3019 Point Grey Road - Board Decision and Minutes

Appeal Section:	573(1)(b) - Appeal of Regulation – Building Line
Legal Description:	Lot A, Block 24, District Lot 192 and Plan VAP 9538
Lot Size:	Irregular site
Zone:	RS-2
Related By-Law Clause:	Zoning By-law and Tree By-law

Appeal Description:
Requesting relaxations of the Zoning By-law and the Tree By-law with permission to provide new development beyond the Building Line (proposed development beyond the building line: new swimming pool and a hot-tub, new patios, new stepped terraces and stairs with new landscaping), new over-height fence and gate at this site, and a request to remove existing trees from the site (New construction at this site).

Related to Development Application No. DB-2022-04243: To construct a two-storey with cellar, one-family dwelling with an attached garage providing five (5) parking spaces, and having vehicular access from Point Grey Road and a proposed new swimming pool, hot-tub, stepped terraces and patios in the rear yard at this site (and BOV's approval is required for development the building line).

Appellant's zoning request (See attached letters and Arch. drawings):
1. Allow for over height fence and gate (6'-0") for safety of residents consistent with the existing property and other residences along Point Grey Road.
2. Allow development beyond the rear yard building line to enhance the foreshore condition for both private and public benefit.
3. Allow the removal of by-law protected trees in conflict with the proposed development.

Discussion:

Kalli Niedoba, were present to speak in support of the appeal.

At the request of the Chair, the appellant agreed to dispense with the reading of the submission, which had been in the Members' possession prior to the meeting. The appellant's initial comments were that they are looking to build some new developments beyond the building line; such as a new swimming pool, a hot tub, a new patio, new stepped terraces and stairs with new landscaping, new over height fence and gate, and to remove existing trees from the site. They're looking to remove invasive plant species on site.

The Director of Planning's Representative Mr. Chen's initial comments were that this is an appeal for building beyond the building line. The Director of Planning cannot permit building beyond the building line, and cannot support the appeal. They also have concerns over the swimming pool. The Board Chair stated that the Board's site office received three (3) letters in Support and two (2) letters in opposition to this appeal. The Chair stated that if there were any interested parties in the audience who wished to speak to this appeal, they should raise their hand to be recognized and when recognized, state their full name and address and spell their surname for the record. There were no comments.

Final Comments:
Mr. Chen's final comments were that the boulder clusters beyond the North property line is not what the Director of Planning is objecting to. The Director of Planning is not in support of the appeal. The appellant had no final comments.

This appeal was heard by the Board of Variance on February 14h, 2023 and was ALLOWED in PART, thereby ONLY approving the removal and the replacement of trees as presented at the appeal hearing, and subject to the following conditions: (1) that the development shall otherwise comply with the requirements and regulations of the Zoning and Development By-law to the satisfaction of the Director of Planning.

NOTE: The Owners must comply with the Tree-By-law and shall remove and replace the existing trees on-site at a 1 to 1 ratio, and shall be to the satisfaction of the Director of Planning.

NOTE: AUDIO recording of this appeal is available upon request and please contact the Secretary to the Board of Variance at (604) 873-7723.

BattersbyHowat

Board of Variance Application
3019 Point Grey Road
One-family dwelling

PROJECT DATA

property address	3019 Point Grey Road, Vancouver BC, V6K 1A7
legal description	LOT A BLOCK 24 PLAN VAP9538 DISTRICT LOT 192 NEW WESTMINSTER
dimensions + site area	78'-2" x 154'-6" x 77'-10" x 161'-6" (23.83m x 46.94m x 23.47m x 19.07m) 12,293 ft² (312 m²)
zoning	RS-2
variances requested	**1.** Allow for over height fence and gate (6'-0") for safety of residents consistent with the existing property and other residences along Point Grey Road. **2.** Allow development beyond the rear yard building line to enhance the foreshore condition for both private and public benefit. **3.** Allow the removal of by-law protected trees in conflict with the proposed development
relevant bylaws/sections	*Section 10.9 – Fences* *10.9.4 Notwithstanding section 10.9.3, a fence or similar structure shall be permitted in a required front yard or on the boundaries of a required front yard located in the C-1 District or any R district provided it does not exceed 1.2 m in height.* *RS-2 District Schedule* *Section 4.6.3 – Rear Yard* *4.6.3 Where a building line has been established pursuant to the provisions of section 14.2 of this By-law, such building line shall be deemed to be the southerly boundary of any required rear yard on lands described in "Plan A" of Part III of Schedule E* *Schedule E to Bylaw No. 3575, Zoning and Development By law* *14.3 No development shall be carried out upon, over or under any part of a site:* *(a) between any building line established by Parts I and II of Schedule E and the limit of the adjoining or projected street or lane;* *(b) as described in Part III of Schedule E* *Section 2.1, By law No. 9958, Protection of Trees* *Exemption for small trees* *2.2 This By-law does not apply to a tree that has a trunk or stem the diameter of which, or two or more trunks or stems the combined diameter of the two or three largest trunks or stems of which, measured 1.4 m above the existing grade of the ground adjoining its base, is less than 20 cm, except for a replacement tree or a tree that is part of a hedge.*

BattersbyHowat

Board of Variance, City Hall
453 West 12th Avenue
Vancouver, BC

January 16, 2023

To whom it may concern,

On behalf of the residents of 3019 Point Grey Road, we are requesting three (3) variances from the board, to be voted on separately at the scheduled appeal on February 14th, 2023.

Firstly, we are requesting a relaxation pertaining to the 1.2m maximum height of fences permitted in a front yard. In accordance with the existing conditions at the subject property we wish to maintain the existing gate height at 1.8m, with an upgraded design to suit the character and quality of the future built house. The proposed design includes a driveway to dually function as a play court for the children to play basketball and other sports. The gate design will first and foremost promote safety, while adding aesthetic value to the neighbourhood. By preventing balls from entering the busy public throughfare of cars, cyclists, pedestrians, and dog owners that frequent the seaside greenway, the parents can also have peace of mind knowing that their 4 children under age 10, are safe to play freely in the front yard.

Second, we are requesting that the board allow development beyond the rear yard building line to enhance the rear yard and foreshore condition, improving the ecological condition and experiential qualities for both the residents and public who enjoy the waterfront. In the upper elevations of the property parcel, the proposed design includes a swimming pool, hot tub, and terraces in concert with naturalistic planting throughout to framing views of the north shore mountains and Salish sea. As the rear yard slopes steeply to the foreshore, this proposal seeks to mitigate the detrimental impacts of king tides and sea level rise upon the waterfront. Building upon efforts of the adjacent property of 3011 Point Grey Road, the foreshore retention strategy aims to soften and beautify the shoreline with terraced, native plantings, and strategic boulder placement arranged to reduce wave energy and scouring of sediments. This will allow beneficial intertidal plant communities and invertebrates to establish, improving the ecological functioning and overall condition of the beach.

Lastly, we are requesting that the board permits the removal of bylaw protected trees, to allow for the relevant landscape design enhancements to be constructed. The proposed replacement tree species shall provide greater habitat value and contribute to the aesthetic qualities of the proposed development.

It is our hope that these requests will set a precedent for future development along the foreshore and seaside greenway along Point Grey Road, encouraging property owners to play an active role in promoting the safety and wellbeing of the community. Thank you for taking the time to examine our proposal.

Sincerely,

David Battersby
Principal, BattersbyHowat Architects Inc.

WESTMAR ADVISORS

Memorandum

Client	**BattersbyHowat Architects Inc.**	
Project Name	3019 Point Grey Foreshore Works - Shoreline Protection	
Project No.	1220183-P01	
Document No.	1220183-P01-00-MEM-0001 Revision 0	
Date	16 January 2023	
Attention to	Kalli Niedoba	BattersbyHowat Architects Inc.
Copies	Vignesh Ramadhas	Westmar Advisors Inc.
	Michael Isaacson	Westmar Advisors Inc.
Subject	Foreshore Works at 3019 Point Grey Road - Coastal Engineering Study	

1 Introduction

Westmar Advisors Inc. (Westmar) has been retained by BattersbyHowat Architects Inc. (Battersby Howat), to conduct a coastal engineering study to provide recommendations related to proposed foreshore works on and adjacent to a waterfront property located at 3019 Point Grey Road in Vancouver. The owners of the property wish to redevelop the property and adjacent foreshore to include foreshore enhancements, generally comprised of retaining walls, basalt columns, shoreline protection in the form of boulder and fill placement, and vegetative enhancements. The proposed foreshore enhancements are as shown on a set of BattersbyHowat Drawings (Drawings 1 to 6) and a rendering shown in Drawing 7

In support of the proposed foreshore works, this study is intended to provide the following:

- A determination of relevant design water levels for this project that includes a consideration of tides, storm surge, sea level rise and waves, developed in the context of loads on retaining walls, shore protection design and permitting requirements.
- Recommendations regarding boulder and filter rock sizing and placement for shoreline protection, to be located adjacent to the retaining walls.
- An evaluation of potential erosion risks of the natural bluff, the natural shoreline, and the shoreline protection, needed in the context of permitting requirements, and the integrity of the shoreline protection and the retaining walls.
- A determination of the required building setback, and the suitability of the current design in meeting this requirement.

The latter two items support permitting requirements for this project.

Figure 1 provides a birds-eye view of the property, neighbouring properties, and the foreshore in their vicinity, while Figure 2 shows an aerial view of these as viewed from the north. The figures indicate that the foreshore is predominantly bare sandstone / sandstone outcrops, with little or no sands and finer sediments, while Figure 2 also shows the bank and retaining wall fronting the property and the neighbouring properties.

Figure 1 – Aerial view of subject property, neighbouring properties, and the adjacent foreshore (Google Earth)

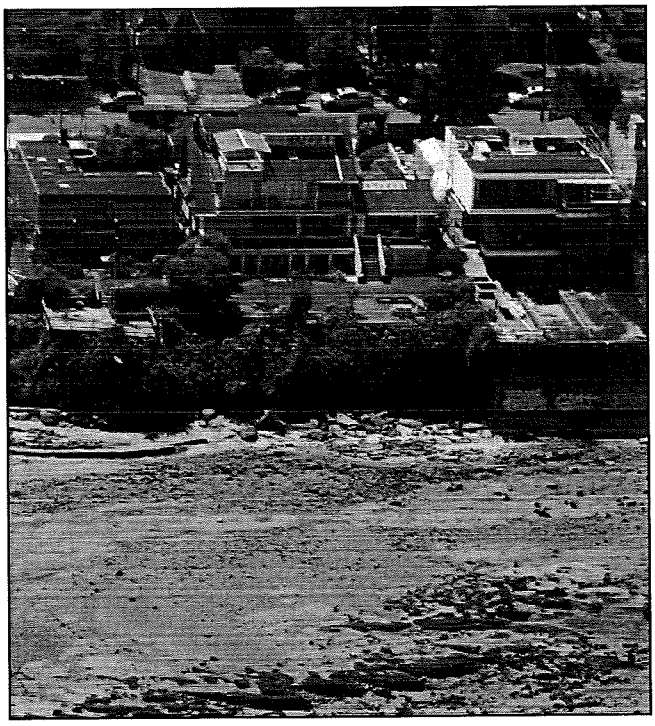


Figure 2 – Aerial view of subject property, neighbouring properties, and the adjacent foreshore, as seen from the north (ShoreZone)

2 Reference Materials

This study relies on the following BattersbyHowat Drawings:

1) Drawing No. L0.4, Layout Plan, dated 23 December 2022
2) Drawing No. L1.0, North Yard Layout and Materials Plan, dated 11 January 2023
3) Drawing No. L1.1, Nort-South Section – West Yard, dated 11 January 2023
4) Drawing No. L1.2, Nort-South Section – Dining Terrace and Foreshore, dated 11 January 2023
5) Drawing No. L1.3, Nort-South Section – Foreshore and Swimming Pool, dated 11 January 2023
6) Drawing No. L1.5, Foreshore Enhancement Diagram, dated 11 January 2023
7) Foreshore Collage, dated 7 November 2022

As well, this study relies on the following references:

1) Coastal Engineering Manual (CEM), U.S. Army Corps of Engineers, 2002 (with subsequent updates).
2) BC Ministry of Forests, Lands, Natural Resource Operations and Rural Development (BC MFLNRO). 2018. Amendments to Sections 3.2.6, 3.5 and 3.6 of: *Flood hazard area land use management guidelines, BC Ministry of Water, Land and Air Protection, May 2004*. January 2018.
3) The Rock Manual, 2nd Edition, CIRIA, 2007.
4) WSP Canada Inc. (WSP). 2019. Flood Control for West Vancouver Waterfront Buildings Interim Planning for Coastal Flooding & Sea Level Rise, report to the District of West Vancouver, October 2019.
5) EurOtop. 2018. Manual on wave overtopping of sea defences and related structures. An overtopping manual largely based on European research, but for worldwide application.

3 Water Level Components

Design water levels required for this study are developed by considering contributions from tides, storm surge, relative sea level rise and waves. This section describes the determination of these various components, while Section 4 considers their combination so as to obtain the required design wave levels.

3.1 Tide and Storm Surge

Tides at the site are mixed semi-diurnal, corresponding to two highs and two lows of unequal height each day. The Higher High Water Large Tide (HHWLT) at the nearest tidal station 7795, Point Atkinson, is 2.16 m GD, obtained from the data portal: https://www.bio.gc.ca/science/data-donnees/can-ewlat/index3-en.php (GD denotes Geodetic Datum, which corresponds to the datum CGVD2013). However, the HHWLT elevation is not used directly, since tide level and storm surge are considered simultaneously in the "Probabilistic Method" that is used.

Storm surge refers to an increase in the mean water level above the astronomical tide level because of a storm and so excludes wave-by-wave fluctuations.

For the Probabilistic Method referred to, the tide and storm surge are considered in combination such that combined tide plus storm surge levels are used. WSP (Reference 4) has indicated that these elevations for Point Atkinson, are 2.50 m GD and 2.57 m GD for 50-year and 200-year return periods,

respectively. These tide + storm surge values were independently verified by Westmar in 2021 using measured tide data for Point Atkinson and are used in this study.

3.2 Relative Sea Level Rise

Sea Level Rise (SLR) refers to the increase in mean sea level at a specified time horizon (year) relative to a specified base year because of climate change. Relative Sea Level Rise (RSLR) refers to Sea Level Rise minus local land uplift, and so is more relevant to assessing potential impacts of increasing coastal water levels.

Based on statements in the relevant BC Guidelines (BC MFLNRO, 2018), it has been commonplace to select a SLR value of 1 m for the year 2100. However, these statements are reproduced from earlier guidelines published in 2011 and are now considered superseded. The Guidelines recognize this possibility: "*The scenario is intended to be reviewed every 10 years or sooner if there is significant new scientific information*".

Thus, extensive information, data and methodologies have become available since the publication of the earlier 2011 guidelines, including detailed information on projected SLR, land uplift / subsidence rates across BC that are also needed, and a consistent probabilistic treatment of uncertainties relating to future SLR.

The RSLR projection should take account of global SLR, a regional adjustment and local land uplift, and should be based on emission scenario RCP8.5 ("business as usual" scenario with respect to greenhouse gas emissions). Thus, an up-to-date approach for estimating RSLR, with a consistent probabilistic treatment of uncertainties in RSLR projections, corresponds to the "vertical allowance" as adopted by Small Craft Harbours, of the Department of Fisheries & Oceans (DFO). Such information is available at many stations through DFO's CAN-EWLAT portal. Based on this portal, the vertical allowances for this project are obtained as 0.28 m to the year 2073 and 0.56 m to the year 2100, both relative to 2023.

3.3 Waves

Design wave conditions are normally described by the significant wave height, denoted H_s, and peak period of the waves, denoted T_p. The significant wave height, which is a representative wave height commonly used in coastal engineering practice, is the average height of the highest one-third of the waves in a storm; and the peak period is the wave period in a storm at which the wave energy distribution with wave frequency is a maximum. For applications relating to wave effects at the shoreline, these conditions are extended to include wave runup at the shoreline or a shoreline structure.

Wave runup, which is typically influenced by wave breaking, refers to the maximum wave surface elevation at the shoreline relative to the local mean water level. Wave runup influences the loads on retaining walls and the maximum reach of the water in establishing design water levels. During an extreme storm, the runup of individual waves vary, such that it is customary to rely on the "2% runup", denoted R_m, which is the runup value that is exceeded by the highest 2% of waves in the storm.

The methodology used to obtain the above design wave conditions has involved, first, an analysis of wind data to obtain extreme wind conditions corresponding to selected return periods (50 years and 200 years in the present case); the application of these to a hindcast analysis to determine corresponding deep-water wave conditions; the transformation of these, primarily by shoaling and refraction, to determine corresponding wave conditions in the nearshore area; and finally, a consideration of wave breaking and runup mechanics to determine the wave runup as the waves reach the shore. In order to obtain the needed wave parameters, a desktop analysis based on the above methodology has been undertaken and calibrated so as to take account of corresponding information for neighbouring locations along the Vancouver shoreline obtained over the past few years.

Design wave conditions for both 50-year and 200-year return periods have thereby been obtained approximately as follows:

- 50-year return period: H_s = 1.8 m, T_p = 6.3 s, R_m = 2.6 m
- 200-year return period: H_s = 2.1 m, T_p = 6.5 s, R_m = 3.0 m

4 Design Water Levels

Several design water levels need to be established for this project.

Waves and water levels relating to the design of retaining walls and shore protection are developed based on a 50-year return period and an end-year of 2073 (corresponding to a 50-year design life). The mean water level and the wave crest elevation are given as follows:

- The mean water level is taken to correspond to the 1-in-50-year combined tide plus storm surge elevation plus RSLR to the project end-year 2073.
- The wave crest elevation is taken to correspond to the mean water level as above plus a suitable value of wave runup for a 1-in-50-year storm.

Waves and water levels with respect to permitting requirements relating to Flood Construction Levels and setbacks are developed based on a 200-year return period and an end-year 2100. The mean water level and the wave crest elevation are given as follows:

- The mean water level is taken to correspond to the 1-in-200-year combined tide plus storm surge elevation plus RSLR to the year 2100. This is referred to as the "*Designated Flood Level.*"
- The wave crest elevation is taken to correspond to the mean water level as above plus a suitable value of wave runup for the 1-in-200-year storm. This is referred to as the "*Flood Construction Reference Plane.*" (FCRP).

The latter elevation, along with the addition of 0.6 m freeboard, is equivalent to the Flood Construction Level described in the BC Guidelines (BC MFLNRO, 2018).

These design elevations and the elevation components for the two return periods have been obtained as shown in Table 1 below.

Table 1 – Design water levels and components

Water level component	50-year return period, end-year 2073	200-year return period, end-year 2100
HHWLT (1)	2.16 m GD	2.16 m GD
Tide + storm surge	2.50 m GD	2.57 m GD
Relative sea level rise	0.28 m	0.56 m
Mean water level	**2.8 m GD**	**3.1 m GD** (2)
Wave runup	2.6 m	3.0 m
Wave crest elevation	**5.4 m GD**	**6.1 m GD** (3)

Notes:
1. HHWLT provided for reference only - not used directly
2. Designated Flood Level
3. Flood Construction Reference Plane (FCRP)

It is noted that the 200-year wave crest elevation plus a freeboard of 0.6 m corresponds to the Flood Construction Level described in the BC Guidelines. In comparison, VanMap indicates that the building is to be located above the 8 m GD contour, which confirms that the building is above the Flood Construction Level.

5 Armour Stone Sizing

Armour stone sizing has been developed based on the methods of Hudson and Van der Meer (References. 1, 3 and 5), with an average of these two estimates taken. The recommended armour stone sizing is presented in Table 2. These results are based on a slope of 1.5H:1V for the armour layer adjacent to the retaining walls, and smooth, reasonably rounded rocks. The sizes of materials used for the filter layers are related to the rock size and have also been estimated. Accordingly, the rock and filter layer sizes are recommended as in Table 2 below:

Table 2 - Armour stone and filter layer sizing

	Armour Layers		Filter Layer	
	Mass (kg)	Nominal Diameter (mm)	Mass (kg)	Nominal Diameter (mm)
Maximum	2,180	940	34	240
Median	1,560	840	25	210
Minimum	1,111	750	18	190

The nominal diameter of the rocks is defined as the length of a cube of the rock material with the same mass.

It is expected that the fill material with fine content may be partially eroded under more extreme wave / water level conditions, and occasional maintenance works may then be required to restore this, especially in later years as more significant SLR has occurred.

It would be possible to accommodate some departures from the guidelines given in Table 2, in recognition of the aesthetics of the shore protection and to encourage habitat development and planting. Allowing for this, the retaining wall footings are to be keyed into the sandstone base. Even so, any such departures will need to be reviewed and approved by a qualified engineer during construction. Such departures should not then impact the retaining wall design, although they may lead to increased erosion of the fill material under severe storm conditions, and to some movement of boulders.

The placement of boulders and rocks lower on the foreshore, as indicated in Drawing 6, does not affect the wall design.

6 Beach Processes and Erosion

The possibility of erosion of the bluff and beach needs to be considered in the context of retaining wall stability and design, the functionality of the proposed shoreline protection, and the establishment of the building setback consistent with permitting requirements.

As a general summary of erosion processes, sediment transport along a shoreline may include: longshore transport (i.e., sediment movement parallel to the shore) associated with waves approaching the shoreline obliquely and the resulting longshore currents; onshore / offshore transport, whereby storm waves transport material offshore, while lower waves between storms transport material onshore to rebuild a beach; and, if relevant, intermittent erosion of the backshore to provide a sediment source for the beach. However, such transport is contingent on the availability of sediment, whereas there are no sediment sources close to the site, so that little or no sand and finer materials are found at the site itself. Specifically, the foreshore substrate generally consists of bedrock outcropping, cobbles, and gravels.

In fact, there are three aspects to potential erosion that may be considered in the present context: as relating to the bluff, the natural seabed, and the placement of fill materials.

First, erosion of the bluff cannot occur, since the natural bluff will be contained within a set of retaining walls, and so will no longer be exposed to potential erosion from the sea (regardless of sea level rise). Second, erosion of the natural seabed should not occur since there is little or no sediment overlying the sandstone base and outcrops. Third, erosion of newly placed fill may occur under more severe storms occurring in conjunction with high tides, especially in later years on account of sea level rise. While this may require replenishment, this does not impact the design of the walls nor setback considerations.

In summary, the potential erosion of the bluff is not applicable, since the retaining walls front the current bluff, erosion of the natural seabed will not occur since there are little or no finer materials here, and occasional erosion of newly placed fill may occur under more extreme conditions, and may require replenishment, but this does not impact the design of the walls nor setback considerations.

7 Setback

There is a need to consider the suitability of the building setback relative to the foreshore in the context of the relevant BC guidelines (BC MFLNRO, 2018).

Clause 3.5.5.4 ("Lots with Coastal Bluffs") of the Guidelines describe the determination of setbacks "*for lots containing coastal bluffs that are steeper than 3(H):1(V) and susceptible to erosion from the sea.*" This leads

to setbacks of 30 m or greater. However, this clause is not relevant here, since the property is not located on a bluff susceptible to erosion, as described in Section 6 above.

Clause 3.5.5.4 ("Lots with Coastal Bluffs") also states: "*The setback may be modified provided the modification is supported by a report, giving consideration to the coastal erosion that may occur over the life of the project, prepared by a suitably qualified Professional Engineer experienced in coastal engineering*". This statement supports the option of developing the coastal engineering analysis that is undertaken below, whereby a suitable setback requirement is established.

Clause 3.5.5.1 ("Standard FCL's and Setbacks") states that: "*The building setback should be at least the greater of 15 m from the future estimated Natural Boundary of the sea at Year 2100, or landward of the location where the natural ground elevation contour is equivalent to the Year 2100 FCL*". The Year 2100 Natural Boundary is defined as the horizontal location of the intersection between the FCRP (see Table 2) and the present-day topography. However, this definition is not relevant here, since the bluff will be fronted by retaining walls whose elevation exceeds the FCRP, so that there is no overtopping of the walls, even taking account of RSLR. Thus, the boundary is instead interpreted as the location of the retaining walls at the FCRP elevation. Therefore, the required setback is 15 m from the retaining wall (at the FCRP elevation). In making this assessment, due attention has been given to all aspects of the coastal flood hazard associated with Year 2100 water levels, including "potential wave, debris and related splash impacts on buildings" (as stated in the Guidelines). The current design, as indicated in Drawings 1 to 5, indicate that this distance is 15.5 m or greater. Therefore, it is affirmed that the building setback identified in Drawings 1 to 5 conform with the relevant guidelines.

8 Conclusions

This memorandum provides an assessment of the coastal engineering aspects of the proposed redevelopment of the property and adjacent foreshore at 3019 Point Grey Road in Vancouver, on the basis of information contained in Drawings 1 to 6 that are referred to.

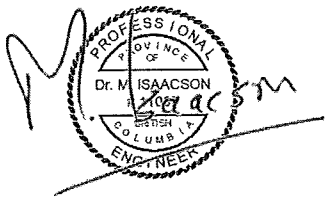
Design wave conditions and design water levels are developed as indicated in Section 3 and in Table 1, respectively.

Table 2 provides sizing guidelines with respect to the boulders and filter rock fronting the retaining walls. It would be possible to accommodate deviations from these guidelines, in recognition of the aesthetics of the shore protection and to encourage habitat development and planting. However, any such deviations would be contingent on these being reviewed and approved by a qualified engineer during construction. Furthermore, it is understood that the retaining wall footings are to be keyed into the sandstone base.

A summary review of erosion potential and risks finds that there should be no erosion of the existing bluff and the original beach, whereas potential erosion of newly placed fill may be possible under more severe conditions. While the latter may require replenishment, this has no implications with respect to retaining wall design or a determination of the building setback.

An assessment of the building setback in the context of the relevant guidelines indicates that this should be a minimum of 15 m as measured from the retaining walls, whereas the minimum setback indicated on the relevant drawings is 15.5 m, and so is considered acceptable.

End of Memorandum



Prepared by:

Dr. Michael Isaacson, P.Eng.
Senior Coastal Engineer

January 16, 2023
Westmar Advisors Inc.
Permit to Practice No. 1001354

Signed

Reviewed by:

Vignesh Ramadhas, P.Eng.
Senior Marine Structural Engineer

Signed

Approved by:

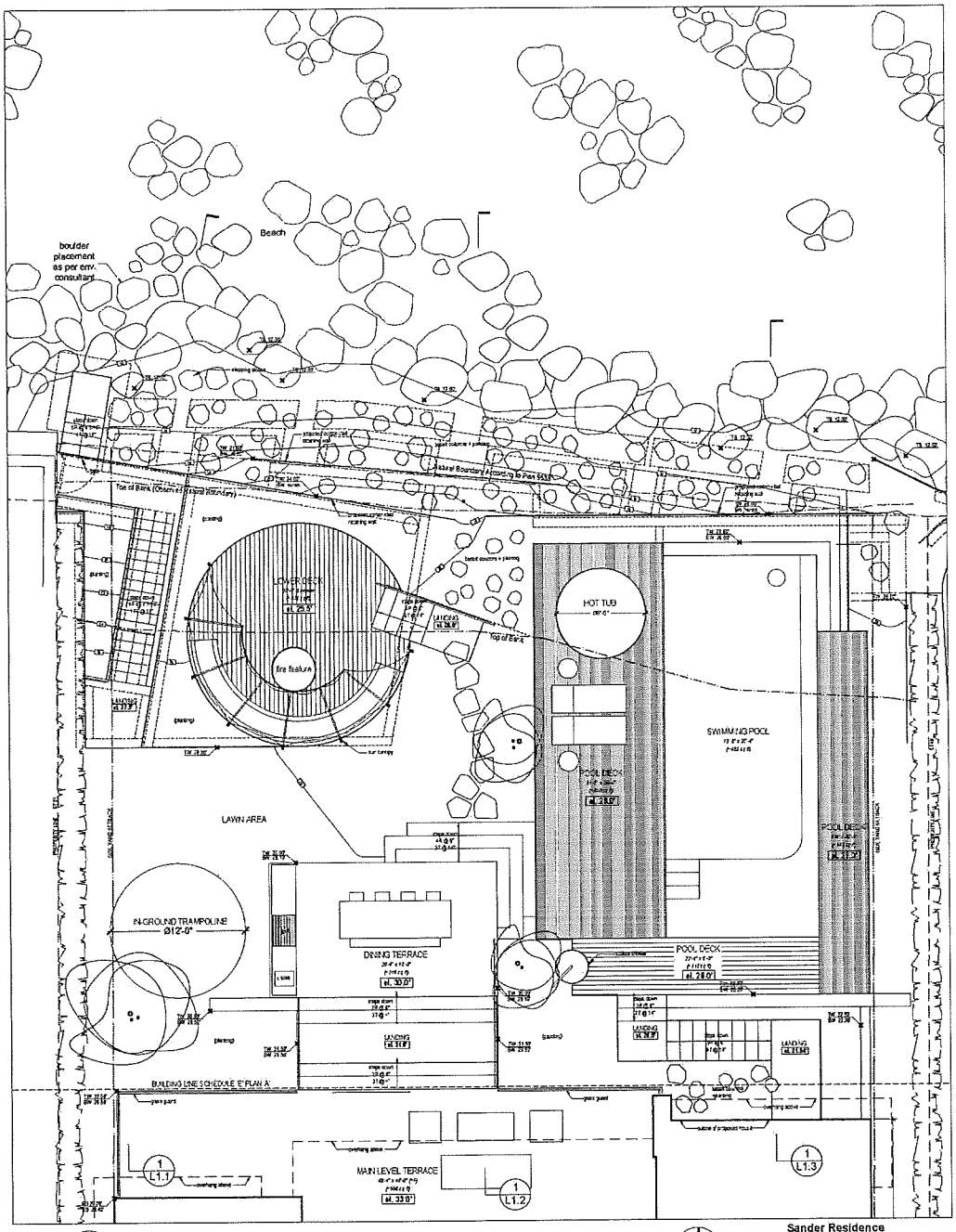
Vignesh Ramadhas, P.Eng.
Senior Marine Structural Engineer

Signed

APPENDIX 1 – Proposed Works Drawings

BattersbyHowat Architects - Rendering of backshore and foreshore works

BattersbyHowat Architects – North yard layout



Sander Residence
3019 Point Grey Road
Vancouver, B.C.

L1.0

North Yard Layout
+ Materials Plan

BattersbyHowat

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SCALE: as noted
Date: 11 January 2023

BattersbyHowat Architects – Foreshore enhancement diagram