COMPOSITION TILE
VNR	VENEER
VWC	VINYL WALL COVERING
W	----------
W/ (w/)	WITH
WC	WATER CLOSET
WH	WATER HEATER
WOM	WALK OFF MAT
WT	WEIGHT

SHEET INDEX

SHEET NUMBER	DRAWING DESCRIPTION
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A-121	FLOOR PLAN
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A-132	EQUIPMENT & PLUMBING SCHEDULE
A-133	FURNITURE FLOOR PLAN
A-141	FINISH FLOOR PLAN
A-151	REFLECTED CEILING PLAN
A-211	TYPICAL INTERIOR ELEVATIONS
A-212	INTERIOR ELEVATIONS
A-213	INTERIOR ELEVATIONS
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A-335	FURNITURE SPECIFICATIONS
A-351	DOOR & RELITE SCHEDULE
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A-402	TYPICAL LIGHT GAUGE DETAILS
A-403	INTERIOR DETAILS
A-510	CEILING DETAILS - SEISMIC
A-511	CEILING DETAILS
A-512	TYPICAL ADA MOUNTING HEIGHTS, LOCATIONS, AND CLEARANCES
A-601	INTERIOR SIGNAGE FLOOR PLAN
A-602	EGD FLOOR PLAN
A-603	INTERIOR SIGNAGE AND EGD SCHEDULES
A-651	CASEWORK TYPES
A-652	CASEWORK TYPES
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M-002	MECHANICAL SPECIFICATIONS
M-003	WSEC MECHANICAL REQUIREMENTS LIST
M-004	WSEC MECHANICAL REQUIREMENTS LIST
M-005	WSEC MECHANICAL REQUIREMENTS LIST
M-006	WSEC MECHANICAL REQUIREMENTS LIST
M-007	WSEC MECHANICAL REQUIREMENTS LIST
M-008	WSEC MECHANICAL REQUIREMENTS LIST
M-009	WSEC MECHANICAL REQUIREMENTS LIST
M-010	WSEC MECHANICAL REQUIREMENTS LIST
M-011	WSEC MECHANICAL REQUIREMENTS LIST
M-012	WSEC MECHANICAL REQUIREMENTS LIST
M-013	WSEC MECHANICAL REQUIREMENTS LIST
M-014	WSEC MECHANICAL REQUIREMENTS LIST
M-015	WSEC MECHANICAL REQUIREMENTS LIST
M-016	WSEC MECHANICAL REQUIREMENTS LIST
M-017	WSEC MECHANICAL REQUIREMENTS LIST
M-018	WSEC MECHANICAL REQUIREMENTS LIST
M-019	WSEC MECHANICAL REQUIREMENTS LIST
M-020	WSEC MECHANICAL REQUIREMENTS LIST
M-021	WSEC MECHANICAL REQUIREMENTS LIST
M-022	WSEC MECHANICAL REQUIREMENTS LIST
M-023	WSEC MECHANICAL REQUIREMENTS LIST
M-024	WSEC MECHANICAL REQUIREMENTS LIST
M-201	HVAC FLOOR PLAN
M-301	HVAC ROOF PLAN
M-601	MECHANICAL DETAILS
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E-004	ENERGY FORMS
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PLUMBING	
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P-002	PLUMBING CALCULATIONS AND SPECIFICATIONS
P-201	PLUMBING WASTE AND VENT FLOOR PLAN
P-301	PLUMBING DOMESTIC WATER FLOOR PLAN
P-601	PLUMBING DETAILS

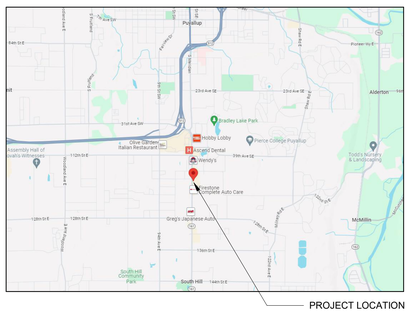
PROJECT INFORMATION

PROJECT DESCRIPTION:	NEW 4,833 (NET) SF URGENT CARE AND OCC MED CLINIC
PROJECT NAME:	INDIGO - PUYALLUP
SITE ADDRESS:	4505 S MERIDIAN PUYALLUP, WA 98373
PARCEL NUMBER:	0419106022
LEGAL DESCRIPTION:	SECTION 10 TOWNSHIP 19 RANGE 04 QUARTER 23 L 1 OF S P 2016-07-20-5007 EASE OF REC OUT OF 2-091 SEG 2017-0119 DX8/30/16 DX
CODES UTILIZED:	2021 INTERNATIONAL BUILDING CODE (IBC) W/ WAC AMENDMENTS 2017 ICC/ANSI A117.1 2021 INTERNATIONAL FIRE CODE (IFC) W/ STATE AND CITY AMENDMENTS 2021 INTERNATIONAL MECHANICAL CODE (IMC) W/ STATE AMENDMENTS 2021 UNIFORM PLUMBING CODE (UPC) 2020 NATIONAL ELECTRICAL CODE 2021 WASHINGTON STATE ENERGY CODE 2021 INTERNATIONAL ENERGY CONSERVATION CODE PUYALLUP MUNICIPAL CODE
JURISDICTION:	CITY OF PUYALLUP
ZONING:	URBAN CENTER MIXED USE (UCX)
USE:	BUSINESS (NO CHANGE IN USE)
LOT AREA:	4.55 ACRES (198,198 SF)
OCCUPANCY:	BUSINESS (MEDICAL OFFICE)
CONSTRUCTION TYPE:	WOOD FRAME VB
SPRINKLERED:	NO
NUMBER OF STORIES:	1 STORY
BUILDING HEIGHT:	EXISTING

GENERAL NOTES

1. ALL WORK SHALL CONFORM WITH 2018 INTERNATIONAL BUILDING CODE, WASHINGTON STATE ENERGY CODE AND ALL GOVERNING JURISDICTIONS' RULES, ORDINANCES, AND REGULATIONS.
2. SEPARATE PERMITS ARE REQUIRED FOR ELECTRICAL.
3. THE CONTRACTOR SHALL CONSULT PLANS OF ALL TRADES AND CONSULTANTS, INCLUDING DESIGN-BUILD DOCUMENTS TO VERIFY SIZE, LOCATION, WEIGHT, POWER, AND OTHER REQUIREMENTS, PRIOR TO BIDDING AND AGAIN PRIOR TO BEGINNING WORK.
4. THE CONTRACTOR SHALL PROVIDE TEMPORARY BRACING FOR THE STRUCTURE AND STRUCTURAL COMPONENTS UNTIL FINAL CONNECTIONS HAVE BEEN COMPLETED IN ACCORDANCE WITH THE CONSTRUCTION DOCUMENTS.
5. PROVIDE NEAT CUT WHERE UTILITIES PENETRATE RATED WALL AND FLOOR ASSEMBLIES, SEAL WITH FIRE-RATED, NON-COMBUSTIBLE MATERIAL, IMPERVIOUS TO THE PASSAGE OF SMOKE, CONFORMING TO CODE AND BUILDING OFFICIAL'S REQUIREMENTS.
6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL SAFETY PRECAUTIONS AND THE METHODS, TECHNIQUES, SEQUENCES, OR PROCEDURES REQUIRED BY THE GOVERNING JURISDICTIONS.
7. NO BUILDING OR PORTION OF BUILDING SHALL BE OCCUPIED OR USED FOR STORAGE PRIOR TO THE ISSUANCE OF A CERTIFICATE OF OCCUPANCY FOR THAT BUILDING OR PORTION OF THE BUILDING.
8. PRIOR TO BEGINNING ANY WORK, THE CONTRACTOR SHALL VERIFY THE LOCATION OF UTLITIES AND PROTECT THEM FROM DAMAGE.
9. ALL DEMOLISHED OR REMOVED MATERIALS SHALL BE DISPOSED OF OFF-SITE BY THE CONTRACTOR IN A LEGAL MANNER.
10. PROVIDE APPROVED FIRE EXTINGUISHERS AS REQUIRED BY THE FIRE MARSHALL. VERIFY LOCATION INDICATED IN THE CONSTRUCTION DOCUMENTS WITH THE FIRE MARSHALL AND THE GENERAL CONTRACTOR PRIOR TO FRAMING
11. ALL DIMENSIONS INDICATED ARE TO FACE OF FINISH, FACE OF STOREFRONT MULLION, OR FACE OF EXISTING SURFACE UNLESS OTHERWISE NOTED.
12. DO NOT SCALE THESE DRAWINGS FOR DIMENSIONS.
13. VERIFY ALL DIMENSIONS, DATUMS, AND LEVELS PRIOR TO CONSTRUCTION.
14. DO NOT MODIFY THE WORK SHOWN EXCEPT WITH WRITTEN INSTRUCTION FROM ARCHITECT.
15. REPORT ANY CONFLICTS BETWEEN THE DRAWINGS AND EXISTING SPACE BEFORE PROCEEDING. ANY WORK DONE BY THE CONTRACTOR AFTER DISCOVERY OF CONFLICTING INFORMATION SHALL BE DONE AT THE CONTRACTOR'S RISK.
16. THESE DRAWINGS ARE THE EXCLUSIVE PROPERTY OF THE ARCHITECT AND MAY BE REPRODUCED ONLY WITH WRITTEN PERMISSION OF THE ARCHITECT. AUTHORIZED REPRODUCTIONS MUST BEAR THE NAME OF THE ARCHITECT.

VICINITY MAP



PROJECT TEAM

OWNER
MULTICARE HEALTH SYSTEM
PO BOX 5299
TACOMA, WA 98415-5299
CONTACT: MATTHEW CLARK
PHONE: 425.429.1532
EMAIL: MATTHEW.CLARK@MULTICARE.ORG

CONTRACTOR
TBD

ARCHITECT
BCRA, INC
2106 PACIFIC AVENUE, SUITE 300
TACOMA, WA 98402
CONTACT: HEIDI KIHLMAN
PHONE: 253.627.4367
EMAIL: HKIHLMAN@BCRADESIGN.COM

DEFERRED PERMITS

ELECTRICAL
SIGNAGE

THE APPROVED CONSTRUCTION PLANS AND **ALL** ENGINEERING MUST BE POSTED ON THE JOB AT ALL INSPECTIONS IN A VISIBLE AND READILY ACCESSIBLE LOCATION.

FULL SIZED LEDGIBLE **COLOR** PLANS ARE REQUIRED TO BE PROVIDED BY THE PERMITTEE ON SITE FOR ALL INSPECTIONS **(MIN. PLAN SIZE 24" X 36")**

bcra
T 253.627.4367 F 253.627.4385 WWW.BCRADESIGN.COM
2106 PACIFIC AVENUE, SUITE 300, TACOMA, WA 98402

SEAL
5664 REGISTERED ARCHITECT DOUGLAS P. OBERST STATE OF WASHINGTON

PRCTI20240772

PROJECT
MULTICARE TENANT IMPROVEMENT
INDIGO - PUYALLUP
4505 S MERIDIAN
PUYALLUP, WA 98373

REVISIONS

DATE
05.09.2024

BCRA NO.
22023.00.11

DRAWN BY:

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COVER

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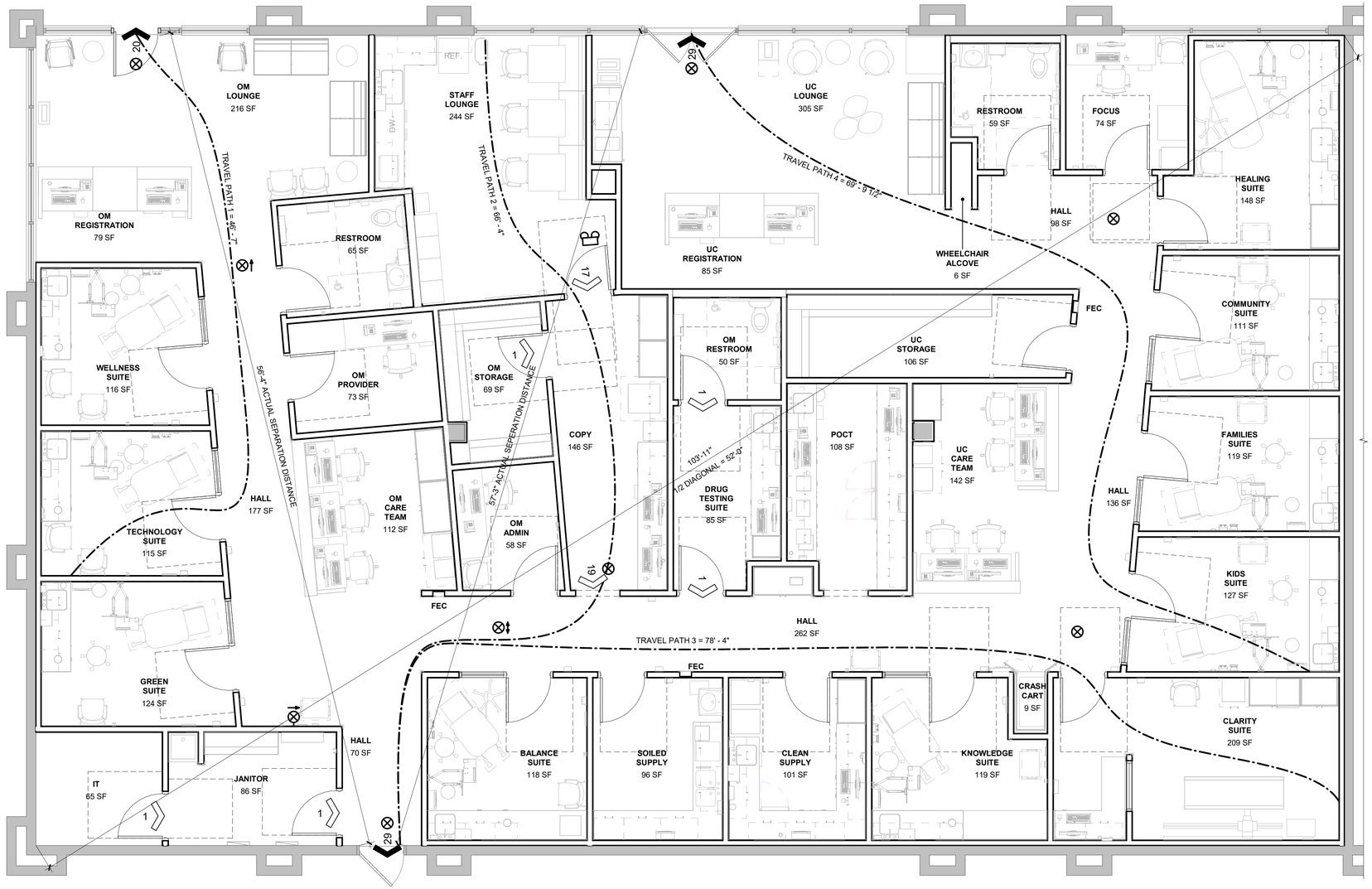

1 LIFE SAFETY PLAN
1/4" = 1'-0"

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

PLAN NORTH

CODE INFORMATION

SCOPE OF WORK:
TENANT IMPROVEMENT IN AN EXISTING COMMERCIAL SHELL. 4,833 (NET) SF URGENT CARE CLINIC COMPLYING WITH TYPE B OCCUPANCY REQUIREMENTS, NO PERSONS INCAPABLE OF SELF-PRESERVATION. THE PROPOSED CLINIC CONTAINS (10) EXAM SPACES AND ADDITIONAL CLINIC SUPPORT SPACES. NO STRUCTURAL MODIFICATIONS NEEDED.

BUILDING

EXISTING USE: (B) RETAIL
PROPOSED USE: (B) MEDICAL OFFICE

LEASE SPACE SQUARE FOOTAGE: 4,833 SF (NET)

OCCUPANCY CALCULATIONS per table 1004.5

BUSINESS AT 150/OCC

PATIENT ROOMS:

COMMUNITY SUITE	112 SF	
FAMILIES SUITE	119 SF	
KIDS SUITE	127 SF	
TECHNOLOGY SUITE	115 SF	
HEALING SUITE	149 SF	
CLARITY SUITE	209 SF	
KNOWLEDGE SUITE	119 SF	
GREEN SUITE	118 SF	
WELLNESS SUITE	116 SF	
BALANCE SUITE	124 SF	
TOTAL:	1,308 SF GROSS / 100 OLF	= 14 OCC

BUSINESS SPACES:

POCT	108 SF	
SOILED SUPPLY	96 SF	
CLEAN SUPPLY	102 SF	
DRUG TESTING SUITE	90 SF	
IT	65 SF	
COPY	146 SF	
FOCUS	75 SF	
UC REGISTRATION	85 SF	
OM REGISTRATION	79 SF	
UC CARE TEAM	142 SF	
OM CARE TEAM	112 SF	
OM OFFICE 1	58 SF	
OM OFFICE 2	73 SF	
TOTAL:	1,231 SF / 150 OLF	= 9 OCC

ASSEMBLY:

UC LOUNGE	310 SF / 15 OLF	= 21 OCC
OM LOUNGE	217 SF / 15 OLF	= 15 OCC
STAFF LOUNGE	245 SF / 15 OLF	= 17 OCC

STORAGE:

UC STORAGE	107 SF	
OM STORAGE	70 SF	
JANITOR	88 SF	
TOTAL:	265 SF / 300 OLF	= 1 OCC

TOTAL OCCUPANTS: = **77 OCC**

PLUMBING FIXTURE COUNT: 77 TOTAL OCCUPANTS

PLUMBING REQUIRED PER TABLE 2902.1:
WC: 1 PER 25 (1ST 50); THEN 1 PER 50
LAV: 1 PER 40 (1ST 40); THEN 1 PER 80

PROVIDED:
3 WATER CLOSET
3 LAVATORY

EXITS REQUIRED: per table 1006.2.1 — MAX OCC FOR 1 EXIT IS 49 — **(2) EXISTING EXITS**

EXIT DISTANCE per section 1007.1.1 — 1/2 OF DIA. OF SPACE (UNSPRINKLERED)
52'-0" DISTANCE NEEDED
56'-4" DISTANCE ACTUAL
57'-3" DISTANCE ACTUAL

EXIT WIDTHS per section 1005.3.2 — OCC LOAD (77) 0.2
15.4"
32" MIN

TRAVEL DISTANCE: per table 1017.2 — UNSPRINKLERED =200'
TRAVEL PATH 1: 46'-7"
TRAVEL PATH 2: 66'-4"
TRAVEL PATH 3: 78'-4"
TRAVEL PATH 4: 69'-9 1/2"

ADA TRANSACTION PROVIDED AT REGISTRATION DESK (SEE A-512 FOR MOUNTING & CLEARANCES)

ADA HANDWASH PROVIDED IN EXAM ROOMS AND TOILETS (SEE A-512 FOR MOUNTING & CLEARANCES)

FIRE EXTINGUISHERS ARE PROVIDED THROUGHOUT IN ACCORDANCE WITH 2018 IFC SECTION 906 AND 2018 NFPA 10. MOUNT FIRE EXTINGUISHERS ALONG EGRESS PATHS WHENEVER POSSIBLE WITH TOPS NO MORE THAN 60 INCHES AND BOTTOM NO LESS THAN 4 INCHES ABOVE THE FLOOR. MINIMUM FIRE EXTINGUISHER RATING IS 2A10BC. MAXIMUM TRAVEL DISTANCE TO AN EXTINGUISHER IS 75 FEET. EACH UNIT OF "A" MAY COVER UP TO 3000 SF OF FLOOR AREA. ADDITIONAL EXTINGUISHERS MAY BE REQUIRED DUE TO SPECIFIC HAZARDS AS OUTLINES IN SECTION 906 OF THE 2018 IFC. 2 FIRE EXTINGUISHERS AND CABINETS PROVIDED.

REFER TO SITE PLAN FOR ADA PATH OF TRAVEL FROM PARKING.

CODE LEGEND

- 135 — EXIT OCCUPANT LOAD - BUILDING
- 62 — EXIT OCCUPANT LOAD - ROOM / AREA
- EXIT LIGHT - REFER ALSO TO ELECTRICAL
- EXIT LIGHT WITH DIRECTIONAL INDICATOR - REFER ALSO TO ELECTRICAL
- WALL MOUNTED EXIT LIGHT - REFER ALSO TO ELECTRICAL
- EMERGENCY LIGHT - REFER ALSO TO ELECTRICAL
- TRAVEL DISTANCE PATH (12'-0")
- TRAVEL DISTANCE
- FEC — FIRE EXTINGUISHER CABINET

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2106 PACIFIC AVENUE, SUITE 300, TACOMA, WA 98402

SEAL
5664
REGISTERED ARCHITECT
DOUGLAS P. OBERST
STATE OF WASHINGTON

City of Puyallup
Development & Permitting Services
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Building | Planning | Engineering | Public Works | Fire | Traffic

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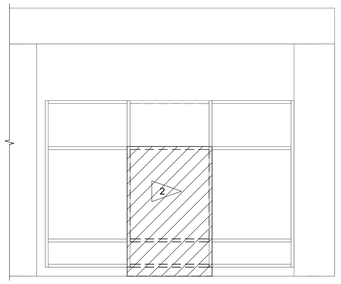
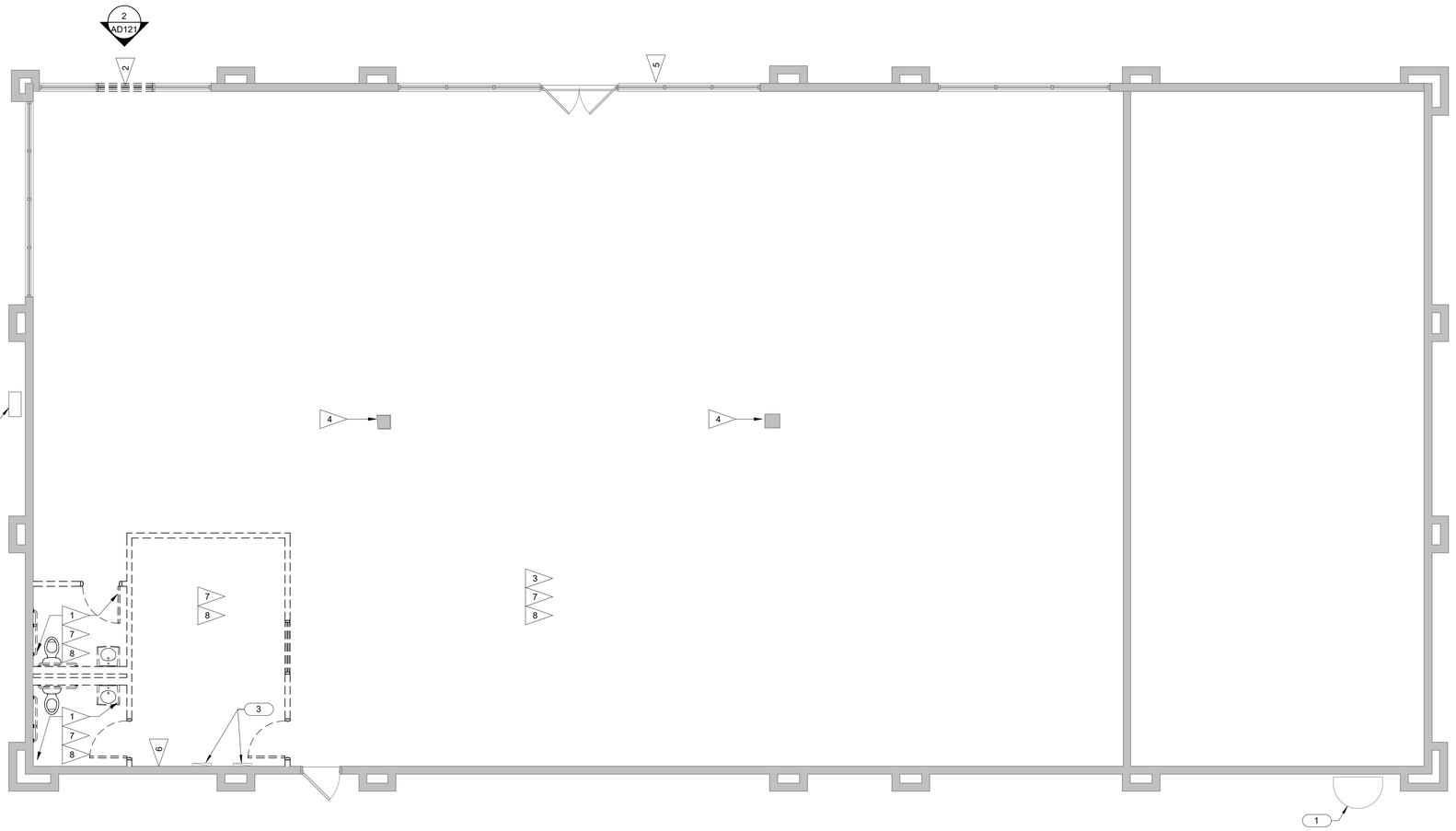


2 DEMOLITION EXTERIOR ELEVATION
1/4" = 1'-0"



1 DEMOLITION FLOOR PLAN
3/16" = 1'-0"

PLAN NORTH

0 2 4 8

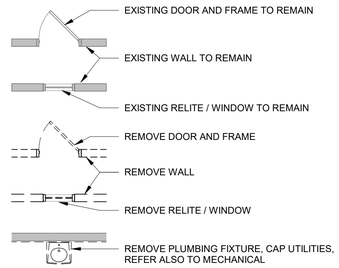
SCALE: 1/4" = 1'-0"

DEMOLITION FLOOR PLAN GENERAL NOTES

1. DISPOSE OF ALL REMOVED ITEMS FROM THE SITE THAT ARE NOT BEING SALVAGED.
2. COORDINATE REMOVED ITEMS WITH NEW WORK.
3. FIELD VERIFY EXISTING CONDITIONS PRIOR TO THE START OF DEMOLITION OPERATIONS. BRING ANY DISCREPANCIES WHICH MAY SIGNIFICANTLY AFFECT DEMOLITION OR NEW CONSTRUCTION TO THE ATTENTION OF THE ARCHITECT FOR REVIEW.
4. DO NOT ALTER THE STRUCTURAL INTEGRITY OF THE EXISTING BUILDING OR ITS ASSEMBLIES UNLESS SPECIFICALLY NOTED OTHERWISE.
5. FOR THE PURPOSES OF THESE DEMOLITION DRAWINGS, DEFINITIONS ARE AS FOLLOWS:
   A. **DEMOLISH** - COMPLETE DEMOLITION OF AN ENTIRE STRUCTURE. NO ITEMS TO BE REMOVED OR SALVAGED.
   B. **REMOVE** - SELECTIVE REMOVAL OF A DESIGNATED BUILDING ELEMENT IN A MANNER THAT ENSURES THAT SURROUNDING EXISTING BUILDING ELEMENTS (TO REMAIN) ARE PROTECTED FROM DAMAGE. ALL REMOVED ITEMS ARE TO BE DISPOSED OF IN AN APPROPRIATE MANNER OFF-SITE.
   C. **SALVAGE** - REMOVAL OF A DESIGNATED BUILDING ELEMENT IN A MANNER THAT PROTECTS THE ITEM BEING REMOVED FOR RE-USE IN THE PROJECT, OR TURNED OVER TO THE OWNER. ITEM IS TO BE STORED BY THE GENERAL CONTRACTOR (FOR RE-USE) OR COORDINATED WITH THE OWNER FOR REMOVAL FROM THE SITE.
6. WHERE EXISTING WALLS AND DOOR FRAMES ARE REMOVED, DISASSEMBLE OR CUT OFF FLUSH ANCHOR BOLTS, CONDUIT, PIPING IN FLOOR AND FILL HOLES W/ CEMENTITIOUS UNDERLAYMENT/GROUT FLUSH W/ FLOOR SURFACE.
7. AREAS OF REMOVAL OF EXISTING GWB ARE TO BE COORDINATED WITH STRUCTURAL, MECHANICAL AND ELECTRICAL DRAWINGS.
8. PROTECT ALL EXISTING STRUCTURE, EQUIPMENT, WALLS, FLOORS, ROOFS AND FINISHES TO REMAIN FROM DAMAGE DURING DEMOLITION. REPAIR AND REPLACE DAMAGED EXISTING CONSTRUCTION.
9. ANY EXISTING CONSTRUCTION OR FINISH ELEMENTS AFFECTED BY THE REMOVAL OF EXISTING BUILDING SYSTEMS SHALL BE PATCHED AND REPAIRED TO MATCH ADJACENT BUILDING FINISHES IN A CONSISTENT MANNER.
10. REMOVE ALL RESTROOM FLOORING AND ASSOCIATED FINISHES INCLUDING ADHESIVE AND WALL BASE UNLESS NOTED OTHERWISE
11. WHERE WALL TILE IS BEING ADDED TO EXISTING WALLS THAT DO NOT CURRENTLY HAVE WALL TILE, REMOVE EXISTING GWB SO THAT NEW TILE BACKER BOARD WILL BE FLUSH WITH EXISTING GWB ABOVE THE TILE WAINSCOT.

DEMOLITION FLOOR PLAN LEGEND

NOTE: NOT ALL LEGEND ITEMS MAY BE PRESENT ON THIS SHEET



DEMOLITION FLOOR PLAN DEMO NOTES

1. REMOVE ALL RESTROOM FIXTURES AND ASSOCIATED EQUIPMENT. CAP AND REROUTE UTILITIES AS NEEDED
2. REMOVE EXISTING STOREFRONT PANELS AS SHOWN TO PREPARE FOR NEW DOOR. GC TO COORDINATE IN THE FIELD WITH A STOREFRONT SYSTEM SPECIALIST FOR BEST APPROACH TO REMOVE STOREFRONT AND ADD DOOR IN ITS PLACE.
3. REMOVE EXISTING SUSPENDED CEILING SYSTEM, ASSOCIATED LIGHT GRILLES AND ACCESSORIES WITHIN SCOPE OF WORK AREA.
4. REMOVE EXISTING FURRED WALL, COLUMN TO REMAIN.
5. REMOVE EXISTING WINDOW FILM
6. REMOVE EXISTING EQUIPMENT UNLESS NOTED OTHERWISE
7. REMOVE ALL EXISTING FINISHES INCLUDING BUT NOT LIMITED TO CARPET, OTHER FLOORING AND ASSOCIATED ADHESIVES; CHAIRRAIL; ELECTRICAL COMPONENTS INCLUDING BUT NOT LIMITED TO FLOOR OUTLETS, WALL OUTLETS, AND OTHER ELECTRICAL COMPONENTS WITHIN SCOPE OF WORK UNLESS NOTED OTHERWISE.
8. REMOVE ALL EXISTING ACOUSTIC CEILING TILE SYSTEMS, LIGHTING, AND MECHANICAL DIFFUSERS WITHIN SCOPE OF WORK. SALVAGE EXISTING DUCTWORK. REFER TO PROPOSED MECHANICAL DRAWINGS FOR NEW DUCTWORK LAYOUT.

DEMOLITION FLOOR PLAN SHEET NOTES

1. LADDER TO ACCESS ROOF TO REMAIN
2. GAS METER TO REMAIN
3. ELECTRICAL PANELS TO REMAIN

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STATE OF WASHINGTON

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PRCTI20240772

PROJECT
MULTICARE TENANT IMPROVEMENT
INDIGO - PUYALLUP
4505 S MERIDIAN
PUYALLUP, WA 98373

REVISIONS

DATE
05.09.2024
BCRA NO.
22023.00.11
DRAWN BY:
REVIEWED BY:
SHEET TITLE
FIRST FLOOR DEMOLITION PLAN

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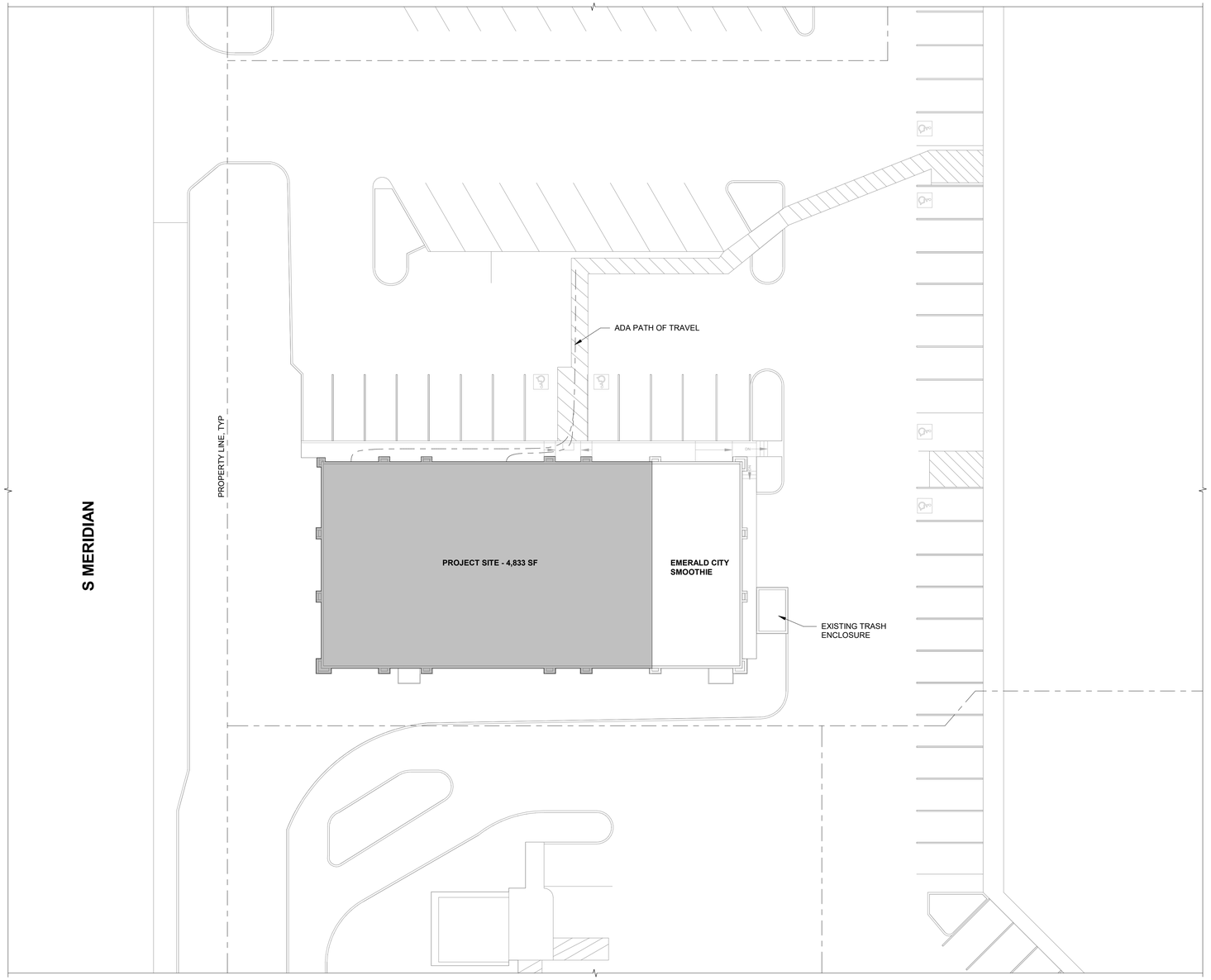

1 SITE PLAN
1/16" = 1'-0"

TRUE NORTH

0 8 16 32
SCALE: 1/16" = 1'-0"

PROJECT LOCATION

4505 S MERIDIAN
PUYALLUP, WA 98373

PARCEL NUMBER:	0419106022
ZONING:	COMMERCIAL PROPERTY (C01)
LOT AREA:	4.55 ACRES (198,198 SF)

SITE PLAN GENERAL NOTES

1. NO EXTERIOR WORK UNLESS REQUIRED BY JURISDICTION OR LANDLORD/DEVELOPMENT. DRAWINGS BASED ON IMAGES. VERIFY-IN-FIELD ALL DIMENSIONS

SITE LEGEND

- EXISTING BUILDING
- PROJECT LOCATION

PARKING REQUIREMENTS

PER PUYALLUP MUNICIPAL CODE
TITLE 20 DEVELOPMENT CODE 20.55.010 (20):
1 PARKING SPACE PER 200 SF OF MEDICAL OFFICE

4833 SF / 200 SF = **17 PARKING SPACES REQUIRED**

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REVIEWED BY: Reviewer
SHEET TITLE
SITE PLAN

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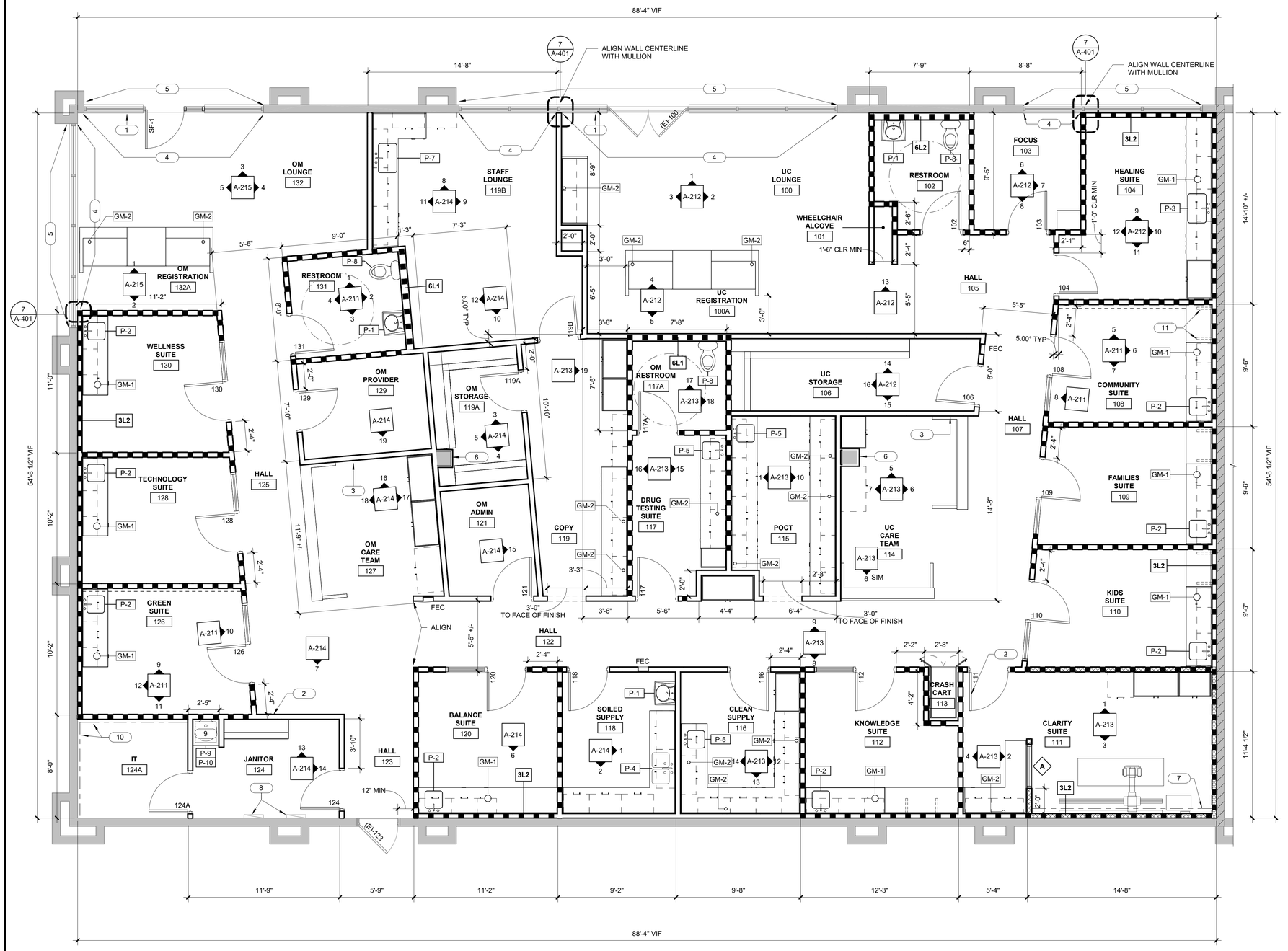

1 FLOOR PLAN
1/4" = 1'-0"

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

PLAN NORTH

FLOOR PLAN GENERAL NOTES

1. DIMENSIONS ARE TO FACE OF STUD, FACE OF STOREFRONT OR FACE OF EXISTING FINISH.
2. WALLS ARE TYPE 3L1 UNO.
3. REFER TO A-351 FOR DOOR TYPES.
4. REFER TO A-401 FOR WALL PARTITION TYPES AND DETAILS.
5. REFER TO A-512 FOR TYPICAL ADA MOUNTING HEIGHTS, LOCATIONS, AND CLEARANCES.
6. NOTIFY ARCHITECT IMMEDIATELY IF EXISTING SHELL AND SHELL COMPONENTS DIFFER FROM WHAT IS SHOWN REFLECTING EXISTING CONDITIONS SO BEST DECISION CAN BE MADE.
7. REFER TO SEPERATE PACKAGES FROM THE ARCHITECT FOR EXTERIOR SIGNAGE AND EXTERIOR WINDOW GRAPHICS.

FLOOR PLAN LEGEND

NOTE: NOT ALL LEGEND ITEMS MAY BE PRESENT ON THIS SHEET

- 6W# — WALL ASSEMBLY; REFER TO SHEETS A-401
- EXISTING DOOR TO REMAIN
- EXISTING WALL TO REMAIN
- EXISTING RELITE / WINDOW TO REMAIN
- INTERIOR FRAMED WALL - STOP WALL AT 6" ABOVE HIGHEST CEILING UNLESS NOTED OTHERWISE - BRACE TO STRUCTURE ABOVE AS SHOWN ON A-521.
- WALL-MOUNTED ITEM - REFER TO INTERIOR ELEVATIONS AND A-131
- RELITE / WINDOW
- A — RELITE / WINDOW TAG
- 123 — DOOR TAG
- DOOR
- FEC — FIRE EXTINGUISHER IN CABINET
- EXISTING FIRE RATED WALL
- 0.79 mm 7'-0" TALL LEAD SHIELDING PER MANUFACTURER'S RECOMMENDATIONS, REFER TO FULL LEAD SHIELDING REPORT FOR SCOPE.
- P-# — PLUMBING FIXTURE TAG, REFER TO A-132
- GM-# — GROMMET TAG, REFER TO A-132
- ACOUSTIC INTERIOR WALL

FLOOR PLAN SHEET NOTES

1. "OPEN" SIGN LOCATION ADJACENT TO DOOR, CENTER BETWEEN MULLIONS. SEE INTERIOR ELEVATIONS. CONFIRM LOCATION WITH OWNER AND EXTERIOR WINDOW GRAPHICS PACKAGE PRIOR TO PLACEMENT.
2. EYE CHART LOCATION, OWNER TO VERIFY DURING ACTIVATION.
3. NURSE CALL ANNUNCIATOR, OWNER TO VERIFY LOCATION DURING CONSTRUCTION.
4. PROVIDE ROLLER SHADES ON WINDOWS, RS-1.
5. PRIVACY FILM, REFER TO EXTERIOR GRAPHIC SIGNAGE PACKAGE.
6. EXISTING COLUMN. GC TO INFORM ARCHITECT IF COLUMN LOCATION VARIES FROM PLAN. COLUMN TO BE WRAPPED WITH WALL TYPE 1C1 UNLESS NOTED OTHERWISE
7. PROVIDE BACKING AS NEEDED PER RADIOLOGY PLANS.
8. EXISTING ELECTRICAL PANELS TO REMAIN.
9. WATER HEATER, TIGHT TO WALL.
10. PROVIDE BACKING AS NEEDED PER CLIENT'S IT PLANS.
11. EH BENCH SUPPORT BRACKET, SURFACE MOUNTED HEAVY DUTY ALUM. BRACKET, EH-1416B, TYP AT SUITES.

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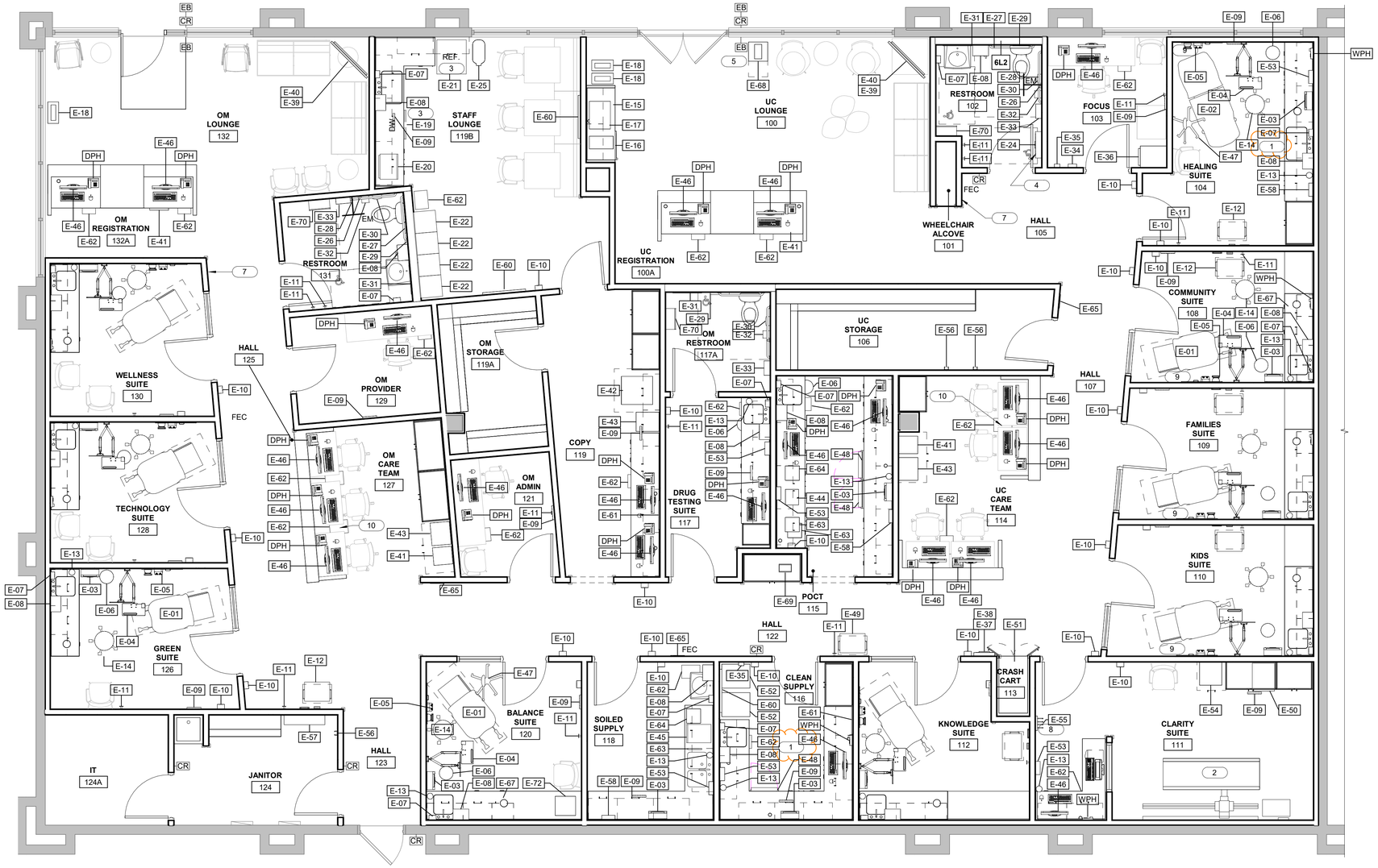

2 FF&E FLOOR PLAN

1/4" = 1'-0"

PLAN NORTH

0 2 4 8

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

EQUIPMENT PLAN GENERAL NOTES

1. PROVIDE WALL BACKING FOR ALL WALL HUNG/ BRACED ITEMS. REFER TO INTERIOR ELEVATIONS ON SHEETS A-211, A-212, A-213, A-214, A-215, A-216, AND TYPICAL MOUNTING HEIGHTS SHEET FOR PLACEMENT ON A-512.
2. COMMUNITY SUITE 108 SHOWS TYPICAL EQUIPMENT LAYOUT FOR 109 FAMILIES SUITE AND 110 KIDS SUITE.
3. 126 GREEN SUITE SHOWS TYPICAL EQUIPMENT LAYOUT FOR 130 WELLNESS SUITE AND 126 TECHNOLOGY SUITE.
4. FOR ADDITIONAL TYPICAL MOUNTING HEIGHTS AND CLEARANCES REFER TO SHEET A-512.

EQUIPMENT PLAN LEGEND

NOTE: NOT ALL LEGEND ITEMS MAY BE PRESENT ON THIS SHEET

- E-## — EQUIPMENT TAG; REFER TO SHEET A-132.
- RECESSED ELECTRICAL PANEL, REFER TO ELECTRICAL
- FURNITURE SHOWN FOR REFERENCE ONLY
- EXISTING DOOR TO REMAIN
- EXISTING WALL TO REMAIN
- EXISTING RELITE / WINDOW TO REMAIN
- INTERIOR FRAMED WALL - STOP WALL AT 6" ABOVE HIGHEST CEILING UNLESS NOTED OTHERWISE - BRACE TO STRUCTURE ABOVE AS SHOWN ON A-521.
- WALL-MOUNTED ITEM - REFER TO INTERIOR ELEVATIONS
- RELITE / WINDOW
- DOOR
- FEC — FIRE EXTINGUISHER IN CABINET
- WPH — WALL MOUNTED PHONE, PROVIDE DATA IN WALL
- DPH — DESK PHONE
- CR — CARD READER BY OTHERS (MOUNTING HEIGHT 42" AFF UNO) PROVIDE RING / STRING. COORDINATE WITH SECURITY VENDOR.
- EB — EXIT RELEASE BUTTON / ADA DOOR OPERATOR BUTTON (MOUNTING HEIGHT 42" AFF UNO). COORDINATE WITH SECURITY VENDOR.
- EM — EMERGENCY PUSH BUTTON, REFER TO INTERIOR ELEVATIONS FOR LOCATION.

EQUIPMENT FLOOR PLAN SHEET NOTES

1. (2) OXYGEN TANKS, TYPE E, 684 CAPACITY. ONE TO BE LOCATED IN CLEAN SUPPLY AND ONE LOCATED IN HEALING SUITE ON CART PROVIDED BY OWNER.
2. X-RAY EQUIPMENT, SEE SHIMADZU MEDICAL SYSTEMS DRAWINGS FOR FURTHER CLARIFICATION.
3. REFRIGERATOR AND DISHWASHER TO MEET ACCESSIBILITY REQUIREMENTS PER ICC-A117.1-2009, SECTIONJ 804.6.6.
4. BABY CHANGE STATION (E-24) IN RESTROOM ONLY.
5. TEMPORARY GRAPHIC STANCHION - REFER TO INTERIOR SIGNAGE PACKAGE.
6. (2) 10 LITER NITROGEN TANKS LOCATED IN CLEAN SUPPLY.
7. PREFERRED LOCATION OF MASTER LIGHT SWITCH, KEY SWITCH FOR PANIC HARDWARE, AND SECURITY PANEL.
8. LOCATION OF THE X-RAY SHUT OFF BUTTON, 60" TO AFF; LOCATED BEHIND THE 18"D COUNTER.
9. POWER / DATA OUTLETS FOR EXAM WORKSTATIONS ARE STACKED IN LINE ON WALL.
10. CARE TEAM PANIC BUTTON.

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EQUIPMENT FLOOR PLAN

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PLUMBING FIXTURE SCHEDULE

MARK	LOCATION	DESCRIPTION	COUNT
P-1	RESTROOM 102, SOILED SUPPLY 118, RESTROOM 131	WALL-MOUNTED SINK, BRENHAM K-1997-1 W/ SHROUD K-1998, WHITE; LAVATORY GRID DRAIN, POLISHED CHROME; FAUCET - SLOAN LINO, EAF-250-ISM	3
P-2	COMMUNITY SUITE 108, FAMILIES SUITE 109, KIDS SUITE 110, KNOWLEDGE SUITE 112, BALANCE SUITE 120, GREEN SUITE 126, TECHNOLOGY SUITE 128, WELLNESS SUITE 130	INTEGRAL SINK (SS-3) - CORIAN #8252, GLACIER WHITE; LAVATORY GRID DRAIN, POLISHED CHROME; FAUCET - KOHLER TRITON	8
P-3	HEALING SUITE 104	INTEGRAL SINK (SS-3) - CORIAN #881, GLACIER WHITE, W/ STRAINER BASKET IN POLISHED CHROME; FAUCET - KOHLER TRITON	1
P-4	SOILED SUPPLY 118	CORIAN #850, GLACIER WHITE (SS-3), W/ STRAINER BASKET IN POLISHED CHROME; FAUCET -CHICAGO MANUAL SINK (50-LES317XKAB); 13.5" SWING ONLY GOOSE NECK, CHROME (GN10ASWG)	1
P-5	POCT 115, CLEAN SUPPLY 116, DRUG TESTING SUITE 117	INTEGRAL SINK (SS-3) - CORIAN #804, GLACIER WHITE (SS-3), W/ STRAINER BASKET IN POLISHED CHROME; FAUCET - KOHLER, TRITON	3
P-7	STAFF LOUNGE 119B	INTEGRAL SINK (SS-3) - CORIAN #5610, GLACIER WHITE (SS-3), W/ STRAINER BASKET IN POLISHED CHROME; FAUCET - KOHLER, TRITON	1
P-8	RESTROOM 102, OM RESTROOM 117A, RESTROOM 131	TOILET - AMERICAN STANDARD, HERITAGE VORMAX, RIGHT HEIGHT (205AA.104), WHITE; PROVIDE AMERICAN STANDARD COMMERCIAL TOILET SEAT THAT IS COMPATIBLE W/ SPECIFIED WATER CLOSET	3
P-9	JANITOR 124	MOP SINK - MUST SEE, MODEL 63M, 10"X24"X24", WHITE, OR APPROVED EQUAL. MOP SINK ACC - HOSE HOLDER, MOP HANGER AND BUMPER GUARDS, WHITE VINYL, OR APPROVED EQUAL MOP FAUCET - CHICAGO FAUCETS 897-CP OR APPROVED EQUAL.	1
P-10	JANITOR 124	WATER HEATER	1

PLUMBING SCHEDULE GENERAL NOTES

1. ADA RESTROOM TOILETS MUST HAVE THE FLUSH HANDLE ON THE SIDE OPPOSITE OF THE WALL FOR ACCESSIBILITY. SEE A-512 FOR RESTROOM ELEVATION DIAGRAMS.

GROMMET SCHEDULE

TYPE MARK	MANUFACTURER	DESCRIPTION	COUNT
GM-1	BOBRICK	B-532, 6" DIA. ROUND, STAINLESS STEEL	12
GM-2	MOCKETT	2 1/2" DIA. ROUND, WHITE	16

GROMMET SCHEDULE GENERAL NOTES

1. COUNTS FOR GM-2 SHOW ONLY LOCATIONS THAT CAN BE PRE DRILLED BY CASEWORK MANUFACTURER. ADDITIONAL LOCATIONS TO BE MADE AND DRILLED IN FIELD BY OWNER.

2. GM-3 IS FOR DESIGN INTENT AND IS OPEN TO CONSIDERATION OF OTHER PRODUCTS THAT MEET SIMILAR SPECIFICATIONS.

SPECIALTY EQUIPMENT SCHEDULE - CONTRACTOR / VENDOR FURNISHED ITEMS

TYPE	DESCRIPTION	RESPONSIBILITY
E-16	BEVERAGE GLASS DOOR REFRIGERATOR	CFCI
E-19	DISHWASHER - 24 IN	CFCI
E-21	REFRIGERATOR - 24.5"W	CFCI
E-23	OPEN SIGN, REMOTE CONTROLLED, 2 HOOKS	CFCI
E-26	GRAB BAR - 18IN	CFCI
E-27	GRAB BAR - 36IN	CFCI
E-28	GRAB BAR - 42IN	CFCI
E-29	SEAT COVER DISPENSER	CFCI
E-30	SURFACE-MOUNTED SANITARY NAPKIN DISPOSAL	CFCI
E-31	MIRROR - 24X36	CFCI
E-33	UTILITY SHELF 5" D & 12" L RESTROOM	CFCI
E-34	KEY BOX	CFCI
E-35	KEY BOX 5-KEY COMBO	CFCI
E-36	SAFE	VFVI
E-38	MOUNTED AED CABINET SEMI-RECESSED	CFCI
E-56	CRUTCH HOOK	CFCI
E-57	UTILITY SHELF WITH MOP AND BROOM HOLDER	CFCI
E-65	FIRE EXTINGUISHER AND CABINET	CFCI
E-66	CORNER GUARD - 54"H (CG-1)	CFCI
E-67	WASTE CAN - INSIDE COUNTER EXAM	CFCI
E-70	TRIMLINE SERIES SURFACE-MOUNTED WASTE RECEPTACLE	CFCI

SPECIALTY EQUIPMENT SCHEDULE - OWNER FURNISHED ITEMS

TYPE	DESCRIPTION	RESPONSIBILITY
E-01	FULL FEATURED EXAMINATION TABLE	OFVI
E-02	FULL FEATURED EXAMINATION TABLE	OFVI
E-03	SHARPS CONTAINER	OFCI
E-04	COMPUTER WALL STATION	OFCI
E-05	INSTRUMENT BOARD	OFCI
E-06	EXAM WASTE CAN - SMALL BIOHAZARD	OFOI
E-07	HAND SOAP	OFCI
E-08	AUTOMATED PAPER TOWEL DISPENSER	OFCI
E-09	WALL CLOCK	OFCI
E-10	GEL DISPENSER	OFCI
E-11	COAT HOOK	OFCI
E-12	STAND ON SCALES & HEIGHT GAUGE	OFCI
E-13	WIRE CANNISTER HOLDER	OFCI
E-14	EXAM ROOM STOOLS	OFVI
E-15	WASTE CAN - BEVERAGE STATION	OFOI
E-17	COFFEE MAKER	OFVI
E-18	WASTE CAN - 20 GAL	OFVI
E-20	MICROWAVE	OFCI
E-22	LOCKERS - STANDING HEIGHT	OFVI
E-24	BABY CHANGING STATION	OFCI
E-25	WASTE CAN - LARGE	OFVI
E-32	TOILET TISSUE DISPENSER	OFCI
E-37	AUTOMATIC EXTERNAL DEFIBRILLATOR	OFOI
E-39	TV MONITOR - LED	OFCI
E-40	TV WALL MOUNT - SWIVEL / TILT	OFCI
E-41	PRINTER WITH CASTERS	OFOI
E-42	MF COPIER	OFOI
E-43	SHRED BIN	OFVI
E-44	CENTRIFUGE	OFOI
E-45	AUTOCLAVE	OFOI
E-46	WORKSTATION	OFOI
E-47	LED EXAM LIGHT - MOBILE CASTER STAND KIT	OFOI
E-48	MEDICAL-GRADE UNDERCOUNTER REFRIGERATOR	OFVI
E-49	NEONATAL SCALE & CART	OFVI
E-50	BLANKET WARMER	OFVI
E-51	UTILITY CART	OFVI
E-52	BIOHAZARD COMINGLED DISPOSAL BIN	OFVI
E-53	GLOVE BOX HOLDER	OFCI
E-54	SOILED LINEN HAMPER	OFOI
E-55	APRON HOOK	OFCI
E-58	EYEWASH KIT	OFCI
E-60	CORKBOARD	OFCI
E-61	MEMO STRIPS (CORK)	OFCI
E-62	WASTE CAN - ADMIN	OFOI
E-63	ACRYLIC DIVIDER	OFOI
E-64	ACRYLIC SHIELD	OFOI
E-68	FREESTANDING INFECTION PREVENTION CENTER	OFVI
E-69	DINAMAP	OFOI
E-71	AUDIO BOOTH	OFVI

EQUIPMENT SCHEDULE GENERAL NOTES

1. VERIFY EQUIPMENT FURNISHING RESPONSIBILITY AND INSTALLATION RESPONSIBILITY.
2. FOR ADDITIONAL TYPICAL MOUNTING HEIGHTS AND CLEARANCES REFER TO SHEET A-512.
3. VERIFY ALL INSTALL LOCATIONS WITH CLIENT PRIOR TO SHEATHING. VERIFY ALL BACKING/BLOCKING REQUIREMENTS WITH PRODUCT SPECIFICATIONS.
4. REFER TO FINISH FLOOR PLAN FOR CORNER GUARD LOCATIONS (CG-1, E-66).
5. CONTRACTOR TO COORDINATE SPECIALTY EQUIPMENT SPECIFICATIONS WITH MULTICARE TEAM.

EQUIPMENT SCHEDULE ABBREVIATIONS

CFCI	CONTRACTOR FURNISHED, CONTRACTOR INSTALLED
OFCI	OWNER FURNISHED, CONTRACTOR INSTALLED
OFOI	OWNER FURNISHED, OWNER INSTALLED
OFVI	OWNER FURNISHED, VENDOR INSTALLED
VFVI	VENDOR FURNISHED, VENDOR INSTALLED

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REVIEWED BY:

SHEET TITLE
EQUIPMENT & PLUMBING SCHEDULE

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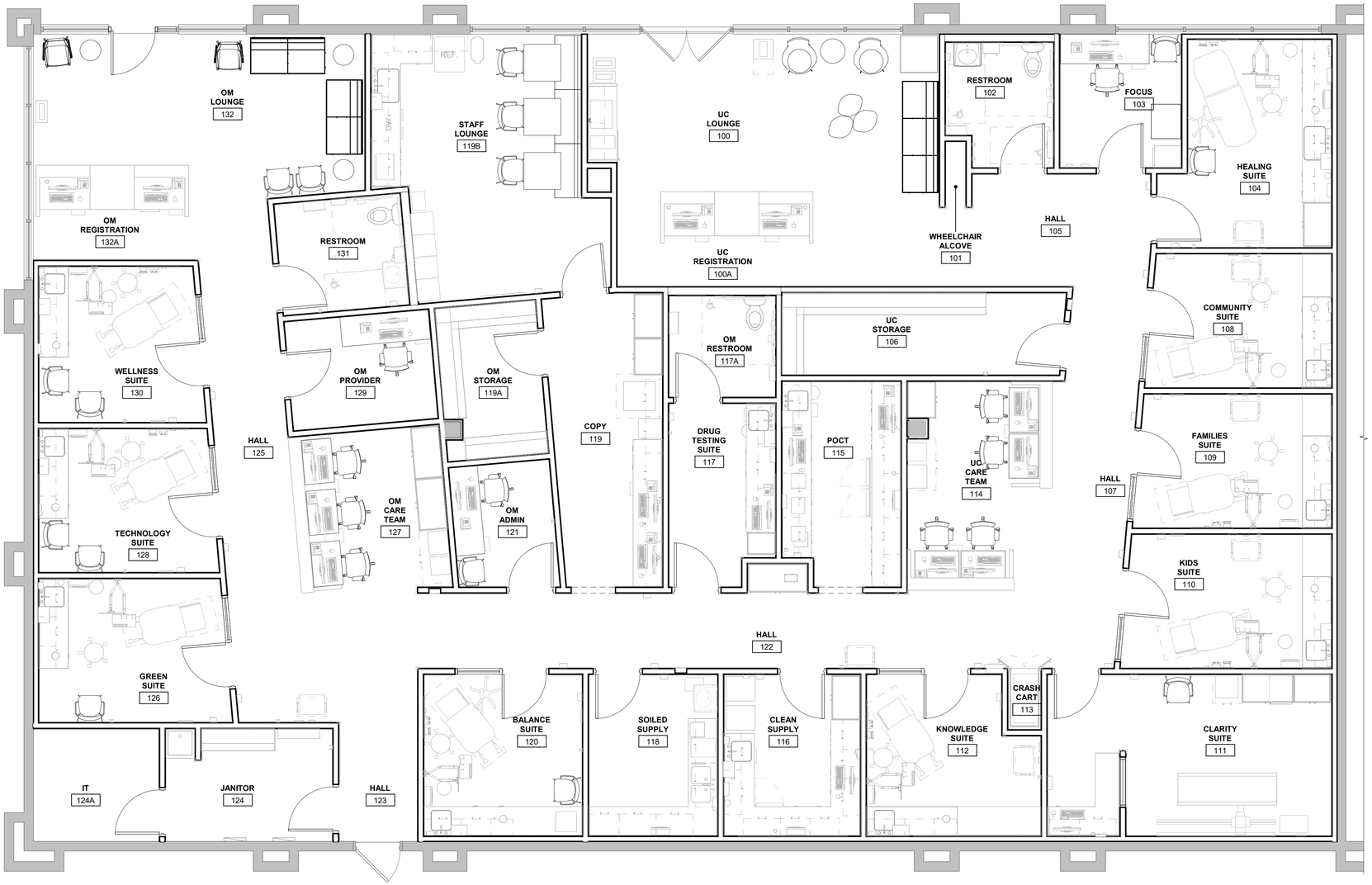

1 FURNITURE FLOOR PLAN
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PLAN NORTH

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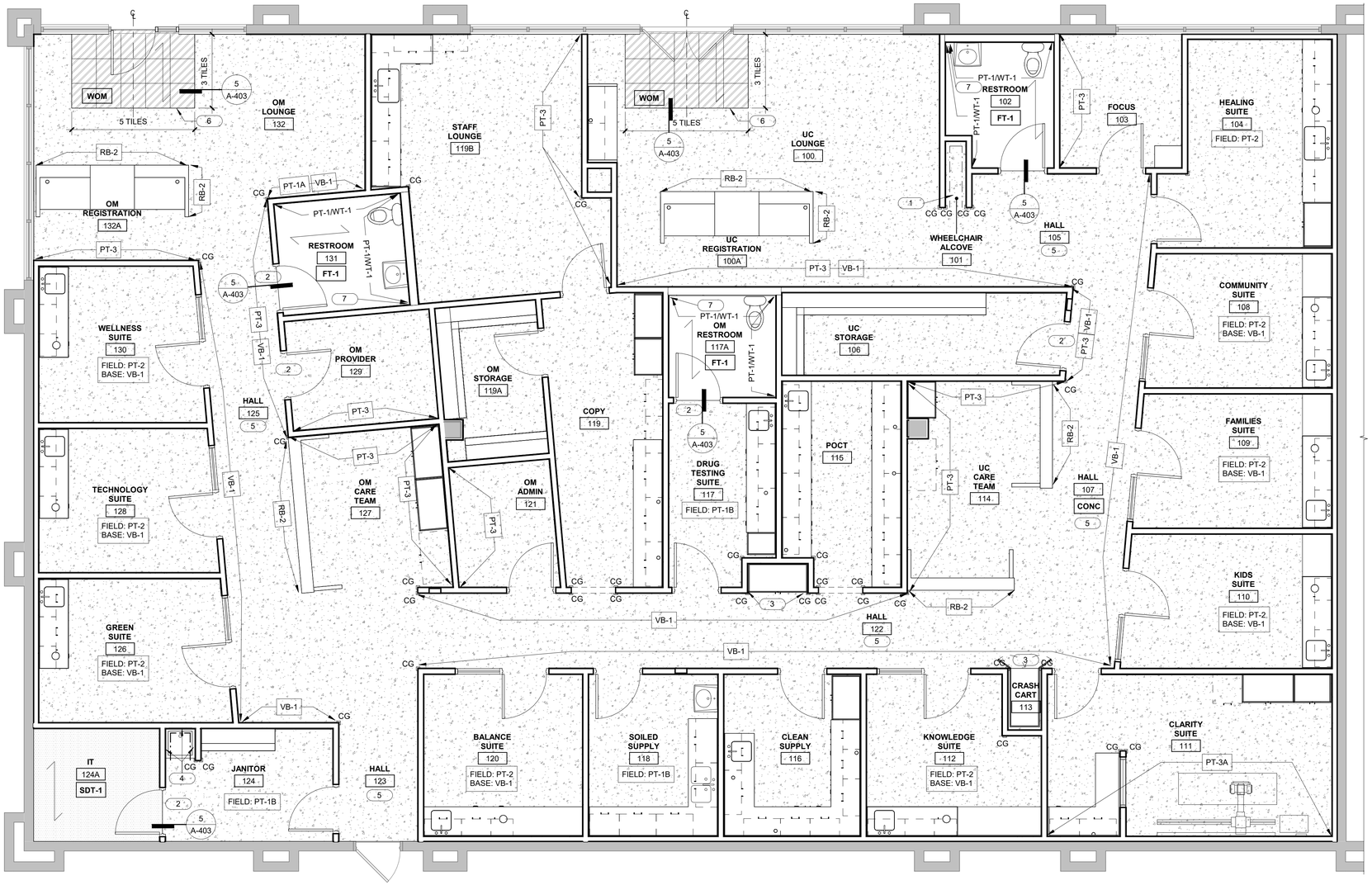


FINISH FLOOR PLAN GENERAL NOTES

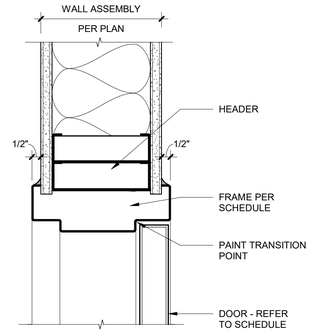
1. REFER TO FINISH FLOOR PLAN AND INTERIOR ELEVATIONS FOR ALL WALL FINISH EXTENTS.
2. REFER TO FINISH FLOOR PLAN AND REFLECTED CEILING PLANS FOR CEILING FINISHES.
3. REFER TO SHEET A-331 AND A-332 FOR ALL INTERIOR FINISHES.
4. PAINT ALL GWB SOFFITS COLOR TO MATCH ADJACENT WALL.
5. WHERE MULTIPLE FINISHES ARE NOTED ON THE ROOM FINISH SCHEDULE, REFER TO INTERIOR ELEVATION SHEETS A-211 - A-214 FOR DELINIATION OF VARIOUS FINISH LOCATIONS.
6. PREFFERED FINISH FOR EXPOSED BUILDING COMPONENTS NOT ALREADY SELECTED IN DOCUMENTS ARE TO BE WHITE. IF WHITE IS NOT AVAILABLE A POLISHED CHROME OR STAINLESS STEEL IS APPROPRIATE. ITEMS INCLUDE BUT ARE NOT LIMITED TO FIRE STROBE, FIRE SPRINKLER, MECHANICAL, PLUMBING, ETC.
7. RUBBER BASE (RB-1) TO BE INSTALLED ON ALL WALLS THROUGHOUT CLINIC UNLESS NOTED OTHERWISE.
8. ALL WALLS TO BE PAINTED PT-1A UNLESS NOTED OTHERWISE.
9. ALL FLOOR FINISHES TO BE SEALED CONCRETE (CONC) UNLESS NOTED OTHERWISE; FINISH SPECIFICATIONS ON A-331 AND A-332 FOR MORE INFORMATION.

LEGEND

- PT-# — START AND STOP OF ACCENT PAINT COLORS.
- CG — CORNER GUARDS (CG)
- CONC — CONCRETE (CONC)
- SDT-1 — STATIC DISSAPATIVE TILE (SDT-1)
- FT-1 — FLOOR TILE (FT-1)
- WOM — WALK-OFF MAT (WOM-1)
- FLOOR FINISH INSTALLATION DIRECTION
- FRP FULL HEIGHT

FLOOR PLAN SHEET NOTES

1. WHEELCHAIR ALCOVE TO HAVE FRP-1 ON WALLS AND PT-1A ON CEILING.
2. PAINT DOOR FRAME TO MATCH ADJACENT WALL COLOR STOP, TRANSITION IS AT THE INSIDE CORNER OF FRAME. REFER TO DETAIL 2/A-141.
3. CONTINUE PT-1A TO THE INSIDE CORNER OF OPENING ON WALLS AND HEADER.
4. WET WALLS ONLY FOR FRP-1 UP TO 8'-0". PAINT PT-1B ABOVE AND ALL OTHER WALLS.
5. HIGH IMPACT RESISTANT GWB WITHIN ROOM TO GO UP 4'-0" AFF OF WALL ON CORRIDOR SIDE ONLY.
6. RECESSED WALK-OFF MAT, WOM-1 TO BE FLUSH WITH THE SEALED CONCRETE; CENTER ON DOOR, 5 TILES WIDE, 4 TILES DEEP. SCHLUTER TRIM TO BE INSTALLED ON ALL EXPOSED EDGES.
7. TILE INSTALL START CORNER.



DOOR JAMB PAINT TRANSITION POINT

3" = 1'-0"

1 FINISH FLOOR PLAN

1/4" = 1'-0"

PLAN NORTH

0 2 4 8

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

IF SHEET MEASURES LESS THAN 24"X36", IT IS A REDUCED PRINT. REDUCE SCALE ACCORDINGLY

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DATE 05.09.2024
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REVIEWED BY:
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FINISH FLOOR PLAN

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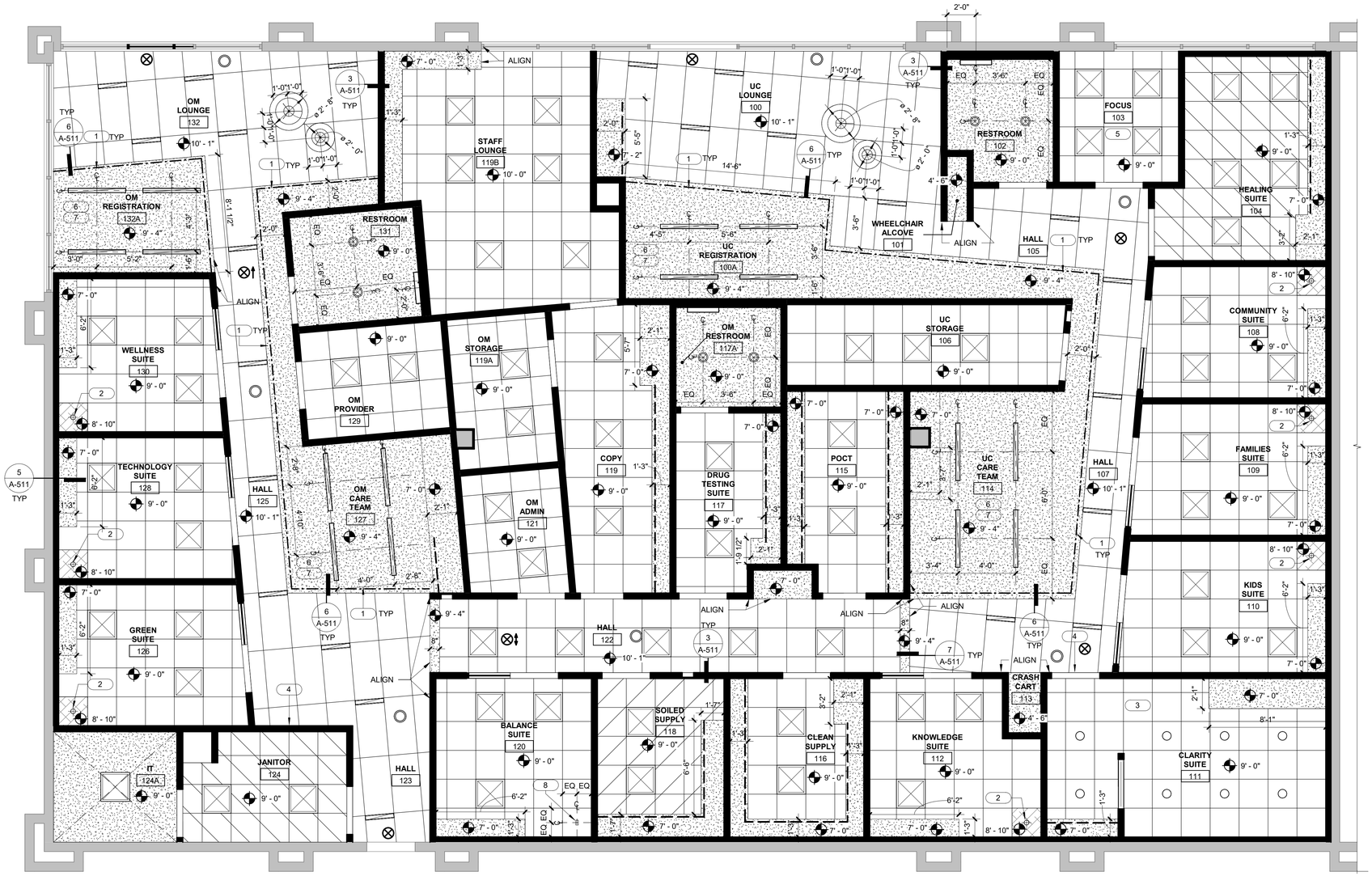

REFLECTED CEILING PLAN GENERAL NOTES

1. CENTER SUSPENDED CEILING GRIDS WITHIN OVERALL DIMENSION OF ROOM/AREA PER GRAPHIC REPRESENTATION AND PROVIDE EQUAL DIMENSIONS AT EDGE OF PERIMETER WALLS AND/OR SOFFITS, UNLESS NOTED OTHERWISE.
2. DIMENSIONS ARE TO FACE OF FINISH, FACE OF STOREFRONT, FACE OF EXISTING FINISH, AND CENTERLINE OF FIXTURES, UNLESS NOTED OTHERWISE.
3. AT SUSPENDED ACOUSTICAL CEILINGS, CENTER LIGHT FIXTURES, DIFFUSERS, SPEAKERS, FIRE SPRINKLER HEADS, ALARMS, DETECTORS ETC. WITHIN TILES, UNLESS NOTED OTHERWISE.
4. PROVIDE ARMSTRONG BERC2 CLIP (OR APPROVED EQUIVALENT) IN LIEU OF 2" PERIMETER ANGLE PER ICC 3SR-1308 FOR CONNECTING GRID MEMBERS TO PERIMETER WALL.
5. REFER TO SHEET A-510 FOR TYPICAL SUSPENDED CEILING SEISMIC REQUIREMENTS.
6. PER ASCE 7-02 SECTION 9.6.2.6.2.2 ITEM C: PROVIDE LATERAL FORCE BRACING (VERTICAL STRUTS AND SPLAY WIRES) FOR CEILINGS WITH AN AREA OF 1,000 SQUARE FEET OR MORE.
7. DESIGN AND PROVIDE ALL CEILING SECONDARY SUPPORT SYSTEMS SUSPENDED FROM PRIMARY STRUCTURE ABOVE. REFER TO A-511 FOR MINIMUM CEILING PERFORMANCE REQUIREMENTS.
8. CEILING HEIGHTS ARE 9'-0" UNLESS NOTED OTHERWISE.
9. REFER TO SHEET A-511 FOR TYPICAL CEILING DETAILS.
10. ALL GWB CEILINGS AND SOFFITS TO BE PAINTED PT-1 UNLESS NOTED OTHERWISE.

REFLECTED CEILING PLAN LEGEND

- ACT-1 ACOUSTIC CEILING TILE (2'x4')
  REFER TO SHEET A-331 FOR SPEC
- ACT-2 ACOUSTIC CEILING TILE (2'x2')
  REFER TO SHEET A-331 FOR SPEC
- ACT-3 ACOUSTIC CEILING TILE (2'x2')
  REFER TO SHEET A-331 FOR SPEC
- ACT- 4 METALWORKS 3D TILE (2'x2'X2") @ 8'-10" AFF
  REFER TO SHEET A-331 FOR SPEC
- (1) LAYER 5/8" GYPSUM BOARD
  CONTRACTOR'S OPTION:
  -ON SUSPENDED GWB CEILING SYSTEM
  -ON WOOD FRAMING
  -ON METAL FRAMING
  REFER TO A-510, A-511 FOR CEILING SUPPORT PERFORMANCE REQS
- UNDERCABINET TASK LIGHTING
  JUNO PRO SERIES LED, UPLED30, 30K, 80CRI, WH
- LED STRIP FIXTURE ON TOP OF SOFFIT
- LIGHT, REFER TO ELEC
  2X2 TROFFER, EATON METELUX LED
  22EN-LD2-30-UNV-L840-CD-1
- REFER TO ELEC
  LINEAR LED, PHILIPS LEDALITE, TRUGROOVE RECESSED
  3900LAGMS1-02-7-1-E
- REFER TO ELEC
  LINEAR LED, PHILIPS LEDALITE, TRUGROOVE
  RECESSED 3900LAGMS3-04-7-1-E
- REFER TO ELEC
  VANITY LIGHT, VISA LIGHTING CB5518-POSH,
  L30K-L, 300K, TW9016
- REFER TO ELEC
  LOBBY PENDANT ET2 LIGHTING, PUFFS LED MINI
  PENDANT, E21121-11WT, 7.5"H X 6.25"D, 3000K, 120V
- REFER TO ELEC
  RECESSED CANS, KENALL, HADL6-FF-PAFW-22L-40K8-W-CSS-G-RIG6-DV-DIM1
- REFER TO ELEC
  EXAM ROOM PENDANT, TECH LIGHTING, MINA
  700TDMINAP1COS-LED930
- REFER TO ELEC
  LOBBY PENDANT, KUZCO LIGHTING, CERCHIO LED PENDANT
  KZC1087229, REFER TO PLAN FOR DIM, 90 CRI, 3000K, 120V
- REFER TO ELEC
  LOBBY PENDANT,CLAESSON KOIVISTO RUNE FOR MUUTO,
  FLUID PENDANT 15402, 5.5" H X 9" D, 100 CRI, 2900K, 120V
- REFER TO ELEC
  EXIT LIGHT EDGE LIT LED, HUBBELL LIGHTING CELSGNE
- 11'-0" CEILING HEIGHT
- WALL - EXTEND TO 6" ABOVE ADJACENT CEILING, TYP.
- 360 CAMERA
  VERIFY LAYOUT WITH CLIENT SECURITY TEAM PRIOR TO ROUGH IN AND INSTALL

REFLECTED CEILING PLAN SHEET NOTES

1. LED LIGHT STRIP ON TOP OF THE SOFFIT FOR UP LIGHTING.
2. LIGHT FIXTURE MOUNTED AT 7'-4" AFF, SEE ELECTRICAL.
3. RECESSED CAN LIGHTING IN CLARITY ROOM TO BE DIMMABLE.
4. ENSURE ADEQUATE LIGHTING FOR EYE CHART.
5. LIGHTING FIXTURES TO BE DIMMABLE.
6. SOFFIT TO BE PAINTED PT-3A.
7. CONSULTANTS TO AVOID PENETRATIONS TO SOFFIT ABOVE REGISTRATION AND CARE TEAM WHEN POSSIBLE. SURFACE MOUNT ITEMS TO MATCH PT-3A.
8. INSTALL OUTLET, SEE ELECTRICAL.

1 REFLECTED CEILING PLAN
1/4" = 1'-0"

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

PLAN NORTH

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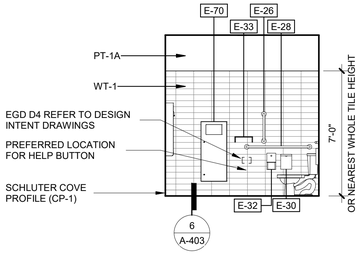
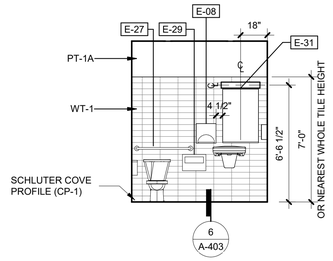
INTERIOR ELEVATION GENERAL NOTES

1. FOR ADDITIONAL TYPICAL MOUNTING HEIGHTS AND CLEARANCES REFER TO SHEET A-512.
2. SEE SHEET A-651, A-652 FOR KEYING AT LOCKED CASEWORK.



SIM - ELEVATIONS
102 RESTROOM



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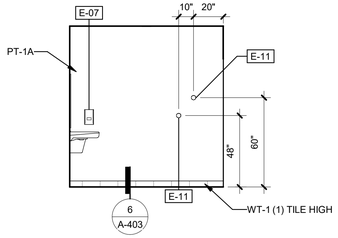
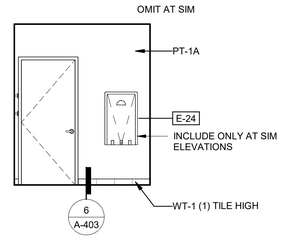
102 RESTROOM

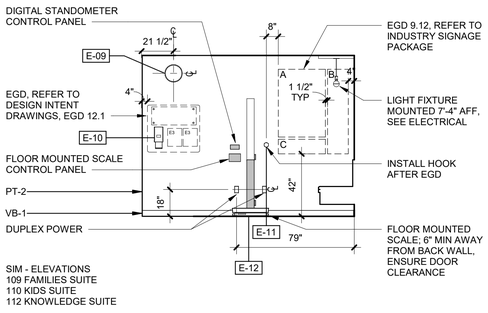


SIM - ELEVATIONS
102 RESTROOM

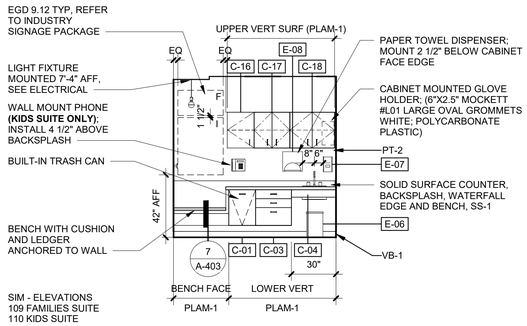


SIM - ELEVATIONS
102 RESTROOM

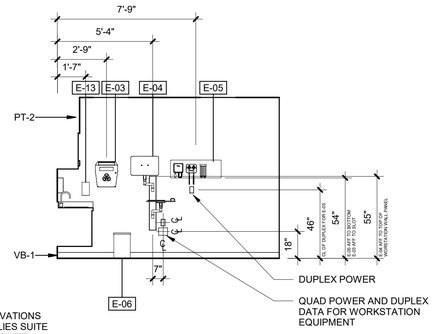
1	131 TYPICAL RESTROOM - NORTH	2	131 TYPICAL RESTROOM - EAST	3	205 TYPICAL RESTROOM - SOUTH	4	131 TYPICAL RESTROOM - WEST
	1/4" = 1'-0"		1/4" = 1'-0"		1/4" = 1'-0"		1/4" = 1'-0"



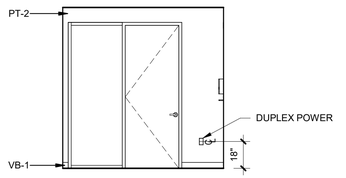
SIM - ELEVATIONS
109 FAMILIES SUITE
110 KIDS SUITE
112 KNOWLEDGE SUITE



SIM - ELEVATIONS
109 FAMILIES SUITE
110 KIDS SUITE
112 KNOWLEDGE SUITE

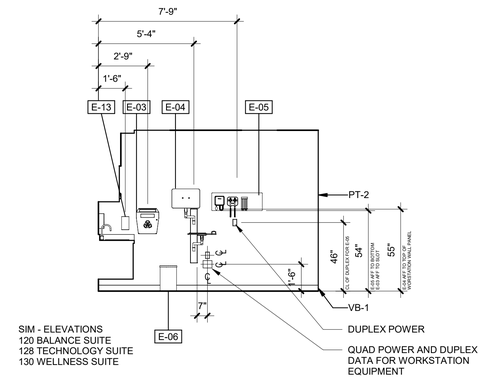


SIM - ELEVATIONS
109 FAMILIES SUITE
110 KIDS SUITE
112 KNOWLEDGE SUITE

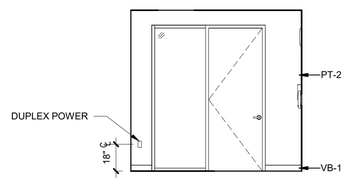


SIM - ELEVATIONS
109 FAMILIES SUITE
110 KIDS SUITE
112 KNOWLEDGE SUITE

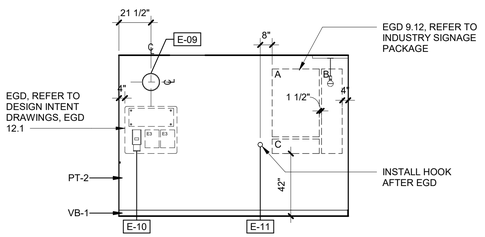
5	108 TYPICAL UC SUITE - NORTH	6	108 TYPICAL UC SUITE - EAST	7	108 TYPICAL UC SUITE - SOUTH	8	108 TYPICAL SUITE - WEST
	1/4" = 1'-0"		1/4" = 1'-0"		1/4" = 1'-0"		1/4" = 1'-0"



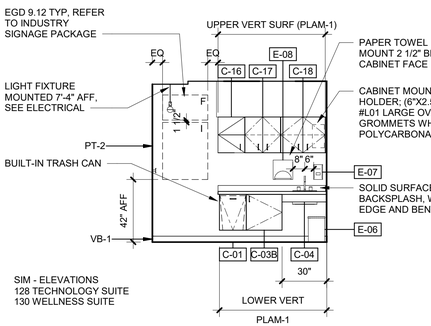
SIM - ELEVATIONS
120 BALANCE SUITE
128 TECHNOLOGY SUITE
130 WELLNESS SUITE



SIM - ELEVATIONS
120 BALANCE SUITE
128 TECHNOLOGY SUITE
130 WELLNESS SUITE



SIM - ELEVATIONS
120 BALANCE SUITE
128 TECHNOLOGY SUITE
130 WELLNESS SUITE



SIM - ELEVATIONS
128 TECHNOLOGY SUITE
130 WELLNESS SUITE

9	126 TYPICAL OM SUITE - NORTH	10	126 TYPICAL OM SUITE - EAST	11	126 TYPICAL OM SUITE - SOUTH	12	126 TYPICAL OM SUITE - WEST
	1/4" = 1'-0"		1/4" = 1'-0"		1/4" = 1'-0"		1/4" = 1'-0"

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TYPICAL INTERIOR ELEVATIONS

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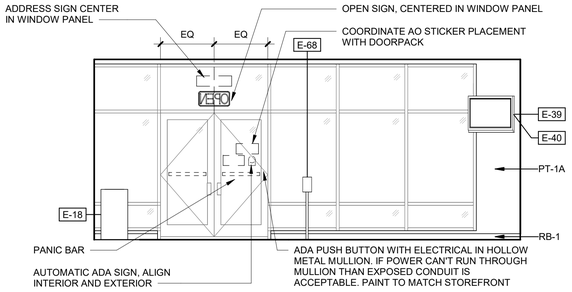
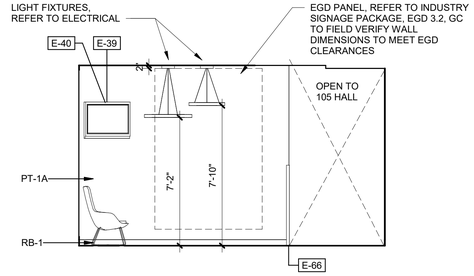
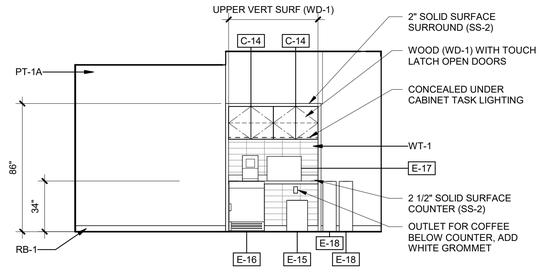


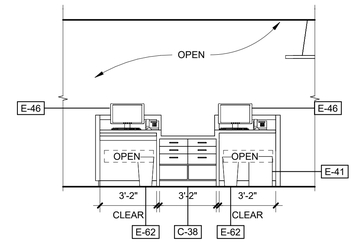
1 100 UC LOUNGE - NORTH
1/4" = 1'-0"



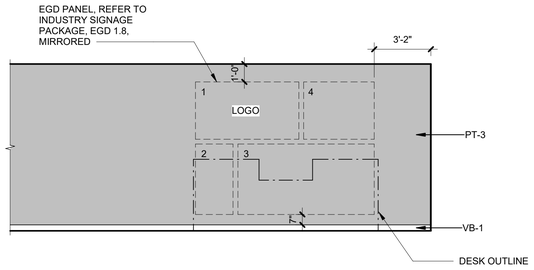
2 100 UC LOUNGE - EAST
1/4" = 1'-0"



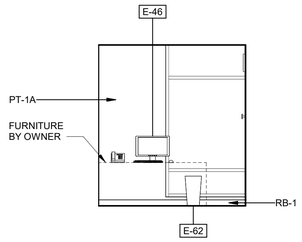
3 100 UC LOUNGE - WEST
1/4" = 1'-0"



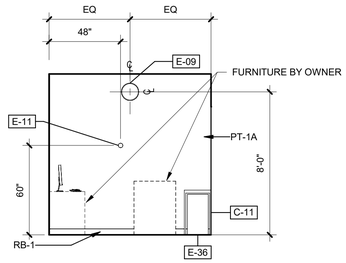
4 100A UC RECEPTION - NORTH
1/4" = 1'-0"



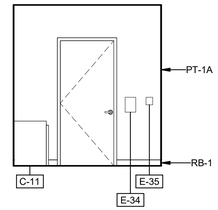
5 100A UC REGISTRATION - SOUTH
1/4" = 1'-0"



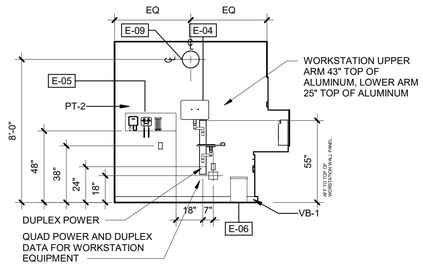
6 103 FOCUS - NORTH
1/4" = 1'-0"



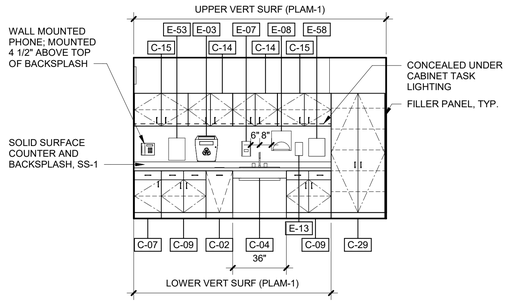
7 103 FOCUS - EAST
1/4" = 1'-0"



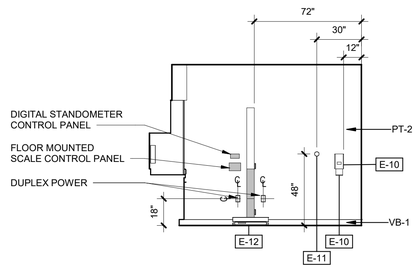
8 103 FOCUS - SOUTH
1/4" = 1'-0"



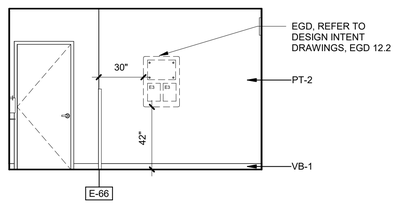
9 104 HEALING SUITE - NORTH
1/4" = 1'-0"



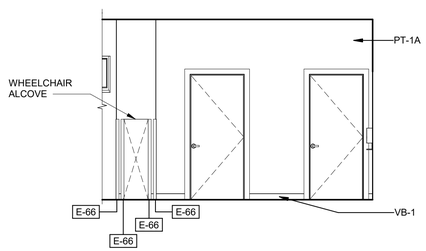
10 104 HEALING SUITE - EAST
1/4" = 1'-0"



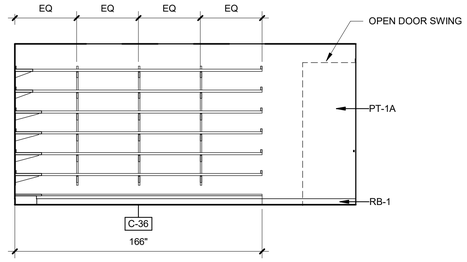
11 104 HEALING SUITE - SOUTH
1/4" = 1'-0"



12 104 HEALING SUITE - WEST
1/4" = 1'-0"



13 105 HALL - NORTH
1/4" = 1'-0"



14 106 UC STORAGE - NORTH
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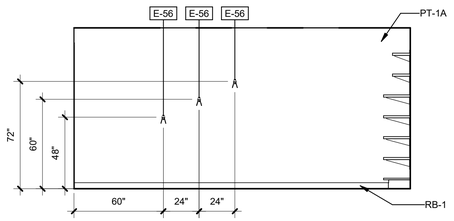
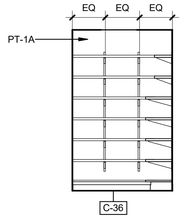


15 106 UC STORAGE - SOUTH
1/4" = 1'-0"



16 106 UC STORAGE - WEST
1/4" = 1'-0"

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PROJECT
MULTICARE TENANT IMPROVEMENT
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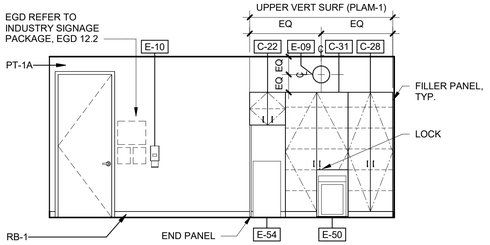
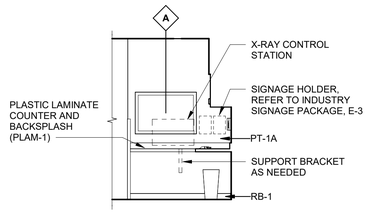
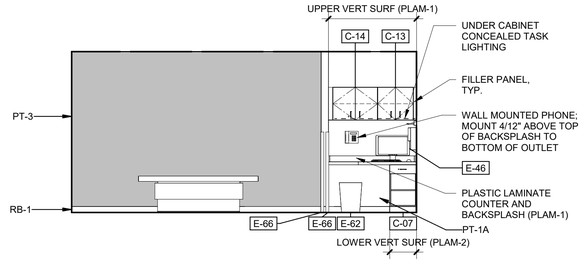
1. FOR ADDITIONAL TYPICAL MOUNTING HEIGHTS AND CLEARANCES REFER TO SHEET A-512.
2. SEE SHEET A-651, A-652 FOR KEYING AT LOCKED CASEWORK.



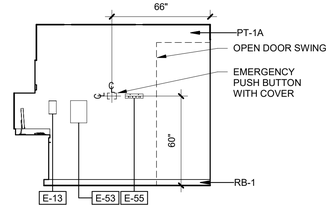
1 111 CLARITY SUITE - NORTH
1/4" = 1'-0"



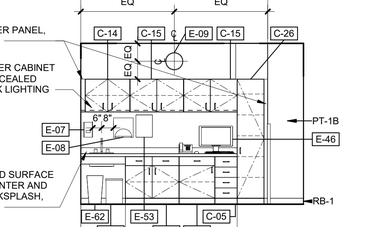
2 111 CLARITY SUITE - EAST B
1/4" = 1'-0"



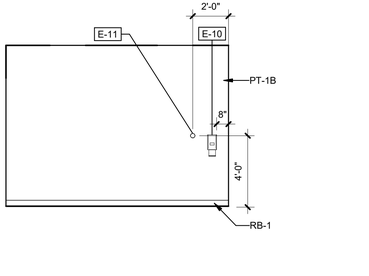
3 111 CLARITY SUITE - SOUTH
1/4" = 1'-0"



4 111 CLARITY SUITE - WEST B
1/4" = 1'-0"

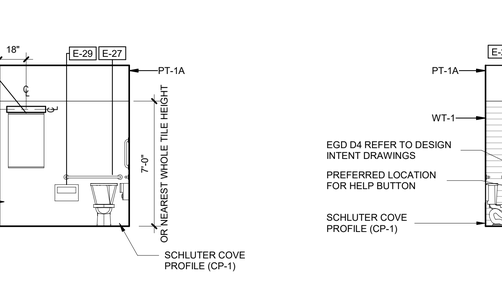


5 114 UC CARE TEAM - NORTH
1/4" = 1'-0"

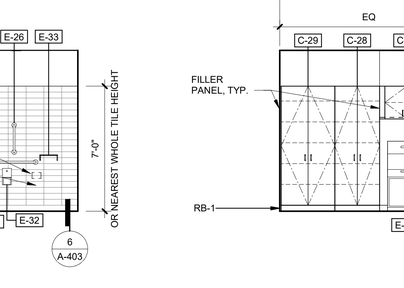


SIM 114 UC CARE TEAM 2-PERSON DESK

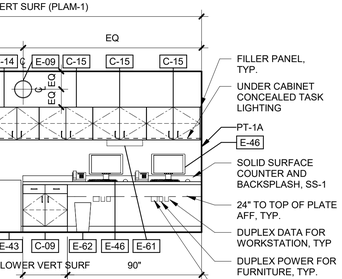
6 114 UC CARE TEAM - EAST
1/4" = 1'-0"



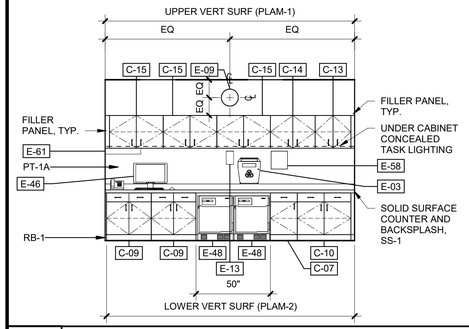
7 114 UC CARE TEAM - WEST
1/4" = 1'-0"



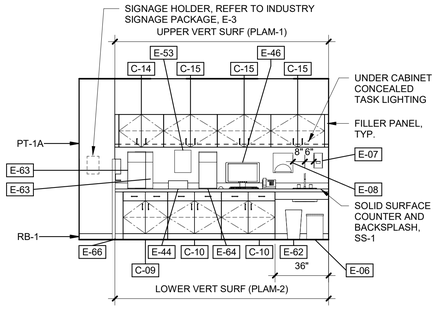
8 122 HALL - SOUTH
1/4" = 1'-0"



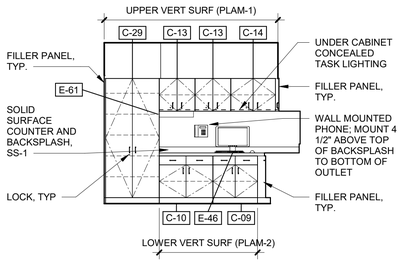
9 122 HALL - NORTH
1/4" = 1'-0"



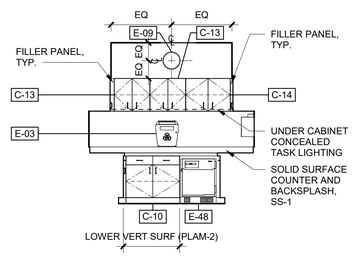
10 115 POCT - EAST
1/4" = 1'-0"



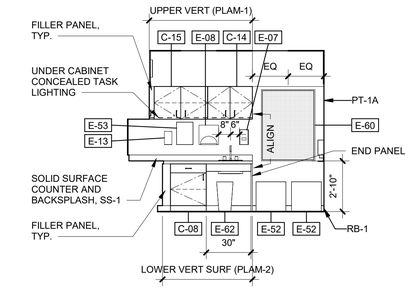
11 115 POCT - WEST
1/4" = 1'-0"



12 116 CLEAN SUPPLY - EAST
1/4" = 1'-0"



13 116 CLEAN SUPPLY - SOUTH
1/4" = 1'-0"



14 116 CLEAN SUPPLY - WEST
1/4" = 1'-0"

15 117 DRUG TESTING SUITE - EAST
1/4" = 1'-0"

16 117 DRUG TESTING SUITE - WEST
1/4" = 1'-0"

17 117A OM RESTROOM - NORTH
1/4" = 1'-0"

18 117A OM RESTROOM - EAST
1/4" = 1'-0"

19 119 COPY - EAST
1/4" = 1'-0"

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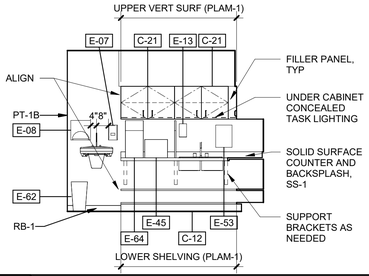
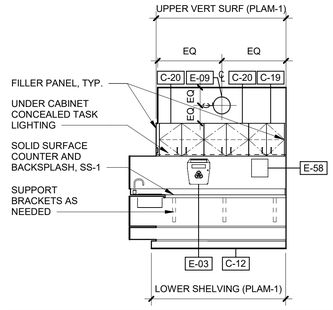
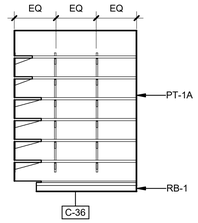


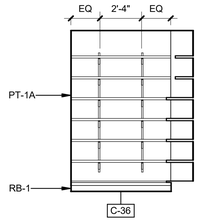
1 118 SOILED SUPPLY - EAST
1/4" = 1'-0"



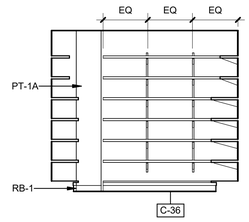
2 118 SOILED SUPPLY - SOUTH
1/4" = 1'-0"



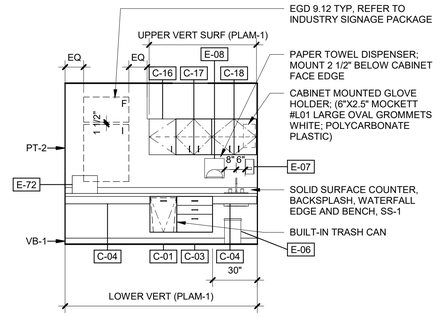
3 119A OM STORAGE - NORTH
1/4" = 1'-0"



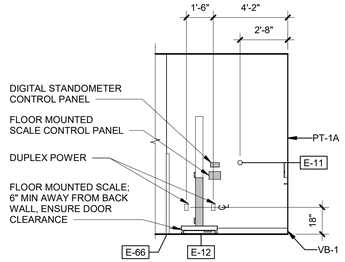
4 119A OM STORAGE - SOUTH
1/4" = 1'-0"



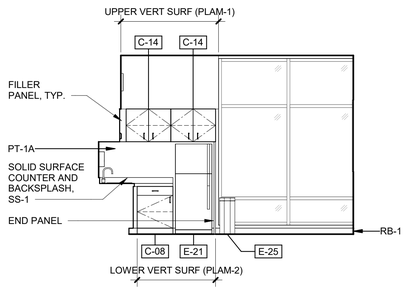
5 119A OM STORAGE - WEST
1/4" = 1'-0"



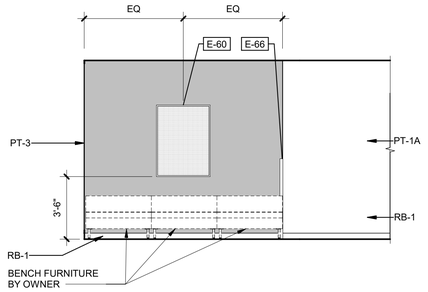
6 120 BALANCE SUITE - SOUTH
1/4" = 1'-0"



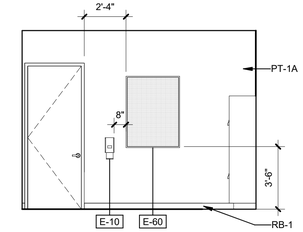
7 125 HALL - SOUTH
1/4" = 1'-0"



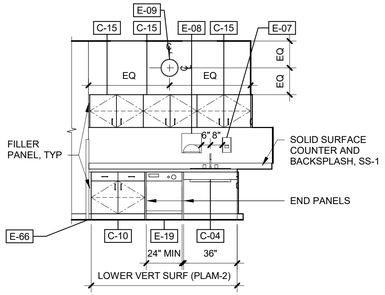
8 119B STAFF LOUNGE - NORTH
1/4" = 1'-0"



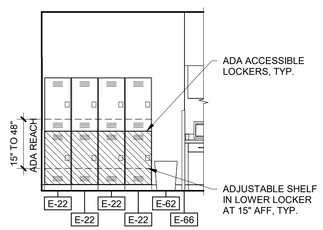
9 119B STAFF LOUNGE - EAST
1/4" = 1'-0"



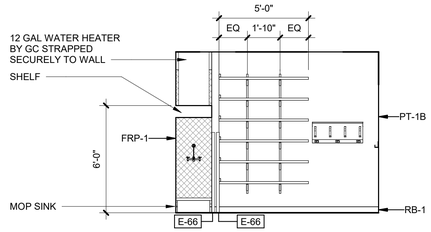
10 119B STAFF LOUNGE - SOUTH
1/4" = 1'-0"



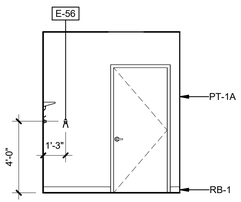
11 119B STAFF LOUNGE - WEST
1/4" = 1'-0"



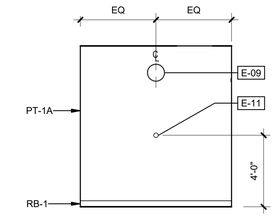
12 119B STAFF LOUNGE - WEST B
1/4" = 1'-0"



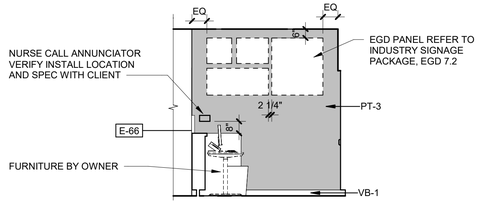
13 124 JANITOR - NORTH
1/4" = 1'-0"



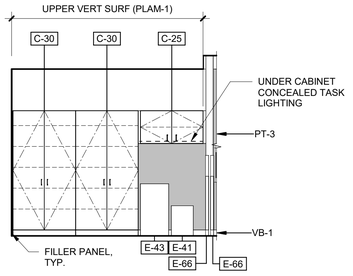
14 124 JANITOR - EAST
1/4" = 1'-0"



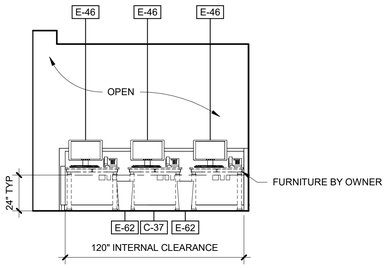
15 121 OM ADMIN - EAST
1/4" = 1'-0"



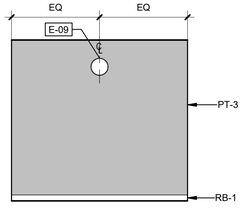
16 127 OM CARE TEAM - NORTH
1/4" = 1'-0"



17 127 OM CARE TEAM - EAST
1/4" = 1'-0"



18 127 OM CARE TEAM - WEST
1/4" = 1'-0"



19 129 OM PROVIDER - SOUTH
1/4" = 1'-0"

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PROJECT
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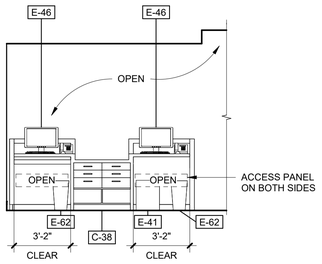
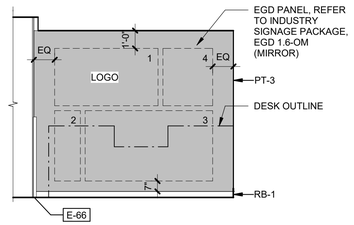
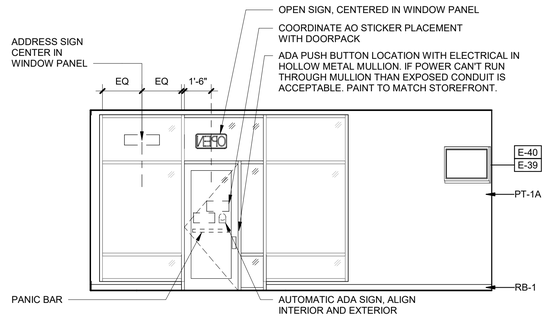


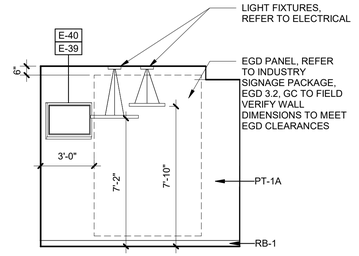
1 132A OM RECEPTION - NORTH
1/4" = 1'-0"



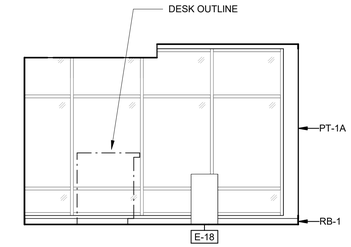
2 132A OM RECEPTION - SOUTH
1/4" = 1'-0"



3 132 OM LOUNGE - NORTH
1/4" = 1'-0"



4 132 OM LOUNGE - EAST
1/4" = 1'-0"



5 132 OM LOUNGE - WEST
1/4" = 1'-0"

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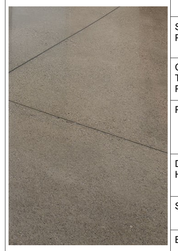
09 6500 - RESILIENT FLOORING

CONC

LOCATION:

DESCRIPTION:



EXISTING FLOOR PREP	REMOVE ANY FLOOR COVERING, ADHESIVE, COATINGS AND UNDERLAYMENT FILLER TO EXPOSE BARE, SOUND CONCRETE, PROFILE EXISTING CONCRETE SURFACE TO ICRI CSP 3 TO 5.
SURFACE PRIMER	RAPID SET TXP FAST TRU EPOXY PRIMER WITH 20/30 MESH SILICA SAND BROADCAST ONTO WET PRIMER.
CEMENTITIOUS TOPPING PRODUCT	RAPID SET TRU PC POLISHED CONCRETE, SELF-LEVELING HIGH PERFORMANCE ARCHITECTURAL TOPPING APPLIED AT 3/8" TO 1/2" THICKNESS.
POLISHING	POLISH TOPPING USING PLANETARY DIAMOND GRINDING/POLISHING EQUIPMENT, STARTING WITH 40 GRIT METAL AND WORKING UP TO 400 GRIT RESIN.
DENSIFIER/ HARDENER	APPLY PROSOCO CONSOLIDECK LS PENETRATING LITHIUM SILICATE DENSIFIER AND HARDENER TO POLISHED TOPPING.
SEALER	APPLY PROSOCO CONSOLIDECK POLISHGUARD SEALER TO DENSIFIED TOPPING FLOOR.
BURNISHING	BURNISH SEALED TOPPING FLOOR SURFACE TO UNIFORM GLASS AND APPEARANCE.

06 4100 - FINISH AND ARCHITECTURAL WOODWORK

PLAM-1

LOCATION: GENERAL CASEWORK FINISH

DESCRIPTION: PLASTIC LAMINATE

MANUFACTURER	NEVAMAR
COLOR	PRECISION WHITE #S7036T
FINISH	TEXTURED

PLAM-2

LOCATION: POCT, CLEAN SUPPLY, STAFF LOUNGE, CLARITY BASE CABINETS

DESCRIPTION: PLASTIC LAMINATE

MANUFACTURER	WILSONART
COLOR	NEOWALNUT
FINISH	FINE VELVET #7991-38

WD-1

LOCATION: REGISTRATION AND CARE TEAM DESK, LOUNGE, BEVERAGE STATION

DESCRIPTION: WOOD PANELING

MANUFACTURER	WINDFALL LUMBER
TYPE	3/4" ENGINEERED PANEL
SPECIES	RECLAIMED DOUGLAS FIR
FINISH	SEMI-GLOSS 104 WB VARNISH
COLOR	CUSTOM SP-8435, WF ID #S-3024
	MUST MEET CLASS A RATING IN ACCORDANCE WITH ASTM E 84 OR UL723
	INCLUDE REQUIRED MATERIAL / SUPPLIES FOR EDGES TO BE FINISHED

WD-2

LOCATION: DOORS AND EGD PANELS

DESCRIPTION: WOOD PANELING

MANUFACTURER	VT INDUSTRIES
TYPE	A GR CTRLD WD
SPECIES	WHITE BIRCH, QUARTER SAWN
FINISH	CUSTOM FINISH #4D82
	CUSTOM SP-8435, WF ID #S-3024
	MUST MEET CLASS A RATING IN ACCORDANCE WITH ASTM E 84 OR UL723

08 8100 - GLASS GLAZING

GL-1

LOCATION: RELITE

DESCRIPTION: INTERIOR GLAZING

FINISH	CLEAR GLASS WITH FILM APPLIED
	TEMPERED WHERE REQUIRED

GL-2

LOCATION: CASEWORK

DESCRIPTION: INTERIOR GLAZING

MANUFACTURER	SAFLEX, VANCEVA COLOR STUDIO
COLLECTION	VANCEVA WHITE COLLECTION
COLOR	COOL WHITE
SIZE	VERIFY WITH FABRICATOR
FINISH	TEMPERED WHERE REQUIRED

09 3000 - TILE

FT-1

LOCATION: RESTROOMS

DESCRIPTION: CERAMIC FLOOR TILE

MANUFACTURER	DALTILE
COLLECTION	BRYNE
COLOR	MIST - MATTE
SIZE	12" X 24"
JOINT WIDTH	1/8"
INSTALLATION	ASHLAR

WT-1

LOCATION: BEVERAGE STATION, RESTROOMS

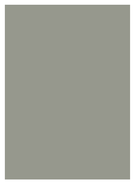
DESCRIPTION: CERAMIC WALL TILE

MANUFACTURER	MARAZZI
COLLECTION	COSTA CLARA
COLOR	CLOUD CC80
SIZE	3" X 11-7/8" X 5/16"
JOINT WIDTH	1/8"
INSTALLATION	STACK BOND, HORIZONTAL

GROUT

LOCATION: BEVERAGE STATION, RESTROOMS

DESCRIPTION: CORRESPONDING FLOOR TILE AND WALL TILE GROUT



MANUFACTURER	LATICRETE
PRODUCT LINE	SPECTRALOCK PRO PREMIUM GROUT
COLOR	24 NATURAL GREY

CP-1

LOCATION: AT TILE BASE IN RESTROOMS

DESCRIPTION: COVE PROFILE

MANUFACTURER	SCHLUTER SYSTEMS
COLLECTION	STEP REPEAT
PROFILE	DILEX-AHX
FINISH	STAINLESS STEEL

09 5000 - ACOUSTICAL CEILINGS

ACT-1

LOCATION: LOUNGE AND HALLS

DESCRIPTION: ACOUSTIC CEILING TILE

MANUFACTURER	ARMSTRONG
COLLECTION	OPTIMA
EDGE	#3257 SQUARE TEGULAR 9/16"
SIZE	24" X 48"
FINISH	WHITE
SUSPENSION SYSTEM	
MANUFACTURER	ARMSTRONG
COLLECTION	SUPRAFINE
SIZE	9/16" GRID
FINISH	WHITE

ACT-2

LOCATION: EXAM SUITES, CLEAN SUPPLY, COPY, STORAGE, STAFF LOUNGE, FOCUS

DESCRIPTION: ACOUSTIC CEILING TILE

MANUFACTURER	ARMSTRONG
COLLECTION	OPTIMA
EDGE	#1942 BEVELED TEGULAR 9/16"
SIZE	24" X 24"
FINISH	WHITE
SUSPENSION SYSTEM	
MANUFACTURER	ARMSTRONG
COLLECTION	SUPRAFINE
SIZE	9/16" GRID
FINISH	WHITE

ACT-3

LOCATION: HEALING SUITE, SOILED SUPPLY, IT

DESCRIPTION: ACOUSTIC CEILING TILE

MANUFACTURER	ARMSTRONG
COLLECTION	OPTIMA HEALTH ZONE
EDGE	#3114 SQUARE LAY-IN 15/16"
SIZE	24" X 24"
FINISH	WHITE
SUSPENSION SYSTEM	
MANUFACTURER	ARMSTRONG
COLLECTION	PRELUDE
SIZE	15/16" GRID
FINISH	WHITE

ACT-4

LOCATION: HEALING SUITE, SOILED SUPPLY, IT

DESCRIPTION: ACOUSTIC CEILING TILE

MANUFACTURER	ARMSTRONG
COLLECTION	METALWORKS 3D
EDGE	SQUARE DOWN TEGULAR 9/16"
SIZE	24" X 24"
FINISH	WHITE
PERFORATION	M1 - UNPERFORATED

09 6500 - RESILIENT FLOORING

RB-1

LOCATION: THROUGHOUT CLINIC

DESCRIPTION: RUBBER BASE

MANUFACTURER	JOHNSONITE
LINE	BASEWORKS THERMOSET
PROFILE	BASEWORK 4"
COLOR	ICICLE
SIZE	4" H

RB-2

LOCATION: REGISTRATION AND CARE TEAM DESKS

DESCRIPTION: RUBBER BASE

MANUFACTURER	JOHNSONITE
LINE	BASEWORKS THERMOSET
PROFILE	BASEWORK 4"
COLOR	DARK BROWN B
SIZE	4"H

SDT-1

LOCATION: IT

DESCRIPTION: STATIC DISSIPATIVE TILE

MANUFACTURER	ARMSTRONG
COLLECTION	EXCELON SDT
COLOR	51950 MARBLE BEIGE
SIZE	12" X 12"

VB-1

LOCATION: HIGH TRAFFIC AREAS

DESCRIPTION: VINYL WALL BASE

MANUFACTURER	INPRO
TYPE	HIGH IMPACT WALL BASE
FINISH	SUEDE TEXTURE
COLOR	0238 FEATHER
SIZE	4" H
	INSTALL ABOVE FINISH FLOOR

09 6800 - CARPET

WOM-1

LOCATION: LOBBY/ RECEPTION

DESCRIPTION: WALK OFF MAT

MANUFACTURER	INTERFACE
COLLECTION	STEP REPEAT
PATTERN	SR899
COLOR	104939 GRANITE
SIZE	50CM X 50CM
INSTALLATION	MONOLITHIC

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PROJECT
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09 7700 - SPECIAL WALL FINISHES

FRP-1

LOCATION: WHEELCHAIR ALCOVE AND JANITOR
DESCRIPTION: FIBERGLASS REINFORCED PANEL

MANUFACTURER	PANOLAM
COLOR	WHITE
FINISH	SMOOTH

09 9000 - PAINTING AND COATING

PT-1A

LOCATION: GENERAL WALL COLOR
DESCRIPTION: PAINT

MANUFACTURER	BENJAMIN MOORE
COLOR	ICE MIST 0C-67
FINISH	EGGSHELL

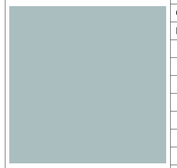
PT-1B

LOCATION: JANITOR, SOILED SUPPLY
DESCRIPTION: PAINT

MANUFACTURER	BENJAMIN MOORE
COLOR	ICE MIST 0C-67
FINISH	EPOXY

PT-2

LOCATION: EXAM SUITES
DESCRIPTION: PAINT



MANUFACTURER	SHERWIN WILLIAMS
COLOR	RAIN SW 6219
FINISH	EGGSHELL

PT-3

LOCATION: HALLWAY JEWEL, COPY, CARE TEAM, CLARITY
DESCRIPTION: PAINT

MANUFACTURER	BEHR
COLOR	OCEAN ABYSS MQ6-01
FINISH	EGGSHELL

10 2600 - WALL AND CORNER PROTECTION

CG-1

LOCATION: THROUGHOUT CLINIC
DESCRIPTION: CORNER GUARD

MANUFACTURER	CS ACROVYN
TYPE	4000 SSM-20N
FINISH	SUEDE TEXTURE
COLOR	949 WHITE
SIZE	52" X 2"
	INSTALL ABOVE FINISH FLOOR

12 2413 - ROLLER WINDOW SHADES

RS-1

LOCATION: AT WINDOWS
DESCRIPTION: ROLLER SHADES

MANUFACTURER	DRAPER
TYPE	CLUTCH OPERATED FLEXSHADE NEXD
	FASCIA ONLY WITH CEILING OR WALL MOUNTED ENDCAPS
COLOR	WHITE
ENDCAP SIZE	SMALL
FABRIC SERIES	SHEERWEAVES SW 3500
COLOR	U58 SNOWY WHITE (CHALK)
OPENNESS	5%

12 3661 - SOLID SURFACING COUNTERTOPS

SS-1

LOCATION: GENERAL COUNTERTOP
DESCRIPTION: SOLID SURFACE

MANUFACTURER	CORIAN
COLOR	ANTARCTICA

SS-2

LOCATION: CARE TEAM AND REGISTRATION DESKS, BEVERAGE STATION SURROUND
DESCRIPTION: SOLID SURFACE

MANUFACTURER	CORIAN
COLOR	DESIGNER WHITE

SS-3

LOCATION: INTEGRAL SINKS
DESCRIPTION: SOLID SURFACE

MANUFACTURER	CORIAN
COLOR	GLACIER WHITE

12 5000 - SITE FURNISHINGS

UPH-1

LOCATION: EXAM SUITES
DESCRIPTION: UPHOLSTERY TEXTILE

MANUFACTURER	MOMENTUM
PATTERN	VANGUARD CV
COLOR	SPRUCE

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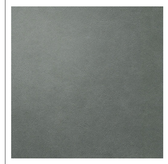
LOBBY LOUNGE SOFA

LOCATION: LOUNGE
DESCRIPTION: LOUNGE SEATING

MANUFACTURER	ARCADIA
COLLECTION	UPTOWN SOCIAL LOUNGE
PRODUCTS	ARMLESS SOFA, #5103
	ARMLESS LOVESEAT, #5102
	LOUNGE CHAIR, 7" ARMS WITH CORIAN ARM CAPS

PRODUCT: LOBBY LOUNGE SOFA / LOVESEAT / CHAIR WITH ARMS
DESCRIPTION: BACK AND SEAT TEXTILE



MANUFACTURER	MOMENTUM
PATTERN	RUSTIC
COLOR	BLUESTEM

PRODUCT: LOBBY LOUNGE SOFA / LOVESEAT / CHAIR WITH ARMS
DESCRIPTION: ARM CAP

MANUFACTURER	CORIAN
MATERIAL	SOLID SURFACE
COLOR	RAIN CLOUD

PRODUCT: LOBBY LOUNGE SOFA / LOVESEAT / CHAIR WITH ARMS
DESCRIPTION: LEGS / BASE

MANUFACTURER	ARCADIA
MATERIAL	METAL
COLOR	CHARCOAL GREY

OTTOMANS

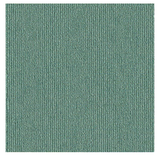
LOCATION: LOUNGE
DESCRIPTION: LOUNGE OTTOMAN

MANUFACTURER	ARCADIA
COLLECTION	LEAFLETTE MODULAR
PRODUCT	BUDS BENCH #3780 WITH PLINTH BASE
SIZE	W22.75" x D17.25" x H34.5"

PRODUCT: LOBBY OTTOMAN
DESCRIPTION: SEAT 1

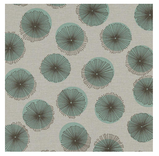
MANUFACTURER	MOMENTUM
PATTERN	VANGUARD CV
COLOR	GILDED

PRODUCT: LOBBY OTTOMAN
DESCRIPTION: SEAT 2



MANUFACTURER	DESIGNTEX
PATTERN	STOCKHOLM CRYPTON
COLOR	3111-502 LAGOON

PRODUCT: LOBBY OTTOMAN
DESCRIPTION: SEAT 3



MANUFACTURER	STINSON
PATTERN	PETAL DOTS
COLOR	PDO55 SEAGLASS

PRODUCT: LOBBY OTTOMAN
DESCRIPTION: BASE

MANUFACTURER	ARCADIA
MATERIAL	WOOD
COLOR	SLATE GREY BEECH

LOUNGE END TABLE

LOCATION: LOUNGE
DESCRIPTION: LOUNGE END TABLE

MANUFACTURER	KIMBALL INTERNATIONAL
COLLECTION	EPIC TABLES BY NATIONAL
PRODUCTS	OCCASIONAL TABLE WITH LAMINATE TOP
BASE	EPIC SQUARE BASE
TOP	CORIAN TOP

PRODUCT: LOUNGE END TABLE
DESCRIPTION: TOP MATERIAL

MANUFACTURER	KIMBALL INTERNATIONAL
MATERIAL	LAMINATE
COLOR	PORTOBELLO

PRODUCT: LOUNGE END TABLE
DESCRIPTION: BASE MATERIAL

MANUFACTURER	KIMBALL INTERNATIONAL
MATERIAL	METAL
COLOR	SATIN NICKEL

PRODUCT: LOUNGE END TABLE
DESCRIPTION: TOP FINISH

MANUFACTURER	CORIAN
MATERIAL	SOLID SURFACE
COLOR	GLACIER WHITE

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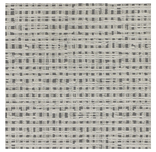
LOBBY LOUNGE CHAIR

LOCATION:	LOUNGE
DESCRIPTION:	LOUNGE CHAIR

MANUFACTURER	ARCADIA
COLLECTION	DAVA LOUNGE
PRODUCT	#6762, HIGH BACK LOUNGE CHAIR, WOOD BASE

PRODUCT:	LOBBY LOUNGE CHAIR
DESCRIPTION:	BACK UPHOLSTERY



MANUFACTURER	MOMENTUM
PATTERN	PLAN
COLOR	FRIEZE

PRODUCT:	LOBBY LOUNGE CHAIR
DESCRIPTION:	SEAT CUSHION UPHOLSTERY

MANUFACTURER	MOMENTUM
PATTERN	BEELINE EPU
COLOR	FORGE

PRODUCT:	LOBBY LOUNGE CHAIR (DAVA CHAIR)
DESCRIPTION:	LEGS MATERIAL

MANUFACTURER	ARCADIA
MATERIAL	WOOD
COLOR	SMOKY UMBER ASH

LOUNGE SIDE TABLE

LOCATION:	LOUNGE
DESCRIPTION:	LOUNGE SIDE TABLE

MANUFACTURER	ANDREU WORLD
COLLECTION	REVERSE OCCASIONAL
MODEL	ME5126
TOP SHAPE	ROUND

PRODUCT:	LOUNGE SIDE TABLE
DESCRIPTION:	TOP FINISH

MANUFACTURER	ANDREU WORLD
MATERIAL	WOOD - OAK
COLOR	318 CENDRE OAK

PRODUCT:	LOUNGE SIDE TABLE
DESCRIPTION:	BASE FINISH

MANUFACTURER	ANDREU WORLD
MATERIAL	ECO THERMO-POLYMER
COLOR	6013 DARK GREY

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STAFF LOUNGE TABLE AND CHAIR

LOCATION: STAFF LOUNGE

DESCRIPTION: STAFF BREAKROOM TABLE

MANUFACTURER	KI
COLLECTION	PIROUETTE TABLES
BASE / FRAME STYLE	SQUARE // RECTANGLE
LEG TYPE	X-BASE // STANDARD (TRAINING)
HEIGHT	STANDARD HEIGHT
FEET	GLIDE

LOCATION: STAFF LOUNGE

DESCRIPTION: STAFF BREAKROOM CHAIR

MANUFACTURER	KI
COLLECTION	LIMELITE
PRODUCT	STACK CHAIR
BASE / FRAME STYLE	4-LEG
SHELL STYLE	SOLID COLOR POLY
ARM STYLE	ARMLESS

PRODUCT: STAFF BREAKROOM TABLE / CHAIR

DESCRIPTION: TABLETOP AND SEAT SHELL

MANUFACTURER	KI
MATERIAL	POLY
COLOR	COTTONWOOD

PRODUCT: STAFF BREAKROOM TABLE / CHAIR

DESCRIPTION: LEGS FINISH

MANUFACTURER	KI
MATERIAL	METAL
COLOR	HONEY BEE

STAFF LOUNGE BOOTH

LOCATION: STAFF LOUNGE

DESCRIPTION: STAFF BREAKROOM TATTOO BOOTH

MANUFACTURER	KI
COLLECTION	TATTOO
PRODUCT	SLIM SEAT
CONTRAST OPTION	CONTRASTING FABRICS
TABLE OPTION	NO TABLE
BASE STYLE	GLIDES
POWER OPTION	NO POWER

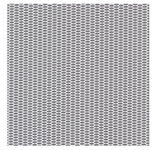
PRODUCT: STAFF BREAKROOM TATTOO BOOTH

DESCRIPTION: BASE AND BACK UPHOLSTERY

MANUFACTURER	STINSON
PATTERN	OUTLANDER
COLOR	64219 FLANNEL

PRODUCT: STAFF BREAKROOM TATTOO BOOTH

DESCRIPTION: SEAT UPHOLSTERY



MANUFACTURER	CARNEGIE
PATTERN	HUE 6014
COLOR	3

PRODUCT: STAFF BREAKROOM TATTOO BOOTH

DESCRIPTION: LEGS / BASE FINISH

MANUFACTURER	KI
MATERIAL	METAL
COLOR	HONEY BEE

STAFF TASK CHAIRS

LOCATION: STAFF LOUNGE, FOCUS, CARE TEAM

DESCRIPTION: TASK CHAIR

MANUFACTURER	KIMBALL INTERNATIONALL
COLLECTION	JOYA BY KIMBALL
PRODUCT	TASK SIT-TO-STAND CHAIR WITH ARMS
ARMS	3D ADJUSTABLE HEIGHT
BACKS	UPHOLSTERED, TASK
BASES	SIT-TO-STAND

PRODUCT: JOYA TASK SIT-TO-STAND CHAIR

DESCRIPTION: BACK AND SEAT UPHOLSTERY

MANUFACTURER	STINSON
PATTERN	BESPOKE
COLOR	63693 FLINT

HEALING SUITE GUEST CHAIR

LOCATION: HEALING SUITE, FOCUS

DESCRIPTION: GUEST CHAIR

MANUFACTURER	ENCORE
COLLECTION	KITSY
MODEL	6811-U, FULLY UPHOLSTERED, 4-LEG BASE

PRODUCT: GUEST CHAIR

DESCRIPTION: SEAT TEXTILE

MANUFACTURER	MOMENTUM
PATTERN	VANGUARD CV
COLOR	SPRUCE

PRODUCT: GUEST CHAIR

DESCRIPTION: LEGS MATERIAL

MANUFACTURER	ENCORE
MATERIAL	STANDARD METAL
COLOR	CHROME

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DOOR HARDWARE GROUPS - PSR

GROUP	ABBREV.	TYPE	MFR	DESCRIPTION	FINISH
HW-01	HI-2	HINGE, FULL MORTISE	IVES	5BB1 4-1/2" X 4-1/2" NRP	652
	OH-1	OVERHEAD STOP	GLYNN-JOHNSON	104S 36" DR	630
	GA-2	GASKETING	PEMKO	S88D 21'	
	DB-1	DOOR BOTTOM	PEMKO	411ARL 36"	
	LO-2	PASSAGE LATCH SET	SCHLAGE	ND10S - TLR	626
HW-02	HI-2	HINGE, FULL MORTISE	IVES	5BB1 4 1/2" X 4 1/2" NRP	652
	CL-3	CLOSER*	NORTON	8301 SN-134; EXTRA-CLEARANCE #2018S OFFSET SOFFIT PLATE	689
	LO-1	PRIVACY INDICATOR	SCHLAGE	L9044 - 03A L283-722	626
	CL-3	CLOSER	LCN	4011 REGARM PULL SIDE MT	
	DB-1	DOOR BOTTOM	PEMKO	411ARL 36"	
	GA-2	GASKETING	PEMKO	S88D 21'	
	ST-1	WALL STOP	IVES	WS401CCV	626
HW-03	HI-2	HINGE, FULL MORTISE	IVES	5BB1 4 1/2" X 4 1/2" NRP	US26D
	LO-5	STOREROOM LOCK	SCHLAGE	ND80 .J. TLR	.626
	CY-3	CORE	SCHLAGE	23-030 -ICX .50-231	
	SI-1	SILENCER	IVES	SR64-GRY	
	OH-1	OVERHEAD STOP	GLYNN-JOHNSON	104S 36" DR	US32D
	CY-2	CYLINDER	SCHLAGE	23-030 .CKC	.626
HW-04	HI-2	HINGE, FULL MORTISE	IVES	5BB1 4 1/2" X 4 1/2" NRP	652
	ST-1	WALL STOP*	ROCKWOOD	SOLID CAST - 403	630
	LO-4	CLASSROOM LOCK	SCHLAGE	ND70 .J .TLR	.626
	CY-3	CORE	SCHLAGE	23-030 -ICX .50-231	
	SI-1	SILENCER	IVES	SR64-GRY	
	CL-6	CLOSER*	LCN	4011 REGARM PULL SIDE MT	.689
	ST-1	WALL STOP	IVES	WS401CCV	
HW-05	HI-2	HINGE, FULL MORTISE	IVES	5BB1 4 1/2" X 4 1/2" NRP	652
	LO-2	PASSAGE LATCH	SCHLAGE	ND10S-TLR	626
	CL-2	CLOSER*	LCN	4011 .H PULL SIDE MT	.689
	ST-1	WALL STOP	IVES	WS401CCV	626
	GA-1	GASKETING	PEMKO	S88D 17'	
	DB-1	DOOR BOTTOM	PEMKO	411ARL 36"	
HW-06	HI-1	HINGE, FULL MORTISE	IVES	5BB1 4 1/2" X 4 1/2" NRP	652
	LO-2	PASSAGE LATCH	SCHLAGE	ND10S - TLR	.626
	SI-1	SILENCER	IVES	SR64-GRY	
	OH-1	OVERHEAD STOP	GLYNN-JOHNSON	104S 36" DR	
HW-07	HC-1	CONTINUOUS HINGE	MARKAR	HG305 7'0 AS	630
	LO-3	PASSAGE LATCH	SCHLAGE	ND10 .TLR .XN12-307	.626
	OH-1	OVERHEAD STOP	GLYNN-JOHNSON	104S 36" DR	US32D
	SI-1	SILENCER	IVES	SR64-GRY	
HW-08	HI-2	HINGE, FULL MORTISE	IVES	5BB1 4 1/2" X 4 1/2" NRP	652
	LO-5	STOREROOM LOCK	SCHLAGE	ND80 .J. TLR	.626
	CY-3	CORE	SCHLAGE	23-030-ICX .50-231	
	ES-1	ELECTRIC STRIKE	HES	1006 ELEC	630
	CY-2	CYLINDER	SCHLAGE	23-030 .CKC	.626
	CL-1	CLOSER*	LCN	4011 .CYLDEL .REGARM	.689
	SI-1	SILENCER	IVES	SR64-GRY	
	ES-2	ELECTRIC STRIKE FACE PLATE	HES	J	630
	ES-3	SMART PAC BRIDGE RECTIFIER	HES	2005M3	
	ST-1	WALL STOP	IVES	WS401CCV	626
HW-09	HI-2	HINGE, FULL MORTISE	IVES	5BB1 4 1/2" X 4 1/2" NRP	652
	LO-5	STOREROOM LOCK	SCHLAGE	ND80 .J .TLR	.626
	CY-3	CORE	SCHLAGE	23-030-ICX .50-231	
	ES-1	ELECTRIC STRIKE	HES	1006 ELEC	630
	CL-4	CLOSER*	LCN	4111 .EDA PUSH SIDE MT	.689
	OH-1	OVERHEAD STOP	GLYNN-JOHNSON	104S 36" DR	
	DB-1	DOOR BOTTOM	PEMKO	411ARL 36"	
	GA-1	GASKETING	PEMKO	S88D 17'	
	ES-2	ELECTRIC STRIKE FACE PLATE	HES	J	630
	ES-3	SMART PAC BRIDGE RECTIFIER	HES	2005M3	
HW-10	HI-1	HINGE, FULL MORTISE	IVES	5BB1 4 1/2" X 4 1/2" NRP	652
	LO-2	PASSAGE LOCK	SCHLAGE	ND10 .TLR 2-3/4" B.S.	.626
	OH-1	OVERHEAD STOP	GLYNN-JOHNSON	104S 36" DR	US32D
	DB-1	DOOR BOTTOM	PEMKO	411ARL 36"	
	GA-1	GASKETING	PEMKO	S88D 17'	
	SI-1	SILENCER	IVES	SR64-GRY	
HW-11	CY-1	CYLINDER	SCHLAGE	20-079	.626
	CY-2	CYLINDER	SCHLAGE	20-030 .CKC	.626
HW-12	HI-2	HINGE, FULL MORTISE	IVES	5BB1 4 1/2" X 4 1/2" NRP	652
	ED-1	RIM EXIT DEVICE	VON DUPRIN	99.L .3' .996L(STD) .06 2-3/4" B.S.	.626
	CY-1	CYLINDER	SCHLAGE	20-079	.626
	CY-2	CYLINDER	SCHLAGE	23-030 .CKC	.626
	CY-3	CORE	SCHLAGE	23-030-ICX .50-231	
	ES-1	ELECTRIC STRIKE	HES	1006	630
	ES-2	ELECTRIC STRIKE FACE PLATE	HES	J	630
	ES-3	SMART PAC BRIDGE RECTIFIER	HES	2005M3	
	CL-4	CLOSER	LCN	4111 .EDA PUSH SIDE MT	.689
	ST-1	WALL STOP	IVES	WS401CCV	626
	GA-1	GASKETING	PEMKO	S88D 17'	

DOOR SCHEDULE

TO ROOM	DOOR NUMBER	DOOR WIDTH	DOOR HEIGHT	DOOR DEPTH	DOOR TYPE	DOOR MATERIAL	DOOR FINISH	DOOR GLAZING	FRAME TYPE	FRAME MATERIAL	FRAME FINISH	HARDWARE GROUP	REMARKS	DOOR NUMBER
102 RESTROOM	102	3' - 0"	7' - 0"	1 3/4"	A	WD-2	STAIN	--	2	HM	PT-1	HW-02		102
103 FOCUS	103	3' - 0"	7' - 0"	1 3/4"	B	WD-2	STAIN	GL-1	2	HM	PT-1	HW-10		103
104 HEALING SUITE	104	3' - 0"	7' - 0"	1 3/4"	A	WD-2	STAIN	--	1	HM	PT-1	HW-01	2	104
106 UC STORAGE	106	3' - 0"	8' - 0"	1 3/4"	A	WD-2	STAIN	--	2	HM	PT-1/PT-3	HW-06	3	106
108 COMMUNITY SUITE	108	3' - 0"	8' - 0"	1 3/4"	A	WD-2	STAIN	GL-1	1	HM	PT-1	HW-01	2	108
109 FAMILIES SUITE	109	3' - 0"	8' - 0"	1 3/4"	A	WD-2	STAIN	GL-1	1	HM	PT-1	HW-01	2	109
110 KIDS SUITE	110	3' - 0"	8' - 0"	1 3/4"	A	WD-2	STAIN	GL-1	1	HM	PT-1	HW-01	2	110
111 CLARITY SUITE	111	3' - 0"	8' - 0"	1 3/4"	A	WD-2	STAIN	--	2	HM	PT-1	HW-07	1	111
112 KNOWLEDGE SUITE	112	3' - 0"	8' - 0"	1 3/4"	A	WD-2	STAIN	GL-1	1	HM	PT-1	HW-01	2	112
116 CLEAN SUPPLY	116	3' - 0"	7' - 0"	1 3/4"	A	WD-2	STAIN	--	2	HM	PT-1	HW-08	4	116
117 DRUG TESTING SUITE	117	3' - 0"	7' - 0"	1 3/4"	A	WD-2	STAIN	--	2	HM	PT-1/PT-3	HW-04	3	117
117A OM RESTROOM	117A	3' - 0"	8' - 0"	1 3/4"	A	WD-2	STAIN	--	2	HM	PT-1	HW-02		117A
118 SOILED SUPPLY	118	3' - 0"	7' - 0"	1 3/4"	C	WD-2	STAIN	GL-1	2	HM	PT-1	HW-04		118
119A OM STORAGE	119A	3' - 0"	7' - 0"	1 3/4"	A	WD-2	STAIN	--	2	HM	PT-1	HW-06		119A
119B STAFF LOUNGE	119B	3' - 0"	8' - 0"	1 3/4"	B	WD-2	STAIN	GL-1	2	HM	PT-1	HW-05		119B
120 BALANCE SUITE	120	3' - 0"	7' - 0"	1 3/4"	A	WD-2	STAIN	GL-1	1	HM	PT-1	HW-01	2	120
121 OM ADMIN	121	3' - 0"	7' - 0"	1 3/4"	A	WD-2	STAIN	GL-1	2	HM	PT-1/PT-3	HW-10	3	121
124 JANITOR	124	3' - 0"	7' - 0"	1 3/4"	A	WD-2	STAIN	--	2	HM	PT-1	HW-03		124
124A IT	124A	3' - 0"	7' - 0"	1 3/4"	A	WD-2	STAIN	--	2	HM	PT-1	HW-09	4	124A
126 GREEN SUITE	126	3' - 0"	8' - 0"	1 3/4"	A	WD-2	STAIN	GL-1	1	HM	PT-1	HW-01	2	126
128 TECHNOLOGY SUITE	128	3' - 0"	8' - 0"	1 3/4"	A	WD-2	STAIN	GL-1	1	HM	PT-1	HW-01	2	128
129 OM PROVIDER	129	3' - 0"	7' - 0"	1 3/4"	A	WD-2	STAIN	GL-1	2	HM	PT-1/PT-3	HW-10	3	129
130 WELLNESS SUITE	130	3' - 0"	8' - 0"	1 3/4"	A	WD-2	STAIN	GL-1	1	HM	PT-1	HW-01	2	130
131 RESTROOM	131	3' - 0"	7' - 0"	1 3/4"	A	WD-2	STAIN	--	2	HM	PT-1/PT-3	HW-02	3	131

DOOR SCHEDULE GENERAL NOTES

1. VERIFY ROUGH OPENING SIZE WITH DOOR MANUFACTURER.
2. MANUALLY OPERATED FLUSH BOLTS ARE NOT ALLOWED.
3. PROVIDE ACCESSIBLE HARDWARE ON ALL DOORS.
4. ALL EXTERIOR DOORS AND FRAMES MUST MEET WASHINGTON STATE ENERGY CODE MAXIMUM U-VALUE (.60) AND MAXIMUM SHGC OF GLAZING AND FRAME ASSEMBLIES.
5. ALL DOORS AND FRAMES SHALL COMPLY WITH AIR BARRIER REQUIREMENTS.
6. REFER TO INTERIOR FINISH SCHEDULE ON SHEET A-331 FOR FINISH SPECIFICATIONS.
7. ALL GLAZING TO BE TEMPERED.
8. PAINT HOLLOW METAL FRAMES TO MATCH ADJACENT WALL PAINT.
9. PROVIDE WALL STOPS AT SWING DOOR WITH OUT OVERHEAD STOPS.

DOOR SCHEDULE ABBREV.S

AT	ACOUSTICAL THRESHOLD
AL	ALUMINUM
AO	AUTO OPENER
CL	CLASSROOM LOCK
EXG	EXISTING
FF	FACTORY FINISH
GL	GLAZING
HDWR	HARDWARE
HM	HOLLOW METAL
KC	KEYCARD ACCESS & ELECTRIC STRIKE
LO	LATCH ONLY
OS	OVERHEAD STOP
PH	PANIC HARDWARE
PL	PRIVACY LOCK
PT	PAINT
SC	SELF CLOSER
SL	STOREROOM LOCK
STL	STEEL
SF	STOREFRONT
WD	WOOD

DOOR SCHEDULE REMARKS

1. LEAD LINED DOOR AND FRAME 0.79 MM LEAD SHIELDING.
2. DOOR TRIM INSIDE EXAM SUITES TO BE PT-1.
3. REFER TO DETAIL 2/A-331 FOR HOW TO DO MULTIPLE FRAME FINISHES.

GLASS TYPES

GL1 1/4" INSULATED TEMPERED GLASS WITH PRIVACY FILM; REFER TO DOOR TYPES AND DOOR FRAMES FOR LOCATIONS AND EXTENTS OF FILM

RELITE SCHEDULE

RELITE NUMBER	HEAD HEIGHT	HEIGHT	WIDTH	DESCRIPTION	COMMENTS
A	6' - 0"	2' - 4"	3' - 5 7/128"	0.79 MM LEAD SHIELDED	

STOREFRONT SCHEDULE

DOOR NUMBER	DOOR WIDTH	DOOR HEIGHT	DOOR DEPTH	DOOR MATERIAL	DOOR FINISH	DOOR GLAZING	FRAME TYPE	FRAME MATERIAL	FRAME FINISH	HDWR GROUP	REMARKS	DOOR NUMBER
(E)-100	6' - 0"	6' - 11"	1 1/2"	EXG	EXG	EXG	EXG	EXG	EXG	HW-11	PH, SC, AO, KC	(E)-100
SF-1	3' - 0"	7' - 1"	1 3/4"	AL	BLACK	MATCH EXISTING	HM	AL	BLACK	HW-11	AO, KC, OS, PH, PR, SC	SF-1

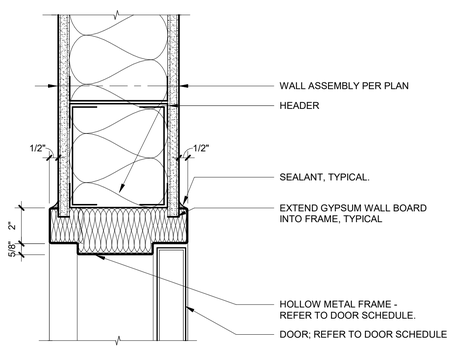
STOREFRONT SCHEDULE ABBREV.S

AT	ACOUSTICAL THRESHOLD
AL	ALUMINUM
AO	AUTO OPENER
EXG	EXISTING
FF	FACTORY FINISH
GL	GLAZING
HDWR	HARDWARE
HM	HOLLOW METAL
KC	KEYCARD ACCESS & ELECTRIC STRIKE
LO	LATCH ONLY
L	LOCK
OPP	OPPOSITE
OS	OVERHEAD STOP
PH	PANIC HARDWARE
PL	PRIVACY LOCK
PO	PULL ONLY
PR	PAIR
PT	PAINT
SC	SELF CLOSER
SL	STOREROOM LOCK
STL	STEEL
SF	STOREFRONT
WD	WOOD

STOREFRONT SCHEDULE REMARKS

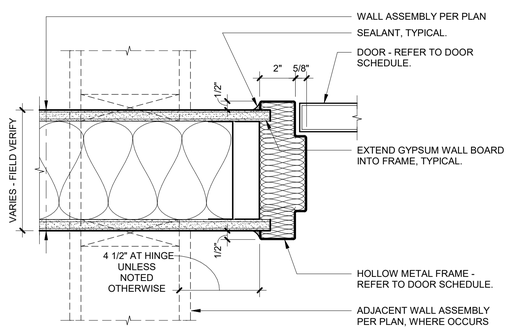
A. AUTO OPENER SINGLE LEAF ONLY.

B. MATCH FINISHES TO THE REST OF THE STOREFRONT FOR CONSISTENT LOOK ACROSS ENTIRE STOREFRONT.



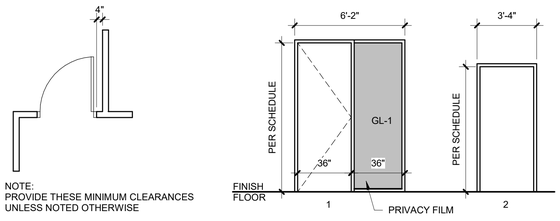
2 TYPICAL HOLLOW METAL DOOR HEAD

3" = 1'-0"



1 TYPICAL HOLLOW METAL DOOR JAMB

3" = 1'-0"

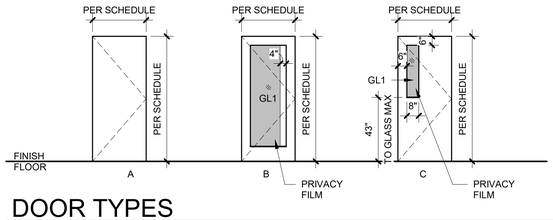


TYPICAL DOOR CLEARANCES

1/4" = 1'-0"

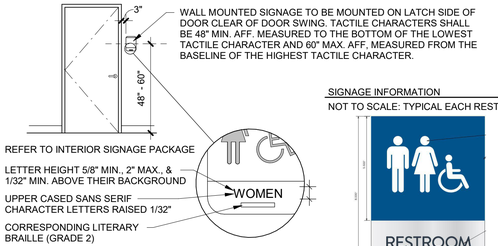
DOOR FRAME TYPES

1/4" = 1'-0"



DOOR TYPES

1/4" = 1'-0"

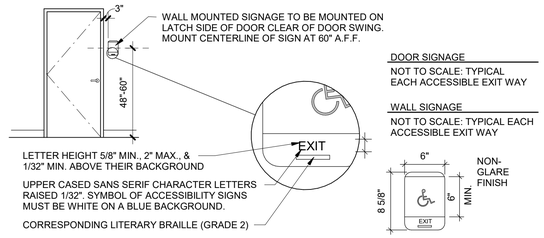


SIGNAGE INFORMATION

NOT TO SCALE: TYPICAL EACH RESTROOM

RESTROOM SIGNAGE

1/4" = 1'-0"



DOOR SIGNAGE

NOT TO SCALE: TYPICAL EACH ACCESSIBLE EXIT WAY

WALL SIGNAGE

NOT TO SCALE: TYPICAL EACH ACCESSIBLE EXIT WAY

ACCESSIBLE EXIT SIGNAGE

1/4" = 1'-0"

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2106 PACIFIC AVENUE, SUITE 300, TACOMA, WA 98402

SEAL

5664 REGISTERED ARCHITECT DOUGLAS P. OBERST STATE OF WASHINGTON

City of Puyallup
Development & Permitting Services
ISSUED PERMIT
Building | Planning | Engineering | Public Works | Fire | Traffic

PRCTI20240772

PROJECT
MULTICARE TENANT IMPROVEMENT
INDIGO - PUYALLUP
4505 S MERIDIAN
PUYALLUP, WA 98373

REVISIONS

DATE 05.09.2024

BCRA NO. 22023.00.11

DRAWN BY:

REVIEWED BY:

SHEET TITLE
DOOR & RELITE SCHEDULE

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SHEET

A-351

PERMIT / CD SET

IF SHEET MEASURES LESS THAN 24"X36", IT IS A REDUCED PRINT. REDUCE SCALE ACCORDINGLY

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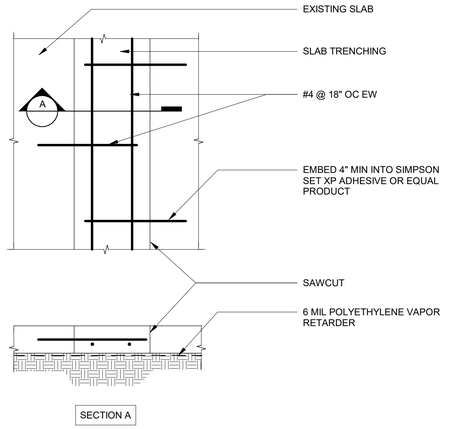
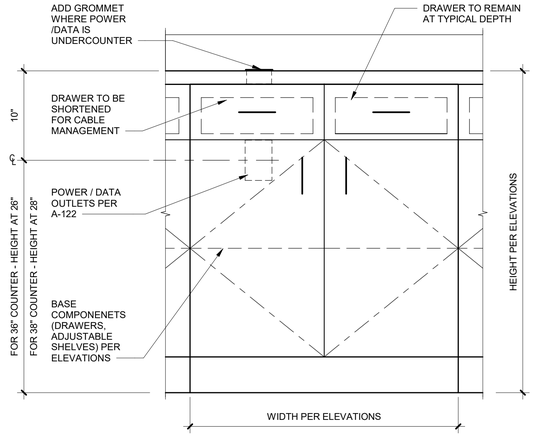
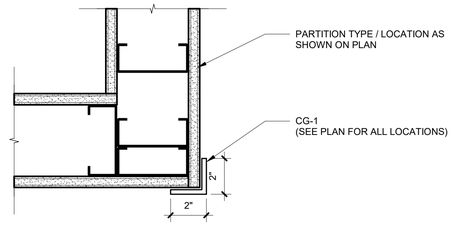


NOTE: GC TO VERIFY AND CONFIRM WITH STRUCTURAL THAT EXISTING BUILDING IS SLAB ON GRADE

9 SLAB TRENCH DRAIN
1 1/2" = 1'-0"



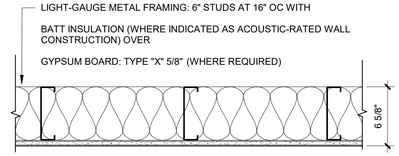
ELEVATION UNDERCOUNTER POWER & DATA
1 1/2" = 1'-0"



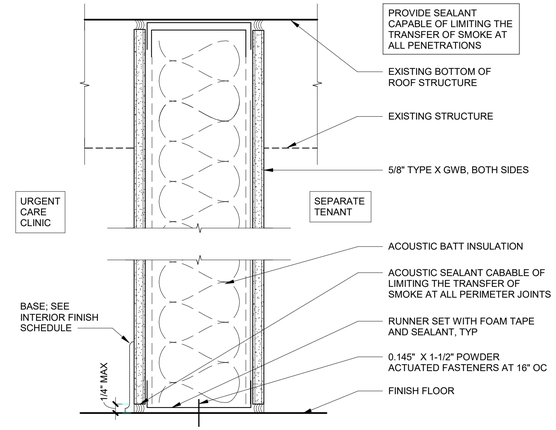
3 CORNER GUARD
3" = 1'-0"

WALL PARTITION GENERAL NOTES

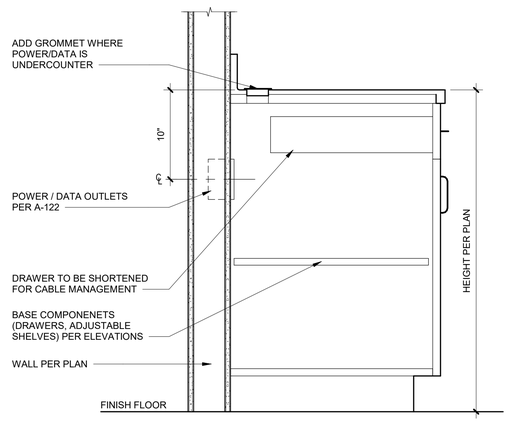
1. STUD SPACING AT 16" O.C.
2. ALL SOUND WALL SYSTEMS SHALL BE AIR TIGHT TO AVOID SOUND TRANSMISSION THROUGH CRACKS OR HOLES. FLEXIBLE SEALANT OR AN ACOUSTICAL GASKET SHALL BE USED TO SEAL BETWEEN THE SOUND WALL AND ALL DISSIMILAR SURFACES. TAPING GYPSUM BOARD WALL AND WALL-CEILING INTERSECTIONS PROVIDE AN ADEQUATE AIR SEAL. RECESSED WALL FIXTURES SUCH AS FIRE EXTINGUISHER CABINETS, ELECTRICAL OR DATA OUTLETS SHALL NOT BE LOCATED BACK TO BACK OR IN THE SAME STUD CAVITY. ANY OPENING FOR FIXTURES OR PIPE SHALL BE CUT TO THE PROPER SIZE AND SEALED. ALSO, SEE FIGURE 11 OF THE GA-600-2009 FIRE RESISTANCE DESIGN MANUAL.
3. 5/8" THICK, "TYPE X" GYSPSUM WALL BOARD, UNO.
4. PROVIDE BACKING/STRUCTURAL SUPPORT FOR ALL WALL MOUNTED EQUIPMENT, FIXTURES AND CABINETS.
5. PACK MINERAL FIBER INSULATION AROUND PIPES, CONDUITS, DUCTS OR OTHER EQUIPMENT THAT PENETRATE NON-FIRE RATED PARTITIONS.
6. GREATER STUD SIZE (DEPTHS) ARE PERMITTED TO MEET GA- FILE ASSEMBLY RATINGS. STUD SPACINGS INDICATED ARE MAXIMUMS.
7. FIRE-RATED ASSEMBLIES: INSTALL FIRESTOPPING SYSTEM MATCHING THE FIRE RATING OF THE ASSEMBLY AS SPECIFIED IN SECTION 07 8400 AT PENETRATIONS THROUGH FIRE RATED ASSEMBLIES AND AT GAPS/CRACKS BETWEEN DISSIMILAR MATERIALS AND AT PERIMETER OF ASSEMBLY.



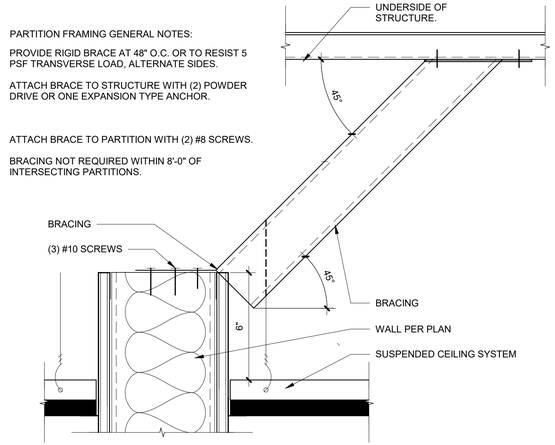
6L2 6" METAL STUD WALL ASSEMBLY
SCALE: 1 1/2" = 1'-0"



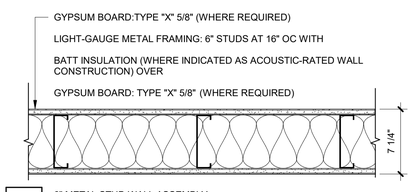
8 SMOKE
3" = 1'-0"



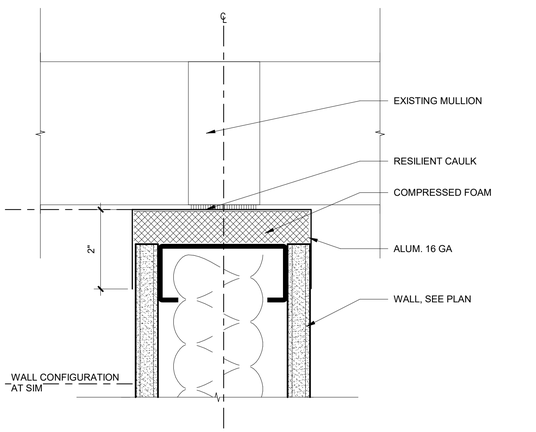
SECTION UNDERCOUNTER POWER & DATA
1 1/2" = 1'-0"



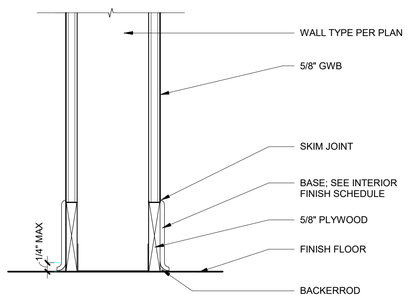
2 TYPICAL PARTITION WALL BRACING
3" = 1'-0"



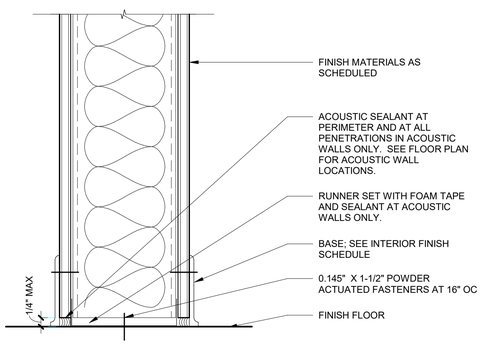
6L1 6" METAL STUD WALL ASSEMBLY
SCALE: 1 1/2" = 1'-0"



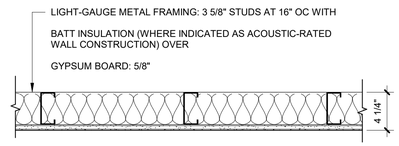
7 WALL AT EXISTING STOREFRONT
6" = 1'-0"



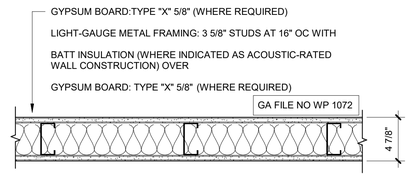
4 REINFORCED COVE RUBBER BASE
3" = 1'-0"



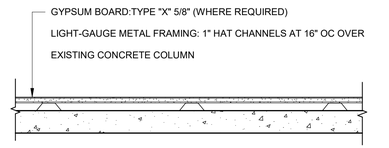
1 TYP. INTERIOR PARTITION WALL AT SLAB
3" = 1'-0"



3L2 3 5/8" METAL STUD WALL ASSEMBLY
SCALE: 1 1/2" = 1'-0"



3L1 3 5/8" METAL STUD WALL ASSEMBLY
SCALE: 1 1/2" = 1'-0"



1C1 1" METAL HAT CHANNEL FURRING WALL ASSEMBLY
SCALE: 1 1/2" = 1'-0"

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WALL PARTITION TYPES & DETAILS

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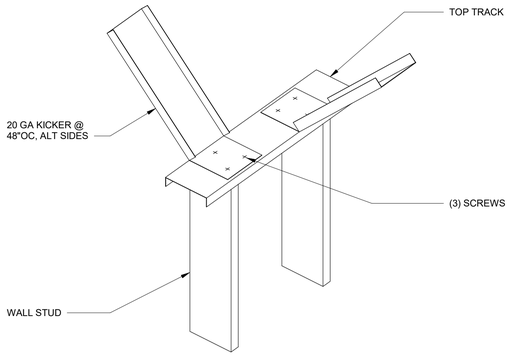
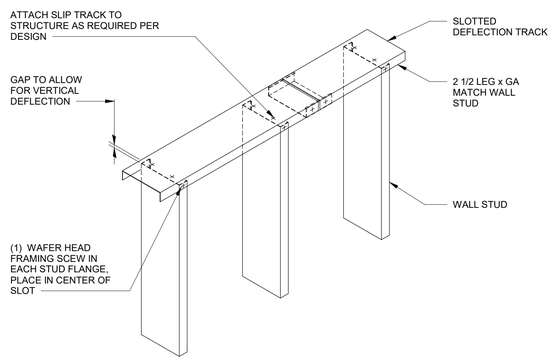
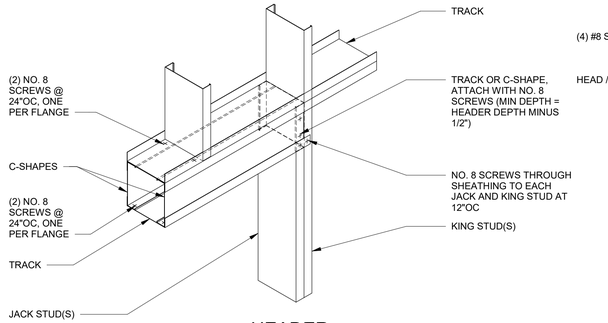


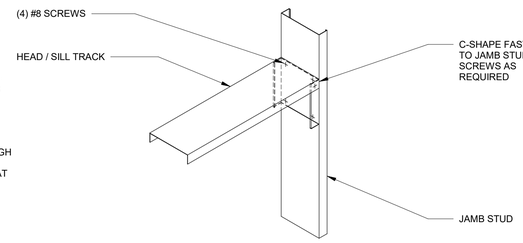
7 TOP OF WALL BRACING
1 1/2" = 1'-0"



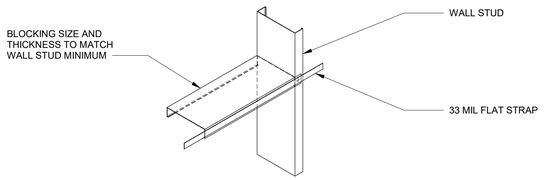
6 TOP OF WALL DEFLECTION TRACK DETAIL
1 1/2" = 1'-0"



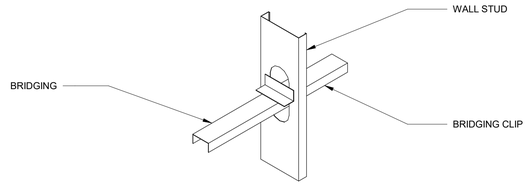
HEADER



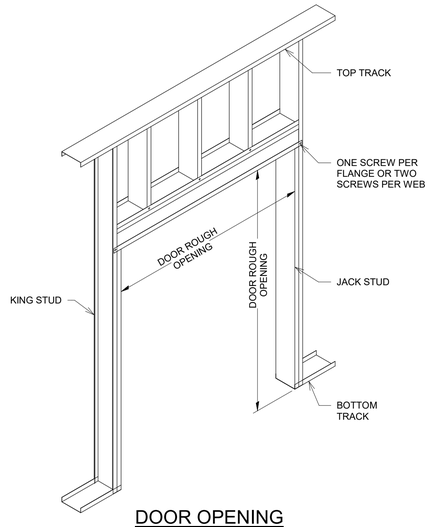
SILL



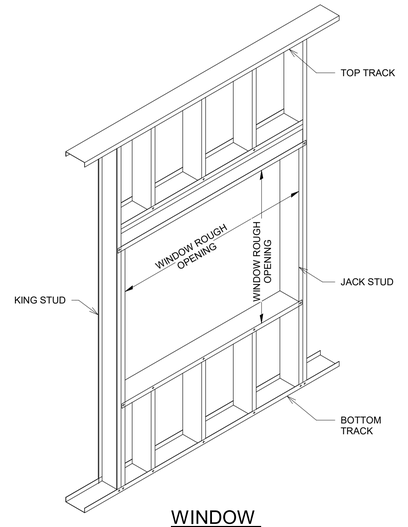
BLOCKING



BRIDGING



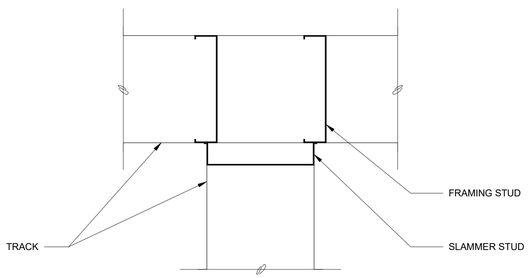
DOOR OPENING



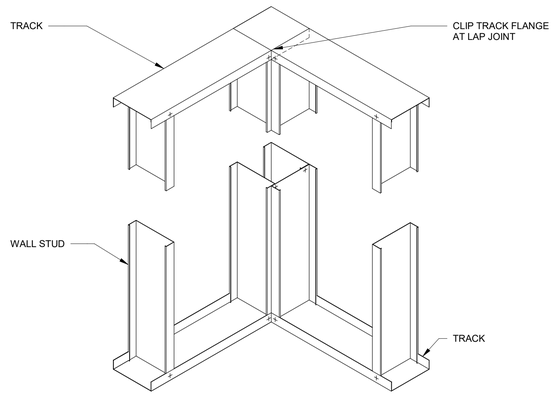
WINDOW OPENING

NOTES:
1. DETAILS SHOWN HERE ARE FOR MANDOOR WITH STEEL FRAME INSERT FROM MANUFACTURER AND SMALL WINDOW OPENINGS ONLY.

5 BRIDGING AND BLOCKING
1 1/2" = 1'-0"

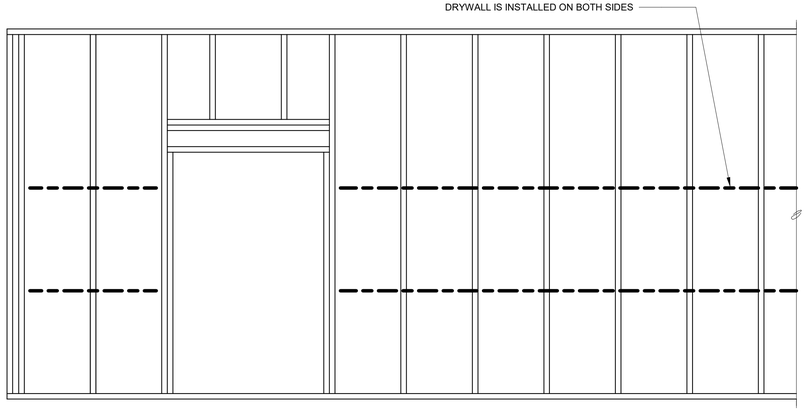


4 FRAMING AT WALL INTERSECTION DETAIL
3" = 1'-0"



3 FRAMING AT CORNER WALL DETAIL
1 1/2" = 1'-0"

2 HEADER AND SILL AT MANDOOR AND SMALL WINDOW DETAIL
3/4" = 1'-0"



PARTITION WALL HEIGHT SCHEDULE

SIZE	SPACING	MAX HEIGHT
162S125-18 (25 GA)	16"OC	4'-10"
162S125-27 (22 GA)	16"OC	5'-8"
162S125-30 (20 GA)	16"OC	5'-10"
250S125-18 (25 GA)	16"OC	6'-8"
250S125-27 (22 GA)	16"OC	7'-10"
250S125-30 (20 GA)	16"OC	8'-1"
350S125-18 (25 GA)	16"OC	7'-3"
350S125-27 (22 GA)	16"OC	10'-1"
350S125-30 (20 GA)	16"OC	10'-5"
362S125-18 (25 GA)	16"OC	7'-10"
362S125-27 (22 GA)	16"OC	10'-5"
362S125-30 (20 GA)	16"OC	10'-9"
400S125-18 (25 GA)	16"OC	9'-0"
400S125-27 (22 GA)	16"OC	11'-3"
400S125-30 (20 GA)	16"OC	11'-7"
600S125-27 (22 GA)	16"OC	11'-3"
600S125-30 (20 GA)	16"OC	15'-10"
600S125-33 (20 GA)	16"OC	16'-6"
600S125-43 (18 GA)	16"OC	18'-1"
800S125-43 (18 GA)	16"OC	25'-0"

1 FRAMING ELEVATION AND SCHEDULING ELEVATION
3/4" = 1'-0"

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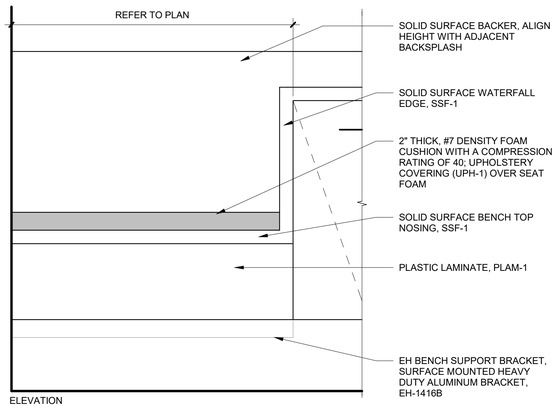
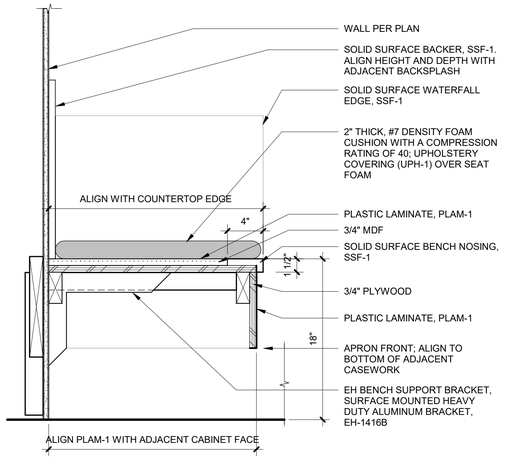
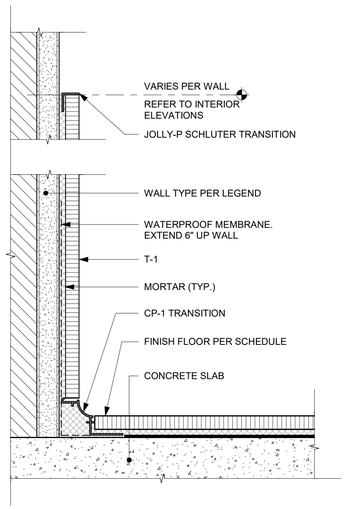
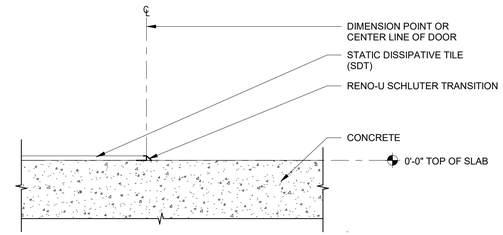




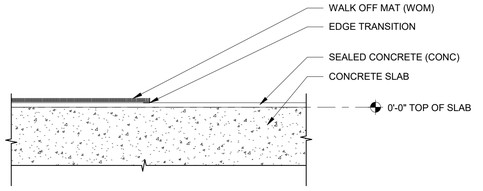
7 EXAM ROOM BENCH DETAIL
1 1/2" = 1'-0"



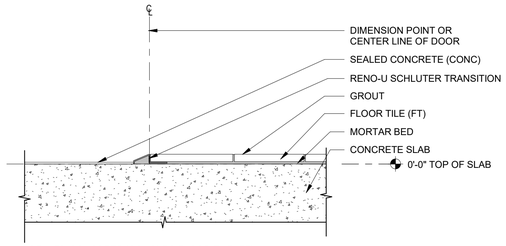
6 WALL TILE TO FLOOR TILE
6" = 1'-0"



STATIC DISSIPATIVE TILE (SDT) TO SEALED CONCRETE (CONC)



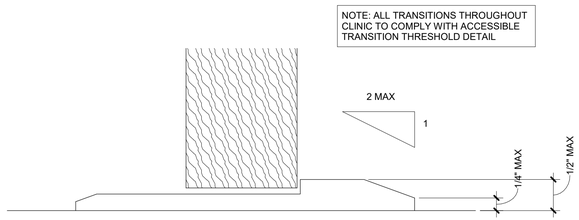
WALK OFF MAT (WOM) TO SEALED CONCRETE (CONC)



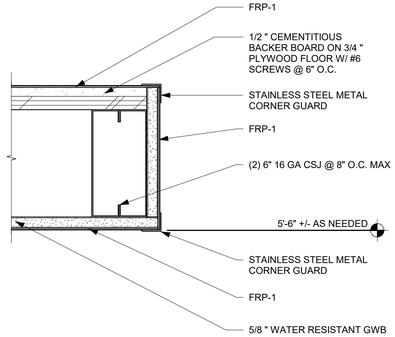
SEALED CONCRETE (CONC) TO FLOOR TILE (FT)

NOTE:
1. PER ANSI A117.1-2009 SECTION 303: AT ALL FLOOR TRANSITIONS, ANY CHANGE IN LEVEL SHALL NOT EXCEED 1/2". VERTICAL CHANGES IN LEVEL SHALL BE NO MORE THAN 1/4", CHANGES IN LEVEL GREATER THAN 1/4", AND NO MORE THAN 1/2" SHALL BE BEVELED WITH A SLOPE NOT STEEPER THAN 1:2. SEE DETAIL 4/A-403.

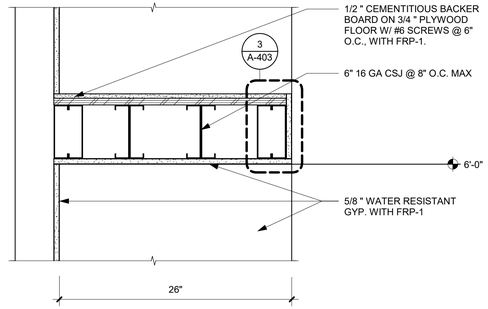
5 TYP FLOOR FINISH TRANSITIONS
3" = 1'-0"



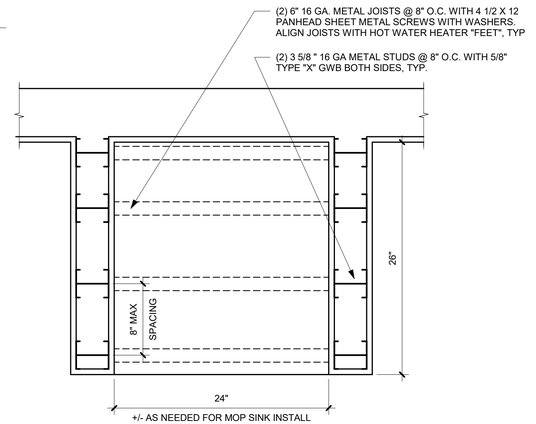
4 ACCESSIBLE THRESHOLD
6" = 1'-0"



3 SHELF EDGE DETAIL
3" = 1'-0"



2 WATER HEATER SHELF
1 1/2" = 1'-0"



1 WATER HEATER SHELF - PLAN
1 1/2" = 1'-0"

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NWCB Technical Document 03/22

SUSPENDED CEILINGS
401

Suspension Systems for Acoustical Lay-in Ceilings Seismic Design Categories D, E & F

This document provides the 2021 IBC referenced standards for the prescriptive design and installation of suspension systems for acoustical lay-in ceilings. Incorporation of this document will provide a more uniform standard for installation and inspection. This document is intended to accomplish the intent of the International Building Code (IBC), including the Oregon Structural Specialty Code and Washington State Building Code, with regard to the requirements for seismic design category D, E and F for suspended ceilings and related items. Prescriptive suspension systems shall be installed per these requirements and those of the referenced documents. Engineered design of suspension systems are outside the scope of this document. Manufacturers' recommendations shall be followed where applicable.

The following are outside the scope of this technical document:

- Suspension systems for acoustical lay-in ceilings in Risk Category IV structures. *Source: ASCE 7 Section 13.1.3, ASTM E580 Section 5.7*
- Suspension systems for acoustical lay-in ceilings assigned a component importance factor of 1.5 in accordance with ASCE 7 Section 13.1.3 by the registered design professional. *Source: ASCE 7 Section 13.1.3, ASTM E580 Section 5.7*
- Suspension systems for acoustical lay-in ceiling designed in accordance with accepted engineering practice by a registered design professional. *Source: ASCE 7 Section 13.5.6.2*
- Suspension systems consisting of screw or nail-attached gypsum board on one level that are surrounded by and connected to walls or soffits that are laterally braced to the structure above are exempt from the requirements of ASCE-7 Section 13.5.6. *Source ASCE-7 Section 13.5.6 Exception 2*

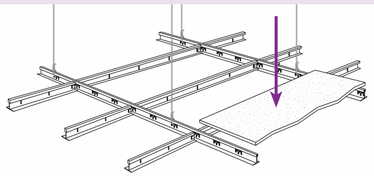
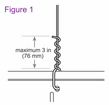


Figure 1



General Requirements

- Referenced sources per hierarchy: 2021 International Building Code (IBC), American Society of Civil Engineers (ASCE-7-16), American Society of Testing Materials (ASTM C635, ASTM C636, ASTM E580).
- Partitions that are tied to the ceiling and all partitions greater than 6 ft in height shall be laterally braced to the structure. Bracing shall be independent of the ceiling splay bracing system. *Source: ASCE 7 Section 13.5.8.1*
- For further information on bracing of non-load bearing partitions, refer to NWCB Technical Document #200-501.
- All main beams are to be Heavy Duty (HD as defined in ASTM C635). *Source: ASTM E580 Section 5.1.1*
- Ceilings less than or equal to 144 ft² and surrounded by walls or soffits that are laterally braced to the structure above are exempt from the seismic design requirements of ASCE 7 and ASTM E580. *Source ASCE 7 Section 13.5.6 Exception 1*
- All wire ties shall be tightly wrapped around themselves a minimum of three turns within three inches (Figure 1). *Source: ASTM C636 Section 2.3.4*
- Main beams shall be level to within 1/4 in. in 10-ft. *Source: ASTM C636 Section 2.3.1*
- Cross tees shall be level to within 1/8 in. in 12-ft. *Source: ASTM C636 Section 2.2.1*

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Figure 2
Lateral-Force Bracing *Source: ASTM E580 Figure 5*

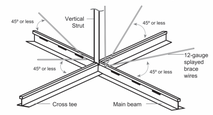


Figure 3
Maximum Recommended Lengths for Vertical Struts

EMT CONDUIT	
½" EMT conduit	up to 5'10"
¾" EMT conduit	up to 7'8"
1" EMT conduit	up to 9'9"
METAL STUDS	
Single 1⅝" metal stud (20-gauge)	up to 12'0"
Back-to-back 1⅝" metal stud (20 gauge)	up to 15'0"
Single 2 ½" metal stud (20-gauge)	up to 13'6"
Back-to-back 2 ½" metal stud (25-gauge)	up to 15'0"

Source: Northwest Wall and Ceiling Bureau

Note: Plenum heights greater than 15'0" will require engineering calculations.

Figure 4a
Attached Wall Molding Requirements

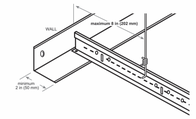
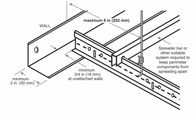


Figure 4b
Unattached Wall Molding Requirements



Lateral-Force Bracing *(Figures 2 and 3)*

- Lateral-force bracing, which is the use of vertical struts (compression posts) and splay wires, is required for all ceiling areas greater than 1000 ft² (see Figure 2). *Source: ASTM E580 Section 5.2.8.1, Section 5.2.8.2*
- Lateral-force bracing shall be 12 ft on center (maximum) and begin no farther than 6 ft from walls. *Source: ASTM E580 Section 5.2.8.2*
- Lateral-force bracing splay wires shall consist of four 12-gauge wires attached to the main beam, arrayed 90° from each other and at an angle not exceeding 45° from the plane of the ceiling. *Source: ASTM E580 Section 5.2.8.2*
- Lateral-force bracing splay wires shall be attached to the grid and to the structure in such a manner that they can support a load of not less than 250 lb when tested per ASTM E3090 (Figure 6b). *Source: ASTM E580 Section 5.2.8.3*
- Power-actuated fasteners in concrete or masonry shall not be used for the attachment of lateral-force bracing splay wires unless tested and approved for seismic loading. *Source: ASCE 7 Section 13.4.5, Oregon Building Codes Division Statewide Code Interpretation No. 11-01 (oregon.gov/bcd/codes-stand/Documents/interp-11-01-pafoeilings.pdf)*
- Power-actuated fasteners in steel shall be permitted for the attachment of lateral-force bracing splay wires. *Source: ASCE 7 Section 13.4.5 Exception 2*
- Splay wires are to be within 2 inches of the connection of the vertical strut to suspended ceiling. *Source: ASTM E580 Section 5.2.8.2*
- Rigid bracing may be used in lieu of splay wires. *Source: ASTM E580 Section 5.2.8.4*
- Vertical struts must be positively attached to the suspension systems and the structure above. *Source: ASTM E580 Section 5.2.8.2*
- The vertical strut may be EMT conduit, metal studs or a proprietary compression post (see Figure 3).
- Changes in ceiling plane elevation requires independent lateral force-bracing for each ceiling plane. *Source: ASTM E580 Section 5.2.8.6*

Wall Moldings *(Figures 4a and 4b)*

- Wall moldings (perimeter closure angles) are required to have a horizontal flange not less than 2" wide. Two adjacent ends of the ceiling grid shall be positively attached to the wall molding (pop rivets or approved method), and the opposite ends shall have a ¾-in clearance from the wall and be free to slide. *Source: ASTM E580 Section 5.2.2, Section 5.2.3*
- Where substantiating documentation has been provided to the local jurisdiction, proprietary perimeter clips may be used in tandem with 7/8" closure angle to satisfy the requirements for the 2" closure angle.
- Perimeter supporting clips shall be attached to the supporting closure angle or channel with a minimum of two screws per clip and shall be installed around the entire ceiling perimeter. *Source: ASCE-7 Section 13.5.6.2.2a*

Spreader Bars *(Figure 4b)*

- Terminal ends of main runners and cross members shall be tied together or have some other approved means to prevent their spreading. *Source: ASTM E580 Section 5.2.4*

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Figure 5a

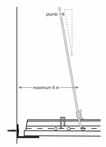


Figure 5b • Countersloping

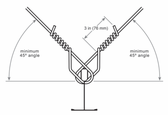


Figure 6a

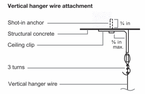


Figure 6b

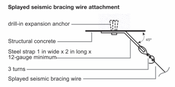
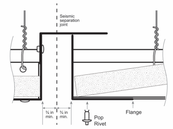


Figure 7



- Spreader bars are not required at perimeters where runners are attached directly to closure angles.
- Where substantiating documentation has been provided to the local jurisdiction for review and approval, proprietary perimeter clips may be used to satisfy the requirements for spreader bars.

Hanger (Suspension) Wires *(Figures 5a and 5b)*

- Hanger and perimeter wires must be plumb within 1:6 unless (Figure 5a) counter sloping wires are provided (Figure 5b). *Source: ASTM C636 Section 2.1.4*
- Hanger wires shall be spaced 4 ft on center, maximum. *Source: ASTM C636 Section 2.1.3*
- Hanger wires shall be No. 12-gauge. *Source: ASTM C636 Section 2.1.6, ASTM E580 Section 5.2.7.1*
- Hanger wires shall not press against ducts or pipes. *Source: ASTM C636 Section 2.1.4*
- Hanger wires shall not have local kinks or bends as a means of leveling main beams or cross tees. *Source: ASTM C636 Section 2.2.3, Section 2.3.3*
- Any connection device at the supporting construction shall be capable of carrying not less than 90 lb. *Source: ASTM E580 Section 5.2.7.2*
- Power Actuated Fasteners (PAFs) are an approved method of attachment for hanger wires where the service load on any individual fastener does not exceed 90 lb in concrete or 250 lb in steel. *Source: ASCE Section 7-16 13.4.5 Exception 1 & 2, Oregon Building Codes Division Statewide Code Interpretation No. 11-01 (oregon.gov/bcd/codes-stand/Documents/interp-11-01-pafoeilings.pdf)*
- Terminal ends of each main beam and cross tee must be supported within 8 inches of each wall with a perimeter wire or approved wall support (see Figures 4a & 5a). *Source: ASTM E580 Section 5.2.6*
- Wires shall not attach to or bend around interfering material or equipment. A trapeze or equivalent device shall be used where obstructions preclude direct suspension. Trapeze suspensions shall be sized to resist the dead load and lateral forces appropriate for the seismic category. *Source: ASTM E580 Section 5.2.7.4*

Electrical Fixtures

- All lighting fixtures shall be positively attached to the suspended ceiling system by mechanical means as specified in the National Electrical Code (NEC), unless independently supported. *Source: ASTM E580 Section 5.3.1*
- Light fixtures weighing less than 10 lb shall have one 12-gauge safety wire connected from the fixture housing to the structure above. This wire may be slack. *Source: ASTM E580 Section 5.3.4*
- Light fixtures weighing more than 10 lb and less than or equal to 56 lb shall be supported directly from the structure above by approved hangers. These wires may be slack. *Source: ASTM E580 Section 5.3.5*
- Light fixtures weighing more than 56 lb shall be supported directly from the structure above by approved hangers. *Source: ASTM E580 Section 5.3.6*
- Pendant-hung fixtures shall be directly supported from the structure above using a 9-gauge minimum wire or an approved alternate support without using the ceiling suspension system for direct support. *Source: ASTM E580 Section 5.3.7*

Mechanical Services

- Terminals or services weighing less than or equal to 20 lb shall be positively attached to the ceiling suspension main runners or to cross runners that have the same carrying capacity as the main runners. *Source: ASTM E580 Section 5.4.1*
- Terminals or services weighing more than 20 lb but less than or equal to 56 lb shall be positively attached to the ceiling suspension main runners or to cross runners that have the same carrying capacity as the main runners, and shall have two 12-gauge safety wires connecting them to the ceiling system hangers or the structure above. These wires may be slack. *Source: ASTM E580 Section 5.4.2*
- Terminals or services weighing more than 56 lb shall be supported directly from the structure above by approved hangers. *Source: ASTM E580 Section 5.4.3*

Seismic Separation Joints *(Figure 7)*

- All continuous ceiling areas exceeding 2500 ft² shall have a seismic separation joint, bulkhead braced to the structure or full-height partition that breaks the ceiling into areas of no more than 2500 ft² and a ratio of the long to short dimension less than or equal to four. Each 2500 ft² maximum area shall be capable of allowing + or – ¾ in (1½ in total) at the joints horizontal movement in the plane of the ceiling. Areas surrounded by bulkheads or full height partitions shall be provided with closure angles. Each area with a seismic separation joint, bulkhead or full-height partition shall have Lateral-Force Bracing as prescribed on page 2. *Source: ASCE-7 Section 13.5.6.2.2b, ASTM E580 Section 5.2.9.1*

Sprinklers

- For ceilings without rigid bracing, sprinkler head penetrations shall have a 2-in oversize ring, sleeve or adapter through the ceiling tile to allow free movement of at least one inch in all horizontal directions. Flexible head design that can accommodate 1 inch free movement shall be permitted as an alternate. *Source: ASTM E580 Section 5.2.8.5*

Glossary for this Document *(regional terminology may vary)*

CROSS TEE The cross member that interlocks with the main beams, also known as a cross runner or cross T-bar.

DIFFUSER A circular or rectangular metal grill used for the passage of air from a ducted system.

GRID The main beams and cross tees of the suspension system.

HANGER WIRE 10- or 12-gauge soft annealed wire used as primary support for the grid system. Also called a suspension wire.

LATERAL-FORCE BRACING The bracing method used to prevent ceiling uplift or restrict lateral movement during a seismic event. Lateral-force bracing consists of vertical struts and splay wires.

MAIN BEAM The primary suspension member supported by hanger wires, also known as the main runner or carrying tee, carrying runner or mains.

MOLDING/CLOSURE ANGLE A light-gauge metal angle or channel fastened to the perimeter wall or partition to support the perimeter ends of an accoustical ceiling grid.

PERIMETER CLIP A proprietary angle bracket attached directly to the wall molding/closure angle which allows for ¾ in movement in the event of seismic activity and interlocks properly with ends of grid system.

PERIMETER WIRE A hanger wire placed within 8 in of the surrounding walls.

PLENUM The space above a suspended ceiling.

SLACK WIRE A 12-gauge wire that is not tight or taut.

SPREADER or SPACER BAR A bar with notches to prevent the suspension system from separating, also called a stabilizer bar.

SPLAY WIRE A wire installed at an angle rather than perpendicular to the grid.

VERTICAL STRUT The rigid vertical member used in lateral-force bracing of the suspension system. Also known as compression post, seismic pod or seismic strut. Common materials are electrical conduit (EMT), metal studs or proprietary products.

The NWCB has been serving the construction industry since 1950. It is recognized as a technical authority, educational body and spokesperson for the wall and ceiling industry. It provides services to architects and the construction community on all matters relating to the diversified wall and ceiling industry. As the industry's development and coordination organization, the NWCB saw the need to establish this document to provide clarification and the intent of NEHRP (National Earthquake Hazards Reduction Program) an agency of FEMA (Federal Emergency Management Agency). It is meant to serve as a set of recommendations and is not intended for any specific construction project. NWCB makes no express or implied warranty or guarantee of the techniques, construction methods or materials identified herein.

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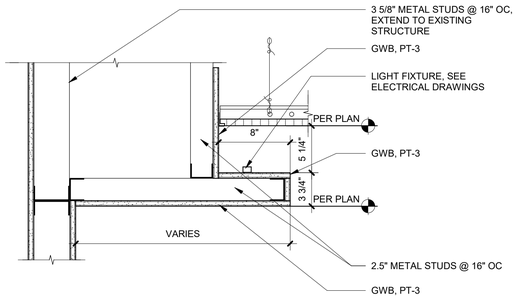
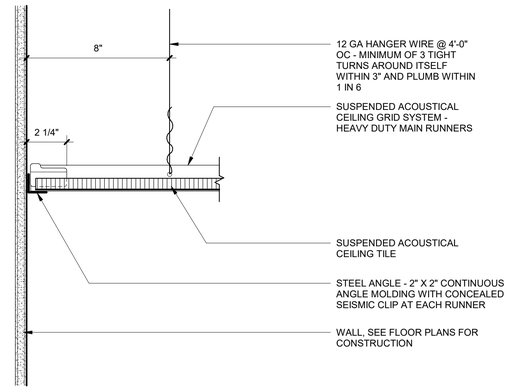
CEILING SUPPORT PERFORMANCE REQS

THE CEILING SUPPORT OPTION SELECTED BY THE CONTRACTOR FOR SUSPENDED GWB CEILINGS SHALL BE BIDDER DESIGNED AND CONFORM TO THE FOLLOWING PERFORMANCE REQUIREMENTS:

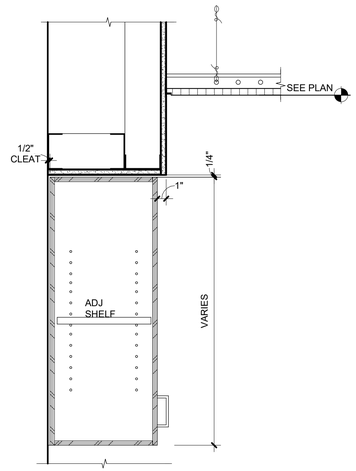
- MATCH CEILING CONFIGURATION / LAYOUT/ TYPE SHOWN ON THE DRAWINGS.
- FRAMING SHALL BE CONNECTED TO THE STRUCTURAL FLOOR AND ROOF ELEMENTS TO SUPPORT THE CEILING DEAD LOAD PLUS A 300 POUND CONCENTRATED LOAD APPLIED TO ANY LOCATION WITHOUT PERMANENT DEFLECTION OR FAILURE OF FRAMING SYSTEM.
- DEFLECTION OF FRAMING SHALL NOT EXCEED L/240.
- FRAMING SPACING AT MAXIMUM 24" ON CENTER
- SELECT THE CEILING SUPPORT OPTION AS REQUIRED TO ACCOMMODATE AND WORK WITH THE LAYOUT OF THE MECHANICAL AND ELECTRICAL WORK ABOVE THE CEILING.

  CEILING WALLS SHALL CONFORM TO THE FOLLOWING PERFORMANCE REQUIREMENTS:
- WALL FRAMING SHALL BE CONNECTED TO THE STRUCTURAL FLOOR AND ROOF ELEMENTS TO SUPPORT THE APPLIED DEAD LOADS PLUS A 300 POUND CONCENTRATED LOAD APPLIED TO ANY LOCATION WITHOUT PERMANENT DEFLECTION OR FAILURE OF FRAMING.
- SECURELY BRACE WALLS UP TO STRUCTURAL FLOOR AND ROOF ELEMENTS ABOVE AT MAXIMUM SPACING OF 8'-0" TO PREVENT LATERAL MOVEMENT OF WALL. BRACING SHALL BE CONCEALED FROM VIEW. SELECT BRACING METHOD TO ACCOMMODATE AND WORK WITH MECHANICAL AND ELECTRICAL WORK.

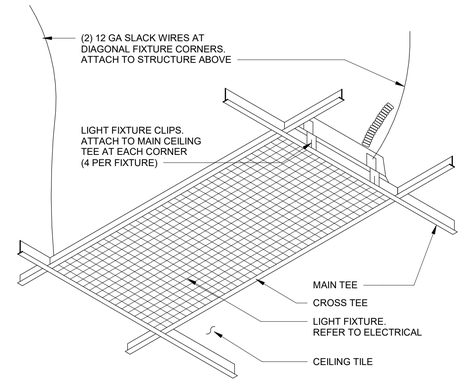




6 LIGHT SHELF SOFFIT DETAIL
1 1/2" = 1'-0"

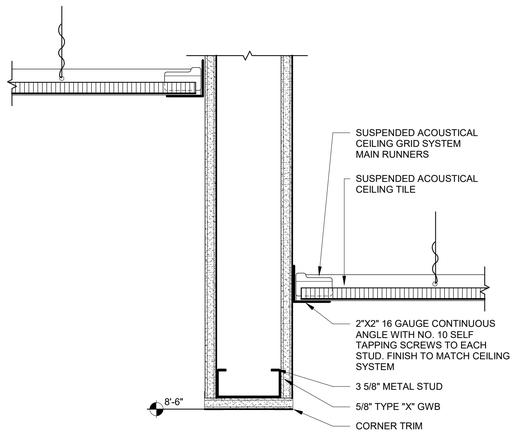


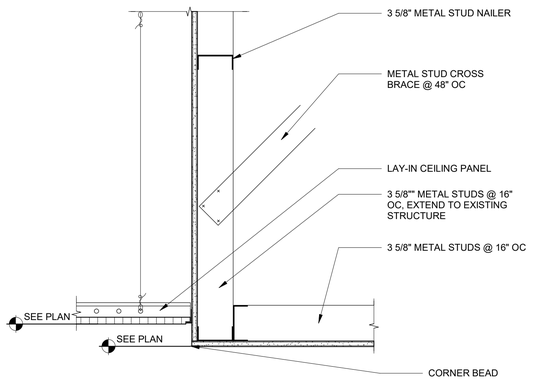
3 PERIMETER @ SUSPENDED ACT CEILING
3" = 1'-0"

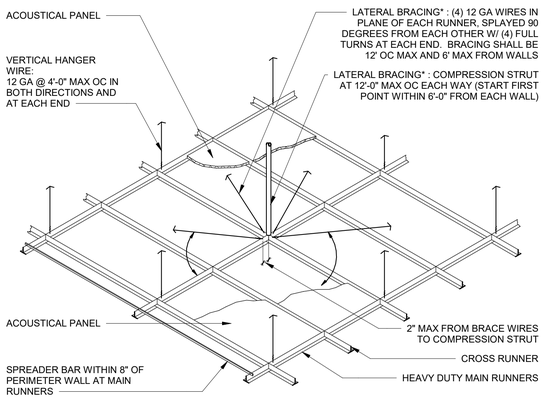


5 TYPICAL UPPER CABINET AND SOFFIT
1 1/2" = 1'-0"

2 SEISMIC FASTENING AT LIGHT FIXTURE
3" = 1'-0"







* NOTE: LATERAL BRACING IS NOT REQUIRED FOR CEILINGS LESS THAN 1,000 SQUARE FEET PROVIDED THEY ARE SURROUNDED BY FOUR WALLS AND BRACED TO STRUCTURE.

7 GWB HEADER
3" = 1'-0"

4 SOFFIT DETAIL
1 1/2" = 1'-0"

1 BRACING AT SUSPENDED ACT CEILING
3" = 1'-0"

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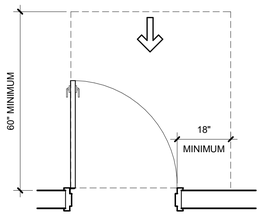
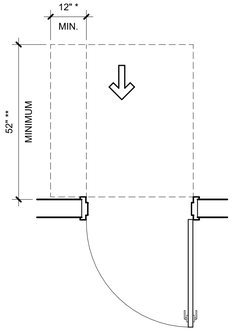
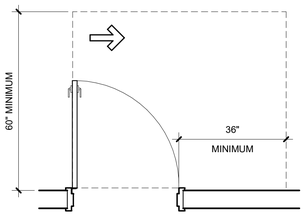


ACCESSIBLE ROUTES
FRONT APPROACH, PULL-SIDE

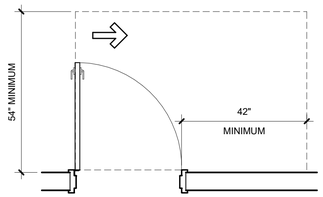


* IF BOTH CLOSER AND LATCH ARE PROVIDED
** IN EXISTING BUILDINGS AND FACILITIES, THE DIMENSION PERPENDICULAR TO THE DOOR OR GATE FOR THE FRONT DIRECTION ON THE PATH SIDE SHALL BE 48 INCHES.

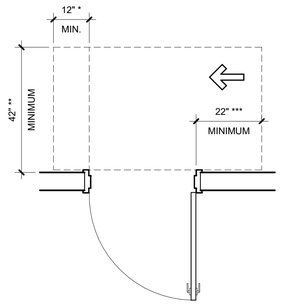
ACCESSIBLE ROUTES
FRONT APPROACH, PUSH-SIDE



ACCESSIBLE ROUTES
HINGE APPROACH, PULL-SIDE

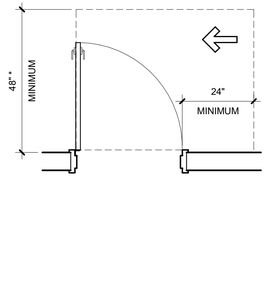


ACCESSIBLE ROUTES
HINGE APPROACH, PULL-SIDE



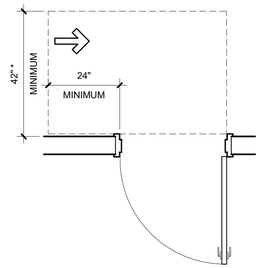
* IF BOTH CLOSER AND LATCH ARE PROVIDED
** 48" MININUM IF BOTH CLOSER AND LATCH PROVIDED
*** BEYOND HINGE SIDE

ACCESSIBLE ROUTES
HINGE APPROACH, PUSH-SIDE



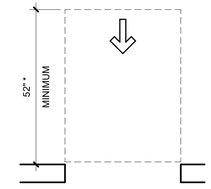
* 54 MIN. IF CLOSER IS PROVIDED

ACCESSIBLE ROUTES
LATCH APPROACH, PULL-SIDE



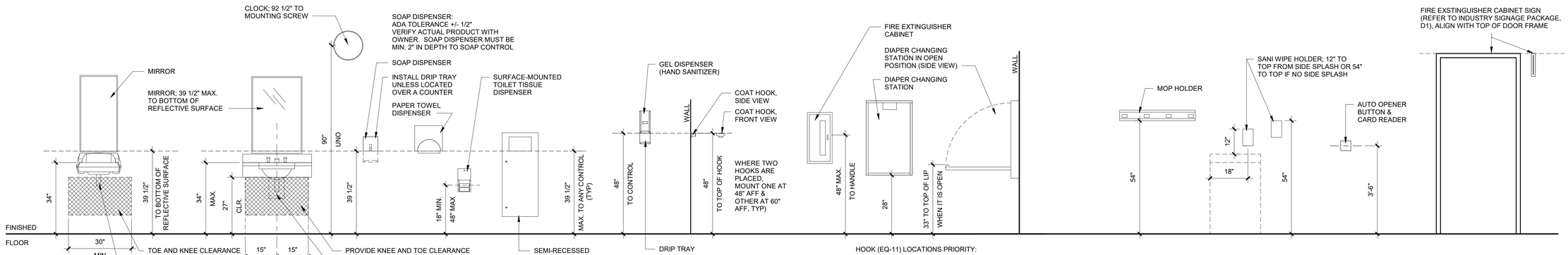
* 48 MIN. IF CLOSER IS PROVIDED

ACCESSIBLE ROUTES
LATCH APPROACH, PUSH-SIDE

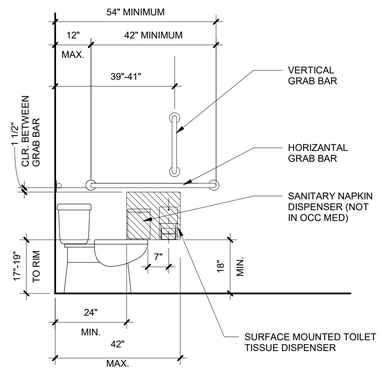


* IN EXISTING BUILDINGS AND FACILITIES, THE DIMENSION PERPENDICULAR TO THE DOORWAY FOR THE FRONT DIRECTION SHALL BE 48 INCHES MINIMUM

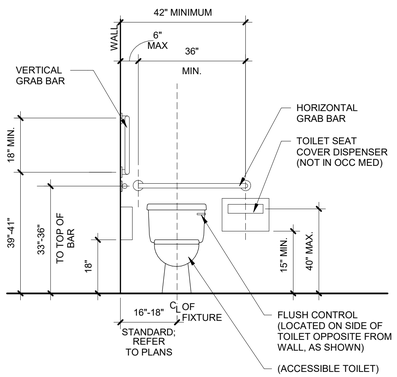
ACCESSIBLE ROUTES
DOORWAYS WITHOUT DOORS



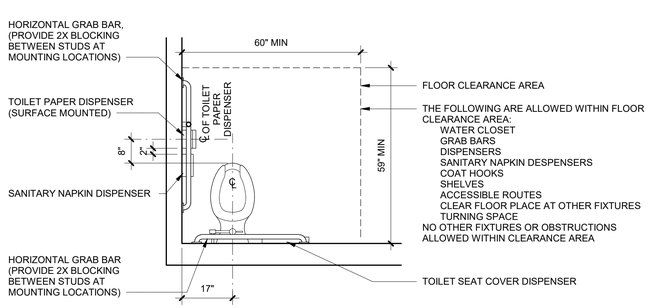
TYPICAL ACCESSORY MOUNTING HEIGHTS



ACCESSIBLE TOILETS - GENERAL TANKLESS TOILETS

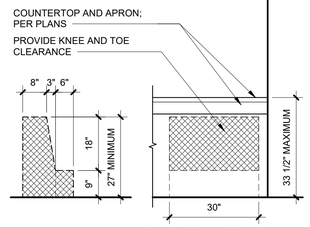


NOTE: FLUSH HANDLE TO BE 36" AFF. MAX. AND INSTALLED ON OPEN SIDE OF WATER CLOSET.



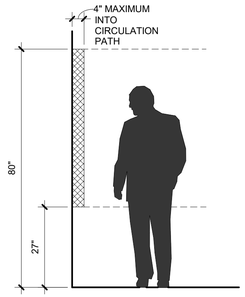
PLAN VIEW [NOTE: REFER TO WHEEL CHAIR ACCESSIBLE WATER CLOSET COMPARTMENT (ADULT) FOR SIDE WALL AND BACK WALL ELEVATION VIEWS]

NOTE: DIMENSIONS ARE FROM FINISHED FACE OF WALL / PARTITION



NOTE: AT COUNTERTOP LOCATIONS WITH TOP-MOUNTED SINKS, SET COUNTERTOP HEIGHT TO PROVIDE 34" MAXIMUM TO TOP OF SINK LIP

KNEE AND TOE CLEARANCE



LIMITS OF PROTRUDING OBJECTS

TYPICAL ACCESSIBLE MOUNTING HEIGHTS, LOCATIONS AND CLEARANCES

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TYPICAL ADA MOUNTING HEIGHTS, LOCATIONS, AND CLEARANCES

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FLOOR PLAN GENERAL NOTES

1. VERIFY ALL FIELD CONDITIONS AND DIMENSIONS PRIOR TO FABRICATION AND/OR INSTALLATION
2. VERIFY ALL MOUNTING HEIGHTS AND LOCATIONS PRIOR TO FABRICATION AND/OR INSTALLATION
3. EGD CALL OUTS WERE TAKEN FROM 02.10.2021 MASTER INDIGO STANDARDS PACKAGE VERSION PROVIDED BY INDUSTRY GRAPHICS/PETE SCHOLL.

FLOOR PLAN LEGEND

XX-XXX — SIGNAGE TYPE - SIGN NUMBER

1 INTERIOR SIGNAGE FLOOR PLAN
1/4" = 1'-0"

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

PLAN NORTH

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05.09.2024

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22023.00.11

DRAWN BY: Author

REVIEWED BY:

SHEET TITLE
INTERIOR SIGNAGE FLOOR PLAN

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SHEET

A-601

PERMIT / CD SET

24x36 5/9/2024 4:23:58 PM

FLOOR PLAN GENERAL NOTES

1. VERIFY ALL FIELD CONDITIONS AND DIMENSIONS PRIOR TO FABRICATION AND/OR INSTALLATION
2. VERIFY ALL MOUNTING HEIGHTS AND LOCATIONS PRIOR TO FABRICATION AND/OR INSTALLATION
3. EGD CALL OUTS WERE TAKEN FROM 02.10.2021 MASTER INDIGO STANDARDS PACKAGE VERSION PROVIDED BY INDUSTRY GRAPHICS/PETE SCHOLL.

FLOOR PLAN LEGEND

XX-XXX — SIGNAGE TYPE - SIGN NUMBER

1 EGD FLOOR PLAN
1/4" = 1'-0"

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

PLAN NORTH

IF SHEET MEASURES LESS THAN 24"X36", IT IS A REDUCED PRINT. REDUCE SCALE ACCORDINGLY

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SEAL

5664
REGISTERED ARCHITECT
DOUGLAS P. OBERST
STATE OF WASHINGTON

City of Puyallup
Development & Permitting Services
ISSUED PERMIT
Building | Planning | Engineering | Public Works | Fire | Traffic

PRCTI20240772

PROJECT
MULTICARE TENANT IMPROVEMENT
INDIGO - PUYALLUP
4505 S MERIDIAN
PUYALLUP, WA 98373

REVISIONS

DATE
05.09.2024

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SHEET TITLE
EGD FLOOR PLAN

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SHEET

A-602

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24x36 5/9/2024 4:23:59 PM

SIGNAGE MESSAGE SCHEDULE

Type	Sign ID	Left Arrow	Message	Right Arrow	Description	Symbol	Notes
B							
B1.2	B1.2-001		READY TO GO		AREA ID GRAPHIC		DOUBLE SIDED; REPEAT MESSAGE ON BOTH SIDES
B1.2	B1.2-002		READY TO GO		AREA ID GRAPHIC		DOUBLE SIDED; REPEAT MESSAGE ON BOTH SIDES
C							
C1.1	C1.1-001		104 - HEALING SUITE		EXAM ROOM ID		
C1.1	C1.1-002		108 - COMMUNITY SUITE		EXAM ROOM ID		
C1.1	C1.1-003		109 - FAMILIES SUITE		EXAM ROOM ID		
C1.1	C1.1-004		110 KIDS SUITE		EXAM ROOM ID		
C1.1	C1.1-005		111 - CLARITY SUITE		EXAM ROOM ID		
C1.1	C1.1-006		112 - KNOWLEDGE SUITE		EXAM ROOM ID		
C1.1	C1.1-007		120 - BALANCE SUITE		EXAM ROOM ID		
C1.1	C1.1-008		126 - GREEN SUITE		EXAM ROOM ID		
C1.1	C1.1-009		128 - TECHNOLOGY SUITE		EXAM ROOM ID		
C1.1	C1.1-010		130 - WELLNESS SUITE		EXAM ROOM ID		
C1.2(S)	C1.2(S)-001		Healing Suite		EXAM ROOM ID - SHORT		
C1.2(S)	C1.2(S)-002		Community Suite		EXAM ROOM ID - SHORT		
C1.2(S)	C1.2(S)-003		Families Suite		EXAM ROOM ID - SHORT		
C1.2(S)	C1.2(S)-004		Kids Suite		EXAM ROOM ID - SHORT		
C1.2(S)	C1.2(S)-005		Clarity Suite		EXAM ROOM ID - SHORT	RADIOLOGY SYMBOL	
C1.2(S)	C1.2(S)-006		Knowledge Suite		EXAM ROOM ID - SHORT		
C1.2(S)	C1.2(S)-007		Balance Suite		EXAM ROOM ID - SHORT		
C1.2(S)	C1.2(S)-008		Green Suite		EXAM ROOM ID - SHORT		
C1.2(S)	C1.2(S)-009		Technology Suite		EXAM ROOM ID - SHORT		
C1.2(S)	C1.2(S)-010		Wellnes Suite		EXAM ROOM ID - SHORT		
C1.3	C1.3-001		HEALING SUITE		FLAG SYSTEM		
C1.3	C1.3-002		COMMUNITY SUITE		FLAG SYSTEM		
C1.3	C1.3-003		FAMILIES SUITE		FLAG SYSTEM		
C1.3	C1.3-004		KIDS SUITE		FLAG SYSTEM		
C1.3	C1.3-005		CLARITY SUITE		FLAG SYSTEM		
C1.3	C1.3-006		KNOWLEDGE SUITE		FLAG SYSTEM		
C1.3	C1.3-007		BALANCE SUITE		FLAG SYSTEM		
C1.3	C1.3-008		GREEN SUITE		FLAG SYSTEM		
C1.3	C1.3-009		TECHNOLOGY SUITE		FLAG SYSTEM		
C1.3	C1.3-010		WELLNESS SUITE		FLAG SYSTEM		
C2	C2-001		103 - FOCUS		SUPPORT ROOM ID		
C2	C2-002		106 - UC STORAGE		SUPPORT ROOM ID		
C2	C2-003		115 - POCT		SUPPORT ROOM ID		
C2	C2-004		116 - CLEAN SUPPLY		SUPPORT ROOM ID	TANK SYMBOL	
C2	C2-005		117 - DRUG TESTING SUITE		SUPPORT ROOM ID		
C2	C2-006		118 - SOILED SUPPLY		SUPPORT ROOM ID	BIOHAZARD SYMBOL	
C2	C2-007		119 - COPY		SUPPORT ROOM ID		
C2	C2-008		119A - OM STORAGE		SUPPORT ROOM ID		
C2	C2-009		119B - STAFF LOUNGE		SUPPORT ROOM ID		
C2	C2-010		121 - OM ADMIN		SUPPORT ROOM ID		
C2	C2-011		124 - JANITOR		SUPPORT ROOM ID		
C2	C2-012		124A - IT		SUPPORT ROOM ID	HAND SYMBOL	
C2	C2-013		129 - OM PROVIDER		SUPPORT ROOM ID		
C3.1	C3.1-001		RESTROOM		RESTROOM ID	M/W/ACCESSIBILITY	CHANGE BACKGROUND COLOR OF SIGN TO BLUE PER UPDATED CODE
C3.1	C3.1-002		RESTROOM		RESTROOM ID	M/W/ACCESSIBILITY	CHANGE BACKGROUND COLOR OF SIGN TO BLUE PER UPDATED CODE
C3.1	C3.1-003		RESTROOM		RESTROOM ID	M/W/ACCESSIBILITY	CHANGE BACKGROUND COLOR OF SIGN TO BLUE PER UPDATED CODE
C3.3	C3.3-001		BABY CHANGING STATION		CHANGING STATION ID		CHANGE BACKGROUND COLOR OF SIGN TO BLUE PER UPDATED CODE
D							
D1	D1-001				FIRE EXTINGUISHER ID - FLAG MOUNT	FIRE EXTINGUISHER SYMBOL	
D1	D1-002				FIRE EXTINGUISHER ID - FLAG MOUNT	FIRE EXTINGUISHER SYMBOL	
D2	D2-001				EXIT	EXIT SIGN	
D2	D2-002				EXIT	EXIT SIGN	
D2	D2-003				EXIT	EXIT SIGN	
D4	D4-001		PULL FOR HELP		INSTRUCTIONAL		
D4	D4-002		PULL FOR HELP		INSTRUCTIONAL		
D4	D4-003		PULL FOR HELP		INSTRUCTIONAL		
D5	D5-001		NOTICE EMPLOYEES MUST WASH HANDS BEFORE RETURNING TO WORK		INSTRUCTIONAL		
D5	D5-002		NOTICE EMPLOYEES MUST WASH HANDS BEFORE RETURNING TO WORK		INSTRUCTIONAL		
D5	D5-003		NOTICE EMPLOYEES MUST WASH HANDS BEFORE RETURNING TO WORK		INSTRUCTIONAL		
D6	D6-001		PLEASE FLUSH TOILET PAPER ONLY		INSTRUCTIONAL		
D6	D6-002		PLEASE FLUSH TOILET PAPER ONLY		INSTRUCTIONAL		
D6	D6-003		PLEASE FLUSH TOILET PAPER ONLY		INSTRUCTIONAL		
D7	D7-001		We are happy to provide HOT beverages on request. Please feel free to ask us!		INSTRUCTIONAL		
D8	D8-001				AED - FLAG MOUNT	AED SYMBOL	
D9	D9-001				IT STOP SIGN	HAND SYMBOL	
D10	D10-001		CAUTION BIOHAZARDOUS WASTE STORAGE AREA		BIOHAZARDOUS WASTE ID	BIOHAZARD	
D10	D10-002		CAUTION BIOHAZARDOUS WASTE STORAGE AREA		BIOHAZARDOUS WASTE ID	BIOHAZARD	
E							
E1	E1-001				STANCHION		
E1	E1-002				STANCHION		
E3	E3-001				TEMPORARY INFORMATION - WALL MOUNTED		TO BE MOUNTED POST-CONSTRUCTION BY OWNER
E3	E3-002				TEMPORARY INFORMATION - WALL MOUNTED		TO BE MOUNTED POST-CONSTRUCTION BY OWNER
E3	E3-003				TEMPORARY INFORMATION - WALL MOUNTED		TO BE MOUNTED POST-CONSTRUCTION BY OWNER
E3	E3-004				TEMPORARY INFORMATION - WALL MOUNTED		TO BE MOUNTED POST-CONSTRUCTION BY OWNER
E3	E3-005				TEMPORARY INFORMATION - WALL MOUNTED		TO BE MOUNTED POST-CONSTRUCTION BY OWNER

SIGNAGE MESSAGE SCHEDULE

Type	Sign ID	Left Arrow	Message	Right Arrow	Description	Symbol	Notes
E3	E3-006				TEMPORARY INFORMATION - WALL MOUNTED		TO BE MOUNTED POST-CONSTRUCTION BY OWNER
E3	E3-007				TEMPORARY INFORMATION - WALL MOUNTED		TO BE MOUNTED POST-CONSTRUCTION BY OWNER
E3	E3-008				TEMPORARY INFORMATION - WALL MOUNTED		TO BE MOUNTED POST-CONSTRUCTION BY OWNER
E3	E3-009				TEMPORARY INFORMATION - WALL MOUNTED		TO BE MOUNTED POST-CONSTRUCTION BY OWNER
E3	E3-010				TEMPORARY INFORMATION - WALL MOUNTED		TO BE MOUNTED POST-CONSTRUCTION BY OWNER
E3	E3-011				TEMPORARY INFORMATION - WALL MOUNTED		TO BE MOUNTED POST-CONSTRUCTION BY OWNER
E3	E3-012				TEMPORARY INFORMATION - WALL MOUNTED		TO BE MOUNTED POST-CONSTRUCTION BY OWNER
E3	E3-013				TEMPORARY INFORMATION - WALL MOUNTED		TO BE MOUNTED POST-CONSTRUCTION BY OWNER
E3	E3-014				TEMPORARY INFORMATION - WALL MOUNTED		TO BE MOUNTED POST-CONSTRUCTION BY OWNER
E3	E3-015				TEMPORARY INFORMATION - WALL MOUNTED		TO BE MOUNTED POST-CONSTRUCTION BY OWNER
E3	E3-016				TEMPORARY INFORMATION - WALL MOUNTED		TO BE MOUNTED POST-CONSTRUCTION BY OWNER
E3	E3-017				TEMPORARY INFORMATION - WALL MOUNTED		TO BE MOUNTED POST-CONSTRUCTION BY OWNER
E3	E3-018				TEMPORARY INFORMATION - WALL MOUNTED		TO BE MOUNTED POST-CONSTRUCTION BY OWNER
E3	E3-019				TEMPORARY INFORMATION - WALL MOUNTED		TO BE MOUNTED POST-CONSTRUCTION BY OWNER
E3	E3-020				TEMPORARY INFORMATION - WALL MOUNTED		TO BE MOUNTED POST-CONSTRUCTION BY OWNER
E3	E3-021				TEMPORARY INFORMATION - WALL MOUNTED		TO BE MOUNTED POST-CONSTRUCTION BY OWNER
E3	E3-022				TEMPORARY INFORMATION - WALL MOUNTED		TO BE MOUNTED POST-CONSTRUCTION BY OWNER
E3	E3-023				TEMPORARY INFORMATION - WALL MOUNTED		TO BE MOUNTED POST-CONSTRUCTION BY OWNER
E3	E3-024				TEMPORARY INFORMATION - WALL MOUNTED		TO BE MOUNTED POST-CONSTRUCTION BY OWNER
E3	E3-025				TEMPORARY INFORMATION - WALL MOUNTED		TO BE MOUNTED POST-CONSTRUCTION BY OWNER
E3	E3-026				TEMPORARY INFORMATION - WALL MOUNTED		TO BE MOUNTED POST-CONSTRUCTION BY OWNER
E3	E3-027				TEMPORARY INFORMATION - WALL MOUNTED		TO BE MOUNTED POST-CONSTRUCTION BY OWNER
E4	E4-001				EVACUATION PLAN - WALL MOUNTED		
E6	E6-001				EYE CHART		TO BE MOUNTED POST-CONSTRUCTION BY CONTRACTOR
E6	E6-002				EYE CHART		TO BE MOUNTED POST-CONSTRUCTION BY CONTRACTOR
EGD							
EGD 1.8	EGD 1.8-001				LOBBY REGISTRATION		LOGO ON THE RIGHT
EGD 1.8	EGD 1.8-002				LOBBY REGISTRATION		LOGO ON THE RIGHT
EGD 3.2	EGD 3.2-001				LOBBY BANQUETTE		GC TO FIELD VERIFY WALL DIMENSIONS TO MEET EGD CLEARANCES
EGD 3.2	EGD 3.2-002				LOBBY BANQUETTE		GC TO FIELD VERIFY WALL DIMENSIONS TO MEET EGD CLEARANCES
EGD 7.1	EGD 7.2-001				PROVIDER STATION		
EGD 7.1	EGD 7.2-002				PROVIDER STATION		
EGD 9.2	EGD 9.2 OM-005				GUEST SUITE		
EGD 9.2	EGD 9.2 OM-006				GUEST SUITE		
EGD 9.2	EGD 9.2 OM-007				GUEST SUITE		
EGD 9.2	EGD 9.2 OM-008				GUEST SUITE		
EGD 9.2	EGD 9.2-001				GUEST SUITE		
EGD 9.2	EGD 9.2-002				GUEST SUITE		
EGD 9.2	EGD 9.2-003				GUEST SUITE		
EGD 9.2	EGD 9.2-004				GUEST SUITE		
EGD 12.1	EGD 12.1-001				DRY ERASE BOARD - LARGE		
EGD 12.1	EGD 12.1-002				DRY ERASE BOARD - LARGE		
EGD 12.1	EGD 12.1-003				DRY ERASE BOARD - LARGE		
EGD 12.1	EGD 12.1-004				DRY ERASE BOARD - LARGE		
EGD 12.1	EGD 12.1-005				DRY ERASE BOARD - LARGE		
EGD 12.1	EGD 12.1-006				DRY ERASE BOARD - LARGE		
EGD 12.1	EGD 12.1-007				DRY ERASE BOARD - LARGE		
EGD 12.1	EGD 12.1-008				DRY ERASE BOARD - LARGE		
EGD 12.2	EGD 12.2-001				DRY ERASE BOARD - SMALL		
EGD 12.2	EGD 12.2-001				DRY ERASE BOARD - SMALL		

SIGN TYPES

Sign Type	Description	Count
		2
B1.2	AREA ID GRAPHIC	2
C1.1	EXAM ROOM ID	10
C1.2(S)	EXAM ROOM ID - SHORT	10
C1.3	FLAG SYSTEM	10
C2	SUPPORT ROOM ID	13
C3.1	RESTROOM ID	3
C3.3	CHANGING STATION ID	1
D1	FIRE EXTINGUISHER ID - FLAG MOUNT	2
D2	EXIT	3
D4	INSTRUCTIONAL	3
D5	INSTRUCTIONAL	3
D6	INSTRUCTIONAL	3
D7	INSTRUCTIONAL	1
D8	AED - FLAG MOUNT	1
D9	IT STOP SIGN	1
D10	BIOHAZARDOUS WASTE ID	2
E1	STANCHION	2
E3	TEMPORARY INFORMATION - WALL MOUNTED	27
E4	EVACUATION PLAN - WALL MOUNTED	1
E6	EYE CHART	2
EGD 1.8	LOBBY REGISTRATION	2
EGD 3.2	LOBBY BANQUETTE	2
EGD 7.1	PROVIDER STATION	2
EGD 9.2	GUEST SUITE	8
EGD 12.1	DRY ERASE BOARD - LARGE	8
EGD 12.2	DRY ERASE BOARD - SMALL	2

Grand total: 126

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SEAL

5664
REGISTERED ARCHITECT
DOUGLAS P. OBERST
STATE OF WASHINGTON

City of Puyallup
Development & Permitting Services
ISSUED PERMIT
Building | Planning | Engineering | Public Works | Fire | Traffic

PRCTI20240772

PROJECT
MULTICARE TENANT IMPROVEMENT
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4505 S MERIDIAN
PUYALLUP, WA 98373

REVISIONS

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REVIEWED BY:

SHEET TITLE
INTERIOR SIGNAGE AND EGD SCHEDULES

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SHEET
A-603

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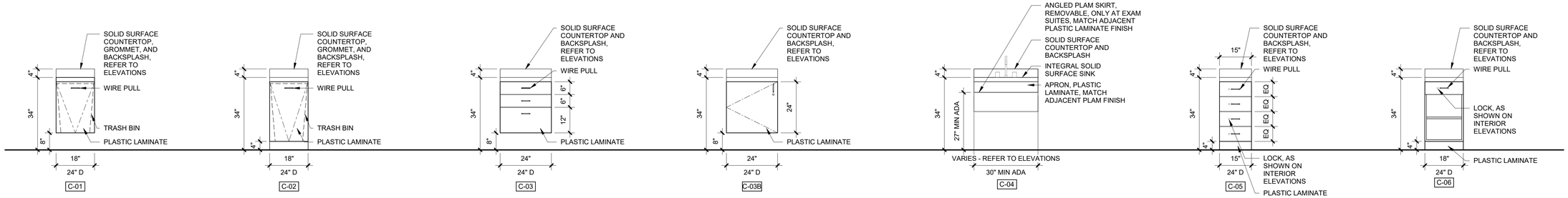
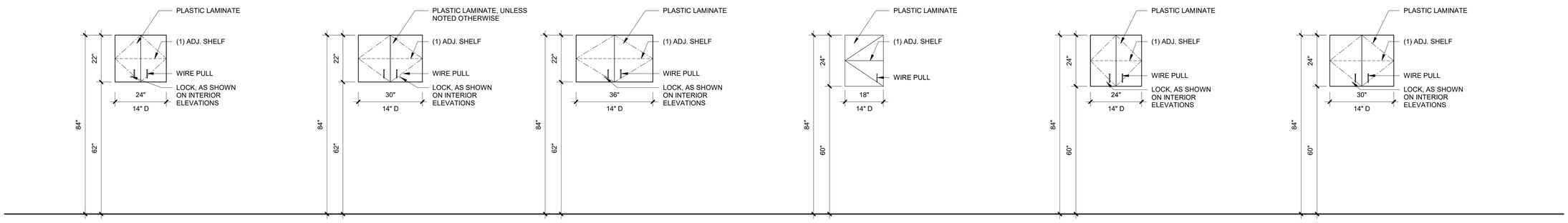
IF SHEET MEASURES LESS THAN 24"X36", IT IS A REDUCED PRINT. REDUCE SCALE ACCORDINGLY

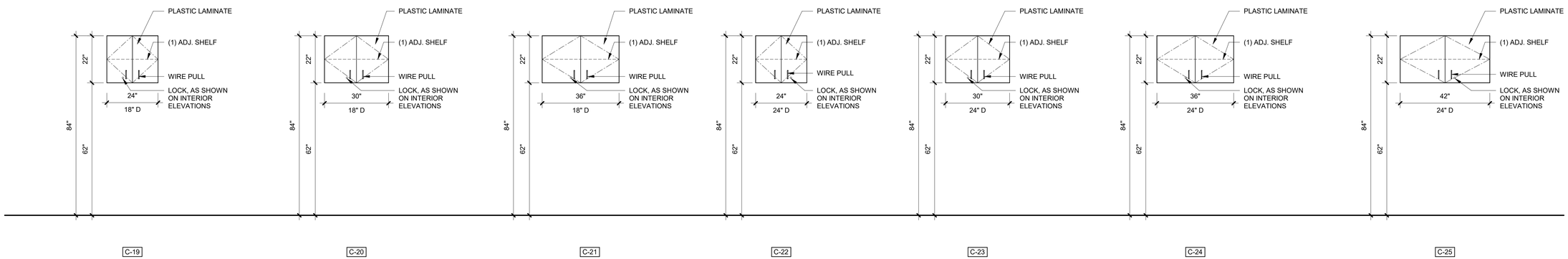
24x36 5/9/2024 4:23:00 PM

CASEWORK TYPES GENERAL NOTES

1. KEY A: TALL CABINETS WITH LOCKS AT THE CLEAN SUPPLY AND CLARITY SUITE
   KEY B: UPPER CABINETS IN THE CLEAN SUPPLY.
2. REMOVE BASE AT DINAMAPS CASEWORK.
3. BAR PULLS FOR CASEWORK TO GO IN EXAM SUITES, CLARITY, CARE TEAM, AND BEVERAGE STATION. WIRE PULLS FOR CASEWORK EVERYWHERE ELSE.







CASEWORK TYPES

1/2" = 1'-0"

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

IF SHEET MEASURES LESS THAN 24"X36", IT IS A REDUCED PRINT. REDUCE SCALE ACCORDINGLY

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SHEET TITLE
CASEWORK TYPES

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SHEET
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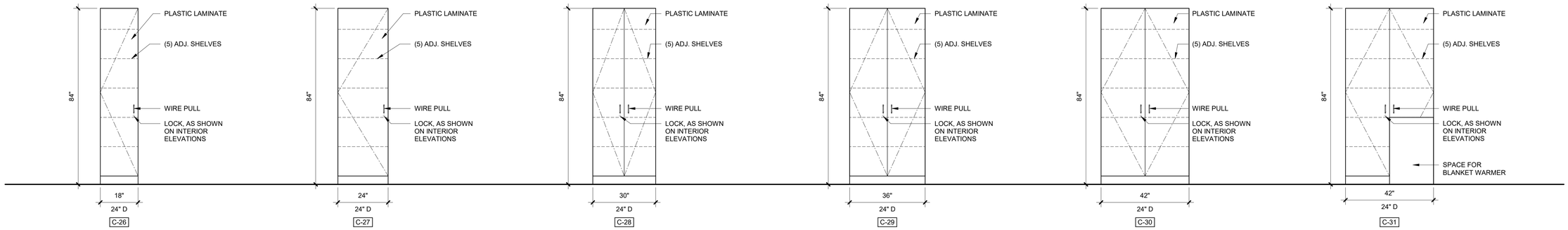
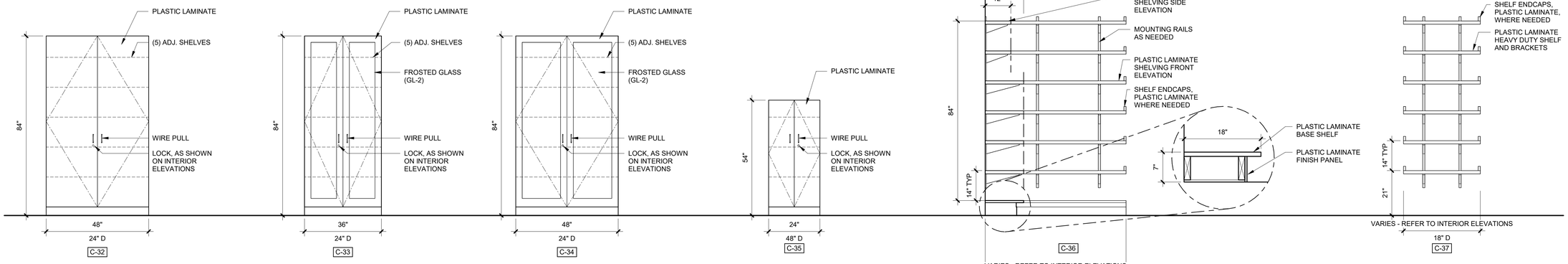
24x36 5/9/2024 4:23:01 PM

CASEWORK TYPES GENERAL NOTES

1. KEY A: TALL CABINETS WITH LOCKS AT THE CLEAN SUPPLY AND CLARITY SUITE
   KEY B: UPPER CABINETS IN THE CLEAN SUPPLY.
2. REMOVE BASE AT DINAMAPS CASEWORK.
3. BAR PULLS FOR CASEWORK TO GO IN EXAM SUITES, CLARITY, CARE TEAM, AND BEVERAGE STATION. WIRE PULLS FOR CASEWORK EVERYWHERE ELSE.

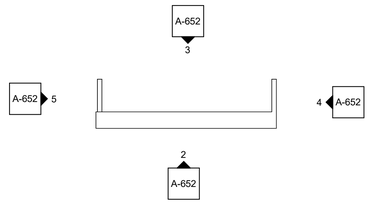




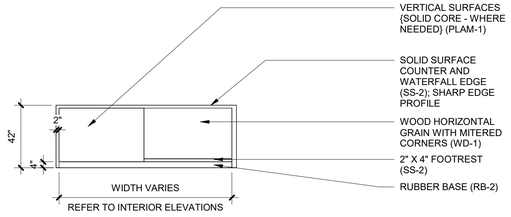
CASEWORK TYPES

1/2" = 1'-0"

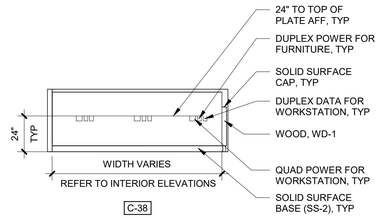
SCALE: 1/2" = 1'-0"



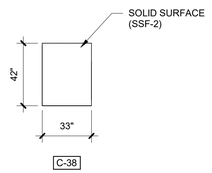
1	CARE TEAM DESK KEY PLAN
	1/4" = 1'-0"



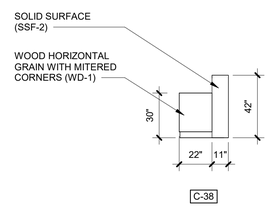
2	CARE TEAM DESK - FRONT
	1/4" = 1'-0"



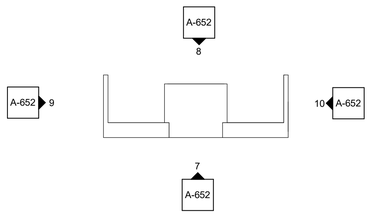
3	CARE TEAM DESK - BACK
	1/4" = 1'-0"



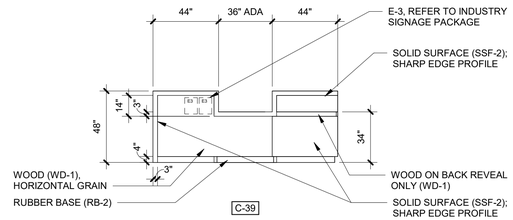
4	CARE TEAM DESK - LEFT
	1/4" = 1'-0"



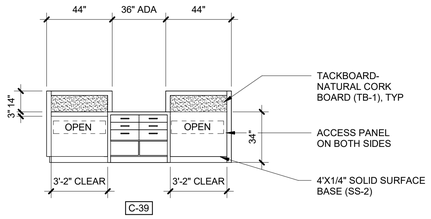
5	CARE TEAM DESK - RIGHT
	1/4" = 1'-0"



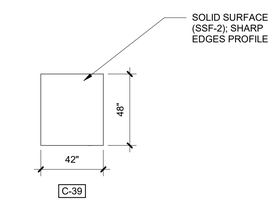
6	REGISTRATION DESK KEY PLAN
	1/4" = 1'-0"



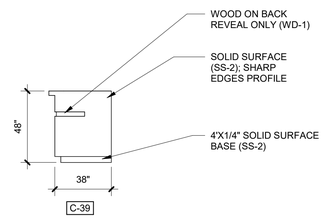
7	REGISTRATION DESK - FRONT
	1/4" = 1'-0"



8	REGISTRATION DESK - BACK
	1/4" = 1'-0"



9	REGISTRATION DESK - LEFT
	1/4" = 1'-0"



10	REGISTRATION DESK - RIGHT
	1/4" = 1'-0"

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PRCTI20240772

PROJECT
MULTICARE TENANT IMPROVEMENT
INDIGO - PUYALLUP
4505 S MERIDIAN
PUYALLUP, WA 98373

REVISIONS

DATE
05.09.2024
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ROOF TOP UNIT SCHEDULE

EQUIP. TAG	MANUFACTURER & MODEL OR EQUAL	SERVICE	LOCATION	SUPPLY AIR CFM	EXT. STATIC PRESS. IN.WG.	COOLING CAPACITY			GAS HEATING CAPACITY MBH		ENTERING CONDITIONS				ELECTRICAL DATA					SEER/IEER /EER	AFUE	FILTER MERV	REF.	WEIGHT LBS	REMARKS
											EVAPORATOR		CONDENSER												
											COOLING	HEATING	COOLING	HEATING											
						TON	TOTAL MBH	SENSIBLE MBH	INPUT	OUTPUT	°F DB	°F WB	°F DB	°F DB	°F DB	V	PH	Hz	MCA	MOP					
RTU 1	"LENNOX" MO. LGA048HH1Y	SEE PLAN	ROOF	1600		4	51	28	125.00	98.75	75	67	70	95	39	208	3	60	25	35	12.0/-/10.4	0.78	13	HCFC-22	720	(1)
RTU 2	"LENNOX" MO. LGA048HH1Y	SEE PLAN	ROOF	1600		4	51	28	125.00	98.75	75	67	70	95	39	208	3	60	25	35	12.0/-/10.4	0.78	13	HCFC-22	720	(1)
RTU 3	"LENNOX" MO. LGA048HH1Y	SEE PLAN	ROOF	1600		4	51	28	125.00	98.75	75	67	70	95	39	208	3	60	25	35	12.0/-/10.4	0.78	13	HCFC-22	720	(1)
RTU 4	"LENNOX" MO. LGA048HH1Y	SEE PLAN	ROOF	1600		4	51	28	125.00	98.75	75	67	70	95	39	208	3	60	25	35	12.0/-/10.4	0.78	13	HCFC-22	720	(1)

KEYED NOTES:

(1) ROOF TOP UNIT (RTU) NOT UNDER TENANT SCOPE. RTU WITH ECONOMIZER INCLUDING THE PROGRAMMABLE THERMOSTAT CONTROL SHALL BE PROVIDED BY THE LAND LORD UNDER (WARM SHELL) SEPARATE CONTRACT. TENANT WILL RECEIVE THE SPACE WHERE RTU'S ARE ALREADY INSTALLED WITH SUPPLY/RETURN VERTICAL STUBS CONNECTIONS.

THERMOSTAT SETTINGS		
SCHEDULE MODE	COOLING °F	HEATING °F
OCCUPIED - 10:00 AM - 7:00 PM	75	70
UNOCCUPIED - 7:00 PM - 10:00 AM	80	62

1. OUTSIDE AIR INTAKE DAMPER TO CLOSE DURING UNOCCUPIED MODE.
2. TEMPERATURE SENSORS CONTROLLING HVAC UNITS SHALL BE SET TO MAINTAIN ZONE TEMPERATURES :

FAN COIL UNITS

EQUIP. TAG	MFR. & MODEL	SERVICE	LOCATION	SUPPLY AIR CFM	OUTDOOR AIR CFM	EXT. STATIC PRESS. IN.WG.	COOLING CAPACITY			HEATING CAPACITY, MBH @47°F	ENT. AIR		FAN MOTOR HP	ELECTRICAL DATA 230-1PH-60HZ		FILTER MERV	WEIGHT LBS	REMARKS
							NOM. TON	TOTAL MBH	SEN. MBH	TOTAL	EVAP. °F DB	EVAP. °F WB		MCA	MOP			
FC 1	"LG" MO. LSN181HSV5	IT	WALL	530	-	0.25	1.5	18.0	13.5	21.6	75	67	0.23	POWERED FROM OUTDOOR		MERV 13	25.6	(2)(3)

NOTES:

(1) OUTDOOR (HEAT PUMP) CONDENSING UNIT.

(2) DUCTLESS WALL MOUNTED SPLIT FAN COIL UNIT.

(3) PROVIDE NEW PROGRAMMABLE WALL MOUNTED THERMOSTAT COMPATIBLE WITH THE UNIT

(4) PROVIDE WITH CONDENSATE DRAIN PUMP.

HEAT PUMP

EQUIP. TAG	MFR. MODEL	SYSTEM CAPACITY KBH		ELEC.DATA			REF. TYPE	CONDENSER WEIGHT, LBS	EER / SEER / IEER	HSPF / COP	REMARKS
		COOLING @ 95°F AMB	HEATING @ 47°F AMB	V-P-H	MCA	MOCP					
HP 1	"LG" MO. LSU181HSV5	18.0	21.6	230-1-60	19	30	R410A	128	12.5 / 22	9.5 / -	(1)

NEW FAN SCHEDULE

EQUIP. TAG	MANUFACTURER & MODEL	SERVICE	LOCATION	OUTSIDE AIR (CFM)	EXHAUST AIR (CFM)	EXT. STATIC PRESS. IN. W.G.	HEATING ENTHALPY RECOVERY EFFICIENCY	SOUND LEVEL dB(A)	ELECTRICAL DATA					WEIGHT LBS	REMARKS
									V	PH	Hz	MCA	MOP		
ERV THRU	"LOSSNAY" MO. LGH-F470RVX2-E	SEE FLOOR PLAN	CEILING	470	470	1.00	64.00%	40	208/230	1	60	5.1	15	110	(1)(2)(3)(4)(5)(6)(7)(8)(9)

KEYED NOTES:

(1) HIGH EFFICIENCY ENERGY RECOVERY VENTILATOR.

(2) HORIZONTAL MOUNTING POSITION.

(3) STAND-ALONE REMOTE CONTROLLER.

(4) DISCONNECT SWITCH TO BE FURNISHED AND INSTALLED BY ELECTRICAL CONTRACTOR.

(5) PROVIDE VIBRATION ISOLATORS & FLEXIBLE DUCT CONNECTION.

(6) PROVIDE WITH TIME-CLOCK. FAN TO RUN CONTINUOUSLY DURING OCCUPIED HOURS.

(7) PROVIDE BACKDRAFT DAMPER AT THE RETURN AIR INLET.

(8) PROVIDE WITH MERV 14 FILTER.

(9) INTERLOCK WITH RTU.

MECHANICAL VENTILATION REQUIREMENT

ROOM #	NAME	AREA S.F.	CEILING HEIGHT FT.	PRESSURE RELATION FROM THE ADJACENT SPACE, ASHRAE 170	DESIGN PRESSURE RELATION FROM THE ADJACENT SPACE	MIN. ACH PER ASHRAE 170		MIN. VENTILATION RATE, CFM		DESIGN VENTILATION RATE, CFM		
						OA	TOTAL	OA	TOTAL	OA	TOTAL	TOTAL EXHAUST
1	108 COMMUNITY SUITE (EXAM RM)	113	9	NR	P	2	6	34	102	70	260	80
2	120 GREEN SUITE (EXAM RM)	120	9	NR	P	2	6	36	108	85	220	110
3	109 FAMILY SUITE (EXAM RM)	119	9	NR	P	2	6	36	107	70	220	60
4	110 KIDS SUITE (EXAM RM)	127	9	NR	P	2	6	38	114	70	220	60
5	117 DRUG TESTING SUITE (LAB)	90	9	N	N	2	6	27	81	70	120	160
6	112 KNOWLEDGE SUITE	119	9	NR	NR	2	6	36	107	50	220	
7	129 OM OFFICE 2	129	9	NR	NR	2	6	39	116	45	180	
8	121 OM OFFICE 1	58	9	NR	NR	2	6	17	52	70	150	
9	111 CLARITY SUITE (X-RAY RM)	211	9	NR	P	2	6	63	190	80	270	70
10	130 WELLNESS SUITE (TRETMENT)	115	9	NR	P	2	6	35	104	60	220	110
11	115 POCT (LAB)	104	9	N	N	2	6	31	94	30	100	140
12	104 HEALING SUITE (TREATMENT)	149	9	NR	P	2	6	45	134	60	220	80
13	107 HALL	112	10	NR	P	0	4	0	75	0	150	
14	105 HALL	158	10	NR	P	0	4	0	105	0	150	
15	123 HALL	190	10	NR	P	0	4	0	127	0	140	
16	122 HALL	166	10	NR	P	0	4	0	111	0	140	
17	125 HALL	81	10	NR	P	0	4	0	54	0	150	
18	100A UC REGISTRATION	122	9	NR	P	2	6	37	110	70	140	
19	100 UC LOUNGE	270	10	NR	P	2	6	90	270	100	500	170
20	132A REGISTRATION	83	9	NR	P	2	6	25	75	50	140	
21	132 OM LOUNGE	213	10	NR	P	2	6	71	213	100	300	160
22	114 UC CARE TEAM	170	9	NR	P	2	6	51	153	60	180	
23	127 CARE TEAM	125	9	NR	P	2	6	38	113	95	220	
24	119B STAFF LOUNGE	245	9	NR	P	2	6	74	221	100	350	130
25	131 RESTROOM	66	9	N	N	0	10	70		70	0	70
26	117 OM RESTROOM	50	9	N	N	0	10	70		70	0	70
27	102 RESTROOM	62	9	N	N	0	10	70		70	0	70
28	128 TEHNOLOGY SUITE	117	9	NR	NR	2	6	35	105	95	220	
29	126 BALANCE SUITE	126	9	NR	NR	2	6	38	113	95	220	
30	103 FOCUS	74	9	NR	NR	2	6	22	67	30	200	
31	119 COPY	142	9	NR	NR	2	2	43	43	45	150	
32	106 UC STORAGE	108	9	NR	NR	0	10	0	162	0	130	
33	119A OM STORAGE	72	9	NR	NR	0	10	0	108	0	110	
34	124 JANITOR	88	9	N	N	0	10	0	132	0	140	150
35	118 SOLIED SUPPLY	95	9	N	N	2	10	29	143	30	150	190
36	116 CLEAN SUPPLY	100	9	NR	P	2	4	30	60	40	120	
	TOTAL	4489						1230	3869	1880	6400	1880

DUCT HEATER SCHEDULE

EQUIP. TAG	MANUFACTURER & MODEL	SIZE	MIN VEL.	CFM	kW	V	PH	Hz	FLA (A)	REMARKS
DH THRU	"GREEMHECK" MO. IDHE	12"X8" FLANGE	400 FPM	470	6	208	1	60	28.8	(1)

KEYED NOTES:

(1) SCR CONTROLLER AND DUCT THERMOSTAT SET AT 65°F+/- 2°.

AIR DEVICE SCHEDULE

MARK	NECK SIZE / THROAT SIZE	DIFFUSER SIZE / DIMENSION	CFM RANGE	TYPE				MOUNTING		DUTY				MFR.	MODEL NO.	NOTES
				DIFFUSER	REGISTER	GRILLE	LOUVER	LAY-IN	SURFACE	SUPPLY	RETURN	EXHAUST	TRANSFER			
SD-1	12"Ø	24"X24"	370-455	X	-	-	-	X	-	X	-	-	-	TITUS	PAS	(1)(2)(3)
SD-2	10"Ø	24"X24"	250-355	X	-	-	-	X	-	X	-	-	-	TITUS	PAS	(1)(2)(3)
SD-3	8"Ø	24"X24"	150-230	X	-	-	-	X	-	X	-	-	-	TITUS	PAS	(1)(2)(3)
SD-4	6"Ø	24"X24"	100-130	X	-	-	-	X	-	X	-	-	-	TITUS	PAS	(1)(2)
RD-1	14"Ø	24"X24"	-	X	-	-	-	X	-	-	X	-	-	TITUS	PAR	(1)(2)
RD-2	12"Ø	24"X24"	-	X	-	-	-	X	-	-	X	-	-	TITUS	PAR	(1)(2)
RD-3	8"Ø	24"X24"	-	X	-	-	-	X	-	-	X	-	-	TITUS	PAR	(1)(2)
RD-4	6"Ø	24"X24"	-	X	-	-	-	X	-	-	X	-	-	TITUS	PAR	(1)(2)
RD-5	10"Ø	24"X24"	-	X	-	-	-	X	-	-	X	-	-	TITUS	PAR	
EG-1	8"X8"	9-3/4"X9-3/4"	55-90	-	X	-	-	-	X	-	-	X	-	TITUS	350R	(1)(2)

NOTES:

(1) SELECTION OF THE FINISHES OF AIR DISTRIBUTION DEVICES BY INTERIOR DESIGNER/ARCHITECT.

(2) PROVIDE OPPOSED BLADE DAMPER

(3) TYPE AND CFM SHALL BE AS INDICATED ON DRAWINGS M-101 AT EACH AIR DEVICE

GENERAL MECHANICAL NOTES

#	DESCRIPTION
1	All work shall meet the 2021 IMC I-codes. CONSTRUCTION TO CONFORM WITH: - 2018 INTERNATIONAL BUILDING CODE, WITH LOCAL AMENDMENTS - 2018 INTERNATIONAL MECHANICAL CODE, WITH LOCAL AMENDMENTS - 2018 INTERNATIONAL PLUMBING CODE. WITH LOCAL AMENDMENTS - 2018 INTERNATIONAL ELECTRICAL CODE, WITH LOCAL AMENDMENTS - 2018 WASHINGTON STATE ENERGY CODE
2	ALL INDICATED DIMENSIONS ARE APPROXIMATE AND ARE GIVEN FOR ESTIMATE PURPOSES ONLY. BEFORE PROCEEDING WITH THE WORK, THIS CONTRACTOR SHALL CAREFULLY CHECK AND VERIFY ALL DIMENSIONS, SIZES AND REQUIRED CLEARANCES. CONTRACTOR SHALL AND SHALL ASSUME FULL RESPONSIBILITY FOR THE FITTING OF ALL EQUIPMENT AND MATERIALS HEREIN REQUIRED TO OTHER PARTS OF THE WORK AND TO THE WORK OF OTHER TRADES.
3	CONTRACTOR SHALL COMPLY WITH ALL CONTRACT DOCUMENTS IN LAYING OUT HIS WORK AND EQUIPMENT OR SPECIALTIES REQUIRING READING, ADJUSTMENT, INSPECTION, REPAIRS, REMOVAL OR REPLACEMENT AND SHALL BE CONVENIENTLY AND ACCESSIBLY LOCATED WITH REFERENCE TO THE FINISHED BUILDING.
4	DUCTWORK SHALL BE FABRICATED AND INSTALLED IN ACCORDANCE WITH CHAPTER 6 OF THE LATEST EDITION OF INTERNATIONAL MECHANICAL CODE AND 2006 SMACNA EDITION.
5	ALL BRACING OF DUCTS AND PIPING SHALL BE INSTALLED IN ACCORDANCE WITH ``SMACNA'' GUIDELINES FOR SEISMIC RESTRAINTS OF MECHANICAL AND PLUMBING SYSTEMS. WHERE BRACING DETAILS ARE NOT SHOWN ON DRAWINGS OR IN THE GUIDELINES, THE FIELD INSTALLATION SHALL BE SUBJECT TO THE APPROVAL OF THE ARCHITECT AND THE STRUCTURAL ENGINEER.
6	ALL FRESH AIR INTAKES SHALL BE LOCATED A MINIMUM OF 10'-0" FROM ANY SANITARY VENT, EXHAUST FAN DISCHARGE AND FLUE OF OTHER GAS FIRED EQUIPMENT. WHEN NECESSARY, EXTEND VENT OR PROVIDE ADDITIONAL FRESH AIR INTAKE DUCTWORK AS DIRECTED BY THE ENGINEER.
7	THE INSTALLATION OF VALVES, THERMOMETERS, GAUGES, CLEANOUTS, DAMPERS, DUCT ACCESS DOORS OR OTHER INDICATING EQUIPMENT OR SPECIALTIES REQUIRING READING, ADJUSTMENT, INSPECTION, REPAIRS, REMOVAL OR REPLACEMENT SHALL BE CONVENIENTLY AND ACCESSIBLY LOCATED.
8	WHERE ANCHORAGE DETAILS ARE NOT SHOWN ON THE DRAWINGS, THE FIELD INSTALLATION SHALL BE SUBJECT TO THE APPROVAL OF THE STRUCTURAL ENGINEER.
9	THE SIZES, WEIGHTS AND CAPACITIES OF ALL EQUIPMENT SCHEDULES ON THE DRAWING HAVE BEEN CAREFULLY COMPUTED. SHOULD EQUAL ITEMS BUT DIFFERENT MANUFACTURER'S BE SUBMITTED FOR APPROVAL, ALL SUCH SUBMITTALS SHALL INCLUDE 1/4" SCALE SHOP DRAWINGS SHOWING METHOD OF INSTALLATION. PROVIDE LOAD RATINGS AND SEISMIC CALCULATIONS AS APPROVED BY A REGISTERED STRUCTURAL ENGINEER WITH EACH SUBMITTAL.
10	REQUIRED ROUTINE MAINTENANCE ACTION SHALL BE CLEARLY STATED AND INCORPORATED ON A READILY ACCESSIBLE LABEL, WHICH MAYBE LIMITED TO IDENTIFYING BY TITLE AND/ OR PUBLICATION NUMBER THE OPERATION AND MAINTENANCE MANUAL FOR THAT PARTICULAR MODEL AND TYPE OF PRODUCT. ONE COPY OF THIS INFORMATION SHALL BE FURNISHED BY THE CONTRACTOR TO THE OWNER.
11	THE CONTRACTOR SHALL COORDINATE HIS WORK WITH ALL TRADES AT THE SITE. ANY COST TO INSTALL WORK TO ACCOMPLISH SAID COORDINATION WHICH DIFFERS FROM THE WORK AS SHOWN ON THE PLANS SHALL BE INCURRED BY THE CONTRACTOR. ANY DISCREPANCIES, AMBIGUITIES OR CONFLICTS SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT DURING BID TIME FOR CLARIFICATION. ANY SUCH CONFLICTS NOT CLARIFIED PRIOR TO BID SHALL BE SUBJECT TO THE INTERPRETATION OF THE ARCHITECT AT NO ADDITIONAL COST TO THE OWNER.
12	AFTER ALL REQUIREMENTS OF THE SPECIFICATIONS AND/ OR THE DRAWINGS HAVE BEEN FULLY COMPLETED, REPRESENTATIVES OF THE OWNER WILL INSPECT THE WORK. PRIOR TO FINAL INSPECTION THE REPRESENTATIVES OF THE OWNER SHALL BE PROVIDED WITH DETAILED OPERATING AND MAINTENANCE INSTRUCTIONS AND COPIES OF GUARANTIES/WARRANTIES FOR EACH SYSTEM. INCLUDE A COPY OF ALL INSPECTION VERIFICATIONS AND REPORTS REQUIRED BY THE ENFORCING AGENCY. THE CONTRACTOR SHALL PROVIDE COMPETENT PERSONNEL TO DEMONSTRATE THE OPERATION OF ANY ITEM OR SYSTEM, TO THE FULL SATISFACTION OF EACH REPRESENTATIVE. FINAL ACCEPTANCE OF THE WORK WILL BE MADE BY THE OWNER AFTER RECEIPT OF APPROVAL AND RECOMMENDATION OF ACCEPTANCE FROM EACH REPRESENTATIVE.
13	WHEREVER A DISCREPANCY IN QUANTITY OR SIZE OF MECHANICAL EQUIPMENT MATERIAL ARISES ON THE DRAWINGS AND/OR SPECIFICATIONS, THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING AND INSTALLING ALL MATERIAL AND SERVICES REQUIRED BY THE STRICTEST CONDITIONS NOTED ON DRAWINGS AND/ OR IN THE SPECIFICATION TO ENSURE COMPLETE AND OPERABLE SYSTEMS AS REQUIRED BY THE OWNER AND ENGINEER.
14	PENETRATION OF PIPES, CONDUITS, ETC., IN WALLS REQUIRING PROTECTED OPENING SHALL BE FIRE STOPPED. FIRE STOP MATERIAL SHALL BE A U.L. TESTED AND APPROVED ASSEMBLY APPROVED BY THE STATE FIRE MARSHALL.
15	FINAL LOCATIONS OF THERMOSTAT TO BE VERIFIED WITH THE ELECTRICAL AND MECHANICAL ENGINEER AT THE JOB SITE.
16	EACH SYSTEM PROVIDING HEATING OR COOLING AIR IN EXCESS OF 2000 CFM SHALL BE EQUIPPED WITH AN AUTOMATIC SHUT-OFF. SHUT-OFF SHALL STOP THE AIR MOVING EQUIPMENT WHEN SMOKE IS DETECTED IN MAIN SUPPLY AIR DUCT SERVED BY THE SYSTEM.
17	CONTRACTOR SHALL OBTAIN AND PAY FOR ALL NECESSARY PERMITS, FEES, AND INSPECTIONS REQUIRED BY GOVERNING AUTHORITIES.
18	SMOKE DETECTORS ASSOCIATED WITH SMOKE DAMPERS AND HVAC SHUTOFFS SHALL BE TESTED BY AN APPROVED TESTING AGENCY OR A QUALIFIED THIRD PARTY SPECIAL INSPECTOR. THE SPECIAL INSPECTOR /TESTING AGENCY SHALL BE AN INDEPENDENT THIRD PARTY INDIVIDUAL OR FIRM AND SHALL NOT BE THE INSTALLING CONTRACTOR. A PROFESSIONAL ENGINEER SHALL SUBMIT A FINAL INSPECTION APPROVAL OR OCCUPANCY APPROVAL, INCLUDING CONDITIONAL OCCUPANCY APPROVAL (IBC 717.3, IMC 605).
19	ALL DUCT AND OTHER RELATED AIR DISTRIBUTION COMPONENT OPENINGS SHALL BE PROTECTED DURING STORAGE ON THE CONSTRUCTION SITE, AND SHALL BE COVERED WITH TAPE, PLASTIC, SHEET METAL OR OTHER ACCEPTABLE METHODS UNTIL THE FINAL STARTUP OF THE HEATING AND COOLING EQUIPMENT TO REDUCE THE AMOUNT OF DUST AND DEBRIS WHICH MAY COLLECT IN THE SYSTEM.
20	PROVIDE AT LEAST MERV-13 FILTERS IN REGULARLY OCCUPIED SPACES OF MECHANICALLY VENTILATED BUILDINGS. INSTALLED FILTERS MUST BE CLEARLY LABELED BY THE MANUFACTURER INDICATING THE MERV RATING, AND FILTER SPECIFICATION SHALL BE INCLUDED IN THE OPERATION AND MAINTENANCE MANUAL.
21	DURING CONSTRUCTION, SEAL PERMANENT HVAC DUCTS/EQUIPMENT STORED ONSITE BEFORE INSTALLATION. PROVIDE MERV-8 FILTERS ON HVAC FOR REGULARLY OCCUPIED, ACTIVELY VENTILATED SPACES
22	COVERING OF DUCT OPENINGS AND PROTECTION OF MECHANICAL EQUIPMENT DURING CONSTRUCTION. AT THE TIME OF ROUGH INSTALLATION AND DURING STORAGE ON THE CONSTRUCTION SITE UNTIL FINAL STARTUP OF THE HEATING, COOLING AND VENTILATING EQUIPMENT, ALL DUCT AND OTHER RELATED AIR DISTRIBUTION COMPONENT OPENINGS SHALL BE COVERED WITH TAPE, PLASTIC, SHEETMETAL OR OTHER METHODS ACCEPTABLE TO THE ENFORCING AGENCY TO REDUCE THE AMOUNT OF DUST, WATER AND DEBRIS WHICH MAY ENTER THE SYSTEM. PROTECT DUCT OPENINGS AND MECHANICAL EQUIPMENT DURING CONSTRUCTION. LIMIT USE OF PERMANENT HVAC DURING CONSTRUCTION TO CONDITIONING NECESSARY FOR MATERIAL AND EQUIPMENT INSTALLATION. IF PERMANENT HVAC IS USED DURING CONSTRUCTION, INSTALL MERV-8 FILTERS ON RETURNS, AND REPLACE ALL FILTERS IMMEDIATELY PRIOR TO OCCUPANCY, OR, IF THE BUILDING IS OCCUPIED DURING ALTERATION, AT THE CONCLUSION OF CONSTRUCTION.

MECHANICAL LEGEND

SYMBOL & ABBREVIATION	DESCRIPTION
SA / SUP	SUPPLY AIR (RISE/DROP)
RA/RET	RETURN AIR DUCT (RISE/DROP)
EA/EXH	EXHAUST AIR DUCT (RISE/DROP)
CD/SR	CEILING DIFFUSER/SUPPLY REGISTER (ARROWHEAD REPRESENTS NUMBER OF THROW)
RR/RG	RETURN REGISTER/GRILLE
ER/RG	EXHAUST REGISTER/GRILLE
	RECTANGULAR DUCT ELBOW WITH TURNING VANES
FC	FLEXIBLE CONNECTION
MVD	MANUAL VOLUME DAMPER
FD	FIRE DAMPER
(L)	DUCT LINING (1" THICK UNLESS OTHERWISE NOTED)
	SINGLE LINE DUCT BRANCH TAKE-OFF
	DUCT TRANSITION (RECTANGULAR TO ROUND)
FLEX	FLEXIBLE DUCT (5'-0" MAXIMUM)
T	T-STAT PROGRAMMABLE THERMOSTAT
CD	CONDENSATE DRAIN
Ø	DIA. DIAMETER
DL	DL DOOR LOUVER
UC	DOOR UNDERCUT (¼" MINIMUM)
M	FURNISHED AND INSTALLED BY MECHANICAL CONTRACTOR
E	FURNISHED AND INSTALLED BY ELECTRICAL CONTRACTOR
ME	FURNISHED AND INSTALLED BY MECHANICAL CONTRACTOR AND INSTALLED BY ELECTRICAL CONTRACTOR
C	CARBON DIOXIDE SENSOR
SD	SD DUCT SMOKE DETECTOR
SD-1 / 400	AIR OUTLET/INLET DEVICE DESIGNATION (S-SUPPLY, R-RETURN, E-EXHAUST) / AIR QUANTITY IN CFM
EF / -	MECHANICAL EQUIPMENT DESIGNATION / DESIGNATED NUMBER
A/C, AC	AIR CONDITIONING
BDD	BACK DRAFT DAMPER
CB	CIRCUIT BREAKER
CLG.	CEILING
CONN.	CONNECT/CONNECTION
CONT.	CONTINUATION
CONT'R	CONTRACTOR
CFM	CUBIC FEET PER MINUTE
DET.	DETAIL
DISC.	DISCONNECT
DTR	DOWN THRU ROOF
EF	EXHAUST FAN
(E)	EXISTING
GA.	GAGA/GAUGE
GC	GENERAL CONTRACTOR
HVAC	HEATING, VENTILATING, AND AIR CONDITIONING
MFR.	MANUFACTUTER
MECH.	MECHANICAL
(N)	NEW
OA/OSA	OUTSIDE AIR
OBD	OPPOSED BLADE DAMPER
S/S	STAINLESS STEEL
TYP.	TYPICAL
UTR.	UP THRU ROOF

NOTE:
NOT ALL SYMBOLS AND ABBREVIATIONS ARE NECESSARILY USED IN THIS PROJECT.

MECHANICAL DRAWING SCHEDULE

NUMBER	TITLE
M-001	MECHANICAL LEGEND, NOTES, AND EQUIPMENT SCHEDULE
M-002	MECHANICAL SPECIFICATIONS
M-003 THRU M-024	WSEC MECHANICAL REQUIREMENT LIST
M-201	HVAC FLOOR PLAN
M-301	HVAC ROOF PLAN
M-601	MECHANICAL DETAIL

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PROJECT
MULTICARE TENANT IMPROVEMENT
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SECTION 230000 - BASIC MECHANICAL REQUIREMENTS HEATING, VENTILATION AND AIR CONDITIONING & SECTION 230593 - TESTING, ADJUSTING AND BALANCING

	SECTION 230000
A	NOTE
1	DRAWINGS AND GENERAL PROVISIONS OF CONTRACT, GENERAL AND SUPPLEMENTARY CONDITIONS AND ALL OTHER INCLUDING SPECIFICATION SECTIONS, APPLY TO THIS AND OTHER SECTIONS OF DIVISION 23
2	THE CONTRACTOR FOR THIS DIVISION OF WORK IS REQUIRED TO READ THE SPECIFICATIONS AND REVIEW DRAWINGS FOR ALL DIVISIONS OF WORK AND IS RESPONSIBLE FOR THE COORDINATION OF THEIR WORK AND THE WORK OF THEIR SUBCONTRACTORS WITH ALL DIVISIONS OF WORK. IT IS THIS CONTRACTORS RESPONSIBILITY TO PROVIDE THEIR SUBCONTRACTORS WITH A COMPLETE SET OF BID DOCUMENTS
3	THIS CONTRACTOR IS RESPONSIBLE FOR SCHEDULING THE COMPLETION AND INSPECTION OF THEIR WORK AND THE WORK OF THEIR SUBCONTRACTORS TO COMPLY WITH THE SCHEDULE AND THE PROJECT COMPLETION DATE
4	THIS CONTRACTOR SHALL VISIT THE SITE PRIOR TO SUBMITTAL OF BID TO DETERMINE CONDITIONS AFFECTING THE WORK. ANY ITEMS WHICH ARE NOT COVERED IN THE BID DOCUMENTS OR ANY PROPOSED SUBSTITUTIONS SHALL BE LISTED SEPARATELY AND QUALIFIED IN THE CONTRACTORS BID. SUBMITTAL OF BID SHALL SERVE AS EVIDENCE OF KNOWLEDGE OF EXISTING CONDITIONS AND ANY MODIFICATIONS WHICH ARE REQUIRED TO MEET THE INTENT OF THE DRAWINGS AND SPECIFICATIONS. FAILURE TO VISIT THE SITE DOES NOT RELIEVE THE CONTRACTOR OF RESPONSIBILITY IN PERFORMANCE OF WORK
B	GENERAL REQUIREMENTS
1	THIS CONTRACTOR SHALL PROVIDE ALL LABOR, MATERIALS, EQUIPMENT, SERVICES, TOOLS, TRANSPORTATION, INCIDENTALS AND DETAILS NECESSARY TO PROVIDE A COMPLETE MECHANICAL SYSTEM AS SHOWN ON THE DRAWINGS, CALLED FOR IN THE SPECIFICATIONS, AND AS REQUIRED BY JOB CONDITIONS
2	THE DRAWINGS AND SPECIFICATIONS ARE INTENDED TO SUPPLEMENT EACH OTHER AND ANY MATERIAL OR LABOR CALLED FOR IN ONE SHALL BE FURNISHED AND INSTALLED EVEN THOUGH NOT SPECIFICALLY MENTIONED IN BOTH. ANY MATERIAL OR LABOR WHICH IS NEITHER SHOWN ON THE DRAWINGS NOR CALLED FOR IN THE SPECIFICATIONS, BUT WHICH IS OBVIOUSLY NECESSARY TO COMPLETE THE WORK, AND WHICH IS USUALLY INCLUDED IN WORK OF SIMILAR CHARACTER, SHALL BE FURNISHED AND INSTALLED AS PART OF CONTRACT
3	WHERE THE DRAWINGS OR SPECIFICATIONS CALL FOR ITEMS WHICH EXCEED CODE'S REQUIREMENT, THE CONTRACTOR IS RESPONSIBLE FOR FURNISHING AND INSTALLING THE SYSTEM WITH THE MORE STRINGENT REQUIREMENTS AS DESIGNED AND DESCRIBED ON THESE DRAWINGS, UNLESS SPECIFICALLY NOTED OTHERWISE
4	ALL MECHANICAL WORK SHALL BE INSTALLED SO AS TO BE READILY ACCESSIBLE FOR OPERATING, SERVICING, MAINTAINING, AND SUFFICIENT SERVICE ACCESS TO ALL EQUIPMENT. THIS CONTRACTOR IS RESPONSIBLE FOR PROVIDING REPAIRING
5	ALL WORK SHALL BE PERFORMED IN A NEAT PROFESSIONAL MANNER USING GOOD ENGINEERING AND CONSTRUCTION PRACTICES
6	UNLESS SPECIFICALLY NOTED OTHERWISE, MATERIALS, PRODUCTS, AND EQUIPMENT, INCLUDING ALL COMPONENTS THEREOF, SHALL BE UNDERWRITERS LABORATORIES LISTED AND LABELED AND SIZED IN CONFORMITY WITH REQUIREMENTS OF STATE AND LOCAL CODES, CONFORMITY WITH REQUIREMENTS OF STATE AND LOCAL CODES, WHICHEVER IS MORE STRINGENT
C	CODES
1	ALL WORK SHALL CONFORM TO THE STATE'S, COUNTY'S, CITY'S AND LOCAL CODES AND ORDINANCES, SAFETY AND HEALTH CODES, NFPA CODES, ENERGY CODES AND ALL OTHER APPLICABLE CODES AND REQUIREMENTS. THIS CONTRACTOR SHALL INQUIRE INTO AND COMPLY WITH ALL APPLICABLE CODES, ORDINANCES, AND REGULATIONS. THIS CONTRACTOR SHALL INCLUDE ANY CHANGES REQUIRED BY CODES IN THE BID AND IF THESE CHANGES ARE NOT INCLUDED IN THE BID, THEY MUST BE QUALIFIED AS A SEPARATE LINE ITEM IN THE BID
D	LICENSES, PERMITS, INSPECTIONS & FEES
1	THIS CONTRACTOR SHALL OBTAIN AND PAY FOR ALL LICENSES, PERMITS, INSPECTIONS, AND FEES REQUIRED OR RELATED TO THEIR WORK
2	FURNISH TO THE ARCHITECT ALL CERTIFICATES OF INSPECTION AND FINAL INSPECTION APPROVAL AT COMPLETION OF PROJECT
E	TRADE NAMES, MANUFACTURERS AND SHOP DRAWINGS OF ANY UNAUTHORIZED EQUIPMENT SHALL BE SUBJECT TO REMOVAL
1	WHERE TRADE NAMES AND MANUFACTURERS ARE USED ON THE DRAWINGS OR IN THE SPECIFICATIONS, THE EXACT EQUIPMENT SHALL BE USED AS A MINIMUM FOR THE BASE BID. MANUFACTURERS CONSIDERED AS AN EQUAL OR BETTER IN ALL ASPECTS TO THAT SPECIFIED WILL BE SUBJECT TO APPROVAL IN WRITING BY THE ARCHITECT PRIOR THROUGH SHOP DRAWING SUBMITTAL PROCESS, FOR ACCEPTANCE. THE USE AND REPLACEMENT AT THE CONTRACTOR'S EXPENSE
2	MECHANICAL CONTRACTOR SHALL SUBMIT ONLY SUBSTITUTION REQUESTS TO ARCHITECT FOR APPROVAL. SUBMISSIONS SHALL BE MADE EARLY ENOUGH IN PROJECT TO ALLOW FOUR (4) WORKING DAYS FOR ARCHITECT'S REVIEW WITHOUT CAUSING DELAYS OR CONFLICTS TO THE JOB'S PROGRESS. SUBMITTALS SHALL BEAR THE STAMP OF THE SUBCONTRACTOR SHOWING THAT THEY HAVE REVIEWED AND CONFIRMED THAT THE SUBMITTALS ARE IN CONFORMANCE WITH THE CONTRACT DRAWINGS AND SPECIFICATIONS OR INDICATE WHERE EXCEPTIONS HAVE BEEN TAKEN
F	GUARANTEE
1	THIS CONTRACTOR SHALL GUARANTEE ALL MATERIALS AND WORK PROVIDED UNDER THEIR CONTRACT AND SHALL MAKE GOOD, REPAIR OR REPLACE AT THEIR OWN EXPENSE, ANY DEFECTIVE WORK, MATERIAL, OR EQUIPMENT WHICH MAY BE DISCOVERED WITHIN A PERIOD OF 12 MONTHS FROM THE DATE OF ACCEPTANCE (IN WRITING) OF THE INSTALLATION BY ARCHITECT. EXTENDED WARRANTIES ARE AS SPECIFIED WITH INDIVIDUAL EQUIPMENT
2	CONTRACTOR SHALL PROVIDE A COMPLETE 12-MONTH WARRANTY FOR ALL PARTS ON EQUIPMENT INSTALLED. THIS CONTRACTOR SHALL NOT BEAR ADDITIONAL WARRANTIES BEYOND A COMPLETE WORKING SYSTEM, AND AS SUCH, NO ADDITIONAL MONEYS SHOULD BE INCLUDED IN THE BID
G	RECORD DRAWINGS
1	THIS CONTRACTOR SHALL MAINTAIN ONE COPY OF DRAWINGS ON THE JOB SITE TO RECORD DEVIATIONS FROM CONTRACT DRAWINGS, SUCH AS: A. LOCATION OF CONCEALED PIPING VALVES AND DUCTS. B. REVISIONS, ADDENDUM, AND CHANGE ORDERS. C. SIGNIFICANT DEVIATIONS MADE NECESSARY BY FIELD CONDITIONS, APPROVED EQUIPMENT SUBSTITUTIONS, AND CONTRACTOR'S COORDINATION WITH OTHER TRADES
2	AT COMPLETION OF THE PROJECT AND BEFORE FINAL APPROVAL, THE CONTRACTOR SHALL MAKE ANY FINAL CORRECTIONS TO DRAWINGS AND CERTIFY THE ACCURACY OF EACH PRINT BY SIGNATURE THEREON
H	DISCREPANCIES IN DOCUMENTS
1	DRAWINGS (PLANS, SPECIFICATIONS, AND DETAILS) ARE DIAGRAMMATIC AND INDICATE THE GENERAL LOCATION AND INTENT OF THE MECHANICAL SYSTEMS. WHERE DRAWINGS, EXISTING SITE CONDITIONS, SPECIFICATIONS OR OTHER TRADES CONFLICT OR ARE UNCLEAR, ADVISE ARCHITECT, IN WRITING, OF VARIATIONS TO CONTRACT DOCUMENTS PRIOR TO SUBMISSION OF BID. OTHERWISE, ARCHITECT'S INTERPRETATION OF CONTRACT DOCUMENTS OR CONDITIONS SHALL BE FINAL WITH NO ADDITIONAL COMPENSATION PERMITTED

I	SLEEVES
1	THIS CONTRACTOR SHALL PROVIDE SLEEVES TO PROTECT EQUIPMENT OR FACILITIES IN THE INSTALLATION. EACH SLEEVE SHALL EXTEND THROUGH IT'S RESPECTIVE FLOOR, WALL OR PARTITION AND SHALL BE CUT FLUSH WITH EACH SURFACE EXCEPT SLEEVES THAT PENETRATE THE FLOOR, WHICH SHALL EXTEND 2" ABOVE THE FLOOR. CONTRACTOR MUST COORDINATE THROUGH THE ARCHITECT ANY CORE DRILLING OR CUTTING OF OPENINGS IN MASONRY FLOORS OR WALLS
2	ALL SLEEVES AND OPENINGS THROUGH FIRE RATED WALLS AND/OR FLOORS SHALL BE FIRE SEALED WITH CALCIUM SILICATE, SILICONE "RTV" FOAM, "3M" FIRE RATED SEALANT OR EQUAL, SO AS TO RETAIN THEIR FIRE RATING
3	SLEEVES IN BEARING AND MASONRY WALLS, FLOORS, AND PARTITIONS SHALL BE STANDARD WEIGHT STEEL PIPE FINISHED WITH SMOOTH EDGES. FOR OTHER THAN MASONRY PARTITIONS, THROUGH SUSPENDED CEILINGS, OR FOR CONCEALED VERTICAL PIPING, SLEEVES SHALL BE NO. 22 U.S.G. GALVANIZED STEEL MINIMUM
J	HANGERS
1	HANGERS SHALL INCLUDE ALL MISCELLANEOUS STEEL SUCH AS ANGLE IRON, BANDS, C-CLAMPS WITH RETAINING CLIPS, CHANNELS, HANGER RODS, ETC., NECESSARY FOR THE INSTALLATION OF WORK
2	HANGERS SHALL BE FASTENED TO BUILDING STEEL, CONCRETE, OR MASONRY, BUT NOT TO PIPING. HANGING FROM METAL DECK IS NOT PERMITTED. HANGERS MUST BE ATTACHED TO UPPER CHORD OF BAR JOIST. WHERE INTERFERENCE OCCUR, AND IN ORDER TO SUPPORT DUCTWORK OR PIPING, THE CONTRACTOR MUST INSTALL TRAPEZE TYPE HANGERS OR SUPPORTS WHICH SHALL BE LOCATED WHERE THEY DO NOT INTERFERE WITH ACCESS TO FIRE DAMPERS, VALVES, AND OTHER EQUIPMENT
3	HANGERS FOR ALL INSULATED PIPING SHALL BE SIZED AND INSTALLED FOR THE OUTER DIAMETER OF INSULATION. INSTALL 6" LONG SPLIT CIRCLE GALVANIZED SADDLE BETWEEN THE HANGER AND THE PIPE INSULATION
4	HANGERS AND PIPING OF DISSIMILAR METALS SHALL BE DI- ELECTRICALLY SEPARATED
K	SCOPE OF WORK
1	THIS CONTRACTOR SHALL FURNISH ALL LABOR, MATERIALS, EQUIPMENT, SERVICES, TOOLS, TRANSPORTATION AND FACILITIES NECESSARY FOR, REASONABLY IMPLIED AND INCIDENTAL TO, THE FURNISHING, INSTALLATION, COMPLETION AND TESTING OF ALL THE WORK FOR THE MECHANICAL SYSTEMS AS SHOWN ON THE DRAWINGS, CALLED FOR IN THE SPECIFICATIONS, AND AS REQUIRED BY JOB CONDITIONS, TO INCLUDE, BUT NOT BE LIMITED TO THE FOLLOWING: - HVAC UNITS, EQUIPMENT, AND APPURTENANCES (UNLESS NOTED OTHERWISE) - DUCTWORK, FITTINGS, DAMPERS, AND INSULATION - CURBS, ROOFING, AND STEEL FRAMING FOR SUPPORT (AS APPLICABLE, REFER TO PLANS) - CONDENSATE PIPING SYSTEMS (AS APPLICABLE, REFER TO PLANS) - TESTING, ADJUSTING, AND BALANCING. BEFORE STARTING WORK, THIS CONTRACTOR SHALL VISIT THE JOBSITE AND EXAMINE THE ARCHITECTURAL, STRUCTURAL, MECHANICAL AND ELECTRICAL PLANS AND SPECIFICATIONS TO SEQUENCE, COORDINATE, AND INTEGRATE THE VARIOUS ELEMENTS OF THE HVAC SYSTEM, INTERFERENCE AND CONFRONTATIONS
L	HVAC EQUIPMENT
1	PRIMARY HEATING AND AIR CONDITIONING UNITS ARE TO BE FURNISHED BY THIS CONTRACTOR AS SCHEDULED UNLESS NOTED OTHERWISE. REFER TO PLANS FOR REQUIREMENTS. ALL EQUIPMENT SHALL INCLUDE A FIVE (5) YEAR COMPRESSOR AND TEN (10) YEAR HEAT EXCHANGER WARRANTY
2	ALL EQUIPMENT SHALL BE COMPLETE IN EVERY RESPECT WITH ALL DEVICES, APPURTENANCES, AND ACCESSORIES PROVIDED TO MEET THE DESIGN INTENT AND OPERATION OF THE SYSTEMS SHOWN ON THE DRAWINGS AND SPECIFIED HEREIN
3	EQUIPMENT SHALL BE INSTALLED AND STARTUP PERFORMED IN STRICT ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS
M	METAL DUCTWORK - NO FIBERGLASS DUCT ALLOWED
1	NO DUCTWORK SHALL BE FABRICATED PRIOR TO JOB SITE VISIT AND APPROVAL BY THE GENERAL CONTRACTOR. A SKETCH MUST BE SUBMITTED INDICATING SIGNIFICANT DEVIATIONS FROM DESIGN AND MUST BE APPROVED BY ARCHITECT PRIOR TO FABRICATION OR INSTALLATION
2	EXCEPT AS OTHERWISE INDICATED, FABRICATE AND INSTALL RECTANGULAR AND ROUND DUCTWORK WITH GALVANIZED STEEL IN ACCORDANCE WITH SMACNA "HVAC DUCT CONSTRUCTION STANDARDS" OF THE LATEST EDITION. WHERE OTHER CODES ARE ENFORCED, (I.E. UMC, BOCA, ETC.) USE THE MOST STRINGENT CODE FOR DUCT CONSTRUCTION STANDARDS
3	EXCEPT WHERE OTHERWISE INDICATED, CONSTRUCT DUCT SYSTEMS TO THE FOLLOWING PRESSURE CLASSIFICATIONS: SUPPLY DUCTS: 2" W.G., POSITIVE RETURN AND EXHAUST DUCTS: 2" W.G., NEGATIVE EXCEPT WHERE OTHERWISE INDICATED, USE DUCT SEALANT FOLLOWING PRESSURE CLASSIFICATIONS: SUPPLY DUCTS: CLASS B - 3" W.G. RETURN AND EXHAUST DUCTS: CLASS C - 2" W.G.
4	IN ACCORDANCE WITH THESE CONSTRUCTION AND SEALANT PRESSURE CLASSIFICATIONS, MAXIMUM DUCT AIR LEAKAGE WILL NOT EXCEED 5% AS REQUIRED FOR FINAL AIR BALANCE APPROVAL
5	ROUND AND FLAT OVAL DUCTWORK SHALL BE GALVANIZED STEEL WITH SPIRAL LOCK SEAM CONSTRUCTION. ROUND DUCTWORK SIZES 12" DIAMETER AND SMALLER IN CONCEALED AREAS MAY BE SNAP-LOCK CONSTRUCTION. ALL SNAP-LOCK SEAMS SHALL BE SEALED AS DESCRIBED IN THESE SPECIFICATIONS. DUCT AND FITTINGS SHALL BE G90 GALVANIZED STEEL CONFORMING TO ASTM A-653 AND A-924. ALL FITTINGS THAT ARE SPOT WELDED OR BUTTON PUNCHED CONSTRUCTION SHALL BE INTERNALLY SEALED. ROUND DUCTWORK MAY BE SPIROSAFE SELF SEALING DUCT SYSTEM AS MANUFACTURED BY LINDAB OR AN APPROVED EQUAL BY UNITED MCGILL, SEMCO OR SPIRO
6	AS A MINIMUM, CROSS BREAK ALL FLAT SURFACES OR REINFORCE WITH A BEAD APPROXIMATELY 3/8" WIDE X 3/16" DEEP ON 12" CENTERS TO PREVENT VIBRATIONS, REGARDLESS OF DUCT GAUGE
7	INSTALL FACTORY MANUFACTURED DOUBLE THICKNESS TURNING VANES IN ALL 90 DEGREE ELBOWS OVER 36" IN LENGTH. INSTALL FACTORY MANUFACTURED SINGLE THICKNESS TURNING VANES IN ALL OTHER ELBOWS
8	INSTALL RIGID ROUND AND RECTANGULAR METAL DUCT WITH SUPPORT SYSTEMS INDICATED IN SMACNA STANDARDS. SUPPORT HORIZONTAL DUCTS WITHIN 2 FEET OF EACH ELBOW AND WITHIN 4 FEET OF EACH BRANCH INTERSECTION USING DOUBLE STRAP HANGERS ON EACH SIDE OF FITTING. SUPPORT VERTICAL DUCTS AT A MAXIMUM INTERVAL OF 16 FEET AND AT EACH FLOOR. NO WOOD SHALL BE USED TO SUPPORT OR BRACE DUCTS. PROVIDE SWAY AND SEISMIC BRACING AS REQUIRED BY STATE AND LOCAL CODES
9	WHERE DUCTS PASS THROUGH ROOFS AND FLOORS, PROVIDE AS MINIMUM 1-1/2"X1-1/2" X1/8" STEEL ANGLE FRAMES AT EACH SIDE OF OPENING. THE ANNULAR SPACE BETWEEN DUCT AND ANGLE FRAMES SHALL BE CAULKED WITH SILICONE SEALANT OR FIREPROOFED AS REQUIRED BY ASSEMBLY FIRE RATING
10	ALL JOINTS AND SEAMS SHALL BE SEALED WITH 2" WIDE, GLASS-FIBER-FABRIC REINFORCED TAPE. JOINTS ALSO SHALL BE RIVETED OR CONNECTED WITH SHEET METAL SCREWS. LIQUID SEALANT BY UNITED MCGILL CORP., DOW CORNING, MIRACLE ADHESIVES AND SUREBOND INC. WILL BE ACCEPTED IN LIEU OF TAPE

11	SOFT ELASTOMER BUTYL GASKET WITH ADHESIVE BACKING SHALL BE USED TO SEAL FLANGED JOINTS
12	DUCT TRANSITIONS SHALL NOT EXCEED 30 DEGREES SLOPE EXCEPT AS SPECIFICALLY NOTED OTHERWISE.
13	PROVIDE ACCESS TO ALL MOTORIZED ZONE DAMPERS, FIRE DAMPERS, CONTROLS AND OTHER ITEMS IN DUCTWORK THAT REQUIRE SERVICE OR INSPECTION. IF THE ACCESS PANEL LOCATION IS EXPOSED MUST BE APPROVED BY ARCHITECT PRIOR TO INSTALLATION. LAY-IN SUPPLY AND RETURN AIR DIFFUSERS, GRILLES AND REGISTERS WITH PLASTER FRAMES MAY BE USED AS ACCESS LOCATIONS WHEN WITHIN 3'-0" OF DEVICE
14	WHERE DUCTWORK SIZE IS LARGER THAN CONNECTED DEVICE (I.E. DIFFUSER, REGISTER) SMOOTH DUCT TRANSITIONS ARE TO TAKE PLACE JUST PRIOR TO DEVICE CONNECTION
15	ALL KITCHEN VENTILATION DUCT INSTALLATION AND DESIGN SHALL CONFORM TO NFPA 96, CHAPTER 5 OF IMC, AND OTHER LOCAL CODE REQUIREMENTS. GREASE DUCTS SHALL BE CONSTRUCTED OF CARBON STEEL SHEET OR TYPE 304, STAINLESS STEEL. JOINTS AND SEAMS SHALL BE MADE WITH A CONTINUOUS LIQUID-TIGHT WELD OR BRAZE MADE ON THE EXTERNAL SURFACE OF THE DUCT SYSTEM. DUCT BRACING AND SUPPORTS SHALL BE MADE OF NON-COMBUSTIBLE MATERIALS. BOLTS AND OTHER MECHANICAL FASTENERS SHALL NOT PENETRATE THE DUCT WALLS
16	GREASE DUCT SYSTEMS SHALL SLOPE NOT LESS THAN 1/4 INCH PER LINEAL FOOT TOWARD THE HOOD OR TOWARD AN APPROVED GREASE RESERVOIR. WHERE HORIZONTAL DUCTS EXCEED 75 FEET IN LENGTH, THE SLOPE SHALL NOT BE LESS THAN 1 INCH PER LINEAL FOOT
17	ANY PORTION OF A GREASE DUCT SYSTEM INACCESSIBLE FROM THE DUCT ENTRY OR DISCHARGE SHALL BE PROVIDED WITH ADEQUATE CLEANOUT OPENINGS. CLEANOUT OPENINGS SHALL BE EQUIPPED WITH TIGHT-FITTING DOORS CONSTRUCTED OF STEEL HAVING A THICKNESS NOT LESS THAN THAT REQUIRED FOR THE DUCT
18	3M FIRE RESISTIVE DUCT WRAP 615 (1-1/2" THICKNESS) OR EQUAL SHALL BE USED TO ENCLOSE THE GREASE DUCTWORK. THE ENCLOSURE SHALL BE CONSTRUCTED OF NO LESS THAN 2 LAYERS OF DUCT WRAP. FIRESTOP SYSTEM MATERIAL FOR 1 OR 2 HOUR ENCLOSURE PER MANUFACTURER'S INSTALLATION INSTRUCTION. ENCLOSURE IS PERMITTED TO BE IN DIRECT CONTACT WITH COMBUSTIBLES
N	FLEXIBLE CONNECTIONS
1	FLEXIBLE COLLARS SHALL BE FURNISHED AND INSTALLED IN ALL CONNECTIONS BETWEEN VIBRATING EQUIPMENT (FANS, AIR HANDLERS, ROOFTOP UNITS, ETC.) AND DUCTS OR CASINGS. ALSO, FURNISH AND INSTALL FLEXIBLE CONNECTIONS WHERE DUCTS CROSS BUILDING EXPANSION JOINTS
2	FLEXIBLE CONNECTIONS SHALL BE CONSTRUCTED OF NEOPRENE-COATED FLAMEPROOF FABRIC. PROVIDE ADEQUATE JOINT FLEXIBILITY TO ALLOW FOR MOVEMENT AND PREVENT THE TRANSMISSION OF VIBRATION
O	FLEXIBLE AIR DUCT
1	FLEXIBLE AIR DUCT SHALL BE 1" INSULATED CLASS 1 AND RATED FOR THE OPERATING PRESSURE OF THE SYSTEM. DUCT CONSTRUCTION MATERIAL (PLASTIC, CLOTH, ALUMINUM) MUST ADHERE TO LOCAL CODES REQUIREMENTS AND BE INCLUDED AS SUCH IN THE BID
2	FLEXIBLE AIR DUCT SHALL BE ATTACHED PER DETAILS. FLEXIBLE AIRDUCT MAY ONLY BE USED IN CONCEALED VERTICAL APPLICATIONS WITHOUT PRIOR APPROVAL FROM ARCHITECT UNLESS NOTED OTHERWISE
3	FLEXIBLE DUCT SHALL NOT EXTEND OVER 5'-0" IN LENGTH AT ANY ONE LOCATION
P	SUPPLY AIR TAKE-OFF FITTINGS
1	FURNISH AND INSTALL CONICAL OR "BELL-MOUTH" TAKE-OFFS FROM MAIN DUCTWORK TO ROUND BRANCHES. INSTALL PER MANUFACTURER'S INSTRUCTIONS AND DETAILS
Q	DAMPERS
1	FURNISH AND INSTALL MANUAL LOCKING QUADRANT VOLUME CONTROL DAMPERS WITH HANDLE OPERATORS AS SHOWN ON PLANS TO FACILITATE AIR BALANCING
R	PIPING
1	CONDENSING PIPING COMPONENTS AND INSTALLATION SHALL BE CAPABLE OF WITHSTANDING WITH WORKING PRESSURE AT 350 PSI
2	CONDENSER WATER PIPING SHALL BE COPPER TYPE L, SILVER BRAZED. ENTIRE WER ASSEMBLY SHALL BE DOMESTICALLY MANUFACTURING IN THE USA
S	DUCTWORK INSULATION
1	FURNISH AND INSTALL INSULATION PRODUCTS IN ACCORDANCE WITH MANUFACTURER'S WRITTEN INSTRUCTIONS, AND IN ACCORDANCE WITH RECOGNIZED INDUSTRY PRACTICES. INSULATION MUST COMPLY WITH NFPA 90A
2	DUCTWORK SIZES SHOWN ON DRAWINGS ARE INSIDE CLEAR DIMENSIONS. INCREASE DUCTWORK SIZES AS REQUIRED FOR INTERNALLY LINED DUCTWORK TO MAINTAIN INSIDE CLEAR DIMENSIONS
3	ALL SUPPLY AND RETURN DUCTWORK WITHIN 15 FEET OF THE AC UNIT SHALL BE INTERNALLY LINED. INTERNAL LINING SHALL BE 1-INCH THICK
4	FURNISH AND INSTALL INSULATION PRODUCTS IN ACCORDANCE WITH MANUFACTURER'S WRITTEN INSTRUCTIONS, AND IN ACCORDANCE WITH RECOGNIZED INDUSTRY PRACTICES
5	INSULATE ALL OF THE FOLLOWING DUCTWORK: - CONCEALED SUPPLY DUCTWORK THAT IS NOT INTERNALLY LINED. - UNTREATED OUTSIDE AIR DUCTWORK LOCATED WITHIN THE INTERIOR. - EXTERIOR SUPPLY & RETURN DUCTWORK. - DRYER EXHAUST DUCTWORK. INSULATION SHALL BE 1-1/2" REINFORCED FOIL FACED, VAPOR SEALED FIBERGLASS. INSTALLED THERMAL RESISTANCE (DEG F-SQ FT-HR/BTU) SHALL BE AT LEAST 4.5 FOR INTERIOR DUCTWORK AND 6.5 FOR EXTERIOR DUCTWORK, OR AS REQUIRED BY LOCAL CODES, WHICHEVER IS MORE STRINGENT. PROVIDE EXTERIOR DUCTWORK INSULATION WITH WEATHERPROOF JACKETING
6	ALL INSULATION AND LINING SHALL HAVE A FLAME SPREAD RATING OF NOT MORE THAN 25 AND A SMOKE DEVELOPED RATING OF NO HIGHER THAT 50 WHEN TESTED IN ACCORDANCE WITH ASTM C 411, OR AS REQUIRED BY LOCAL CODES
T	CURBS AND STEEL FRAMING FOR SUPPORT
1	THIS CONTRACTOR WILL FURNISH AND INSTALL ALL NECESSARY CURBS AND BLOCKING REQUIRED TO INSTALL ALL HVAC EQUIPMENT AS DESCRIBED OR IMPLIED ON THE DRAWINGS. CURBS SHALL BE A MINIMUM OF 14" HIGH OF THE SAME MANUFACTURER OF THE EQUIPMENT SUPPORTED, UNLESS NOTED OTHERWISE. ALL CURBS MUST BE INSTALLED SO THAT TOP OF CURBS ARE "DEAD" LEVEL. COORDINATE STEEL FRAMING REQUIREMENTS, ROOF PENETRATIONS, AND ROOF FLASHING WITH GENERAL CONTRACTOR TO DETERMINE SCOPE OF WORK PRIOR TO BID. THIS CONTRACTOR MUST RECEIVE WRITTEN APPROVAL BEFORE ANY ADDITIONAL WORK TAKES PLACE
	END OF SECTION 230000

	SECTION 230593
A	DESCRIPTION
1	THE TESTING AND BALANCING WORK WILL BE PERFORMED UNDER A SEPARATE CONTRACT FROM THE HVAC WORK. THE WORK DESCRIBED IN THIS SECTION SHALL BE PERFORMED BY AN INDEPENDENT TEST AND BALANCE AGENCY, SPECIALIZING IN TESTING AND BALANCING OF HVAC SYSTEMS AND A NUMBER OF THE AABC OR APPROVED EQUAL ORGANIZATION
B	SCOPE OF WORK
1	HVAC SYSTEM TEST AND BALANCE IN ACCORDANCE WITH PROCEDURE ESTABLISHED BY AABC OR NEBB
2	MEASUREMENT OF FINAL OPERATING CONDITIONS OF HVAC EQUIPMENT
3	TEST AND BALANCE REPORTS
4	EACH PIECE OF AIR CONDITIONING AND HEATING EQUIPMENT AND THE AIR DISTRIBUTIONS SYSTEMS SHALL BE TESTED AND ADJUSTED TO INSURE PROPER FUNCTIONING OF ALL CONTROL, PROPER DISTRIBUTION OF AIR, MAINTENANCE OF TEMPERATURE, ELIMINATION OF DRAFTS, NOISE AND VIBRATION, AND LEFT IN THE FIRST CLASS OPERATING CONDITION. THE AIR SYSTEM SHALL BE READJUSTED IF REQUIRED FOR COMFORT OF EACH ROOM
5	THE MECHANICAL CONTRACTOR WILL MAKE ANY CHANGES IN THE PULLEYS, BELTS, DAMPERS, VANES, BAFFLES AND THE LIKE REQUIRED FOR CORRECT BALANCE OF SYSTEM AS RECOMMENDED BY T&B AGENCY AND TO THE SATISFACTION OF THE OWNER
C	SUBMITTALS
1	PROVIDE (6) SIX COPIES OF TEST AND BALANCE REPORT TO THE OWNER FOR REVIEW AND APPROVAL IN THE SOFT COVER, LETTER SIZE, 3-RING BINDER MANUAL COMPLETE WITH INDEX PAGE AND INDEXING TAGS. THE REPORT SHALL INCLUDE A SET OF REDUCED DRAWINGS WITH AIR OUTLETS AND EQUIPMENT IDENTIFIED TO CORRESPOND WITH DATA SHEETS AND INDICATING THERMOSTAT LOCATIONS
2	THE TEST AND BALANCE REPORT SHALL INCLUDE, AS A MINIMUM, BUT NOT BE LIMITED TO: - EACH EQUIPMENT SHALL BE IDENTIFIED BY EQUIPMENT SERVICE NUMBER, MANUFACTURER, MODEL NUMBER, AND SERIAL NUMBER, MOTOR HORSEPOWER, MOTOR NAMEPLATE VOLTAGE, MOTOR RPM, ACTUAL AND DESIGN STATIC PRESSURE, ACTUAL OUTLET VELOCITY, ACTUAL CFM, DESIGN CFM. - EACH COIL OUTLET SHALL BE IDENTIFIED WITH MANUFACTURE, MODEL NUMBER, SIZE, VELOCITY, CORRECTION FACTOR, ACTUAL CFM, DESIGN CFM. - EACH AIR OUTLET SHALL BE IDENTIFIED WITH MANUFACTURE, MODEL NUMBER, SIZE, VELOCITY, CORRECTION FACTOR, ACTUAL CFM, DESIGN CFM. - TRAVERSE READING OF MAIN SUPPLY, RETURN AND OUTSIDE AIR DUCT TO ESTABLISH AIR QUANTITIES - TEST AND RECORD TEMPERATURES FROM TEMPERATURE CONTROLLERS SUCH AS DAY THERMOSTAT, NIGHT THERMOSTAT. - TEST AND RECORD TEMPERATURES FROM MAIN SUPPLY AIR TRUNK, MIXED AIR DURING THE FULL HEATING AND FULL COOLING CYCLE AND ECONOMIZER CYCLE - TEST AND BALANCE ECONOMIZER - WATER BALANCE - EXHAUST SYSTEM BALANCE

NOT ALL SECTIONS APPLY

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PRCTI20240772

PROJECT
MULTICARE TENANT IMPROVEMENT
INDIGO - PUYALLUP
4505 S MERIDIAN
PUYALLUP, WA 98373

REVISIONS

DATE: 2024.03.29
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DRAWN BY: LL
REVIEWED BY: SR
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Mechanical Requirements List, pg 1 of 25

2018 WSEC Requirements for Commercial Buildings including Group R2, R3 & R4 over 3 stories & all R1 -- Administered by ©2024 NEEA, All rights reserved

The following information is necessary to check a mechanical permit application for compliance with the mechanical systems and equipment requirements in the Washington State Energy Code, Commercial Provisions.
For questions about this report, contact WSEC Commercial Technical Support at 360-539-5300 or via email at com.techsupport@waenergycodes.com

Project:
INDIGO - PUYALLUP - 2018 WSEC
4505 S MERIDIAN
Puyallup, WA 98373

Date: 2024-04-26

Applies	Code Section	Code Provision	Compliance Information Required In Permit Documentation	Location in Documents	Building Department Notes
SCOPE					
	C103.1	Construction documents - General	For a shell & core or tenant space (first build-out) project, indicate if there is no mechanical scope included in the project.		
YES	C103.1	Construction documents - General	For an alteration project, indicate if there is no mechanical scope included in the project.		
PERFORMANCE CRITERIA & SYSTEM DESIGN					
NA	C403.1	Exempt process equipment	Identify equipment used by manufacturing, industrial or commercial processes that are not for space conditioning or maintaining comfort and amentities for occupants; identify provisions applicable to this equipment per C403.1 exception		
	C403.1.1	HVAC total system performance ratio (TSPR)	For systems serving office, retail, library or education occupancies, provide a TSPR report that demonstrates the proposed design ratio is equal to or greater than the standard reference design ratio, or exception applied		
NA	C403.1.2	Calculation of heating and cooling loads	Provide load calculations performed per ASHRAE Std 183 or equivalent, using design parameters per C302 and Appendix C; include load adjustments to account for energy recovery		
NA	C403.1.3	Data centers	Provide documentation that demonstrates that data center systems comply with the maximum allowed Design MLC and Annualized MLC per ASHRAE 90.4 with 2018 WSEC adjustments per climate zone		
NA	C403.2.1 C403.4.2.2	Zone isolation	If there are HVAC zones that are intended to be occupied non-simultaneously, identify isolation zone areas on plans; if multiple zones intended to be occupied simultaneously will be combined into a single isolation zone, include on plans that the combined zone area does not exceed 25,000 sf and does not include more than one floor; or exception applied		
NA			Indicate locations of associated zone isolation dampers in HVAC distribution system		
NA			Refer to HVAC Controls section in Requirements List for applicable automatic setback and shutdown controls requirements		
EQUIPMENT SELECTION & PERFORMANCE					

Mechanical Requirements List, pg 2 of 25

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YES	C403.3.1	Equipment and system sizing	Indicate that output capacities of heating and cooling equipment and systems are no greater than the smallest available equipment size that exceeds the calculated loads; note exceptions applied	M-001	
YES	C403.3.2 C403.9.1	HVAC equipment performance requirements (efficiency)	Provide equipment schedules on plans and in WSEC mechanical equipment compliance reports; indicate equipment type, calculated loads, capacity, rated and WSEC minimum efficiencies for all heating and cooling equipment; include supply and ventilation air cfms and operating hours for all air systems; identify heating and cooling equipment that does not have a corresponding WSEC minimum efficiency (manufacturer rated)	M-001	
NA	C405.8	Electric motor efficiency	List all motors ≥ 1/12 hp (that are not integral to a rated piece of equipment) in the mechanical or electrical equipment schedules on plans; indicate motor type and applicable efficiency table, hp, rpm, number of poles and rated efficiency, or exception applied		
NA	C403.3.2	Gas and oil-fired forced air furnace and unit heaters	For forced air furnaces with capacity ≥ 225,000 Btu/h and all unit heaters, indicate in equipment schedule intermittent ignition or IID, flue or draft damper, and rated jacket loss		
NA	C403.3.2.4	Packaged electric heating / cooling equipment	Verify all packaged electric equipment with > 6,000 Btu/h cooling capacity and any amount of heating is a heat pump; include in equipment schedules		
NA	C403.3.3	Hot gas bypass limitation for DX cooling equipment	For cooling equipment with hot gas bypass, provide either multiple step unloading or continuous capacity modulation; indicate bypass capacity per Table C403.3.3		
NA	C403.3.2.5	Humidification	For cooling systems with humidification equipment that are also required to have air economizer, indicate humidifier is adiabatic (direct evaporative or fog atomization), or exception applied		
	C403.3.2	Hydronic equipment	Refer to Requirements List section Hydronic Systems - Equipment Selection & Performance for selection criteria specific to chillers and boilers		
NA	C403.9	Heat rejection equipment	Refer to Requirements List section Heat Rejection Systems - Equipment Selection & Performance for selection criteria specific to cooling towers, dry coolers and condensers (air-cooled and evaporative)		
EQUIPMENT SELECTION & PERFORMANCE - DEDICATED OUTSIDE AIR SYSTEMS (DOAS)					

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YES	C403.3.5 C403.3.5.4	Dedicated outdoor air systems	For buildings with occupancies required to comply with the DOAS provisions per Table C403.3.5, identify on plans all occupancies in the building and indicate which occupied spaces are required to have ventilation air delivered by a DOAS; or exception applied	M-001	
NA			If natural ventilation exception is applied, identify these spaces on plans; indicate operable window area complies with IMC Section 402; provide documentation describing how required ventilation will be provided during all occupied hours, including during inclement weather		
NA			If high efficiency VAV exception is applied, identify these spaces on plans; refer to Single Zone VAV section for Groups A-1, A-2 and A-3 occupancy classifications, or Multiple Zone VAV for other than Groups A-1, A-2 and A-3 (per Table C403.3.5)		
NA			If compliance with the DOAS provisions is deemed to be impractical, provide documentation that demonstrates the alternate design strategy applied that achieves a comparable level of energy efficiency, as pre-approved by the AHJ		
NA			Refer to Requirements List section after Multiple-Zone Air Systems for High Efficiency Multiple-Zone VAV Systems exception to C403.3.5 DOAS		
NO			Refer to Requirements List section after High Efficiency Multiple-Zone Air Systems for High Efficiency Single-Zone VAV Systems exception to C403.3.5 DOAS		
YES	C403.3.5.1	DOAS energy recovery method and effectiveness	For all DOAS systems, indicate exhaust air ER method and basis of rated effectiveness (sensible or latent); indicate ≥ 60% sensible or ≥ 50% enthalpy ER effectiveness based on delta between outdoor air and return air enthalpies at design conditions; or exception applied		
NO			If applying exception for DCV, identify occupant load in space and airflow control configured to reduce ventilation rate by ≥ 50% when occupancy is less than design occupancy		
YES	C403.3.5.1	DOAS fan power	For DOAS with total system fan hp < 5 hp, indicate total system fan power does not exceed 1 watt per cfm		
NA			For DOAS with total system fan hp ≥ 5 hp, indicate total system fan power complies with fan power limitation per Section C403.8.1		

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YES	C403.3.5.2	Heating / cooling system controls with DOAS	Indicate systems and equipment associated with the delivery of zone level heating and cooling (fans, hydronic pumps, primary air dampers, etc) are configured to shut off, and central equipment is configured to turn down, when there is no call for heating or cooling in the zone they serve		
NO			If applying Exception to heating / cooling fans used for air mixing in the space during deadband periods, include fan watts per cfm in equipment schedule		
YES	C403.3.5.3	Decoupled DOAS supply air	Indicate method of delivery of DOAS supply air to the occupied space (directly into space, downstream of terminal heating / cooling coils); or exception applied		
NA	C403.6.1	Multiple zone DOAS	For DOAS serving multiple zones, indicate controls configured to reduce the volume of outdoor air in each zone independently when the zone is unoccupied; or exception applied		
ADDITIONAL EFFICIENCY CREDITS - DEDICATED OUTSIDE AIR SYSTEMS (DOAS)					
NA	C406.6	DOAS	For building occupancies not subject to the requirements of Section C403.3.5, to comply with this additional efficiency credit, provide calculations that demonstrate 90% or more of the total floor area of all occupied, conditioned spaces are served by a DOAS per C403.3.5		
YES	C406.7	High performance DOAS - Energy recovery effectiveness and fan power	For all building occupancies, to comply with this additional efficiency credit, demonstrate compliance with C406.6	M-001	
NO			Indicate energy recovery sensible effectiveness of all DOAS is ≥ 80%		
NA			For each system, indicate that total system fan power does not exceed 0.5 watts per cfm		
FANS AND FAN CONTROLS					
NO	C403.8.1	Fan power limitation	For all HVAC fan systems that provide heating and / or cooling and all DOAS, provide system total nameplate hp in equipment schedules on project plans		
NA			For all applicable HVAC systems with total fan motor nameplate hp > 5hp, verify fan system motor hp or bhp complies with fan power limits per equations in Table C403.8.1(1)		
NA			Terminal units installed in conjunction with a DOAS (hydronic heat pumps, VRF heat pumps, chilled/hot water terminal units, variable volume terminal units) shall be treated as independent air-handling units for purposes of fan power calculations		

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NA	C403.8.2	Motor nameplate hp	For all applicable HVAC systems with total fan motor nameplate hp > 5hp, indicate fan motors specified are the smallest available motor hp size greater than fan bhp, note exceptions applied		
NA	C405.8	Fractional hp fan motors	For all fractional hp fan motors (1/12 - 1 hp), indicate that motors comply with applicable WSEC efficiency tables; if motor type is not listed in an efficiency table, indicate whether fan has an electronically commutated motor, has motor rated efficiency of at least 70%, or exception applied		
NA	C403.8.3	Fan efficiency	For individual fans > 5hp, and multiple fans combined in series or parallel that operate as the functional equivalent of a single fan with a combined total motor hp > 5hp, indicate in equipment schedule that rated FEG for all applicable fans is ≥ 67, or exception applied; indicate these fans are sized so total efficiency is within 15% of the fan maximum total efficiency		
NA	C403.8.4	Group R occupancy exhaust fan efficacy	For all exhaust fans ≤ 400 cfm in Group R occupancies, indicate in equipment schedule the fan flow rate and efficacy (cfm/watt), or exception applied; refer to Table C403.8.4		
NA	C403.2.3	Variable flow capacity - fans	For fan motors ≥ 7.5 hp, indicate method of variable flow control (VSD or equivalent method) in equipment schedule, or exception applied		
NA	C403.8.5.1	Fan airflow control	For DX air handling units with cooling capacity ≥ 42,000 Btu/h and evaporative and chilled water air handling units with fan ≥ 0.25 hp, indicate whether system is single zone or multiple zone and related control method (cooling capacity controlled in response to space temperature, space temperature is controlled by modulating supply airflow, or both)		
NA			For mechanical cooling systems (includes DX and chilled water coils) that control cooling capacity in response to space temperature - Provide a minimum of two stages of fan control; indicate minimum fan speed is ≤ 66% of full speed drawing ≤ 40% of full speed fan power during periods of low cooling or ventilation only		

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NA			For other mechanical cooling systems (includes DX and chilled water coils) that control space temperature by modulating airflow (in lieu of, or in addition to, controlling capacity in response to space temperature) - Provide fan controls for modulating supply airflow; indicate minimum fan speed is ≤ 50% of full speed drawing ≤ 30% of full speed fan power during periods of low cooling or ventilation only; or exception applied		
ADDITIONAL EFFICIENCY PACKAGE OPTION, MORE EFFICIENT HVAC EQUIPMENT & FAN PERFORMANCE - MUST COMPLY WITH ALL 3 PROVISIONS TO BE ELIGIBLE					
	C406.2.1	HVAC system selection	To comply with this additional efficiency credit, provide calculations that demonstrate (based on heating and cooling output capacity) that 90% or more of all HVAC equipment serving conditioned floor areas have a corresponding WSEC listed efficiency; or exception applied		
	C406.2.2	Minimum equipment efficiency	In addition to system selection requirement, indicate that all associated heating and cooling equipment have a rated efficiency for all equipment performance criteria (heating, cooling, full load, part load) that is at least 15% better than the listed WSEC efficiency; include specific equipment exceptions applied For systems required to provide a TSPR report per C403.1.1, demonstrate that the proposed design ratio is at minimum 10% higher than the standard reference design ratio For projects complying via weighted average efficiency exception, include calculations that demonstrate the overall average better than code efficiency of all equipment performance criteria for all equipment is ≥ 15%; indicate that all equipment has at least 5% better than code efficiency For systems serving low energy and semi-heated spaces, indicate that 90% or more of installed heating output capacity is provided by electric infrared or gas-fired radiant equipment for localized heating applications only		
	C406.2.3	Minimum fan efficiency grade	In addition to system selection and efficiency requirements, indicate rated FEG of all ≥ 1 hp (750 watt) stand alone supply, return and exhaust fans is ≥ 71; indicate these fans are sized so the fan efficiency at design conditions is within 10% of the maximum total or static efficiency		
VENTILATION, EXHAUST & ENERGY RECOVERY					
YES	C403.2.2.1	Ventilation	Indicate method of ventilation air delivery (natural or mechanical) for each zone	M-001	

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NO			If mechanically delivered, indicate that ventilation systems are configured to provide not more than 150% of, but at least the minimum required volume of outdoor air to each zone per IMC, ASHRAE 62.1 or other applicable code (WAC, OSHA, etc); or exception applied	M-001	
			If delivered via natural ventilation, identify required elements per IMC including: minimum openable area to the outdoors or qualifying adjoining spaces; criteria for ensuring required ventilation is provided during all occupied hours of the year (including during inclement outdoor conditions)		
NO	C403.2.2.2	Exhaust	Indicate that exhaust systems are configured to provide not more than 150% of, but at least the minimum required volume from each zone per IMC, or other applicable code (WAC, OSHA, etc); or exception applied	M-001	
NO	C403.4.2.4	Exhaust system off-hour controls	Refer to Requirements List section HVAC Controls for off-hour controls requirements for exhaust systems	M-001	
NA	C403.3.6	Balanced ventilation for Group R-2 occupancy	For Group R-2 dwelling and sleeping units, indicate that each habitable space is provided with a balanced ventilation system; indicate system is provided with energy recovery with 60% sensible recovery effectiveness		
NA	C403.7.1	Demand controlled ventilation	Identify spaces > 500 sf with occupant load ≥ 25 people/1,000 sf per IMC; for each space indicate whether it is served by an HVAC system with total design ventilation air > 3,000 cfm, and / or the system has airside economizer or automatic modulating outdoor air damper; indicate controls are configured to provide demand controlled ventilation or provide supporting documentation for applied exception		
NA	C403.7.2	Occupancy sensors	For gyms, classrooms, auditoriums, conference rooms and other spaces with occupant load ≥ 25 people/1,000 sf per IMC, that have an area > 500 sf, indicate occupancy-based ventilation air control when space is unoccupied and method (closes outdoor air damper or shuts-off equipment); or alternate means provided to automatically reduce ventilation air when space is partially occupied; or exception applied		
YES	C403.7.3	Ventilation air heating control	For ventilation air systems that operate in conjunction with heating and cooling systems, indicate that ventilation air is tempered (via heating or heat recovery) to no greater than 60F when the space conditioning system is in cooling mode	M-001	

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NA	C403.7.4.2	Ventilation controls for Group R-1 guestrooms	Refer to Requirements List section HVAC Controls for Group R-1 temperature setback and set-up controls		
NA			Indicate method of ventilation and exhaust isolation for each guest room and automatic controls that are configured to turn off ventilation and exhaust airflow when each room is unoccupied		
NA	C403.8.4	Group R occupancy exhaust fan efficacy	Refer to Requirements List section Fans & Fan Controls		
	C403.7.5 C403.7.5.1	Enclosed loading dock ventilation	For enclosed loading docks, indicate ventilation / exhaust system method of activation (gas detection system for CO and NO2, or occupancy sensors), and control method (staged or modulating)		
	C403.7.5 C403.7.5.2	Enclosed parking garage ventilation	For enclosed parking garages, indicate ventilation / exhaust system activated by gas detection system for CO and NO2, and control method (staged or modulating); or exception applied		
NA	C403.7.6	Ventilation / exhaust systems energy recovery	For systems with design ventilation air > 5,000 cfm, or design supply air cfm and % ventilation air exceeding the values in Tables C403.7.6(1) or (2), indicate exhaust air energy recovery method; or exception applied with supporting calculations		
NA			For rooms served by multiple systems with aggregate design ventilation air > 5,000 cfm, or aggregate design supply air cfm and % ventilation air exceeding the values in Tables C403.7.6(1) or (2), indicate exhaust air energy recovery method; or exception applied with supporting calculations		
NO			Indicate energy recovery rated effectiveness that increases outdoor air enthalpy by ≥ 50% based on delta between outdoor air and return air enthalpies at design conditions		
	C403.7.7.1.1 C403.7.7.1.2 C403.7.7.1.3	Kitchen exhaust hood system	Indicate on plans the type, duty, UL rating and exhaust airflow rate of each kitchen hood		
			Provide calculations that show a balanced accounting of total kitchen exhaust (include all hoods) with % of: supply air, transfer air from adjacent spaces, and make-up air		
			For hoods with make-up air drawn directly into the exhaust air cavity of each hood, indicate that replacement air does not exceed 10% of hood exhaust airflow rate		
			For kitchens with total hood exhaust exceeding 2,000 cfm, indicate that each hood is UL 710 rated and maximum exhaust airflow rate of each hood is per Table C403.7.7.1.2; or exception applied		

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			For kitchens with total hood exhaust exceeding 2,000 cfm, indicate energy efficiency compliance method (demand ventilation, energy recovery, or transfer air that would otherwise be exhausted); or exception applied		
	C403.7.7.2	Laboratory exhaust systems energy recovery	For buildings with total lab exhaust > 5,000 cfm, indicate method of energy recovery used to pre-condition laboratory make-up air; energy recovery effectiveness (min 25°F increase in outside air temperature); or alternative method per exception (VAV exhaust, semi-conditioned makeup, or CERM calculation)		
NA	C403.7.7.3	Transfer air	For spaces where conditioned supply air is utilized as transfer air to balance mechanical exhaust, indicate basis of transfer airflow (supply required to meet loads, health/safety requirement, air that would normally be exhausted); or exception applied		
YES	C403.7.8.1 C403.7.8.3	Shutoff dampers for building isolation	Indicate locations of outdoor air intake, exhaust and relief outlet dampers on plans; indicate whether dampers are Class 1 motorized, or gravity and exception applied (include leakage rating, cfm/sf)		
			Indicate location of stairway and elevator hoistway shaft vent dampers on plans; verify dampers are Class 1 motorized; or exception applied		
	C403.7.8.2 C403.7.8.3	Shutoff dampers for return air	Indicate locations of return air dampers that are integral to airside economizer operation; verify dampers are motorized; indicate whether dampers are Class 1, or within packaged equipment eligible for leakage rating exception (include leakage rating, cfm/sf)		
YES	C403.7.8.4	Damper actuation	Indicate automatic controls configured to close outdoor air intake, exhaust and relief outlet dampers during unoccupied equipment operation; not including economizer cooling, night flush or IMC required outdoor air / exhaust	M-001	
			Indicate method of activation of stairway and elevator hoistway shaft vent dampers (fire alarm or interruption of power)		
	C404.11.4	Exhaust system energy recovery for heated indoor pools and permanent spas	For buildings with pools or spas with water surface area > 200 sf, indicate exhaust air energy recovery method and use of waste heat (preheat ventilation air, pool water or service hot water); or exception applied		
			Indicate energy recovery system has the rated effectiveness and is configured to decrease the exhaust air temperature at design conditions by ≥ 36°F		

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HVAC CONTROLS					
YES	C403.4.1	Thermostatic controls (thermostats and humidistats)	Indicate locations of thermostatic and humidity control devices and the zones they serve on plans, including perimeter system zones	M-001	
			Where adjacent (neighboring) zones are controlled by separate thermostats (including perimeter systems used to offset heat gain or loss), and are connected by permanent openings > 10% of either zone sf area, indicate controls configured to prevent adjacent zones from operating in conflicting modes (one in heat, other in cool); applies to adjacent perimeter zones, adjacent nonperimeter zones, and adjacent perimeter and nonperimeter zones		
			If applying Exception 2 to nonperimeter zones adjacent to perimeter zones, indicate that setpoints and deadband settings in these zones are coordinated so cooling in a nonperimeter zone does not occur until the temperature in that zone is 5°F higher than the adjacent perimeter zone temperature in heating		
YES			If applying Exception 3 for DOAS, indicate supply air temperature heating setpoint is ≤ 65°F and cooling setpoint is ≥ 72°F, or method of supply air temperature reset	M-001	
NA	C403.4.1.1	Heat pump supplementary heat	Indicate staged heating operation with compression as the first stage of heating and supplemental heating controlled with outdoor lock-out temperature set to 40°F or less		
	C403.4.1.2	Deadband	Indicate zone thermostatic controls configured with 5°F minimum deadband for systems that control both heating and cooling		
	C403.4.1.3	Setpoint overlap restriction (thermostats)	If separate heating and cooling thermostatic control devices are used to serve a zone, indicate locations of both thermostatic control devices and the zone they serve on plans		
			Indicate a limit switch, mechanical stop or DDC control with programming to prevent simultaneous heating and cooling		
NA	C403.4.1.4	Heated or cooled vestibules	Indicate thermostatic controls within heating or cooled vestibules with a heating setpoint ≤ 60°F and cooling setpoint ≥ 85°F; indicate controls are configured to turn off heating when outdoor temperature is > 45°F; or note exception applied		
NA	C403.4.1.4	Heated air curtains	Indicate controls are configured to turn off air curtain heating when outdoor temperature is > 45°F		

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NA	C403.4.1.6	Door switches for HVAC system thermostatic control	Where doors open to the outdoors from a conditioned space, indicate automatic controls configured to setback the HVAC system(s) when the door is open for > 5 minutes; indicate method of HVAC system setback control (turns off the HVAC system or resets the heating setpoint to 55°F and cooling setpoint to 85°F), or exception applied		
YES	C403.4.2 C403.4.2.1 C403.4.2.2	Automatic setback and shutdown	Indicate zone thermostatic controls configured with required automatic setback and manual override functions, setback temperatures, and control method (automatic time clock or 7 day programmable controls); note exceptions applied	M-001	
YES	C403.4.2.3	Automatic (optimum) start and stop	Indicate all HVAC systems are provided with automatic start and stop controls; indicate start controls are configured to adjust the equipment start time as required to bring each area served up to design temperature just prior to scheduled occupancy; indicate stop controls are configured to reduce heating setpoint and increase cooling setpoint by at least 2°F prior to scheduled unoccupied periods	M-001	
YES	C403.4.2.4	Exhaust system off-hour controls	For exhaust systems serving conditioned spaces in all occupancies other than Group R, indicate method of control and that controls are configured to turn exhaust systems on and off in concert with the ventilation air systems providing their make-up air, or exception applied	M-001	
NA	C403.4.2.5	Transfer and destratification fan system off-hour controls	For transfer fan or mixing fan systems serving conditioned spaces in all occupancies other than Group R, indicate method of control and that controls are configured to turn fans on and off in concert with the associated HVAC systems, or exception applied		
NA	C403.4.7	Combustion heating equipment	For combustion heating equipment other than boilers or radiant heaters with output capacity > 225,000 Btu/h, indicate modulating or staged combustion control		
NA	C403.4.7.1	Combustion decorative vented appliance, combustion fireplace and fire pit controls	Indicate controls that are configured to limit operation of combustion appliance, fireplace and fire pit to ≤ 1 hour without override, or that occupancy sensor controls are provided		

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NA	C403.7.4.1	Temperature setpoint controls for Group R-1 guestrooms	For hotels / motels with over 50 guest rooms, indicate automatic controls for HVAC equipment serving guest rooms are configured to setback (heating) and set-up (cooling) temperature setpoint by at least 4°F when room is unoccupied, and adjust setpoint to 60°F (heating) and 80°F (cooling) when room is unrented / vacated; indicate control method - activated by room entry, occupancy sensor or networked guestroom control system		
NA	C403.7.4.2	Ventilation controls for Group R-1 guestrooms	Refer to Requirements List section Ventilation, Exhaust & Energy Recovery		
NA	C403.4.9 C403.4.10	Thermostatic controls for Group R2 / R3 dwelling units and Group R2 sleeping units	For primary space conditioning systems, indicate 5-2 programmable thermostats capable of two setback periods per day; indicate each non-primary system is provided with at minimum an adjustable thermostat, or exception applied. For all thermostats indicate purpose (heating only, cooling only, or both) and required temperature range; indicate thermostats are configured for at minimum a 5°F deadband		
NA	C403.4.11.1 C403.4.11.2 C403.4.11.3	DDC system applications, controls and display	Provide central and zone level DDC controls as required based on system application, capacity or size thresholds and other qualification per Table C403.4.11.1		
NA			Identify all DDC system input / output control points in project documents		
NA			Indicate control capability includes monitoring zone and system level demand for fan pressure, pump pressure, heating and cooling; indicate capability to transfer demand information from zones to air / hydronic distribution system controllers, and to central plant systems and equipment controllers		
NA			Indicate system has the capability for trending and graphically displaying input / output points		
NA	C403.5.1	DX air handler variable cooling control(Located under Integrated Economizer Control)	For DX air handlers with cooling capacity ≥ 65,000 Btu/h, indicate number of cooling stages provided and method (multiple compressors and / or variable speed compressors); indicate minimum displacement (capacity reduction) as % of full load; indicate thermostats are configured with the same number of cooling stages and displacement		
NA			Indicate control method (cooling capacity controlled in response to space temperature, space temperature controlled by modulating supply airflow, or both)		
DUCTWORK, SHAFTS AND PLENUMS					

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YES	C403.10.1.1 C403.10.2	Duct construction	Indicate on plans that all ductwork is constructed and sealed per IMC	M-002, M-601	
YES			For outdoor air ductwork, also indicate on plans that ductwork meets air leakage requirements per C402.5 and vapor retarder requirements per the IBC	M-002, M-601	
NO	C403.10.2.1 C403.10.2.2 C403.10.2.3	Duct pressure classifications	Identify location of low, medium and high pressure ductwork on plans		
NA	C403.10.2.3	High pressure duct leakage test	Indicate high pressure duct leakage testing requirements on plans; provide test results to jurisdiction when completed		
NO	C403.10.1.1 C403.10.1.2	Duct insulation	For outdoor air ductwork located within conditioned space (upstream or downstream of shutoff damper), identify climate zone and indicate ductwork insulation R-value per Table C403.10.1.1 on plans; or exception applied	M-002, M-601	
NO			For supply and return air ductwork located within unconditioned space or outdoors, identify climate zone and indicate ductwork insulation R-value per Table C403.10.1.2 on plans; or exception applied	M-002, M-601	
YES			For supply air ductwork located within conditioned space, identify on plans if design supply air temperature is < 55°F or > 105°F; indicate ductwork insulation R-value per Table C403.10.1.2 on plans; or exception applied	M-002, M-601	
YES			For return and exhaust air ductwork located within conditioned space (upstream of the shutoff damper) and downstream of an energy recovery media, indicate ductwork insulation R-value per Table C403.10.1.2; or exception applied	M-002, M-601	
YES			For exhaust and relief air ductwork located within conditioned space and downstream of the shutoff damper, indicate ductwork insulation R-value per Table C403.10.1.2; or exception applied	M-002, M-601	
YES	C403.10.1.1 C402.1.3	Shaft and plenum insulation	For outdoor air shafts and plenums, indicate on plans that the R-value of insulation on these elements complies with Table C402.1.3 for steel-framed walls	M-002, M-601	
PIPING					
	C403.10.3	Piping insulation	Indicate design temperature range of fluid conveyed in piping and thickness of insulation (in inches) on hydronic piping plans; or exception applied		
	C403.10.3.1	Protection of piping insulation	Indicate method of protection of pipe insulation from damage / degredation on hydronic piping plans		

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ECONOMIZERS					
NA	C403.5	Air economizer required	Identify all cooling systems requiring air economizer controls in equipment schedules on plans and in WSEC mechanical equipment compliance reports		
NA			Indicate all systems utilizing air economizer exceptions in WSEC mechanical equipment compliance report, including those with water-side economizer in lieu of air economizer; indicate on plans and in WSEC mechanical equipment compliance reports all eligible exception(s) taken and measures to comply with exception(s)		
NA	C403.4.1 C403.5.1	Integrated economizer operation - air and water	Indicate air and water-side economizers are configured for partial cooling operation even where additional mechanical cooling is required to meet the load		
NA			For DX air handlers with single or multiple stages of mechanical cooling; indicate controls are configured with air economizer as the first stage of cooling		
NA			Refer to Requirements List section HVAC Controls for additional requirements for DX air handlers		
NA	C403.5.2	Economizer heating system impact - air and water	Verify control method of HVAC systems with economizers does not increase building heating energy usage during normal operation		
NA	C403.5.3.1	Air economizer capacity	Indicate modulating outdoor air and return air dampers are configured to provide up to 100% outdoor air for cooling		
NA	C403.5.1 C403.5.3.2	Air economizer controls and integrated operation	Indicate that economizer controls are configured to provide partial economizer cooling when additional mechanical cooling is also required to meet the cooling load		
NA			Indicate that control of economizer dampers is not based only on mixed air temperature; or exception applied for systems with cooling capacity ≤ 65,000 Btu/h		
NA	C403.5.3.3	Air economizer high limit controls	Indicate high limit shut-off control method and required high limit per Table C403.5.3.3		
NA	C403.5.3.4	Relief of excess outdoor air	Refer to Requirements List section Ventilation, Exhaust & Energy Recovery		
NA			Indicate relief air outlets are sized and configured to relieve excess building air during air economizer operation to prevent building over-pressurization		
NA			Indicate relief air outlet are located to avoid recirculation into the building		

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	C403.5.4.1	Water economizer capacity	For eligible systems where water-side economizer may be provided in lieu of air economizer, indicate system is capable of 100% design cooling capacity at 50°F db / 45°F wb outdoor air temperatures; indicate if threshold for 100% design cooling capacity via economizer must be lowered to 45°F db / 40°F wb due to dehumidification requirements		
	C403.5.4.2	Water economizer maximum pressure drop	Indicate that the pressure drop across precooling coils and heat exchangers in water economizer systems do not exceed 15 feet (4572 mm)		
NA	C403.5.5	DX equipment economizer fault detection and diagnostics	For DX air handlers with economizer and cooling capacity ≥ 54,000 Btu/h, provide a fault detection and diagnostics (FDD) system to monitor economizer system operation and report faults		
HYDRONIC SYSTEMS - EQUIPMENT SELECTION & PERFORMANCE					
	C403.3.2.1	Maximum air cooled chiller capacity	For chilled water plants and buildings with > 500 tons of cooling capacity, indicate air-cooled chiller capacity is ≤ 100 tons, or exception applied		
	C403.6.7	Large capacity cooling systems	For buildings ≥ 300 tons of cooling capacity, indicate method of multi-stage or variable capacity control (VSD, multiple staged compressors, or max capacity of any single unit		
	C403.3.2.2	Non-standard water-cooled centrifugal chillers	For water-cooled centrifugal chillers not designed for operation at standard conditions, provide calculations documenting maximum full load and part load rated equipment performance requirements		
	C403.3.3	Hot gas bypass limitation for chillers	For cooling equipment with hot gas bypass, provide either multiple step unloading or continuous capacity modulation; indicate bypass capacity per Table C403.3.3		
	C403.4.3 C403.3.4	Large capacity boiler systems	For hydronic systems with only a single boiler that has > 500,000 Btu/h input capacity, indicate multi-stage or modulating burner		
			For boiler system (single or multiple) with > 1,000,000 Btu/h input capacity, indicate turndown ratio per Table C403.3.4 and method (multiple single input boilers, modulating boilers, or combination)		
	C403.2.3	Variable flow capacity - pumps	For pump motors ≥ 7.5 hp, indicate method of variable flow control (VSD or equivalent method) in equipment schedule, or exception applied		
HYDRONIC SYSTEMS - CONTROLS					
	C403.4.3	Boiler sequencing	Indicate automatic controls that sequence operation of multiple boilers		

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	C403.4.3.2	Two-pipe changeover systems	Indicate changeover deadband is ≥ 15°F outdoor air temperature; indicate controls are configured so that heating / cooling modes are active for at minimum 4 hours before changeover and that the delta between heating / cooling supply temperatures at changeover point is			
	C403.4.1.5	Heating water temperature setback	For boilers that provide building heating via one- or two-pipe systems, indicate controls that provide heating water temperature setback based on outdoor temperature			
	C403.4.4	Hydronic system part load controls and supply-water temperature reset	For heating and chilled water systems with ≥ 300,000 Btu/h output capacity, indicate system controls are configured to automatically reset supply water temperature based upon demand; or exception applied			
			Indicate automatic pump flow controls are configured to reduce system flow rate by ≥ 50%, or the maximum allowed by the equipment manufacturer, based upon the heating or cooling loads; or decribe why not required			
			For hydronic systems with output capacity ≥ 300,000 Btu/h that serve heating water systems, chilled water systems and water-cooled unitary air conditioners, indicate that pumps are provided with a variable speed drive if one of the following conditions apply: 1) System pump motor hp is ≥ 2 hp and pumps are designed to operate continuously or per time schedule; 2) System pump motor hp is ≥ 7.5 hp and pumps are controlled by automatic DDC configured to only operate pumps when there is a call for zone heating or cooling			
			Where variable speed drives are required, indicate system is configured so that pump motor power is ≤ 30% of design wattage at 50% of design flow rate; indicate pump flow is controlled to maintain one control valve nearly wide open, or to maintain a mimimum differential pressure; or exception applied			
	C403.4.6	Hydronic system variable pump flow control	For individual pumps required to have variable speed controls, indicate manner of pump speed control (differential pressure, static pressure setpoint, zone heating or cooling demand, or based on the relationship between variable speed controller fequency and power)			
	C403.4.5	Chiller / boiler plant pump isolation	Indicate controls are configured to automatically reduce overall plant flow and shut-off flow through individual chillers and boilers when not in use			

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	C403.4.3.3.1	Water loop heat pump - temperature deadband	Indicate method of water loop temperture control (central plant equipment controls are configured to provide ≥ 20°F water supply temperature deadband between heat rejection and heat addition modes, or controls are configured for system loop temperature optimization			
	C403.4.3.3.2	Water loop heat pump - heat rejection equipment	Indicate type of cooling tower (open- or closed-circuit) in equipment schedule; indicate whether the cooling tower is used directly in the heat pump loop or in conjunction with a separate heat exchanger; indicate method used to limit system heat loss when heat rejection is not needed			
	C403.4.3.3.3	Water loop heat pump - isolation valves	For hydronic heat pump systems with total system power > 10 hp, indicate 2-way isolation valves on each heat pump and variable flow system control			
HEAT REJECTION SYSTEMS - EQUIPMENT SELECTION & PERFORMANCE						
	C403.9.1.3	Centrifugal fan open-circuit cooling towers	For open-circuit centrifugal fan cooling towers with ≥ 1,100 gpm capacity, indicate cooling towers comply with efficiency requirements for axial fan open circuit cooling towers			
HEAT REJECTION & RECOVERY - CONTROLS						
	C403.9.1.1C 403.9.1.2	Fan speed control	For each fan powered by an individual motor or array of motors, with total connected fan power ≥ 5 hp (including motor service factor), indicate method of automatic fan speed control (adjusted based on leaving fluid temperature or condenser temperature / pressure of heat rejection device); verify fan selection provides ≤ 30% design wattage at 50% design airflow			
			For multiple-cell heat rejection equipment with VSD, indicate controls are configured to ramp all fans in unison (not staged on / off operation)			
	C403.9.1.4	Cooling tower flow turndown	For open-circuit cooling towers configured with multiple- or variable-speed condenser water pumps, indicate system is designed so all cells can be run in parallel; indicate method of condenser pump turn down control			
	C403.9.2.1	Heat recovery for service water heating	For buildings with 24-hour operation and > 1,500,000 Btu/h of heat rejection capacity and design service hot water load > 250,000 Btu/h, indicate condenser heat recovery to pre-heat service water; or exception applied. Provide calculations showing the amount of recovered heat that is utilized (60% of peak heat rejection load or pre-heat service water to 85°F).			

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	C403.9.2.2	Steam condensate systems heat recovery	For buildings with on-site steam heating systems, indicate condensate water heat recovery and use of recovered heat			
			For buildings that use off-site generated steam where condensate is not returned to the source, indicate on-site condensate water heat recovery			
	C403.9.2.3	Refrigeration condenser heat recovery	For buildings with food service, meat or deli departments that have ≥ 500,000 Btu/h of remote refrigeration capacity for coolers / freezers, indicate condenser heat recovery and use of captured energy (service water heating, space heating, or dehumidification reheating)			
			For buildings with ≥ 40,000 sf conditioned floor area and ≥ 1,000,000 Btu/h of remote refrigeration capacity, indicate condenser heat recovery to pre-heat service water; indicate remaining recovered heat is applied to space heating or dehumidification reheating			
	C403.9.2.4	Heat recovery for space heating	For buildings that operate > 70 hour per week, that are not served by a DOAS with energy recovery, and have > 1,500,000 Btu/h of heat rejection capacity and ≥ 0.45 cfm per sf of design minimum supply airflow with reheat, indicate condenser heat recovery is provided for space heating that complies with Sections C403.9.2.4.1 or C403.9.2.4.2 or C403.9.2.4.4			
	C403.9.2.4.1 C403.9.2.4.4	Water to water heat recovery	Indicate that 90% or more of the total building space heating and ventilation air design loads are served by heat energy rejected from either a heat recovery chiller or the cooling loop of water to water heat pump equipment			
	C403.9.2.4.2	Exhaust heat recovery	Indicate that waste heat is recovered from least 90% of the total building exhaust airflow such that leaving exhaust air temperature while in heat recovery mode is 55 deg F dry bulb; note exhaust air systems eligible for exception to this requirement			
	C403.9.2.4.3	Process heat recovery	In spaces with 5 watts per sf year-round cooling loads from lights and equipment, indicate these spaces are served by water-cooled equipment configured for heat recovery			
			If these spaces are served by economizer (air or water), indicate automatic controls are configured to disable economizer operation while system is in heat recovery mode			
MULTIPLE ZONE AIR SYSTEMS						

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	C403.6.1	Air systems serving multiple zones	Identify supply air systems serving multiple zones and the zones they serve on plans; indicate whether system is VAV and method of primary air control; or provide supporting documentation for applied exception to VAV			
	C403.6.1	VAV air terminal primary supply airflow	Provide equipment schedules on plans that list all VAV air terminals and types (fan-powered series and parallel air terminals, single duct and dual duct air terminals, etc)			
			For each air terminal include: maximum primary supply airflow rates during zone peak heating and zone peak cooling; maximum terminal airflow during reheating, recooling or mixing; minimum ventilation airflow rate, and the basis for these values; if IMC or ASHRAE 62.1 multiple zone equation is the basis for minimum flow rates, provide this calculation on plans			
	C403.6.2	Single duct VAV terminal units	Indicate single duct terminal units are configured to reduce primary supply air before reheating or recooling			
	C403.6.3	Dual duct systems - terminal units	For systems with separate warm air and cool air ducts, indicate terminal units are configured to reduce the flow from one duct to minimum before mixing with air from the other duct			
	C403.6.8C403.6.9	VAV system static - pressure sensors and DDC set points	Indicate locations of duct static pressure sensors on plans; include at least one sensor per major duct branch; verify controller setpoint pressure at each sensor is ≤ 1.2 inch w.g.			
			For systems with zone level DDC, indicate controls are configured to monitor zone damper positions and reset static pressure setpoint based on the zone requiring most pressure; include control logic that automatically detects and generates an alarm if any zone excessively drives reset logic, and allows building operators to exclude zones from reset logic			
	C403.6.4	VAV system supply air reset	Indicate controls automatically reset supply air temperature in response to building loads or outdoor air temperature; or exception applied			
	C403.6.5	Multiple-zone VAV system ventilation optimization controls	For systems with zone level DDC controls, indicate controls are configured to automatically reduce outdoor airflow in response to changes in system ventilation efficiency; or exception applied			

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	C403.6.6	Parallel fan powered VAV air terminals	Indicate controls automatically activate or shut off the air terminal fan based on call for heating and / or ventilation; indicate controls are configured to activate the terminal fan as the first stage of heating prior to activating the heating coil; indicate control method of primary air during warmup or temperature setback mode			
HIGH EFFICIENCY MULTIPLE-ZONE VAV SYSTEMS - EXCEPTION TO C403.3.5 DOAS, MUST COMPLY WITH ALL 15 PROVISIONS TO BE ELIGIBLE						
	C403.6.10,Item 1	Minimum area served and zoning	Indicate that each high efficiency multiple-zone VAV systems serves an area ≥ 3,000 sf and includes ≥ 5 zones			
	C403.6.10, Item 2	Air economizer	Indicate system is configured for 100% air economizer operation and complies with all related economizer requirements per C403.5 (without economizer exceptions)			
	C403.6.10, Item 3	Direct digital controls (DDC)	Provide DDC controls for all components of system per C403.4.11 (regardless of system size); identify all DDC system input / output control points; indicate capability for trending and graphical display			
	C403.6.10, Items 4 and 5	Supply and outdoor airflow measurement and control	For systems with minimum required outdoor air > 2,500 cfm, provide an airflow monitoring station that is configured to measure outdoor air intake under all load conditions; indicate control sequence that increases or reduces outdoor air cfm based on VAV terminal feedback of ventilation efficiency (per C403.6.5 without exceptions) or and DCV (per C403.7.1)			
			Provide a suppy airflow monitoring station that is configured to measure supply air delivered to VAV terminals under all load conditions			
	C403.6.10,Item 6	Zone isolation and maximum area served	Verify maximum area served by a single VAV system is ≤ 50,000 sf, or one entire floor, whichever is greater; in addition if a system serves > 25,000 sf, that includes areas that are expected to be occupied non-simultaneously, indicate zone isolation controls per C403.2.1			
	C403.6.10, Item 7	Interior / exterior zone design supply air temperature	Verify that VAV terminals serving interior cooling driven loads are sized per a design supply air temperature that is 5°F higher than VAV terminals serving exterior zones while in cooling mode			
	C403.6.10, Item 8	Maximum air terminal inlet velocity and fan power	Identify all air terminals with minimum primary airflow setpoints > 50% of maximum setpoint in mechanical equipment schedule for these air terminals indicate inlet velocity does not exceed 900 fpm			

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	C403.6.10,Item 8	Maximum allowable system brake horsepower	For each multiple-zone VAV system, provide calculations that verify total fan system bhp is ≤ 90% of the total allowable fan system bhp per Option 2 equation in Table C403.8.1.1			
	C403.6.10,Item 9	Fan-powered terminal unit motor and control	Indicate all series and parallel fan-powered terminals have electronically commutated motors (ECM); indicate DDC control system is configured to vary air terminal fan speed as a function of the load; indicate fan speed during periods of low heating, low cooling, or ventilation-only mode is ≤ 66% of peak design air flow, or provide supporting documentation for applied exception			
	C403.6.10, Item 10	Application of single duct and fan-powered terminal units	Indicate VAV terminal types on plans; verify fan-powered terminal units only serve perimeter zones with envelope loads and interior zones with high occupant density and DCV per C403.7.1; verify all other zones are served by single duct terminal units			
	C403.6.10, Item 11	Fan-powered terminal unit primary air reset	Indicate DDC controls are configured to automatically reset the primary supply air cfm setpoint of all fan-powered terminal units to the minimum required to maintain ventilation during occupied heating or deadband mode, based upon the VAV air handling unit minimum ventilation air fraction			
	C403.6.10,Item 12	Controls for high occupant density spaces	For zones > 150 sf with high occupant density (≥ 25 people / 1000 sf), indicate zone is served by a dedicated terminal unit with DCV control that resets terminal unit ventilation setpoint based on measured CO2; also indicate occupancy sensor control that automatically reduces minimum ventilation to zero and sets back room heating and cooling setpoints by ≥ 5°F when space in unoccupied			
	C403.6.10, Item 13	Dedicated cooling systems serving data centers and server, electronic equipment and telecom spaces	For data centers and server, electronic equipment, telecom or similar spaces with design cooling loads > 5 W/sf, indicate spaces are served by dedicated cooling systems that are independent of the HPVAV systems serving the rest of building			
			Indicate dedicated cooling systems are configured for 100% air economizer operation and comply with all related economizer requirements per C403.5 (without economizer exceptions), or heat recovery per C403.5, Exception 9			
	C403.6.10, Item 14	Central plant efficiency	Indicate whether systems are served by a high efficiency heating water plant, or a high efficiency chilled water plant			

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MULTICARE TENANT IMPROVEMENT
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Mechanical Requirements List, pg 22 of 25

2018 WSEC Requirements for Commercial Buildings including Group R2, R3 & R4 over 3 stories & all R1 -- Administered by ©2024 NEEA, All rights reserved

The following information is necessary to check a mechanical permit application for compliance with the mechanical systems and equipment requirements in the Washington State Energy Code, Commercial Provisions.
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			If complying via high efficiency heating water plant: Indicate all VAV terminals have hydronic heating coils served by a heating water system with either gas-fired boiler(s) with thermal efficiency (Et) ≥ 92%, air-to-water heat pumps, or heat recovery chillers; indicate hydronic heating coils are sized per a maximum 120°F entering water temperature during peak demand		
			If complying via high efficiency chilled water plant: Indicate all VAV air handlers have cooling coils served by chillers with rated IPLV efficiency that exceeds WSEC listed IPLV by at least 25% per Table C403.3.2(7) (note water-cooled IPLV is max, all others are min); indicate smallest chiller or compressor in plant is ≤ 20% of the total plant capacity, or provide thermal storage sized for ≥ 20% of total plant capacity		
	C403.6.10, Item 15	Fault detection and diagnostics	Indicate DDC system includes automatic fault detection and diagnostics (FDD) configured to monitor operation and provide fault reporting of all required parameters for all VAV air handlers and VAV air terminal units in the HPVAV system		
HIGH EFFICIENCY SINGLE-ZONE VAV SYSTEMS - EXCEPTION TO C403.3.5 DOAS, MUST COMPLY WITH ALL 8 PROVISIONS TO BE ELIGIBLE					
	C403.12, Item 1	Air economizer	Indicate system is configured for 100% air economizer operation and complies with all related economizer requirements per C403.5 (without economizer exceptions)		
	C403.12, Item 2	Direct digital controls (DDC)	Provide DDC controls for all components of system per C403.4.11 (regardless of system size); identify all DDC system input / output control points; indicate capability for trending and graphical display		
	C403.12,Item 3	Outdoor airflow measurement and control	For systems with minimum required outdoor air ≥ 1,000 cfm, provide an airflow monitoring station that is configured to measure outdoor air intake under all load conditions; indicate controls that adjust outdoor air cfm via DCV per C403.7.1		
	C403.12,Item 4	Maximum allowable system brake horsepower	For each single-zone VAV system, provide calculations that verify total fan system bhp is ≤ 90% of the total allowable fan system bhp per Option 2 equation in Table C403.8.1.1		
	C403.12, Item 5	Supply airflow control	Provide controls that adjust supply airflow based on the heating and cooling loads; indicate control sequence that limits minimum fan speed to 30% of peak design airflow or required ventilation during unoccupied mode, whichever is less		

Mechanical Requirements List, pg 23 of 25

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	C403.12,Item 6	Controls for high occupant density spaces	For zones > 150 sf with high occupant density (≥ 25 people / 1000 sf), indicate DCV control that resets ventilation setpoint based on measured CO2; also indicate occupancy sensor control that automatically reduces minimum ventilation to zero and sets back room heating and cooling setpoints by ≥ 5°F when space in unoccupied		
	C403.12, Item 7	High efficiency system option	Indicate which system performance option is applied - high efficiency DX cooling and heat pump or high efficiency gas heating; or heating coils served by a high efficiency heating water plant; or cooling coils served by high efficiency chilled water plant		
			If complying via high efficiency DX: Indicate full load and part load rated cooling efficiency exceeds WSEC listed efficiency by at least 15%; if heating is supplied by a gas-fired furnace, indicate thermal efficiency (Et) is ≥ 90%; if system is a heat pump, indicate heating efficiency (HSPF or COP) exceeds WSEC listed efficiency by at least 10%; control of cooling and heating coil output shall be configured with a minimum of 2-stages or modulating		
			If complying via high efficiency heating water plant: Indicate hydronic heating coils are served by a heating water system with either gas-fired boiler(s) with thermal efficiency (Et) ≥ 92%, air-to-water heat pumps, or heat recovery chillers; indicate hydronic heating coils are sized per a maximum 120°F entering water temperature during peak demand		
			If complying via high efficiency chilled water plant: Indicate cooling coils are served by chillers with rated IPLV efficiency that exceeds WSEC listed IPLV by at least 25% per Table C403.3.2(7) (note water-cooled IPLV is max, all others are min); indicate smallest chiller or compressor in plant is ≤ 20% of the total plant capacity, or provide thermal storage sized for ≥ 20% of total plant capacity		
	C403.12, Item 8	Fault detection and diagnostics	Indicate DDC system includes automatic fault detection and diagnostics (FDD) configured to monitor operation and provide fault reporting of all required parameters for all HPVAV single-zone air systems		
EXTERIOR HEATING SYSTEMS					
	C403.11.1	Heating outside a building	Indicate systems providing heating in non-enclosed outdoor occupied spaces are radiant systems		

Mechanical Requirements List, pg 24 of 25

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			Indicate occupancy sensing or timer switch controls configured to automatically shut off heating system when area served is unoccupied		
	C403.11.2	Snow melt systems	Indicate automatic controls configured to shut off system when pavement temperature exceeds 50°F and no precipitation is falling, and when outdoor air temperature exceeds 40°F.		
	C403.11.3	Freeze protection system controls	Indicate automatic controls to shut off system when outdoor temperature exceeds 40°F, or conditions protect fluid from freezing		
HVAC EQUIPMENT ENERGY USE METERING					
	C409.3.1	HVAC equipment energy use metering	For new buildings > 50,000 sf and building additions > 25,000 sf, verfiy energy use metering of all equipment used to provide space heating and cooling, dehumidification and ventilation will be provided per C409; indicate equipment eligible for exception		
DOCUMENTATION AND SYSTEM SPECIFIC REQUIREMENT TO SUPPORT COMMISSIONING (CX)					
	C408.1	Scope of mechanical systems commissioning	For buildings with ≥ 240,000 Btu/h total output cooling capacity or ≥ 300,000 Btu/h total output heating capacity, indicate that all mechanical systems regardless of individual capacity are required to be commissioned; or provide building heating / cooling capacity calculation demonstrating eligibilty for exception		
			Indicate that all systems, equipment and controls for which the WSEC requires control functions and / or configuration to perform specific functions are included in the Cx scope		
	C408.1.1 C408.1.4.1	Commissioning requirements in construction documents	Indicate in plans and specifications that Cx per C408 is required for all applicable mechanical systems		
			Include general summary that includes at minimum: narrative description of activites, responsibilities of the Cx team, schedule of activities including verification of project close out documentation per C103.6, and conflict of interest plan (if required)		
			Include in general summary that a Cx project report or Compliance Checklist (Figure C408.1.4.1) shall be completed by the Certified Cx Professional and provided to the owner prior to the final mechanical inspection.		

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	C408.1.2.2	Functional performance testing criteria	Identify in plans and specifications the intended operation of all equipment and controls during all modes of operation, including interfacing between new and existing-to-remain systems		
	C408.2.2	Air system and hydronic system balancing	Indicate in plans that air and fluid flow rates shall be tested and balanced within the tolerances defined in the specifications; indicate systems shall be balanced in a manner to first minimize throttling losses, then adjusted to meet design flow conditions		
	C408.2.2.1	Air system balancing devices	Indicate devices that provide the capability to balance all supply air outlets, zone terminals and air handling equipment requiring system balancing		
	C408.2.2.2	Hydronic system balancing devices	Indicate devices that provide the capability to isolate, balance and measure flow across all hydronic equipment requiring system balancing including heating and cooling coils and pumps; or exception applied		
PROJECT CLOSE OUT DOCUMENTATION					
YES	C103.6	Documentation and project close out submittal requirements	Indicate in plans that project close out documentation and training of building operations personnel is required for all mechanical components, equipment and systems governed by this code; indicate close out documentation shall include: record documents, O&M manuals, applicable WSEC mechanical equipment compliance reports and calculations	M-002	

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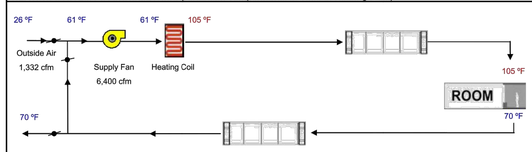
HVAC SYSTEM HEATING AND COOLING LOADS SUMMARY

Project Name | Date: 4/26/2024

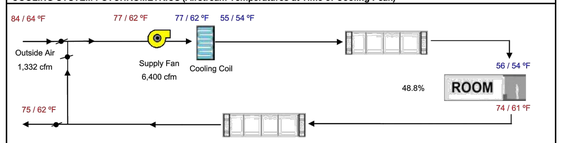
System Name: RTUS | Floor Area: 4,331

ENGINEERING CHECKS		SYSTEM LOAD	COIL COOLING PEAK CFM	COIL COOLING PEAK Sensible	COIL COOLING PEAK Latent	COIL HTG. PEAK CFM	COIL HTG. PEAK Sensible
Number of Systems	4						
Heating System							
Output per System	98,750	**Total Room Loads**	4,474	87,736	8,662	618	22,976
Total Output (Btuh)	395,000	**Return Vented Lighting**		0			
Output (Btuh/sqft)	91.2	**Return Air Ducts**		4,387			1,149
Cooling System		**Return Fan**		0			0
Output per System	51,000	**Ventilation**	1,332	12,834	-3,032	1,332	62,802
Total Output (Btuh)	204,000	**Supply Fan**		0			0
Total Output (Tons)	17.0	**Supply Air Ducts**		4,387			1,149
Total Output (Btuh/sqft)	47.1						
Total Output (sqft/Ton)	254.8	**TOTAL SYSTEM LOAD**		109,343	5,630		88,076
Air System							
CFM per System	1,600	**HVAC EQUIPMENT SELECTION**					
Airflow (cfm)	6,400	LENNOX LGA048HH1Y		119,563	80,111		395,000
Airflow (cfm/sqft)	1.48						
Airflow (cfm/Ton)	376.5						
Outside Air (%)	20.8%	**Total Adjusted System Output** (Adjusted for Peak Design conditions)		119,563	80,111		395,000
Outside Air (cfm/sqft)	0.31						
Note: values above given at ARI conditions		**TIME OF SYSTEM PEAK**			Jul 3 PM		Jan 1 AM

HEATING SYSTEM PSYCHROMETRICS (Airstream Temperatures at Time of Heating Peak)



COOLING SYSTEM PSYCHROMETRICS (Airstream Temperatures at Time of Cooling Peak)



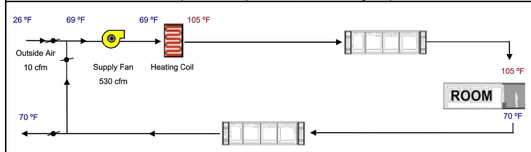
HVAC SYSTEM HEATING AND COOLING LOADS SUMMARY

Project Name | Date: 4/26/2024

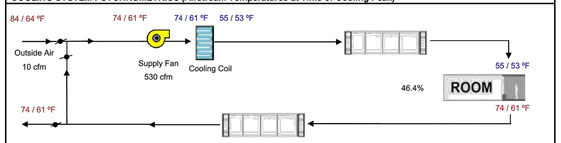
System Name: HP/FC-1 | Floor Area: 65

ENGINEERING CHECKS		SYSTEM LOAD	COIL COOLING PEAK CFM	COIL COOLING PEAK Sensible	COIL COOLING PEAK Latent	COIL HTG. PEAK CFM	COIL HTG. PEAK Sensible
Number of Systems	1						
Heating System							
Output per System	21,600	**Total Room Loads**	27	552	30	16	591
Total Output (Btuh)	21,600	**Return Vented Lighting**		0			
Output (Btuh/sqft)	332.3	**Return Air Ducts**		28			30
Cooling System		**Return Fan**		0			0
Output per System	18,000	**Ventilation**	10	100	-1	10	461
Total Output (Btuh)	18,000	**Supply Fan**		0			0
Total Output (Tons)	1.5	**Supply Air Ducts**		28			30
Total Output (Btuh/sqft)	276.9						
Total Output (sqft/Ton)	43.3	**TOTAL SYSTEM LOAD**		707	29		1,111
Air System							
CFM per System	530	**HVAC EQUIPMENT SELECTION**					
Airflow (cfm)	530	LG		13,700	3,565		13,380
Airflow (cfm/sqft)	8.15						
Airflow (cfm/Ton)	353.3						
Outside Air (%)	1.8%	**Total Adjusted System Output** (Adjusted for Peak Design conditions)		13,700	3,565		13,380
Outside Air (cfm/sqft)	0.15						
Note: values above given at ARI conditions		**TIME OF SYSTEM PEAK**			Jul 3 PM		Jan 1 AM

HEATING SYSTEM PSYCHROMETRICS (Airstream Temperatures at Time of Heating Peak)



COOLING SYSTEM PSYCHROMETRICS (Airstream Temperatures at Time of Cooling Peak)



ROOM HEATING PEAK LOADS

Project Name | Date: 4/26/2024

ROOM INFORMATION		DESIGN CONDITIONS	
Room Name	LOUNGE 100 UC	**Time of Peak**	Jan 1 AM
Floor Area	270.00 ft²	**Outdoor Dry Bulb Temperature**	26 °F
Indoor Dry Bulb Temperature	70 °F		

Conduction	Area		U-Value		ΔT °F		Btu/hr
Slab-On-Grade	perim = 46.0	X	0.7300	X	44	=	1,488
R-19 Wall	142.0	X	0.0489	X	44	=	307
Nonesidential Prescriptive	193.0	X	0.3200	X	44	=	2,736
R-30 Roof No Attic	270.0	X	0.0346	X	44	=	413

Items shown with an asterisk (*) denote conduction through an interior surface to another room — **Page Total** 4,944

Infiltration:[1.00 (Schedule Fraction) X 1.068 (Air Sensible) X 270 (Area) X 8.00 (Ceiling Height) X 0.000 (ACH) **/ 60]** X 44 (ΔT) = 0

TOTAL HOURLY HEAT LOSS FOR ROOM 4,944

ROOM HEATING PEAK LOADS

Project Name | Date: 4/26/2024

ROOM INFORMATION		DESIGN CONDITIONS	
Room Name	COMUNITY SUITE 108	**Time of Peak**	Jan 1 AM
Floor Area	113.00 ft²	**Outdoor Dry Bulb Temperature**	26 °F
Indoor Dry Bulb Temperature	70 °F		

Conduction	Area		U-Value		ΔT °F		Btu/hr
R-30 Roof No Attic	113.0	X	0.0346	X	44	=	173

Items shown with an asterisk (*) denote conduction through an interior surface to another room — **Page Total** 173

Infiltration:[1.00 (Schedule Fraction) X 1.068 (Air Sensible) X 113 (Area) X 8.00 (Ceiling Height) X 0.000 (ACH) **/ 60]** X 44 (ΔT) = 0

TOTAL HOURLY HEAT LOSS FOR ROOM 173

ROOM HEATING PEAK LOADS

Project Name | Date: 4/26/2024

ROOM INFORMATION		DESIGN CONDITIONS	
Room Name	HEALING SUITE 104	**Time of Peak**	Jan 1 AM
Floor Area	149.00 ft²	**Outdoor Dry Bulb Temperature**	26 °F
Indoor Dry Bulb Temperature	70 °F		

Conduction	Area		U-Value		ΔT °F		Btu/hr
R-30 Roof No Attic	149.0	X	0.0346	X	44	=	228
R-19 Wall	56.0	X	0.0489	X	44	=	121
Nonesidential Prescriptive	81.0	X	0.3200	X	44	=	1,148

Items shown with an asterisk (*) denote conduction through an interior surface to another room — **Page Total** 1,498

Infiltration:[1.00 (Schedule Fraction) X 1.068 (Air Sensible) X 149 (Area) X 8.00 (Ceiling Height) X 0.000 (ACH) **/ 60]** X 44 (ΔT) = 0

TOTAL HOURLY HEAT LOSS FOR ROOM 1,498

ROOM HEATING PEAK LOADS

Project Name | Date: 4/26/2024

ROOM INFORMATION		DESIGN CONDITIONS	
Room Name	REGISTRATION UC 100A	**Time of Peak**	Jan 1 AM
Floor Area	122.00 ft²	**Outdoor Dry Bulb Temperature**	26 °F
Indoor Dry Bulb Temperature	70 °F		

Conduction	Area		U-Value		ΔT °F		Btu/hr
R-30 Roof No Attic	122.0	X	0.0346	X	44	=	187

Items shown with an asterisk (*) denote conduction through an interior surface to another room — **Page Total** 187

Infiltration:[1.00 (Schedule Fraction) X 1.068 (Air Sensible) X 122 (Area) X 8.00 (Ceiling Height) X 0.000 (ACH) **/ 60]** X 44 (ΔT) = 0

TOTAL HOURLY HEAT LOSS FOR ROOM 187

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ROOM HEATING PEAK LOADS

Project Name | Date: 4/26/2024

ROOM INFORMATION		DESIGN CONDITIONS	
Room Name	RESTROOM OM 117	**Time of Peak**	Jan 1 AM
Floor Area	50.00 ft²	**Outdoor Dry Bulb Temperature**	26 °F
Indoor Dry Bulb Temperature	70 °F		

Conduction	Area		U-Value		ΔT °F		Btu/hr
R-30 Roof No Attic	50.0	X	0.0346	X	44	=	77
		X		X		=	
		X		X		=	
		X		X		=

ROOM HEATING PEAK LOADS

Project Name | Date: 4/26/2024

ROOM INFORMATION		DESIGN CONDITIONS	
Room Name	HALL 122	**Time of Peak**	Jan 1 AM
Floor Area	166.00 ft²	**Outdoor Dry Bulb Temperature**	26 °F
Indoor Dry Bulb Temperature	70 °F		

Conduction	Area		U-Value		ΔT °F		Btu/hr
R-30 Roof No Attic	166.0	X	0.0346	X	44	=	254
		X		X		=	
		X		X		=	
		X		X		=

ROOM HEATING PEAK LOADS

Project Name | Date: 4/26/2024

ROOM INFORMATION		DESIGN CONDITIONS	
Room Name	SOILED SUPPLY 118	**Time of Peak**	Jan 1 AM
Floor Area	95.00 ft²	**Outdoor Dry Bulb Temperature**	26 °F
Indoor Dry Bulb Temperature	70 °F		

Conduction	Area		U-Value		ΔT °F		Btu/hr
Slab-On-Grade	perim = 9.0	X	0.7300	X	44	=	291
R-30 Roof No Attic	95.0	X	0.0346	X	44	=	145
R-19 Wall	123.0	X	0.0489	X	44	=	266

Items shown with an asterisk (*) denote conduction through an interior surface to another room — **Page Total** 703

Infiltration:[1.00 (Schedule Fraction) X 1.068 (Air Sensible) X 95 (Area) X 8.00 (Ceiling Height) X 0.000 (ACH) **/ 60]** X 44 (ΔT) = 0

TOTAL HOURLY HEAT LOSS FOR ROOM 703

ROOM HEATING PEAK LOADS

Project Name | Date: 4/26/2024

ROOM INFORMATION		DESIGN CONDITIONS	
Room Name	FAMILY SUITE 109	**Time of Peak**	Jan 1 AM
Floor Area	119.00 ft²	**Outdoor Dry Bulb Temperature**	26 °F
Indoor Dry Bulb Temperature	70 °F		

Conduction	Area		U-Value		ΔT °F		Btu/hr
R-30 Roof No Attic	119.0	X	0.0346	X	44	=	182

Items shown with an asterisk (*) denote conduction through an interior surface to another room — **Page Total** 182

Infiltration:[1.00 (Schedule Fraction) X 1.068 (Air Sensible) X 119 (Area) X 8.00 (Ceiling Height) X 0.000 (ACH) **/ 60]** X 44 (ΔT) = 0

TOTAL HOURLY HEAT LOSS FOR ROOM 182

ROOM HEATING PEAK LOADS

Project Name | Date: 4/26/2024

ROOM INFORMATION		DESIGN CONDITIONS	
Room Name	KIDS SUITE 110	**Time of Peak**	Jan 1 AM
Floor Area	127.00 ft²	**Outdoor Dry Bulb Temperature**	26 °F
Indoor Dry Bulb Temperature	70 °F		

Conduction	Area		U-Value		ΔT °F		Btu/hr
R-30 Roof No Attic	127.0	X	0.0346	X	44	=	194

Items shown with an asterisk (*) denote conduction through an interior surface to another room — **Page Total** 194

Infiltration:[1.00 (Schedule Fraction) X 1.068 (Air Sensible) X 127 (Area) X 8.00 (Ceiling Height) X 0.000 (ACH) **/ 60]** X 44 (ΔT) = 0

TOTAL HOURLY HEAT LOSS FOR ROOM 194

ROOM HEATING PEAK LOADS

Project Name | Date: 4/26/2024

ROOM INFORMATION		DESIGN CONDITIONS	
Room Name	DRUG TESTING SUITE 117	**Time of Peak**	Jan 1 AM
Floor Area	90.00 ft²	**Outdoor Dry Bulb Temperature**	26 °F
Indoor Dry Bulb Temperature	70 °F		

Conduction	Area		U-Value		ΔT °F		Btu/hr
R-30 Roof No Attic	90.0	X	0.0346	X	44	=	138

Items shown with an asterisk (*) denote conduction through an interior surface to another room — **Page Total** 138

Infiltration:[1.00 (Schedule Fraction) X 1.068 (Air Sensible) X 90 (Area) X 8.00 (Ceiling Height) X 0.000 (ACH) **/ 60]** X 44 (ΔT) = 0

TOTAL HOURLY HEAT LOSS FOR ROOM 138

ROOM HEATING PEAK LOADS

Project Name | Date: 4/26/2024

ROOM INFORMATION		DESIGN CONDITIONS	
Room Name	KNOWLEDGE SUITE 112	**Time of Peak**	Jan 1 AM
Floor Area	119.00 ft²	**Outdoor Dry Bulb Temperature**	26 °F
Indoor Dry Bulb Temperature	70 °F		

Conduction	Area		U-Value		ΔT °F		Btu/hr
R-30 Roof No Attic	119.0	X	0.0346	X	44	=	182
R-19 Wall	166.0	X	0.0489	X	44	=	359

Items shown with an asterisk (*) denote conduction through an interior surface to another room — **Page Total** 541

Infiltration:[1.00 (Schedule Fraction) X 1.068 (Air Sensible) X 119 (Area) X 8.00 (Ceiling Height) X 0.000 (ACH) **/ 60]** X 44 (ΔT) = 0

TOTAL HOURLY HEAT LOSS FOR ROOM 541

ROOM HEATING PEAK LOADS

Project Name | Date: 4/26/2024

ROOM INFORMATION		DESIGN CONDITIONS	
Room Name	CLARITY SUITE 111	**Time of Peak**	Jan 1 AM
Floor Area	211.00 ft²	**Outdoor Dry Bulb Temperature**	26 °F
Indoor Dry Bulb Temperature	70 °F		

Conduction	Area		U-Value		ΔT °F		Btu/hr
R-30 Roof No Attic	211.0	X	0.0346	X	44	=	323
R-19 Wall	268.0	X	0.0489	X	44	=	580

Items shown with an asterisk (*) denote conduction through an interior surface to another room — **Page Total** 903

Infiltration:[1.00 (Schedule Fraction) X 1.068 (Air Sensible) X 211 (Area) X 8.00 (Ceiling Height) X 0.000 (ACH) **/ 60]** X 44 (ΔT) = 0

TOTAL HOURLY HEAT LOSS FOR ROOM 903

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MULTICARE TENANT IMPROVEMENT
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REVISIONS

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ROOM HEATING PEAK LOADS

Project Name | Date: 4/26/2024

ROOM INFORMATION		DESIGN CONDITIONS	
Room Name	POCT 115	**Time of Peak**	Jan 1 AM
Floor Area	104.00 ft²	**Outdoor Dry Bulb Temperature**	26 °F
Indoor Dry Bulb Temperature	70 °F		

Conduction	Area		U-Value		ΔT °F		Btu/hr
R-30 Roof No Attic	104.0	X	0.0346	X	44	=	159

Items shown with an asterisk (*) denote conduction through an interior surface to another room — **Page Total** 159

Infiltration:[1.00 (Schedule Fraction) X 1.068 (Air Sensible) X 104 (Area) X 8.00 (Ceiling Height) X 0.000 (ACH) **/ 60]** X 44 (ΔT) = 0

TOTAL HOURLY HEAT LOSS FOR ROOM 159

ROOM HEATING PEAK LOADS

Project Name | Date: 4/26/2024

ROOM INFORMATION		DESIGN CONDITIONS	
Room Name	HALL 107	**Time of Peak**	Jan 1 AM
Floor Area	112.00 ft²	**Outdoor Dry Bulb Temperature**	26 °F
Indoor Dry Bulb Temperature	70 °F		

Conduction	Area		U-Value		ΔT °F		Btu/hr
R-30 Roof No Attic	112.0	X	0.0346	X	44	=	171

Items shown with an asterisk (*) denote conduction through an interior surface to another room — **Page Total** 171

Infiltration:[1.00 (Schedule Fraction) X 1.068 (Air Sensible) X 112 (Area) X 8.00 (Ceiling Height) X 0.000 (ACH) **/ 60]** X 44 (ΔT) = 0

TOTAL HOURLY HEAT LOSS FOR ROOM 171

ROOM HEATING PEAK LOADS

Project Name | Date: 4/26/2024

ROOM INFORMATION		DESIGN CONDITIONS	
Room Name	UC CARE TEAM 114	**Time of Peak**	Jan 1 AM
Floor Area	170.00 ft²	**Outdoor Dry Bulb Temperature**	26 °F
Indoor Dry Bulb Temperature	70 °F		

Conduction	Area		U-Value		ΔT °F		Btu/hr
R-30 Roof No Attic	170.0	X	0.0346	X	44	=	260

Items shown with an asterisk (*) denote conduction through an interior surface to another room — **Page Total** 260

Infiltration:[1.00 (Schedule Fraction) X 1.068 (Air Sensible) X 170 (Area) X 8.00 (Ceiling Height) X 0.000 (ACH) **/ 60]** X 44 (ΔT) = 0

TOTAL HOURLY HEAT LOSS FOR ROOM 260

ROOM HEATING PEAK LOADS

Project Name | Date: 4/26/2024

ROOM INFORMATION		DESIGN CONDITIONS	
Room Name	CLEAN SUPPLY 116	**Time of Peak**	Jan 1 AM
Floor Area	100.00 ft²	**Outdoor Dry Bulb Temperature**	26 °F
Indoor Dry Bulb Temperature	70 °F		

Conduction	Area		U-Value		ΔT °F		Btu/hr
R-30 Roof No Attic	100.0	X	0.0346	X	44	=	153
R-19 Wall	128.0	X	0.0489	X	44	=	277

Items shown with an asterisk (*) denote conduction through an interior surface to another room — **Page Total** 430

Infiltration:[1.00 (Schedule Fraction) X 1.068 (Air Sensible) X 100 (Area) X 8.00 (Ceiling Height) X 0.000 (ACH) **/ 60]** X 44 (ΔT) = 0

TOTAL HOURLY HEAT LOSS FOR ROOM 430

ROOM HEATING PEAK LOADS

Project Name | Date: 4/26/2024

ROOM INFORMATION		DESIGN CONDITIONS	
Room Name	OFFICE OM 129	**Time of Peak**	Jan 1 AM
Floor Area	129.00 ft²	**Outdoor Dry Bulb Temperature**	26 °F
Indoor Dry Bulb Temperature	70 °F		

Conduction	Area		U-Value		ΔT °F		Btu/hr
R-30 Roof No Attic	129.0	X	0.0346	X	44	=	197

Items shown with an asterisk (*) denote conduction through an interior surface to another room — **Page Total** 197

Infiltration:[1.00 (Schedule Fraction) X 1.068 (Air Sensible) X 129 (Area) X 8.00 (Ceiling Height) X 0.000 (ACH) **/ 60]** X 44 (ΔT) = 0

TOTAL HOURLY HEAT LOSS FOR ROOM 197

ROOM HEATING PEAK LOADS

Project Name | Date: 4/26/2024

ROOM INFORMATION		DESIGN CONDITIONS	
Room Name	WELLNESS SUITE 130	**Time of Peak**	Jan 1 AM
Floor Area	115.00 ft²	**Outdoor Dry Bulb Temperature**	26 °F
Indoor Dry Bulb Temperature	70 °F		

Conduction	Area		U-Value		ΔT °F		Btu/hr
R-30 Roof No Attic	115.0	X	0.0346	X	44	=	176
R-19 Wall	147.0	X	0.0489	X	44	=	318

Items shown with an asterisk (*) denote conduction through an interior surface to another room — **Page Total** 494

Infiltration:[1.00 (Schedule Fraction) X 1.068 (Air Sensible) X 115 (Area) X 8.00 (Ceiling Height) X 0.000 (ACH) **/ 60]** X 44 (ΔT) = 0

TOTAL HOURLY HEAT LOSS FOR ROOM 494

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REVISIONS

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ROOM HEATING PEAK LOADS

Project Name | Date: 4/26/2024

ROOM INFORMATION		DESIGN CONDITIONS	
Room Name	HALL 125	**Time of Peak**	Jan 1 AM
Floor Area	81.00 ft²	**Outdoor Dry Bulb Temperature**	26 °F
Indoor Dry Bulb Temperature	70 °F		

Conduction	Area		U-Value		ΔT °F		Btu/hr
R-30 Roof No Attic	81.0	X	0.0346	X	44	=	124
		X		X		=	
		X		X		=	
		X		X		=

ROOM HEATING PEAK LOADS

Project Name | Date: 4/26/2024

ROOM INFORMATION		DESIGN CONDITIONS	
Room Name	OM STORAGE 119A	Time of Peak	Jan 1 AM
Floor Area	72.00 ft²	Outdoor Dry Bulb Temperature	26 °F
Indoor Dry Bulb Temperature	70 °F		

Conduction	Area		U-Value		ΔT °F		Btu/hr
R-30 Roof No Attic	72.0	X	0.0346	X	44	=	110
		X		X		=	
		X		X		=	
		X		X		=

ROOM COOLING PEAK LOADS

Project Name | Date: 4/26/2024

ROOM INFORMATION		DESIGN CONDITIONS	
Room Name	RESTROOM OM 117	**Time of Peak**	Jun 1 PM
Floor Area	50.00 ft²	**Outdoor Dry Bulb Temperature**	81 °F
Indoor Dry Bulb Temperature	74 °F	**Outdoor Wet Bulb Temperature**	63 °F

Conduction	Area		U-Value		DETD[1]		Btu/hr
R-30 Roof No Attic	50.0	X	0.0346	X	62.9	=	109
		X		X		=	
		X		X		=	
		X		X		=	
		X		X		=	
		X		X		=	
		X		X		=	
		X		X		=	
		X		X		=	
		X		X		=	
				Page Total			109

1. Design Equivalent Temperature Difference (DETD)
Items shown with an asterisk (*) denote conduction through an interior surface to another room.

Solar Gain	Orientation	Area		SGF		SC		Weighting Factor		Btu/hr
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
							Page Total			0

Internal Gain	Sched. Frac.		Area		Heat Gain						Weighting Factor		Btu/hr
Lights	1.00	X	50	X	1.150	Watts/Sqft	X	3.413	Btu/Watt	X	0.999	=	196
Occupants	1.00	X	50	X	250	Btu/occ.	/	100.000	Sqft/occ.	X	1.000	=	125
Receptacle	1.00	X	50	X	1.500	Watts/Sqft	X	3.413	Btu/Watt	X	1.000	=	256
Process	1.00	X	50	X	0.000	Watts/Sqft	X	3.413	Btu/Watt	X	1.000	=	0
Process Lighting	1.00	X	50	X	0.000	Watts/Sqft	X	3.413	Btu/Watt	X	0.000	=	0

Infiltration: [1.00 (Schedule Fraction) X 1.068 (Air Sensible) X 50 (Area) X 8.00 (Ceiling Height) X 0.00 (ACH) / 60] X 7 (ΔT) = 0

TOTAL HOURLY SENSIBLE HEAT GAIN FOR ROOM 686

Latent Gain	Sched. Frac.		Area		Heat Gain							Btu/hr
Occupants	1.00	X	50	X	200	Btuh/occ.	/	100.000	Sqft/occ.	=		100
Receptacle	1.00	X	50	X	0.000	Watts/Sqft	X	3.413	Btu/Watt	=		0
Process	1.00	X	50	X	0.000	Watts/Sqft	X	3.413	Btu/Watt	=		0

Infiltration: [1.00 (Schedule Fraction) X 4,789 (Air Latent) X 50 (Area) X 8.00 (Ceiling Height) X 0.00 (ACH) /60] X 0.00000 (ΔW) = 0

TOTAL HOURLY LATENT HEAT GAIN FOR ROOM 100

ROOM COOLING PEAK LOADS

Project Name | Date: 4/26/2024

ROOM INFORMATION		DESIGN CONDITIONS	
Room Name	RESTROOM 102	**Time of Peak**	Jun 2 PM
Floor Area	62.00 ft²	**Outdoor Dry Bulb Temperature**	82 °F
Indoor Dry Bulb Temperature	74 °F	**Outdoor Wet Bulb Temperature**	63 °F

Conduction	Area		U-Value		DETD[1]		Btu/hr
R-30 Roof No Attic	62.0	X	0.0346	X	61.8	=	132
R-19 Wall	108.0	X	0.0489	X	10.9	=	58
		X		X		=	
		X		X		=	
		X		X		=	
		X		X		=	
		X		X		=	
		X		X		=	
		X		X		=	
		X		X		=	
				Page Total			190

1. Design Equivalent Temperature Difference (DETD)
Items shown with an asterisk (*) denote conduction through an interior surface to another room.

Solar Gain	Orientation	Area		SGF		SC		Weighting Factor		Btu/hr
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
							Page Total			0

Internal Gain	Sched. Frac.		Area		Heat Gain						Weighting Factor		Btu/hr
Lights	1.00	X	62	X	1.150	Watts/Sqft	X	3.413	Btu/Watt	X	0.999	=	243
Occupants	1.00	X	62	X	250	Btu/occ.	/	100.000	Sqft/occ.	X	1.000	=	155
Receptacle	1.00	X	62	X	1.500	Watts/Sqft	X	3.413	Btu/Watt	X	1.000	=	317
Process	1.00	X	62	X	0.000	Watts/Sqft	X	3.413	Btu/Watt	X	1.000	=	0
Process Lighting	1.00	X	62	X	0.000	Watts/Sqft	X	3.413	Btu/Watt	X	0.000	=	0

Infiltration: [1.00 (Schedule Fraction) X 1.068 (Air Sensible) X 62 (Area) X 8.00 (Ceiling Height) X 0.00 (ACH) / 60] X 8 (ΔT) = 0

TOTAL HOURLY SENSIBLE HEAT GAIN FOR ROOM 905

Latent Gain	Sched. Frac.		Area		Heat Gain							Btu/hr
Occupants	1.00	X	62	X	200	Btuh/occ.	/	100.000	Sqft/occ.	=		124
Receptacle	1.00	X	62	X	0.000	Watts/Sqft	X	3.413	Btu/Watt	=		0
Process	1.00	X	62	X	0.000	Watts/Sqft	X	3.413	Btu/Watt	=		0

Infiltration: [1.00 (Schedule Fraction) X 4,789 (Air Latent) X 62 (Area) X 8.00 (Ceiling Height) X 0.00 (ACH) /60] X 0.00000 (ΔW) = 0

TOTAL HOURLY LATENT HEAT GAIN FOR ROOM 124

ROOM COOLING PEAK LOADS

Project Name | Date: 4/26/2024

ROOM INFORMATION		DESIGN CONDITIONS	
Room Name	FOCUS 103	**Time of Peak**	Jun 3 PM
Floor Area	74.00 ft²	**Outdoor Dry Bulb Temperature**	83 °F
Indoor Dry Bulb Temperature	74 °F	**Outdoor Wet Bulb Temperature**	64 °F

Conduction	Area		U-Value		DETD[1]		Btu/hr
R-30 Roof No Attic	74.0	X	0.0346	X	57.6	=	147
R-19 Wall	74.0	X	0.0489	X	11.3	=	41
Nonesidential Prescriptive	40.0	X	0.3200	X	5.0	=	63
		X		X		=	
		X		X		=	
		X		X		=	
		X		X		=	
		X		X		=	
		X		X		=	
		X		X		=	
		X		X		=	
				Page Total			252

1. Design Equivalent Temperature Difference (DETD)
Items shown with an asterisk (*) denote conduction through an interior surface to another room.

Solar Gain	Orientation	Area		SGF		SC		Weighting Factor		Btu/hr
Window	(N)	40.0	X	42	X	0.287	X	0.845	=	412
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
							Page Total			412

Internal Gain	Sched. Frac.		Area		Heat Gain						Weighting Factor		Btu/hr
Lights	1.00	X	74	X	1.150	Watts/Sqft	X	3.413	Btu/Watt	X	0.999	=	290
Occupants	1.00	X	74	X	250	Btu/occ.	/	100.000	Sqft/occ.	X	1.000	=	185
Receptacle	1.00	X	74	X	1.500	Watts/Sqft	X	3.413	Btu/Watt	X	1.000	=	379
Process	1.00	X	74	X	0.000	Watts/Sqft	X	3.413	Btu/Watt	X	1.000	=	0
Process Lighting	1.00	X	74	X	0.000	Watts/Sqft	X	3.413	Btu/Watt	X	0.000	=	0

Infiltration: [1.00 (Schedule Fraction) X 1.068 (Air Sensible) X 74 (Area) X 8.00 (Ceiling Height) X 0.00 (ACH) / 60] X 9 (ΔT) = 0

TOTAL HOURLY SENSIBLE HEAT GAIN FOR ROOM 1,518

Latent Gain	Sched. Frac.		Area		Heat Gain							Btu/hr
Occupants	1.00	X	74	X	200	Btuh/occ.	/	100.000	Sqft/occ.	=		148
Receptacle	1.00	X	74	X	0.000	Watts/Sqft	X	3.413	Btu/Watt	=		0
Process	1.00	X	74	X	0.000	Watts/Sqft	X	3.413	Btu/Watt	=		0

Infiltration: [1.00 (Schedule Fraction) X 4,789 (Air Latent) X 74 (Area) X 8.00 (Ceiling Height) X 0.00 (ACH) /60] X 0.00000 (ΔW) = 0

TOTAL HOURLY LATENT HEAT GAIN FOR ROOM 148

ROOM COOLING PEAK LOADS

Project Name | Date: 4/26/2024

ROOM INFORMATION		DESIGN CONDITIONS	
Room Name	STORAGE UC 106	**Time of Peak**	Jun 1 PM
Floor Area	108.00 ft²	**Outdoor Dry Bulb Temperature**	81 °F
Indoor Dry Bulb Temperature	74 °F	**Outdoor Wet Bulb Temperature**	63 °F

Conduction	Area		U-Value		DETD[1]		Btu/hr
R-30 Roof No Attic	108.0	X	0.0346	X	62.9	=	235
		X		X		=	
		X		X		=	
		X		X		=	
		X		X		=	
		X		X		=	
		X		X		=	
		X		X		=	
		X		X		=	
		X		X		=	
				Page Total			235

1. Design Equivalent Temperature Difference (DETD)
Items shown with an asterisk (*) denote conduction through an interior surface to another room.

Solar Gain	Orientation	Area		SGF		SC		Weighting Factor		Btu/hr
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
							Page Total			0

Internal Gain	Sched. Frac.		Area		Heat Gain						Weighting Factor		Btu/hr
Lights	1.00	X	108	X	1.150	Watts/Sqft	X	3.413	Btu/Watt	X	0.999	=	423
Occupants	1.00	X	108	X	250	Btu/occ.	/	100.000	Sqft/occ.	X	1.000	=	270
Receptacle	1.00	X	108	X	1.500	Watts/Sqft	X	3.413	Btu/Watt	X	1.000	=	553
Process	1.00	X	108	X	0.000	Watts/Sqft	X	3.413	Btu/Watt	X	1.000	=	0
Process Lighting	1.00	X	108	X	0.000	Watts/Sqft	X	3.413	Btu/Watt	X	0.000	=	0

Infiltration: [1.00 (Schedule Fraction) X 1.068 (Air Sensible) X 108 (Area) X 8.00 (Ceiling Height) X 0.00 (ACH) / 60] X 7 (ΔT) = 0

TOTAL HOURLY SENSIBLE HEAT GAIN FOR ROOM 1,481

Latent Gain	Sched. Frac.		Area		Heat Gain							Btu/hr
Occupants	1.00	X	108	X	200	Btuh/occ.	/	100.000	Sqft/occ.	=		216
Receptacle	1.00	X	108	X	0.000	Watts/Sqft	X	3.413	Btu/Watt	=		0
Process	1.00	X	108	X	0.000	Watts/Sqft	X	3.413	Btu/Watt	=		0

Infiltration: [1.00 (Schedule Fraction) X 4,789 (Air Latent) X 108 (Area) X 8.00 (Ceiling Height) X 0.00 (ACH) /60] X 0.00000 (ΔW) = 0

TOTAL HOURLY LATENT HEAT GAIN FOR ROOM 216

ROOM COOLING PEAK LOADS

Project Name | Date: 4/26/2024

ROOM INFORMATION		DESIGN CONDITIONS	
Room Name	GREEN SUITE 120	**Time of Peak**	Jun 2 PM
Floor Area	120.00 ft²	**Outdoor Dry Bulb Temperature**	82 °F
Indoor Dry Bulb Temperature	74 °F	**Outdoor Wet Bulb Temperature**	63 °F

Conduction	Area		U-Value		DETD[1]		Btu/hr
R-30 Roof No Attic	120.0	X	0.0346	X	61.8	=	256
R-19 Wall	151.0	X	0.0489	X	10.9	=	81
		X		X		=	
		X		X		=	
		X		X		=	
		X		X		=	
		X		X		=	
		X		X		=	
		X		X		=	
		X		X		=	
				Page Total			337

1. Design Equivalent Temperature Difference (DETD)
Items shown with an asterisk (*) denote conduction through an interior surface to another room.

Solar Gain	Orientation	Area		SGF		SC		Weighting Factor		Btu/hr
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
							Page Total			0

Internal Gain	Sched. Frac.		Area		Heat Gain						Weighting Factor		Btu/hr
Lights	1.00	X	120	X	1.150	Watts/Sqft	X	3.413	Btu/Watt	X	0.999	=	470
Occupants	1.00	X	120	X	250	Btu/occ.	/	100.000	Sqft/occ.	X	1.000	=	300
Receptacle	1.00	X	120	X	1.500	Watts/Sqft	X	3.413	Btu/Watt	X	1.000	=	614
Process	1.00	X	120	X	2.000	Watts/Sqft	X	3.413	Btu/Watt	X	1.000	=	819
Process Lighting	1.00	X	120	X	0.000	Watts/Sqft	X	3.413	Btu/Watt	X	0.000	=	0

Infiltration: [1.00 (Schedule Fraction) X 1.068 (Air Sensible) X 120 (Area) X 8.00 (Ceiling Height) X 0.00 (ACH) / 60] X 8 (ΔT) = 0

TOTAL HOURLY SENSIBLE HEAT GAIN FOR ROOM 2,541

Latent Gain	Sched. Frac.		Area		Heat Gain							Btu/hr
Occupants	1.00	X	120	X	200	Btuh/occ.	/	100.000	Sqft/occ.	=		240
Receptacle	1.00	X	120	X	0.000	Watts/Sqft	X	3.413	Btu/Watt	=		0
Process	1.00	X	120	X	0.000	Watts/Sqft	X	3.413	Btu/Watt	=		0

Infiltration: [1.00 (Schedule Fraction) X 4,789 (Air Latent) X 120 (Area) X 8.00 (Ceiling Height) X 0.00 (ACH) /60] X 0.00000 (ΔW) = 0

TOTAL HOURLY LATENT HEAT GAIN FOR ROOM 240

ROOM COOLING PEAK LOADS

Project Name | Date: 4/26/2024

ROOM INFORMATION		DESIGN CONDITIONS	
Room Name	OFFICE OM 121	**Time of Peak**	Jun 1 PM
Floor Area	58.00 ft²	**Outdoor Dry Bulb Temperature**	81 °F
Indoor Dry Bulb Temperature	74 °F	**Outdoor Wet Bulb Temperature**	63 °F

Conduction	Area		U-Value		DETD[1]		Btu/hr
R-30 Roof No Attic	58.0	X	0.0346	X	62.9	=	126
		X		X		=	
		X		X		=	
		X		X		=	
		X		X		=	
		X		X		=	
		X		X		=	
		X		X		=	
		X		X		=	
		X		X		=	
				Page Total			126

1. Design Equivalent Temperature Difference (DETD)
Items shown with an asterisk (*) denote conduction through an interior surface to another room.

Solar Gain	Orientation	Area		SGF		SC		Weighting Factor		Btu/hr
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
							Page Total			0

Internal Gain	Sched. Frac.		Area		Heat Gain						Weighting Factor		Btu/hr
Lights	1.00	X	58	X	1.150	Watts/Sqft	X	3.413	Btu/Watt	X	0.999	=	227
Occupants	1.00	X	58	X	250	Btu/occ.	/	100.000	Sqft/occ.	X	1.000	=	145
Receptacle	1.00	X	58	X	1.500	Watts/Sqft	X	3.413	Btu/Watt	X	1.000	=	297
Process	1.00	X	58	X	2.000	Watts/Sqft	X	3.413	Btu/Watt	X	1.000	=	396
Process Lighting	1.00	X	58	X	0.000	Watts/Sqft	X	3.413	Btu/Watt	X	0.000	=	0

Infiltration: [1.00 (Schedule Fraction) X 1.068 (Air Sensible) X 58 (Area) X 8.00 (Ceiling Height) X 0.00 (ACH) / 60] X 7 (ΔT) = 0

TOTAL HOURLY SENSIBLE HEAT GAIN FOR ROOM 1,191

Latent Gain	Sched. Frac.		Area		Heat Gain							Btu/hr
Occupants	1.00	X	58	X	200	Btuh/occ.	/	100.000	Sqft/occ.	=		116
Receptacle	1.00	X	58	X	0.000	Watts/Sqft	X	3.413	Btu/Watt	=		0
Process	1.00	X	58	X	0.000	Watts/Sqft	X	3.413	Btu/Watt	=		0

Infiltration: [1.00 (Schedule Fraction) X 4,789 (Air Latent) X 58 (Area) X 8.00 (Ceiling Height) X 0.00 (ACH) /60] X 0.00000 (ΔW) = 0

TOTAL HOURLY LATENT HEAT GAIN FOR ROOM 116

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REVISIONS

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ROOM COOLING PEAK LOADS

Project Name | Date: 4/26/2024

ROOM INFORMATION		DESIGN CONDITIONS	
Room Name	HALL 122	**Time of Peak**	Jun 1 PM
Floor Area	166.00 ft²	**Outdoor Dry Bulb Temperature**	81 °F
Indoor Dry Bulb Temperature	74 °F	**Outdoor Wet Bulb Temperature**	63 °F

Conduction	Area		U-Value		DETD[1]		Btu/hr
R-30 Roof No Attic	166.0	X	0.0346	X	62.9	=	361
		X		X		=	
		X		X		=	
		X		X		=	
		X		X		=	
		X		X		=	
		X		X		=	
		X		X		=	
		X		X		=	
		X		X		=	
				Page Total			361

1. Design Equivalent Temperature Difference (DETD)
Items shown with an asterisk (*) denote conduction through an interior surface to another room.

Solar Gain	Orientation	Area		SGF		SC		Weighting Factor		Btu/hr
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
							Page Total			0

Internal Gain	Sched. Frac.		Area		Heat Gain						Weighting Factor		Btu/hr
Lights	1.00	X	166	X	1.150	Watts/Sqft	X	3.413	Btu/Watt	X	0.999	=	651
Occupants	1.00	X	166	X	250	Btu/occ.	/	100.000	Sqft/occ.	X	1.000	=	415
Receptacle	1.00	X	166	X	1.500	Watts/Sqft	X	3.413	Btu/Watt	X	1.000	=	850
Process	1.00	X	166	X	2.000	Watts/Sqft	X	3.413	Btu/Watt	X	1.000	=	1,133
Process Lighting	1.00	X	166	X	0.000	Watts/Sqft	X	3.413	Btu/Watt	X	0.000	=	0

Infiltration: [1.00 (Schedule Fraction) X 1.068 (Air Sensible) X 166 (Area) X 8.00 (Ceiling Height) X 0.00 (ACH) / 60] X 7 (ΔT) = 0

TOTAL HOURLY SENSIBLE HEAT GAIN FOR ROOM 3,409

Latent Gain	Sched. Frac.		Area		Heat Gain						Btu/hr
Occupants	1.00	X	166	X	200	Btuh/occ.	/	100.000	Sqft/occ.	=	332
Receptacle	1.00	X	166	X	0.000	Watts/Sqft	X	3.413	Btu/Watt	=	0
Process	1.00	X	166	X	0.000	Watts/Sqft	X	3.413	Btu/Watt	=	0

Infiltration: [1.00 (Schedule Fraction) X 4,789 (Air Latent) X 166 (Area) X 8.00 (Ceiling Height) X 0.00 (ACH) /60] X 0.00000 (ΔW) = 0

TOTAL HOURLY LATENT HEAT GAIN FOR ROOM 332

ROOM COOLING PEAK LOADS

Project Name | Date: 4/26/2024

ROOM INFORMATION		DESIGN CONDITIONS	
Room Name	HALL 123	**Time of Peak**	Jul 2 PM
Floor Area	190.00 ft²	**Outdoor Dry Bulb Temperature**	83 °F
Indoor Dry Bulb Temperature	74 °F	**Outdoor Wet Bulb Temperature**	64 °F

Conduction	Area		U-Value		DETD[1]		Btu/hr
R-30 Roof No Attic	190.0	X	0.0346	X	60.7	=	398
R-19 Wall	54.0	X	0.0489	X	11.1	=	29
Metal Door	21.0	X	0.7000	X	13.1	=	192
		X		X		=	
		X		X		=	
		X		X		=	
		X		X		=	
		X		X		=	
		X		X		=	
		X		X		=	
				Page Total			620

1. Design Equivalent Temperature Difference (DETD)
Items shown with an asterisk (*) denote conduction through an interior surface to another room.

Solar Gain	Orientation	Area		SGF		SC		Weighting Factor		Btu/hr
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
							Page Total			0

Internal Gain	Sched. Frac.		Area		Heat Gain						Weighting Factor		Btu/hr
Lights	1.00	X	190	X	1.150	Watts/Sqft	X	3.413	Btu/Watt	X	0.999	=	745
Occupants	1.00	X	190	X	250	Btu/occ.	/	100.000	Sqft/occ.	X	1.000	=	475
Receptacle	1.00	X	190	X	1.500	Watts/Sqft	X	3.413	Btu/Watt	X	1.000	=	973
Process	1.00	X	190	X	2.000	Watts/Sqft	X	3.413	Btu/Watt	X	1.000	=	1,297
Process Lighting	1.00	X	190	X	0.000	Watts/Sqft	X	3.413	Btu/Watt	X	0.000	=	0

Infiltration: [1.00 (Schedule Fraction) X 1.068 (Air Sensible) X 190 (Area) X 8.00 (Ceiling Height) X 0.00 (ACH) / 60] X 9 (ΔT) = 0

TOTAL HOURLY SENSIBLE HEAT GAIN FOR ROOM 4,109

Latent Gain	Sched. Frac.		Area		Heat Gain						Btu/hr
Occupants	1.00	X	190	X	200	Btuh/occ.	/	100.000	Sqft/occ.	=	380
Receptacle	1.00	X	190	X	0.000	Watts/Sqft	X	3.413	Btu/Watt	=	0
Process	1.00	X	190	X	0.000	Watts/Sqft	X	3.413	Btu/Watt	=	0

Infiltration: [1.00 (Schedule Fraction) X 4,789 (Air Latent) X 190 (Area) X 8.00 (Ceiling Height) X 0.00 (ACH) /60] X 0.00000 (ΔW) = 0

TOTAL HOURLY LATENT HEAT GAIN FOR ROOM 380

ROOM COOLING PEAK LOADS

Project Name | Date: 4/26/2024

ROOM INFORMATION		DESIGN CONDITIONS	
Room Name	CARE TEAM 127	**Time of Peak**	Jun 1 PM
Floor Area	125.00 ft²	**Outdoor Dry Bulb Temperature**	81 °F
Indoor Dry Bulb Temperature	74 °F	**Outdoor Wet Bulb Temperature**	63 °F

Conduction	Area		U-Value		DETD[1]		Btu/hr
R-30 Roof No Attic	125.0	X	0.0346	X	62.9	=	272
		X		X		=	
		X		X		=	
		X		X		=	
		X		X		=	
		X		X		=	
		X		X		=	
		X		X		=	
		X		X		=	
		X		X		=	
				Page Total			272

1. Design Equivalent Temperature Difference (DETD)
Items shown with an asterisk (*) denote conduction through an interior surface to another room.

Solar Gain	Orientation	Area		SGF		SC		Weighting Factor		Btu/hr
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
							Page Total			0

Internal Gain	Sched. Frac.		Area		Heat Gain						Weighting Factor		Btu/hr
Lights	1.00	X	125	X	1.150	Watts/Sqft	X	3.413	Btu/Watt	X	0.999	=	490
Occupants	1.00	X	125	X	250	Btu/occ.	/	100.000	Sqft/occ.	X	1.000	=	313
Receptacle	1.00	X	125	X	1.500	Watts/Sqft	X	3.413	Btu/Watt	X	1.000	=	640
Process	1.00	X	125	X	1.000	Watts/Sqft	X	3.413	Btu/Watt	X	1.000	=	427
Process Lighting	1.00	X	125	X	0.000	Watts/Sqft	X	3.413	Btu/Watt	X	0.000	=	0

Infiltration: [1.00 (Schedule Fraction) X 1.068 (Air Sensible) X 125 (Area) X 8.00 (Ceiling Height) X 0.00 (ACH) / 60] X 7 (ΔT) = 0

TOTAL HOURLY SENSIBLE HEAT GAIN FOR ROOM 2,141

Latent Gain	Sched. Frac.		Area		Heat Gain						Btu/hr
Occupants	1.00	X	125	X	200	Btuh/occ.	/	100.000	Sqft/occ.	=	250
Receptacle	1.00	X	125	X	0.000	Watts/Sqft	X	3.413	Btu/Watt	=	0
Process	1.00	X	125	X	0.000	Watts/Sqft	X	3.413	Btu/Watt	=	0

Infiltration: [1.00 (Schedule Fraction) X 4,789 (Air Latent) X 125 (Area) X 8.00 (Ceiling Height) X 0.00 (ACH) /60] X 0.00000 (ΔW) = 0

TOTAL HOURLY LATENT HEAT GAIN FOR ROOM 250

ROOM COOLING PEAK LOADS

Project Name | Date: 4/26/2024

ROOM INFORMATION		DESIGN CONDITIONS	
Room Name	TEHNOLOGY SUITE 128	**Time of Peak**	Jul 3 PM
Floor Area	117.00 ft²	**Outdoor Dry Bulb Temperature**	84 °F
Indoor Dry Bulb Temperature	74 °F	**Outdoor Wet Bulb Temperature**	64 °F

Conduction	Area		U-Value		DETD[1]		Btu/hr
R-30 Roof No Attic	117.0	X	0.0346	X	56.5	=	228
R-19 Wall	136.0	X	0.0489	X	29.6	=	197
		X		X		=	
		X		X		=	
		X		X		=	
		X		X		=	
		X		X		=	
		X		X		=	
		X		X		=	
		X		X		=	
				Page Total			425

1. Design Equivalent Temperature Difference (DETD)
Items shown with an asterisk (*) denote conduction through an interior surface to another room.

Solar Gain	Orientation	Area		SGF		SC		Weighting Factor		Btu/hr
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
							Page Total			0

Internal Gain	Sched. Frac.		Area		Heat Gain						Weighting Factor		Btu/hr
Lights	1.00	X	117	X	1.150	Watts/Sqft	X	3.413	Btu/Watt	X	0.999	=	459
Occupants	1.00	X	117	X	250	Btu/occ.	/	100.000	Sqft/occ.	X	1.000	=	293
Receptacle	1.00	X	117	X	1.500	Watts/Sqft	X	3.413	Btu/Watt	X	1.000	=	599
Process	1.00	X	117	X	1.000	Watts/Sqft	X	3.413	Btu/Watt	X	1.000	=	399
Process Lighting	1.00	X	117	X	0.000	Watts/Sqft	X	3.413	Btu/Watt	X	0.000	=	0

Infiltration: [1.00 (Schedule Fraction) X 1.068 (Air Sensible) X 117 (Area) X 8.00 (Ceiling Height) X 0.00 (ACH) / 60] X 10 (ΔT) = 0

TOTAL HOURLY SENSIBLE HEAT GAIN FOR ROOM 2,175

Latent Gain	Sched. Frac.		Area		Heat Gain						Btu/hr
Occupants	1.00	X	117	X	200	Btuh/occ.	/	100.000	Sqft/occ.	=	234
Receptacle	1.00	X	117	X	0.000	Watts/Sqft	X	3.413	Btu/Watt	=	0
Process	1.00	X	117	X	0.000	Watts/Sqft	X	3.413	Btu/Watt	=	0

Infiltration: [1.00 (Schedule Fraction) X 4,789 (Air Latent) X 117 (Area) X 8.00 (Ceiling Height) X 0.00 (ACH) /60] X 0.00000 (ΔW) = 0

TOTAL HOURLY LATENT HEAT GAIN FOR ROOM 234

ROOM COOLING PEAK LOADS

Project Name | Date: 4/26/2024

ROOM INFORMATION		DESIGN CONDITIONS	
Room Name	BALANCE SUITE 126	**Time of Peak**	Jul 3 PM
Floor Area	126.00 ft²	**Outdoor Dry Bulb Temperature**	84 °F
Indoor Dry Bulb Temperature	74 °F	**Outdoor Wet Bulb Temperature**	64 °F

Conduction	Area		U-Value		DETD[1]		Btu/hr
R-30 Roof No Attic	126.0	X	0.0346	X	56.5	=	246
R-19 Wall	135.0	X	0.0489	X	29.6	=	195
		X		X		=	
		X		X		=	
		X		X		=	
		X		X		=	
		X		X		=	
		X		X		=	
		X		X		=	
		X		X		=	
				Page Total			441

1. Design Equivalent Temperature Difference (DETD)
Items shown with an asterisk (*) denote conduction through an interior surface to another room.

Solar Gain	Orientation	Area		SGF		SC		Weighting Factor		Btu/hr
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
							Page Total			0

Internal Gain	Sched. Frac.		Area		Heat Gain						Weighting Factor		Btu/hr
Lights	1.00	X	126	X	1.150	Watts/Sqft	X	3.413	Btu/Watt	X	0.999	=	494
Occupants	1.00	X	126	X	250	Btu/occ.	/	100.000	Sqft/occ.	X	1.000	=	315
Receptacle	1.00	X	126	X	1.500	Watts/Sqft	X	3.413	Btu/Watt	X	1.000	=	645
Process	1.00	X	126	X	2.000	Watts/Sqft	X	3.413	Btu/Watt	X	1.000	=	860
Process Lighting	1.00	X	126	X	0.000	Watts/Sqft	X	3.413	Btu/Watt	X	0.000	=	0

Infiltration: [1.00 (Schedule Fraction) X 1.068 (Air Sensible) X 126 (Area) X 8.00 (Ceiling Height) X 0.00 (ACH) / 60] X 10 (ΔT) = 0

TOTAL HOURLY SENSIBLE HEAT GAIN FOR ROOM 2,755

Latent Gain	Sched. Frac.		Area		Heat Gain						Btu/hr
Occupants	1.00	X	126	X	200	Btuh/occ.	/	100.000	Sqft/occ.	=	252
Receptacle	1.00	X	126	X	0.000	Watts/Sqft	X	3.413	Btu/Watt	=	0
Process	1.00	X	126	X	0.000	Watts/Sqft	X	3.413	Btu/Watt	=	0

Infiltration: [1.00 (Schedule Fraction) X 4,789 (Air Latent) X 126 (Area) X 8.00 (Ceiling Height) X 0.00 (ACH) /60] X 0.00000 (ΔW) = 0

TOTAL HOURLY LATENT HEAT GAIN FOR ROOM 252

ROOM COOLING PEAK LOADS

Project Name | Date: 4/26/2024

ROOM INFORMATION		DESIGN CONDITIONS	
Room Name	JANITOR 124	**Time of Peak**	Jun 2 PM
Floor Area	88.00 ft²	**Outdoor Dry Bulb Temperature**	82 °F
Indoor Dry Bulb Temperature	74 °F	**Outdoor Wet Bulb Temperature**	63 °F

Conduction	Area		U-Value		DETD[1]		Btu/hr
R-30 Roof No Attic	88.0	X	0.0346	X	61.8	=	188
R-19 Wall	160.0	X	0.0489	X	10.9	=	85
		X		X		=	
		X		X		=	
		X		X		=	
		X		X		=	
		X		X		=	
		X		X		=	
		X		X		=	
		X		X		=	
				Page Total			273

1. Design Equivalent Temperature Difference (DETD)
Items shown with an asterisk (*) denote conduction through an interior surface to another room.

Solar Gain	Orientation	Area		SGF		SC		Weighting Factor		Btu/hr
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
							Page Total			0

Internal Gain	Sched. Frac.		Area		Heat Gain						Weighting Factor		Btu/hr
Lights	1.00	X	88	X	1.150	Watts/Sqft	X	3.413	Btu/Watt	X	0.999	=	345
Occupants	1.00	X	88	X	250	Btu/occ.	/	100.000	Sqft/occ.	X	1.000	=	220
Receptacle	1.00	X	88	X	1.500	Watts/Sqft	X	3.413	Btu/Watt	X	1.000	=	451
Process	1.00	X	88	X	0.000	Watts/Sqft	X	3.413	Btu/Watt	X	1.000	=	0
Process Lighting	1.00	X	88	X	0.000	Watts/Sqft	X	3.413	Btu/Watt	X	0.000	=	0

Infiltration: [1.00 (Schedule Fraction) X 1.068 (Air Sensible) X 88 (Area) X 8.00 (Ceiling Height) X 0.00 (ACH) / 60] X 8 (ΔT) = 0

TOTAL HOURLY SENSIBLE HEAT GAIN FOR ROOM 1,289

Latent Gain	Sched. Frac.		Area		Heat Gain						Btu/hr
Occupants	1.00	X	88	X	200	Btuh/occ.	/	100.000	Sqft/occ.	=	176
Receptacle	1.00	X	88	X	0.000	Watts/Sqft	X	3.413	Btu/Watt	=	0
Process	1.00	X	88	X	0.000	Watts/Sqft	X	3.413	Btu/Watt	=	0

Infiltration: [1.00 (Schedule Fraction) X 4,789 (Air Latent) X 88 (Area) X 8.00 (Ceiling Height) X 0.00 (ACH) /60] X 0.00000 (ΔW) = 0

TOTAL HOURLY LATENT HEAT GAIN FOR ROOM 176

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PUYALLUP, WA 98373

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ROOM COOLING PEAK LOADS

Project Name | Date: 4/26/2024

ROOM INFORMATION		DESIGN CONDITIONS	
Room Name	SOILED SUPPLY 118	**Time of Peak**	Jun 2 PM
Floor Area	95.00 ft²	**Outdoor Dry Bulb Temperature**	82 °F
Indoor Dry Bulb Temperature	74 °F	**Outdoor Wet Bulb Temperature**	63 °F

Conduction	Area		U-Value		DETD[1]		Btu/hr
R-30 Roof No Attic	95.0	X	0.0346	X	61.8	=	203
R-19 Wall	123.0	X	0.0489	X	10.9	=	66
		X		X		=	
		X		X		=	
		X		X		=	
		X		X		=	
		X		X		=	
		X		X		=	
		X		X		=	
		X		X		=	
		X		X		=	
					Page Total		268

1. Design Equivalent Temperature Difference (DETD)
Items shown with an asterisk (*) denote conduction through an interior surface to another room.

Solar Gain	Orientation	Area		SGF		SC		Weighting Factor		Btu/hr
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
							Page Total		=	0

Internal Gain	Sched. Frac.		Area		Heat Gain					Weighting Factor		Btu/hr
Lights	1.00	X	95	X	1.150	Watts/Sqft	X	3.413	Btu/Watt	X 0.999	=	372
Occupants	1.00	X	95	X	250	Btu/occ.	/	100.000	Sqft/occ.	X 1.000	=	238
Receptacle	1.00	X	95	X	1.500	Watts/Sqft	X	3.413	Btu/Watt	X 1.000	=	486
Process	1.00	X	95	X	0.000	Watts/Sqft	X	3.413	Btu/Watt	X 1.000	=	0
Process Lighting	1.00	X	95	X	0.000	Watts/Sqft	X	3.413	Btu/Watt	X 0.000	=	0

Infiltration: [1.00 (Schedule Fraction) X 1.068 (Air Sensible) X 95 (Area) X 8.00 (Ceiling Height) X 0.00 (ACH) / 60] X 8 (ΔT) = 0

TOTAL HOURLY SENSIBLE HEAT GAIN FOR ROOM 1,365

Latent Gain	Sched. Frac.		Area		Heat Gain						Btu/hr
Occupants	1.00	X	95	X	200	Btuh/occ.	/	100.000	Sqft/occ.	=	190
Receptacle	1.00	X	95	X	0.000	Watts/Sqft	X	3.413	Btu/Watt	=	0
Process	1.00	X	95	X	0.000	Watts/Sqft	X	3.413	Btu/Watt	=	0

Infiltration: [1.00 (Schedule Fraction) X 4,789 (Air Latent) X 95 (Area) X 8.00 (Ceiling Height) X 0.00 (ACH) /60] X 0.00000 (ΔW) = 0

TOTAL HOURLY LATENT HEAT GAIN FOR ROOM 190

ROOM COOLING PEAK LOADS

Project Name | Date: 4/26/2024

ROOM INFORMATION		DESIGN CONDITIONS	
Room Name	FAMILY SUITE 109	**Time of Peak**	Jun 1 PM
Floor Area	119.00 ft²	**Outdoor Dry Bulb Temperature**	81 °F
Indoor Dry Bulb Temperature	74 °F	**Outdoor Wet Bulb Temperature**	63 °F

Conduction	Area		U-Value		DETD[1]		Btu/hr
R-30 Roof No Attic	119.0	X	0.0346	X	62.9	=	259
		X		X		=	
		X		X		=	
		X		X		=	
		X		X		=	
		X		X		=	
		X		X		=	
		X		X		=	
		X		X		=	
		X		X		=	
					Page Total		259

1. Design Equivalent Temperature Difference (DETD)
Items shown with an asterisk (*) denote conduction through an interior surface to another room.

Solar Gain	Orientation	Area		SGF		SC		Weighting Factor		Btu/hr
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
							Page Total		=	0

Internal Gain	Sched. Frac.		Area		Heat Gain					Weighting Factor		Btu/hr
Lights	1.00	X	119	X	1.150	Watts/Sqft	X	3.413	Btu/Watt	X 0.999	=	466
Occupants	1.00	X	119	X	250	Btu/occ.	/	100.000	Sqft/occ.	X 1.000	=	298
Receptacle	1.00	X	119	X	1.500	Watts/Sqft	X	3.413	Btu/Watt	X 1.000	=	609
Process	1.00	X	119	X	2.000	Watts/Sqft	X	3.413	Btu/Watt	X 1.000	=	812
Process Lighting	1.00	X	119	X	0.000	Watts/Sqft	X	3.413	Btu/Watt	X 0.000	=	0

Infiltration: [1.00 (Schedule Fraction) X 1.068 (Air Sensible) X 119 (Area) X 8.00 (Ceiling Height) X 0.00 (ACH) / 60] X 7 (ΔT) = 0

TOTAL HOURLY SENSIBLE HEAT GAIN FOR ROOM 2,444

Latent Gain	Sched. Frac.		Area		Heat Gain						Btu/hr
Occupants	1.00	X	119	X	200	Btuh/occ.	/	100.000	Sqft/occ.	=	238
Receptacle	1.00	X	119	X	0.000	Watts/Sqft	X	3.413	Btu/Watt	=	0
Process	1.00	X	119	X	0.000	Watts/Sqft	X	3.413	Btu/Watt	=	0

Infiltration: [1.00 (Schedule Fraction) X 4,789 (Air Latent) X 119 (Area) X 8.00 (Ceiling Height) X 0.00 (ACH) /60] X 0.00000 (ΔW) = 0

TOTAL HOURLY LATENT HEAT GAIN FOR ROOM 238

ROOM COOLING PEAK LOADS

Project Name | Date: 4/26/2024

ROOM INFORMATION		DESIGN CONDITIONS	
Room Name	KIDS SUITE 110	**Time of Peak**	Jun 1 PM
Floor Area	127.00 ft²	**Outdoor Dry Bulb Temperature**	81 °F
Indoor Dry Bulb Temperature	74 °F	**Outdoor Wet Bulb Temperature**	63 °F

Conduction	Area		U-Value		DETD[1]		Btu/hr
R-30 Roof No Attic	127.0	X	0.0346	X	62.9	=	276
		X		X		=	
		X		X		=	
		X		X		=	
		X		X		=	
		X		X		=	
		X		X		=	
		X		X		=	
		X		X		=	
		X		X		=	
					Page Total		276

1. Design Equivalent Temperature Difference (DETD)
Items shown with an asterisk (*) denote conduction through an interior surface to another room.

Solar Gain	Orientation	Area		SGF		SC		Weighting Factor		Btu/hr
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
							Page Total		=	0

Internal Gain	Sched. Frac.		Area		Heat Gain					Weighting Factor		Btu/hr
Lights	1.00	X	127	X	1.150	Watts/Sqft	X	3.413	Btu/Watt	X 0.999	=	498
Occupants	1.00	X	127	X	250	Btu/occ.	/	100.000	Sqft/occ.	X 1.000	=	318
Receptacle	1.00	X	127	X	1.500	Watts/Sqft	X	3.413	Btu/Watt	X 1.000	=	650
Process	1.00	X	127	X	2.000	Watts/Sqft	X	3.413	Btu/Watt	X 1.000	=	867
Process Lighting	1.00	X	127	X	0.000	Watts/Sqft	X	3.413	Btu/Watt	X 0.000	=	0

Infiltration: [1.00 (Schedule Fraction) X 1.068 (Air Sensible) X 127 (Area) X 8.00 (Ceiling Height) X 0.00 (ACH) / 60] X 7 (ΔT) = 0

TOTAL HOURLY SENSIBLE HEAT GAIN FOR ROOM 2,608

Latent Gain	Sched. Frac.		Area		Heat Gain						Btu/hr
Occupants	1.00	X	127	X	200	Btuh/occ.	/	100.000	Sqft/occ.	=	254
Receptacle	1.00	X	127	X	0.000	Watts/Sqft	X	3.413	Btu/Watt	=	0
Process	1.00	X	127	X	0.000	Watts/Sqft	X	3.413	Btu/Watt	=	0

Infiltration: [1.00 (Schedule Fraction) X 4,789 (Air Latent) X 127 (Area) X 8.00 (Ceiling Height) X 0.00 (ACH) /60] X 0.00000 (ΔW) = 0

TOTAL HOURLY LATENT HEAT GAIN FOR ROOM 254

ROOM COOLING PEAK LOADS

Project Name | Date: 4/26/2024

ROOM INFORMATION		DESIGN CONDITIONS	
Room Name	DRUG TESTING SUITE 117	**Time of Peak**	Jun 1 PM
Floor Area	90.00 ft²	**Outdoor Dry Bulb Temperature**	81 °F
Indoor Dry Bulb Temperature	74 °F	**Outdoor Wet Bulb Temperature**	63 °F

Conduction	Area		U-Value		DETD[1]		Btu/hr
R-30 Roof No Attic	90.0	X	0.0346	X	62.9	=	196
		X		X		=	
		X		X		=	
		X		X		=	
		X		X		=	
		X		X		=	
		X		X		=	
		X		X		=	
		X		X		=	
					Page Total		196

1. Design Equivalent Temperature Difference (DETD)
Items shown with an asterisk (*) denote conduction through an interior surface to another room.

Solar Gain	Orientation	Area		SGF		SC		Weighting Factor		Btu/hr
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
							Page Total		=	0

Internal Gain	Sched. Frac.		Area		Heat Gain					Weighting Factor		Btu/hr
Lights	1.00	X	90	X	1.150	Watts/Sqft	X	3.413	Btu/Watt	X 0.999	=	353
Occupants	1.00	X	90	X	250	Btu/occ.	/	100.000	Sqft/occ.	X 1.000	=	225
Receptacle	1.00	X	90	X	1.500	Watts/Sqft	X	3.413	Btu/Watt	X 1.000	=	481
Process	1.00	X	90	X	2.000	Watts/Sqft	X	3.413	Btu/Watt	X 1.000	=	614
Process Lighting	1.00	X	90	X	0.000	Watts/Sqft	X	3.413	Btu/Watt	X 0.000	=	0

Infiltration: [1.00 (Schedule Fraction) X 1.068 (Air Sensible) X 90 (Area) X 8.00 (Ceiling Height) X 0.00 (ACH) / 60] X 7 (ΔT) = 0

TOTAL HOURLY SENSIBLE HEAT GAIN FOR ROOM 1,848

Latent Gain	Sched. Frac.		Area		Heat Gain						Btu/hr
Occupants	1.00	X	90	X	200	Btuh/occ.	/	100.000	Sqft/occ.	=	180
Receptacle	1.00	X	90	X	0.000	Watts/Sqft	X	3.413	Btu/Watt	=	0
Process	1.00	X	90	X	0.000	Watts/Sqft	X	3.413	Btu/Watt	=	0

Infiltration: [1.00 (Schedule Fraction) X 4,789 (Air Latent) X 90 (Area) X 8.00 (Ceiling Height) X 0.00 (ACH) /60] X 0.00000 (ΔW) = 0

TOTAL HOURLY LATENT HEAT GAIN FOR ROOM 180

ROOM COOLING PEAK LOADS

Project Name | Date: 4/26/2024

ROOM INFORMATION		DESIGN CONDITIONS	
Room Name	KNOWLEDGE SUITE 112	**Time of Peak**	Jun 2 PM
Floor Area	119.00 ft²	**Outdoor Dry Bulb Temperature**	82 °F
Indoor Dry Bulb Temperature	74 °F	**Outdoor Wet Bulb Temperature**	63 °F

Conduction	Area		U-Value		DETD[1]		Btu/hr
R-30 Roof No Attic	119.0	X	0.0346	X	61.8	=	254
R-19 Wall	166.0	X	0.0489	X	10.9	=	89
		X		X		=	
		X		X		=	
		X		X		=	
		X		X		=	
		X		X		=	
		X		X		=	
		X		X		=	
		X		X		=	
					Page Total		343

1. Design Equivalent Temperature Difference (DETD)
Items shown with an asterisk (*) denote conduction through an interior surface to another room.

Solar Gain	Orientation	Area		SGF		SC		Weighting Factor		Btu/hr
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
							Page Total		=	0

Internal Gain	Sched. Frac.		Area		Heat Gain					Weighting Factor		Btu/hr
Lights	1.00	X	119	X	1.150	Watts/Sqft	X	3.413	Btu/Watt	X 0.999	=	466
Occupants	1.00	X	119	X	250	Btu/occ.	/	100.000	Sqft/occ.	X 1.000	=	298
Receptacle	1.00	X	119	X	1.500	Watts/Sqft	X	3.413	Btu/Watt	X 1.000	=	609
Process	1.00	X	119	X	2.000	Watts/Sqft	X	3.413	Btu/Watt	X 1.000	=	812
Process Lighting	1.00	X	119	X	0.000	Watts/Sqft	X	3.413	Btu/Watt	X 0.000	=	0

Infiltration: [1.00 (Schedule Fraction) X 1.068 (Air Sensible) X 119 (Area) X 8.00 (Ceiling Height) X 0.00 (ACH) / 60] X 8 (ΔT) = 0

TOTAL HOURLY SENSIBLE HEAT GAIN FOR ROOM 2,528

Latent Gain	Sched. Frac.		Area		Heat Gain						Btu/hr
Occupants	1.00	X	119	X	200	Btuh/occ.	/	100.000	Sqft/occ.	=	238
Receptacle	1.00	X	119	X	0.000	Watts/Sqft	X	3.413	Btu/Watt	=	0
Process	1.00	X	119	X	0.000	Watts/Sqft	X	3.413	Btu/Watt	=	0

Infiltration: [1.00 (Schedule Fraction) X 4,789 (Air Latent) X 119 (Area) X 8.00 (Ceiling Height) X 0.00 (ACH) /60] X 0.00000 (ΔW) = 0

TOTAL HOURLY LATENT HEAT GAIN FOR ROOM 238

ROOM COOLING PEAK LOADS

Project Name | Date: 4/26/2024

ROOM INFORMATION		DESIGN CONDITIONS	
Room Name	CLARITY SUITE 111	**Time of Peak**	Jun 2 PM
Floor Area	211.00 ft²	**Outdoor Dry Bulb Temperature**	82 °F
Indoor Dry Bulb Temperature	74 °F	**Outdoor Wet Bulb Temperature**	63 °F

Conduction	Area		U-Value		DETD[1]		Btu/hr
R-30 Roof No Attic	211.0	X	0.0346	X	61.8	=	450
R-19 Wall	268.0	X	0.0489	X	10.9	=	143
		X		X		=	
		X		X		=	
		X		X		=	
		X		X		=	
		X		X		=	
		X		X		=	
		X		X		=	
		X		X		=	
					Page Total		593

1. Design Equivalent Temperature Difference (DETD)
Items shown with an asterisk (*) denote conduction through an interior surface to another room.

Solar Gain	Orientation	Area		SGF		SC		Weighting Factor		Btu/hr
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
							Page Total		=	0

Internal Gain	Sched. Frac.		Area		Heat Gain					Weighting Factor		Btu/hr
Lights	1.00	X	211	X	1.150	Watts/Sqft	X	3.413	Btu/Watt	X 0.999	=	827
Occupants	1.00	X	211	X	250	Btu/occ.	/	100.000	Sqft/occ.	X 1.000	=	528
Receptacle	1.00	X	211	X	1.500	Watts/Sqft	X	3.413	Btu/Watt	X 1.000	=	1,080
Process	1.00	X	211	X	4.000	Watts/Sqft	X	3.413	Btu/Watt	X 1.000	=	2,881
Process Lighting	1.00	X	211	X	0.000	Watts/Sqft	X	3.413	Btu/Watt	X 0.000	=	0

Infiltration: [1.00 (Schedule Fraction) X 1.068 (Air Sensible) X 211 (Area) X 8.00 (Ceiling Height) X 0.00 (ACH) / 60] X 8 (ΔT) = 0

TOTAL HOURLY SENSIBLE HEAT GAIN FOR ROOM 5,909

Latent Gain	Sched. Frac.		Area		Heat Gain						Btu/hr
Occupants	1.00	X	211	X	200	Btuh/occ.	/	100.000	Sqft/occ.	=	422
Receptacle	1.00	X	211	X	0.000	Watts/Sqft	X	3.413	Btu/Watt	=	0
Process	1.00	X	211	X	0.000	Watts/Sqft	X	3.413	Btu/Watt	=	0

Infiltration: [1.00 (Schedule Fraction) X 4,789 (Air Latent) X 211 (Area) X 8.00 (Ceiling Height) X 0.00 (ACH) /60] X 0.00000 (ΔW) = 0

TOTAL HOURLY LATENT HEAT GAIN FOR ROOM 422

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MULTICARE TENANT IMPROVEMENT
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ROOM COOLING PEAK LOADS

Project Name | Date: 4/26/2024

ROOM INFORMATION		DESIGN CONDITIONS	
Room Name	POCT 115	**Time of Peak**	Jun 1 PM
Floor Area	104.00 ft²	**Outdoor Dry Bulb Temperature**	81 °F
Indoor Dry Bulb Temperature	74 °F	**Outdoor Wet Bulb Temperature**	63 °F

Conduction	Area		U-Value		DETD[1]		Btu/hr
R-30 Roof No Attic	104.0	X	0.0346	X	62.9	=	226
		X		X		=	
		X		X		=	
		X		X		=	
		X		X		=	
		X		X		=	
		X		X		=	
		X		X		=	
		X		X		=	
		X		X		=	
				Page Total			226

1. Design Equivalent Temperature Difference (DETD)
Items shown with an asterisk (*) denote conduction through an interior surface to another room.

Solar Gain	Orientation	Area		SGF		SC		Weighting Factor		Btu/hr
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
							Page Total			0

Internal Gain	Sched. Frac.		Area		Heat Gain					Weighting Factor		Btu/hr
Lights	1.00	X	104	X	1.150	Watts/Sqft	X	3.413	Btu/Watt	X 0.999	=	408
Occupants	1.00	X	104	X	250	Btu/occ.	/	100.000	Sqft/occ.	X 1.000	=	260
Receptacle	1.00	X	104	X	1.500	Watts/Sqft	X	3.413	Btu/Watt	X 1.000	=	532
Process	1.00	X	104	X	0.000	Watts/Sqft	X	3.413	Btu/Watt	X 1.000	=	0
Process Lighting	1.00	X	104	X	0.000	Watts/Sqft	X	3.413	Btu/Watt	X 0.000	=	0

Infiltration: [1.00 (Schedule Fraction) X 1.068 (Air Sensible) X 104 (Area) X 8.00 (Ceiling Height) X 0.00 (ACH) / 60] X 7 (ΔT) = 0

TOTAL HOURLY SENSIBLE HEAT GAIN FOR ROOM 1,426

Latent Gain	Sched. Frac.		Area		Heat Gain						Btu/hr
Occupants	1.00	X	104	X	200	Btuh/occ.	/	100.000	Sqft/occ.	=	208
Receptacle	1.00	X	104	X	0.000	Watts/Sqft	X	3.413	Btu/Watt	=	0
Process	1.00	X	104	X	0.000	Watts/Sqft	X	3.413	Btu/Watt	=	0

Infiltration: [1.00 (Schedule Fraction) X 4,789 (Air Latent) X 104 (Area) X 8.00 (Ceiling Height) X 0.00 (ACH) /60] X 0.00000 (ΔW) = 0

TOTAL HOURLY LATENT HEAT GAIN FOR ROOM 208

ROOM COOLING PEAK LOADS

Project Name | Date: 4/26/2024

ROOM INFORMATION		DESIGN CONDITIONS	
Room Name	HALL 107	**Time of Peak**	Jun 1 PM
Floor Area	112.00 ft²	**Outdoor Dry Bulb Temperature**	81 °F
Indoor Dry Bulb Temperature	74 °F	**Outdoor Wet Bulb Temperature**	63 °F

Conduction	Area		U-Value		DETD[1]		Btu/hr
R-30 Roof No Attic	112.0	X	0.0346	X	62.9	=	243
		X		X		=	
		X		X		=	
		X		X		=	
		X		X		=	
		X		X		=	
		X		X		=	
		X		X		=	
		X		X		=	
		X		X		=	
				Page Total			243

1. Design Equivalent Temperature Difference (DETD)
Items shown with an asterisk (*) denote conduction through an interior surface to another room.

Solar Gain	Orientation	Area		SGF		SC		Weighting Factor		Btu/hr
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
							Page Total			0

Internal Gain	Sched. Frac.		Area		Heat Gain					Weighting Factor		Btu/hr
Lights	1.00	X	112	X	1.150	Watts/Sqft	X	3.413	Btu/Watt	X 0.999	=	439
Occupants	1.00	X	112	X	250	Btu/occ.	/	100.000	Sqft/occ.	X 1.000	=	280
Receptacle	1.00	X	112	X	1.500	Watts/Sqft	X	3.413	Btu/Watt	X 1.000	=	573
Process	1.00	X	112	X	2.000	Watts/Sqft	X	3.413	Btu/Watt	X 1.000	=	765
Process Lighting	1.00	X	112	X	0.000	Watts/Sqft	X	3.413	Btu/Watt	X 0.000	=	0

Infiltration: [1.00 (Schedule Fraction) X 1.068 (Air Sensible) X 112 (Area) X 8.00 (Ceiling Height) X 0.00 (ACH) / 60] X 7 (ΔT) = 0

TOTAL HOURLY SENSIBLE HEAT GAIN FOR ROOM 2,300

Latent Gain	Sched. Frac.		Area		Heat Gain						Btu/hr
Occupants	1.00	X	112	X	200	Btuh/occ.	/	100.000	Sqft/occ.	=	224
Receptacle	1.00	X	112	X	0.000	Watts/Sqft	X	3.413	Btu/Watt	=	0
Process	1.00	X	112	X	0.000	Watts/Sqft	X	3.413	Btu/Watt	=	0

Infiltration: [1.00 (Schedule Fraction) X 4,789 (Air Latent) X 112 (Area) X 8.00 (Ceiling Height) X 0.00 (ACH) /60] X 0.00000 (ΔW) = 0

TOTAL HOURLY LATENT HEAT GAIN FOR ROOM 224

ROOM COOLING PEAK LOADS

Project Name | Date: 4/26/2024

ROOM INFORMATION		DESIGN CONDITIONS	
Room Name	UC CARE TEAM 114	**Time of Peak**	Jun 1 PM
Floor Area	170.00 ft²	**Outdoor Dry Bulb Temperature**	81 °F
Indoor Dry Bulb Temperature	74 °F	**Outdoor Wet Bulb Temperature**	63 °F

Conduction	Area		U-Value		DETD[1]		Btu/hr
R-30 Roof No Attic	170.0	X	0.0346	X	62.9	=	370
		X		X		=	
		X		X		=	
		X		X		=	
		X		X		=	
		X		X		=	
		X		X		=	
		X		X		=	
		X		X		=	
		X		X		=	
				Page Total			370

1. Design Equivalent Temperature Difference (DETD)
Items shown with an asterisk (*) denote conduction through an interior surface to another room.

Solar Gain	Orientation	Area		SGF		SC		Weighting Factor		Btu/hr
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
							Page Total			0

Internal Gain	Sched. Frac.		Area		Heat Gain					Weighting Factor		Btu/hr
Lights	1.00	X	170	X	1.150	Watts/Sqft	X	3.413	Btu/Watt	X 0.999	=	666
Occupants	1.00	X	170	X	250	Btu/occ.	/	100.000	Sqft/occ.	X 1.000	=	425
Receptacle	1.00	X	170	X	1.500	Watts/Sqft	X	3.413	Btu/Watt	X 1.000	=	870
Process	1.00	X	170	X	2.000	Watts/Sqft	X	3.413	Btu/Watt	X 1.000	=	1,160
Process Lighting	1.00	X	170	X	0.000	Watts/Sqft	X	3.413	Btu/Watt	X 0.000	=	0

Infiltration: [1.00 (Schedule Fraction) X 1.068 (Air Sensible) X 170 (Area) X 8.00 (Ceiling Height) X 0.00 (ACH) / 60] X 7 (ΔT) = 0

TOTAL HOURLY SENSIBLE HEAT GAIN FOR ROOM 3,492

Latent Gain	Sched. Frac.		Area		Heat Gain						Btu/hr
Occupants	1.00	X	170	X	200	Btuh/occ.	/	100.000	Sqft/occ.	=	340
Receptacle	1.00	X	170	X	0.000	Watts/Sqft	X	3.413	Btu/Watt	=	0
Process	1.00	X	170	X	0.000	Watts/Sqft	X	3.413	Btu/Watt	=	0

Infiltration: [1.00 (Schedule Fraction) X 4,789 (Air Latent) X 170 (Area) X 8.00 (Ceiling Height) X 0.00 (ACH) /60] X 0.00000 (ΔW) = 0

TOTAL HOURLY LATENT HEAT GAIN FOR ROOM 340

ROOM COOLING PEAK LOADS

Project Name | Date: 4/26/2024

ROOM INFORMATION		DESIGN CONDITIONS	
Room Name	CLEAN SUPPLY 116	**Time of Peak**	Jun 2 PM
Floor Area	100.00 ft²	**Outdoor Dry Bulb Temperature**	82 °F
Indoor Dry Bulb Temperature	74 °F	**Outdoor Wet Bulb Temperature**	63 °F

Conduction	Area		U-Value		DETD[1]		Btu/hr
R-30 Roof No Attic	100.0	X	0.0346	X	61.8	=	213
R-19 Wall	128.0	X	0.0489	X	10.9	=	68
		X		X		=	
		X		X		=	
		X		X		=	
		X		X		=	
		X		X		=	
		X		X		=	
		X		X		=	
				Page Total			282

1. Design Equivalent Temperature Difference (DETD)
Items shown with an asterisk (*) denote conduction through an interior surface to another room.

Solar Gain	Orientation	Area		SGF		SC		Weighting Factor		Btu/hr
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
							Page Total			0

Internal Gain	Sched. Frac.		Area		Heat Gain					Weighting Factor		Btu/hr
Lights	1.00	X	100	X	1.150	Watts/Sqft	X	3.413	Btu/Watt	X 0.999	=	392
Occupants	1.00	X	100	X	250	Btu/occ.	/	100.000	Sqft/occ.	X 1.000	=	250
Receptacle	1.00	X	100	X	1.500	Watts/Sqft	X	3.413	Btu/Watt	X 1.000	=	512
Process	1.00	X	100	X	0.000	Watts/Sqft	X	3.413	Btu/Watt	X 1.000	=	0
Process Lighting	1.00	X	100	X	0.000	Watts/Sqft	X	3.413	Btu/Watt	X 0.000	=	0

Infiltration: [1.00 (Schedule Fraction) X 1.068 (Air Sensible) X 100 (Area) X 8.00 (Ceiling Height) X 0.00 (ACH) / 60] X 8 (ΔT) = 0

TOTAL HOURLY SENSIBLE HEAT GAIN FOR ROOM 1,436

Latent Gain	Sched. Frac.		Area		Heat Gain						Btu/hr
Occupants	1.00	X	100	X	200	Btuh/occ.	/	100.000	Sqft/occ.	=	200
Receptacle	1.00	X	100	X	0.000	Watts/Sqft	X	3.413	Btu/Watt	=	0
Process	1.00	X	100	X	0.000	Watts/Sqft	X	3.413	Btu/Watt	=	0

Infiltration: [1.00 (Schedule Fraction) X 4,789 (Air Latent) X 100 (Area) X 8.00 (Ceiling Height) X 0.00 (ACH) /60] X 0.00000 (ΔW) = 0

TOTAL HOURLY LATENT HEAT GAIN FOR ROOM 200

ROOM COOLING PEAK LOADS

Project Name | Date: 4/26/2024

ROOM INFORMATION		DESIGN CONDITIONS	
Room Name	OFFICE OM 129	**Time of Peak**	Jun 1 PM
Floor Area	129.00 ft²	**Outdoor Dry Bulb Temperature**	81 °F
Indoor Dry Bulb Temperature	74 °F	**Outdoor Wet Bulb Temperature**	63 °F

Conduction	Area		U-Value		DETD[1]		Btu/hr
R-30 Roof No Attic	129.0	X	0.0346	X	62.9	=	280
		X		X		=	
		X		X		=	
		X		X		=	
		X		X		=	
		X		X		=	
		X		X		=	
		X		X		=	
		X		X		=	
		X		X		=	
				Page Total			280

1. Design Equivalent Temperature Difference (DETD)
Items shown with an asterisk (*) denote conduction through an interior surface to another room.

Solar Gain	Orientation	Area		SGF		SC		Weighting Factor		Btu/hr
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
							Page Total			0

Internal Gain	Sched. Frac.		Area		Heat Gain					Weighting Factor		Btu/hr
Lights	1.00	X	129	X	1.150	Watts/Sqft	X	3.413	Btu/Watt	X 0.999	=	506
Occupants	1.00	X	129	X	250	Btu/occ.	/	100.000	Sqft/occ.	X 1.000	=	323
Receptacle	1.00	X	129	X	1.500	Watts/Sqft	X	3.413	Btu/Watt	X 1.000	=	660
Process	1.00	X	129	X	2.000	Watts/Sqft	X	3.413	Btu/Watt	X 1.000	=	881
Process Lighting	1.00	X	129	X	0.000	Watts/Sqft	X	3.413	Btu/Watt	X 0.000	=	0

Infiltration: [1.00 (Schedule Fraction) X 1.068 (Air Sensible) X 129 (Area) X 8.00 (Ceiling Height) X 0.00 (ACH) / 60] X 7 (ΔT) = 0

TOTAL HOURLY SENSIBLE HEAT GAIN FOR ROOM 2,649

Latent Gain	Sched. Frac.		Area		Heat Gain						Btu/hr
Occupants	1.00	X	129	X	200	Btuh/occ.	/	100.000	Sqft/occ.	=	258
Receptacle	1.00	X	129	X	0.000	Watts/Sqft	X	3.413	Btu/Watt	=	0
Process	1.00	X	129	X	0.000	Watts/Sqft	X	3.413	Btu/Watt	=	0

Infiltration: [1.00 (Schedule Fraction) X 4,789 (Air Latent) X 129 (Area) X 8.00 (Ceiling Height) X 0.00 (ACH) /60] X 0.00000 (ΔW) = 0

TOTAL HOURLY LATENT HEAT GAIN FOR ROOM 258

ROOM COOLING PEAK LOADS

Project Name | Date: 4/26/2024

ROOM INFORMATION		DESIGN CONDITIONS	
Room Name	WELLNESS SUITE 130	**Time of Peak**	Jul 3 PM
Floor Area	115.00 ft²	**Outdoor Dry Bulb Temperature**	84 °F
Indoor Dry Bulb Temperature	74 °F	**Outdoor Wet Bulb Temperature**	64 °F

Conduction	Area		U-Value		DETD[1]		Btu/hr
R-30 Roof No Attic	115.0	X	0.0346	X	56.5	=	225
R-19 Wall	147.0	X	0.0489	X	29.6	=	213
		X		X		=	
		X		X		=	
		X		X		=	
		X		X		=	
		X		X		=	
		X		X		=	
		X		X		=	
		X		X		=	
				Page Total			437

1. Design Equivalent Temperature Difference (DETD)
Items shown with an asterisk (*) denote conduction through an interior surface to another room.

Solar Gain	Orientation	Area		SGF		SC		Weighting Factor		Btu/hr
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
							Page Total			0

Internal Gain	Sched. Frac.		Area		Heat Gain					Weighting Factor		Btu/hr
Lights	1.00	X	115	X	1.150	Watts/Sqft	X	3.413	Btu/Watt	X 0.999	=	451
Occupants	1.00	X	115	X	250	Btu/occ.	/	100.000	Sqft/occ.	X 1.000	=	288
Receptacle	1.00	X	115	X	1.500	Watts/Sqft	X	3.413	Btu/Watt	X 1.000	=	589
Process	1.00	X	115	X	2.000	Watts/Sqft	X	3.413	Btu/Watt	X 1.000	=	785
Process Lighting	1.00	X	115	X	0.000	Watts/Sqft	X	3.413	Btu/Watt	X 0.000	=	0

Infiltration: [1.00 (Schedule Fraction) X 1.068 (Air Sensible) X 115 (Area) X 8.00 (Ceiling Height) X 0.00 (ACH) / 60] X 10 (ΔT) = 0

TOTAL HOURLY SENSIBLE HEAT GAIN FOR ROOM 2,549

Latent Gain	Sched. Frac.		Area		Heat Gain						Btu/hr
Occupants	1.00	X	115	X	200	Btuh/occ.	/	100.000	Sqft/occ.	=	230
Receptacle	1.00	X	115	X	0.000	Watts/Sqft	X	3.413	Btu/Watt	=	0
Process	1.00	X	115	X	0.000	Watts/Sqft	X	3.413	Btu/Watt	=	0

Infiltration: [1.00 (Schedule Fraction) X 4,789 (Air Latent) X 115 (Area) X 8.00 (Ceiling Height) X 0.00 (ACH) /60] X 0.00000 (ΔW) = 0

TOTAL HOURLY LATENT HEAT GAIN FOR ROOM 230

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ROOM COOLING PEAK LOADS

Project Name | Date: 4/26/2024

ROOM INFORMATION		DESIGN CONDITIONS	
Room Name	HALL 125	**Time of Peak**	Jun 1 PM
Floor Area	81.00 ft²	**Outdoor Dry Bulb Temperature**	81 °F
Indoor Dry Bulb Temperature	74 °F	**Outdoor Wet Bulb Temperature**	63 °F

Conduction	Area		U-Value		DETD[1]		Btu/hr
R-30 Roof No Attic	81.0	X	0.0346	X	62.9	=	176
		X		X		=	
		X		X		=	
		X		X		=	
		X		X		=	
		X		X		=	
		X		X		=	
		X		X		=	
		X		X		=	
		X		X		=	
				Page Total			176

1. Design Equivalent Temperature Difference (DETD)
Items shown with an asterisk (*) denote conduction through an interior surface to another room.

Solar Gain	Orientation	Area		SGF		SC		Weighting Factor		Btu/hr
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
							Page Total			0

Internal Gain	Sched. Frac.		Area		Heat Gain					Weighting Factor		Btu/hr
Lights	1.00	X	81	X	1.150	Watts/Sqft	X	3.413	Btu/Watt	X 0.999	=	317
Occupants	1.00	X	81	X	250	Btu/occ.	/	100.000	Sqft/occ.	X 1.000	=	203
Receptacle	1.00	X	81	X	1.500	Watts/Sqft	X	3.413	Btu/Watt	X 1.000	=	415
Process	1.00	X	81	X	2.000	Watts/Sqft	X	3.413	Btu/Watt	X 1.000	=	553
Process Lighting	1.00	X	81	X	0.000	Watts/Sqft	X	3.413	Btu/Watt	X 0.000	=	0

Infiltration: [1.00 (Schedule Fraction) X 1.068 (Air Sensible) X 81 (Area) X 8.00 (Ceiling Height) X 0.00 (ACH) / 60] X 7 (ΔT) = 0

TOTAL HOURLY SENSIBLE HEAT GAIN FOR ROOM 1,664

Latent Gain	Sched. Frac.		Area		Heat Gain						Btu/hr
Occupants	1.00	X	81	X	200	Btuh/occ.	/	100.000	Sqft/occ.	=	162
Receptacle	1.00	X	81	X	0.000	Watts/Sqft	X	3.413	Btu/Watt	=	0
Process	1.00	X	81	X	0.000	Watts/Sqft	X	3.413	Btu/Watt	=	0

Infiltration: [1.00 (Schedule Fraction) X 4,789 (Air Latent) X 81 (Area) X 8.00 (Ceiling Height) X 0.00 (ACH) /60] X 0.00000 (ΔW) = 0

TOTAL HOURLY LATENT HEAT GAIN FOR ROOM 162

ROOM COOLING PEAK LOADS

Project Name | Date: 4/26/2024

ROOM INFORMATION		DESIGN CONDITIONS	
Room Name	REGISTRATION OM 132A	**Time of Peak**	Jun 6 PM
Floor Area	83.00 ft²	**Outdoor Dry Bulb Temperature**	79 °F
Indoor Dry Bulb Temperature	74 °F	**Outdoor Wet Bulb Temperature**	62 °F

Conduction	Area		U-Value		DETD[1]		Btu/hr
R-30 Roof No Attic	83.0	X	0.0346	X	29.0	=	83
R-19 Wall	36.0	X	0.0489	X	28.2	=	50
Nonesidential Prescriptive	65.0	X	0.3200	X	3.0	=	61
		X		X		=	
		X		X		=	
		X		X		=	
		X		X		=	
		X		X		=	
		X		X		=	
		X		X		=	
				Page Total			194

1. Design Equivalent Temperature Difference (DETD)
Items shown with an asterisk (*) denote conduction through an interior surface to another room.

Solar Gain	Orientation	Area		SGF		SC		Weighting Factor		Btu/hr
Window	(W)	65.0	X	220	X	0.287	X	0.587	=	2,417
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
							Page Total			2,417

Internal Gain	Sched. Frac.		Area		Heat Gain					Weighting Factor		Btu/hr
Lights	1.00	X	83	X	1.150	Watts/Sqft	X	3.413	Btu/Watt	X 0.999	=	325
Occupants	1.00	X	83	X	250	Btu/occ.	/	100.000	Sqft/occ.	X 1.000	=	208
Receptacle	1.00	X	83	X	1.500	Watts/Sqft	X	3.413	Btu/Watt	X 1.000	=	425
Process	1.00	X	83	X	0.000	Watts/Sqft	X	3.413	Btu/Watt	X 1.000	=	0
Process Lighting	1.00	X	83	X	0.000	Watts/Sqft	X	3.413	Btu/Watt	X 0.000	=	0

Infiltration: [1.00 (Schedule Fraction) X 1.068 (Air Sensible) X 83 (Area) X 8.00 (Ceiling Height) X 0.00 (ACH) / 60] X 5 (ΔT) = 0

TOTAL HOURLY SENSIBLE HEAT GAIN FOR ROOM 3,569

Latent Gain	Sched. Frac.		Area		Heat Gain						Btu/hr
Occupants	1.00	X	83	X	200	Btuh/occ.	/	100.000	Sqft/occ.	=	166
Receptacle	1.00	X	83	X	0.000	Watts/Sqft	X	3.413	Btu/Watt	=	0
Process	1.00	X	83	X	0.000	Watts/Sqft	X	3.413	Btu/Watt	=	0

Infiltration: [1.00 (Schedule Fraction) X 4,789 (Air Latent) X 83 (Area) X 8.00 (Ceiling Height) X 0.00 (ACH) /60] X 0.00000 (ΔW) = 0

TOTAL HOURLY LATENT HEAT GAIN FOR ROOM 166

ROOM COOLING PEAK LOADS

Project Name | Date: 4/26/2024

ROOM INFORMATION		DESIGN CONDITIONS	
Room Name	OM LOUNGE 132	**Time of Peak**	Jun 6 PM
Floor Area	213.00 ft²	**Outdoor Dry Bulb Temperature**	79 °F
Indoor Dry Bulb Temperature	74 °F	**Outdoor Wet Bulb Temperature**	62 °F

Conduction	Area		U-Value		DETD[1]		Btu/hr
R-30 Roof No Attic	213.0	X	0.0346	X	29.0	=	213
R-19 Wall	46.0	X	0.0489	X	28.2	=	63
Nonesidential Prescriptive	66.0	X	0.3200	X	3.0	=	62
R-19 Wall	190.0	X	0.0489	X	11.5	=	107
Nonesidential Prescriptive	125.0	X	0.3200	X	3.0	=	118
		X		X		=	
		X		X		=	
		X		X		=	
		X		X		=	
				Page Total			564

1. Design Equivalent Temperature Difference (DETD)
Items shown with an asterisk (*) denote conduction through an interior surface to another room.

Solar Gain	Orientation	Area		SGF		SC		Weighting Factor		Btu/hr
Window	(W)	66.0	X	220	X	0.287	X	0.587	=	2,454
Window	(N)	125.0	X	54	X	0.287	X	0.719	=	1,393
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
							Page Total			3,847

Internal Gain	Sched. Frac.		Area		Heat Gain					Weighting Factor		Btu/hr
Lights	1.00	X	213	X	1.150	Watts/Sqft	X	3.413	Btu/Watt	X 0.999	=	835
Occupants	1.00	X	213	X	250	Btu/occ.	/	100.000	Sqft/occ.	X 1.000	=	533
Receptacle	1.00	X	213	X	1.500	Watts/Sqft	X	3.413	Btu/Watt	X 1.000	=	1,090
Process	1.00	X	213	X	0.000	Watts/Sqft	X	3.413	Btu/Watt	X 1.000	=	0
Process Lighting	1.00	X	213	X	0.000	Watts/Sqft	X	3.413	Btu/Watt	X 0.000	=	0

Infiltration: [1.00 (Schedule Fraction) X 1.068 (Air Sensible) X 213 (Area) X 8.00 (Ceiling Height) X 0.00 (ACH) / 60] X 5 (ΔT) = 0

TOTAL HOURLY SENSIBLE HEAT GAIN FOR ROOM 6,870

Latent Gain	Sched. Frac.		Area		Heat Gain						Btu/hr
Occupants	1.00	X	213	X	200	Btuh/occ.	/	100.000	Sqft/occ.	=	426
Receptacle	1.00	X	213	X	0.000	Watts/Sqft	X	3.413	Btu/Watt	=	0
Process	1.00	X	213	X	0.000	Watts/Sqft	X	3.413	Btu/Watt	=	0

Infiltration: [1.00 (Schedule Fraction) X 4,789 (Air Latent) X 213 (Area) X 8.00 (Ceiling Height) X 0.00 (ACH) /60] X 0.00000 (ΔW) = 0

TOTAL HOURLY LATENT HEAT GAIN FOR ROOM 426

ROOM COOLING PEAK LOADS

Project Name | Date: 4/26/2024

ROOM INFORMATION		DESIGN CONDITIONS	
Room Name	STAFF LOUNGE 119B	**Time of Peak**	Jun 2 PM
Floor Area	245.00 ft²	**Outdoor Dry Bulb Temperature**	82 °F
Indoor Dry Bulb Temperature	74 °F	**Outdoor Wet Bulb Temperature**	63 °F

Conduction	Area		U-Value		DETD[1]		Btu/hr
R-30 Roof No Attic	245.0	X	0.0346	X	61.8	=	523
R-19 Wall	131.0	X	0.0489	X	10.9	=	70
Nonesidential Prescriptive	68.0	X	0.3200	X	4.0	=	86
		X		X		=	
		X		X		=	
		X		X		=	
		X		X		=	
		X		X		=	
		X		X		=	
		X		X		=	
				Page Total			679

1. Design Equivalent Temperature Difference (DETD)
Items shown with an asterisk (*) denote conduction through an interior surface to another room.

Solar Gain	Orientation	Area		SGF		SC		Weighting Factor		Btu/hr
Window	(N)	68.0	X	46	X	0.287	X	0.769	=	694
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
							Page Total			694

Internal Gain	Sched. Frac.		Area		Heat Gain					Weighting Factor		Btu/hr
Lights	1.00	X	245	X	1.150	Watts/Sqft	X	3.413	Btu/Watt	X 0.999	=	960
Occupants	1.00	X	245	X	250	Btu/occ.	/	100.000	Sqft/occ.	X 1.000	=	613
Receptacle	1.00	X	245	X	1.500	Watts/Sqft	X	3.413	Btu/Watt	X 1.000	=	1,254
Process	1.00	X	245	X	0.000	Watts/Sqft	X	3.413	Btu/Watt	X 1.000	=	0
Process Lighting	1.00	X	245	X	0.000	Watts/Sqft	X	3.413	Btu/Watt	X 0.000	=	0

Infiltration: [1.00 (Schedule Fraction) X 1.068 (Air Sensible) X 245 (Area) X 8.00 (Ceiling Height) X 0.00 (ACH) / 60] X 8 (ΔT) = 0

TOTAL HOURLY SENSIBLE HEAT GAIN FOR ROOM 4,200

Latent Gain	Sched. Frac.		Area		Heat Gain						Btu/hr
Occupants	1.00	X	245	X	200	Btuh/occ.	/	100.000	Sqft/occ.	=	490
Receptacle	1.00	X	245	X	0.000	Watts/Sqft	X	3.413	Btu/Watt	=	0
Process	1.00	X	245	X	0.000	Watts/Sqft	X	3.413	Btu/Watt	=	0

Infiltration: [1.00 (Schedule Fraction) X 4,789 (Air Latent) X 245 (Area) X 8.00 (Ceiling Height) X 0.00 (ACH) /60] X 0.00000 (ΔW) = 0

TOTAL HOURLY LATENT HEAT GAIN FOR ROOM 490

ROOM COOLING PEAK LOADS

Project Name | Date: 4/26/2024

ROOM INFORMATION		DESIGN CONDITIONS	
Room Name	RESTROOM 131	**Time of Peak**	Jun 1 PM
Floor Area	66.00 ft²	**Outdoor Dry Bulb Temperature**	81 °F
Indoor Dry Bulb Temperature	74 °F	**Outdoor Wet Bulb Temperature**	63 °F

Conduction	Area		U-Value		DETD[1]		Btu/hr
R-30 Roof No Attic	66.0	X	0.0346	X	62.9	=	143
		X		X		=	
		X		X		=	
		X		X		=	
		X		X		=	
		X		X		=	
		X		X		=	
		X		X		=	
		X		X		=	
				Page Total			143

1. Design Equivalent Temperature Difference (DETD)
Items shown with an asterisk (*) denote conduction through an interior surface to another room.

Solar Gain	Orientation	Area		SGF		SC		Weighting Factor		Btu/hr
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
							Page Total			0

Internal Gain	Sched. Frac.		Area		Heat Gain					Weighting Factor		Btu/hr
Lights	1.00	X	66	X	1.150	Watts/Sqft	X	3.413	Btu/Watt	X 0.999	=	259
Occupants	1.00	X	66	X	250	Btu/occ.	/	100.000	Sqft/occ.	X 1.000	=	165
Receptacle	1.00	X	66	X	1.500	Watts/Sqft	X	3.413	Btu/Watt	X 1.000	=	338
Process	1.00	X	66	X	0.000	Watts/Sqft	X	3.413	Btu/Watt	X 1.000	=	0
Process Lighting	1.00	X	66	X	0.000	Watts/Sqft	X	3.413	Btu/Watt	X 0.000	=	0

Infiltration: [1.00 (Schedule Fraction) X 1.068 (Air Sensible) X 66 (Area) X 8.00 (Ceiling Height) X 0.00 (ACH) / 60] X 7 (ΔT) = 0

TOTAL HOURLY SENSIBLE HEAT GAIN FOR ROOM 905

Latent Gain	Sched. Frac.		Area		Heat Gain						Btu/hr
Occupants	1.00	X	66	X	200	Btuh/occ.	/	100.000	Sqft/occ.	=	132
Receptacle	1.00	X	66	X	0.000	Watts/Sqft	X	3.413	Btu/Watt	=	0
Process	1.00	X	66	X	0.000	Watts/Sqft	X	3.413	Btu/Watt	=	0

Infiltration: [1.00 (Schedule Fraction) X 4,789 (Air Latent) X 66 (Area) X 8.00 (Ceiling Height) X 0.00 (ACH) /60] X 0.00000 (ΔW) = 0

TOTAL HOURLY LATENT HEAT GAIN FOR ROOM 132

ROOM COOLING PEAK LOADS

Project Name | Date: 4/26/2024

ROOM INFORMATION		DESIGN CONDITIONS	
Room Name	COPY 119	**Time of Peak**	Jun 1 PM
Floor Area	142.00 ft²	**Outdoor Dry Bulb Temperature**	81 °F
Indoor Dry Bulb Temperature	74 °F	**Outdoor Wet Bulb Temperature**	63 °F

Conduction	Area		U-Value		DETD[1]		Btu/hr
R-30 Roof No Attic	142.0	X	0.0346	X	62.9	=	309
		X		X		=	
		X		X		=	
		X		X		=	
		X		X		=	
		X		X		=	
		X		X		=	
		X		X		=	
		X		X		=	
				Page Total			309

1. Design Equivalent Temperature Difference (DETD)
Items shown with an asterisk (*) denote conduction through an interior surface to another room.

Solar Gain	Orientation	Area		SGF		SC		Weighting Factor		Btu/hr
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
							Page Total			0

Internal Gain	Sched. Frac.		Area		Heat Gain					Weighting Factor		Btu/hr
Lights	1.00	X	142	X	1.150	Watts/Sqft	X	3.413	Btu/Watt	X 0.999	=	557
Occupants	1.00	X	142	X	250	Btu/occ.	/	100.000	Sqft/occ.	X 1.000	=	355
Receptacle	1.00	X	142	X	1.500	Watts/Sqft	X	3.413	Btu/Watt	X 1.000	=	727
Process	1.00	X	142	X	0.000	Watts/Sqft	X	3.413	Btu/Watt	X 1.000	=	0
Process Lighting	1.00	X	142	X	0.000	Watts/Sqft	X	3.413	Btu/Watt	X 0.000	=	0

Infiltration: [1.00 (Schedule Fraction) X 1.068 (Air Sensible) X 142 (Area) X 8.00 (Ceiling Height) X 0.00 (ACH) / 60] X 7 (ΔT) = 0

TOTAL HOURLY SENSIBLE HEAT GAIN FOR ROOM 1,947

Latent Gain	Sched. Frac.		Area		Heat Gain						Btu/hr
Occupants	1.00	X	142	X	200	Btuh/occ.	/	100.000	Sqft/occ.	=	284
Receptacle	1.00	X	142	X	0.000	Watts/Sqft	X	3.413	Btu/Watt	=	0
Process	1.00	X	142	X	0.000	Watts/Sqft	X	3.413	Btu/Watt	=	0

Infiltration: [1.00 (Schedule Fraction) X 4,789 (Air Latent) X 142 (Area) X 8.00 (Ceiling Height) X 0.00 (ACH) /60] X 0.00000 (ΔW) = 0

TOTAL HOURLY LATENT HEAT GAIN FOR ROOM 284

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PROJECT
MULTICARE TENANT IMPROVEMENT
INDIGO - PUYALLUP
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REVISIONS

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ROOM COOLING PEAK LOADS

Project Name | Date: 4/26/2024

ROOM INFORMATION		DESIGN CONDITIONS	
Room Name	OM STORAGE 119A	**Time of Peak**	Jun 1 PM
Floor Area	72.00 ft²	**Outdoor Dry Bulb Temperature**	81 °F
Indoor Dry Bulb Temperature	74 °F	**Outdoor Wet Bulb Temperature**	63 °F

Conduction	Area		U-Value		DETD[1]		Btu/hr
R-30 Roof No Attic	72.0	X	0.0346	X	62.9	=	157
		X		X		=	
		X		X		=	
		X		X		=	
		X		X		=	
		X		X		=	
		X		X		=	
		X		X		=	
		X		X		=	
		X		X		=	
					Page Total		157

1. Design Equivalent Temperature Difference (DETD)
Items shown with an asterisk (*) denote conduction through an interior surface to another room.

Solar Gain	Orientation	Area		SGF		SC		Weighting Factor		Btu/hr
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
							Page Total			0

Internal Gain	Sched. Frac.		Area		Heat Gain						Weighting Factor		Btu/hr
Lights	1.00	X	72	X	1.150	Watts/Sqft	X	3.413	Btu/Watt	X	0.999	=	282
Occupants	1.00	X	72	X	250	Btu/occ.	/	100.000	Sqft/occ.	X	1.000	=	180
Receptacle	1.00	X	72	X	1.500	Watts/Sqft	X	3.413	Btu/Watt	X	1.000	=	369
Process	1.00	X	72	X	0.000	Watts/Sqft	X	3.413	Btu/Watt	X	1.000	=	0
Process Lighting	1.00	X	72	X	0.000	Watts/Sqft	X	3.413	Btu/Watt	X	0.000	=	0

Infiltration: [1.00 (Schedule Fraction) X 1.068 (Air Sensible) X 72 (Area) X 8.00 (Ceiling Height) X 0.00 (ACH) / 60] X 7 (ΔT) = 0

TOTAL HOURLY SENSIBLE HEAT GAIN FOR ROOM 987

Latent Gain	Sched. Frac.		Area		Heat Gain						Btu/hr
Occupants	1.00	X	72	X	200	Btuh/occ.	/	100.000	Sqft/occ.	=	144
Receptacle	1.00	X	72	X	0.000	Watts/Sqft	X	3.413	Btu/Watt	=	0
Process	1.00	X	72	X	0.000	Watts/Sqft	X	3.413	Btu/Watt	=	0

Infiltration: [1.00 (Schedule Fraction) X 4,789 (Air Latent) X 72 (Area) X 8.00 (Ceiling Height) X 0.00 (ACH) /60] X 0.00000 (ΔW) = 0

TOTAL HOURLY LATENT HEAT GAIN FOR ROOM 144

ROOM COOLING PEAK LOADS

Project Name | Date: 4/26/2024

ROOM INFORMATION		DESIGN CONDITIONS	
Room Name	IT ROOM	**Time of Peak**	Jul 3 PM
Floor Area	65.00 ft²	**Outdoor Dry Bulb Temperature**	84 °F
Indoor Dry Bulb Temperature	74 °F	**Outdoor Wet Bulb Temperature**	64 °F

Conduction	Area		U-Value		DETD[1]		Btu/hr
R-30 Roof No Attic	65.0	X	0.0346	X	56.5	=	127
R-19 Wall	120.0	X	0.0489	X	11.5	=	67
R-19 Wall	107.0	X	0.0489	X	29.6	=	155
		X		X		=	
		X		X		=	
		X		X		=	
		X		X		=	
		X		X		=	
		X		X		=	
					Page Total		349

1. Design Equivalent Temperature Difference (DETD)
Items shown with an asterisk (*) denote conduction through an interior surface to another room.

Solar Gain	Orientation	Area		SGF		SC		Weighting Factor		Btu/hr
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
			X		X		X		=	
							Page Total			0

Internal Gain	Sched. Frac.		Area		Heat Gain						Weighting Factor		Btu/hr
Lights	1.00	X	65	X	0.700	Watts/Sqft	X	3.413	Btu/Watt	X	0.999	=	155
Occupants	1.00	X	65	X	245	Btu/occ.	/	333.000	Sqft/occ.	X	1.000	=	48
Receptacle	1.00	X	65	X	0.000	Watts/Sqft	X	3.413	Btu/Watt	X	1.000	=	0
Process	1.00	X	65	X	0.000	Watts/Sqft	X	3.413	Btu/Watt	X	1.000	=	0
Process Lighting	1.00	X	65	X	0.000	Watts/Sqft	X	3.413	Btu/Watt	X	0.000	=	0

Infiltration: [1.00 (Schedule Fraction) X 1.068 (Air Sensible) X 65 (Area) X 8.00 (Ceiling Height) X 0.00 (ACH) / 60] X 10 (ΔT) = 0

TOTAL HOURLY SENSIBLE HEAT GAIN FOR ROOM 552

Latent Gain	Sched. Frac.		Area		Heat Gain						Btu/hr
Occupants	1.00	X	65	X	155	Btuh/occ.	/	333.000	Sqft/occ.	=	30
Receptacle	1.00	X	65	X	0.000	Watts/Sqft	X	3.413	Btu/Watt	=	0
Process	1.00	X	65	X	0.000	Watts/Sqft	X	3.413	Btu/Watt	=	0

Infiltration: [1.00 (Schedule Fraction) X 4,789 (Air Latent) X 65 (Area) X 8.00 (Ceiling Height) X 0.00 (ACH) /60] X 0.00000 (ΔW) = 0

TOTAL HOURLY LATENT HEAT GAIN FOR ROOM 30

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EXPIRES: 11/24/2025

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PROJECT
MULTICARE TENANT IMPROVEMENT
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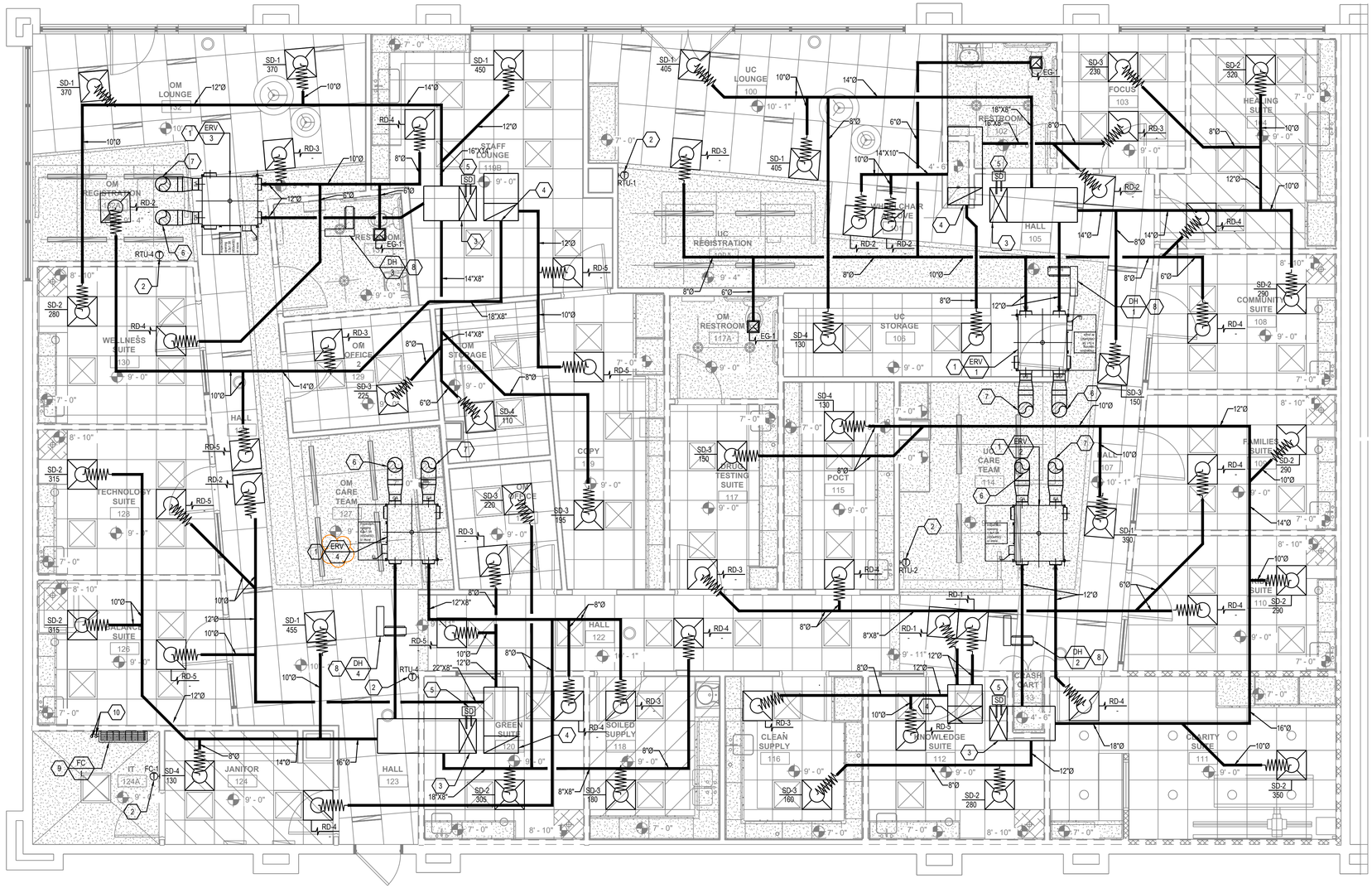

HVAC SHEET NOTES

#	DESCRIPTION
1	NEW ENERGY RECOVERY VENTILATION (DOAS) UNIT.
2	NEW WALL MOUNTED THERMOSTAT @48 A.F.F.
3	CONNECT NEW SUPPLY AIR DUCT FROM EXISTING VERTICAL DUCT SLAB.
4	CONNECT NEW RETURN AIR DUCT FROM EXISTING VERTICAL DUCT SLAB.
5	NEW DUCT SMOKE DETECTOR. SHALL GLOBALLY SHUT DOWN THE EQUIPMENT WHEN PRODUCT OF COMBUSTION IS DETECTED.
6	12"Ø OUTSIDE AIR DUCT UP TO THE ROOF. SEE M-102 FOR CONTINUATION.
7	12"Ø EXHAUST AIR DUCT UP TO THE ROOF. PROVIDE BACK-DRAFT DAMPER. SEE M-102 FOR CONTINUATION.
8	NEW DUCT HEATER. SEE M0.1 FOR SPECIFICATION.
9	NEW FAN COIL UNIT, TERMINATE CONDENSATE DRAIN INTO LAVATORY TAIL PIECE. SEE M0.1 FOR SPECIFICATIONS
10	REFRIGERANT GAS / LIQ. PIPING UP TO HEAT PUMP ON THE ROOF.

NOTES

#	DESCRIPTION
1	PROVIDE REMOTE CABLE CONTROL VOLUME DAMPER FOR ALL VOLUME DAMPERS INSTALLED ABOVE HARD CEILING.

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

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PRCTI20240772

PROJECT
MULTICARE TENANT IMPROVEMENT
INDIGO - PUYALLUP
4505 S MERIDIAN
PUYALLUP, WA 98373

REVISIONS

DATE
2024.03.29

BCRA NO.
22023.00.11

DRAWN BY:

REVIEWED BY:

SHEET TITLE
HVAC FLOOR PLAN

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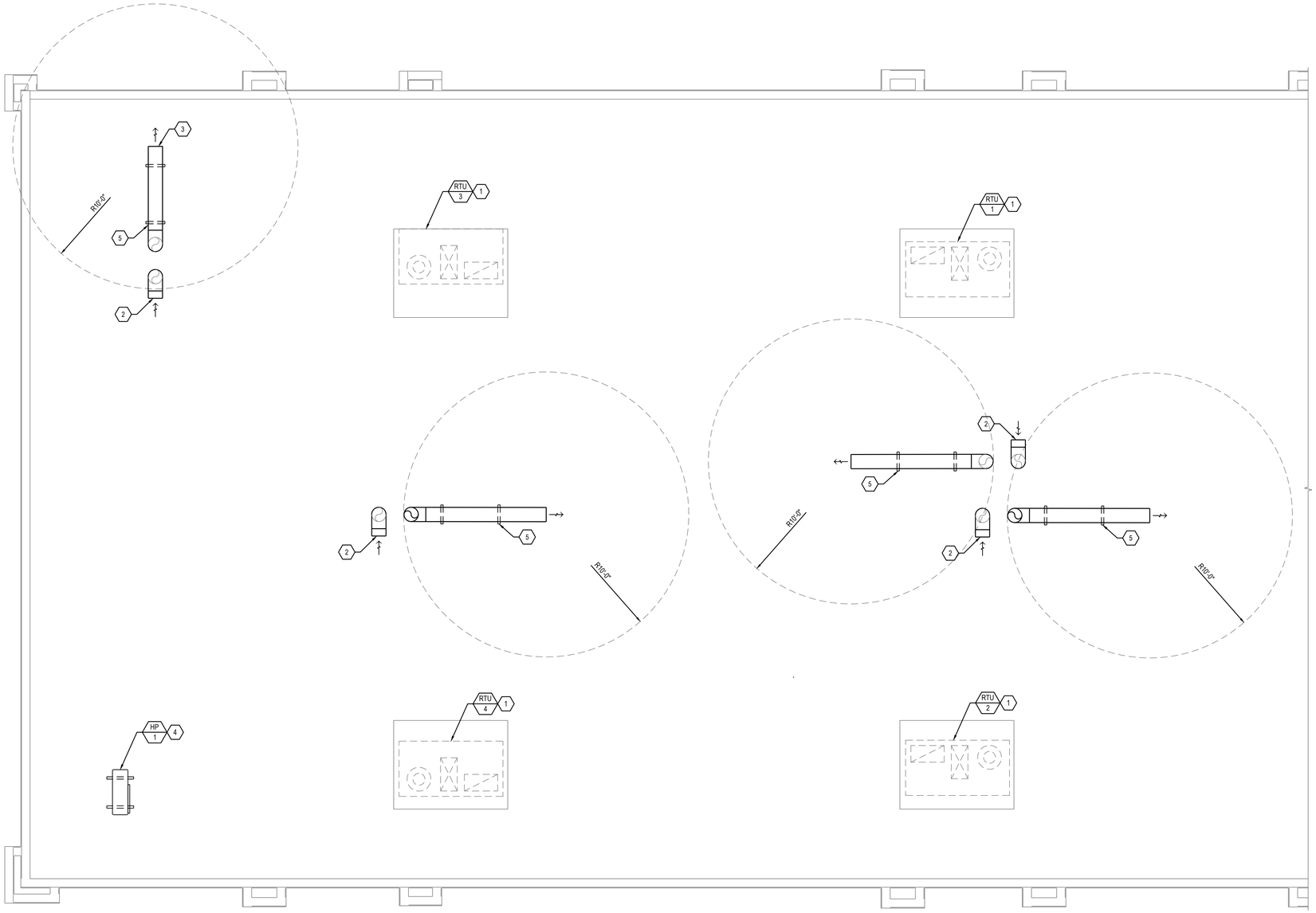

1 HVAC ROOF PLAN SCALE: 1/4" = 1'-0"

SHEET NOTES

#	DESCRIPTION
1	ROOF TOP UNIT "NOT IN SCOPE". SEE M-001 FOR SPECIFICATIONS.
2	ROOF JACK (GOOSENECK) AIR INTAKE WITH 1/4" MESH SCREEN
3	EXHAUST AIR DUCT TERMINATION WITH 1/4" MESH SCREEN
4	HEAT PUMP PUMP MOUNTED ON WOOD SLEEPER. SEE M0.1 FOR SPECIFICATIONS. PROVIDE CLASS I OR II VAPOR BARRIER FOR REFRIGERANT PIPE INSULATION INSTALLED OUTDOOR.
5	TYPICAL DUCT SUPPORT, 4'-0" DISTANCE BETWEEN SUPPORT, TO BE INSTALLED IN ACCORDANCE WITH THE LATEST SMACNA DUCT CONSTRUCTION STD. AND/OR MANUFACTURER'S PUBLISHED INSTALLATION INSTRUCTIONS.

NOTES

#	DESCRIPTION
1	EXHAUST OUTLET SHALL BE LOCATED A MINIMUM OF 10 FT. ABOVE ADJOINING GRADE AND 10 FT. FROM OUTDOOR AIR INTAKE, DOORS, OCCUPIED AREAS AND OPERABLE WINDOWS.

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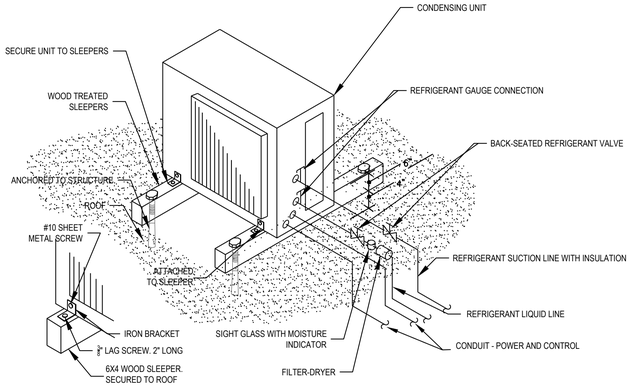
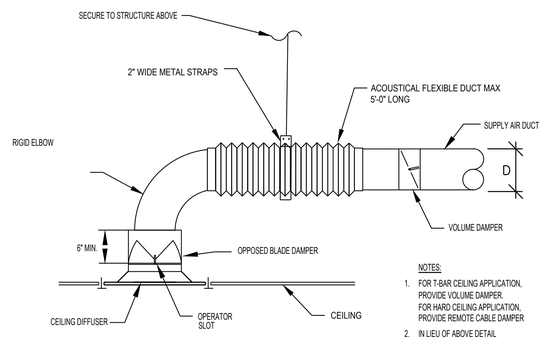
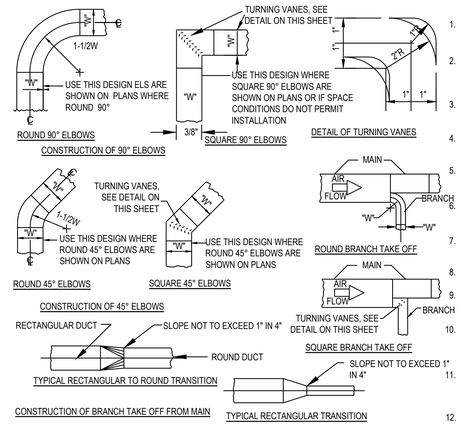


7	HEAT PUMP MOUNTING DETAIL	NTS



NOTES:
1. FOR T-BAR CEILING APPLICATION, PROVIDE VOLUME DAMPER. FOR HARD CEILING APPLICATION, PROVIDE REMOTE CABLE DAMPER
2. IN LIEU OF ABOVE DETAIL METAL PLENUM MAY BE USED TO CONNECT THE BRANCH DUCT TO THE DIFFUSERS.

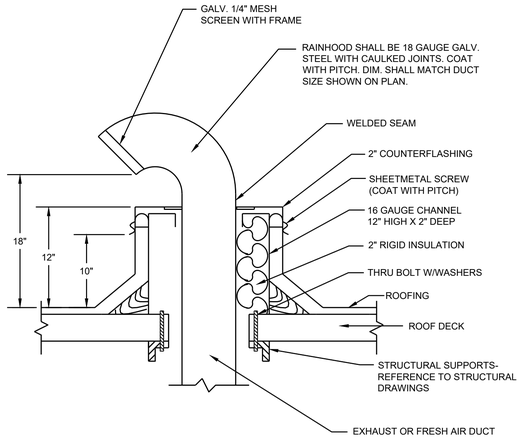
4	CEILING DIFFUSER DETAIL	NTS



INSTALLATION NOTES

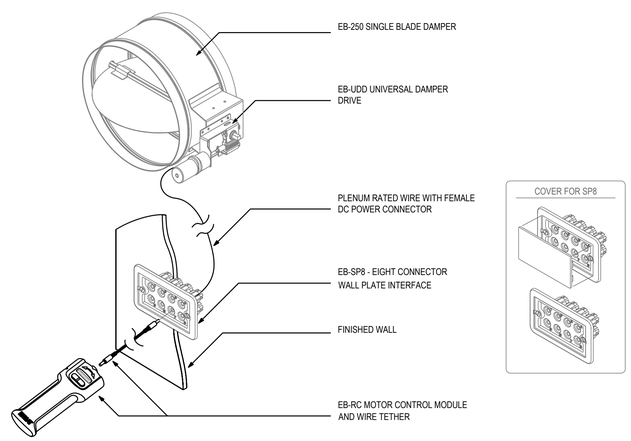
1. ALL DUCTS SHALL BE CONSTRUCTED AND ERECTED IN A NEAT AND WORKMANLIKE MANNER.
2. DUCT SHALL BE CONSTRUCTED OF THE WEIGHTS, GAGES AND MATERIAL SHOWN IN THE SCHEDULE ON THESE DRAWINGS.
3. THE DIMENSIONS SHOWN FOR ALL DUCTS SHOWN IN PLAN GIVE THE WIDTH FIRST AND THEN THE HEIGHT.
4. DUCT RISERS SHOULD BE SUPPORTED BY ANGLES AT EVERY FLOOR.
5. AIR TURN SHALL BE INSTALLED IN ALL ABRUPT ELBOWS TO PREVENT TURBULENCE.
6. DUCTS SHALL BE SECURELY ATTACHED TO THE BUILDING CONSTRUCTION IN AN APPROVED MANNER.
7. DIVERGING TRANSITION PIECES SHALL BE MADE AS GRADUAL AS POSSIBLE.
8. INSTALL FIRE DAMPERS IN ACCORDANCE WITH UL 555.
9. ACCESS PANELS SHOULD BE PLACED BEFORE AND/OR AFTER EQUIPMENT INSTALLED IN THE DUCT.
10. DUCT AREA SHOULD NOT BE DECREASED MORE THAN 10% WHEN OBSTRUCTIONS CANNOT BE AVOIDED, AND THEN A STREAMLINED FITTING SHOULD BE USED.
11. FLEXIBLE FABRIC CONNECTIONS (OR EQUAL) SHOULD BE USED ON BOTH INLETS AND OUTLETS OF ALL FANS AND AIR HANDLING UNITS.
12. JOINTS AND SEAMS OF SUPPLY DUCTS SHALL BE FASTENED SECURELY AND MADE AIR TIGHT.

1	DUCT CONSTRUCTION STANDARDS	NTS

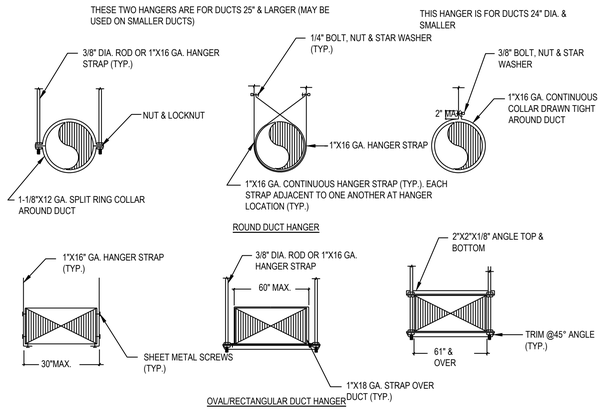


8	ROOF JACK (GOOSENECK) DETAIL	NTS

EB - 250 DAMPER DRIVE SYSTEM - WITH EB-SP8 EIGHT CONNECTOR INTERFACE

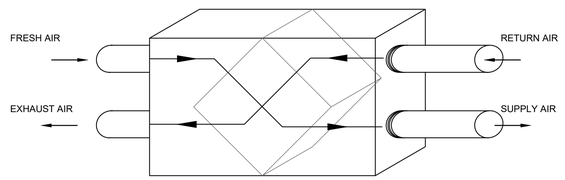


5	REMOTE CONTROL DAMPER SYSTEM	NTS



2	DUCT SUPPORT	NTS

9	NOT USED	NTS



6	ENERGY RECOVERY VENTILATOR	NTS

DUCT CONSTRUCTION MINIMUM SHEET METAL THICKNESSES

RECTANGULAR DUCTS

MAXIMUM SIZE (INCHES)	STEEL (MINIMUM THICKNESS, NOMINAL)	ALUMINUM (MINIMUM THICKNESS, NOMINAL)
THROUGH 12	0.022 INCH (26 GAGE, GALV.)	0.020 INCH (NO. 24 B&S GAGE)
13 THROUGH 30	0.028 INCH (24 GAGE, GALV.)	0.025 INCH (NO. 22 B&S GAGE)
31 THROUGH 54	0.034 INCH (22 GAGE, GALV.)	0.032 INCH (NO. 20 B&S GAGE)
55 THROUGH 84	0.040 INCH (20 GAGE, GALV.)	0.040 INCH (NO. 18 B&S GAGE)
OVER 84	0.052 INCH (18 GAGE, GALV.)	0.051 IINCH (NO. 16 B&S GAGE)

ROUND DUCTS

MAXIMUM SIZE (INCHES)	SPIRAL SEAM DUCT	LONGITUDINAL SEAM DUCT	FITTINGS
	STEEL (MINIMUM THICKNESS, NOMINAL)	STEEL (MINIMUM THICKNESS, NOMINAL)	STEEL (MINIMUM THICKNESS, NOMINAL)
THROUGH 12	0.019 INCH (28 GAGE, GALV.)	0.022 INCH (26 GAGE, GALV.)	0.022 INCH (26 GAGE, GALV.)
13 THROUGH 18	0.022 INCH (26 GAGE, GALV.)	0.028 INCH (24 GAGE, GALV.)	0.028 INCH (24 GAGE, GALV.)
19 THROUGH 28	0.028 INCH (24 GAGE, GALV.)	0.034 INCH (22 GAGE, GALV.)	0.034 INCH (22 GAGE, GALV.)
29 THROUGH 36	0.034 INCH (22 GAGE, GALV.)	0.040 INCH (20 GAGE, GALV.)	0.040 INCH (20 GAGE, GALV.)
37 THROUGH 52	0.040 INCH (20 GAGE, GALV.)	0.052 INCH (18 GAGE, GALV.)	0.052 INCH (18 GAGE, GALV.)

3	METAL GAGES	NTS

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PROJECT
MULTICARE TENANT IMPROVEMENT
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LIGHTING SCHEDULE

TYPE	SYMBOL	TYPE / DESCRIPTION	MANUFACTURER / CATALOG #	LAMPS	WATTS	VOLTAGE	NOTES
F1		2X2 TROFFER	EATON METALUX LED 22EN-LD2-30-UNV-L840-CD-1	LED	24.9W	120V	
F1E		SIMILAR TO TYPE "F1", EXCEPT WITH BUILT IN BATTERY PACK	EATON METELUX LED 22EN-LD2-30-UNV-L840-CD-1	LED	24.9W	120V	
F2		RECESSED LINEAR LIGHT	PHILIPS LEDALITE, TRUGROOVE 3900LAGMS1-02-7-1-E	LED	20W	120V	
F2E		SIMILAR TO TYPE "F2", EXCEPT WITH BUILT IN BATTERY PACK	PHILIPS LEDALITE, TRUGROOVE 3900LAGMS1-02-7-1-E	LED	20W	120V	
F3		RECESSED LINEAR LIGHT	PHILIPS LEDALITE, TRUGROOVE 3900LAGMS3-04-7-1-E	LED	42W MAX	120V	
F4		LED STRIP LIGHT	TBD	LED	1.5W/FT	120V	
F5		RECESSED CANS	KENALL HADL6-FF-PAFW-22L-40K8-W-CSS-G-RIG 6-DV-DIM1	LED	22W	120V	
F5E		SIMILAR TO TYPE "F5", EXCEPT WITH BUILT IN BATTERY PACK	KENALL HADL6-FF-PAFW-22L-40K8-W-CSS-G-RIG 6-DV-DIM1	LED	22W	120V	
F6		EXAM ROOM PENDANT	TECH LIGHTING, MINA 700TDMINAP 1COS-LED930	LED	9W	120V	
F7		UNDER CABINET TASK LIGHT	JUNO PRO SERIES UPLED30, 30K, 90CRI, WH	LED	10.7W	120V	
F8		VANITY LIGHT	VISA LIGHTING CB5518-POSH L30K-L, 30K, TW9016	LED	15W	120V	
F9		LOBBY PENDANT LIGHTING	ET2 LIGHTING E21121-11WT,7.5"H X 6.26D, 3000K, 120V	LED	4.9W	120V	
F10		LOBBY PENDANT LIGHTING	KUZCO LIGHTING CERCHIO LED PENDANT, KZC1087229, DIM, 90CRI, 3000K, 120V	LED	24 IN: 52W 32 IN: 65W	120V	
F11		LOBBY PENDANT	CLAESSON KOIVISTO RUNE FLUID PENDANT 15402, 5.5" H X 9" D, 100 CRI, 2900K, 120V	LED		120V	
EX		EXIT SIGN WITH BUILT IN BATTERY PACK FOR MIN 90 MINUTES RUNTIME	EXIT LIGHT EDGE LIT LED, HUBBELL LIGHTING CELSGNE	LED	1W	120V	

NOTES:

1. ALL FIXTURES SHALL BE RATED TO OPERATED ON 120 VOLTS.
2. ALL FIXTURES SHALL BE DIMMABLE.
3. FINISH TO BE CONFIRMED BY ARCHITECT.
4. ELECTRICAL CONTRACTOR SHALL PROVIDE ALL NECESSARY ACCESSORIES AND COMPONENTS FOR COMPLETE INSTALLATION.
5. SUBSTITUTIONS ALLOWED UNLESS OTHERWISE NOTED.

WIRE SCHEDULE AND NOTES

LOAD PER PH (KVA)	WIRE SIZE (AWG)	MAXIMUM LENGTH OF BRANCH CIRCUIT PER UTILIZATION VOLTAGE (120, 1PH, MAX V.D. 3%)	(240, 1PH, MAX V.D. 3%)	(240, 3PH, MAX V.D. 3%)	NOTES AND REMARKS
< 1.92	#12	56 FT	85 FT	98 FT	5
	#10	94 FT	141 FT	163 FT	5
	#8	144 FT	217 FT	250 FT	5
	#6	230 FT	345 FT	398 FT	5
< 1.44	#12	75 FT	113 FT	130 FT	5
	#10	125 FT	188 FT	217 FT	5
	#8	192 FT	289 FT	334 FT	5
	#6	306 FT	460 FT	531 FT	5
< 1.26	#12	86 FT	129 FT	149 FT	
	#10	143 FT	215 FT	248 FT	
	#8	220 FT	330 FT	381 FT	
< 1.08	#12	100 FT	150 FT	173 FT	
	#10	167 FT	250 FT	289 FT	
	#8	256 FT	385 FT	445 FT	
< 0.9	#12	120 FT	180 FT	208 FT	
	#10	200 FT	300 FT	347 FT	
<0.72	#12	150 FT	225 FT	260 FT	
	#10	250 FT	376 FT	434 FT	

#	NOTES
1	CONTRACTOR SHALL REFER TO THIS TABLE PRIOR TO START OF BRANCH CIRCUIT ROUGH-IN.
2	CONTRACTOR SHALL USE THE APPROPRIATE WIRE SIZE IN CONJUNCTION WITH THE LENGTH OF THE PROPOSED FIELD VERIFIED ROUTING OF BRANCH CIRCUIT WIRING (INCLUDING VERTICAL & LATERAL RUN, ROUTED PARALLEL/PERPENDICULAR TO THE BUILDING STRUCTURE).
3	SEE PANEL SCHEDULE FOR THE CORRESPONDING KVA LOAD PER PHASE OF A PARTICULAR BRANCH CIRCUIT.
4	RESISTANCE VALUES USED ARE FOR UNCOATED COPPER WIRES IN STEEL CONDUIT. 75 DEGREE C., OPERATING AT 60HZ.
5	THE VALUES IN "120V, 1PH" COLUMN IS TO BE USED FOR GENERAL PURPOSE RECEPTACLE LOADS.

ABBREVIATIONS AND TAGS

ABB.	DESCRIPTION	ABB.	DESCRIPTION
EWH	ELECTRIC WATER HEATER	SD	SMOKE DETECTOR
(E)	EXISTING TO REMAIN	TEL	TELEPHONE
EC	ELECTRICAL CONTRACTOR	TX	TRANSFORMER
FA	FIRE ALARM	TV	TELEVISION
FMT	FLEXIBLE METALLIC TUBING	UAC	UNDER ANOTHER CONTRACT
GC	GENERAL CONTRACTOR	UAS	UNDER ANOTHER SECTION
GFI	GROUND FAULT INTERUPTER	UON	UNLESS OTHERWISE NOTED
IG	ISOLATED GROUND	V.D.	VOLTAGE DROP
LL	LANDLORD	W	WIRE
LV	LOW VOLTAGE	WP	WEATHERPROOF
AC 1	MECHANICAL UNIT TAG. SEE MECHANICAL DRAWINGS FOR ADDITIONAL DESCRIPTION.	E-4 4	DETAIL TAG. REFER TO DETAIL 4 ON SHEET NUMBER E-4.

NON-INFRINGEMENT STATEMENT

"THE ELECTRICAL DESIGN IN THIS SET OF PLANS AND SPECIFICATIONS DOES NOT INFRINGE ON THE EXISTING BUILDING LIFE SAFETY OR SMOKE CONTROL SYSTEM."

BY:..... .....

DATE: 09/08/2023

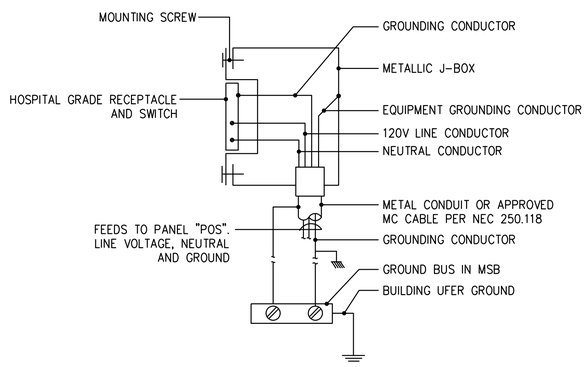
ELECTRICAL LEGEND

SYMBOL	DESCRIPTION
$	SINGLE POLE SWITCH AND BOX, WALL MOUNTED +44" AFF. LOWER CASE LETTER INDICATES CIRCUIT CONTROLLED BY SWITCH.
$T	HP RATED MANUAL STARTER/DISCONNECT TOGGLE SWITCH, 120V, MAX 1HP UON.
D	WALL MOUNTED DIMMER SWITCH, 0-10V DIMMING WITH ON-OFF SWITCH.
$LV	WALL MOUNTED 2 WAY ON, CENTER OFF LOW VOLTAGE SWITCH FOR LCP CONTROLLER LIGHTS.
	RECEPTACLE, DUPLEX 20A, 120V GRD, NEMA 5-20R +18"AFF U.O.N. (WP=WEATHERPROOF, GFI=GROUND FAULT CIRCUIT INTERRUPTER)
D	DEDICATE RECEPTACLE, DUPLEX 20A, 120V GRD, NEMA 5-20R +18"AFF U.O.N. (WP=WEATHERPROOF, GFI=GROUND FAULT CIRCUIT INTERRUPTER)
USB	USB RECEPTACLE, DUPLEX 20A, 120V GRD, NEMA 5-20R +42"AFF U.O.N.
	RECEPTACLE, SINGLE, 20A, 120V GRD, NEMA 5-20R +18"AFF UON.
	RECEPTACLE, DOUBLE DUPLEX (2) 20A, 120V, GRD - NEMA (2) 5-20R +18"AFF U.O.N.
	RECEPTACLE DUPLEX 20A, 120V GRD NEMA 5-20R FLOOR MOUNTED.
	RECEPTACLE DOUBLE DUPLEX (2) 20A, 120V GRD, NEMA 5-20R UON. FLOOR MOUNTED.
	2 PORT VOICE/ DATA OUTLET, WALL MOUNT +18" AFF PROVIDE RING & STRING TO PULL CABLES THRU HOLLOW WALL. VOICE/ DATA WIRING BY TELECOM SYSTEM INSTALLER.
TV	TV OUTLET, WALL MOUNT +60" AFF PROVIDE RING & STRING TO PULL CABLES THRU HOLLOW WALL.
	COMBINATION 4-PLEX RECEPTACLE, NEMA 5-20R DOUBLE DUPLEX (1 DUPLEX AUTO CONTROLLED BY OCCUPANCY SENSOR PER T24, (1) DUPLEX UNCONTROLLED), & TYPE 6 VOICE/DATA OUTLET, FLOOR MOUNTED. PROVIDE MIN. 3/4" TEL/DATA CONDUIT WITH PULL WIRES.
	4-PLEX RECEPTACLE, NEMA 5-20R DOUBLE DUPLEX (1 DUPLEX AUTO CONTROLLED BY OCCUPANCY SENSOR PER T24, (1) DUPLEX UNCONTROLLED), +18"AFF, U.O.N.
	DUPLEX RECEPTACLE, NEMA 5-20R OCCUPANCY SENSOR CONTROLLED, +18"AFF.
GFCI	GFCI DUPLEX RECEPTACLE ABOVE COUNTER LEVEL, NEMA 5-20R.
GFCI	GFCI DUPLEX RECEPTACLE ABOVE COUNTER LEVEL, VACANCY SENSOR CONTROLLED, NEMA 5-20R.
	NEMA L6-30R RECEPTACLE AT LAB ROOM/SERVER ROOM, FIELD COORDINATE FINAL MOUNTING LOCATION & HEIGHT.
30	RECEPTACLE AT SERVER ROOM, NEMA L15-30. MOUNTED ABOVE RACKS.
	RECEPTACLE, 120V/208V, 3PH, 4W, GRD, RATING AS INDICATED IN PLANS.
	RECEPTACLE 20A, 480V, 3PH, 4W, GRD, NEMA L22-20R, +18"AFF UON.
	DUPLEX RECEPTACLE AT TEST LAB 20A, 120V, GND (5-20R U.O.N), SUSPENDED BY TYPE S.O. CORD WITH GRIPS AT EACH END.
	DOUBLE DUPLEX RECEPTACLE AT TEST LAB 20A, 120V, GND (5-20R U.O.N), SUSPENDED BY TYPE S.O. CORD WITH GRIPS AT EACH END.
	TWIST-LOCK RECEPTACLE 20, 250V, SINGLE PHASE (L6-20R U.O.N), SUSPENDED BY TYPE S.O. CORD WITH GRIPS AT EACH END.
OS	OCCUPANCY SENSOR LOW VOLTAGE CEILING MOUNTED FOR ROOM CONTROLLER.
OS	OCCUPANCY SENSOR LOW VOLTAGE WALL MOUNTED FOR ROOM CONTROLLER.
DS	CEILING MOUNTED DAYLIGHT SENSOR.
J	JUNCTION BOX CEILING MOUNTED, SIZE TO CODE, TAPE AND TAG WIRES.
J	JUNCTION BOX WALL MOUNTED, SIZE TO CODE, TAPE AND TAG WIRES.
	NEW ELECTRICAL PANELBOARD, SURFACE OR FLUSH MOUNTED.
	EXISTING ELECTRICAL PANELBOARD, SURFACE OR FLUSH MOUNTED.
	SPECIAL PURPOSE ELECTRICAL PANELBOARD, SURFACE OR FLUSH MOUNTED.
	TRANSFORMER - DRY TYPE.
	FUSED DISCONNECT SWITCH WITH DUAL ELEMENT FUSES. SWITCH AND FUSES RATING PER NAMEPLATE OF SERVED UNIT.
	NON-FUSED DISCONNECT SWITCH, RATING PER NAMEPLATE OF SERVED UNIT.
	MAGNETIC MOTOR STARTER, NEMA RATING AS REQUIRED PER SERVED UNIT.
M	MOTOR OUTLET AND FLEX CONNECTION TO MOTOR.
P	WALL MOUNTED JUNCTION BOX FOR PRE-WIRED FURNITURE POWER SYSTEM CONNECTION. PROVIDE POWER WHIP WITH TERMINATION PLUG TO MATCH FURNITURE SYSTEM CONNECTOR. LOCATE BOX AS LOW AS POSSIBLE. FIELD COORDINATE FINAL LOCATION.
C	COMBINATION TELEPHONE AND DATA OUTLET, WALL MOUNTED AS LOW AS POSSIBLE FOR FLEXIBLE CONNECTION TO FURNITURE SYSTEM.
C P	FLOOR MOUNTED FURNITURE FEEDS W/POWER & TELE/DATA PORT CAPACITY FOR ELECTRIFIED DESKS PER CLIENT'S REQUIREMENTS.
C P	POWER POLES W/POWER & TELE/DATA PORT CAPACITY FOR ELECTRIFIED DESKS PER CLIENT'S REQUIREMENTS.
	TELEPHONE PULL CORD. SEE POWER PLANS E3.0A THRU E3.0C.
WAP	WIRELESS ACCESS POINT. SEE POWER PLANS E3.0A THRU E3.0C.
CR	CARD READER. PROVIDE J. BOX W/RING AND STRING TO ABOVE CEILING. ELECTRIFIED HARDWARE FOR DOORS. ALL CARD READER MODELS TO +44" A.F.F AND TO BE PROVIDE BY CLIENT.
B	PUSH BUTTON SWITCH (480 SERIES TYPE 482A4U) FOR ADA AUTOMATIC PUSH BUTTON.
P	PANIC BUTTON. COORDINATE EXACT LOCATION AND REQUIREMENTS WITH INSTALLER.
	LEGEND NOTES: 1. MOUNTING HEIGHT INDICATED ARE AFF TO CENTER OF PLATE. INCASE OF CONFLICT, GENERAL NOTES 41 & 42 SHALL PREVAIL. 2. NOT ALL SYMBOLS AND ABBREVIATIONS ARE NECESSARILY USED IN THIS PROJECT.

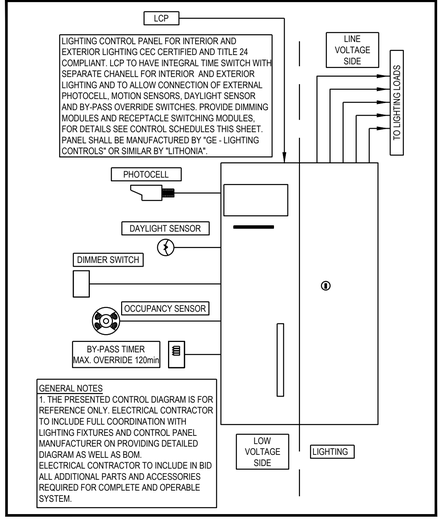
SCOPE OF ELECTRICAL WORK

#	DESCRIPTION
1	PROVIDE INDOOR LIGHTING THAT MEET THE REQUIREMENTS FOR NORMAL AND EMERGENCY USE.
2	PROVIDE POWER RECEPTACLES AND POWER SUPPLIES TO ALL HVAC, PLUMBING, KITCHEN EQUIPMENT AND OTHER ELECTRICAL EQUIPMENT IN THE TENANT SPACE.
3	REFER TO SPECIFICATIONS SECTION ON E0.2 FOR ADDED DESCRIPTION OF WORK AND TEMPORARY SERVICE REQUIREMENTS.

PATIENT CARE AREA WIRING METHOD



TYPICAL LIGHTING CONTROL SYSTEM



ADA NOTES

#	TITLE
1	INSTALL ELECTRICAL RECEPTACLES BETWEEN 18"-48" AFF.
2	INSTALL SWITCHES USED BY ROOM OCCUPANTS TO CONTROL LIGHTING, APPLIANCES OR ENVIRONMENTAL EQUIPMENT AT 36"-48" AFF OR 36"-44" IF A REACH OVER AN OBJECT EXCEEDS 20".
3	CONTROLS AND SWITCHES SHALL OPERATE WITH ONE HAND AND NOT REQUIRED TIGHT GRASPING, PINCHING OR TWISTING OF THE WRIST, A 5 LB FORCE TO ACTIVATE CONTROLS.
4	INSTALL ENVIRONMENTAL CONTROLS, 48" IS THE MAXIMUM FOR HIGH AND 15" FOR LOW REACH.

ELECTRICAL DRAWING SCHEDULE

#	TITLE
E-001	ELECTRICAL LEGEND, GENERAL NOTES AND SCHEDULES
E-002	ELECTRICAL SPECIFICATIONS
E-003	SINGLE LINE DIAGRAM AND PANEL SCHEDULE
E-004	ENERGY FORM
E-005A	ENERGY FORM - CHECKLIST- PART A
E-005B	ENERGY FORM - CHECKLIST - PART B
E-201	ELECTRICAL LIGHTING PLAN
E-301	ELECTRICAL POWER PLAN
E-401	ELECTRICAL ROOF PLAN

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EXPIRES: 09/30/2024

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PROJECT
MULTICARE TENANT IMPROVEMENT
INDIGO - PUYALLUP
4505 S MERIDIAN
PUYALLUP, WA 98373

REVISIONS

DATE
2024.03.29

BCRA NO.
22023.00.11

DRAWN BY:

REVIEWED BY:

SHEET TITLE
ELECTRICAL LEGEND, GENERAL NOTES AND SCHEDULES

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SHEET
E-001

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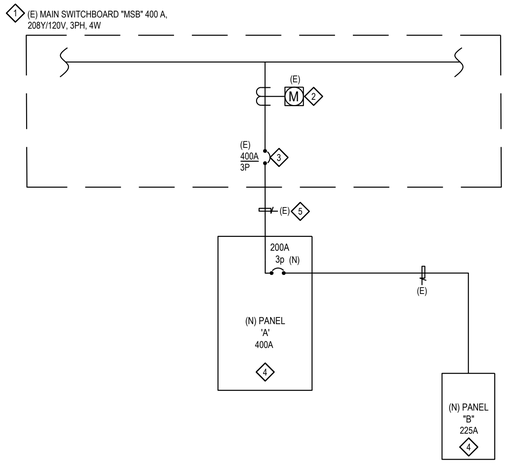
ELECTRICAL SPECIFICATIONS

PART 1	GENERAL
1.01	SCOPE OF WORK: FURNISH AND INSTALL ALL MATERIALS AND EQUIPMENT AND PROVIDE ALL LABOR, TOOLS, TRANSPORTATION, SUPERINTENDENCE AND SERVICES REQUIRED AND NECESSARY TO COMPLETE THE WORK SHOWN ON THE DRAWINGS AND/OR SPECIFIED HEREIN. ALSO INCLUDE ALL OTHER WORK AND MISCELLANEOUS ITEMS, NOT SPECIFICALLY MENTIONED, BUT REASONABLY INFERRED FOR A COMPLETE INSTALLATION INCLUDING ALL ACCESSORIES AND APPURTENANCES REQUIRED FOR TESTING THE SYSTEM. IT IS THE INTENT OF THE DRAWINGS AND SPECIFICATIONS THAT ALL SYSTEMS BE COMPLETE, AND READY FOR OPERATION.
1.02	2 REGULATORY REQUIREMENTS: CODE COMPLIANCE IS MANDATORY. NOTHING IN THESE DRAWINGS AND SPECIFICATION PERMITS WORK NOT CONFORMING TO THESE CODES. WHERE WORK IS SHOWN TO EXCEED MINIMUM CODE REQUIREMENTS, COMPLY WITH DRAWINGS AND SPECIFICATIONS. ALL WORK AND MATERIALS SHALL COMPLY WITH THE LATEST RULES, CODES AND REGULATIONS, INCLUDING, BUT NOT LIMITED TO THE FOLLOWING: A. 2020 NATIONAL ELECTRICAL CODE - NEC. B. 2018 WASHINGTON STATE ENERGY CODE. C. OCCUPATIONAL SAFETY AND HEALTH ACT STANDARD (OSHA). D. NFPA #101: LIFE SAFETY CODE. E. STATE FIRE MARSHALL. F. ALL LOCAL ORDINANCES HAVING JURISDICTION.
1.03	LICENSE, FEES AND PERMITS: ELECTRICAL CONTRACTOR SHALL PAY FOR ALL LICENSES, PERMITS AND INSPECTION FEES REQUIRED BY THE AUTHORITY HAVING JURISDICTION AND SHALL ARRANGE FOR ALL REQUIRED INSPECTIONS.
1.04	SAFETY AND INDEMNITY: THE CONTRACTOR SHALL BE SOLELY AND COMPLETELY RESPONSIBLE FOR CONDITIONS OF THE JOB SITE, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY DURING PERFORMANCE OF WORK. THIS REQUIREMENT WILL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS. NO ACT, SERVICE, DRAWING REVIEW OR CONSTRUCTION REVIEW BY THE OWNER, THE ENGINEERS OR THEIR CONSULTANTS, IS INTENDED TO INCLUDE REVIEW OF THE ADEQUACY OF THE CONTRACTOR'S SAFETY MEASURES, IN, ON, OR NEAR THE CONSTRUCTION SITE.
1.05	DRAWINGS AND SPECIFICATIONS: ALL DRAWINGS AND ALL DIVISIONS OF THESE SPECIFICATIONS SHALL BE CONSIDERED AS A WHOLE AND WORK OF THIS DIVISION SHOWN ANYWHERE THEREIN SHALL BE FURNISHED UNDER THIS DIVISION. DRAWINGS ARE DIAGRAMMATIC AND INDICATE THE GENERAL ARRANGEMENT OF EQUIPMENT AND WIRING. MOST DIRECT ROUTING OF CONDUITS AND WIRING IS NOT ASSURED. EXACT REQUIREMENTS SHALL BE GOVERNED BY CONDITIONS OF THE JOB. CONSULT ALL OTHER DRAWINGS IN PREPARATION OF THE BID. EXTRA LENGTHS OF WIRING OR ADDITION OF PULL OR JUNCTION BOXES, ETC., NECESSITATE BY SUCH CONDITIONS SHALL BE INCLUDED IN THE BID.
1.06	CONDITIONS AT SITE: VISIT SITE OF THE WORK, COMPARE IT WITH THE DRAWINGS AND SPECIFICATIONS AS TO THE CONDITIONS UNDER WHICH WORK IS TO BE PERFORMED, ASCERTAIN AND CHECK ALL CONDITIONS AND ELEVATIONS AND TAKE ALL MEASUREMENTS WHICH MAY AFFECT THE WORK. NO ALLOWANCE SHALL SUBSEQUENTLY BE MADE FOR ANY EXTRA EXPENSE OR CLAIMS DUE TO FAILURE OR NEGLECT UNDER THIS REQUIREMENT TO MAKE SUCH EXAMINATION, INCLUDING EXAMINATION OF RESTRICTED WORKING CONDITIONS OR SUCH OTHER DIFFICULTIES VISUALLY OBSERVED DURING SITE VISIT. CONTRACTOR IS RESPONSIBLE FOR BECOMING COMPLETELY FAMILIAR WITH THE ARCHITECTURAL AND STRUCTURAL CONDITIONS AND LIMITATIONS WHICH WILL EXIST IN THE BUILDING AND TO PROVIDE ALL LABOR, TOOLS AND MATERIALS REQUIRED TO PRODUCE A COMPLETELY CONCEALED INSTALLATION AS INDICATED ON THE PLANS, SPECIFICATIONS, AND REQUIRED BY THE CODE.
1.07	WORKMANSHIP AND CONTRACTOR'S QUALIFICATIONS: ONLY QUALITY WORKMANSHIP WILL BE ACCEPTED. HAPHAZARD OR POOR INSTALLATION WILL BE CAUSE FOR REJECTION OF WORK.
1.08	SHOP DRAWINGS AND MATERIALS LISTS: SUBMIT TO OWNER IN A SINGLE PACKAGE SIX (6) COPIES OF COMPLETE SHOP DRAWINGS AND MATERIALS LIST, AS NOTED BELOW, FOR REVIEW WITHIN FIFTEEN (15) DAYS AFTER AWARD OF CONTRACT. SUBMITTALS REQUIRED AS FOLLOWS: A. WIRING DEVICES: SWITCHES, RECEPTACLES, DEVICE PLATES. B. WIRES, CONNECTORS, TAPES, SPLICES, TERMINATIONS, RACEWAYS, AND ACCESSORIES. C. LIGHTING FIXTURES, LAMPS AND LIGHTING CONTROL EQUIPMENT. D. PANELBOARDS, DISCONNECT SWITCHES, CIRCUIT BREAKERS, ETC.
1.09	SUBSTITUTIONS: ONE OR MORE MAKES OF MATERIALS OR METHODS MAY HAVE BEEN SPECIFIED TO ESTABLISH THE STANDARD OF QUALITY, WORKMANSHIP, FINISH AND DESIGN REQUIRED, BUT OTHER MATERIALS OR METHODS EQUAL IN QUALITY, WORKMANSHIP, FINISH, DESIGN, AND GUARANTEED PERFORMANCE, WILL BE ACCEPTED. HOWEVER, ALL CHANGES AND SUBSTITUTIONS SHALL BE REQUESTED IN LETTER FORM AND SHALL BE ACCOMPANIED WITH A STATEMENT OF THE AMOUNT OF MONEY TO BE RETURNED TO THE CONTRACT IF THE SUBSTITUTION IS PERMITTED. NO WORK INVOLVING MATERIALS SUBMITTED FOR SUBSTITUTION SHALL PROCEED UNTIL WRITTEN ACCEPTANCE IS RECEIVED FROM THE OWNER. THE OWNER IS THE SOLE JUDGE OF ACCEPTABILITY OF PREFERRED SUBSTITUTIONS. IF A SUBSTITUTION ITEM IS PERMITTED, AND ANY RE-DESIGN EFFORT IS THEREBY NECESSITATED, THE REQUIRED REDESIGN SHALL BE AT THE CONTRACTOR'S EXPENSE.
1.10	COORDINATION: COORDINATE WORK WITH OTHER TRADES TO AVOID CONFLICT AND TO PROVIDE CORRECT ROUGH-IN AND CONNECTION FOR EQUIPMENT FURNISHED UNDER OTHER TRADES THAT REQUIRE ELECTRICAL CONNECTIONS. INFORM CONTRACTORS OF OTHER TRADES OF THE REQUIRED ACCESS TO AND CLEARANCES AROUND ELECTRICAL EQUIPMENT TO MAINTAIN SERVICE ABILITY AND CODE COMPLIANCE. VERIFY EQUIPMENT DIMENSIONS AND REQUIREMENTS WITH PROVISIONS SPECIFIED UNDER THIS SECTION. CHECK ACTUAL JOB CONDITIONS BEFORE FABRICATING WORK. REPORT NECESSARY CHANGES IN TIME TO PREVENT NEEDLESS WORK. CHANGES OR ADDITIONS, SUBJECT TO ADDITIONAL COMPENSATION, WHICH ARE MADE WITHOUT WRITTEN AUTHORIZATION AND AN AGREED PRICE, SHALL BE AT THE CONTRACTOR'S RISK AND EXPENSE.
1.11	CUTTING AND PATCHING: ALL CUTTING AND PATCHING REQUIRED FOR WORK OF THIS DIVISION IS INCLUDED HEREIN. COORDINATION WITH GENERAL CONTRACTOR AND OTHER TRADES IS IMPERATIVE. CONTRACTOR SHALL BEAR THE RESPONSIBILITY FOR AND THE ADDED EXPENSE OF ADJUSTING FOR IMPROPER HOLES, SUPPORTS, ETC.
1.12	ACCEPTANCE DEMONSTRATION: UPON COMPLETION OF THE WORK, AT A TIME TO BE DESIGNATED BY THE OWNER, THE CONTRACTOR SHALL DEMONSTRATE FOR THE OWNER THE OPERATION OF THE ELECTRICAL INSTALLATION, INCLUDING ANY AND ALL SPECIAL ITEMS INSTALLED BY HIM OR INSTALLED UNDER HIS SUPERVISION. PROPERLY SET AUTOMATIC TIME SWITCHES TO PERFORM SWITCHING OPERATIONS IN ACCORDANCE WITH SCHEDULES PROVIDED BY THE OWNER'S REPRESENTATIVE. AND DEMONSTRATE (USING THE MANUFACTURER'S OPERATING INSTRUCTIONS) HOW TO OVERRIDE AND/OR TEST TIME SWITCHES PROGRAMMING.
1.13	RECORD DRAWINGS, EQUIPMENT DATA: MAINTAIN ONE SET OF CLEAN WORKING DRAWINGS AT THE JOB SITE AND ENTER DAILY SUCH "AS-BUILT" INFORMATION AS FEEDER AND SERVICE ROUTES, PULL BOX LOCATIONS AND CHANGES IN LAYOUT OR ARRANGEMENT WHICH OCCUR DURING CONSTRUCTION. DELIVER COMPLETED DRAWINGS TO THE OWNER. DELIVER TO THE OWNER'S REPRESENTATIVE THREE COPIES OF DATA SHEETS OR OTHER CURRENT MANUFACTURERS' PUBLICATIONS FOR EACH ITEM OF ELECTRICAL EQUIPMENT FURNISHED FOR THE PROJECT INCLUDING AT LEAST THESE DATA: A. TECHNICAL DESCRIPTION AND REPLACEABLE PARTS LIST. B. PHYSICAL DESCRIPTION AND INSTALLATION INSTRUCTIONS. C. USER'S MANUAL AND OPERATING INSTRUCTIONS. D. MANUFACTURER'S WARRANTY.
1.14	CLEAN-UP: RID THE PREMISES OF SCRAP MATERIALS, TRASH AND DEBRIS BOTH DURING CONSTRUCTION AND AT COMPLETION OF THE PROJECT. LEAVE THE BUILDING AND SURROUNDING AREA IN A CLEAN AND ORDERLY CONDITION.
1.15	GUARANTEE: GUARANTEE THE INSTALLATION FREE FROM DEFECTS OF WORKMANSHIP AND MATERIALS FOR A PERIOD OF ONE YEAR AFTER DATE OF CERTIFICATION OF FINAL PAYMENT AND PROMPTLY REMEDY ANY DEFECTS DEVELOPING DURING THIS PERIOD, WITHOUT CHARGE.
1.16	TEMPORARY SERVICES: A. PROVIDE ADEQUATE AND SAFE TEMPORARY ELECTRICAL POWER AND LIGHTING THROUGHOUT THE CONSTRUCTION AND FINISHING OF THE PREMISES. IN ADDITION TO SPECIAL OR UNUSUAL REQUIREMENTS, PROVIDE AT LEAST THESE ITEMS: 1. THREE (3) 20-AMP CIRCUITS FOR CONSTRUCTION POWER TOOLS. PROVIDE GFI TEMPORARY CIRCUITS WITH COVERPLATES TO MEET OSHA REQUIREMENTS. 2. THREE OR MORE LIGHT STRINGS SUSPENDED APPROXIMATELY ONE FOOT BELOW THE HEIGHT OF FINISH CEILING WITH LAMPS SPACED NOT MORE THAN TWELVE FEET ON CENTERS. STRINGS SHALL BE RUN THE LENGTH OF THE STORE SPACE PARALLEL TO THE DEMISING WALLS, WITH ONE STRING WITHIN EIGHT FEET OF EACH WALL AND ONE (OR MORE) INTERMEDIATE STRING(S) ARRANGED TO LIMIT THE SPACING BETWEEN ROWS TO SIXTEEN FEET OR LESS. 3. FLOOD LIGHTING AND TASK LIGHTING FOR PAINTING AND OTHER FINISH WORK. B. WHERE SCOPE INCLUDES THE REMOVAL OF EXTERIOR LIGHTING, CONTRACTOR SHALL PROVIDE TEMPORARY EXTERIOR LIGHTING UNTIL THE NEW EXTERIOR LIGHTING HAS BEEN ACCEPTED BY THE OWNER. TEMPORARY EXTERIOR LIGHTING SHALL COMPLY WITH IESNA STANDARDS FOR SECURITY LIGHTING. C. WHERE SCOPE INCLUDES THE DISABLING OF A FIRE ALARM SYSTEM, CONTRACTOR SHALL PROVIDE A FIRE WATCH. FIRE WATCH SHALL COMPLY WITH NFPA AND LOCAL FIRE MARSHAL REQUIREMENTS. D. WHEN PERMANENT ELECTRICAL SERVICE IS OPERABLE, DISCONNECT AND REMOVE FROM THE PREMISES THE MATERIALS AND EQUIPMENT USED FOR TEMPORARY POWER AND LIGHTING. RESTORE MODIFICATIONS AND REPAIR DAMAGE CAUSED BY THE INSTALLATION, USE OR REMOVAL OF TEMPORARY SERVICE PROVISIONS.

PART 2	PRODUCTS
2.01	MATERIAL APPROVAL: ALL MATERIALS MUST BE NEW AND BEAR UNDERWRITER'S LABORATORIES LABEL. MATERIALS THAT ARE NOT COVERED BY UL TESTING STANDARDS SHALL BE TESTED AND APPROVED BY AN INDEPENDENT TESTING LABORATORY OR A GOVERNMENTAL AGENCY. MATERIAL NOT IN ACCORDANCE WITH THESE SPECIFICATIONS MAY BE REJECTED EITHER BEFORE OR AFTER INSTALLATION.
2.02	CONDUITS AND OTHER RACEWAYS: A. RIGID STEEL: HOT-DIPPED GALVANIZED. B. INTERMEDIATE METAL CONDUIT (IMC): HOT-DIPPED GALVANIZED. C. ELECTRICAL METALLIC TUBING (EMT): ELECTRO-GALVANIZED. D. RIGID NON METALLIC CONDUIT (PVC SCHEDULE 40). E. WIREWAY: CODE GAUGE STEEL, WITH KNOCKOUTS AND HINGED COVER, CORROSION RESISTANT GRAY BAKED ENAMEL FINISH. F. PROVIDE FITTINGS AND ACCESSORIES APPROVED FOR THE PURPOSE EQUAL IN ALL RESPECTS TO THE CONDUIT OR RACEWAY. EMT CONNECTORS AND COUPLINGS SHALL BE STEEL SETSCREW TYPE INDOORS AND STEEL COMPRESSION TYPE IN WET LOCATIONS AND OUTDOORS.
2.03	WIRES AND CABLES: A. FOR POWER AND LIGHTING SYSTEM 600V OR LESS: 1. CONDUCTOR: MINIMUM SIZE #12 AWG. A. #12 AND #10 AWG SOLID COPPER. B. #8 AWG AND LARGER SHALL BE STRANDED COPPER. 2. INSULATION TYPE: A. #12 TO #1 AWG: THWN FOR WET OR UNDERGROUND AND THHN FOR DRY LOCATIONS. B. #1/0 THROUGH #4/0 AWG: XHHW (55 MILS). C. #250 MCM AND LARGER: XHHW (65 MILS). D. GROUNDING WIRE: TW. E. METAL CLAD (MC) CLABLES. B. CONDUCTORS ARE MADE FROM COPPER EXCEPT #8 OR LARGER MAY BE ALUMINUM. SIZES 14AWG, 12 AWG AND 10 AWG MAY BE EITHER SOLID OR STRANDED, 8AWG AND LARGER ARE STRANDED. THE CONDUCTORS ARE CONSTRUCTED WITH THWN/THWN OR XHHW-2 INSULATION RATED FOR 90°C DRY OR WET AT 600 VOLTS MAX. A GROUNDING CONDUCTOR IS CABLED WITH THE PHASE CONDUCTORS. INTERLOCKED ALUMINUM ARMOR. C. FOR SIGNAL AND COMMUNICATIONS CIRCUIT: SPECIAL CABLES SHALL BE AS SPECIFIED ON DRAWINGS. D. ACCEPTABLE PRODUCTS: GENERAL ELECTRIC, ANACONDA, OKONITE, PARANITE OR TRIANGLE PRODUCTS CONFORMING OR EXCEEDING APPLICABLE IPCEA STANDARDS.
2.04	OUTLET BOXES, JUNCTION AND PULL BOXES: A. OUTLET BOXES: 4" SQUARE X 1-1/2" DEEP (OR LARGER) GALVANIZED SHEET STEEL KO-TYPE WITH PLASTER RING AND COVER FOR GENERAL INTERIOR USE AND CAST METAL TYPE FS OR FD WITH MATCHING SCREW COVERS FOR EXTERIOR AND EXPOSED INTERIOR LOCATIONS (GASKETED IN DAMP OR WET LOCATIONS). B. JUNCTION BOXES SHALL BE SAME AS OUTLET BOXES UP TO 42 CU. IN. AND CODE GAUGE STEEL IN LARGER SIZES WITH SURFACE OR FLUSH-TYPE SCREW-MOUNTED TRIM COVERS, BOTH BOXES AND COVERS INHIBITOR-PRIMED AND PAINTED INSIDE OUT. C. PULL BOXES SHALL BE SAME AS JUNCTION BOXES UNLESS INDICATED OTHERWISE ON THE DRAWINGS, WITH COVERS. D. TELEPHONE OUTLET BOXES SHALL BE THE TYPE AND SIZE REQUIRED BY THE SERVING TELEPHONE COMPANY BUT NOT SMALLER THAN 4-11/16" SQUARE X 2-1/8" DEEP WITH SINGLE-GANG RING AND SIERRA #S-754N SPLIT PLATE BUSHING. E. UNDERGROUND AND SITE JUNCTION BOXES, HANDHOLES, AND MANHOLES 1. SHALL BE MADE UP OF PRECAST CONCRETE WITH TRAFFIC RATED STEEL COVERS. EXTENSIONS SHALL BE PROVIDED AS NECESSARY TO MAIN REQUIRED COVERAGE FOR DUCT BANKS. 2. PROVIDE 10" X 17" (MIN) FOR PULLBOXES, 36" X 60" (MIN) FOR HANDHOLES, AND 6'X8'X6' (MIN) MANHOLES.
2.05	WIRING DEVICES AND PLATES: A. UNLESS OTHERWISE INDICATED, ALL WIRING DEVICES AND COVER PLATES SHALL BE FURNISHED AND INSTALLED IN COLOR TO MATCH FINISH SURFACE WHERE IT IS LOCATED ON, I.E., DARK BROWN, BEIGE, WHITE OR STAINLESS STEEL. B. WIRING DEVICES AND PLATES SHALL BE LISTED FOR SPECIFIC USE. C. ALL POWER RECEPTACLES AND SWITCHES FOR GENERAL PURPOSE CIRCUITS SHALL BE NEMA SPECIFICATION GRADE, RATED AS FOLLOWS: 1. GENERAL PURPOSE RECEPTACLES: NEMA 5-15R OR 5-20R 2. DEDICATED RECEPTACLES: NEMA 5-20R
2.06	CONDUIT HANGERS: FOR INDIVIDUAL CONDUIT RUNS NOT DIRECTLY FASTENED TO THE STRUCTURE, USE ROD HANGERS MANUFACTURED BY CADDY, UNISTRUT OR POWERSTRUT. FOR MULTIPLE CONDUIT RUNS, USE UNISTRUT OR POWERSTRUT TRAPEZE TYPE CONDUIT SUPPORT DESIGNED FOR MAXIMUM DEFLECTION NOT GREATER THAN 1/8". ROD HANGERS SHALL BE 3/8" MINIMUM DIAMETER.
2.07	WIRE CONNECTORS: FOR WIRE SIZES #8 AWG AND SMALLER: INSULATED PRESSURE TYPE (WITH LIVE SPRING) RATED 105 DEGREES C, 600V, FOR BUILDING WIRING AND 1000V IN SIGNS OR FIXTURES, SCOTCHLOK OR IDEAL. FOR WIRE SIZE #6 AWG AND LARGER: T & B OR EQUIVALENT COMPRESSION TYPE WITH 3M #33+ OR PLYMOUTH "SLIPKNOT GREY" TAPE INSULATION.
2.08	PANELBOARDS: A. UNLESS OTHERWISE NOTED ACCEPTABLE MANUFACTURERS ARE CUTLER HAMMER, SQUARE D, SIEMENS, GENERAL ELECTRIC, EATON OR APPROVED EQUAL. ELECTRICAL EQUIPMENT ARE BASED ON THE FOLLOWING: 1. LIGHTING AND APPLIANCE PANELBOARDS - SQUARE D NF AND NQOD 2. POWER PANELBOARDS - SQUARE D, I LINE A. CONSTRUCTION: CABINETS SHALL BE OF CODE GAUGE, GALVANIZED STEEL, SURFACE OR FLUSH MOUNTED AS INDICATED. DOORS SHALL BE OF COLD-ROLLED STEEL WITH CONCEALED HINGES AND FLUSH CATCH AND LOCK. ALL PANELS SHALL BE KEYED ALIKE. PANELS LOCATED ADJACENT TO EACH OTHER SHALL HAVE IDENTICALLY SIZED ENCLOSURE AND TRIMS. MINIMUM PANEL WIDTH SHALL BE 20". FINISH EXPOSED PART WITH ONE COAT OF PRIMER AND ONE COAT OF LIGHT GREY ENAMEL SUITABLE FOR OVER PAINTING IN FIELD IF DESIRED. B. BUS BARS: PROVIDE GROUND BLOCK WITH FULL COMPLEMENT OF TERMINALS IN ADDITION TO INSULATED NEUTRAL BUS. FUTURE BREAKER SPACES SHALL HAVE COMPLETE PROVISION INCLUDING BUSSES AND CONNECTING HARDWARE. C. CIRCUIT BREAKERS: SHALL BE QUICK-MAKE, QUICK-BREAK, MOLDED CASE TYPE: i. 120/240 VOLT PANELS: SHALL BE SQUARE D TYPE "QOB" LINE, BOLT-ON TYPE, WITH MINIMUM SYMMETRICAL INTERRUPTING CAPACITY AS SHOWN. ii. PROVIDE MULTI-POLE UNITS WITH COMMON TRIP ELEMENT. iii. CIRCUIT BREAKERS USED ON "ON-OFF" CONTROL OF FLUORESCENT LIGHTING (PANELBOARD SWITCHING) SHALL BE UNDERWRITERS' LABORATORIES LISTED AND MARKED "SWD" TO INDICATE THEIR SUITABILITY. B. IDENTIFICATION: PROVIDE SCREWED-ON (NO ADHESIVES) BAKELITE OR PHOTO-ETCHED METALLIC NAMEPLATE IDENTIFICATION ON OUTSIDE OF EACH PANEL SHOWING PANEL DESIGNATION, VOLTAGE AND PHASE IN MINIMUM 1/8" HIGH LETTERS. EACH PANEL SHALL CONTAIN A METAL-FRAMED CIRCUIT DIRECTORY INSIDE COVER, WITH PLASTIC PROTECTOR. C. COMPLETE SHOP DRAWINGS ARE REQUIRED. DIMENSIONS SHALL MATCH FLOOR PLANS AND ELEVATIONS.
2.09	LIGHTING: A. FURNISH AND INSTALL ALL FIXTURES COMPLETE, INCLUDING LAMPS AND DRIVER READY FOR SERVICE. B. SUPPORTS: PROPER SUPPORTS AND MOUNTING ACCESSORIES, SUCH AS HANGERS, STEMS, YOKES, PLASTER FRAMES, ETC. SHALL BE PROVIDED AS REQUIRED BY THE TYPE OF CEILING INSTALLED. WHERE SWIVEL CANOPIES OR BALL ALIGNERS ARE SPECIFIED, THEY SHALL CAUSE FIXTURE TO HANG PLUMB REGARDLESS OF CEILING SLOPE. C. FIXTURE DESIGNATION: FIXTURE TYPES ARE DESIGNATED ON DRAWINGS. WHERE ONLY ONE FIXTURE DESIGNATION IS SHOWN, IT APPLIES TO ALL FIXTURES IN THAT ROOM OR AREA. FOR EXACT FIXTURE COUNT AND LOCATION REFER TO REFLECTED CEILING PLAN.
2.1000	DISCONNECT SWITCHES: A. SAFETY SWITCHES: HEAVY DUTY TYPE, 240V, HORSEPOWER RATED FOR MOTORS, FUSED OR NON-FUSED AS REQUIRED. B. PROVIDE FUSE AS SHOWN IN CONSTRUCTION DOCUMENTS. MOUNT IN ENCLOSURE WITH NEMA RATING AS REQUIRED FOR THE SPECIFIC APPLICATION. C. ACCEPTABLE MANUFACTURERS: GENERAL ELECTRIC, SQUARE D OR WESTINGHOUSE.

PART 3	EXECUTION
3.01	GENERAL: A. ELECTRIC SYSTEM LAYOUTS INDICATED ON THE DRAWINGS ARE GENERALLY DIAGRAMMATIC AND SHALL BE FOLLOWED AS CLOSELY AS ACTUAL CONSTRUCTION AND WORK OF OTHER TRADES WILL PERMIT. GOVERN EXACT ROUTING OF CABLE AND WIRING AND THE LOCATIONS OF OUTLETS BY THE STRUCTURE AND EQUIPMENT SERVED. TAKE ALL DIMENSIONS FROM ARCHITECTURAL DRAWINGS. B. CONSULT ALL OTHER DRAWINGS, VERIFY SCALES AND REPORT ANY DIMENSIONAL DISCREPANCIES OR OTHER CONFLICTS WITH OWNER BEFORE SUBMITTING BID. C. ALL HOME RUNS TO PANELBOARDS ARE INDICATED AS STARTING FROM THE OUTLET NEAREST THE PANEL AND CONTINUING IN THE GENERAL DIRECTION OF THAT PANEL. CONTINUE SUCH CIRCUITS TO THE PANEL AS THOUGH THE ROUTES WERE COMPLETELY INDICATED. TERMINATE HOMERUNS OF SIGNAL, ALARM, AND COMMUNICATION SYSTEMS IN A SIMILAR MANNER. D. AVOID CUTTING AND BORING HOLES THROUGH STRUCTURE OR STRUCTURAL MEMBERS WHEREVER POSSIBLE. OBTAIN PRIOR APPROVAL OF OWNER AND CONFORM TO ALL STRUCTURAL REQUIREMENTS WHEN CUTTING OR BORING THE STRUCTURE IS NECESSARY AND PERMITTED. E. FURNISH AND INSTALL ALL NECESSARY HARDWARE, HANGERS, BLOCKING, BRACKETS, BRACING, RUNNERS, ETC. REQUIRED FOR EQUIPMENT SPECIFIED UNDER THIS SECTION. INSTALLATION SHALL MEET SEISMIC 4 REQUIREMENTS. F. PROVIDE NECESSARY BACKING REQUIRED TO INSURE RIGID MOUNTING OF OUTLET BOXES. G. ELECTRICAL INSTALLATION IN PUBLIC LOCATIONS SHALL BE ACCESSIBLE AND INSTALLATION SHALL COMPLY WITH AMERICAN DISABILITIES ACT (ADA) REQUIREMENTS. ELECTRICAL INSTALLATION SHALL COMPLY WITH APPLICABLE CODES AS LISTED IN CONSTRUCTION DOCUMENTS.
3.02	WIRING METHODS: A. IN CONCEALED SPACES WHERE THE USE OF "ROMEX" AND "BX" WIRING IS PERMITTED BY ALL APPLICABLE CODES AND REGULATIONS, PROVIDE FACTORY-FABRICATED, PRE-ASSEMBLED, UL LABELED TYPE "NMC" AND "AC" CABLES AS PREFERRED WIRING METHOD FOR BRANCH CIRCUITS IN RESIDENTIAL UNITS. A GROUNDING CONDUCTOR SHALL BE PROVIDED IN EACH CABLE. B. WHEN CONDITIONS DETERMINED IN "A" ABOBE ARE NOT MET, INSTALL ALL WIRING IN RACEWAY, OR USE MC CABLE WHERE APPROVED BY ALL APPLICABLE CODES AND REGULATIONS. CONDUIT SHALL BE RIGID STEEL, IMC OR EMT AS FOLLOWS: 1. ABOVE GROUND: USE RIGID STEEL, IMC OR EMT. A. WET LOCATIONS: RIGID STEEL OR IMC ONLY. B. LOCATIONS SUBJECT TO MECHANICAL INJURY (0 TO 3FT ABOVE FINISH FLOOR): RIGID STEEL OR IMC ONLY. C. DRY LOCATIONS AND NOT SUBJECT TO MECHANICAL INJURY: EMT, IMC OR RIGID STEEL CONDUIT. 2. UNDERGROUND/UNDERFLOOR: PVC - SCHEDULE 40 WITH RIGID STEEL AT LAST TRANSITION TO ABOVE GROUND. 3. IN SLAB & INSIDE WALLS: PVC SCHEDULE 40. B. USE FLEXIBLE CONDUITS IN THE FOLLOWING APPLICATIONS: 1. FINAL CONNECTIONS TO MOTOR. 2. FINAL CONNECTIONS INTO AND OUT OF THE TRANSFORMER. 3. FINAL CONNECTIONS TO VIBRATING EQUIPMENT. 4. INTER-CONNECTIONS BETWEEN ALL LIGHT FIXTURES (NOT TO INCLUDE HOMERUN FROM FIXTURE OR DEVICE TO PANELBOARD, WHICH MUST BE RIGID). 5. FINAL CONNECTIONS WHERE RIGID CONDUIT IS NOT PRACTICAL. 6. IN WALLS (FOR LIGHT SWITCHES AND 120V POWER RECEPTACLES AND HVAC CONTROL EQUIPMENT). C. FLEXIBLE METALLIC CONDUIT MUST BE THE SAME SIZE AS THE RIGID CONDUIT TO WHICH IT IS CONNECTED. D. THE CONNECTION TO OUTDOOR EQUIPMENT MUST BE WEATHERPROOF, I.E. LIQUIDTIGHT OR SEALTIGHT. E. MINIMUM SIZE OF CONDUIT SHALL BE 1/2" FOR INDIVIDUAL LIGHTING FIXTURE CONNECTIONS OR TO INDIVIDUAL LIGHT SWITCHES IF APPROVED BY ALL APPLICABLE CODES. MINIMUM SIZE FOR ALL OTHER LOCATIONS SHALL BE 3/4". IF HVAC CONTROL WIRING IS REQUIRED TO BE RUN IN CONDUIT, IT SHALL BE A 3/4" MINIMUM, UNLESS OTHERWISE NOTED ON DRAWINGS. ALL IN/UNDER FLOOR CONDUITS SHALL BE 3/4" MINIMUM SIZE. F. USE OF RIGID NON METALLIC CONDUIT IS LIMITED TO OUTDOOR, UNDERGROUND UP TO THE LAST PULLBOX PRIOR TO ENTERING OR TRANSITIONING TO ABOVE GROUND. TRANSITION SHALL BE TAPED WRAPPED RIGID STEEL CONDUIT.
3.03	INSTALLATION OF CONDUITS: A. GENERAL: 1. RUN ALL CONDUIT CONCEALED UNLESS OTHERWISE NOTED OR SHOWN. 2. RUN ALL CONDUIT PARALLEL TO OR AT RIGHT ANGLES TO CENTER LINES OF COLUMNS AND BEAMS. 3. CONDUITS ABOVE CEILINGS SHALL NOT OBSTRUCT REMOVAL OF CEILING TILES, LIGHTING FIXTURES, AIR DIFFUSERS, ETC. 4. CONDUITS SHALL NOT CROSS ANY DUCT SHAFT OR AREA DESIGNATED AS FUTURE DUCT SHAFT HORIZONTALLY. CONDUIT RISERS WHEN ALLOWED IN DUCT SHAFT MUST BE COORDINATED WITH MECHANICAL WORK TO AVOID ANY CONFLICT. 5. X-RAY ALL PROPOSED CONDUIT PENETRATIONS THROUGH CONCRETE SLAB PRIOR TO BEGINNING OF WORK. 6. BENDS IN ANY ONE RUN SHALL NOT EXCEED A TOTAL OF 270°. B. CONDUIT SUPPORTS: 1. SUPPORT CONDUITS WITH UNDERWRITER'S LABORATORIES LISTED STEEL CONDUIT SUPPORTS AT INTERVALS REQUIRED BY THE NATIONAL ELECTRIC CODE. WIRES OR SHEET METAL STRIPS ARE NOT ACCEPTABLE FOR CONDUIT SUPPORT. USE CONDUIT HANGERS FOR ALL CONDUITS NOT DIRECTLY FASTENED TO STRUCTURE AND FOR ALL MULTIPLE CONDUIT RUNS. DO NOT ATTACH ANY CONDUIT TO MECHANICAL DUCTS OR PIPES. 2. INDIVIDUAL CONDUITS 1/2" AND 3/4" SIZE FOR LIGHTING MAY BE SUPPORTED FROM CEILING SUPPORT WIRES WITH CADDY CLIPS ONLY IF ACCEPTABLE TO LOCAL CODE. ONLY ONE CONDUIT IS PERMITTED TO BE ATTACHED TO ANY CEILING SUPPORT WIRE. HANG SUCH CONDUIT SO AS NOT TO AFFECT LEVEL OF CEILING. 3. AVOID ATTACHING CONDUIT TO FAN PLENUMS. WHEN IT IS NECESSARY TO SUPPORT CONDUIT FROM FAN PLENUM, PROVIDE A LENGTH OF FLEXIBLE CONDUIT BETWEEN PORTION ATTACHED FAN PLENUM AND PORTION ATTACHED TO THE BUILDING TO MINIMIZE TRANSMISSION OF VIBRATION TO THE BUILDING STRUCTURE. C. CONDUIT PENETRATION: 1. PENETRATING FIRE RATED FLOOR: SEAL PENETRATION WITH FIRE RETARDANT SEALANT SPECIFIED HEREIN, U.L. NO. CAJ 5048, F RATING-2 HR, T RATING-2 HR. 2. PENETRATING ROOF OR EXTERIOR WALL: AVOID PENETRATING ROOF OR EXTERIOR WALL WHERE POSSIBLE. WHERE PENETRATIONS ARE NECESSARY, BUILDING WEATHERPROOF INTEGRITY MUST BE PRESERVED. 3. PENETRATING SOUND INSULATED OR AIR PLENUM WALL: INSTALL CONDUIT IN CONDUIT SLEEVE AND SEAL PENETRATION AS DETAILED ON THE DRAWINGS. 4. PENETRATING NON-FIRE RATED DRY WALL: CONDUIT SLEEVES ARE NOT REQUIRED. PENETRATIONS MUST BE SEALED WITH PLASTER PRIOR TO PAINTING. PENETRATIONS MADE AFTER WALL FINISH IS APPLIED MUST BE AS SMALL AS POSSIBLE AND PROVIDED WITH ESCUTCHEONS, ONE ON EACH SIDE OF WALL. 5. PENETRATING SUSPENDED CEILING: CUT HOLE AS SMALL AS POSSIBLE TO PERMIT CONDUIT PENETRATION. PROVIDE ESCUTCHEON FOR EACH CONDUIT BELOW CEILING.
3.04	INSTALLATION OF WIRES: A. PULL NO WIRE INTO ANY PORTION OF THE CONDUIT SYSTEM UNTIL ALL CONSTRUCTION WORK WHICH MIGHT DAMAGE THE WIRE HAS BEEN COMPLETED. B. INSTALL ALL WIRE CONTINUOUS FROM OUTLET TO OUTLET OR TERMINAL TO TERMINAL. SPLICES IN CABLES WHEN REQUIRED SHALL BE MADE IN HANDHOL

SINGLE LINE DIAGRAM



GENERAL NOTES

#	DESCRIPTION
1	ALL EQUIPMENT IS EXISTING UNLESS SHOWN AS NEW (N). FIELD VERIFY ALL EXISTING CONDITIONS.
2	ALL WIRE IS COPPER. REFER TO SPECIFICATION FOR CONDUCTION INSULATION TYPE.
3	ONLY U.L. LISTED EQUIPMENT SHALL BE USED.
4	RATING OF ALL OVERCURRENT PROTECTION DEVICES, SWITCHES AND MAGNETIC STARTERS TO BE VERIFIED WITH NAMEPLATE RATING OF ASSOCIATED UNIT AND TO BE REVISED AS REQUIRED.
5	CONTRACTOR TO FIELD VERIFY ALL EXISTING CONDITIONS BEFORE ANY WORK OR BID. CONTRACTOR SHALL CONFIRM ACCURACY OF THESE DRAWINGS BEFORE START OF THE PROJECT AND CONTACT ENGINEER AND ARCHITECT IN CASE OF ANY DISCREPANCY. PERFORM ANY NECESSARY REPAIRS AND REPLACEMENTS RELATED TO EXISTING PANELS UNDER THIS SCOPE OF WORK.
6	ALL ELECTRICAL EQUIPMENT SHALL BE FIELD MARKED WARNING QUALIFIED PERSONAL OF THE POTENTIAL ARC FLASH HAZARDS AND THE APPROPRIATE PPE REQUIRED, PER 02 NEC ART. 110-16 AND NFPA-70E-200.

SHEET NOTES

#	DESCRIPTION
1	EXISTING MAIN SWITCHBOARD "MSB". RATING AS SHOWN.
2	EXISTING UTILITY METER TO REMAIN. NO WORK REQUIRED.
3	EXISTING CIRCUIT BREAKER TO REMAIN. RATING AS SHOWN. PROVIDE NAMEPLATE AND MARKINGS WITH NEW "INDIGO CARE" NAMEPLATE.
4	PROVIDE NEW PANEL. PROVIDE TYPEWRITTEN UPDATED SCHEDULE UPON COMPLETION OF THIS PROJECT. FIELD VERIFY PANEL CONDITION AND RATINGS BEFORE COMMENCING WORK. SEE PANEL SCHEDULE.
5	EXISTING FEEDER TO REMAIN. NO WORK REQUIRED.

PANEL SCHEDULES

(N) PANEL 'A'

VOLTAGE: 120/208 | WIRE: 4 | MOUNTING: SURFACE | NOTES:
BUS RATING: 400A | PHASE: 3 | AIC RATING: 10K
MAIN REQUIREMENT: MLO | TYPE: 1 | CONDITION: NEW

CKT#	NOTES	LOAD	CB P	CB T	LOAD DESCRIPTION	LOAD KVA	PHASE	LOAD KVA	LOAD DESCRIPTION	CB P	CB T	LOAD	NOTES	CKT#
1	*	C	1	20	(E)EXTERIOR LIGHT	0.50	A	2.39	(E)RTU-1	3	35	ML	*	2
3	*		1	20	SPARE		B	2.39	-	-	-	ML	*	4
5	*		1	20	SPARE		C	2.39	-	-	-	ML	*	6
7	*	M	1	20	(E)EH--1	0.80	A	2.39	(E)RTU-2	3	35	M	*	8
9	*	D	1	20	(E)FACP	0.20	B	2.39	-	-	-	M	*	10
11	*	G	1	20	(E)REC_ROOF	0.36	C	2.39	-	-	-	M	*	12
13		D	3	100	X-RAY MACHINE GENERATOR	9.60	A	2.39	(E)RTU-3	3	35	M	*	14
15		D	-	-	-	9.60	B	2.39	-	-	-	M	*	16
17		D	-	-	-	9.60	C	2.39	-	-	-	M	*	18
19		D	1	20	ACCESS CONTROL SYSTEM	0.50	A	2.39	(E)RTU-4	3	35	M	*	20
21		D	1	20	SOUND SYSTEM	0.50	B	2.39	-	-	-	M	*	22
23		G	1	20	REC_OM REGISTRATION	0.72	C	2.39	-	-	-	M	*	24
25		G	1	20	REC_OM REGISTRATION	0.36	A	0.36	REC_COPY ROOM	1	20	G		26
27		G	1	20	REC_OM LOUNGE	0.36	B	0.36	REC_COPY ROOM	1	20	G		28
29		G	1	20	REC_WELLNESS SUITE	0.36	C	0.36	REC_COPY ROOM	1	20	G		30
31		G	1	20	REC_WELLNESS SUITE	0.36	A	0.36	REC_POCT ROOM	1	20	G		32
33		G	1	20	REC_TECHNOLOGY SUITE	0.36	B	0.36	REC_POCT ROOM	1	20	G		34
35		G	1	20	REC_TECHNOLOGY SUITE	0.54	C	0.60	REC_POCT ROOM_REFRIGERATOR	1	20	G	GB	36
37		D	1	20	REC_RACK IT ROOM	0.36	A	0.60	REC_POCT ROOM_REFRIGERATOR	1	20	G	GB	38
39		D	1	20	REC_RACK IT ROOM	0.50	B	0.36	REC_UC CARE TEAM	1	20	G		40
41	GB	G	1	20	REC_JANITOR ROOM	0.50	C	0.36	REC_UC CARE TEAM	1	20	G		42
43		G	1	20	REC_HALL 122,123,125	0.54	A	0.36	REC_UC CARE TEAM	1	20	G		44
45		G	1	20	REC_OM CARE TEAM	0.36	B	0.36	REC_UC CARE TEAM	1	20	G		46
47		G	1	20	REC_OM CARE TEAM	0.36	C	0.36	REC_UC CARE TEAM	1	20	G		48
49		G	1	20	REC_OM CARE TEAM	0.36	A	0.36	REC_OM OFFICE 1	1	20	G		50
51		G	1	20	REC_OM CARE TEAM	0.36	B	0.36	REC_OM OFFICE 2	1	20	G		52
53		G	1	20	REC_OM CARE TEAM	0.36	C	0.36	REC_DRUG TESTING SUITE	1	20	G		54
55		M	2	70	DH-1	3.00	A	0.53	ERV-4	2	15	M		56
57		M	-	-	-	3.00	B	0.53	-	-	-	M		58
59		M	2	70	DH-2	3.00	C		SPACE					60
61		M	-	-	-	3.00	A	18.91	PANEL B	3	200			62
63					SPACE		B	18.00	-	-	-			64
65					SPACE		C	20.86	-	-	-			66

CONNECTED LOAD:

PHASE A	50.42	KVA
PHASE B	45.13	KVA
PHASE C	48.26	KVA
TOTAL	143.81	KVA

NOTES
GB - PROVIDE GFCI TYPE BREAKER.
*** -- EXISTING EQUIPMENT CONNECTED TO THIS PANEL**

DEMAND LOAD CALCULATION

DEMAND LOAD	SUBTOTAL	NEC DEMAND FACTOR	
CONTINUOUS LOAD (C)	**21.37**	125%	26.71
DEDICATED LOAD (D)	**34.50**	100%	34.50
GENERAL RECEPTACLE (G)	**23.12**	100% of 1st 10KVA & 50% of remaining	16.56
KITCHEN EQUIPMENT (K)	**3.16**	100%	0.00
MOTOR LOAD (M)	**61.66**	125% of largest motor + 100% remaining	63.45
		TOTAL DEMAND KVA	141.23
		AMPS @ 120/208V, 3 PHASE, 4WIRE:	**392.01**
			(TOTAL A+B)

(N) PANEL 'B'

VOLTAGE: 120/208 | WIRE: 4 | MOUNTING: SURFACE | NOTES:
BUS RATING: 225A | PHASE: 3 | AIC RATING: 10K
MAIN REQUIREMENT: MLO | TYPE: 1 | CONDITION: NEW

CKT#	NOTES	LOAD	CB P	CB T	LOAD DESCRIPTION	LOAD KVA	PHASE	LOAD KVA	LOAD DESCRIPTION	CB P	CB T	LOAD	NOTES	CKT#
1		G	1	20	REC - HALLWAY 105,107	0.36	A	0.85	LIGHTING	1	20	C		2
3		C	1	20	REC - SHOW WINDOW	0.72	B	0.85	LIGHTING	1	20	C		4
5		G	1	20	REC_REGISTRATION 100A	0.36	C	0.85	LIGHTING	1	20	C		6
7		G	1	20	REC - REGISTRATION 100A	0.72	A	1.20	SIGNAGE	1	20	C		8
9		D	1	20	REC - REGISTRATION 100A (PRINTER)	0.50	B	0.20	LIGHTING CONTROLLER LCP	1	20	C		10
11	GB	G	1	20	REC - LOUNGE 100 (REFRIGERATOR)	0.60	C	0.18	REC_UC STORAGE	1	20	G		12
13		G	1	20	REC - LOUNGE 100 (COFFEE MAKER)	1.20	A	0.50	NURSE CALL SYSTEM	1	20	D		14
15		G	1	20	REC - COMMUNITY SUITE 108	0.72	B	0.36	REC_CLARITY SUITE	1	20	G		16
17		G	1	20	REC - COMMUNITY SUITE 108	0.36	C	0.36	REC_CLARITY SUITE	1	20	G		18
19		G	1	20	REC - FAMILIES SUITE 109	0.72	A	0.36	REC_CLARITY SUITE_BLANKET WARMER	1	20	D	GB	20
21		G	1	20	REC - FAMILIES SUITE 109	0.36	B	0.36	REC_CLARITY SUITE	1	20	D		22
23		G	1	20	REC - KIDS SUITE 110	0.72	C	0.36	REC_CLARITY SUITE	1	20	D		24
25		G	1	20	REC - KIDS SUITE 110	0.36	A	0.36	REC_CLARITY SUITE	1	20	D		26
27		G	1	20	REC_FOCUS RM	0.36	B	0.36	REC_KNOWLEDGE SUITE	1	20	G		28
29		G	1	20	REC - HEALING SUITE 104	0.72	C	0.36	REC_KNOWLEDGE SUITE	1	20	G		30
31		G	1	20	REC - HEALING SUITE 104	0.36	A	0.36	REC_GREEN SUITE	1	20	G		32
33	GB	K	1	20	REC_STAFF LOUNGE_MICROWAVE	1.00	B	0.36	REC_GREEN SUITE	1	20	G		34
35	GB	K	1	20	REC_STAFF LOUNGE_REFRIGERATOR	0.60	C	1.00	REC_SOILD SUPPLY_AUTOCLAVE	1	20	D		36
37	GB	K	1	20	REC_STAFF LOUNGE_DISHWASHER	1.20	A	0.3.6	REC_CLEAN SUPPLY_REFRIGERATOR	1	20	G	GB	38
39	GB	K	1	20	REC_STAFF LOUNGE	0.36	B	0.36	REC_CLEAN SUPPLY	1	20	G		40
41		G	1	20	REC_COVENIENCE	0.36	C	5.00	EWH-1	3	60	C		42
43		D	1	20	HWRCP-1	0.10	A	5.00	-	-	-	C		44
45		D	1	20	SMOKE DETECTOR	0.10	B	5.00	-	-	-	C		46
47					SPACE		C	3.00	DH-3	2	70	ML		48
49					SPACE		A	3.00	-	-	-	ML		50
51		M	2	30	HP-1&FC-1	1.97	B	3.00	DH-4	2	70	M		52
53		M	-	-	-	1.97	C	3.00	-	-	-	M		54
55		M	2	15	ERV-1	0.53	A	1.20	SIGNAGE	1	20	C		56
57		M	-	-	-	0.53	B		SPACE					58
59		M	2	15	ERV-2	0.53	C		SPACE					60
61		M	-	-	-	0.53	A		SPACE					62
63		M	2	15	ERV-3	0.53	B		SPACE					64
65		M	-	-	-	0.53	C		SPACE					66

CONNECTED LOAD:

PHASE A	18.91	KVA
PHASE B	18.00	KVA
PHASE C	20.86	KVA
TOTAL	57.77	KVA

NOTES
GB - PROVIDE GFCI TYPE BREAKER.

DEMAND LOAD CALCULATION

DEMAND LOAD	SUBTOTAL	NEC DEMAND FACTOR	
CONTINUOUS LOAD (C)	**20.87**	125%	26.09
DEDICATED LOAD (D)	**3.64**	100%	3.64
GENERAL RECEPTACLE (G)	**10.98**	100% of 1st 10KVA & 50% of remaining	10.49
KITCHEN EQUIPMENT (K)	**3.16**	80%	2.53
MOTOR LOAD (M)	**19.12**	125% of largest motor + 100% remaining	20.62
		TOTAL DEMAND KVA	63.37
		AMPS @ 120/208V, 3 PHASE, 4WIRE:	**175.89**

GENERAL NOTES

#	DESCRIPTION
1	NEW CIRCUIT BREAKERS IN EXISTING PANELS SHALL MATCH EXISTING IN TYPE AND INTERRUPTING RATING.

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SEAL
TONY CLAVIO CALLES — STATE OF WASHINGTON — 36755 — REGISTERED PROFESSIONAL ENGINEER
EXPIRES: 09/30/2024

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PRCTI20240772

PROJECT
MULTICARE TENANT IMPROVEMENT
INDIGO - PUYALLUP
4505 S MERIDIAN
PUYALLUP, WA 98373

REVISIONS

DATE
2024.03.29
BCRA NO.
22023.00.11
DRAWN BY:
REVIEWED BY:
SHEET TITLE
SINGLE LINE DIAGRAM AND PANEL SCHEDULE

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LIGHTING COMPLIANCE SUMMARY

2021 WSEC Compliance Forms for Commercial Buildings including Group R2, R3 & R4 over 3 stories and all R1

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Project & Applicant Information	**Project Title**	240362 Indigo Urgent Care, Puyallup, WA - 2021 WSEC
	Project Address	4504 MERIDIAN Puyallup, WA 98373
	Applicant Name	
	Applicant Phone	
	Applicant Email	

For Building Department Use: **Date: Mar 21, 2024**

For questions about this report, contact WSEC Commercial Technical Support at 360-539-5300 or via email at com.techsupport@waenergycodes.com

General Occupancy	All Commercial	**General Building Use Type**		Healthcare, Urgent Care	**Building Cond. Floor Area**	5,000
General Project Types	Alteration	**New Building or Addition Lighting Scope**	**Alteration Lighting Scope**	Interior Lighting	**Project Cond. Floor Area**	5,000
					Floors Above Grade	1
					Compliance Method	General Prescriptive
Lighting Project Description						

Lighting Compliance Scope and Method	**Project Type**	**Interior / Exterior** (Interior includes both interior & parking)	**Luminaire Replacement Scope**	**Compliance Method**	**LPA Calculation Adjustment**	**Compliance Verification**
	Alteration	Interior Lighting	20% or more replaced	Space by space	No Calculation Adjustments allowed	**COMPLIES**
Additional Energy Efficiency (AEC) Measures Included	No lighting or electrical additional energy efficiency measures included in project		**Load Management (LDM) Measures Included**		No lighting or electrical load management measures included in project	

Project Title	240362 Indigo Urgent Care, Puyallup, WA - 2021 WSEC	**Date**	Mar 21, 2024
Lighting Power Calculation	**ALTERATION - INTERIOR LIGHTING (20% or more replaced)**	**Compliance Verification**	**COMPLIES**
Compliance Method	**Space by space**	**LPA Calculation Adjustment**	**none**

Interior Lighting Power Allowance - Space by Space

General Space Type	Specific Space Type	Gross Interior Area (SF)	LPA (Watts/SF)	Total Watts Allowed (SF x LPA x 1)	Total Proposed Watts (LPD + Display LPD)	Compliance Status
Computer room/data center		66	0.94	62		
Copy/print room		150	0.31	47		
Corridors	General	731	0.41	300		
Electrical/mechanical		98	0.43	42		
Food preparation		265				
Lobby	General	777	0.84	653		
Office	Enclosed ≤ 250 sf	145	0.74	107		
Restroom	General	207	0.63	130		
Healthcare facility	Exam/treatment room	570	1.40	798		
Healthcare facility	Exam/treatment room	300	1.40	420		
Healthcare facility	Exam/treatment room	386	1.40	540		
Healthcare facility	Exam/treatment room	207	1.40	290		
Healthcare facility	Imaging room	240	0.94	226		
Healthcare facility	Medical supply room	235	0.62	146		
Healthcare facility	Operating room	240	2.26	542		
Warehouse/storage area	Smaller hand-carried items	210	0.69	145		
			Proposed Total LPD		**3,651**	
	Totals			**4,448**	**3,651**	**COMPLIES**

Proposed Lighting Power Density

Fixture Type	Fixture ID	Quantity of Fixtures (#F)	Watts or Wattage Limit per Fixture (WpF)	Total Linear Feet (LF)	Watts per Linear Foot (WpLF)	Total Watts Proposed (#F x WpF) or (LF x WpLF)
Individual Fixtures						
Direct / indirect pendant	F10	2	65			130
Troffer	F1/F1E	66	25			1,650
Recessed downlight	F5	14	22			308
Under-cabinet	L07	60	2			120
Other fixture type	F8	3	15			45
Other fixture type	F2/F2E	23	20			460
Other fixture type	F3	16	42			672
Linear Fixtures						
LED strip	F4	133	2			266
Exempt Fixtures						
Medical & dental task	F6	8				
					Proposed Total LPD	**3,651**

Project Title	240362 Indigo Urgent Care, Puyallup, WA - 2021 WSEC	**Date**	Mar 21, 2024

Proposed Fixtures Details — **ALTERATION - INTERIOR LIGHTING (20% or more replaced)**

Fixture Type/Application	Fixture ID	Location in Documents	Lamp Type	New or Existing-to-Remain
Individual Fixtures				
Direct / indirect pendant	F10	E201	LED	New
	Fixture Description: PENDANT			Are these fixtures located within a daylight zone?: No
	Do these fixtures require specific application lighting controls?: None required			
Troffer	F1/F1E	E201	LED	New
	Fixture Description: TROFFER			Are these fixtures located within a daylight zone?: No
	Do these fixtures require specific application lighting controls?: None required			
Recessed downlight	F5	E201	LED	New
	Fixture Description: RECESSED DOWNLIGHT			Are these fixtures located within a daylight zone?: No
	Do these fixtures require specific application lighting controls?: None required			
Under-cabinet	L07	E201	LED	New
	Fixture Description: UNDER CABINET TASK LIGHT			Are these fixtures located within a daylight zone?: No
	Do these fixtures require specific application lighting controls?: None required			
Other fixture type	F8	E201	LED	New
	Fixture Description: VANITY LIGHT			Are these fixtures located within a daylight zone?: No
	Do these fixtures require specific application lighting controls?: None required			
Other fixture type	F2/F2E	E201	LED	New
	Fixture Description: RECESSED LINEAR			Are these fixtures located within a daylight zone?:
	Do these fixtures require specific application lighting controls?: None required			
Other fixture type	F3	E201	LED	New
	Fixture Description: LINEAR LED			Are these fixtures located within a daylight zone?: No
	Do these fixtures require specific application lighting controls?: None required			
Linear Fixtures				
LED strip	F4	E201	LED	New
	How is linear fixture quantity defined?: Quantity of fixtures with current limiting device			Length of track (LT):
	Fixture Description: LED STRIP LIGHT			Are these fixtures located within a daylight zone?:
	Do these fixtures require specific application lighting controls?: None required			
Exempt Fixtures				
Medical & dental task	F6	E201		New

	Fixture Description: EXAM ROOM PENDANT	Do these fixtures require specific application lighting controls?: Lighting for non-human life forms, dedicated control

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EXPIRES: 09/30/2024

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PRCTI20240772

PROJECT
MULTICARE TENANT IMPROVEMENT
INDIGO - PUYALLUP
4505 S MERIDIAN
PUYALLUP, WA 98373

REVISIONS

DATE
2024.03.29

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Lighting, Motor and Electrical Requirements List, pg 1 of 13

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Project:
240362 Indigo Urgent Care, Puyallup, WA - 2021 WSEC
4504 MERIDIAN
Puyallup, WA 98373

Date: 2024-03-21

Applies	Code Section	Component	Compliance Information Required In Permit Documentation	Location in Documents	Building Department Notes
LIGHTING SCOPE					
NA	C103.1	Construction documents - General	For a shell & core or tenant space (first build-out) project, indicate if there is no lighting scope included in the project.		
NA	C103.1	Construction documents - General	For an alteration project, indicate if there is no lighting scope included in the project.		
NA	C405.1	Lighting in sleeping units	Indicate general compliance path for permanently installed luminaires in sleeping units – vacancy controls & luminaire efficacy; or lighting power allowance.		
INTERIOR LIGHTING CONTROLS					
NA	C405.2	Interior lighting controls, general	For all interior lighting systems, indicate lighting control method (general lighting controls requirements or luminaire level lighting controls) on plans for all spaces and lighting zone(s) served; indicate exceptions applied to eligible spaces and light		
YES	C405.2.3	Manual controls	Indicate on plans the method of manual lighting control, location of manual control device and the area or specific application it serves.	E201	
YES	C405.2.4 C405.2.4.1	Manual interior light reduction controls	For general lighting not controlled by occupancy sensors, indicate on plans which method of manual 50% lighting load reduction is provided, or indicate applicable exception.	E201	
YES	C405.2.1 C405.2.2	Method of automatic shut-off control	Indicate on plans the method of automatic shut-off control during unoccupied periods (occupancy sensor or time switch) for all lighting zones.	E201	
YES	C405.2.1	Occupant sensor controls	Indicate on plans all luminaires that are controlled by occupant sensor controls; indicate controls are configured to turn luminaires 100% off when the space is unoccupied	E201	
YES	C405.2.1 C405.2.1.1	Occupant sensor controls	Indicate if occupant sensor controls are configured to be manual on or automatic on to not more than 50% power; indicate spaces eligible for exception that allows automatic on to 100% power.	E201	
NA	C405.2.1.2	Occupant sensor controls - warehouse storage areas & library stacks	Indicate each aisleway within a warehouse or library stack space designated as a separate zone that is independently controlled		

Lighting, Motor and Electrical Requirements List, pg 2 of 13

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NA			Indicate occupant sensors are configured to automatically reduce lighting power by ≥ 50% when the zone is unoccupied for over 20 minutes; indicate controls are configured to automatically restore lighting to full power when the zone or space is occupie		
NA	C405.2.1.2	Occupant sensor controls - warehouse storage areas & library stacks	Indicate method of automatic 100% shut-off (occupancy sensor or time switch)		
NA	C405.2.1.3	Occupant sensor controls - open plan office areas	For open plan office areas larger than 300 sf, indicate all general lighting control zones are ≤ 600 sf		
NA	C405.2.1.3	Occupant sensor controls - open plan office areas	Indicate all general lighting control zones are provided with vacancy controls that are configured to reduce lighting power by not less than 80% when the zone is unoccupied and turn luminaires 100% off when the control zone is unoccupied; indicate unoccup		
NA	C405.2.1.4	Occupant sensor controls - enclosed fire-rated stairwells	Indicate stairway lighting is provided with occupancy sensor controls that reduce lighting power by not less than 50% when the stairway in unoccupied and restore lighting to 100% when it is occupied.		
NO	C405.2.1.5	Occupant sensor controls - corridors	Indicate corridor lighting is provided with occupancy sensor controls that reduce lighting power by not less than 50% when the corridor is unoccupied.		
YES	C405.2.2.1	Automatic time switch controls	Indicate spaces on plans where time switch controls are configured to turn luminaires 100% off during unoccupied hours		
YES			Indicate spaces on plans where time switch controls are configured to turn on lighting to full power versus 50% power	E201	
NA			Indicate locations of override switches on plans and the lighting zone(s) served; indicate that the area(s) served by each override switch does not exceed 5,000 sf.	E201	
NA	C405.2.5.2 C405.2.5.4	Daylight zones - Sidelit zones	Indicate primary and secondary sidelit daylight zone floor areas on plans		
NA			For small vertical fenestration assemblies (rough opening less than 10% of primary daylight zone floor area) where daylight responsive controls are not required, provide fenestration area to daylight zone floor area calculation(s).		
NA			Indicate toplit daylight zone floor areas on plans.		
NA	C405.2.5 C405.2.5.1	Daylight responsive controls	Indicate on plans all lighting zone(s) served by daylight responsive controls; indicate that the area served by each control device does not exceed 2,500 SF		

Lighting, Motor and Electrical Requirements List, pg 3 of 13

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NA			Identify sidelit and toplit daylight zones that are not provided with daylight responsive controls and the exception(s) that apply		
NA	C405.2.5.1	Daylight responsive controls	Indicate on plans that all daylight responsive controls provide continuous dimming to ≤15% full light output		
NA	C405.2.5.1	Daylight responsive controls	Indicate that daylight responsive controls are configured to completely shut off all controlled lighting fixtures within the lighting zone.		
NA	C405.2.6	Additional controls - Specific application lighting controls	Identify spaces and lighting fixtures on plans that require specific application lighting controls per this section.		
YES	C405.2.6, Items 1.1 thru 1.6	Additional lighting controls for display, accent & supplemental task lighting	Indicate on plans that all display, accent and supplemental task lighting fixtures are controlled independently from general area lighting	E201	
NA	C405.2.6, Items 1.1 and 1.2	Display and accent lighting	For display and accent lighting fixtures, including lighting fixtures added per the C405.2.2.1 additional interior lighting power allowance, indicate on plans the separate manual controls for these fixtures and the type of automatic off controls (occupanc		
NA			For display case lighting fixtures, indicate on plans the separate manual controls for these fixtures and the type of automatic off controls (occupancy sensor or time-switch)		
YES	C405.2.6, Item 1.4	Supplemental task lighting	For supplemental task lighting fixtures including under-shelf or under-cabinet lighting, indicate on plans the separate manual controls for these fixtures and the type of automatic off controls (occupancy sensor or time-switch)	E201	
NA	C405.2.6, Item 1.5	Lighting equipment for sale or demonstration	For lighting equipment for sale or demonstration, indicate on plans the separate manual controls for these fixtures and the type of automatic off controls (occupancy sensor or time-switch)		
NA			For exhibit lighting fixtures in galleries, museums and monuments, indicate on plans the separate manual controls for these fixtures and the type of automatic off controls (occupancy sensor or time-switch).		
	C405.2.6, Item 2	Permanently installed lighting in sleeping units	Indicate method of automatic off control of all installed luminaires in sleeping units (vacancy or captive key card control); also refer to Receptacles.		

Lighting, Motor and Electrical Requirements List, pg 4 of 13

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NA	C405.2.6, Item 3	Lighting for non-visual applications	For lighting serving non-visual applications (food warming and lighting for life support of nonhuman life forms), indicate on plans that lighting fixtures are controlled independently from both general area lighting and other lighting applications within		
NA			Indicate on plans separate manual controls for non-visual lighting application fixtures and applicable automatic lighting controls; indicate that the area served by each control device does not exceed 4,000 sf.		
NO			For task lighting that serves medical & dental purposes, indicate on plans that lighting fixtures are provided with manual control that is independent from general area lighting.		
YES	C405.2.6, Item 5	Means of egress lighting	Identify all means of egress lighting fixtures on plans including fixtures that function as both normal and emergency illumination	E201	
NA			Provide calculation for total lighting power density (LPD) of all means of egress lighting fixtures; if total LPD is ≥ 0.01 Watts/SF, indicate on plans the method of automatic shut-off control during unoccupied periods (emergency relay & occupancy sens		
NA	C405.2.8	Advanced lighting controls in open office areas	For open office areas ≥ 5,000 sf, indicate which advanced lighting control system is provided (luminaire level lighting controls or networked lighting controls).		
	C405.2.8.1	Luminaire level lighting controls (LLLC)	Where LLLC are provided to comply with C405.2.8, or provided as the alternate lighting controls compliance method per C405.2, or to comply with C406.2.4.2 Enhanced digital interior lighting controls; provide sequence of operations that describes required		
NA	C405.2.8.1 C405.2.8.3	Luminaire level lighting controls (LLLC)	Indicate on plans that each LLLC luminaire is configured with occupancy sensing control functions (including C405.2.1.3 requirements for open office areas) and continuous full range dimming controls to brighten or dim lights based on occupancy and availab		
NA	C405.2.8.2	Networked lighting control (NLC)	Where NLC are provided to comply with C405.2.8, or to comply with C406.2.4.2 Enhanced digital interior lighting controls; provide sequence of operations that describes required NLC capabilities and performance parameters		
NA	C405.2.8.2 C405.2.8.3	Networked lighting control (NLC)	Indicate on plans that each NLC luminaire is individually addressable or document exception applied; Indicate on plans that each NLC luminaire is configured with occupancy sensing control functions (including C405.2.1.3 requirements for open office areas)		

Lighting, Motor and Electrical Requirements List, pg 5 of 13

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NA	C405.8.3	High end trim	Where high end trim is required, luminaires shall be initially configured to limit maximum lumen output or lighting power to 85% or to the target design lighting power.		
INTERIOR LIGHTING CONTROLS - ADDITIONAL ENERGY EFFICIENCY MEASURE					
NA	C406.2.4.2	Enhanced digital interior lighting controls	To comply with the enhanced interior lighting controls measure, provide calculations that demonstrate that lighting in ≥ 50% of the project floor area is provided with LLLC (C405.2.8.1) or NLC (C405.2.8.2) controls with high end trim (C405.2.8.3)		
NO			Where LLLC is provided, indicate on plans that each LLLC controlled luminaire is configured with integral sensors; where NLC is provided, indicate on plans that each NLC controlled luminaire is configured to be independently addressable; provide sequence		
NA	C406.2.4.1	Enhanced lighting controls in Group R-2	In Group R-2 occupancies, indicate on plans a master control at the main entrance to each dwelling or sleeping unit that switches off all lights and switched receptacles (may be two controls, one for lights and the other for receptacles); indicate on plan		
INTERIOR LIGHTING CONTROLS - LIGHTING LOAD MANAGEMENT MEASURE					
NA	C406.3.1	Interior lighting DDC controls & real-time demand response	To comply with the interior lighting load management measure, indicate automatic lighting controls are connected to a central DDC system capable of activation by an external utility signal; where utility real-time demand or pricing program exists, indicat		
NA	C406.3.1	Interior lighting power reduction controls	Indicate lighting controls are configured to gradually reduce by continuous dimming the interior general area lighting power by ? 20% in response to a peak demand signal; calculate the percentage of total building floor area served by load management ligh		
NA	C406.3.1	Warehouse & retail storage interior lighting power reduction controls	For warehouse & retail storage areas, indicate method of interior general area lighting power reduction (continuous dimming by ? 20%; switching off ? 25% of lighting power).		
EXTERIOR LIGHTING CONTROLS					
	C405.2.9 C405.2.9.1 C405.2.9	Exterior lighting controls	For all exterior lighting, indicate on plans automatic controls (either daylight sensing or astronomic time clock) configured to turn lighting off when daylight is present; or indicate exception applied.		
			For exterior building facade & landscape lighting, indicate that controls are configured to turn this lighting off when daylight is present for a minimum of 6 hours per night, or from 1 hour after closing to 1 hour before opening per the occupancy schedul		

Lighting, Motor and Electrical Requirements List, pg 6 of 13

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			For outdoor parking area (not parking garage) luminaires that are mounted ≤ 24 feet high and are rated at ≥ 40 watts, indicate that controls are configured to turn this lighting off when daylight is present; in addition, indicate controls are config		
			For exterior lighting other than building facade, landscape and outdoor parking area lighting, indicate controls are configured to reduce lighting power by at least 50% from 12am-6am, or 1 hour after closing to 1 hour before opening, or when no activity i		
	C405.2.10	Parking garage lighting control	Indicate all interior parking garage lighting fixtures are provided with time switch controls (per C405.2.2.1) or occupancy sensor controls (per C405.2.1.1); indicate controls are configured to reduce lighting power by at least 30% when no activity is det		
	C405.2.10	Parking garage lighting control - Perimeter lighting zones	For parking garage lighting fixtures located within 20 feet of perimeter wall openings, indicate on plans that daylight sensing controls are configured to reduce lighting power by at least 50%, or exception applied		
	C405.2.10	Parking garage lighting control - Eye adaptation lighting	For lighting fixtures at vehicle entrances & exits, indicate on plans that daylight sensing controls are configured to reduce lighting power by at least 50% from sunrise to sunset.		
NA	C405.3	Lighting for plant growth and maintenance	For permanently installed lighting fixtures used specifically for plant growth and maintenance, indicate that the photosynthetic photon efficacy measured at the lamp or luminaire is ≥ 1.7 ţ½mol/J in greenhouses and ≥ 1.9 ţ½mol/J in all other indoo		
	C405.5.4	Exterior gas-fired lighting appliances	Indicate ignition system is a method other then continuously burning pilot light.		
INTERIOR & EXTERIOR LIGHTING CONTROL CIRCUITS					
NA	C405.2.7	Area controls - Master control switches	Indicate location(s) of lighting master control switch(es) intended to control multiple independent switches; a circuit breaker may not be used as a lighting master control switch		
NA			Verify the maximum power controlled by any single lighting control switch or automatic control device is no more than a 20 amp circuit loaded to ? 80%.		
INTERIOR LIGHTING POWER & EFFICACY					
NA	C405.4.1	Total connected interior lighting power	Include all luminaires in interior lighting fixture schedule; indicate fixture types, lamps, ballasts and rated watts per fixture; include rated wattage of lamps for luminaires with lamps connected directly to building power; include wattage limit of tran	E-001	

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PROJECT
MULTICARE TENANT IMPROVEMENT
INDIGO - PUYALLUP
4505 S MERIDIAN
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REVISIONS

DATE
2024.03.29

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NA			Identify spaces eligible for lighting power exemption on plans and in WSEC interior lighting compliance reports; indicate the exception applied	E-201& E-004D	
NA			Identify lighting equipment eligible for lighting power exemption in fixture schedule and in WSEC interior lighting compliance reports; indicate the exception applied.	E-201& E-004D	
	C405.1.1	Lighting in dwelling units	Include all permanently installed luminaires in dwelling units in interior lighting fixture schedule; include luminaire lighting power and efficacy (lumens)		
			Include all permanently installed luminaires in sleeping units in interior lighting fixture schedule; include luminaire lighting power or efficacy (lumens) depending on compliance path taken per C405.1		
NA			For all permenantly installed luminaires, indicate in interior lighting fixture schedule that rated lamp efficacy is ≥ 65 lumens/watt or luminaire efficacy is ≥ 45 lumens/watt.		
NA	C405.4.2	Interior lighting power allowance (LPA)	Indicate which interior LPA method is applied to the entire building (Building Area Method or Space-by-Space Method); indicate LPA applied is Space-by-Space Method for partial building projects and for buildings with unfinished spaces.		
INTERIOR LIGHTING POWER CALCULATION - INDICATE COMPLIANCE PATH TAKEN					
NA	C405.4.2.1	Building Area Method	Demonstrate that total proposed interior lighting wattage per building does not exceed the sum of the maximum allowed wattages for all building area types; identify locations of building areas on plans; provide WSEC interior lighting compliance reports.		
YES	C405.4.2.2	Space-By-Space Method	Demonstrate that total proposed interior lighting wattage does not exceed the maximum allowed wattage; identify locations of space types on plans, including additional allowance retail display areas and areas with display, highlight and decorative lightin	E-201& E-004D	
INTERIOR LIGHTING POWER & EFFICACY - ADDITIONAL ENERGY EFFICIENCY MEASURES					
NA	C406.2.3.1 C406.2.3.2	Reduced interior lighting power density (LPD)	To comply with the reduced interior LPD additional energy efficiency measure, demonstrate that total proposed interior LPD wattage is 10% or 20% lower than the total interior LPA wattage for the area the reduced lighting power measure is being applied to		

Lighting, Motor and Electrical Requirements List, pg 8 of 13

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	C406.2.3.3	Reduced interior LPD - Dwelling & sleeping unit lamp efficacy	To comply with reduced interior LPD additional energy efficiency measure for a building with dwelling units or sleeping units, indicate in interior lighting fixture schedule that all permenantly installed luminaires have a rated lamp efficacy ≥ 90 lume		
EXTERIOR LIGHTING POWER & EFFICACY					
	C405.5.2	Total connected exterior lighting power	Include all luminaires in exterior lighting fixture schedule; indicate fixture types, lamps, ballasts and rated watts per fixture; include rated wattage of lamps for luminaires with lamps connected directly to building power; include wattage limit of tran		
			Identify exterior lighting applications eligible for lighting power exemption on plans and in WSEC exterior lighting compliance reports; indicate the exception applied.		
	TABLE C405.5.3(1)	Exterior lighting zone	Indicate the building exterior lighting zone as specified by the AHJ.		
	C405.5.1	Exterior building grounds lighting	For building grounds lighting fixtures rated at greater than 25 watts, indicate in exterior lighting fixture schedule that fixtures have a rated lamp efficacy ≥ 100 lumens/watt or indicate the exception applied.		
EXTERIOR LIGHTING POWER CALCULATION					
	C405.5.3	Exterior lighting power allowance (LPA)	Demonstrate that total proposed exterior surface lighting wattage does not exceed the maximum allowed wattage (including base site allowance); identify locations of exterior surfaces on plans; provide WSEC exterior lighting compliance reports		
			Demonstrate that total proposed wattage for each additional allowance exterior surface type does not exceed the LPA for the surface type (includes base site allowance remaining after C405.5.3 LPA calculation); identify locations of additional allowance ex		
LIGHTING SYSTEMS ALTERATIONS					
YES	C503.7.1	New lighting systems and controls	Where new interior or exterior lighting systems are installed within an existing building site, indicate new lighting controls comply with C405.2; indicate commissioning of lighting controls (C408.4) and lighting system energy end-use metering (C409.3) wi	E001, E201	
NA	C503.7.2	Interior lighting & parking garage lighting alteration	Include all new luminaires in interior lighting fixture schedule in plans, provide same lighting fixture information as for new construction per C405.4.1 and C405.4.2		

Lighting, Motor and Electrical Requirements List, pg 9 of 13

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			For alterations that add or replace ≥ 20% of luminaires within an interior space or parking garage, indicate which interior lighting power allowance (LPA) method is applied to the alteration project area (Space-by-Space Method for partial building alte		
			Demonstrate that total proposed interior lighting wattage (including existing-to-remain lighting wattage) within the alteration project area does not exceed the maximum allowed wattage (Space-by-Space Method) or the sum of the maximum allowed wattages for		
NA	C503.7.2	Interior lighting alterations (LPA) - Add/replace	For alterations that add or replace < 20% of luminaires in an interior space or parking garage, calculate total existing interior lighting wattage within the project area prior to the alteration		
NA	C503.7.2	Interior lighting alterations (LPD) - Add/replace	Demonstrate that total proposed interior lighting wattage (including existing-to-remain lighting wattage) within the alteration project area does not exceed the total existing interior lighting wattage prior to the alteration; provide WSEC interior lighti		
			Include all new luminaires in exterior lighting fixture schedule in plans, provide same lighting fixture information as for new construction per C405.5.2		
	C503.7.2	Exterior lighting alterations (LPA) - Add/replace &ge 20%	For alterations that add or replace ≥ 20% of exterior lighting wattage, indicate exterior lighting power allowance (LPA) calculated in the same manner as for new construction		
	C503.7.2	Exterior lighting alterations (LPD) - Add/replace &ge 20%	Demonstrate that total proposed exterior lighting wattage (including existing-to-remain lighting wattage) does not exceed the maximum allowed wattage; identify locations of surface types on plans, including additional allowance surfaces; provide WSEC exte		
	C503.7.2	Exterior lighting alterations (LPA) - Add/replace	For alterations that add or replace < 20% of exterior lighting wattage, calculate total existing exterior lighting wattage prior to the alteration		
	C503.7.2	Exterior lighting alterations (LPD) - Add/replace	Demonstrate that total proposed exterior lighting wattage (including existing-to-remain lighting wattage) does not exceed the total existing exterior lighting wattage prior to the alteration; identify locations of surface types on plans, including additio		
	C503.7.3	Interior lighting wiring & circuiting alterations	Where new wiring is installed to serve new interior luminaires and /or luminaires are relocated to a new circuit; indicate manual and automatic lighting controls are provided (as applicable) - manual & light reduction (C405.2.3 & C405.2.4); occupancy sens		

Lighting, Motor and Electrical Requirements List, pg 10 of 13

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			Where new wiring is installed to serve new exterior luminaires and /or luminaires are relocated to a new circuit; indicate circuit power area controls (C405.2.7) are provided; indicate commissioning of exterior lighting controls (C408.4) will be provided,		
	C503.7.4	Lighting panel alterations	Where a new interior and/or exterior lighting panel is installed or an existing panel is moved (including all new raceway and conductor wiring), indicate all of the same interior lighting controls requirements as for wiring & circuiting alterations apply,		
	C503.7.5	Newly-created rooms	Where interior space(s) are reconfigured (permanently installed walls or ceiling-height partitions) to create new enclosed spaces, indicate the following manual and automatic lighting controls are provided (as applicable) - manual & light reduction (C405.		
NA	C504.2	Lighting repairs	Identify existing luminaires being upgraded with bulb and / or ballast replacement; indicate fixture alteration does not increase existing fixture wattage		
NA	C505.1	Change of interior space use	Identify spaces on plans where the building area type or space use type is being changed from one type to another per Tables C405.4.2(1) or (2) including additional allowance retail display areas and areas with display, highlight and decorative lighting		
NA			Demonstrate that total proposed interior lighting wattage (including existing-to-remain lighting wattage) within the alteration project area does not exceed the maximum allowed wattage (Space-by-Space Method) or the sum of maximum allowed wattage per each		
RECEPTACLES					
	C405.10	Automatic receptacle control	Provide schedule on electrical plans that lists the number of controlled and uncontrolled receptacles in each space where controlled receptacles are required - classrooms, enclosed offices, conference rooms, copy/print rooms, break rooms and individual wo		
			Identify all controlled and uncontrolled receptacles on electrical plans; indicate that ≥ 50% of all receptacles are provided with automatic controls in each space where they are required; include receptacle configuration such as spacing between contro		
			Indicate on plans the method of automatic control for each controlled receptacle zone (occupant sensor or programmable time-of-day control); indicate that the area served by each control device does not exceed 5,000 sf.		

Lighting, Motor and Electrical Requirements List, pg 11 of 13

2021 WSEC Requirements for Commercial Buildings including Group R2, R3 & R4 over 3 stories & all R1 -- Administered by ©2024 NEEA. All rights reserved
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	C405.2.6, Item 2	Switched receptacles in sleeping units	Indicate method of automatic off control of all switched receptacles in sleeping units (vacancy or key card control).		
NA	C405.7.1	Electric receptacles at dwelling unit gas appliances	In all designated appliance locations within dwelling units (kitchen cooking appliances, laundry and domestic water heating), indicate electric receptacles or junction box & circuit within 12 inches of the appliance location with sufficient capacity to se		
	C503.7.7	Electrical receptacle alerations	For alteration project areas ≥ 5,000 sf where electric receptacles are added or replaced, indicate receptacles are provided with automatic controls per C405.10, or exception applied.		
ELECTRIC MOTORS					
	C405.8	Electric motor efficiency	Include all motors, including fractional hp motors, in electric motor schedule on electrical plans; indicate motor type, horsepower, rpm, rated efficiency, or exception applied.		
ELEVATORS, ESCALATORS & MOVING WALKS					
	C405.9.1	Elevator cabs	For luminaires in each elevator cab, provide calculations that demonstrate average efficacy is not less than 35 lumens per watt		
			For elevators that do not have an integral air conditioning system, indicate rated watts per cfm for elevator cab ventilation fans do not exceed 0.33 watts per cfm		
			Indicate automatic controls that de-energize lighting and ventilation fans when elevator is stopped and unoccupied for a period of 15 minutes or more.		
	C405.9.2	Escalators and moving walks	Indicate escalators and moving walks comply with ASME A17.1/CSA B44 and are provided with automatic controls that are configured to reduce operational speed to the minimum permitted when not in use, or exception applied.		
	C405.9.3	Escalator energy recovery	Indicate escalators are designed to recover electrical energy when resisting overspeed in the down direction.		
RENEWABLE ENERGY					
NA	C411	Renewable Energy	For new construction, including additions, change of use, and change of occupancy, with floor area ≥ 10000sf; provide documentation of on-site renewable energy capacity; provide calculations supporting applicable exceptions; if qualifying by exception provide an accounting for the additional Additional Energy Efficiency Credits that will be required		

Lighting, Motor and Electrical Requirements List, pg 12 of 13

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RENEWABLE ENERGY - ADDITIONAL ENERGY EFFICIENCY MEASURE					
NA	C406.2.5	On-site and off-site renewable energy	To comply with the renewable energy measure, provide an accounting of on-site and any contracted off-site renewable energy capacity; for all off-site sources, indicate the C411.2 renewable energy source type, energy factor, and the rated capacity and calculated code credited kW; indicate on-site renewables used to comply with C411 or for a code exception elsewhere in the code; with the remaining renewable energy provide Equation 4-17 calculations showing the achieved credits and that the achieved credits are ? the base credits for the measure		
NA	C406.2.5	On-site and off-site renewable energy	Provide documentation that all off-site renewable energy systems comply with Sections C411.2.2 and C411.2.3 including all contracts, and the ownership and location of off-site generation		
ELECTRIC ENERGY STORAGE - LOAD MANAGMENT MEASURE					
NA	C406.3.4	Electric energy storage	To comply with the electrical energy storage load managment measure, indicate automatic controls shall store electricity in electric storage devices during nonpeak periods and use stored energy during peak periods; Document the total electric storage device capacity; indicate it is ? 5 Wh/sf (58 Wh/sm) of gross building area; for proration provide the proration calculations supporting the claimed credit		
GENERAL ELECTRICAL SYSTEMS					
	C405.6	Electrical transformers	Include electrical transformer schedule on electrical plans; indicate transformer type, size (kVA), efficiency, or exception applied.		
	C405.7	Dwelling unit electrical energy consumption	Indicate on electrical plans that each dwelling unit in a Group R-2 building has a separate electrical energy meter, or exception applied.		
NA	C405.11	Voltage drop	Indicate wire conductors are sized so that the maximum voltage drop from customer service conductors to branch circuit conductors is &le 5%.		
NA	C405.12	Alternating current-output uninterruptible power supplies (AC-output UPS)	Indicate in plans that AC-output UPS systems serving computer rooms meet or exceed the calculation and testing requirements identified in ENERGY STAR Program Requirements for Uninterruptible Power Supplies (UPS) ? Eligibility Criteria Version 2.0.		
COMMISSIONING (CX)					

Lighting, Motor and Electrical Requirements List, pg 13 of 13

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	C408.4	Scope of electrical power & lighting systems commissioning	Indicate that all electrical systems (receptacles, transformers, motors, vertical & horizontal transportation) for which the WSEC requires control functions and/or configuration to perform specific functions are required to be commissioned; include docume		
			Where total building lighting load is ≥ 10 kW or the total lighting load of luminaires requiring daylight sensing and/or occupancy control is ≥ 5 kW, indicate that all automatic lighting control systems are required to be commissioned; or provide ca		
	C408.1.1	Commissioning requirements in construction documents	Indicate Cx requirements in plans and specifications for all applicable electrical and lighting control systems		
	C408.1.2 C103.6.3	Commissioning requirements in construction documents	General summary of Cx plan shall include the following: 1) Narrative description of activities; 2) Responsibilities of the Cx team; 3) Schedule of activities including verification of project close out documentation (C103.6); 4) Conflict of interest plan		
	C408.1.3 C408.1.4	Commissioning requirements in construction documents	Include in general summary that a Cx project report and Cx Compliance Checklist (Figure C408.1.4.1) shall be completed by the Certified Cx Professional and provided to the owner prior to the final electrical inspection.		
NA	C408.4.1	Functional performance testing criteria	Identify in plans and specifications the intended operation of all electrical equipment and controls during all modes of operation, including interfacing between new and existing-to-remain systems.		
PROJECT CLOSE OUT					
YES	C103.6.3	Documentation requirements	Indicate in plans that project close out documentation is required; indicate information shall include WSEC lighting compliance reports that document all interior lighting areas and space types, exterior lighting surface types, interior/exterior lighting		
If "no" is selected for any question, provide explanation.					

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PRCTI20240772

PROJECT
MULTICARE TENANT IMPROVEMENT
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PUYALLUP, WA 98373

REVISIONS

DATE
2024.03.29

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REVIEWED BY:

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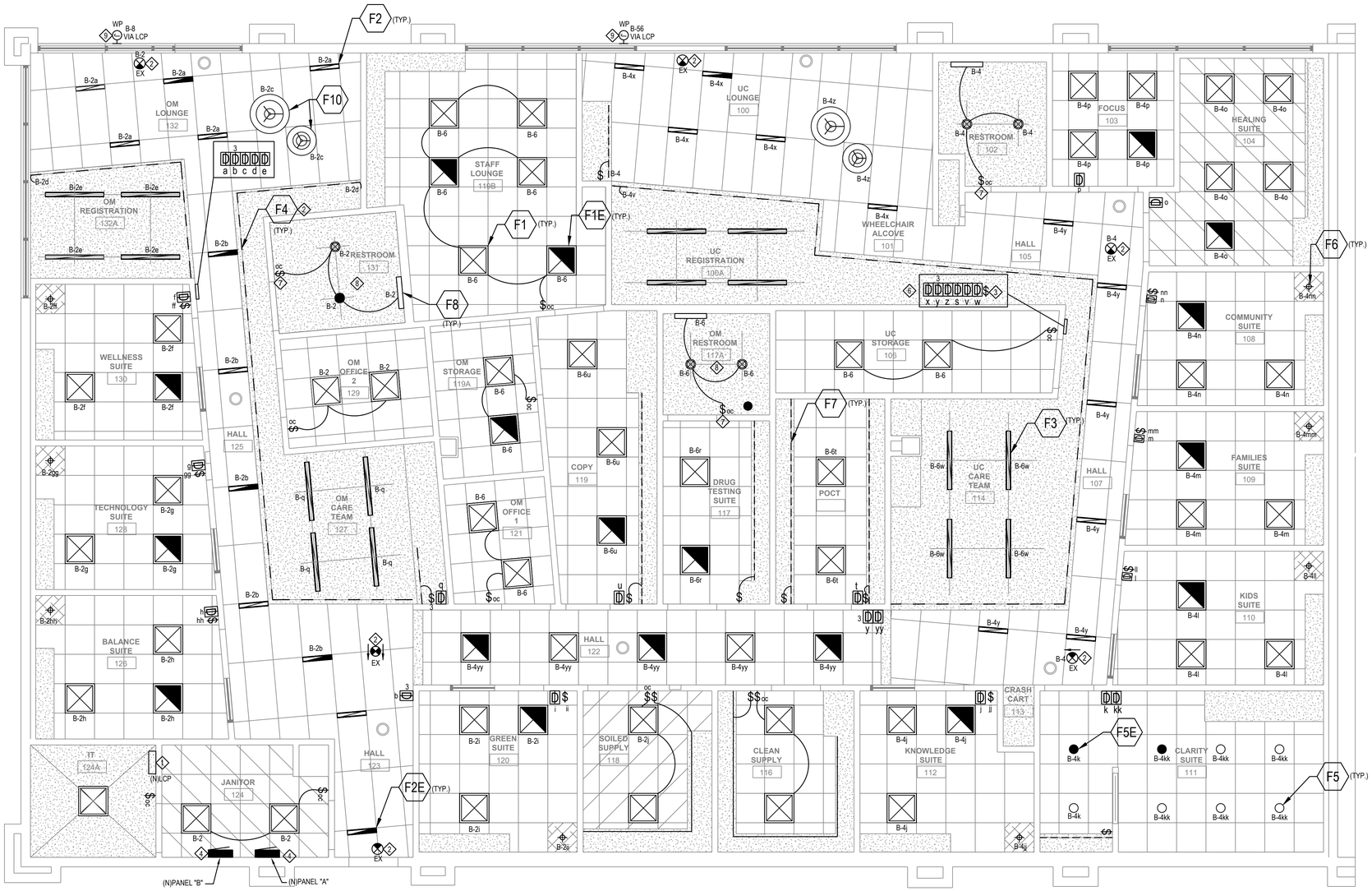

1 ELECTRICAL LIGHTING PLAN SCALE: 1/4" = 1'-0"

GENERAL NOTES

CODE	NOTES
A	GENERAL CONTRACTOR SHALL NOTIFY ARCHITECT IMMEDIATELY IF CONFLICTS OCCUR BETWEEN LIGHTING AND ANY OTHER TRADE. DO NOT PROCEED WITH INSTALLATION IN THAT AREA UNTIL CONFLICT HAS BEEN RESOLVED TO THE SATISFACTION OF THE ARCHITECT AND ENGINEER.
B	REFER TO ARCHITECTURAL DRAWINGS FOR EXACT LOCATIONS AND MOUNTING INSTRUCTIONS FOR ALL LIGHT FIXTURES. ELECTRICAL CONTRACTOR'S BID SHALL INCLUDE THE INSTALLATION OF ALL LIGHT FIXTURES AND ASSOCIATED LAMPS INCLUDING ALL NECESSARY HARDWARE AND SUPPORT PER SEISMIC REQUIREMENTS.
C	ALL WIRES SHALL BE #12 AWG UNLESS NOTED OTHERWISE. PROVIDE SEPARATE NEUTRAL WIRE FOR ALL LIGHTING CIRCUITS BACK TO LIGHTING CONTROL PANEL.
D	WHERE WIRE SIZES ARE NOTED ON DRAWINGS, THAT SIZE SHALL BE THROUGH THE ENTIRE RUN UNLESS NOTED OTHERWISE.
E	ALL EMERGENCY LIGHT FIXTURES SHALL BE SERVED FROM BATTERY BACKUP. EMERGENCY AND EXIT LIGHTS SHALL BE INSTALLED AND CIRCUITED PER THE LATEST NATIONAL ELECTRICAL CODE AND ALL LOCAL CODES. (INSTALL A CENTRAL BATTERY SYSTEM WHERE THE USE OF INDIVIDUAL BATTERY UNITS ARE PROHIBITED BY LOCAL CODES.). ALL EMERGENCY FIXTURES AND EXIT SIGNS SHALL BE CONNECTED TO UNSWITCHED HOT LEG OF THE LOCAL LIGHTING CIRCUIT.
F	ALL LIGHT FIXTURES INSTALLED OVER UTENSIL WASHING AREA, FOOD HANDLING OR FOOD PREPARATION AREAS OR OPEN FOOD STORAGE AREAS SHALL BE OF SHATTERPROOF CONSTRUCTION OR SHALL BE PROTECTED WITH SHATTERPROOF SHIELDS AND SHALL BE READILY CLEANABLE.
G	ELECTRICAL CONTRACTOR SHALL MAKE ALL FINAL CONNECTIONS AS REQUIRED FOR A FULLY COMPLETE AND OPERABLE SYSTEM.
H	ELECTRICAL CONTRACTOR TO FIELD VERIFY ALL CONDITIONS PRIOR TO BID.
I	REFER TO BUILDING GUIDANCE STANDARDS FOR MATERIAL SELECTION CRITERIA, FINISHES AND GENERAL WORK RULES.
J	ALL CONDUITS SHALL BE PLACED AS HIGH AS POSSIBLE. COORDINATE WITH OTHER TRADES.
K	ALL EMERGENCY WIRING SHALL BE KEPT ENTIRELY INDEPENDENT FROM ALL OTHER WIRING PER NEC 700.10(B).
L	GC TO COORDINATE WITH OWNER REGARDING SECURITY INSTALL SPEC

SHEET NOTES

NUMBER	NOTES
1	RUN ALL LIGHTING CIRCUITS THROUGH NEW LIGHTING CONTROL PANEL (LCP). PANEL SHALL HAVE INTEGRAL ASTRONOMIC TIME CLOCK WITH (2) SEPARATE CHANNELS FOR GENERAL INTERIOR LIGHTING AND EXTERIOR LIGHTING. PANEL SHOULD HAVE SUFFICIENT NUMBER OF ZONES TO SUPPORT THE LIGHTING SYSTEM BUT NO LESS THAN (8) ZONES FOR INTERIOR LIGHTING. PANEL SHALL BE MANUFACTURED BY "WATTSTOPPER" OR APPROVED EQUAL.
2	EXIT/EMERGENCY LIGHT FIXTURE WITH BATTERY PACK. EMERGENCY BATTERY PACK SHALL BE CONNECTED TO LOCAL LIGHTING CIRCUIT AHEAD OF ALL SWITCHES.
3	BY-PASS SWITCH FOR INTERIOR LIGHTING OVERRIDE. MAXIMUM OVERRIDE TIME 120MIN, PROVIDE ENGRAVED LABEL. SWITCH SHALL BE PROGRAMMED TO OVERRIDE ONLY THE LIGHTS THAT ARE IN THE SIGHT FROM THE SWITCH LOCATION. DEVICE TO BE COMPATIBLE WITH "LC".
4	PROVIDE NEW PANEL. PROVIDE TYPEWRITTEN SCHEDULE UPON COMPLETION OF THIS PROJECT. SEE PANEL SCHEDULE ON SHEET E0.3.
5	DIMMING BANK. PROVIDE MANUAL DIMMERS FOR INDICATED CIRCUIT. DIMMER RATING TO MATCH SERVING LOAD TYPE AND RATING. IF DIMMERS ARE GANGED TOGETHER DO NOT BREAK FINS. IF FINS ARE BROKEN, APPLY DERATING FACTOR.
6	PROVIDE ENGRAVED LABEL FOR DIMMERS SHOWING AREA CONTROLLED BY IT.
7	SWITCH WITH INTEGRATED OCCUPANCY SENSOR.
8	CEILING MOUNTED RESTROOM EXHAUST FAN TO BE CONTROLLED BY LIGHT SWITCH. COORDINATE EXACT LOCATION WITH MECHANICAL CONTRACTOR.
9	PROVIDE CONNECTION FOR EXTERIOR BUILDING SIGN. FIELD COORDINATE EXACT LOCATION OF SIGN. PROVIDE DISCONNECTING MEANS AS REQUIRED PER NEC 600.6(A)(3). ELECTRIC SIGN SHALL BE UL LISTED AND PROPERLY LABELED AS PER CODE REQUIREMENTS (SECTION 600.3 & 600.4). SIGN CONTRACTOR TO OBTAIN SEPARATE PERMIT.

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PROJECT
MULTICARE TENANT IMPROVEMENT
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REVISIONS

DATE 2024.03.29
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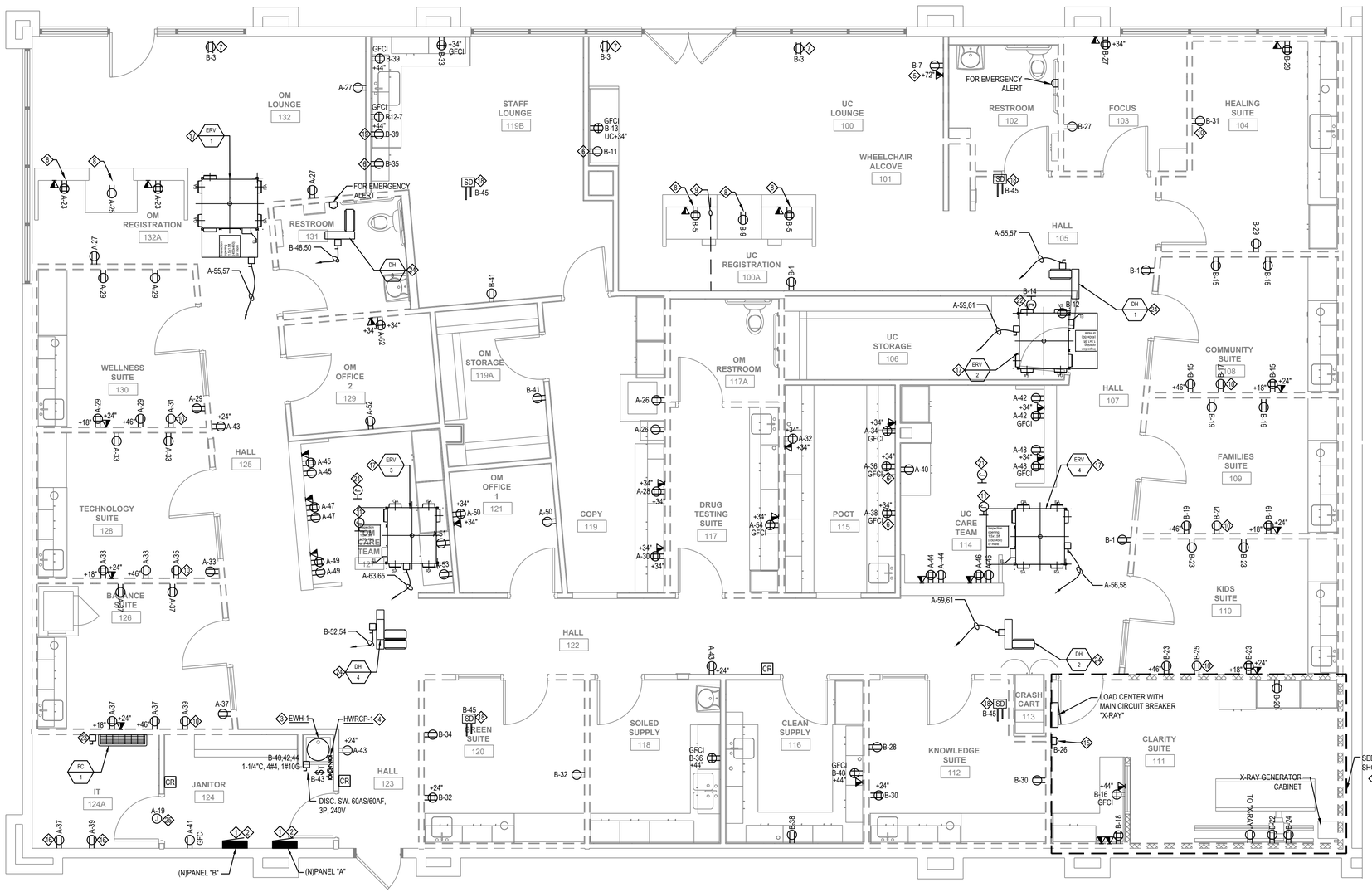

1 ELECTRICAL POWER PLAN SCALE: 1/4" = 1'-0"

GENERAL NOTES

CODE	NOTES
A	PROVIDE GFCI PROTECTION FOR ALL 120V RECEPTACLES IN KITCHEN AND BAR AREAS. ALL GFCI RECEPTACLES SHALL BE READILY ACCESSIBLE AS PER NEC 422.5. FOR ALL EQUIPMENT WITHOUT READY ACCESS UTILIZE GFI BREAKER AT PANELBOARD (WITH DEDICATED NEUTRAL).
B	KITCHEN EQUIPMENT POWER/ELECTRICAL INFORMATION ARE BASED ON INFORMATION AVAILABLE FROM KITCHEN DRAWINGS. ELECTRICAL CONTRACTOR SHALL VERIFY RECEPTACLE CONFIGURATIONS AND LOADS WITH KITCHEN VENDOR PRIOR TO ROUGH-IN. REPORT TO ENGINEER OF RECORD AS TO DISCREPANCIES.
C	ALL WIRES SHALL BE #12 AWG UNLESS NOTED OTHERWISE. PROVIDE SEPARATE NEUTRAL WIRE FOR ALL LIGHTING CIRCUITS BACK TO LIGHTING CONTROL PANEL.
D	ALL 120V RUNS LONGER THAN 100' SHALL BE #10 WIRE SIZE UNLESS NOTED OTHERWISE ON PLANS.
E	WHERE WIRE SIZES ARE NOTED ON DRAWINGS, THAT SIZE SHALL BE THROUGH THE ENTIRE RUN UNLESS NOTED OTHERWISE.
F	ELECTRICAL CONTRACTOR SHALL MAKE ALL FINAL CONNECTIONS AS REQUIRED FOR A FULLY COMPLETE AND OPERABLE SYSTEM.
G	ELECTRICAL CONTRACTOR TO FIELD VERIFY ALL CONDITIONS PRIOR TO BID.
H	THE CONTRACTOR SHALL COORDINATE THE EXACT MOUNTING LOCATION OF ALL LIGHT FIXTURES, LIGHT SWITCHES, RECEPTACLES, TELEPHONE/DATA OUTLETS, AND ANY OTHER DEVICE LOCATIONS SHOWN ON THIS PLAN WITH THE ARCHITECTURAL FLOOR PLAN, ARCHITECTURAL REFLECTED CEILING PLAN, AND ARCHITECTURAL INTERIOR ELEVATIONS. DEVICES NOT LOCATED ON THE ARCHITECTURAL DRAWINGS SHALL BE COORDINATED WITH THE ARCHITECT IN THE FORM OF RFI (REQUEST FOR INFORMATION). CONTRACTOR SHALL ASSUME THAT DEVICES ARE TO BE MOUNTED CENTERED ON THE WALLS, SECTION OF WALLS, WINDOWS, ETC. AND THAT ADDITIONAL MOUNTING BRACKETS AND ACCESSORIES SHALL BE A PART OF THE BID PROPOSAL.
I	REFER TO MECHANICAL CONTROLS DIAGRAM FOR ADDITIONAL SCOPE OF WORK, SUCH AS POWER FOR THERMOSTATS, AND OTHER WORK REQUIRED BY ELECTRICAL CONTRACTOR AND NOT SPECIFICALLY MENTIONED IN ELECTRICAL DRAWINGS.
J	REFER TO ARCHITECTURAL DETAILS FOR INSTALLATION OF OUTLETS IN FIRE RATED WALLS.
K	ALL PERMANENTLY CONNECTED (HARD-WIRED) APPLIANCES SHALL BE SERVED WITH DISCONNECTING MEAN WITHIN SIGHT OF THE UNIT, OR THE SERVING CIRCUIT BREAKER IN THE PANEL SHALL BE CAPABLE OF BEING LOCKED IN OPEN POSITION AS REQUIRED PER NEC 422.31.
L	ALL RECEPTACLE SHALL BE TAMPER-RESISTANCE, HOSPITAL-GRADE TYPE IN AREA ACCESSIBLE TO PATIENTS INCLUDING BUT NOT LIMITED TO EXAM ROOM, RESTROOM AND WAITING ROOM.
M	EACH BRANCH CIRCUIT OF A MULTIWIRE BRANCH CIRCUIT WILL BE SIMULTANEOUSLY DISCONNECTED AT THE POINT WHERE THE BRANCH CIRCUIT ORIGINATES.
N	THE CONTROLLED RECEPTACLE OUTLET MUST BE CLEARLY DIFFERENT FROM UNCONTROLLED RECEPTACLE OUTLET.
O	ALL OUTLETS ABOVE COUNTERTOPS THROUGHOUT ENTIRE SCOPE OF AREA TO BE +44" A.F.F AND TO BE GFCI WHERE REQUIRED.
P	COORDINATE FLOOR CORES LOCATION IN FIELD PRIOR TO ROUGH-IN.
Q	ALL UNDER CONDUIT AND PIPING SHALL BE INSTALLED AS NOT TO INTERFERE WITH BUILDING SYSTEMS OR OTHER TENANT REQUIREMENTS.
R	PROVIDE REDUNDANT GROUNDING FOR PATIENT CARE AREA PER NEC SECTION 517.13. THE METAL RACEWAY OR CABLE ITSELF QUALIFY AS EQUIPMENT GROUNDING RETURN PATH. LIGHT ABOVE 7'-6" AND SWITCHES LOCATED OUTSIDE OF THE PATIENT CARE AREA AS EXCLUDED.
S	ALL GFCI RECEPTACLES SHALL BE READILY ACCESSIBLE.

SHEET NOTES

#	NOTES
1	MAINTAIN 42" CLEARANCE IN FRONT OF 480V EQUIPMENT AND 36" CLEARANCE IN FRONT OF 208V EQUIPMENT, 30" MIN. CLEAR WIDTH.
2	PROVIDE NEW PANEL. PROVIDE TYPEWRITTEN SCHEDULE UPON COMPLETION OF THIS PROJECT. SEE PANEL SCHEDULE ON SHEET E0.3.
3	PROVIDE CONNECTION FOR ELECTRIC WATER HEATER. REFER TO PLUMBING DRAWINGS. FIELD VERIFY EXACT LOCATION AND COORDINATE ALL REQUIREMENTS WITH PLUMBING CONTRACTOR.
4	PROVIDE CONNECTION FOR HOT WATER RECIRCULATING PUMP. REFER TO PLUMBING DRAWINGS. FIELD VERIFY EXACT LOCATION AND COORDINATE ALL REQUIREMENTS WITH PLUMBING CONTRACTOR.
5	PROVIDE CONNECTION FOR TV. FIELD VERIFY EXACT LOCATION, MOUNTING HEIGHT AND ALL REQUIREMENTS WITH INSTALLER.
6	PROVIDE CONNECTION FOR REFRIGERATOR. POWER FROM GFCI TYPE BREAKER.
7	RECEPTACLE FOR SEASONAL LIGHTING (SHOW WINDOW RECEPTACLES) IN CEILING CENTERED ABOVE WINDOW, AS PER CODE REQUIREMENTS.
8	RECEPTACLE / DATA OUTLET LOCATED UNDER THE COUNTER. COORDINATE EXACT LOCATION WITH ARCHITECT AND CASEWORK INSTALLER PRIOR TO ROUGH-IN.
9	SAW CUT THE EXISTING FLOOR FOR UNDERGROUND POWER AND SYSTEMS CONDUITS. PATCH THE FLOOR TO MATCH ADJACENT SURFACE. COORDINATE ALL WORK WITH OWNER, AND EXISTING UTILITY BEFORE COMMENCING WORK.REFER TO ARCHITECTURAL SET/ARCH DETAIL 8/A-401
10	PROVIDE RECEPTACLE FOR EXAM TABLE. FIELD VERIFY EXACT LOCATION.
11	NURSE CALL ANNUNCIATOR. FIELD VERIFY EXACT LOCATION AT CARE TEAM DESK.
12	ELECTRICAL CONTRACTOR SHALL COORDINATE WITH X-RAY EQUIPMENT PROVIDER AND SHOP DRAWINGS FOR ALL X-RAY MACHINE POWER AND SYSTEM CONDUITS AND CONDUCTORS INFORMATION. PROVIDE ANY NECESSARY EQUIPMENT AND DEVICES FOR A COMPLETE AND OPERATIONAL X-RAY SYSTEM.
13	PROVIDE OVER SIZED COVERPLATE TO CONCEAL OPENING AROUND BACK BOX FOR ALL RECEPTACLES IN THIS AREA.
14	PROVIDE ALL ELECTRICAL WALL/FLOOR BOXES WITH APPROPRIATE LEAD SHIELDING.
15	PROVIDE MUSHROOM TYPE "EMERGENCY OFF" RED BUTTON. SHUNT TRIP FEATURE ON X-RAY MAIN CIRCUIT BREAKER.
16	PROVIDE RECEPTACLE FOR DATA RACK AND MOUNT AT BOTTOM OF DATA RACK. COORDINATE EXACT LOCATION AND QUANTITIES WITH OWNER AND LOW VOLTAGE INSTALLER.
17	PROVIDE CONNECTION FOR ENERGY RECOVERY VENTILATION. REFER TO MECHANICAL DRAWINGS. FIELD VERIFY EXACT LOCATION AND COORDINATE ALL REQUIREMENTS WITH MECHANICAL CONTRACTOR.
18	SMOKE DETECTOR. PROVIDED BY MECHANICAL AND CONNECTED BY ELECTRICAL. FIELD VERIFY EXACT LOCATION AND ALL REQUIREMENTS WITH MECHANICAL CONTRACTOR.
19	RECEPTACLE FOR DISHWASHER, GFCI PROTECTED. THE OUTLET FOR DISHWASHER SHALL BE LOCATED IN THE SPACE ADJACENT TO THE SPACE OCCUPIED BY THE DISHWASHER PER NEC ARTICLE 422.16(B)(2).
20	PROVIDE CONNECTION FOR CENTRIFUGE. FIELD VERIFY EXACT LOCATION, MOUNTING HEIGHT AND ALL REQUIREMENTS WITH INSTALLER.
21	PROVIDE JUNCTION BOX FOR CARE TEAM PANIC BUTTON. PROVIDE CONDUIT BACK TO THE ACCESS CONTROL SYSTEM.
22	PROVIDE CONNECTION TO NURSE CALL POWER SUPPLY. FIELD VERIFY EXACT LOCATION.
23	DISCONNECT SWITCH PROVIDED WITH FAN COIL UNIT. PROVIDE REQUIRED POWER & CONTROL WIRING FROM HEAT PUMP UNIT. SEE MECHANICAL PLANS FOR EXACT LOCATION AND EQUIPMENT SPECIFICATIONS.
24	PROVIDE CONNECTION FOR DUCT HEATER. REFER TO MECHANICAL DRAWINGS. FIELD VERIFY EXACT LOCATION AND COORDINATE ALL REQUIREMENTS WITH MECHANICAL CONTRACTOR.
25	PROVIDE CONNECTION FOR HEAT PUMP. REFER TO MECHANICAL DRAWINGS. FIELD VERIFY EXACT LOCATION AND COORDINATE ALL REQUIREMENTS WITH MECHANICAL CONTRACTOR.
26	PROVIDE CONNECTION FOR FAN COIL UNIT. REFER TO MECHANICAL DRAWINGS. FIELD VERIFY EXACT LOCATION AND COORDINATE ALL REQUIREMENTS WITH MECHANICAL CONTRACTOR.
27	PROVIDE, IF NONE EXISTING, WP/GFCI RECEPTACLES WITHIN 25' FROM MECHANICAL EQUIPMENT.
28	PROVIDE CONNECTION TO ACCESS CONTROL SYSTEM. FIELD VERIFY EXACT LOCATION AND ALL REQUIREMENTS WITH INSTALLER.

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PRCTI20240772

PROJECT
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PUYALLUP, WA 98373

REVISIONS

DATE
2024.03.29

BCRA NO.
22023.00.11

DRAWN BY:

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ELECTRICAL POWER PLAN

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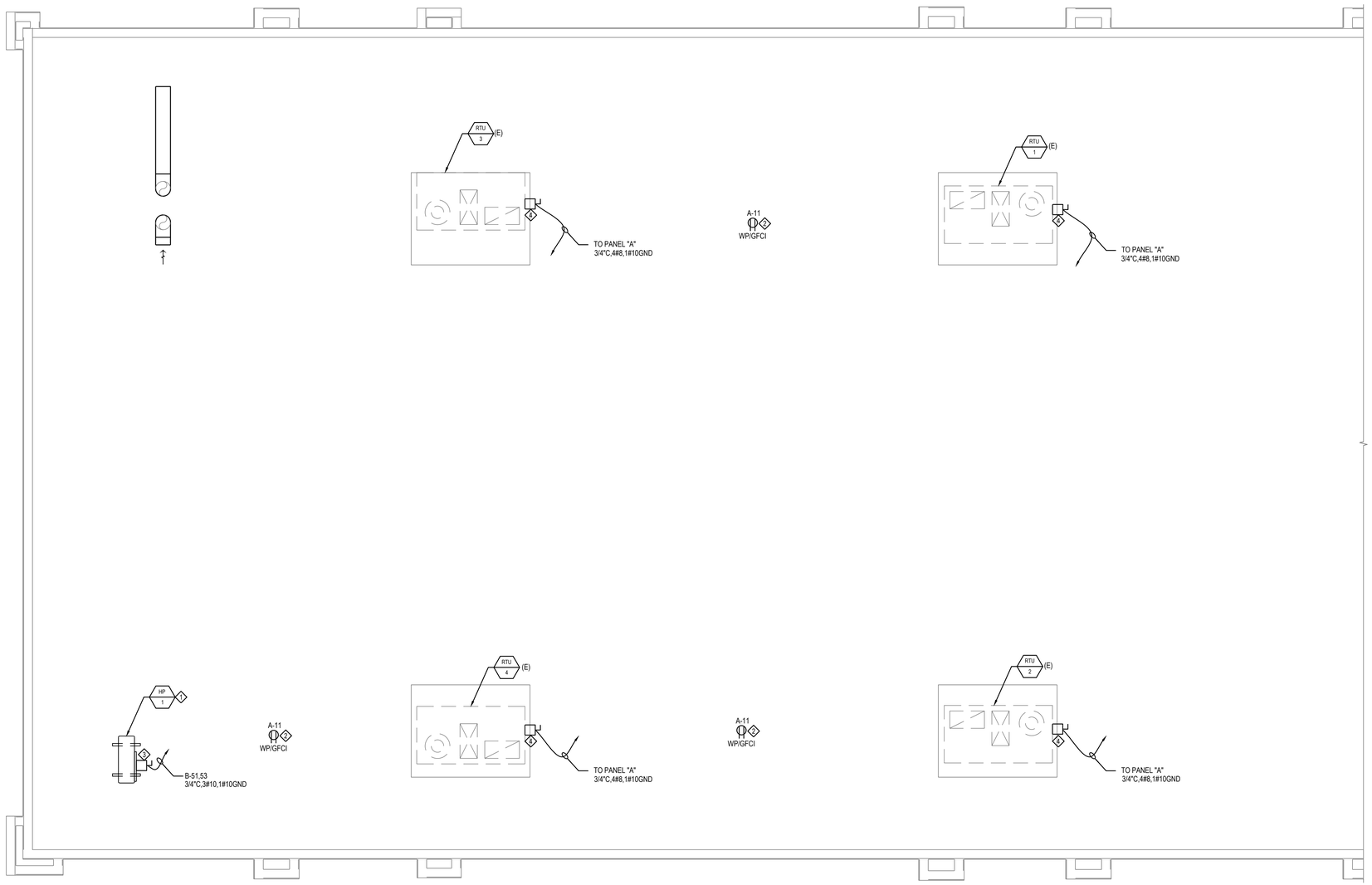

1 ELECTRICAL POWER PLAN — SCALE: 1/4" = 1'-0"

GENERAL NOTES

CODE	NOTES
A	WHERE WIRE SIZES ARE NOTED ON DRAWINGS, THAT SIZE SHALL BE THROUGH THE ENTIRE RUN UNLESS NOTED OTHERWISE.
B	ELECTRICAL CONTRACTOR SHALL MAKE ALL FINAL CONNECTIONS AS REQUIRED FOR A FULLY COMPLETE AND OPERABLE SYSTEM.
C	REFER TO MECHANICAL CONTROLS DIAGRAM FOR ADDITIONAL SCOPE OF WORK AND OTHER WORK REQUIRED BY ELECTRICAL CONTRACTOR AND NOT SPECIFICALLY MENTIONED IN ELECTRICAL DRAWINGS.
D	ALL EQUIPMENT (DISCONNECT SWITCHES, RECEPTACLES, CONDUITS...) ON THE ROOF SHALL BE WEATHERPROOF.
E	COORDINATE EXACT LOCATION OF ALL ELECTRICAL EQUIPMENT WITH MECHANICAL CONTRACTOR .
F	ELECTRICAL CONTRACTOR TO FIELD VERIFY ALL CONDITIONS PRIOR TO BID.

SHEET NOTES

#	NOTES
1	PROVIDE CONNECTION FOR HEAT PUMP UNIT. REFER TO MECHANICAL DRAWINGS. FIELD VERIFY EXACT LOCATION AND COORDINATE ALL REQUIREMENTS WITH MECHANICAL CONTRACTOR.
2	PROVIDE, IF NONE EXISTING, WP/GFCI RECEPTACLE WITHIN 25' FROM MECHANICAL EQUIPMENT.
3	DISCONNECT SWITCH, 30AS/30AF, 2P, 240V, NEMA 3R.
4	DISCONNECT SWITCH, 40AS/35AF, 3PH, 240V, NEMA 3R.

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PRCTI20240772

PROJECT
MULTICARE TENANT IMPROVEMENT
INDIGO - PUYALLUP
4505 S MERIDIAN
PUYALLUP, WA 98373

REVISIONS

DATE
2024.03.29

BCRA NO.
22023.00.11

DRAWN BY:

REVIEWED BY:

SHEET TITLE
ELECTRICAL ROOF PLAN

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SHEET
E-401

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PLUMBING FIXTURE SCHEDULE

FIXT. ID	DESCRIPTION	MANUFACTURER	ROUGH IN				REMARKS
			W	V	CW	HW	
EWH-1	ELECTRIC WATER HEATER	A.O.SMITH	-	-	1-1/4"	1-1/4"	SEE SPEC ON P0.2.
ET-1	EXPANSION TANK	AMTROL	-	-	-	3/4"	MODEL #ST-5, 2 GALLONS CAPACITY, MAX. OPERATING PRESSURE 150PSI, MAX. OPERATING TEMPERATURE 200°F.
HWRCP-1	HOT WATER RETURN PUMP	GRUNDFOS	-	-	-	1/2"	MODEL #UP15-10B5, 115V, 60 WATTS, 1.0 GPM AT 5 FT HEAD.
WHA	WATER HAMMER ARRESTOR	J.R.SMITH	-	-	3/4"	-	MODEL #5005A, HYDROTROL, FIXTURE UNIT RATING 1-11 FU.
WCO	WALL CLEANOUT	J.R.SMITH	AS PIPE SIZE	-	-	-	TAPER THREAD PLUG WITH SQUARE FRAME AND COVER IN POLISHED CHROME
FCO	FLOOR CLEANOUT	J.R.SMITH	AS PIPE SIZE	-	-	-	MODEL# 4031L-F FLOOR CLEANOUT WITH FLASHING POLISHED CHROME BODY AND COVER.
MX-1	THERMOSTATIC MIXING VALVE	POWERS	-	-	1/2"	1/2"	MODEL #LFe480-10, POINT-OF-USE MIXING VALVE, BRONZE BODY CONSTRUCTION. SET OUTLET TEMPERATURE AT 105°F.
FWD-1	FOOD WASTE DISPOSER	INSINKERATOR	2"	-	-	-	MODEL #BADGER 5 WITH, CONTINUOUS FEED, WITH DISHWASHER DRAIN CONNECTION OR APPROVED EQUAL.
BFP-1	BACKFLOW PREVENTER	WATTS	-	-	1/2"	-	MODEL LF007.
WOB-1	WATER OUTLET BOX	IPS CORPORATION	-	-	1/2"	-	MINI STAINLESS STEEL OUTLET BOX WITH LEAD FREE QTR-TURN VALVE #88522 BRASS QTR TURN VALVE, INSTALLED, 1/2" CPVC CONX #SSMIB2AB UNIT 5.

GENERAL PLUMBING NOTES

#	DESCRIPTION
1	CONSTRUCTION TO CONFORM WITH: - 2018 INTERNATIONAL BUILDING CODE, WITH LOCAL AMENDMENTS - 2018 INTERNATIONAL MECHANICAL CODE, WITH LOCAL AMENDMENTS - 2018 UNIFORM PLUMBING CODE. WITH LOCAL AMENDMENTS - NATIONAL ELECTRICAL CODE, WITH LOCAL AMENDMENTS - 2018 INTERNATIONAL FIRE CODE, WITH LOCAL AMENDMENTS - 2018 WASHINGTON STATE ENERGY CODE, WITH LOCAL AMENDMENTS - 2018 INTERNATIONAL ENERGY CONSERVATION CODE, WITH LOCAL AMENDMENTS. - ALONG WITH ANY OTHER APPLICABLE LOCAL CODE AND STATE LAWS AND REGULATIONS
2	SOIL OR WASTE PIPE SHALL SLOPE 2% MINIMUM, UNLESS OTHERWISE NOTED OR REQUIRED BY CODE.
3	ALL DRAIN, WATER & GAS LINES SHALL BE KEPT TIGHT TO THE UNDERSIDE OF EQUIPMENT & SECURED IN PLACE.
4	CONTRACTOR SHALL VERIFY THE LOCATION OF THE SANITARY SEWER AT SITE AND SHALL REVISE THE SEWER SYSTEM AS REQUIRED.
5	ALL CLEANOUTS SHALL BE INSTALLED WHERE READILY ACCESSIBLE. THE CONTRACTOR SHALL COORDINATE ALL CLEANOUT LOCATIONS WITH EQUIPMENT, CABINETS, ETC. AND THE ARCHITECT PRIOR TO ANY INSTALLATION.
6	ALL VALVES, TRAP PRIMERS, WATER HAMMERS ARRESTORS OR OTHER EQUIPMENT SHOWN IN WALLS OR ABOVE NON-ACCESSIBLE CEILING SHALL BE INSTALLED BEHIND AN ACCESS PANEL.
7	ALL PLUMBING FIXTURE VENTS TO TERMINATE A MINIMUM OF 12 INCHES FROM ANY VERTICAL SURFACE AND 10 FEET FROM ANY OUTSIDE AIR INTAKE.
8	INSTALLATION SHALL CONFORM TO THE ENERGY CODE FOR NEW NON-RESIDENTIAL BUILDINGS.
9	PRIOR TO COMMENCING WORK ON THIS PROJECT, CONTRACTOR SHALL VERIFY DEPTH, SIZE, LOCATION AND CONDITION OF ALL EXISTING UTILITIES IN FIELD BEFORE STARTING WORK. SHOULD CONDITIONS EXIST OTHER THAN THOSE INDICATED WHICH WOULD CAUSE THE DESIGN TO BE ALTERED, CONTRACTOR SHALL NOTIFY OWNER AND GENERAL CONTRACTOR IMMEDIATELY.
10	CONTRACTOR SHALL COORDINATE INSTALLATION OF PLUMBING WORK WITH ALL OTHER TRADES SO AS TO AVOID DELAY OR INTERFERENCES. CONTRACTOR TO REVIEW ARCHITECTURAL AND EQUIPMENT SHEETS.
11	ALL PLUMBING WORK AND MATERIALS SHALL BE INSTALLED IN ACCORDANCE WITH ALL APPLICABLE STATE & LOCAL ORDINANCES & REGULATIONS HAVING JURISDICTION. CONTRACTOR SHALL OBTAIN ALL APPROVALS REQUIRED FROM REGULATING AGENCIES BEFORE STARTING WORK. ALL PLUMBING WORK & MATERIALS SHALL MEET THE REQUIREMENTS OF THE LATEST EDITIONS OF THE LOCAL PLUMBING CODE, UNLESS OTHERWISE REQUIRED BY THE DEPARTMENT OF BUILDING & SAFETY. OBTAIN & PAY FOR ALL PERMITS, FEES & INSPECTIONS REQUIRED BY GOVERNING AUTHORITIES. ALL PIPING TO BE CONCEALED UNLESS NOTED OTHERWISE.
12	THE EQUIPMENT ROUGH-INS AS SHOWN ARE BASED UPON AVAILABLE INFORMATION HOWEVER, IN SOME INSTANCES, THE OWNER OR SUPPLIER MAY SUBSTITUTE OR THE EQUIPMENT ITEM MAY VARY FROM WHAT IS SHOWN, THEREFORE, THE CONTRACTOR SHALL VERIFY ALL CRITICAL DIMENSIONS WITH THE OWNER PRIOR TO CONSTRUCTION. FAILURE OF THE CONTRACTOR TO VERIFY THESE DIMENSIONS SHALL PLACE THE RESPONSIBILITY FOR ANY SUBSEQUENT RELOCATION DIRECTLY ON THE CONTRACTOR.
13	CONTRACTOR SHALL PROVIDE GAS PIPING TO UNITS AND ALL FINAL CONNECTIONS REQUIRED FOR OPERATION.
14	INSTALL SHUT-OFF VALVES ON ALL HOT & COLD WATER LINES TO FIXTURE OR APPLIANCE.
15	PROVIDE FIRE RESISTIVE CAULKING FOR PIPE PENETRATIONS THRU FIRE RATED WALLS AND SLABS, TO MAINTAIN ASSIG. FIRE RATING.USE APPROPRIATE UL LISTED FIRE PROOFING SYSTEMS. PRIOR TO BEING CONCEALED,PIPING PENETRATIONS AT FIRE RESISTIVE ASSEMBLIES SHALL BE INSPECTED TO VERIFY COMPLIANCE WITH THE FIRE RESISTANCE RATING.
16	ALL VALVES, UNIONS, ETC. TO BE SAME SIZE AS PIPE UNLESS OTHERWISE INDICATED ON DRAWINGS.
17	ENSURE THAT ALL JOINTS, GAPS AND SPACES ALONG THE PERIMETER OF PLUMBING FIXTURES ARE TO BE SEALED WITH NSF APPROVED SEALANT TO WITHIN 1/32"
18	PROVIDE ADA-COMPLIANT UNDERSINK PIPE PROTECTION (LAV GUARD OR SIMILAR) AT ALL SINKS AND LAVATORIES FOR HOT AND COLD WATER.
19	ALL SELECTED KITCHEN FAUCETS SHOULD HAVE FLOW RATES 1.8GPM OR LESS AND ALL KITCHEN LAVATORIES SHOULD HAVE FLOW RATES 0.5GPM OR LESS PER CAL GREEN CHAPTER 5. PLUMBING FIXTURES AND FITTINGS SHALL BE INSTALLED IN ACCORDANCE WITH THE CALIFORNIA PLUMBING CODE (CPC), AND SHALL MEET THE APPLICABLE STANDARDS REFERENCED IN CPC TABLE 1401.1 AND CALGREEN CHAPTER 6.

NOTE:
NOT ALL NOTES ARE NECESSARILY APPLICABLE FOR THIS PROJECT.

PLUMBING LEGEND

SYMBOL	ABBREVIATION	DESCRIPTION
	CW	COLD WATER PIPING
	HW	HOT WATER PIPING (140° F)
	HWR	HOT WATER RECIRCULATION PIPING (140° F)
TW	TW	TEMPERED WATER PIPING (110° F)
	S OR W	SOIL OR WASTE PIPING BELOW GRADE
	GYW	GRAY WATER WASTE PIPING BELOW GRADE
	S OR W	SOIL OR WASTE PIPING ABOVE GRADE
CWV	CWV	COMBINATION WASTE & VENT PIPING
	V	VENT PIPING
CD	CD	CONDENSATE DRAIN PIPING
D	ID	INDIRECT DRAIN PIPING
G	G	NATURAL GAS PIPING
	WHA	WATER HAMMER ARRESTOR
	P.O.C.	POINT-OF-CONNECTION
		POINT-OF-DISCONNECTION
		CAPPED
		UNION
	UP	PIPE UP
	DN	PIPE DOWN
	DN	PIPE TEE DOWN
	BV	BALL VALVE
	CV	CHECK VALVE
	RED	REDUCER
	PUMP	PUMP
	FCO	FLOOR CLEANOUT OR GRADE CLEANOUT
	WCO	WALL CLEANOUT
	AFF	ABOVE FINISHED FLOOR
	BFF	BELOW FINISHED FLOOR
	BG	BELOW GROUND
	(E)	EXISTING
	(N)	NEW
	NTS	NOT TO SCALE
	IE	INVERT ELEVATION
	QTY.	QUANTITY
	V.T.R.	VENT THROUGH ROOF
	V.I.F.	VERIFY IN FIELD
	FU	FIXTURE UNIT

NOTE:
NOT ALL SYMBOLS AND ABBREVIATIONS ARE NECESSARILY USED IN THIS PROJECT.

EQUIPMENT SELECTED BY CLIENT SCHEDULE

FIXT. ID	DESCRIPTION	MANUFACTURER	ROUGH IN				REMARKS
			W	V	CW	HW	
P-1	LAVATORY	KOHLER	2"	1-1/2"	1/2"	1/2"	WALL-MOUNTED SINK, BRENHAM K-1997-1 W/ SHROUD K-1998, WHITE; LAVATORY GRID DRAIN, POLISHEDCHROME; FAUCET - SLOAN LINO, EAF-250-ISM.
P-2	HAND SINK	CORIAN	2"	1-1/2"	1/2"	1/2"	INTEGRAL SINK (SSF-3) - CORAIN #8252, GLACIER WHITE; LAVATORY GRID DRAIN, POLISHED CHROME; FAUCET - KOHLER TRITON K-703-K-CP; WRISTBLADES, K-16010-5-CP.
P-3	HAND SINK	CORIAN	2"	1-1/2"	1/2"	1/2"	INTEGRAL SINK (SSF-3) - CORIAN #881, GLACIER WHITE, W/ STRAINER BASKET IN POLISHED CHROME; FAUCET - KOHLER TRITON K-703-K-CP; WRISTBLADES, K-16010-5-CP.
P-4	SOILED SINK	CORIAN	2"	1-1/2"	1/2"	1/2"	CORIAN #850, GLACIER WHITE (SSF-3), W/ STRAINER BASKET IN POLISHED CHROME; FAUCET -CHICAGO MANUAL SINK (50-LES317XKAB); 13.5" SWING ONLY GOOSE NECK, CHROME (GN10ASWG).
P-5	SINK	CORIAN	2"	1-1/2"	1/2"	1/2"	INTEGRAL SINK (SSF-3) - CORIAN #804, GLACIER WHITE, W/ STRAINER BASKET IN POLISHED CHROME; FAUCET - KOHLER, TRITON K-7305-K-CP; WRISTBLADES, K-16010-5-CP.
P-7	KITCHEN SINK	CORIAN	2"	1-1/2"	3/4"	3/4"	INTEGRAL SINK (SSF-3) - CORIAN #5610, GLACIER WHITE, W/ STRAINER BASKET IN POLISHED CHROME; FAUCET - CHICAGO 895-317GN2AE35ABCP ;WRIST BLADES, K-16010-5-CP.
P-8	WATER CLOSET	AMERICAN STANDARD	4"	2"	3/4"	-	TOILET - AMERICAN STANDARD, HERITAGE VORMAX, RIGHT HEIGHT (205AA.104), WHITE; PROVIDE AMERICAN STANDARD COMMERCIAL TOILET SEAT THAT IS COMPATIBLE W/ SPECIFIED WATER CLOSET.
P-9	MOP SINK	MUST SEE	3"	2"	3/4"	3/4"	MOP SINK - MUST SEE, MODEL 63M, 10"X24"X24", WHITE, OR APPROVED EQUAL. MOP SINK ACC - HOSE HOLDER, MOP HANGER AND BUMPER GUARDS, WHITE VINYL, OR APPROVED EQUAL MOP FAUCET - CHICAGO FAUCETS 897-CP OR APPROVED EQUAL.
E-17	COFFEE MAKER	STAPLES	-	-	1/2"	-	MARS FLAVIA CREATION 500 (MDR00046).
E-36	DISHWASHER	FRIGIDAIRE	-	-	-	1/2"	MODEL FFBD1831U.
E-38A	REFRIGERATOR	WHIRPOOL	-	-	1/2"	-	MODEL WRT312CZJW.

CONDENSATE DRAIN PIPE SIZING

CONDENSATE PIPE SIZE (IN INCHES)	MAXIMUM EQUIPMENT CAPACITY IN TONS OF REFRIGERATION (SLOPE : 1/8" = 1'-0")	REMARK
3/4"	20	WITH PIPE RUNNING AT 3/4 FULL AND OUTSIDE AIR AT 90°F DB AND 73°F WB.
1"	40	
1-1/4"	90	
1-1/2"	125	
2"	250	

PIPING INSULATION SCHEDULE

PIPE SIZE	< 1"	1" - 1-1/2"	1-1/2" - 4"	4" TO < 8"	8" & LARGER
INSULATION THICKNESS	1"	1-1/2"	1-1/2"	1-1/2"	1-1/2"

ALL INSULATION SHALL BE W/R VALUES OF 4.0 TO 4.6.

MATERIAL SPECIFICATIONS

SERVICES		CAST IRON NO-HUB	GALV. STEEL SCH 40	BLACK STEEL SCH 40	TYPE M COPPER	TYPE L COPPER	TYPE K COPPER	TYPE L ACR-OXY/MED COPPER	PVC	REMARK
COLD WATER	ABOVE GROUND					●				
	BELOW GROUND						●			2
HOT/TEMPER WATER	ABOVE GROUND					●				
	BELOW GROUND						●			
WASTE	ABOVE GROUND	●								1
	BELOW GROUND	●								1, 2
VENT	ABOVE GROUND	●								1
	BELOW GROUND	●								1, 2
CONDENSATE DRAIN	ABOVE GROUND				●					
	BELOW GROUND				●					
INDIRECT WASTE	INDOOR				●					
	OUTDOOR				●					
GREASE WASTE	ABOVE GROUND	●								
	BELOW GROUND	●								
NATURAL GAS	INDOOR			●						
	OUTDOOR		●							
OXYGEN	INDOOR							●		
ANESTHESIA SCAVENGING GAS	INDOOR								●	

1. ABS DWV IS ACCEPTABLE IF ALLOWED BY THE LOCAL AUTHORITY HAVING JURISDICTION. CONTRACTOR TO PROVIDE BID ALTERNATE AND APPROVAL LETTER TO OWNER FOR CONSIDERATION.
2. PROTECT PIPING WITH APPROVED POLY WRAP OR PVC IOMIL PIPE TAPE.

NOT USED

PLUMBING DRAWING SCHEDULE

NUMBER	TITLE
P-001	PLUMBING LEGEND, GENERAL NOTES AND SCHEDULES
P-002	PLUMBING CALCULATIONS AND SPECIFICATIONS
P-201	PLUMBING WASTE AND VENT FLOOR PLAN
P-301	PLUMBING DOMESTIC WATER FLOOR PLAN
P-601	PLUMBING DETAILS

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ELECTRIC HOT WATER HEATER SIZING

ITEM	QTY	DESCRIPTION	DEMAND @ 140°F [GPH]	DEMAND @ 110°F [GPH]	DEMAND TOTAL [GPH]
P-1	3	LAVATORY	0	5	15.00
P-2	8	HAND SINK	0	5	40.00
P-3	1	HAND SINK	0	5	5.00
P-4	1	SOILED SINK	5	0	5.00
P-5	3	SINK	0	5	15.00
P-7	1	KITCHEN SINK	10	0	10.00
P-9	1	MOP SINK	15	0	15.00
E-36	1	DISHWASHER	20	0	20.00
TOTAL			-	-	125.00
Demand factor:	0.70	Hot water demand:			87.50
		Total hot water demand:			87.50
Temperature rise:	60.00	Thermal efficiency:	0.98		
KW Input [kW] = GPH x Temerature rise x 8.33 [lb/gall] / Thermal efficiency X 3412 BTU/KW=					13.08

NEW ELECTRIC WATER HEATER

QUANTITY	1
MANUFACTURER & MODEL	A.O.SMITH, DSE-50-15
RECOVERY RATE	104 GPH @ 60°F TEMPERATURE RISE
STORAGE CAPACITY	50 GALLONS
ELECTRICAL INPUT	208 V, 3ph, 60 Hz, 15 kW
THERMAL EFFICIENCY	98%
NOTE	NEW WATER HEATER INSTALLED ON PLATFORM ABOVE MOP SINK, PROVIDED BY OTHERS.

NOT USED

WATER LOAD CALCULATION

AVAILABLE WATER PRESSURE (VERIFY IN THE FIELD)	-	-	45	PSI
MAX. DISTANCE	195	120%=	234.00	FT
PRESSURE LOSS THRU WATER METER & BFP	-	-	15	PSI
HEAD LOSS	10	[FT]*0.43=	4.30	PSI
RESIDUAL PRESSURE	-		20	PSI
PRESSURE AVAILABLE AFTER LOSSES	-		5.70	PSI
ALLOWABLE DROP PER 100 FT	-		2.44	PSI

DESIGN VELOCITY <= 8 FPS & DESIGN PSI DROP/ 100 FT <= 2.4 PSI FOR COLD WATER THE MAX FLOW RATE FOR EACH PIPE SIZE CAN CARRY.

DOMESTIC COLD WATER SIZING SCHEDULE

PIPE SIZE	1/2"	3/4"	1"	1-1/4"	1-1/2"	2"
GPM	2	4	9	15	24	52
FL.-TANK FIXTURE UN.	1	4	12	22	39	138
PRESSURE DROP	2.40	2.40	2.40	2.40	2.40	2.40

DESIGN VELOCITY <= 8 FPS & DESIGN PSI DROP/100 FT <= 2.40 PSI

DOMESTIC HOT WATER SIZING SCHEDULE

PIPE SIZE	1/2"	3/4"	1"	1-1/4"	1-1/2"	2"
GPM	2	4	9	15	24	47
FL.-TANK FIXTURE UN.	1	4	12	22	39	115
PRESSURE DROP	2.40	2.40	2.40	2.40	2.40	2.40

DESIGN VELOCITY <= 5 FPS & DESIGN PSI DROP/100 FT <= 2.40 PSI

FIXTURE UNIT CALCULATIONS

ITEM	QTY	DESCRIPTION	WATER PIPING F.U. PER FIXTURE	WATER PIPING TOTAL CW F.U.	WATER PIPING TOTAL HW F.U.	WASTE PIPING F.U. PER FIXTURE	WASTE PIPING TOTAL SS F.U.
P-1	3	LAVATORY	1	3	3	1	3
P-2	8	HAND SINK	1	8	8	1	8
P-3	1	HAND SINK	1	1	1	1	1
P-4	1	SOILED SINK	2	2	2	2	2
P-5	3	SINK	1	3	3	1	3
P-7	1	KITCHEN SINK	1.5	1.5	1.5	2	2.0
P-8	3	WATER CLOSET	2.5	7.5	0	4	12
P-9	1	MOP SINK	3	3.0	3.0	3	3
E-17	1	COFFEE MAKER	1	1	0	0	0
E-36	1	DISHWASHER	2	2	2.0	2	2
E-38A	1	REFRIGERATOR	0.5	0.5	0.0	0	0
TOTAL:			-	32.5	23.5	-	36.0

MINIMUM PIPE SIZES

	COLD WATER	WASTE
TOTAL FOR AREA OF WORK	32.5 F.U.(F.T.) = 21 GPM = 1-1/2"	36 D.F.U. = 4"

VELOCITY <= 8 f.p.s PRESSURE = MAXIMUM POSSIBLE FOR VELOCITY <= 8 F.P.S AND GIVEN PIPE SIZE.

PLUMBING SPECIFICATIONS

PART 1 GENERAL

1.01

SCOPE OF WORK:
FURNISH ALL LABOR, MATERIALS, EQUIPMENT AND SERVICES REQUIRED FOR AND/OR REASONABLY INCIDENTAL TO THE COMPLETION OF THE FOLLOWING WORK.
A. SANITARY WASTE AND VENT PIPING SYSTEM INCLUDING CONNECTIONS TO BUILDING SEWER AS SHOWN.
B. DOMESTIC HOT AND COLD WATER SYSTEMS INCLUDING WATER HEATER, AND RELATED ACCESSORIES AND CONTROLS. CONNECTION TO BUILDING WATER AS SHOWN.
C. PLUMBING FIXTURES, TRIM AND ACCESSORIES INCLUDING INSTALLATION AND SUPPORT.
D. FLASHING AND SEALING OF ROOF AND EXTERIOR WALL PENETRATIONS FOR WATER TIGHTNESS.
E. CAULKING AND SEALING OF FLOOR AND WALL PENETRATIONS AND FORMED SHAFT PENETRATIONS.
F. BACKING FOR SECURING FIXTURES, TRIM AND PIPING.
G. ACCESS DOORS WHERE SHOWN OR REQUIRED BY CODE.
H. HANGERS, SUPPORTS, AND GUIDES.
I. CLEANUP OF DEBRIS AND FINAL CLEANUP OF DRAINS, FIXTURES AND EQUIPMENT.
J. RECORD DRAWINGS AND OPERATING MANUALS.
K. LICENSE, PERMITS AND ASSOCIATED FEES. MECH. CONDENSATE DRAINS FROM HVAC EQUIPMENT.
L. CUTTING, DRILLING AND PATCHING FOR ALL SURFACES IN RELATION TO PLUMBING WORK.

1.02

RELATED WORK INCLUDED UNDER OTHER SECTIONS:
A. DIVISION 21 00 00 - WET PIPE SPRINKLER SYSTEMS
B. DIVISION 23 00 00 - HEATING, VENTILATING AND AIR CONDITIONING
C. DIVISION 26 00 00 - ELECTRICAL

1.03

EXAMINATION OF SITE:
A. VISIT SITE BEFORE SUBMITTING BID AND CHECK LOCATION OF ALL EXISTING CONDITIONS WHICH WILL AFFECT THIS WORK. VERIFY DIMENSIONS AND LOCATIONS SHOWN ON DRAWINGS AND COVER ALL COSTS. CONTRACTOR SHALL ASSUME REASONABLE VARIATIONS OR MINOR OMISSIONS AND SHALL COMPLETE PROPOSED WORK WITHOUT ADDITIONAL COST. FAILURE TO VISIT SITE WILL NOT LESSEN RESPONSIBILITY OR ENTITLE ADDITIONAL COMPENSATION FOR WORK NOT INCLUDED IN PROPOSAL.

1.04

DRAWINGS:
THE ACCOMPANYING DRAWINGS SHALL BE CONSIDERED PART OF THESE SPECIFICATIONS. WORK AND MATERIALS SHOWN ON THE DRAWINGS AND NOT MENTIONED IN THE SPECIFICATIONS AND VICE VERSA SHALL BE EXECUTED AS IF SPECIFICALLY MENTIONED OR SHOWN IN BOTH. THE DRAWINGS SHALL BE CONSIDERED AS SCHEMATIC IN NATURE AND MINOR MODIFICATIONS OF THE WORK TO COMPLY WITH THE STRUCTURE AS FOUND SHALL BE MADE.

1.05

RULES AND REGULATIONS:
A. ALL WORK AND MATERIAL SHALL BE IN FULL ACCORDANCE WITH THE LATEST RULES AND REGULATIONS OF THE STATE FIRE MARSHAL AND OTHER APPLICABLE STATE AND LOCAL RULES AND REGULATIONS. NOTHING IN THESE DRAWINGS OR SPECIFICATIONS SHALL BE CONSTRUED TO PERMIT WORK NOT CONFORMING TO THESE CODES.
B. FURNISH WITHOUT ANY EXTRA CHARGE ANY ADDITIONAL MATERIAL AND LABOR WHEN REQUIRED TO COMPLY WITH THESE LAWS, ORDINANCES AND CODES REGARDLESS OF WHETHER SHOWN OR MENTIONED IN THESE SPECIFICATIONS OF DRAWINGS.

1.06

SUBMITTALS:
A. SUBMIT FOR REVIEW TO THE OWNER A COMPLETE AND ALL-INCLUSIVE LIST OF EQUIPMENT AND MATERIALS PROPOSED FOR USE (6 COPIES), ACCOMPANIED BY MANUFACTURER'S DATA SHEETS. DATA SHALL BE FORWARDED IN A SINGLE PACKAGE WRITTEN 15 DAYS AFTER AWARD OF CONTRACT. SUBMIT SIX BLUE LINE PRINTS AND ONE REPRODUCIBLE SHOP DRAWING SHOWING PROPOSED PLUMBING INSTALLATION. INCLUDE SIZES, LOCATIONS AND OTHER REQUIRED INFORMATION TO COORDINATE INSTALLATION WITH OTHER TRADES.
B. WITHIN 5 DAYS AFTER AWARD OF CONTRACT, SUBMIT 6 COPIES OF A LETTER STATING ANY MATERIALS THAT CONTRACTOR WISHES TO SUBSTITUTE, TO THE OWNER FOR APPROVAL. INCLUDE SUCH INFORMATION AS MANUFACTURER'S NAME, TYPE OF MATERIAL, CERTIFIED RATINGS, OVERALL APPEARANCE, AND NECESSARY INFORMATION TO EXPLAIN FUNCTION AND OPERATION OF MATERIAL. ALL PROPOSED SUBSTITUTIONS SHALL BE EQUAL IN QUALITY, DESIGN, UTILITY AND APPEARANCE TO MATERIAL, EQUIPMENT OR METHOD SPECIFIED.

1.07

AS-BUILT DRAWINGS:
A SET OF PLUMBING PLANS WILL BE FURNISHED TO THE CONTRACTOR ON WHICH HE SHALL INDICATE THE INSTALLATION "AS-BUILT" AS THE WORK PROGRESSES. UPON COMPLETION OF THE WORK, A SET OR REPRODUCIBLE DRAWINGS SHALL BE OBTAINED FROM THE OWNER AT COST, AND ALL CHANGES AS NOTED ON THE RECORD SET OF PRINTS SHALL BE INCORPORATED THEREON. THIS SET OF REPRODUCIBLE, ALONG WITH ONE SET OF BLUEPRINTS, SHALL BE DELIVERED TO THE OWNER UPON COMPLETION AND BEFORE FINAL ACCEPTANCE OF THE PROJECT.

1.08

GUARANTEE:
THE CONTRACTOR SHALL LEAVE THE ENTIRE INSTALLATION IN COMPLETE WORKING ORDER FREE FROM ANY DEFECTIVE MATERIAL, WORKMANSHIP OR FINISH. HE SHALL GUARANTEE TO REPAIR OR REPLACE, WITHOUT CHARGE, DEFECTS DUE TO FAULTY WORKMANSHIP OR MATERIAL FOR A PERIOD OF ONE YEAR FROM THE DATE OF FILING OF THE NOTICE OF COMPLETION.

1.09

OPERATION MANUALS AND OWNER INSTRUCTIONS:
A. PROVIDE COMPLETE OPERATION AND MAINTENANCE MANUALS COVERING ALL PLUMBING SYSTEMS AND EQUIPMENT THAT HAVE BEEN INSTALLED. THREE (3) COPIES OF THE MANUAL SHALL BE BOUND IN HARDBACK BINDERS.
B. PROVIDE INSTRUCTIONS TO OWNER AS TO OPERATION OF ALL EQUIPMENT. INSTRUCTION PERIOD TO COMMENCE FOR MINIMUM OF (2) HOURS AND SHALL BE SCHEDULED AT OWNER'S CONVENIENCE.

1.10

CUTTING AND PATCHING:
A. THE CONTRACTOR SHALL DO ALL CUTTING, DRILLING AND PATCHING WHICH MAY BE REQUIRED FOR THE INSTALLATION OF THE WORK UNDER THIS SECTION OF THE SPECIFICATIONS.
B. PATCHING SHALL BE OF THE SAME WORKMANSHIP, MATERIAL, AND FINISH AND SHALL MATCH ACCURATELY ALL SURROUNDING CONSTRUCTION IN A MANNER SATISFACTORY TO THE OWNER. NO CUTTING OF THE STRUCTURE SHALL BE PERMITTED WITHOUT WRITTEN APPROVAL OF THE OWNER.

PART 2 MATERIALS

2.01

PIPING:
A. HUBLESS CAST IRON SOIL PIPE AND FITTINGS:
1. PIPE AND FITTINGS FOR BOTH UNDERGROUND AND ABOVEGROUND INSTALLATION SHALL BE NO-HUB CAST IRON PIPE AND FITTINGS MANUFACTURED FROM GRAY CAST IRON AND SHALL CONFORM TO ASTM A 888, AND CISPI 301 (CURRENT VERSION). ALL PIPE AND FITTINGS ARE TO BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS AND LOCAL CODE REQUIREMENTS. PRODUCTS MUST BE MARKED WITH THE NAME OF THE USPTO REGISTERED TRADEMARK OF THE MANUFACTURER. ACCEPTABLE MANUFACTURERS ARE CHARLOTTE PIPE, STAR PIPE PRODUCTS, TYLER/AB&I OR APPROVED EQUAL.
2. STANDARD COUPLINGS SHALL BE USED FOR BRANCH PIPING AND SHALL CONFORM TO CISPI STANDARD 310, ASTM C 1227, AND ASTM C 564. COUPLINGS SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S BAND TIGHTENING SEQUENCE AND TORQUE RECOMMENDATIONS. TIGHTEN BANDS WITH A PROPERLY CALIBRATED TORQUE LIMITING DEVICE.
3. HEAVY DUTY COUPLINGS (BLUE SHIELD) SHALL BE USED FOR MAIN PIPING AND SHALL CONFORM TO ASTM C 1540, AND ASTM C 564. THIRD PARTY TESTING AND LISTING IS REQUIRED TO PROVE CONFORMANCE TO THE STANDARDS. COUPLINGS SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S BAND TIGHTENING SEQUENCE AND TORQUE RECOMMENDATIONS. TIGHTEN BANDS WITH A PROPERLY CALIBRATED TORQUE LIMITING DEVICE.
4. THE SYSTEM SHALL BE HYDROSTATICALLY TESTED AFTER INSTALLATION TO 10 FEET OF HEAD, OR AIR TEST TO 4.3 PSI.
1-1/2" AND SMALLER
2" AND LARGER
B. INTERIOR ABOVEGROUND SOIL, WASTE, VENT AND STORM DRAIN PIPING:
1. 3" AND LARGER - HUBLESS CAST-IRON PIPE AND FITTINGS.
2. 2" AND SMALLER - COPPER DWV TUBE, COPPER DRAINAGE FITTINGS, AND THREDED JOISTS.
C. INTERIOR DOMESTIC WATER PIPING:
3" AND SMALLER - TYPE L HARD TEMPERED COPPER WITH SOLDER END FITTINGS.
95-5 TIN AND ANTIMONY SOLDER JOINTING (LEAD-FREE). USE TYPE K FOR UNDERGROUND PIPING.
D. CONDENSATE DRAIN PIPING:
COPPER WATER TUBE ASTM B88, TYPE "M", SOLDER WITH 95-5 SOLDER, LEAD-FREE TYPE. CONDENSATE DRAIN PIPE IN CEILING SPACE SHALL BE INSULATED WITH 1/2" THICK ARMSTRONG ARMAFLEX, AND SECTIONS BUTTED FIRMLY TOGETHER.
E. THE FIRE-TEST RESPONSE CHARACTERISTIC OF ANY PIPING INSULATION SHALL HAVE A FLAME-SPREAD INDEX OF NOT MORE THAN 25 AND A SMOKE-DEVELOPED INDES OF NOT MORE THAN 50 WHEN TESTED IN ACCORDANCE WITH ASTM E 84 OR BY A TESTING AND INSPECTING AGENCY ACCEPTABLE TO AUTHORITIES HAVING JURISDICTION, OR REQUIRED BY LOCAL CODES.
F. DOMESTIC HOT WATER, TEMPERED WATER AND HOT WATER RETURN PIPING SHALL BE INSULATED WITH 1" THICK DENSITY GLASS FIBER INSULATION, HAVING FACTORY-APPLIED, SELF-SEALING ALL-SERVICE JACKET, MOLDED TO CONFORM TO PIPING, K-VALUE AT 75 DEGREES F, MAXIMUM 0.23 BTU-IN/HR-SQ.FT. DEGREES F.
G. GAS PIPING: GALVANIZED STEEL, ASTM-120, SCHEDULE 40 AND FITTINGS.

2.02

PIPE FLASHINGS:
#4 LEAD WITH COUNTERFLASHING RING BY GLENCO, STONEMAN ENGINEERING OR APPROVED EQUAL.

2.03

VALVES:
A. GATE VALVES: RED & WHITE 204 OR EQUAL, 3" AND SMALLER.
B. CHECK VALVES: RED & WHITE 238 OR EQUAL, 3" AND SMALLER.
C. BALL VALVES: BRASS OR BRONZE BODY WITH CHROME -PLATED BRONZE BALL, MSS SP-110, RED & WHITE VALVE 5044F OR EQUAL.

2.04

PLUMBING FIXTURES AND TRIM:
PLUMBING FIXTURES TO BE FURNISHED AND INSTALLED UNDER THIS CONTRACT. SEE PLUMBING FIXTURE SCHEDULE.

2.05

PIPE HANGERS AND SUPPORTS:
A. SUPERSTRUT, GRINNELL, OR APPROVED EQUAL.
B. INSTALLATION PER MANUFACTURER'S RECOMMENDATIONS.
C. ALL HANGERS BELOW DECK TO BE STAINLESS STEAL. ALL BOLTS AND THREE ROLLS SHALL HAVE DOUBLE NUTS FOR LOCKING

PART 3 INSTALLATION AND EXECUTION

3.01

GENERAL:
A. SUPPORT C.I. SOIL PIPING AT 5 FEET ON CENTER MAXIMUM AND EACH JOINT AND/OR FITTING. SUPPORT 1/2" AND 3/4" PIPING AT 6 FEET ON CENTER MAXIMUM. SUPPORT 1" TO 1- 1/2" PIPING AT 8 FEET ON CENTERS. SUPPORT 2" AND LARGER PIPING AT 10 FEET ON CENTER MAXIMUM. STEEL PIPING 4" AND LARGER MAY BE SUPPORTED AT 12 FEET ON CENTER MAXIMUM EXCEPT FOR VICTAULIC FITTED PIPING WHICH SHALL BE SUPPORTED AT 10 FEET ON CENTER MAXIMUM.

3.02

SPECIAL REQUIREMENTS, RESPONSIBILITIES AND TESTING:
A. INSTALL PIPING GENERALLY LEVEL, FREE OF TRAPS AND UNNECESSARY BENDS, TO CONFORM WITH BUILDING REQUIREMENTS. PIPE TO BE FREE OF DEFECTS, AND INSTALLED TO AVOID ANY POSSIBLE GALVANIC ACTION BY ISOLATING DISSIMILAR METALS.
B. TEST AND RECORD AVAILABLE DOMESTIC WATER PRESSURE IN STATIC AND DYNAMIC CONDITIONS FOR DYNAMIC TESTING RECORD PRESSURE AND FLOW RATE IN GALLONS PER MINUTE. TRANSMIT THIS INFORMATION TO THE ENGINEER BEFORE PROCEEDING WITH THE WORK.
C. PROVIDE ALL TESTS SPECIFIED HERE IN AFTER AND AS OTHERWISE REQUIRED. PROVIDE ALL TEST EQUIPMENT, INCLUDING TEST PUMPS, GAUGES, INSTRUMENTS AND OTHER EQUIPMENT REQUIRED. PRESSURE GAUGES USED SHALL BE GRADUATED IN INCREMENTS NOT GREATER THAN 5 POUNDS PER SQUARE INCH. NO PLUMBING OR DRAINAGE SYSTEM OR PART THERE OF SHALL BE COVERED, CONCEALED, OR PUT INTO USE UNLESS IT HAS BEEN SPECIFIED. CONDUCT ALL TESTS IN THE PRESENCE OF THE OWNER'S REPRESENTATIVE, AND OBTAIN THE NECESSARY JURISDICTIONAL AUTHORITY INSPECTIONS.
D. APPLY A WATER TEST TO THE WASTE, AND VENT SYSTEMS WHETHER IN ITS ENTIRETY OR IN SECTIONS; IF APPLIED TO THE ENTIRE SYSTEM, TIGHTLY CLOSE ALL OPENINGS IN THE PIPING EXCEPT THE HIGHEST OPENING, AND FILL THE SYSTEM WITH WATER TO THE POINT OF OVERFLOW. IF THE SYSTEM IS TESTED IN SECTIONS, TIGHTLY PLUG EACH OPENING EXCEPT FOR THE HIGHEST OPENING OF THE SECTION UNDER TEST, AND FILL EACH SECTION WITH WATER, BUT TEST WITH NO LESS THAN A 10' HEAD OF WATER. IN TESTING SUCCESSIVE SECTIONS, TEST AT LEAST THE UPPER 10' OF THE NEXT PRECEDING SECTION SO THAT NO JOINT OR PIPE IN THE BUILDING (EXCEPT THE UPPERMOST 10' OF THE SYSTEM) SHALL HAVE BEEN SUBMITTED TO A TEST OF LESS THAN A 10' HEAD OF WATER. KEEP WATER IN THE SYSTEM OR IN THE PORTION UNDER TEST FOR AT LEAST 24 HOURS BEFORE INSPECTION STARTS, WITH THE SYSTEM TIGHT AT ALL POINTS.
E. DOMESTIC WATER SYSTEM SHALL BE TESTED AND PROVED TIGHT UNDER A PRESSURE OF NOT LESS THAN 150 PSI. PIPING MUST STAND THE TEST FOR A PERIOD OF 24 HOURS WITHOUT LEAKING.
F. CHLORINATION OF THE DOMESTIC COLD AND HOT WATER PIPING SYSTEMS IN ACCORDANCE WITH STANDARD TESTING PROCEDURES AND LOCAL HEALTH DEPARTMENT REQUIREMENTS. TESTING BY A FIRM SUCH AS BENNET-MARINE OR EQUAL. SUBMIT CERTIFICATE OF SATISFACTORY TEST RESULTS.
G. UPON COMPLETION OF TESTING, CERTIFY TO THE ARCHITECT, IN WRITING THAT THE SPECIFIED TESTS HAVE BEEN PERFORMED AND THAT THE INSTALLATION COMPLIES WITH THE SPECIFIED REQUIREMENTS.

3.03

PIPING INSTALLATION:
A. MAKE CHANGES IN SIZE OF PIPE WITH REDUCING FITTINGS; BUSHINGS WILL NOT BE PERMITTED EXCEPT FOR BELL SHAPED COPPER BUSHINGS.
B. INSTALL DIELECTRIC INSULATING UNIONS IN WATER PIPING BETWEEN COPPER PIPING AND FERROUS PIPING OR EQUIPMENT - EPCO, OR EQUAL.
C. INSTALL EXPOSED POLISHED CHROME CONNECTIONS FROM FIXTURES OR EQUIPMENT WITH SPECIAL CARE. SHOW NO TOOL MARKS OR THREADS AT FITTINGS.
D. CAP OPENINGS IN PIPING DURING CONSTRUCTION.
E. PROVIDE 85% RED BRASS PIPE IPS, IN CONNECTION TO FAUCETS, FLUSH VALVES,HOSE BIBS OR SIMILAR ITEMS REQUIRING RIGID PIPING. EXTEND BRASS PIPE FROM FIXTURE TO POINT WHERE PIPING CAN BE SECURELY FASTENED TO BUILDING CONSTRUCTION. ALL EXPOSED PIPING AND STOP VALVES IN CONNECTION TO FIXTURES SHALL BE CHROME PLATED BRASS.
F. INSTALL UNIONS ADJACENT TO VALVES AND WHERE NECESSARY TO FACILITATE DISASSEMBLY OF PIPING.
G. ESCUTCHEONS: FIT EXPOSED PIPES PASSING THROUGH FLOORS, WALLS OR CEILINGS WITH ESCUTCHEONS. MANUFACTURE SPECIAL SIZES OF ESCUTCHEONS FROM STEEL AND PRIME COAT SAME. CUT IN ROUND, RECTANGULAR OR SQUARE SPACE TO PROVIDE A CLEAN APPEARANCE ACCEPTABLE TO THE ARCHITECT.
H. SUPPORT PIPING INDEPENDENTLY OF EQUIPMENT TO WHICH IT IS CONNECTED.
I. MAKE COPPER SOLDER JOINTS WITH 95/5 SOLDER, OR SILFOS; CLEAN SURFACES TO BE JOINED FREE OF OIL, GREASE, RUST OR OXIDES AND APPLY FLUX TO EACH JOINT BEFORE HEATING ASSEMBLY.
J. ROUGH-IN AND MAKE FINAL CONNECTIONS TO ALL OTHER EQUIPMENT FURNISHED UNDER OTHER DIVISIONS, REQUIRING PLUMBING CONNECTIONS.
K. ALL FLOOR PENETRATIONS ABOVE OCCUPIED BASEMENT AREAS SHOULD BE PROTECTED WITH "LINK-SEALS".

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PROJECT
MULTICARE TENANT IMPROVEMENT
INDIGO - PUYALLUP
4505 S MERIDIAN
PUYALLUP, WA 98373

REVISIONS

DATE 2024.03.29
BCRA NO. 22023.00.11
DRAWN BY: LL
REVIEWED BY: SR
SHEET TITLE
PLUMBING CALCULATIONS AND SPECIFICATIONS

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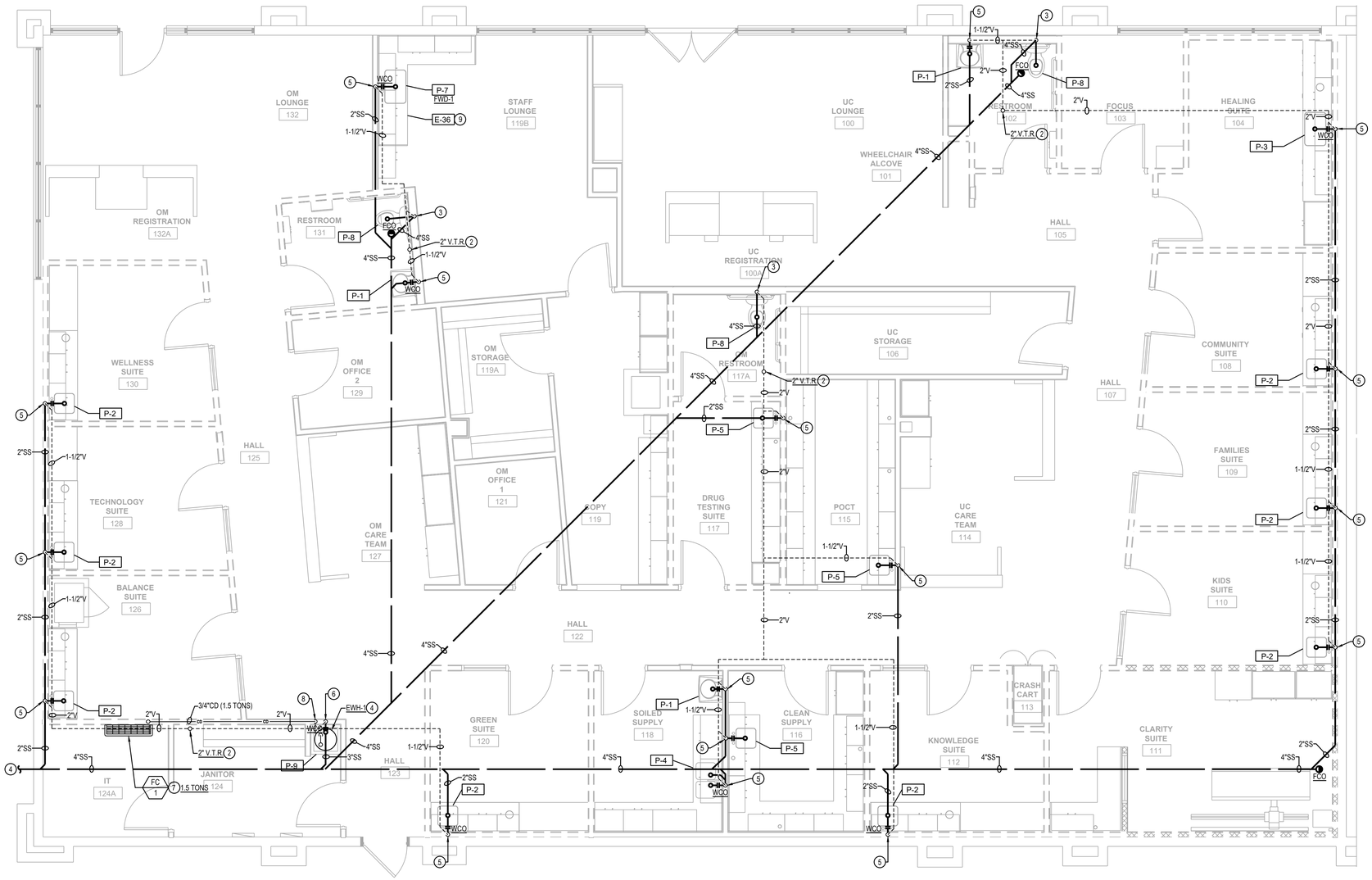

GENERAL NOTES

#	DESCRIPTION
1	V.I.F. EXACT LOCATION AND SIZE OF ALL EXISTING PIPING.
2	THE CONTRACTOR SHALL, BEFORE SUBMITTING ANY PROPOSAL, EXAMINE THE SITE AND SHALL DETERMINE FOR HIMSELF THE CONDITIONS THAT MAY AFFECT THE WORK. NO ALLOWANCE SHALL BE MADE IF THE CONTRACTOR FAILS TO MAKE SUCH EXAMINATIONS.
3	PRIOR TO STARTING CONSTRUCTION, DETERMINE EXACT INVERT ELEVATION, SIZE, DEPTH, DIRECTION OF FLOW AND LOCATION OF EXISTING UTILITIES WHERE CONNECTIONS ARE TO BE MADE OR INTERSECTIONS OCCUR. NOTIFY ARCHITECT OR ENGINEER FOR DISCREPANCY BETWEEN DRAWINGS AND ACTUAL FIELD CONDITIONS. WORK BACK TOWARD BUILDING FROM UTILITY CONNECTION FOR ALL PIPING SYSTEMS.
4	CONTRACTOR TO VERIFY THAT ALL EXISTING PIPING THAT ARE TO REMAIN WITHIN THE PREMISES ARE IN WORKING CONDITION BY MEANS OF VIDEO TAPPING ALL RUNS AND PLACING SYSTEM UNDER A PRESSURE TEST FOR APPROVAL.
5	CONTRACTOR TO REMOVE ALL EXISTING PIPING THAT WILL NOT BE REUSED. ABANDONED PIPES ARE NOT ACCEPTABLE.
6	CONTRACTOR SHALL PROVIDE AND INSTALL ANY INCIDENTAL WORK OR ITEMS NOT SHOWN OR SPECIFIED WHICH ARE NECESSARY TO PROVIDE A COMPLETE AND WORKABLE SYSTEM.

WASTE AND VENT SHEET NOTES

#	DESCRIPTION
1	EXTEND AS NEEDED AND CONNECT TO THE EXISTING 4" SS LINE BELOW FLOOR THAT USED TO SERVE DEMOLISHED RESTROOM. CONTRACTOR TO VERIFY IN THE FIELD EXACT LOCATION, INVERT ELEVATION, ROUTING AND SLOPE OF THE EXISTING LINE AND TO ADJUST POC, AS NEEDED.
2	PROVIDE NEW 2" V.T.R., REFER TO DETAIL NO. 8 ON SHEET P6.1.
3	4" SS DOWN AND 2" VENT UP.
4	INSTALL NEW ELECTRIC WATER HEATER ON PLATFORM ABOVE MOP SINK, PROVIDED BY OTHERS. PROVIDE 3/4" COMBINED DRAIN LINE FOR PRESSURE AND RELIEVE VALVE AND OVERFLOW DRAIN PAN, AND TERMINATE IT OVER MOP SINK WITH MIN 2" AIR GAP.
5	2" SS DOWN AND 1-1/2" VENT UP.
6	3" SS DOWN AND 2" VENT UP.
7	OUTLINE OF NEW WALL MOUNTED FAN COIL UNIT, PROVIDED WITH INTEGRATED CONDENSATE PUMP. REFER TO MECHANICAL PLANS FOR MORE INFO.
8	3/4" CD DOWN FROM ROOF IN WALL AND DISCHARGE OVER MOP SINK WITH AIR GAP.
9	INDIRECT DRAIN FROM DISHWASHER TO BE TERMINATED INTO FOOD WASTE DISPOSER THRU AN APPROVED DISHWASHER'S AIR GAP FITTING.
10	-
11	-
12	-
13	-
14	-
15	-

1 PLUMBING WASTE AND VENT FLOOR PLAN SCALE: 1/4" = 1'-0"

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PROJECT
MULTICARE TENANT IMPROVEMENT
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PUYALLUP, WA 98373

REVISIONS

DATE
2024.03.29

BCRA NO.
22023.00.11

DRAWN BY: LL

REVIEWED BY: SR

SHEET TITLE
PLUMBING WASTE AND VENT FLOOR PLAN

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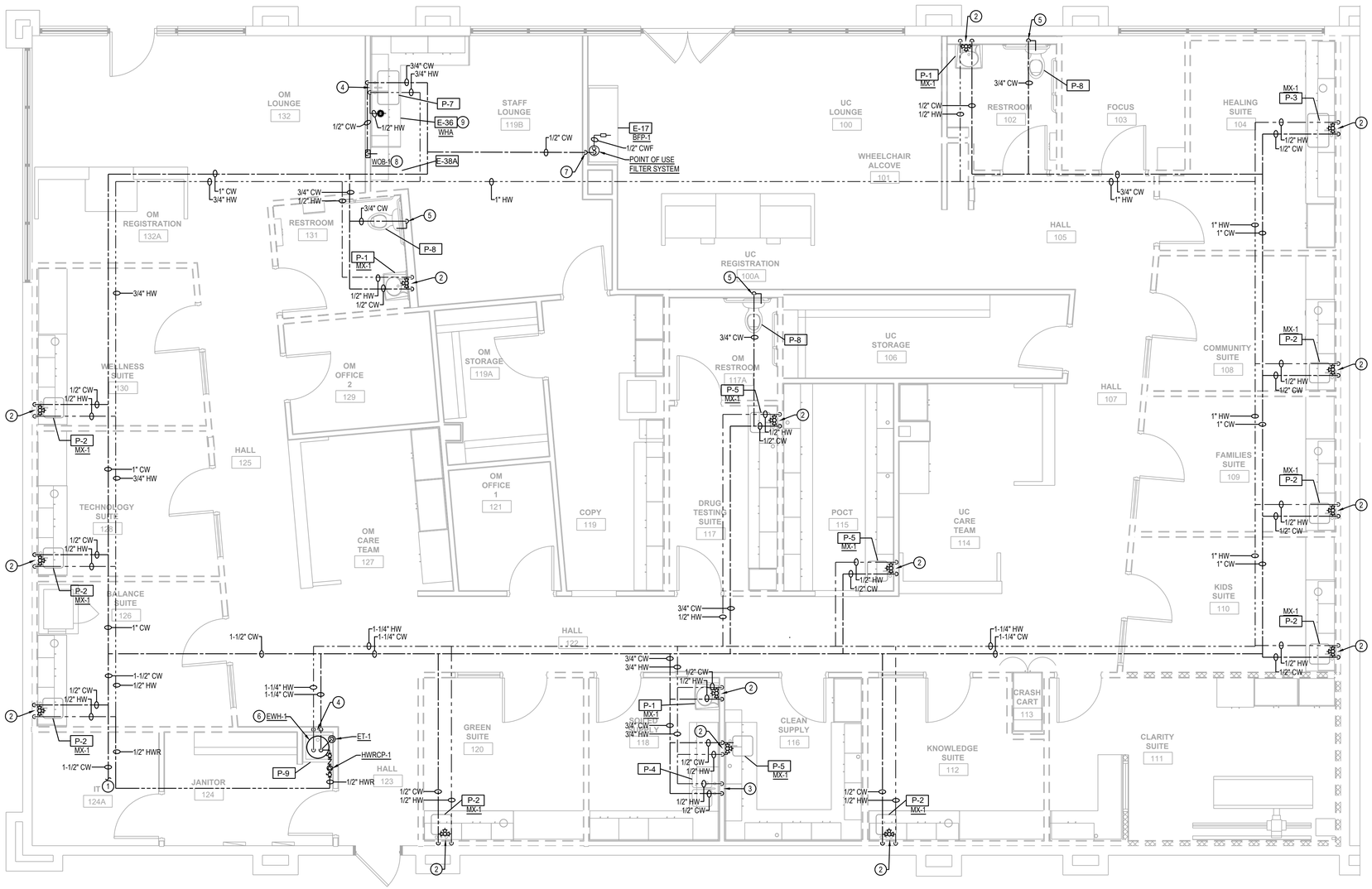

1 PLUMBING DOMESTIC WATER FLOOR PLAN SCALE: 1/4" = 1'-0"

GENERAL NOTES

#	DESCRIPTION
1	V.I.F. EXACT LOCATION AND SIZE OF ALL EXISTING PIPING.
2	THE CONTRACTOR SHALL, BEFORE SUBMITTING ANY PROPOSAL, EXAMINE THE SITE AND SHALL DETERMINE FOR HIMSELF THE CONDITIONS THAT MAY AFFECT THE WORK. NO ALLOWANCE SHALL BE MADE IF THE CONTRACTOR FAILS TO MAKE SUCH EXAMINATIONS.
3	PRIOR TO STARTING CONSTRUCTION, DETERMINE EXACT INVERT ELEVATION, SIZE, DEPTH, DIRECTION OF FLOW AND LOCATION OF EXISTING UTILITIES WHERE CONNECTIONS ARE TO BE MADE OR INTERSECTIONS OCCUR. NOTIFY ARCHITECT OR ENGINEER FOR DISCREPANCY BETWEEN DRAWINGS AND ACTUAL FIELD CONDITIONS. WORK BACK TOWARD BUILDING FROM UTILITY CONNECTION FOR ALL PIPING SYSTEMS.
4	CONTRACTOR TO VERIFY THAT ALL EXISTING PIPING THAT ARE TO REMAIN WITHIN THE PREMISES ARE IN WORKING CONDITION BY MEANS OF VIDEO TAPPING ALL RUNS AND PLACING SYSTEM UNDER A PRESSURE TEST FOR APPROVAL.
5	CONTRACTOR TO REMOVE ALL EXISTING PIPING THAT WILL NOT BE REUSED. ABANDONED PIPES ARE NOT ACCEPTABLE.
6	CONTRACTOR SHALL PROVIDE AND INSTALL ANY INCIDENTAL WORK OR ITEMS NOT SHOWN OR SPECIFIED WHICH ARE NECESSARY TO PROVIDE A COMPLETE AND WORKABLE SYSTEM.

DOMESTIC WATER SHEET NOTES

#	DESCRIPTION
1	EXTEND AS NEEDED AND CONNECT TO THE EXISTING AT LEAST 1-1/2" COLD WATER LINE ABOVE CEILING THAT USED TO SERVE DEMOLISHED RESTROOM. CONTRACTOR TO VERIFY IN THE FIELD EXACT SIZE, LOCATION, ELEVATION AND ROUTING OF THE EXISTING LINE AND TO ADJUST POC, IF NEEDED.
2	1/2" HOT AND COLD WATER DOWN TO LAVATORY / HAND SINK. PROVIDE POINT-OF-USE THERMOSTATIC MIXING VALVE AT ACCESSIBLE LOCATION BELOW LAVATORY / HAND SINK.
3	1/2" HOT AND COLD WATER DOWN.
4	3/4" HOT AND COLD WATER DOWN.
5	3/4" COLD WATER DOWN.
6	1-1/4" HOT AND COLD WATER LINES, 1/2" HOT WATER RETURN LINE TO NEW WATER HEATER INSTALLED ON PLATFORM ABOVE MOP SINK, PROVIDED BY OTHERS.
7	1/2" COLD WATER DOWN IN WALL TO POINT OF USE FILTRATION SYSTEM.
8	RUN 1/2" CW FOR REFRIGERATOR THRU WALL AND CONNECT TO WATER OUTLET BOX (WOB-1), THAT WILL SERVE REFRIGERATOR.
9	1/2" HOT WATER TO DISHWAHER, INSTALL WHA AT ACCESSIBLE LOCATION.
10	-
11	-
12	-
13	-
14	-
15	-

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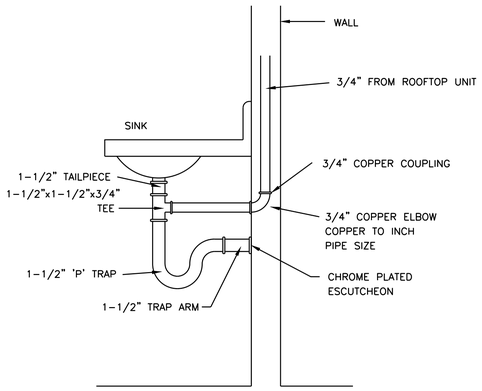
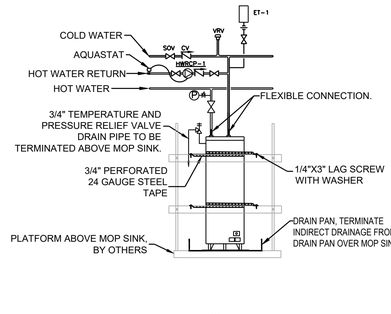
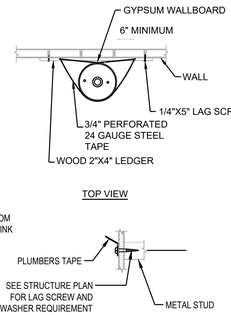


7	CONDENSATE DRAIN CONNECTION TO LAVATORY TAILPIECE DETAIL	NTS

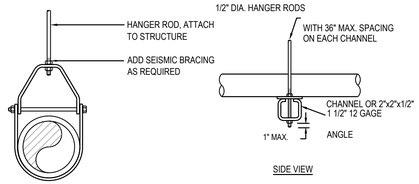
NOTE:
WATER HEATER STRAPPING SHALL BE AT POINTS WITHIN THE UPPER ONE-THIRD (1/3) AND LOWER ONE-THIRD (1/3) OF ITS VERTICAL DIMENSIONS. AT THE LOWER POINT, A MINIMUM DISTANCE OF FOUR (4) INCHES SHALL BE MAINTAINED ABOVE THE CONTROLS WITH THE STRAPPING.



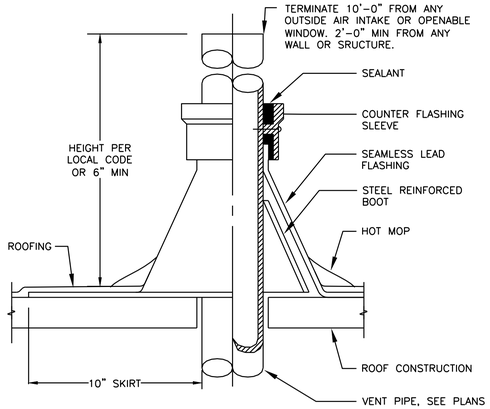


4	ELECTRIC WATER HEATER SEISMIC STRAPPING DETAIL	NTS

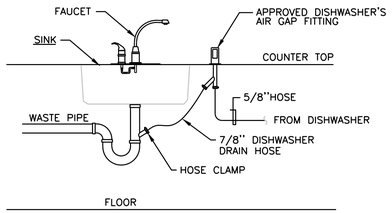
NOTE:
SUPPORT HORIZONTAL PIPING:
- CAST-IRON HUBLESS PIPING: EVERY OTHER JOINT, UNLESS OVER 4 FEET, THEN SUPPORT EACH JOINT.
- COPPER PIPING: 1-1/2" AND SMALLER, 6 FEET; 2" AND LARGER, 10 FEET.
- STEEL GAS PIPING: 1/2", 6 FEET; 3/4" AND 1", 8 FEET; 1-1/4" AND LARGER, 10 FEET.



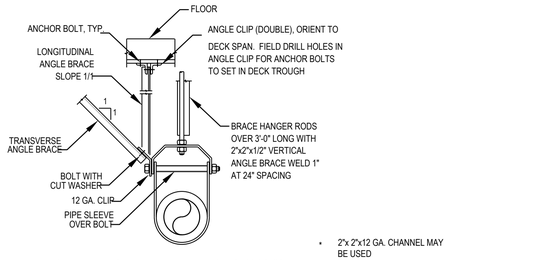
1	PIPE HANGER DETAIL	NTS



8	VENT THRU ROOF DETAIL	NTS



5	DISHWASHER DRAIN TO KITCHEN SINK DETAIL	NTS



PIPE SIZE	ANGLE BRACE *	BOLT TO ANGLE	ANGLE CLIP **	ANCHOR BOLTS OR INSERTS ***
2"	2"x2" 16 GA.	1/2"	3"x3"x1/2"x1'-4"	1/2
3, 4	2"x2" 16 GA.	1/2"	3"x3"x1/2"x1'-4"	1/2
5, 6	2.5"x2.5" 16 GA.	1/2"	5"x3"x1/2"x1'-4"	1/2
8	3"x3" 12 GA.	1/2"	2-5x3x1/2x1'-4"	2
10	3"x3" 12 GA.	1"	2-5x3x1/2"x1'-4"	2

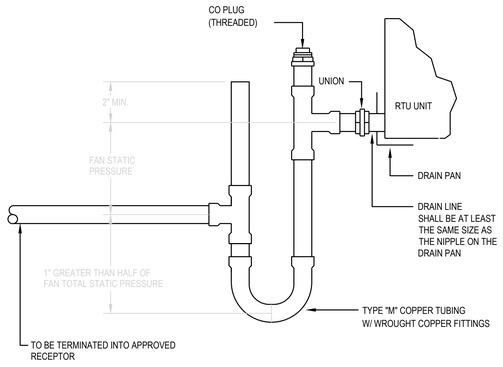
* 2"x 2"x12 GA. CHANNEL MAY BE USED

** BENT PLATE OF EQUAL THICKNESS MAY BE SUBSTITUTED FOR LONGITUDINAL ANGLE CLIP TO FACILITATE ANCHORAGE TO SLAB TROUGHS. PROVIDE EQUAL NUMBER OF ANCHOR BOLTS TO THAT SHOWN.

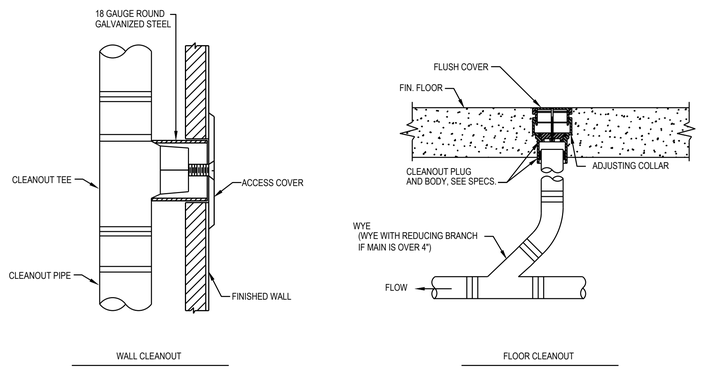
*** PROVIDE MINIMUM EMBEDMENT OF 1 1/2" ABOVE TOP OF METAL DECK FOR ALL ANCHOR BOLTS.

2	PIPE SUPPORT DETAIL	NTS

9	NOT USED	NTS



6	CONDENSATE DRAIN CONNECTION DETAIL	NTS



3	CLEANOUT DETAILS	NTS

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PROJECT
MULTICARE TENANT IMPROVEMENT
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REVISIONS

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