

CONSTRUCTION NOTES

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

- 1. ROOF CONSTRUCTION
 NO.210 (10.25kg/m²) ASPHALT SHINGLES, 11.1mm (7/16")
 ASPENITE SHEATHING WITH "H" CLIPS. APPROVED WOOD
 TRUSSES @ 600mm (24") O.C. MAX. APPROVED EAVES
 PROTECTION TO EXTEND 900mm (3"-0") FROM EDGE OF ROOF PROTECTION TO EXTEND 900mm (3-0") FROM EDGE OF ROOF AND MIN. 300mm (12") BEYOND INNER FACE OF EXTERIOR WALL, (EAVES PROTECTION NOT REQ"D. FOR ROOF 8:12 OR GREATER) 38x89 (2"x4") TRUSS BRACING @ 1830mm (6"-0") O.C. AT BOTTOM CHORD. PREFIN. ALUM. EAVESTROUGH, FASCIA, RWL & VENTED SOFFIT. ATTIC VENTILATION 1:300 OF INSULATED CEILING AREA WITH 25% AT EAVES. AND 25% AT RIDGE (OBC 9.19.1.2)
- 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
- <u>BRICK VENEER CONSTRUCTION (2"x6")</u>
 90mm (4") FACE BRICK 25mm (1") AIR SPACE,
 22x180x0.76mm (7/8"x7"x0.03") GALV. METAL TIES **②** 400mm (16") O.C. HORIZONTAL 600mm (24") O.C. VERTICAL. APP AIR BARRIER 11.1mm (7/16") EXTERIOR TYPE SHEATHING, AIR BARRIER II.Imm (// 10) EXILERION TYPE SHEAHINIG, 38x140 (2°x6") STUDS @ 400mm (16") D.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") D.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.
- BRICK VENEER CONSTRUCTION (2"x4" GARAGE WALL)
 90mm (4") FACE BRICK 25mm (1") AIR SPACE,
 22x180x0.76mm (7/8"x7"x0.03") GALV. METAL TIES @ 400mm
 (16") O.C. HORIZONTAL 600mm (24") O.C. VERTICAL. APPROVED
 AIR BARRIER, 38x89 (2"x4") STUDS @ 400mm (16") O.C. [FOR
 CLIENT UPGRADE ONLY RSI 3.35 (R19) INSULATION AND
 APPROVED VAPOUR BARRIER, 13mm (1/2") INT. DRYWALL
 FINISH.] PROVIDE WEEP HOLES @ 800mm (32") O.C. BOTTOM
 COURSE AND OVER OPENINGS. PROVIDE THRU—WALL FLASHING
 UP MIN. 150mm (6") BEHIND BUILDING PAPER. BRICK TO BE
 MIN. 150MM(6") ABOVE FINISH GRADE.
- 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, PROVIDE 38x140 (2"x6") STUDS/PLATES WHERE NOTED.
- FOUNDATION WALL/FOOTINGS: —SEE OBC 9.15.3, 9.15.4 200mm (8") POURED CONC. FOTN. WALL 20MPa (c/w 2-15M REBAR TOP & BOTTOM) WITH BITUMENOUS DAMPPROOFING AND OPT. DRAINAGE LAYER. DRAINAGE LAYER REQ. WHEN BASEMENT INSUL. EXTENDS 900 (2'-11") BELOW FIN. GRADE. MAXIMUM POUR HEIGHT 2390 (7'-10") ON 500x155 (20"x6") CONTINUOUS KEYED CONC. FTG. BRACE FOTN. 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 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
- 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.) <u>EXPOSED FLOOR TO EXTERIOR PROVIDE RSI 5.46 (R31)</u> 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.
- 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 $\frac{2}{8}$) FOR REQUIRED EXIT STAIRS SERVING A HOUSE OR DWELLING UNIT. -9.8.2.2(3) CLEAR HEIGHT OVER STAIRS SHALL NOT BE LESS

THAN 1950mm (76 ¾") -9.8.4 STEP DIMENSIONS (TABLE 9.8.4.1) STAIR COMPONENT <u>MINIMUM</u> MAXIMUM 125mm (4 15") 200mm (7 7")

RUN 255mm (4 fg") 200mm (7 fg")
RUN 255mm (10 fg") 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 RE MIN 50mm (1 fg")

BEHIND IT TO BE MIN. 50mm (1 $\frac{15}{15}$ ") -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: (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
- CONC. © 2400mm (7'-10") O.C. USE NON-SHRINK GROUT TO LEVEL SILL PLATE WHEN REQUIRED. (SEE OBC. 9.23.7)

 LL PLATE TO BE PRESSURE TREATED OR 6 MIL POLY BELOW.

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

 PLACED 3'' 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 WASSIEP)

(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") SILL PLATE ON DAMPPROOFING MATERIAL, 13mm (1/2") DIA. ANCHOR BOLTS 200mm (8") LONG, EMBEDDED MIN. 100mm (4") INTO CONC. @ 2400mm (7'-10") O.C. 100mm (4") HIGH CONC. CURB ON 350x155 (14"x6") CONC. FOOTING. ADD HORIZ. BLOCKING AT MID-HEIGHT IF WALL IS UNFINISHED.
- 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 $\mbox{\rm Kpo}_{.}$ MINIMUM AND AS PER SOILS REPORT.
- STEEL BASEMENT COLUMN (SEE O.B.C. 9.17.3.1, 3"x3"x(.188) NON-ADJUSTABLE STL. COL. WITH 150x150x9.5 3.53, (1.105) NO. SCHOLLES ST. SCH. MINI SOCIAL ST. (1.105) (1.06 N. 1.105) (1 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 150x155x9.5
 (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 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 AC STEEL BEAM. 19x64 (1"x3") CONTINUOUS WD. STRAPPING BOTH SIDES OF
- (18.) GARAGE SLAB: 100mm (4") 32MPa (4640psi) CONC. SLAB WITH 5-8% AIR ENTRAINMENT ON OPT. 100 (4") COARSE GRANULAR FILL WITH COMPACTED SUB-BASE OR COMPACTED NATIVE FILL SLOPE TO FRONT AT 1% MIN.
- 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.
- $\fbox{20.}$ 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 3RISERS, 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 (R40) RIGID INSUL. BACKING OBC 9.19.2
- FIREPLACE CHIMNEYS -OBC. 9.21.— TOP OF FIREPLACE CHIMNEY SHALL BE 915mm (3"-O") ABOVE THE HIGHEST POINT AT WHICH IT COMES IN CONTACT WITH THE ROOF AND 610mm (2"-O") 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") x 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.
- 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") 0.C. 2-15m IN THICKENED 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.
- SUBFLOOR 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
- 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 FDIN. WALL SHALL NOT BE REDUCED TO LESS THAN SUMMITTED

(3 &") THICK TO A MAX. DEPTH OF 350mm (13 \") AND SHALL

P. T. PRESSURE TREATED

BE TIED TO THE FACING MATERIAL WITH METAL TIES SPACER TIFTED

PERMIT COCCUMMENT

HORIZONTALLY. FILL SPACE BETWEEN WALL AND FACING SOLD

WITH MORTAR. (SEE OBC 9.15.4.7)

A COPY OF the permit plans Coccuments shall be kept & maintained of site and made / available to an inspector upon request.RCI

38.) CONVENTIONAL ROOF FRAMING 38x140 (2"x6") RAFTERS @ CONVENIONAL ROOF FRAMING 38X140 (2 % b) RAFIERS ● 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. 2830mm (9'-3") SPAN & 38x140 (2"x6") ● 400mm (16") O.C. FOR MAX. 4450mm (14"-7") SPAN. RAFTERS FOR BUILT-UP ROOF TO BE 38x89 (2"x4") ● 600mm (24") O.C. WITH A 38x89 (2"x4") CENTRE POST TO THE TRUSS BELOW, LATERALLY BRACED ATT 1900mm (5' 0") O.C. WEDTCALLY 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: SIDING-METAL OR VINYL- 2"X6" @12" 0/C STUCCO -2"X6" @16" 0/C STUCCO BRICK TO 4'-0"

4. BRICK FULL HEIGHT -2-2"X6" @12" O/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

-ASSUMING MASONRY VENEER CONSTRUCTION, MAX. FLOUR
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. FLASHING FOR EXT. WALL OPENINGS (O.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 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.
- LVL BEAMS SHALL BE 2.0E WS MICRO-LAM LVL (Fb=2800ps.MIN.) OR EQUIVALENT. NAIL EACH PLY OF LVL WITH 89mm (3 1/2") LONG COMMON WIRE NAILS @ 300mm (12") O.C. STAGGERED IN 2 ROWS FOR 184, 240 & 300mm (7 1/4",9 1/2", 11 7/8") DEPTHS AND STAGGERED IN 3 ROWS FOR GREATER DEPTHS AND FOR 4 PLY MEMBERS ADD 13mm
- 1/2, 11 //8) DEPTHS AND STAGGERED IN 3 ROWS FOR GREATER DEPTHS AND FOR 4 PLT MEMBERS ADD TSMM (1/2") DIA. GALVANIZED BOLTS BOLTED AT 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 JUISTS AND BUILT-UP WOOD MEMBERS INTERSECTING FLOSH 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 R 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

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 L5

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) LVL3 LVL5 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

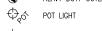
MASONRY VENEER LINTEL SCHEDULE [OBC2012] PROVIDE 6"MINIMUM BEARING EACH END 9.20.5 **OPENINGS** LINTEL SIZE 3 1\2" × 3 1\2" × 1/4" 4" × 3 1\2" × 1/4" 5" × 3 1\2" × 5/16" 5" × 3 1\2" × 7/16" 5" × 3 1\2" × 7/16" 6" × 3 1/2" × 7/16" UP TO 8'-0" TO 8'-8" 8'-8" TO 10'-10" 10'-10" TO 11'-5" 11'-5" TO 11'-9" 11'-9" TO 12'-6"

LEGEND

(2) EXHAUST VENT

DUPLEX OUTLET (12" HIGH)

HEAVY DUTY OUTLET



ф-LIGHT FIXTURE (CEILING MOUNTED) LIGHT FIXTURF

SWITCH ₹ SWITCH (3-WAY)



₩ %

DOUBLE JOIST DJ LAMINATED VENEER LUMBER

POINT LOAD FROM ABOVE

HOSE BIB

M.C. MEDICINE CABINET DOUBLE VOLUME WALL SEE NOTE (39.)

SOLID WOOD BEARING **₹**% **≅**</

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.

WHERE REQUIRED. (SEE ALSO O.B.C. 9.1.1.7.(1)

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

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 M - 2021

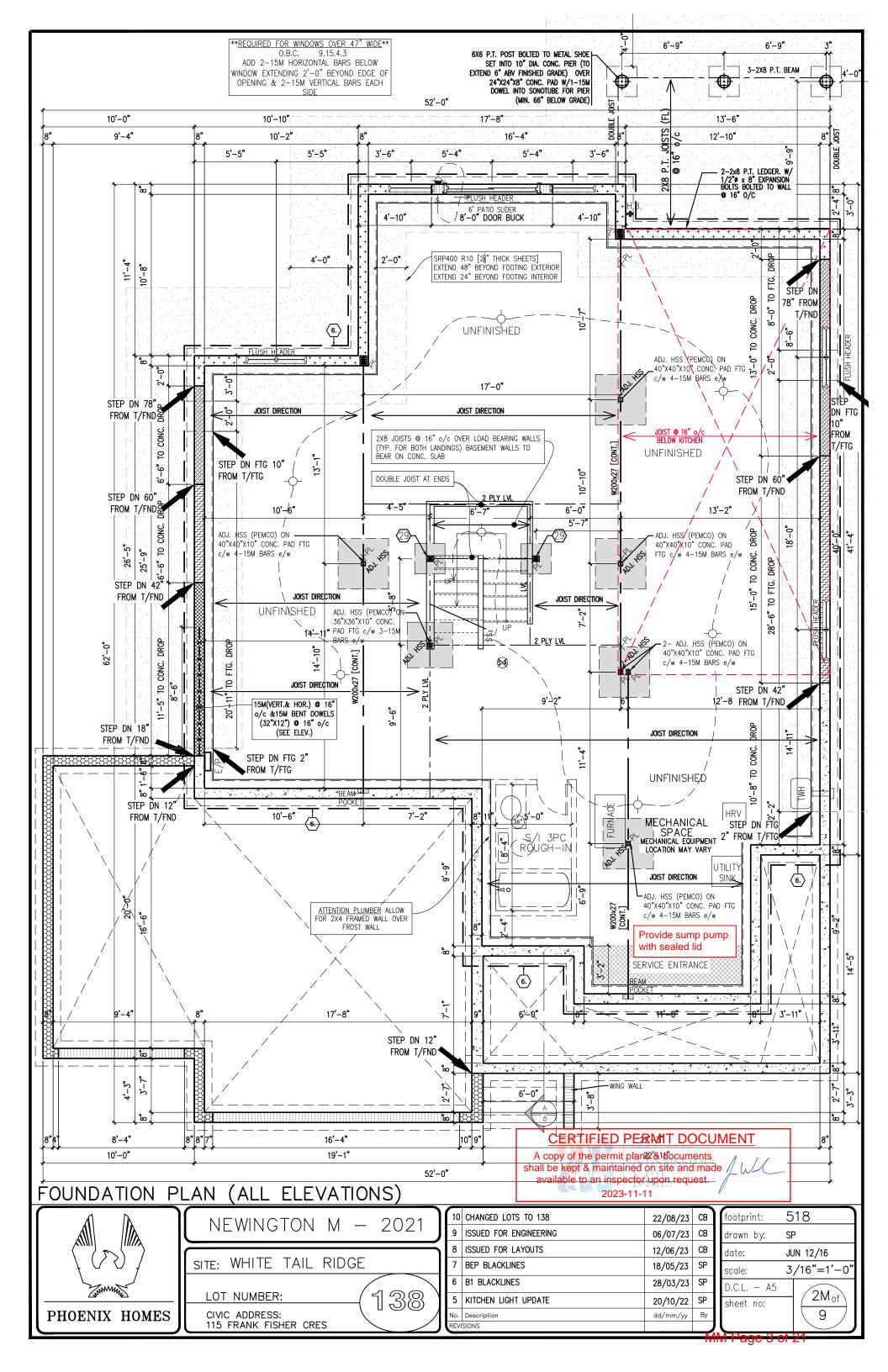
SITE: WHITE TAIL RIDGE

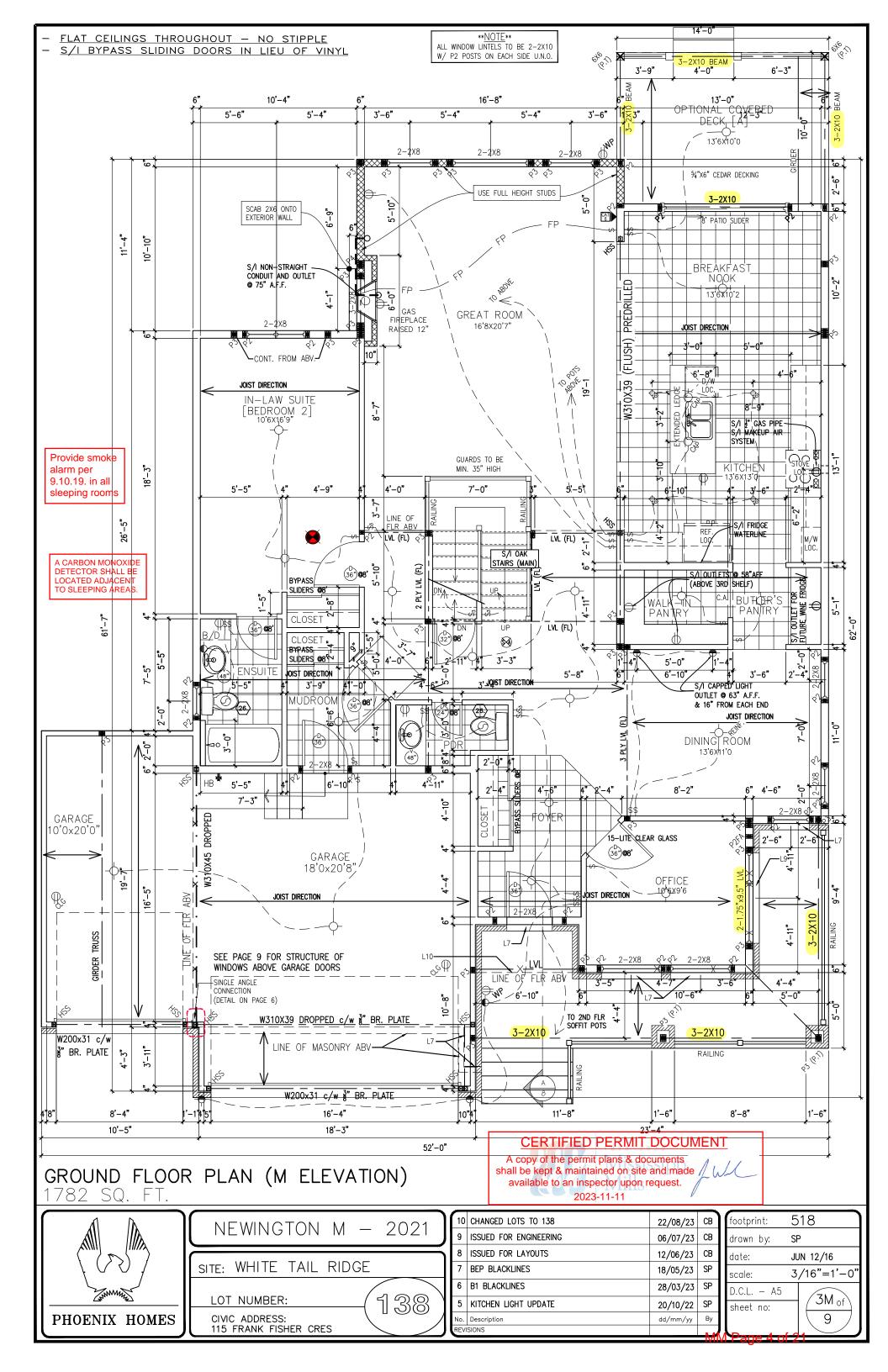
LOT NUMBER:

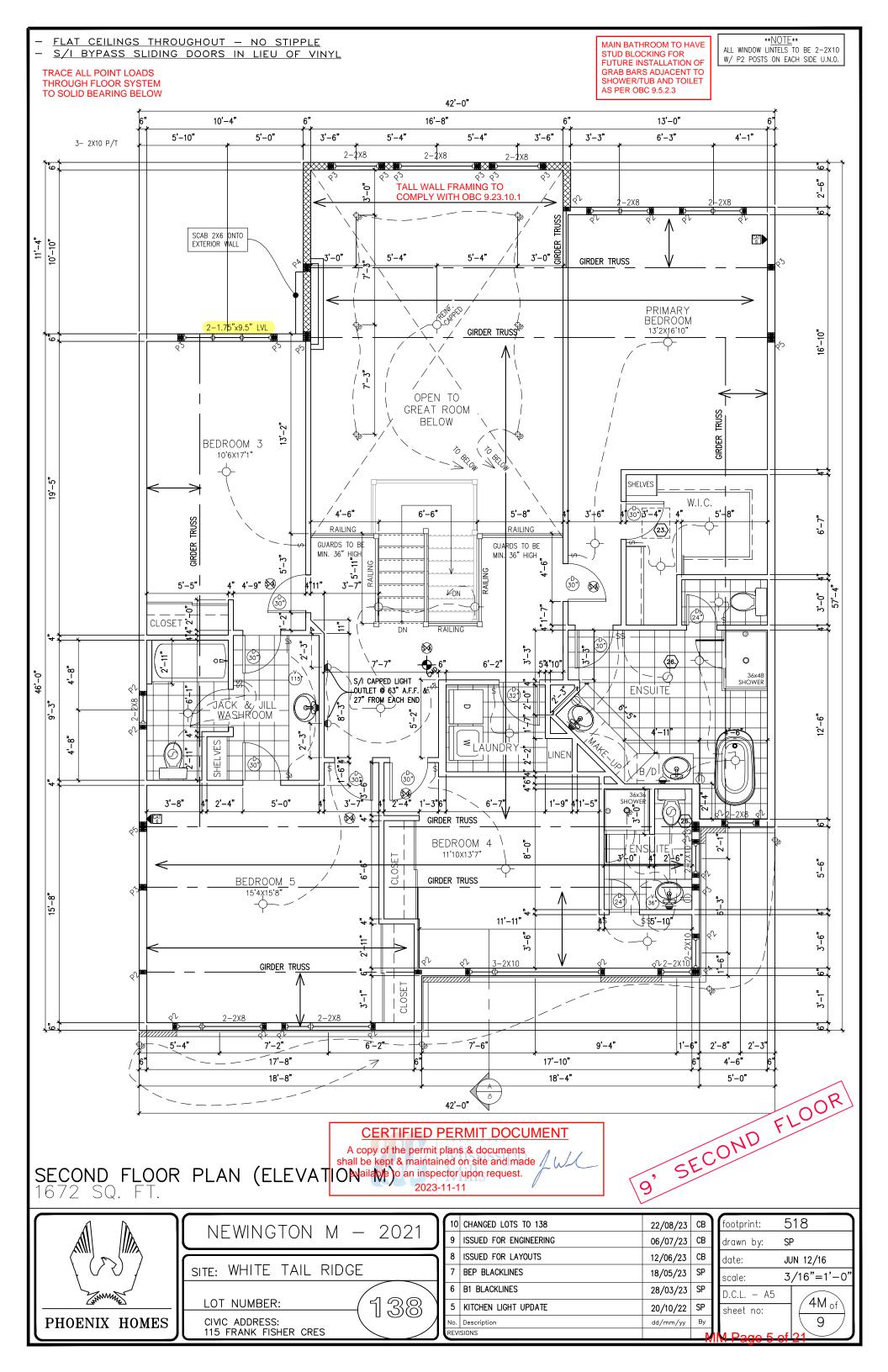
CIVIC ADDRESS: 115 FRANK FISHER CRES 138

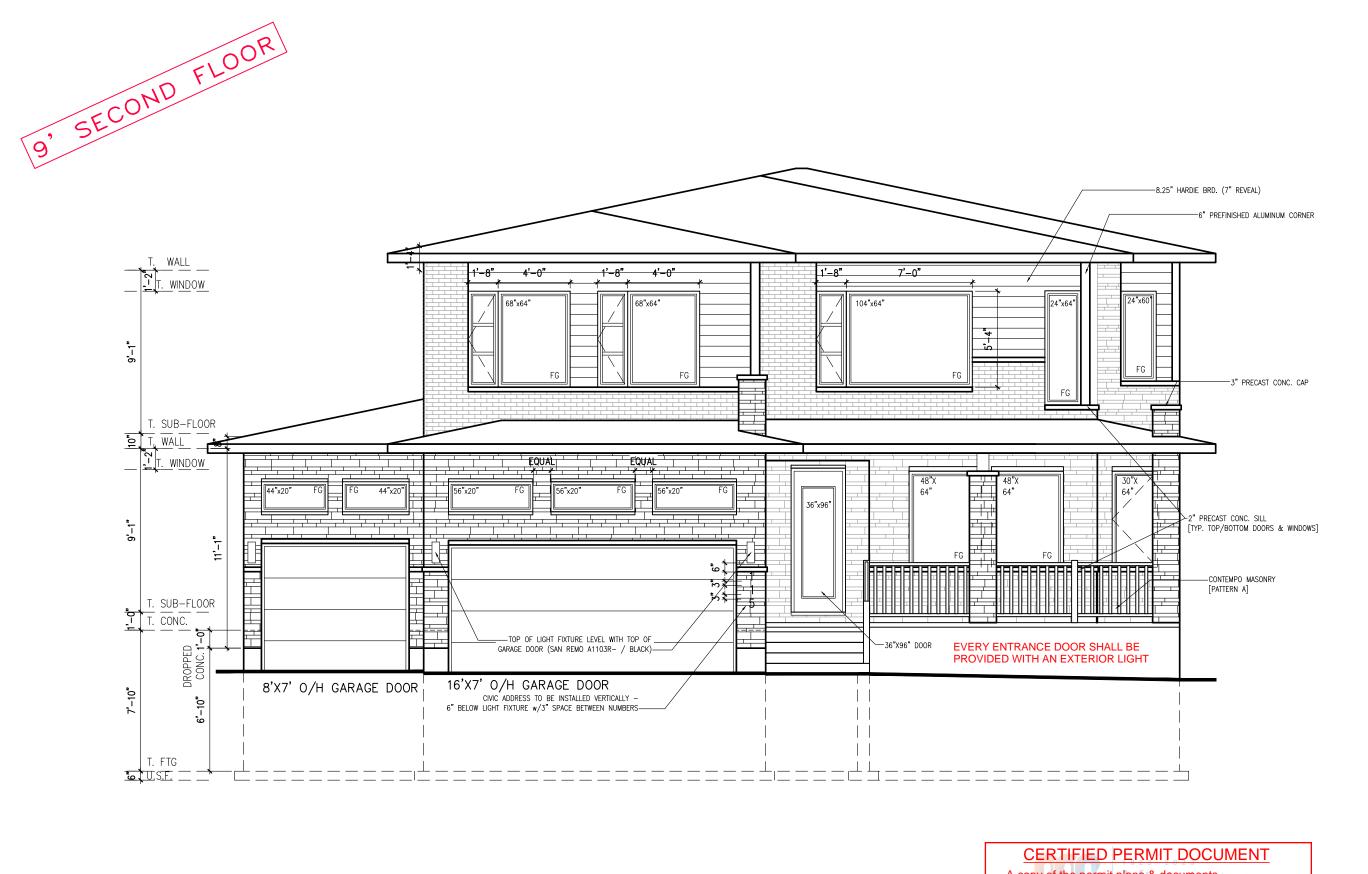
2023-11-11 10 CHANGED LOTS TO 138 CB 22/08/23 ISSUED FOR ENGINEERING CB 06/07/23 8 ISSUED FOR LAYOUTS CB 12/06/23 BEP BLACKLINES 18/05/23 SP B1 BLACKLINES 6 28/03/23 SP KITCHEN LIGHT UPDATE SP 20/10/22 dd/mm/yy Description

518 footprint: drawn by: SP JUN 12/16 date: 3/16"=1'-0'scale: D.C.L. - A5 $1M ext{ of}$ sheet no: 9









A copy of the permit plans & documents shall be kept & maintained on site and made // available to an inspector upon request. 2023-11-11

SITE: HOMES **PHOENIX**

 \widetilde{SM}

20/10/22

3/16"=1

8 8 8 8 8 8

10 CHANGED LOTS TO 138
9 ISSUED FOR ENGINEERING
8 ISSUED FOR LAYOUTS
7 BEP BLACKLINES
6 B1 BLACKLINES
5 KITCHEN LIGHT UPDATE

IDGE

 $\overline{\simeq}$

TAIL

WHITE

CIVIC ADDRESS: 115 FRANK FISHER

101

202

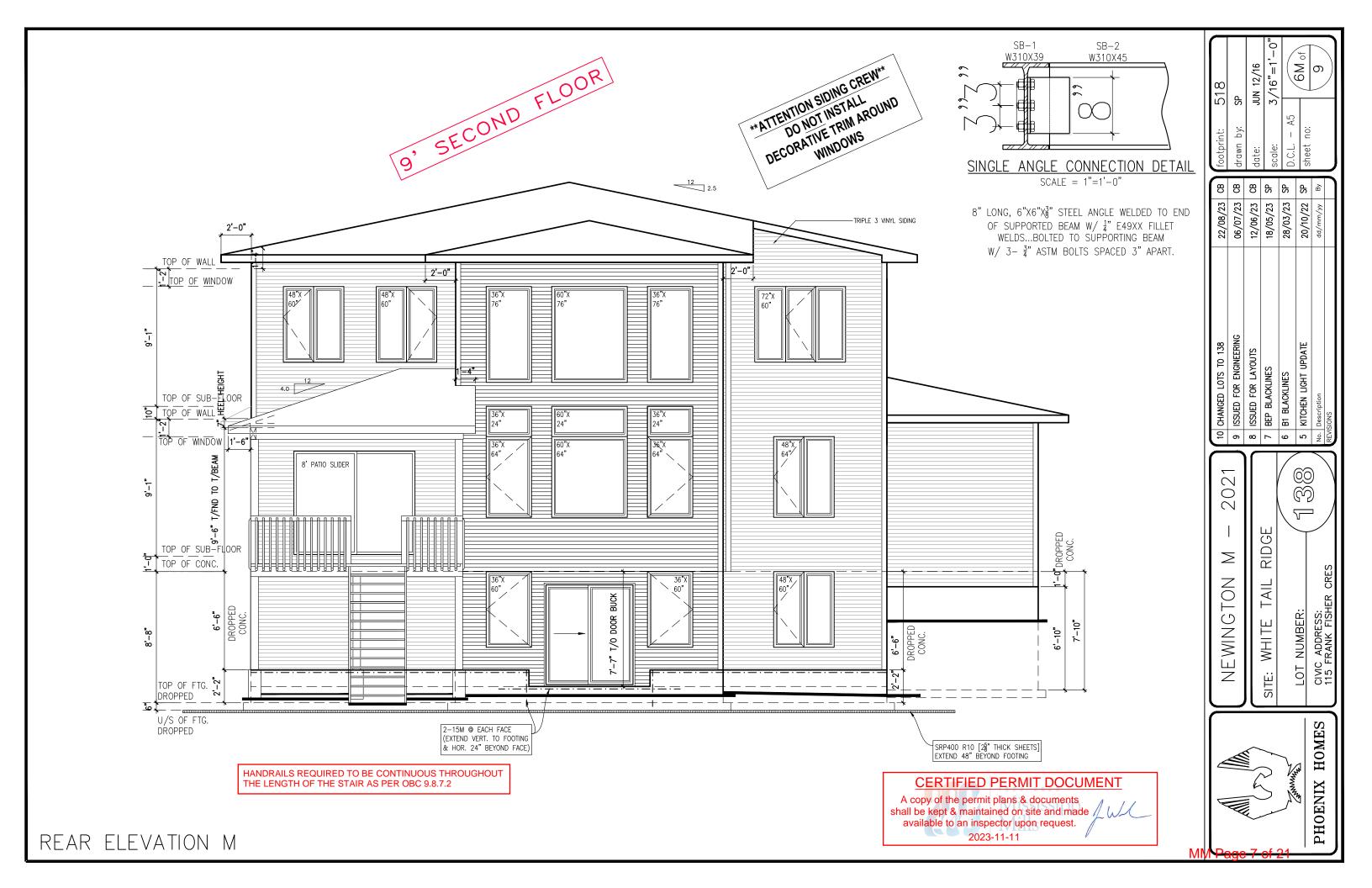
NOL

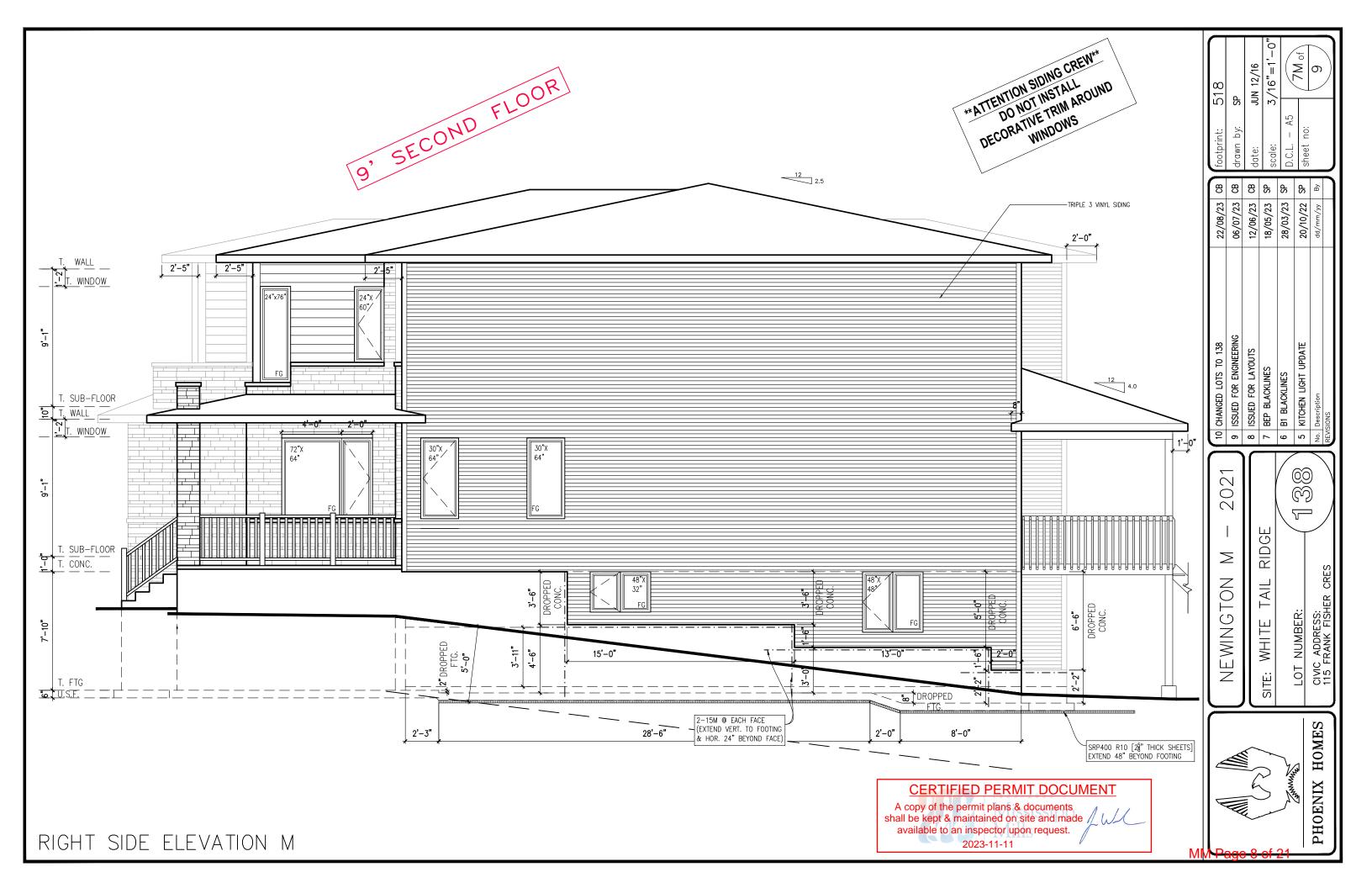
NEWING

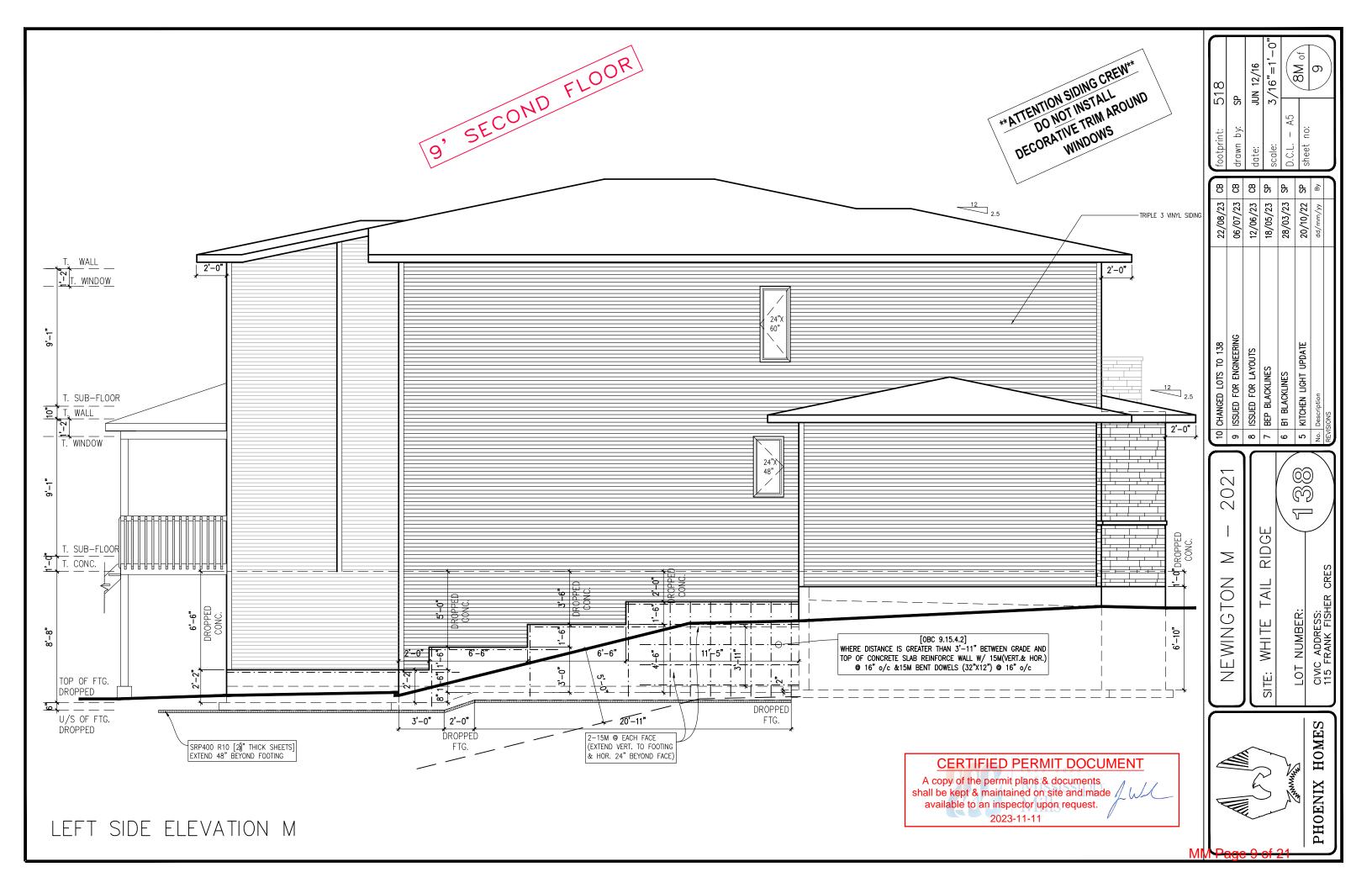
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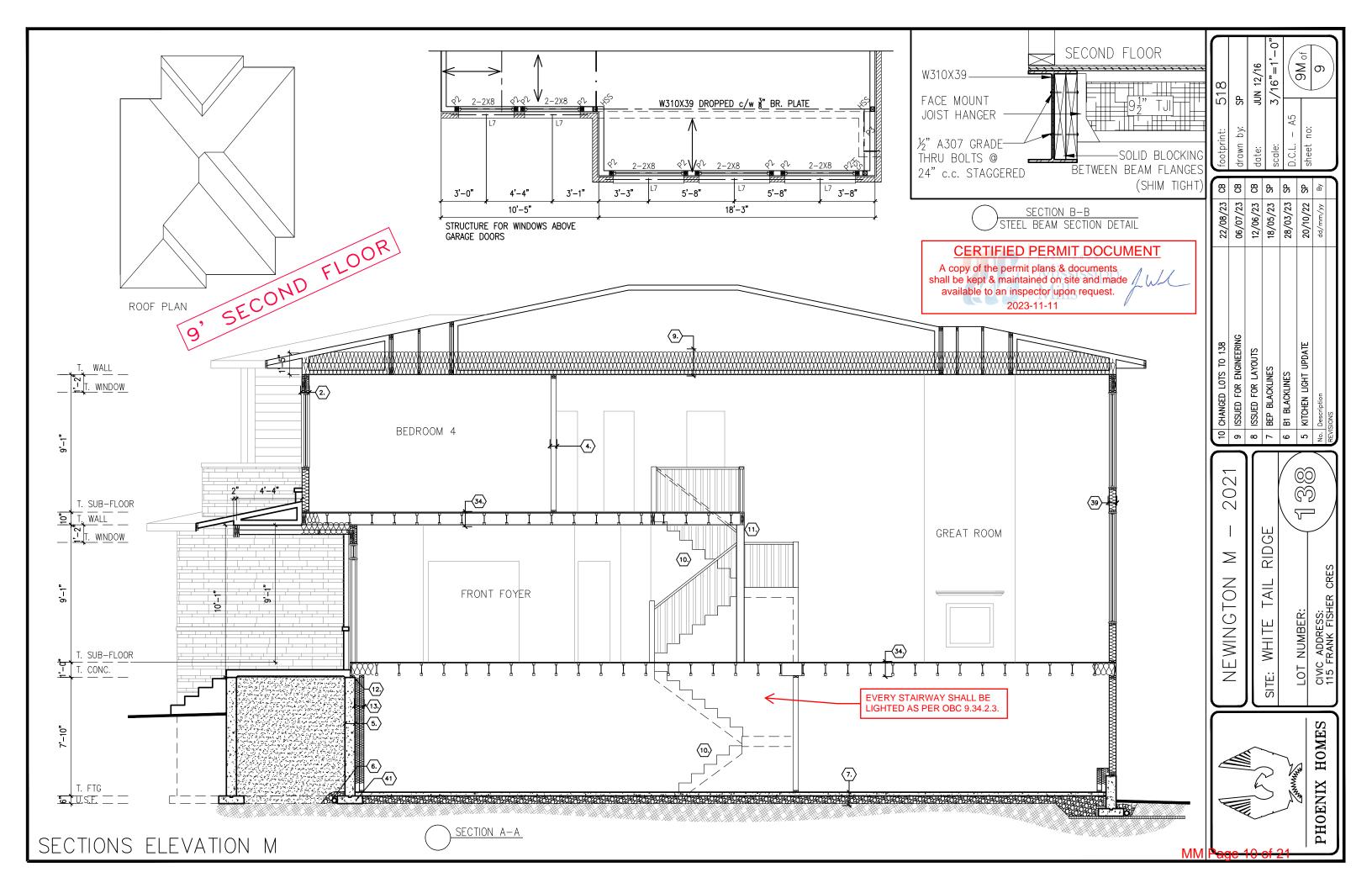
51 SP

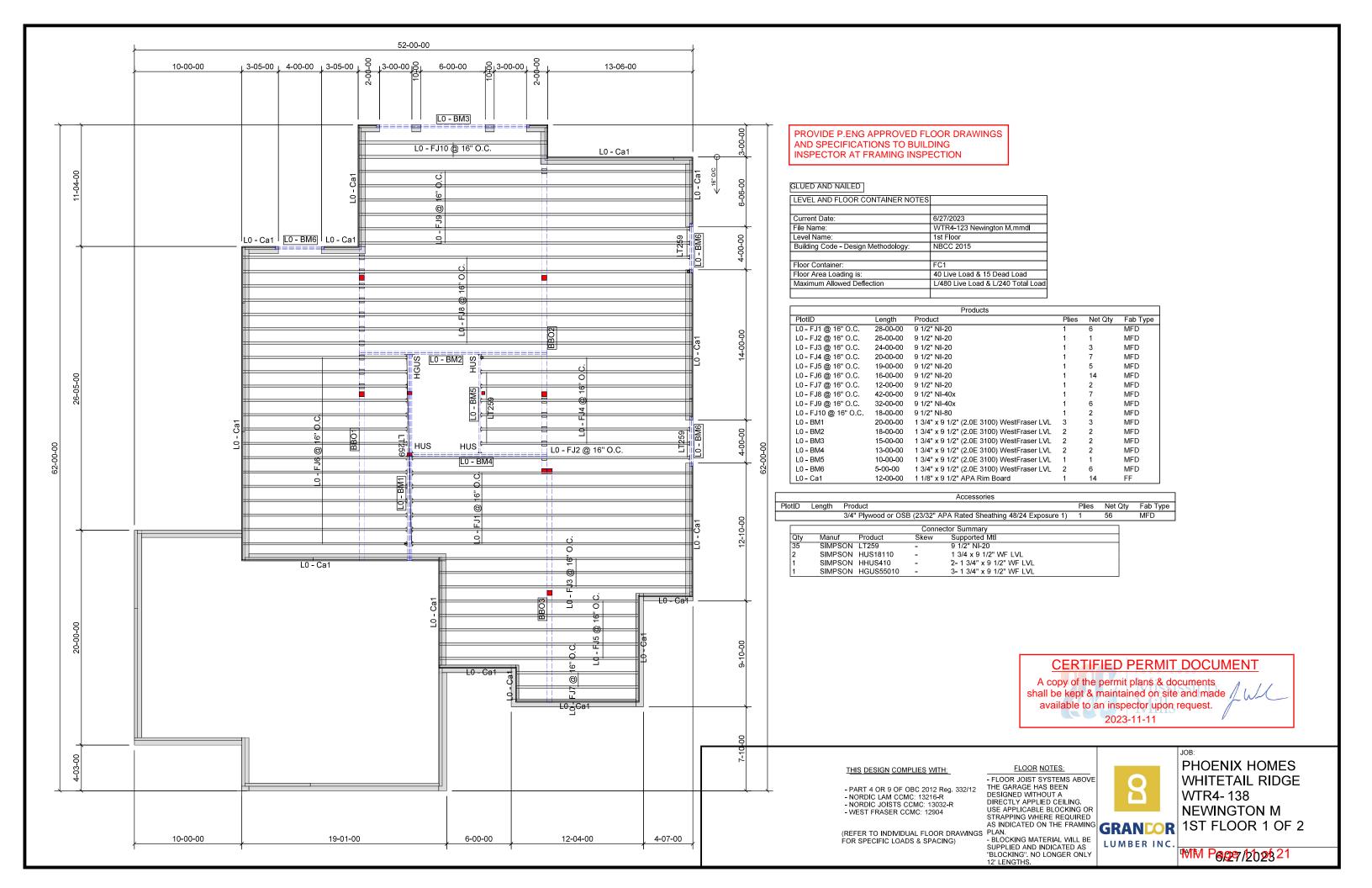
by:

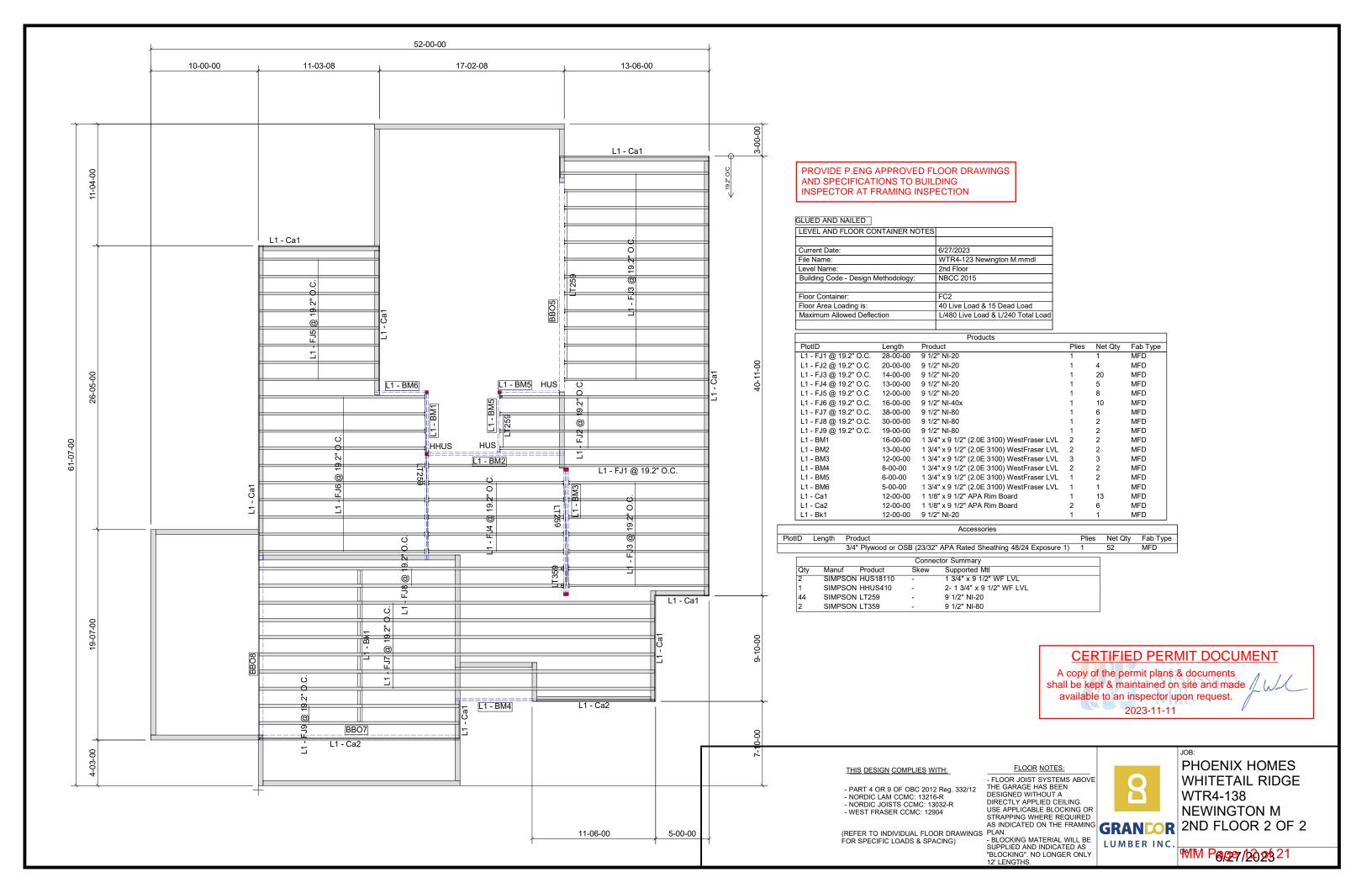


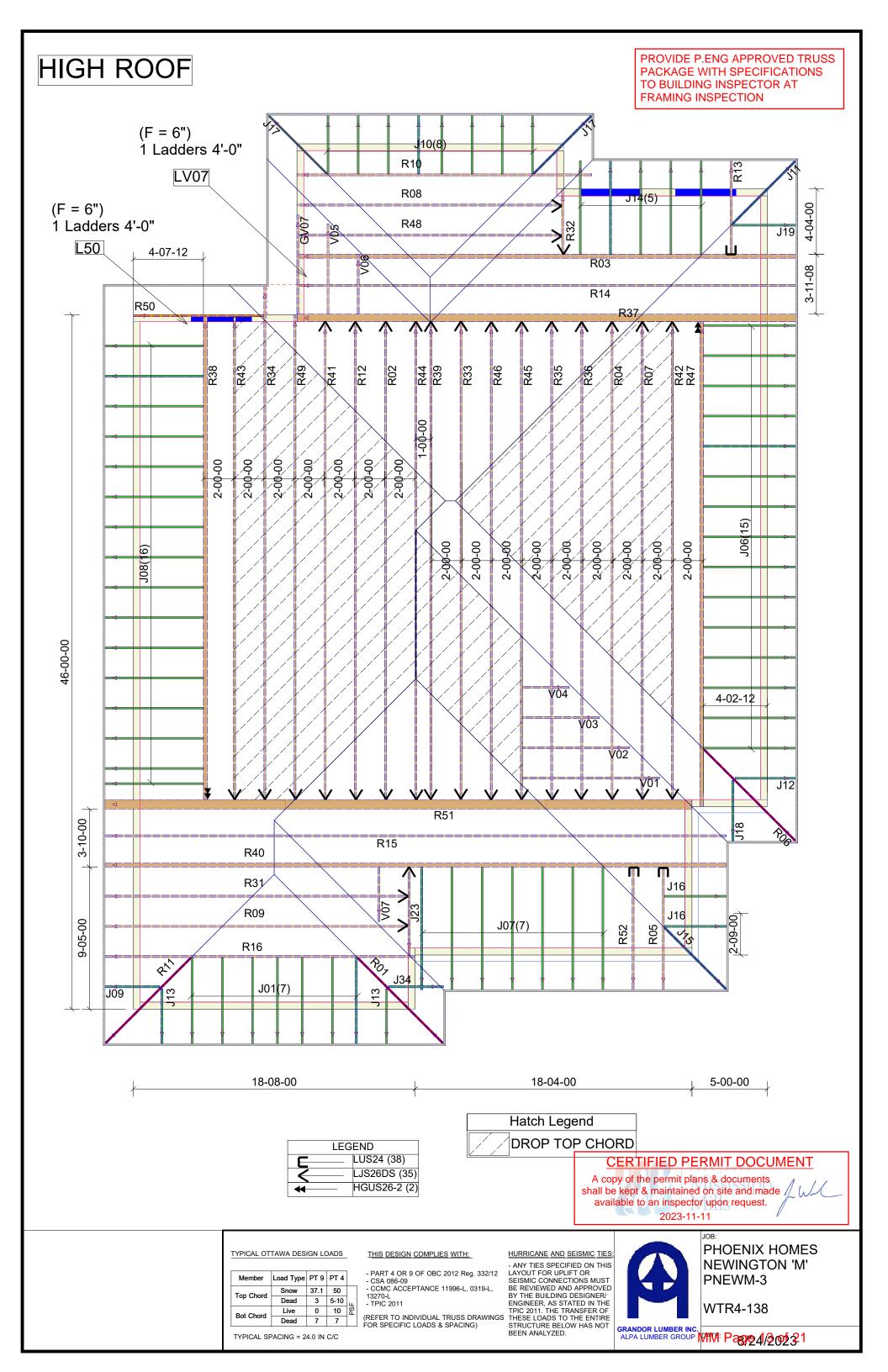


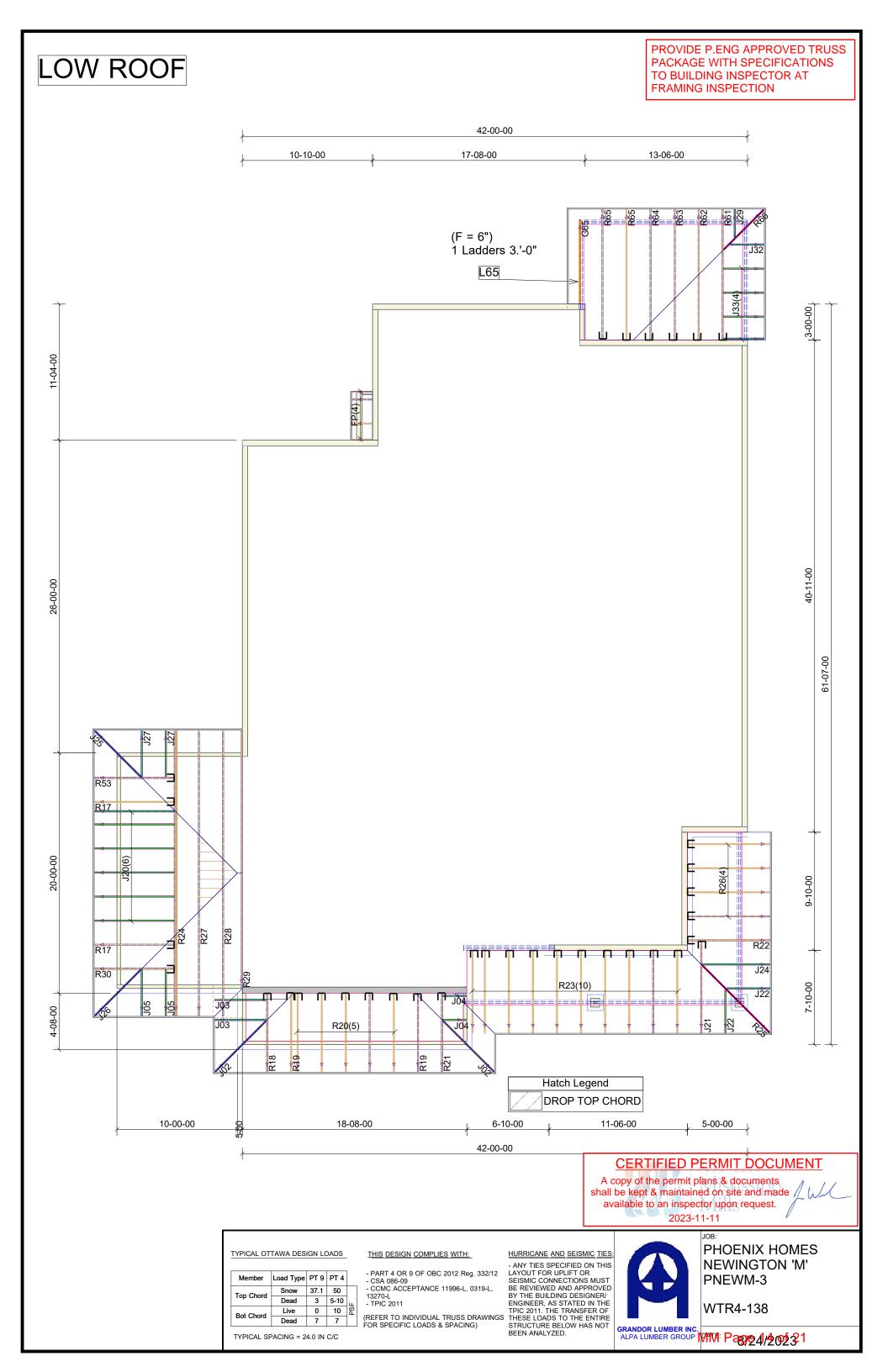












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(613) 860-0923

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August 31, 2023 (Revised)

Kollaard File # 230020 – LOT138

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, 115 Frank Fisher Crescent, Lot # 138 White Tail Ridge, Arnprior, Kollaard Associates File # 230020

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

- Phoenix Homes, Lot # 138, White Tail Ridge, Pages # 1M to 9M, Dated 06/07/2023
- Grandor, High Roof Truss Layout, Newington 'M', WTR4-138, Dated 08/24/2023
- Grandor, Low Roof Truss Layout, Newington 'M', WTR4-138, Dated 08/24/2023
- Grandor, 2nd Floor Joist Layout, WTR4-138, Newington M, Dated 06/27/2023
- Grandor, 1st Floor Joist Layout, WTR4-138, Newington M, Dated 06/27/2023

Kollaard Associates offers the following comments:

Second Floor Plan - Pages # 4M:

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

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2023-11-11

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





- 6. 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 # 9M is adequate.
- 8. The proposed single angle connection of two steel beams detailed on Phoenix Homes Sheet # 6M is adequate.
- 9. Posts supporting girders may consist of built up 2x6 posts as indicated on Phoenix Homes Pages # 3M and are laterally supported by plywood or OSB sheathing (i.e. posts form part of sheathed exterior walls unless noted).
- 10. Truss design is by others.
- 11. Floor joist design and flush LVL beams within the floor structure are by the manufacturer.

Basement Plan – Pages # 2M:

- 12. It is the opinion of Kollaard Associates that the proposed steel beams and posts shown on Phoenix Homes Sheet # 2M are adequate.
- 13. It is the opinion of Kollaard Associates that the proposed deck beams, posts, joists, sonotubes and ledger connection shown on Phoenix Homes Sheet # 2M and are adequate.
- 14. The front porch slab reinforcement described on Phoenix Homes Sheet # 1M is adequate.
- 15. As noted on Phoenix Homes Sheet # 2M, the framed walls supporting the intermediate landing may be supported by the basement slab.
- 16. 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".
- 17. 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 exceeds 3'-11", the foundation reinforcement shown on Phoenix Homes Sheet #8M is adequate to withstand the lateral earth pressures.
- 18. The proposed strip footings, interior pad footings and exterior pad footings shown on Phoenix Homes Page # 2M and noted on Phoenix Homes Sheet # 1M are adequate.
- 19. Floor joist design, flush LVL beams within the floor structure and LVL lintels are by the manufacturer. All posts supporting flush LVL lintels are to be P2 posts unless otherwise noted.

General Notes:

- All gravity loads to be carried to foundation through solid blocking.
- 21. Truss design is by others.
- 22. Floor joist design, flush LVL beams within the floor structure and LVL lintels are by the manufacturer.
- 23. The self supporting stairs are to be designed by the stair manufacturer.

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- 24. All dimension lumber, except non-load bearing 8 ft 2x6 studs to be No.2 grade SPF or better.
- 25. Non-load bearing 8 ft 2x6 studs to be No.3 or Stud grade SPF or better.
- 26. All guards to be as per OBC SB-7, unless otherwise mentioned and designed by others.
- 27. All brick lintels to be as per OBC Table 9.20.5.2.B.
- 28. 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.
- 29. 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".
- 30. All 3" x 3" x 3/16" HSS posts c/w 6" x 6" x 3/8" top and bottom bearing plates.
- 31. The assumed soil bearing resistance of 100 kPa is to be verified prior to construction.
- 32. 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.
- 33. Comments provided in this report are made in consideration of Part 9 and Part 4 (where applicable) of the 2012 OBC as amended.
- 34. This report constitutes a review of the structural information indicated on the building plans cited in this report for the client indicated above.

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

Sincerely, Kollaard Associates Inc.



Christopher Cogliati, P.Eng.

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2023-11-11

