# SKAGIT COUNTY COMMUNITY JUSTICE CENTER

## PHYSICAL BARRIERS

**201 SUZANNE LANE**
**MOUNT VERNON, WA 98273**

## PERMIT SET

**MAY 9, 2025**

## PROJECT TEAM

| | | |
|---|---|---|
| OWNER | SKAGIT COUNTY<br>1800 CONTINENTAL PLACE<br>MOUNT VERNON, WA 98273 | KEN HANSEN<br>360-416-1179<br>KHANSEN@CO.SKAGIT.WA.US |
| ARCHITECT | DLR GROUP<br>51 UNIVERSITY ST SUITE 600<br>SEATTLE, WA 98101 | RYAN WHITE<br>206-461-6000<br>RWHITE@DLRGROUP.COM |
| STRUCTURAL ENGINEER | DLR GROUP<br>51 UNIVERSITY ST SUITE 600<br>SEATTLE, WA 98101 | ROBERT LAWSON<br>360-605-0019<br>RLAWSON@DLRGROUP.COM |

## DESCRIPTION OF WORK

PHYSICAL BARRIER IMPROVEMENT FOR THE GUARDRAILS WITHIN THE EXISTING DAYROOM SPACES AT THE SKAGIT COUNTY COMMUNITY JUSTICE CENTER. SCOPE OF WORK IS LIMITED TO THE DESIGN AND CONSTRUCTION OF NEW GUARDRAILS ATOP EXISITING GUARDRAILS WITHIN THE EXISTING (7) DAYROOMS AT THE STAIR AND MEZZANINE LEVEL. THERE IS NO INCREASE TO THE BUILDING AREA, OCCUPANT LOAD, OR CHANGE OF OCCUPANCY OR USE. THERE ARE NO BUILDING ENVELOPE ALTERATIONS WITHIN THE SCOPE OF WORK.

SCOPE OF WORK TO FOLLOW ALL CURRENT BUILDING CODES. EXISTING CODE PLANS OF THE BUILDING HAVE BEEN SUBMITTED FOR REFERENCE.

## PARCEL NUMBERS

P119263, P119265

## ZONING TYPE

PUBLIC

## EXISTING SF

100,754 SF

## FLOOD ZONE

5301510425C

## VICINITY MAP


## BUILDING CODE INFORMATION

**APPLICABLE CODES:**
2021 INTERNATIONAL BUILDING CODE (IBC) W/ AMENDMENTS

**EXISTING OCCUPANCY GROUP(S)**
I-3 = CONDITION 4 (PRIMARY BUILDING USE)
I-3 = CONDITION 3 (PROGRAMS WING)
B = BUSINESS (ADMINISTRATIVE AREAS, CONTROL ROOM, MULTIPURPOSE ROOMS, BUILDING MECHANICAL/SERVICE AREAS)
A-3 = ASSEMBLY AT COURTROOM
I-2 = CARE SUITE (MAX. 8 CARE RECIPIENT BEDS AND MAX. 5,000 S.F.)

ALL OCCUPANCIES TREATED AS NONSEPARATED OCCUPANCIES PER 508.3. ALLOWABLE AREA CALCULATIONS AND MOST RESTRICTIVE PROVISIONS OF CHAPTER 9 SHALL APPLY TO THE TOTAL NONSEPARATED OCCUPANCY AREA. PROVISIONS OF CHAPTER 4 ARE LIMITED TO THE REFERENCED OCCUPANCY AREA ONLY.

REF. CP SERIES FOR EXISTING CODE ANALYSIS - FOR REFERENCE ONLY.

**EXISTING CONSTRUCTION TYPE(S)**
TYPE IIB, REF. CP1.01 FOR EXISTING CODE ANALYSIS - FOR REFERENCE ONLY.

**EXISTING FLOOR AREAS**
FIRST FLOOR: 88,519 SF
MEZZANINE: 12,235 SF

**EXISTING BUILDING TOTAL FLOOR AREA**
100,754 SF - REF. CP SERIES FOR EXISTING CODE ANALYSIS - FOR REFERENCE ONLY.

**EXISTING BUILDING HEIGHT**
30'-0" - REF. CP SERIES FOR EXISTING CODE ANALYSIS & ALLOWABLE HEIGHT - FOR REFERENCE ONLY.

**EXISTING FIRE SUPPRESSION SYSTEM**
SUPERVISED AND MONITORED AUTOMATIC SPRINKLER SYSTEM SHALL BE DESIGNED AND INSTALLED THROUGHOUT. INSTITUTIONAL HEADS TO BE USED WHERE PRONE TO TAMPERING. STANDPIPE HOSE CONNECTION PROVIDED AS PER IBC 905.4(6). NO CONNECTIONS PROVIDED ADJACENT TO HORIZONTAL EXITS FOR AREA REACHABLE FROM EXTERIOR DOOR CONSISTENT WITH IBC 905.4(2) PROVISIONS FOR DISTANCE FROM EXIT STAIR HOSE CONNECTION. PORTABLE FIRE EXTINGUISHER LOCATIONS IDENTIFIED IN ACCORDANCE WITH PROVISIONS OF IBC 906.2. REF. CP SERIES FOR EXISTING CODE ANALYSIS - FOR REFERENCE ONLY.

**EXISTING FIRE ALARM SYSTEM**
FIRE ALARM AND OCCUPANT NOTIFICATION SYSTEM TO BE DESIGNED AND INSTALLED PER 907 EXCEPT AS OTHERWISE APPROVED IN ACCORDANCE WITH NFPA 72 AS PERMITTED BY IFC 901.2. SMOKE DETECTION IN GROUP I-3 TO BE IN ACCORDANCE WITH IBC 907.2.6.3.3 AND 909.12.3, AND IN GROUP I-2 PER NFPA 101-18.2.5.7.2.1(D)(2). REF. CP SERIES FOR EXISTING CODE ANALYSIS - FOR REFERENCE ONLY.

**EXISTING SMOKE CONTROL SYSTEM**
ENGINEERED SMOKE CONTROL SYSTEM TO PROVIDE A TENABLE ENVIRONMENT FOR EXITING FROM THE SMOKE COMPARTMENT IN AREA OF FIRE ORIGIN IN ACCORDANCE WITH IBC SECTION 909 FOR EACH GROUP I-3 WINDOWLESS SMOKE COMPARTMENT AS PER IBC 408.9 REF. CP SERIES FOR EXISTING CODE ANALYSIS - FOR REFERENCE ONLY.

## SHEET INDEX



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13029 REGISTERED ARCHITECT
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SCCJC
PHYSICAL BARRIERS
201 SUZANNE LANE
MT VERNON, WA 98273

PERMIT SET
05/09/2025
REVISIONS

73-24145-00

COVER SHEET

G0.0

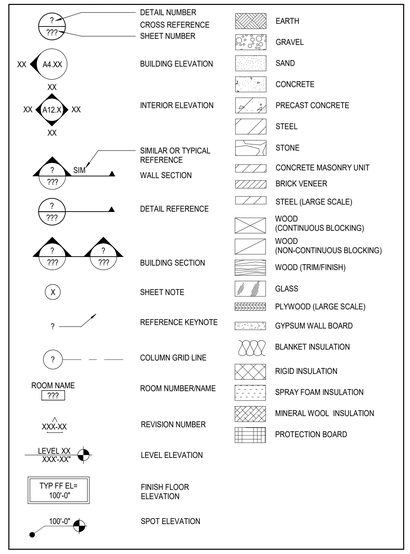
# GENERAL ABBREVIATIONS

| | |
|---|---|
| # | NUMBER |
| & | AND |
| @ | AT |
| ADA | AMERICANS WITH DISABILITY ACT |
| ADDN | ADDITION OR ADDITIONAL |
| AFF | ABOVE FINISHED FLOOR |
| AFG | ABOVE FINISHED GRADE |
| AHJ | AUTHORITY HAVING JURISDICTION |
| ALT | ALTERNATE |
| ANSI | AMERICAN NATIONAL STANDARDS INSTITUTE |
| APPROX | APPROXIMATE |
| ARCH | ARCHITECTURAL |
| BLDG | BUILDING |
| BSMT | BASEMENT |
| CL | CENTER LINE |
| CLG | CEILING |
| CM | CENTIMETER |
| CONC | CONCRETE |
| CONN(S) | CONNECTION(S) |
| CONST | CONSTRUCTION |
| CONT | CONTINUOUS |
| CONTR | CONTRACT(OR) |
| CTR | CENTER |
| D | DEPTH |
| DEG | DEGREE |
| DEMO | DEMOLISH OR DEMOLITION |
| DIA | DIAMETER |
| DIM | DIMENSION |
| DIV | SPECIFICATION DIVISION |
| DN | DOWN |
| DTL | DETAIL |
| DWG(S) | DRAWING(S) |
| E | EAST |
| EA | EACH |
| EC | ELECTRICAL CONTRACTOR |
| EL | ELEVATION |
| ELEC | ELECTRICAL |
| ENG | ENGINEER |
| EQ | EQUAL |
| EQUIP | EQUIPMENT |
| EQUIV | EQUIVALENT |
| EXST | EXISTING |
| EXT | EXTERIOR |
| FIN | FINISHED |
| FL | FLOOR |
| FT | FEET |
| FUT | FUTURE |
| GC | GENERAL CONTRACTOR |
| GOVT | GOVERNMENT |
| H | HEIGHT |
| HORIZ | HORIZONTAL |
| HT | HEIGHT |
| i.e. | THAT IS |
| IBC | INTERNATIONAL BUILDING CODE |
| IN | INCH |
| INT | INTERIOR |
| LB(S) | POUND(S) |
| M | THOUSAND |
| M | METER |
| MAX | MAXIMUM |
| MC | MECHANICAL CONTRACTOR |
| MECH | MECHANICAL |
| MEZZ | MEZZANINE |
| MFR | MANUFACTURER |
| MIN | MINIMUM |
| MISC | MISCELLANEOUS |
| MM | MILLIMETER |
| N | NORTH |
| N/A | NOT APPLICABLE |
| NIC | NOT IN CONTRACT |
| NTS | NOT TO SCALE |
| OC | ON CENTER |
| OPP | OPPOSITE |
| OVHD | OVERHEAD |
| PAR | PARALLEL |
| PENT | PENTHOUSE |
| PLYWD | PLYWOOD |
| QTY | QUANTITY |
| REQ(D) | REQUIRE(D) |
| REV | REVISION(S) |
| RM | ROOM |
| RND | ROUND |
| S | SOUTH |
| SCHED | SCHEDULE |
| SECT | SECTION |
| SHT | SHEET |
| SIM | SIMILAR |
| SPEC | SPECIFICATION(S) |
| STD | STANDARD |
| STL | STEEL |
| STOR | STORAGE |
| STRUCT | STRUCTURAL |
| SYM | SYMETRICAL |
| TEMP | TEMPORARY |
| TYP | TYPICAL |
| UNEX | UNEXCAVATED |
| UNFIN | UNFINISHED |
| UNO | UNLESS NOTED OTHERWISE |
| VERT | VERTICAL |
| VEST | VESTIBULE |
| VIF | VERIFY IN FIELD |
| W | WEST |
| W/ | WITH |
| W/O | WITHOUT |

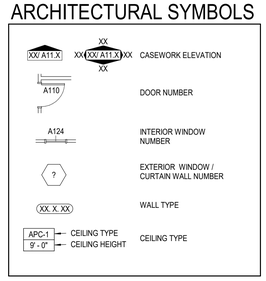
# ARCHITECTURAL ABBREVIATIONS

| | |
|---|---|
| A/E | ARCHITECT/ENGINEER |
| AB | AIR BARRIER |
| ABS | ASBESTOS |
| ACC | ADA ACCESSIBLE |
| ACR | ACRYLIC |
| ACT | ACOUSTIC CEILING TILE |
| AD | ACCESS DOOR |
| ADJ | ADJUSTABLE |
| ADJT | ADJACENT |
| ADMIN | ADMINISTRATION |
| AEC | AUTOMATED EXTERNAL DEFIBRILLATORS |
| AL | ALUMINUM |
| ALUM | ALUMINUM |
| AP | ACCESS PANEL |
| APC | ACOUSTIC PANEL CEILING |
| ASPH | ASPHALT |
| AUTO | AUTOMATIC |
| AVG | AVERAGE |
| AWP | ACOUSTIC WALL PANEL |
| B.O. | BOTTOM OF |
| BCS | BABY CHANGING STATION |
| BD | BOARD |
| BLK | BLOCK |
| BLKG | BLOCKING |
| BLKHD | BULKHEAD |
| BM(S) | BEAM(S) |
| BOT | BOTTOM |
| BRDG | BRIDGING |
| BRG | BEARING |
| BRKT | BRACKET |
| BT | BATHTUB |
| BTWN | BETWEEN |
| CAB | CABINET |
| CBD | CHALKBOARD |
| CER | CERAMIC |
| CF | CUBIC FEET |
| CFCI | CONTRACTOR FURNISHED CONTRACTOR INSTALLED |
| CFMF | COLD-FORMED METAL FRAMING |
| CG | CLEAR FLOAT GLASS |
| CI | CAST IRON |
| CIG | CLEAR INSULATING GLASS |
| CIP | CAST IN PLACE |
| CJ | CONTROL JOINT |
| CJA | CONTROL JOINT ABOVE |
| CLO | CLOSET |
| CLR | CLEAR |
| CMU | CONCRETE MASONRY UNIT |
| COL | COLUMN |
| COM | COMMON |
| COMB | COMBINATION |
| COMM | COMMUNICATIONS |
| COMPR | COMPRESSIBLE |
| CONF | CONFERENCE |
| CONFIG | CONFIGURATION |
| CORR | CORRIDOR |
| CP | COVER PLATE |
| CPT | CARPET |
| CR | CHAIR RAIL |
| CS | COUNTERSINK |
| CSTJ | CONSTRUCTION JOINT |
| CSWK | CASEWORK |
| CT | CERAMIC TILE |
| CTG | CLEAR TEMPERED FLOAT GLASS |
| CTIG | CLEAR TEMPERED INSULATING GLASS |
| CU | COPPER |
| CU | COMBINATION UNIT |
| CV | CONDOM VENDOR |
| CY | CUBIC YARD |
| CYL | CYLINDER |
| DB | DECIBEL |
| DBL | DOUBLE |
| DC | DUST COLLECTOR |
| DEPR | DEPRESS(ION)(ED) |
| DEPT | DEPARTMENT |
| DET | DETENTION |
| DF | DRINKING FOUNTAIN |
| DG | DOOR GRILLE |
| DIAG | DIAGONAL |
| DPFG | DAMPROOFING |
| DR | DOOR |
| DSN | DOWNSPOUT NOZZLE |
| DW | DISHWASHER |
| DWL(S) | DOWEL(S) |
| DWR | DRAWER |
| EB | EXPANSION BOLT |
| EE | EACH END |
| EEW | EMERGENCY EYE WASH |
| EEWS | EMERGENCY EYE WASH SHOWER |
| EFF | EFFICIENCY |
| EJ | EXPANSION JOINT |
| ELAS | ELASTOMERIC |
| ELEV | ELEVATOR |
| EMER | EMERGENCY |
| ENCL | ENCLOSURE |
| ENTR | ENTRANCE |
| ERF | EPOXY RESIN FLOORING |
| EUI | ENERGY USE INTENSITY |
| EW | EACH WAY |
| EWC | ELECTRIC WATER COOLER |
| EXP | EXPANSION |
| EXP | EXPOSED |
| F | FABRIC |
| F.O. | FACE OF |
| FAB | FABRICATE(D) |
| FB | FACE BRICK |
| FD | FLOOR DRAIN |
| FDN | FOUNDATION |
| FE | FIRE EXTINGUISHER |
| FEC | FIRE EXTINGUISHER CABINET |
| FF | FINISH FLOOR |
| FH | FIRE HYDRANT |
| FHC | FIRE HOSE CABINET |
| FIG | FIGURE |
| FIX | FIXTURE |
| FLASH | FLASHING |
| FLEX | FLEXIBLE |
| FLG | FLOORING |
| FLM | FULL LENGTH MIRROR |
| FLUOR | FLUORESCENT |
| FO | FINISH OPENING |
| FOC | FACE OF CONCRETE |
| FOF | FACE OF FINISH |
| FOM | FACE OF MASONRY |
| FOS | FACE OF STUD |
| FOW | FACE OF WALL |
| FP | FIREPROOFING |
| FR | FIRE RESISTANT |
| FRP | FIBERGLASS REINFORCED PANEL |
| FRT | FIRE RESISTANCE TREATED |
| FS | FLOOR SINK |
| FSS | FOLDING SHOWER SEAT |
| FTG | FOOTING |
| FVC | FIRE VALVE CABINET |
| FWC | FABRIC WALL COVERING |
| G | GROUT |
| GA | GAUGE |
| GAL | GALLON |
| GALV | GALVANIZED |
| GB | GRAB BAR |
| GD | GARBAGE DISPOSAL |
| GEN | GENERAL |
| GFA | GROSS FLOOR AREA |
| GL | GLUE LAMINATED |
| GL | GLASS |
| GMP | GUARANTEED MAXIMUM PRICE |
| GR | GUARD RAIL |
| GR | GRADE |
| GRS | GALVANIZED RIGID STEEL |
| GWB | GYPSUM WALL BOARD |
| GYP | GYPSUM |
| HC | HOLLOW CORE |
| HD | HAND DRYER |
| HDF | HIGH DENSITY FIBERBOARD |
| HDR | HEADER |
| HDWD | HARDWOOD |
| HDWR | HARDWARE |
| HM | HOLLOW METAL |
| HR | HOUR |
| HR | HANDRAIL |
| HS | HARDWARE SET |
| HSS | HOLLOW STRUCTURAL SHAPE |
| HVAC | HEATING VENTILATING AND AIR CONDITIONING |
| IAW | IN ACCORDANCE WITH |
| ID | INSIDE DIAMETER |
| IF | INSIDE FACE |
| IIP | INSULATED INFILL PANEL GLASS |
| IJ | ISOLATION JOINT |
| IJS | IN JOIST SPACE |
| INC. | INCLUDE(ING) |
| INSUL | INSULATION |
| JAN | JANITOR |
| JBE | JOIST BEARING ELEVATION |
| JCT | JUNCTION |
| JFB | JOINT FILLER BOARD |
| JST | JOIST |
| JT | JOINT |
| KCJ | KEYED CONSTRUCTION JOINT |
| KD | KNOCKDOWN |
| KH | KITCHEN HOOD |
| KIT | KITCHEN |
| L | ANGLE |
| LAB | LABORATORY |
| LAM | LAMINATED |
| LAV | LAVATORY |
| LBR | LUMBER |
| LDG | LOADING |
| LF | LINEAR FOOT |
| LG | LENGTH (LONG) |
| LG | LAMINATED GLASS |
| LIN | LINEAR |
| LINO | LINOLEUM |
| LKR | LOCKER |
| LOC | LOCATION |
| LONG | LONGITUDINAL |
| LSC | LIFE SAFETY CODE |
| LTG | LIGHTING |
| LV | LOUVER |
| LVT | LUXURY VINYL TILE |
| MAG | MAGNETIC |
| MAINT | MAINTENANCE |
| MAN | MANUAL |
| MAS | MASONRY |
| MATL | MATERIAL |
| MB | MOP BASIN |
| MBD | MARKER BOARD |
| MBH | MOP/BROOM HOLDER |
| MC | MEDICINE CABINET |
| MEMB | MEMBRANE |
| MH | MANHOLE |
| MR/S | MIRROR WITH SHELF |
| MTD | MOUNTED |
| MTG | MOUNTING |
| MUL | MULLION |
| NC | NOISE CRITERIA |
| NFPA | NATIONAL FIRE PROTECTION ASSOCIATION |
| NOM | NOMINAL |
| O to O | OUT TO OUT |
| OA | OVERALL |
| OFCI | OWNER FURNISHED CONTRACTOR INSTALLED |
| OFF | OFFICE |
| OFOI | OWNER FURNISHED OWNER INSTALLED |
| OH | OPPOSITE HAND |
| OPG(S) | OPENING(S) |
| OSHA | OPERATIONAL SAFETY AND HEALTH ADMINISTRATION |
| OTB | OPEN TO BELOW |
| OVFL | OVERFLOW |
| P | PAINT |
| PAN B | PANIC BOLT |
| PB | PARTICLE BOARD |
| PC | PRECAST CONCRETE |
| PCD | PAPER CUP DISPENSER |
| PCT | PORCELAIN CERAMIC TILE |
| PD | PANIC DEVICE |
| PERF | PERFORATED |
| PERP | PERPENDICULAR |
| PG | PATTERN GLASS |
| PIC | PORTABLE INSTRUMENT CONNECTION |
| PIG | PATTERN INSULATING GLASS |
| PL | PLATE |
| PL | PROPERTY LINE |
| PL | PLASTIC LAMINATE |
| PLAM | PLASTIC LAMINATE |
| PLBG | PLUMBING |
| PR | PAIR |
| PREFAB | PREFABRICATED |
| PROJ | PROJECT(OR) (ION) |
| PS | PROJECTION SCREEN |
| PT | POINT |
| PT | POINT OF TANGENCY |
| PTD | PAPER TOWEL DISPENSER |
| PTD/R | COMBINATION TOWEL DISPENSER/RECEPTACLE |
| PTN | PARTITION |
| PVC | POLYVINYL CHLORIDE |
| PWL | SOUND POWER LEVEL |
| QT | QUARRY TILE |
| QTR RND | QUARTER ROUND |
| R | RISER |
| RAD | RADIUS |
| RB | RUBBER BASE |
| RC | REMOTE CONTROL |
| RCP | REFLECTED CEILING PLAN |
| RD | ROOF DRAIN |
| REF | REFERENCE |
| REFL | REFLECTED |
| REM | REMOVABLE |
| RESIL | RESILIENT |
| RF | RESILIENT FLOORING |
| RF | RUBBER FLOOR |
| RFM | RECESSED FLOOR MAT |
| RH | ROBE HOOK |
| RI&C | ROUGH IN AND CONNECT |
| S | SINK |
| SAT | SPRAYED ACOUSTIC TREATMENT |
| SAW | SOUND ABSORBING WALL UNITS |
| SB | SPLASH BLOCK |
| SC | SOLID CORE |
| SC | SHOWER CURTAIN |
| SCD | SEAT COVER DISPENSER |
| SCH | SHOWER CURTAIN HOOK |
| SCR | SHOWER CURTAIN ROD |
| SCT | STRUCTURAL CLAY TILE |
| SD | SOAP DISPENSER |
| SECY | SECRETARY |
| SF | SQUARE FEET |
| SG | SPANDREL GLASS |
| SGL | SINGLE |
| SH | SHOWER |
| SHM | SECURITY HOLLOW METAL |
| SLNT | SEALANT |
| SM | SHEET METAL |
| SND | SANITARY NAPKIN DISPOSAL |
| SNV | SANITARY NAPKIN VENDOR |
| SPL | SOUND PRESSURE LEVEL |
| SQ | SQUARE |
| SS | SOLID SURFACE |
| SSA | STORM SHELTER AREA |
| SSS | STAINLESS STEEL SHELF |
| SST | STAINLESS STEEL |
| ST | STONE |
| ST | STAIR |
| STAG'D | STAGGERED |
| STC | SOUND TRANSMISSION CLASS |
| STGR | STRINGER |
| SUBFL | SUBFLOOR |
| SURF | SURFACE |
| SUSP | SUSPENDED |
| SVF | SHEET VINYL FLOORING |
| T | TREAD |
| T&G | TONGUE AND GROOVE |
| T.O. | TOP OF |
| TAN | TANGENT |
| TB | TOWEL BAR |
| TBD | TACK BOARD |
| TCP | TOILET COMPARTMENT PARTITION |
| TERR | TERRAZZO |
| TFG | TINTED FLOAT GLASS |
| TG | TEMPERED GLASS |
| TH | THRESHOLD |
| THK | THICK(NESS) |
| TI | TENANT IMPROVEMENT |
| TIG | TINTED INSULATING GLASS |
| TMR | TILT MIRROR UNIT |
| TOIL | TOILET |
| TOP | TOP OF PAVING |
| TRANS | TRANSVERSE |
| TT | TERRAZZO TILE |
| TTD | TOILET TISSUE DISPENSER |
| TTG | TINTED TEMPERED FLOAT GLASS |
| TTIG | TINTED TEMPERED INSULATING GLASS |
| TW | TACK WALL |
| UL | UNDERWRITERS LABORATORIES |
| UR | URINAL |
| US | UTILITY SHELF |
| UTIL | UTILITY |
| VB | VAPOR BARRIER |
| VB | VINYL BASE |
| VCB | VENTED COVE BASE |
| VF | VINYL FLOOR |
| VOC | VOLITILE ORGANIC COMPOUND |
| VOL | VOLUME |
| VP | VENEER PLASTER |
| VT | VINYL TILE |
| VWC | VINYL WALL COVERING |
| W | WIDE |
| WB | WALL BASE |
| WC | WATER CLOSET |
| WC | WALL COVERING |
| WCL | WATER CLOSET/LAVATORY COMBINATION |
| WD | WOOD |
| WDF | WOOD FLOORING |
| WDW | WINDOW |
| WG | POLISHED WIRE GLASS |
| WI | WROUGHT IRON |
| WOM | WALK OFF MAT |
| WR | WASTE RECEPTACLE |
| WRB | WEATHER RESISTANT BARRIER |
| WW | WARM WHITE |
| WWF | WELDED WIRE FABRIC |
| YD | YARD |

# GENERAL SYMBOLS




# ARCHITECTURAL SYMBOLS





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REGISTERED ARCHITECT
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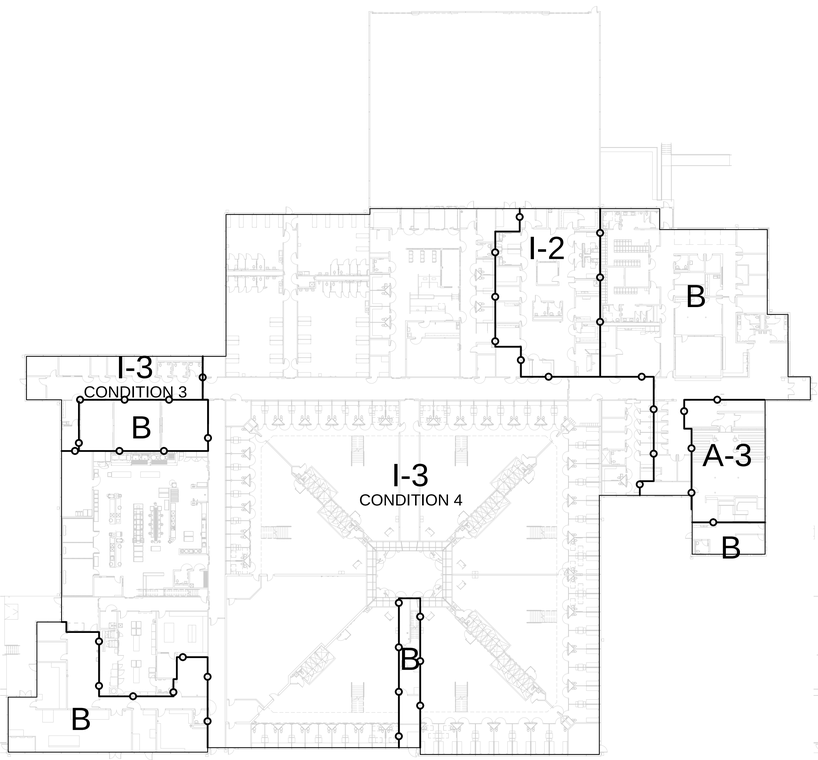
GENERAL NOTES, SYMBOLS, AND ABBREVIATIONS

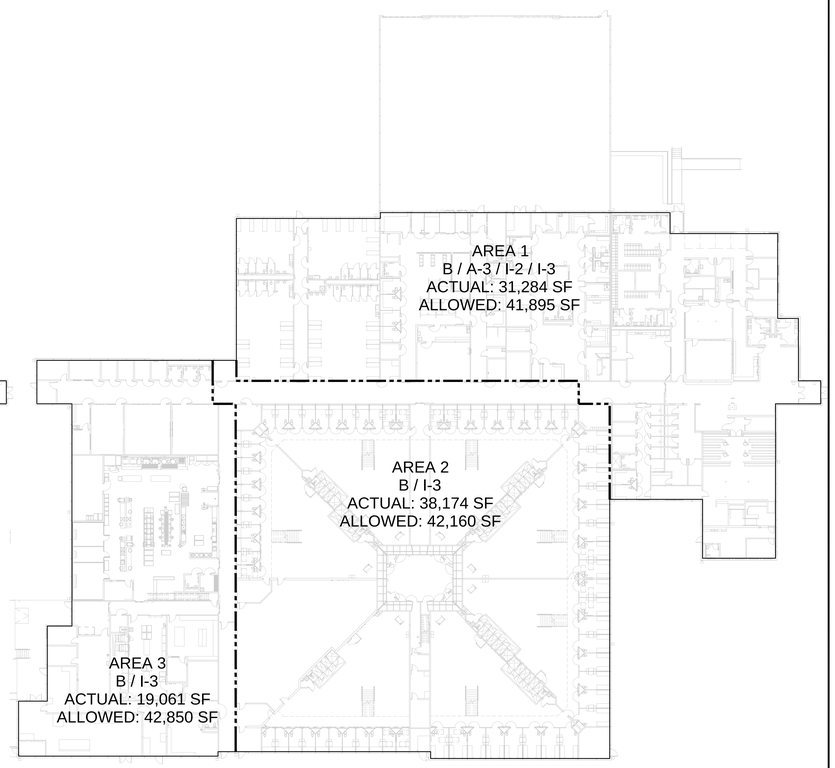
G1.1




NORTH

## OCCUPANCY DIAGRAM - FIRST FLOOR

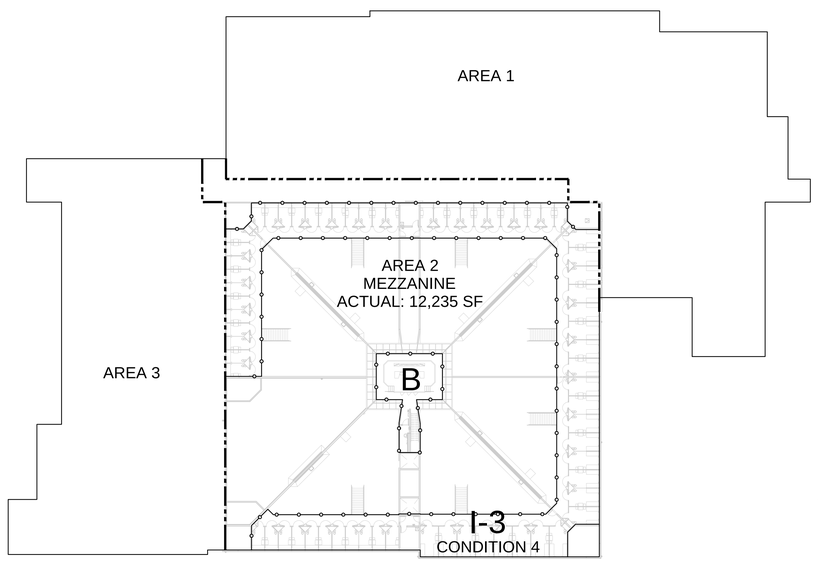
SCALE: 1/32" = 1'-0"




NORTH

## ALLOWABLE AREA DIAGRAM - FIRST FLOOR

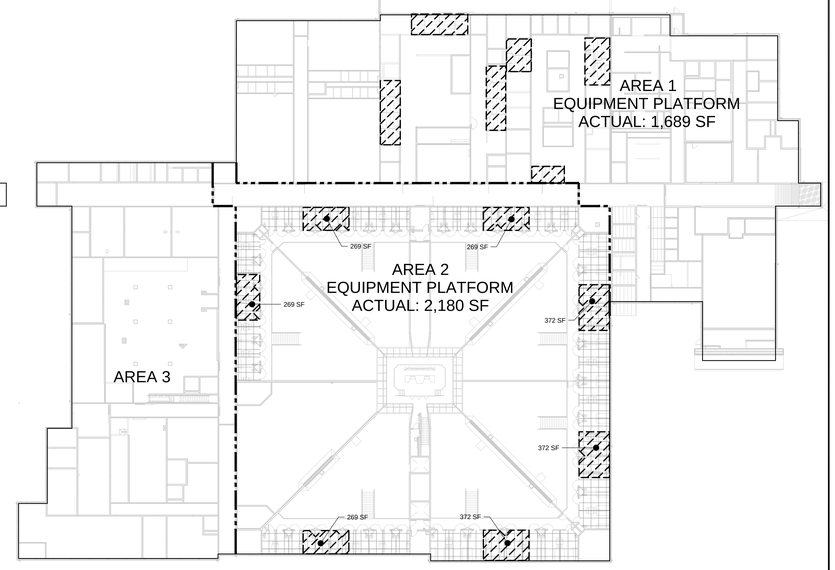
SCALE: 1/32" = 1'-0"




NORTH

## AREA DIAGRAM - MEZZANINE

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




NORTH

## AREA DIAGRAM - UTILITY PLAN

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

**CODE STUDY**

APPLICABLE CODES:
2012 INTERNATIONAL BUILDING CODE (IBC) W/ AMENDMENTS
2012 INTERNATIONAL MECHANICAL CODE (IMC) W/ AMENDMENTS
2012 INTERNATIONAL FIRE CODE (IFC) W/ AMENDMENTS
2012 LIFE SAFETY CODE (NFPA 101) IN GROUP I-2 W/
WA DEPARTMENT OF HEALTH AMENDMENTS
2012 UNIFORM PLUMBING CODE (UPC) W/ AMENDMENTS
2012 WASHINGTON STATE ENERGY CODE
2014 NATIONAL ELECTRIC CODE W/ AMENDMENTS

OCCUPANCY CLASSIFICATION:
I-3 = CONDITION 4 (PRIMARY BUILDING USE)
I-3 = CONDITION 3 (PROGRAMS WING)
B = BUSINESS (ADMINISTRATIVE AREAS, CONTROL ROOM, MULTIPURPOSE ROOMS, BUILDING MECHANICAL/SERVICE AREAS)
A-3 = ASSEMBLY AT COURTROOM
I-2 = CARE SUITE (MAX. 8 CARE RECIPIENT BEDS AND MAX. 5,000 S.F.)

ALL OCCUPANCIES TREATED AS NONSEPARATED OCCUPANCIES PER 508.3. ALLOWABLE AREA CALCULATIONS AND MOST RESTRICTIVE PROVISIONS OF CHAPTER 9 SHALL APPLY TO THE TOTAL NONSEPARATED OCCUPANCY AREA. PROVISIONS OF CHAPTER 4 ARE LIMITED TO THE REFERENCED OCCUPANCY AREA ONLY.

CONSTRUCTION TYPE:
TYPE IIB
ALLOWABLE HEIGHT (TABLE 503 AND 504.2): 75' WITH SPRINKLERS, EXCEPT I-2: 55'
ALLOWABLE STORIES (TABLE 503 AND 504.2): 2 STORIES WITH SPRINKLERS, EXCEPT I-2: 1 STORY
TABULAR AREAS: I-3 = 10,000 SQ. FT. A-3 = 9,500 SQ. FT.
I-2 = 11,000 SQ. FT. B = 23,000 SQ. FT.

AREA INCREASES:
Aa = [At * [At * If] + [At * Is]
Aa: ALLOWABLE BUILDING AREA PER STORY
At: TABULAR BUILDING AREA PER STORY PER TABLE 503
If: AREA INCREASE FACTOR DUE TO FRONTAGE
If = [(F/P-0.25)W/30
F: BUILDING PERIMETER THAT FRONTS ON A PUBLIC WAY OR OPEN SPACE HAVING 20 FT MIN WIDTH
P: PERIMETER OF ENTIRE BUILDING
W: WIDTH OF PUBLIC WAY OR OPEN SPACE
Is: AREA INCREASE FACTOR DUE TO SPRINKLER PROTECTION

AREA 1: A-3; IIB
If = [702 / 1063 - 0.25] 30 / 30 = 0.410
Aa = [9,500 + [9,500 * 0.410] + [9,500 * 3]] = 41,895

AREA 2: I-3, IIB
If = [307 / 659 - 0.25] 30 / 30 = 0.216
Aa = [10,000 + [10,000 * 0.216] + [10,000 * 3]] = 42,160

AREA 3: I-3, IIB
If = [357 / 667 - 0.25] 30 / 30 = 0.285
Aa = [10,000 + [10,000 * 0.285] + [10,000 * 3]] = 42,850

MEZZANINES DO NOT CONTRIBUTE TO BUILDING AREA OR STORIES PER 505.2 BUT SHALL BE USED IN CALCULATIONS FOR FIRE AREA. MEZZANINES ARE TO BE LESS THAN OR EQUAL TO 1/2 OF THE FLOOR AREA OF THE ROOM IN WHICH IT IS LOCATED AND SHALL HAVE 7'-0" MIN CLEAR ABOVE AND BELOW. SECOND TIER OF HOUSING PODS AND CONTROL ROOM ARE CLASSIFIED AS MEZZANINE SPACE.

TOTAL AREA OF MEZZANINES AND UNOCCUPIED ELEVATED EQUIPMENT PLATFORMS SHALL NOT EXCEED 2/3 OF THE FLOOR AREA OF THE ROOM IN WHICH THEY ARE LOCATED.

HAZARDOUS MATERIALS
MAXIMUM ALLOWABLE QUANTITIES PER IBC TABLE 307.1(1)
FOR WELDING AREA INCLUDE:
FLAMMABLE GAS (STORAGE): 2,000 CU.FT. AT NTP
FLAMMABLE GAS (CLOSED USE): 2,000 CU.FT. AT NTP
OXIDIZING GAS (STORAGE): 3,000 CU.FT. AT NTP
OXIDIZING GAS (CLOSED USE): 3,000 CU.FT. AT NTP
CONTROL AREA SEPARATION PER IBC 414.2: 1-HOUR

REQUIRED SEPARATIONS
INCIDENTAL USES REQUIRING SEPARATION PER TABLE 509
ROOM WITH BOILERS OVER 15PSI & 10HP (SMOKE-RESISTANT)
LAUNDRY ROOM OVER 100 SQ. FT. (SMOKE-RESISTANT)
WASTE AND LINEN COLLECTION IN I-2 (1-HOUR)
LABORATORY IN I-2 (SMOKE-RESISTANT)
SECONDARY POWER SOURCE AND TRANSFER SWITCHES (1-HR, 909.11)
GROUP I-2 (2-HR, NFPA 101-18.1.3.4)
BOILER AND FUEL-FIRED HEATER ROOM (NFPA 101-18.3.2.1)

SMOKE BARRIERS
SMOKE BARRIERS SHALL BE PROVIDED FOR ANY AREA OCCUPIED BY SLEEPING RESIDENTS TOTALING 50 OR MORE PERSONS AND SHALL BE DIVIDED INTO TWO SMOKE COMPARTMENTS PER 408.6. EACH SMOKE COMPARTMENT SHALL NOT HOUSE MORE THAN 200 RESIDENTS.

AREA SEPARATION FIRE WALL CONTINUITY
AREAS TO BE SEPARATED WITH 2 HOUR FIRE WALLS PER 706.4. WALLS TO MAINTAIN A FIRE RESISTANCE RATING UP TO 4' ON ADJACENT WALLS TO MAINTAIN CONTINUITY PER 706.5.1. PER 706.6 FIRE WALLS SHALL CONTINUE 30" ABOVE ROOF OR BY EXCEPTION 2, ROOFS SHALL MAINTAIN A FIRE RESISTANCE RATING OF ONE HOUR FOR 4' HORIZONTALLY AND HAVE NO OPENINGS WITHIN THE 4' HORIZONTAL DISTANCE. PARAPETS AT EXTERIOR RATED WALLS SHALL EXTEND 18" ABOVE ROOF SURFACE REQUIRED UNLESS ROOF AND DECK IS ENTIRELY OF NON COMBUSTIBLE MATERIALS.

FIRE WALL OPENINGS MAX OPENINGS ARE NOT LIMITED PER 706.8 EXCEPTION 2 BUT SHALL NOT EXCEED 25% OF THE WALL.

AT BUILDINGS OF DIFFERENT ROOF LEVELS, FIRE WALL SHALL EXTEND 30 INCHES ABOVE LOWER ROOF, WITH MINIMUM 1-HOUR FIRE-RATED EXTERIOR WALL FOR 15 FEET ABOVE LOWER ROOF, UNLESS LOWER ROOF ASSEMBLY IS 1-HOUR FIRE RATED MINIMUM 10 FEET FROM FIRE WALL, SUPPORTED BY 1-HOUR FIRE-RATED STRUCTURE.

FINISHES:
WALL AND CEILING FINISH REQUIREMENTS AS FOLLOWS:

INTERIOR EXIT STAIRS AND PASSAGES
I-2 AND A-3 AND B = CLASS B
I-3 = CLASS A
CORRIDORS & ENCLOSURES FOR EXIT ACCESS STAIRS
I-2 AND A-3 = CLASS B
B = CLASS C
I-3 = CLASS A (C ALLOWED AS WAINSCOT MATERIAL)
ROOMS AND ENCLOSED SPACES
I-2 = CLASS B
OTHERS = CLASS C (INCL. I-2 ROOMS WITH LESS THAN 4 PERSONS)

MEANS OF EGRESS
MINIMUM HEIGHT CLEARANCE: 7'-6" (6'-8" ALLOWED AT PROTRUDING OBJECTS)

WIDTHS:
STAIRWAYS = 0.3 INCHES/OCCUPANT BUT NOT LESS THAN:
44 INCHES
36 INCHES IF SERVING AN OCCUPANT LOAD LESS THAN 50
OTHER MEANS OF EGRESS COMPONENTS = 0.2 INCHES/
OCCUPANT BUT NOT LESS THAN:
EGRESS DOORS CLEAR WIDTH = 32" MIN
DOORS TO SLEEPING UNITS IN I-3 = 28" MIN
CORRIDOR WITH GURNEY TRAFFIC = 72" MIN
FOR BED MOVEMENT IN I-2 CORRIDOR = 96" MIN

DOORS-CLEAR OPENING
36" = 32" CLEAR = 160 PEOPLE
42" = 36" CLEAR = 190 PEOPLE
48" = 44" CLEAR = 220 PEOPLE

COMMON PATH OF TRAVEL (MAXIMUM TRAVEL DISTANCE ALLOWED BEFORE 2 EGRESS PATHS ARE AVAILABLE)
A-3 = 75' I-2 = 75'
B = 100' I-3 = 100'

EXIT ACCESS TRAVEL DISTANCE:
A-3 = 250' I-2 = 100' (CARE SUITE)
B = 300' I-3 = 200'

NUMBER OF EXITS: MORE THAN ONE EXIT MUST BE PROVIDED FOR OCCUPANT LOAD ABOVE THE FOLLOWING:
A-3 AND B 49 PERSONS
I-2 10 PERSONS
I-3 10 PERSONS (IN AREAS WITHOUT SMOKE DETECTION OR STAFF SUPERVISION - IBC COMMENTARY)

WHERE MORE THAN ONE EGRESS IS REQUIRED, DOORS MUST BE SEPARATED MINIMUM 1/3 DIAGONAL DISTANCE OF THE ROOM. THE FORCE TO OPEN HORIZONTAL SLIDING DOOR SHALL NOT EXCEED 50 POUNDS WITH A 50-POUND PERPENDICULAR FORCE AGAINST THE DOOR.

INTERIOR SPACE DIMENSIONS OF HABITABLE SPACES (IBC 1208):
MINIMUM ROOM WIDTH: 7'-0"
MINIMUM CEILING HEIGHT: 7'-6"

PROVISIONS FOR CONTINUOUS AND UNOBSTRUCTED PASSAGE THROUGH SALLYPORTS DURING AN EMERGENCY EGRESS CONDITION SHALL BE PROVIDED.

DOORS IN MEANS OF EGRESS SERVING SPACES OCCUPIED BY PERSONS WHOSE MOVEMENTS ARE CONTROLLED FOR SECURITY REASONS MAY BE EQUIPPED WITH EGRESS CONTROL DEVICES WHICH SHALL UNLOCK MANUALLY AND AUTOMATICALLY PER IBC 1008.1.9.10 (AND PER NFPA 101-18.2.2.2.6 WHEN SERVING GROUP I-2).

FIRE PROTECTION
SUPERVISED AND MONITORED AUTOMATIC SPRINKLER SYSTEM SHALL BE DESIGNED AND INSTALLED THROUGHOUT. INSTITUTIONAL HEADS TO BE USED WHERE PRONE TO TAMPERING.

STANDPIPE HOSE CONNECTION PROVIDED AS PER IBC 905.4(6). NO CONNECTIONS PROVIDED ADJACENT TO HORIZONTAL EXITS FOR AREA REACHABLE FROM EXTERIOR DOOR CONSISTENT WITH IBC 905.4(2) PROVISIONS FOR DISTANCE FROM EXIT STAIR HOSE CONNECTION.

PORTABLE FIRE EXTINGUISHER LOCATIONS IDENTIFIED IN ACCORDANCE WITH PROVISIONS OF IBC 906.2.

FIRE ALARM
FIRE ALARM AND OCCUPANT NOTIFICATION SYSTEM TO BE DESIGNED AND INSTALLED PER 907 EXCEPT AS OTHERWISE APPROVED IN ACCORDANCE WITH NFPA 72 AS PERMITTED BY IFC 901.2. SMOKE DETECTION IN GROUP I-3 TO BE IN ACCORDANCE WITH IBC 907.2.6.3.3 AND 909.12.3; AND IN GROUP I-2 PER NFPA 101-18.2.5.7.2.1(3)(2).

SMOKE CONTROL
ENGINEERED SMOKE CONTROL SYSTEM TO PROVIDE A TENABLE ENVIRONMENT FOR EXITING FROM THE SMOKE COMPARTMENT IN AREA OF FIRE ORIGIN IN ACCORDANCE WITH IBC SECTION 909 FOR EACH GROUP I-3 WINDOWLESS SMOKE COMPARTMENT AS PER IBC 408.9.

**BOUNDARY LEGEND:**

- AREA BOUNDARY
- OCCUPANCY BOUNDARY
- FIRE SEPARATION (2-HR)
- FIRE WALL (2-HR) AND SMOKE BARRIER
- EXTERIOR FIRE-RATED WALL (1-HR)
- FIRE BARRIER (1-HR)
- SMOKE BARRIER (1-HR)
- SMOKE PARTITION
- CORRIDOR PARTITION
- SMOKE RESISTANT CONSTRUCTION
- SMOKE-TIGHT CONSTRUCTION
- 2" EXPANSION JOINT
- EQUIPMENT PLATFORM
- HORIZONTAL MECHANICAL CHASE
- HORIZONTAL CONTINUITY OF SMOKE BARRIER
- PUBLIC MODE NOTIFICATION UNLESS OTHERWISE NOTED

**TENABILITY LEGEND:**

- ZONE A (AREA SMOKE DETECTION INSTALLED IN CIRCULATION SPACES)
- ZONE B (AREA SMOKE DETECTION THROUGHOUT)
- ZONE C (AREA SMOKE DETECTION THROUGHOUT)
- ZONE D (AREA SMOKE DETECTION THROUGHOUT)
- ZONE E

**SYMBOL LEGEND:**

- #### — OCCUPANT LOAD
- A / C — A. OCCUPANT LOAD AT EXIT ACCESS
- B / C — B. CUMMULATIVE OCCUPANT LOAD AT EXIT
- C. EXIT CAPACITY OF DOOR OR STAIR: STAIR = 0.3"/OCCUPANT OTHER = 0.2"/OCCUPANT
- SMOKE COMPARTMENT EXIT ACCESS; ARROWS INDICATE DIRECTION OF TRAVEL
- FE — FIRE EXTINGUISHER (FE) SEE ARCH. DWGS. FOR MOUNTING
- CLASS I STANDPIPE HOSE CONNECTION
- FACP — FIRE ALARM CONTROL PANEL (FACP)
- RAAP — REMOTE ALARM ANNUNCIATOR PANEL (RAAP)
- FSCP — FIRE FIGHTER'S SMOKE CONTROL PANEL (FSCP)
- ROOF SMOKE AND HEAT VENT (2 LEAVES AT NOM. 2' X 8' OPENING EACH)

**FIRE-RESISTANCE RATED SEPARATIONS**

| ITEM | NARRATIVE |
|---|---|
| Construction Type | Type II-B (IBC Table 601)<br>• All 3 building areas of common construction type.<br>• Each area separated by 2-hour fire wall |
| Allowable Area | Single story with sprinklers → Area increase per 506.1 and 506.3. Frontage increase (506.2) limited due to contiguous building area. Group A, B and I: 2-hour fire wall (Table 706.4, note a)<br>• Three separate buildings with 2-hour fire walls, each below allowable area.<br>• Mezzanines and Equipment Platforms do not contribute to building area (IBC 505.2 and 505.3).<br>• Mezzanine area includes balcony and cells on second tier.<br>• Equipment platforms in Area 2 are within a mechanical chase on the utility level, above the mezzanine spaces. These equipment platforms represent the area of periodic maintenance access.<br>• See Sheet CP1.03 for Allowable Area of mezzanine and equipment platforms. |
| Occupancy Classifications | Nonseparated uses per 508.3<br>**Institutional Group I-3:** Buildings and structures inhabited by more than 5 persons who are under restraint or security, and generally incapable of self-preservation due to security measures not under the occupants' control.<br>**Condition 3:** This occupancy condition shall include buildings in which free movement is allowed within individual smoke compartments, such as within a residential unit comprised of individual sleeping units and group activity spaces, where egress is impeded by remote-controlled release of means of egress from such a smoke compartment to another smoke compartment.<br>**Condition 4:** Free movement is restricted from an occupied space. Remote-controlled release is provided to permit movement from sleeping units, activity spaces, and other occupied areas.<br>**Institutional Group I-2:** Medical care on a 24-hour basis for more than 5 persons who are incapable of self-preservation.<br>**Business Group B:** Small spaces used for assembly shall be classified as Group B or as part of that occupancy (303.1.2)<br>Training and skill development within an academic program, civic administration, electronic data processing, telephone exchanges, laboratories-testing and research, professional services (attorneys), laundry and dry cleaning: pick-up and delivery stations and self-serve (304)<br>**Assembly Group A-3:** Courtrooms<br>Group I-3/Condition 4 is present in each area, as well as:<br>**Area 1**<br>• Group A-3 Courtroom<br>• Group B Professional Service Areas<br>• Group B Administration Areas<br>• Group I-3/Condition 4 – Video Court/Attorney Visitation<br>• Group I-2 Infirmary<br>• Group I-3/Condition 4 – Intake/Releasing<br>• Group I-3/Condition 4 – Work Release Housing<br>**Area 2**<br>• Group I-3/Condition 4 – Housing pods<br>• Group B – Control Room<br>**Area3**<br>• Group I-3/Condition 3 – Activities Circulation<br>• Group B – Multipurpose Rooms (ea. <750 sq.ft.)<br>• Group I-3/Condition 4 – Kitchen, Laundry, Commissary<br>• Group B – Building services/maintenance/mechanical |
| Equipment Platforms | • Equipment Platform. An unoccupied, elevated platform used exclusively for mechanical systems (IBC 202).<br>• Access to equipment platforms shall be per IMC (IBC 1209.3).<br>• A permanent ladder shall be provided on the building interior or entrance for access to the equipment platform (IMC 306.5).<br>• Equipment platforms do not require a means of egress per IBC 10.<br>• The reference to a permanent ladder is intended for rooftop platforms, and not applicable or feasible due to security requirements.<br>• A hydraulic lift may be driven in to the day rooms to gain access to the equipment platforms.<br>• Use of such a machine will provide a greater level of safety to workers in transporting tools and equipment than attempting to transport those items on a fixed exterior ladder.<br>• Therefore, this approach should be approved in accordance with IBC Section 104.11 as alternative equipment. |

DLR GROUP
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13029 REGISTERED ARCHITECT
TYSON M. WHITE
STATE OF WASHINGTON

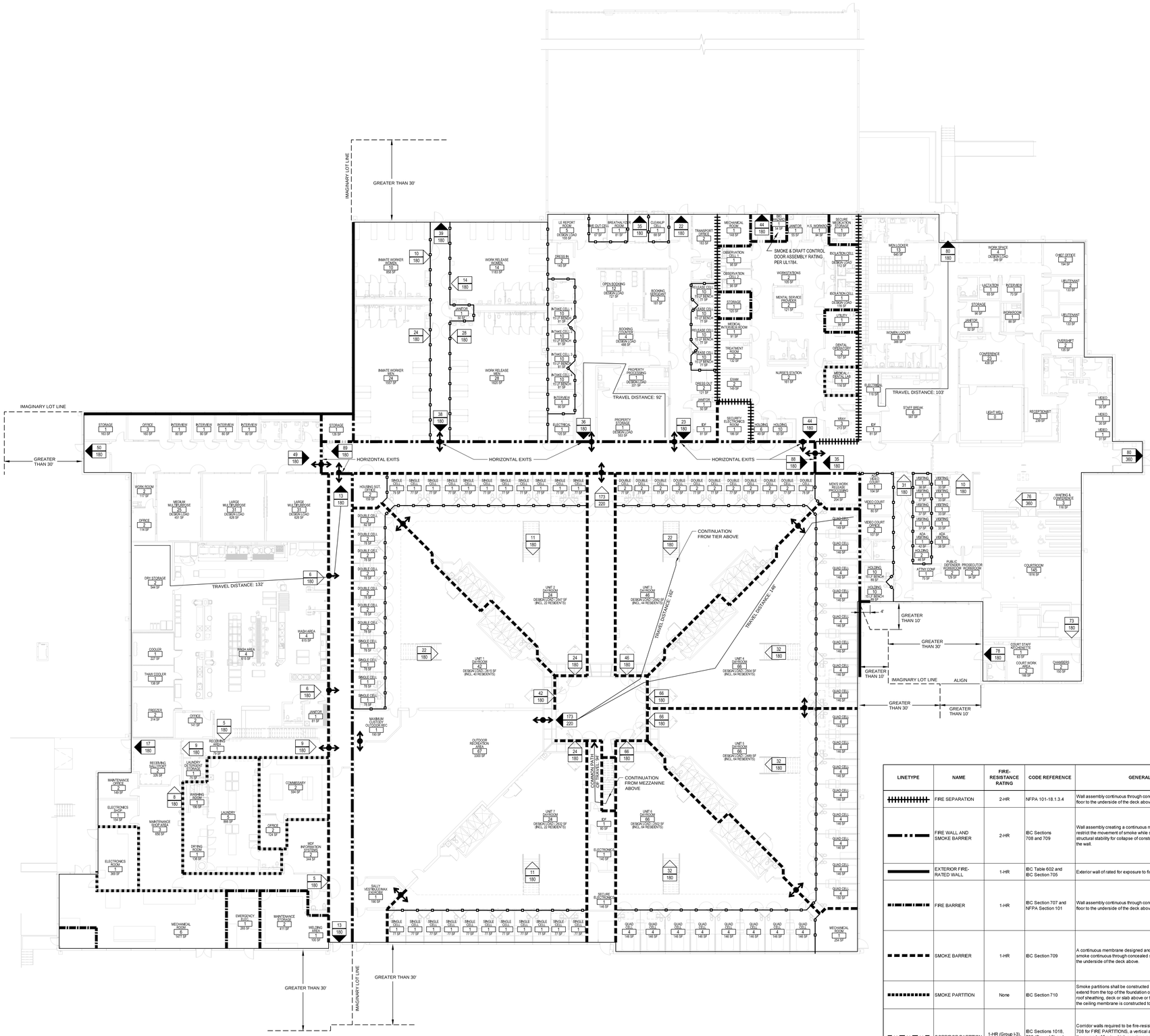
SCCJC
PHYSICAL BARRIERS
201 SUZANNE LANE
MT. VERNON, WA 98273

PERMIT SET
05/09/2025
REVISIONS

73-24145-00

EXISTING CODE ANALYSIS - SUMMARY - FOR REFERENCE ONLY

CP1.01




| Building Means of Egress | |
|---|---|
| Item | Narrative |
| Use of Intervening Rooms | Means of egress may pass through adjoining or intervening rooms or areas where such adjoining rooms or areas and the area served are accessory to one another, are not Group H, and provide a discernable path of egress travel to an exit. (IBC 1014.2 Item 1)<br>• Circulation spaces which are adjoining and accessory to other rooms or areas are present, including:<br>□ Intake/Booking Waiting and Circulation<br>□ Housing Circulation<br>□ Activities Circulation<br>□ Work Release Circulation<br>Consistent with California State Fire Marshal Task Group approach, these intervening rooms will not be fire-resistance-rated.<br>• Offices with the kitchen, commissary and laundry egress through the associated space. This intervening room condition should be acceptable due to limited occupant load of the office and direct awareness intended to be achieved with the office so situated.<br>• The Control Room is permitted to have a single exit (IBC Table 1014.3), as the common path of travel is less than 100 feet from a remote portion of the mezzanine, measured along the exit access stairway (IBC 1016.3.1) to the door entering the circulation hallway below. This route involves travel through multiple intervening rooms, and should continue to be considered acceptable.<br>• Access to two exits is provided from each housing unit. Separation of the exit access is achieve with one path through the center circulation hallway, and the other around the outer perimeter through an adjacent unit. This could involve travel through multiple pods. As the pods are adjacent, and identical use, and the movement is escorted, this arrangement should be acceptable.<br>• The outdoor recreation yard serves as an egress court, as part of the exit discharge. Passage through two sallyports is required in order to ultimately exit the building. These sallyports should not be considered intervening rooms or represent reentering the building, as IBC 408.3.7 specifically permits sallyports to be in the means of egress where there are provisions for continuous and unobstructed passage through such sallyports during emergency egress. |

| Building Means of Egress | |
|---|---|
| Item | Narrative |
| Exit Access Doorways | • Horizontal sliding doors in the means of egress shall be operable in the presence of a 50-pound perpendicular force (IBC 408.3.2).<br>• Horizontal sliding doors in smoke barriers need only be of substantial construction to resist passage of smoke (IBC 716.5.3).<br>• Horizontal sliding doors occur at multiple locations in the means of egress with the Skagit County Jail project, including the main central circulation corridor.<br>• The code includes a specific exception for horizontal sliding doors in a smoke barrier, a more robust wall than a corridor for which the code does not state an exception.<br>• The project is identifying smoke barrier walls for the central fire-resistance-rated corridor, exceeding the minimum level of construction prescribed by code. |
| Door Swing | • Doors need not be side-hinged swinging in Group I-3 (IBC 1008.1.2).<br>• Doors shall be substantial construction to resist the passage of smoke when required to be smoke tight (IBC 408.8.4).<br>• Swinging doors in smoke barrier walls in Group I-3 must meet 716.5.3 where they occur in a smoke barrier.<br>• It is necessary for doors to be provided with cuff-port openings.<br>• As discussed above, the code recognizes horizontal sliding doors as providing the intended level of smoke resistance.<br>• Therefore, openings in swinging doors, such as cuff ports, when obstructed by a horizontal sliding door panel, should be considered to satisfy the exception for a horizontal sliding door.<br>• Based on the provisions of IBC 1008.1.2 for door swing and 1008.1.9.10 for locking arrangements, the direction of door swing and egress width in Area 2 should be based on simultaneous movement of 33 persons maximum. Within Area 2, the evacuation plans involve relocation of up to half of the largest unit population. |
| Smoke Compartments | Maximum 200 residents per smoke compartment (IBC 408.6.1).<br>• Work release area is included with Booking and Releasing.<br>• Units 2, 3 and 5, as well as Hallway (H100), are within a common smoke zone. |

| LINETYPE | NAME | FIRE-RESISTANCE RATING | CODE REFERENCE | GENERAL CONDITIONS | WALL PENETRATIONS | | | |
|---|---|---|---|---|---|---|---|---|
| | | | | | SWINGING DOORS | OTHER DOORS | WINDOWS | DUCT/AIR TRANSFER |
| | FIRE SEPARATION | 2-HR | NFPA 101-18.1.3.4 | Wall assembly continuous through concealed spaces, extending from top of the floor to the underside of the deck above. | Not applicable. No openings anticipated. | Not applicable. No openings anticipated. | Not applicable. No openings anticipated. | Penetrations shall comply with IBC Section 717. Listed fire/smoke damper with 1.5-HR minimum rating. |
| | FIRE WALL AND SMOKE BARRIER | 2-HR | IBC Sections 708 and 709 | Wall assembly creating a continuous membrane designed and constructed to restrict the movement of smoke while separating building areas with sufficient structural stability for collapse of construction on either side without collapse of the wall. | 90-min. fire door assembly tested per NFPA 252 ** or UL 10C with smoke and draft control per UL 1784. Aggregate width of all openings shall not exceed 25% of wall length. Self or automatic-closing, latching fire doors. | Sliding doors: 90-min. fire door assembly tested per NFPA 252 or UL 10B with smoke and draft control per UL 1784. Otherwise same as swinging doors. Allowed for I-3 egress doors per IBC Section 1008.1.2. *** | Allowed only as part of a fire door assembly in accordance with 716.5 (door vision panels labelled D-H-90 if up to 100 sq. ft. or D-H-W-90 if > 100 sq. ft.) or as a 2-hour fire-resistance-rated glazing assembly tested to ASTM E 119 or UL 263 in accordance with IBC Sections 716.2 & 716.6. Aggregate width of all openings shall not exceed 25% of wall length. | Penetrations shall comply with IBC Section 717. Listed fire/smoke damper with 1.5-HR minimum rating. Individual size not limited. Aggregate width of all openings shall not exceed 25% of wall length. |
| | EXTERIOR FIRE-RATED WALL | 1-HR | IBC Table 602 and IBC Section 705 | Exterior wall of rated for exposure to fire from both sides. | Not applicable. No openings anticipated. | Not applicable. No openings anticipated. | Not applicable. No openings anticipated. | Not applicable. No openings anticipated. |
| | FIRE BARRIER | 1-HR | IBC Section 707 and NFPA Section 101 | Wall assembly continuous through concealed spaces, extending from top of the floor to the underside of the deck above. | 45-min. fire door assembly tested per NFPA 252 ** or UL 10C. Self or automatic-closing, latching fire doors. | Sliding doors: 45-min. fire door assembly tested per NFPA 252 or UL 10B. Self or automatic-closing, latching fire doors. Allowed for I-3 egress doors per IBC Section 1008.1.2. *** | Allowed only as part of a fire door assembly in accordance with 716.5 (20-min door vision panels labelled D-20, 45-min sidelight/transom panels labelled D-H-OH-45) or as a 3/4-hour fire-resistance-rated glazing assembly tested to ASTM E 119 or UL 263 in accordance with IBC Sections 716.2 & 716.6. Aggregate width of all openings shall not exceed 25% of wall length. | Penetrations shall comply with IBC Section 717. Listed fire damper with 1.5-HR minimum rating. |
| | SMOKE BARRIER | 1-HR | IBC Section 709 | A continuous membrane designed and constructed to restrict the movement of smoke continuous through concealed spaces, extending from top of the floor to the underside of the deck above. | 20-min. fire door assembly tested per NFPA 252 or UL 10C without hose stream test and with smoke and draft control per UL 1784. Self or automatic-closing, latching fire doors. | Sliding doors: 20-min. fire door assembly with smoke and draft control per UL 1784. Self or automatic-closing, latching fire doors. Allowed for I-3 egress doors per IBC Section 1008.1.2-*** | Allowed only as part of a fire door assembly in accordance with 716.5 (20-min door vision panels labelled D-20, 45-min sidelight/transom panels labelled D-H-OH-45) or as a 3/4-hour fire-resistance-rated glazing assembly tested to ASTM E 119 or UL 263 in accordance with IBC Sections 716.2 & 716.6. | Penetrations shall comply with IBC Section 717. Listed fire/smoke damper with 1.5-HR minimum rating. |
| | SMOKE PARTITION | None | IBC Section 710 | Smoke partitions shall be constructed to prevent the passage of smoke and shall extend from the top of the foundation or floor below to the underside of the floor or roof sheathing, deck or slab above or to the underside of the ceiling above where the ceiling membrane is constructed to limit the transfer of smoke. | Not applicable. No openings anticipated. | Not applicable. No openings anticipated. | Not applicable. No openings anticipated. | Duct penetrations shall be sealed. Air transfer openings require a smoke damper per IBC Section 717.3.2.2 * |
| | CORRIDOR PARTITION | 1-HR (Group I-3), None (Group I-2) | IBC Sections 1018, 708 (Group I-3) and 710 (Group I-2) | Corridor walls required to be fire-resistance rated shall comply with IBC Section 708 for FIRE PARTITIONS, a vertical assembly of materials designed to restrict the spread of fire in which openings are protected. Corridor walls not requiring a fire-resistance rating shall comply with IBC Section 710 for SMOKE PARTITIONS. | I-3: 20-min. fire door assembly tested per NFPA 252 or UL 10C without hose stream test and with smoke and draft control per UL 1784. Self or automatic-closing, latching fire doors . I-2: Positive latching doors with smoke and draft control per UL 1784. Self or automatic-closing doors permitted but not required. | I-3: Sliding doors: 20-min. fire door assembly with smoke and draft control per UL 1784. Self or automatic-closing, latching fire doors. Allowed for I-3 egress doors per IBC Section 1008.1.2. I-2: Sliding doors: Positive latching doors with smoke and draft control per UL 1784. Self or automatic-closing doors permitted but not required. *** | I-3: Allowed only as part of a fire door assembly in accordance with 716.5 (20-min door vision panels labelled D-20, 45-min sidelight/transom panels labelled D-H-OH-45) or as a 3/4-hour fire-resistance-rated glazing assembly tested to ASTM E 119 or UL 263 in accordance with IBC Sections 716.2 & 716.6. I-2: Sealed to resist the free passage of smoke. | I-3: Penetrations shall comply with IBC Section 717. Listed fire/smoke damper with 1.5-HR minimum rating. I-2: Duct penetrations shall be sealed. Air transfer openings require a smoke damper per IBC Section 717.3.2.2 * |
| | SMOKE RESISTANT CONSTRUCTION | None | IBC Section 509.4.2 | Construction capable of resisting the passage of smoke. The walls shall extend from the top of the foundation or floor assembly below to the underside of the ceiling that is a component of a fire-resistance-rated floor assembly or roof assembly above or to the underside of the floor or roof sheathing, deck or slab above. | Self or automatic-closing upon detection of smoke per IBC Section 716.5.9.3. No air transfer openings. Max undercut per NFPA 80. | Rolling shutter doors: Same requirements as swinging doors. *** | Not referenced. Resistant to free passage of smoke. Maintain integrity of wall construction. | Duct penetrations shall maintain integrity of wall construction. Air transfer openings require a smoke damper per IBC Section 710.8. |
| | SMOKE-TIGHT CONSTRUCTION | None | IBC Section 408.8.1 | Provide construction capable of resisting the passage of smoke. | Cell doors shall be substantial doors per IBC Section 408.8.4, of construction that will resist the passage of smoke. Latches and self or automatic-closing doors permitted but not required. Same requirements for other doors in accordance with IBC Section 909.4. | Sliding doors: Same requirements as swinging doors. *** | Not referenced. Resistant to free passage of smoke. Maintain integrity of wall construction. | Duct penetrations shall maintain integrity of wall construction. Air transfer openings should be provided with a smoke damper per IBC Section 710.8. |

* Where smoke damper installation will interfere with a Section 909 smoke control system, approved alternate protection is allowed.
** After 5 minutes into the NFPA 252 test, the neutral pressure level in the furnace shall be established at 40" or less above the sill.
*** Opening force requirements per IBC Section 408.3.2 for I-3 or Section 1008.1.4.3 for other occupancy.

**BOUNDARY LEGEND:**

- AREA BOUNDARY
- OCCUPANCY BOUNDARY
- FIRE SEPARATION (2-HR)
- FIRE WALL (2-HR) AND SMOKE BARRIER
- EXTERIOR FIRE-RATED WALL (1-HR)
- FIRE BARRIER (1-HR)
- SMOKE BARRIER (1-HR)
- SMOKE PARTITION
- CORRIDOR PARTITION
- SMOKE RESISTANT CONSTRUCTION
- SMOKE-TIGHT CONSTRUCTION
- 2" EXPANSION JOINT
- EQUIPMENT PLATFORM
- HORIZONTAL MECHANICAL CHASE
- HORIZONTAL CONTINUITY OF SMOKE BARRIER
- PUBLIC MODE NOTIFICATION UNLESS OTHERWISE NOTED

**TENABILITY LEGEND:**

- ZONE A (AREA SMOKE DETECTION INSTALLED IN CIRCULATION SPACES)
- ZONE B (AREA SMOKE DETECTION THROUGHOUT)
- ZONE C (AREA SMOKE DETECTION THROUGHOUT)
- ZONE D (AREA SMOKE DETECTION THROUGHOUT)
- ZONE E

**SYMBOL LEGEND:**

- #### OCCUPANT LOAD
- A / C — A. OCCUPANT LOAD AT EXIT ACCESS
- B — B. CUMMULATIVE OCCUPANT LOAD AT EXIT
- B / C — C. EXIT CAPACITY OF DOOR OR STAIR: STAIR = 0.3"/OCCUPANT OTHER = 0.2"/OCCUPANT
- SMOKE COMPARTMENT EXIT ACCESS; ARROWS INDICATE DIRECTION OF TRAVEL
- FE — FIRE EXTINGUISHER (FE) SEE ARCH. DWGS. FOR MOUNTING
- CLASS I STANDPIPE HOSE CONNECTION
- FACP — FIRE ALARM CONTROL PANEL (FACP)
- RAAP — REMOTE ALARM ANNUNCIATOR PANEL (RAAP)
- FSCP — FIRE FIGHTER'S SMOKE CONTROL PANEL (FSCP)
- ROOF SMOKE AND HEAT VENT (2 LEAVES AT NOM. 2'-X 8' OPENING EACH)

NOTES:

1. DISTRIBUTION OF OCCUPANTS SHOWN TO REPRESENT POTENTIAL USE OF MEANS OF EGRESS. APPROVED FIRE SAFETY AND EVACUATION PLANS TO BE PROVIDED BY FACILITY IN ACCORDANCE WITH IFC SECTIONS 404.3.1 AND 404.3.2.
2. OCCUPANT LOAD OF INDIVIDUAL SPACES BASED ON IBC TABLE 1004.1.2 UNLESS OTHERWISE NOTED. NOTED DESIGN LOAD SUBJECT TO APPROVAL BY BUILDING OFFICIAL PER IBC SECTION 1004.1.2. HOLDING CELL OCCUPANT LOAD BASED ON SEATING LENGTH OF 18 INCHES PER PERSON PER IBC SECTION 1004.4.

# CODE PLAN - FIRST FLOOR

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

NORTH

DLR GROUP
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13029
REGISTERED ARCHITECT
RYAN M. WHITE
STATE OF WASHINGTON

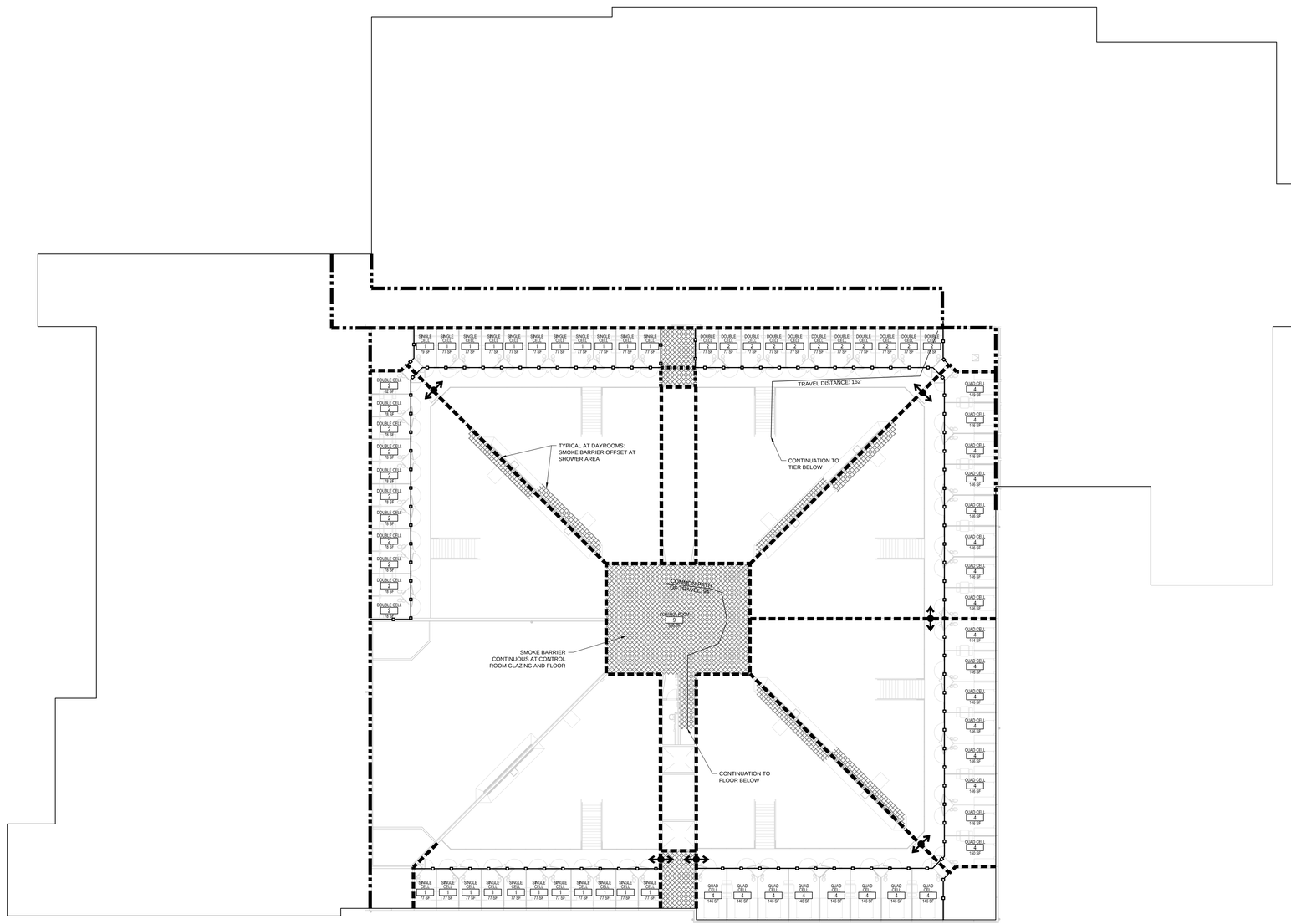
SCCJC
PHYSICAL BARRIERS
201 SUZANNE LANE
MT. VERNON, WA 98273

PERMIT SET
05/09/2025
REVISIONS

73-24145-00

EXISTING CODE ANALYSIS - FIRST FLOOR - FOR REFERENCE ONLY

CP1.02




NOTES:

1. SEE SHEET CP1.01 AREA DIAGRAM - UTILITY PLAN FOR EQUIPMENT PLATFORM AREAS LOCATED ABOVE MEZZANINE LEVEL.
2. DISTRIBUTION OF OCCUPANTS SHOWN TO REPRESENT POTENTIAL USE OF MEANS OF EGRESS. APPROVED FIRE SAFETY AND EVACUATION PLANS TO BE PROVIDED BY FACILITY IN ACCORDANCE WITH IFC SECTIONS 404.3.1 AND 404.3.2.
3. OCCUPANT LOAD OF INDIVIDUAL SPACES BASED ON IBC TABLE 1004.1.2 UNLESS OTHERWISE NOTED. NOTED DESIGN LOAD SUBJECT TO APPROVAL BY BUILDING OFFICIAL PER IBC SECTION 1004.1.2.

# CODE PLAN - MEZZANINE

NORTH

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

**BOUNDARY LEGEND:**

- AREA BOUNDARY
- OCCUPANCY BOUNDARY
- FIRE SEPARATION (2-HR)
- FIRE WALL (2-HR) AND SMOKE BARRIER
- EXTERIOR FIRE-RATED WALL (1-HR)
- FIRE BARRIER (1-HR)
- SMOKE BARRIER (1-HR)
- SMOKE PARTITION
- CORRIDOR PARTITION
- SMOKE RESISTANT CONSTRUCTION
- SMOKE-TIGHT CONSTRUCTION
- 2" EXPANSION JOINT
- EQUIPMENT PLATFORM
- HORIZONTAL MECHANICAL CHASE
- HORIZONTAL CONTINUITY OF SMOKE BARRIER
- PUBLIC MODE NOTIFICATION UNLESS OTHERWISE NOTED

**TENABILITY LEGEND:**

- ZONE A (AREA SMOKE DETECTION INSTALLED IN CIRCULATION SPACES)
- ZONE B (AREA SMOKE DETECTION THROUGHOUT)
- ZONE C (AREA SMOKE DETECTION THROUGHOUT)
- ZONE D (AREA SMOKE DETECTION THROUGHOUT)
- ZONE E

**SYMBOL LEGEND:**

- #### — OCCUPANT LOAD
- A / C — A. OCCUPANT LOAD AT EXIT ACCESS
- B / C — B. CUMMULATIVE OCCUPANT LOAD AT EXIT
- C. EXIT CAPACITY OF DOOR OR STAIR: STAIR = 0.3"/OCCUPANT OTHER = 0.2"/OCCUPANT
- SMOKE COMPARTMENT EXIT ACCESS; ARROWS INDICATE DIRECTION OF TRAVEL
- FE — FIRE EXTINGUISHER (FE) SEE ARCH. DWGS. FOR MOUNTING
- CLASS I STANDPIPE HOSE CONNECTION
- FACP — FIRE ALARM CONTROL PANEL (FACP)
- RAAP — REMOTE ALARM ANNUNCIATOR PANEL (RAAP)
- FSCP — FIRE FIGHTER'S SMOKE CONTROL PANEL (FSCP)
- ROOF SMOKE AND HEAT VENT (2 LEAVES AT NOM. 2' X 8' OPENING EACH)

| ITEM | NARRATIVE |
|---|---|
| Allowable Area | A mezzanine may be up to one-half of the floor area of the room or space in which it is located with an approved emergency voice/alarm communications system, excluding enclosed portions of the room in the determination (IBC 505.2.1).<br>• Based on the control room being constantly attended, and having ready access to facilitate communication among staff, receive alarm notification signals, and open cell doors, the allowable area of the housing mezzanines are based on one-half of the total area of the dayroom, cells, and shower stalls.<br>a. The area of the Unit 7 mezzanine level also includes the storage room and connecting hallway.<br>b. The Control Room mezzanine area includes the toilet room and stair landing, and looks onto the outdoor recreation yard for the space to which it is open.<br>c. The storage room and mezzanine hallway on the east side of the pods is based on the area of the circulation hallway below.<br>• The cells at the mezzanine level are also considered open, applying the same consideration regarding the control room functions. |

| LOCATION | FLOOR 1 AREA (DAYROOM, FLOOR 1 CELLS & SHOWERS) | ALLOWABLE MEZZANINE AREA FLOOR 1 AREA x (1/2) | ATTRIBUTED MEZZANINE AREA | ALLOWABLE EQUIPMENT PLATFORM AREA FLOOR 1 AREA x (2/3) - ACTUAL MEZZANINE AREA | ATTRIBUTED EQUIPMENT PLATFORM AREA |
|---|---|---|---|---|---|
| UNIT 1 | 3753 | 1876 | 1468 | 1034 | 270 |
| UNIT 2 | 3757 | 1878 | 1412 | 1092 | 266 |
| UNIT 3 | 3777 | 1888 | 1404 | 1114 | 267 |
| UNIT 4 | 4021 | 2010 | 1704 | 976 | 370 |
| UNIT 5 | 4021 | 2010 | 1720 | 960 | 370 |
| UNIT 6 | 4025 | 2012 | 1701 | 982 | 370 |
| UNIT 7 | 3704 | 1852 | 1614 | 855 | 268 |
| HALLWAY (H100 & H101 | 1541 | 770 | 206 | 821 | - |
| RECREATION AREA (L100) | 3345 | 1672 | 1006 | 1224 | - |

NOTE: ALL VALUES IN SQUARE FEET

DLR GROUP
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13029
REGISTERED ARCHITECT
BRIAN M. WHITE
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PHYSICAL BARRIERS
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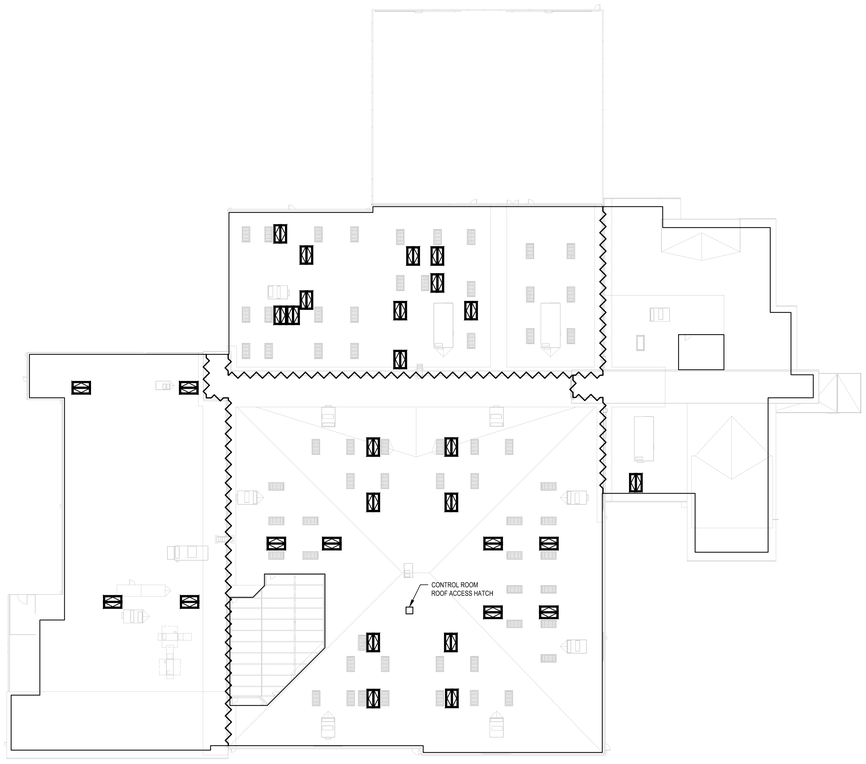
PERMIT SET
05/09/2025
REVISIONS

73-24145-00

EXISTING CODE ANALYSIS - MEZZANINE - FOR REFERENCE ONLY

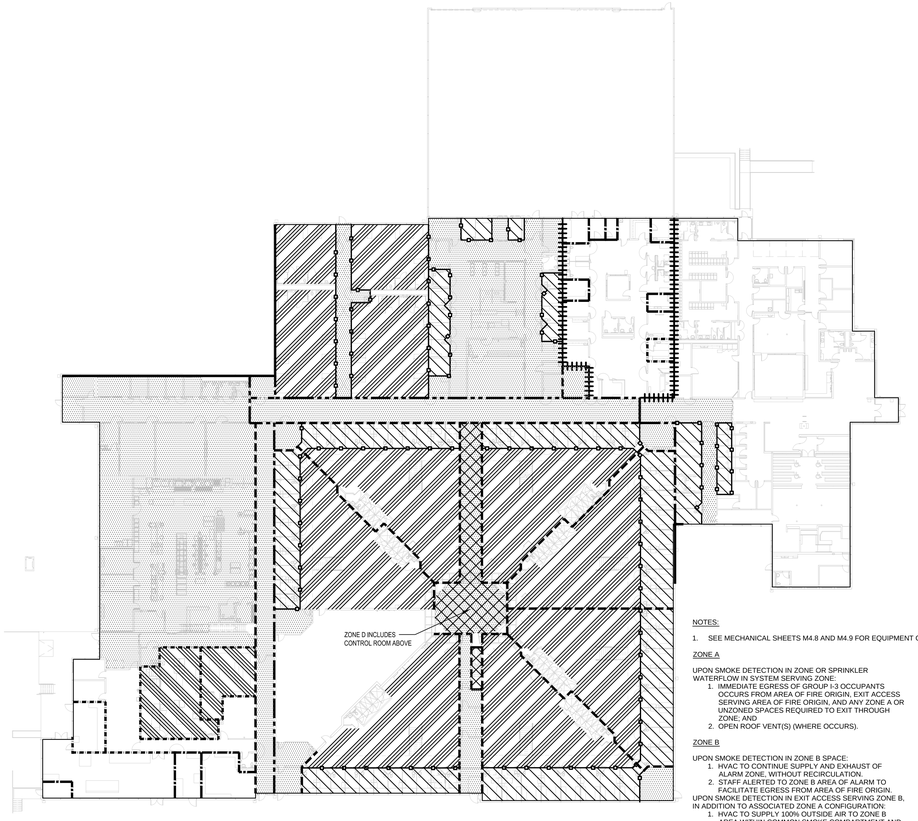
CP1.03




## EXPANSION JOINT & ROOF VENT LOCATIONS

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

NORTH




## TENABILITY ANALYSIS PLAN

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

NORTH

NOTES:

1. SEE MECHANICAL SHEETS M4.8 AND M4.9 FOR EQUIPMENT OPERATIONS.

ZONE A

UPON SMOKE DETECTION IN ZONE OR SPRINKLER WATERFLOW IN SYSTEM SERVING ZONE:
1. IMMEDIATE EGRESS OF GROUP I-3 OCCUPANTS OCCURS FROM AREA OF FIRE ORIGIN, EXIT ACCESS SERVING AREA OF FIRE ORIGIN, AND ANY ZONE A OR UNZONED SPACES REQUIRED TO EXIT THROUGH ZONE; AND
2. OPEN ROOF VENT(S) (WHERE OCCURS).

ZONE B

UPON SMOKE DETECTION IN ZONE B SPACE:
1. HVAC TO CONTINUE SUPPLY AND EXHAUST OF ALARM ZONE, WITHOUT RECIRCULATION.
2. STAFF ALERTED TO ZONE B AREA OF ALARM TO FACILITATE EGRESS FROM AREA OF FIRE ORIGIN.

UPON SMOKE DETECTION IN EXIT ACCESS SERVING ZONE B, IN ADDITION TO ASSOCIATED ZONE A CONFIGURATION:
1. HVAC TO SUPPLY 100% OUTSIDE AIR TO ZONE B AREA WITHIN COMMON SMOKE COMPARTMENT AND STOP RETURN AIR; AND
2. STOP HVAC SUPPLY AND RETURN IN EXIT ACCESS OF ALARM ZONE.

ZONE C

UPON SMOKE DETECTION IN ZONE C ROOM:
1. HVAC SERVING ROOM OF ALARM STOPS;
2. OPEN ROOF VENT(S) SERVING ROOM; AND
3. STAFF ALERTED TO ROOM OF FIRE ORIGIN TO FACILITATE EGRESS FROM AREA OF FIRE ORIGIN.

UPON SMOKE DETECTION IN CONNECTING HALLWAY, IN ADDITION TO ZONE A CONFIGURATION:
1. HVAC TO SUPPLY 100% OUTSIDE AIR TO ROOM AND STOP RETURN AIR; AND
2. STOP HVAC SUPPLY AND RETURN IN CONNECTING HALLWAY.
3. OPEN ROOF VENT IN HALLWAY (WHERE OCCURS).

ZONE D

UPON SMOKE DETECTION IN DAYROOM, IN ADDITION TO ASSOCIATED ZONE A AND C CONFIGURATIONS:
1. HVAC TO SUPPLY 100% OUTSIDE AIR AND STOP RETURN AIR TO ALL ZONE D; AND
2. ZONE D TO ACHIEVE 0.05-IN.W.G. POSITIVE PRESSURE RELATIVE TO DAYROOM OF FIRE ORIGIN.

UPON SMOKE DETECTION IN ZONE D HALLWAY:
1. HVAC TO SUPPLY 100% OUTSIDE AIR AND STOP RETURN AIR TO CONTROL ROOM;
2. HVAC TO STOP SUPPLY TO ZONE D HALLWAY; AND
3. CONTROL ROOM TO ACHIEVE 0.05-IN.W.G. POSITIVE PRESSURE RELATIVE TO HALLWAY WHEN DOOR TO OUTDOOR RECREATION YARD IS OPEN.

UPON SMOKE DETECTION IN CONTROL ROOM:
1. HVAC TO SUPPLY 100% OUTSIDE AIR TO HALLWAY AND STOP RETURN AIR;
2. HVAC TO STOP SUPPLY TO CONTROL ROOM; AND
3. ZONE D HALLWAY TO ACHIEVE 0.05-IN.W.G. POSITIVE PRESSURE RELATIVE TO CONTROL ROOM WHEN ROOF ACCESS HATCH IS OPEN.

ZONE E

UPON SMOKE DETECTION IN CONNECTING HALLWAY, IN ADDITION TO ZONE A CONFIGURATION:
1. HVAC TO SUPPLY 100% OUTSIDE AIR TO ROOM AND STOP RETURN AIR;
2. STOP OPERATION OF HEAT PRODUCING EQUIPMENT IN LAUNDRY ROOM; AND
3. STOP EXHAUST FROM ZONE E.
4. STOP HVAC SUPPLY AND RETURN IN CONNECTING HALLWAY.

**BOUNDARY LEGEND:**

- AREA BOUNDARY
- OCCUPANCY BOUNDARY
- FIRE SEPARATION (2-HR)
- FIRE WALL (2-HR) AND SMOKE BARRIER
- EXTERIOR FIRE-RATED WALL (1-HR)
- FIRE BARRIER (1-HR)
- SMOKE BARRIER (1-HR)
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- CORRIDOR PARTITION
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- A / C — A. OCCUPANT LOAD AT EXIT ACCESS
- B — B. CUMMULATIVE OCCUPANT LOAD AT EXIT
- B / C — C. EXIT CAPACITY OF DOOR OR STAIR: STAIR = 0.3"/OCCUPANT OTHER = 0.2"/OCCUPANT
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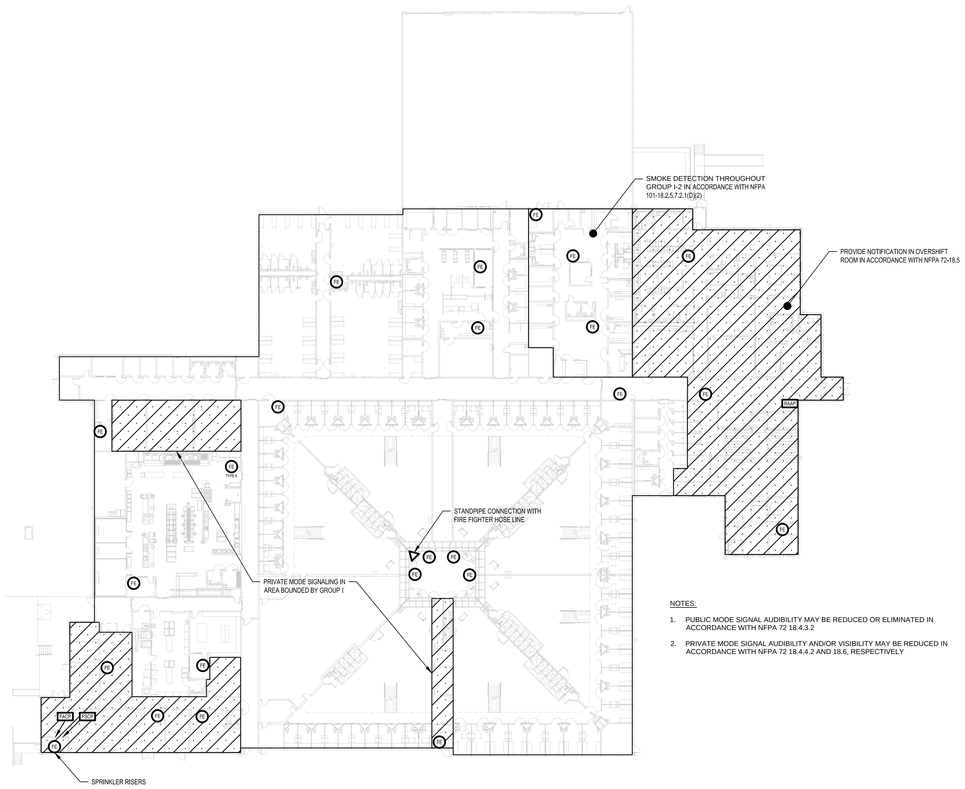


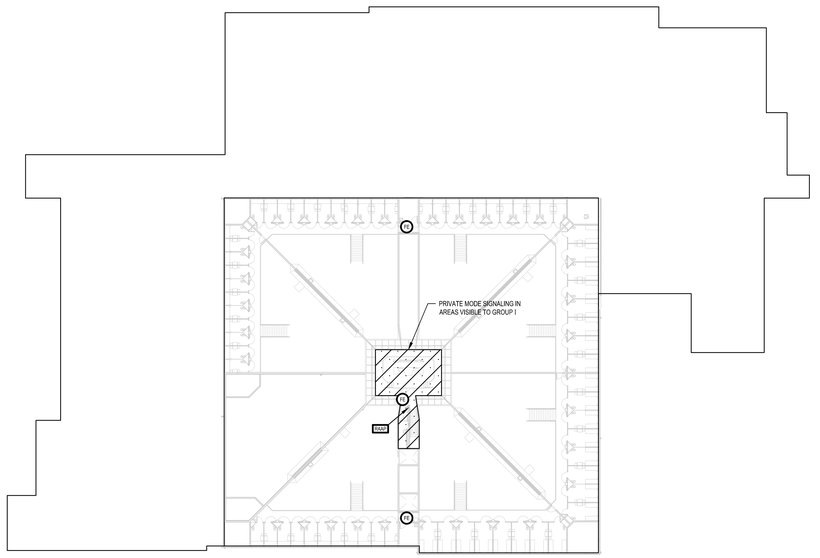

## FIRE EQUIPMENT LOCATIONS - FIRST FLOOR

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

NORTH

NOTES:

1. PUBLIC MODE SIGNAL AUDIBILITY MAY BE REDUCED OR ELIMINATED IN ACCORDANCE WITH NFPA 72 18.4.3.2
2. PRIVATE MODE SIGNAL AUDIBILITY AND/OR VISIBILITY MAY BE REDUCED IN ACCORDANCE WITH NFPA 72 18.4.4.2 AND 18.6, RESPECTIVELY




## FIRE EQUIPMENT LOCATIONS - MEZZANINE

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

NORTH

| WINDOWLESS BUILDING CONDITIONS | |
|---|---|
| Applicable Portions of Building | Every portion of Group I-3 a windowless building to be equipped with engineered smoke control to provide a tenable environment for egress from the portion of the smoke compartment that is the area of fire origin (IBC 408.9).<br>• Windowless building conditions are applicable to Group I-3 spaces only.<br>• Tenable environment for evacuation is required only from the area of fire origin within Group I-3.<br>• Based on the limited combustible load and absence of ignition sources rooms with occupant loads not exceeding 10 restrained persons |
| Fire Scenarios | Design fire fuel, heat release rate, and sprinkler effectiveness (IBC 909.9).<br>• A plastic cart is envisioned as a potential fuel source, which may be present in any hallway or open room. Cart fire scenarios will utilize a t² slow growth rate to simulate an extended ignition period<br>• The open booking desk is also a potential fire location. Based on plastic business machines and foam upholstered desk chairs, this scenario will utilize a fast growing t² fire, which will peak and decay upon sprinkler activation based upon the sparse combustible load and effectiveness of sprinklers.<br>• A significant fire scenario is not anticipated within the cells having occupant loads of less than 10 restrained persons. The continued operation of the HVAC serving the cell, and intervention by others in the cell, together with the absence of an apparent fuel source, should sufficiently support tenability for the occupants.<br>• Values applied in cfd model will be based on industry literature. |
| Exterior Openings | • The current strategy involves automatic heat vents which would release upon smoke detection in order to vent products of combustion.<br>• HVAC system will provide 100% outside air to rooms with locks capable of preventing egress in the event of a fire in the exit access outside the room. The exit access vent will open.<br>• Upon smoke detection in a unit dayroom or alternate housing HVAC will stop and the roof vent(s) will open.<br>• Consistent with the provisions of 408.3.7, sallyports should provide for free and continuous movement for ventilation of the space or corridor served |
| Tenability Criteria | • Tenability criteria will be assessed at 6-feet above the floor through computation fluid dynamics modeling:<br>□ Visibility<br>□ Thermal exposure<br>□ Toxicity (carbon monoxide exposure)<br>• Consistent with the provision of 909.4.6, the duration of tenability will be provided based on the tenability zones provided below. Movement times determined by egress modeling will apply the prescribed safety factor of 1.5; pre-movement times will be as indicated by facility plan (currently under development).<br>□ Zone A – Movement initiated upon detection.<br>□ Zones B, C and E – Based on the sequence of operational plans developed for this specific facility and durations determined from egress model.<br>□ Zone D – Not applicable. |

DLR GROUP



13029 REGISTERED ARCHITECT RYAN M. WHITE STATE OF WASHINGTON

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PERMIT SET
05/09/2025
REVISIONS

73-24145-00

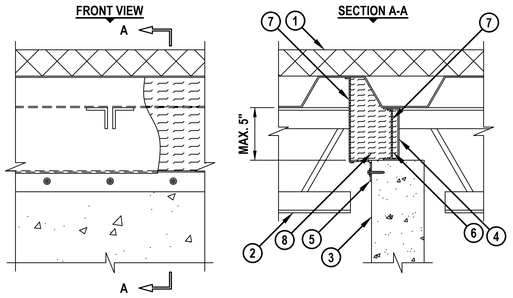
EXISTING CODE ANALYSIS - GENERAL - FOR REFERENCE ONLY

CP1.04

NG

## ENGINEERING JUDGMENT FIRESTOP DETAIL

PROJECT : SKAGIT
CONTRACTOR : VANDERLIP
F-RATING = 2-HR. (SEE NOTE NO. 3 BELOW)




1. BUILT UP METAL ROOF DECK ASSEMBLY (NON FIRE-RATED).
2. STEEL BAR JOIST (NON FIRE-RATED).
3. CONCRETE WALL ASSEMBLY (MINIMUM 5" THICK) (2-HR. FIRE-RATING).
4. CONTINUOUS STEEL BENT PLATE (MINIMUM 1/8" THICK) SECURELY ATTACHED TO METAL DECKING AND WALL ASSEMBLY WITH THE APPROPRIATE HILTI ANCHORS (NON FIRE-RATED).
5. MAXIMUM 2" x 2" STEEL ANGLE (NON FIRE-RATED).
6. MINIMUM 1" THICKNESS MINERAL WOOL (MIN. 4 PCF DENSITY) COMPRESSED 50%.
7. MINIMUM 1/8" (WET) THICKNESS HILTI CFS-SP WB FIRESTOP JOINT SPRAY TO COMPLETELY COVER MINERAL WOOL, OVERLAPPING MINIMUM 1/2" ONTO METAL ROOF DECK, STEEL ANGLE, AND BENT PLATE.
8. MINIMUM 3-1/2" THICKNESS MINERAL WOOL (MIN. 4 PCF DENSITY) COMPRESSED 50%, FLUSH WITH EDGE OF STEEL ANGLE.

NOTES : 1. MAXIMUM WIDTH OF JOINT = 5".
2. T-RATING MAY NOT EQUAL F-RATING IN ACCORDANCE WITH UL 2079.
3. FIRE-RATING OF ASSEMBLY IS DEPENDENT UPON THE PERFORMANCE OF BUILT UP METAL ROOF DECK, BENT PLATE, STEEL BAR JOIST, AND STEEL ANGLE UNDER FIRE CONDITIONS.

## BED MIX SUMMARY

| POD | CUSTODY LEVEL | GENDER | SINGLE | DOUBLE | QUAD. | DORM | TOTAL |
|---|---|---|---|---|---|---|---|
| | MEDIUM | M | | | 64 | | 64 |
| | HIGH MEDIUM | M | | 44 | | | 44 |
| | HIGH MEDIUM | F | 4 | 36 | | | 40 |
| | MEDIUM | M | | | 64 | | 64 |
| | EXERCISE | | | | | | 0 |
| | MAX | M | 22 | | | | 22 |
| | MAX | M | 22 | | | | 22 |
| | MEDIUM | M | | | 64 | | 64 |
| | WORK RELEASE | M | | | | 28 | 28 |
| | WORK RELEASE | F | | | | 14 | 14 |
| | INMATE WORKER | M | | | | 24 | 24 |
| | INMATE WORKER | F | | | | 10 | 10 |
| | | | | | SUBTOTAL GENERAL HOUSING | | 392 |
| C | MEDICAL | M/F | 4 | | | | 4 |
| BED TYPE BREAKOUT | | | 52 | 80 | 192 | 76 | |
| | | | 13% | 20% | 48% | 199 | |
| | | | | | TOTAL BEDS | | 400 |

## PLUMBING FIXTURE COUNTS

PLUMBING FIXTURE COUNT ANALYSIS - IBC 2012 - TABLE 2902.1
MINIMUM NUMBER REQUIRED PLUMBING FIXTURES

| CLASSIFICATION | OCCUPANCY | DESCRIPTION | WATER CLOSETS MALE | WATER CLOSETS FEMALE | LAVATORIES MALE | LAVATORIES FEMALE | SHOWERS MALE | SHOWERS FEMALE | DRINKING FOUNTAINS | SERVICE SINK |
|---|---|---|---|---|---|---|---|---|---|---|
| ASSEMBLY | A-3 | COURTROOM | 1:125 | 1:65 | 1:200 | 1:200 | -- | -- | 1/1000 | 1 |
| BUSINESS | B | OFFICE SPACE | 1:25 + 1:50 over 1st 50 | 1:25 + 1:50 over 1st 50 | 1:40 + 1:80 over 1st 80 | 1:40 + 1:80 over 1st 80 | -- | -- | 1/100 | 1 |
| INSTITUTIONAL | 1-2 | MEDICAL | 1:ROOM | 1:ROOM | 1:ROOM | 1:ROOM | 1/15 | 1/15 | 1/100 | 1 |
| | 1-2 | EMPLOYEES | 1:25 | 1:25 | 1:35 | 1:35 | -- | - | 1/100 | -- |
| | 1-3 | PRISON | 1:CELL | 1:CELL | 1:CELL | 1:CELL | 1:15 | 1:15 | 1/100 | 1 |
| | 1-3 | DETENTION/CORRECTIONAL CENTER | 1:15 | 1:15 | 1:15 | 1:15 | 1:15 | 1:15 | 1/100 | 1 |
| | 1-3 | EMPLOYEE | 1:25 | 1:25 | 1:25 | 1:25 | -- | -- | 1/100 | -- |

PLUMBING FIXTURE COUNT ANALYSIS - IBC 2012 - TABLE 2902.1
REQUIRED/ACTUAL NUMBER OF PLUMBING FIXTURES PROVIDED

| CLASSIFICATION | OCCUPANCY | DESCRIPTION | WATER CLOSETS MALE | WATER CLOSETS FEMALE | LAVATORIES MALE | LAVATORIES FEMALE | SHOWERS MALE | SHOWERS FEMALE | DRINKING FOUNTAINS | SERVICE SINK |
|---|---|---|---|---|---|---|---|---|---|---|
| ASSEMBLY | A-3 | COURTROOM | 1/2 | 2/2 | 1/2 | 1/2 | -- | -- | 1/2 | 1/1 |
| BUSINESS | B | OFFICE SPACE | 2/4 | 2/4 | 2/4 | 2/4 | 0/2 | 0/2 | -- | 1/1 |
| INSTITUTIONAL | 1-2 | MEDICAL | 5/5 | 4/4 | 5/5 | 4/4 | 4/4 | 4/4 | -- | 1/1 |
| | 1-2 | EMPLOYEES | 1/1 | 1/1 | 1/1 | 0/1 | | | -- | -- |
| | 1-3 | PRISON | 76/76 | 60/60 | 76/76 | 60/60 | 7/20 | 6/14 | -- | 1/1 |
| | 1-3 | DAYROOM | 0/4 | 0/3 | 0/4 | 0/3 | -- | -- | 7/7 | 7/7 |
| | 1-3 | HOLDING | 2/2 | 1/1 | 2/2 | 1/1 | -- | -- | -- | -- |
| | | DETENTION/CORRECTIONAL CENTER | 4/5 | 2/2 | 4/5 | 2/2 | 4/5 | 2/2 | 4/4 | 1/1 |
| | | INTAKE/RELEASE CELLS | 8/8 | 2/2 | 8/8 | | -- | -- | -- | 1/1 |
| | | INTAKE/RELEASE BOOKING | 1/1 | | 1/1 | | -- | -- | -- | -- |
| | | INTAKE/RELEASE STAFF | 1/1 | | 1/1 | | -- | -- | -- | -- |
| | | INMATE INTERVIEW | 1/1 | | 1/1 | | -- | -- | -- | -- |
| | | STAFF | 1/2 | | 1/2 | | -- | -- | -- | -- |
| | | KITCHEN/INMATE | 1/1 | | 1/1 | | --- | --- | -- | 1/1 |
| | | STAFF | 1/1 | | 1/1 | | -- | -- | -- | -- |
| | | LAUNDRY/INMATE | 1/1 | | 1/1 | | | | -- | -- |
| | | | 1/1 | | 1/1 | | | | | |

ASSUMPTIONS:

A-3 OCCUPANCY - COURTROOM AND LOBBY
3060 SF/15SF = 204 OCCUPANTS (102 FEMALE/102 MALE)

B OCCUPANCY - OFFICES AND LOCKER ROOMS
9628 SF-100 SF = 97 OCCUPANTS (49 FEMALE/48 MALE)

I-2 OCCUPANCY - MEDICAL
4,360 SF
INMATE OCCUPANTS: 26
EMPLOYEES: 17 OCCUPANTS

I-3 OCCUPANCY - WORK RELEASE DORMITORY
6325 SF
FEMALE INMATES: 24 OCCUPANTS
MALE INMATES: 52 OCCUPANTS

I-3 OCCUPANCY - CELLS
FEMALE INMATES IN CELLS OCCUPY (1) 22 SINGLE/DOUBLE POD CELL= 4+18*2= 40 FEMALE INMATES
MALE INMATES IN CELLS OCCUPY (2) 22 SINGLE CELL PODS, (1) 22 DOUBLE CELL POD, AND (3) 16 QUAD CELL PODS = 22+22+44+64+64+64=280 MALE INMATES
EMPLOYEES: 911 SF/100 = 10 OCCUPANTS

I-3 INTAKE AND RELEASE
5905 SF
INTAKE CELLS
(1) FEMALE INMATE CELLS: 10
(3) MALE INMATE CELLS: 30
RELEASE CELLS:
(1) FEMALE INMATE CELLS: 10
(3) MALE INMATE CELLS: 30
(1) STAFF TOILET:
1WC; 1 LAV
(1) INMATE TOILET TO SERVE OPEN BOOKING
1WC; 1 LAV
TIME OUT CELL: 1 FLOOR TOILET
CLEAN UP CELL: 1 FLOOR TOILET
(1) SERVICE SINK

I-3 OCCUPANCY - KITCHEN
5772 SF/200 = 29 OCCUPANTS

I-3 OCCUPANCY - LAUNDRY
INMATE TOILET
STAFF TOILET

21 CP1.05 SMOKE BARRIER @ GRID 7
SCALE: 3" = 1'-0"




31 CP1.05 PARALLEL TO DECK - INTERIOR CONCRETE WALL - HEAD DTL
SCALE: 3" = 1'-0"




NOTE: IF WALL TYPE INDICATES GWB EXTENDS TO STRUCTURE AT BOTH SIDES OF THE WALL, THEN BOTH SIDES MUST BE SEALED TO DECK.
ALL NON-BEARING WALLS THAT EXTEND TO STRUCTURAL DECK SHALL ALLOW FOR 1" VERTICAL MOVEMENT

32 CP1.05 PARALLEL TO DECK DEFLECTION TRACK HEAD
SCALE: 3" = 1'-0"




33 CP1.05 SEALED METAL PANEL JOIST PENETRATION
SCALE: 3" = 1'-0"




A ELEVATION @ MASONRY/PRECAST WALL
A2 SECTION @ MASONRY/PRECAST WALL
B ELEVATION @ METAL STUD WALL
B2 SECTION @ METAL STUD WALL

34 CP1.05 BAR JOIST THRU-WALL PENETRATION DETAILS
SCALE: 1 1/2" = 1'-0"




51 CP1.05 PERPENDICULAR TO DECK - INTERIOR CONCRETE WALL HEAD DTL
SCALE: 3" = 1'-0"




NOTE: IF WALL TYPE INDICATES GWB EXTENDS TO STRUCTURE AT BOTH SIDES OF THE WALL, THEN BOTH SIDES MUST BE SEALED TO DECK.
ALL NON-BEARING WALLS THAT EXTEND TO STRUCTURAL DECK SHALL ALLOW FOR 1" VERTICAL MOVEMENT

52 CP1.05 PERPENDICULAR TO DECK DEFLECTION TRACK
SCALE: 3" = 1'-0"




53 CP1.05 SEALED METAL PANEL JOIST PENETRATION
SCALE: 3" = 1'-0"




A FIRE / SMOKE RATED WALLS
B NON-RATED WALLS

44 CP1.05 TOP OF MASONRY/PRECAST WALL SLIP CONNECTION DETAILS
SCALE: 1 1/2" = 1'-0"




NOTE: THESE DETAILS ARE ALSO REQUIRED AT ALL NON-RATED CORRIDOR WALLS. SEE CODE PLAN FOR LOCATIONS.

A TYPICAL FIRE-RATED TOP OF WALL CONDITION
B TYPICAL FIRE-RATED TOP OF WALL CONDITION
C EXPOSED STUDS TOP OF WALL CONDITION

54 CP1.05 T.O. METAL STUD WALL SLIP CONNECTION DETAILS - METAL DECK
SCALE: 3" = 1'-0"

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PHYSICAL BARRIERS
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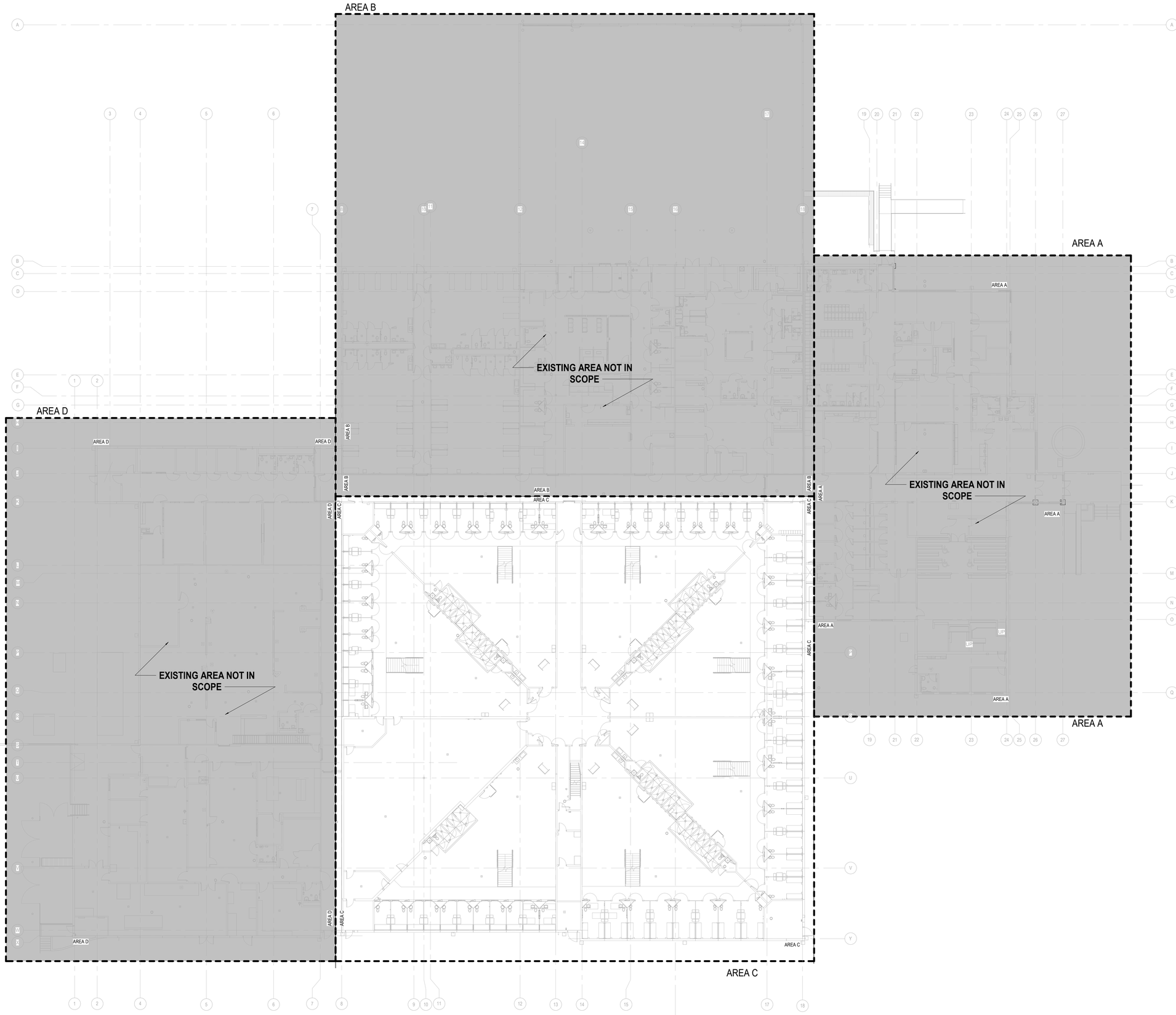
REVISIONS

73-24145-00

EXISTING CODE ANALYSIS - GENERAL - FOR REFERENCE ONLY

CP1.05




OVERALL FLOOR PLAN (FOR REFERENCE ONLY)

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

NORTH

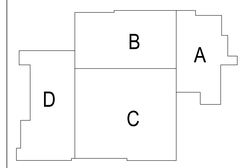
## GENERAL ARCHITECTURAL NOTES

1. SEE STRUCTURAL DRAWINGS FOR BRACING OF PHYSICAL BARRIERS.
2. ENLARGED DAYROOM PLAN AND ASSOCIATED VIEWS APPLY TO ALL DAYROOMS
3. GUARDRAIL PHYSICAL BARRIER SCOPE APPLIES TO ALL DAYROOMS, TYP.
4. CONTRACTOR TO VERIFY IN FIELD EXISTING RAILING LOCATIONS, PROXIMITY TO SKYLIGHTS, AND CONNECTIONS TO EXISTING RAILINGS
5. CONTRACTOR TO VERIFY IN FIELD EXISTING STRUCTURAL MEMBERS LOCATION IN RELATION TO PROPOSED PHYSICAL BARRIER

## LEGEND

PLAN AREA DESIGNATIONS

## KEY PLAN

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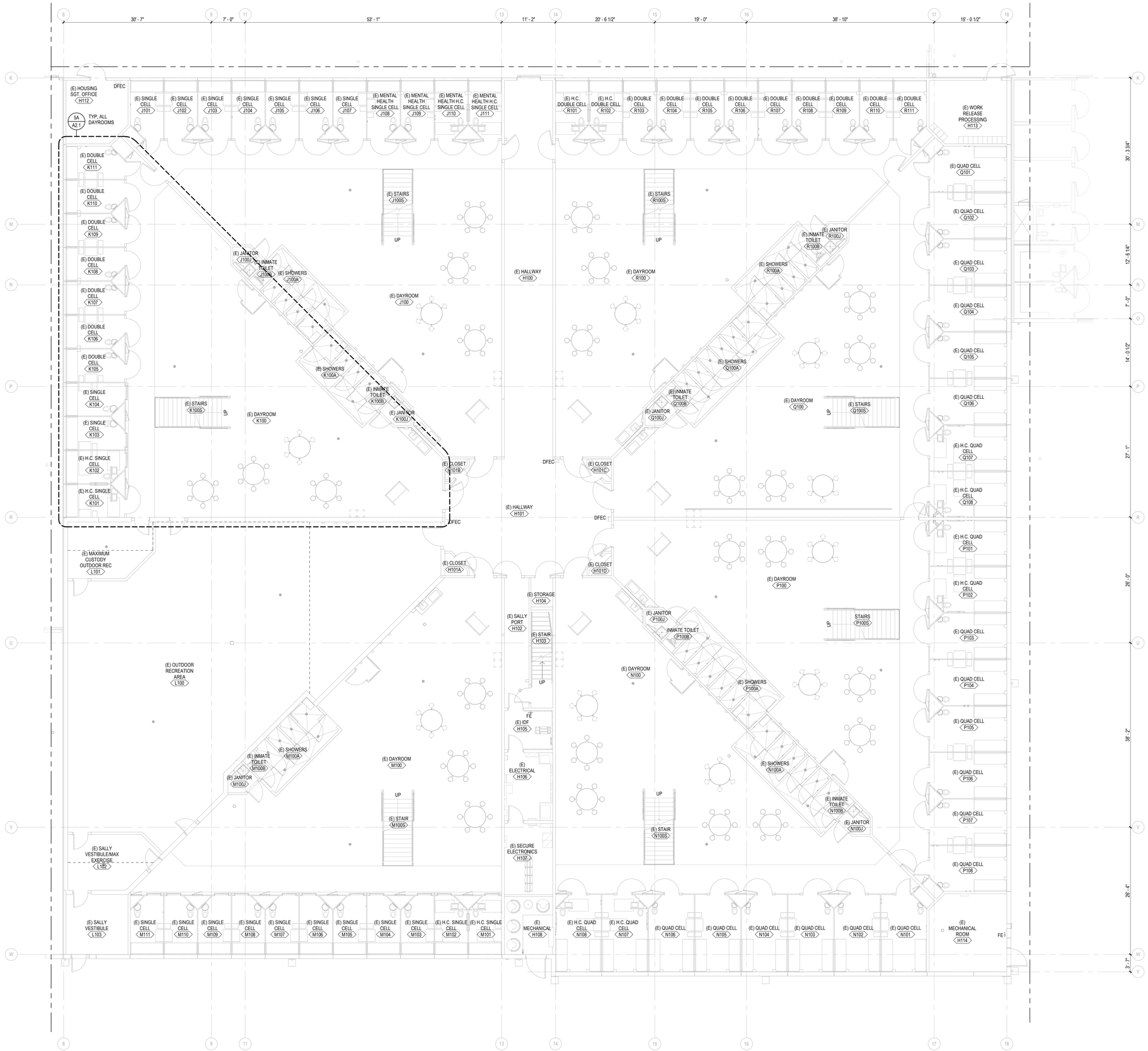
OVERALL FLOOR PLAN

A1.0




# FIRST FLOOR PLAN - AREA C

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

NORTH

## GENERAL ARCHITECTURAL NOTES

1. SEE STRUCTURAL DRAWINGS FOR BRACING OF PHYSICAL BARRIERS.
2. ENLARGED DAYROOM PLAN AND ASSOCIATED VIEWS APPLY TO ALL DAYROOMS
3. GUARDRAIL PHYSICAL BARRIER SCOPE APPLIES TO ALL DAYROOMS, TYP.
4. CONTRACTOR TO VERIFY IN FIELD EXISTING RAILING LOCATIONS, PROXIMITY TO SKYLIGHTS, AND CONNECTIONS TO EXISTING RAILINGS
5. CONTRACTOR TO VERIFY IN FIELD EXISTING STRUCTURAL MEMBERS LOCATION IN RELATION TO PROPOSED PHYSICAL BARRIER

## PLAN LEGEND

NEW CONSTRUCTION

EXISTING

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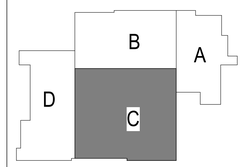
STATE OF WASHINGTON

## KEY PLAN

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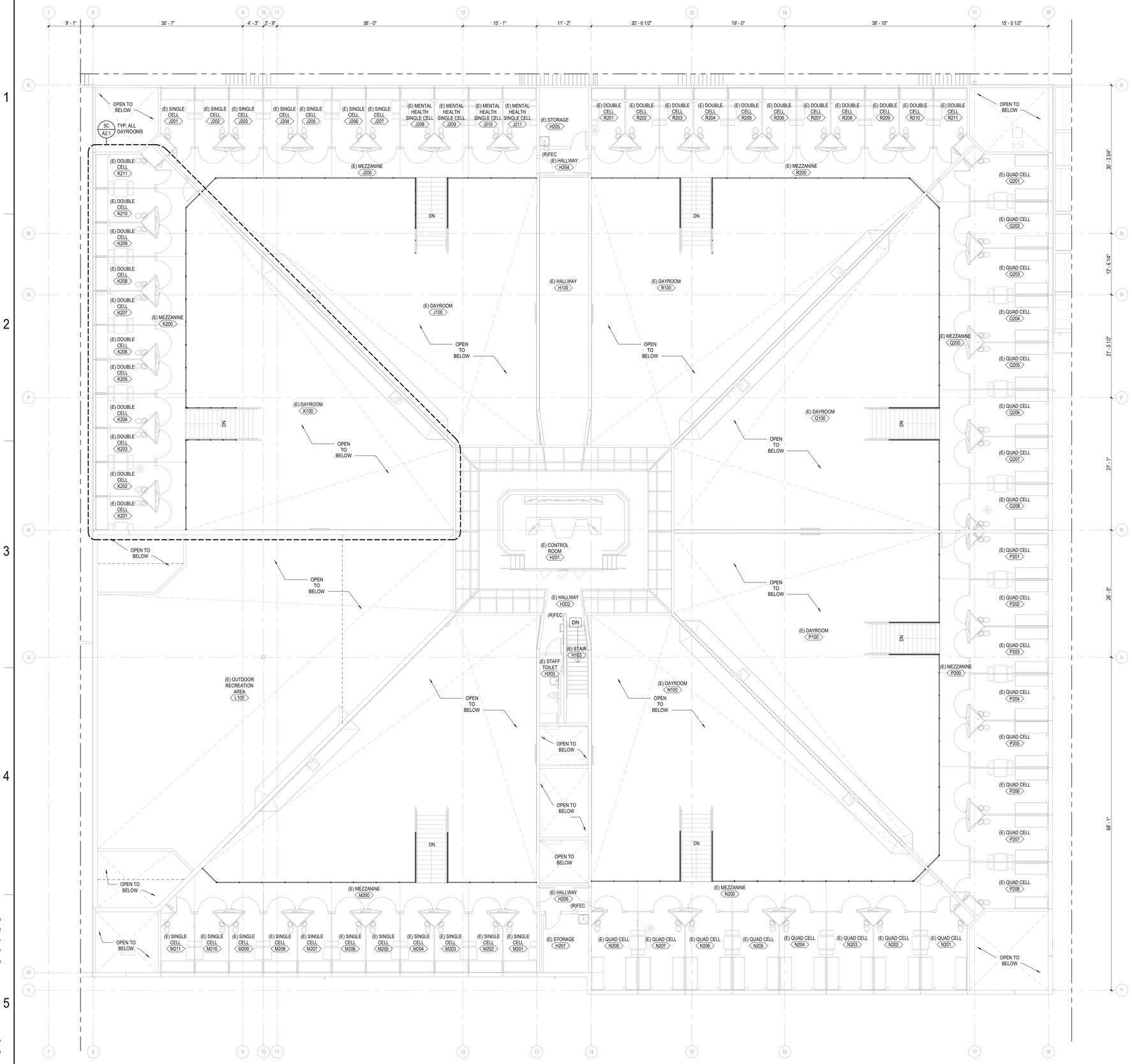
FIRST FLOOR PLAN - AREA C

A1.1C




## MEZZANINE FLOOR PLAN - AREA C

NORTH

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

## GENERAL ARCHITECTURAL NOTES

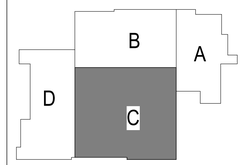
1. SEE STRUCTURAL DRAWINGS FOR BRACING OF PHYSICAL BARRIERS.
2. ENLARGED DAYROOM PLAN AND ASSOCIATED VIEWS APPLY TO ALL DAYROOMS
3. GUARDRAIL PHYSICAL BARRIER SCOPE APPLIES TO ALL DAYROOMS, TYP.
4. CONTRACTOR TO VERIFY IN FIELD EXISTING RAILING LOCATIONS, PROXIMITY TO SKYLIGHTS, AND CONNECTIONS TO EXISTING RAILINGS
5. CONTRACTOR TO VERIFY IN FIELD EXISTING STRUCTURAL MEMBERS LOCATION IN RELATION TO PROPOSED PHYSICAL BARRIER

## PLAN LEGEND

NEW CONSTRUCTION

EXISTING

## KEY PLAN

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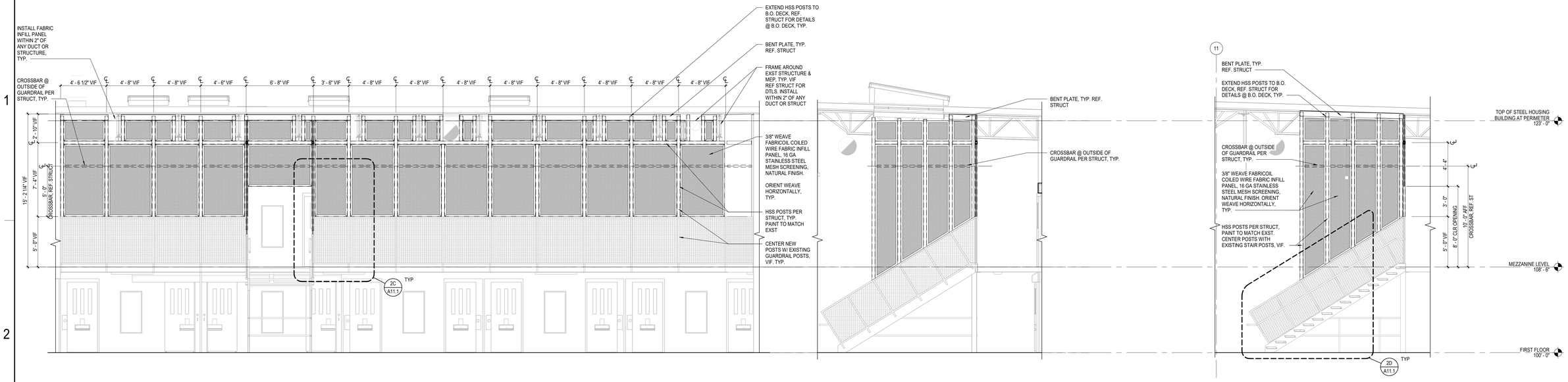
MEZZANINE FLOOR PLAN - AREA C

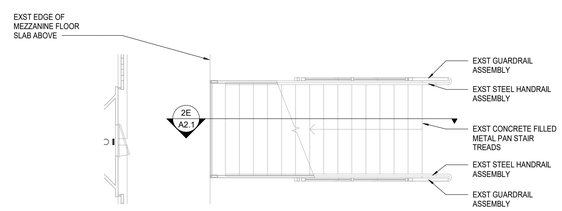
A1.2C

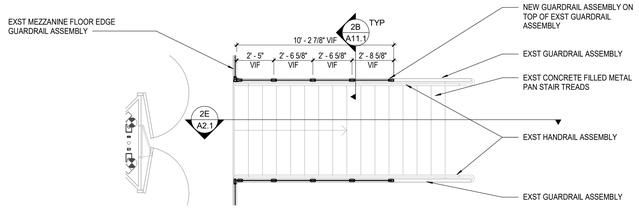



2A A2.1 **ELEVATION - TYPICAL DAYROOM MEZZANINE**
SCALE: 1/4" = 1'-0"

2D A2.1 **ELEVATION - TYPICAL DAYROOM STAIR**
SCALE: 1/4" = 1'-0"

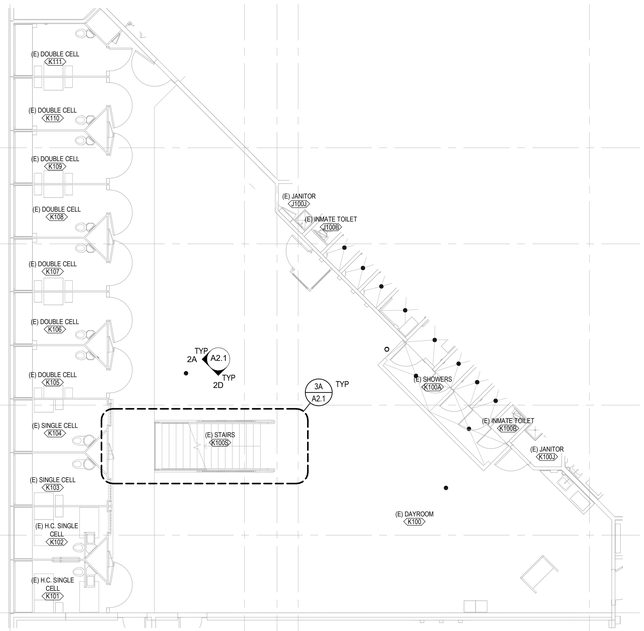
2E A2.1 **SECTION - TYPICAL DAYROOM STAIR**
SCALE: 1/4" = 1'-0"

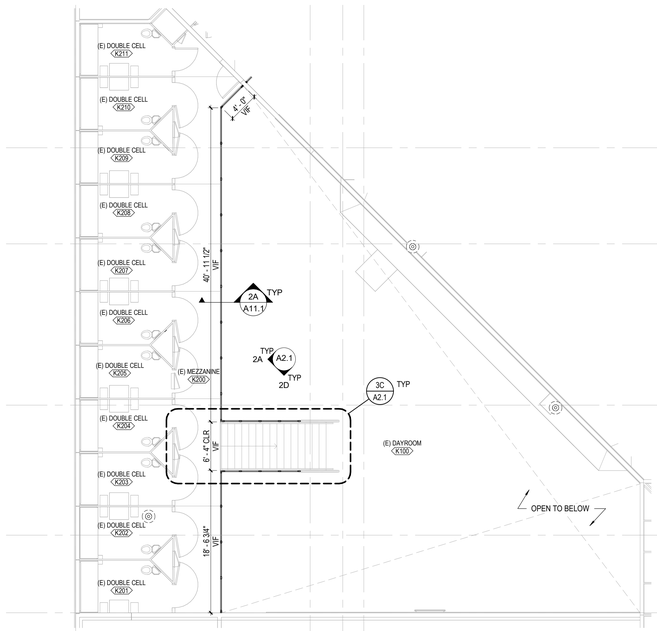



3A A2.1 **ENLARGED STAIR PLAN - TYPICAL DAYROOM FIRST FLOOR**
SCALE: 1/4" = 1'-0"

3C A2.1 **ENLARGED STAIR PLAN - TYPICAL DAYROOM MEZZANINE FLOOR**
SCALE: 1/4" = 1'-0"





5A A2.1 **ENLARGED PLAN - TYPICAL DAYROOM FIRST FLOOR**
SCALE: 1/8" = 1'-0"

5C A2.1 **ENLARGED PLAN - TYPICAL DAYROOM MEZZANINE FLOOR**
SCALE: 1/8" = 1'-0"

5E A2.1 **ENLARGED RCP - TYPICAL DAYROOM**
SCALE: 1/8" = 1'-0"



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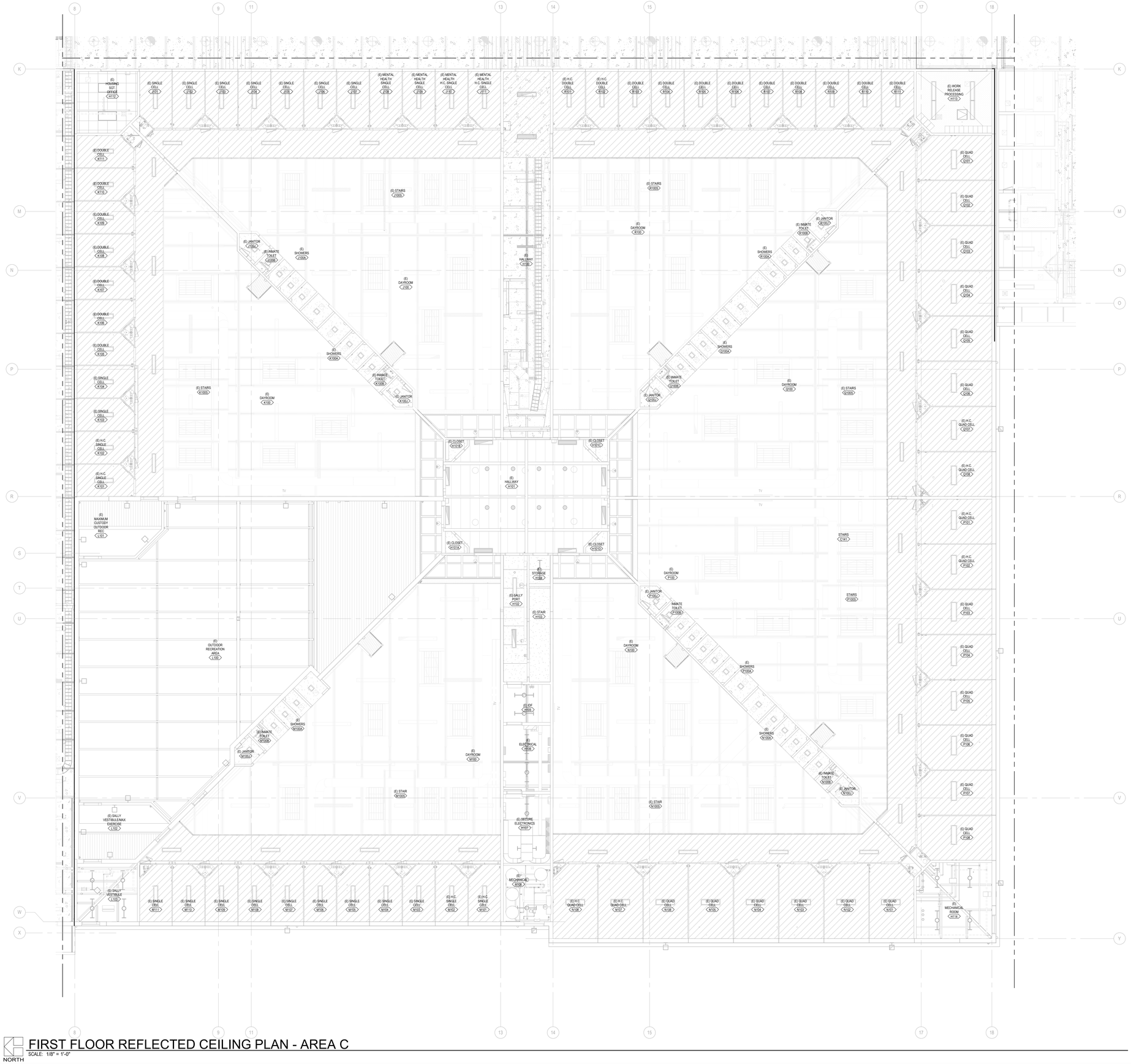
ENLARGED FLOOR PLANS - TYPICAL DAYROOM

A2.1




# FIRST FLOOR REFLECTED CEILING PLAN - AREA C

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

NORTH

## REFLECTED CEILING PLAN LEGEND

- 1" ACOUSTICAL SPRAY APPLIED TO EXPOSED STRUCTURE AND DECK. WRAP DOWN WALL TO 10' AFF U.N.O.
- PAINTED SUSPENDED GWB CEILING WITH SECURITY BARRIER MESH BETWEEN GWB AND METAL STUD
- EXPOSED DECK
- EXPOSED CELLULAR METAL DECK WITH SECURITY PANEL
- METAL SECURITY MESH
- OR — SECURITY-PLANK CEILING ASSEMBLY
- NEW CONSTRUCTION
- EXISTING



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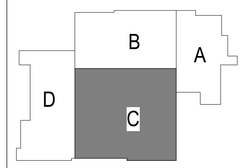


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FIRST FLOOR REFLECTED CEILING PLAN - AREA C - FOR REFERENCE ONLY

A3.1C

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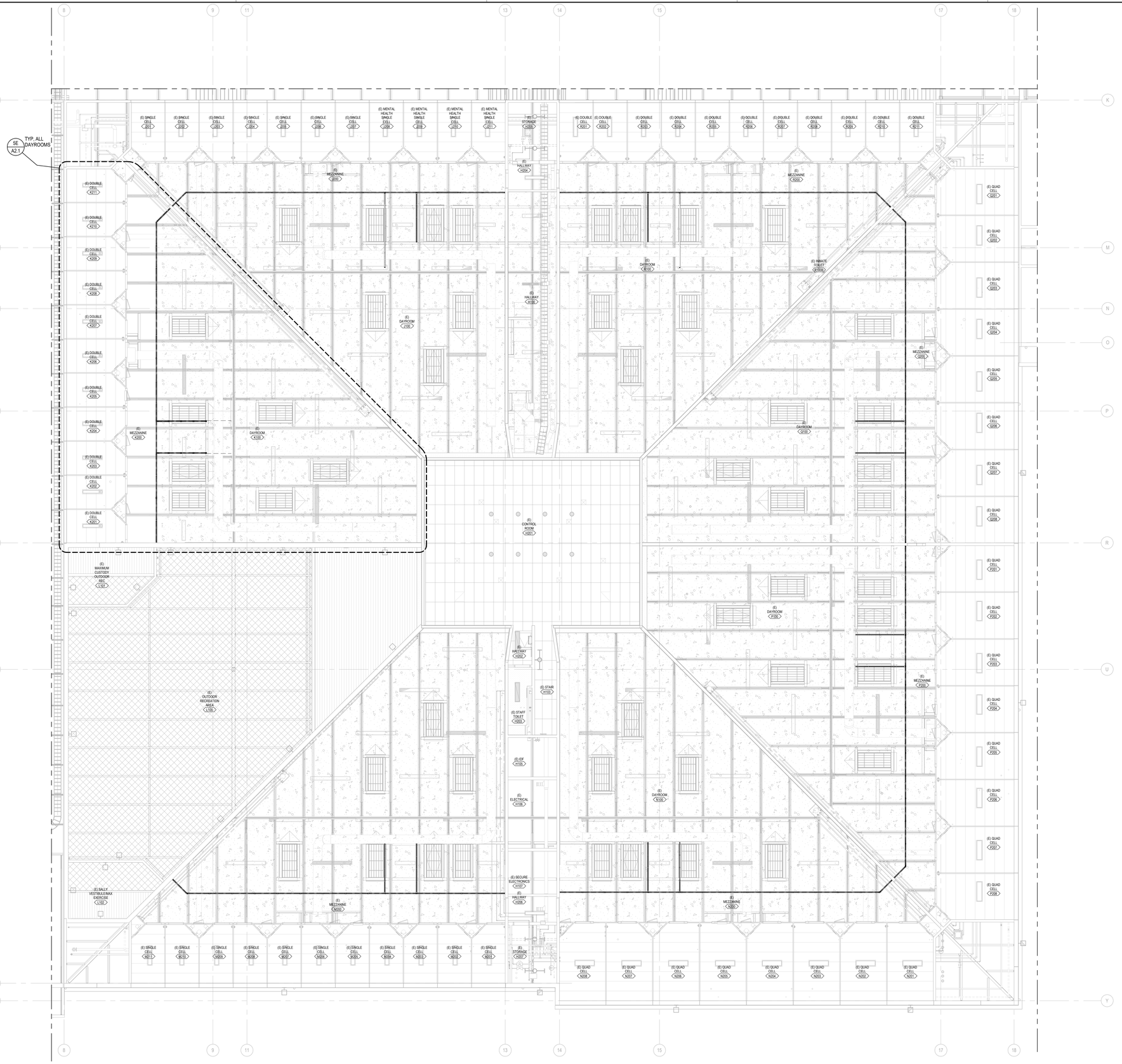


## MEZZANINE LEVEL REFLECTED CEILING PLAN-AREA C

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

NORTH

## REFLECTED CEILING PLAN LEGEND

- 1" ACOUSTICAL SPRAY APPLIED TO EXPOSED STRUCTURE AND DECK. WRAP DOWN WALL TO 10' AFF U.N.O.
- PAINTED SUSPENDED GWB CEILING WITH SECURITY BARRIER MESH BETWEEN GWB AND METAL STUD
- EXPOSED DECK
- EXPOSED CELLULAR METAL DECK WITH SECURITY PANEL
- METAL SECURITY MESH
- OR — SECURITY-PLANK CEILING ASSEMBLY
- NEW CONSTRUCTION
- EXISTING

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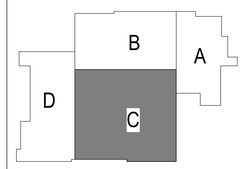
KEY PLAN

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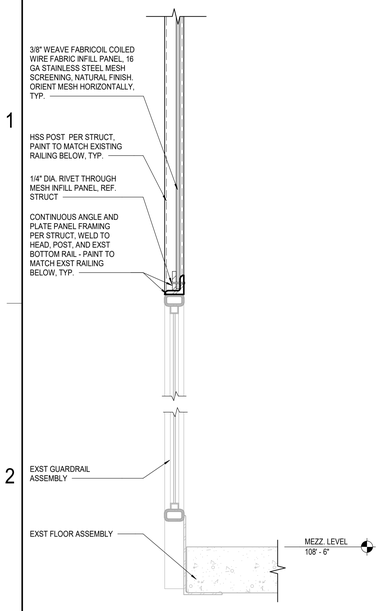
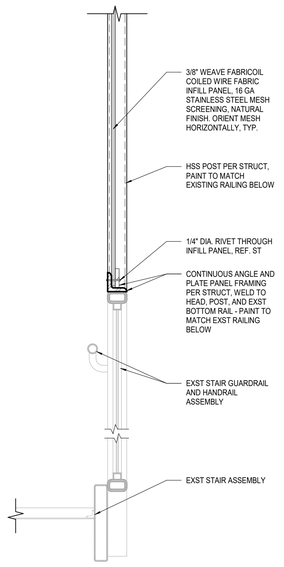
MEZZANINE LEVEL REFLECTED CEILING PLAN - AREA C

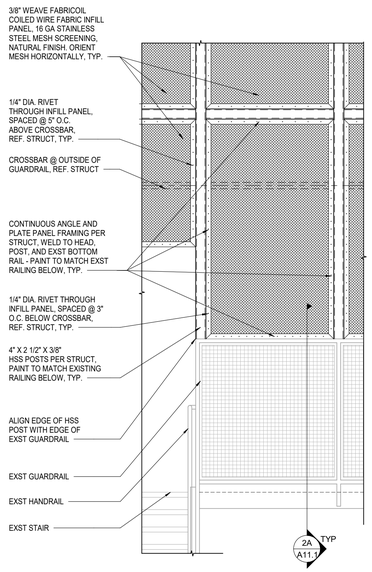
A3.2C



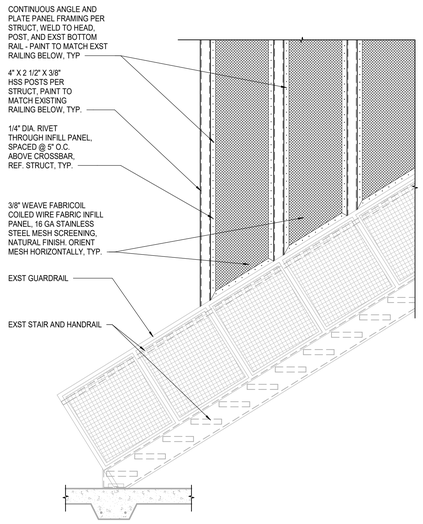

2A A11.1 TYP SECTION THROUGH GUARDRAIL AT MEZZANINE
SCALE: 1 1/2" = 1'-0"




2B A11.1 TYPICAL STAIR HANDRAIL/GUARDRAIL DETAIL
SCALE: 1 1/2" = 1'-0"




2C A11.1 TYPICAL GUARDRAIL, HOUSING MEZZ LEVEL
SCALE: 1/2" = 1'-0"




2D A11.1 TYPICAL GUARDRAIL @ STAIR, END SECTION
SCALE: 1/2" = 1'-0"

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INTERIOR DETAILS

A11.1

# GENERAL STRUCTURAL NOTES

**GENERAL**

1. THE DRAWINGS REPRESENT THE FINISHED STRUCTURE, NOT THE METHOD OF CONSTRUCTION. THE CONTRACTOR SHALL PROVIDE ALL TEMPORARY GUYING AND BRACING REQUIRED TO ERECT AND HOLD THE STRUCTURE IN PROPER ALIGNMENT UNTIL ALL STRUCTURAL WORK AND CONNECTIONS HAVE BEEN COMPLETED. THE RESEARCH, DESIGN, SAFETY, ADEQUACY, AND INSPECTION OF ERECTION BRACING, SHORING, GUYING, TEMPORARY SUPPORTS, ETC, IS THE RESPONSIBILITY OF THE CONTRACTOR.

2. THE ENGINEER SHALL NOT BE RESPONSIBLE FOR THE CONTRACTOR'S MEANS AND METHODS, SEQUENCES OF CONSTRUCTION, OR CONSTRUCTION TECHNIQUES USED TO PERFORM THE WORK. OBSERVATION VISITS TO THE SITE WILL NOT INVOLVE REVIEW OF THESE ITEMS.

3. THE ENGINEER SHALL NOT BE RESPONSIBLE FOR THE CONTRACTOR'S SAFETY PROGRAM. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COMPLYING WITH ALL SAFETY PRECAUTIONS AND REGULATIONS DURING THE WORK. THE ENGINEER WILL NOT ADVISE ON, NOR ISSUE DIRECTION, AS TO SAFETY PRECAUTIONS AND PROGRAMS. OBSERVATION VISITS TO THE SITE WILL NOT INVOLVE REVIEW OF THESE ITEMS.

4. CONTRACTOR IS TO ESTABLISH AND VERIFY OPENINGS AND INSERTS FOR ITEMS TO BE INSTALLED BY OTHER TRADES PRIOR TO SUBMITTAL OF SHOP DRAWINGS AND CONSTRUCTION.

5. CONSTRUCTION MATERIAL AND EQUIPMENT LOADS PLACED ON THE STRUCTURE DURING THE CONSTRUCTION PROCESS SHALL NOT EXCEED THE DESIGN LIVE LOAD OF THE STRUCTURE NOTED IN THESE DRAWINGS. THE ENGINEER SHALL NOT BE RESPONSIBLE TO INVESTIGATE, NOR APPROVE, THE STRUCTURE FOR CONSTRUCTION MATERIAL OR EQUIPMENT LOADING. ERECTION OR CONSTRUCTION LOADS ARE NOT TO BE APPLIED UNTIL PROPER STRUCTURAL FRAMING CONNECTIONS ARE MADE, AND ALL TEMPORARY BRACING IS IN PLACE. THE CONTRACTOR SHALL DESIGN AND PROVIDE TEMPORARY BRACING OF THE STRUCTURE WHERE NECESSARY FOR CONSTRUCTION LOADS.

6. DETAILS THAT ARE NOTED AS "TYPICAL" OR "TYP" ON DETAIL TITLES ARE TO BE APPLIED TO THE PROJECT CONSTRUCTION AS GENERAL CONSTRUCTION METHODS UNLESS NOTED OTHERWISE. THESE DETAILS ARE NOT CUT AT ALL LOCATIONS WHERE THEY OCCUR, AND THEY MAY NOT BE CUT AT ALL. WHERE NO SPECIFIC DETAILS ARE SHOWN, CONSTRUCTION SHALL CONFORM TO SIMILAR CONDITIONS ELSEWHERE ON THE PROJECT, SUBJECT TO APPROVAL OF THE ENGINEER.

7. DO NOT SCALE DRAWINGS. CONTRACTOR IS TO VERIFY ALL DIMENSIONS RELATIVE TO ARCHITECTURAL OR OTHER DISCIPLINE DRAWINGS PRIOR TO CONSTRUCTION. ANY DISCREPANCIES MUST BE REPORTED TO THE ENGINEER PRIOR TO CONSTRUCTION.

8. WHERE DISCREPANCIES OCCUR BETWEEN GENERAL NOTES, PLANS, DETAILS, AND SPECIFICATIONS, THE MOST STRINGENT REQUIREMENTS SHALL GOVERN, UNLESS APPROVED OTHERWISE BY THE ENGINEER IN WRITING PRIOR TO CONSTRUCTION.

9. THE STRUCTURAL DRAWINGS SHALL BE USED IN CONJUNCTION WITH THE DRAWINGS OF ALL OTHER DISCIPLINES AND SPECIFICATIONS. THE CONTRACTOR SHALL ESTABLISH AND VERIFY THE REQUIREMENTS OF OTHER TRADES AS TO SLEEVES, CHASES, HANGERS, INSERT ANCHORS, HOLES, AND OTHER ITEMS TO BE PLACED OR SET IN THE STRUCTURAL WORK. DO NOT PENETRATE ANY STRUCTURAL ELEMENTS (BEAMS, COLUMNS, WALLS, SLABS, STEEL DECKS, ETC) WITHOUT PRIOR WRITTEN APPROVAL OF THE ENGINEER.

10. IF THE ENGINEER'S SEAL AND SIGNATURE IS NOT AFFIXED TO THESE DRAWINGS, THESE DRAWINGS ARE INTENDED FOR PRELIMINARY PURPOSES ONLY AND SHALL NOT BE USED FOR CONSTRUCTION.

**DESIGN CRITERIA**

1. ALL CONSTRUCTION, MATERIALS, AND WORKMANSHIP SHALL CONFORM TO THE REQUIREMENTS OF THESE DRAWINGS, SPECIFICATIONS, AND THE CODES, RULES AND REGULATIONS OF THE 2018 INTERNATIONAL BUILDING CODE (IBC), AS ADOPTED AND AMENDED BY THE AUTHORITY HAVING JURISDICTION (AHJ) HEREAFTER REFERRED TO AS THE BUILDING CODE.

2. MATERIAL SPECIFIC DESIGN STANDARDS LISTED IN THESE GENERAL NOTES ARE THE VERSION REFERENCED BY THE BUILDING CODE. IF NOT REFERENCED BY THE BUILDING CODE, USE THE LATEST EDITION APPROVED BY THE AUTHORITY HAVING JURISDICTION ON THE DATE OF THE PERMIT ISSUANCE.

3. RISK CATEGORY III

   DESIGN LIVE LOADS (OUT OF PLANE) 10 PSF

**STRUCTURAL RENOVATION SCOPE**

1. PROJECT STRUCTURAL SCOPE IS LIMITED TO THE FOLLOWING:
   a. EXTENSION OF EXISTING RAILING TO BARRICADE MEZZANINE AND STAIR

**EXISTING CONDITIONS**

1. CONTRACTOR IS TO FIELD VERIFY EXISTING CONDITIONS PRIOR TO BIDDING. ALL WORK AND MATERIALS NECESSARY TO INSTALL NEW WORK IN EXISTING BUILDING(S) SHALL BE INCLUDED.

2. CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND EXISTING CONDITIONS AND SHALL CONTACT THE ENGINEER IF ANY DISCREPANCIES ARE FOUND BEFORE PROCEEDING. NOTIFY ENGINEER IMMEDIATELY IF EXISTING CONDITIONS DO NOT MATCH, OR SEEM IN CONFLICT WITH, INFORMATION SHOWN ON DRAWINGS.

3. DIMENSIONS INDICATED ON PLAN AS FIELD VERIFY, OR "FV", ARE DIMENSIONS THAT MAY BE REQUIRED FOR FABRICATION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFICATION OF DIMENSIONS IN THE FIELD NECESSARY FOR FABRICATION OF MEMBERS AND PRIOR TO SUBMISSION OF SHOP DRAWINGS.

4. CONTRACTOR TO PROVIDE PROTECTION FOR ALL EXISTING BUILDING MATERIALS AND EQUIPMENT TO REMAIN FROM DAMAGE DUE TO DEMOLITION OR CONSTRUCTION OPERATIONS PERFORMED UNDER THIS CONTRACT.

5. THE SEQUENCE OF CONSTRUCTION SHALL BE THE RESPONSIBILITY THE CONTRACTOR. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ALL TEMPORARY GUYS, BRACING, AND OTHER SUPPORTS AS NEEDED TO SAFELY RESIST ALL GRAVITY AND LATERAL LOADS TO WHICH THE EXISTING OR PROPOSED STRUCTURE MAY BE SUBJECTED, INCLUDING LOADS FROM ERECTION EQUIPMENT AND ERECTION OPERATIONS, AND WIND OR SEISMIC FORCES COMPARABLE IN INTENSITY FOR WHICH THE STRUCTURE IS DESIGNED. LOAD VERIFICATION OF EXISTING MEMBERS TO RECEIVE TEMPORARY SHORING SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR'S ENGINEER.

6. ALL ERECTION AND CONSTRUCTION PROCEDURES SHALL MEET THE REQUIREMENTS OF ALL APPLICABLE CODES AND ORDINANCES.

7. ALL FRAMING CONNECTIONS TO EXISTING STRUCTURE SHALL BE FIELD VERIFIED PRIOR TO SHOP DRAWING PRODUCTION AND FABRICATION. FIELD VERIFIED DIMENSIONS SHALL BE INCLUDED ON FIRST SHOP DRAWING SUBMITTAL AND NOTED AS SUCH.

8. CONTRACTOR SHALL LOCATE REBAR IN EXIST. CONSTRUCTION PRIOR TO DRILLING OF HOLES AND SHALL TAKE CARE NOT TO DAMAGE EXIST. BARS. IF DAMAGE TO EXIST. REBAR OCCURS DURING CONSTRUCTION, THE CONTRACTOR IS RESPONSIBLE FOR REPAIRING THE DAMAGE. REPAIR PROCEDURES NOT DETAILED IN THE CONTRACT DOCUMENTS WILL REQUIRE PREPARATION BY A QUALIFIED PROFESSIONAL ENGINEER REGISTERED IN THE STATE IN WHICH THE PROJECT IS LOCATED AND MUST BE APPROVED BY THE ENGINEER.

**EXISTING DOCUMENTATION**

1. THE FOLLOWING DOCUMENTS WERE USED TO REPRESENT EXISTING STRUCTURE IN THE CONSTRUCTION DOCUMENTS. NOT ALL ELEMENTS AND INFORMATION HAS BEEN PROVIDED. COPIES OF THE EXISTING DRAWINGS MAY BE AVAILABLE AT THE CONTRACTOR'S REQUEST.
   - ARCHITECTURAL DRAWINGS DATED JULY 18, 2005, BY DLR GROUP.
   - STRUCTURAL DRAWINGS DATED JULY 18, 2005, BY DLR GROUP.

**DEMOLITION**

1. DEMOLITION OF EXISTING STRUCTURE TO BE REMOVED SHALL BE PERFORMED BY THE CONTRACTOR USING MEANS NECESSARY TO PREVENT DAMAGE TO THE EXISTING STRUCTURE TO REMAIN. DAMAGE TO THE EXISTING STRUCTURE TO REMAIN SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE USING METHODS REVIEWED BY THE STRUCTURAL ENGINEER. IF EXISTING CONDITIONS DIFFER FROM THOSE SHOWN IN THE CONTRACT DOCUMENTS CONTACT THE ARCHITECT PRIOR TO PROCEEDING WITH WORK.

2. SHORING OF THE EXISTING STRUCTURE SHALL BE PROVIDED BY THE CONTRACTOR AND DESIGNED BY A QUALIFIED PROFESSIONAL ENGINEER REGISTERED IN THE STATE IN WHICH THE PROJECT IS LOCATED.

**STRUCTURAL STEEL**

1. FABRICATOR QUALIFICATIONS: FABRICATOR SHALL BE AISC CERTIFIED OR AN "APPROVED FABRICATOR" IN ACCORDANCE WITH THE BUILDING CODE AND APPROVED BY THE AHJ. IN LIEU OF THE PREVIOUS, FABRICATOR SHALL INCLUDE IN THEIR BID THE SERVICES OF A SPECIAL INSPECTOR TO PROVIDE IN-PLANT INSPECTION/TESTING SERVICES FOR WORK COMPLETED ON THE FABRICATOR'S PREMISES TO MEET BUILDING CODE REQUIREMENTS. AT THE COMPLETION OF WORK, FABRICATOR SHALL SUBMIT A "CERTIFICATE OF COMPLIANCE" TO THE ARCHITECT AND AHJ STATING THAT THE WORK WAS PERFORMED IN ACCORDANCE WITH APPROVED CONSTRUCTION DOCUMENTS.

2. STRUCTURAL STEEL SHAPES AND CONNECTING COMPONENTS SHALL CONFORM TO THE FOLLOWING MATERIAL SPECIFICATIONS UNO:
   FOLLOWING MATERIAL SPECIFICATIONS:

| | |
|---|---|
| HOLLOW STRUCTURAL SECTIONS (HSS) RECTANGULAR & SQUARE | ASTM A500, GRADE C, Fy = 50 KSI |
| STEEL SHAPES AND PLATES | ASTM A572, Fy = 50 KSI |
| MACHINE BOLTS | ASTM A307 |
| THREADED RODS | ASTM A36 |
| WELDING ELECTRODES | E70XX |

3. CONTRACTOR IS RESPONSIBLE FOR THE STABILITY OF THE BUILDING SYSTEM AT ALL TIMES DURING THE ERECTION PROCESS. ELEMENTS HAVE BEEN DESIGNED FOR THE FINAL COMPLETED CONDITION AND HAVE NOT BEEN INVESTIGATED FOR TEMPORARY LOADING DURING CONSTRUCTION. INVESTIGATION OF THE STRUCTURAL ELEMENTS FOR ADEQUACY DURING THE STEEL ERECTION AND CONSTRUCTION PROCESS IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR. CONTRACTOR TO PROVIDE TEMPORARY SUPPORTS AS REQUIRED TO MAINTAIN STABILITY.

4. UNO, ALL STRUCTURAL STEEL PERMANENTLY EXPOSED TO THE WEATHER SHALL BE HOT DIP GALVANIZED AFTER FABRICATION IN ACCORDANCE WITH ASTM A123. ALL DAMAGED GALVANIZING SHALL BE REPAIRED IN ACCORDANCE WITH ASTM A780.

5. ALL BOLTS (HIGH STRENGTH, ANCHOR BOLTS, EXPANSION BOLTS, ADHESIVE ANCHORS, ETC.) SHALL BE INSTALLED WITH STEEL NUTS AND WASHERS. NUTS AND WASHERS FOR HIGH STRENGTH BOLTS SHALL CONFORM TO ASTM A563 AND TO ASTM F436, RESPECTIVELY.

6. WELDING PROCEDURES, ELECTRODES, AND WELDER QUALIFICATIONS SHALL CONFORM TO THE AMERICAN WELDING SOCIETY CODE D1.1, AISC STANDARDS, AND LOCAL CODE REQUIREMENTS.

7. ALL WELDS SHOWN ON THE DRAWINGS SHALL BE SHOP WELDS, UNO. WHERE SHOWN, FIELD WELDING SHALL BE USED. CONTRACTOR MAY SUBSTITUTE FIELD WELDS FOR SHOP WELDS AT THEIR DISCRETION. SHOP DRAWINGS SHALL CLEARLY NOTE ALL WELDING USING AWS A2.4 SYMBOLS.

8. COORDINATE WITH ALL OTHER TRADES WHICH STEEL INTERACTS. THIS INCLUDES BUT IS NOT LIMITED TO COORDINATING WITH MASONRY, PRECAST CONCRETE, CAST-IN-PLACE CONCRETE, JOIST, AND METAL DECK SUPPLIERS.

**SUBMITTALS**

1. THE FOLLOWING ITEMS ARE REQUIRED STRUCTURAL SUBMITTALS AS DESCRIBED IN THE SPECIFICATIONS.
   a. STRUCTURAL STEEL FRAMING
   b. STEEL MESH SCREEN PANEL FRAMING

2. THE FOLLOWING ITEMS ARE DELEGATED DESIGN (DEFERRED SUBMITTALS PER THE BUILDING CODE):
   a. WEAVE COILED WIRE FABRIC
   b. WEAVE COILED WIRE FABRIC FASTENERS (RIVETS)

3. DELEGATED DESIGN SUBMITTAL CALCULATIONS AND/OR SHOP DRAWINGS SHALL BE SIGNED AND SEALED BY THE ENGINEER RESPONSIBLE FOR THEIR PREPARATION AND SHALL BE SUBMITTED TO THE ENGINEER FOR REVIEW WITH THE SHOP DRAWING SUBMITTAL. ONCE REVIEWED, CONTRACTOR SHALL FORWARD TO THE AHJ FOR APPROVAL. FABRICATION AND INSTALLATION OF THE DELEGATED DESIGN SUBMITTAL ITEMS SHALL NOT OCCUR UNTIL APPROVAL OF THE AHJ IS RECEIVED.

4. THE CONTRACTOR SHALL DEVELOP AND SUBMIT A SUBMITTAL SCHEDULE INDICATING THE NUMBER OF SHOP DRAWINGS TO BE SUBMITTED EACH WEEK OVER THE DURATION OF THE PROJECT.

5. THE SUBMITTAL SCHEDULE PROVIDED BY THE CONTRACTOR IS NECESSARY TO PROVIDE REASONABLE TIME TO PROCESS THE SCHEDULED SUBMITTALS. THE ENGINEER'S REVIEW SCHEDULE WILL BE DETERMINED USING THE SUBMITTAL SCHEDULE PROVIDED BY THE CONTRACTOR.

6. REVIEW OF SHOP DRAWINGS DOES NOT RELIEVE THE CONTRACTOR FROM CONFORMANCE WITH THE INTENT OF THE DRAWINGS. REVIEW DOES NOT IMPLY OR STATE THAT THE FABRICATOR HAS CORRECTLY INTERPRETED THE CONSTRUCTION DOCUMENTS.

7. COPIES OF THE CONTRACT DOCUMENTS SHALL NOT BE SUBMITTED AS SHOP DRAWINGS. CONTRACT DRAWINGS SHOW ONLY GENERAL DESIGN INTENT. FINAL SHOP DRAWING SECTIONS SHALL PROVIDE SIZES, LAYOUT, EXACT DIMENSIONS, ELEVATIONS, GRADES OF MATERIALS, ETC, SPECIFIC TO EACH LOCATION.

8. SHOP DRAWINGS SHALL BE REVIEWED AND STAMPED BY THE GENERAL CONTRACTOR OR CONSTRUCTION MANAGER PRIOR TO SUBMITTING TO ENGINEER. REQUEST FOR INFORMATION FOR ITEMS SUCH AS OVERALL BUILDING GEOMETRY, ELEVATIONS, ETC. SUBMITTED THROUGH SHOP DRAWINGS SHALL BE DETERMINED BY THE CONTRACTOR. IF GEOMETRY CANNOT BE DETERMINED FROM THE CONTRACT DOCUMENTS, THE CONTRACTOR SHALL SUBMIT AN RFI AND COORDINATE THE RESPONSE WITH ALL AFFECTED TRADES PRIOR TO FABRICATION.

9. ANY CHANGES, SUBSTITUTION REQUESTS, OR DEVIATIONS FROM THE CONTRACT DOCUMENTS SHALL BE CLOUDED BY THE SUPPLIER AND THE CONTRACTOR. SUCH ITEMS NOT CLOUDED BY THE SUBMITTING PARTY SHALL NOT BE CONSIDERED ALLOWED AFTER THE ENGINEER'S REVIEW UNLESS NOTED ACCORDINGLY BY THE ENGINEER IN WRITING.

**ABBREVIATIONS**

ABBREVIATIONS ARE AS SHOWN IN THE CONTRACT DOCUMENTS WITH THE FOLLOWING EXCEPTIONS:

| | | | |
|---|---|---|---|
| # | REINFORCING BAR SIZE | LB(S) | POUND(S) |
| | SHEET METAL SCREW SIZE | Ld | REINFORCING BAR DEVELOPMENT LENGTH |
| @ | AT (SPACING) | Ldh | HOOKED REINFORCING BAR DEVELOPMENT LENGTH |
| Ø | DIAMETER | LF | LINEAR FOOT (FEET) |
| AB | ANCHOR BOLT | LFRS | LATERAL FORCE RESISTING SYSTEM |
| ABC | AGGREGATE BASE COURSE | LIN | LINEAR |
| ADDL | ADDITIONAL | LL | LIVE LOAD |
| AFF | ABOVE FINISHED FLOOR | LLBB | LONG LEG BACK TO BACK |
| AHJ | AUTHORITY HAVING JURISDICTION | LLH | LONG LEG HORIZONTAL |
| ALT | ALTERNATE | LLV | LONG LEG VERTICAL |
| ANCH | ANCHOR | LONG | LONGITUDINAL |
| APPROX | APPROXIMATE | Ls | REINFORCING BAR LAP SPLICE LENGTH |
| AR | ANCHOR ROD | LSH | LONG SLOTTED HOLE |
| ARCH | ARCHITECTURAL | LVL | LAMINATED VENEER LUMBER |
| B/ | BOTTOM OF | LW | LONG WAY |
| BOD | BOTTOM OF DECK | LWC | LIGHTWEIGHT CONCRETE |
| BLDG | BUILDING | | |
| BLKG | BLOCKING | MAX | MAXIMUM |
| BM(S) | BEAM(S) | MECH | MECHANICAL |
| BOF | BOTTOM OF FOOTING | MEP | MECHANICAL, ELECTRICAL & PLUMBING |
| BOL | BOTTOM OF LINTEL | MF | MOMENT FRAME |
| BOS | BOTTOM OF STEEL | MFR | MANUFACTURER |
| BOT | BOTTOM | MIN | MINIMUM |
| BRBF | BUCKLING RESTRAINED BRACED FRAME | MISC | MISCELLANEOUS |
| | | MTL | METAL |
| BRG | BEARING | MWFRS | MAIN WIND FORCE RESISTING SYSTEM |
| BTWN | BETWEEN | (N) | NEW |
| | | NA | NOT APPLICABLE |
| C | CHANNEL | NIC | NOT IN CONTRACT |
| CANT | CANTILEVER | NO | NUMBER |
| CFMF | COLD-FORMED METAL FRAMING | NS | NEAR SIDE |
| CIP | CAST-IN-PLACE | NTS | NOT TO SCALE |
| CJ | CONTROL JOINT | NWC | NORMAL WEIGHT CONCRETE |
| CJP | COMPLETE JOINT PENETRATION | | |
| CL | CENTERLINE | OC | ON CENTER |
| CLR | CLEAR | OCBF | ORDINARY CONCENTRICALLY BRACED FRAME |
| CMU | CONCRETE MASONRY UNIT | | |
| COL | COLUMN | OCCS | ORDINARY CANTILEVER COLUMN SYSTEM |
| COMP | COMPOSITE | OD | OUTSIDE DIAMETER |
| CONC | CONCRETE | OF | OUTSIDE FACE |
| CONN(S) | CONNECTION(S) | OH | OPPOSITE HAND |
| CONST | CONSTRUCTION | OMF | ORDINARY MOMENT FRAME |
| CONT | CONTINUOUS | OPG(S) | OPENING(S) |
| CONTR | CONTRACT(OR) | OPP | OPPOSITE |
| CSTJ | CONSTRUCTION JOINT | OWJ | OPEN WEB JOIST |
| CTR | CENTER | | |
| | | PAF | POWDER ACTUATED FASTENER |
| (D) | DEMOLISH | PC | PRECAST CONCRETE, PILE CAP |
| DBA | DEFORMED BAR ANCHOR | PCBE | PRECAST CONCRETE BEARING ELEVATION |
| DCW | DEMAND CRITICAL WELD | | |
| DEG | DEGREE | PCF | POUNDS PER CUBIC FOOT |
| DIA | DIAMETER | PERP | PERPENDICULAR |
| DIAG | DIAGONAL | PJP | PARTIAL JOINT PENETRATION |
| DIM | DIMENSION | PL | PLATE |
| DL | DEAD LOAD | PLF | POUNDS PER LINEAL FOOT |
| DO | DITTO | PLWD | PLYWOOD |
| DT | PRESTRESSED PRECAST DOUBLE TEE | PREFAB | PREFABRICATED |
| DTL | DETAIL | PROJ | PROJECTION |
| DWG(S) | DRAWING(S) | PSF | POUNDS PER SQUARE FOOT |
| DWL(S) | DOWEL(S) | PSI | POUNDS PER SQUARE INCH |
| | | PTW | PRESERVATIVE TREATED WOOD |
| (E) | EXISTING | RAD | RADIUS |
| EA | EACH | RC | REINFORCED CONCRETE |
| EBF | ECCENTRICALLY BRACED FRAME | REF | REFERENCE |
| EE | EACH END | REINF | REINFORCE, REINFORCED, REINFORCEMENT, REINFORCING |
| EF | EACH FACE | | |
| EJ | EXPANSION JOINT | REQ(D) | REQUIRE(D) |
| EL | ELEVATION | REV(S) | REVISION(S) |
| ELEC | ELECTRICAL | RTU | ROOFTOP UNIT |
| ELEV | ELEVATOR | | |
| EMBED | EMBEDMENT, EMBEDDED | SCBF | SPECIAL CONCENTRICALLY BRACED FRAME |
| EN | EDGE NAILING | | |
| EWP | ENGINEERED WOOD PRODUCT | SCCS | SPECIAL CANTILEVER COLUMN SYSTEM |
| ENG | ENGINEER | SCHED | SCHEDULE |
| EOD | EDGE OF DECK | SDL | SUPERIMPOSED DEAD LOAD |
| EOR | ENGINEER OF RECORD | SDS | SELF-DRILLING SCREWS |
| EOS | EDGE OF SLAB | SSH | SHORT SLOTTED HOLE |
| EQ | EQUAL | SECT | SECTION |
| EQUIP | EQUIPMENT | SEOR | STRUCTURAL ENGINEER OF RECORD |
| EQUIV | EQUIVALENT | SF | SQUARE FOOT |
| EW | EACH WAY | SFRS | SEISMIC FORCE RESISTING SYSTEM |
| EXP | EXPANSION | SHT | SHEET |
| EXT | EXTERIOR | SIM | SIMILAR |
| | | SL | SNOW LOAD |
| f'c | SPECIFIED COMPRESSIVE STRENGTH OF CONCRETE | SMF | SPECIAL MOMENT FRAME |
| | | SOG | SLAB ON GRADE |
| f'm | SPECIFIED COMPRESSIVE STRENGTH OF MASONRY | SPA | SPACE, SPACING |
| | | SPEC(S) | SPECIFICATION(S) |
| FD | FLOOR DRAIN | SST | STAINLESS STEEL |
| FDN | FOUNDATION | STAGD | STAGGERED |
| FRT | FIRE RESISTANCE TREATED | STD | STANDARD |
| FS | FAR SIDE | STIFF | STIFFENER |
| FT | FEET (FOOT) | STL | STEEL |
| FTG | FOOTING | STRUCT | STRUCTURE, STRUCTURAL |
| FV | FIELD VERIFY | SYM | SYMMETRICAL |
| Fy | YIELD STRENGTH | T | THICKNESS |
| | | T&B | TOP & BOTTOM |
| GA | GAGE, GAUGE | T&G | TONGUE & GROOVE |
| GALV | GALVANIZED | TC | TENSION CONTROL |
| GB | GRADE BEAM | TCW | TOP OF CONCRETE WALL |
| GC | GENERAL CONTRACTOR | TEMP | TEMPORARY |
| GLB | GLUE LAMINATED BEAM | THRD | THREADED |
| GR | GRADE | T/ | TOP OF |
| | | TOB | TOP OF BEAM |
| H | HEIGHT | TOC | TOP OF CONCRETE |
| HC | PRESTRESSED PRECAST HOLLOW CORE | TOF | TOP OF FOOTING |
| HDR | HEADER | TOS | TOP OF STEEL |
| HORIZ | HORIZONTAL | TOW | TOP OF WALL |
| HS | HEADED STUD | TPE | TOP OF PIER ELEVATION |
| | | TRANS | TRANSVERSE |
| ID | INSIDE DIAMETER | TSE | TOP OF SLAB ELEVATION |
| IF | INSIDE FACE | TWE | TOP OF WALL ELEVATION |
| IMF | INTERMEDIATE MOMENT FRAME | TYP | TYPICAL |
| IN | INCH | UNO | UNLESS NOTED OTHERWISE |
| INC | INCLUDE(ING) | VERT | VERTICAL |
| INT | INTERIOR | VFY | VERIFY |
| | | W/ | WITH |
| JBE | JOIST BEARING ELEVATION | W/O | WITHOUT |
| JST | JOIST | WD | WOOD |
| JT | JOINT | WFRS | WIND FORCE RESISTING SYSTEM |
| | | WGT | WEIGHT |
| K | KIP (1,000 LBS) | WP | WORK POINT |
| KSF | KIPS PER SQUARE FOOT | WPS | WELDING PROCEDURE SPECIFICATION |
| | | WT | STEEL TEE SECTION |
| | | WWR | WELDED WIRE FABRIC/REINFORCEMENT |
| | | X-STR | EXTRA STRONG |
| | | XX-STR | DOUBLE EXTRA STRONG |
| | | ZRC | ZINC RICH COATING |



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STRUCTURAL NOTES

S0.1

## REQUIRED STRUCTURAL OBSERVATIONS

1. IN ACCORDANCE WITH IBC, SECTION 1704.6, THE OWNER'S REPRESENTATIVE SHALL EMPLOY A REGISTERED DESIGN PROFESSIONAL TO PERFORM STRUCTURAL OBSERVATIONS AS LISTED IN THE BELOW STATEMENT OF REQUIRED STRUCTURAL OBSERVATIONS.

2. STRUCTURAL OBSERVATION DOES NOT INCLUDE, OR WAIVE, THE RESPONSIBILITY FOR COMPLETING THE LISTED SPECIAL INSPECTIONS OR INSPECTIONS REQUIRED BY IBC SECTION 110.

3. AT THE CONCLUSION OF THE WORK, THE STRUCTURAL OBSERVER SHALL SUBMIT TO THE AHJ A WRITTEN STATEMENT THAT THE SITE VISITS HAVE BEEN MADE AND IDENTIFY ANY REPORTED DEFICIENCIES WHICH, TO THE BEST OF THE STRUCTURAL OBSERVER'S KNOWLEDGE, HAVE NOT BEEN RESOLVED.

4. IT IS THE RESPONSIBILITY OF THE GENERAL CONTRACTOR OR CONSTRUCTION MANAGER TO NOTIFY THE ENGINEER AS TO WHEN EACH MAJOR PHASE OF CONSTRUCTION IS READY FOR OBSERVATION A MINIMUM OF TEN (10) WORKING DAYS IN ADVANCE.

5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING THAT NAILING, REINFORCEMENT, WELDS, CONNECTIONS, ETC. ARE VISIBLE FOR DESIGNATED STRUCTURAL OBSERVER AT THE TIME OF SITE VISIT.

6. STRUCTURAL OBSERVATIONS FOR STRUCTURES:
   A. AT COMPLETION OF NEW SCREENING INSTALLATION ON EXISTING GUARDRAILS.

## STATEMENT OF SPECIAL INSPECTIONS

1. IN ACCORDANCE WITH IBC, SECTION 1704, THE OWNER'S REPRESENTATIVE SHALL EMPLOY ONE OR MORE QUALIFIED SPECIAL INSPECTORS AND/OR TESTING AGENCIES TO PERFORM STRUCTURAL TESTS AND SPECIAL INSPECTIONS ON THE TYPES OF WORK LISTED IN THE STATEMENT OF SPECIAL INSPECTIONS.

2. THE DESIGNATED ENGINEER OF RECORD FOR SPECIAL INSPECTIONS SHALL BE RESPONSIBLE FOR DEFINING THE ACTIVITIES OF THE INSPECTORS, FOR CERTIFYING THE QUALIFICATIONS OF THE INSPECTORS WITH THE AHJ, AND TO ATTEND THE PRE-CONSTRUCTION MEETING TO DEFINE THEIR SCOPE OF SERVICES AND THE TESTING OR TEST PROCEDURES THAT ARE REQUIRED AS OUTLINED IN THE BUILDING CODE.

3. THE INSPECTOR SHALL OBSERVE THE WORK ASSIGNED TO VERIFY CONFORMANCE WITH THE APPROVED CONTRACT DOCUMENTS.

4. THE INSPECTOR SHALL FURNISH DAILY INSPECTION REPORTS ON THE WORK TO THE OWNER'S REPRESENTATIVE, AHJ AND ENGINEER. ALL DISCREPANCIES SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE CONTRACTOR FOR CORRECTION, AND, IF UNCORRECTED, TO THE ENGINEER AND THE AHJ.

5. THE DESIGNATED ENGINEER OF RECORD FOR SPECIAL INSPECTIONS SHALL COMPLETE, SIGN AND SEAL A FINAL REPORT CERTIFYING THAT TO THE BEST OF THEIR KNOWLEDGE, THE WORK IS IN CONFORMANCE WITH THE APPROVED CONTRACT DOCUMENTS.

6. SPECIAL INSPECTION IS TO BE PROVIDED IN ADDITION TO THE INSPECTIONS CONDUCTED BY THE AHJ AND SHALL NOT BE CONSTRUED TO RELIEVE THE OWNER OR AUTHORIZED AGENT FROM REQUESTING THE INSPECTIONS REQUIRED BY IBC SECTION 110.

7. STEEL CONSTRUCTION: SPECIAL INSPECTIONS FOR STRUCTURAL STEEL SHALL BE IN ACCORDANCE WITH THE QUALITY ASSURANCE INSPECTION REQUIREMENTS OF AISC 360-16. PROVIDE INSPECTION PER IBC SECTION 1704.2.5 FOR STRUCTURAL LOADING-BEARING MEMBERS AND ASSEMBLIES FABRICATED ON THE PREMISES OF A FABRICATOR'S SHOP. THESE INSPECTIONS SHALL BE AT CONTRACTOR'S EXPENSE IF THE FABRICATOR IS NOT AN APPROVED FABRICATOR PER SECTION 1704.2.5.1.

8. WELDING: WELDING INSPECTION SHALL BE IN COMPLIANCE WITH AWS D1.1. THE BASIS FOR WELDING INSPECTOR QUALIFICATIONS SHALL BE AWS D1.1. PROVIDE SPECIAL INSPECTION IN ACCORDANCE WITH AISC 360-16 TABLE N5.4-1 THROUGH TABLE N5.4-3.

9. STEEL DETAILING: AN INSPECTION OF THE STEEL FRAME SHALL BE PERFORMED TO VERIFY COMPLIANCE WITH THE DETAILS SHOWN ON THE APPROVED CONSTRUCTION DOCUMENTS, SUCH AS BRACING, STIFFENING, MEMBER LOCATIONS AND PROPER APPLICATION OF JOINT DETAILS AT EACH CONNECTION.

10. HIGH STRENGTH BOLTING: INSTALLATION OF HIGH STRENGTH BOLTS SHALL BE PERIODICALLY INSPECTED IN ACCORDANCE WITH AISC SPECIFICATIONS. HIGH STRENGTH BOLTING. PROVIDE SPECIAL INSPECTION IN ACCORDANCE WITH AISC 360-16 TABLE N5.6-1 THROUGH TABLE N5.6-3.

**AISC 360 — TABLE N5.4-1**

**INSPECTION TASKS PRIOR TO WELDING**

| INSPECTION TASKS PRIOR TO WELDING | QC | QA |
|---|---|---|
| Welder qualification records and continuity records | P | O |
| Welding procedure specifications (WPS) available | P | P |
| Manufacturer certifications for welding consumables available | P | P |
| Material identification (type / grade) | O | O |
| Welder identification system [a] | O | O |
| Fit-up of groove welds (including joint geometry)<br>• Joint preparations<br>• Dimensions (alignment, root opening, root face, bevel)<br>• Cleanliness (condition of steel surfaces)<br>• Tacking (tack weld quality and location)<br>• Backing type and fit (if applicable) | O | O |
| Fit-up of CJP groove welds of HSS T-, Y- and K-joints without backing (including joint geometry)<br>• Joint preparations<br>• Dimensions (alignment, root opening, root face, bevel)<br>• Cleanliness (condition of steel surfaces)<br>• Tacking (tack weld quality and location) | P | O |
| Configuration and finish of access holes | O | O |
| Fit-up of fillet welds<br>• Dimensions (alignment, gaps at root)<br>• Cleanliness (condition of steel surfaces)<br>• Tacking (tack weld quality and location) | O | O |
| Check welding equipment | O | — |

[a] The fabricator or erector, as applicable, shall maintain a system by which a welder who has welded a joint or member can be identified. Stamps, if used, shall be the low-stress type.

O - Observe these items on a random basis. Operations need not be delayed pending these inspections.
P - Perform these tasks for each welded joint or member.

**AISC 360 — TABLE N5.4-2**

**INSPECTION TASKS DURING WELDING**

| INSPECTION TASKS DURING WELDING | QC | QA |
|---|---|---|
| Control and handling of welding consumables<br>• Packaging<br>• Exposure Control | O | O |
| No welding over cracked tack welds | O | O |
| Environmental conditions<br>• Wind speed within limits<br>• Precipitation and temperature | O | O |
| WPS Followed<br>• Settings on welding equipment<br>• Travel Speed<br>• Selected welding materials<br>• Shielding gas type / flow rate<br>• Preheat applied<br>• Interpass temperature maintained (min. / max.)<br>• Proper position (F, V, H, OH) | O | O |
| Welding techniques<br>• Interpass and final cleaning<br>• Each pass within profile limitations<br>• Each pass meets quality requirements | O | O |
| Placement and installation of steel headed stud anchors | P | P |

O - Observe these items on a random basis. Operations need not be delayed pending these inspections.
P - Perform these tasks for each welded joint or member.

**AISC 360 — TABLE N5.4-3**

**INSPECTION TASKS AFTER WELDING**

| INSPECTION TASKS AFTER WELDING | QC | QA |
|---|---|---|
| Welds cleaned | O | O |
| Size, length and location of welds | P | P |
| Welds meet visual acceptance criteria<br>• Crack prohibition<br>• Weld / base-metal fusion<br>• Crater cross section<br>• Weld profiles<br>• Weld size<br>• Undercut<br>• Porosity | P | P |
| Arc strikes | P | P |
| k-area [a] | P | P |
| Weld access holes in rolled heavy shapes and build-up heavy shapes [b] | P | P |
| Backing removed and weld tabs removed (if required) | P | P |
| Repair activities | P | P |
| Document acceptance or rejection of welded joint or member | P | P |
| No prohibited welds have been added without the approval of the EOR | O | O |

[a] When welding of doubler plates, continuity plates or stiffeners has been performed in the k-area, visually inspect the web k-area for cracks within 3 inches (75 mm) of the weld.

[b] After rolled heavy shapes (see Section A3.1c) and built-up heavy shapes (see Section A3.1d) are welded, visually inspect the weld access hole for cracks.

O - Observe these items on a random basis. Operations need not be delayed pending these inspections.
P - Perform these tasks for each welded joint or member.

**AISC 360 — TABLE N5.6-1**

**INSPECTION TASKS PRIOR TO BOLTING**

| INSPECTION TASKS PRIOR TO BOLTING | QC | QA |
|---|---|---|
| Manufacturer's certifications available for fastener materials | O | P |
| Fasteners marked in accordance with ASTM requirements | O | O |
| Proper fasteners selected for the joint detail (grade, type, bolt length if threads are to be excluded from shear plane) | O | O |
| Proper bolting procedure selected for joint detail | O | O |
| Connecting elements, including the appropriate faying surface condition and hole preparation, if specified, meet applicable requirements | O | O |
| Pre-installation verification testing by installation personnel observed and documented for fastener assemblies and methods used | P | O |
| Proper storage provided for bolts, nuts, washers, and other fastener components | O | O |

O - Observe these items on a random basis. Operations need not be delayed pending these inspections.
P - Perform these tasks for each bolted connection.

**AISC 360 — TABLE N5.6-2**

**INSPECTION TASKS DURING BOLTING**

| INSPECTION TASKS DURING BOLTING | QC | QA |
|---|---|---|
| Fastener assemblies placed in all holes and washers and nuts are positioned as required | O | O |
| Joint brought to the snug-tight condition prior to the pretensioning operation | O | O |
| Fastener component not turned by the wrench prevented from rotating | O | O |
| Fasteners are pretensioned in accordance with the RCSC Specification, progressing systematically from the most rigid point toward the free edges | O | O |

O - Observe these items on a random basis. Operations need not be delayed pending these inspections.
P - Perform these tasks for each bolted connection.

**AISC 360 — TABLE N5.6-3**

**INSPECTION TASKS AFTER BOLTING**

| INSPECTION TASKS AFTER BOLTING | QC | QA |
|---|---|---|
| Document acceptance or rejection of bolted connections | P | P |

O - Observe these items on a random basis. Operations need not be delayed pending these inspections.
P - Perform these tasks for each bolted connection.



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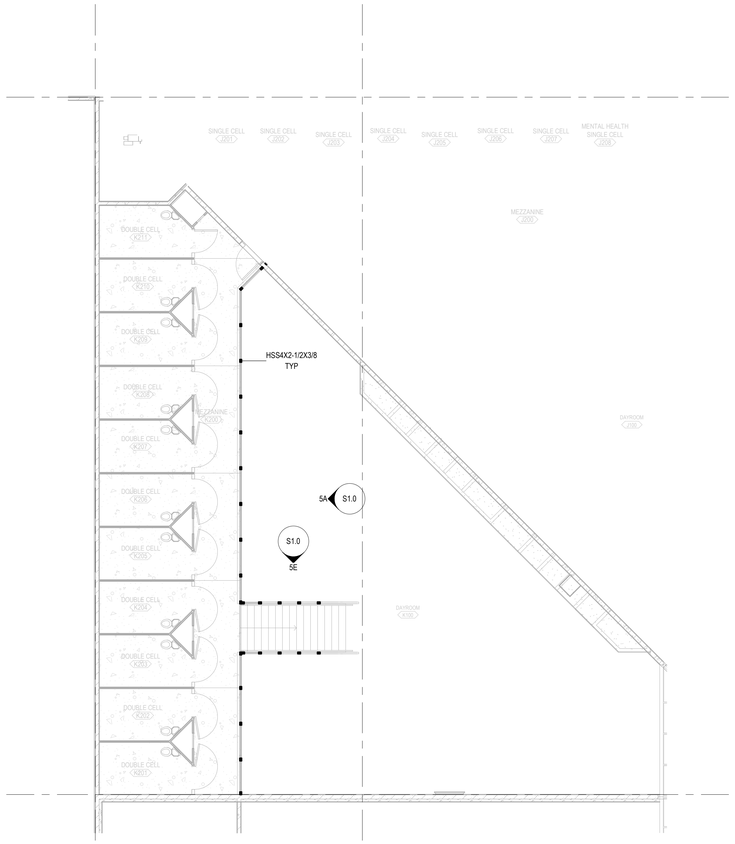
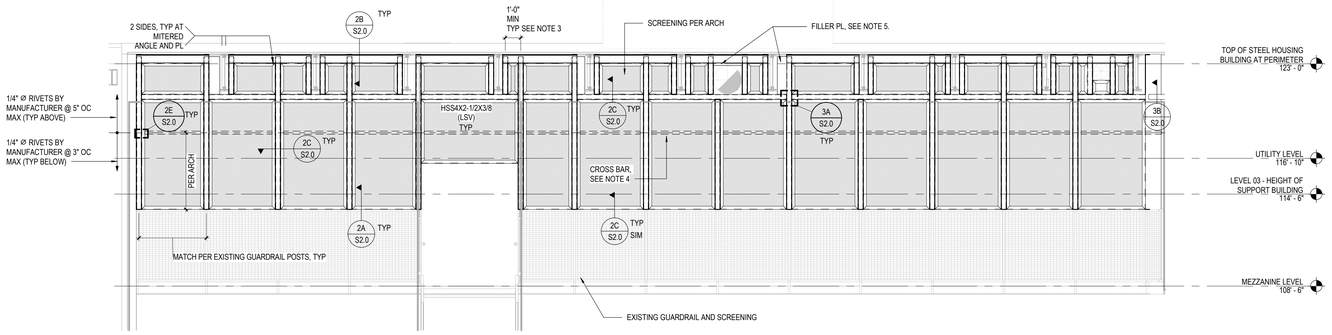
GENERAL STRUCTURAL NOTES & SPECIAL INSPECTIONS

S0.2




## TYP PARTIAL MEZZANINE FLOOR FRAMING PLAN

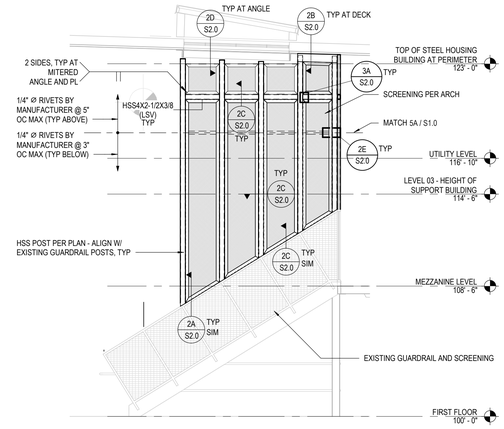
3A / S1.0 SCALE: 1/8" = 1'-0"




**NOTES:**
1. CONTRACTOR TO FIELD VERIFY EXISTING FRAMING.
2. SEE ARCHITECTURAL DRAWINGS FOR ALL DIMENSIONS NOT SHOWN.
3. FRAME AROUND EXISTING STRUCTURE OR EQUIPMENT.
4. PROVIDE CROSS BAR BRACING FOR INSTALLATION AS NECESSARY. SEE 2E / S2.0.
5. MAINTAIN MAX 2" CLEARANCE AROUND DUCTS AND JOISTS. PROVIDE PL 3/16" AROUND DUCT OR JOIST WHERE NECESSARY. WELD PL TO HSS POST AND BEAM PER 3D / S2.0.

## TYP GUARDRAIL ELEVATION

5A / S1.0 SCALE: 1/4" = 1'-0"




**NOTES:**
1. CONTRACTOR TO FIELD VERIFY EXISTING FRAMING.
2. SEE ARCHITECTURAL DRAWINGS FOR ALL DIMENSIONS NOT SHOWN.
3. FRAME AROUND EXISTING STRUCTURE OR EQUIPMENT.
4. PROVIDE CROSS BAR BRACING FOR INSTALLATION AS NECESSARY. SEE 2E / S2.0.
5. MAINTAIN MAX 5" CLEARANCE AROUND DUCTS AND JOISTS. PROVIDE PL 3/16" AROUND DUCT OR JOIST WHERE NECESSARY. WELD PL TO HSS POST AND BEAM PER 3D / S2.0.

## TYP STAIR ELEVATION

5E / S1.0 SCALE: 1/4" = 1'-0"



05/08/2025

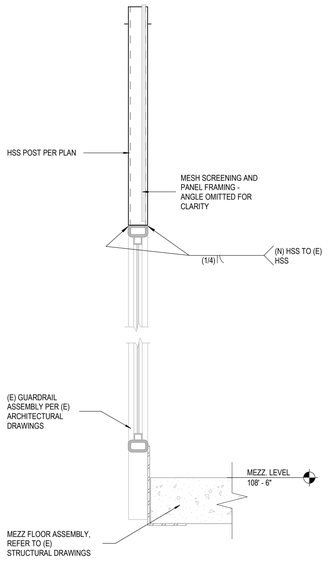
SCCJC
PHYSICAL BARRIERS
201 SUZANNE LANE
MT VERNON, WA 98273

PERMIT SET
05/09/2025
REVISIONS

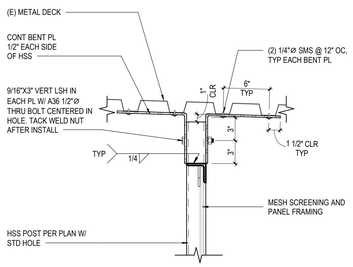
73-24145-00

PARTIAL FLOOR PLAN AND ELEVATIONS

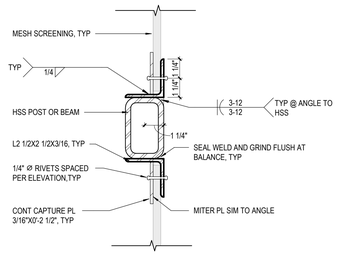
S1.0




2A S2.0 **TYP TOP RAIL EXTENSION**
SCALE: 1 1/2" = 1'-0"

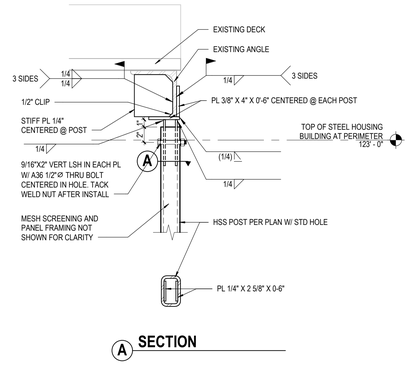



2B S2.0 **TYP HSS POST TO METAL DECK**
SCALE: 1 1/2" = 1'-0"



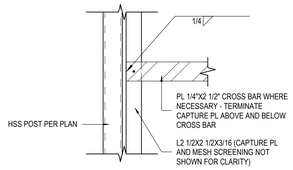

**NOTES:**
FOR ALT U-CHANNEL SEE 3C / S2.0

2C S2.0 **TYP SCREEN MESH TO HSS**
SCALE: 3" = 1'-0"




A **SECTION**

2D S2.0 **POST TO DECK AT SKYLIGHT ANGLES**
SCALE: 1 1/2" = 1'-0"




2E S2.0 **CROSS BAR BRACING**
SCALE: 1 1/2" = 1'-0"




3A S2.0 **TYP HSS TO HSS**
SCALE: 1" = 1'-0"




**NOTES:**
FOR CALLOUTS NOT SHOWN SEE 2C / S2.0 OR 3C / S2.0 FOR U-CHANNEL ALT CENTER (N) POST ON (E) POST

3B S2.0 **SCREEN MESH AT ANGLED POST**
SCALE: 3" = 1'-0"




3C S2.0 **ALT SCREEN MESH TO HSS**
SCALE: 3" = 1'-0"




3D S2.0 **FILLER PL TO HSS**
SCALE: 3" = 1'-0"



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STRUCTURAL FRAMING DETAILS

S2.0