

FIRE DEPARTMENT NOTES

1. PROVIDE A PORTABLE FIRE EXTINGUISHER WITH A RATING OF NOT LESS THAN 2-A WITHIN 75 FOOT TRAVEL DISTANCE TO ALL PORTIONS OF THE BUILDING ON EACH FLOOR AND ADDITIONAL EXTINGUISHERS AS REQUIRED BY FIRE DEPARTMENT FIELD INSPECTOR OR BUILDING DEPARTMENT INSPECTOR.
2. PROVIDE EXIT SIGN WITH 6" LETTERS OVER REQUIRED EXITS, WHERE SHOWN, ON DRAWINGS, AND ADDITIONAL SIGNS AS REQUIRED BY BUILDING DEPARTMENT INSPECTOR OR FIRE DEPARTMENT FIELD INSPECTOR. CONNECT EXIT SIGNS TO EMERGENCY POWER CIRCUITS. COMPLY WITH BUILDING CODES.
3. PROVIDE EMERGENCY LIGHTING OF ONE FOOT-CANDLE AT FLOOR LEVEL. COMPLY WITH BUILDING CODES.
4. MAINTAIN AISLES AT LEAST 44" WIDE AT PUBLIC AREAS.
5. EVERY EXIT DOOR SHALL BE OPERABLE FROM THE INSIDE WITHOUT THE USE OF A KEY OR ANY SPECIAL KNOWLEDGE OR EFFORT. SPECIAL LOCKING DEVICES SHALL BE OF AN APPROVED TYPE. ALL NEW DOORS SHALL HAVE APPROVED LEVER HANDLES.
6. DOORS OPENING INTO REQUIRED 1-HOUR, FIRE-RESISTIVE CORRIDORS SHALL BE PROTECTED WITH A SMOKE OR DRAFT STOP ASSEMBLY HAVING A 20-MINUTE RATING AND SHALL BE SELF-CLOSING.
7. 20-MINUTE DOOR JAMBS TO BE TIGHT-FITTING, SMOKE AND DRAFT CONTROLLED.
8. EXIT DOORS SHALL SWING IN THE DIRECTION OF TRAVEL WHEN SERVING 50 OR MORE PERSONS AND IN ANY HAZARDOUS AREA.
9. INTERIOR WALL AND CEILING FINISHES FOR EXIT CORRIDOR SHALL NOT EXCEED AN END POINT FLAME SPREAD RATING:
 - A. CLASS I, FLAME SPREAD 0-25, SMOKE DENSITY 150, FOR MATERIALS INSTALLED IN VERTICAL EXITS.
 - B. CLASS II, FLAME SPREAD 26-75, SMOKE DENSITY 300, FOR MATERIALS INSTALLED IN HORIZONTAL EXITS.
 - C. CLASS III, FLAME SPREAD 76-200, SMOKE DENSITY 450, FOR MATERIALS INSTALLED IN ANY OTHER LOCATION.
10. DECORATIONS (CURTAINS, DRAPES, SHADES, HANGINGS, ETC.) SHALL BE NON-COMBUSTIBLE OR BE FLAME-PROOFED IN AN APPROVED MANNER.
11. PROVIDE FIRE DAMPERS OR DOORS WHERE AIR DUCTS PENETRATE FIRE-RATED WALLS OR CEILINGS.
12. STORAGE, DISPENSING OR USE OF ANY FLAMMABLE OR COMBUSTIBLE LIQUIDS, FLAMMABLE GAS AND HAZARDOUS SUBSTANCES SHALL COMPLY WITH UNIFORM FIRE CODE REGULATIONS.
13. WOOD BLOCKING SHALL BE FIRE TREATED IN ACCORDANCE WITH APPLICABLE CODE REQUIREMENTS.
14. EXTEND OR MODIFY EXISTING FIRE/LIFE SAFETY SYSTEM AS REQUIRED TO PROVIDE AN APPROVED FIRE / LIFE SAFETY SYSTEM. SUBMIT PLANS TO FIRE DEPARTMENT WITH COMPLETE DESCRIPTION OF SEQUENCE OF OPERATION, AND OBTAIN APPROVAL PRIOR TO INSTALLATION.
15. LOCATE THE CENTER OF FIRE ALARM INITIATING DEVICES 48" ABOVE THE LEVEL OF THE FLOOR, WORKING PLATFORM, GROUND SURFACE OR SIDEWALK.
16. EMERGENCY WARNING SYSTEMS SHALL ACTIVATE A MEANS OF WARNING THE HEARING IMPAIRED, FLASHING VISUAL WARNING SHALL HAVE A FREQUENCY OF NOT MORE THAN 60 FLASHES PER MINUTE.
17. EXTEND OR MODIFY EXISTING AUTOMATIC FIRE EXTINGUISHING SYSTEM AS REQUIRED TO PROVIDE AN APPROVED AUTOMATIC FIRE EXTINGUISHING SYSTEM. SUBMIT PLANS TO FIRE DEPARTMENT AND OBTAIN APPROVAL PRIOR TO INSTALLATION.
18. AUTOMATIC SPRINKLER SYSTEMS SHALL BE SUPERVISED BY AN APPROVED CENTRAL, PROPRIETARY OR REMOTE STATION SERVICE OR A LOCAL ALARM WHICH WILL GIVE AN AUDIBLE SIGNAL AT A CONSTANTLY ATTENDED LOCATION.

GENERAL NOTES (FLOOR PLAN)

1. FOR DIMENSION PLANS, REFER TO SHEETS A2.02
2. COMPLY WITH CODES, LAWS, ORDINANCES, RULES, AND REGULATIONS OF PUBLIC AUTHORITIES GOVERNING THE WORK.
3. REFER TO A00.20 FOR REQUIRED ADA CLEARANCES
4. OBTAIN AND PAY FOR PERMITS AND INSPECTIONS REQUIRED BY PUBLIC AUTHORITIES GOVERNING THE WORK.
5. REVIEW DOCUMENTS, VERIFY DIMENSIONS AND FIELD CONDITIONS AND CONFIRM THAT WORK IS BUILDABLE AS SHOWN. REPORT ANY CONFLICTS OR OMISSIONS TO THE ARCHITECT FOR CLARIFICATION PRIOR TO PERFORMING ANY WORK IN QUESTION.
6. SUBMIT REQUESTS FOR SUBSTITUTIONS, REVISIONS, OR CHANGES TO ARCHITECT FOR REVIEW PRIOR TO PURCHASE, FABRICATION OR INSTALLATION.
7. COORDINATE WORK WITH THE OWNER, INCLUDING SCHEDULING TIME AND LOCATIONS FOR DELIVERIES, BUILDING ACCESS, USE OF BUILDING SERVICES AND FACILITIES, AND USE OF ELEVATORS. MINIMIZE DISTURBANCE OF BUILDING FUNCTIONS AND OCCUPANTS.
8. OWNER WILL PROVIDE WORK NOTED "BY OTHERS" OR "N/C" UNDER SEPARATE CONTRACT. INCLUDE SCHEDULE REQUIREMENTS IN CONSTRUCTION PROGRESS SCHEDULE AND COORDINATE TO ASSURE ORDERLY SEQUENCE OF INSTALLATION
9. COORDINATE TELECOMMUNICATIONS, DATA AND SECURITY SYSTEM INSTALLATIONS.
10. MAINTAIN EXITS, EXIT LIGHTING, FIRE PROTECTIVE DEVICES, AND ALARMS IN CONFORMANCE WITH CODES AND ORDINANCES.
11. PROTECT AREA OF WORK AND ADJACENT AREAS FROM DAMAGE.
12. MAINTAIN WORK AREAS SECURE AND LOCKABLE DURING CONSTRUCTION. COORDINATE WITH TENANT AND LANDLORD TO ENSURE SECURITY.
13. DO NOT SCALE DRAWINGS. WRITTEN DIMENSIONS GOVERN. IN CASE OF CONFLICT, CONSULT THE ARCHITECT.
14. PARTITIONS ARE DIMENSIONED FROM FINISH FACE TO FINISH FACE, UNLESS OTHERWISE NOTED. MAINTAIN DIMENSIONS MARKED "CLEAR". ALLOW FOR THICKNESS OF FINISHES.
15. COORDINATE AND PROVIDE BACKING FOR MILLWORK AND ITEMS ATTACHED OR MOUNTED TO WALLS OR CEILINGS.
16. WHERE EXISTING ACCESS PANELS CONFLICT WITH CONSTRUCTION, RELOCATE PANELS TO ALIGN WITH AND FIT WITHIN NEW CONSTRUCTION.
17. UNDERCUT DOORS TO CLEAR TOP OF FLOOR FINISHES BY 1/4 INCH, UNLESS OTHERWISE NOTED.
18. EXISTING EXTERIOR WALLS THAT ARE EXPOSED DURING CONSTRUCTION ARE TO BE INSULATED AS PER ADJACENT NEW CONSTRUCTION
19. AIR BARRIER JOINTS, SEAMS, AND PENETRATIONS SHALL BE SEALED, TAPED, OR COVERED WITH A MOISTURE VAPOR-PENMEABLE WRAPPING MATERIAL
20. CONTRACTOR TO SUBMIT A TEST AND BALANCE REPORT VERIFYING DESIGN CFM OF THE HVAC SYSTEM (SUPPLY, RETURN, OUTDOOR AIR, AND EXHAUST FANS)
21. WHERE BATT INSULATION IS USED, THE VAPOR-BARRIER SHALL BE INSTALLED ON THE WARM SIDE
22. WALL MOUNTED FIRE EXTINGUISHERS 10LBS, ABC. FINAL LOCATION TO BE DEPENDANT ON FIRE DEPARTMENT WALK-THRU. 7-9 TOTAL
23. KNIX BOX - 2 TOTAL, ONE AT ENTRANCE, ONE AT PUMP ROOM VERIFY EXACT LOCATION W FIRE MARSHALL PRIOR TO INSTALLATION

ABBREVIATIONS

A	ACCESSORY ACOUSTICAL AFF ALT ANNUNCIATOR AND ANNOZED ARCH AUTO AVG &	ACCESSORY ACOUSTICAL ABOVE FINISHED FLOOR ALUMINUM ALTERNATE ANNUNCIATOR AND ANNOZED APPLANCE ARCHITECTURAL AUTOMATIC AVERAGE AND
B	BUDG BOLD BD BLKG BRODM BD BUILT UP	BUILDING BOLLARD BOARD BLOCKING BROADROOM BUILT UP
C	CAB CPT CEM CER CLG COATG COILG CONC CONSTR CONTR CONTR (ACTOR) COV CMU	CABINET CARPET CEMENT(TIOUS) CERAMIC CLG COATING COILING CONCRETE CONSTRUCTION CONTINUOUS(TION) CONTRACTOR) COVER CONCRETE MASONRY UNIT
D	DBL DEPT DES DET DF DIA DIFF DIM DISP DIV DN DOL DR DISCON DWR	DOUBLE DEPARTMENT DESIGN(ED) DETAIL DRINKING FOUNTAIN DIAMETER DIFFUSER DIMENSION DISPENSER DIVISION DOWN DOLLAR (US CURRENCY) DOOR DISCONNECT DRAWER
E	ELAST ELEC EMBED ENGR ENR EQ EQUIP EXIST EXP EXPS EXT	ELASTOMERIC ELECTRICAL EMBED(ED)(ING) ENGINEER(ED) ENTRANCE EQUVAL EQUIPMENT EXISTING EXPANSION JOINT EXPOSE(ED) EXTERIOR
F	FAB FD FE FEAG FHC FIN FLDG FLC FR FRMG FXD FXTR FLR FURN FMC	FABRICATION FLOOR DRAIN FIRE EXTINGUISHER FIRE EXTINGUISHER AND CABINET FIRE HOSE CABINET FINISH FOLDING FIREPLACE FIRE RATING(ED) FRAMING FIXED FIXTURE FLOOR(ING) FURNITURE FABRIC WALL COVERING
G	GA GRC GRRG GRRP GL GR GYP GYP BD GWB	GAUGE GLASS FIBER REINFORCED CONCRETE GLASS FIBER REINFORCED GYPSUM GLASS FIBER REINFORCED PLASTER GRADE(ING) GYPSUM BOARD GYPSUM WALL BOARD
H	HD HDWD HWE HM HORZ HYAC	HEAD HARDWOOD HARDWARE HOLLOW METAL HORIZONTAL HEATING, VENTILATING, AND AIR CONDITIONING
I	INFO INSTRM INSTR INSUL INTLK INT INFILTRATION	INFORMATION INSTRUMENT(TATION) INSULATION INTERLOCK(ING) INTERIOR INFILTRATION
J	JAN JC JANITR JANITR CLOSET	JANITOR JANITOR CLOSET
K	KIT	KITCHEN
L	LAV LB E LT LTLG LVR	LAVATORY POUND BRITISH POUND (CURRENCY) LIGHT LEVELING LOUVER
M	MAX MFD MFR MECH MET MEMB MEZZ MIN MISC MLWK MLWK MOIST MOT MOT MTD	MAXIMUM MANUFACTURED MANUFACTURER MECHANICAL METAL MEMBRANE MEZZANINE MINIMUM MISCELLANEOUS MILLWORK MOISTURE MOTOR(IZED) MOUNTED
N	NIC NO NTS	NOT IN CONTRACT NUMBER NOT TO SCALE
O	ORNA OVRFL OVRHD OPNG OPR	ORNAMENTAL OVERFLOW OVERHEAD OPENING(S) OPERABLE
P	PTN PEDSTRAN PBD PNL POLYST PORT PREFIN PREFAB PLAM PLAS PLASTC PLYWD PRTECN	PARTITION PEDESTRIAN PARTICLE BOARD PANEL POLYSTYRENE PORTABLE PREFINISHED PREFABRICATED PLASTER LAMINATE PLASTER PLASTIC PLYWOOD PROTECTION
R	RDR RECES RECP REF REFL REFR REDO REIS RENF RESIL RFG RM RO	READER RECESSED RECEPTACLE REFERENCE REFLECTED REFLECTOR REQUIRED REINFORCED RESISTANT(IVE) REINFORCED(ING)(MENT) RESILIENT ROOMING ROOM ROUGH OPENING
S	SCR SECUR SF SGL SHORG SM STD SST SST SST STL	SCRIBE SECURITY SQUARE FEET SINGLE SHORING SIMILAR STANDARD STEEL
T	THK TTL TLL TOL TRAF TRNS TRTD T&G TYP	THICK TOILET TOILET TRAFFIC TRANSPARENT TREATED TONGUE AND GROOVE TYPICAL
U	UNDR UTL UNO	UNDERLAYMENT UTILITY UNLESS NOTED OTHERWISE
V	VEH VERT VF	VEHICLE VERTICAL VERIFY IN FIELD
W	W/ WC WD WDW W/O WT WTRPRF	WITH WATER CLOSET WOOD WINDOW WITHOUT WEIGHT WATERPROOFING

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GENERAL NOTES

A0.01

POWER & COMMUNICATION NOTES

1. PRIOR TO CORING SLAB, REVIEW LOCATIONS WITH ARCHITECT AND COORDINATE LOCATIONS WITH OWNER.
2. COORDINATE INSTALLATION OF TELECOMMUNICATIONS, DATA AND SECURITY SYSTEMS.
3. VERIFY EQUIPMENT SPECIFICATIONS, POWER AND INSTALLATION REQUIREMENTS WITH MANUFACTURER TO ENSURE PROPER FIT AND FUNCTION.
4. VERIFY MOUNTING REQUIREMENTS OF ELECTRICAL, TELEPHONE AND OTHER EQUIPMENT.
5. GANG ADJACENT LIGHT SWITCHES AND COVER WITH A SINGLE PLATE.
6. PROVIDE LIGHT SWITCHING IN CONFORMANCE WITH TITLE 24 REQUIREMENTS. FOR ROOMS OR AREAS GREATER THAN 100 SQUARE FEET PROVIDE DOUBLE SWITCHES WITH EACH SWITCH CONTROLLING 50% OF LAMPS PER FIXTURE.
7. MOUNT STANDARD WALL OUTLETS, SWITCHES AND THERMOSTATS AT HEIGHTS REQUIRED BY TITLE 24 AND ADA GUIDELINES UNLESS OTHERWISE NOTED. WHEN THERMOSTATS AND LIGHT SWITCH OCCUR TOGETHER, INSTALL BOTH ALIGNED HORIZONTALLY WITH CENTER LINE AT +3'-2" ABOVE FINISHED FLOOR.
8. INDICATED DIMENSIONS ARE TO THE CENTER LINE OF OUTLET OR SWITCH, OR CLUSTER OF OUTLETS OR SWITCHES, UNLESS OTHERWISE NOTED.
9. INSTALL OUTLETS ON OPPOSITE SIDES OF PARTITIONS IN SEPARATE STUD CAVITIES. DO NOT INSTALL BACK-TO-BACK.
10. PROVIDE MATCHING COVER PLATES, RECEPTACLES AND RELATED ITEMS. PROVIDE ONE-PIECE TYPE GANG COVER PLATES, UNLESS OTHERWISE NOTED.
11. IDENTIFY DEDICATED OR ISOLATED GROUND ELECTRICAL OUTLETS WITH A RED DOT.

DISABLED ACCESS NOTES

1. IN BUILDINGS AND FACILITIES, FLOORS OF A GIVEN STORY SHALL BE A COMMON LEVEL THROUGHOUT, OR SHALL BE CONNECTED BY PEDESTRIAN RAMPS, PASSENGER ELEVATORS OR SPECIAL ACCESS LIFTS.
2. FLOOR SURFACES SHALL BE SLIP-RESISTANT.
3. EVERY CORRIDOR AND AISLE SERVING AN OCCUPANT LOAD OF 10 OR MORE SHALL BE NOT LESS THAN 44" IN WIDTH.
4. ABRUPT CHANGES IN LEVEL ALONG ANY ACCESSIBLE ROUTE SHALL NOT EXCEED 1/2" IN HEIGHT. LEVEL CHANGES NOT EXCEEDING 1/4" MAY BE VERTICAL. BEVEL OTHERS WITH A SLOPE NO GREATER THAN 1:2.
5. LATCHING AND LOCKING DOORS THAT ARE HAND ACTIVATED AND WHICH ARE IN A PATH OF TRAVEL SHALL BE OPERABLE WITH A SINGLE EFFORT BY LEVER TYPE HARDWARE, PAINC BARS, PUSH-PULL ACTIVATING BARS, OR OTHER HARDWARE DESIGNED TO PROVIDE PASSAGE WITHOUT REQUIRING THE ABILITY TO GRASP THE OPENING HARDWARE. MOUNT DOOR OPENING HARDWARE BETWEEN 30" AND 44" ABOVE FLOOR FINISH.
6. CENTER HAND ACTIVATED DOOR OPENING HARDWARE BETWEEN 30" AND 44" ABOVE THE FLOOR.
7. MAXIMUM PULL OR PUSH EFFORT TO OPERATE DOORS SHALL NOT EXCEED 8.5 POUNDS FOR EXTERIOR DOORS AND 5 POUNDS FOR INTERIOR DOORS, MEASURED AT RIGHT ANGLES TO HINGED DOORS AND AT CENTER PLANE OF SLIDING OR FOLDING DOORS. CORRESPONDING DEVICES OR AUTOMATIC DOOR OPERATORS, MAY BE UTILIZED TO MEET THE ABOVE STANDARDS. MAXIMUM EFFORT TO OPERATE REQUIRED FIRE DOORS MAY BE INCREASED NOT TO EXCEED 15 POUNDS.
8. THE BOTTOM 10" OF ALL DOORS (EXCEPT SLIDING AND AUTOMATIC) SHALL HAVE A SMOOTH UNINTERRUPTED SURFACE TO ALLOW THE DOOR TO BE OPENED BY A WHEELCHAIR FOOTREST WITHOUT CREATING A TRAP OR HAZAROUS CONDITION. PROVIDE A 10" HIGH SMOOTH PANEL ON THE PUSH SIDE OF NARROW FRAME DOORS.
9. EVERY REQUIRED ENTRANCE OR PASSAGE DOORWAY SHALL BE NOT LESS THAN 3' IN WIDTH AND NOT LESS THAN 6'-8" IN HEIGHT. DOORS SHALL BE CAPABLE OF OPENING AT LEAST 90 DEGREES AND SHALL BE SO MOUNTED THAT THE CLEAR WIDTH OF THE DOORWAY IS NOT LESS THAN 32".
10. WHERE A PAIR OF DOORS IS UTILIZED, AT LEAST ONE OF THE DOORS SHALL PROVIDE A CLEAR, UNOBSTRUCTED OPENING WIDTH OF 32" WITH THE LEAF POSITIONED AT AN ANGLE OF 90 DEGREES FROM ITS CLOSED POSITION.
11. IDENTIFY ACCESSIBLE ENTRANCES WITH AT LEAST ONE STANDARD SIGN AND WITH ADDITIONAL DIRECTIONAL SIGNS, AS REQUIRED, VISIBLE FROM APPROACHING PEDESTRIAN WAYS.
12. THE FLOOR OR LANDING ON EACH SIDE OF AN ENTRANCE OR PASSAGE DOOR SHALL BE LEVEL AND CLEAR. THE LEVEL AND CLEAR AREA SHALL HAVE A LENGTH IN THE DIRECTION OF DOOR SWING OF AT LEAST 60" AND THE LENGTH OPPOSITE THE DIRECTION OF DOOR SWING OF 44" AS MEASURED AT RIGHT ANGLES TO THE PLANE OF THE DOOR IN ITS CLOSED POSITION.
13. FLOORS OR LANDINGS SHALL BE NOT MORE THAN 1/2" LOWER THAN THE THRESHOLD OF THE DOORWAY, CHANGE IN LEVEL BETWEEN 1/4" AND 1/2" SHALL BE BEVELED WITH A SLOPE NO GREATER THAN 1:2.
14. TO ALERT THE VISUALLY IMPAIRED, MARK THE UPPER APPROACH AND THE LOWER TREAD OF EACH INTERIOR STAIR WITH A STRIP OF CLEARLY CONTRASTING COLOR AT LEAST 2" WIDE, PLACED PARALLEL TO AND NOT MORE THAN 1" FROM THE NOSE OF THE STEP OR LANDING. THE STRIP SHALL BE OF A MATERIAL THAT IS AT LEAST AS SLIP RESISTANT AS THE OTHER TREADS OF THE STAIR.
15. CENTER ELECTRICAL RECEPTACLE OUTLETS NOT LESS THAN 15" ABOVE THE FLOOR OR WORKING PLATFORM.
16. SANITARY FACILITIES LOCATED ON AN ACCESSIBLE FLOOR OF A BUILDING SHALL BE ACCESSIBLE TO THE PHYSICALLY HANDICAPPED.
17. 17. ENTRY TO SANITARY FACILITIES:
 - 17.1. A 44" CLEAR AISLES OR CORRIDORS WHERE OCCUPANT LOAD IS 10 OR MORE.
 - 17.2. B. DOORWAYS TO HAVE A 32" CLEAR OPENING.
 - 17.3. C. ON APPROACH SIDE, PROVIDE A 60" CLEAR LEVEL SPACE WHEN DOOR
 - 17.4. SWINGS TOWARD APPROACH AND 44" SPACE WHEN DOOR SWINGS AWAY FROM APPROACH.
18. TOILET ROOM ACCESSORIES
 - 18.1. MOUNT BOTTOM EDGE OF MIRRORS NO HIGHER THAN 40" FROM THE FLOOR.
 - 18.2. MOUNT TOILET TISSUE DISPENSERS WITHIN 12" FROM THE FRONT EDGE OF THE TOILET SEAT.
 - 18.3. MOUNT DISPENSING AND DISPOSAL FIXTURES (TOWEL, SANITARY MARKERS, WASTE, COIN SLOTS, ETC.) WITH OPERATING PARTS NO HIGHER THAN 40" FROM THE FLOOR.
19. SINGLE ACCOMMODATION TOILET FACILITY
 - 19.1. WATER CLOSET TO HAVE A 28" CLEARANCE FROM A FIXTURE AND 32" FROM A WALL.
 - 19.2. MINIMUM CLEAR SPACE IN FRONT OF WATER CLOSET TO BE 48".
 - 19.3. A SPACE 36" X 48" IS PERMITTED IN FRONT OF EXISTING WATER CLOSET ACCESSIBLE TO THE HANDICAPPED.
20. THE HEIGHT OF THE WATER CLOSET (TOP OF SEAT) SHALL BE BETWEEN 17" AND 19".
21. MOUNT FLUSH VALVE CONTROL NO MORE THAN 44" ABOVE THE FLOOR, ON THE SIDE OF THE TOILET WITH THE GREATEST SEPARATION FROM ADJACENT WALL OR OTHER SURFACE.
22. PROVIDE GRAB BARS ON EACH SIDE, OR ONE SIDE AND BACK OF WATER CLOSET.
 - 22.1. GRAB BARS TO BE 33" ABOVE AND PARALLEL TO THE FLOOR.
 - 22.2. SIDE BARS TO BE 42" LONG AND PROJECT 24" IN FRONT OF WATER CLOSET STOOL. GRAB BAR AT BACK TO BE 36" LONG.
 - 22.3. DIAMETER OF GRAB BARS TO BE 1-1/4" TO 1-1/2".
 - 22.4. PROVIDE 1-1/2" CLEARANCE BETWEEN GRAB BARS AND WALL.
 - 22.5. GRAB BARS (INCLUDING CONNECTORS, FASTENERS, SUPPORT BACKING, ETC.) SHALL SUPPORT A 250 POUND LOAD.
 - 22.6. GRAB BARS SHALL NOT ROTATE WITHIN THEIR FITTINGS.
 - 22.7. GRAB BARS AND ANY ADJACENT SURFACE SHALL BE FREE OF SHARP OR ABRASIVE ELEMENTS.
 - 22.8. EDGES SHALL HAVE A MINIMUM RADIUS OF 1/8".
23. PROVIDE A CLEAR FLOOR SPACE 30" X 48" IN FRONT OF LAVATORY TO PERMIT A FORWARD APPROACH.
24. MOUNT LAVATORIES WITH A MINIMUM CLEARANCE OF 29" FROM THE FLOOR TO THE BOTTOM OF THE APRON. PROVIDE KNEE CLEARANCE UNDER THE FRONT UP EXTENDING A MINIMUM OF 30" IN WIDTH WITH 8" MINIMUM WIDTH, AND SHALL BE A MINIMUM OF 9" HIGH FROM THE FLOOR A MINIMUM OF 17" DEEP FROM THE FRONT OF THE LAVATORY.
25. FAUCET CONTROLS AND OPERATING MECHANISMS SHALL BE OPERABLE WITH ONE HAND AND SHALL NOT REQUIRE TIGHT GRASPING, PINCHING OR TWISTING OF THE WRIST. THE FORCE REQUIRED TO ACTIVATE CONTROLS SHALL BE NO GREATER THAN 5 POUNDS. LEVER OPERATED, PUSH TYPE AND ELECTRONICALLY CONTROLLED MECHANISMS ARE EXAMPLES OF ACCEPTABLE DESIGNS. SELF CLOSING ARE ALLOWED IF THE FAUCET REMAINS OPEN FOR AT LEAST 10 SECONDS.
26. INSULATE OR OTHERWISE COVER HOT WATER AND DRAIN PIPES UNDER LAVATORIES.
27. THERE SHALL BE NO SHARP OR ABRASIVE SURFACES UNDER LAVATORIES.

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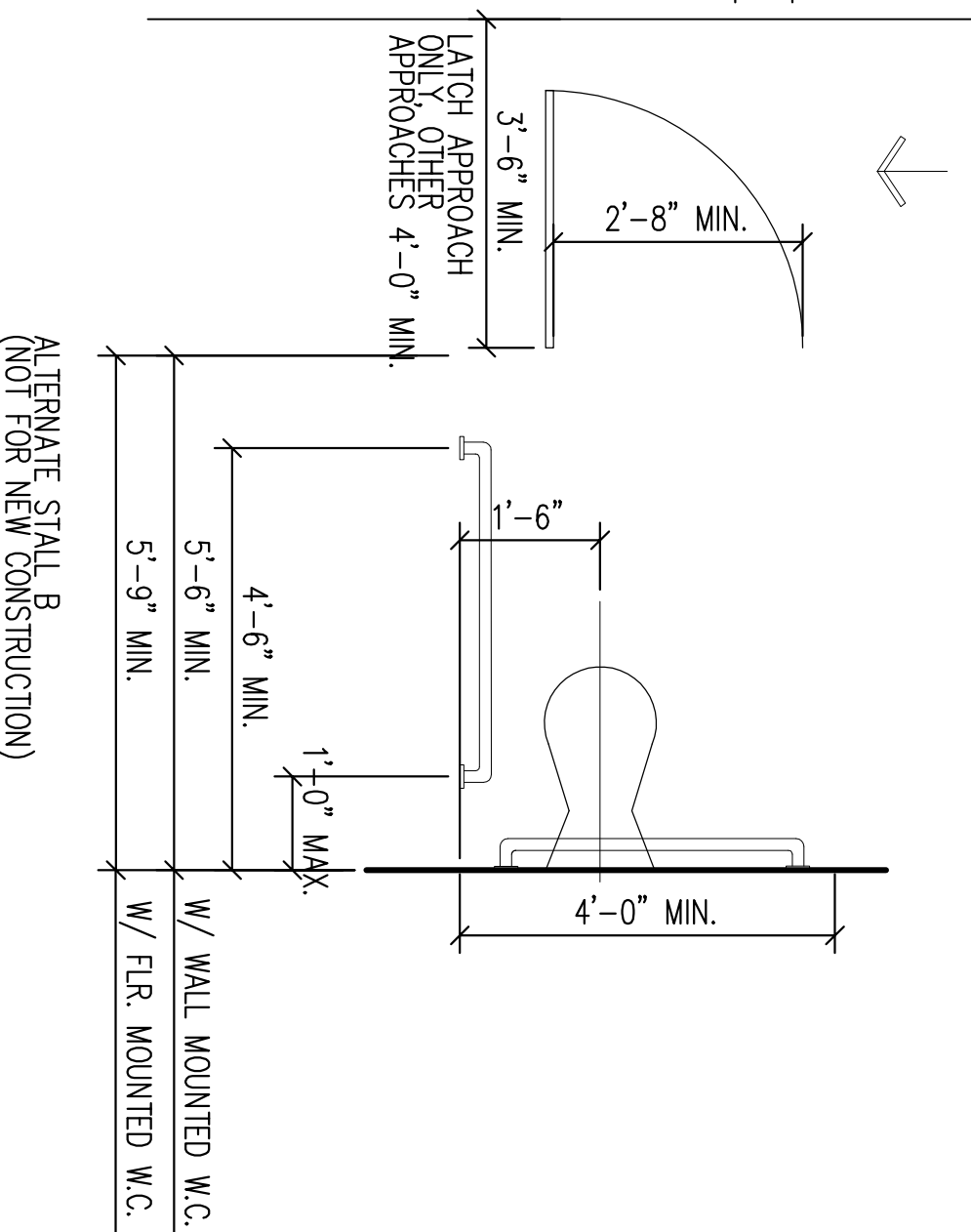
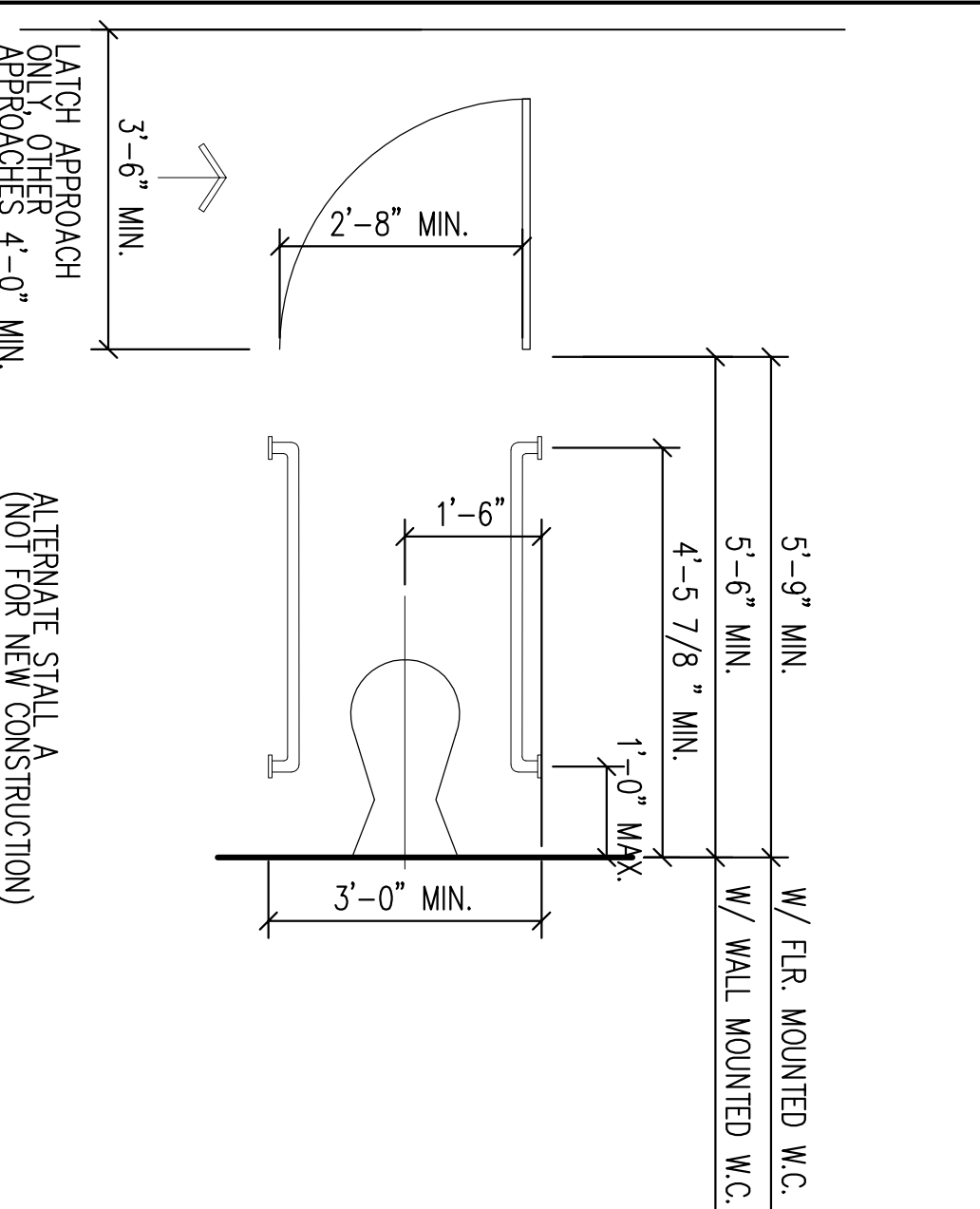
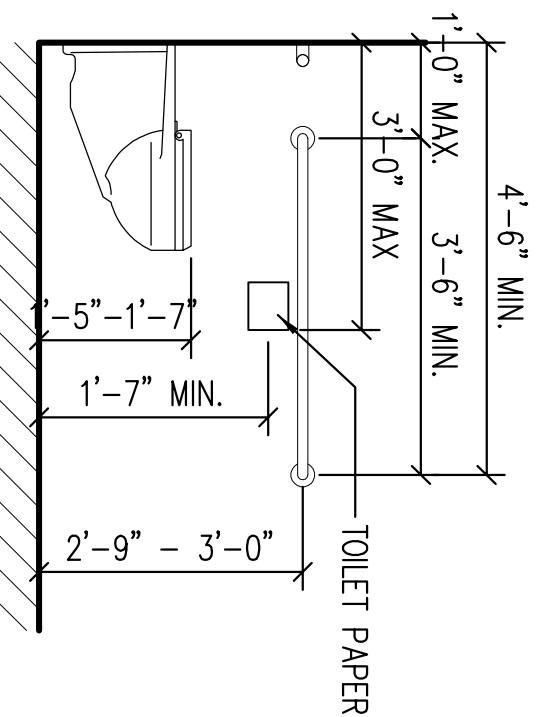
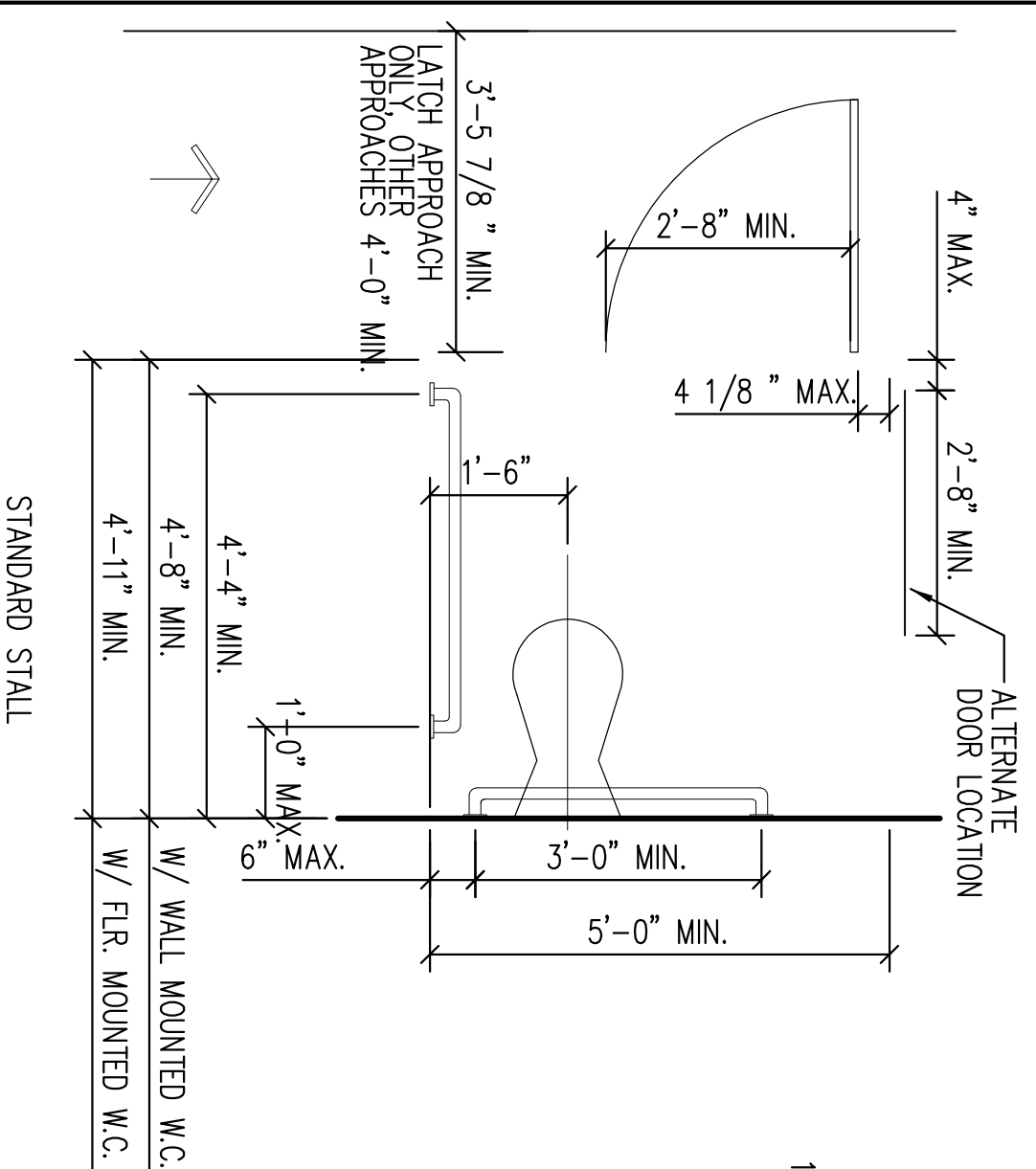
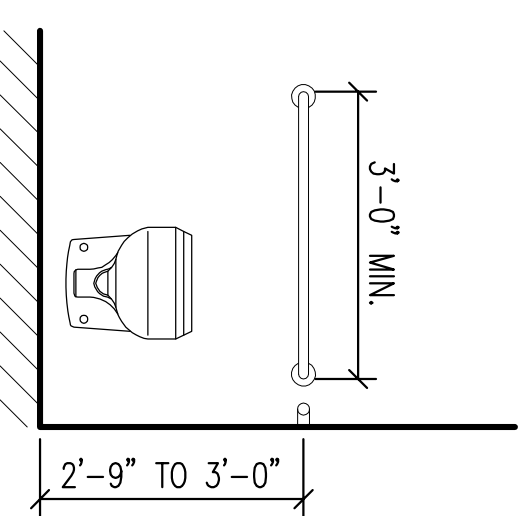
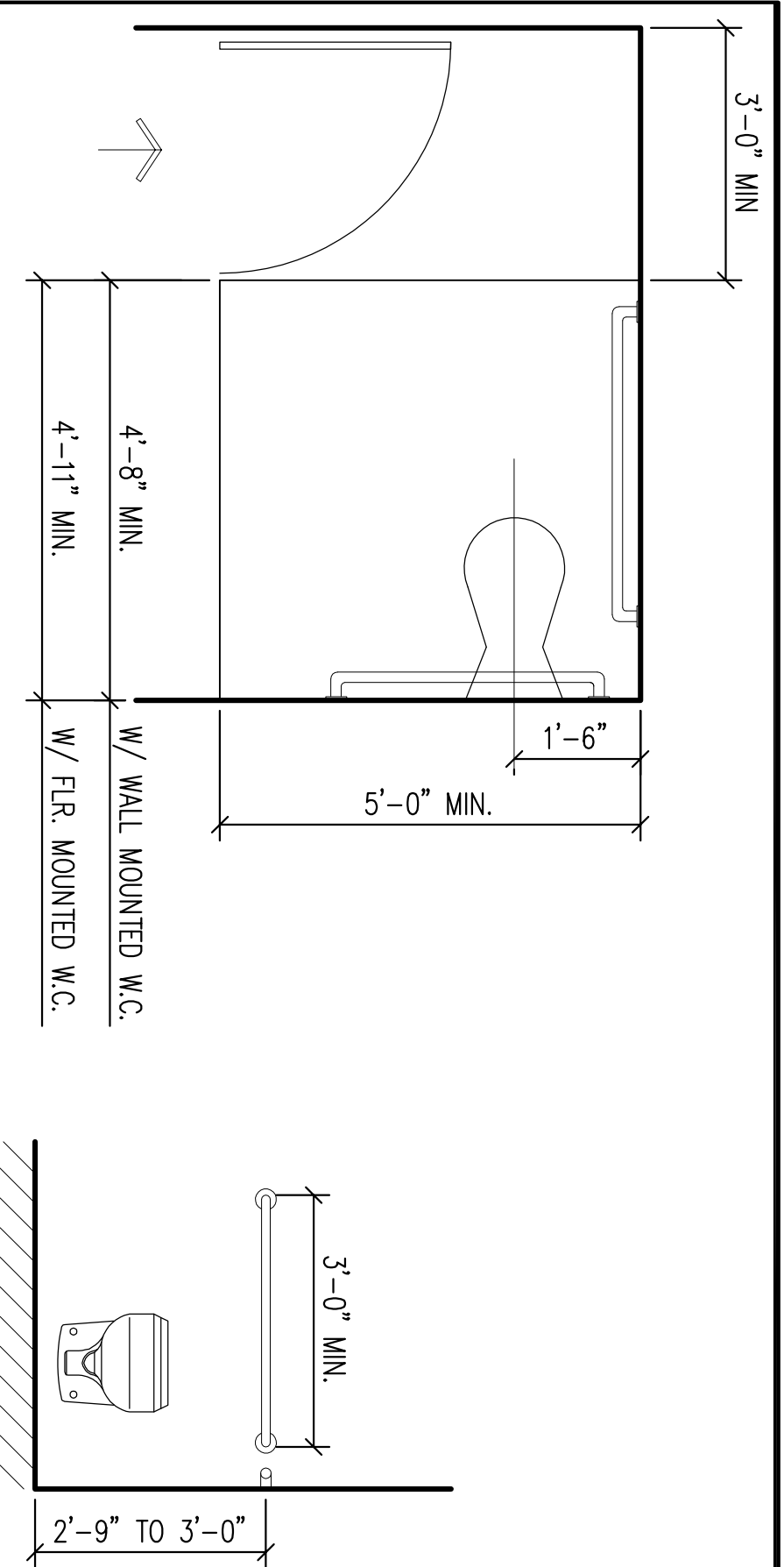
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GENERAL NOTES

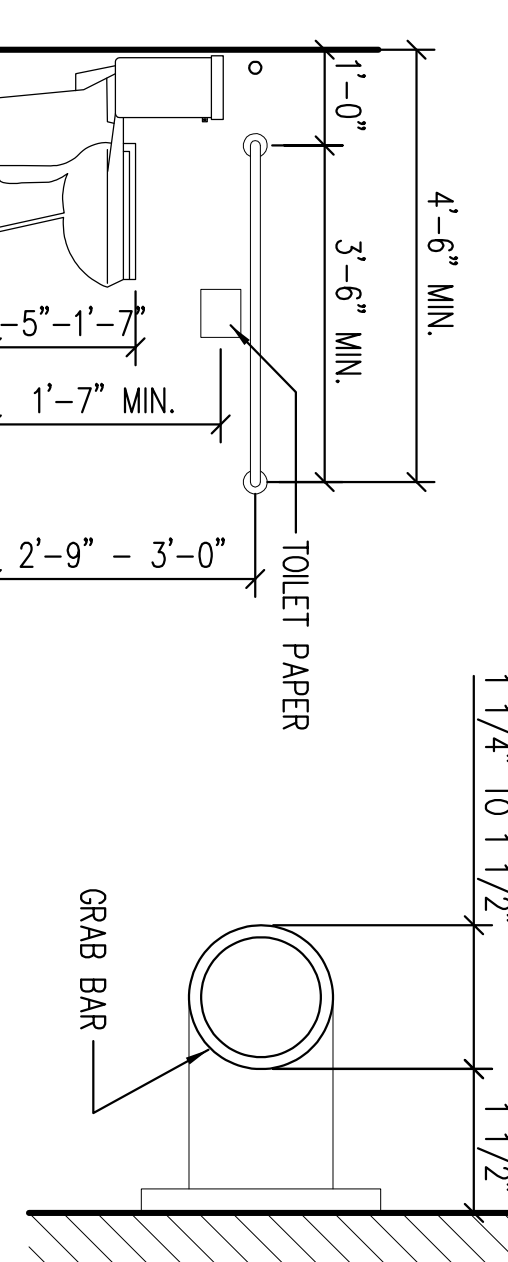
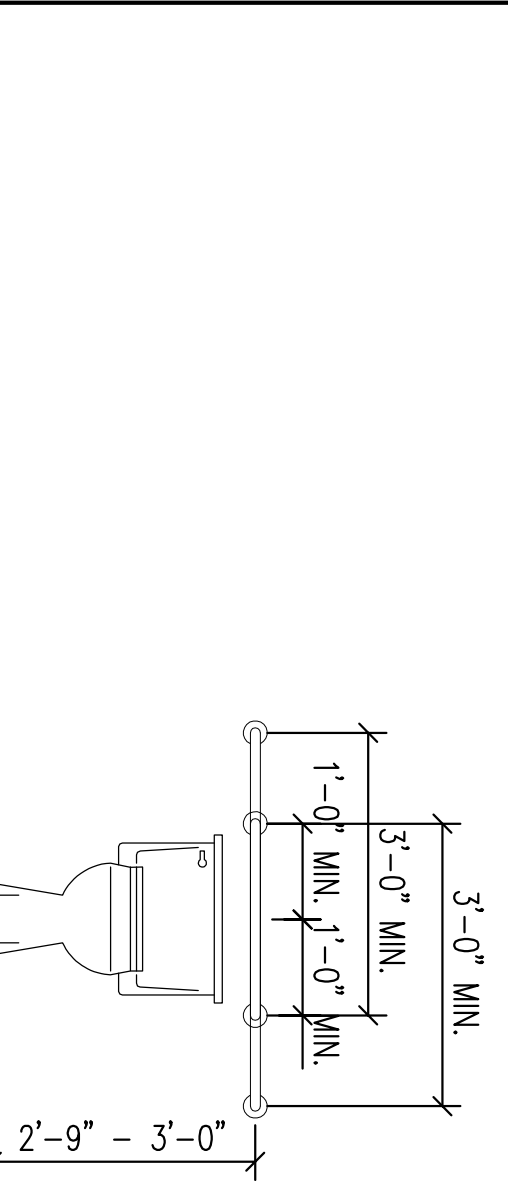
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MULTI-USER TOILET

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

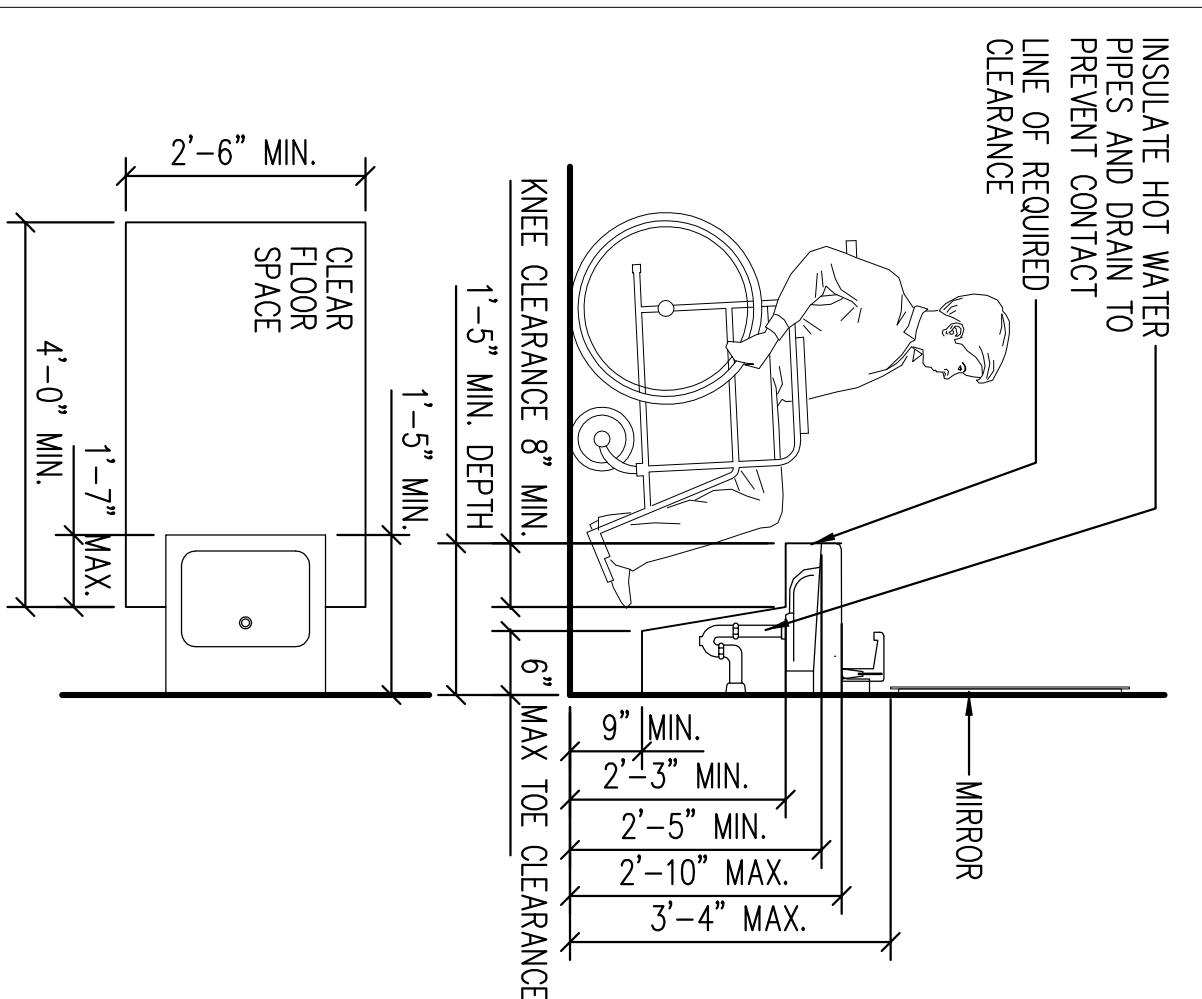
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GRAB BARS AND CLEARANCES AT TOILET

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

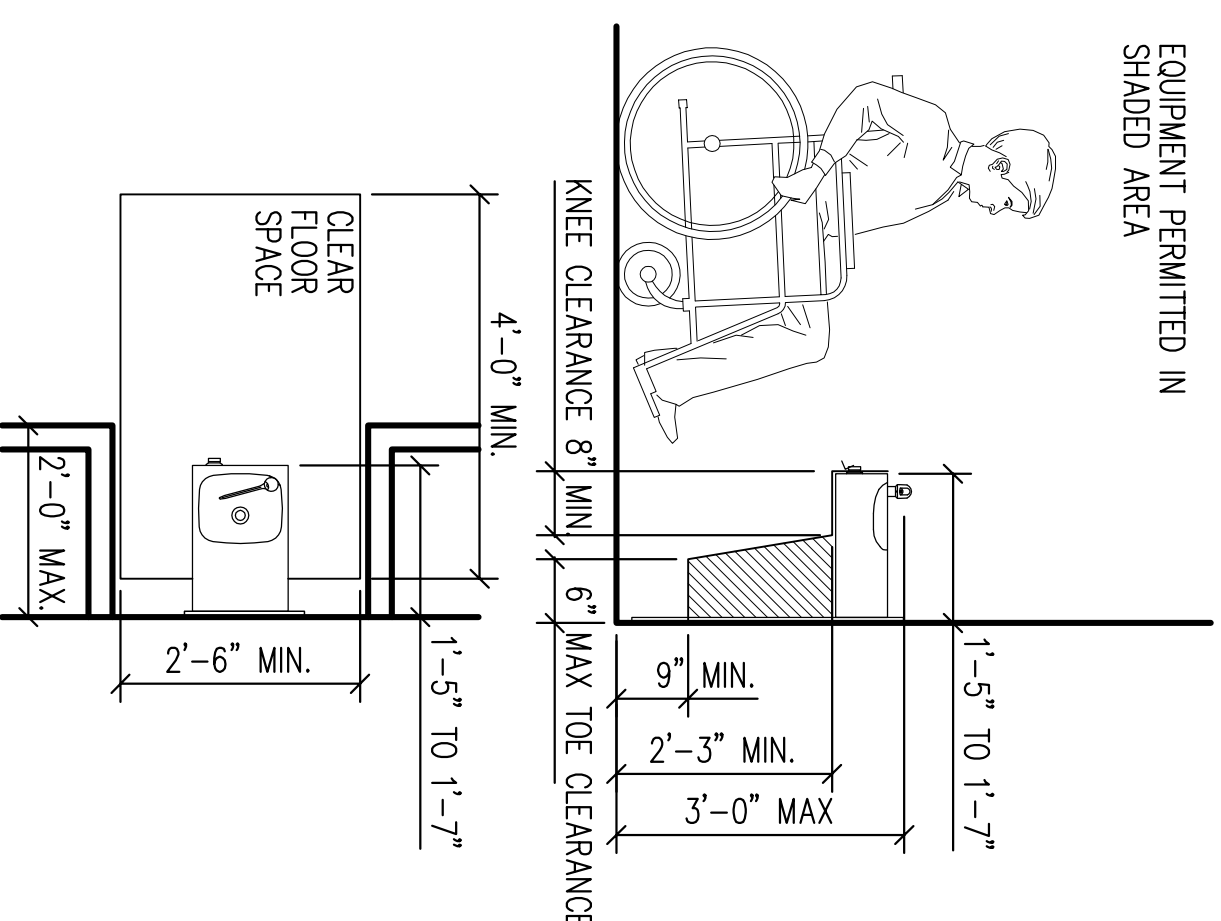
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SINK OR VANITY

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

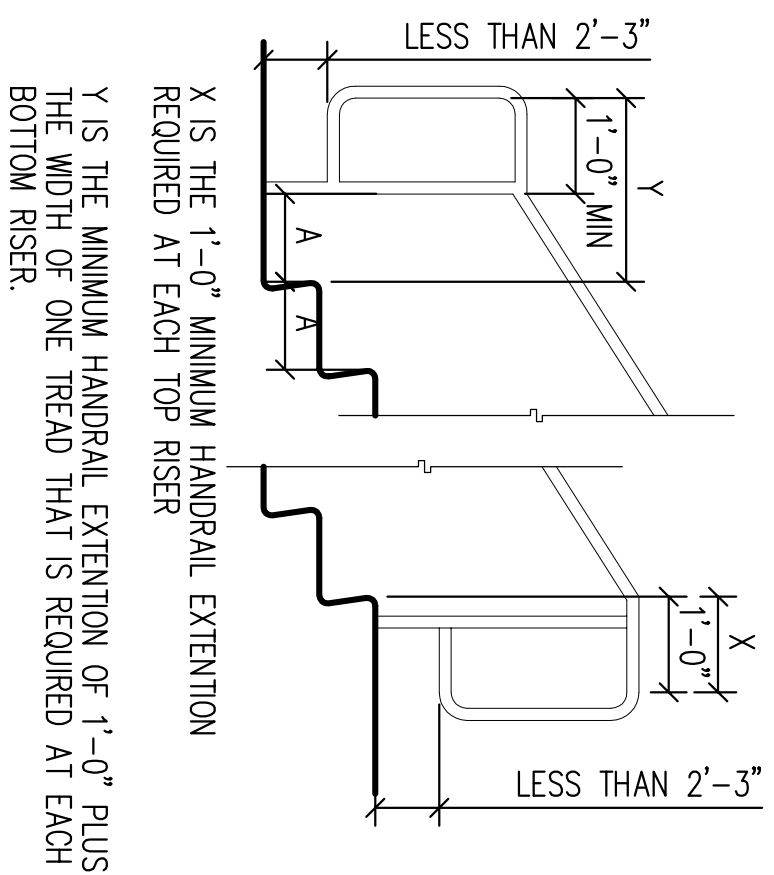
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DRINKING FOUNTAIN

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

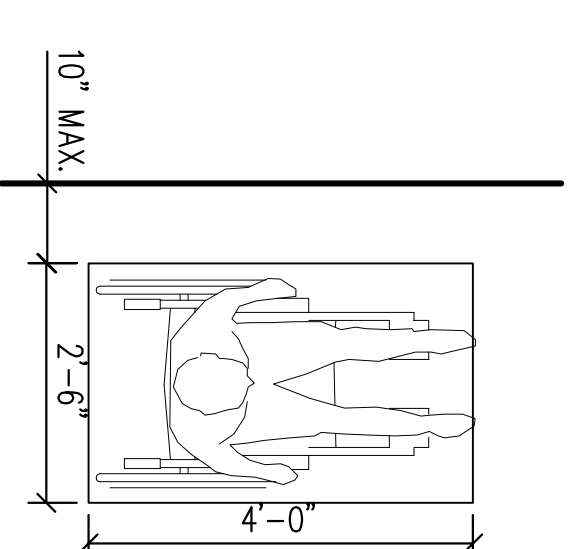
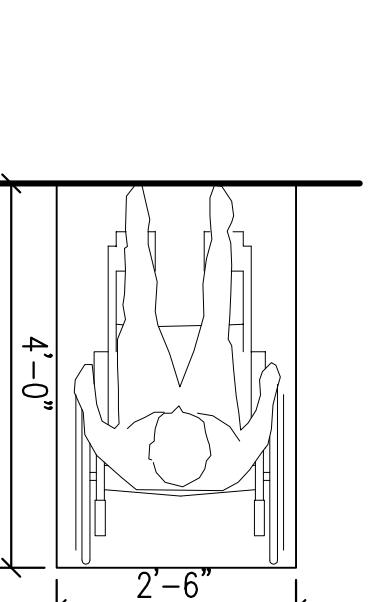
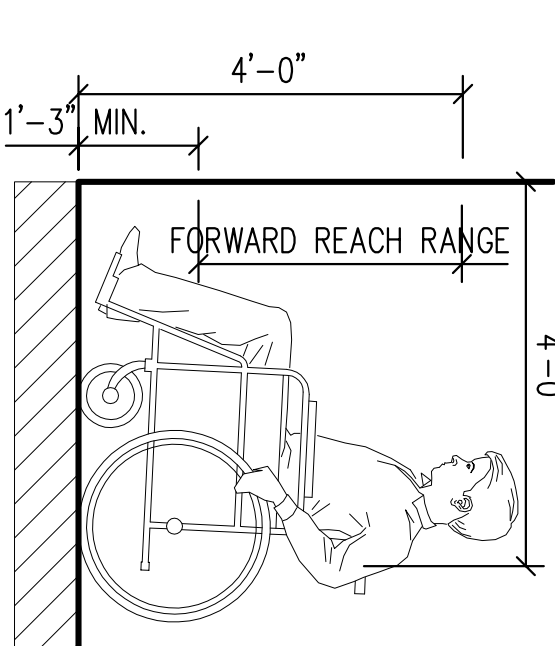
12



HANDRAIL EXTENSIONS

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

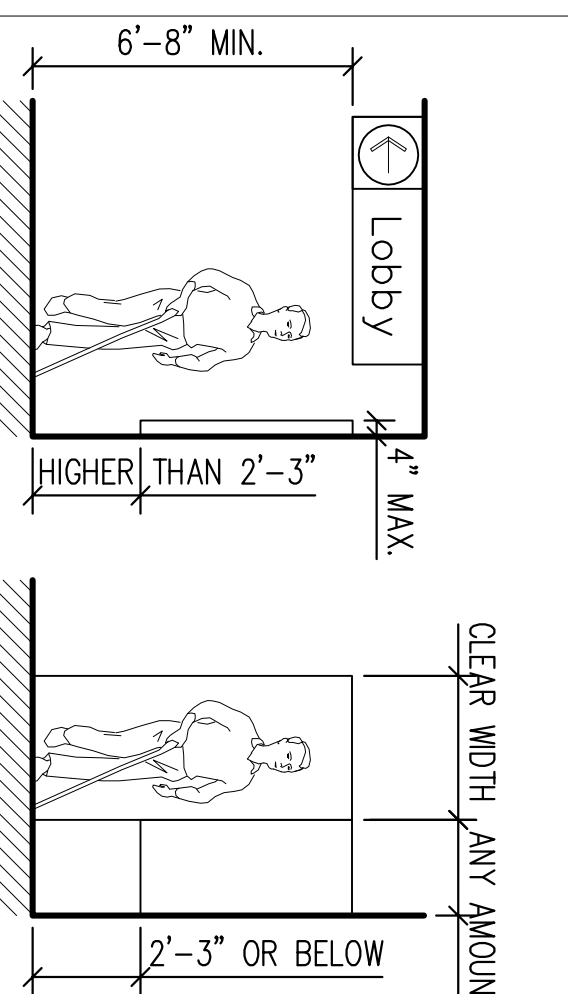
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REACH RANGES

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

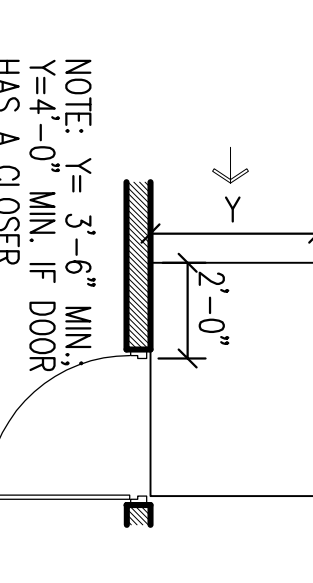
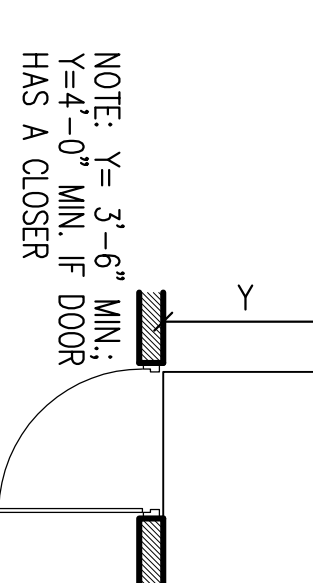
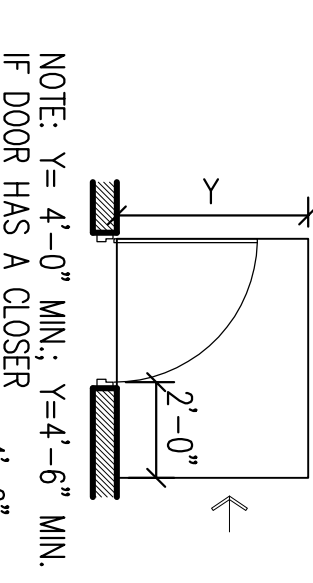
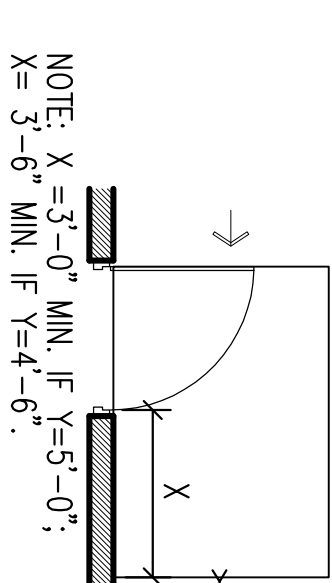
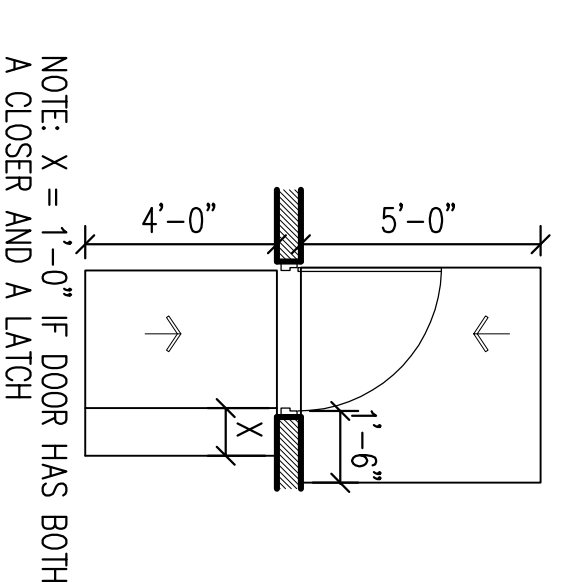
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PROTRUDING OBJECTS

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

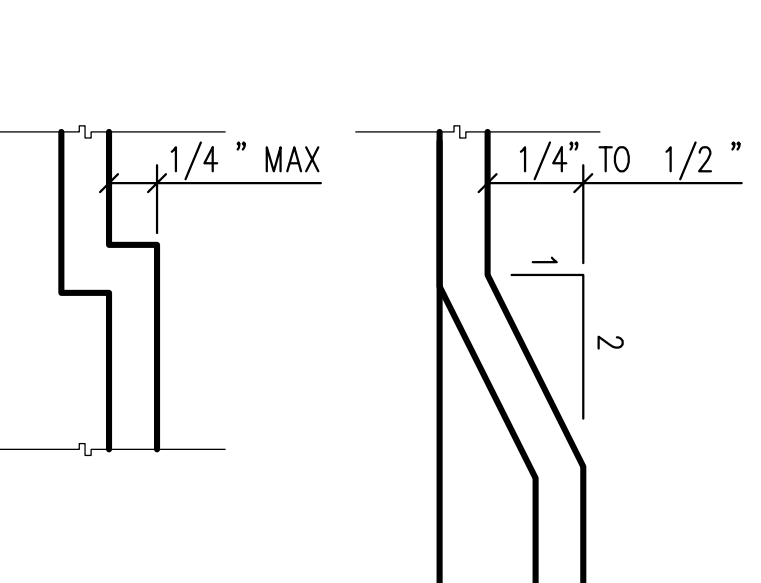
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CLEARANCES

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

02



THRESHOLDS

SCALE: FULL

03

PROJECT:



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ADA DETAILS

A0.20

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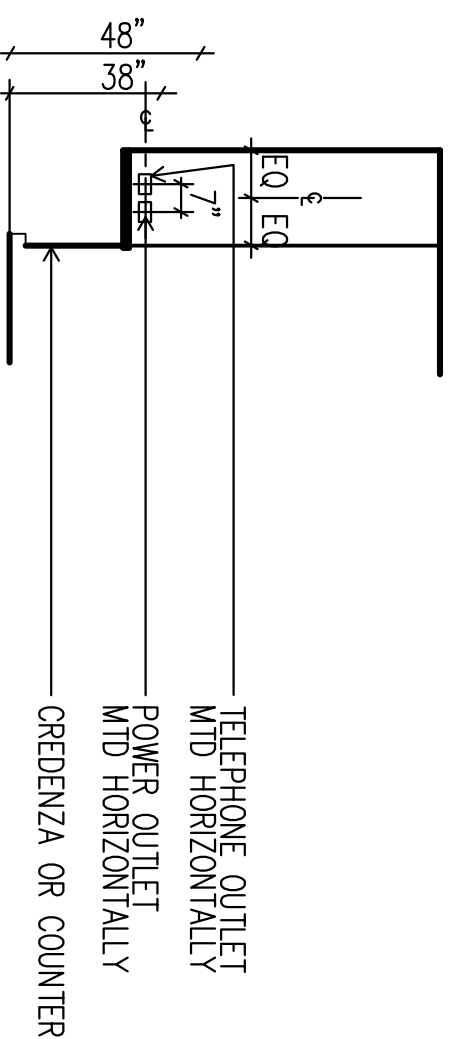
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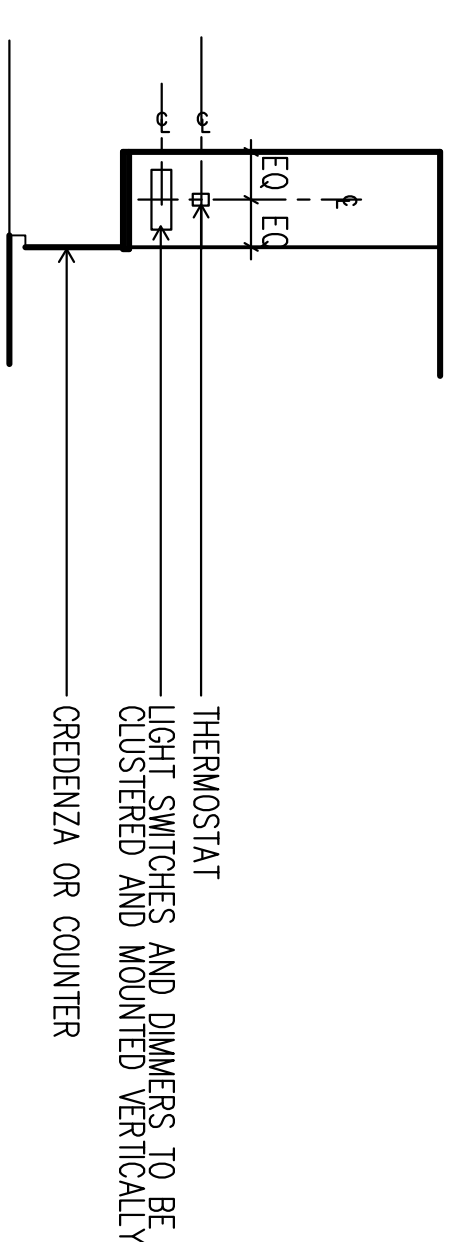
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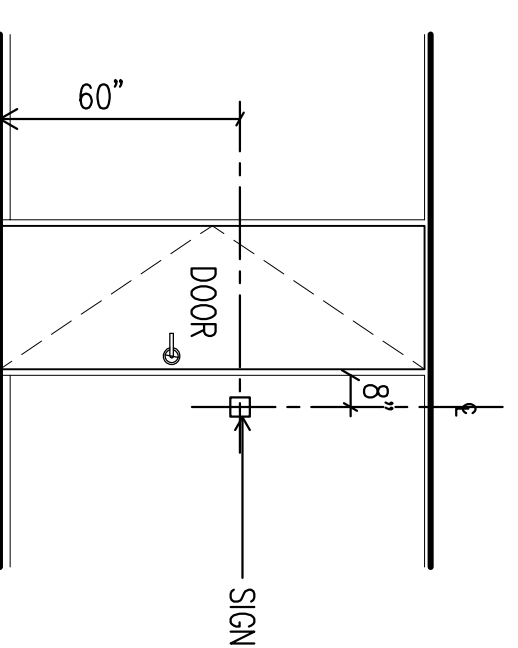
MOUNTING LOCATIONS cont.



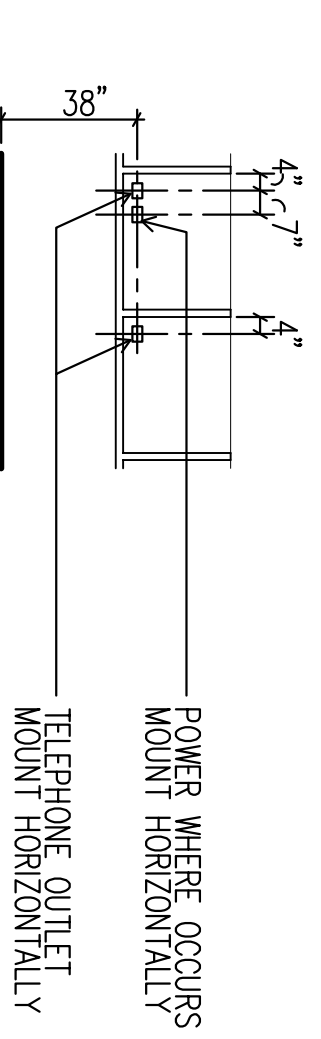
12 LOCATIONS at CREDENZAS or COUNTERS OUTLETS



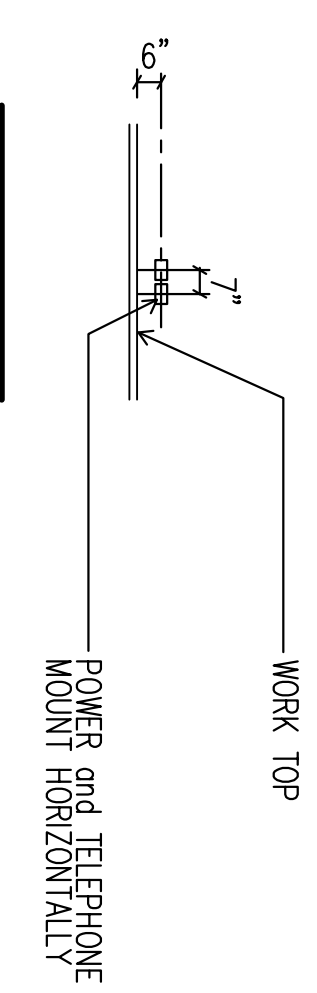
13 LOCATIONS at CREDENZAS or COUNTERS THERMOSTAT LIGHT SWITCHES AND DIMMERS TO BE CLUSTERED AND MOUNTED VERTICALLY CREDENZA OR COUNTER



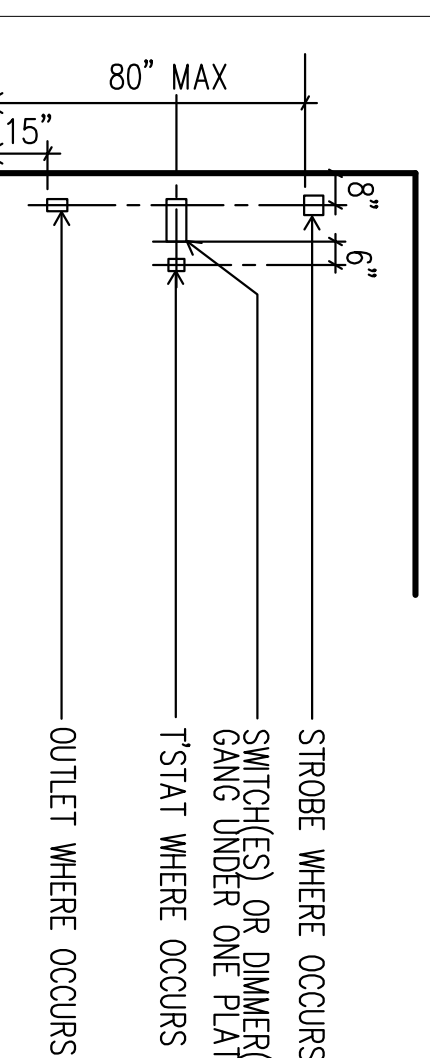
14 LOCATIONS at CREDENZAS or COUNTERS SIGN



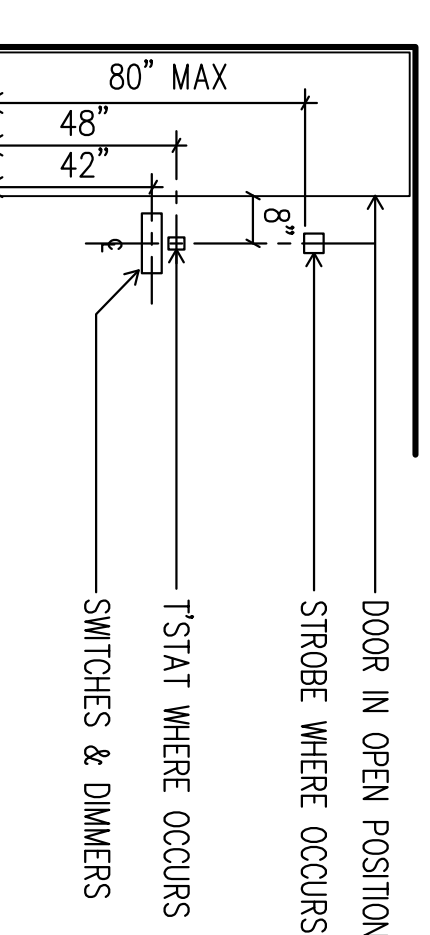
15 LOCATION FOR TYPICAL SIGNS



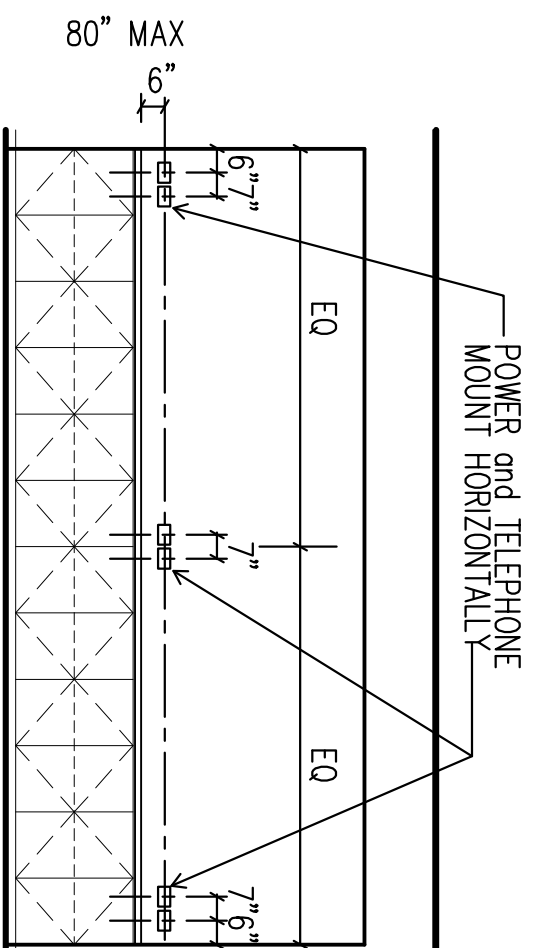
16 LOCATIONS at STANDUP TELEPHONE COUNTERS



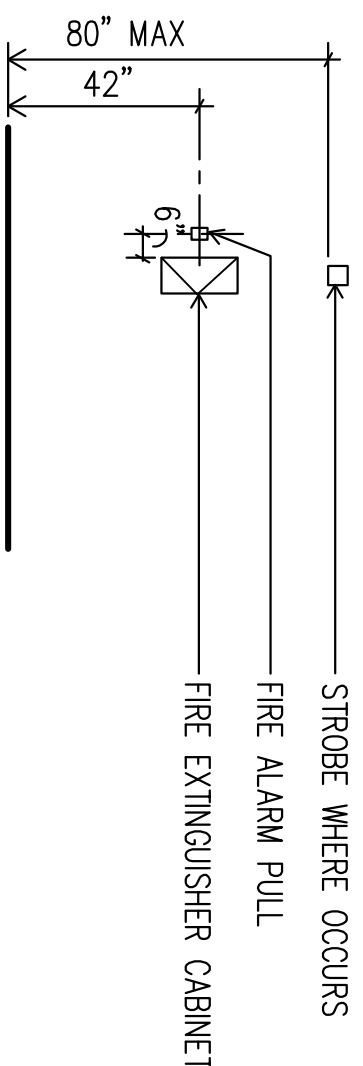
17 LOCATIONS at BUSINESS CENTER



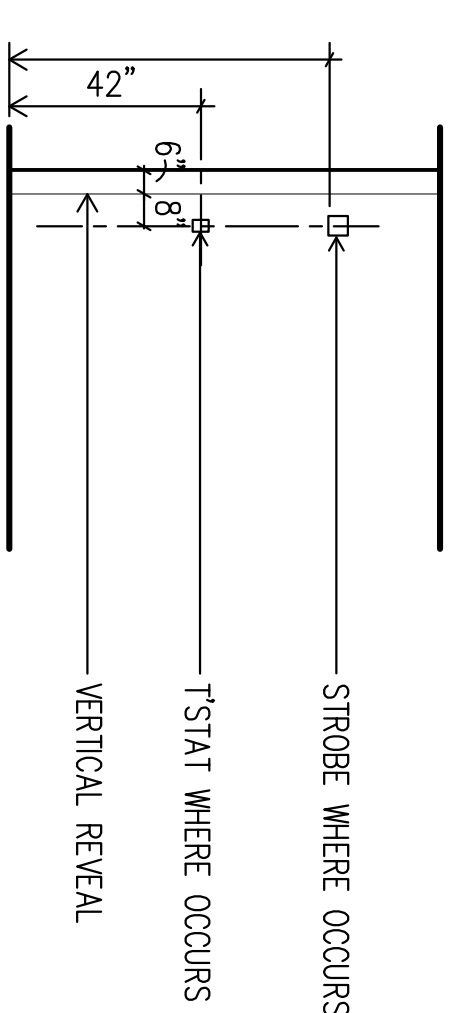
18 LOCATIONS at MILLWORK COUNTERS



19 LOCATIONS at MILLWORK COUNTERS

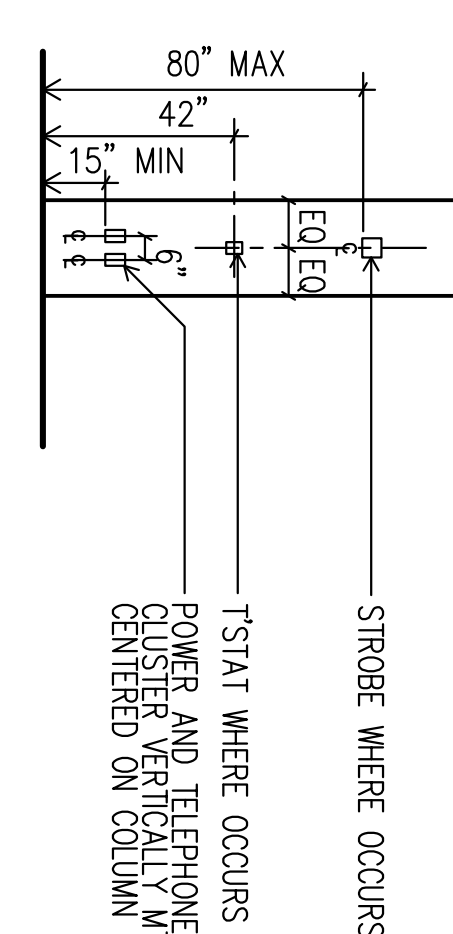


20 LOCATIONS at FIRE EXTINGUISHER CABINET STROBES and FIRE ALARM PULLS

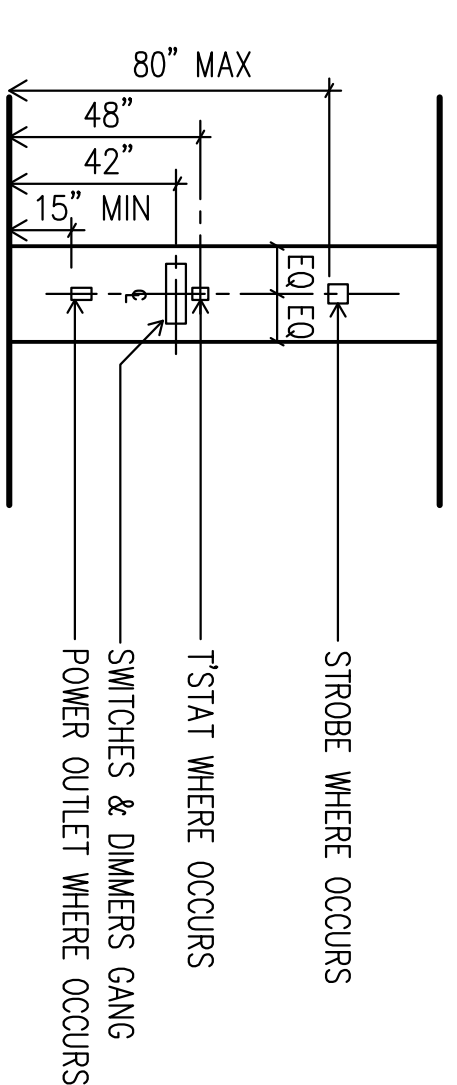


21 LOCATIONS at CORNERS with REVEALS STROBES and THERMOSTATS

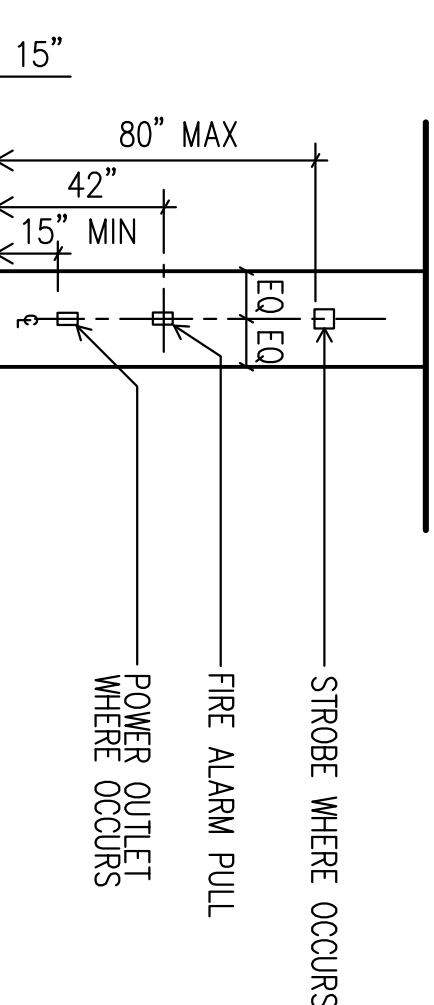
MOUNTING LOCATIONS cont.



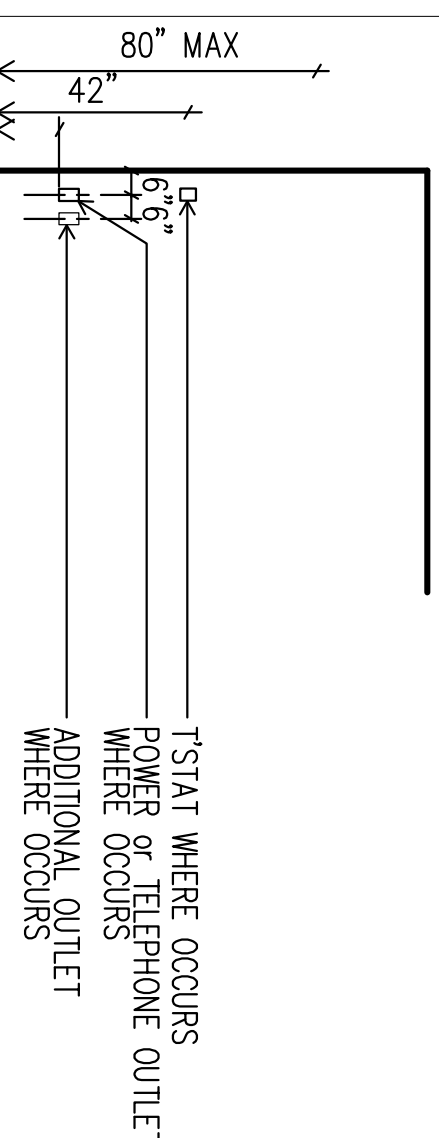
22 LOCATIONS at COLUMNS, BETWEEN DOORS, ETC. OUTLET GROUPS, STROBES and THERMOSTATS



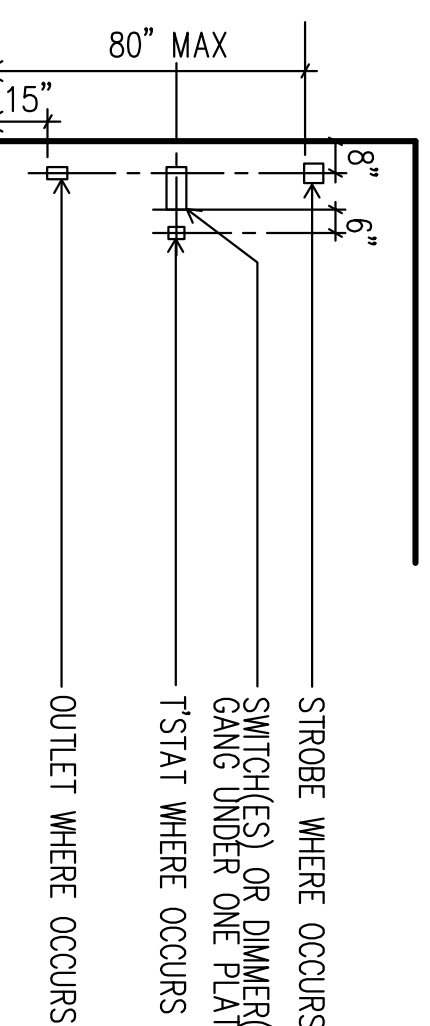
23 LOCATIONS at COLUMNS, BETWEEN DOORS, ETC. SWITCHES, STROBES and THERMOSTATS



24 LOCATIONS at COLUMNS, BETWEEN DOORS, ETC. OUTLETS, STROBES and FIRE ALARM PULLS

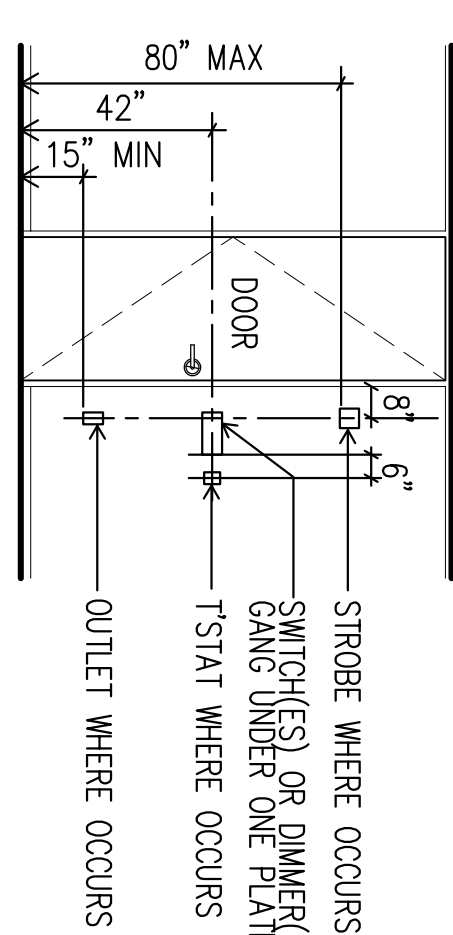


25 LOCATIONS at CORNERS

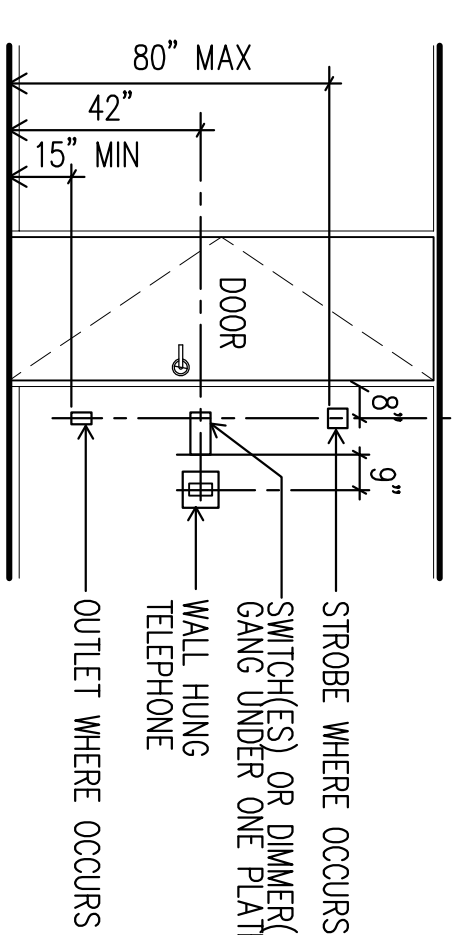


26 LOCATIONS at CORNERS SWITCHES, OUTLETS, STROBES and THERMOSTATS

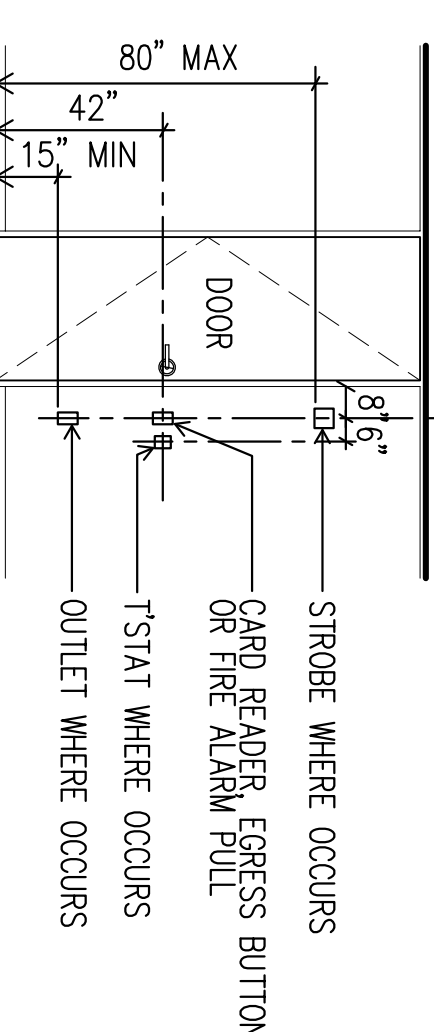
MOUNTING LOCATIONS



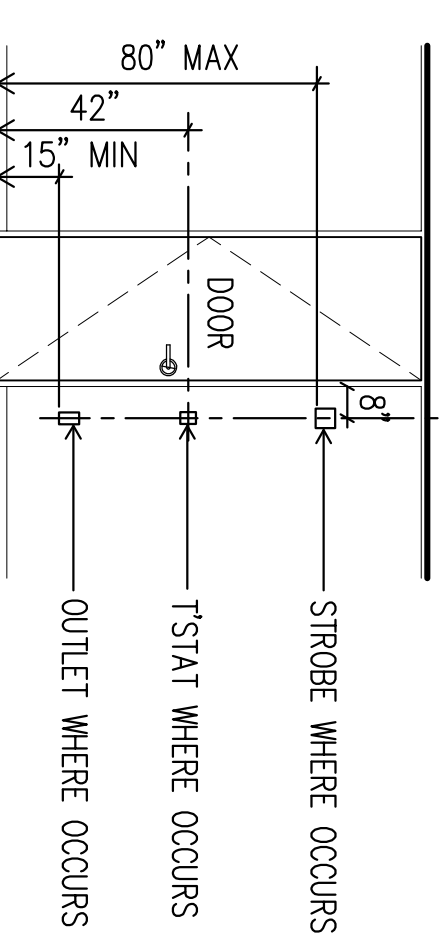
27 LOCATIONS at DOOR JAMBS SWITCH AND THERMOSTAT



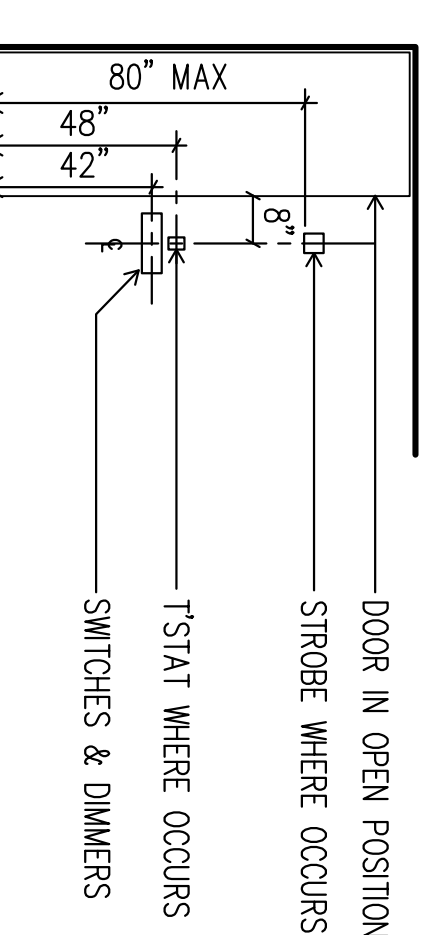
28 LOCATIONS at DOOR JAMBS SWITCH and TELEPHONE



29 LOCATIONS at DOOR JAMBS CARD READER, EGRESS BUTTON or FIRE ALARM PULL



30 LOCATIONS at DOOR JAMBS THERMOSTAT, STROBE or OUTLET



31 LOCATIONS at OPEN DOORS SWITCHES, STROBES and THERMOSTATS

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TYP. MOUNTING HEIGHTS

A0.30

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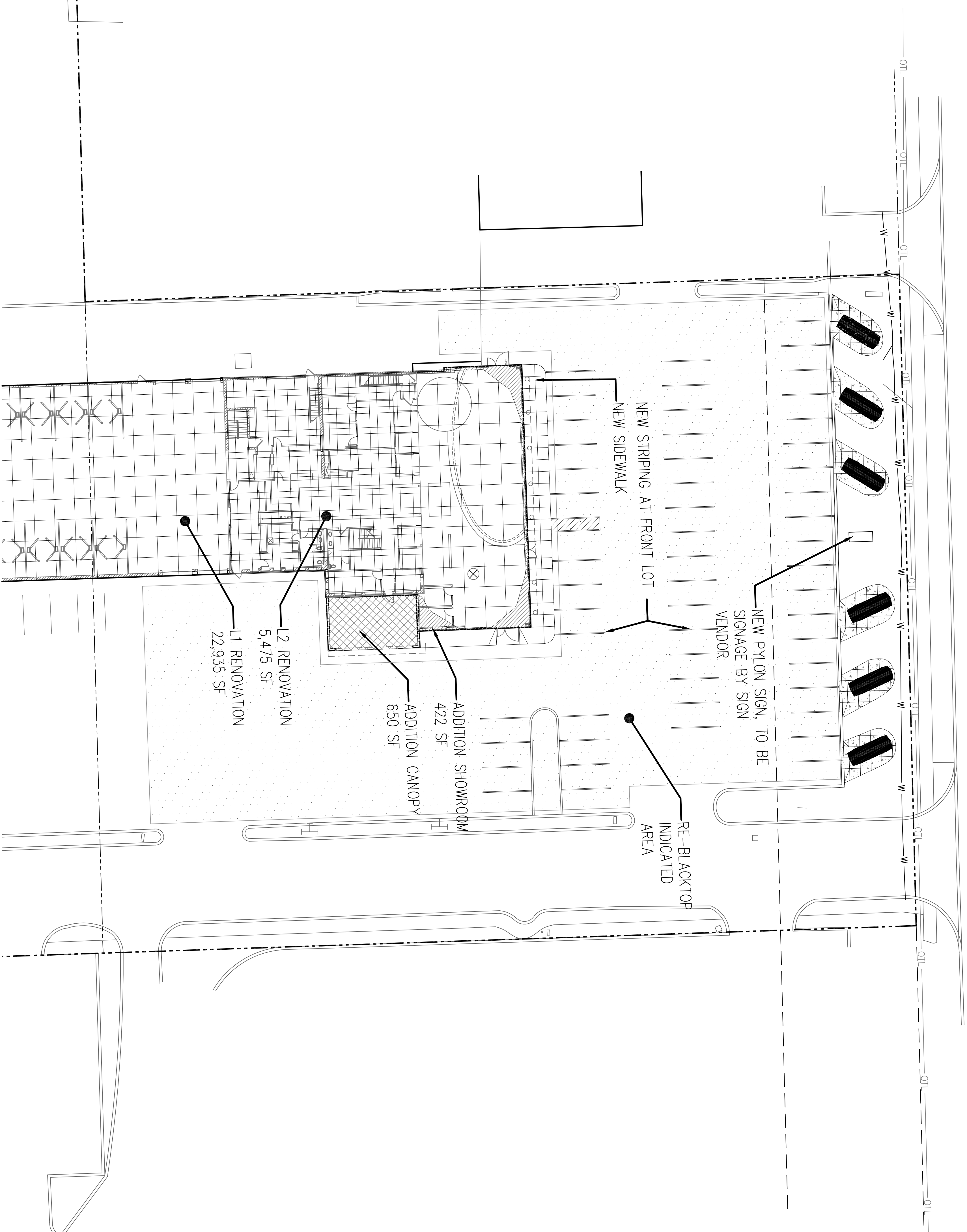
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SITE PLAN

A00.50



SITE PLAN

SCALE: 40FT

1

GENERAL DEMO NOTES

1. REFER TO A101B FOR ADDITIONAL NOTES

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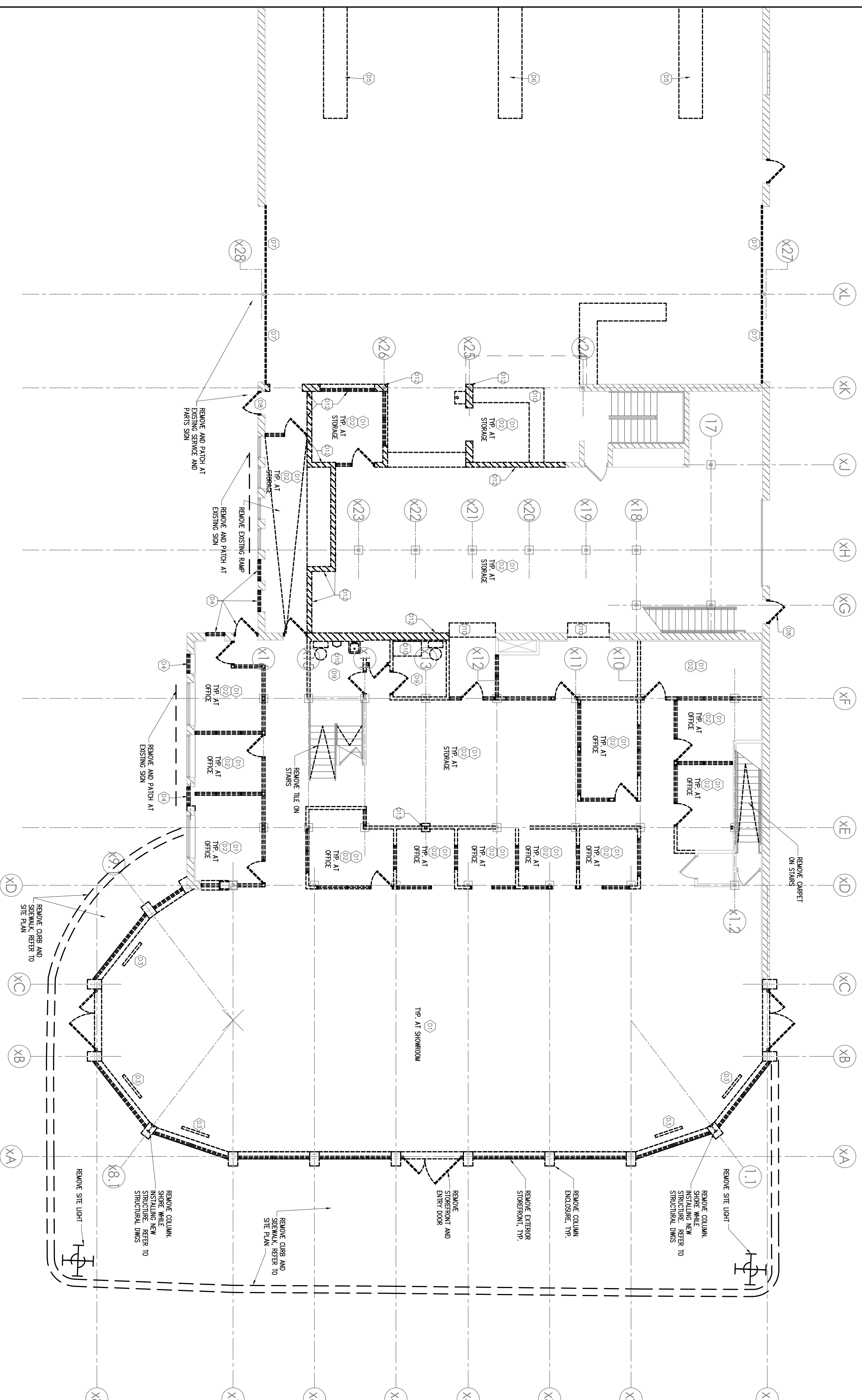
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DEMO PLAN - SHOWROOM

A01.01A



FLOOR PLAN - FIRST FLOOR SHOWROOM
SCALE: 1/8"



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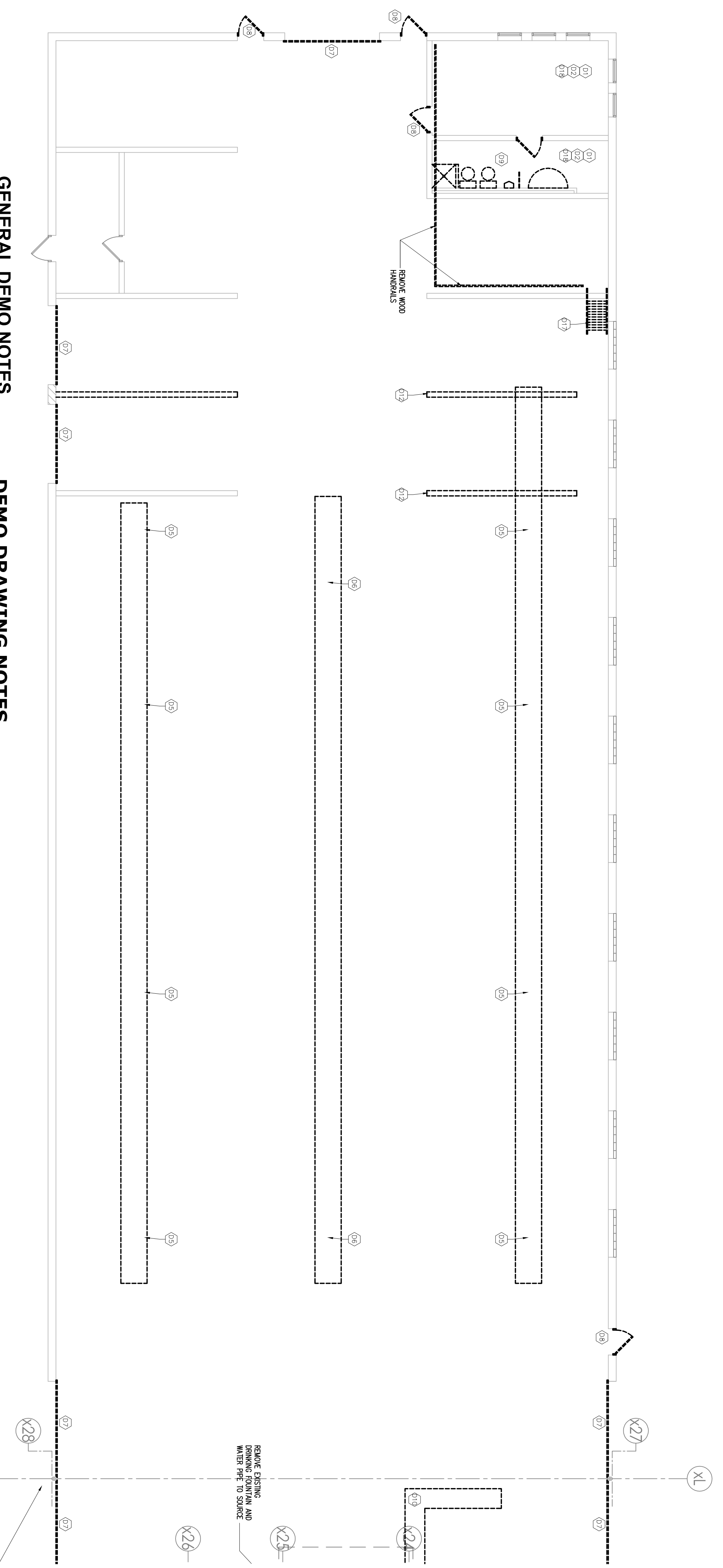
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DEMO PLAN - SERVICE

A01.01B



GENERAL DEMO NOTES

1. COMPLY WITH APPLICABLE LOCAL, STATE AND FEDERAL CODES AND REGULATIONS PERTAINING TO SAFETY OF PERSONS, PROPERTY AND ENVIRONMENTAL PROTECTION.
2. PROVIDE AND MAINTAIN BARRICADES, LIGHTING, AND GUARDRAILS AS REQUIRED BY APPLICABLE CODES AND REGULATIONS TO PROTECT OCCUPANTS OF BUILDING AND WORKERS.
3. ERECT AND MAINTAIN DISTRIBUTE PARTITIONS AS REQUIRED TO PREVENT SPREAD OF DUST, FUMES, AND SMOKE, ETC. TO OTHER PARTS OF THE BUILDING. ON COMPLETION, REMOVE PARTITIONS AND REPAIR DAMAGED SURFACES TO MATCH ADJACENT SURFACES.
4. IF DEMOLITION IS PERFORMED IN EXCESS OF THAT REQUIRED, RESTORE EFFECTED AREAS AT NO COST TO THE OWNER.
5. REMOVE FROM SITE DAILY AND LEGALLY DISPOSE OF REFUSE, DEBRIS, RUBBER, AND OTHER MATERIALS RESULTING FROM DEMOLITION OPERATIONS.
6. REMOVE DESIGNATED PARTITIONS, COMPONENTS, BUILDING EQUIPMENT, AND FIXTURES AS REQUIRED FOR NEW WORK.
7. REMOVE ABANDONED HVAC EQUIPMENT, INCLUDING DUCT WORK.
8. REMOVE ABANDONED ELECTRICAL, TELEPHONE AND DATA CABLEING AND DEVICES, UNLESS OTHERWISE NOTED.
9. REMOVE EXISTING FLOOR FINISHES AND PREPARE SUBFLOOR AS REQUIRED FOR NEW FLOOR FINISHES.

DEMO DRAWING NOTES

- D1 - REMOVE FLOOR FINISH (TILE OR CARPET) AND BASE. PREPARE FOR NEW FLOOR FINISH.
- D2 - REMOVE CEILING, TILE GRIDS, AND LIGHTS. TAKE ELECTRICAL BACK TO PANEL. REMOVE MECH DIFFUSER AND CLEAN FOR REUSE.
- D3 - REMOVE AND PATCH AND REROUTE FLOOR FLOOR DIFFUSERS. REFER TO MECHANICAL DRAWINGS.
- D4 - REMOVE EXTERIOR DOOR/WINDOW AND FRAME. PATCH FOR NEW MASONRY INFILL OR NEW DOOR. REFER TO FLOOR PLAN.
- D5 - REMOVE FLOOR SLAB AT EXISTING PLATES OF VEHICLE LIFTS
- D6 - AT EXISTING FLOOR DRAIN, REMOVE ANY BROKEN CONCRETE EDGING AND REPAIR.
- D7 - REMOVE OVERHEAD DOOR, CONTROLS, TRACKS
- D8 - REMOVE DOOR AND/OR FRAME AND MOLDING. PATCH AS REQ'D. REPLACE WITH NEW DOOR.
- D9 - REMOVE INDICATED PLUMBING FIXTURES. REFER TO PLUMBING DRAWINGS.
- D10 - REMOVE CASEWORK
- D11 - REMOVE SOFFIT, BULKHEAD, LIGHTS, AND FRAMING. REMOVE STRUCTURAL OUTRIGGERS EXTENSIONS TO MATCH WITH FLOOR PLAN
- D12 - REMOVE MASONRY WALL, PATCH FLOOR AND WALLS. CAREFULLY MAINTAIN COLUMN WHERE APPLICABLE
- D13 - CAREFULLY REMOVE COLUMN, REFER TO STRUCTURAL
- D14 - REMOVE GLAZING AND FRAME
- D15 - REMOVE GYP BD SILL TO FLOOR
- D16 - REMOVE DOOR KNOB, REPLACE WITH NEW LEVER
- D17 - REMOVE WOOD SHIPS LADDER
- D18 - REMOVE ELEC IN THIS ROOM. REMOVE AND REUSE ALL DIFFUSERS IN THIS ROOM

FLOOR PLAN - FIRST FLOOR SERVICE

SCALE: 1/8"

1

GENERAL PLAN NOTES

1. REFER TO A201B FOR ADDITIONAL NOTES

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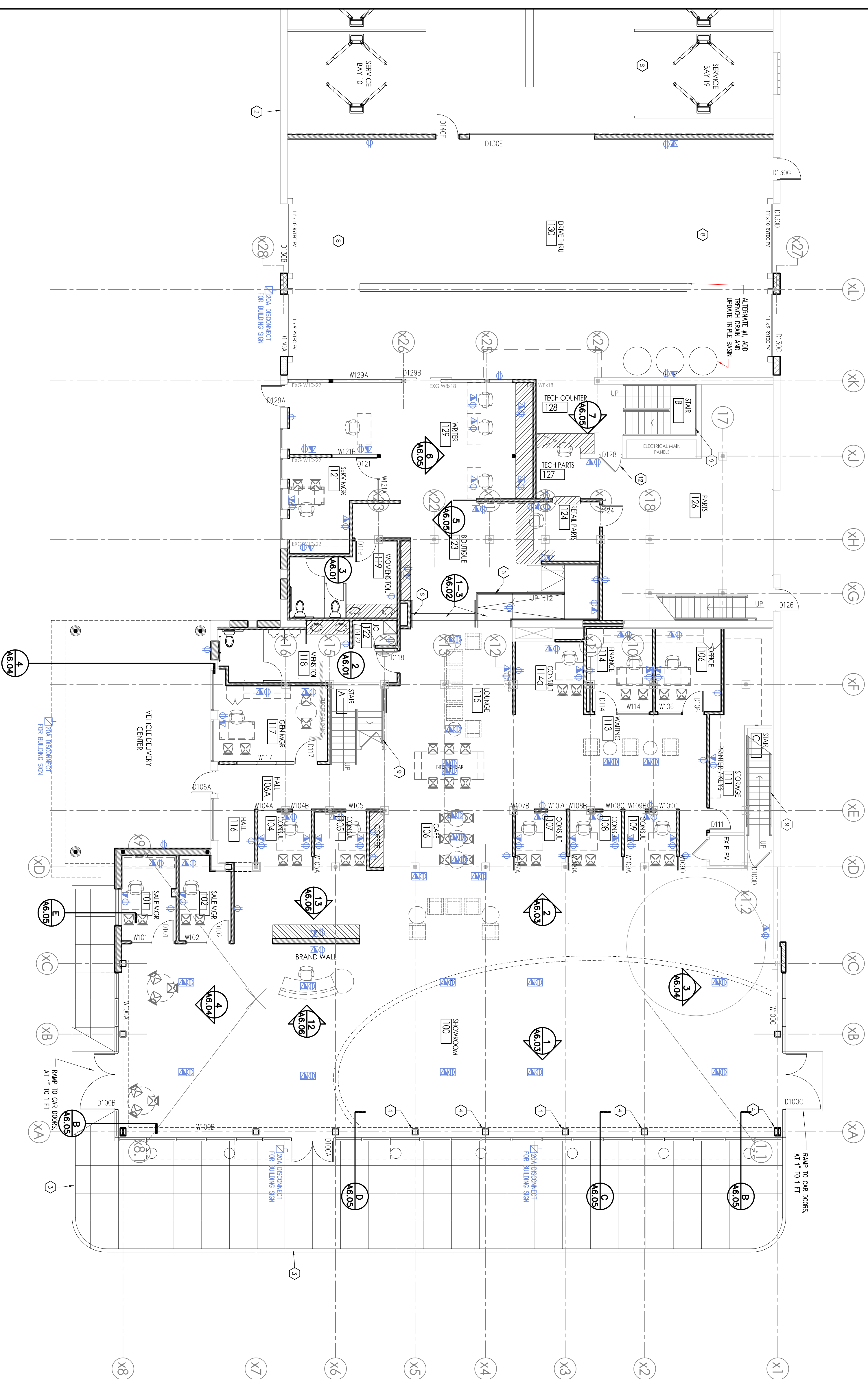
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FLOOR PLAN - SHOWROOM

A02.01A



FLOOR PLAN - FIRST FLOOR SHOWROOM

SCALE: 1/8"

1

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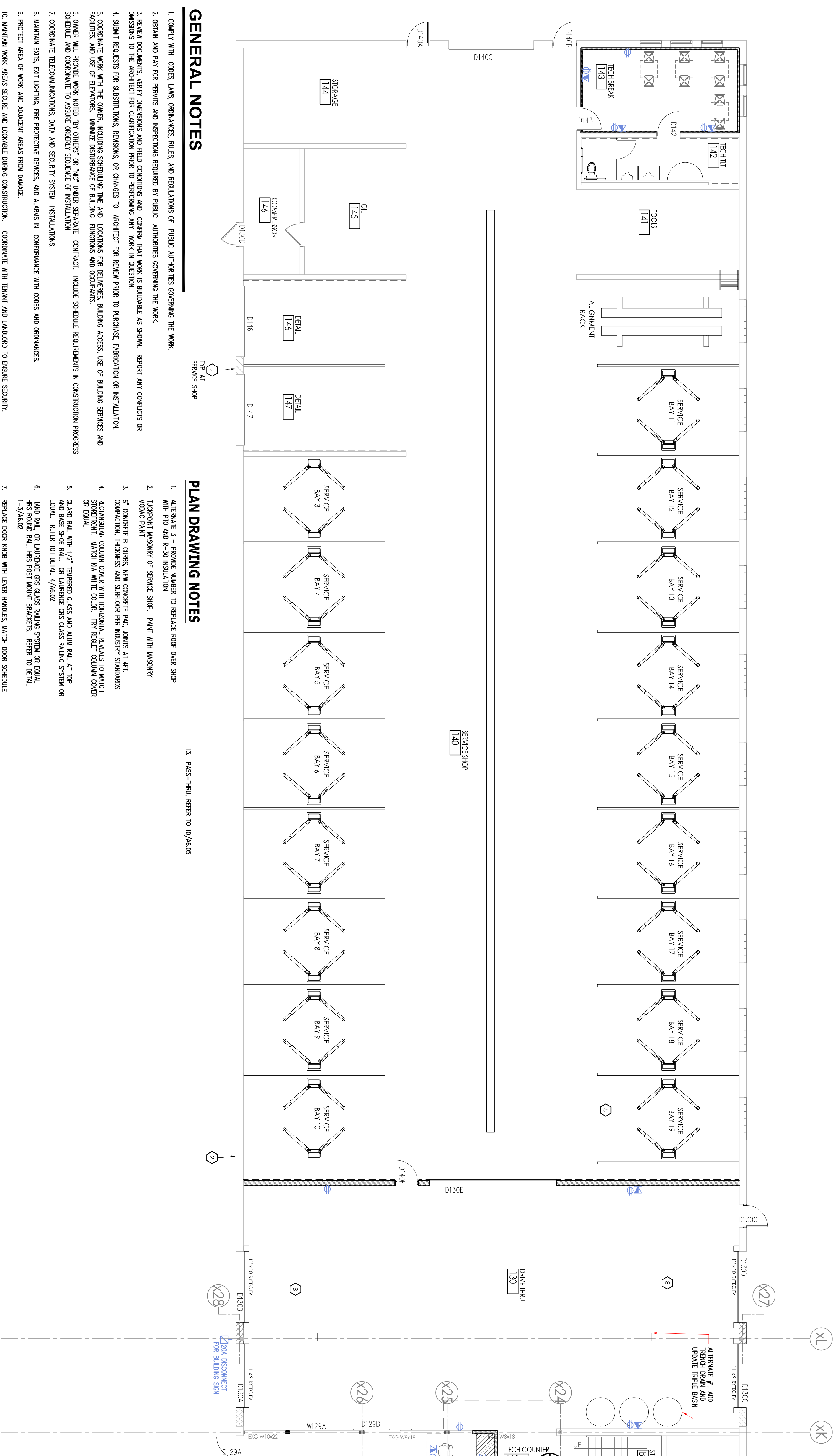
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FLOOR PLAN - SERVICE

A02.01B



GENERAL NOTES

1. COMPLY WITH CODES, LAWS, ORDINANCES, RULES, AND REGULATIONS OF PUBLIC AUTHORITIES GOVERNING THE WORK.
2. OBTAIN AND PAY FOR PERMITS AND INSPECTIONS REQUIRED BY PUBLIC AUTHORITIES GOVERNING THE WORK.
3. REVIEW DOCUMENTS, VERIFY DIMENSIONS AND FIELD CONDITIONS AND CONFIRM THAT WORK IS BUILDABLE AS SHOWN. REPORT ANY CONFLICTS OR OMISSIONS TO THE ARCHITECT FOR CLARIFICATION PRIOR TO PERFORMING ANY WORK IN QUESTION.
4. SUBMIT REQUESTS FOR SUBSTITUTIONS, REVISIONS, OR CHANGES TO ARCHITECT FOR REVIEW PRIOR TO PURCHASE, FABRICATION OR INSTALLATION.
5. COORDINATE WORK WITH THE OWNER, INCLUDING SCHEDULING TIME AND LOCATIONS FOR DELIVERIES, BUILDING ACCESS, USE OF BUILDING SERVICES AND FACILITIES, AND USE OF ELEVATORS. MINIMIZE DISTURBANCE OF BUILDING FUNCTIONS AND OCCUPANTS.
6. OWNER WILL PROVIDE WORK NOTED BY OTHERS OR "NOT" UNDER SEPARATE CONTRACT. INCLUDE SCHEDULE REQUIREMENTS IN CONSTRUCTION PROGRESS SCHEDULE AND COORDINATE TO ASSURE CORRECT SEQUENCE OF INSTALLATION.
7. COORDINATE TELECOMMUNICATIONS, DATA AND SECURITY SYSTEM INSTALLATIONS.
8. MAINTAIN EXITS, EXIT LIGHTING, FIRE PROTECTIVE DEVICES, AND ALARMS IN CONFORMANCE WITH CODES AND ORDINANCES.
9. PROTECT AREA OF WORK AND ADJACENT AREAS FROM DAMAGE.
10. MAINTAIN WORK AREAS SECURE AND LOCKABLE DURING CONSTRUCTION. COORDINATE WITH TENANT AND LANDLORD TO ENSURE SECURITY.
11. DO NOT SCALE DRAWINGS. WRITTEN DIMENSIONS GOVERN IN CASE OF CONFLICT. CONSULT THE ARCHITECT.
12. PARTITIONS ARE DIMENSIONED FROM FINISH FACE TO FINISH FACE, UNLESS OTHERWISE NOTED. MAINTAIN DIMENSIONS MARKED "CLEAR". ALLOW FOR THICKNESS OF FINISHES.
13. COORDINATE AND PROVIDE BACKING FOR MILLWORK AND ITEMS ATTACHED OR MOUNTED TO WALLS OR CEILINGS.
14. WHERE EXISTING ACCESS PANELS CONFLICT WITH CONSTRUCTION, RELOCATE PANELS TO ALIGN WITH AND FIT WITHIN NEW CONSTRUCTION.
15. UNDERCUT DOORS TO CLEAR TOP OF FLOOR FINISHES BY 1/4 INCH, UNLESS OTHERWISE NOTED.

PLAN DRAWING NOTES

1. ALTERNATE 3 - PROVIDE NUMBER TO REPLACE ROOF OVER SHOP WITH P10 AND R-30 INSULATION
2. TIE-POINT MASONRY OF SERVICE SHOP. PAINT WITH MASONRY MORTAR PAINT
3. 6" CONCRETE B-CORNER NEW CONCRETE PAD, JOINTS AT SET COMPANION, FINISHES AND SURFACES PER MASONRY STANDARDS
4. RECTANGULAR COLUMN COVER WITH HORIZONTAL REVEALS TO MATCH STOREFRONT. MATCH KIA WHITE COLOR. FRY REVEAL COLUMN COVER OR EQUAL.
5. GLAZED RAIL WITH 1/2" TEMPERED GLASS AND ALUM RAIL AT TOP AND BASE SHOE RAIL OR LAUNDRER ORS GLASS RAILING SYSTEM OR EQUAL. REFER TO DETAIL 4/16.02
6. HAND RAIL OR LAUNDRER ORS GLASS RAILING SYSTEM OR EQUAL HAS ROUND RAIL, HAS POST W/ANT BRACKETS. REFER TO DETAIL 1-3/16.02
7. REPLACE DOOR KNOB WITH LEVER HANDLES, MATCH DOOR SCHEDULE
8. SAND-BLAST COSSING FLOOR, REMOVE WITH 3 PART EPOXY FLOOR WITH BROADCASTED HEAVY FLAKES. COLOR TO BE DETERMINED BY ARCHITECT
9. PAINT EXISTING PRE RAILS
10. NEW PRE RAILS ANCHORED TO CMU WALL, NEW METAL SHIPS LADDER TO MEZZANINE
11. FRAME AND ENCLOSE EXISTING COLUMN
12. NEW DOOR LEVER
13. PASS-THRU, REFER TO 10/16.05

FLOOR PLAN - FIRST FLOOR SERVICE
SCALE: 1/8"

1

GENERAL PLAN NOTES

1. REFER TO A2018 FOR ADDITIONAL NOTES

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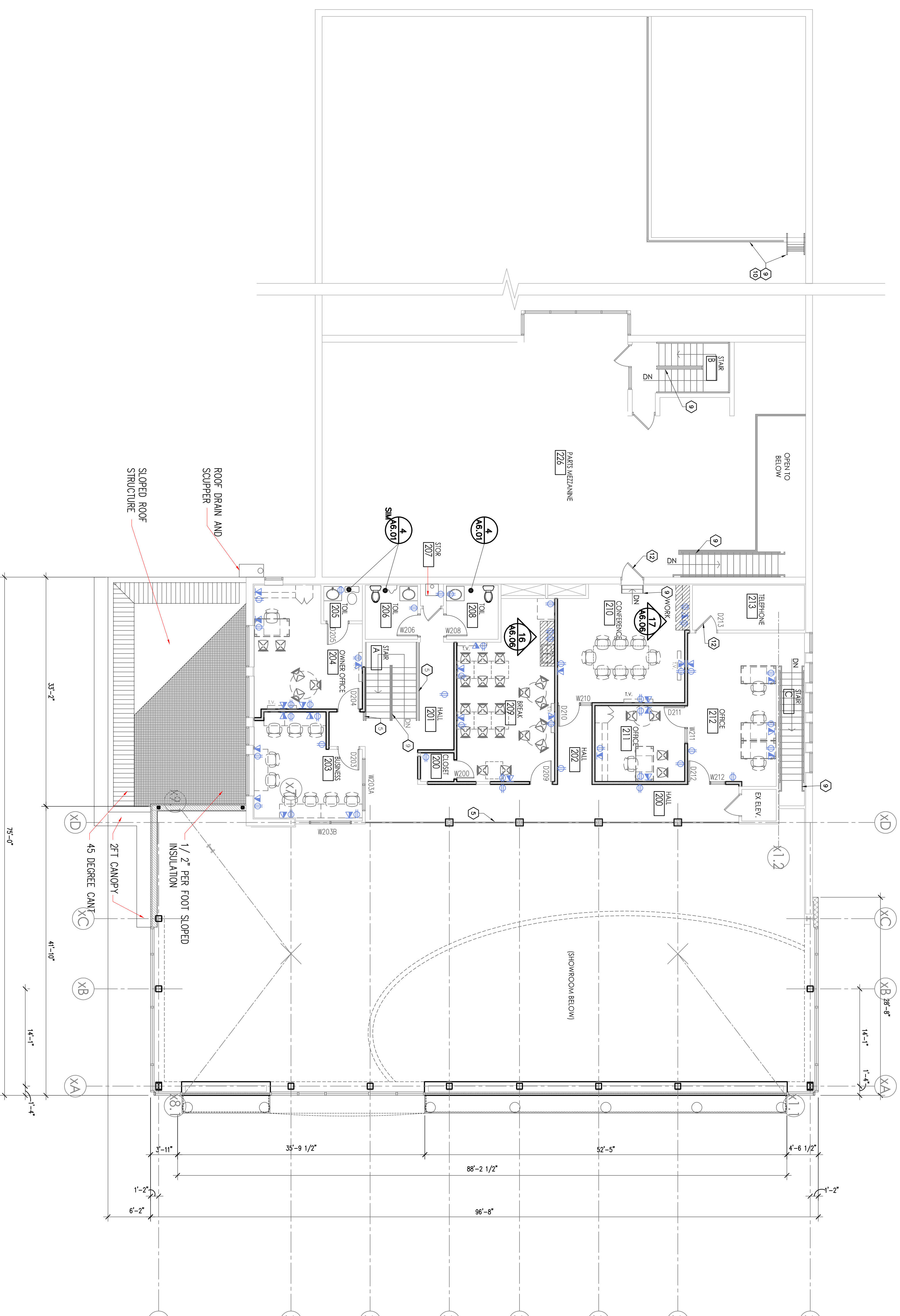
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FLOOR PLAN - L2

A02.02



FLOOR PLAN - SECOND FLOOR

SCALE: 1/8"

PROJECT:



International Auto KIA
8821 159th Street
Orland Hills, IL 60487

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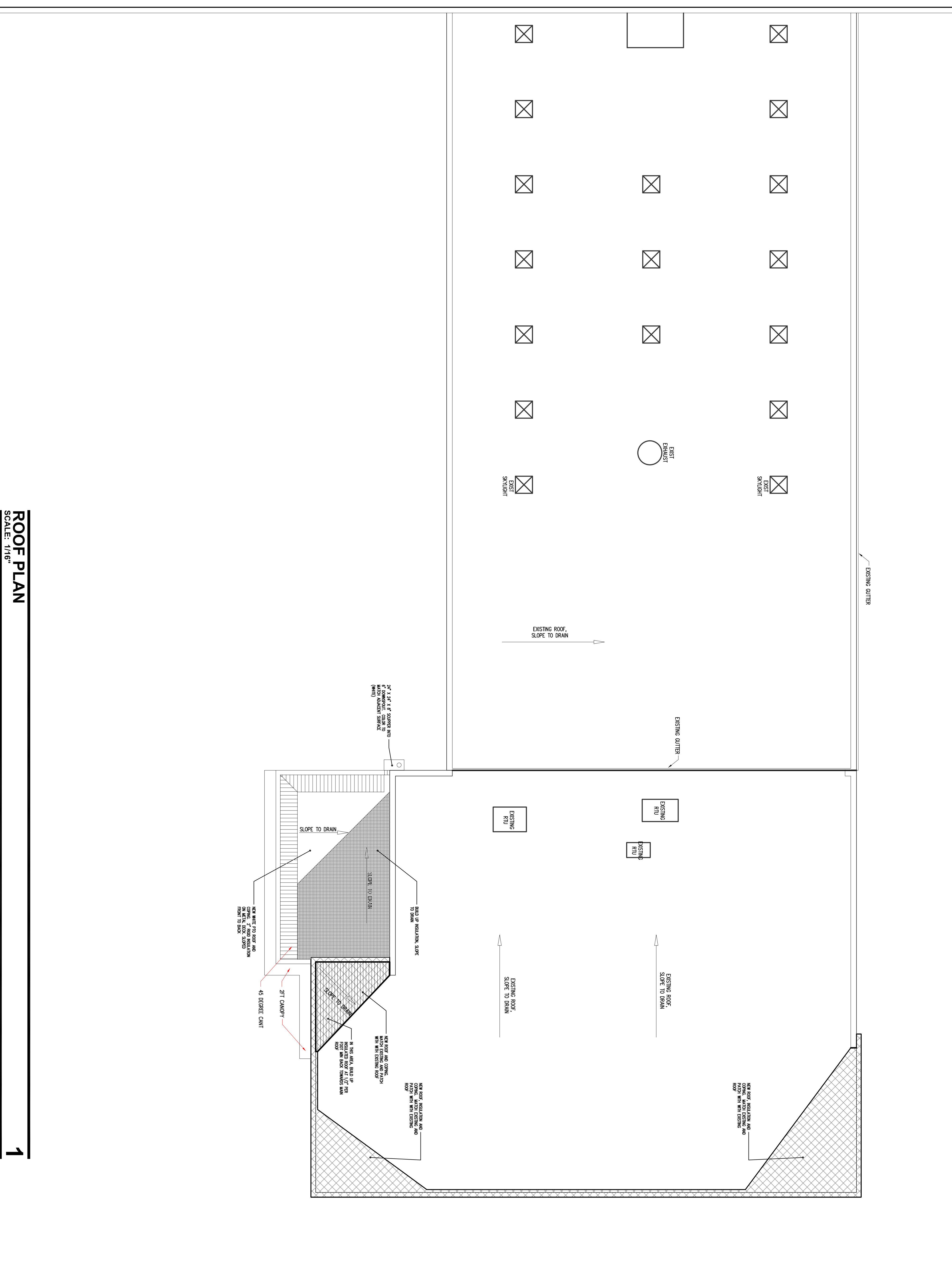
ROOF PLAN - OVERALL

A02.03

ROOF PLAN
SCALE: 1/16"

1

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GENERAL PLAN NOTES

1. REFER TO A201B-DIM FOR ADDITIONAL NOTES

PROJECT:



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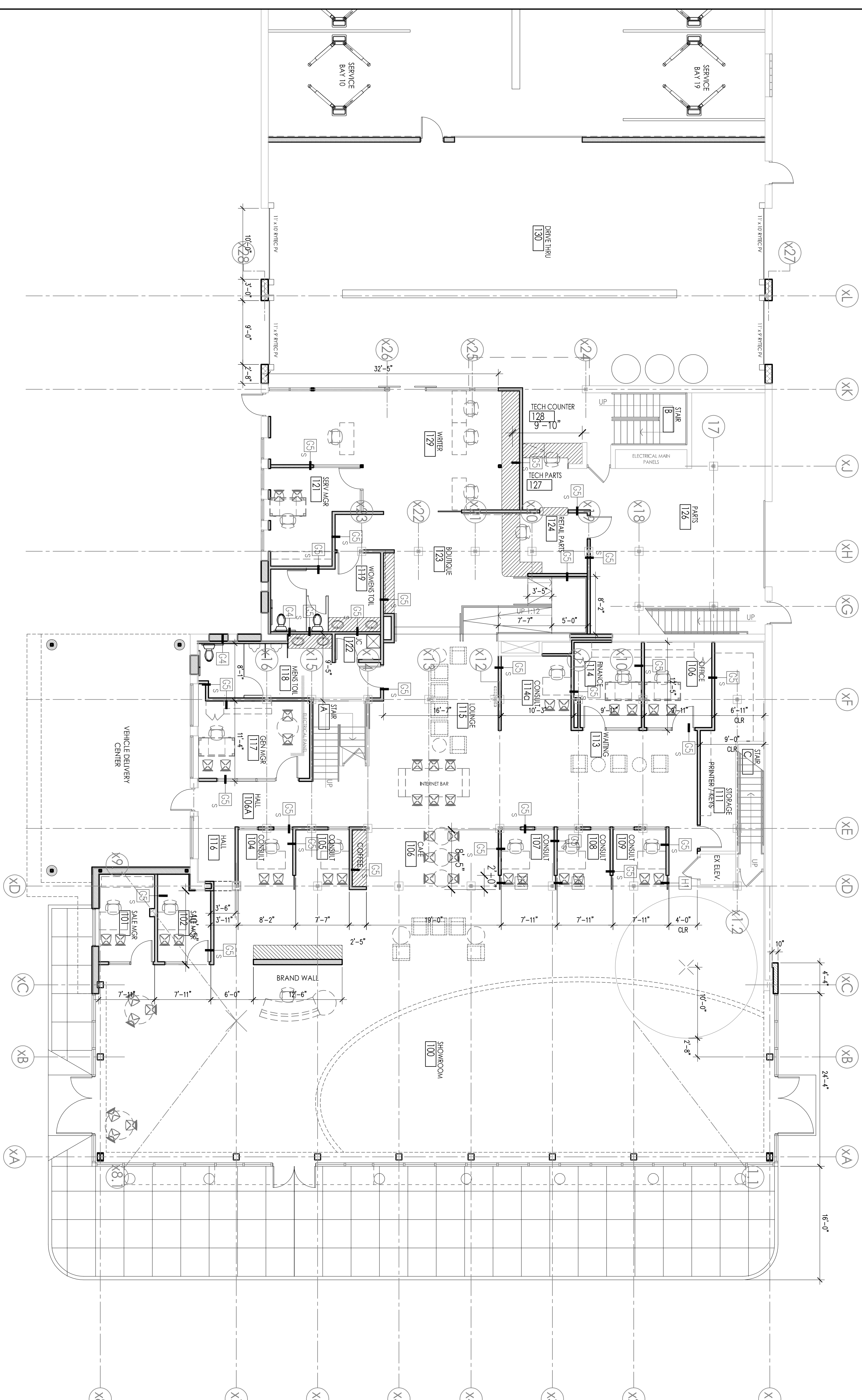
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FLOOR PLAN - FIRST FLOOR SHOWROOM

SCALE: 1/8"

1

DIMENSION PLAN - SHOWROOM

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A02.11A

PROJECT:



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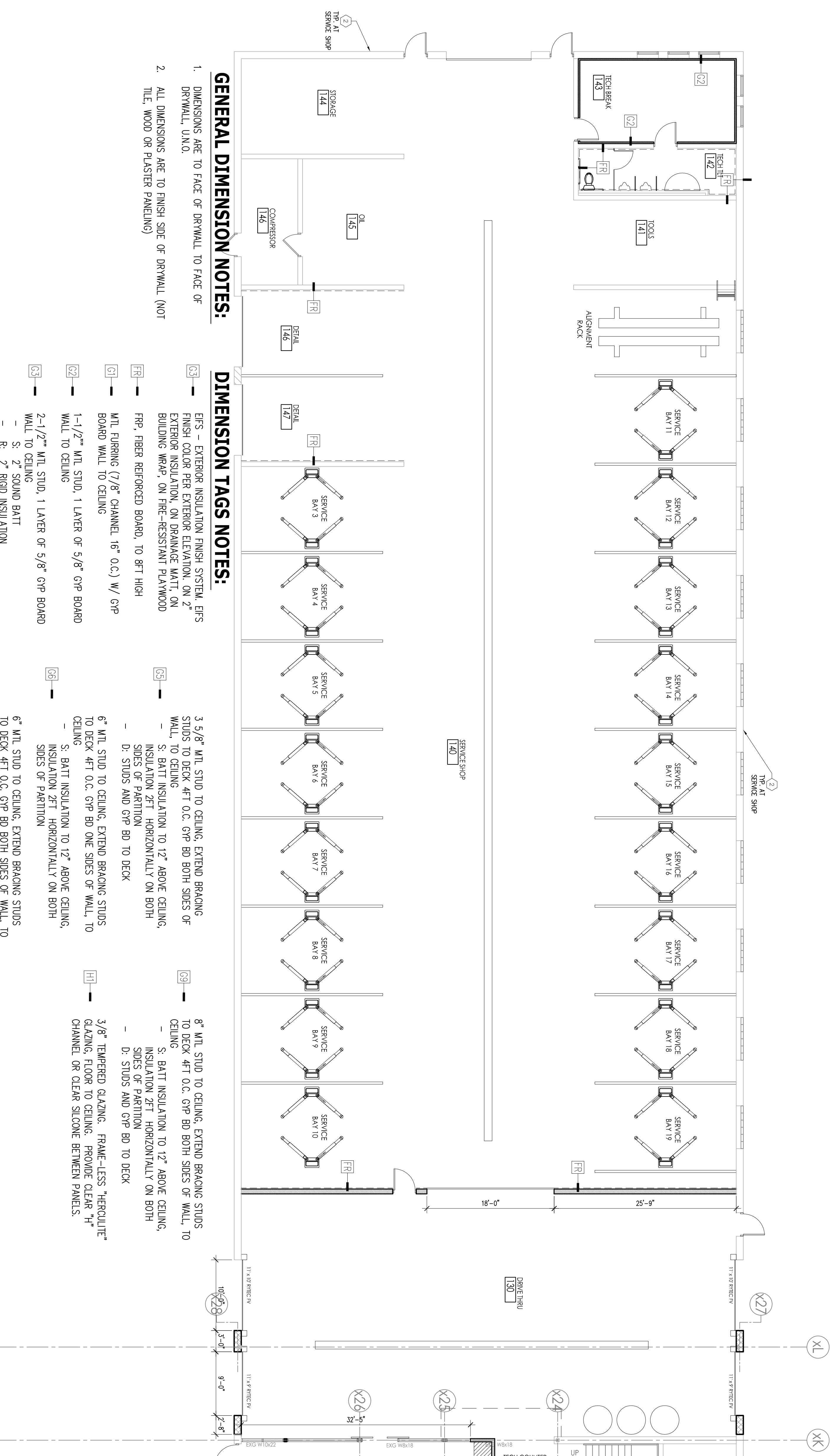
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DIMENSION PLAN - SERVICE

A02.11B



GENERAL DIMENSION NOTES:

- 1. DIMENSIONS ARE TO FACE OF DRYWALL TO FACE OF DRYWALL, U.N.O.
- 2. ALL DIMENSIONS ARE TO FINISH SIDE OF DRYWALL (NOT TILE, WOOD OR PLASTER PANELING)

DIMENSION TAGS NOTES:

- [C3]** - EIFS - EXTERIOR INSULATION FINISH SYSTEM, EIFS FINISH COLOR PER EXTERIOR ELEVATION, ON 2" EXTERIOR INSULATION, ON DRAINAGE MATT, ON BUILDING WRAP, ON FIRE-RESISTANT PLAYWOOD
- [FR]** - FRP, FIBER REINFORCED BOARD, TO 8FT HIGH
- [G1]** - MTL FLIRING (7/8" CHANNEL, 16" O.C.) W/ GYP BOARD WALL TO CEILING
- [G2]** - 1-1/2" MTL STUD, 1 LAYER OF 5/8" GYP BOARD WALL TO CEILING
- [G3]** - 2-1/2" MTL STUD, 1 LAYER OF 5/8" GYP BOARD WALL TO CEILING
 - S: 2" SOUND BATT
 - R: 2" RIGD INSULATION
 - D: EXTEND STUDS AND INSULATION TO DECK
- [G4]** - 3-5/8" MTL STUD, 1 LAYER OF 5/8" GYP BOARD WALL TO 8" ABOVE CEILING
 - S: BATT INSULATION
- [G5]** - 3 5/8" MTL STUD TO CEILING, EXTEND BRACING STUDS TO DECK 4FT O.C. GYP BD BOTH SIDES OF WALL, TO CEILING
 - S: BATT INSULATION TO 12" ABOVE CEILING, INSULATION 2FT HORIZONTALLY ON BOTH SIDES OF PARTITION
 - D: STUDS AND GYP BD TO DECK
- [G6]** - 6" MTL STUD TO CEILING, EXTEND BRACING STUDS TO DECK 4FT O.C. GYP BD ONE SIDES OF WALL, TO CEILING
 - S: BATT INSULATION TO 12" ABOVE CEILING, INSULATION 2FT HORIZONTALLY ON BOTH SIDES OF PARTITION
- [G7]** - 6" MTL STUD TO CEILING, EXTEND BRACING STUDS TO DECK 4FT O.C. GYP BD BOTH SIDES OF WALL, TO CEILING
 - S: BATT INSULATION TO 12" ABOVE CEILING, INSULATION 2FT HORIZONTALLY ON BOTH SIDES OF PARTITION
 - D: STUDS AND GYP BD TO DECK
- [G9]** - 8" MTL STUD TO CEILING, EXTEND BRACING STUDS TO DECK 4FT O.C. GYP BD BOTH SIDES OF WALL, TO CEILING
 - S: BATT INSULATION TO 12" ABOVE CEILING, INSULATION 2FT HORIZONTALLY ON BOTH SIDES OF PARTITION
 - D: STUDS AND GYP BD TO DECK
- [H1]** - 3/8" TEMPERED GLAZING, FRAME-LESS "HERCULITE" GLAZING, FLOOR TO CEILING, PROVIDE CLEAR "H" CHANNEL OR CLEAR SILICONE BETWEEN PANELS.

FLOOR PLAN - FIRST FLOOR SERVICE

SCALE: 1/8"

1

GENERAL PLAN NOTES

1. REFER TO A2019-DW FOR ADDITIONAL NOTES

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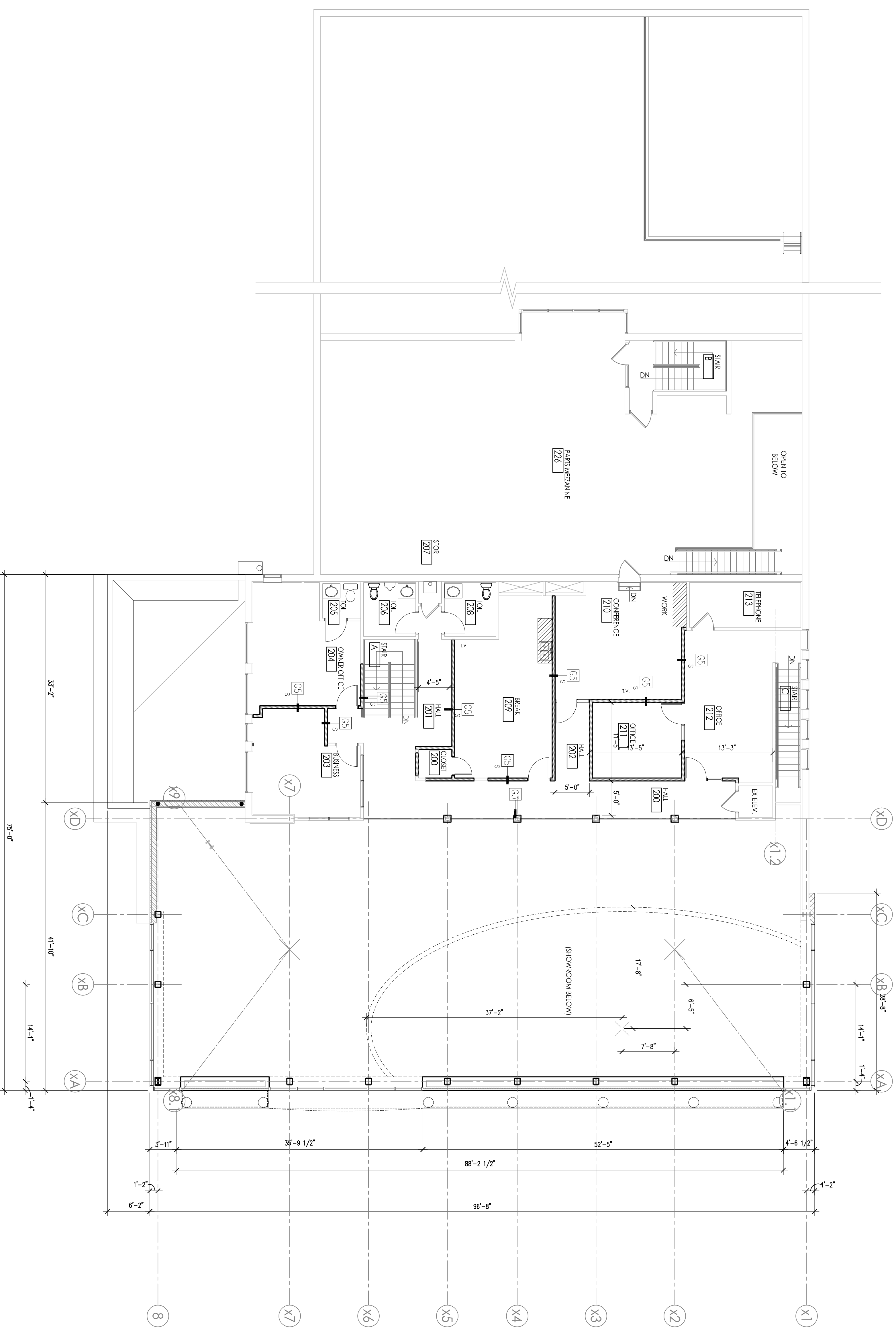
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DIMENSION PLAN - L2

FLOOR PLAN - SECOND FLOOR

SCALE: 1/8"



1

A02.12

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GENERAL PLANS NOTES

- 1. REFER TO A219 FOR ADDITIONAL FINISH PLAN NOTES
- 2. REFER TO A223 FOR ADDITIONAL MATERIALS LEGEND

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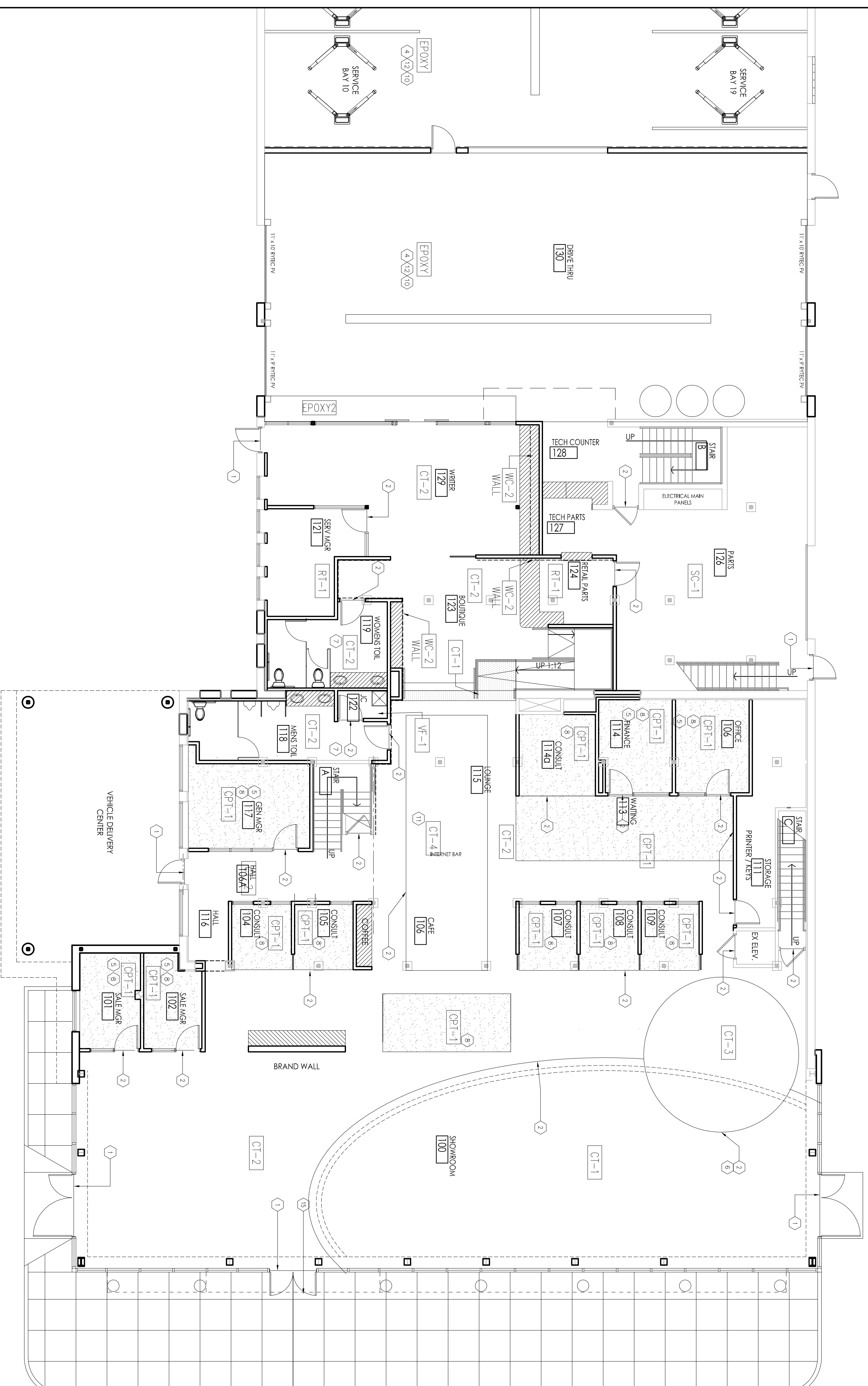
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FINISH PLAN - SHOWROOM

A02.21A



FINISH PLAN - FIRST FLOOR SHOWROOM

SCALE: 1/8"

1

PROJECT:



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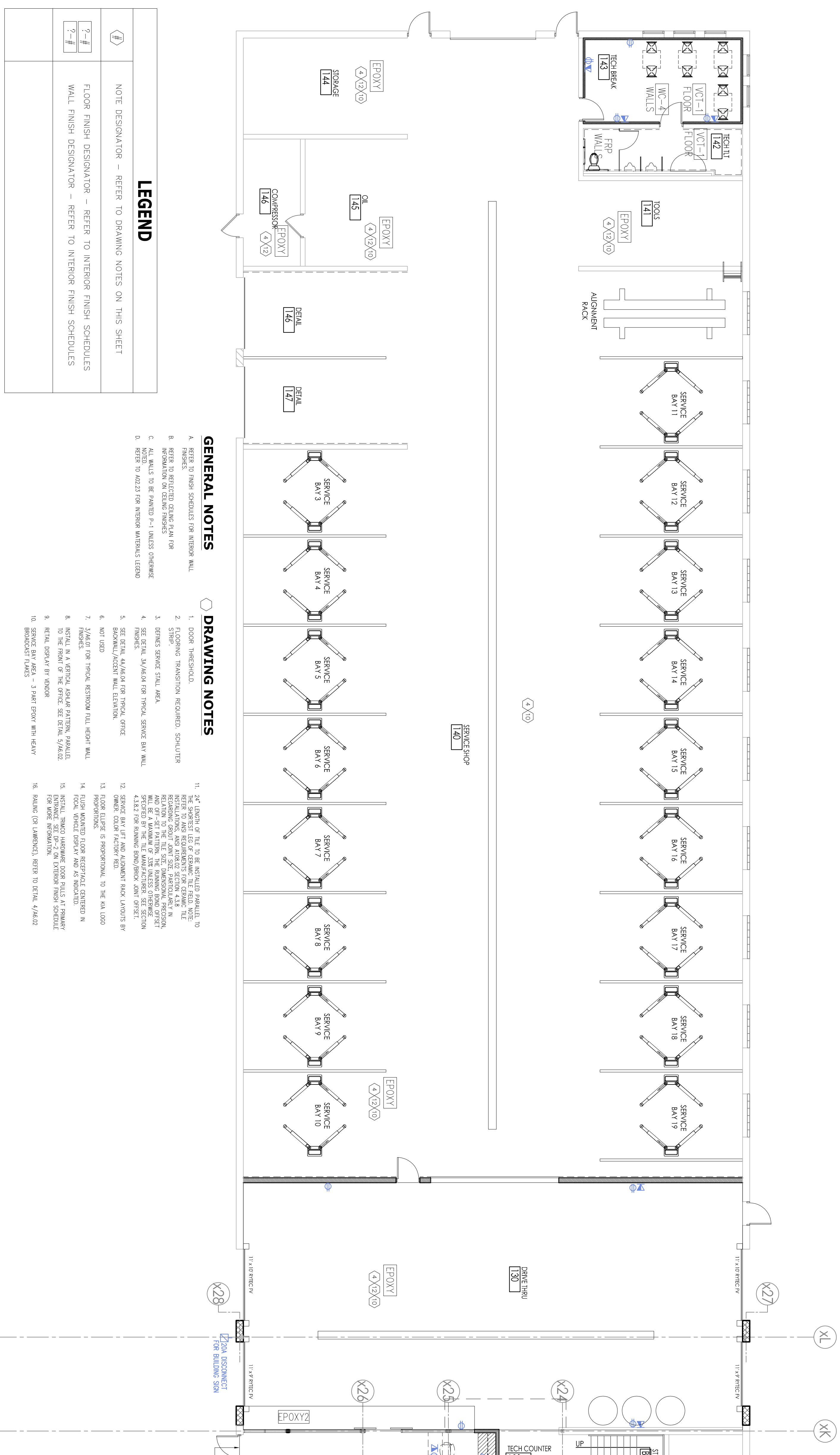
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FINISH PLAN - SERVICE

A02.21B



LEGEND

#	NOTE DESIGNATOR – REFER TO DRAWING NOTES ON THIS SHEET
?-#	FLOOR FINISH DESIGNATOR – REFER TO INTERIOR FINISH SCHEDULES
?-#	WALL FINISH DESIGNATOR – REFER TO INTERIOR FINISH SCHEDULES

NOTE: FOR FURTHER INFORMATION REFER TO THE INTERIOR FINISH SCHEDULE

GENERAL NOTES

- A. REFER TO FINISH SCHEDULES FOR INTERIOR WALL FINISHES.
- B. REFER TO REFLECTED CEILING PLAN FOR INFORMATION ON CEILING FINISHES.
- C. ALL WALLS TO BE PAINTED P-1 UNLESS OTHERWISE REFER TO A02.23 FOR INTERIOR MATERIALS LEGEND.

DRAWING NOTES

- 1. DOOR THRESHOLD.
- 2. FLOORING TRANSITION REQUIRED: SCHLUTER STRIP.
- 3. DENIES SERVICE STILL AREA.
- 4. SEE DETAIL 5/A/6/04 FOR TYPICAL SERVICE BAY WALL FINISHES.
- 5. SEE DETAIL 4/A/6/04 FOR TYPICAL SERVICE BAY WALL BACKWALL/ACCENT WALL DETAILING.
- 6. NOT USED.
- 7. 3/4"Ø1 FOR TYPICAL RESTROOM TALL HEIGHT WALL FINISHES.
- 8. INSTALL IN A VERTICAL ASHLAR PATTERN, PARALLEL TO THE FRONT OF THE OFFICE. SEE DETAIL 5/A/6/02 RETAIL DISPLAY BY VENDOR.
- 9. SERVICE BAY AREA = 3 PART EPOXY WITH HEAVY BRUSHED FINISHES.
- 11. 24" LENGTH OF TILE TO BE INSTALLED PARALLEL TO THE SHORTEST LEG OF CERAMIC TILE FIELD. NOTE: REFER TO A02.23 FOR TYPICAL CERAMIC TILE FIELD DETAILING. GROUT JOINT SIZE PARTICULARLY IN RELATION TO THE TILE SIZE. DIMENSIONAL PROVISIONS FOR TYPICAL CERAMIC TILE FIELD DETAILING WILL BE A MAXIMUM OF 3/16" UNLESS OTHERWISE SPECIFIED BY THE TILE MANUFACTURER. SEE SECTION 4.1.3.2.2 FOR TYPICAL BRUSHED GROUT JOINT DETAIL.
- 12. SERVICE BAY LEFT AND ALIGNMENT RACK LAYOUTS BY OWNER. COLOR PAVEMENT REQ.
- 13. FLOOR ELAPSE IS PROPORTIONAL TO THE KIA LOGO PROPORTIONS.
- 14. FLUSH MOUNTED FLOOR RECEPTACLE CENTERED IN FLOOR VEHICLE DESIGN AND AS INDICATED.
- 15. INSTALL TRUCKO HARDWARE DOOR PULLS AT PRIMARY FOR MORE INFORMATION.
- 16. RAILING (GR LAMINEX), REFER TO DETAIL 4/A/6/02.

FINISH PLAN - FIRST FLOOR SERVICE
SCALE: 1/8"

FINISH PLAN NOTES

1. REFER TO A211B FOR ADDITIONAL NOTES

PROJECT:



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8821 159th Street
Orland Hills, IL 60487

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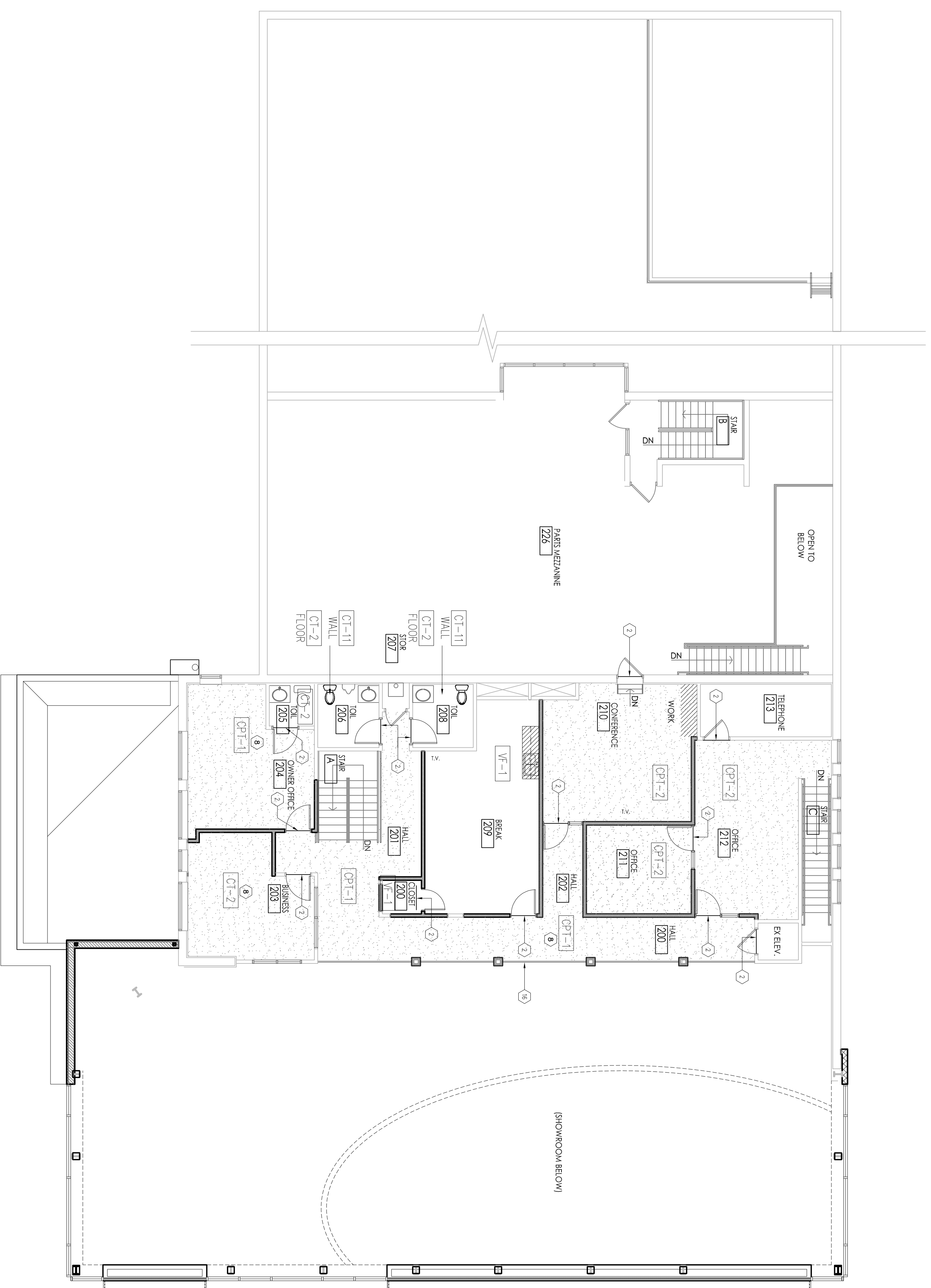
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FINISH PLAN - SECOND FLOOR

SCALE: 1/8"

1

FINISH FLOOR PLAN - L2

A02.22

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GENERAL NOTES

1. REFER TO A2.33-35 FOR FURNITURE SCHEDULE AND CUTS

PROJECT:



International Auto KIA
8821 159th Street
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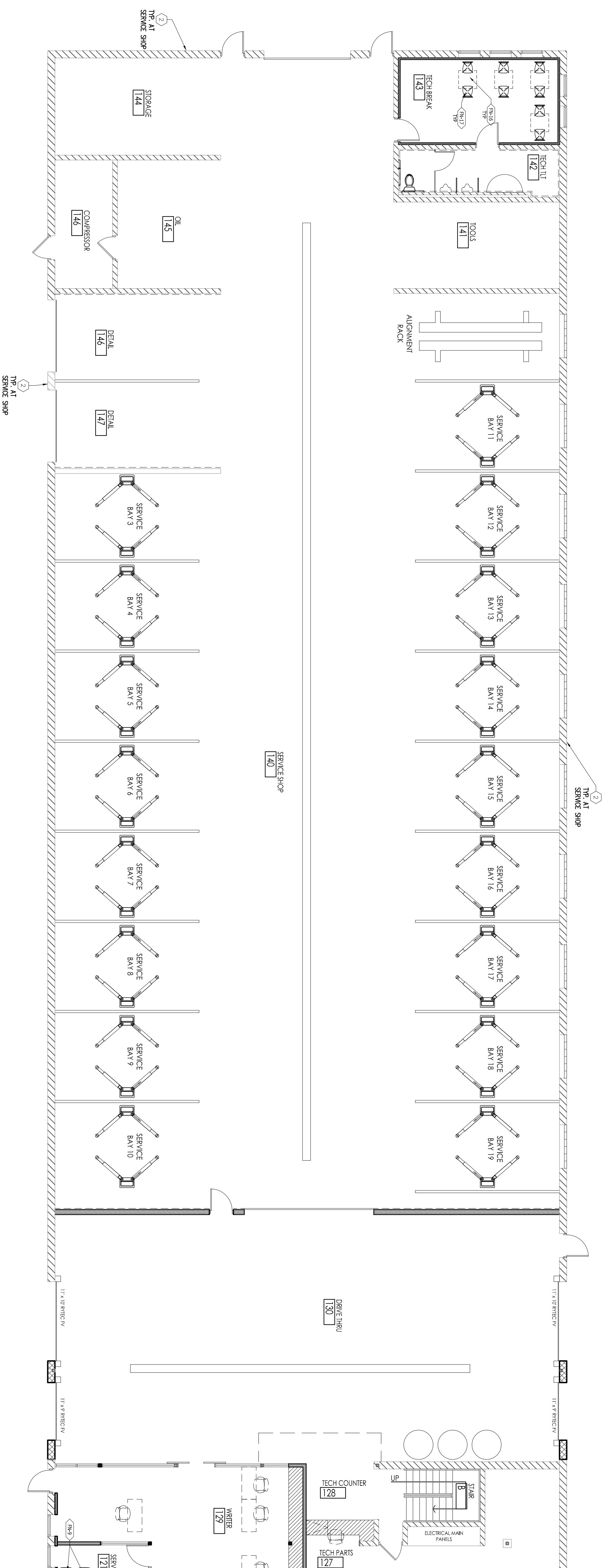
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FINISH PLAN - FIRST FLOOR SERVICE

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

1

FURNITURE PLAN - SERVICE

A02.31B

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GENERAL NOTES

1. REFER TO A2.1B FOR ADDITIONAL NOTES

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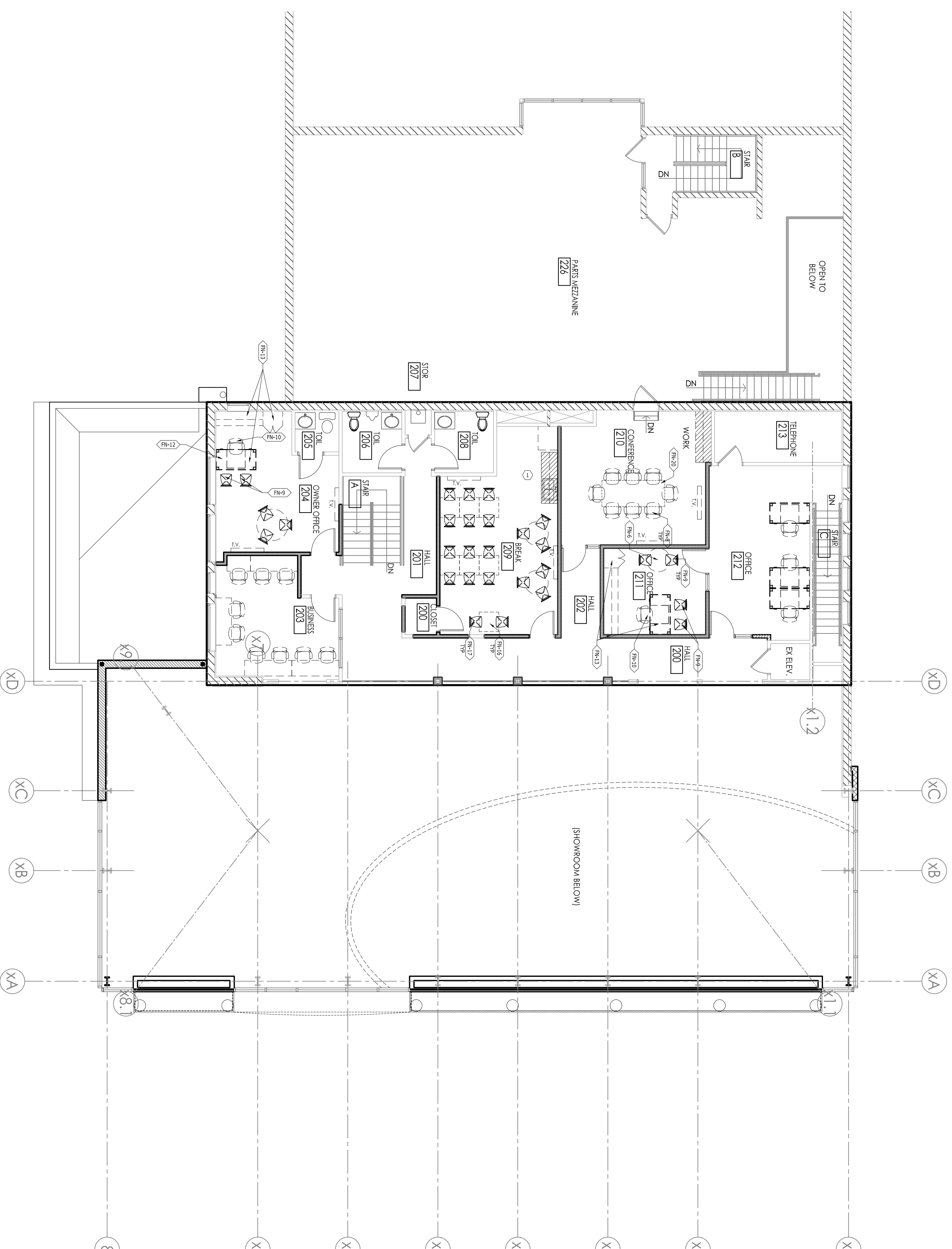
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FURNITURE FLOOR PLAN - L2

A02.32



FURNITURE PLAN - SECOND FLOOR

SCALE: 1/8"

1

PROJECT:



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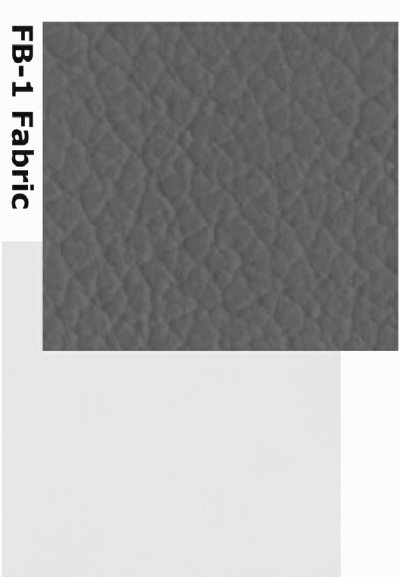
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Fabric



FB-1 Fabric
FB-2 Fabric

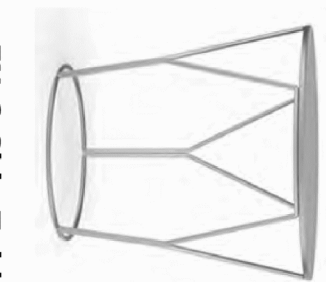


FB-3 Fabric
FB-4 Fabric

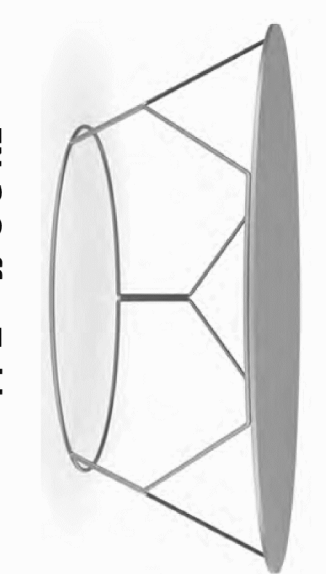
Customer Lounge



FN-1 Lounge Seating,
Showroom Lounge, Service Lounge,
2nd Floor Lounge



FN-2 Side Table,
Showroom Lounge,
Service Lounge

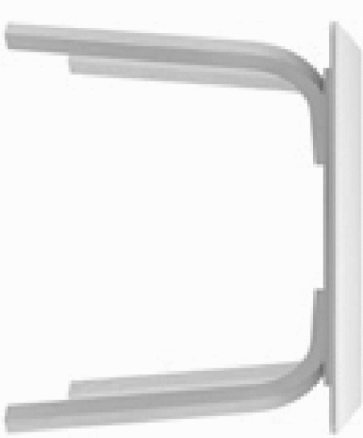


FN-3 Coffee Table,
Service Lounge

Cafe and Internet Bar



FN-4 Café Table,
Cafe



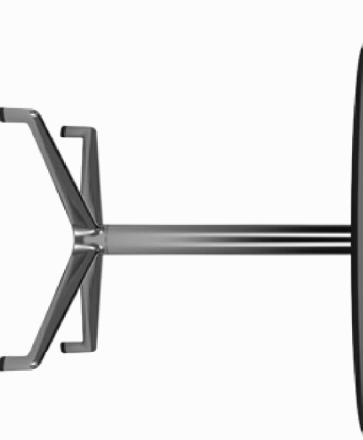
FN-4 Alternate Café Table,
Cafe



FN-5 Café Chair,
Cafe



FN-7 Barstool,
Internet Bar, Retail



FN-6 Consultation Table,
Sales Consultation, Delivery



FN-9 Guest Chair,
Sales Consultation, General
Offices, Delivery

Office and Consultation



FN-8 Task Chair,
BOH



FN-10 & FN-24 Task Chair,
Manager Office, F&I Office,
Reception, Internet Sales



FN-11 Work Station,
Sales Consultation, Sales Managers,
Manager Office, F&I Office,
Service Write-Up, Service Manager

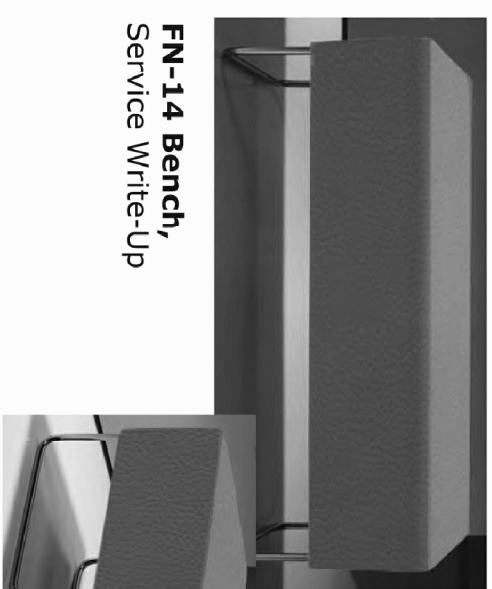


FN-12 File Storage,
Sales Consultation



FN-13 Desk System & Storage,
Managers Offices, F & I Office, Dealer

Service Write-Up



FN-14 Bench,
Service Write-Up



FN-15 Stool,
Service Write-Up, Retail Parts,
Tech Library, Tech Parts

Breakroom, Tech Breakroom



FN-16 Breakroom Table,
Breakroom, Tech Breakroom



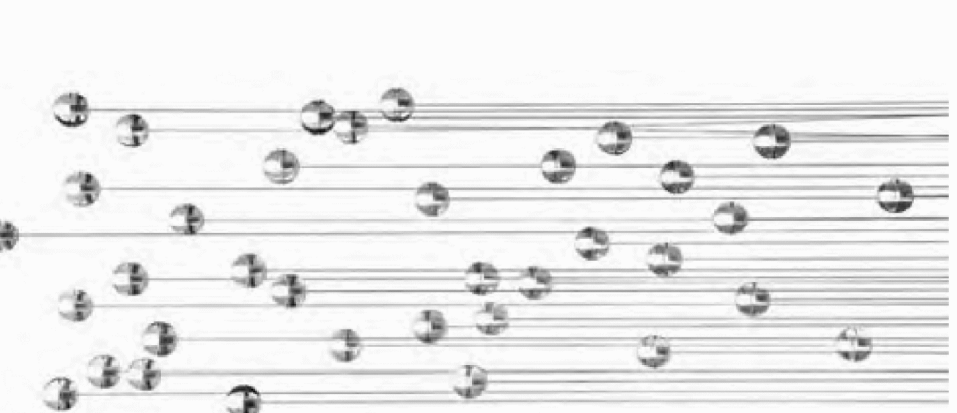
FN-17 Breakroom Chair,
Breakroom,
Tech Breakroom

Business Development/Internet Sales



FN-18 Desk System,
BDC/Internet Sales

Accent Lighting



Focal Lights,
Feature Vehicle Pad



Pendant Light,
Lounge, Reception



Pendant Light,
Service Write-Up

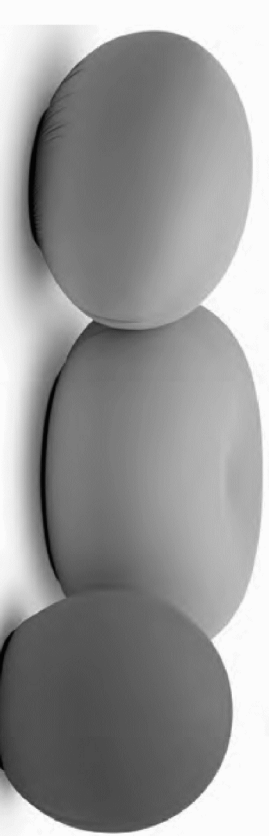


FN-20 Conference Table,
Conference Room



FN-21 Desk System,
Service Manager

Kids Area



FN-22 Kids Seating,
Childrens Area

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FURNITURE CUTS

A02.35

GENERAL CEILING NOTES

1. REFER TO A310B FOR ADDITIONAL NOTES

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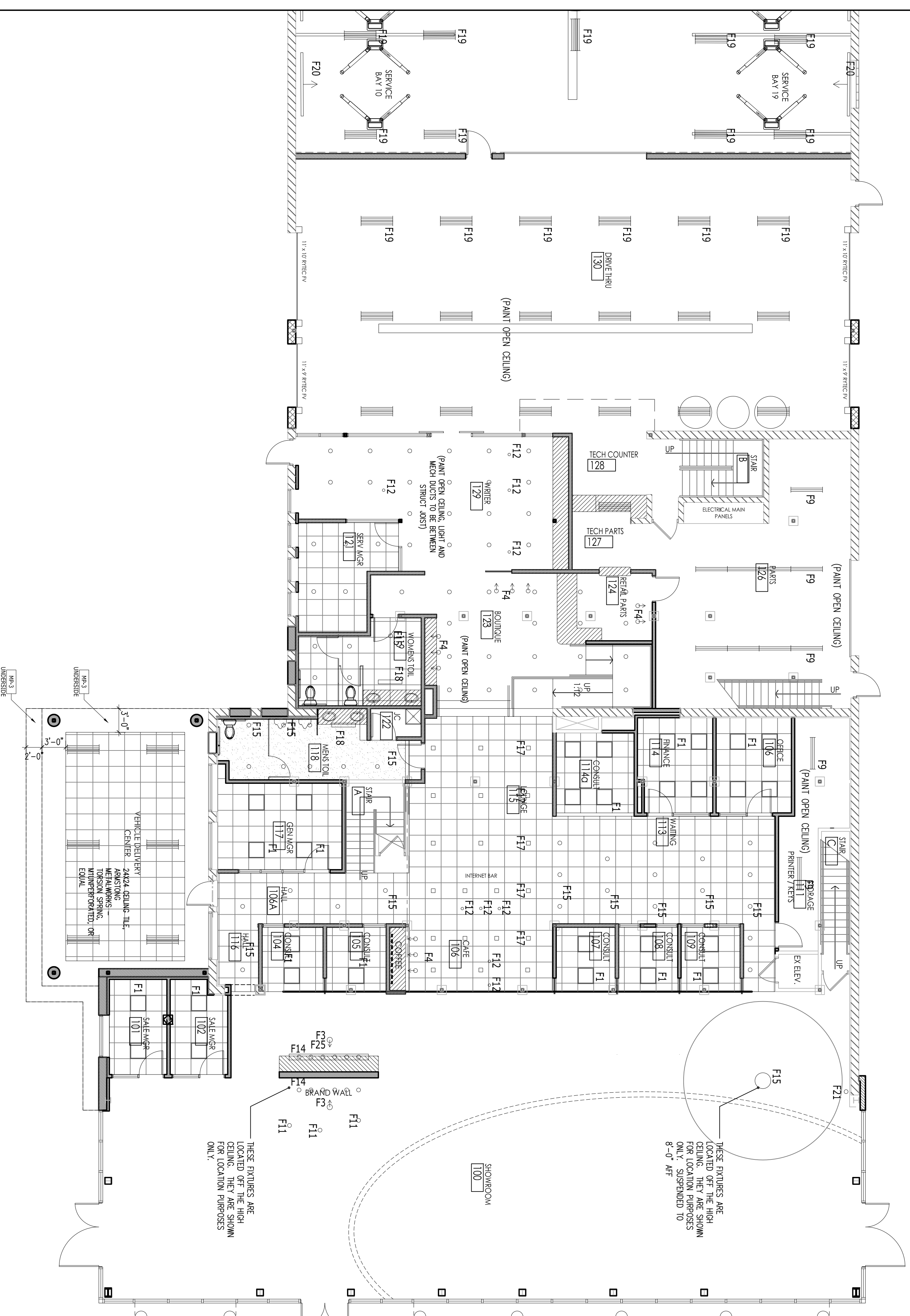
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CEILING PLAN
- SHOWROOM

03.01A

CEILING PLAN - FIRST FLOOR SHOWROOM
SCALE: 1/8"



THESE FIXTURES ARE
LOCATED OFF THE HIGH
CEILING. THEY ARE SHOWN
ONLY FOR LOCATION PURPOSES
ONLY. SUSPENDED TO
8'-0" AFF

THESE FIXTURES ARE
LOCKED OFF THE HIGH
CEILING. THEY ARE SHOWN
ONLY FOR LOCATION PURPOSES
ONLY.

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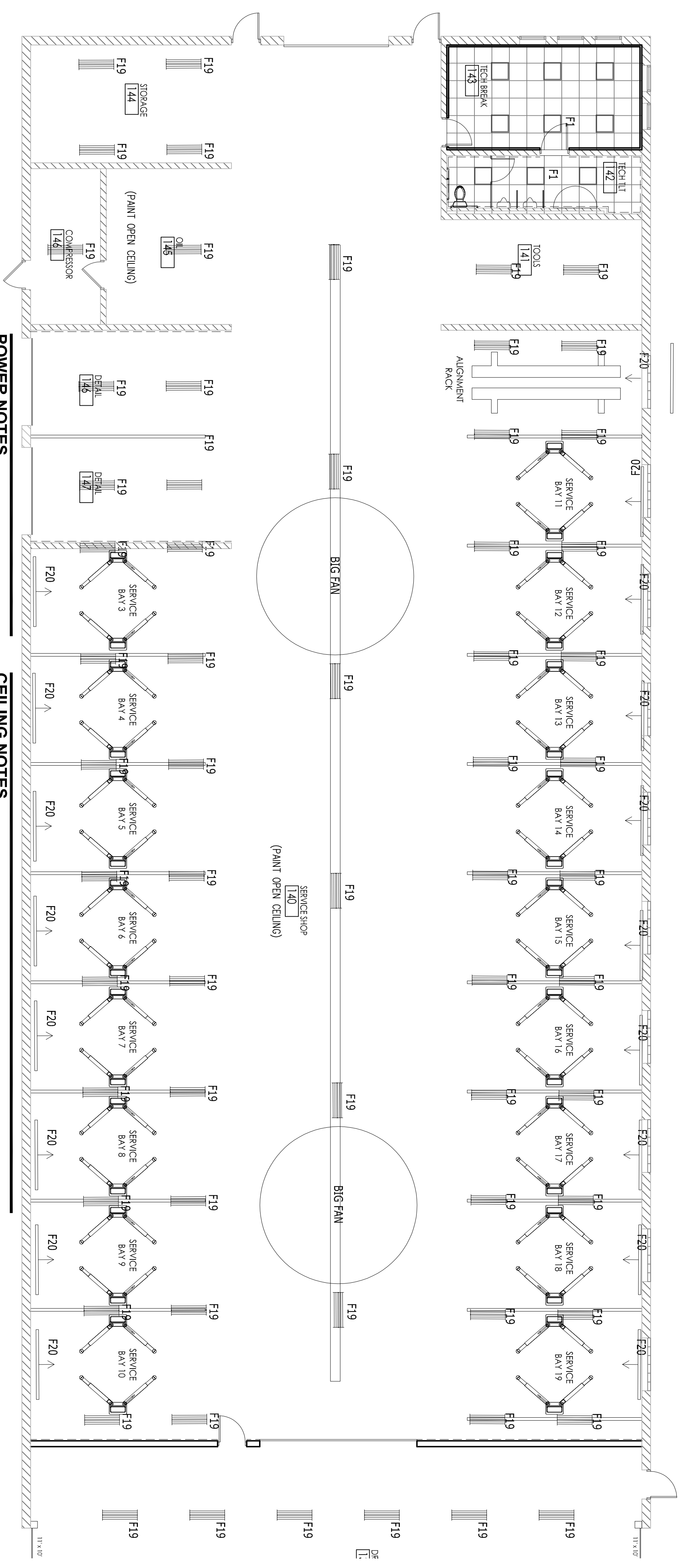
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Tel: 224-293-6312
Fax: 224-293-6444
Ken.Meddings@wteengineering.com
Attn: Ken Meddings (Electrical)



POWER NOTES

SCALE: NTS

1. PRIOR TO CONING SLAB, REVIEW LOCATIONS WITH ARCHITECT AND CORROBATE LOCATIONS WITH OWNER.
2. CORROBATE INSTALLATION OF TELECOMMUNICATIONS, DATA AND SECURITY SYSTEMS.
3. VERIFY EQUIPMENT SPECIFICATIONS, POWER AND INSTALLATION REQUIREMENTS WITH MANUFACTURER TO ENSURE PROPER FIT AND FUNCTION.
4. VERIFY MOUNTING REQUIREMENTS OF ELECTRICAL, TELEPHONE AND OTHER EQUIPMENT.
5. GANG ADJACENT LIGHT SWITCHES AND COVER WITH A SINGLE PLATE.
6. PROVIDE LIGHT SWITCHING IN COMPLIANCE WITH THE 24 REQUIREMENTS FOR ROOMS OR AREAS GREATER THAN 100 SQUARE FEET. PROVIDE DOUBLE SWITCHES WITH EACH SWITCH CONTROLLING 50% OF LAMPS PER FIXTURE.
7. MOUNT STANDOFF WALL OUTLETS, SWITCHES AND THERMOSTATS AT HEIGHTS REQUIRED BY THE 24 AND ADD GROUNDING, UNLESS OTHERWISE NOTED. WHEN THERMOSTATS AND LIGHT SWITCH OCCUR TOGETHER, INSTALL BOTH ALIGNED HORIZONTALLY WITH CENTER LINE AT 4'-3"-2" ABOVE FINISHED FLOOR.
8. INDICATED DIMENSIONS ARE TO THE CENTER LINE OF OUTLET OR SWITCH, OR CLUSTER OF OUTLETS OR SWITCHES, UNLESS OTHERWISE NOTED.
9. INSTALL OUTLETS ON OPPOSITE SIDES OF PARTITIONS IN SEPARATE STUD CAVITIES. DO NOT INSTALL BACK-TO-BACK.
10. PROVIDE MATCHING COVER PLATES, RECEPTACLES AND RELATED ITEMS.
11. PROVIDE ONE-PIECE TYPE GANG COVER PLATES, UNLESS OTHERWISE NOTED.
11. DESIGN DEDICATED OR ISOLATED GROUND ELECTRICAL OUTLETS WITH A RED BOOT.

CEILING NOTES

SCALE: NTS

1. REFER TO FINISH SCHEDULE FOR ADDITIONAL INFORMATION ON FINISHES
2. REFER TO A03.03 FOR ADDITIONAL CEILING NOTES AND SCHEDULES
3. REPLACE ALL CEILING TILE AND GRID
4. REPLACE ALL MECH DIFFUSERS IN NEW CEILING GRIDS. ONE-PIECE-ONE
5. SINGS ARE VENDOR PROVIDED. VENDOR INSTALLED. HOWEVER, ELECTRICAL CONNECTION IS TO BE PROVIDED BY CONTRACTOR.
6. LIGHT FIXTURES IN SUSPENDED CEILING SHALL BE SECURED TO THE GRID. THE GRID AROUND EACH FIXTURE SHALL BE SUPPORTED FROM THE BUILDING STRUCTURE (NOT FROM DECK)
7. DESIGN SUSPENDED CEILING REMAINS SYSTEMS TO RESIST A MINIMUM OF 200 LBS OF THE WEIGHT OF THE CEILING SYSTEM, INCLUDING ANY LOADS THEREAFTER TO THE SYSTEM. USE A MINIMUM CEILING WEIGHT OF 5 POUNDS PER SQUARE FOOT TO DETERMINE THE LATERAL FORCE.
8. LOCATE REGISTERS AND LIGHTING FIXTURES WHEN GRID LINES, CENTER SPRINKLER HEADS, SPEAKERS, RECESSED FIXTURES, AND SIMILAR CEILING ELEMENTS IN ADJACENT UNITS, UNLESS OTHERWISE NOTED.
9. FINISH HVAC DIFFUSERS, DRAPERY POCKETS, AND SPEAKER GRILLES TO MATCH ADJACENT FINISH, UNLESS OTHERWISE NOTED.
10. WHERE CEILING LOADS DO NOT EXCEED 5 POUNDS PER SQUARE FOOT AND WHERE PARTITIONS ARE NOT CONNECTED TO THE CEILING SYSTEM, THE FOLLOWING BRACING METHODS MAY BE PROVIDED FOR LATERAL SUPPORT BY FOUR WIRES OF MINIMUM NO. 12 GAUGE, SPACED IN FOUR DIRECTIONS 90 DEGREES APART, AND CONNECTED TO THE MAIN RUNNER WITHIN 2" OF THE CROSS RUNNER AND TO THE STRUCTURE ABOVE AT AN ANGLE NOT EXCEEDING 45 DEGREES FROM THE HORIZONTAL. THE WIRING SHALL BE SUPPORTED FROM THE STRUCTURE AT 12 FEET ON CENTER IN EACH DIRECTION, WITH THE FIRST POINT WITHIN 4' FROM EACH WALL.

CEILING PLAN - FIRST FLOOR SERVICE

SCALE: 1/8"



CEILING PLAN - SERVICE

A03.01B

- MAR 20 2017 - DESIGN REVIEW
- MAR 29 2017 - DESIGN REVIEW
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GENERAL CEILING NOTES

1. REFER TO A301B FOR ADDITIONAL NOTES

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CEILING PLAN - L2 OFFICE

SCALE: 1/8"

1

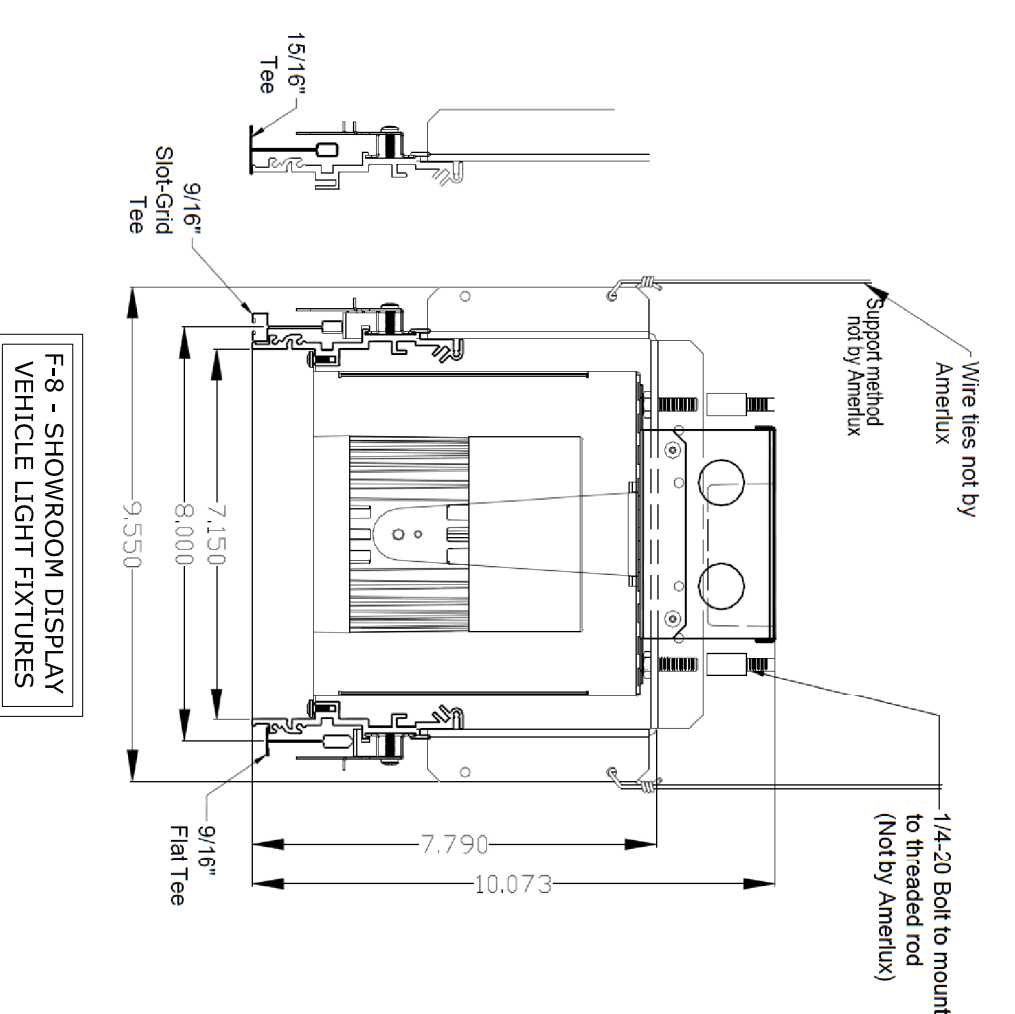
CEILING PLAN - L2 OFFICE

A03.02

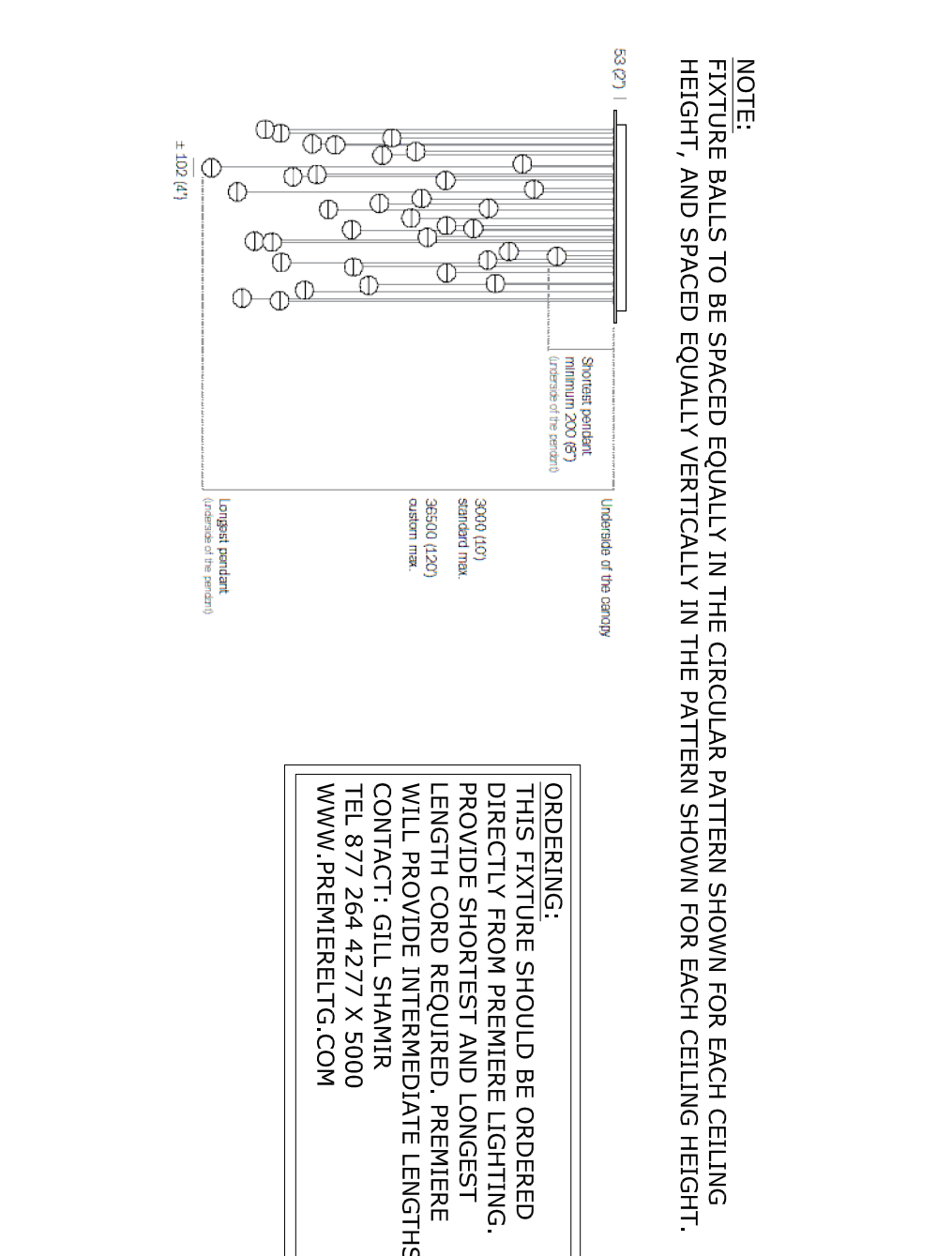
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LIGHT FIXTURE SCHEDULE / LEGEND - LED

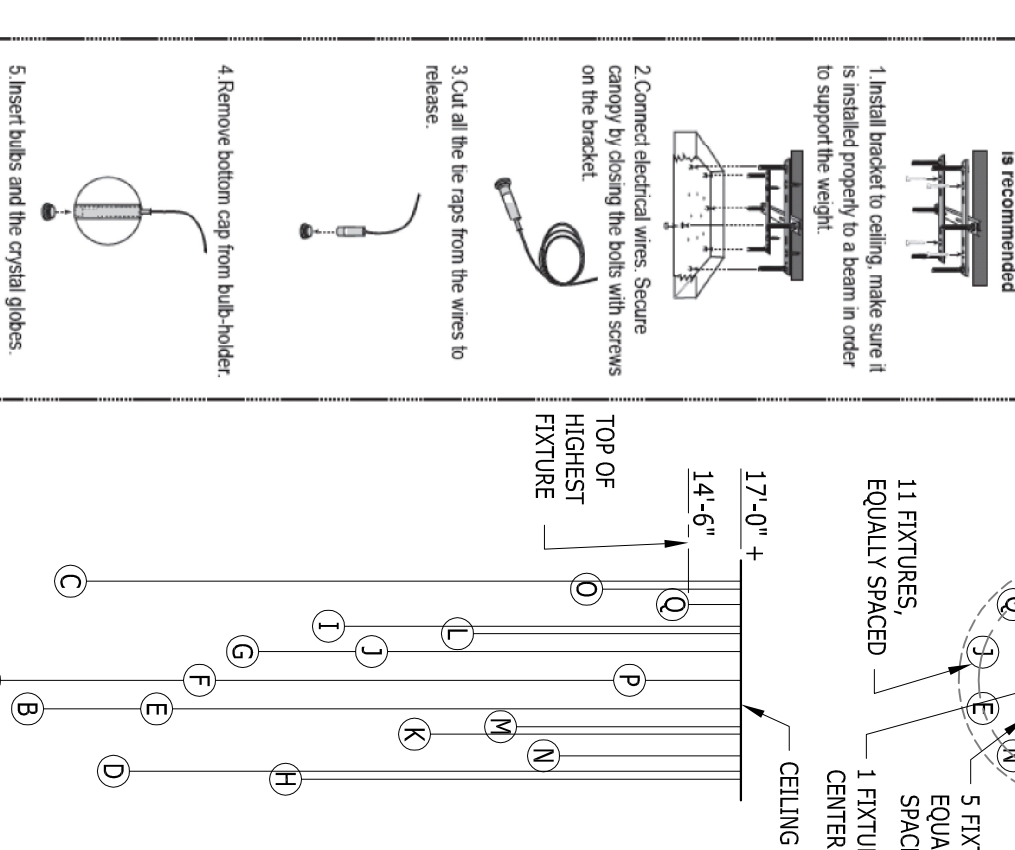
Symbol	Label	Catalog Number	Description/Location	Lamp	Watts	Symbol	Label	Catalog Number	Description/Location	Lamp	Watts
	F1, F2	LSI REC22 LED SS RAD NW UE DIM FINELTE HRR A 2X2 DCO LEDHO 4000K	Grid Ceiling Recessed Fluorescent Offices, Consultation	4000K LED	XX		F15	LSI AD16 LED 20 NW UE C1100 AMERLUX E4-75R-A14 36 LED VOLTS E4-75RD-A14 CLC VWF 4000	Recessed Downlight Hallways, Restrooms	2000 LU LED	32
	F3	INTENSE HOUL 6AR L2 40 VOLTS 30 IR4600 C SF	Recessed ADJUSTABLE FLOOD DISTRIBUTION Vehicle Delivery and to Spotlight BRAND WALL LOGO where ceiling is 12' or less	3200 LU LED	48		F17	LSI AD16 LED 20 NW UE C1100 AMERLUX E4-75R-A14 36 LED VOLTS E4-75RD-A14 CLC VWF 4000 WILA 665 7 6 4 SSK45 80	Recessed Downlight Service Lounge, Internet Cafe, Conference Room	2000 LU 4000K LED	40
	F4	Amerlux Lighting F4-75RA-16 LED-VOL-T-RT-4000/F4-75RA-SDC Cree ESA ADR 6 14 C MDAD SSGC FF 35K	Recessed LED Retail Display	LED	16		F19	LSI PMX LED WHO NW UE DIM TGH10 PHILIPS DAVBRITE FBX 16L L 40 UNV	Suspended Service Bays	16,000 LU 4000K LED	165
	F5, F6, F8	SHAPER 600 SERIES 24" Scone 600-24-2-L3/830-UNV-SN BROWNLEE 5025 24 NT E20LED 30K	Restrooms	2000 LU 3000K LED	19		F20	LSI EG3 4 S LED HO NW UE 4SP BRACKET TGH10 PHILIPS DAVBRITE DVA E 55L 8-40 4 UNV	Suspended Service Bays	6500 LU 4000K LED	65
	F7, F9	LSI DW LED HO NW UE PHILIPS DAVBRITE LF 4 EZ 38 40 U LUG	Wrap Storage, Parts	LED	XX		F21	ACOLYTE RBNL-023 4 4 35 F FEELUX DVA 2 LSI LXDC	Concealed Ambient Focal Vehicle Accent Wall	LED	4.4 W/F
	F8, F14	PHILIPS DAVBRITE OWL 4 4000 840 UNV AMERLUX MESA-GRID WITH 38W FLATO LED RSA COMBOLIGHT BLACK HOUSING AND TRIM Contact: Trade Jahn at Amerlux Lighting email: tjahn@amerlux.com phone: 562-756-4724	Recessed channel - multiple Downlight Showroom Vehicle Display Brand Wall	4000K LED	XX		F23, F24	LSI AD16 LED 28 NW UE C1100 PHILIPS LIGHTLUX C-L 50 N VOLTS V8 4000K MEDIUM BEAM COMFORT CLEAR TRIM, POLISHED FLANGE	Recessed Downlight General Showroom Lighting, Service Reception	6000 LU 4000K LED	70
	F11	Bonhome Provide suspension for 96" AFF mounting Contact: Sheri Charon at Linea, Inc email: sherich@linea-inc.com phone 310 273 5425	Pendant Lounge, Reception	E26 75W 250 Spot	75		FX1	LSI XIG B LED 19 350 CW UE F140 GPT SST	In Grade Uplight Site *For site lighting locations see sheet A-1-C	LED	XX
	F12	VIVO F837507 BIN BRUSHED NICKEL FINISH HINKLEY LIGHTING Suspend @ 90" AFF	Pendant Cafe tables, Service Write-up	LED EDISON VINTAGE FILAMENT	4		F25	INTENSE HOUL 6AR L3 40 VOLTS 30 IR4600 C SF	Recessed ADJUSTABLE SPOT distribution to Spotlight BRAND WALL LOGO for use where ceiling exceeds 12'	LED	XX
	F13	PREMIERE LUMINAIRE GLOBE LIGHTING CBL26 (14" AND HIGHER CEILINGS) 30 DIA, BRUSHED NICKEL GLOBE LIGHTING CBL26 (10-12' CEILINGS) 24 DIA, BRUSHED NICKEL SEE DRAWING A-5B THIS FIXTURE MUST BE ORDERED DIRECTLY FROM PREMIERE LIGHTING GILL SHAMIR 877 264 4277 X 5000	Pendant Feature Vehicle	(36) 1.15W (G4) LED THIS WEIGHS 160 LBS (24) 1.15W (G4) LED THIS WEIGHS 110 LBS SEE DRAWING A-5B	54 36	<p>NOTES: LED PRODUCTS ARE AVAILABLE IN A MULTITUDE OF COLOR TEMPERATURES, BEAM SPREADS AND LUMEN OUTPUT PACKAGES. THE AOR SHALL SPECIFY PRODUCTS THAT ARE APPROPRIATE FOR THE CEILING HEIGHTS AND TO PROVIDE A HIGH QUALITY INSTALLATION. WHERE MULTIPLE MANUFACTURERS/PRODUCTS ARE LISTED, EITHER IS ACCEPTABLE FOR USE AS APPROPRIATE. WHERE ONLY A SINGLE MANUFACTURER IS LISTED, PROVIDE THAT PRODUCT. SUBSTITUTES WILL NOT BE ALLOWED UNLESS APPROVED IN WRITING BY IBDF. GENERALY, ALL COLOR TEMPERATURES SHALL BE 4000K. EXCEPT RESTROOM SCONCES ARE 3000K. ALL CRIS SHALL EXCEED 80 ALL RECESSED DOWNLIGHTS ARE SELF-FLANGED, NO WHITE TRIM RINGS ALLOWED! SEE A-1-C FOR SITE LIGHTING (POLISHED CEILING) BE SILVER COLOR)</p>					



LIGHT DETAIL AT SHOWROOM SCALE: 1/2



LIGHT DETAIL AT F-15, VEHICLE HIGHLIGHT SCALE: 1/1



1

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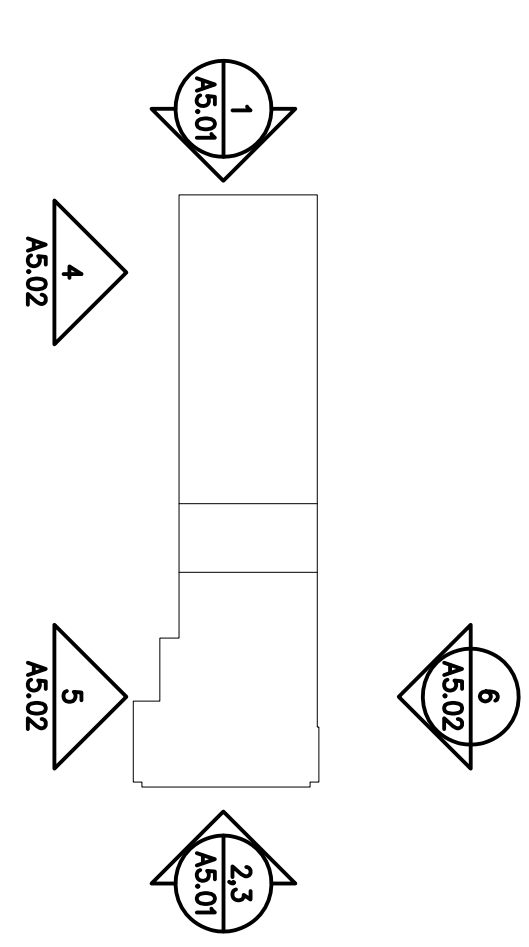
LIGHTING LEGEND AND DETAILS

A03.03

ELEVATION NOTES

1. REFER TO A5.03 FOR MATERIAL LEGEND

ELEVATION LEGEND



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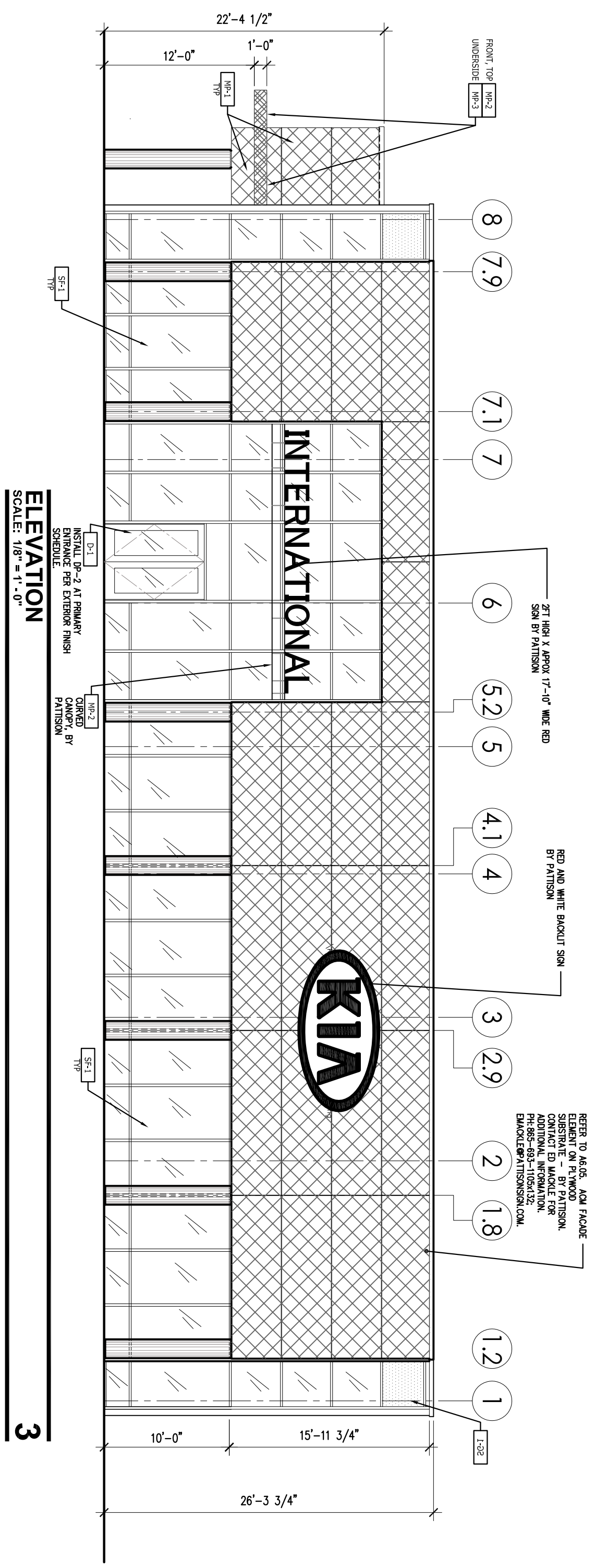
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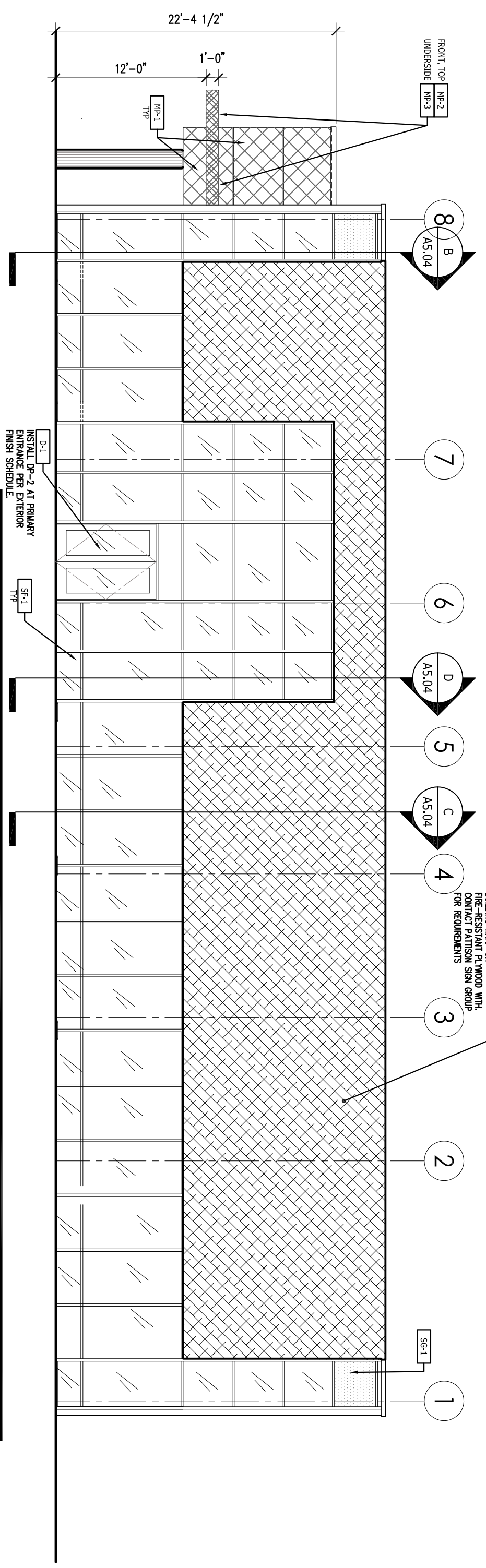
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ELEVATION

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

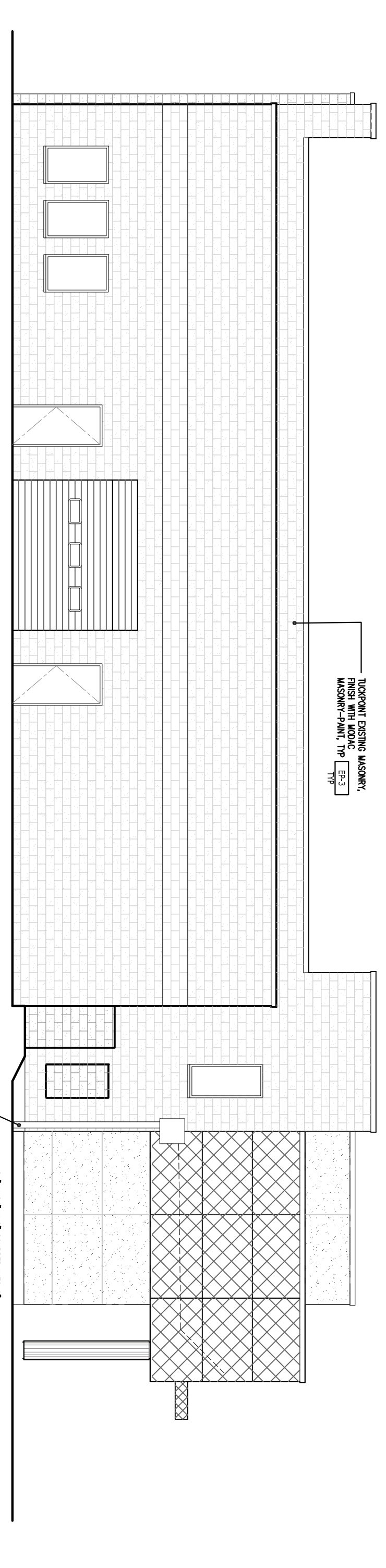
3



ELEVATION

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

2



ELEVATION

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

1

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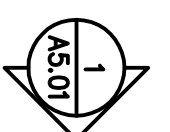
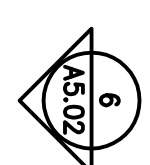
EXTERIOR ELEVATIONS

A05.01

ELEVATION LEGEND

ELEVATION LEGEND

1. REFER TO A5.03 FOR MATERIAL LEGEND



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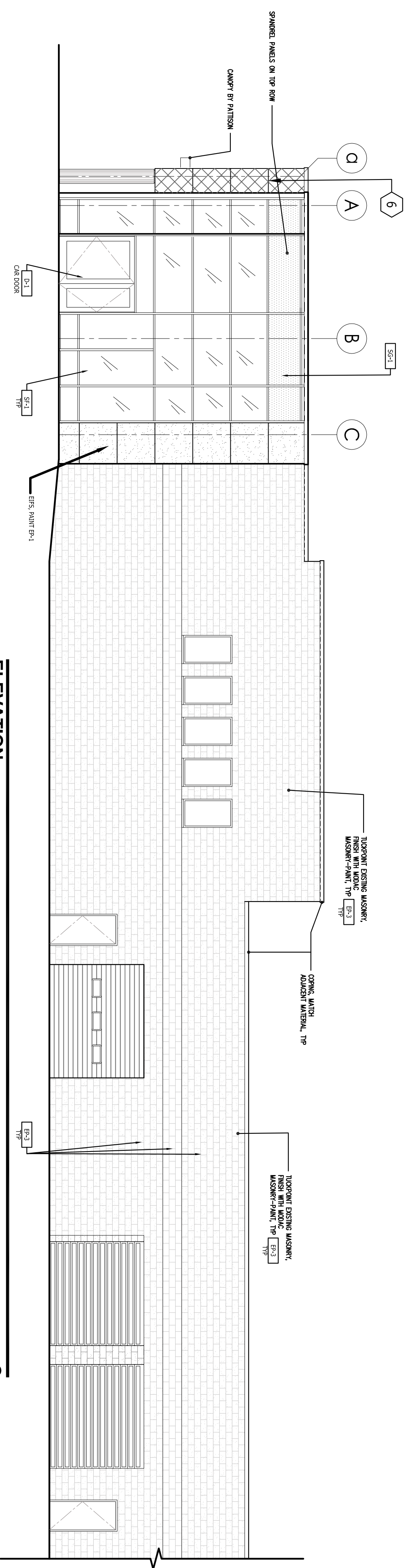
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STRUCTURAL ENGINE:

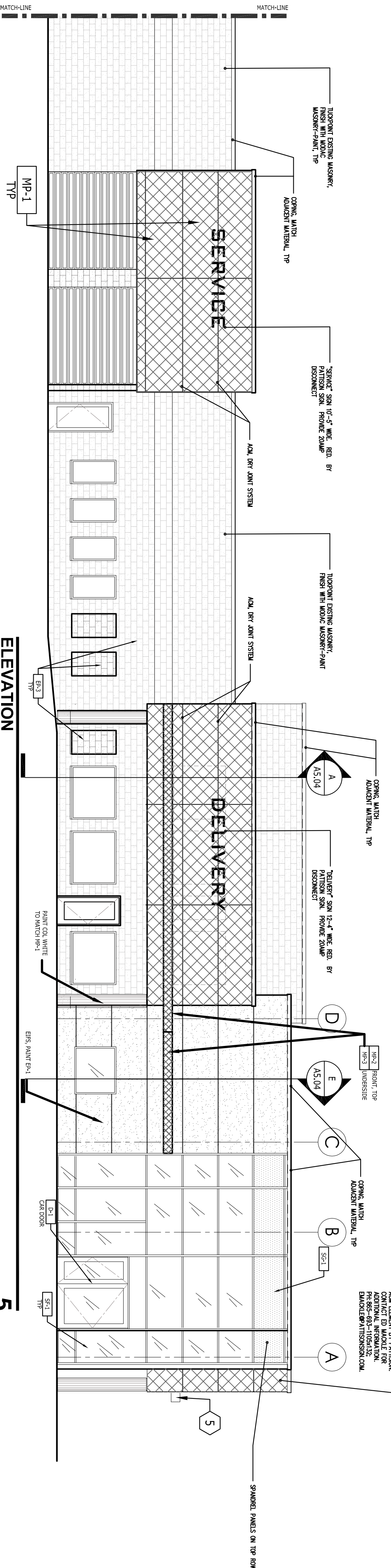
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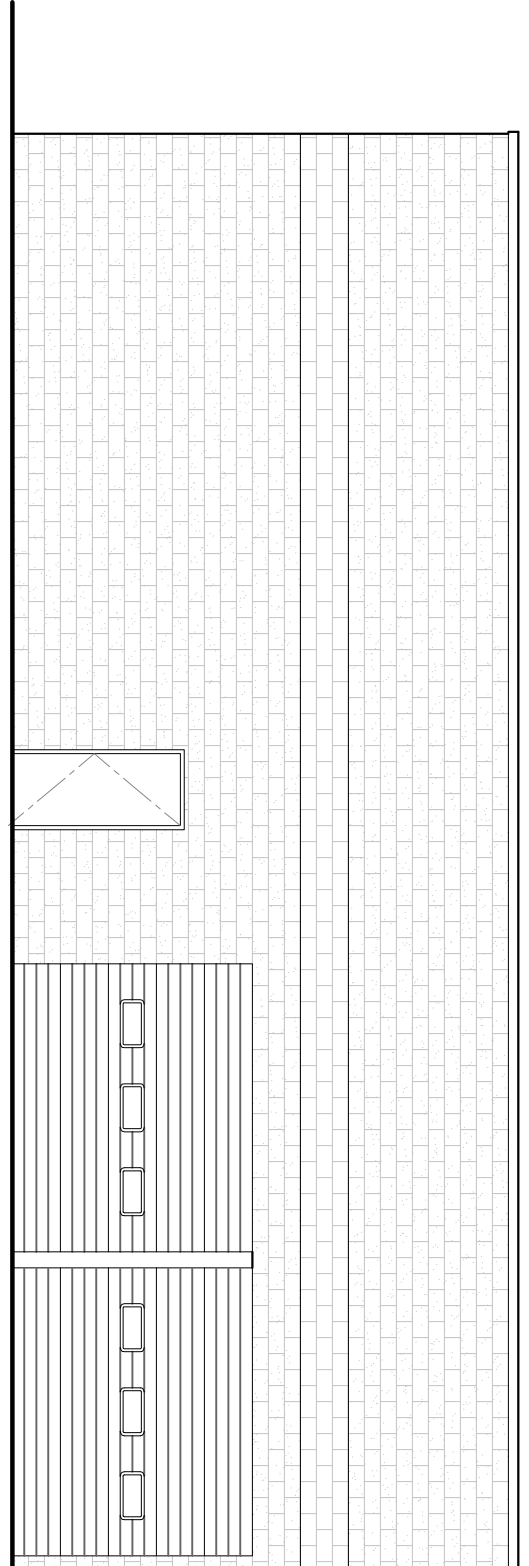
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ELEVATION 6
SCALE: 1/8" = 1'-0"



ELEVATION 5
SCALE: 1/8" = 1'-0"



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

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EXTERIOR ELEVATIONS

A05.02

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EXTERIOR MATERIALS

A05.03

CODE	MATERIAL	MANUFACTURER	PRODUCT	DESCRIPTION			DIMENSION	LOCATION	ADDITIONAL INFORMATION
				COLOR	FINISH	TEXTURE			
CC-1	COLORADO CONCRETE	LM SCORFIELD	CONCRETE ADJUSTERS FOR COLOR CONTINUED CONCRETE	12% COOL GRAY	BROOM FINISH		ENTRY WALK WAY	CONTACT ROBERT E. MARASOFF AT LM SCORFIELD COMPANY (800) 880-2900 NOTE: REFER TO MANUFACTURER'S SALES REPRESENTATIVE FOR APPROPRIATE PRODUCTS & INSTALLATION RECOMMENDATIONS. NOTE: CONSTRUCTION TO CROSS EXISTING DRIVE - SCHEDULE (VI) OR (S) BASED ON STATE REQUIREMENTS	
CC-2	COLORADO CONCRETE	LM SCORFIELD	CONCRETE ADJUSTERS FOR COLOR CONTINUED CONCRETE	C-3 DARK GRAY	BROOM FINISH		ENTRY WALK WAY STRIPING	CONTACT ROBERT E. MARASOFF AT LM SCORFIELD COMPANY (800) 880-2900 NOTE: REFER TO MANUFACTURER'S SALES REPRESENTATIVE FOR APPROPRIATE PRODUCTS & INSTALLATION RECOMMENDATIONS. NOTE: REFER TO MANUFACTURER'S SALES REPRESENTATIVE FOR APPROPRIATE PRODUCTS & INSTALLATION RECOMMENDATIONS. NOTE: CONSTRUCTION TO CROSS EXISTING DRIVE - SCHEDULE (VI) OR (S) BASED ON STATE REQUIREMENTS	
CP-1	CAF EPSI	(PARTS ADJACENT WALL)							
CHU-1	CONCRETE MASONRY UNIT	ANCHOR CONCRETE PRODUCTS (QUADCAST ARCHITECTURAL BRAND)	ANCHOR SPLIT FACE BLOCK	L-15			EXTERIOR PERIMETER OF BUILDING	CONTACT STRIP FACTORY AT ANCHOR CONCRETE PRODUCTS, INC. (800) 415-5445 OR CONTACT DAVID JANE AT ANCHOR CONCRETE PRODUCTS, INC. (800) 415-5445 NOTE: FOR PRODUCT SUBSTITUTION REFER TO QUADCAST ARCHITECTURAL PRODUCTS. PRODUCT SUBSTITUTIONS MUST BE APPROVED BY ARCHITECT. INSTALLATION RECOMMENDATIONS AND PRODUCT SUBSTITUTIONS BASED ON REGION.	
D-1	MAIN DOOR/VEHICLE DOOR	FITTO ARCHITECTURAL METALS, INC. OR EQUAL	STANDARD WARRIOR WHITE CENTER HANGING	#13 BLACK FINISH GLASS & ALUMINUM			SHOWROOM	CONTACT FITTO ARCHITECTURAL METALS (800) 912-7488	
D-2	ROLLING OVERHEAD DOOR	PROVIDED BY ARCHITECT OF RECORD	PROVIDED BY ARCHITECT OF RECORD	#13 BLACK FINISH GLASS & ALUMINUM GLASS TO BE SOLARBAN TINT		10'X10'	SERVICE RECEIVING VEHICLE DELIVERY	CONTACT FITTO ARCHITECTURAL METALS (800) 912-7488	
D-3	ROLLING OVERHEAD PARTS RECEIVING DOOR	NOT USED		NO GLAZING			PARTS RECEIVING		
D-4	MAIN DOOR	FITTO ARCHITECTURAL METALS, INC. OR EQUAL	STANDARD WARRIOR STYLE CENTER HANGING DOOR	#13 BLACK FINISH GLASS TO BE SOLARBAN TINT		3070	SHOWROOM	CONTACT FITTO ARCHITECTURAL METALS (800) 912-7488	
D-5	ROLLING OVERHEAD DOOR	PROVIDED BY ARCHITECT OF RECORD	PROVIDED BY ARCHITECT OF RECORD	ROUND SINGLE BAND OF GLASS PAINT EP-1		SEE DRAWING FOR SIZE	SERVICE BAYS		
D-6	SOLID MAIN DOOR	PROVIDED BY ARCHITECT OF RECORD	PROVIDED BY ARCHITECT OF RECORD	PAINT: BROWN WOOD. EXTERIOR IN CHARCOAL SLATE - SEE EP-1					
D9-2	DOOR WALL ASSEMBLY	TRINCO HARDWARE	K&S CAB DOOR WALL	BUSHED ALUMINUM		8' X 8.5" (EACH PULL PER DOOR LEAF)	REARWY ENTRY DOORS	CONTACT S&M CONE (224) 382-4251 EMAIL: S&MCONCRETE@S&M.COM WWW.TRINCOHARDWARE.COM	
EPIS-1	NOT USED							CONTACT BOB DANZ AT TRIVIT (724) 243-9301	
EPIS-2	EXTERIOR INSULATED FINISHING SYSTEM	TRIVIT	TRIVIT SYSTEMS, INC. OUTSULATION PLUS NO EPS	K&M Q2 200			ALTERNATE TO CHU-1		
EP-1	EXTERIOR PAINT	BEUMANN MOORE	SUPER SPEC HP DTM ACRYLIC LOW LUSTER P25	615A MATTLEFALL	EXTERIOR IN CHARCOAL SLATE		EXTERIOR METAL DOORS	CONTACT JASON WALKER AT BEUMANN MOORE (773) 597-8698	
EP-2	EXTERIOR PAINT	BEUMANN MOORE	BEUMANN MOORE	OF-61	WHITE BIANCO				
EP-3	EXTERIOR PAINT	BEUMANN MOORE	BEUMANN MOORE	1461	STAINLESS SILVER		ALTERNATE TO CHU-1	CONTACT JASON WALKER AT BEUMANN MOORE (773) 597-8698 NOTE: CONTACT MANUFACTURER TO OBTAIN PERFORMANCE FINISH & PAINT SERIES FOR SUBMITTAL	
G-4	EXTERIOR GLAZING	FRG INDUSTRIES OR EQUAL	FRG INDUSTRIES OR EQUAL ARCHITECTURAL GLASS	FRG SOLARBAN IN CLEAR	VISIBLE TRANSMITTANCE = 79%		GENERAL	CONTACT FRG SOLARBAN AT FRG INDUSTRIES (613) 543-2255 NOTE: FRG SOLARBAN IS A REGISTERED TRADEMARK OF LOCAL ENERGY CODES. IT IS THE RESPONSIBILITY OF THE ARCHITECT OF RECORD TO RESOLVE ANY DISCREPANCY IN REMAINING IN REMAINING THE CONSTRUCTION DOCUMENTS TO ENSURE A CODE COMPLIANT BUILDING	
MP-1	METAL PANEL	ALPOLIC	DRY JOINT SYSTEM	AMSWAY	SAW WHITE	5062" W X 136" L	EXTERIOR FACADE MAIN FIELD	CONTACT DAVID J. KENNEDY AT ALPOLIC (727) 382-5224 NOTE: FOR WINDTIGHT ACCOUNT RECORDING PLEASE CONTACT VENDOR ABOVE	
MP-2	METAL PANEL	ALPOLIC	DRY JOINT SYSTEM	AMSWAY	NICK BATHURM	5062" W X 148/196" L	EXTERIOR COLUMNS EXTERIOR CANOPY	CONTACT DAVID J. KENNEDY AT ALPOLIC (727) 382-5224	
MP-3	METAL PANEL	ALPOLIC	DRY JOINT SYSTEM	AMSWAY	ROVER 250	5074" W X 136" L 50" W X 136" L	BOTTOM OF CANOPIES EXTERIOR SHROOBY FACIODE	CONTACT DAVID J. KENNEDY AT ALPOLIC (727) 382-5224 GLAZING TO BE SOLARBAN TINT OR EQUAL. ALL REMAINING ROWS TO BE CLEAR INSULATED PANELS.	
SF-1	STONE FRONT	FITTO ARCHITECTURAL METALS, INC.	TW4 458 & TW4 459 EPS OR EP-800	AMONIZED BLACK FINISH #43			EXTERIOR FACIODE	CONTACT SCOTT BANE AT TRILITE GLASS & ALUMINUM SOLUTIONS (317) 728-6513	
SG-1	SPANDREL GLASS	TRILITE GLASS & ALUMINUM SOLUTIONS	DC 99AC-COTE - 300	COLORED #380 GRAY			EXTERIOR FACIODE		

Exterior Materials

CHU-1 Concrete Masonry Unit, Exterior Facade, Main Field (Split Face Finish)

CC-1 Colored Concrete, Exterior Walkway

CC-2 Colored Concrete, Exterior Walkway Accent Striping

SF-1 Stone Front, General Exterior

MP-1 Metal Panel, Exterior Facade, Main Field

MP-2 Metal Panel, Exterior Canopy

MP-3 Metal Panel, Bottom of Canopies

EP-1 Exterior Paint, Exterior Doors

EP-2 Exterior Paint, Alternates to CHU-1

1. Main Branding Wall with Kia illuminated sign and dealer identification.
2. Decorative Columns prefabricated for the main branding wall.

1. Main Branding Wall
This branding element kit is shipped to the site ready to assemble and install directly to the steel stud framed wall with 3/4 plywood and waterproofing (TYP). Utilizing pre-engineered attachment brackets, the kit provides the depth of the branding unit (established by the wall signage/dealer name illuminated letters).

Once the framed wall is in place and waterproofing installed, the kit is then installed onto the wall. All waterproofing and window seals are in place prior to the branding element being installed. The windows/curtain wall must be installed with the face flush with the face of the plywood sheathing and fully waterproof and flashed prior to the branding element installation.

When the wall is built and prepared the brackets are set in place. This will establish the depth of the branding element. The brackets are tied together with small supports to lock in the unit's final dimension. The dealer name bar with letters is then set in place by connecting to the bracket system and spanning the entire entry opening of 22 feet. Then the light boxes at the perimeter are installed per installation instructions.

After the framework, dealer name bar with letters, and light boxes are installed, the electrical supply and runs must be put in place per the wiring diagram provided. This wiring will be run to one main service box located at the top of the branding unit with a service access in the top coping for later service and repair if needed. A wire whip will be run to the main sign location for later face application to the ACM. Upon completion of the wiring, the light units will be checked for full functionality. ACM panels will be installed to the framing work according to the installation guidelines. At this same time, the light boxes will be checked for full functionality. The main ACM panels will be installed to the surface of the ACM. The top of the wall will be covered with a cap that will extend over the buildings existing waterproofing coping cap.

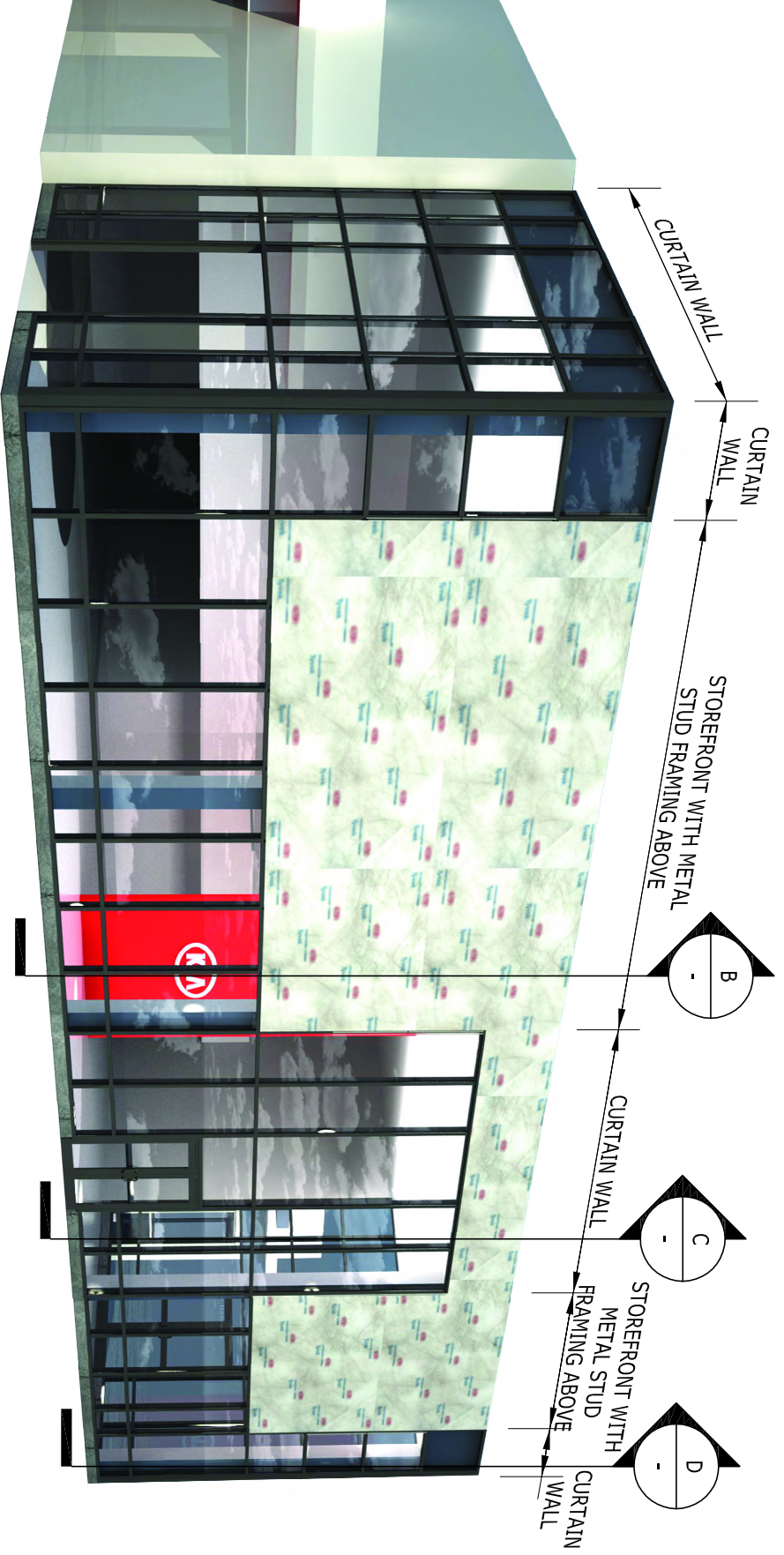
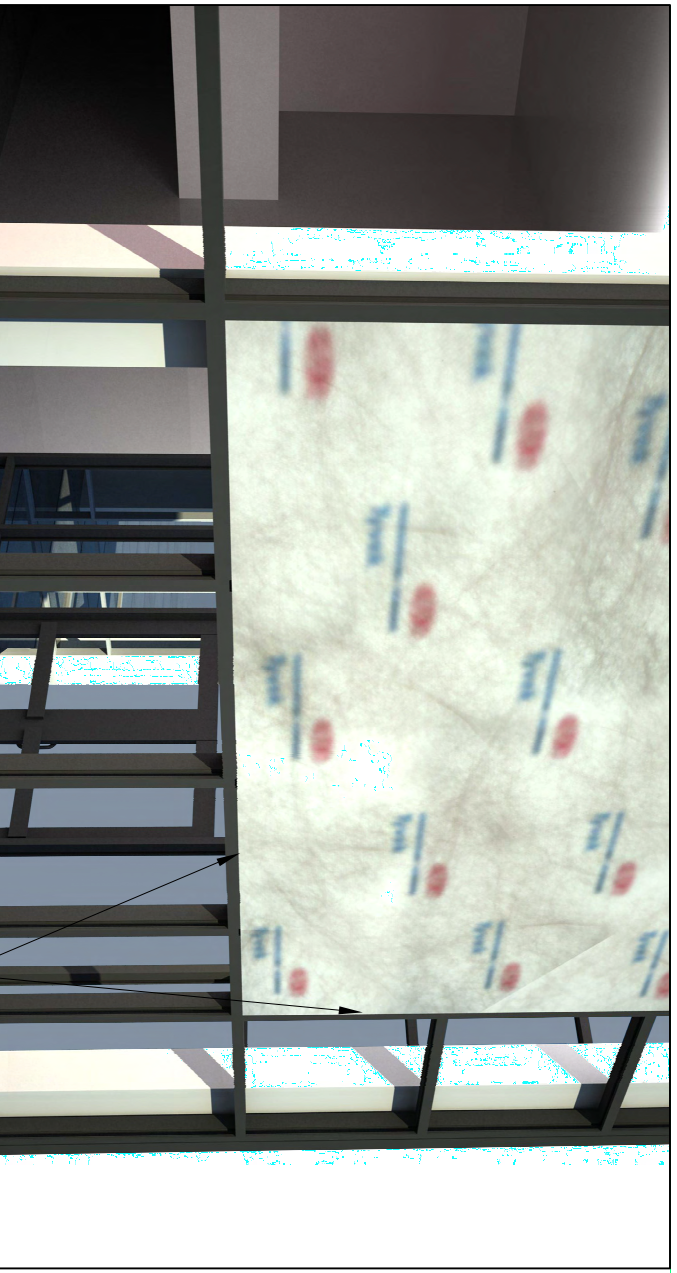
2. Decorative Column Covers

Once all panels and signs are in place, the Branding Wall columns will be placed below the wall. These units are designed to be placed below the wall to provide a finished appearance to the exterior and dash below. This is done with a flashing connection to accommodate the potential deflection caused by cold/hot weather. These columns are aesthetic only and are not required to support the branding unit kit.

A final inspection of all components and the installation is complete.
 ** The framed and sheeted wall provided by the general contractor must support a minimum of 4lbs per sq. foot of load from the branding element.
 ** Windows must not protrude past the surface of the sheathing of the wall. If this occurs there will be a blocking of the light bar and interference to access and installation.

*Note: Alternate option - Aluminum composite wall panels for the service and delivery bay exterior walls.

CONTACT ED MACLE AT PATTISON SIGN GROUP FOR ADDITIONAL INFORMATION
 Ph: 865-693-1105 X132
 cell: 865-228-4688
 E: Emacle@PattisonSign.com



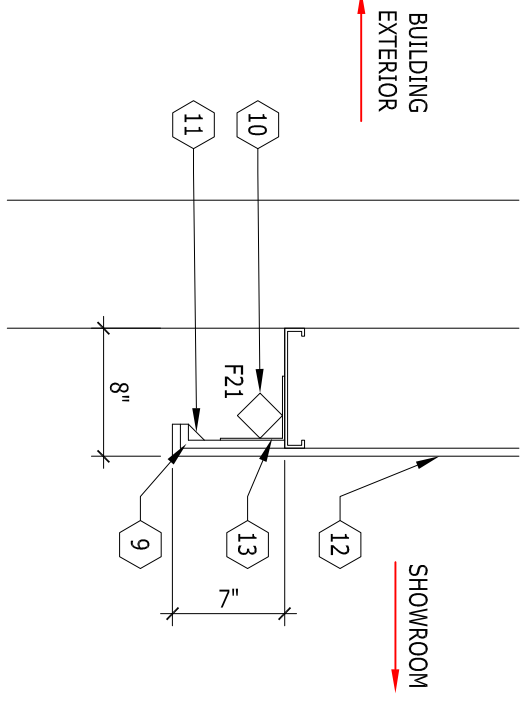
LEGEND	
#	NOTE DESIGNATOR - REFER TO DRAWING NOTES ON THIS SHEET
7-#	FINISH DESIGNATOR - REFER TO SCHEDULES ON A-A4 SERIES SHEETS AND SHEET A-7A

GENERAL NOTES

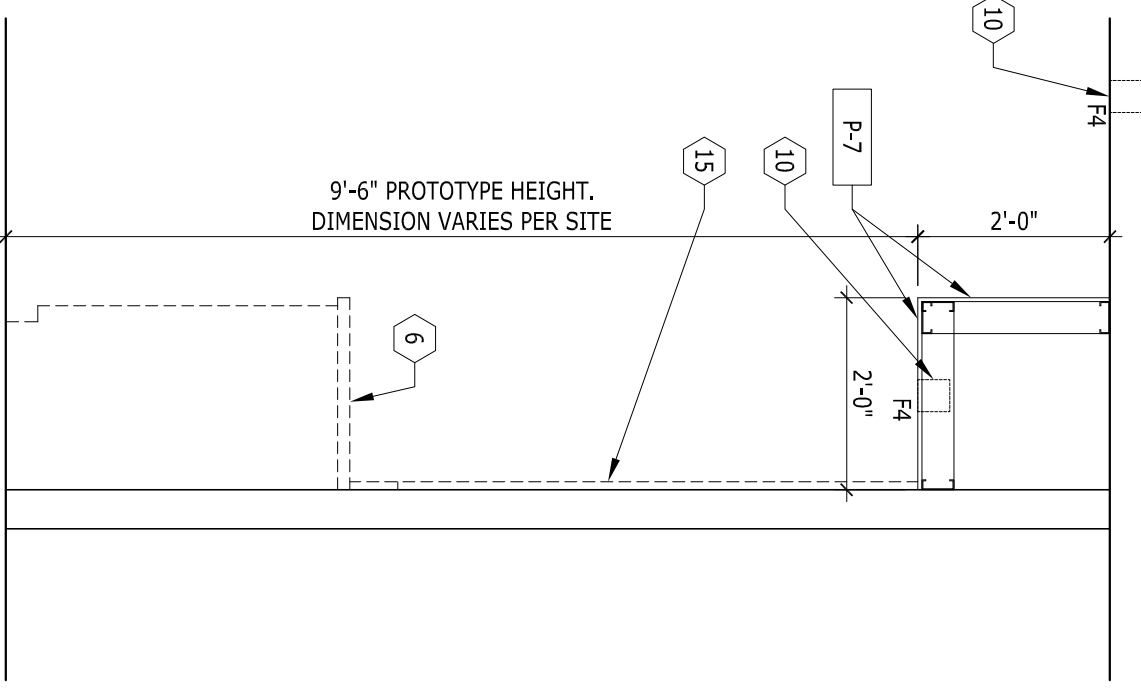
- ALL CEILING HEIGHTS - REFER TO CEILING PLAN
- PREFERRED CONDITIONS SHOWN, MODIFY AS REQUIRED PER PLAN.
- REFER TO REFLECTED CEILING PLAN FOR ACTUAL CEILING HEIGHTS.
- PROVIDE ACCESS TO THE REAR OF EACH INDIVIDUAL LETTER FOR BOTH FASTENING AND ELECTRICAL CONNECTIONS IN ACCORDANCE WITH THE N.E.C. AND LOCAL CODES. PROVIDE ACCESS THROUGH SPOFFIT FROM BOTTOM WHEN REAR ACCESS IS NOT POSSIBLE.
- WINDOW GLAZING, SOLARBAR 70X4

DRAWING NOTES

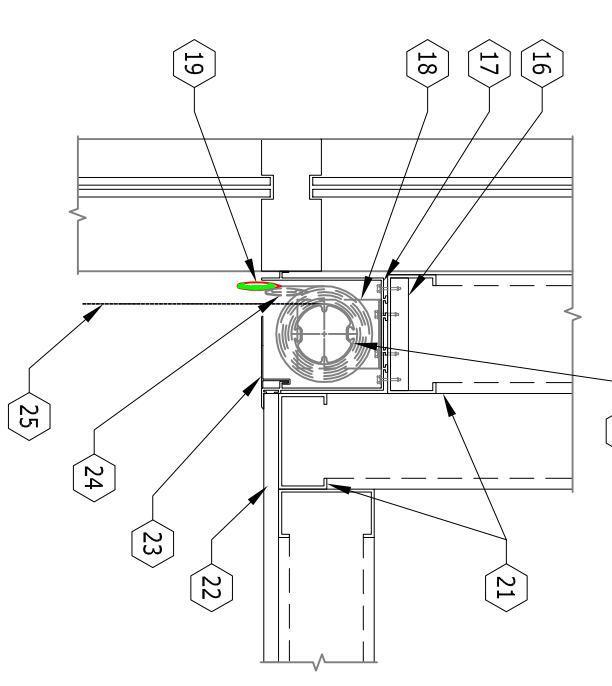
- STOREFRONT SYSTEM.
- ROOF JOISTS.
- STRUCTURAL COLUMN BEYOND.
- FRONT FACIE BRANDING ELEMENT PROVIDED BY PATTISON SIGN GROUP. CONTACT ED MACLE FOR ADDITIONAL INFORMATION. PH:865-693-1105X132; E:MACLE@PATTISONSIGN.COM.
- SPANDREL GLASS.
- FINTURE.
- CURTAIN WALL SYSTEM.
- GRAPHIC BY OWNER.
- DRYWALL.
- LIGHT FINTURE, SEE CEILING PLAN
- BLOCKING AS REQUIRED.
- DRYWALL.
- ANGLE.
- PLYWOOD SHEETING AND WATERPROOFING PROVIDED BY G.C. CONTACT PISG FOR
- REQUIREMENTS.
- SLATWALL PROVIDED BY EWT WORLDWIDE.
- CONTINUOUS BLOCKING.
- EXTRUDED ALUMINUM POCKET.
- BRACKET.
- HEN BAR SEALED INSIDE SHADECLOTH IN UP POSITION.
- ROLLER TUBE AND SHAPE BAND REGULAR ROLLER ASSEMBLY.
- RECOMMENDED CEILING FRAMING.
- FINISHED CEILING
- REMOVABLE CLOSURE.
- HEN BAR IN UP POSITION.
- SHADECLOTH IN DOWN POSITION.
- METAL PANEL SPOFFIT BEYOND.
- TRACK FOR ROLL-UP DOOR.



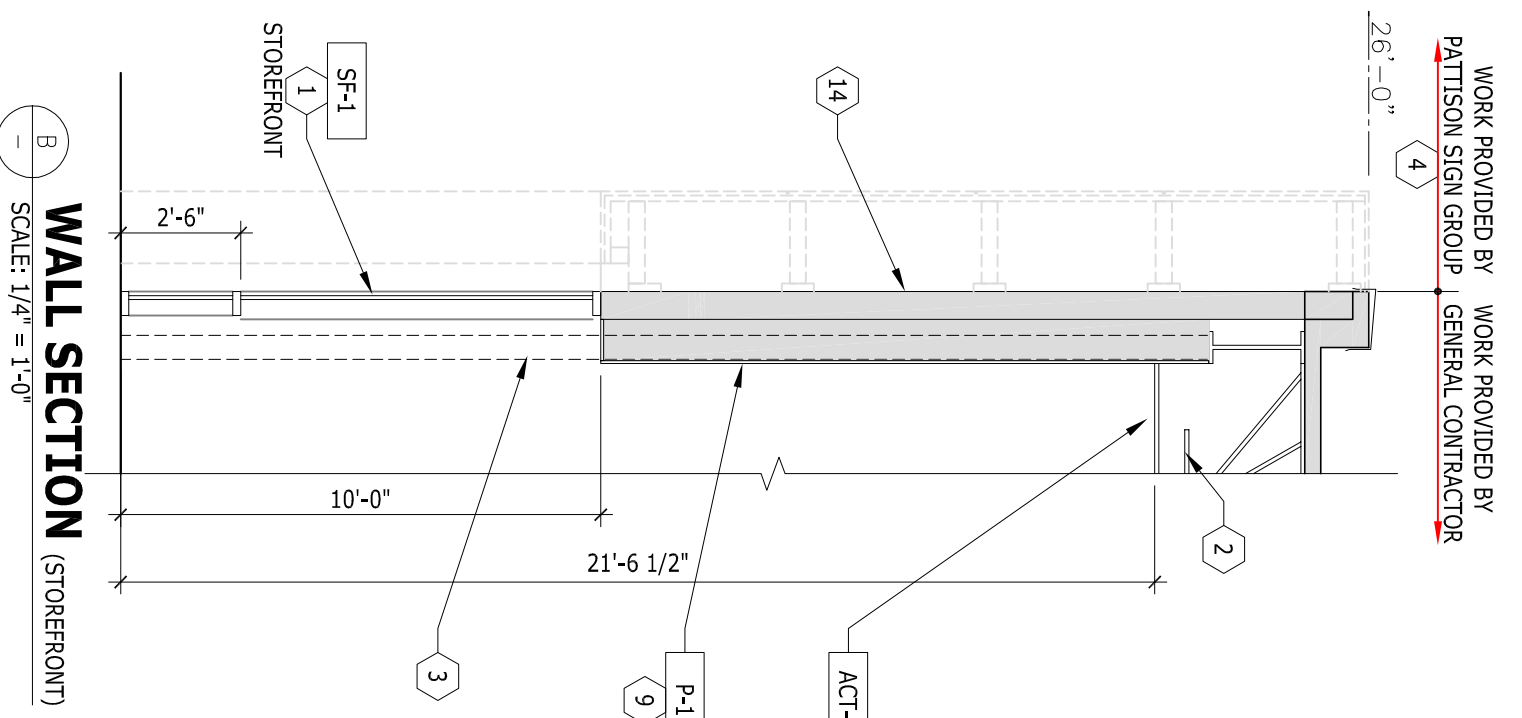
VERTICAL FLOOR-TO-CEILING FOCAL VEHICLE ACCENT LIGHTING SECTION
 SCALE: 1" = 1'-0"



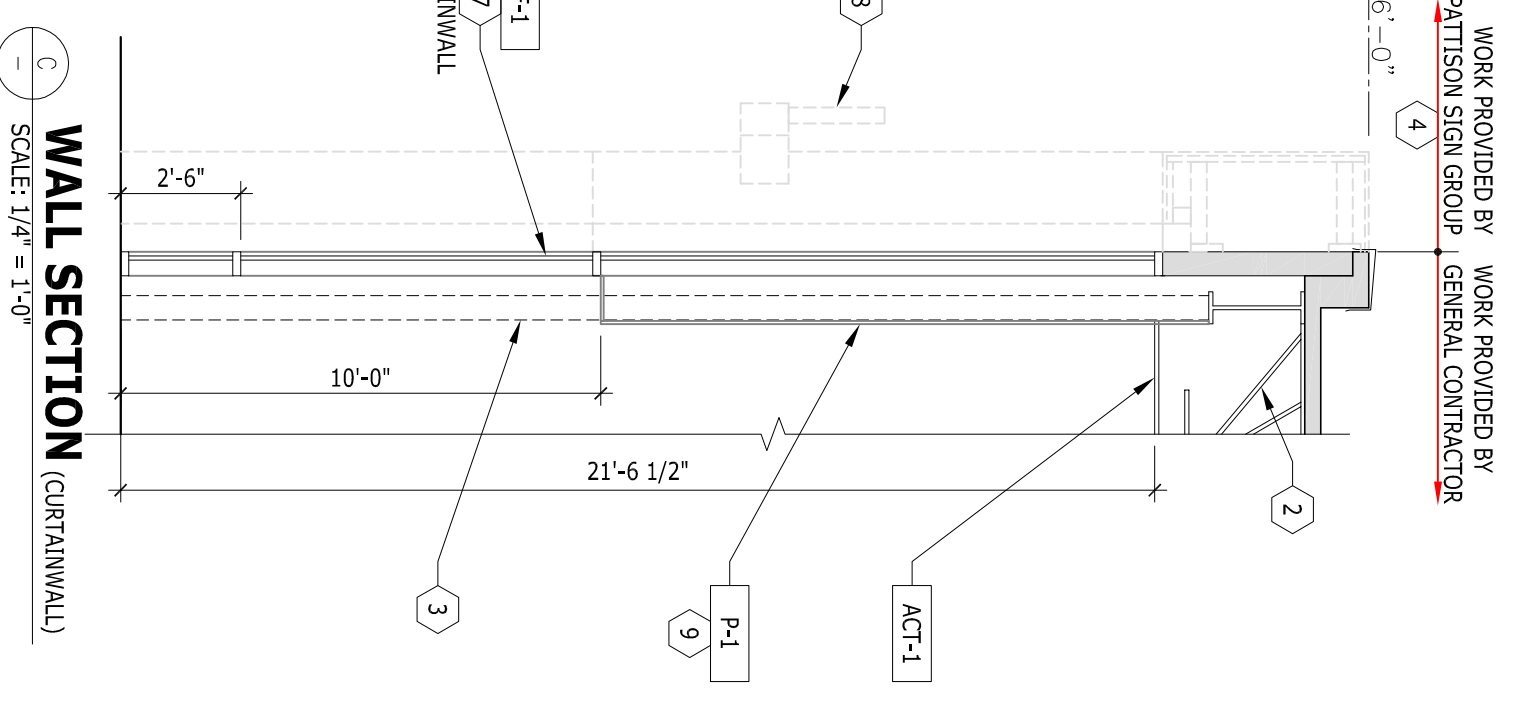
RETAIL DISPLAY LIGHTING DETAIL
 SCALE: 1/2" = 1'-0"



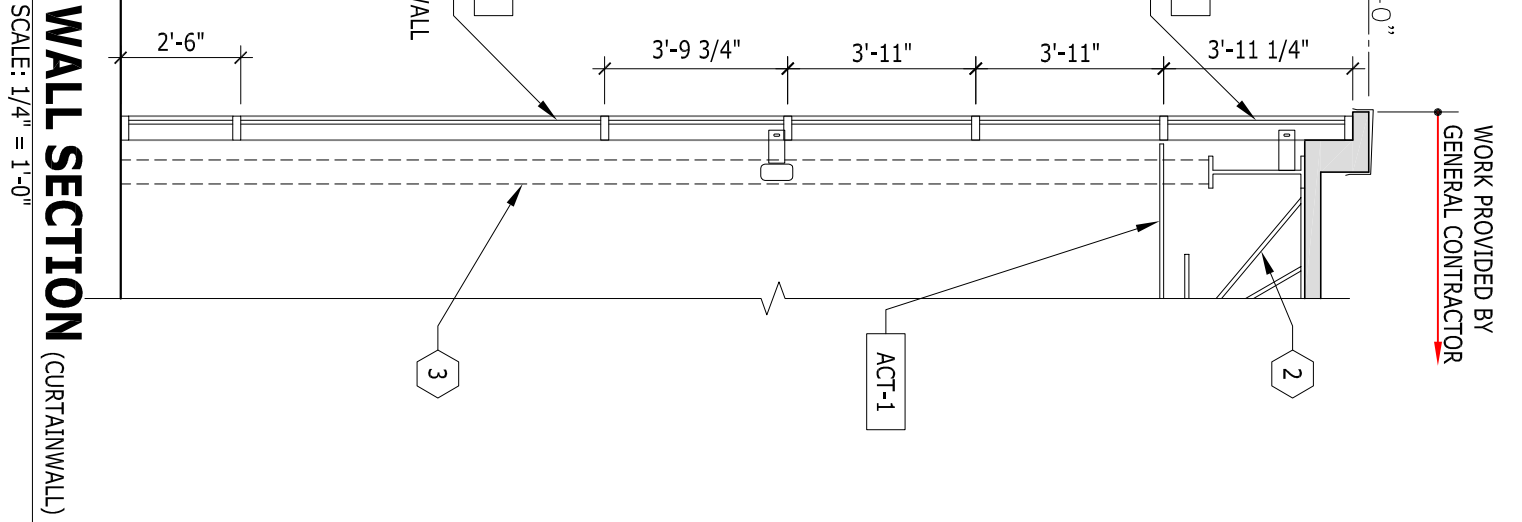
OPTIONAL SUN SHADE- GENERAL DETAIL
 SCALE: 1-1/2" = 1'-0"



WALL SECTION (STOREFRONT)
 SCALE: 1/4" = 1'-0"



WALL SECTION (CURTAINWALL)
 SCALE: 1/4" = 1'-0"



WALL SECTION (CURTAINWALL)
 SCALE: 1/4" = 1'-0"

PROJECT:



International Auto KIA
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 Tel: 847-571-3814
 simon_yu@simon-arch.com
 Attn: Simon Yu

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VRIGLIO & ASSOCIATES, LTD
 Structural Engineers
 24069 North Echo Lake Rd
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 Fax: 847-307-8324
 www.vrigliossoc.com
 Attn: Ryan Freund

MECH / PLUMB / ELECT:

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 2675 Pratum Avenue
 Hoffman Estate, IL 60192
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 Fax: 224-293-6444
 Ken.Meddings@wteengineering.com
 Attn: Ken Meddings (Electrical)

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- MAY 10 2017 - FOR BID

EXTERIOR MATERIALS

A05.04

PROJECT:

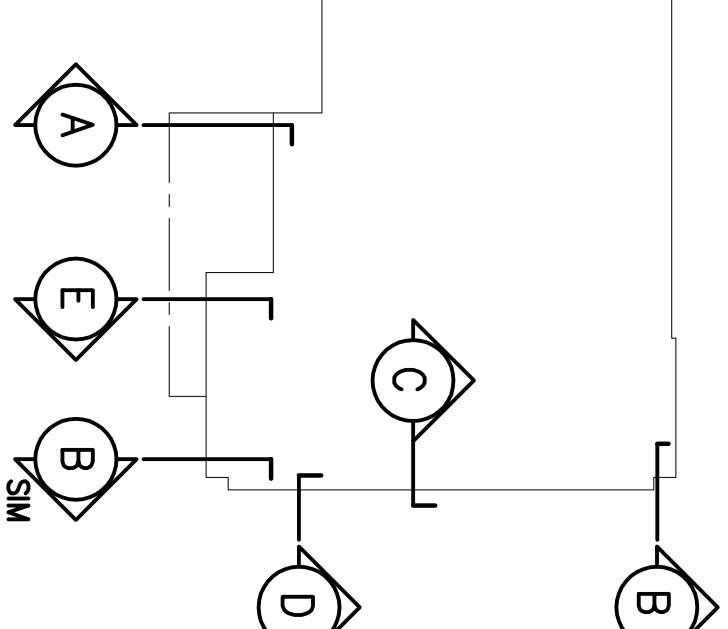


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ELEVATION LEGEND
SCALE: NTS



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Structural Engineers
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Lake Zurich, IL 60047
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Fax: 847-507-8524
www.vigiliosc.com
Attr: Ryan Freund

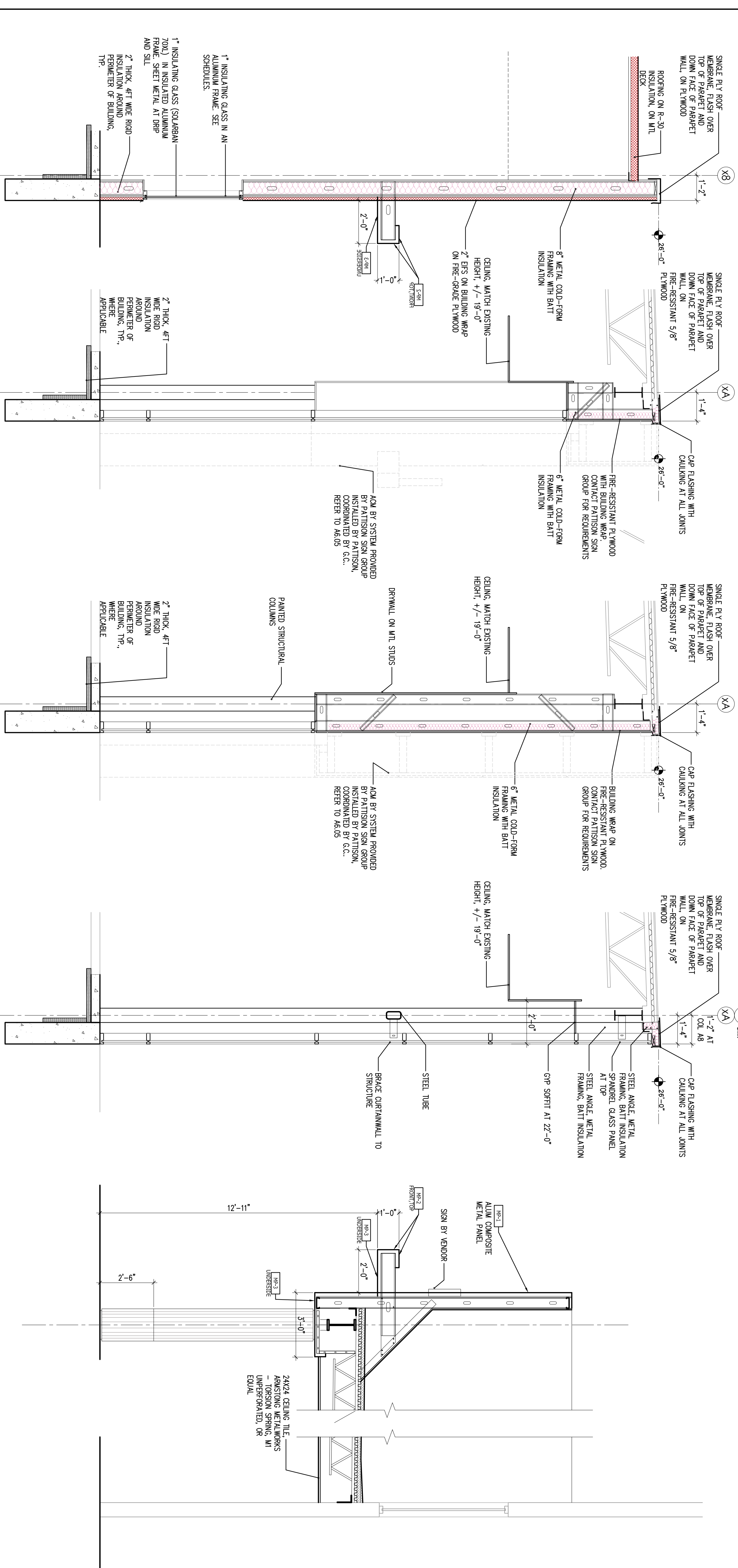
MECH / PLUMB / ELECT:

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EXTERIOR SECTIONS

A05.05



SECTION AT FRONT FACADE
SCALE: 3/8" = 1'-0"

SECTION AT FRONT FACADE
SCALE: 3/8" = 1'-0"

SECTION AT FRONT FACADE
SCALE: 3/8" = 1'-0"

SECTION AT FRONT/SIDE FACADE
SCALE: 3/8" = 1'-0"

SECTION - AT DELIVERY CANOPY
SCALE: 3/8" = 1'-0"

A

PROJECT:



International Auto KIA
8821 159th Street
Orland Hills, IL 60487

ARCHITECT:

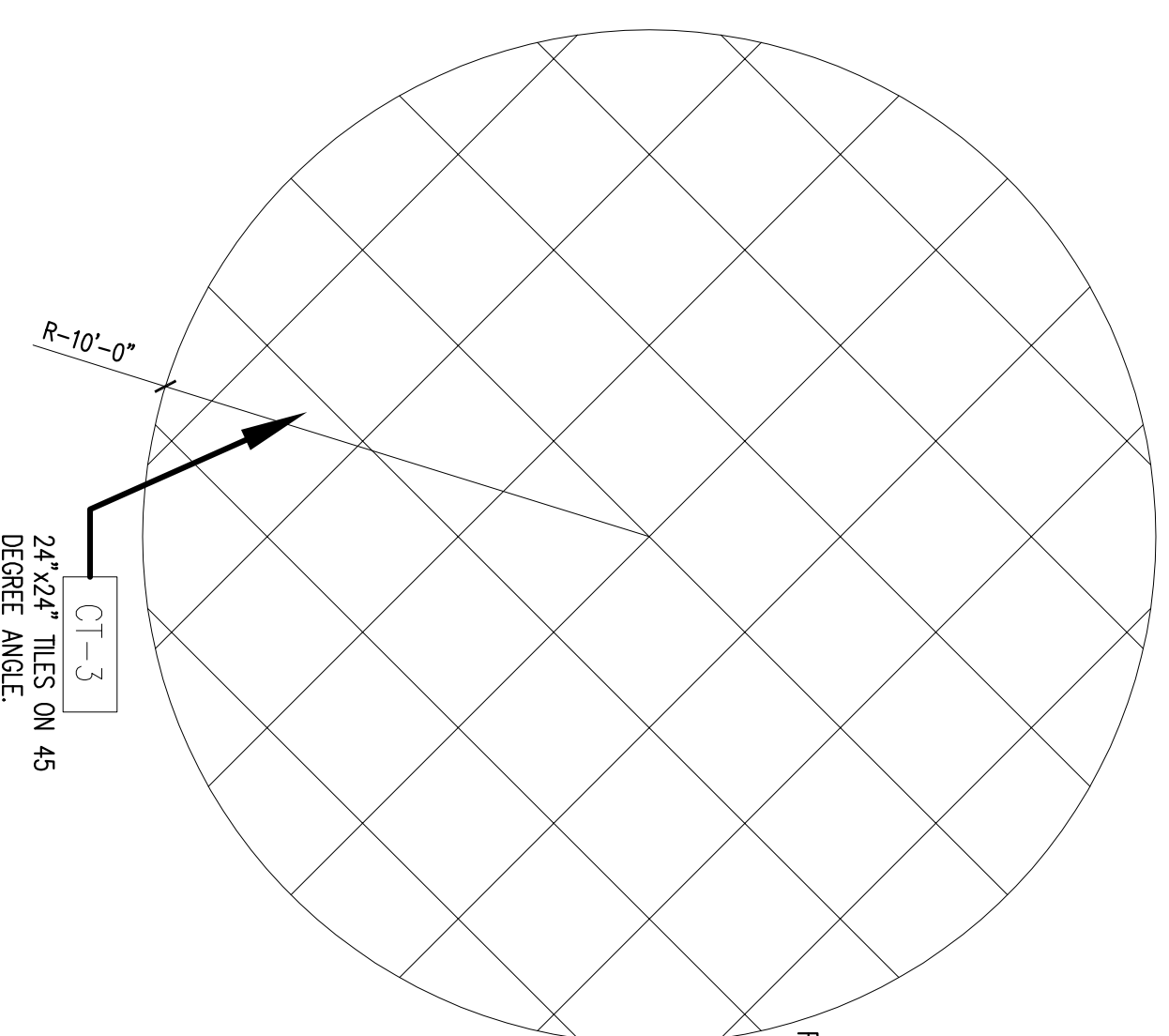
SIMON ARCHITECTURE DESIGN GROUP, LLC
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simon_yu@simon-arch.com
Attn: Simon Yu

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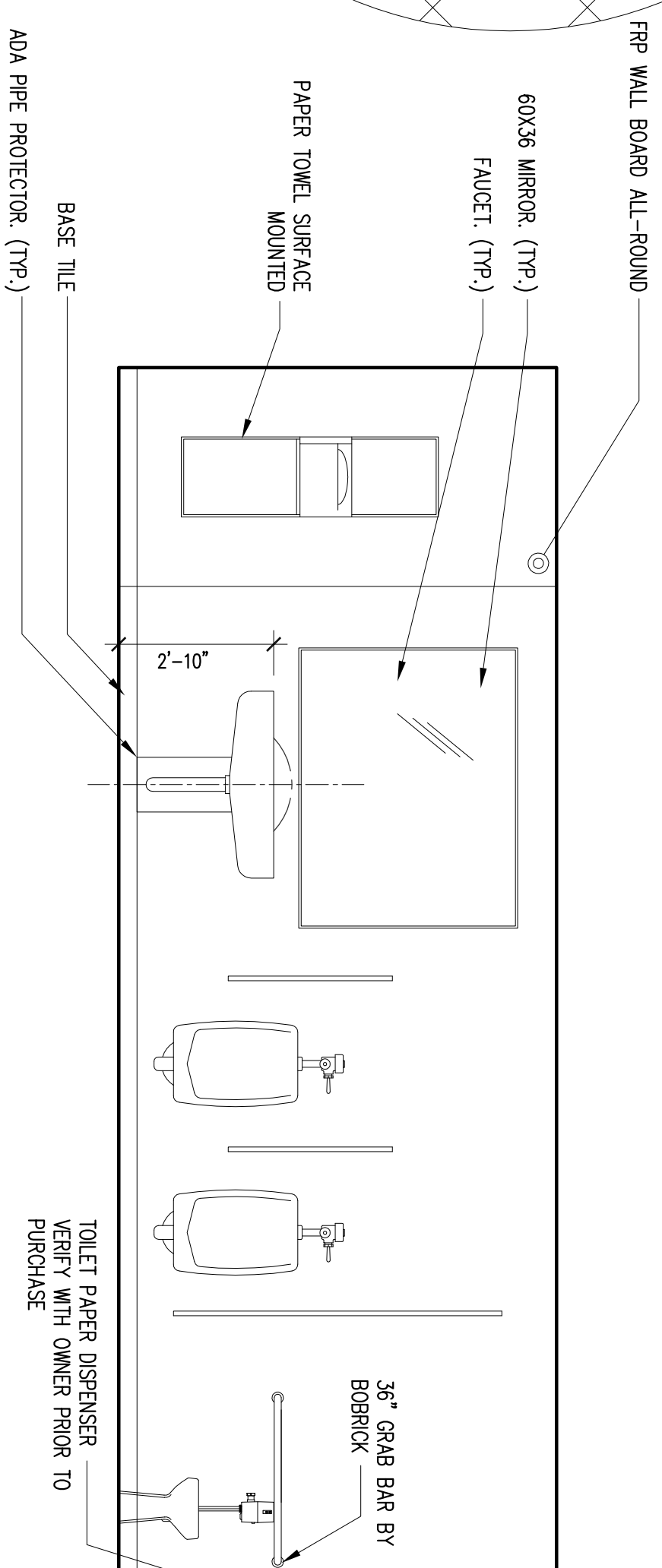
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Hoffman Estate, IL 60192
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Fax: 224-293-6444
Ken.Meddings@wteengineering.com
Attn: Ken Meddings (Electrical)



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

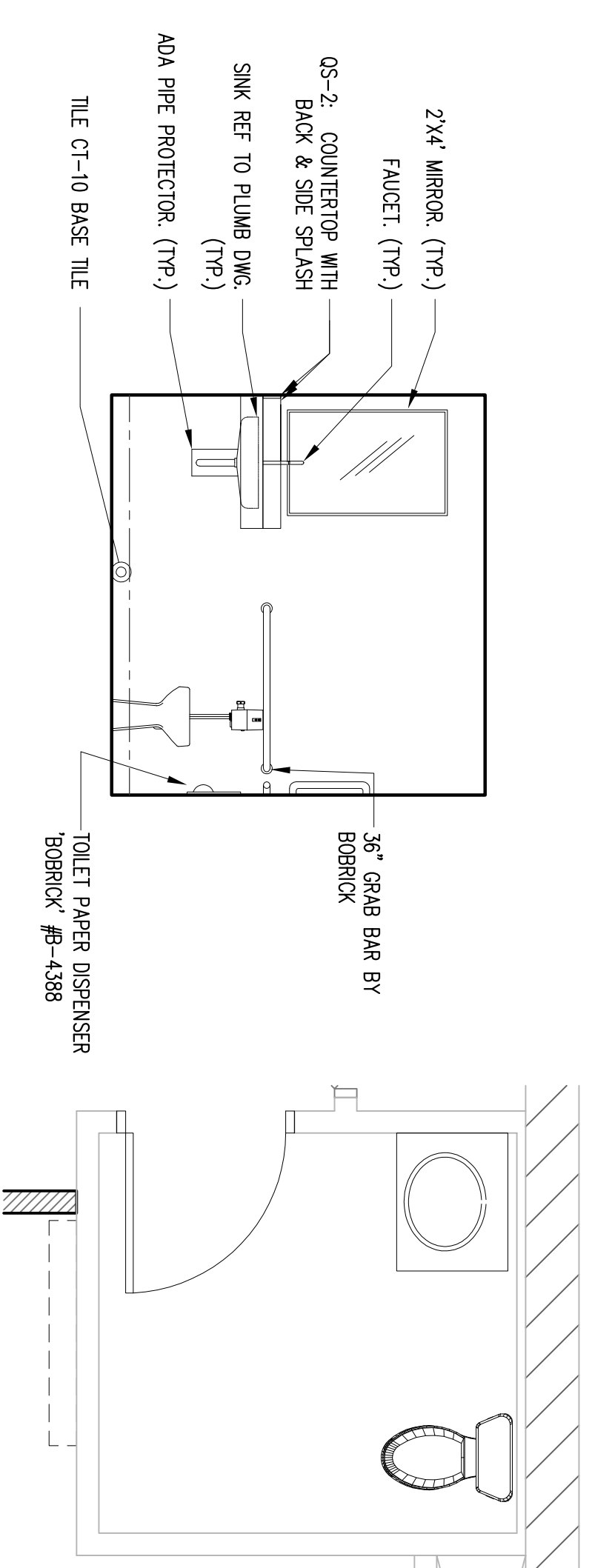
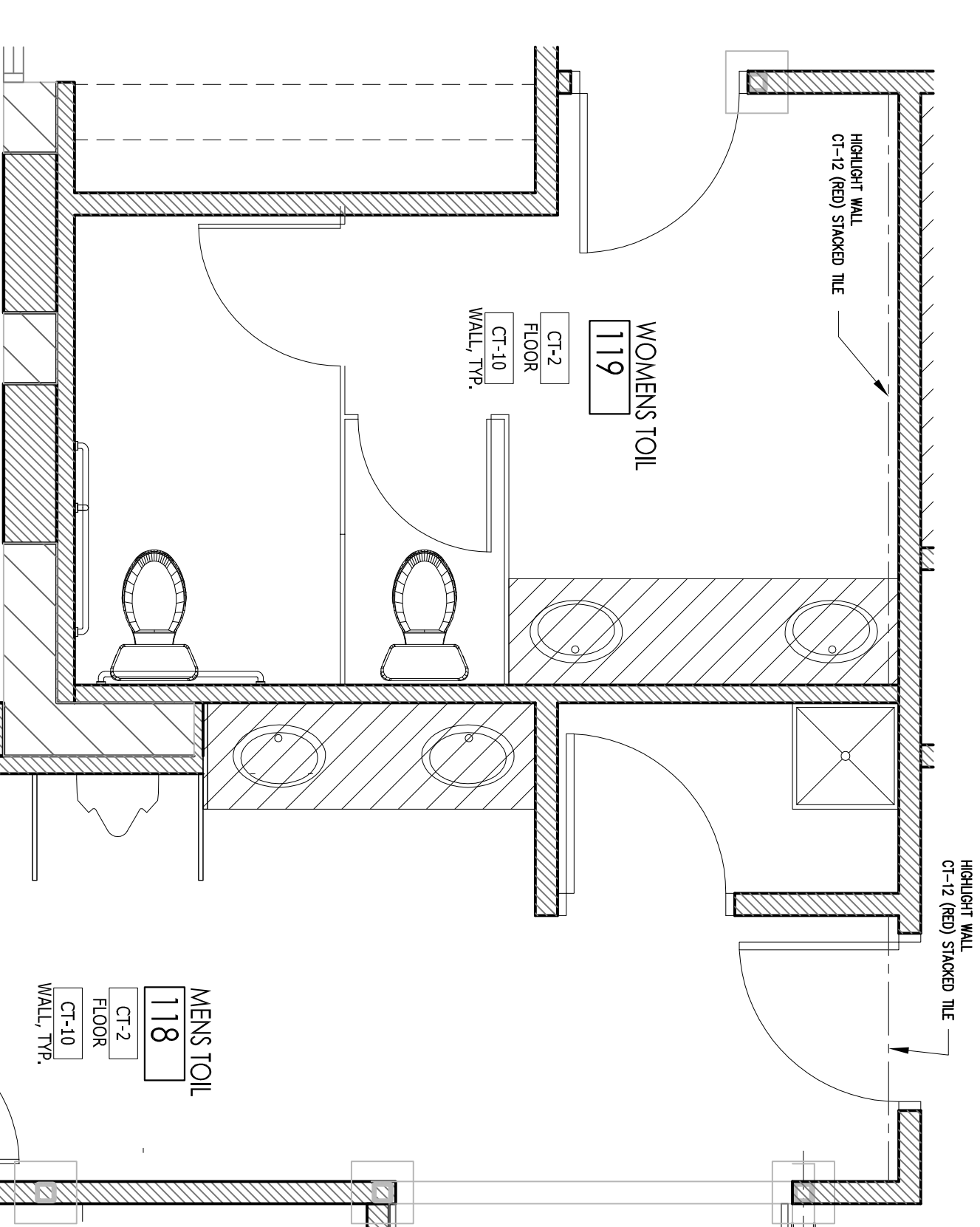
LOCKER ROOM
SCALE: 3/8"



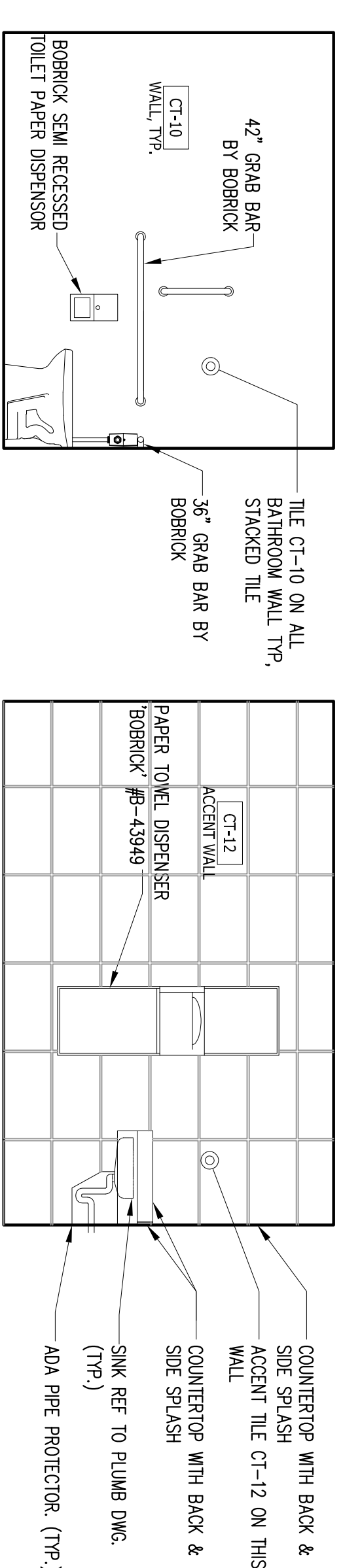
TOILET PAPER DISPENSER - VERIFY WITH OWNER PRIOR TO PURCHASE

FOR TILE:

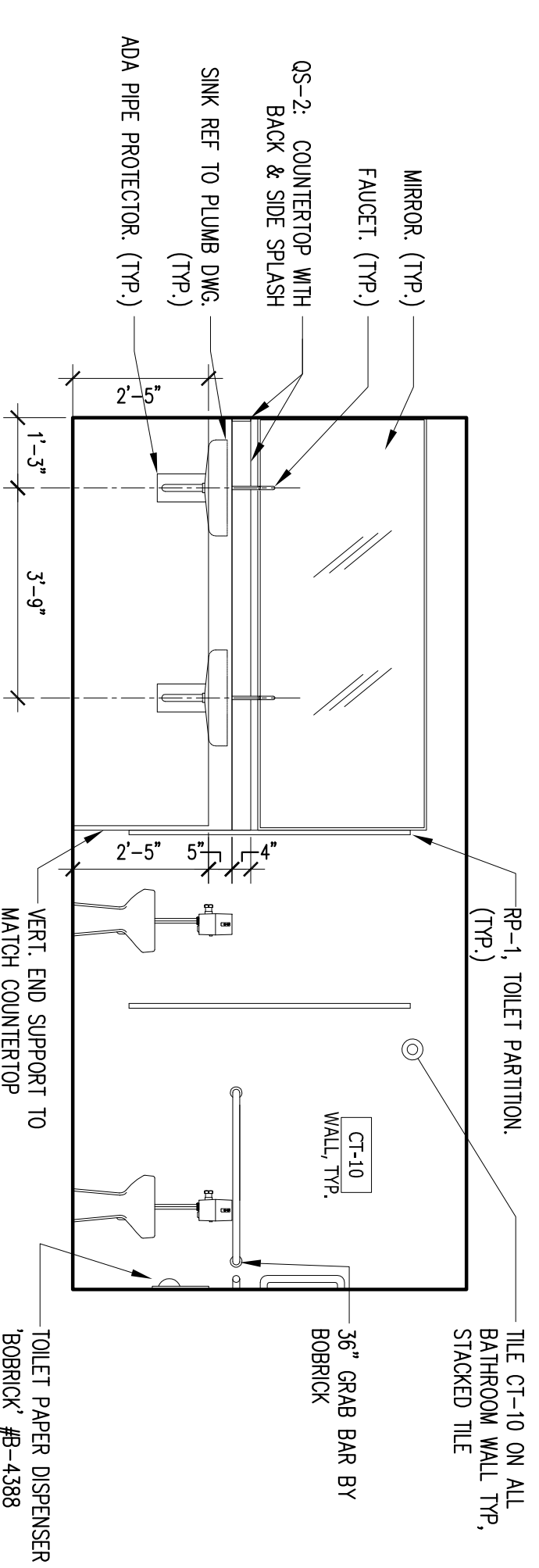
1. REFER TO TONA HANDBOOK & ANSI REQUIREMENTS FOR PROPER INSTALLATION METHODS FOR LARGE FORMAT CERAMIC WALL TILE. REFER TO ANSI SECTION 4.3.7 REGARDING SPACING & SECTION A3.8 REGARDING GROUT JOINT SIZE, PARTICULARLY IN RELATION TO THE TILE SIZE, DIMENSIONAL PRECISION & OFF-SET PATTERN.
2. REQUIRED: TO ACHIEVE PROPER INSTALLATION FOR LARGER FORMAT WALL TILES, CONTRACTOR TO USE THE TUSCAN LEVELING SYSTEM OR EQUAL & DOUBLE SPREADING TECHNIQUE (BACK-BUTTERING). REFER TO THINSET MANUFACTURERS TECHNICAL DATA SHEET FOR RECOMMENDED TROWEL SIZE & COVERAGE INFORMATION.



WOMEN'S RESTROOMS
SCALE: 3/8"



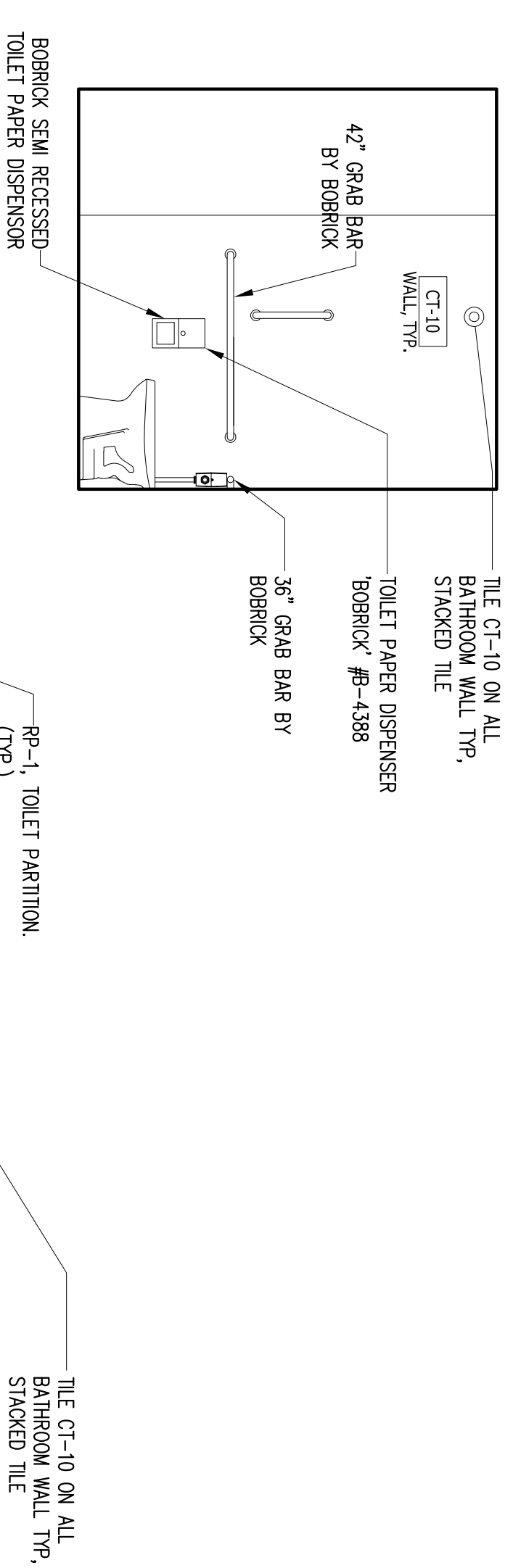
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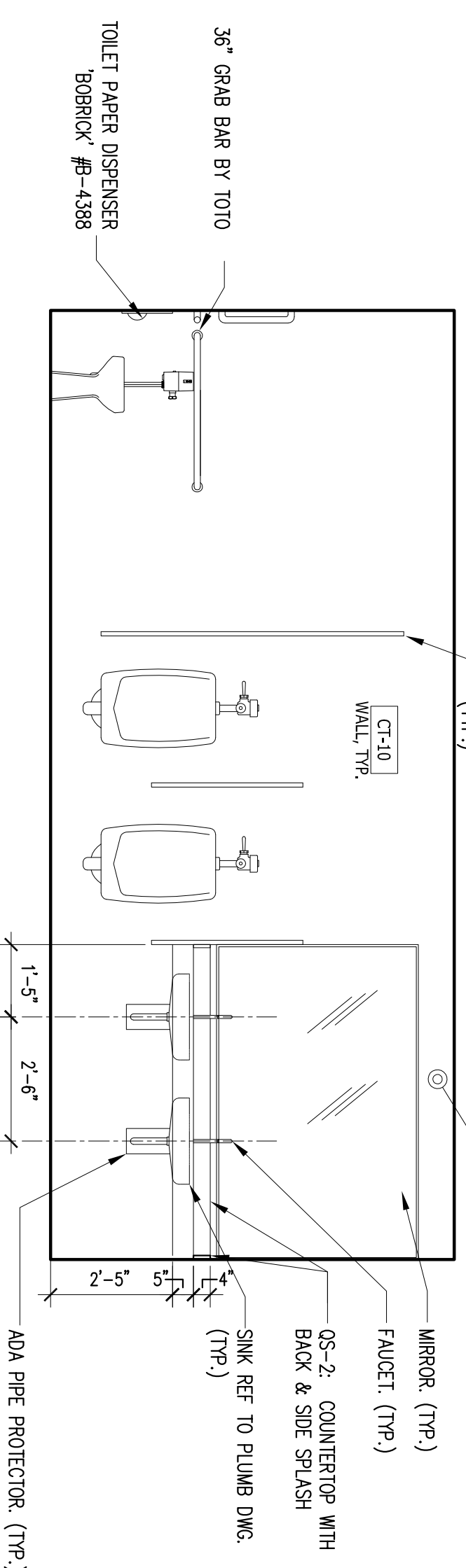
WOMEN'S RESTROOMS
SCALE: 3/8"

3

PUBLIC RESTROOMS
SCALE: 3/8"



1



MEN'S RESTROOM
SCALE: 3/8"

2

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INTERIOR ELEVATIONS

A06.01

PROJECT:



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ARCHITECT:

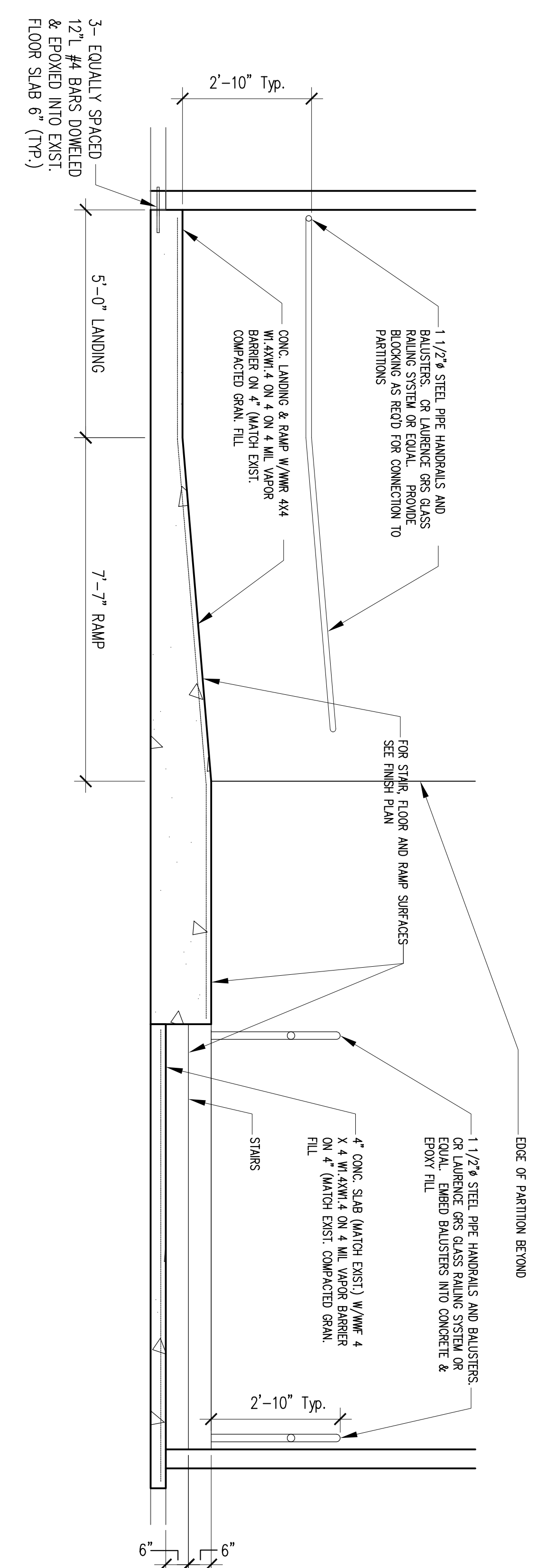
SIMON ARCHITECTURE DESIGN GROUP, LLC
505 Lake Cook Road, Suite 350
Deerfield, IL 60015
Tel: 847-571-3814
simon_yui@simon-arch.com
Attn: Simon Yu

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Structural Engineers
24069 North Echo Lake Rd
Lake Zurich, IL 60047
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Fax: 847-307-8324
www.vgibusiness.com
Attn: Ryan Freund

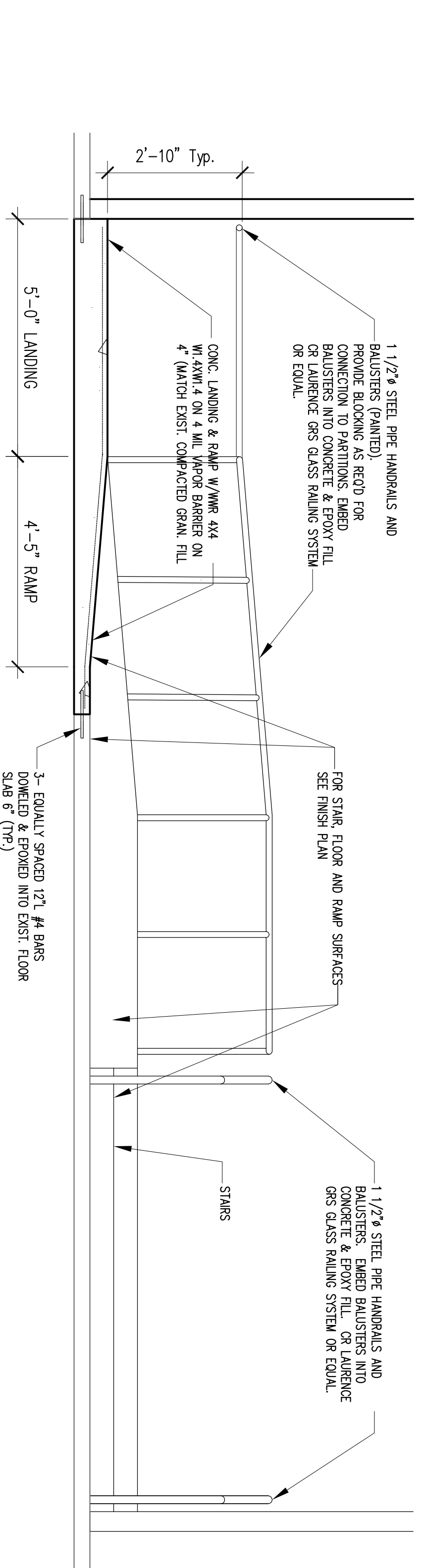
MECH / PLUMB / ELECT:

W-T Electrical Engineering, LLC
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Hoffman Estate, IL 60192
Tel: 224-293-6312
Fax: 224-293-6444
Ken.Meddings@wteengineering.com
Attn: Ken Meddings (Electrical)



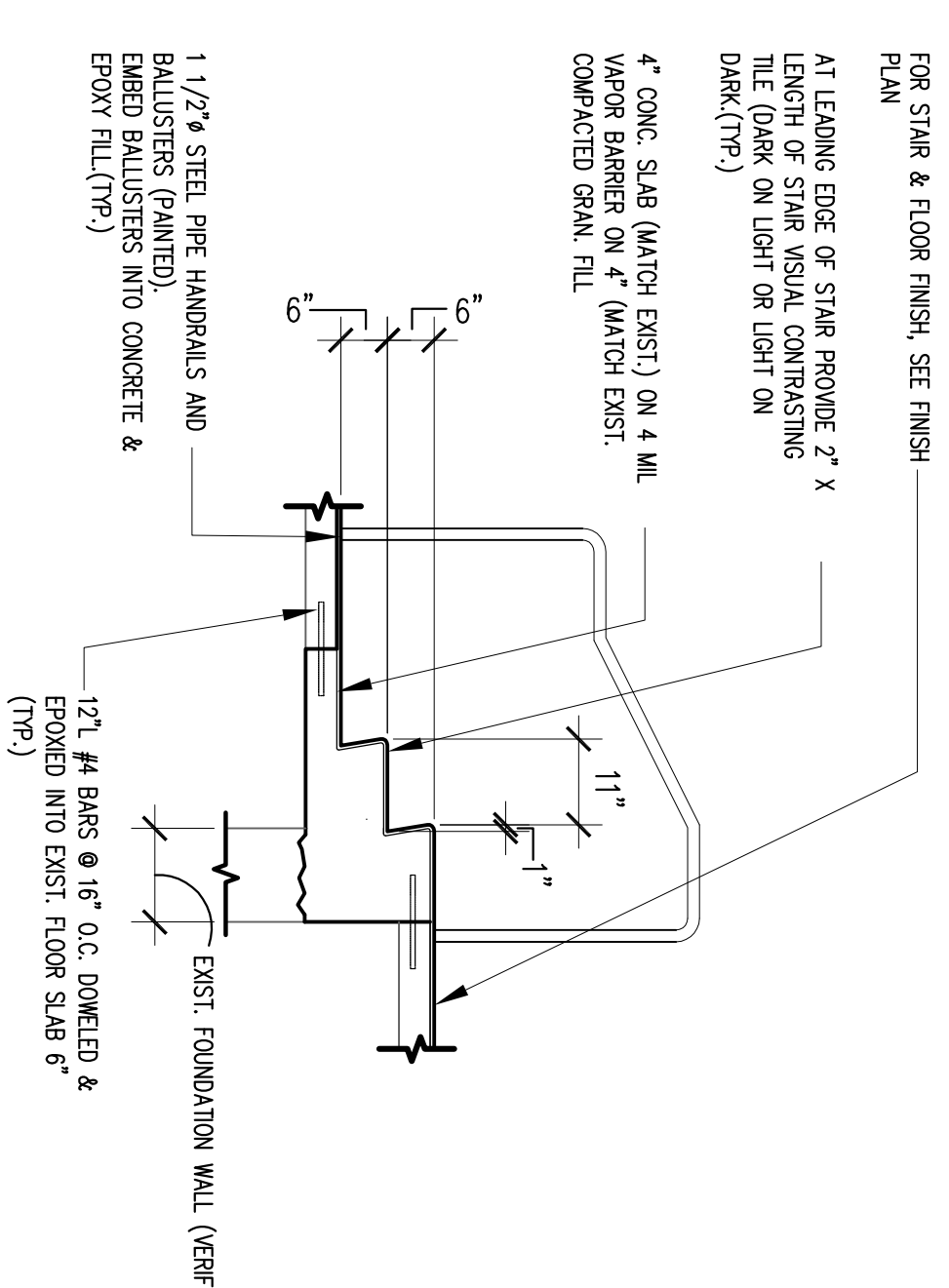
RAMP AND STAIR DETAIL
SCALE: 1/2" = 1'-0"

2



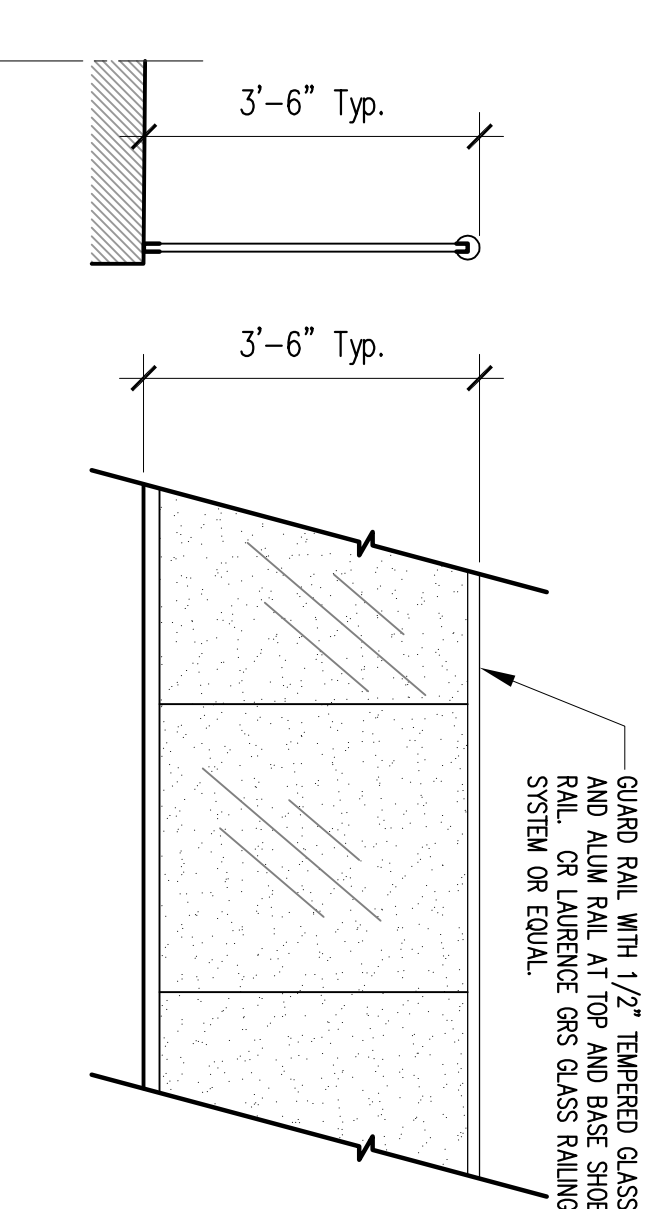
RAMP AND STAIR DETAIL
SCALE: 1/2" = 1'-0"

3



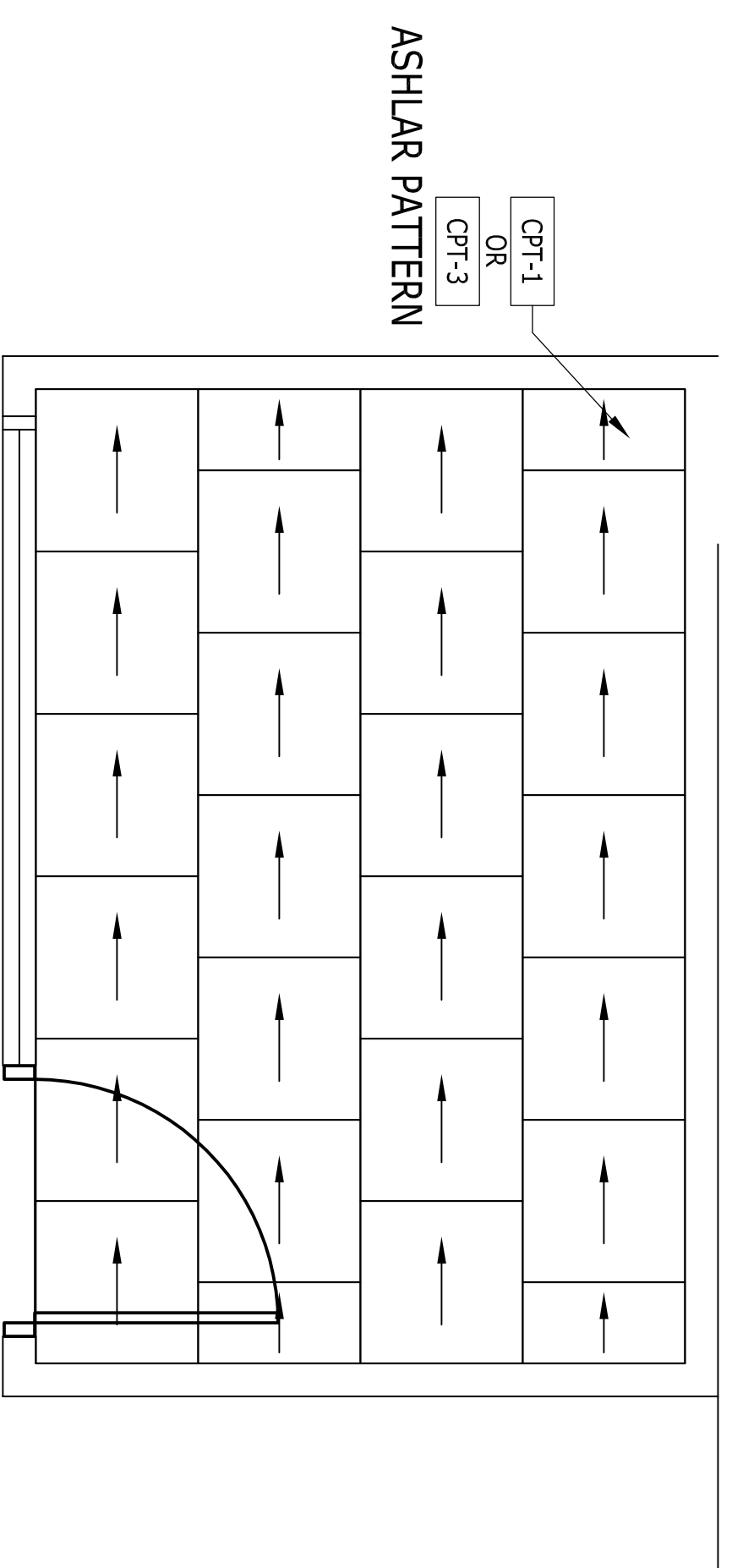
STAIR DETAIL
SCALE: 1/2" = 1'-0"

1



GUARD RAIL DETAIL
SCALE: 1/2" = 1'-0"

4



FLOOR CARPET PATTERN
SCALE: N.T.S.

5

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INTERIOR ELEVATIONS

A06.02

PROJECT:



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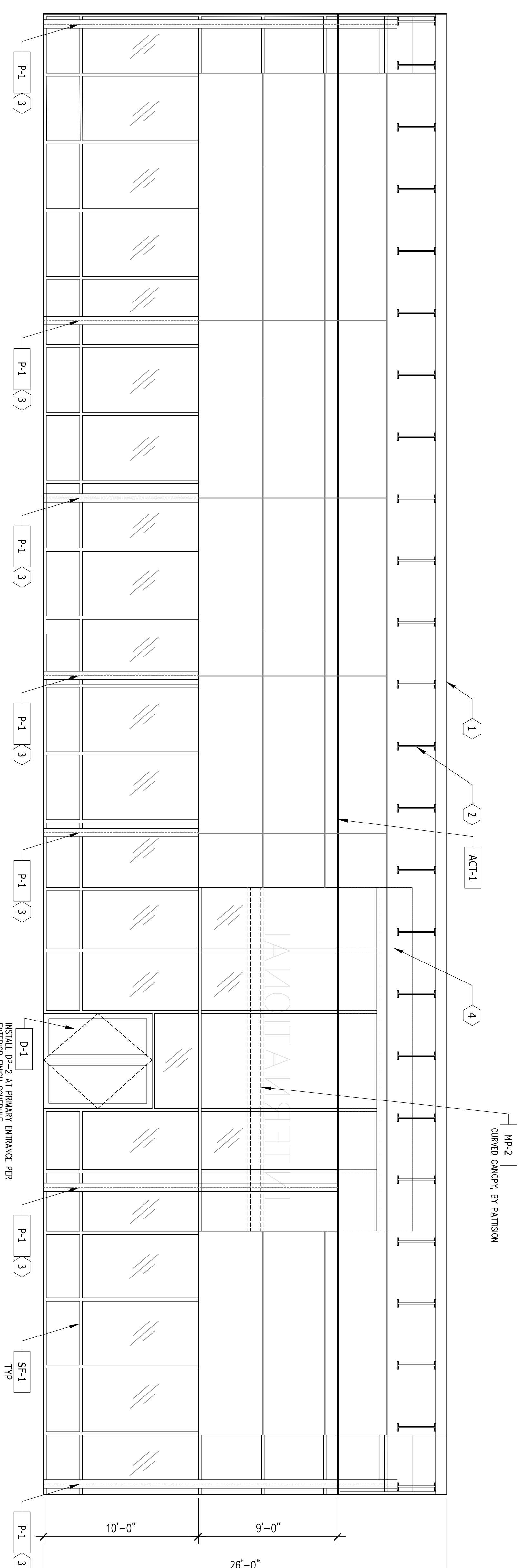
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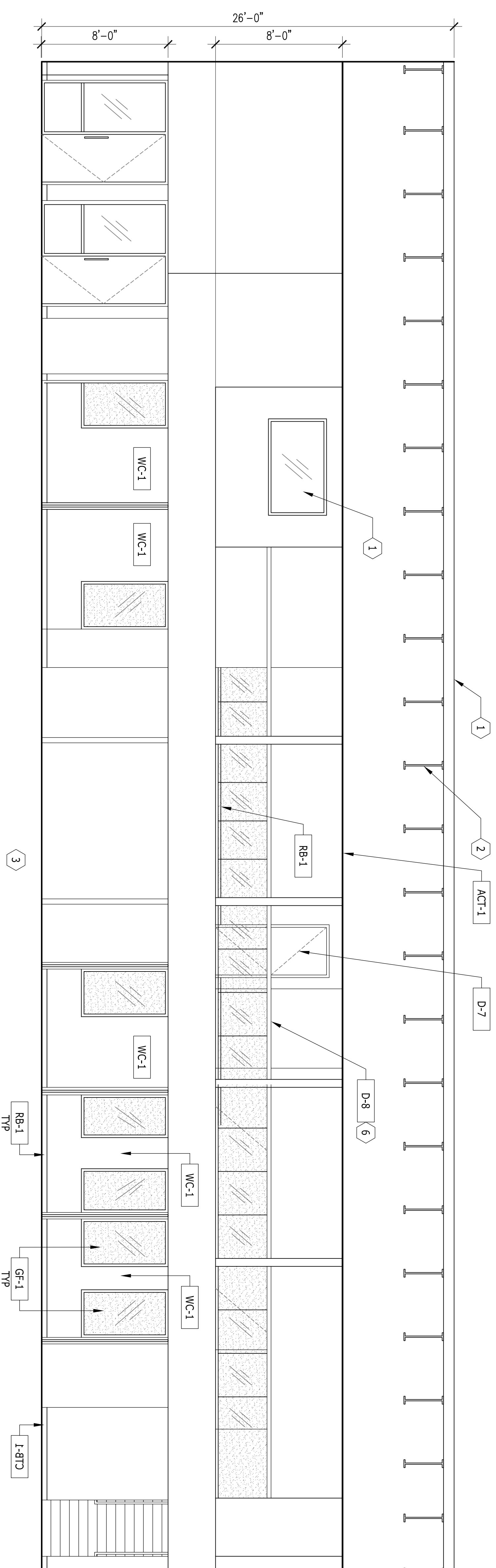
INTERIOR ELEVATIONS

A06.03



INTERIOR ELEVATION - FRONT SHOWROOM
SCALE: 1/8"

1



INTERIOR ELEVATION - REAR SHOWROOM
SCALE: 1/8"

2

PROJECT:



International Auto KIA
8821 159th Street
Orland Hills, IL 60487

ARCHITECT:

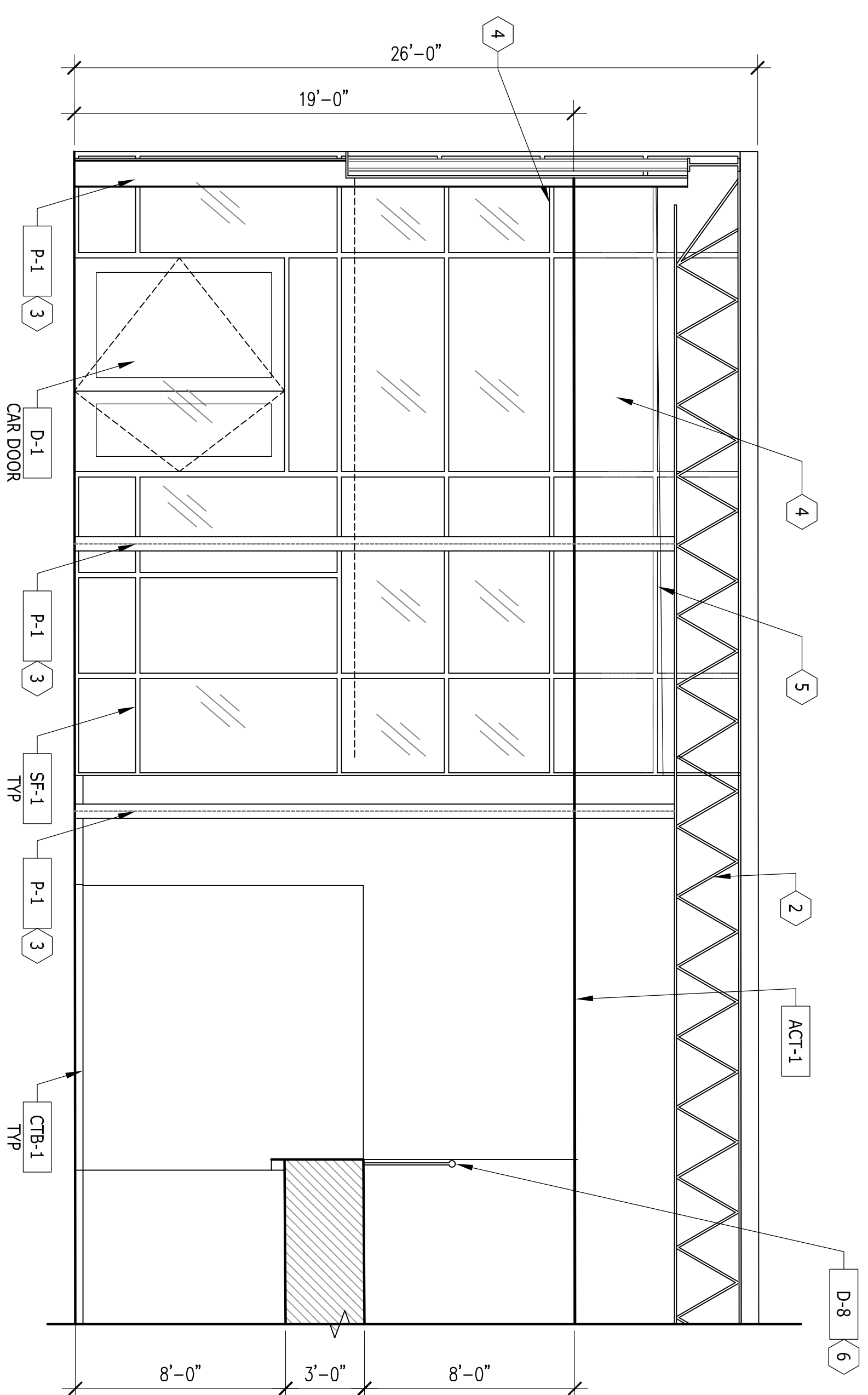
SIMON ARCHITECTURE DESIGN
DESIGN GROUP, LLC
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simon_yv@simon-arch.com
Attr: Simon Yu

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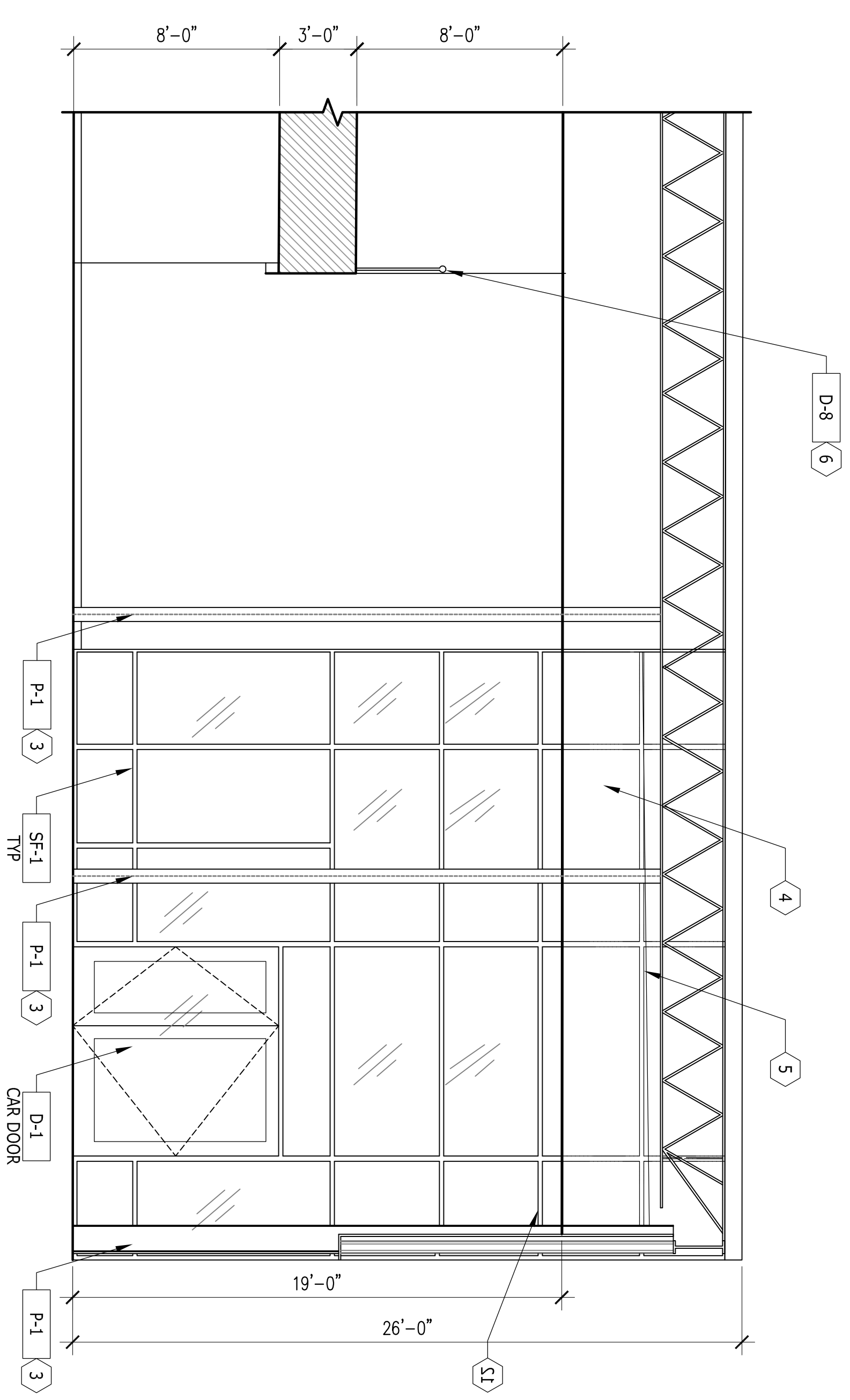
MECH / PLUMB / ELECT:

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Hoffman Estate, IL 60192
Tel: 224-293-6312
Fax: 224-293-6444
Ken.Meddings@wteengineering.com
Attr: Ken Meddings (Electrical)



INTERIOR ELEVATION - RIGHT SHOWROOM
SCALE: 1/8" = 1'-0"

4



INTERIOR ELEVATION - RIGHT SHOWROOM
SCALE: 1/8" = 1'-0"

3

LEGEND

#	NOTE DESIGNATOR - REFER TO DRAWING NOTES ON THIS SHEET
?-#	FINISH DESIGNATOR - REFER TO A-4A SERIES SHEETS AND A-4B SERIES SHEETS

GENERAL NOTES

- A. ALL CEILING HEIGHTS SHOWN HAVE BEEN ESTABLISHED BASED UPON A GROUND-UP PROTOTYPICAL STRUCTURE. MODIFICATIONS AND SUBJECTIVE ANALYSIS MAY BE REQUIRED IN RETROFIT CONDITIONS.
- B. ELEVATIONS SHOWN ARE PROTOTYPICAL. ACTUAL ELEVATIONS WILL VARY. SEE SITE SPECIFIC SHEETS FOR SPECIFIC INFORMATION.
- C. ALL WALLS TO BE WC-1 UNLESS NOTED OTHERWISE.
- D. DEALER'S ARCHITECT/CONTRACTOR TO PROVIDE ACCESS TO THE REAR OF EACH INDIVIDUAL LETTER FOR BOTH FASTENING AND ELECTRICAL CONNECTION IN ACCORDANCE WITH THE N.E.C. AND LOCAL CODES. PROVIDE ACCESS THROUGH SOFFIT BOTTOM WHEN REAR ACCESS IS NOT POSSIBLE.
- E. PREFERRED CONDITIONS SHOWN. MODIFY AS REQUIRED PER PLAN.
- F. REFER TO REFLECTED CEILING PLAN ON SHEET A-5 FOR PROTOTYPICAL CEILING HEIGHTS.

DRAWING NOTES

- 1. ROOF CONSTRUCTION
- 2. ROOF JOIST.
- 3. COLUMN.
- 4. SOFFIT BEYOND
- 5. STOREFRONT BEHIND SOFFIT
- 6. RAILING. REFER TO DETAIL 4/A6.02
- 7. EXISTING BORROWED LIGHT

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INTERIOR ELEVATIONS

A06.04

PROJECT:



International Auto KIA
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Orland Hills, IL 60487

ARCHITECT:

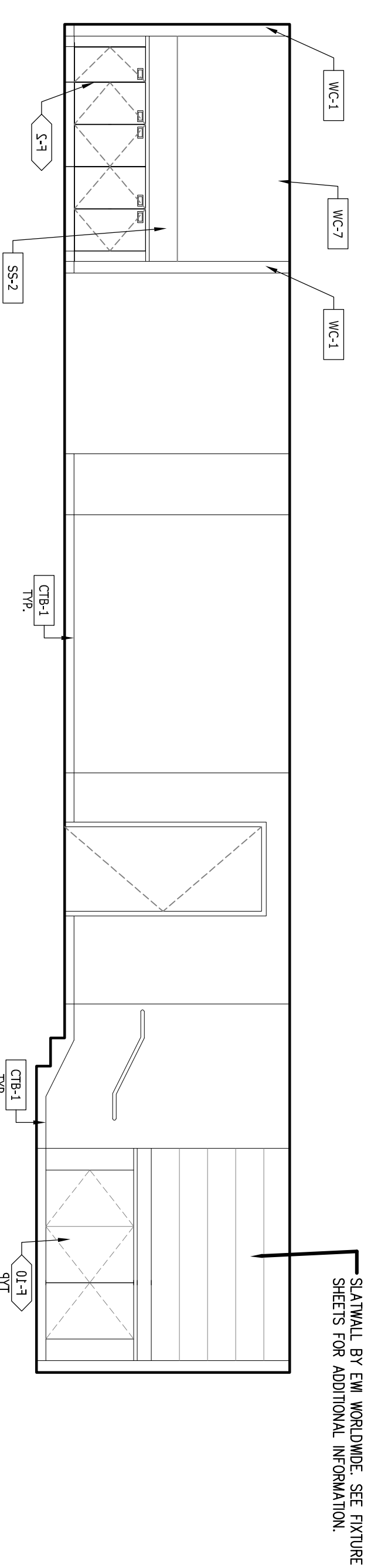
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Attr: Simon Yu

STRUCTURAL ENGINE:

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Fax: 847-307-8324
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Attr: Ryan Freund

MECH / PLUMB / ELECT:

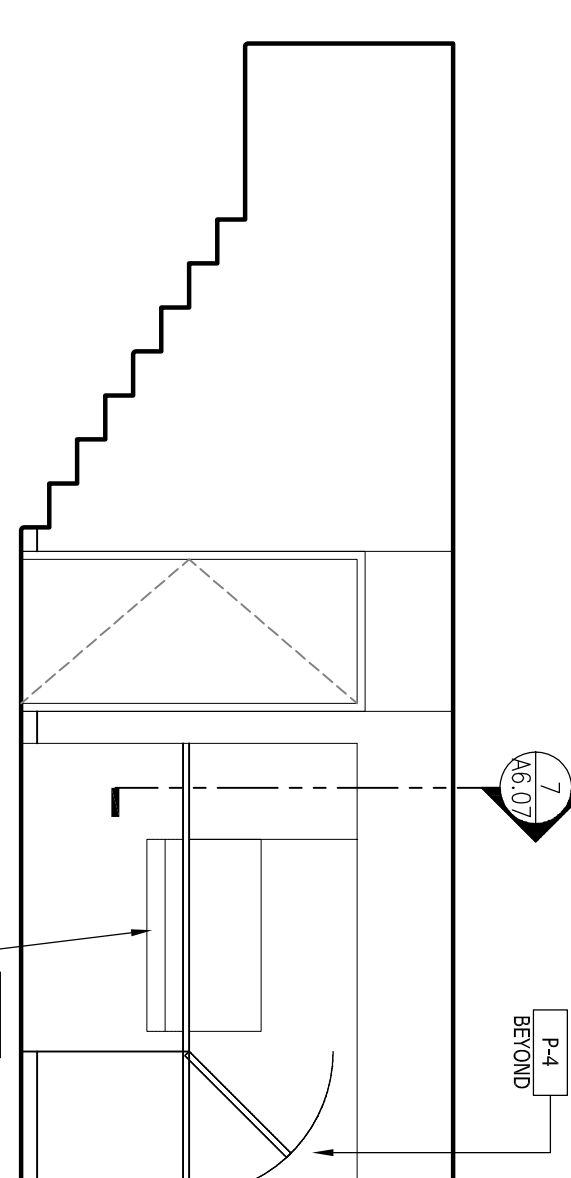
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Ken.Meddings@wtenengineering.com
Attr: Ken Meddings (Electrical)



INTERIOR ELEVATION - RETAIL/ CAFE ELEVATION

SCALE: 1/4"

5



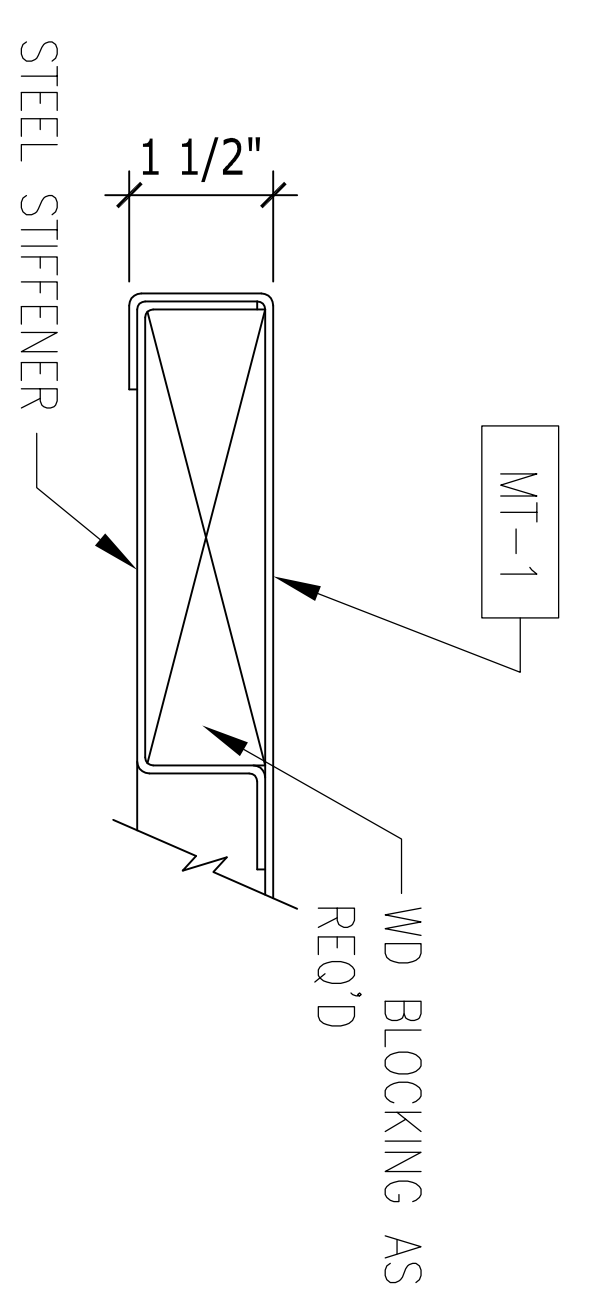
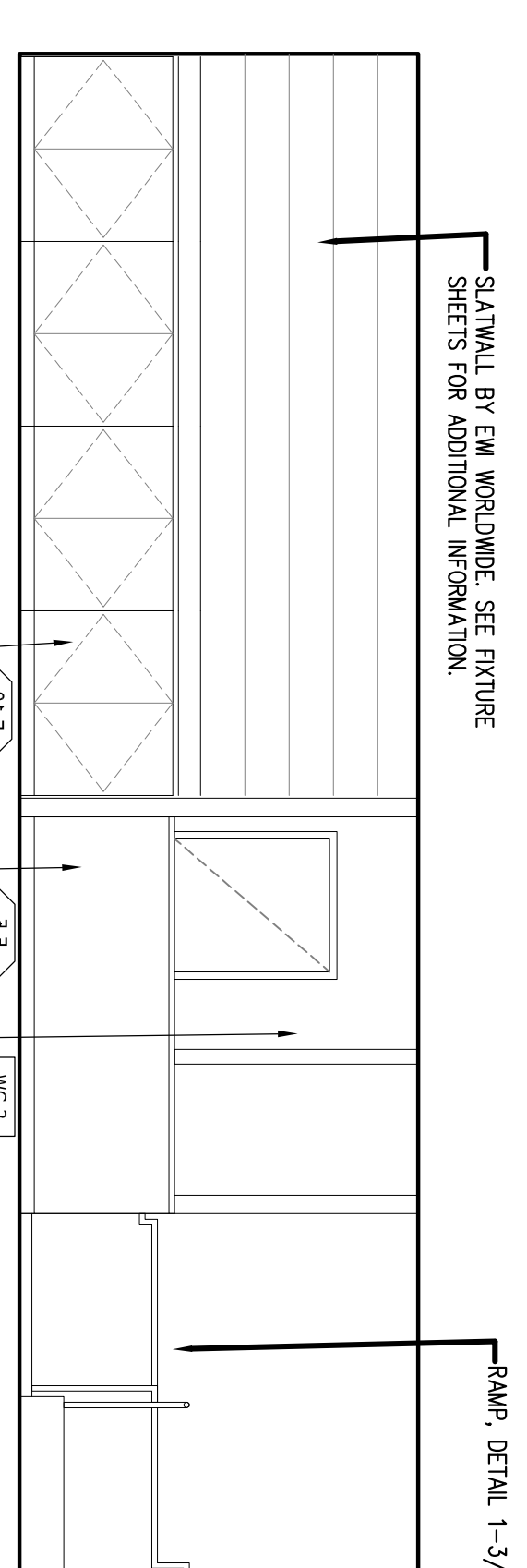
INTERIOR ELEVATION - TECH PARTS ELEVATION

SCALE: 1/4"

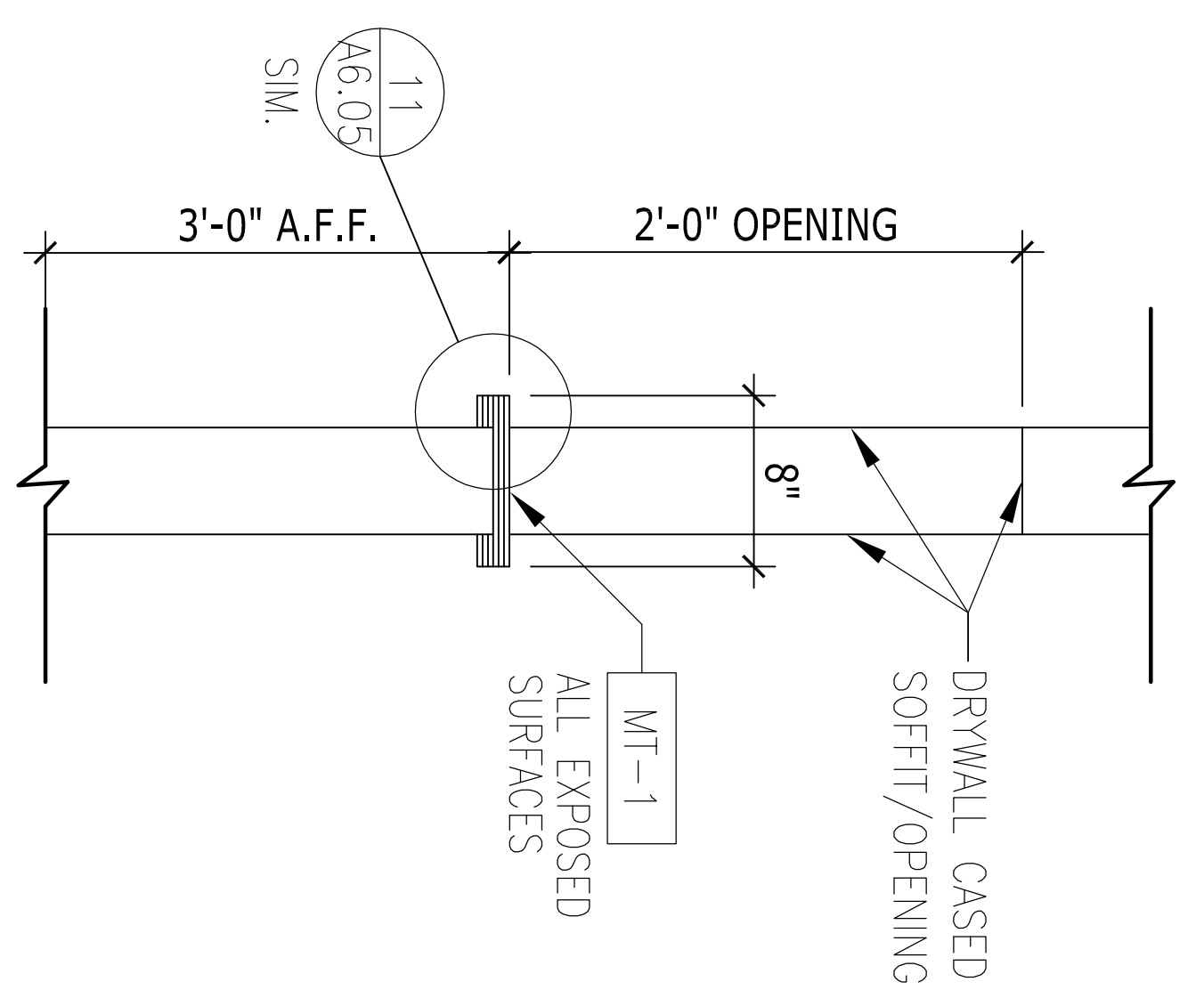
INTERIOR ELEVATION - RETAIL PARTS ELEVATION

SCALE: 1/4"

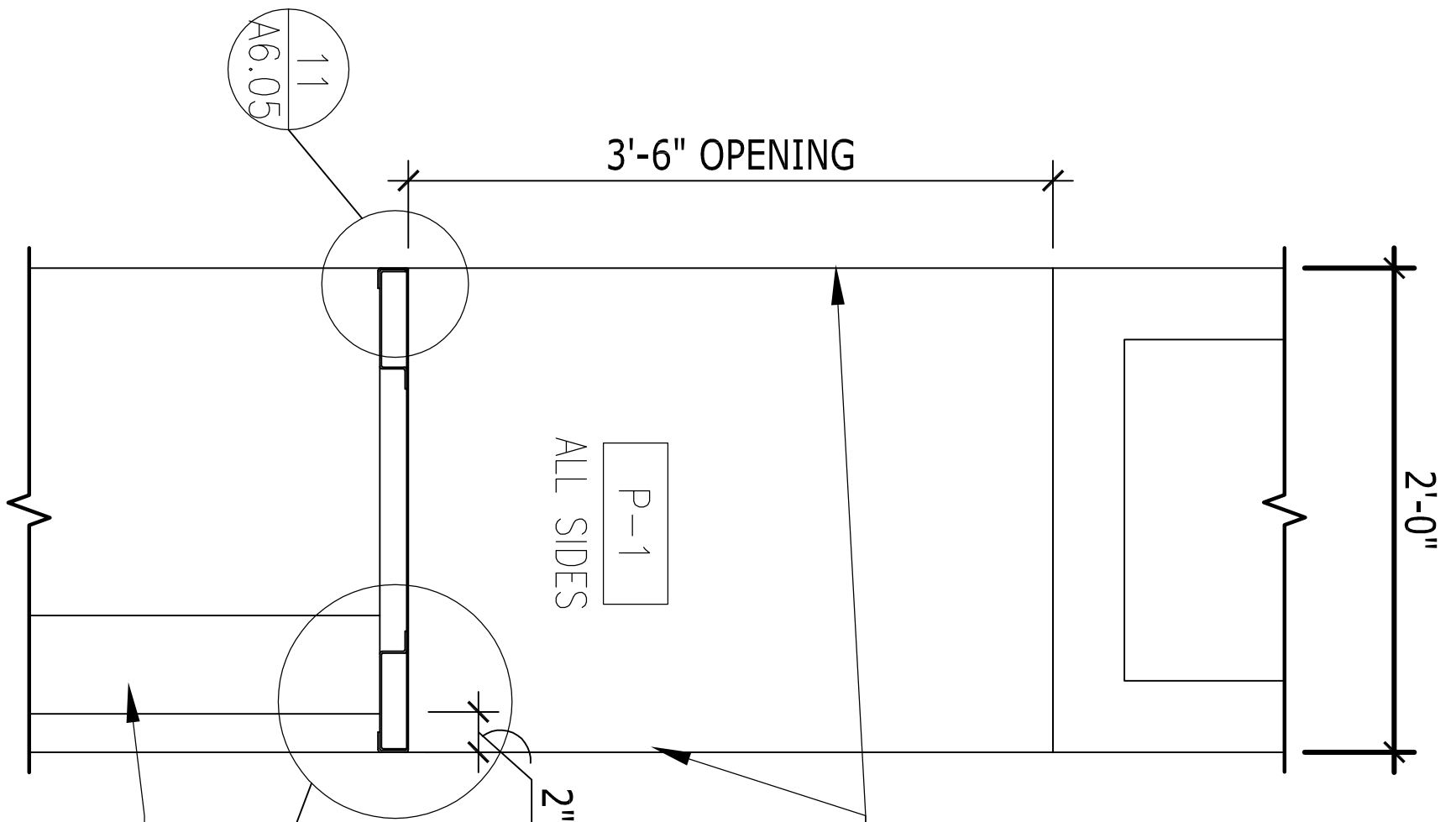
6



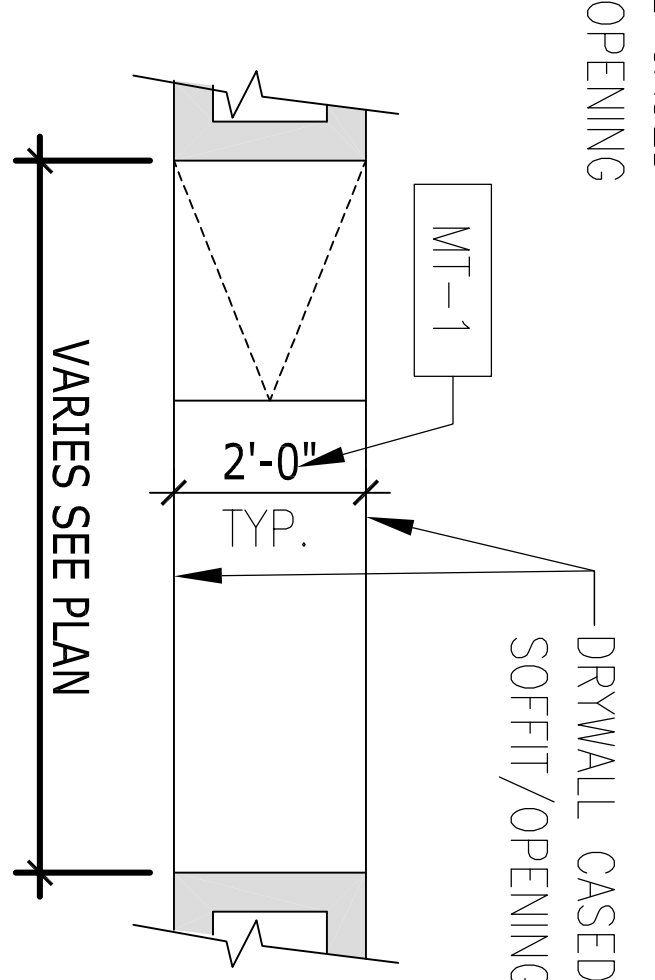
COUNTER DETAIL 11
SCALE: 3/4"



TECH PARTS COUNTER SECTION 10
SCALE: 3/4"



TECH PARTS COUNTER SECTION 9
SCALE: 3/4"



TECH PARTS COUNTER PLAN 8
SCALE: 1/4"

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INTERIOR ELEVATIONS

A06.05

PROJECT:



International Auto KIA
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ARCHITECT:

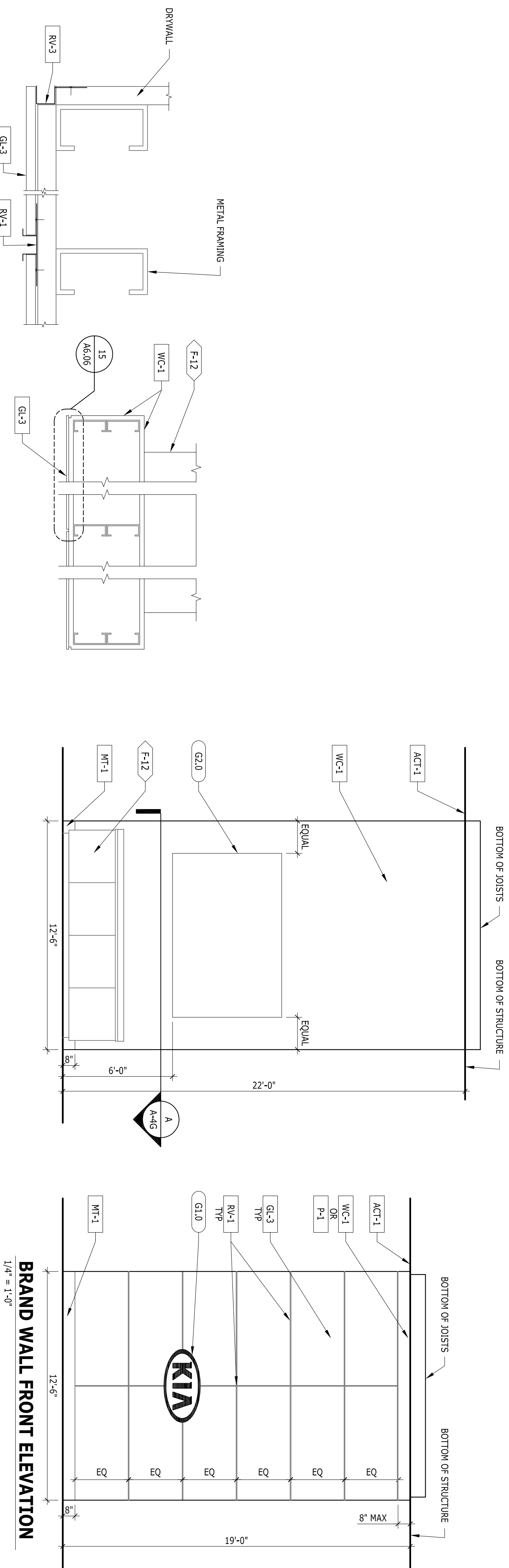
SIMON ARCHITECTURE
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STRUCTURAL ENGINE:

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Attr: Ken Meddings (Electrical)



15 BRAND WALL SECTION

14 BRAND WALL SECTION

13 INT ELEV - BRAND WALL REAR

12 INT ELEV - BRAND WALL FRONT

12 BRAND WALL FRONT ELEVATION

15 DETAIL AT BRAND WALL

14 INT ELEV - CONF ROOM

17 INT ELEV - CONF ROOM

16 INT ELEV - BREAK 209

MAR 20 2017 - DESIGN REVIEW
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MAY 10 2017 - FOR BID

INTERIOR ELEVATIONS

A06.06

PROJECT:



International Auto KIA
8821 159th Street
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Attn: Simon Yu

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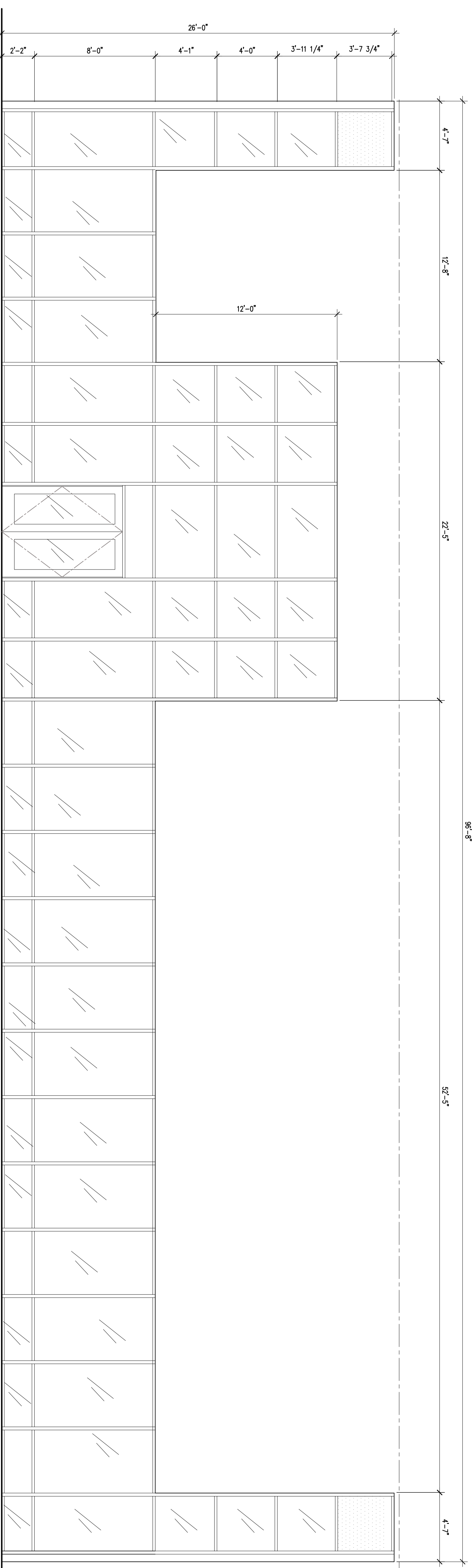
MECH / PLUMB / ELECT:

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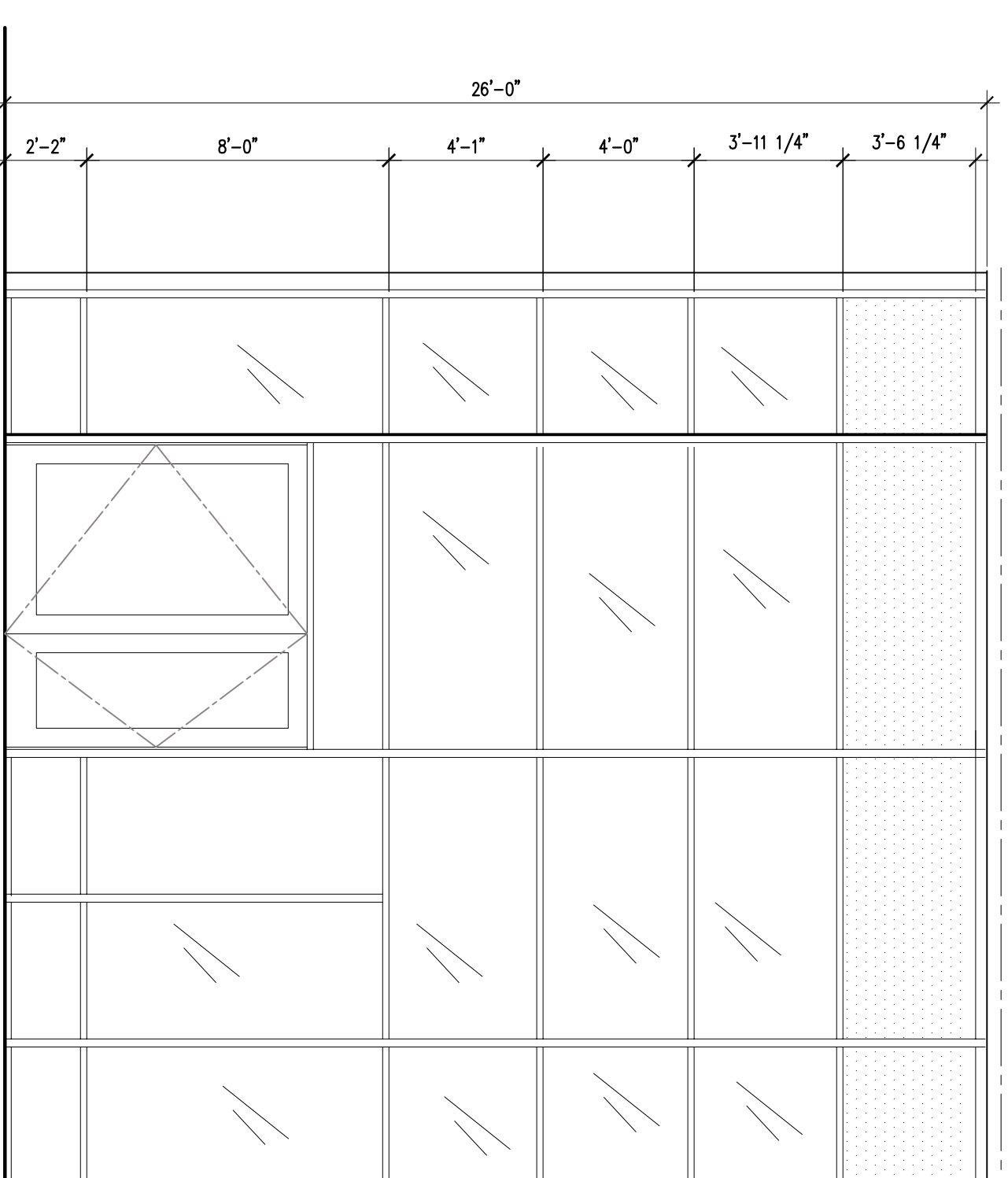
WINDOW SCHEDULE

A07.01



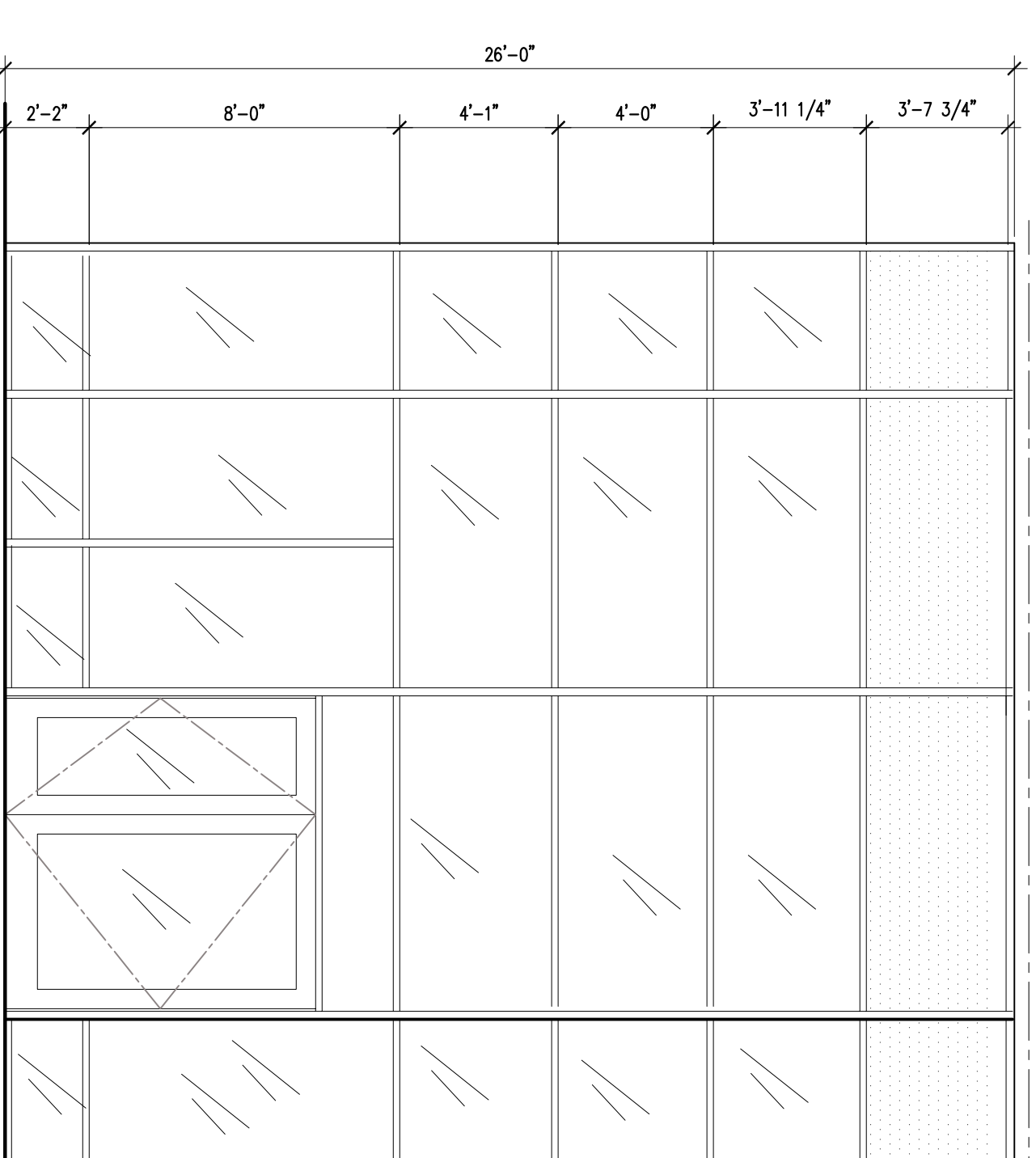
WINDOW ELEVATION
SCALE: 1/4"

SF-1 INSULATED STORMWIND W SOLARBAN 70XL
REFER TO A5103-5104 MATERIAL SCHEDULE



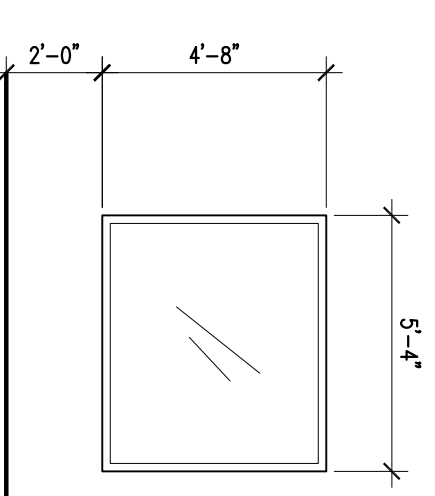
WINDOW ELEVATION
SCALE: 1/4"

SF-1 INSULATED STORMWIND W SOLARBAN 70XL
REFER TO A5103-5104 MATERIAL SCHEDULE



WINDOW ELEVATION
SCALE: 1/4"

SF-1 INSULATED STORMWIND W SOLARBAN 70XL
REFER TO A5103-5104 MATERIAL SCHEDULE



WINDOW ELEVATION
SCALE: 1/4"

SF-1 INSULATED STORMWIND W SOLARBAN 70XL
REFER TO A5103-5104 MATERIAL SCHEDULE

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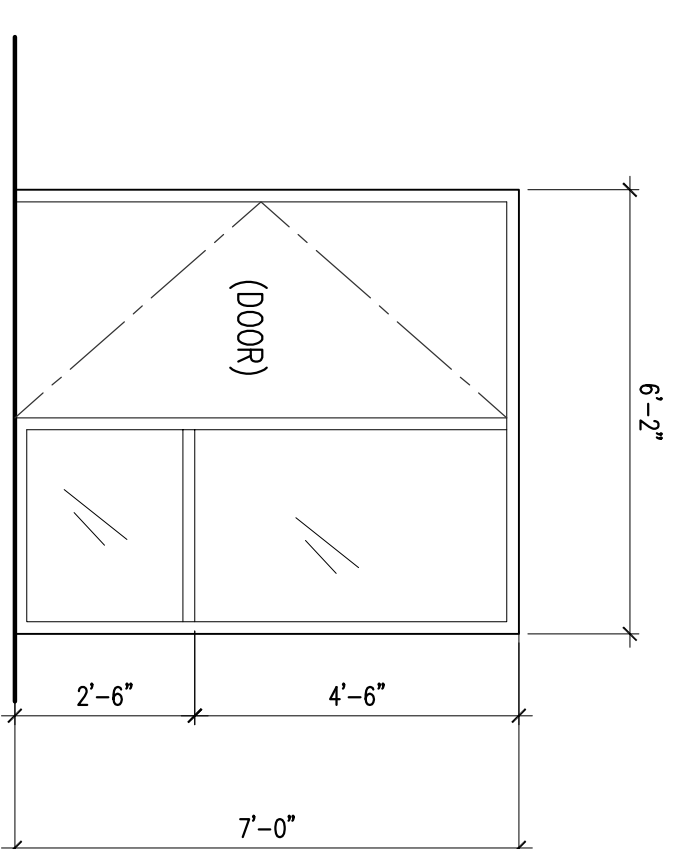
SIMON ARCHITECTURE DESIGN GROUP, LLC
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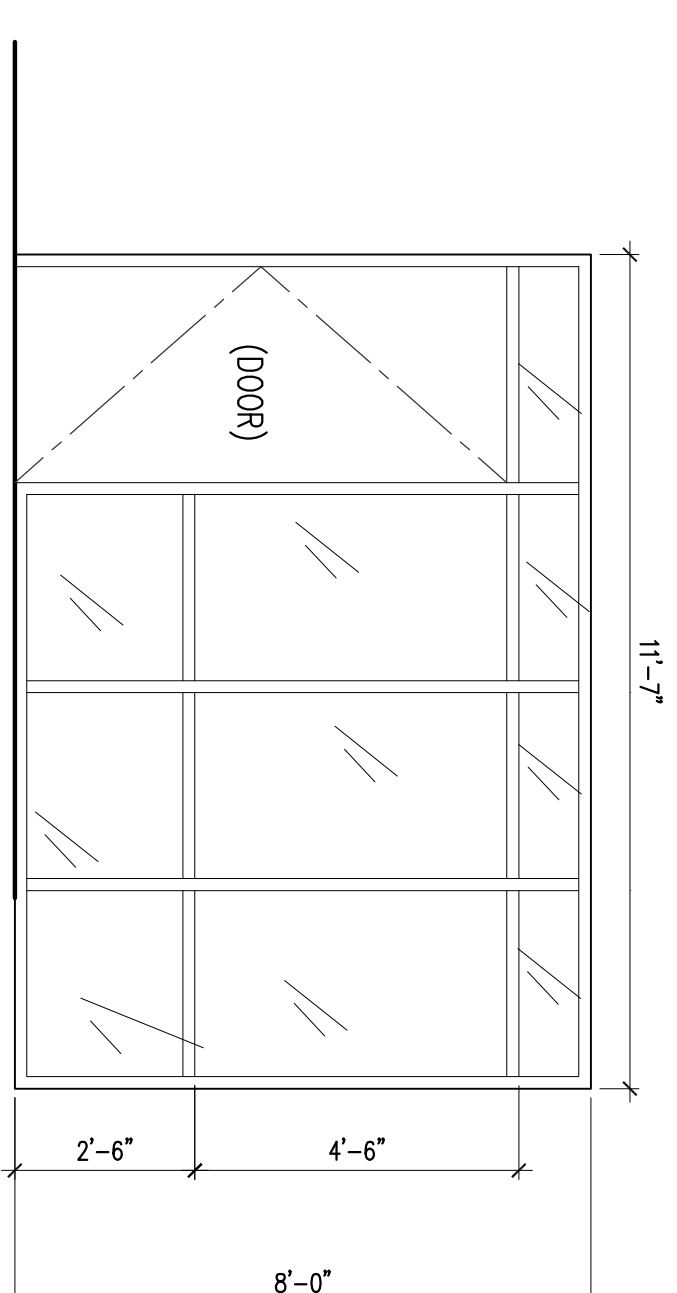
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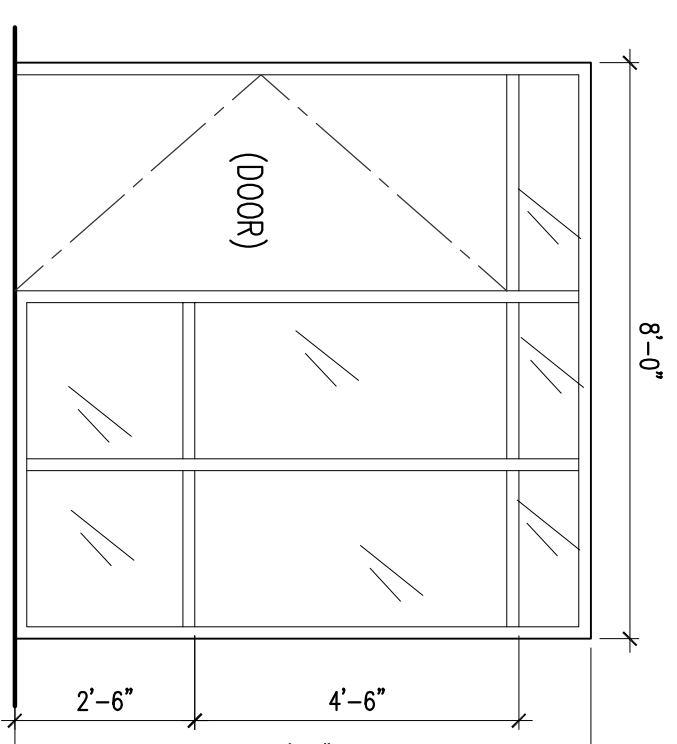
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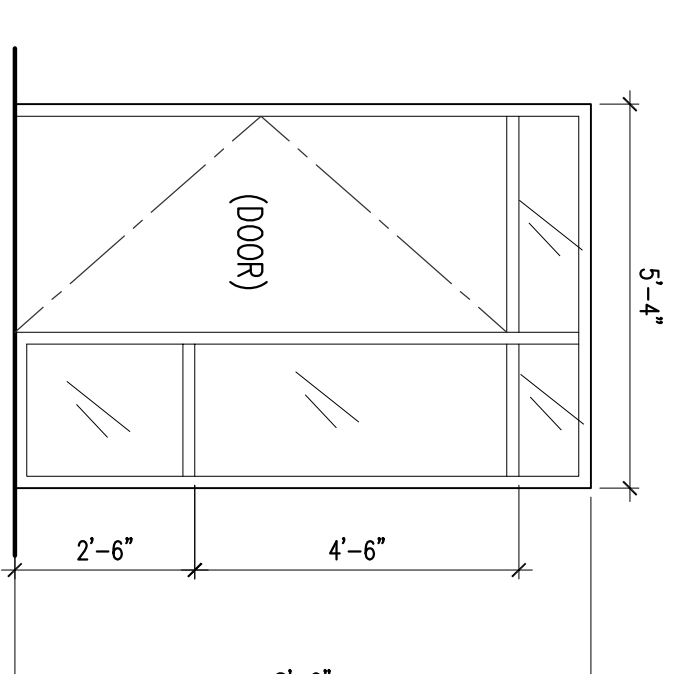
WINDOWS:
W-121A
INTERIOR STOREFRONT SYSTEM, CLEAR ANODIZED ALUMINUM, 1/4" CLEAR TEMPERED GLASS
D WINDOW ELEVATION
SCALE: 3/8"



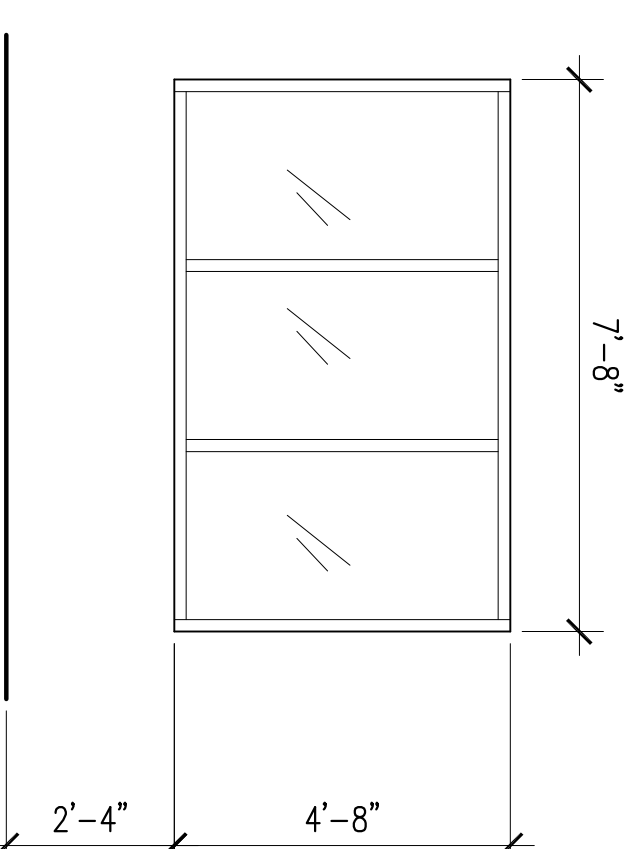
WINDOWS:
W-117
INTERIOR STOREFRONT SYSTEM, CLEAR ANODIZED ALUMINUM, 1/4" CLEAR TEMPERED GLASS
C WINDOW ELEVATION
SCALE: 3/8"



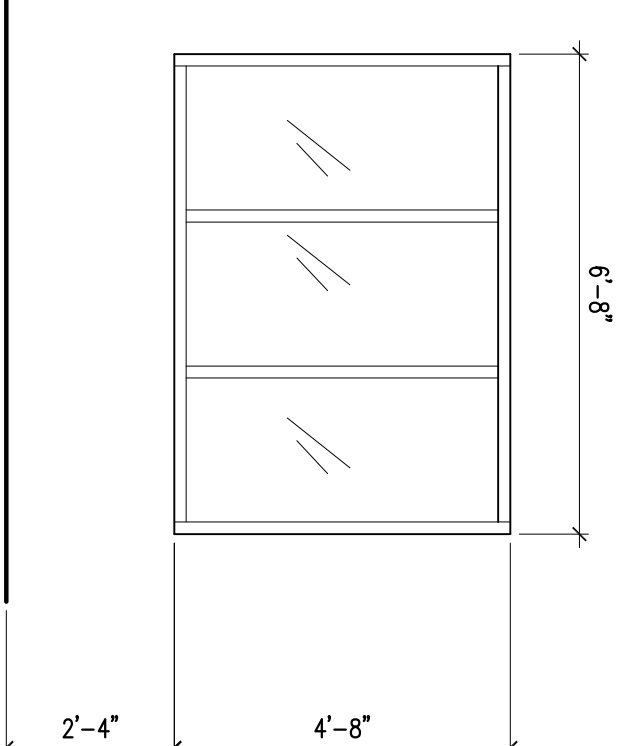
WINDOWS:
W-116
INTERIOR STOREFRONT SYSTEM, CLEAR ANODIZED ALUMINUM, 1/4" CLEAR TEMPERED GLASS
B WINDOW ELEVATION
SCALE: 3/8"



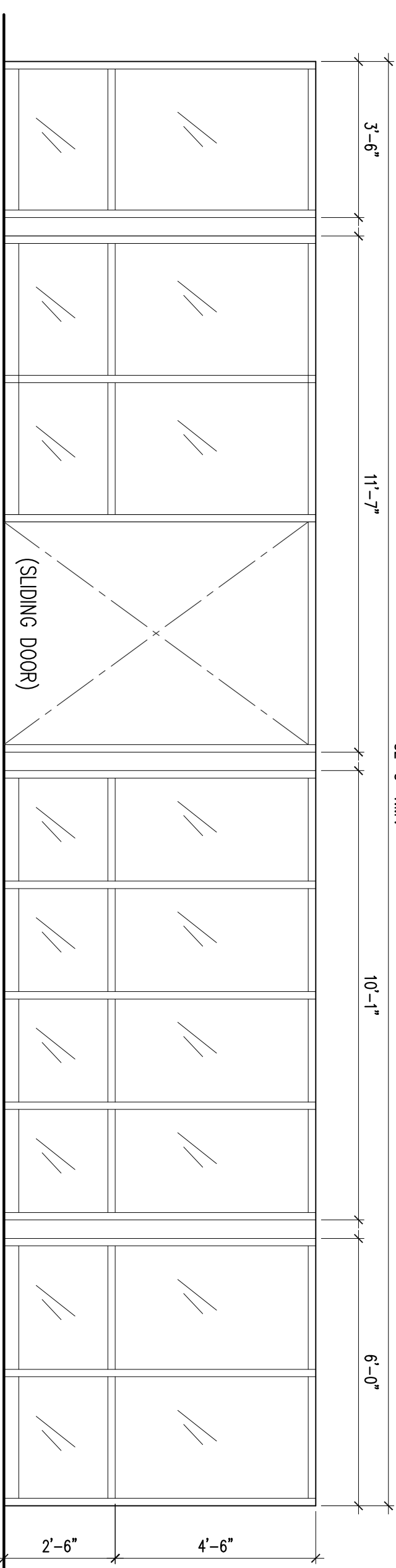
WINDOWS:
W-101
W-102
W-108
INTERIOR STOREFRONT SYSTEM, CLEAR ANODIZED ALUMINUM, 1/4" CLEAR TEMPERED GLASS
A WINDOW ELEVATION
SCALE: 3/8"



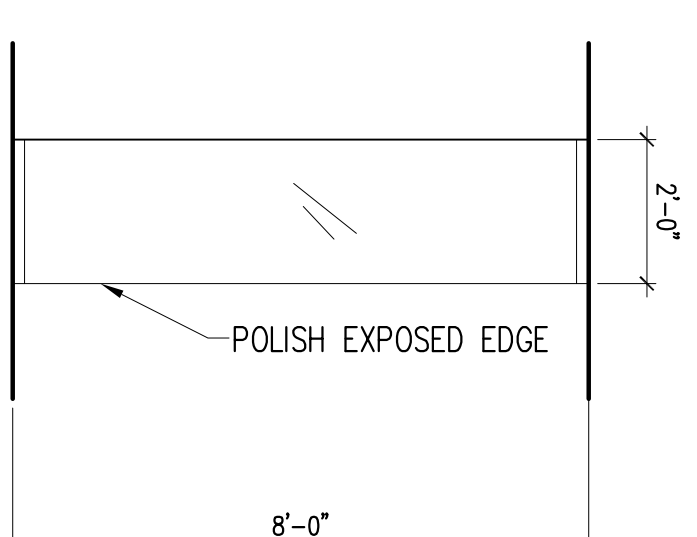
WINDOWS:
W-203A
INTERIOR STOREFRONT SYSTEM, CLEAR ANODIZED ALUMINUM, 1/4" CLEAR TEMPERED GLASS
G WINDOW ELEVATION
SCALE: 3/8"



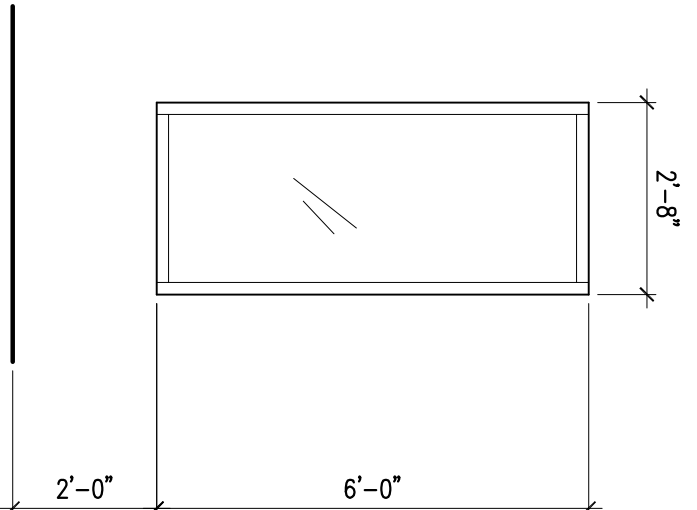
WINDOWS:
W-121B
INTERIOR STOREFRONT SYSTEM, CLEAR ANODIZED ALUMINUM, 1/4" CLEAR TEMPERED GLASS
F WINDOW ELEVATION
SCALE: 3/8"



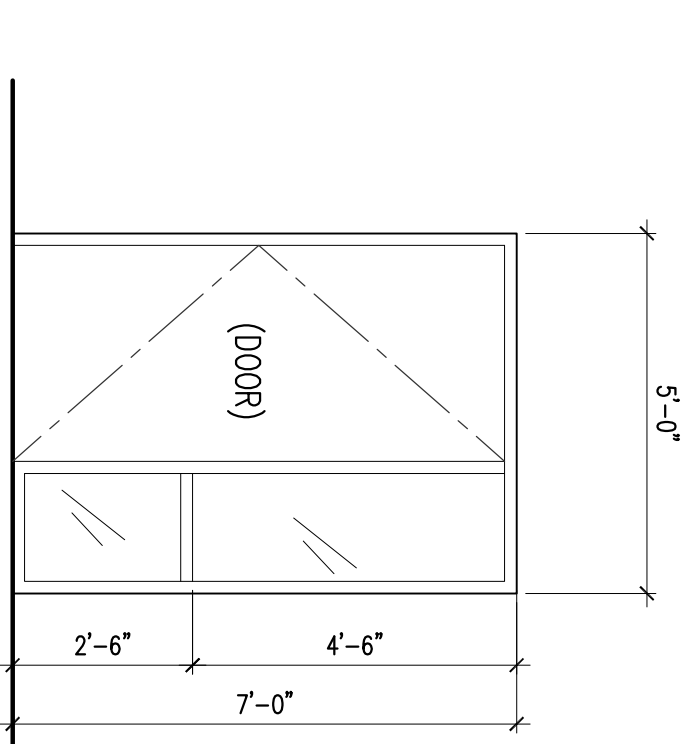
WINDOWS:
W-129A
EXTERIOR STOREFRONT SYSTEM, CLEAR ANODIZED ALUMINUM, 1" CLEAR TEMPERED GLASS
E WINDOW ELEVATION
SCALE: 3/8"



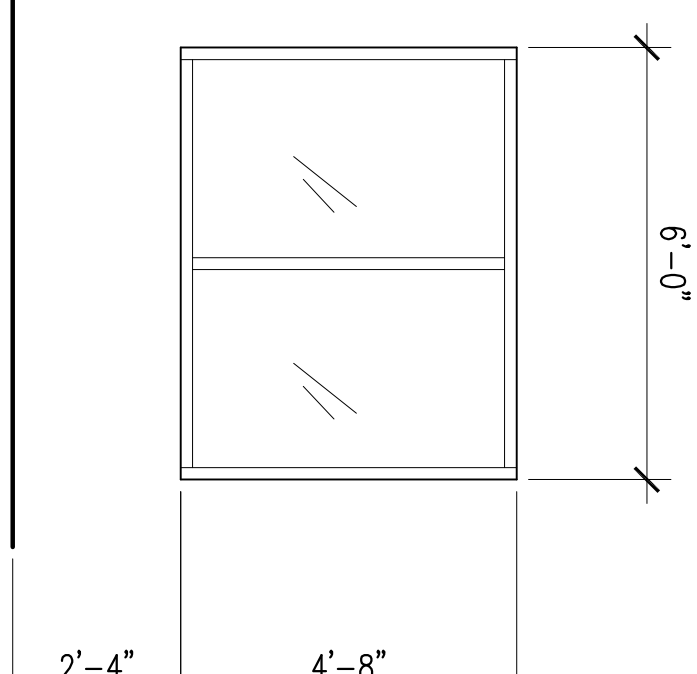
WINDOWS:
W-104A
W-104B
W-107B
W-107C
W-107D
W-108C
W-108B
W-109C
FRAMELESS WINDOW SYSTEM
1/2" TEMPERED GLASS
L WINDOW ELEVATION
SCALE: 3/8"



WINDOWS:
W-104A
W-104B
W-107B
W-107C
W-107D
W-108C
W-108B
W-109C
INTERIOR STOREFRONT SYSTEM, CLEAR ANODIZED ALUMINUM, 1/4" CLEAR TEMPERED GLASS
K WINDOW ELEVATION
SCALE: 3/8"



WINDOWS:
W-101
W-102
W-108
INTERIOR STOREFRONT SYSTEM, CLEAR ANODIZED ALUMINUM, 1/4" CLEAR TEMPERED GLASS
J WINDOW ELEVATION
SCALE: 3/8"



WINDOWS:
W-203B
INTERIOR STOREFRONT SYSTEM, CLEAR ANODIZED ALUMINUM, 1/4" CLEAR TEMPERED GLASS
H WINDOW ELEVATION
SCALE: 3/8"

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WINDOW SCHEDULE

A07.02

PROJECT:



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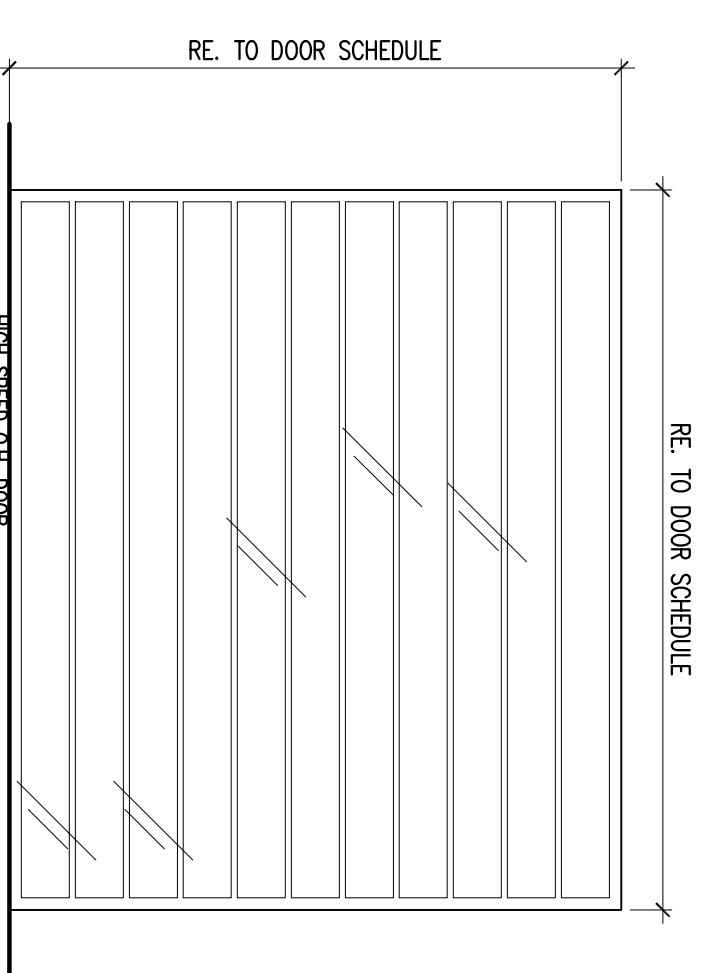
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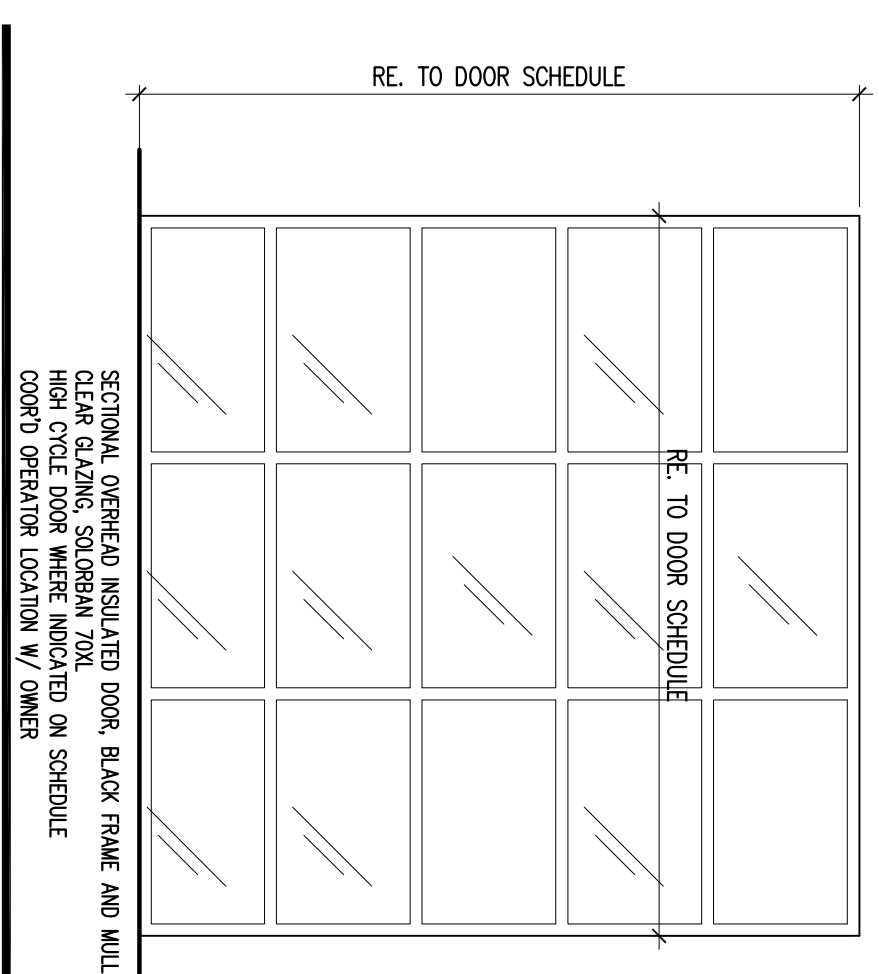
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DOOR TYPE

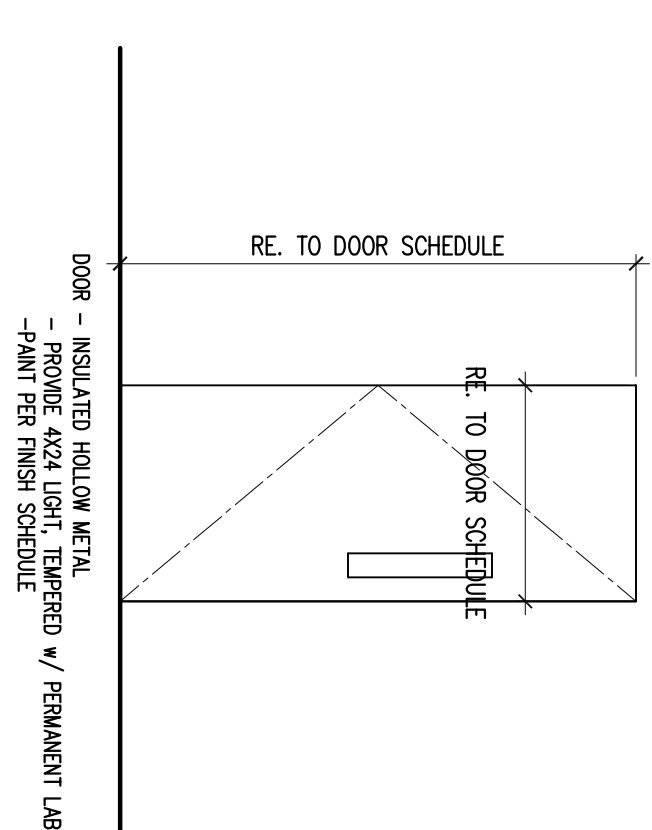
A07.03



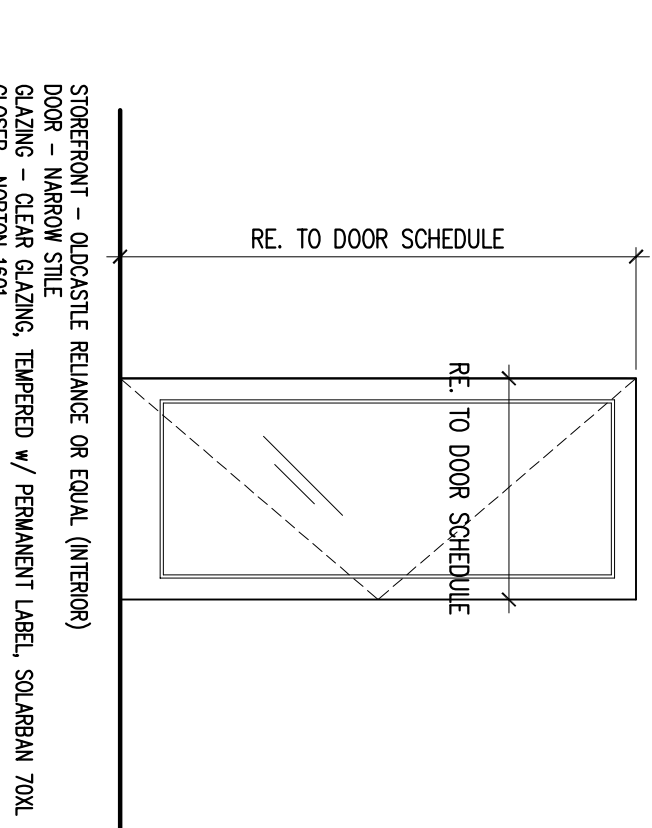
N DOOR TYPE - HIGH SPEED OH DOOR
SCALE: 1/2" = 1'-0"



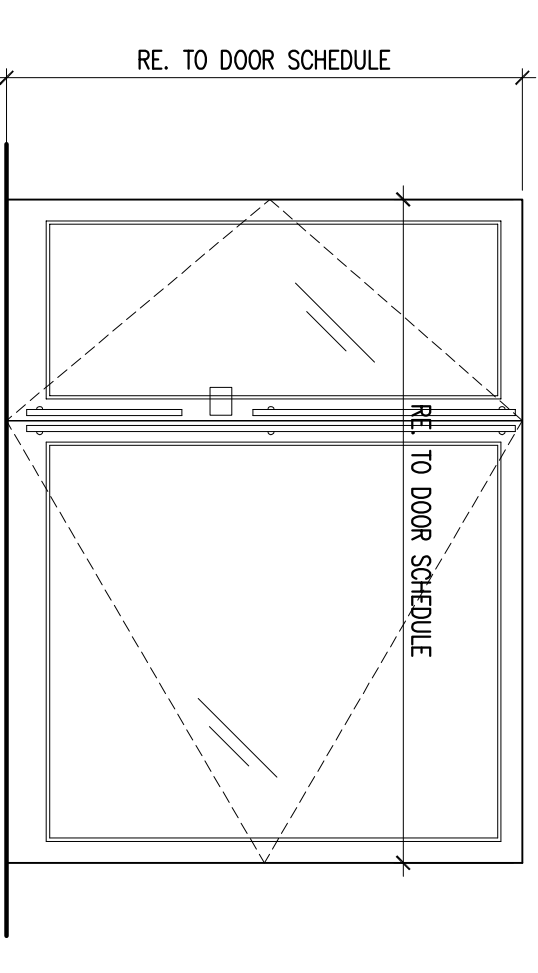
J DOOR TYPE - OH GLAZED DOOR
SCALE: 1/2" = 1'-0"



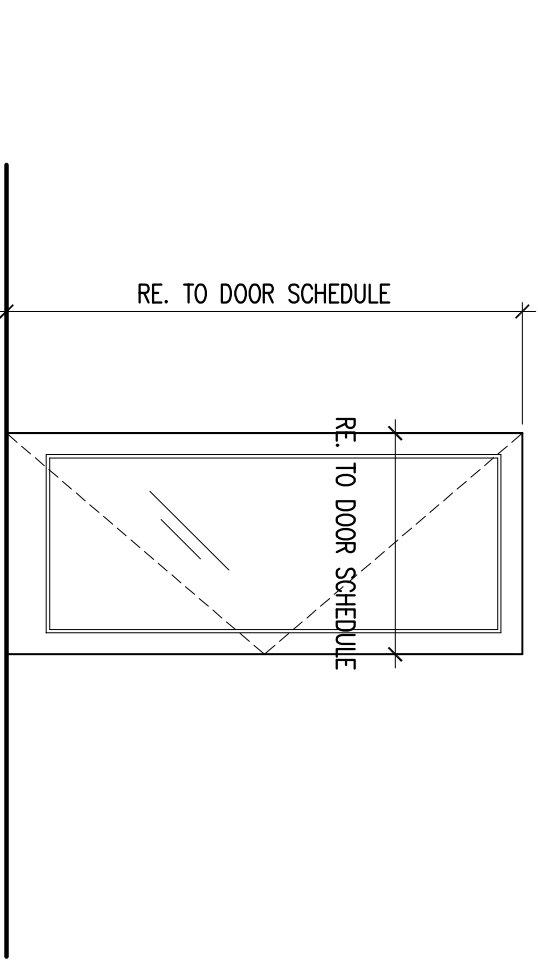
E HM DOOR W/ GLASS
SCALE: 1/2" = 1'-0"



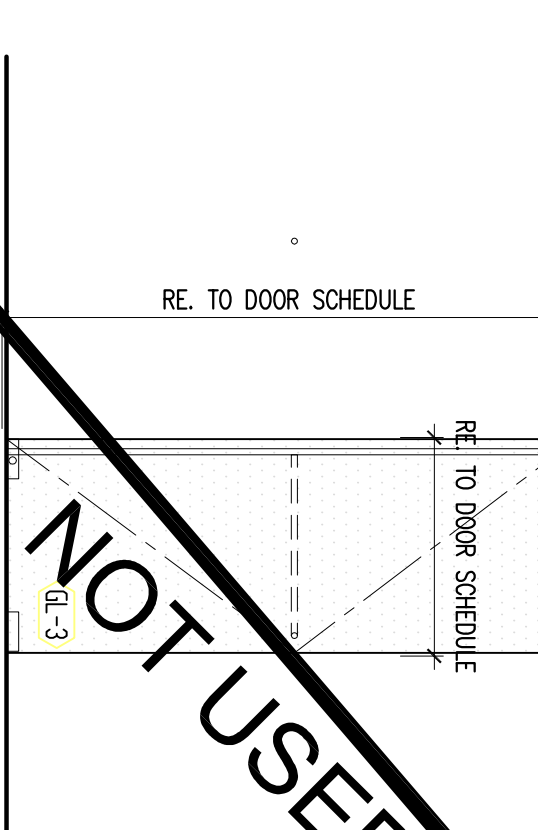
A DOOR - STOREFRONT SINGLE
SCALE: 3/8" = 1'-0"



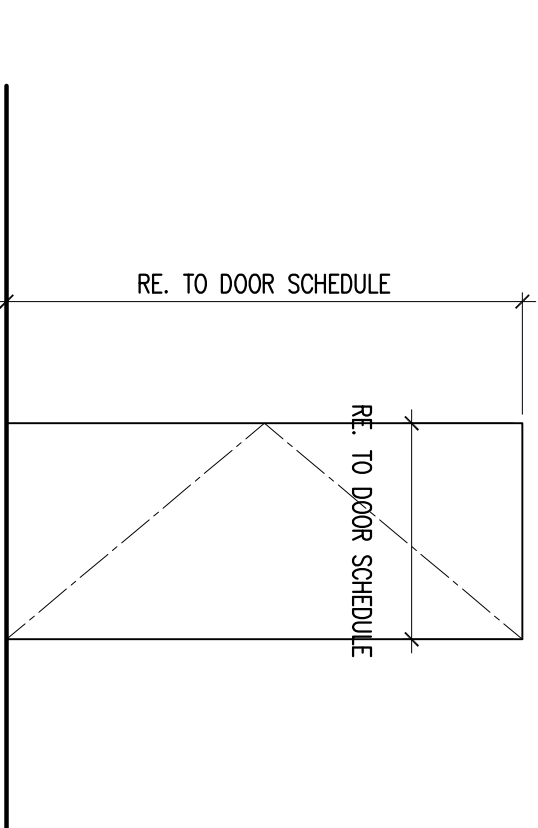
P DOOR TYPE - AUTOMOTIVE
SCALE: 1/2" = 1'-0"



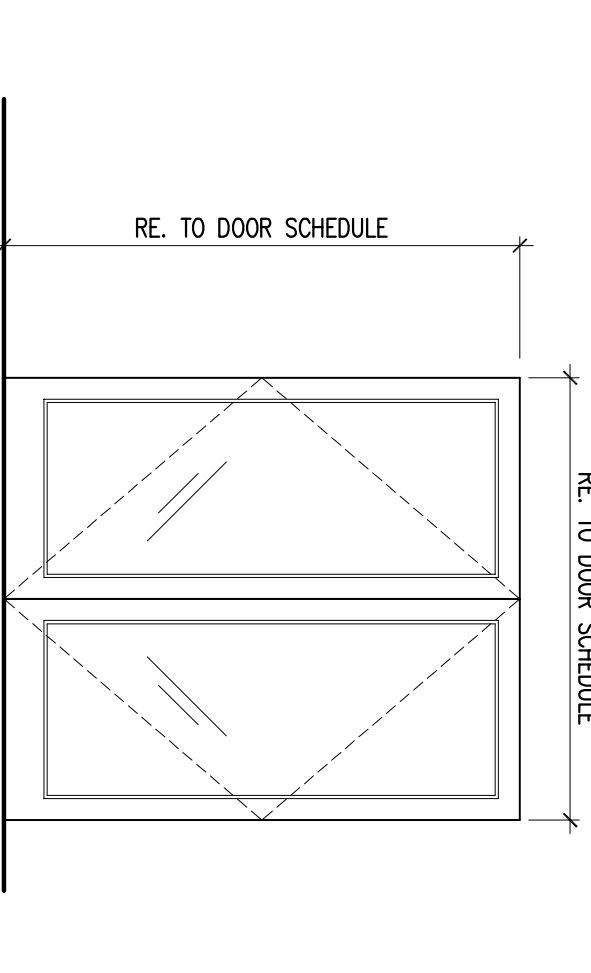
K INTERIOR STOREFRONT OFFICE
SCALE: 3/8" = 1'-0"



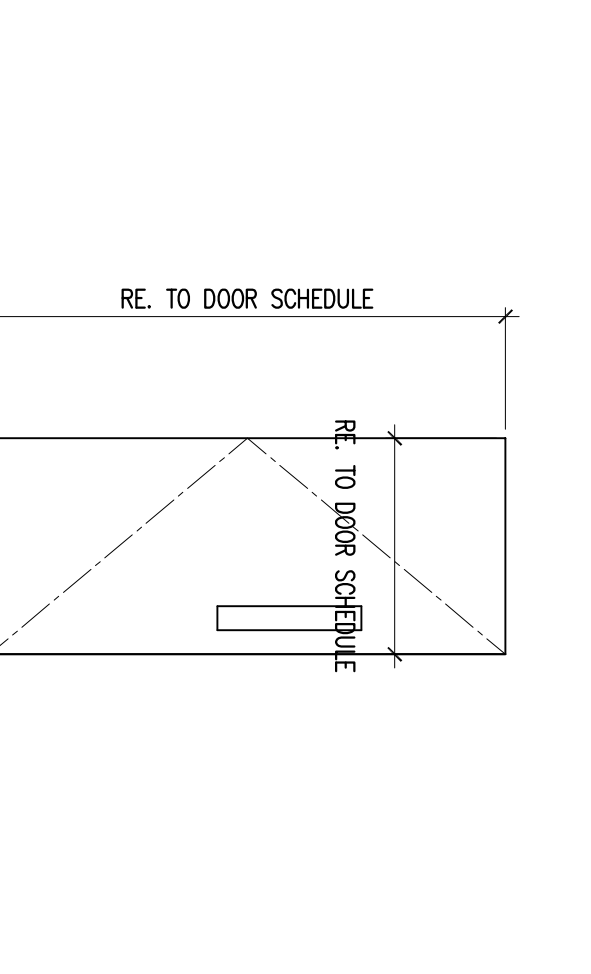
F ALL GLASS "HERCULITE" DOOR
SCALE: 3/8" = 1'-0"



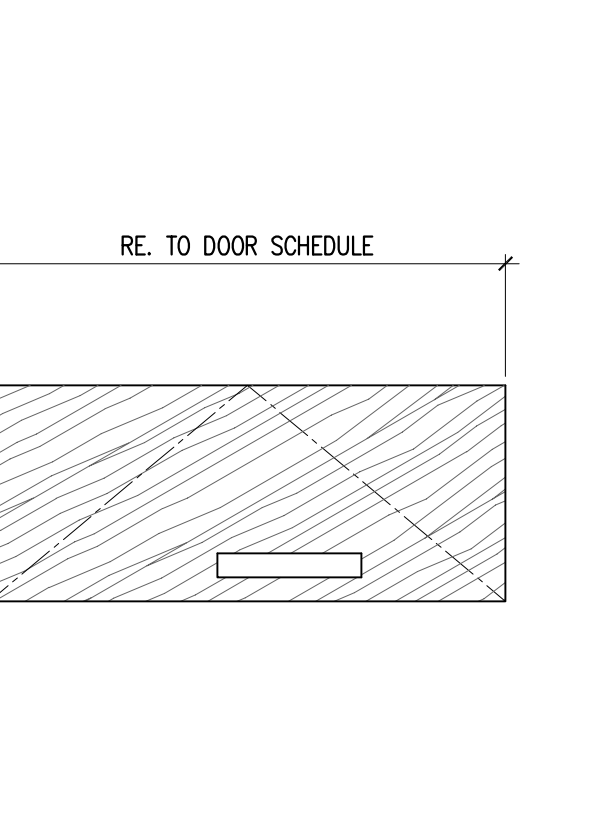
B HM DOOR - NON INSULATED
SCALE: 3/8" = 1'-0"



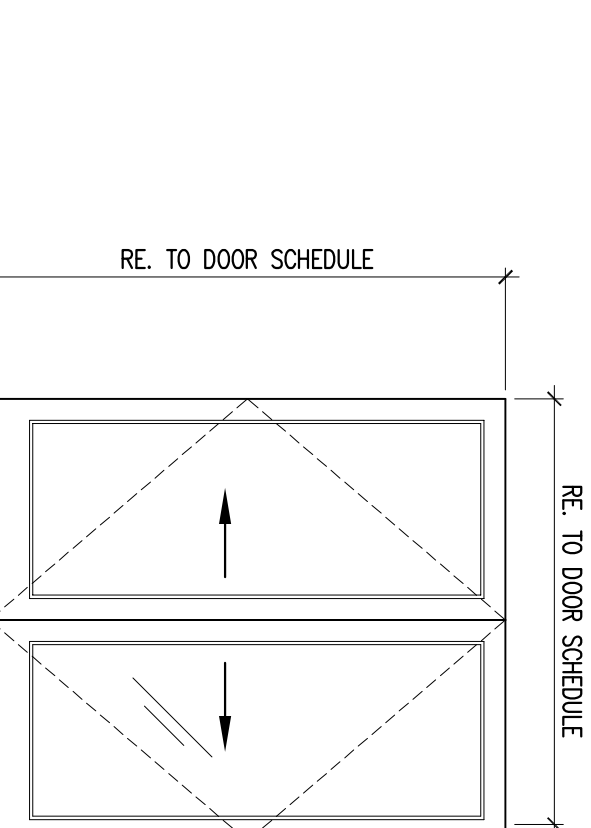
R DOOR - STOREFRONT SINGLE
SCALE: 3/8" = 1'-0"



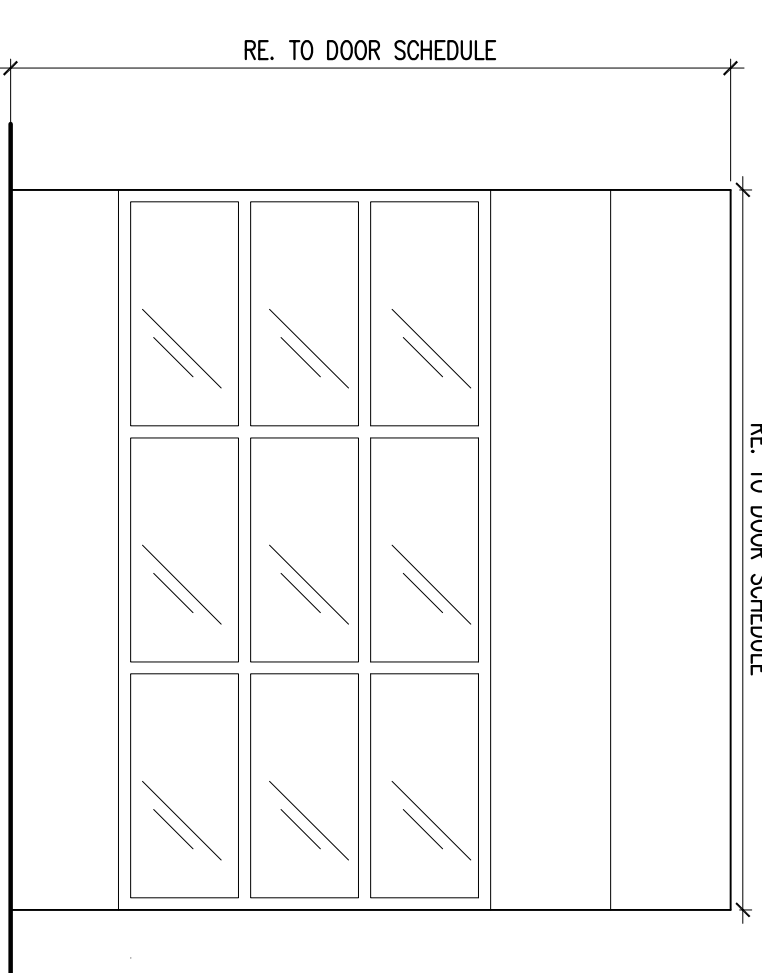
L HM DOOR W GLASS - NON-INSULATED
SCALE: 3/8" = 1'-0"



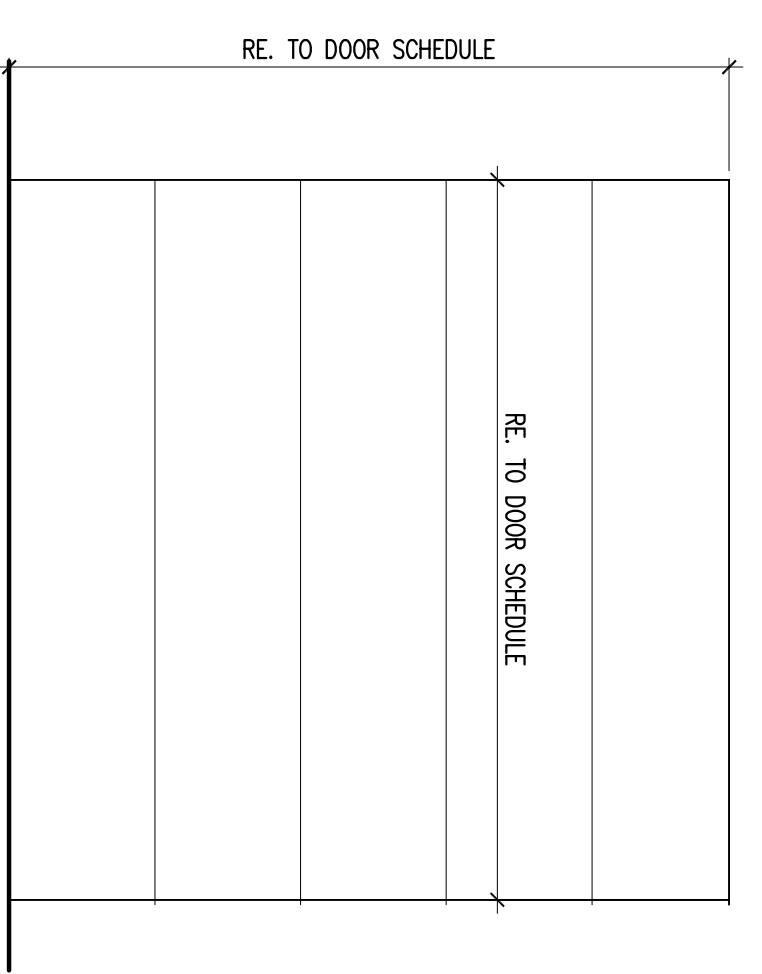
G DOOR TYPE - SOLID WOOD DOOR
SCALE: 1/2" = 1'-0"



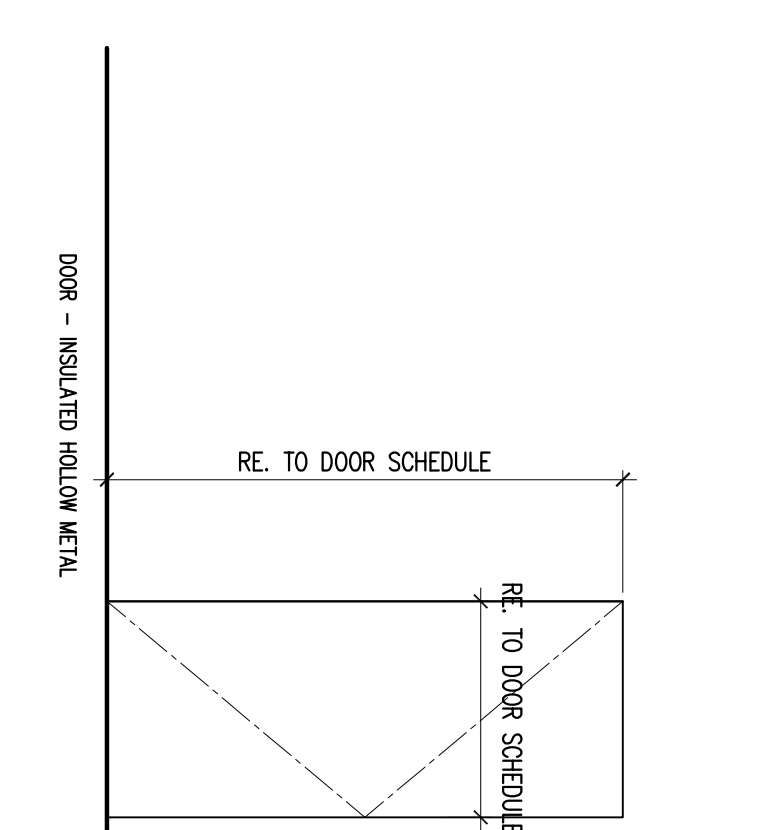
C DOOR - STOREFRONT SLIDER
SCALE: 3/8" = 1'-0"



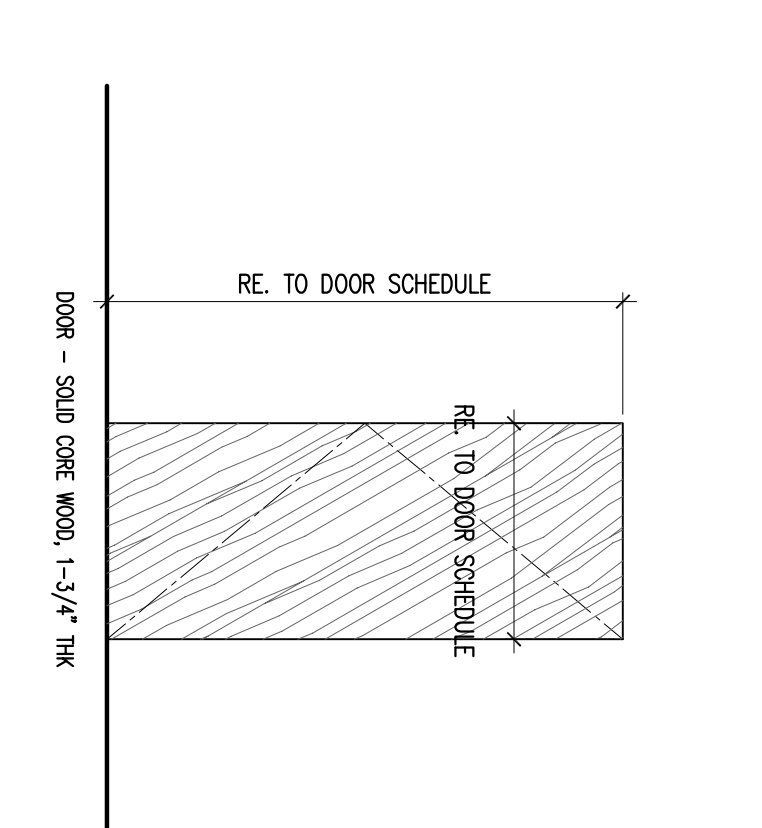
S DOOR TYPE - OH GLAZED DOOR
SCALE: 1/2" = 1'-0"



M OH DOOR - SOLID PANEL W/ VISION
SCALE: 3/8" = 1'-0"



H HM DOOR - INSULATED
SCALE: 1/2" = 1'-0"



D DOOR TYPE - SOLID WOOD DOOR
SCALE: 3/8" = 1'-0"

AUTOMOTIVE BI-FOLD DOOR - CLEAR AND/ OR ALUM FINISH
GLAZING - CLEAR GLAZING, TEMPERED W/ PERMANENT LABEL, SOLARBAN 70XL
CLOSER - NORTON 1601 ON ACTIVE LEAF
PUSH-PULL - (PAD ON ACTIVE LEAF), OR LAURENCE, LAUDER PULLS
BUTT HINGES - NORTON FINKE
FRAME - BLACK FINISH, NARROW STYLE
THRESHOLD 1/2" X 4"
RESER BLOCK - EXTRUDED ALUM BLOCK AT BOTH INACTIVE LEAF

STOREFRONT - GLASSITE RELIANCE OR EQUAL (EXTERIOR-RATED INSULATED)
DOOR - NARROW STYLE
GLAZING - CLEAR GLAZING, TEMPERED W/ PERMANENT LABEL, SOLARBAN 70XL
CLOSER - NORTON 1601
PUSH-PULL - OR LAURENCE CO. OR EQUAL, TYP LOOKING LATTER PULLS
FRAME - BLACK FINISH, NARROW STYLE
THRESHOLD 1/2" X 4"

DOOR HINGES -
LAURENCE CO. OR EQUAL
AS TYP LOOKING LAUDER PULLS
AT PULL, USE ORL PAINC PAINO OR EQ.

NOT USED

DOOR - NON-INSULATED HOLLOW METAL

STOREFRONT - GLASSITE RELIANCE OR EQUAL (EXTERIOR-RATED INSULATED)
DOOR - NARROW STYLE
GLAZING - CLEAR GLAZING, TEMPERED W/ PERMANENT LABEL, SOLARBAN 70XL
CLOSER - NORTON 1601
PUSH-PULL - OR LAURENCE CO. OR EQUAL, TYP LOOKING LATTER PULLS
FRAME - BLACK FINISH, NARROW STYLE
THRESHOLD 1/2" X 4"

DOOR - HOLLOW METAL
- PROVIDE 4X24 LIGHT, TEMPERED W/ PERMANENT LABEL

DOOR - SOLID CORE WOOD, 1-3/4" THK

SELF SPRINGING SLIDER DOOR
- CLEAR ANODIZED STOREFRONT
- BREAK-AWAY FUNCTION FOR EMERGENCY EGRESS
- TEMPERED GLAZING

SECTIONAL OVERHEAD INSULATED DOOR, BLACK FRAME AND MILLIONS
CLEAR GLAZING, SOLARBAN 70XL
HIGH CYCLE DOOR WHERE INDICATED ON SCHEDULE
COORD OPERATOR LOCATION W/ OWNER

CLEAR GLAZING
HIGH CYCLE DOOR
COORD OPERATOR LOCATION W/ OWNER

DOOR - INSULATED HOLLOW METAL

DOOR - SOLID CORE WOOD, 1-3/4" THK

GENERAL

- G1. CODES AND STANDARDS: INTERNATIONAL BUILDING CODE 2012, WITH LOCAL AMENDMENTS ASCE 7-10 AMERICAN SOCIETY OF CIVIL ENGINEERS, MINIMUM DESIGN LOADS ACI AMERICAN CONCRETE INSTITUTE, LATEST EDITION AISC AMERICAN INSTITUTE OF STEEL CONSTRUCTION, LATEST EDITION AWS AMERICAN WELDING SOCIETY, LATEST EDITION SDI STEEL DECK INSTITUTE, LATEST EDITION ASTM AMERICAN SOCIETY OF TESTING AND MATERIALS ANSI AMERICAN NATIONAL STANDARD INSTITUTE
- G2. DESIGN LOADS:
- SECOND FLOOR DEAD LOAD:**
 JOIST: 5 PSF
 MEP/MISC: 5 PSF
 1-1/2" METAL DECK + 2.5" CONCRETE: 48 PSF
 CEILING: 3 PSF
- FLOOR LIVE LOAD:**
 MEZZANINE OFFICE: 200 PSF
 OFFICE: 100 PSF
- ROOF DEAD LOAD:**
 JOIST: 5 PSF
 INSULATION: 2 PSF
 MISC/MECH: 5 PSF
 MEMBRANE: 3 PSF
 METAL DECK: 2 PSF
 CEILING: 3 PSF
- ROOF LIVE LOAD:** 20 PSF
- ROOF SNOW LOAD:**
 GROUND SNOW LOAD: 30 PSF
 FLAT ROOF SNOW LOAD: 25 PSF
 SNOW EXPOSURE FACTOR, C_e: 1.0
 SNOW LOAD IMPORTANCE FACTOR, I: 1.0
 THERMAL FACTOR, C_t: 1.0
- WIND DESIGN CRITERIA:**
 BASIC WIND SPEED: 115 MPH
 RISK CATEGORY: II
 WIND LOAD IMPORTANCE FACTOR: 1.0
 WIND EXPOSURE - MWFRS: B
 WIND EXPOSURE - COMPONENTS & CLADDING: B
 INTERNAL PRESSURE COEFFICIENT: +/- 0.18
 EXTERNAL PRESSURE COEFFICIENT - MWFRS: +/- 0.8/-0.5
 EXTERNAL PRESSURE COEFFICIENT - C&C: +/- 0.8/-0.5
 NET UPLIFT ON JOISTS: 15 PSF NET (MIN)
- BUILDING MAIN WINDFORCE-RESISTING SYSTEM DATA:**
 NET UPLIFT ON TRUSSES: PER ASCE 7-10
 INTERNAL PRESSURE COEFFICIENT: +/- 0.18
 EXTERNAL PRESSURE COEFFICIENT: +/- 0.8/-0.5
- EARTHQUAKE DESIGN DATA:**
 RISK CATEGORY: II
 SEISMIC IMPORTANCE FACTOR, I_e: 1.0
 SEISMIC USE GROUP: GROUP 1
 SPECIAL RESPONSE COEFFICIENTS:
 S_s: 0.151 g
 S₁: 0.067 g
 S_{ds}: 0.161 g
 S_{d1}: 0.107 g
- SITE CLASS: D
 SEISMIC DESIGN CATEGORY: C
 BASIC SEISMIC-FORCE RESISTING SYSTEM: INTERNAL SHEAR WALLS
 SEISMIC RESPONSE COEFFICIENT, C_s: 0.08
 DESIGN BASE SHEAR: 65 KIPS
 RESPONSE MODIFICATION COEFFICIENT, R: 2
 ANALYSIS PROCEDURE: EQUIV. LATERAL FORCE PROCEDURE
- G3. DIMENSIONS ON STRUCTURAL DRAWINGS ARE TO BE CHECKED AGAINST ARCHITECTURAL, MECHANICAL, AND ELECTRICAL DRAWINGS AS WELL AS AGAINST FIELD CONDITIONS BY CONTRACTORS.
- G4. UNLESS NOTED OTHERWISE, DETAILS, SECTIONS, AND NOTES ON THE DRAWINGS ARE INTENDED TO BE TYPICAL FOR SIMILAR CONDITIONS.
- G5. THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING THE LOCATION AND PLACEMENT OF INSERTS, HANGERS, SLEEVES, DUCTWORK, PADS, AND ANCHOR RODS THAT ARE REQUIRED BY MECHANICAL EQUIPMENT
- G6. IF DISCREPANCIES APPEAR ON THE CONTRACT DOCUMENTS, OR BETWEEN THE CONTRACT DOCUMENTS AND EXISTING CONDITIONS, THE CONTRACTOR SHALL REQUEST AN INTERPRETATION FROM THE ARCHITECT BEFORE BIDDING. IF THE CONTRACTOR FAILS TO MAKE SUCH REQUEST, IT IS PRESUMED THAT BOTH PROVISIONS WERE INCLUDED IN THE BID AND THE ARCHITECT SHALL DETERMINE WHICH OF THE CONFLICTING REQUIREMENTS SHALL GOVERN. THE CONTRACTOR SHALL PERFORM THE WORK AT NO ADDITIONAL COST TO THE OWNER IN ACCORDANCE WITH THE ARCHITECT'S DETERMINATION.

FOUNDATIONS

- F1. ALL SOIL SUPPORTED FOOTINGS SHALL BE FOUNDED UPON UNDISTURBED, NATURAL SOIL SUBGRADE OR ON TESTED AND APPROVED FILL WITH A MINIMUM NET ALLOWABLE BEARING CAPACITY OF 3000 PSF AS INDICATED ON THE ORIGINAL STRUCTURAL DRAWINGS DATED OCT. 19, 1988 AND AS FIELD VERIFIED AND APPROVED BY THE OWNER'S SOIL TESTING LABORATORY. THE FOOTING ELEVATIONS AND SOIL BEARING CAPACITIES AS SHOWN ON THE DRAWINGS ARE ESTIMATED FROM THE SOIL BORING DATA. FINAL, EXACT ELEVATIONS AND SOIL BEARING CAPACITIES SHALL BE FIELD DETERMINED AND VERIFIED BY THE OWNER'S SOIL TESTING LABORATORY AND REVIEWED BY THE ARCHITECT/ENGINEER DURING CONSTRUCTION.
- F2. THE SOIL SUBGRADE FOR ALL FOOTINGS AND SLABS SHALL BE INSPECTED AND APPROVED BY THE OWNER'S TESTING LABORATORY IMMEDIATELY PRIOR TO PLACING CONCRETE.
- F3. ALL FOOTING AND SLAB SUBGRADES, INCLUDING PIT SLABS, SHALL BE COMPACTED TO 95 PERCENT OF STANDARD PROCTOR (ASTM D698) MAXIMUM DENSITY AT OPTIMUM MOISTURE CONTENT.
- F4. ALL ORGANIC AND/OR OTHER UNSUITABLE MATERIALS SHALL BE REMOVED FROM SUBGRADE AND BACK FILL AREAS AND BACKFILLED WITH SELECT FILL (DOT CA6 GRADATION), COMPACTED TO 98 PERCENT OF STANDARD PROCTOR (ASTM D698) MAXIMUM DENSITY AT OPTIMUM MOISTURE CONTENT.
- F5. DO NOT UNDERMINE EXISTING CONSTRUCTION.
- F6. PLACE BACKFILL SIMULTANEOUSLY ON BOTH SIDES OF FOUNDATION WALLS.
- F7. NO MUD SLABS, FOOTINGS, OR SLABS SHALL BE PLACED ONTO OR AGAINST SUBGRADE CONTAINING FREE WATER, FROST, OR ICE.
- F8. THE CONTRACTOR SHALL PROVIDE ALL NECESSARY MEASURES TO PREVENT ANY FROST OR ICE FROM PENETRATING ANY FOOTING OR SLAB SUBGRADE BEFORE AND AFTER PLACING OF CONCRETE UNTIL SUCH SUBGRADES ARE FULLY PROTECTED BY THE PERMANENT BUILDING STRUCTURE. SUCH PROTECTION IS ADDITIONAL SCOPE.
- F9. THE CONCRETE FOR EACH ISOLATED FOOTING SHALL BE PLACED IN ONE (1) CONTINUOUS PLACEMENT.
- F10. ALL PERIMETER WALL AND COLUMN FOOTINGS SHALL BEAR A MINIMUM OF 3'-6" BELOW FINISHED GRADE.
- CONCRETE**
- C1. ALL CONCRETE WORK INCLUDING FORMING, REINFORCING, MIXING, PLACING, FINISHING AND CURING SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE AMERICAN CONCRETE INSTITUTE (ACI) MANUAL OF CONCRETE PRACTICE INCLUDING "BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE", ACI 318 AND "SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDING", ACI 301, AND ALL STANDARDS REFERENCED THEREIN.
- C2. UNLESS NOTED OTHERWISE, CONCRETE SHALL BE NORMAL WEIGHT CONCRETE AND SHALL DEVELOP 3500 PSI MINIMUM COMPRESSIVE STRENGTH IN 28 DAYS. SEE TABLE BELOW FOR OTHER MIX DESIGN PARAMETERS.
- C3. VERTICAL WALL CONSTRUCTION JOINTS SHALL BE FORMED WITH VERTICAL BULKHEADS AND KEYWAYS. WALL REINFORCING SHALL BE CONTINUOUS THROUGH THE JOINT OR SHALL BE DOWELED WITH AN EQUIVALENT AREA OF REINFORCEMENT.
- C4. NO SLAB SHALL HAVE COLD JOINTS IN A HORIZONTAL PLANE.
- C5. THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING THE LOCATION AND PLACEMENT OF INSERTS, EMBEDDED PLATES, MASONRY ANCHORS, REGLETS, SLEEVES, DUCTWORK, PADS, AND ANCHOR RODS. THE INSERTS, EMBEDDED PLATES, ETC. SHALL NOT INTERFERE WITH CONCRETE REINFORCEMENT LOCATION.
- C6. NO OPENING SHALL BE MADE IN ANY STRUCTURAL MEMBER WITHOUT THE WRITTEN APPROVAL OF THE ARCHITECT.
- C7. EXPOSED EXTERNAL CONCRETE CORNERS SHALL BE CHAMFERED 3/4 INCHES, UNLESS SHOWN OR NOTED OTHERWISE.
- C8. SLABS ON GRADE SHALL BE PLACED IN ALTERNATE STRIPS WITH A MAXIMUM WIDTH OF 40'-0" OR AS SHOWN ON PLAN. CONTROL JOINTS SHALL BE CUT WITHIN 24 HOURS AFTER THE CONCRETE HAS SET. CONTROL JOINTS SHALL NOT EXCEED 15'-0" INTERVALS IN EACH DIRECTION, AND SHALL BE LOCATED TO CONFORM WITH BAY SPACING WHEREVER POSSIBLE (I.E. AT COLUMN CENTERLINES, HALF-BAYS, THIRD-BAYS).
- C9. CONTRACTOR TO SUBMIT:
 • CONCRETE MIX DESIGN FOR EACH CONCRETE MIXTURE.
- C10. THE OWNER WILL ENGAGE A QUALIFIED INDEPENDENT TESTING AND INSPECTING AGENCY TO PERFORM FIELD TESTS AND INSPECTION AND PREPARE TEST REPORTS IN ACCORDANCE WITH ACI 301.

CONCRETE MIX						
LOCATION	UNIT WEIGHT (P.C.F.)	F'c PSI 28 DAYS	MAX. W/C RATIO	MAX SLUMP (INCHES)	TOTAL AIR CONTENT +/- 1 1/2%	MIN. / MAX. AGGREGATE SIZE
FOOTINGS	145	3,500	0.45	4	N.A.	3/4" / 1"
WALLS (U.N.O.)	145	4,000	0.45	3*	6%	3/4" / 1"
COLUMN PIERS	145	4,000	0.45	3*	6%	3/4" / 1"
INTERIOR SLAB-ON-GRADE	145	4,000**	0.45	4	3% MAX	3/4" / 1"
EXTERIOR SLAB-ON-GRADE	145	4,500	0.45	4	7%	3/4" / 1"

* PRIOR TO ADDING SUPERPLASTICIZER
 ** CONCRETE FOR INTERIOR SLAB-ON-GRADE
 MIN CEMENT CONTENT = 517 PCY
 COARSE AGGREGATE SIZE = #67 (3/4")
 FLEXURAL STRENGTH @ 28 DAYS (MODULUS OF RUPTURE) = 700PSI
 FINE AGGREGATE SHALL NOT EXCEED 45% OF TOTAL AGGREGATE BY WEIGHT
 USE OF FLY ASH ON SLAB-ON-GRADE IS PROHIBITED

REINFORCEMENT

- R1. UNLESS NOTED OTHERWISE, REINFORCEMENT SHALL CONFORM TO ASTM SPECIFICATION A615, GRADE 60.
- R2. UNLESS NOTED OTHERWISE, WELDED WIRE FABRIC SHALL CONFORM TO ASTM SPECIFICATION ASTM A 185, WELDED STEEL WIRE FABRIC.
- R3. CORNER BARS SHALL BE PROVIDED AT WALL CORNERS EQUAL TO THE HORIZONTAL WALL REINFORCEMENT.
- R4. ALL CONCRETE FORMED SLAB OR WALL OPENINGS SHALL BE REINFORCED WITH 2 NO. 5 BARS PLACED ONE IN EACH FACE AT 45 DEGREES TO OPENING CORNERS.
- R5. THE FOLLOWING CONCRETE COVER SHALL BE PROVIDED FOR REINFORCEMENT UNLESS NOTED OTHERWISE:
- | MINIMUM CONCRETE PROTECTION FOR REINFORCEMENT | |
|---|---|
| CONCRETE ELEMENT | MIN. COVER (IN.) |
| CONCRETE CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH | 3" |
| CONCRETE EXPOSED TO EARTH OR WEATHER: | |
| #6 THROUGH #18 BARS | 2" |
| #5 BAR, W31 OR D31 WIRE, AND SMALLER | 1-1/2" |
| CONCRETE NOT EXPOSED TO WEATHER OR IN CONTACT WITH GROUND | |
| SLABS, WALLS AND JOISTS | #14 AND #18 BARS 1-1/2"
#11 BAR AND SMALLER 3/4" |
| BEAMS AND COLUMNS | PRIMARY REINFORCEMENT, TIES, STIRRUPS, SPIRALS 1-1/2" |
- R6. ARRANGEMENT AND DETAILS FOR REINFORCEMENT, INCLUDING BAR SUPPORTS AND SPACERS, SHALL BE IN ACCORDANCE WITH THE "A.C.I. DETAILING MANUAL (ACI SP-66)," LATEST EDITION.
- R7. PROVIDE ALL ACCESSORIES NECESSARY TO SUPPORT REINFORCEMENT AT THE POSITIONS INDICATED. PLASTIC COATED ACCESSORIES SHALL BE USED IN ALL EXPOSED CONCRETE WORK.
- R8. ALL EMBEDMENT LENGTHS AND LAPS SHALL BE AS REQUIRED BY ACI 318. UNLESS NOTED OTHERWISE, MINIMUM LAP SHALL BE 48 BAR DIAMETERS.
- R9. CONTRACTOR TO SUBMIT SHOP DRAWINGS FOR STEEL REINFORCEMENT LAYOUT AND DETAILS, REINFORCEMENT TEST REPORTS AND CERTIFICATES.

STRUCTURAL STEEL

- S1. STRUCTURAL STEEL WORK SHALL CONFORM TO THE AISC "DESIGN SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS," AND THE AISC "CODE OF STANDARD PRACTICE FOR STEEL BUILDINGS AND BRIDGES."
- S2. STRUCTURAL STEEL WIDE FLANGE SHAPES SHALL CONFORM TO ASTM A992. PLATES, ANGLES, CHANNELS, AND MISCELLANEOUS MATERIAL SHALL CONFORM TO ASTM A36. HOLLOW STRUCTURAL SECTIONS SHALL CONFORM TO ASTM A500, GRADE B. STEEL PIPE SECTIONS SHALL CONFORM TO ASTM A53, GRADE B.
- S3. ANCHOR RODS SHALL BE ASTM F1554 GR 55, 3/4" DIAMETER WITH EMBEDDED 12" WITH A DOUBLE NUT AT THE END OF THE ROD, UNLESS NOTED OTHERWISE.
- S4. HIGH STRENGTH BOLTING SHALL BE DONE IN ACCORDANCE WITH AISC "SPECIFICATION FOR STRUCTURAL JOINTS USING ASTM A325 OR ASTM A490 BOLTS."
- S5. BOLTS, NUTS, AND WASHERS SHALL CONFORM TO THE REQUIREMENTS OF ASTM A325. BOLTS SHALL BE 3/4 INCH DIAMETER MINIMUM.
- S6. WELDING SHALL BE DONE BY CERTIFIED WELDERS AND SHALL CONFORM TO AWS D1.1 "STRUCTURAL WELDING CODE-STEEL," LATEST EDITION. ALL WELDING ELECTRODES SHALL BE E70XX.
- S7. THE FABRICATOR/ERECTOR SHALL SUBMIT TO THE ARCHITECT FOR REVIEW:
 • ENGINEERED AND CHECKED DRAWINGS SHOWING SHOP FABRICATION DETAILS, FIELD ASSEMBLY DETAILS, AND ERECTION DIAGRAMS FOR ALL STRUCTURAL STEEL.
 • CONNECTIONS SHALL BE DESIGNED BY A LICENSED STRUCTURAL ENGINEERING IN THE STATE OF ILLINOIS. CALCULATIONS PREPARED BY A LICENSED STRUCTURAL ENGINEER IN THE STATE OF ILLINOIS. DRAWINGS AND CALCULATIONS SHALL BE SUBMITTED CONCURRENTLY.
- S8. UNLESS NOTED OTHERWISE, CONNECTIONS SHALL BE EITHER AISC SINGLE PLATE OR DOUBLE ANGLE SHEAR CONNECTIONS USING A325 BOLTS IN SHEAR BEARING TYPE CONNECTIONS.
- S9. FIELD CONNECTIONS, EXCEPT WHERE SHOWN TO BE WELDED, SHALL BE BOLTED.
- S10. CONNECTIONS SHALL BE DESIGNED FOR THE BEAM REACTIONS INDICATED ON THE DRAWINGS. IN CASES WHERE REACTIONS ARE NOT INDICATED, PROVIDE AT LEAST ONE HALF (1/2) OF THE UNIFORM LOAD CARRYING CAPACITY OF THE BEAM. THE MINIMUM NUMBER OF BOLTS FOR ANY CONNECTION SHALL BE TWO (2). CONNECTIONS SHALL NOT BE LESS THAN ONE HALF (1/2) THE DEPTH OF THE BEAM. MOMENT CONNECTIONS SHALL DEVELOP THE FULL CAPACITY OF THE MEMBER SPECIFIED, UNLESS DESIGN MOMENTS AND SHEARS ARE NOTED ON THE DRAWINGS.
- S11. BEAMS AND JOISTS SHALL BE FABRICATED WITH THE NATURAL CAMBER UP. PROVIDE CAMBERS AS INDICATED ON THE DRAWINGS.
- S12. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CONTROL OF ALL ERECTION PROCEDURES AND SEQUENCES WITH RELATION TO TEMPERATURE DIFFERENTIALS, ESPECIALLY WITH RESPECT TO STRUCTURAL STEEL FRAMING INTO CONCRETE WALLS, BEAMS, OR COLUMNS.
- S13. THERE SHALL BE NO FIELD CUTTING OF STRUCTURAL STEEL MEMBERS FOR THE WORK OF OTHER TRADES WITHOUT THE PRIOR WRITTEN APPROVAL OF THE ARCHITECT.
- S14. ERECT AND MAINTAIN TEMPORARY BRACING TO INSURE THE ALIGNMENT AND STABILITY OF THE STRUCTURE DURING ERECTION UNTIL PERMANENT CONNECTIONS HAVE BEEN COMPLETED.
- S15. ALL STRUCTURAL STEEL EXPOSED TO VIEW IN THE FINISHED BUILDING SHALL CONFORM TO THE AISC "CODE OF STANDARD PRACTICE FOR STEEL BUILDINGS AND BRIDGES," SECTION 10, "ARCHITECTURAL EXPOSED STRUCTURAL STEEL."

STRUCTURAL STEEL

- S17. ALL STEEL EXPOSED TO THE EXTERIOR SHALL BE GALVANIZED IN ACCORDANCE WITH A123 AND ASM A385. BOLTS, FASTENERS AND HARDWARE SHALL CONFORM TO ASTM F2329. FIELD WELDS SHALL BE GROUND SMOOTH AND TOUCH UP IN ACCORDANCE WITH ASTM A780.
- S18. ALL INTERIOR STEEL SHALL BE PRIMED AND PAINTED AS FOLLOWS:
 • CLEAN SURFACES IN ACCORDANCE WITH SSPC-SP STANDARDS.
 • APPLY TWO COATS OF NONSPHALIC PAINT COMPLYING WITH SSPC-PS GUIDE 7.00
- STRUCTURAL METAL DECK**
- S1. METAL DECK SHALL BE DESIGNED, DETAILED, FABRICATED, AND ERECTED IN ACCORDANCE WITH STEEL DECK INSTITUTE SPECIFICATIONS. METAL DECK SHALL BE DESIGNED FOR THE SPANS AND LOADING CONDITIONS SHOWN ON THE DRAWINGS, AND/OR IN THE METAL DECK SCHEDULE.
- S2. METAL DECK SECTION PROPERTIES SHALL BE COMPUTED IN ACCORDANCE WITH AISI "SPECIFICATION FOR THE DESIGN OF COLD FORMED STEEL STRUCTURAL MEMBERS." METAL DECKING SHALL BE FABRICATED FROM STEEL TYPE ASTM A446, GRADE A, HAVING A MINIMUM YIELD STRENGTH OF 33,000 PSI. METAL ROOF DECK SHALL BE PAINTED. COMPOSITE FLOOR DECK SHALL BE HOT-DIPPED GALVANIZED.
- S3. PROVIDE ENGINEERED AND CHECKED SHOP DRAWINGS INDICATING LOCATION, GAGE, AND SIZE OF EACH PIECE OF DECKING. THE SHOP DRAWINGS SHALL CLEARLY SHOW WELDING DETAILS TO STRUCTURAL FRAMING AND SIDE LAP CONNECTION DETAILS.
- S4. METAL DECKING SHALL BE WELDED AT 12 INCHES MAXIMUM ON CENTER TO THE SUPPORTING STEEL, WITH A 5/8-INCH DIAMETER WELD. SIDE LAPS SHALL BE A MIN. OF (2) #10 TEK SCREWS PER SPAN. NO WELD OR FASTENER SPACING SHALL BE GREATER THAN THAT RECOMMENDED BY THE DECK MANUFACTURER.
- S5. THE METAL DECK SHALL BE DESIGNED TO BE CONTINUOUS OVER THREE (3) SPANS IN THE DIRECTION INDICATED. SINGLE AND DOUBLE SPANS, IF REQUIRED, SHALL SATISFY LOAD AND DEFLECTION REQUIREMENTS.
- S6. PROVIDE, AS REQUIRED, RIDGE AND VALLEY PLATES, COLUMN CLOSURES, CANT STRIPS, SUMP PLATES AT PIPING PENETRATIONS AND RECESSED SUMP PANS AT ROOF DRAINS. PROVIDE SUPPLEMENTAL FRAMING AT OPENINGS AS REQUIRED FOR SUPPORT OF THE METAL DECK. OPENINGS SHALL BE COORDINATED WITH ARCHITECTURAL AND MECHANICAL DRAWINGS.
- S7. ANY METAL DECK OPENING THAT IS 12-INCH DIAMETER OR LARGER OR ANY GROUP OF OPENINGS THAT PENETRATE MORE THAN ONE METAL DECK RIB SHALL BE FRAMED WITH SUPPLEMENTAL. SEE TYPICAL FRAMING FOR ROOF OPENING.
- S8. NO LOADS SHALL BE PERMITTED TO BE HUNG DIRECTLY FROM METAL ROOF DECK OR FORM DECK.

COLD-FORMED STRUCTURAL STEEL - GENERAL

1. DESIGN AND CONSTRUCTION OF COLD FORMED STRUCTURAL STEEL MEMBERS SHALL MEET THE CRITERIA OF THE AMERICAN IRON AND STEEL INSTITUTE "NORTH AMERICAN SPECIFICATION FOR THE DESIGN OF COLD-FORMED STEEL STRUCTURAL MEMBERS" (LATEST EDITION)
2. COLD FORMED STRUCTURAL STEEL MEMBERS SHALL BE FORMED FROM STEEL HAVING A G-60 GALVANIZED COATING COMPLYING WITH THE REQUIREMENTS OF ASTM A653.
3. GALVANIZED STUDS, JOISTS, ANGLES, AND STRAPS 12, 14, AND 16 GAGE SHALL BE FORMED FROM STEEL THAT CORRESPONDS TO ASTM A1003, WITH A MINIMUM YIELD STRENGTH OF 50,000 PSI.
4. ALL GALVANIZED 18 STUDS, TRACK, BRIDGING, END CLOSURES AND ACCESSORIES SHALL BE FORMED FROM STEEL THAT CORRESPONDS TO ASTM A1003, WITH A MINIMUM YIELD STRENGTH OF 33,000 PSI.
5. SELF TAPPING SCREW FASTENERS SHALL MEET THE REQUIREMENTS OF ASTM C1513. PROVIDE MIN. #12 SCREWS SPACED @ 16" O.C. (U.N.O.).
6. WELDING OF COLD FORMED STEEL CONNECTIONS SHALL BE IN ACCORDANCE WITH AWS D1.3 "STRUCTURAL WELDING CODE - SHEET STEEL". TOUCH UP ALL WELDS WITH APPROVED GALVANIZED TOUCH UP PAINT.
7. WEB STIFFENERS SHALL BE PROVIDED AT REACTION POINTS OR AREAS OF CONCENTRATED LOADS WHERE INDICATED ON THE PLANS.
8. LIGHT GAUGE-TRACK SHALL BE FASTENED TO STUDS WITH #10 SCREWS IN EACH FLANGE OF STUDS.
9. WALL BRIDGING SHALL BE INSTALLED IN A MANNER TO PREVENT STUD ROTATION. SPACE BRIDGING NOT TO EXCEED 4'-0" O.C.
10. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING TEMPORARY BRACING UNTIL ALL ELEMENTS OF THE LATERAL LOAD RESISTING SYSTEM ARE IN PLACE AND CONNECTIONS MADE.
11. THE GENERAL CONTRACTOR IS RESPONSIBLE FOR ASSURING THAT CONSTRUCTIONS LOADS DO NOT EXCEED THE SPECIFIED DESIGN LIVE LOADS. CONSTRUCTION LOADS HAVE NOT BEEN CONSIDERED IN THIS DESIGN.
12. NO SPLICES IN STUDS, JOISTS, HEADERS OR OTHER LOAD CARRYING MEMBERS MAY BE MADE WITHOUT PRIOR ENGINEERING REVIEW AND SPECIFIC DETAILS FOR ANY SUCH REVISION TO THE ORIGINAL DESIGN.
13. THERE SHALL BE NO FIELD CUTTING OF STRUCTURAL COLD-FORMED STEEL WALLS, FLOOR JOISTS, TRUSSES, AND ASSOCIATED BRIDGING, BRACING AND STRAPS WITH OUT THE WRITTEN APPROVAL OF THE ENGINEER.
14. THE FABRICATOR/ERECTOR SHALL SUBMIT TO THE ARCHITECT FOR REVIEW:
 - ENGINEERED AND CHECKED DRAWINGS SHOWING SHOP FABRICATION DETAILS, FIELD ASSEMBLY DETAILS, AND ERECTION DIAGRAMS.
 - ALL COMPONENTS AND CONNECTIONS SHALL BE DESIGNED BY A LICENSED STRUCTURAL ENGINEERING IN THE STATE OF ILLINOIS. CALCULATIONS PREPARED BY A LICENSED STRUCTURAL ENGINEER IN THE STATE OF ILLINOIS. DRAWINGS AND CALCULATIONS SHALL BE SUBMITTED CONCURRENTLY.

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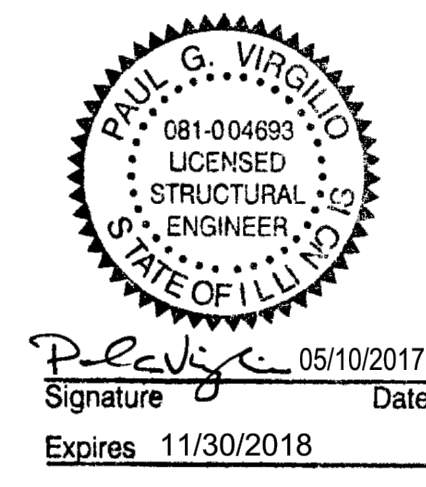
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GENERAL NOTES

S0.1



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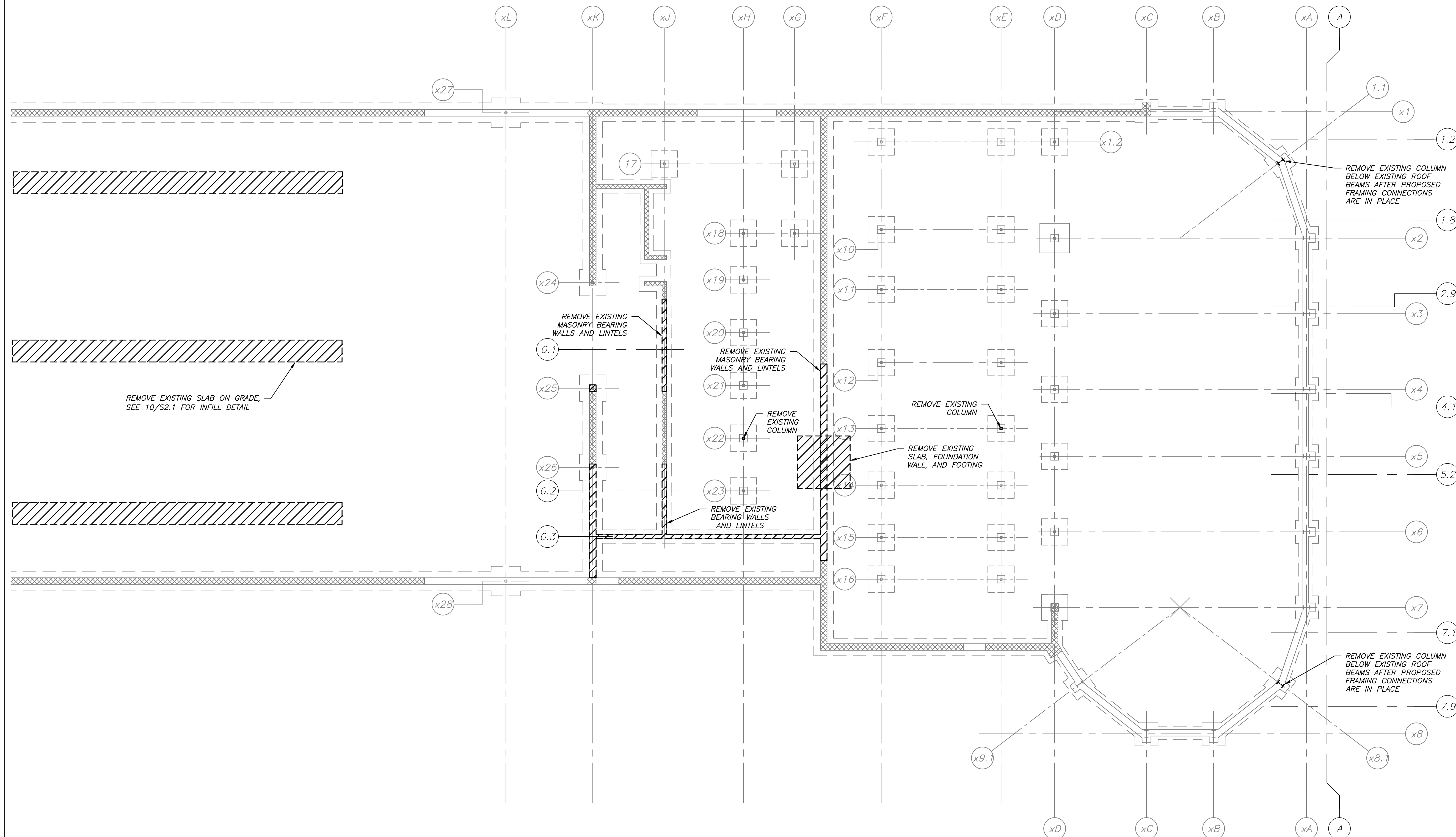
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DEMOLITION PLAN

S1.0

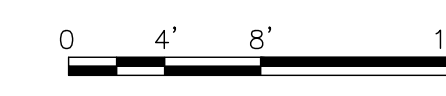
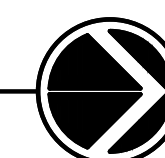
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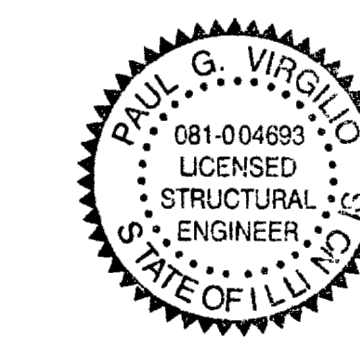
NOTES:

- SEE ARCHITECTURAL DRAWINGS FOR LOCATIONS AND EXTENTS OF ALL DEMOLITION.
- CONTRACTOR SHALL PROVIDE PROPER SHORING FOR ALL EXISTING STRUCTURAL MEMBERS UNTIL NEW CONSTRUCTION IS COMPLETE.
- CONTRACTOR SHALL SUBMIT ALL SHORING PLANS AND DETAILS, SIGNED AND SEALED BY LICENSED STRUCTURAL ENGINEER IN THE STATE OF ILLINOIS.

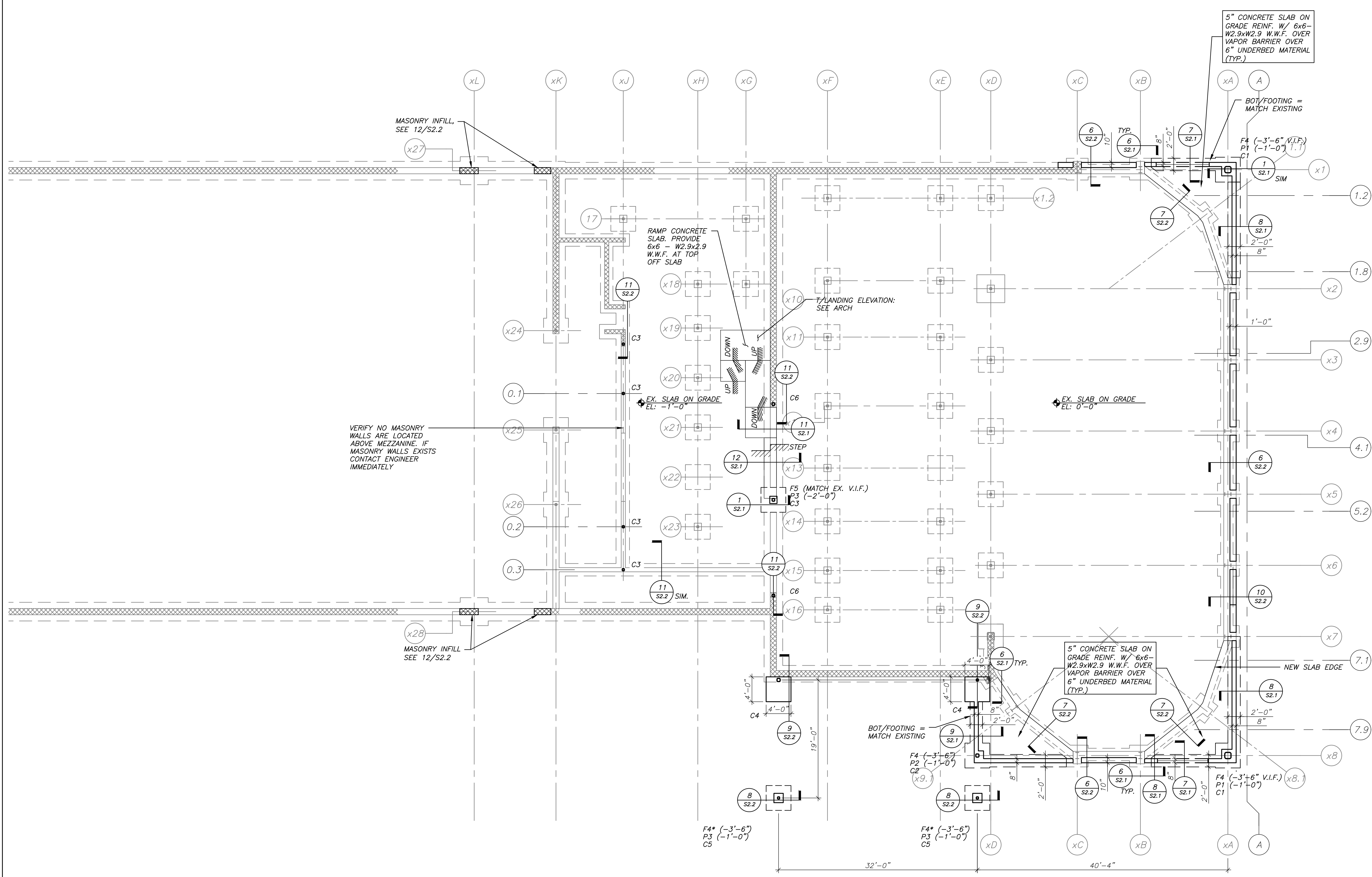
1 DEMOLITION PLAN
S1.1 1/8" = 1'-0"



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



Paul G. Virgilio
Signature Date
Expires 11/30/2018



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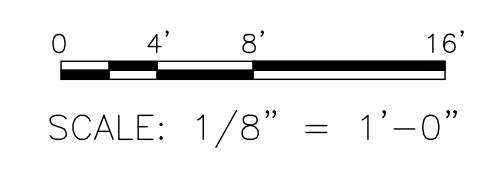
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FOUNDATION AND
FIRST FLOOR PLAN

S1.1

- NOTES:
1. FX (XX'-XX') INDICATES FOOTING MARK AND ELEVATION. SEE SHEET S2.1 FOR FOOTING SCHEDULES AND DETAILS.
 2. PX (XX'-XX') INDICATES PIER MARK AND ELEVATION. SEE SHEET S2.1 FOR PIER DETAILS.
 3. CX INDICATES COLUMN MARK. SEE SHEET S3.2 FOR COLUMN SCHEDULE AND BASE PLATE DETAILS.
 4. SEE S0.1 FOR GENERAL NOTES.
 5. SEE SHEETS S2.1, S2.2, FOR TYPICAL FOUNDATION DETAILS.

1 FOUNDATION AND FIRST FLOOR PLAN
S1.0 1/8" = 1'-0"



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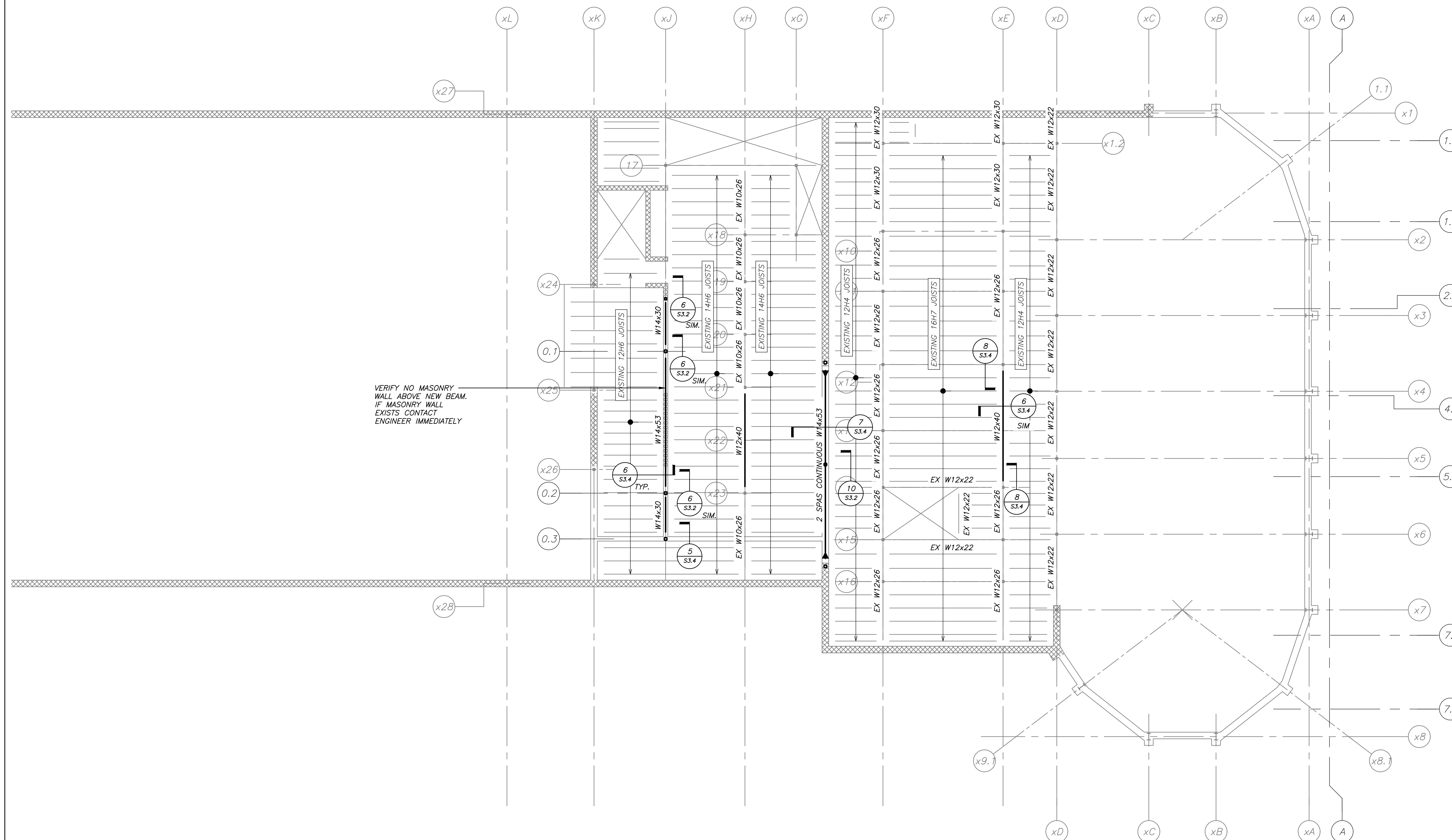
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SECOND FLOOR
FRAMING PLAN

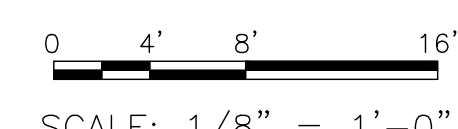
S1.2



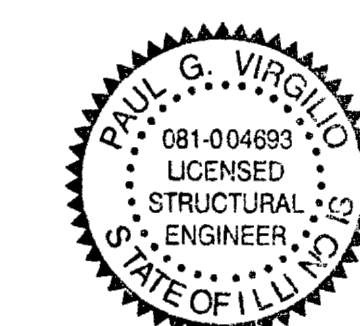
VERIFY NO MASONRY WALL ABOVE NEW BEAM.
IF MASONRY WALL EXISTS CONTACT
ENGINEER IMMEDIATELY

- NOTES:
1. T/STEEL EL: VARIES, SEE PLAN.
 2. LX INDICATES LINTEL MARK. SEE SHEET S3.2 FOR LINTEL DETAILS.

1 SECOND FLOOR FRAMING PLAN
S1.2 1/8" = 1'-0"



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



Paul G. Virgilio
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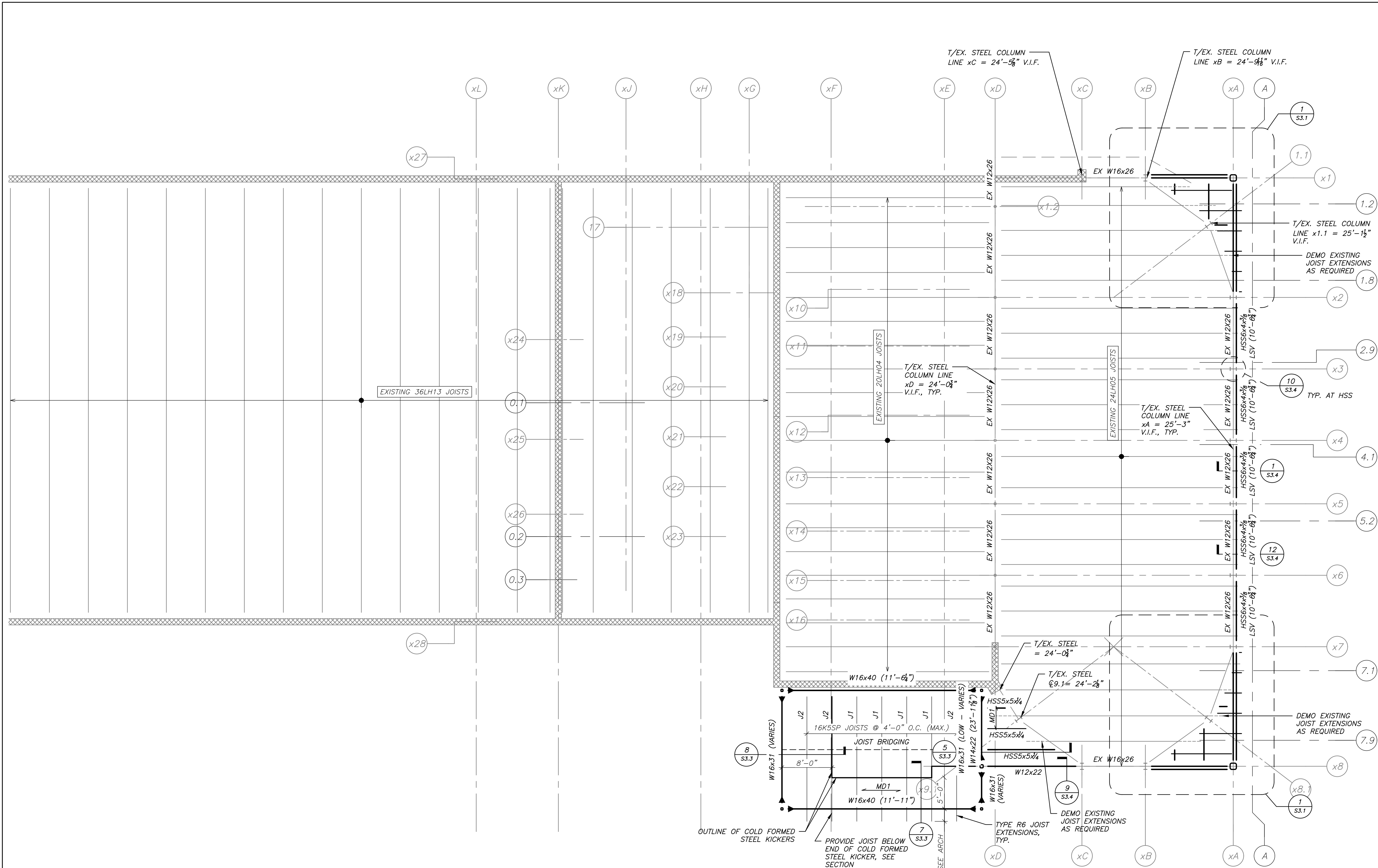
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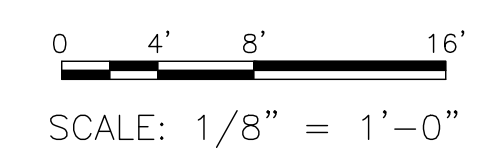
ROOF FRAMING PLAN

S1.3

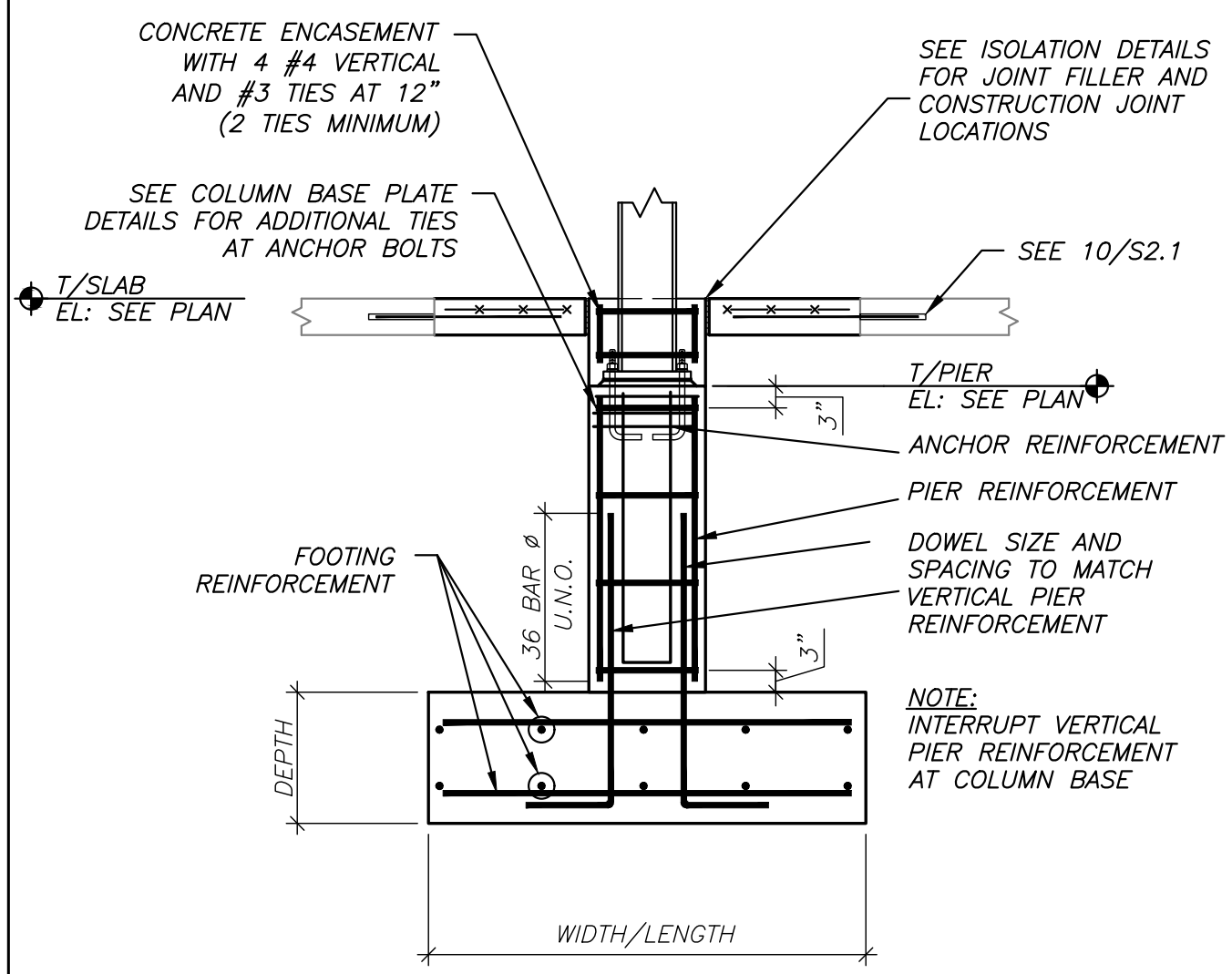


- NOTES:
1. T/STEEL EL: VARIES, SEE PLAN.
 2. MD1 → INDICATES SPAN DIRECTION OF 1.5"x20 GAUGE COMPOSITE METAL DECK.
 3. ALL STEEL SHALL BE EVENLY SPACED IN BAYS, U.N.O.
 4. SEE SHEET S3.3 FOR LATERAL BRACING ELEVATIONS AND DETAILS.
 5. LX INDICATES LINTEL MARK. SEE SHEET S3.2 FOR LINTEL DETAILS.
 6. SP INDICATES JOIST TO BE DESIGNED FOR SPECIAL LOADINGS. SEE JOIST DIAGRAMS ON SHEET S3.3
 7. Jx= JOIST DIAGRAM LABEL. SEE SHEET S3.3
 8. ▶ INDICATES MOMENT CONNECTION. SEE 2/S3.2

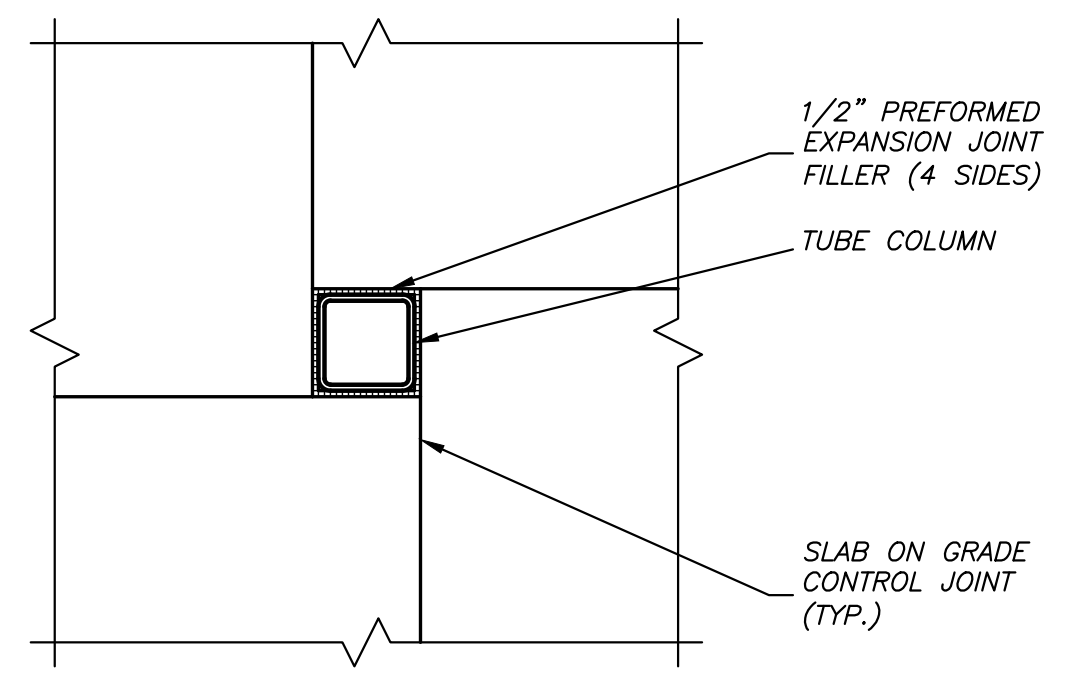
1 ROOF FRAMING PLAN
S1.3 1/8" = 1'-0"



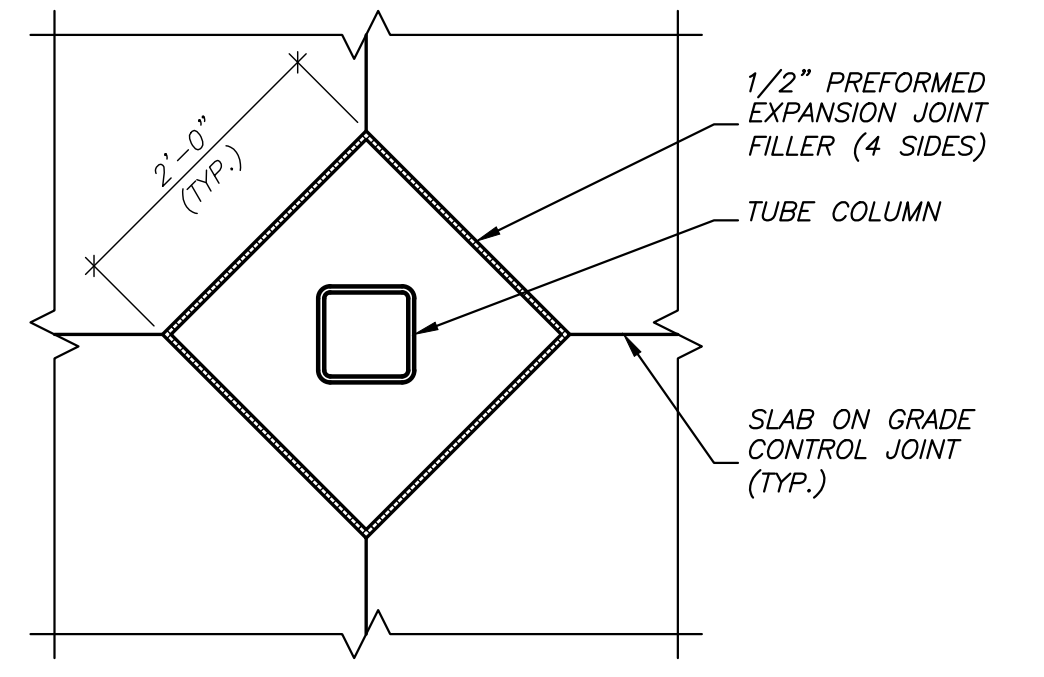
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Paul G. Virgilio
Signature Date
Expires 11/30/2018



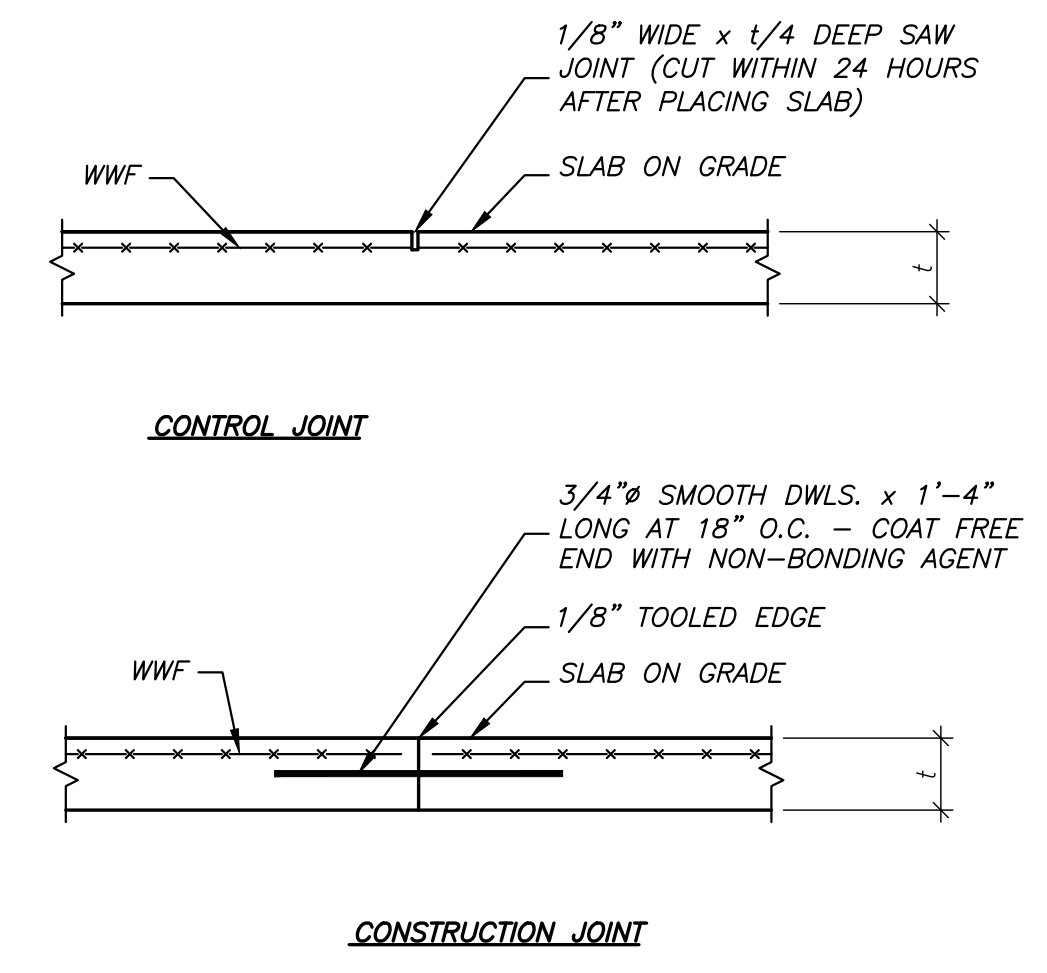
1 TYPICAL PIER DETAIL AT DEPRESSED COL. BASE



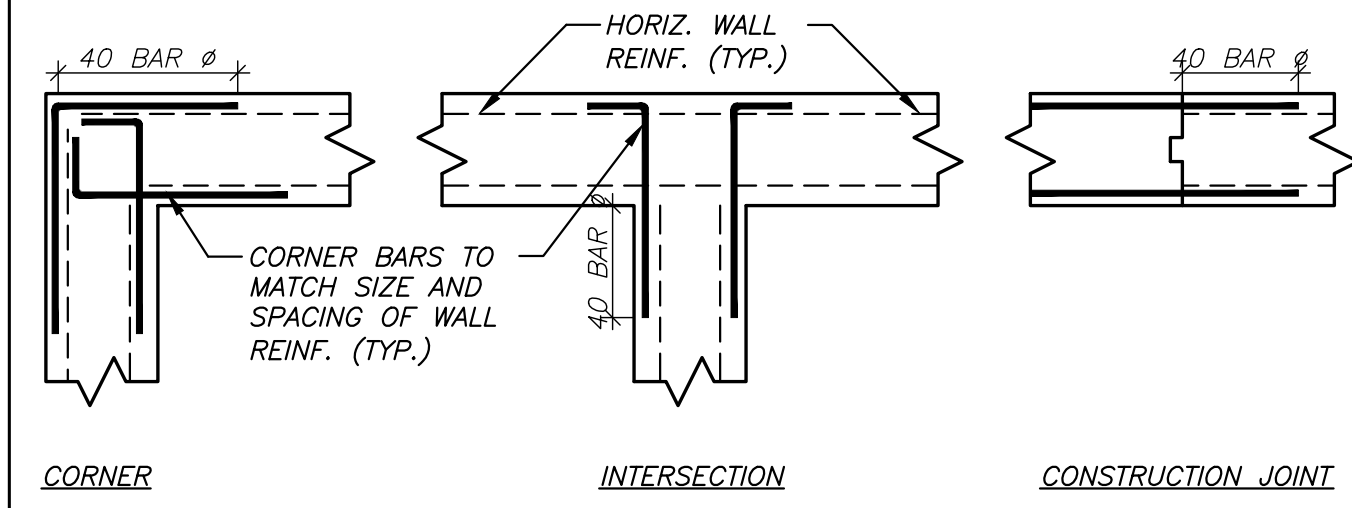
2 TYP. INTERIOR COLUMN ISOLATION JOINT DETAIL



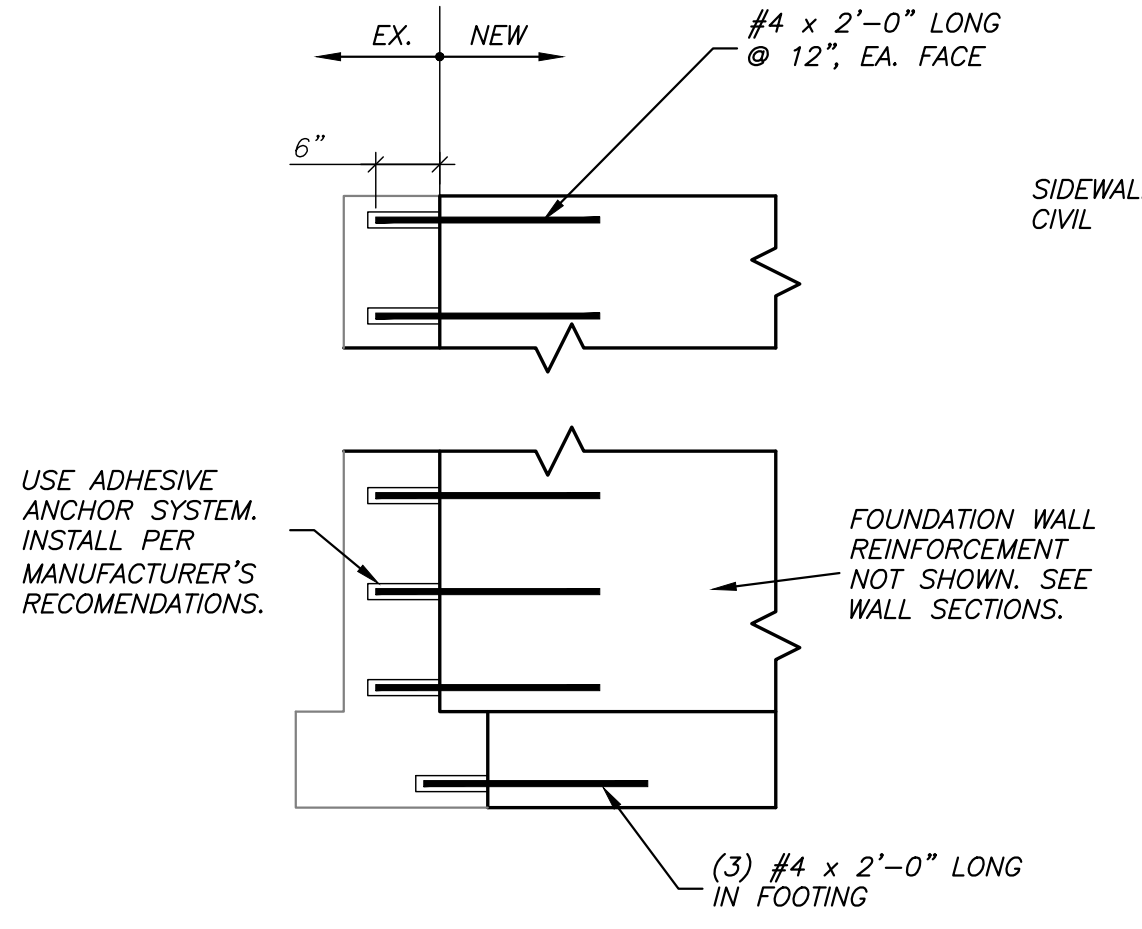
3 TYP. INTERIOR COLUMN ISOLATION JOINT DETAIL



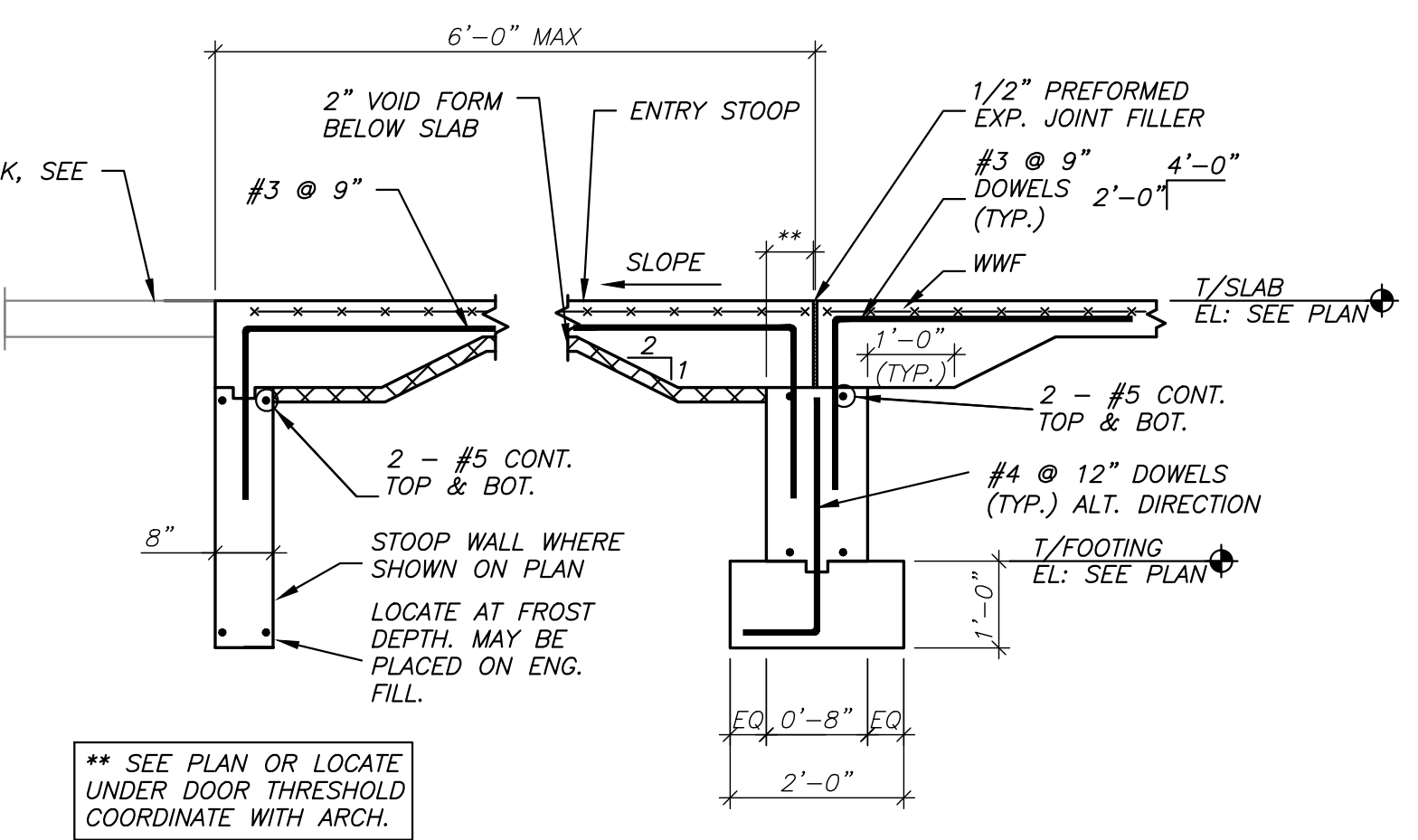
4 TYPICAL SLAB ON GRADE JOINT DETAILS



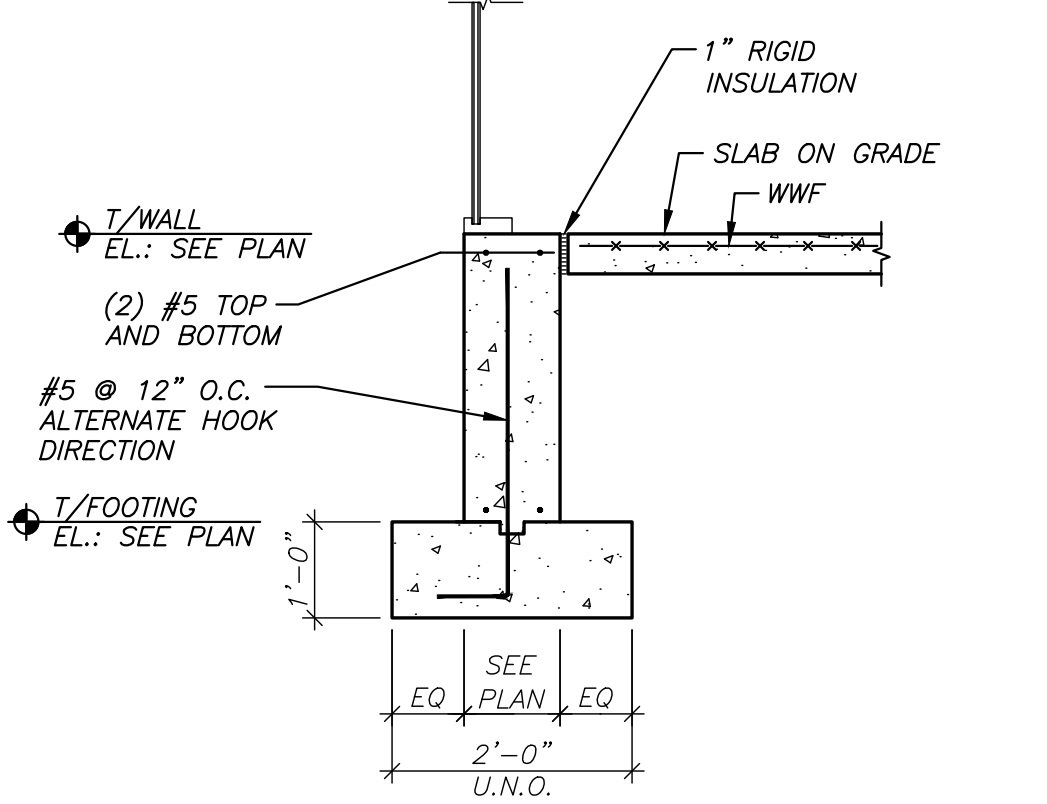
5 TYPICAL WALL REINFORCING DETAIL



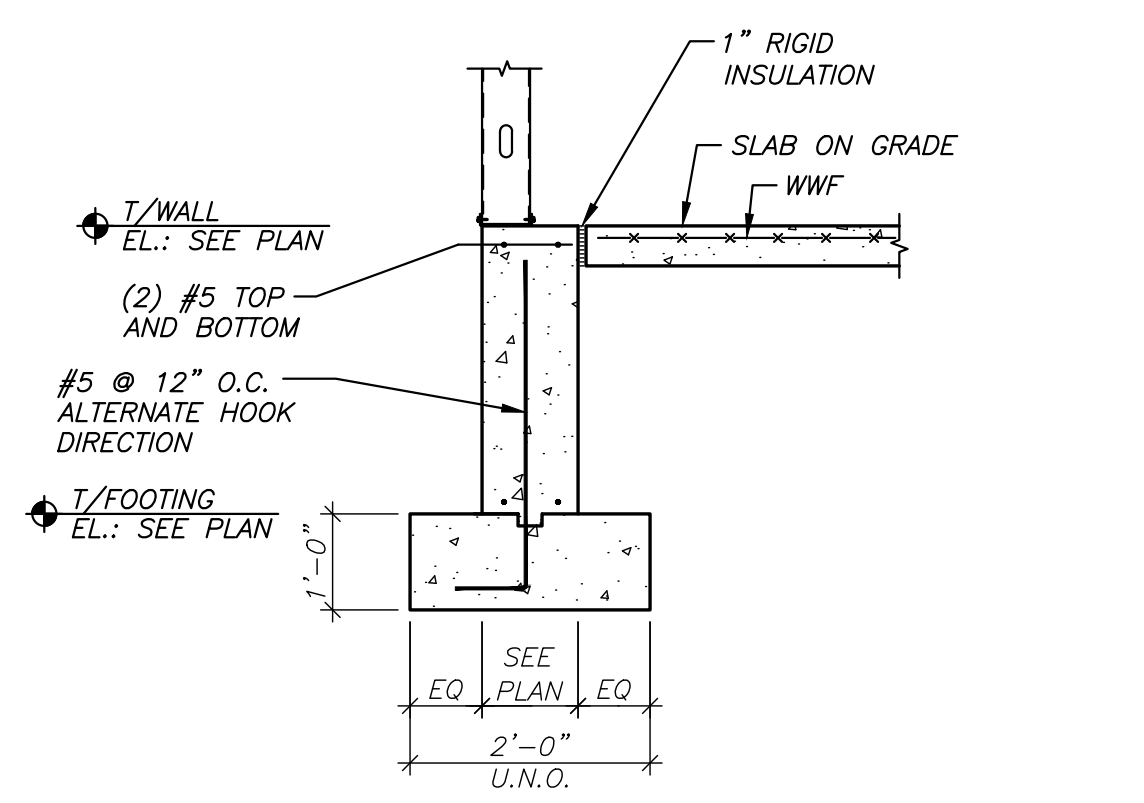
6 TYPICAL FOUNDATION WALL SPLICE



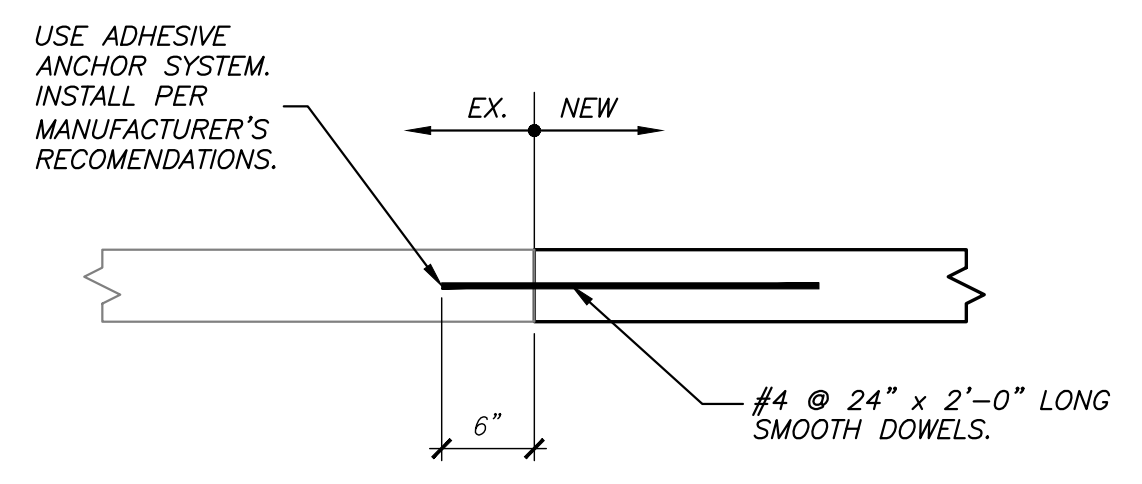
7 TYPICAL FOUNDATION WALL SECTION AT DOOR



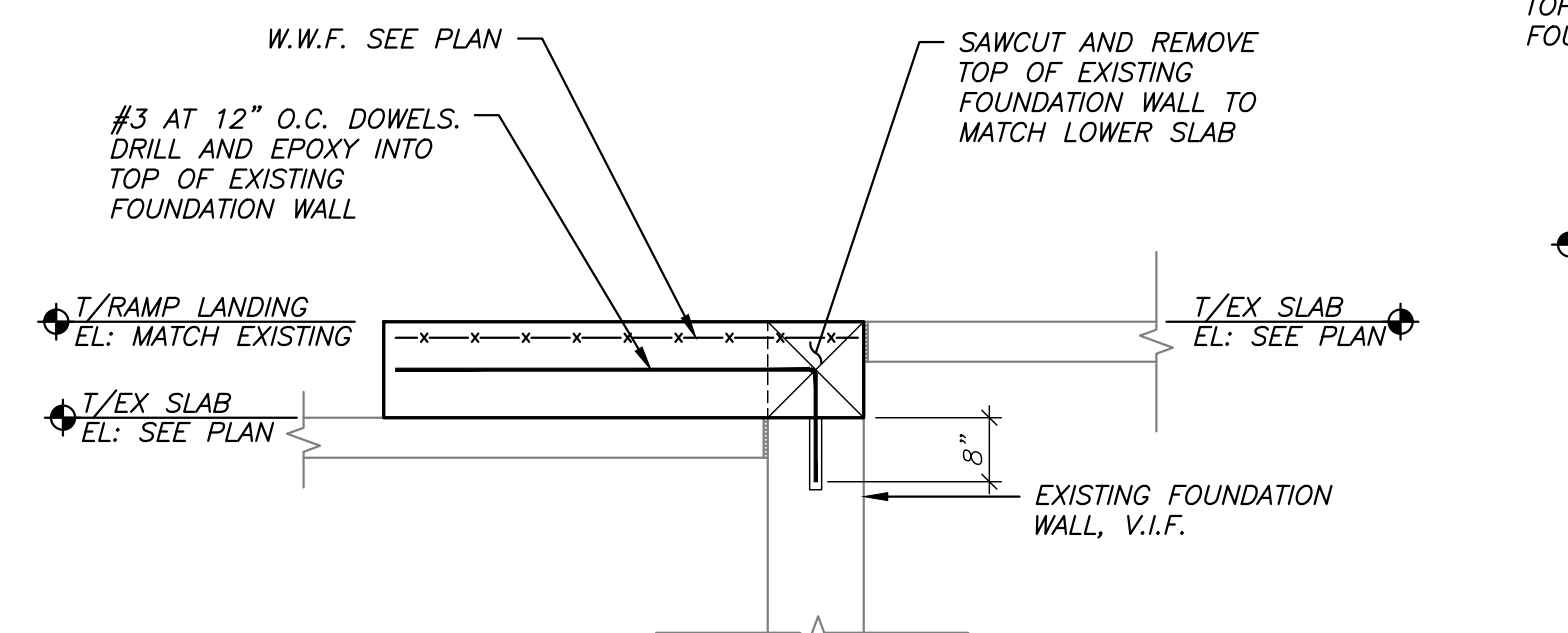
8 TYPICAL FOUNDATION WALL SECTION



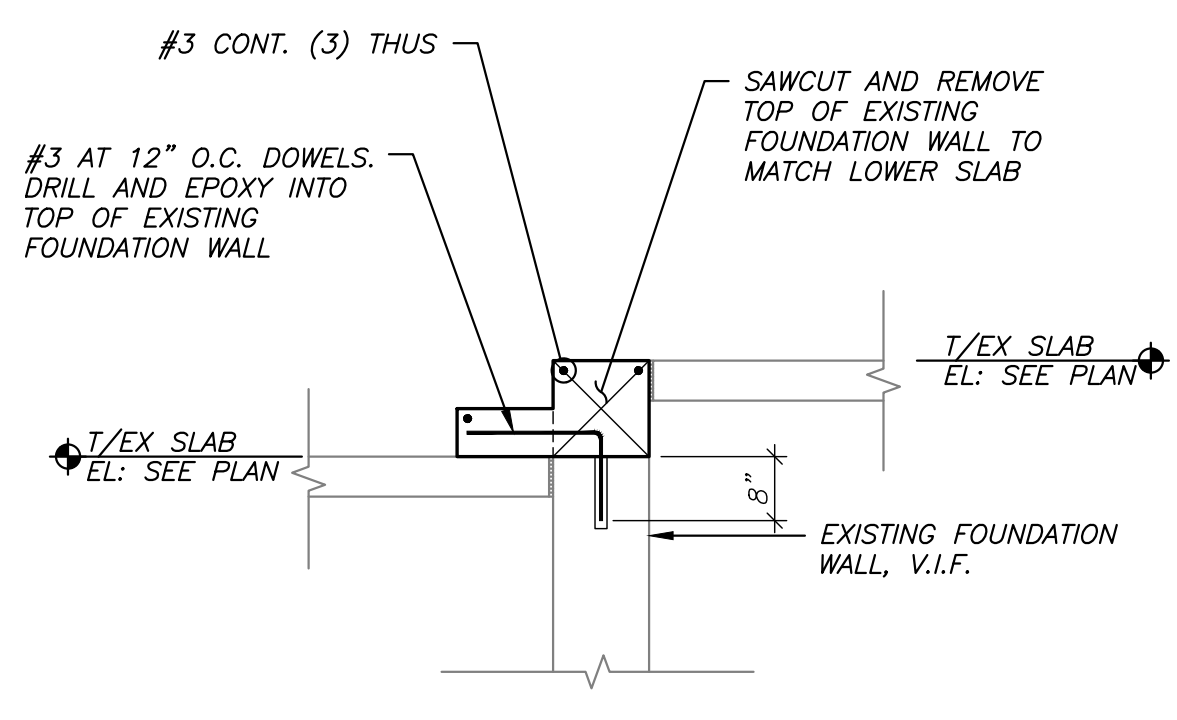
9 TYPICAL FOUNDATION WALL SECTION



10 TYPICAL SLAB ON GRADE SPLICE DETAIL



11 SECTION AT RAMP



12 SECTION AT STEP

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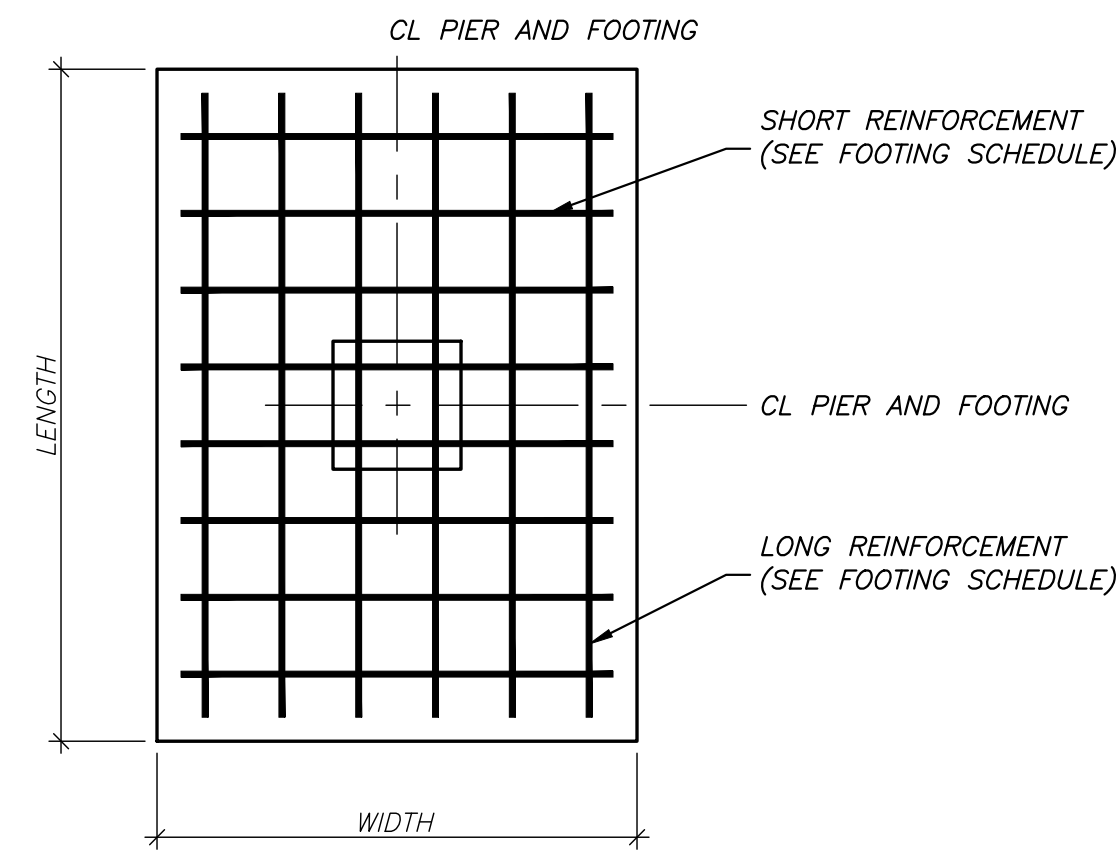
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FOUNDATION DETAILS
S2.1
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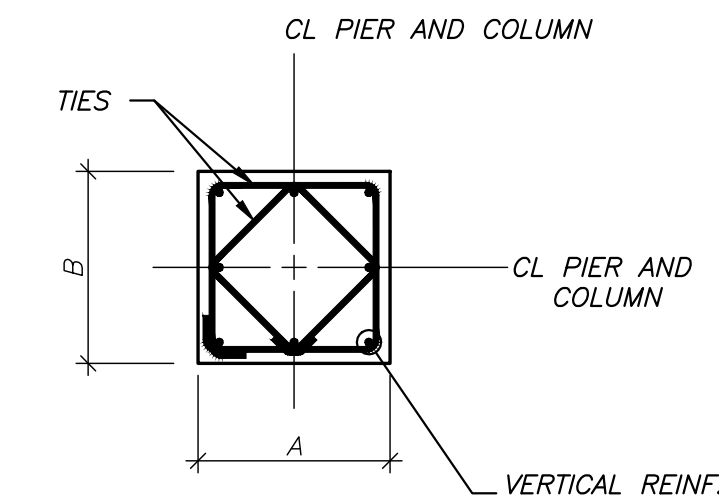
FOOTING MARK	SIZE			BOTT. REINF.		TOP REINF.		REMARKS
	WIDTH	LENGTH	DEPTH	LONG.	SHORT	LONG.	SHORT	
F4	4'-0"	4'-0"	1'-2"	5-#5	5-#5	-	-	SEE 2/S2.2
F4*	4'-0"	4'-0"	1'-2"	5-#5	5-#5	5-#5	5-#5	SEE 2/S2.2
F5	5'-0"	5'-0"	1'-0"	6-#7	6-#7	-	-	SEE 2/S2.2
F6	6'-0"	6'-0"	1'-4"	7-#6	7-#6	-	-	SEE 2/S2.2

F_b = SEE STRUCTURAL NOTES
 f'_c = SEE STRUCTURAL NOTES
 f_y = SEE STRUCTURAL NOTES



PIER MARK	TYPE	SIZE A x B	REINFORCEMENT		REMARKS
			VERTICAL	TIES	
P1	2	24"x24"	6-#8	#4 @ 12"	ADD (2) TIES AT TOP
P2	2A	18"x18"	6-#8	#4 @ 16"	(2) TIES AT TOP
P3	1	18"x18"	6-#8	#4 @ 16"	(2) TIES AT TOP
P4					

NOTES:
 1. SEE FOUNDATION PLANS AND DETAILS FOR TOP OF PIER ELEVATIONS.
 2. SEE FOUNDATION WALL SECTIONS FOR WALL REINFORCEMENT.
 3. DASHED LINE ON PIER DETAILS INDICATES LIMITS OF DEPRESSED AREA FOR COLUMN BASE. FILL ALL POCKETS WITH CONCRETE AFTER THE STEEL FRAME IS ERECTED AND PLUMB.

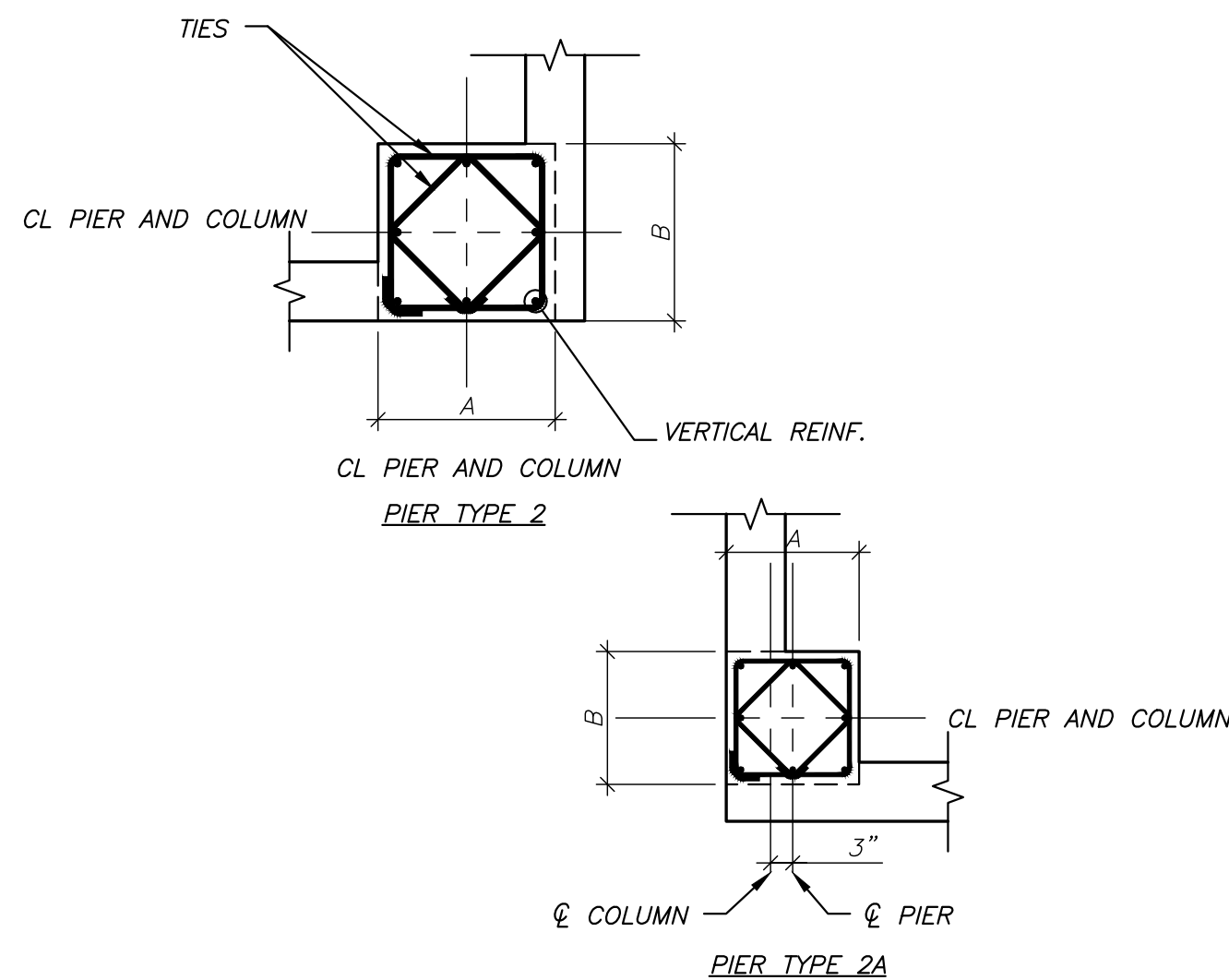


1 FOOTING SCHEDULE
 S2.2

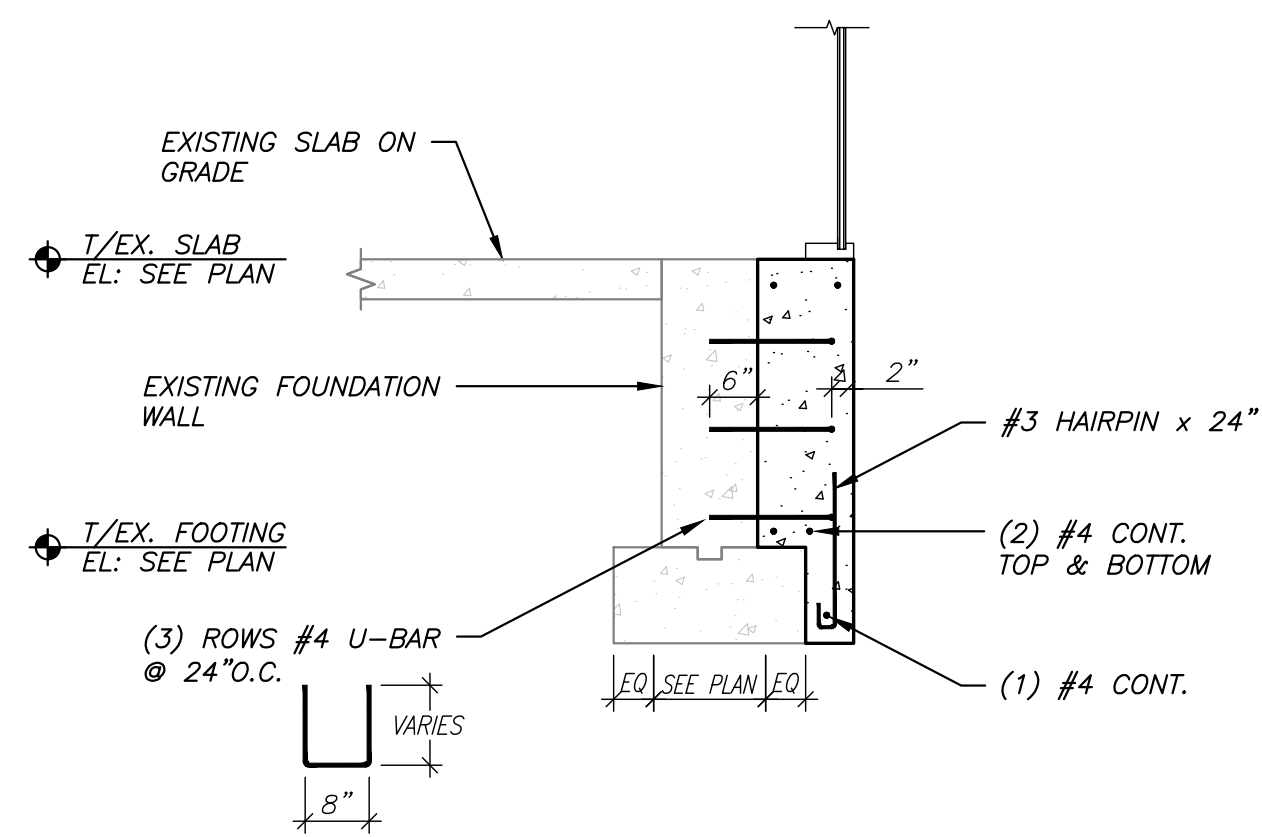
2 TYPICAL RECTANGULAR FOOTING PLAN
 S2.2

3 CONCRETE PIER SCHEDULE
 S2.2

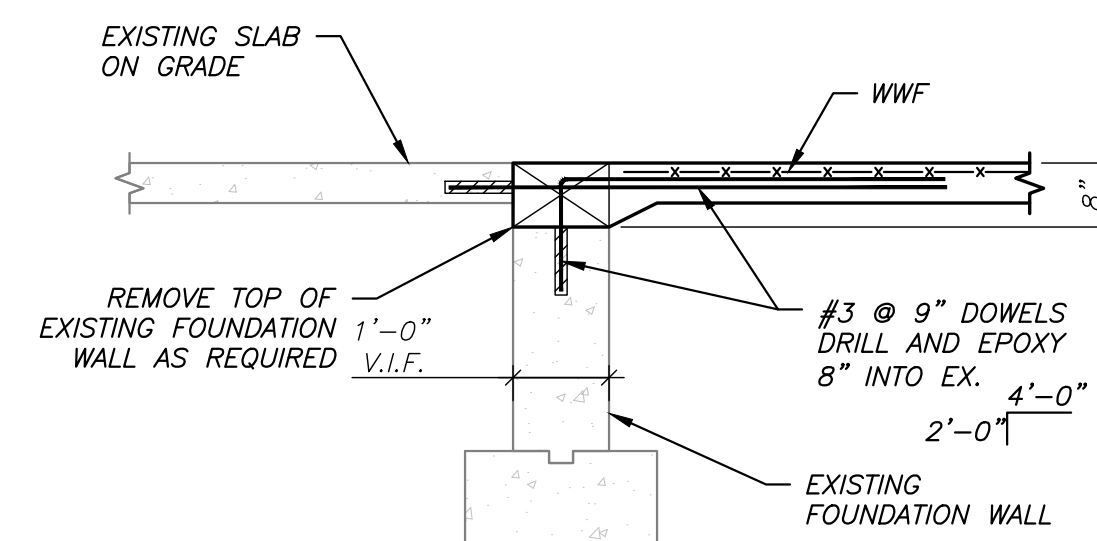
4 PIER TYPE 1
 S2.2



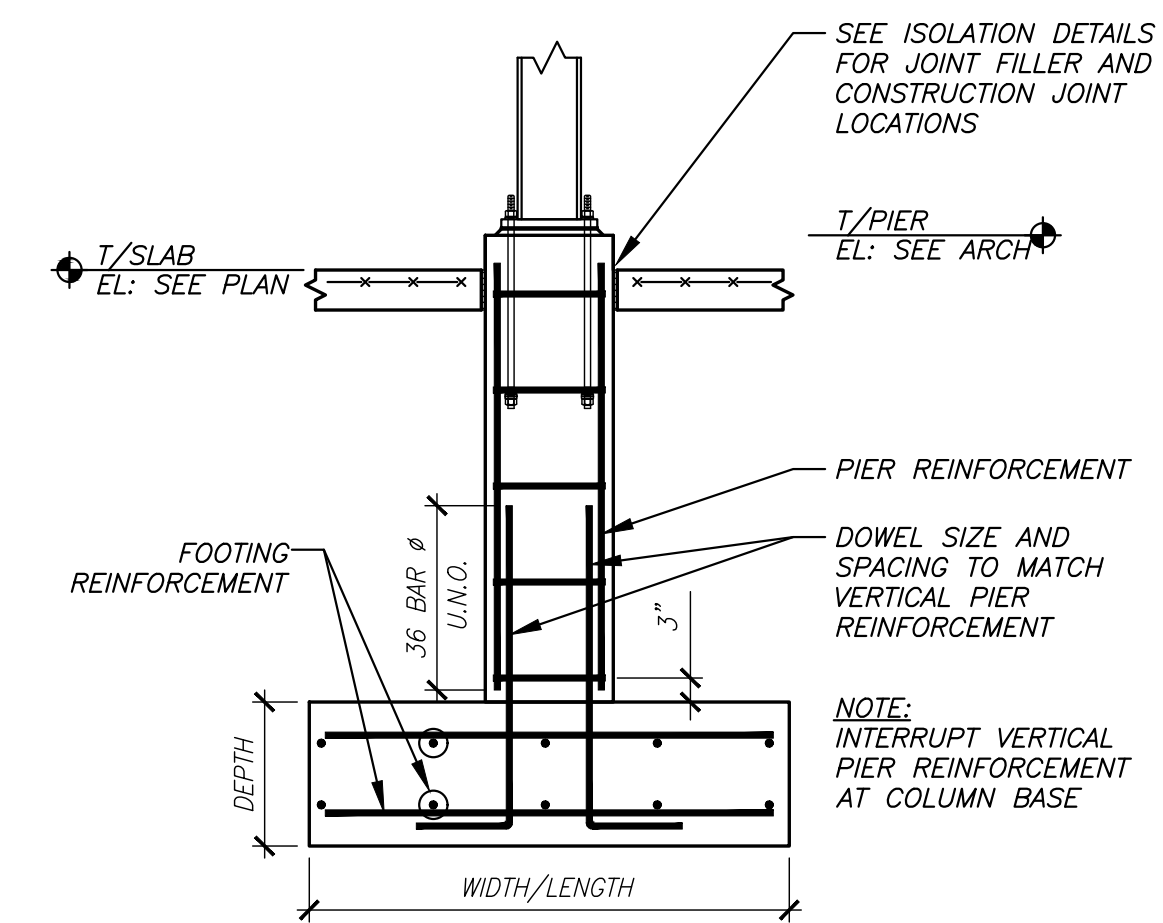
5 PIER TYPE 2 AND 2A
 S2.2



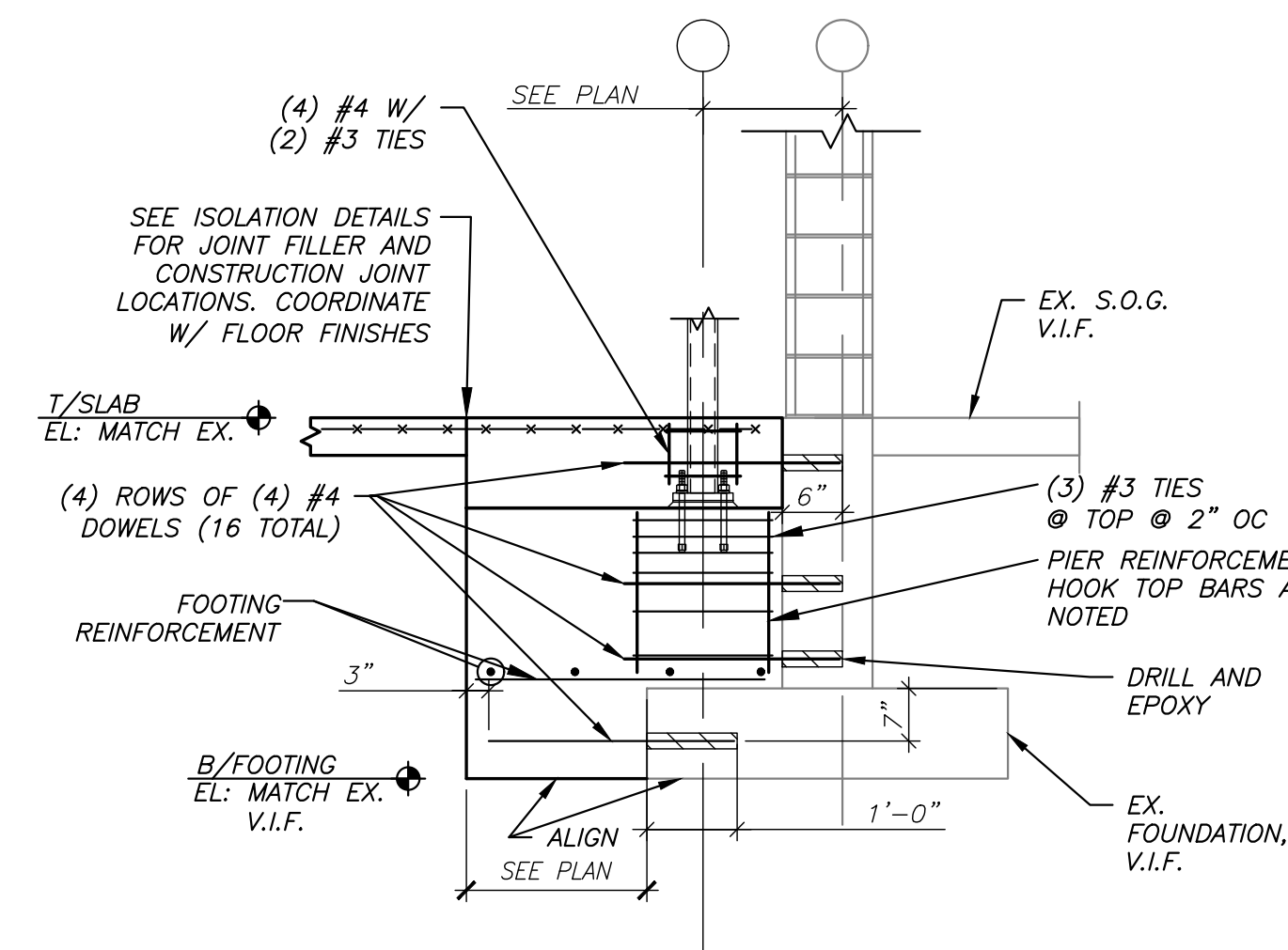
6 TYPICAL FOUNDATION WALL SECTION
 S2.2
 1/2" = 1'-0"



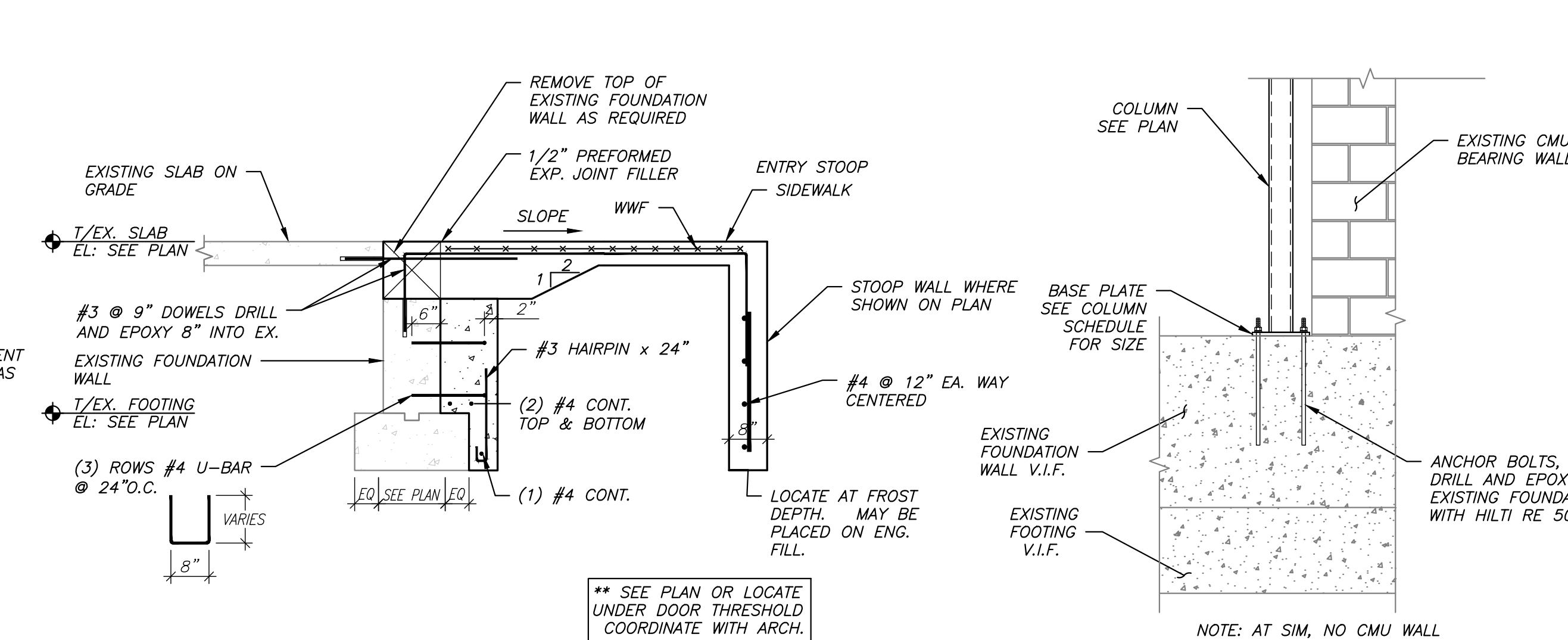
7 TYPICAL FOUNDATION WALL SECTION
 S2.2
 1/2" = 1'-0"



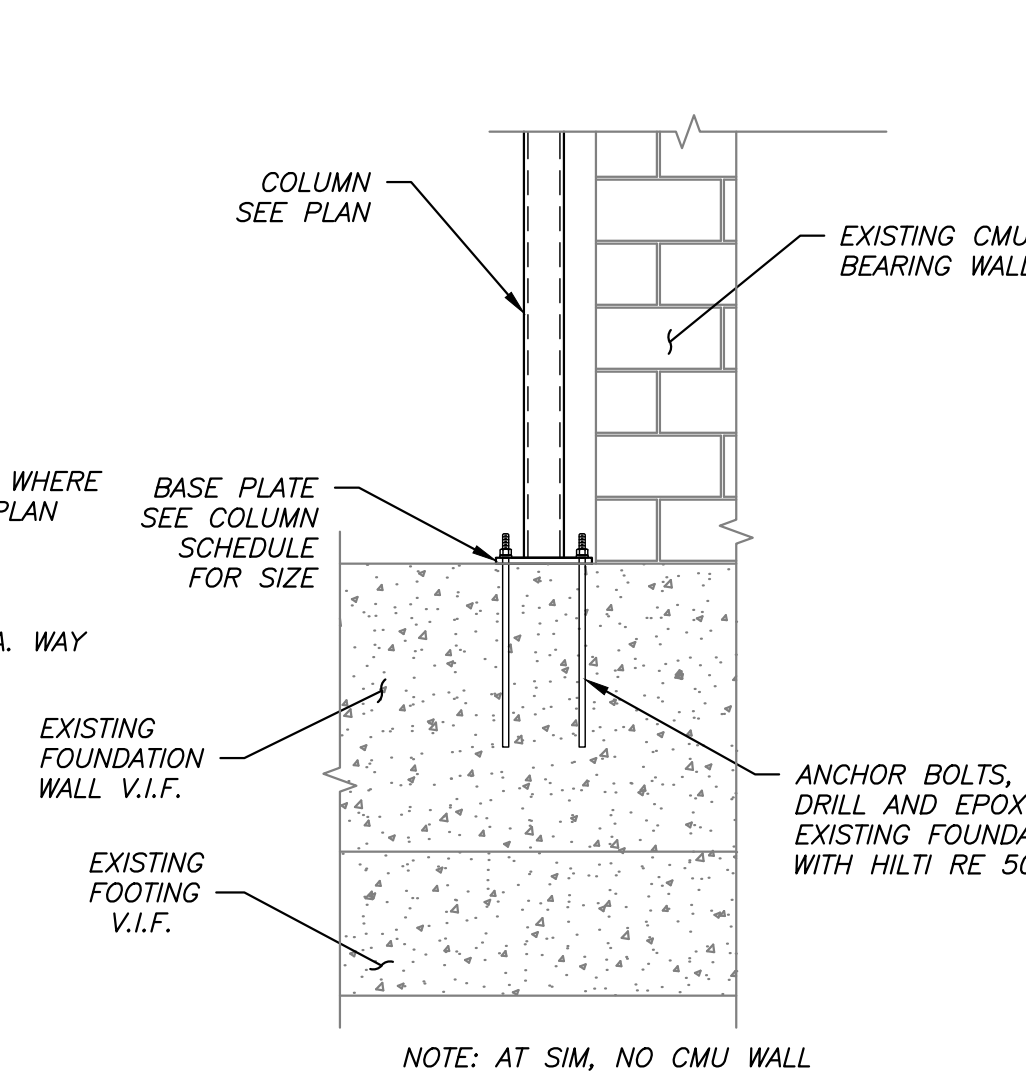
8 TYPICAL PIER DETAIL AT RAISED COL. BASE
 S2.2



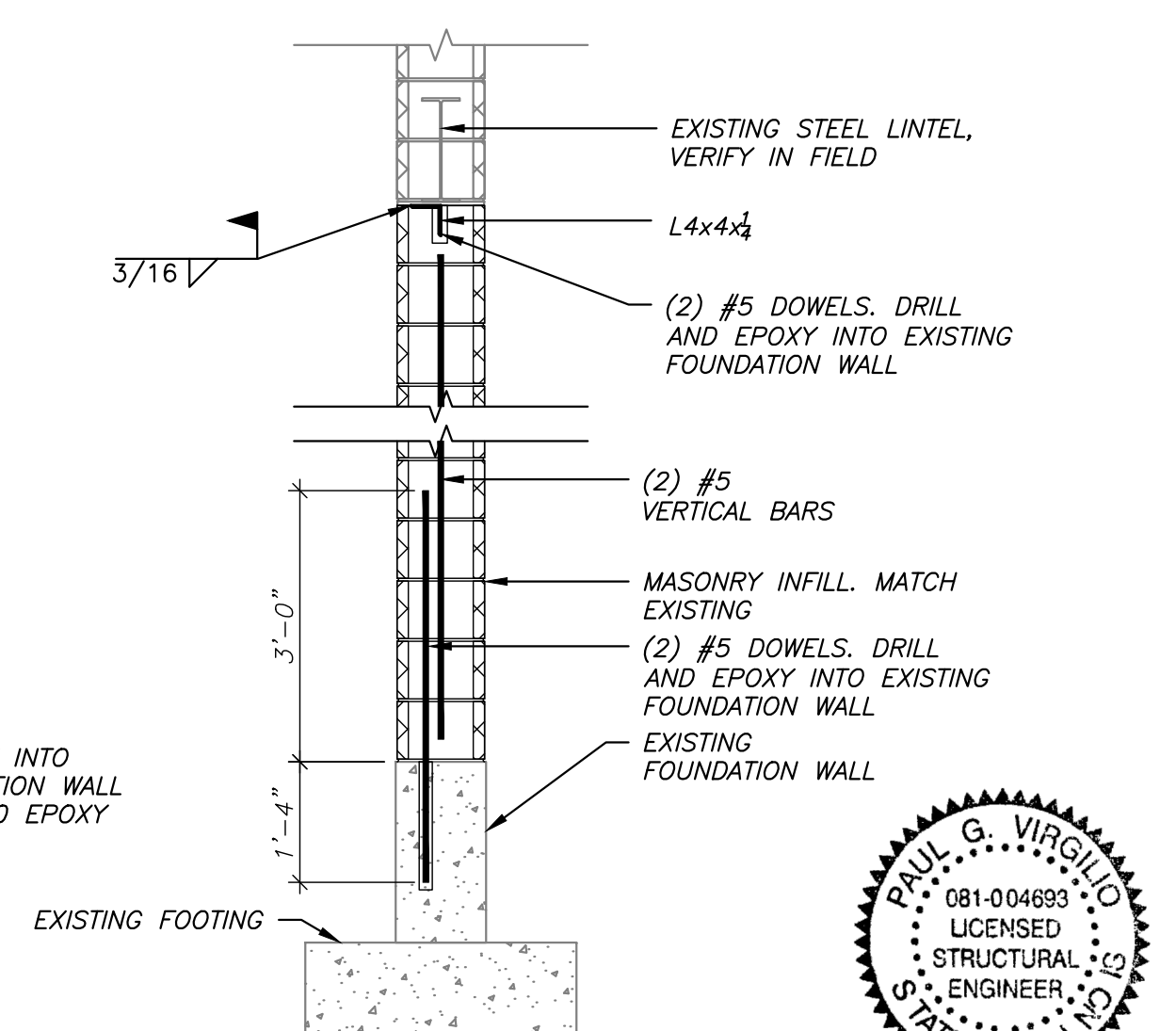
9 FOUNDATION SECTION AT COLUMN
 S2.2



10 TYPICAL FOUNDATION WALL SECTION
 S2.2



11 SECTION
 S2.2
 1/2" = 1'-0"



12 SECTION
 S2.2
 1/2" = 1'-0"

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FOUNDATION DETAILS

S2.2

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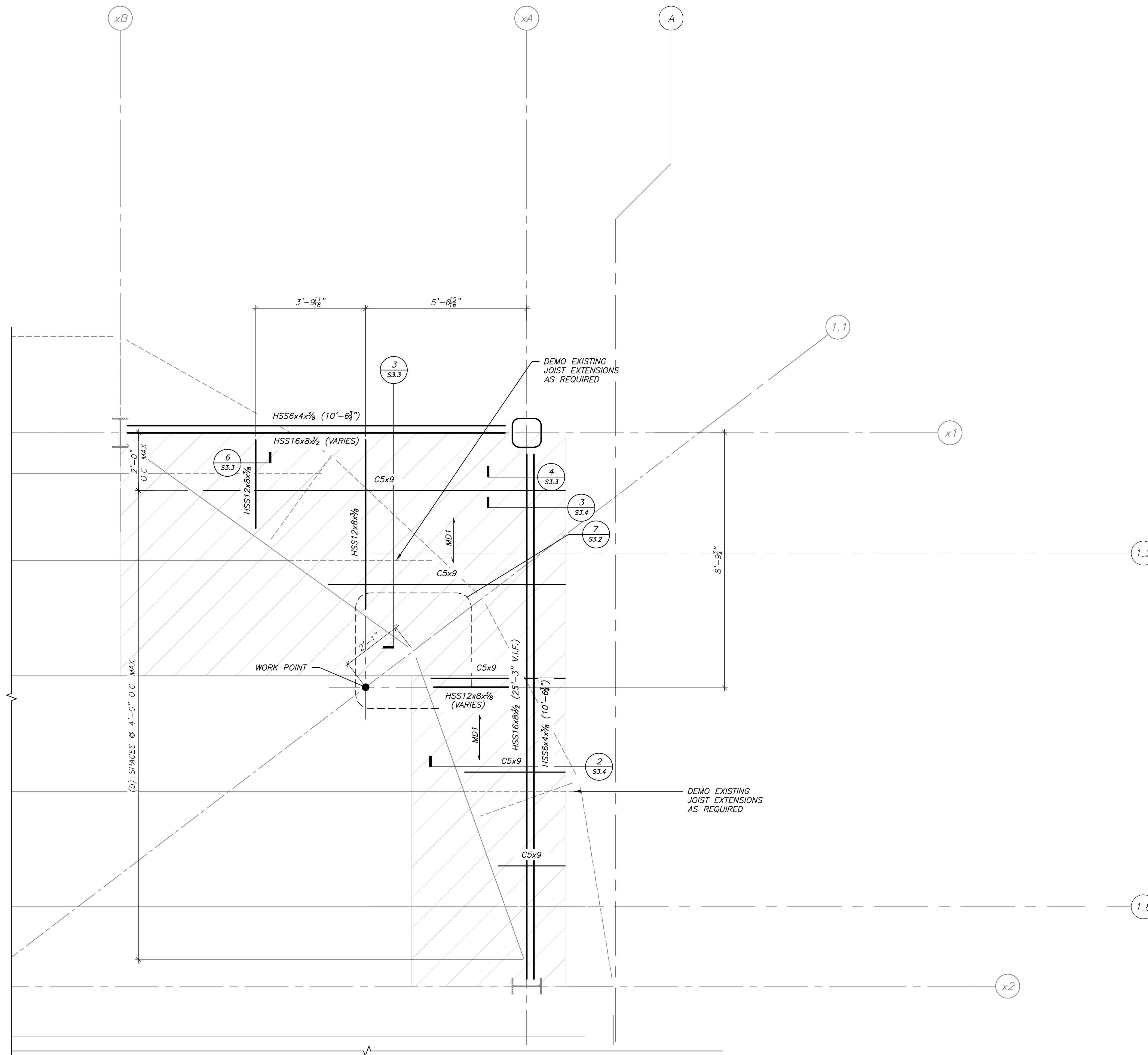
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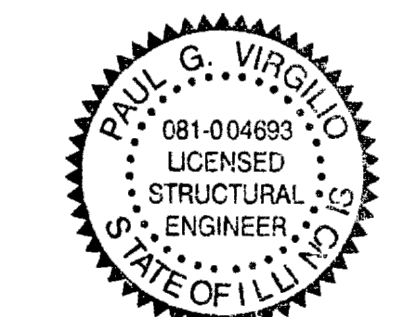
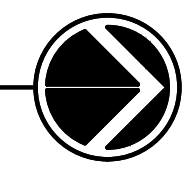
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- NOTES:
1. T/STEEL EL: VARIES, SEE PLAN.
 2. —MD1— INDICATES SPAN DIRECTION OF 1.5"x20 GAUGE METAL ROOF DECK.
 3. SEE SHEET S3.2 FOR DECK SCHEDULE AND TYP. DETAILS
 4. ALL STEEL SHALL BE EVENLY SPACED IN BAYS; U.N.O.
- INDICATES EXTENTS OF NEW METAL ROOF DECK.

1 ENLARGED ROOF FRAMING PLAN

S3.1 1/2" = 1'-0"

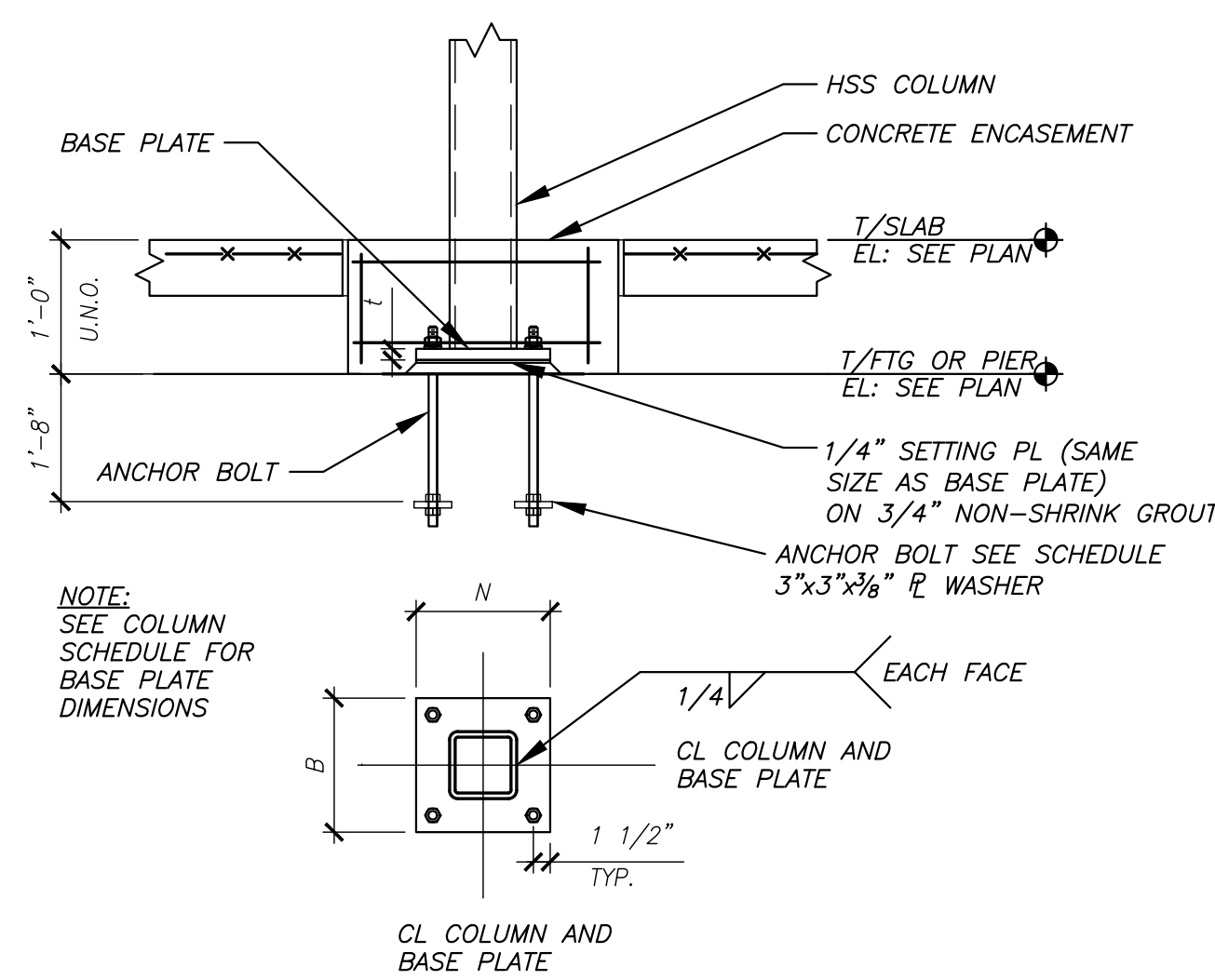


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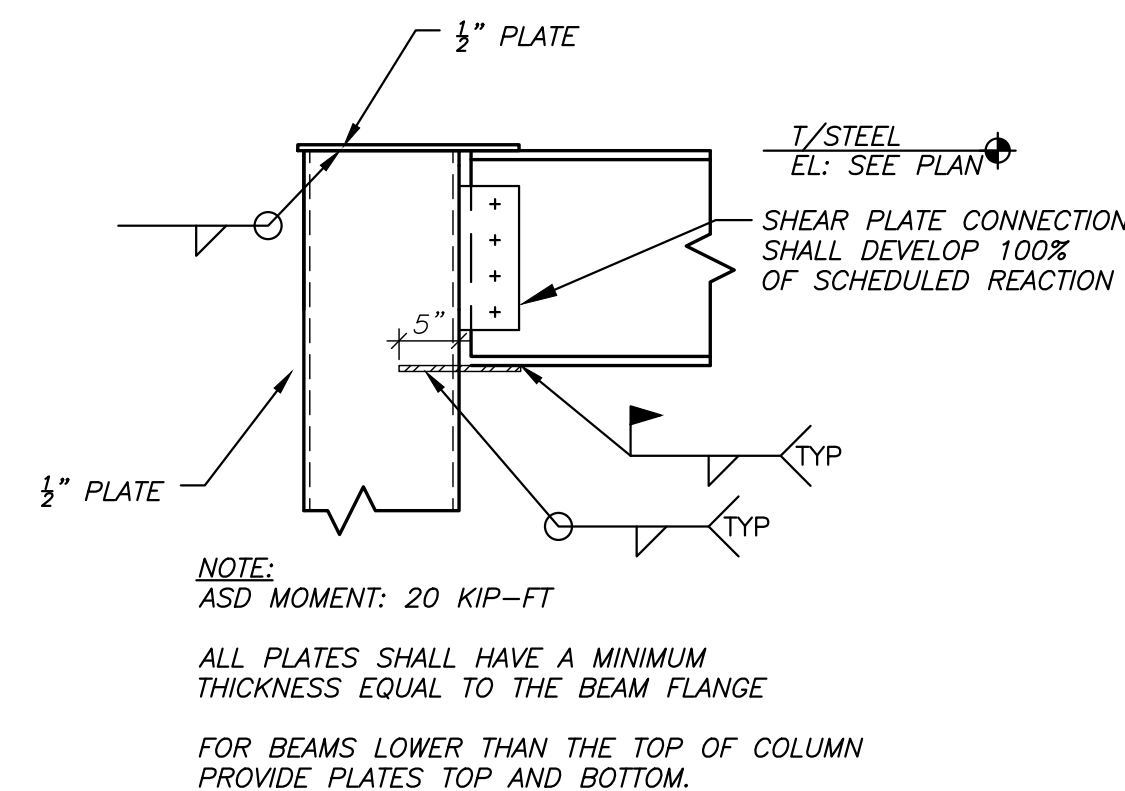
ENLARGED ROOF FRAMING PLAN

S3.1

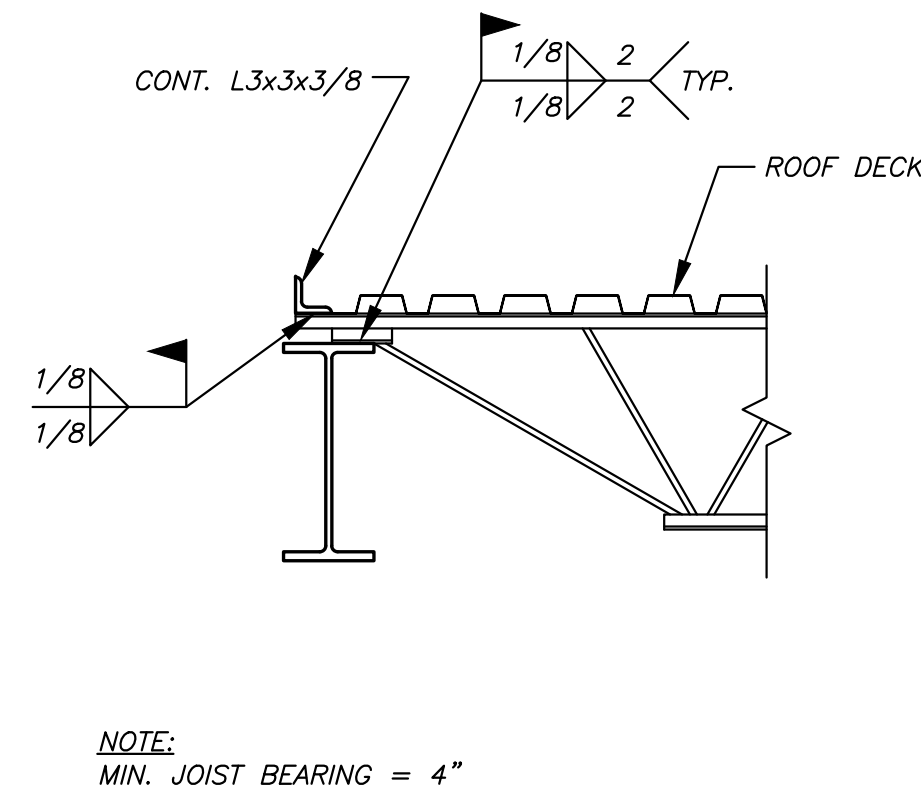
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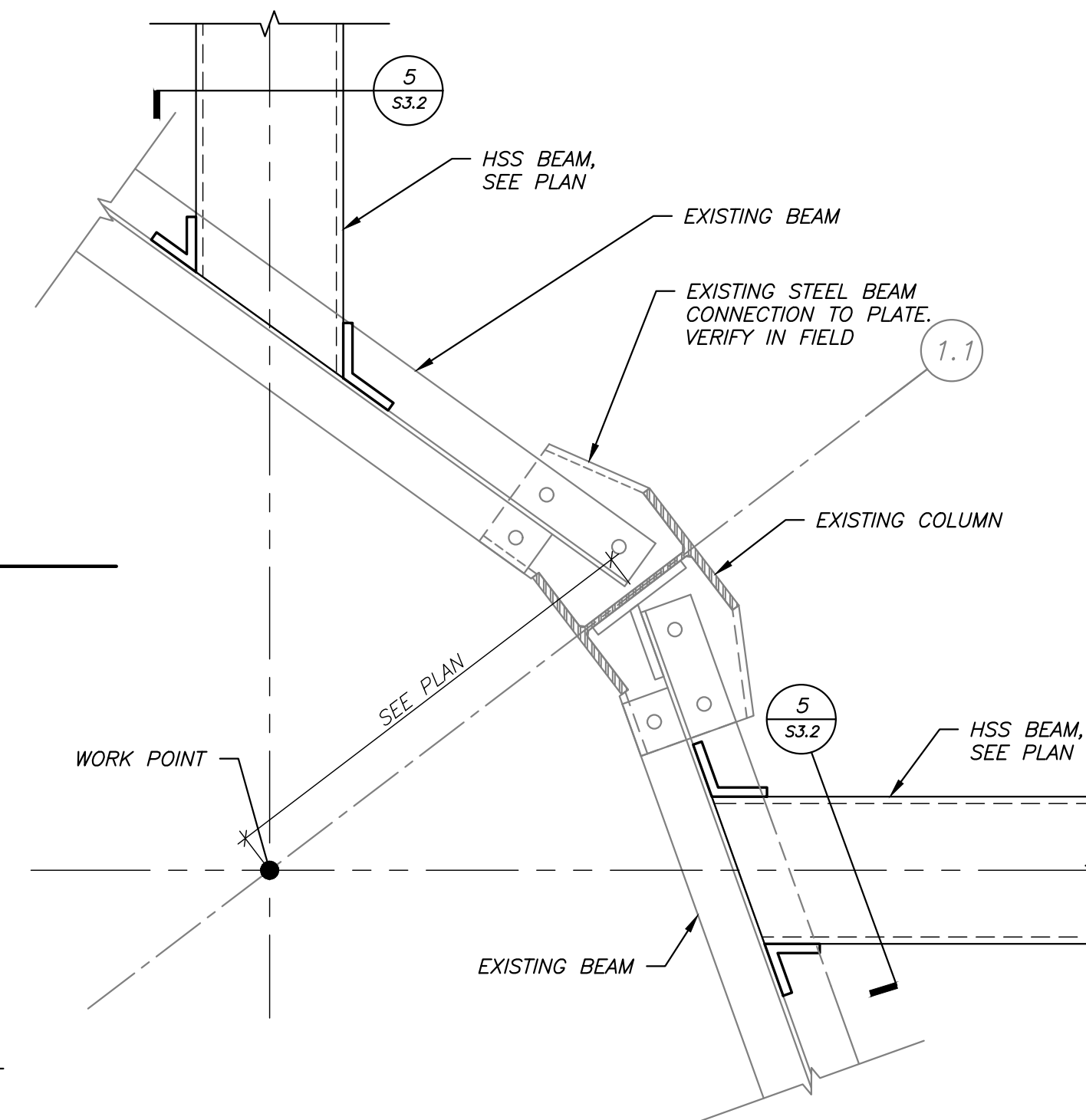
1 TYPICAL TUBE COLUMN BASE PLATE DETAIL



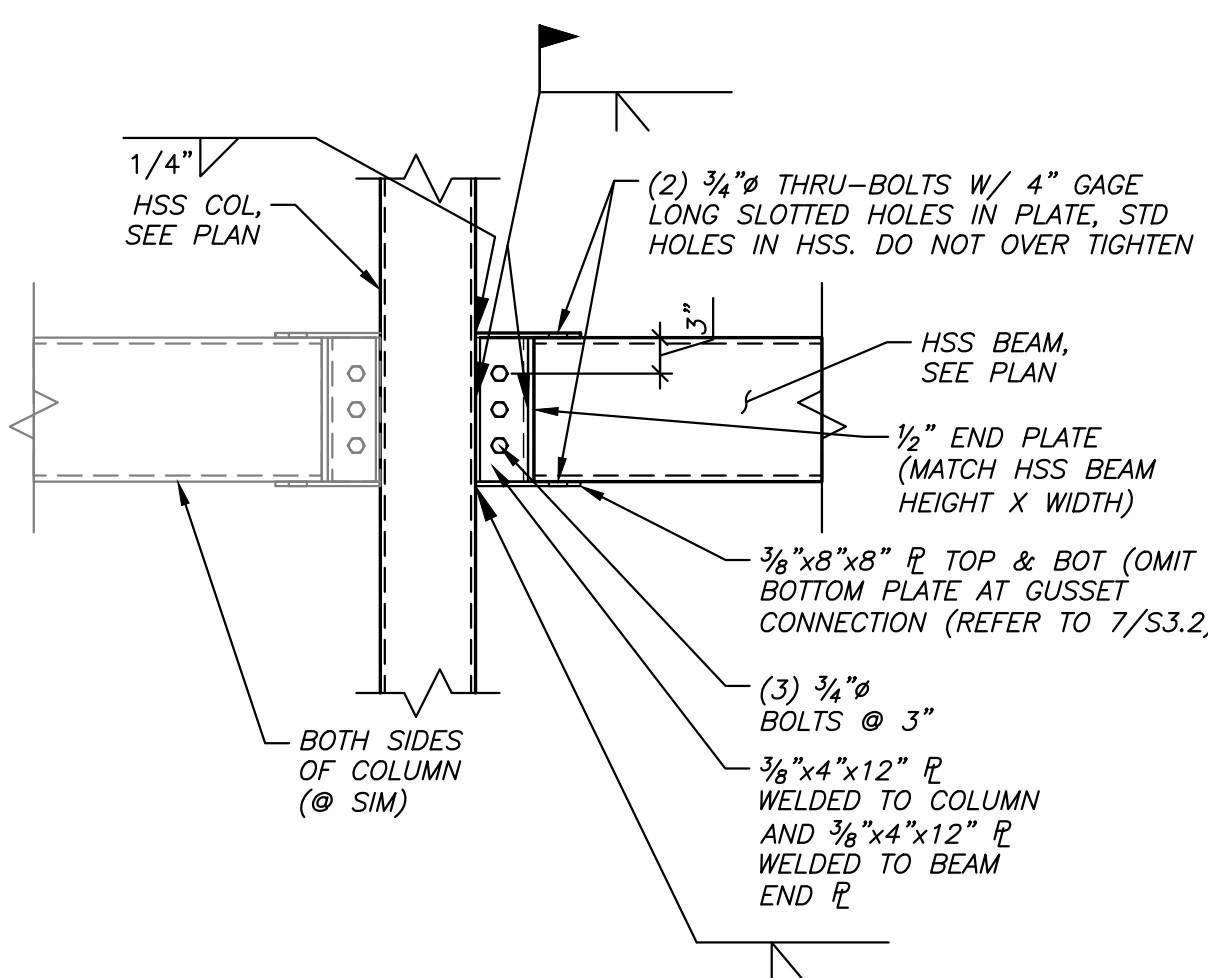
2 TYPICAL BEAM TO HSS COL. MOMENT CONNECTION



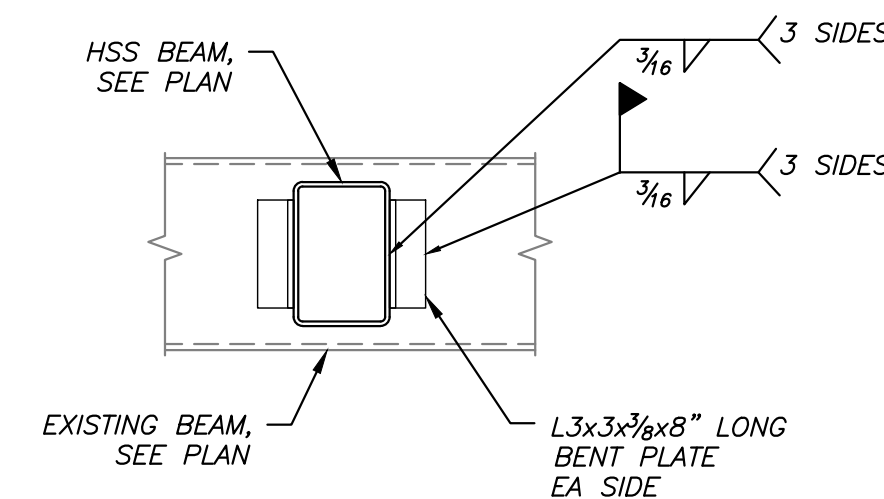
3 TYPICAL JOIST TO BEAM DETAIL



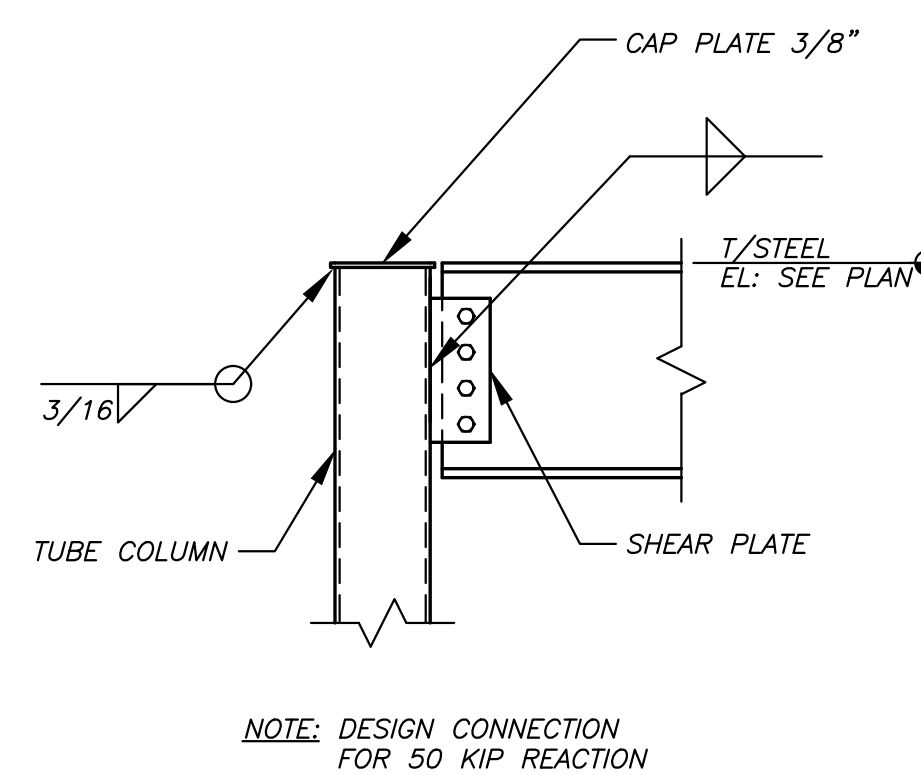
7 ENLARGED PLAN



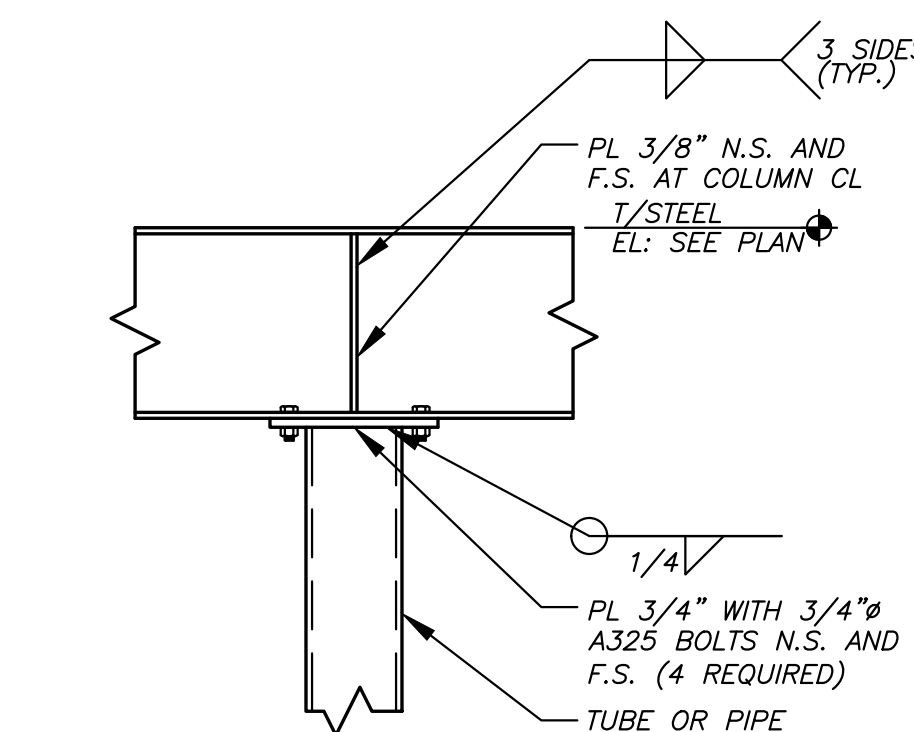
4 HSS BEAM TO COLUMN CONNECTION



5 HSS BEAM TO BEAM CONNECTION



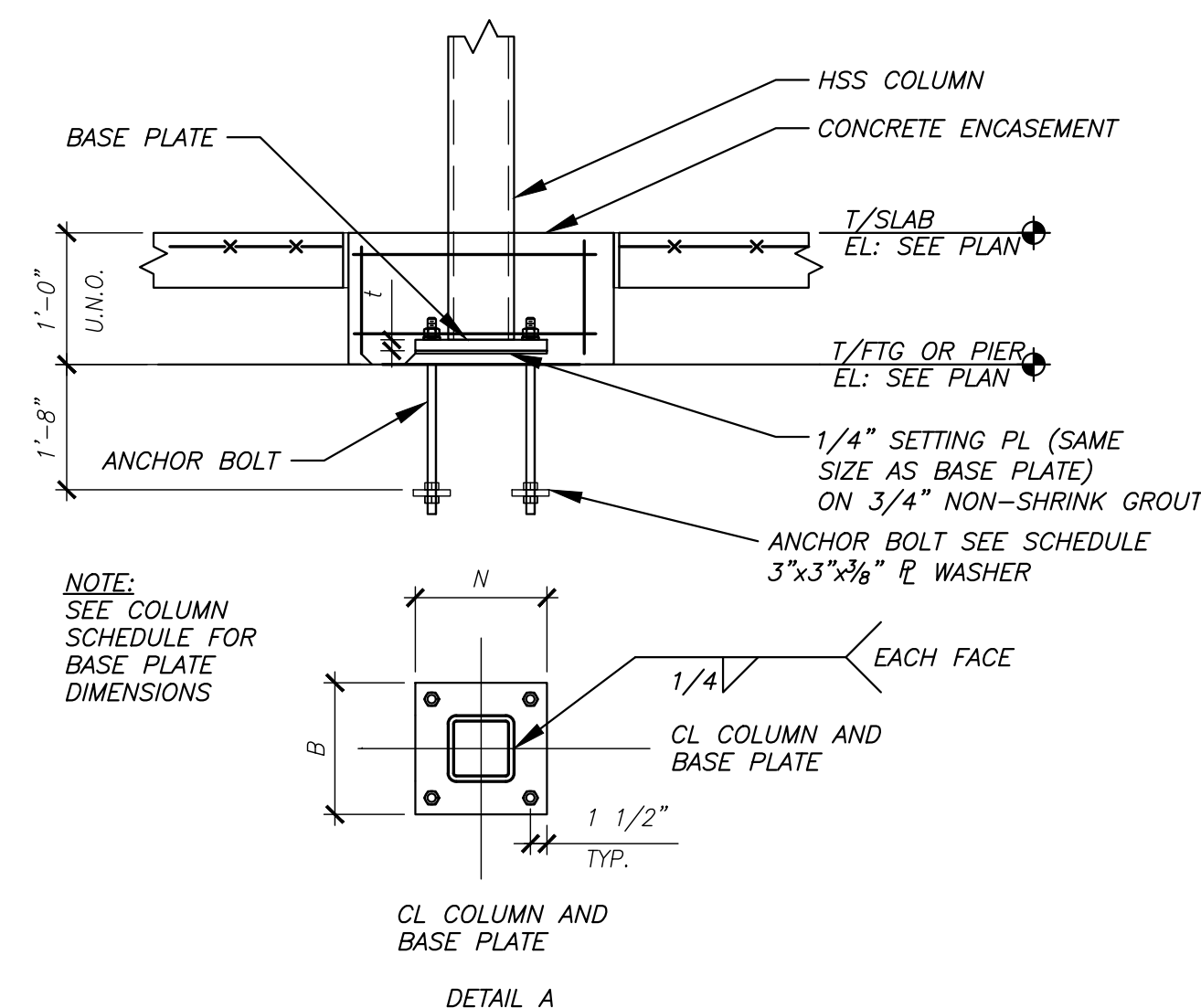
6 TYPICAL BEAM TO TUBE COLUMN CONNECTION



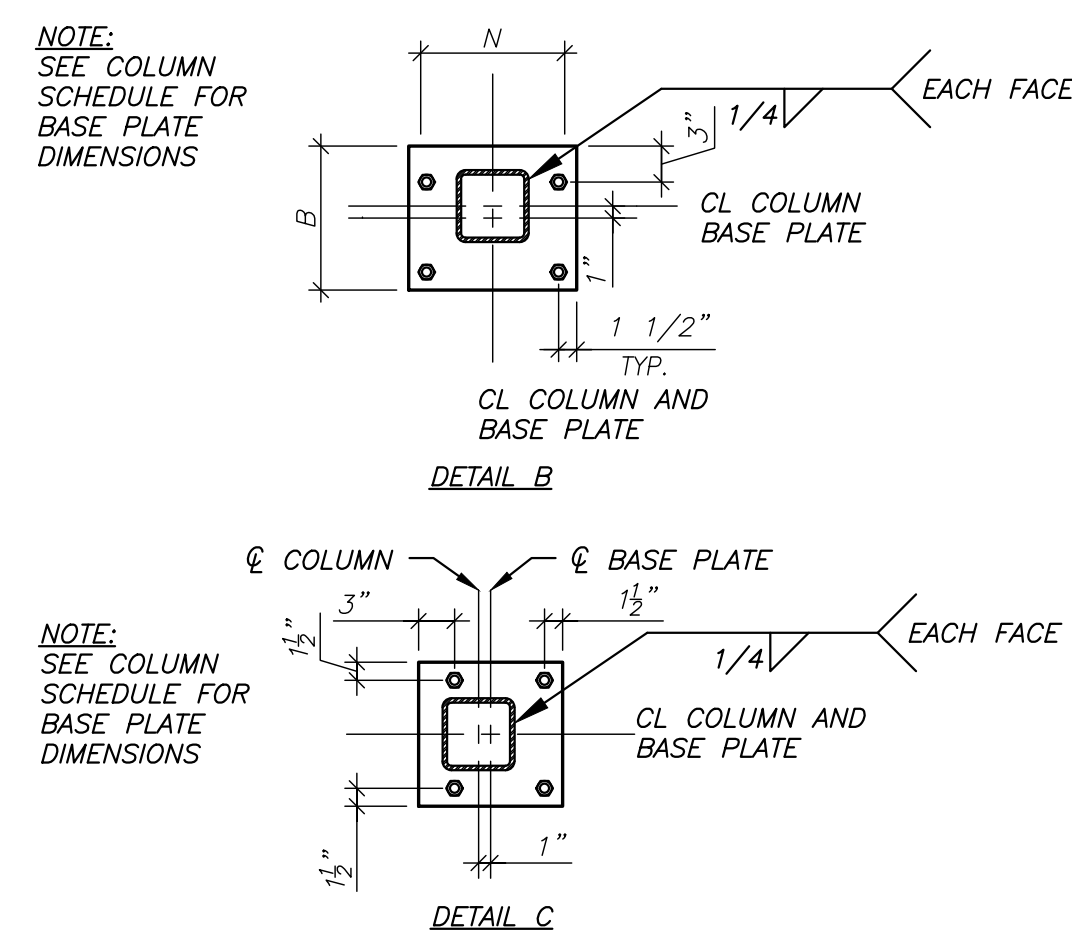
10 TYPICAL BEAM OVER COLUMN CONNECTION

COLUMN SCHEDULE		F _y = SEE GENERAL NOTES					
COLUMN MARK	C1	C2	C3	C4	C5	C6	
LEVEL							
ROOF							
MEZZANINE	HSS5x8x3/8	HSS6x6x3/8	HSS5x8x3/8	HSS6x6x3/8	HSS5x8x3/8	HSS5x8x3/8	
FIRST FLOOR							
BASE PLATE t x N x B	3/4"x14"x1'-2"	3/4"x12"x1'0"	3/4"x12"x1'-0"	7/8"x14"x1'-0"	7/8"x12"x1'-0"	3/4"x10"x1'-0"	
ANCHOR BOLTS (4 3/4" U.N.O.)	(4) 3/4" Ø	(4) 3/4" Ø	(4) 3/4" Ø	(4) 3/4" Ø	(4) 3/4" Ø	(4) 3/4" Ø	
REMARKS	SEE 9/S3.2 DETAIL A	SEE 9/S3.2 DETAIL C	SEE 9/S3.2 DETAIL A	SEE 9/S3.2 DETAIL B	SEE 9/S3.2 DETAIL A	SEE 9/S3.2 DETAIL A	

8 COLUMN SCHEDULE



9 TYPICAL TUBE COLUMN BASE PLATE DETAILS



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FRAMING DETAILS

S3.2

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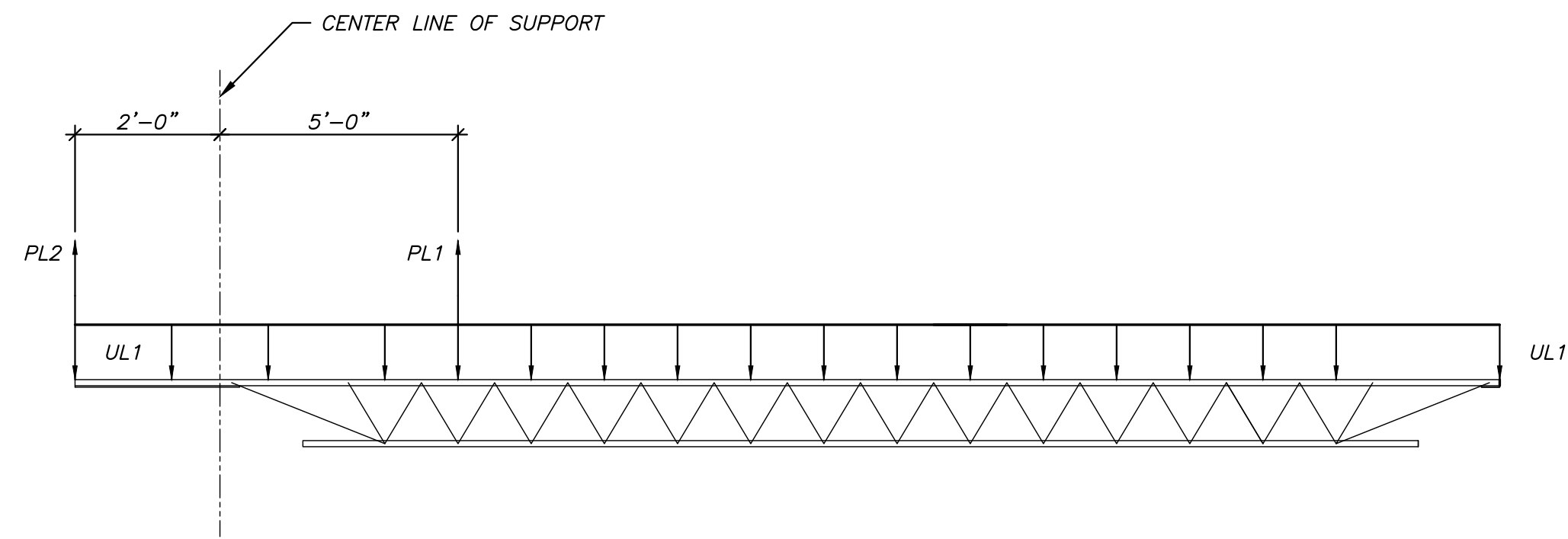
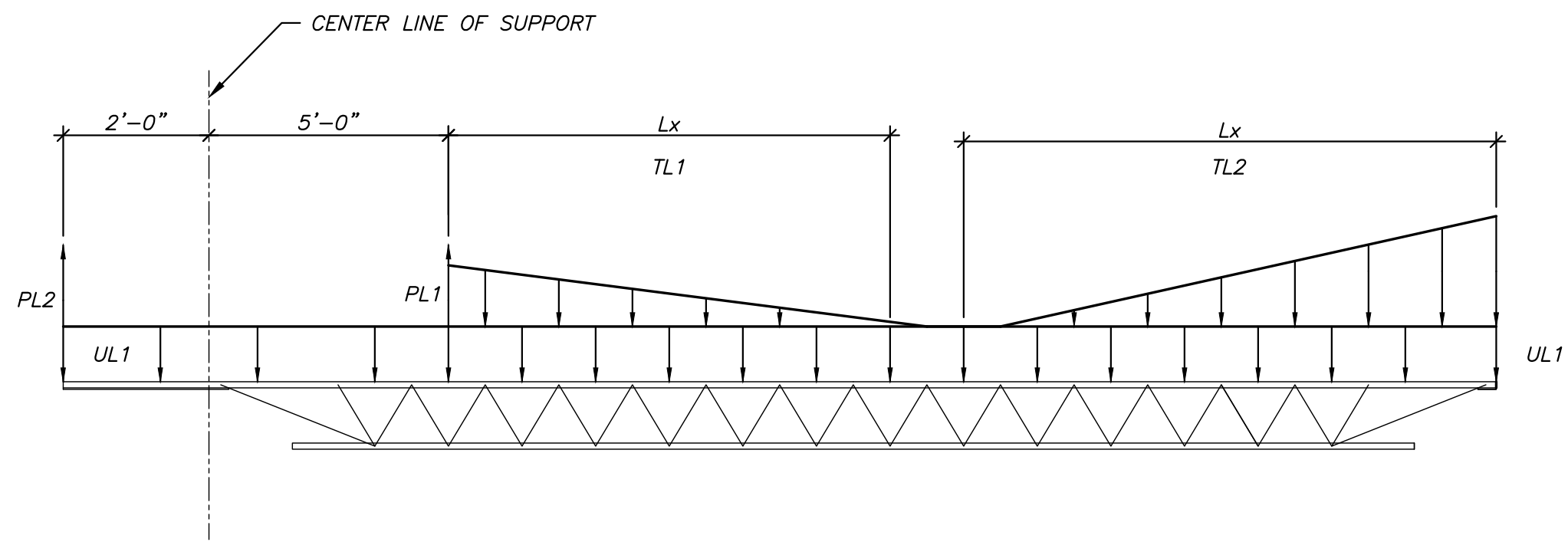
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FRAMING DETAILS

S3.3



POINT LOAD SCHEDULE

MARK	DEAD LOAD (lbf)	SNOW LOAD (lbf)	WIND LOAD (lbf)
PL1	100	100	±1000
PL2	400	500	±1000

UNIFORM LOAD SCHEDULE

MARK	DEAD LOAD (plf)	SNOW LOAD (plf)	WIND LOAD (plf)
UL1	80	100	±70

TRIANGLE LOAD SCHEDULE

MARK	DEAD LOAD (plf)	SNOW DRIFT LOAD (plf)	WIND LOAD (plf)	LENGHT Lx (ft)
TL1	0	260	0	14.5
TL2	0	240	0	13

POINT LOAD SCHEDULE

MARK	DEAD LOAD (lbf)	SNOW LOAD (lbf)	WIND LOAD (lbf)
PL1	100	0	±500
PL2	400	0	±500

UNIFORM LOAD SCHEDULE

MARK	DEAD LOAD (plf)	SNOW LOAD (plf)	SNOW DRIFT LOAD (plf)	WIND LOAD (plf)
UL1	80	100	235	±250

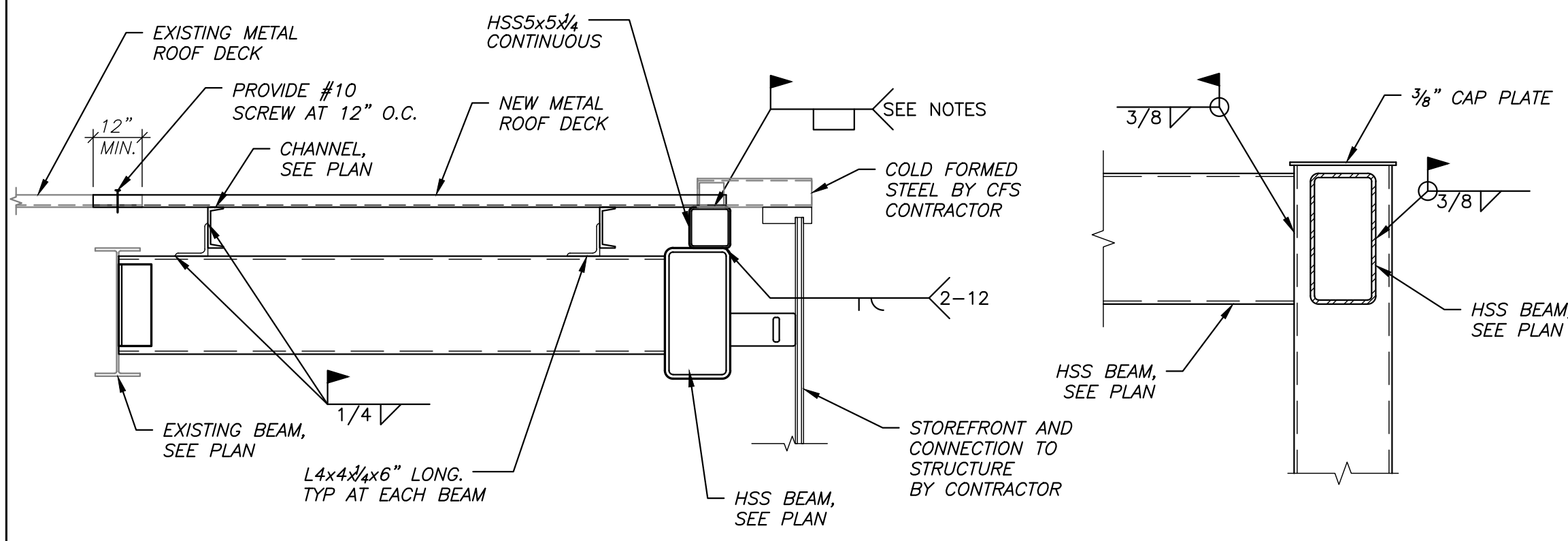
NOTE: PL1 WIND LOAD AND PL2 WIND LOAD ACT IN OPPOSITE DIRECTIONS SIMULTANEOUSLY

NOTE: PL1 WIND LOAD AND PL2 WIND LOAD ACT IN OPPOSITE DIRECTIONS SIMULTANEOUSLY

NOTE: PL1 AND PL2 WIND LOAD DO NOT ACT SIMULTANEOUSLY WITH UNIFORM LOAD

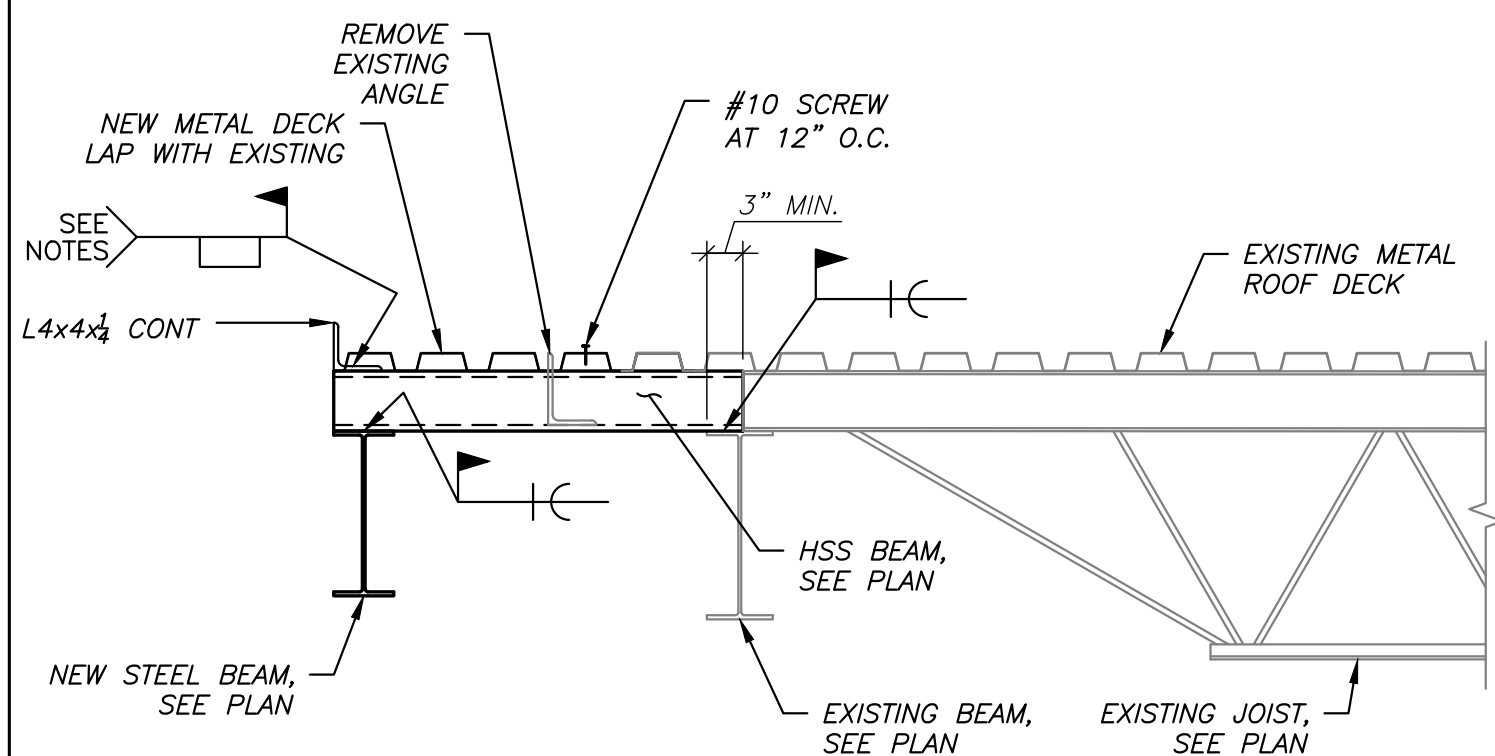
1 JOIST LOADING DIAGRAM - J1
S3.3

2 JOIST LOADING DIAGRAM - J2
S3.3



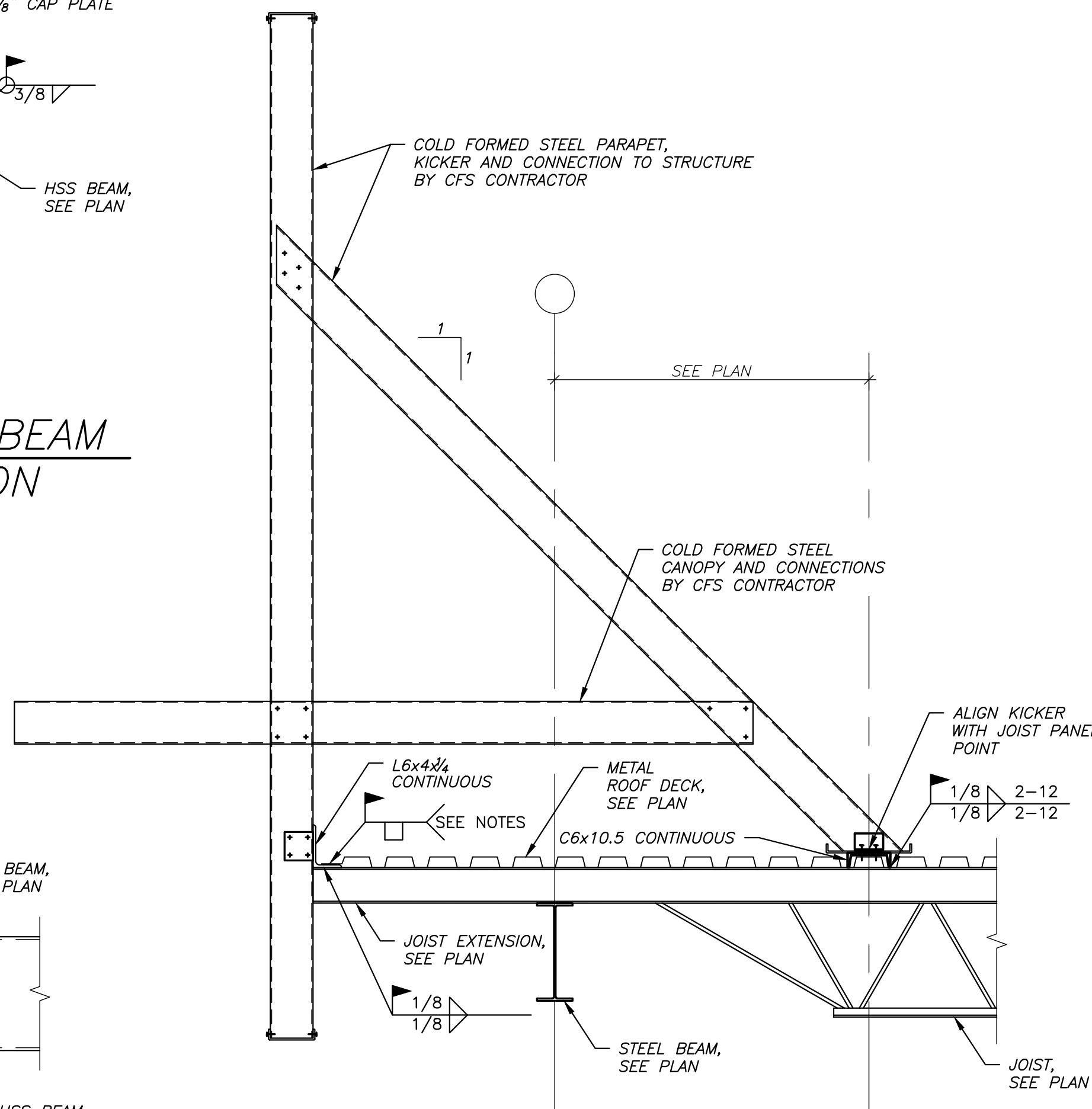
3 SECTION
S3.3 3/4" = 1'-0"

4 BEAM TO BEAM CONNECTION
S3.3

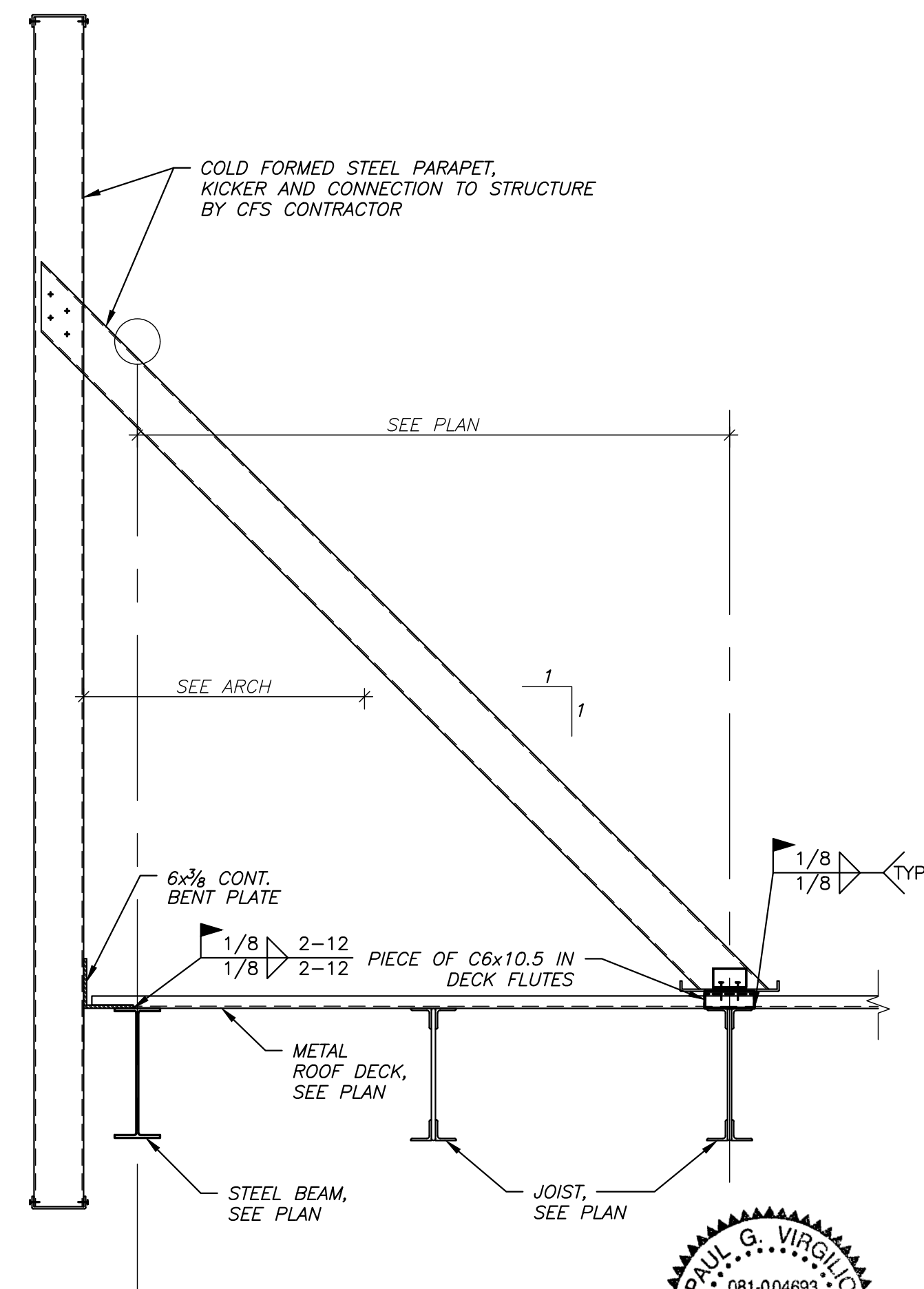


5 SECTION
S3.3 3/4" = 1'-0"

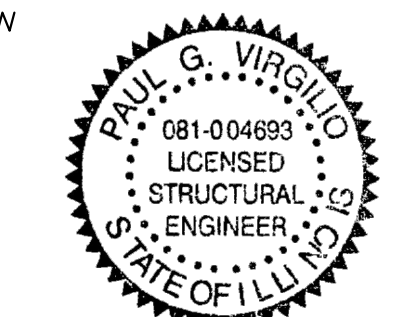
6 BEAM TO BEAM CONNECTION
S3.3



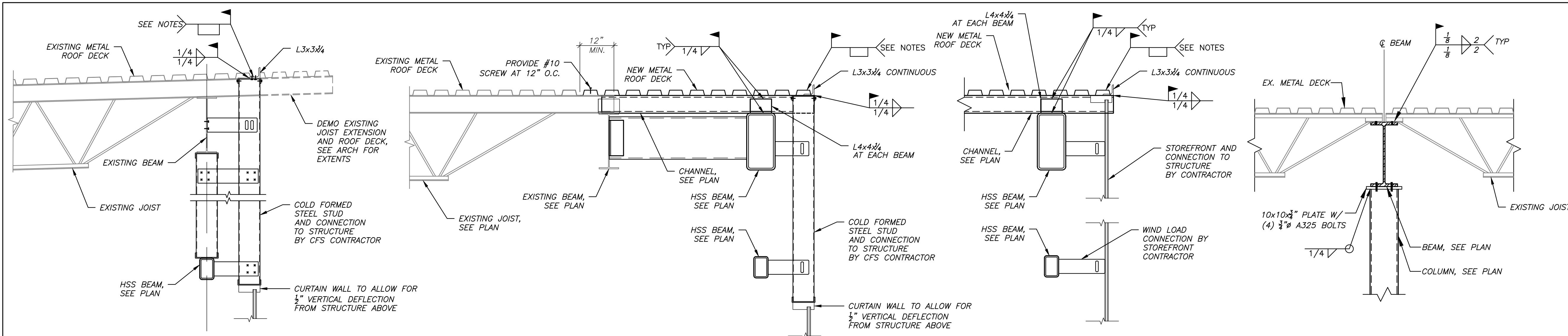
7 SECTION
S3.3



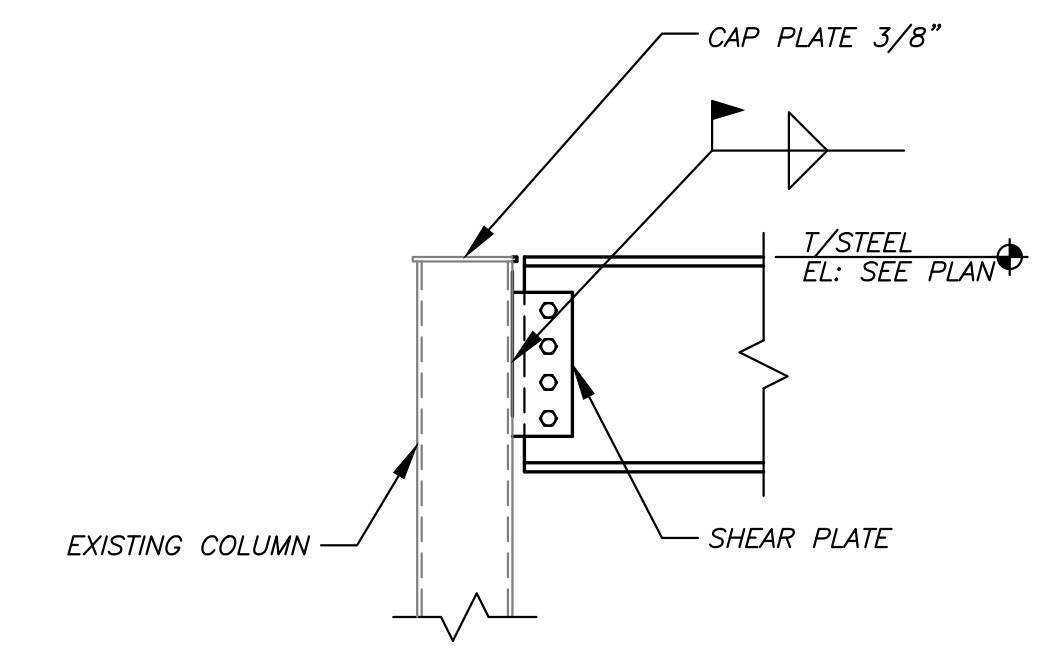
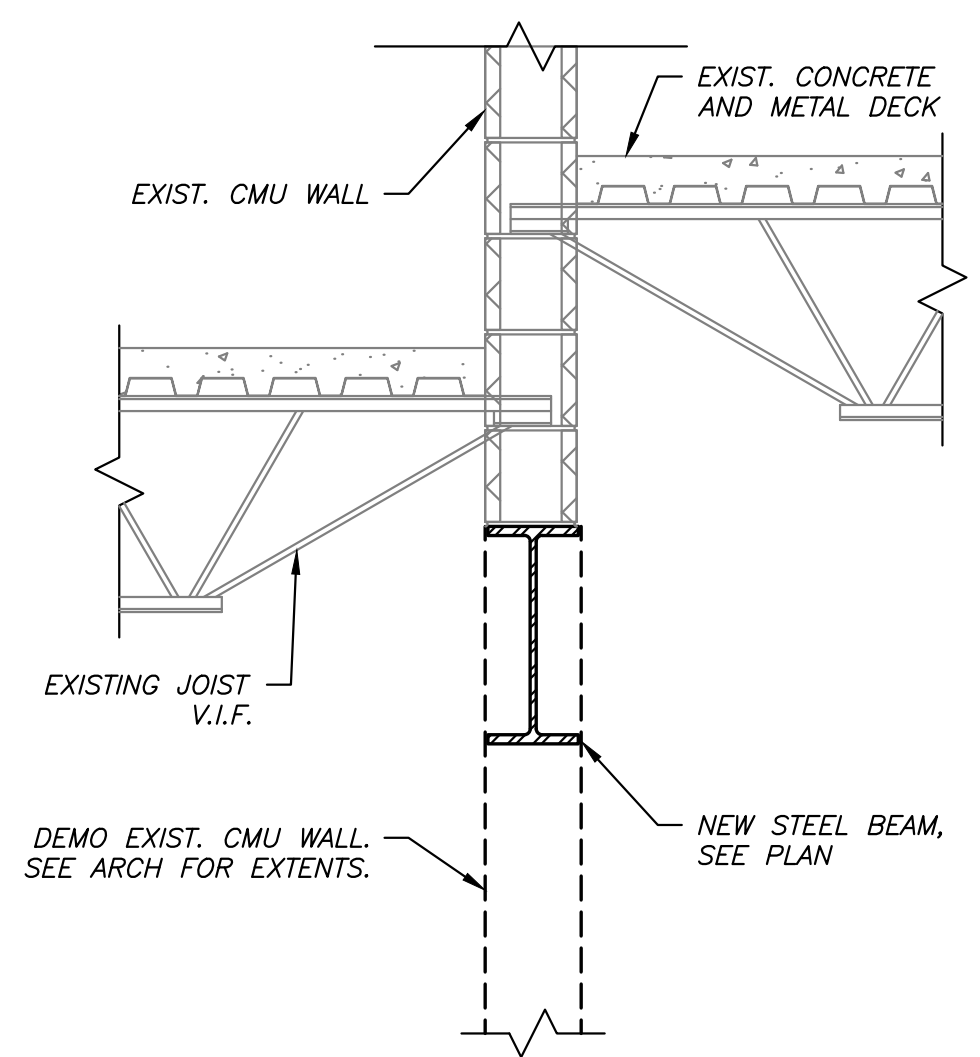
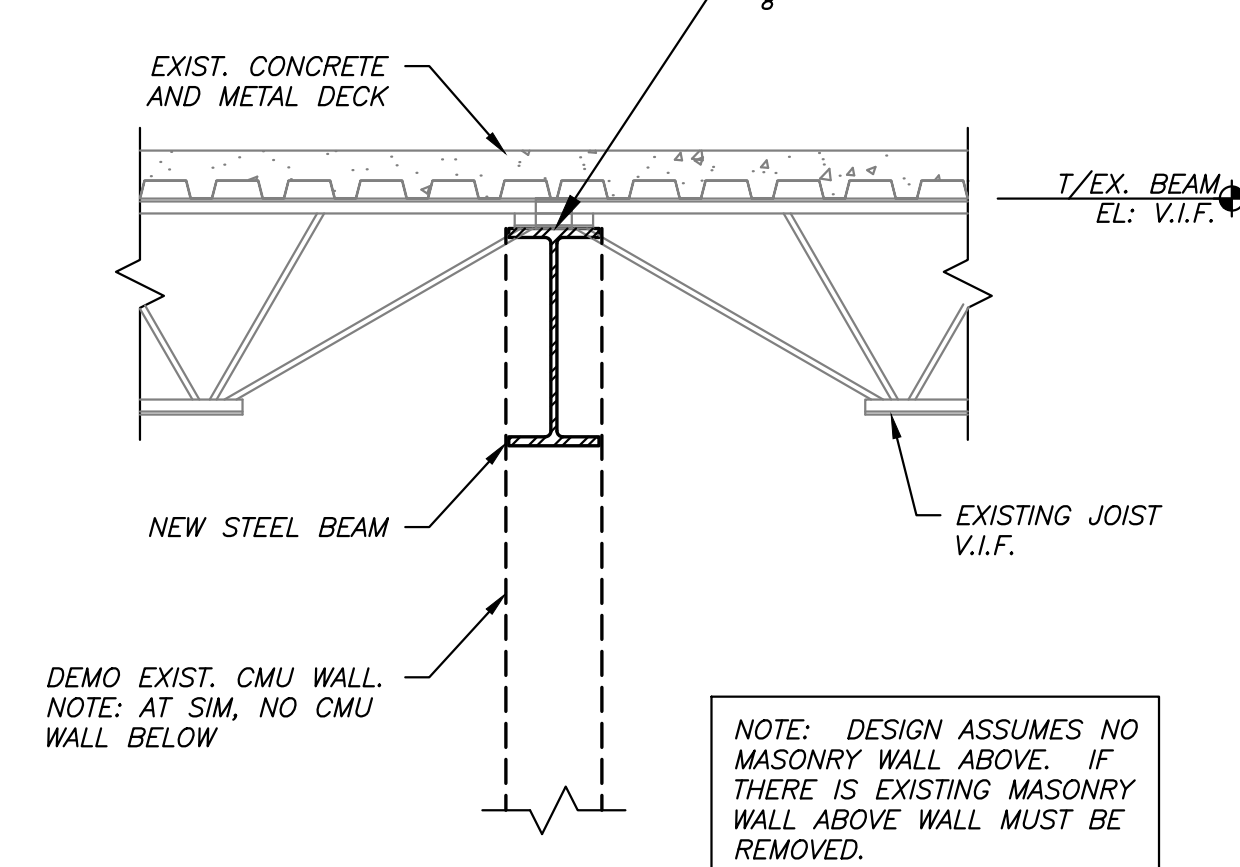
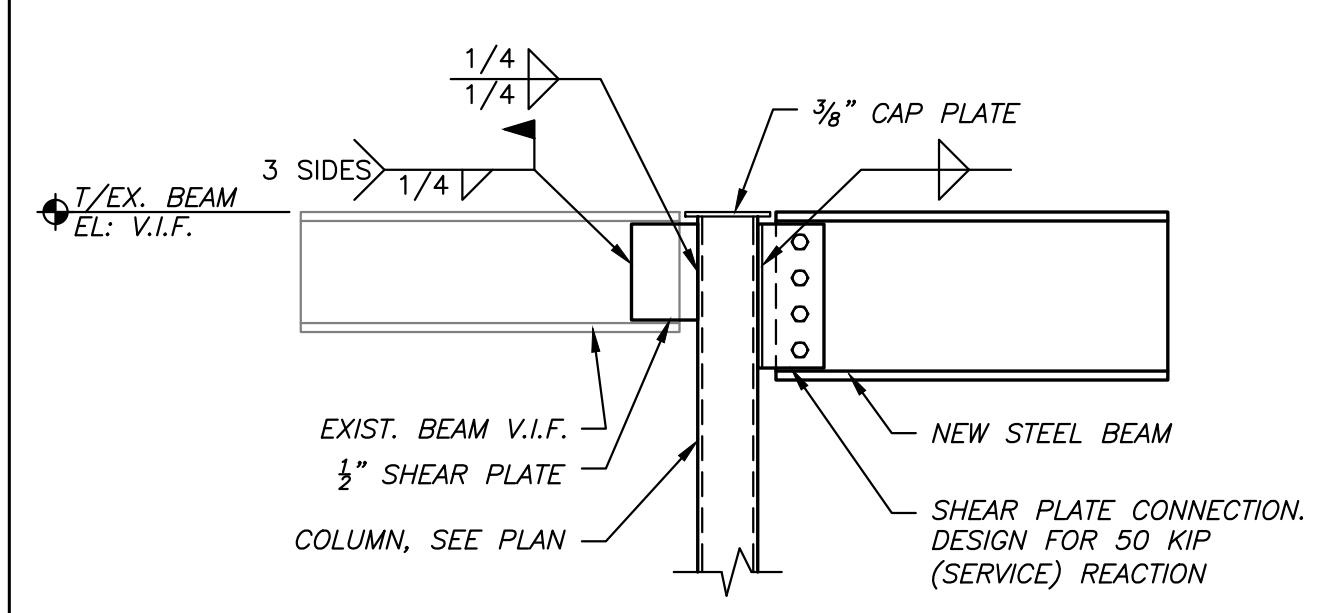
8 SECTION
S3.3



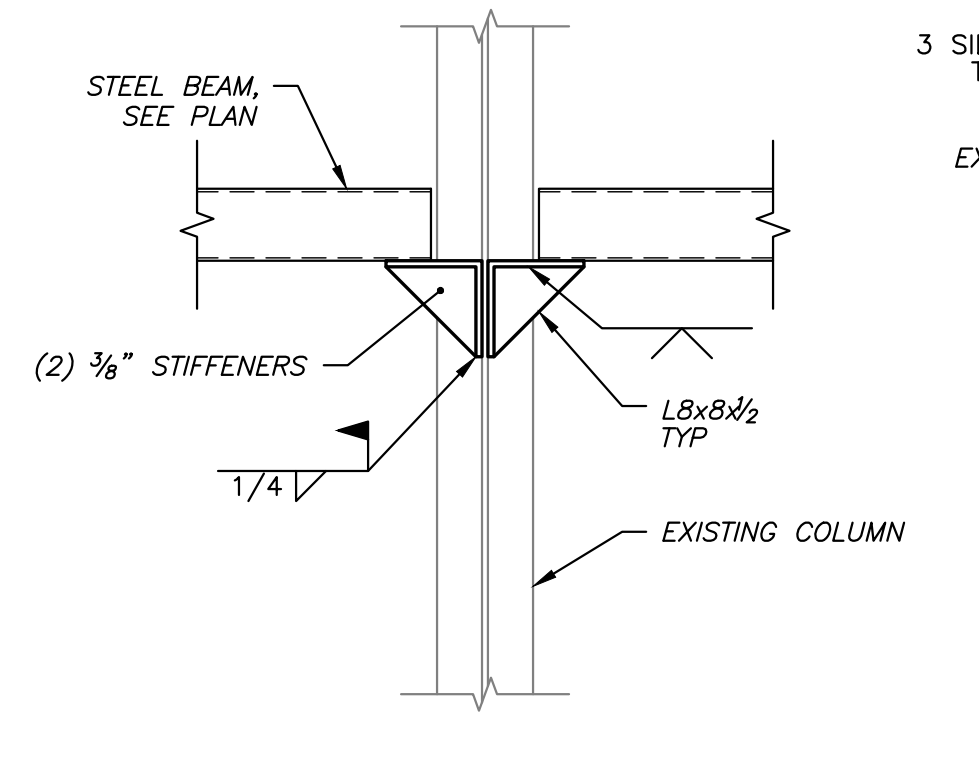
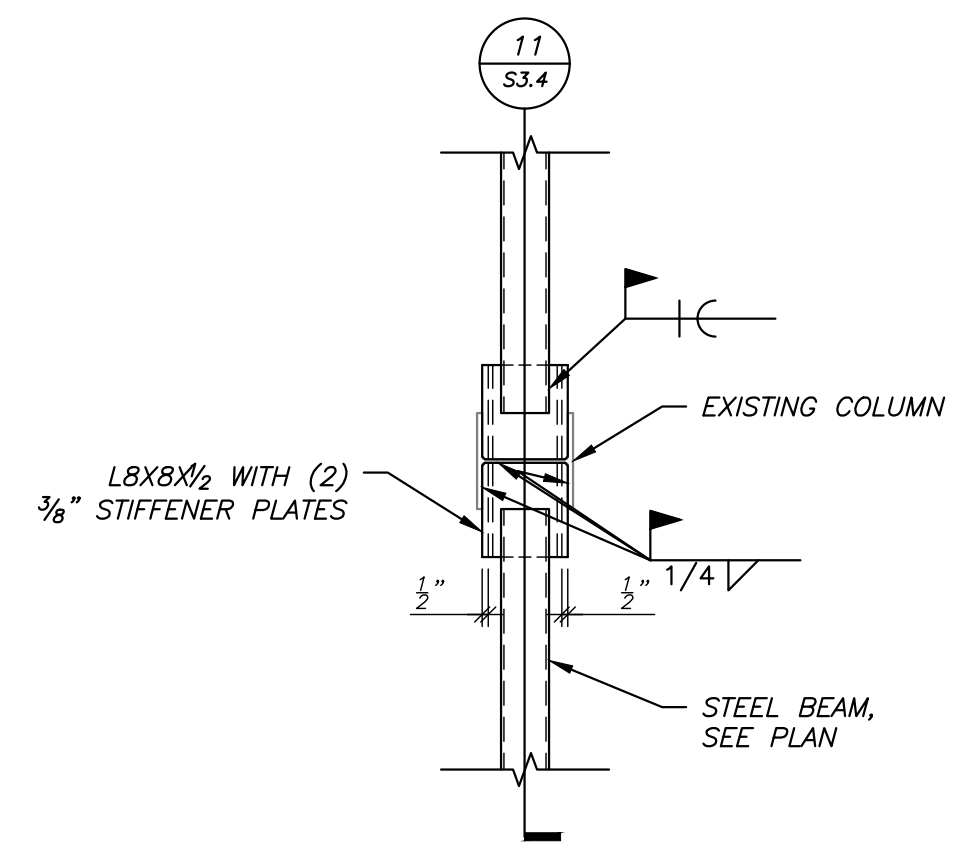
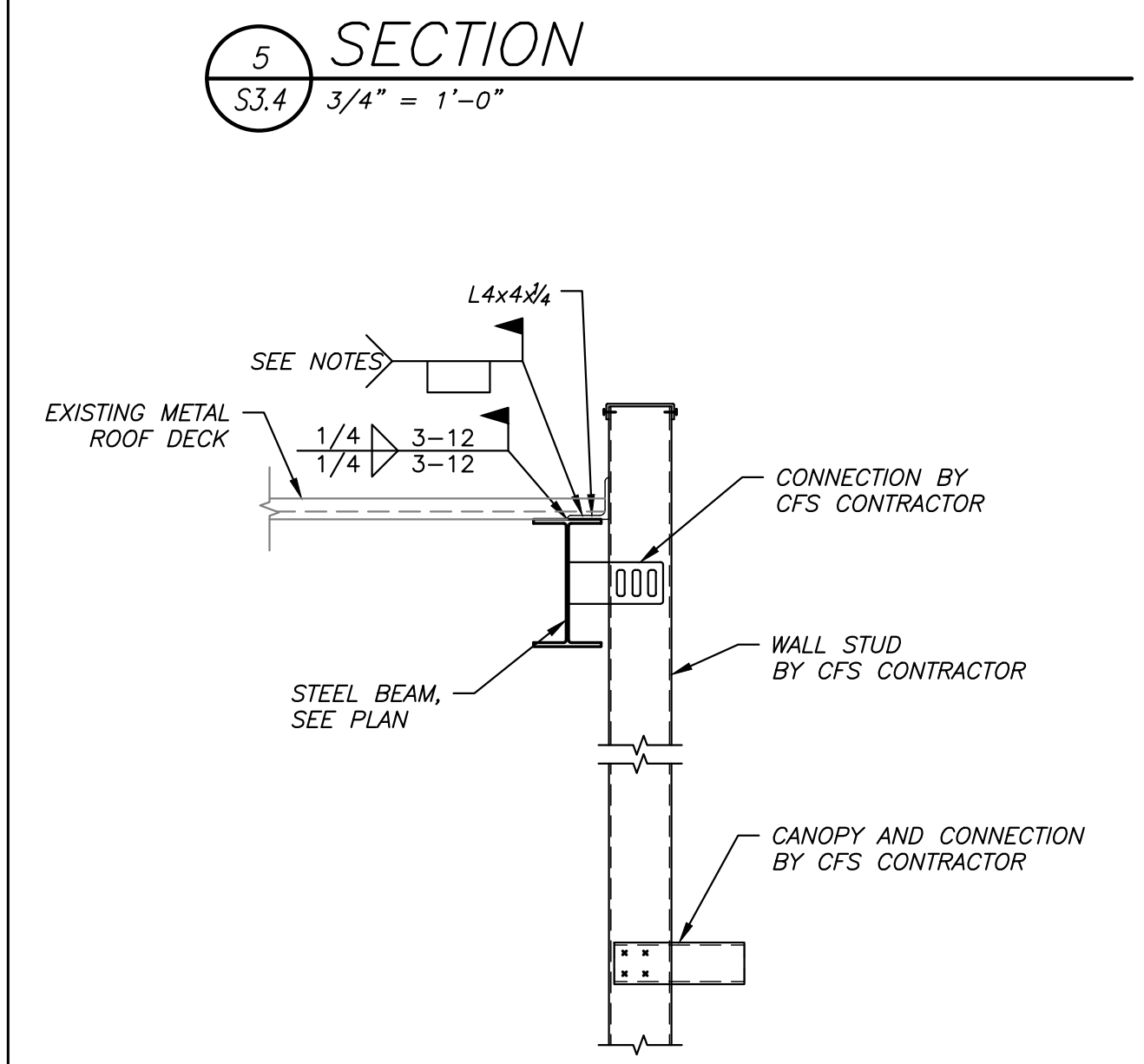
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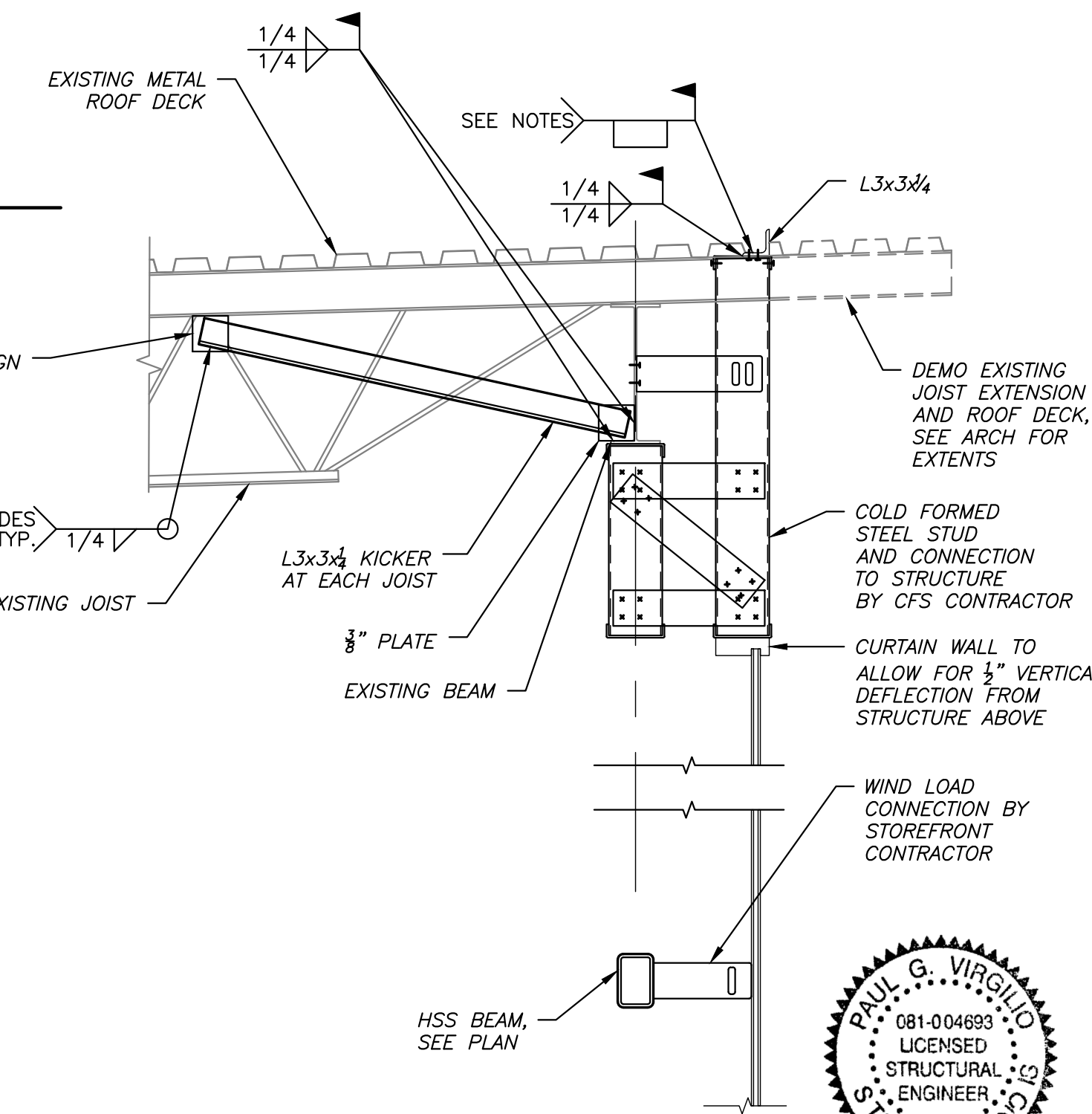
4 TYPICAL JOIST TO BEAM DETAIL
S3.4 3/4" = 1'-0"



8 TYPICAL BEAM TO TUBE COLUMN CONNECTION
S3.4 3/4" = 1'-0"



11 SECTION
S3.4 3/4" = 1'-0"



12 SECTION
S3.4 3/4" = 1'-0"

PAUL G. VIRGILIO
081-004693
LICENSED STRUCTURAL ENGINEER
STATE OF ILLINOIS
Paul G. Virgilio
Signature 05/10/2017
Date
Expires 11/30/2018

PROJECT:

International Auto KIA
8821 159th Street
Orland Hills, IL 60487

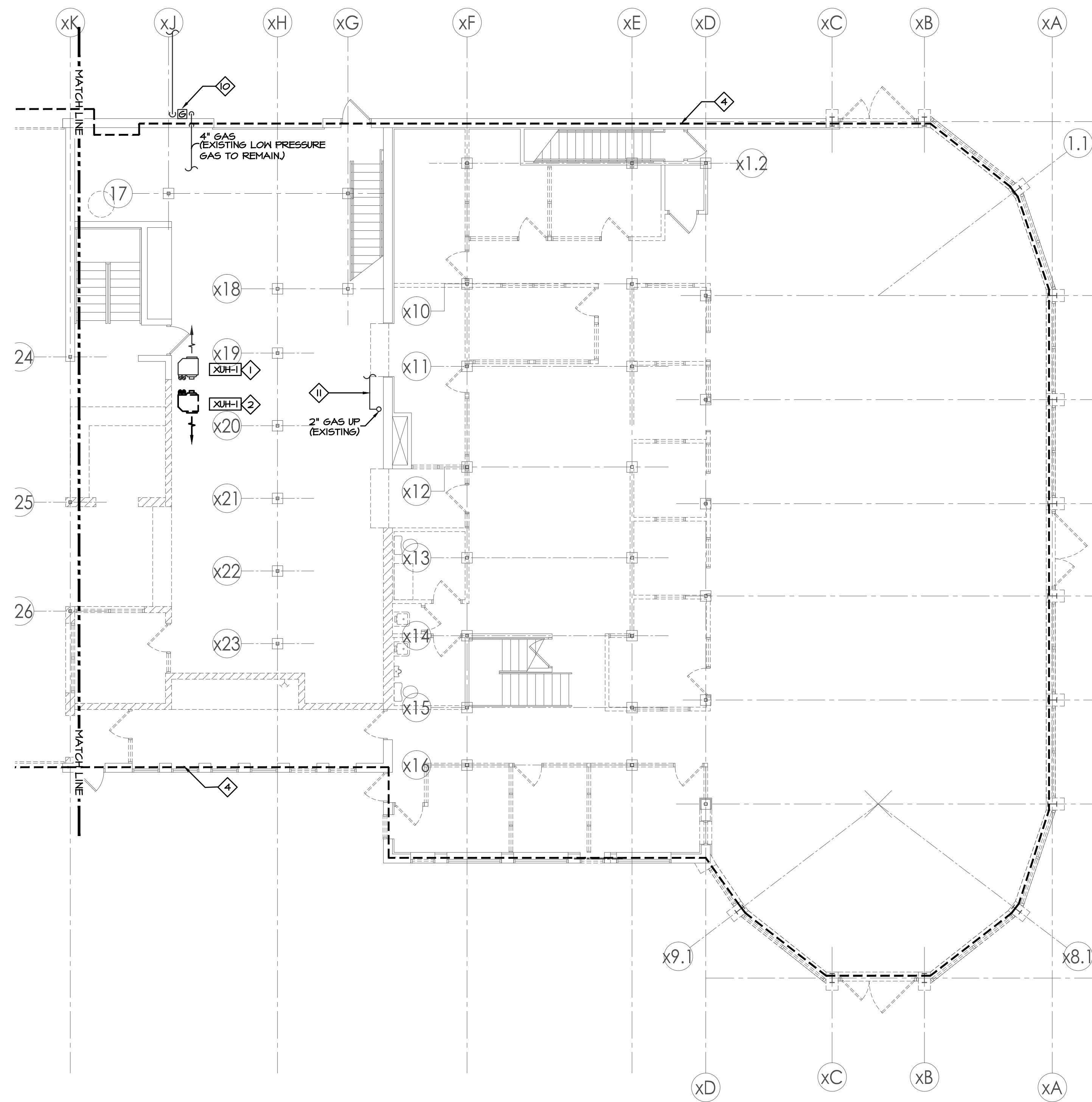
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FRAMING DETAILS
S3.4



- MECHANICAL KEY NOTES**
- EXISTING XUH-1 TO REMAIN.
 - DEMO EXISTING XUH-1 COMPLETE WITH POWER AND CONTROLS. CAP GAS CONNECTION AT SOURCE.
 - DEMO EXISTING HVAC SERVING THIS AREA COMPLETE WITH DUCTWORK, DIFFUSERS, EXHAUST FAN, POWER AND CONTROLS. CAP EXISTING GAS CONNECT.
 - DEMO EXISTING HVAC EQUIPMENT SERVING THIS AREA UNLESS OTHERWISE NOTED.
 - EXISTING EXHAUST FAN XEF-6 TO BE REMOVED COMPLETE WITH POWER AND CONTROLS UP TO THE SOURCE. CAP EXISTING DUCT AT INLET CONNECTION.
 - EXISTING VEHICLE EXHAUST DUCT TO REMAIN.
 - EXISTING GAS UNIT HEATERS & RADIANT HEATERS TO REMAIN SERVING THIS AREA.
 - CAP AT THIS LOCATION.
 - EXISTING 1-1/2" GAS PIPE TO REMAIN.
 - UPGRADE EXISTING GAS SERVICE FROM 3471 MBH TO 3700 MBH DUE TO ADDITIONAL UPGRADE OF ROOF TOP UNIT CAPACITIES AND ADDITION OF NEW MAU-1.
 - EXISTING TO REMAIN.

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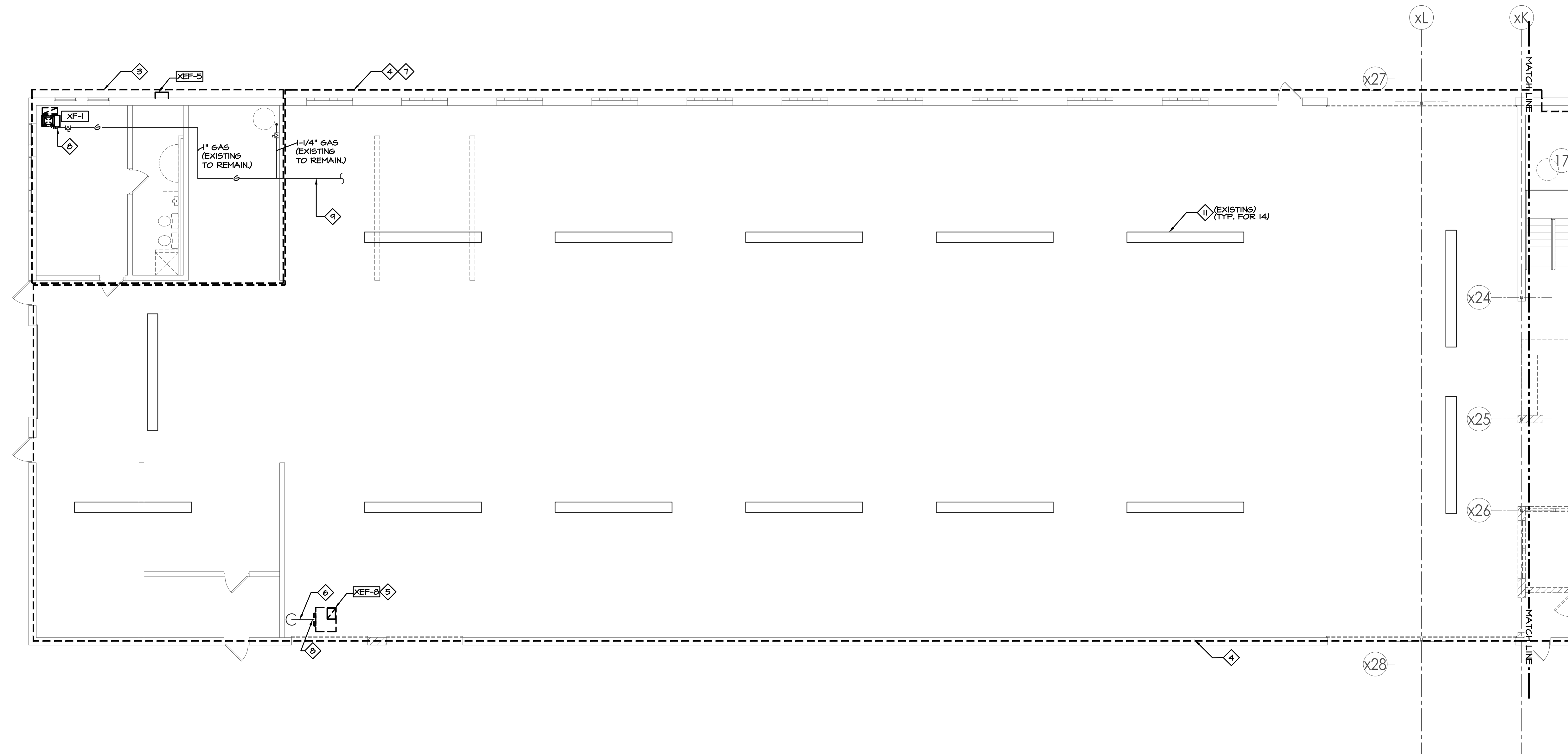
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**MECHANICAL FIRST
FLR DEMO PLAN**

MD1.1



NOTES

1. SEE SHEET MD1.1 FOR KEY NOTES.
2. FOR LEGENDS SEE SHEET M2.2.

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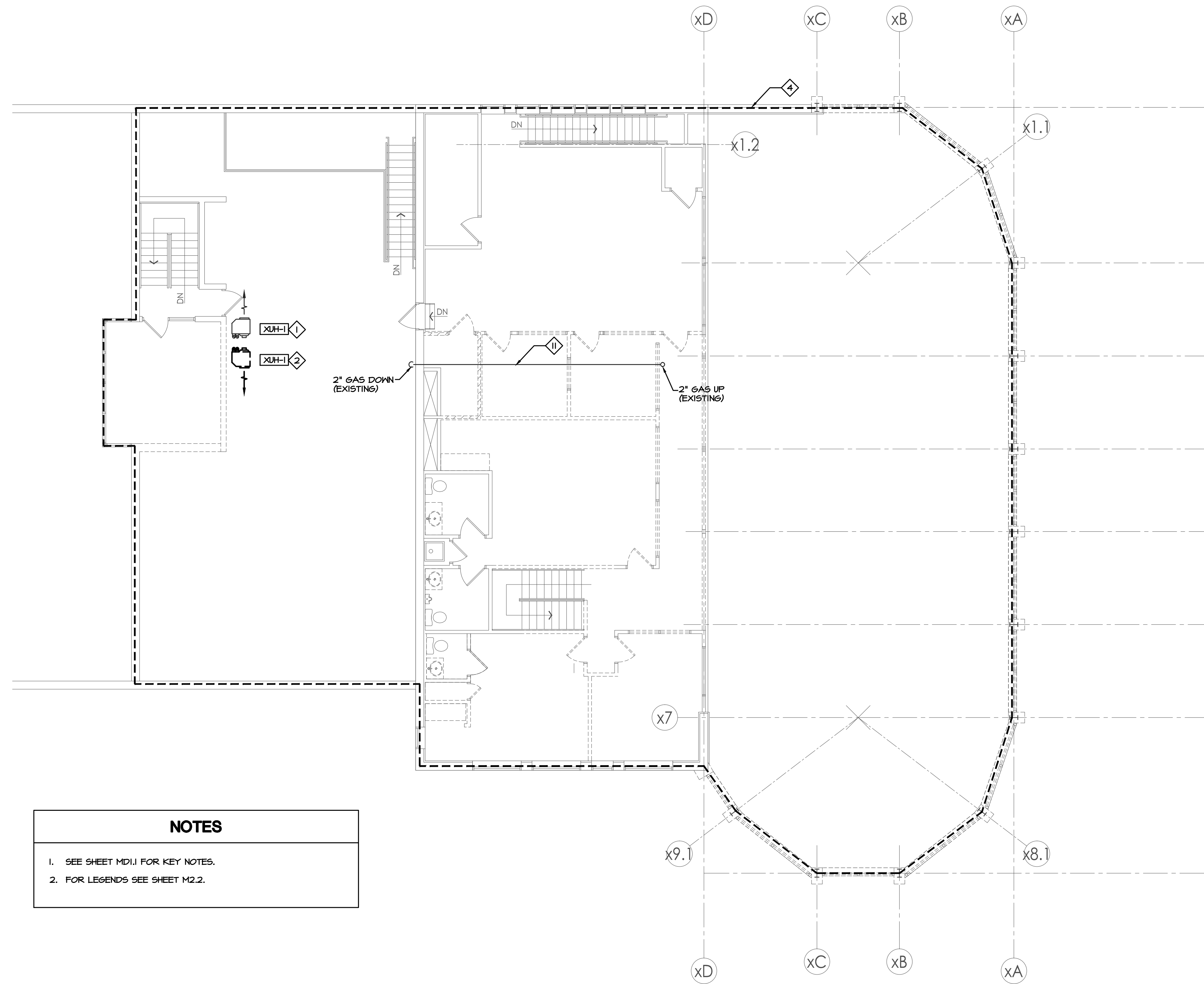
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**MECHANICAL FIRST
 FLR DEMO PLAN**

MD1.2



NOTES

1. SEE SHEET MD1.1 FOR KEY NOTES.
2. FOR LEGENDS SEE SHEET M2.2.

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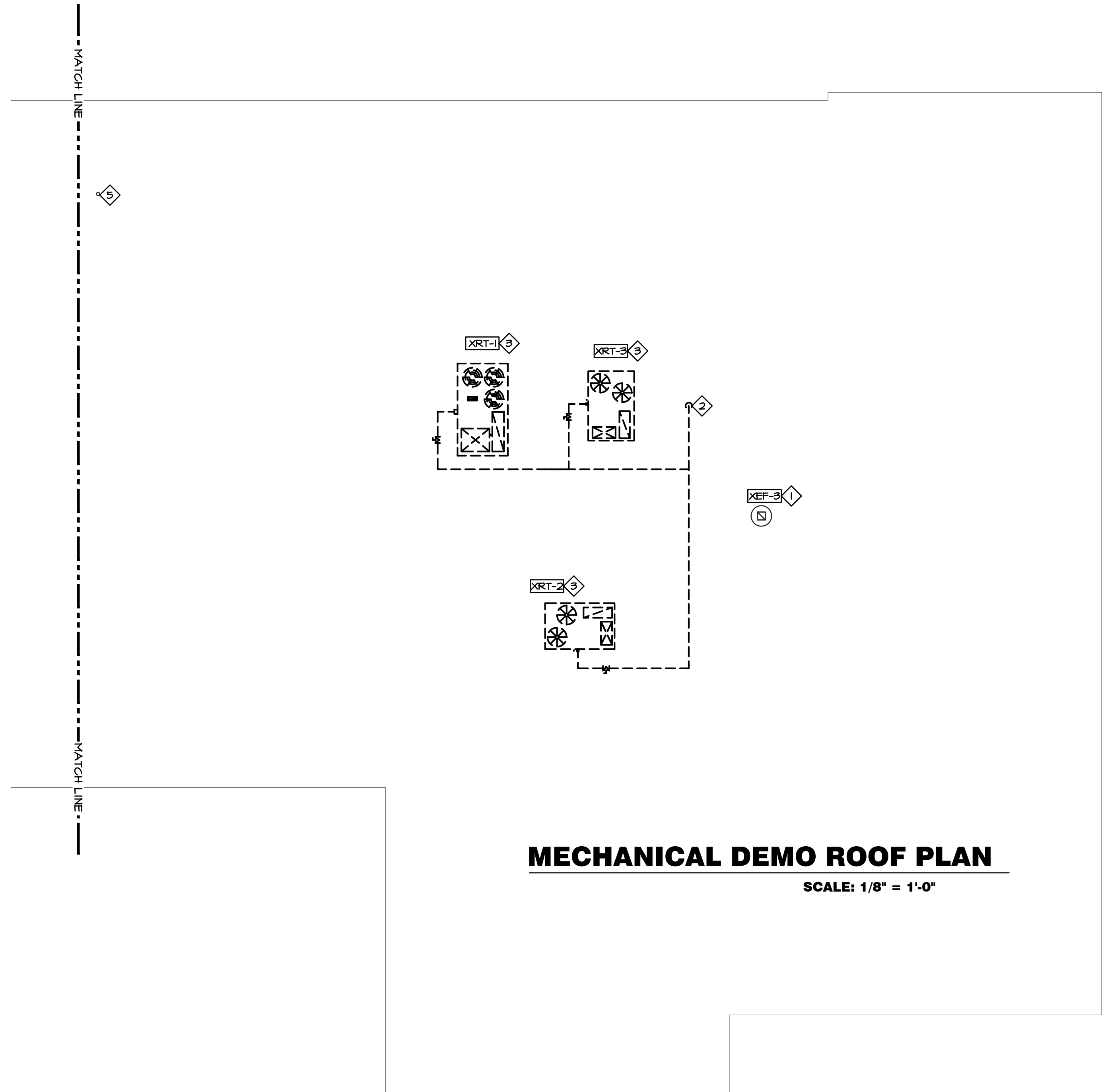
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**MECH SECOND FLR
 DEMO PLAN**

MD1.3



- MECHANICAL KEY NOTES**
- EXISTING XEF-3 TO BE ABANDONED INPLACE. CAP THE DUCT BELOW THE ROOF. REMOVE POWER AND CONTROLS UP TO THE SOURCE.
 - CAP 2" EXISTING GAS AT THIS LOCATION.
 - DEMO EXISTING ROOFTOP UNIT PER EPA STANDARDS COMPLETE WITH POWER, GAS CONNECTION & CONTROLS.
 - EXISTING GOOSENECK TO REMAIN.
 - EXISTING WATER HEATER FLUE TO REMAIN.
 - DEMO EXISTING CONDENSING UNIT PER EPA STANDARDS COMPLETE WITH POWER AND CONTROLS.
 - EXISTING FLUE & VENT FROM EXISTING FURNACE TO REMAIN.
 - EXISTING EXHAUST FAN TO REMAIN.

PROJECT:

KIA

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MECHANICAL DEMO ROOF PLAN

MD1.4

PROJECT:



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ARCHITECT:



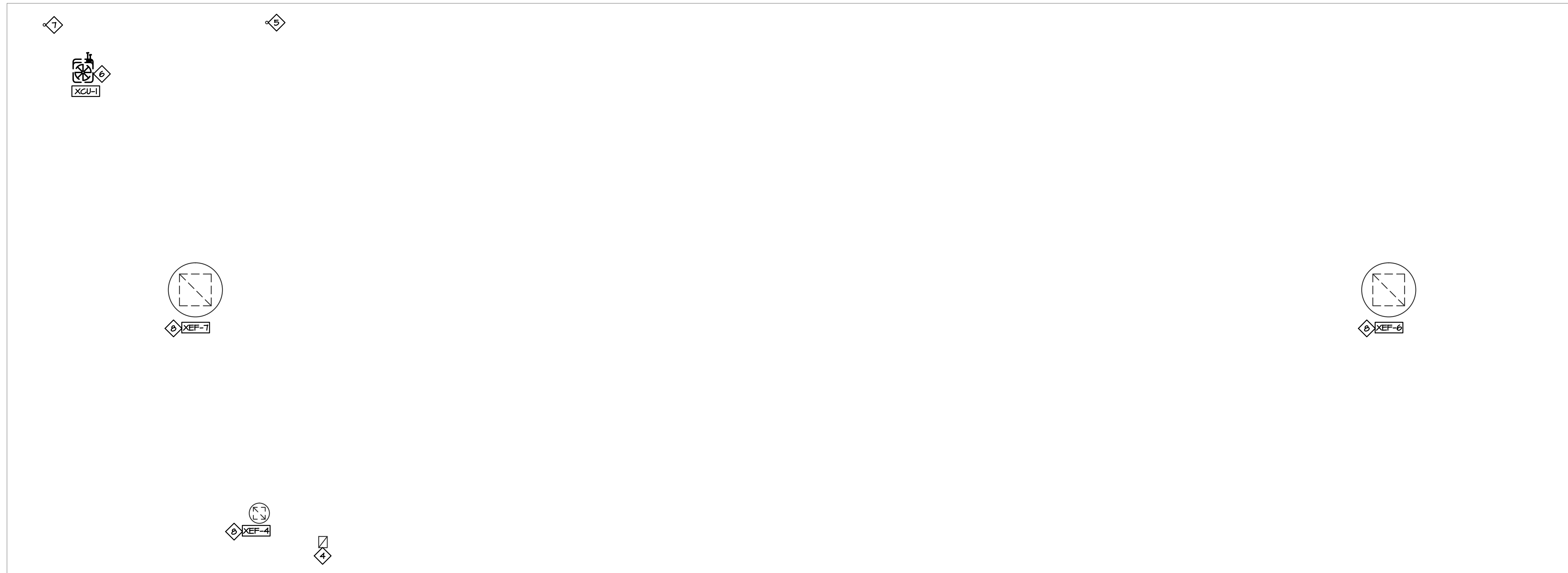
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MECHANICAL DEMO ROOF PLAN

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

NOTES

1. SEE SHEET MD1.4 FOR KEY NOTES.
2. FOR LEGENDS SEE SHEET M2.2.

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MECHANICAL ROOF DEMO PLAN

MD1.5

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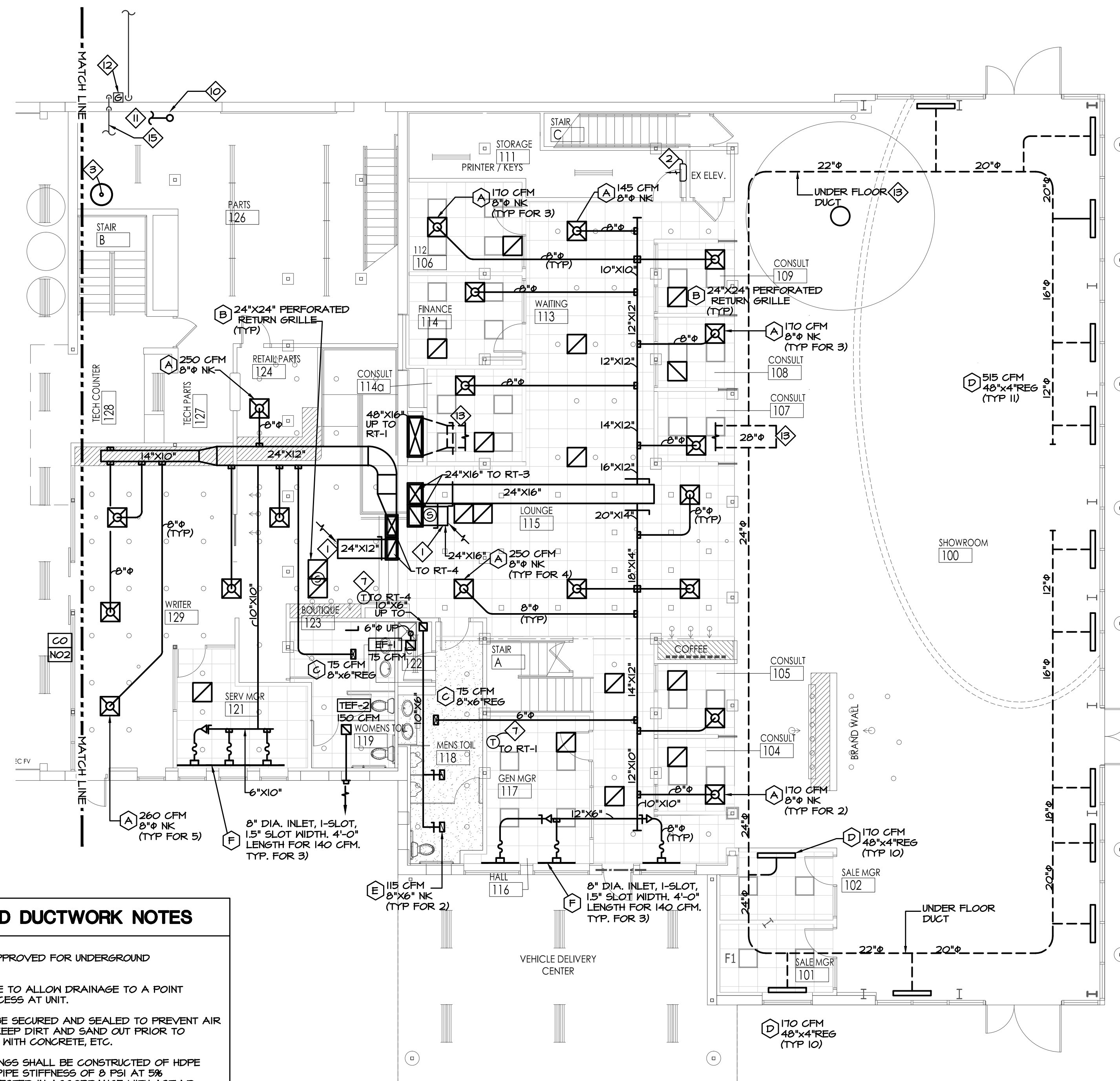
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- MECHANICAL KEY NOTES**
- PLENUM RETURN. TERMINATE THE OPENING WITH 1"X1" WIRE MESH.
 - 3 KW ELECTRIC UNIT HEATER FURNISHED AND INSTALLED BY THE ELECTRICAL CONTRACTOR.
 - EXTEND AND CONNECT EXISTING 4" FLUE TO NEW WATER HEATER. EXTEND AND CONNECT EXISTING GAS CONNECTION. PROVIDE SHUT-OFF VALVE, UNION AND DIRT LEG.
 - EXTEND AND CONNECT EXISTING 6" FLUE TO NEW WATER HEATER. EXTEND AND CONNECT EXISTING GAS CONNECTION. PROVIDE SHUT-OFF VALVE, UNION AND DIRT LEG.
 - EXISTING 18" DIAMETER DUCT.
 - EXTEND AND CONNECT 24"X24" EXHAUST DUCT TO EXISTING GOOSENECK.
 - INSTALL THERMOSTAT 48" ABOVE FINISHED FLOOR.
 - EXTEND AND CONNECT EXISTING (2) 3" FLUE TO NEW FURNACE F-1. EXTEND AND CONNECT EXISTING GAS CONNECTION. PROVIDE SHUT-OFF VALVE, UNION AND DIRT LEG.
 - EXISTING 2" GAS UP TO ROOF TOP UNIT AT THIS LOCATION. SEE M1.4 FOR CONTINUATION.
 - NEW 2-1/2" GAS (LOW PRESSURE) UP & DOWN.
 - EXTEND AND CONNECT TO MAIN LOW PRESSURE GAS MAIN.
 - UPGRADE EXISTING GAS SERVICE FROM 3471 MBH TO 3700 MBH DUE TO ADDITION/UPGRADE OF ROOF TOP UNIT CAPACITIES AND ADDITION OF NEW MAU-1.
 - COORDINATE INSTALLATION OF UNDERGROUND DUCTWORK W/ UNDERGROUND PLUMBING IN THIS AREA.
 - PROVIDE 1" GAS CONNECTION WITH UNION, DIRT LEG, AND GAS COCK TO F-1. PROVIDE 3/4" CONDENSATE FROM FURNACE AND HUMIDIFIER TO FLOOR DRAIN. PROVIDE FLEXIBLE DUCT CANVAS CONNECTIONS, SIDE FILTER RACKS, NEOPRENE LEGS, DX PIPING FROM COIL TO CU-1 UNIT ON ROOF, AND PVC VENT AND COMBUSTION AIR PIPING TO F-1.
 - 4" DIA EXISTING GAS MAIN (LOW PRESSURE).
 - EXISTING EXHAUST FANS. INTERLOCK WITH MAU-1.

- UNDERGROUND DUCTWORK NOTES**
- DUCTS SHALL BE APPROVED FOR UNDERGROUND INSTALLATION.
 - DUCTS SHALL SLOPE TO ALLOW DRAINAGE TO A POINT PROVIDED WITH ACCESS AT UNIT.
 - ALL DUCTS SHALL BE SECURED AND SEALED TO PREVENT AIR LEAKAGE AND TO KEEP DIRT AND SAND OUT PRIOR TO BURYING, COVERING WITH CONCRETE, ETC.
 - PLASTIC DUCT FITTINGS SHALL BE CONSTRUCTED OF HDPE HAVING A MINIMUM PIPE STIFFNESS OF 8 PSI AT 5% DEFLECTION WHEN TESTED IN ACCORDANCE WITH ASTM D 2412. PLASTIC DUCT FITTINGS SHALL BE CONSTRUCTED OF EITHER PVC OF HIGH DENSITY POLYETHYLENE. PLASTIC DUCT AND FITTINGS SHALL BE UTILIZED IN UNDERGROUND INSTALLATIONS ONLY. THE MAXIMUM DESIGN TEMPERATURE FOR SYSTEMS UTILIZING PLASTIC DUCT AND FITTINGS SHALL BE 150 DEG F.
 - COORDINATE UNDERGROUND DUCTWORK WITH FOOTINGS AND WITH ALL UNDERGROUND PLUMBING LINES.
 - INSTALL ALL UNDERGROUND DUCTWORK ABOVE THE WATER TABLE. DUCTS SHOULD NOT BE PLACED WHERE WATER INFILTRATION MAY OCCUR.
 - ALL UNDERGROUND DUCTWORK SHALL BE HDPE AS MANUFACTURED BY BLUE DUCT, OR APPROVED EQUAL AND INSTALL PER MANUFACTURER'S RECOMMENDATIONS.
 - THE TOP OF THE DUCT CAN EXTEND INTO THE CEMENT, LEAVING A MINIMUM OF 5" OF CEMENT ABOVE THE TOP OF THE DUCT.
 - DO NOT EXCEED 600 LBS/LINEAR FOOT OF LOADING ON UNDERGROUND DUCTWORK.
 - UNDERGROUND SUPPLY/RETURN DUCTS SHALL BE AIR LEAKAGE TESTED PER IECC 2012 SECTION C-403.2.1.1.3

MECHANICAL FIRST FLOOR PLAN
SCALE: 1/8" = 1'-0"

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MECHANICAL FIRST FLOOR PLAN
M1.1

PROJECT:



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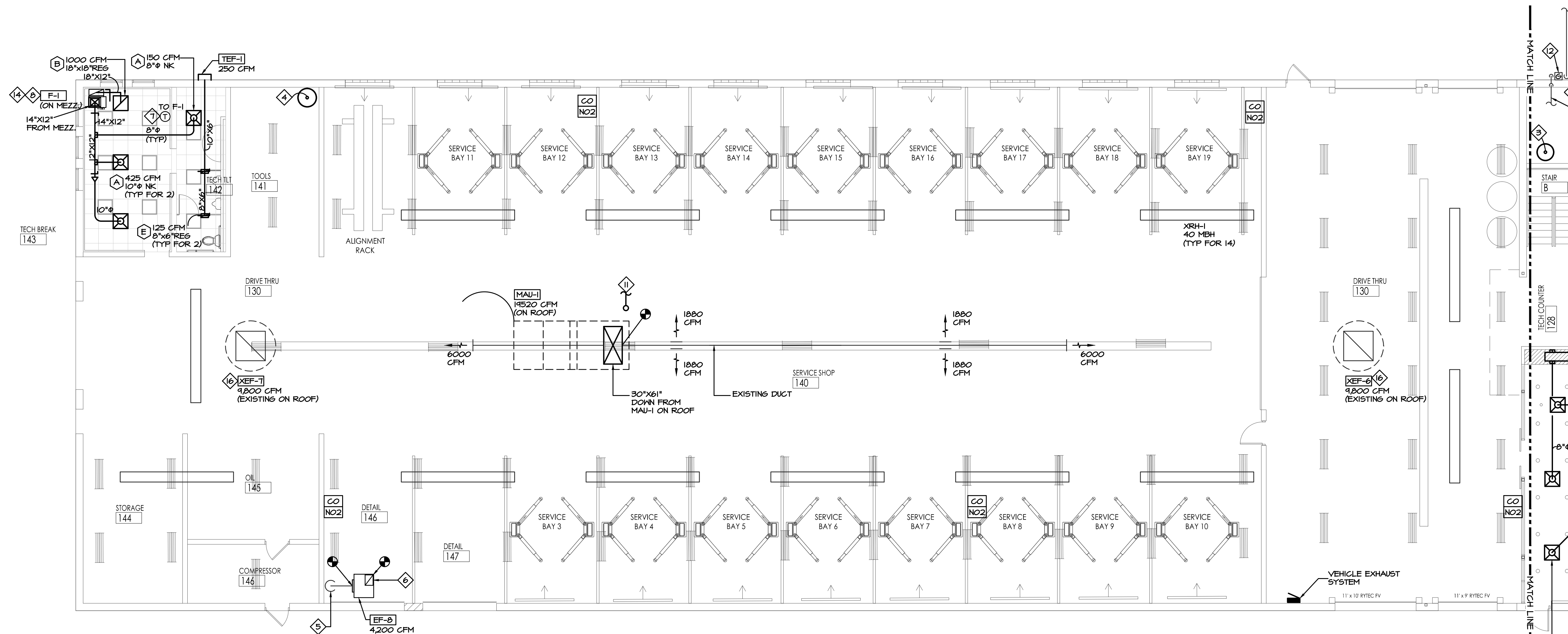
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MECHANICAL FIRST FLOOR PLAN

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

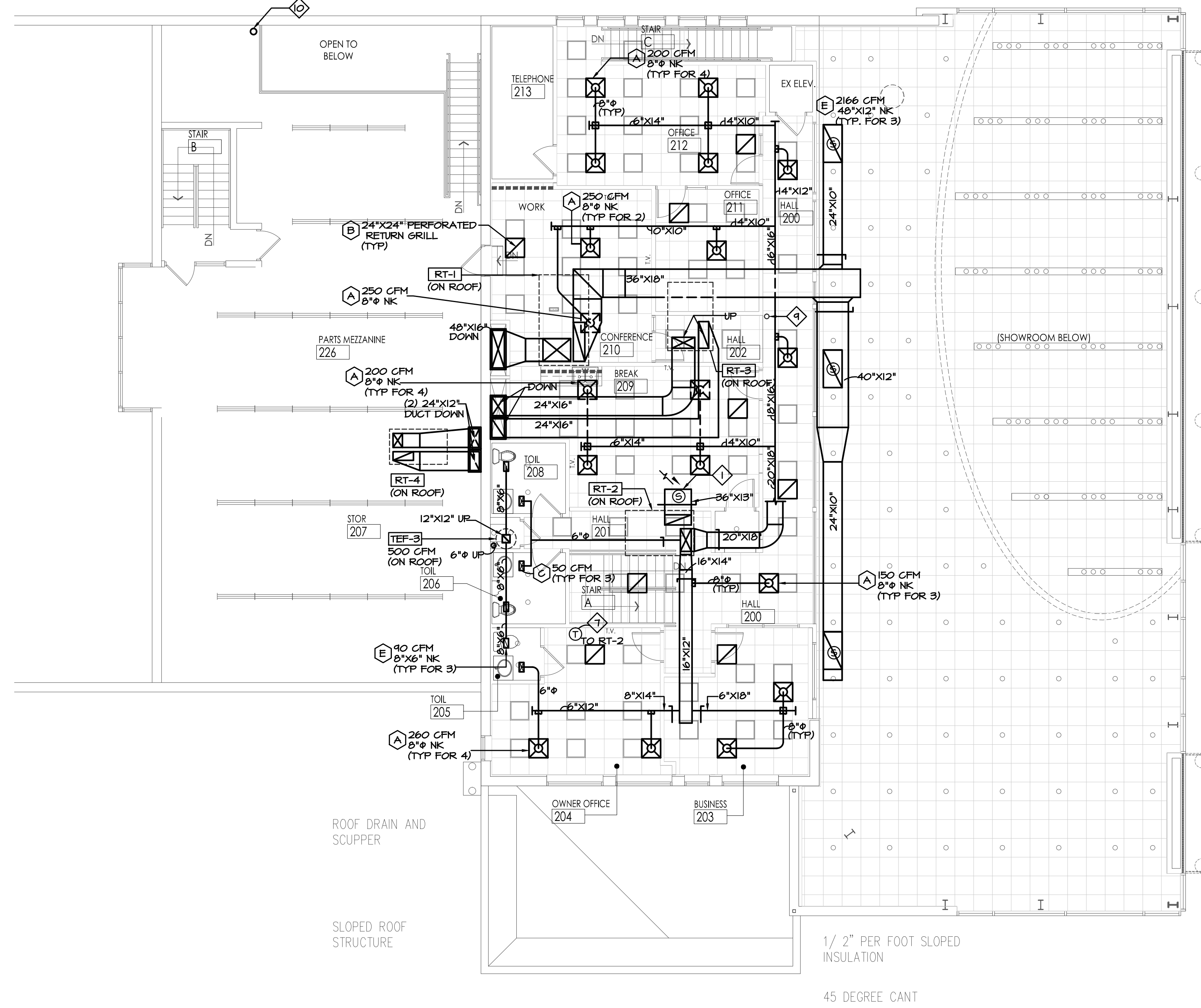
NOTES

1. SEE SHEET M1.1 FOR KEY NOTES.
2. FOR LEGENDS SEE SHEET M2.2.

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MECHANICAL FIRST FLOOR PLAN

M1.2



NOTES

1. SEE SHEET M1.1 FOR KEY NOTES.
2. FOR LEGENDS SEE SHEET M2.2.

MECHANICAL SECOND FLOOR PLAN
 SCALE: 1/8" = 1'-0"

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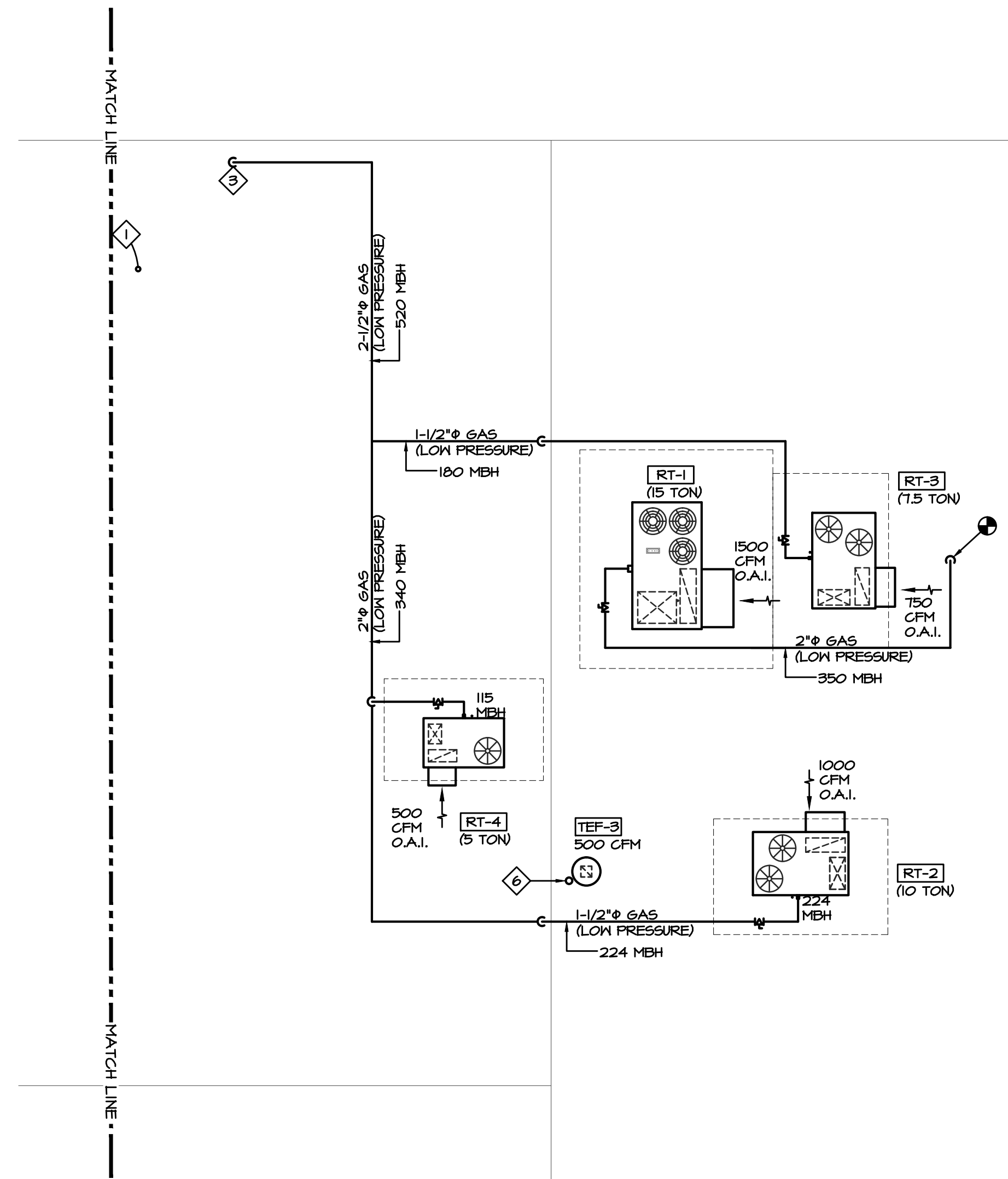
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**MECHANICAL
 SECOND FLOOR
 PLAN
 M1.3**



MECHANICAL ROOF PLAN

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

MECHANICAL KEY NOTES

1. EXISTING 4" FLUE TO NEW WATER HEATER.
2. EXISTING 6" FLUE TO NEW WATER HEATER.
3. NEW 2-1/2" GAS (LOW PRESSURE) DOWN. SEE M1.2 FOR CONTINUATION.
4. 4" GAS PIPE (LOW PRESSURE) DOWN. CONNECT UNIT WITH SHUT-OFF VALVE, UNION AND DIRT LEG.
5. PROVIDE REFRIGERANT PIPING FROM CONDENSING UNIT ON ROOF TO F-1 ON MEZZANINE. ROUTE PIPING ABOVE CEILING. SIZE PIPING PER MANUFACTURER'S RECOMMENDATIONS AND FOR FIELD CONDITIONS.
6. TERMINATE JANITOR'S CL. EXHAUST WITH RAIN CAP.

MECHANICAL ROOF NOTES

1. ALL ROOFTOP EQUIPMENT LOCATIONS SHALL BE COORDINATED WITH ROOF DRAINS. REFER TO ARCHITECTURAL AND STRUCTURAL PLANS FOR EXACT LOCATIONS OF EQUIPMENT.
2. THE INSTALLING CONTRACTOR SHALL PROVIDE ROOF CURBS AND LEVELING CURBS TO MATCH THE ROOF PITCH IF REQUIRED. THE ROOFING CONTRACTOR SHALL FLASH ALL CURBS INTO ROOF.
3. ALL STRUCTURAL DUCT OPENINGS SHALL BE APPROVED BY THE STRUCTURAL ENGINEER PRIOR TO CUTTING. INDICATE ON 1/4" SHOP DRAWINGS EXACT LOCATION OF OPENINGS COORDINATED WITH STRUCTURAL TRADES. PROVIDE DUCT ROOF CURBS AT ALL DUCT PENETRATIONS THRU ROOF.
4. ALL VENTS AND EXHAUSTS SHALL BE LOCATED A MINIMUM OF 10'-0" FROM ANY FRESH AIR INTAKES PER LOCAL CODES. PLUMBING VENTS SHALL BE A MINIMUM OF 12'-0" FROM ANY FRESH AIR INTAKE. EXTEND TERMINATION HEIGHT TO PROVIDE A 12'-0" CROSS SECTION CLEARANCE FROM PLUMBING VENTS WHERE NEEDED.
5. ALL ROOFTOP EQUIPMENT SHALL BE SET ON EQUIPMENT CURBS OR RAILS. ALL PIPE AND DUCT PENETRATIONS THROUGH THE ROOF SHALL HAVE A WEATHERPROOF CURB OR FLASHING. ALL ROOF FLASHING SHALL BE PERFORMED BY THE ROOFING CONTRACTOR.
6. PROVIDE A GAS SHUT-OFF VALVE, UNION, AND MIN. 6" DIRT LEG AT ALL ROOFTOP UNITS PROVIDE A CONDENSATE P-TRAP AT ALL ROOFTOP UNITS.
7. THE MECHANICAL CONTRACTOR SHALL INSTALL ALL GAS PIPING SHOWN ON THIS PLAN. ALL GAS PIPING ROUTED ACROSS ROOF SHALL BE SUPPORTED BY ROOF SUPPORTS 10'-0" ON CENTER MAXIMUM. GAS PIPING SHALL BE SCHEDULE 40 BLACK STEEL, ASTM A53 MALLEABLE IRON OR FORGED STEEL WELDING TYPE. ALL GAS PIPING SHALL BE INSTALLED PER A.S.A. REQUIREMENTS ALL GAS PIPING SHOWN IS SIZED AT LOW PRESSURE.
8. ALL GAS PIPING EXPOSED TO THE OUTDOORS SHALL BE CLEANED AND PAINTED BLACK FOR CORROSION PROTECTION PER IMC 1909.21

PROJECT:



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MECHANICAL ROOF PLAN

M1.4

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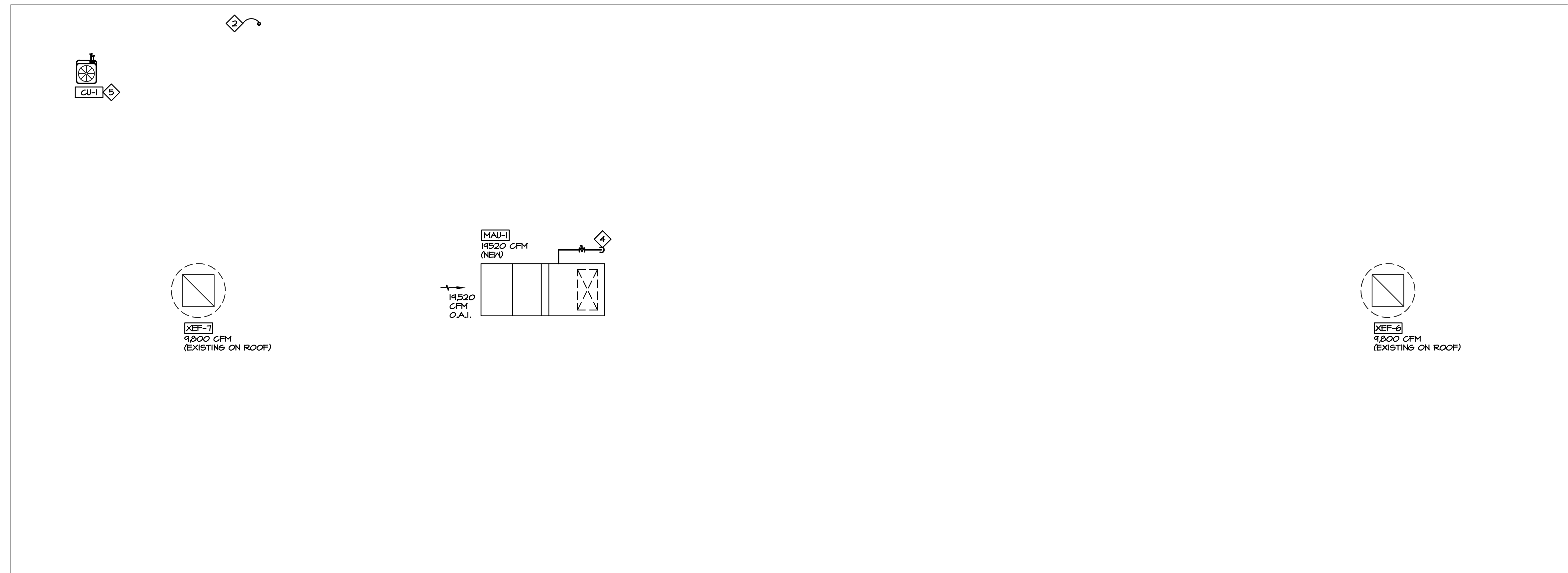
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MECHANICAL ROOF NOTES

1. ALL ROOFTOP EQUIPMENT LOCATIONS SHALL BE COORDINATED WITH ROOF DRAINS. REFER TO ARCHITECTURAL AND STRUCTURAL PLANS FOR EXACT LOCATIONS OF EQUIPMENT.
2. THE INSTALLING CONTRACTOR SHALL PROVIDE ROOF CURBS AND LEVELING CURBS TO MATCH THE ROOF PITCH IF REQUIRED. THE ROOFING CONTRACTOR SHALL FLASH ALL CURBS INTO ROOF.
3. ALL STRUCTURAL DUCT OPENINGS SHALL BE APPROVED BY THE STRUCTURAL ENGINEER PRIOR TO CUTTING. INDICATE ON 1/4" SHOP DRAWINGS EXACT LOCATION OF OPENINGS COORDINATED WITH STRUCTURAL TRADES. PROVIDE DUCT ROOF CURBS AT ALL DUCT PENETRATIONS THRU ROOF.
4. ALL VENTS AND EXHAUSTS SHALL BE LOCATED A MINIMUM OF 10'-0" FROM ANY FRESH AIR INTAKES PER LOCAL CODES. PLUMBING VENTS SHALL BE A MINIMUM OF 12'-0" FROM ANY FRESH AIR INTAKE. EXTEND TERMINATION HEIGHT TO PROVIDE A 12'-0" CROSS SECTION CLEARANCE FROM PLUMBING VENTS WHERE NEEDED.
5. ALL ROOFTOP EQUIPMENT SHALL BE SET ON EQUIPMENT CURBS OR RAILS. ALL PIPE AND DUCT PENETRATIONS THROUGH THE ROOF SHALL HAVE A WEATHERPROOF CURB OR FLASHING. ALL ROOF FLASHING SHALL BE PERFORMED BY THE ROOFING CONTRACTOR.
6. PROVIDE A GAS SHUT-OFF VALVE, UNION, AND MIN. 6" DIRT LEG AT ALL ROOFTOP UNITS PROVIDE A CONDENSATE P-TRAP AT ALL ROOFTOP UNITS.
7. THE MECHANICAL CONTRACTOR SHALL INSTALL ALL GAS PIPING SHOWN ON THIS PLAN. ALL GAS PIPING ROUTED ACROSS ROOF SHALL BE SUPPORTED BY ROOF SUPPORTS 10'-0" ON CENTER MAXIMUM. GAS PIPING SHALL BE SCHEDULE 40 BLACK STEEL, ASTM A53 MALLEABLE IRON OR FORGED STEEL WELDING TYPE. ALL GAS PIPING SHALL BE INSTALLED PER A.S.A. REQUIREMENTS ALL GAS PIPING SHOWN IS SIZED AT LOW PRESSURE.
8. ALL GAS PIPING EXPOSED TO THE OUTDOORS SHALL BE CLEANED AND PAINTED BLACK FOR CORROSION PROTECTION PER IMC 1903.21

MECHANICAL ROOF PLAN

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

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MECHANICAL ROOF PLAN

M1.5

PACKAGED GAS HEATING / ELECTRIC COOLING ROOFTOP UNIT SCHEDULE																							
ITEM TAG	MANUFACTURER AND MODEL NUMBER	NOMINAL TONS	ARI SEER/EER	BLOWER SECTION				COOLING CAPACITY				HEATING CAP.		ELECTRICAL DATA						AREA SERVING	UNIT WEIGHT (LBS)	REMARKS	
				SUPPLY CFM	MIN. O.A. CFM	ESP	BHP	REFRIG. TYPE	REFRIG. LBS	SENS. MBH	TOTAL MBH	INPUT MBH	OUTPUT MBH	VOLT-PH-HZ	COMP. R.L.A.	COND. F.L.A.	EVAP. F.L.A.	INT. C.O.	MCA				MOCP
RT-1	"CARRIER" #48TCFD16	15.0	10.8	6,000	1,500	1.00"	3.64 (MED)	R-410A	21.0	154.3	172.47	350 280	280 224	208-3-60	25 25	(3) 1.5	10.8	NO	79	100	SHOW ROOM	2000	1-13, 15, 16, 17
RT-2	"CARRIER" #48TECD12	10	12.8	4,000	1000	1.00"	2.93 (MED)	R-410A	-	96.2	124.10	224 180	184 141	208-3-60	15.9 15.9	(2) 1.5	10.8	NO	54	60	OFFICE AREA 2ND FLOOR	1500	1-13, 15, 16, 18
RT-3	"CARRIER" #48TED08	7.5	11.0	3,000	750	0.75"	2.04 (MED)	R-410A	-	78.42	94.74	180 120	148 98	208-3-60	13.6 13.6	(2) 1.5	8.6	NO	43	50	OFFICE AREA 1ST FLOOR	1000	1-12, 14, 15, 16, 19
RT-4	"CARRIER" #48KCEA06	5	14.10	2,000	500	1.00"	1.66 (MED)	R-410A	-	46.23	61.84	115 93	93	208-3-60	15.9 13.5	(1) 1.4	8.4	NO	30	45	SERVICE AREA 1ST FLOOR	700	1-12, 14, 15, 16

REMARKS:

- VERIFY EXACT VOLTAGE IN THE FIELD AND WITH ELECTRICAL CONTRACTOR PRIOR TO ORDERING.
- MAINTAIN MANUFACTURER'S RECOMMENDED SERVICE CLEARANCES.
- OUTSIDE AIR INTAKE SHALL BE A MINIMUM OF 10'-0" AWAY FROM ANY EXHAUST DISCHARGE.
- PROVIDE PREFABRICATED INSULATED FULL PERIMETER ROOF CURB LEVELLED 1/4" HIGH.
- PROVIDE FLEXIBLE CANVAS CONNECTIONS AT SUPPLY AND RETURN DUCT CONNECTIONS.
- PROVIDE GAS PIPING, UNION, GAS COCK AND DIRT LEG CONNECTIONS TO UNIT.
- PROVIDE FILTER TRAY WITH 2" THICK THROW AWAY FILTERS.
- PROVIDE BELT DRIVE EVAPORATOR FAN MOTOR. PROVIDE FIELD SUPPLIED DRIVE AS REQUIRED.
- PROVIDE 7-DAY FULLY PROGRAMMABLE WALL MOUNTED HEATING/COOLING/FAN THERMOSTAT WITH OCCUPIED/UNOCCUPIED MODES.
- ELECTRICAL CONTRACTOR SHALL FURNISH AND INSTALL FIELD MOUNTED DISCONNECT SWITCH. DISCONNECT SHALL NOT BE MOUNTED ON UNIT NAMEPLATE.
- ELECTRICAL CONTRACTOR SHALL FURNISH AND INSTALL UNPOWERED CONVENIENCE OUTLETS. REFER TO ELECTRICAL PLANS FOR LOCATIONS OF OUTLETS.
- ELECTRICAL CONTRACTOR SHALL FURNISH AND INSTALL A RETURN DUCT MOUNTED SMOKE DETECTOR. DETECTOR SHALL BE WIRED AS REQUIRED BY LOCAL CODES.
- PROVIDE FULLY LOW LEAK MODULATING MOTORIZED ECONOMIZER WITH POWER EXHAUST WITH W1220 CONTROL. INTERLOCK ECONOMIZER WITH THERMOSTAT OCCUPIED/UNOCCUPIED SETTING. ECONOMIZER DAMPER SHALL CLOSE WHEN THERMOSTAT IS IN UNOCCUPIED MODE.
- PROVIDE FULLY LOW LEAK MODULATING MOTORIZED ECONOMIZER WITH ENTHALPY CONTROL, BAROMETRIC RELIEF WITH W1220 CONTROL. INTERLOCK ECONOMIZER WITH THERMOSTAT OCCUPIED/UNOCCUPIED SETTING.
- ECONOMIZER DAMPER SHALL CLOSE WHEN THERMOSTAT IS IN UNOCCUPIED MODE.
- PROVIDE FULLY LOW LEAK MODULATING MOTORIZED ECONOMIZER WITH ENTHALPY CONTROL, BAROMETRIC RELIEF WITH W1220 CONTROL. INTERLOCK ECONOMIZER WITH THERMOSTAT OCCUPIED/UNOCCUPIED SETTING.
- PROVIDE TWO SPEED FAN CONTROLLER.
- PROVIDE HAIL GUARDS.
- PROVIDE FIELD MEASURED CURB ADAPTOR. CARRIER MODEL #CDI 1-3015-400B OR APPROVED EQUAL.
- PROVIDE FIELD MEASURED CURB ADAPTOR. CARRIER MODEL #CDI 1-5035-400S OR APPROVED EQUAL.
- PROVIDE FIELD MEASURED CURB ADAPTOR. CARRIER MODEL #CDI 1-5035-400S OR APPROVED EQUAL.

EXHAUST FAN SCHEDULE													
ITEM TAG	MANUFACTURER AND MODEL NUMBER	QTY	CFM	ESP	SONES	ELECTRICAL DATA			CONTROLLED VIA	DAMPER TYPE	AREA SERVING	UNIT WEIGHT (LBS)	REMARKS
						VOLT-PH-HZ	HP OR NOTED	RPM					
TEF-1	"GREENHECK" #C1-090-VG	1	250	0.5"	-	115-1-60	1/10	1361	INTERLOCK WITH OCCUPANCY SENSOR	BACKDRAFT	TECH-TL-142	40	1-6
TEF-2	"GREENHECK" #5P-B150	1	150	0.25"	3.0	115-1-60	1/20 WATTS	1050	INTERLOCK WITH OCCUPANCY SENSOR	BACKDRAFT	W-TOILET-119	12	1-5
TEF-3	"GREENHECK" #6-090-VG	1	500	0.56"	-	208-1-60	1/10	1725	INTERLOCK WITH OCCUPANCY SENSOR	BACKDRAFT	TOILETS-1ST AND SECOND FLR	50	1-5
EF-1	"GREENHECK" #5P-B40	1	75	0.25"	1.3	115-1-60	0.65 AMPS	700	WALL SWITCH	BACKDRAFT	JANITORS CLOSET-122	12	1-5
EF-2	"GREENHECK" #USF-216-10-B1-50	1	4,200	3.0"	-	208-3-60	5	2431	INTERLOCK WITH MAU-1	BACKDRAFT	SERVICE SHOP-190	300	1-5, 7

REMARKS:

- VERIFY EXACT VOLTAGE PRIOR TO ORDERING EQUIPMENT.
- ELECTRICAL CONTRACTOR SHALL PROVIDE DISCONNECT SWITCH AND LINE WIRING.
- PROVIDE BACKDRAFT DAMPER.
- PROVIDE HOODED WALL CAP, BRICK VENT, PITCHED ROOF CAP, OR FLAT ROOF CAP AS REQUIRED.
- PROVIDE FULL PERIMETER INSULATED ROOF CURB WITH BIRDSCREEN.
- PROVIDE VERTICAL MOUNT EXHAUST DAMPER.
- REPLACE EXISTING MOUNTING AS REQUIRED.

GAS FIRED FURNACE SCHEDULE														
ITEM TAG	MANUFACTURER AND MODEL NUMBER	CFM	ESP	INPUT (BTUH)	OUTPUT (BTUH)	ELECTRICAL DATA				AREA SERVING	VENT SIZES	UNIT WEIGHT (LBS)	REMARKS	
						VOLT-PH-HZ	HP	RPM	MCA					FUSE
F-1	"CARRIER" UPFLOW #54TP6A080-16	1000	0.4"	80000	78,000	115/160	1.0	VARIABLE	12.4	15	SEE PLAN	3" V 3" CA	195	ALL

REMARKS:

- PROVIDE 3/4" GAS PIPE CONNECTION WITH UNION, SHUT-OFF VALVE AND 6" MIN. DIRT LEG.
- ELECTRICAL CONTRACTOR SHALL FURNISH AND INSTALL DISCONNECT SWITCH.
- PROVIDE FLEXIBLE CANVAS CONNECTION AT INLET AND DISCHARGE DUCT CONNECTIONS TO UNIT.
- PROVIDE PVC VENT PIPING INSTALLED PER MANUFACTURER'S RECOMMENDATIONS.
- PROVIDE 4" "EZ FLEX" FILTERS WITH ENDCAPS (10 MERV).
- PROVIDE 7-DAY, PROGRAMMABLE THERMOSTAT WITH SET BACK CAPABILITIES.
- PROVIDE ECM MOTOR.
- FURNACES SHALL BE 95% AFUE.
- PROVIDE CARRIER BYPASS TYPE HUMIDIFIER.
- UNIT SHALL HAVE 2-STAGE HEATING OPERATION.
- UNIT SHALL BE ENERGY STAR RATED.
- SET SPEED AS REQUIRED TO ACHIEVE PLAN AIRFLOWS.
- DOWN FLOW SUPPLY.

OUTDOOR CONDENSING UNIT SCHEDULE														
ITEM TAG	MANUFACTURER AND MODEL NUMBER	SEER	NOMINAL TONS	REFRIG.	REFRIG. CHARGE (LBS)	COOLING CAPACITY (BTUH)	UNIT SERVING	ELECTRICAL DATA					UNIT WEIGHT (LBS)	REMARKS
								VOLT-PH-HZ	COMP RLA	COND FLA	MCA	MAX FUSE		
CU-1	"CARRIER" #24ABC624	16.0	2.0	R-410A	6.0	24,000	F-1	230-1-60	13.5	0.75	14.0	25	148	1-8

REMARKS:

- VERIFY ELECTRICAL REQUIREMENT WITH ELECTRICAL CONTRACTOR PRIOR TO ORDERING.
- PROVIDE TIMED LOCK-OUT SERVICE VALVES AND DRYER.
- PROVIDE UNIT WITH CASED N-COIL TYPE EVAPORATOR COIL WITH REFRIGERANT SPECIFIC TXV.
- MOUNT UNIT LEVEL ON GRADE ON 4" DEEP CONCRETE PAD. COORDINATE WITH GENERAL CONTRACTOR.
- ELECTRICAL CONTRACTOR SHALL PROVIDE WEATHER PROOF DISCONNECT SWITCH.
- PROVIDE DX LIQUID AND SUCTION REFRIGERANT PIPING SIZED FOR ACTUAL FIELD CONDITIONS AND MANUFACTURER'S RECOMMENDATIONS.
- PROVIDE REFRIGERANT SAFETY RELIEF VALVE IN ACCORDANCE WITH LOCAL CODES.
- CONDENSING UNITS SHALL BE MINIMUM 16 SEER AND ENERGY STAR RATED.

AIR DEVICE SCHEDULE				
ITEM TAG	MANUFACTURER AND MODEL NUMBER	DESCRIPTION	ACCESSORIES	REMARKS
A	"TITUS" #TMS	24"x24" LOUVERED SUPPLY DIFFUSER W/ROUND NECK	OPPOSED BLADE DAMPER	1, 2, 3
B	"TITUS" #PAR	24"x24" PERFORATED RETURN GRILLE	WHITE FINISH	2, 3
C	"TITUS" #300RS	VERTICAL ADJUSTABLE BLADE, DOUBLE DEFLECTION SUPPLY REGISTER	CROSSED BLADE DAMPER	1, 2, 3
D	"TITUS" #CT-480	LINEAR BAR DIFFUSER 1/2 SPACING, 1/2 BARS, 0 DEFLECT	ALUMINUM	2, 4
E	"TITUS" #350FL	ANGLED HORIZONTAL FIXED BLADE SINGLE DEFLECTION EXHAUST GRILLE	ALUMINUM	2, 3
F	"TITUS" #TBD1-80	PLENUM SLOT DIFFUSER 48" LONG	INSULATED HOUSING	2, 3

REMARKS:

- PROVIDE OPPOSED BLADE DAMPERS.
- PROVIDE ADAPTOR BOOTS AS REQUIRED.
- PROVIDE MATTE WHITE FINISH IN LAY-IN AND DRYWALL AREAS.
- PROVIDE FRAME STYLE TYPE 5.

M15081 VENTILATION SCHEDULE IMC2015													
ROOM TAG	ROOM NAME OCCUPANCY CLASSIFICATION	ROOM AREA (SQFT)	NUMBER OF OCCUPANTS OR FIXTURES	TABLE REQUIREMENTS		ZONE AIR DIST. EFFECT.	REQUIRED SPACE VENTILATION		ACTUAL SPACE VENTILATION		SERVED BY		REMARKS
				CFM / OCC.	CFM / SQFT		O.A. (CFM)	EXHAUST (CFM)	SUPPLY (CFM)	O.A. (CFM)	EXHAUST (CFM)	SUPPLY	
110	CHILDRENS ROOM	180	4	7.5	0.18	0.8	75	NR	340	85		XRT-3	
111	OPEN OFFICE	1272	18	5	0.06	0.8	208	NR	2160	540		XRT-3	
100	Showroom	3680	20	7.5	0.06	0.8	454	NR	6000	1500		RT-1	RT-1
104	Office	70	3	5	0.06	0.8	24	NR	170	42.5		RT-3	RT-3
105	Office	70	3	5	0.06	0.8	24	NR	170	42.5		RT-3	RT-3
117	General Manager	200	5	5	0.06	0.8	48	NR	420	106		RT-3	RT-3
118	Men Tol	170	3	7.5	0	0	NR	226	75	18.75	230	RT-3	TEF-3
	Corr	200	0	5	0.06	0.8	15	NR	140	35		RT-3	RT-3
115	Lounge	639	8	5	0.06	0.8	98	NR	1000	250		RT-3	RT-3
113	Passage	420	0	5	0.06	0.8	32	NR	145	36.25		RT-3	RT-3
107	Office	60	3	5	0.06	0.8	23	NR	170	43		RT-3	RT-3
108	Office	60	3	5	0.06	0.8	23	NR	170	43		RT-3	RT-3
109	Office	60	3	5	0.06	0.8	23	NR	170	43		RT-3	RT-3
114	Finance	110	3	5	0.06	0.8	27	NR	170	43		RT-3	RT-3
114a	Consultant	110	3	5	0.06	0.8	27	NR	170	43		RT-3	RT-3
108	Office	110	3	5	0.06	0.8	27	NR	170	43		RT-3	RT-3
122	Jan Cl	30	1	7.5	0	0	0	75	NR	NR		NR	EF-1
119	W Tol	150	2	7.5	0	0	NR	150	75	19	150	RT-4	TEF-2
121	Service Manager	145	3	5	0.06	0.8	30	NR	420	105	105	RT-4	RT-4
128-123	Writer	760	20	7.5	0.06	0.8	245	NR	1300	325	325	RT-4	RT-4
124	Retail Parts	110	3	5	0.06	0.8	27	NR	250	63	62.5	RT-4	RT-4
142	W Tol	150	2	7.5	0	0	NR	150	150	38	250	F-1	TEF-1
1043	Tech Break	280	4	5	0.06	0.8	45	NR	850	213	250	F-1	F-1
140	Service Shop	13180	30		0.75	0.8	9885	NR	19620	19620	19600	MAU-1	MEF-6 & MEF-7
212	Office	290	3	5	0.06	0.8	41	NR	800	200	200	RT-2	RT-2
211	Office	150	5	5	0.06	0.8	43	NR	250	63	63	RT-2	RT-2
210	Conference	310	8	5	0.06	0.8	73	NR	500	125	125	RT-2	RT-2
209	Break RM	350	14	7.5	0.18	0.8	210	NR	800	200	200	RT-2	RT-2
201	Hall	600	0	0	0.06	0.8	45	NR	450	113	113	RT-2	RT-2
203	Business	215	9	5	0.06	0.8	72	NR	800	125	125	RT-2	RT-2
204	Owners Office	280	6	5	0.06	0.8	57	NR	600	125	125	RT-2	RT-2
204	Owners Office	280	6	5	0.06	0.8	57	NR	600	125	125	RT-2	RT-2
208	Tol	60	1	7.5	0	0	NR	75	50	13	90	RT-2	TEF-3
206	Tol	60	1	7.5	0	0	NR	75	50	13	90	RT-2	TEF-3
205	Tol	60	1	7.5	0	0	NR	75	50	13	90	RT-2	TEF-3

DIRECT GAS FIRED MAKEUP AIR UNIT SCHEDULE														
ITEM TAG	MANUFACTURER AND MODEL NUMBER	BLOWER SECTION				HEATING		ELECTRICAL DATA			AREA SERVING	UNIT WEIGHT (LBS)	REMARKS	
		CFM	ESP	(GTT) BHP	RPM	LAT (F)	INPUT (MBH)	OUTPUT (MBH)	VOLT-PH-HZ	M.C.A.				MAX FUSE
MAU-1	"GREENHECK" #DGX-P222-H35-11	14525	1.65	(2) 7.5	1770	70	1,700	1,562	208-3-60	62.0	80	SERVICE SHOP 140	2500	ALL

REMARKS:

- UNIT MOUNTED DISCONNECT SWITCH AND FIELD WIRING BY ELECTRICAL CONTRACTOR.
- V-BANK FILTER SECTION 20X25X2-(4) RACK WITH 2" PLEATED, INSULATED SINGLE WALL CABINET.
- REMOVABLE ACCESS PANELS.
- REMOTE CONTROL PANEL.
- HEAT INLET AIR SENSOR.
- ROOM OVERRIDE.
- PROVIDE FLEXIBLE CONNECTION BETWEEN DUCT AND UNIT.
- VIBRATION ISOLATORS.
- PROVIDE INTAKE HOOD WITHOUT BAFFLES, DISCONNECT SWITCH, BIRD/BUG SCREEN.
- PROVIDE 16" HIGH INSULATED ROOF CURB WITH 1.5" MIN. DEFLECTION VIBRATION ISOLATION.
- PROVIDE TWO-POSITION MOTORIZED DAMPER, UL LABEL, AND FLEXIBLE CANVAS DUCT CONNECTIONS.
- A RETURN DUCT MOUNTED SMOKE DETECTOR BY ELECTRICAL CONTRACTOR.
- OUTSIDE AIR INTAKE SHALL BE 10'-0" MINIMUM AWAY FROM ANY EXHAUST DISCHARGE.
- PROVIDE FACTORY UNIT MOUNTED DISCONNECT SWITCH, FIELD WIRING BY ELECTRICAL CONTRACTOR.
- PROVIDE GAS PIPING, UNION, GAS COCK, AND DIRT LEG CONNECTIONS TO UNIT.
- IEC MOTOR STARTER.
- AIRFLOW PROVIDING SWITCH, ENTHALPY CONTROL AND HEAT REMCON.
- PROVIDE SCREENED AIR INLET HOOD AUTOMATED DAMPER.
- DOWN DISCHARGE ARRANGEMENT.
- TWO-STAGE GAS EACH FURNACE, DUCT STAT REMOTE DIAL.
- INTERLOCK WITH EXISTING ROOF MOUNTED EXHAUST FANS EF-7 & EF-8.

PROJECT:



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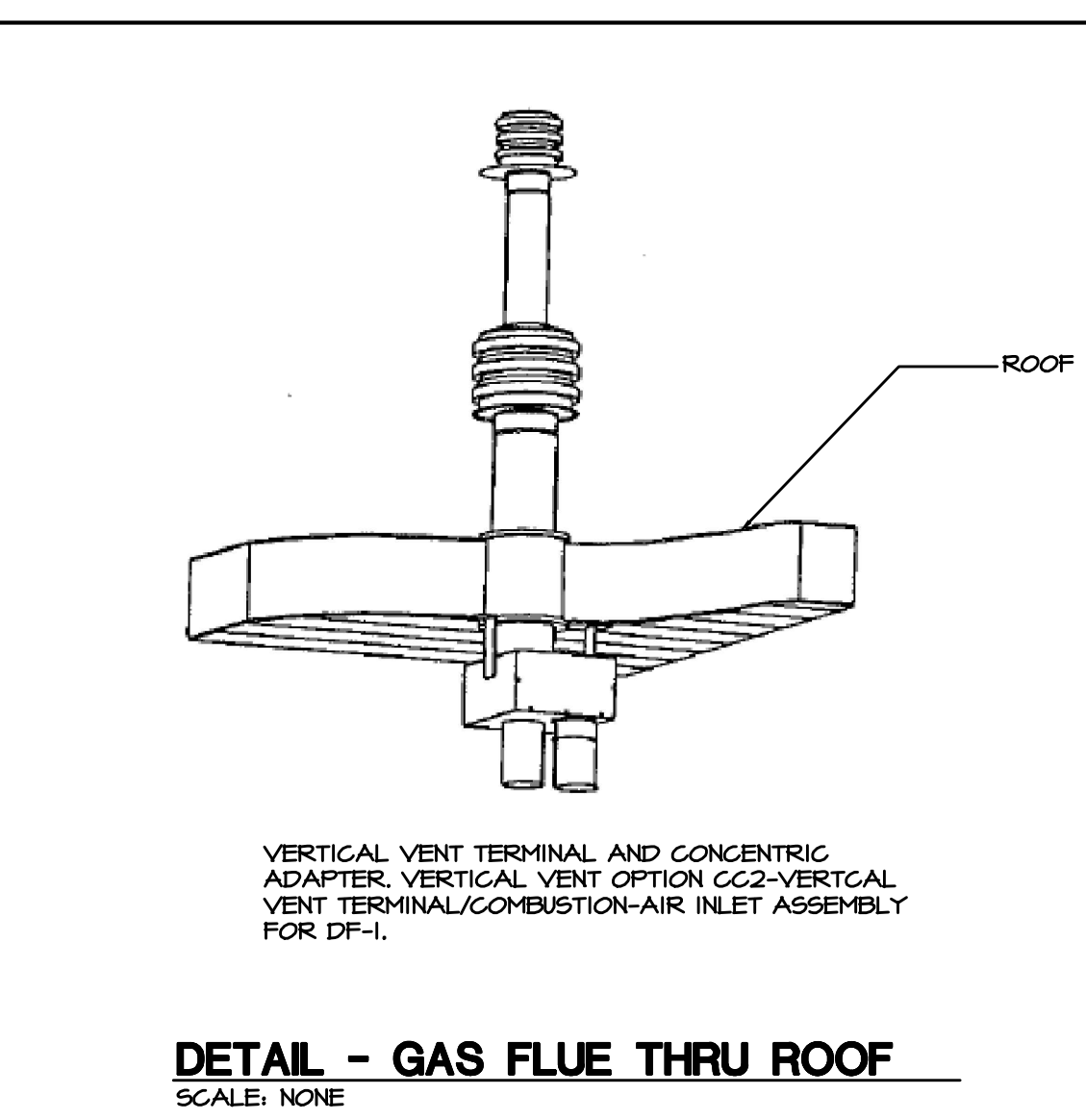
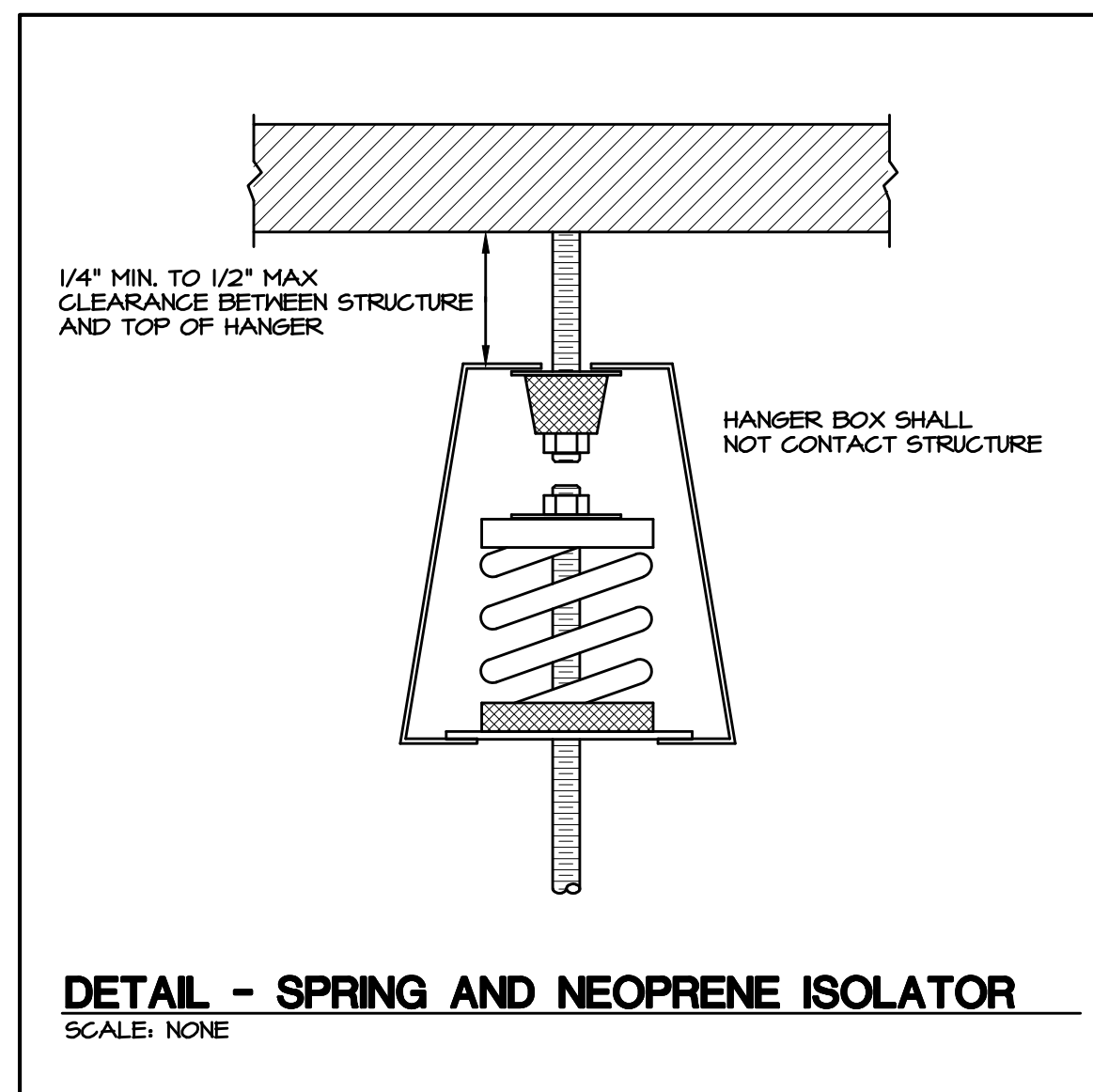
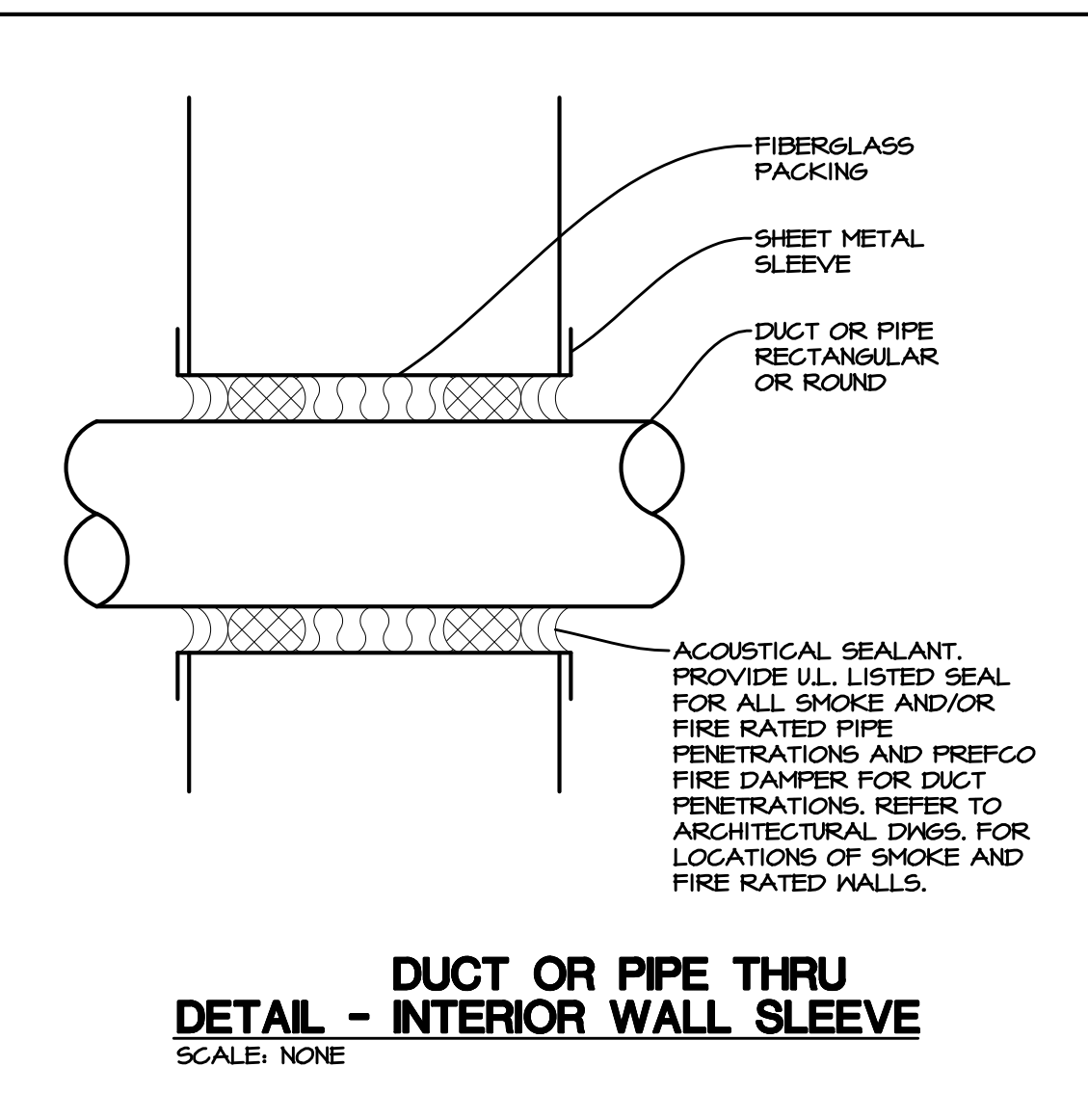
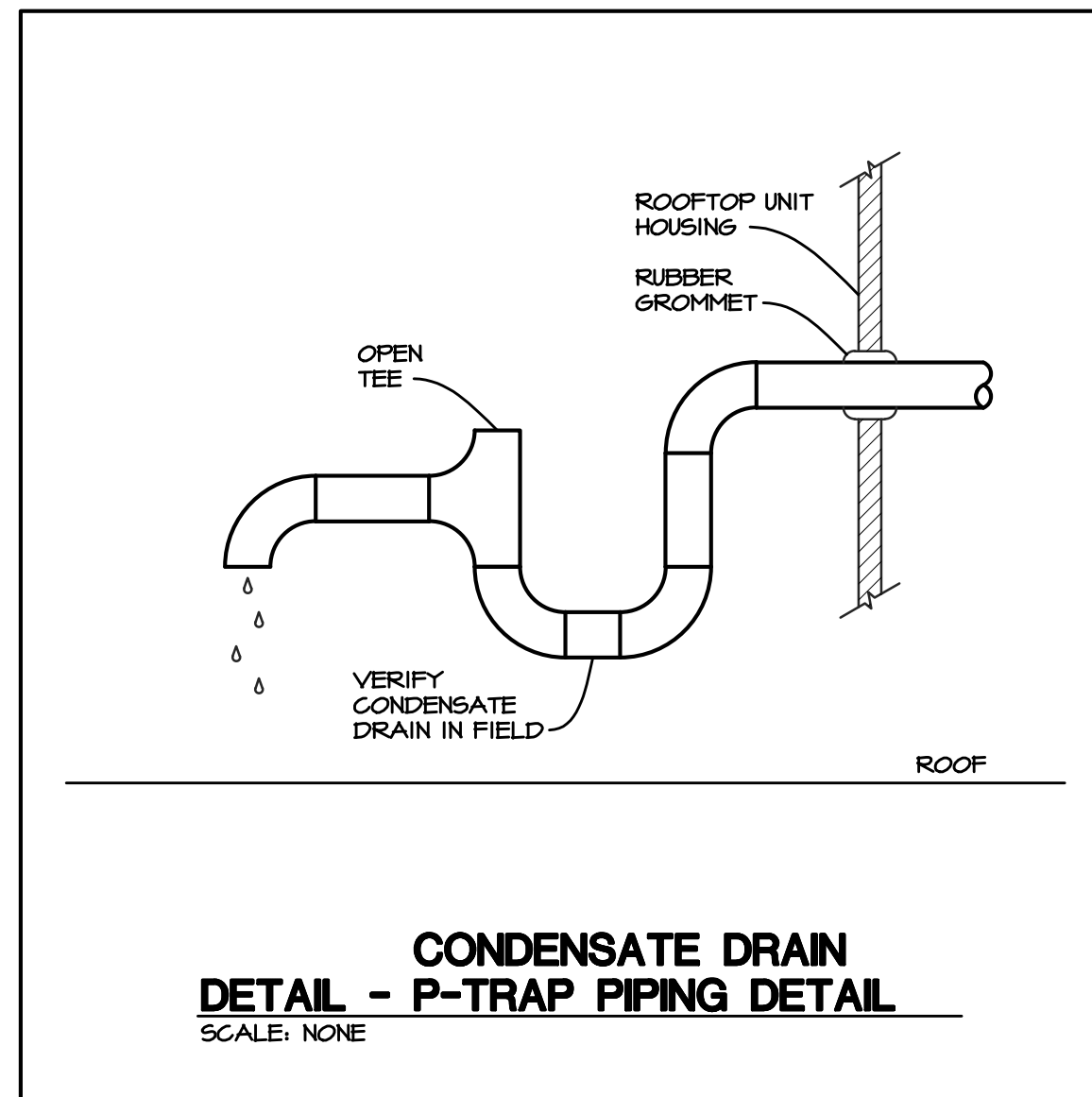
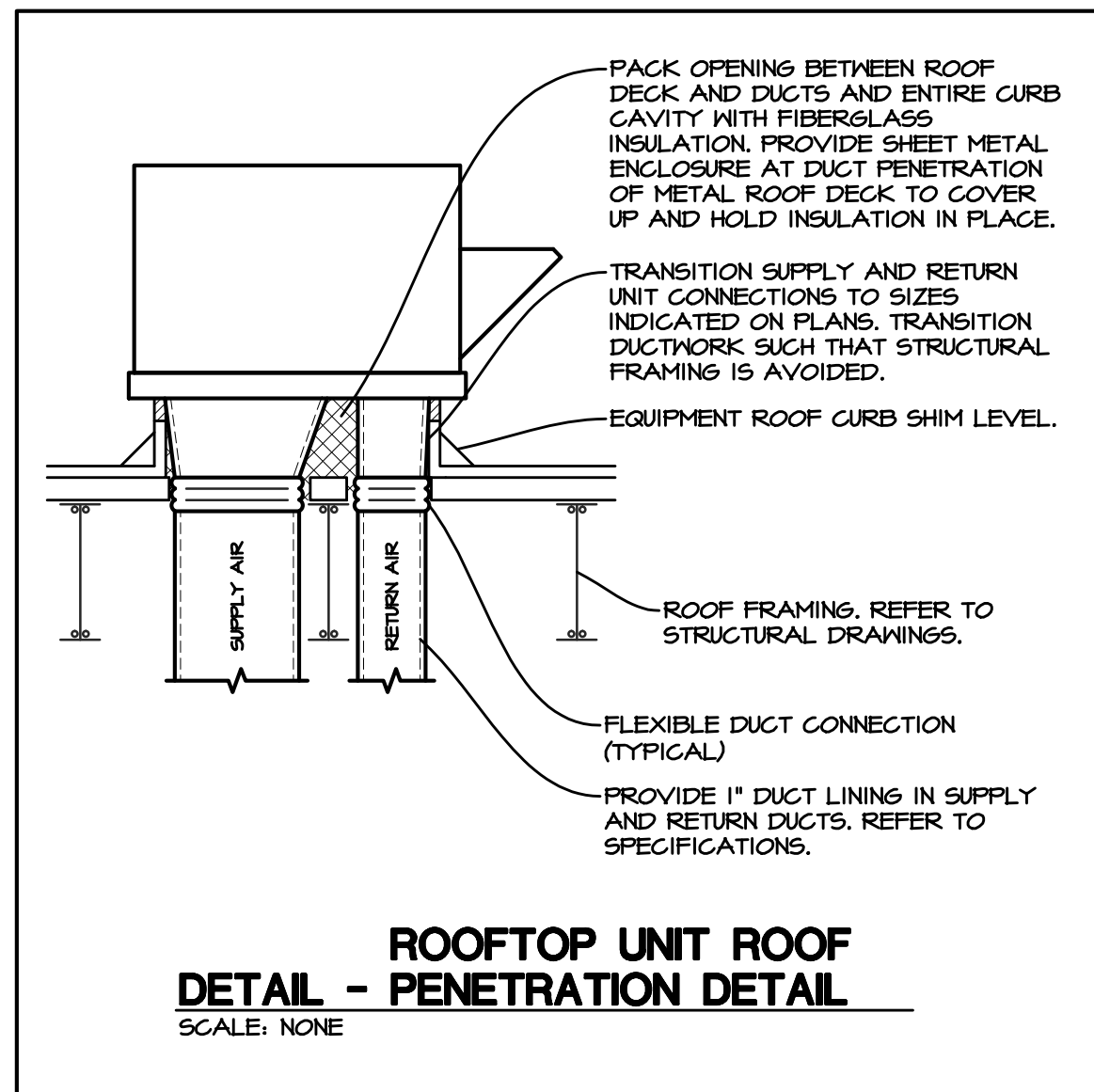
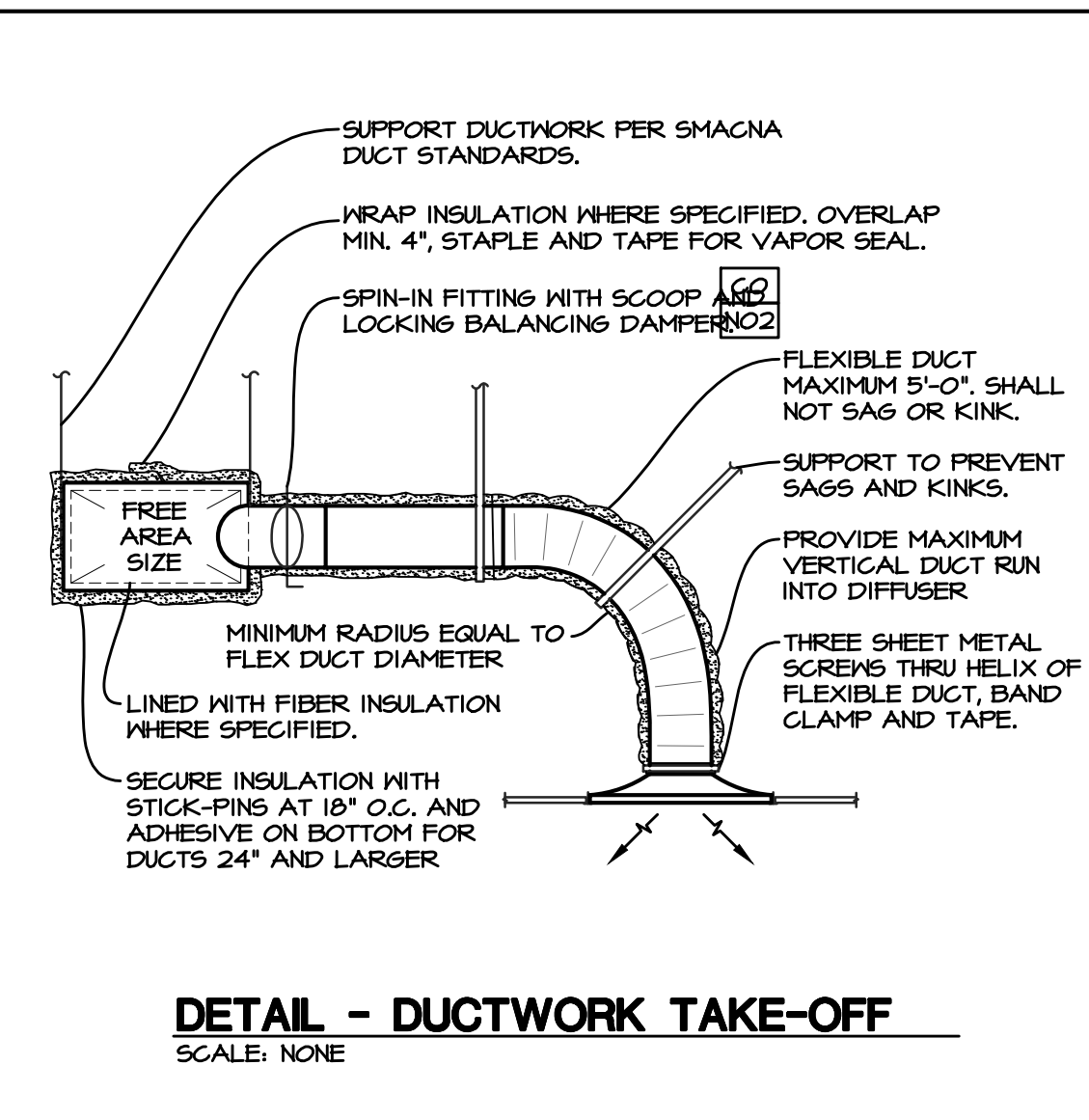
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MAR 20 2017 - DESIGN REVIEW
MAR 29 2017 - DESIGN REVIEW
APRIL 24 2017 - DESIGN REVIEW
MAY 10 2017 - FOR BID

MECHANICAL SCHEDULES

M2.1



MECHANICAL LEGEND

—	NEW DUCTWORK AND AIR DEVICES TO MATCH EXISTING.
—	EXISTING DUCTWORK AND AIR DEVICES TO REMAIN. CLEAN AND RECONDITION AS REQUIRED.
- - - -	EXISTING DUCTWORK AND AIR DEVICES TO BE REMOVED.
10"x10"	NEW DUCTWORK DIMENSIONS
10"/10	EXISTING DUCTWORK DIMENSIONS
⊕	THERMOSTAT
⊙	SENSOR (REMOTE TEMPERATURE SENSOR UNLESS OTHERWISE NOTED)
⊞	TAKEOFF WITH MANUAL VOLUME DAMPER
—	LOCKABLE MANUAL VOLUME DAMPER (MYD)
—	FIRE DAMPER
A.F.F.	ABOVE FINISHED FLOOR
B.F.C.	BELOW FINISHED CEILING
M.V.D.	LOCKABLE MANUAL VOLUME DAMPER
W.C.	INCHES OF WATER COLUMN
U.C.	UNDER CUT DOOR
U.T.R.	UP THROUGH ROOF
⊕	NEW TO EXISTING CONNECTION
◆	DEMO BREAK POINT. DEMO BACK TO THIS POINT
RT-1	EQUIPMENT TAG
⊕ (CFM) (SIZE)	NEW AIR DEVICE TAG
⊞	CEILING DIFFUSER WITH FOUR WAY THROW
⊞	CEILING DIFFUSER WITH THREE WAY THROW
⊞	CEILING DIFFUSER WITH TWO WAY THROW
⊞	CEILING DIFFUSER FOR RETURN AIR
⊞	SUPPLY REGISTER
⊞	RETURN / EXHAUST GRILLE
(X)-(CFM)	EXISTING AIR DEVICE X = S = SUPPLY AIR R = RETURN AIR E = EXHAUST AIR M = MAKEUP AIR T = TRANSFER AIR
⊞	EXISTING CEILING DIFFUSER
⊞	EXISTING CEILING DIFFUSER FOR RETURN AIR
⊕	VENTLESS PRESSURE REGULATOR
⊞	MANUAL GAS VALVE
⊞	MECHANICAL GAS VALVE

MECHANICAL SPECIFICATIONS

- THE MECHANICAL CONTRACTOR SHALL VISIT THE JOB SITE AND VERIFY ALL EXISTING CONDITIONS IN FIELD AND INCLUDE IN THEIR BID ALL REQUIRED CHANGES TO PROVIDE A COMPLETE OPERATING SYSTEM.
- THIS CONTRACTOR SHALL FURNISH AND INSTALL MATERIAL INDICATED ON DRAWINGS AND AS REQUIRED TO PROVIDE A COMPLETE AND SATISFACTORY OPERATING INSTALLATION.
- ALL MATERIALS SHALL BE NEW AND OF STANDARD QUALITY UNLESS OTHERWISE NOTED; NO REJECTS. ALL MATERIALS FOR WHICH AN UNDERWRITER'S LABORATORY STANDARD EXISTS SHALL BEAR A U.L. LABEL. PROTECT ALL EQUIPMENT AND WORK FROM DAMAGE DUE TO ANY CAUSE.
- ALL WORK SHALL BE EXECUTED IN ACCORDANCE WITH THE NATIONAL, STATE AND LOCAL CODES AND REGULATIONS GOVERNING THE INSTALLATION OF THE WORK INVOLVED. ALL PERMITS FOR THE INSTALLATION OF THE WORK AND ALL INSPECTIONS OF SAME SHALL BE ARRANGED FOR BY THIS CONTRACTOR. ALL FEES AND ASSESSMENTS IN CONNECTION THEREWITH SHALL BE PAID BY THIS CONTRACTOR, THE COST OF WHICH SHALL BE INCLUDED IN THEIR BID.
- THE GENERAL CONDITIONS AND SPECIAL CONDITIONS ISSUED BY THE OWNER AND/OR ARCHITECT SHALL GOVERN WHERE APPLICABLE. GENERAL CONDITIONS AND SPECIAL CONDITION REQUIREMENTS RELATED BUT NOT LIMITED TO THE FOLLOWING SHALL APPLY:
 - RUBBISH REMOVAL.
 - COMPLIANCE WITH THE OWNER'S REQUIREMENTS.
 - OBTAINING AND PAYING FOR REQUIRED LICENSES AND PERMITS.
 - REPLACEMENT OF DAMAGED SYSTEM EQUIPMENT, AND/OR BUILDING DUE TO NEW INSTALLATIONS.
 - COMPLIANCE WITH ALL STATE AND LOCAL CODES AND ORDINANCES.
 - WORKMAN'S COMPENSATION INSURANCE, PUBLIC LIABILITY INSURANCE.
- THE ENTIRE INSTALLATION SHALL BE PERFORMED IN A FIRST-CLASS WORKMANLIKE MANNER. THE COMPLETE SYSTEM SHALL BE FULLY OPERATIONAL AND ACCEPTANCE BY THE OWNER SHALL BE A CONDITION OF THE CONTRACT.
- DUCTWORK AND PIPING SHALL RUN IN STRAIGHT LINES PARALLEL AND/OR PERPENDICULAR TO THE BUILDING CONSTRUCTION, AS HIGH AS POSSIBLE.
- THIS CONTRACTOR SHALL INCLUDE ALL MISCELLANEOUS ITEMS REQUIRED TO COMPLETE THE WORK INCLUDING MOVING AND RIGGING OF MATERIAL AND EQUIPMENT, HANGERS, SUPPORTS, STRUCTURAL FRAMING CHANGES, FITTINGS AND SLEEVES.
- ALL MATERIAL, WORKMANSHIP AND EQUIPMENT SHALL BE GUARANTEED FOR ONE YEAR AFTER SYSTEM ACCEPTANCE. PROVIDE TYPEWRITTEN OPERATING INSTRUCTIONS, AND EQUIPMENT WARRANTIES.
- ALL SHEET METAL DUCTS SHALL BE ERECTED IN FIRST CLASS AND WORKMANLIKE MANNER TRUE TO THE DIMENSIONS INDICATED ON THE DRAWINGS, UNLESS OTHERWISE APPROVED, STRAIGHT AND SMOOTH ON THE INSIDE WITH NEATLY FINISHED AIRTIGHT JOINTS. ALL SLOP JOINTS SHALL BE MADE IN THE DIRECTION OF FLOW UNLESS OTHERWISE INDICATED ON THE DRAWINGS. ALL ELBOWS SHALL HAVE A CENTERLINE RADIUS EQUAL TO 15 TIMES THE WIDTH OF THE DUCT. THE SHEET METAL USED SHALL BE GALVANIZED IRON, EXCEPT AS HEREINAFTER SPECIFIED. THE THICKNESS OF THE SHEET METAL AND SIZE AND SPACING OF THE STIFFENERS USED SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE LATEST EDITION OF THE SMACNA HVAC DUCT CONSTRUCTION STANDARDS - METAL AND FLEXIBLE BOOK. CONSTRUCT DUCTWORK IN ACCORDANCE WITH THE REQUIREMENTS OF SMACNA AND CURRENT LOCAL CODES. ASHRAE GUIDE AND DATA BOOK "SCHEDULE OF RECOMMENDED CONSTRUCTION FOR LOW PRESSURE RECTANGULAR SHEET METAL DUCTS." ALL DUCTWORK SHALL COMPLY WITH ASHRAE AND SMACNA STANDARDS.
- ALL DUCTWORK TO BE SUPPORTED FROM BUILDING CONSTRUCTION WITH ROD HANGERS AND PROPERLY SIZED ANGLE IRON BOTTOM SUPPORTS. THE DUCTS SHALL BE SECURELY ANCHORED TO THE BUILDING IN AN APPROVED MANNER AND SHALL BE SO INSTALLED AS TO BE COMPLETELY FREE FROM VIBRATION UNDER ALL CONDITIONS OF OPERATION. THE DUCTS SHALL BE PROPERLY BRACED AND REINFORCED WITH STEEL ANGLES OR OTHER STRUCTURAL MEMBERS SPACED NOT MORE THAN 60" ON CENTERS. ALL SAGGING DUCTWORK WILL BE REMOVED AND REHUNG AS DIRECTED BY ENGINEER.
- FLEXIBLE DUCTS AND CONNECTORS SHALL BE TESTED IN ACCORDANCE WITH UL 181 AND BE LABELED. FLEXIBLE DUCTS AND CONNECTORS SHALL BE LIMITED TO A MAXIMUM LENGTH OF 5'-0".
- ALL DUCTWORK SHALL BE INSULATED AS FOLLOWS UNLESS OTHERWISE SPECIFIED ON THE DRAWINGS. COVERINGS AND LININGS, INCLUDING ADHESIVES, SHALL HAVE A FLAME SPREAD INDEX NO MORE THAN 25 AND A SMOKE DEVELOPED INDEX NOT MORE THAN 50, WHEN TESTED IN ACCORDANCE WITH ASTM E 84. ALL DUCTWORK LOCATED WITHIN AND SPACE THAT DOES NOT DIRECTLY COMMUNICATE WITH THE OUTDOORS, AND IS WITHIN THE BUILDING ENVELOPE SHALL BE CONSIDERED TO BE WITHIN A CONDITIONED SPACE.

RECTANGULAR:	GLASS FIBER LINING WITH R-4 INSTALLED VALUE
ROUND:	FOIL FACED DUCT WRAP WITH R-4 INSTALLED VALUE

*OUTSIDE AIR INTAKE DUCTWORK IN CONDITIONED SPACES SHALL BE WRAPPED WITH R-5 FOIL FACED DUCT WRAP.
*EXPOSED SPIRAL DUCTWORK IN CONDITIONED SPACES NOT INSULATED

UNCONDITIONED SPACE	
RECTANGULAR:	GLASS FIBER LINING WITH R-6 INSTALLED VALUE OR FOIL FACED DUCT WRAP WITH R-6 INSTALLED VALUE
ROUND:	FOIL FACED DUCT WRAP WITH R-6 INSTALLED VALUE

EXTERIOR DUCTWORK	
	RIGID BOARD EXTERIOR INSULATION WITH R-9 INSTALLED VALUE
	SIMILAR TO "CERTAINTEED" COMMERCIAL BOARD WITH WEATHER PROOF ALUMINUM JACKET WRAP SIMILAR TO "VENTURE GLAD" #511CM
- ALL DUCTWORK DIMENSIONS SHOWN ARE CLEAR INSIDE DIMENSIONS.
- THE MECHANICAL CONTRACTOR SHALL SUBMIT (4) FOUR PRODUCT SHOP DRAWINGS FOR ALL NEW EQUIPMENT AND DUCT LAYOUT TO BE FURNISHED FOR ARCHITECT, OWNER, AND ENGINEER'S APPROVAL. CATALOG CUT SHEETS FOR ALL EQUIPMENT AND MATERIAL SHALL BE MADE AVAILABLE ON SITE. ALL EQUIPMENT AND APPLIANCES MUST BEAR LABEL INDICATING SUITABLE FOR USE. THE MECHANICAL CONTRACTOR SHALL SUBMIT THE MANUFACTURER'S INSTALLATION INSTRUCTIONS TO THE BUILDING OWNER, INCLUDING INSTALLATION FOR OUTSIDE INSTALLATION WHEN APPLICABLE.
- THE EQUIPMENT SPECIFIED TO SET STANDARDS, INTENTION IS "OR EQUAL" IF APPROVED PRIOR TO BID DUE DATE.
- THE MECHANICAL CONTRACTOR SHALL HIRE AN INDEPENDENT AND CERTIFIED TEST AND BALANCE CONTRACTOR TO BALANCE SYSTEM TO AIR QUANTITIES AS INDICATED ON PLANS, AND SHALL PROVIDE A TEST AND BALANCE REPORT TO BE SENT TO THE BUILDING DEPARTMENT NO LESS THAN THREE DAYS PRIOR TO FINAL INSPECTION. CONTRACTOR SHALL ALSO PROVIDE COPIES OF THE BALANCE REPORT TO THE OWNER, ARCHITECT, AND ENGINEER. REPORT SHALL ALSO INCLUDE FAN RPM AND PRESSURE INFORMATION.
- PROVIDE 7-DAY PROGRAMMABLE ELECTRONIC THERMOSTAT WITH 2 HOUR OVERRIDE, 10 HOUR BATTERY BACKUP, AUTOCHANGEOVER BETWEEN HEATING AND COOLING MODES, 5 DEGREE FADDBAND, DIGITAL READOUT, AND FAN AUTOON CONTROLS. THERMOSTAT SHALL BE MANUFACTURED BY HONEYWELL, WHITE-ROGERS OR APPROVED EQUAL. PROVIDE CLEAR PLASTIC LOCKING COVER WITH KEYS.
- MECHANICAL CONTRACTOR SHALL FURNISH AND INSTALL FIRE DAMPERS IN DUCTWORK AND FIRESTOP ALL PIPE PENETRATIONS THRU RATED FLOORS, CEILINGS AND WALLS. VERIFY LOCATIONS OF ALL RATED ASSEMBLIES WITH ARCHITECTURAL PLANS. FIRE DAMPERS SHALL BE IN ACCORDANCE WITH UL 555. ALL FIRE DAMPERS SHALL BE "TYPE B" OR "TYPE C" DAMPERS WITH STORED DAMPER OUT OF AIRSTREAM UNLESS OTHERWISE NOTED.
- ALL DUCT LAYOUTS, PIPING LAYOUTS, WIRING LAYOUTS, ETC. ARE SCHEMATIC. EXACT LOCATIONS SHALL BE DETERMINED BY THE CONSTRUCTION AND STRUCTURE OF THE BUILDING AND SHALL BE VERIFIED AND COORDINATED IN THE FIELD. EACH TRADE CONTRACTOR SHALL CERTIFY IN WRITING TO THE OWNER AND ARCHITECT THAT HE HAS THOROUGHLY REVIEWED AND COORDINATED ALL LOCATIONS AND ROUTINGS WITH ALL OTHER TRADES PRIOR TO FABRICATION OF DUCTS, PIPING, CONDUITS, ETC. AND START OF INSTALLATION OF SAME. ANY INSTALLATION OF CONSTRUCTION CONFLICTS WHICH OCCUR IN THE FIELD SHALL BE RESOLVED BY THE TRADE CONTRACTOR TO THE SATISFACTION OF THE OWNER AND ARCHITECT AND AT NO EXPENSE TO THE OWNER OR ARCHITECT.

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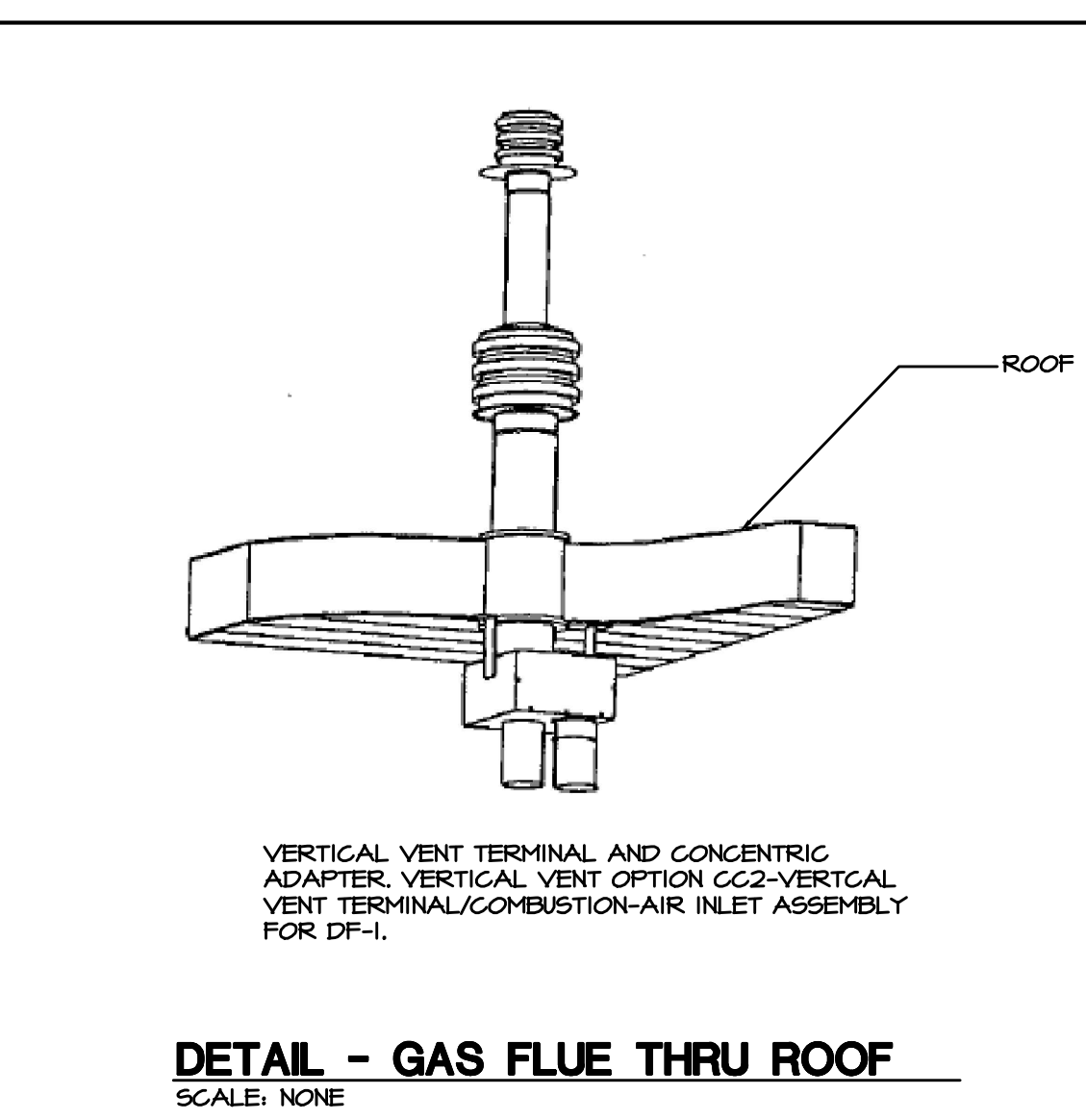
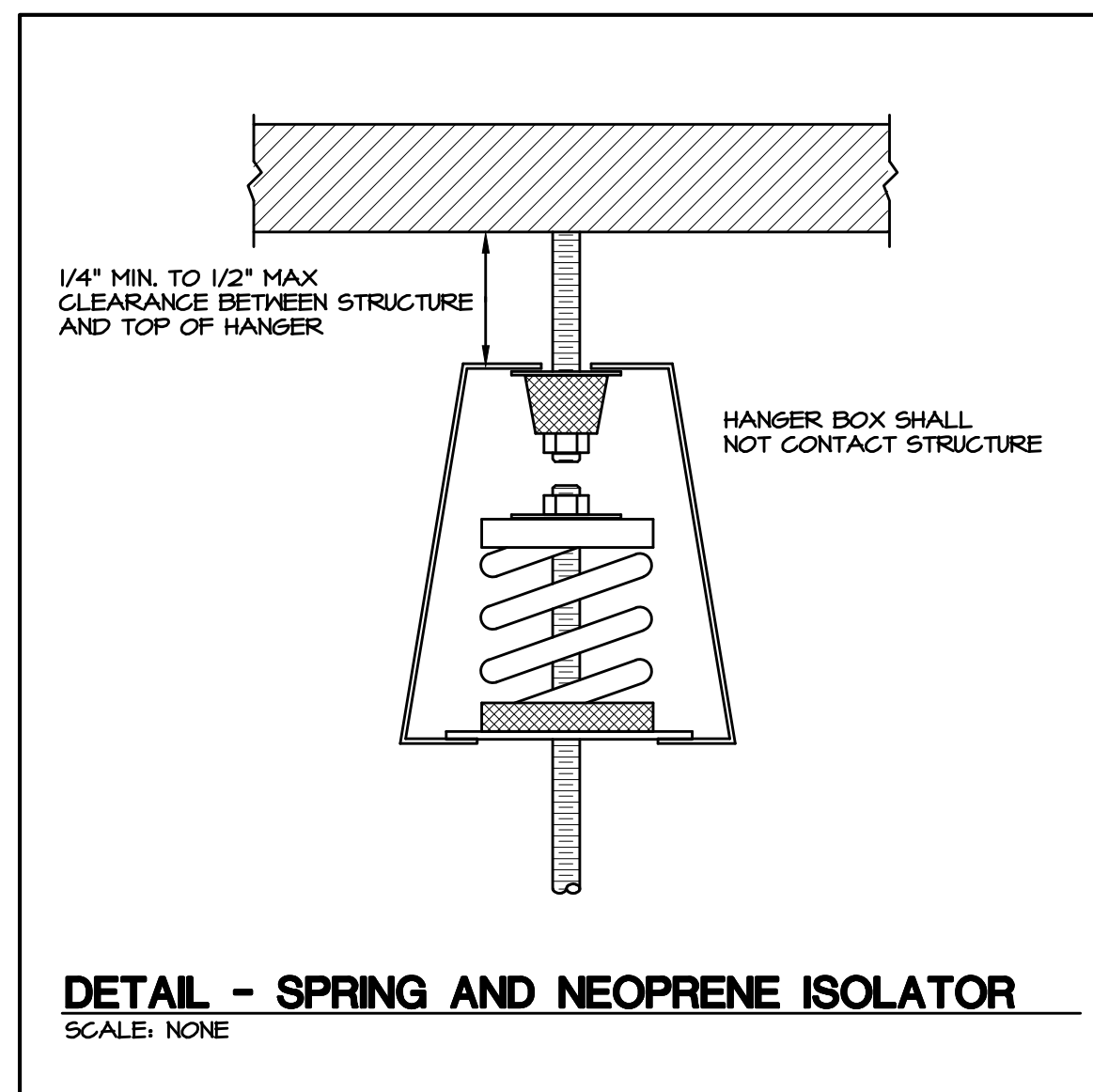
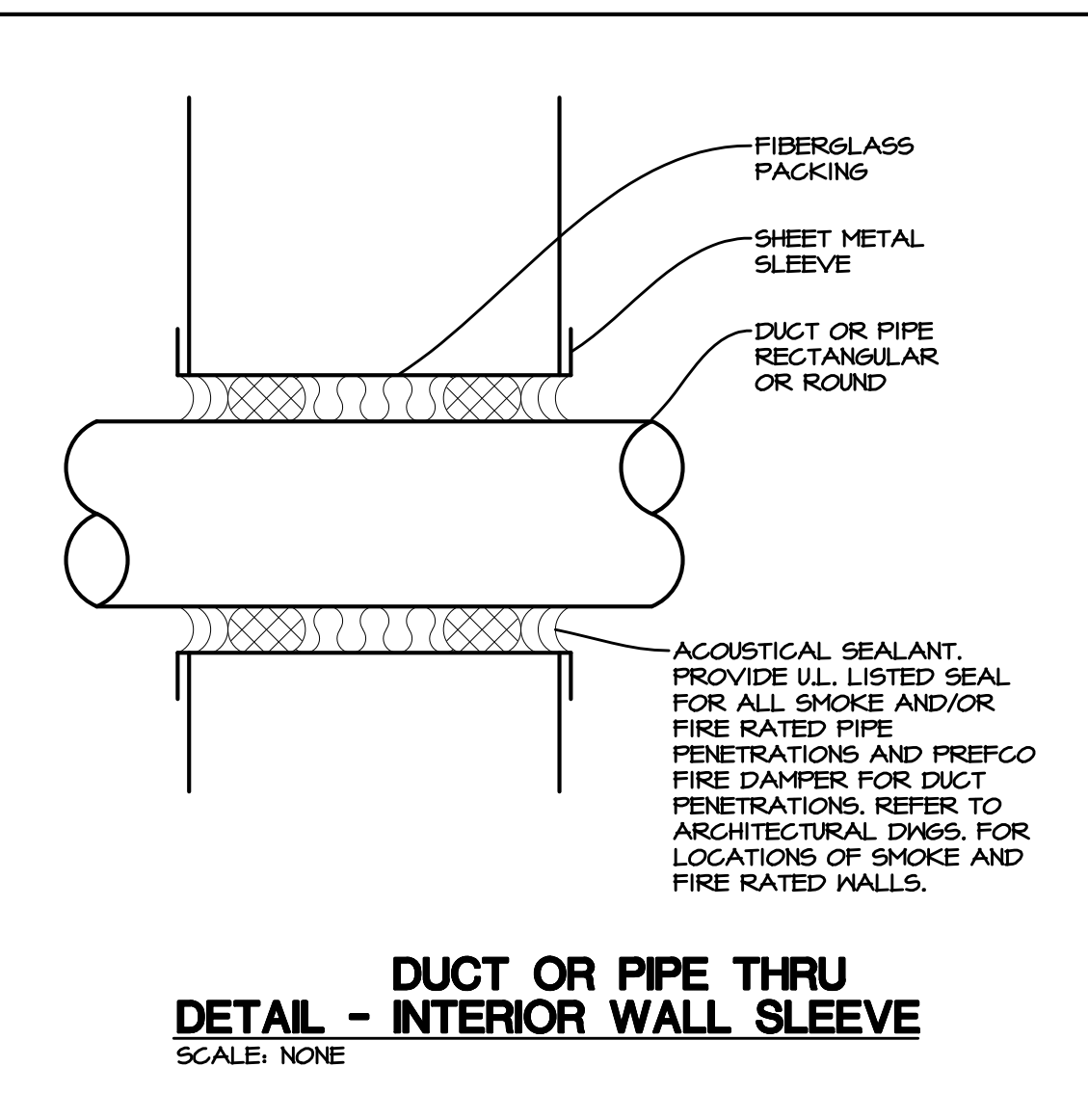
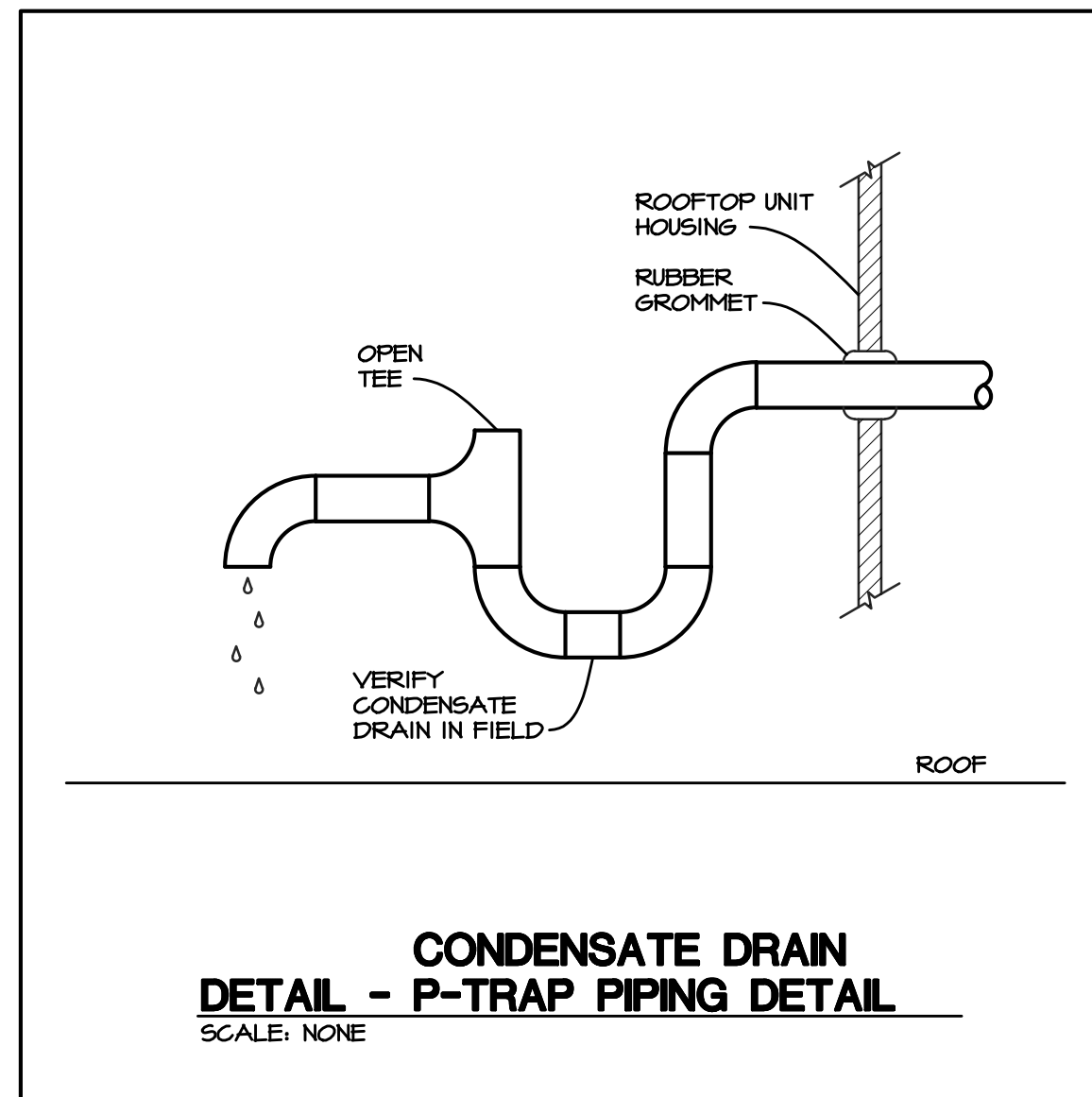
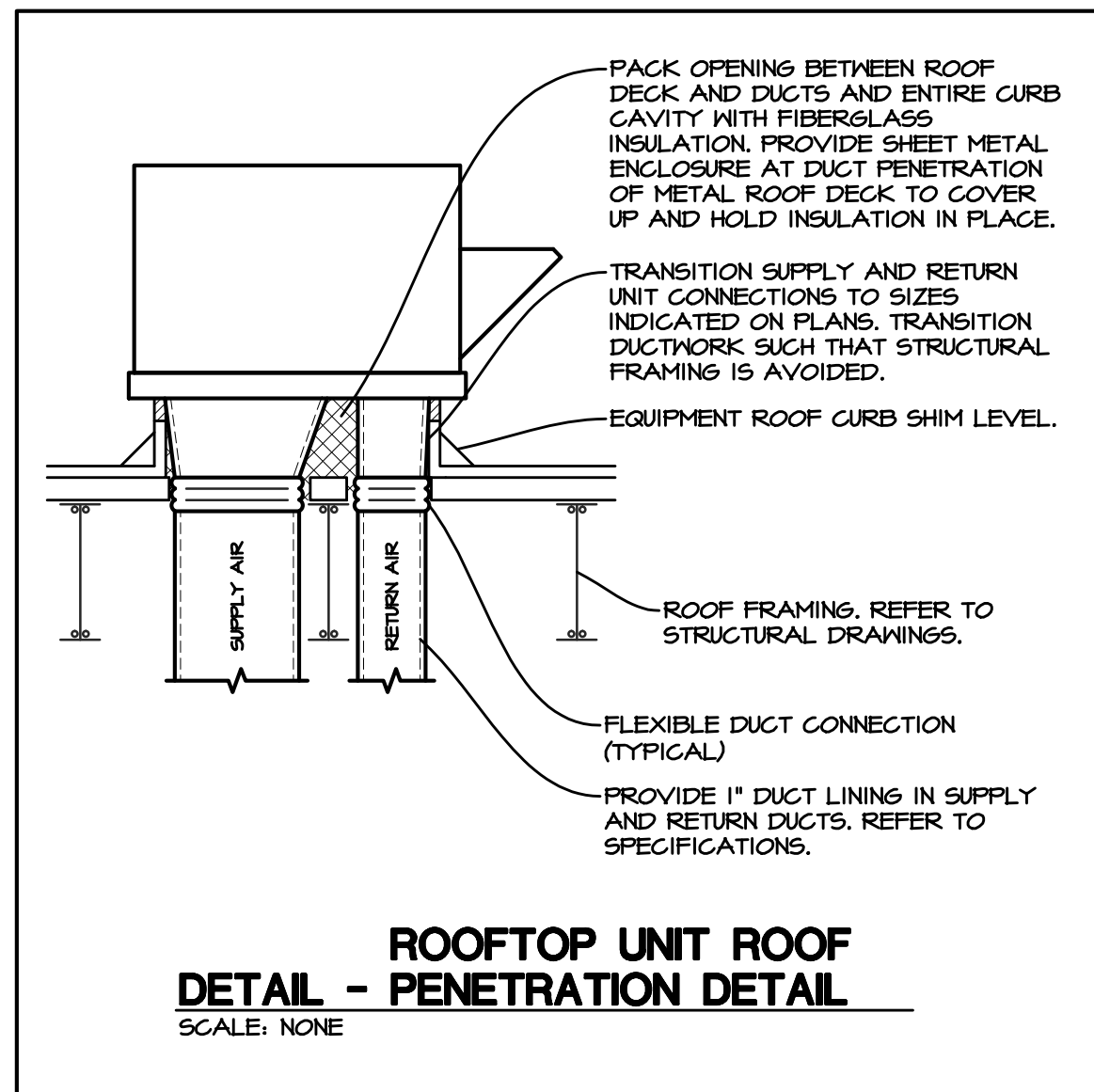
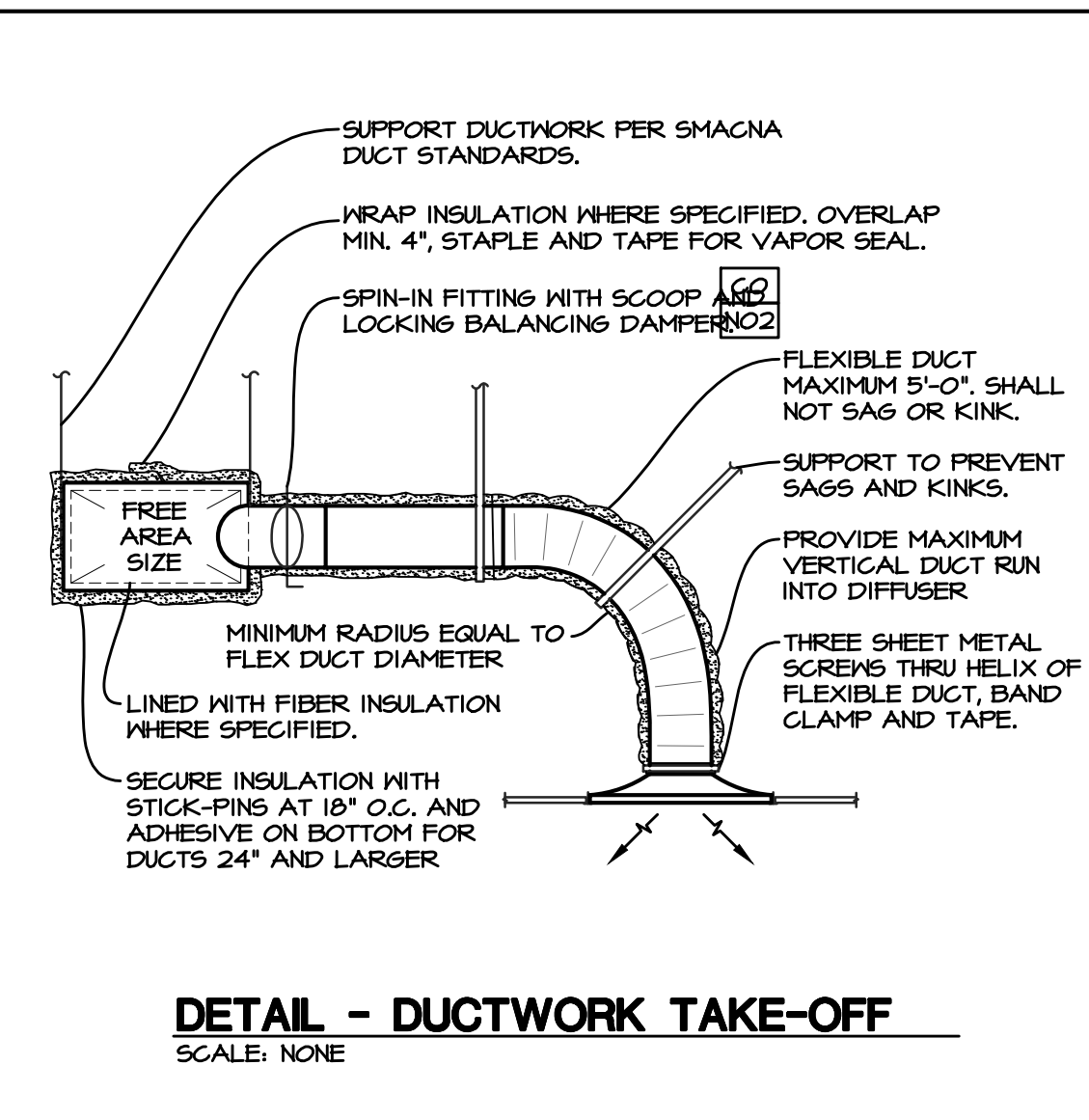
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MECHANICAL SPECS & DETAILS

M2.2



MECHANICAL LEGEND

—	NEW DUCTWORK AND AIR DEVICES TO MATCH EXISTING.
—	EXISTING DUCTWORK AND AIR DEVICES TO REMAIN. CLEAN AND RECONDITION AS REQUIRED.
- - - -	EXISTING DUCTWORK AND AIR DEVICES TO BE REMOVED.
10"x10"	NEW DUCTWORK DIMENSIONS
10"/10	EXISTING DUCTWORK DIMENSIONS
⊕	THERMOSTAT
⊙	SENSOR (REMOTE TEMPERATURE SENSOR UNLESS OTHERWISE NOTED)
⊞	TAKEOFF WITH MANUAL VOLUME DAMPER
—	LOCKABLE MANUAL VOLUME DAMPER (MYD)
— FD	FIRE DAMPER
A.F.F.	ABOVE FINISHED FLOOR
B.F.C.	BELOW FINISHED CEILING
M.V.D.	LOCKABLE MANUAL VOLUME DAMPER
W.C.	INCHES OF WATER COLUMN
U.C.	UNDER CUT DOOR
U.T.R.	UP THROUGH ROOF
⊕	NEW TO EXISTING CONNECTION
◆	DEMO BREAK POINT. DEMO BACK TO THIS POINT
RT-1	EQUIPMENT TAG
⊕ (CFM) (SIZE)	NEW AIR DEVICE TAG
⊞	CEILING DIFFUSER WITH FOUR WAY THROW
⊞	CEILING DIFFUSER WITH THREE WAY THROW
⊞	CEILING DIFFUSER WITH TWO WAY THROW
⊞	CEILING DIFFUSER FOR RETURN AIR
⊞	SUPPLY REGISTER
⊞	RETURN / EXHAUST GRILLE
(X)-(CFM)	EXISTING AIR DEVICE X = S = SUPPLY AIR R = RETURN AIR E = EXHAUST AIR M = MAKEUP AIR T = TRANSFER AIR
⊞	EXISTING CEILING DIFFUSER
⊞	EXISTING CEILING DIFFUSER FOR RETURN AIR
⊕	VENTLESS PRESSURE REGULATOR
⊞	MANUAL GAS VALVE
⊞	MECHANICAL GAS VALVE

MECHANICAL SPECIFICATIONS

- THE MECHANICAL CONTRACTOR SHALL VISIT THE JOB SITE AND VERIFY ALL EXISTING CONDITIONS IN FIELD AND INCLUDE IN THEIR BID ALL REQUIRED CHANGES TO PROVIDE A COMPLETE OPERATING SYSTEM.
- THIS CONTRACTOR SHALL FURNISH AND INSTALL MATERIAL INDICATED ON DRAWINGS AND AS REQUIRED TO PROVIDE A COMPLETE AND SATISFACTORY OPERATING INSTALLATION.
- ALL MATERIALS SHALL BE NEW AND OF STANDARD QUALITY UNLESS OTHERWISE NOTED; NO REJECTS. ALL MATERIALS FOR WHICH AN UNDERWRITER'S LABORATORY STANDARD EXISTS SHALL BEAR A U.L. LABEL. PROTECT ALL EQUIPMENT AND WORK FROM DAMAGE DUE TO ANY CAUSE.
- ALL WORK SHALL BE EXECUTED IN ACCORDANCE WITH THE NATIONAL, STATE AND LOCAL CODES AND REGULATIONS GOVERNING THE INSTALLATION OF THE WORK INVOLVED. ALL PERMITS FOR THE INSTALLATION OF THE WORK AND ALL INSPECTIONS OF SAME SHALL BE ARRANGED FOR BY THIS CONTRACTOR. ALL FEES AND ASSESSMENTS IN CONNECTION THEREWITH SHALL BE PAID BY THIS CONTRACTOR, THE COST OF WHICH SHALL BE INCLUDED IN THEIR BID.
- THE GENERAL CONDITIONS AND SPECIAL CONDITIONS ISSUED BY THE OWNER AND/OR ARCHITECT SHALL GOVERN WHERE APPLICABLE. GENERAL CONDITIONS AND SPECIAL CONDITION REQUIREMENTS RELATED BUT NOT LIMITED TO THE FOLLOWING SHALL APPLY:
 - RUBBISH REMOVAL.
 - COMPLIANCE WITH THE OWNER'S REQUIREMENTS.
 - OBTAINING AND PAYING FOR REQUIRED LICENSES AND PERMITS.
 - REPLACEMENT OF DAMAGED SYSTEM EQUIPMENT, AND/OR BUILDING DUE TO NEW INSTALLATIONS.
 - COMPLIANCE WITH ALL STATE AND LOCAL CODES AND ORDINANCES.
 - WORKMAN'S COMPENSATION INSURANCE, PUBLIC LIABILITY INSURANCE.
- THE ENTIRE INSTALLATION SHALL BE PERFORMED IN A FIRST-CLASS WORKMANLIKE MANNER. THE COMPLETE SYSTEM SHALL BE FULLY OPERATIONAL AND ACCEPTANCE BY THE OWNER SHALL BE A CONDITION OF THE CONTRACT.
- DUCTWORK AND PIPING SHALL RUN IN STRAIGHT LINES PARALLEL AND/OR PERPENDICULAR TO THE BUILDING CONSTRUCTION, AS HIGH AS POSSIBLE.
- THIS CONTRACTOR SHALL INCLUDE ALL MISCELLANEOUS ITEMS REQUIRED TO COMPLETE THE WORK INCLUDING MOVING AND RIGGING OF MATERIAL AND EQUIPMENT, HANGERS, SUPPORTS, STRUCTURAL FRAMING CHANGES, FITTINGS AND SLEEVES.
- ALL MATERIAL, WORKMANSHIP AND EQUIPMENT SHALL BE GUARANTEED FOR ONE YEAR AFTER SYSTEM ACCEPTANCE. PROVIDE TYPEWRITTEN OPERATING INSTRUCTIONS, AND EQUIPMENT WARRANTIES.
- ALL SHEET METAL DUCTS SHALL BE ERECTED IN FIRST CLASS AND WORKMANLIKE MANNER TRUE TO THE DIMENSIONS INDICATED ON THE DRAWINGS, UNLESS OTHERWISE APPROVED, STRAIGHT AND SMOOTH ON THE INSIDE WITH NEATLY FINISHED AIRTIGHT JOINTS. ALL SLOP JOINTS SHALL BE MADE IN THE DIRECTION OF FLOW UNLESS OTHERWISE INDICATED ON THE DRAWINGS. ALL ELBOWS SHALL HAVE A CENTERLINE RADIUS EQUAL TO 15 TIMES THE WIDTH OF THE DUCT. THE SHEET METAL USED SHALL BE GALVANIZED IRON, EXCEPT AS HEREINAFTER SPECIFIED. THE THICKNESS OF THE SHEET METAL AND SIZE AND SPACING OF THE STIFFENERS USED SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE LATEST EDITION OF THE SMACNA HVAC DUCT CONSTRUCTION STANDARDS - METAL AND FLEXIBLE BOOK. CONSTRUCT DUCTWORK IN ACCORDANCE WITH THE REQUIREMENTS OF SMACNA AND CURRENT LOCAL CODES. ASHRAE GUIDE AND DATA BOOK "SCHEDULE OF RECOMMENDED CONSTRUCTION FOR LOW PRESSURE RECTANGULAR SHEET METAL DUCTS." ALL DUCTWORK SHALL COMPLY WITH ASHRAE AND SMACNA STANDARDS.
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RECTANGULAR:	GLASS FIBER LINING WITH R-4 INSTALLED VALUE
ROUND:	FOIL FACED DUCT WRAP WITH R-4 INSTALLED VALUE

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*EXPOSED SPIRAL DUCTWORK IN CONDITIONED SPACES NOT INSULATED

UNCONDITIONED SPACE	
RECTANGULAR:	GLASS FIBER LINING WITH R-6 INSTALLED VALUE OR FOIL FACED DUCT WRAP WITH R-6 INSTALLED VALUE
ROUND:	FOIL FACED DUCT WRAP WITH R-6 INSTALLED VALUE

EXTERIOR DUCTWORK	
	RIGID BOARD EXTERIOR INSULATION WITH R-9 INSTALLED VALUE
	SIMILAR TO "CERTAINTEED" COMMERCIAL BOARD WITH WEATHER PROOF ALUMINUM JACKET WRAP SIMILAR TO "VENTURE GLAD" #511CM
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MECH VEHICLE EXHAUST SYSTEM

M2.3

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SIGNED
1/1/17

EXPIRES
11/30/17

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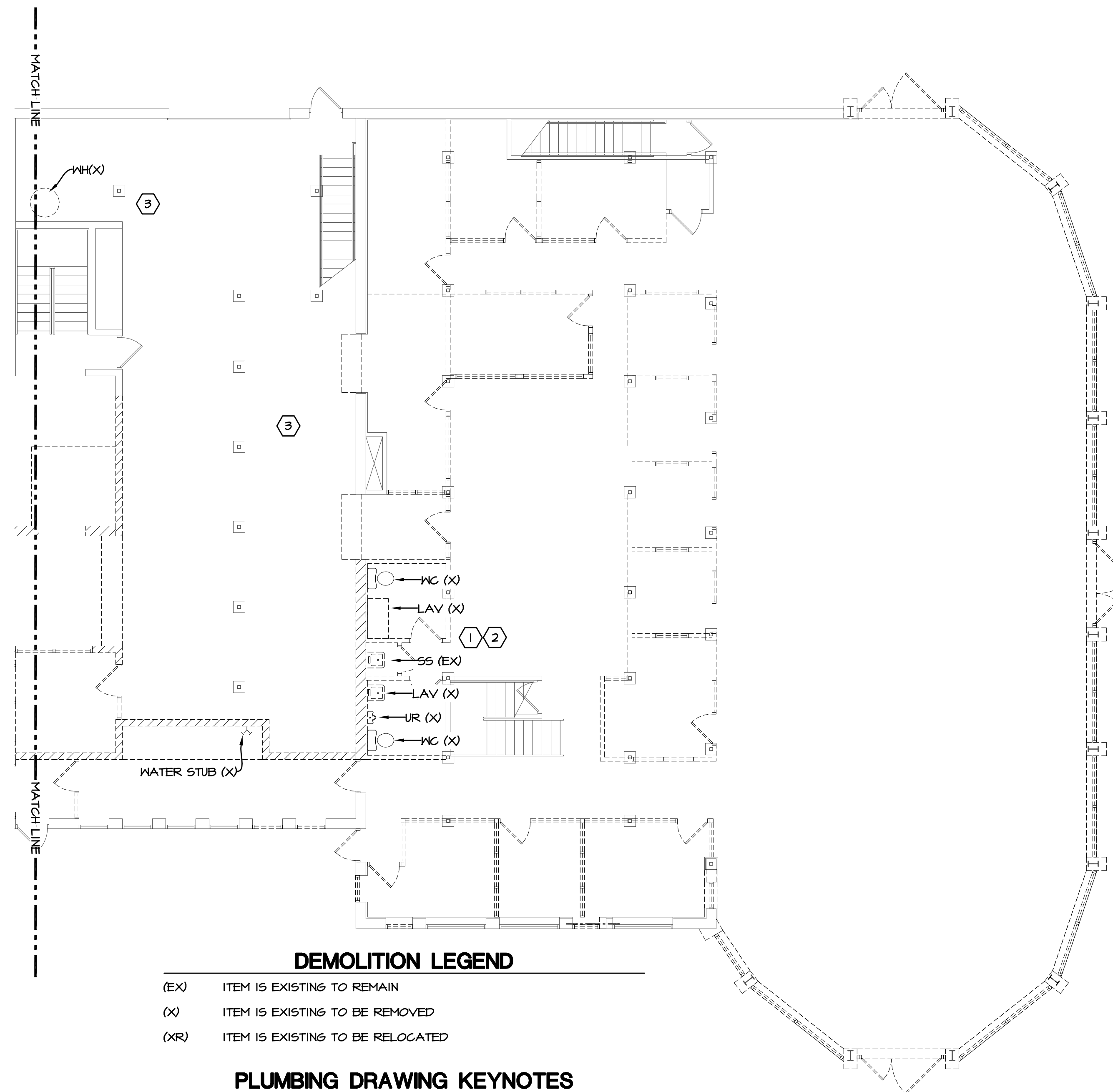
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**PARTIAL
DEMOLITION
PLUMBING**

PD1.1



DEMOLITION LEGEND

- (EX) ITEM IS EXISTING TO REMAIN
- (X) ITEM IS EXISTING TO BE REMOVED
- (XR) ITEM IS EXISTING TO BE RELOCATED

PLUMBING DRAWING KEYNOTES

- ① CAP UNDERGROUND SANITARY BELOW FLOOR GAS TIGHT. ABANDON PIPE IN PLACE PER STATE OF ILLINOIS CODE SECTION 040.1320 PARAGRAPH D).
- ② REMOVE AND CAP ALL ABOVE GROUND WASTE, VENT AND WATER PIPING ABOVE FLOOR. SEE PLUMBING PLANS FOR NEW TOILET ROOM FIXTURES.
- ③ REMOVE EXISTING HOT AND CW PIPING IN THIS AREA. SEE PLUMBING PLANS

PARTIAL DEMOLITION PLUMBING PLAN

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

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**PARTIAL
DEMOLITION
PLUMBING**

PD1.2



PARTIAL DEMOLITION PLUMBING PLAN

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

DEMOLITION LEGEND

- (EX) ITEM IS EXISTING TO REMAIN
- (X) ITEM IS EXISTING TO BE REMOVED
- (XR) ITEM IS EXISTING TO BE RELOCATED

PLUMBING DRAWING KEYNOTES

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- ② REMOVE AND CAP ALL ABOVE GROUND WASTE, VENT AND WATER PIPING ABOVE FLOOR. SEE PLUMBING PLANS FOR NEW TOILET ROOM FIXTURES.
- ③ REMOVE EXISTING ENG ALL ABOVE GROUND WASTE, VENT AND WATER PIPING ABOVE FLOOR. SEE PLUMBING PLANS FOR NEW TOILET ROOM EQUIPMENT.

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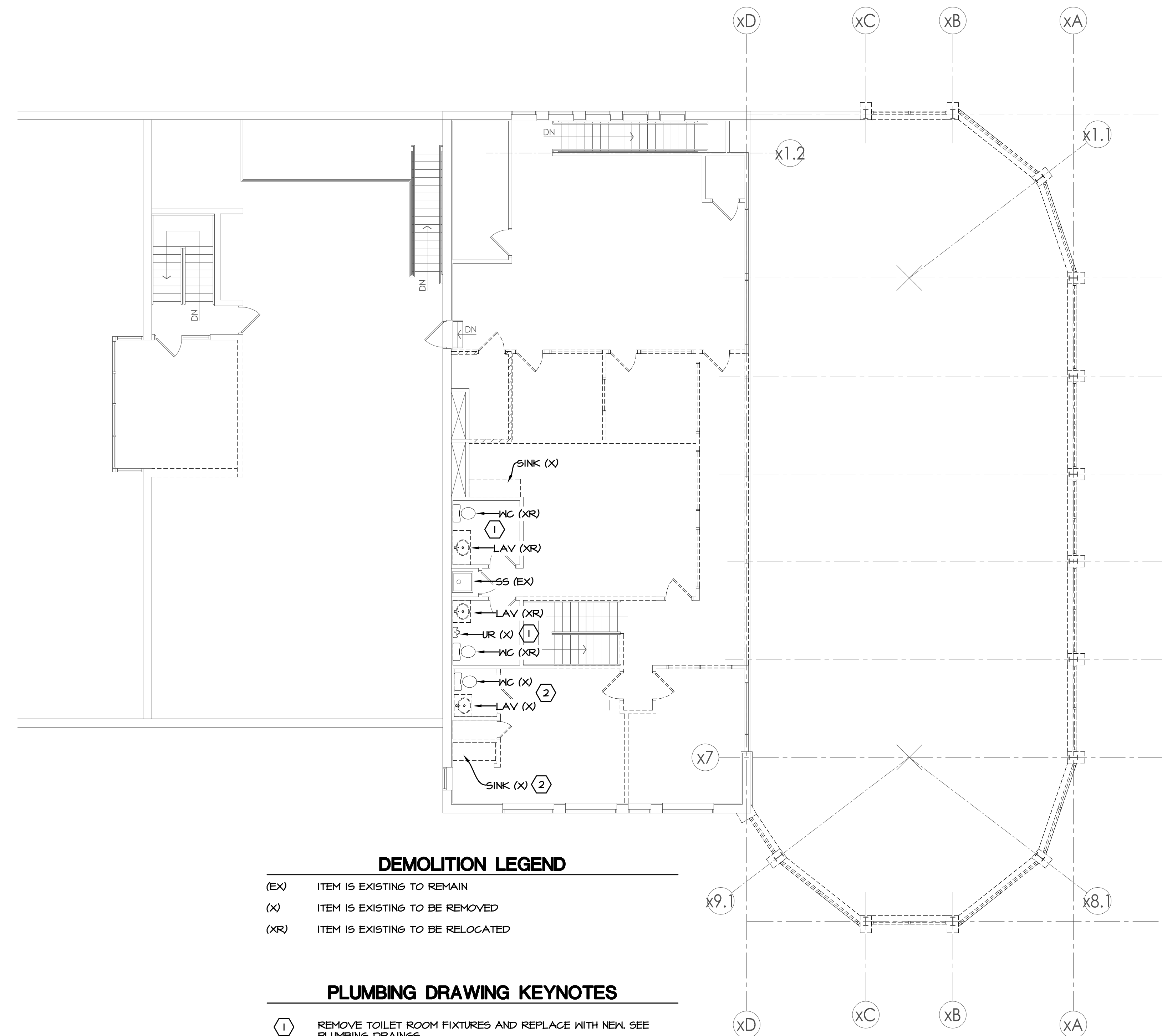


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**MEZZANINE
DEMOLITION
PLUMBING**

PD1.3



DEMOLITION LEGEND

- (EX) ITEM IS EXISTING TO REMAIN
- (X) ITEM IS EXISTING TO BE REMOVED
- (XR) ITEM IS EXISTING TO BE RELOCATED

PLUMBING DRAWING KEYNOTES

- ① REMOVE TOILET ROOM FIXTURES AND REPLACE WITH NEW. SEE PLUMBING DRAINGS
- ② REMOVE ALL ABOVE GROUND WASTE, VENT AND WATER PIPING ABOVE FLOOR. SEE PLUMBING PLANS FOR NEW TOILET ROOM EQUIPMENT

MEZZANINE DEMOLITION PLUMBING PLAN

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

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Attn: Ken Meddings (Electrical)

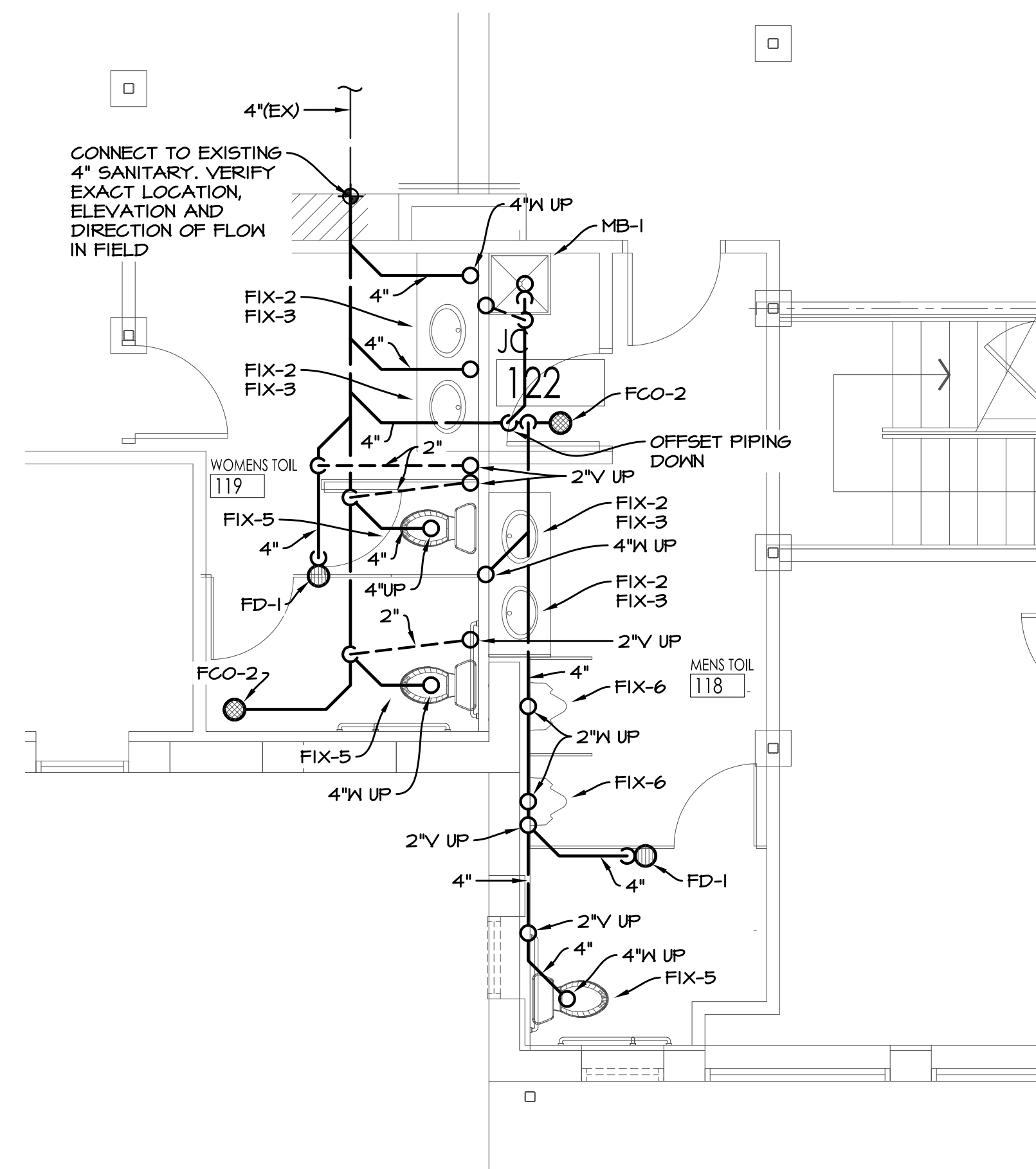


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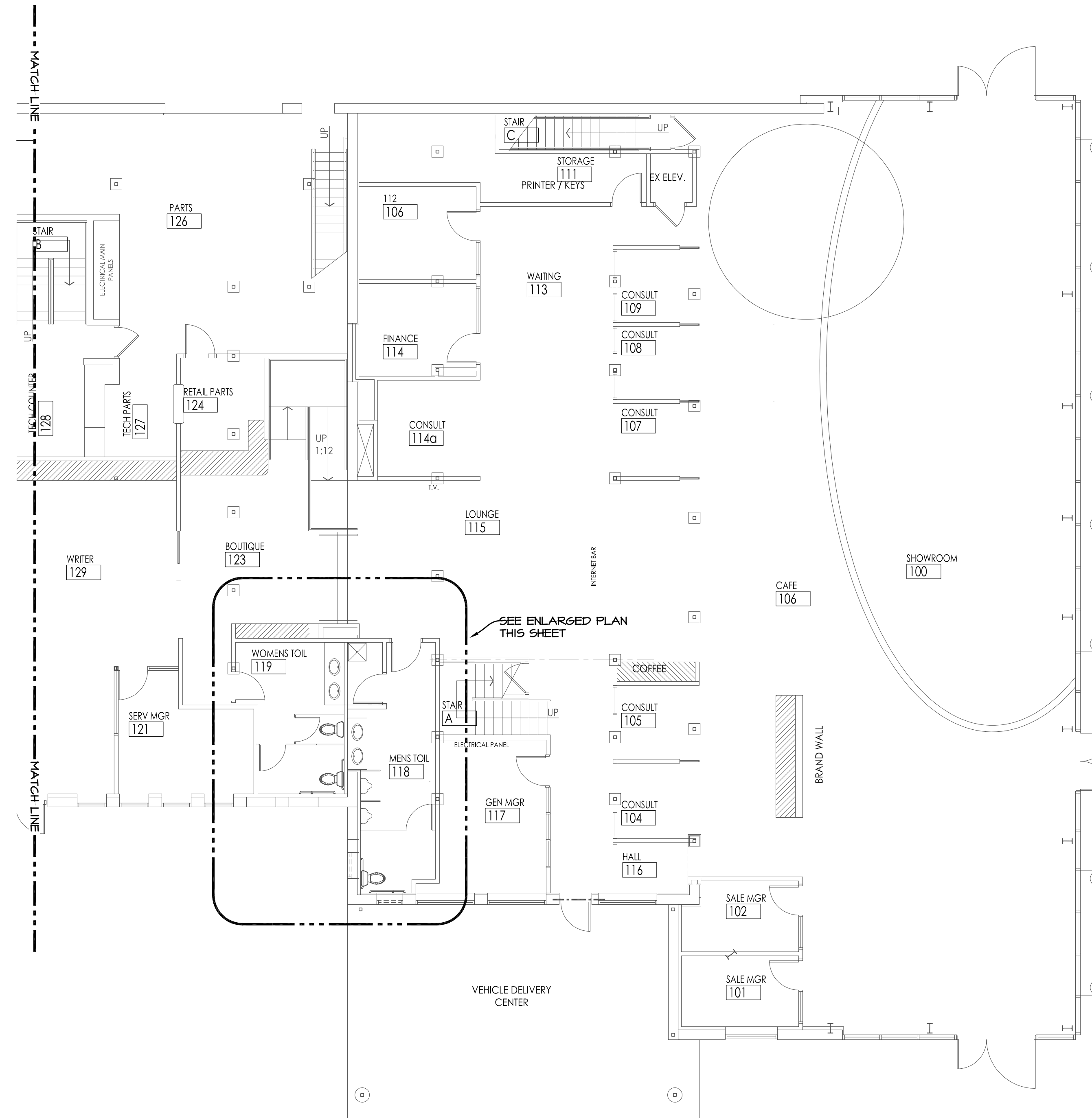
**PARTIAL
UNDERGROUND
PLUMBING**

P1.1



ENLARGED UNDERGROUND PLUMBING PLAN

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



PARTIAL UNDERGROUND PLUMBING PLAN

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

PROJECT:



International Auto KIA
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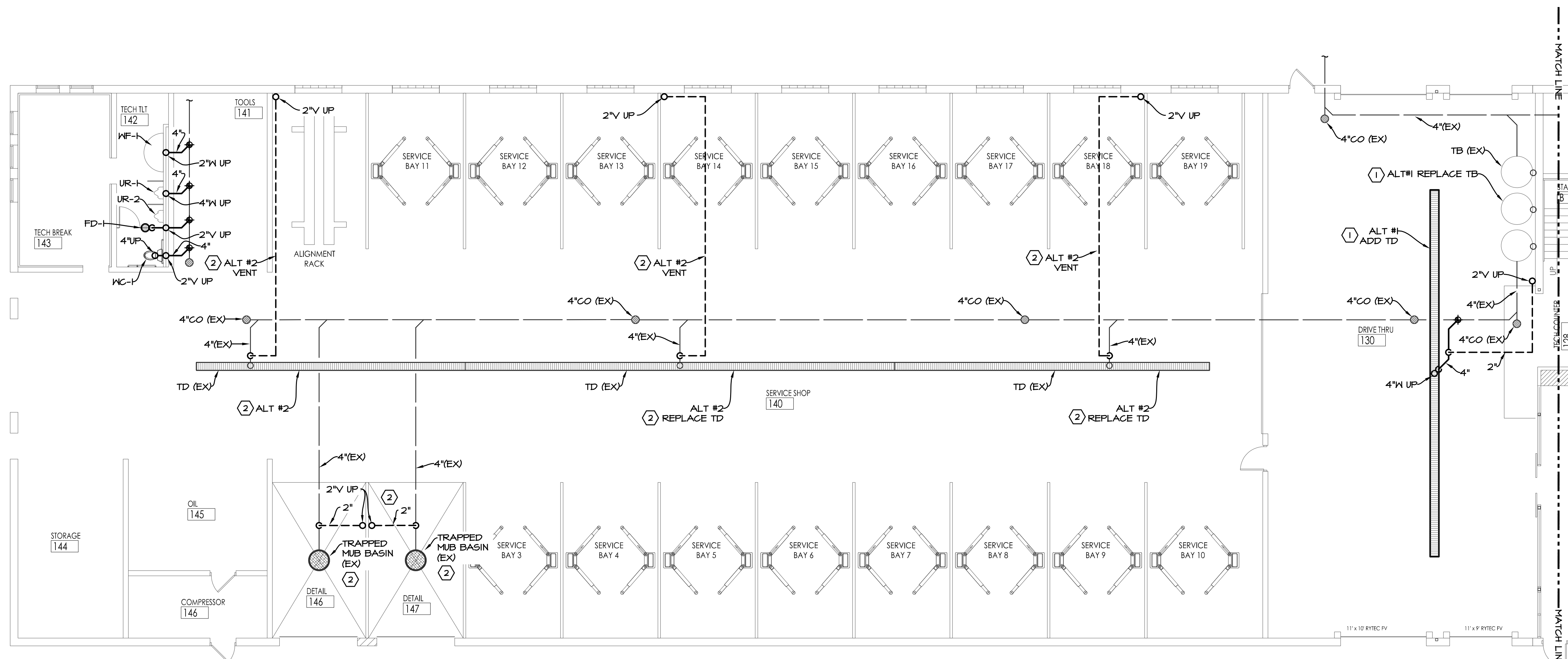


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PARTIAL UNDERGROUND PLUMBING

P1.2



PARTIAL UNDERGROUND PLUMBING PLAN

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

ALTERNATE #1 TRIPLE BASIN

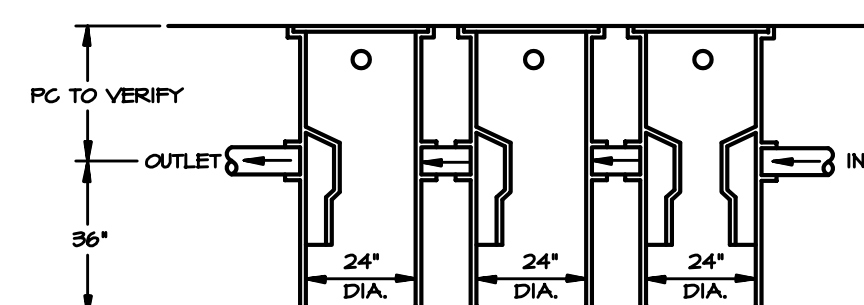
TRIPLE BASIN CALCULATIONS FOR SERVICE GARAGE

TOTAL SQUARE FEET OF GARAGE AREA=7,749
-500 SQUARE FEET=6 CUBIC FEET
7,249SF DIVIDED BY 500= 14.5 CUBIC FEET
CUBIC FEET OF STORAGE REQUIRED= 20.5 CUBIC FEET
CUBIC FEET MULTIPLIED BY 7.5 GALLONS= 153.75
TOTAL GALLONS DIVIDED BY 3= 51.25 GALLONS STORAGE
EACH BASIN REQUIRED

VOLUME IN GALLONS PER FOOT OF WATER

18" DIA=13.5/FT 30" DIA=36/FT
24" DIA=23.5/FT 48" DIA=94/FT
36" DIA=52.9/FT 72" DIA=211.5/FT
60" DIA=147/FT

24" DIA BASIN X 32" DEEP= 58.75 GALLONS EACH
TOTAL STORAGE= 176.25 GALLONS



PLUMBING DRAWING KEYNOTES

- 1 ALTERNATE #1, ADD NEW TD, 4" SANITARY, VENT OPENINGS AND REPLACE EXISTING TRIPLE GARAGE BASIN. MATCH EXISTING INVERT ELEVATION. VENT TRIPLE BASINS PER CODE. JR SMITH 9931 SERIES WITH DI RIM, 9870-461-M DUCTILE IRON GRATES, END CAPS, BOTTOM OUTLET AND LOCKING CLAMPS.
- 2 ALTERNATE #2, REPLACE EXISTING TD, ADD P-TRAPS TO 4" OPENINGS, INDIVIDUALLY VENT EACH TRAP AND EXISTING MUD BASINS PER CODE. VENTS TO INDEPENDENTLY VENT THROUGH ROOF. JR SMITH 9931 SERIES WITH DI RIM, 9870-461-M DUCTILE IRON GRATES, END CAPS, BOTTOM OUTLET AND LOCKING CLAMPS.



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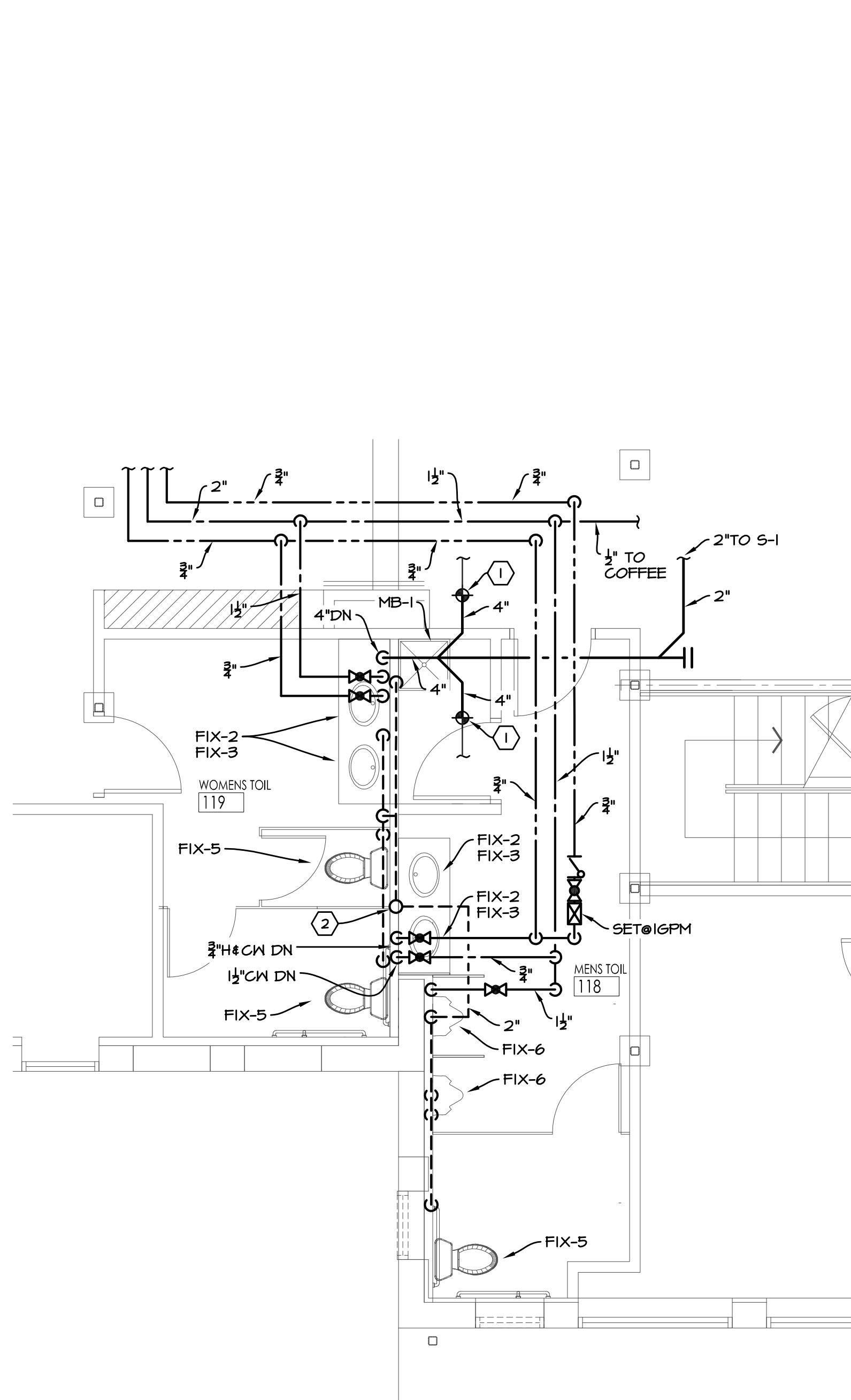


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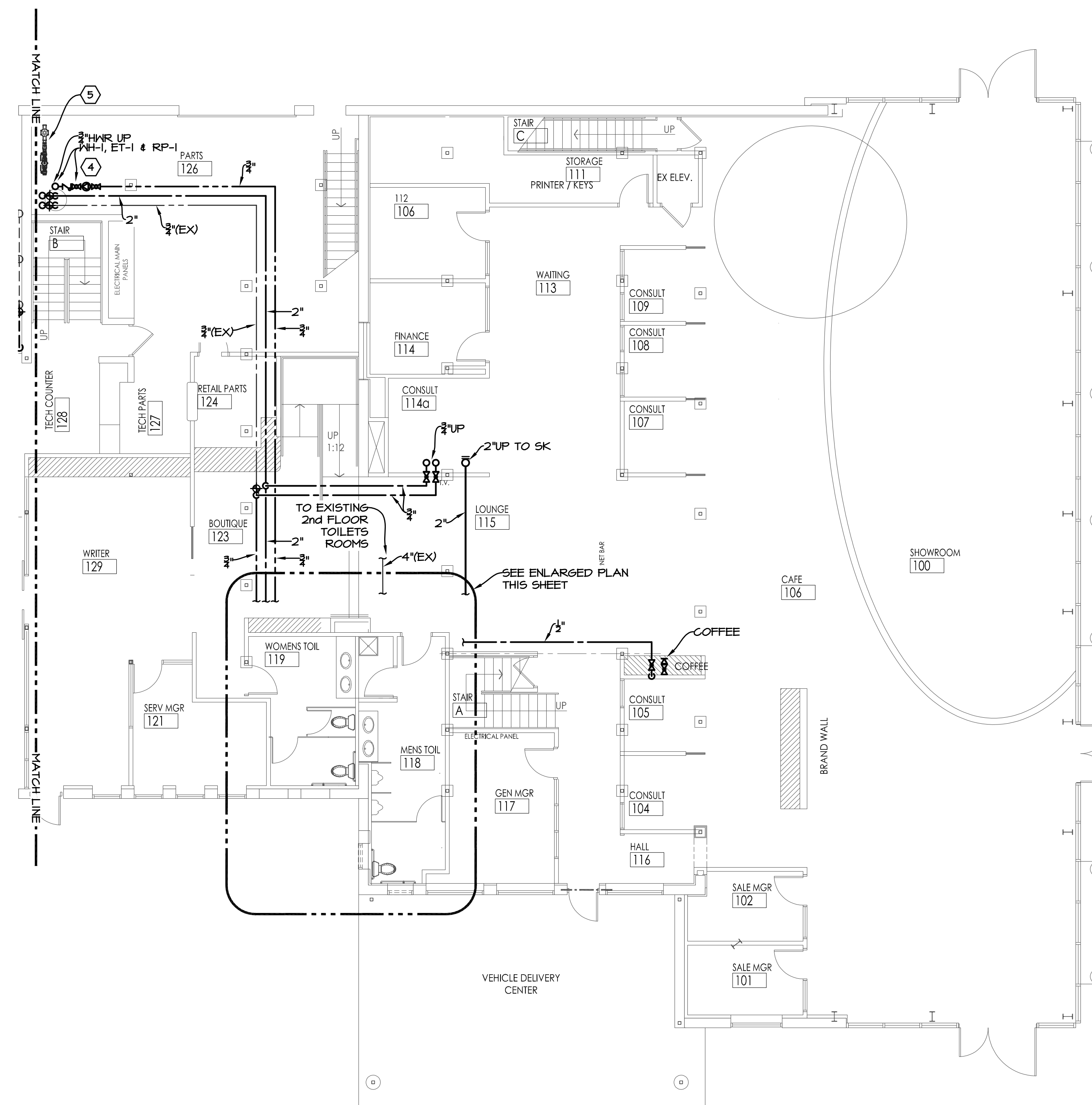
**PARTIAL ABOVE
GROUND PLUMBING**

P1.3



ENLARGED ABOVE GROUND PLUMBING PLAN

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



PARTIAL ABOVE GROUND PLUMBING PLAN

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

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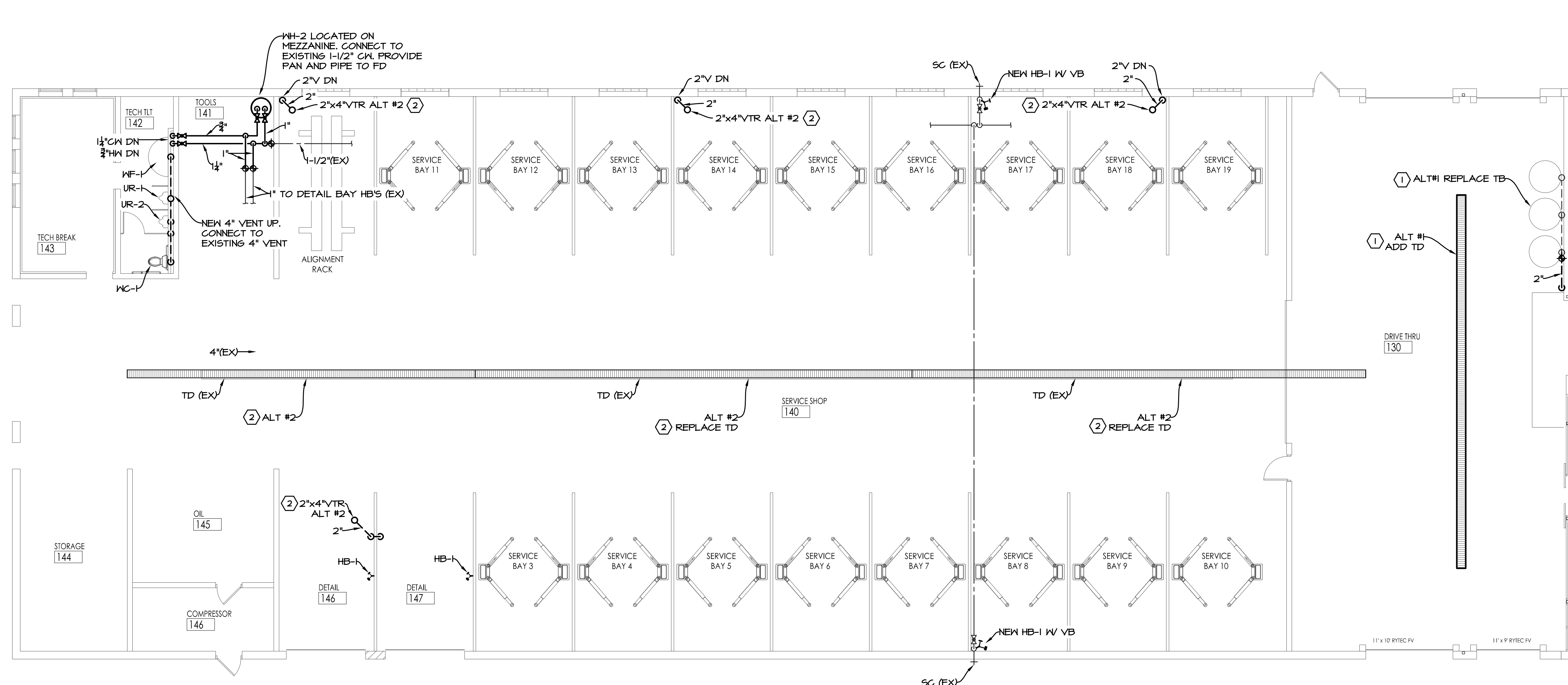
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**PARTIAL ABOVE
GROUND PLUMBING**

P1.4

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PARTIAL UNDERGROUND PLUMBING PLAN

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

PLUMBING DRAWING KEYNOTES

- ① ALTERNATE #1, ADD NEW TD, 4" SANITARY, VENT OPENINGS AND REPLACE EXISTING TRIPLE GARAGE BASIN. MATCH EXISTING INVERT ELEVATION. VENT TRIPLE BASINS PER CODE
- ② ALTERNATE #2, REPLACE EXISTING TD, ADD P-TRAPS TO 4" OPENINGS, INDIVIDUALLY VENT EACH TRAP AND EXISTING MUD BASINS PER CODE. VENTS TO INDEPENDENTLY VENT THROUGH ROOF.
- ③ CONNECT TO EXISTING HW AND CW AND INSTALL NEW H4C HOSE BIBB WITH CHECK VALVES
- ④ CONNECT TO EXISTING HW AND CW AND INSTALL NEW HW-I, ET-I, RP-I AND NEW HOT WATER RETURN (HWR) LINES.
- ⑤ VERIFY EXISTING DATA

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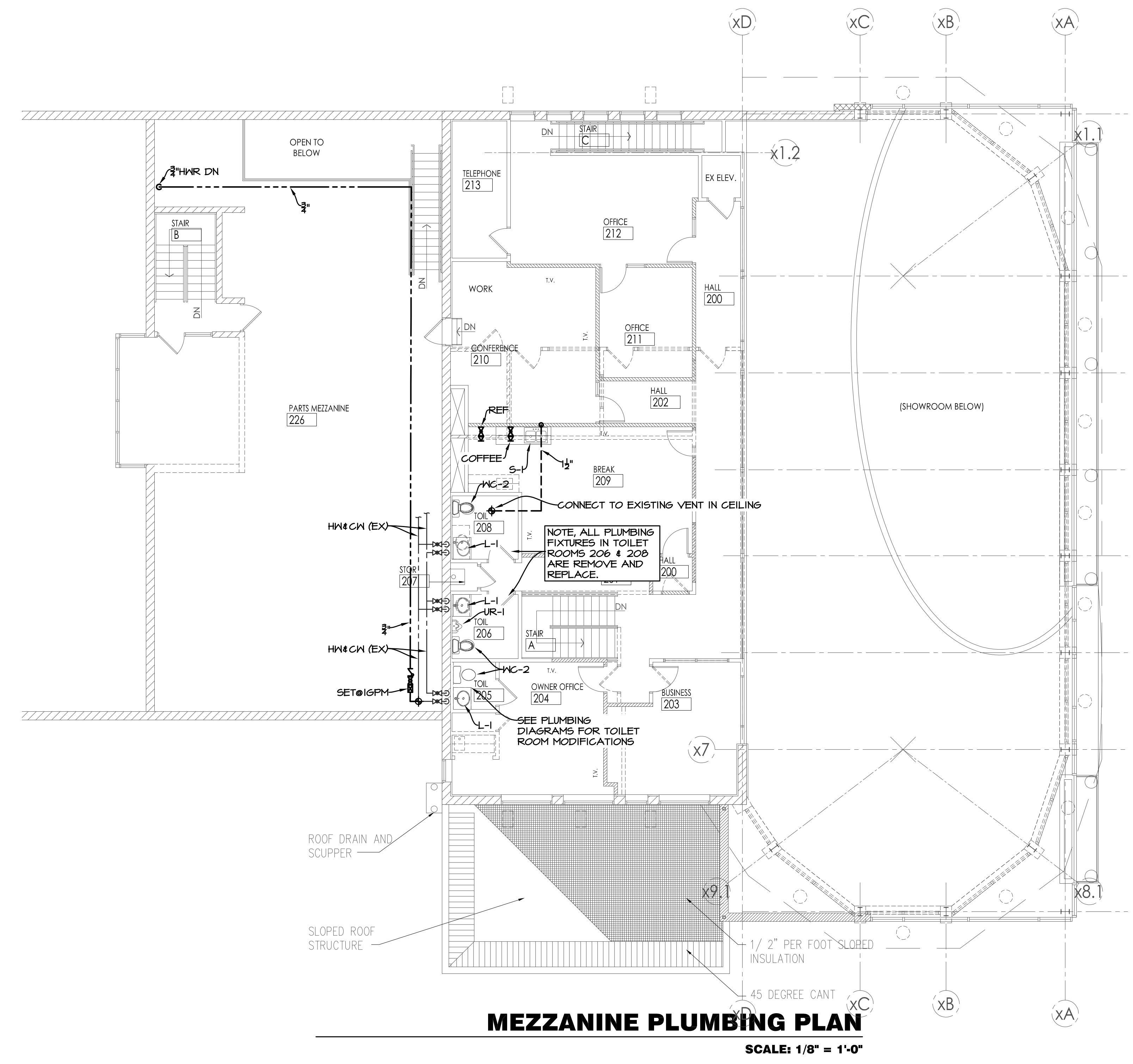


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MEZZANINE PLUMBING

P1.5



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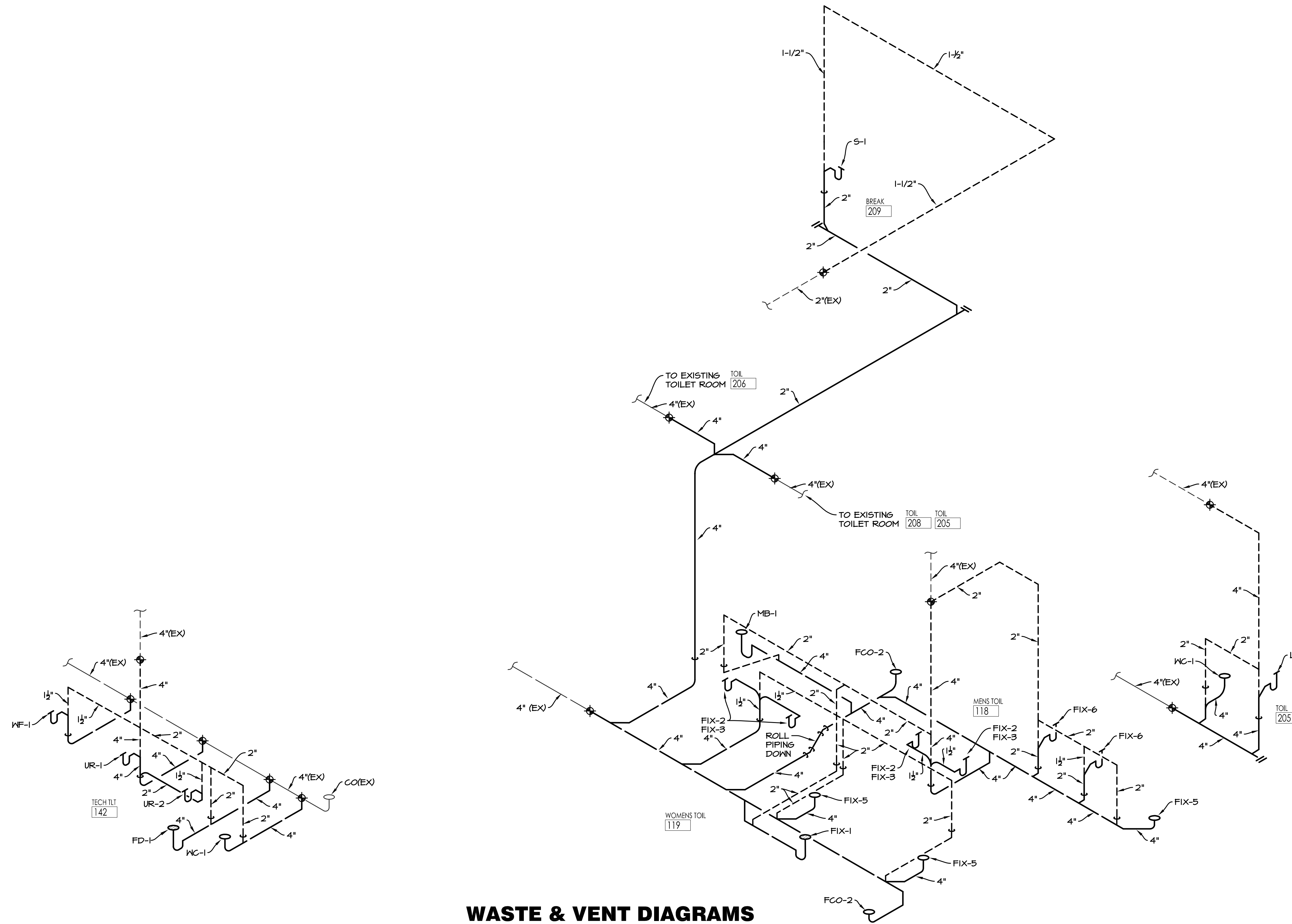


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WASTE & VENT DIAGRAM

P1.6



WASTE & VENT DIAGRAMS
SCALE: NONE

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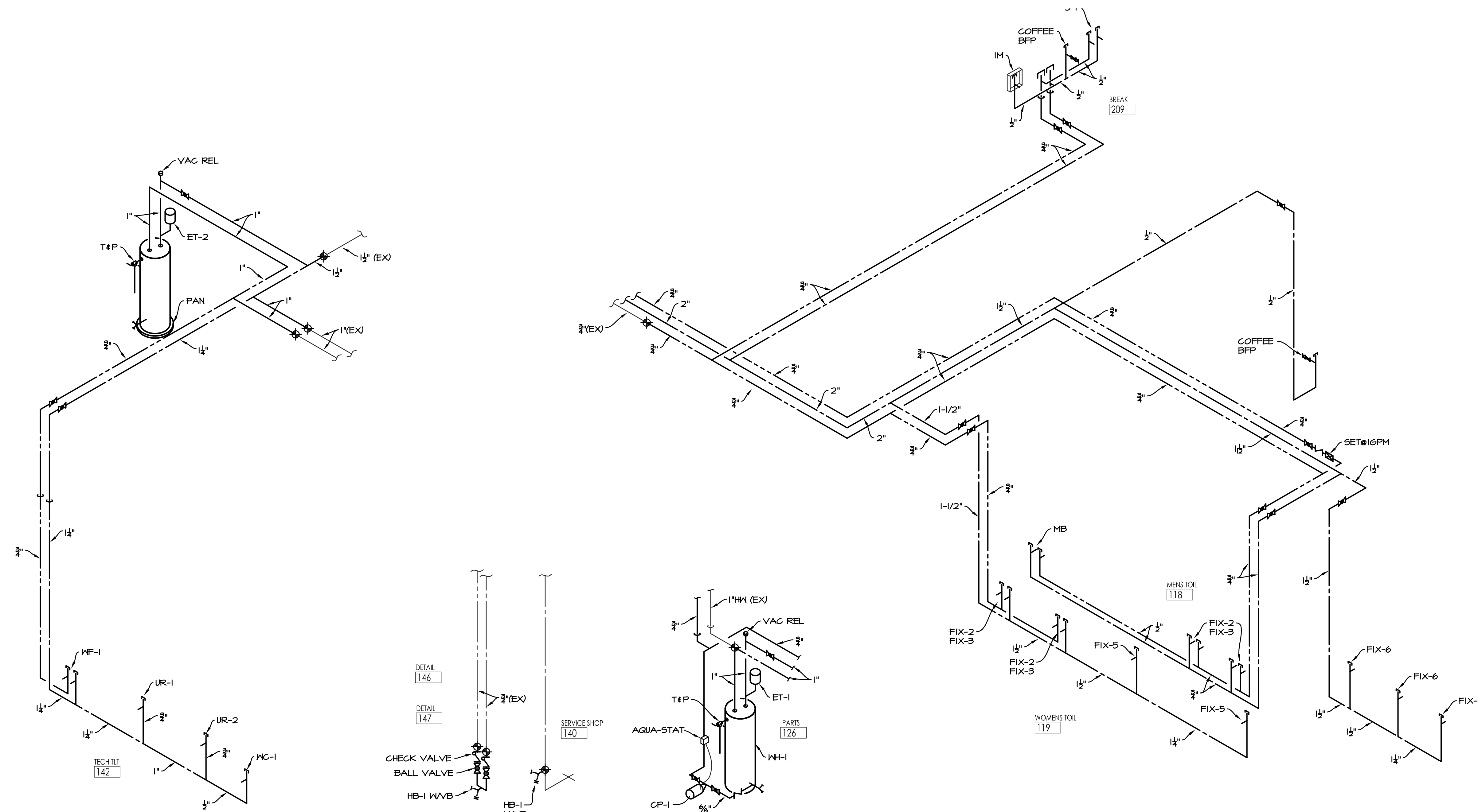


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WATER DIAGRAMS

P1.7



WATER DIAGRAMS
SCALE: NONE

PLUMBING SYMBOLS

Table of plumbing symbols including: NOT ALL SYMBOLS MAY APPLY, EXISTING COLD WATER PIPING, EXISTING HOT WATER PIPING, EXISTING HOT WATER RETURN PIPING, EXISTING UNDERGROUND SEWER, EXISTING SUSPENDED SEWER, EXISTING VENT PIPING, COLD WATER PIPING (INSULATED), HOT WATER PIPING (INSULATED), HOT WATER RETURN PIPING (INSULATED), TEMPERED WATER PIPING (INSULATED), TEMPERED WATER RETURN PIPING (INSULATED), UNDERGROUND SEWER, SUSPENDED SEWER, VENT PIPING, DRAIN TILE, UNION, CLEAN-OUT PLUG, WALL CLEAN-OUT, FLOOR GO, FLOOR GO FINISHED AREAS, FLOOR GO NO-LOAD AREAS, FLOOR DRAIN, FLOOR DRAIN WITH EXTENSIONS, HUB DRAIN, AREA DRAIN, FLOOR SINK, ROOF DRAIN, OVERFLOW ROOF DRAIN, DOWNSPOUT NOZZLE, GATE VALVE, BALL VALVE, BALANCING VALVE, CHECK VALVE, STRAINER, DUAL CHECK WITH VENT AND STRAINER, DUAL CHECK WITH ATMOSPHERIC VENT, DUAL CHECK VALVE, PRESSURE VACUUM BREAKER, ATMOSPHERIC VACUUM BREAKER, BOXED WALL HYDRANT, WALL HYDRANT, HOSE BIB, YARD HYDRANT, TRENCH DRAIN, STACK OR RISER DESIGNATION, NEW CONNECTION BETWEEN NEW AND EXISTING, COLD WATER, DRAINAGE FIXTURE UNIT, DOWN, DOWNSPOUT, HOT WATER, HOT WATER RETURN, NON-POTABLE COLD WATER, SANITARY, KITCHEN GREASE WASTE, OIL WASTE, STORM, VENT, VENT THROUGH ROOF, VERIFY IN FIELD.

PLUMBING NOTES

- 1) SAW CUT EXISTING FLOOR AND WALL CONSTRUCTION AS REQUIRED IN ORDER TO ACCOMMODATE NEW WASTE, VENT AND WATER SUPPLY PIPING. PATCH ALL NEW WORK TO MATCH EXISTING CONSTRUCTION. DEMOLITION SHALL BE PERFORMED BY THE CONTRACTOR. DEAD ENDS GREATER THAN 10'-0" IN LENGTH AND ALL WATER SUPPLY PIPING DEAD ENDS SHALL NOT EXCEED 2'-0" IN LENGTH.
2) ALL CLEAN-OUTS SHALL BE INSTALLED WHERE READILY ACCESSIBLE. THE CONTRACTOR SHALL COORDINATE ALL CLEAN-OUT LOCATIONS, WITH EQUIPMENT SIZED CLEANING LINES SHALL NOT RESULT IN STRAIGHT RUN INTERVALS NOT TO EXCEED FIFTY (50') AS WELL AS AT EACH CHANGE OF DIRECTION GREATER THAN (60 DEGREES). FIXTURE TRAPS (I.E. FLOOR DRAINS) SHALL NOT CONSTITUTE CLEAN-OUT ACCESS POINTS IF A CABLE MUST MAKE TWO (2) OR MORE RIGHT ANGLE TURNS IN ORDER TO ENTER THE MAIN DRAIN OR STACK.
3) ALL PLUMBING FIXTURE VENTS SHALL TERMINATE A MINIMUM OF 12" FROM ANY VERTICAL SURFACE AND 12'-0" HORIZONTALLY FROM ANY OUTSIDE FRESH AIR INTAKE OR A MINIMUM OF 24" ABOVE FRESH AIR INTAKES IF THE 12'-0" HORIZONTAL SEPARATION IS NOT POSSIBLE.
4) INSTALL SHUT-OFF VALVES ON ALL HOT & COLD WATER LINES TO FIXTURE OR APPLIANCE.
5) PROVIDE 12" (MINIMUM) LONG AIR CHAMBERS ON ALL WATER SUPPLY LINES TO FIXTURES AND EQUIPMENT. PROVIDE WATER HAMMER ARRESTORS AT ALL FIXTURES WITH QUICK-CLOSING VALVES/FAUCETS.
6) PROVIDE AIR GAPS FOR INDIRECT DRAINS AS REQUIRED BY CODE. AIR GAP SHALL BE TWO (2) TIMES THE DIAMETER OF THE INDIRECT DRAIN.
7) PROVIDE DI-ELECTRIC UNIONS, COUPLINGS, ADAPTORS OR FLANGES AT ALL TRANSITIONS OF FERROUS PIPING TO NON-FERROUS PIPING.
8) PROVIDE NON-REMOVEABLE/INTEGRAL VACUUM BREAKER ON ALL NEW AND EXISTING MOP BASIN FAUCETS AND ALL OTHER NEW AND EXISTING THREADED HOSE OUTLETS, HOSE BIBS AND WALL HYDRANTS.
9) COORDINATE ROUTING OF ALL PIPING SYSTEMS TO AVOID DUCTWORK, ELECTRICAL CONDUIT, BEAMS AND OTHER STRUCTURAL MEMBERS.
10) PROVIDE TRAP PRIMERS FOR ALL FLOOR DRAINS NOT RECEIVING DISCHARGE ON A REGULAR BASIS FROM WATER SUPPLIED FIXTURES OR EQUIPMENT. VEGETABLE OIL ACCEPTABLE.
11) PROVIDE APPROVED BACK-FLOW PREVENTION DEVICE ON ALL SODA DISPENSERS, COFFEE MAKERS, CAPPUCCINO MAKERS, CARBONATORS, ICE MACHINES, ETC. PER LOCAL CODE REQUIREMENTS AND EQUIPMENT/FIXTURE MANUFACTURER'S REQUIREMENTS. LOCATE IN AN ACCESSIBLE AREA.
12) PROVIDE VALVE STEM EXTENSIONS AS REQUIRED FOR ALL INSULATED WATER SUPPLY PIPING.
13) PROVIDE GROUTING/CAULKING WHERE FIXTURES MEET WALLS, FLOORS, COUNTERTOPS, ETC.
14) PROVIDE ADA-COMPLIANT FLUSH VALVE HANDLES THAT ACTIVATE WITH FIVE FOOT POUNDS OF PRESSURE OR LESS FORCE. LOCATE ALL WATER CLOSET FLUSH VALVE HANDLES ON WIDE SIDE OF STALLS.
15) ROUTE CIRCULATING HOT WATER DISTRIBUTION MAINS WITHIN 25 FEET (MINIMUM) OF EACH FIXTURE. PROVIDE AUTOMATIC PRESSURE COMPENSATING FLOW CONTROL VALVES FOR BALANCING CONTROL IN ACCESSIBLE LOCATIONS (PROVIDE ACCESS PANEL AS REQUIRED). INSULATE ALL RE-CIRCULATION PIPING.
16) ALL EXPOSED WASTE PIPING LOCATED IN TOILET ROOMS SHALL BE CHROME PLATED BRASS WITH MATCHING STOPS AND ESCUTCHEONS. PROVIDE LEAD KEY TYPE STOPS IN ALL PUBLIC AREAS OR WHERE VANDAL RESISTANT INSTALLATIONS ARE REQUIRED. ALL RISER TUBES SHALL BE RIGID AND CHROME PLATED.
17) PROVIDE PROTECTIVE INSULATED PIPE COVERS ON P-TRAPS, ANGLE STOPS, OFFSET TAILPIECES, RISER SUPPLY TUBES, ETC. FOR ALL ADA ACCESSIBLE FIXTURES.
18) PROVIDE A.S.S.E. 1070 APPROVED POINT-OF-USE THERMOSTATIC MIXING VALVE TO SUPPLY 110 DEGREES (MAXIMUM) HOT WATER TO ALL PUBLIC AND ADA ACCESSIBLE LAVATORIES. PROVIDE 115 DEGREE F (MAXIMUM) HOT WATER TO ALL SHOWERS. PROVIDE 140 F DEGREE HOT WATER TO ALL FIXTURES WHERE HOT WATER IS REQUIRED FOR SANITIZING OR CLEANING.
19) PROVIDE A VACUUM RELIEF VALVE ON ALL ELEVATED OR BOTTOM FED WATER HEATERS IN ADDITION TO A TEMPERATURE & PRESSURE RELIEF VALVE.
20) OUTLET TEMPERATURE ON ALL WATER HEATERS SHALL BE SET AT 135 DEGREES F (MINIMUM) AND THERMOSTATICALLY MIXED DOWN AT POINTS INDICATED ON PLANS.
21) ALL BACK-FLOW PREVENTION DEVICES SHALL BE TESTED IN-LINE AND APPROVED BY A CROSS-CONNECTION CONTROL DEVICE INSPECTOR BEFORE BEING PLACED INTO SERVICE. BACK-FLOW PREVENTION DEVICES SHALL BE TESTED AND MAINTAINED AT LEAST ANNUALLY BY A CROSS-CONNECTION CONTROL DEVICE INSPECTOR AND RECORDS TO VERIFY TESTING AND MAINTENANCE SHALL BE AVAILABLE AT THE SITE OF THE INSTALLATION OF THE DEVICE. BACK-FLOW PREVENTION DEVICES SHALL NOT BE INSTALLED MORE THAN 5'-0" ABOVE THE FLOOR. PROVIDE A PROTECTIVE STRAINER UPSTREAM OF ALL BACK-FLOW PREVENTION DEVICES UNLESS THE DEVICE CONTAINS A BUILT-IN STRAINER.
22) ALL WATER SUPPLY DISTRIBUTION PIPING CONVEYING "NON-POTABLE" WATER SHALL BE PERMANENTLY IDENTIFIED BY A DISTINCTIVE PURPLE-COLORED PAINT.
23) PROVIDE LEAD ROOF FLASHING ON ALL VENT STACKS PENETRATING THROUGH THE ROOF (EXCEPT RUBBER ROOFS). PROVIDE INCREASED FITTINGS.
24) PLUMBING CONTRACTOR TO COORDINATE EXACT SIZE AND LOCATION OF EACH FLEU/VENT FOR EACH GAS-FIRED WATER HEATER. COORDINATE WITH MECHANICAL CONTRACTOR AND VERIFY ADEQUATE CHASE/CHIMNEY SPACE WITH ARCHITECT PRIOR TO START OF CONSTRUCTION.
25) PLUMBING CONTRACTOR SHALL FURNISH AND INSTALL PVC INTAKE AND EXHAUST EACH GAS-FIRED WATER HEATER. INSTALL PER MANUFACTURER'S RECOMMENDATIONS.
26) FURNISH FIRE RATED PIPE SLEEVE OR FIRE CAULKING ON ALL PIPE PENETRATIONS THROUGH FIRE RATED WALLS/FLOORS.
27) PLUMBING CONTRACTOR TO VERIFY ALL EXISTING WASTE, VENT AND WATER SUPPLY PIPING WHERE NEW CONNECTIONS ARE TO BE MADE PRIOR TO BID. VERIFY EXACT SIZE, LOCATION, INVERT, CONDITION AND REQUIREMENTS IN FIELD. REPORT ANY MAJOR DISCREPANCIES TO ARCHITECT/ENGINEER IMMEDIATELY.

PLUMBING SPECIFICATIONS

THE GENERAL CONDITIONS AND SUPPLEMENTAL GENERAL CONDITIONS ISSUED BY THE ARCHITECT SHALL GOVERN WHERE APPLICABLE.
THIS CONTRACTOR SHALL THOROUGHLY FAMILIARIZE HIMSELF WITH THE PLANS AND SHALL VERIFY EXISTING SITE CONDITIONS AT THE JOB SITE BEFORE SUBMITTING BID. FAILURE TO RECOGNIZE WORK REQUIRED SHALL BE AT THE EXPENSE OF THIS CONTRACTOR. NO CONSIDERATION SHALL BE GIVEN FOR ADDITIONAL COMPENSATION AFTER THE LETTING OF BIDS.
ENTIRE INSTALLATION SHALL BE PERFORMED IN A FIRST-CLASS WORKMANLIKE MANNER. THE COMPLETED SYSTEMS SHALL BE FULLY OPERATIONAL; ACCEPTANCE BY THE OWNER SHALL BE A CONDITION OF THE CONTRACT. ALL WORK SHALL BE COORDINATED WITH OTHER TRADES IN ORDER TO AVOID INTERFERENCES, PRESERVE MAXIMUM HEADROOM AND AVOID OMISSIONS.
CONTRACTOR TO MAKE ALL NECESSARY TAPS, AS CALLED FOR ON THE DRAWINGS.
THIS CONTRACTOR SHALL REMOVE ALL DEBRIS ON A REGULAR BASIS AND UPON COMPLETION OF THE JOB AND CLEAN ALL FIXTURES.
COVER ALL HOT AND COLD LINES, ROOF DRAINS AND HORIZONTAL DOWNSPOUT PIPING. PIPE COVERING TO BE SHALL BE 3-1/2 LB. DENSITY FIBERGLASS WITH MOLDED FITTINGS AND BUTT JOINTS AND VAPOR BARRIER. WATER PIPING INSULATION SHALL BE INSTALLED PER 2012 IECC SEC. C404.5.
IT SHALL BE THE RESPONSIBILITY OF THIS CONTRACTOR TO START UP, ADJUST AND CHECK FOR PROPER OPERATION ALL EQUIPMENT INSTALLED UNDER HIS CONTRACT.

SPRINKLER SPECIFICATIONS

THE GENERAL CONDITIONS AND SUPPLEMENTAL GENERAL CONDITIONS ISSUED BY THE ARCHITECT SHALL GOVERN WHERE APPLICABLE.
THIS CONTRACTOR SHALL VERIFY EXISTING SITE CONDITIONS AT THE JOB SITE BEFORE SUBMITTING BID. FAILURE TO RECOGNIZE WORK REQUIRED SHALL BE AT THE EXPENSE OF THIS CONTRACTOR. NO CONSIDERATION SHALL BE GIVEN FOR ADDITIONAL COMPENSATION AFTER THE LETTING OF BIDS.
ENTIRE INSTALLATION SHALL BE PERFORMED IN A FIRST-CLASS WORKMANLIKE MANNER. THE COMPLETED SYSTEMS SHALL BE FULLY OPERATIONAL; ACCEPTANCE BY THE OWNER SHALL BE A CONDITION WITH OTHER TRADES IN ORDER TO AVOID INTERFERENCES, PRESERVE MAXIMUM HEADROOM AND AVOID OMISSIONS.
CONTRACTOR TO MAKE ALL NECESSARY TAPS, AS CALLED FOR ON THE DRAWINGS.
THIS CONTRACTOR SHALL REMOVE ALL DEBRIS ON COMPLETION OF THE JOB AND CLEAN ALL FIXTURES.
IT SHALL BE THE RESPONSIBILITY OF THIS CONTRACTOR TO START UP, ADJUST AND CHECK FOR PROPER OPERATION, ALL EQUIPMENT INSTALLED UNDER THIS CONTRACT.
THIS CONTRACTOR SHALL ALLOW IN HIS INITIAL BID THE COST OF SERVICE ON ALL EQUIPMENT INSTALLED UNDER HIS CONTRACT FOR A PERIOD OF ONE (1) YEAR FROM DATE OF FINAL INSPECTION OF THE WORK.
THIS CONTRACTOR SHALL SUBMIT TO THE ARCHITECT/ ENGINEER, OWNERS INSURANCE UNDERWRITER, AND LOCAL FIRE DEPARTMENT FOR APPROVAL COMPLETE INSTALLATION AND DESIGN DRAWINGS SHOWING THE SPRINKLER SYSTEM LAYOUTS. THE LAYOUT SHALL INDICATE ALL OF THE SPRINKLER PIPING, SPRINKLER HEAD LOCATIONS AND DETAILS OF ANCHORS AND SUPPORTS AS REQUIRED.
THE SPRINKLER SYSTEM SHALL BE LAID OUT TO ELIMINATE ALL CONFLICTS BETWEEN THE SPRINKLER SYSTEM AND THE STRUCTURE INCLUDING THE MECHANICAL AND ELECTRICAL SYSTEMS AS THEY ARE SHOWN ON THE CONTRACT DRAWINGS.
THE LAYOUT SHALL INDICATE COORDINATION BETWEEN SUCH ITEMS AS DUCTWORK, LIGHTS, STRUCTURAL MEMBERS, ETC. PIPE FOR ABOVE GRADE SHALL BE NEW SCHEDULE 40 FOR BRANCHES AND SCHEDULE 10 FOR MAINS. STANDARD WEIGHT STEEL DESIGNED FOR 175 LB. WORKING PRESSURE, CONFORMING TO A.S.A. B36.10 MANUFACTURED IN THE U.S.
FITTINGS SHALL BE NEW 125 LB. CAST IRON SCREWED OR FLANGED CONFORMING TO A.S.A. B16.4, MANUFACTURED IN THE U.S. AND APPROVED FOR FIRE PROTECTION SPRINKLER SYSTEMS.
THE SPRINKLER RISERS, MAINS AND BRANCH PIPING SHALL BE SUPPORTED FROM THE BUILDING STRUCTURE, USING APPROVED TYPE STEEL HANGERS, BRACKETS, ANCHORS AND STUDS, OF SIZE AND NUMBER IN ACCORDANCE WITH N.F.P.A. #13.
THE SPRINKLER SYSTEM SHALL BE INSTALLED IN CONFORMANCE WITH PAMPHLET 13 OF THE NATIONAL FIRE PROTECTION ASSOCIATION AND ALL REQUIREMENTS OF THE LOCAL FIRE DEPARTMENT AND OWNER'S INSURANCE UNDERWRITER.
ALL PIPING ABOVE GRADE SHALL BE HYDROSTATICALLY TESTED AT 200 PSIG FOR A TWO-HOUR PERIOD IN ACCORDANCE WITH N.F.P.A. #24.
CONTRACTOR IS RESPONSIBLE FOR SPACING, PIPE SIZE, OFFSETS, CLEARANCES, VALVES, ELBOWS, HANGERS, ALL ACCESSORIES AND QUANTITIES FOR ALL.
THIS CONTRACTOR SHALL DESIGN AND INSTALL A COMPLETE SPRINKLER SYSTEM PER NFPA AND LOCAL CODES.

FIXTURE SCHEDULE

Table of fixture schedule including: WC-1, WC-2, UR-1, L-1, S-1, FIX-2, FIX-3, FIX-5, FIX-6, MB-1, WF-1. Descriptions include: 'AMERICAN STANDARD' MODEL # 215AA.104/105 CADET PRO RIGHT HEIGHT TOILET, 'BEMIS' MODEL #215556CT OPEN FRONT LESS COVER, ELONGATED, HEAVY-DUTY, INJECTION MOLDED SOLID PLASTIC TOILET SEAT, CP STOP AND RISER TUBE, 'AMERICAN STANDARD' MODEL # 211CA.104 CADET PRO TOILET, 'BEMIS' MODEL #215556CT OPEN FRONT LESS COVER, ELONGATED, HEAVY-DUTY, INJECTION MOLDED SOLID PLASTIC TOILET SEAT, CP STOP AND RISER TUBE, 'AMERICAN STANDARD' MODEL # 6540.001 WASHBROOM URINAL, 'VITREOUS CHINA, 10 GPF, FLUSHING RIM, ELONGATED 14" RIM FROM FINISHED WALL, WASHOUT FLUSH ACTION, EXTENDED SIDES FOR PRIVACY, 3/4" TOP SPUD, OUTLET CONNECTION THREADED 2" INSIDE, 2 WALL HANGERS. MOUNT AT ADA HEIGHT, 'SLOAN' MODEL #8186-1.0 OPTIMA BATTERY OPERATED FLUSHMETER, EXPOSED, HIGH-EFFICIENCY (1.0 GPF) FOR TOP-SPUD URINALS, 'JAY R SMITH' MODEL #637 URINAL SUPPORT, 'AMERICAN STANDARD' MODEL # 0475.020 AQUALYN LAVATORY, DROP-IN, VITREOUS CHINA, FRONT OVERFLOW, OVAL-SHAPED BOWL, SELF-DRAINING DECK AREA FAUCET LEDGE, FAUCET HOLES ON 4" CENTERS, 'SYMMONS' MODEL #5-20-0-15 SINGLE HANDLE LAVATORY FAUCET WITH LEVER HANDLE FOR HANDICAP ACCESSIBLE APPLICATIONS. CERAMIC CARTRIDGE, 'SYMMONS' MODEL #1-210-CK POINT-OF-USE THERMOSTATIC MIXING VALVE WITH INTEGRAL CHECKS, (SET TEMPERATURE SHALL NOT EXCEED 110 DEGREES F), 'MCGUIRE' MODEL #PW2125NCPRO SEAMLESS PRE-WRAPPED ADJUSTABLE CAST BRASS P-TRAP KIT WITH PRE-WRAPPED PRO-DRAIN OFFSET GRID STRAINER. KIT ALSO INCLUDES SUPPLY COVERS, PROVIDE CHROME-PLATED ANGLE STOPS, ESCUTCHEONS AND RISER TUBES, 'ELKAY' MODEL #LRAD3321 GOURMET DOUBLE BOWL STAINLESS STEEL SINK, SINK IS SEAMLESSLY DRAWN OF #18 GAUGE, TYPE 304 STAINLESS STEEL. (SINK BOWL SHALL BE 6-1/2" DEEP), 'SYMMONS' MODEL #5-23-15 SYMMETRIX SINGLE LEVER KITCHEN FAUCET WITH CERAMIC CONTROL COMPONENTS AND HANDLE LIMIT STOP, 8-1/2" SWING SPOUT WITH AERATOR, 3/8" SUPPLIES, 8" CENTERS, POLISHED CHROME FINISH, 'SYMMONS' MODEL #1-210-CK POINT-OF-USE THERMOSTATIC MIXING VALVE WITH INTEGRAL CHECKS, (SET TEMPERATURE SHALL NOT EXCEED 110 DEGREES F), PROVIDE CHROME-PLATED ANGLE STOPS, RISER TUBES, P-TRAP AND TAILPIECES, 'TEL MUSTEE' #63M MOLDED STONE BASIN WITH INTEGRAL DRAIN BODY, 'CHICAGO' 89T-RCF SERVICE FAUCET FITTING WITH INTEGRAL VACUUM BREAKER, HOSE THREAD SPOUT AND INTEGRAL STOPS. PROVIDE CHECK VALVES ON CW AND HW WATER PIPING UPSTREAM OF FAUCET, 'BRADLEY' #MF2444-STD-IR-LSD-XXX-TMA TERREON QUADRA-POINT ADA WASHFOUNTAIN WITH INFRARED CONTROLS, POWDERED SOAP DISPENSER AND TMV. COLOR AS SELECTED BY ARCHITECT, 'TOTO' FLOOR MOUNT FV WATER CLOSET. SEE ARCHITECTURAL PLANS FOR DESCRIPTION, 'TOTO' URINAL AND FV. SEE ARCHITECTURAL DRAWINGS FOR DESCRIPTION.

PROJECT:

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Attn: Ken Meddings (Electrical)

Professional Engineer Seal for Mark O. Ventrella, Registered Professional Engineer, State of Illinois, No. 062-050025, Expires 11/30/17.

Table of project milestones: MAR 20 2017 - DESIGN REVIEW, MAR 29 2017 - DESIGN REVIEW, APRIL 24 2017 - DESIGN REVIEW, MAY 10 2017 - FOR BID.

PLUMBING NOTES AND SPECIFICATIONS

P2.1

DEMOLITION GENERAL NOTES :

1. COORDINATE DEMOLITION AND PREPARATION WORK TO MINIMIZE DISTURBANCE TO THE OPERATION OF THE FACILITY. USE DIRECTIONAL SIGNAGE, BARRICADES, AND DUST PARTITIONS AS REQUIRED.
2. ITEMS REMOVED AND SALVAGED SHALL BE TURNED OVER TO OWNER AND TRANSPORTED TO A ROOM OR AREA ONSITE DESIGNATED BY THE OWNER.
3. ELECTRICAL DEMOLITION DRAWINGS HAVE BEEN ASSEMBLED UTILIZING AVAILABLE RECORD DRAWINGS AND VISUAL FIELD OBSERVATIONS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO VISIT THE PROJECT JOBSITE PRIOR TO THE DELIVERY OF BIDS AND THOROUGHLY INVESTIGATE ALL EXISTING CONDITIONS CONCERNING ELECTRICAL DEMOLITION AND INCLUDE IN HIS PRICING ALL LABOR AND MATERIALS TO PERFORM ALL REMOVAL WORK NECESSARY TO ACCOMMODATE NEW CONSTRUCTION. WHERE EXISTING CIRCUITRY EXTENDS BEYOND THE REMODEL AREA, THE SUBCONTRACTOR SHALL PROVIDE ALL EXTENSIONS AND REVISIONS TO EXISTING CIRCUITRY TO MAINTAIN CONTINUITY OF AFFECTED BRANCH CIRCUITRY.
4. AT THE OPTION OF THE SUBCONTRACTOR, EXISTING IN PLACE BRANCH CIRCUITRY CONDUIT AND WIRE MAY BE UTILIZED AS LONG AS THE USE OF EXISTING SYSTEMS DOES NOT ADVERSELY AFFECT THE ORIGINAL DESIGN INTENT OF THE CONSTRUCTION DOCUMENTS.
5. EQUIPMENT SHOWN AS BOLD AND DASHED IN DEMOLITION FRAME IS EQUIPMENT SHALL BE REMOVED COMPLETELY,

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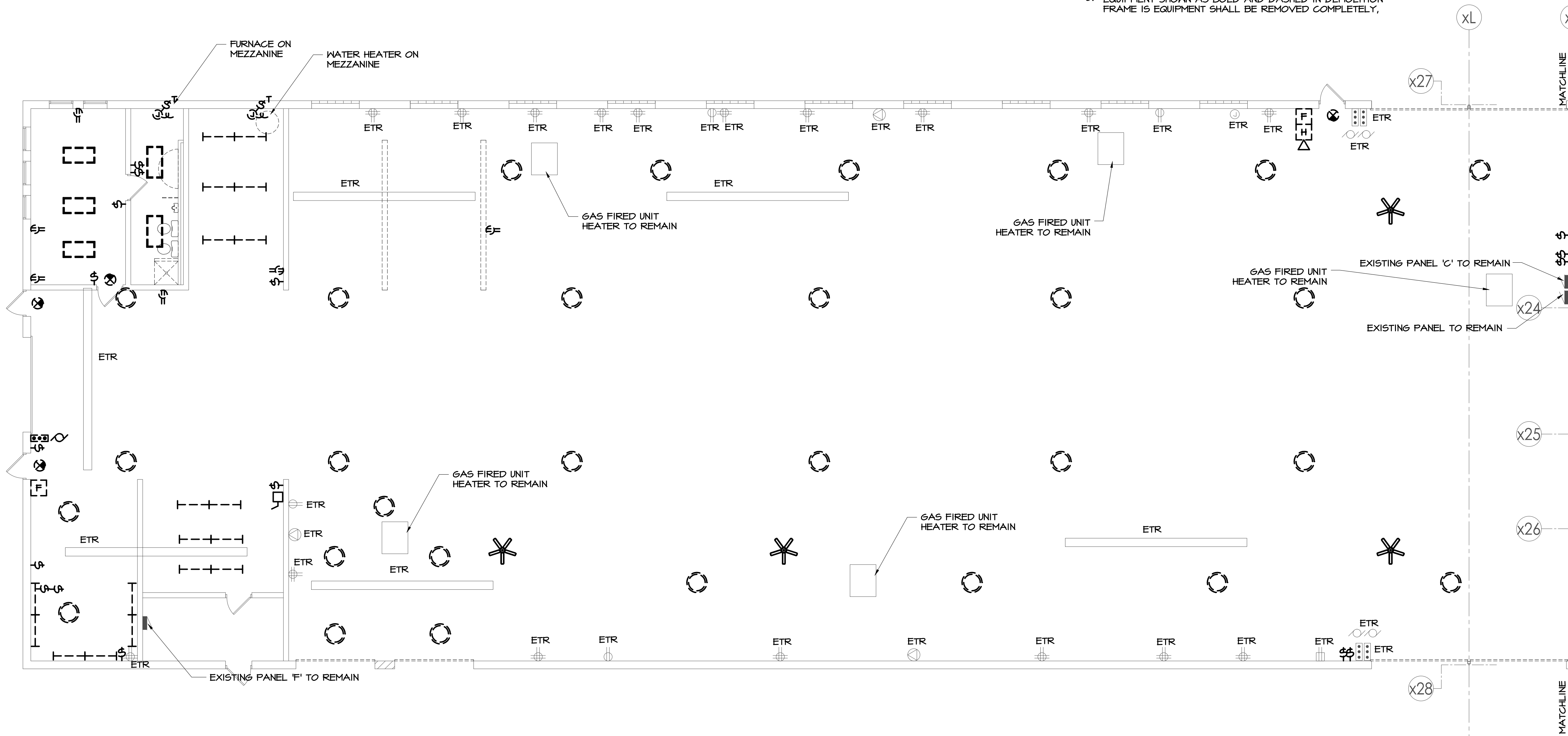


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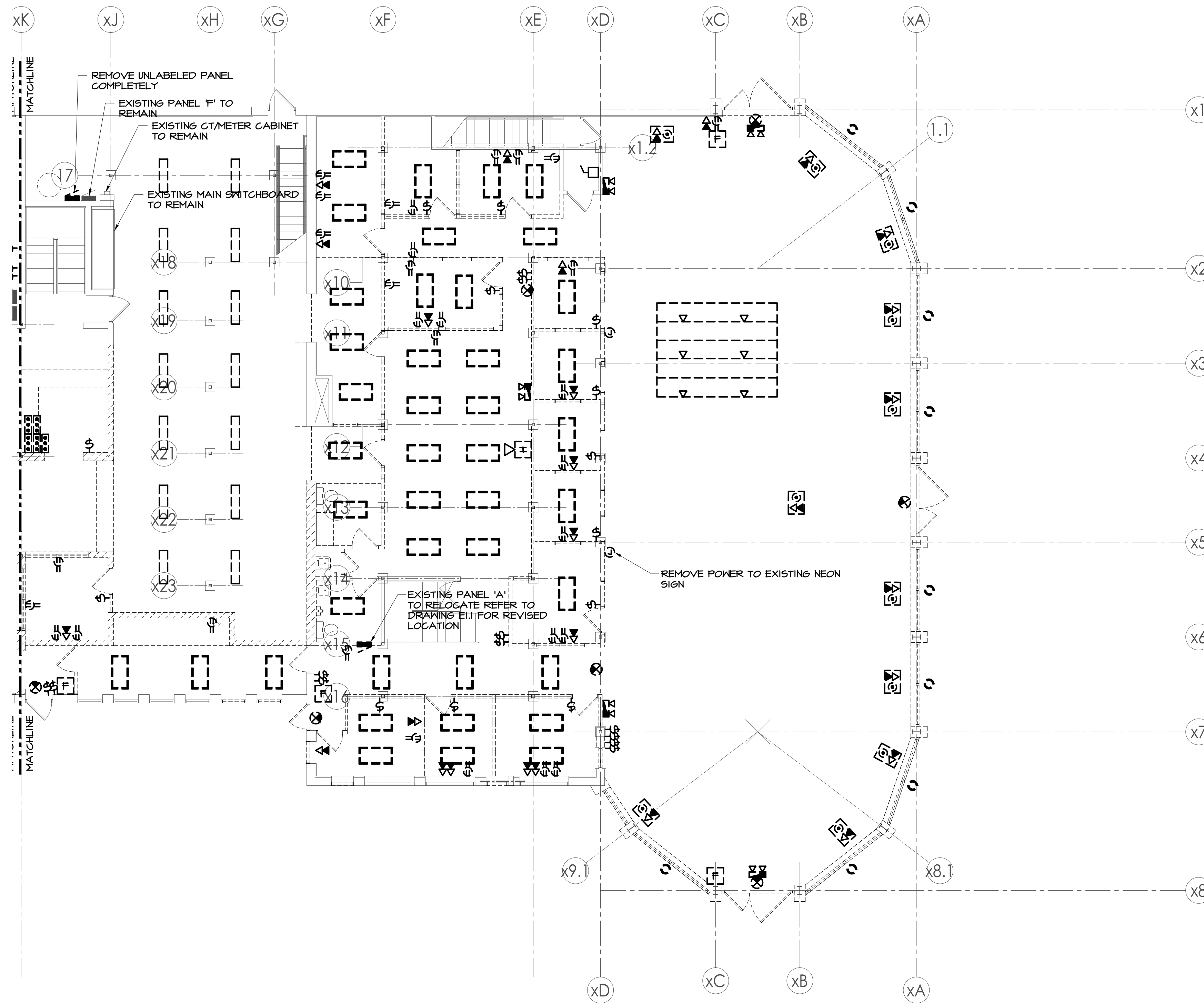
DEMOLITION FIRST FLOOR SERVICE BAY POWER & LIGHTING

ED1.1



ELECTRICAL POWER PLAN

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



ELECTRICAL POWER PLAN

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

DEMOLITION GENERAL NOTES :

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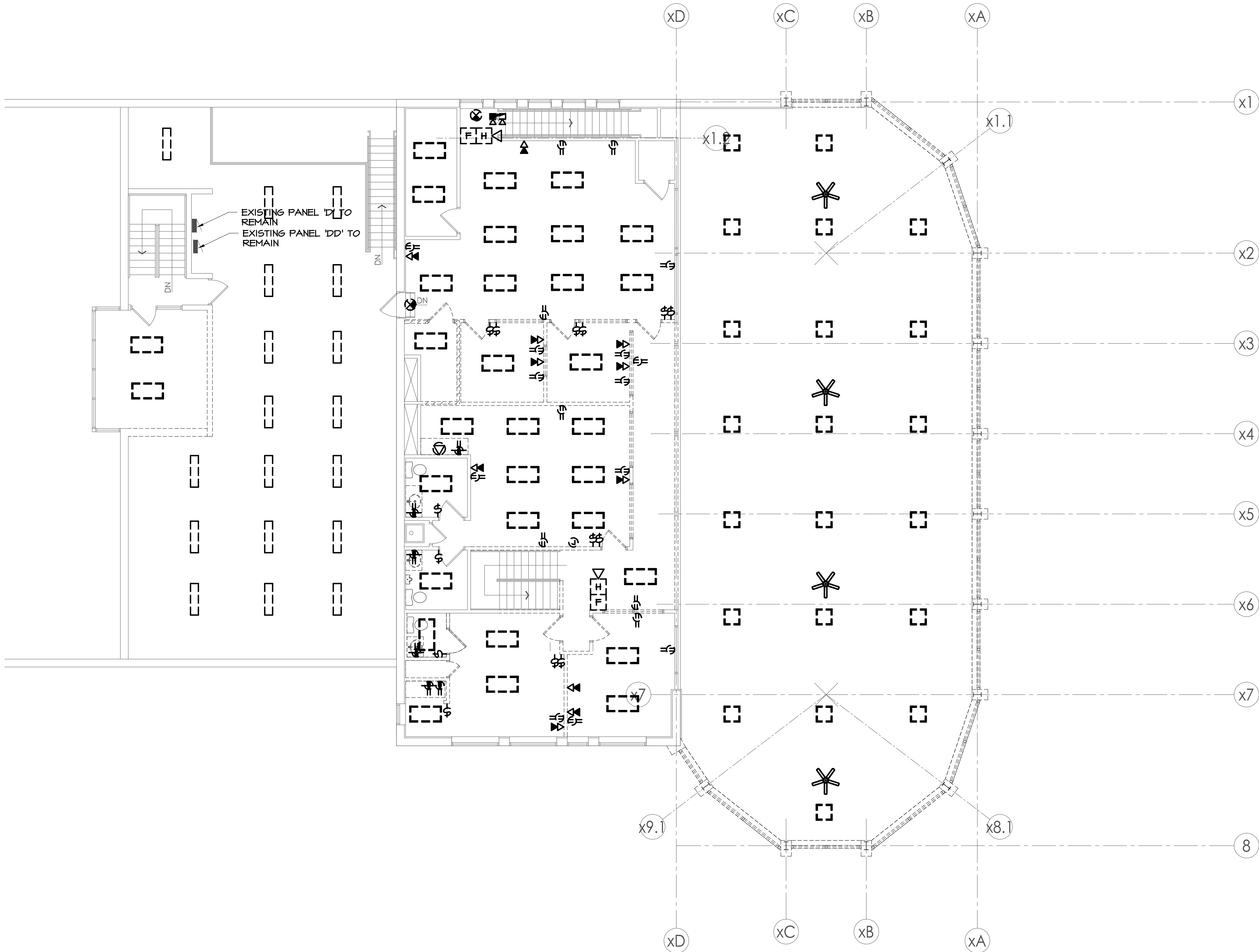
- MAR 20 2017 - DESIGN REVIEW
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DEMOLITION FIRST FLOOR SHOWROOM POWER & LIGHTING

ED1.1

DEMOLITION GENERAL NOTES :

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5. EQUIPMENT SHOWN AS BOLD AND DASHED IN DEMOLITION FRAME IS EQUIPMENT SHALL BE REMOVED COMPLETELY,



ELECTRICAL POWER PLAN

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

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DEMOLITION SECOND FLOOR SHOWROOM POWER & LIGHTING

ED1.3

LEGEND

SI SYMBOL DENOTES SPECIAL OUTLET CONNECTION, NUMBER (SI) ADJACENT TO SYMBOL CORRESPONDS WITH TAG ON SCHEDULE. REFER TO DRAWING E5.2 FOR SPECIAL OUTLET SCHEDULE.

GENERAL NOTES:

1. ALL BRANCH CIRCUITS SHOWN THAT ARE 120V, 20A, 1 POLE SHALL BE 2-#12, 1-#12GRD, 3/4" C UNLESS OTHERWISE NOTED. CONTRACTOR MAY NETWORK CIRCUITS, IF NETWORKING IS CHOSEN CONTRACTOR MUST COMPLY WITH LATEST ACCEPTED VERSION OF THE NEC.
2. CONTRACTOR MUST TAKE INTO CONSIDERATION VOLTAGE DROP ON LONGER RUNS. ANY RUN LONGER THAN 100' CONTRACTOR IS RESPONSIBLE FOR CHECKING VOLTAGE DROP AND INCREASING CONDUCTOR SIZE WHEN NECESSARY.

KEYED NOTES:

1 PROVIDE A LEVITON EZ MAX PLUS RELAY CONTROL PANEL FOR EXTERIOR LIGHTING CIRCUITS FED FROM EXISTING PANEL 'F'.

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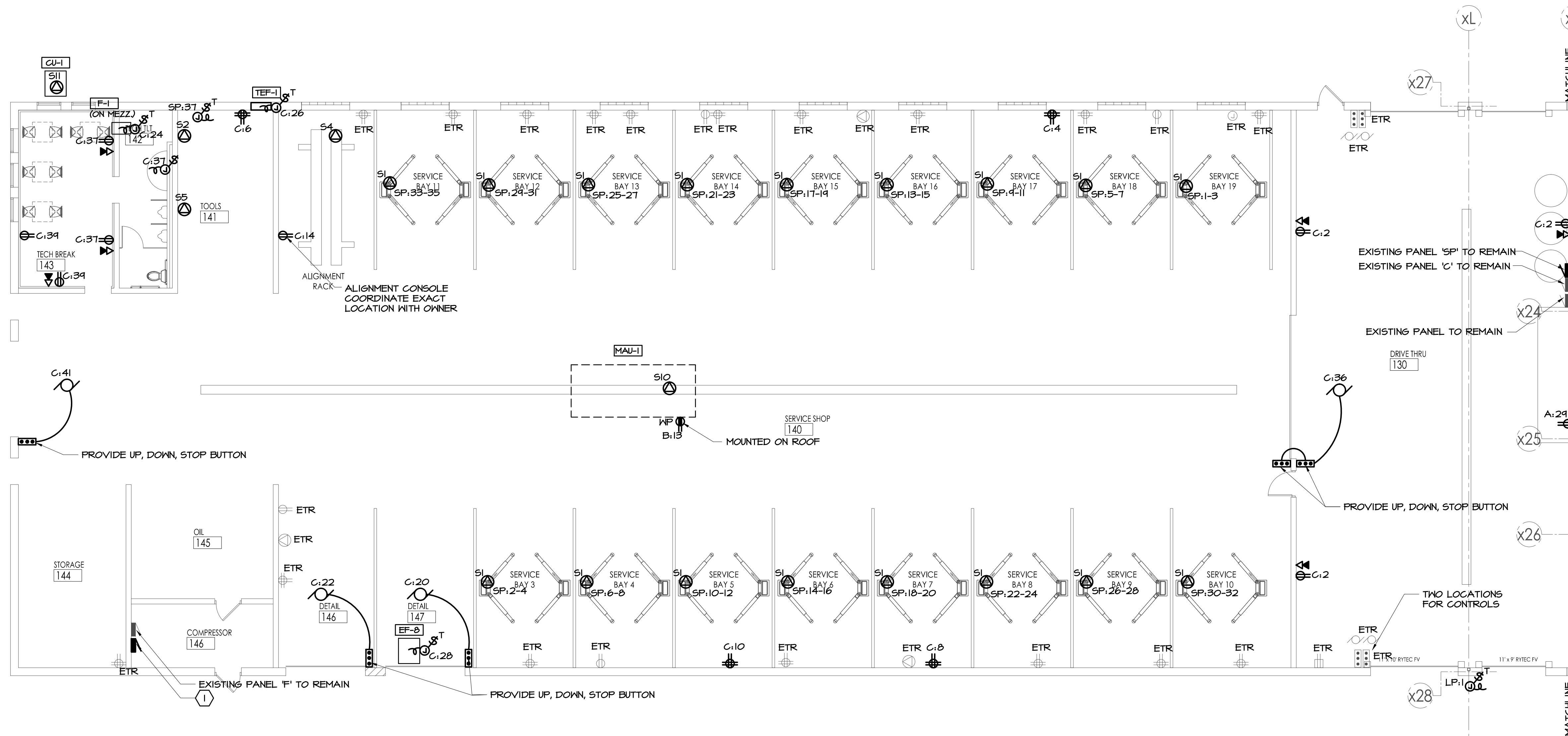


SIGNED: Mark O. Ventrell / 1/17
EXPIRES: 11/30/17

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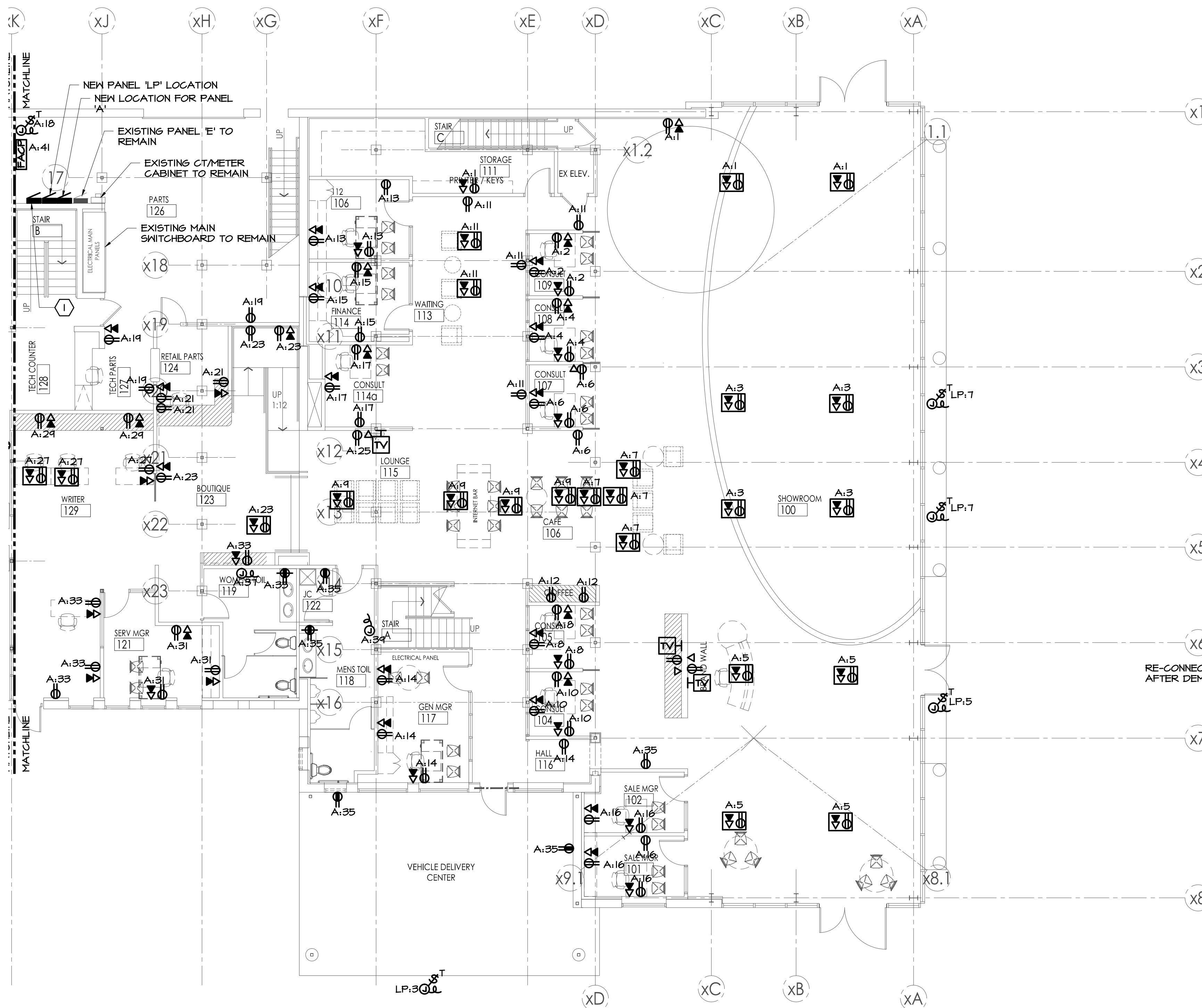
**FIRST FLOOR
POWER & SYSTEMS
SERVICE BAY PLAN**

E1.1



PARTIAL POWER & SYSTEMS PLAN

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



PARTIAL POWER & SYSTEMS PLAN
SCALE: 1/8" = 1'-0"

LEGEND

SI SYMBOL DENOTES SPECIAL OUTLET CONNECTION, NUMBER (SI) ADJACENT TO SYMBOL CORRESPONDS WITH TAG ON SCHEDULE. REFER TO DRAWING E5.2 FOR SPECIAL OUTLET SCHEDULE.

GENERAL NOTES:

- ALL BRANCH CIRCUITS SHOWN THAT ARE 120V, 20A, 1 POLE SHALL BE 2-#12, 1-#12GRD, 3/4" C UNLESS OTHERWISE NOTED. CONTRACTOR MAY NETWORK CIRCUITS, IF NETWORKING IS CHOSEN CONTRACTOR MUST COMPLY WITH LATEST ACCEPTED VERSION OF THE NEC.
- CONTRACTOR MUST TAKE INTO CONSIDERATION VOLTAGE DROP ON LONGER RUNS. ANY RUN LONGER THAN 100' CONTRACTOR IS RESPONSIBLE FOR CHECKING VOLTAGE DROP AND INCREASING CONDUCTOR SIZE WHEN NECESSARY.

KEYED NOTES:

- PROVIDE A LEVITON EZ MAX PLUS RELAY CONTROL PANEL FOR EXTERIOR LIGHTING CIRCUITS FED FROM EXISTING PANEL 'E' AND A EZ MAX PLUS PANEL FOR THE INTERIOR CIRCUITS FED FROM NEW PANEL 'LP'. NOT ALL CIRCUITS IN PANEL 'LP' WILL BE CONTROLLED THROUGH EZ MAX PANEL. ONLY CIRCUITS AND LIGHTS NOT SHOWN WITH LOCAL SWITCHING SHALL BE CONTROLLED THROUGH THE EZ MAX PANEL. ALSO THE OVERRIDE SWITCHES SHOWN WILL ALLOW THAT LIGHTING TO BE TURNED ON FOR A TIMED PERIOD.

RE-CONNECT SITE PYLON SIGN TO EXISTING FEED AFTER DEMOLITION IS COMPLETED

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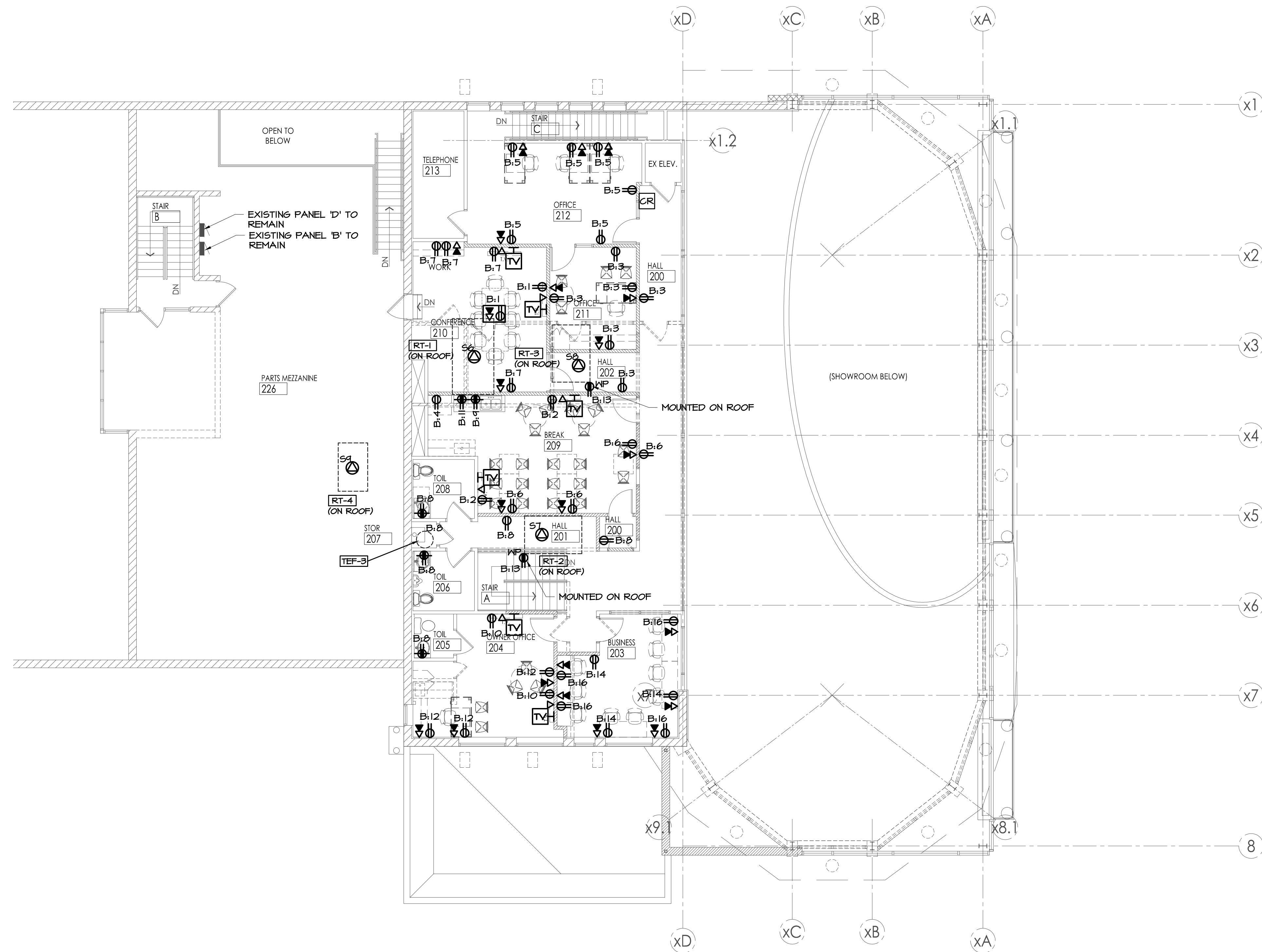


SIGNED M.O. VENTRELL EXPIRES 11/30/17

- MAR 20 2017 - DESIGN REVIEW
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**FIRST FLOOR
POWER & SYSTEMS
SHOWROOM PLAN**

E1.2



PARTIAL POWER & SYSTEMS PLAN

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

LEGEND

SI SYMBOL DENOTES SPECIAL OUTLET CONNECTION, NUMBER (SI) ADJACENT TO SYMBOL CORRESPONDS WITH TAG ON SCHEDULE. REFER TO DRAWING E5.2 FOR SPECIAL OUTLET SCHEDULE.

GENERAL NOTES:

1. ALL BRANCH CIRCUITS SHOWN THAT ARE 120V, 20A, 1 POLE SHALL BE 2-#12, 1-#12GRD, 3/4" C UNLESS OTHERWISE NOTED. CONTRACTOR MAY NETWORK CIRCUITS, IF NETWORKING IS CHOSEN CONTRACTOR MUST COMPLY WITH LATEST ACCEPTED VERSION OF THE NEC.
2. CONTRACTOR MUST TAKE INTO CONSIDERATION VOLTAGE DROP ON LONGER RUNS. ANY RUN LONGER THAN 100' CONTRACTOR IS RESPONSIBLE FOR CHECKING VOLTAGE DROP AND INCREASING CONDUCTOR SIZE WHEN NECESSARY.

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4/2/17

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11/30/17

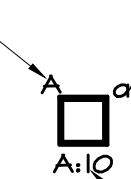
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**UPPER LEVEL
POWER & SYSTEMS
SHOWROOM PLAN**

E1.3

LIGHTING LEGEND

UPPER CASE LETTER DENOTES FIXTURE TYPE REFER TO LIGHTING FIXTURE SCHEDULE FOR FIXTURE INFORMATION



LOWER CASE LETTER DENOTES SWITCH LEG CORRESPONDS WITH LETTER AT SWITCH

LETTER + NUMBERS DENOTES CIRCUIT NUMBERS.

GENERAL NOTES:

1. ALL BRANCH CIRCUITS SHOWN THAT ARE 120V, 20A, 1 POLE SHALL BE 2-#12, I-#12GRD, 3/4" UNLESS OTHERWISE NOTED. CONTRACTOR MAY NETWORK CIRCUITS, IF NETWORKING IS CHOSEN CONTRACTOR MUST COMPLY WITH LATEST ACCEPTED VERSION OF THE NEC.
2. ALL VACANCY AND OCCUPANCY SENSORS SHALL BE DUAL TECHNOLOGY TYPE.
3. LIGHTING IS FED FROM PANEL 'LP' UNLESS OTHERWISE NOTED. BRANCH CIRCUIT NUMBERS ONLY ARE SHOWN.

KEYED NOTES:

1. PROVIDE A FAN SPEED CONTROL FROM SAME MANUFACTURER AS FAN. FAN SPEED CONTROL SHALL BE COMPATIBLE WITH THE FAN INSTALLED.

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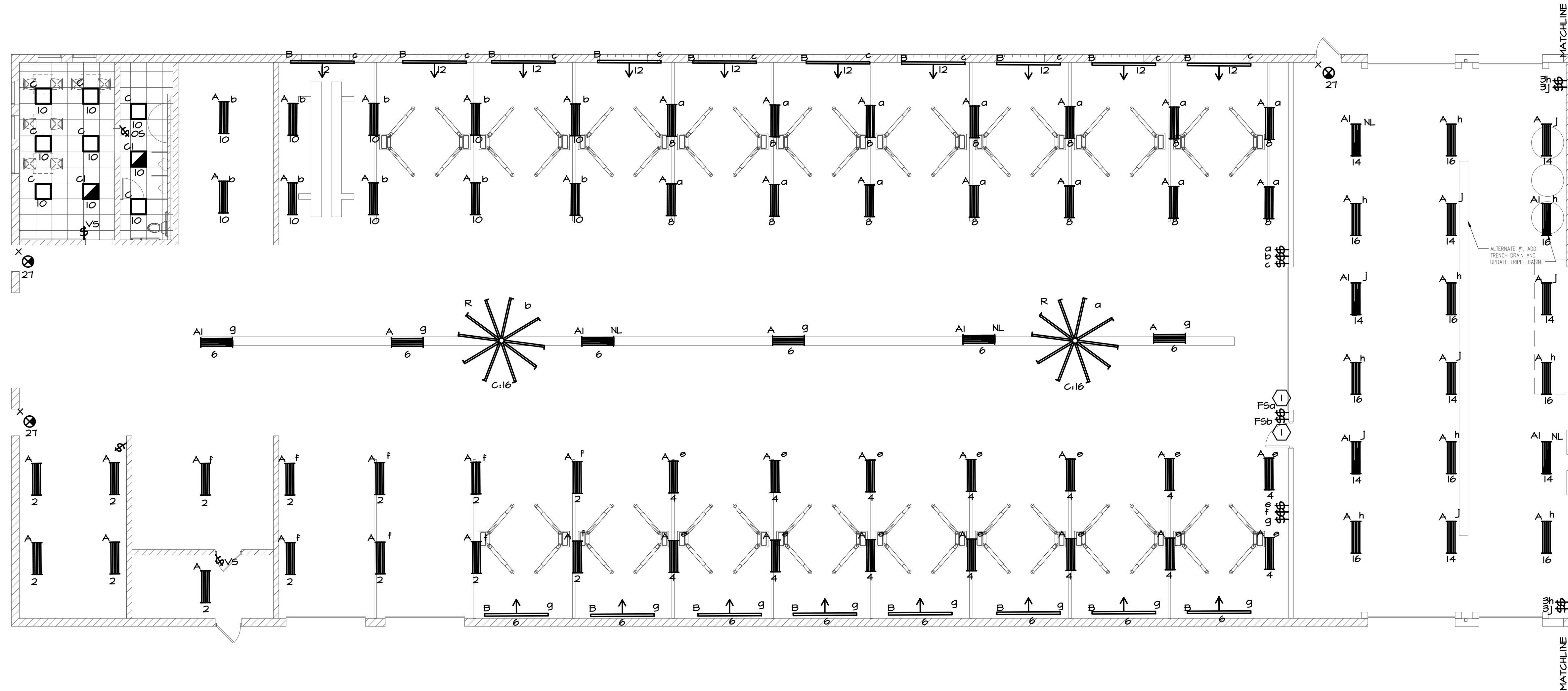
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M/O/V

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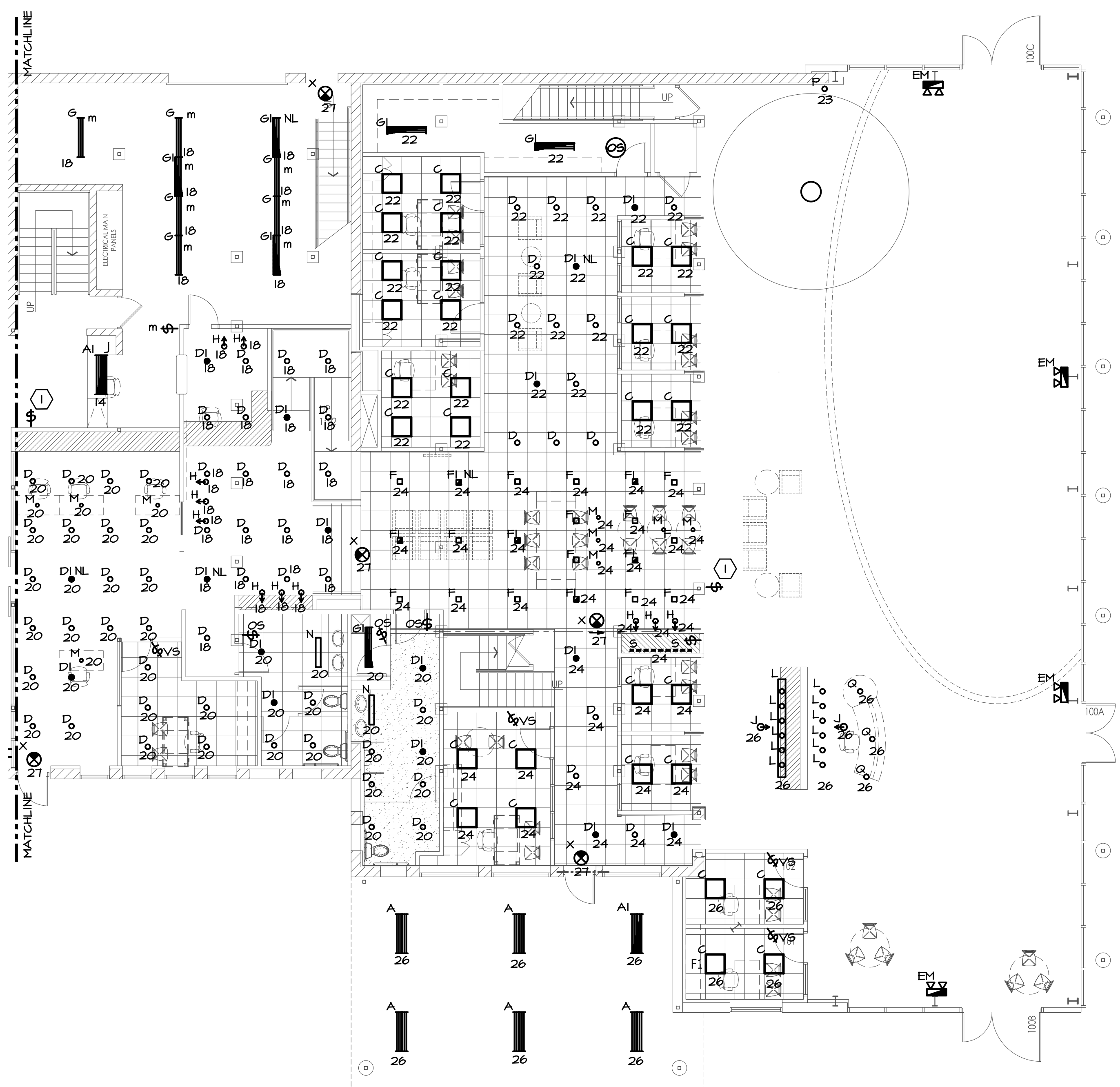
**FIRST FLOOR
LIGHTING
SERVICE BAY PLAN**

E2.1



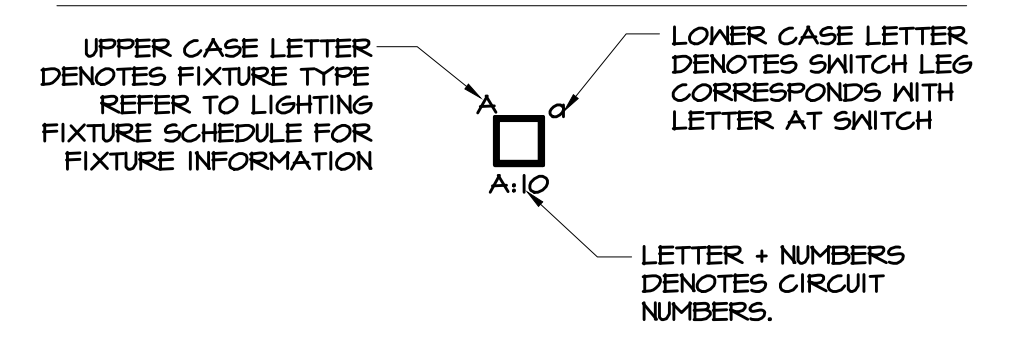
PARTIAL LIGHTING PLAN

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



PARTIAL LIGHTING PLAN
SCALE: 1/8" = 1'-0"

LIGHTING LEGEND



GENERAL NOTES:

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2. ALL VACANCY AND OCCUPANCY SENSORS SHALL BE DUAL TECHNOLOGY TYPE.

KEYED NOTES:

1. 2 HOUR OVER RIDE SWITCH FOR TIMER/CONTROL PANEL. AFTER PROGRAMMED LIGHTS SHUT OFF OVERRIDE SWITCH WILL TURN LIGHTS BACK ON FOR 2 HOURS. LOCATION OF SWITCH IS DIAGRAMMATIC, COORDINATE WITH OWNER TO LOCATE SWITCH.

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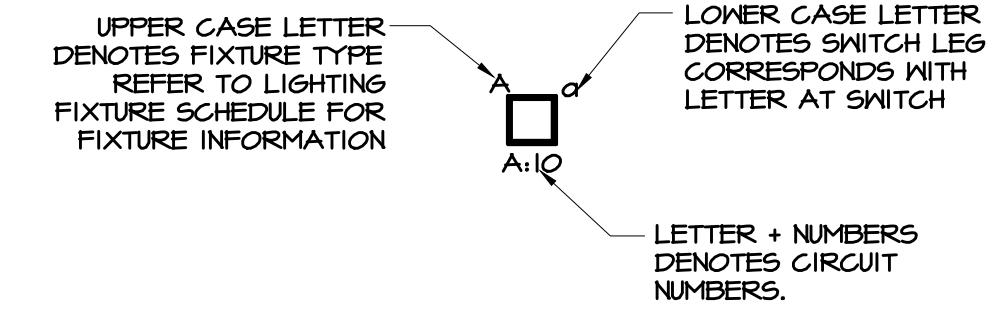
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FIRST FLOOR LIGHTING SHOWROOM PLAN

E2.2

LIGHTING LEGEND



GENERAL NOTES:

1. ALL BRANCH CIRCUITS SHOWN THAT ARE 120V, 20A, 1 POLE SHALL BE 2-#12, 1-#12GRD, 3/4" UNLESS OTHERWISE NOTED. CONTRACTOR MAY NETWORK CIRCUITS, IF NETWORKING IS CHOSEN CONTRACTOR MUST COMPLY WITH LATEST ACCEPTED VERSION OF THE NEC.
2. ALL VACANCY AND OCCUPANCY SENSORS SHALL BE DUAL TECHNOLOGY TYPE.

KEYED NOTES:

- ① PROVIDE ALL COMPONENTS NECESSARY FOR A COMPLETE WORKING DAYLIGHT SENSING SYSTEM PER ENERGY CODE.



PARTIAL LIGHTING PLAN

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

PROJECT:



International Auto KIA
8821 159th Street
Orland Hills, IL 60487

ARCHITECT:



505 Lake Cook Road, Suite 350
Deerfield, IL 60015
Tel: 847-571-3814
simon_yu@simon-arch.com
Attn: Simon Yu

STRUCTURAL ENGIN:

VIRGILIO & ASSOCIATES, LTD
Structural Engineers
24069 North Echo Lake Rd
Lake Zurich, IL 60047
Tel: 847-550-8411
Fax: 847-307-8324
www.virgilioassoc.com
Attn: Ryan Freund

MECH / PLUMB / ELECT:

W-T Electrical Engineering, LLC
2675 Pratum Avenue
Hoffman Estate, IL 60192
Tel: 224-293-6312
Fax: 224-293-6444
Ken.Meddings@wtengineering.com
Attn: Ken Meddings (Electrical)



SIGNED 8/21/17 EXPIRES 11/30/17

- MAR 20 2017 - DESIGN REVIEW
- MAR 29 2017 - DESIGN REVIEW
- APRIL 24 2017 - DESIGN REVIEW
- MAY 10 2017 - FOR BID

UPPER LEVEL LIGHTING SHOWROOM PLAN

E2.3

PROJECT:



International Auto KIA
8821 159th Street
Orland Hills, IL 60487

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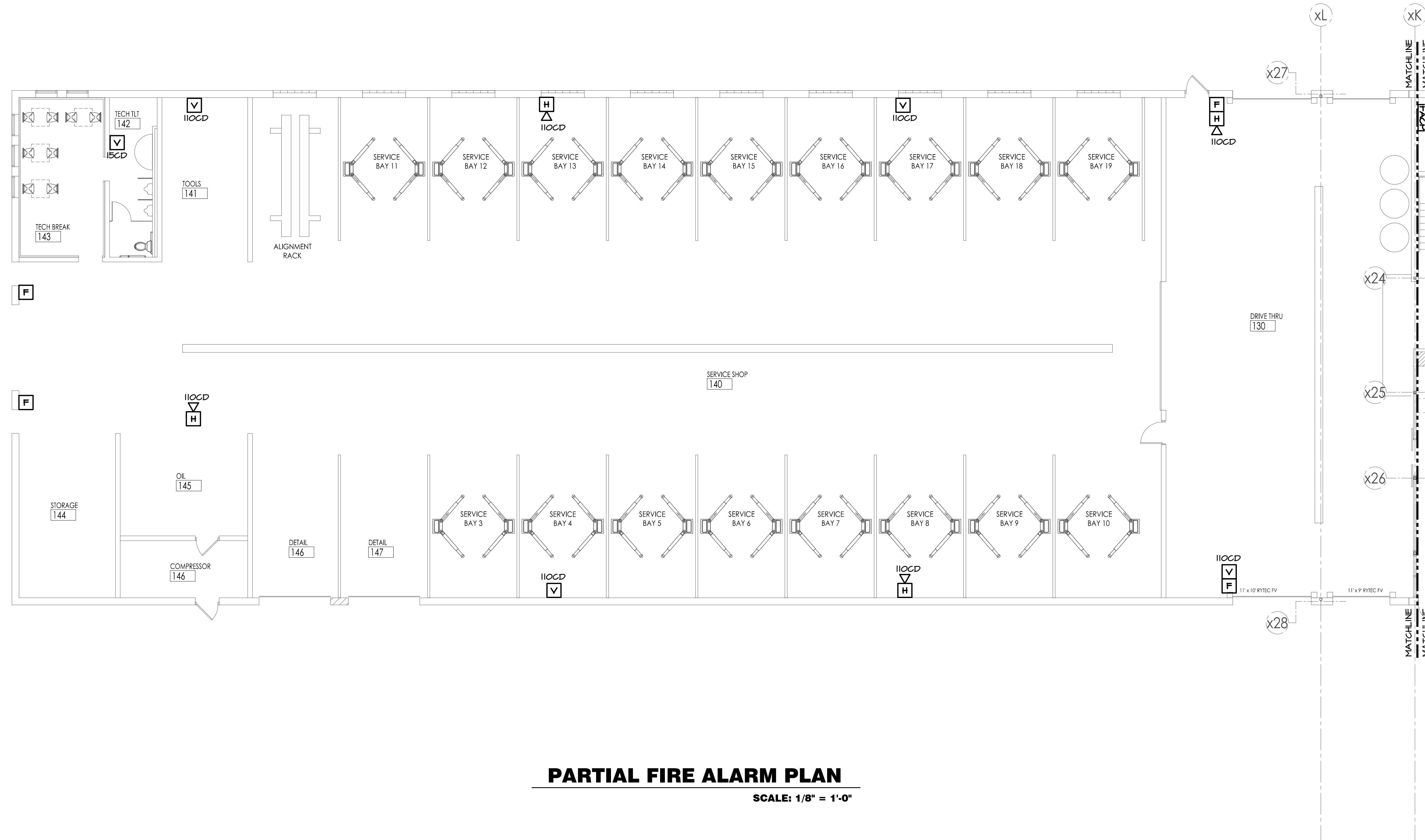
MAR 20 2017 - DESIGN REVIEW
MAR 29 2017 - DESIGN REVIEW
APRIL 24 2017 - DESIGN REVIEW
MAY 10 2017 - FOR BID

**FIRST FLOOR
FIRE ALARM
SERVICE BAY PLAN**

E3.1

FIRE ALARM GENERAL NOTES:

1. PROVIDE ALL ALARM DEVICES, NOTIFICATION DEVICES, PANELS, ETC., REQUIRED BY LOCAL CODES. PROVIDE NETWORK/TERMINATION PANELS AS REQUIRED.
2. PROVIDE COMPLETE FIRE ALARM PERMIT AND CONSTRUCTION DOCUMENTS. SUBMIT DOCUMENTS TO PERMITTING AUTHORITY AND RE-SUBMIT BASED ON COMMENTS. OBTAIN AGENCY APPROVAL PRIOR TO INSTALLATION.
3. PROVIDE HORN/STROBE DEVICES AS REQUIRED BY LOCAL FIRE OFFICIALS AND WIRE TO FIRE ALARM CONTROL PANEL. DEVICE LAYOUT IS REPRESENTATIVE ONLY. PROVIDE ACTUAL QUANTITY OF DEVICES PER IFC AND PER LOCAL AUTHORITY HAVING JURISDICTION REQUIREMENTS.
4. PROVIDE BATTERY AND VOLTAGE DROP CALCULATIONS.



PARTIAL FIRE ALARM PLAN

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

PROJECT:



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Orland Hills, IL 60487

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SIGNED
x/x/17

EXPIRES
11/30/17

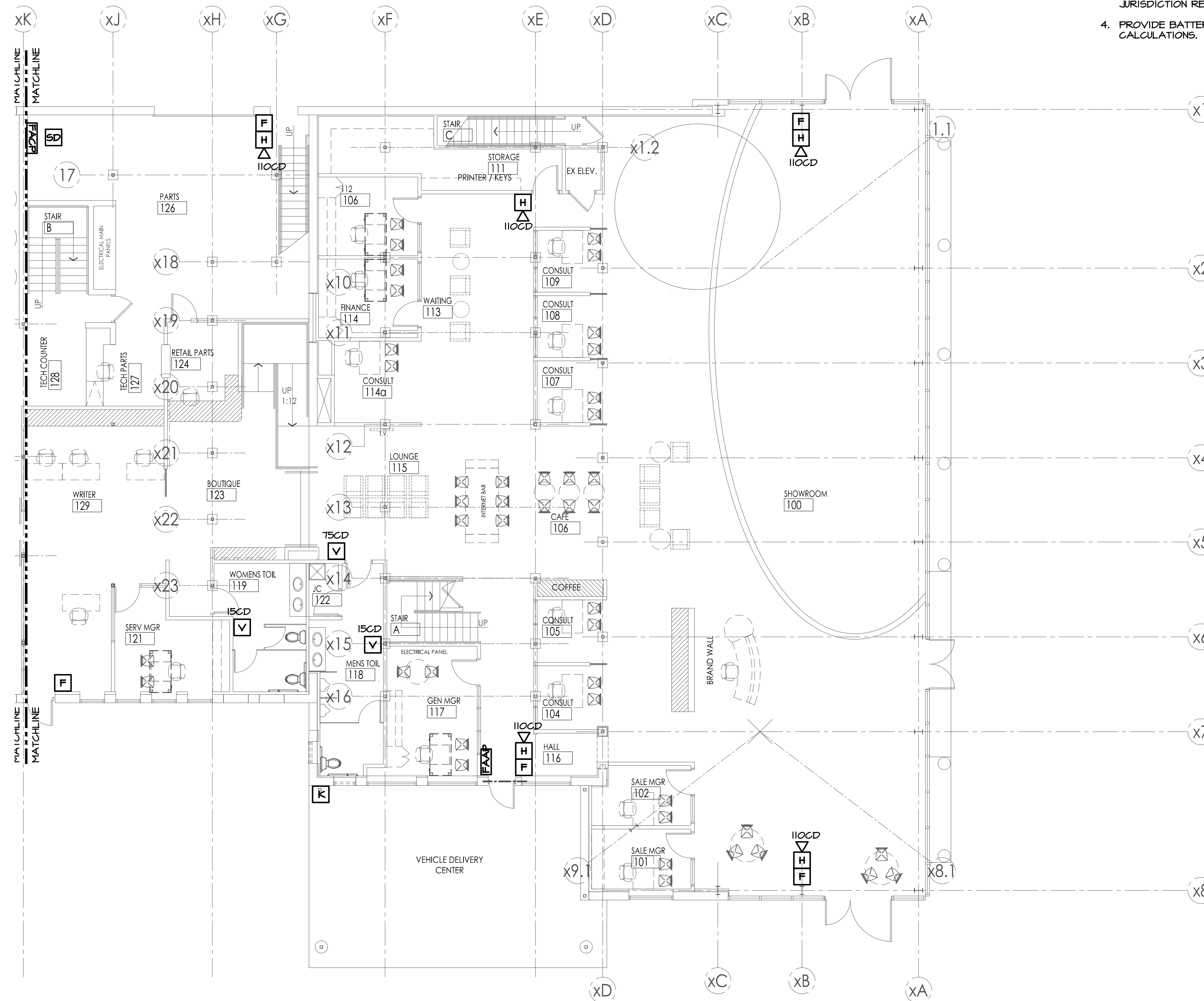
MAR 20 2017 - DESIGN REVIEW
MAR 29 2017 - DESIGN REVIEW
APRIL 24 2017 - DESIGN REVIEW
MAY 10 2017 - FOR BID

FIRST FLOOR FIRE ALARM SHOWROOM PLAN

E3.2

FIRE ALARM GENERAL NOTES:

1. PROVIDE ALL ALARM DEVICES, NOTIFICATION DEVICES, PANELS, ETC., REQUIRED BY LOCAL CODES. PROVIDE NETWORK/TERMINATION PANELS AS REQUIRED.
2. PROVIDE COMPLETE FIRE ALARM PERMIT AND CONSTRUCTION DOCUMENTS. SUBMIT DOCUMENTS TO PERMITTING AUTHORITY AND RE-SUBMIT BASED ON COMMENTS. OBTAIN AGENCY APPROVAL PRIOR TO INSTALLATION.
3. PROVIDE HORN/STROBE DEVICES AS REQUIRED BY LOCAL FIRE OFFICIALS AND WIRE TO FIRE ALARM CONTROL PANEL. DEVICE LAYOUT IS REPRESENTATIVE ONLY. PROVIDE ACTUAL QUANTITY OF DEVICES PER IFC AND PER LOCAL AUTHORITY HAVING JURISDICTION REQUIREMENTS.
4. PROVIDE BATTERY AND VOLTAGE DROP CALCULATIONS.



PARTIAL FIRE ALARM PLAN

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

PROJECT:



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SIGNED
8/28/17

EXPIRES
11/30/17

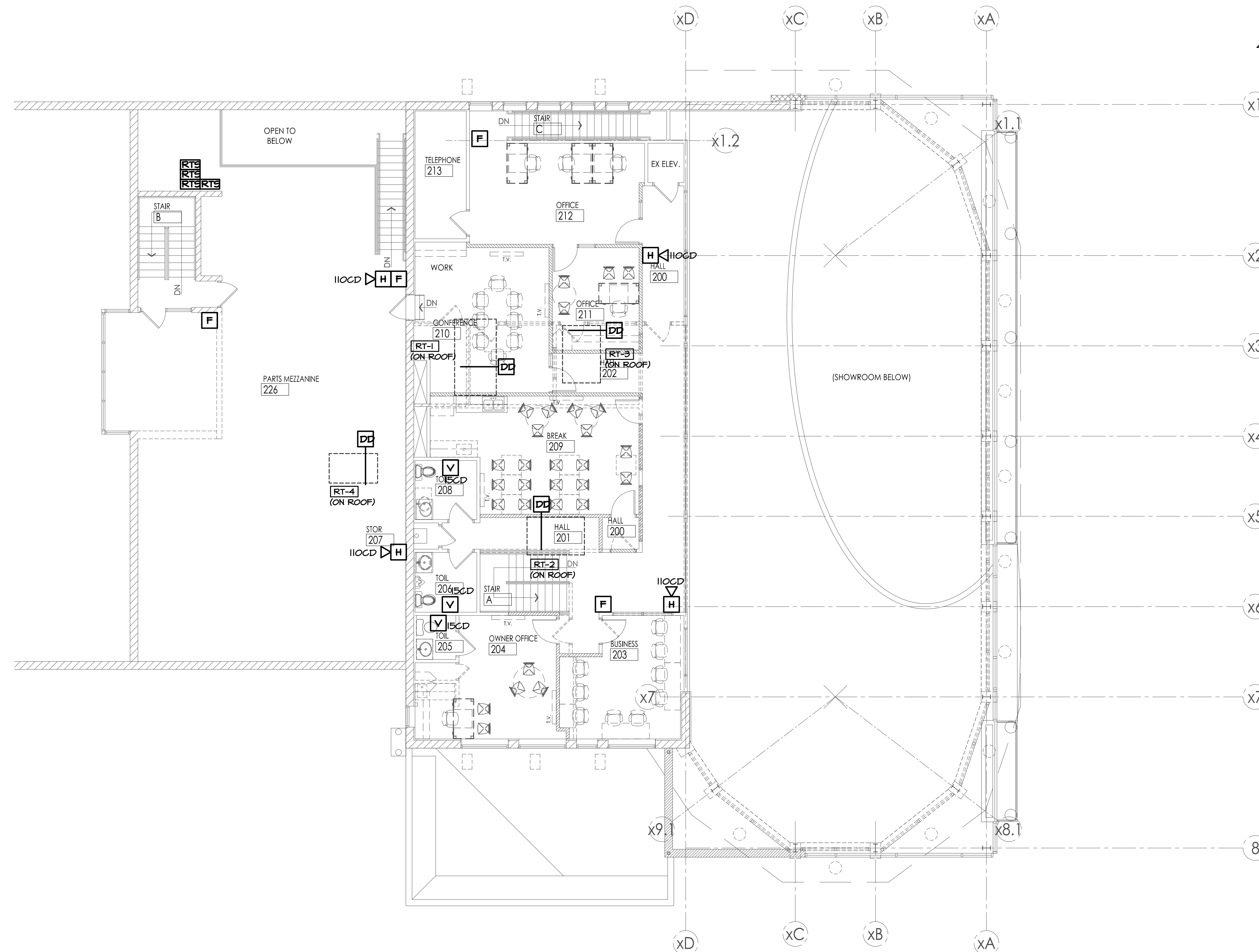
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UPPER LEVEL FIRE ALARM SHOWROOM PLAN

E3.3

FIRE ALARM GENERAL NOTES:

1. PROVIDE ALL ALARM DEVICES, NOTIFICATION DEVICES, PANELS, ETC., REQUIRED BY LOCAL CODES. PROVIDE NETWORK/TERMINATION PANELS AS REQUIRED.
2. PROVIDE COMPLETE FIRE ALARM PERMIT AND CONSTRUCTION DOCUMENTS. SUBMIT DOCUMENTS TO PERMITTING AUTHORITY AND RE-SUBMIT BASED ON COMMENTS. OBTAIN AGENCY APPROVAL PRIOR TO INSTALLATION.
3. PROVIDE HORN/STROBE DEVICES AS REQUIRED BY LOCAL FIRE OFFICIALS AND WIRE TO FIRE ALARM CONTROL PANEL. DEVICE LAYOUT IS REPRESENTATIVE ONLY. PROVIDE ACTUAL QUANTITY OF DEVICES PER IFC AND PER LOCAL AUTHORITY HAVING JURISDICTION REQUIREMENTS.
4. PROVIDE BATTERY AND VOLTAGE DROP CALCULATIONS.



PARTIAL FIRE ALARM PLAN

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

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PANELBOARD SCHEDULES

E5.1

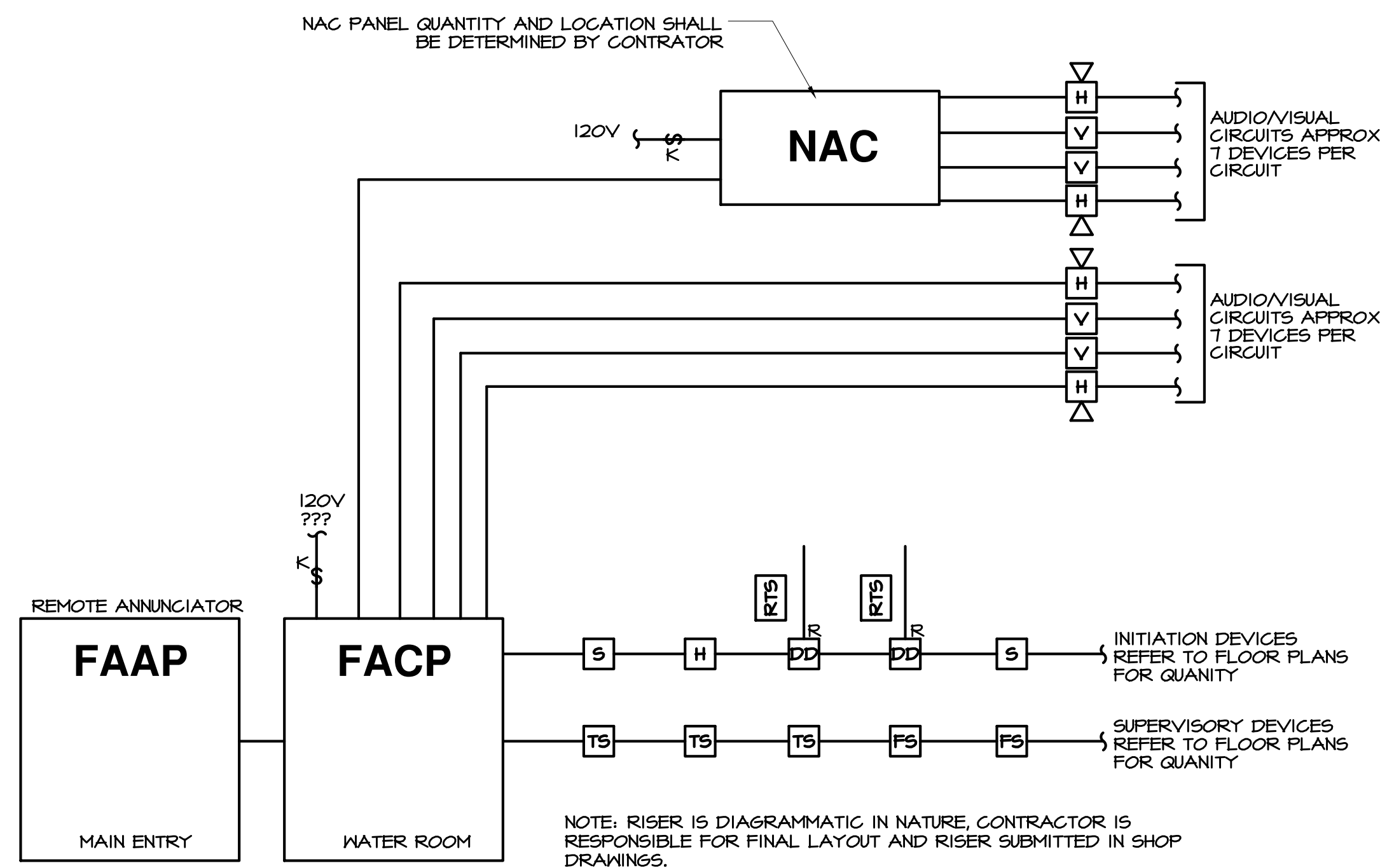
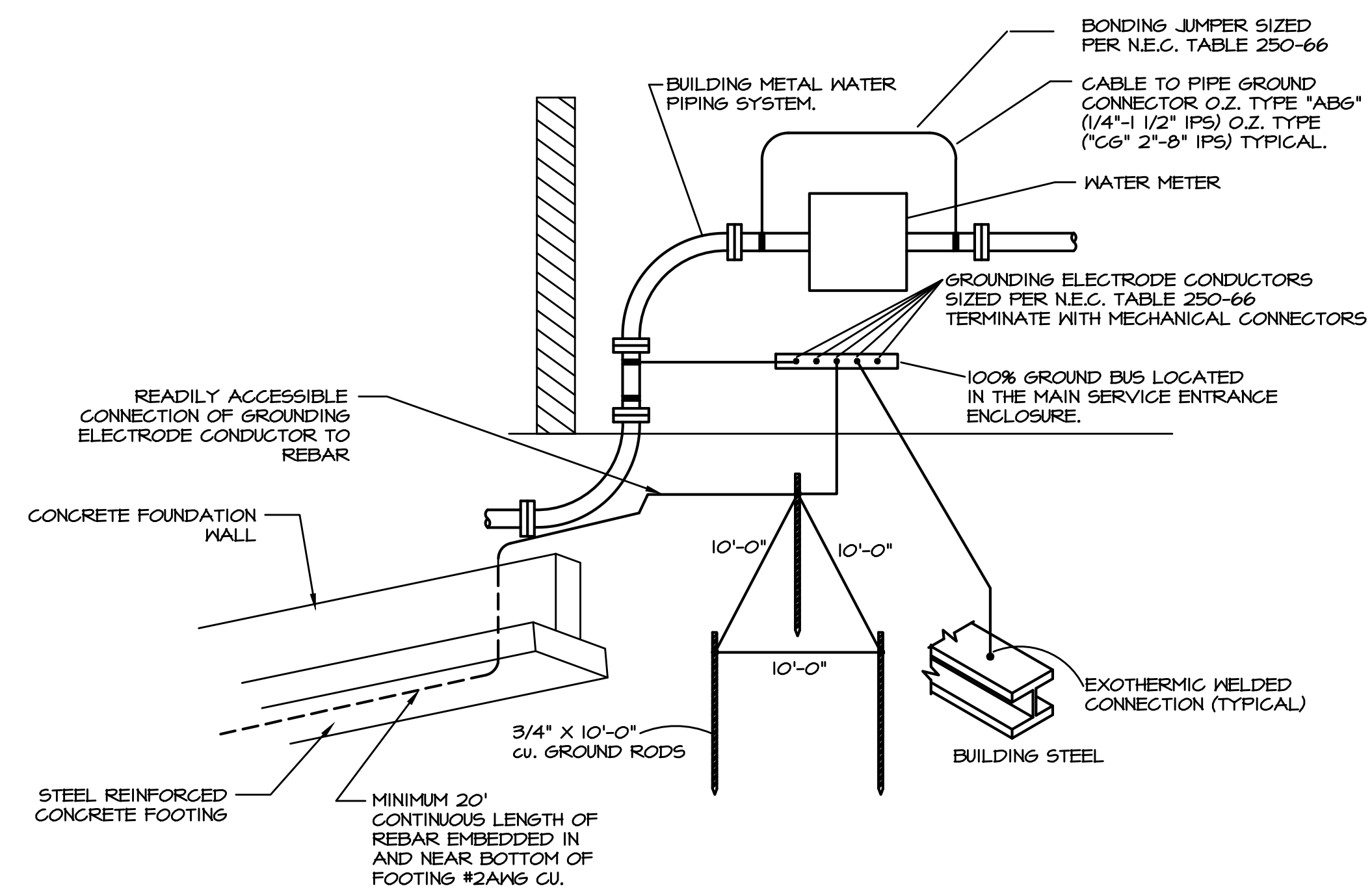
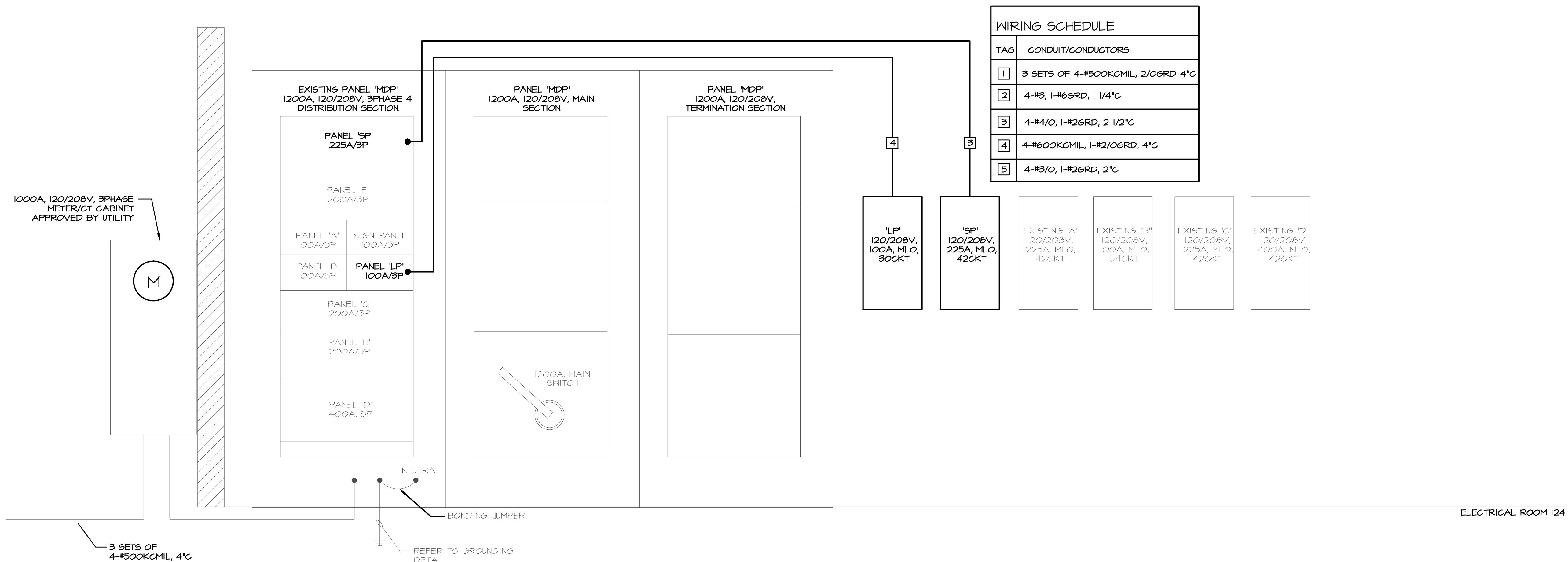


DIAGRAM - FIRE ALARM RISER
NOT TO SCALE



DETAIL - EXISTING GROUNDING ELECTRODE SYSTEM
NO SCALE



ELECTRICAL RISER DIAGRAM
NOT TO SCALE

PANEL		F		VOLTS		120/208V		PHASE		3 PHASE, 4 WIRE	
AMPS		200A AT FRAME		MAIN		200A MLO		A.I.C.		EXISTING	
LOCATION		SERVICE BAY		MOUNTING		SURFACE					
CKT. #	POLE	TRIP	LOCATION	KVA	KVA	LOCATION	TRIP	POLE	CKT. #		
1	2	20	EXTERIOR LIGHTING	1.1	1.1	EXTERIOR LIGHTING	20	2	2		
3				1.1	1.1				4		
5	2	20	EXTERIOR LIGHTING	1.1	1.1	EXTERIOR LIGHTING	20	2	6		
7				1.1	1.1				8		
9	2	20	EXTERIOR LIGHTING	1.1	1.1	EXTERIOR LIGHTING	20	2	10		
11				1.1	1.1				12		
13	2	20	EXTERIOR LIGHTING	1.1	1.1	EXTERIOR LIGHTING	20	2	14		
15				1.1	1.1				16		
17	2	20	EXTERIOR LIGHTING	1.1	1.1	EXTERIOR LIGHTING	20	2	18		
19				1.1	1.1				20		
21	2	20	EXTERIOR LIGHTING	1.1	1.1	EXTERIOR LIGHTING	20	2	22		
23				1.1	1.1				24		
25	2	20	EXTERIOR LIGHTING	1.1	1.1	EXTERIOR LIGHTING	20	2	26		
27				1.1	1.1				28		
29	2	20	EXTERIOR LIGHTING	1.1	1.1	EXTERIOR LIGHTING	20	2	30		
31				1.1	1.1				32		
33	2	20	EXTERIOR LIGHTING	1.1	1.1	EXTERIOR LIGHTING	20	2	34		
35				1.1	1.1				36		
37	2	20	EXTERIOR LIGHTING	1.1	-	SPACE			38		
39				1.1	-	SPACE			40		
41			SPACE	-	-	SPACE			42		
TOTAL =				22	19.8	= TOTAL					
						TOTAL KVA =		41.8	TOTAL AMPS =		116

NOTES:
1. ALL C/B'S SERVING HVAC EQUIPMENT SHALL BE HACR RATED.
2. ALL C/B'S SERVING EMNL LIGHTING SHALL HAVE LOCK-ON DEVICE.
3. ALL C/B'S USED FOR SWITCHING OF LIGHTS SHALL BE SWITCH DUTY RATED.

PANEL		D		VOLTS		120/208V		PHASE		3 PHASE, 4 WIRE	
AMPS		400A AT FRAME		MAIN		400A MLO		A.I.C.		EXISTING	
LOCATION		SERVICE BAY		MOUNTING		SURFACE					
CKT. #	POLE	TRIP	LOCATION	KVA	KVA	LOCATION	TRIP	POLE	CKT. #		
1				7.3	5.9				2		
3	3	100	SHOWROOM RTU	7.3	5.9	MAKEUP AIR UNIT SERVICE	80	3	4		
5				7.3	5.9				6		
7				5.0	3.3				8		
9	3	60	RT-2	5.0	3.3	RT-4	45	3	10		
11				5.0	3.3				12		
13				4.0	-				14		
15	3	50	RT-3	4.0	-	SPARE	20	3	16		
17				4.0	-				18		
19	1	20	SPARE	-	2.0				20		
21	1	20	SPARE	-	2.0	FLOOR EXHAUST SYSTEM	50	3	22		
23			SPACE	-	2.0				24		
25	1	20	SPARE	-	-	SPARE	20	1	26		
27			SPACE	-	-	SPARE	20	1	28		
29			SPACE	-	-	SPACE			30		
TOTAL =				48.9	33.6	= TOTAL					
						TOTAL KVA =		82.5	TOTAL AMPS =		228

NOTES:
1. ALL C/B'S SERVING HVAC EQUIPMENT SHALL BE HACR RATED.
2. ALL C/B'S SERVING EMNL LIGHTING SHALL HAVE LOCK-ON DEVICE.
3. ALL C/B'S USED FOR SWITCHING OF LIGHTS SHALL BE SWITCH DUTY RATED.

PANEL		B		VOLTS		120/208V		PHASE		3 PHASE, 4 WIRE	
AMPS		100A AT FRAME		MAIN		100A MLO		A.I.C.		EXISTING	
LOCATION		SERVICE BAY		MOUNTING		SURFACE					
CKT. #	POLE	TRIP	LOCATION	KVA	KVA	LOCATION	TRIP	POLE	CKT. #		
1	1	20	CONFERENCE ROOM	.72	.36	TV RECEPCTABLES	20	1	2		
3	1	20	OFFICE 211 RECEPCTACLE	.72	1.0	REFRIGERATOR	20	1	4		
5	1	20	OFFICE 212 RECEPCTACLE	.40	.72	BREAK ROOM RECEPCTABLES	20	1	6		
7	1	20	WORK AREA RECEPCTABLES	.36	.72	RESTROOM AND OTHERS	20	1	8		
9	1	20	MICROWAVE	1.2	.54	TV RECEPCTABLES ROOM 204	20	1	10		
11	1	20	COUNTER TOP RECEPCTACLE	.54	.72	OFFICE RECEPCTABLES ROOM 204	20	1	12		
13	1	20	ROOF TOP RECEPCTABLES	.54	.72	OFFICE RECEPCTABLES ROOM 203	20	1	14		
15	1	20	SPARE	-	.72	OFFICE RECEPCTABLES ROOM 203	20	1	16		
17	1	20	SPARE	-	-	SPACE			18		
19	1	20	SPARE	-	3.0				20		
21	1	20	SPARE	-	3.0	COMPUTER PANEL	40	3	22		
23			SPACE	-	3.0				24		
TOTAL =				4.98	14.5	= TOTAL					
						TOTAL KVA =		14.48	TOTAL AMPS =		54

NOTES:
1. ALL C/B'S SERVING HVAC EQUIPMENT SHALL BE HACR RATED.
2. ALL C/B'S SERVING EMNL LIGHTING SHALL HAVE LOCK-ON DEVICE.
3. ALL C/B'S USED FOR SWITCHING OF LIGHTS SHALL BE SWITCH DUTY RATED.

PANEL		C		VOLTS		120/208V		PHASE		3 PHASE, 4 WIRE	
AMPS		200A AT FRAME		MAIN		200A MLO		A.I.C.		EXISTING	
LOCATION		SERVICE BAY		MOUNTING		SURFACE					
CKT. #	POLE	TRIP	LOCATION	KVA	KVA	LOCATION	TRIP	POLE	CKT. #		
1	1	20	LIGHTS SERVICE AREA	1.1	.72	DRIVE THRU RECEPCTABLES	20	1	2		
3	1	20	LIGHTS SERVICE AREA	1.1	.36	SERVICE RECEPCTABLES	20	1	4		
5	1	20	LIGHTS SERVICE AREA	1.1	.36	SERVICE RECEPCTABLES	20	1	6		
7	1	20	LIGHTS SERVICE AREA	1.1	.36	SERVICE RECEPCTABLES	20	1	8		
9	1	20	LIGHTS SERVICE AREA	1.1	.36	SERVICE RECEPCTABLES	20	1	10		
11	1	20	PADDLE FANS	.75	.36	SERVICE RECEPCTABLES	20	1	12		
13	1	20	EAST WALL RECEPCTABLES	.72	1.0	ALIGNMENT CONSOLE	20	1	14		
15	1	20	EAST WALL RECEPCTABLES	.72	1.0	SERVICE AREA PADDLE FAN	20	1	16		
17	1	20	EAST WALL RECEPCTABLES	.72	1.0	SERVICE AREA PADDLE FAN	20	1	18		
19	1	20	WEST DOOR OPENER	1.0	.75	DETAIL OVERHEAD DOORS	20	1	20		
21	1	20	WEST DOOR OPENER	1.0	.75	DETAIL OVERHEAD DOORS	20	1	22		
23				3.0	.75	FURNACE F-1	20	1	24		
25	3	70	AIR COMPRESSOR	3.0	.75	TEF-1	20	1	26		
27				3.0	.50	EF-8	20	1	28		
29	1	20	LIGHTS AIR COMPRESSOR ROOM	.75	2.0				30		
31	1	20	RECEPCTABLES LIGHT POLES	.54	2.0	WELDER	50	2	32		
33				2.0	.72	RECEPCTABLES REAR LOT POLES	20	1	34		
35	2	25	CONDENSER CU-1	2.0	.75	OVERHEAD DOOR	20	1	36		
37	1	20	RECEPCTABLES BREAK ROOM	.54	4.8				38		
39	1	20	RECEPCTABLES BREAK ROOM	.54	4.8	SUB PANEL 'CC'	60	3	40		
41	1	20	OVERHEAD DOOR	.75	4.8				42		
TOTAL =				25.56	27.28	= TOTAL					
						TOTAL KVA =		52.84	TOTAL AMPS =		146

NOTES:
1. ALL C/B'S SERVING HVAC EQUIPMENT SHALL BE HACR RATED.
2. ALL C/B'S SERVING EMNL LIGHTING SHALL HAVE LOCK-ON DEVICE.
3. ALL C/B'S USED FOR SWITCHING OF LIGHTS SHALL BE SWITCH DUTY RATED.

PANEL		A		VOLTS		120/208V		PHASE		3 PHASE, 4 WIRE	
AMPS		200A AT FRAME		MAIN		200A MLO		A.I.C.		EXISTING	
LOCATION		SERVICE BAY		MOUNTING		SURFACE					
CKT. #	POLE	TRIP	LOCATION	KVA	KVA	LOCATION	TRIP	POLE	CKT. #		
1	1	20	FLOOR RECEPCTABLES SHOWROOM	.72	.54	CONSULT RECEPCTABLES	20	1	2		
3	1	20	FLOOR RECEPCTABLES SHOWROOM	.72	.54	CONSULT RECEPCTABLES	20	1	4		
5	1	20	FLOOR RECEPCTABLES SHOWROOM	.72	.54	CONSULT RECEPCTABLES	20	1	6		
7	1	20	FLOOR RECEPCTABLES SHOWROOM	.72	.54	CONSULT RECEPCTABLES	20	1	8		
9	1	20	FLOOR RECEPCTABLES SHOWROOM	.72	.54	CONSULT RECEPCTABLES	20	1	10		
11	1	20	FLOOR RECEPCTABLES SHOWROOM	.72	1.0	COFFEE RECEPCTABLES	20	1	12		
13	1	20	OFFICE RECEPCTABLES	.54	.72	GENERAL MANAGERS OFFICE RECEPCTS	20	1	14		
15	1	20	OFFICE RECEPCTABLES	.54	.54	SALES MANAGERS OFFICE RECEPCTS	20	1	16		
17	1	20	OFFICE RECEPCTABLES	.54	.50	WATER HEATER	20	1	18		
19	1	20	PARTS RECEPCTABLES	.72	-	SPARE	20	1	20		
21	1	20	RETAIL PARTS RECEPCTABLES	.72	-	SPARE	20	1	22		
23	1	20	BOUTIQUE RECEPCTABLES	.72	-	SPARE	20	1	24		
25	1	20	TV RECEPCTABLES	1.0	-	SPARE	20	1	26		
27	1	20	WRITER RECEPCTABLES	.40	-	SPARE	20	1	28		
29	1	20	WRITER RECEPCTABLES	.40	-	SPARE	20	1	30		
31	1	20	SERVICE MANAGER RECEPCTABLES	.72	-	SPARE	20	1	32		
33	1	20	COMPUTERS	1.0	-	SPARE	20	1	34		
35	1	20	RESTROOMS & CONVENIENCE	.72	-	SPARE	20	1	36		
37	1	20	HAND DRYER	1.0	-	SPARE	20	1	38		
39	1	20	HAND DRYER	1.0	-	-	20	1	40		
41	1	20	FIRE ALARM PANEL	.25	-	SPACE			42		
TOTAL =				15.54	4.96	= TOTAL					
						TOTAL KVA =		20.55	TOTAL AMPS =		57

NOTES:
1. ALL C/B'S SERVING HVAC EQUIPMENT SHALL BE HACR RATED.
2. ALL C/B'S SERVING EMNL LIGHTING SHALL HAVE LOCK-ON DEVICE.
3. ALL C/B'S USED FOR SWITCHING OF LIGHTS SHALL BE SWITCH DUTY RATED.

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PANELBOARD SCHEDULES

E5.1

PANEL		LP		VOLTS		120/208V		PHASE		3PH, 4W	
AMPS		100		MAIN		100A MLO		A.I.C.		10,000	
LOCATION		SERVICE BAY		MOUNTING		SURFACE					
CKT. #	U POLE	TRIP	LOCATION	KVA	KVA	LOCATION	TRIP	U POLE	CKT. #		
1	1	20	SIGNAGE EAST SIDE SERVICE	1.0	1.5	SERVICE HIGH BAY LIGHTING	20	1	2		
3	1	20	SIGNAGE EAST SIDE SHOWROOM	1.0	1.5	SERVICE HIGH BAY LIGHTING	20	1	4		
5	1	20	SIGNAGE FRONT ENTRY	1.0	1.5	SERVICE HIGH BAY LIGHTING	20	1	6		
7	1	20	SIGNAGE FRONT ENTRY	1.0	1.5	SERVICE HIGH BAY LIGHTING	20	1	8		
9	1	20	SECOND FLOOR LIGHTING	1.3	1.5	SERVICE HIGH BAY LIGHTING	20	1	10		
11	1	20	SECOND FLOOR LIGHTING	1.3	1.5	SERVICE HIGH BAY LIGHTING	20	1	12		
13	1	20	SECOND FLOOR LIGHTING	1.3	1.5	SERVICE HIGH BAY LIGHTING	20	1	14		
15	1	20	SECOND FLOOR LIGHTING	1.3	1.5	SERVICE HIGH BAY LIGHTING	20	1	16		
17	1	20	SHOWROOM LIGHTING	1.4	1.2	PARTS LIGHTING	20	1	18		
19	1	20	SHOWROOM LIGHTING	1.4	1.2	PARTS LIGHTING	20	1	20		
21	1	20	SHOWROOM LIGHTING	1.4	1.2	OFFICE LIGHTING	20	1	22		
23	1	20	SHOWROOM LIGHTING	1.4	1.2	OFFICE LIGHTING	20	1	24		
25	1	20	SHOWROOM LIGHTING	1.4	1.2	OFFICE LIGHTING	20	1	26		
27	1	20	EXIT LIGHTING	.25					28		
29									30		
TOTAL =				16.45	18.0	= TOTAL					
TOTAL KVA =				34.45	TOTAL AMPS =		45				

NOTES:
1. ALL C/B'S SERVING HVAC EQUIPMENT SHALL BE HACR RATED.
2. ALL C/B'S SERVING EM/NL LIGHTING SHALL HAVE LOCK-ON DEVICE.
3. ALL C/B'S USED FOR SWITCHING OF LIGHTS SHALL BE SWITCH DUTY RATED.

PANEL		E		VOLTS		120/208V		PHASE		3 PHASE, 4 WIRE	
AMPS		200A AT FRAME		MAIN		200A MLO		A.I.C.		EXISTING	
LOCATION		SERVICE BAY		MOUNTING		SURFACE					
CKT. #	U POLE	TRIP	LOCATION	KVA	KVA	LOCATION	TRIP	U POLE	CKT. #		
1	2	20	POLE LIGHTS	1.1	1.1	POLE LIGHTS	20	2	2		
3	2	20	POLE LIGHTS	1.1	1.1	POLE LIGHTS	20	2	4		
5	2	20	POLE LIGHTS	1.1	1.1	POLE LIGHTS	20	2	6		
7	2	20	POLE LIGHTS	1.1	1.1	POLE LIGHTS	20	2	8		
9	2	20	POLE LIGHTS	1.1	1.1	POLE LIGHTS	20	2	10		
11	2	20	POLE LIGHTS	1.1	1.1	POLE LIGHTS	20	2	12		
13	2	20	POLE LIGHTS	1.1	1.1	POLE LIGHTS	20	2	14		
15	2	20	POLE LIGHTS	1.1	1.1	POLE LIGHTS	20	2	16		
17	2	20	POLE LIGHTS	1.1	1.1	POLE LIGHTS	20	2	18		
19	2	20	POLE LIGHTS	1.1	1.1	POLE LIGHTS	20	2	20		
21	2	20	POLE LIGHTS	1.1	1.1	POLE LIGHTS	20	2	22		
23	2	20	POLE LIGHTS	1.1	1.1	POLE LIGHTS	20	2	24		
25	2	20	POLE LIGHTS	1.1	1.1	POLE LIGHTS	20	2	26		
27	2	20	POLE LIGHTS	1.1	1.1	POLE LIGHTS	20	2	28		
29	2	20	POLE LIGHTS	1.1	-	SPARE	20	1	30		
31	2	20	POLE LIGHTS	1.1	-	SPARE	20	1	32		
33	2	20	POLE LIGHTS	1.1	-	SPARE	20	1	34		
35	2	20	POLE LIGHTS	1.1	1.1	POLE LIGHTS	20	2	36		
37	1	20	RECEPTACLES LUNCH ROOM	.72	1.1				38		
39	1	20	LIGHTS LUNCH ROOM	.75	-	SPARE	20	1	40		
41	1	20	DOOR #5	.50	-	SPARE	20	1	42		
TOTAL =				21.77	17.6	= TOTAL					
TOTAL KVA =				34.37	TOTAL AMPS =		104				

NOTES:
1. ALL C/B'S SERVING HVAC EQUIPMENT SHALL BE HACR RATED.
2. ALL C/B'S SERVING EM/NL LIGHTING SHALL HAVE LOCK-ON DEVICE.
3. ALL C/B'S USED FOR SWITCHING OF LIGHTS SHALL BE SWITCH DUTY RATED.

PANEL		SP		VOLTS		120/208V		PHASE		3PH, 4W	
AMPS		200		MAIN		200A MLO		A.I.C.		10,000	
LOCATION		SERVICE BAY		MOUNTING		SURFACE					
CKT. #	U POLE	TRIP	LOCATION	KVA	KVA	LOCATION	TRIP	U POLE	CKT. #		
1	2	20	LIFT POWER BAY #14	1.0	1.0	LIFT POWER BAY #3	20	2	2		
3	2	20	LIFT POWER BAY #14	1.0	1.0	LIFT POWER BAY #3	20	2	4		
5	2	20	LIFT POWER BAY #10	1.0	1.0	LIFT POWER BAY #4	20	2	6		
7	2	20	LIFT POWER BAY #10	1.0	1.0	LIFT POWER BAY #4	20	2	8		
9	2	20	LIFT POWER BAY #17	1.0	1.0	LIFT POWER BAY #5	20	2	10		
11	2	20	LIFT POWER BAY #17	1.0	1.0	LIFT POWER BAY #5	20	2	12		
13	2	20	LIFT POWER BAY #16	1.0	1.0	LIFT POWER BAY #6	20	2	14		
15	2	20	LIFT POWER BAY #16	1.0	1.0	LIFT POWER BAY #6	20	2	16		
17	2	20	LIFT POWER BAY #15	1.0	1.0	LIFT POWER BAY #7	20	2	18		
19	2	20	LIFT POWER BAY #15	1.0	1.0	LIFT POWER BAY #7	20	2	20		
21	2	20	LIFT POWER BAY #14	1.0	1.0	LIFT POWER BAY #8	20	2	22		
23	2	20	LIFT POWER BAY #14	1.0	1.0	LIFT POWER BAY #8	20	2	24		
25	2	20	LIFT POWER BAY #13	1.0	1.0	LIFT POWER BAY #9	20	2	26		
27	2	20	LIFT POWER BAY #13	1.0	1.0	LIFT POWER BAY #9	20	2	28		
29	2	20	LIFT POWER BAY #12	1.0	1.0	LIFT POWER BAY #10	20	2	30		
31	2	20	LIFT POWER BAY #12	1.0	1.0	LIFT POWER BAY #10	20	2	32		
33	2	20	LIFT POWER BAY #11	1.0	2.0	ALIGNMENT LIFT	40	2	34		
35	2	20	LIFT POWER BAY #11	1.0	2.0	ALIGNMENT LIFT	40	2	36		
37	1	20	WATER HEATER	.50		SPACE			38		
39			SPACE			SPACE			40		
41			SPACE			SPACE			42		
TOTAL =				18.0	20.0	= TOTAL					
TOTAL KVA =				38.0	TOTAL AMPS =		105				

NOTES:
1. ALL C/B'S SERVING HVAC EQUIPMENT SHALL BE HACR RATED.
2. ALL C/B'S SERVING EM/NL LIGHTING SHALL HAVE LOCK-ON DEVICE.
3. ALL C/B'S USED FOR SWITCHING OF LIGHTS SHALL BE SWITCH DUTY RATED.

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SIGNED 8/28/17 EXPIRES 11/30/17

MAR 20 2017 - DESIGN REVIEW
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APRIL 24 2017 - DESIGN REVIEW
MAY 10 2017 - FOR BID

PANELBOARD SCHEDULES

E5.2

LIGHTING FIXTURE SCHEDULE						
TYPE	DESCRIPTION & FEATURES	LAMPS		MOUNTING	VOLT	SPECIFIED MANUFACTURER AND CATALOG NUMBER
		QTY.	TYPE	CLG./POLE-TYPE		
A	2X4 LED HIGH BAY LIGHTING	-	110W LED	SURFACE/CEILING	120	PHILIPS-FBX16LL 40 UNV WP6 FBX GRIP5 W6 FBX 2W
A1	2X4 LED HIGH BAY LIGHTING W/EM BATTERY PACK REFER TO NOTE #12	-	110W LED	SURFACE/CEILING	120	PHILIPS-FBX16LL 40 UNV WP6 FBX GRIP5 W6 FBX 2W E/LED
B	STRIP LIGHT SUSPENDED WORK BAYS	-	65W LED	SUSPENDED/CEILING	120	PHILIPS-DWA E 65L 840 4 UNV
C	2X2 LED TROFFER FOR GRID OR DRYWALL CEILING	-	37W LED	RECESSED/CEILING	120	FINELITE-HFRLD A 2X2 DCO B 840 930 120 'C1' FOR GRID 'DW' FOR DRYWALL
C1	2X2 LED TROFFER W/EM BATTERY PACK REFER TO NOTE #7	-	37W LED	RECESSED/CEILING	120	FINELITE-HFRLD A 2X2 DCO B 840 930 120 BSLT22 BODINE BATTERY PACK
D	6" RECESSED LED DOWNLIGHT	-	32W LED	RECESSED/CEILING	120	PHILIPS-C6L20NJVZIOV / C6L2020DL40KMC CLPVB
D1	6" RECESSED LED DOWNLIGHT W/EM BATTERY PACK REFER TO NOTE #7	-	32W LED	RECESSED/CEILING	120	PHILIPS-C6L20NJVZIOVEM / C6L2020DL40K MC CL P VB EM
F	6" RECESSED SQUARE LED DOWNLIGHT	-	27W LED	RECESSED/CEILING	120	LSI-LAD65Q 27 LED 40 48 UE T5Q6 HAZ WH
F1	6" RECESSED SQUARE LED DOWNLIGHT W/EM BATTERY PACK REFER TO NOTE #7	-	27W LED	RECESSED/CEILING	120	LSI-LAD65Q 27 LED 40 48 UE T5Q6 HAZ WH EM
G	4' LED WRAPAROUND	-	18W LED	SURFACE/CEILING	120	PHILIPS-OWL 4 40L 840 UNV DIM
G1	4' LED WRAPAROUND W/EM BATTERY PACK REFER TO NOTE #7	-	18W LED	SURFACE/CEILING	120	PHILIPS-OWL 4 40L 840 UNV DIM E/LED
H	LED DOWNLIGHT RETAIL DISPLAY	-	16W LED	RECESSED/CEILING	120	AMERLUX LT6-E4.T5RA-16-LED-120-FL-4000 /E4.T5RA-SDC
J	ADJUSTABLE LED DOWNLIGHT	-	48W LED	RECESSED/CEILING	120	WILA-623 864 SA40 80 120
K	7" LED DOWNLIGHT	-	70W LED	RECESSED/CEILING	120	PHILIPS-CTL 50 N 120 VB 4000K MEDIUM BEAM COMFORT CLEAR TRIM, POLISHED FLANGE
L	RECESSED CHANNEL MULTI DOWNLIGHT CONTACT: TRACIE JAHN 562-756-4734	-	70W LED	RECESSED/CEILING	120	AMERLUX-MESA GRID W/38W FIATO LED RSA COMBOLIGHT BLACK HOUSING AND TRIM
M	DECORATIVE PENDANT	-	4W LED	PENDANT/CEILING	120	VIVO-FR3T507 BNI BRUSHED NICKEL FINISH
N	DECORATIVE LINEAR PENDANT	-	19W LED	PENDANT/CEILING	120	SHAPER-600 SERIES 24" SCONCE 600-24-2-L3 830-UNV-SN
P	CONCEALED AMBIENT DIRECTIONAL	-	4.4W LED	RECESSED/CEILING	120	ACOLYTE-RBNL4023 4.4 35 F
Q	DECORATIVE PENDANT CONTACT: SHERI CHARRON @ LINEA, INC. 310-273-5425	-	70W LED	RECESSED/CEILING	120	BONBONNE 96" AFF
R	BIG ASS FAN	-	-	CEILING	120	BIG ASS FAN - 1515 10FT FAN WITH CONTROLS
S	UNDERCABINET LIGHT	-	9W & 18W LED	UNDERCABINET	120	PHILIPS-523-000068-06 FOR 20" FIXTURE 523-000068-14 FOR 40" FIXTURE
X	EDGE LIT EXIT SIGN	-	INCLUDED	WALL/CEILING	120	PHILIPS-ER44RLDU 2 R

NOTES:

- VERIFY TYPE OF CEILING OR WALL FOR ALL RECESSED LIGHTING FIXTURES PRIOR TO ORDERING.
- PROVIDE ALL ADDITIONAL HARDWARE FOR FIXTURE MOUNTING AS REQUIRED AT NO EXTRA COST.
- THE FIXTURE SCHEDULE DOES NOT NECESSARILY LIST ALL ACCESSORIES AND HARDWARE NECESSARY FOR THE COMPLETION OF INSTALLATION, NOR DOES IT DETAIL THE CEILING CONSTRUCTION TO BE ENCOUNTERED. IT IS THE CONTRACTOR'S RESPONSIBILITY TO PROPERLY DETERMINE AND PROVIDE CORRECT COMPONENTS, ACCESSORIES, AND HARDWARE AS REQUIRED FOR THE INSTALLATION.
- CONTRACTOR SHALL COORDINATE WITH ARCHITECTURAL DRAWINGS AND CEILING CONTRACTOR FOR EXACT LIGHTING FIXTURE LOCATION.
- THIS CONTRACTOR SHALL PROVIDE POINT-BY-POINT LIGHTING CALCULATIONS FOR ANY SUBSTITUTED LIGHTING FIXTURES, POINT-BY-POINT CALCULATIONS SHALL BE PROVIDED WITH SHOP DRAWINGS AND BE CALCULATED BY THE MANUFACTURER OF THE LIGHTING FIXTURE FOR THE AREAS BEING SERVED. CALCULATIONS AND SHOP DRAWINGS SHALL BE SUBMITTED TO ENGINEER FOR REVIEW A MINIMUM OF SEVEN (7) DAYS PRIOR TO BID DATE IN ORDER TO BE CONSIDERED.
- ALL BATTERY BACK-UP EMERGENCY LIGHT AND EXIT SIGN LIGHTING FIXTURES INDICATED SHALL HAVE BATTERY BACK-UP RATED FOR 1-1/2 HOURS MINIMUM AND AS APPROVED BY LOCAL FIRE PREVENTION BUREAU.
- EMERGENCY LIGHTING SHALL BE PROVIDED WITH SEPARATE EMERGENCY BATTERY PACK POWERED WITH SEPARATE HOT LEG. THE NORMAL BALLAST SHALL BE CONNECTED WITH ALL OTHER NORMAL FIXTURES CONTROLS. THE FIXTURE SHALL ACT AS A NORMAL CONTROLLABLE FIXTURE UNTIL LOSS OF POWER, AT THAT CONDITION EMERGENCY BATTERY PACK SHALL ENERGIZE LAMPS

SPECIAL OUTLET SCHEDULE													
SYM	DESCRIPTION	LOCATION	LOAD		FED FROM		O.C.P. (A/P)	WIRING	DISCONNECT		JUNCTION	RECEPT.	NOTES
			VOLT/PH	KW	PANEL	CKT			SIZE/POLE	SIZE/POLE			
51	SERVICE LIFT	SERVICE SHOP	208/1	2	SEE PLAN	SEE PLAN	20/2	3/4" C W2-#12, 1-#12GRD	30/2	-	-	-	3.
52	TIRE CHANGER	SERVICE 130	208/1	5	-	-	30/2	3/4" C W2-#10, 1-#10GRD	-	-	-	L6-30R	4.
53	AIR COMPRESSOR	SPECIAL TOOLS 131	208/3	4	-	-	30/3	3/4" C W3-#8, 1-#10GRD	60/3	-	-	-	3.
54	ALIGNMENT LIFT	SERVICE SHOP	208/1	5	SP	34-36	40/2	3/4" C W2-#8, 1-#10GRD	60/2	-	-	-	3.
55	WHEEL BALANCER	SERVICE 130	208/1	3	-	-	20/2	3/4" C W2-#12, 1-#12GRD	-	-	-	L6-20R	4.
56	RT-1	ROOF	208/3	22	D	1-3-5	100/3	1 1/4" C W3-#3, 1-#6GRD	100/3	-	-	-	2.
57	RT-2	ROOF	208/3	15	D	7-9-11	60/3	1" C W3-#6, 1-#10GRD	60/3	-	-	-	2.
58	RT-3	ROOF	208/3	12	D	13-15-17	50/3	1" C W3-#6, 1-#10GRD	60/3	-	-	-	2.
59	RT-4	ROOF	208/3	10	D	8-10-12	45/3	3/4" C W3-#8, 1-#10GRD	60/3	-	-	-	2.
510	MAU-1	ROOF SERVICE	208/3	10	D	2-4-6	80/3	1 1/4" C W3-#3, 1-#6GRD	100/3	-	-	-	2.
511	CU-1	EXTERIOR SERVICE	208/1	2	C	33-35	25/2	3/4" C W2-#10, 1-#10GRD	30/2	-	-	-	2.
512													

NOTES:

- DISCONNECTING MEANS IS INTEGRAL TO UNIT.
- PROVIDE NEMA-3R DISCONNECT ADJACENT TO UNIT. PROVIDE FLEXIBLE CONDUIT FOR FINAL 3'.
- PROVIDE NEMA-1 DISCONNECT ADJACENT TO UNIT. PROVIDE FLEXIBLE CONDUIT FOR FINAL 3'.
- PROVIDE RECEPTACLE TO MATCH CORD. COORDINATE WITH OWNERS EQUIPMENT PRIOR TO PURCHASING RECEPTACLE.
- PROVIDE NEMA-4X EQUIPMENT IN CAR WASH. COORDINATE WITH CAR WASH VENDOR TO DETERMINE WHAT EQUIPMENT IS PROVIDED BY THEM

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SIGNED
8/28/17

EXPIRES
11/30/17

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EQUIPMENT SCHEDULES

E5.3

FIRE ALARM SYMBOLS

	FIRE ALARM CONTROL PANEL (FACP) WITH REMOTE 24 HOUR TELEPHONE MONITORING
	FIRE ALARM ANNUCIATOR PANEL (FAAP)
	FIRE ALARM SYSTEM DUAL ACTION FULL STATION (48" A.F.F.) (MOUNT WITHIN 5'-0" OF DOOR)
	FIRE ALARM SYSTEM SPEAKER (AUDIO ALARM) CEILING MOUNT
	VISUAL STROBE SIGNAL ADJUSTABLE CANDELA STROBE - (80" AFF)
	SMOKE DETECTOR, PHOTOELECTRIC TYPE WITH OPTIONAL CO SENSOR
	CARBON MONOXIDE DETECTOR
	PROJECTED BEAM DETECTOR
	BEAM DETECTOR REFLECTOR
	HEAT DETECTOR, FIXED TEMPERATURE (140° DEGREES)
	DUCT TYPE SMOKE DETECTOR
	REMOTE INDICATING LIGHT WITH KEY-OPERATED TEST SWITCH. VERIFY LOCATION OF LIGHT AND KEY SWITCH WITH INSPECTOR.
	NOTIFICATION APPLIANCE CIRCUIT PANEL
	WALL MOUNTED ELECTRO-MAGNETIC DOOR HOLD
	KNOX BOX
	SPRINKLER ALARM BELL
	SOLENOID VALVE, BY DIVISION 15, WIRED BY E.C.
	SPRINKLER ALARM FLOW SWITCH, BY DIVISION 15, WIRED BY E.C.
	SPRINKLER ALARM TAMPER SWITCH, BY DIVISION 15, WIRED BY E.C.
	END OF LINE RESISTOR

NOTE: FIRE ALARM SYSTEM SHALL BE ZONED PER NFPA CODE. NON-CODED, CONTINUOUS SOUNDING, UL LISTED, WITH SERIES BATTERIES, MINIMUM WIRE TWO CONDUCTOR INSULATED #14 AWG, TWISTED PAIR, MINIMUM 3/4" CONDUIT.

SUBMIT SHOP DRAWINGS TO ENGINEER FOR REVIEW PRIOR TO INSTALLATION. INSTALL ALL DEVICES PER LOCAL CODE, VERIFY PRIOR TO INSTALLATION.

PROVIDE AND INSTALL CONDUIT AND WIRING AS REQUIRED FOR FIRE ALARM DEVICES. CONNECT FACP TO TELEPHONE TERMINAL CABINET. ELEC. CONTRACTOR SHALL VERIFY EXACT QUANTITY OF FIRE ALARM DEVICES PRIOR TO BIDDING.

ELECTRICAL SYMBOLS

	FLUORESCENT LIGHT FIXTURE. CAPITAL LETTER DENOTES FIXTURE TYPE, NUMERAL INDICATES CIRCUIT ASSIGNMENT, SUBSCRIPT LETTER DENOTES SWITCH LEG. SHADING OF ANY FIXTURE INDICATES CIRCUITED TO UNSWITCHED EMERGENCY CIRCUIT. SEE "LIGHTING FIXTURE SCHEDULE."		DUPLEX RECEPTACLE, NEMA 5-20R, 15"A.F.F.
	EXIT SIGN UNIVERSAL MOUNT SHADED AREA INDICATES FACE, ARROWS AS REQUIRED. SEE "LIGHTING FIXTURE SCHEDULE."		ISOLATED GROUND DUPLEX RECEPTACLE, NEMA 5-20R, 15"AFF
	LIGHTING FIXTURE OUTLET - SEE "LIGHTING FIXTURE SCHEDULE"		ISOLATED GROUND QUAD RECEPTACLE, NEMA 5-20R, 15"AFF
	SELF CONTAINED EMERGENCY LIGHTING FIXTURE, WITH BATTERY BACK-UP AND SOLID STATE CHARGER		DUPLEX RECEPTACLE CROSS LINE DENOTES 6" ABOVE COUNTER OR BACKSPLASH.
	SINGLE POLE TOGGLE SWITCH, 48"AFF, SUBSCRIPT LETTER DENOTES SWITCH LEG, 20 AMP, 120 VOLT		DUPLEX RECEPTACLE SHADING DENOTES GROUND FAULT CIRCUIT INTERRUPTER "GFCI". NEMA 5-20R
	THREE WAY TOGGLE SWITCH, 48"AFF, 20AMP, 120VOLT.		QUAD RECEPTACLE
	MANUAL SINGLE PHASE MOTOR STARTER WITH THERMAL OVERLOAD PROTECTION. "P" DENOTES DEVICE FURNISHED WITH PILOT LIGHT, 48"AFF UNLESS INDICATED OTHERWISE		SWITCHED RECEPTACLE HALF THE RECEPTACLE CONTROLLED BY SWITCH
	DIMMER SWITCH, 48"A.F.F.		MULTI USE FLOOR RECEPTACLE
	FAN SPEED SWITCH, 48"A.F.F.		CEILING MOUNT RECEPTACLE
	WALL MOUNTED OCCUPANCY SENSOR "AUTO ON / AUTO OFF" 48"A.F.F. LUTRON - MS-A102-WH		COMBINATION DUPLEX RECEPTACLE AND USB PORT
	WALL MOUNTED VACANCY SENSOR "MANUAL ON / AUTO OFF" 48"A.F.F. LUTRON - MS-A102-WH		SPECIAL PURPOSE OUTLET, COORDINATE REQUIREMENTS WITH SPECIAL OUTLET SCHEDULE
	LOW VOLTAGE CEILING MOUNTED ULTRASONIC/ PASSIVE INFRARED OCCUPANCY SENSOR "AUTO ON/ AUTO OFF OPERATION"		LIGHTING AND/OR POWER PANEL. REFER TO RISER DIAGRAM
	LOW VOLTAGE CEILING MOUNTED ULTRASONIC/ PASSIVE INFRARED OCCUPANCY SENSOR "MANUAL ON/ AUTO OFF OPERATION"		MOTOR
	LOW VOLTAGE CEILING MOUNTED DAYLIGHT PHOTOCELL		PHOTO ELECTRIC CONTROL, ROOF MOUNTED, 120V OPERATION, 20A RATED
	LIGHTING POWER PACK;		AUXILIARY JUNCTION BOX
	NON FUSED SAFETY SWITCH, RATING AS INDICATED		FLEXIBLE CONDUIT CONNECTION
	FUSED DISCONNECT SWITCH, SWITCH AND FUSE RATING AS INDICATED.		TELEPHONE OUTLET, WITH 3/4" CONDUIT STUB ABOVE ACCESSIBLE CEILING. ROUGH-IN ONLY NO CABLING
			DATA SYSTEM OUTLET WITH 3/4" CONDUIT STUB ABOVE ACCESSIBLE CEILING. ROUGH-IN ONLY NO CABLING
			TV OUTLET, WITH 3/4" CONDUIT STUB ABOVE ACCESSIBLE CEILING. ROUGH-IN ONLY NO CABLING
			HDMI PORT
			INTERCOM SPEAKER, ROUGH-IN ONLY NO CABLING
			POWER POLE WITH DIVIDED RACEWAY LEGRAND OR APPROVED EQUAL
			STATIONARY CAMERA. ROUGH-IN ONLY NO CABLING
			PAN, TILT, ZOOM. ROUGH-IN ONLY NO CABLING

ELECTRICAL SPECIFICATIONS

THE GENERAL CONDITIONS AND SUPPLEMENTAL GENERAL CONDITIONS BY THE ARCHITECT SHALL GOVERN WHERE APPLICABLE.

THIS CONTRACTOR SHALL THOROUGHLY FAMILIARIZE HIMSELF WITH THE PLANS AND SHALL VERIFY EXISTING SITE CONDITIONS AT THE JOB SITE BEFORE SUBMITTING BID. FAILURE TO RECOGNIZE WORK REQUIRED SHALL BE AT THE EXPENSE OF THIS CONTRACTOR. NO CONSIDERATION SHALL BE GIVEN FOR ADDITIONAL COMPENSATION AFTER THE LETTING OF BIDS.

ENTIRE INSTALLATION SHALL BE PERFORMED IN A FIRST-CLASS WORKMANLIKE MANNER AND SHALL CONFORM TO ALL APPLICABLE CODES AND ORDINANCES. THE COMPLETED SYSTEMS SHALL BE FULLY OPERATIONAL; ACCEPTANCE BY THE OWNER SHALL BE A CONDITION OF THE CONTRACT. ALL WORK SHALL BE COORDINATED WITH OTHER TRADES IN ORDER TO AVOID INTERFERENCES; PRESERVE MAXIMUM HEADROOM, AND AVOID OMISSIONS. ALL MATERIALS, WORKMANSHIP AND EQUIPMENT SHALL BE GUARANTEED FOR ONE (1) YEAR AFTER SYSTEM ACCEPTANCE.

RECEPTACLES AND SWITCHES SHALL BE THE TYPE AS SHOWN ON THE DRAWINGS AND SHALL BE SPECIFICATION GRADE.

MINIMUM BRANCH WIRE SIZE SHALL BE #12 AWG COPPER EXCEPT FOR CONTROL AND SIGNAL CIRCUITS. INSULATION (INTERIOR) SHALL BE SOLID TYPE THIN OR THIN SIZES #12 THROUGH #10. SIZES #8 THROUGH T50 MCML SHALL BE STRANDED TYPE THIN OR THIN AT THE CONTRACTOR'S OPTION.

MINIMUM OUTLET BOXES SHALL BE 4" SQUARE, UNLESS OTHERWISE SPECIFIED.

CONTRACTOR SHALL NOT SCALE DRAWINGS FOR DIMENSIONS BUT SHALL CONTACT THE PROJECT ARCHITECT FOR ALL DIMENSIONAL DATA AND SHALL VERIFY EXACT LOCATION AND MOUNTING HEIGHTS OF ALL OUTLETS WITH ARCHITECT AND/OR OWNER PRIOR TO INSTALLATION.

GROUNDING SHALL COMPLY WITH REQUIREMENTS OF ALL APPLICABLE CODES.

ALL MATERIALS USED SHALL BE NEW AND BEAR THE U/L LABEL AND BE OF THE APPROPRIATE NEMA STANDARD.

THIS CONTRACTOR SHALL ALLOW IN HIS INITIAL BID THE COST OF SERVICES ON ALL EQUIPMENT INSTALLED UNDER HIS CONTRACT FOR A PERIOD OF ONE (1) YEAR FROM DATE OF FINAL ACCEPTANCE OF THE WORK.

LAYOUT IS DIAGRAMMATIC AND WORK SHALL BE INSTALLED TO MEET FIELD CONDITIONS AND EQUIPMENT SELECTED. PROVIDE SHOP DRAWINGS AS REQUIRED AND VERIFY ALL EQUIPMENT.

PANELBOARDS SHALL BE DEAD FRONT WITH BOLT-ON TYPE CIRCUIT BREAKERS WCU BUS. A TYPED LEGEND, UNDER A CLEAR PLEXAN-GLASS SHALL BE PROVIDED FOR CIRCUIT IDENTIFICATION.

CONTRACTOR SHALL INCLUDE ALL MISCELLANEOUS ITEMS REQUIRED TO COMPLETE THE WORK.

CONTRACTOR SHALL OBTAIN AND PAY FOR ALL PERMITS AND REQUIRED INSPECTION FEES.

IT SHALL BE THE RESPONSIBILITY OF THIS CONTRACTOR TO COORDINATE AND REVIEW THE ELECTRICAL CHARACTERISTICS, AMPACITY AND OTHER REQUIREMENTS OF ALL EQUIPMENT PRIOR TO INSTALLATION.

IT SHALL BE THE RESPONSIBILITY OF THIS CONTRACTOR TO COORDINATE THE LOCATIONS OF CONDUIT ROUTING, EQUIPMENT, LIGHTING, ETC. WITH ALL OTHER TRADES IN THE FIELD PRIOR TO INSTALLATION.

THE ENTIRE INSTALLATION OF ALL COMPONENTS OF THIS PROJECT SHALL COMPLY WITH ALL FEDERAL ADA REQUIREMENTS. VERIFY EXACT LOCATIONS AND HEIGHTS OF ALL FIXTURES AND OUTLETS BEFORE INSTALLATION TO INSURE COMPLIANCE WITH FEDERAL REGULATIONS.

FOR CLARITY OF ALL PLANS, SOME CONDUIT AND WIRE HAS NOT BEEN SHOWN. IT IS THE RESPONSIBILITY OF THIS CONTRACTOR TO FURNISH AND INSTALL COMPLETE AND OPERATING SYSTEMS INCLUDING ALL CONDUIT AND WIRING.

FOR ALL NIGHT LIGHTING, EXIT SIGNS AND BATTERY POWERED EMERGENCY LIGHTING CIRCUITS, THIS CONTRACTOR SHALL USE #10 AWG FOR THE ENTIRE CIRCUIT LENGTH UNLESS INDICATED OTHERWISE.

THIS CONTRACTOR SHALL MAINTAIN THE FIRE RATED INTEGRITY OF ALL FLOORS, CEILINGS AND WALLS. ALL PENETRATIONS THROUGH FIRE RATED BUILDING ELEMENTS SHALL BE EFFECTIVELY SEALED USING APPROVED MATERIALS AND METHODS. ALL LIGHTING FIXTURES MOUNTED IN FIRE RATED CEILINGS SHALL MAINTAIN THE INTEGRITY OF THE FIRE RATED CEILINGS USING APPROVED MATERIALS AND METHODS. REFER TO ARCHITECTURAL DRAWINGS FOR FIRE RATINGS.

THIS CONTRACTOR SHALL INSPECT THE COMPLETE SET OF DRAWINGS AND SPECIFICATIONS TO DETERMINE HIS ENTIRE SCOPE OF WORK. THIS CONTRACTOR SHALL VISIT THE SITE AND BECOME FAMILIAR WITH THE EXISTING CONDITIONS AND EXTENT OF DEMOLITION AND NEW WORK FOR THIS PROJECT PRIOR TO SUBMITTING HIS BID.

THE ELECTRICAL INSTALLATION IS TO BE IN STRICT ACCORDANCE WITH THE APPLICABLE RULES AND REGULATIONS OF ALL LOCAL, STATE AND FEDERAL ELECTRICAL CODES AND THE LOCAL UTILITY COMPANY REQUIREMENTS OR ANY OTHER AUTHORITIES HAVING LAWFUL JURISDICTION.

ALL SITE UNDERGROUND BRANCH CIRCUIT WIRING IN CONDUIT SHALL BE TYPE THWN OR XHHW.

ALL UNDERFLOOR OR EXPOSED TO THE WEATHER CONDUIT SHALL BE HEAVYWALL, GALVANIZED RIGID STEEL, MINIMUM SIZE 3/4".

ALL UNDERGROUND CONDUIT SHALL BE SCHEDULE 40 PVC

PROVIDE BARRIERS TO SEPARATE DIFFERENT PHASES IN 277 VOLT GANGED SWITCH BOXES.

ALL WIRE SHALL BE INSTALLED IN THINWALL, ELECTRICAL METALLIC TUBING (EMT) CONDUIT UNLESS OTHERWISE NOTED. MINIMUM SIZE SHALL BE 3/4" FOR BRANCH CIRCUIT WIRING, DROPS TO SWITCHES AND BRANCH DEVICES MAY BE 1/2" UNLESS OTHERWISE NOTED ON DRAWINGS. ALL THINWALL FITTINGS SHALL BE OF THE STEEL COMPRESSION GLAND TYPE PER ALL APPLICABLE CODE REQUIREMENTS. ALL CONDUITS SHALL BE CONCEALED WHERE POSSIBLE. WHERE EXPOSED, THIS CONTRACTOR SHALL RUN CONDUITS IN STRAIGHT LINES PARALLEL AND/OR PERPENDICULAR TO THE BUILDING CONSTRUCTION. CONDUITS INSTALLED IN AREAS SUBJECT TO MECHANICAL DAMAGE SHALL BE RIGID GALVANIZED, OR INTERMEDIATE METAL TYPE.

THIS CONTRACTOR SHALL PROVIDE ALL TEMPORARY WIRING FOR ALL TRADES FOR CONSTRUCTION EQUIPMENT (i.e. HANDTOOLS, WELDERS, PIPE BENDERS, ETC.) AND CONSTRUCTION LIGHTING PER THE LATEST OSHA STANDARDS. INCLUDE ALL COSTS IN THE BASE BID. THIS CONTRACTOR SHALL ESTABLISH SAFE WORKING PROCEDURES FOR THE PROTECTION OF THE WORKMEN IN ALL PHASES OF WORK, COMPLYING WITH THE APPLICABLE PROVISIONS OF ALL CITY, STATE AND FEDERAL SAFETY LAWS (OSHA).

ABBREVIATIONS

A, AMP - AMPERES	ETR - EXISTING TO REMAIN	NFPA - NATIONAL FIRE PROTECTION ASSOCIATION
AFF - ABOVE FINISHED FLOOR	FLA - FULL LOAD AMPS	NIC - NOT IN CONTRACT
AFG - ABOVE FINISHED GRADE	FLEX - FLEXIBLE	NTS - NOT TO SCALE
ATS - AUTOMATIC TRANSFER SWITCH	GRD - GROUND	NO - NORMALLY OPEN
AWG - AMERICAN WIRE GAUGE	GFI - GROUND FAULT INTERRUPTING	OH - OVERHEAD
C - CONDUIT	HID - HIGH INTENSITY DISCHARGE	PNL - PANEL
CB - CIRCUIT BREAKER	HP - HORSEPOWER	QTY - QUANTITY
CCTV - CLOSED CIRCUIT TELEVISION	IG - ISOLATED GROUND	REF - REFERENCE, REFER
CKT - CIRCUIT	INC - INCANDESCENT	RG5 - RIGID GALVANIZED STEEL
COND - CONDUCTOR	J-BOX, JB - JUNCTION BOX	SQ FT - SQUARE FOOT
CONN - CONNECTION	KCMIL - 1000 CIRCULAR MILS	SS - STAINLESS STEEL
CU - COPPER	KVA - KILOVOLT AMPS	SW - SWITCH
DP - DISTRIBUTION PANEL	KW - KILOWATT	TEL - TELEPHONE
DISC - DISCONNECT	LTG - LIGHTING	TYP - TYPICAL
DN - DOWN	LV - LOW VOLTAGE	UG - UNDERGROUND
EA - EACH	MAX - MAXIMUM	UH - UNIT HEATER
ELEC - ELECTRICAL	MCB - MAIN CIRCUIT BREAKER	V - VOLTAGE
ELEV - ELEVATOR	MDP - MAIN DISTRIBUTION PANEL	VFD - VARIABLE FREQUENCY DRIVE
EM, EMERG - EMERGENCY	MFR - MANUFACTURER	WP - WEATHERPROOF
EMT - ELECTRICAL METALLIC TUBING	MH - MANHOLE, METAL HALIDE, MOUNTING HEIGHT	WT - WEIGHT
EOL - END OF LINE	MIN - MINIMUM	XFMR, XFMR - TRANSFORMER
EUH - ELECTRIC UNIT HEATER	MLO - MAIN LUGS ONLY	
EWG - ELECTRIC WATER COOLER	MTD - MOUNTED	
EWH - ELECTRIC WATER HEATER	N/A - NOT APPLICABLE	
EX - EXISTING	NEC - NATIONAL ELECTRICAL CODE	

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SIGNED
8/28/17

EXPIRES
11/30/17

MAR 20 2017 - DESIGN REVIEW

MAR 29 2017 - DESIGN REVIEW

APRIL 24 2017 - DESIGN REVIEW

MAY 10 2017 - FOR BID

**SYMBOLS,
ABBREVIATIONS
& SPECIFICATIONS**

E6.1