



District of West Vancouver

Revised Soil Removal, Deposit, Blasting and Rock Breaking Bylaw No. 5130, 2021

Effective Date: July 27, 2021

Revised Bylaw

This is a revised bylaw. Soil Removal, Deposit, Blasting and Rock Breaking Bylaw No. 5130, 2021 was revised pursuant to Bylaw Revision Authorization Bylaw No. 5149, 2021 (adopted September 27, 2021) and Soil Removal, Deposit, Blasting and Rock Breaking Bylaw No. 5130, 2021, Revision Bylaw No. 5148, 2021 (adopted October 4, 2021). The revision of this bylaw was certified by the Corporate Officer on September 28, 2021.

Consolidated for Convenience Only

This is a consolidation of the bylaws listed below. The amendment bylaws have been combined with the original bylaw for convenience only. This consolidation is not a legal document. Certified copies of the original bylaws should be consulted for all interpretations and applications of the bylaw on this subject.

Amendment Bylaw
Bylaw No. 5252, 2023

Effective Date
June 26, 2023

The bylaw numbers in the margin of this consolidation refer to the bylaws that amended the parent bylaw (Revised Soil Removal, Deposit, Blasting and Rock Breaking Bylaw No. 5130, 2021). The number of any amending bylaw that has been repealed is not referred to in this consolidation.

Revised Soil Removal, Deposit, Blasting and Rock Breaking Bylaw No. 5130, 2021

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District of West Vancouver

Revised Soil Removal, Deposit, Blasting, and Rock Breaking Bylaw No. 5130, 2021

A bylaw to regulate the removal from and deposit of soil on lands within the Municipality, to regulate and prohibit the use of explosive agents for blasting, to require the holding of a permit for such purposes, and to fix a fee and security for such permit.

Previous amendments: *Amendment Bylaw 5252.*

WHEREAS the Community Charter authorizes Council by bylaw, to regulate, prohibit and impose requirements in relation to public safety;

WHEREAS the Council of The Corporation of the District of West Vancouver deems it expedient to provide for the removal and deposit of soil from or on lands within the Municipality be regulated;

AND WHEREAS the Council of The Corporation of the District of West Vancouver deems it expedient to restrict the provisions related to explosive agents for blasting and include a clear definition of explosives for blasting.

NOW THEREFORE, the Council of The Corporation of the District of West Vancouver enacts as follows:

Part 1 Citation

- 1.1 This bylaw may be cited as Revised Soil Removal, Deposit, Blasting and Rock Breaking Bylaw No. 5130, 2021.

Part 2 Severability

- 2.1 If a portion of this bylaw is held invalid by a Court of competent jurisdiction, then the invalid portion must be severed and the remainder of this bylaw is deemed to have been adopted without the severed section, subsection, paragraph, subparagraph, clause or phrase.

Part 3 Previous Bylaw Repeal

- 3.1 Blasting Bylaw No. 4024, 1996 (adopted on November 25, 1996) is hereby repealed.
- 3.2 Soil Removal and Deposit Regulation Bylaw No. 3786, 1992 (adopted on March 22, 1993) and the following amendment bylaws are hereby repealed:

Amendment Bylaw	Effective Date
Bylaw No. 4703, 2011	November 28, 2011
Bylaw No. 4148, 1999	February 8, 1999
Bylaw No. 4025, 1996	November 18, 1996
Bylaw No. 3981, 1996	February 12, 1996
Bylaw No. 3854, 1993	January 10, 1994

- 3.3 The amendments to Blasting Bylaw No. 4024, 1996 effected by the following amendment bylaw are hereby repealed:

Amendment Bylaw	Effective Date
Bylaw No. 4521, 2007	October 22, 2007

- 3.4 The amendments to Soil Removal and Deposit Regulation Bylaw No. 3786, 1992 effected by the following amendment bylaw are hereby repealed:

Amendment Bylaw	Effective Date
Bylaw No. 4521, 2007	October 22, 2007

Part 4 Definitions

- 4.1 In this bylaw:

“Approving Officer” means the approving officer for the District under the British Columbia Land Title Act;

“Affected Owners” means the owners or occupiers of parcels of land to be inspected before a Blasting Permit is issued pursuant to Section 7.2.14;

“Application” means a document with the requirements outlined in Schedule A or Schedule B depending on the type of permit requested;

“Blast” or “Blasting” means the use of explosives, or chemicals, for the purpose of moving, displacing or breaking rock or other material;

“Blaster” means the person, firm or corporation engaged by the Owner to conduct Blasting and includes an agent, contractor or employee of the Blaster;

“Blasting Permit” means the written authority granted by the Director pursuant to this Bylaw for the purposes of Blasting.

“Building Permit” means a permit in good standing issued by the District of West Vancouver in accordance with the Building Bylaw No. 4400, 2004, as amended from time to time;

“Control Measures/Blasting Plan” means a document that complies with the requirements set out in Section 7.2.9;

“Council” means the duly elected Council of The Corporation of the District of West Vancouver;

”Deposit” means the act of moving soil or rock and placing it on land or into a stockpile or other storage facility;

“Director” means the Director of Planning of the District and any person designated by the Director to exercise the Director's powers under this Bylaw;

“District” means The Corporation of the District of West Vancouver;

“Engineer” means a professional engineer who specializes in rock mechanics and has expertise in blasting in urban areas, is independent of the Blaster, is acceptable to the Director, and who is retained to carry out the duties under Section 7.2;

“Explosive(s)” includes any chemical compound or mechanical mixture which by fire, friction, concussion, percussion or detonation, may cause a sudden release of gasses having pressure capable of producing destructive effects;

“Hospital” means a hospital or licensed hospital under the Hospital Act;

“Letter(s) of Assurance” means a document or documents, in the form set out in Schedule E, to be completed, executed and delivered by the Engineer under Section 7.2.8;

“Lot” means real property registered as a parcel in the records of the applicable land title office;

“Other Material” means non-degradable construction or demolition waste, such as masonry rubble, concrete rubble and asphalt;

“Owner” means the person registered in the Land Title Office as entitled to the fee simple of a parcel, holders of a registered right to purchase a parcel, or holders of a right of way in favour of a statutory authority and a person authorized in writing by the Owner to act as the Owner's agent for purposes of this Bylaw;

“Public Lands Application” means an “Application” by a person or entity, other than the District, for rock removal on a highway, park, right of way or other area that is owned or controlled by the District;

“Removal” means the act of removing rock or soil from land or from a stockpile or other storage on land;

“Rock-breaking” means the removal of boulders or bedrock from land by drilling, percussive breaking (not hammering), or splitting, but excluding blasting;

“Rock-breaking Permit” means the written authority granted by the Director pursuant to this Bylaw for the purposes of Rock-breaking;

“Soil” means peat, clay, silt, sand, gravel, cobbles, boulders, bedrock or other substance of which land is naturally composed, as well as “Other Material” (as defined above) but shall not include stumps or logs;

“Soil Permit” means the written authority granted by the Director pursuant to this Bylaw for the removal or deposit of soil from or on land within the District;

“Wood waste” means wood residue in mechanically shredded form and includes sawdust, hog fuel, bark, chips, slabs, shavings, trimmings, edgings or other such waste which is the result of any manufacturing process involved in the production of lumber or other wood products.

Part 5 Permit Required

5.1 Soil Permit

Subject to the following circumstances hereof, no person shall remove, deposit or cause to be removed or deposited soil unless a Soil Permit has been granted for such removal or deposit pursuant to Section 7.1 and Schedule A of this Bylaw and every such removal or deposit shall conform in all respects to the regulations and requirements of this Bylaw and the terms and conditions of the permit.

A Soil Permit under this Bylaw shall not be required in the following circumstances:

5.1.1 Work on Public Lands

The removal from or deposit upon a public highway, statutory right-of-way, or other public property of such soil as is necessary for the construction or installation of a roadway, utility service, dike, or other service thereon, or disposal or stockpiling where such work is being done with the approval of the District’s Director of Engineering and Transportation or their designate;

5.1.2 Building Permit

The removal or deposit of soil, except Blasting or Rock-breaking, related to the construction of buildings or structures, the correct grade, depth and extent of which are shown accurately on scaled drawings submitted as part of the application for a Building Permit and for which a Building Permit has been issued and is in good standing;

5.1.3 Subdivision

The removal or deposit of soil related to the construction of roads or the installation of utilities and services required by the Approving Officer as a condition of approval of the subdivision of land, provided that the said roads, utilities and services are constructed in accordance with engineering drawings approved by the District's Director of Engineering and Transportation or their designate;

5.1.4 Minor Works

The removal or deposit of soil where: at any point the depth of the soil removed or deposited does not exceed 1.2 metres; the unrestrained slope of the filled or excavated surface does not exceed two (2) horizontal to one (1) vertical; retaining walls associated with the work do not exceed a height of 1.2 metres measured from the natural ground elevation; or, for deposit of soil, the slope of the existing ground does not exceed fifteen percent (15%) at any point or where the existing ground is filled, the underlying natural ground surface does not exceed fifteen percent (15%) at any point.

5.2 Blasting or Rock-breaking Permit

Subject to the following circumstances hereof, no person shall remove or cause to be removed rock unless a Blasting or Rock-breaking Permit has been granted for such removal pursuant to Section 7.2, Section 7.3 and Schedule B of this Bylaw and every such removal shall conform in all respects to the regulations and requirements of this Bylaw and the terms and conditions of the permit. The Director may require additional information beyond that outlined in Section 7.2 and Section 7.3 in order to grant such a permit for removal.

Blasting or Rock-breaking **may** be exempted by the Director in the following circumstances from the provision of Sections 7.2.5 – 7.2.10, 7.2.13, 7.2.14, Part 10, Part 14 and Part 15 of this Bylaw. Written approval from the Director is required prior any rock removal on site.

- 5.2.1 Less than 10 cubic metres of rock or other material is to be removed by Rock-breaking or blasted by means of detonating not more than 0.3 kilograms of explosive per delay as permitted by Part 6.1.1;
- 5.2.2 The rock to be removed consists entirely of boulders separate from bedrock;
- 5.2.3 If the rock removal is specifically authorized by a statute or regulation other than the Community Charter or Local Government Act; or
- 5.2.4 If the work is, in the Director's opinion, required on an urgent basis to lessen or eliminate an imminent threat to life, safety, property damage or public transportation routes and communication systems.

Part 6 Limitation of Blasting or Rock-breaking

- 6.1 On land in a Single or Two Family Zone and in the residential area within Caulfield Land Use Contract D.A.A. (all as designated, identified, delineated and shown in Zoning Bylaw No. 4662, 2010 as amended) Blasting and Rock-breaking is prohibited except:

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- 6.1.1 For the construction of a primary dwelling, garage, coach house, access driveways, and parking areas as shown on plans for which a building permit has been issued and is in good standing, and for such purposes the allowable rock volume to be broken shall be:
 - (a) a total volume of 400m³ on lots less than 885m² or;
 - (b) a total volume of 600m³ on lots over and equal to 885m² or;
 - (c) a total volume of 800m³ on a new lot created by consolidating two existing lots; consolidated following the effective date of the Revised Soil Removal, Deposit, Blasting and Rock Breaking Bylaw No. 5130, 2021 or;
 - (d) a volume specified by the Director in accordance with Section 6.7,

and provided further that a maximum volume of 45m³ may be removed through splitting, the remaining volume, up to the allowable maximum, must be removed using alternate approved Rock-breaking or Blasting methods. This volume

may be adjusted by the Director based on an assessment of the site conditions.

If the District has records of the actual volume of rock that was previously removed on a lot then the actual volume of said previously removed rock will be deducted from the allowable rock volume specified under Section 6.1.1. For consolidated lots, any records of the actual volume of rock that was previously removed from the pre-consolidated lots will be deducted from the allowable rock volume specified under Section 6.1.1. If the District has no records of the actual volume of rock that was previously removed on a lot then no adjustments are made to the allowable rock volume specified under Section 6.1.1.

- 6.1.2 For the installation of utilities and utility connections; and
 - 6.1.3 Blasting or Rock-breaking required by the certificate of a geotechnical engineer for the safe use of the site.
- 6.2 Despite the provisions of Section 6.1.1, the Owner of the land may apply to the Director for a Blasting or Rock-breaking permit to remove a volume of rock specified in the permit in order to:
- 6.2.1 Facilitate the construction of a swimming pool so as to reduce the visual and auditory impact of the pool and associated mechanical equipment on surrounding properties;
 - 6.2.2 Enable any accessory building or structure to be located on the site in a manner which will:
 - (a) Accommodate the design and spatial relationship of the buildings so the floor levels conform to the natural contours of the site.
 - (b) Eliminate or reduce the use of exposed foundation walls and structural support elements.
 - (c) Minimize the visible mass of all structures as viewed from adjacent roads and properties.
 - 6.2.3 Enable minor terrain alteration, in the opinion of the Director, to accommodate landscaping work or property amenity; but excluding in all cases, the removal of rock which substantially alters the natural grade of the site.

- 6.3 Under no circumstance shall the aggregate volume of rock removed pursuant to Section 6.1.1 and 6.2 exceed the allowable rock volume in Section 6.1.1.
- 6.4 This Part does not apply to rock-breaking required for the construction of roads or the installation of utilities and services in accordance with approved subdivision drawings.
- 6.5 Excluding subdivision, on site rock crushing and grinding will not be permitted at any time.
- 6.6 Rock hammering will not be permitted at any time.
- 6.7 The Director may allow a variance to increase, up to a maximum of 15%, the allowable rock volume pursuant to Section 6.1.1 (a), (b), and (c) and 6.2 to minimize development sighting impacts, maintain consistency to the established character of the neighbourhood, or address environmental considerations.

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Every request for a variance shall be made in writing to the Director in a form satisfactory to them. The Director may require additional documentation to substantiate the request. The request should be submitted at the time of application for Blasting or Rock Breaking Permit.

Part 7 Application

7.1 Soil Permit

Every application for a Soil Permit shall be made in writing to the Director in a form satisfactory to them, and every application shall include the information set out in Sections 1 and 2 of Schedule A herein and shall meet the technical requirements imposed by the Director in accordance with Section 2 of Schedule A herein.

Any operation involving the removal or deposit of soil, whether under permit or otherwise, shall comply with the requirements set out in Sections 3 to 11 of Schedule A.

The application shall include the permit fee set out in Fees and Charges Bylaw No. 5025, 2019, as amended from time to time.

7.2 Blasting Permit

When an Owner proposes to remove rock through means of Blasting, the Owner shall first apply to the Director for a Blasting Permit by providing each of the following:

- 7.2.1 A completed and signed Application as set out in Schedule B;
- 7.2.2 A copy of a valid Blasting Certificate issued to the Blaster by Worksafe BC for all persons completing the Blast (the original of which must be produced for inspection if required by the Director);
- 7.2.3 An indemnity from the Owner in the form and with the content of that attached as Schedule C;
- 7.2.4 A certificate of insurance providing coverage for the Blaster, the Owner and the other parties as specified in Schedule D against liability for loss or damage to persons or property as a result of blasting, which insurance shall remain in force while the permit is valid;
- 7.2.5 The permit fee and damage deposit set out in Fees and Charges Bylaw No. 5025, 2019 as amended from time to time. The damage deposit shall be security for the completion of all requirements under this Bylaw and may be used at any time by the District to secure completion of any of these requirements. A permit extension fee will be required for all permits that exceed their permit expiry date as determined by Part 9. Extension will be granted for permits based on the discretion of the Director;
- 7.2.6 A comprehensive topographic survey of the parcel (or the portion thereof) where the removal is to be carried out, prepared by a B.C.L.S. or a professional engineer. The survey perimeter, at a minimum, should be defined as a 3m setback from the aggregated area of the footprint formed by the exterior walls of the principle building and garage as shown on the building permit plans and a 1m setback from the edge of driveway as shown on the building permit plans. The topographic survey shall have the dimensioned exterior walls of the principle building and garage, and edge of driveway, overlaid as shown on the building permit plans. The survey shall be completed after removal of organics and other overburden so that the bedrock proposed to be removed is exposed;
- 7.2.7 The removal areas shall be clearly marked on site with the depth of removal indicated, for approval by the Director if required, prior to issuance of the permit. The method of marking should not be removed by inclement weather;
- 7.2.8 Letter(s) of Assurance;
- 7.2.9 A Control Measures/Blasting Plan, prepared by the Blaster and accepted in writing by the Engineer, which shall consist of a

sketch of the blasting pattern and include the sequence of detonation and the maximum weight of explosives to be detonated per delay and shall specify measures designed to minimize potential injury to any person and avoid, control, or minimize the impact of the Blasting. If Blasting is not proposed within 150 metres of any structure, utility line, railway, public or private road, street, lane, driveway, or walkway, or is not expected to produce a rock cut over 3.5 metres high, then the Director may waive the requirement for a Control Measures/Blasting Plan. During the continuance of the permit, the Director may authorize amendments to the Control Measures/Blasting Plan which are approved in writing by the Engineer;

- 7.2.10 A report detailing how drill rigs and compressors are to be muffled, and the Director may, as a condition of issuing the permit, require use of equipment to reduce or control noise levels;
- 7.2.11 Information on the purpose for which removal is being undertaken;
- 7.2.12 The amount of material proposed to be removed shall include:
 - (a) A setback of 1m from the exterior walls of the primary dwelling, garage, and coach house as shown on the Building Permit plans to the depth of the approved slab;
 - (b) 0.4m below the slab for the aggregated area of the footprint formed by the exterior walls of the primary dwelling, garage, and coach house, as shown on the Building Permit plans;
 - (c) 0.4m below the finished surface for the area of the access driveways and parking areas as shown on the Building Permit plans;
 - (d) Truncation of all interior corners, to a maximum length of 2m, to remove 90 degree angles in order to account for potential over break.
- 7.2.13 Calculations and other such information as is necessary to enable the Director to verify the amount of material that is proposed to be removed under provisions of this Bylaw or any other bylaw or policy of the District.
- 7.2.14 A report on the results of a preblast inspection which shall be made of all principal structures and outbuildings, swimming

pools, retaining walls, patios, and driveways on any parcel of land within such distance of the blasting as the Director may specify, but no less than 120m from the site of the rock removal. The Blaster shall cause the survey to be conducted after notice in writing to the Affected Owners and after giving the Affected Owners a reasonable opportunity to be present or to have an agent present. The report of the preblast inspection shall identify by words and/or pictorially all observed damage to structures existing on the property inspected and anything that may be susceptible to damage from blasting and shall be signed by the person conducting the inspection and by the Affected Owners. If any Affected Owner has refused entry to inspect or has not cooperated to arrange an inspection within two (2) weeks of notice being given, or if the Affected Owner will not sign the inspection despite a reasonable opportunity to do so, then the Director may, at the Director's option, waive this requirement;

- 7.2.15 For a Public Lands Application, the persons seeking permission to blast shall sign all forms, complete all requirements and bear all responsibilities, liabilities and costs under the Bylaw and otherwise, as if they were the Owner, and the Director shall determine what will be required before the Director will accept the Application.

7.3 Rock-breaking Permit

When an Owner proposes to remove rock through means of Rock-breaking, the Owner shall first apply to the Director for a Rock-breaking Permit by fulfilling the requirements outlined in Section 7.2. Rock-breaking permits are exempted by this Bylaw from the provision of Section 7.2.2, 7.2.9 and 7.2.14.

Part 8 Order of Rock Removal

- 8.1 All rock removal required for a driveway and garage must be completed prior to any rock removal for the principle dwelling or coach house. A post rock removal topographic survey is to be submitted and accepted by the Director for all volumes after completion of driveway and garage rock removal and before commencing rock removal for the principle dwelling or coach house.

Part 9 Permit

- 9.1 Soil removal and deposit permits issued under this Bylaw shall expire twelve (12) months from the date of issuance. Application for a new permit

- shall be made in the same manner and upon payment of the same fees as provided in the Fees and Charges Bylaw No. 5025, 2019, as amended from time to time.
- 9.2 Authority for Blasting under a Blasting Permit expires:
- 9.2.1 ten (10) working days after issuance of the Blasting Permit for lots less than 885m², and;
- 9.2.2 fifteen (15) working days after issuance of the Blasting Permit for lots over and equal to 885m².
- 9.3 Authority for Rock-breaking under a Rock-breaking Permit expires fifteen (15) working days after issuance of the Permit for Rock-breaking.
- 9.4 The Director may, at the request of the Owner and upon receiving such information as the Director may require, extend the authority for rock removal under a Blasting or Rock-breaking Permit for the extension fee specified in the Fees and Charges Bylaw No. 5025, 2019 as amended from time to time. The Director shall be satisfied that any policy of insurance or security provided under Sections 7.2.3 or 7.2.4 will remain in effect.
- 9.5 The Director may cancel or suspend the authority for rock removal under a Blasting or Rock-breaking Permit if there are reasonable grounds to believe that the Owner or Blaster has done anything in violation of this Bylaw or the permit, or in violation of any agreement made pursuant to Sections 7.2.3 and 7.2.4. No person who has had their authority for rock removal under a permit cancelled or suspended shall engage in or carry on rock removal in the District unless special written permission to do so is given by the Director.

Part 10 Monitoring of Blasting

- 10.1 The Owner shall, at the Owner's cost, retain the Engineer to act on the Owner's behalf to: complete the requirements of Section 7.2 that relate to the Engineer, to monitor the blasting and to ensure that the Blasting complies with the Control Measures/Blasting Plan, the Blasting Permit, and the requirements of this Bylaw.
- 10.2 The Engineer shall immediately notify the Director if they have direct or indirect knowledge of a contravention of the Control Measures/Blasting Plan, the Blasting Permit, or the provisions of this Bylaw.
- 10.3 Ground vibration measurements shall be made while Blasting, at the closest structure to the blast and at any other structure considered to be sensitive to ground vibrations, as determined by the Engineer. All records

- pertaining to the safety aspects of the entire rock removal project and its impact on neighbouring properties, including vibration records, Control Measures/Blasting Plan(s) and delay patterns, shall be retained by the Blaster for a period of six (6) years.
- 10.4 The Engineer shall be present at the first blast that is of the full magnitude specified in the Control Measures/Blasting Plan. During the course of Blasting, the Blaster shall forward to the Engineer all blast records and the Engineer shall review the blast records and confirm to the Director, if requested, that blasting is being carried out in accordance with the Control Measures/Blasting Plan, and shall immediately report any problems, unusual circumstances, or inconsistencies to the Director.
- 10.5 In no circumstances shall ground vibration at any structure exceed a particle velocity of 50 millimetres per second or any lower limit for any given structure specified by the Engineer and made a condition of the Blasting Permit. The Blaster will immediately report to the Engineer, and the Engineer shall forthwith report to the Director, any instance when, and under what circumstances, vibrations exceeded the specified maximum limits.

Part 11 Hours and Conditions

- 11.1 Soil removal or deposit shall be done within the hours permitted under Noise Control Bylaw No. 4404, 2005, as amended from time to time.
- 11.2 Rock-breaking or Blasting shall only be done:
- 11.2.1 On Monday to Friday, not including holidays, and only within the hours permitted under Noise Control Bylaw No. 4404, 2005, as amended from time to time;
 - 11.2.2 When atmospheric or other conditions permit a clear observation at a radius of not less than 100 metres from the place where the blasting is to be carried out.
- 11.3 No Rock-breaking or Blasting can be done between December 17th and January 2nd of the following year.
- 11.4 The Director may withhold issuing a Rock-breaking or Blasting Permit until the end of the nesting season, if the subject property is within the buffer area of a nest of a protected wildlife species, as defined by the Provincial Guidelines for Raptor Conservation during Urban and Rural Land Development in British Columbia (2013), or may specify as a condition of a Permit that the Rock-breaking or Blasting must not occur except on or after a date specified in the permit.

Part 12 Blasting or Rock-breaking Notification

- 12.1 Blasting or Rock-breaking is not to be undertaken until written notice has been given to the Director and all Affected Owners. The number of Owners to be notified or the area of notification may be increased at the discretion of the Director and once increased, then all subsequent notification required under this bylaw shall apply to those Owners or the increased area. The notice shall describe the work to be done, the approximate quantity of rock to be removed, the expected date of commencement, the estimated duration of the project, and the name and phone number of the representative of the Blaster or Owner who will provide additional information.
- 12.2 At least 48 hours notice shall be given of the commencement of any Blasting or Rock-breaking, and at least one week's (7 days) notice shall be given of any project expected to continue for more than two (2) days.
- 12.3 No blasting shall be done within 300 metres of a School or Hospital until notice as required in Sections 12.1 and 12.2 has also been given to the senior administrator of the School or Hospital, as the case may be, and has been provided to the Director. Further notice must be given to the senior administrator, or his or her designate, at least two (2) hours prior to each actual blast, stating the approximate time of the blast.

Part 13 Blasting Safety

- 13.1 The Blaster shall ensure that a security person (equipped with and trained in the use of warning and signalling devices approved by Worksafe BC) shall be posted at every location where vehicles or pedestrians might be affected by a blast. Prior to any blast, this security person shall signal vehicles and pedestrians to prevent them from entering an area which may be affected by the blast. No blasting shall be done until all persons and vehicles vacate the area affected by the blast.
- 13.2 Prior to a blast adjacent to a travelled highway, the Blaster shall cause an effective warning to be given (in accordance with Worksafe BC regulations) in sufficient time to enable persons or vehicles that may be affected by the blast to move to a safe distance from the area. When a blast is completed, the Blaster shall cause the area affected by the blast to be inspected to ensure that it is free of unexploded charges, explosive material or other material which the blasting has caused to be a danger or a potential hazard. When the Blaster's inspection is completed, the security person shall restore normal vehicular and pedestrian traffic as soon as reasonably practicable.

- 13.3 While blasting is being carried on, the Blaster shall provide at least one competent assistant and as many additional competent assistants as circumstances may require and cause them to warn and implement all reasonable precautions to safeguard the occupants of buildings who may be affected by the blast.

Part 14 Post Rock Removal Topographic Survey Requirements

- 14.1 A post blast topographic survey in accordance with Section 7.2.6 is required for all Blasting and/or Rock-breaking. Volume blasted in excess of the allowable rock volume will be charged at a rate identified in the Fees and Charges Bylaw No. 5025, 2019, as amended from time to time.

Part 15 Post Rock Removal Notification Requirements

- 15.1 The Owner shall notify or cause to be notified the Director and each Affected Owner, in writing, when the rock removal to be carried out under the permit has been completed. Security deposit release will not be processed until sixty days after the letter is received.
- 15.2 At any time within sixty days after the date of notice given under Section 15.1, an Affected Owner may give notice to the Owner or the Blaster, with a copy to the District, that the Affected Owner's property has sustained damage as a consequence of the blasting. Upon receipt of such notice, the Owner or the Blaster shall conduct a post-blast inspection of the property. The Affected Owner or an authorized agent shall be given notice and a reasonable opportunity to be present during the post-blast inspection. If the Affected Owner doesn't permit entry to the property within two weeks of the notice being given, or cooperate in the post-blast inspection, then it shall be presumed that the Affected Owner's allegation of damage has been satisfied. The Owner or Blaster shall complete the post-blast inspection without delay and submit a report of the inspection to the Affected Owner with a copy to the Director.
- 15.3 The amount of any loss or damage within the scope of an indemnity under Section 7.2.3 that remains unpaid to the District six (6) months after the date of the post-blast inspection shall be deemed to be a debt due to the District which shall be recovered by the District in the same manner as taxes due on the parcel of land where the Blasting was carried out.

Part 16 Dust Control

- 16.1 No operation by which soil or rock is removed or deposited shall cause a dust or dirt nuisance affecting any neighbouring property, highway or right of way.

Part 17 No Wood Waste

- 17.1 No person shall deposit, cause the deposit or permit the deposit of wood waste upon any land, save and except that wood waste not exceeding 15cm in depth may be allowed for landscaping purposes only.

Part 18 Other Material

- 18.1 No person shall deposit, cause the deposit or permit the deposit of Other Material on any land.

Part 19 All Damage to be Repaired

- 19.1 All damage to Municipal or privately-owned drainage facilities, natural watercourses, roads, lanes or other Municipal or privately-owned property or facilities, resulting from a soil removal, soil deposit, Blasting or Rock-breaking operation shall be promptly and properly repaired by the permit holder or an agent or agents of the permit holder, to the complete satisfaction of the Director.

Part 20 No Obstructions

- 20.1 All drainage facilities, natural watercourses and ground water aquifers shall be kept free of silt, clay, sand, rubble, debris, gravel and all other material or thing originating from any removal of soil, deposit of soil, Blasting or Rock-breaking from or upon any lands, and every obstruction and all damage caused to such drainage facilities, natural watercourses or ground water aquifers shall constitute an infraction of this Bylaw and the person responsible shall on summary conviction thereof, be subject to the penalty hereinafter provided.

Part 21 Stockpiles

- 21.1 Stockpiles of soil which are part of any soil removal or deposit operations shall be confined to the locations prescribed in the Soil Permit for the period of time authorized by the Soil Permit.

Part 22 No Encroachments

22.1 No operation by which soil is removed or deposited shall encroach upon, undermine, damage or endanger any adjacent property, highway, statutory right-of-way or easement or, where a Soil Permit is required, encroach into any setback area prescribed in the said permit.

Part 23 Directors Powers

23.1 The Director, or their delegate, is hereby authorized at all reasonable times to enter upon and inspect any lands:

23.1.1 To determine if the Owner of a proposed soil removal or deposit site is required to obtain a Soil Permit under this Bylaw.

23.1.2 To determine if soil removal or deposit has occurred on a lot for which the Owner does not have a valid Soil Permit and the Owner does not qualify for an exemption from the provisions of this Bylaw.

23.1.3 From which soil is to be, or is being, or has been removed or deposited, in order to ascertain whether the provisions of this Bylaw and any permit issued pursuant thereto, are being obeyed. Every permit holder shall maintain up-to-date records sufficient to allow the progress of the soil removal or deposit operation to be monitored for compliance with the provisions of this Bylaw and the terms and conditions of the permit, and such records shall be made available to the Director upon request.

23.1.4 In the event of a breach of any provision of this Bylaw or condition set out in the permit, the Director may issue to the holder of the permit or the Owner of lands from or upon which soil is being removed or deposited, or both, a notice of such breach. Every permit holder receiving such notice of breach shall forthwith cease and desist from all removal or deposit operations and every Owner shall thereupon refuse to permit the further removal or deposit of soil from or upon the said lands until such breach is remedied to the satisfaction of the Director.

23.1.5 To order the cessation of work that is proceeding in contravention of this Bylaw by placing a Stop Work Order at the site or by a registered return letter to the person carrying on the work or causing it to be carried on. The Owner of a Lot on which a stop work notice has been posted, and every other person, shall cease all construction activities on that Lot immediately. No work shall be done on the Lot except that which the Director

agrees, in writing, is necessary to remove hazards or to mitigate damage arising from exposure to the elements. Work on the site, in general, may not resume unless and until full compliance with this Bylaw has been achieved, or if full compliance is not possible, then unless and until alternative measures approved or required by the Director have been completed or secured to the sole satisfaction of the Director and the Director has rescinded, in writing, the stop work notice on the Lot.

- 23.1.6 To order a person to immediately stop all rock removal operations by placing a Stop Work Order at the site in any case where complaints are received by the Director concerning damage or injury to persons or property or of a violation of the permit or this Bylaw and in such case no rock removal operation shall be carried out until the Director, or their designate, has completed their investigation and the Stop Work Order has been removed.
- 23.1.7 To order a person to immediately stop all rock removal operations by placing a Stop Work Order at the site and requesting an interim rock removal topographic survey. The Stop Work Order will be lifted once an interim rock removal topographic survey is accepted by the Director and approval to continue rock removal is granted in writing. The permit length, under Part 9, will be extended by the number of working days the Stop Work Order was in place. Alternately, the Owner or Blaster may agree to cease all blasting or rock-breaking until an interim rock removal topographic survey is reviewed and accepted by the Director, and approval to continue rock removal is granted in writing. The permit length, under Part 9, would be extended by the number of working days that the work was stopped for provision of the interim rock removal topographic survey. Under this alternative other work at the Lot not related to Blasting or Rock-breaking may continue.

Part 24 Failure to Remedy

- 24.1 In the event that any person having received such notice of breach fails within the time set forth therein to remedy such breach or otherwise proceeds to breach any provision of this Bylaw or condition of a permit, the Director may at any time thereafter revoke the permit. Any security deposit or fees paid pursuant to the granting of a permit under this Bylaw shall be forfeit and may be employed by the District to remedy such breach.

- 24.2 If a breach of this Bylaw has occurred or is occurring on any lands, the District or its appointed agents may enter upon the said lands or any part thereof and carry out the works required to remedy the breach, and the expense of doing so shall be paid by the person in breach and, if not paid within 90 days, the expense, with interest at the prescribed rate and costs, shall be recovered in the same manner as municipal taxes.

Part 25 Offence and Penalty

- 25.1 Every person who violates a provision of this bylaw, or who consents, allows or permits an act or thing to be done in violation of a provision of this bylaw, or who neglects to or refrains from doing anything required to be done by a provision of this bylaw, is guilty of an offence and is liable to the penalties imposed under this bylaw, and is guilty of a separate offence each day that a violation continues to exist.
- 25.2 Every person who commits an offence is liable on summary conviction to a fine or to imprisonment, or to both a fine and imprisonment, not exceeding the maximum allowed by the *Offence Act*.

Schedules

- Schedule A – Technical Requirements for Removal or Deposit of Soil by Permit or Otherwise
Schedule B – Application for a Blasting or Rock-breaking Permit
Schedule C – Blasting or Rock-breaking Permit Indemnity
Schedule D – Blasting or Rock-breaking Insurance Requirements
Schedule E – Confirmation of Commitment by Owner and by Engineer

READ A FIRST TIME on June 28, 2021

READ A SECOND TIME on June 28, 2021

READ A THIRD TIME on June 28, 2021

ADOPTED by the Council on July 27, 2021.

Mayor

Corporate Officer

Schedule A – Technical Requirements for Removal or Deposit of Soil by Permit or Otherwise

INFORMATION REQUIRED ON A PERMIT APPLICATION

1. In addition to the requirements set out in the text of this Bylaw, every applicant for a soil removal or deposit permit shall submit with their application.
 - a) A description of the soil and the purpose for which the soil is to be removed or deposited.
 - b) The consent in writing of the Owner.
 - c) A current title search of the lands.
 - d) The dates of commencement of the work and of completion including clean-up.
 - e) Such further and other information as may be necessary to adequately describe the proposed soil removal or deposit operation for which the permit is applied for.

SITE PLAN IN SUPPORT OF PERMIT APPLICATION

2. The Director may require from the applicant for a permit plans of the lands from or upon which the applicant proposes to remove or deposit the soil, prepared by a BC Land Surveyor Director, which may include:
 - a) A statement from a BC Land Surveyor of the volume of soil to be removed or deposited together with a copy of the calculations, cross-sections, and other engineering data and pertinent information used in calculating such estimated total volume.
 - b) Contour plans of the said lands, to a scale of not less than 1:250, showing contours at a vertical interval suitable to describe the existing terrain of the said lands, and the relation thereof to those of the adjoining lands, and highways, and showing at one (1) metre intervals the proposed geodetic elevations of the lands after the soil has been removed therefrom or deposited thereon. Cross-sections may be required as necessary to clearly show the existing and proposed ground surfaces.
 - c) Full particulars of the present use, occupancy and conditions of the lands from or upon which

the removal or deposit of soil is proposed and of those portions of adjacent lands which may be affected by the proposed soil removal or deposit operation, including all pertinent topographic features, buildings, structures and tree cover existing thereon, highways and highway allowances, foot paths, watercourses, water table, drainage facilities, wells, private sewage disposal systems, fence lines, facilities existing for pedestrian and vehicular traffic (indicating the suitability of same for carrying the type and volume of traffic to be generated in the removal or deposit of the soil), and all utilities, services and other existing facilities.

- d) The proposed slopes which will be maintained during and upon completion of the removal or deposit of the soil.
- e) The proposed methods of erosion control for the banks of the excavation or of the soil deposit, during and upon completion of the removal or deposit of the soil.
- f) The proposed methods of drainage control for the excavation or the soil deposit, during and upon completion of the removal or deposit of the soil.
- g) The proposed methods of access to the lands during and upon completion of the removal or deposit of the soil.
- h) The proposed methods of fencing, enclosing, and clearing the lands affected to ensure that no hazard to human or animal life shall exist.
- e) The location of stockpiles indicating their extent and nature and duration.
- j) The location of buildings, and other proposed structures and improvements.
- k) Such further and other information as may be necessary to adequately describe the proposed soil removal or deposit operation for which the permit is applied for.

SLOPES

3. The slope of any part of an exposed face of any excavated or deposited soil, except bedrock, shall not

be greater than two (2) horizontal to one (1) vertical, except that a steeper slope may be allowed where a Professional Engineer certifies that the face of the excavation would be stable at a steeper slope.

WORK NEAR UTILITIES

4. No removal or deposit of soil greater than 0.5 metres in depth shall be undertaken within 2.5 metres of any utility pole, pipeline or structure or public roadway or lane, without providing the authority having jurisdiction one weeks notice in writing.

WORK ON HIGHWAYS AND RIGHTS OF WAY

5. No removal or deposit shall be undertaken on a road, street, lane, footpath, highway, or on a statutory right-of-way without first obtaining the permission in writing of the authority having jurisdiction over such highway or right-of-way.

UNDERMINING EXCAVATION

6. No excavation shall extend beyond the limiting excavation face delineated by the boundaries and the maximum slopes permitted above. There shall be no excavation into the toe of such limiting excavation face. Such limiting excavation face shall comprise undisturbed natural soil and it shall not be extended by backfilling.

DRAINAGE

7. Removal and deposit operations shall, at all times, be graded in such a manner that positive gravity drainage is assured throughout, and a drainage system shall be installed which is of sufficient capacity and extent to ensure that groundwater and surface run-off will not drain into adjoining lands at greater rates after commencement than prior to the commencement of the soil removal or deposit operations. Surface water shall not be allowed to pool anywhere within the work, provided however, that where necessary to remove sediment from surface run-off, a settling pool may be established for the duration of the operation.

IDENTIFY BOUNDARIES

8. It shall be the responsibility of the person removing or depositing soil to establish the boundary of any rights-of-way or highways.

TEMPORARY WORKS

9. All structures, fills or excavations erected or made in connection with a soil removal or deposit operation under this schedule shall be temporary in nature and

shall be removed forthwith upon completion of the soil removal or deposit operations.

HAZARDS

10. All hazards or potential hazards arising from soil removal or deposit operations shall be adequately fenced or otherwise protected for the safety of the public.

MAINTENANCE
CLEAN-UP AND
COMPLETION OF
OPERATIONS

11. During and upon completion of every soil removal or deposit operation:
 - a) the boundaries of all adjacent lands, highways, rights-of-way and easements shall be protected from erosion or collapse and from run off of water or mud;
 - b) all works required by this Bylaw and any permit issued pursuant thereto shall be completed in accordance with accepted sound engineering principles and to the satisfaction of the Director;
 - c) all surfaces of the fill or excavation other than bedrock or rock used in construction of walls shall be covered with grass or other suitable cover and the same shall be maintained so that it becomes reasonably established;
 - d) all surfaces of the excavation or the soil deposit shall be left with a slope not greater than that permitted by this Bylaw or as specified in the permit;
 - e) any and all loose rock material created by construction on any Lot, whether by excavation, drilling, blasting or other means, and having a dimension greater than 150mm, must be removed entirely from the Lot, used and placed for the creation of retaining walls, or be covered by at least 300mm of soil in a stable location on the Lot with such soil being capable of normal plant growth with reasonable consideration for soil settlement.

Schedule B – Application for a Blasting or Rock-breaking Permit

1. This application is for a (circle one):
 - a) Blasting Permit
 - b) Rock-breaking Permit

2. I, _____, of _____
(Print full name of Owner) (Address)
am the registered Owner of the following lands:

(street address)

(legal description)

(phone number) (____) _____ - _____ (email) _____

3. I hereby authorize _____
(Print full name of Owner's Agent)
of _____, _____
(company name) (phone no.)

to act as my agent pursuant to the Bylaw.

4. The purpose of the rock removal is (circle all relevant):
 - a) road and utilities
 - b) utility connections
 - c) house or garage
 - d) coach house
 - e) power pole
 - f) driveway or parking area
 - g) other (describe) _____

5. Lot size _____ m²

6. Maximum volume of rock to be broken shall not exceed _____ m³
per Section 6.1.1 of the Soil Removal, Deposit, Blasting and Rock
Breaking Bylaw No. 5130, 2021.

7. Previous volume of rock removed on Lot (as verified by a District Land
Development Technician) _____ m³.

8. Volume of rock allowed to be removed (#6 minus #7): _____ m³.
9. Volume of rock proposed to be removed for the primary dwelling and coach house as certified by a BCLS and calculated in accordance with Section 7.2.12 of the Soil Removal, Deposit, Blasting and Rock Breaking Bylaw No. 5130, 2021: _____ m³.
10. Volume of rock proposed to be removed for the access driveway, parking areas and garage as certified by a BCLS and calculated in accordance with Section 7.2.12 of the Soil Removal, Deposit, Blasting and Rock Breaking Bylaw No. 5130, 2021: _____ m³.
11. Total volume of rock proposed to be removed (#9 plus #10) _____ m³.
12. Estimated duration of Blasting or Rock-breaking _____ days.
13. The fee as required by the Fees and Charges Bylaw No. 5025, 2019, as amended from time to time, is enclosed.
14. The documentation as outlined in Section 7.2 and Section 7.3 of the Soil Removal, Deposit, Blasting and Rock Breaking Bylaw No. 5130, 2021 for a Blasting Permit or Rock-breaking Permit respectively, is provided in support of this application.
15. The above information is certified to be correct:

(Owner's Agent signature)

(Owner's signature(s) or Authorized Signatory if a Corporation)

Schedule C – Blasting or Rock-breaking Permit Indemnity

Date: _____

To: The Director of Operations
THE CORPORATION OF THE DISTRICT
OF WEST VANCOUVER
750 - 17th Street
West Vancouver, B.C.
V7V 3T3

Re: _____
Address of Project (print)

Legal Description of Project (print)

The undersigned hereby indemnifies The Corporation of the District of West Vancouver with respect to all actions, causes of actions, claims, demands, costs and expenses (including legal fees) arising from or in any way connected to the activities on the above referenced property for which a Blasting or Rock-breaking Permit is applied for pursuant to Soil Removal, Deposit, Blasting and Rock Breaking Bylaw No. 5130, 2021 or any acts or omissions of the blaster, the undersigned agent or their employees and agents relating thereto.

Owner's Name (print)

Owner's signature (If Owner is a corporation
the signature of a signing officer must be
given here.)

Owner's Agent signature

Schedule D – Blasting or Rock-breaking Insurance Requirements

The Owner shall provide the Director of Planning with a certificate of insurance to insure damage to persons or property that may be injured by the Blasting or Rock-breaking. This insurance shall be public liability and property damage insurance in a form satisfactory to the Municipal Solicitor, with Five Million Dollars (\$5,000,000) coverage inclusive for loss or damage in respect of injury or death of any person or person and/or damage to property from any one accident or occurrence. There shall be no third party deductible for bodily injury or property damage loss and no space warranty clause. The District, the Director of Planning, any engineer hired as a consultant by the District in relation to a particular application, and the company employing the holder of the blasting certificate shall be named insureds. Notification will be given by the insurer to the Director of Planning by registered mail not less than 30 days prior to material change, cancellation or termination of the insurance.

Schedule E – Confirmation of Commitment by Owner and by Engineer

Re: Verification of Control Measures/Blasting Plan and Monitoring of Blasting
by a Registered Professional

To: Director of Planning
THE CORPORATION OF THE DISTRICT
OF WEST VANCOUVER
750 17th Street
West Vancouver, B.C.
V7V 3T3

Date: _____

Dear Director of Planning:

Re: _____
Address of Project (print)

Legal Description of Project (print)

The undersigned Owner has retained _____ as an Engineer to review a Control Measures/Blasting Plan and to monitor the blasting as required by Soil Removal, Deposit, Blasting and Rock Breaking Bylaw No. 5130, 2021 (the "Bylaw").

The Owner and the Engineer have read the Bylaw. The Owner and the Engineer acknowledge their responsibility to each notify the Director of Planning if the Engineer ceases to be retained by the Owner either before the date the Engineer ceases to be retained or, if that is not possible, then as soon possible.

The Owner and the Engineer understand that where the registered professional ceases to be retained at any time during construction, work on the above project will cease until such time as

- a) a new registered professional is retained, and
- b) a new letter in the form set out in Schedule E to the Bylaw is filed with the Director of Planning.

The Engineer hereby gives assurance that the Control Measures/Blasting Plan reviewed by this registered professional in support of the application for the blasting permit substantially complies with the Soil Removal, Deposit, Blasting and Rock Breaking Bylaw No. 5130, 2021 and other applicable enactment's respecting safety and meets all reasonable criteria for safety of life and property

and will provide the further written assurance required by Section 7.2.8 of the Soil Removal, Deposit, Blasting and Rock Breaking Bylaw No. 5130, 2021.

The Engineer hereby undertakes to be responsible for field reviews of the blasting as required in the Soil Removal, Deposit, Blasting and Rock Breaking Bylaw No. 5130, 2021.

The Engineer also undertakes to notify the Director of Planning in writing as soon as possible if the Engineer's contract for field review is terminated at any time.

The undersigned certifies that they are licensed to practice as a professional engineer under the Engineers and Geoscientists Act and is specialized in rock mechanics.

Registered Professional

Owner

Registered Professional's Name (print)

Owner's Name (print)

Address (print)

Owner's or Owners appointed agent's signature. (If owner is a corporation the signature of a signing officer must be given here.)

Registered Professional's Signature
(affix Registered Professional's Seal here)

(If the Registered Professional is a member of a firm, complete the following.)

I am a member of the firm _____
and I sign this letter on behalf of the firm. (print name of firm)