

San Rafael City Schools



SRCS District Office - Business
Services & Capital Facilities

310 Nova Albion Way, San Rafael, CA 94903

Bid Set

12/20/23

HED

2023-SR001-002

PROJECT TEAM

OWNER
SAN RAFAEL CITY SCHOOLS
SAN RAFAEL HIGH SCHOOL DISTRICT
310 NOVA ALBION WAY
SAN RAFAEL, CA 94903
TEL (415) 485-2445

ARCHITECT OF RECORD
HARLEY ELLIS DEVEREAUX
417 MONTGOMERY STREET SUITE 400
SAN FRANCISCO, CA 94104
TEL (415) 981-2345

MECHANICAL & PLUMBING ENGINEER OF RECORD
H&M MECHANICAL GROUP
8517 EARHART RD, SUITE 230
OAKLAND, CA 94621
TEL (510) 569-2000

ELECTRICAL ENGINEER OF RECORD
OMAHONY & MYER
4340 REDWOOD HWY, SUITE 245
SAN RAFAEL, CA 94903
TEL (415) 492-0420

APPLICABLE CODES

2022 CALIFORNIA BUILDING CODE (CBC) PART 2, TITLE 24, (CCR)
2022 CALIFORNIA GREEN BUILDING CODE PART 11, TITLE 24, (CCR)
2022 CALIFORNIA FIRE CODE (CFC) PART 9, TITLE 24 (CCR)
2022 CALIFORNIA MECHANICAL CODE (CMC) PART 4, TITLE 24 (CCR)
2022 CALIFORNIA PLUMBING CODE (CPC) PART 5, TITLE 24 (CCR)
2022 CALIFORNIA ELECTRICAL CODE (CEC) PART 3, TITLE 24 (CCR)
2022 CALIFORNIA ENERGY CODE (CEC) PART 6, TITLE 24, (CCR)
2022 CALIFORNIA ADMINISTRATIVE CODE (CAC) PART 1, TITLE 24 (CCR)
2010 ADA STANDARDS ACCESSIBLE DESIGN
CCR TITLE 19 PUBLIC SAFETY DIVISION 1 STATE FIRE MARSHAL

INCLUDING ANY CODES REFERRED TO BY THE ABOVE,

NATIONAL FIRE PROTECTION ASSOCIATION (NFPA) CODES, LIFE SAFETY CODE 101 AND OTHER NFPA PAMPHLETS. REGULATIONS THAT RELATE TO THE LICENSING OF HEALTH FACILITIES, SUCH AS TITLE 22, DIVISION 5, CHAPTER 1, 2, 3, 4, AND 5

THE ABOVE CODES AND REGULATIONS REFER TO THE LATEST EDITION OR REVISION IN FORCE ON THE DATE OF THE CONTRACT, UNLESS OTHERWISE STATED. NOTHING ON THE DRAWINGS IS TO BE CONSTRUED AS REQUIRING OR PERMITTING WORK THAT IS CONTRARY TO THE LISTED CODES AND REGULATIONS, OR OTHER LOCAL STATE OR FEDERAL CODES OR REGULATIONS WHICH MAY BE APPLICABLE.

PROJECT DESCRIPTION

THIS PROJECT CONSISTS OF INTERIOR, NON-STRUCTURAL DEMOLITION AND REMODEL OF BUSINESS SERVICES & CAPITAL FACILITIES OFFICES

ALL BUILDINGS ARE EXISTING AND NO SITE WORK IS INCLUDED IN PROJECT SCOPE.

ADDRESS: 320 NOVA ALBION WAY, SAN RAFAEL, CA 94903
APN: 175-060-31

BUILDING 'C'

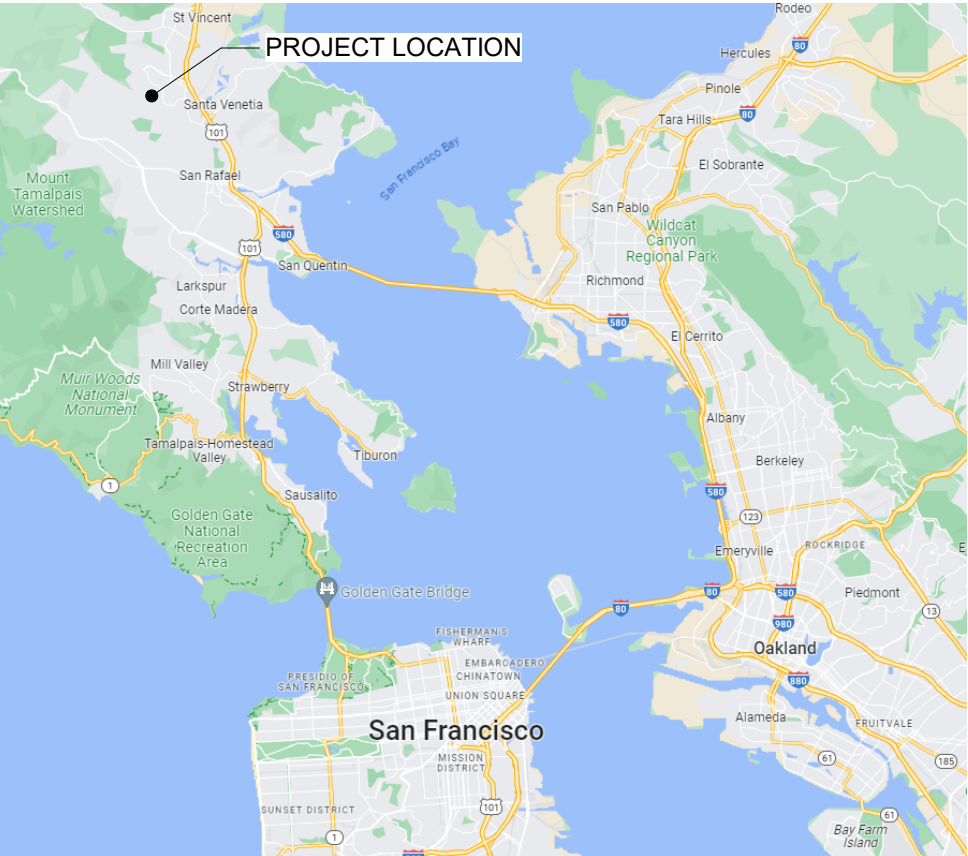
EXISTING BUILDING OCCUPANCY TYPE: B

PROJECT AREA: 1,680 SF

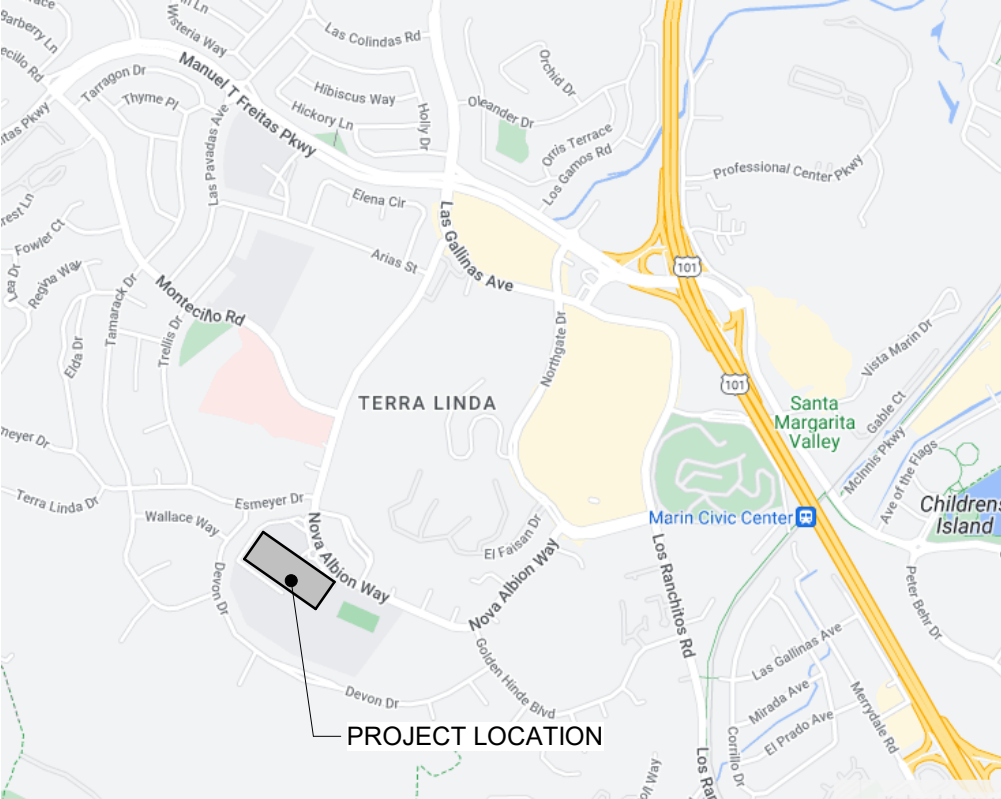
CONSTRUCTION TYPE: V-B

SPRINKLERED: YES

VICINITY MAP



VICINITY MAP



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Δ	Date	Issued For
1	12/20/23	50% Construction Documents

HED

417 Montgomery Street
Suite 400
San Francisco, California
94104 USA

(415) 981-2345

WWW.HED.DESIGN

2023-SR001-002

Project Information

G-001

SIGNAGE SCHEDULE NOTES

1. SIGNAGE SCHEDULE ADDRESSES SIGNAGE ASSOCIATED WITH DOORS ONLY. SEE FLOOR PLANS, EXTERIOR ELEVATIONS AND INTERIOR ELEVATIONS FOR ADDITIONAL SIGNAGE NOT CALLED OUT IN THE SIGNAGE SCHEDULE.
2. FINAL TACTILE SIGNAGE TEXT TO BE DETERMINED AT TIME OF SUBMITTAL - TYPICAL
3. INTERNATIONAL SYMBOL OF ACCESSIBILITY SIGNAGE FOR BUILDINGS, SEE FLOOR PLANS AND SIGNAGE SCHEDULE
4. CODE GOVERNED SIGNS TO BE FIELD-INSPECTED PER CBC SECTION 11B-703.1.1.2.

San Rafael City Schools

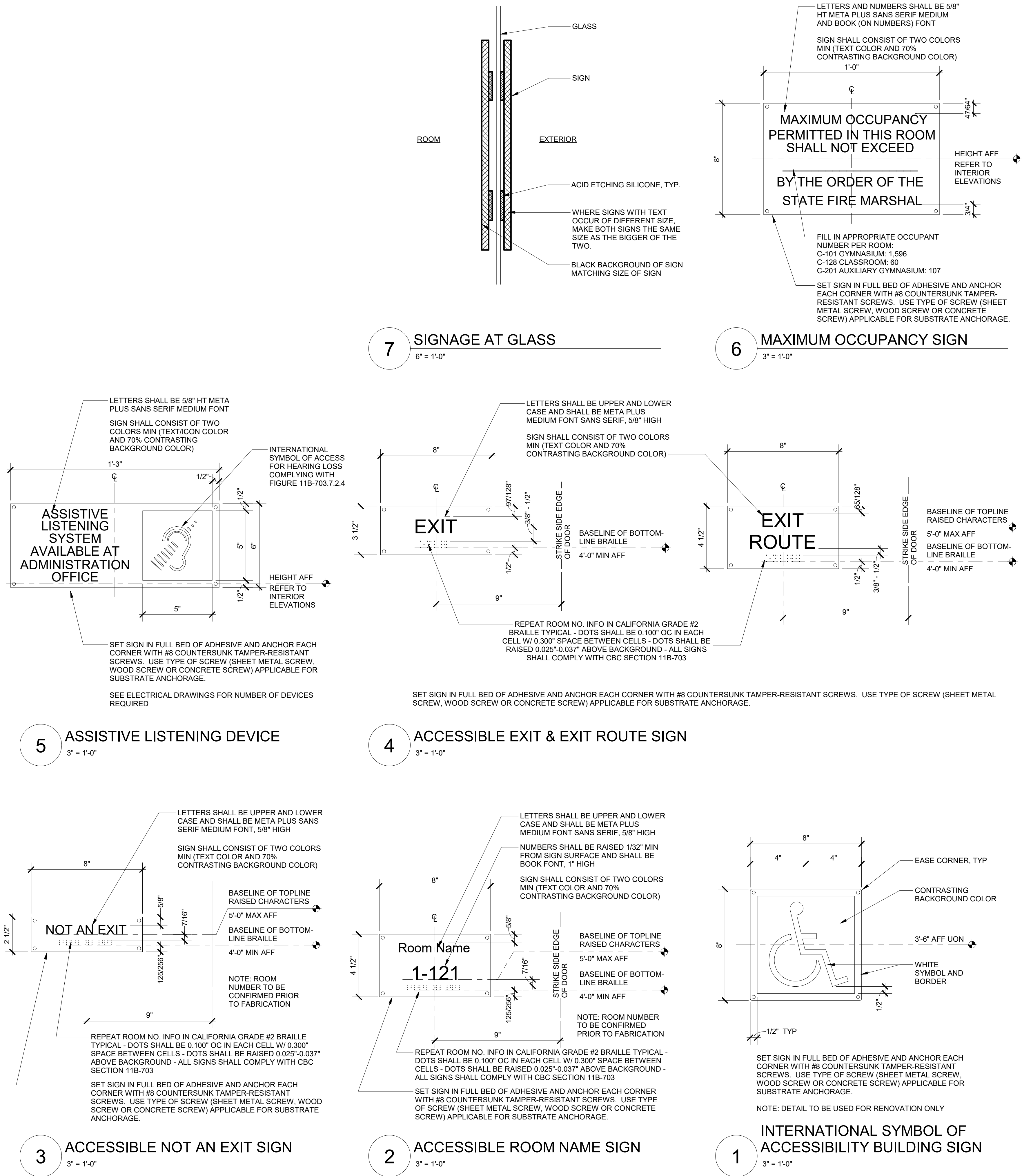


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GENERAL NOTES

1. THE CONSTRUCTION CONTRACT IS FOR A COMPLETE AND FULLY FUNCTIONING INSTALLATION. THESE DOCUMENTS DESCRIBE THE DESIGN INTENT AND SPECIFIC REQUIREMENTS OF THE INSTALLATION. THE CONTRACT DOCUMENTS ARE COMPLEMENTARY, AND WHAT IS REQUIRED BY ONE SHALL BE AS BINDING AS IF REQUIRED BY ALL. THESE DOCUMENTS ARE NOT MEANT TO SHOW EVERY ITEM REQUIRED TO CONSTRUCT THE WORK. ITEMS SUCH AS, BUT NOT LIMITED TO, FASTENERS, CONNECTORS, FILERS, MISCELLANEOUS CLOSURE ELEMENTS, ANCILLARY CONTROL WIRING AND POWER WHERE REQUIRED FOR THE CONTROL OR OPERATION OF THE PROVIDED EQUIPMENT, ETC. ARE NOT ALWAYS SHOWN BUT ARE CONSIDERED TO BE INCLUDED IN THE SCOPE OF THE WORK. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO PROVIDE A FULLY FUNCTIONING INSTALLATION WHICH MEETS THE DESIGN INTENT, INCLUDING BUT NOT LIMITED TO THE SPECIFIC REQUIREMENTS IN THESE DOCUMENTS.
2. THESE DOCUMENTS DESCRIBE WORK UNDER A SINGLE CONSTRUCTION CONTRACT. THE USE OF SUB-CONTRACTORS IS THE ELECTION OF THE GENERAL CONTRACTOR. IT IS NOT THE INTENT OF THE DOCUMENTS TO DIVIDE THE WORK AMONG SUB-CONTRACTORS. WHERE THE DOCUMENTS IDENTIFY WORK WITH SUCH NOTES AS "NOT IN MECHANICAL WORK" OR "NOT IN ELECTRICAL WORK" OR "SEE STRUCTURAL DRAWINGS," IT MEANS THAT THE WORK IS NOT FURTHER DESCRIBED OR SPECIFIED ON THE DRAWING WHERE SUCH NOTES APPEAR. IT DOES NOT PRECLUDE THE CONTRACTOR FROM DELEGATING THE WORK TO ENTITIES OF HIS ELECTION. IN ADDITION, THE DIVISION OF THE CONTRACT DOCUMENTS INTO ARCHITECTURAL, STRUCTURAL, ELECTRICAL AND MECHANICAL OR OTHER DESIGN DISCIPLINES IS FOR CONVENIENCE ONLY, AND IS NOT INTENDED TO DIVIDE THE WORK AMONG VARIOUS SUB-CONTRACTORS, OR IMPLY THAT ALL OF THE WORK FOR A PARTICULAR TRADE IS SHOWN ONLY IN THOSE DRAWINGS OR SPECIFICATIONS.
3. REFERENCE TO "CONTRACTOR" IN THESE DOCUMENTS SHALL BE INTERPRETED AS REFERRING TO THE GENERAL CONTRACTOR OR TO ANY SUB-CONTRACTOR TO THE GENERAL CONTRACTOR, COLLECTIVELY OR AS INDIVIDUAL ENTITIES. FURTHER, REFERENCE TO A PARTICULAR SUB-CONTRACTOR IS FOR CONVENIENCE ONLY, AND IS NOT INTENDED TO LIMIT THE SCOPE OF THE WORK TO THAT TRADE OR LIMIT THE RESPONSIBILITIES OF THE GENERAL CONTRACTOR TO COORDINATE THE WORK OF ALL TRADES AS DEFINED BY THE OWNER/CONTRACTOR AGREEMENT.
4. THE DRAWINGS AND PROJECT MANUAL ESTABLISH DETAILED MINIMUM REQUIREMENTS FOR THE DESIGN AND CONSTRUCTION OF THE PROJECT. PARTIAL OR OUTDATED SETS OF CONTRACT DOCUMENTS SHOULD NOT BE DISTRIBUTED OR UTILIZED.
5. WORK IS TO COMPLY WITH APPLICABLE FEDERAL, STATE AND LOCAL CODES AND REGULATIONS IN FORCE AT THE TIME OF CONSTRUCTION.
6. CONTRACTOR IS RESPONSIBLE FOR OBTAINING AND PAYING FEES FOR PERMITS PRIOR TO STARTING CONSTRUCTION. PERMITS ARE TO BE POSTED IN A CONSPICUOUS PLACE ON THE PROJECT SITE AS REQUIRED BY AUTHORITY HAVING JURISDICTION.
7. UNLESS SPECIFICALLY NOTED AS BEING RE-USED, MATERIALS FURNISHED AT THE JOB SITE SHALL BE NEW AND FREE FROM DEFECTS, AND SHALL BE STORED AT THE SITE IN SUCH A MANNER AS TO PROTECT THEM FROM DAMAGE. ALL WORK SHALL BE BEST PRACTICE OF EACH TRADE.
8. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO COMPLETELY COORDINATE WORK AS REQUIRED TO MEET THE DESIGN INTENT AS DEFINED BY THE DOCUMENTS. THE CONTRACTOR SHALL LAY OUT AND SEQUENCE THE INSTALLATION OF WORK SO THAT THE DIFFERENT SYSTEMS DO NOT OBSTRUCT INSTALLATION OF SUBSEQUENT WORK. IN GENERAL, SYSTEMS INSTALLED FIRST SHOULD BE AS HIGH AND AS TIGHT TO THE STRUCTURE AS POSSIBLE TO ALLOW SPACE FOR SYSTEMS WHICH FOLLOW.
9. IT IS THE RESPONSIBILITY OF THE CONTRACTOR AND SUB-CONTRACTORS TO REVIEW DRAWINGS, PROJECT MANUAL, ADDENDA, BULLETINS, ETC. IN ORDER TO ENSURE COMPLETE COORDINATION OF WORK. FAILURE TO REVIEW AND COORDINATE ALL CONTRACT DOCUMENTS BY THE GENERAL CONTRACTOR WITH THE SUB-CONTRACTORS FOR APPLICABLE PORTIONS OF THE WORK DOES NOT RELIEVE ANY PARTY FROM PROVIDING MATERIALS AND WORK REQUIRED FOR A COMPLETE INSTALLATION.
10. THE PROJECT MANUAL, WHICH INCLUDES THE GENERAL CONDITIONS, SUPPLEMENTAL CONDITIONS, AND TECHNICAL SPECIFICATIONS, AND THE DRAWINGS, ARE COMPLEMENTARY AND TOGETHER DESCRIBE THE PROJECT REQUIREMENTS. WHERE THERE ARE DISCREPANCIES BETWEEN THE PROJECT MANUAL AND THE DRAWINGS, THE CONTRACTOR SHALL ADVISE THE ARCHITECT OF SUCH AND REQUEST CLARIFICATION. IN GENERAL, THE PROJECT MANUAL TAKES PRECEDENCE OVER DRAWINGS. LARGE SCALE DETAILS TAKE PRECEDENCE OVER SMALL SCALE DETAILS.
11. THE GENERAL CONTRACTOR AND SUB-CONTRACTORS SHALL VISIT THE SITE PRIOR TO BIDDING IN ORDER TO FAMILIARIZE THEMSELVES WITH THE EXISTING CONDITIONS AND THE IMPACT OF THE PROPOSED WORK INDICATED ON THE DRAWINGS AND SPECIFICATIONS ON THESE CONDITIONS. ANY QUESTIONS REGARDING THE COORDINATION OF NEW WORK WITH EXISTING CONDITIONS MUST BE SUBMITTED TO THE ARCHITECT IN WRITING PRIOR TO THE BID SUBMISSION AND WITH ADEQUATE TIME FOR RESPONSE TO ALL BIDDERS. THE ARCHITECT WILL RESPOND TO TIMELY QUESTIONS WITH A WRITTEN RESPONSE TO ALL BIDDERS.
12. ALL WORK NOTED "NIC" IS NOT IN CONTRACT. CONTRACTOR SHALL COORDINATE WITH OTHER CONTRACTORS ON SITE PER REQUIREMENT ESTABLISHED BY OWNER.
13. EXISTING DIMENSIONS AND CONDITIONS INDICATED IN THESE DOCUMENTS ARE FROM ELECTRONIC CAD INFORMATION PROVIDED BY THE OWNER AND ARE ASSUMED TO BE ACCURATE AS SHOWN. THE CONTRACTOR SHALL VERIFY THE ACCURACY OF SUCH INFORMATION PRIOR TO THE START OF CONSTRUCTION, AND ADVISE THE ARCHITECT OF ANY DEVIATIONS OR CONFLICTS WITH THE INFORMATION SHOWN ON THE DRAWINGS.
14. DRAWINGS ARE NOT TO BE SCALED. CONTRACTOR SHALL REFER TO THE DIMENSIONS INDICATED OR THE ACTUAL SIZES OF CONSTRUCTION ITEMS. WHERE NO DIMENSION OR METHODS OF DETERMINING A LOCATION EXISTS, VERIFY DIMENSION WITH ARCHITECT PRIOR TO LAYOUT AND INSTALLATION.
15. THE DRAWINGS AND REFERENCED DETAILS HAVE BEEN DIMENSIONED IN ORDER TO ESTABLISH THE CONTROL AND GUIDELINES FOR FIELD LAYOUT. WHERE DISCREPANCIES EXIST BETWEEN THE DRAWINGS AND FIELD CONDITIONS, THE CONTRACTOR SHALL NOTIFY THE ARCHITECT OF SUCH PRIOR TO START OF WORK.
16. DIMENSIONS ON DOCUMENTS ARE TO FACE OF FINISH MATERIALS UNLESS OTHERWISE INDICATED.
17. WHERE DIMENSIONS INDICATED ARE NOTED AS VERIFY IN FIELD (VIF) THE DIMENSION SHOWN IS THE BASIS OF DESIGN, BUT MAY DIFFER FROM ACTUAL CONDITIONS. CONTRACTOR SHALL VERIFY THESE DIMENSIONS WHILE LAYING OUT THE WORK AND REPORT ANY DISCREPANCIES TO THE ARCHITECT PRIOR TO PROCEEDING. WHERE DIMENSIONS ARE NOTED AS "+/-", FIELD DIMENSIONS MAY VARY FROM THE NOTED DIMENSIONS BY MINOR AMOUNTS. DISCREPANCIES OF MORE THAN 1" SHOULD BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CONFIRMATION. DIMENSIONS NOTED AS "HOLD" OR "CLEAR" ARE TO BE ACCURATE TO WITHIN 1/4".
18. DETAILS ARE KEYED TO THE PLANS AT TYPICAL LOCATIONS. TYPICAL DETAILS APPLY TO ALL LOCATIONS WHICH ARE SIMILAR BUT ARE NOT NECESSARILY KEYED TO EVERY LOCATION TO WHICH THEY APPLY. CONTRACTOR IS RESPONSIBLE TO COORDINATE THE LOCATION OF ALL TYPICAL DETAILS AND INSTALL THE WORK INDICATED. FEATURES NOT SHOWN IN THEIR ENTIRETY SHALL BE COMPLETELY PROVIDED AS IF SHOWN IN FULL. IF DISCREPANCIES EXIST, CONTRACTOR IS TO REQUEST CLARIFICATION BY THE ARCHITECT OF SUCH CONDITIONS.
19. FINISH FLOOR ELEVATIONS REFER TO TOP OF CONCRETE SLAB, UNLESS NOTED OTHERWISE. WHERE CONCRETE SLAB IS DEPRESSED TO ACCOMMODATE SETTING BEDS, RAISED ACCESS FLOOR, OR OTHER SIMILAR FLOOR ASSEMBLIES, FINISH FLOOR ELEVATIONS ARE TO TOP OF FINISH FLOOR ASSEMBLY INDICATED.
20. FIRE RATING "TAPES" INDICATED ON FLOOR PLANS SHOW EXTENT OF FIRE RATED PARTITIONS, BARRIERS AND FIRE WALLS. RATING IN A PARTITION SHALL BE CONTINUOUS AND SHALL CONTINUE OVER DOORS AND OVER AND BELOW WINDOWS WHETHER OR NOT THEY ARE SHOWN AS SUCH ON THE PLANS. REFER TO PARTITION DETAILS FOR REQUIREMENTS OF THE RATED ASSEMBLIES.
21. VERIFY AND COORDINATE SIZES, LOCATION AND MOUNTING REQUIREMENTS OF ALL EQUIPMENT AND FIXTURES. IT IS THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE REQUIRED BLOCKING, BACKING, SLEEVES, ETC. FOR A COMPLETE, NEAT INSTALLATION. COORDINATE INSTALLATION OF ALL SLEEVES AND OPENINGS AS REQUIRED THROUGH ALL EXISTING OR NEW CONSTRUCTION.

22. DETAILS INDICATE DESIGN INTENT OF WORK IN PLACE. MINOR MODIFICATIONS MAY BE REQUIRED TO SUIT JOB CONDITIONS OR DIMENSIONS AND ARE TO BE INCLUDED AS PART OF THE WORK.
23. PROVIDE PROTECTION FOR PEDESTRIANS OR OCCUPANTS OF ADJACENT AREAS OF THE BUILDING AS NECESSARY AND AS REQUIRED BY THE AUTHORITY HAVING JURISDICTION.
24. MAINTAIN THE PREMISES CLEAN AND FREE OF TRASH AND DEBRIS. PROTECT PROJECT, THE SITE, AND PERSONAL PROPERTY FROM DAMAGE.
25. PROTECT WORK AREAS AND EXISTING ADJACENT AREAS, INCLUDING EXISTING UTILITIES, FROM DAMAGE, REPAIR, REPLACE, OR PATCH ANY DAMAGE DUE TO CONSTRUCTION. REPAIRED CONSTRUCTION IS SUBJECT TO REVIEW AND ACCEPTANCE BY ARCHITECT.
26. PROVIDE REQUIRED TEMPORARY UTILITIES, BRACING, SUPPORTS, SHORING, ETC. CONTRACTOR SHALL BE RESPONSIBLE FOR DESIGN ADEQUACY AND SAFETY OF ERECTION.
27. CONTRACTOR SHALL MAINTAIN CURRENT UPDATED RECORD DRAWINGS AND SPECIFICATIONS ON SITE AT ALL TIMES.
28. CONTRACTOR IS RESPONSIBLE FOR MEANS AND METHODS OF CONSTRUCTION, INCLUDING BUT NOT LIMITED TO SITE SAFETY AND SECURITY FOR WORKERS AND GENERAL MEMBERS OF THE PUBLIC.
29. METAL FABRICATIONS AND SUPPORT ASSEMBLIES WHETHER SHOWN OR NOT SHALL BE PROVIDED FOR THE STRUCTURAL SUPPORT OF MISCELLANEOUS ELEMENTS. GENERAL CONTRACTOR IS RESPONSIBLE FOR PROVIDING ENGINEERED STRUCTURAL ASSEMBLIES AND CALCULATIONS SHOWING COMPLIANCE WITH CODE REQUIREMENTS AND ACCOUNTING FOR STATIC AND DYNAMIC LOADS INCLUDING ANY WIND OR SEISMIC LOADS, THERMAL MOVEMENT OF SUPPORTING STRUCTURE AND DIMENSIONAL TOLERANCES OF THE BUILDING.
30. THE CONTRACTOR SHALL PROVIDE AND INSTALL ALL STIFFENERS, BRACING, BACK-UP PLATES AND SUPPORTING BRACKETS REQUIRED FOR APPROPRIATE INSTALLATION OF ALL TOILET ROOM ACCESSORIES AND PARTITIONS, AND ALL WALL MOUNTED OR SUSPENDED MECHANICAL, ELECTRICAL OR MISCELLANEOUS EQUIPMENT.
31. PIPE SLEEVES IN MECHANICAL EQUIPMENT ROOMS EXTEND 2" ABOVE THE FLOOR LINE. FILL THE ANNULAR SPACES OF PIPE SLEEVES THROUGH THE FLOOR OR THROUGH RATED WALLS WITH FIRE SAFING AND SMOKE SEAL COMPOUND AS INDICATED ON THE SPECIFICATION, AND AS APPROVED BY THE AUTHORITY HAVING JURISDICTION.
32. SIZES OF MECHANICAL EQUIPMENT PADS AND BASES SHOWN ON PLAN ARE APPROXIMATE. CONTRACTOR SHALL VERIFY DIMENSIONS OF ALL PADS AND BASES WITH THE APPROPRIATE EQUIPMENT MANUFACTURERS. CONTRACTOR SHALL COORDINATE MOUNTINGS WITH APPROPRIATE EQUIPMENT MANUFACTURERS. PADS AND BASES SHALL BE INDICATED ON SUBMITTALS AND BROUGHT TO THE ATTENTION OF THE ARCHITECT PRIOR TO LAY-OUT OF REINFORCING STEEL OR STEEL DECK.
33. PROVIDE ACCESS PANELS FOR MECHANICAL AND ELECTRICAL EQUIPMENT AS REQUIRED BY APPLICABLE CODES. ALL ACCESS PANELS IN GYP BOARD SHALL BE CONCEALED, MUD-IN TYPE. ELECTRICAL J-BOXES, PLUMBING CLEANOUTS, FIRE DAMPERS AND OTHER SIMILAR ITEMS REQUIRING ACCESS ARE NOT TO BE LOCATED ABOVE GYPSUM BOARD OR SIMILAR NON-ACCESSIBLE CEILING.

ABBREVIATIONS

ADJ	ADJACENT, ADJUSTABLE
AFF	ABOVE FINISHED FLOOR
ALT	ALTERNATE
BLDG	BUILDING
CIP	CAST-IN-PLACE
CJ	CONSTRUCTION JOINT, CONTROL JOINT
CL	CENTERLINE
CLG	CEILING
CLR	CLEAR, CLEARANCE
CMU	CONCRETE MASONRY UNIT(S)
COL	COLUMN
CONC	CONCRETE
DET	DETAIL
DF	DRINKING FOUNTAIN
DIA	DIAMETER
DIM	DIMENSION
DN	DOWN
DWG	DRAWING
EA	EACH
EF	EXHAUST FAN
EJ	EXPANSION JOINT
EL	ELEVATION (GRADE)
EWCC	ELECTRIC WATER COOLER
EXIST	EXISTING
EXP	EXPOSED
EXT	EXTERIOR
FD	FLOOR DRAIN
FE	FIRE EXTINGUISHER
FEC	FIRE EXTINGUISHER CABINET
FFE	FURNITURE, FIXTURES & EQUIPMENT
FIN	FINISH, FINISHED
FRTW	FIRE RATED, FIRE RETARDANT
GA	FIRE RETARDANT TREATED WOOD
GALV	GAUGE
GYP BD	GALVANIZED
HORIZ	GYPSUM BOARD
INT	HOLLOW METAL
MAX	HORIZONTAL
MFR	INTERIOR
MIN	MAXIMUM
MO	MANUFACTURER
NIC	MINIMUM
NOM	MASONRY OPENING
NTS	NOT IN CONTRACT
OC	NOMINAL
OFCI	NOT TO SCALE
OFOI	ON CENTER
OH	OWNER FURNISHED CONTRACTOR INSTALLED
OPP	OWNER FURNISHED OWNER INSTALLED
PL	OPPOSITE HAND
PPT	OPPOSITE
PR	PROPERTY LINE
PSF	PRESERVATIVE PRESSURE TREATED
RD	PAIR
SF	PER SQUARE FOOT
SIM	ROOF DRAIN
SPEC	SQUARE FOOT
TYP	SIMILAR
UL	SPECIFICATIONS
UON	TYPICAL
VERT	UNDERWRITER'S LABORATORIES
VIF	UNLESS OTHERWISE NOTED
WI	VERTICAL
W/O	VERIFY IN FIELD
	WITHOUT

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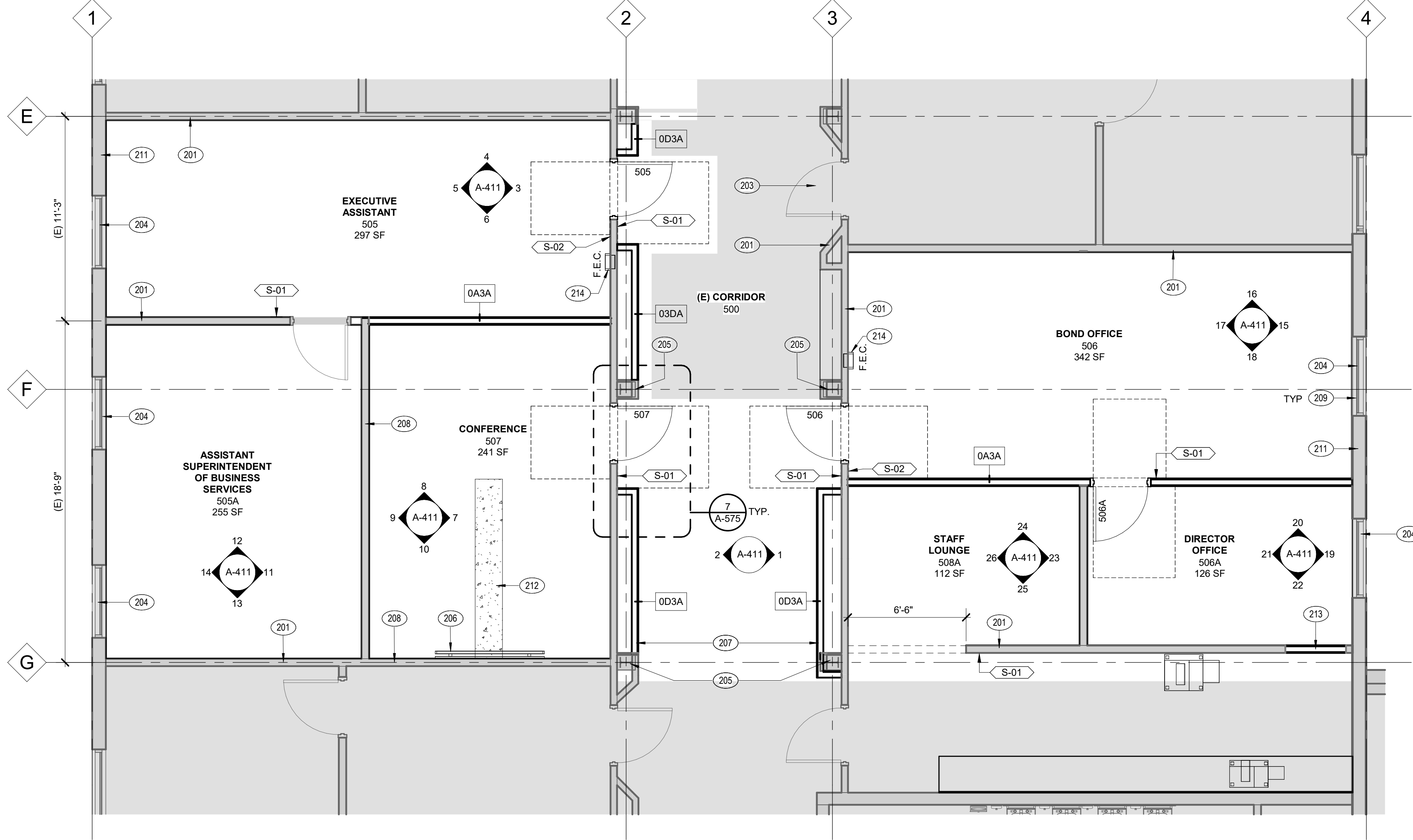
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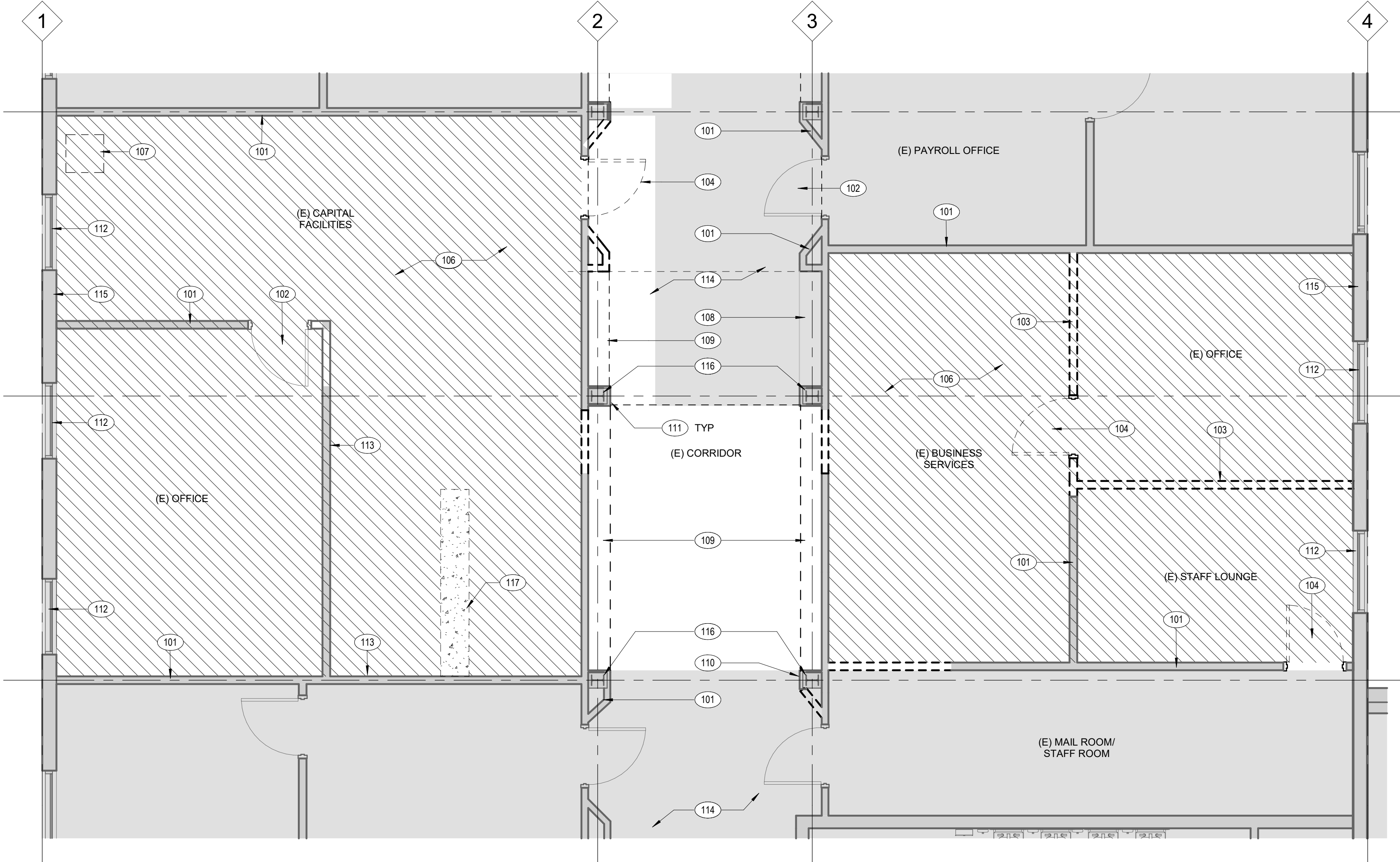
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WWW.HED.DESIGN



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



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

DEMOLITION PLAN NOTES

- THE ARCHITECT HAS NO RESPONSIBILITY FOR THE DISCOVERY, PRESENCE, HANDLING, REMOVAL, OR DISPOSAL OF, OR EXPOSURE OF PERSONS TO, HAZARDOUS MATERIALS OR TOXIC SUBSTANCES IN ANY FORM AT THE PROJECT SITE, INCLUDING BUT NOT LIMITED TO, ASBESTOS, ASBESTOS PRODUCTS, POLYCHLORINATED BIPHENYL (PCB), LEAD PAINT OR OTHER TOXIC SUBSTANCES. THE FACT THAT THESE DOCUMENTS DO NOT INDICATE THE PRESENCE OF OR REMOVAL OR CONTAINMENT OF THE FOREGOING IS NOT INTENDED TO INDICATE THAT THESE MATERIALS OR SUBSTANCES, AMONG OTHERS, ARE NOT PRESENT AND ARE NOT REQUIRED TO BE REMOVED OR CONTAINED IN COMPLIANCE WITH FEDERAL, STATE AND LOCAL REGULATIONS.
- PORTIONS OF THE BUILDING IMMEDIATELY ADJACENT TO THE PROJECT AREA WILL BE OCCUPIED DURING SELECTIVE DEMOLITION. WORK SHALL NOT DISTURB NORMAL OPERATIONS ADJACENT TO AREAS IDENTIFIED FOR SELECTIVE DEMOLITION WITHOUT THE EXPRESS CONSENT OF PARTIES AFFECTED. DISTURBANCE MAY INCLUDE, WITHOUT LIMITATION, DUST, DIRT, DEBRIS, NOISE, ODORS, ETC.
- CONDUCT WORK IN MANNER THAT WILL MINIMIZE NEED FOR DISRUPTION OF NORMAL OPERATIONS. PROVIDE MINIMUM 72 HOURS ADVANCE NOTICE OF DEMOLITION ACTIVITIES DISRUPTING OPERATIONS IN AREAS AROUND THE WORK, INCLUDING ON LEVELS ABOVE OR BELOW AS APPLICABLE.
- PROVIDE TEMPORARY BARRICADES AND OTHER FORMS OF PROTECTION TO PROTECT STAFF PERSONNEL AND GENERAL PUBLIC FROM INJURY DURING SELECTIVE DEMOLITION WORK.
- CONTRACTOR SHALL VERIFY EXISTING BUILDING DIMENSIONS, PARTITION AND WALL LOCATIONS AND FLOOR ELEVATIONS IN FIELD AND NOTIFY THE ARCHITECT OF DISCREPANCIES PRIOR TO START OF WORK.
- CONTRACTOR TO DOCUMENT EXISTING CONDITIONS PRIOR TO START OF WORK USING PHOTOGRAPHS, VIDEOS, OR OTHER MEANS WHICH CAN BE READILY SHARED. SUCH DOCUMENTATION WILL BE MADE AVAILABLE TO ARCHITECT AS REQUIRED BELOW.
- PROTECT FROM DAMAGE EXISTING FINISH WORK THAT IS TO REMAIN IN PLACE AND IS EXPOSED DURING DEMOLITION OPERATIONS. RESTORE ANY DAMAGED FINISHES TO CONDITION PRIOR TO START OF WORK.
- PROTECT FLOORS WITH SUITABLE COVERING WHEN NECESSARY.
- COVER AND PROTECT FURNITURE, EQUIPMENT, AND FIXTURES FROM SOILING OR DAMAGE WHEN DEMOLITION WORK IS PERFORMED IN AREAS WHERE SUCH ITEMS HAVE NOT BEEN REMOVED. RESTORE ANY SUCH ELEMENTS THAT ARE DAMAGED TO CONDITION PRIOR TO DEMOLITION WORK.
- PRIOR TO CUTTING EXISTING CONSTRUCTION, LOCATE AND VISIBLY MARK SERVICES TO REMAIN IN OPERATION, INCLUDING FLOOR PENETRATIONS, UNDOCUMENTED CONDITIONS, UTILITY RISERS, ETC., AND WALLS THAT CONTAIN VERTICAL RISERS THAT REMAIN IN OPERATION DURING THE DEMOLITION WORK.
- IF UNANTICIPATED MECHANICAL, ELECTRICAL, OR STRUCTURAL ELEMENTS THAT CONFLICT WITH INTENDED FUNCTION OF DESIGN ARE ENCOUNTERED, INVESTIGATE, MEASURE AND DOCUMENT NATURE AND EXTENT OF CONFLICT AND NOTIFY ARCHITECT BEFORE PROCEEDING.
- MAINTAIN EXISTING UTILITIES INDICATED TO REMAIN IN SERVICE AND PROTECT THEM AGAINST DAMAGE DURING DEMOLITION OPERATIONS. DO NOT INTERRUPT UTILITIES SERVING FUNCTIONING FACILITIES, EXCEPT WHEN AUTHORIZED IN WRITING BY AUTHORITIES HAVING JURISDICTION. PROVIDE TEMPORARY SERVICES ACCEPTABLE TO GOVERNING AUTHORITIES DURING INTERRUPTIONS TO EXISTING UTILITIES.
- WHERE DEMOLITION IS REQUIRED BEYOND THE LIMITS OF THE CONTRACT TO ROUTE NEW DUCTWORK, PIPING, CONDUITS ETC., RATED WALLS AND SMOKE BARRIERS SHALL BE PATCHED BY CONTRACTOR MAKING PENETRATIONS. ALL FINISHES DAMAGED BY THE WORK SHALL BE RESTORED TO THEIR CONDITION PRIOR TO START OF WORK.
- REPAIR DEMOLITION IN EXCESS OF THAT REQUIRED. RETURN ELEMENTS OF CONSTRUCTION AND SURFACES TO REMAIN TO CONDITION PRIOR TO START OF OPERATIONS. REPAIR ADJACENT CONSTRUCTION OR SURFACES SOILED OR DAMAGED BY SELECTIVE DEMOLITION.
- PROVIDE SHORING, BRACING OR OTHER MEANS REQUIRED TO PROTECT AND MAINTAIN THE SAFETY, INTEGRITY AND STABILITY OF EXISTING AND NEW CONSTRUCTION. WHEN REQUIRED, DESIGN OF THESE MEANS AND METHODS SHALL BE BY A LICENSED PROFESSIONAL ACCEPTABLE TO THE AUTHORITY HAVING JURISDICTION.
- IF ROOFING, GLAZING, FLASHING, COPING OR PORTIONS OF EXTERIOR WALLS ARE REMOVED OR OPENED, SUITABLE THERMAL AND/OR MOISTURE OR VAPOR PROTECTION SHALL BE PROVIDED AND MAINTAINED FOR THE DURATION SUCH ELEMENTS OR PORTIONS OF THE BUILDING ARE OPEN TO WEATHER.
- ERECT AND MAINTAIN 1 HOUR FIRE RESISTANCE RATED TEMPORARY PARTITIONS WHERE REQUIRED OR AS DIRECTED BY THE AHJ TO PROTECT EXISTING CONSTRUCTION AND ADJACENT OPERATIONS.
- REMOVAL OF ITEMS NOTED INCLUDES REMOVAL OF ASSOCIATED ANCHORS, ADHESIVES, HARDWARE, CONDUIT, WIRE, PIPING, FASTENERS, BRACKETS, SUPPORTS, ETC. TO BARE EXISTING STRUCTURE.
- NEW CEILING INSTALLATIONS ARE NOT TO REUSE COMPONENTS OF OLD OR REMOVED CEILING SYSTEMS. WHERE EXISTING CEILINGS ARE INDICATED TO BE DEMOLISHED, COMPLETELY REMOVE EXISTING CEILING AND SUSPENSION SYSTEM COMPONENTS, INCLUDING BRACKETS, SUPPORT WIRES, SPLAY WIRES, COMPRESSION STRUTS, AND ATTACHMENTS TO STRUCTURE.
- SCOPE OF DEMOLITION WORK REQUIRED IS NOT NECESSARILY LIMITED TO WHAT IS SHOWN ON THE DEMOLITION PLANS. THE INTENT IS TO REMOVE ALL MECHANICAL, ELECTRICAL AND ARCHITECTURAL ITEMS AS REQUIRED TO FACILITATE NEW CONSTRUCTION. SEE STRUCTURAL, MECHANICAL AND ELECTRICAL DEMOLITION DRAWINGS FOR ADDITIONAL SCOPE OF DEMOLITION WORK.
- REFER TO FINISH PLANS/SCHEDULES FOR SELECTIVE DEMOLITION OF EXISTING FINISHES THAT MAY BE REQUIRED IN AREAS NOT INDICATED ON THESE DRAWINGS.
- SELECTIVE LIMITED DEMOLITION OF CEILINGS ON LEVEL BELOW (NOT SHOWN) MAY BE REQUIRED TO ACCOMMODATE INSTALLATION OF NEW STRUCTURAL, MECHANICAL, PLUMBING OR ELECTRICAL WORK. RESTORE CEILINGS TO CONDITION PRIOR TO DEMOLITION.
- REMOVE WALL COVERING AND BASE AT EXISTING WALLS SCHEDULED TO RECEIVE NEW FINISHES. PREP WALL TO RECEIVE SCHEDULED FINISH. REFER TO FINISH PLANS/SCHEDULES FOR EXTENT OF DEMOLITION.
- REFER TO SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.

FLOOR PLAN KEYNOTE LEGEND

201	(E) WALL
203	(E) DOOR
204	(E) WINDOW
205	(E) STEEL COLUMN ENCASED IN CONCRETE
206	WALL MOUNTED DISPLAY AND WALL MOUNT OFCI. PROVIDE BLOCKING PER 18/A-572
207	ALIGN NEW FINISH WITH FACE OF EXISTING COLUMN SURROUND
208	INSTALL ACOUSTIC BATT INSULATION WITHIN EXISTING WALL FRAMING. FINISH FACE WITH 5/8" GYP BOARD TO MATCH ADJACENT.
209	MANUALLY OPERATED ROLLER SHADES AT ALL EXTERIOR WINDOWS. TYP. SEE 13/A-574
210	(E) BUILT-IN LOCKERS
211	(E) CONCRETE WALL
212	PATCH AND REPAIR FLOOR SLAB FOR NEW FLOOR BOX SEE DETAIL 10/A-575
213	DOOR INFILL WALL TO MATCH EXISTING SEE DETAIL 11/A-575
214	(N) SEMI RECESSED FIRE HYDRANT TO EXTEND NO FURTHER THAN 4" BEYOND THE WALL SURFACE

DEMOLITION KEYNOTE LEGEND

101	(E) WALL TO REMAIN
102	(E) DOOR TO REMAIN
103	DEMOLISH WALL AS SHOWN
104	REMOVE DOOR AND FRAME
106	REMOVE ALL FLOORING AND WALL BASE. CLEAN AND PREPARE CONCRETE SLAB TO RECEIVE NEW FINISH.
107	MECHANICAL UNIT TO BE REMOVED AS PART OF SEPARATE PHASE. ENSURE ALL FLOOR ANCHORS ARE REMOVED AND SUBFLOOR IS PATCHED AND REPAIRED IN PREPARATION FOR NEW FLOORING
108	(E) BUILT-IN LOCKERS TO REMAIN
109	PORTION OF BUILT-IN LOCKERS TO BE REMOVED. DEMOLISH PLATFORM AND LOW WALL BELOW.
110	PROTECT PORTION OF (E) WALL TILE TO REMAIN
111	PROTECT COLUMN SURROUNDS AND FINISH COVER PLATES
112	(E) WINDOW TO REMAIN
113	REMOVE GYP BOARD ON ONE SIDE OF EXISTING WALL IN PREPARATION FOR ACOUSTIC BATT INSULATION. SEE FLOOR PLAN.
114	(E) FLOORING TO REMAIN. PROTECT IN PLACE.
115	(E) CONCRETE WALL TO REMAIN
116	(E) STEEL COLUMN ENCASED IN CONCRETE TO REMAIN.
117	REMOVE EXISTING FLOOR SLAB AS REQUIRED FOR NEW FLOOR BOX AND CONDUIT.

FLOOR PLAN NOTES

- CONTRACTOR TO COORDINATE AND PROVIDE BACKING FOR ALL ITEMS IN CONTRACT, AS WELL AS ITEMS NOTED WHICH ARE IDENTIFIED AS NOT IN CONTRACT (INC) OR ITEMS WHICH ARE OWNER-PROVIDED OR VENDOR-PROVIDED. SUCH ITEMS MAY INCLUDE, BUT ARE NOT LIMITED TO, SIGNAGE, VISUAL BOARD UNITS, CONFERRING TRAYS, RAILS OR OTHER ACCESSORIES, BULLETIN BOARDS, DISPLAY CASES, COMPUTER OR TELEVISION DISPLAYS, MONITORS, SECURITY CAMERAS, WIRELESS ACCESS POINTS, LOCKERS, AND OTHER CASEWORK OR EQUIPMENT.
- DO NOT SCALE DRAWINGS. USE DIMENSIONS INDICATED.
- CONTRACTOR SHALL VERIFY BUILDING DIMENSIONS, PARTITION AND WALL LOCATIONS, AND FLOOR ELEVATIONS AND NOTIFY THE ARCHITECT OF ANY DISCREPANCIES PRIOR TO START OF WORK.
- ALL EXISTING CONSTRUCTION REMAINING BUT AFFECTED BY THE WORK UNDER THIS CONTRACT SHALL BE RESTORED AND REFINISHED TO MATCH THE MATERIALS, FINISH AND ALIGNMENT OF THE EXISTING ADJACENT CONSTRUCTION.
- COORDINATE QUANTITY, SIZE AND LOCATION OF ALL FLOOR, ROOF AND WALL OPENINGS FOR MECHANICAL AND ELECTRICAL WORK FOR A COMPLETE INSTALLATION. PROVIDE OPENINGS SHOWN OR REQUIRED FOR COMPLETION OF WORK.
- COORDINATE SIZE AND LOCATION OF ALL ACCESS PANELS WITH APPROPRIATE TRADES.
- ALL DIMENSIONS ARE TO FACE OF GYPSUM BOARD, NOMINAL FINISH FACE OF CONCRETE, OR NOMINAL FACE OF MASONRY UNLESS OTHERWISE NOTED.
- DIMENSIONS IN ROOMS WITH WALL TILE ARE TO FACE OF TILE SURFACE TYPICAL, UNLESS OTHERWISE NOTED, WITH THICKNESS OF TILE AND SETTING BED BEING IDENTIFIED NOMINALLY AS 1/2". IF TILE AND SETTING BED IS THICKER THAN 1/2", PARTITION LAYOUT TO BE ADJUSTED ACCORDINGLY.
- WHERE FIRE RATED PARTITIONS TERMINATE AT EXTERIOR WALLS, PROVIDE FIRE SAFING (UL LISTED) INSULATION FROM END OF PARTITION TO INTERIOR FACE OF EXTERIOR SHEATHING, 5" DEPTH X FULL HEIGHT OF CONSTRUCTION (TYPICAL).
- WHERE SOUND INSULATED PARTITIONS TERMINATE AT EXTERIOR WALL ASSEMBLIES, EXTEND GYPSUM BOARD, ISOLATION CHANNELS, AND SOUND ATTENUATING INSULATION AS SCHEDULED, TO INSIDE FACE OF EXTERIOR SHEATHING, AND SEAL JOINT AT SHEATHING WITH ACOUSTICAL SEALANT.
- FOR ADDITIONAL INTERIOR FINISHES WHICH MAY IMPACT DIMENSIONS, REFER TO FINISH PLANS/SCHEDULES.
- WHERE INTERIOR PARTITIONS ABUT WINDOW SYSTEMS, ALIGN CENTERLINES OF PARTITIONS WITH CENTERLINES OF EXISTING WINDOW MULLIONS, UNLESS OTHERWISE NOTED.
- PROVIDE CONTINUOUS FIRE RATED CONSTRUCTION BEHIND RECESSED FIXTURES IN FIRE PARTITIONS, FIRE BARRIERS AND FIRE WALLS.
- PROVIDE FIREPROOFING CONTINUITY WITH EXISTING CONDITIONS, USING LIKE SYSTEMS AS EXISTING, WHERE REQUIRED. VERIFY CONSTRUCTION OF EXISTING ELEMENTS IDENTIFIED AS FIRE RATED AND REPORT CONDITIONS NEGATIVELY IMPACTING RATING OF ELEMENT TO ARCHITECT.
- PATCH AND REPAIR EXISTING PARTITIONS AT REMOVED RECESSED ITEMS AND AT NEW DOOR OPENINGS. CUT BACK EXISTING GYPSUM BOARD TO NEXT STUD. JOINT BETWEEN NEW AND EXISTING GYPSUM BOARD SHALL BE REINFORCED BY AHJ.
- PATCH AND REPAIR EXISTING CONCRETE SLAB AND/OR DECK AT REMOVED FLOOR DRAINS, WATER CLOSETS, DUCT PENETRATIONS AND OTHER REMOVED UTILITIES. PROVIDE CONCRETE IN THICKNESS REQUIRED TO MAINTAIN FIRE RATING OF FLOOR SLAB. REFER TO STRUCTURAL DRAWINGS FOR REQUIRED REINFORCEMENT OR ANCHORING. REPAIR OR INSTALL FIREPROOFING UNDER SLAB AS REQUIRED TO MATCH EXISTING CONSTRUCTION OR AS REQUIRED BY AHJ.
- LEVEL AND SCARIFY EXISTING SLABS TO PROVIDE ACCEPTABLE SUBSTRATE FOR SCHEDULED FLOORING. REFER TO FINISH PLANS/SCHEDULES AND SPECIFICATIONS FOR PREPARATION OF FLOORS TO RECEIVE NEW FINISHES.

FLOOR PLAN LEGEND

	EXISTING STRUCTURAL GRID LINE
	NEW PARTITION
	EXISTING WALL OR PARTITION
	DOOR MARK
	NEW DOOR
	5'-0" TO DOOR OPENING - TYP (UON)
	PARTITION TYPE (SEE PARTITION TYPES SHEET A-571)
ROOM NAME	ROOM NAME & NUMBER
101	
	FIRE EXTINGUISHER CABINET
	PLAN AREA NOT IN SCOPE

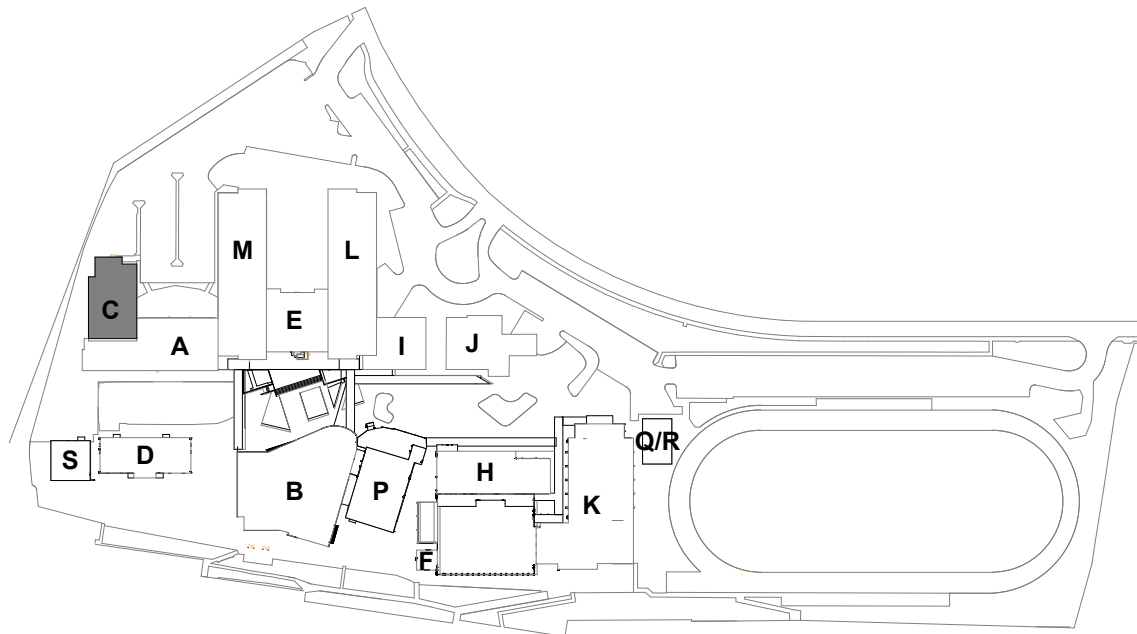
DEMOLITION LEGEND

	EXISTING TO BE REMOVED
	EXISTING TO REMAIN
	FOR ENTIRE FLOOR IN SHADED AREA - COMPLETELY REMOVE ALL EXISTING FLOOR FINISHES (AT ROOMS AND/OR AREAS TO REMAIN AND RECEIVE NEW FLOOR FINISHES. LEAVE SUB-FLOOR CLEAN AND PREPARED FOR NEW WORK.
	PLAN AREA NOT IN SCOPE

SIGNAGE KEYNOTES

S-01	ROOM IDENTIFICATION SIGN - 2/G-002
S-02	EXIT SIGN 4/G-002
NOTE: SEE G-002 FOR TYP SIGNAGE MOUNTING HEIGHT	

KEY PLAN



San Rafael City Schools



310 Nova Albion Way, San Rafael, CA 94903

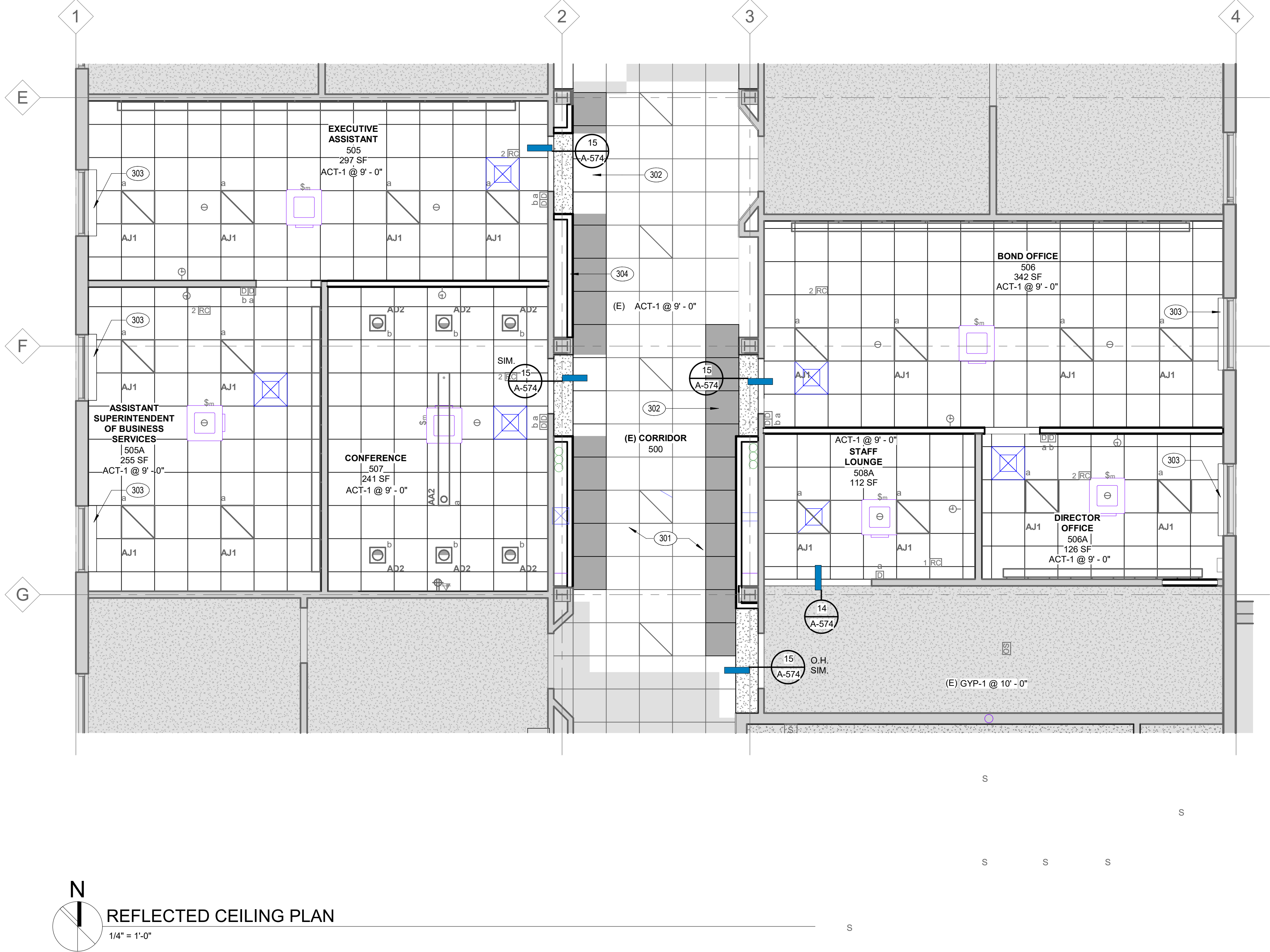
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310 Nova Albion Way, San Rafael, CA 94903

Δ	Date	Issued For
1	12/20/23	50% Construction Documents

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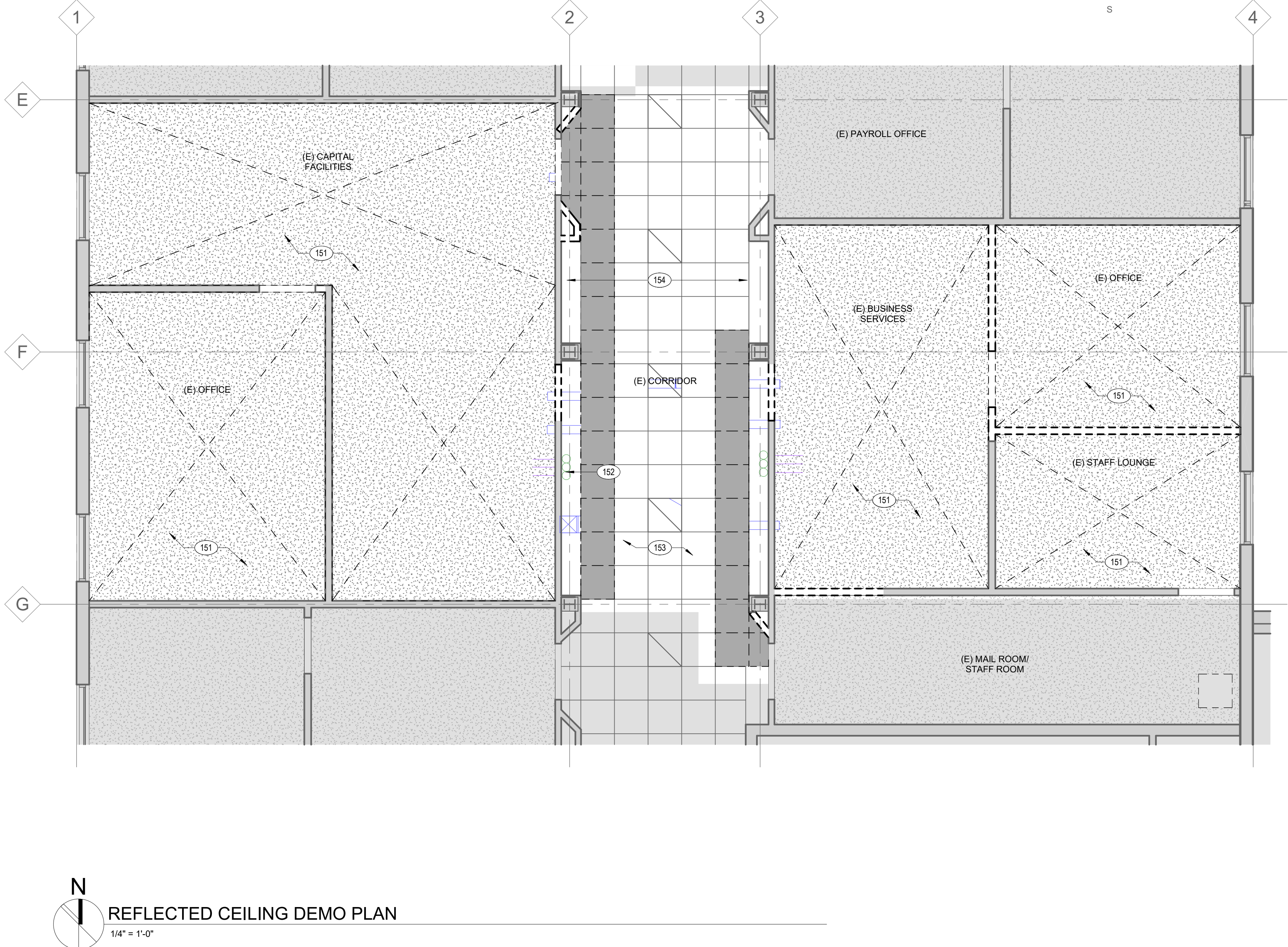
Demo & Floor Plans



CEILING PLAN KEYNOTE LEGEND	
301	(E) CORRIDOR DROPPED CEILING TO REMAIN
302	INFILL 2X2 ACOUSTIC CEILING NEAR DOOR TO MATCH AND ALIGN WITH EXISTING ADJACENT
303	(E) MANUAL ROLLER SHADES AT ALL EXTERIOR WINDOWS PROTECT IN PLACE, TYP.
304	(E) BUILT-IN LOCKERS TO REMAIN

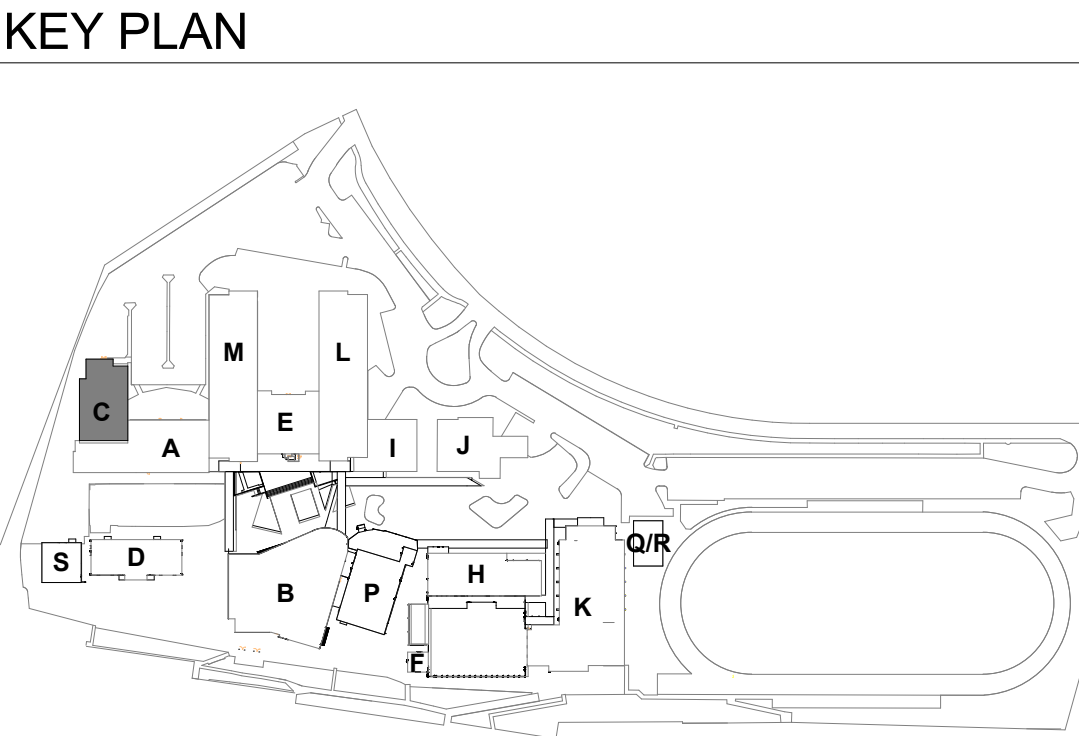
- CEILING NOTES**
- COORDINATE SIZE AND LOCATION OF ACCESS PANELS WITH TRADE REQUIRING SAME AND CONFIRM WITH ARCHITECT.
 - COORDINATE CEILING SUSPENSION SYSTEMS WITH OTHER CEILING SPACE EQUIPMENT SUPPORTING DEVICES.
 - CONTRACTOR SHALL MAINTAIN THE FIRE RATING INTEGRITY OF EXISTING PARTITIONS INDICATED AS FIRE RESISTANCE RATED. REPORT CONDITIONS NEGATIVELY IMPACTING RATING OF ELEMENT TO ARCHITECT.
 - CEILING PANELS TO BE CENTERED IN ROOM IN BOTH DIRECTIONS UNLESS OTHERWISE INDICATED.
 - NO CEILING PANEL TO BE CUT TO LESS THAN 6" WIDTH.
 - SPRINKLER HEADS TO BE LOCATED IN THE CENTER OF CEILING PANELS (TYPICAL).
 - VERIFY LOCATIONS OF SOFFIT AND CEILING CONTROL JOINTS WITH THE ARCHITECT PRIOR TO INSTALLATION
 - COORDINATE ESCUTCHEON PLATES AT CEILING PANEL PENETRATIONS WITH ELECTRICAL AND MECHANICAL TRADES.
 - REFER TO ELECTRICAL DRAWINGS FOR FIXTURE TYPES.

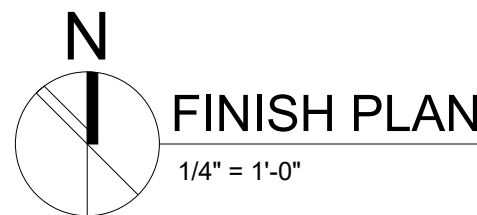
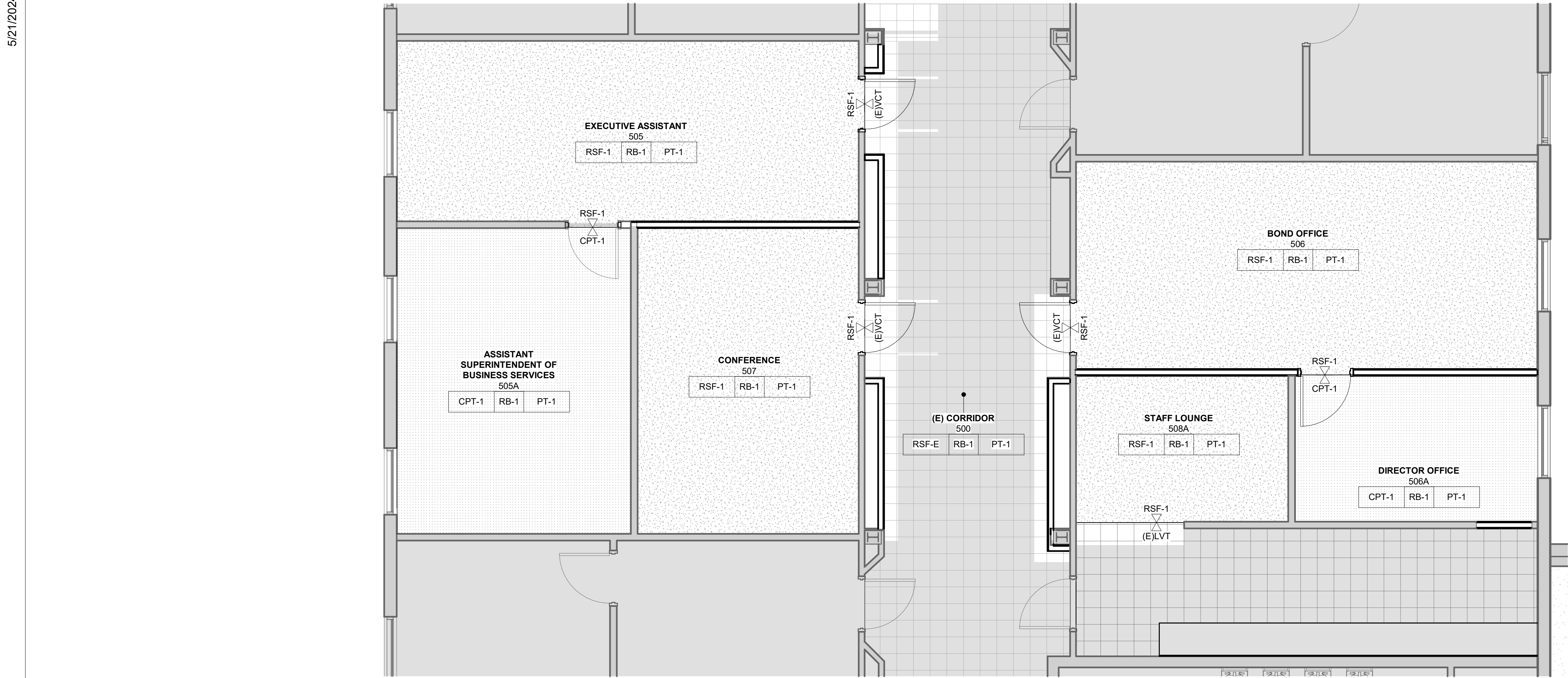
- CEILING PLAN LEGEND**
- (ACT-1) 24" X 24" ACOUSTIC PANEL CEILING ON METAL CEILING SUSPENSION SYSTEM.
 - 24" X 24" ACOUSTIC PANEL CEILING ON METAL CEILING SUSPENSION SYSTEM TO MATCH (E) CORRIDOR CEILING.
 - 24" X 24" ACOUSTIC PANEL CEILING ON METAL CEILING SUSPENSION SYSTEM TO MATCH (E) CORRIDOR CEILING.
 - ACP-1 @ 8'-0" CEILING TYPE & HEIGHT TAG
 - LIGHT FIXTURE (REFER ELEC. DWGS)
 - CEILING CASSETTE AIR HANDLER SEE MECH.
 - RETURN AIR DIFFUSER SEE MECH.
 - PLAN AREA NOT IN SCOPE



CEILING PLAN DEMOLITION KEYNOTE...	
151	REMOVE ALL EXISTING CEILINGS, SUPPORTS & LIGHTS ABOVE. SEE DEMOLITION LEGEND FOR ADDITIONAL NOTES.
152	DEMOLISH SOFFIT ABOVE PORTION OF LOCKERS TO BE REMOVED.
153	(E) CORRIDOR DROPPED CEILING TO REMAIN.
154	(E) BUILT-IN LOCKERS TO REMAIN

- CEILING DEMOLITION LEGEND**
- EXISTING TO BE REMOVED
 - EXISTING TO REMAIN
 - COMPLETELY REMOVE ALL EXISTING CEILINGS UON (EITHER LAY-IN, PLASTER, OR GYP BD INCLUDING ALL CURTAIN, CEILING MOUNTED EQUIPMENT, SUPPORTS, TRACKS ETC)
 - REMOVE EXISTING CEILING GRID IN COORIDOR AS REQUIRED FOR LOCKER REMOVAL & NEW FURRING WALLS FOR DOOR CLEARANCE.
 - PLAN AREA NOT IN SCOPE

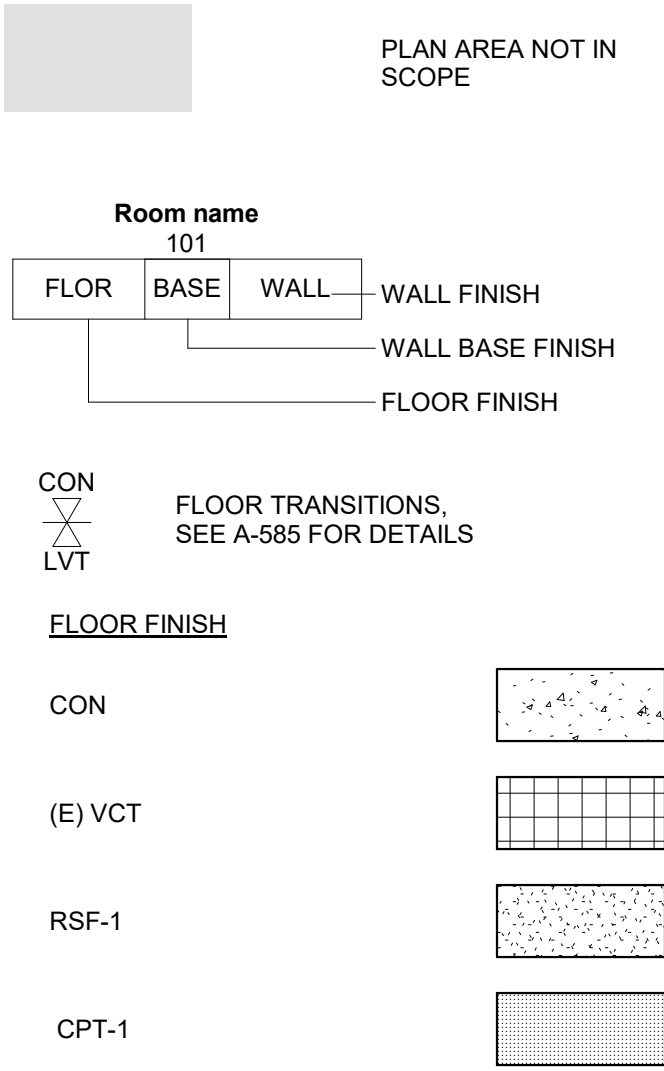




FINISH PLAN NOTES

- 1. TRANSITION AND REDUCER STRIPS TO MATCH COLOR OF FLOORING, UNLESS OTHERWISE NOTED.
- 2. TRANSITION FLOOR FINISHES AT CENTER OF DOOR, UNLESS OTHERWISE NOTED.
- 3. FLOORS TO BE LEVELED AS REQUIRED TO ACCEPT FINISHES PER FINISH PLANS/SCHEDULE.
- 4. INSTALL ALL FLOORING IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS. VERIFY LOCATION OF SEAMING AND TRANSITIONS WITH THE ARCHITECT.
- 5. RESILIENT TILE FLOORING TO BE SEALED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.
- 6. RESILIENT BASE TO BE STRAIGHT AT CARPET FLOORING, COVED AT OTHER LOCATIONS.
- 7. RECESSED WIREWAYS, ACCESS PANELS, GRILLES, FIRE EXTINGUISHER CABINETS, ELECTRICAL PANELS, AND OTHER SUCH ARCHITECTURAL, ELECTRICAL AND MECHANICAL DEVICES SHALL BE FINISHED TO MATCH ADJACENT WALL OR CEILING SURFACE, UNLESS OTHERWISE NOTED.
- 8. FINISH MATERIALS TO COMPLY WITH CODE REQUIRED FLAME SPREAD AND SMOKE DEVELOPED RATINGS.
 - MATERIALS USED IN CORRIDORS SHALL CONFORM TO CLASS 1 REQUIREMENT, FLAME SPREAD RATING 0 TO 25 AND MAXIMUM SMOKE DEVELOPED 200 RATING.

FINISH PLAN LEGEND



ABBREVIATION

- FLOOR
- CON - SEALED CONCRETE FLOOR
 - CPT - CARPET
 - RSF - RUBBER SHEET FLOORING
 - VCT - VINYL COMPOSITION TILE
- BASE
- RB - RUBBER BASE
- WALL
- GYP - GYPSUM BOARD
 - PT - PAINT
- MISCELLANEOUS
- CG - CORNER GUARD
 - WB - WHITEBOARD

San Rafael City Schools



310 Nova Albion Way, San Rafael, CA 94903

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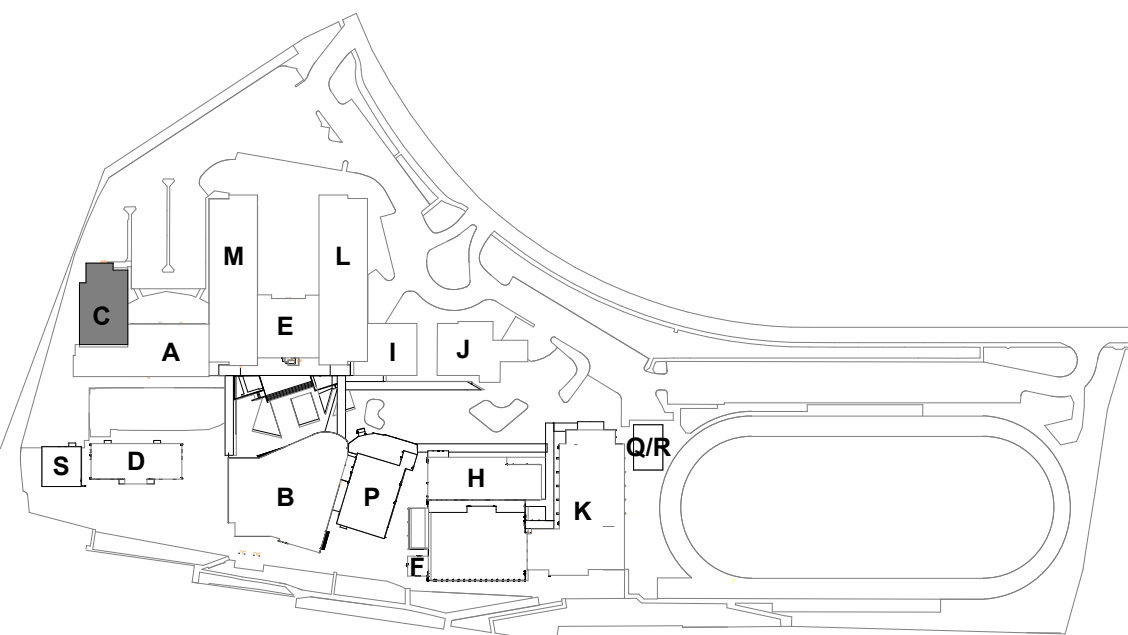
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1	12/20/23	50% Construction Documents

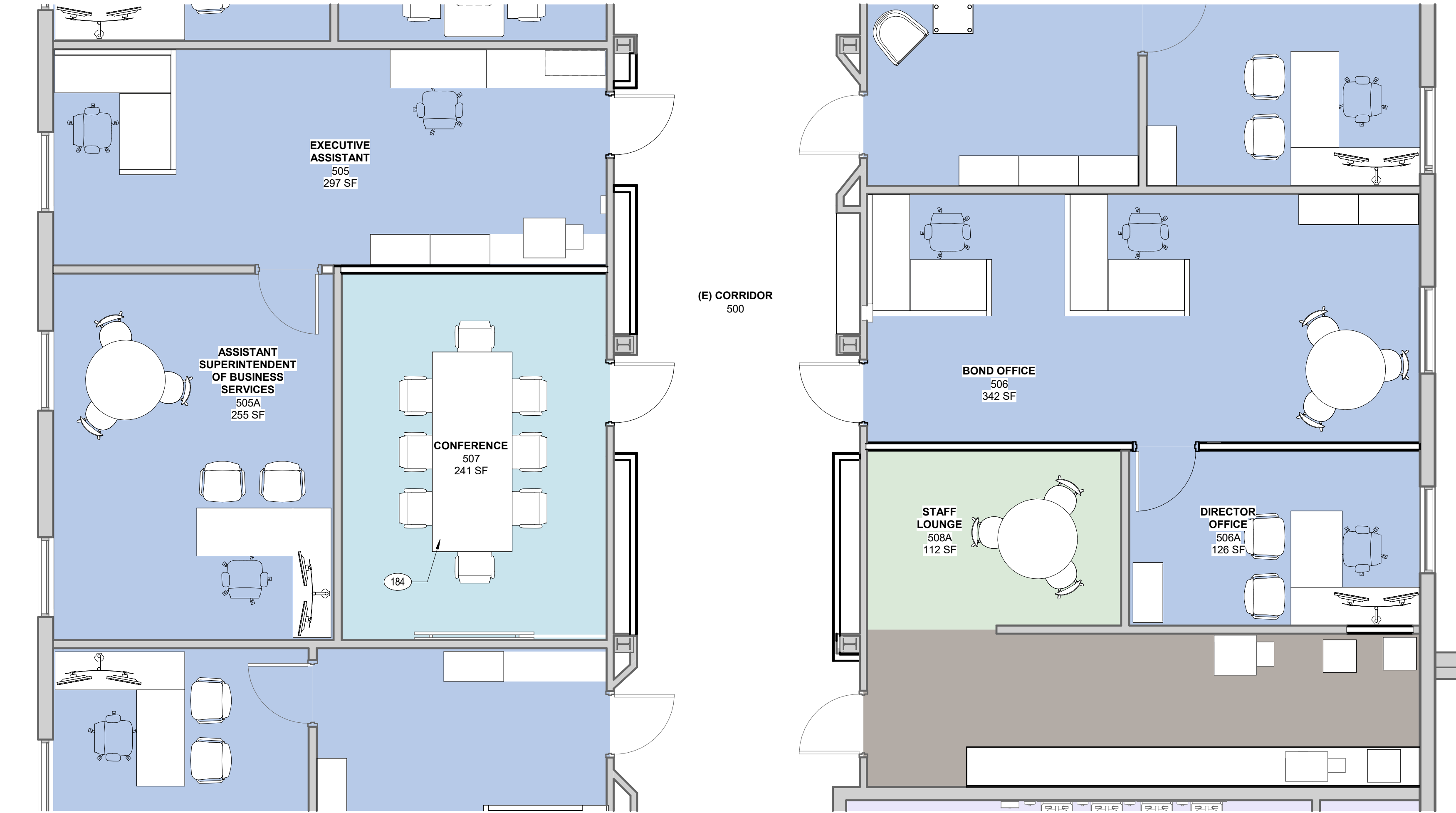
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KEY PLAN

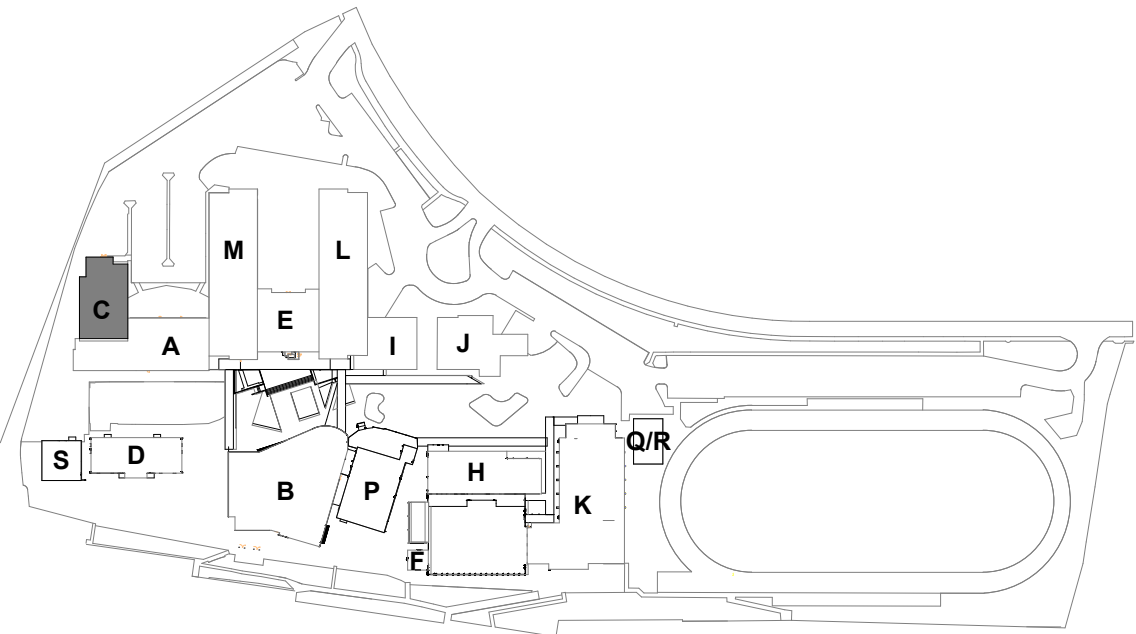




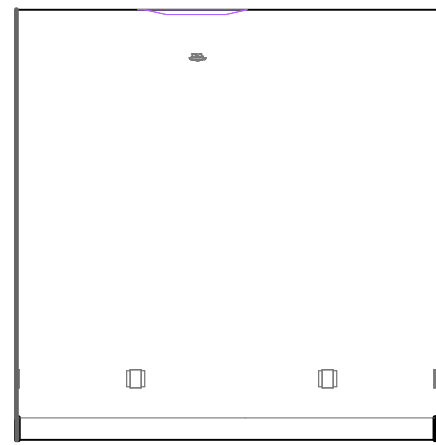
FURNITURE PLAN KEYNOTE LEGEND	
Key Value	Keynote Text
184	RELOCATED (E) 4'-0" x 10'-0" CONFERENCE TABLE

N
LEVEL 1 FURNITURE PLAN - SECTOR A
1/4" = 1'-0"

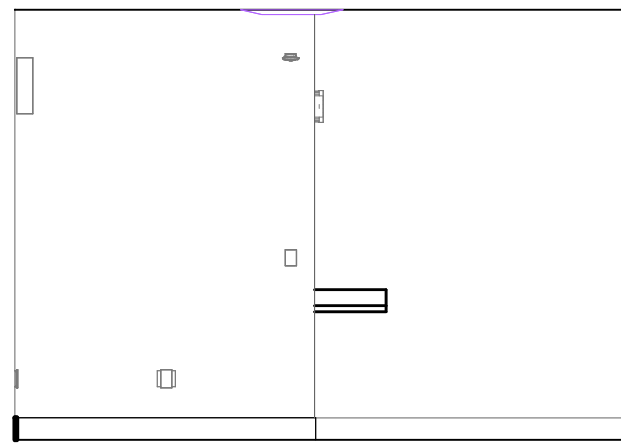
KEY PLAN



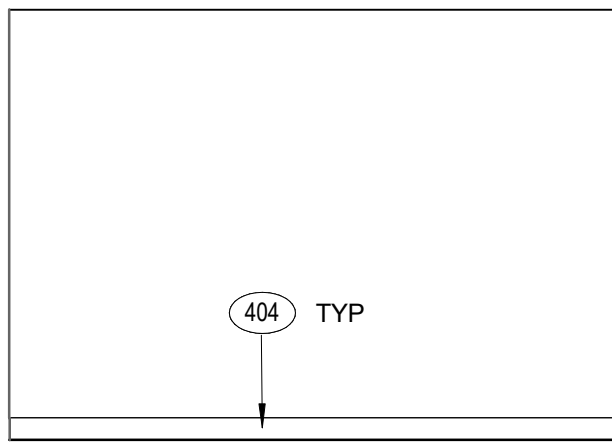
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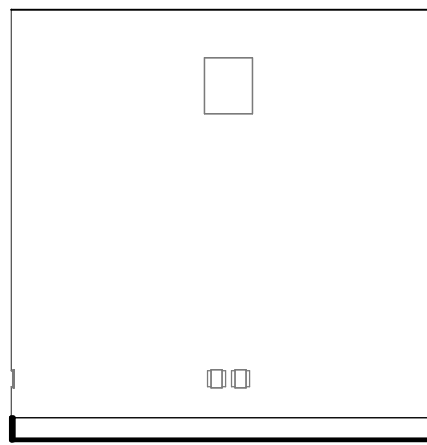
26 ELEVATION - STAFF LOUNGE WEST
1/4" = 1'-0"



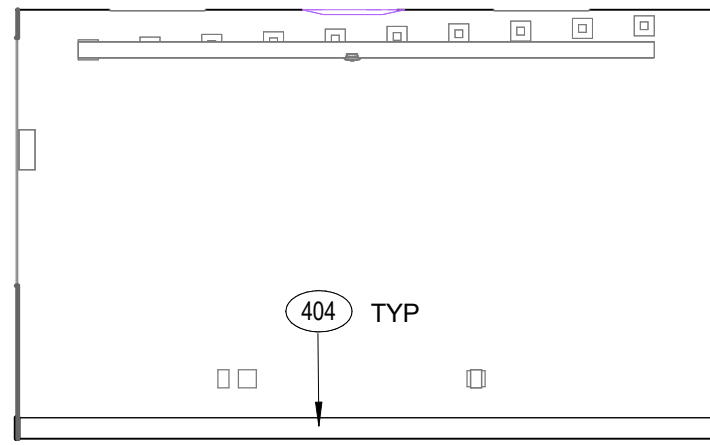
25 ELEVATION - STAFF LOUNGE SOUTH
1/4" = 1'-0"



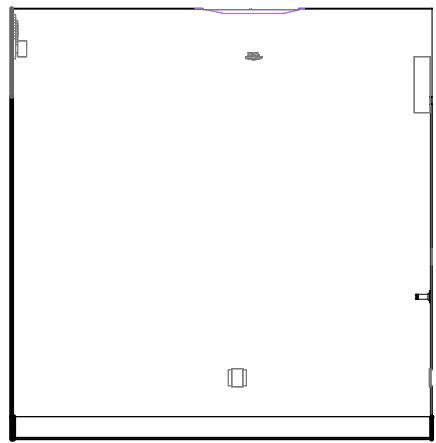
24 ELEVATION - STAFF LOUNGE NORTH
1/4" = 1'-0"



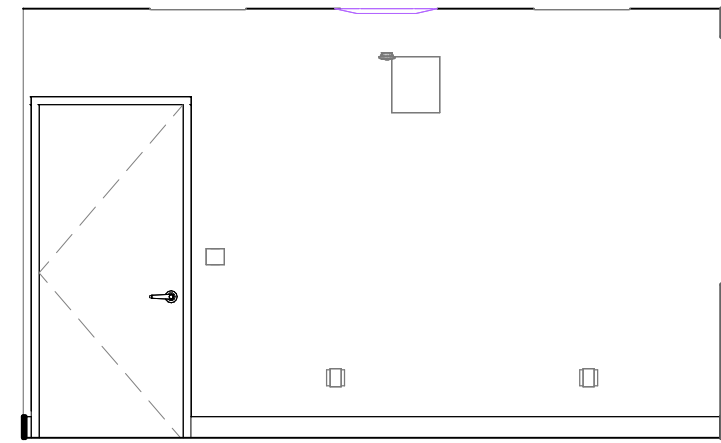
23 ELEVATION - STAFF LOUNGE EAST
1/4" = 1'-0"



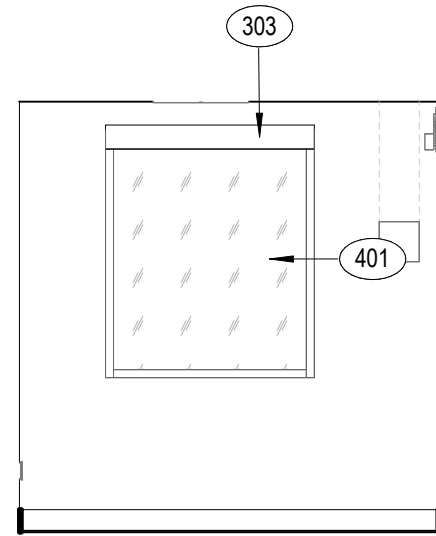
22 ELEVATION - DIRECTOR SOUTH
1/4" = 1'-0"



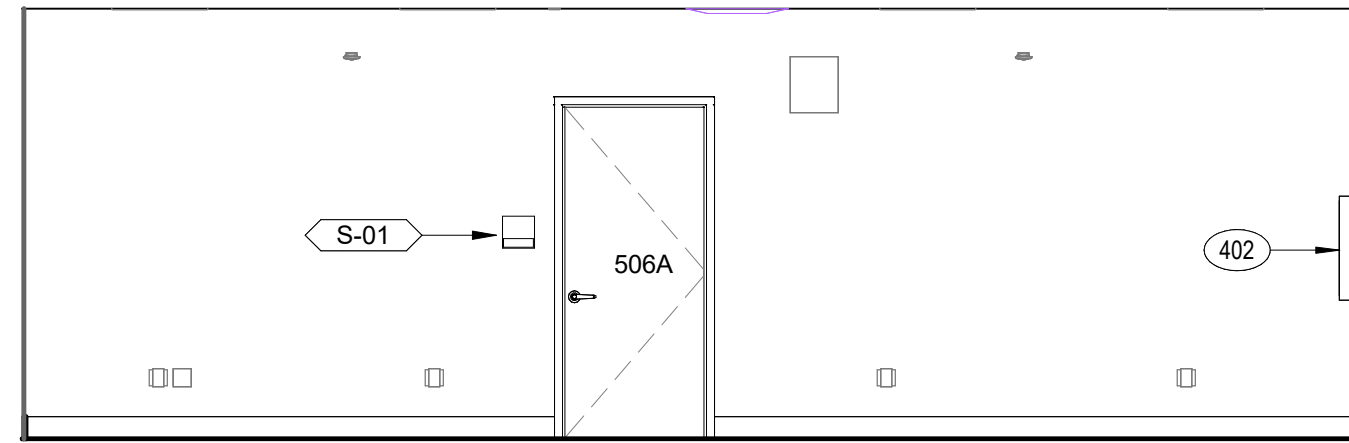
21 ELEVATION - DIRECTOR WEST
1/4" = 1'-0"



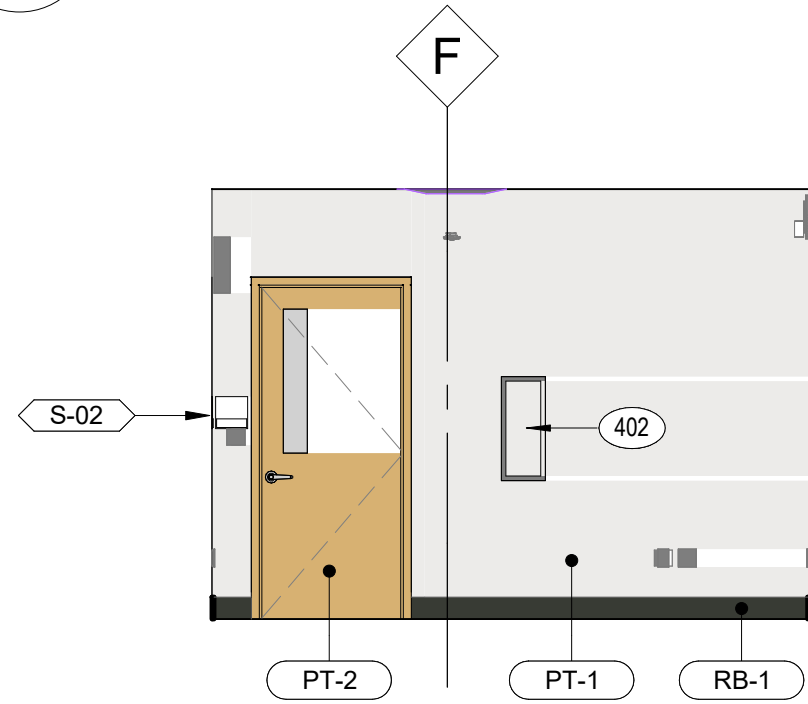
20 ELEVATION - DIRECTOR NORTH
1/4" = 1'-0"



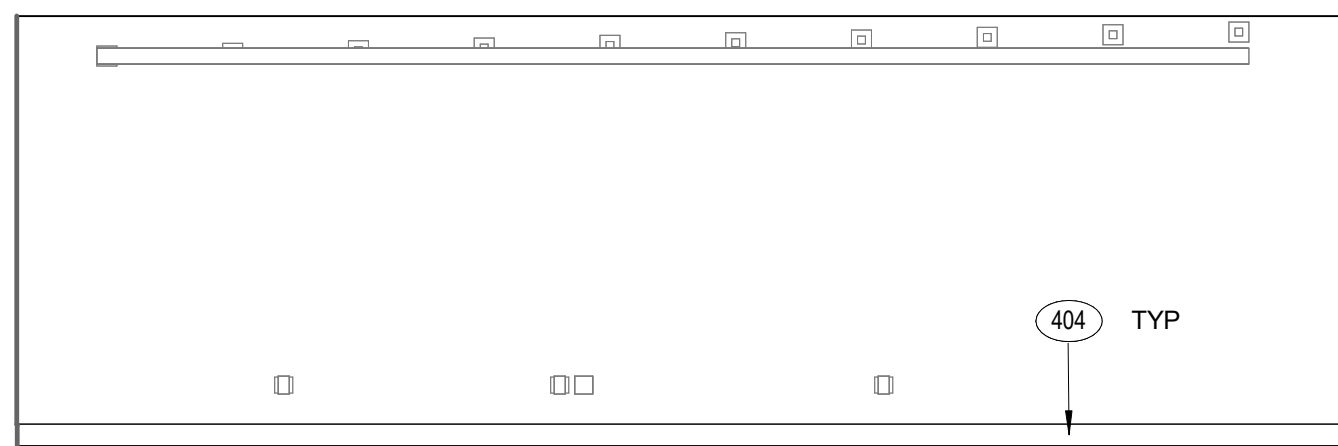
19 ELEVATION - DIRECTOR EAST
1/4" = 1'-0"



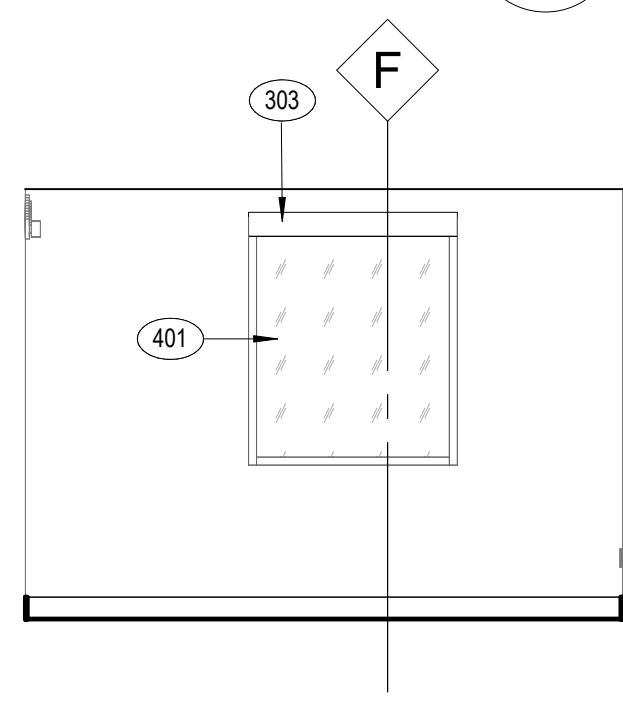
18 ELEVATION - BOND OFFICE SOUTH
1/4" = 1'-0"



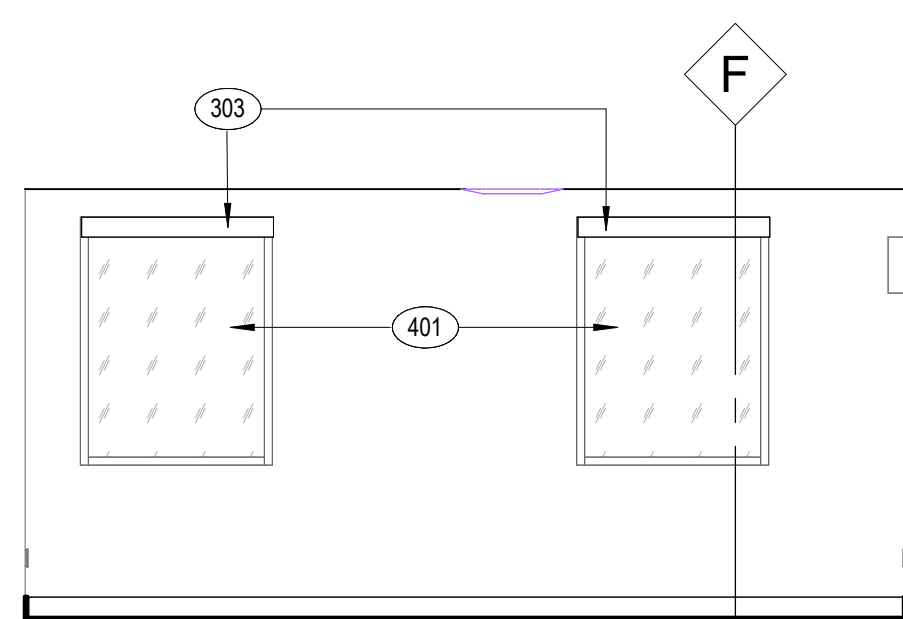
17 ELEVATION - BOND OFFICE WEST
1/4" = 1'-0"



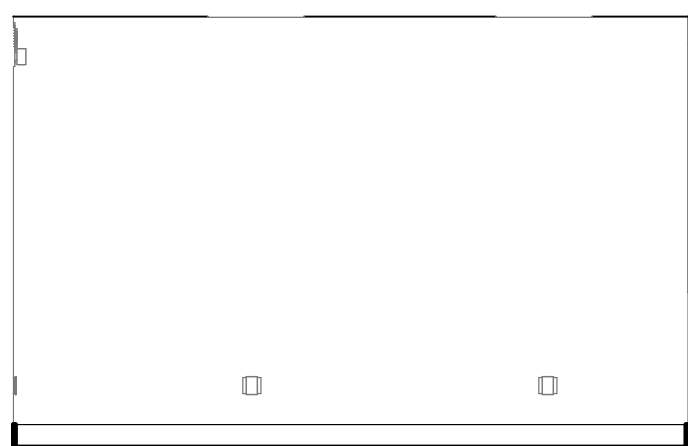
16 ELEVATION - BOND OFFICE NORTH
1/4" = 1'-0"



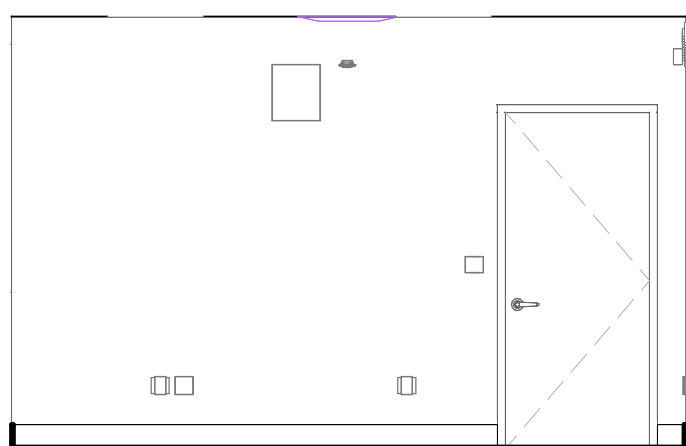
15 ELEVATION - BOND OFFICE EAST
1/4" = 1'-0"



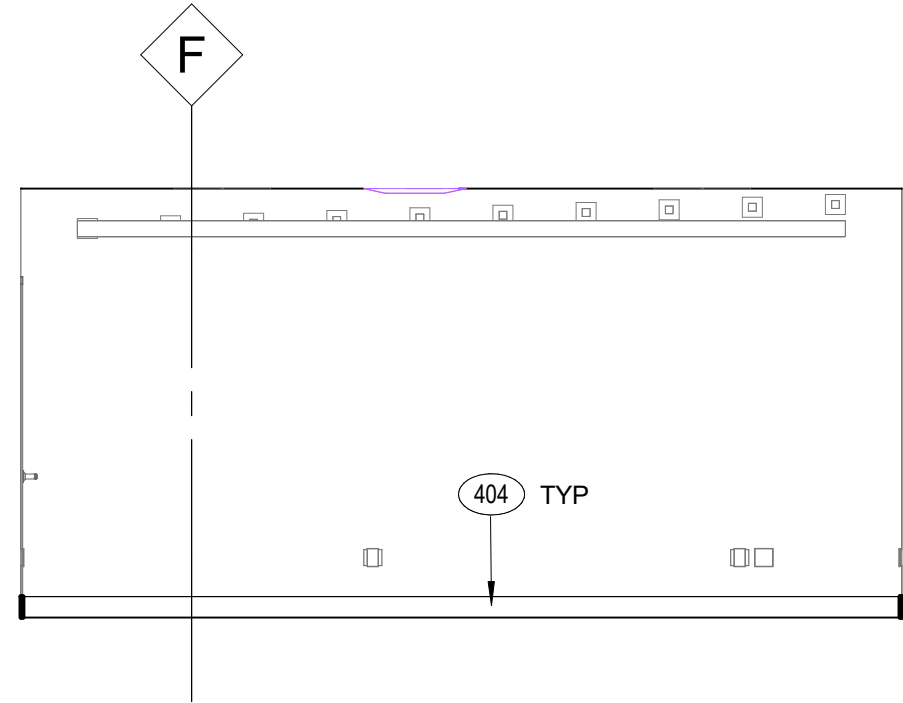
14 ELEVATION - ASSIST SUPER WEST
1/4" = 1'-0"



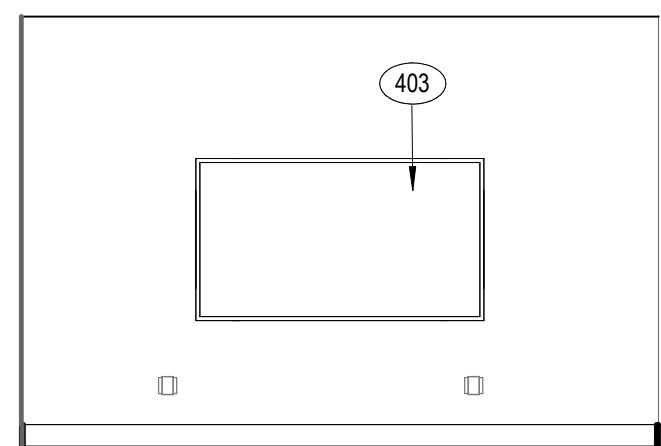
13 ELEVATION - ASSIST SUPER EAST
1/4" = 1'-0"



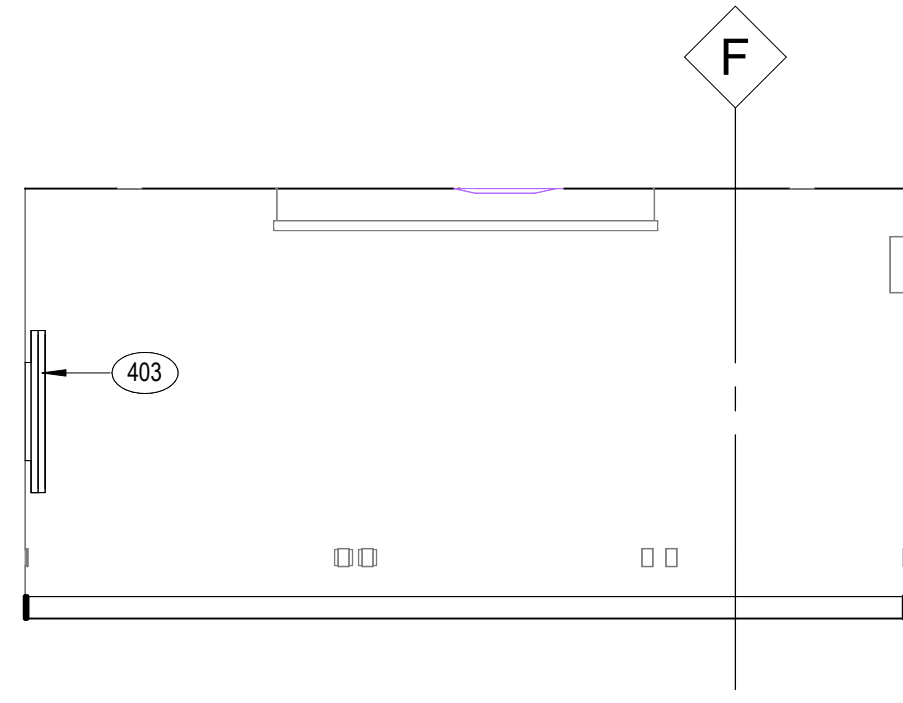
12 ELEVATION - ASSIST SUPER NORTH
1/4" = 1'-0"



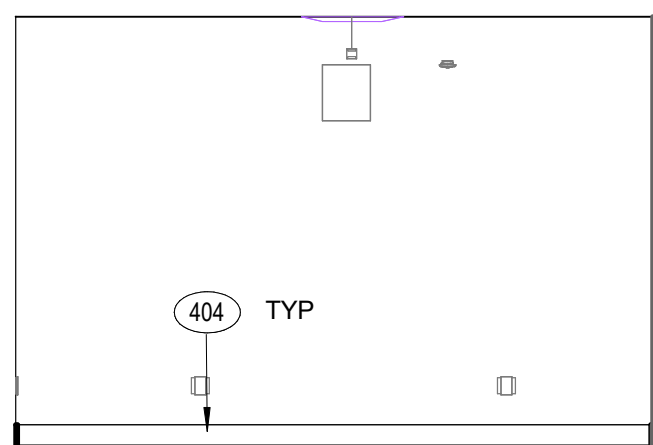
11 ELEVATION - ASSIST SUPER EAST
1/4" = 1'-0"



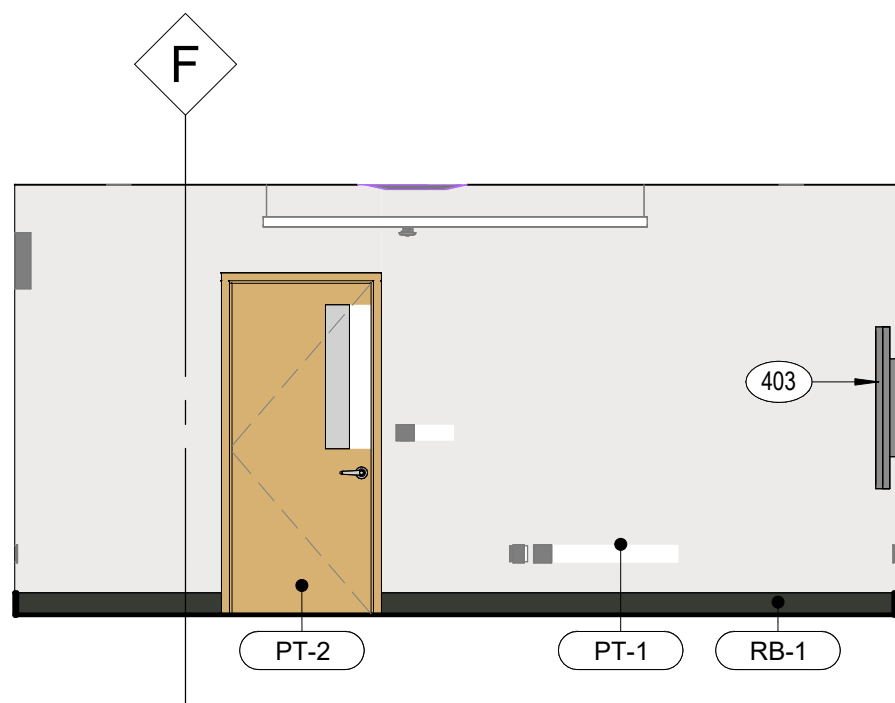
10 ELEVATION - CONF SOUTH
1/4" = 1'-0"



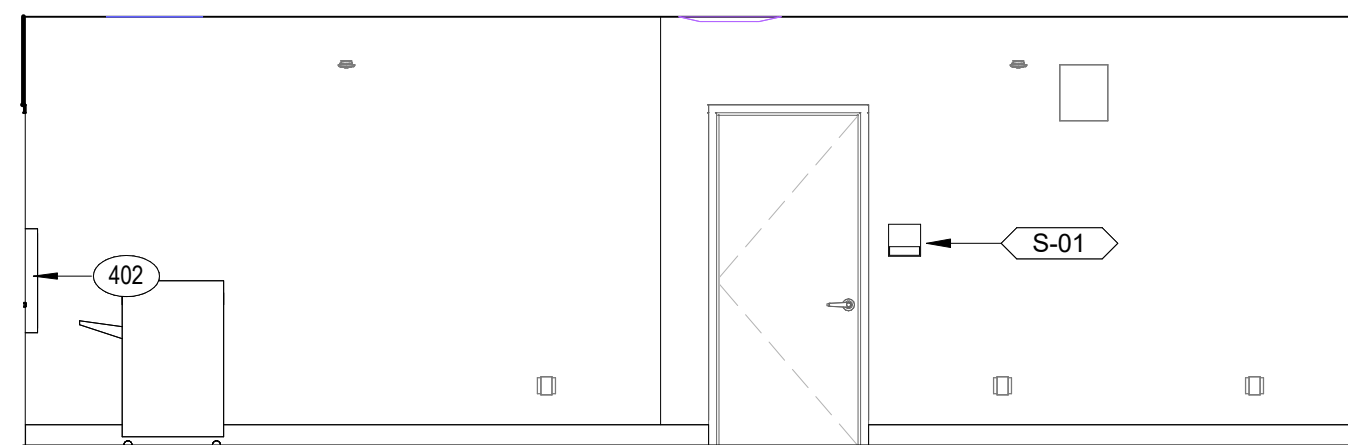
9 ELEVATION - CONF WEST
1/4" = 1'-0"



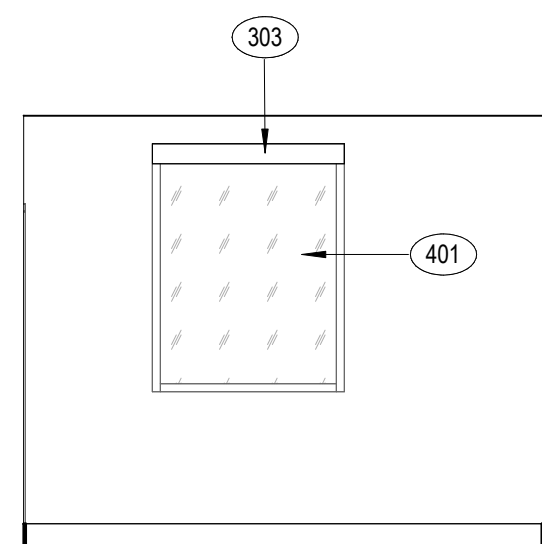
8 ELEVATION - CONF NORTH
1/4" = 1'-0"



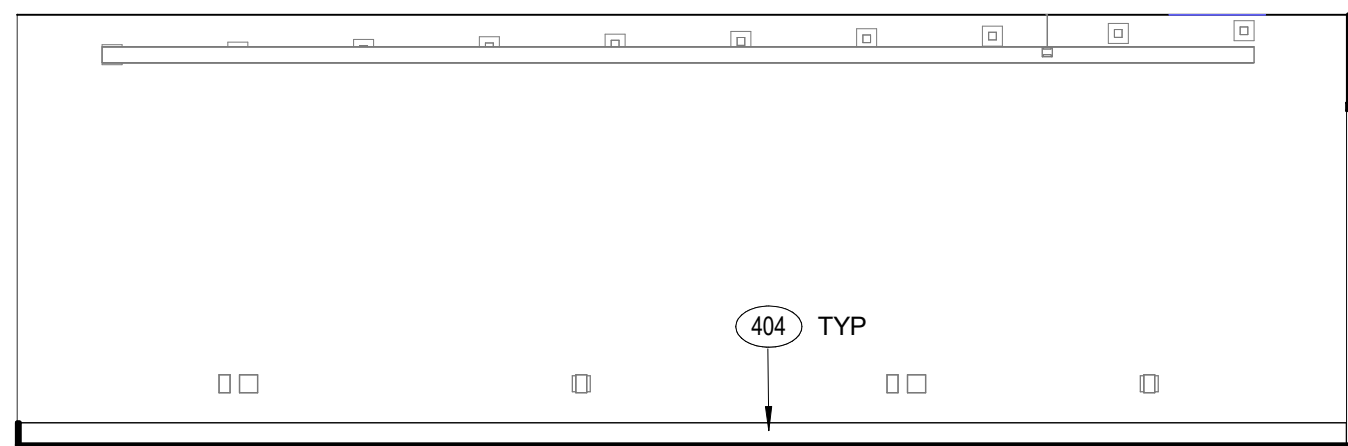
7 ELEVATION - CONF EAST
1/4" = 1'-0"



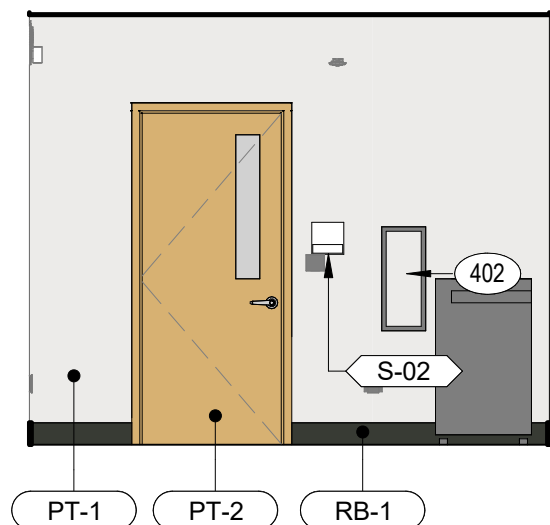
6 ELEVATION - EXEC ASSISTANT SOUTH
1/4" = 1'-0"



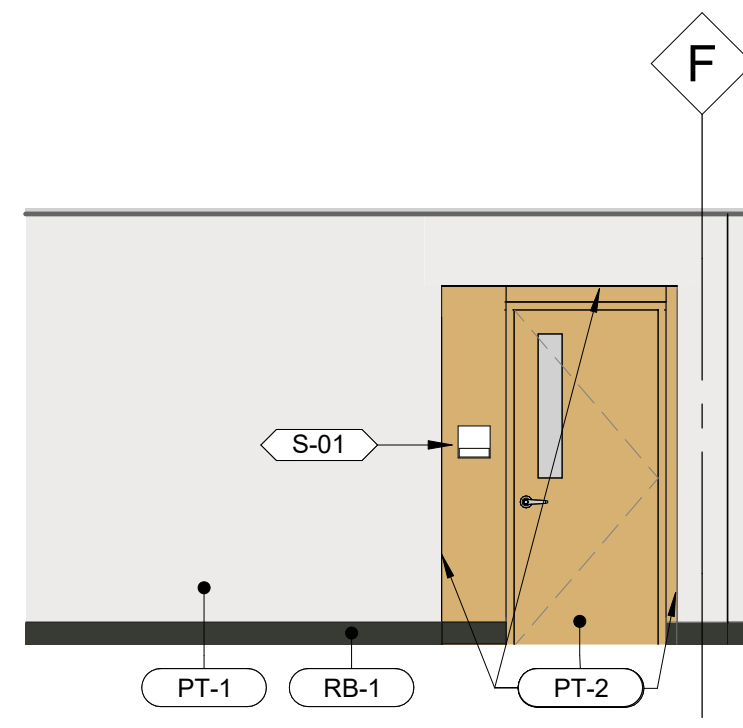
5 ELEVATION - EXEC ASSISTANT WEST
1/4" = 1'-0"



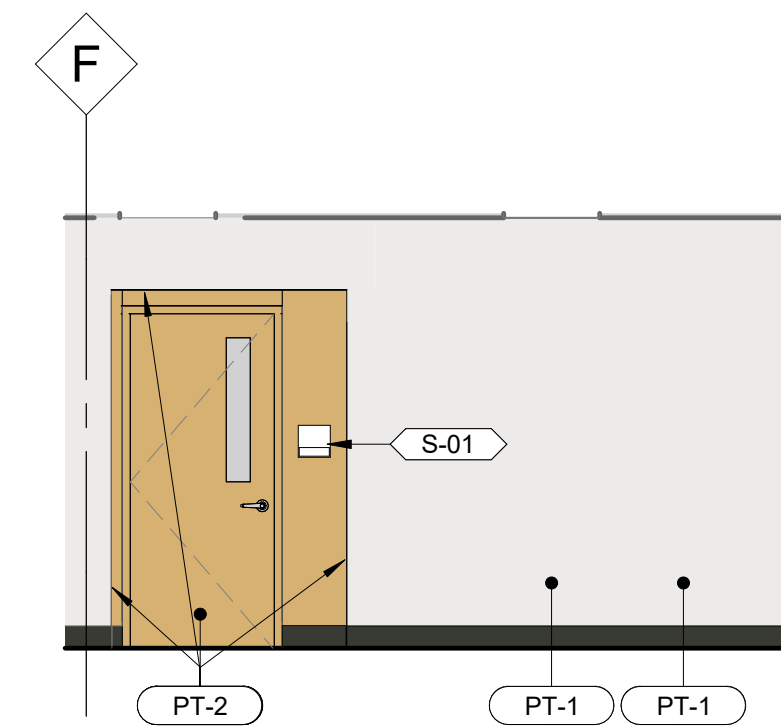
4 ELEVATION - EXEC ASSISTANT NORTH
1/4" = 1'-0"



3 ELEVATION - EXEC ASSISTANT EAST
1/4" = 1'-0"



2 ELEVATION - CORRIDOR WEST
1/4" = 1'-0"



1 ELEVATION - CORRIDOR EAST
1/4" = 1'-0"

INTERIOR ELEVATION KEYNOTE LEGEND	
Key Value	Keynote Text
303	(E) MANUAL ROLLER SHADES AT ALL EXTERIOR WINDOWS PROTECT IN PLACE, TYP.
401	(E) WINDOW
402	SEMI-RECESSED FIRE EXTINGUISHER CABINET
403	WALL MOUNTED DISPLAY, OFCI. PROVIDE BACKING PER 18A-522 AS REQUIRED.
404	RUBBER WALL BASE, SEE 6/A-585

NOTE: REFERENCE DOOR MARK TO DOOR SCHEDULE ON A-601

SIGNAGE KEYNOTES

S-01 ROOM IDENTIFICATION SIGN - 2/G-002
S-02 EXIT SIGN 4/G-002

NOTE: SEE G-002 FOR TYP SIGNAGE MOUNTING HEIGHT

INTERIOR ELEVATIONS LEGEND

XX FINISH TAG SEE FINISH MATERIALS LIST ON SHEET A-601
ARROW LEADER INDICATES ADJACENT WALL OR CEILING SURFACE. SURFACE PLAN NOT SHOWN IN ELEVATION SEE PLAN FOR EXTENTS
DOT LEADER INDICATES SURFACE PLANE AS SHOWN IN ELEVATION

San Rafael City Schools

SR SAN RAFAEL CITY SCHOOLS

310 Nova Albion Way, San Rafael, CA 94903

SRCS District Office - Business Services & Capital Facilities

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Interior Elevations

A-411

PARTITION NOTES

1. PROVIDE NON-COMPOSITE METAL FRAMING ASSEMBLIES OF METAL STUD DEPTH AND SPACING AS INDICATED FOR PROJECT SPECIFIC SPANS MEETING AN ALLOWABLE DEFLECTION OF L/240 WITH LATERAL LOAD OF AT LEAST 5 PSF FOR LIMITING HEIGHTS. PROVIDE 20 GA. STUDS (MINIMUM), PROVIDE HEAVIER GAUGE AND/OR WIDER FLANGE WIDTH TO MEET STATED PERFORMANCE REQUIREMENTS FOR LIMITING HEIGHTS. COMPLY WITH METAL FRAMING MANUFACTURER'S REQUIREMENTS FOR BRACING STUD FLANGES AND PROVIDING HORIZONTAL BRIDGING AT 48" O.C. MAXIMUM VERTICAL SPACING.
2. TO THE EXTENT POSSIBLE, FIRE RATED WALLS SHALL BE COMPLETELY AND CONTINUOUSLY CONSTRUCTED FIRST (EXCEPT FOR FINAL FINISH), WITH OTHER NON-RATED WALLS CONSTRUCTED TO THEM.
3. FIRE RATED WALLS EXTEND FULL HEIGHT TO STRUCTURE ABOVE AND SEAL TO DECK UNLESS DETAILED OTHERWISE.
4. USE GALVANIZED CORNER BEADS AND EDGE TRIM IN EXPOSED WORK.
5. MOVEMENT CONTROL:
 - A. PROVIDE FOR VERTICAL MOVEMENT AT THE HEAD OF CONSTRUCTION AS INDICATED IN THE NOTES ON THE DRAWINGS. CONNECT HEAD RUNNER CHANNEL TO THE UNDERSIDE OF STRUCTURE AS INDICATED ON THE DRAWINGS; CUT STUDS SHORT TO ALLOW FOR VERTICAL MOVEMENT IN ACCORDANCE WITH NOTE BELOW, AND DO NOT FASTEN TO HEAD RUNNER CHANNEL; FASTEN GYPSUM BOARD TO STUDS ONLY.
 - B. ALLOW FOR A MIN OF 1" VERTICAL MOVEMENT FOR PARTITIONS BELOW SLABS, BEAMS OR TRUSSES.
 - C. ALLOW FOR 3/4" RACKING OF PARTITIONS BUILT NEXT TO VERTICAL ELEMENTS (i.e. COLUMNS, WALLS, EXTERIOR WALLS).
6. PROVIDE ABUSE RESISTANT GYPSUM BOARD AT STAIR SIDES OF STAIR ENCLOSURE PARTITIONS..
7. SOUND CONTROL:
 - A. SEAL OPENINGS AT OUTLETS, SWITCHES, MECHANICAL OPENINGS AND PERIMETER CONDITIONS WITH ACOUSTIC SEALANT.
 - B. PROVIDE SOUND ATTENUATION BLANKETS WHERE INDICATED.
8. PENETRATIONS AT SMOKE AND FIRE RATED ASSEMBLIES SHALL BE PROTECTED, SEALED AND DAMPERED, USING UL OR OTHER AHJ APPROVED METHODS, MATERIALS AND INSTALLATION, AS REQUIRED TO MAINTAIN THE ASSEMBLY'S RATING AND SMOKE RESISTANT REQUIREMENTS. ALL MATERIALS AND INSTALLATION DETAILS SHALL CONFORM TO UL LISTINGS FOR "THROUGH-PENETRATION FIRE STOP SYSTEMS" WHERE APPLICABLE. CONTRACTOR SHALL SUBMIT SHOP DRAWING DETAILS, FURNISHED BY THE MANUFACTURER, OF THE FIRE STOP MATERIAL, THAT SHOW COMPLETE CONFORMANCE TO THE UL LISTING AND SUCH DRAWINGS SHALL BE AVAILABLE TO AHJ INSPECTORS. THE DRAWINGS SHALL BE SPECIFIC FOR EACH PENETRATION TYPE.
9. WHERE IDENTIFIED ON DRAWINGS, SMOKE BARRIERS/PARTITIONS SHALL BE CONTINUOUS FROM INSIDE FACE OF SHEATHING OF OUTSIDE WALLS, FROM FIRE BARRIER TO FIRE BARRIER, FROM SMOKE BARRIER TO SMOKE BARRIER AND FROM FLOOR SLAB TO FLOOR OR ROOF SLAB ABOVE, THEREBY PROVIDING CONTINUITY THROUGH ALL CONCEALED SPACES. COMPLETELY SEAL ALL OPENINGS WHERE THE SMOKE BARRIER ABUTS OTHER SMOKE BARRIERS, FIRE BARRIERS, EXTERIOR WALLS, THE FLOOR BELOW AND THE FLOOR OR CEILING ABOVE.
10. LIGHT GAUGE METAL FRAMING SHALL BE INSTALLED IN STRICT ACCORDANCE WITH ASTM 754 "STANDARD SPECIFICATIONS FOR INSTALLATION OF STEEL FRAMING MEMBERS".
11. WALL TYPES SHOW BASE WALL CONSTRUCTION. BASE, TILE, WOOD PANELING / TRIM, ACOUSTICAL PANELS, ETC. MAY OCCUR AS SCHEDULED OR DETAILED ELSEWHERE.
12. AT FULL- HEIGHT PARTITIONS WHERE DUCTWORK OR OTHER OBSTACLES PREVENT EXTENSION OF ALL STUDS TO DECK, FRAME STUDS AROUND OBSTACLES WITH HEADERS AND BRACING AS NECESSARY. PROVIDE DOUBLED STUDS AT ENDS OF OPENINGS TO DECK ABOVE..
13. LOCATE VERTICAL CONTROL JOINTS AT 30'-0" O.C.(MAX.) OR AS SHOWN ON PLANS OR NOTED AS "C-J" ON ELEVATIONS. CONFIRM CONTROL JOINT LOCATIONS WITH ARCHITECT PRIOR TO FRAMING.
14. PROVIDE 5/8" CEMENTITIOUS BACKER BOARD AT TILE (REFER TO ROOM FINISH PLANS/SCHEDULES FOR LOCATIONS AND HEIGHT). AT CONTRACTOR'S OPTION, PROVIDE 5/8" FIBERGLASS MAT TILE BACKER BOARD AT PARTITIONS SCHEDULED TO RECEIVE TILE IN NON-WET AREAS, SHOWER AREAS AND AREAS WITH TERRAZZO BASE TO RECEIVE CEMENTITIOUS BACKER BOARD ONLY.
15. GYPSUM BOARD FINISH TO BE LEVEL 4 UON.

San Rafael City Schools

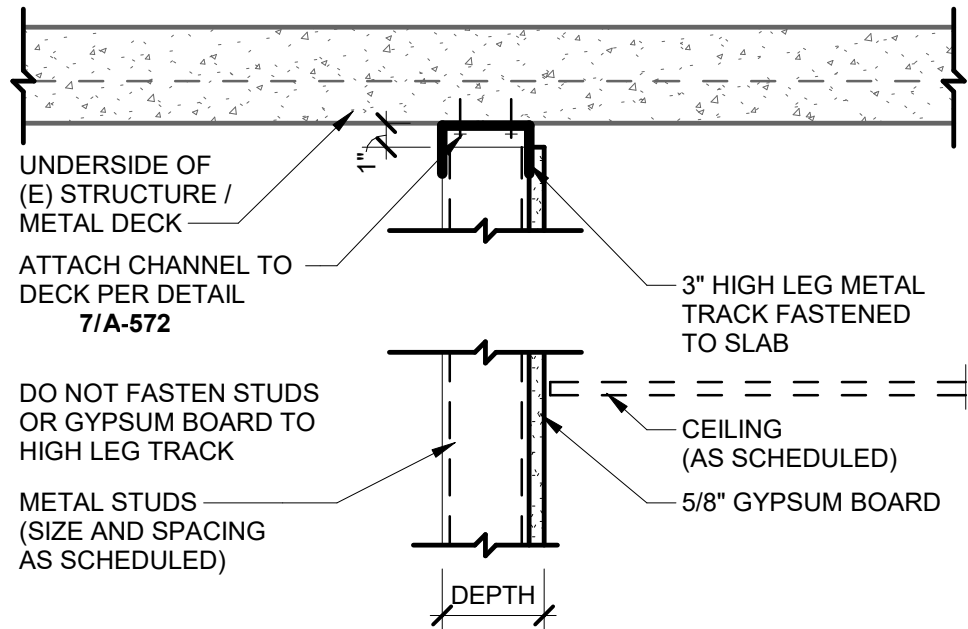


310 Nova Albion Way, San Rafael, CA 94903

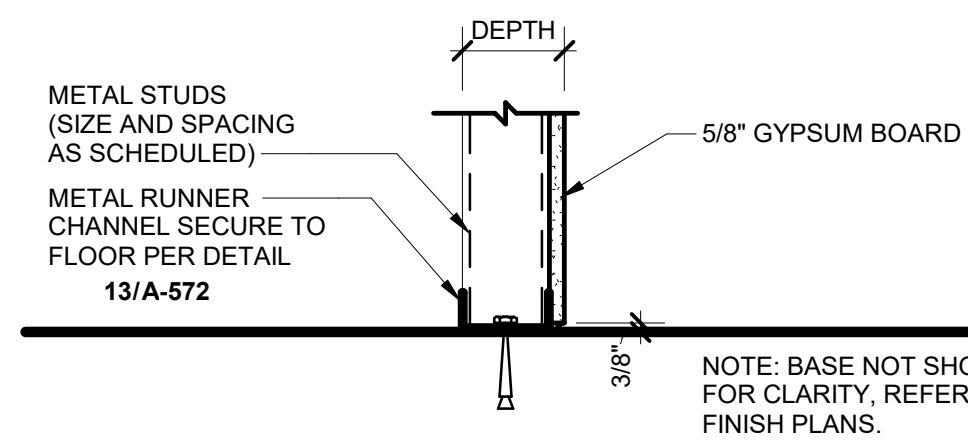
SRCS District Office - Business Services & Capital Facilities

310 Nova Albion Way, San Rafael, CA 94903

Δ	Date	Issued For
1	12/20/23	50% Construction Documents

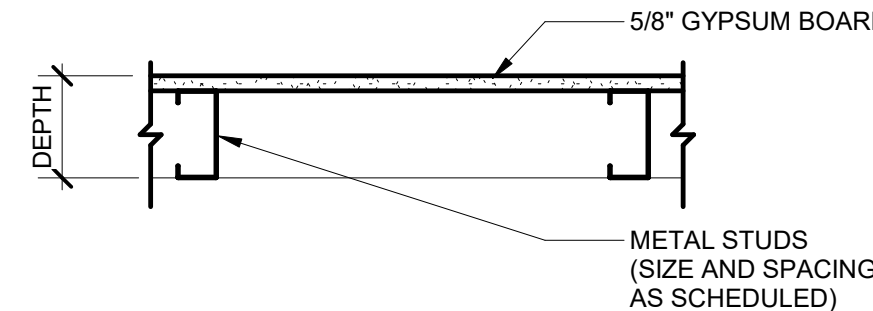


D PARTITION DETAIL D-T01
T01 1 1/2" = 1'-0"



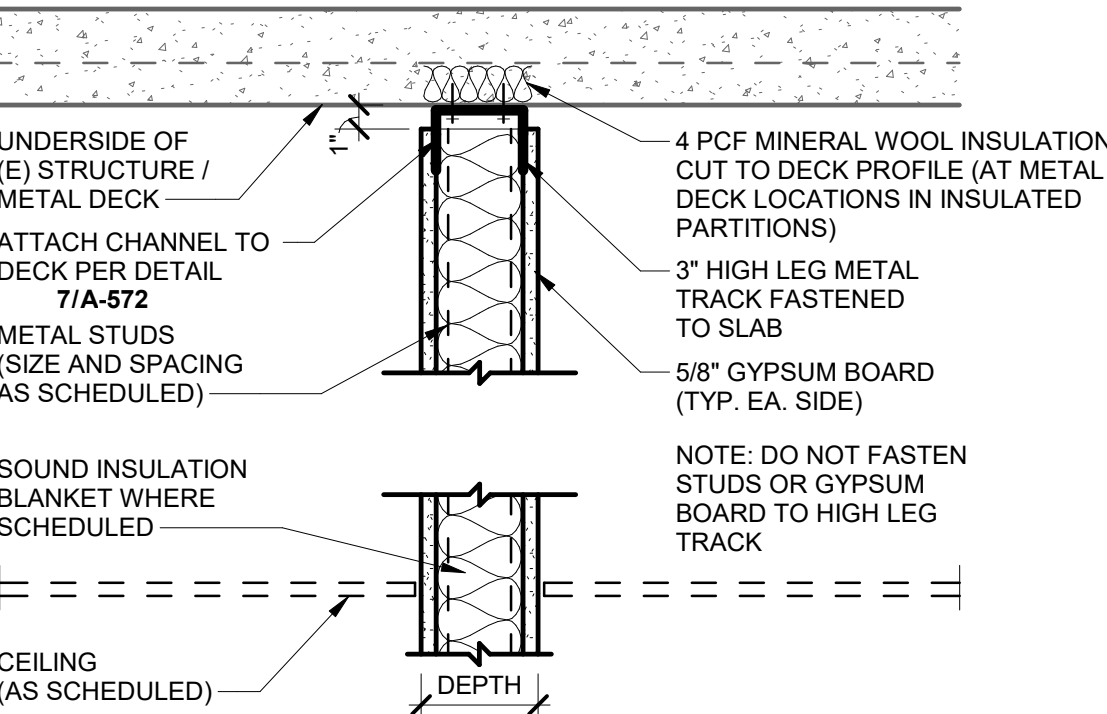
D PARTITION DETAIL D-B01
B01 1 1/2" = 1'-0"

TYPE	DEPTH	FRAMING		DETAILS		INSUL THK
		WIDTH	SPACING (OC)	BOTTOM	TOP	
0D3A	4 1/4"	3 5/8"	16"	B01	T01	-

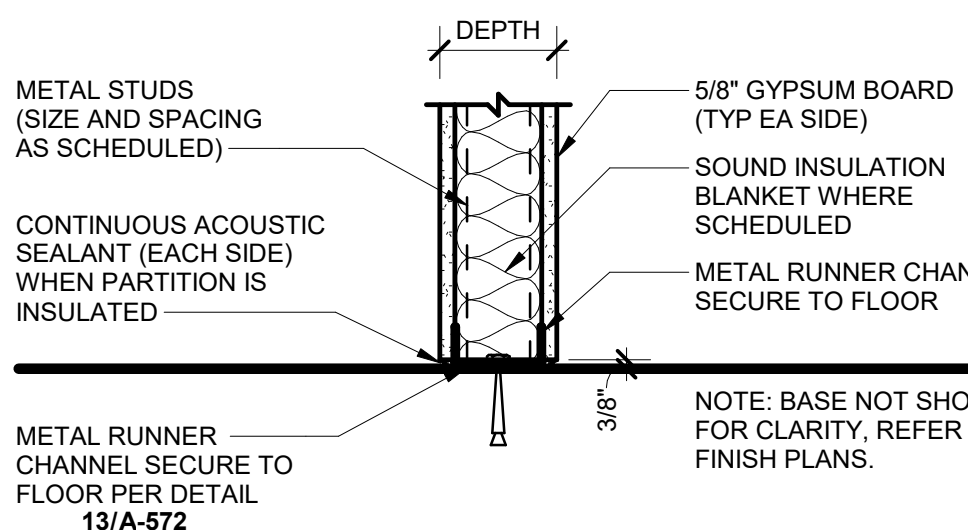


D PARTITION D
1 1/2" = 1'-0"

TYPE D



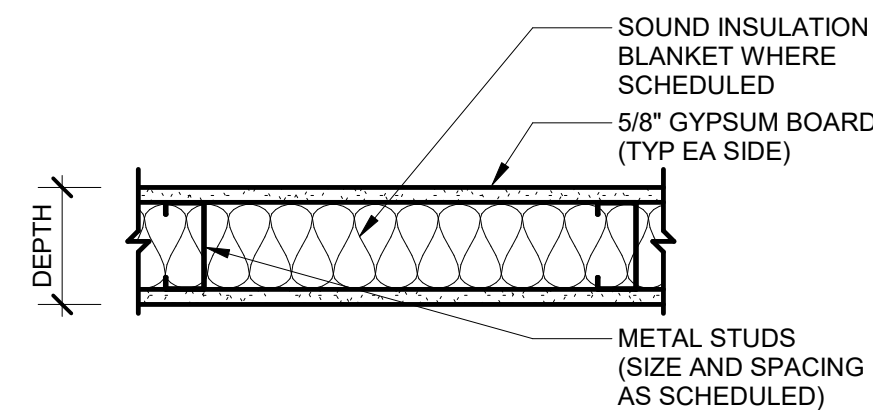
A PARTITION DETAIL A-T01
T01 1 1/2" = 1'-0"



A PARTITION DETAIL A-B01
B01 1 1/2" = 1'-0"

TYPE	DEPTH	FRAMING		DETAILS		INSUL THK
		WIDTH	SPACING (OC)	BOTTOM	TOP	
0A3A	4 7/8"	3 5/8"	16"	B01	T01	3 1/2"

"WHERE PARTITION ALIGNS WITH EXISTING WALL, MATCH EXISTING STUD SIZE. VERIFY IN FIELD.



A PARTITION A
1 1/2" = 1'-0"

TYPE A

PARTITION TYPES - NAMING

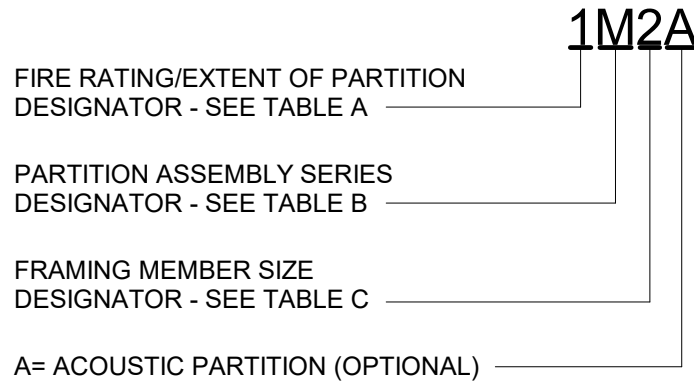


TABLE A - RATING/EXTENT OF PARTITION

DES.	CONDITION
0	NON-RATED, FULL-HEIGHT, BOTTOM 01/TOP 01
1, 2, 3	RATING IN HOURS, FULL HEIGHT, BOTTOM 02/TOP 02
U	FINISH 6" ABOVE CEILING, BOTTOM 01/TOP 03
	PARTITION UNDER CEILING, BOTTOM 01/TOP 07
H	PARTIAL HEIGHT PARTITION BOTTOM 10/TOP 10

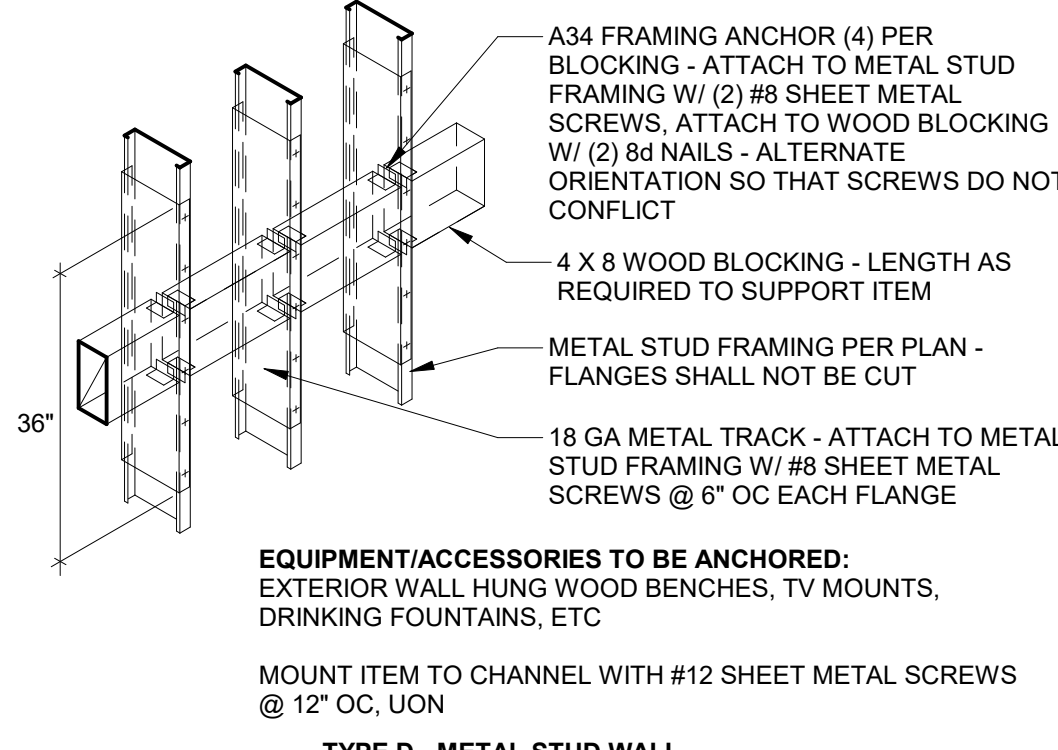
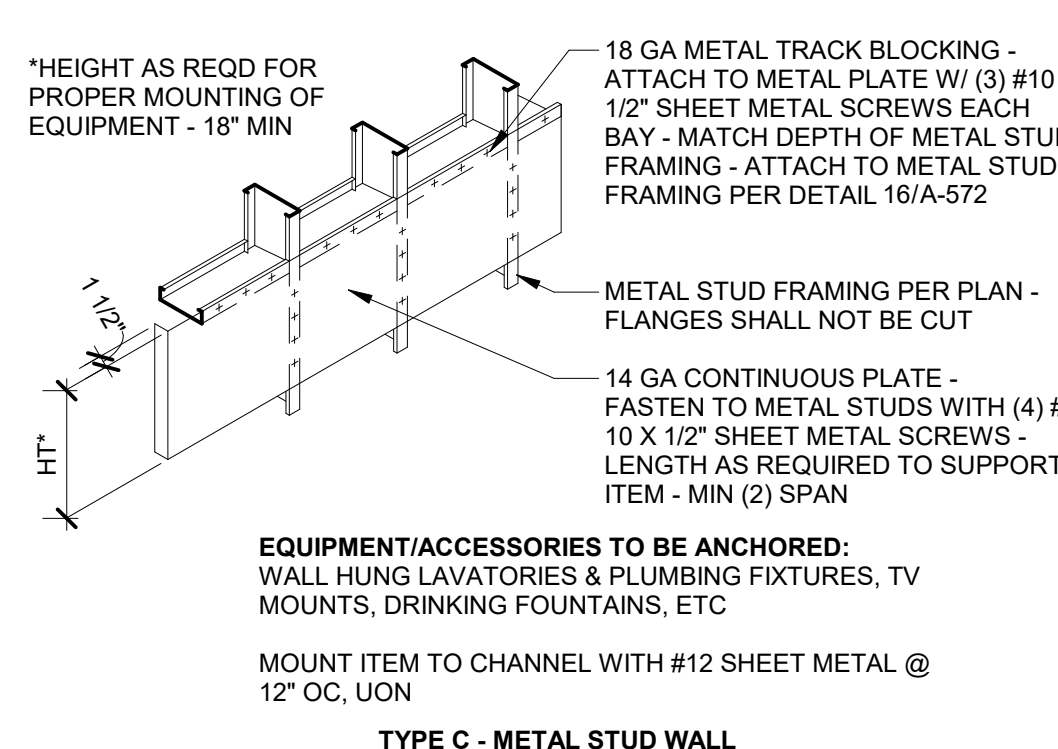
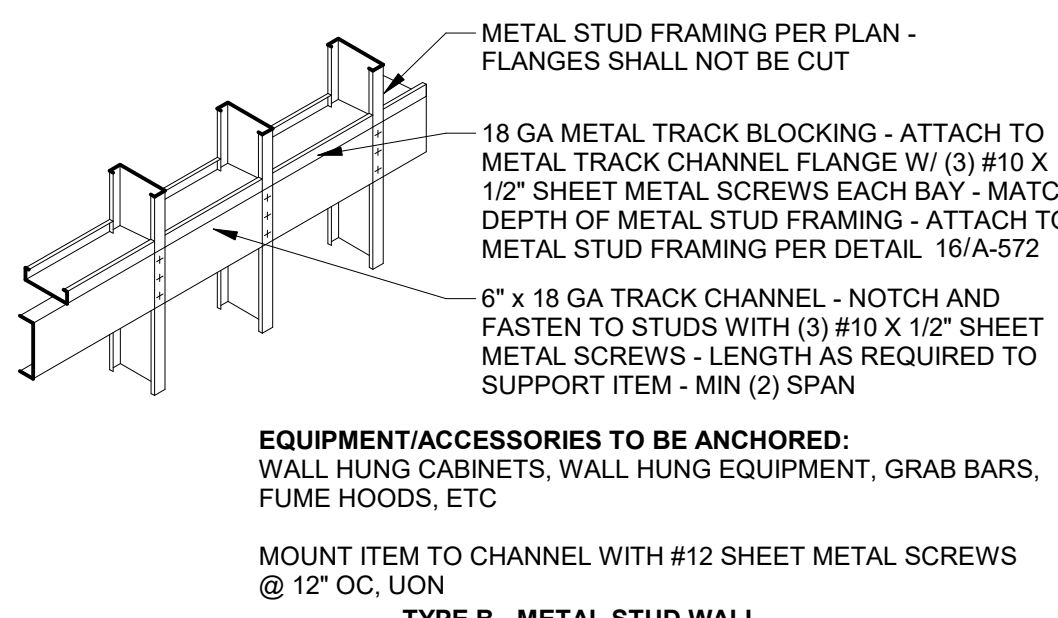
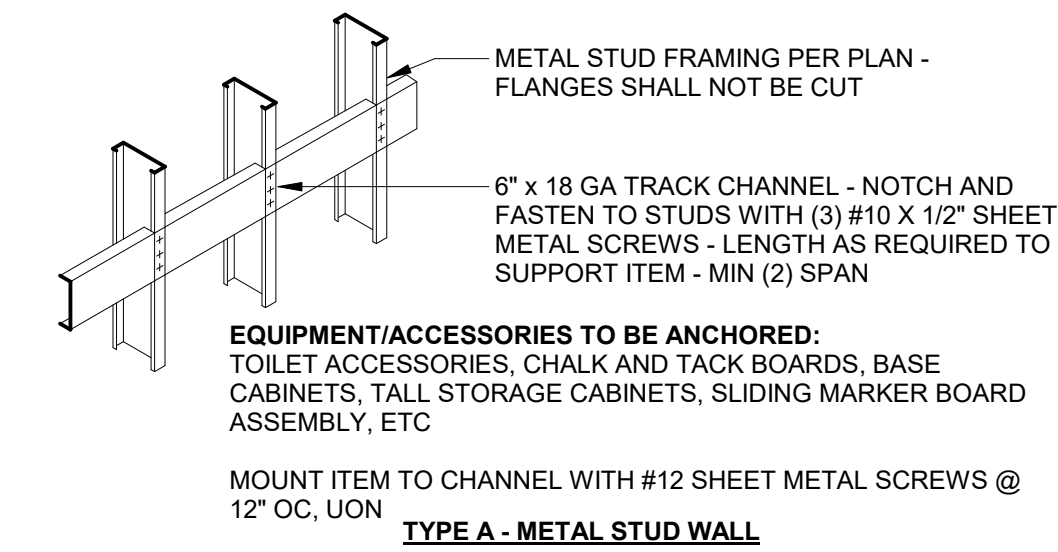
TABLE B - PARTITION ASSEMBLY SERIES

TYPE	SHEATHING	FRAMING	SHEATHING
A	1 LAYER	MTL C-STUD	1 LAYER
B	2 LAYERS	MTL C-STUD	2 LAYERS
C	1 LAYER	MTL C-STUD	2 LAYERS
D	1 LAYER	MTL C-STUD	NONE
E	2 LAYERS	MTL C-STUD	NONE
F	1 LAYER	HAT CHANNEL	NONE
G	2 LAYERS	HAT CHANNEL	NONE
H	1 LAYER	MTL C-H STUD	SHAFT LINER
J	2 LAYERS	MTL C-H STUD	SHAFT LINER
K	1 LAYER	2 MTL C-STUD	1 LAYER
L	2 LAYERS	2 MTL C-STUD	2 LAYERS
M		MTL	
N	1 LAYER	WD STUD	1 LAYER
P	2 LAYERS	WD STUD	2 LAYERS
Q	1 LAYER	WD STUD	2 LAYERS
R	1 LAYER	WD STUD	NONE
S	2 LAYERS	WD STUD	NONE
T	1 LAYER	WD FURRING	NONE
U	2 LAYERS	WD FURRING	NONE
V	RESERVED FOR PROJECT SPECIFIC ASSIGNMENT		
W	RESERVED FOR PROJECT SPECIFIC ASSIGNMENT		
X	RESERVED FOR PROJECT SPECIFIC ASSIGNMENT		
Y	RESERVED FOR PROJECT SPECIFIC ASSIGNMENT		
Z	RESERVED FOR PROJECT SPECIFIC ASSIGNMENT		

TABLE C - FRAMING MEMBER SIZE

DES.	MTL STUD WIDTH	MTL C-H STUD WIDTH (NOM)	WD STUD WIDTH (NOM)	CMU WIDTH (NOM)
-		NO FRAMING		
0	7/8" HAT CH		1"	10"
1	1 1/2" HAT CH			
2	2 1/2"	2 1/2"	2"	12"
3	3 5/8"	-	4"	4"
4	4"	4"	4"	4"
6	6"	6"	6"	6"
8	8"	-	8"	8"

Partition Types



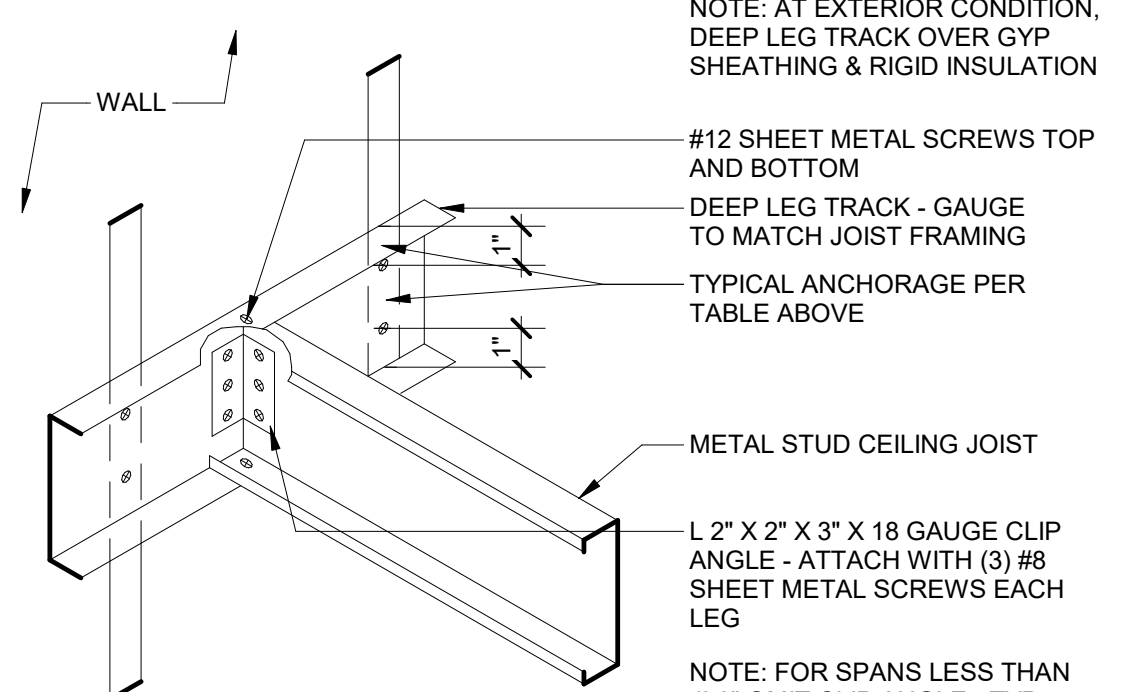
TYPICAL NOTES:

1. WALL STUD FLANGES ARE CONTINUOUS
2. SEE TYPICAL WALL FRAMING SCHEDULE FOR GAUGE OF STUDS
3. VERIFY LENGTH, HEIGHT, LOCATION AND NUMBER REQUIRED WITH EQUIPMENT AND ACCESSORY MANUFACTURER.
4. CONTRACTOR IS RESPONSIBLE TO INSURE WALL FINISH IS SMOOTH & PLUMB FOR THE ITEM THAT BACKING PLATE IS INTENDED FOR

18 TYP METAL FRAMING BACKING

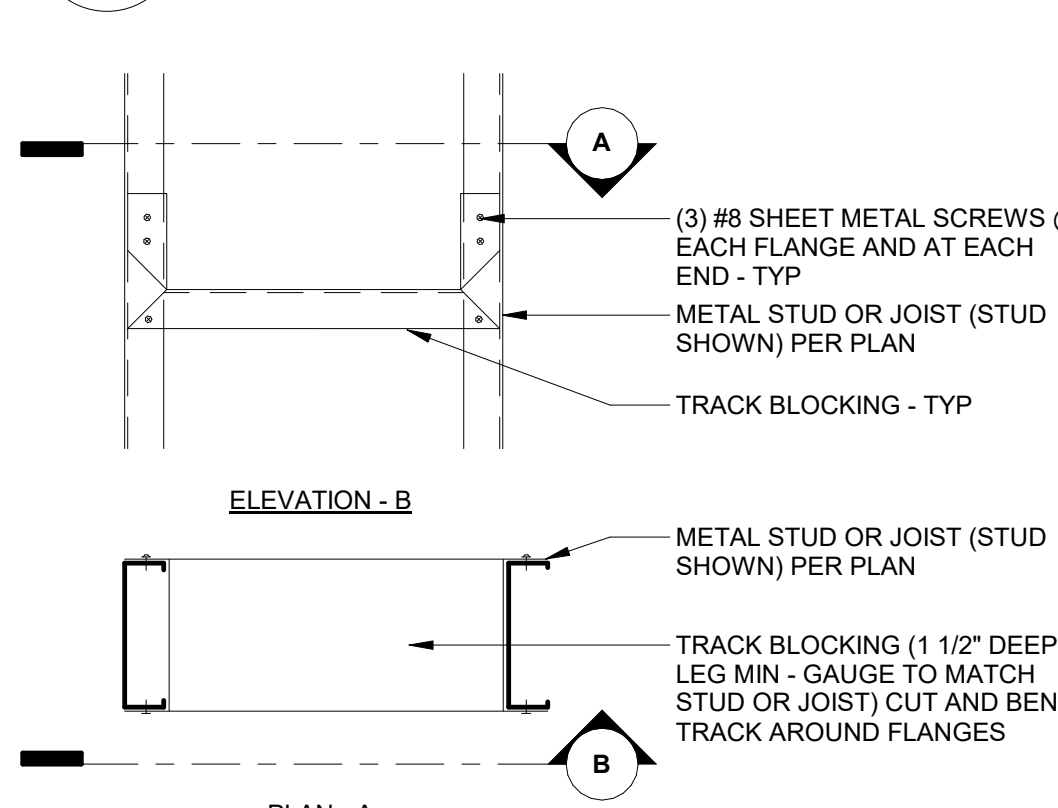
1/2" = 1'-0"

CONDITION	ANCHORAGE
CONCRETE	(2) 3/8" Ø X 2" MIN EMBEDMENT HLTI KWIK BOLT TZ EXPANSION ANCHORS @ 24" OC MAX - ICC ESR 1917
METAL	(2) #10 SHEET METAL SCREWS @ 16" OC MAX AT EXTERIOR CONDITION, DEEP LEG TRACK OVER GYP SHEATHING & RIGID INSULATION: (3) #10 SHEET METAL SCREWS @ 16" OC MAX
STRUCTURAL STEEL	(2) 6/177" Ø X 1 1/4" HLTI EDS LOW VELOCITY POWER DRIVEN FASTENERS @ 24" OC MAX - ICC ESR #1663



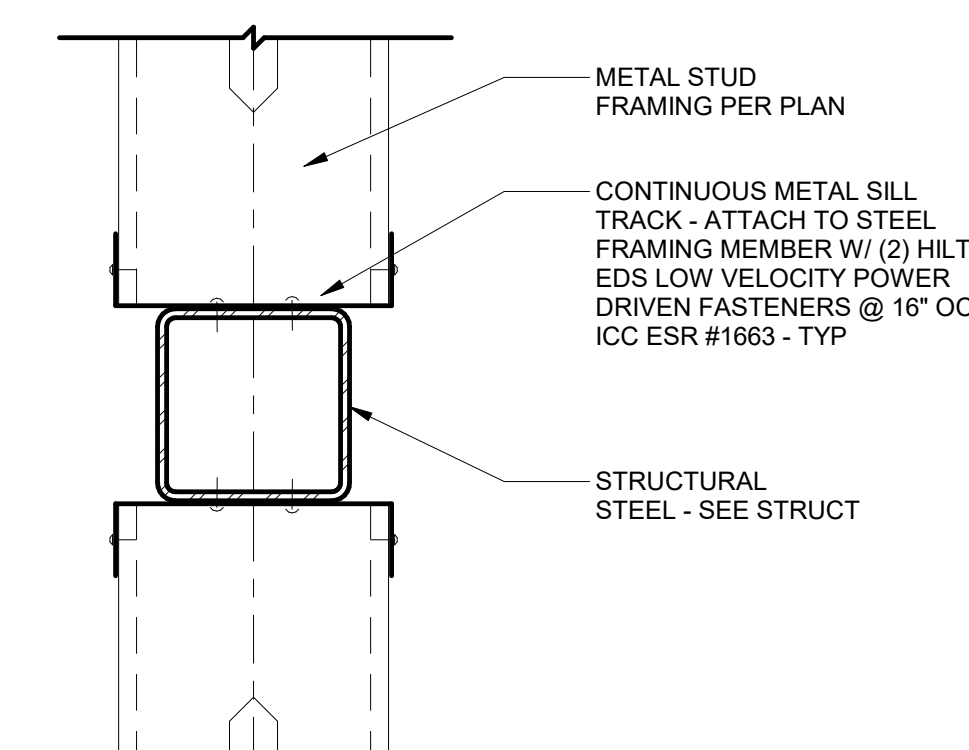
17 TYP METAL FRAMING LEDGER ATTACHMENT

1 1/2" = 1'-0"



16 TYP TRACK BLOCKING

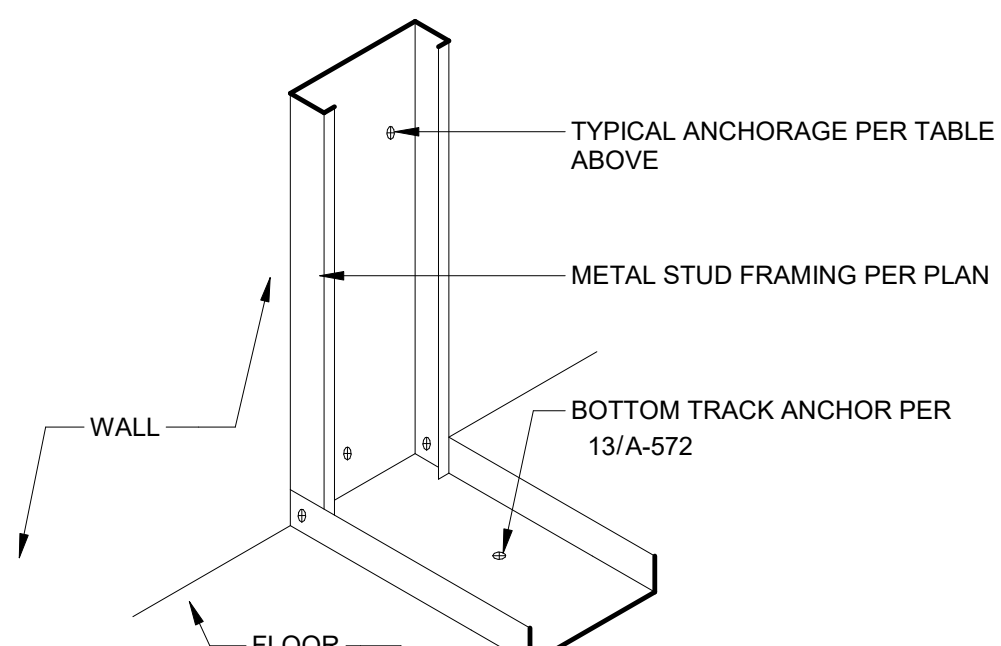
1 1/2" = 1'-0"



TYP METAL FRAMING WALL ATTACHMENT TO STRUCTURAL STEEL

3" = 1'-0"

CONDITION	ANCHORAGE
CONCRETE	3/8" Ø X 2" MIN EMBEDMENT HLTI KWIK BOLT TZ EXPANSION ANCHORS @ 24" OC MAX - ICC ESR #1917
METAL	(2) #10 SHEET METAL SCREWS @ 16" OC MAX
STRUCTURAL STEEL	(2) 0.177" Ø X 1 1/4" HLTI EDS LOW VELOCITY POWER DRIVEN FASTENERS @ 24" OC MAX - ICC ESR #1663
CMU	(2) 1/4" HLTI KH-EZ SCREW ANCHORS W/ EMBED 1 5/8" @ 24" OC - ICC ESR #3056

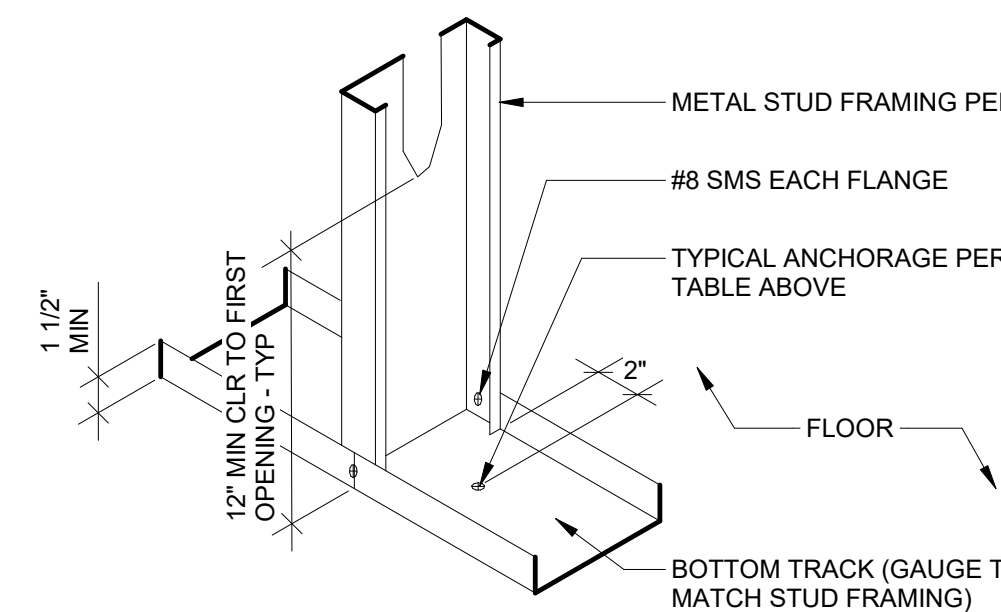


TYP METAL FRAMING WALL ATTACHMENT

1 1/2" = 1'-0"

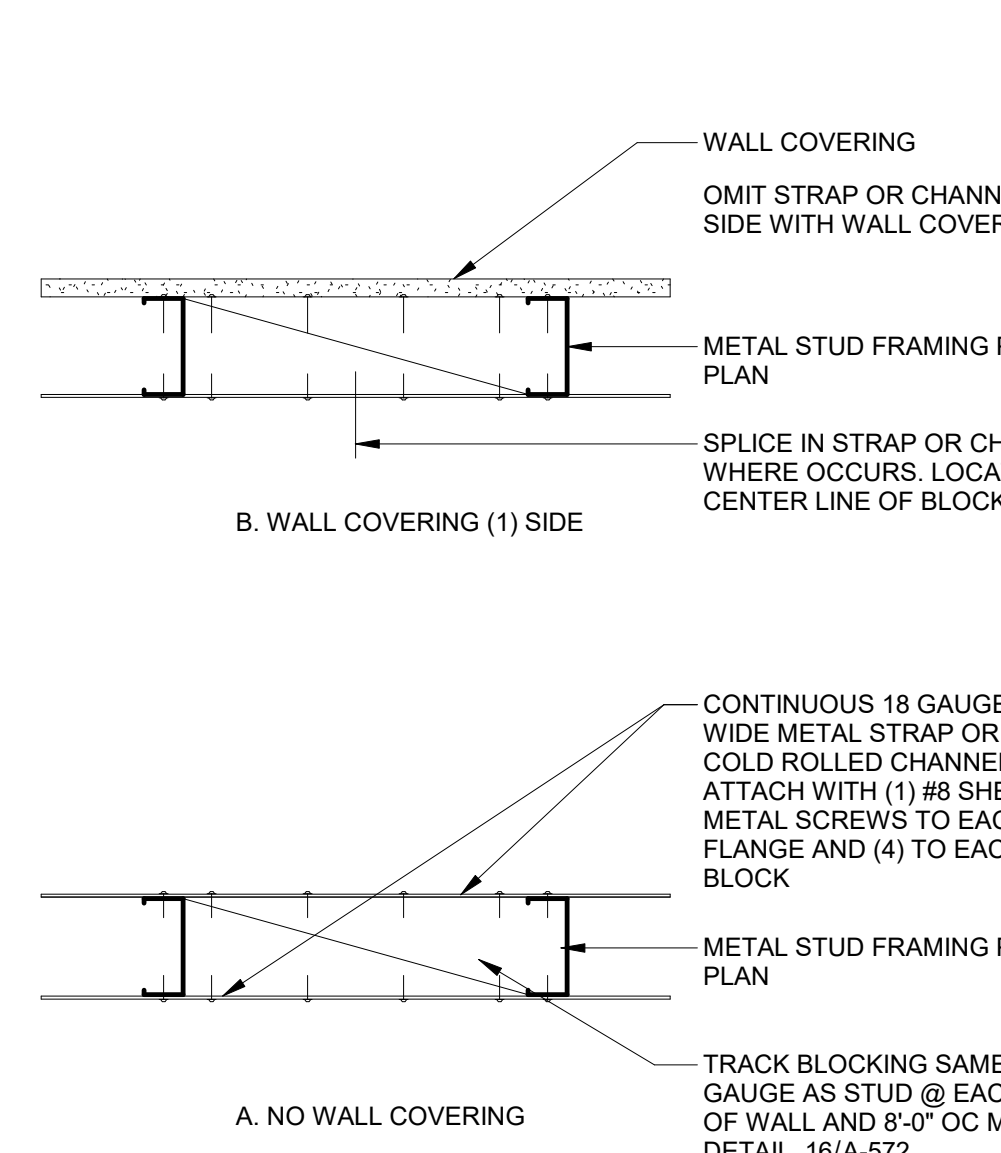
CONDITION	ANCHORAGE
CONCRETE SLAB	METAL TRACK - ATTACH W/ 0.157 SHANK Ø X 1 1/2" MIN EMBEDMENT HLTI X-U @ 32" OC MAX W/ STEEL WASHERS - 6" FROM ENDS - ICC ESR #2269
CONCRETE COMPOSITE FLOOR DECK	METAL TRACK - ATTACH W/ 0.157 SHANK Ø X 3/4" MIN EMBEDMENT HLTI X-U @ 32" OC MAX W/ STEEL WASHERS - 6" FROM ENDS - ICC ESR #2269
CONCRETE CURB	SEE STRUCTURAL DRAWINGS

NOTE: PROVIDE ADDITIONAL ANCHORAGE @ EACH SIDE OF JAMB STUD AND EACH BACKING PLATE STUD.



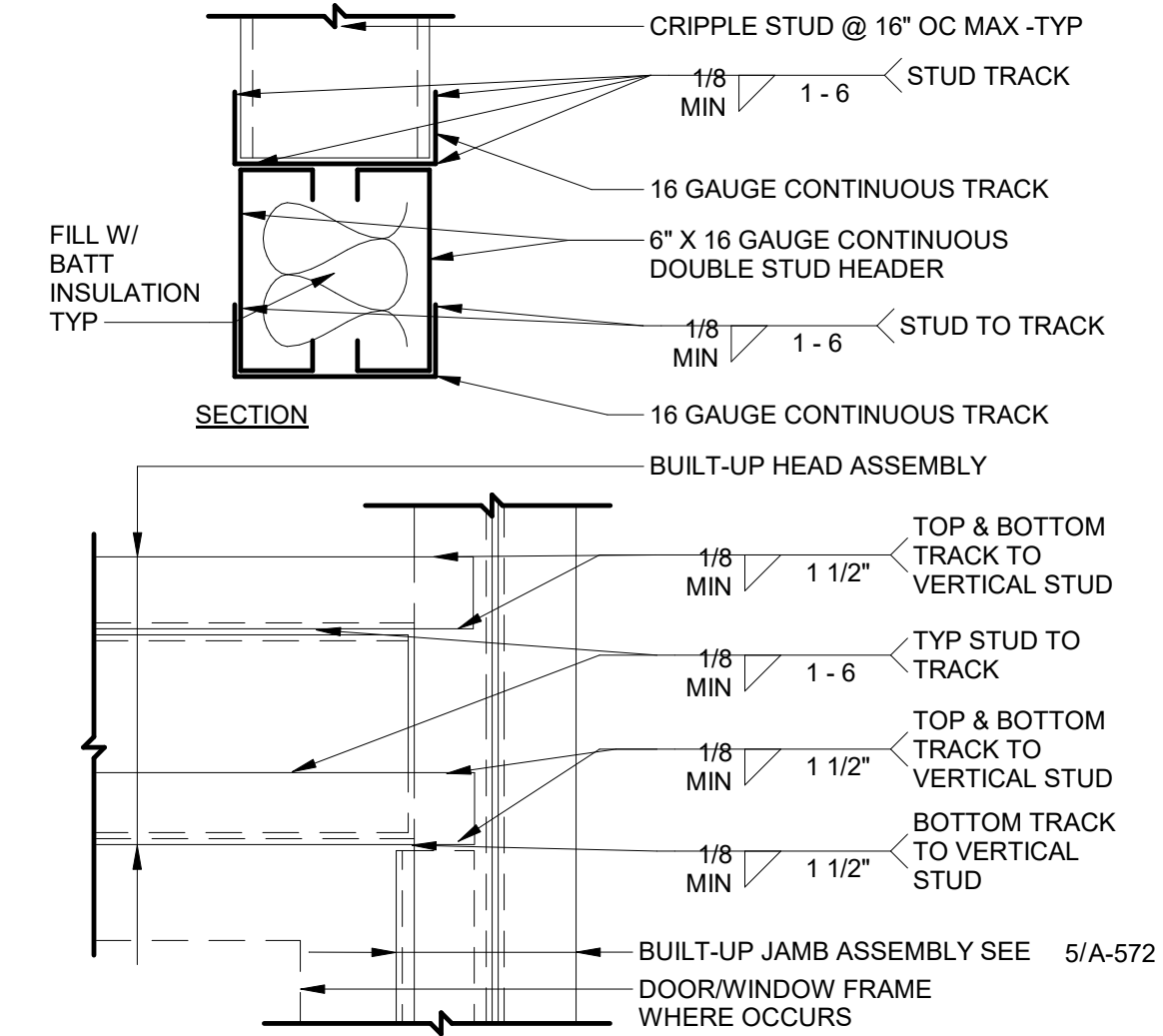
TYP BOTTOM TRACK ATTACHMENT

1 1/2" = 1'-0"



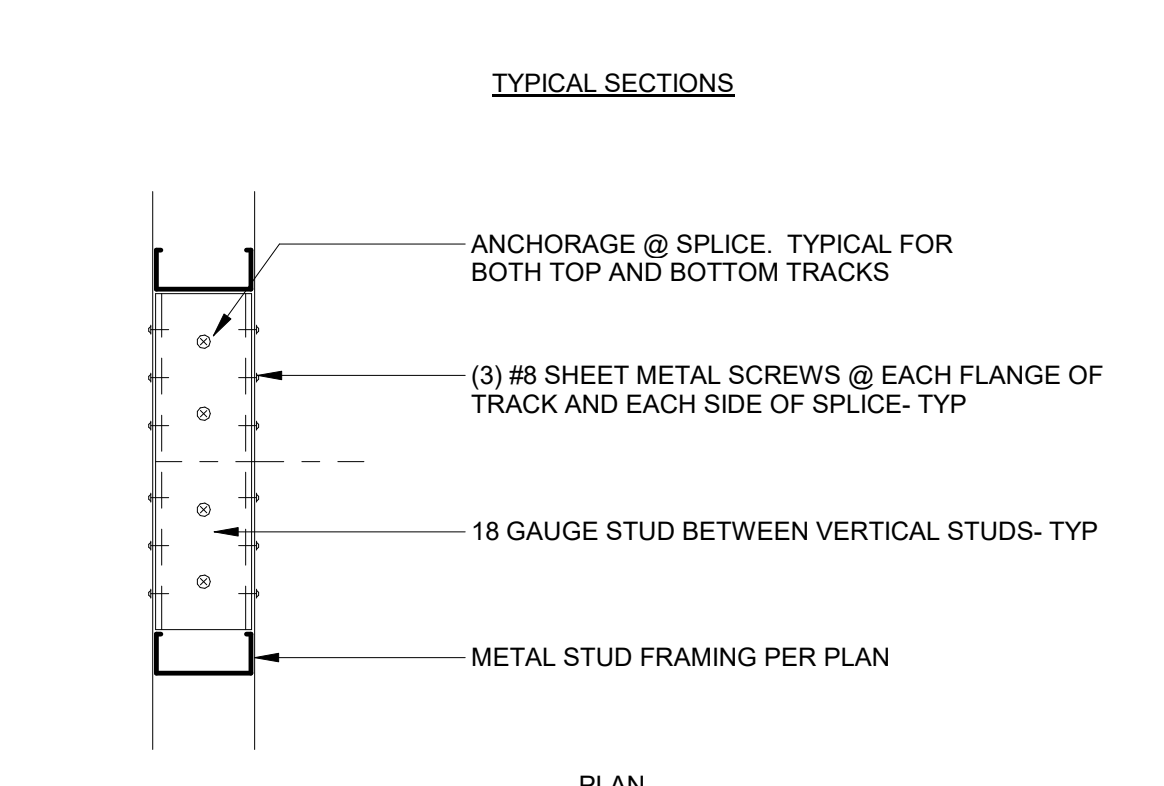
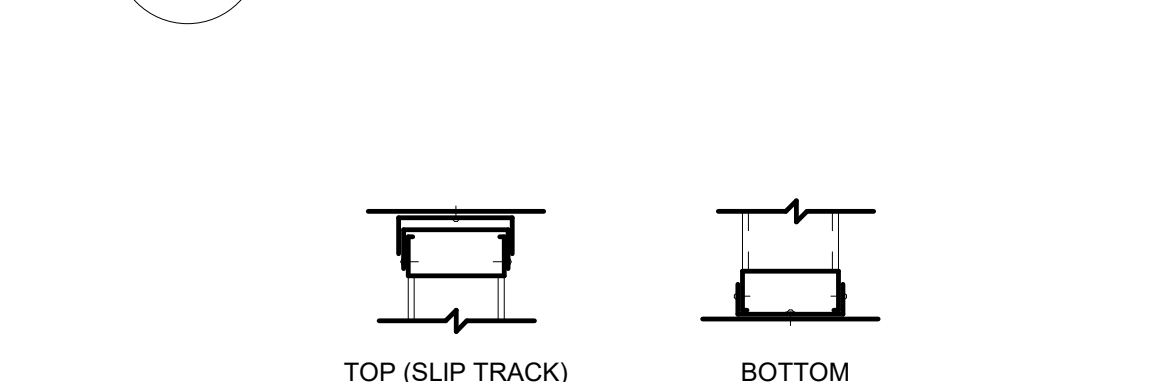
TYPICAL BRIDGING

1 1/2" = 1'-0"



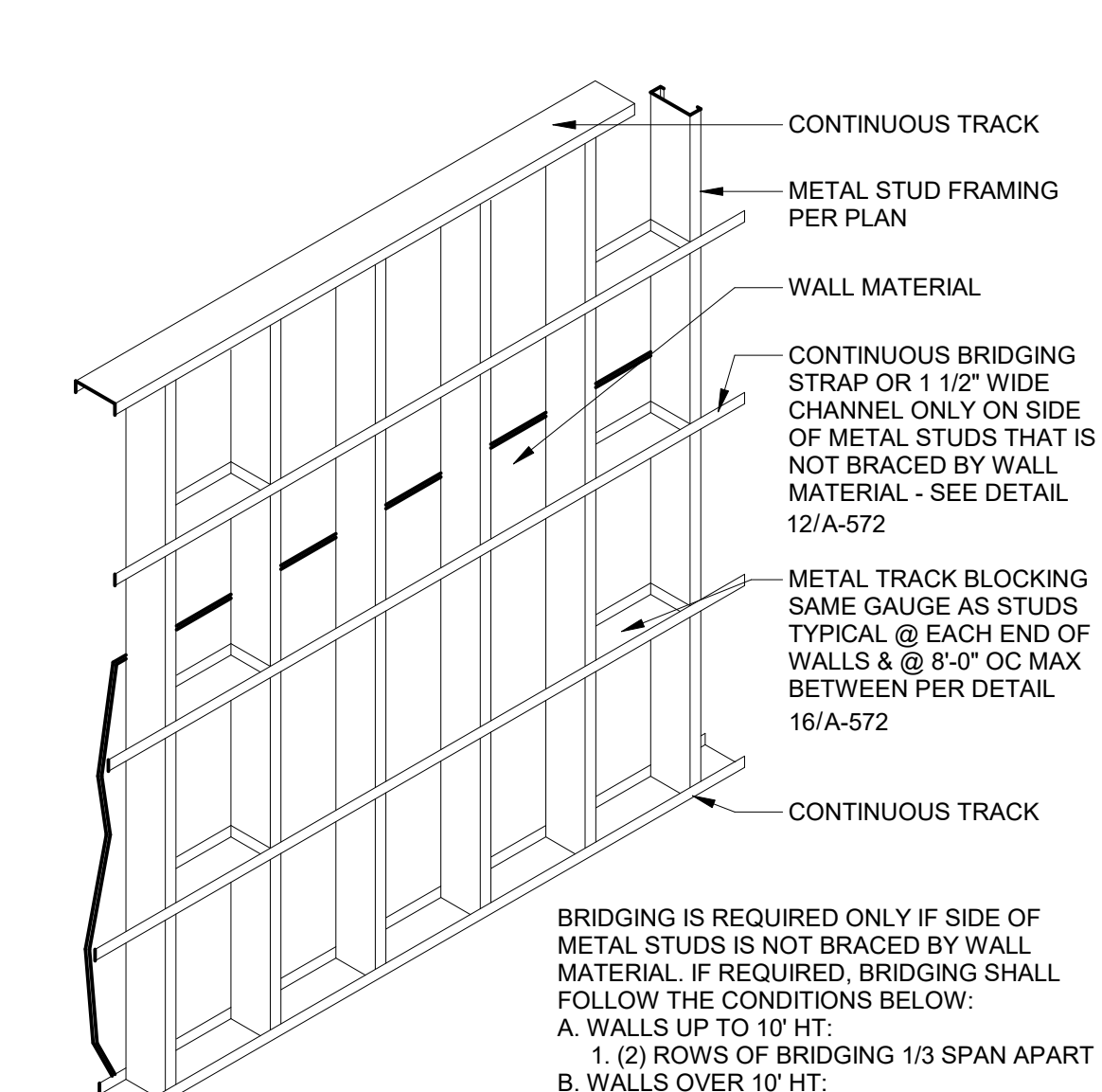
OPENING HEADER - 16'-0" MAX WIDTH

3" = 1'-0"



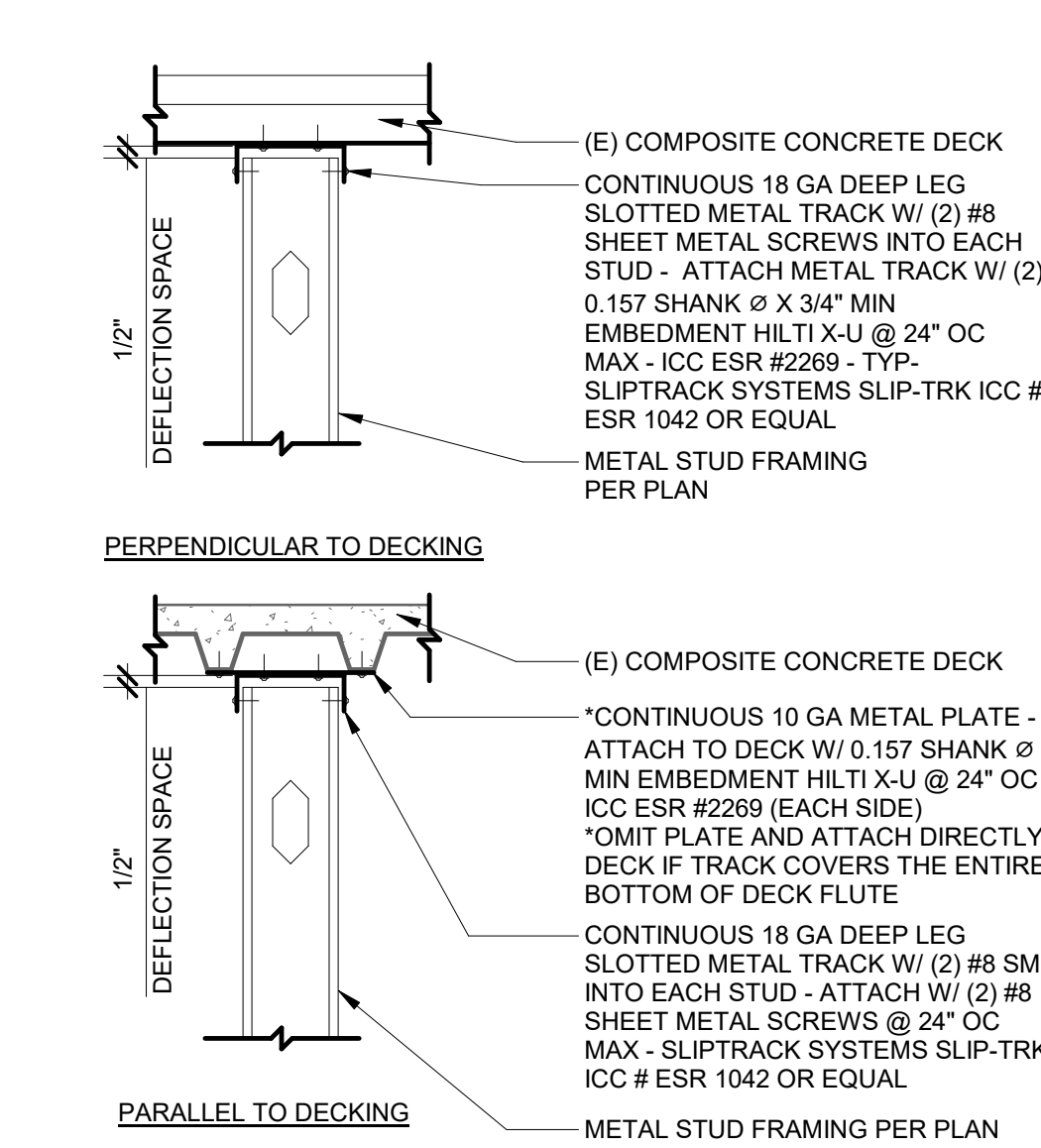
TYP METAL FRAMING TRACK SPLICE

1 1/2" = 1'-0"



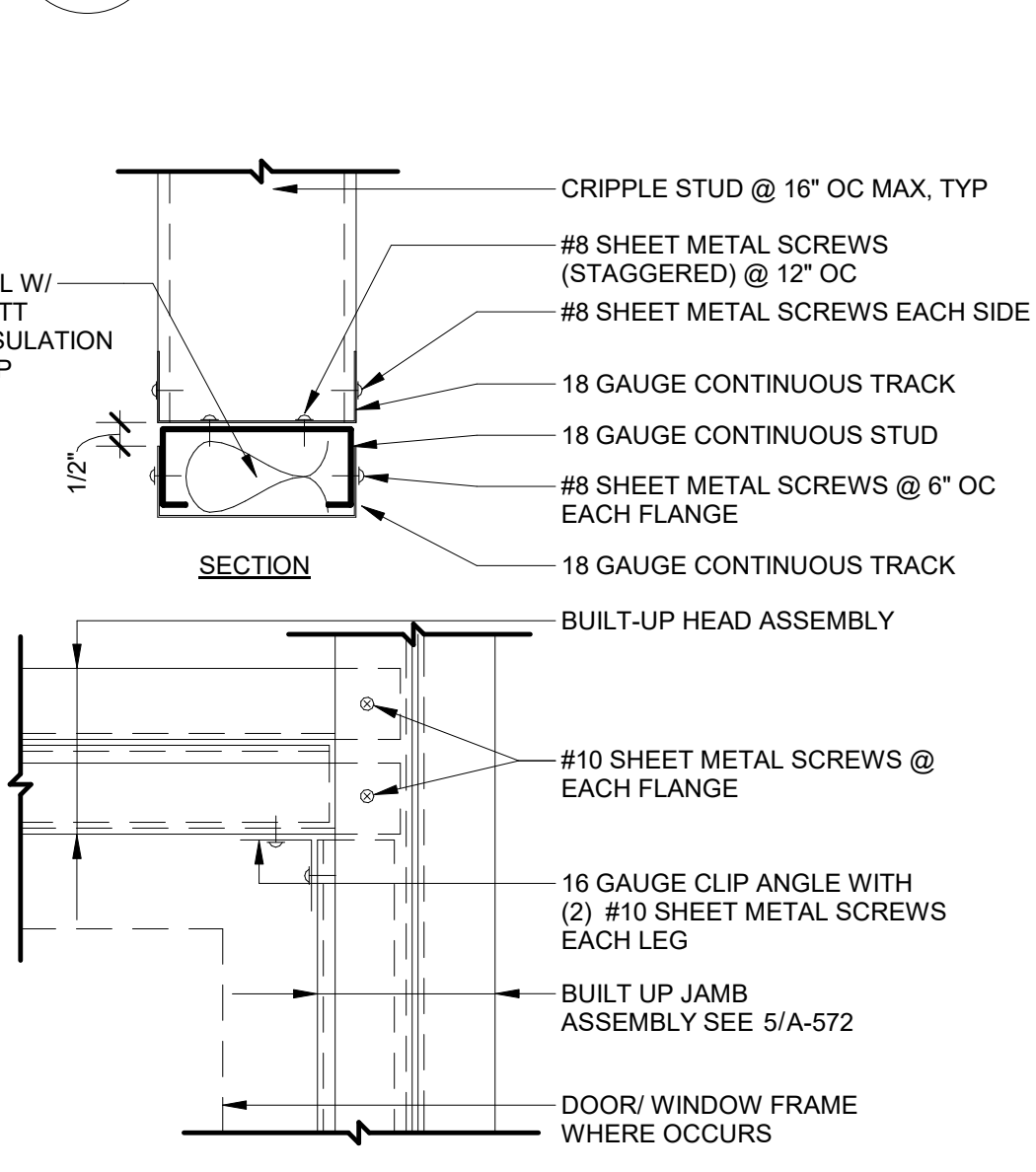
TYP METAL FRAMING BRIDGING

1/2" = 1'-0"



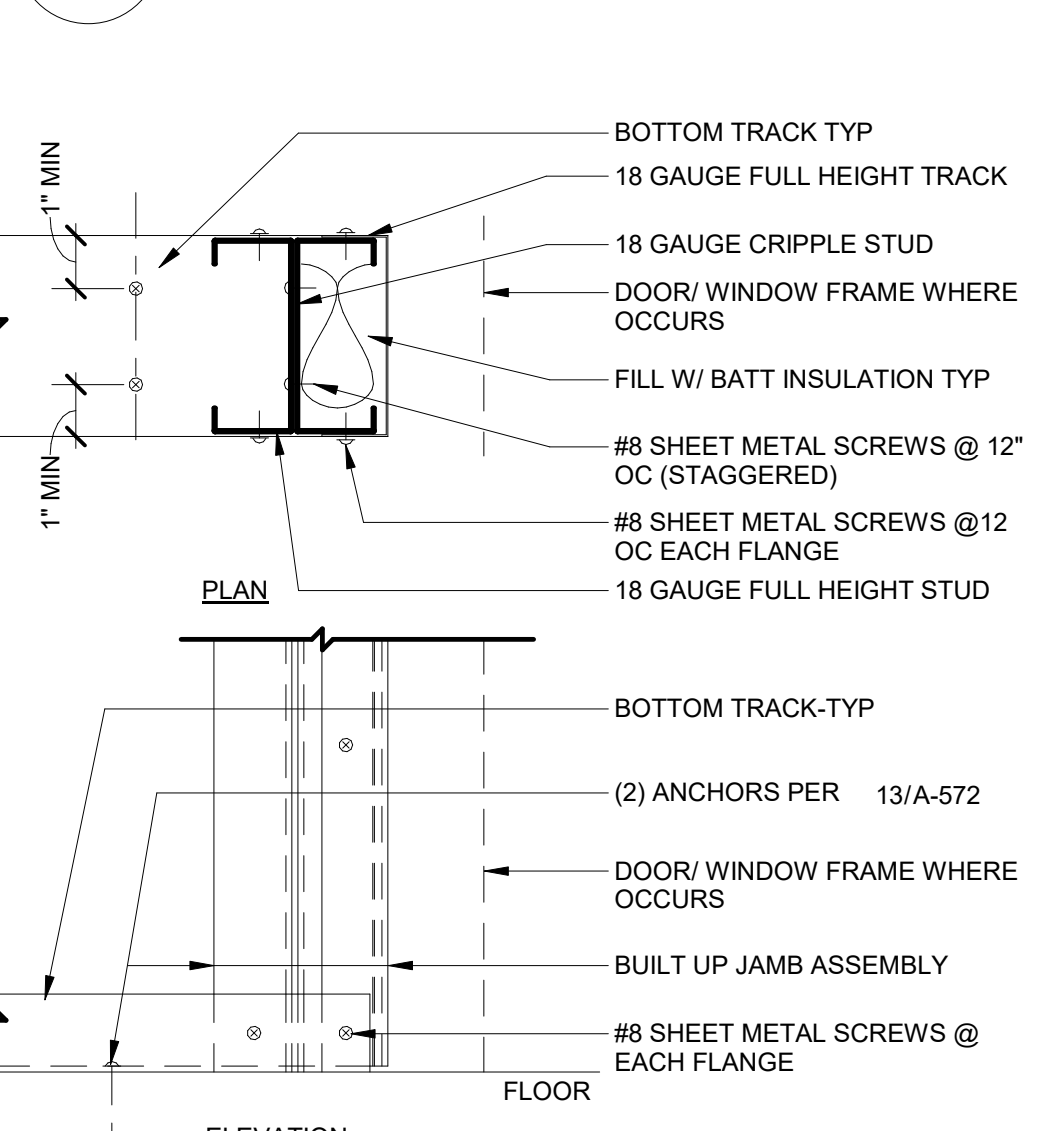
TYP TRACK ATTACHMENT AT DECK

1 1/2" = 1'-0"



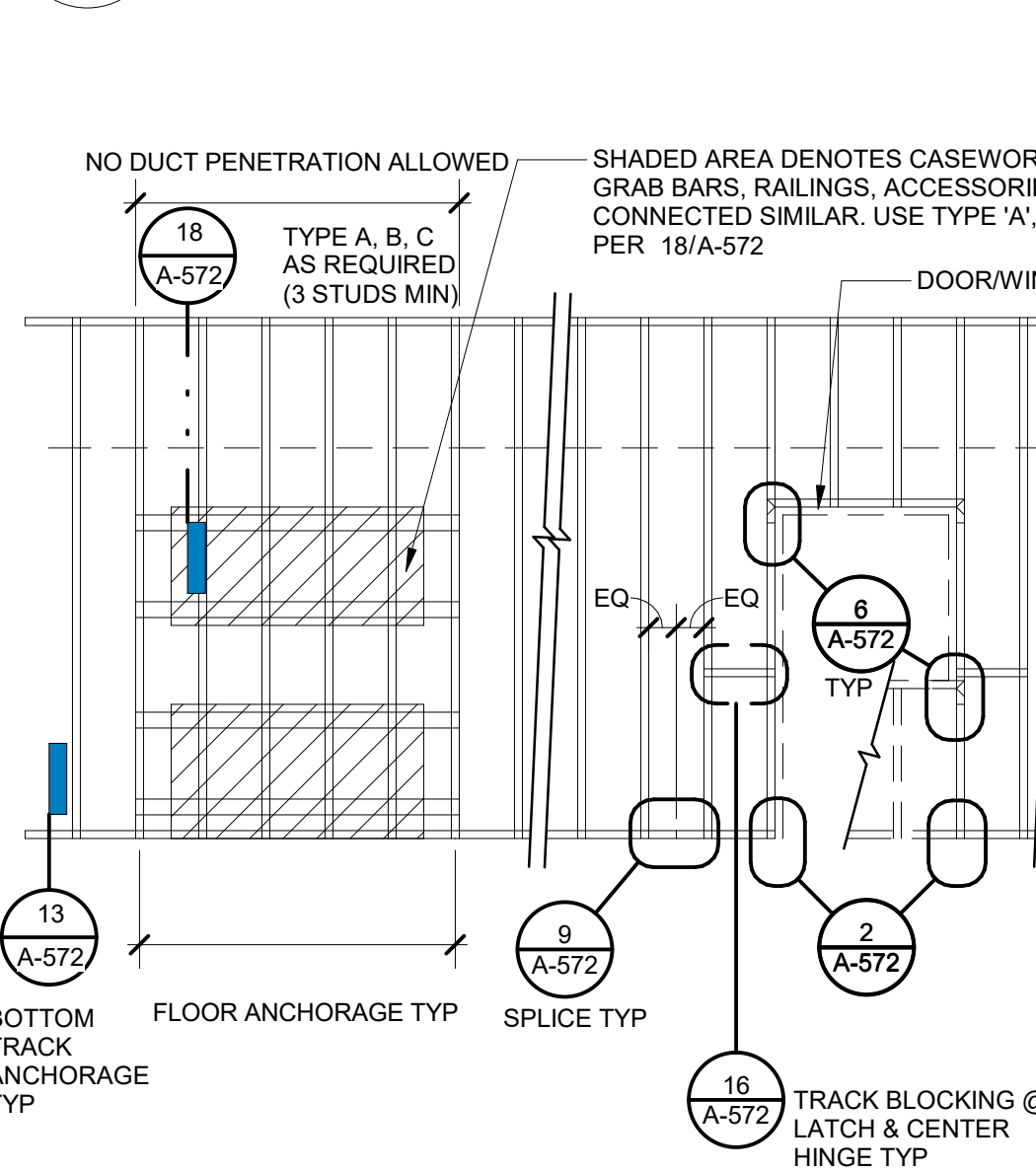
OPENING HEADER - 8'-6" MAX WIDTH

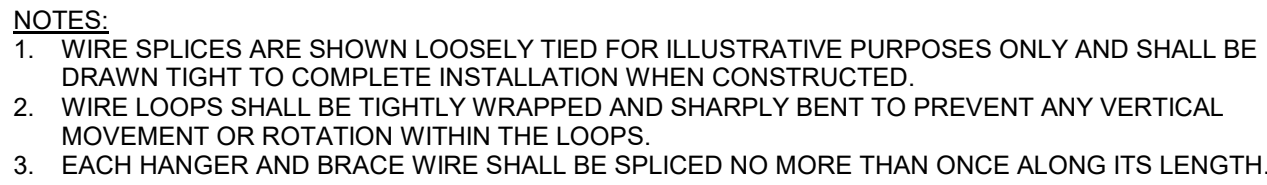
3" = 1'-0"



TRACK ANCHORAGE - 16'-0" WIDE OPENING

3" = 1'-0"



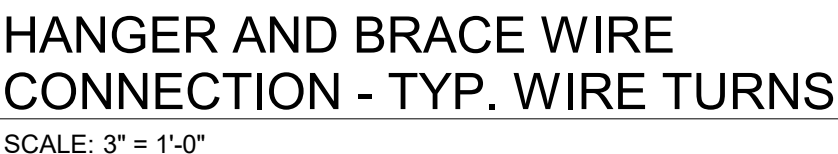


COMPRESSION STRUT CHANNEL SECTION	MAXIMUM LENGTH
250S125-33	5' - 10"
250S137-33	6' - 10"
362S137-33	8' - 0"
250S137-43	8' - 10"
400S137-43	10' - 10"



COMPRESSION STRUT CONNECTION TABLE

HANGER AND BRACE WIRE CONNECTION TABLE

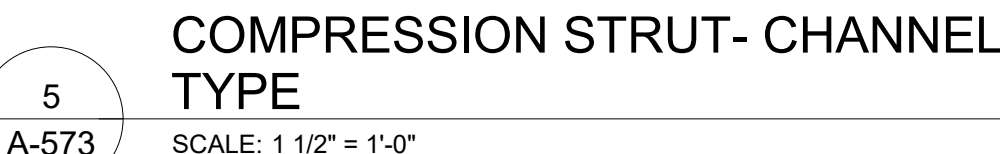


7 COMPRESSION STRUT TABLE
A-573 SCALE: 12" = 1'-0"



- NOTES:**
1. MACHINE BOLT IS NOT REQUIRED ON OPTION 3.
 2. OPTION 3 IS PERMITTED ONLY WHERE THE ROOF OR FLOOR STRUCTURE IS SAWN TIMBER WITHOUT GYPSUM BOARD.
 3. DIMENSION "L" SHALL NOT TO EXCEED THE ALLOWABLE LENGTH GIVEN IN THE TABLE ON **7/A-573** FOR THE COMPRESSION STRUT USED

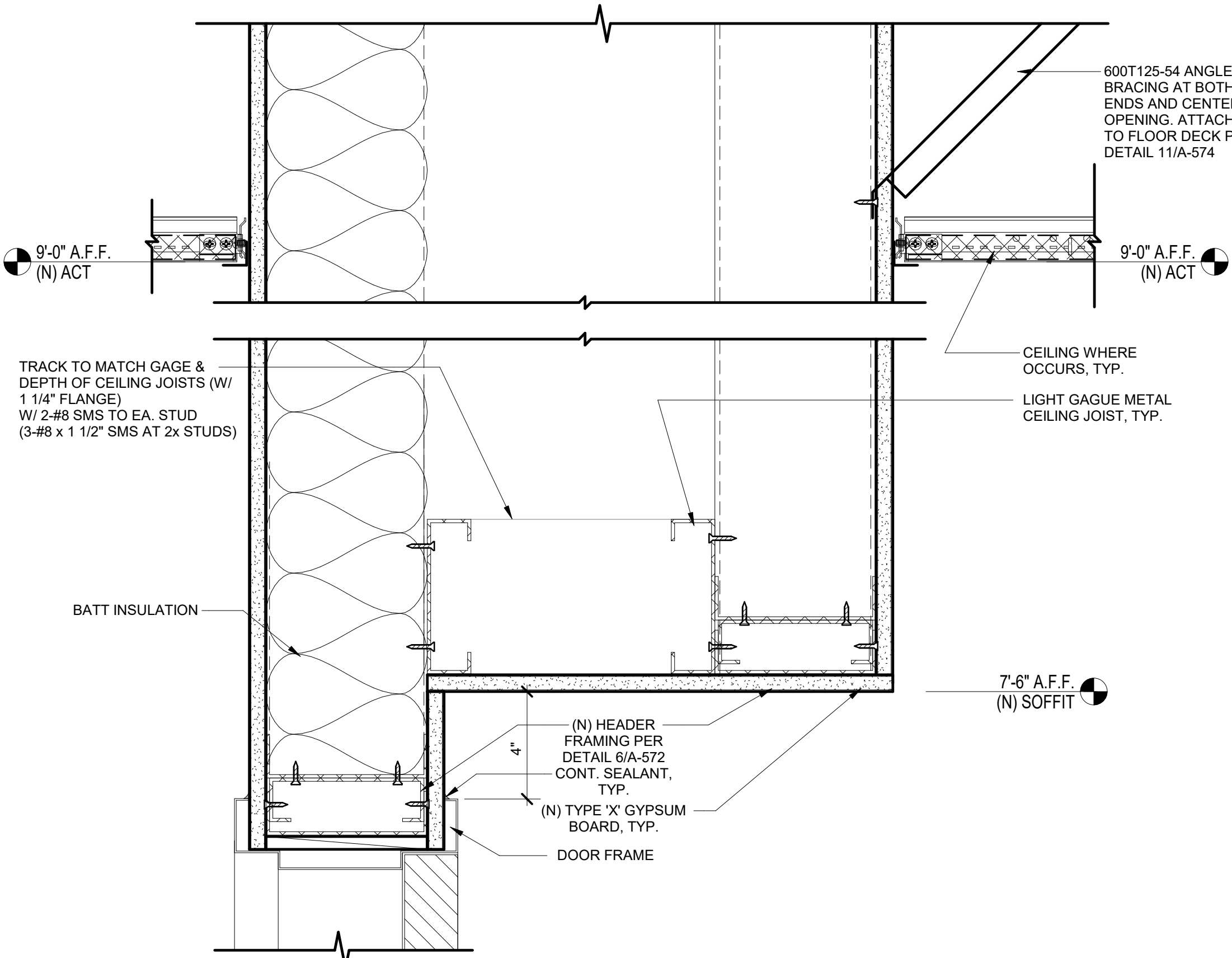
6 COMPRESSION STRUT - EMT TYPE
A-573 SCALE: 1 1/2" = 1'-0"



WALL/SUSPENDED CEILING INTERSECTION



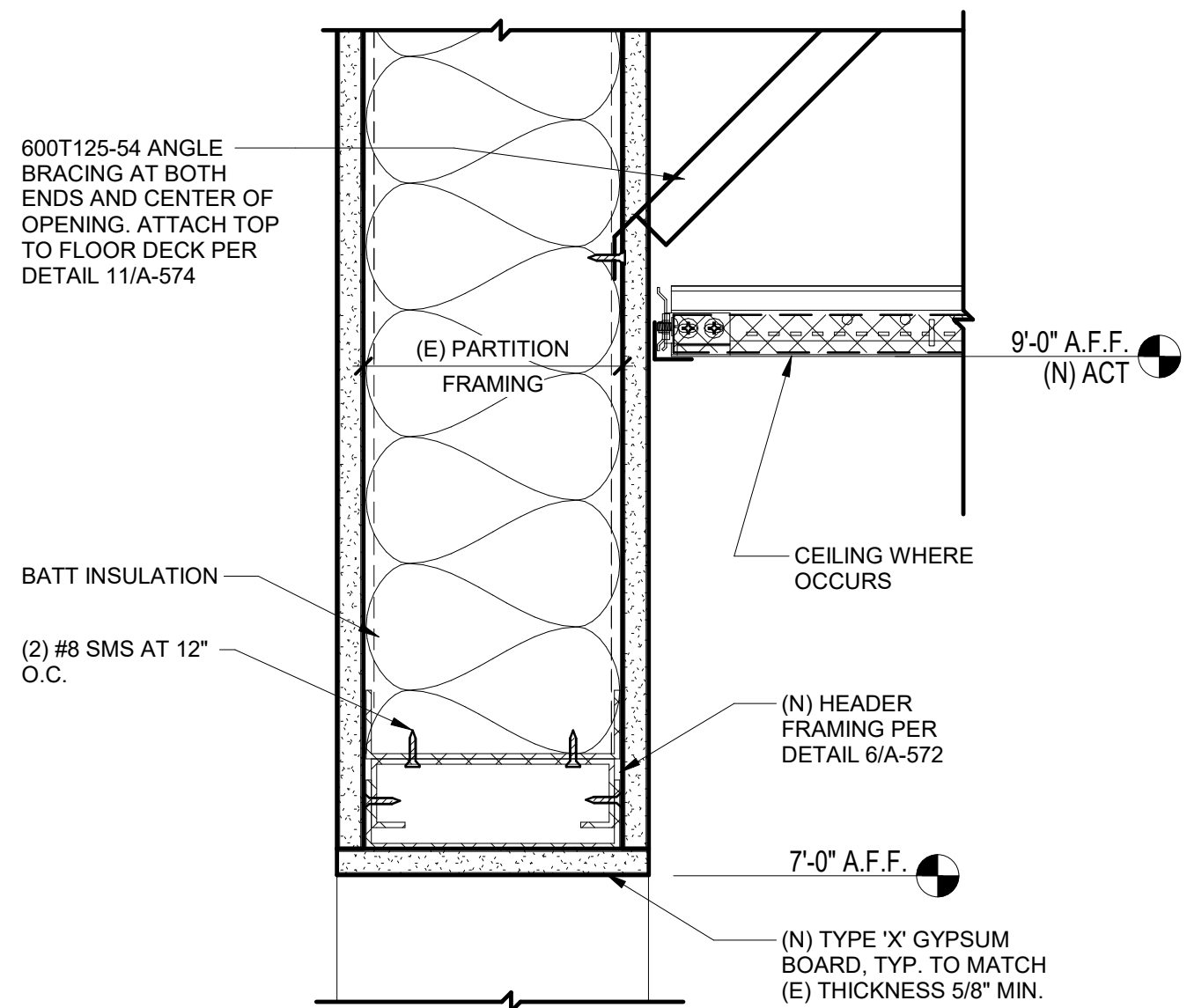
NOTE: SYSTEM COMPONENTS, MATERIALS, RUNNER SPLICES, AND INSTALLATION SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF CALIFORNIA BUILDING CODE AND THE RESPECTIVE I.C.C. EVALUATION REPORT AND LISTED BELOW FOR EACH MANUFACTURER AND SYSTEM.



15
A-574

CEILING TRANSITION AT DOOR AT CORRIDOR DOOR OPENINGS

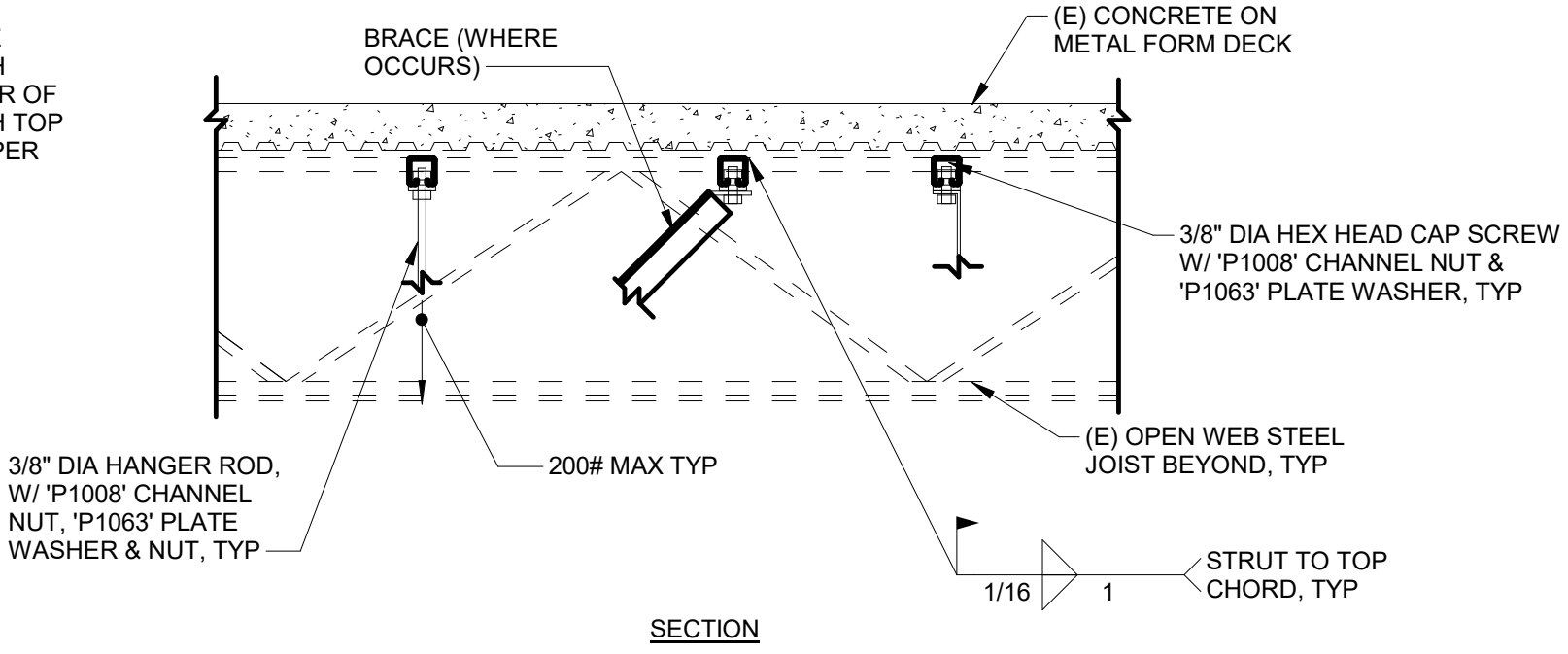
SCALE: 3" = 1'-0"



14
A-574

WALL OPENING HEAD

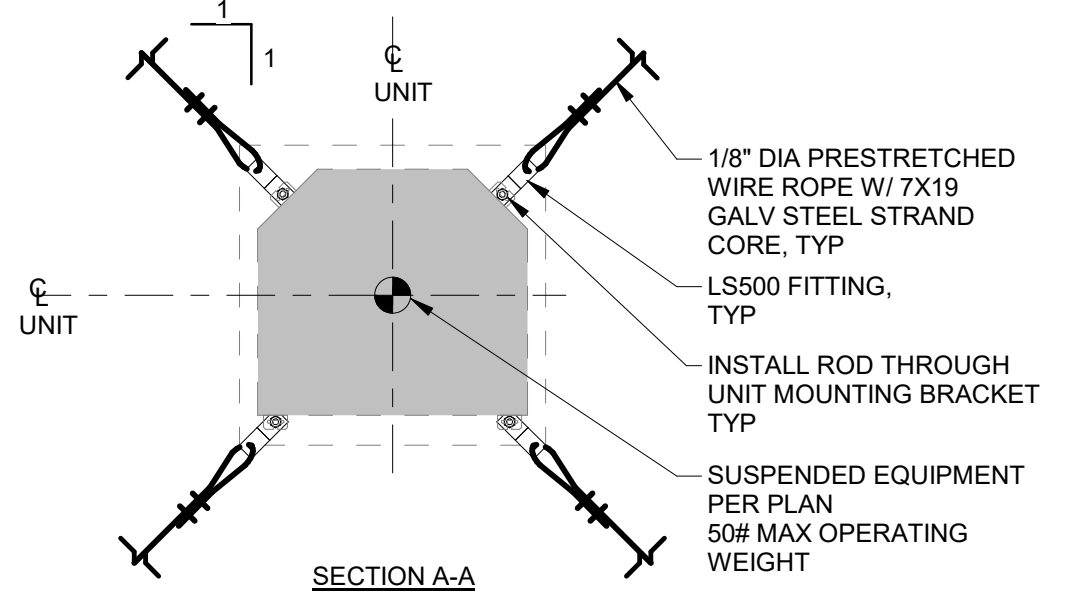
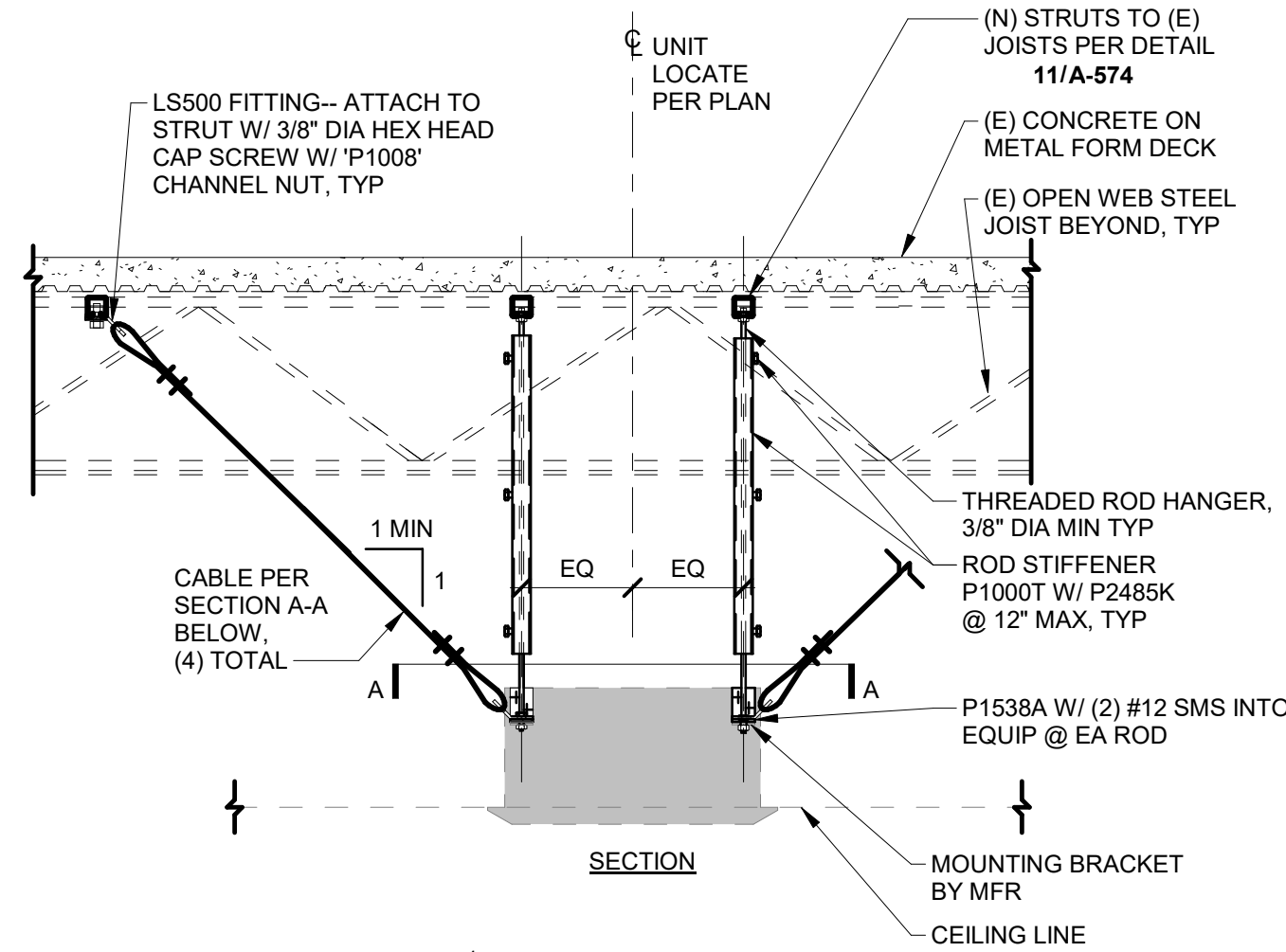
SCALE: 3" = 1'-0"



11
A-574

TYP. ATTACHMENTS TO (E) FLOOR DECK

SCALE: 1" = 1'-0"

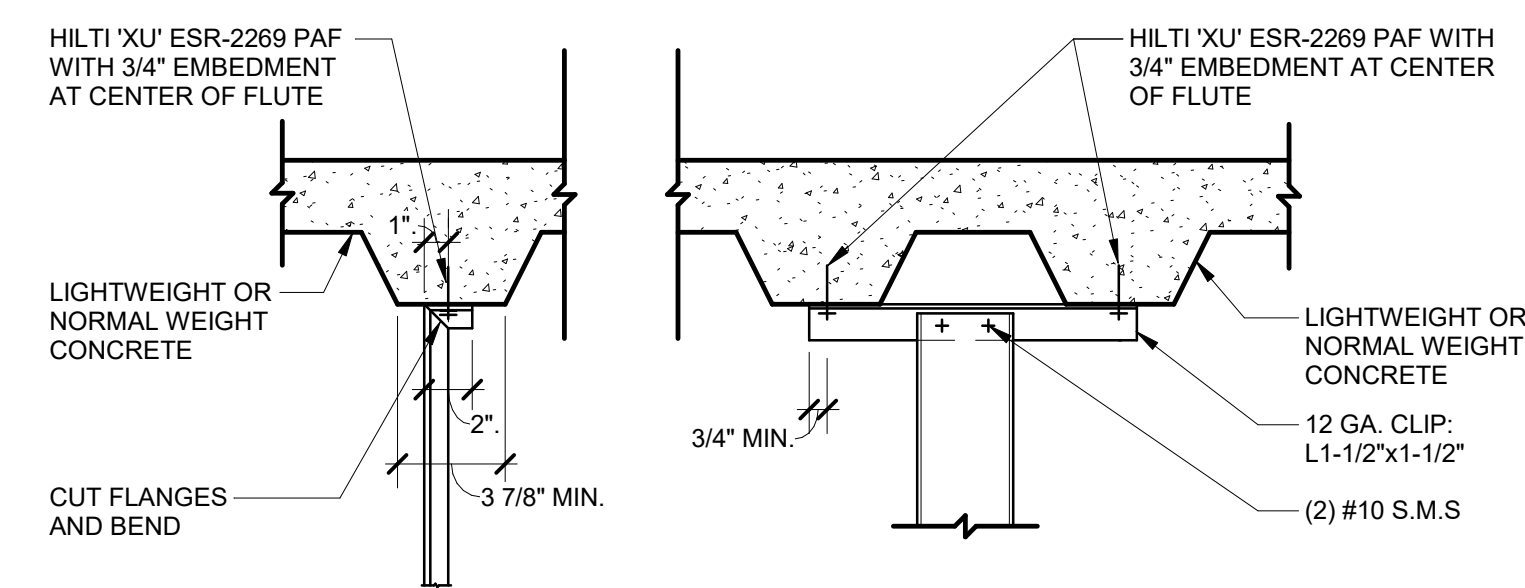


- NOTES:
1. ALL CHANNEL STRUTS AND FITTINGS SHALL BE UNISTRUT/ATKORE
 2. REF MECH DETAIL 3/M-002.

10
A-574

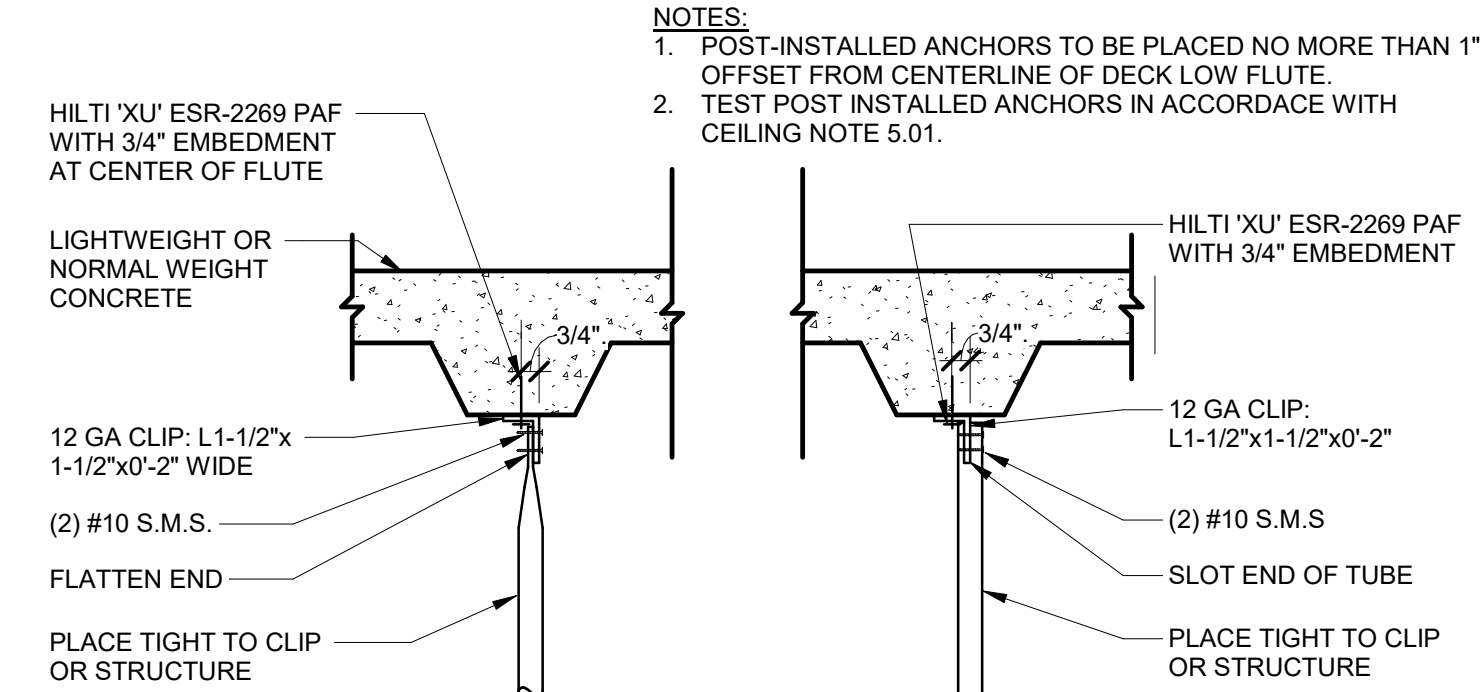
TYP. SUSPENDED FAN COIL (CEILING CASSETTE TYPE) 'FC' SUPPORT

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



CHANNEL STRUT: OPTION 1

CHANNEL STRUT: OPTION 2



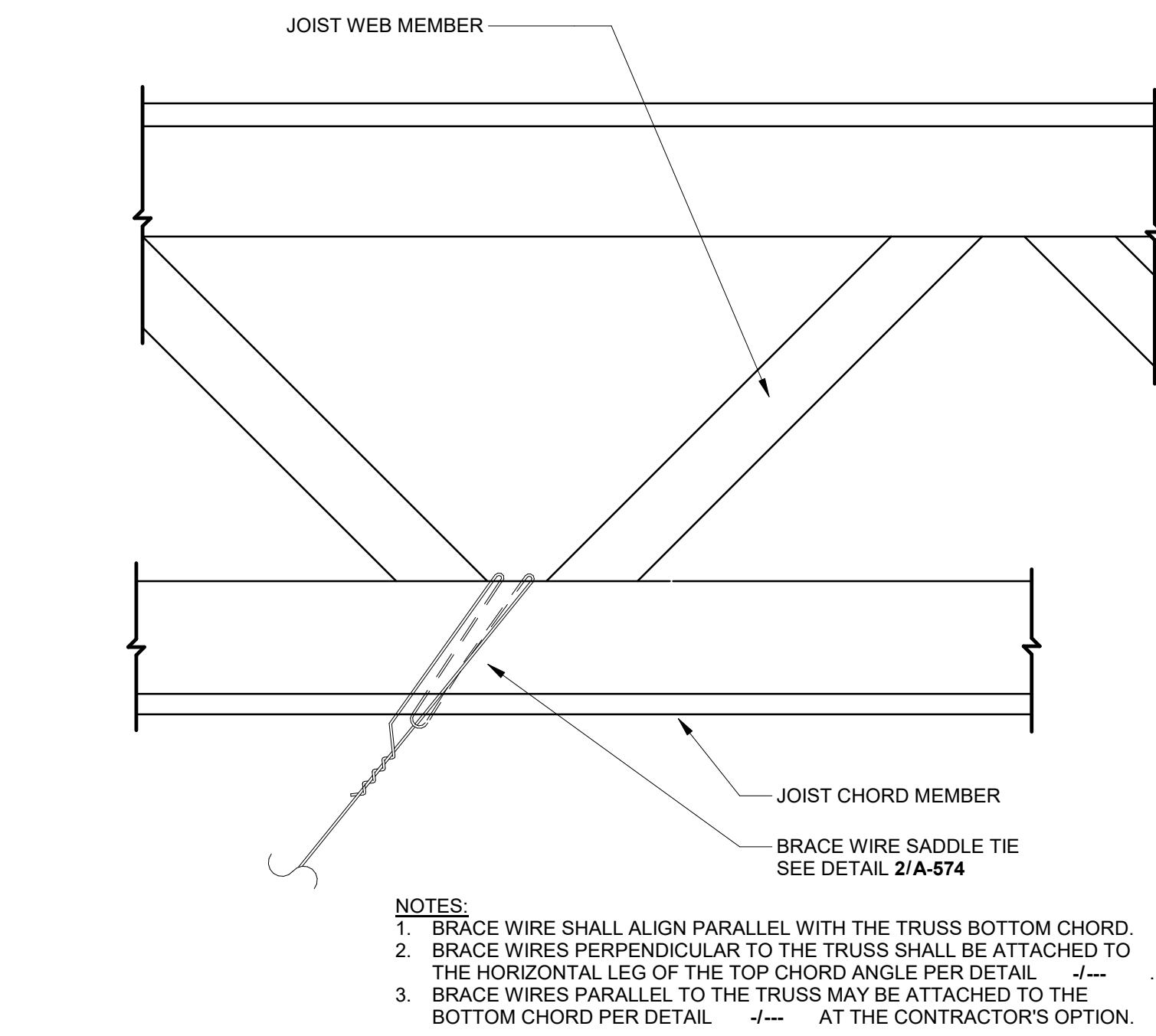
EMT STRUT: OPTION 1

EMT STRUT: OPTION 2

9
A-574

STRUT CONNECTION TO CONCRETE OVER METAL DECK

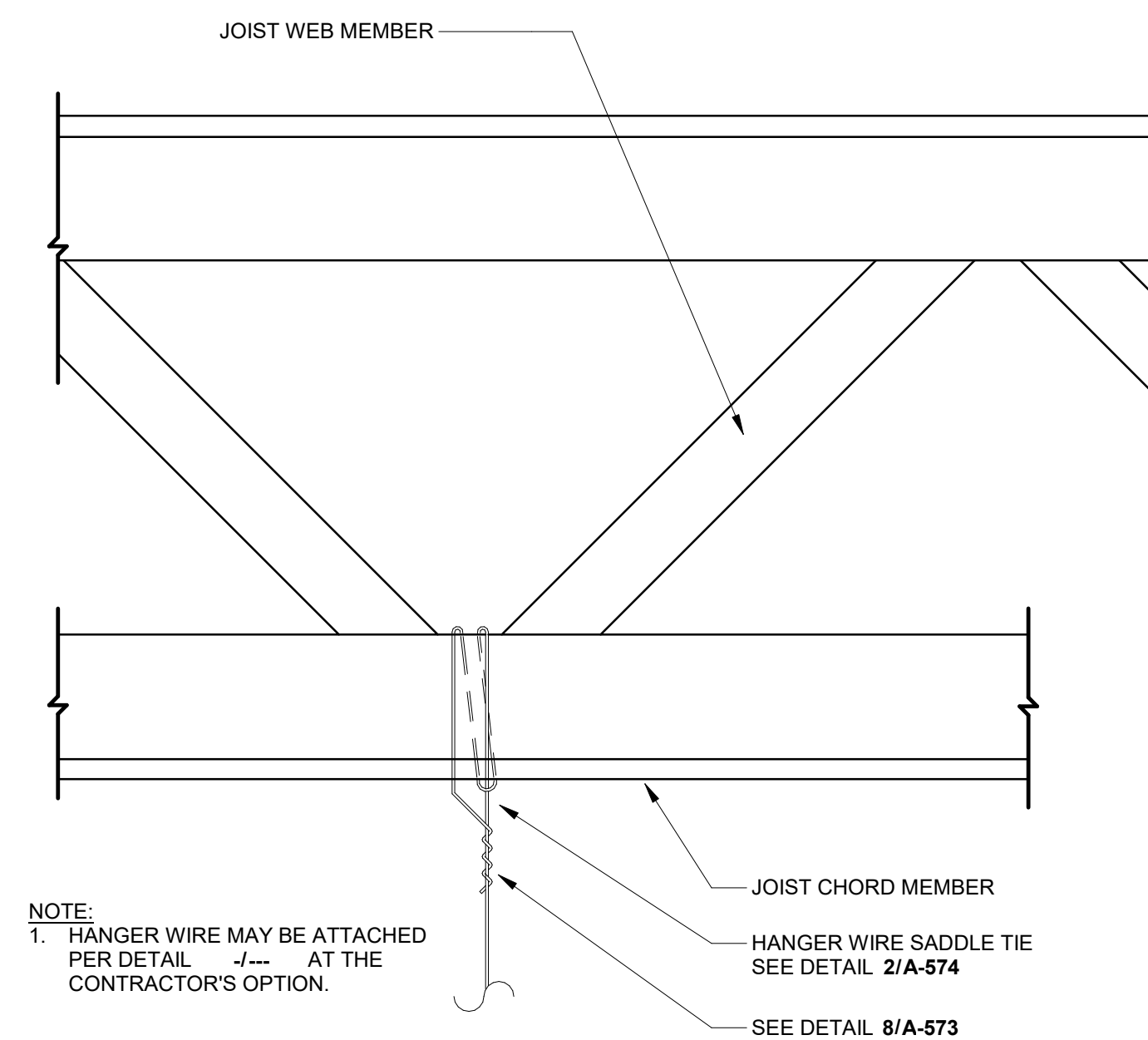
SCALE: 1 1/2" = 1'-0"



7
A-574

BRACE WIRE CONNECTION TO OPEN-WEB STEEL JOIST

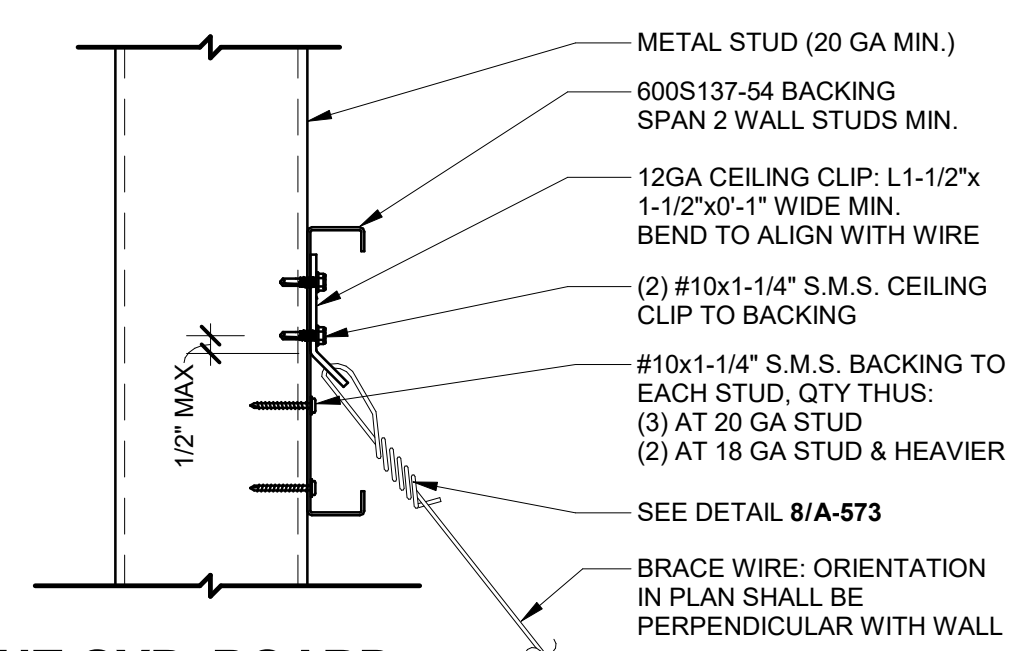
SCALE: 1 1/2" = 1'-0"



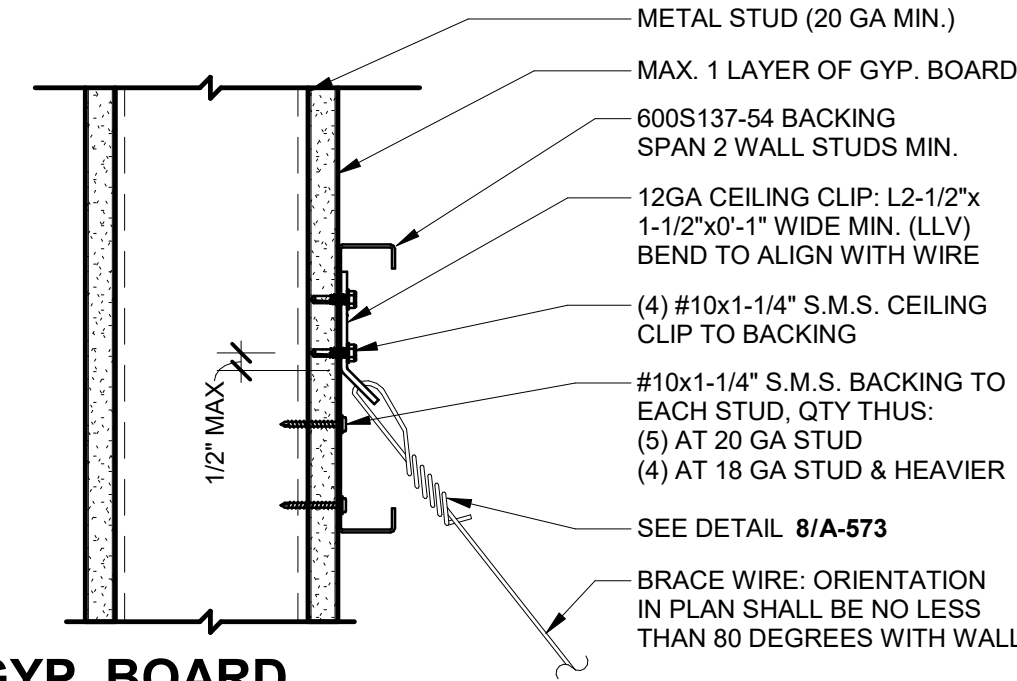
6
A-574

HANGER WIRE CONNECTION TO OPEN-WEB STEEL JOIST

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



WALL WITHOUT GYP. BOARD

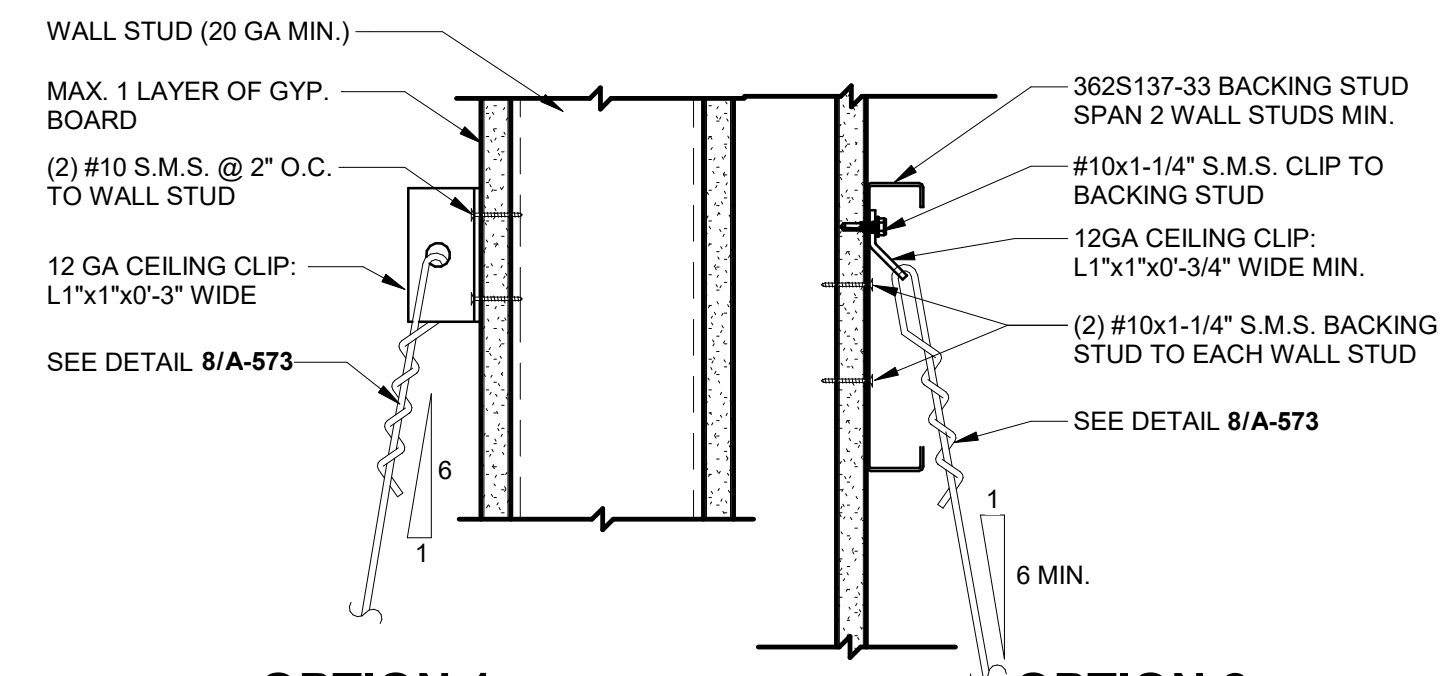


WALL WITH GYP. BOARD

5
A-574

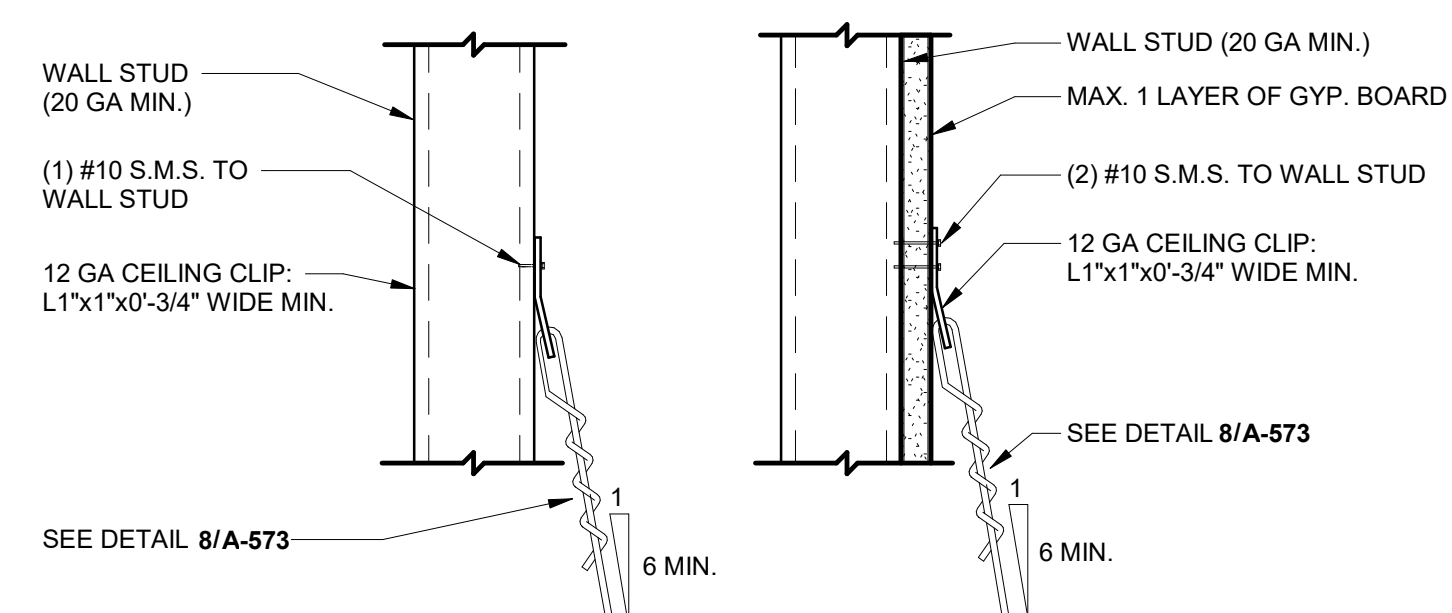
BRACE WIRE CONNECTION TO METAL STUD WALL

SCALE: 3" = 1'-0"



OPTION 1

OPTION 2



OPTION 3A: DIRECT

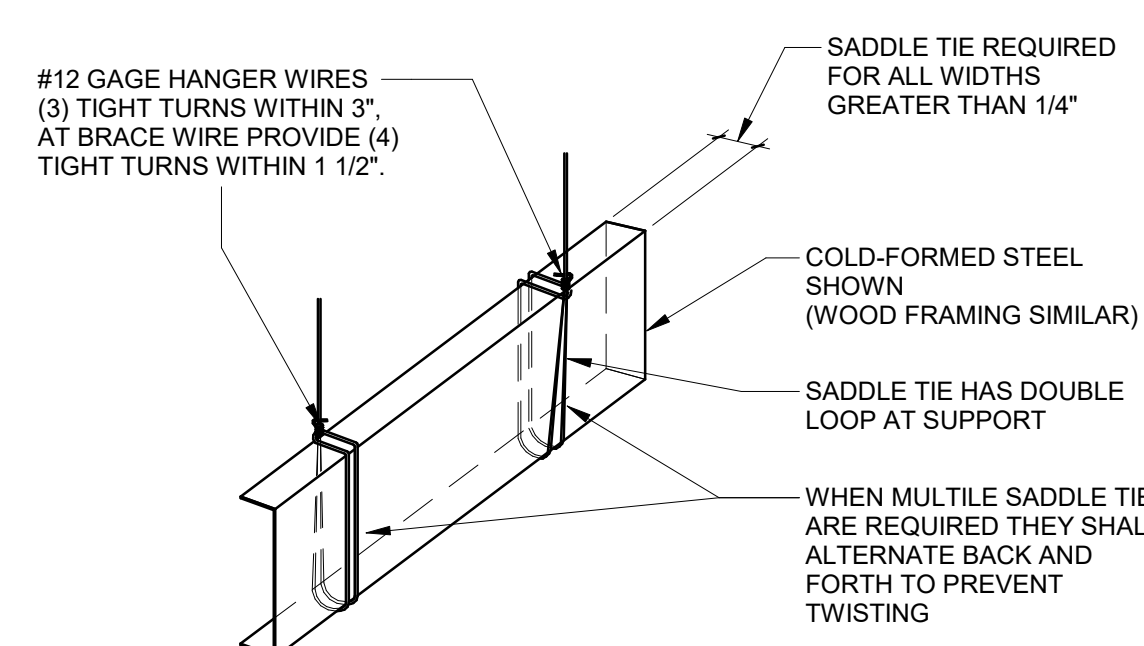
OPTION 3B: AT GYP

- NOTES:
1. THIS DETAIL APPLIES AT PERIMETER WIRE ATTACHEMENT OR WHERE OBSTRUCTION PREVENTS ATTACHMENT TO THE STRUCTURE ABOVE.

3
A-574

HANGER WIRE CONNECTION TO METAL STUD WALL

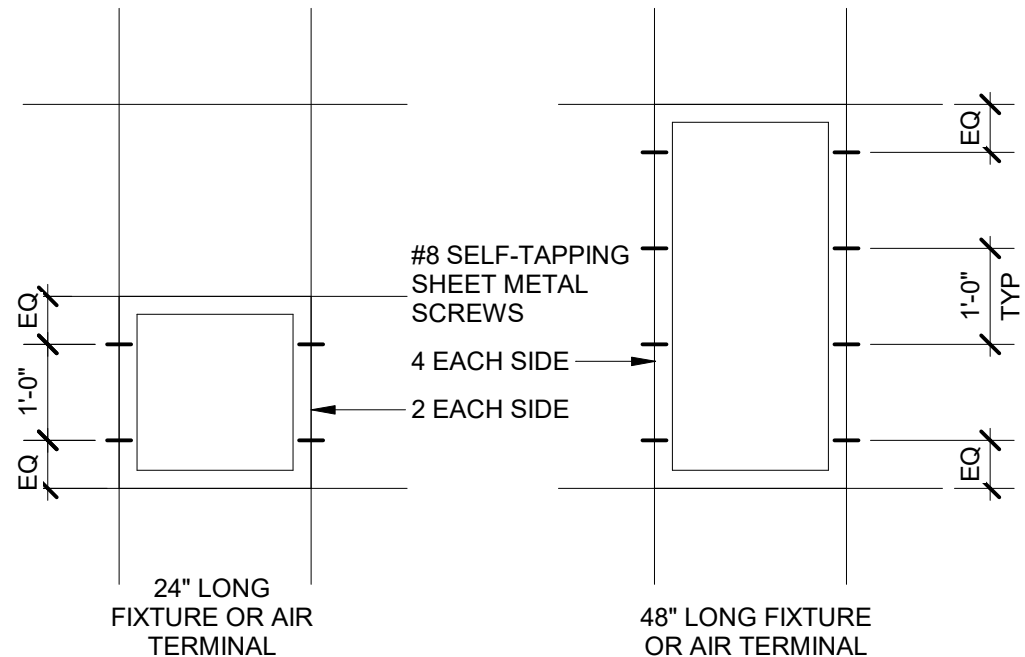
SCALE: 3" = 1'-0"



2
A-574

TYP. SADDLE TIE DETAIL

SCALE: 3" = 1'-0"

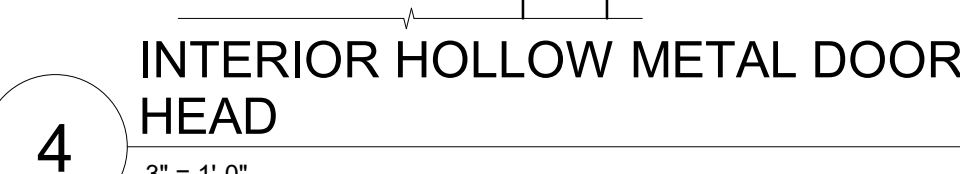


- ATTACHMENT OF LIGHT FIXTURES AND AIR TERMINALS TO CEILING GRID
- NOTE: FOR LIGHT FIXTURES WEIGHING GREATER THAN 10 LBS BUT LESS THAN OR EQUAL TO 50 LBS, PROVIDE A MIN OF (2) #12 GA SLACK SAFETY WIRES CONNECTED FROM THE FIXTURE HOUSING AT DIAGONAL CORNERS TO THE STRUCTURE ABOVE. SEE DETAIL 4/A-573

1
A-574

LIGHT FIXTURE ATTACHMENT

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



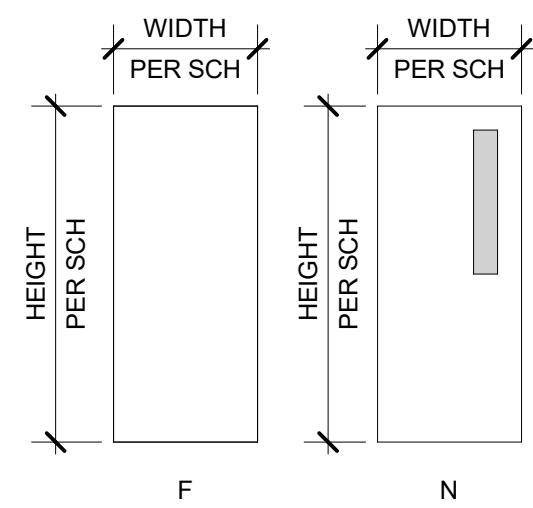
Δ	Date	Issued For
1	12/20/23	50% Construction Documents

DOOR SCHEDULE														
MARK	DOORS					FRAME				HEAD	JAMB	HW SET	NOTES	
	SIZE		THK	TYPE - MTL	FINISH	GLAZING	TYPE-MTL	FINISH	GLAZING					
	WIDTH	HEIGHT												
LEVEL 1	3'-0"	7'-0"	1 3/4"	N-WD	PT-2	GL-1	001-HM1	PT-2	NA	6/A-575	5/A-575		1	
505	3'-0"	7'-0"	1 3/4"	N-WD	PT-2	GL-1	001-HM1	PT-2	NA	6/A-575	5/A-575		1	
506A	3'-0"	7'-0"	1 3/4"	F-WD	PT-3	NA	001-HM1	PT-4	NA	4/A-575	5/A-575		1	
507	3'-0"	7'-0"	1 3/4"	N-WD	PT-2	GL-1	001-HM1	PT-2	NA	6/A-575	5/A-575		1	

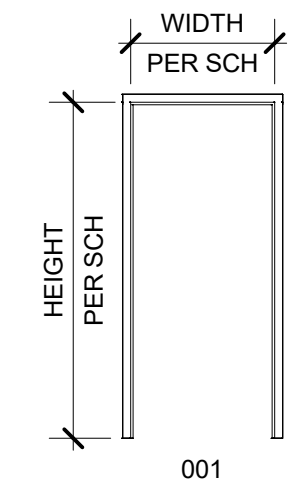
ROOM FINISH SCHEDULE										
ROOM NO LEVEL 1	NAME	FINISH		WALLS				CEILING	NOTES	
		FLOOR	BASE	N	S	E	W			
500	(E) CORRIDOR	RSF-E	RB-1		PT-1	PT-1		ACT-E	MATCH EXISTING ADJACENT ACT CEILING & FLOORING	
505	EXECUTIVE ASSISTANT	RSF-1	RB-1	PT-1	PT-1	PT-1	PT-1	ACT-1		
505A	ASSISTANT SUPERINTENDENT OF BUSINESS SERVICES	CPT-1	RB-1	PT-1	PT-1	PT-1	PT-1	ACT-1		
506	BOND OFFICE	RSF-1	RB-1	PT-1	PT-1	PT-1	PT-1	ACT-1		
506A	DIRECTOR OFFICE	CPT-1	RB-1	PT-1	PT-1	PT-1	PT-1	ACT-1		
507	CONFERENCE	RSF-1	RB-1	PT-1	PT-1	PT-1	PT-1	ACT-1		
508A	STAFF LOUNGE	RSF-1	RB-1	PT-1	PT-1	PT-1	PT-1	ACT-1		

FINISH MATERIALS LIST						
MARK	MANUFACTURER	STYLE	PRODUCT #	SIZE	COLOR	COMMENTS
BASE						
RB-1	BURKE		103	6"	ESPRESSO	
CARPET						
CPT-1	-	-	-	-	-	
CEILING						
ACT-1	ARMSTRONG	CALLA LAY-IN CEILING TILES W/15/16 PRELUDE 'XL'		2'x2'		
ACT-E	-			2'X2'		TO MACH EXISTING CORRIDOR
GLAZING						
GL-1		LAMINATED TEMPERED GLAZING				DOOR TRANSOM
PAINT						
PT-1	-		-		-	INTERIOR FIELD PAINT
PT-2	-		-		-	INTERIOR ACCENT PAINT
PT-3	-		-		-	INTERIOR ACCENT PAINT
PT-4	-		-		-	INTERIOR ACCENT PAINT
RESILIENT FLOORING						
RSF-1	-	-	-		-	
RSF-E	-	-	-		-	TO MATCH EXISTING CORRIDOR

PANEL TYPES



FRAME TYPES



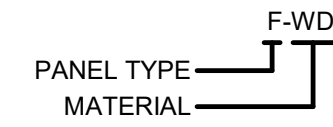
MATERIAL LEGEND

MATERIAL (MTL)	
AL	ALUMINUM
EX	EXISTING
GL	GLASS
HM	HOLLOW METAL
SS	STAINLESS STEEL
STL	STEEL
WD	WOOD
FINISH	
FF	FACTORY FINISH
PT	PAINT (AS SCHEDULED)
CLR ANO	CLEAR ANODIZED ALUMINUM
PLAM	PLASTIC LAMINATE

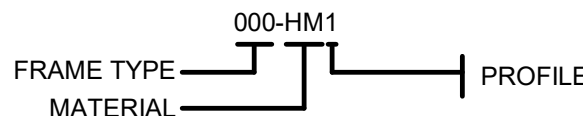
NOTE: ALL DOORS ARE UNDERCUT 5/8". PROVIDE 3/4" UNDERCUT AT ALL TOILET ROOM, HOUSEKEEPING (HK), SOILED UTILITY AND LOCKER ROOM DOORS.

NOTE: ALL GLAZING (GL-1) IN DOORS AND SIDELITE/TRANSOM GLAZING TO BE LAMINATED GLASS, U.O.N.

PANEL TYPES



FRAME TYPES



San Rafael City Schools



310 Nova Albion Way, San Rafael, CA 94903

SRCS District Office - Business Services & Capital Facilities

310 Nova Albion Way, San Rafael, CA 94903

Δ	Date	Issued For
1	12/20/23	50% Construction Documents

HED

417 Montgomery Street
Suite 400
San Francisco, California
94104 USA

(415) 981-2345
WWW.HED.DESIGN

MECHANICAL NOTES & SPECIFICATIONS

1. THESE DRAWINGS & NOTES SHALL BE READ IN CONJUNCTION WITH & BE CONSIDERED TO BE PART OF A SEPARATE & COMPLETE MECHANICAL SPECIFICATION.
2. ENTIRE INSTALLATION SHALL CONFORM TO THE REQUIREMENTS OF ALL APPLICABLE CODES AND REGULATIONS, INCLUDING:

2.1. 2022 CALIFORNIA BUILDING CODE (CBC) -CCR TITLE 24 PART 2

2.2. 2022 CALIFORNIA ELECTRICAL CODE (CEC) -CCR TITLE 24 PART 3

2.3. 2022 CALIFORNIA MECHANICAL CODE (CMC) -CCR TITLE 24 PART 4

2.4. 2022 CALIFORNIA PLUMBING CODE (CPC) -CCR TITLE 24 PART 5

2.5. 2022 CALIFORNIA FIRE CODE (FC) -CCR TITLE 24 PART 9

2.6. 2022 CALIFORNIA EXISTING BUILDING CODE (CEBC) -CCR TITLE 24 PART 10

2.7. 2022 CALIFORNIA GREEN BUILDING (CGB) STANDARD

2.8. 2022 CALIFORNIA BUILDING ENERGY EFFICIENCY STANDARDS
3. CONTRACTOR SHALL OBTAIN & PAY FOR ALL REQUIRED FEES, PERMITS & INSPECTIONS.
4. COORDINATE ENTIRE INSTALLATION OF THE HVAC SYSTEM(S) WITH THE WORK OF ALL OTHER TRADES PRIOR TO ANY FABRICATION OR INSTALLATION. PROVIDE ALL FITTINGS, OFFSETS, AND TRANSITIONS FOR A COMPLETE AND WORKABLE INSTALLATION. COORDINATE ITEMS TO BE PROVIDED BY OTHER TRADES WHERE MENTIONED IN THE CONTRACT DOCUMENTS PRIOR TO BID. NO EXCEPTIONS. PROVIDE A COMPLETE WORKING SYSTEM PER CONTRACT DOCUMENTS.
5. COORDINATE ALL WORK WITH THE ARCHITECTURAL, STRUCTURAL DRAWINGS AND DRAWINGS OF OTHER TRADES. INSTALL ALL WORK TO CLEAR NEW AND EXISTING ARCHITECTURAL WORK, STRUCTURAL MEMBERS AND WORK OF OTHER TRADES. NO ITEM SUCH AS PIPE, DUCT, ETC. SHALL BE IN CONTACT WITH ANY EQUIPMENT. ANY ERRORS, OMISSIONS, DISCREPANCIES, DEFICIENCIES, OR CONFLICTS SHALL BE BROUGHT TO THE ATTENTION OF THE GENERAL CONTRACTOR, THE ARCHITECT AND THE ENGINEER PRIOR TO PROCEEDING WITH ANY AFFECTED WORK.
6. COORDINATE THE LOCATION OF ALL ROOF OPENINGS & THE LOCATION OF ALL ROOF MOUNTED EQUIPMENT WITH THE STRUCTURAL & ARCHITECTURAL PLANS PRIOR TO ANY FABRICATION & INSTALLATION.
7. PLATFORMS, CURBS, AND FLASHING FOR MECHANICAL EQUIPMENT IS INDICATED ON THE STRUCTURAL AND ARCHITECTURAL PLANS, UNLESS NOTED OTHERWISE. WHERE THERE IS A CONFLICT WITH THE MECHANICAL PLANS, NOTIFY THE ARCHITECT AND ENGINEER PRIOR TO FABRICATION AND INSTALLATION.
8. COORDINATE THE LOCATIONS OF ALL CEILING DIFFUSERS, REGISTERS, AND GRILLES WITH THE ARCHITECTURAL REFLECTED CEILING PLAN, ELECTRICAL LIGHTING LAYOUT, FIRE SPRINKLER SYSTEM, AND ARCHITECTURAL ROOM ELEVATIONS. THE ARCHITECT AND ENGINEER SHALL BE IMMEDIATELY NOTIFIED OF ANY CONFLICTS PRIOR TO FABRICATION AND INSTALLATION.
9. EQUIPMENT, DUCTS, PIPING, & OTHER DEVICES & MATERIALS INSTALLED OUTSIDE OF THE BUILDING OR OTHERWISE EXPOSED TO THE WEATHER SHALL BE COMPLETELY WEATHER PROOFED & PAINTED TO MATCH. COORDINATE WITH ARCHITECT PRIOR TO PAINTING.
10. VERIFY ALL CLEARANCES & AVAILABLE SPACE FOR DUCTWORK PRIOR TO ORDERING AND/OR FABRICATION.
11. DIMENSIONS SHOWN ON THESE PLANS ARE APPROXIMATE AND MUST BE CONFIRMED ON SITE AND/OR PER ARCHITECTURAL DRAWINGS. ANY SCALE NOTATIONS ARE TO BE VERIFIED PRIOR TO ANY TAKE-OFF.
12. PRIOR TO OCCUPANCY THE ENTIRE HVAC SYSTEMS SHALL BE BALANCED BY AN INDEPENDENT AIR BALANCE CONTRACTOR FOR AIR IN ACCORDANCE AND PROCEDURES WITH (AABC) ASSOCIATED AIR BALANCE COUNCIL STANDARDS, (NEBB) NATIONAL ENVIRONMENTAL BALANCING BUREAU, OR (TABB) TESTING ADJUSTING AND BALANCING BUREAU. SYSTEMS SHALL BE BALANCED AS INDICATED ON PLANS INCLUDING OUTSIDE AIR VENTILATION. FINAL BALANCING SHALL BE WITHIN 10% FOR SUPPLY, RETURN AND OUTSIDE AIR QUANTITIES INDICATED. WHERE THERE IS A CONFLICT IN PLANS, NOTIFY THE ENGINEER PRIOR TO BALANCING OF SYSTEM. IF NOT DONE SO THE ENTIRE SYSTEM MUST BE RE-BALANCED DUE TO CONFLICTS ON CONTRACT DOCUMENTS. PROVIDE A COPY OF THE AIR BALANCE REPORT TO THE ENGINEER FOR REVIEW. PROVIDE PROCEDURES AND REPORTING PER CAL GREEN CODES SECTION 5.410.4.3, SECTION 5.410.4.3.1 AND SECTION 5.410.4.4.
13. CONTROLS CONTRACTOR & AIR BALANCE CONTRACTOR TO COORDINATE WORK & PERFORM NECESSARY TASKS TO OBTAIN AIR FLOW QUANTITIES FOR SYSTEMS SHOWN HEREIN.
14. PROVIDE TO BUILDING OWNER, PER CGB SEC. 5.410.4.5, AND CMC SEC 514.0, OPERATING PROCEDURES FOR THE USE, INSPECTION, TESTING, AND MAINTENANCE OF EQUIPMENT MANUAL INCLUDING INSPECTION AND REPORTS.
15. ADHESIVES, SEALANTS AND CAULKING SHALL BE COMPLIANT WITH LOW VOC OR OTHER TOXIC COMPOUND LIMITS SET BY (R) 4.504.2 AND/OR (NR)5.504.4.
16. NONRESIDENTIAL (NR) VOLUNTARY MEASURE. CONTRACTOR TO PROVIDE FLUSH-OUT PER GREEN POINT RATING REQUIREMENT'S SECTION A5.504.1.1 & A5.505.1.2 INCLUDING TEMPORARY BLOWER.
17. PROVIDE OPERATING PROCEDURES FOR COOKING EQUIPMENT PER CMC SEC. 514.1.
18. EQUIPMENT, ACCESSORIES AND RELATED PIPING SHALL BE INSTALLED IN STRICT ACCORDANCE WITH THE EQUIPMENT MANUFACTURER'S RECOMMENDATIONS. PROVIDE ALL FITTINGS, TRANSITIONS, DAMPERS, VALVES, AND OTHER DEVICES REQUIRED FOR A COMPLETE WORKABLE INSTALLATION.
19. MAINTENANCE LABEL SHALL BE AFFIXED TO ALL MECHANICAL EQUIPMENT AND A MAINTENANCE MANUAL SHALL BE PROVIDED FOR THE OWNER'S USE. LABEL SHALL IDENTIFY THE UNIT DESIGNATION PER PLANS AND THE SPACE IT SERVES.

19.1. EQUIPMENT: 4-1/2"x1-1/2" ENGRAVED PLASTIC-LAMINATED SIGN WITH 1/2" WHITE LETTERS ON BLACK BACKGROUND.

19.2. PIPING: SELF-STICKING PIPE MARKERS CONSISTING OF PIPE SERVICE WORDING AND ARROW INDICATING DIRECTION OF FLOW ON ANSI COLOR BACKGROUND. MAXIMUM SPACING OF 50 FEET APART. SECURE MARKER WITH 2-1/4" WIDE SELF-STICKING CLEAR TAPE AROUND PERIPHERY OF MARKER.
20. PROVIDE MANUAL VOLUME DAMPERS AND BACKDRAFT DAMPERS FOR OUTSIDE AIR INTAKES ON ALL AIR HANDLING EQUIPMENT AND EXHAUST FANS SERVING CONDITIONED SPACES. EXCEPTION: EQUIPMENT WITH FACTORY AIR ECONOMIZERS.
21. OUTSIDE AIR INTAKES SHALL MEET AS A MINIMUM CODE REQUIRED CLEARANCES FROM EXHAUST, FLUE, FUEL BURNING APPLIANCES AND PLUMBING VENT OUTLETS. FOR GAS/ELECTRIC AIR CONDITIONING UNITS WHERE THE CODE REQUIRED CLEARANCES ARE NOT MET, A FACTORY FLUE GAS DEFLECTOR AND EXTENSION SHALL BE USED TO MINIMIZE THESE CLEARANCES.
22. ALL HVAC EQUIPMENT SERVING NORMALLY OCCUPIED SPACES HAVING OVER 10' OF DUCT SHALL HAVE MINIMUM MERV13 FILTERS UNLESS OTHERWISE NOTED. DOES NOT INCLUDE EXHAUST SYSTEMS.
23. AIR FILTERS SHALL BE STATE FIRE MARSHALL APPROVED & LISTED, PREFORMED FILTERS HAVING COMBUSTIBLE FRAMING SHALL BE TESTED AS A COMPLETE ASSEMBLY. INSTALLED FILTERS SHALL BE CLEARLY LABELED BY THE MANUFACTURER INDICATING THE MERV RATING, & THE FILTER SPECIFICATION SHALL BE INCLUDED IN THE OPERATION & MAINTENANCE MANUAL. AIR FILTERS SHALL BE ACCESSIBLE FOR CLEANING OR REPLACEMENT.
24. EQUIPMENT WITH MOVING PARTS, FIXED OR FLEXIBLY MOUNTED, SHALL BE PROVIDED WITH FLEXIBLE DUCT & PIPE CONNECTIONS & SHALL BE BRACED OR ANCHORED.
25. HVAC EQUIPMENT SHALL BE CERTIFIED BY THE CALIFORNIA ENERGY COMMISSION TO COMPLY WITH THE LATEST EFFICIENCY STANDARDS.
26. AC UNITS PROVIDED WITH ECONOMIZER CYCLE DAMPERS SHALL HAVE DAMPERS SET UP TO CLOSE AUTOMATICALLY ON FAN SHUTDOWN. DAMPERS SHALL NOT USE LINKAGE ARRANGEMENT BUT RATHER DIRECT DRIVE ACTUATORS.
27. AIR HANDLING EQUIPMENT SERVING CONDITIONED SPACES SHALL PROVIDE CONTINUOUS OUTSIDE AIR TO SPACES IN OCCUPIED MODE. CONTROLS SHALL BE PROVIDED TO PROVIDE THE MINIMUM RATE OF OUTDOOR AIR REQUIRED BY THE STATE ENERGY REGULATIONS.

28. CONTRACTOR TO SUBMIT ALL EQUIPMENT, DUCTWORK, AIR DISTRIBUTION DEVICES, & OTHER ACCESSORIES TO THE ENGINEER FOR APPROVAL PRIOR TO ANY ORDERING OF SUCH ITEMS.
29. CONTROL AND POWER WIRING DIAGRAMS DETAILS ARE DIAGRAMMATIC ONLY. REFER TO ELECTRICAL DRAWING FOR PROPER POWER WIRING DIAGRAM. SUBMIT CONTROL DRAWINGS FOR APPROVAL. IT IS THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN CONTROL DRAWINGS FROM UNIT MANUFACTURERS FOR PROPER WIRING AND OPERATION TO COMPLY WITH CONTROL SEQUENCE.
30. LINE VOLTAGE WIRING SHALL BE INSTALLED IN CONDUIT. ALL LINE VOLTAGE CONDUIT AND WIRING, INCLUDING FINAL CONNECTIONS, SHALL BE PROVIDED AND INSTALLED BY THE ELECTRICAL CONTRACTOR AS INDICATED ON THE ELECTRICAL DRAWINGS OR SPECIFIED IN THE ELECTRICAL SECTION OF THE SPECIFICATIONS. ALL ELECTRICAL WORK SHALL BE INSTALLED IN ACCORDANCE WITH ALL APPLICABLE CODES AND REGULATIONS OF GOVERNING BODIES HAVING JURISDICTION THEREOF.
31. LOW VOLTAGE CONDUIT & WIRING AS APPLICABLE, INCLUDING FINAL CONNECTIONS, SHALL BE FURNISHED & INSTALLED BY THE MECHANICAL CONTRACTOR AS INDICATED ON THE MECHANICAL DRAWINGS OR SPECIFIED IN THE MECHANICAL SECTION OF THE SPECIFICATIONS.
32. LOW VOLTAGE WIRING SHALL BE IN CONDUIT. PLENUM RATED WIRING INSTALLED IN CEILING SPACE, WHEN APPROVED BY SCHOOL DISTRICT, IS ACCEPTABLE.
33. ELECTRICAL CONTRACTOR TO PROVIDE REQUIRED RELAY ACCESSORIES FOR CONNECTION OF 120V/1Ø VENTILATION EQUIPMENT TO 277V/1Ø LIGHTING AS APPLICABLE.
34. NOTE USED
35. THERMOSTATS SHALL HAVE LOCKABLE COVERS (WHERE INDICATED ON PLANS) & SHALL BE OF THE ELECTRONIC, PROGRAMMABLE, AUTOMATIC CHANGEOVER TYPE TO SEQUENCE HEATING OR COOLING SET POINT RANGE SHALL BE 10F BETWEEN FULL HEATING & COOLING. THEY SHALL HAVE CAPABILITY OF TERMINATING ALL HEATING AT A TEMPERATURE NO MORE THAN 70°F, & COOLING AT A TEMPERATURE NOT LESS 78°F. ADJUSTABLE TEMPERATURE DIFFERENTIAL SHALL BE 1 SHALL BE FROM 55°F TO 85°F. MOUNT TOP OF BOX AT NO MORE THAN 42 INCHES ABOVE FLOOR TO MEET LOCAL ADA REQUIREMENT. IN ADDITION, THERMOSTAT(S) SHALL HAVE THE CAPABILITY TO CONNECT & RESPOND TO AN OCCUPANT CONTROLLED DEMAND RESPONSE SIGNAL OR PROVIDE SIGNAL FOR RESETTING OF ROOM SETPOINTS.
36. THERMOSTATS THAT ARE PART OF AN ENERGY MANAGEMENT SYSTEM SHALL FOLLOW CONTROL SPECIFICATIONS AND DRAWING REQUIREMENTS.
37. LINE VOLTAGE THERMOSTATS SHALL BE FURNISHED BY THE MECHANICAL CONTRACTOR AND INSTALLED BY THE ELECTRICAL CONTRACTOR.
38. AT THE TIME OF ROUGH INSPECTION & DURING STORAGE ON THE CONSTRUCTION SITE & UNTIL FINAL STARTUP OF THE HEATING, COOLING & VENTILATION EQUIPMENT, ALL DUCT & OTHER RELATED AIR DISTRIBUTION COMPONENTS, OPENINGS SHALL BE COVERED WITH TAPE, PLASTIC, SHEET METAL OR OTHER METHODS TO REDUCE THE AMOUNT OF DEBRIS WHICH MAY COLLECT IN THE SYSTEM. PROVIDE POLLUTANT CONTROL PER CAL GREEN 2019 CODES SECTION 5.504.1-4 FOR TEMPORARY VENTILATION, COVERINGS OF DUCT WORKING & PROTECTION OF MECHANICAL EQUIPMENT DURING CONSTRUCTION, & USE OF LOW VOC SEALANTS
39. ALL SUPPLY, RETURN AND EXHAUST DUCT JOINTS SHALL BE SEALED PER CMC CHAPTER 6 REQUIREMENTS. SEAL CLASS A.
40. DUCTWORK CONSTRUCTION SHALL MEET THE FOLLOWING SYSTEM PRESSURE REQUIREMENTS:

40.1. ALL OTHER DUCTWORK - 2 INCH WATER COLUMN
41. DUCTWORK CONSTRUCTION SHALL BE INSTALLED & SEALED TO MEET THE REQUIREMENTS OF CMC SECS 601.0, 602.0, 603.0, 605.0; & ANSI, SMACNA HVAC DUCT CONSTRUCTION STANDARDS METAL & FLEXIBLE. DUCTWORK & ACCESSORIES WILL BE INSTALLED IN ACCORDANCE WITH NFPA 90A, NFPA 90B, ASHRAE HANDBOOK, & SMACNA HVAC DUCT CONSTRUCTION STANDARDS - METAL & FLEXIBLE. UL 181 CERTIFIED & THE CMC & THE EQUIPMENT MANUFACTURER'S RECOMMENDATIONS AS APPLICABLE. MOUNTING & SUPPORTING OF EQUIPMENT, DUCTS, ACCESSORIES, & APPURTENANCES SHALL BE PROVIDED, INCLUDING STRUCTURAL SUPPORTS, HANGERS, STANDS, CLAMPS & BRACKETS. NEW RECTANGULAR DUCTWORK SHALL BE SHEET METAL CONSTRUCTED OR SPIRAL ROUND.
42. WHERE OPENINGS HAVE BEEN MADE IN WALLS, FLOORS, OR CEILINGS FOR THE PASSAGE OF DUCTWORK OR PIPES, SUCH OPENINGS SHALL BE CLOSED AND PROTECTED BY THE INSTALLATION OF APPROVED METAL COLLARS SECURELY FASTENED TO THE ADJOINING STRUCTURE, ALL IN ACCORDANCE WITH CMC 316.11.
43. ALL FLEXIBLE DUCT SHALL NOT EXCEED FIVE FEET IN LENGTH TO RESPECTIVE DIFFUSERS, GRILLES, OR OTHER AIR DEVICES. FLEX DUCT SHALL NOT BE USED IN LIEU OF RIGID ELBOWS OR FITTINGS PER CMC SEC. 603.4.1. FLEXIBLE DUCT MAY BE USED AS AN ELBOW AT A TERMINAL DEVICE USING "FLEX RIGHT" FOR SIZES 4" TO 16".
44. LIMIT USE OF PERMANENT HVAC SYSTEMS DURING CONSTRUCTION TO CONDITIONING NECESSARY FOR MATERIAL & EQUIPMENT INSTALLATION. IF PERMANENT HVAC IS USED DURING CONSTRUCTION, INSTALL MERV-8 FILTERS ON RETURNS, & REPLACE ALL FILTERS IMMEDIATELY PRIOR TO OCCUPANCY, OR, IF THE BUILDING IS OCCUPIED DURING ALTERATION, AT THE CONCLUSION OF CONSTRUCTION.
45. PROVIDE SEISMIC RESTRAINTS TO ALL DUCTWORK, PIPE, AND EQUIPMENT SUPPORTS IN ACCORDANCE WITH THE OSHPD (HCAI) PRE-APPROVED OPM# FOR SEISMIC RESTRAINT OF MECHANICAL SYSTEMS. SUSPENDED EQUIPMENT SHALL BE PROVIDED WITH SEISMIC ANCHORAGE AND ISOLATION SUPPORTS.
46. WHERE ANCHORAGE DETAILS ARE NOT SHOWN ON THE DRAWINGS THE FIELD INSTALLATION SHALL BE SUBJECT TO THE APPROVAL OF THE STRUCTURAL ENGINEER OR THE FIELD REPRESENTATIVE OF THE DIVISION OF THE STATE ARCHITECT.
47. RECTANGULAR DUCT TURNS IN SUPPLY, RETURN, AND EXHAUST DUCTS SHALL HAVE TURNING VANES UNLESS OTHERWISE NOTED, OR SHALL HAVE A INNER RADIUS TURN OF NO LESS THAN THE WIDTH OF THE DUCT.
48. DUCTWORK HANDLING CONDITIONED AIR SHALL BE INSULATED OR LINED TO MEET CMC 605. INTERIOR DUCTWORK SHALL BE INSULATED WITH A NON-FIBROUS MATERIAL, R=4.2. ALL SUPPLY AND RETURN DUCTWORK EXPOSED TO WEATHER OR IN UNCONDITIONED SPACE SHALL BE INTERNALLY LINED WITH 2" THICK DUCT (R-8.0) LINER UNLESS OTHERWISE INDICATED OR SPECIFIED. ALL DUCT SIZES INDICATED ON PLANS ARE NET INSIDE DIMENSIONS. ALL INSULATION SHALL HAVE A FLAME SPREAD OF NOT MORE THAN 25 AND A SMOKE DENSITY NOT EXCEEDING 50. ALL DUCT INSULATION SHALL COMPLY WITH 2022 BEES SECTION 120.4(A).
49. MANUAL VOLUME DAMPERS SHALL BE PROVIDED IN ALL DUCT BRANCHES TO INDIVIDUAL DIFFUSERS, GRILLES, AND REGISTERS, AS WELL AS OUTSIDE AIR INTAKE DUCTS. DAMPERS SHALL BE LOCATED AT THE BRANCH DUCT LOCATIONS. COORDINATE LOCATIONS OF DAMPERS WITH THE AIR BALANCING CONTRACTOR PRIOR TO BID, SO AS TO ENSURE ACCESSIBILITY AFTER INSTALLATION. IN LOCATIONS WHERE THESE DAMPERS ARE INACCESSIBLE, CABLE OPERATED ADJUSTMENT CONTROLS SHALL BE PROVIDED AT NO ADDITIONAL COST. OPPOSED BLADE DAMPERS SHALL NOT BE PERMITTED UNLESS OTHERWISE NOTED.
50. FOR AIR MOVING EQUIPMENT HAVING MORE THAN 2000 CFM SHALL HAVE DUCT SMOKE DETECTOR, BUT ARE NOT REQUIRED PER 2022 CMC 609.0 EXCEPTION WHERE ALL AREAS SERVED BY SAID EQUIPMENT HAS DIRECT EGRESS WITHIN 100 FEET.
51. FOR INACCESSIBLE AREAS PROVIDE ACCESS PANELS FOR ALL DAMPERS, EQUIPMENT, SMOKE DETECTORS, & CONTROL DEVICES. THESE PANELS SHALL MATCH THE RATING OF THE WALL AND/OR CEILING THAT THEY ARE LOCATED IN. MINIMUM ACCESS PANEL SIZES SHALL BE 12"x12" FOR HAND ACCESS & 30"x30" MINIMUM FOR BODY ACCESS. WHERE A LARGER ACCESS PANEL IS REQUIRED DUE TO INSTALLATION CONSTRAINTS OR EQUIPMENT SIZE, DO SO AT NO ADDITIONAL COST & SHALL OBTAIN PRIOR APPROVAL FROM THE ARCHITECT, ENGINEER & DSA.
52. REMOVE ALL LEFT OVER DUCTWORK SCRAPS, ETC. (IF ANY) AND LEAVE PREMISES CLEAN AND FREE OF ANY TRASH OR DEBRIS DUE TO ANY WORK.

53. INSULATED PIPES SHALL CONFORM TO 2022 BUILDING ENERGY EFFICIENCY STANDARDS SECTION 120.3, TABLE 120.3-A. INSULATED PIPE EXPOSED TO WEATHER SHALL BE COVERED WITH E-FLEX GUARD MANUFACTURED BY AIREX MFGR INC.
54. DUCTS & PIPES THAT PASS THROUGH BUILDING EXPANSION JOINTS SHALL INCORPORATE A FLEXIBLE CROSS OVER. FOR DUCTS THAT SHALL CONSIST OF A MINIMUM OF 6-8" LONG FLEX CONNECTOR EXTENDING THROUGH THE FULL SEISMIC JOINT. FOR PIPING A FLEXIBLE JOINT EITHER AS MANUFACTURED BY METRAFLEX (OR EQUAL) OR A FLEXIBLE PIPE JOINT OF SUFFICIENT LENGTH & NUMBER OF ELBOWS (4 MIN) TO ALLEVIATE STRESS ON PIPE TO ACCOMMODATE DIFFERENTIAL BUILDING SEPARATION.
55. MECHANICAL EQUIPMENT MOUNTED ON ROOF SHALL BE LOCATED ON A WELL DRAINED SURFACE OF THE ROOF. AT LEAST 6 FEET OF CLEARANCE SHALL BE AVAILABLE BETWEEN ANY PART OF THE EQUIPMENT & THE EDGE OF A ROOF OR SIMILAR HAZARD; OR RIGIDLY FIXED RAILS, GUARDS, PARAPETS, OR OTHER BUILDING STRUCTURES AT LEAST 42 INCHES IN HEIGHT SHALL BE PROVIDED ON THE EXPOSED SIDE.
56. MECHANICAL, LIGHTING CONTROL, ENVELOPE AND PROCESS EQUIPMENT REQUIRING ACCEPTANCE TESTING SHALL BE PROVIDED BY CERTIFIED TECHNICIANS. SEE SHEET MECHANICAL TITLE 24 SHEETS FOR MECHANICAL ACCEPTANCE TESTING REQUIREMENT.
57. DUCT SIZE INDICATED ON PLANS ARE THE INSIDE DIMENSION

PIPING, DUCTWORK, AND ELECTRICAL DISTRIBUTION SYSTEM BRACING NOTE

Piping, ductwork, and electrical distribution systems shall be braced to comply with the forces and displacements prescribed in ASCE 7-16 Section 13.3 as defined in ASCE 7-16 Sections 13.6.5, 13.6.6, 13.6.7, 13.6.8; and 2022 CBC Sections 1617A.1.24, 1617A.1.25 and 1617A.1.26

The method of showing bracing and attachments to the structure for the identified distribution system are as noted below. When bracing and attachments are based on a pre-approved installation guide (e.g., HCAI OPM for 2013 CBC or later), copies of the bracing system installation guide or manual shall be available on the jobsite prior to the start of and during the hanging and bracing of the distribution systems. The Structural Engineer of Record shall verify the adequacy of the structure to support the hanger and brace loads.

Mechanical Piping (MP), Mechanical Ducts (MD), Plumbing Piping (PP), Electrical Distribution Systems (E);

MP[x] MD[x] PP[] E[] Option 1: Detailed on the approved drawings and project specific notes and details.

MP[] MD[] PP[] E[] Option 2: Shall comply with the HCAI Preapproval (OPM#);(I.E. OPM 0052-13 B-Line, OPM#-0043-13 Mason Industries Inc., and OPM#-0203-13 M.W. Sausse & Co. Inc.).

M/E/P COMPONENT ANCHORAGE NOTE

All mechanical, plumbing, and electrical components shall be anchored and installed per the details on the DSA-Approved Construction Documents. The following components shall be anchored or braced to meet the force and displacement requirements prescribed in 2022 CBC, Sections 1617A.1.18 through 1617A.1.26 and ASCE 7-16 Chapters 13, 26 and 30.

1. All permanent equipment and components
2. Temporary or movable equipment that is permanently attached (e.g. hard wired) to the building utility services such as electricity, gas or water. "permanently attached" shall include all electrical connections except plugs for 110/220 volt receptacles having a flexible cable.
3. Temporary, movable, or mobile equipment which is heavier than 400 pounds or has a center of mass located 4 feet or more above the adjacent floor or roof level that directly support the component are required to be restrained in a manner approved by DSA.

The following mechanical and electrical components shall be positively attached to the structure, but need not demonstrate design compliance with the references noted above. These components shall have flexible connections provided between the component and associated ductwork, piping, and conduit. Flexible connections must allow movement in both transfers and longitudinal directions:

- A. Components weighing less than 400 pounds and have a center of mass located 4 feet or less above the adjacent floor or roof level that directly support the component.
- B. Components weighing less than 20 pounds, or in the case of distributed systems, less than 5 pounds per foot, which are suspended from a roof or floor or hung from a wall.

The anchorage of all mechanical, electrical and plumbing components shall be subject to the approval of the design professional in general responsible charge or structural engineer delegated responsibility and acceptance by DSA. The project inspector will verify that all components and equipment have been anchored in accordance with the above requirements.

MECHANICAL LEGEND		
SYMBOL	ABBREVIATION	DESCRIPTION
	AFF	ABOVE FINISHED FLOOR
	AL	ACOUSTICALLY LINED
	AP	ACCESS PANEL
	OA	OUTSIDE AIR
	RA	RETURN AIR
	SA	SUPPLY AIR
	TA	TRANSFER AIR
	BOD	BOTTOM OF DUCT
	CFM	CUBIC FEET PER MINUTE
○ —	BDD	DAMPER: BACKDRAFT
	FD	DAMPER: FIRE
	FSD	DAMPER: FIRE/SMOKE
≡≡	MVD	DAMPER: MANUAL VOLUME
□		DIAMETER
	DN	DOWN
	DS	DISCONNECT SWITCH
⑥ —	DSO	DUCT SMOKE DETECTOR
	EER	ENERGY EFFICIENCY RATIO
	(E)	EXISTING
	F	FAN
	FLA	FULL LOAD AMPS
	HP	HORSEPOWER
	MCA	MINIMUM CIRCUIT AMPACITY
	MOP	MAXIMUM OVERCURRENT PROTECTION
	MS	MOTOR STARTER
	RL	REFRIGERANT LIQUID
	RS	REFRIGERANT SUCTION
	P.E.	POWER EXHAUST
	SEER	SEASONAL EER
	SAD	SEE ARCHITECTURAL DRAWING
	SSD	SEE STRUCTURAL DRAWING
Ⓢ		REMOTE SENSOR: TEMPERATURE
Ⓒ		REMOTE SENSOR: CARBON DIOXIDE
Ⓓ		THERMOSTAT @ +48" A.F.F
	TYP	TYPICAL
	UON	UNLESS OTHERWISE NOTED
	WT	WEIGHT
	24x12	RECTANGULAR DUCT - INCHES
	12"	ROUND DUCT - INCHES
-----		WIRING AND CONDUIT BY ELECTRICAL CONTRACTOR.
-----		CONDUIT, WIRING AND FINAL CONNECTION BY MECHANICAL OR CONTROL CONTRACTOR.
Ⓔ		FURNISHED AND INSTALLED BY ELECTRICAL CONTRACTOR.
Ⓜ		FURNISHED AND INSTALLED BY MECHANICAL OR CONTROL CONTRACTOR

SUBSTITUTION OF MATERIALS

1. EQUALS: THE DESIGN HAS BEEN BASED ON THE MANUFACTURER'S NAME AND PRODUCT LISTED ON THE DRAWINGS. OTHER MANUFACTURER'S NAMES LISTED IN THE SPECIFICATIONS MAY BE SELECTED AND CONSIDERED AS EQUAL FOR QUALITY ONLY. HOWEVER, THEY MUST MATCH THE PERFORMANCE, CONSTRUCTION, FIT AND FEATURES OF THOSE SELECTED FOR DESIGN. THE ACCEPTANCE OF THESE DOES NOT RELIEVE THE CONTRACTOR OF RESPONSIBILITY FOR PROVIDING THE REQUIRED MATERIALS AND PROVIDING A WORKABLE SYSTEM. THOSE ITEMS NOTED AS 'NO SUBSTITUTIONS' SHALL BE FURNISHED WHEN SPECIFIED.
2. TO SUBSTITUTE EQUIPMENT OR MATERIAL OTHER THAN THOSE CONSIDERED FOR THE BASIS OF DESIGN, SUBMIT INFORMATION AS CALLED FOR IN THE 'REQUEST FOR SUBSTITUTION' SPECIFICATIONS, AND SUBMIT REQUIRED INFORMATION FOR BOTH THE SPECIFIED OR SCHEDULED ITEM AND THE SUBSTITUTE ITEM. THESE SUBMITTALS MUST SHOW THAT BOTH THE SPECIFIED AND THE SUBSTITUTE MATERIAL MATCH IN QUALITY, PERFORMANCE, CONSTRUCTION, FIT AND FEATURES OF THOSE SELECTED FOR DESIGN. ANY EQUIPMENT OR MATERIAL SUBMITTED FOR SUBSTITUTION WITHOUT THE COMPARISON INFORMATION WILL NOT BE REVIEWED OR ACCEPTABLE.
3. LIABILITY OF SUBSTITUTIONS: PERFORMANCE OF SUBSTITUTIONS MUST BE EQUAL TO THE ITEM SPECIFIED. SHOULD THE SUBSTITUTED ITEM FAIL TO PERFORM ACCORDING TO SPECIFICATIONS, REPLACE WITH THE ORIGINALLY SPECIFIED ITEM WITHOUT EXTRA COMPENSATION ON REQUEST OF THE ARCHITECT ANY TIME WITHIN THE GUARANTEE PERIOD.

San Rafael City Schools



310 Nova Albion Way, San Rafael, CA 94903

SRCS District Office - Business Services & Capital Facilities

320 Nova Albion Way, San Rafael, CA 94903

△ Date Issued For



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WWW.HED.DESIGN

Project Number

Mechanical Notes and Legend

DUCTLESS SPLIT FAN COIL & HEAT PUMP SCHEDULE

INDOOR UNIT							EXISTING OUTDOOR UNIT											
TAG	AREA SERVES	"MITSUBISHI" MODEL	MCA	ELECT (V/φ/HZ)	AIRFLOW (CFM)	OPER WEIGHT (LBS)	ANCHORAGE DETAIL (DETAIL #/SHEET #)	TAG	AREA SERVES	"MITSUBISHI" MODEL	MCA / MOP	ELECT (V/φ/HZ)	OPER WEIGHT (LBS)	RATED COOLING CAPACITY KBTU/H	RATED HEATING CAPACITY KBTU/H	SEER2 / EER2	HSPF2	ANCHORAGE DETAIL (DETAIL #/SHEET #)
FC-1.1	EXEC. ASS.	SLZ-KF12NA	0.3	208/1/60	230	31	3 / M0.02	(E) HP-1	BUSINESS SERVICE	MXZ-5C42NA4								
FC-1.2	ASS. SUPER.	SLZ-KF12NA	0.3	208/1/60	230	31												
FC-1.3	CONFERENCE	SLZ-KF12NA	0.3	208/1/60	230	31												
FC-2.1	BOND OFFICE	SLZ-KF15NA	0.3	208/1/60	245	31		(E) HP-2	CBO OFFICES	MXZ-5C42NA4								
FC-2.2	STAFF LOUNGE	SLZ-KF09NA	0.3	208/1/60	230	31												
FC-2.3	DIRECTOR OFFICE	SLZ-KF09NA	0.3	208/1/60	230	31												
ACCESSORIES: CP - CONDENSATE PUMP IS - 3-POLE ISOLATION SWITCH MOUNTED NEXT TO WALL MOUNTED FAN COIL UNIT LC - L-CONNECTOR PIPE LS - RECTORSEAL SLIM DUCT LINESET COVER AND WALL CAP FOR REFRIGERANT PIPING EXPOSED TO WEATHER AND IN SPACES. 24V - BAGNET INTERFACE FOR CONNECTION TO ALERTON NETWORK (SEE DETAIL 8 THIS SHEET)																		
NOTE: 1. INDOOR UNIT POWERED BY OUTDOOR UNIT																		

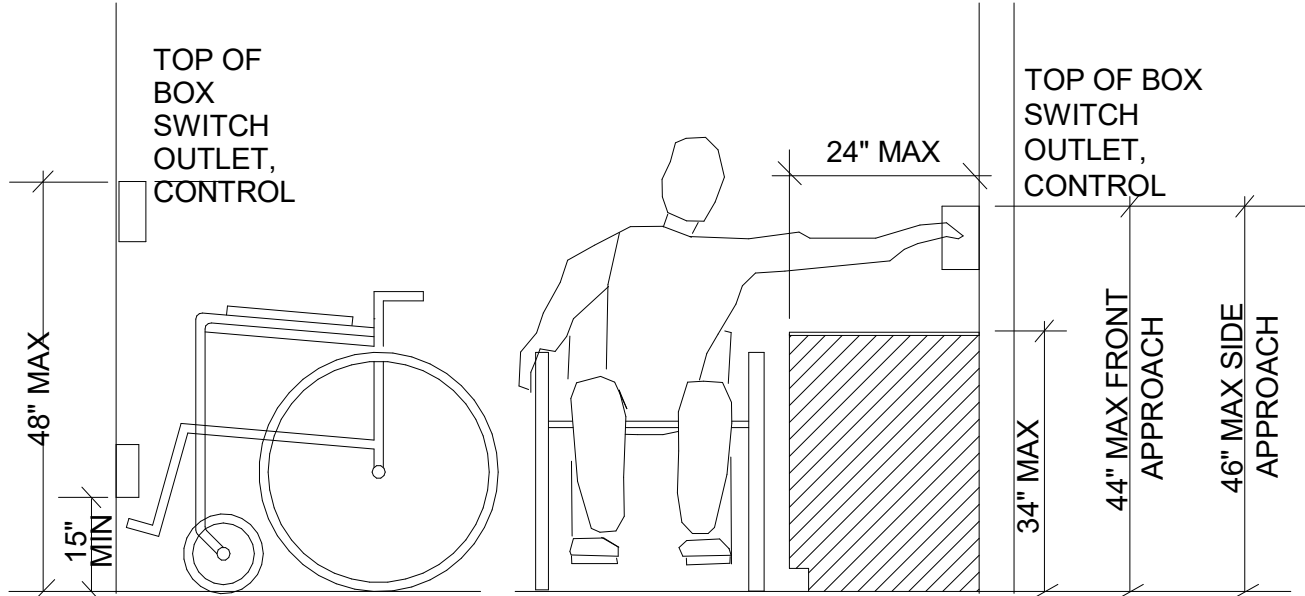
FANS (EXISTING)

TAG	BASIS OF DESIGN			AIR FLOW (SCFM)	ESP (" WC)	ELECTRICAL		SOUND POWER (DB)	WEIGHT (LBS)	ANCHORAGE DETAIL (DETAIL/SHEET)	REMARKS
	MANUF.	MODEL	TYPE			HP/ (WATT)	VOLTS/PH/HZ				
(E) SF-1	GREENHECK	KSQ-12-M2-VG	ROOF	1500	1.0	1	208/3/60	65	47		

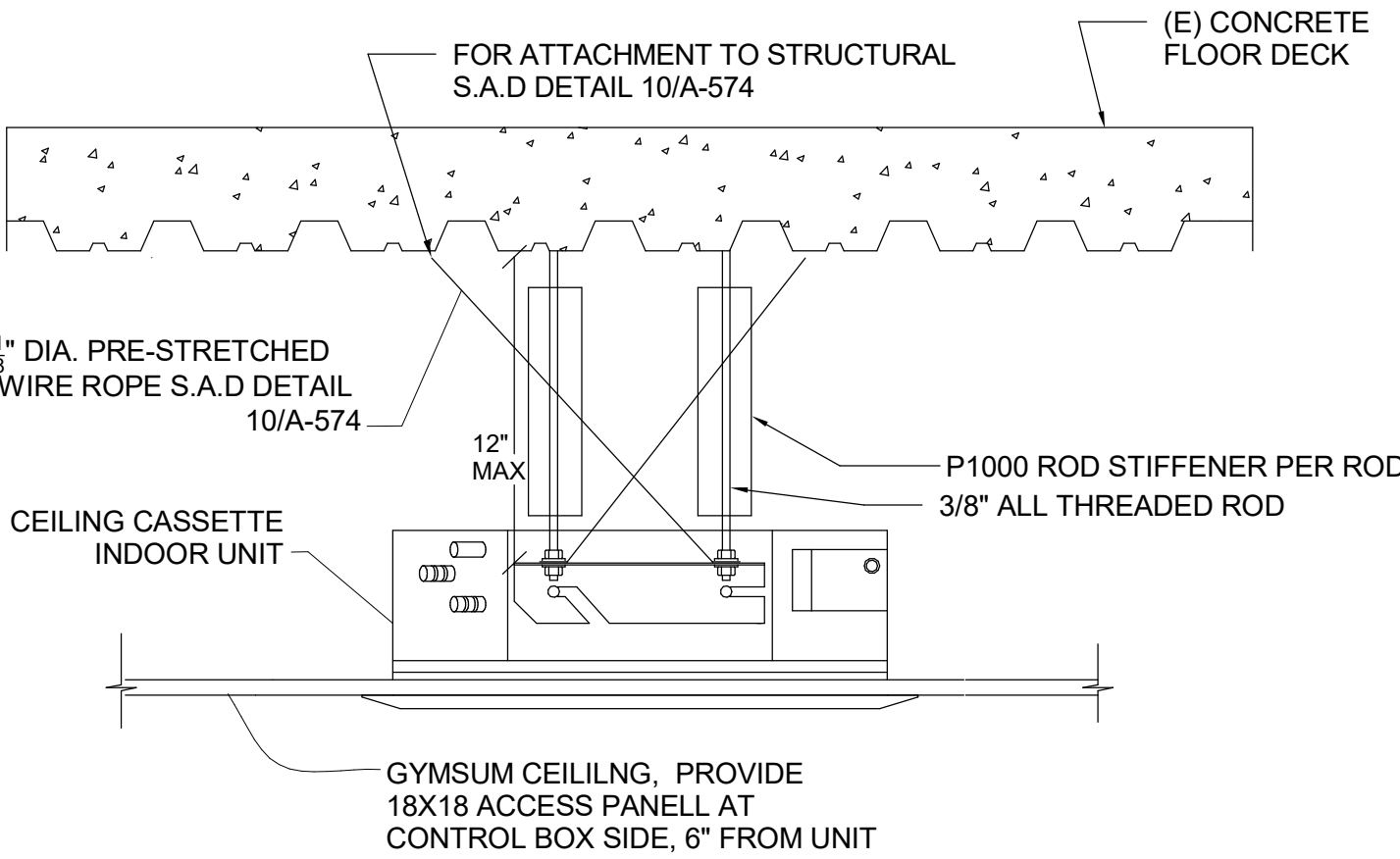
AIR DISTRIBUTION

STYLE	MFR	MODEL NO	APPLICATION	DESCRIPTION	INSTALLATION NOTES
A	TITUS	TDC	T-BAR CEILING SUPPLY DIFFUSER	LOUVERED FACE, ROUND NECK, 4 WAY (U.O.N), WHITE FINISH	WITH SEISMIC CLIP
			CEILING DIFFUSER: <div>NECK 1224 FACE 300A TYPE CFM</div>	SIDEWALL REGISTER: <div>NECK 12X24 300A TYPE CFM</div>	

NOTES:
ELECTRICAL RECEPTACLE OUTLETS ON BRANCH CIRCUITS OF 30 AMPERES OR LESS AND COMMUNICATION SYSTEM RECEPTACLES SHALL BE LOCATED NO MORE THAN 48 INCHES MEASURED FROM THE TOP OF THE RECEPTACLE OUTLET BOX NOR LESS THAN 15 INCHES MEASURED FROM THE BOTTOM OF THE RECEPTACLE OUTLET BOX TO THE LEVEL OF THE FINISHED FLOOR OR WORKING PLATFORM. IF THE REACH IS OVER A PHYSICAL BARRIER OR AN OBSTRUCTION (FOR EXAMPLE, A KITCHEN BASE CABINET), RECEPTACLES SHALL BE LOCATED WITHIN THE REACH RANGES SPECIFIED IN SECTION 1138A.3. PHYSICAL BARRIERS AND OBSTRUCTIONS SHALL NOT EXTEND MORE THAN 25 INCHES FROM THE WALL BENEATH THE RECEPTACLE. 2016 CBC §1138A.1 (2016 CBC §11B-308.11 & 11B-308.1.2).



CONTROL DEVICE ADA MOUNTING HT.



1ST FLOOR SUPPORT FROM FLOOR ASSEMBLY BETWEEN 2ND AND 1ST FLOOR

CEILING MOUNT FAN COIL DETAIL

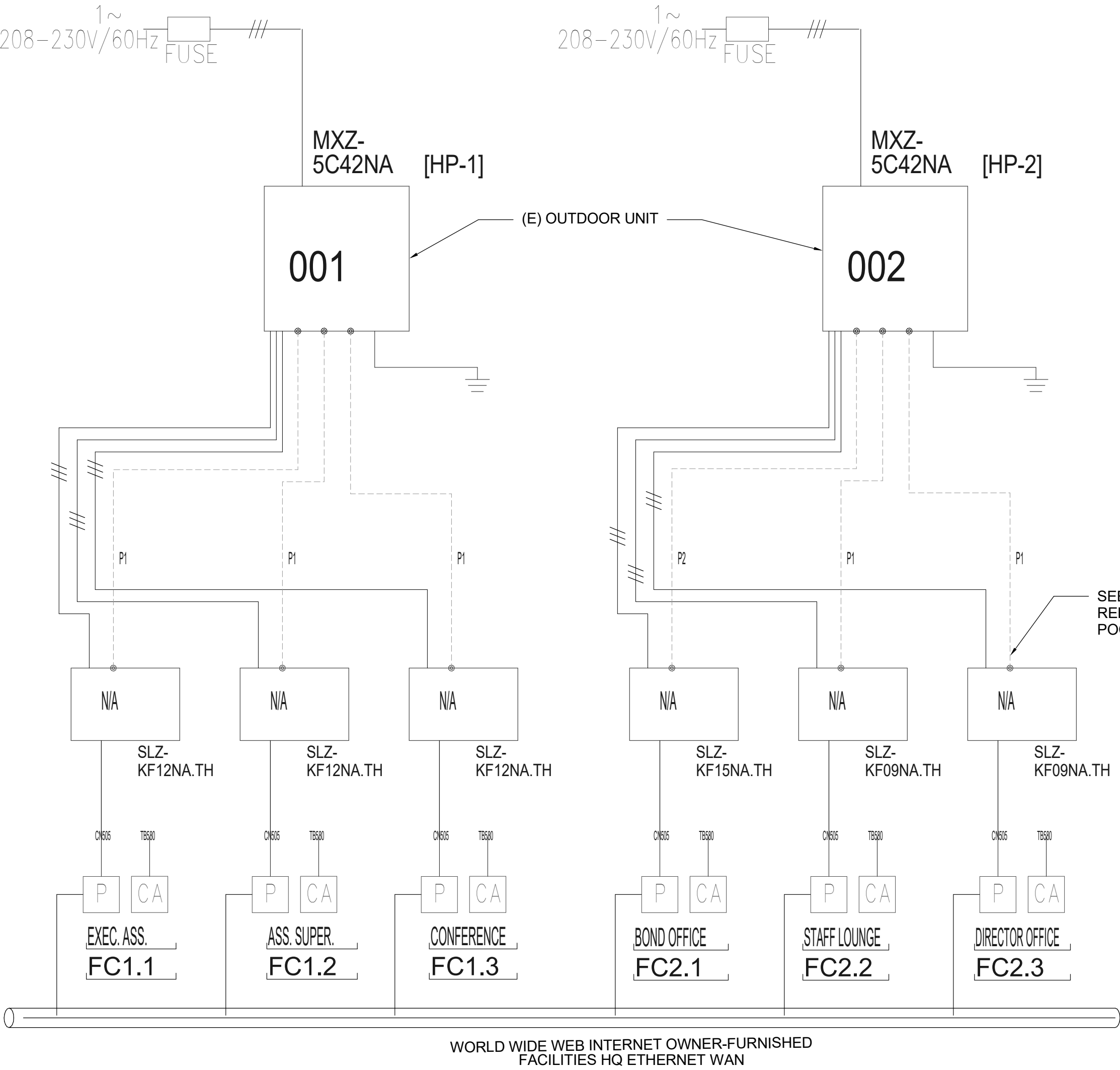


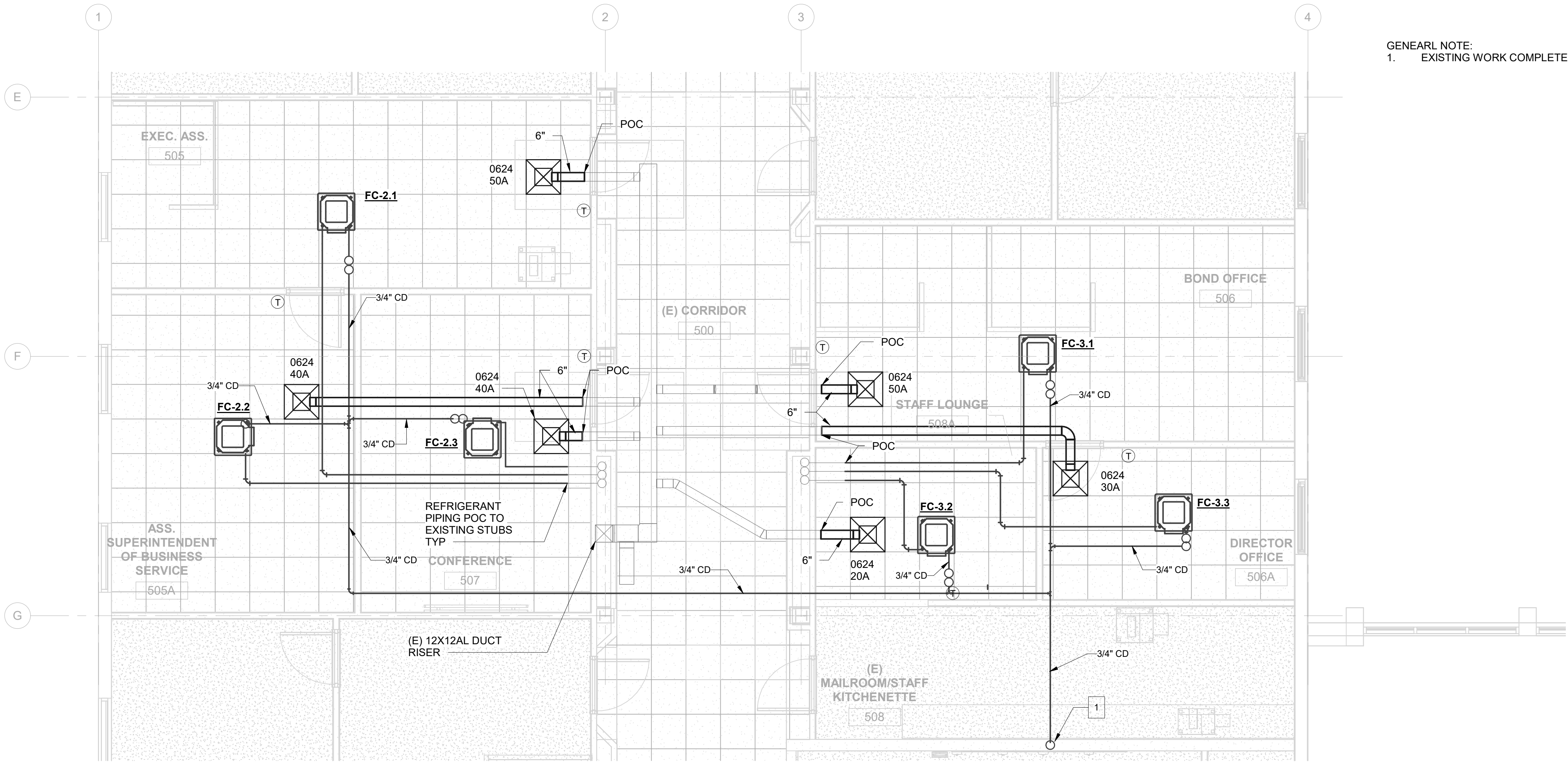
DIAGRAM	SYMBOL	LEGEND
DISPLAY	DESCRIPTION	
---	POWER WIRE	
---	CONTROL WIRE	
---	REF. PIPE	

PIPING AND CONTROLS	
SYMBOL LIQUID PIPE/GAS PIPE SIZE	
P1	1/4 1/38
P2	1/4 1/12
SYMBOL MODEL NUMBER	
CR	PAC-YT330RAU-J
P	PAC-UKPRC001-QN-1

Diamond System Builder	
sw:	5.2.1.5
db:	5.2.1.4
1/30/2024	10:32 AM

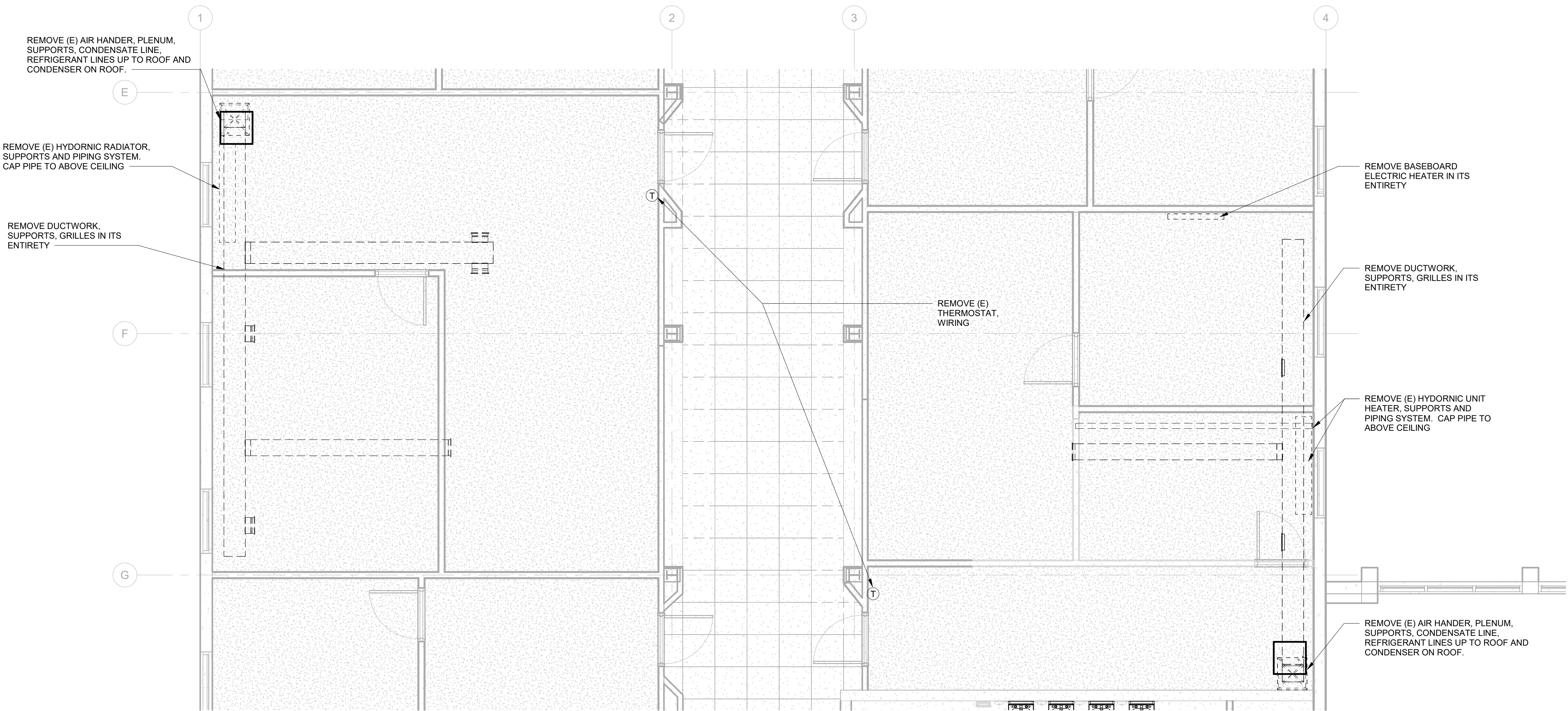
SPLIT SYSTEM DIAGRAM

CEILING MOUNT FAN COIL DETAIL

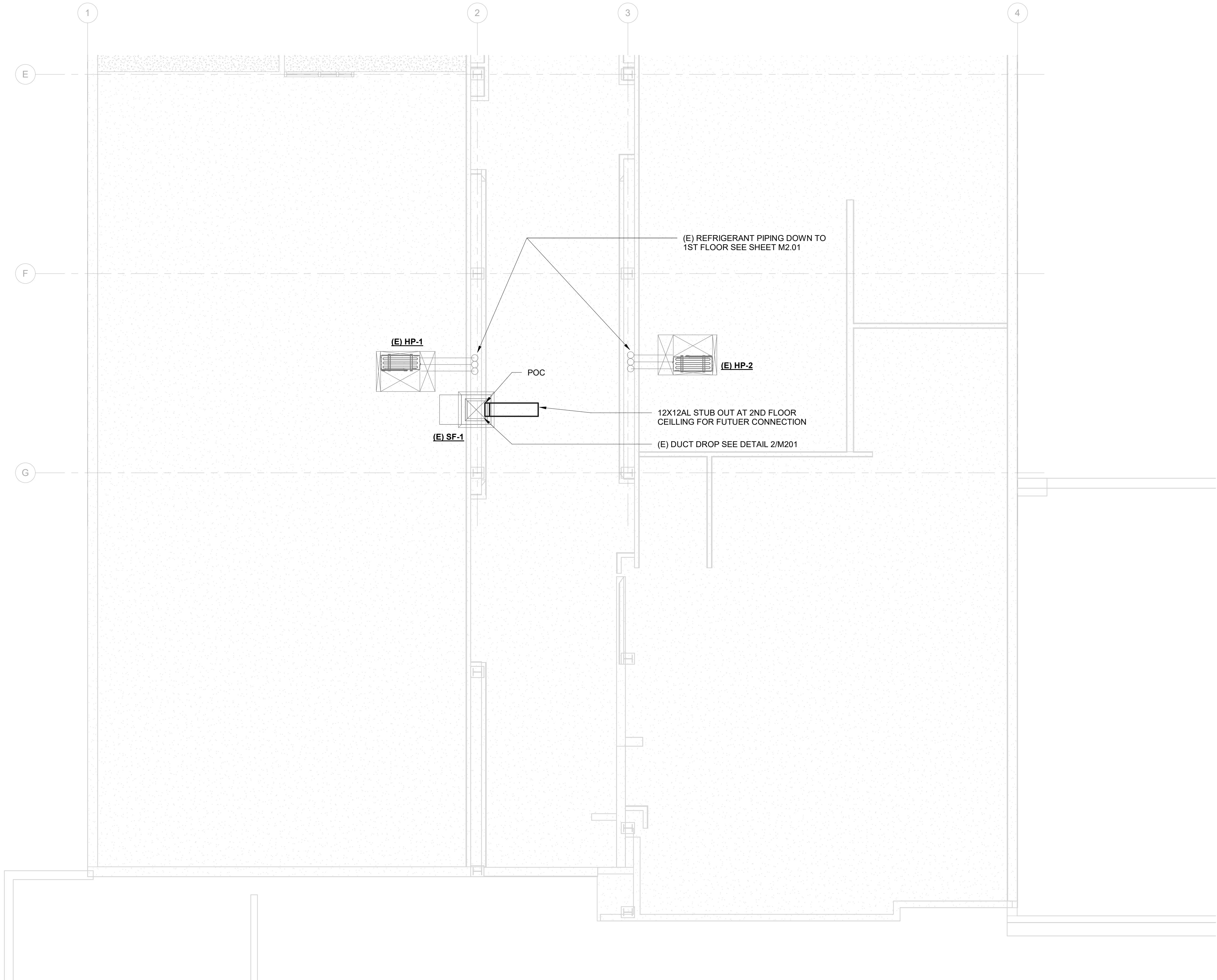


GENEALR NOTE:
1. EXISTING WORK COMPLETED UNDER SEPARTE PROJECT

MECHANICAL NEW - BUSINESS SERVICE
& FACILITIES
1/4\"/>



MECHANICAL DEMO - BUSINESS
SERVICES & FACILITIES
1/4\"/>



① MECHANICAL ROOF PLAN
1/4" = 1'-0"

ANCHORAGE NOTES
ELECTRICAL ANCHORAGE NOTES.
ALL ELECTRICAL COMPONENTS SHALL BE ANCHORED AND INSTALLED PER THE DETAILS ON THE DSA APPROVED CONSTRUCTION DOCUMENTS. THE FOLLOWING COMPONENTS SHALL BE ANCHORED OR BRACED TO MEET THE FORCE AND DISPLACEMENT REQUIREMENTS PRESCRIBED IN THE 2022 CBC SECTIONS 1617A.1.18 THROUGH 1617A.1.26 AND ASCE 7-16, CHAPTER 13, 26, AND 30.
<div><div>1. ALL PERMANENT EQUIPMENT AND COMPONENTS.</div><div>2. TEMPORARY, MOVABLE OR MOBILE EQUIPMENT THAT IS PERMANENTLY ATTACHED (e.g. HARD WIRED) TO THE BUILDING UTILITY SERVICES SUCH AS ELECTRICITY, GAS OR WATER. "PERMANENTLY ATTACHED" SHALL INCLUDE ALL ELECTRICAL CONNECTIONS EXCEPT FLUSH FOR 110/220 VOLT RECEPTACLES HAVING A FLEXIBLE CABLE.</div><div>3. TEMPORARY, MOVABLE OR MOBILE EQUIPMENT WHICH IS HEAVIER THAN 400 POUNDS OR HAS A CENTER OF MASS LOCATED 4 FEET OR MORE ABOVE THE ADJACENT FLOOR OR ROOF LEVEL THAT DIRECTLY SUPPORT THE COMPONENT IS REQUIRED TO BE RESTRAINED IN A MANNER APPROVED BY DSA.</div></div>
THE FOLLOWING ELECTRICAL COMPONENTS SHALL BE POSITIVELY ATTACHED TO THE STRUCTURE, BUT NEED NOT DEMONSTRATE DESIGN COMPLIANCE WITH THE REFERENCES NOTED ABOVE. THESE COMPONENTS SHALL HAVE FLEXIBLE CONNECTIONS PROVIDED BETWEEN THE COMPONENT AND ASSOCIATED CONDUIT. FLEXIBLE CONNECTIONS MUST ALLOW MOVEMENT IN BOTH TRANSVERSE AND LONGITUDINAL DIRECTIONS.
<div><div>A. COMPONENT WEIGHING LESS THAN 400 POUNDS AND HAVING A CENTER OF MASS LOCATED 4 FEET OR LESS ABOVE THE ADJACENT FLOOR OR ROOF LEVEL THAT DIRECTLY SUPPORT THE COMPONENT.</div><div>B. COMPONENTS WEIGHING LESS THAN 20 POUNDS, OR IN THE CASE OF DISTRIBUTED SYSTEMS, LESS THAN 5 POUNDS PER FOOT, WHICH ARE SUSPENDED FROM A ROOF OR FLOOR OR HUNG FROM WALL.</div></div>
THE ANCHORAGE OF ALL ELECTRICAL COMPONENTS SHALL BE SUBJECT TO THE APPROVAL OF THE DESIGN PROFESSIONAL IN GENERAL RESPONSIBLE CHARGE OR STRUCTURAL ENGINEER DELEGATED RESPONSIBILITY AND ACCEPTANCE BY DSA. THE PROJECT INSPECTOR WILL VERIFY THAT ALL COMPONENTS AND EQUIPMENT HAVE BEEN ANCHORED IN ACCORDANCE WITH THE ABOVE REQUIREMENTS.
ELECTRICAL DISTRIBUTION SYSTEM BRACING NOTE:
ELECTRICAL DISTRIBUTION SYSTEMS SHALL BE BRACED TO COMPLY WITH THE FORCES AND DISPLACEMENTS PRESCRIBED IN ASCE 7-16 SECTION 13.3 AS DEFINED IN ASCE 7-16 SECTION 13.6.5, 13.6.6, 13.6.7, 13.6.8, AND 2022 CBC, SECTIONS 1617A.1.24, 1617A.1.25, AND 1617A.1.26.
THE METHOD OF SHOWING BRACING AND ATTACHMENTS TO THE STRUCTURE FOR THE IDENTIFIED DISTRIBUTION SYSTEM ARE AS NOTED BELOW. WHEN BRACING AND ATTACHMENTS ARE BASED ON A PREAPPROVED INSTALLATION GUIDE (eg. OSHDP OPM FOR 2013 CBC OR LATER), COPIES OF THE BRACING SYSTEM INSTALLATION GUIDE OR MANUAL SHALL BE AVAILABLE ON THE JOBSITE PRIOR TO THE START OF AND DURING THE HANGING AND BRACING OF THE DISTRIBUTION SYSTEMS. THE STRUCTURAL ENGINEER OF RECORD SHALL VERIFY THE ADEQUACY OF THE STRUCTURE TO SUPPORT THE HANGER AND BRACE LOADS.
ELECTRICAL DISTRIBUTION SYSTEMS ARE: [X] - OPTION 1: DETAILED ON THE APPROVED DRAWINGS WITH PROJECT SPECIFIC NOTES AND DETAILS [] - OPTION 2: SHALL COMPLY WITH THE APPLICABLE OSHDP PRE-APPROVAL (OPM #).
LIGHT FIXTURES:
ALL LIGHT FIXTURES SHALL BE POSITIVELY ATTACHED TO THE CEILING SUSPENSION SYSTEMS BY MECHANICAL MEANS TO RESIST A HORIZONTAL FORCE EQUAL TO THE WEIGHT OF THE FIXTURE. A MINIMUM OF TWO SCREWS OR APPROVED FASTENERS ARE REQUIRED AT EACH LIGHT FIXTURE. PER ASTM E580, SECTION 5.3.1.
SURFACE-MOUNTED LIGHT FIXTURES SHALL BE ATTACHED TO THE MAIN RUNNER WITH AT LEAST TWO POSITIVE CLAMPING DEVICES. THE CLAMPING DEVICE SHALL COMPLETELY SURROUND THE SUPPORTING CEILING RUNNER AND BE MADE OF STEEL WITH A MINIMUM THICKNESS OF #14 GAGE. ROTATIONAL SPRING CATCHES DO NOT COMPLY. A #12 GAGE SLACK SAFETY WIRE SHALL BE CONNECTED FROM EACH CLAMPING DEVICE TO THE STRUCTURE ABOVE. PROVIDE ADDITIONAL SUPPORTS WHEN LIGHT FIXTURES ARE EIGHT (8) FEET OR LONGER OR EXCEED 56 LB. MAXIMUM SPACING BETWEEN SUPPORTS SHALL NOT EXCEED EIGHT (8) FEET.
LIGHT FIXTURES WEIGHING LESS THAN OR EQUAL TO 10 LB. SHALL HAVE A MINIMUM OF ONE (1) #12 GAGE SLACK SAFETY WIRE CONNECTED FROM THE FIXTURE HOUSING TO THE STRUCTURE ABOVE.
LIGHT FIXTURES WEIGHING GREATER THAN 10 LB. BUT LESS THAN OR EQUAL TO 56 LBS. MAY BE SUPPORTED DIRECTLY ON THE CEILING RUNNERS, BUT THEY SHALL HAVE A MINIMUM OF TWO (2) #12 GAGE SLACK SAFETY WIRES CONNECTED FROM THE FIXTURE HOUSING AT DIAGONAL CORNERS TO THE STRUCTURE ABOVE. EXCEPTION: ALL LIGHT FIXTURES GREATER THAN TWO BY FOUR FEET WEIGHING LESS THAN 56 LBS. SHALL HAVE A #12 GAGE SLACK SAFETY WIRE AT EACH CORNER.
ALL LIGHT FIXTURES WEIGHING GREATER THAN 56 LB. SHALL BE INDEPENDENTLY SUPPORTED BY NOT LESS THAN FOUR (4) TAUT #12 GAGE HANGER WIRES (ONE AT EACH CORNER) ATTACHED FROM THE FIXTURE HOUSING TO THE STRUCTURE ABOVE, OR OTHER APPROVED HANGERS. THE FOUR (4) TAUT #12 GAGE WIRES OR OTHER APPROVED HANGERS, INCLUDING THEIR ATTACHMENT TO THE STRUCTURE ABOVE, SHALL BE CAPABLE OF SUPPORTING FOUR (4) TIMES THE WEIGHT OF THE FIXTURE.

GENERAL DEMOLITION NOTES
1. THE CONTRACTOR SHALL VERIFY IN THE FIELD ALL LINES, LEVELS, DIMENSIONS AND EXISTING CONDITIONS. THE INFORMATION ON THE DRAWINGS REGARDING EXISTING ELECTRICAL EQUIPMENT AND BRANCH CIRCUITS IS THE RESULT OF FIELD SURVEY AND IS ACCURATE TO THE BEST OF OUR KNOWLEDGE. IT IS INTENDED, HOWEVER, AS A GUIDE FOR USE IN VERIFICATION ONLY.
2. ANY EXISTING ELECTRICAL EQUIPMENT IN THE AREA OF NEW CONSTRUCTION NOT SHOWN ON THE EXISTING PLANS SHALL BE DOCUMENTED AND SUBMITTED TO THE ENGINEER FOR DETERMINATION OF ACTION REQUIRED.
3. WHEREVER THE REMOVAL OF EXISTING ELECTRICAL EQUIPMENT IS CALLED FOR AND ALL EQUIPMENT ON A PARTICULAR BRANCH CIRCUIT IS TO BE REMOVED, ALL CONDUIT AND WIRE BACK TO THE PANEL SHALL BE ENTIRELY REMOVED AND THE CIRCUIT IN PANEL SHALL BE MARKED "SPARE". THIS APPLIES TO SIGNAL AND COMMUNICATIONS SYSTEMS EQUIPMENT, CONDUIT, AND WIRE AS WELL.
4. WHEREVER THE REMOVAL OF EXISTING ELECTRICAL EQUIPMENT IS CALLED FOR AND ALL EQUIPMENT ON A PARTICULAR BRANCH CIRCUIT IS NOT TO BE REMOVED, THE CIRCUIT SHALL BE MAINTAINED CONTINUOUS TO THE EXISTING EQUIPMENT IN USE WITH MINIMUM INTERRUPTIONS OF POWER. THIS APPLIES TO SIGNAL AND COMMUNICATIONS SYSTEMS EQUIPMENT, CONDUIT, AND WIRE AS WELL.
5. WHENEVER THE REMOVAL OF EXISTING CONSTRUCTION REVEALS ELECTRICAL WORK THAT IS TO REMAIN, BUT IS IN CONFLICT WITH NEW CONSTRUCTION, RELOCATE THE EXISTING ELECTRICAL WORK AS NECESSARY TO AVOID ANY CONFLICT. RELOCATION WORK SHALL BE DONE TO MINIMIZE ANY INTERRUPTIONS OF POWER.
6. CARE SHALL BE TAKEN IN ORDER TO IDENTIFY AND PROTECT ALL EXISTING ELECTRICAL WORK THAT IS TO REMAIN.
7. ENSURE RECONNECTION OF EXISTING DEVICES WHOSE CIRCUITS HAVE BEEN INTERRUPTED BY DEMOLITION BY PROVIDING NEW CONNECTION TO ANOTHER EXISTING TO REMAIN DEVICE OR PANEL.
8. ALL EXISTING ELECTRICAL EQUIPMENT SHOWN ON THE PLANS FOR NEW WORK ARE THOSE WHICH ARE TO BE REUSED DURING SOME PHASE OF THE NEW CONSTRUCTION OR REQUIRE SOME SPECIAL CONSIDERATIONS.
9. WHENEVER THE REMOVAL OF EXISTING ELECTRICAL PANELBOARDS ARE CALLED FOR AND ALL EXISTING BRANCH CIRCUITS ARE NOT TO BE REMOVED, THE EXISTING BRANCH CIRCUITS SHALL BE CONNECTED TO OTHER EXISTING ELECTRICAL EQUIPMENT OR PANELS STILL IN USE WITH MINIMUM INTERRUPTIONS OF POWER. ALSO, IF REQUIRED, THESE SAME BRANCH CIRCUITS SHALL BE RECONNECTED TO RELOCATED EXISTING OR NEW PANELBOARDS AS PART OF THE NEW CONSTRUCTION. THIS APPLIES TO SIGNAL AND COMMUNICATIONS SYSTEMS EQUIPMENT, CONDUIT AND WIRE AS WELL.
10. THE ELECTRICAL CONTRACTOR SHALL REVISE EXISTING PANEL SCHEDULES TO CORRESPOND TO ACTUAL CONDITIONS AFTER ALL DEMOLITION AND NEW WORK IS COMPLETED.
11. REMOVE ALL ABANDONED CONDUIT AND WIRE ABOVE CEILINGS.
12. WHEN ELECTRICAL EQUIPMENT OR DEVICE IS REMOVED FROM AN EXISTING WALL OR CEILING WHICH IS TO REMAIN, PATCH ABANDONED OPENINGS TO MATCH EXISTING FINISH.
13. IN GENERAL, THE DEMOLITION PLANS SHOW ALL EXISTING EQUIPMENT THAT IS TO BE REMOVED UNLESS NOTED OTHERWISE. HOWEVER, ELECTRICAL EQUIPMENT, WHETHER SHOWN ON THIS DRAWING OR NOT, WHERE LOCATED IN THE AREA SCHEDULED TO BE DEMOLISHED, SHALL BE REMOVED COMPLETELY (INCLUDING CONDUIT AND WIRES BACK TO THE LAST REMAINING FIXTURE, OUTLET, DEVICE, ETC.) UNLESS OTHERWISE NOTED. COORDINATE DEMOLITION WORK WITH ARCHITECT AND GENERAL CONTRACTOR.
14. EXISTING CONDUIT FEEDS UP THROUGH FLOOR SHALL BE CUT OFF AND PLUGGED FLUSH WITH FLOOR WHERE EXISTING WALLS, ETC. ARE REMOVED. REMOVE CONDUCTORS FROM THE POINT BACK TO LAST OUTLET REMAINING IN SERVICE.
15. IT SHALL BE THE RESPONSIBILITY OF THIS CONTRACTOR TO MAINTAIN CONTINUITY OF ALL ELECTRICAL SYSTEMS, EQUIPMENT, ETC. REMAINING IN OPERATION WHICH IS BEING FED BY AN ABANDONED OUTLET. MAINTAINING CONTINUITY SHALL CONSIST OF REROUTING OF CONDUIT, WIRE, ETC. AS REQUIRED.
16. IT SHALL BE THIS CONTRACTOR'S RESPONSIBILITY TO VERIFY LOCATIONS OF EXISTING CIRCUITS AND ADJUST CIRCUIT NUMBERS ACCORDING TO EXISTING CONDITIONS IF REQUIRED
17. THE ELECTRICAL CONTRACTOR SHALL COORDINATE WITH THE OWNER PRIOR TO REMOVAL OF EXISTING ELECTRICAL EQUIPMENT AND TURN OVER REMOVED EQUIPMENT THAT THE OWNER REQUESTS, IN AS-FOUND CONDITION. EQUIPMENT THAT IS TO BE TURNED OVER SHALL BE BOXED AND TAGGED TO IDENTIFY THE SPECIFIC EQUIPMENT. EQUIPMENT TO BE TEMPORARILY REMOVED DUE TO THE CONSTRUCTION SHALL BE CLEANED AND RE-INSTALLED IN ITS ORIGINAL CONDITION OR AS REQUIRED.
18. WHERE EXISTING WALLS HAVE BEEN REMOVED, AND THERE ARE EXISTING CONDUIT FEEDS WHICH HAVE BEEN CUT OFF AND CAPPED FLUSH WITH THE FLOOR, IT IS THE CONTRACTOR'S RESPONSIBILITY TO IDENTIFY AND DIMENSION ALL SUCH CONDUITS ON THE "AS-BUILT" DRAWINGS.
19. IF ANY EQUIPMENT THAT IS SCHEDULED TO REMAIN IN OPERATION IS DAMAGED BY THE CONTRACTOR, IT SHALL BE REPLACED TO ITS ORIGINAL CONDITION SATISFACTORY TO THE OWNER AT CONTRACTOR'S EXPENSE.

ABBREVIATIONS
AFF ABOVE FINISHED FLOOR
AFG ABOVE FINISHED GRADE
C CONDUIT
CATV CABLE TV
CB CIRCUIT BREAKER
CO CONDUIT ONLY
CU COPPER
DP DISTRIBUTION PANEL
E.C. ELECTRICAL CONTRACTOR
E.G.C. EQUIPMENT GROUNDING CONDUCTOR
EM EMERGENCY
EMS ENERGY MANAGEMENT SYSTEM
EQPT EQUIPMENT
EXT EXTERIOR
(E) EXISTING
(ER) EXISTING EQUIPMENT TO BE RELOCATED
(EX) EXISTING EQUIPMENT TO BE DEMOLISHED
FA FIRE ALARM
FMC FLEXIBLE METALLIC CONDUIT
FO FIBER OPTIC
FTL FEED THROUGH LUGS
G.E.C. GROUNDING ELECTRODE CONDUCTOR
GFI GROUND FAULT CIRCUIT INTERRUPTING TYPE RECEPTACLE
INV INVERTER, EM LIGHTING OR PHOTOVOLT. AC.
IDF INTERMEDIATE DISTRIBUTION FRAME
L LOOKABLE
LTG LIGHTING
LV LOW VOLTAGE
MC METAL CLAD CABLING
MCB MAIN CIRCUIT BREAKER
MDF MAIN DISTRIBUTION FRAME
MFRG MANUFACTURER
MLO MAIN LUGS ONLY
MTD MOUNTED
(N) NEW
N.E.C. NATIONAL ELECTRICAL CODE
NEU NEUTRAL
NIEC NOT IN ELECTRICAL CONTRACT
OAH OVERALL HEIGHT
OFCI OWNER FURNISHED, CONTRACTOR INSTALLED
P INDICATES FIXTURES ON PHOTOCCELL CONTROL
PA PUBLIC ADDRESS
PNL PANEL
S.A.D. SEE ARCHITECTURAL DRAWINGS
SIG SIGNAL SYSTEM
SPD SURGE PROTECTION DEVICE
STC SIGNAL TERMINAL CABINET
SWBD SWITCHBOARD
TELE TELEPHONE
UFER CONCRETE ENCASED CU G.E.C.
UGN UNLESS OTHERWISE NOTED
UG UNDERGROUND
VAV VAV BOX. SEE MECHANICAL DIVISION DRAWINGS FOR LOCATIONS. PROVIDE TOGGLE TYPE DISCONNECT SWITCH.
WP WEATHER PROOF, NEMA 3R, EQUALS "WILE IN USE" TYPE WHEN APPLIED TO EXTERIOR POWER RECEPTACLES
XFMR TRANSFORMER

GENERAL ELECTRICAL NOTES
21. THE CONTRACTOR SHALL PAY FOR ALL REQUIRED PERMITS AND INSPECTION FEES.
22. THE CONTRACTOR SHALL VERIFY ALL CRITICAL DIMENSIONS WITH THE ARCHITECTURAL DRAWINGS PRIOR TO ROUGH-IN.
23. ALL EXIT SIGNS SHALL COMPLY WITH THE RELEVANT PORTIONS OF SECTIONS 1008 AND 1013 OF THE CBC.
24. ALL MECHANICAL DIVISION EQUIPMENT LOW VOLTAGE CONTROL WIRING AND RACEWAY SHALL BE PROVIDED AND INSTALLED AS SPECIFIED IN MECHANICAL DIVISION U.O.N.
25. COORDINATE INSTALLATION OF ALL RECESSED LUMINAIRE(S) WITH MECHANICAL DIVISION PRIOR TO INSTALLATION OF HVAC DUCTS AND SPRINKLER HEADS. ENSURE AFTER INSTALLATION OF LUMINAIRE(S) THAT THERE IS NO CONTACT BETWEEN DUCTS AND LUMINAIRE(S) TO AVOID VIBRATION IN LUMINAIRE(S).
26. USE FLEXIBLE CONDUIT FOR ALL MOTOR, TRANSFORMER, RECESSED LUMINAIRE CONNECTIONS, AND CONNECTIONS BETWEEN TWO SEPARATE STRUCTURES AND FOR ALL FINAL CONNECTIONS TO "CRITICAL EQUIPMENT" AS DEFINED IN SPECIFICATIONS. MINIMUM 1/2" DIAMETER, LIQUID TIGHT TYPE USED OUTDOORS AND IN ALL WET LOCATIONS; PROVIDE WITH CODE-SIZE (MINIMUM #12) BARE GROUND WIRE IN ALL FLEXIBLE CONDUIT.
27. PROVIDE A DEDICATED NEUTRAL CONDUCTOR FOR ALL BRANCH CIRCUITS FEEDING OUTLETS AS NOTED ON THE DRAWINGS.
28. FOR FLUSH MOUNTED PANELBOARDS THE CONTRACTOR SHALL STUD A MINIMUM OF FOUR (4) 3/4" CONDUITS FROM THE PANEL UP INTO THE ACCESSIBLE CEILING ABOVE FOR FUTURE CIRCUITS.
29. ALL CONDUIT CONNECTORS TO OUTLET OR JUNCTION BOXES SHALL HAVE INSULATED THROATS (MANUFACTURED AS AN INTEGRAL PART OF THE CONNECTOR). AFTER-MARKET INSERTABLE THROATS ARE NOT ACCEPTABLE.
30. ALL CIRCUITS IN ALL JUNCTION BOXES AND DEVICES SHALL BE CLEARLY IDENTIFIED BY MEANS OF "E2" NUMBERING TAGS OR EQUIVALENT, TO IDENTIFY THE CIRCUIT NUMBER OR RELAY SUPPLYING THE CONDUCTOR. ALL JUNCTION BOXES SHALL BE LABELED PER SPECIFICATIONS.
31. ALL SURFACE MOUNTED POWER AND SIGNAL BOXES IN FINISHED AREAS SHALL BE "WIREMOLD" TYPE, WITH MATCHING RACEWAYS, SURFACE MOUNTED STEEL JUNCTION BOXES AND/OR EMT ARE NOT ACCEPTABLE.
32. ALL LOCATIONS OF BARE METAL SURFACE MOUNTED CONDUIT, BOXES, PANEL COVERS, AND RELATED FITTINGS OR ACCESSORIES INSTALLED IN FINISHED AREAS (BOTH INTERIOR AND EXTERIOR) SHALL BE FINISH PAINTED TO MATCH THE SURFACE TO WHICH THEY ARE MOUNTED TO (AFTER INSTALLATION). PAINTING SHALL INCLUDE DIFFERENT COLORS AS REQUIRED TO MATCH EXISTING STRIPING OR OTHER BUILDING FEATURES TO WHICH THE EQUIPMENT IS ATTACHED AND VISIBLE. VERIFY EXACT JUNCTION BOX LOCATION(S) AND ROUTING OF EXPOSED RACEWAYS WITH THE ARCHITECT PRIOR TO ROUGH-IN.
33. PROVIDE A BLANK COVER PLATE (COLOR TO MATCH ADJACENT DEVICES OR AS SPECIFICALLY CALLED FOR IN SPECIFICATIONS) FOR ALL JUNCTION BOXES (NEW AND EXISTING) ON THE PROJECT WHEN NO DEVICE IS INSTALLED.
34. FOR OUTDOOR 15 AND 20-AMPERE, 125 AND 250-VOLT RECEPTACLES, RECEPTACLES LOCATED IN "WET" LOCATIONS SHALL HAVE "IN-USE" TYPE WEATHERPROOF COVER PLATES PROVIDED AND INSTALLED; RECEPTACLES LOCATED IN "DAMP" LOCATIONS SHALL HAVE "IN-USE" TYPE WEATHERPROOF COVER PLATES IN LOCATIONS DEEMED TO BE "IN-USE" WITH CORD AND PLUG ATTACHED.
35. TWO OR THREE DIFFERENT PHASES SUPPLIED BY A 3-PHASE PANEL MAY SHARE A SINGLE NEUTRAL ONLY IF CIRCUIT POSITIONS ARE ADJACENT IN THE PANEL. PROVIDE COMMON HANDLE-TIE ON BREAKERS FOR MULTI-WIRE BRANCH CIRCUITS, WITH COMMON NEUTRAL, PER NEC REQUIREMENTS.

GENERAL ELECTRICAL NOTES
1. PRIOR TO BID THE CONTRACTOR SHALL VISIT THE SITE TO ADEQUATELY DETERMINE ALL PRE-EXISTING CONDITIONS. BY THE ACT OF SUBMITTING A BID, THE CONTRACTOR WILL BE DEEMED TO HAVE COMPLIED WITH THE FOREGOING, TO HAVE ACCEPTED SUCH CONDITIONS, AND TO HAVE MADE ALLOWANCES THEREFORE IN PREPARING THE BID.
2. PROVIDE PARRY SIZED GREEN GROUND WIRE IN ALL POWER CONDUITS, BRANCH CIRCUITS (LIGHTING & POWER) AND HOMERUNS. PROVIDE ADDITIONAL ISOLATED GROUND, GREEN WITH YELLOW STRIPE, TO ALL ISOLATED GROUND RECEPTACLES.
3. PROVIDE PULLROPE IN ALL EMPTY CONDUITS THROUGHOUT THE PROJECT.
4. REFER TO ARCHITECTURAL PLANS AND ELEVATIONS FOR EXACT LOCATION & CONNECTION REQUIREMENTS OF ALL LUMINAIRE(S) AND ALL OUTLET, SWITCH, AND ELECTRICAL RELATED DEVICE MOUNTING HEIGHTS AND LOCATIONS. COORDINATE LOCATIONS OF ALL LUMINAIRE(S) AND JUNCTION BOXES WITH MECHANICAL DIVISION PRIOR TO ROUGH-IN. COORDINATE LOCATIONS OF ELECTRICAL DEVICES WITH FURNITURE PLANS PRIOR TO ROUGH-IN.
5. REFER TO MECHANICAL PLANS FOR EXACT LOCATION(S) OF ALL MECHANICAL EQUIPMENT, AND CONFIRM EXACT CONNECTION REQUIREMENTS OF ALL MECHANICAL EQUIPMENT WITH MECHANICAL DIVISION. PRIOR TO ROUGH-IN, VERIFY EXACT REQUIREMENTS FOR VOLTAGE, PHASE, HORSE-POWER, OR KVA RATINGS. OF ALL MECHANICAL DIVISION EQUIPMENT REQUIRING ELECTRICAL CONNECTION.
6. VERIFY EXACT CONNECTION REQUIREMENTS, OUTLET TYPE(S), MOUNTING HEIGHT(S) AND LOCATION(S) OF ALL OWNER-SUPPLIED EQUIPMENT, AND ALL EQUIPMENT PROVIDED UNDER OTHER SECTIONS OF THE SPECIFICATIONS. PRIOR TO ROUGH-IN, REFER TO ARCHITECTURAL DRAWINGS FOR EQUIPMENT LOCATIONS.
7. COORDINATE TRENCHING WITH OWNER AND OTHER TRADES BEFORE BEGINNING WORK.
8. ALL CONDUIT PENETRATIONS THROUGH FIRE-RATED WALLS AND FLOORS SHALL BE SEALED AND EQUIPPED WITH U.L. LISTED FIRE PENETRATION ASSEMBLIES TO MAINTAIN FIRE SEPARATION
9. DO NOT INSTALL ANY OUTLETS BACK TO BACK IN STUD WALLS OR DE-MOUNTABLE PARTITIONS.
10. THE CONTRACTOR SHALL VERIFY ALL CEILING TYPES BEFORE ORDERING OF LUMINAIRE(S). ALSO VERIFY THAT ALL FEATURES CALLED FOR IN LUMINAIRE DESCRIPTIONS ON THE LUMINAIRE SCHEDULE ARE INCLUDED WITH CATALOG NUMBERS LISTED ON THE LUMINAIRE SCHEDULE. WHEN LUMINAIRE ORDERS ARE PLACED, AND ARE INCLUDED AS PART OF THE LIGHTING SUBMITTALS FOR THIS PROJECT, IF A DISCREPANCY EXISTS, CONTACT THE ARCHITECT AND ELECTRICAL ENGINEER FOR CLARIFICATION PRIOR TO BID.
11. CIRCUITRY AND CONDUIT ROUTING SHOWN ON THE PLANS IS DIAGRAMMATIC ONLY. THIS CONTRACTOR IS RESPONSIBLE FOR BECOMING COMPLETELY FAMILIAR WITH THE ARCHITECTURAL AND STRUCTURAL CONDITIONS AND LIMITATIONS IN THE BUILDING AND TO PROVIDE ALL LABOR, TOOLS AND MATERIALS REQUIRED TO PRODUCE A COMPLETELY CONCEALED INSTALLATION WHEREVER INDICATED ON THE PLANS.
12. MAINTAIN "AS-BUILT" RECORDS AT ALL TIMES, SHOWING EXACT LOCATION OF ALL UNDERGROUND AND/OR CONCEALED CONDUITS AND SERVICES INSTALLED UNDER THIS CONTRACT, INCLUDING CIRCUIT IDENTIFICATION WHERE APPLICABLE. PROVIDE OWNER WITH "AS-BUILT" DOCUMENTS AS INDICATED IN THE SPECIFICATIONS, AND/OR CALLED FOR IN THE SPECIFICATIONS.
13. DRAWINGS INDICATE THE LOCATION(S) OF DEVICES, LUMINAIRE(S) AND EQUIPMENT, AND THE CIRCUIT NUMBER AND PANEL DESIGNATED TO SUPPLY THEM. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CORRECTLY CONNECTING ALL ELECTRICAL DEVICES TO CIRCUITS INDICATED ON THE DRAWINGS.
14. UNLESS OTHERWISE NOTED, ALL WORK SHOWN ON DRAWINGS IS NEW AND TO BE PROVIDED AND INSTALLED COMPLETE UNDER THIS CONTRACT.
15. ALL EQUIPMENT GROUNDING SHALL CONFORM TO ARTICLE 250 OF THE NATIONAL ELECTRICAL CODE, LATEST EDITION.
16. ALL EXTERIOR CONDUIT ABOVE GRADE, INCLUDING ALL ROOF MOUNTED CONDUIT, SHALL BE GALVANIZED RIGID STEEL. COAT ALL EXPOSED THREADS WITH GALVANIZING PAINT. PAINT ALL SURFACE MOUNTED RACEWAYS AND PULLBOXES TO MATCH SURROUNDING CONDITIONS, AS DIRECTED BY THE ARCHITECT.
17. ALL ELECTRICAL WORK SHALL BE CARRIED OUT IN ACCORDANCE WITH THE LATEST EDITION OF THE N.E.C., AS WELL AS STATE, AND LOCAL CODES AND REQUIREMENTS.
18. ALL CONDUIT SHALL BE CONCEALED, UNLESS OTHERWISE NOTED.
19. THE CONTRACTOR SHALL BE RESPONSIBLE TO VERIFY THE AVAILABLE SHORT CIRCUIT CURRENT AT THE MAIN SWITCHBOARD, INCOMING TERMINALS WITH THE UTILITY COMPANY, AND TO VERIFY THAT ALL POWER AND SIGNAL SERVICE PROVISIONS, INCLUDING CONCRETE EQUIPMENT PADS, CONDUITS, PULLBOXES AND CLEARANCES, MEET THE UTILITY COMPANY'S REQUIREMENTS, PRIOR TO INSTALLATION.
20. EQUIPMENT OVERLOADS AND FUSES SHALL BE PROVIDED AND INSTALLED AS PER NAME PLATE ON THE EQUIPMENT ACTUALLY PROVIDED.

SHEET INDEX
E-001 GENERAL NOTES, LIST OF DRAWINGS
E-002 ELECTRICAL SYMBOLS LIST
E-003 LUMINAIRE SCHEDULE
E-101 FLOOR PLAN - ELECTRICAL DEMOLITION
E-201 FLOOR PLAN - LIGHTING
E-301 FLOOR PLAN - POWER & SIGNAL & MECH. POWER
E-701 DETAILS
E-801 TITLE 24 DOCUMENTATION

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ELECTRICAL SYMBOLS LIST	
	SECURITY SYSTEM DOOR CONTACT. PROVIDE 1/2" C.O. ROUGH-IN FROM NEAREST ACCESSIBLE CEILING AREA, TO DOOR FRAMING. PROVIDE 1" C.O. WITHIN ALL NON-ACCESSIBLE AREAS FOR WIRING AND DEVICE BY OTHERS.
	SECURITY SYSTEM CEILING MOUNT 360° MOTION DETECTOR. PROVIDE 1" C.O. WITHIN ALL NON-ACCESSIBLE AREAS FOR WIRING, DEVICE AND MOUNT, BY OTHERS
	SECURITY SYSTEM CEILING MOUNT GLASS BREAK DETECTOR. PROVIDE 1" C.O. WITHIN ALL NON-ACCESSIBLE AREAS FOR WIRING, DEVICE AND MOUNT, BY OTHERS
	WALL MOUNTED SECURITY SYSTEM KEYPAD, UP 48" TO TOP OF BOX. PROVIDE 3/4" STUB-UP FROM WALL MOUNT LOCATION TO ACCESSIBLE CEILING SPACES, AND PROVIDE 1" C.O. WITHIN ALL NON-ACCESSIBLE AREAS FOR WIRING AND DEVICE BY OTHERS.
	PROJECT NUMBERED NOTE, OR SHEET NUMBERED, AS NOTED ON PLAN.
	COPPER GROUND ROD, 10' L x 3/4" Ø, SEE SPECS
	CIRCUIT BREAKER, INDICATES 100 AMP, 3 POLE
	UTILITY METER
	CONDUCTOR LANDING LUGS
	CONDUIT TURN DOWN
	CONDUIT TURN UP
	CONTINUATION
	CONDUIT STUB
	ELECTRICAL FEEDER TAG, PER COPPER FEEDER SCHEDULE
	MECHANICAL EQUIPMENT DESIGNATION, REFER TO MECHANICAL PLANS.
	ELECTRICAL EQUIPMENT TAG: EQUIPMENT PREFIX "PNL", "DP", "SWBD", "XFMR", "FA", "IDF" EQUIPMENT NAME
	DETAIL OR SHEET REFERENCE CALLOUT. INDICATES DETAIL 1, SHEET E-0.1. WHEN ADJACENT EQUIPMENT, APPLIES TO EQUIPMENT IDENTIFIED ONLY.
	DETAIL OR SHEET REFERENCE CALLOUT. INDICATES DETAIL 1, SHEET E-0.1. WHEN ADJACENT EQUIPMENT, APPLIES TO TYPICAL EQUIPMENT SERIES.
BRANCH CIRCUIT NOMENCLATURE	
EXAMPLES:	
LA1-3	1-POLE BRANCH CIRCUIT TO CB
LA1-1,3,5	1-POLE BRANCH CIRCUIT FOR MULTI CIRCUIT HOMERUNS TO SEPARATE CBS
LA1-[1,3]	2-POLE BRANCH CIRCUIT TO COMMON CB
LA1-[1,3,5]	3-POLE BRANCH CIRCUIT TO COMMON CB

ELECTRICAL SYMBOLS LIST	
	MAIN SWITCHBOARD, DISTRIBUTION PANEL, OR MOTOR CONTROL CENTER
	SURFACE MOUNTED PANELBOARD OR EQUIPMENT AS NOTED ON DRAWINGS. 6' - 6" TO TOP
	FLUSH MOUNTED PANELBOARD OR EQUIPMENT AS NOTED ON DRAWINGS. 6' - 6" TO TOP.
	PAD MOUNTED UTILITY TRANSFORMER, PER UTILITY CO. REQUIREMENTS.
	CONDUIT AND WIRE CONCEALED IN CEILING OR WALL
	CONDUIT AND WIRE UNDERGROUND, OR CONCEALED UNDER SLAB
	CONDUIT AND WIRE RUN EXPOSED, PAINTED TO MATCH ALL ADJACENT FINISHES WITHIN FINISHED SPACES
	HOMERUN TO PANELBOARD OR TERMINAL BOARD, AS NOTED ON PLANS
	CROSSMARKS INDICATE QUANTITY OF #12 CONDUCTORS PLUS PARITY SIZED GROUND CONDUCTOR, NO HASHMARKS INDICATES (2) #12 PLUS PARITY SIZED GROUND CONDUCTOR.
	WIRE SIZE: 10 AWG FOR ALL CONDUCTORS, INCLUDING GROUND WIRE THROUGHOUT THE COMPLETE CIRCUIT
	20A 3PG 125V DUPLEX RECEPTACLE, UP 18" U.O.N. - "WP" INDICATES WEATHERPROOF.
	20A 3PG 125V DOUBLE DUPLEX RECEPTACLE, UP 18" U.O.N.
	20A 3PG 125V DUPLEX RECEPTACLE, MOUNTED ABOVE COUNTER.
	20A 3PG 125V DUPLEX RECEPTACLE, FLUSH CEILING MOUNT.
	SURFACE MOUNTED WIREMOLD RACEWAY WITH RECEPTACLES AS INDICATED ON PLANS
	SURFACE MOUNTED WIREMOLD RACEWAY RISER
	TERMINAL MOUNTING BACKBOARD, 3/4" PLYWOOD, DIMENSIONS AS NOTED ON PLANS, PAINT TO MATCH ADJACENT WALL SURFACE, MAINTAINING VISIBILITY OF UL FIRE RATING LABEL
	DATA OUTLET, WALL MOUNTED, UP 18" U.O.N.
	DATA OUTLET, WALL MOUNTED, MOUNTED ABOVE COUNTER
	DATA OUTLET, FLUSH CEILING MOUNT. "AP" - ACCESS POINT "P" - PROJECTOR
	FLUSH WALL MOUNTED INDOOR PUBLIC ADDRESS SPEAKER & SIGNAL SYSTEM CLOCK, UP 96" U.O.N.
	FLUSH WALL MOUNTED INDOOR PUBLIC ADDRESS SPEAKER, UP 96" U.O.N.
	FLUSH WALL MOUNTED OUTDOOR PUBLIC ADDRESS SPEAKER - "WP" INDICATES WEATHERPROOF
	FLUSH WALL MOUNTED SIGNAL SYSTEM CLOCK, UP +96" U.O.N.
	FLOOR BOX ASSEMBLY, IN-SLAB, DOUBLE DUPLEX RECEPTACLE AND DATA OUTLET.
	FIRE RATED POKE THRU ASSEMBLY FLOOR BOX
	LINE VOLTAGE MOTOR RATED SWITCH INSTALLED AT EQUIPMENT SHOWN
	MOTOR DISCONNECT SWITCH, HORSEPOWER RATED, FUSED
	PLAN SPECIFIC DIMENSIONED SYMBOL, BASED ON INDUSTRY STANDARD FRAME SIZES DIAGRAMMATIC SYMBOL
	MOTOR DISCONNECT SWITCH, HORSEPOWER RATED, NON FUSED
	PLAN SPECIFIC DIMENSIONED SYMBOL, BASED ON INDUSTRY STANDARD FRAME SIZES DIAGRAMMATIC SYMBOL
	VARIABLE FREQUENCY DRIVE, FURNISHED BY MECHANICAL, INSTALLED AND CONNECTED COMPLETE BY ELECTRICAL.

ELECTRICAL SYMBOLS LIST	
	LINE VOLTAGE SINGLE POLE TOGGLE SWITCH, LETTER ADJACENT INDICATES RESPECTIVE ZONE CONTROLLED, UP 48" U.O.N.
	LINE VOLTAGE TWO POLE TOGGLE SWITCH, UP 48" U.O.N.
	LINE VOLTAGE THREE-WAY TOGGLE SWITCH, UP 48" U.O.N.
	LINE VOLTAGE KEY OPERATED TOGGLE SWITCH
	LINE VOLTAGE MOTOR RATED TOGGLE SWITCH INSTALLED AT EQPT SHOWN
	LINE VOLTAGE TOGGLE SWITCH WITH PILOT LIGHT, LIGHT IS ON WHEN CIRCUIT IS CLOSED, UP 48" U.O.N.
	LOW VOLTAGE MOMENTARY CONTACT SWITCH - SEE LOW VOLTAGE RELAY SCHEDULE, LOWER CASE LETTER ADJACENT INDICATES RESPECTIVE ZONE CONTROLLED, UP 48" U.O.N.
	LOW VOLTAGE KEYED MOMENTARY CONTACT SWITCH - SEE LOW VOLTAGE RELAY SCHEDULE, LOWER CASE LETTER ADJACENT INDICATES RESPECTIVE ZONE CONTROLLED, UP 48" U.O.N.
	WALL MOUNTED SWITCH TYPE INFRARED OCCUPANCY SENSOR; UP 48" U.O.N.; SINGLE OR DUAL AS NOTED BY LETTERS ADJACENT. SET TO FIXED 20 MINUTE TIME DELAY AND MAX SENSITIVITY
	WALL MOUNTED DUAL TECHNOLOGY OCCUPANCY SENSOR; UP 48" U.O.N.; SINGLE OR DUAL AS NOTED BY LETTERS ADJACENT. SET TO FIXED 20 MINUTE TIME DELAY AND MAX SENSITIVITY
	WALL MOUNTED DIGITAL DUAL TECHNOLOGY DIMMING OCCUPANCY SENSOR SWITCH, UP 48" U.O.N.
	WALL MOUNTED DIGITAL SWITCH, UP 48" U.O.N.; LOWER CASE LETTER ADJACENT INDICATES RESPECTIVE ZONE CONTROLLED
	WALL MOUNTED SINGLE OR MULTI-ZONE DIGITAL DIMMER SWITCH, UP 48" U.O.N.; LOWER CASE LETTERS ADJACENT INDICATE RESPECTIVE ZONES TO BE SIMULTANEOUSLY MANUALLY CONTROLLED; NUMERAL DESIGNATES NUMBER OF ZONES ASSIGNED TO THE DEVICE
	CEILING MOUNTED DUAL TECHNOLOGY DIGITAL OCCUPANCY SENSOR
	WALL MOUNTED DUAL TECHNOLOGY DIGITAL OCCUPANCY SENSOR
	LOW VOLTAGE COLD TEMPERATURE PIR OCCUPANCY SENSOR
	CEILING MOUNTED LINE VOLTAGE DUAL TECHNOLOGY OCCUPANCY SENSOR
	SINGLE OR MULTI-ZONE SWITCHING OR DIMMING OPEN LOOP DIGITAL DAYLIGHTING SENSOR; NOTATIONS ADJACENT IDENTIFY DAYLIGHT ZONES ASSIGNED TO THE DEVICE. VERIFY EXACT LOCATION PRIOR TO ROUGH-IN
	SINGLE ZONE SWITCHING OR DIMMING CLOSED LOOP DIGITAL DAYLIGHTING SENSOR; NOTATIONS ADJACENT IDENTIFY DAYLIGHT ZONES ASSIGNED TO THE DEVICE. VERIFY EXACT LOCATION PRIOR TO ROUGH-IN
	DAYLIGHT CONTROL PHOTOCELL - BRACKET MOUNTED; NOTATIONS ADJACENT IDENTIFY DAYLIGHT ZONES ASSIGNED TO THE DEVICE. VERIFY EXACT LOCATION PRIOR TO ROUGH-IN
	INDICATES DAYLIGHT ZONE CONTROLLED VIA PHOTOCELL
	ROOM CONTROLLER ADJACENT NUMERAL REFERS TO THE NUMBER OF ZONES TO BE CONTROLLED. VENDOR OR CONTRACTOR TO PROVIDE QUANTITY OF ROOM CONTROLLERS REQUIRED FOR THE NUMBER OF CONTROLLED ZONES.
	PLUG LOAD ROOM CONTROLLER
	NETWORK BRIDGE
	MASTER WIRELESS BORDER ROUTER & NB - SWITCH IN NETWORK CABINET
	SECONDARY WIRELESS BORDER ROUTER
	ISOLATED RELAY INTERFACE
	EMERGENCY LIGHTING CONTROL MODULE
	OCCUPANCY SENSOR POWER PACK MOUNTED IN CONCEALED ACCESSIBLE LOCATION
CALIFORNIA GREEN BUILDING STANDARDS COMPLIANCE	
ALL EXTERIOR LUMINAIRES SPECIFIED IN THESE CONTRACT DOCUMENTS COMPLY WITH THE REQUIREMENTS OF THE CALIFORNIA ENERGY CODE AND THE CALIFORNIA GREEN BUILDING STANDARDS CODE, SECTION AS.106.8 LIGHT POLLUTION REDUCTION. EXTERIOR LUMINAIRES COMPLY WITH BACKLIGHT, UPLIGHT, AND GLARE (BUG) RATINGS AS DEFINED IN IESNA TM-15-11 AND BUG RATINGS DO NOT EXCEED THE MAXIMUM ALLOWABLE RATINGS FOR THIS PROJECT.	

ELECTRICAL SYMBOLS LIST	
ALL SWITCH AND CONTROL MOUNTING HEIGHTS OF 48" SHALL BE TO TOP OF THE DEVICE BOX. ALL RECEPTACLES WITH MOUNTING HEIGHT OF UP TO 18" SHALL BE NO LOWER THAN 15" TO BOTTOM OF THE DEVICE BOX, TYPICAL, U.O.N.	
	INDICATES LUMINAIRE TYPE, SEE LUMINAIRE SCHEDULE
	RECESSED 2'x2', 2'x4' OR 1'x4' LUMINAIRE, FULLY LENSED
	INDICATES EMERGENCY LUMINAIRE. SEE ABBREVIATIONS FOR TYPE OF EMERGENCY SOURCE
	SUSPENDED LINEAR LUMINAIRE
	INDICATES AIRCRAFT CABLE SUPPORT POINT (VERIFY WITH MFR)
	INDICATES COMBINATION AIRCRAFT CABLE/ELECTRICAL FEED POINT (VERIFY WITH MFR)
	SURFACE CEILING, WALL OR COVE MOUNTED LUMINAIRE
	UNDER CABINET LUMINAIRE
	SURFACE CEILING MOUNTED LUMINAIRE
	PENDANT MOUNTED LUMINAIRE
	WALL MOUNTED LUMINAIRE
	RECESSED DOWNLIGHT LUMINAIRE
	RECESSED WALLWASH LUMINAIRE
	POLE ARM-MOUNTED AREA LUMINAIRE; ARROW INDICATES DIRECTION OF LIGHT DISTRIBUTION WHEN NOT PARALLEL TO ARM ORIENTATION
	POST-TOP PEDESTRIAN-SCALE AREA LUMINAIRE; ARROW INDICATES DIRECTION OF LIGHT DISTRIBUTION
	WALL MOUNTED EXIT SIGN, ARROWS AS NOTED ON PLANS. SHADED AREA INDICATES NUMBER OF FACES

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LUMINAIRE SCHEDULE								
TYPE	MOUNTING	DESCRIPTION	MANUFACTURER CATALOG NUMBER	LIGHT SOURCE	POWER SUPPLY	VOLT	INPUT WATTS	REMARKS
AA2	PENDANT	PENDANT MOUNTED DIRECT/INDIRECT LINEAR LUMINAIRE WITH EXTRUDED ALUMINUM CONSTRUCTION HOUSING, WIDESPREAD UPLIGHT OPTIC, FLUSH DOWNLIGHT DIFFUSER, AND CAST ALUMINUM ENDCAPS. 50"- FULLY ADJUSTABLE AIRCRAFT CABLE SUSPENSION KIT. 2.5" X 2.5" X 8' LENGTH COMPRISED OF (1) 8' MODULE. WHITE, BLACK, OR SATIN ALUMINUM POLYESTER PAINTED FINISH TO BE DETERMINED BY THE ARCHITECT. WEIGHT: 2.3 LBS/FT.	FINELITE HP-X-P-ID-8'-B-H-835-F-F- 120/277-SC-FC-1%-FA50- CEILING-FE-FINISH	3500K LED 80 CRI 5286 LM/4'	0-10V DIMMING (1%-100%)	120/277V	88 W	
AC2	SURFACE WALL	WALL MOUNTED DIRECT/INDIRECT LUMINAIRE WITH EXTRUDED ALUMINUM CONSTRUCTION HOUSING, HIGH TRANSMITTANCE CLEAR ACRYLIC LENSES, SAIL SHAPED ENDCAP, 55% ASYMMETRIC UPLIGHT AND 45% LAMBERTIAN DOWNLIGHT DISTRIBUTION. 3.19" H X 1.9" D X 12' L. BLACK, WHITE, METALLIC SILVER POWDER COATED PAINTED FINISH TO BE DETERMINED BY THE ARCHITECT. WEIGHT: 1 LB/FT.	FLUXWERX LNW-A-0-D-W1-FINISH-Y6-8-35- B-E1-M-1L4-1L8-E-A	3500K LED 80 CRI 1337 LM/4'	0-10V DIMMING (1%-100%)	120/277V	35 W	
AC3	SURFACE WALL	SIMILAR TO TYPE AC2 EXCEPT 16" LENGTH.	FLUXWERX LNW-A-0-D-W1-FINISH-Y6-8-35- B-E1-M-2L8-E-A	3500K LED 80 CRI 1337 LM/4'	0-10V DIMMING (1%-100%)	120/277V	47 W	
AC4	SURFACE WALL	SIMILAR TO TYPE AC2 EXCEPT 24" LENGTH.	FLUXWERX LNW-A-0-D-W1-FINISH-Y6-8-35- B-E1-M-3L8-E-A	3500K LED 80 CRI 1337 LM/4'	0-10V DIMMING (1%-100%)	120/277V	70 W	
AD1	NOT USED							
AD2	RECESSED	RECESSED WALLWASHER DOWNLIGHT WITH FORMED STEEL CONSTRUCTION HOUSING, 4.5" DIAMETER BEVELED AND REGRESSED TRIM WITH MATCHING FLANGE. 90 DEGREE BEAM SPREAD WITH SOLITE SPREAD LENS. 2 7/8" HIGH HOUSING WITH 1 1/8" MAX. CEILING THICKNESS. PROVIDE 27" C-CHANNEL BAR HANGERS. WEIGHT: 8 LBS.	USAI LIGHTING B4RW-F-09C3-35KS-W2-D2- BEVEL TRIM-FLANGE TRIM-FT- UNV-D6E-CB27	3500K LED 80 CRI 757 LM	0-10V DIMMING (100%-1%)	UNV	9 W	
AJ1	RECESSED	RECESSED 2' X 2' TROFFER DIE-FORMED STEEL CONSTRUCTION NOM. 2-3/8" DEPTH. CENTER BASKET DESIGN WITH CURVED RIBBED ACRYLIC DIFFUSER; SEISMIC RETAINING CLIPS	LITHONIA 2BLT2-40L-ADP-EZ1-LP835- LATC	3500K LED 82 CRI 4041 LM	0-10V DIMMING (100%-1%)	UNV	31 W	
AK1	NOT USED							
NOTE: ANCHORAGE DETAILS FOR NON-STRUCTURAL COMPONENTS WEIGHING <20LBS ARE NOT REQUIRED PER ASCE 7, CHAPTER 13.								
END OF LUMINAIRE SCHEDULE								

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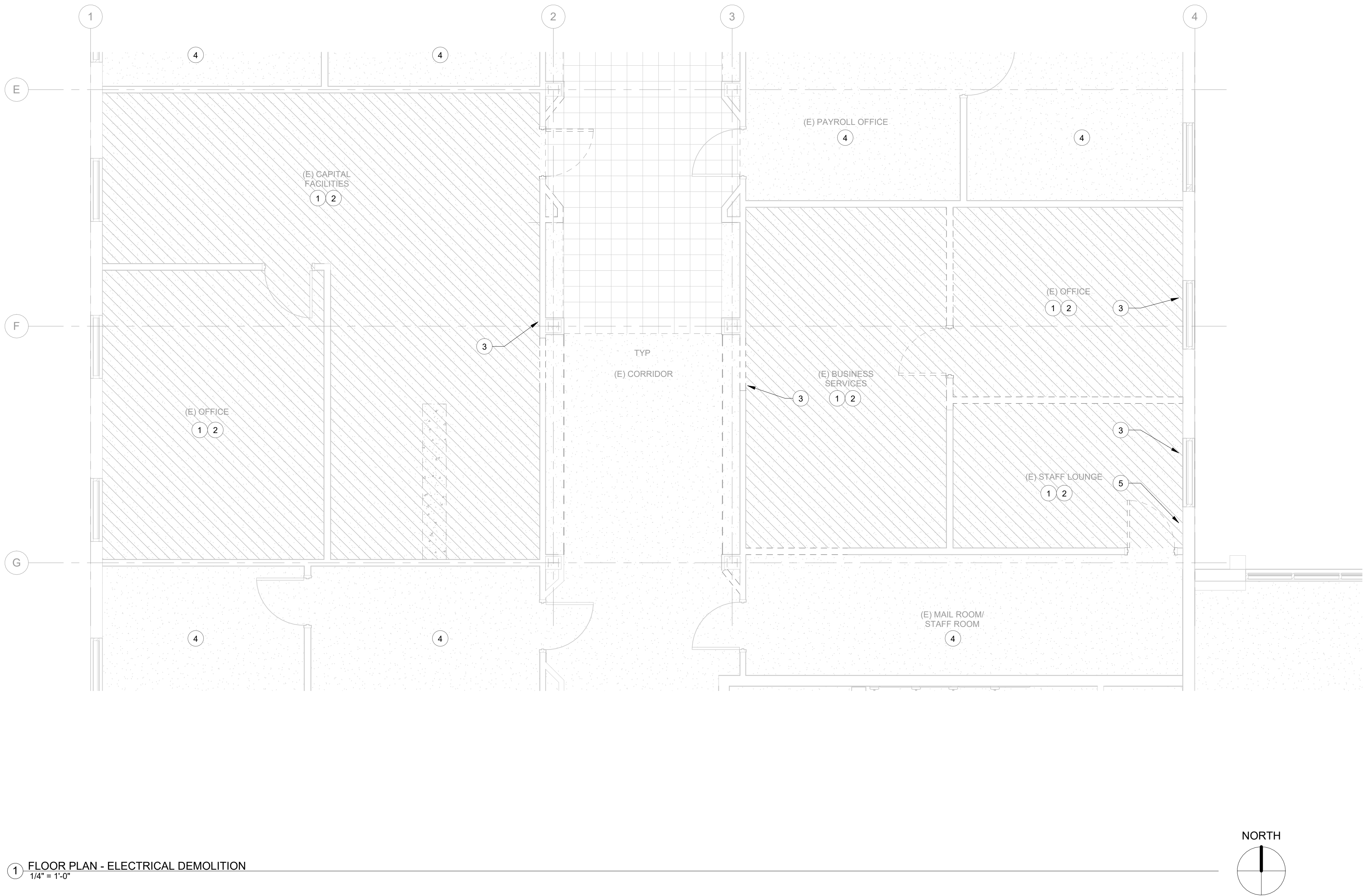
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LUMINAIRE SCHEDULE

E-003



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

SHEET NUMBERED NOTES

- 1 DISCONNECT AND REMOVE ALL EXISTING LUMINAIRES AND ASSOCIATED CONTROLS IN THIS ROOM. INCLUDE ALL RELATED LUMINAIRE CONTROLS CONDUIT, WIRING AND BACK BOXES. EXISTING LUMINAIRE POWER CIRCUITRY IS TO REMAIN TO BE REUSED. REMOVE EXISTING FLEX CONDUIT EXTENSIONS, WHERE PRESENT, BACK TO NEAREST BOX TO REMAIN.
- 2 DISCONNECT AND REMOVE ALL EXISTING RECEPTACLES, TELECOM OUTLETS, CLOCKS AND SPEAKERS IN THIS ROOM. U.O.N. INCLUDE ALL RELATED RACEWAY, WIRING AND BACK BOXES BACK TO NEAREST JUNCTION TO REMAIN. U.O.N.
- 3 EXISTING SURFACE MOUNTED CONDUIT AT THIS WALL IS TO REMAIN. PROTECT IN PLACE.
- 4 NO ELECTRICAL SCOPE IN THIS ROOM.
- 5 EXISTING PUNCH BLOCKS AT THIS LOCATION TO BE RELOCATED. IDENTIFY AND MARK TERMINATION OF ALL EXISTING WIRING CONNECTED TO BLOCKS AND PULL BACK TO A LOCATION OUTSIDE OF THE AREA OF WORK. TRIM EXISTING CONDUITS STUBBED OUT ADJACENT TO BLOCKS BACK TO NEW PUNCH BLOCKS LOCATION IN EXISTING MAIL/STAFF ROOM TO THE SOUTH. BUSH CONDUIT ENDS. SEE E-301 FOR NEW LOCATION.

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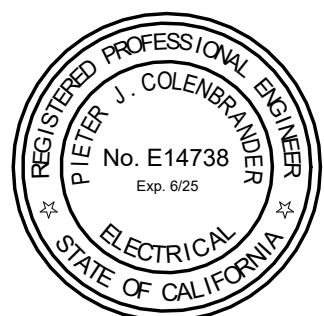


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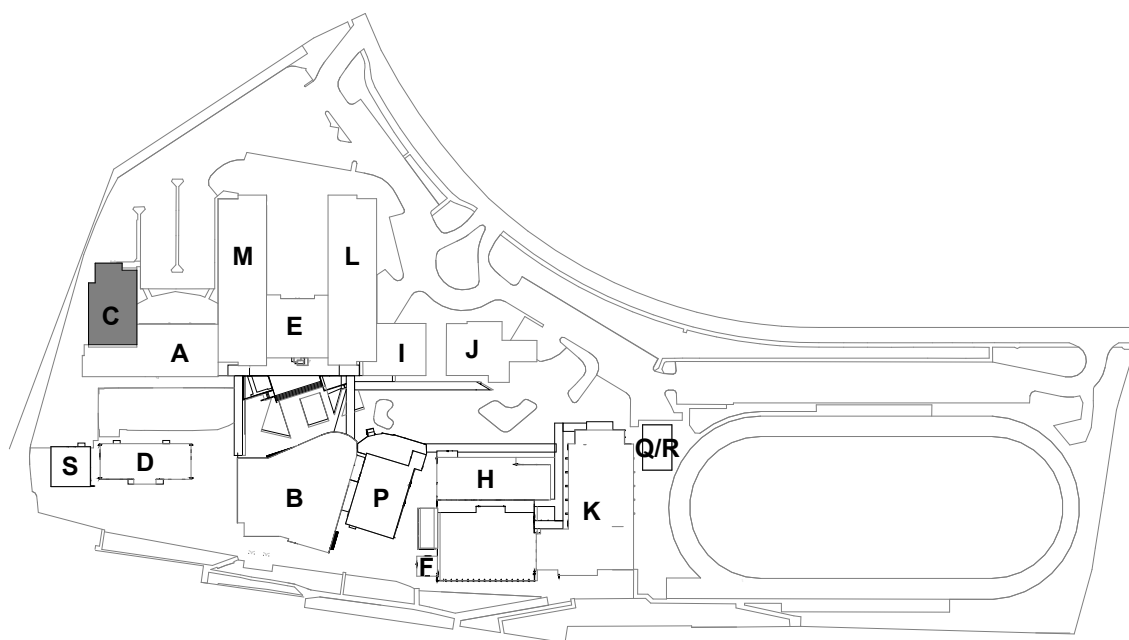


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San Francisco, California
94104 USA
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KEY PLAN

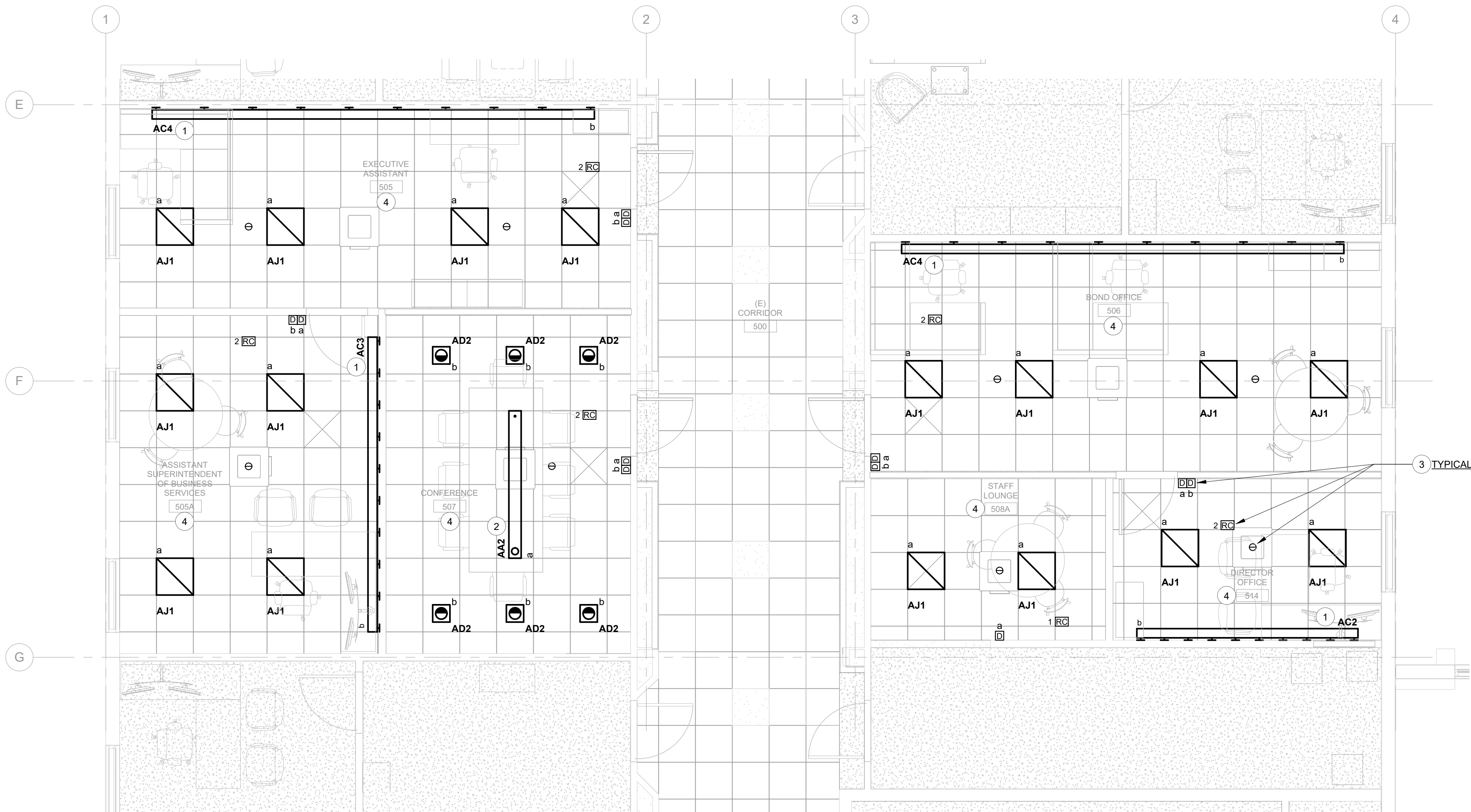


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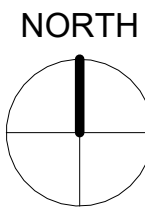
FLOOR PLAN -
ELECTRICAL
DEMOLITION

E-101

NOT FOR CONSTRUCTION



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



SHEET NUMBERED NOTES

- 1 WALL MOUNTED AT 7'-6" A.F.F. TO THE BOTTOM OF THE LUMINAIRE.
- 2 PENDANT MOUNTED AT 7'-6" A.F.F. TO THE BOTTOM OF THE LUMINAIRE.
- 3 PROVIDE AND INSTALL DIMMER SWITCH(ES), OCCUPANCY SENSOR(S), AND ROOM CONTROLLERS WHERE SHOWN. SEE DETAILS ON SHEET E-701. MOUNT ROOM CONTROLLERS ABOVE ACCESSIBLE CEILING WHEREVER POSSIBLE.
- 4 CONNECT COMPLETE NEW LUMINAIRES TO EXISTING LIGHTING CIRCUITS VIA NEW LIGHTING CONTROLS.

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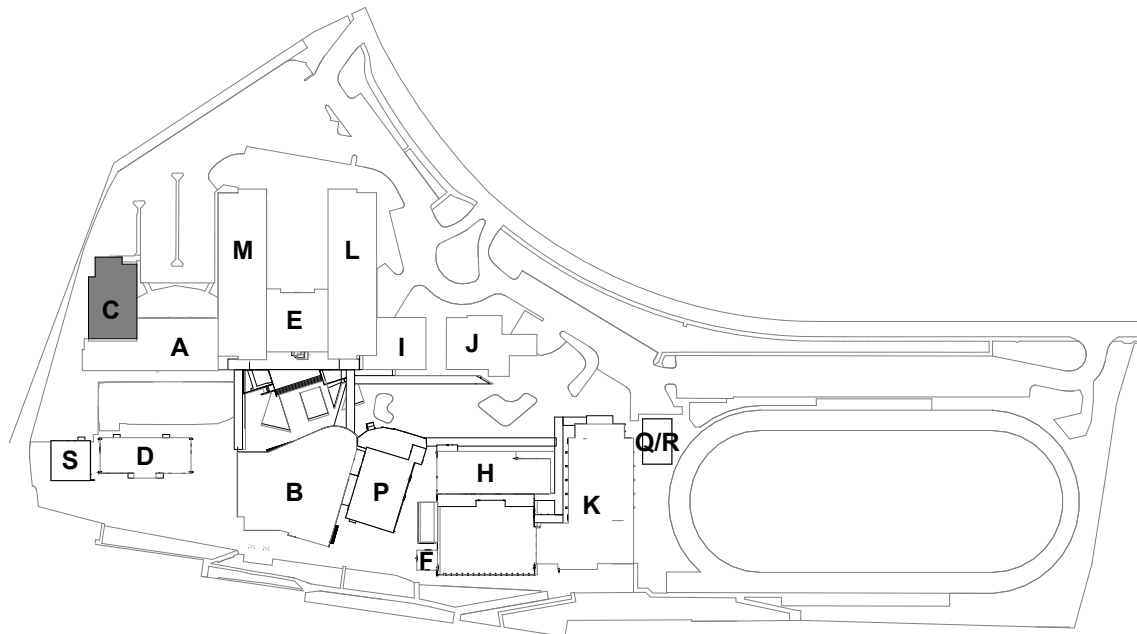
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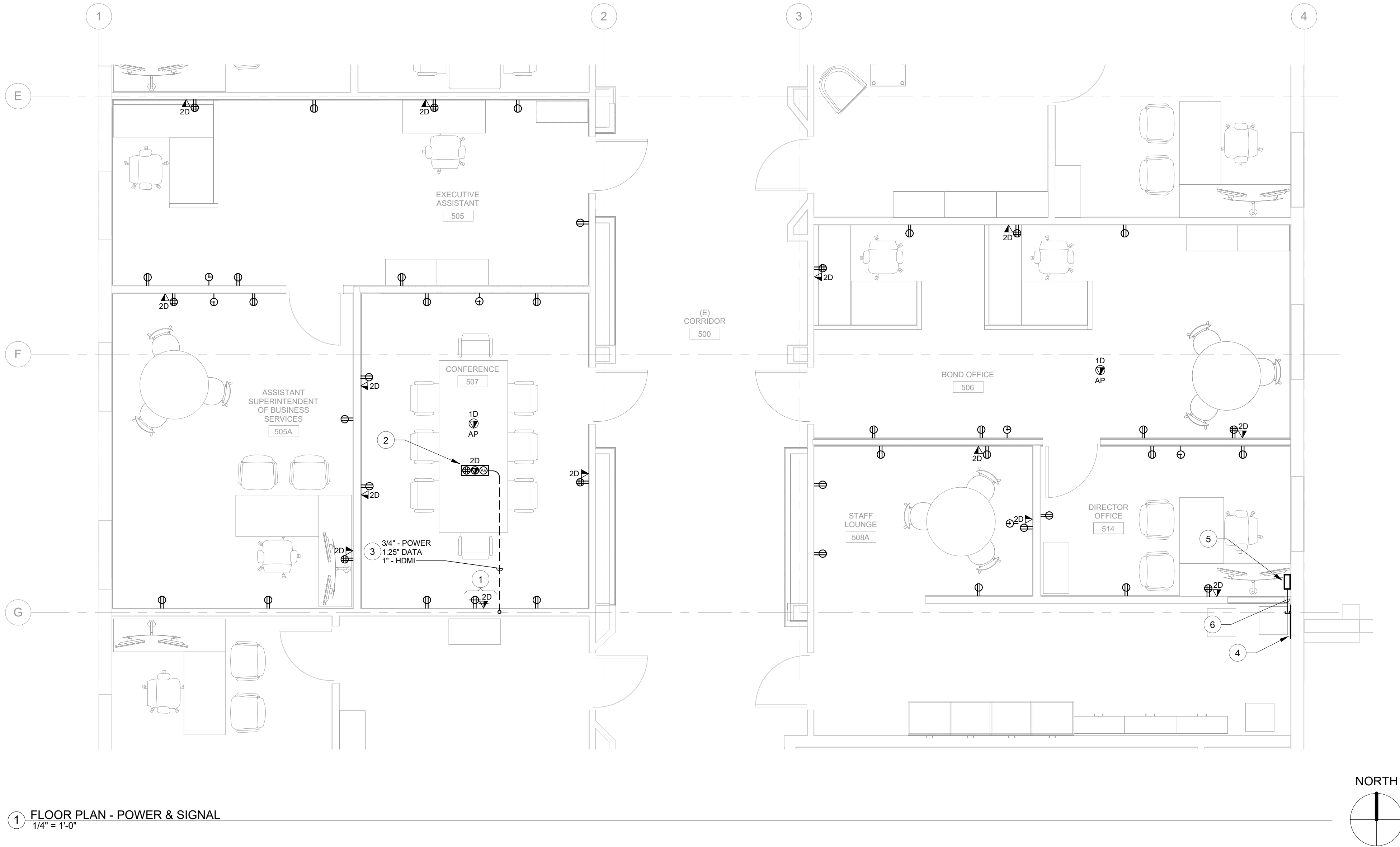
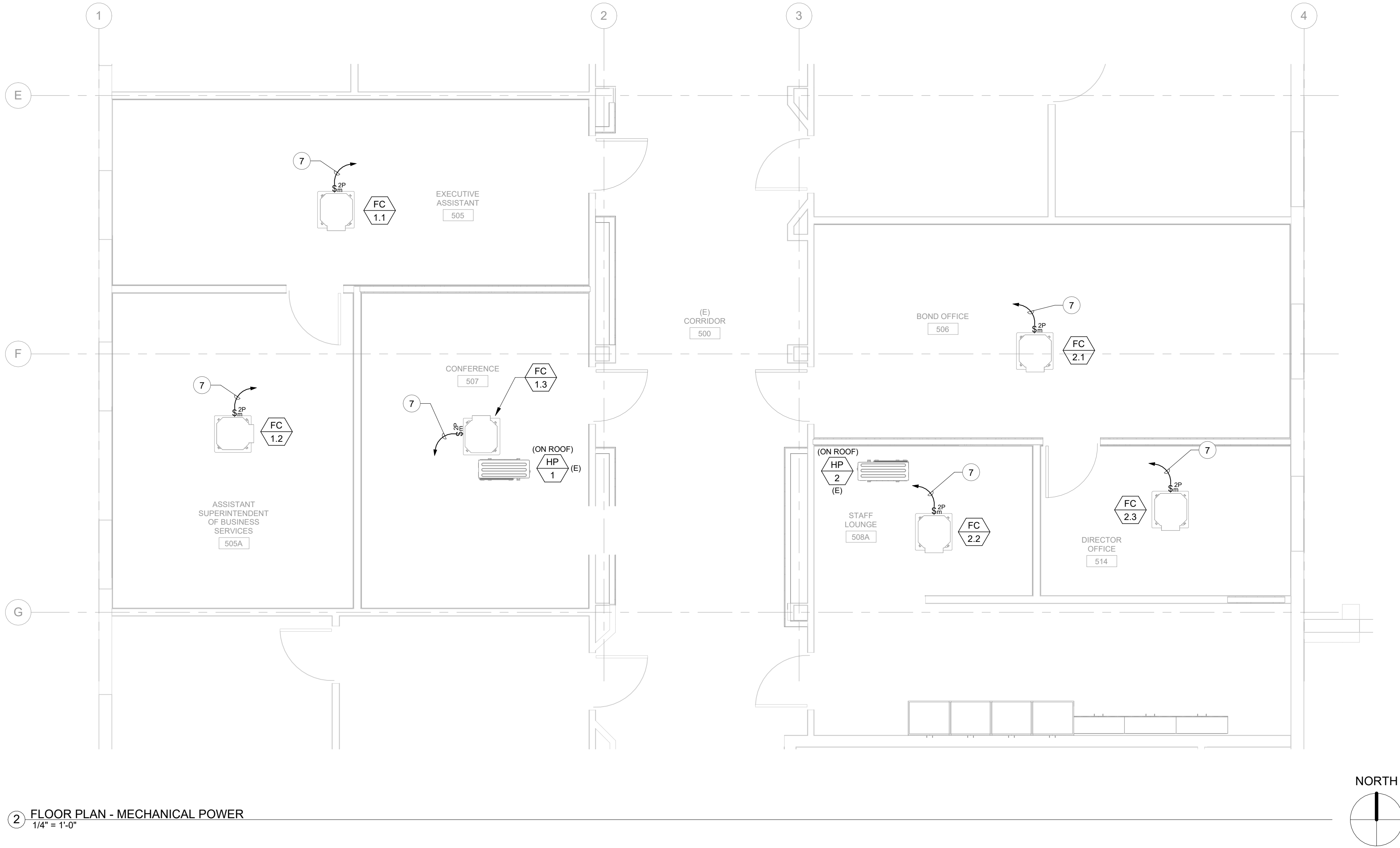
KEY PLAN



###.00

FLOOR PLAN -
LIGHTING

E-201



SHEET NUMBERED NOTES

1

FLUSH WALL MOUNTED AV/POWER BOX ASSEMBLY (BEHIND FLAT PANEL DISPLAY). HUBBELL NET SELECT FPTV 4-GANG BOX #NSAV124M, OR EQUAL, WITH DUPLES RECEPTACLE. (2) DATA JACKS AND (1) EXTRON MODEL WPD110A HDMI CONNECTOR ASSEMBLY. VERIFY MOUNTING HEIGHT AND LOCATION WITH ARCHITECT PRIOR TO ROUGH-IN. SEE ARCHITECTURAL ELEVATION DRAWINGS.

2

PROVIDE (4) COMPARTMENT FLOOR BOX WITH ROUND COVER, LEGRAND MODEL RFB4E, OR EQUAL. AV OUTLET SHOWN TO BE (1) EXTRON MODEL WPD110A HDMI CONNECTOR ASSEMBLY WITH HDMI PASS-THRU CABLE FROM CONNECTOR ASSEMBLY TO HUBBELL AV BOX BEHIND ROOM FLAT PANEL DISPLAY. RUN HDMI CABLE IN CONDUIT SHOWN AND TERMINATE IN HDMI CONNECTOR ASSEMBLY IN AV BOX. SEE NOTES 1 AND 3.

3

SAW CUT EXISTING SLAB AND PROVIDE CONDUIT SHOWN. STUB DATA CONDUIT IN CEILING, HOMERUN POWER CONDUIT TO PANEL INDICATED AND CONNECT HDMI CONDUIT TO HUBBELL AV BOX BEHIND FLAT PANEL DISPLAY. SEE NOTES 1 AND 2.

4

INSTALL EXISTING BACKBOARD AND PUNCH BLOCKS REMOVED FROM ADJACENT ROOM AT THIS LOCATION. RECONNECT COMPLETE EXISTING WIRING FORMERLY CONNECTED TO BLOCKS, USING EXISTING CONDUIT TRIMMED BACK TO THIS LOCATION DURING DEMOLITION WORK. SEE E-101.

5

INTERCEPT EXISTING TELECOM CONDUIT ENTERING ROOM FROM THE CEILING WITH NEW WALL MOUNTED PULLCAN, SIZED PER NEC.

6

PROVIDE NEW 1" CONDUIT FROM NEW PULLBOX, STUBBED OUT ADJACENT TO RELOCATED PUNCH BLOCKS. BUSH CONDUIT END, RECONNECT COMPLETE EXISTING TELECOM WIRING PULLED BACK DURING DEMOLITION WORK TO RELOCATED PUNCH BLOCKS, USING NEW PULLCAN AND CONDUIT.

7

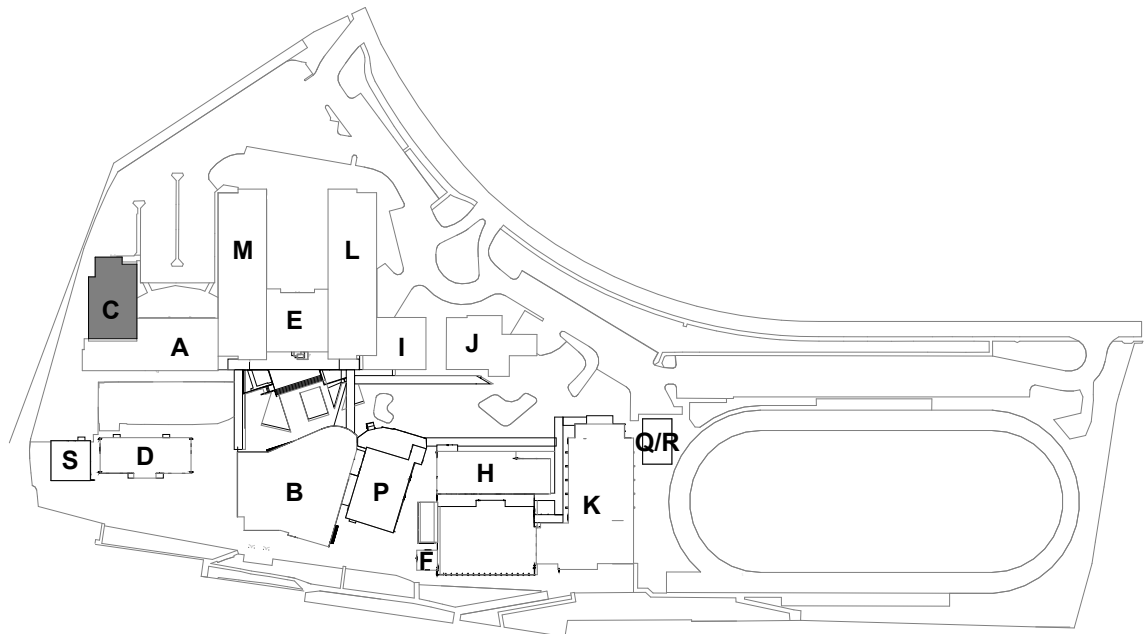
EXISTING OUTDOOR HP UNIT ON ROOF SUBFEEDS LINE VOLTAGE POWER TO INDOOR UNIT. PROVIDE, INSTALL AND CONNECT COMPLETE INTERCONNECTION BETWEEN UNITS USING (2) #12 + (1) #12G, IN 3/4" CONDUIT.

SCOPE NOTE

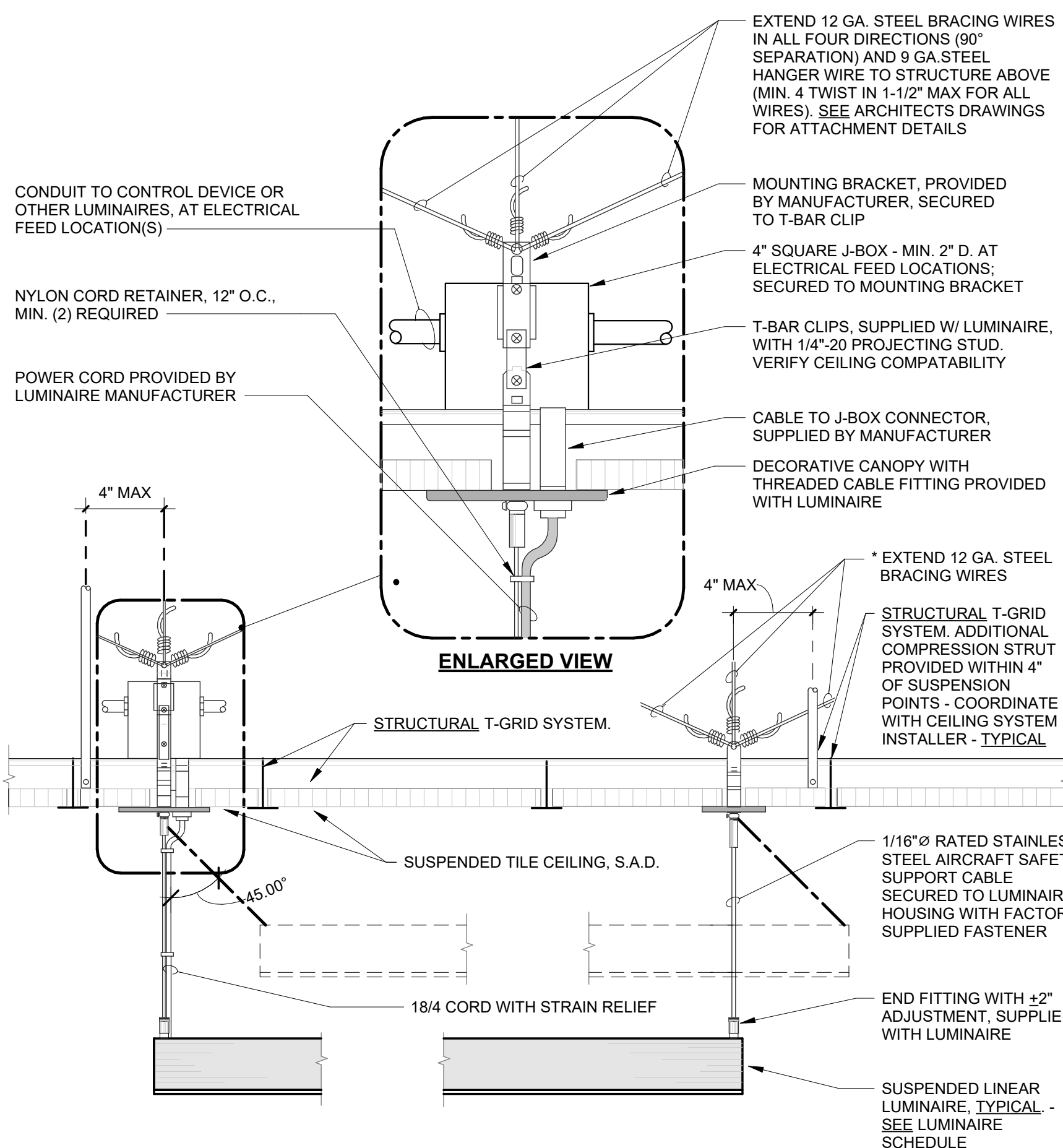
IN ADDITION TO PROJECT SCOPE SHOWN ON THIS SHEET, INCLUDE THE FOLLOWING FOR BIDDING PURPOSES:

- PROVIDE BRANCH CIRCUITY OF THE QUANTITY INDICATED BELOW TO RECEPTACLES SHOWN ON PLAN. ASSUME MAXIMUM CIRCUIT LENGTH TO BE 150 FEET. SEE 26 0500, 3.02(A)(10). UTILIZE 3/4" EMT RACEWAY, CONCEALED IN CEILING AND WALLS. APPLY CIRCUIT DERATING PER NEC 310.15(C), AS NECESSARY.
 - RM. 505 - (4) CKTS.
 - RM. 505A - (2) CKTS.
 - RM. 506 - (5) CKTS.
 - RM. 507 - (4) CKTS.
 - RM. 508A - (2) CKTS.
 - RM. 514 - (2) CKTS.
- PROVIDE QUANTITY OF CAT 6A DATA CABLING INDICATED ON PLAN. ASSUME MAXIMUM CABLE LENGTH OF 100 FEET.
- PROVIDE (3) #12 TO EACH CLOCK SHOWN ON PLAN. HOMERUN TO CAMPUS CLOCK HEAD END EQUIPMENT IN BLDG. I. RUN WIRE ON J-HOOKS ABOVE CEILING, WHEN POSSIBLE.

KEY PLAN



- NOTES: 1. LUMINAIRE SHALL BE FREE TO SWING 45° FROM THE VERTICAL IN ALL DIRECTIONS WITHOUT HITTING ANY OBSTRUCTIONS.
2. SUPPORT (NON-FEED) DETAIL SIMILAR TO ENLARGED VIEW, EXCEPT NO J-BOX OR CONDUIT.
3. COMPRESSION STRUT ONLY REQUIRED WHEN WEIGHT AT THE SUSPENSION POINT IS >20LBS.

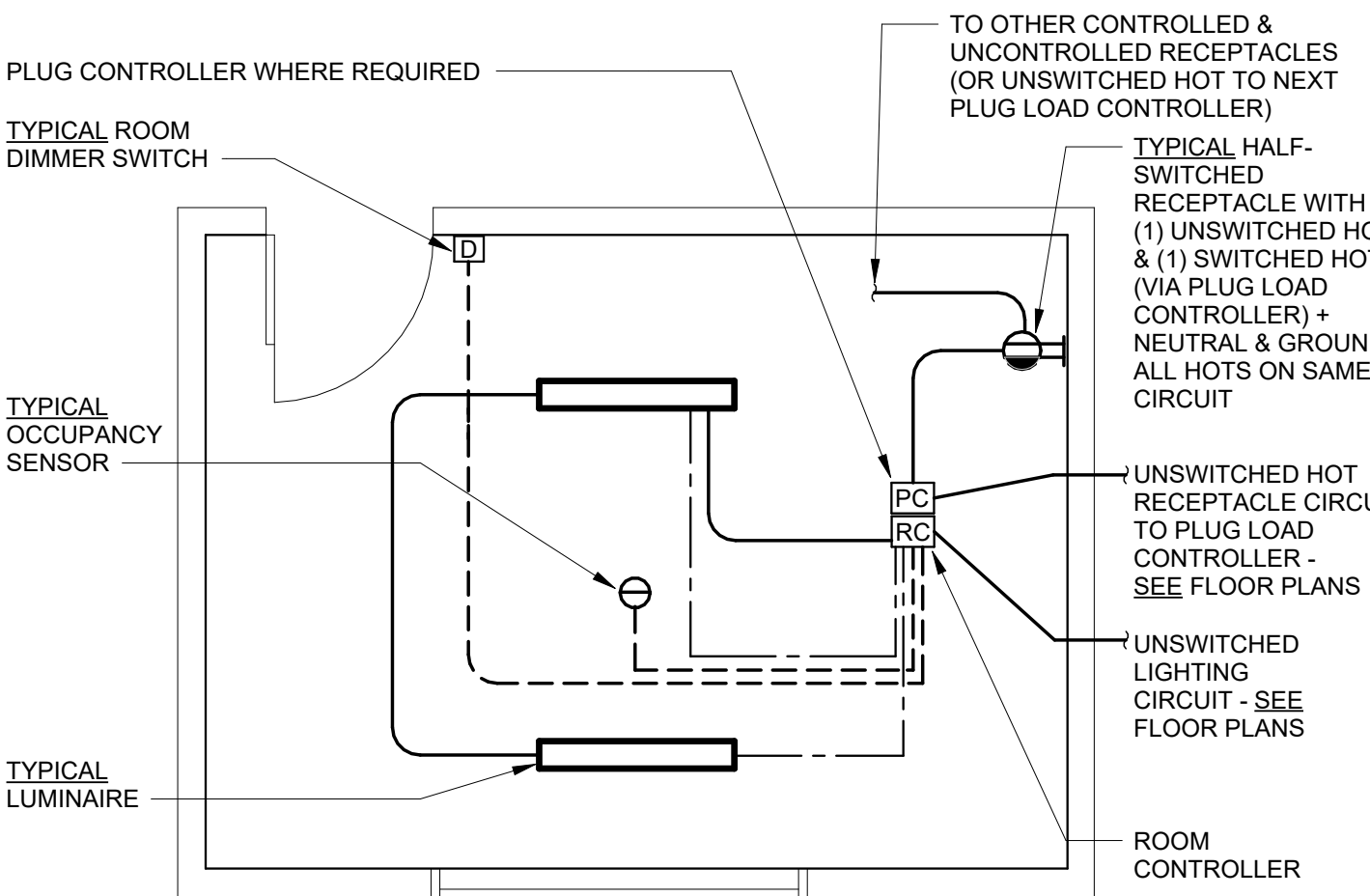


7 SUSPENDED LUMINAIRE ON-GRID MOUNTING - T-BAR SUSPENDED CEILING
NOT TO SCALE

WIRING LEGEND

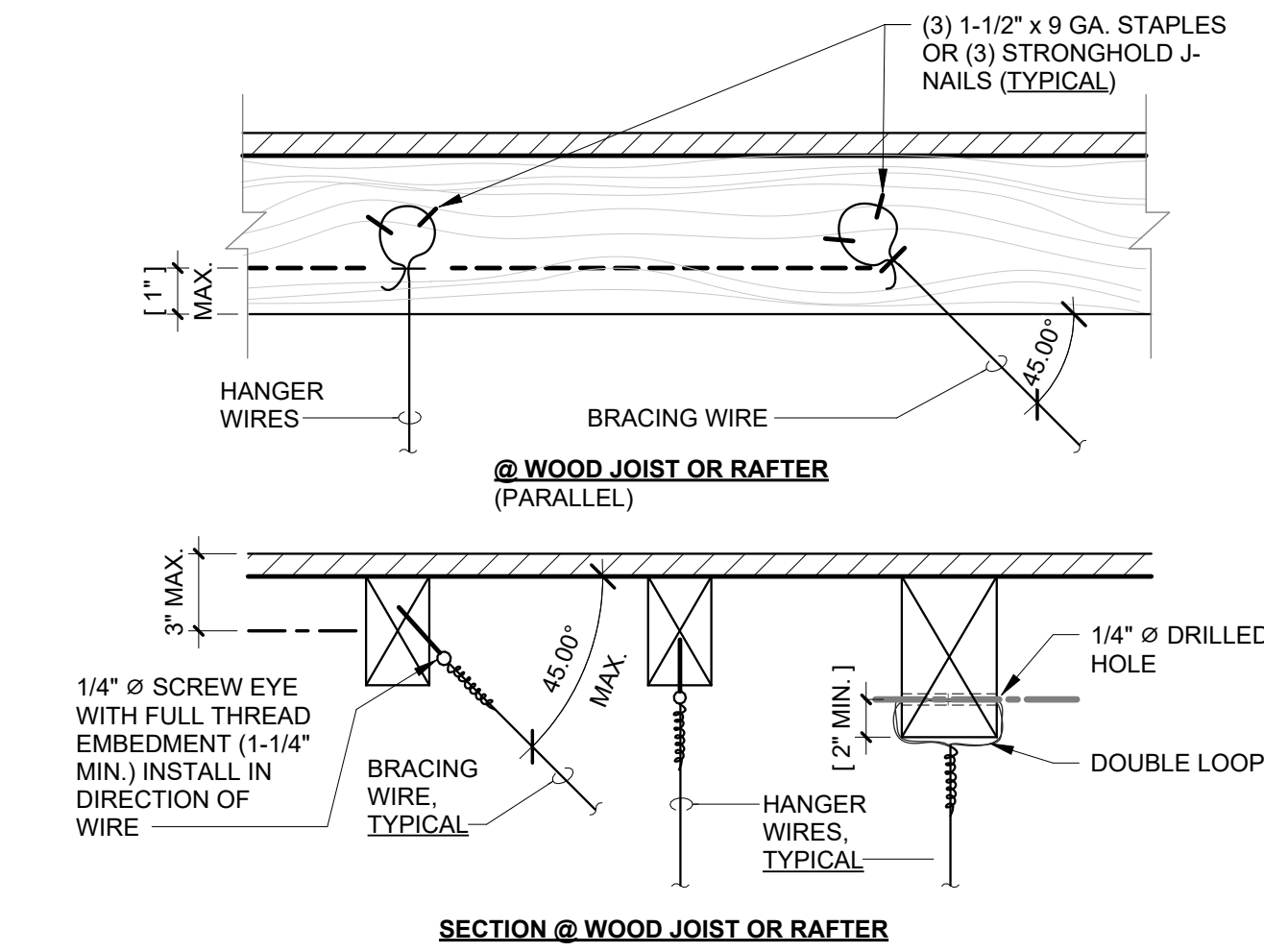
- BRANCH CIRCUIT WIRING - PROVIDED AND INSTALLED BY CONTRACTOR, EXACT QUANTITY, TYPE AND SIZE VARIES
- CAT6A UTP CABLING - PROVIDED AND INSTALLED BY CONTRACTOR, VERIFY WIRE TYPE WITH LIGHTING CONTROL MANUFACTURER
- 0-10V DIMMING CONTROL WIRING

THE ELECTRICAL CONTRACTOR SHALL BALANCE THE DUAL TECHNOLOGY OCCUPANCY SENSORS FOR PROPER SENSOR FUNCTIONALITY. THE ULTRASONIC SENSITIVITY MAY NEED TO BE TUNED TO ELIMINATE FALSE TRIPPING FROM THE HVAC SUPPLY REGISTERS. IDEAL SENSOR PLACEMENT PER MANUFACTURER'S RECOMMENDATIONS IS 6'-0" FROM ANY AIR SUPPLY REGISTER WHEREVER POSSIBLE.

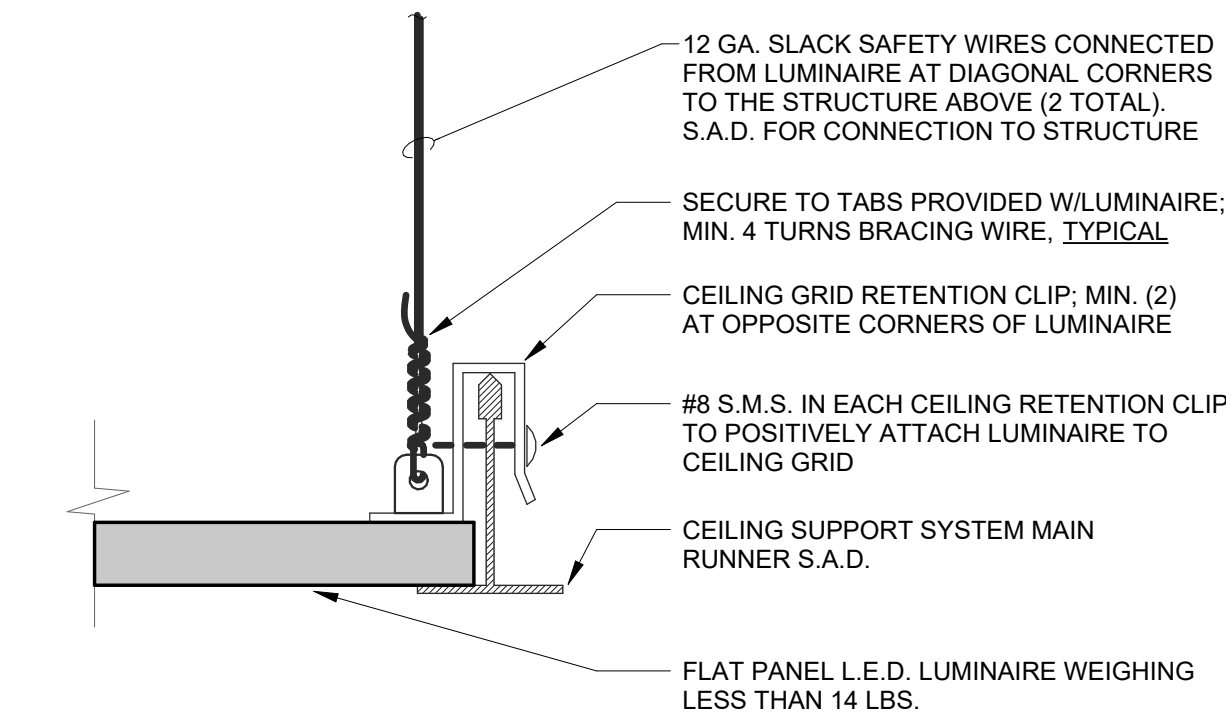


NOTE:
SEE SPECIFIC ROOM CONTROLLER WIRING DIAGRAMS FOR EACH APPLICATION

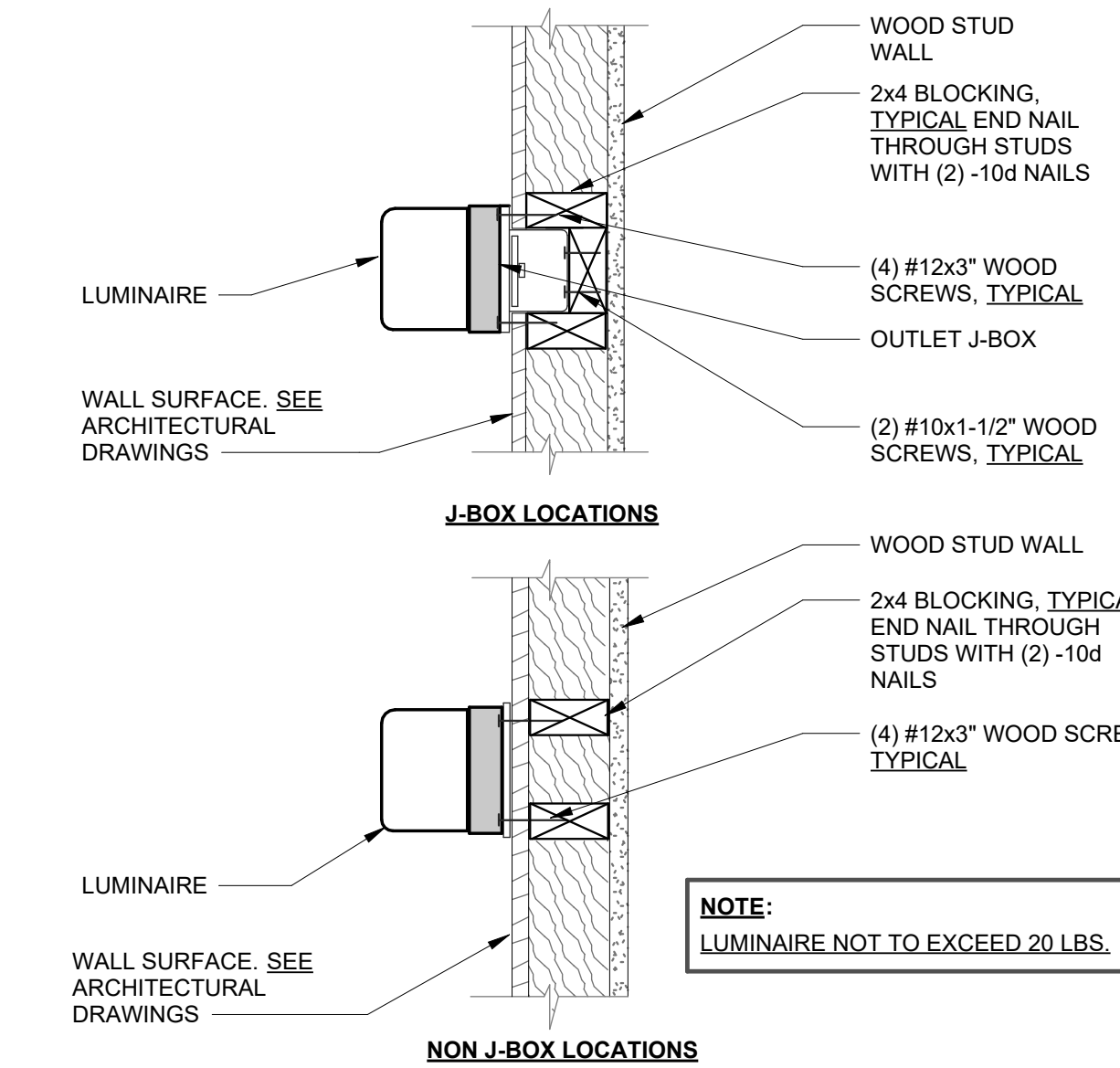
4 TYPICAL ROOM CONTROL DIAGRAM
NO SCALE



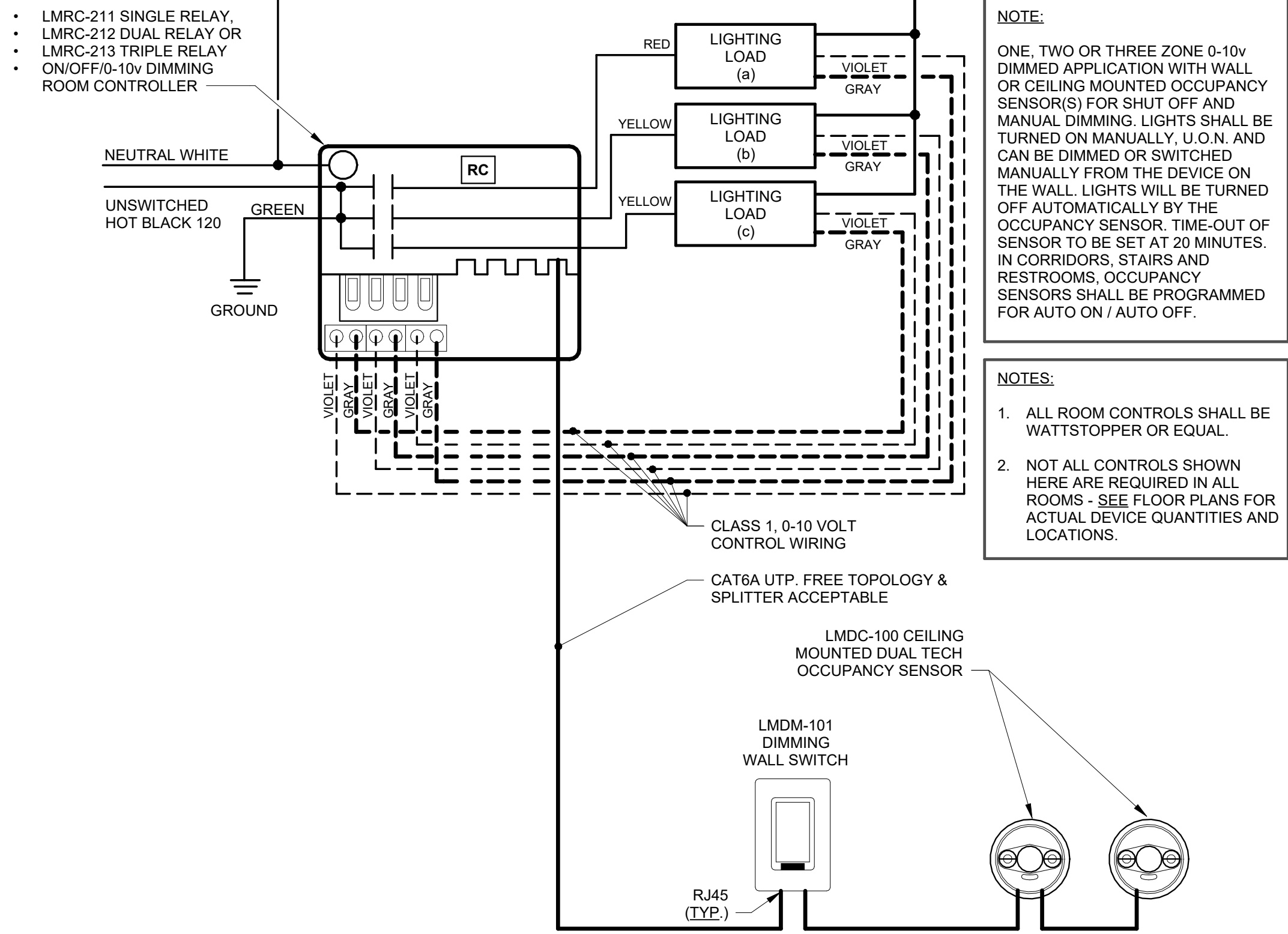
1 HANGER & BRACING WIRES AT WOOD FRAMING
12" = 1'-0"



2 RECESSED LUMINAIRE IN ACT CEILING
12" = 1'-0"



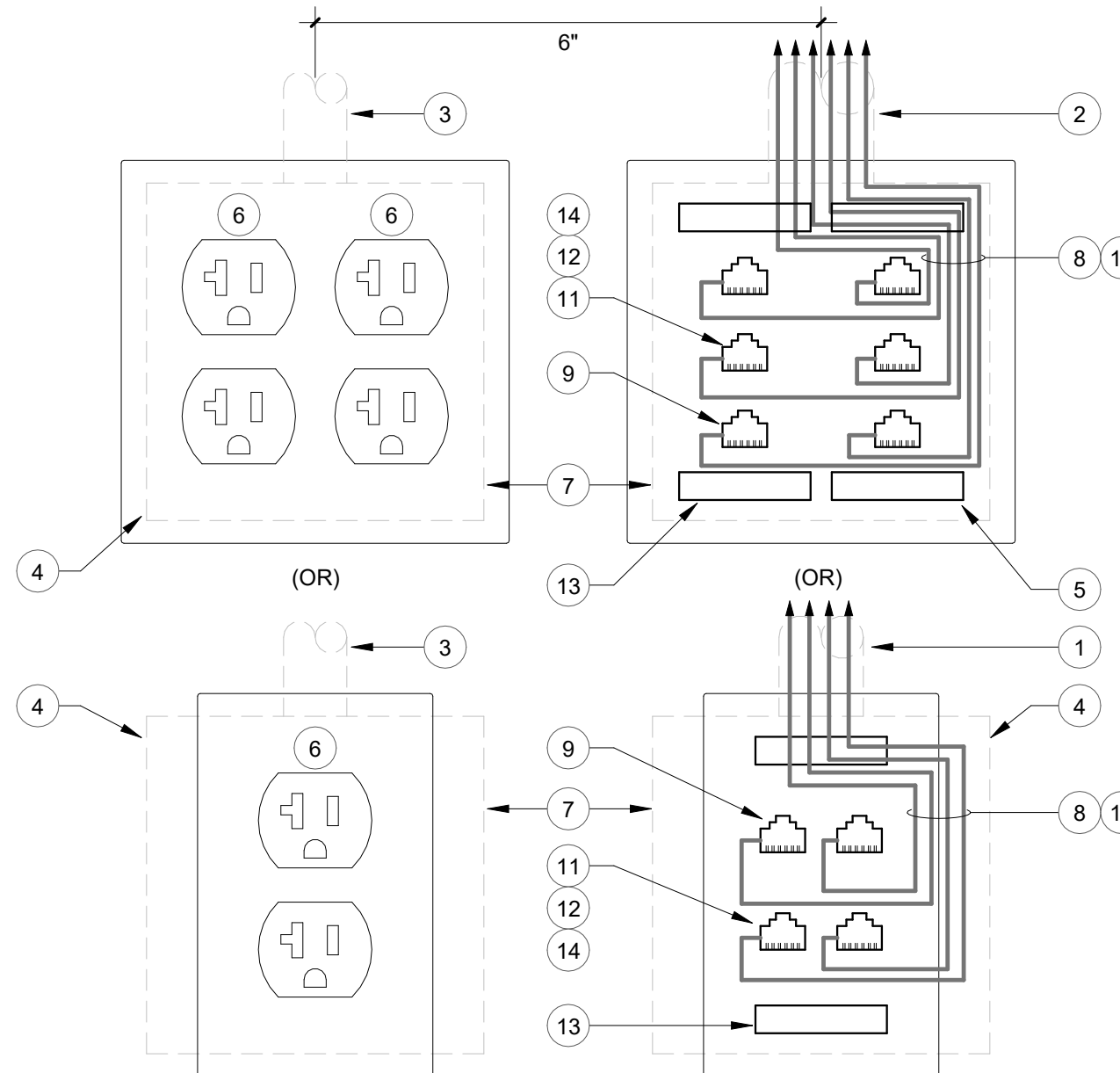
3 WALL MOUNTED LUMINAIRE
12" = 1'-0"



NOTE:
ONE, TWO OR THREE ZONE 0-10v DIMMED APPLICATION WITH WALL OR CEILING MOUNTED OCCUPANCY SENSOR(S) FOR SHUT OFF AND MANUAL DIMMING. LIGHTS SHALL BE TURNED ON MANUALLY, U.O.N. AND CAN BE DIMMED OR SWITCHED MANUALLY FROM THE DEVICE ON THE WALL. LIGHTS WILL BE TURNED OFF AUTOMATICALLY BY THE OCCUPANCY SENSOR. TIME-OUT OF SENSOR TO BE SET AT 20 MINUTES. IN CORRIDORS, STAIRS AND RESTROOMS, OCCUPANCY SENSORS SHALL BE PROGRAMMED FOR AUTO ON / AUTO OFF.

NOTES:
1. ALL ROOM CONTROLS SHALL BE WATTSTOPPER OR EQUAL.
2. NOT ALL CONTROLS SHOWN HERE ARE REQUIRED IN ALL ROOMS - SEE FLOOR PLANS FOR ACTUAL DEVICE QUANTITIES AND LOCATIONS.

5 ONE, TWO, OR THREE ZONE ROOM & PLUG CONTROLLER
NO SCALE



6 COMBINATION POWER & DATA OUTLETS
NO SCALE

- # DETAIL NUMBERED NOTES**
- PROVIDE 1" CONDUIT STUBBED UP TO NEAREST ACCESSIBLE CONCEALED CEILING, U.O.N. - BUSH CONDUIT END(S)
 - PROVIDE 1-1/4" CONDUIT STUBBED UP TO NEAREST ACCESSIBLE CONCEALED CEILING, U.O.N. - BUSH CONDUIT END(S)
 - POWER CONDUIT & WIRES - SEE FLOOR PLANS
 - PROVIDE 4" SQUARE BOX, 2-1/8" DEEP, WITH TWO-GANG PLASTER RING
 - PROVIDE 4" SQUARE BOX, 3-1/2" DEEP, WITH TWO-GANG PLASTER RING
 - PROVIDE 20AMP, 120V, 3PG DOUBLE DUPLEX RECEPTACLE
 - LOCATE BOXES ADJACENT TO EACH OTHER & ALIGN COVER PLATES
 - TERMINATE CABLES AT EACH JACK, PROVIDE QUANTITY OF JACKS AS NOTED ON PLANS
 - WHERE NO DATA JACK IS REQUIRED, PROVIDE BLANK SPACER.
 - PROVIDE HOMERUN DATA CABLES TO RESPECTIVE PATCH PANEL.
 - MODULAR FACEPLATE WITH ANGLED OR FLAT EXIT (VERIFY WITH I.T. STANDARDS)
 - TYPICAL 8 PIN 8 POS, T568B DATA JACK, COLORED BLUE (VERIFY WITH I.T. STANDARDS)
 - PANDUIT, EPFL-1, 1.80 x 0.375 INCH, WHITE, POLYESTER LABEL. LABELS SHALL HAVE CAPACITY FOR 2 COLUMNS FOR LASER PRINTERS AND SHALL BE LABELED AS NOTED IN SPECIFICATIONS (VERIFY WITH I.T. STANDARDS).
 - SEE FLOOR PLANS FOR QUANTITY & TYPE OF JACKS IN EACH LOCATION.
 - TYPICAL SINGLE OR DOUBLE GANG FACEPLATE, FINISH AS DIRECTED BY ARCHITECT.

San Rafael City Schools

SR SAN RAFAEL CITY SCHOOLS

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SRCS District Office - Business Services & Capital Facilities

320 Nova Albion Way, San Rafael, CA 94903

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DETAILS

E-701

San Rafael City
Schools



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DETAILS

STATE OF CALIFORNIA

Indoor Lighting

CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE

Project Name: SRCS District Office - Business Services

Report Page: (Page 7 of 8)

Date Prepared: 2/12/2024

U. DECLARATION OF REQUIRED CERTIFICATES OF INSTALLATION

Selections have been made based on information provided in this document. If any selections have been changed by permit applicant, an explanation should be included in Table E. Additional Remarks. These documents must be provided to the building inspector during construction and can be found online

Form/Title

NRCC-LTI-E - Must be submitted for all buildings

V. DECLARATION OF REQUIRED CERTIFICATES OF ACCEPTANCE

Selections have been made based on information provided in this document. If any selections have been changed by the permit applicant, an explanation should be included in Table E. Additional Remarks. These documents must be provided to the building inspector during construction and any with "A" in the form name must be completed through an Acceptance Test Technician Certification Provider (ATTCP). For more information visit: <http://www.energy.ca.gov/title24/attcp/providers.html>

Form/Title

NRCA-LTI-02-A - Must be submitted for occupancy sensors and automatic time switch controls.

Systems/Spaces To Be Field Verified

Office <250; Office >250; Conference; Lounge;

Generated Date/Time:

Documentation Software: EnergyPro

CA Building Energy Efficiency Standards - 2022 Nonresidential Compliance

Report Version: 2022.0.000

Schema Version: rev 20220101

Compliance ID: EnergyPro-8069-0224-0291

Report Generated: 2024-02-12 14:19:27

STATE OF CALIFORNIA

Indoor Lighting

CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE

Project Name: SRCS District Office - Business Services

Report Page: (Page 8 of 8)

Project Address: 320 Nova Albion Way

Date Prepared: 2/12/2024

DOCUMENTATION AUTHOR'S DECLARATION STATEMENT

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

Documentation Author Name: Pieter Colenbrander

Signature Date: 2024-02-12

Address: 4340 Redwood Highway Suite 245

City/State/Zip: San Rafael CA 94903

RESPONSIBLE PERSON'S DECLARATION STATEMENT

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

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

Responsible Designer Name: Pieter Colenbrander

Date Signed: 2024-02-12

Address: 4340 Redwood Hwy Suite: 245

City/State/Zip: San Rafael CA 94903

Responsible Designer Signature:

Generated Date/Time:

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CERTIFICATE OF COMPLIANCE

Project Name: SRCS District Office - Business Services

Report Page: (Page 4 of 8)

Date Prepared: 2/12/2024

H. INDOOR LIGHTING CONTROLS (Not including PAFs)

This table includes lighting controls for conditioned and unconditioned spaces.

Building Level Controls

01

02

03

Field Inspector

Pass

Fail

NA < 4,000W subject to multilevel

See Area/Space Level Controls

Area Level Controls

04

05

06

07

08

09

10

11

12

Area Description

Complete Building or Area Category Primary Function Area

Manual Area Controls 130.1(a) / 160.5(b)4A

Multi-Level Controls 130.1(b) / 160.5(b)4B

Shut-Off Controls 130.1(c) // 160.5(b)4C

Primary/Sky lit Daylighting 130.1(d) / 160.5(b)4D

Secondary Daylighting 140.6(a)1 / 170.2(e)2A

Interlocked Systems 140.6(a)1 / 170.2(e)2A

Field Inspector

Pass

Fail

Office <250

Office [<=250 square feet]

Readily Accessible

Dimmer

Occupancy Sensor

NA: Rm < 24sf Glazing 24sf Glazing

NA: Rm < 24sf Glazing 24sf Glazing

No

Office >250

Office (>250 square feet)

Readily Accessible

Dimmer

Occupancy Sensor

NA: Rm < 24sf Glazing 24sf Glazing

NA: Rm < 24sf Glazing 24sf Glazing

No

Conference

Convention, Conference, Multipurpose and Meeting Center

Readily Accessible

Dimmer

Occupancy Sensor

NA: Rm < 24sf Glazing 24sf Glazing

NA: Rm < 24sf Glazing 24sf Glazing

No

Lounge

Lounge

Readily Accessible

Dimmer

Occupancy Sensor

NA: Rm < 24sf Glazing 24sf Glazing

NA: Rm < 24sf Glazing 24sf Glazing

No

13

Plan Sheet Showing Daylit Zones:

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Documentation Software: EnergyPro

CA Building Energy Efficiency Standards - 2022 Nonresidential Compliance

Report Version: 2022.0.000

Schema Version: rev 20220101

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STATE OF CALIFORNIA

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CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE

Project Name: SRCS District Office - Business Services

Report Page: (Page 5 of 8)

Date Prepared: 2/12/2024

I. LIGHTING POWER ALLOWANCE: COMPLETE BUILDING OR AREA CATEGORY METHODS

Each area complying using the Complete Building or Area Category Methods per 140.6(b) are included in this table. Column 06 indicates if additional lighting power allowances per 140.6(c) or adjustments per 140.6(a) are being used .

Conditioned Spaces

01

02

03

04

05

06

Area Description

Complete Building or Area Category Primary Function Area

Allowed Density (W/ft²)

Area (ft²)

Allowed Wattage (Watts)

Additional Allowance / Adjustment

PAF

Office >250

Office (>250 square feet)

0.6

924

554.4

No

No

Office <250

Office (<=250 square feet)

0.65

136

88.4

No

No

Lounge

Lounge

0.55

120

66

No

No

Conference

Convention, Conference, Multipurpose and Meeting Center

0.75

251

188.2

No

No

TOTALS:

1,431

897

See Tables J, or P for detail

J. ADDITIONAL ALLOWANCE: AREA CATEGORY METHOD QUALIFYING LIGHTING SYSTEM

This section does not apply to this project.

K. TAILORED METHOD GENERAL LIGHTING POWER ALLOWANCE

This section does not apply to this project.

L. ADDITIONAL LIGHTING ALLOWANCE: TAILORED WALL DISPLAY

This section does not apply to this project.

M. ADDITIONAL LIGHTING ALLOWANCE: TAILORED FLOOR AND TASK LIGHTING

This section does not apply to this project.

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Project Name: SRCS District Office - Business Services

Report Page: (Page 6 of 8)

Date Prepared: 2/12/2024

N. ADDITIONAL LIGHTING ALLOWANCE: TAILORED DECORATIVE /SPECIAL EFFECTS

This section does not apply to this project.

O. ADDITIONAL LIGHTING ALLOWANCE: TAILORED VERY VALUABLE MERCHANDISE

This section does not apply to this project.

P. POWER ADJUSTMENT: LIGHTING CONTROL CREDIT (POWER ADJUSTMENT FACTOR (PAF))

This section does not apply to this project.

Q. RATED POWER REDUCTION COMPLIANCE FOR ONE-FOR-ONE ALTERATIONS

This section does not apply to this project.

R. 80% LIGHTING POWER FOR ALL ALTERATIONS - CONTROLS EXCEPTIONS

This section does not apply to this project.

S. DAYLIGHT DESIGN POWER ADJUSTMENT FACTOR (PAF)

This section does not apply to this project.

T. DWELLING UNIT LIGHTING

This section does not apply to this project.

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STATE OF CALIFORNIA

Indoor Lighting

CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE

Project Name: SRCS District Office - Business Services

Report Page: (Page 1 of 8)

Project Address: 320 Nova Albion Way

Date Prepared: 2/12/2024

A. GENERAL INFORMATION

01 Project Location (city)

San Rafael

04 Total Conditioned Floor Area (ft²)

1,431

02 Climate Zone

2

05 Total Unconditioned Floor Area (ft²)

0

03 Occupancy Types Within Project (select all that apply):

06 # of Stories (Habitable Above Grade)

1

• Office • All Other Occupancies

B. PROJECT SCOPE

This table includes any lighting systems that are within the scope of the permit application and are demonstrating compliance using the prescriptive path outlined in 140.6 / 170.2(e) or 141.0(b)2 / 180.2(b)4 for alterations.

Scope of Work

01

02

03

04

05

My Project Consists of (check all that apply):

Calculation Method

Area (ft²)

Calculation Method

Area (ft²)

88 New Lighting System - Parking Garage

Area Category Method

1431

Area Category Method

0

99 New Lighting System - Parking Garage

Area Category Method

1431

Area Category Method

0

Total Area of Work (ft²)

1431

0

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Report Page: (Page 2 of 8)

Date Prepared: 2/12/2024

C. COMPLIANCE RESULTS

If any cell on this table says "DOES NOT COMPLY" or "COMPLIES with Exceptional Conditions" refer to Table D. for guidance.

Lighting in conditioned and unconditioned spaces must not be combined for compliance per 140.6(b)1 / 170.2(e)

Allowed Lighting Power per 140.6(b) / 170.2(e) (Watts)

01

02

03

04

05

06

07

08

09

Complete Building 140.6(c)1

Area Category 140.6(c)2 / 170.2(e)4

Area Category Additional 140.6(c)2G / 170.2(e)4Av (+)

Tailored 140.6(c)3 / 170.2(e)4B (+)

=

Total Allowed (Watts)

≥

Total Designed (Watts)

PAF Lighting Control Credits 140.6(a)2 / 170.2(e)1B (-)

=

Total Adjusted (Watts) *Includes Adjustments

05 must be >= 08 140.6 / 170.2(e)

Conditioned

897

0

=

897

≥

860

=

860

COMPLIES

Unconditioned

Controls Compliance (See Table H for Details)

COMPLIES

Rated Power Reduction Compliance (See Table Q for Details)

D. EXCEPTIONAL CONDITIONS

This table is auto-filled with uneditable comments because of selections made or data entered in tables throughout the form.

E. ADDITIONAL REMARKS

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

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CA Building Energy Efficiency Standards - 2022 Nonresidential Compliance

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STATE OF CALIFORNIA

Indoor Lighting

CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE

Project Name: SRCS District Office - Business Services

Report Page: (Page 3 of 8)

Date Prepared: 2/12/2024

F. INDOOR LIGHTING FIXTURE SCHEDULE

This table includes all planned permanent and portable lighting other than dwelling unit/ hotel/ motel room lighting. Multifamily dwelling unit and hotel/motel room lighting is documented in Table T. If using Table T to document lighting in multifamily common use areas providing shared provisions for living, eating, cooking or sanitation, those luminaires are not included here.

Designed Wattage: Conditioned Spaces

01

02

03

04

05

06

07

08

09

10

Name or Item Tag

Complete Luminaire Description

Modular (Track) Fixture

Small Aperture & Color Change¹

Watts per luminaire²

How is Wattage determined

Total Number of Luminaires

Excluded per 140.6(a)3 / 170.2(e)2C

Design Watts

Field Inspector

Pass

Fail

AA2

AA2-PENDANT LINEAR

No

NA

88

Mfr. Spec

1

No

88

AC2

AC2-WALL LINEAR 12

No

NA

35

Mfr. Spec

1

No

35

AC3

AC3-WALL LINEAR 16

No

NA

47

Mfr. Spec

1

No

47

AC4

ACA-WALL LINEAR 24

No

NA

70

Mfr. Spec

2

No

140

AD2

AD2-RECESSED WW

No

NA

9

Mfr. Spec

6

No

54

AJ1

AJ1-2X2

No

NA

31

Mfr. Spec

16

No

496

Total Designed Watts: CONDITIONED SPACES

860

¹FOOTNOTE: Design Watts for small aperture and color changing luminaires which qualify per 140.6(a)4B / 170.2(e)2D is adjusted to be 75% /80% of their rated wattage. Table F automatically makes this adjustment, the permit applicant should enter full rated wattage in column 05.
²Authority Having Jurisdiction may ask for Luminaire cut sheets to confirm wattage used for compliance per 130.0(c) / 160.5(b). Wattage used must be the maximum rated for the luminaire, not the lamp.

G. MODULAR LIGHTING SYSTEMS

This section does not apply to this project.