Building to Code:

The contractor/home owner assumes all responsibility for construction of this dwelling, these plans and the notes and details herein upon commencing construction of the structure described herein. This is to include but is not limited to confirmation of and complying with all local bylaws, restrictions, regulations, setbacks, covenants, driveway access and structure to lot orientation and coverage.

covenants, driveway access and structure to lot orientation and coverage.
Our home designs and plans are prepared in accordance to the current edition British Columbia Building Code (based on the design date shown on these plans). Any subsequent changes to the building code must

be complied with during construction and must meet the minimum standards of the current building code,

• Construction is to adhere to requirements of 'GOOD BUILDING PRACTICES' by qualified trades during all aspects of construction

municipal and/or provincial, and to the satisfaction of local authorities having jurisdiction

- Never scale plan dimensions, written dimensions will always take precedence over any scaled dimension
- Conditions on site can vary and any changes to, deviations from or on-site alterations to these plans or the structure herein during construction due to site conditions are the sole responsibility of the contractor/home owner
- Increased loads upon components of the structure during construction due to temporary storage of equipment and/or construction materials can not exceed the intended design loads of any of the structural components
- Footings and foundation walls are to be of a minimum 25 MPa compressive strength concrete (at 28 days)
- Roof truss system is to be designed by professional and sealed by their engineer in accordance with applicable design standards

bearing on solid, undisturbed, inorganic bearing or licensed geo-tech approved materials

- Contractor is responsible to provide cladding and/or exterior finishes details demonstrating compliance with BCBC 2018 9.27
- Heating and/or HVAC system to be designed and installed by a professional contractor in that field in
- Insulation contractor is to provide Effective R Value calculations and ensure installation to minimum code standards per BCBC 2018 9.36

Errors and/or Omissions:

Every effort has been made by 'Skyline Drafting and Design' to ensure accuracy and sufficient detail(s) in its home designs. We cannot, however, assume any responsibility for unintended errors or omissions that may affect construction. The contractor/home owner must assume the responsibility to completely review plans, notes and details of any inaccuracies or discrepancies prior to construction and advise our office immediately to make plan revisions/replacement should it be warranted.

Structural Design and Engineering:

compliance with BCBC 2018 9.32

Design of components not specified by Part 9 of BCBC 2018 are to be certified and sealed by a certified structural engineer registered in the province of British Columbia. All residential designs and their components meet or exceed current minimum residential seismic design standards and requirements and are designed using the latest design software.

Material and Grades:

- No finger jointed lumber is allowed in structural applications
- Lumber is to be SPF Grade #2 or better
- Headers and lintels are to be 2 Ply 2x10 SPF unless noted otherwise
- Beams are to be of continuous material and may NOT be spliced
- Engineered beams to be LVL, PSL, LSL or Glulam and minimum Grade 2.0e
- Connectors, sizes and types herein are Simpson Strong Tie (SST) products
- Sheathing material to be Plywood or OSB nailed to code
- Product substitutions are at the contractor/owners' expense and must include sealed shop drawings from the designer
- The contractor must have a copy of all installation drawings, shop drawings
- and layouts necessary for the project available on site at all times
- All suppliers must have a copy of and follow structural layouts provided by P. Eng
- and supply installation guides for products they provide to the contractor

Posts and Beams:

- Posts to be a minimum SPF Grade #2 or better
- Mechanical post to beam and post to pier connections are required.
 Posts must be restrained from movement in four directions using SST
- "AC and ACE" or equal at the top and SST "CB or BC" or equal at the bottom. Toe nailing is NOT an acceptable restraint method
- Built up posts to be nailed with two rows of 3" common nails @ 12" o/c
- Minimum bearing is to be equal to or more than the width of the member
- that it carries or as noted on the plans by P. Eng
- Beams must be restrained from lateral rotation by either blocking
- on both sides or full height studs on both sides
- Deflection limits to code minimum: L/360 for spans under 16' and L/480 is
- highly recommended for spans over 16'
- Built up beam nailing requirements:
- -2 and 3 ply members up to 18" in depth to be nailed with 3 rows of 3" nails @ 12" o/c and 4 rows of nails for members over 18" in depth
- -Nail 4 ply members as above and bolt with 2 rows @ 24" o/c or screwed
- with full depth Simpson SDS screws @ 16" o/c. Add 6 SDS screws on
- either side of a hangered beam connection
- (Bolts to be a minimum ½" Grade A305 with nuts and heavy flat washers)
 -Refer to member shop drawing for specific details during nailing

Floors and Joists:

- Floor assemblies as described in BCBC 2018 sections:
- 9.23.9 Floor joists9.23.12 Framing over openings
- 9.23.15 Sub-flooring
- 9.23.3 FastenersMechanical connectors required at all flush mount connections
- Sub-floors to be glued as well as mechanically fastened to code
- -Mid-span blocking or bridging at 7' o/c or less
- -Block last (2) joist spaces where joists are parallel to walls at a maximum spacing of 48" o/c including I-Joist floor systems

Nailing and Fastening:

- Connections as noted as above, by P. Eng or to BCBC 2018 Section 9.23.3
- Increase nailing by 20% for gun nails and DO NOT overdrive nails
- $\bullet\,$ Plate to concrete bolts to be ½" x 8" cast in place @ 48" o/c maximum
- -Concrete epoxies to be either Simpson "SET XP" or Hilti "HIT RE-500"
- All trusses, jacks and/or rafters are to be mechanically fastened to exterior wall using SST "H1 or H3" tie downs or as specified on plan

Concrete Specifications:

- Must meet minimum CSA A23.1 and A23.2 requirements
- Typical concrete mixes:

Use	Strength	Aggregate	Water Ratio	Air Content	Slump	Exposure Class
Footings	25 mPa	30 4	0.55 (max)	3-6%	3" +/- 3/4"	F0
Foundations	25 mPa	3" 4	0.55 (max)	4-7%	3" +/- 3/4"	F2
Interior Floor Slabs	32 mPa	3n 4	0.55 (max)	3-6%	3" +/- 3/4"	F0
Garage Slabs	35 mPa	30	0.55 (max)	5-8%	3" +/- 3/4"	F2, C1
Exterior Slabs & Retaining	25 mPa	3n 4	0.55 (max)	5-8%	3" +/- 3/4"	F1,C1

1. Concrete Reinforcing:

 Typical Sizes:
 Minimum Concrete cover

 12m or #4 = 1/2"
 a. Exposed to earth = 3"

 15m or #5 = 5/8"
 b. Exposed to Air = 2"

 18m or #6 = 3/4"
 c. Damproofed walls = 1

- Grade 60 Imperial reinforcing bar minimum
- A minimum 24" lap at splices w/ ties at each end of splice

2. Crack Control in Slabs:

Control joints must not exceed 20' o/c spacing

• All corners must be formed with 24"x24" bent bars

- Control joints must not exceed 20 o/c spacing
 Perimeter must have a ½" compressible joint material
- Reinforcing: 1) 10m rebar mat @ 10" o/c or 2) 6x6 8 ga welded wire mesh or 3) Fibermesh admix (1.5 lb/cu. Yd.)

- 3. Protection from Freezing:
 DO NOT pour concrete if temperature is below 5 degrees Celsius
- If concrete must be poured at temperatures below 5 degrees Celsius, it must be protected from freezing for a minimum 10 days by insulating or tenting with heat

4. Soil Bearing Capacity:

A minimum 150 kPa (3000 psf) soil bearing capacity is required. Refer to BCBC 2018
 Part 9 9.4.4.1 for methods to confirm soil capacity or retain the services of a
 Geo-Technical Engineer licensed in the Province of British Columbia

5. Inspections by P. Er

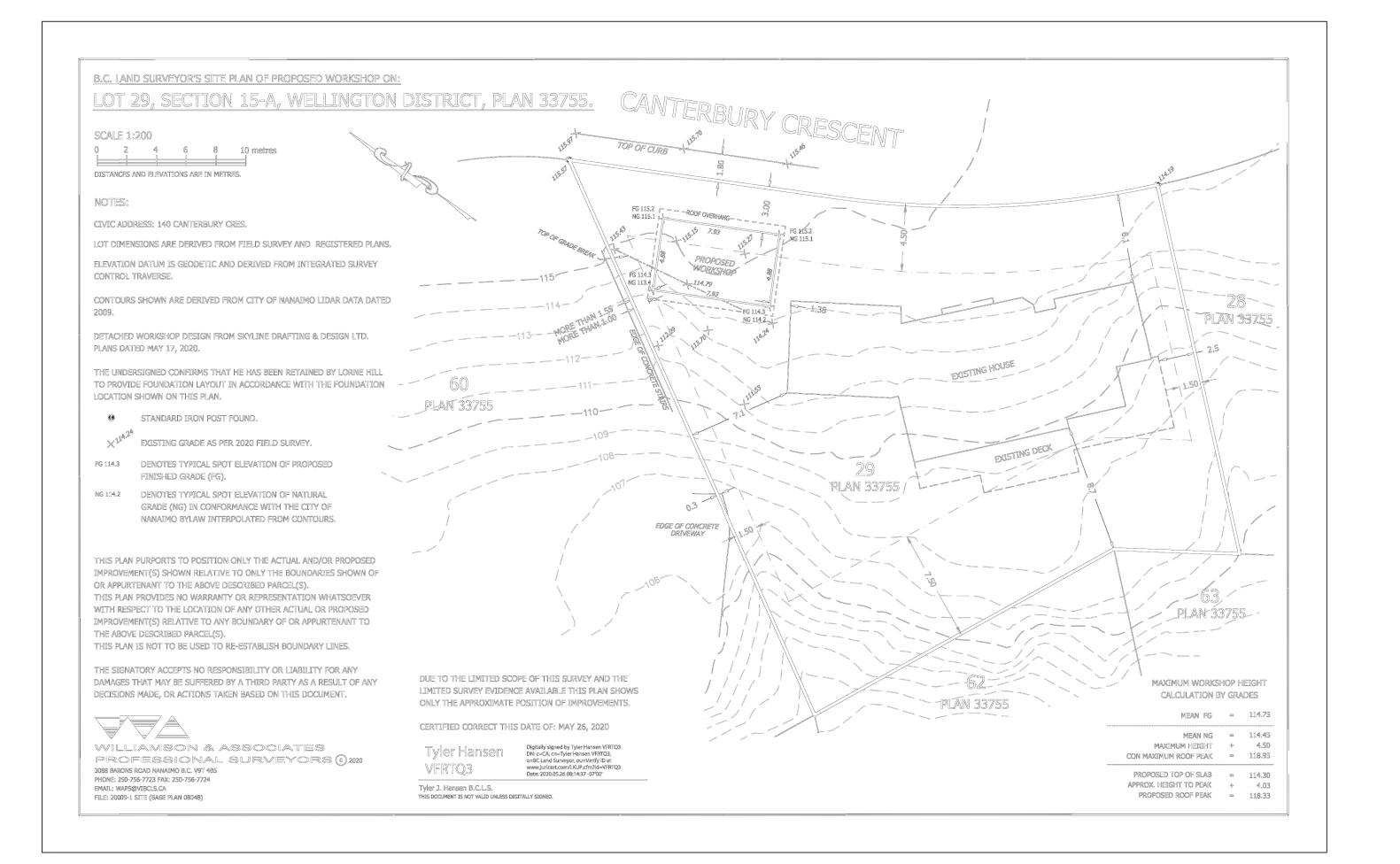
 All forming and reinforcing steel placement is to be confirmed/verified by P. Eng via on site reviews/inspections prior to pouring concrete

6. Backfilling:

• DO NOT backfill until a minimum 28 days after pour to ensure proper concrete curing. Clean, free draining, granular backfill to code must be used within 12" of walls.

GENERAL NOTES and INFORMATION

ANY DETAILS, NOTES, REQUIREMENTS OR CONDITIONS DESCRIBED ON THIS PAGE WILL BE SUPERCEDED BY ANY INSTRUCTION OR DETAIL NOTED AS PART OF THE SEALED DRAWING SET BY P. ENG









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445 Hillcrest Avenue Nanaimo, BC V9R 3M2 (250) 709-0490

Project Description:

PROPOSED WORKSHOP

Client Name: Lorne Hill
Site Address: 140 Canterbury Cres.
City: Nanaimo, BC

City of Nanaimo

Drawing Description:

Telephone No: 250-802-4101

Municipality:

NOTES/LAYOUTS

W. Porter			
17/05/2020			
Preliminary			
As Noted Below			
560-20			

Scale: 1/4" = 1'-0"

Sheet No.