

CONSTRUCTION NOTES

ALL CONSTRUCTION TO ADHERE TO THESE PLANS AND SPEC'S AND TO CONFORM TO THE ONTARIO BUILDING CODE AND ALL OTHER APPLICABLE CODES AND AUTHORITIES HAVING JURISDICTION. THESE REQUIREMENTS ARE TO BE TAKEN AS MINIMUM SPECIFICATIONS. ONT. REG. 332/12

1.

ROOF CONSTRUCTION  
NO.210 (10.25kg/m2) ASPHALT SHINGLES, 11.1mm (7/16") ASPENITE SHEATHING WITH "H" CLIPS. APPROVED WOOD TRUSSES @ 600mm (24") O.C. MAX. APPROVED EAVES PROTECTION TO EXTEND 900mm (3'-0") FROM EDGE OF ROOF AND MIN. 300mm (12") BEYOND INNER FACE OF EXTERIOR WALL, (EAVES PROTECTION NOT REQ'D. FOR ROOF 8:12 OR GREATER) 38x89 (2"x4") TRUSS BRACING @ 1830mm (6'-0") O.C. AT BOTTOM CHORD. PREFIN. ALUM. EAVESTROUGH, FASCIA, RWL & VENTED SOFFIT. ATTIC VENTILATION 1:300 OF INSULATED CEILING AREA WITH 25% AT EAVES. AND 25% AT RIDGE (OBC 9.19.1.2)
2.

FRAME WALL CONSTRUCTION (2"x6")  
SIDING AS PER ELEVATION, APPROVED AIR BARRIER 11.1mm (7/16") EXTERIOR TYPE SHEATHING, 38x140 (2"x6") STUDS @ 400mm (16") O.C., RSI 3.87 (R22) INSULATION AND APPROVED VAPOUR BARRIER AND APPROVED CONT. AIR BARRIER, 13mm (1/2") INT. DRYWALL FINISH. SIDING TO BE MIN. 200mm (8") ABOVE FIN. GRADE
- 2A.

FRAME WALL CONSTRUCTION (2"x4" GARAGE WALL)  
SIDING AS PER ELEVATION, APPROVED AIR BARRIER, 38x89 (2"x4") STUDS @ 400mm (16") O.C., [FOR CLIENT UPGRADE ONLY - RSI 3.35 (R19) INSULATION AND APPROVED VAPOUR BARRIER, 13mm (1/2") INT. DRYWALL FINISH.] SIDING TO BE MIN. 200mm (8") ABOVE FIN. GRADE
3.

BRICK VENEER CONSTRUCTION (2"x6")  
90mm (4") FACE BRICK 25mm (1") AIR SPACE, 22x180x0.76mm (7/8"x7"x0.03") GALV. METAL TIES @ 400mm (16") O.C. HORIZONTAL 600mm (24") O.C. VERTICAL. APPROVED AIR BARRIER 11.1mm (7/16") EXTERIOR TYPE SHEATHING, 38x140 (2"x6") STUDS @ 400mm (16") O.C., RSI 3.87 (R22) INSULATION AND APPROVED VAPOUR BARRIER WITH APPROVED CONTIN. AIR BARRIER. 13mm (1/2") INT. DRYWALL FINISH. PROVIDE WEEP HOLES @ 800mm (32") O.C. BOTTOM COURSE AND OVER OPENINGS. PROVIDE THRU-WALL FLASHING UP MIN. 150mm (6") BEHIND BUILDING PAPER. BRICK TO BE MIN. 150mm (6") ABOVE FINISH GRADE.
- 3A.

BRICK VENEER CONSTRUCTION (2"x4" GARAGE WALL)  
90mm (4") FACE BRICK 25mm (1") AIR SPACE, 22x180x0.76mm (7/8"x7"x0.03") GALV. METAL TIES @ 400mm (16") O.C. HORIZONTAL 600mm (24") O.C. VERTICAL. APPROVED AIR BARRIER, 38x89 (2"x4") STUDS @ 400mm (16") O.C. [FOR CLIENT UPGRADE ONLY - RSI 3.35 (R19) INSULATION AND APPROVED VAPOUR BARRIER, 13mm (1/2") INT. DRYWALL FINISH.] PROVIDE WEEP HOLES @ 800mm (32") O.C. BOTTOM COURSE AND OVER OPENINGS. PROVIDE THRU-WALL FLASHING UP MIN. 150mm (6") BEHIND BUILDING PAPER. BRICK TO BE MIN. 150mm(6") ABOVE FINISH GRADE.
4.

INTERIOR STUD PARTITIONS FOR BEARING PARTITIONS 38x89 (2"x4") @ 400mm (16") O.C. FOR 2 STOREYS AND 300mm (12") O.C. FOR 3 STOREYS, NON-BEARING PARTITIONS 38x89 (2"x4") @ 600mm (24") O.C. PROVIDE 38x89 (2"x4") BOTTOM PLATE AND 2/38x89 (2/2"x4") TOP PLATE. 13mm (1/2") INT. DRYWALL BOTH SIDES OF STUDS, PROVIDE 38x140 (2"x6") STUDS/PLATES WHERE NOTED.
5.

FOUNDATION WALL/FOOTINGS: -SEE OBC 9.15.3, 9.15.4 200mm (8") POURED CONC. FDTN. WALL 20MPa (c/w 2-15mm REBAR TOP & BOTTOM) WITH BITUMENOUS DAMPPROOFING AND OPT. DRAINAGE LAYER. DRAINAGE LAYER REQ. WHEN BASEMENT INSUL. EXTENDS 900 (2'-11") BELOW FIN. GRADE. MAXIMUM POUR HEIGHT 2390 (7'-10") ON 500x155 (20"x6") CONTINUOUS KEYED CONC. FTG. BRACE FDTN. WALL PRIOR TO BACKFILLING. ALL FOOTINGS SHALL REST ON NATURAL UNDISTURBED SOIL OR COMPACTED ENGINEERED FILL, WITH MIN. BEARING CAPACITY OF 100kPa OR GREATER. IF SOIL BEARING DOES NOT MEET MIN. CAPACITY, ENGINEERED FOOTINGS ARE REQUIRED. MAX. FLOOR LIVE LOAD OF 2.4kpa(50psf) PER FLOOR, AND MAX. LENGTH OF SUPPORTED JOISTS IS 4.9m (16'-1"). REFER TO SOILS REPORT FOR SOILS CONDITIONS AND BEARING CAPACITY.
6.

100mm (4") DIA. WEEP TILE 150mm (6") CRUSHED STONE OVER AND AROUND WEEPING TILES.
7.

BASEMENT SLAB OBC. 9.3.1.6,(1)(b) & 9.16.4.5.(1) 80mm (3")MIN. 25MPa (3600psi) CONC. SLAB ON 100mm (4") COARSE GRANULAR FILL, OR 15MPa. (2200psi) CONC. WITH DAMPPROOFING BELOW SLAB.
8.

EXPOSED FLOOR TO EXTERIOR PROVIDE RSI 5.46 (R31) INSULATION, APPROVED VAPOUR BARRIER AND CONTINUOUS AIR BARRIER, FINISHED SOFFIT.
9.

OBC. 12.3.2.1 & 12.3.3.7 ATTIC INSULATION RSI 8.81 (R60) BLOWN IN ROOF INSULATION AND APPROVED VAPOUR BARRIER, 13mm (1/2") INT. DRYWALL FINISH OR APPROVED EQUAL.
10.

STAIRS, STEPS, HANDRAILS -OBC. 9.8.-  
-9.8.2.1(2) STAIR WIDTH MEASURED BETWEEN WALL FACES OR GUARDS SHALL BE NOT LESS THAN 860mm (33 7/8") FOR REQUIRED EXIT STAIRS SERVING A HOUSE OR DWELLING UNIT.  
-9.8.2.2(3) CLEAR HEIGHT OVER STAIRS SHALL NOT BE LESS THAN 1950mm (76 3/4")  
-9.8.4 STEP DIMENSIONS (TABLE 9.8.4.1)  
STAIR COMPONENT      MINIMUM      MAXIMUM  
RISE      125mm (4 13/16")      200mm (7 7/8")  
RUN      255mm (10 1/8")      355mm (14")  
-9.8.4.4 UNIFORMITY & TOLERANCES FOR RISERS & TREADS  
-BETWEEN ADJACENT TREADS & LANDINGS = 5mm  
-BETWEEN TALLEST & SHORTEST RISER IN FLIGHT=10mm  
-9.8.4.6(1)(b) MAX. NOSING 25mm (1")  
-9.8.7.5(1)(b) CLEARANCE BETWEEN HANDRAIL AND SURFACE BEHIND IT TO BE MIN. 50mm (1 13/16")  
-9.8.7.6(1) HANDRAILS SHALL NOT PROJECT MORE THAN 100mm (3 13/16") INTO REQUIRED WIDTH OF STAIR <SEE 9.8.2.1(1)>  
GUARDS -OBC. 9.8.8.3.-  
(1) EXT. GUARDS HEIGHT: =1070mm (42 3/8") MIN.  
(2) INT. GUARDS HEIGHT: =900mm (35 5/8") MIN.  
(1) STAIR LANDING GUARDS: =1070mm (42 3/8") MIN.  
-9.8.8.5(1) MAX. OPENINGS THROUGH GUARDS =100mm (3 13/16")
11.

38x89 (2"x4") SILL PLATE WITH 13mm (1/2") DIA. ANCHOR BOLTS 200mm (8") LONG, EMBEDDED MIN. 100mm (4") INTO CONC. @ 2400mm (7'-10") O.C. USE NON-SHRINK GROUT TO LEVEL SILL PLATE WHEN REQUIRED. (SEE OBC. 9.23.7)
13.

-R12 (3 1/2") CONTINUOUS BATT INSULATION. 2"x4" STUD WALL PLACED 3/4" AWAY FROM WALL. FILL STUD CAVITY WITH R10 BATT INSULATION. APPROVED VB TO 8" ABOVE FLOOR LEVEL.  
OR  
-APPROVED BLANKET INSULATION (R20) MECHANICALLY SECURED TO CONCRETE FOUNDATION WALL WITH 100mm HILTI PINS (COMES WITH PLASTIC WASHER)  
DAMPPROOF WITH BUILDING PAPER BETWEEN THE FOUNDATION WALL AND INSULATION UP TO GRADE LEVEL.  
(SEE DETAIL ON "SB-12 DETAILS" PAGE)

14.

BEARING STUD PARTITION  
38x89 (2"x4") STUDS @ 400mm (16") O.C. 38x89 (2"x4") SILL PLATE ON DAMPPROOFING MATERIAL, 13mm (1/2") DIA. ANCHOR BOLTS 200mm (8") LONG, EMBEDDED MIN. 100mm (4") INTO CONC. @ 2400mm (7'-10") O.C. 100mm (4") HIGH CONC. CURB ON 350x155 (14"x6") CONC. FOOTING. ADD HORIZ. BLOCKING AT MID-HEIGHT IF WALL IS UNFINISHED.
15.

STEEL BASEMENT COLUMN (SEE O.B.C. 9.17.3.1, 9.17.3.4)  
75mm (3") DIA. ADJUSTABLE STL. COL. CONFORMING TO CAN/CGSB-7.2M, AND WITH 102x150x9.5 (4"x6"x3/8") STL. PLATE TOP & BOTTOM. 910x910x300 (36"x36"x12") CONC. FOOTING ON UNDISTURBED SOIL OR ENGINEERED FILL CAPABLE OF SUSTAINING A PRESSURE OF 100 Kpa. MINIMUM AND AS PER SOILS REPORT.
- 15A.

STEEL BASEMENT COLUMN (SEE O.B.C. 9.17.3.1, 9.17.3.4)  
3"x3"x(188) NON-ADJUSTABLE STL. COL. WITH 150x150x9.5 (6"x6"x3/8") STL. TOP & BOTTOM PLATE ON 910x910x300 (36"x36"x12") CONC. FOOTING ON UNDISTURBED SOIL OR ENGINEERED FILL CAPABLE OF SUSTAINING A PRESSURE OF 100 Kpa. MIN. AND AS PER SOILS REPORT.
- 15B.

STEEL COLUMN (SEE OBC. 9.17.3.1, 9.17.3.4) 3"x3"x(188) NON-ADJUSTABLE STL. COL. TO BE ON 150x150x9.5 (6"x6"x3/8") STEEL TOP PLATE, & BOTTOM PLATE. BASE PLATE 120x250x12.5 (4 1/2"x10"x1/2") WITH 2-12mm DIA. x 300mm LONG x50mm HOOK ANCHORS (2-1/2"x12"x2") FIELD WELD COL. TO BASE PLATE.
- 15C.

STEEL COLUMN (SEE OBC. 9.17.3.1, 9.17.3.4) 90mm(3-1/2") DIA.x478mm(188) NON-ADJUSTABLE STL. COL. TO BE ON 150x150x9.5 (6"x6"x3/8") STEEL TOP PLATE, & BOTTOM PLATE. BASE PLATE 120x250x12.5 (4 1/2"x10"x1/2") WITH 2-12mm DIA. x 300mm LONG x50mm HOOK ANCHORS (2-1/2"x12"x2") FIELD WELD COL. TO BASE PLATE.
16.

BEAM POCKET OR 300x150 (12"x6") POURED CONC. NIB WALLS. MIN. BEARING 90mm (3-1/2").
17.

19x64 (1"x3") CONTINUOUS W.D. STRAPPING BOTH SIDES OF STEEL BEAM.
18.

GARAGE SLAB: 100mm (4") 32MPa (4640psi) CONC. SLAB WITH 5-8% AIR ENTRAINMENT ON OPT. 100 (4") COARSE GRANULAR FILL WITH COMPACTED SUB-BASE OR COMPACTED NATIVE FILL SLOPE TO FRONT AT 1% MIN.
19.

13mm (1/2") GYPSUM BD. ON WALL AND CEILING BETWEEN HOUSE AND GARAGE, RSI 3.87 (R22) IN WALLS, RSI 5.46 (R31) IN CEILING. PROVIDE APPROVED AIR BARRIER. TAPE AND SEAL ALL JOINTS AIR TIGHT.
20.

DOOR AND FRAME GASPROOFED. DOOR EQUIPPED WITH SELF CLOSING DEVICE AND WEATHERSTRIPPING. PER OBC 9.10.13.15
21.

WOOD STEP, C/W HANDRAIL & LANDING IF MORE THAN 3 RISERS, MAX.RISE 200mm (7-7/8") MIN.TREAD 255mm (10-1/16") SEE OBC 9.8.9.2, 9.8.9.3 & 9.8.10
22.

CAPPED DRYER EXHAUST VENTED TO EXTERIOR. (USE 100mm(4") DIA. SMOOTH WALL VENT PIPE) OBC 6.2.3.8.(7)
23.

ATTIC ACCESS HATCH 545x610 (21.5"x24") WITH A MIN. AREA OF 3.44 SF WITH WEATHERSTRIPPING RSI 7.0 (R40) RIGID INSUL. BACKING OBC 9.19.2
24.

FIREPLACE CHIMNEYS -OBC. 9.21.- TOP OF FIREPLACE CHIMNEY SHALL BE 915mm (3'-0") ABOVE THE HIGHEST POINT AT WHICH IT COMES IN CONTACT WITH THE ROOF AND 610mm (2'-0") ABOVE THE ROOF SURFACE WITHIN A HORIZ. DISTANCE OF 3050mm (10'-0") FROM THE CHIMNEY.
25.

LINEN CLOSET, 4 SHELVES MIN. 350mm (14") DEEP.
26.

MECHANICAL EXHAUST FAN, VENTED TO EXTERIOR, TO PROVIDE AT LEAST ONE AIR CHANGE PER HOUR.
27.

STEEL BEARING PLATE FOR MASONRY WALLS 280x280x16 (11"x11"x5/8") STL. PLATE FOR STL BEAMS AND 280x280x12 (11"x11"x1/2") STL. PLATE FOR WOOD BEAMS BEARING ON CONC. BLOCK PARTYWALL, ANCHORED WITH 2-19mm (3/4") x 200mm (8") LONG GALV. ANCHORS WITHIN SOLID BLOCK COURSE. LEVEL WITH NON-SHRINK GROUT.
28.

U.L.C. RATED CLASS "B" VENT 610mm (2'-0") ABOVE THE POINT IN CONTACT WITH THE ROOF FOR SLOPES UP TO 9/12, REFER TO THE ONTARIO GAS UTILIZATION CODE.
29.

3-38x140 (3-2"x6") BUILT-UP-POST ON METAL BASE SHOE ANCHORED TO CONC. WITH 12.7 DIA. BOLT, 610x610x254 (24"x24"x10") CONC. FTG. OBC 9.17.4
30.

STEP FOOTINGS: MIN. HORIZ. STEP = 600mm (23-5/8"). MAX. VERT. STEP = 600mm (23-5/8") FOR FIRM SOILS.
31.

PORCH SLAB/STEPS: 130 mm (5") MIN. CONC. 32 MPa SLAB AIR ENTRAINMENT MIN. 5 TO 8% AT 28 DAYS, 10 M BARS @ 250 O/C EACH WAY 10M DOWELS @400 (16") O.C. 2-15m IN THICKENED AREA FROM WALL TO SLAB ALL SIDES (SEE DETAIL)
32.

DIRECT VENT FURNACE TERMINAL MIN. 900mm (36") FROM A GAS REGULATOR, MIN. 300mm (12") ABOVE FIN. GRADE, FROM ALL OPENINGS, EXHAUST AND INTAKE VENTS. HRV INTAKE TO BE A MIN. OF 1830mm (6'-0") FROM ALL EXHAUST TERMINALS. REFER TO GAS UTILIZATION CODE.
33.

DIRECT VENT GAS FIREPLACE. VENT TO BE A MINIMUM 300mm (12") FROM ANY OPENING AND ABOVE FIN. GRADE. REFER TO GAS UTILIZATION CODE.
34.

SUBFLOOR  
-19mm (3/4") T & G SUBFLOOR GLUED AND SCREWED TO ENGINEERED FLOOR JOIST SYSTEM. SUPPLY AND INSTALL BLOCKING AND/OR BRIDGING IF INDICATED BY FLOOR JOIST DESIGNER (REFER TO MANUFACTURER'S LAYOUTS AND INSTALLATION INSTRUCTIONS)
35.

EXPOSED BUILDING FACE -OBC. 9.10.14.5- EXTERIOR WALLS TO HAVE A FIRE RESISTANCE RATING OF NOT LESS THAN 45 min. WHERE LIMITING DISTANCE IS LESS THAN 1.2M (3'-11"). WHERE THE LIMITING DISTANCE IS LESS THAN 600mm (1'-11") THE EXPOSING FACE SHALL BE CLAD IN NON-COMBUSTIBLE MATERIAL.
36.

LINTEL SPECIFICATION  
ALL WINDOW AND DOOR LINTELS TO BE COMPRISED OF 2-2X10 BUILT-UP WOOD BEAM, EACH END BEARING ON P2s (UNLESS NOTED OTHERWISE)
37.

THE FDTN. WALL SHALL NOT BE REDUCED TO LESS THAN 90mm (3 5/8") THICK TO A MAX. DEPTH OF 350mm (13 3/4") AND SHALL BE TIED TO THE FACING MATERIAL WITH METAL TIES SPACED 200mm (8") O.C. VERTICALLY AND 900mm (36") O.C. HORIZONTALLY. FILL SPACE BETWEEN WALL AND FACING SOLID WITH MORTAR. (SEE OBC 9.15.4.7)

38.

CONVENTIONAL ROOF FRAMING 38x140 (2"x6") RAFTERS @ 400mm (16"O.C.), FOR MAX. 11'-7" SPAN. 38x184 (2"x8") RIDGE BOARD. 38x89 (2"x4") COLLAR TIES AT MIDSPANS. CEILING JOISTS TO BE 38x89 (2"x4") @ 400mm (16") O.C. FOR MAX. 2830mm (9'-3") SPAN & 38x140 (2"x6") @ 400mm (16") O.C. FOR MAX. 4450mm (14'-7") SPAN. RAFTERS FOR BUILT-UP ROOF TO BE 38x89 (2"x4") @ 600mm (24") O.C. WITH A 38x89 (2"x4") CENTRE POST TO THE TRUSS BELOW, LATERALLY BRACED AT 1800mm (6'-0") O.C. VERTICALLY.
39.

TWO STOREY VOLUME SPACES  
FOR HIGH WALL UP TO 18'-0": CONSTRUCTION: 2"x6" SPACING AS INDICATED BLOCKING: 3 ROWS @ 4'-6" O/C ± SHEATHING: 7/16" ASPENITE NAILING: 2" STAPLES BET. 4" AND 6" O/C ALONG STUDS  
  
STUD SPACING WITH VARIOUS FINISHES:  
1. SIDING-METAL OR VINYL- 2"x6" @12" O/C  
2. STUCCO 2"x6" @16" O/C  
3. BRICK TO 4'-0" 2"x6" @12" O/C  
4. BRICK FULL HEIGHT 2-2"x6" @12" O/C
40.

TYPICAL 1 HOUR RATED PARTY WALL. REFER TO OBC 9.10.13.15 FOR DETAILS FOR TYPE AND SPECIFICATIONS.

41.

STRIP FOOTING SUPPORTING EXTERIOR WALLS  
-SEE OBC 9.15.3.  
-ASSUMING MASONRY VENEER CONSTRUCTION, MAX. FLOOR LIVE LOAD OF 2.4kPa. (50psf.) PER FLOOR, AND MAX. LENGTH OF SUPPORTED FLOOR JOISTS IS 4.9m (16'-1").  
THE STRIP FOOTING SIZE IS AS FOLLOWS:  
2 STOREY ( STANDARD ) 500x155 (20"x6")  
2 STOREY ( WALK-OUT BASEMENT ) 545x175 (22"x7")  
(UNLESS OTHERWISE NOTED ON PLAN)
42.

EXTERIOR WALLS FOR WALK-OUT CONDITIONS THE EXTERIOR BASEMENT STUD WALL TO BE 38x140 (2"x6") STUDS @ 16" o.c. OR 38x89 (2"x4") STUDS @ 12" o.c.
43.

FLASHING FOR EXT. WALL OPENINGS (O.B.C.9.27.3.8.(3)
44.

SUMP PITS (WHERE REQ'D) SEE O.B.C. 9.14.5.2  
-MUST BE SEALED AS PER 9.25.3.3.(16)

Mississippi Mills

Issued for Permit

2023-09-01

The building shall be constructed in accordance with the Building Code Act, Ontario Building Code and any plans or documents issued with the permit. No deviation or change shall be made to the plans or documents without authorization by the Chief Building Official. When site conditions require a change to the permit drawings or documents, the builder shall be required to obtain the approval of the Chief Building Official. Errors on drawings shall be corrected by the owner and the builder shall understand and comply with their roles as defined in the Act.

WINDOWS:

1.

MINIMUM BEDROOM WINDOW: 1.0m<sup>2</sup> (10.764 sq ft) MINIMUM WINDOW OPENING: 1.0m<sup>2</sup> (10.764 sq ft) HAVE MIN. 0.35m<sup>2</sup> (3.77 sq ft) OF GLASS AREA
2.

WINDOW GUARDS - OBC 9.10.13.15. GUARDS REQUIRED WHERE THE TOP OF THE WINDOW IS LESS THAN 480mm (19") ABOVE FIN. FLOOR AND THE DISTANCE FROM THE WINDOW TO THE ADJACENT GRADE IS GREATER THAN 1800mm (5'-11")
3.

ALL WINDOWS TO COMPLY WITH THERMAL RESISTANCE REQUIREMENTS STATED IN OBC 17.3.5.6 AND SR12 PRESCRIPTIVE COMPLIANCE PACKAGE, AND OBC 9.5, 9.6, 9.7

GENERAL

1.

MECHANICAL VENTILATION IS REQUIRED TO PROVIDE 0.3 AIR CHANGES PER HOUR AVERAGED OVER 24 HOURS. SEE MECHANICAL DRAWINGS.
2.

ALL DOWNSPOUTS TO DRAIN AWAY FROM THE BUILDING AS PER OBC 9.26.18.2 AND MUN. STANDARDS.
3.

ALL WINDOW WELLS TO DRAIN TO FOOTING LEVEL PER OBC 9.14.6.3 CHECK WITH LOCAL AUTHORITY.
4.

PROVIDE STUD WALL REINFORCEMENT FOR FUTURE GRAB BARS IN BATHROOMS. REINF. OF STUD WALLS SHALL BE INSTALLED ADJACENT TO WATER CLOSETS AND SHOWER OR BATHTUB IN MAIN BATHROOM, SEE OBC 9.5.2.3.

LUMBER:

1.

ALL LUMBER SHALL BE SPRUCE NO.2 GRADE, UNLESS NOTED OTHERWISE.
2.

STUDS SHALL BE STUD GRADE SPRUCE, UNLESS NOTED OTHERWISE.
3.

LUMBER EXPOSED TO THE EXTERIOR TO BE SPRUCE NO.2 GRADE PRESSURE TREATED OR CEDAR, UNLESS NOTED OTHERWISE.
4.

ALL LAMINATED VENEER LUMBER (L.V.L.) BEAMS, GIRDER TRUSSES, AND METAL HANGER CONNECTIONS SUPPORTING ROOF FRAMING TO BE DESIGNED & CERTIFIED BY TRUSS MANUF.
5.

LVL BEAMS SHALL BE 2.0E WS MICRO-LAM LVL (Fb=2800psi,MIN.) OR EQUIVALENT. NAIL EACH PLY OF LVL WITH 89mm (3 1/2") LONG COMMON WIRE NAILS @ 300mm (12") O.C. STAGGERED IN 2 ROWS FOR 184, 240 & 300mm (7 1/4", 9 1/2", 11 7/8") DEPTHS AND STAGGERED IN 3 ROWS FOR GREATER DEPTHS AND FOR 4 PLY MEMBERS ADD 13mm (1/2") DIA. GALVANIZED BOLTS BOLTED AT MID-DEPTH OF BEAM @ 915mm (3'-0") O.C.
6.

PROVIDE TOP MOUNT BEAM HANGERS TYPE "SCL" MANUFACTURED BY MGA CONNECTOR LTD. Tel. (905) 642-3175 OR EQUAL FOR ALL LVL BEAM TO BEAM CONNECTIONS UNLESS OTHERWISE NOTED.
7.

JOIST HANGERS: PROVIDE METAL HANGERS FOR ALL JOISTS AND BUILT-UP WOOD MEMBERS INTERSECTING FLUSH BUILT-UP WOOD MEMBERS.
8.

WOOD FRAMING NOT TREATED WITH A WOOD PRESERVATIVE, IN CONTACT WITH CONCRETE, SHALL BE SEPARATED FROM THE CONCRETE BY AT LEAST 2 mil. POLYETHYLENE FILM, No. 50 (45lbs.) ROLL ROOFING OR OTHER DAMPPROOFING MATERIAL, EXCEPT WHERE THE WOOD MEMBER IS ST LEAST 150mm (6") ABOVE THE GROUND.

STEEL:

1.

STRUCTURAL STEEL SHALL CONFORM TO CAN/CSA-G40-21 GRADE 300W. HOLLOW STRUCTURAL SECTIONS SHALL CONFORM TO CAN/CSA-G40-21 GRADE 350W CLASS "H".
2.

REINFORCING STEEL SHALL CONFORM TO CSA-G30-18M GRADE 400R.

CERTIFIED PERMIT DOCUMENT

A copy of the permit plans & documents shall be kept & maintained on site and made available to an inspector upon request.

WOOD LINTELS AND BUILT-UP WOOD BEAMS

L1	2/38 x 184 (2/2" x 8")	SPR.#2
B1	3/38 x 184 (3/2" x 8")	SPR.#2
B2	4/38 x 184 (4/2" x 8")	SPR.#2
L3	2/38 x 235 (2/2" x 10")	SPR.#2
B3	3/38 x 235 (3/2" x 10")	SPR.#2
B4	4/38 x 235 (4/2" x 10")	SPR.#2
L5	2/38 x 286 (2/2" x 12")	SPR.#2
B5	3/38 x 286 (3/2" x 12")	SPR.#2
B6	4/38 x 286 (4/2" x 12")	SPR.#2

LOOSE STEEL LINTELS

L7	90 x 96 x 6.0L (3-1/2" x 3-1/2" x 1/4")
L8	90 x 90 x 8.0L (3-1/2" x 3-1/2" x 5/16")
L9	100 x 90 x 8.0L (4" x 3-1/2" x 5/16")
L10	125 x 90 x 8.0L (5" x 3-1/2" x 5/16")
L11	125 x 90 x 10.0L (5" x 3-1/2" x 3/8")
L12	150 x 100 x 10.0L (6"x 4" x 3/8")

STEEL COLUMNS (UNLESS NOTED OTHERWISE)

TP = (1) 3" DIA. ADJ. ST. POST  
2TP = (2) 3" DIA. ADJ. ST. POSTS  
HSS = 3.5"X3.5" HOLLOW STRUCTURAL SECTION STEEL POST

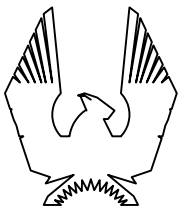
LAMINATED VENEER LUMBER (LVL) BEAMS

LVL1	2-1 3/4"x7 1/4" (2-45x184)
LVL2	3-1 3/4"x7 1/4" (3-45x184)
LVL3	4-1 3/4"x7 1/4" (4-45x184)
LVL4	2-1 3/4"x9 1/2" (2-45x240)
LVL5	3-1 3/4"x9 1/2" (3-45x240)
LVL6	2-1 3/4"x11 7/8" (2-45x300)
LVL7	3-1 3/4"x11 7/8" (3-45x300)

MASONRY VENEER LINTEL SCHEDULE [OBC2012] PROVIDE 6" MINIMUM BEARING EACH END 9.20.5.2B	
OPENINGS	LINTEL SIZE
UP TO 8'-0"	3 1 1/2" x 3 1 1/2" x 1/4"
8'-0" TO 8'-8"	4" x 3 1 1/2" x 1/4"
8'-8" TO 10'-10"	5" x 3 1 1/2" x 5/16"
10'-10" TO 11'-5"	5" x 3 1 1/2" x 7/16"
11'-5" TO 11'-9"	5" x 3 1 1/2" x 1/2"
11'-9" TO 12'-6"	6" x 3 1 1/2" x 7/16"
12'-6" TO 13'-4"	6" x 3 1 1/2" x 1/2"

LEGEND

	M.C.	MEDICINE CABINET
	DOUBLE VOLUME WALL	SEE NOTE 39
	SOLID WOOD BEARING	
	P2 - 2 MEMBER BUILT-UP STUD	
	P3 - 3 MEMBER BUILT-UP STUD	
	P4 - 4 MEMBER BUILT-UP STUD	
	P5 - 5 MEMBER BUILT-UP STUD	
NOTE: SOLID BEARING TO BE AS WIDE AS SUPPORTED MEMBER. SOLID BEARING TO BE A MINIMUM OF P2 (ONE CONTINUOUS STUD AND ONE JACK STUD, UNLESS OTHERWISE NOTED ON PLAN.)		
	SMOKE ALARM (AUDIBLE/VISUAL)-OBC 9.10.19. PROVIDE 1 PER FLOOR, NEAR THE STAIRS CONNECTING THE FLOOR LEVEL. ONE PER SLEEPING ROOM, INCLUDING HALLWAYS BE CONNECTED TO AN ELECTRICAL CIRCUIT AND INTERCONNECTED TO ACTIVATE ALL ALARMS WHEN ONE ALARM SOUNDS. -9.10.19.1(2) REQUIRED SMOKE ALARMS TO HAVE A VISUAL COMPONENT	
	CARBON MONOXIDE ALARM (OBC 9.33.4) WHERE A FUEL-BURNING APPLIANCE IS INSTALLED IN A DWELLING UNIT, A CARBON MONOXIDE ALARM CONFORMING TO CAN/CSA-6.19, CSA 6.19 OR UL2034 SHALL BE INSTALLED ADJACENT TO EACH SLEEPING AREA. CARBON MONOXIDE ALARM(S) SHALL BE PERMANENTLY WIRED SO THAT ITS ACTIVATION WILL ACTIVATE ALL CARBON MONOXIDE ALARMS AND BE EQUIPPED WITH AN ALARM THAT IS AUDIBLE WITHIN BEDROOMS WHEN THE INTERVENING DOORS ARE CLOSED.	
SOIL GAS CONTROL (OBC 9.13.1. & 9.13.4, & SB9) PROVIDE CONSTRUCTION TO PREVENT LEAKAGE OF SOIL GAS INTO THE BUILDING WHERE REQUIRED. (SEE ALSO O.B.C. 9.1.1.7.(1))		
CONTRACTOR MUST VERIFY ALL DIMENSIONS ON THE JOB AND REPORT ANY DISCREPANCY TO THE BUILDER BEFORE PROCEEDING WITH THE WORK. DO NOT SCALE DRAWINGS, USE DIMENSIONS PROVIDED. ALL DRAWINGS TO BE USED FOR CONSTRUCTION ONLY AFTER BUILDING PERMIT HAS BEEN ISSUED.		
	EXHAUST VENT	
	DUPLEX OUTLET (12" HIGH)	
	WEATHERPROOF DUPLEX OUTLET	
	HEAVY DUTY OUTLET	
	POT LIGHT	
	LIGHT FIXTURE (CEILING MOUNTED)	
	LIGHT FIXTURE (WALL MOUNTED)	
	SWITCH	
	SWITCH (3-WAY)	
	FLOOR DRAIN	
	HOSE BIB	
	DOUBLE JOIST	
	LAMINATED VENEER LUMBER	
	POINT LOAD FROM ABOVE	
	PRESSURE TREATED LUMBER	
	GIRDER TRUSS BY ROOF TRUSS MANUF.	
	FLAT ARCH	
	CURVED ARCH	



PHOENIX HOMES

SPRINGFIELD R - 2022

SITE: WHITE TAIL RIDGE

LOT NUMBER:

129


CIVIC ADDRESS:  
124 FRANK FISHER CRESCENT

7	ISSUED FOR ENGINEERING	18/07/23	CB
6	ISSUED FOR LAYOUTS	19/06/23	CB
5	BEP BLACKLINES	31/05/23	SP
4	PRELIMINARY BLACKLINES	13/03/23	SP
3	KITCHEN LIGHT UPDATE	21/10/22	SP
2	ISSUED FOR MASTER PLAN REVIEW	15/08/22	SP
No.	Description	dd/mm/yy	By
REVISIONS			

footprint:	B-24</
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footprint:	B-24
drawn by:	SD
date:	SEP/12
scale:	3/16"=1'-0"
sheet no:	
D.C.L.-A-4	



## FALSE OUT WALLS ABOVE TRUSSES

2023-09-01



7	ISSUED FOR ENGINEERING	18/07/23	CB
6	ISSUED FOR LAYOUTS	19/06/23	CB
5	BEP BLACKLINES	31/05/23	SP
4	PRELIMINARY BLACKLINES	13/03/23	SP
3	KITCHEN LIGHT UPDATE	21/10/22	SP
2	ISSUED FOR MASTER PLAN REVIEW	15/08/22	SP
No.	Description	dd/mm/yy	By
REVISIONS			



FRONT ELEVATION R

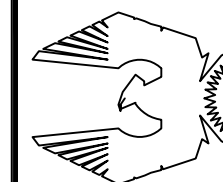
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SITE: WHITE TAIL RIDGE

LOT NUMBER: 129

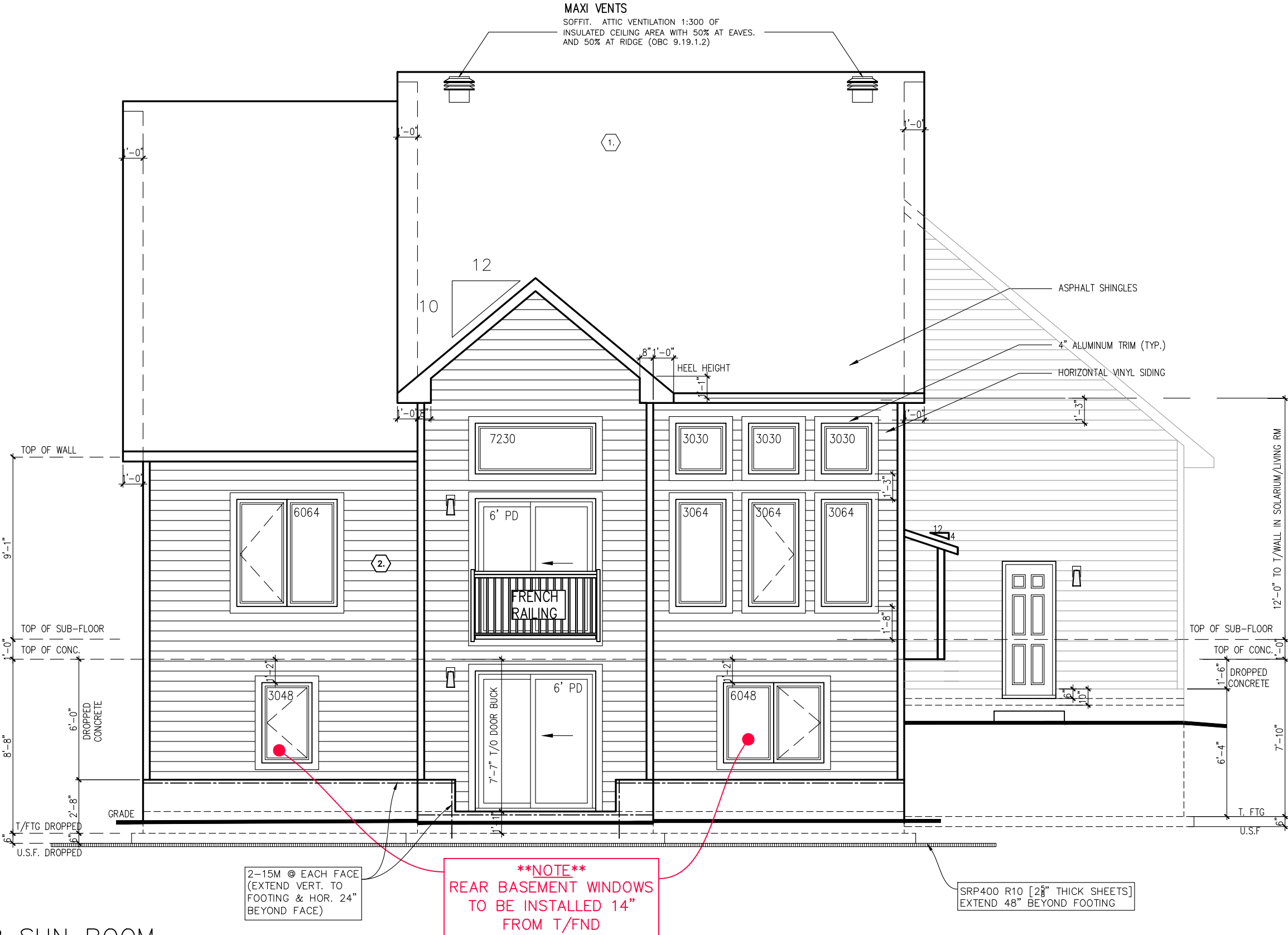
CIVIC ADDRESS:

PHOENIX HOMES





ELEVATION R SUN ROOM



**CERTIFIED PERMIT DOCUMENT**  
A copy of the permit plans & documents shall be kept & maintained on site and made available to an inspector upon request.  
2023-09-01

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drawn by:	SD
date:	SEP/12
scale:	3/16" = 1'-0"
sheet no:	6
D.C.L.-A-4	10

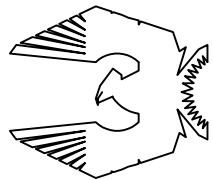
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6	ISSUED FOR LAYOUTS	19/06/23	CB
5	BEP BLACKLINES	31/05/23	SP
4	PRELIMINARY BLACKLINES	13/03/23	SP
3	KITCHEN LIGHT UPDATE	21/10/22	SP
2	ISSUED FOR MASTER PLAN REVIEW	15/08/22	SP

SPRINGFIELD R - 2022

SITE: WHITE TAIL RIDGE

LOT NUMBER: 129

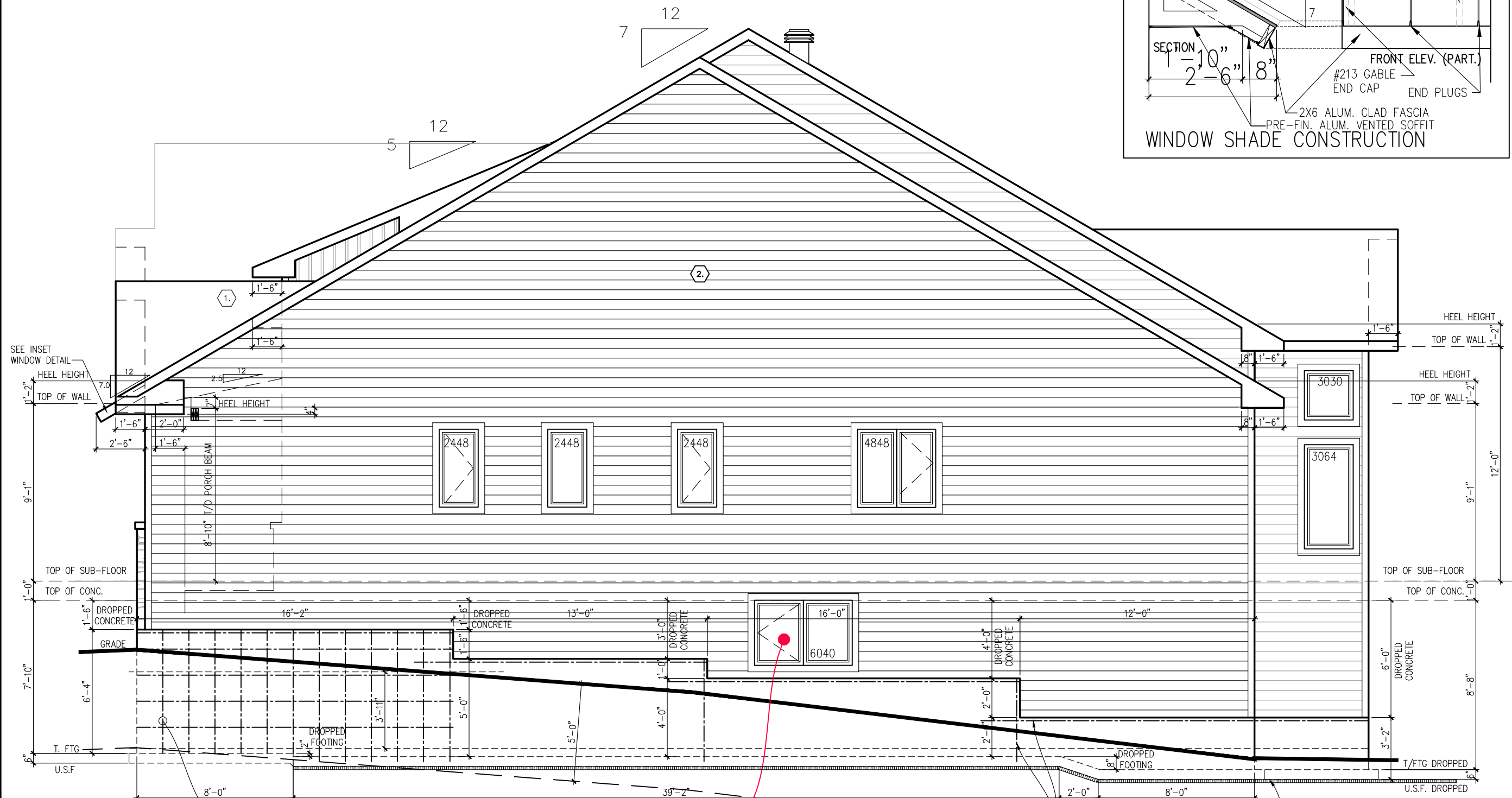
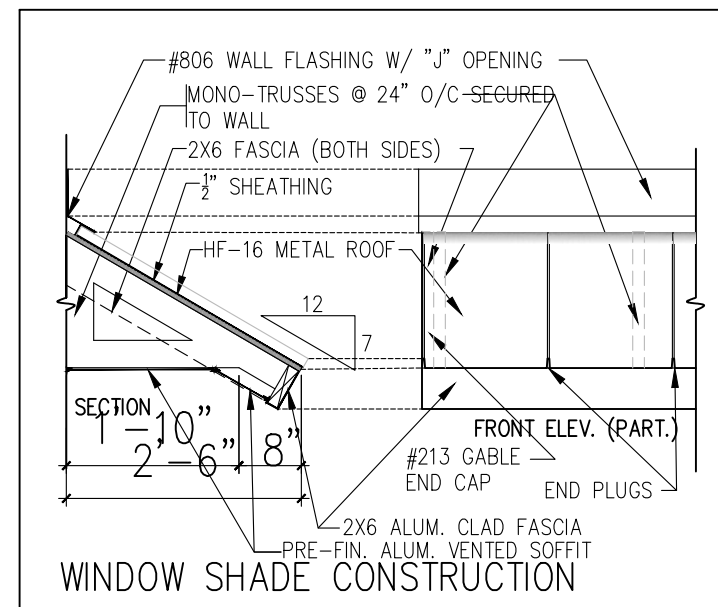
CIVIC ADDRESS: 124 FRANK FISHER CRESCENT



PHOENIX HOMES

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2023-09-01

2023-09-01




RIGHT SIDE  
ELEVATION R  
WITH SUNROOM

[OBC 9.15.4.2]  
WHERE DISTANCE IS GREATER THAN 3'-11"  
BETWEEN GRADE AND TOP OF CONCRETE SLAB  
REINFORCE WALL W/ 15M(VERT.& HOR.) @ 16" o/c  
& 15M BENT DOWELS (32"x12") @ 16" o/c

**\*\*NOTE\*\***  
SIDE BASEMENT WINDOW  
TO BE INSTALLED FLUSH  
WITH T/FND

2-15M @ EACH FACE  
(EXTEND VERT. TO  
FOOTING & HOR. 24"  
BEYOND FACE)

SRP400 R10 [2 $\frac{5}{8}$ " THICK SHEETS]  
EXTEND 48" BEYOND FOOTING

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drawn by:	SD	
date:	SEP/12	
scale:	3/16"=1'-0"	
sheet no:		
D.C.L.-A-4		

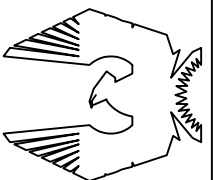
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5	BEP BLACKLINES	31/05/23	SP
4	PRELIMINARY BLACKLINES	13/03/23	SP
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2	ISSUED FOR MASTER PLAN REVIEW	15/08/22	SP
No.	Description	dd/mm/yy	By
REVISIONS			

SPRINGFIELD R - 2022

SITE: WHITE TAIL RIDGE

LOT NUMBER:

CIVIC ADDRESS:  
124 FRANK FISHER CRESCENT



**PHOENIX HOMES**



CERTIFIED PERMIT DOCUMENT

A copy of the permit plans & documents shall be kept & maintained on site and made available to an inspector upon request.  
2023-09-01

full

footprint:	B-24
drawn by:	SD
date:	SEP/12
scale:	3/16"=1'-0"
sheet no:	8
D.C.L. - A-4	10

7	ISSUED FOR ENGINEERING	18/07/23	CB
6	ISSUED FOR LAYOUTS	19/06/23	CB
5	BEP BLACKLINES	31/05/23	SP
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3	KITCHEN LIGHT UPDATE	21/10/22	SP
2	ISSUED FOR MASTER PLAN REVIEW	15/08/22	SP
No.	Description	dd/mm/yy	By
REVISIONS			

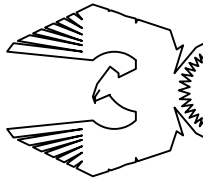
SPRINGFIELD R - 2022

SITE: WHITE TAIL RIDGE

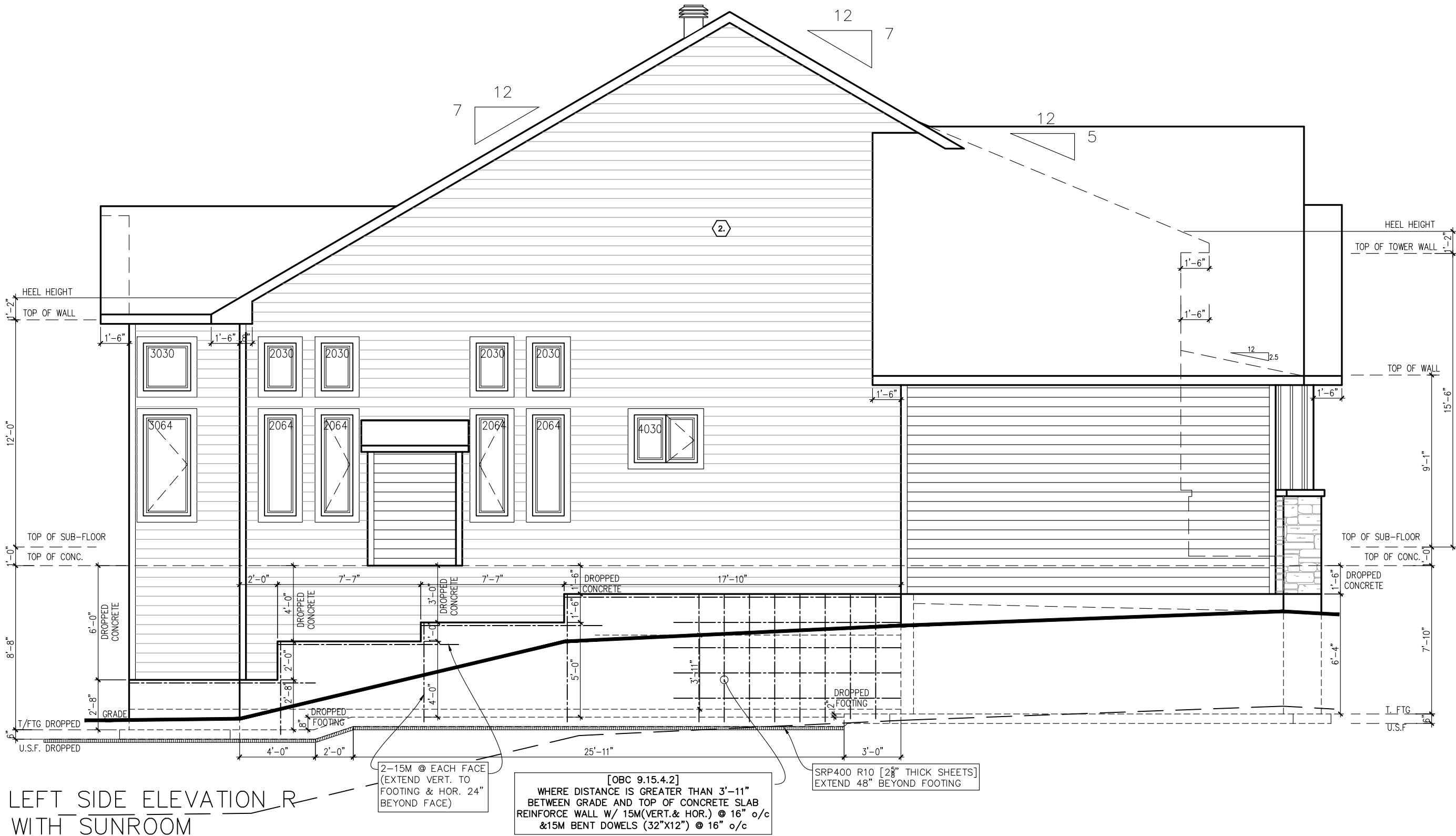
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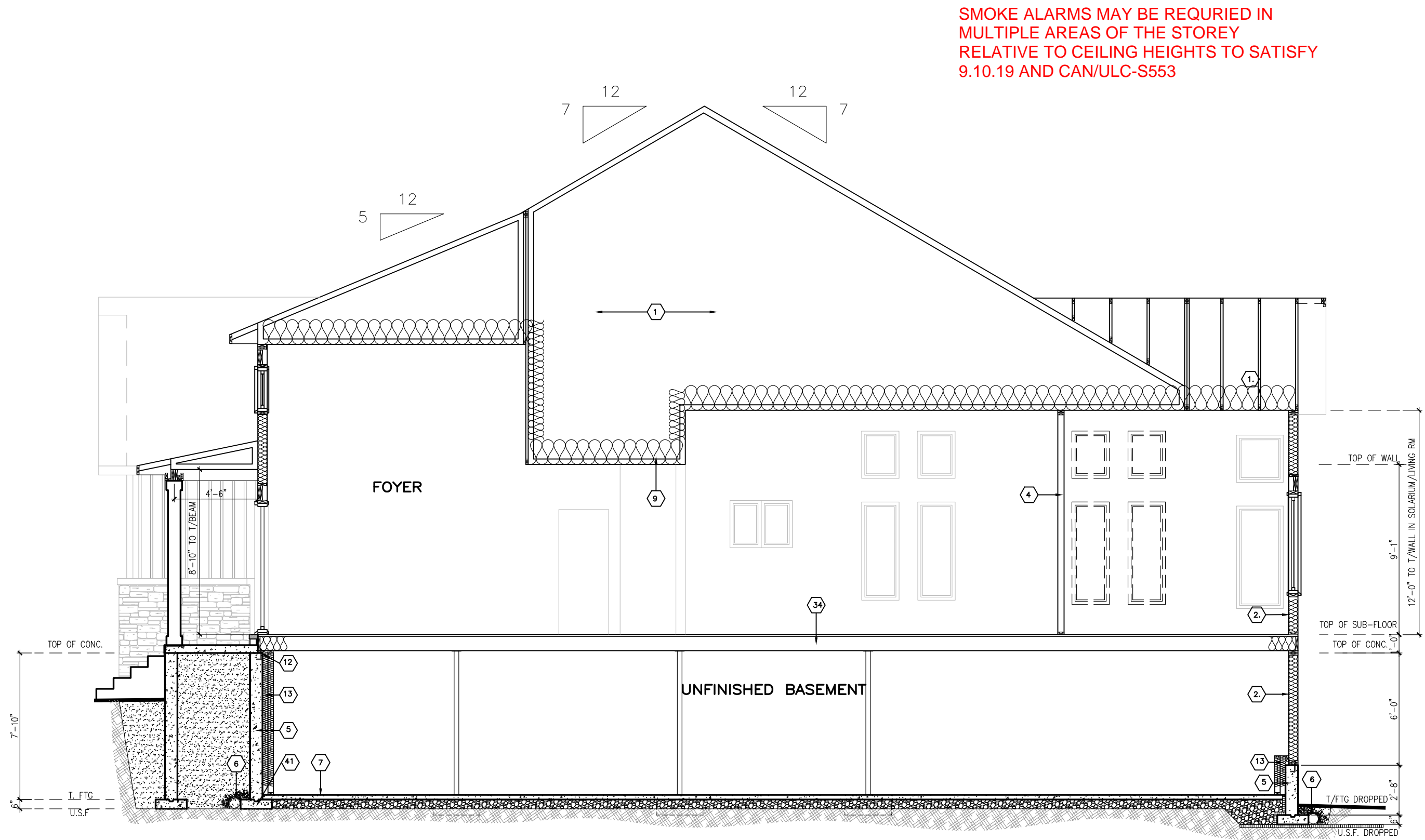
129

CIVIC ADDRESS:  
124 FRANK FISHER CRESCENT



PHOENIX HOMES





ELEVATION R  
SECTION A

**CERTIFIED PERMIT DOCUMENT**  
A copy of the permit plans & documents shall be kept & maintained on site and made available to an inspector upon request.  
2023-09-01

footprint: B-24

drawn by: SD

date: SEP/12

scale: 3/16"=1'-0"

sheet no: 9

D.C.L. - A-4

7	ISSUED FOR ENGINEERING	18/07/23	CB
6	ISSUED FOR LAYOUTS	19/06/23	CB
5	BEP BLACKLINES	31/05/23	SP
4	PRELIMINARY BLACKLINES	13/03/23	SP
3	KITCHEN LIGHT UPDATE	21/10/22	SP
2	ISSUED FOR MASTER PLAN REVIEW	15/08/22	SP
No.	Description	ad/mm/yy	By
REVISIONS			

SPRINGFIELD R - 2022

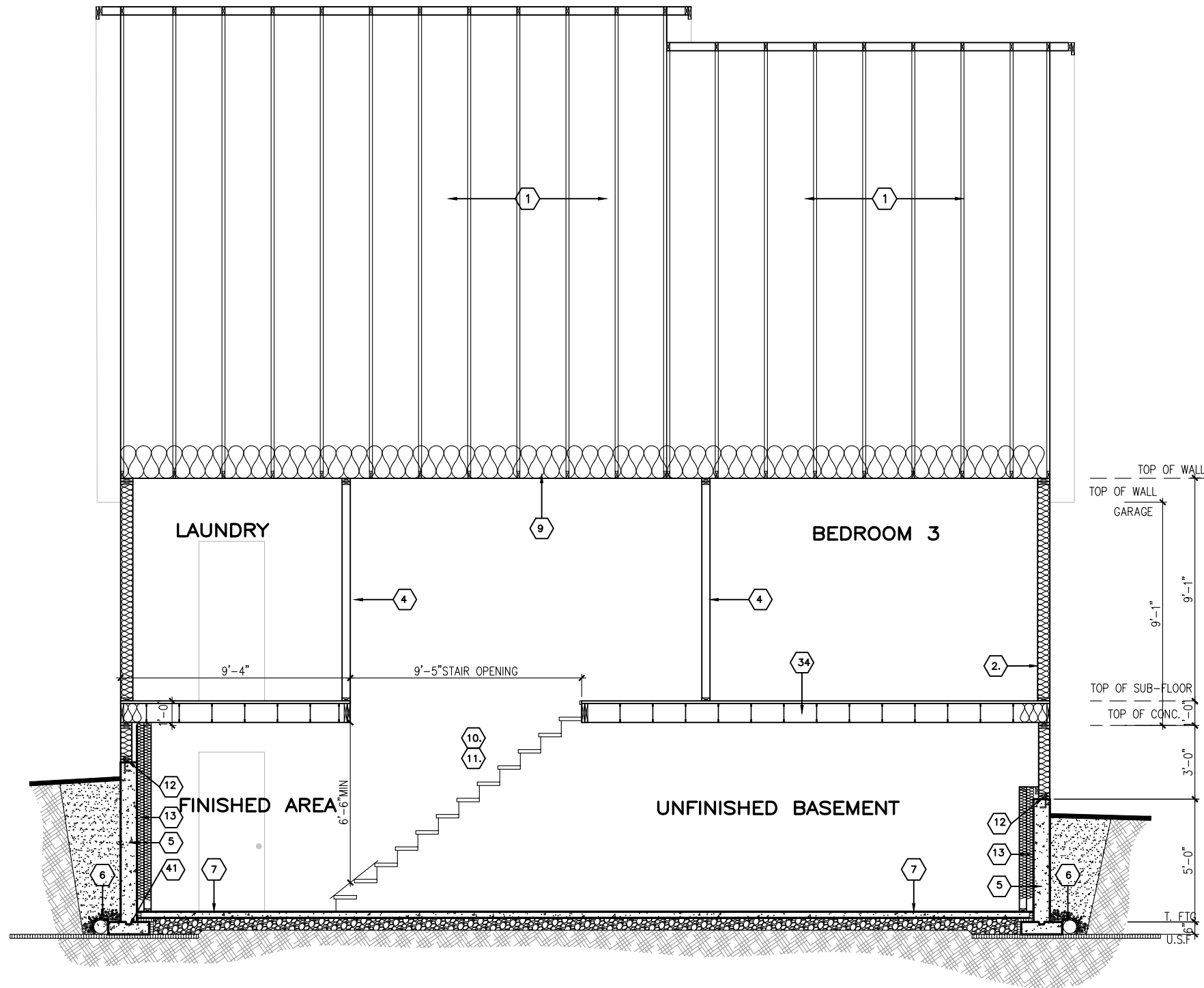
SITE: WHITE TAIL RIDGE

LOT NUMBER: 129

CIVIC ADDRESS: 124 FRANK FISHER CRESCENT

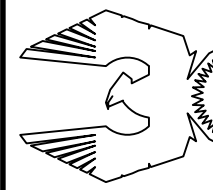
PHOENIX HOMES





ELEVATION R  
SECTION B

**CERTIFIED PERMIT DOCUMENT**  
A copy of the permit plans & documents shall be kept & maintained on site and made available to an inspector upon request.  
2023-09-01



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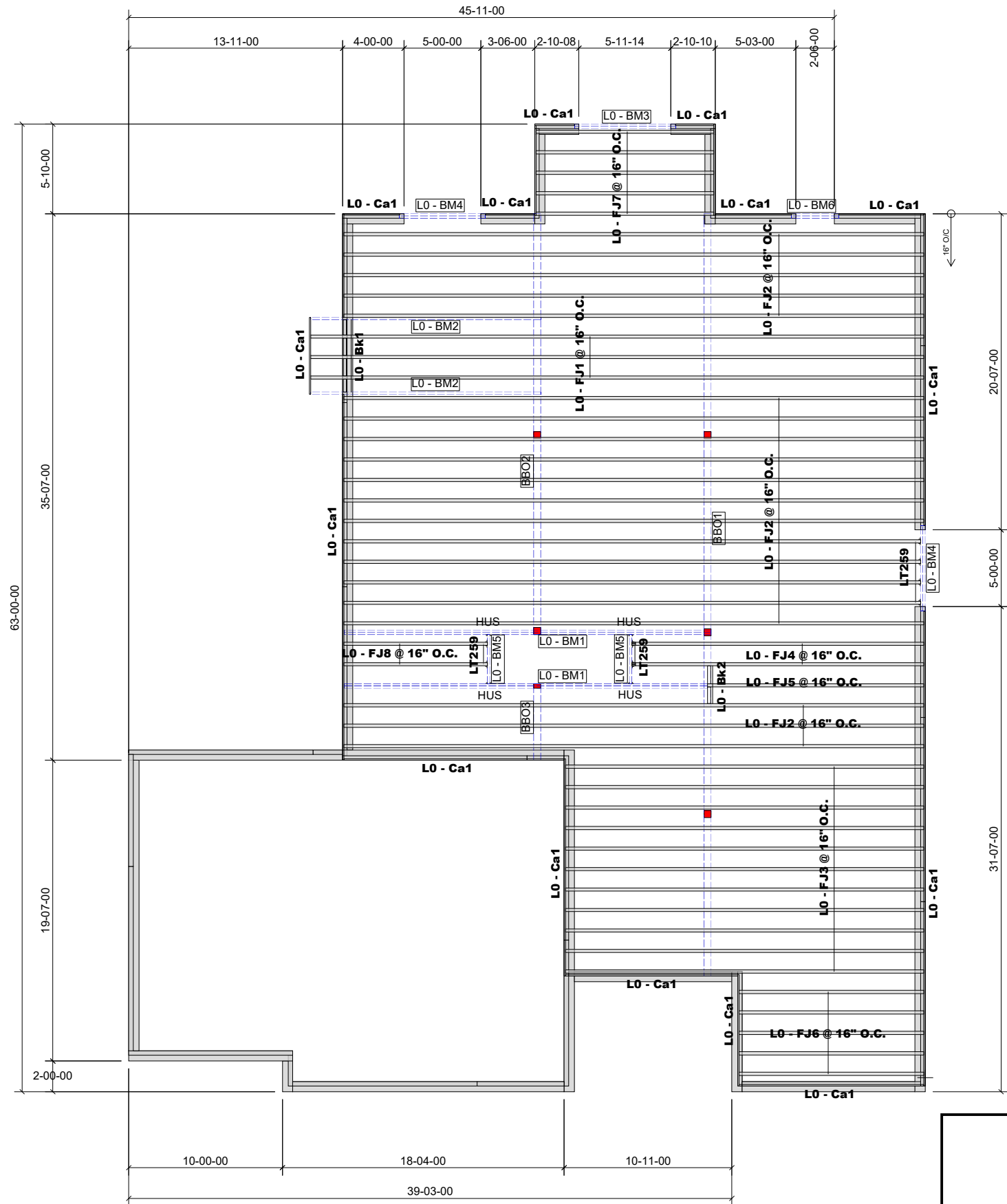
SPRINGFIELD R - 2022

SITE: WHITE TAIL RIDGE

LOT NUMBER: 129  
CIVIC ADDRESS: 124 FRANK FISHER CRESCENT

7	ISSUED FOR ENGINEERING	18/07/23	CB
6	ISSUED FOR LAYOUTS	19/06/23	CB
5	BEP BLACKLINES	31/05/23	SP
4	PRELIMINARY BLACKLINES	13/03/23	SP
3	KITCHEN LIGHT UPDATE	21/10/22	SP
2	ISSUED FOR MASTER PLAN REVIEW	15/08/22	SP
No.	Description	dd/mm/yy	By
REVISIONS			

footprint:	B-24
drawn by:	SD
date:	SEP/12
scale:	3/16"=1'-0"
sheet no:	10
D.C.L. - A-4	10



PROVIDE P.ENG APPROVED  
FLOOR DRAWINGS AND  
SPECIFICATIONS TO BUILDING  
INSPECTOR AT FRAMING  
INSPECTION

GLUED AND NAILED

LEVEL AND FLOOR CONTAINER NOTES	
Current Date:	6/21/2023
File Name:	WTR4-129 Springfield R SR.mmdl
Level Name:	1st Floor
Building Code - Design Methodology:	NBCC 2015
Floor Container:	FC1
Floor Area Loading is:	40 Live Load & 15 Dead Load
Maximum Allowed Deflection	L/480 Live Load & L/240 Total Load

Products					
PlotID	Length	Product	Plies	Net Qty	Fab Type
L0 - FJ1 @ 16" O.C.	40-00-00	9 1/2" NI-20	1	3	MFD
L0 - FJ2 @ 16" O.C.	38-00-00	9 1/2" NI-20	1	20	MFD
L0 - FJ3 @ 16" O.C.	24-00-00	9 1/2" NI-20	1	11	MFD
L0 - FJ4 @ 16" O.C.	19-00-00	9 1/2" NI-20	1	2	MFD
L0 - FJ5 @ 16" O.C.	15-00-00	9 1/2" NI-20	1	1	MFD
L0 - FJ6 @ 16" O.C.	13-00-00	9 1/2" NI-20	1	5	MFD
L0 - FJ7 @ 16" O.C.	12-00-00	9 1/2" NI-20	1	5	MFD
L0 - FJ8 @ 16" O.C.	10-00-00	9 1/2" NI-20	1	2	MFD
L0 - BM1	24-00-00	1 3/4" x 9 1/2" (2.0E 3100) WestFraser LVL	2	4	MFD
L0 - BM2	15-00-00	1 3/4" x 9 1/2" (2.0E 3100) WestFraser LVL	1	2	MFD
L0 - BM3	7-00-00	1 3/4" x 9 1/2" (2.0E 3100) WestFraser LVL	2	2	MFD
L0 - BM4	6-00-00	1 3/4" x 9 1/2" (2.0E 3100) WestFraser LVL	2	4	MFD
L0 - BM5	4-00-00	1 3/4" x 9 1/2" (2.0E 3100) WestFraser LVL	1	2	MFD
L0 - BM6	4-00-00	1 3/4" x 9 1/2" (2.0E 3100) WestFraser LVL	2	2	MFD
L0 - Ca1	12-00-00	1 1/8" x 9 1/2" APA Rim Board	1	15	FF
L0 - Bk1	5-00-00	9 1/2" NI-20	1	1	FF
L0 - Bk2	3-00-00	9 1/2" NI-20	1	1	MFD

Accessories					
PlotID	Length	Product	Plies	Net Qty	Fab Type
		3/4" Plywood or OSB (23/32" APA Rated Sheathing 48/24 Exposure 1)	1	58	MFD

Connector Summary				
Qty	Manuf	Product	Skew	Supported Mtl
8	SIMPSON	LT259	-	9 1/2" NI-20
4	SIMPSON	HUS18110	-	1 3/4" x 9 1/2" (2.0E 3100) WestFraser LVL

CERTIFIED PERMIT DOCUMENT

A copy of the permit plans & documents  
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available to an inspector upon request.

2023-09-01

THIS DESIGN COMPLIES WITH:

- PART 4 OR 9 OF OBC 2012 Reg. 332/12 (Jan 2020 Amendment)
- NORDIC LAM CCMC: 13216-R
- NORDIC JOISTS CCMC: 13032-R
- WEST FRASER CCMC: 12904

(REFER TO INDIVIDUAL FLOOR DRAWINGS  
FOR SPECIFIC LOADS & SPACING)

FLOOR NOTES:

- FLOOR JOIST SYSTEMS ABOVE THE GARAGE HAS BEEN DESIGNED WITHOUT A DIRECTLY APPLIED CEILING. USE APPLICABLE BLOCKING OR STRAPPING WHERE REQUIRED AS INDICATED ON THE FRAMING PLAN.
- BLOCKING MATERIAL WILL BE SUPPLIED AND INDICATED AS "BLOCKING". NO LONGER ONLY 12' LENGTHS.



GRANDOR LUMBER INC.  
ALPHA LUMBER GROUP

JOB:

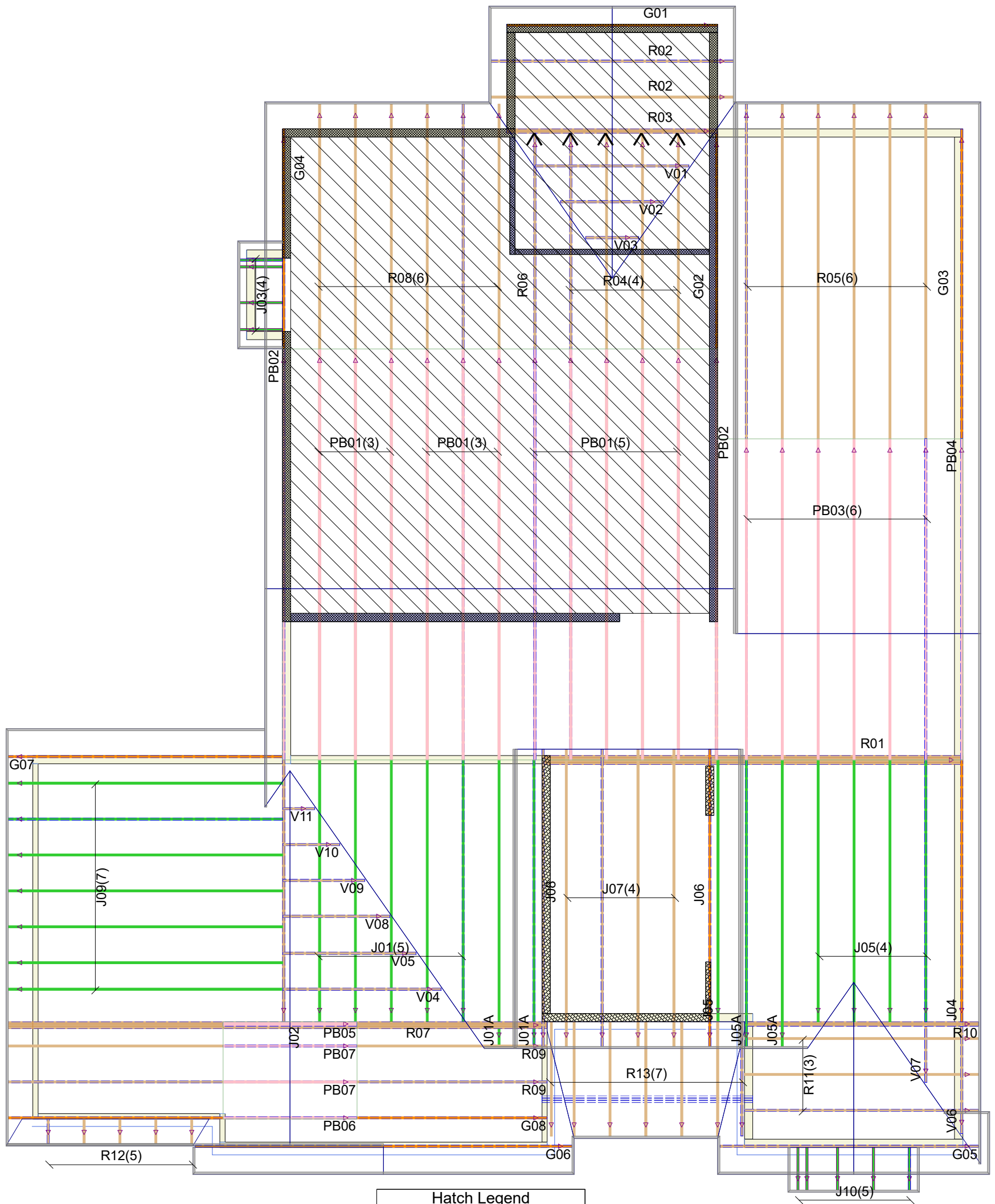
PHOENIX HOMES  
WHITETAIL RIDGE  
WTR4-129  
SPRINGFIELD R  
W/ SUNROOM  
1ST FLOOR 1 OF 1

DATE:

6/21/2023



PROVIDE A COMPLETE PACKAGE OF SEALED TRUSSES, EACH PAGE STAMPED BY P.ENG, AT TIME OF FRAMING INSPECTION.



Hatch Legend	
15'-6" HIGH CEILING	
15'-6" WALL HEIGHT	
12'-0" CEILING	
12'-0" WALL HEIGHT	

CERTIFIED PERMIT DOCUMENT

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2023-09-01

TYPICAL OTTAWA DESIGN LOADS

Member	Load Type	PT 9	PT 4
Top Chord	Snow	37.1	50
	Dead	3	5-10
Bot Chord	Live	0	10
	Dead	7	7

TYPICAL SPACING = 24.0 IN C/C

THIS DESIGN COMPLIES WITH:

- PART 4 OR 9 OF OBC 2012 Reg. 332/12
- CSA 086-09
- CCMC ACCEPTANCE 11996-L, 0319-L, 13270-L
- TPIC 2011

(REFER TO INDIVIDUAL TRUSS DRAWINGS FOR SPECIFIC LOADS & SPACING)

HURRICANE AND SEISMIC TIES:

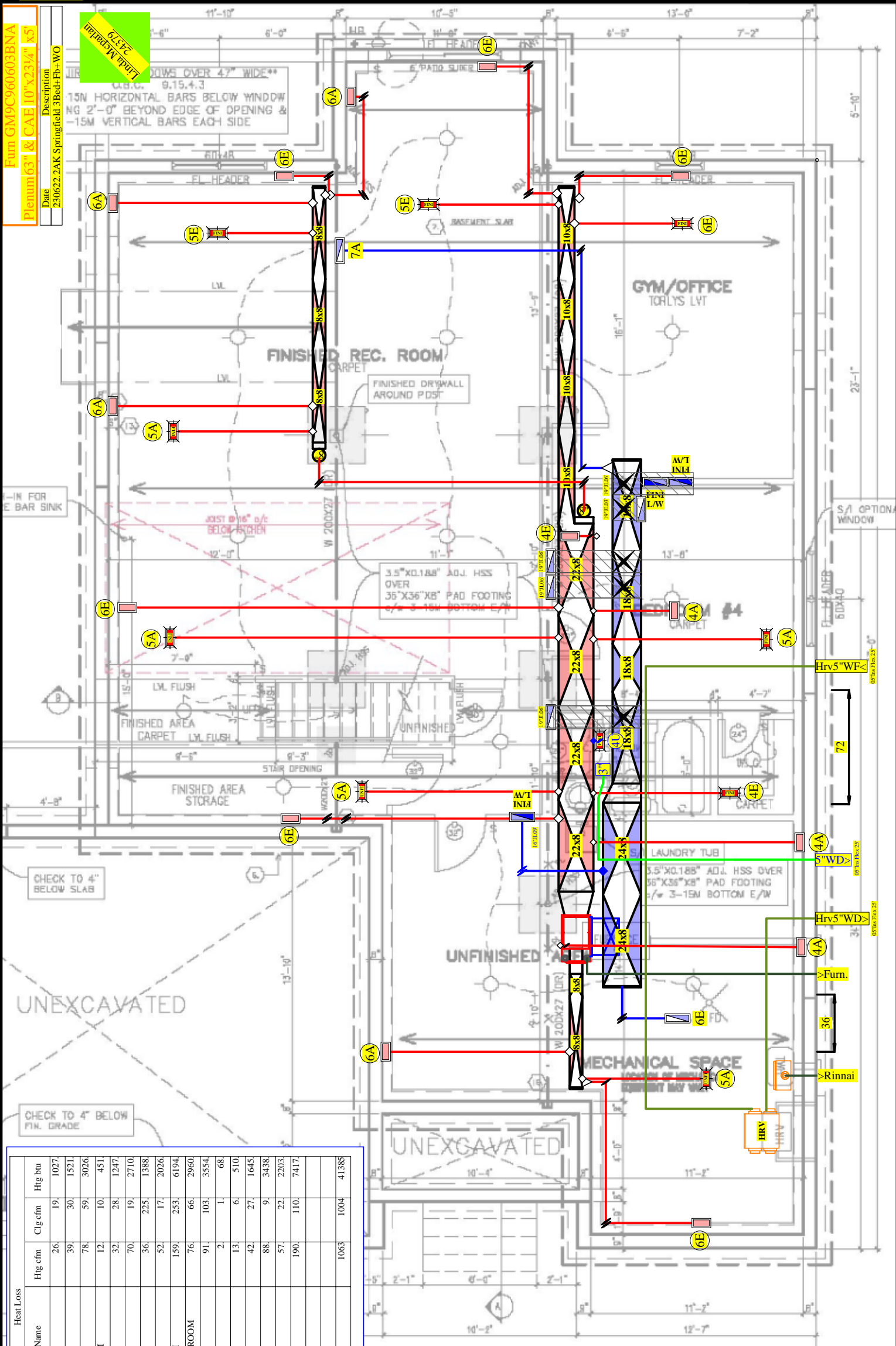
- ANY TIES SPECIFIED ON THIS LAYOUT FOR UPLIFT OR SEISMIC CONNECTIONS MUST BE REVIEWED AND APPROVED BY THE BUILDING DESIGNER/ENGINEER, AS STATED IN THE TPIC 2011. THE TRANSFER OF THESE LOADS TO THE ENTIRE STRUCTURE BELOW HAS NOT BEEN ANALYZED.



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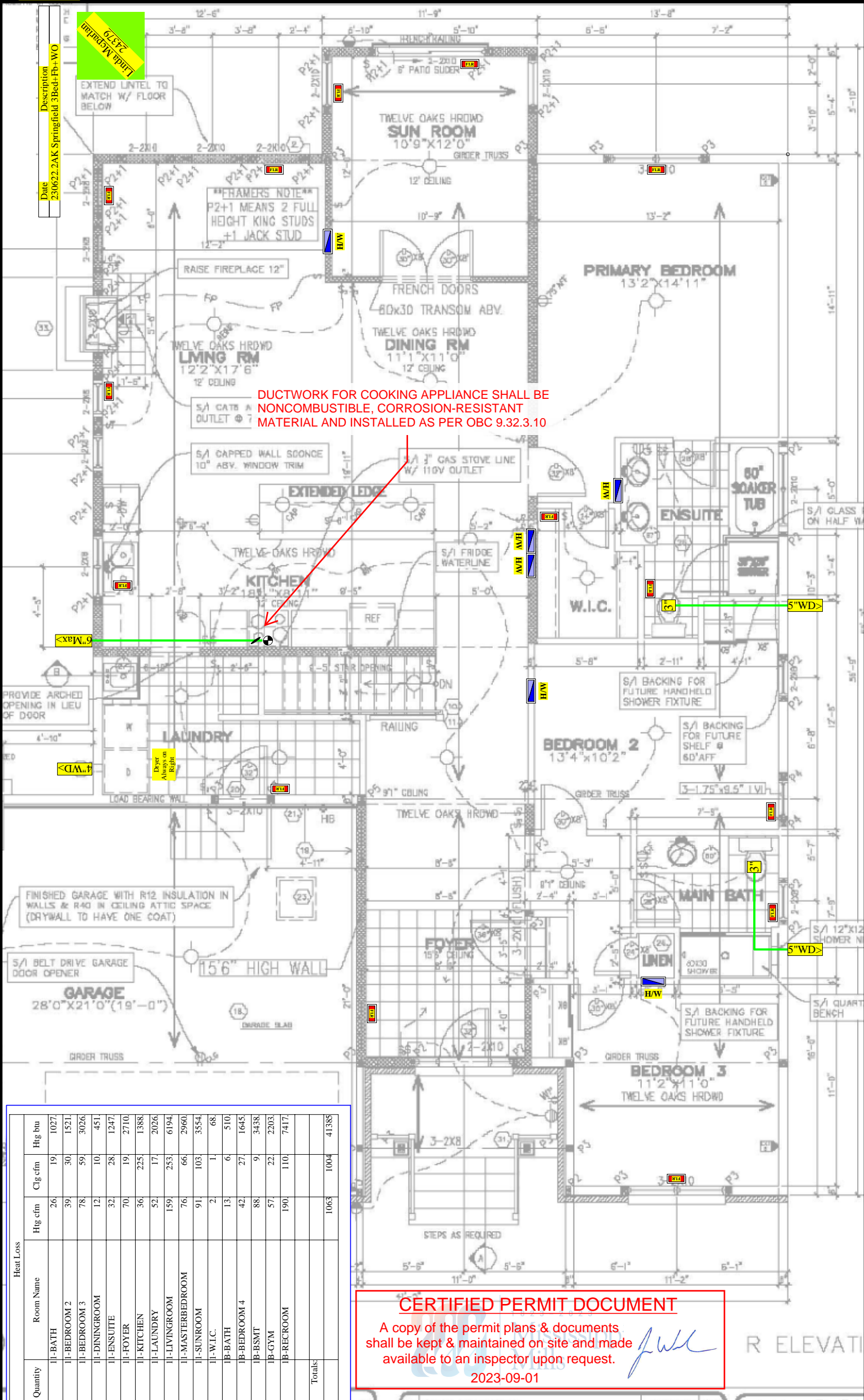
JOB:  
PHOENIX HOMES  
SPRINGFIELD  
ELEVATION 'R'  
PSPRR-1  
WTR4-129

DATE: 7/14/2023



Heat Loss				
Quantity	Room Name	Htg cfm	C/g cfm	Htg bu
1	BATH	26	19	1027
1	BEDROOM 2	39	30	1521
1	BEDROOM 3	78	59	3026
1	DININGROOM	12	10	451
1	ENSUITE	32	28	1247
1	FOYER	70	19	2710
1	KITCHEN	36	225	1388
1	LAUNDRY	52	17	2026
1	LIVINGROOM	159	253	6194
1	MASTERBEDROOM	76	66	2960
1	SUNROOM	91	103	3554
1	W.I.C.	2	1	68
1	BATH	13	6	510
1	BEDROOM 4	42	27	1645
1	B-SMT	88	9	3438
1	GYM	57	22	2203
1	RECROOM	190	110	7417
Totals		1063	1004	41385

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2023-09-01



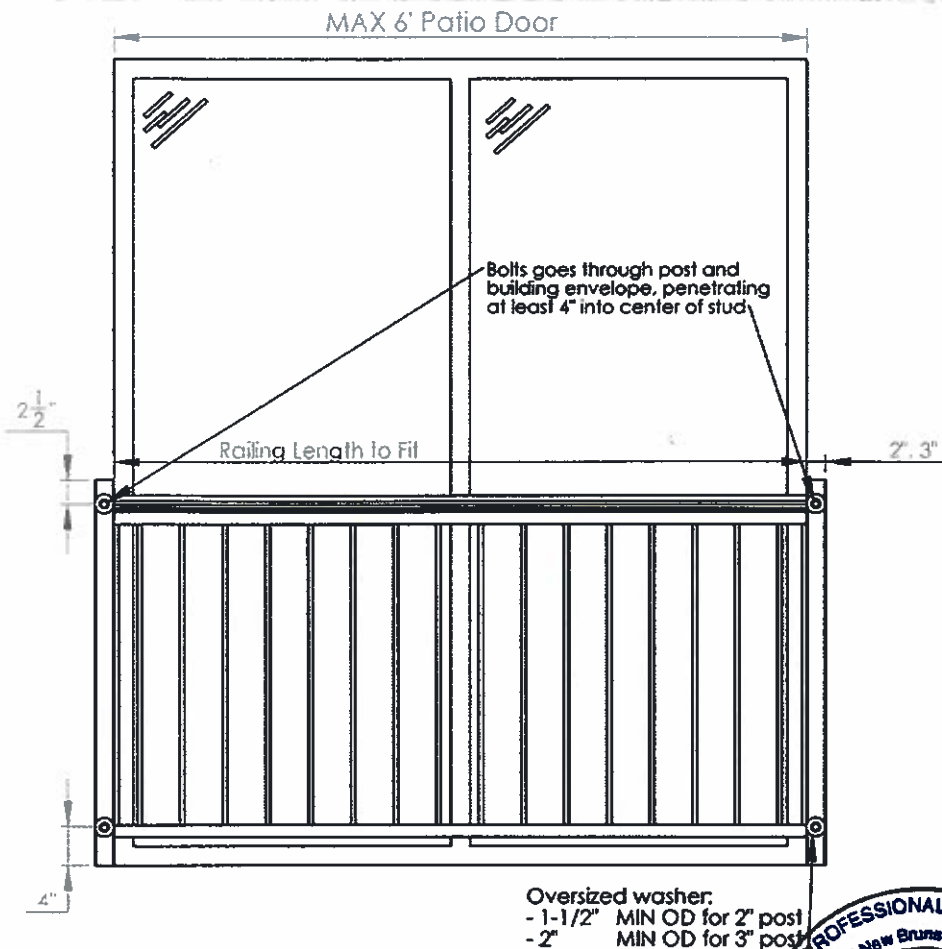
Heat Loss			
Quantity	Room Name	Htg cfm	Htg bu
11	BATH	26	19
11	BEDROOM 2	39	30
11	BEDROOM 3	78	59
11	DININGROOM	12	10
11	ENSUITE	32	28
11	FOYER	70	19
11	KITCHEN	36	225
11	LAUNDRY	52	17
11	LIVINGROOM	159	253
11	MASTERBEDROOM	76	66
11	SUNROOM	91	103
11	W.I.C.	2	1
11	BATH	13	6
11	BEDROOM 4	42	27
11	BSMT	88	9
11	GYM	57	22
11	RECREATION	190	110
Totals		1063	1004
			41385

**CERTIFIED PERMIT DOCUMENT**

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2023-09-01





Oversized washer:  
 - 1-1/2" MIN OD for 2" post  
 - 2" MIN OD for 3" post

- Drilled holes into 2" post must be no larger than 9/16"  $\phi$
- Drilled holes into 3" post must be no larger than 9/16"  $\phi$

Meets the following building codes:

- NBCC 2010 (section 4.1.5.14\* - Loads on Guards, section 9.8.8 - Guards)
- Ontario 2012 (section 4.1.5.14\* - Loads on Guards, section 9.8.8 - Guards)
- \* excludes clause 1(a)

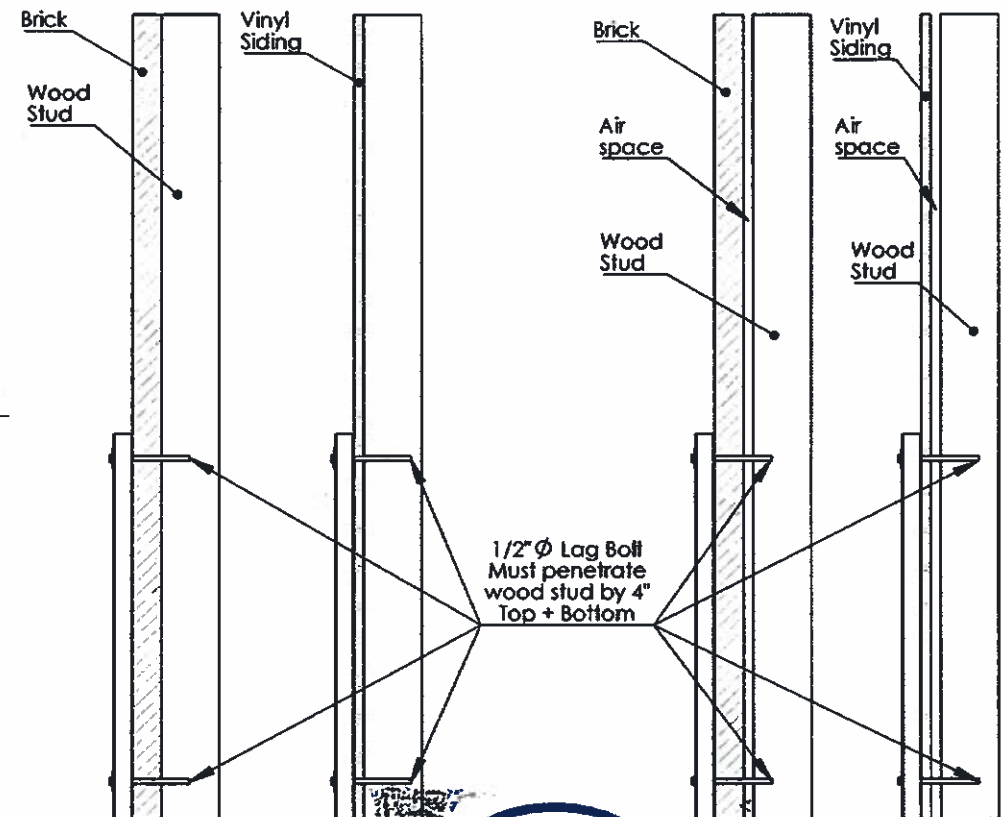
### CERTIFIED PERMIT DOCUMENT

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Notes: 2023-09-01

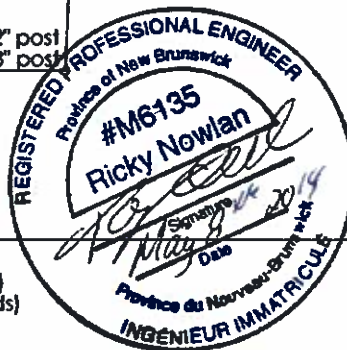
Install anchors as per bolt manufacturer specifications

Main structure load capacity responsibility of others



Without  
Air space

With  
Air space



Imperial  
Manufacturing Group

40 Industrial Park St  
 Richibucto, NB  
 E4W 4A4  
 Tel: 506-523-9117 Fax: 506-523-9024

PROPRIETARY AND CONFIDENTIAL

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Meets NRC ENRC NBCC 2010, CBC 2012

TITLE:

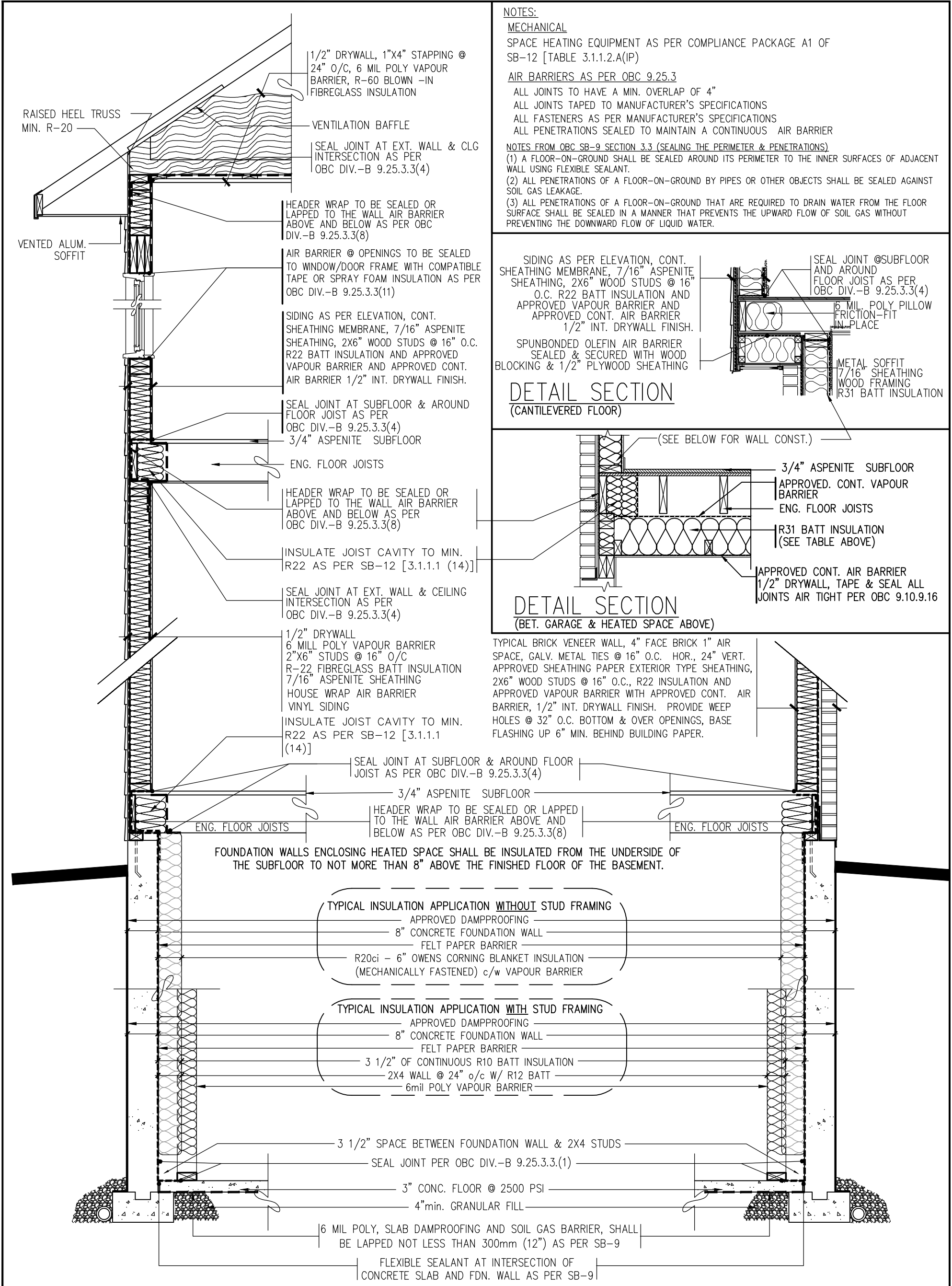
Construction Drawing  
 Kool Ray Pre-Assembled  
 Juliette Railing for 6'(MAX) Patio Doors

SIZE DWG. NO.  
**A** Z-KRES-004

REV

SCALE: NTS Mar 14 SHEET 1 OF 1





NOTES:

MECHANICAL

SPACE HEATING EQUIPMENT AS PER COMPLIANCE PACKAGE A1 OF SB-12 [TABLE 3.1.1.2.A(IP)]

AIR BARRIERS AS PER OBC 9.25.3

- ALL JOINTS TO HAVE A MIN. OVERLAP OF 4"
- ALL JOINTS TAPED TO MANUFACTURER'S SPECIFICATIONS
- ALL FASTENERS AS PER MANUFACTURER'S SPECIFICATIONS
- ALL PENETRATIONS SEALED TO MAINTAIN A CONTINUOUS AIR BARRIER

NOTES FROM OBC SB-9 SECTION 3.3 (SEALING THE PERIMETER & PENETRATIONS)

- (1) A FLOOR-ON-GROUND SHALL BE SEALED AROUND ITS PERIMETER TO THE INNER SURFACES OF ADJACENT WALL USING FLEXIBLE SEALANT.
- (2) ALL PENETRATIONS OF A FLOOR-ON-GROUND BY PIPES OR OTHER OBJECTS SHALL BE SEALED AGAINST SOIL GAS LEAKAGE.
- (3) ALL PENETRATIONS OF A FLOOR-ON-GROUND THAT ARE REQUIRED TO DRAIN WATER FROM THE FLOOR SURFACE SHALL BE SEALED IN A MANNER THAT PREVENTS THE UPWARD FLOW OF SOIL GAS WITHOUT PREVENTING THE DOWNWARD FLOW OF LIQUID WATER.

SIDING AS PER ELEVATION, CONT.  
SHEATHING MEMBRANE, 7/16" ASPENITE  
SHEATHING, 2X6" WOOD STUDS @ 16"  
O.C. R22 BATT INSULATION AND  
APPROVED VAPOUR BARRIER AND  
APPROVED CONT. AIR BARRIER  
1/2" INT. DRYWALL FINISH.

SPUNBONDED OLEFIN AIR BARRIER  
SEALED & SECURED WITH WOOD  
BLOCKING & 1/2" PLYWOOD SHEATHING

DETAIL SECTION  
(CANTILEVERED FLOOR)

SEAL JOINT @SUBFLOOR  
AND AROUND  
FLOOR JOIST AS PER  
OBC DIV.-B 9.25.3.3(4)  
6 MIL. POLY PILLLOW  
FRICTION-FIT  
IN PLACE  
METAL SOFFIT  
7/16" SHEATHING  
WOOD FRAMING  
R31 BATT INSULATION

(SEE BELOW FOR WALL CONST.)  
3/4" ASPENITE SUBFLOOR  
APPROVED. CONT. VAPOUR  
BARRIER  
ENG. FLOOR JOISTS  
R31 BATT INSULATION  
(SEE TABLE ABOVE)

DETAIL SECTION  
(BET. GARAGE & HEATED SPACE ABOVE)

TYPICAL BRICK VENEER WALL, 4" FACE BRICK 1" AIR  
SPACE, GALV. METAL TIES @ 16" O.C. HOR., 24" VERT.  
APPROVED SHEATHING PAPER EXTERIOR TYPE SHEATHING,  
2X6" WOOD STUDS @ 16" O.C., R22 INSULATION AND  
APPROVED VAPOUR BARRIER WITH APPROVED CONT. AIR  
BARRIER, 1/2" INT. DRYWALL FINISH. PROVIDE WEEP  
HOLES @ 32" O.C. BOTTOM & OVER OPENINGS, BASE  
FLASHING UP 6" MIN. BEHIND BUILDING PAPER.

FOUNDATION WALLS ENCLOSING HEATED SPACE SHALL BE INSULATED FROM THE UNDERSIDE OF  
THE SUBFLOOR TO NOT MORE THAN 8" ABOVE THE FINISHED FLOOR OF THE BASEMENT.

TYPICAL INSULATION APPLICATION WITHOUT STUD FRAMING

APPROVED DAMPPROOFING  
8" CONCRETE FOUNDATION WALL  
FELT PAPER BARRIER  
R20ci - 6" OWENS CORNING BLANKET INSULATION  
(MECHANICALLY FASTENED) c/w VAPOUR BARRIER

TYPICAL INSULATION APPLICATION WITH STUD FRAMING

APPROVED DAMPPROOFING  
8" CONCRETE FOUNDATION WALL  
FELT PAPER BARRIER  
3 1/2" OF CONTINUOUS R10 BATT INSULATION  
2X4 WALL @ 24" o/c w/ R12 BATT  
6mil POLY VAPOUR BARRIER

3 1/2" SPACE BETWEEN FOUNDATION WALL & 2X4 STUDS

SEAL JOINT PER OBC DIV.-B 9.25.3.3.(1)

3" CONC. FLOOR @ 2500 PSI

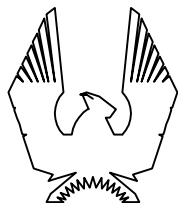
4"min. GRANULAR FILL

6 MIL POLY, SLAB DAMPROOFING AND SOIL GAS BARRIER, SHALL  
BE LAPPED NOT LESS THAN 300mm (12") AS PER SB-9

FLEXIBLE SEALANT AT INTERSECTION OF  
CONCRETE SLAB AND FDN. WALL AS PER SB-9

TYP. DETAIL SECTION (PARTIAL)  
FOR SIDING APPLICATION

TYP. DETAIL SECTION (PARTIAL)  
FOR BRICK VENEER APPLICATION



PHOENIX HOMES

SB-12 COMPLIANCE PACKAGE  
DETAILS (ALL MODELS)

**CERTIFIED PERMIT DOCUMENT**

A copy of the permit plans & documents  
shall be kept & maintained on site and made  
available to an inspector upon request.

2023-09-01

No.	Description	Date	By
4	SB-12 - 2022 UPDATE	JAN - 2022	SP
3	SB-12 - 2017 UPDATE	JAN - 2017	SP
2	ADDED CANTILEVERED FLOOR DETAIL	MAR28-12	TL
1	OBC SB-9 & SB-12 COMPLIANCE PACKAGE	JAN22-12	TL
REVISIONS			

footprint:

drawn by: SP

date:

scale: N/A

sheet no:

SB-12  
DETAILS



**Kollaard Associates**

Engineers

210 Prescott Street

P.O. Box 189

Kemptville, Ontario K0G 1J0

Civil • Geotechnical •  
Structural • Environmental •  
Hydrogeology •

**(613) 860-0923**

FAX: (613) 258-0475

July 18, 2023

Kollaard File # 230020 – LOT129

Phoenix Homes  
18A Bentley Avenue  
Ottawa, Ontario  
K2E 6T8

Attn: Catherine Buck  
Tel: 613-723-9227 x 191  
Email: CBuck@phoenixhomes.ca

**Re: Proposed Single Family Dwelling, 124 Frank Fisher Crescent, Lot # 129 White Tail Ridge, Almonte, Kollaard Associates File # 230020**

With regard to structural issues only, Kollaard Associates has reviewed the following drawings:

- Phoenix Homes, Lot # 129 White Tail Ridge, Pages # 1 to 10, Dated 18/07/2023
- Grandor Lumber Inc., Roof Truss Layout, Springfield, WTR4-129, Dated 07/14/2023
- Grandor Lumber Inc., 1<sup>st</sup> Floor Joist Layout, WTR4-129, Springfield R, Dated 06/21/2023

Kollaard Associates offers the following comments:

Ground Floor Plan – Pages # 3:

1. It is the opinion of Kollaard Associates that the proposed beams, lintels and supporting posts shown on Phoenix Homes Pages # 3 are adequate.
2. The proposed tall wall construction (including posts supporting lintels within the tall wall) noted on Phoenix Homes Pages # 1 is adequate.
3. Posts supporting girders may consist of built up 2x6 posts as indicated on Phoenix Homes Pages # 3 and are laterally supported by plywood or OSB sheathing (i.e. posts form part of sheathed exterior walls unless noted).
4. Truss design is by others.

Basement Plan – Pages # 2:

5. It is the opinion of Kollaard Associates that the proposed steel beams, steel posts and built-up wood posts shown on Phoenix Homes Pages # 2 are adequate.







6. The front porch slab reinforcement described on Phoenix Homes Pages # 1 is adequate.
7. The proposed 7'-10" high foundation walls conform to 2012 OBC Table 9.15.4.2.A. ensuring the grade difference between the basement slab and the exterior finished grade (including the garage slab) does not exceed 7'-6½".
8. The reduction in foundation wall thickness for the installation of the masonry veneer is to be as per 2012 OBC 9.15.4.7.(2).
9. The proposed stepped down foundation walls with framed knee walls above conform to 2012 OBC Table 9.15.4.2.A. ensuring the grade difference between the basement slab and the exterior finished grade does not exceed 3'-11".
10. Where the grade difference between the basement slab and the exterior finished grade exceeds 3'-11" along the right side, the proposed foundation reinforcement noted on Phoenix Homes Pages # 6 and 7 are adequate to withstand the lateral earth pressures.
11. The strip footings and proposed interior pad footings shown on Phoenix Homes Page # 2 and noted on Phoenix Homes Page # 1 are adequate.
12. Floor joist design, flush LVL beams/lintels within the floor structure and LVL lintels are by the manufacturer. The posts supporting the flush LVL beams/lintels shown on Phoenix Homes Pages # 2 are adequate.

General Notes:

13. All gravity loads to be carried to foundation through solid blocking.
14. Truss design is by others.
15. Floor joist design, flush LVL beams within the floor structure and LVL lintels are by the manufacturer.
16. The self supporting stairs are to be designed by the stair manufacturer.
17. All dimension lumber, except non-load bearing 8 ft 2x6 studs to be No.2 grade SPF or better.
18. Non-load bearing 8 ft 2x6 studs to be No.3 or Stud grade SPF or better.
19. All guards to be as per OBC SB-7, unless otherwise mentioned or designed by others.
20. All brick lintels to be as per OBC Table 9.20.5.2.B.
21. Unless otherwise noted, LVL to be 1.8E 3000Fb LVL (Canadian Limit States bending strength of at least 39.5 MPa) with 1¾" nominal width or better.
22. Pemco Steel adjustable posts are designed and approved by the manufacturer. The adjustable steel posts are designed for a max. allowable load of 106.8 kN at a max. height of 9'-3".
23. All 3" x 3" x 3/16" HSS posts c/w 6" x 6" x 3/8" top and bottom bearing plates.
24. The assumed soil bearing resistance of 100 kPa is to be verified prior to construction.

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2023-09-01

25. Note that the truss manufacturer/floor joist supplier has sized the flush LVL beams and girder trusses shown on the building drawings. The comments provided by Kollaard Associates in this report are based in part on the design indicated in the truss and floor layouts. If a different truss and/or floor layout is used in construction, comments made in this report may no longer be valid. Provide Kollaard Associates with the full truss package prior to construction.
26. Comments provided in this report are made in consideration of Part 9 and Part 4 (where applicable) of the 2012 OBC as amended.
27. This report constitutes a review of the structural information indicated on the building plans cited in this report for the client indicated above.

We trust this letter provides sufficient information for your present purposes. If you have any questions concerning this letter please do not hesitate to contact our office.

Sincerely,  
Kollaard Associates Inc.



Christopher Cogliati, P.Eng.

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2023-09-01



# Energy Efficiency Design Summary: Prescriptive Method

(Building Code Part 9, Residential)

This form is used by a designer to demonstrate that the energy efficiency design of a house complies with the building code using the prescriptive method described in Subsection 3.1.1. of SB-12. This form is applicable where the ratio of gross area of windows/sidelights/skylights/glazing in doors and sliding glass doors to the gross area of peripheral walls is not more than 22%.

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2023-09-01

### A. Project Information

Building number, street name 124 Frank Fisher Crescent		Unit number	Lot/Con
Municipality Mississippi Mills	Postal code	Reg. Plan number / other description	

### B. Prescriptive Compliance [indicate the building code compliance package being employed in this house design]

SB-12 Prescriptive (input design package): Package: A1 Table: 3.1.1.2.A(IP)

### C. Project Design Conditions

<b>Climatic Zone (SB-1):</b> <input checked="" type="checkbox"/> Zone 1 (< 5000 degree days) <input type="checkbox"/> Zone 2 (≥ 5000 degree days)	<b>Heating Equipment Efficiency</b> <input checked="" type="checkbox"/> ≥ 92% AFUE <input type="checkbox"/> ≥ 84% < 92% AFUE	<b>Space Heating Fuel Source</b> <input checked="" type="checkbox"/> Gas <input type="checkbox"/> Propane <input type="checkbox"/> Solid Fuel <input type="checkbox"/> Oil <input type="checkbox"/> Electric <input type="checkbox"/> Earth Energy
<b>Ratio of Windows, Skylights &amp; Glass (W, S &amp; G) to Wall Area</b> Area of walls = _____ m <sup>2</sup> or 3324 ft <sup>2</sup> W, S & G % = 12.8 Area of W, S & G = _____ m <sup>2</sup> or 426 ft <sup>2</sup> Utilize window averaging: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		<b>Other Building Characteristics</b> <input type="checkbox"/> Log/Post&Beam <input type="checkbox"/> ICF Above Grade <input type="checkbox"/> ICF Basement <input type="checkbox"/> Slab-on-ground <input type="checkbox"/> Walkout Basement <input type="checkbox"/> Air Conditioning <input type="checkbox"/> Combo Unit <input type="checkbox"/> Air Sourced Heat Pump (ASHP) <input type="checkbox"/> Ground Sourced Heat Pump (GSHP)

### D. Building Specifications [provide values and ratings of the energy efficiency components proposed]

Energy Efficiency Substitutions				
<input type="checkbox"/> ICF (3.1.1.2.(5) & (6) / 3.1.1.3.(5) & (6)) <input type="checkbox"/> Combined space heating and domestic water heating systems (3.1.1.2.(7) / 3.1.1.3.(7)) <input type="checkbox"/> Airtightness substitution(s) Airtightness test required (Refer to Design Guide Attached) <input type="checkbox"/> Table 3.1.1.4.B Required: _____ Permitted Substitution: _____ <input type="checkbox"/> Table 3.1.1.4.C Required: _____ Permitted Substitution: _____ Required: _____ Permitted Substitution: _____				
Building Component	Minimum RSI / R values or Maximum U-Value <sup>(1)</sup>		Building Component	Efficiency Ratings
<b>Thermal Insulation</b>	Nominal	Effective	<b>Windows &amp; Doors</b> Provide U-Value <sup>(1)</sup> or ER rating	
Ceiling with Attic Space	R60		Windows/Sliding Glass Doors	25
Ceiling without Attic Space	R31		Skylights/Glazed Roofs	0.49
Exposed Floor	R31		<b>Mechanicals</b>	
Walls Above Grade	R22		Heating Equip.(AFUE)	96%
Basement Walls		R21.12	HRV Efficiency (SRE% at 0° C)	75%
Slab (all >600mm below grade)	--		DHW Heater (EF)	0.8
Slab (edge only ≤600mm below grade)	R10		DWHR (CSA B55.1 (min. 42% efficiency))	# Showers <u>2</u>
Slab (all ≤600mm below grade, or heated)	R10		Combined Heating System	NO

(1) U value to be provided in either W/(m<sup>2</sup>·K) or Btu/(h·ft<sup>2</sup>·F) but not both.

### E. Designer(s) [name(s) & BCIN(s), if applicable, of person(s) providing information herein to substantiate that design meets the building code]

Qualified Designer Declaration of designer to have reviewed and take responsibility for the design work.		
Name Catherine Buck	BCIN 46674	Signature 