

#### 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

- ROOF CONSTRUCTION
  NO.210 (10.25kg/mz) 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, RYLL & VENTED SOFFIT. ATTIC VENTILATION 1:300 OF INSULATED CEILING AREA WITH 25% AT EAVES. AND 25% AT RIDGE (OBC
- 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
- MIN. 200mm (8") ABOVE FIN. GRADE
- 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") BFHIND BIJLI DING PAPER BRICK TO BE MIN 150mm (6") BEHIND BUILDING PAPER. BRICK TO BE MIN. 150mm (6") ABOVE FINISH GRADE.
- (3A.) BRICK VENEER CONSTRUCTION (2"x4" CARAGE 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") C.C. VERTICAL. APPROVED AIR BARRIER, 38x89 (2"x4") STUDS @ 400mm (16") O.C. [FOR AIR BARKIEK, 30x89 (2 x4 ) SIUDS © 40UMIM (16 ) U.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.
- (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 20MPa (c/w 2-15M REBAR (8') POUNED CONC. FUIN. WALL 20MPG (c/w 2-15M KEBAR 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"%6") 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. 100kPo 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 AND AROUND WEEPING TILES.
- EXPOSED FLOOR TO EXTERIOR PROVIDE RSI 5.46 (R31) INSULATION, APPROVED VAPOUR BARRIER AND CONTINUOUS AIR BARRIER, FINISHED SOFFIT.
- 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.
- $\overbrace{10.} \quad \underbrace{\text{STAIRS, STEPS, HANDRAILS -OBC. 9.8.-}}_{-9.8.2.1(2) \quad \text{STAIR WIDTH MEASURED BETWEEN WALL FACES OR}$ GUARDS SHALL BE NOT LESS THAN 860mm (33  $^{2}_{1}$ ) 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)

STAIR COMPONENT

-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 18")

-9.8.7.6(1) HANDRAILS SHALL NOT PROJECT MORE THAN 100mm (3 16") 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. (2) INT. GUARDS HEIGHT: =900mm (35  $\frac{7}{16}$ ") MIN. (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 LEVEL SILL PLATE WHEN REQUIRED. (SEE OBC. 9.23.7)
- -R12  $(3\frac{1}{2}")$  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.

<u>OR</u> —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)

- 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 MÌN. 100mm (4") HITO CONC. © 2400mm (7"-10") O.C. 100mm (4") HIGH CONC. CURB ON 350-155 (14"x6") CONC. FORMIG, 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 Kpa. 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 Kpa. 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
- 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 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.
- BEAM POCKET OR 300x150 (12"x6") POURED CONC. NIB WALLS. MIN. BEARING 90mm (3-1/2")
- 17.) 19x64 (1"x3") CONTINUOUS WD. STRAPPING BOTH SIDES OF STEEL BEAM.
- 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") GYPSLIM RD ON WALL AND CEILING RETWEEN HOUSE AND GARAGE, RSI 3.87 (R22) IN WALLS, RSI 5.46 (R31) IN CEILING. PROVIDE APPROVED AIR BARRIER. TAPE AND SEAL
- DOOR AND FRAME GASPROOFED. DOOR EQUIPPED WITH SELF CLOSING DEVICE AND WEATHERSTRIPPING. PER OBC 9.10.13.15
- WOOD STEP, C/W HANDRAIL & LANDING IF MORE THAN 3 RISERS, MAX.RISE 200mm (7–7/8") MIN.TREAD 255mm (10–1/16") SEE 0BC 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)
- 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
- 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
- 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.

SOLID WOOD BEARING FOR WOOD STUD WALLS
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.
- $3\!-\!2\text{"x6"}$  BUILT-UP-POST ON 24"x24"x10" CONCRETE FOOTING. (SEPARATE WOOD FROM CONCRETE W/ 6mil POLY AS PER OBC 9.17.4)
- STEP FOOTINGS: MIN. HORIZ. STEP = 600mm (23-5/8"). MAX. VERT. STEP = 600mm (23-5/8") FOR FIRM SOILS.
- PORCH SLAB/STEPS: 130 mm (5") MIN. CONC. 32 MPo SLAB AIR ENTRAINMENT MIN. 5 TO 8% AT 28 DAYS, 10 M BARS @ 250 0/C EACH WAY 10M DOWELS @400 (16") 0.C. 2-15m IN THICKÉNED AREA FROM WALL TO SLAB ALL SIDES (SEE DETAIL)
- 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.
- DIRECT VENT GAS FIREPLACE. VENT TO BE A MINIMUM 300mm (12") FROM ANY OPENING AND ABOVE FIN. GRADE. REFER TO GAS UTILIZATION CODE.
- -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)
- 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.
- 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 EDTN WALL SHALL NOT BE REDUCED TO LESS THAN 90mm (3  $\frac{9}{16}$ ") THICK TO A MAX. DEPTH OF 350mm (13  $\frac{3}{4}$ ") 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)

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") 0.C. FOR MAX.
2830mm (9'-3") SPAN & 38x140 (2"x6") ◎ 400mm (16") 0.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.

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

STUD SPACING WITH VARIOUS FINISHES:

1. SIDING-METAL OR VINYL- 2"X6" @12" 0/C

STUCCO BRICK TO 4'-0" -2"X6" @16" 0/C -2"X6" @16" O/C

4. BRICK FULL HEIGHT -2-2"X6" @12" 0/C 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 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)
- 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.> FLASHING FOR EXT. WALL OPENINGS (0.B.C.9.27.3.8.(3)
- SUMP PITS (WHERE REQ'D) SEE O.B.C. 9.14.5.2 -MUST BE SEALED AS PER 9.25.3.3.(16)

Certified Permit Document

A copy of the permit documents sha be kept and maintained on site and



#### WINDOWS:

- MINIMUM BEDROOM WINDOW -OBC. 9.9.10. AT LEAST ONE BEDROOM WINDOW ON A GIVEN FLOOR IS TO
- MINIMUM BEDROUM WINDOW UBC. 9.3.10. AT LEAST ONE BEDROUM WINDOW ON A GIVEN FLOOR IS TO HAVE MIN. 0.35m2 UNDOSTRUCTED 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 MECHANICAL DRAWINGS.
  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.
- FRAMING TO BE DESIGNED & CERTIFIED BY TRUDS MANUF.

  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") 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") DIA. GALVANIZED BOLTS BOLTED AT MID—DEPTH OF BEAM @ 915mm (3"-0") 0.C.
- PROVIDE TOP MOUNT BEAM HANGERS TYPE "SCL" MANUFACTURED BY MGA CONNECTOR LTD. Tel. (905) 642-3175 OR EQUAL FOR ALL LUL BEAM TO BEAM CONNECTIONS UNLESS OTHERWISE NOTED. JOIST HANGERS: PROVIDE METAL HANGERS FOR ALL JOISTS AND BUILT-UP WOOD 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 (45lbs.) ROLL ROOFING OR OTHER DAMPPROOFING MATERIAL,

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
- 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 В5

# LAMINATED VENEER LUMBER (LVL) BEAMS

- 2-1 3/4"x7 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) LVL2
- LVL4 LVL6

# LOOSE STEEL LINTELS

- 90 x 90 x 6.0L (3-1/2" x 3-1/2" x 1/4"L) 90 x 90 x 8.0L (3-1/2" x 3-1/2" x 5/16"L) 100 x 90 x 8.0L (4" x 3-1/2" x 5/16"L) 125 x 90 x 8.0L (5" x 3-1/2" x 5/16"L) 125 x 90 x 10.0L (5" x 3-1/2" x 3/8"L)
- 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 BEAR	NTEL SCHEDULE [OBC2012] ING 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

- 0 EXHAUST VENT
- $\ominus$ DUPLEX OUTLET (12" HIGH)
- WEATHERPROOF DUPLEX OUTLET lacksquareHEAVY DUTY OUTLET
- ф<sub>о</sub>с POT LIGHT
- ф LIGHT FIXTURE (CEILING MOUNTED) LIGHT FIXTURE (WALL MOUNTED)
- -82
  - SWITCH (3-WAY) <> FLOOR DRAIN
- ₩ % HOSE BIB DOUBLE JOIST
- LAMINATED VENEER LUMBER LVL POINT LOAD FROM ABOVE
- PRESSURE TREATED LUMBER P.T. GIRDER TRUSS BY ROOF TRUSS MANUF. \_\_\_F.A.\_\_\_ FLAT ARCH
  - CURVED ARCH

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.



PHOENIX HOMES

OAKSIDE C - 2022

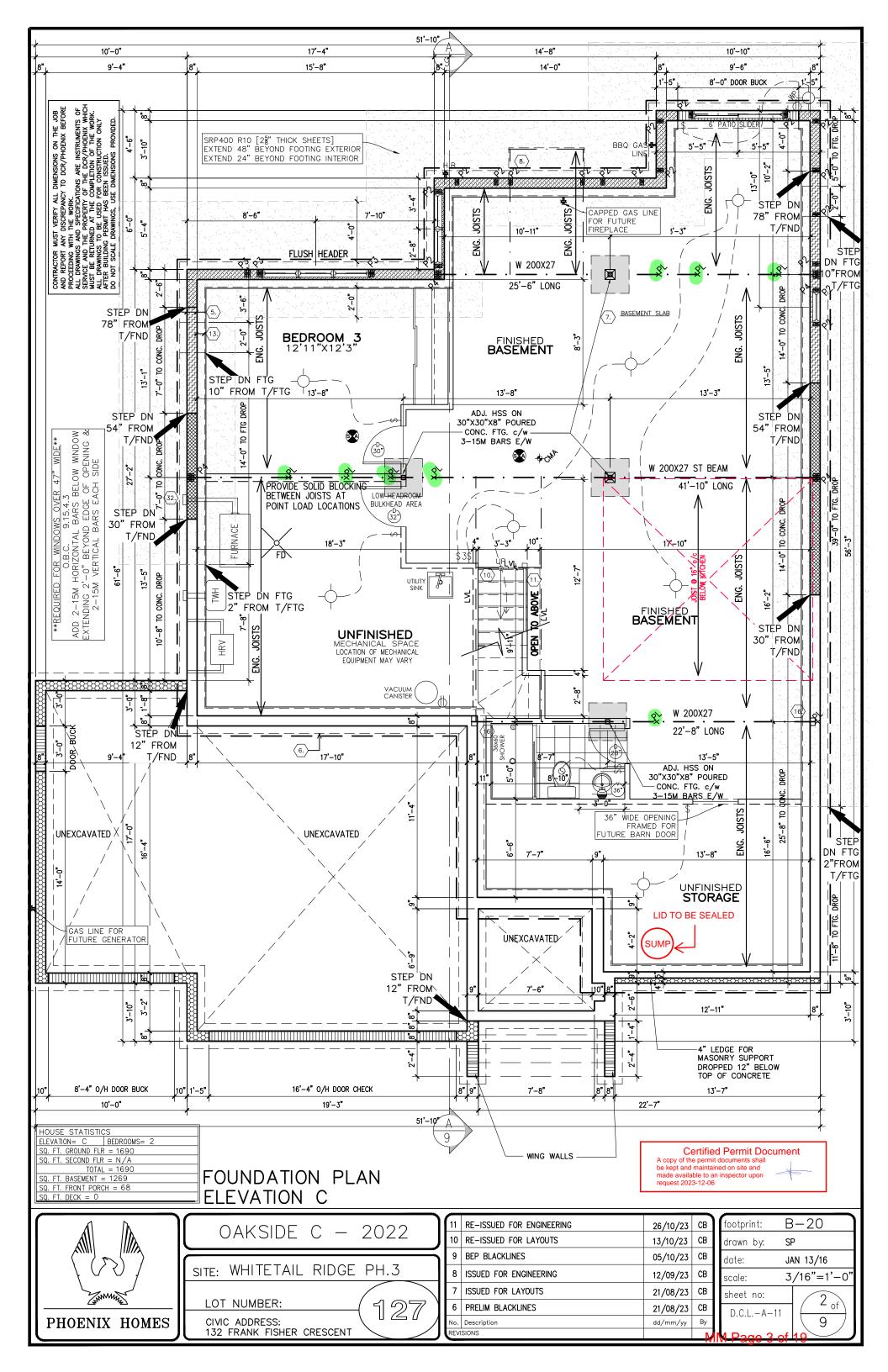
SITE: WHITETAIL RIDGE PH.3

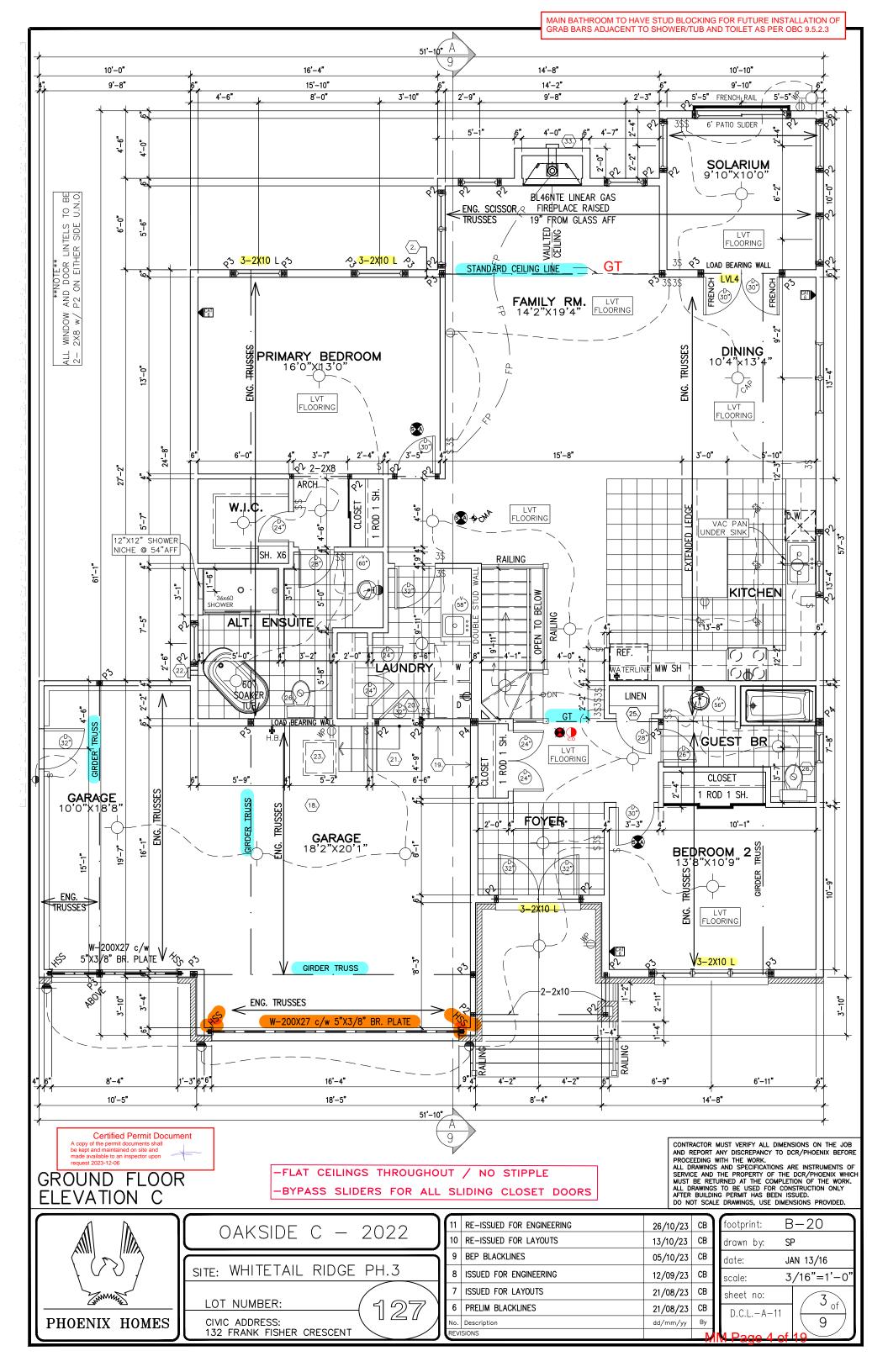
LOT NUMBER:

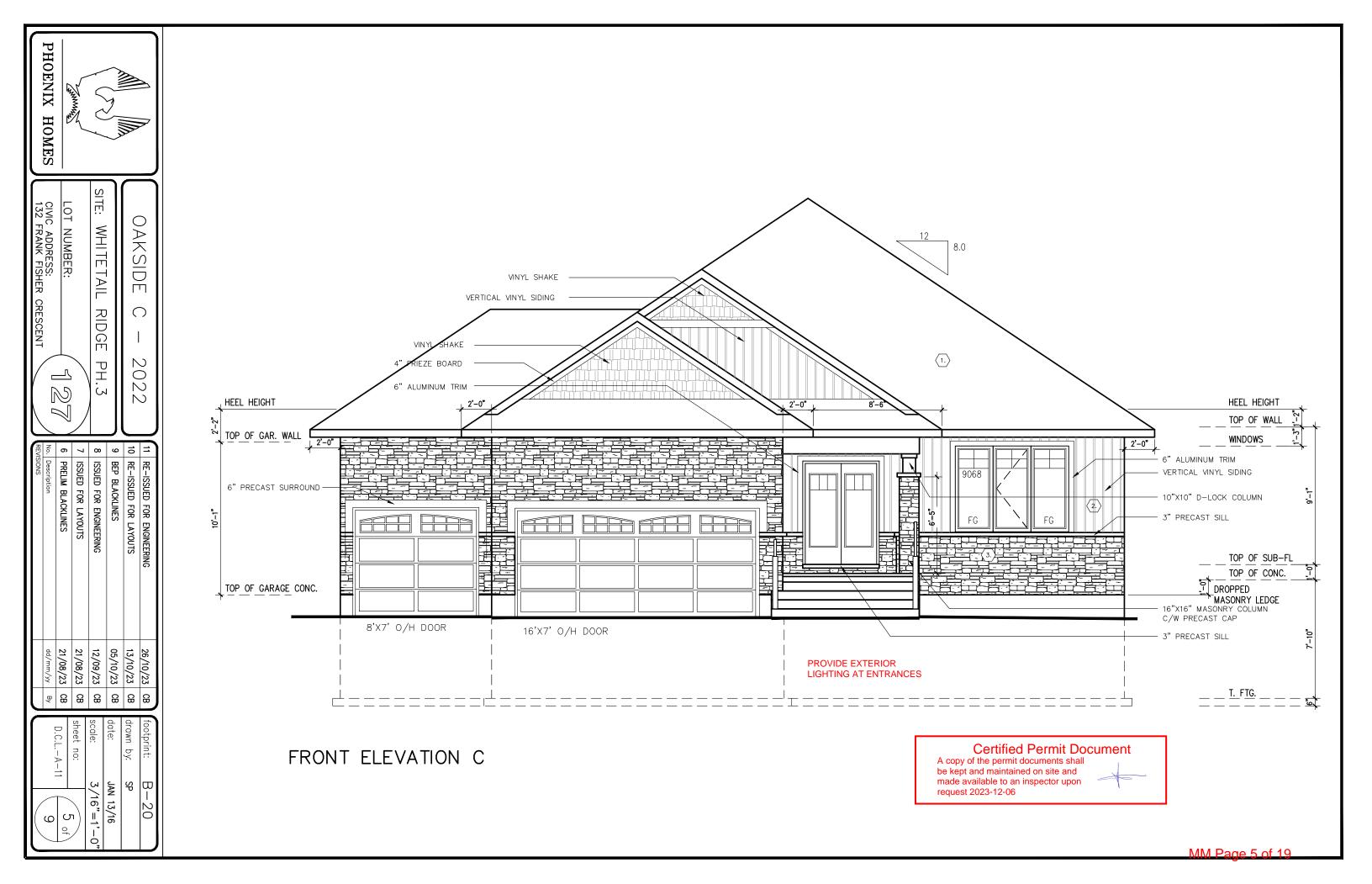
CIVIC ADDRESS: 132 FRANK FISHER CRESCENT 127

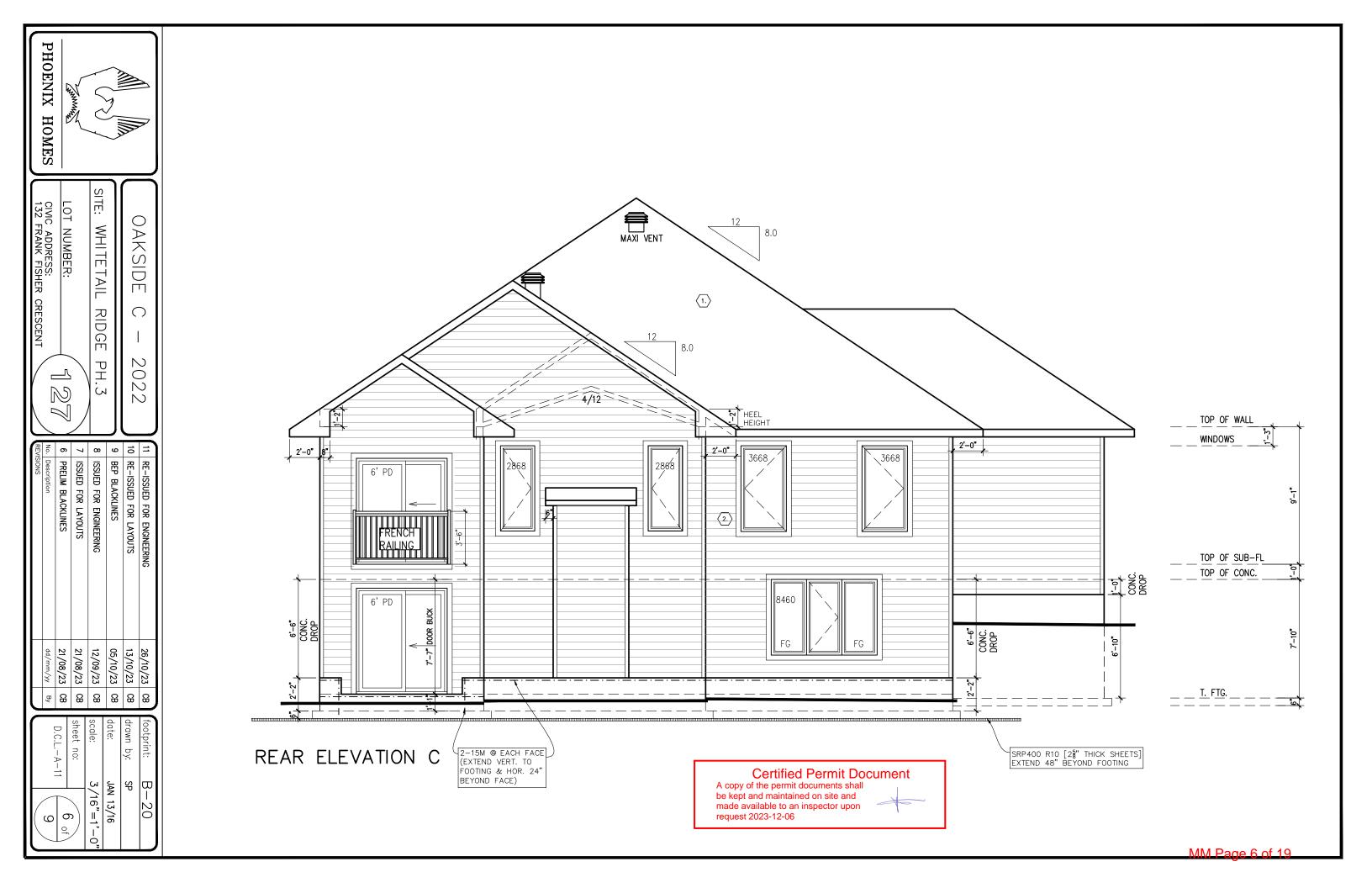
11	RE-ISSUED FOR ENGINEERING	26/10/23	СВ			
10	RE-ISSUED FOR LAYOUTS 13/10/23					
9	BEP BLACKLINES 05/10/23					
8	ISSUED FOR ENGINEERING	12/09/23	СВ			
7	ISSUED FOR LAYOUTS	21/08/23	СВ			
6	PRELIM BLACKLINES	21/08/23	СВ			
No.	Description	dd/mm/yy	Ву			
REVI	SIONS					

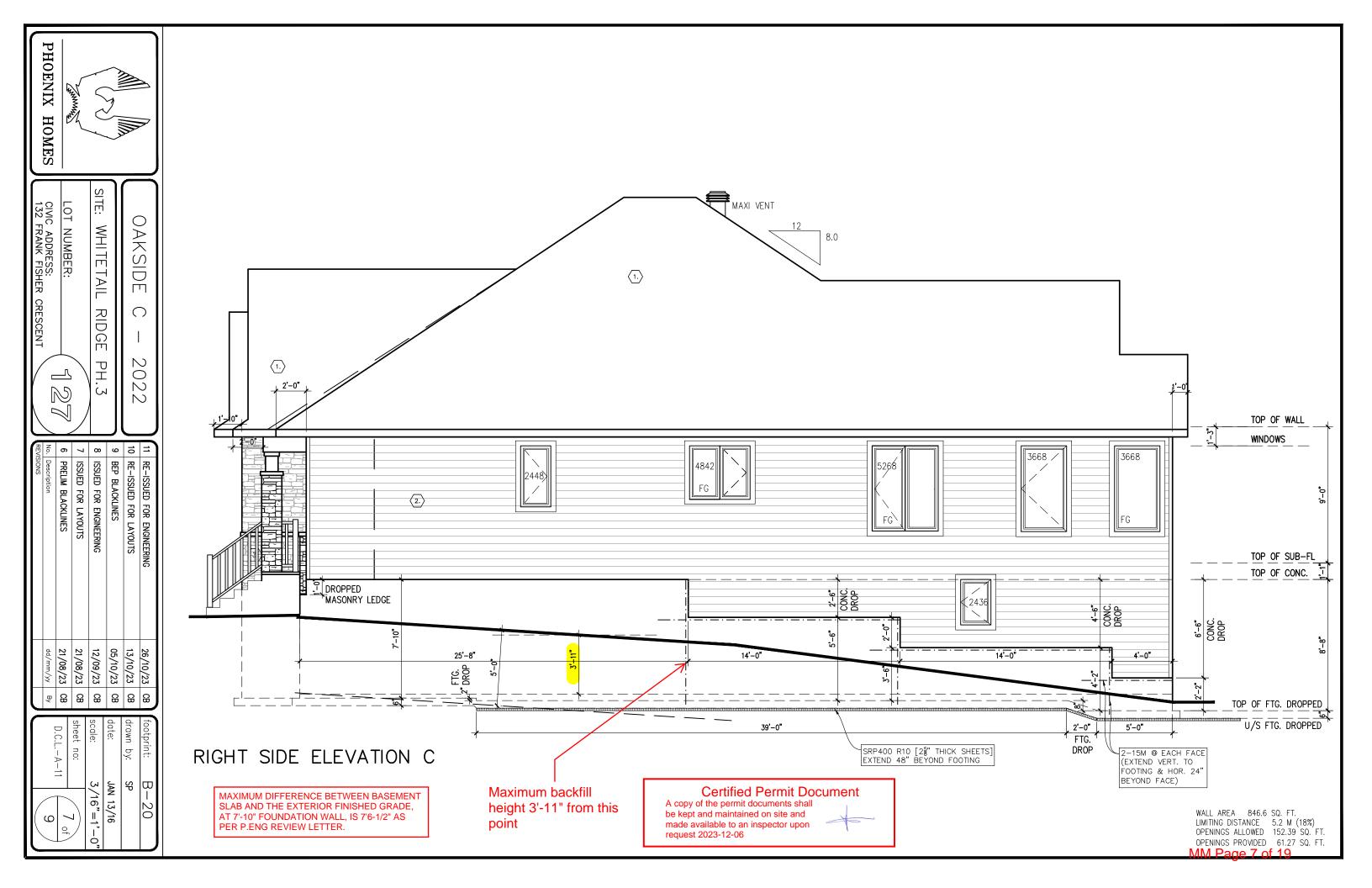
footprint: B - 20drawn by: SP JAN 13/16 date: 3/16"=1'-0' scale sheet no: 1 of D.C.L 9

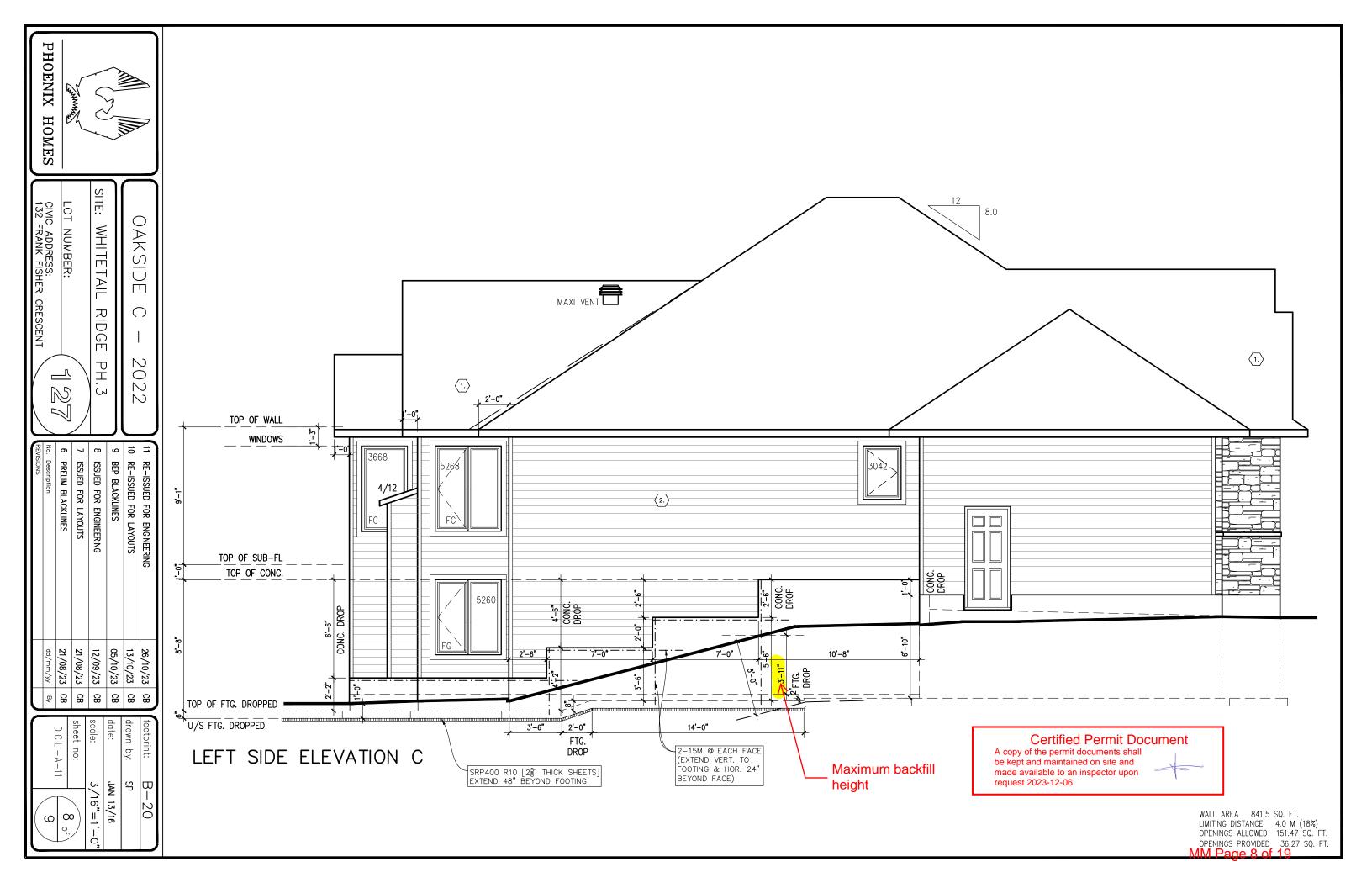


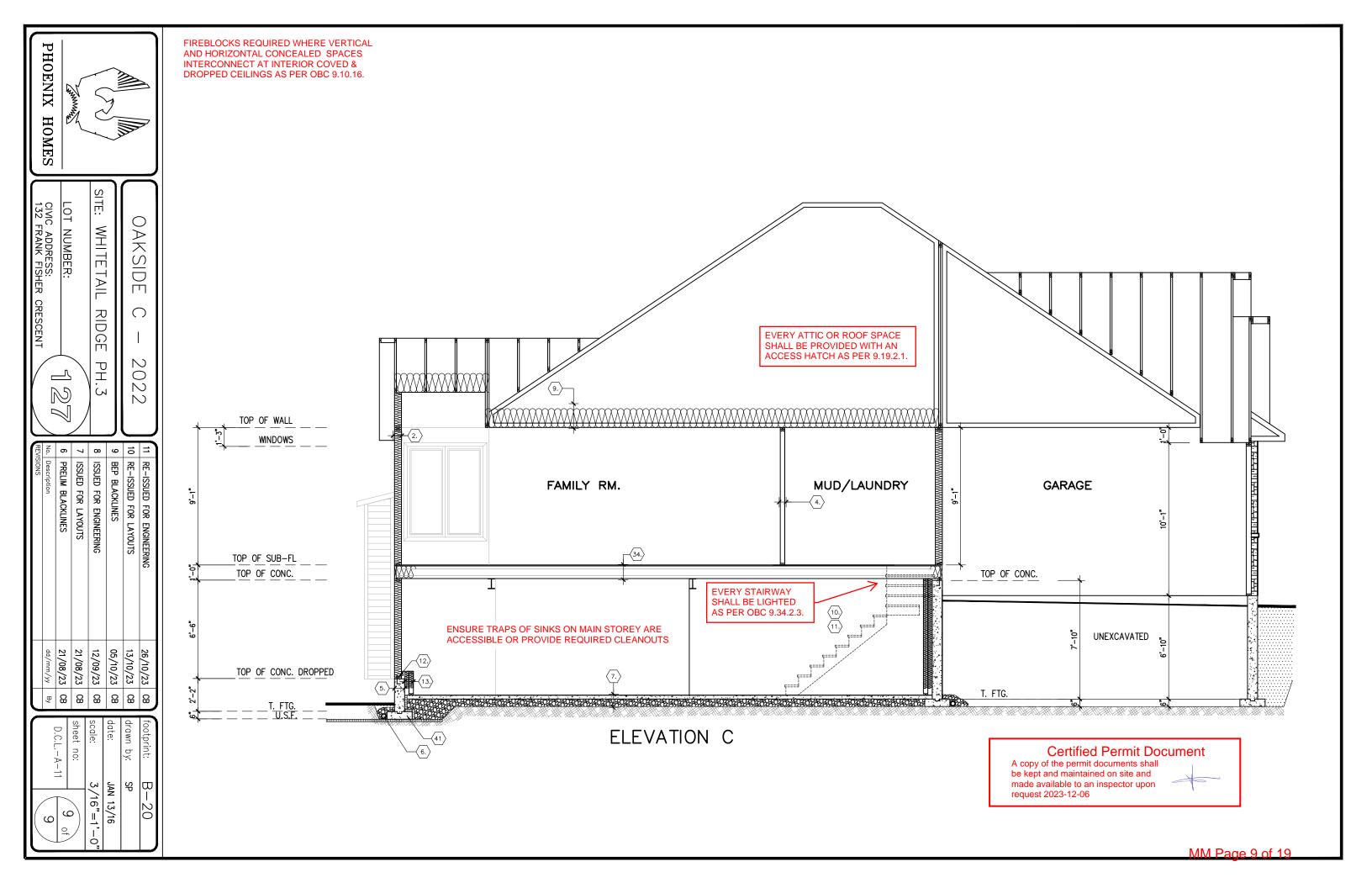










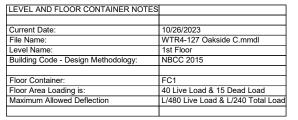


PROVIDE P.ENG APPROVED TRUSS PACKAGE WITH SPECIFICATIONS TO BUILDING INSPECTOR AT FRAMING INSPECTION Hatch Legend Truss Design Reaction 12" Lower ceiling **Certified Permit Document** R02 A copy of the permit documents shall 4/12 Ceiling 7961 / - Ib be kept and maintained on site and made available to an inspector upon Horizontal: - / - lb request 2023-12-06 G03 Truss Design Reaction R02 R21(4) R47 8109 / - Ib G01 Horizontal: - / - lb R47 ROT R01 R02 J03 R23 V04 V05 R06(3) 8 K11K R16 R18 R41 PB03 PB02 PB01 105(15) R31 105(14 Truss Design Reaction R03 14440 / - Ib Horizontal: - / - Ib Truss Design Reaction **R**03 16094 / - lb Horizontal: - / - Ib J06 R03 R40 R28 R34 PB04 V09 V08 V07 V03 J01(3) V02 V01 **J**06 R24 R05 **R22** `**R**04 9'-1" tall post Truss Design Reaction R05 6489 / - Ib Truss Design Reaction Horizontal: - / - lb 7181 / - lb Horizontal: - / - lb PHOENIX HOMES HURRICANE AND SEISMIC TIES: TYPICAL OTTAWA DESIGN LOADS THIS DESIGN COMPLIES WITH: THIS DESIGN COMPLIES WITH:

- PART 4 OR 9 OF OBC 2012 Reg. 332/12
(2019 Amendment)
- CSA 086-09
- CCMC ACCEPTANCE 11996-L, 0319-L, 13270-L
- TPIC 2014
- TPIC 2014
- TPIC 2015
(REFER TO INDIVIDUAL TRUSS DRAWINGS FOR SPECIFIC LOADS & SPACING)

- THIS DESIGNET INSENTITE SEISMIC CONNECTIONS MUST BE REVIEWED AND APPROVED BY THE BUILDING DESIGNER' ENGINEER, AS STATED IN THE TPIC 2014. THE TRANSFER OF THESE LOADS TO THE ENTIRE STRUCTURE BELOW HAS NOT BEEN ANALYZED. OAKSIDE 'C' Load Type PT 9 PT 4 POAKC-2 Snow 37.1 50 WTR4-127 Top Chord Dead 3 5-10 0 10 Live Bot Chord Dead 7 7 GRANDOR LUMBER INC ALPA LUMBER GROUP VIVI Page /2023 19 TYPICAL SPACING = 24.0 IN C/C

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



51-10-00

14-08-00

L0 - Ca1

L0 - Ca1

LO - FJ6 @ 16" O.C.

L0 - FJ3 @ 16" O.C.

L0 - FJ5 @ 16" O.C.

LT259 L0 - BM6

L0 - Ca1

LO - FJ7 @ 16" O.C.

L0 - Ca1

7-06-00

L0 - BM1

L0 - Bk1 L0 - Ca1

BBO1

LO - FJ3 @ 16" O.C.

8-00-00

L0 - BM3 LT259

L0 FJ1 @ 16" O.C.

LO - FJ8 @ 16" O.C. L0 - Bk2

L0 - Ca1

15-01-00

2-00-00

4-04-00

<del>L0 - Ca</del>1

7-00-00

L0 - BM4

LT259

LO - FJ4 @ 16" O.C.

L0 - Ca1

19-03-00

10-00-00

1-02-00

6-00

3-10-00

10-00-00

5-00-00

L0 - Ca1

Products						
PlotID	Length	Product	Plies	Net Qty	Fab Type	
L0 - FJ1 @ 16" O.C.	42-00-00	9 1/2" NI-20	1	7	MFD	
L0 - FJ2 @ 16" O.C.	38-00-00	9 1/2" NI-20	1	2	MFD	
L0 - FJ3 @ 16" O.C.	36-00-00	9 1/2" NI-20	1	5	MFD	
L0 - FJ4 @ 16" O.C.	30-00-00	9 1/2" NI-20	1	13	MFD	
L0 - FJ5 @ 16" O.C.	28-00-00	9 1/2" NI-20	1	2	MFD	
L0 - FJ6 @ 16" O.C.	26-00-00	9 1/2" NI-20	1	2	MFD	
L0 - FJ7 @ 16" O.C.	13-00-00	9 1/2" NI-20	1	7	MFD	
L0 - FJ8 @ 16" O.C.	17-00-00	9 1/2" NI-40x	1	10	MFD	
L0 - BM1	17-00-00	1 3/4" x 9 1/2" (2.0E 3100) WestFraser LVL	2	4	MFD	
L0 - BM2	9-00-00	1 3/4" x 9 1/2" (2.0E 3100) WestFraser LVL	1	2	MFD	
L0 - BM3	9-00-00	1 3/4" x 9 1/2" (2.0E 3100) WestFraser LVL	2	2	MFD	
L0 - BM4	8-00-00	1 3/4" x 9 1/2" (2.0E 3100) WestFraser LVL	2	2	MFD	
L0 - BM5	6-00-00	1 3/4" x 9 1/2" (2.0E 3100) WestFraser LVL	2	2	MFD	
L0 - BM6	5-00-00	1 3/4" x 9 1/2" (2.0E 3100) WestFraser LVL	1	1	MFD	
L0 - BM7	3-00-00	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	20-00-00	9 1/2" NI-20	1	1	FF	
L0 - Bk2	11-00-00	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	57	MFD	

Connector Summary						
Qty	Manuf	Product	Skew	Supported Mtl		
2	Simpson	HUS18110	-	9 1/2" WF LVL		
16	Simpson	LT259	-	9 1/2" NI-20		

### **Certified Permit Document**

A copy of the permit documents shall be kept and maintained on site and made available to an inspector upon request 2023-12-06



#### 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) - BLOO

#### FLOOR NOTES:

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



OAKSIDE C 1ST FLOOR 1 OF 1

WTR4-127

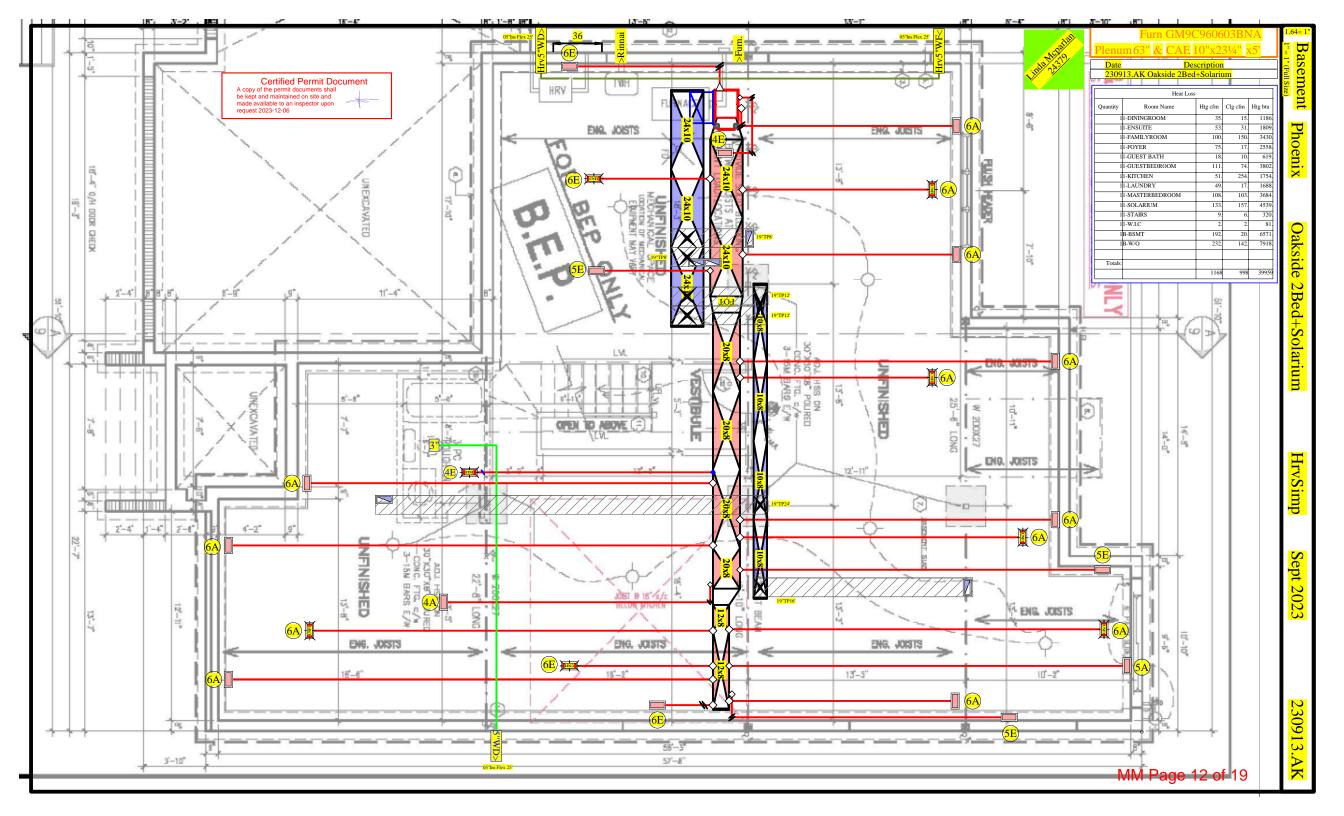
PHOENIX HOMES

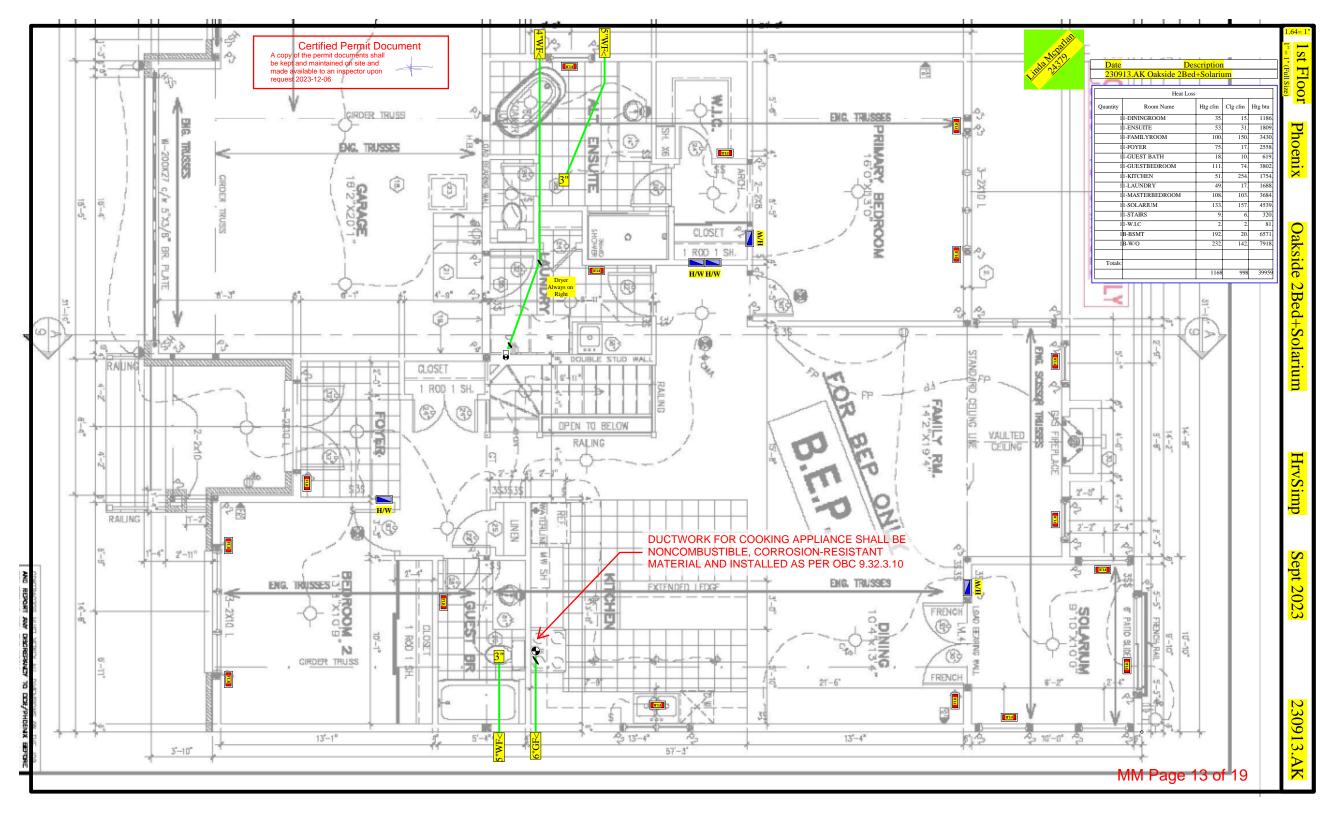
WHITETAIL RIDGE

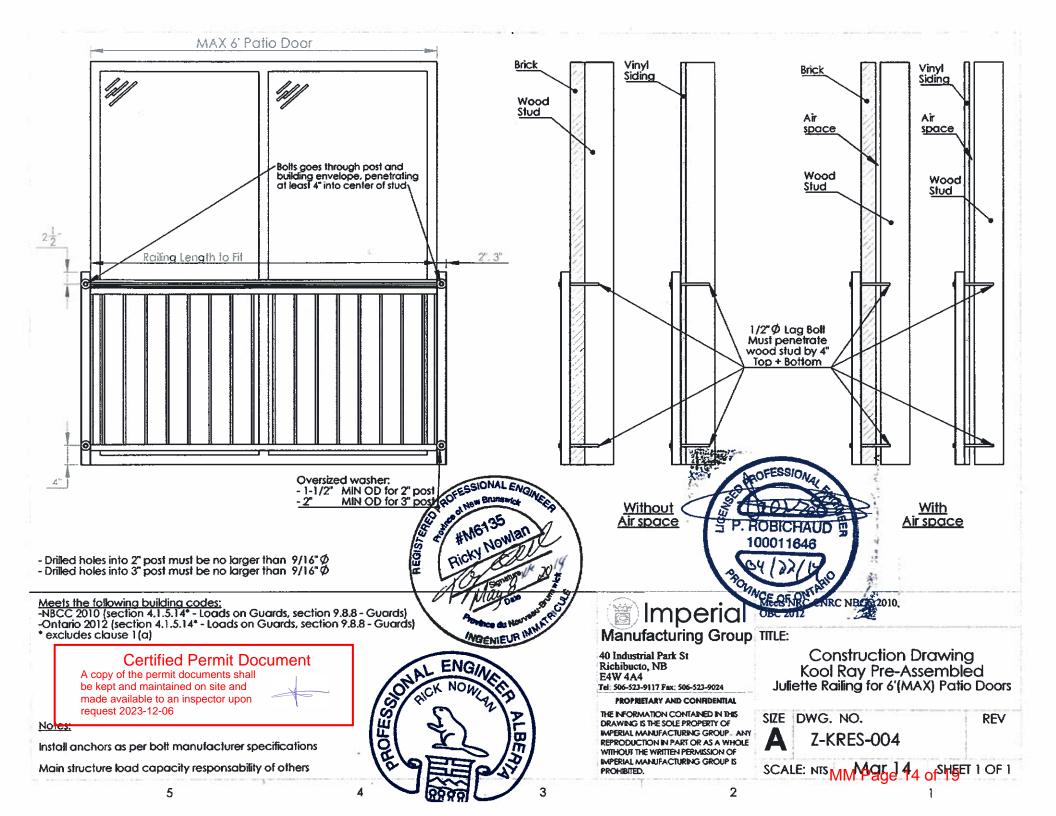


- BLOCKING MATERIAL WILL BE SUPPLIED AND INDICATED AS "BLOCKING", NO LONGER ONLY 12' LENGTHS.

  GRANDOR LUMBER INC ALPA LUMBER GROUP 12' LENGTHS.







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

Structural • Environmental • Hydrogeology •

(613) 860-0923

FAX: (613) 258-0475

October 26, 2023

Kollaard File # 230020 - LOT127

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

Attn: Catherine Buck Tel: 613-723-9227 x 191

Email: CBuck@phoenixhomes.ca

#### **Certified Permit Document**

A copy of the permit documents shall be kept and maintained on site and made available to an inspector upon request 2023-12-06



Re: Proposed Single Family Dwelling, 132 Frank Fisher Crescent, Lot # 127 White Tail Ridge, Almonte, Kollaard Associates File # 230020

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

- Phoenix Homes, Lot # 127 White Tail Ridge, Pages # 1 to 9, Dated 26/10/2023
- Grandor Lumber Inc., Roof Truss Layout, Oakside 'C', WTR4-127, Dated 09/08/2023
- Grandor Lumber Inc., 1<sup>st</sup> Floor Joist Layout, WTR4-127 Oakside C, Dated 2023/10/26

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. 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).
- 3. Truss design is by others.

#### Basement Plan - Pages # 2:

- 4. 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.
- 5. The front porch slab reinforcement described on Phoenix Homes Pages # 1 is adequate.





- 6. 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".
- 7. 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".
- 8. The strip footings and proposed interior pad footings shown on Phoenix Homes Page # 2 and noted on Phoenix Homes Page # 1 are adequate.
- 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:** 

Certified Permit Document
A copy of the permit documents shall
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request 2023-12-06

- 10. All gravity loads to be carried to foundation through solid blocking.
- 11. Truss design is by others.
- 12. Floor joist design, flush LVL beams within the floor structure and LVL lintels are by the manufacturer.
- 13. The self supporting stairs are to be designed by the stair manufacturer.
- 14. All dimension lumber, except non-load bearing 8 ft 2x6 studs to be No.2 grade SPF or better.
- 15. Non-load bearing 8 ft 2x6 studs to be No.3 or Stud grade SPF or better.
- 16. All guards to be as per OBC SB-7, unless otherwise mentioned or designed by others.
- 17. All brick lintels to be as per OBC Table 9.20.5.2.B.
- 18. Unless otherwise noted, LVL to be 1.8E 3000Fb LVL (Canadian Limit States bending strength of at least 39.5 MPa) with 13/4" nominal width or better.
- 19. 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".
- 20. All 3" x 3" x 3/16" HSS posts c/w 6" x 6" x 3/8" top and bottom bearing plates.

Provide a copy of the soil bearing capacity

21. The assumed soil bearing resistance of 100 kPa is to be verified prior to construction.

- 22. 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.
- Comments provided in this report are made in consideration of Part 9 and Part 4 (where applicable) of the 2012 OBC as amended.



24. 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.

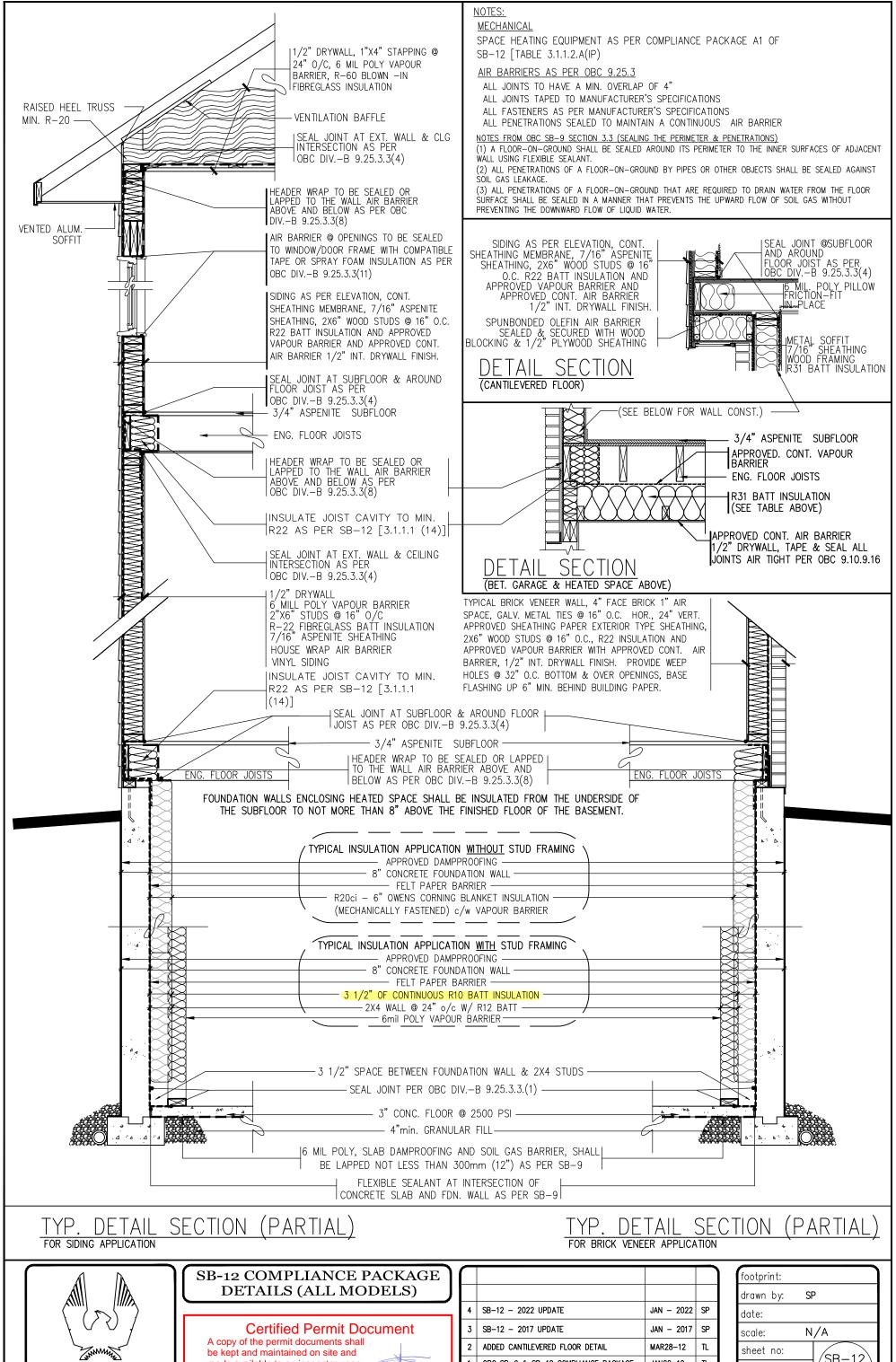


Christopher Cogliati, P.Eng.

## **Certified Permit Document**

A copy of the permit documents shall be kept and maintained on site and made available to an inspector upon request 2023-12-06





PHOENIX HOMES

made available to an inspector upon request 2023-12-06

J					
,	4	SB-12 - 2022 UPDATE	JAN - 2022	SP	
ı	3	SB-12 - 2017 UPDATE	JAN - 2017	SP	
ı	2	ADDED CANTILEVERED FLOOR DETAIL	MAR28-12	TL	
ı	1	OBC SB-9 & SB-12 COMPLIANCE PACKAGE	JAN22-12	ΤL	l
ı	No.	Description	Date	Ву	l
	REV	SIONS			Ļ

SP
N/A
SB-12
DETAILS

# Certified Permit Document A copy of the permit documents shall be kept and maintained on site and made available to an inspector upon request 2023-12-06

# **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%.

For use by Principal Authority								
Application No:				Model/0	Model/Certification Number			
A. Project Information								
Building number, street name	rank Fis	her Cresc	ent			Unit number	127	
Municipality	ank i io	Postar		Reg. PI	an number / other descript	ion	121	
Mississippi Mills				27M	-47			
B. Prescriptive Cor	npliance	[indicate the	building code co	ompliance	package being emplo	yed in this house of	design]	
SB-12 Prescriptive (inpu	ıt design p	ackage): P	ackage: A1		Table	3.1.1.2.A(IF	<u>P)</u>	
C. Project Design Co								
Climatic Zone (SB-1):			uipment Effi	ciency	Space Heating F			
■ Zone 1 (< 5000 degree days		■ ≥ 92% AF				□ Propane		lid Fuel
□ Zone 2 (≥ 5000 degree days		□ ≥ 84% < 9				□ Electric	□ Ła	rth Energy
Ratio of Windows, Skylights	& Glass	(W, S & G) to	Wall Area		Other Building C		Crada s	- ICE Basamant
Area of walls =m² or _3	003 ft <sup>2</sup>		11 1		□ Log/Post&Bear			□ ICF Basement
Alea of Walls =fill of_s		W, S & G	% = <u>11.4</u>		☐ Slab-on-ground ☐ Walkout Basement ☐ Air Conditioning ☐ Combo Unit			
		l Itiliza window	averaging:	/es ≣No	☐ Air Sourced He			
Area of W, S & G =m <sup>2</sup> or	343 ft <sup>2</sup>	Othize Window	averaging.	103 =140	□ Ground Source			
D. Building Specificat	tions [pro	vide values an	d ratings of the	energy eff	iciency components p	proposed]		
Energy Efficiency Subst	titutions							
□ ICF (3.1.1.2.(5) & (6) / 3.1.	1.3.(5) & (6	3))						
□ Combined space heating a	nd domest	ic water hea	ting systems (	(3.1.1.2.(	7) / 3.1.1.3.(7))			
□ Airtightness substitution(s)								
Airtightness test required	□ Table 3.	1.1.4.B Red	quired:		Permit	ed Substitution:_		
(Refer to Design Guide Attached)	□ Table 3.	1.1.4.C Red	quired:		Permit	ed Substitution:_		
		Red	quired:			ed Substitution:_		
Building Component			SI / R values m U-Value <sup>(1)</sup>		Building Comp	onent	Efficie	ency Ratings
Thermal Insulation	Nominal	Effective	Windo	ws & Doors Prov	ide 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		Mechanicals			Art Meritians		
Walls Above Grade		R22		Heating Equip.(AFUE)		96%		
Basement Walls			R21.12	HRV Efficiency (SRE% at 0°C) 75%		75%	5%	
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_1_
Slab (all ≤600mm below grade, o	or heated)	R10		Combir	ned Heating Syste	m	NO	
(1) U value to be provided in either W/(m²•K) or Btu/(h•ft²•F) but not both.								
E. Designer(s) [name(s)	& BCIN(s),	if applicable, o	f person(s) prov	iding infor	mation herein to subs	tantiate that design	n meets the	building code]

**BCIN** 

46674

Form authorized by OHBA, OBOA, LMCBO. Revised December 1, 2016.

Catherine Buck

Qualified Designer Declaration of designer to have reviewed and take responsibility for the design work.

Signature