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
- 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
- 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") 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.
- 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 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.
- $\begin{tabular}{llll} \hline $(6.)$ & 100mm (4") DIA. WEEP TILE 150mm (6") CRUSHED STONE OVER AND AROUND WEEPING TILES. \\ \end{tabular}$
- 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 <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.
- $\overbrace{10.} \quad \underbrace{\text{STAIRS, STEPS, HANDRAILS -OBC. 9.8.-}}_{-9.8.2.1(2) \quad \text{STAIR WIDTH MEASURED BETWEEN WALL FACES OR}$ GUARDS SHALL BE NOT LESS THAN 860mm (33 \S^n) 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)

 L PLATE TO BE PRESSURE TREATED OR 6 MIL POLY BELOW

 -R12 (3/2) CONTINUOUS BATT INSULATION. 2"x4" STUD WALL

 (3/2) -R12 (3") CONTINUOUS BATT INSULATION. 2"x4" STUD WALL PLACED 34" 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)

- 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
- 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 FDTN. WALL SHALL NOT BE REDUCED TO LESS THAN 90mm (3 %") THICK TO A MAX. DEPTH OF 350mm (13 ¾") 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" O/C |
 2" | STUCCO -2"X6" @16" O/C | STUCCO BRICK TO 4'-0" -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)

WINDOWS:

- MINIMUM BEDROOM WINDOW -OBC. 9.9.10. AT LEAST ONE BEDROOM WINDOW ON A GIVEN FLOOR IS TO
- MINIMUM BEDROOM WINDOW OBC. 9.9.10. AT LEAST ONE BEDROOM WINDOW ON A GIVEN FLOOR IS 10 HAVE MIN. 0.35m2 LINOSBITRUCTED 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, 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
- В5
- 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) 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"
10' 6" TO 17' 4"	6" 4 7 1 /2" 4 1 /2"

LEGEND

- 0 EXHAUST VENT
- \ominus DUPLEX OUTLET (12" HIGH)
- WEATHERPROOF DUPLEX OUTLET lacksquareHEAVY DUTY OUTLET
- ф_ос POT LIGHT
- ф LIGHT FIXTURE (CEILING MOUNTED) LIGHT FIXTURE (WALL MOUNTED)
- -82 SWITCH (3-WAY)



- ₩ 🌣 HOSE BIB DOUBLE JOIST LVL LAMINATED VENEER LUMBER
- 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

NEWINGTON R - 2022

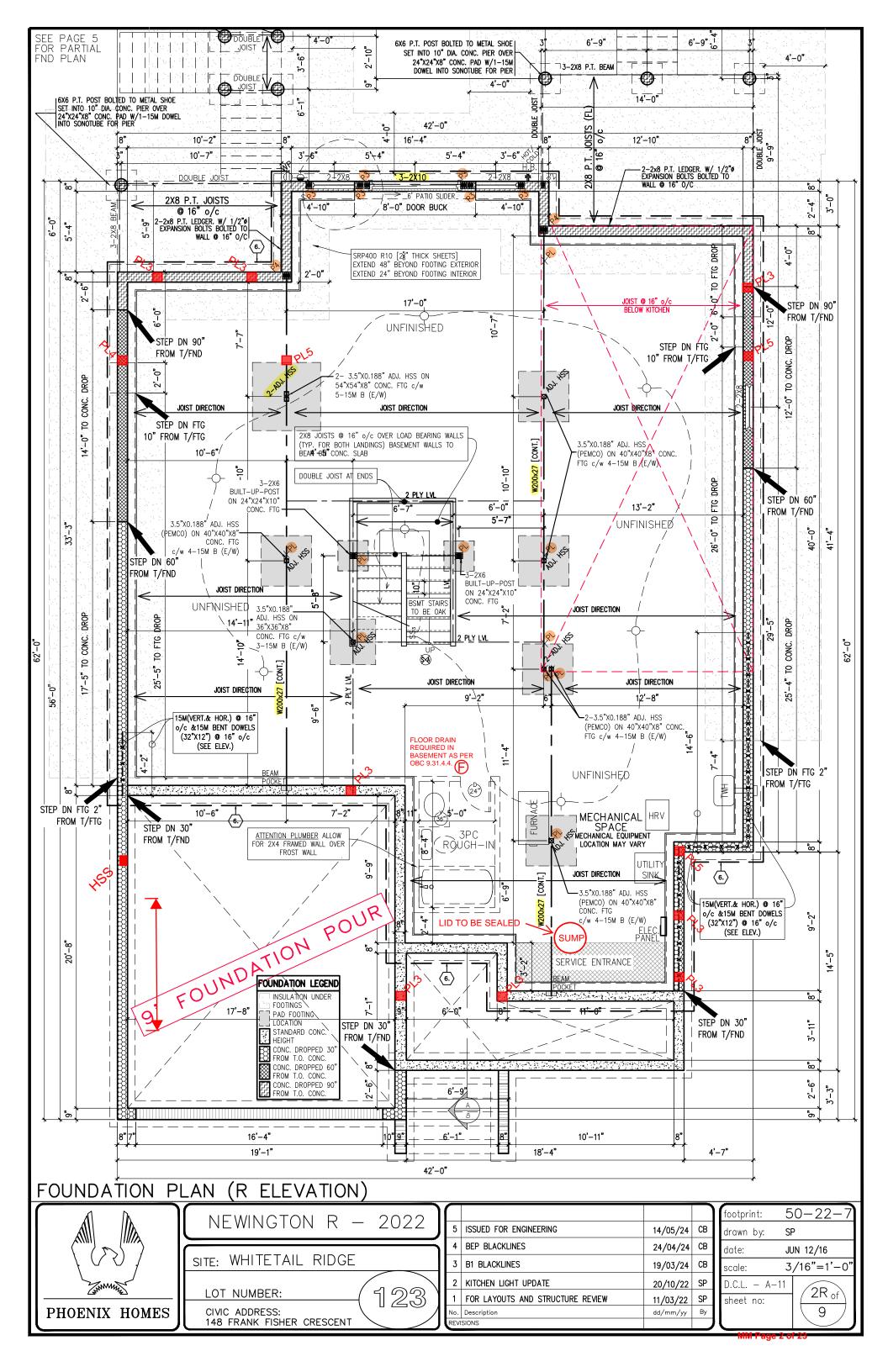
SITE: WHITETAIL RIDGE

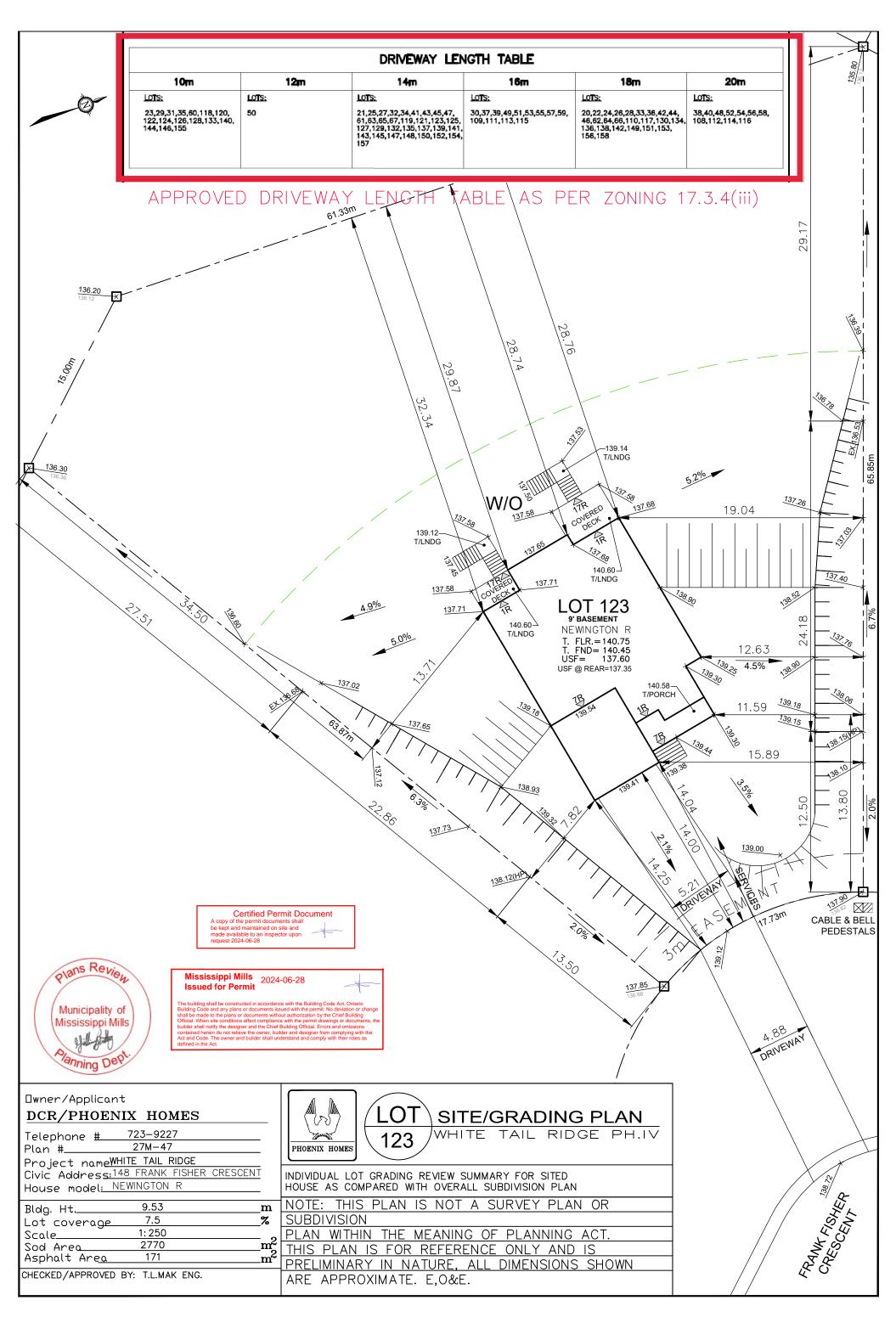
LOT NUMBER:

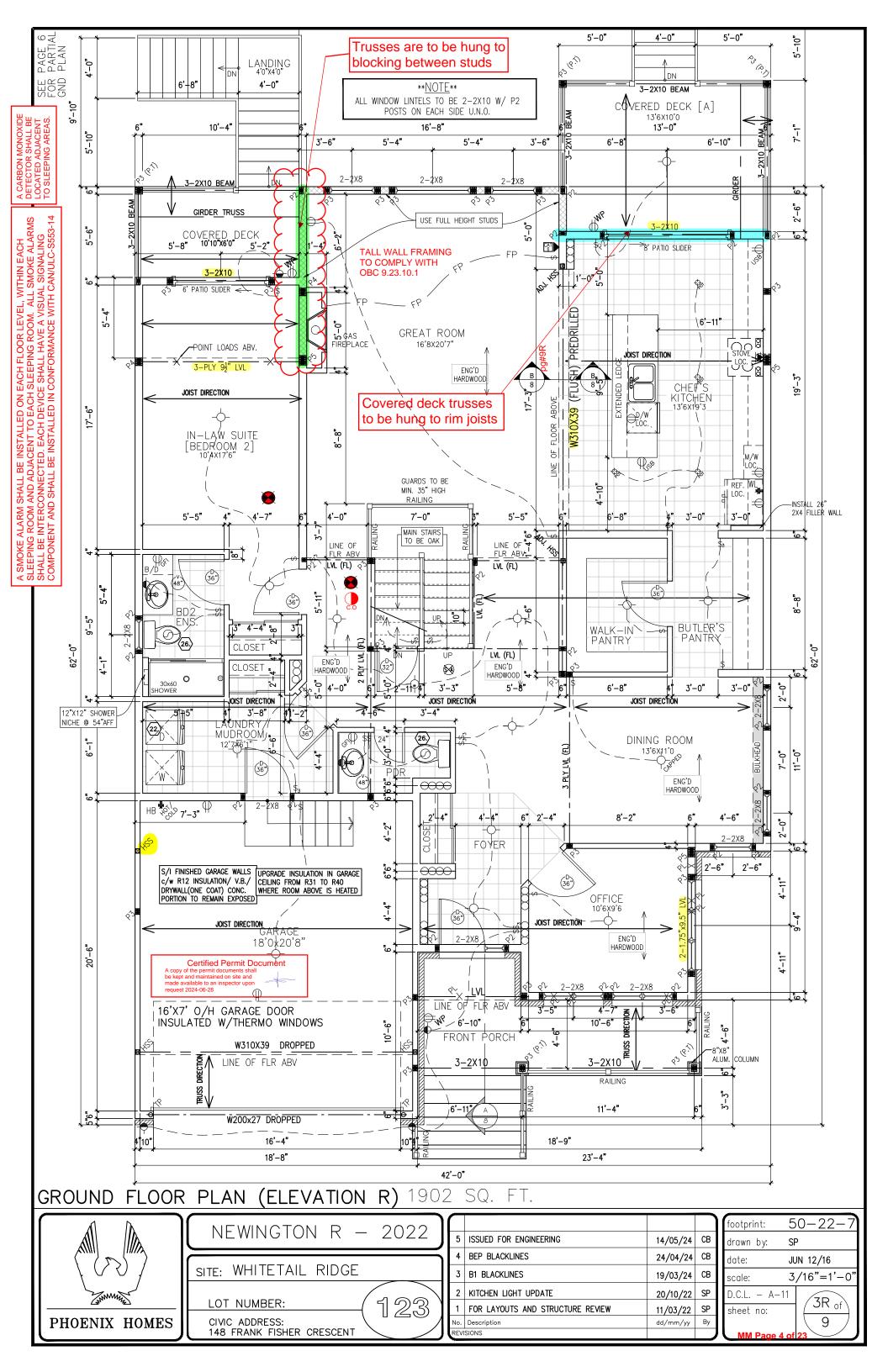
CIVIC ADDRESS: 148 FRANK FISHER CRESCENT

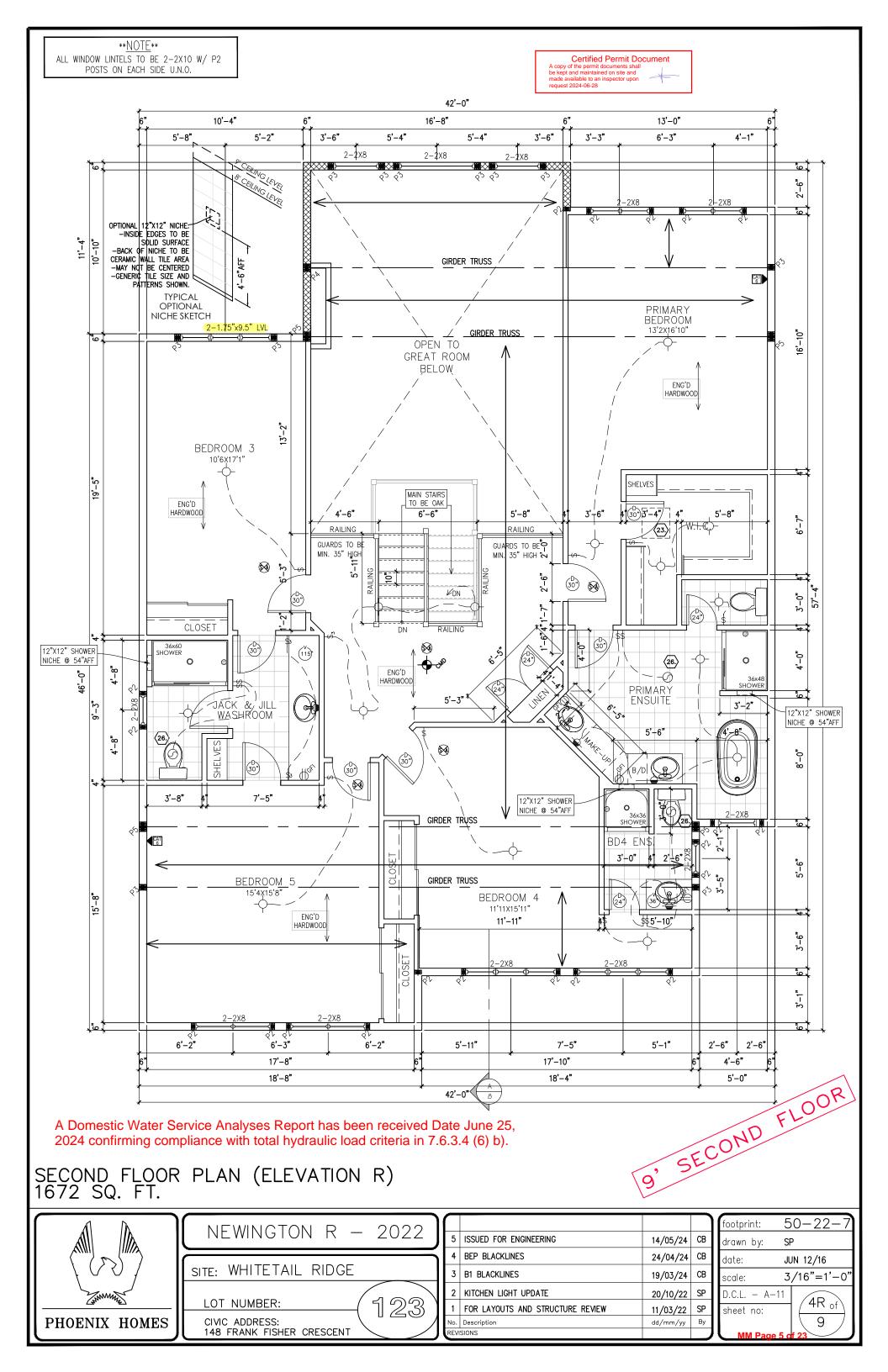
ISSUED FOR ENGINEERING CB 14/05/24 BEP BLACKLINES 24/04/24 CB B1 BLACKLINES 19/03/24 CB KITCHEN LIGHT UPDATE SP 20/10/22 23 FOR LAYOUTS AND STRUCTURE REVIEW 11/03/22 SP No. Description dd/mm/yy

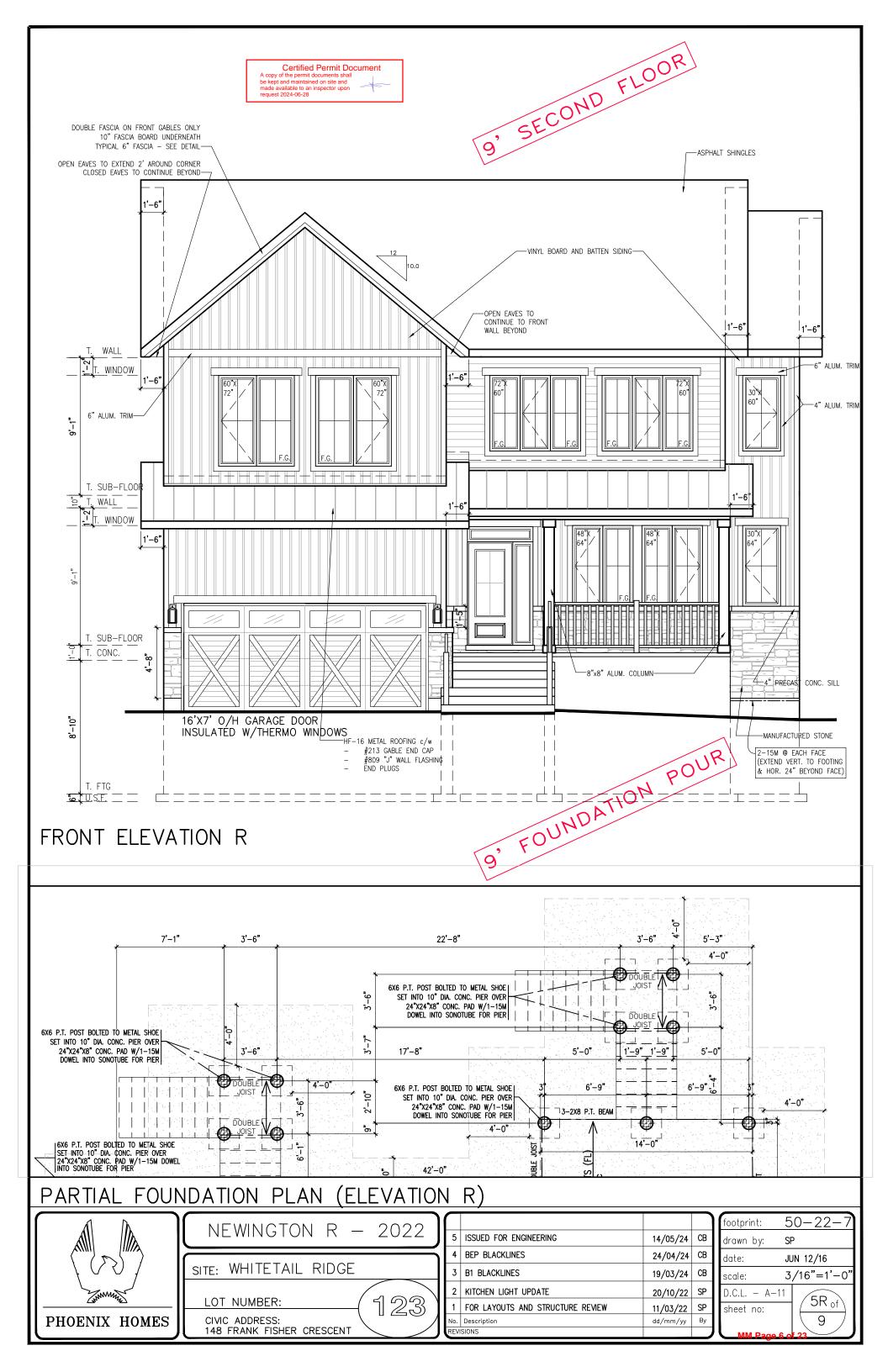
50 - 22 - 7footprint: drawn by: JUN 12/16 date: 3/16"=1'-0' scale: D.C.L. - A-11 1R of sheet no: 9

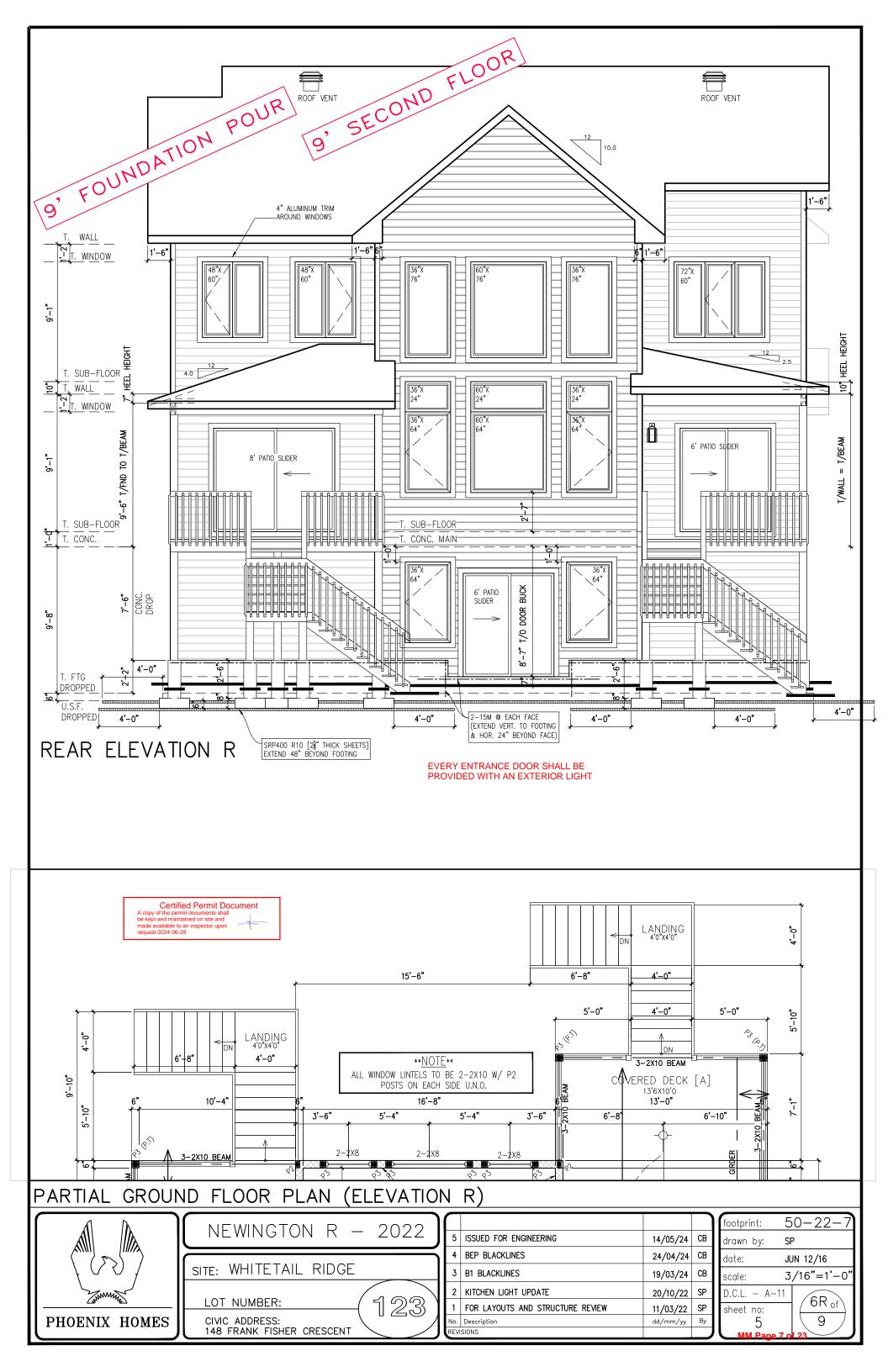


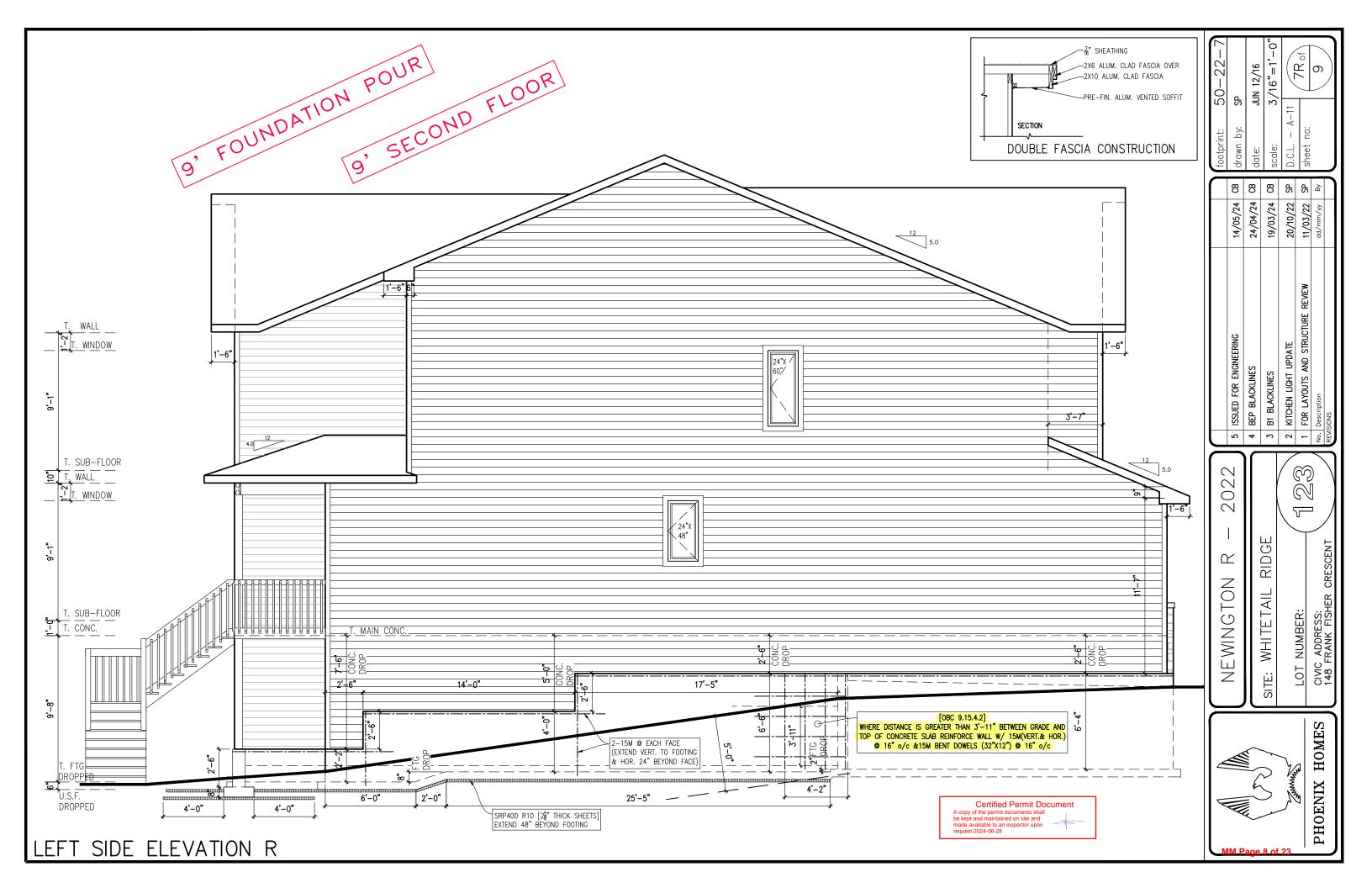


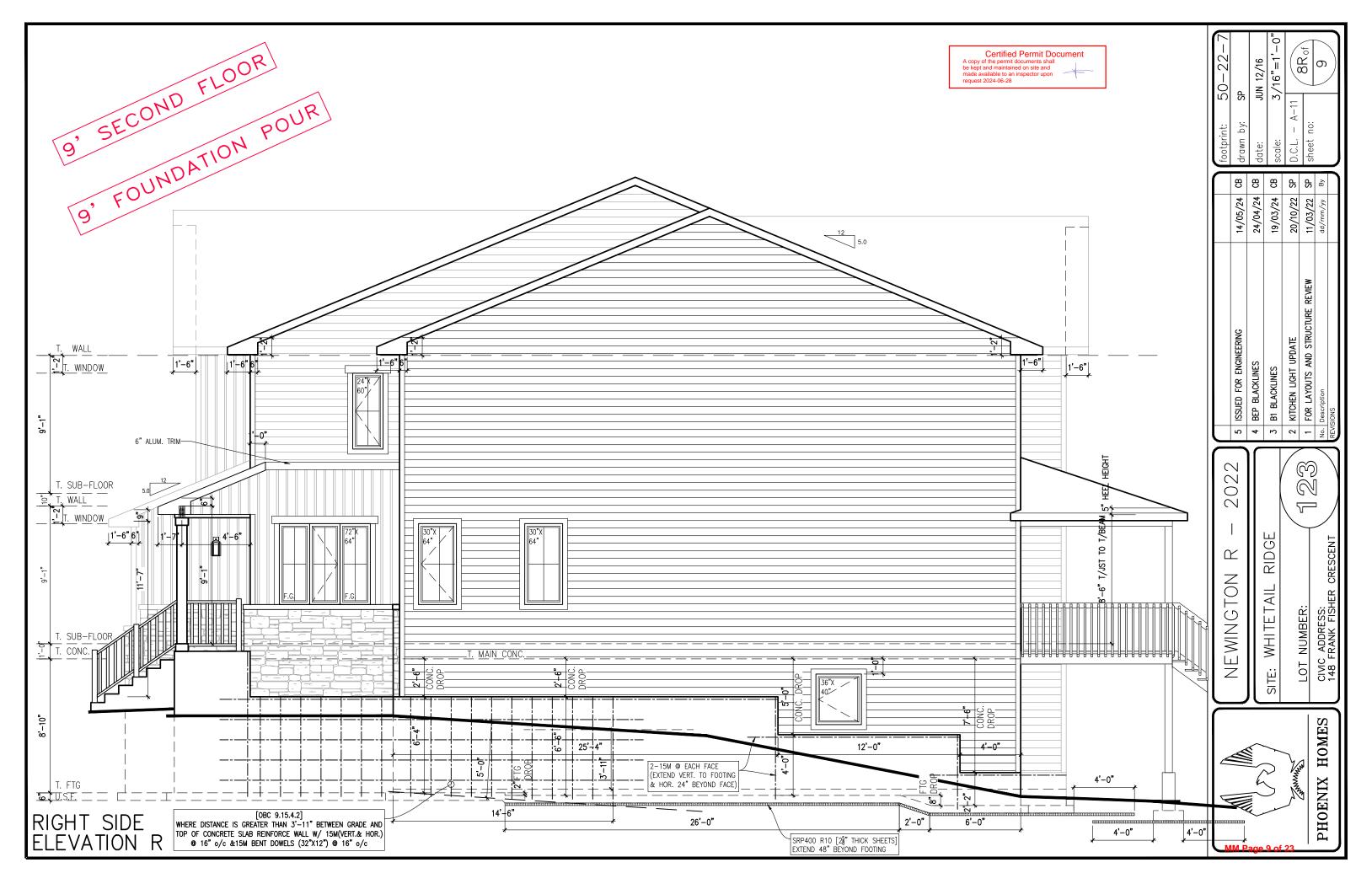


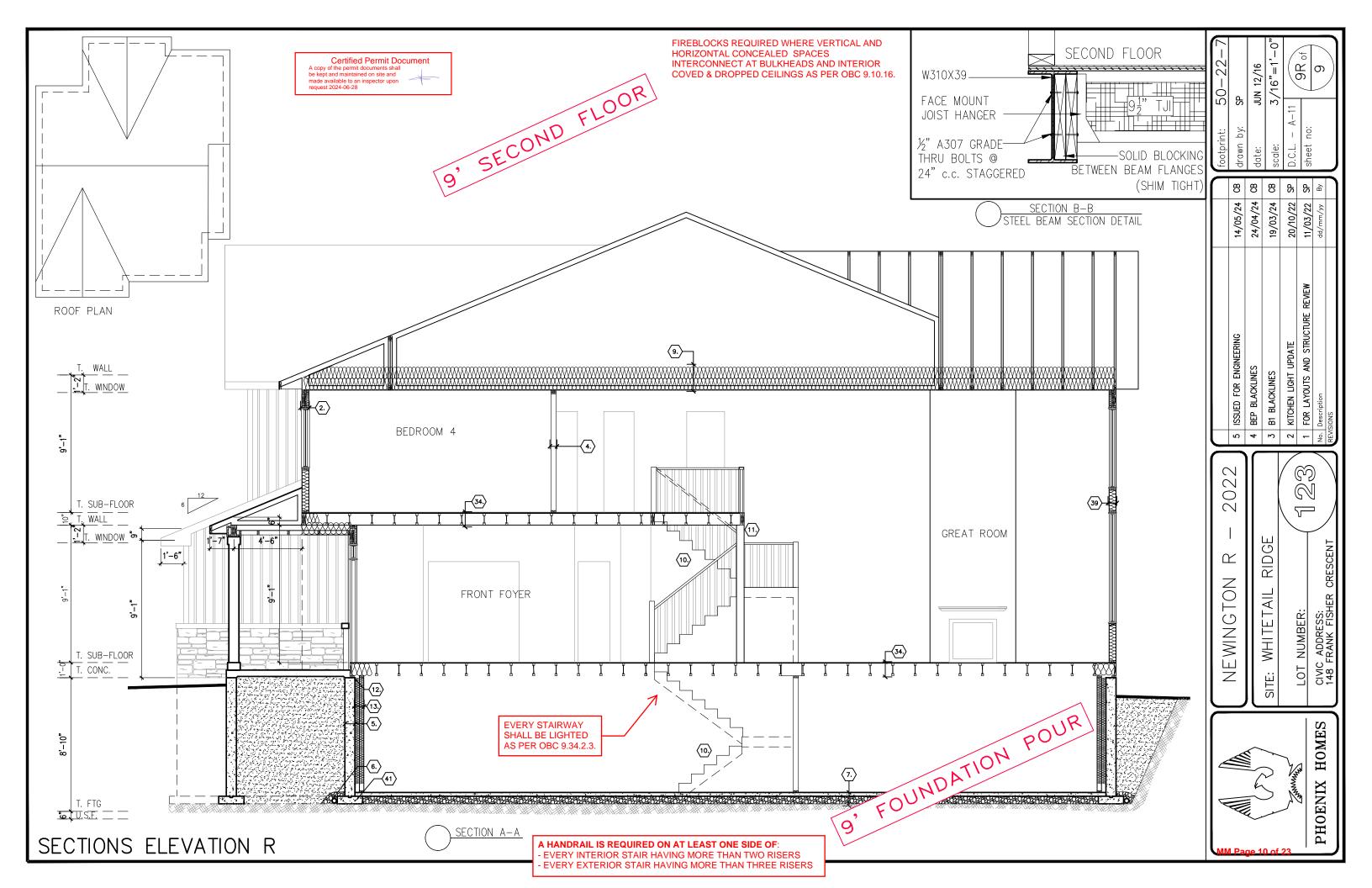












PROVIDE A COMPLETE PACKAGE OF SEALED TRUSS AND FLOOR PLANS PRIOR TO THE FRAMING INSPECTION.



GLUED AND NAILED

LEVEL AND FLOOR CONTAINER NOTE	S
Current Date:	10/20/2022
File Name:	Newington M Option 2 Ext.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 @ 19.2" O.C.	28-00-00	9 1/2" NI-20	1	6	MFD	
L0 - FJ2 @ 19.2" O.C.	24-00-00	9 1/2" NI-20	1	2	MFD	
L0 - FJ3 @ 19.2" O.C.	20-00-00	9 1/2" NI-20	1	6	MFD	
L0 - FJ4 @ 19.2" O.C.	19-00-00	9 1/2" NI-20	1	4	MFD	
L0 - FJ5 @ 19.2" O.C.	16-00-00	9 1/2" NI-20	1	12	MFD	
L0 - FJ6 @ 19.2" O.C.	12-00-00	9 1/2" NI-20	1	2	MFD	
L0 - FJ7 @ 19.2" O.C.	42-00-00	9 1/2" NI-40x	1	9	MFD	
L0 - FJ8 @ 19.2" O.C.	32-00-00	9 1/2" NI-40x	1	2	MFD	
L0 - FJ9 @ 19.2" O.C.	18-00-00	9 1/2" NI-80	1	2	MFD	
L0 - BM1	20-00-00	1 3/4" x 9 1/2" (2.0E 3100) WestFraser LVL	3	3	MFD	
L0 - BM2	18-00-00	1 3/4" x 9 1/2" (2.0E 3100) WestFraser LVL	2	2	MFD	
L0 - BM3	13-00-00	1 3/4" x 9 1/2" (2.0E 3100) WestFraser LVL	2	2	MFD	
L0 - BM4	10-00-00	1 3/4" x 9 1/2" (2.0E 3100) WestFraser LVL	1	1	MFD	
L0 - BM5	5-00-00	1 3/4" x 9 1/2" (2.0E 3100) WestFraser LVL	2	4	MFD	
L0 - Ca1	12-00-00	1 1/8" x 9 1/2" APA Rim Board	1	16	MFD	
L0 - Bk1	5-00-00	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 Product Supported Mtl SIMPSON LT259 9 1/2" NI-20 1 3/4 x 9 1/2" WF LVL 2- 1 3/4" x 9 1/2" WF LVL SIMPSON HUS18110 SIMPSON HHUS410 SIMPSON HGUS55010 3- 1 3/4" x 9 1/2" WF LVL

FLUSH LVL LINTELS FOR **BASEMENT OPENINGS** SPECIFIED ON PAGE 2R. LINTELS ON THIS PAGE TO BE NEGLECTED, AS STATED ON **KOLLARD'S REVIEW (ITEM 18)**

Certified Permit Document A copy of the permit documents shall be kept and maintained on site and made available to an inspector upon request 2024-06-28

THIS DESIGN COMPLIES WITH:

- PART 4 OR 9 OF OBC 2012 Reg. 332/12 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

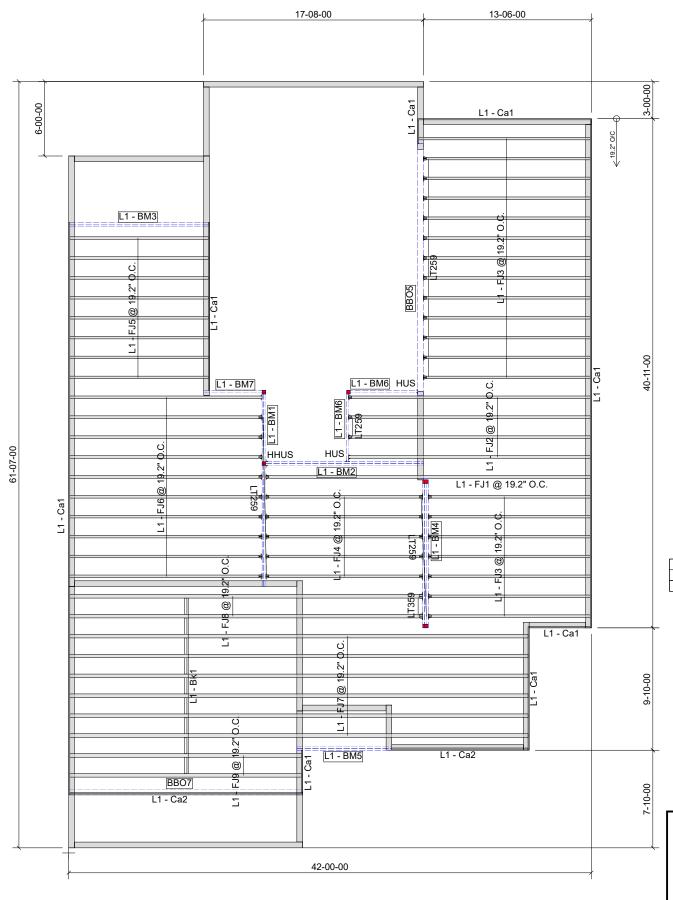
PLAN.
- BLOCKING MATERIAL WILL BE SUPPLIED AND INDICATED AS "BLOCKING". NO LONGER ONLY 12' LENGTHS.



PHOENIX HOMES **NEWINGTON** OPT #2 IN-LAW SUITE 1ST FLOOR 1 OF 2

DATE: MM/28/2102223

PROVIDE A COMPLETE PACKAGE OF SEALED TRUSS AND FLOOR PLANS PRIOR TO THE FRAMING INSPECTION.



GLUED AND NAILED

OLOLD AND NAILLD	
LEVEL AND FLOOR CONTAINER NOTES	
Current Date:	10/20/2022
File Name:	Newington M Option 2 Ext.mmdl
Level Name:	2nd Floor
Building Code - Design Methodology:	NBCC 2015
Floor Container:	FC2
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	
L1 - FJ1 @ 19.2" O.C.	28-00-00	9 1/2" NI-20	1	1	MFD	
L1 - FJ2 @ 19.2" O.C.	20-00-00	9 1/2" NI-20	1	4	MFD	
L1 - FJ3 @ 19.2" O.C.	14-00-00	9 1/2" NI-20	1	20	MFD	
L1 - FJ4 @ 19.2" O.C.	13-00-00	9 1/2" NI-20	1	5	MFD	
L1 - FJ5 @ 19.2" O.C.	12-00-00	9 1/2" NI-20	1	8	MFD	
L1 - FJ6 @ 19.2" O.C.	16-00-00	9 1/2" NI-40x	1	10	MFD	
L1 - FJ7 @ 19.2" O.C.	38-00-00	9 1/2" NI-80	1	6	MFD	
L1 - FJ8 @ 19.2" O.C.	30-00-00	9 1/2" NI-80	1	2	MFD	
L1 - FJ9 @ 19.2" O.C.	19-00-00	9 1/2" NI-80	1	2	MFD	
L1 - BM1	16-00-00	1 3/4" x 9 1/2" (2.0E 3100) WestFraser LVL	2	2	MFD	
L1 - BM2	13-00-00	1 3/4" x 9 1/2" (2.0E 3100) WestFraser LVL	2	2	MFD	
L1 - BM3	12-00-00	1 3/4" x 9 1/2" (2.0E 3100) WestFraser LVL	2	2	MFD	
L1 - BM4	12-00-00	1 3/4" x 9 1/2" (2.0E 3100) WestFraser LVL	3	3	MFD	
L1 - BM5	8-00-00	1 3/4" x 9 1/2" (2.0E 3100) WestFraser LVL	2	2	MFD	
L1 - BM6	6-00-00	1 3/4" x 9 1/2" (2.0E 3100) WestFraser LVL	1	2	MFD	
L1 - BM7	5-00-00	1 3/4" x 9 1/2" (2.0E 3100) WestFraser LVL	1	1	MFD	
L1 - Ca1	12-00-00	1 1/8" x 9 1/2" APA Rim Board	1	12	MFD	
L1 - Ca2	12-00-00	1 1/8" x 9 1/2" APA Rim Board	2	6	MFD	
L1 - Bk1	12-00-00	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	52	MFD

	Connector Summary						
Qty	Manuf Produ	uct Skew	Supported Mtl				
2	SIMPSON HUS	18110 -	1 3/4" x 9 1/2" WF LVL				
1	SIMPSON HHU	S410 -	2- 1 3/4" x 9 1/2" WF LVL				
44	SIMPSON LT25	9 -	9 1/2" NI-20				
2	SIMPSON LT35	9 -	9 1/2" NI-80				

Certified Permit Document

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

(REFER TO INDIVIDUAL FLOOR DRAWINGS PLAN. FOR SPECIFIC LOADS & SPACING) - BLOC

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

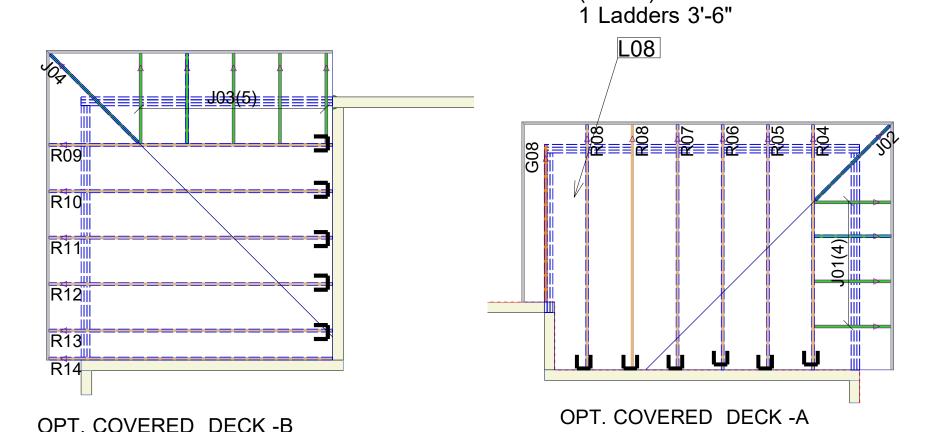
PLAN.
- BLOCKING MATERIAL WILL BE SUPPLIED AND INDICATED AS "BLOCKING". NO LONGER ONLY 12' LENGTHS.



PHOENIX HOMES NEWINGTON OPT #2 IN-LAW SUITE 2ND FLOOR 2 OF 2

MM/239/21325²³

PROVIDE P.ENG APPROVED TRUSS PACKAGE WITH SPECIFICATIONS TO BUILDING INSPECTOR AT FRAMING INSPECTION



TYPICAL OTTAWA DESIGN LOADS

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

TYPICAL SPACING = 24.0 IN C/C

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

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

HURRICANE AND SEISMIC TIES:

(F = 6")

- 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 2014. THE TRANSFER OF THESE LOADS TO THE ENTIRE STRUCTURE BELOW HAS NOT BEEN ANALYZED.



A copy of the permit documents shall be kept and maintained on site and made available to an inspector upon request 2024-06-28

> PHOENIX HOMES **NEWINGTON**

Certified Permit Document

OPT.COVERED DECKS

ALPA LUMBER GROUP DATE: MM/Bage 14-of 23 210 Prescott Street P.O. Box 189 Kemptville, Ontario K0G 1J0 Civil • Geotechnical •

Structural • Environmental •

Hydrogeology •

(613) 860-0923

FAX: (613) 258-0475

May 15, 2024

Kollaard File # 240020 - LOT123

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made available to an inspector upon
request 2024-06-28

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, 148 Frank Fisher Crescent, Lot # 122 White Tail Ridge, Arnprior, Kollaard Associates File # 240020

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

- Phoenix Homes, Lot # 123, White Tail Ridge, Pages # 1R to 9R, Dated 14/05/2024
- Grandor, High Roof Truss Layout, Newington 'R', Dated 06/21/2023
- Grandor, Low Roof Truss Layout, Newington Extended In-Law Suite, Dated 04/29/2022
- Grandor, 2nd Floor Joist Layout, Newington OPT # 2 In-Law Suite, Dated 10/20/2022
- Grandor, 1st Floor Joist Layout, Newington OPT # 2 In-Law Suite, Dated 10/20/2022

Kollaard Associates offers the following comments:

Second Floor Plan - Pages # 4R:

- 1. It is the opinion of Kollaard Associates that the proposed lintels and supporting posts shown on Phoenix Homes Pages # 4R are adequate.
- 2. The proposed tall wall noted on Phoenix Homes Pages # 1R is adequate.
- 3. Posts supporting girders may consist of built up 2x6 posts as indicated on Phoenix Homes Pages # 4R 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.

Ground Floor Plan – Pages # 3R:

5. It is the opinion of Kollaard Associates that the proposed lintels, beams and supporting posts shown on Phoenix Homes Pages # 3R are adequate







- Ramset a 2x6 to the top flange of all steel beams to attach the above framing, floor joists and flush LVL beams.
- 7. The proposed web packing of the steel beam detailed on Phoenix Homes Sheet # 9R is adequate.
- 8. Truss design is by others. A roof truss layout will need to be provided for the rear covered deck.
- 9. Floor joist design and flush LVL beams within the floor structure are by the manufacturer.

Basement Plan – Pages # 2R:

- 10. It is the opinion of Kollaard Associates that the proposed steel beams steel posts shown on Phoenix Homes Sheet # 2R are adequate.
- 11. It is the opinion of Kollaard Associates that the proposed lintels and posts shown on Phoenix Homes Sheet # 2R are adequate.
- 12. It is the opinion of Kollaard Associates that the proposed deck(s) beams, posts, joists, sonotubes and ledger connection shown on Phoenix Homes Sheet # 2R and 5R are adequate.
- 13. The front porch slab reinforcement described on Phoenix Homes Sheet # 1R is adequate.
- 14. As noted on Phoenix Homes Sheet # 2R, the framed walls supporting the intermediate landing may be supported by the basement slab.
- 15. The proposed 8'-10" foundation walls conform to 2012 OBC Table 9.15.4.2.A. ensuring that the grade difference between the basement slab and the exterior grade (including the garage slab) does not exceed 7'-61/2".
- 16. The proposed stepped down foundation walls (ie. framed knee wall above) conform to 2012 OBC Table 9.15.4.2.A. ensuring that the grade difference between the basement slab and the exterior grade (including the garage slab) does not exceed 3'-11". Where the grade difference between the basement slab and the exterior grade (including the garage slab) exceeds 3'-11", the foundation reinforcement shown on Phoenix Homes Sheet # 7R and 8R is adequate to withstand the lateral earth pressures.
- 17. The proposed strip footings, interior pad footings and exterior pad footings shown on Phoenix Homes Page # 2R and noted on Phoenix Homes Sheet # 1R are adequate.
- 18. Floor joist design, flush LVL beams within the floor structure and LVL lintels are by the manufacturer. The flush LVL lintels shown on the floor joist layout are to be neglected.

General Notes:

- 19. All gravity loads to be carried to foundation through solid blocking.
- 20. Truss design is by others.
- 21. Floor joist design, flush LVL beams within the floor structure and LVL lintels are by the manufacturer.
- 22. The self supporting stairs are to be designed by the stair manufacturer.
- 23. All dimension lumber, except non-load bearing 8 ft 2x6 studs to be No.2 grade SPF or better.



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request 2024-06-28

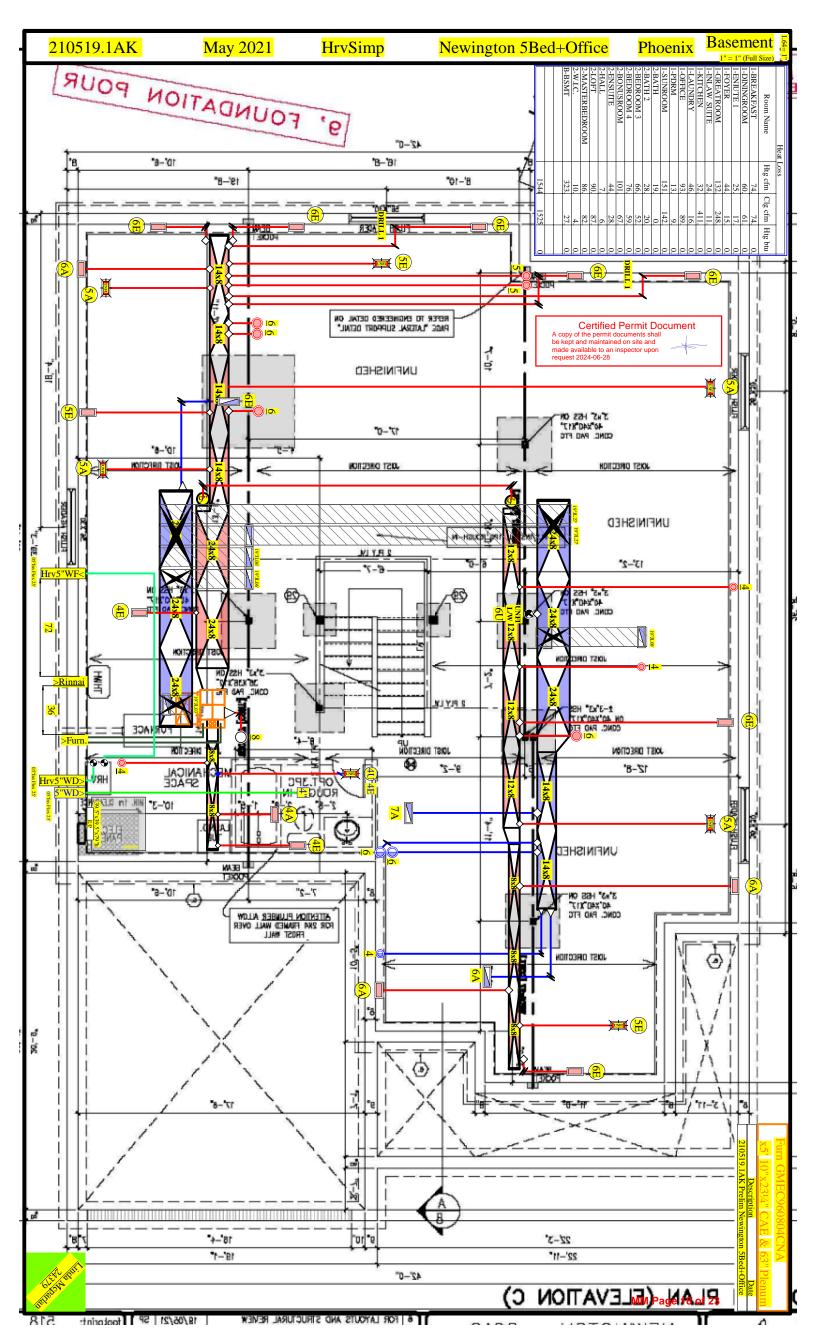
- 24. Non-load bearing 8 ft 2x6 studs to be No.3 or Stud grade SPF or better.
- 25. All guards to be as per OBC SB-7, unless otherwise mentioned and designed by others.
- 26. All brick lintels to be as per OBC Table 9.20.5.2.B.
- 27. Unless otherwise noted, LVL to be 1.8E 3000Fb LVL (Canadian Limit States bending strength of at least 39.5 MPa) with 13/4" nominal width or better.
- 28. Pemco Steel adjustable posts are designed and approved by the manufacturer. The adjustable steel posts are designed for a maximum allowable load of 106.8 kN at a maximum height of 9'-3".
- 29. All 3" x 3" x 3/16" HSS posts c/w 6" x 6" x 3/8" top and bottom bearing plates.
- 30. The assumed soil bearing resistance of 100 kPa is to be verified prior to construction.
- 31. 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.
- 32. Comments provided in this report are made in consideration of Part 9 and Part 4 (where applicable) of the 2012 OBC as amended.
- 33. This report constitutes a review of the structural information indicated on the building plans cited in this report for the client indicated above.

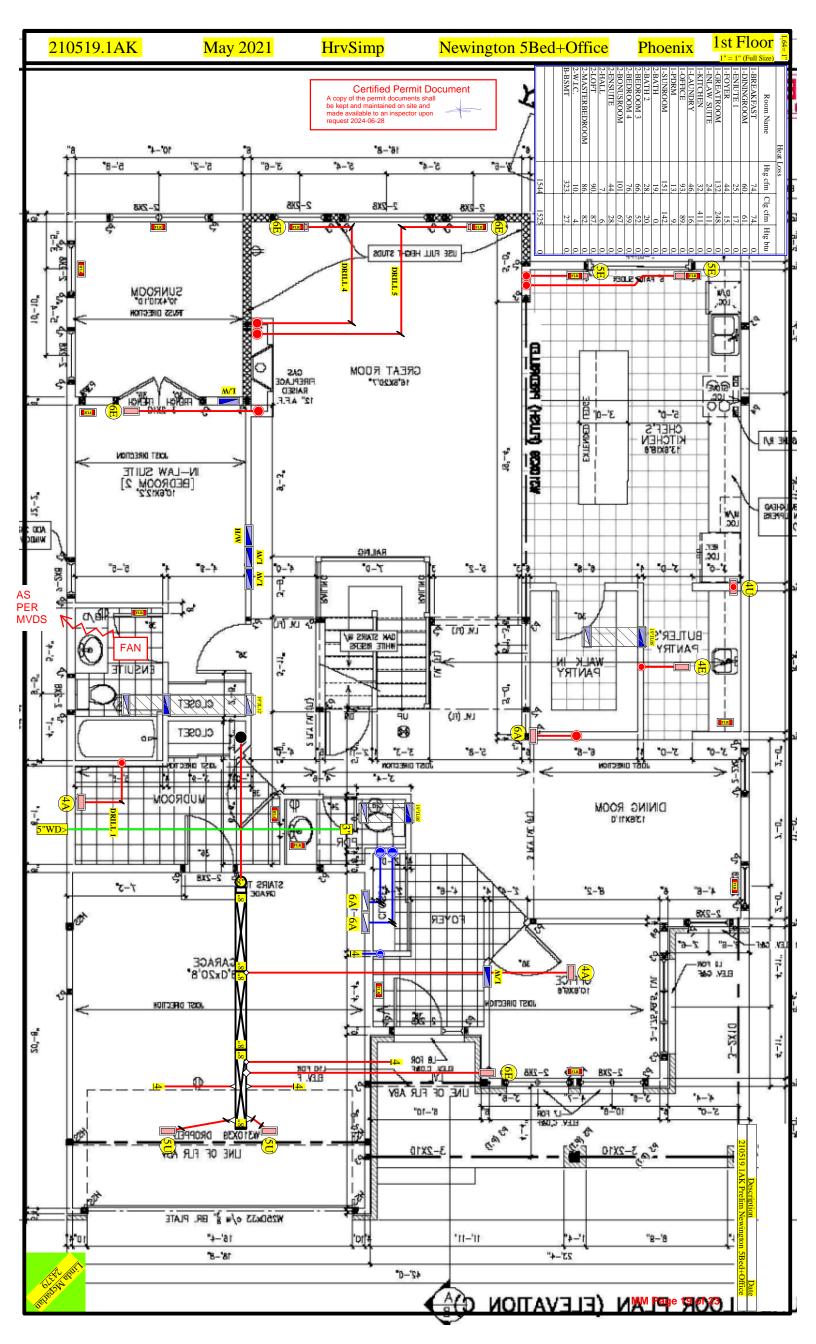
We trust this letter provides sufficient information for your present purposes. If you have any questions concerning this letter please do not hesitate to contact our office.

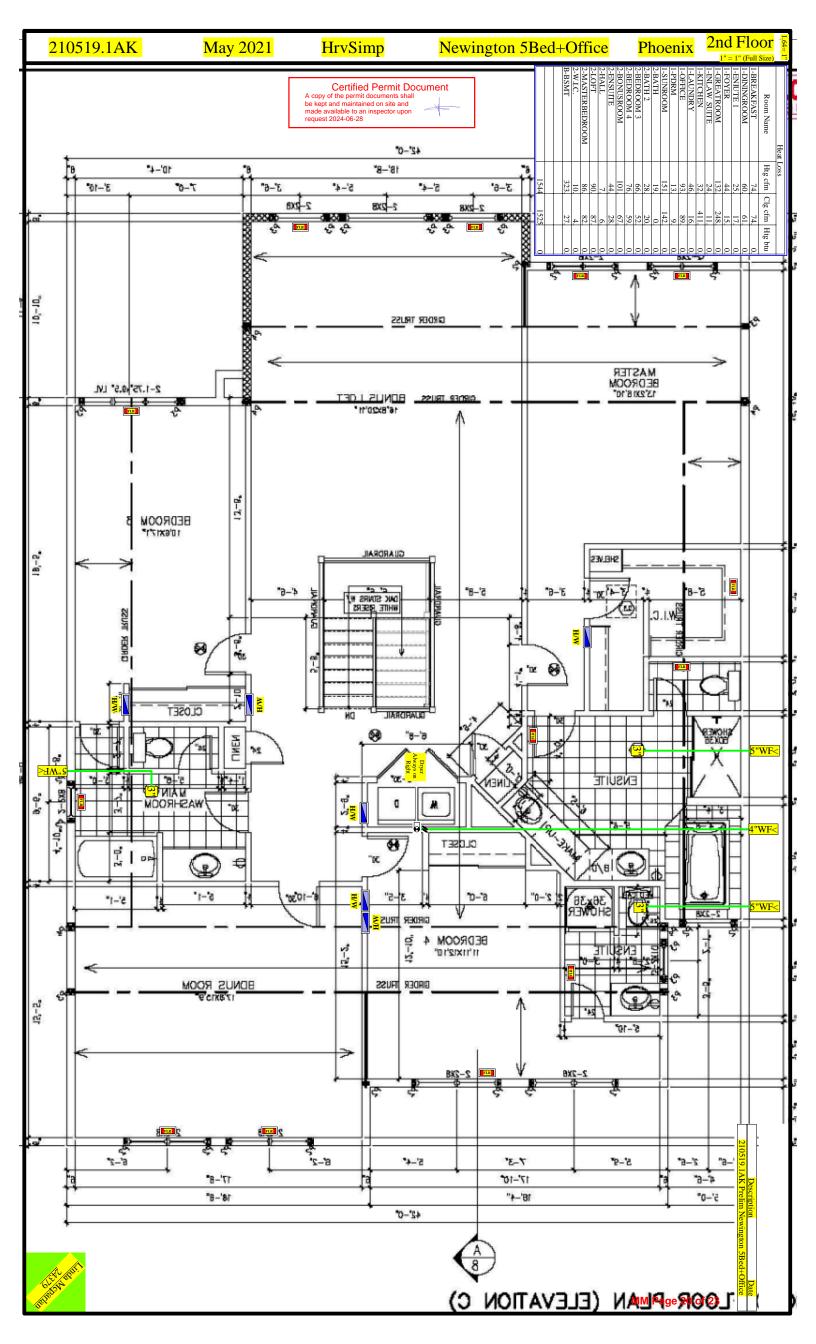
Sincerely, Kollaard Associates Inc.



Christopher Cogliati, P.Eng.



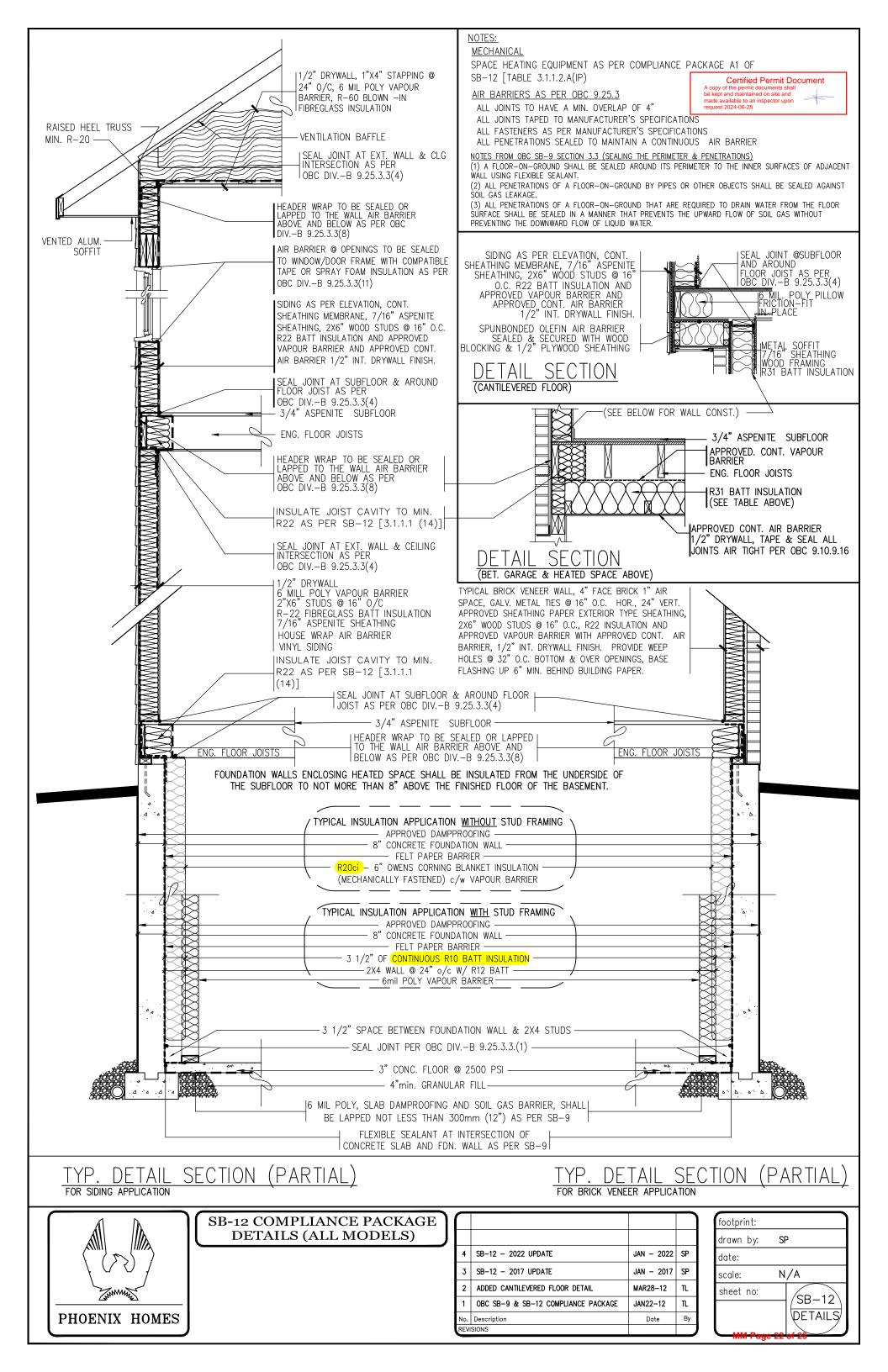




Mechanical Design Report Low rise residential Ottawa



	ise resident	Idi			<u> </u>			
Location of				House Builder PHOENIX				
Installation	Application Number		House Model (if applicable) NEWINGTON 5BED					
	Name HARDING MECHANCIAL							
Installing	Address 2210 CAVANMORE RD							
Contractor	City OTTAWA			Postal Code KOA 1LO				
	Telephone Number 613-831-2257			Fax Number 613-831-9011				
SYSTEM DE	SIGN PARAMETERS			L				
Combustion A	ppliances 9.32.3.1.(1)		Heating	System				
a) X Direct	vent (sealed combustion)	only	X For	ced Air				
b) Dositiv	e venting induced draft (ex	(cept fireplaces)		n-Forced Air (Other)			
c) Natura	l draft, B-vent or induced	draft fireplace	Ele	ctric Space Heat				
d) Solid I	Fuel (including fireplaces)			diant Floor Heat (att				
e) 🗌 No Co	mbustion Appliances			`	pp, pipe & well details) tial (attach duct details)			
House Type 9.	32.3.1.(2)		Ventilat	ion System				
<u> </u>	or b) appliances only, no		L CA	N/CSA-F326				
_	except with solid fuel (inc				Forced Air System			
= ' '	pe c) appliance = Part 6 D	esign	''	-	nection to Forced Air Syst			
	e space heat			•	Not Coupled to Forced Air	System		
	orced air = Option 4		☐ Par	t 6 Design (Other -)			
-	T DESIGN REQUIRE	MENTS						
	on Capacity 9.32.3.3.(1)				TOTAL			
Master Bedroom	n <u>1</u>	x 10 L	/s =	10 L/s	_			
Unfinished Bas	ement 1	x 10 L	/s =	10	_			
Other Habitable	e Rooms 14	x 5 L/	/s =	70	90	T.V.C.		
Principal Vent	ilation Capacity 9.32.3.4.	(1)						
Master Bedroom	m <u>1</u>	x 15 L	/s =	15	<u> </u>			
Other Bedroom	s <u>4</u>	x 7.5 L	_/ _S =	30	_ 45	P.V.C.		
	Required Supple	emental Ventilation	n Capacit	y (T.V.C. less P.V.	C.) = 45			
	G) (F) (0.000 4 G)				***			
	GMEC960804CN							
	r size:GSX1							
_	ng Equipment sized accord			ions of CAN/CSA F				
Geothermal Eq	aipment designed according	g to CAN/CSA-C4	48.2:		No			
Hydronic Equip	oment designed according	to CAN/CSA-B214	:		No			
	Duct (and pipe) schematic attached including sizes, runs and material used: Yes							
VENTILATION EQUIPMENT Heat Recovery Ventilator								
·	AN COMFORT VH30100	RNC HRV						
90	L/s High 45	L/s Low						



Certified Permit Document A copy of the permit documents shall be kept and maintained on site and made available to an inspector upon request 2024-06-28

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/Certification Number							
Application No:			Wiodeli	Certification Number			
A. Project Information							
Building number, street name 148 Frank Fi	sher Cresc	ent			Unit number	123	
Municipality	Postal o	code		an number / other description	on		
Mississippi Mills			27M				
B. Prescriptive Compliand	e [indicate the	building code co	ompliance				
SB-12 Prescriptive (input design	package): P	ackage: <u>A1</u>		Table	: 3.1.1.2.A(IF	<u>P)</u>	
C. Project Design Condition							
Climatic Zone (SB-1):		uipment Effi	ciency	Space Heating F			
■ Zone 1 (< 5000 degree days) □ Zone 2 (≥ 5000 degree days)	■ ≥ 92% AF□ ≥ 84% < 9				□ Propane □ Electric		d Fuel th Energy
Ratio of Windows, Skylights & Glass				Other Building C		L Ear	ar Energy
Area of walls = $_{m^2 \text{ or } 5065}$ ft		6 % = 13.6		□ Log/Post&Beam □ Slab-on-ground □ Air Conditioning	□ ICF Above □ Walkout Ba	sement	ICF Basement
Area of W, S & G =m² or 687 _ f	Utilize window	averaging: 🗆	∕es ≣No	☐ Air Conditioning ☐ Air Sourced Hea ☐ Ground Sourced	at Pump (ASHP))	
D. Building Specifications [p	rovide values an	d ratings of the	energy eff	ficiency components p	roposed]		
Energy Efficiency Substitutions							
□ ICF (3.1.1.2.(5) & (6) / 3.1.1.3.(5) &	(6))						
□ Combined space heating and dome	stic water hea	ting systems	(3.1.1.2.(7) / 3.1.1.3.(7))		al .	
□ Airtightness substitution(s) □ Table	3.1.1.4.B Red	quired:		Permitte	ed Substitution:_		
Airtightness test required (Refer to Design Guide Attached) □ Table	3114C Rec	anited.		Permitte	ed Substitution:_		
(Note: to Design Salate / Mashed) = 1.5.2.5		quired:			ed Substitution:		
Building Component	Minimum R	SI / R values m U-Value ⁽¹⁾		Building Compo		Efficie	ncy Ratings
Thermal Insulation	Nominal	Effective	Windo	ws & Doors Provi	de U-Value ⁽¹⁾ or ER	rating	
Ceiling with Attic Space	R60		Windows/Sliding Glass Doors		oors	25	
Ceiling without Attic Space	R31		Skyligh	ts/Glazed Roofs		0.49	
Exposed Floor	R31		Mecha	nicals			
Walls Above Grade	R22		Heating	g Equip.(AFUE)		96%	
Basement Walls		R21.12	HRV E	fficiency (SRE% at 0)°C)	75%	
Slab (all >600mm below grade)			DHW H	Heater (EF)		0.8	
Slab (edge only ≤600mm below grade)	R10			(CSA B55.1 (min. 42			# Showers_1
Slab (all ≤600mm below grade, or heated)	R10		Combir	ned Heating Syster	n	NO	
(1) U value to be provided in either W/(m². E. Designer(s) [name(s) & BCIN(s			riding infor	mation herein to subs	tantiate that design	n meets the I	building code]

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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.