



**GENERAL NOTES**

- SEE CONSTRUCTION PLAN, POWER AND DATA PLAN, REFLECTED CEILING PLAN AND FINISH PLAN NOTES FOR ADDITIONAL NOTES RELATED TO EACH SPECIFIC PLAN.
- THE INTENT OF THE CONTRACT DOCUMENTS IS TO ALLOW FOR THE PERFORMANCE OF THE WORK. EVERY ITEM NECESSARILY REQUIRED MIGHT NOT BE SPECIFICALLY MENTIONED OR SHOWN. UNLESS EXPRESSLY STATED, ALL SYSTEMS AND EQUIPMENT SHALL BE COMPLETED AND APPROPRIATELY OPERABLE. FURNISH AND INSTALL ALL SPECIFIED AND APPROPRIATE ITEMS, AND ALL INCIDENTAL, ACCESSORY, AND OTHER ITEMS NOT SPECIFIED BUT REQUIRED FOR A COMPLETE AND FINISHED PROJECT.
- NO WORK DEFECTIVE IN CONSTRUCTION OR QUALITY OR DEFICIENT IN ANY REQUIREMENTS OF THE CONTRACT DOCUMENTS WILL BE ACCEPTABLE DESPITE THE ARCHITECT'S FAILURE TO DISCOVER OR POINT OUT DEFECTS OR DEFICIENCIES DURING CONSTRUCTION. DEFECTIVE WORK REVEALED WITHIN THE TIME REQUIRED BY GUARANTEES SHALL BE REPLACED BY WORK CONFORMING TO THE INTENT OF THE CONTRACT. NO PAYMENT, EITHER PARTIAL OR FINAL, SHALL BE CONSTRUED AS AN ACCEPTANCE OF DEFECTIVE WORK OR IMPROPER MATERIALS.
- IT IS INTENDED THAT THE CONTRACTOR PROVIDE COMPLETE CONSTRUCTION AND ANY OMISSIONS IN THESE NOTES OR IN THE OUTLINE OF WORK SHALL NOT BE CONSTRUED AS RELIEVING THE CONTRACTOR OF SUCH RESPONSIBILITIES IMPLIED BY SCOPE OF WORK EXCEPT FOR THE ITEMS SPECIFICALLY NOTED.
- SHOULD ANY PORTION OF THE CONTRACT DOCUMENTS PROVE NOT TO BE, FOR WHATEVER REASONS, UNENFORCEABLE, SUCH UNENFORCEABILITY SHALL NOT EXTEND TO THE REMAINDER OF THE CONTRACT NOR SHALL IT VOID ANY OTHER PROVISIONS OF THE CONTRACT.
- THROUGHOUT THE DURATION OF THE PROJECT THE CONTRACTOR SHALL REFRAIN FROM ACTIONS THAT COULD LEAD TO THE FILING OF CLAIMS OF LIEN BY SUBCONTRACTORS, SUPPLIERS OF MATERIALS, LABOR, SERVICE, OR EQUIPMENT OR ANY OTHER INDIVIDUAL OR COMPANY SO ENTITLED UNDER GOVERNING LAWS AND REGULATIONS UNLESS HE CAN SHOW REASONABLE AND JUSTIFIABLE CAUSE. APPROVAL FOR FINAL PAYMENT SHALL BE CONTINGENT UPON THE CONTRACTOR'S OBTAINING AND FURNISHING TO THE ARCHITECT SIGNED RELEASES FROM SUCH INDIVIDUALS OR COMPANIES.
- THE CONTRACTOR IS RESPONSIBLE FOR CHECKING CONTRACT DOCUMENTS, FIELD CONDITIONS AND DIMENSIONS FOR ACCURACY AND CONFIRMING THAT WORK IS BUILDABLE AS SHOWN BEFORE PROCEEDING WITH CONSTRUCTION. IF THERE ARE ANY QUESTIONS REGARDING THESE OR OTHER COORDINATION QUESTIONS, THE CONTRACTOR SHALL SUBMIT THEM, IN WRITING, TO THE DESIGNER. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING A WRITTEN CLARIFICATION FROM THE DESIGNER BEFORE PROCEEDING WITH WORK IN QUESTION, OR RELATED WORK.
- DURING THE COURSE OF CONSTRUCTION, ACTUAL LOCATIONS OF CONSTRUCTION ITEMS DENOTED IN THE CONSTRUCTION DOCUMENTS SHALL BE INDICATED BY THE CONTRACTOR, TO SCALE, IN CONTRASTING INK ON THE DRAWINGS FOR ALL KINDS OF MECHANICAL AND ELECTRICAL WORK, INCLUDING SITE UTILITIES AND CONCEALED DEVIATIONS FROM THE DRAWINGS. UPON COMPLETION OF THE PROJECT, INCLUDING DRAWINGS, PROVIDED BY THE ARCHITECT. THIS SET SHALL BE CONSPICUOUSLY MARKED "AS BUILT SET" AND DELIVERED TO THE ARCHITECT.
- UPON COMPLETION OF THE WORK OR SHORTLY BEFORE, THE ARCHITECT SHALL PREPARE A PUNCH-LIST OF CORRECTIONS AND UNSATISFACTORY AND/OR INCOMPLETE WORK. FINAL PAYMENT WILL BE CONTINGENT UPON THE COMPLETION OF THESE ITEMS UNDER THE TERMS OF THE OWNER/CONTRACTOR AGREEMENT.
- EXECUTE WORK IN ACCORDANCE WITH ANY AND ALL APPLICABLE CODES, MANUFACTURER'S RECOMMENDATIONS AND TRADE AND REFERENCE STANDARDS, INCLUDING BUT NOT LIMITED TO, IBC, SEISMIC CODES, NEC, NPC, UPC, CBC, MFPA, ASME, UMC, AUI, FIRE AND SAFETY CODES, ADA, STATE TITLE AND ADMINISTRATIVE CODES, AND OTHER APPROPRIATE REGULATORY AUTHORITIES LATEST ENFORCED EDITIONS.
- DO NOT SCALE DRAWINGS; DIMENSIONS SHALL GOVERN. DETAILS SHALL GOVERN OVER PLANS AND ELEVATIONS. LARGE-SCALE DETAILS SHALL GOVERN OVER SMALL-SCALE DETAILS.
- THERE SHALL BE NO SUBSTITUTION OF MATERIALS WHERE A MANUFACTURER IS SPECIFIED. WHERE THE TERM "OR APPROVED EQUAL" IS USED, THE ARCHITECT ALONE SHALL DETERMINE EQUALITY BASED UPON INFORMATION SUBMITTED BY THE CONTRACTOR.
- ALL MATERIALS SHALL BE NEW, UNUSED, AND OF THE HIGHEST QUALITY IN EVERY RESPECT UNLESS OTHERWISE NOTED. MANUFACTURED MATERIALS AND EQUIPMENT SHALL BE INSTALLED AS PER MANUFACTURER'S RECOMMENDATIONS AND INSTRUCTIONS UNLESS NOTED OTHERWISE.
- IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO NOTIFY THE ARCHITECT OF ANY CONFLICTS HEREIN - EITHER APPARENT OR OBVIOUS - PRIOR TO THE START OF NEW WORK ON THAT ITEM OR BEAR THE RESPONSIBILITY OF CORRECTING SUCH WORK AS DIRECTED BY THE ARCHITECT.
- VERIFY LAYOUT AND EXACT LOCATION OF ALL PARTITIONS, DOORS, ELECTRICAL/TELEPHONE AND COMMUNICATION OUTLETS, LIGHT FIXTURES AND SWITCHES WITH THE ARCHITECT IN THE FIELD PRIOR TO INSTALLATION.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DISTRIBUTION OF DRAWINGS TO ALL TRADES UNDER HIS/HER JURISDICTION.
- THE CONTRACTOR SHALL NOT PROCEED WITH ANY WORK REQUIRING ADDITIONAL COMPENSATION BEYOND THE CONTRACT AMOUNT WITHOUT WRITTEN AUTHORIZATION FROM THE ARCHITECT. FAILURE TO OBTAIN AUTHORIZATION SHALL INVALIDATE ANY CLAIM FOR EXTRA COMPENSATION.
- THE CONTRACTOR AND SUBCONTRACTORS SHALL PURCHASE AND MAINTAIN CERTIFICATIONS OF INSURANCE WITH RESPECT TO WORKERS COMPENSATION, PUBLIC LIABILITY AND PROPERTY DAMAGE FOR THE LIMITS AS REQUIRED BY LAW. THE CONTRACTOR SHALL BE RESPONSIBLE FOR INITIATING, MAINTAINING AND SUPERVISING ALL SAFETY PRECAUTIONS IN CONNECTION WITH THE WORK.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR CORRECTING ANY DEFECTS FOUND IN EXISTING BUILDING CONSTRUCTION. THIS INCLUDES BUT IS NOT LIMITED TO UNEVEN SURFACES AND FINISHES AT GYPSUM BOARD OR DAMAGED FIREPROOFING. THE CONTRACTOR SHALL PATCH AND REPAIR SURFACES TO MATCH ADJACENT AND ADJOINING SURFACES, UNLESS NOTED OTHERWISE.
- THE CONTRACTOR SHALL PROVIDE STRICT CONTROL AND JOB CLEANING TO PREVENT DUST AND DEBRIS FROM EMANATING FROM CONSTRUCTION AREA.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR SCHEDULING ALL ACCESS INTO ADJACENT PROPERTY WITH THE PROPERTY OWNERS AS REQUIRED FOR PRICING AND CONSTRUCTION.
- THE CONTRACTOR SHALL PROVIDE PROTECTION TO ALL EXISTING FINISHES REMAINING. THE CONTRACTOR SHALL BE RESPONSIBLE TO REPAIR ANY DAMAGES CAUSED THEREIN BY THE CONTRACTOR OR SUBCONTRACTORS.
- "TYPICAL" OR "TYP." MEANS IDENTICAL FOR ALL SIMILAR CONDITIONS UNLESS NOTED OTHERWISE.
- "SIMILAR" OR "SIM." MEANS COMPARABLE CHARACTERISTICS TO THE CONDITION NOTED. VERY DIMENSIONS AND ORIENTATION ON PLAN.
- "VERIFY" OR "VER." MEANS TO ASCERTAIN AND CONFIRM APPLICATION WITH APPROPRIATE PARTY AS NOTED.
- "ALIGN" MEANS TO ACCURATELY LOCATE FINISHED FACES IN THE SAME PLANE.
- THE CONTRACTOR SHALL THOROUGHLY EXAMINE THE PREMISES AND SHALL BASE HIS/HER BID ON THE EXISTING CONDITIONS, NOTWITHSTANDING ANY INFORMATION SHOWN OR NOT SHOWN ON THE CONSTRUCTION DRAWINGS.
- ALL DRAWINGS AND WRITTEN MATERIAL HEREIN CONSTITUTE THE ORIGINAL AND UNPUBLISHED WORK OF THE ARCHITECT, AND THE SAME MAY NOT BE DUPLICATED, USED OR DISCLOSED WITHOUT THE WRITTEN CONSENT OF THE ARCHITECT. ALL COPYRIGHT LAWS AND REVELATIONS PERTAINING TO INTELLECTUAL PROPERTY APPLY, BEFORE, DURING, AND AFTER CONSTRUCTION.
- ALL INSTALLED PLUMBING, MECHANICAL AND ELECTRICAL EQUIPMENT SHALL OPERATE QUIETLY AND FREE OF VIBRATION. ALL SUCH EQUIPMENT SHALL COMPLY WITH LOCAL SOUND ORDINANCES.
- THE CONTRACTOR SHALL VERIFY THAT NO CONFLICTS EXIST IN LOCATIONS OF ANY AND ALL MECHANICAL, TELEPHONE AND COMMUNICATION, ELECTRICAL, LIGHTING, PLUMBING AND SPRINKLER EQUIPMENT. (TO INCLUDE ALL PIPING, DUCTWORK AND CONDUIT) AND THAT ALL REQUIRED CLEARANCES FOR INSTALLATION AND MAINTENANCE OF ABOVE EQUIPMENT ARE PROVIDED.
- THE GENERAL CONTRACTOR SHALL PROVIDE SUBMITTAL INFORMATION FOR ALL APPLIANCES, FIXTURES, EQUIPMENT, HARDWARE, FINISH MATERIAL AND ANY ADDITIONAL SELECTIONS FOR APPROVAL PRIOR TO ORDERING. SUBMITTAL INFORMATION INCLUDES TECHNICAL INFORMATION, IMAGES OF THE PRODUCT, AND FINISH SAMPLES FOR APPROVAL.

**CONSTRUCTION PLAN NOTES**

- SEE GENERAL NOTES.
  - THE CONTRACTOR SHALL PATCH AND REPAIR ALL FIREPROOFING DAMAGE INCURRED DURING DEMOLITION AND/OR CONSTRUCTION. THE CONTRACTOR SHALL FIREPROOF AS REQUIRED BY CODE, ALL NEW PENETRATIONS GENERATED BY THE WORK DESCRIBED IN THESE DOCUMENTS.
  - ALL PARTITION LOCATIONS SHALL BE AS SHOWN ON THE CONSTRUCTION PLAN. IN THE CASE OF A CONFLICT NOTIFY THE ARCHITECT. THE CONSTRUCTION PLAN BY THE ARCHITECT SUPERSEDES ALL OTHER PLANS, INCLUDING ALL CONSTRUCTION PLANS.
  - UPON COMPLETION OF PARTITION LAYOUT, THE CONTRACTOR SHALL NOTIFY THE ARCHITECT. VERIFICATION OF LAYOUT TO BE PROVIDED BY THE ARCHITECT PRIOR TO PARTITION INSTALLATION.
  - ALL GYPSUM BOARD PARTITIONS SHALL BE TAPED AND SANDED SMOOTH WITH NO VISIBLE JOINTS. THE CONTRACTOR SHALL PATCH AND REPAIR SURFACES TO MATCH ADJACENT OR ADJOINING SURFACES WHEREVER REQUIRED. ALL SURFACES SHALL BE ALIGNED AND SANDED SMOOTH.
  - ALL PARTITIONS ARE DIMENSIONED FINISH FACE OF GYPSUM BOARD TO FINISH FACE OF GYPSUM BOARD, U.N.O. ALL DIMENSIONS MARKED "CLEAR" SHALL BE MAINTAINED AND SHALL ALLOW FOR THE THICKNESS OF ALL FINISHES INCLUDING CARPET (AND CUSHION), CERAMIC TILE, VCT AND PLYWOOD UNDERLAYMENT FILE CABINETS.
  - CEILING HEIGHT PARTITIONS SHALL BE INSTALLED TIGHT TO FINISHED CEILING WITH NO JOINTS VARYING MORE THAN 1/8 INCH OVER 6'-0" AND NO JOINTS GREATER THAN 3/16 INCH.
  - PROVIDE METAL CORNER OR EDGE BEADS AT ALL GWB TERMINATION.
  - REFER TO REFLECTED CEILING PLANS FOR GYPSUM BOARD SOFFITS, CEILINGS AND PLENUM BARRIER LOCATIONS.
  - FOR DOORS THAT ARE NOT LOCATED BY SPECIFIC PLAN DIMENSIONS, REFER TO TYPICAL DOOR JAMB DIMENSIONS. DOOR OR CASED OPENINGS WITHOUT LOCATION DIMENSIONS ARE TO BE (6) INCHES FROM THE FACE OF THE ADJACENT PARTITION OR CENTERED BETWEEN PARTITIONS.
  - TRIM THE BOTTOMS OF DOORS TO CLEAR THE TOP OF FINISHED FLOOR BY 3/8 INCH MAXIMUM, U.N.O.
  - DIMENSIONS LOCATING DOORS BY EDGE ARE TO THE INSIDE EDGE OF JAMB, U.N.O.
  - ALL GLASS SHALL BE CLEAR GLASS, U.N.O. GLAZING TONG MARKS SHALL NOT BE VISIBLE. CLEAN AND POLISH ALL GLASS PRIOR TO PROJECT DELIVERY.
  - ALL MILLWORK ABOVE 4'-0" SHALL BE BOLTED TO PARTITION. THE CONTRACTOR SHALL PROVIDE FIRE TREATED BLOCKING AS REQUIRED.
  - INSTALL ALL NEW OR RELOCATED APPLIANCES SPECIFIED AND ALL EQUIPMENT ACCORDING TO MANUFACTURER'S INSTRUCTIONS AND SPECIFICATIONS. VERIFY ALL CLEAR OPENING DIMENSIONS IN CABINERY ADEQUATELY ACCOMMODATE THE SPECIFIED OR RELOCATED EQUIPMENT.
  - PROVIDE BLOCKING FOR ALL "IN CONTRACT" WALL MOUNTED SHELVES, FIXTURES, AND MILLWORK AND FOR ITEMS SPECIFICALLY NOTED THAT ARE N.I.C.
  - DIMENSIONS MARKED "+I" MEAN A TOLERANCE NOT GREATER NOR SMALLER THAN 2 INCHES FROM INDICATED DIMENSION, U.N.O. VERIFY FIELD DIMENSIONS EXCEEDING TOLERANCE WITH THE ARCHITECT.
  - ALL HEIGHTS ARE DIMENSIONED FROM TOP OF FINISH FLOOR, U.N.O.
  - ALL WORK SHALL BE ERECTED AND INSTALLED PLUMB, LEVEL, SQUARE AND TRUE AND IN PROPER ALIGNMENT.
  - DO NOT SCALE DRAWINGS, WRITTEN DIMENSIONS GOVERN.
- POWER & DATA PLAN NOTES**
- SEE GENERAL NOTES.
  - SURVEY FIELD CONDITIONS AND VERIFY THAT WORK IS FEASIBLE AS SHOWN. VERIFY LOCATION OF FLOOR OUTLETS AND OTHER OUTLETS IN RELATION TO STRUCTURAL AND OTHER ELEMENTS AS REQUIRED. NOTIFY THE ARCHITECT IN WRITING OF ANY DISCREPANCIES BEFORE PROCEEDING WITH WORK.
  - ARCHITECTURAL DRAWINGS DETERMINE THE LOCATION OF OUTLETS AND SUPERSEDE CONSULTANTS DRAWINGS, UNLESS NOTED OTHERWISE. VERIFY FIELD CONDITIONS.
  - ELECTRICAL DESIGN TO BE HANDLED AS DESIGN/BUILD, WHERE APPLICABLE.
  - FURNITURE AND EQUIPMENT IS SHOWN FOR COORDINATION OF OUTLETS AND DEVICES ONLY.
  - ALL SWITCHES SHOWN ADJACENT TO EACH OTHER SHALL BE GANGED AND COVERED IN A SINGLE COVER PLATE, U.N.O. IF SWITCH DOES NOT ALLOW GANGING, VERIFY LOCATION WITH THE ARCHITECT PRIOR TO INSTALLATION.
  - WHERE THERMOSTATS AND LIGHT SWITCHES OCCUR TOGETHER INSTALL BOTH ALIGNED VERTICALLY.
  - ALL ELECTRICAL AND COMMUNICATION OUTLETS AND SWITCHES SHALL BE THE SAME COLOR AS THE COVER PLATE, U.N.O. COORDINATE COVER PLATE COLOR WITH THE ARCHITECT PRIOR TO ORDERING OR INSTALLATION.
  - STANDARD MOUNTING HEIGHTS:  
ELECTRICAL AND COMMUNICATION OUTLETS +18" A.F.F. TO CENTER OF BOX  
WORK COUNTER OUTLETS AT +44" A.F.F. TO CENTER OF BOX  
WALL MOUNTED TELEPHONES AT +50" A.F.F. TO CENTER OF BOX  
SWITCHES @ +44" A.F.F.
  - ALL LIGHT SWITCHES AND OUTLETS TO BE LOCATED 6" FROM THE LATCH SIDE OF THE DOORFRAME, U.N.O.
  - SPECIAL OUTLET MOUNTING HEIGHTS ARE NOTED ADJACENT TO THE OUTLET.
  - AT ALL VOICE AND DATA LOCATIONS PROVIDE MUD RING AND PULL STRING OR CONDUIT IF REQUIRED BY LOCAL BUILDING OFFICIAL. CABLING PROVIDED BY OTHERS.
  - ALL ELECTRICAL, MECHANICAL THERMOSTATS AND LIFE SAFETY DEVICES TO BE LOCATED WITHIN 18" OF THE END OF A WALL OR A DOOR, U.N.O., VERTICALLY ALIGN DEVICES WITH SWITCHES WHERE APPLICABLE.
  - OUTLETS SHOWN BACK TO BACK ON PARTITION WALLS SHALL BE OFFSET 1'-0". SEPARATE BACK-TO-BACK OUTLETS 2'-0" MIN. AT ACOUSTICAL PARTITIONS, U.N.O.
  - COORDINATE ALL WORK RELATED TO SPECIAL EQUIPMENT WITH MANUFACTURER'S RECOMMENDATIONS, SPECIFICATIONS AND INSTRUCTIONS.
  - ALL EXISTING AND NEW FLOOR SLAB PENETRATIONS FOR PIPING AND CONDUIT SHALL BE FULLY PACKED AND SEALED IN ACCORDANCE WITH THE APPLICABLE BUILDING AND FIRE CODES. COORDINATE FLOOR CORES WITH STRUCTURAL BEAMS AND MECHANICAL SYSTEMS BELOW.
  - UPON COMPLETION OF OUTLET LAYOUT, THE CONTRACTOR SHALL NOTIFY THE ARCHITECT. THE ARCHITECT SHALL SITE VERIFY ALL OUTLET LOCATIONS PRIOR TO COMMENCEMENT OF CORING OR OUTLET INSTALLATION.
  - FURNISH AND INSTALL UNDERWRITERS LABORATORIES, INC. (UL) LABELED DEVICES THROUGHOUT.
  - MAINTAIN 4 INCH HORIZONTAL CLEARANCE IN BOTH DIRECTION MINIMUM FROM EDGE OF COVER PLATE, AND THE LIKE, FOR WALL MOUNTED OUTLETS, OR MOUNTMENT FOR FLOOR MOUNTED OUTLETS, AND THE LIKE, ADJACENT TO A WALL, COLUMN OR SIMILAR ELEMENTS, U.N.O.
  - INDICATED DIMENSIONS ARE TO THE CENTER OF THE COVER PLATE OF MOUNTMENT. CLUSTERS OF OUTLETS ARE DIMENSIONED TO THE CENTER OF THE CLUSTER, U.N.O. GANGED COVER PLATES SHALL BE ONE-PIECE TYPE, U.N.O.
  - WALL OUTLETS NOT DIMENSIONED AND SHOWN NEAR THE CORNER SHALL BE INSTALLED 8" FROM THE CORNER. WALL OUTLETS SHOWN NEAR THE CENTER OF A PARTITION SHALL BE INSTALLED ON THE CLOSEST STUD NEAREST THE CENTER, U.N.O.

**REFLECTED CEILING PLAN NOTES**

- SEE GENERAL NOTES.
  - THE CONTRACTOR SHALL COORDINATE THE WORK OF ALL TRADES INVOLVED IN THE CEILING WORK TO INSURE CLEARANCES FOR FIXTURES, DUCTS, PIPING, CEILING SUSPENSION SYSTEM, ETC. MAINTAIN THE FINISHED CEILING HEIGHTS INDICATED ON THE ARCHITECT'S DRAWINGS.
  - REFER TO DESIGN DRAWINGS AND SPECIFICATIONS FOR LOCATION ONLY. MECHANICAL AND ELECTRICAL TO BE HANDLED AS "DESIGN/BUILD", WHERE APPLICABLE.
  - PROVIDE FIRE PROTECTION AT ALL PENETRATIONS OF FIRE RATED ELEMENTS AS REQUIRED BY THE GOVERNING AUTHORITY.
  - PERIMETER CEILING ANGLE, WHERE OCCURS, SHALL BE INSTALLED TIGHT TO VERTICAL SURFACES, FREE FROM CURVES, BREAKS OR OTHER IRREGULARITIES AND PAINTED TO MATCH CEILING FINISH, U.N.O.
  - THE ELECTRICAL SUBCONTRACTOR SHALL FURNISH AND INSTALL ALL FIXTURES, ASSOCIATED TRIM AND FIXTURE LAMPS AS SPECIFIED, U.N.O.
  - ALL SWITCHES, OUTLETS, THERMOSTATS OR ANY OTHER ELECTRICAL ITEMS SHOWN ON PLAN SIDE BY SIDE BUT CALLED OUT AT DIFFERENT HEIGHTS SHOULD BE STACKED VERTICALLY.
  - ALL SWITCHES SHOWN ADJACENT TO EACH OTHER SHALL BE GANGED AND COVERED IN A SINGLE COVER PLATE, U.N.O. IF SWITCH DOES NOT ALLOW GANGING, VERIFY LOCATION WITH THE DESIGNER PRIOR TO INSTALLATION.
  - WHERE THERMOSTATS AND LIGHT SWITCHES OCCUR TOGETHER INSTALL BOTH ALIGNED VERTICALLY.
  - ACCESS PANEL TYPE AND LOCATION SHALL BE SUBMITTED TO THE ARCHITECT FOR APPROVAL PRIOR TO COMMENCING WORK.
  - ALL ELECTRICAL AND MECHANICAL THERMOSTATS, AND LIFE SAFETY DEVICES TO BE LOCATED WITHIN 18" OF THE END OF A WALL OR A DOOR, U.N.O. VERTICALLY ALIGN DEVICES WITH SWITCHES WHERE APPLICABLE.
  - ALL SWITCHES AND DIMMERS SHALL BE LOCATED 48" ABOVE FINISHED FLOOR TO CENTER OF SWITCH, U.N.O. MULTIPLE SWITCHES AT ONE LOCATION SHALL BE GANGED TOGETHER AND FINISHED WITH TONE COVER PLATE, U.N.O.
  - THE REFLECTED CEILING PLAN INDICATES THE LOCATION OF CEILING TYPES, CEILING FIXTURES AND ASSOCIATED ITEMS.
  - ALL SPECIFIC INFORMATION CONCERNING INSTALLATION OF VARIOUS ABOVE CEILING ELEMENTS ARE TO BE FOUND IN THE HVAC, PLUMBING, AND FIRE PROTECTION, ELECTRICAL AND LIGHTING DRAWINGS, AND SPECIFICATIONS.
  - CONTRACTOR TO NOTIFY ARCHITECT OF ANY CONFLICTS OF LIGHT FIXTURE LOCATION WITH MAIN RUNNER, DUCTS, STRUCTURAL, HVAC (E) CONDUIT PRIOR TO FRAMING FOR LIGHTS. ANY DISCREPANCIES BETWEEN THE ARCHITECT'S RCP AND ACTUAL FIELD CONDITIONS ARE TO BE CLARIFIED WITH THE ARCHITECT'S PRIOR TO INSTALLATION.
  - SUBMIT GRILLE, THERMOSTAT AND OTHER FIXTURES AND ELEMENT LAYOUT TO THE ARCHITECT FOR REVIEW AT LEAST 2 WEEKS PRIOR TO INSTALLATION.
  - VERIFY FIELD CONDITIONS AND LOCATIONS OF ALL PLUMBING, MECHANICAL DUCTS, STRUCTURAL ELEMENTS AND ANY AND ALL OTHER APPLICABLE ITEMS. INSTALL APPLICABLE NEW PLUMBING, MECHANICAL, FANS, DUCTS, CONDUITS AND OTHER RELATED AND PERTINENT ITEMS SO AS TO NOT CONFLICT WITH LUMINARIES AND ANY AND ALL FIELD CONDITIONS.
  - FURNISH AND INSTALL UNDERWRITERS LABORATORIES, INC. (UL) LABELED DEVICES THROUGHOUT.
  - INSTALL LIGHT FIXTURES WITH PROTECTIVE MYLAR OR SIMILAR COVER OVER LOUVER LENS, BAFFLE, AND THE LIKE, TO AVOID FIXTURE SOILING OR DAMAGE. FIXTURES SHALL BE MAINTAINED CLEAN AND AS NEW. LAMPS SHALL BE NEW AT PROJECT COMPLETION.
- ELECTRICAL PLAN NOTES**
- SEE GENERAL NOTES.
  - SURVEY FIELD CONDITIONS AND VERIFY THAT WORK IS FEASIBLE AS SHOWN. VERIFY LOCATION OF FLOOR OUTLETS AND OTHER OUTLETS IN RELATION TO STRUCTURAL AND OTHER ELEMENTS AS REQUIRED. NOTIFY THE DESIGNER IN WRITING OF ANY DISCREPANCIES BEFORE PROCEEDING WITH WORK.
  - DESIGNER'S DRAWINGS DETERMINE THE LOCATION OF OUTLETS AND SUPERSEDE CONSULTANTS DRAWINGS, UNLESS NOTED OTHERWISE. VERIFY FIELD CONDITIONS.
  - ELECTRICAL DESIGN TO BE HANDLED AS DESIGN/BUILD.
  - FURNITURE AND EQUIPMENT IS SHOWN FOR COORDINATION OF OUTLETS AND DEVICES ONLY.
  - ALL SWITCHES SHOWN ADJACENT TO EACH OTHER SHALL BE GANGED AND COVERED IN A SINGLE COVER PLATE, U.N.O. IF SWITCH DOES NOT ALLOW GANGING, VERIFY LOCATION WITH THE DESIGNER PRIOR TO INSTALLATION.
  - WHERE THERMOSTATS AND LIGHT SWITCHES OCCUR TOGETHER, INSTALL BOTH ALIGNED VERTICALLY.
  - ALL ELECTRICAL AND COMMUNICATION OUTLETS AND SWITCHES SHALL BE THE SAME COLOR AS THE COVER PLATE, U.N.O. COORDINATE COVER PLATE COLOR WITH THE DESIGNER PRIOR TO ORDERING OR INSTALLATION.
  - STANDARD MOUNTING HEIGHTS:  
A. ELECTRICAL AND COMMUNICATION OUTLETS @ 18" A.F.F. TO CENTER OF BOX.  
B. WALL-MOUNTED TELEPHONES @ 50" A.F.F. TO CENTER OF BOX.  
C. SWITCHES @ 44" A.F.F.
  - ALL LIGHT SWITCHES AND OUTLETS TO BE LOCATED 8" FROM THE LATCH SIDE OF THE DOOR FRAME, U.N.O.
  - SPECIAL OUTLET MOUNTING HEIGHTS ARE NOTED ADJACENT TO THE OUTLET.
  - AT ALL VOICE AND DATA LOCATIONS PROVIDE MUD RING AND PULL STRING OR CONDUIT IF REQUIRED BY LOCAL BUILDING OFFICIAL. CABLING PROVIDED BY OTHERS.
  - ALL ELECTRICAL, MECHANICAL THERMOSTATS AND LIFE SAFETY DEVICES TO BE LOCATED WITHIN 18" OF THE END OF A WALL OR A DOOR, VERTICALLY ALIGN DEVICES WITH SWITCHES WHERE APPLICABLE.
  - OUTLETS SHOWN BACK-TO-BACK ON PARTITION WALLS SHALL BE OFFSET 1'-0". SEPARATE BACK-TO-BACK OUTLETS 2'-0" MIN. AT ACOUSTICAL PARTITIONS, U.N.O.
  - COORDINATE ALL WORK RELATED TO SPECIAL EQUIPMENT WITH MANUFACTURER'S RECOMMENDATIONS, SPECIFICATIONS AND INSTRUCTIONS.
  - ALL EXISTING AND NEW FLOOR SLAB PENETRATIONS FOR PIPING AND CONDUIT SHALL BE FULLY PACKED AND SEALED IN ACCORDANCE WITH THE APPLICABLE BUILDING AND FIRE CODES. COORDINATE FLOOR CORES WITH STRUCTURAL BEAMS AND MECHANICAL SYSTEMS BELOW.
  - UPON COMPLETION OF OUTLET LAYOUT, THE CONTRACTOR SHALL NOTIFY THE DESIGNER. THE DESIGNER SHALL SITE VERIFY ALL OUTLET LOCATIONS PRIOR TO COMMENCEMENT OF CORING OR OUTLET INSTALLATION.
  - FURNISH AND INSTALL UNDERWRITERS LABORATORIES, INC. (UL) LABELED DEVICES THROUGHOUT.
  - MAINTAIN 4 INCH HORIZONTAL CLEARANCE IN BOTH DIRECTION MINIMUM FROM EDGE OF COVER PLATE, AND THE LIKE, FOR WALL-MOUNTED OUTLETS OR MOUNTMENT FOR FLOOR MOUNTED OUTLETS, AND THE LIKE, ADJACENT TO A WALL, COLUMN OR SIMILAR ELEMENTS, U.N.O.
  - INDICATED DIMENSIONS ARE TO THE CENTER OF THE COVER PLATE OF MOUNTMENT. CLUSTERS OF OUTLETS ARE DIMENSIONED TO THE CENTER OF THE CLUSTER, U.N.O. GANGED COVER PLATES SHALL BE ONE PIECE TYPE, U.N.O.
  - WALL OUTLETS NOT DIMENSIONED AND SHOWN NEAR THE CORNER SHALL BE INSTALLED 8" FROM THE CORNER. WALL OUTLETS SHOWN NEAR THE CENTER OF A PARTITION SHALL BE INSTALLED ON THE STUD NEAREST THE CENTER, U.N.O.
  - SEC R404.1 - Provide a note on the drawing.  
"A minimum of 75 percent of permanently installed lamps in lighting fixtures shall be high-efficacy lamps."

**FINISH PLAN NOTES**

- SEE GENERAL NOTES.
  - PAINTING - NO PAINTING OR INTERIOR FINISHING SHALL BE DONE UNDER CONDITIONS, WHICH WILL JEOPARDIZE THE QUALITY OR APPEARANCE OF SUCH WORK. ALL WORKMANSHIP, WHICH IS JUDGED LESS THAN FIRST QUALITY BY THE ARCHITECT, WILL BE REJECTED.  
A. ALL COLORS ARE TO BE SELECTED OR APPROVED BY THE ARCHITECT.  
B. ALL NEW AND EXISTING SURFACES SHALL BE PREPARED TO RECEIVE THE SPECIFIED FINISH.  
C. PAINT GRADE WOODWORK SHALL BE HAND SANDED AND DUSTED CLEAN. ALL KNOT HOLES, PITCH POCKETS OR SAPPY PORTIONS SHALL BE SCRAPPED AND SEALED. FILL NAIL HOLES.  
CRACKS OR DEFECTS CAREFULLY WITH MATCHING PUTTY. INTERIOR PAINT GRADE WOODWORK FINISHES SHALL BE SANDED BETWEEN COATS.  
D. INTERIOR GYPSUM WALLBOARD SURFACES SHALL BE WIPED WITH A DAMP CLOTH JUST PRIOR TO APPLICATION OF THE FIRST COAT, IN ORDER TO LAY FLAT ANY NAP, WHICH MAY HAVE FORMED, IN THE SANDING PROCESS.  
E. ALL EXISTING FERROUS METAL SHALL BE LIGHTING SANDED TO PREPARE A SMOOTH SURFACE.  
F. ALL EXISTING GWB SHALL BE PREPPED AND PATCHED TO MATCH ADJACENT SURFACE.  
G. THE CONTRACTOR SHALL, UPON COMPLETION, REMOVE ALL PAINT FROM WHERE IT HAS SPILLED, SPLASHED OR SPLATTERED ON EXPOSED ADJACENT SURFACES.  
H. PROTECT ALL SURFACES NOT TO RECEIVE PAINT FROM ALL DRIPS, SPLATTERS AND SPILLS. IMMEDIATELY CLEAN ANY SPILL TO AVOID DAMAGING THE EXISTING SURFACE.  
I. ALL VENEER STAINS SHALL HAVE UNIFORM COLOR.  
J. THE CONTRACTOR SHALL PROVIDE THE ARCHITECT WITH A MINIMUM OF (2) 8" X 10" BRUSH-OUTS OF EACH COLOR AND FINISH FOR THE ARCHITECT'S APPROVAL AT LEAST TWO WEEKS PRIOR TO SITE APPLICATION. A WALL TEST WILL BE REQUIRED ONE WEEK PRIOR TO FINAL APPROVAL. THE ARCHITECT RESERVES THE RIGHT TO ADJUST ANY COLOR ONCE THE WALL TEST HAS BEEN MADE.
  - ELECTRICAL SWITCH AND OUTLET COVER PLATES, SURFACE HARDWARE, ETC., SHALL BE INSTALLED AFTER PAINTING AND/OR APPLICATION OF WALLCOVERINGS AND CARPET. REMOVE ALL EXISTING SWITCH AND OUTLET COVER PLATES, SURFACE HARDWARE, GRILLS, SIGNAGE, ETC PRIOR TO PAINTING. REINSTALL WHEN PAINTING IS COMPLETE.
  - THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALLOWING FOR DELIVERY LEAD TIMES FOR ALL FINISHES WITHIN THE CONSTRUCTION SCHEDULE. ALL DELIVERY TIMES MUST BE CONFIRMED, AND ANY EXCESSIVE LENGTH MUST BE BROUGHT TO THE ARCHITECT'S ATTENTION IMMEDIATELY TO ALLOW FOR RE-SPECIFICATION IF NEEDED.
  - THE CONTRACTOR SHALL MODIFY EXISTING FLOOR SURFACES AS REQUIRED TO INSTALL NEW FLOORING MATERIALS THUS PREVENTING NOTICEABLE LUMPS, OR DEPRESSIONS, WHICH MAY CAUSE UNUSUAL WEAR TO NEW MATERIALS.
  - SEE FINISH PLAN, INTERIOR ELEVATIONS AND DETAILS FOR CLARIFICATION OF EXTENT OF FINISH.
  - THE CONTRACTOR SHALL SUBMIT TO THE ARCHITECT A CARPET SEAMING DIAGRAM AT LEAST 2 WEEKS PRIOR TO INSTALLATION.
  - THE CONTRACTOR SHALL COORDINATE WITH THE ARCHITECT FOR COLOR FINISH OF ALL WALL-MOUNTED DEVICES ON ACCENT COLORED WALLS SUCH THAT DEVICES SHALL MATCH THE COLOR OF THE WALL (SWITCHES, OUTLETS, STROBES, ETC.) UNLESS FINISH IS GOVERNED BY CODE.
- PAINT SCHEDULE FOR INTERIOR SURFACES**
- BENJAMIN MOORE OR EQUAL. REFER TO FINISH PLAN FOR COLOR SELECTIONS.**
- GYPSUM WALLBOARD: WALLS AND CEILINGS.  
A. LATEX, EGGSHELL. CLEAN AND ROLL ON THREE-COAT SYSTEM.  
1. BOTTOM COAT: BENJAMIN MOORE, PRISTINE ECO SPEC PRIMER  
2. INTERMEDIATE COAT: BENJAMIN MOORE, PRISTINE ECO SPEC  
3. TOP COAT: BENJAMIN MOORE, PRISTINE ECO SPEC
  - FERROUS METAL: HOLLOW METAL DOORS AND FRAMES, HANDRAILS, EXPOSED MISCELLANEOUS METALS.  
A. ACRYLIC SEMIGLOSS. SAND EXISTING METAL AND BRUSH ON THREE-COAT SYSTEM.  
1. BOTTOM COAT: BENJAMIN MOORE, PRISTINE ECO SPEC PRIMER  
2. INTERMEDIATE COAT: BENJAMIN MOORE, PRISTINE ECO SPEC  
3. TOP COAT: BENJAMIN MOORE, PRISTINE ECO SPEC
  - WOOD: WOOD TRIM, WOOD DOORS AND FRAMES.  
A. ACRYLIC SEMIGLOSS. SAND EXISTING WOOD AND BRUSH ON THREE-COAT SYSTEM.  
1. BOTTOM COAT: BENJAMIN MOORE, PRISTINE ECO SPEC PRIMER  
2. INTERMEDIATE COAT: BENJAMIN MOORE, PRISTINE ECO SPEC  
3. TOP COAT: BENJAMIN MOORE, PRISTINE ECO SPEC
- GENERAL LIGHTING NOTES**
- THE CONTRACTOR SHALL COORDINATE THE WORK OF ALL TRADES INVOLVED IN THE CEILING WORK TO INSURE CLEARANCES FOR FIXTURES, DUCTS, PIPING, CEILING SUSPENSION SYSTEM, ETC. MAINTAIN FINISHED CEILING HEIGHTS INDICATED ON THE ARCHITECT/DESIGNER'S DRAWINGS.
  - REFER TO DESIGN DRAWINGS AND SPECIFICATIONS FOR LOCATION ONLY. MECHANICAL AND ELECTRICAL TO BE HANDLED AS "DESIGN/BUILD",
  - PROVIDE FIRE PROTECTION AT ALL PENETRATIONS OF FIRE-RATED ELEMENTS AS REQUIRED BY THE GOVERNING AUTHORITY.
  - PERIMETER CEILING ANGLE WHERE OCCURS SHALL BE INSTALLED TIGHT TO VERTICAL SURFACES, FREE FROM CURVES, BREAKS OR OTHER IRREGULARITIES AND PAINTED TO MATCH CEILING FINISH.
  - THE ELECTRICAL SUBCONTRACTOR SHALL FURNISH AND INSTALL ALL FIXTURES, ASSOCIATED TRIM AND FIXTURE LAMPS AS SPECIFIED.
  - ALL SWITCHES, OUTLETS, THERMOSTATS OR ANY OTHER ELECTRICAL ITEMS SHOWN ON PLAN SIDE BY SIDE BUT CALLED OUT AT DIFFERENT HEIGHTS SHOULD BE STACKED VERTICALLY.
  - ALL SWITCHES SHOWN ADJACENT TO EACH OTHER SHALL BE GANGED AND COVERED IN A SINGLE COVER PLATE, U.N.O. IF SWITCH DOES NOT ALLOW GANGING, VERIFY LOCATION WITH THE ARCHITECT/DESIGNER PRIOR TO INSTALLATION.
  - WHERE THERMOSTATS AND LIGHT SWITCHES OCCUR TOGETHER, INSTALL BOTH ALIGNED VERTICALLY.
  - ACCESS PANEL TYPE AND LOCATION SHALL BE SUBMITTED TO THE ARCHITECT/DESIGNER FOR APPROVAL PRIOR TO COMMENCING WORK.
  - ALL ELECTRICAL AND MECHANICAL THERMOSTATS AND LIFE SAFETY DEVICES TO BE LOCATED WITHIN 18 INCHES OF THE END OF A WALL OR A DOOR. VERTICALLY ALIGN DEVICES WITH SWITCHES WHERE APPLICABLE.
  - ALL SWITCHES AND DIMMERS SHALL BE LOCATED 48 INCHES ABOVE FINISHED FLOOR TO CENTER OF SWITCH, U.N.O. MULTIPLE SWITCHES AT ONE LOCATION SHALL BE GANGED TOGETHER AND FINISHED WITH ONE TONE COVER PLATE, U.N.O.
  - THE REFLECTED CEILING PLAN INDICATES THE LOCATION OF CEILING TYPES, CEILING FIXTURES AND ASSOCIATED ITEMS.
  - ALL SPECIFIC INFORMATION CONCERNING INSTALLATION OF VARIOUS ABOVE CEILING ELEMENTS ARE TO BE FOUND IN THE HVAC, PLUMBING AND FIRE PROTECTION, ELECTRICAL AND LIGHTING DRAWINGS.
  - CONTRACTOR TO NOTIFY ARCHITECT/DESIGNER OF ANY CONFLICTS OF LIGHT FIXTURE LOCATION WITH MAIN RUNNER, DUCTS, STRUCTURAL, HVAC (E) CONDUIT PRIOR TO FRAMING FOR LIGHTS. ANY DISCREPANCIES BETWEEN THE ARCHITECT/DESIGNER'S RCP AND ACTUAL FIELD CONDITIONS ARE TO BE CLARIFIED WITH THE DESIGNER PRIOR TO INSTALLATION.
  - SUBMIT GRILLE, THERMOSTAT AND OTHER FIXTURES AND ELEMENT LAYOUT TO THE ARCHITECT/DESIGNER FOR REVIEW AT LEAST 2 WEEKS PRIOR TO INSTALLATION.
  - VERIFY FIELD CONDITIONS AND LOCATIONS OF ALL PLUMBING, MECHANICAL DUCTS, STRUCTURAL ELEMENTS AND ANY AND ALL OTHER APPLICABLE ITEMS. INSTALL APPLICABLE NEW PLUMBING, MECHANICAL, FANS, DUCTS, CONDUITS AND OTHER RELATED AND APPURTENANT ITEMS SO AS TO NOT CONFLICT WITH LUMINARIES AND ANY AND ALL FIELD CONDITIONS.
  - FURNISH AND INSTALL UNDERWRITERS LABORATORIES, INC. (UL) LABELED DEVICES THROUGHOUT.
  - INSTALL LIGHT FIXTURES WITH PROTECTIVE MYLAR OR SIMILAR COVER OVER LOUVER LENS, BAFFLE, AND THE LIKE, TO AVOID FIXTURE SOILING OR DAMAGE. FIXTURES SHALL BE MAINTAINED CLEAN AND AS NEW. LAMPS SHALL BE NEW AT PROJECT COMPLETION.



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**MUKHERJEE-SHROFF RESIDENCE  
RESIDENTIAL REMODEL**

8116 SE 73RD ST  
MERCER ISLAND, WA 98040

**PROJECT NUMBER**

**22005**

9221

REGISTERED  
ARCHITECT

SUZANNE ZAHR  
STATE OF WASHINGTON

**ISSUED / REVISIONS      DATE**

ISSUED / REVISIONS	DATE

**ISSUE DATE:                      01.12.23**

**DRAWN BY:                              SZ**

**CHECKED BY:                            SZ**

**GENERAL NOTES**

**SHEET NUMBER**

**A0.1**

**PERMIT SET**



SUZANNE ZAHR INC.

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9221



ISSUED / REVISIONS DATE

ISSUE DATE: 01.12.23

DRAWN BY: SA

CHECKED BY: SZ

**SCHEDULES**

SHEET NUMBER

**A0.2**

**PERMIT SET**

2018 WSEC Residential Energy Compliance Certificate (Effective February 1, 2021)

Property address: \_\_\_\_\_

Builder/registered design professional name: \_\_\_\_\_

Builder/reg. design pro. signature: \_\_\_\_\_

Conditioned floor area: \_\_\_\_\_ ft<sup>2</sup> (per building permit)

**R-Values (R303.1.1)**

Ceiling/Vaulted R-\_\_\_\_ Floors: Over unconditioned space R-\_\_\_\_  
Attic: Attic R-\_\_\_\_ Slab-on-grade floor R-\_\_\_\_

Walls: Above grade R-\_\_\_\_ Fully insulated slab? Y/N (Circle one)  
Below, int. R-\_\_\_\_ Doors: R-\_\_\_\_, R-\_\_\_\_, R-\_\_\_\_  
Below, ext. R-\_\_\_\_

**U-Value of Windows, Skylights and Doors (R303.1.1.3)**

Average area weighted U-value from Glazing Worksheet Average U- \_\_\_\_

**Fuel Normalization (Tables R406.2) and Energy Credits (Table R406.3)**

System Type Number (1 to 5) \_\_\_\_\_ (Select one)

Energy Credits selected (1 to 7) \_\_\_\_\_

Fuel Normalization Credit \_\_\_\_\_ + Total Energy Credits \_\_\_\_\_ = Total Credits \_\_\_\_\_

**Heating, Cooling and Domestic Hot Water**

System Type (Manufacturer and Model Number)	Efficiency
Heating	
Cooling	
DHW	
Drain water heat recovery	

**Onsite Renewable Energy Electric Power System**

System type \_\_\_\_\_ System design capacity \_\_\_\_\_ kW  
Rated annual generation \_\_\_\_\_ kWh/yr

Appliances (Manufacturer and Model)	Energy Star? (Circle one)
Dish washer	Y or N
Refrigerator	Y or N
Washer	Y or N
Dryer	Y or N

Vented or unvented? If vented, CEF rating \_\_\_\_\_

Gas fireplace / heating stove (Section R402.4.2) Fireplace efficiency (FE) \_\_\_\_\_  
Heating or Decorative? (Circle one)

**HVAC System Duct Leakage Testing (R403.3)** Circle one

All ductwork and air handler in conditioned space? (See Option 4.2) Y or N

All ductwork in unconditioned spaces buried and tested at 3% total leakage, and air handler in conditioned space? (See Option 4.1.) Y or N

All ductwork & air handler outside conditioned space insulated to minimum R-8? Y or N

Air handler present at duct leakage test? (Total leakage 4% if yes, 3% if no) Y or N

HVAC leakage to outside test conducted at final? Y or N

Do HVAC duct leakage tests include GPS and time stamp verification? Y or N

HVAC system leakage test calculated design target: \_\_\_\_\_ CFM @ 25 Pa

HVAC system leakage test measured results: \_\_\_\_\_ CFM @ 25 Pa

**Building Leakage Testing (R402.4.1.2)**

Dwelling unit leakage test calculated design target: \_\_\_\_\_ ACH @ 50 Pa

Dwelling unit leakage test, measured results: \_\_\_\_\_ ACH @ 50 Pa

Whole Building Leakage test (R2 non-corridor only) design target: \_\_\_\_\_ CFM/sf @ 50 Pa

Whole Building Leakage test (R2 non-corridor only) measured: \_\_\_\_\_ CFM/sf @ 50 Pa

Do building leakage tests include GPS and time stamp verification? Y or N

**Whole House Ventilation System Measured Flow Rates (M1505.4 IRC-WA)** Circle one

Are the system controls correctly labeled? Y or N

The Whole House Ventilation (WHV) system operation and maintenance (O&M) instructions were provided to the building owner? Y or N

Provided to: \_\_\_\_\_ on \_\_\_\_\_ (date)

Whole House Ventilation System Type: (Circle one)

(1) Whole house exhaust fan, location \_\_\_\_\_

(2) Balanced HRV/ERV, location \_\_\_\_\_  
For R2 low-rise, serves more than one unit? Y or N

(3) Supply or HRV WHV integral to the air handler. Describe system control sequence of operations or reference to design submittal: \_\_\_\_\_

Specify run-time: \_\_\_\_\_ hours per day \_\_\_\_\_ CFM

WHV calculated design minimum flow rate per plan submittal: \_\_\_\_\_

WHV measured min flow rate at commissioning: Exhaust \_\_\_\_\_ CFM, Supply \_\_\_\_\_ CFM

Do WHV flow tests include GPS & time stamp verification? Y or N

HRV/ERV sensible heat recovery efficiency: \_\_\_\_\_

Commissioning Notes: \_\_\_\_\_

**Other Mandatory Requirements** Circle one

All other mandatory requirements of WSEC-R have been met? Y or N

INTERIOR DOOR SCHEDULE						
NUMBER	LEVEL	LOCATION	DOOR WIDTH	DOOR HEIGHT	AREA	TYPE
117.1	MAIN FLOOR	PRIMARY SUITE	2' - 6"	6' - 8"	17 SF	
118.1	MAIN FLOOR	PRIMARY BATH	2' - 6"	6' - 8"	17 SF	
120.2	MAIN FLOOR	GARAGE	8' - 0"	6' - 8"	53 SF	
210.1	SECOND FLOOR	BEDROOM 2	2' - 6"	6' - 8"	17 SF	
210.3	SECOND FLOOR	BATHROOM 2	2' - 4"	6' - 8"	16 SF	
211.1	SECOND FLOOR	BEDROOM 3	2' - 6"	6' - 8"	17 SF	
211.2	SECOND FLOOR	WALK-IN CLOSET	2' - 4"	6' - 8"	16 SF	
214.1	SECOND FLOOR	BONUS /GUEST RM.	2' - 6"	6' - 8"	17 SF	
214.2	SECOND FLOOR	GUEST BATH	2' - 6"	6' - 8"	17 SF	
216.1	SECOND FLOOR	LAUNDRY	2' - 0"	6' - 8"	13 SF	

EXTERIOR DOOR SCHEDULE							
NUMBER	TYPE	LEVEL	LOCATION	DOOR WIDTH	DOOR HEIGHT	AREA	Fire Rating
110.1		MAIN FLOOR	ENTRY	3' - 0"	8' - 0"	24 SF	N/A
120.1		MAIN FLOOR	MUDROOM	2' - 8"	6' - 8"	18 SF	YES

WINDOW SCHEDULE											
TAG	MANUFACTURER	LOCATION	Level	QTY.	SILL	WIDTH	HEIGHT	AREA	UValue	Description	SAFETY GLAZING
W-1		ENTRY	MAIN FLOOR	2	0"	1' - 8"	8' - 0"	13 SF	0.3	SIDELIGHT	YES
W-2		OFFICE	MAIN FLOOR	1	3"	3' - 11"	6' - 5"	25 SF	0.3	CASEMENT	NO
W-3		OFFICE	MAIN FLOOR	2	3"	1' - 10"	6' - 5"	12 SF	0.3	FIXED	NO
W-4		STAIR LANDING	MAIN FLOOR	1	6' - 0"	2' - 0"	2' - 6"	5 SF	0.3	FIXED	NO
W-5		GUEST/TV ROOM	SECOND FLOOR	2	1' - 6"	2' - 10"	4' - 2 1/2"	12 SF	0.3	CASEMENT	NO
W-6		GUEST/TV ROOM	SECOND FLOOR	1	1' - 6"	3' - 10"	4' - 2 1/2"	16 SF	0.3	FIXED	NO
W-7		GYM	SECOND FLOOR	3	1' - 0"	2' - 0"	3' - 8"	7 SF	0.3	CASEMENT	NO
W-8		GUEST/TV ROOM	SECOND FLOOR	1	10' - 5"	3' - 0"		0.3		FIXED	NO

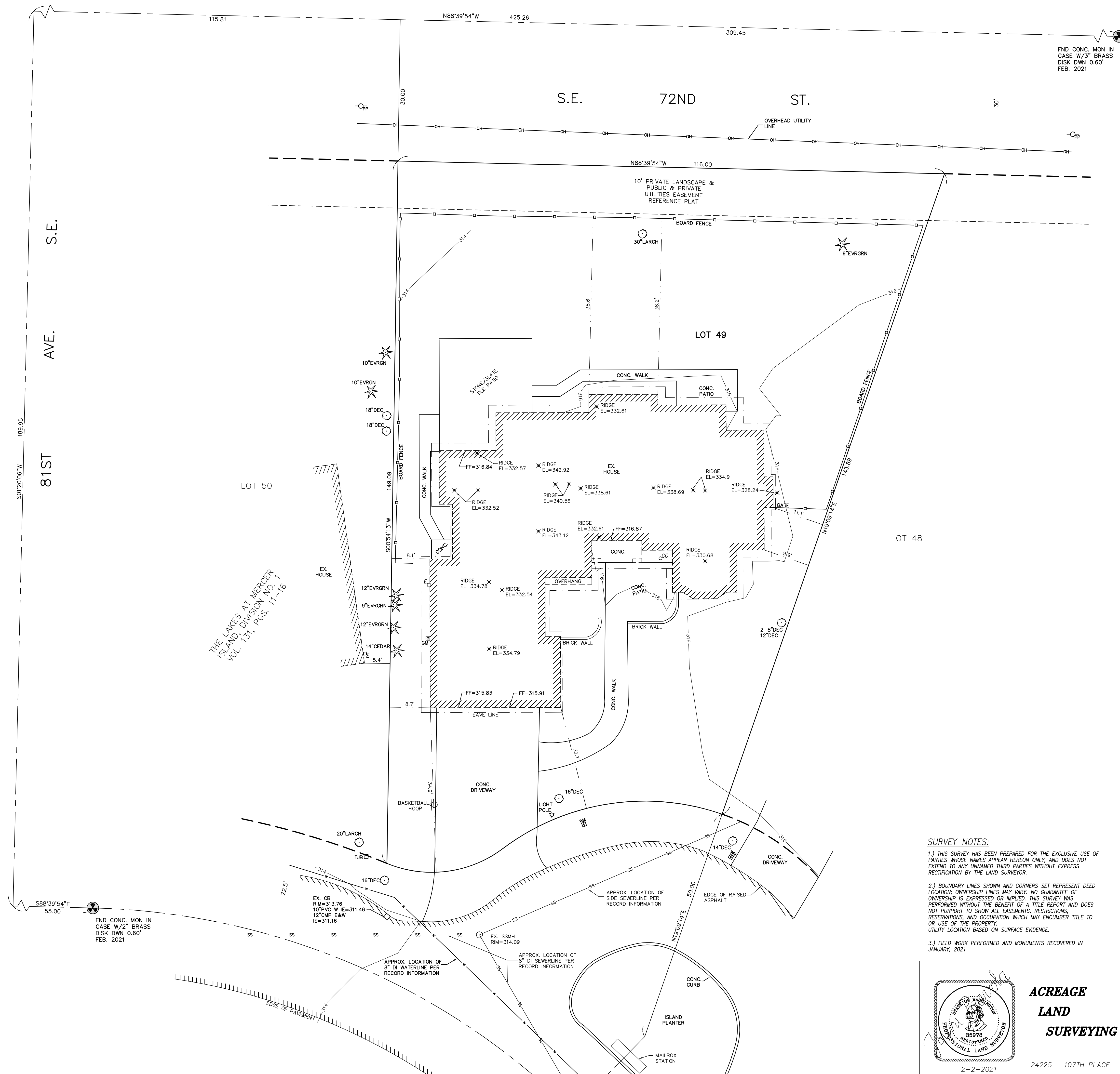
**R402.1.1 Insulation and Fenestration Criteria**

The building thermal envelope shall meet the requirements of Table R402.1.1 based on the climate zone specified in Chapter 3.

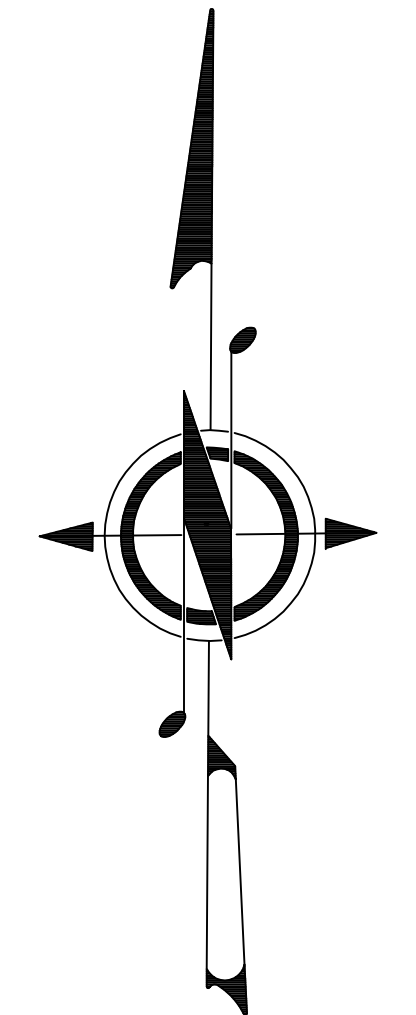
TABLE R402.1.1

**INSULATION AND FENESTRATION REQUIREMENTS BY COMPONENT<sup>a</sup>**

CLIMATE ZONE 5 AND MARINE 4	
Fenestration U-Factor <sup>b</sup>	0.30
Skylight <sup>b</sup> U-Factor	0.50
Ceiling R-Value <sup>c</sup>	49
Wood Frame Wall <sup>e,h</sup> R-Value	21 Int
Floor R-Value	30
Below-Grade <sup>c,h</sup> Wall R-Value	10/15/21 Int + 5TB
Slab <sup>d,f</sup> R-Value and Depth	10, 2 ft



FND CONC. MON IN CASE W/3\"/>



GRAPHIC SCALE  
( IN FEET )  
1 inch = 10 ft.

LEGEND

- STORM DRAIN CATCH BASIN (CB)
- SANITARY SEWER MANHOLE (SSMH)
- CLEAN OUT
- GAS METER
- WATER METER
- POWER POLE
- ELECTRIC METER
- TELE. JUNCTION BOX
- ★ CONIFEROUS TREE
- DECIDUOUS TREE

LEGAL DESCRIPTION

LOT 49, THE LAKES AT MERCER ISLAND DIVISION NO. 1, ACCORDING TO THE PLAT THEREOF, RECORDED IN VOLUME 131 OF PLATS, PAGES 11 THROUGH 16, INCLUSIVE, RECORDS OF KING COUNTY, WASHINGTON.

SITUATE IN THE COUNTY OF KING, STATE OF WASHINGTON.

VERTICAL CONTROL:

NAVD88 PER GPS OBSERVATIONS IN WASHINGTON STATE REFERENCE NETWORK.

EQUIPMENT AND PROCEDURES:

METHOD OF SURVEY: SURVEY PERFORMED BY FIELD TRAVERSE  
 INSTRUMENTATION: TOPCON PS103A ELECTRONIC TOTAL STATION AND LEICA GPS RECEIVER.  
 PRECISION: MEETS OR EXCEEDS STATE STANDARDS WAC 322-130-090  
 BASIS OF BEARING: STATE PLANE COORDINATE SYSTEM PER FOUND MONUMENTS ON 9TH AVE.

SURVEY NOTES:

- 1.) THIS SURVEY HAS BEEN PREPARED FOR THE EXCLUSIVE USE OF PARTIES WHOSE NAMES APPEAR HEREON ONLY, AND DOES NOT EXTEND TO ANY UNNAMED THIRD PARTIES WITHOUT EXPRESS RECTIFICATION BY THE LAND SURVEYOR.
- 2.) BOUNDARY LINES SHOWN AND CORNERS SET REPRESENT DEED LOCATION; OWNERSHIP LINES MAY VARY. NO GUARANTEE OF OWNERSHIP IS EXPRESSED OR IMPLIED. THIS SURVEY WAS PERFORMED WITHOUT THE BENEFIT OF A TITLE REPORT AND DOES NOT PURPORT TO SHOW ALL EASEMENTS, RESTRICTIONS, RESERVATIONS, AND OCCUPATION WHICH MAY ENCUMBER TITLE TO OR USE OF THE PROPERTY. UTILITY LOCATION BASED ON SURFACE EVIDENCE.
- 3.) FIELD WORK PERFORMED AND MONUMENTS RECOVERED IN JANUARY, 2021

REFERENCES

1. PLAT OF THE LAKES AT MERCER ISLAND DIV. NO. 1, VOL. 131, PGS. 11 THROUGH 16
2. RECORD OF SURVEY BK. 141, PG. 82

PARCEL NUMBER: 414100-0490  
 ADDRESS 8116 S.E. 73RD ST. MERCER ISLAND 98040



ACREAGE  
LAND  
SURVEYING

206  
326-9912

TOPOGRAPHIC SURVEY  
FOR  
SHARAT SHROFF  
&  
MUKJ PARAMITA  
IN THE NE1/4, SE1/4, SEC.25, T.24N., R.4E, W.M.  
KING COUNTY, WASHINGTON

DWN. BY: BH	DATE: 2/2/2021	JOB NO. 21014
CHK. BY: JP	SCALE: 1" = 10'	SHEET: 1 OF 1

# PROJECT DATA

**ZONE:**  
R-9.6  
THE NET LOT AREA SHALL BE AT LEAST 9,600 SQUARE FEET. LOT WIDTH SHALL BE AT LEAST 75 FEET AND LOT DEPTH SHALL BE AT LEAST 80 FEET.

**LOT AREA:**  
13,116 SF

**LOT WIDTH:**  
93'-7 1/2"  
TOTAL SIDE YARD SETBACK: 17% LOT WIDTH: 15.9'  
MINIMUM SIDE YARD SETBACK: 33% LOT WIDTH: 5.25'

**GROSS FLOOR AREA CALCULATIONS:**  
R-9.6: 8,000 SQUARE FEET OR 40 PERCENT OF THE LOT AREA, WHICHEVER IS LESS.

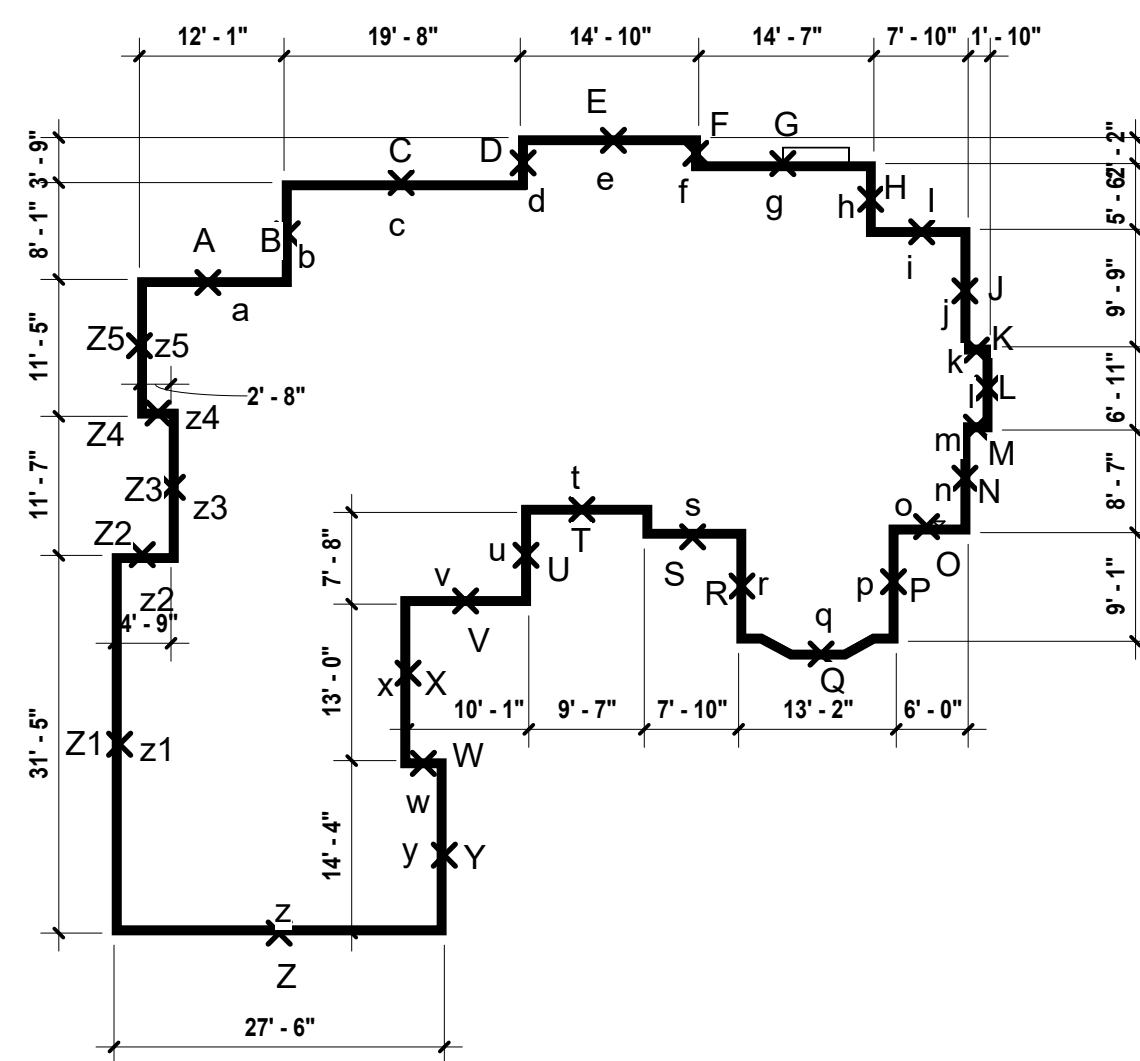
ALLOWED GFA:	5,247.2 SF
EXISTING FIRST FLOOR AREA:	2,259 SF
EXISTING UPPER FLOOR AREA:	1,075 SF
EXISTING ATTACHED GARAGE:	715 SF
TOTAL EX. GFA:	4,049 SF

ADDITION ON UPPER FLOOR PLAN:	
GUEST SUITE:	265 SF
GYM ABOVE GARAGE (UNHEATED):	465 SF
TOTAL ADDITION:	730 SF

TOTAL PROPOSED GFA: 4,779 SF < 5,247.2 SF

THERE WOULD BE NO CHANGE ON LOT COVERAGE FOR THIS PROJECT

# AVERAGE BUILDING ELEVATION



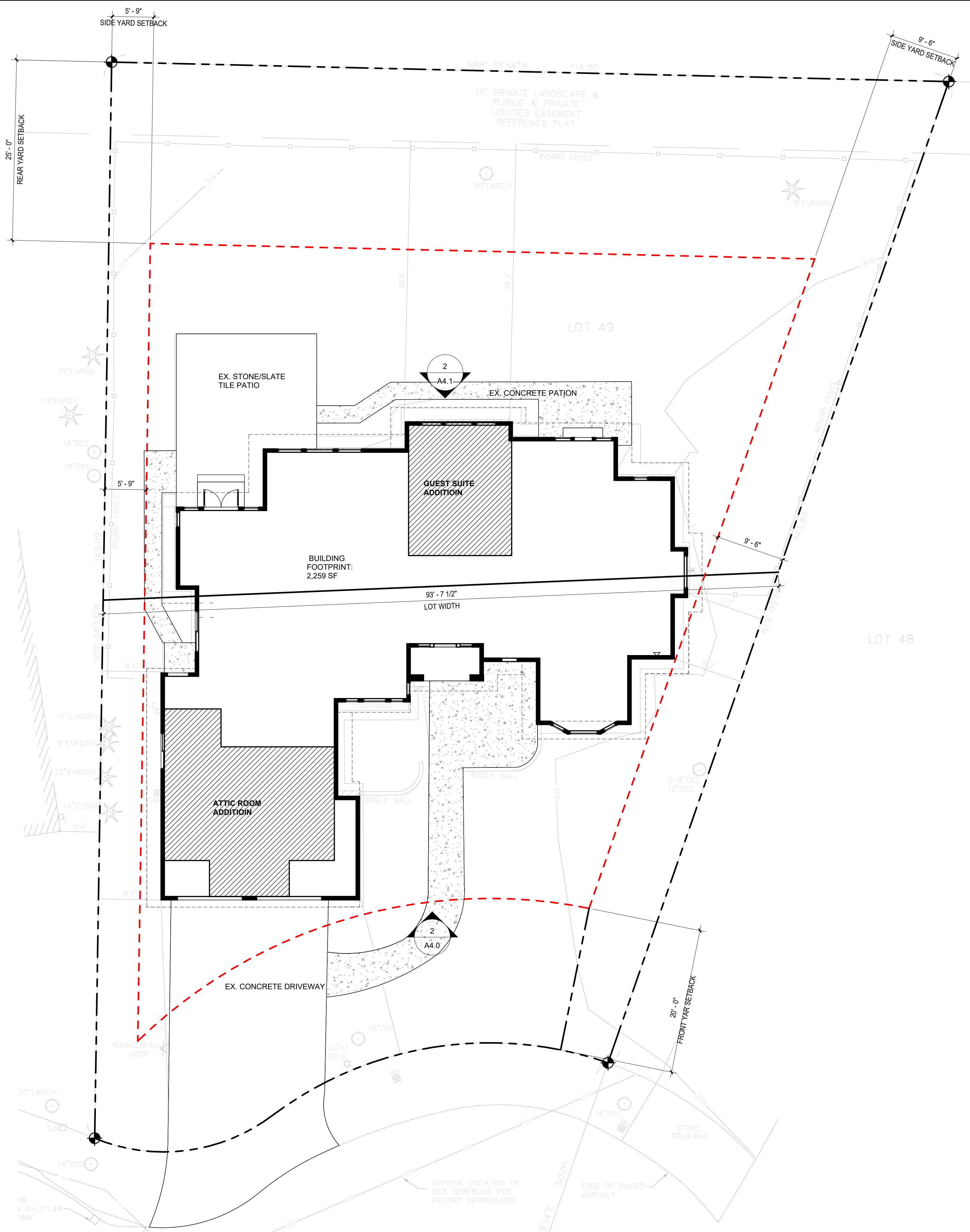
### AVERAGE EXISTING GRADE

MIDPOINT ELEVATION	WALL SEGMENT LENGTH
A	21.023
B	8.093
C	10.467
D	3.375
E	14.493
F	2.187
G	14.588
H	5.5
I	7.855
J	9.75
K	1.835
L	6.927
M	1.835
N	5.025
O	6
P	9.095
Q	13.347
R	9.095
S	7.855
T	7.585
U	7.667
V	10.083
X	15
W	3
Y	14.73
Z	27.3
Z1	31.417
Z2	4.75
Z3	11.583
Z4	3.467
Z5	11.417

**AVERAGE BUILDING ELEVATION FORMULA:**  
(Mid-point Elevation of Individual Wall Segment) x (Length of Individual Wall Segment)  
(Total Length of Wall Segments)  
—OR—  
$$\frac{(Axa)+(Bxb)+(Cxc)+(Dxd)+(Exe)+(Fxf)+(Ggx)+(Hhx)}{a+b+c+d+e+f+g+h}$$

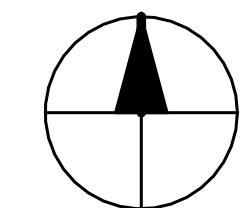
**WHERE:** A,B,C,D... = Lower of Finished or Existing Ground Elevation at Midpoint of Wall Segment  
**AND:** a,b,c,d... = Length of Wall Segment Measured on Outside Wall

CALCULATION =  $97138.16 / 307.578 = 315.81'$   
AVERAGE EXISTING GRADE: 315.81'  
MAX. BUILDING HEIGHT:  $315.81' + 30' = 345.81'$



# 1 SITE PLAN

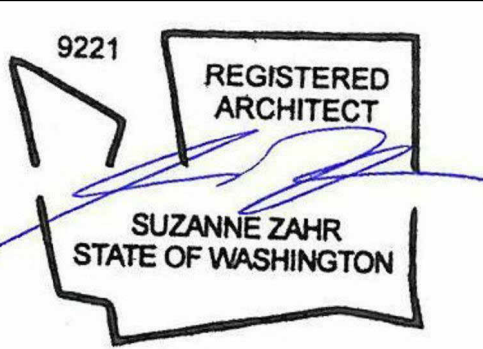
1/8" = 1'-0"



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MERCER ISLAND, WA 98040

PROJECT NUMBER  
**22005**



ISSUED / REVISIONS	DATE

ISSUE DATE: 01.12.23  
DRAWN BY: SA  
CHECKED BY: SZ

**SITE PLAN**

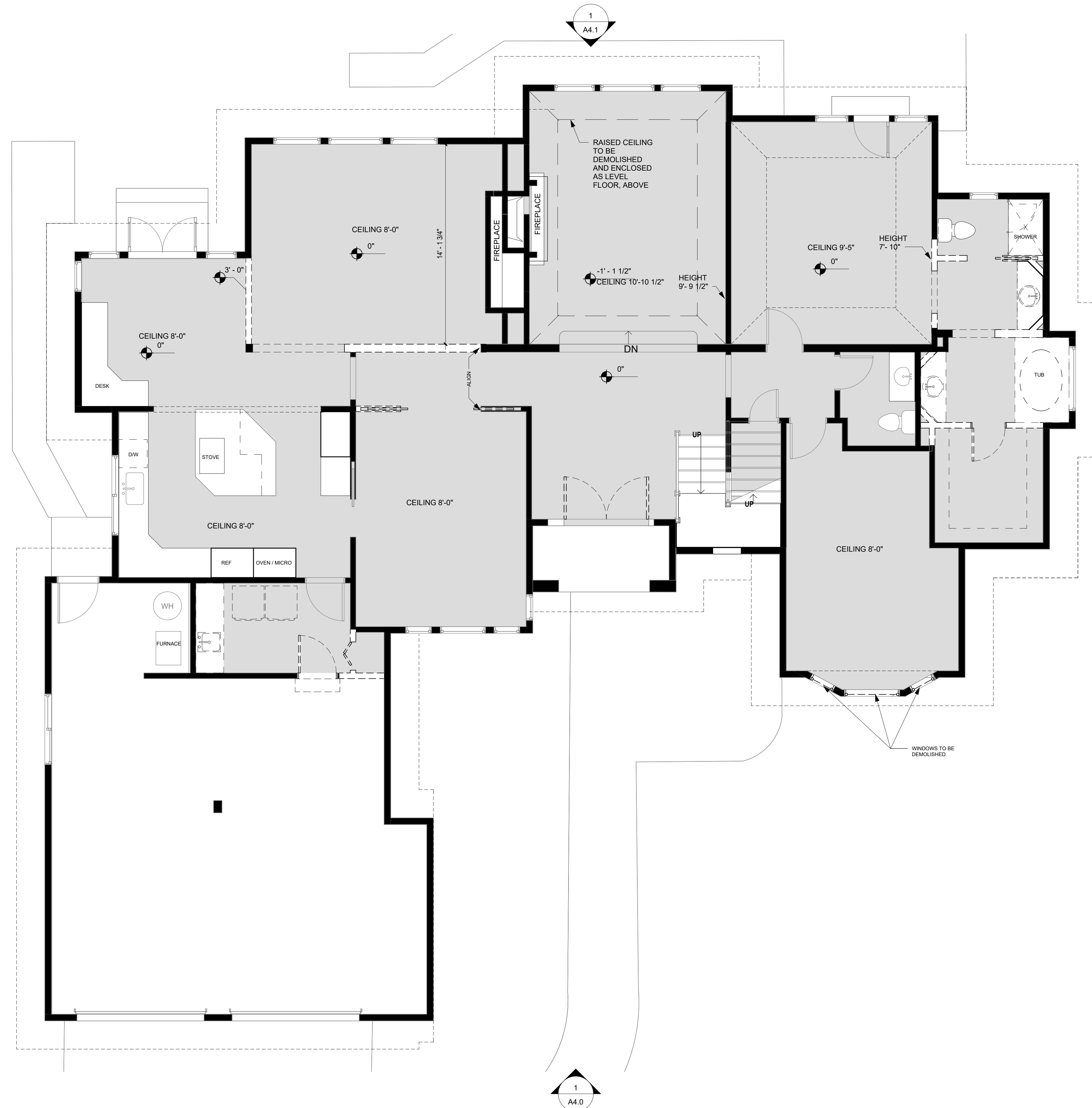
SHEET NUMBER  
**A1.0**

**PERMIT SET**

LEGEND	
	BLACK SOLID INFILL REPRESENTS EXISTING BUILDING WALLS TO REMAIN (BLOCKWORK, STOREFRONT, STRUCTURE, ETC.)
	REPRESENTS NEW WALL.
	REPRESENTS EXISTING WALL TO BE DEMOLISHED.
	REPRESENTS WALL TAG.
	REPRESENTS WALL DIMENSION FROM FACE OF STRUCTURE UNLESS NOTED OTHERWISE
	REPRESENTS OVERHEAD OR BELOW.

**NOTES**

- PLAN SHOWS EXISTING CONDITION TO BE DEMOLISHED AND EXISTING CONDITION TO REMAIN, U.N.O.



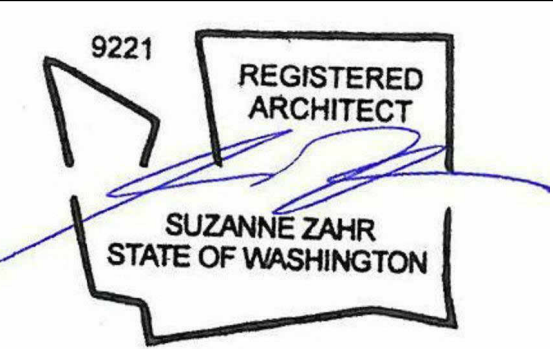
**1 DEMO MAIN FLOOR PLAN**  
 1/4" = 1'-0"



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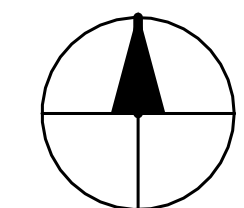
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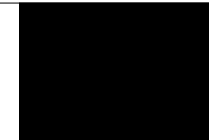
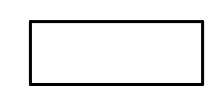

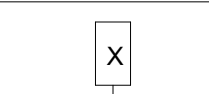
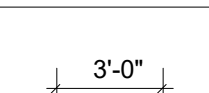

**MAIN FLOOR DEMO PLAN**

SHEET NUMBER  
**A2.0**

**PERMIT SET**

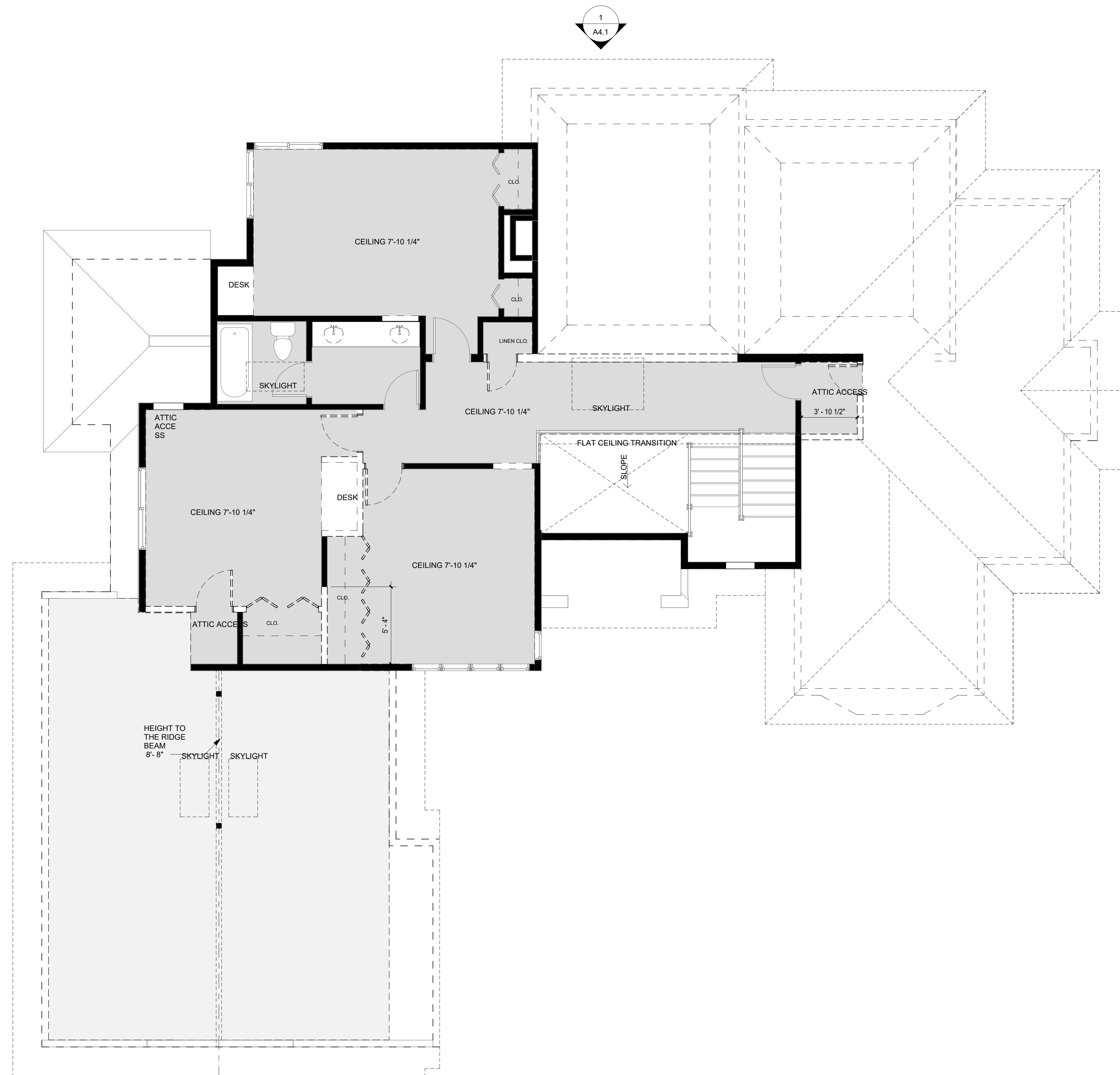


**LEGEND**

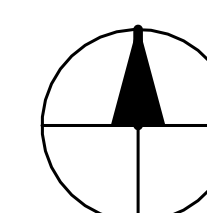
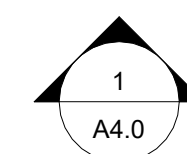
	BLACK SOLID INFILL REPRESENTS EXISTING BUILDING WALLS TO REMAIN (BLOCKWORK, STOREFRONT, STRUCTURE, ETC.)
	REPRESENTS NEW WALL.
	REPRESENTS EXISTING WALL TO BE DEMOLISHED.
	REPRESENTS WALL TAG.
	REPRESENTS WALL DIMENSION FROM FACE OF STRUCTURE UNLESS NOTED OTHERWISE
	REPRESENTS OVERHEAD OR BELOW.

**NOTES**

- PLAN SHOWS EXISTING CONDITION TO BE DEMOLISHED AND EXISTING CONDITION TO REMAIN, U.N.O.



**1 DEMO UPPER FLOOR PLAN**  
 1/4" = 1'-0"



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**MUKHERJEE-SHROFF RESIDENCE**  
**RESIDENTIAL REMODEL**  
 8116 SE 73RD ST  
 MERCER ISLAND, WA 98040

PROJECT NUMBER

**22005**

9221

REGISTERED ARCHITECT

SUZANNE ZAHR  
 STATE OF WASHINGTON

ISSUED / REVISIONS      DATE

ISSUED / REVISIONS	DATE

ISSUE DATE: 01.12.23

DRAWN BY: SA

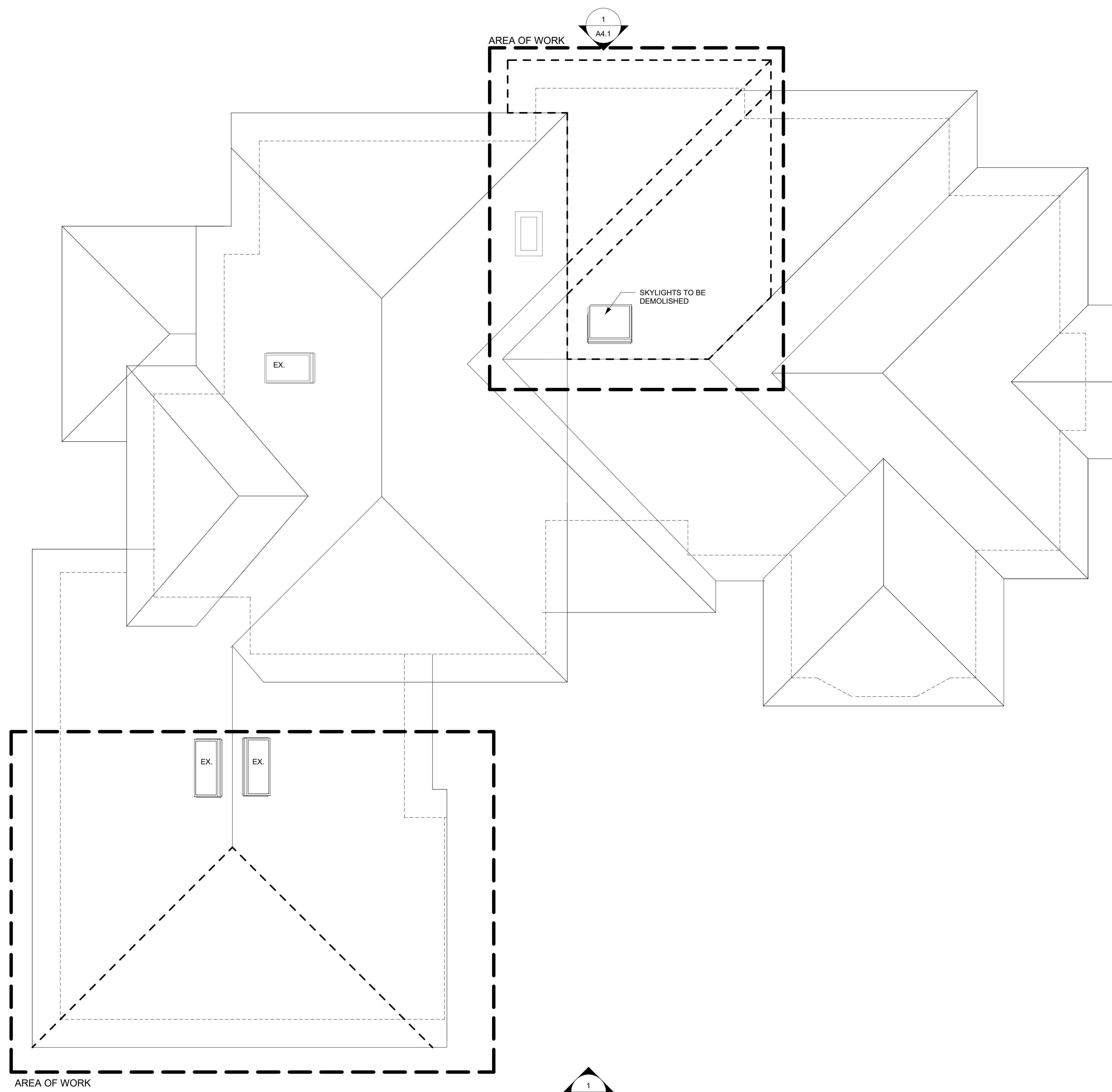
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**UPPER FLOOR DEMO PLAN**

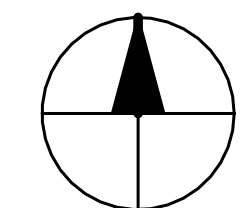
SHEET NUMBER

**A2.1**

**PERMIT SET**



**1** ROOF DEMO PLAN  
1/4" = 1'-0"

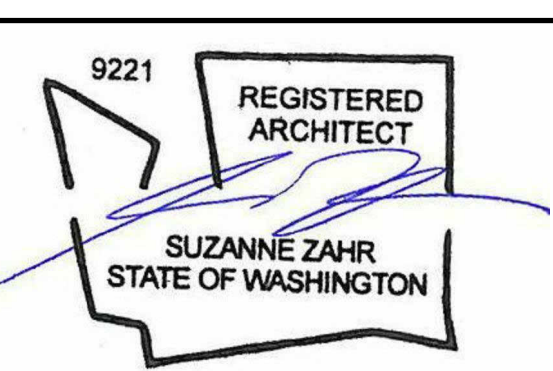


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ROOF DEMO PLAN

SHEET NUMBER  
**A2.2**

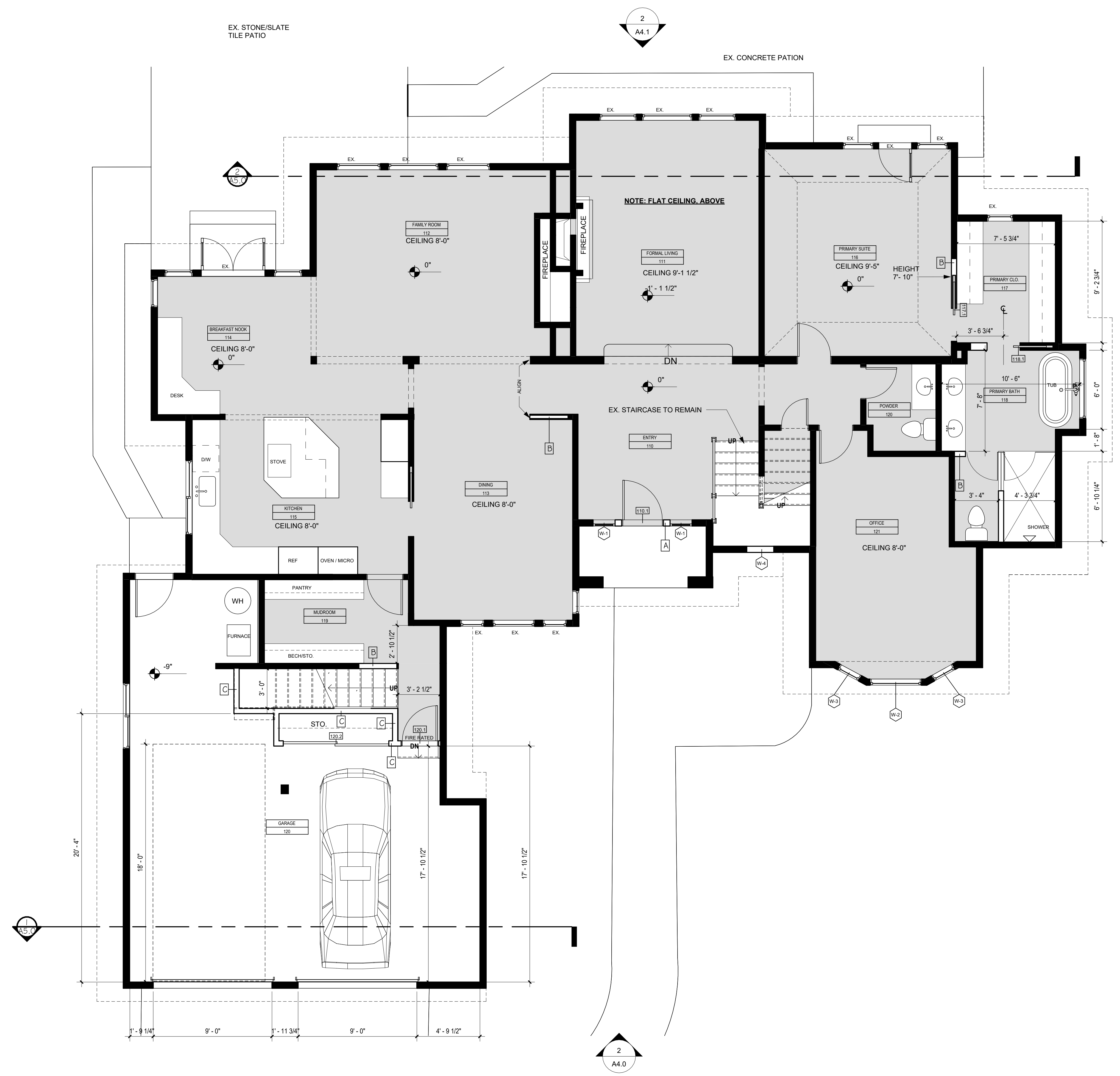
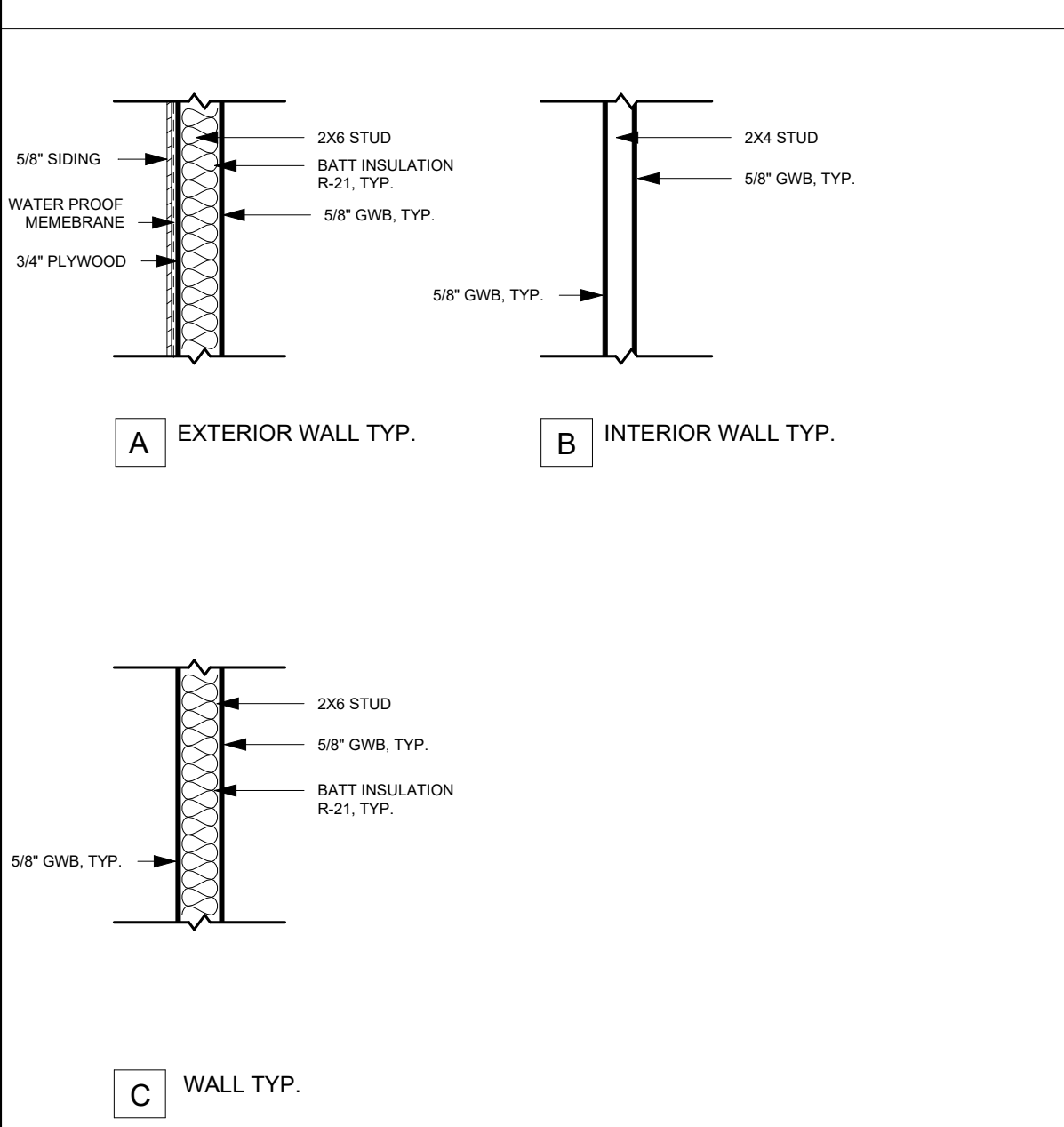
PERMIT SET



**LEGEND**

	BLACK SOLID INFILL REPRESENTS EXISTING BUILDING WALLS TO REMAIN (BLOCKWORK, STOREFRONT, STRUCTURE, ETC.)
	REPRESENTS NEW WALL.
	REPRESENTS INSULATION
	REPRESENTS A WALL TAG.
	REPRESENTS WALL DIMENSION FROM FACE OF STRUCTURE UNLESS NOTED OTHERWISE
	REPRESENTS A DOOR TAG.
	REPRESENTS A WINDOW TAG.
	REPRESENTS A ROOM TAG.
	REPRESENTS OVERHEAD OR BELOW.
	REPRESENTS OVERHEAD EXHAUST FAN (MIN. 80 CFM).
	REPRESENTS OVERHEAD SMOKE DETECTOR.
	REPRESENTS OVERHEAD CARBON MONOXIDE DETECTOR

**WALL TYPES**



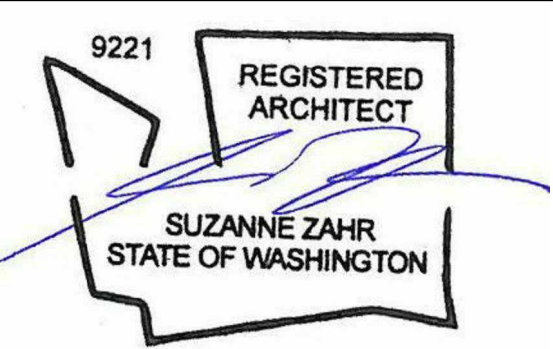
**1** PROPOSED MAIN FLOOR PLAN  
 1/4" = 1'-0"      EX. CONCRETE DRIVEWAY



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**22005**



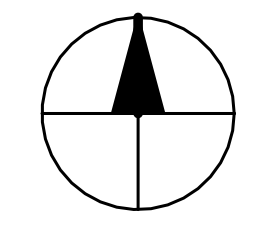
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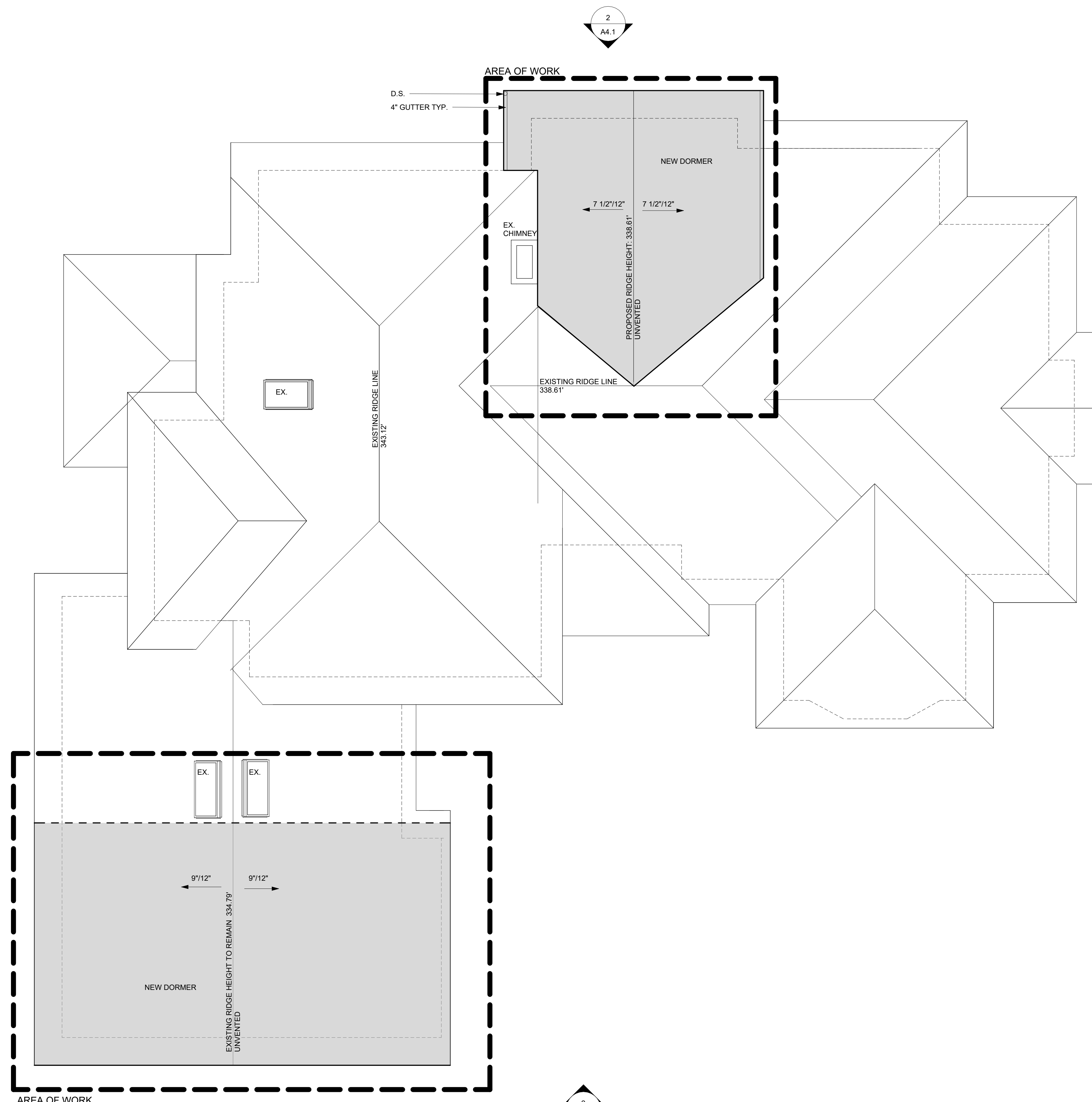
**MAIN FLOOR CONSTRUCTION PLAN**

SHEET NUMBER  
**A2.3**

**PERMIT SET**



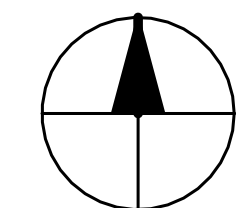




**1** PROPOSED ROOF PLAN  
1/4" = 1'-0"

2  
A4.1

2  
A4.0

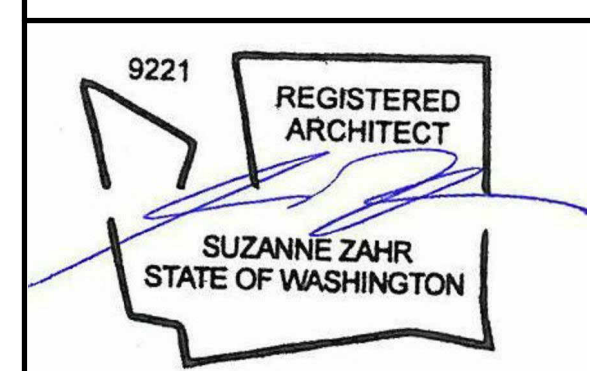


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**ROOF CONSTRUCTION PLAN**

SHEET NUMBER  
**A2.5**

**PERMIT SET**

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REGISTERED  
 ARCHITECT

SUZANNE ZAHR  
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ISSUED / REVISIONS DATE

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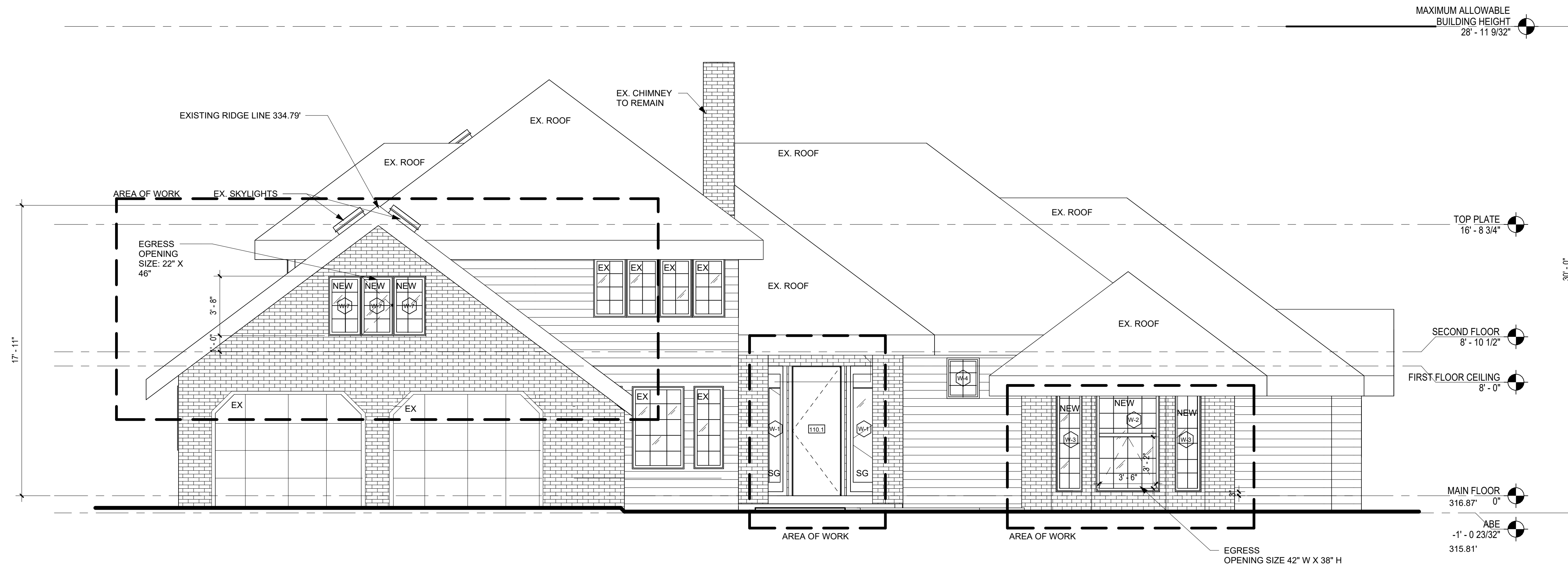
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**BUILDING  
 ELEVATIONS**

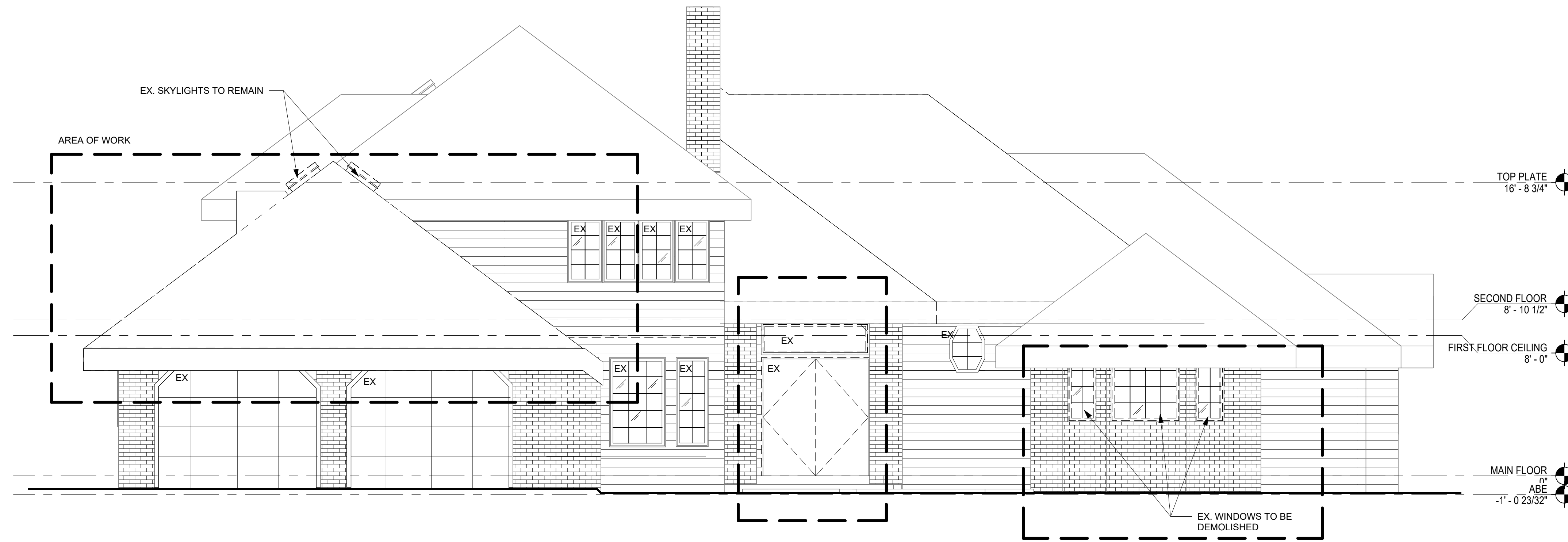
SHEET NUMBER

**A4.0**

**PERMIT SET**



**2 PROPOSED SOUTH ELEVATION - FRONT YARD**  
 1/4" = 1'-0"



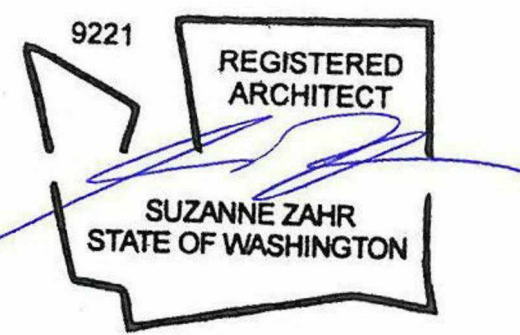
**1 DEMO SOUTH ELEVATION - FRONT YARD**  
 1/4" = 1'-0"



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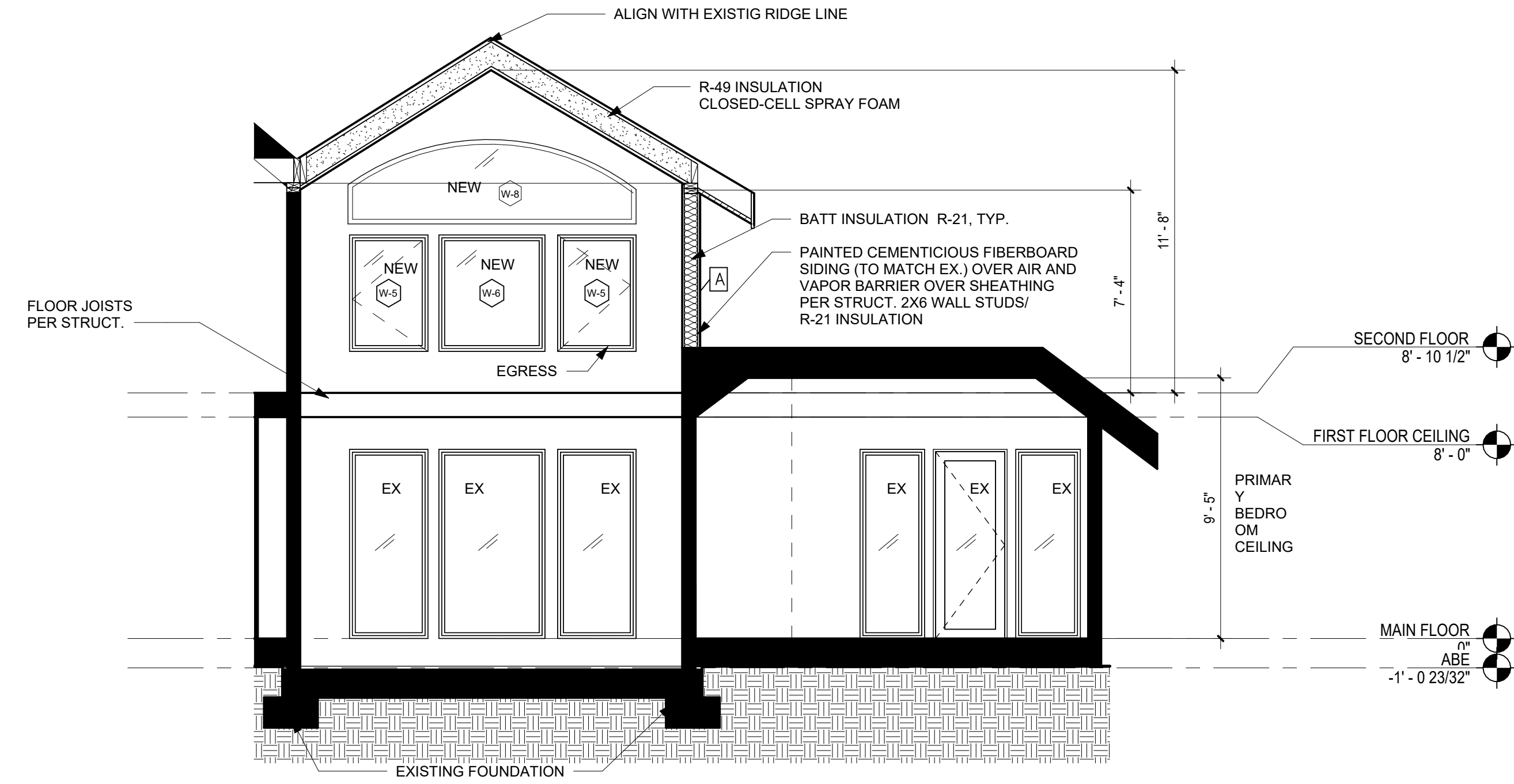
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ISSUE DATE: 01.12.23  
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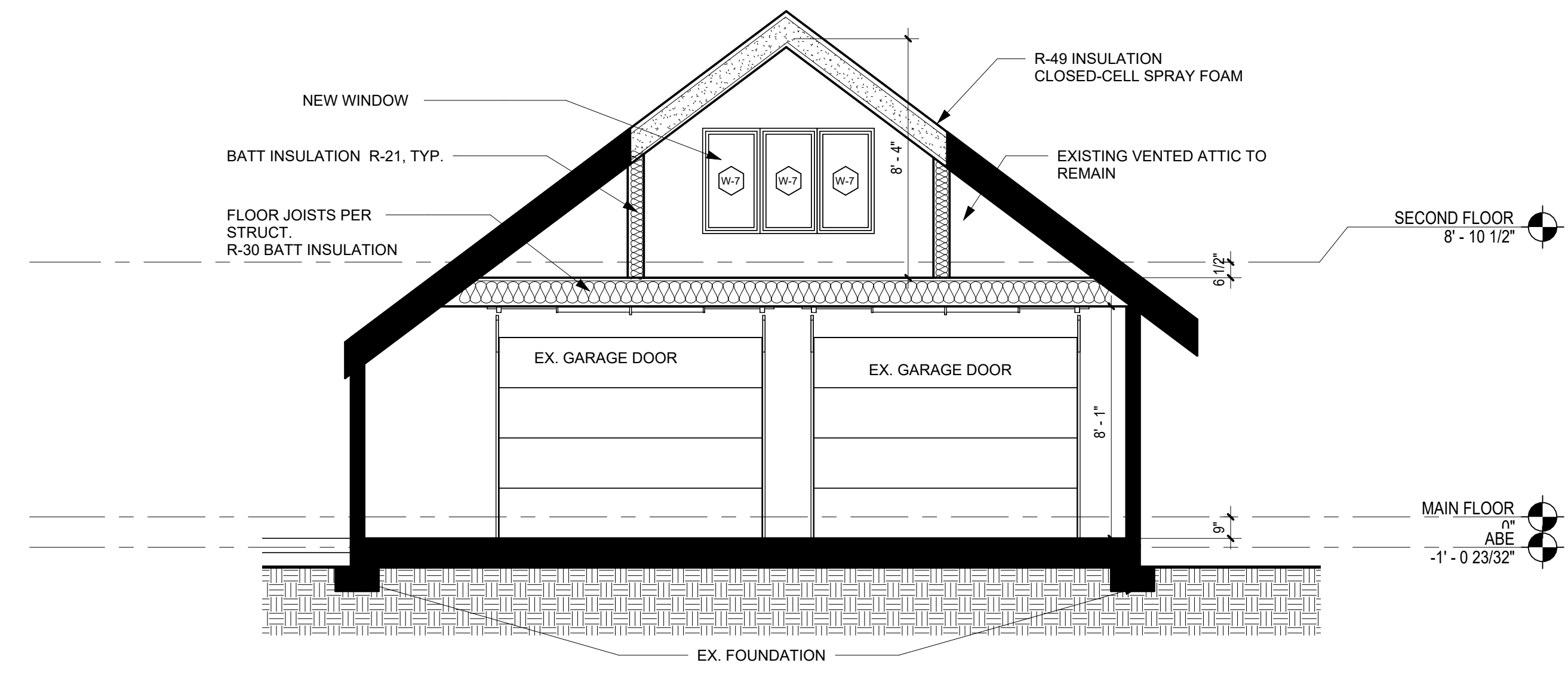
**BUILDING SECTIONS**

SHEET NUMBER  
**A5.0**

**PERMIT SET**



**2 LIVING ROOM SECTION**  
 1/4" = 1'-0"



**1 GARAGE SECTION**  
 1/4" = 1'-0"



**FRONT YARD  
BEFORE & AFTER**



**REAR YARD  
BEFORE & AFTER**



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**3D VIEWS**

SHEET NUMBER  
**A6.0**

**PERMIT SET**



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 Phone: 206-527-1288  
 Email: john@cse-engineering.com

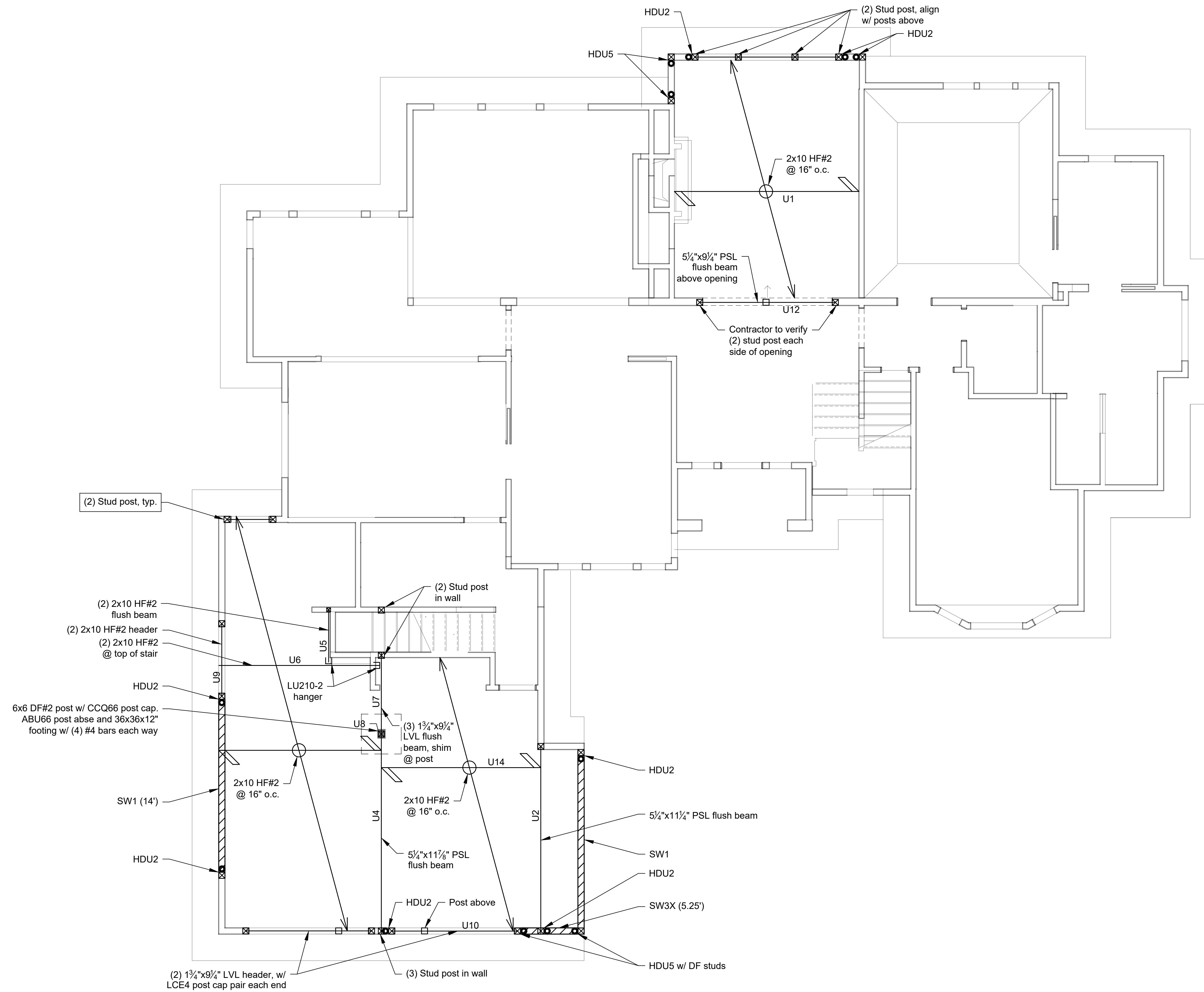
**Mukherjee Residence**  
 8116 SE 73rd St  
 Mercer Island, WA 98040

Revisions:

Date:  
 12-23-22

Sheet:

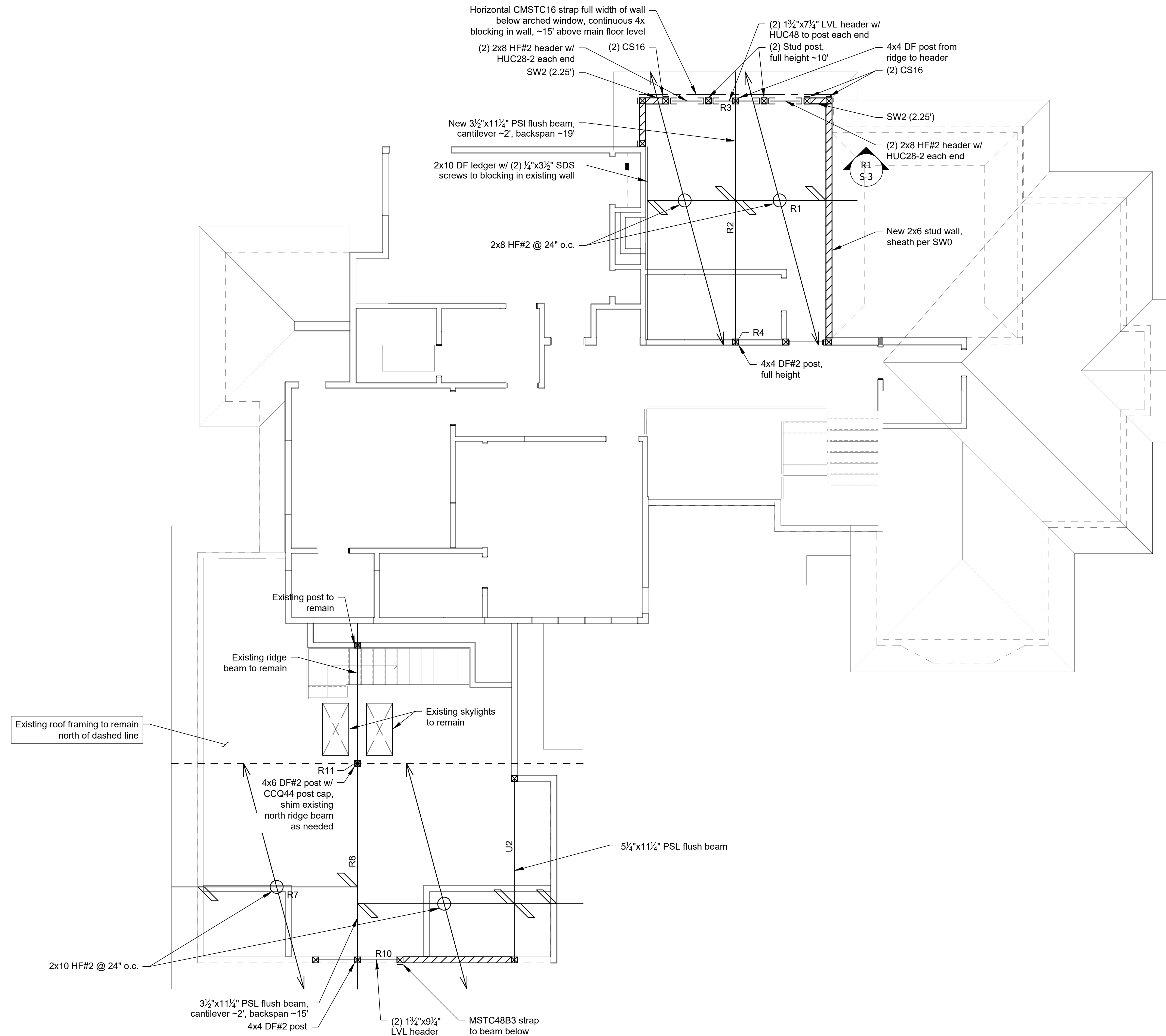
**S-1**



1 Upper Floor Framing and Main Floor Wall Plan

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





1 Roof Framing and Upper Floor Wall Plan

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

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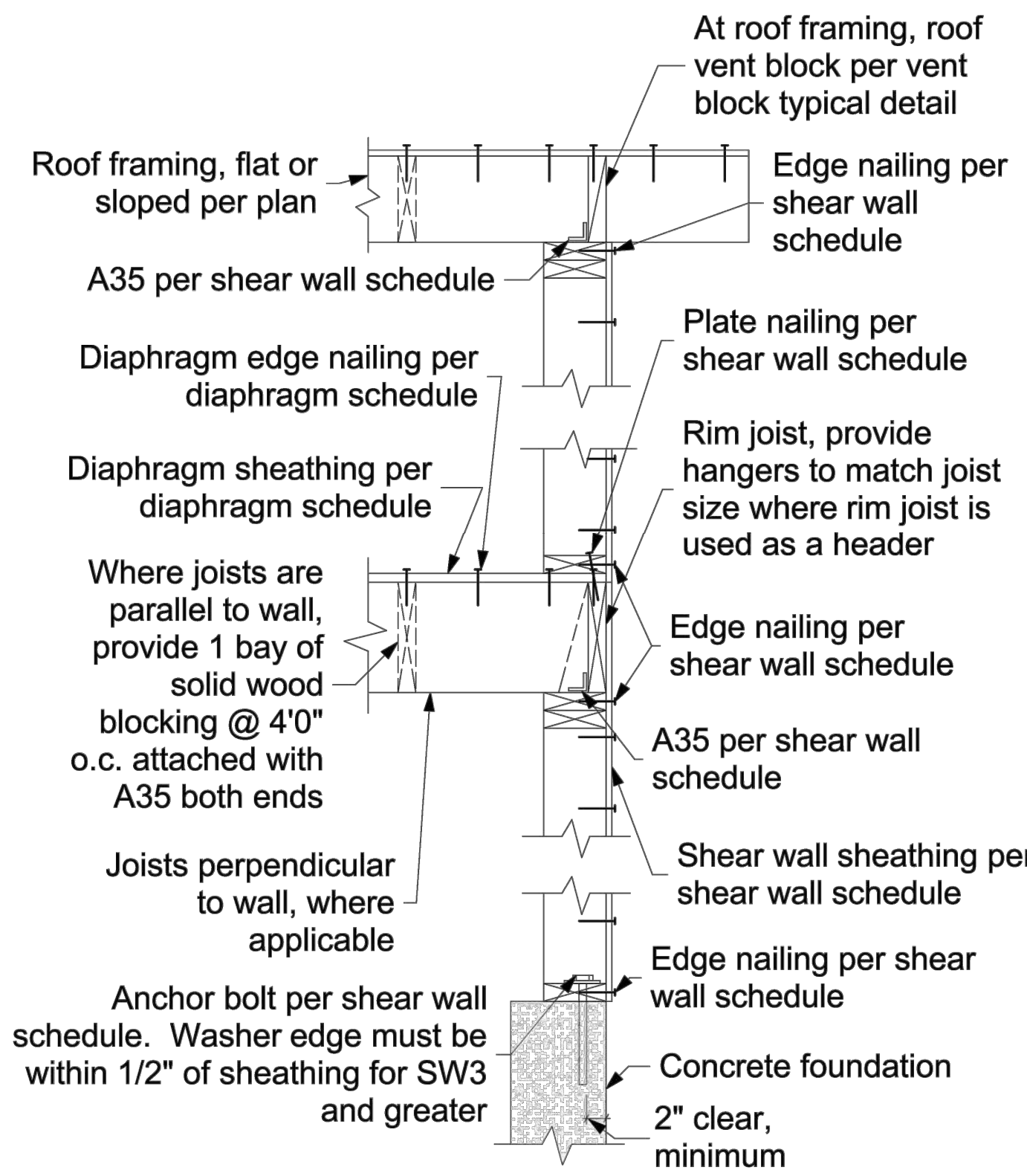
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Revisions:

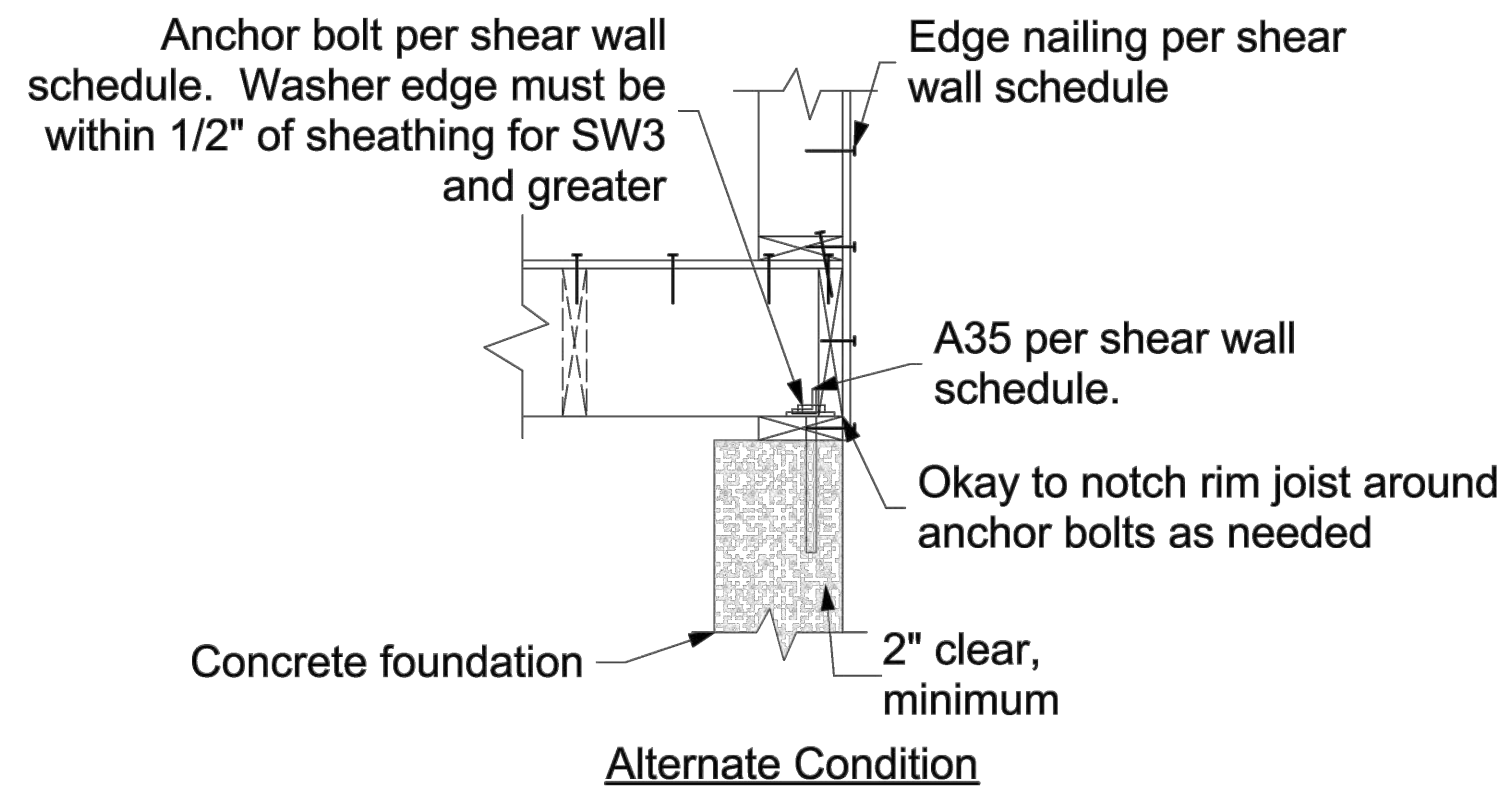
Date:  
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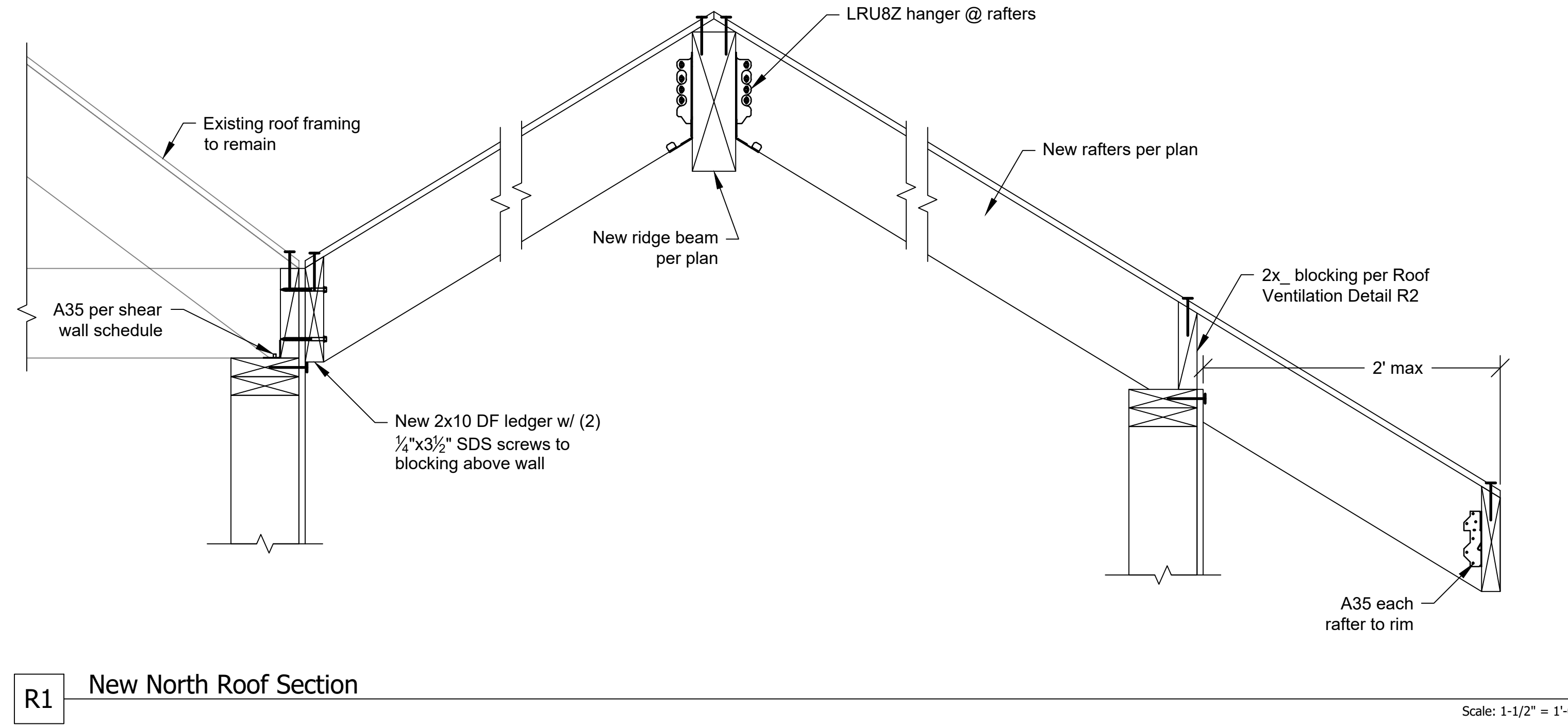
S-2



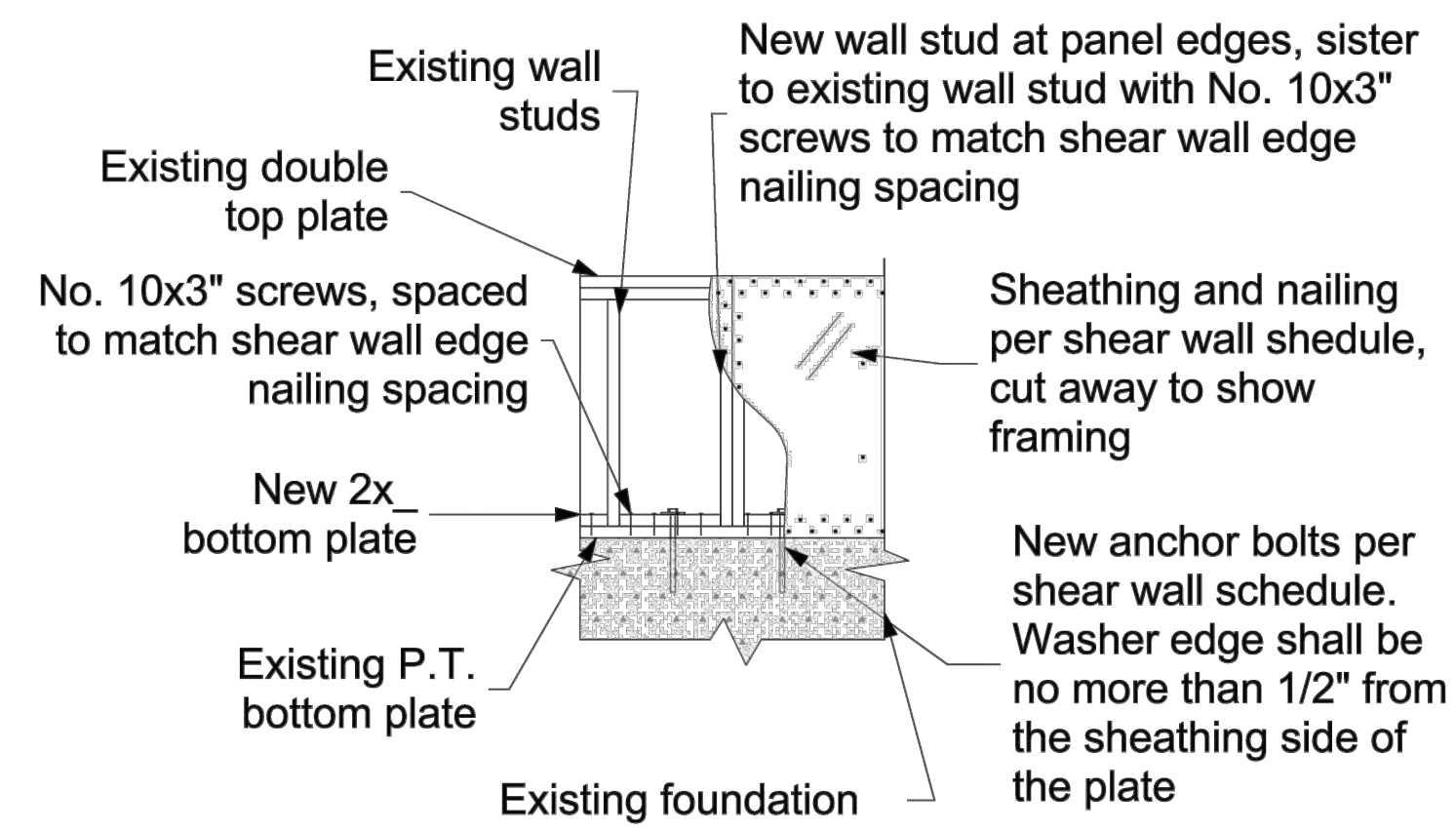
**W1** Exterior Shear Wall Typical Framing Detail  
Scale: 1" = 1'-0"



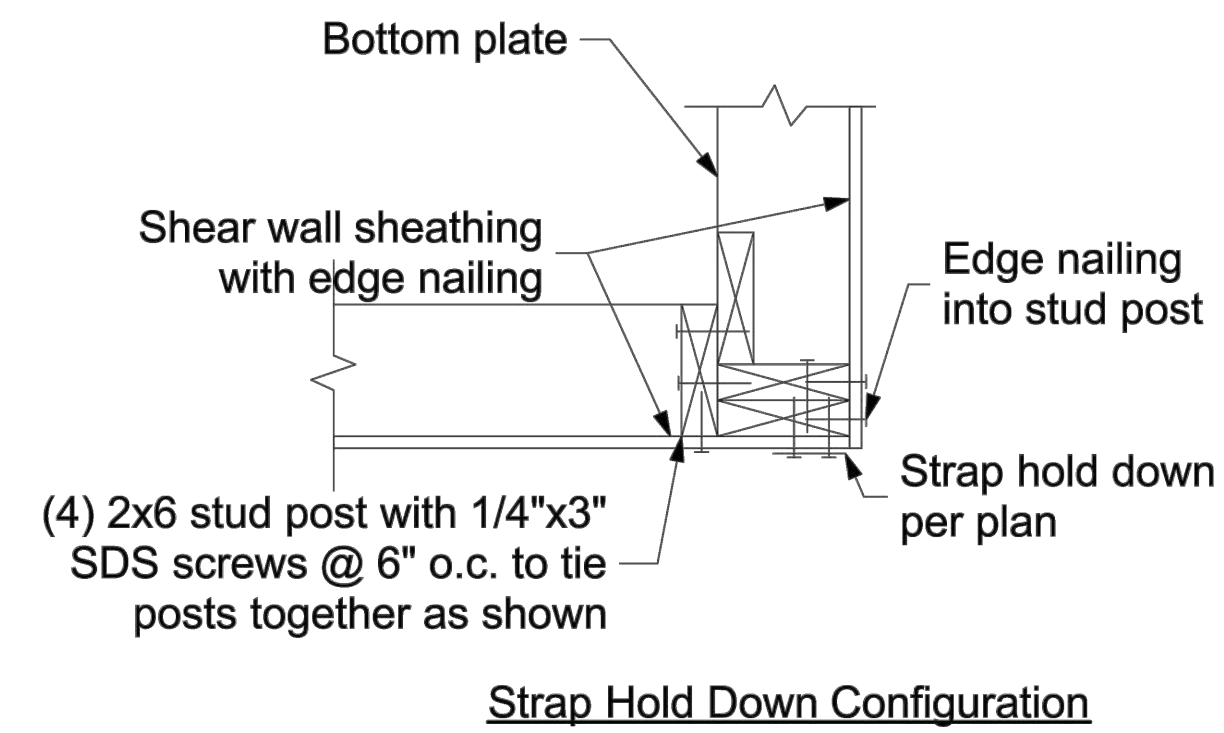
Alternate Condition



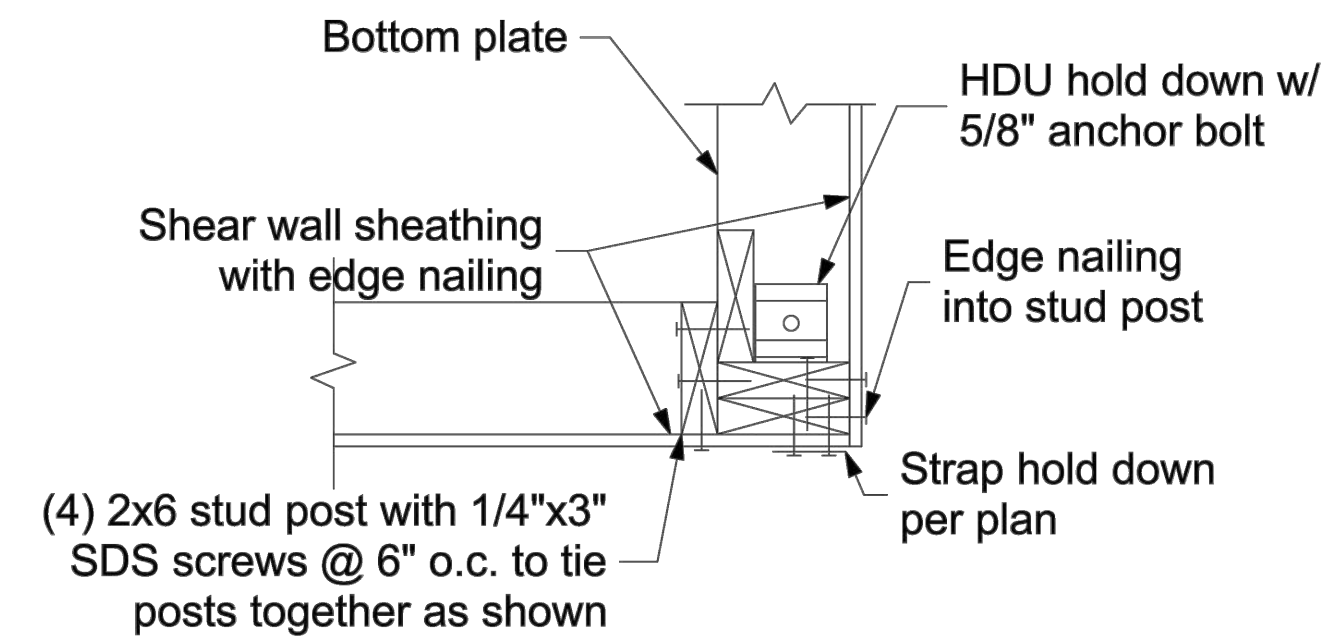
**R1** New North Roof Section  
Scale: 1-1/2" = 1'-0"



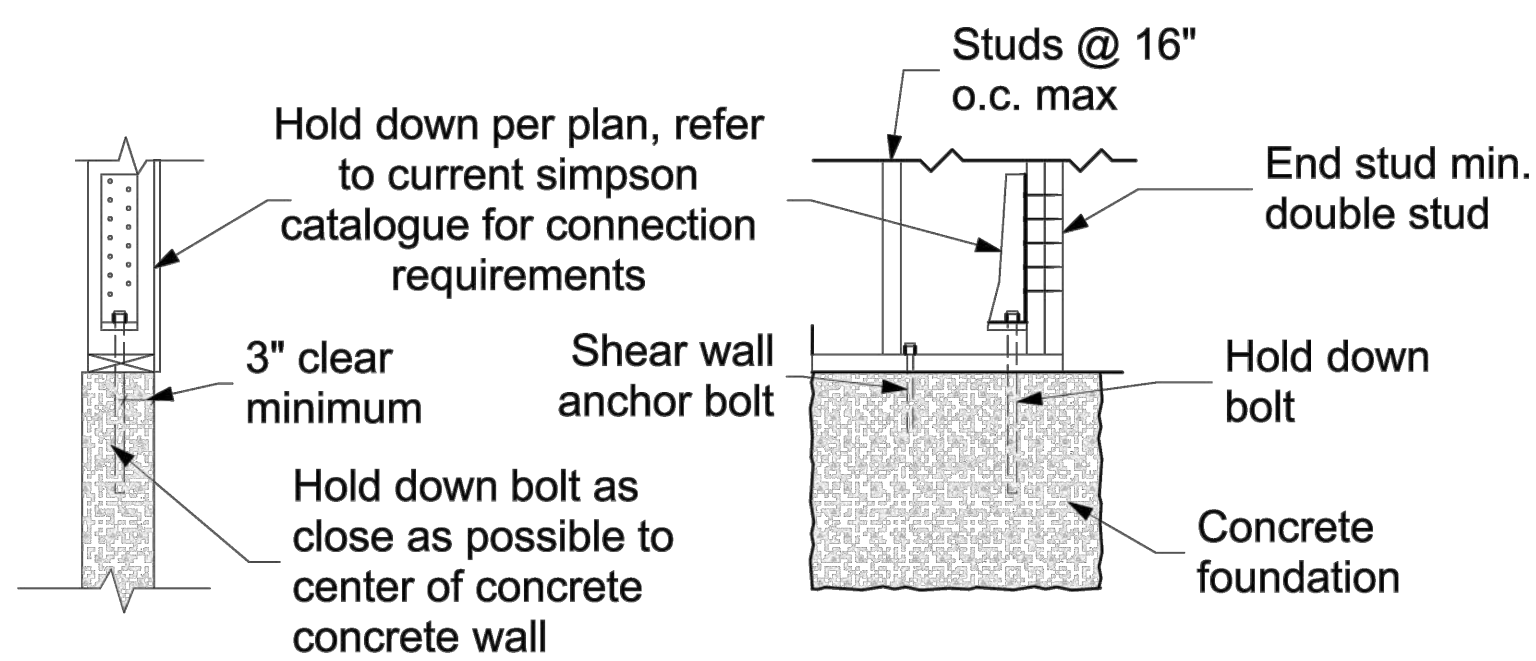
**W2** Retrofit High Strength Shear Wall Detail  
Scale: 1/2" = 1'-0"



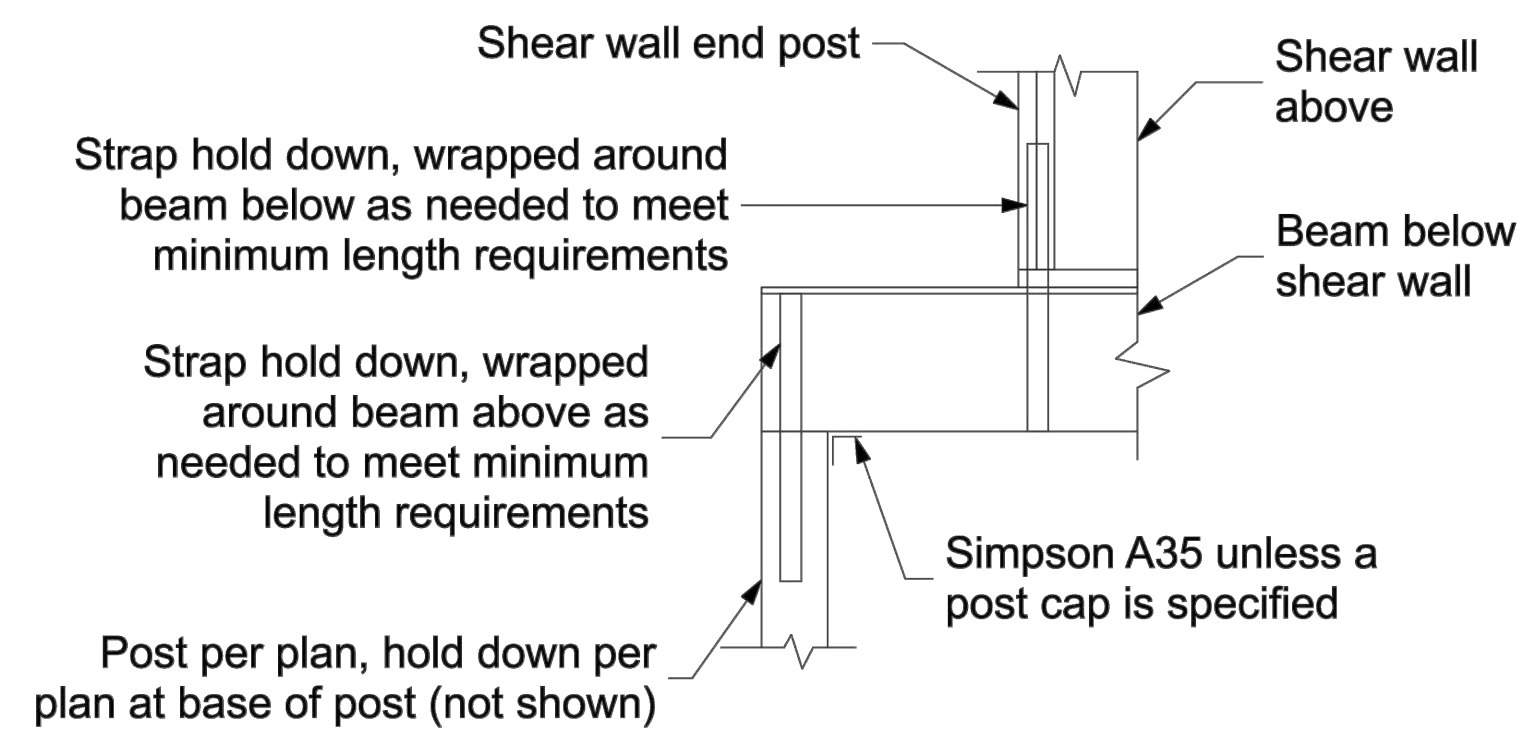
Strap Hold Down Configuration



HDU Configuration

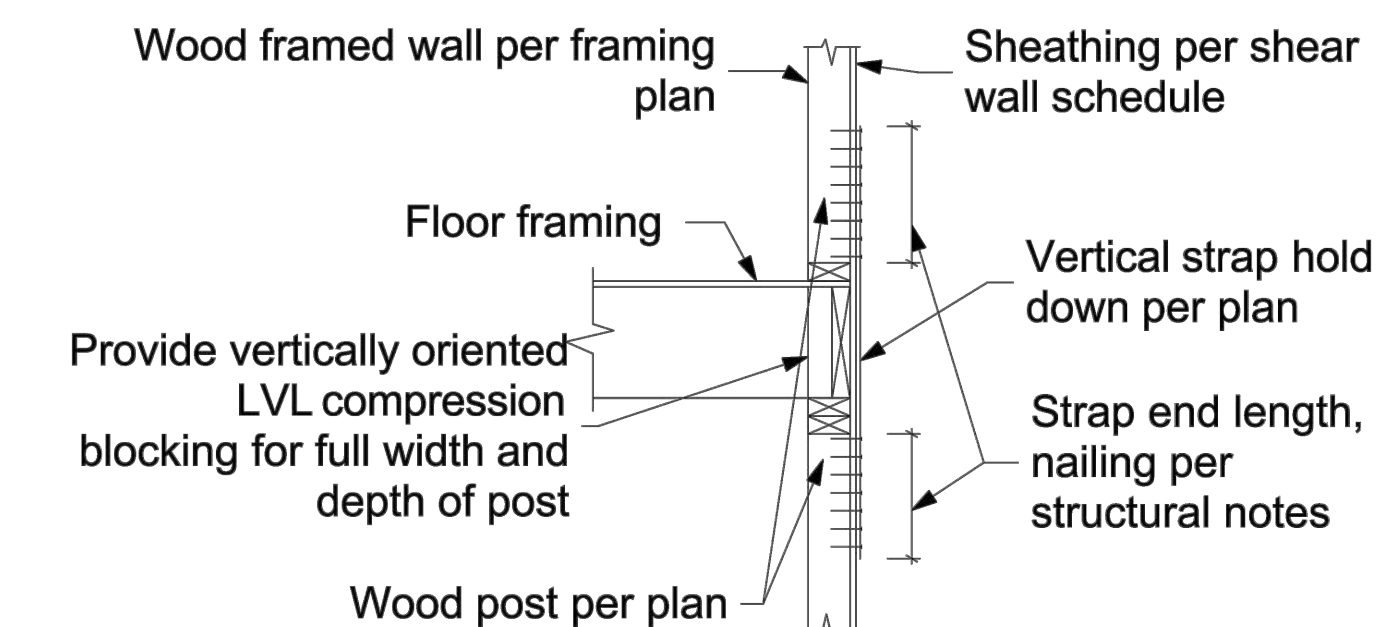


**H1** HDU Down Detail  
Scale: 3/4" = 1'-0"



**H2** Discontinuous Hold Down Detail  
Scale: 3/4" = 1'-0"

**H3** Corner Hold Down Detail  
Scale: 1-1/2" = 1'-0"



**H4** Strap Down Detail  
Scale: 3/4" = 1'-0"

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Date:  
12-23-22

Sheet:

**S-3**



**Structural Notes:**

**Applicable Codes and Standards:**

2018 International Building Code (IBC) and other applicable local building codes.  
 ASCE/SEI 7-16 – “Minimum Design Loads for Buildings and Other Structures”  
 2018 NDS for wood structures.  
 American Wood Preservers Bureau - AWPB Standards for Pressure Treated Material.  
 American Concrete Institute - ACI 315, ACI 318, ACI 301, ACI 307.

Structural design shall be in accordance with the latest edition of above codes and standards. Contractor shall comply with the latest edition of all applicable codes and standards.

**Special Inspections:**

Special Inspections are required for:  
 Epoxy Grouted Anchor Bolt Installation

**Design Loads:**

Live load:	roof	25 psf (snow)
	floors	40 psf
Dead load:	solar panels	4 psf
Wind load:	Basic wind speed	110 mph, exposure B, KzT=1.6
	Building Category:	Enclosed, Wind Important Factor Iw = 1.0
	Refer to calculation page L1 for design wind forces.	
	Internal pressure	5 psf, Components and cladding design per 1609.6.4.4.1

Seismic loading per IBC Section 1613, Site Class D.

The basic structural type is a bearing wall system with light framed walls with shear panels. Rw = 6.5 (wood structural panels), soil type D.  
 Seismic importance factor I.0, Seismic Use Group I  
 Design and Analysis by Simplified Design Procedure  
 Peak Ground Accelerations (PGA) based on USGS Hazards Program, by lat/long.  
 PGA 1 sec = .507 PGA .2 sec = 1.467  
 Seismic base shear = 0.150 \* Dead Load

**Foundations:**

Soil parameters (assumed): Vertical allowable soil pressure: 1,500 psf  
 All soil conditions are to be field verified during construction. Footings shall bear on firm natural soils or on structural fill placed over firm natural soils, and inspected in place. Footings shall extend 18 inches minimum below adjacent exterior finished grade and shall extend 12 inches minimum below existing interior grade unless otherwise noted on plans. Structural fill shall be placed in 12-inch maximum horizontal lifts (loose thickness) and compacted to 90 percent of maximum dry density in accordance with ASTM D-1557. Imported structural fill shall be granular material containing no more than 5 percent fines, passing no. 200 sieve. Structural fill in place shall be tested by a licensed soil engineer or approved by the building inspector.

Drainage behind the concrete walls shall be provided conforming to the construction details.

**Cast in Place Concrete:**

Concrete shall attain a minimum compressive strength of 2,500 psi at 28 days (5-½ sack mix). An alternate mix provided by the concrete supplier and pre-approved by the building department is acceptable.

Reinforcing steel shall conform to ASTM A-615, Grade 60 (Fy=60,000 psi) for all bars. Provide all wall and footing horizontal bars with 2'-0" x 2'-0" corner bars of the same size at all corners and wall intersections. Minimum lap splice 48 bar diameters.

Concrete protection for reinforcement shall be:	
Concrete exposed to earth or weather	1.5" (#5 & smaller) 2" (#6 & larger)
Concrete cast against earth	3"
Slabs	0.75"

**Bolts:**

Anchor bolts shall conform to F1554. All other bolts shall conform to ASTM A307. Minimum anchor bolt size and spacing shall be ½" diameter bolts @ 6' o.c. Shear wall anchor bolts per the shear wall schedule.

For cast-in-place anchors, provide 7" minimum embedment into the new concrete foundation.  
 For retrofitted anchors, provide 5" minimum embedment into the existing concrete foundation. Epoxy grout with Simpson SET epoxy.  
 Provide 3"x3" square x 0.229" thick bolt washers where anchor bolts connect the sill plate to the concrete foundation.

**Wood Framing Specifications:**

All sill plates and other wood framing which is in contact with concrete or masonry must be preservative-treated in accordance with AWWA U1 and M4 standards. For anchor bolts connecting wood sill plates to concrete or masonry, provide galvanized steel washers and nuts on top of the sill, minimum washer size 3" x 3" x 1/4" thick.

Where toenails are used for stud wall construction, a minimum of (2) toenails at top and bottom of each stud shall be provided. Toenails shall be 16d nails driven at approximately a 45 degree angle, with a minimum of 1-1/2" of the nail shank shall be embedded in both the stud and the plate. End nails driven through the plate and into the stud end grain are not permitted. Simpson A34 clips at top and bottom of each stud are permitted where correct toenailing is not provided.

Wherever joists bear on a wall or beam, either a continuous rim joist or solid wood blocking must be provided. Blocking shall be connected to the joists with A35 angles at each end. Individual blocks may be omitted to allow for ducting or other openings. Consult with the engineer of record if more than 25% of the blocking is omitted.

Where LVLs are specified with a thickness greater than 1-3/4", the beam may be built up out of multiple 1-3/4" LVL beams connected per truss-joist TJ-9000 specifier's guide.

Unless noted otherwise, the following grades and species shall be used for structural lumber:

2x joists	Hem-Fir #2
2x, 3x, and 4x studs	DF/L standard for plywood or WSP shear walls
	Hem-Fir standard for other walls
4x and 6x beams	DF-L #2
Microllam LVL lumber	LVL 1.9E, Fb = 2600 psi, Fv = 285 psi (minimums)
Parallam lumber	2.0 WS, Fb = 2900 psi, Fv = 290 psi (minimums)
Glu-lam lumber	24F-V4 for simple span beams, 24F-V8 for cantilever beams

All framing connections shall be per Table 2304.10.1 of the IBC, unless otherwise noted.

**Preservative-Treated Wood and Fasteners:**

All wood in contact with concrete or masonry shall be preservative-treated, in accordance with AWWA U1 and M4 standards.

All fasteners installed in preservative-treated wood shall be hotdipped zinc-coated galvanized with a minimum coating weight complying with ASTM A 153.

Fasteners other than nails and timber rivets are permitted to be mechanically deposited zinc-coated with coating weights complying with ASTM B 695, Class 55 minimum. Plain carbon steel fasteners in wood preservative-treated with SBX/DOT or zinc borate are not required to be galvanized.

**Plywood Thickness, Grade, and Nailing:**

Install plywood sheets with face grain perpendicular to framing. Stagger joints in adjacent sheets. If not otherwise noted, use nailing schedule, Table 2304.6.1 of the IBC.

**Metal Framing Connectors:**

**Unless otherwise noted:** Metal framing connectors shall be manufactured by the Simpson company, or approved equal. Unless noted otherwise, use U-series joist hangers to match joist size (e.g., U210 for 2x10 joist). Provide H1 or H2.5 hurricane ties, or other connectors with similar capacity, at every roof joist or truss, and H6 or H7 at ends of roof beams and girder trusses. Where supported by wood posts, wood beams shall be connected to the tops of the posts using Simpson AC, PCZ, or EPCZ post caps, and to the bottoms of the posts bearing on wood framing using Simpson AC connectors or A35 clips. Where supported by perpendicular beams, wood beams shall be connected by HU-series face mount beam hangers. Provide Simpson AB\_ or PB\_ post bases to connect posts to concrete foundations. Unless otherwise specified, the maximum number of nails or screws should always be installed on any connector.

**Bearing Walls:**

All walls supported by continuous concrete footings shall be connected to the foundation per 2018 IRC section 403.1.6. 1/2" diameter anchor bolts shall be provided at 4' o.c., or two per wall segment, minimum. Anchor bolts shall penetrate 7" into the concrete foundation.

**Hold Down Notes**

**Convention for showing shear walls and hold downs:** Shear walls are shown on the framing plan for the floor above. (For example, first floor shear walls will be shown on the second floor framing plan, and the shear walls for the topmost floor will be shown on the roof framing plan.) Hold downs are located at the **bottom** of that shear wall, and connect the end of the shear wall to wall framing or a structural beam located in the floor below the shear wall. Contact the engineer of record for clarification if needed.

Hold downs for each floor must be continuously connected to hold downs on the floor below (or to other intermediate wood framing where so indicated), until they are finally connected to the concrete foundation.

Hold downs shall be installed so as to be as far apart as is reasonable. Hold downs may be located on either the near side or the far side of the post or double stud to which they are attached. In no case shall a hold down bolt be located farther than 6" from the end of the shear wall, except with prior written approval of the engineer. Refer to the latest edition of the Simpson Catalog for details.

Where multiple studs are called out at a hold down, nail studs together with (2) 16d nails at 8" o.c. or 1/4" x 3" Simpson SDS Screws at 12" o.c.

Where a hold down post lands on a rim joist, provide full depth vertically oriented blocking under the post.

**Strap Hold Downs:**

Provide a vertically oriented strap hold down consisting of one or two of the Simpson vertical strap ties listed below, connecting the end stud or post of the shear wall indicated to new or existing studs in the wall framing below, or to a wood beam supporting the shear wall, where applicable. Straps shall be installed so that the minimum end length is provided to both connected posts or studs. Where a strap is connected to a beam below, the strap shall be wrapped around the beam until the minimum end length is reached. See Strap Hold Down Typical Detail.

CS16 denotes a Simpson CS16 strap, with a minim end length of 14", and (13) 8d nails each end.

**Rod Hold Downs:**

HDUx denotes a Simpson HDU(2,4,5,8,or 11)-SDS2.5 hold down. For hold down bolts at existing concrete foundations, use the following bolts:

**For HDU2,4,5:** 5/8" diameter A307 threaded steel rod may be used, which shall be epoxy grouted into a 3/4" diameter hole with a minimum embedment of 10". See Retrofit HDU Typical Detail.

**Special Note:**

All holes for hold down bolts which are installed into existing foundations must be inspected during the installation of the hold down. Either the building inspector, the structural engineer of record, or the special inspection agency must perform the inspection and approve it before the bolts may be epoxy grouted into the holes. The epoxy grout used must be Simpson SET-XP unless otherwise noted by the engineer of record.

For drilled holes into existing concrete, no less than 2" must be provided between the edge of the hole and the face of concrete. The Engineer of Record or Special Inspector must witness the installation of hold down bolts, including cleaning the holes with compressed air and a wire brush before the anchor is installed. The hole shall be filled with enough epoxy that when the anchor is inserted, the epoxy rises to the top of the concrete. Care shall be taken that no air bubbles persist in the epoxy.

The contractor must verify that the existing foundation stem wall is uncracked and continuous, and is sound and in good condition, within 5 feet of any retrofitted shear wall or hold down, in any direction, except with prior written approval of the engineer. The existing concrete foundation stem wall shall be at least 6" thick and 2'-6" in height. The concrete shall be of good quality, hard and uniform, with appropriate aggregate type, size and distribution, and with no visible rock pockets or other similar deficiencies.

Any existing cracks located within 10' of any hold down must be completely filled with an appropriate epoxy based concrete repair product. The product to be used shall be approved in writing by the engineer prior to filling the cracks.

Contact the engineer of record prior to proceeding if any of these requirements are not met, or if the installation of the hold downs results in any visible damage to the existing foundation.

**SHEAR WALL SCHEDULE**

**(Lumber for shear walls is HF#2 or better, unless otherwise noted.)**

Type	Material	Edge Nailing	Field Nailing	A.B. Size/Spacing	Plate Nailing	Plates	A35 Spacing	Shear Capacity
SW0	15/32" WSP one side, unblocked	8d @ 6"	8d @ 12"	1/2"Ø @ 72"	(2) 16d @ 12"	2x_	24"	100 plf
SW1	15/32" WSP one side	8d @ 6"	8d @ 12"	1/2"Ø @ 48"	(2) 16d @ 9"	2x_	24"	230 plf
SW2	15/32" WSP one side	8d @ 4"	8d @ 12"	1/2"Ø @ 32"	(2) 16d @ 6"	2x_	16"	350 plf
SW3	15/32" WSP one side	10d @ 3"	10d @ 12"	5/8"Ø @ 24"	(2) 16d @ 4"	3x_	12"	550 plf
SW3X	15/32" WSP one side	10d @ 2"	10d @ 12"	5/8"Ø @ 24"	5/8"Ø x 8" Lag @ 24"	3x_	9"	710 plf

**For shear wall callouts on the Structural Framing Plans:** SW x (y') denotes a shear wall type "x" with a minimum length of "y" feet. See Exterior Shear Wall Typical Detail.

• For SW3 and greater: studs, plates, and blocking where two WSP panels abut shall have a minimum 3" nominal thickness. Double 2x\_ members may be used for studs if the members are connected by plate nailing. Note 10d nails at WSP panel edges.

- "WSP" refers to "Wood Structural Panel", either plywood or other wood materials.
- Provide double stud minimum at both ends of all shear walls.
- At the roof or top level of any shear wall, "A35 spacing", and all other relevant connector specifications, apply to assemblies at both the top and bottom of the shear wall. At lower levels, apply to the bottom of the wall only.
- Provide floor diaphragm edge nailing per diaphragm schedule through floor plywood into blocking, parallel joist framing, or top plates (whichever applies) of all shear walls.
- Provide 3x\_ plates, and 4x\_ rim joists, minimum, where lag screws are specified for plate nailing.
- Where shear wall edge nails are spaced closer than 3" o.c., or spaced 3" o.c. with 10d nails, foundation sill plates and all framing members receiving edge nailing from abutting panels shall not be less than a single 3x\_ member.
- Provide 4x\_ or double 2x\_ framing where A35 angles are used on both sides of one piece of wood.
- Where a shear wall terminates above the foundation level (no shear wall below), provide minimum 4x\_ blocking or double joist framing (as applicable) below the shear wall. "&" Plate nailing per this schedule shall be nailed into this blocking at the bottom of the shear wall.
- Shear wall nails shall be placed no closer than 3/8" from a panel edge or perpendicular face of stud.
- Maximum spacing between nails shall not exceed 12".
- Shear wall nailing shall be common or galvanized box nails, unless lag screws are noted. Galvanized nails shall be hot dipped or tumbled.

- Lag screw plate connectors shall penetrate 3.5" minimum, and plates or beams receiving lag screws shall have a minimum width of 3.5".
- Where hold downs are specified, the shear wall bolt shall be located within 6 inches of the end of the shear wall, unless otherwise approved by the engineer of record. Minimum end studs shall be as specified in the most recent Simpson catalog.
- Shear wall edge nailing through shear wall sheathing shall be provided into all studs attached to a hold down.
- Retrofit anchor bolts shall have a minimum embedment of 5" into the concrete foundation.
- Cast in place anchor bolts shall have a minimum embedment of 7" into the concrete foundation.
- For SW3 and greater, foundation anchor bolt plate washers shall extend to within 1/2" of the edge of the sheathing.
- Plate nails shall be nailed into a solid wood rim joist.
- 2x\_ plates may be substituted for 3x\_ plates if panels are nailed with edge nailing directly to the rim joist.
- Where 3x\_ plates are used, (2) 20d common nails must be used instead of (2) 16d common nails to connect studs to the bottom plate.
- For SW3 and greater at existing walls, Retrofit High Strength Shear Wall Typical Detail may be used.
- Where Roof ventilation is required over a shear wall, see roof ventilation detail.

**Diaphragm Schedule**

**(Lumber for diaphragm construction is HF#2 or better, unless otherwise noted.)**

Type	Material	Edge Nailing	Field Nailing	Edge Blocking	Remarks
Roof	15/32" CDX 24/0	8d @ 6" o.c.	8d @ 12" o.c.	no	Minimum Standard
Floor	23/32" CDX 48/24	8d @ 6" o.c.	8d @ 12" o.c.	no	Minimum Standard

- "WSP" refers to "Wood Structural Panel", either plywood or other wood materials.
- Rim joists at exterior walls shall be continuous for tension. At rim joist splice locations, provide (2) CS16 horizontal straps, minimum 24"
- Where roof or floor framing is cantilevered over an exterior wall below, provide solid blocking with Diaphragm edge nailing between joists.
- This is the minimum required diaphragm construction. Where otherwise noted on the plans, additional blocking or nailing may be required.

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