

**GENERAL NOTES:**

1. THE BUILDER SHALL VERIFY THAT SITE CONDITIONS ARE CONSISTENT WITH THESE PLANS BEFORE STARTING WORK. WORK NOT SPECIFICALLY DETAILED SHALL BE CONSTRUCTED TO THE SAME QUALITY AS SIMILAR WORK THAT IS DETAILED. ALL WORK SHALL BE DONE IN ACCORDANCE WITH INTERNATIONAL, STATE & LOCAL BUILDING CODES.
2. WRITTEN DIMENSIONS AND SPECIFIC NOTES SHALL TAKE PRECEDENCE OVER SCALED DIMENSIONS AND GENERAL NOTES. THE ENGINEER/DESIGNER SHALL BE CONSULTED FOR CLARIFICATION IF SITE CONDITIONS ARE ENCOUNTERED THAT ARE DIFFERENT THAN SHOWN. IF DISCREPANCIES ARE FOUND IN THE PLANS OR NOTES, OR IF A QUESTION ARISES OVER THE INTENT OF THE PLANS OR NOTES, CONTRACTOR SHALL VERIFY AND IS RESPONSIBLE FOR ALL DIMENSIONS (INCLUDING ROUGH OPENINGS).
3. PLEASE SEE ADDITIONAL NOTES CALLED OUT ON OTHER SHEETS.

**BRACED WALL PANEL NOTES:**

**B.P. BRACED WALL PANEL** - 3/4" MIN. LENGTH w/ 7/16" OSB OR 1/2" PLYWOOD AND 3d COMMONS 8' ON AT ALL PANEL EDGES, 12" OC FIELD & 3/4" x 8" PER PANEL LOCATED AT 14 POINTS & 1800R MIN. HOLD DOWN EACH END \*HPFH022 OR STD10)

**I.B.P. INTERIOR BRACED WALL PANEL** - 1/2" GYP. 3d PER R 602.10.3(5); 1/2" GYP EACH SIDE w/ R6 X 1/4" TYPE 5 OR W/ SCREWS PER ASTM C1002 @ 7" OC @ ALL SUPPORTS

**A.B.P. ALTERNATE BRACED WALL PANEL** - 2" x 2" MIN. WIDTH w/ 7/16" OSB OR 1/2" PLYWOOD AND 3d COMMONS 8' ON AT ALL PANEL EDGES, 12" OC FIELD & 3/4" x 8" PER PANEL LOCATED AT 14 POINTS & 1800R MIN. HOLD DOWN EACH END \*HPFH022 OR STD10)

**P.F.H. PORTAL FRAME W/ HOLD DOWNS BRACED WALL PANEL** - 16" MAX. WIDTH w/ 7/16" OSB OR 1/2" PLYWOOD AND 3d COMMONS 8' ON AT ALL PANEL EDGES, 12" OC FIELD 3' ON AT MID SPAN BRACING & (2) A.B. PER PANEL LOCATED AT 14 POINTS & 1800R MIN. HOLDDOWN EACH END \*HPFH022 OR STD10)

**GENERAL STEEL NOTES:**

- ANCHOR BOLTS:  
 PROVIDE WITH STANDARD WASHERS AND NUTS.  
 GALVANIZE BOLTS (WHERE NOTED ON DRAWINGS) ACCORDING TO ASTM A 153 CLASS C. OVERLAP NUTS TO CLASS 2A FIT BEFORE GALVANIZING, ACCORDING TO ASTM A 563.  
 PROVIDE BEVELED WASHERS AT BOLT HEADS OR NUTS BEARING ON SLOPING SURFACES.

**DOOR AND WINDOW NOTES:**

1. EVERY BEDROOM SHALL BE PROVIDED WITH AN EGRESS WINDOW WITH FINISH SILL HEIGHT NOT GREATER THAN 44" ABOVE THE FINISH FLOOR HEIGHT AND SHALL HAVE A MINIMUM OPENABLE AREA OF 5.7 SQ. FT. EGRESS WINDOWS SHALL NOT HAVE AN OPENABLE AREA LESS THAN 20" WIDE OR 24" HIGH.
2. ALL WALK-THRU DOORS SHALL BE SOLID CORE
3. INTERIOR DOORS SHALL BE PAINTED. ENTRY DOOR TO BE DEFINED BY HOME OWNER PRIOR TO ORDERING

**NAILING NOTES: (PER IRC TABLE R602.3(1))**

- JOIST TO SILL OR GIRDER  
 BRIDGING TO JOIST  
 SOLE PLATE TO JOIST OR BLKG  
 STUD TO SOLE PLATE  
 TOP PLATE TO STUD
- DOUBLE STUDS  
 DOUBLE TOP PLATES  
 CONTINUOUS HEADER, TWO PIECES  
 BUILT-UP HEADER, TWO PIECES  
 W/ 1/2" SPACES  
 TOP PLATES, LAPS AND INTERSECTIONS
- CEILING JOISTS TO PLATE  
 CONTINUOUS HEADER TO STUD  
 CEILING JOISTS, LAPS OVER PARTITIONS  
 CEILING JOISTS TO PARALLEL RAFTERS  
 RAFTER TO PLATE  
 1" BRACE TO EACH STUD AND PLATE  
 BUILT-UP CORNER STUDS  
 2" FLANKS
- 1/2" PLYWOOD ROOF AND WALL SHEATHING
- 3/4" PLYWOOD SUBFLOOR
- 2x MULTIPLE JOISTS - STAGGER @ 15" OC  
 W/ (2) @ EA. END OR SPLICE  
 (3) OR FEWER  
 (4) OR MORE
- TOE NAIL (3)-3d  
 TOE NAIL EA. END (2)-3d  
 FACE NAIL 16d @ 16" OC  
 16d @ 16" OC ALONG EA. EDGE  
 FACE NAIL (2)-16d
- TOE NAIL (3)-3d  
 TOE NAIL (4)-3d  
 FACE NAIL (3)-10d  
 TOE NAIL (2)-16d  
 FACE NAIL (2)-3d  
 10d @ 24" OC  
 (2)-16d @ EA. BRS.
- EDGES 3d @ 6" OC  
 INTERMEDIATE 3d @ 12" OC
- EDGES 3d @ 6" OC  
 INTERMEDIATE 3d @ 12" OC
- 16d NAILS  
 1/2" DIA. M.B. W/ STANDARD NUT AND WASHERS

**FRAMING NOTES:**

1. PROVIDE DOUBLE JOISTS UNDER ALL WALLS RUNNING PARALLEL TO JOISTS.
2. PROVIDE POSITIVE VENTILATION AT EA. END OF EA. RAFTER SPACE AT VAULTED CEILING AREAS.
3. PROVIDE FIRE BLOCKING, DRAFT STOPS AND FIRE STOPS AS PER I.B.C. SEC. R502.12.
4. PROVIDE POSITIVE CONNECTIONS AT EACH END OF ALL POSTS AND COLUMNS TO RESIST LATERAL DISPLACEMENT.

**ABBREVIATION NOTES:**

1. AHJ = Authority Having Jurisdiction.
2. CMU = Concrete Masonry Units.
3. FSJ = Furnish & Install.
4. FFE = Furniture, Fixtures & Equipment.
5. GC = General Contractor.
6. LF = Linear Feet.
7. MACAP = Match As Closely As Possible.
8. M-E-P = Mechanical (HVAC), Electrical, Plumbing.
9. NIC = Not In Contract, OTR = Over The Road.
10. PM = Project Manager.
11. SF = Square Feet.
12. SS = STAINLESS STEEL.
13. TM = Time & Material.
14. TBD = To Be Determined.
15. TR = Pressure Treated Lumber.
16. UG = Underground.
17. U.I. = Pounds/Unit Inches.
18. UNO = Unless Noted Otherwise.
19. XP = Weatherproof.
20. XP/FCI = Weatherproof GFCI Receptacle.
21. XG = Existing Conditions.
22. ETR = Existing To Remain.

**FOUNDATION NOTES:**

1. BASEMENT ADDITION SLAB ON GRADE.
2. ALL FOOTINGS TO REST ON CLEAN FIRM UNDISTURBED SOIL. STEP FOOTINGS AS REQUIRED TO MAINTAIN REQUIRED DEPTH BELOW FINISH GRADES.
3. CONCRETE STRENGTH: 3,000 PSI AT 28 DAYS FOR ALL SLABS. (FOUNDATION DESIGN BASED ON 3,000 PSI). 3,000 PSI AT 28 DAYS FOR ALL OTHER CONDITION. MAXIMUM SLUMP, 4"
4. USE ASTM A415 GRADE 60 DEFORMED REINFORCING BARS UNLESS NOTED OTHERWISE.
5. CONCRETE EXPANSION ANCHORS SHALL BE SIMPSON WEDGE-ALL STUD ANCHORS OR ENGINEER APPROVED EQUAL. EPOXY TO BE SIMPSON "SET" ADHESIVE OR APPROVED EQUAL.
6. INFILTRATION, ALL OPENINGS IN THE EXT. BLDG. ENVELOPE SHALL BE SEALED AGAINST AIR INFILTRATION. THE FOLLOWING AREAS MUST BE SEALED:  
 JOINTS AROUND WINDOW AND DOOR FRAMES  
 JOINTS BETWEEN WALL CAVITY AND WINDOW/DR. FRM.  
 JOINTS BETWEEN WALL AND FOUNDATION  
 JOINTS BETWEEN WALL AND ROOF  
 JOINTS BETWEEN WALL PANELS  
 UTILITY PENETRATIONS THROUGH EXTERIOR WALLS

**GENERAL STAIR & RAILING NOTES:**

1. STAIRWAYS SHALL HAVE A MIN. WIDTH OF 34". HAND RAILS MAY ENCRDACH A MAX. OF 3 1/2" INTO THE REQUIRED WIDTH.
2. TREADS SHALL HAVE A MIN. WIDTH OF 4". STAIR TREADS MUST BE UNIFORM AND CAN NOT VARY FROM THE LARGEST TO THE SMALLEST BY MORE THAN 3/8".
3. STAIRWAYS SHALL HAVE MIN. 8" OF HEADROOM AT THE NOSE OF THE STAIR.
4. ENCLOSED USABLE SPACE UNDER INTERIOR STAIRS SHALL BE PROTECTED ON THE ENCLOSED FACE WITH 5/8" TYPE "X" GYPSUM WALL BOARD.
5. STAIRWAYS SHALL HAVE AT LEAST ONE HANDRAIL LOCATED 36" ABOVE THE NOSING OF TREADS AND LANDINGS. THE HAND GRIP PORTION OF HANDRAILS SHALL NOT BE LESS THAN 1-1/2" OR GREATER THAN 2" IN CROSS-SECTIONAL DIMENSION.
6. HANDRAILS SHALL BE CONTINUOUS THE FULL LENGTH OF THE STAIRS. THE ENDS OF HANDRAILS SHALL RETURN TO WALL OR TERMINATE INTO A NEPEL POST OR SAFETY TERMINAL.
7. STAIRWAYS HAVING LESS THAN 2 RISERS DO NOT REQUIRE A HAND RAIL.
8. 34" MIN. HEIGHT GUARDRAILS SHALL BE PROVIDED FOR AT PORCHES, DECKS, BALCONIES, STAIRWAYS AND LANDINGS WHERE THE ADJACENT SURFACE IS GREATER THAN 30" BELOW.
9. RAILING AND GUARDRAIL BALUSTER SPACING SHALL BE NO GREATER THAN 4".
10. THE TRIANGULAR OPENINGS FORMED BY THE RISER, TREAD, AND BOTTOM OF GUARDRAIL SHALL NOT ALLOW A 6" DIAMETER SPHERE TO PASS THROUGH.

**GRADING NOTES:**

1. CONTRACTOR TO VERIFY LOCATION OF ALL EXISTING UTILITIES.
2. PROVIDE POSITIVE DRAINAGE AWAY FROM BUILDING.
3. FINAL GRADE TO CONVEY SURFACE DRAINAGE TOWARD ROCK CHANNELS AND DISPERSION TRENCHES.
4. AREAS TO BE FILLED SHALL BE CLEARED, GRUBBED TO REMOVE TREES, VEGETATION, ROOTS AND OTHER OBJECTIONABLE MATERIAL AND STRIPPED OF TOPSOIL.
5. PLACE FILL SLOPES WITH A GRADIENT STEEPER THAN 3:1 IN LIFTS NOT TO EXCEED 3 INCHES, AND MAKE SURE EACH LIFT IS PROPERLY COMPACTED.

**EROSION CONTROL NOTES:**

1. INSTALL SILT FENCE PRIOR TO ANY EXCAVATION OR CONSTRUCTION.
2. MINIMIZE SITE DISTURBANCE BY TIGHT CONTROL OF EXCAVATION LIMITS.
3. ALL EXPOSED SOIL SHALL BE MULCHED WITH STRAW OR HOGWORTH TO MINIMIZE SOIL EROSION. NO SOIL SHALL BE LEFT IN AN EXPOSED CONDITION. IT IS RECOMMENDED THAT THE CONTRACTOR MAINTAIN A STOCK PILE OF THIS MATERIAL ON SITE FOR QUICK APPLICATION.
4. HYDROSEED WITH A WOOD CELLULOSE FIBER MULCH APPLIED AT A RATE OF 2,000/LB/ACRE. USE AN ORGANIC TACKIFIER AT NO LESS THAN 150 LB/ACRE OR PER MANUFACTURER'S RECOMMENDATION IF HIGHER. APPLICATION OF TACKIFIER SHALL BE HEAVIER AT EDGES, IN VALLEYS AND AT CRESTS OF BANKS AND OTHER AREAS WHERE SEED CAN BE MOVED BY WIND OR WATER.
5. DISPERSION TRENCHES SHALL OVERTFLOW ONTO NATIVE UNDISTURBED GROUND. NO SITE DISTURBANCE BELOW TRENCHES.

**ELECTRICAL, DATA, & AUDIO NOTES:**

- HOME OWNER SHALL DO A WALK-THRU WITH RELEVANT INSTALLERS TO VERIFY THE EXACT LOCATION FOR OUTLETS, LIGHTS, SWITCHES, CABLE, DATA, PHONE, AUDIO, ETC.
- ELECTRICAL:**
1. ELECTRICAL RECEPTACLES IN BATHROOMS, KITCHENS AND GARAGES SHALL BE G.F.I. ORS F.I.C. PER NATIONAL ELECTRICAL CODE REQUIREMENTS.
  2. PROVIDE ONE SMOKE DETECTOR IN EACH ROOM AND ONE IN EACH CORRIDOR ACCESSING BEDROOMS. CONNECT SMOKE DETECTORS TO HOUSE POWER AND INTER-CONNECT SMOKE DETECTORS SO THAT, WHEN ANY ONE IS TRIPPED, THEY ALL WILL SOUND. PROVIDE BATTERY BACKUP FOR ALL UNITS.
  3. CIRCUITS SHALL BE VERIFIED WITH HOME OWNER PRIOR TO WIRE INSTALLATION.
  4. FINAL SWITCHES FOR TIMERS AND DIMMERS SHALL BE VERIFIED WITH HOME OWNER.
  5. FIXTURES TO BE SELECTED BY HOME OWNER.
- AUDIO:**
1. LOCATE SPEAKERS AND AUDIO CONTROLS AS INDICATED IN THE PLAN; RUN CIRCUIT OF SPEAKER WIRING TO AUDIO HOME PANEL SPECIFIED BY FLOOR.
  2. AUDIO SPEAKERS TO BE APPROVED BY HOME OWNER.
  3. LOCATE JACKS AS INDICATED IN THE PLAN; INSTALL DATA / CABLE PANEL SIMILAR TO "ON Q1". SYSTEM TO BE APPROVED BY HOME OWNER.
- DATA / CABLE:**
- LOCATE SECURITY PANELS AS INDICATED IN THE PLAN; SYSTEM TO BE APPROVED BY HOME OWNER.

**EXTERIOR FINISH NOTES:**

1. EXTERIOR FINISH MATERIALS TO MATCH EXISTING MATERIALS AND COLORS AS CLOSE AS POSSIBLE.
2. ROOFING TO BE ASPHALT SHINGLES OVER 15# FELT ON 5/8" OSB SHEATHING.
3. NEW GUTTERS AND DOWNSPOUTS TO MATCH AND TIE INTO EXISTING AS IS POSSIBLE OR NOTED OTHERWISE.

**3D RENDERING FINISH NOTES:**

1. RENDERINGS ARE NOT TO SCALE, ALL RENDERINGS ARE FOR ARTISTIC DEPICTION AND REFERENCE ONLY. PLAN UPDATES MAY NOT BE REFLECTED IN RENDERINGS.
2. FINAL FINISHES SHALL BE CONFIRMED WITH THE HOME OWNER PRIOR TO APPLICATION.

**STRUCT. WOOD CONSTRUCTION:**

STRUCTURAL SAWN LUMBER:  
 DESIGN VALUES FOR SAWN LUMBER, SIZES 2" THICK X 5" AND WIDER:

DFI NO. 2 DESIGN VALUES:	SPP NO. 2 DESIGN VALUES:
FB= 1,140 PSI (SINGLE)	FB= 1,105 PSI (SINGLE)
E = 1,600,000 PSI	E = 1,400,000 PSI
FC= 625 PSI (PERPENDICULAR TO GRAIN)	FC= 425 PSI (PERPENDICULAR TO GRAIN)
HEM FIR NO. 2 DESIGN VALUES:	SOUTHERN PINE NO. 2 DESIGN VALUES:
FB= 1,075 PSI (SINGLE)	FB= 1,210 PSI (SINGLE)
E = 1,300,000 PSI	E = 1,600,000 PSI
FC= 405 PSI (PERPENDICULAR TO GRAIN)	FC= 565 PSI (PERPENDICULAR TO GRAIN)

TYPICAL FRAMING SHALL BE SPP  
 LONG SPAN JOIST SHALL BE SPRUCE PINE FIR OR DOUGLAS FIR-LARCH PINE NO. 2 OR BETTER  
 ALLOWABLE STRESSES FOR SAWN LUMBER SHALL BE IN ACCORDANCE WITH THE EDITION OF THE "NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION PLUS SUPPLEMENT," DESIGN VALUES FOR WOOD CONSTRUCTION" BY THE NATIONAL FOREST PRODUCTS ASSOCIATION.  
 DETAIL, FABRICATE AND ERECT STRUCTURAL WOOD IN ACCORDANCE WITH THE AMERICAN INSTITUTE OF TIMBER CONSTRUCTION STANDARDS AND SPECIFICATIONS, THE PROJECT MANUAL AND THESE DRAWINGS.  
 ALL LUMBER CONNECTORS SHALL HAVE ICC APPROVAL.  
 ALL WOOD USED FOR SILL PLATES, DECKS, AND RAILINGS SHALL BE TREATED LUMBER.  
 ALL LUMBER IN CONTACT WITH CONCRETE OR MASONRY SHALL BE TREATED.  
 ALL SILL PLATES SHALL BE FULL WIDTH OF CONCRETE FOUNDATION OR WALL.  
 REPAIR/REPLACE ALL FRAMING DAMAGED BY MECHANICAL SYSTEMS.  
 ALL WOOD PLATES SHALL BE ANCHORED TO FOUNDATION WALL WITH 1/2" DIA X 16" LONG ANCHOR BOLTS @ 8'-0" O.C. MAXIMUM AND 12" FROM ALL CORNERS. MINIMUM.  
 ALL FABRICATION AND ERECTION PER NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION DO NOT DRILL OVERSIZE HOLE FOR MITERS WITHOUT ARCHITECT'S APPROVAL.  
 ALL LUMBER SHALL BE STAMPED WITH THE GRADE MARK OF AN APPROVED TESTING AGENCY.  
 ALL WINDOW AND DOOR HEADERS IN WOOD FRAMED WALLS TO BE 2-2X10'S W/1/2" PLYWOOD SHIM, UNLESS OTHERWISE NOTED.

**THERMAL ENVELOPE WALL CONSTRUCTION:**

- INSULATION MINIMUM R-VALUES:  
 EXTERIOR STUD WALLS: R-15  
 FLAT CEILING: R-49  
 CATHEDRAL CEILING: R-30
- PROVIDE VENTILATION BAFFLES @ ALL RAFTER SPACES.
- FOAM ALL OPENINGS IN EXTERIOR WALLS.  
 FOAM ALL OPENINGS IN TOP PLATES.
- WALL ABOVE GRADE WALLS TO HAVE A VAPOR PERMEABLE AIR BARRIER INSTALLED PER MANUFACTURER'S INSTRUCTIONS.  
 JOINTS SHALL OVERLAP AND BE SEALED WITH MANUFACTURER APPROVED TAPE.  
 ATTACHMENT PENETRATIONS TO BE SEALED WITH MANUFACTURER APPROVED METHODS.
- AIR BARRIER AND INSULATION REQUIREMENTS:  
 GENERAL REQUIREMENTS:  
 CONTINUOUS AIR BARRIER SHALL BE INSTALLED IN THE BUILDING ENVELOPE.  
 THE EXTERIOR THERMAL ENVELOPE CONTAINS A CONTINUOUS AIR BARRIER.  
 BREAKS OR JOINTS IN THE AIR BARRIER SHALL BE SEALED.
- CEILING/ATTIC:  
 THE AIR BARRIER IN ANY DROPPED CEILING OR SOFFIT SHALL BE ALIGNED WITH THE INSULATION AND ANY GAPS IN THE AIR BARRIER SEALED.  
 ACCESS OPENINGS, DROP DOWNSTAIRS OR KNEE WALL DOORS TO UNCONDITIONED ATTIC SPACES SHALL BE SEALED.  
 THE JUNCTION OF THE FOUNDATION AND SILL PLATE SHALL BE SEALED.  
 THE JUNCTION OF THE TOP PLATE AND THE TOP OF EXTERIOR WALLS SHALL BE SEALED.  
 KNEE WALLS SHALL BE SEALED.
- WINDOWS, SKYLIGHTS AND DOORS: THE SPACE BETWEEN FRAMING AND SKYLIGHTS, AND THE JAMBS OF WINDOWS AND DOORS, SHALL BE SEALED.  
 RIM JOISTS: RIM JOISTS SHALL INCLUDE THE AIR BARRIER.
- FLOORS INCLUDING CANTILEVERED FLOORS AND FLOORS ABOVE GARAGES: THE AIR BARRIER SHALL BE INSTALLED AT ANY EXPOSED EDGE OF INSULATION.  
 CRAWL SPACE WALLS: EXPOSED EARTH IN UNVENTED CRAWL SPACES SHALL BE COVERED WITH A CLASS I VAPOR RETARDER WITH OVERLAPPING JOINTS TAPE.  
 SHAFTS, PENETRATIONS: DUCT SHAFTS, UTILITY PENETRATIONS, AND FLUE SHAFTS OPENING TO EXTERIOR OR UNCONDITIONED SPACE SHALL BE SEALED.  
 GARAGE SEPARATION: AIR SEALING SHALL BE PROVIDED BETWEEN THE GARAGE AND CONDITIONED SPACES.
- RECESSED LIGHTING: RECESSED LIGHT FIXTURES INSTALLED IN THE BUILDING THERMAL ENVELOPE SHALL BE SEALED TO THE FINISHED SURFACE.
- SHOWERTUB ON EXTERIOR WALL: THE AIR BARRIER INSTALLED AT EXTERIOR WALLS ADJACENT TO SHOWERS AND TUBS SHALL SEPARATE THE WALL FROM THE SHOWER OR TUB.
- ELECTRICAL/PHONE BOX ON EXTERIOR WALLS: THE AIR BARRIER SHALL BE INSTALLED BEHIND ELECTRICAL AND COMMUNICATION BOXES. ALTERNATIVELY, AIR-SEALED BOXES SHALL BE INSTALLED.
- HVAC REGISTER BOOTS: HVAC SUPPLY AND RETURN REGISTER BOOTS THAT PENETRATE BUILDING THERMAL ENVELOPE SHALL BE SEALED TO THE SUBFLOOR, WALL COVERING OR CEILING PENETRATED BY THE BOOT.

**GENERAL PROJECT DATA**

- ALL CODES GOVERN OVER DRAWINGS.  
 RESIDENTIAL BUILDING CODE OF OHIO 1, 2 & 3 FAMILY RESIDENCE.  
 LOCAL CODES AND ORDINANCES (VERIFY)
- USE GROUP CLASSIFICATION: RESIDENTIAL: SINGLE-FAMILY  
 CONSTRUCTION CLASSIFICATION: WOOD FRAME, TYPE 5B, UNPROTECTED  
 CLIMATIC AND GEOGRAPHIC DESIGN CRITERIA (301.2)  
 GROUND SNOW LOAD: 20 PSF
- WIND DESIGN SPEED: 115 MPH  
 WIND EXPOSURE CATEGORY: EXPOSURE B (301.2.1.4)  
 WIND DESIGN TOPOGRAPHIC EFFECTS: NO  
 SEISMIC DESIGN CATEGORY: 3  
 SUBJECT TO DAMAGE FROM WEATHERING: SEVERE  
 SUBJECT TO DAMAGE FROM FROST LINE DEPTH: 42 INCHES  
 SUBJECT TO DAMAGE FROM TEMPERATURE: MODERATE TO HEAVY  
 WINTER DESIGN TEMP: 5 DEG  
 HEATING DEGREE DAYS: 6,351  
 DEGREES NORTH LATITUDE: 41 DEG 20 MIN  
 ICE BARRIER UNDERLAYMENT REQUIRED: YES  
 AIR FREEZING INDEX: <1500  
 WEATHERING PROBABILITY FOR CONCRETE: SEVERE

301.3 ALLOWABLE STORY HEIGHT: (AS PERMITTED BY SECTION 611 TABLES PLUS FLOOR FRAMING HEIGHT)  
 301.1 DEAD LOADS: THE ACTUAL HEIGHTS OF MATERIALS AND CONSTRUCTION SHALL BE USED FOR DETERMINING DEAD LOAD WITH CONSIDERATION FOR THE DEAD LOAD OF FIXED SERVICE EQUIPMENT.

**THE FOLLOWING ARE USED FOR TYPICAL DEAD LOADS:**

- FLOOR JOISTS: 10 PSF  
 CEILING JOISTS: 10 PSF  
 ROOF RAFTERS: 15 PSF

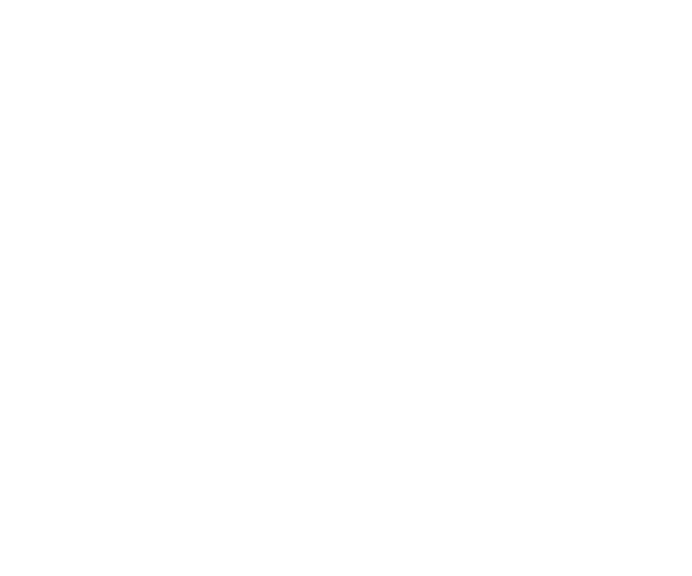
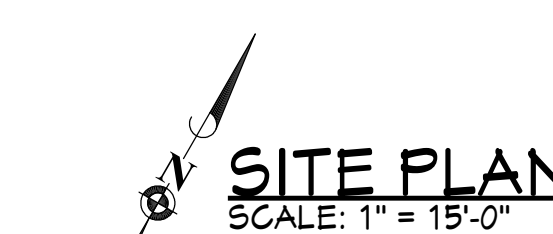
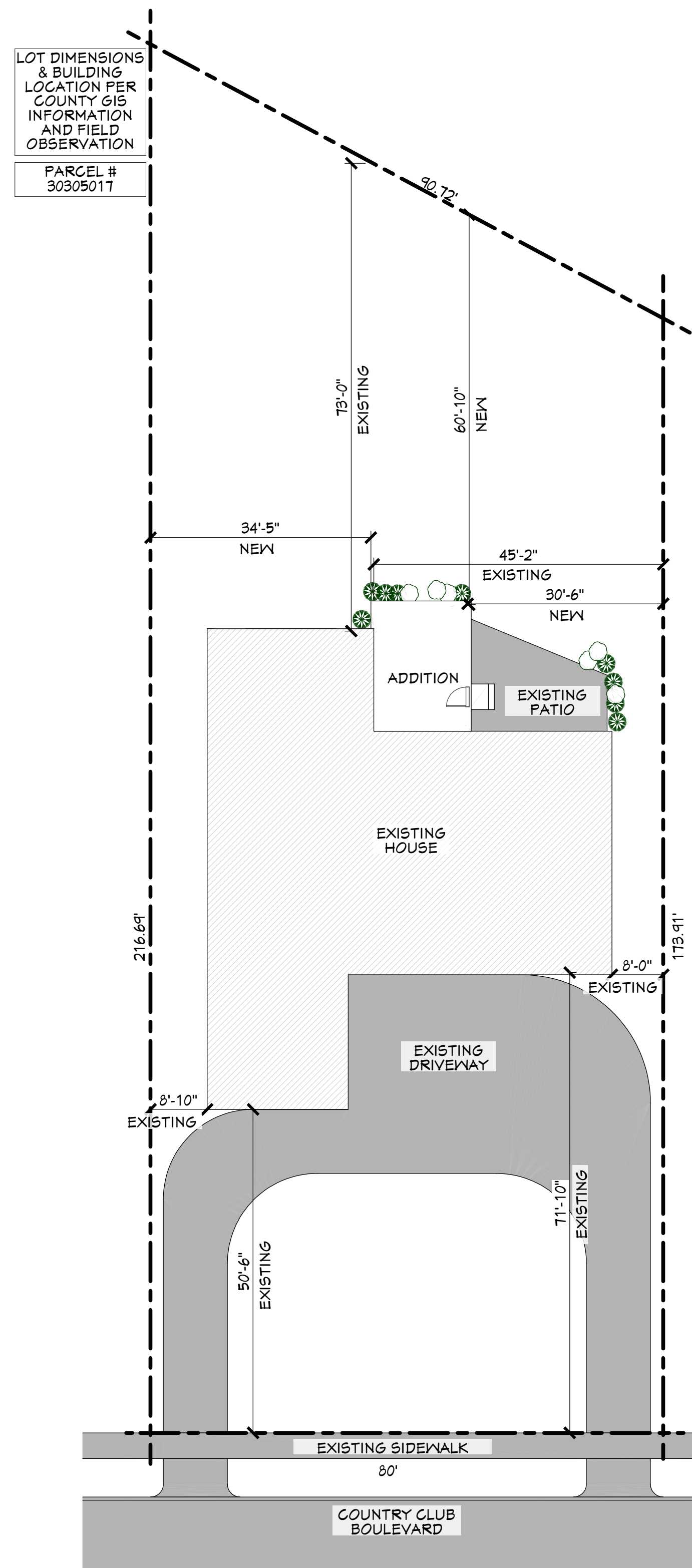
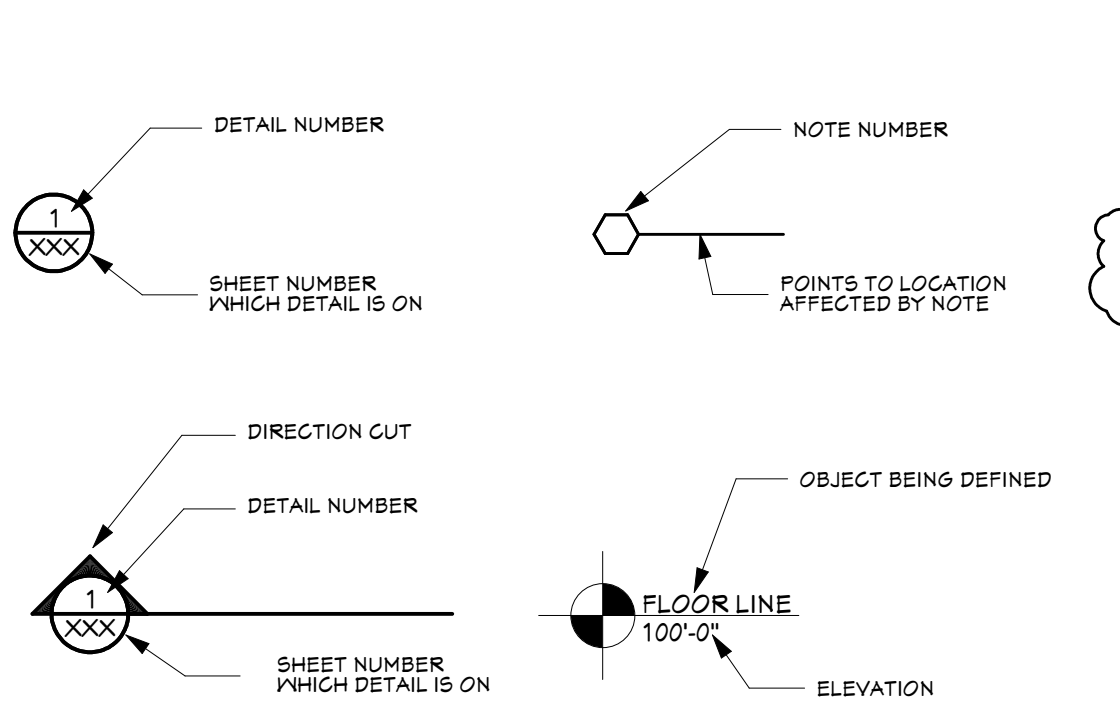
- LIVE LOADS (301.5):  
 ATTICS WITHOUT STORAGE: 10 PSF  
 BALCONIES (EXTERIOR) AND DECKS: 40 PSF  
 GUARDRAILS AND HANDRAILS: 200 PSF  
 GUARDRAIL IN-FILL COMPONENTS: 50 PSF  
 ROOMS OTHER THAN SLEEPING ROOM: 40 PSF  
 SLEEPING ROOMS: 30 PSF  
 STAIRS: 40 PSF

- ROOF LOADS (301.6)  
 SLOPES UP TO 12:12: 25 PSF  
 SLOPES @ 12:12: 15 PSF

ALLOWABLE DEFLECTION OF STRUCTURAL MEMBERS:  
 RAFTERS HAVING SLOPES GREATER THAN 3:12 WITH NO FINISHED CEILING ATTACHED TO RAFTERS: L/120  
 INTERIOR WALLS AND PARTITIONS: H/150  
 FLOORS AND PLASTERED CEILING: L/360  
 ALL OTHER STRUCTURAL MEMBERS: L/240  
 EXTERIOR WALLS—WIND LOADS WITH FLEXIBLE FINISHES: H/120  
 LINTELS SUPPORTING MASONRY VENEER WALLS: L/600

- DEFERRED SUBMITTALS**  
 DEFERRED SUBMITTALS TO BE DESIGNED UNDER THE SUPERVISION OF AN ENGINEER LICENSED IN THE STATE OF OHIO:  
 - ENGINEER TRUSS DRAWINGS  
 - ELECTRICAL SYSTEM DRAWINGS  
 - MECHANICAL SYSTEM DRAWINGS  
 - NOTARIZED SOIL TESTING LETTER OF EXCAVATING COMPANY ON SITE

**SYMBOLS LEGEND**



**DRAWING INDEX**

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A-4	- SECTIONS - ELEVATION - ROOM SCHEDULE
A-5	- ROOF PLAN - ROOF FRAMING PLAN - WALL SECTION - UNIFORM LOAD TABLE & CONNECTION DETAILS
A-6	- AISC STANDARD DETAILS
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A-9	- ADDITION PERSPECTIVES

**PROJECT SQUARE FOOTAGES (EXISTING)**

TOTAL LOT AREA:	14,640 SQ. FT.
FIRST FLOOR LIVING AREA:	2,502 SQ. FT.
SUN ROOM ADDITION:	242 SQ. FT.
TOTAL LIVING AREA:	2,744 SQ. FT.

**SCOPE OF WORK (REMODEL EXISTING MULTIFAMILY)**

THE SCOPE OF WORKS CONSISTS ON BUILDING A NEW SUN ROOM ON CONCRETE SLAB WITH CATHEDRAL CEILING, NEW ROOF, ELECTRICAL CONNECTIONS, WINDOWS AND DOORS, AND FRAMING MEMBERS.

REMODEL FOR:  
**2676 COUNTRY CLUB, ROCKY RIVER, OH 44116**

PLANS & DETAILS THIS PAGE:  
 - GENERAL NOTES  
 - SITE PLAN & ADDITION RENDERING

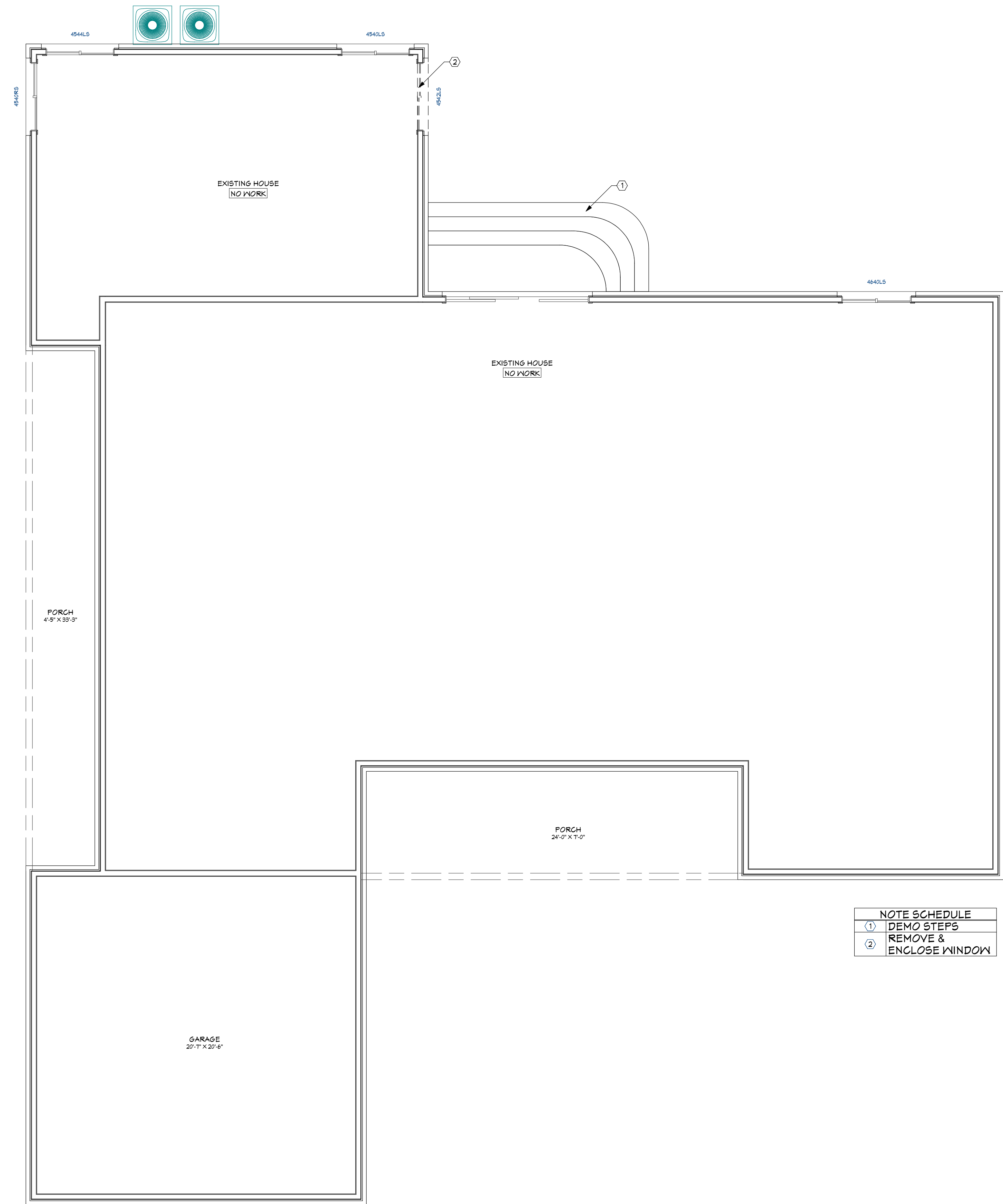
DRAFTING 12401 Rockside Rd. # 25611, Cleveland, OH  
**& DESIGN**  
 (216)-278-2468 gabriel.g@gydraftingdesign.com

Revision Number	Date

DATE:  
 5/22/2026

SCALE:

SHEET:  
**A-1**



NOTE SCHEDULE	
①	DEMO STEPS
②	REMOVE & ENCLOSE WINDOW

**FIRST FLOOR DEMO PLAN**  
 SCALE: 1/4" = 1'-0"

WALL SCHEDULE		
2D SYMBOL	WALL TYPE	COMMENTS
[Symbol]	INTERIOR-4, EXISTING	
[Symbol]	BRICK-4, EXISTING	
[Symbol]	8" CMU (BLOCK) STEM WALL, EXISTING	

**PLANS & DETAILS THIS PAGE:**  
 - DEMO PLAN  
 - DEMO NOTE  
 - WALL SCHEDULE

REMODEL FOR:  
**2676 COUNTRY CLUB, ROCKY RIVER, OH 44116**

**DRAFTING & DESIGN**  
 12401 Rockside Rd. # 256711, Cleveland, OH  
 (216)-278-2468 gabriel@gvdraftingdesign.com

Revision Table	
Number	Date

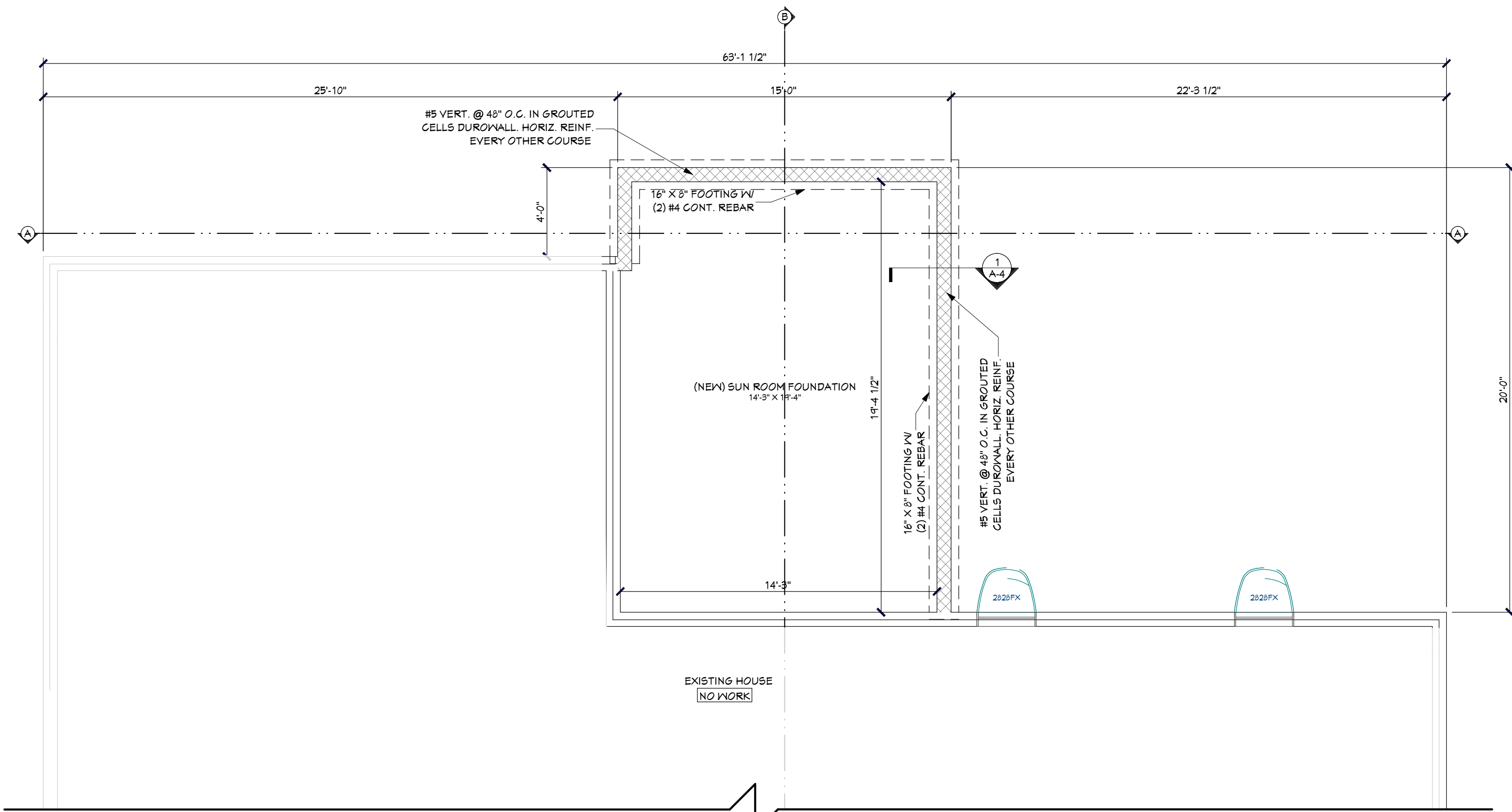
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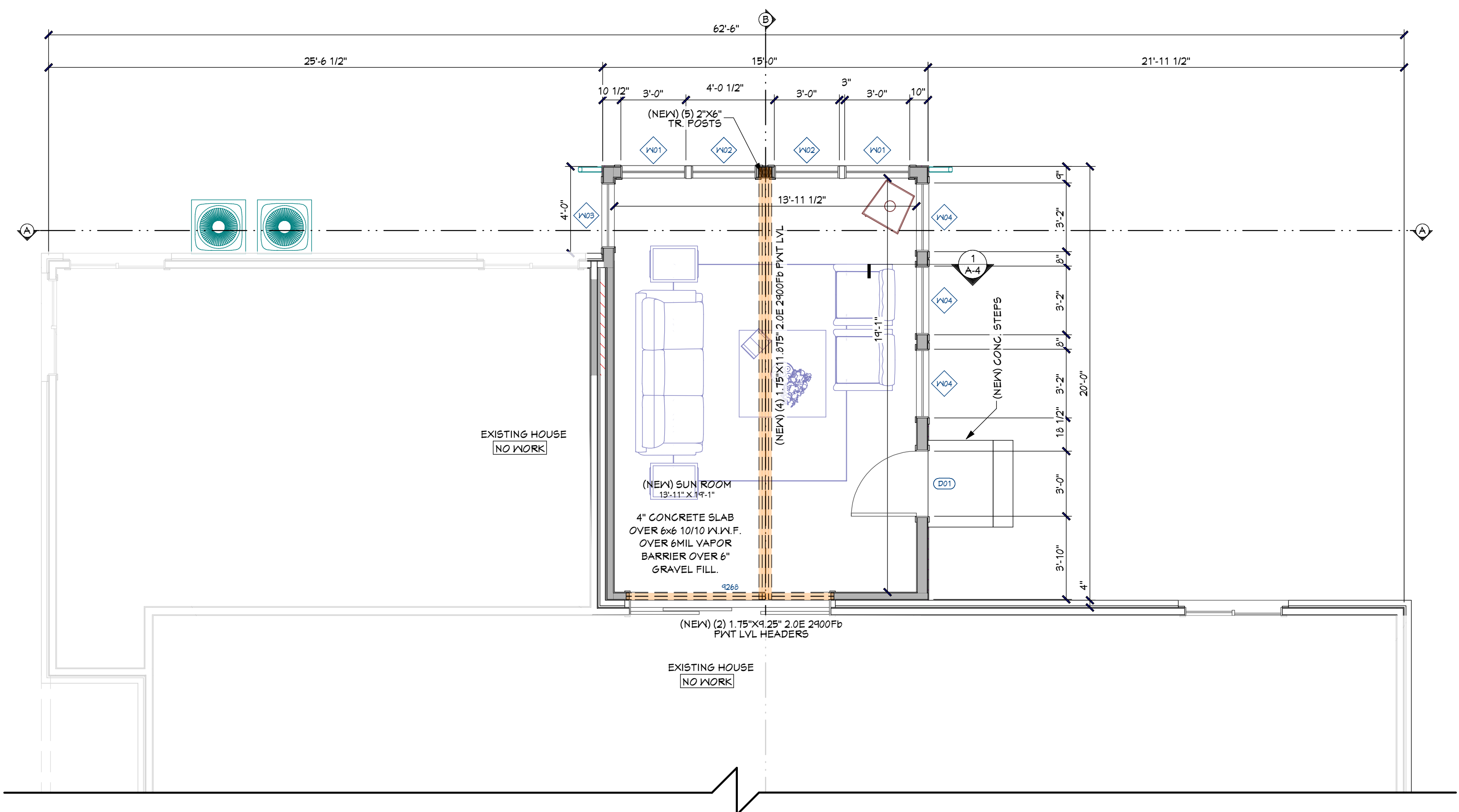
SCALE:

SHEET:

**A-2**



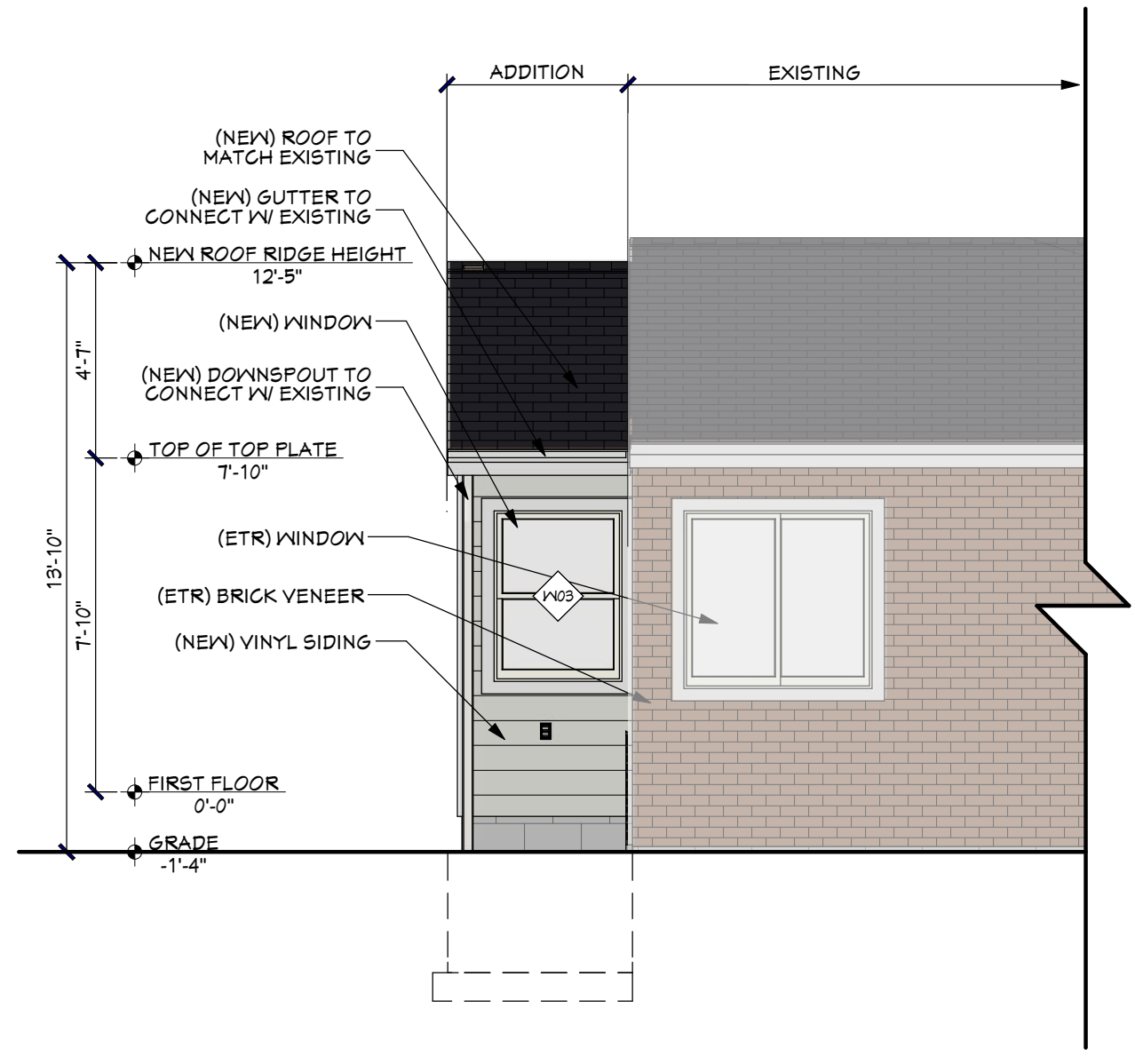
**FOUNDATION PLAN**  
SCALE: 1/4" = 1'-0"



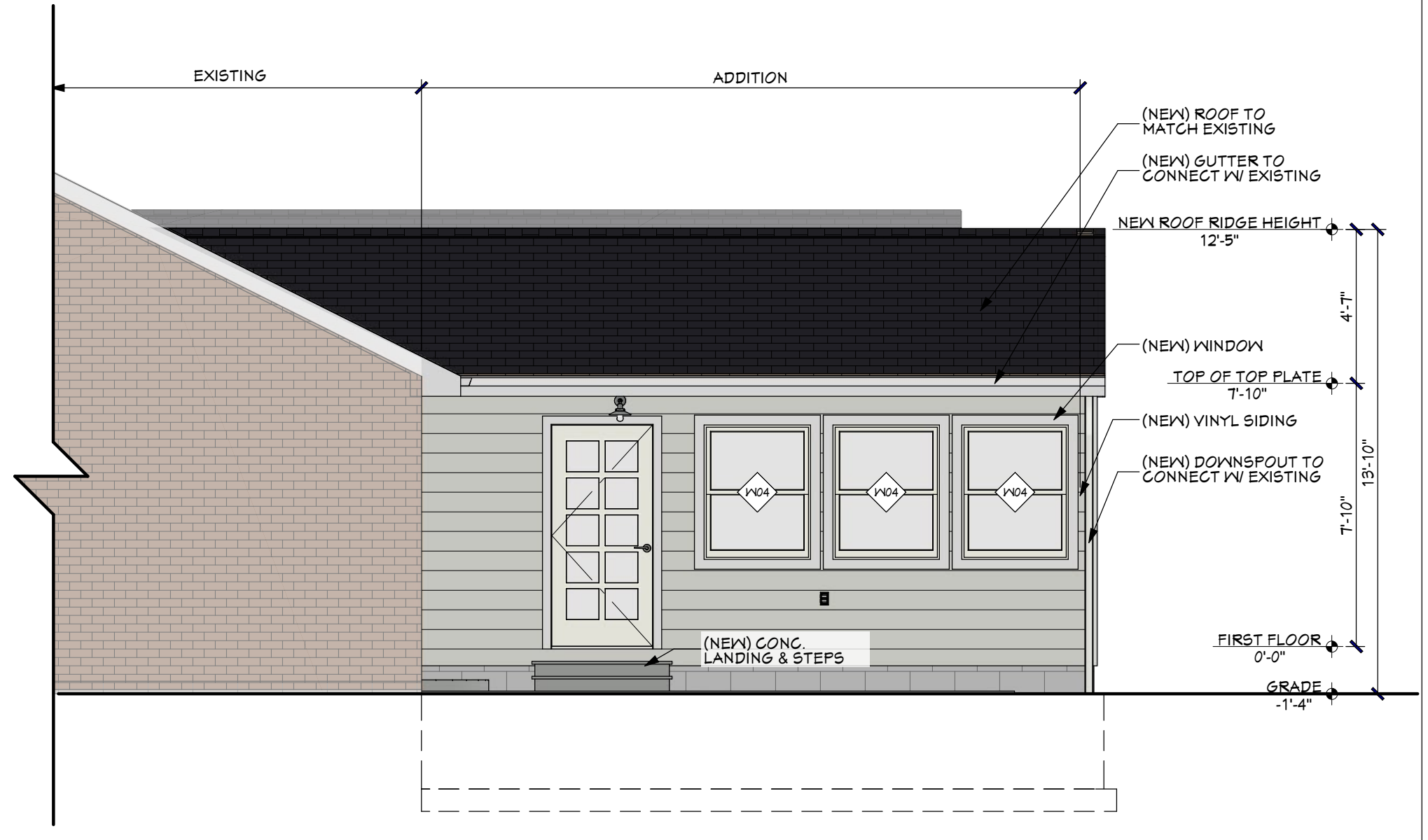
**FIRST FLOOR PLAN**  
SCALE: 1/4" = 1'-0"

WINDOW SCHEDULE										
NUMBER	QTY	FLOOR	WIDTH	HEIGHT	R/O	EGRESS	HEADER	BOTTOM	DESCRIPTION	COMMENTS
W01	2	1	36"	21 1/2"	37"X22 1/2"		2"X8"X37" (3)	82"	FIXED GLASS TRANSOM	
W02	2	1	36"	42"	37"X43"		2"X8"X37" (3)	82"	FIXED GLASS TRANSOM	
W03	5	1	36"	48"	37"X49"		2"X8"X40" (3)	32"	DOUBLE HUNG	

DOOR SCHEDULE								
NUMBER	QTY	FLOOR	WIDTH	HEIGHT	R/O	HEADER	DESCRIPTION	COMMENTS
D01	1	1	36"	80"	38"X83"	2"X8"X41" (3)	EXT. HINGED-DOOR F05	



**LEFT/SOUTHWEST ELEVATION**  
SCALE: 1/4" = 1'-0"



**RIGHT/NORTHEAST ELEVATION**  
SCALE: 1/4" = 1'-0"

WALL SCHEDULE		
2D SYMBOL	WALL TYPE	COMMENTS
[Symbol]	INTERIOR-4, EXISTING	
[Symbol]	BRICK-4, EXISTING	
[Symbol]	8" CMU (BLOCK) STEM WALL, EXISTING	
[Symbol]	SIDING-6, NEW	
[Symbol]	INTERIOR-4, NEW	
[Symbol]	8" CMU (BLOCK) STEM WALL, NEW	

PLANS & DETAILS THIS PAGE:  
- FLOOR PLANS  
- ELEVATIONS  
- DOOR & WINDOW SCHEDULE  
- WALL SCHEDULE

REMODEL FOR:  
**2676 COUNTRY CLUB, ROCKY RIVER, OH 44116**

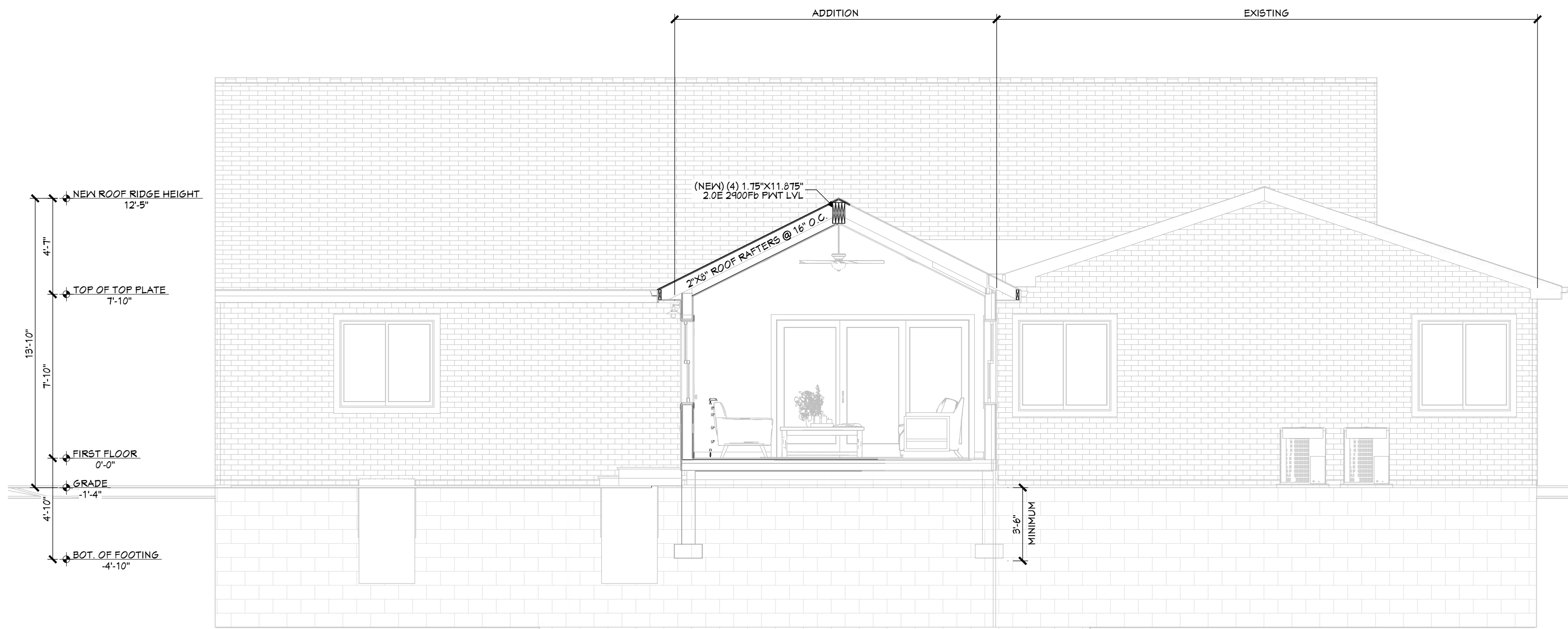
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(216)-278-2468 gabriel.g@gydraftingdesign.com

Revision Table	
Number	Date

DATE:  
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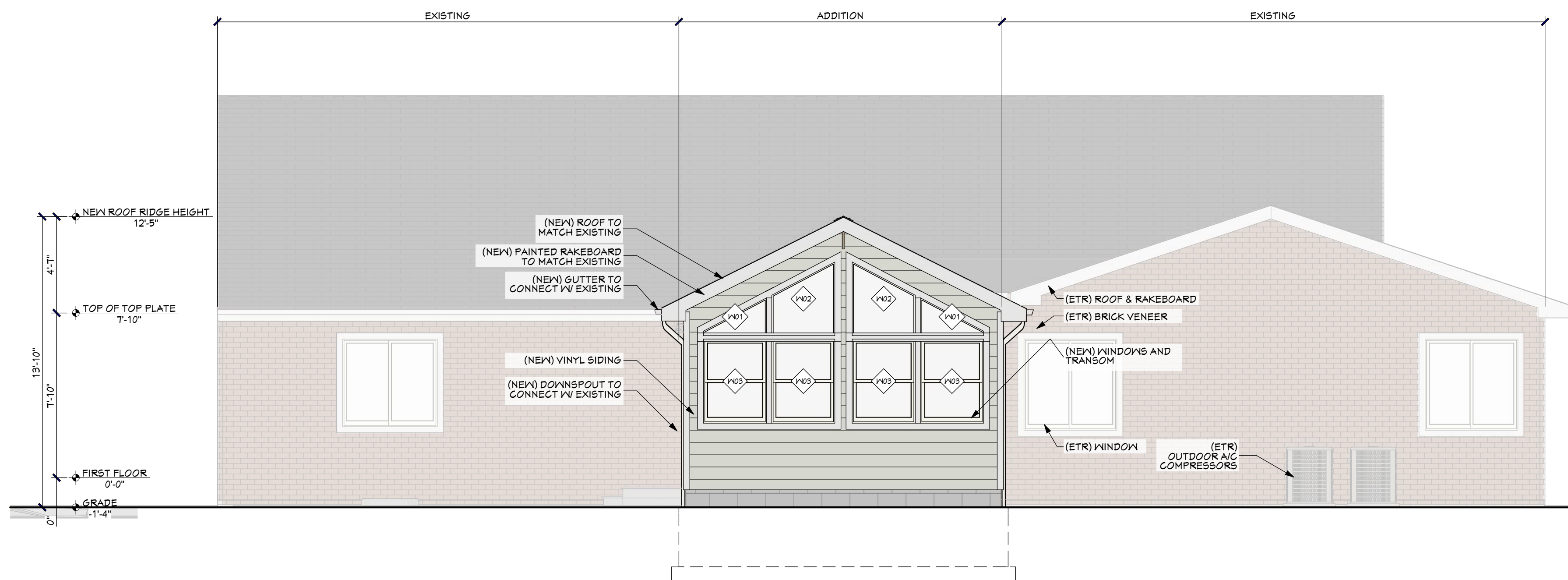
SCALE:

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**A-3**

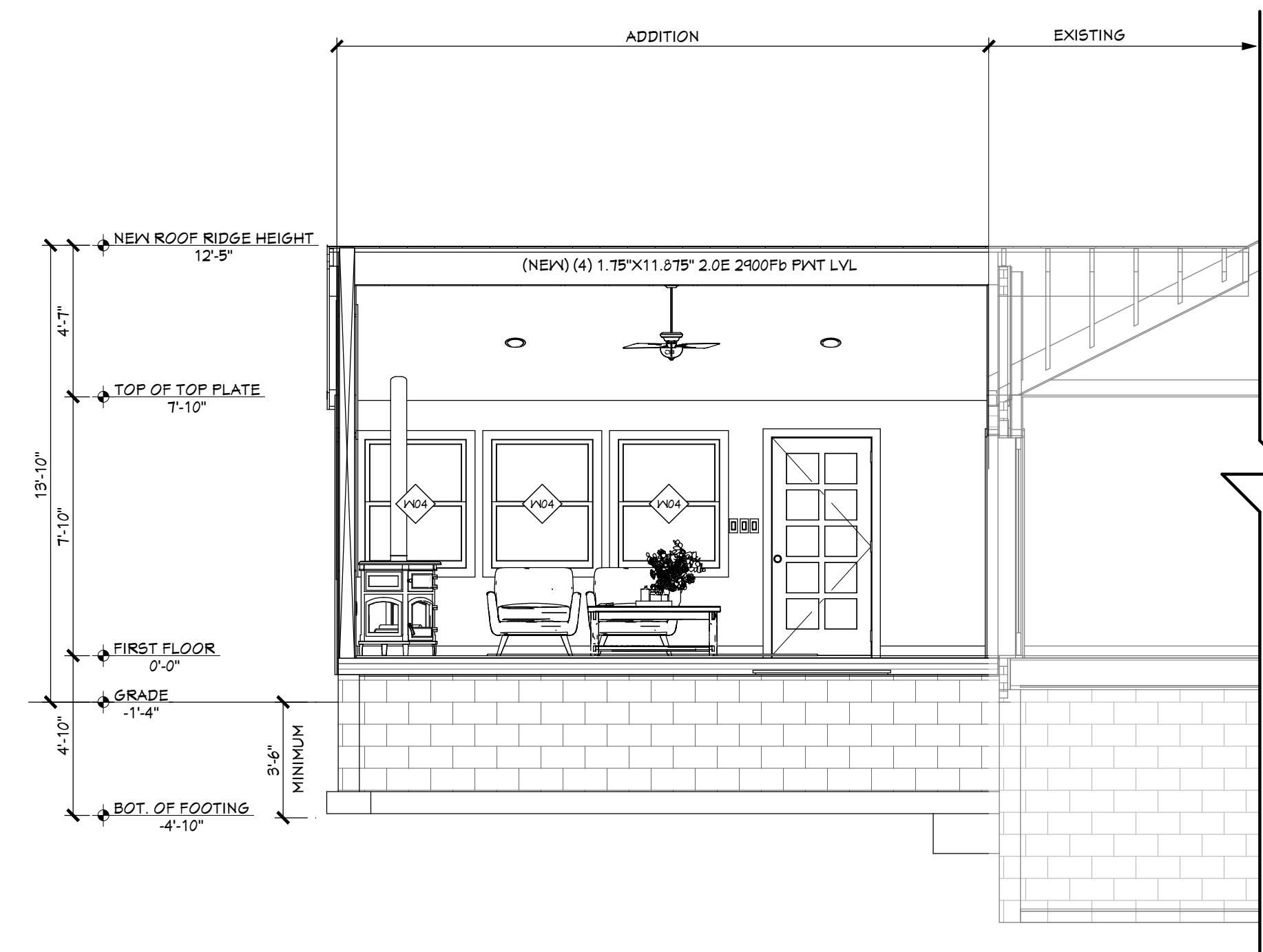


**SECTION A-A**  
SCALE: 1/4" = 1'-0"

ROOM FINISH SCHEDULE							
ROOM NAME	FLOOR	AREA, INTERIOR (SQ FT)	CEILING HEIGHT	WALL MATERIAL	FLOOR FINISH	CEILING FINISH	BASE MOLDING
(NEW) SUN ROOM	1	266		DRYWALL	BIRCH 5" PLANK - WEATHERED, FOAM UNDERLAYMENT	DRYWALL, TONGUE AND GROOVE LUAN	STOCK
TOTALS:		266					



**BACK/NORTHWEST ELEVATION**  
SCALE: 1/4" = 1'-0"



**SECTION B-B**  
SCALE: 1/4" = 1'-0"

PLANS & DETAILS THIS PAGE.  
- ELEVATION  
- SECTIONS  
- ROOM SCHEDULE

REMODEL FOR:  
**2676 COUNTRY CLUB, ROCKY RIVER, OH 44116**

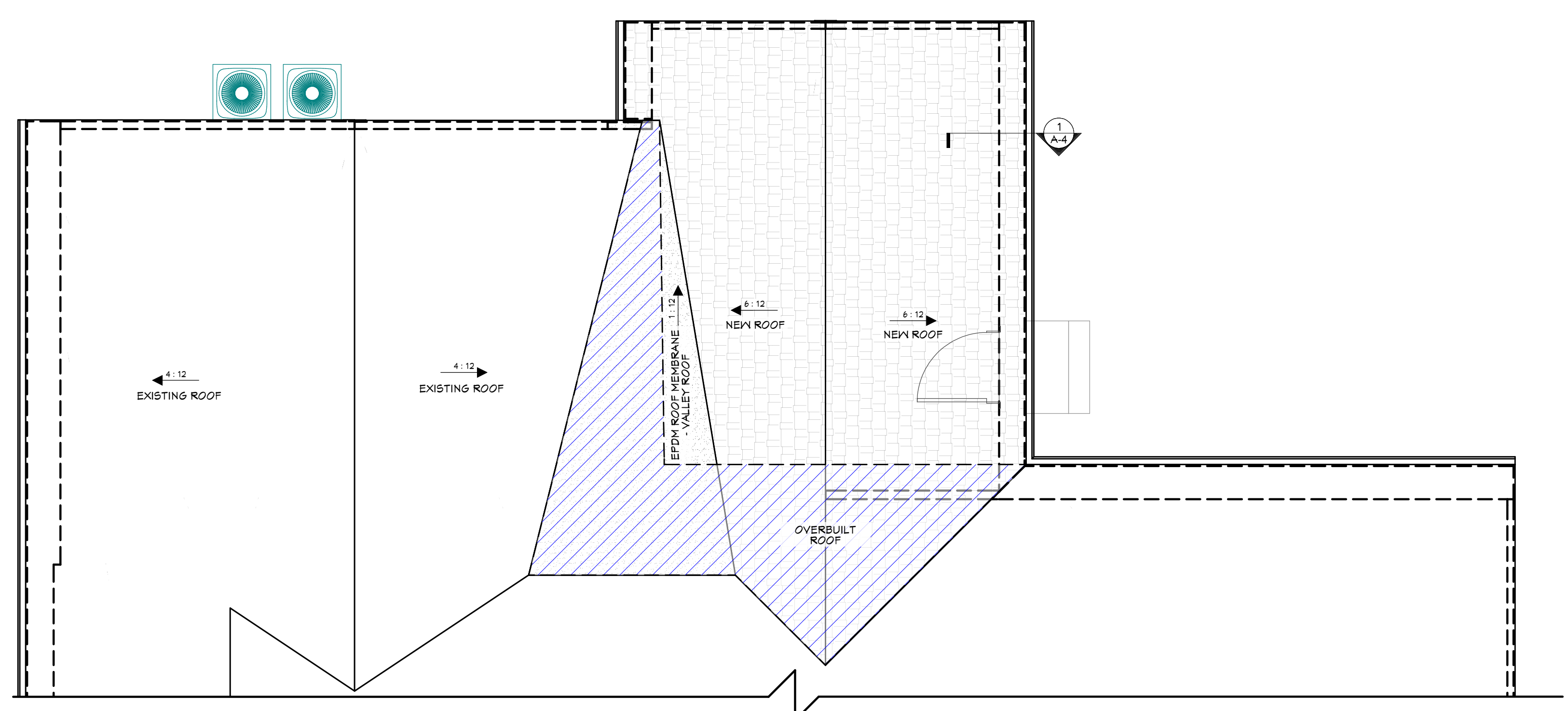
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Revision Table	
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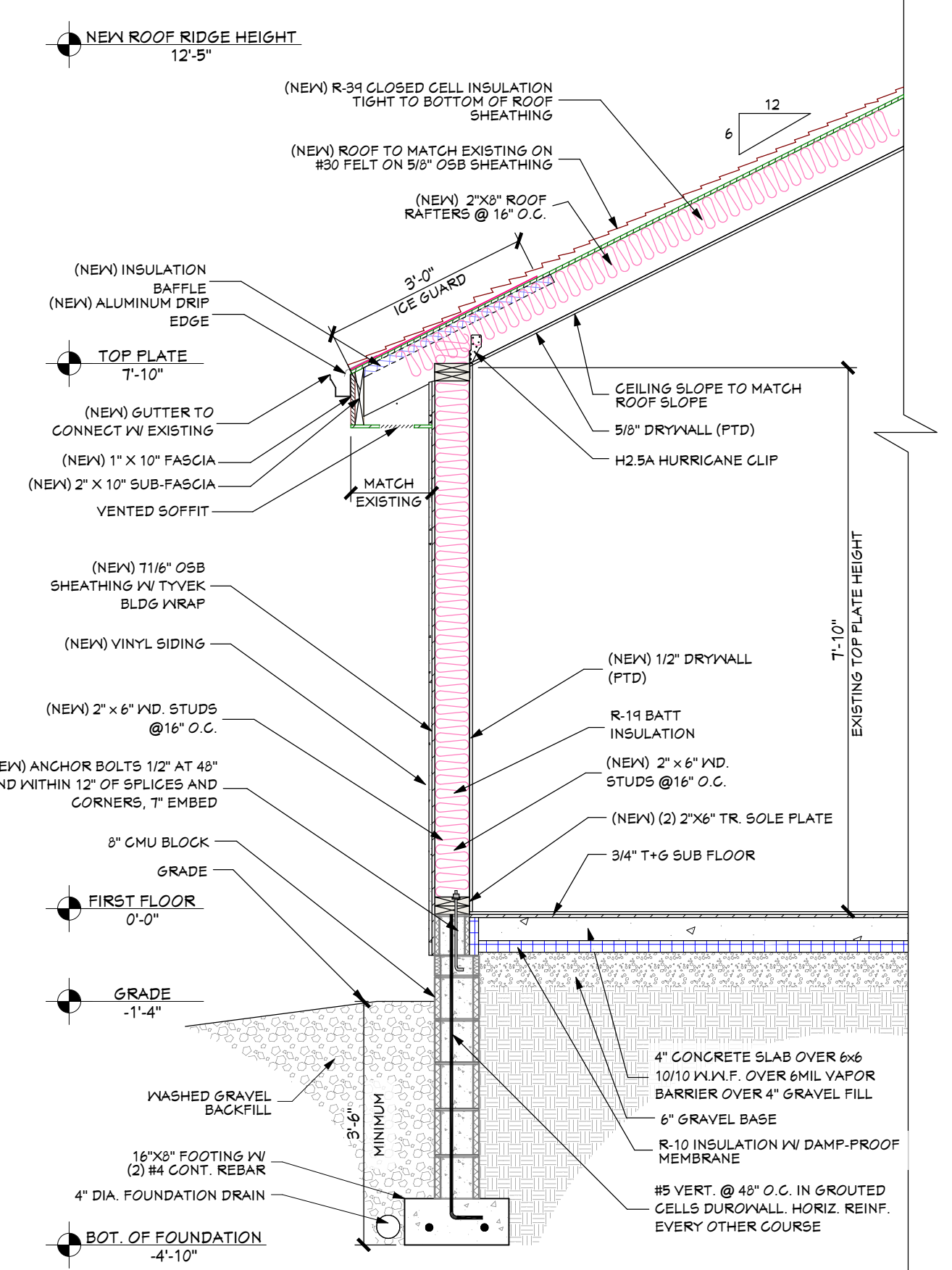
DATE:  
5/22/2026

SCALE:

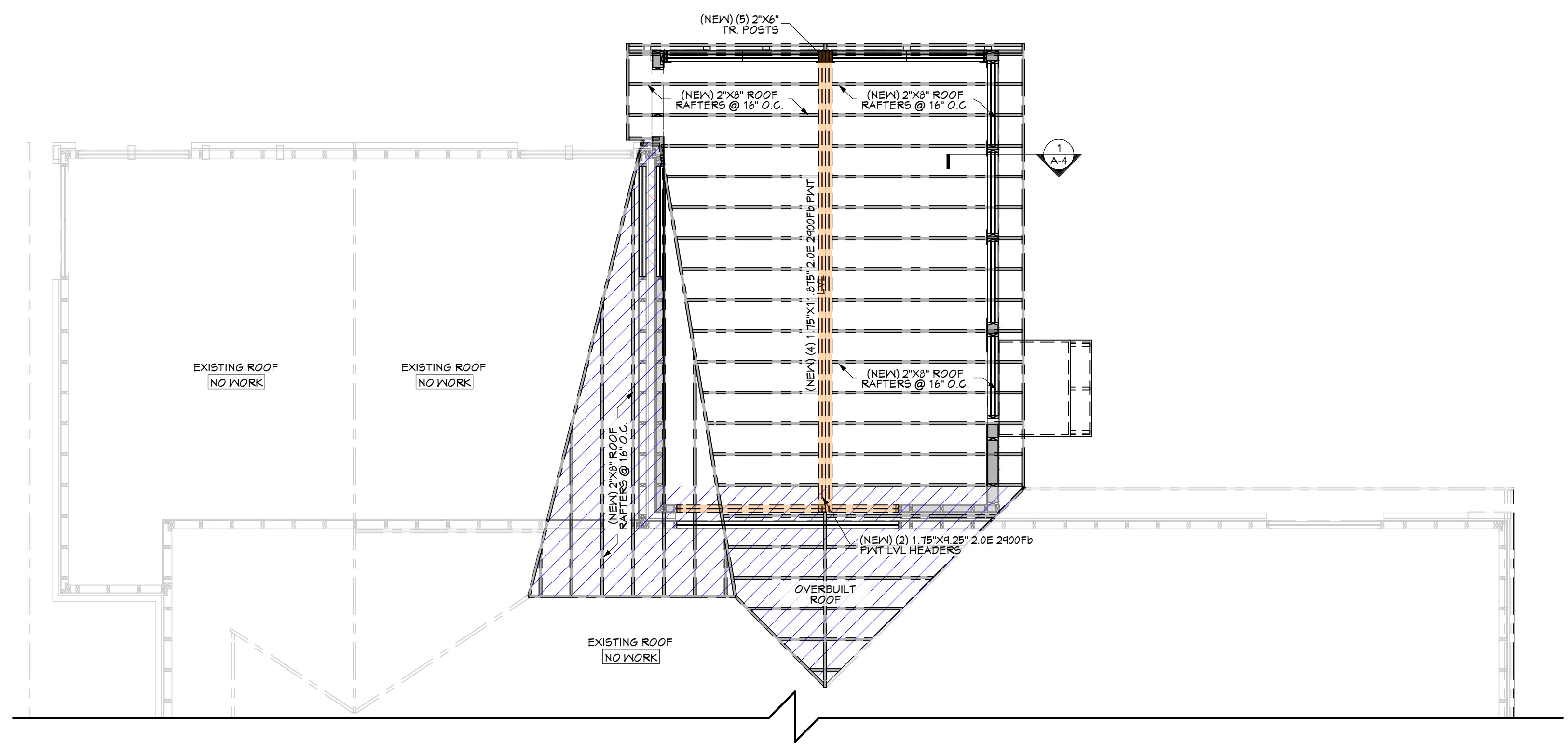
SHEET:  
**A-4**



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



**SECTION A-5**  
SCALE: 1/2" = 1'-0"



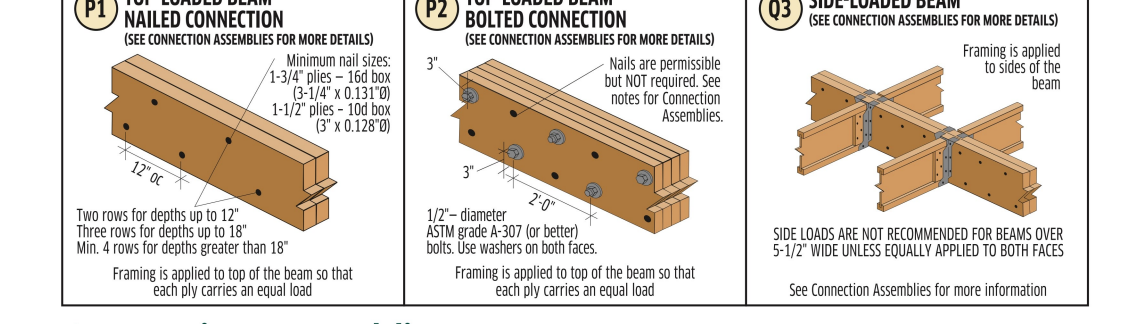
**ROOF FRAMING PLAN**  
SCALE: 1/4" = 1'-0"

**2.0E 2900F5 PWT LVL Uniform Floor Load (PLF) Tables**

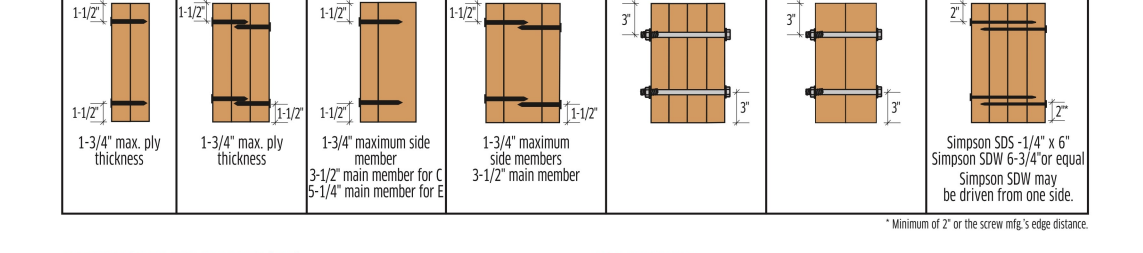
**Table Usage:**  
1. Select the required span.  
2. Divide the design loads by the desired number of plies.  
3. Select a beam that exceeds the Total Load and the appropriate Live Load.  
4. Check the bearing requirements.

Span	1-3/4" x 7-1/4"		1-3/4" x 9-1/4"		1-3/4" x 9-1/2"		1-3/4" x 11-1/4"		1-3/4" x 11-7/8"		1-3/4" x 14"		1-3/4" x 16"		1-3/4" x 18"		Span
	Live Load	Total	Live Load	Total	Live Load	Total	Live Load	Total	Live Load	Total	Live Load	Total	Live Load	Total	Live Load	Total	
5'	262	979	316	1076	370	1133	424	1191	478	1257	532	1323	586	1389	640	1455	5'
6'	401	1436	485	1617	570	1702	654	1787	738	1872	822	1957	906	2042	990	2127	6'
7'	540	1893	645	2100	750	2205	855	2310	960	2415	1065	2520	1170	2625	1275	2730	7'
8'	679	2350	810	2567	940	2684	1070	2801	1200	2918	1330	3035	1460	3152	1590	3269	8'
9'	818	2807	975	3094	1130	3211	1285	3328	1440	3445	1595	3562	1750	3679	1905	3796	9'
10'	957	3264	1135	3501	1300	3618	1465	3735	1630	3852	1795	3969	1960	4086	2125	4203	10'
11'	1096	3721	1295	3938	1470	4055	1645	4172	1820	4289	1995	4406	2170	4523	2345	4640	11'
12'	1235	4178	1455	4395	1640	4512	1825	4629	2010	4746	2195	4863	2380	4980	2565	5097	12'
13'	1374	4635	1615	4852	1810	4969	2005	5086	2190	5203	2375	5320	2560	5437	2745	5554	13'
14'	1513	5092	1775	5269	1990	5386	2195	5503	2390	5620	2585	5737	2780	5854	2930	5971	14'
15'	1652	5549	1935	5746	2160	5863	2365	5980	2555	6097	2745	6214	2925	6331	3110	6448	15'
16'	1791	6006	2095	6223	2340	6340	2540	6457	2730	6574	2920	6691	3105	6808	3290	6925	16'
17'	1930	6463	2255	6640	2530	6757	2745	6874	2945	6991	3135	7108	3315	7225	3475	7342	17'
18'	2069	6920	2415	7117	2720	7234	2945	7351	3155	7468	3345	7585	3535	7702	3660	7819	18'
19'	2208	7377	2575	7594	2910	7711	3165	7828	3375	7945	3555	8062	3745	8179	3845	8296	19'
20'	2347	7834	2735	8071	3080	8188	3385	8305	3585	8422	3755	8539	3935	8656	4025	8773	20'
21'	2486	8291	2895	8548	3250	8665	3605	8782	3805	8900	3965	9017	4115	9134	4205	9251	21'
22'	2625	8748	3055	9025	3420	9142	3835	9259	4015	9376	4175	9493	4325	9610	4395	9727	22'
23'	2764	9205	3215	9502	3590	9619	4055	9736	4215	9853	4335	9970	4485	10087	4565	10204	23'
24'	2903	9662	3375	9979	3760	10136	4275	10253	4455	10370	4605	10487	4755	10604	4845	10721	24'
25'	3042	10119	3535	10456	3930	10593	4505	10710	4645	10827	4815	10944	4965	11061	5035	11178	25'
26'	3181	10576	3695	10893	4100	11030	4735	11147	4885	11264	5035	11381	5185	11498	5235	11615	26'
27'	3320	11033	3855	11330	4270	11367	4965	11484	5085	11601	5245	11718	5335	11835	5385	11952	27'
28'	3459	11490	4015	11767	4440	11704	5135	11821	5265	11938	5415	12055	5485	12172	5535	12289	28'
29'	3598	11947	4175	12204	4610	12141	5305	12258	5445	12375	5575	12492	5655	12609	5685	12726	29'
30'	3737	12404	4335	12641	4780	12578	5475	12695	5615	12812	5745	12929	5815	13046	5855	13163	30'

**Connection Details**



**Connection Assemblies**



**UNIFORM SIDE LOAD CAPACITY (PLF)**

Connection	2 Rows of Nails		2 Rows of 1/2" Bolts at 12" oc		2 Rows of 1/2" Bolts at 12" oc		2 Rows of 1/2" Bolts at 12" oc	
	at 12" oc	at 18" oc	at 12" oc	at 18" oc	at 12" oc	at 18" oc	at 12" oc	at 18" oc
1	100	100	100	100	100	100	100	100
2	100	100	100	100	100	100	100	100
3	100	100	100	100	100	100	100	100
4	100	100	100	100	100	100	100	100
5	100	100	100	100	100	100	100	100
6	100	100	100	100	100	100	100	100
7	100	100	100	100	100	100	100	100
8	100	100	100	100	100	100	100	100
9	100	100	100	100	100	100	100	100
10	100	100	100	100	100	100	100	100

PLANS & DETAILS THIS PAGE:  
- ROOF PLAN  
- ROOF FRAMING PLAN  
- WALL SECTION  
- UNIFORM LOAD TABLE & CONNECTION DETAILS

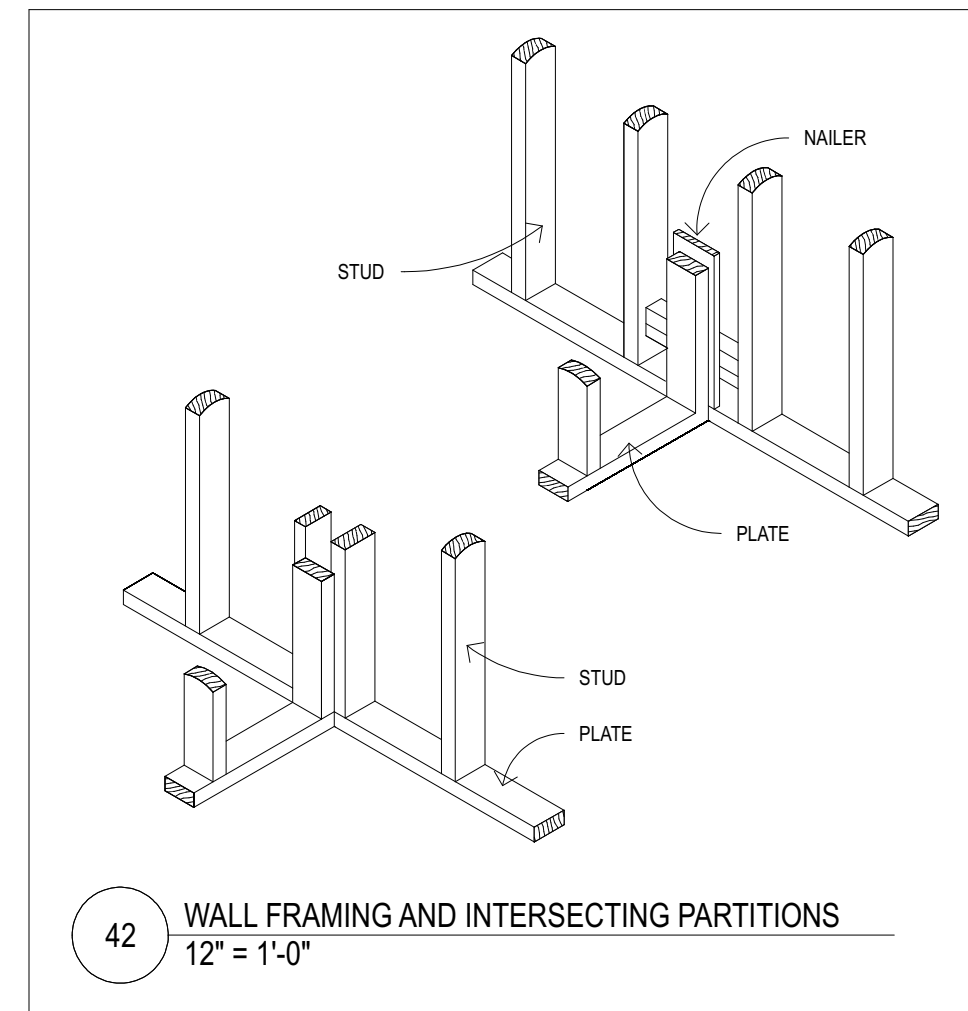
REMODEL FOR:  
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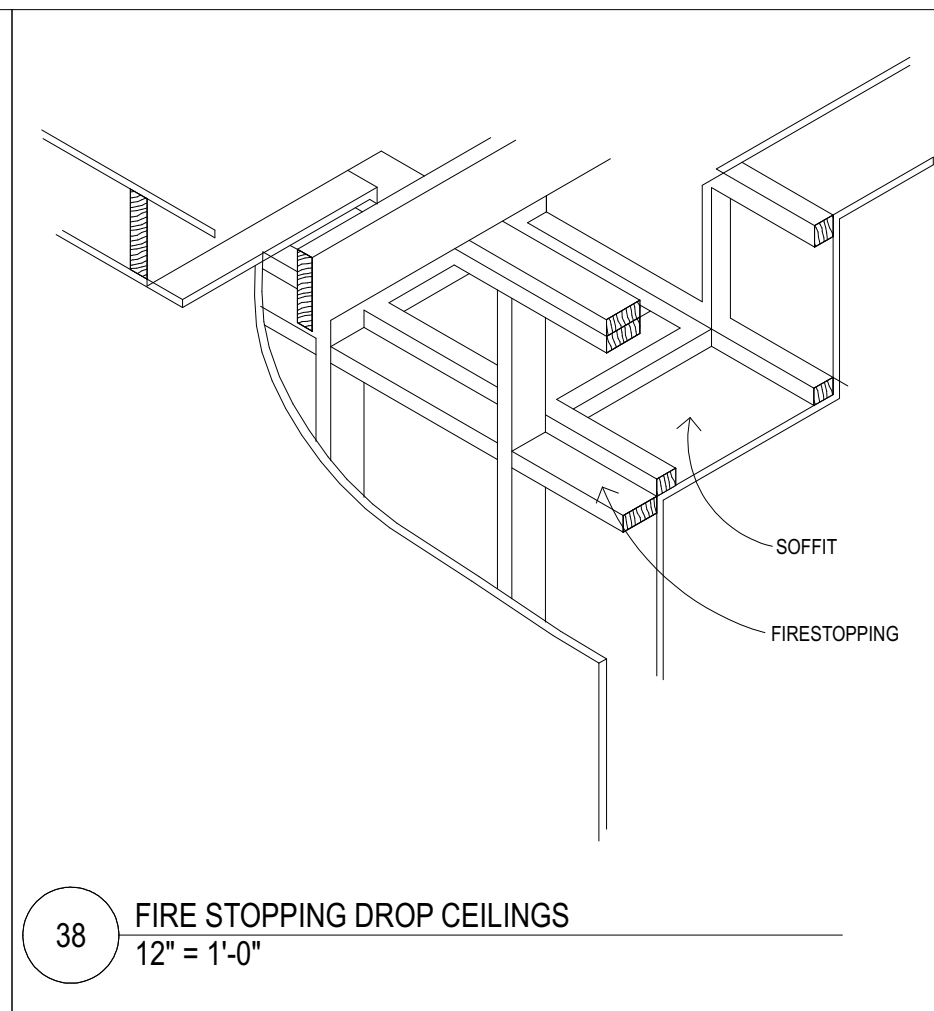
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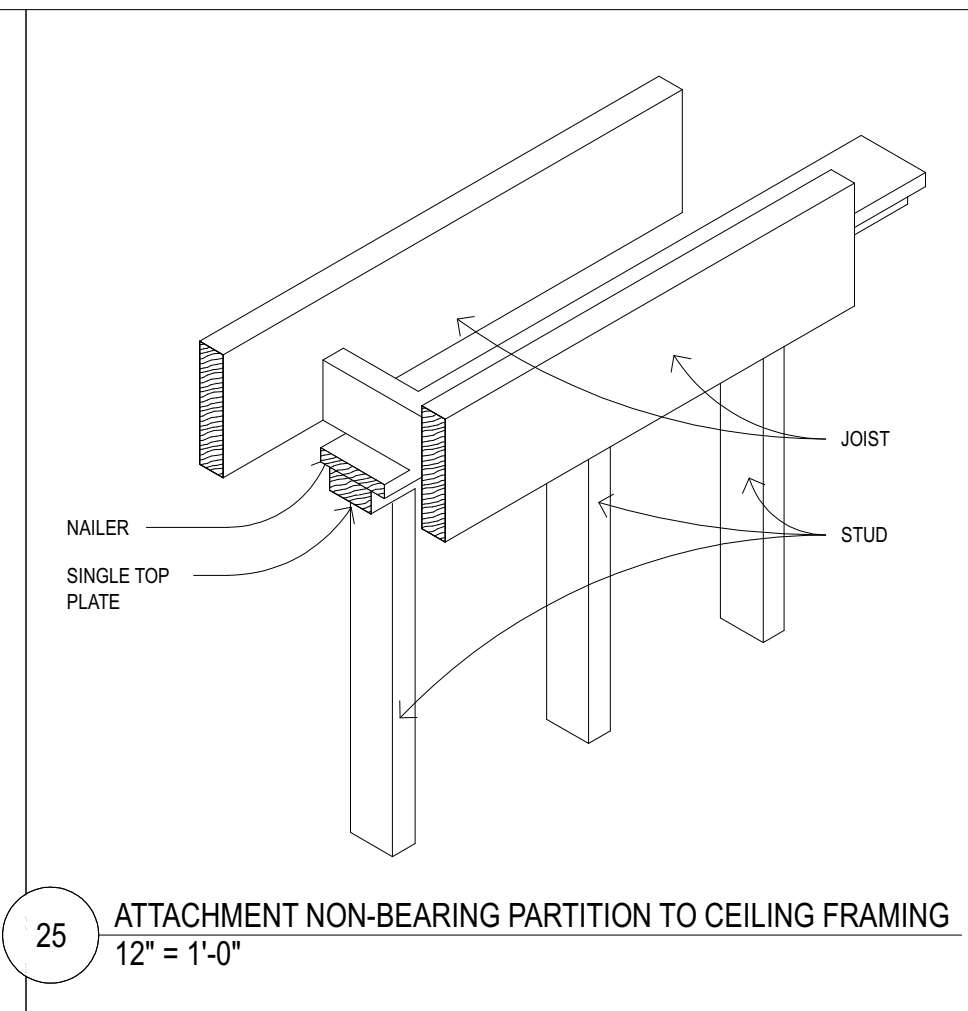
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**A-5**



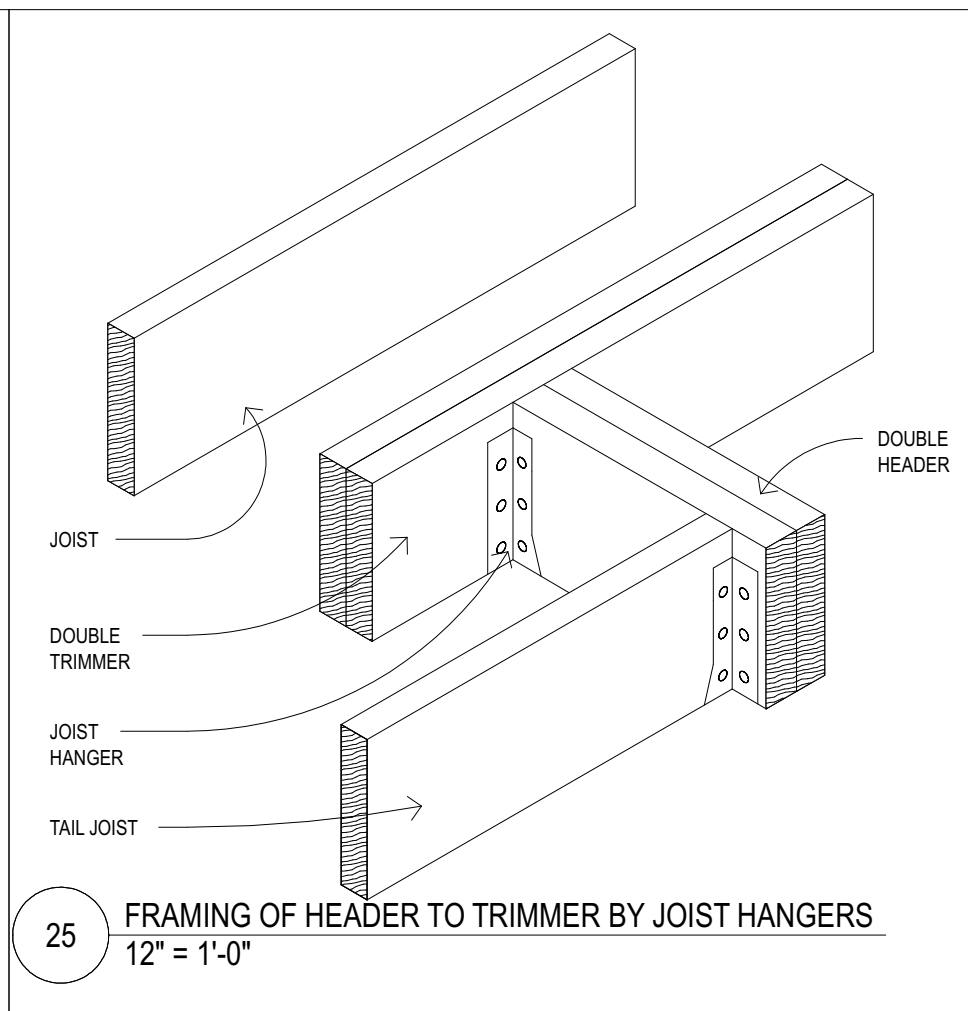
42 WALL FRAMING AND INTERSECTING PARTITIONS  
12" = 1'-0"



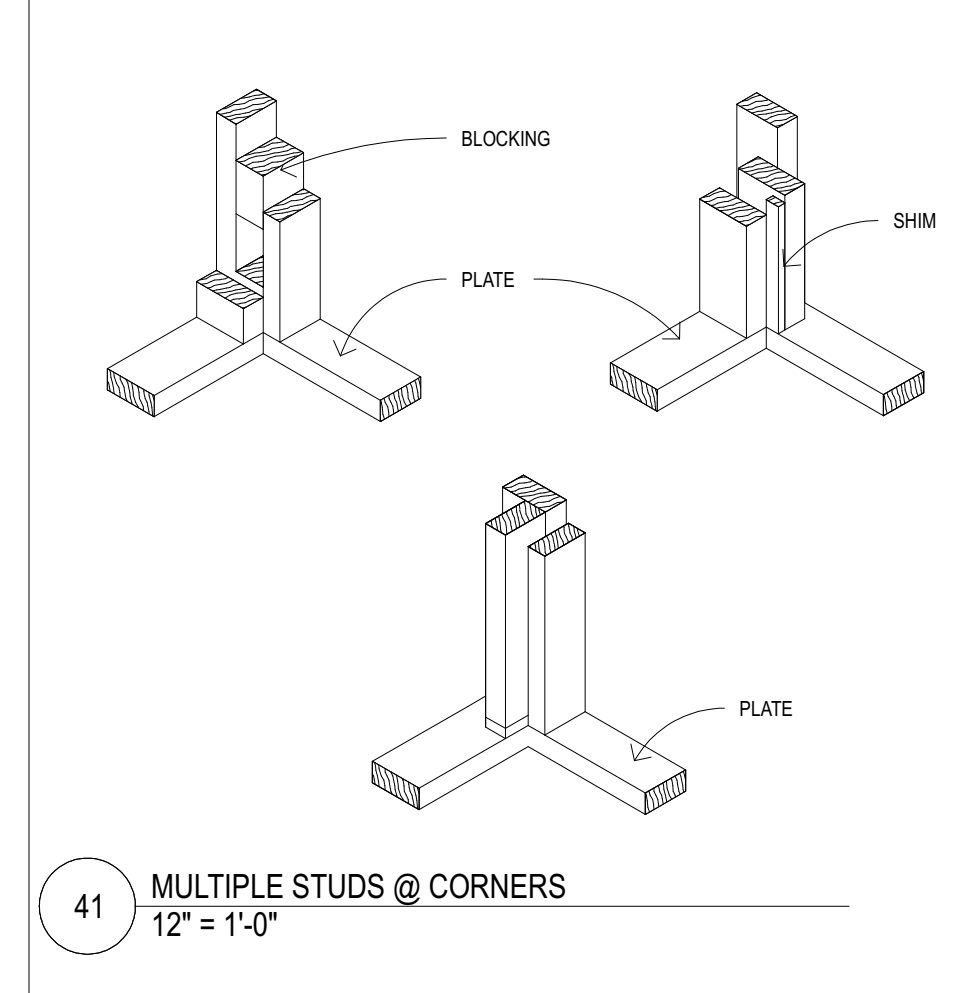
38 FIRE STOPPING DROP CEILINGS  
12" = 1'-0"



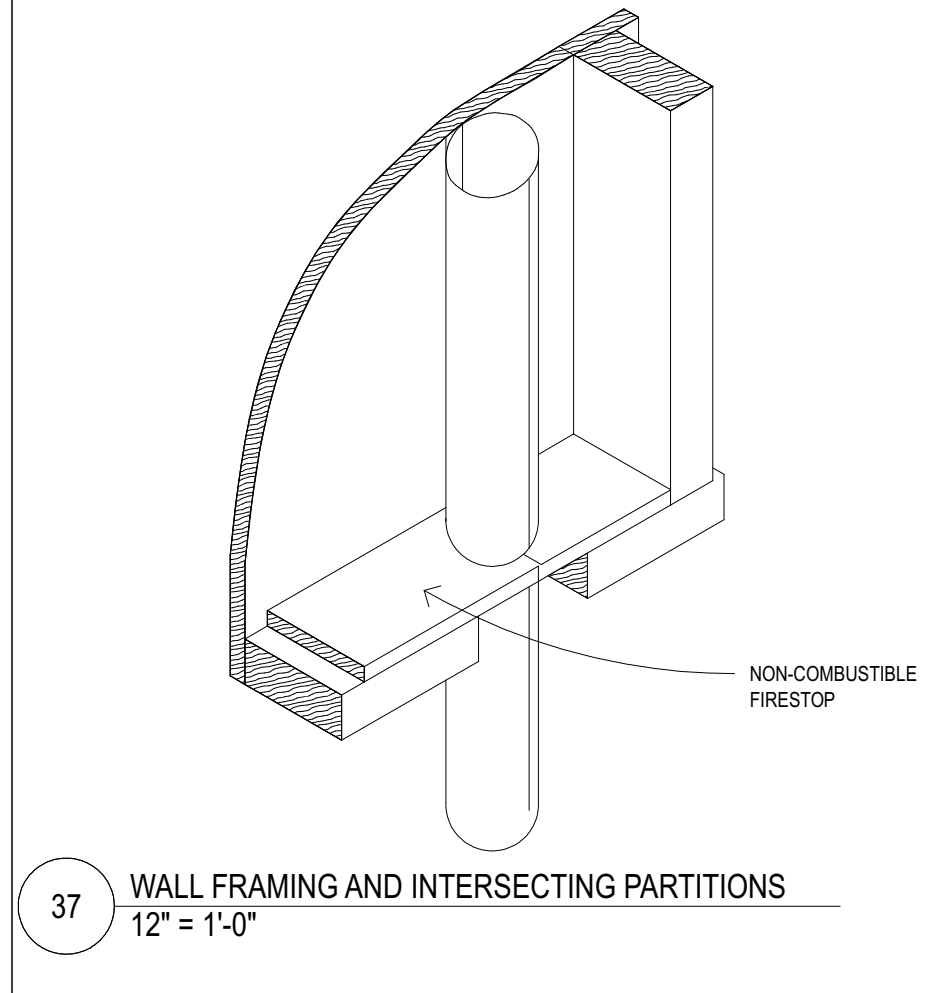
25 ATTACHMENT NON-BEARING PARTITION TO CEILING FRAMING  
12" = 1'-0"



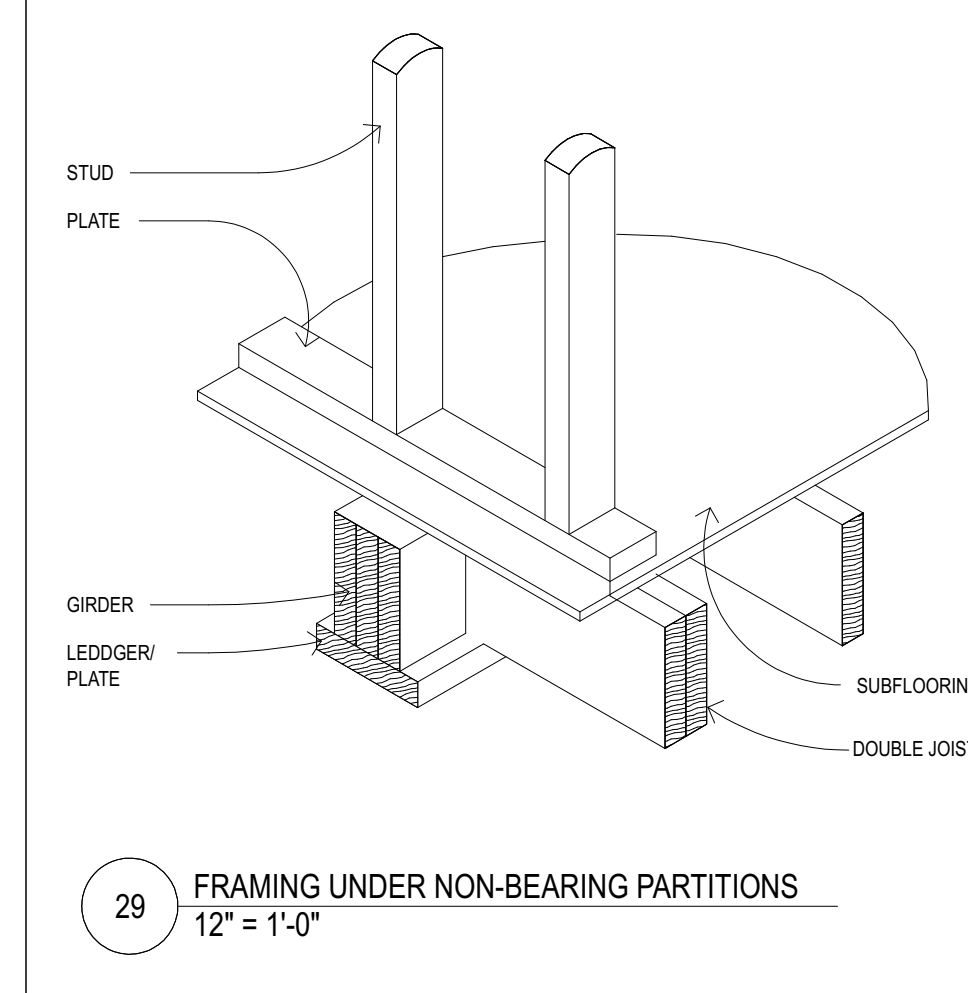
25 FRAMING OF HEADER TO TRIMMER BY JOIST HANGERS  
12" = 1'-0"



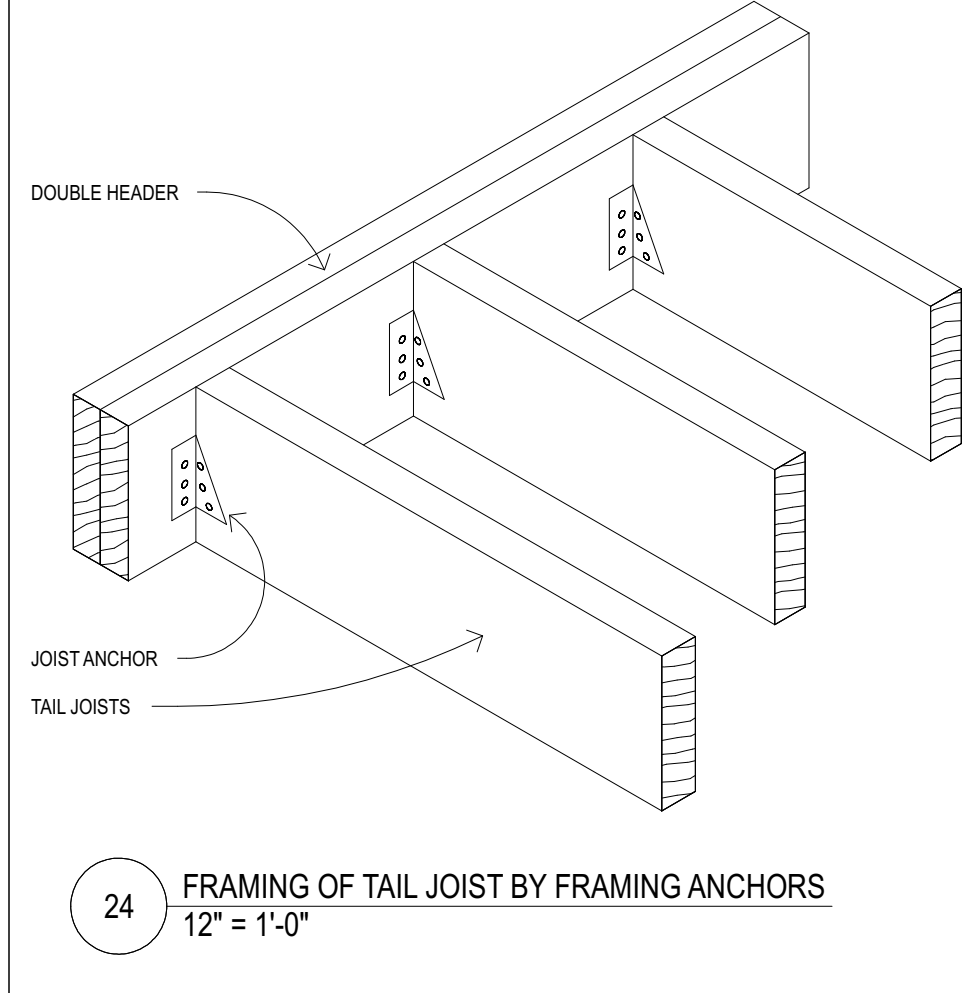
41 MULTIPLE STUDS @ CORNERS  
12" = 1'-0"



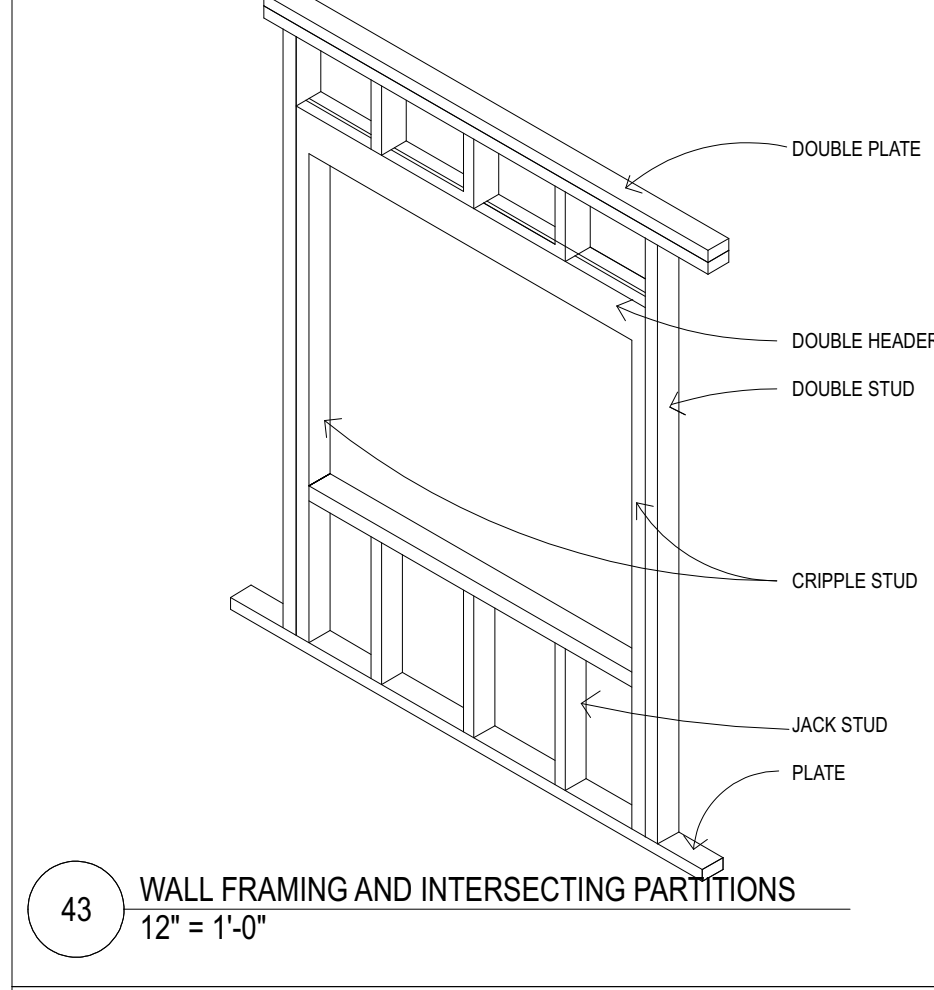
37 WALL FRAMING AND INTERSECTING PARTITIONS  
12" = 1'-0"



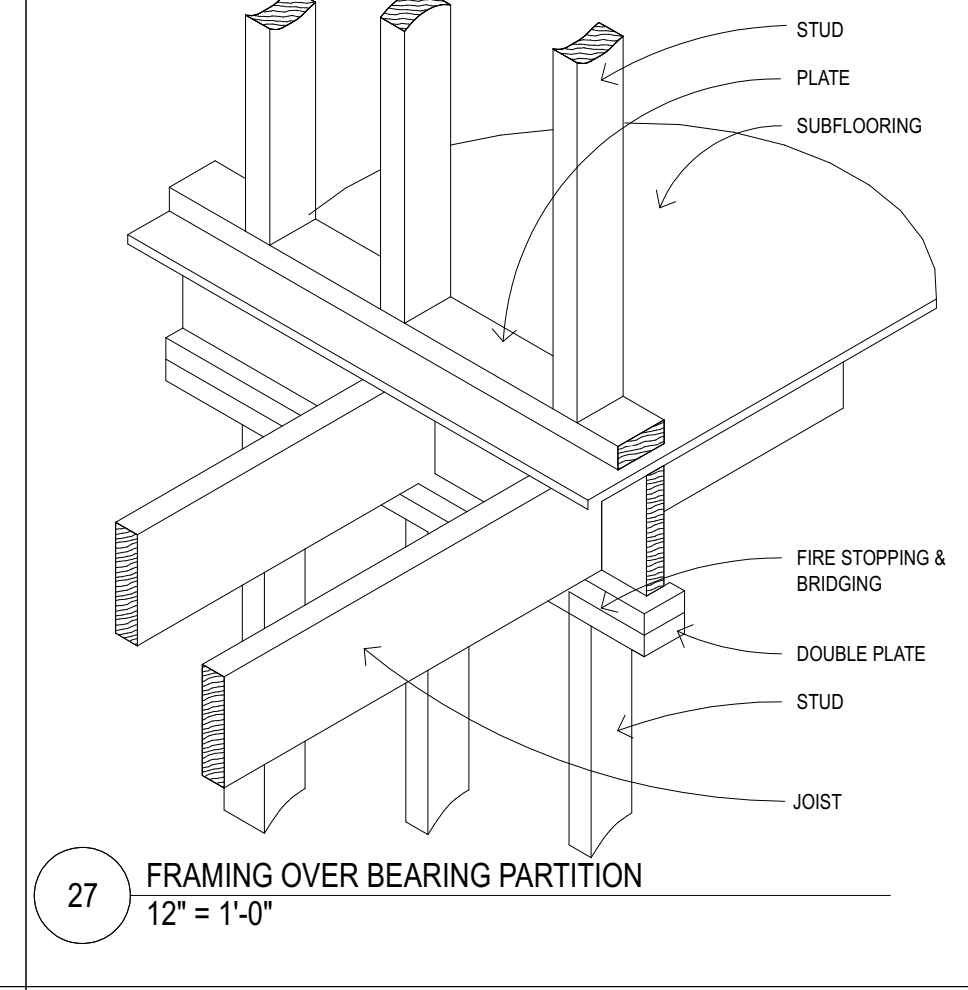
29 FRAMING UNDER NON-BEARING PARTITIONS  
12" = 1'-0"



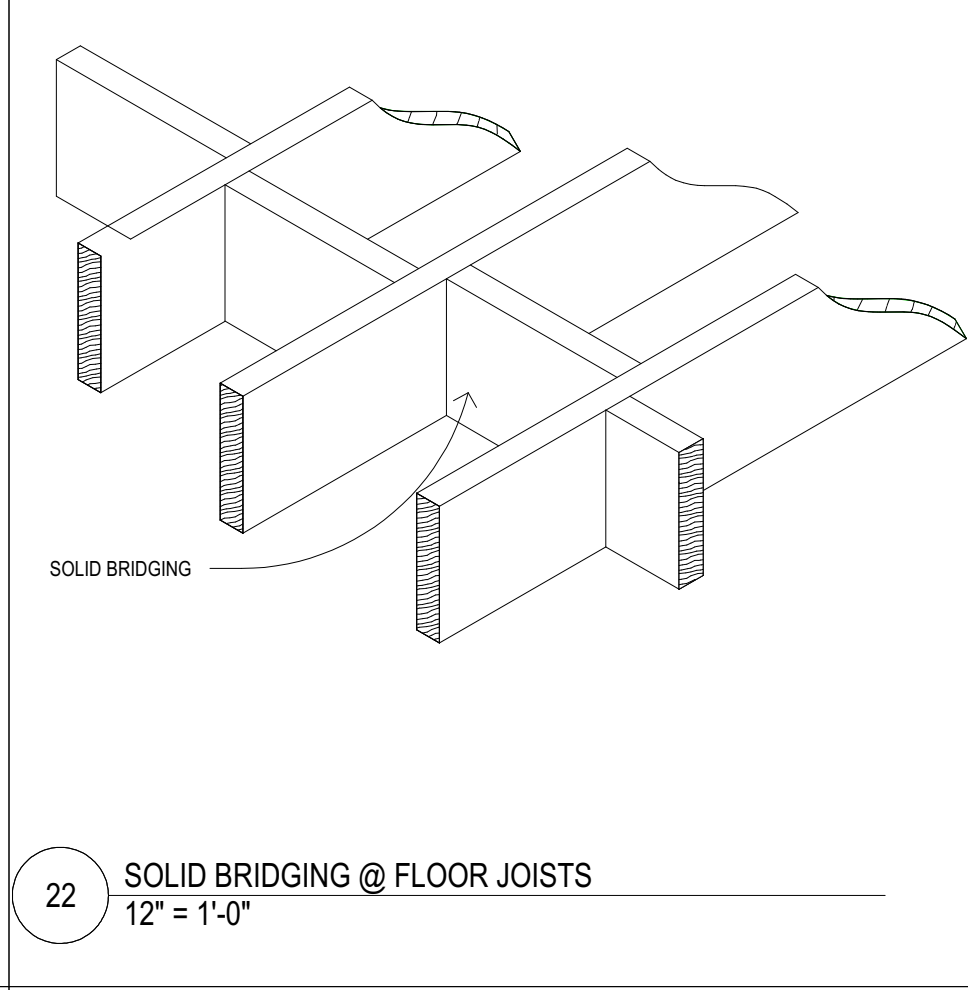
24 FRAMING OF TAIL JOIST BY FRAMING ANCHORS  
12" = 1'-0"



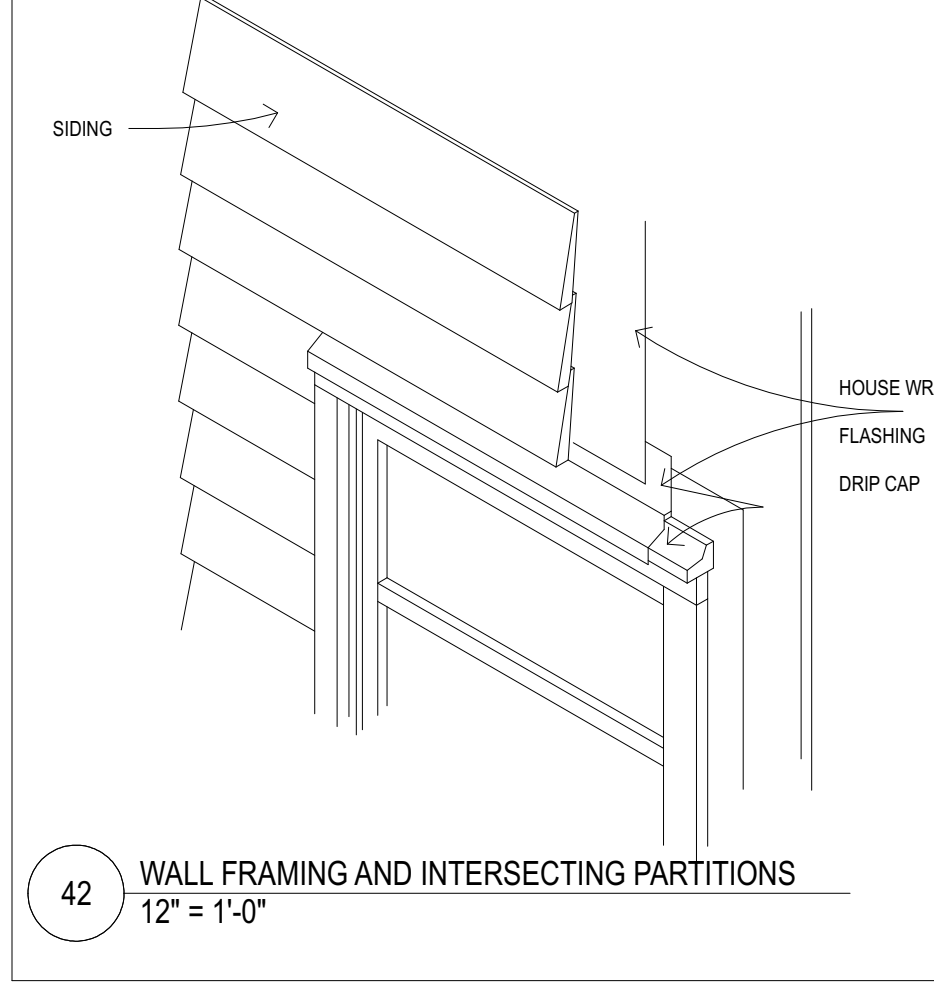
43 WALL FRAMING AND INTERSECTING PARTITIONS  
12" = 1'-0"



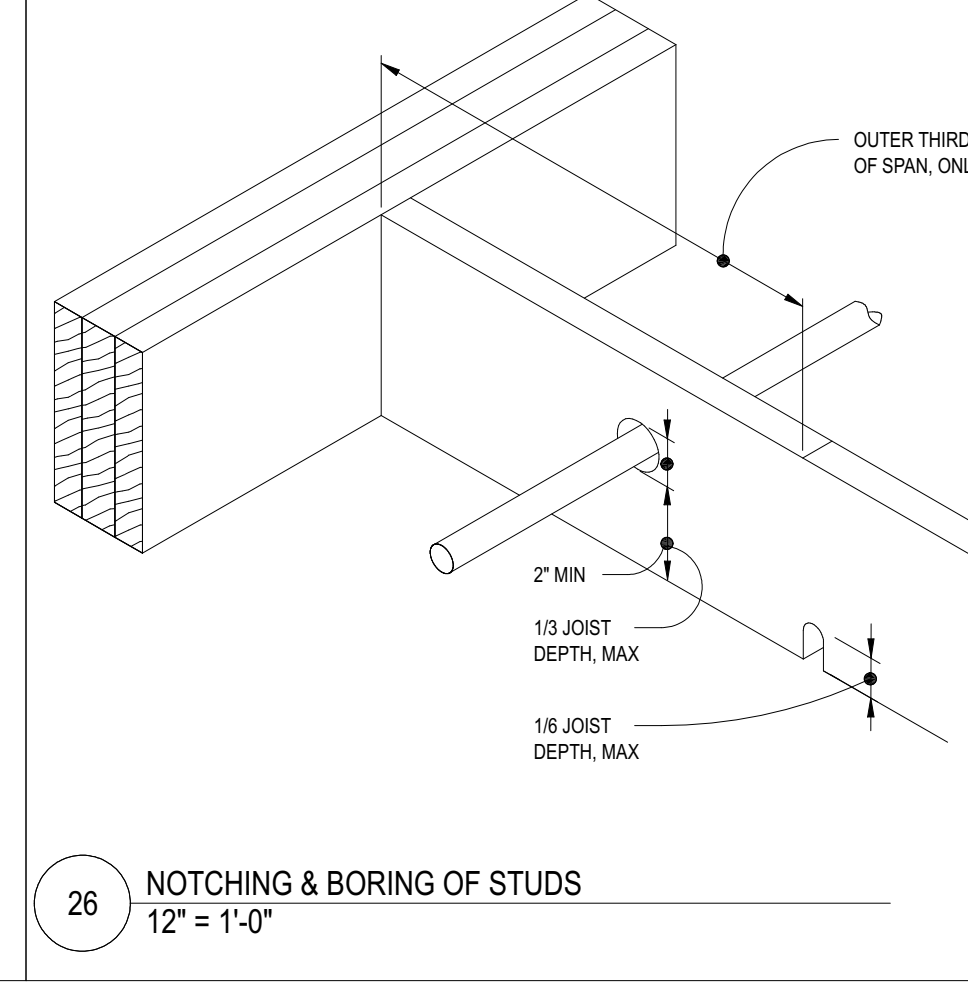
27 FRAMING OVER BEARING PARTITION  
12" = 1'-0"



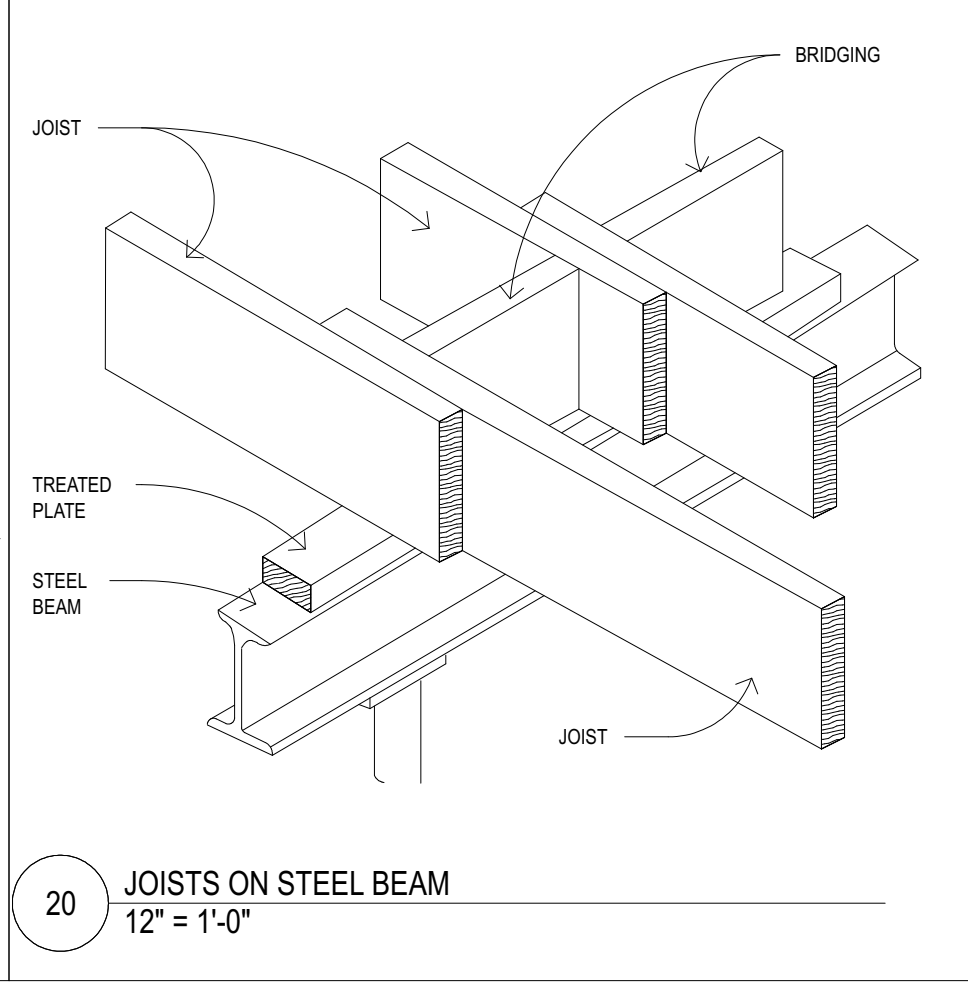
22 SOLID BRIDGING @ FLOOR JOISTS  
12" = 1'-0"



42 WALL FRAMING AND INTERSECTING PARTITIONS  
12" = 1'-0"



26 NOTCHING & BORING OF STUDS  
12" = 1'-0"



20 JOISTS ON STEEL BEAM  
12" = 1'-0"

**AWC STANDARD DETAILS**  
SCALE: 12" = 1'-0"

PLANS & DETAILS THIS PAGE - AWC STANDARD DETAILS

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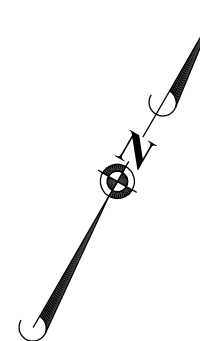
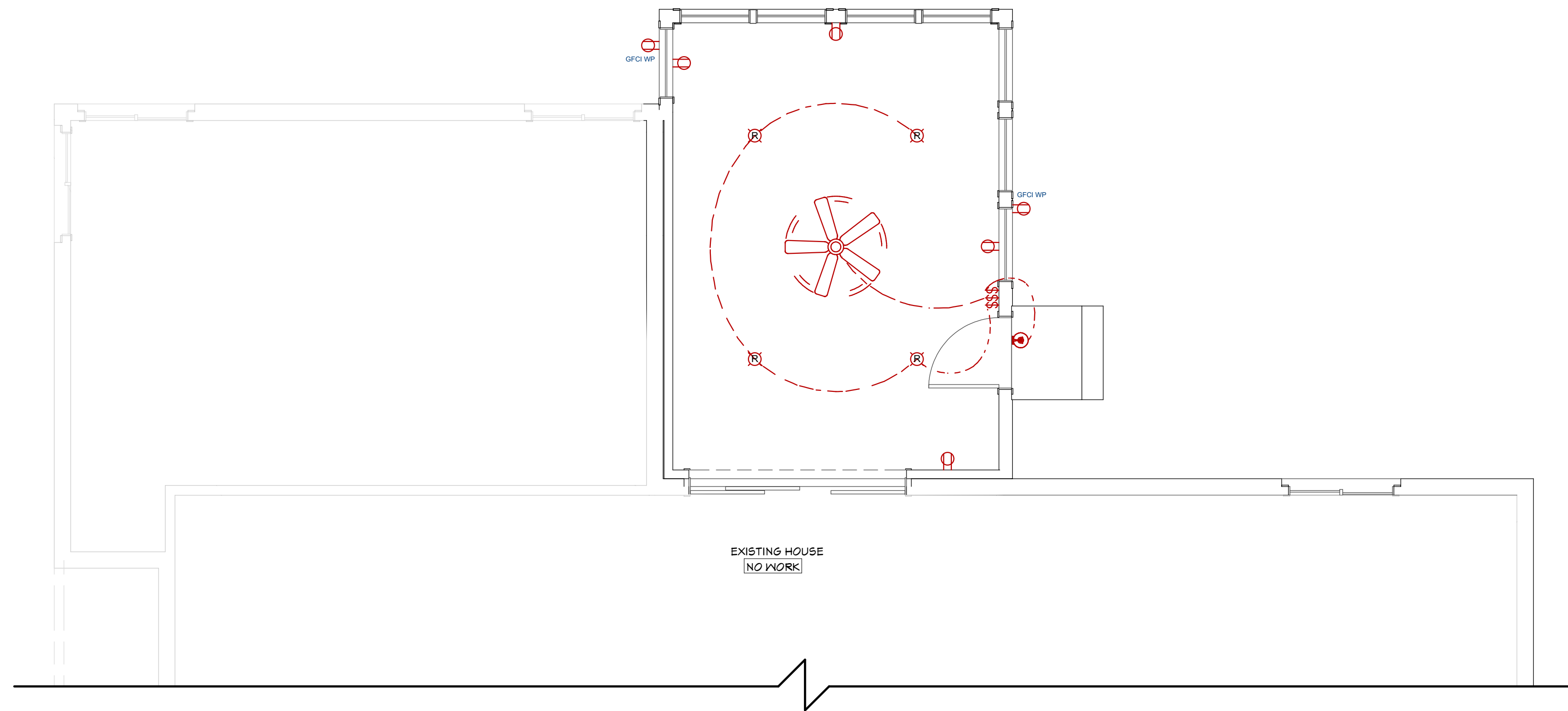
SHEET:

**A-6**

**ELECTRICAL NOTES:**

- ELECTRICAL WORK SHALL BE INSTALLED IN ACCORDANCE WITH THE N.E.C., ALL APPLICABLE FEDERAL, STATE, AND LOCAL CODES, AND THE OWNER'S DESIGN CRITERIA. DURING CONSTRUCTION, OBSERVE ALL REQUIREMENTS OF THE OCCUPATIONAL SAFETY AND HEALTH ACT.
- THIS DESIGN IS ADDRESSED TO A CONTRACTOR WHICH IS LICENSED IN HIS WORK AND UNDERSTANDS THE NATIONAL, STATE, AND LOCAL CODES. IT IS NOT POSSIBLE TO REPRODUCE THE ENTIRE CODE WITHIN THESE DRAWINGS AND SPECIFICATIONS; THEREFORE, IT IS THE RESPONSIBILITY OF THE INSTALLER TO USE APPROVED MATERIALS, METHODS, AND LOCATIONS ACCEPTABLE TO THE FEDERAL, STATE, AND LOCAL CODES AND AUTHORITIES.
- CODE REQUIREMENTS SHALL BE INCLUDED AN INSTALLED EVEN IF NOT SHOWN. DRAWINGS ARE SCHEMATIC AND MAY NOT SHOW CODE REQUIREMENTS.
- FUSES WITH DOWN LINE CIRCUIT BREAKERS AND CIRCUIT BREAKERS WITH DOWN LINE CIRCUIT BREAKERS SHALL BE COORDINATED BY THE MANUFACTURER.
- THE INSTALLATION SHALL BE COORDINATED WITH THE REFLECTED CEILING PLANS (WHEN AVAILABLE) AND ARCHITECTURAL DRAWINGS.
- ELECTRICAL WORK SHALL BE CONCEALED IN FINISHED AREAS WITH DEVICES AND EQUIPMENT MOUNTED FLUSH WHERE POSSIBLE.
- SURFACE-MOUNTED FIXTURES, FLUORESCENT AND INCANDESCENT, SHALL BE MOUNTED SECURELY TO THE CEILING. PROVIDE AIR GAP TO CEILING IF REQUIRED.
- INSULATION SHALL NOT BE PLACED ON FIXTURES.
- LIGHT FIXTURES SHALL BE SUPPORTED FROM BUILDING STRUCTURE.
- PROVIDE ALL CUTTING, PATCHING, AND OPENINGS IN FLOORS
- WIRING DEVICES SHALL BE INSTALLED IN OUTLET BOXES. BOXES SHALL BE 4-INCH SQUARE MINIMUM WITH DEVICE COVERS TO SUIT.
- MOUNT ALL RECEPTACLES VERTICALLY UNLESS OTHERWISE NOTED.
- PERMANENTLY MARK BACK OF DEVICE PLATES WITH PANEL AND CIRCUIT NUMBER. PROVIDE NAMEPLATES FOR ALL EQUIPMENT.
- PERMANENTLY MARK ON PANEL LOCATIONS FOR CIRCUITS.
- INTERIOR EQUIPMENT MOUNTED ON EXTERIOR WALLS SHALL BE ATTACHED TO 3/4-INCH PAINTED FIRE-PROOFED PLYWOOD BOARDS FURRED OUT 1-INCH FROM THE WALL.
- EXTERIOR EQUIPMENT SHALL BE NEMA 3R
- EXTERIOR OUTLETS SHALL BE ON GFCI CIRCUITS (GROUND FAULT CIRCUIT INTERRUPTED). OUTLETS IN LIVING SPACES SHALL BE ON AFCI CIRCUITS (ARC FAULT CIRCUIT INTERRUPTER). LIGHTING CIRCUITS SHALL BE AFCI.
- OUTLETS IN WET LOCATIONS AND BASEMENT SHALL BE COMBINATION GFCI/AFCI
- PROVIDE A COMPLETE GROUNDING SYSTEM PER N.E.C. PROVIDE SEPARATE GROUND CONDUCTOR FOR ALL POWER CIRCUITS.
- HARDWARE, SUPPORTS, HANGERS, ANGLE IRONS, CHANNELS, RODS AND CLAMPS NECESSARY TO INSTALL ELECTRICAL EQUIPMENT SHALL BE SUPPLIED TO SUIT CONDITIONS AND APPLICATION. THE USE OF PERFORATED STRAPS WILL NOT BE PERMITTED.
- SUPPORTING DEVICES SHALL BE GALVANIZED OR ALUMINUM MATERIAL. STEEL WORK ERECTED FOR THE SUPPORT OF ELECTRICAL EQUIPMENT SHALL BE PAINTED WITH ONE COAT OF IRON-OXIDE GRAY PAINT AFTER CUTTING, DRILLING, WELDING, ETC., AND ONE COAT OF GRAY EPOXY PAINT.
- PROVIDE DUPLEX OUTLETS FOR MAINTENANCE AT HEATING AND/OR COOLING EQUIPMENT (LIGHTING FOR INTERIOR EQUIPMENT).
- ALL RECEPTACLES SHALL BE TAMPER-RESISTANT

ELECTRICAL SCHEDULE					
2D SYMBOL	QTY	ATTACHED TO	DESCRIPTION	CODE	COMMENTS
Ⓜ	4	CEILING	RECESSED DOWN LIGHT 6		
\$	3	WALL	SWITCH (DECORATOR)		
Ⓜ	1	WALL	INDUSTRIAL WALL SCONCE		
Ⓜ	4	WALL	DECORATOR OUTLET		
GFCI WP	2	WALL	GFCI WP		



**SUN ROOM SCHEMATIC ELECTRICAL PLAN**

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

PLANS & DETAILS THIS PAGE:  
- SCHEMATIC ELECTRICAL PLAN  
- ELECTRICAL NOTES  
- ELECTRICAL SCHEDULE

REMODEL FOR:  
**2676 COUNTRY CLUB, ROCKY RIVER, OH 44116**

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Revision Table	
Number	Date

DATE:

5/22/2026

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**A-7**

FASTENER SCHEDULE FOR STRUCTURAL MEMBERS		
DESCRIPTION OF BUILDING ELEMENTS	NUMBER AND TYPE OF FASTENERS <sup>1,2,3,4</sup>	SPACING OF FASTENERS
<b>Roof</b>		
Blocking between joists or rafters to top plate, toe nail	3-8d (2 1/2" x 0.113")	—
Ceiling joists to plate, toe nail	3-8d (2 1/2" x 0.113")	—
Ceiling joists not attached to parallel rafter, laps over partitions, face nail	3-10d	—
Collar tie rafter, face nail or 1 1/2" x 20 gage ridge strap	3-10d (3" x 0.128")	—
Rafter to plate, toe nail	2-16d (3 1/2" x 0.135")	—
Roof rafters to ridge, valley or hip rafters:		
toe nail	4-16d (3 1/2" x 0.135")	—
face nail	3-16d (3 1/2" x 0.135")	—
<b>Wall</b>		
Build-up corner studs	10d (3" x 0.128")	24" o.c.
Build-up header, two pieces with 1/2" spacer	16d (3 1/2" x 0.135")	16" o.c. along each edge
Continued header, two pieces	16d (3 1/2" x 0.135")	16" o.c. along each edge
Continuous header to stud, toe nail	4-8d (2 1/2" x 0.113")	—
Double studs, face nail	10d (3" x 0.128")	24" o.c.
Double top plates, face nail	10d (3" x 0.128")	24" o.c.
Double top plates, minimum 24-inch offset of end joints, face nail in lapped area	8-16d (3 1/2" x 0.135")	—
Sole plate to joist or blocking, face nail	16d (3 1/2" x 0.135")	16" o.c.
Sole plate to joist or blocking at braced wall panels	3-16d (3 1/2" x 0.135")	16" o.c.
Stud to sole plate, toe nail	3-8d (2 1/2" x 0.113") or 2-16d (3 1/2" x 0.135")	—
Top or sole plate to stud, end nail	2-16d (3 1/2" x 0.135")	—
Top plates, laps at corners and intersections, face nail	2-10d (3" x 0.128")	—
1" brace to stud and plate, face nail	2-8d (2 1/2" x 0.113") 2 staples 1 1/2"	—
1" x 6" sheathing to each bearing, face nail	2-8d (2 1/2" x 0.113") 2 staples 1 1/2"	—
1" x 8" sheathing to each bearing, face nail	2-8d (2 1/2" x 0.113") 3 staples 1 1/2"	—
Wider than 1" x 8" sheathing to each bearing, face nail	3-8d (2 1/2" x 0.113") 4 staples 1 1/2"	—
<b>Floor</b>		
Joist to sill or girder, toe nail	3-8d (2 1/2" x 0.113")	—
1" x 6" subfloor or less to each joist, face nail	2-8d (2 1/2" x 0.113") 2 staples 1 1/2"	—
2" subfloor to joist or girder, blind and face nail	2-16d (3 1/2" x 0.135")	—
Rim joist to top plate, toe nail (roof applications also)	8d (2 1/2" x 0.113")	6" o.c.
2" planks (plank & beam - floor & roof)	2-16d (3 1/2" x 0.135")	at each bearing
Build-up girders and beams, 2-inch lumber layers	10d (3" x 0.128")	Nail each layer as follows: 32" o.c. at top & bottom & staggered. Two nails at ends & at each splice.
Ledger strip supporting joists or rafters	3-16d (3 1/2" x 0.135")	At each joist or rafter
<b>Other wall sheathing</b>		
1/2" structural cellulose fiberboard sheathing	1/2" galvanized roofing nail, 1/2" crown or 1" crown staple 16 ga., 1 1/2" long	3" edge 6' Intermediate
3/8" structural cellulose fiberboard sheathing	1 1/2" galvanized roofing nail, 1/2" crown or 1" crown staple 16 ga., 1 1/2" long	3" edge 6' Intermediate
1/2" gypsum sheathing <sup>5</sup>	1 1/2" galvanized roofing nail; staple galvanized, 1 1/2" long 2 1/2" screws, Type W or S	7" edge 7' Intermediate
1/2" gypsum sheathing <sup>6</sup>	1 1/2" galvanized roofing nail; 1 1/2" screws, Type W or S	7" edge 7' Intermediate
<b>Wood structural panels, combination subfloor underlayment to framing</b>		
1/2" and less	6d deformed (2" x 0.120") nail or 8d common (2 1/2" x 0.131") nail	6" edge 12' Intermediate
1/2" - 1"	8d common (2 1/2" x 0.131") nail or 8d deformed (2 1/2" x 0.120") nail	6" edge 12' Intermediate
1 1/2" - 1 1/2"	10d common (3" x 0.148") nail or 8d (2 1/2" x 0.131") deformed nail	6" edge 12' Intermediate

All nails are smooth-common, box or deformed shanks except where otherwise stated. Nails used for framing and sheathing connections shall have minimum average bending yield strengths as shown: 80 ksi for shank diameter of 0.192 inch (20d common nail), 90 ksi for shank diameters larger than 0.142 inch but not larger than 0.177 inch, and 100 ksi for shank diameters of 0.142 inch or less.

- Staples are 16 gage wire and have a minimum 7/16-inch on diameter crown width.
- Nails shall be spaced at not more than 6 inches on center at all supports where spans are 48 inches or greater.
- Four-foot-by-8-foot or 4-foot-by-9-foot panels shall be applied vertically.
- Spacing of fasteners on floor sheathing panel edges applies to panel edges supported by framing members and required blocking and at all floor perimeters only. Spacing of fasteners on roof sheathing panel edges applies to panel edges supported by framing members and required blocking. Blocking of roof or floor sheathing panel edges perpendicular to the framing members need not be provided except as required by other provisions of this code. Floor perimeter shall be supported by framing members or solid blocking.

ALTERNATE ATTACHMENTS			
Wood structural panels subfloor, roof and wall sheathing to framing and particleboard wall sheathing to framing			
up to 1/2"	Staple 15 ga. 1 1/2"	4" edge	8' Intermediate
	0.097 - 0.099 Nail 2 1/2"	3" edge	6' Intermediate
1/2" and 1/4"	Staple 16 ga. 1 1/2"	3" edge	6' Intermediate
	0.113 Nail 2 1/2"	3" edge	6' Intermediate
1/2" and 1/4"	Staple 15 and 16 ga. 2"	4" edge	8' Intermediate
	0.097 - 0.099 Nail 2 1/2"	4" edge	8' Intermediate
1"	Staple 14 ga. 2"	4" edge	8' Intermediate
	0.097 - 0.099 Nail 2 1/2"	3" edge	6' Intermediate
1"	Staple 16 ga. 2"	4" edge	8' Intermediate
	Staple 14 ga. 2"	4" edge	8' Intermediate
1"	0.113 Nail 2 1/2"	3" edge	6' Intermediate
	Staple 15 ga. 2 1/2"	4" edge	8' Intermediate
1"	0.097 - 0.099 Nail 2 1/2"	4" edge	8' Intermediate
	<b>Floor underlayment, plywood-hardboard-particleboard</b>		
1/4" and 1/2"	1 1/2" ring or screw shank nail—minimum 12 1/2" ga. (0.099") shank diameter	3" edge	6' Intermediate
	Staple 18 ga., 1/4" crown width	2" edge	5' Intermediate
1 1/2", 1/4", 1/2" and 1/2"	1 1/2" ring or screw shank nail—minimum 12 1/2" ga. (0.099") shank diameter	6" edge	8' Intermediate
	1 1/2" ring or screw shank nail—minimum 12 1/2" ga. (0.099") shank diameter	6" edge	8' Intermediate
0.200	<b>Hardboard</b>		
	1 1/2" long ring-grooved underlayment nail	6" edge	6' Intermediate
0.200	4d cement-coated sinker nail	6" edge	6' Intermediate
	Staple 18 ga., 7/8" long (plastic coated)	3" edge	6' Intermediate
1/4"	<b>Particleboard</b>		
	4d ring-grooved underlayment nail	3" edge	6' Intermediate
1/4"	Staple 18 ga., 1/4" long, 1/4" crown	3" edge	6' Intermediate
	6d ring-grooved underlayment nail	6" edge	10' Intermediate
1/4"	6d ring-grooved underlayment nail	3" edge	6' Intermediate
	Staple 16 ga., 1 1/2" long, 1/4" crown	6" edge	10' Intermediate
1/2", 1/4"	4d ring-grooved underlayment nail	3" edge	6' Intermediate
	Staple 18 ga., 1/4" long, 1/4" crown	3" edge	6' Intermediate

Nail is a general description and may be T-head, modified round head or round head.

- Staples shall have a minimum crown width of 7/16-inch on diameter center at all supports where spans are 48 inches or greater.
- Nails or staples shall be spaced at not more than 12 inches on center at intermediate supports for floors.
- Fasteners shall be placed in a grid pattern throughout the body of the panel.

TABLE R502.3.1(1) FLOOR JOIST SPANS FOR COMMON LUMBER SPECIES (Residential living areas, live load = 30 psf, L <sub>10</sub> = 360°)									
JOIST SPACING (inches)	SPECIES AND GRADE	DEAD LOAD = 10 psf						DEAD LOAD = 20 psf	
		2 x 6	2 x 8	2 x 10	2 x 12	2 x 6	2 x 8	2 x 10	2 x 12
		Maximum floor joist spans							
		(ft. - in.)	(ft. - in.)	(ft. - in.)	(ft. - in.)	(ft. - in.)	(ft. - in.)	(ft. - in.)	(ft. - in.)
12	Spruce-pine-fir #1	11-3	14-11	18-0	23-0	11-3	14-7	17-9	20-7
12	Spruce-pine-fir #2	11-3	14-11	18-0	23-0	11-3	14-7	17-9	20-7
16	Spruce-pine-fir #1	10-3	13-6	17-2	19-11	9-11	12-7	15-5	17-10
16	Spruce-pine-fir #2	10-3	13-6	17-2	19-11	9-11	12-7	15-5	17-10
24	Spruce-pine-fir #1	8-11	11-6	14-1	16-3	8-1	10-3	12-7	14-7
24	Spruce-pine-fir #2	8-11	11-6	14-1	16-3	8-1	10-3	12-7	14-7

TABLE R502.3.1(2) FLOOR JOIST SPANS FOR COMMON LUMBER SPECIES (Residential living areas, live load = 40 psf, L <sub>10</sub> = 360°)									
JOIST SPACING (inches)	SPECIES AND GRADE	DEAD LOAD = 10 psf						DEAD LOAD = 20 psf	
		2 x 6	2 x 8	2 x 10	2 x 12	2 x 6	2 x 8	2 x 10	2 x 12
		Maximum floor joist spans							
		(ft. - in.)	(ft. - in.)	(ft. - in.)	(ft. - in.)	(ft. - in.)	(ft. - in.)	(ft. - in.)	(ft. - in.)
12	Spruce-pine-fir #1	10-3	13-6	17-3	20-7	10-3	13-3	16-3	18-10
12	Spruce-pine-fir #2	10-3	13-6	17-3	20-7	10-3	13-3	16-3	18-10
16	Spruce-pine-fir #1	9-4	12-3	15-5	17-10	9-1	11-6	14-1	16-3
16	Spruce-pine-fir #2	9-4	12-3	15-5	17-10	9-1	11-6	14-1	16-3
24	Spruce-pine-fir #1	8-1	10-3	12-7	14-7	7-5	9-5	11-8	13-4
24	Spruce-pine-fir #2	8-1	10-3	12-7	14-7	7-5	9-5	11-8	13-4

TABLE R502.4.1(1) RAFTER SPANS FOR COMMON LUMBER SPECIES (Ground snow load = 30 psf, ceiling not attached to rafters, L <sub>10</sub> = 180°)									
JOIST SPACING (inches)	SPECIES AND GRADE	DEAD LOAD = 10 psf						DEAD LOAD = 20 psf	
		2 x 6	2 x 8	2 x 10	2 x 12	2 x 6	2 x 8	2 x 10	2 x 12
		Maximum rafter spans							
		(ft. - in.)	(ft. - in.)	(ft. - in.)	(ft. - in.)	(ft. - in.)	(ft. - in.)	(ft. - in.)	(ft. - in.)
12	Spruce-pine-fir #1	13-9	17-5	21-4	24-8	12-4	15-7	19-1	22-1
12	Spruce-pine-fir #2	13-9	17-5	21-4	24-8	12-4	15-7	19-1	22-1
16	Spruce-pine-fir #1	11-11	15-1	18-5	21-5	11-7	14-5	17-3	20-5
16	Spruce-pine-fir #2	11-11	15-1	18-5	21-5	11-7	14-5	17-3	20-5
24	Spruce-pine-fir #1	9-9	12-4	15-1	17-6	8-8	11-0	13-6	15-7
24	Spruce-pine-fir #2	9-9	12-4	15-1	17-6	8-8	11-0	13-6	15-7

Check sources for availability of lumber in lengths greater than 20 feet.

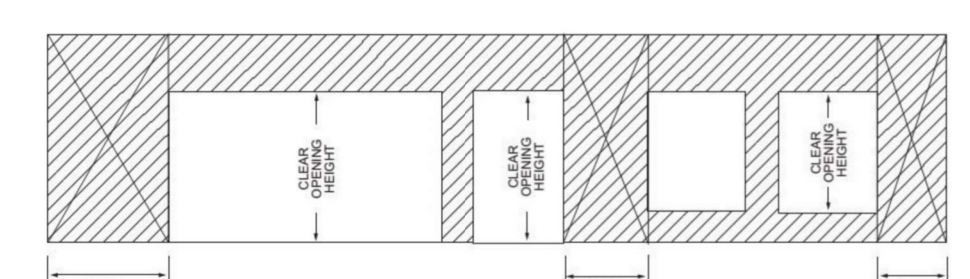
a. The tabulated rafter spans assume that ceiling joists are located at the bottom of the attic space or that some other method of resisting the outward push of the rafters on the bearing walls, such as rafter ties, is provided at that location. Where ceiling joists or rafter ties are located higher in the attic space, the rafter spans shall be multiplied by the following factors:

H <sub>c</sub> /H <sub>r</sub>	Rafter Span Adjustment Factor
1/3	0.67
1/4	0.76
1/5	0.83
1/6	0.90
1/7.5 or less	1.00

1. where:  
 2. H<sub>c</sub> = Height of ceiling joists or rafter ties measured vertically above the top of the rafter support walls.  
 3. H<sub>r</sub> = Height of roof ridge measured vertically above the top of the rafter support walls.  
 Span exceeds 26 feet in length.

TABLE R502.5.1(2) CEILING JOIST SPANS FOR COMMON LUMBER SPECIES (Uninhabitable attics with limited storage, live load = 20 psf, L <sub>10</sub> = 240°)									
JOIST SPACING (inches)	SPECIES AND GRADE	DEAD LOAD = 10 psf						DEAD LOAD = 20 psf	
		2 x 6	2 x 8	2 x 10	2 x 12	2 x 6	2 x 8	2 x 10	2 x 12
		Maximum ceiling joist spans							
		(ft. - in.)	(ft. - in.)	(ft. - in.)	(ft. - in.)	(ft. - in.)	(ft. - in.)	(ft. - in.)	(ft. - in.)
12	Spruce-pine-fir #1	9-5	14-9	18-9	22-11				
12	Spruce-pine-fir #2	9-5	14-9	18-9	22-11				
16	Spruce-pine-fir #1	8-7	12-10	16-3	19-10				
16	Spruce-pine-fir #2	8-7	12-10	16-3	19-10				
24	Spruce-pine-fir #1	7-2	10-6	13-3	16-3				
24	Spruce-pine-fir #2	7-2	10-6	13-3	16-3				

BRACING METHODS TABLE 602.10.4				
METHODS, MATERIAL	MIN THICKNESS	FIGURE	CONNECTION CRITERIA	
			Fasteners	Spacing
CS-WSP Continuously sheathed wood structural panel adjacent to garage openings	1/2"		Exterior sheathing per Table 602.3(3)	6" edges 12" field
			Interior sheathing per Table 602.3(1) or 602.3(2)	Varies by fastener
CS-G Continuously sheathed wood structural panel	1/2"		See Method CS-WSP	See Method CS-WSP
CS-PF Continuously sheathed portal frame	7/16"		See Section 602.10.6.4	See Section 602.10.6.4



MINIMUM LENGTH OF BRACED WALL PANELS TABLE 602.10.5				
METHOD (See Table 602.10.4)	MINIMUM LENGTH (inches)		CONTRIBUTING LENGTH (inches)	
	8 feet	9 feet		
DWB, WSP, SFB, PBS, PCP, HPS, BV-WSP	48	48	Actual	
CS-G	24	27	Actual	
CS-WSP, CS-SFB	Adjacent clear opening height (inches)			
	≤ 64	24	27	
	68	26	27	
	72	27	27	
	76	30	29	
	80	32	30	
	84	35	32	
	88	38	35	
	92	43	37	
	96	48	41	
100	—	44		
104	—	49		
108	—	54		
CS-PF	SDC A, B and C	16	18	1.5 x Actual

TABLE 602.10.6.4 TENSION STRAP CAPACITY FOR RESISTING WIND PRESSURES PERPENDICULAR TO METHODS PFH, PFG AND CS-PF BRACED WALL PANELS <sup>a</sup>					
MINIMUM WALL STUD FRAMING NOMINAL SIZE AND GRADE	MAXIMUM PONY WALL HEIGHT (feet)	MAXIMUM TOTAL WALL HEIGHT (feet)	MAXIMUM OPENING WIDTH (feet)	TENSION STRAP CAPACITY REQUIRED (pounds)	
				Ultimate Design Wind Speed V <sub>ult</sub> (mph)	
2 x 6 Stud Grade	2	12	9	1,000	2,025
				1,150	2,375

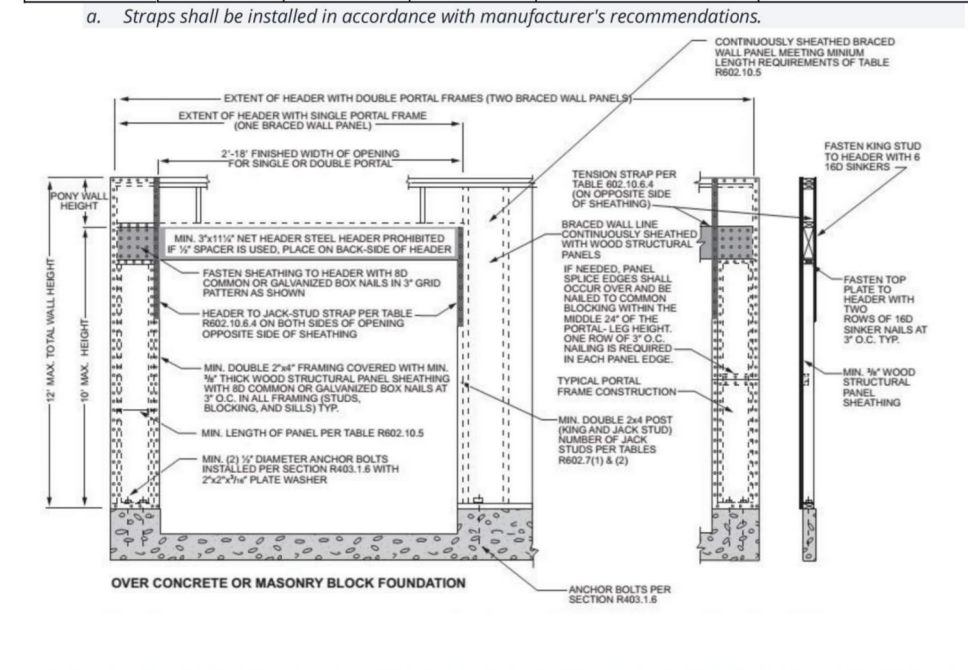


FIGURE 602.10.6.4: METHOD CS-PF—CONTINUOUSLY SHEATHED PORTAL FRAME PANEL CONSTRUCTION

Each end of a braced wall line with continuous sheathing shall have one of the conditions shown in Figure 602.10.7.

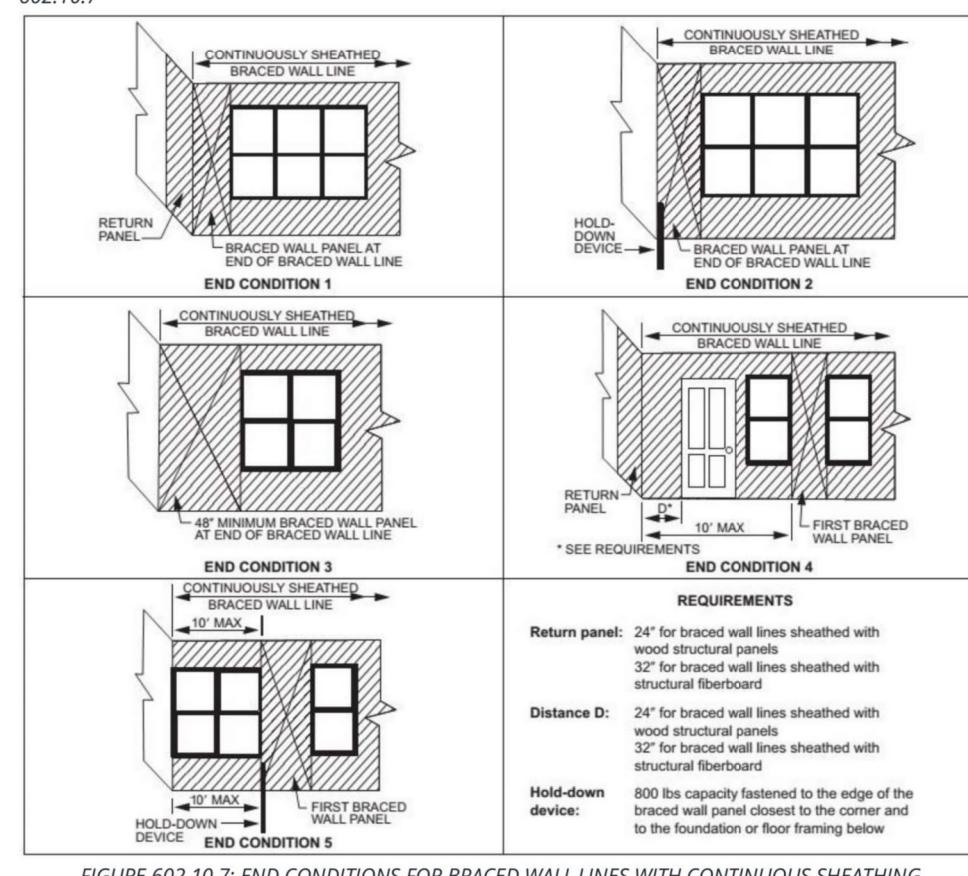
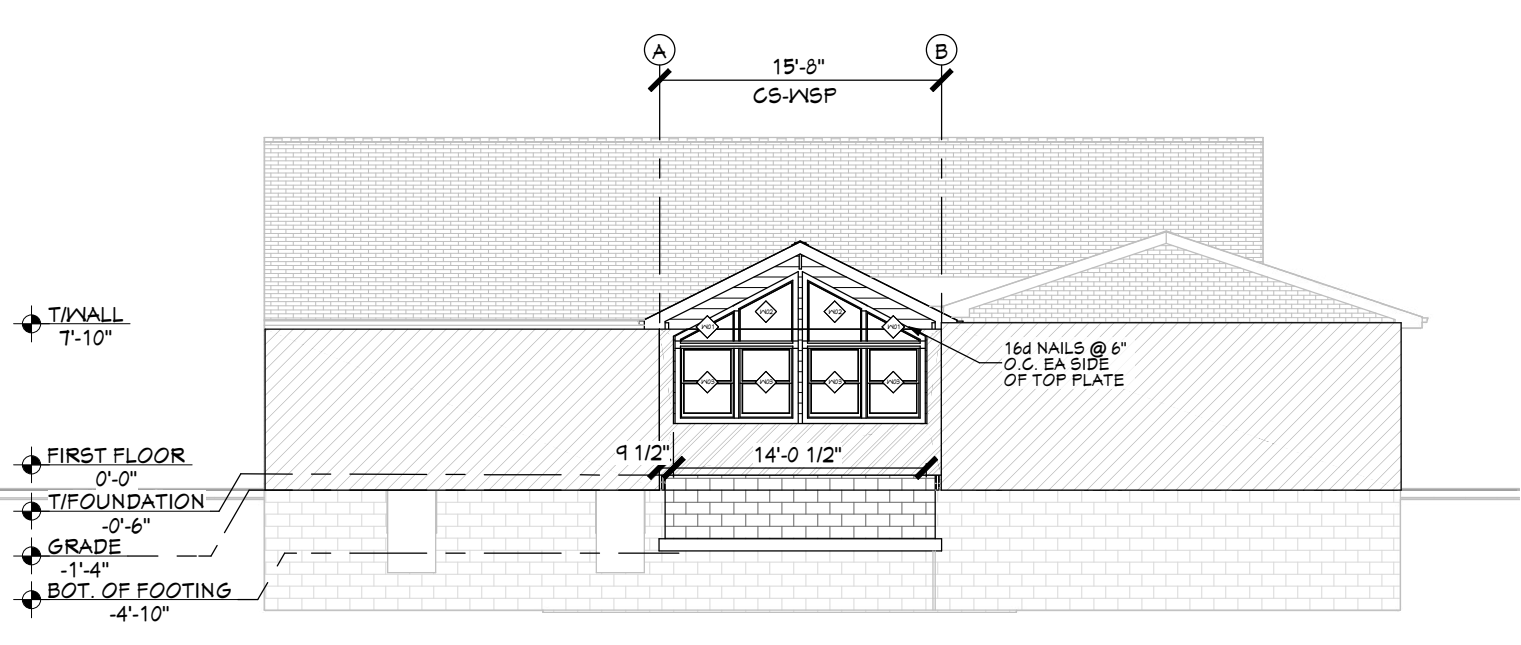
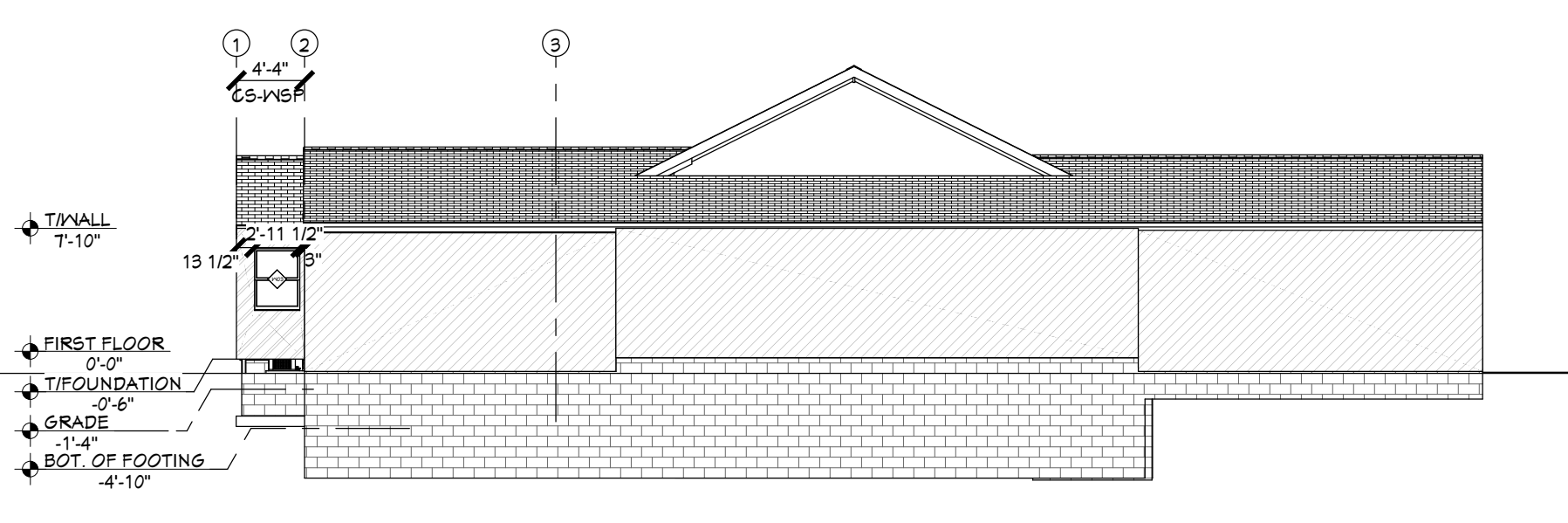


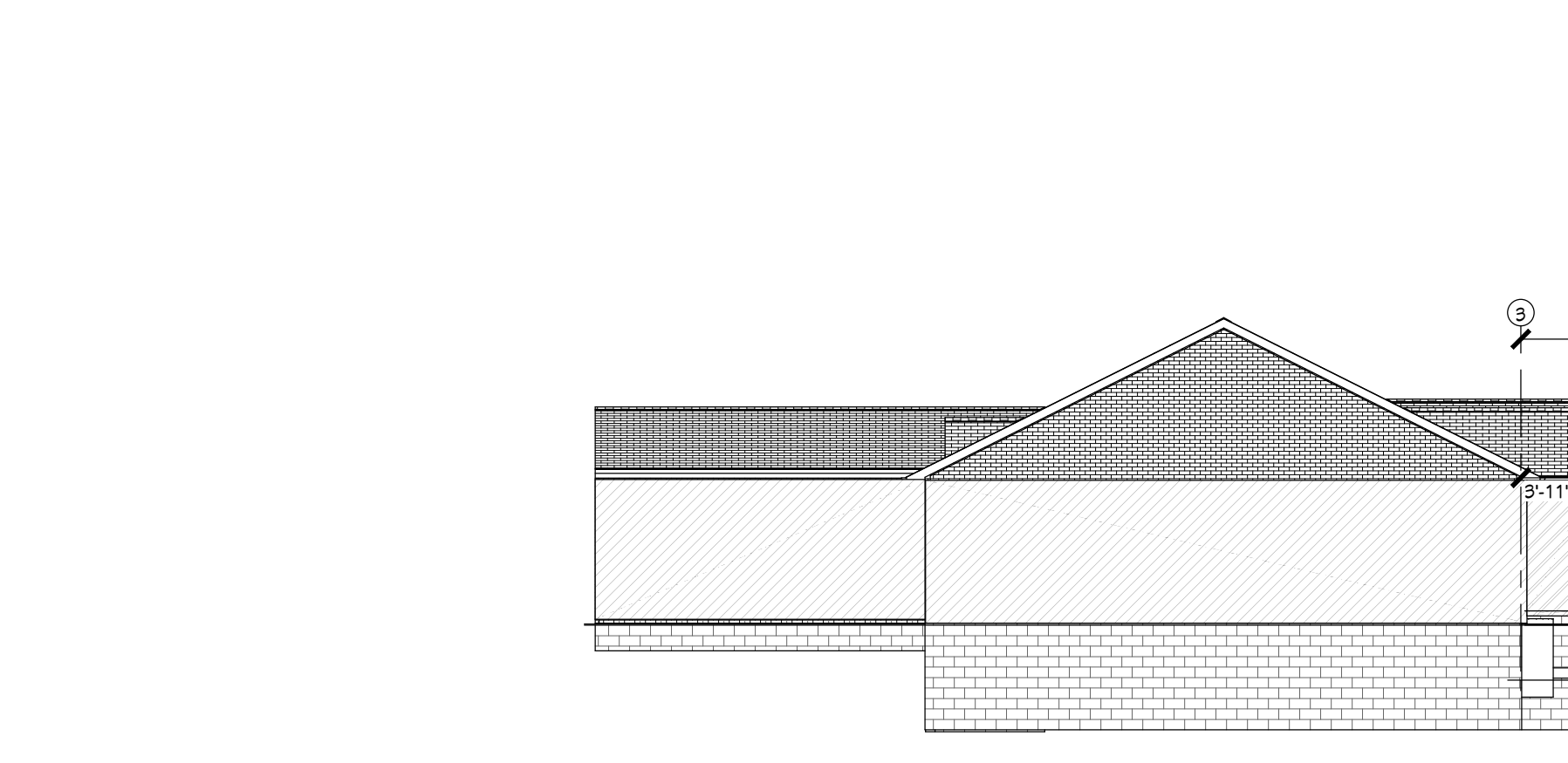
FIGURE 602.10.7: END CONDITIONS FOR BRACED WALL LINES WITH CONTINUOUS SHEATHING



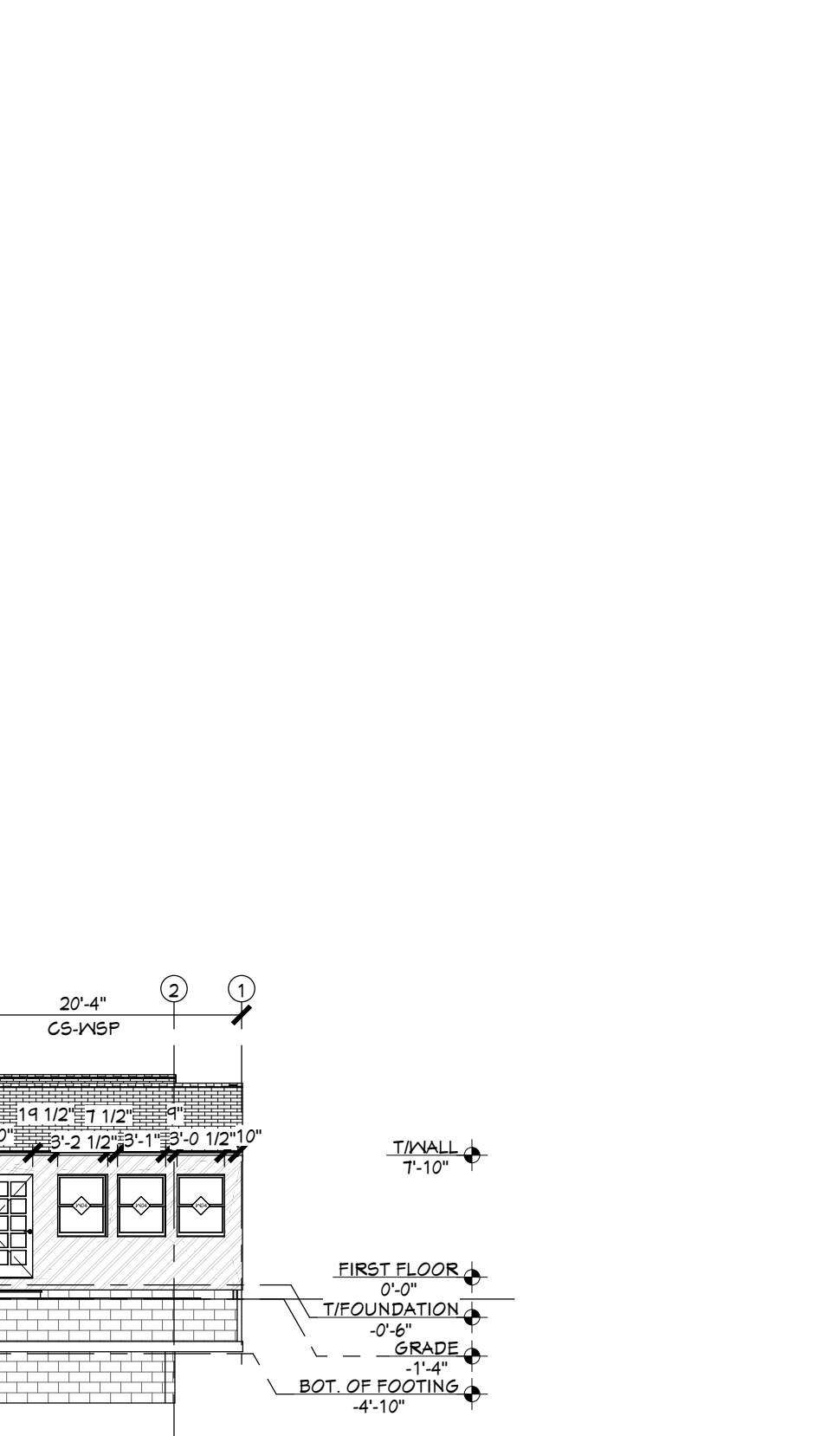
A LEFT/SOUTHWEST BRACED WALL ELEV. SCALE: 1/4" = 1'-0"



B BACK/NORTHWEST BRACED WALL ELEV. SCALE: 1/4" = 1'-0"



C RIGHT/NORTHEAST BRACED WALL ELEV. SCALE: 1/4" = 1'-0"



D BRACED WALL PLAN SCALE: 3



**ADDITION PERSPECTIVES**

**3D RENDERING FINISH NOTES:**  
 1. RENDERINGS ARE NOT TO SCALE; ALL RENDERINGS ARE FOR ARTISTIC DEPICTION AND REFERENCE ONLY. PLAN UPDATES MAY NOT BE REFLECTED IN RENDERINGS.  
 2. FINAL FINISHES SHALL BE CONFIRMED WITH THE HOME OWNER PRIOR TO APPLICATION.

PLANS & DETAILS THIS PAGE.  
- PERSPECTIVES

REMODEL FOR:  
**2676 COUNTRY CLUB, ROCKY RIVER, OH 44116**

**DRAFTING & DESIGN** 12401 Rockside Rd. # 26611, Cleveland, OH  
 (216)-278-2468 gabriel.g@gydraftingdesign.com

Revision Table	
Number	Date

DATE:

5/22/2026

SCALE:

SHEET:

**A-9**