
TO: Electoral Area Services Committee **DATE:** November 20, 2018

FROM: Stephen Boogaards
Planner **FILE:** PL2017-143

**SUBJECT: Development Permit with Variance Application and Site Specific Floodplain
Bylaw Exemption No. PL2017-143
5516 Deep Bay Drive – Electoral Area H
Lot 59, District Lot 1, Newcastle District, Plan 20442**

RECOMMENDATIONS

1. That the Board approve Development Permit with Variance No. PL2017-143 to permit the construction of a dwelling unit, accessory building, and associated landscaping subject to the terms and conditions outlined in Attachments 2 to 5.
2. That the Board exempt Lot 59, District Lot 1, Newcastle District, Plan 20442 from Section 13(c) of Bylaw 1469 to allow the placement of structural fill within 15 metres from the boundary of the sea.
3. That the Board direct staff to complete the required notification for Development Permit with Variance No. PL2017-143.

SUMMARY

The applicants have applied for a development permit with variance and site specific floodplain bylaw exemption to accommodate the demolition of the existing structures and to redevelop the property for a dwelling unit and an accessory building. Due to the small size and depth of the property, the construction of the proposed buildings are constrained by zoning regulations and the floodplain setback, established through the “Regional District of Nanaimo Floodplain Management Bylaw No. 1469, 2006” (Floodplain Bylaw). The applicant proposes variances to the height of both buildings (to accommodate additional height for the risk of flooding) and to setbacks to the front lot line (which would move the buildings further away from the sea).

The habitable portions of the buildings will comply with the Flood Construction Level (FCL) of the RDN Floodplain Bylaw. However, the applicant has also requested a site specific exemption to the setback for the use of fill for structural elevation. As the applicant has provided sufficient justification according to Regional District of Nanaimo (RDN) Board policy and no negative impacts are anticipated as a result of the proposed variance, it is recommended that the Board approve the development permit with variance and site specific exemption pending the outcome of public notification and subject to the terms and conditions outlined in Attachments 2 to 5.

BACKGROUND

The RDN has received an application from Gary and Sara Moore to permit the construction of a dwelling unit, accessory building, and associated landscaping. The subject property is approximately 702.4 square metres in area and is zoned Residential 2 Zone (RS2), pursuant to “Regional District of Nanaimo Land Use and Subdivision Bylaw No. 500, 1987”. The property is located on the Deep Bay spit, is northwest of Deep Bay Harbour, and is adjacent to other residential properties (see Attachment 1 – Subject Property Map).

The property contains an existing dwelling unit and shed, and is serviced by Deep Bay Improvement District community water and onsite sewage disposal. The property also contains a cobble seawall along the present natural boundary, a small yard area behind the dwelling, and a boat ramp (see Attachment 2 - Survey of Existing Structures).

The proposed development is subject to the following Marine Coast DPA as per the “Regional District of Nanaimo Electoral Area ‘H’ Official Community Plan Bylaw No. 1335, 2017.” As the landfill and structural support for the proposal will also be located within the 15.0 metre floodplain setback, as established within the Floodplain Bylaw, the dwelling and accessory building will require a site specific exemption to the Floodplain Bylaw.

Proposed Development, Variance and Site Specific Exemption

The proposed development includes the demolition of an existing dwelling unit and accessory building, and the construction of a new dwelling unit, accessory building and associated landscaping. The applicant proposes to vary the following regulations from the “Regional District of Nanaimo Land Use and Subdivision Bylaw No. 500, 1987”:

1. **Section 3.4.62 – Maximum Number and Size of Buildings and Structures** to increase the maximum dwelling unit height from 8.0 metres to 8.7 metres.
2. **Section 3.4.62 – Maximum Number and Size of Buildings and Structures** to increase the maximum accessory building height from 6.0 metres to 7.4 metres.
3. **Section 3.4.62 – Minimum Setback Requirements** to reduce the setback for the dwelling unit from the front lot line from 8.0 metres to 5.25 metres.
4. **Section 3.4.62 – Minimum Setback Requirements** to reduce the setback for the accessory building from the front lot line from 8.0 metres to 5.25 metres.

Due to the depth of the property, the proposed dwelling and accessory building are not able to be accommodated outside the 15.0 metre floodplain setback established for land fill or structural support that are required to support a floor system above the FCL. With the recommended fill, the proposed dwelling unit and the habitable portions of the accessory building will comply with FCL requirements.

Land Use Implications

Due to the property size, topography, and lot depth relative to the required setbacks and elevation / height requirements, the applicant has requested variances to height and front lot line setbacks in the zoning bylaw and for a site specific exemption to the Floodplain Bylaw. In support of the variance and exemptions requests, the applicant has provided a justification with

respect to “Board Policy B1.5 Development Variance Permit, Development Permit with Variance and Floodplain Exemption Application Evaluation” reflecting the property constraints for redevelopment.

With respect to the request for a front lot line setback variance, the applicant proposes to move the dwelling and accessory building further back from the 8.0 metre setback from the present natural boundary and 5.0 metres from the titled boundary. This would provide additional protection of the dwelling from the sea and situate the new building further back than the existing buildings (see Attachment 2 – Survey of Existing Structures). With respect to impacts, the dwelling unit and accessory building will generally not appear to be closer to the road than neighbouring dwelling units, while also being set back further from the natural boundary of the sea relative to the existing buildings.

With respect to the request for the height variance for the dwelling unit, the applicant proposes to vary the maximum height to accommodate the additional elevation required for FCL. The applicant has submitted a Geotechnical Hazard Assessment by Lewkowich Engineering Associates Ltd. dated October 12, 2018 which identified that the dwelling must be elevated to a FCL of 4.35 metres. While Bylaw 500 establishes that the height of a building is taken from the FCL (as per the RDN Floodplain Bylaw), the height required under the Province of BC’s Flood Hazard Management Guidelines to account for sea level rise to the year 2100 is not included. Therefore, for the subject property, the height of the building is calculated from the RDN Floodplain Bylaw requirement of 3.3 metres Geodetic Survey of Canada Datum (GSC) FCL for the underside of the habitable floor space, while the geotechnical report and provincial guidelines identify 4.35 metres as the FCL to accommodate sea level rise. While the level of the first floor will be above the first floor of surrounding buildings to comply with geotechnical requirements, the actual building is 7.62 metres tall and is generally in scale with dwellings on surrounding properties.

With respect to the height variance for the accessory building, the applicant proposes the height variance to accommodate both a garage and an office / studio above. The applicant has made efforts to reduce the variance with a slightly sloped flat style roof which will be lower than the proposed dwelling. While only the office / studio is required to comply with FCL, as the garage will structurally elevate these portions of the building over the FCL, the constraints on the property limit the location of accessory buildings through setbacks and parcel coverage. The height variance would permit the maximum permitted accessory building floor area within the same building footprint.

Under the RDN Floodplain Bylaw and Board Policy B1.5, the applicant must also provide sufficient geotechnical and land use justification for the site specification exemption to the Floodplain Bylaw. The Geotechnical Hazard Assessment, provided for the purposes of the site specific exemption, identifies potential geotechnical hazards with the property being subject to the defined oceanic floodplain and seismic liquefaction. The assessment identifies that without a site specific exemption the property would be unreasonably hindered as there would be no suitable building areas that comply with the bylaw. The assessment also identifies that the proposed construction will be further from the sea than the existing dwelling and that accreted land on the foreshore provides a measure of protection from storm events.

The assessment identifies that the site is considered safe and suitable for the intended use of a residential dwelling and accessory building, and the proposed development will not result in a detrimental impact on the environment or adjoining properties provided the recommendations

are followed. The recommendations include a minimum FCL of 4.35 metres GSC; conditions for differential settlement and footings which would allow occupants to safely egress during seismic events; conditions that the foundation loads are supported on natural undisturbed soils; and allows for small retaining walls less than 1.0 metre in height with excavated onsite soils for safe egress from the dwelling. The assessment also includes a sealed Quality Assurance Statement (Schedule D) required with any site specific exemption to the Floodplain Bylaw.

Given the retaining walls and land alteration proposed with the site specific exemption, the Geotechnical Hazard Assessment also includes provisions for erosion and sediment control. The assessment recommends that soil piles be covered with tarps during rain events; excavations be drained to an outlet area to allow sediment to settle; driveways be free of sediment; and bare ground be covered with mulch until revegetation occurs. The property owner has also provided an Environmental Assessment & Construction Environmental Management Plan to establish conditions for the revegetation of the property.

Given that the applicant has provided sufficient rationale, the geotechnical engineer confirms the property is safe for the intended use and adjacent properties, and that the variance is not anticipated to result in negative view implications for adjacent properties, the applicant has made reasonable efforts to address Policy B1.5 guidelines. As a condition of the development permit with variance and site specific exemption, the report will be registered on the property title as a covenant, saving the RDN harmless from all losses or damages to life or property as a result of the hazardous condition (see Attachment 3 – Terms and Conditions of Permit). As part of the building permit, the buildings will require oversight by a geotechnical and structural engineer.

Environmental Implications

The applicant has provided an Environmental Assessment & Construction Environmental Management Plan by D.R. Clough Consulting, dated October 23, 2018 to address foreshore protection during construction of the buildings and the multi-tiered retaining wall. The retaining wall is intended for the gardens, safe egress from the dwelling, and to transition from the dwelling to natural grade. To address the DPA guidelines, the report recommends revegetation with native vegetation within the garden areas and below the lower wall. The restoration area represents an area of 72.0 square metres and 140 plants at a density of one plant per 0.6 square metres, and includes dune grass, Nootka Rose, Oregon Stonecrop, Nodding Onion, Coastal Strawberry, Beach Pea, Dull Oregon Grape and Yarrow. The report also includes conditions for sediment control or the management of spills from machinery during construction.

As a condition of the permit, the applicant is required to provide a landscaping security deposit for plants, mulch and labour in the amount of \$3,988.70 to ensure the planting is completed and maintained over the recommended period. As a condition of approval, the applicant will also be required to submit a post construction inspection report to confirm that the construction and planting complies with the Environmental Impact Assessment, including confirmation of planting, environmental monitoring and sediment, and erosion measures. A follow up inspection will also be required after the one year maintenance period for the plantings (see Attachment 3 – Terms and Conditions of Permit).

While the garden areas will include a low profile retaining wall close to the titled natural boundary of the sea, the environmental assessment identifies that the walls are intended for soil retention and not erosion protection. The walls will be above the titled boundary of the sea,

though the environmental report recommends an additional 2.0 metres wide replanting area below the wall to the present natural boundary. This is currently the location of the lawn area and the cobblestone retaining wall. Considering the sheltered coastline and the revegetation below the development, the report anticipates a net habitat gain to occur with no impact to adjacent properties. In addition to the requirements of the report, as a condition of approval, the applicant must also ensure that the planting or work below the titled or present natural boundary is acceptable to the Province of BC (see Attachment 3 – Terms and Conditions of Permit).

Intergovernmental Implications

As the property contains a mapped archaeological site (DISe-7), the applicant has received an Alteration Permit (under the *Heritage Conservation Act* from the BC Archaeology Branch) for the purposes of the construction of the dwelling unit, the accessory building, and landscaping. Qualicum First Nation has also been made aware of the development proposal.

Fisheries and Oceans Canada requires the applicant to complete a standard self-assessment process for projects near water. The property owner and agent are responsible to ensure they comply with the *Fisheries Act*, and are required to complete the self-assessment. The qualified environmental professional has completed the self-assessment and it was concluded that the project is entirely above the present natural boundary and therefore would not cause serious harm to fish or fish habitat.

Public Consultation Implications

Pending the Electoral Area Services Committee's recommendation and pursuant to the *Local Government Act* and the "Regional District of Nanaimo Development Application and Notification Procedures Bylaw No. 1776, 2018.", property owners and tenants of parcels located within a 50.0 metre radius of the subject property will receive a direct notice of the proposal and will have an opportunity to comment on the proposed variances prior to the Board's consideration of the application.

ALTERNATIVES

1. To approve Development Permit with Variance No. PL2017-143 subject to the terms and conditions outlined in Attachments 2 to 5.
2. To deny Development Permit with Variance No. PL2017-143.

FINANCIAL IMPLICATIONS

The proposed development has no implications related to the Board 2018 – 2022 Financial Plan.

STRATEGIC PLAN IMPLICATIONS

The Plan's "Focus on the Environment" states that the Board will focus on protecting and enhancing the environment in all decisions. The DPA guideline requirement for an environmental assessment helps ensure that site-specific environmentally sensitive features are identified and that the impacts of development on the environment are identified and mitigated.



Stephen Boogaards
sboogaards@rdn.bc.ca
October 26, 2018

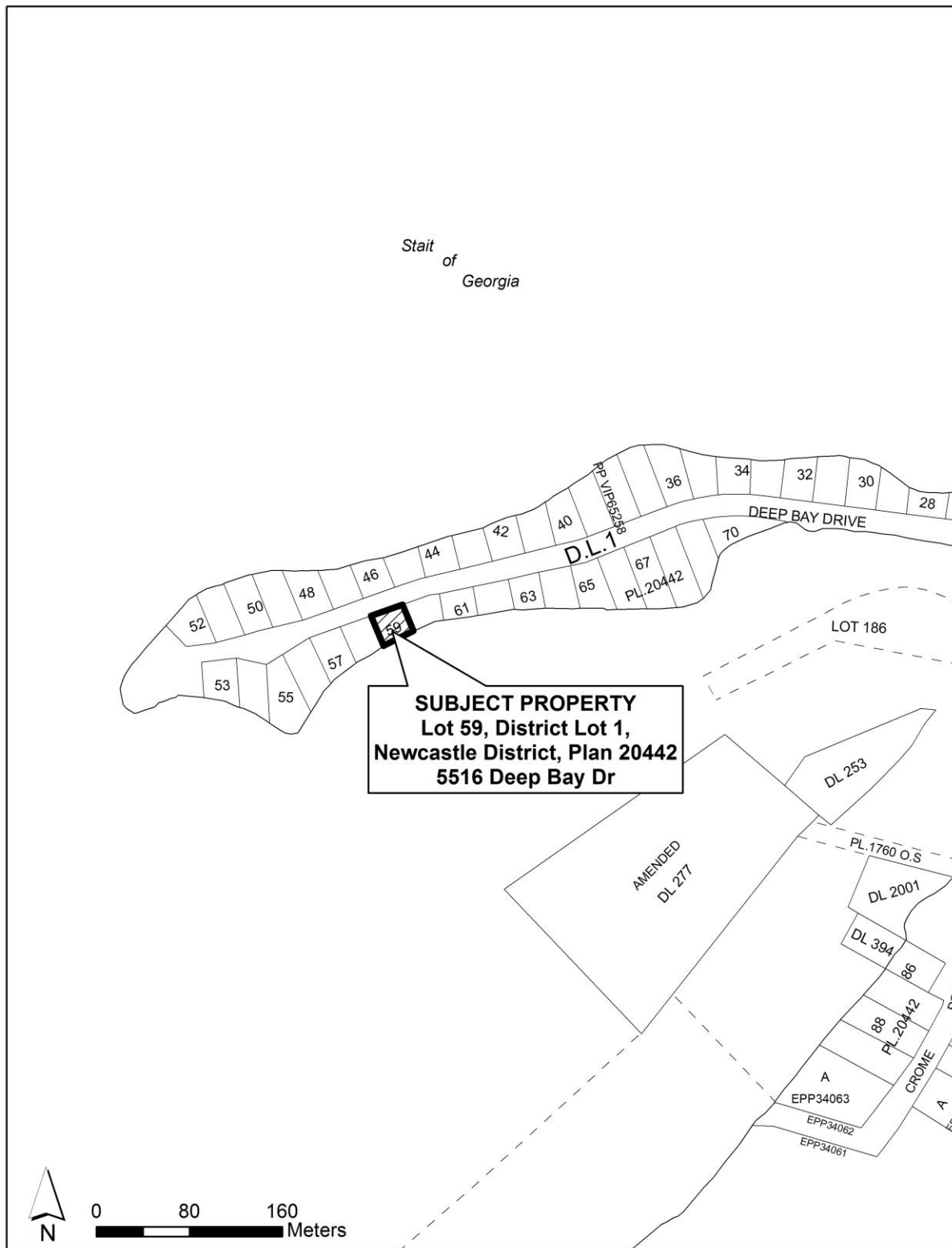
Reviewed by:

- P. Thompson, Acting Manager, Current Planning
- G. Garbutt, General Manager, Strategic & Community Development
- P. Carlyle, Chief Administrative Officer

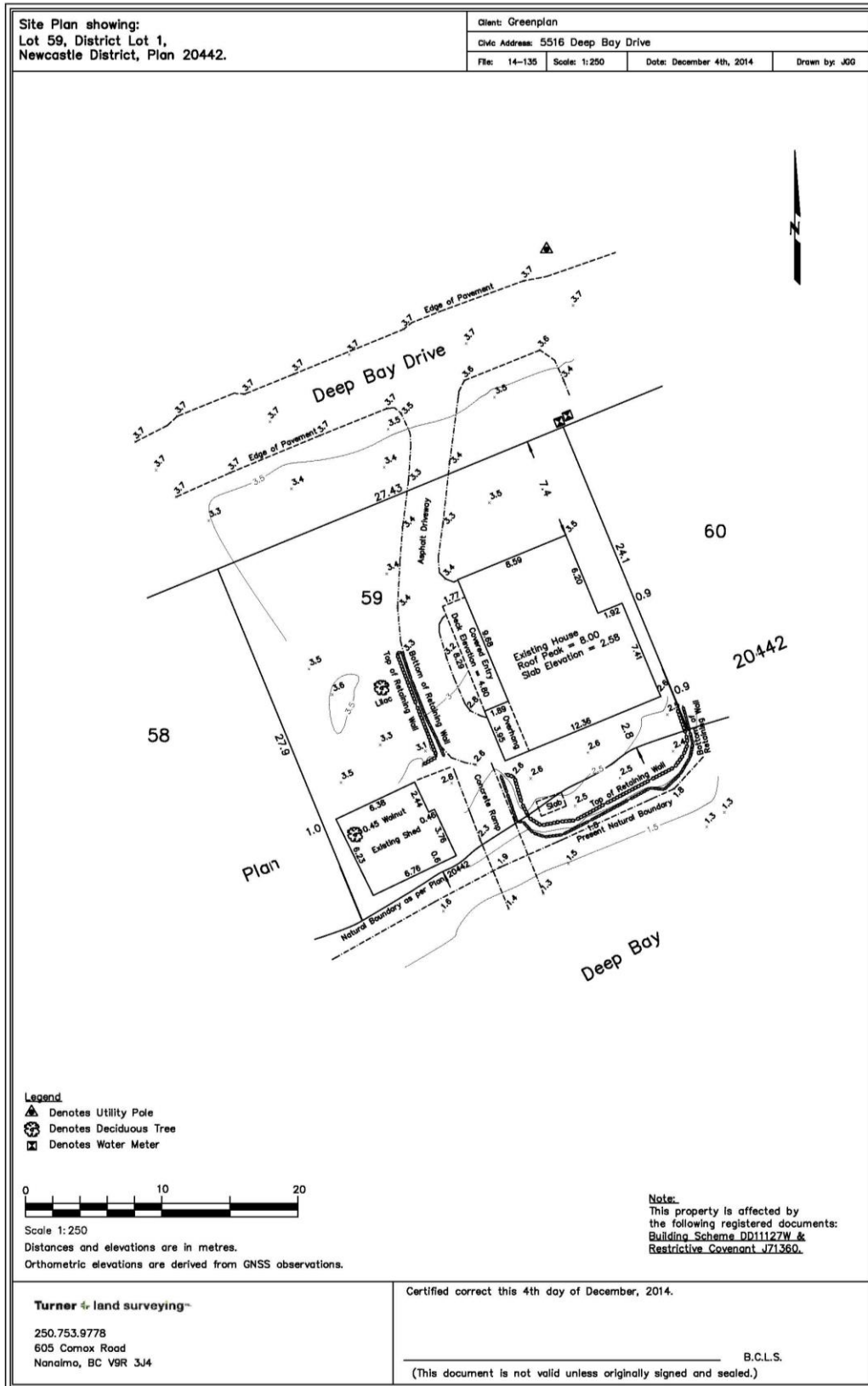
Attachments

1. Subject Property Map
2. Survey of Existing Structures
3. Terms and Conditions of Permit
4. Proposed Site Plan and Variances
5. Proposed Building Elevations

Attachment 1
Subject Property Map



Attachment 2 Survey of Existing Structures



Attachment 3

Terms and Conditions of Permit

The following sets out the terms and conditions of Development Permit with Variance No. PL2018-143:

Bylaw No. 500, 1987 Variances

With respect to the lands, “Regional District of Nanaimo Land Use and Subdivision Bylaw No. 500, 1987” is varied as follows:

1. **Section 3.4.62 – Maximum Number and Size of Buildings and Structures** to increase the maximum dwelling unit height from 8.0 metres to 8.7 metres.
2. **Section 3.4.62 – Maximum Number and Size of Buildings and Structures** to increase the maximum accessory building height from 6.0 metres to 7.4 metres.
3. **Section 3.4.62 – Minimum Setback Requirements** to reduce the setback for the dwelling unit from the front lot line from 8.0 metres to 5.25 metres.
4. **Section 3.4.62 – Minimum Setback Requirements** to reduce the setback for the accessory building from the front lot line from 8.0 metres to 5.25 metres.

Conditions of Approval

1. The site is developed in accordance with the Site Plan prepared by Turner & Associates Land Surveying, dated October 23, 2018 and attached as Attachment 4.
2. The proposed development is in general compliance with the plans and elevations prepared by Anderson Greenplan dated October 18, 2018 and attached as Attachment 5.
3. The subject property shall be developed in accordance with the recommendations contained in the Geotechnical Hazard Assessment prepared by Lewkowich Engineering Associates Ltd., dated October 12, 2018.
4. The issuance of this permit shall be withheld until the applicant, at the applicant's expense, registers a Section 219 Covenant on the property title containing the Geotechnical Hazard Assessment prepared by Lewkowich Engineering Associates Ltd., dated October 12, 2018, and includes a save harmless clause that releases the Regional District of Nanaimo from all losses and damages as a result of the potential hazard.
5. The subject property shall be developed in accordance with the recommendations contained in the Environmental Assessment & Construction Environmental Management Plan prepared by D.R Clough Consulting dated September 25, 2017, revised October 23, 2018.
6. Prior to occupancy being granted, D.R Clough or other registered professional biologist shall provide a post construction report to the Regional District of Nanaimo to confirm the construction and planting have been completed in accordance with the Environmental Assessment & Construction Environmental Management Plan.

7. The proposed landscaping shall be provided and maintained in accordance with the Environmental Assessment & Construction Environmental Management Plan prepared by D.R Clough Consulting dated September 25, 2017, revised October 23, 2018.
8. Prior to the issuance of this permit, the applicant is to provide a landscaping security deposit in the amount of \$3,988.70 for planting in accordance with the plan, which shall be considered for release after a period of one year where the Regional District of Nanaimo is satisfied that the landscaping has been maintained.
9. The proposed tiered retaining wall shown in Attachment 5 shall be under 1.0 metre in height.
10. Any planting or works below the titled boundary and present natural boundary are at the discretion of the Province of BC.
11. The property owner shall obtain the necessary permits for construction in accordance with Regional District of Nanaimo Building Regulations.

Attachment 4
Proposed Site Plan and Variances (Page 1 of 2)

Site Plan showing proposed building locations on: Lot 59, District Lot 1, Newcastle District, Plan 20442.		Client: Gary Moore	
		Civic Address: 5516 Deep Bay Drive	
File: 14-135	Date: October 31st, 2018	Scale: 1:250	Drawn by: RJT

Proposed Building Height—Accessory Building
Elevation grade below roof ridge (at the intersection of the upper wall) = 3.23
Maximum allowable building height = 6.0 (RS2)
Maximum allowable roof ridge elevation = 9.23
Proposed roof ridge elevation = 10.63 (1.4m variance required)
Proposed slab elevation = 2.86

Note:
The maximum building height of the principal dwelling has been determined using the flood construction level. Please refer to the Regional District of Nanaimo Variance Application for the building height calculation (Principal Dwelling).
Proposed principal dwelling roof ridge elevation = 11.97 (0.7m Variance Required)

Area of Lot 59 = 702.4 sq.m. (7561 sq.ft.)
Note: Lot area is calculated to the titled boundary (Plan 20442).

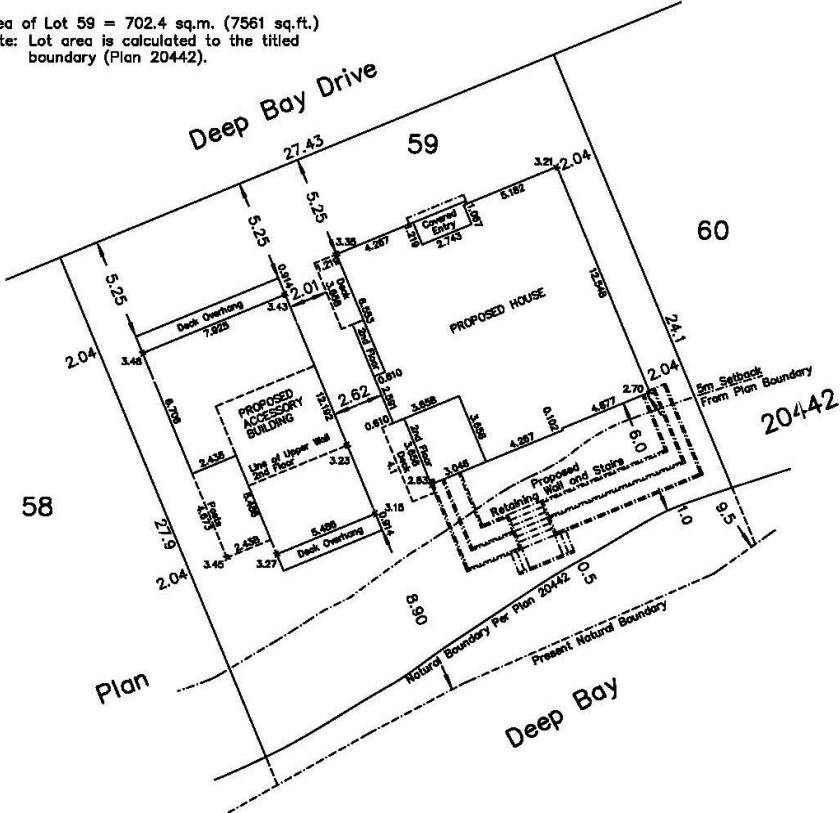
Proposed Building Height—Principal Dwelling
Elevation grade below roof ridge (at the intersection of the upper wall) = 3.23
Maximum allowable building height = 6.0 (RS2)
Maximum allowable roof ridge elevation = 9.23
Proposed roof ridge elevation = 11.97 (0.7m variance required)
Proposed slab elevation = 2.86

Note:
This property is affected by the following registered documents:
Building Scheme DD11127W & Restrictive Covenant J71360.

Distances and elevations are in metres.
Orthometric elevations are derived from GNSS observations.
Offsets shown to property boundaries are measured from the proposed building wall, support posts or upper floor projections.

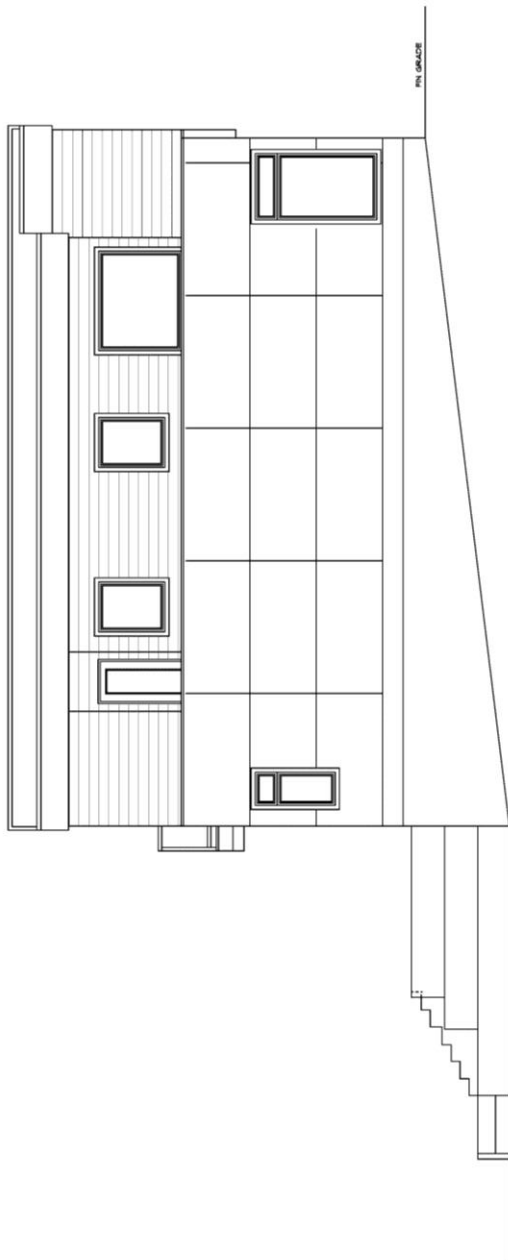
Turner & Associates
land surveying
250.753.9778
605 Comox Road
Nanaimo, BC V9R 3J4

Ryan Turner
YNBXB2
Certified correct this 31st day of October, 2018.
Digitally signed by Ryan Turner YNBXB2
DN: cn=Ryan Turner YNBXB2, o=BC Land Surveyors, ou=Verify ID at www.verifyid.com, email=ryan@verifyid.com, c=CA
Date: 2018.10.31 00:31:00 -0700
B.C.L.S.
(This document is not valid unless originally signed and sealed.)

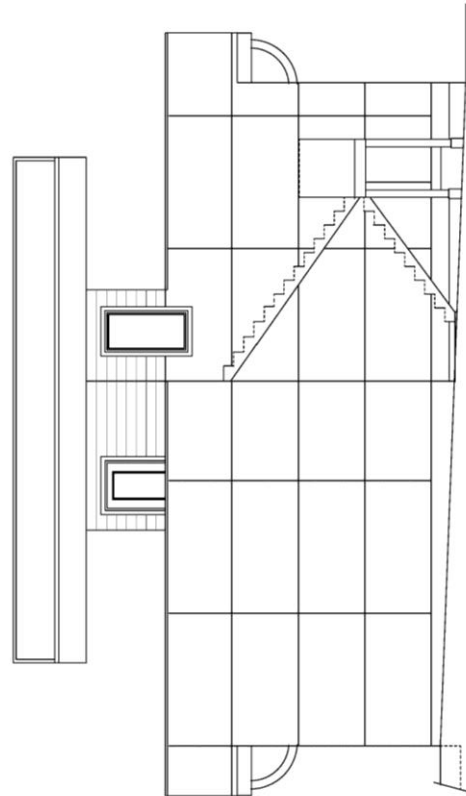


Proposed variance to the maximum from 8.0 metres to 8.7 metres for the dwelling.

Attachment 5
Proposed Building Elevations (Page 1 of 2)

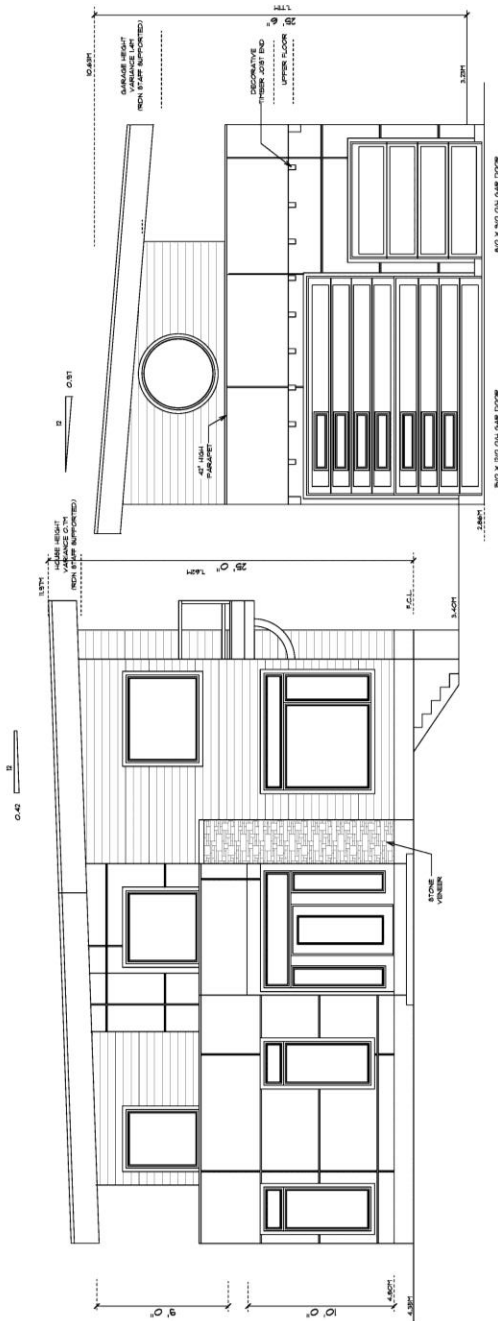


LEFT (EAST) ELEVATION
SCALE: 1/4" = 1' 0"

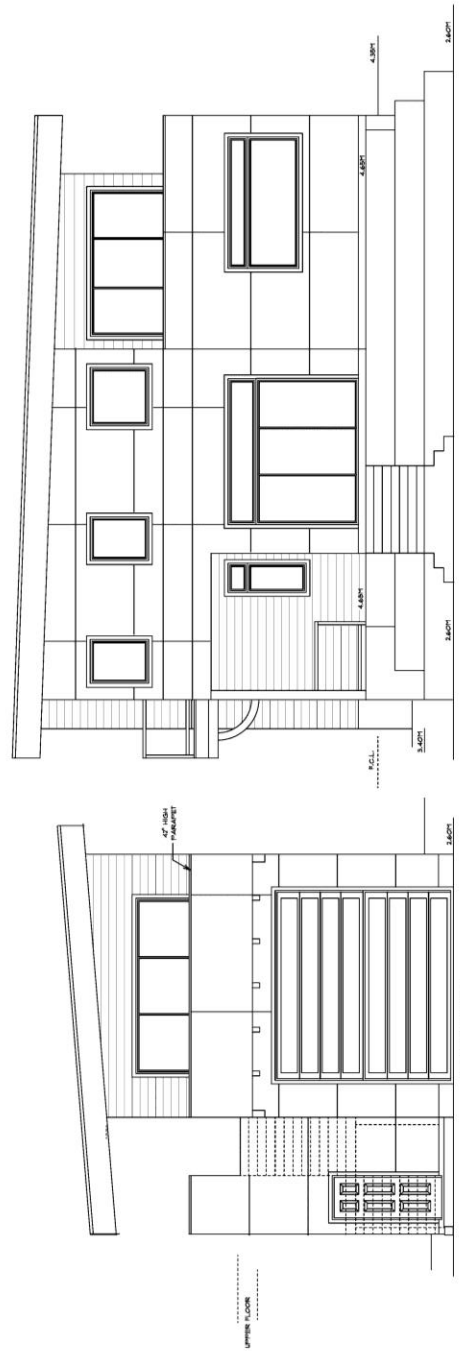


RIGHT (WEST) ELEVATION
SCALE: 1/4" = 1' 0"

Attachment 5
Proposed Building Elevations (Page 2 of 2)



FRONT (NORTH) ELEVATION
SCALE: 1/4" = 1'-0"



REAR (SOUTH) ELEVATION
SCALE: 1/4" = 1'-0"