

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 BOGE 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")
- 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") INTL 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 FINSH.
 PROVIDE WEEP HOLES @ 800mm (32") O.C. BOITOM COURSE
 AND OVER OPENINGS. PROVIDE THRU-WALL FLASHING UP MIN.
 150mm (6") BEHIND BUILDING PAPER. BRICK TO BE MIN.
 150mm (6") BEHIND BUILDING PAPER. BRICK TO BE MIN. 150mm (6") ABOVE FINISH GRADE.
- BRICK VENEER CONSTRUCTION (2"x4" GARAGE WALL)
 90mm (4") FACE BRICK 25mm (1") AIR SPACE,
 22x180x0.76mm (7/6"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
 ADDROVED VADOUR PARPIER 1.33mm (1/3") INT. DRYWALL CLIENT OFGRADE ONLY - RS 3.35 (RT9) INSUCATION 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.
- 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.
- FOUNDATION WALL/FOOTINGS: —SEE OBC 9.15.3, 9.15.4 200mm (8") POURED CONC. FDTN. WALL 20MPO (c/w 2-15M REBAR TOP & BOTTOM) WITH BITUMENOUS DAMPPROOFING AND OPT. DRAINAGE LAYER. DRAINAGE LAYER REQ. WHEN BASEMENT INSUL. 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.
- 100mm (4") DIA. WEEP TILE 150mm (6") CRUSHED STONE OVER 6. 100mm (4) DIA. WELL THE AND AROUND WEEPING TILES.
- 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 <u>ATTIC INSULATION</u> RSI 8.81 (R60) BLOWN IN ROOF INSULATION AND APPROVED VAPOUR BARRIER, 13mm (1/2") INT. DRYWALL FINISH OR APPROVED EQUAL.
- 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 🐉 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 $\frac{3}{4}$ ") -9.8.4 STEP DIMENSIONS (TABLE 9.8.4.1) MAXIMUM STAIR COMPONENT MINIMUM 125mm (4 15") 200mm (7 7")

RUN 255mm (10 ½) 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 $\frac{15}{16}$ ") -9.8.7.6(1) HANDRAILS SHALL NOT PROJECT MORE THAN 100mm

- (3 15") INTO REQUIRED WIDTH OF STAIR <SEE 9.8.2.1(1)> GUARDS -OBC. 9.8.8.3.-(1) EXT. GUARDS HEIGHT: =1070mm (42 $\frac{1}{8}$) MIN. INT GUARDS HEIGHT: =900mm(1) STAIR LANDING GUARDS: =1070mm (42 $\frac{1}{8}$ ") MIN. -9.8.8.5(1) MAX. OPENINGS THROUGH GUARDS = 100mm (3 $\frac{15}{16}$ ")
- 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 IFVFI SILL PLATE WHEN REQUIRED. (SEE OBC. 9.23.7)
- -R12 (34") CONTINUOUS BATT INSULATION, 2"x4" STUD WALL PLACED 3½" 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") 0.C. 38x89 (2"x4") SOKOS (2 X4) SIDUIS & 400mm (16) JOL. SOKOS (2 X4) SIDUIS & 400mm (16) JOL. SOKOS (2 X4) SILL PLATE ON DAMPPROOFING MATERIAL, 13mm (1/2") DIA. ANCHOR BOLTS 200mm (8") LONG, EMBEDDED MIN. 100mm (4") HIGH CONC. CURB ON 350x155 (14"x6") CONC. FORDING. ADD HORIZ. BLOCKING AT MID—HEIGHT IF WALL IS UNFINISHED.
- 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 Kpg. MINIMUM AND AS PER SOILS REPORT.
- 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 Kpg. MIN. AND AS PER SOILS REPORT.
- 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.
- STEEL COLUMN (SEE OBC. 9.17.3.1, 9.17.3.4) 90mm(3-1/2") DIA.X4.78mm(.188) NON-ADJUSTABLE STL. COL. TO BE ON
- BEAM POCKET OR 300x150 (12"x6") POURED CONC. NIB WALLS. MIN. BEARING 90mm (3-1/2")
- 17. STEEL BEAM. 19x64 (1"x3") CONTINUOUS WD. STRAPPING BOTH SIDES OF
- 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.
- 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.
- 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
- CAPPED DRYER EXHAUST VENTED TO EXTERIOR. (USE 100mm(4") DIA. SMOOTH WALL VENT PIPE) OBC 6.2.3.8.(7)
- ATTIC ACCESS HATCH 545x610 (21.5"x24") WITH A MIN. AREA OF 3.44 SF WITH WEATHERSTRIPPING RSI 7.0 $^{'}(\text{R40})$ 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.
- MECHANICAL EXHAUST FAN, VENTED TO EXTERIOR, TO PROVIDE AT LEAST ONE AIR CHANGE PER HOUR.
- 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") \times 200mm (8") LONG GALV. ANCHORS WITHIN SOLID BLOCK COURSE. LEVEL WITH NON-SHRINK GROUT.

SOLID WOOD BEARING FOR WOOD STUD WALLS SOLID BEARING TO BE AT LEAST AS WIDE AS THE SUPPORTED MEMBER. SOLID WOOD BEARING COMPRISED OF BUILT-UP WOOD STUDS TO BE CONSTRUCTED IN ACCORDANCE WITH OBC. 9.17.4.2 (2).

- 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.
- 3-2"x6" BUILT-UP-POST ON 24"x24"x10" CONCRETE FOOTING. (SEPARATE WOOD FROM CONCRETE W/ 6mil POLY AS PER
- STEP FOOTINGS: MIN. HORIZ. STEP = 600mm (23-5/8"). MAX. VERT. STEP = 600mm (23-5/8") FOR FIRM SOILS.

OBC 9.17.4)

- PORCH SLAB/STEPS: 130 mm (5") MIN. CONC. 32 MPa SLAB AIR ENTRAINMENT MIN. 5 TO 8% AT 28 DAYS, 10 M BARS @ 250 0/C EACH WAY 10M DOWELS @400 (16") O.C. 2-15m IN THICKENED AREA FROM WALL TO SLAB ALL SIDES (SEE DETAIL)
- DIRECT VENT FURNACE TERMINAL MIN. 900mm (36") FROM A DIRECT VENT FORWACE LEMINAL 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.
- 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
- 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.

TO MANUFACTURER'S LAYOUTS AND INSTALLATION INSTRUCTIONS)

- 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)
 - THE FDTN. WALL SHALL NOT BE REDUCED TO LESS THAN 90mm THE FUNN. WALL SHALL NOT BE REDUCED TO \$1.55 mins \$50mm (13.3 m). THIS TO THE FACING MATERIAL WITH METAL TIES \$PACE RTIFIED PERMIT ENDSCLIMENT 200mm (8") O.C. VERTICALLY AND 900mm (36") O.C.

38.) CONVENTIONAL ROOF FRAMING 38x140 (2"x6") RAFTERS @ 400mm (16"0.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. JOIST 10 BE JOKAS (2 X4) @ 400mm (16) 0.C. FOR MAX. 2831mm (9'-3") SPAN & J8X140 (2"X6") @ 400mm (16") 0.C. FOR MAX. 4450mm (14'-7") SPAN. RAFTERS FOR BUILT-UP ROOF TO BE J8X89 (2"X4") @ 600mm (24") 0.C. WITH A J8X89 (2"X4") CENTRE POST TO THE TRUSS BELOW, LATERALLY BRACED AT 1800mm (6'-0") O.C. VERTICALLY.

TWO STOREY VOLUME SPACES FOR HIGH WALL UP TO 18'=0": CONSTRUCTION: 2"X6" SPACING AS INDICATED BLOCKING: 3 ROWS @ 4'-6" O/C \pm SHEATHING: 7/16" ASPENITE NAILING: 2" STAPLES BET. 4" AND 6" O/C ALONG STUDS

STUD SPACING WITH VARIOUS FINISHES: SIDING-METAL OR VINYL- 2"X6" @12" 0/C
STUCCO -2"X6" @16" 0/C BRICK TO 4'-0" -2"X6" @16" 0/C -2-2"X6" @12" 0/C BRICK FULL HEIGHT

40. TYPICAL 1 HOUR RATED PARTYWALL. REFER TO DETAILS FOR TYPE AND SPECIFICATIONS.

41.) STRIP FOOTING SUPPORTING EXTERIOR WALLS –SEE OBC 9.15.3.

-ASSUMING MASONRY VENEER CONSTRUCTION, MAX. FLOOR -ASSUMING MASUNITY 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") (UNLÈSS OTHERWISE NOTED ON PLAN)

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

43.\(\rightarrow\) FLASHING FOR EXT. WALL OPENINGS (0.B.C.9.27.3.8.(3))

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

WINDOWS:

- MINIMUM BEDROOM WINDOW -OBC. 9.9.10. AT LEAST ONE BEDROOM WINDOW ON A GIVEN FLOOR IS TO HAVE MIN. 0.35m2 UNOBSTRUCTED GLAZED OR OPENABLE AREA WITH MIN. CLEAR WIDTH OF 380 mm (1'-3"). WINDOW GUARDS -OBC. 9.8.8.1. A GUARD IS REQUIRED WHERE THE TOP OF THE WINDOW SILL IS LOCATED
- LESS THAN 480mm (1'-7") ABOVE FIN. FLOOR AND THE DISTANCE FROM THE FIN. FLOOR TO THE ADJACENT GRADE IS GREATER THAN 1800mm (5'-11")
 ALL WINDOWS TO COMPLY WITH THERMAL RESISTANCE REQUIREMENTS STATED IN OBC 12.3.2.6. AND SB12
- PRESCRIPTIVE COMPLIANCE PACKAGE, AND OBC 9.5, 9.6, 9.7

GENERAL

- MECHANICAL VENTILATION IS REQUIRED TO PROVIDE 0.3 AIR CHANGES PER HOUR AVERAGED OVER 24 HOURS. SEE
- ALL DOWNSPOUTS TO DRAIN AWAY FROM THE BUILDINGAS PER OBC 9.26.18.2 AND MUN. STANDARDS.
 ALL WINDOW WELLS TO DRAIN TO FOOTING LEVEL PER OBC 9.14.6.3 CHECK WITH LOCAL AUTHORITY.
 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:

- ALL LUMBER SHALL BE SPRUCE NO.2 GRADE, UNLESS NOTED OTHERWISE.
 STUDS SHALL BE STUD GRADE SPRUCE, UNLESS NOTED OTHERWISE.
 LUMBER EXPOSED TO THE EXTERIOR TO BE SPRUCE No.2 GRADE PRESSURE TREATED OR CEDAR, UNLESS NOTED
- ALL LAMINATED VENEER LUMBER (L.V.L.) BEAMS, GIRDER TRUSSES, AND METAL HANGER CONNECTIONS SUPPORTING ROOF FRAMING TO BE DESIGNED & CERTIFIED BY TRUSS MANUF.
- LUL BEAMS SHALL BE 2.0E WS MICRO-LAM LUL (Fb=2800psi.MIN.) OR EQUIVALENT. NAIL EACH PLY OF LVL WITH 89mm (3 1/2") LONG COMMON WIRE NAILS @ 300mm (12") 0.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, 11 //8) DEPTHS AND STAGGERED IN 3 ROWS FOR GREATER DEPTHS AND FOR 4 PLY MEMBERS ADD 1.5mm (1/2") DIA. GALVANIZED BOLTS BOLTS DAT MID-DEPTH OF BEAM @ 915mm (3'-0") O.C. 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.

 JOIST HANGERS: PROVIDE METAL HANGERS FOR ALL JOISTS AND BUILT-UP WOOD MEMBERS INTERSECTING FLUSH
- JOIST HANGERS: PROVIDE METAL HANGERS FOR ALL JUISIS AND BUILT-UP WOULD MEMBERS INTERSECTING FLUSH
 BUILT-UP WOOD MEMBERS.
 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 (451bs.) ROLL ROOFING OR OTHER DAMPPROOFING MATERIAL,
 EXCEPT WHERE THE WOOD MEMBER IS ST LEAST 150mm (6") ABOVE THE GROUND.

STEEL:

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

WOOD LINTELS AND BUILT-UP WOOD BEAMS

- 2/38 x 184 (2/2" x 8") SPR.#2 3/38 x 184 (3/2" x 8") SPR.#2 4/38 x 184 (4/2" x 8") SPR.#2
- 2/38 x 235 (2/2" x 10") SPR.#2 3/38 x 235 (3/2" x 10") SPR.#2 4/38 x 235 (4/2" x 10") SPR.#2
- L5
- 2/38 x 286 (2/2" x 12") SPR.#2 3/38 x 286 (3/2" x 12") SPR.#2 4/38 x 286 (4/2" x 12") SPR.#2
- LAMINATED VENEER LUMBER (LVL) BEAMS
- 2-1 3/4"x7 1/4" (2-45x184)
- LVL5
- 2-1 3/4 x/ 1/4 (2-45x184) 3-1 3/4"x7 1/4" (3-45x184) 4-1 3/4"x7 1/4" (4-45x184) 2-1 3/4"x9 1/2" (2-45x240) 3-1 3/4"x9 1/2" (3-45x240) 2-1 3/4"x11 7/8" (2-45x300) 3-1 3/4"x11 7/8" (3-45x300)

LOOSE STEEL LINTELS

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

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

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

LEGEND

- EXHAUST VENT
- DUPLEX OUTLET (12" HIGH) ₩
- WEATHERPROOF DUPLEX OUTLET HEAVY DUTY OUTLET
- $\bigoplus_{Q^{\prime}} Q^{\prime}$ POT LIGHT LIGHT FIXTURE (CEILING MOUNTED) -ф-
- SWITCH (3-WAY) FLOOR DRAIN
 - HOSE BIB DOUBLE JOIST
- LAMINATED VENEER

shall be kept & maintained on site and made

available to an inspector upon reduest?ch 2023-11-11

POINT LOAD FROM ABOVE

DOUBLE VOLUME WALL SEE NOTE (39.) SOLID WOOD BEARING

M.C. MEDICINE CABINET

\$€\$0 **\$**€\$0 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 CREQUIT AND INTERCONNECTED TO ACTIVATE ALL -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, WHERE A FUEL—BORNING AFFICIANCE IS INSTALLED IN A DWELLING SHITLE 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 HERE 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.



SPRINGFIELD M - 2022

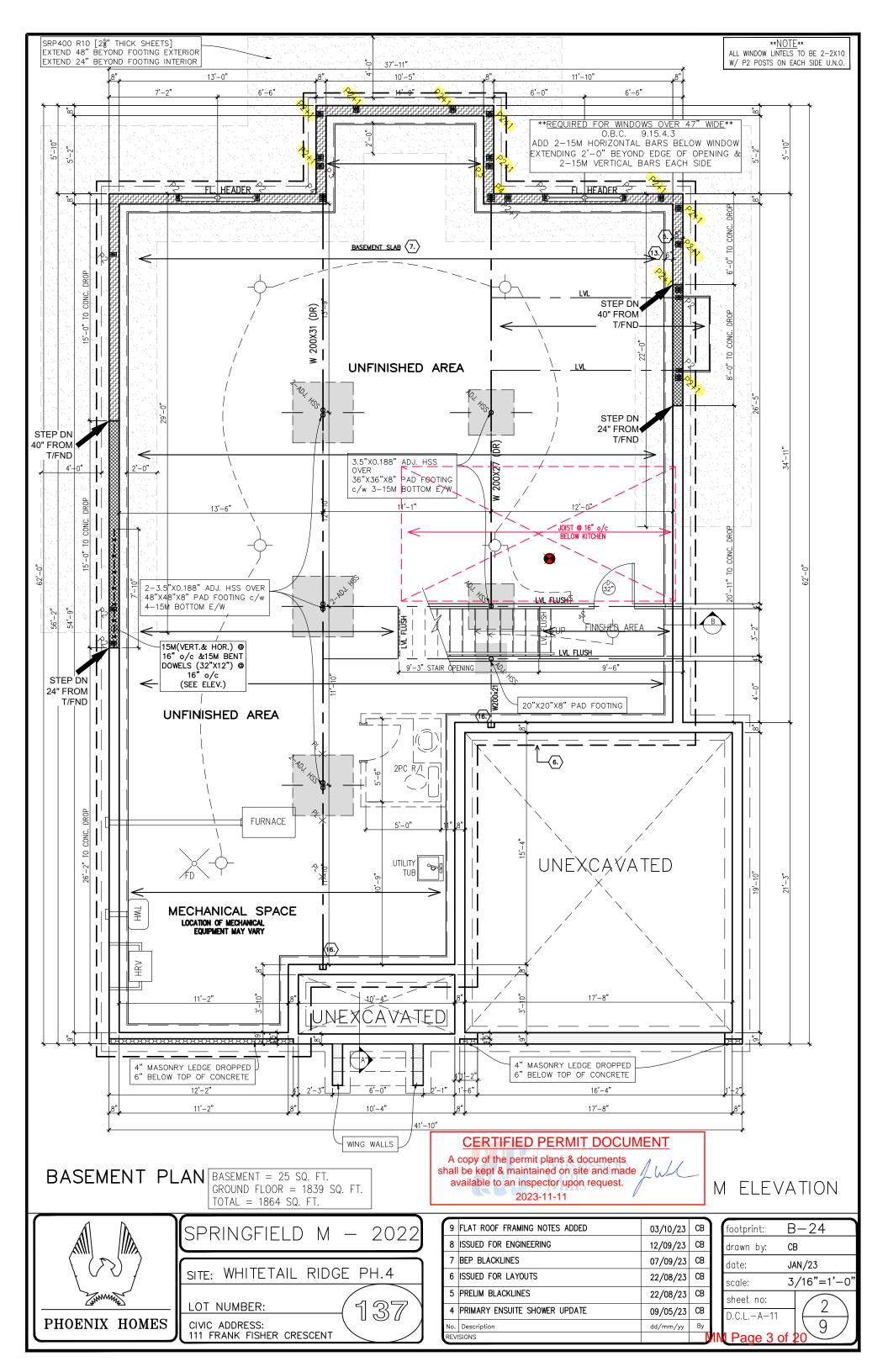
SITE: WHITETAIL RIDGE PH.4

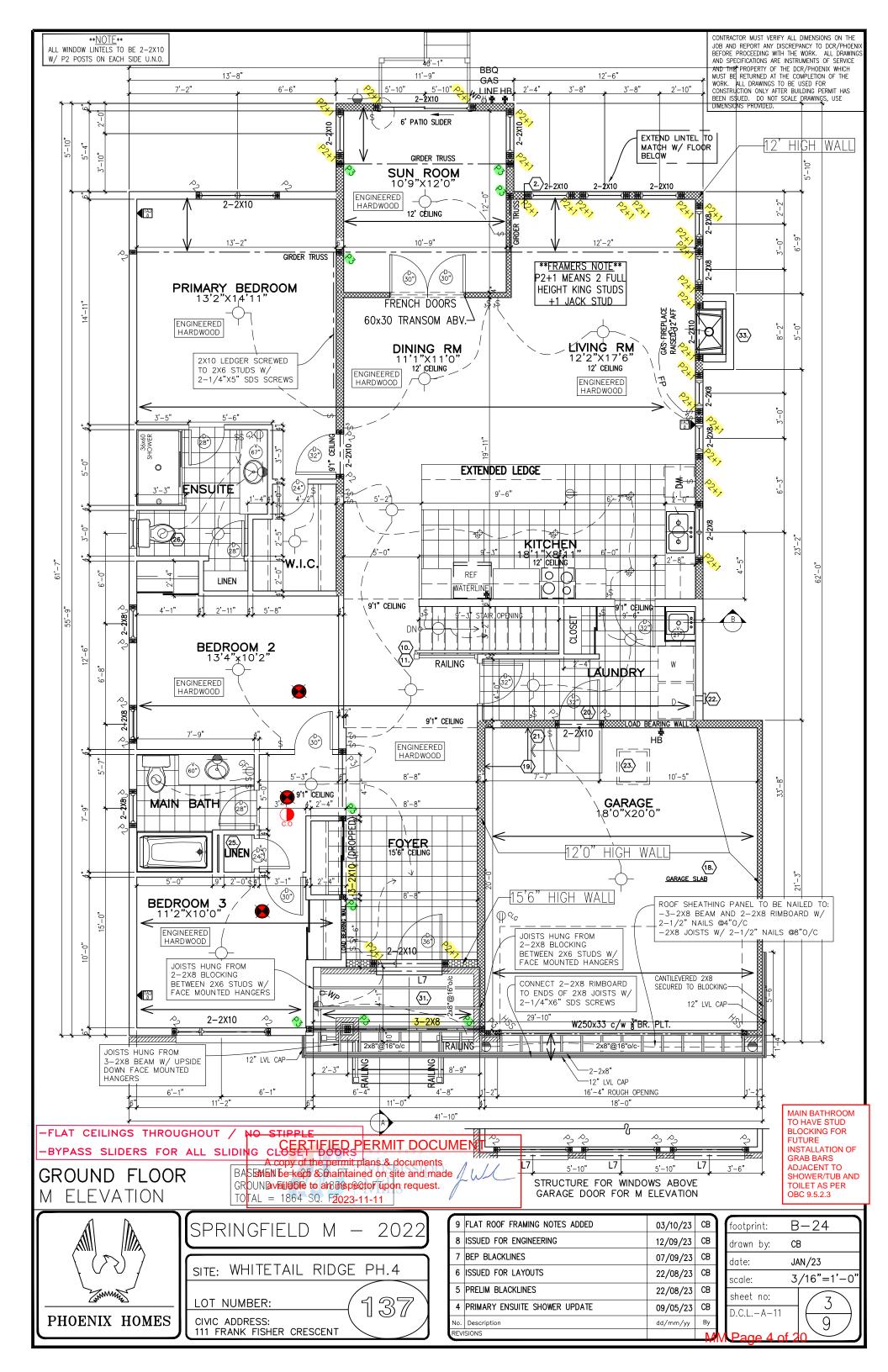
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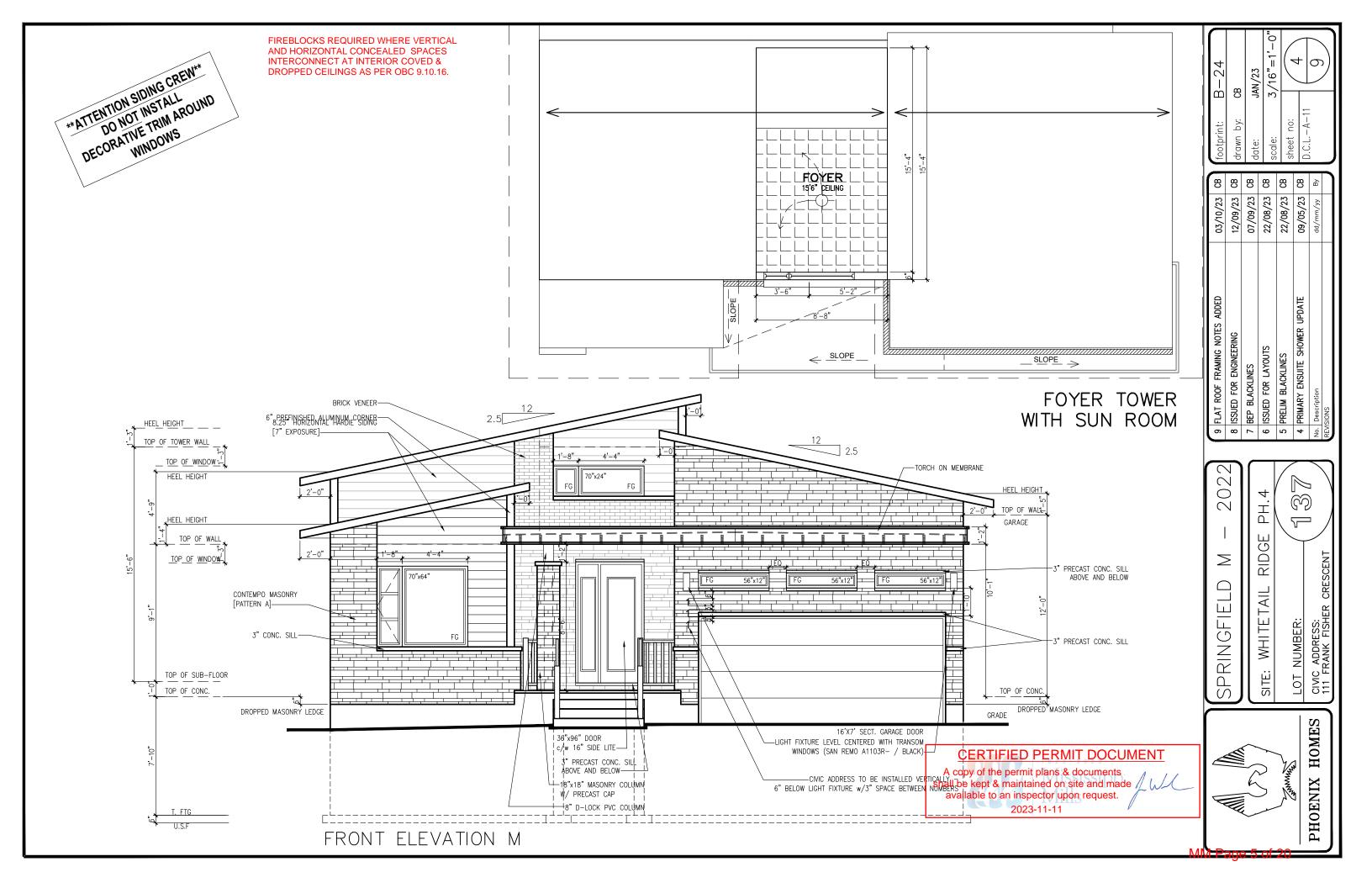
CIVIC ADDRESS: 111 FRANK FISHER CRESCENT 137

9	FLAT ROOF FRAMING NOTES ADDED	03/10/23	СВ	1
8	ISSUED FOR ENGINEERING	12/09/23	СВ	H
7	BEP BLACKLINES	07/09/23	CB	ll
6	ISSUED FOR LAYOUTS	22/08/23	СВ	lŀ
5	PRELIM BLACKLINES	22/08/23	СВ	lŀ
4	PRIMARY ENSUITE SHOWER UPDATE	09/05/23	СВ	lŀ
No.	Description	dd/mm/yy	Ву	Н
REV	SIONS		D.	, l

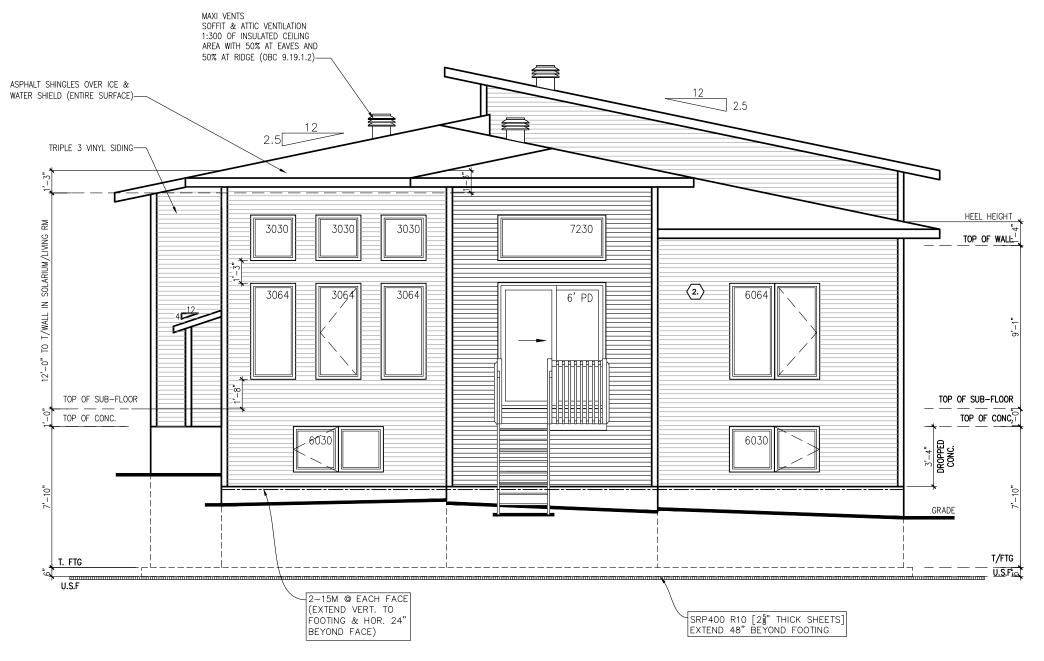
B - 24footprint: drawn by: CB JAN/23 date: 3/16"=1'-0' scale: sheet no: 9











PROVIDE EXTERIOR LIGHTING AT ENTRANCES

ELEVATION M 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.

2023-11-11

B-24	89	JAN /23	3/16"=1'-0		\ \ \		へ の ノ	
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6	9 FLAT ROOF FRAMING NOTES ADDED	03/10/23	8
∞	8 ISSUED FOR ENGINEERING	12/09/23	B
7	7 BEP BLACKLINES	07/09/23	8
9	6 ISSUED FOR LAYOUTS	22/08/23	CB
5	5 PRELIM BLACKLINES	22/08/23	8
4	4 PRIMARY ENSUITE SHOWER UPDATE	09/05/23 CB	ප
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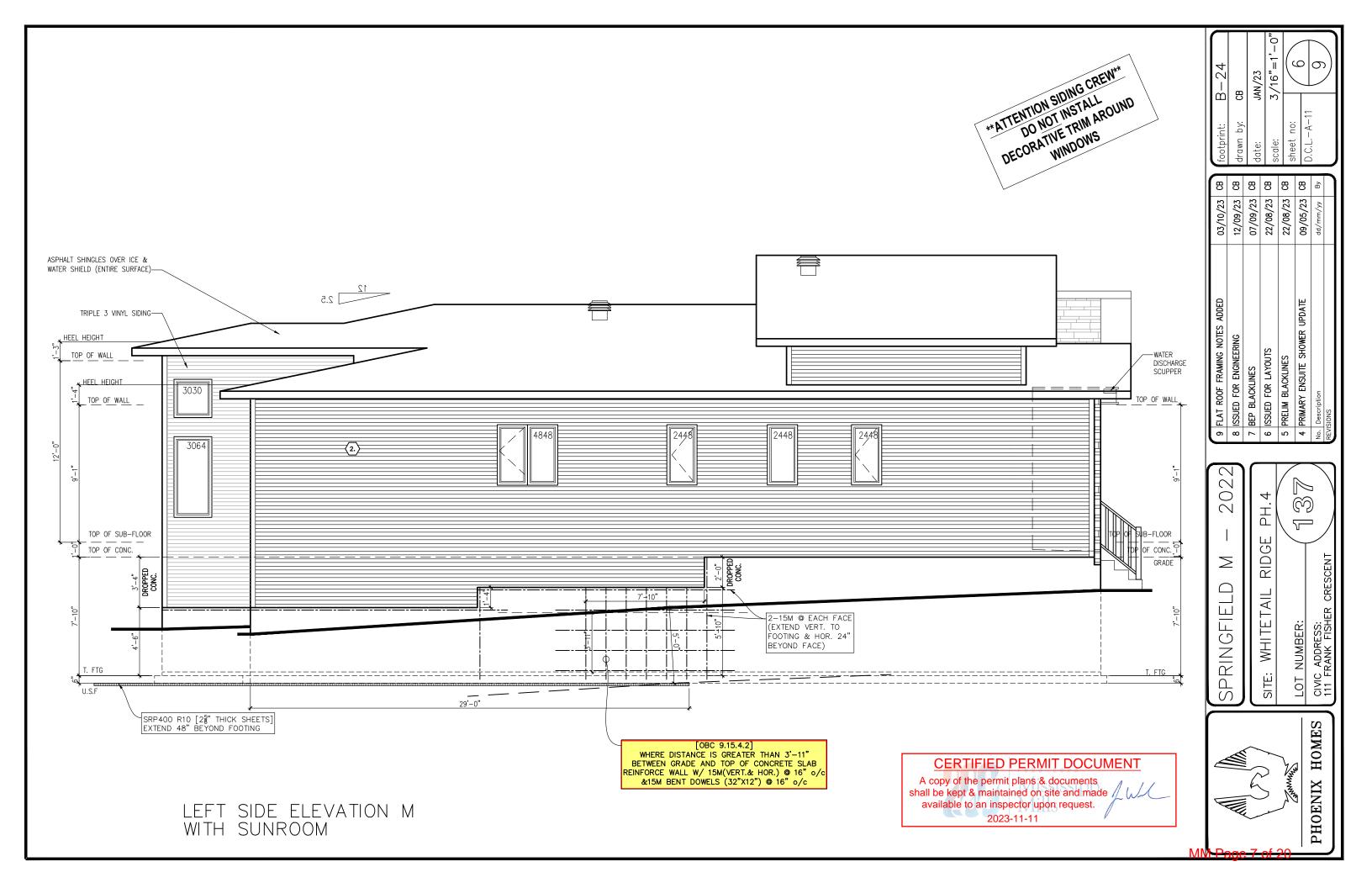
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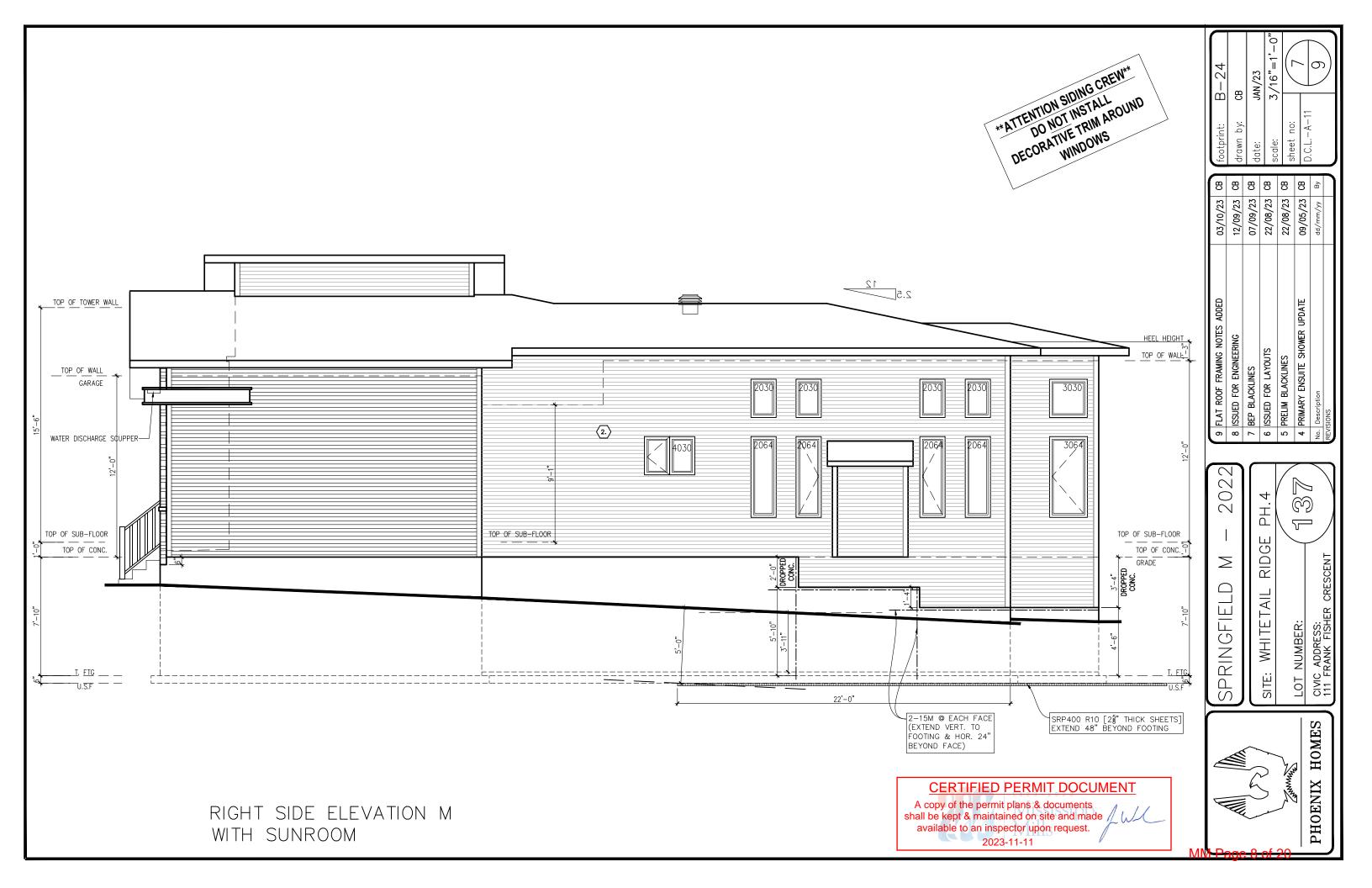
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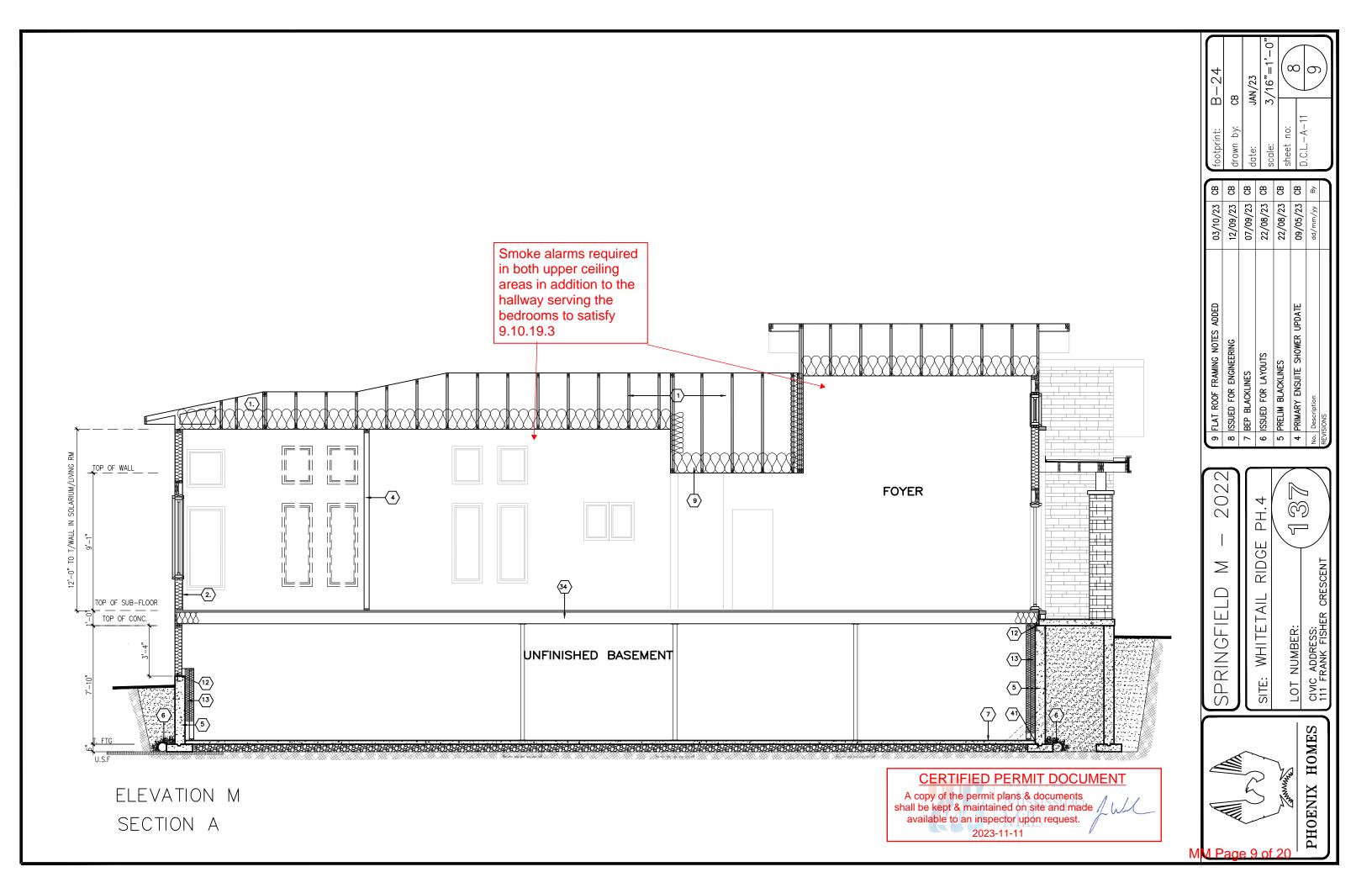
SPRINGFIEL

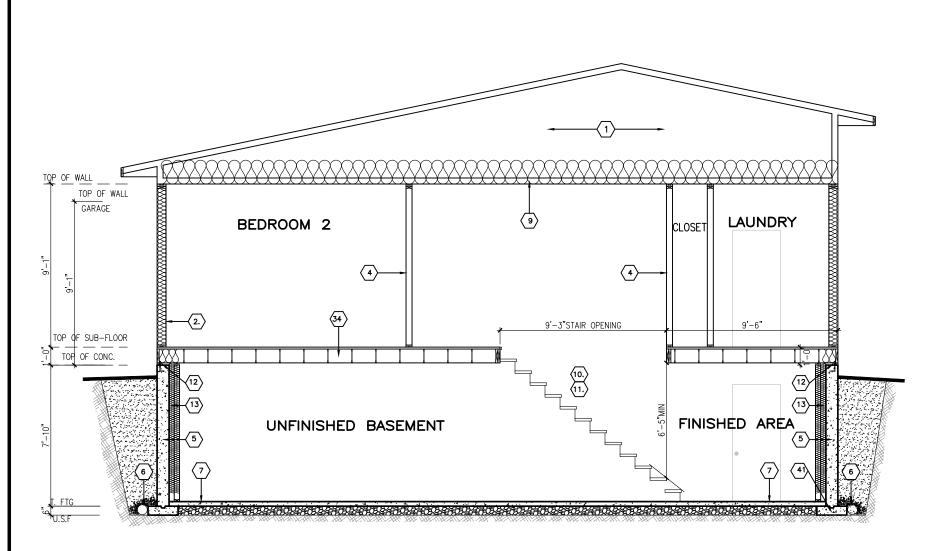
SITE: WHITETAIL RIDC
LOT NUMBER:
CIVIC ADDRESS:
111 FRANK FISHER CRESCENT











ELEVATION M SECTION B

CERTIFIED PERMIT DOCUMENT

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2023-11-11

FLAT ROOF FRAMING NOTES ADDED	03/10/23 CB footprint:	3	_	ootprint:
ISSUED FOR ENGINEERING	12/09/23 CB	89	U	drawn by:
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PRELIM BLACKLINES	22/08/23 CB	8	, ,	-0000
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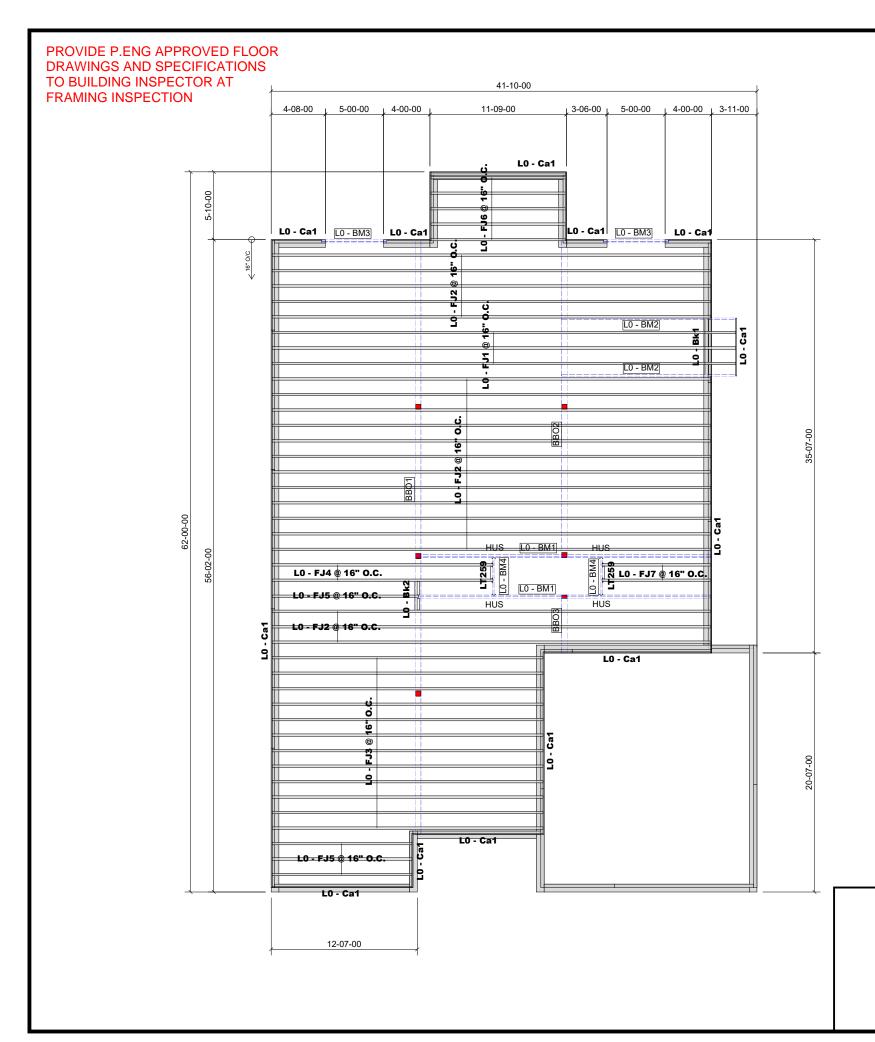
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SPRINGFIELD

CB JAN/23

PH.4 RIDGE

HOMES PHOENIX



GLUED AND NAILED

LEVEL AND FLOOR CONTAINER NOTES	
Current Date:	9/8/2023
File Name:	WTR4-137 Springfield M Sunroom.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	12	MFD
L0 - FJ4 @ 16" O.C.	19-00-00	9 1/2" NI-20	1	2	MFD
L0 - FJ5 @ 16" O.C.	13-00-00	9 1/2" NI-20	1	4	MFD
L0 - FJ6 @ 16" O.C.	12-00-00	9 1/2" NI-20	1	5	MFD
L0 - FJ7 @ 16" O.C.	10-00-00	9 1/2" NI-20	1	2	MFD
L0 - BM1	26-00-00	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	6-00-00	1 3/4" x 9 1/2" (2.0E 3100) WestFraser LVL	2	4	MFD
L0 - BM4	4-00-00	1 3/4" x 9 1/2" (2.0E 3100) WestFraser LVL	1	2	MFD
L0 - Ca1	12-00-00	1 1/8" x 9 1/2" APA Rim Board	1	16	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 Produ	ct Skew	Supported Mtl		
4	SIMPSON LT259) -	9 1/2" NI-20		
4	SIMPSON HUS1	8110 -	1 3/4" x 9 1/2" (2.0E 3100) WestFraser LVL		

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2023-11-11

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 PLAN. FOR SPECIFIC LOADS & SPACING) - BLOOK

FLOOR NOTES:

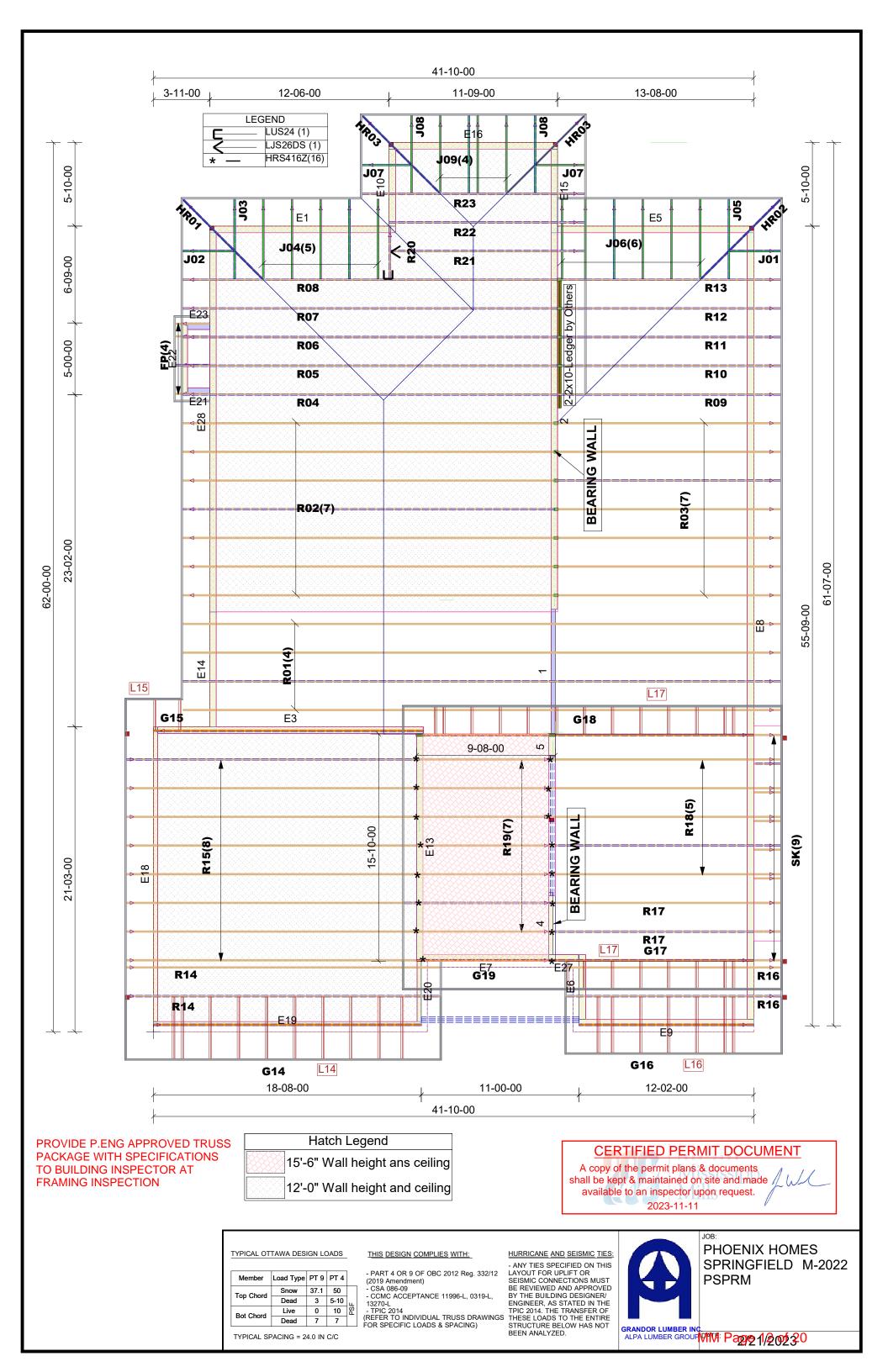
- FLOOR JOIST SYSTEMS ABOVE THE GARAGE HAS BEEN DESIGNED WITHOUT A DIRECTLY APPLIED CEILING. USE APPLICABLE BLOCKING OR STRAPPING WHERE REQUIRED AS INDICATED ON THE FRAMING

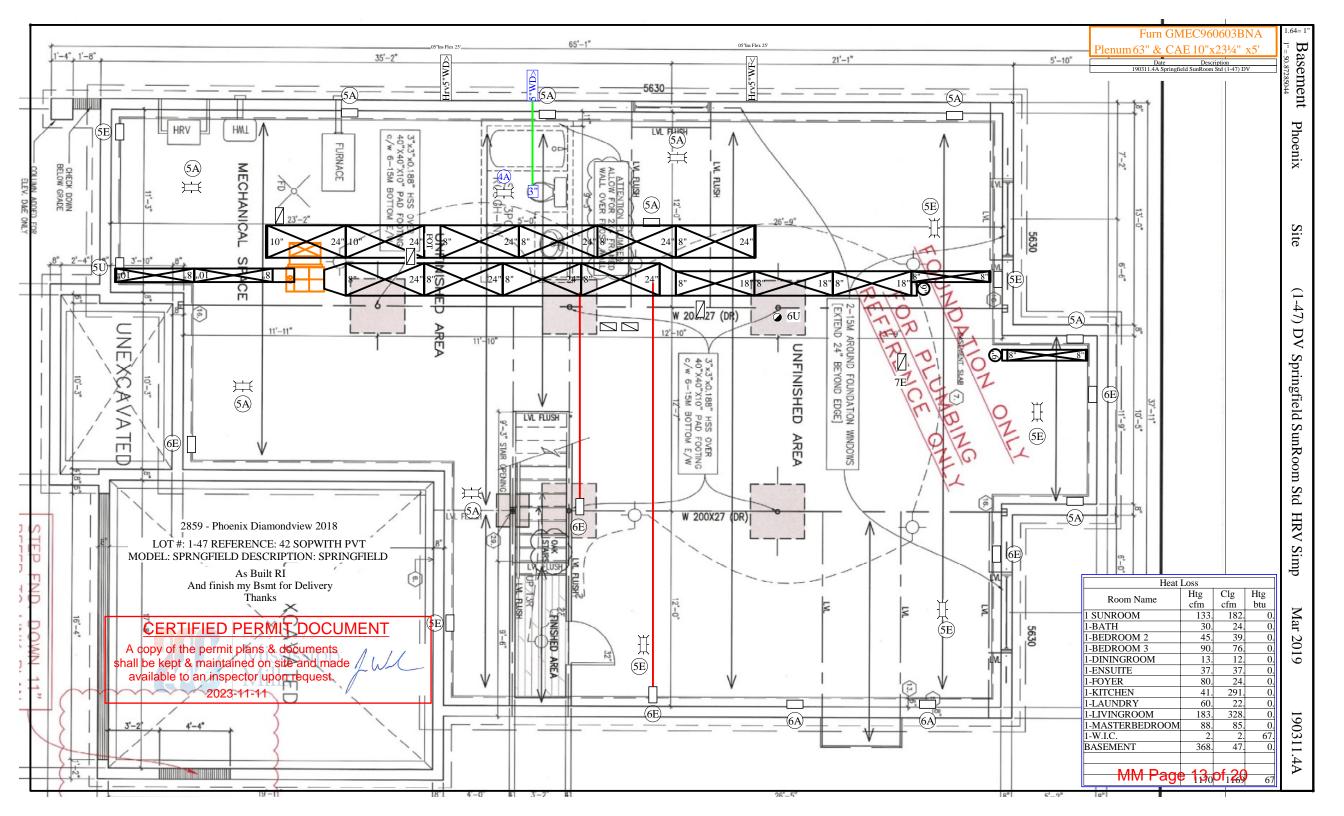


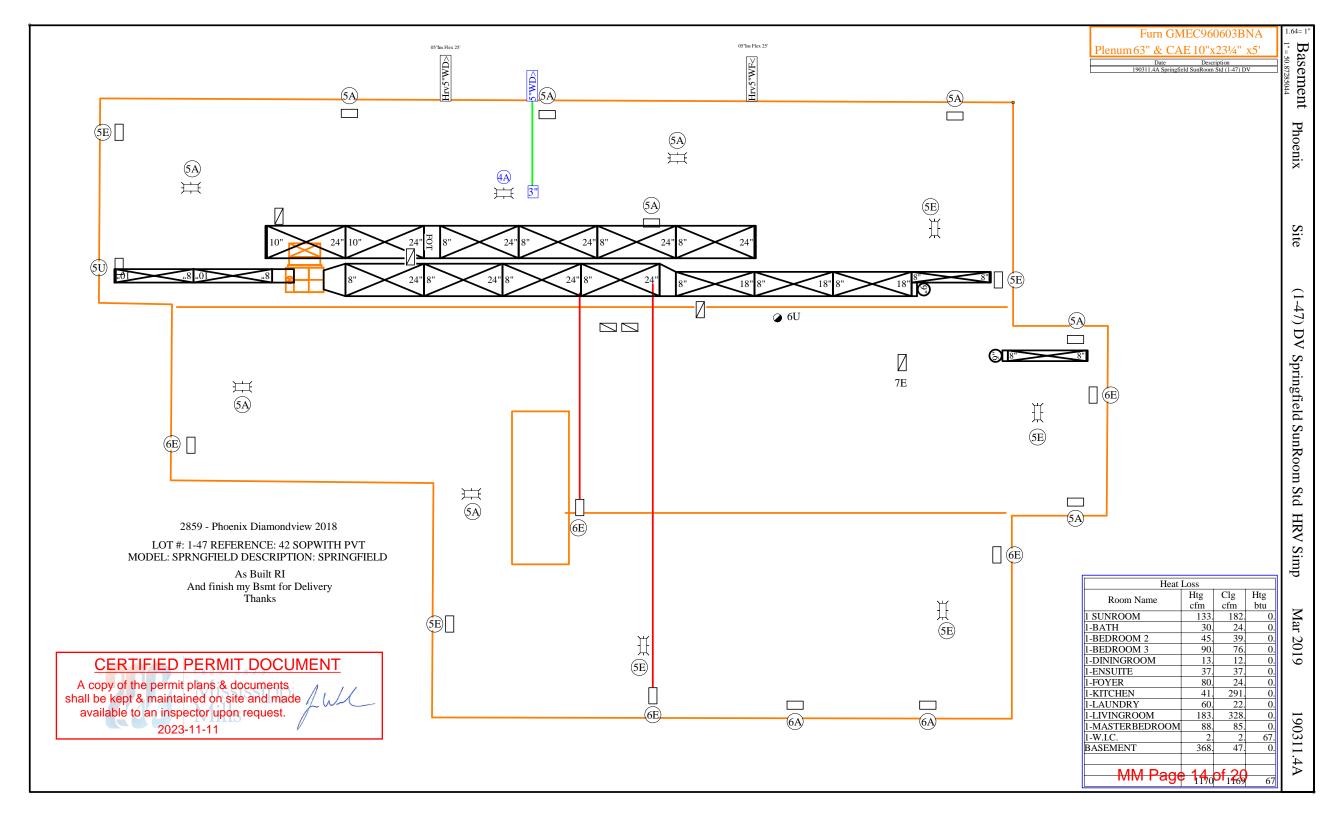
PHOENIX HOMES WHITETAIL RIDGE WTR4-137 SPRINGFIELD M W/ SUNROOM

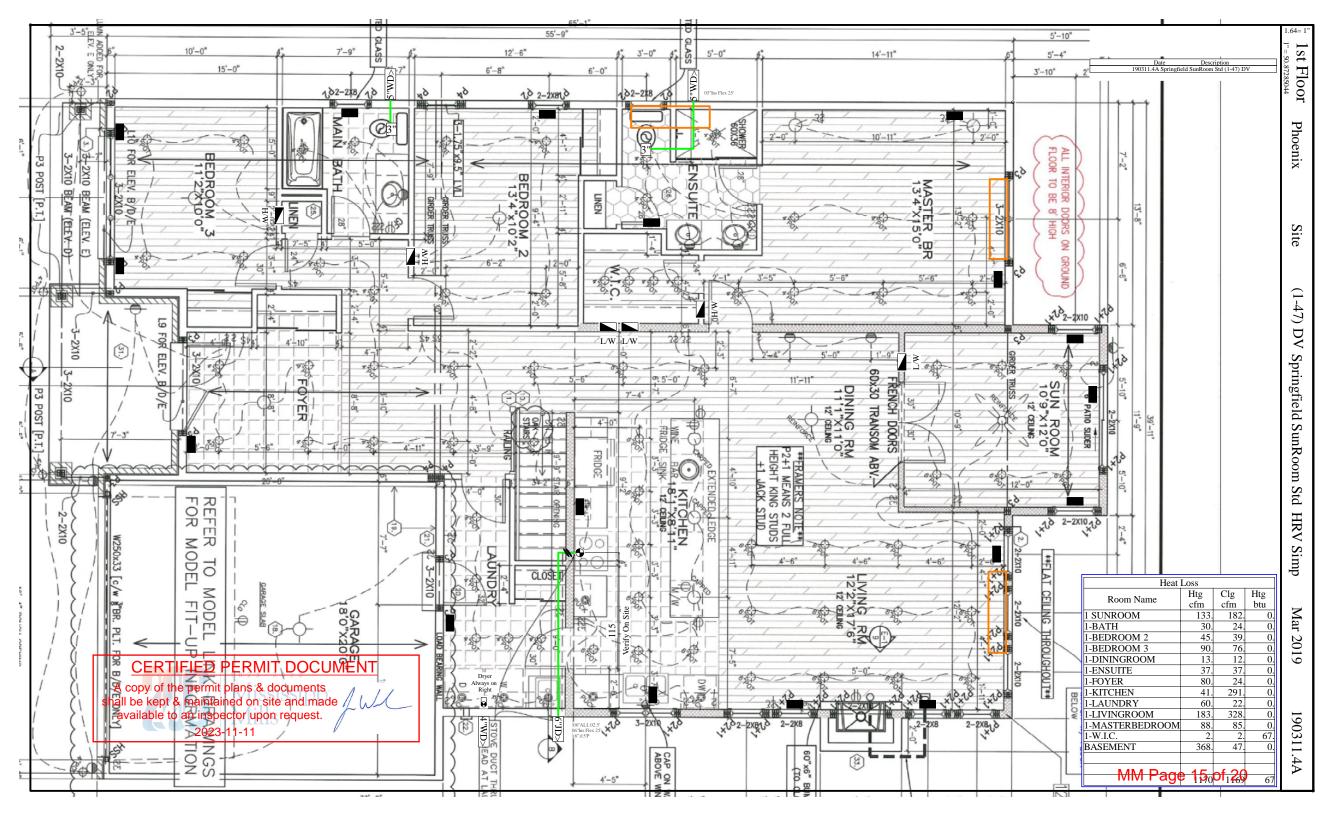
- BLOCKING MATERIAL WILL BE SUPPLIED AND INDICATED AS "BLOCKING". NO LONGER ONLY 12' LENGTHS.

- BLOCKING MATERIAL WILL BE GRANDOR LUMBER INC ALPA LUMBER GROUP 1ST FLOOR 1 OF 1 WIN Page 3100 140









210 Prescott Street P.O. Box 189 Kemptville, Ontario K0G 1J0 Civil • Geotechnical • Structural • Environmental •

Hydrogeology •

(613) 860-0923

FAX: (613) 258-0475

October 4, 2023 (Revised)

Kollaard File # 230020 – LOT137

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, 111 Frank Fisher Crescent, Lot # 137 White Tail Ridge, Almonte, Kollaard Associates File # 230020

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

- Phoenix Homes, Lot # 137 White Tail Ridge, Pages # 1 to 9, Dated 12/09/2023
- Grandor Lumber Inc., Roof Truss Layout, Springfield M-2022, Dated 02/21/2023
- Grandor Lumber Inc., 1st Floor Joist Layout, WTR4-137, Springfield M w/ Sunroom, Dated 2023/09/11

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. The proposed blocking between the studs to support to fasten the front porch roof joist hangers (through the wall sheathing) noted on Phoenix Homes Pages # 3 is adequate. The 2-2x8 blocking is to be nailed to the 2x6 studs with 3 3" nails at each end, per 2x8 ply.
- 4. The proposed construction of the flat overhang past the front porch beam shown on Phoenix Homes Pages # 3 is adequate.
- 5. 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).
- 6. Truss design is by others.



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Basement Plan - Pages # 2:

- 7. 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.
- 8. The front porch slab reinforcement described on Phoenix Homes Pages # 1 is adequate.
- 9. 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".
- 10. 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).
- 11. 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".
- 12. Where the grade difference between the basement slab and the exterior finished grade exceeds 3'11" along the left side, the proposed foundation reinforcement noted on Phoenix Homes Page # 6 is
 adequate to withstand the lateral earth pressures.
- 13. The strip footings and proposed interior pad footings shown on Phoenix Homes Page # 2 and noted on Phoenix Homes Page # 1 are adequate.
- 14. 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:

- 15. All gravity loads to be carried to foundation through solid blocking.
- 16. Truss design is by others.
- 17. Floor joist design, flush LVL beams within the floor structure and LVL lintels are by the manufacturer.
- 18. The self supporting stairs are to be designed by the stair manufacturer.
- 19. All dimension lumber, except non-load bearing 8 ft 2x6 studs to be No.2 grade SPF or better.
- 20. Non-load bearing 8 ft 2x6 studs to be No.3 or Stud grade SPF or better.
- 21. All guards to be as per OBC SB-7, unless otherwise mentioned or designed by others.
- 22. All brick lintels to be as per OBC Table 9.20.5.2.B.
- 23. 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.
- 24. 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".
- 25. All 3" x 3" x 3/16" HSS posts c/w 6" x 6" x 3/8" top and bottom bearing plates.

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- 26. The assumed soil bearing resistance of 100 kPa is to be verified prior to construction.
- 27. 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.
- 28. Comments provided in this report are made in consideration of Part 9 and Part 4 (where applicable) of the 2012 OBC as amended.
- 29. 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.

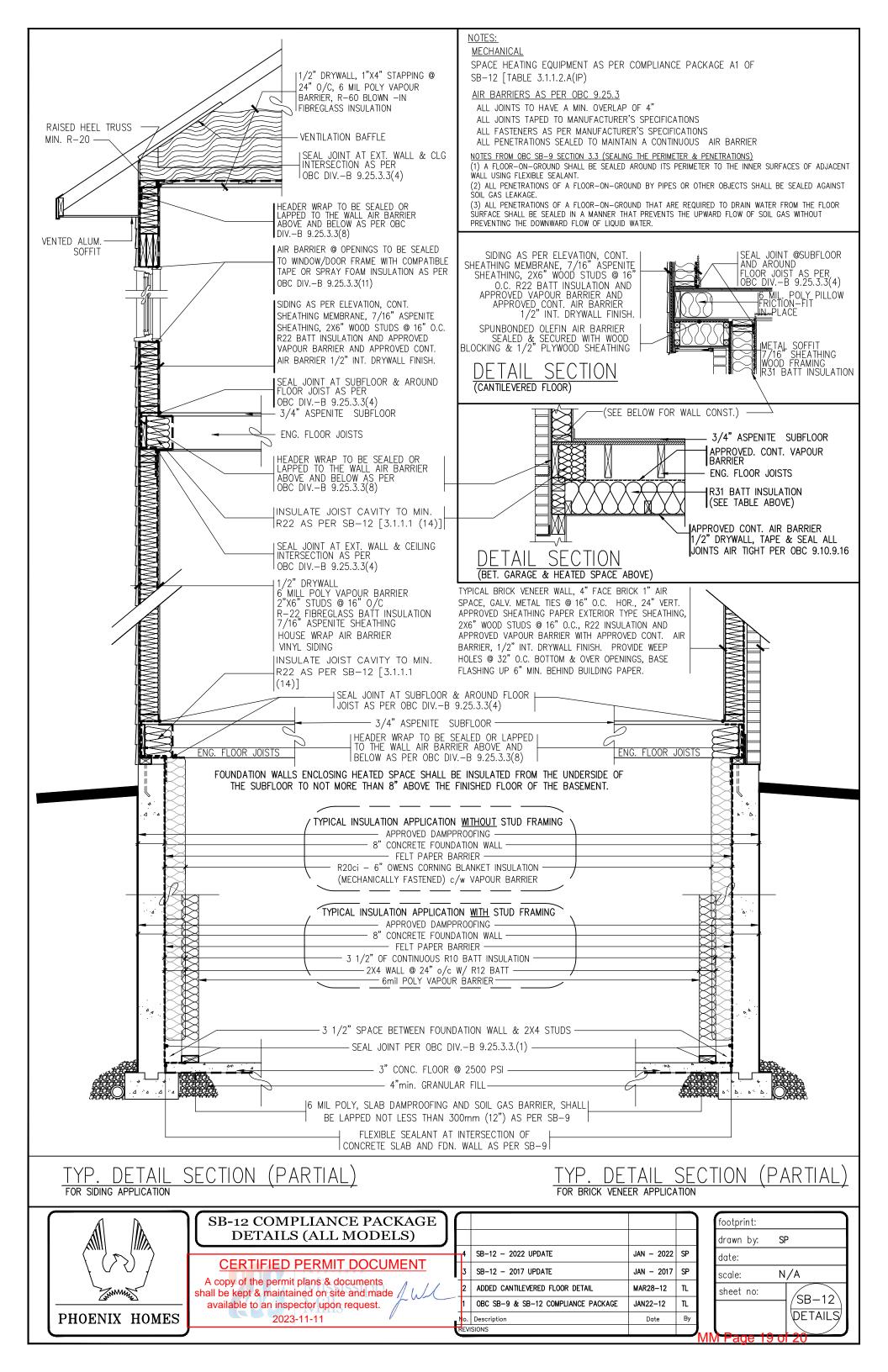


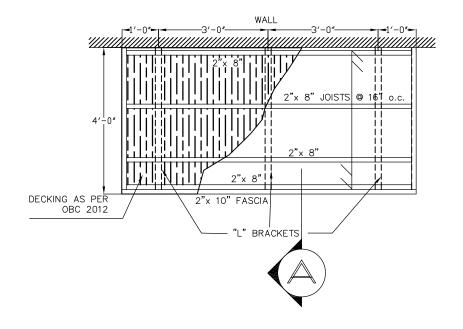
Christopher Cogliati, P.Eng.

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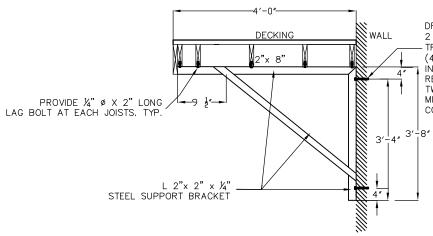
A copy of the permit plans & documents shall be kept & maintained on site and made available to an inspector upon request.

2023-11-11





PLAN



DRILL INTO EXISTING FOUNDATION WALL 2 -1/2" Ø RED HEAD STAINLESS STEEL TRUBOLT WEDGE ANCHOR (4" MIN. EMBEDMENT) INSTALL AS PER MANUFACTURERS RECOMMENDATIONS. TWO BOLTS PER BRACKET LEG. MIN. EDGE DISTANCE FROM TOP OF CONCRETE WALL=4"

SECTION 'A'



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2023-11-11

NOTES:

STEEL
-ALL STRUCTURAL STEEL WORK
INCLUDING DESIGN OF ALL
COMPONENTS SHALL BE CARRIED OUT IN ACCORDANCE
WITH CAN/CSA-S16-09.
-HOLLOW STRUCTURAL SECTIONS TO

-HOLLOW STRUCTURAL SECTIONS TO CAN/CSA G40.20 GRADE 350, CLASS C OF H.
- STRUCTURAL STEEL SHALL CONFORM TO CAN/CSA G40.21 GRADE 300W ALL WORK SHALL CONFORM OBC 2012 GONTRACTOR TO VERIFY ALL HIMENSIONS ON SITE.
FOR ADDITIONAL INFORMATION, SEE MINIMERSIONS CONTRACTOR TO STRUCTURE STRUCTU

NGINEERING DWGS

LL HARDWARE TO BE HOT-DIP

ALL HARDWARE TO BE 1151 5... CALVANIZED CONCRETE MIN. STRENGTH: 25 MPA

