

CITY OF KELOWNA

MEMORANDUM

Date: July 29, 2020
File No.: Z20-0058
To: Urban Planning Management (KB)
From: Development Engineering Manager (JK)
Subject: 286 Lake Ave. RU1 to RU1c

The Development Engineering Branch has the following comments and requirements associated with this application. The utility upgrading requirements outlined in this report will be a requirement of this development.

1) **GENERAL**

- a) The following requirements are valid for two (2) years from the reference date of this memo, or until the application has been closed, whichever occurs first. The City of Kelowna reserves the rights to update/change some or all items in this memo once these time limits have been reached.
- b) Driveway access must follow all City of Kelowna driveway standards (maximum 6.0 m wide).

2) **DOMESTIC WATER AND FIRE PROTECTION**

- a) This property is currently serviced with a Copper 13mm-diameter water service. One metered water service will supply both the main residence and the carriage house. A Mechanical Engineer to confirm service needed.

3) **SANITARY SEWER SYSTEM**

- a) Our records indicate that this property is currently serviced with a 100-mm diameter sanitary sewer service. The service will be adequate for this application.

4) **POWER AND TELECOMMUNICATION SERVICES**

- a) It is the applicant's responsibility to make a servicing application with the respective electric power, telephone and cable transmission companies to arrange for service upgrades to these services which would be at the applicant's cost. Underground services will be required for all new power and telecommunications services.

James Kay

James Kay, P.Eng.
Development Engineering Manager

AS



July 16, 2020

City of Kelowna
Urban Planning Department
1435 Water Street
Kelowna, BC

RE: Proposed Rezoning, and Heritage Alteration Permit at 286 Lake Avenue

Dear Urban Planner:

The purpose of this application is to rezone the subject property from "RU1 – Large Lot Housing" to "RU1c – Large Lot Housing with Carriage House" to allow for the construction of a carriage house. In addition to this rationale, a Heritage Report by a registered Heritage Professional was prepared as part of the submission materials.

With regards to site details, the current landscape of the property will remain the same. However, the driveway access on Water Street will be removed to provide open space for the existing dwelling, and the garage which is also accessed from Water Street will be removed to provide open space for the carriage house. We believe it is important to highlight the historical nature of the neighbourhood; therefore, the gable of the existing dwelling will be changed to shingles to match the proposed carriage house. Additionally, the proposed carriage house will be pedestrian oriented, with access from Water Street, and vehicle access from the rear lane. The principle dwelling will continue to have pedestrian access from Lake Avenue.

The proposed carriage house includes both parking for the property on the ground floor and a modest suite. The living space, located upstairs, includes 1 bedroom plus den, 1 bathroom, and an open kitchen / living plan. 48m² of outdoor open space is provided on the east side of the carriage house and windows are provided on 3 sides of the carriage house, including a dormer to match the heritage theme of the existing dwelling. The ground floor of the carriage house consists of a garage which contains two regular parking stalls for the primary house, and a parking stall for the carriage house which is separated by a wall.

The downtown area was developed with single unit dwellings on large lots dating back to the early 1900's, a time associated with the early incorporation of the City of Kelowna. The neighbourhood has seen a resurgence of development in the last 20 years. The construction of the proposed carriage house will create density in a desirable area of Kelowna, providing walkable access to many employment and commercial uses in the nearby downtown business district as well as to several parks and beaches on Okanagan Lake.

We believe this proposal is a good fit within the foundation of the neighbourhood and will contribute to positive infill in this area of Kelowna.

Regards,

Birte Decloux – URBAN OPTIONS Planning & Permits

on behalf Ian Mackay

GENERAL NOTES

- The following notes are to be included as part of the drawings.
- The General Contractor or the Owner/builder shall verify all dimensions, details, structural materials and conditions shown on the drawings or noted in the specifications.
- The General Contractor or Owner/builder shall resolve any problems arising out of any variances from the drawings and specifications, or from conditions encountered at the job site. Such resolution shall be the sole responsibility of the General Contractor or Owner/builder.
- The Designer shall not be responsible for any departure from the drawings and Specifications authorized by any inspection authority during the course of construction.
- The General Contractor or Owner/builder shall ensure that all work conform to the current Building Code adopted by the authorities having jurisdiction or local Building Codes and By-laws that may take precedence.
- The General Contractor or Owner/builder shall be responsible for correct placement of this building on the site. Any pre-existing structures must be surveyed prior to construction. The foundation must be constructed on undisturbed bearing soil or pre-engineered soil approved by a geotechnical engineer certified in the province of British Columbia and below a frost line of 2'-0" below grade.
- The Designer shall not be responsible for site conditions such as soil bearing capacity, depths of water tables or buried structures. A geotechnical engineer registered in the province of British Columbia may be required to determine such conditions per the requirements of the authorities having jurisdiction.
- All work shall be equal in all respects to good building practice.
- Written dimensions take precedence over scaled drawings.
- Construction loads on the structure caused by interim storage of materials or use of equipment will not be allowed to exceed the design loads.
- These drawings are not to be scaled.

ERRORS AND OMISSIONS

- The Designer makes every effort to provide complete and accurate home plans. This office assumes no liability for any errors or omissions that may affect construction.
- Should any discrepancies be found on this set of drawings, please advise our office at your earliest convenience.

STRUCTURAL DESIGN CRITERIA

- Assumed roof design snow load (live + dead) = 35 psf (1.68 kN/m²)
- Assumed soil bearing capacity = 2000 psf (95.76 kN/m²)
- Concrete foundation walls and slabs-on-grade shall have a minimum compressive strength of 3000 psi (20 MPa) at 28 days.
- All reinforcing bars shall be billet steel complying with CSA-G30.10.
- Any Structural Engineer's drawings provided take precedence over these drawings.
- The qualified professional engineer must be registered in the province of British Columbia and in good standing with the Engineering Association of BC.
- If there is a Structural Engineering involved, they must provide schedules for their design and are responsible for their own design and inspections.
- If there is no Structural Engineer involved, it is the responsibility of the authority having jurisdiction to confirm all structural design criteria.

FOUNDATION

- Foundations shall be a minimum of 8" thick insulated concrete (exceptions noted) or ICF on solid undisturbed bearing soil or pre-engineered soil approved by a geotechnical engineer certified in the province of British Columbia and below a frost line of 2'-0" below grade.
- Basement foundation walls shall not be backfilled until:
 - Concrete has reached its specified 28 day strength.
 - Structural floor framing, including subfloor, required to support the walls is complete and fully nailed and anchored.
- Foundation wall heights may require adjustment to suit site conditions.
- All concrete and masonry foundation walls exceeding limits specified in the current Building Code require engineering.
- All foundation walls 24" (600mm) and higher shall have a minimum of 1 1/2" (12mm) reinforcing bar centered on wall and located 3" (75mm) from the top of wall.
- Corner reinforcing to be lapped a minimum 24" (600mm).
- Provide minimum side clear concrete cover of 1 1/2" (38mm).
- Provide minimum bottom clear concrete cover of 3" (76mm) cast against soil.
- The Contractor shall examine all applicable drawings for locations of embedded items before placing concrete.
- Perimeter drainage shall be installed where required to the approval of local authorities.

WOOD FRAME CONSTRUCTION:

- Dimensions are taken from outside face of exterior wall sheathing to centerline of interior wall studs. Face of exterior sheathing to be flush with outside face of foundation wall. Exceptions noted.
- All studs, plates, backing, blocking and bridging to be No. 2 SPF or better.
- All joists, rafters, beams and lintels to be No. 2 SPF or better. Exceptions noted.
- Floor joists shall be doubled under all non-loadbearing partitions parallel to the joists.
- Joists are to be placed to accommodate heating, plumbing and other services.
- All lintels to be 2-2x10 (2-38x235) or pre-engineered lintels. Exceptions noted.
- Wood in contact with concrete to be dampproofed with 45 lb tar saturated felt, 6 mil polyethylene.
- All wood plates are to be anchored to foundation with 12 mm (1/2") anchor bolts with spacing not exceeding 1800 mm or (6'-0") O.C. Unless noted otherwise by the structural engineer of record. Exceptions noted.
- Exterior wood plates are to be level and sealed at contact with concrete foundation.
- Cross-bridging for floor joists and roof joists shall be 38x38 (2"x2") diagonal type wherever possible. Use solid blocking with T/J's.
- Cross-bridging rows shall be installed at mid-span for joist spans exceeding 2100 mm (7'-0") or at 2100 mm (7'-0") maximum, unless strapping or sheathing is applied to the underside of joists.
- Roof trusses may require an engineer's certificate. For pre-engineered trusses, a certificate must be obtained from the truss fabricator.
- Caulk under all exterior door & window frames and at both sides of exposed masonry chimneys.
- Caulk under all base plates at exterior walls.
- Junctions between the floor to rim joist & rim joist to foundation must be sealed.

STEEL CONSTRUCTION:

- All structural steel design & construction must be sealed & approved by a Structural Engineer registered in the province of British Columbia.
- Fabrication, erection, structural design and detailing of all structural steel and connectors shall be in accordance with CSA-S16-09. Steel decking and metal studs shall be designed, fabricated and installed in accordance with CSA-S16-09 (R2012) and specifications of the manufacturer. Shop drawings shall be sealed by a qualified professional engineer registered in the province of British Columbia.

DECK AND PORCH CONSTRUCTION:

- All framing to be No.2 SPF or better and #1 ACQ pressure treated lumber. Exceptions noted.
- Girders for floor joists to be a min. 2-ply 2x10 unless noted otherwise. Girders shall be either bolted to posts w/ 1/2" dia. galvanized bolts or anchored into concrete pier.
- All joists to have blocking at 8'-0" o/c.
- All ledgers attached to house to have a flashing barrier, lapping behind the siding, between the house and ledger. Ledger shall be bolted to the building with 1/2" dia. galvanized bolts.
- All footings for posts and piers to be below local frost line. Piers shall extend a minimum of 6" above grade or per plan.
- All framing material to have appropriate galvanized hangers and anchors.

INSULATION, VENTILATION, AND SEALING:

- Minimum effective insulation requirements (HRV not installed):
 - Walls above grade: RSI 3.08 (R-17.5)
 - Walls below grade: RSI 2.98 (R-16.9)
 - Roof & ceiling / [cathedral & flat]: RSI 8.67 / [RSI 4.67] (R-50 / [R-28])
 - Floors Above Unheated Space: RSI 4.67 (R-26.5)
 - Under floors above frost line: RSI 1.96 (R-11)
 - Heated floors: RSI 2.32 (R-13.2)
- Minimum effective insulation requirements (HRV installed):
 - Walls above grade: RSI 2.29 (R-16.86)
 - Walls below grade: RSI 2.98 (R-16.86)
 - Roof & ceiling / [cathedral & flat]: RSI 6.91 / [RSI 4.67] (R-39.23 / [R-28])
 - Floors Above Unheated Space: RSI 4.67 (R-26.5)
 - Under floors above frost line: RSI 1.96 (R-11)
 - Heated floors: RSI 2.32 (R-13.2)
- Sealant shall be provided where required to prevent the entry of water into the structure.
- Sealant shall be provided at vertical joints between different cladding materials unless the joint is suitably lapped or flashed to prevent the entry of rain.
- 6 mil polyethylene vapour barrier shall be installed on the warm side of insulation.
- Flexible sheet air barrier materials require all joints to be lapped minimum of 50mm (2"), sealed, structurally supported. All sealants must be non-hardening. Vapour barrier tape is recommended to be applied to all joints additionally, even if not required at joint.
- Windows, Doors, and Skylights shall be sealed to vapour & air barriers.
- Sealants shall be applied between window frames or trim and the exterior caldding or masonry per British Columbia Building Code 9.27.4, or a Envelope Engineer specifications.
- Poly hats are required on exterior walls and ceilings for electrical boxes and pot lights. Which must be sealed to the vapour/air barrier.
- Attic hatches and all electrical penetrations into the attic space along any gaps, spaces, penetrations, irregularities that could inhibit vapour/air leakagemust be sealed.
- Foundation wall insulation to be 3" XPS (R15) of rigid insulation on outside face of concrete, both sides of ICF or min. 1" EPS rigid insulation between a batt filled firing wall & foundation wall.
- Ceiling insulation is blown cellulose insulation in attic/flat trusses and Sprayed polyurethane foam, medium density closed cell (CANULC S705.1) in floors/cathedral ceilings.
- Provide a baffle of air space (equal to soffit venting area) between insulation and roof sheathing at exterior wall line.
- All walls and ceilings between residential spaces and garages or carports shall be insulated.
- Insulation requirements may vary with heating systems and with local conditions. Verify with local authorities.

INSULATION, VENTILATION, AND SEALING:

- All roof spaces shall be ventilated with soffit, roof or gable vents, or a combination of these equally distributed between the top of roof space and soffits. Unless Sprayed polyurethane foam, medium density closed cell (CANULC S705.1) is used.
 - Venting area for attics and roof spaces shall be a minimum of 1/300 the of attic or roof space area. Unless Sprayed polyurethane foam, medium density closed cell (CANULC S705.1) is used.
 - Vents for unheated crawlspaces shall be closeable, with a minimum total area 1/500 the of the crawlspace area.
- FINISHING:**
- All interior and exterior finishes shown on the drawings shall be confirmed by the Owner & Contractor.
 - Exterior doors shall be solid core and weather-stripped.
 - All exterior doors with flush/recessed threshold to have built-in drain in sill or have grate drain and flashing below on the exterior side of the door.
 - Garage doors to dwelling area to be solid core, weather-stripped and self-closing.
 - All horizontal changes in exterior finishes to be flashed. Aswell as any horizontal offsets in cladding may compromise the drainage of moisture from behind the exterior finish above.
 - Flashing to be installed over all unprotected exterior openings.
 - Sliding glass doors shall have safety glass.
 - Window sizes are shown in foot and inches.
 - Door Sizes are shown in feet and inches.
 - Openings in partitions shown without doors are to be full height unless shown as an arch, door opening, or noted otherwise.
 - Lintels at archways are to be framed 2075mm (6'-11") high. Exceptions noted.
 - Coat and clothes closets shall have one rod and shelf. Linen closets shall have 5 adjustable shelves where possible. Broom closets shall have one shelf (unless shown/noted otherwise).
 - All bathrooms shall have a wall medicine cabinet or one lockable cabinet drawer.

HEATING:

- Installation of entire heating system, whether electric, forced warm air or hot water, must comply with manufacturer's directions (where applicable) and conform to requirements of local codes and regulations in all respects.
- Gas connection will require separate permit and inspection.
- All supply air ducts to be installed overhead in basement unless specified otherwise.
- All return air intakes and registers to be located and installed for maximum efficiency by a qualified heating contractor.

PLUMBING:

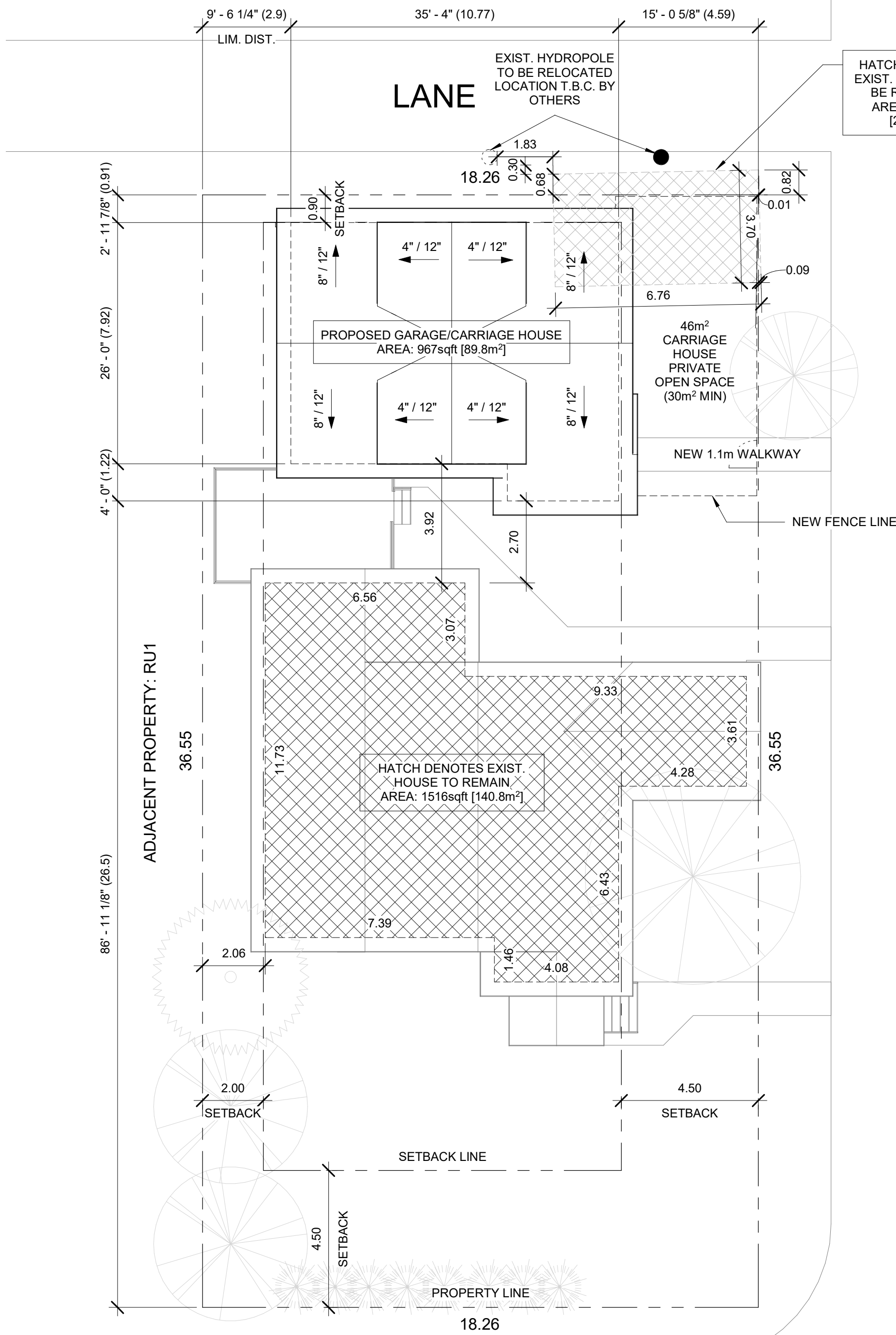
- All materials, equipment and methods of installation shall be in accordance with requirements outlined in Part 7 of the most current British Columbia Building Code and applicable local regulations.
- When the Owner's property is not located on a municipal sewer system, wells and septic disposal systems are to be located and constructed in accordance with health authorities having jurisdiction.
- All plumbing materials in contact with soils shall be corrosive resistant.
- All water closets to be low flush (water efficient) water closets, Unless noted otherwise.
- All plumbing fixtures to be low flow (water efficient) fixtures, Unless noted otherwise.

ELECTRICAL:

- Installation of electrical items must comply with the most current British Columbia Electrical Code and with the local electrical supplier in all respects.
- Outlet locations must comply with or exceed current minimum requirements outlined in the British Columbia Building Code. The minimum requirements are to be used as a guide only, and may be adjusted according the Owner's and/or local authority's specific requirements beyond the minimum.
- All lights to be light emitting diode (LED) lights, Unless Noted Otherwise.

ABBREVIATIONS

AC.	Acoustic
AW.	Awning
B.C.B.C.	B.C. Building Code
BD.	Board
B.F.	Bifold door
BM.	Beam
BTWN.	Between
B.U.	Built-up
CEIL.	Ceiling
COL.	Column
CONC.	Concrete
CONC. BLK	Concrete block
CONT.	Continuous
C.S.	Crawlspace
C/W	Complete with
DIA.	Diameter
DIM.	Dimension
DN.	Down
D.	Dryer
D.W.	Dishwasher
ELECT.	Electrical
ELEV.	Elevation
EQ.	Equal
E/W	Each Way
F.	Refridgerator
F.D.	Floor drain
FLR.	Floor
F.E.P.	From Existing Plans
FND.	Foundation
FRZR.	Freezer
FTG.	Footing
FUR.	Furnace
GA.	Garage
G.R.	Guard Rail
GWB.	Gypsum board
H.B.	Hose bib
HORIZ.	Horizontal
HT.	Height.
H/W.	Hot Water Tank
I.H/W.	Instant Hot Water Heater
INSUL.	Insulation
LDRY.	Laundry
LIN.	Linen
LINO.	Linoeum
LOUV.	Louvered
MAX.	Maximum
M.C.	Medicine cabinet
MFR. SPEC'S	Manufacturer's Specifications
MIN.	Minimum
MIR.	Mirror
MW.	Microwave
N/A	Not Applicable
N.B.C	National Building Code
N.T.S	Not to scale
OBSC.	Obscure
O/C	On centre
O/H	Overhead
OH.	Overhang
PKT.	Pocket Door
P.L.A.	Point Load Above
PLYWD	Plywood
R.	Range
REQ'D	Required
R.C.	Rubber cover
R. & S.	Rod & Shaft
RM.	Room
R.O.	Rough opening
R/W	Reinforced with
R.W.L.	Rain Water Leader
S.	Sink
S/C	Solid core
SH.	Shower
S.O.G.	Slab on grade
SUSP.	Suspended
T/O	Top of
TYP.	Typical
T.B.C	To be confirmed
U/S	Underside
V.B.	Vapour Barrier
VERT.	Vertical
V.H.	Vent Hood
W.	(Clothes) Washer
w/	With
W.C.	Water Closet
WD.	Wood
W.P.	Weatherproof
W.W.M.	Welded wire mesh
U.N.O.	Unless Noted Otherwise

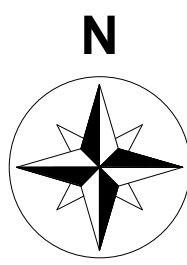


ATTACHMENT C

This forms part of application

Z20-0058

Planner
Initials KB



Blue Vision
Design Inc.
3448 Cougar Rd
West Kelowna, BC
V4T 2G9
250.864.6666
blue.vision@hotmail.com

Issue Schedule		
Issue Number	Description	Date (dd.mm.yy)
1	Review	22.04.2020
2	Development Permit	19.06.2020

Ian Mackay
286 Lake Ave
Kelowna, BC V1Y 5W7
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GARAGE/CARRIAGE
HOUSE ADDITION

286 LAKE AVE
Kelowna, BC

SITE PLAN

SCALE:

AS NOTED

DRAWN BY:	CHECKED BY:
DS	BV
DATE:	PROJECT:
19.06.2020	2019-046

A1.0

1 SITE PLAN
1" = 10'-0"

BUILDING NOTES

GENERAL ZONING AND SITE INFORMATION

- CIVIC ADDRESS: 286 LAKE AVE
- LEGAL: PLAN 2220, LOT 9
- ZONE: RU1 - SINGLE FAMILY RESIDENTIAL
- AUTHORITY: CITY OF KELOWNA
- TOTAL LOT AREA: 7184sqft [667.4m²]
- MAXIMUM PARCEL COVERAGE: 40% (50% INCL. DRIVEWAYS)

EXISTING SITE COVERAGE:

- + EXISTING HOUSE FOOTPRINT: 1516sqft [140.0m²]
- + EXIST. GARAGE FOOTPRINT: 269sqft [25.0m²]
- = TOTAL EXISTING SITE COVERAGE 1785sqft [165.8m²] (24.8%)

PROPOSED SITE COVERAGE:

- + EXISTING HOUSE FOOTPRINT: 1516sqft [140.0m²]
- + PROPOSED CARRIAGE HOUSE FOOTPRINT: 967sqft [89.8m²]
- = PROPOSED TOTAL SITE COVERAGE: 2483sqft [230.7m²] (34.6%)

CARRIAGE HOUSE FLOOR AREA:

- + CARRIAGE HOUSE LOWER FLOOR AREA: 123sqft [11.4m²]
- + CARRIAGE HOUSE SECOND FLOOR AREA: 677sqft [62.9m²]
- = TOTAL CARRIAGE HOUSE FLOOR AREA: 800sqft [74.3m²]

- FRONT YARD SETBACK: 6.0m
- REAR YARD SETBACK: 7.5m
- SIDE YARD SETBACK: 2.3m & 4.5m FOR FLANKING STREET
- MAXIMUM HEIGHT OF MAIN HOUSE: 9.5m (2.5 STOREY)