

THE TOWN OF COMOX

BYLAW 1824

A BYLAW TO PROTECT DRAINAGE INFRASTRUCTURE IN COMOX

WHEREAS, Section 69 of the *Community Charter* enables Council to regulate in respect of drainage provided by persons other than the municipality in relation to design and installation and require building and structure connection thereto, the maintenance of proper water flow therein and the reclamation or protection of part of the land mass of the municipality from erosion by any cause;

NOW THEREFORE, the Council of the Town of Comox in open meeting assembled enacts as follows:

TITLE

1. This Bylaw may be cited for all purposes as the “Comox Drainage Infrastructure Protection Bylaw 1824”.

DEFINITIONS

2. In this Bylaw:

Administrator means the person appointed to the position of Chief Administrative Officer by the Council.

Applied Science Technologist or Applied Science Technician means a member of the Association of Applied Science Technologists and Technicians of B.C.

Approving Officer means the person appointed to that position by the Council

Building Inspector means a person appointed to that position by the Council

Bylaw Enforcement Officer includes a person appointed to that position by the Council and an employee of the Town of Comox who is a Bylaw Enforcement Officer pursuant to Section 36 of the *Police Act*.

Construction Works includes clearing, site grading, excavation, filling and alteration of land including vegetation; the construction of, addition to, or alteration of buildings, structures, services and other works on land including pavement; and the landscaping of land including ground cover, irrigation systems, exterior lighting, pavement, pavers, brickwork and retaining walls incorporated into the landscaping.

Council means the Council of the Town of Comox.

Deleterious Substance means soil, silt, gravel, and any other suspended solids including any substance that, if added to any water, would degrade or alter or form part of a process of degradation or alteration of the quality of that water so that it is rendered or is likely to be rendered harmful to the operation of the drainage system.

Corporate Officer means the person appointed to that position by the Council.

Designated Environmental Monitor means an engineer, registered professional biologist, geoscientist, applied science technologist or applied science technician who is registered and in good standing in British Columbia, is trained in designing and implementing ESC plans, is responsible for inspecting, monitoring and reporting on the ESC facilities constructed and installed pursuant to an ESC plan under this Bylaw and where specified in this Bylaw is responsible for the preparation of ESC plans.

Designated Professional Engineer” means a member of the Association of Professional Engineers and Geoscientists of the Province of British Columbia practicing in the consulting engineering industry with a declared area of practice in civil or geotechnical engineering and trained and experienced in designing and overseeing the construction of stormwater management systems who has prepared or been engaged to prepare an ESC plan under this Bylaw.

Developer means the owner in fee simple of land or lessee of the owner on which construction works are undertaken and includes the owner’s or lessee’s agent and contractor.

Director of Finance means the person appointed to that position by the Council.

Drainage System means any Town owned system designed, constructed or installed for the purpose of containing or conveying stormwater to an Outlet Destination, or natural watercourse, whether such system is located on public lands or registered statutory rights-of-way, in place historically, or previously approved by the Town and includes, without limitation, storm sewer mains, ditches, swales, stormwater detention and infiltration systems, and any privately constructed on-site stormwater infiltration systems where provided on private lands as a work required as a condition of subdivision approval or building permit issuance, but does not include ESC facilities on private land.

Erosion and Sediment Control Facilities (ESC Facilities) means all works and measures included in an erosion and sediment control plan.

Erosion and Sediment Control Plan (ESC Plan) means the specifications, drawings, plans, phased construction schedules and design calculations of a Designated Professional Engineer or Designated Environmental Monitor for works and measures to control and monitor the discharge of any Prohibited Material into the Drainage System, that are prepared in accordance with sections 11(b) and 13 of this bylaw and drafting standards for such plans prescribed by the Municipal Engineer.

Excessive Suspended Solids Discharge means an indirect or direct fluid discharge containing total suspended solids exceeding 25 milligrams per liter (mg/l) into any Drainage System, measured at the immediate outlet or point of discharge into the Drainage System.

Excessive Turbidity means, in respect of a direct or indirect fluid discharge into any Drainage System, turbidity that exceeds 20 NTU measured at the immediate outlet or point of discharge into the Drainage System.

Minor Development means the construction of, addition to or alteration of a maximum of one single- or two-family dwelling, coach house, secondary suite, bed and breakfast accommodation, home occupation, or accessory buildings and structures thereto where Comox Zoning Bylaw 1850 does not permit more than one single- or two-family dwelling on a parcel.

Municipal Engineer means the person appointed to the position of Director of Operations by the Council.

Director of Development Services means the person appointed to that position by the Council.

NTU means nephelometric turbidity unit as determined by the National Field Manual for the Collection of Water-Quality Data, U.S. Geological Survey, Compiled July 2014.

Outlet Destination means the point in a drainage system where stormwater is disposed into surrounding soil.

Parcel means any lot, block, or other area in which land is held or into which it is subdivided, but does not include a highway.

Prohibited Material means:

- (a) any Excessive Suspended Solids Discharge or any discharge of any sediment, earth, construction or excavation wastes, cement, concrete, or other substances which when mixed with water, will constitute Excessive Suspended Solids Discharge;
- (b) any Deleterious Substance; and
- (c) any discharge having Excessive Turbidity.

Superintendent of Public Works means the person appointed to that position by the Council.

Registered Professional Biologist means a member of the College of Applied Biology of British Columbia.

Security Deposit means the security deposit to be provided pursuant to section 34 of this Bylaw.

Significant Rainfall Event means any precipitation event, which meets or exceeds 10 mm/hour, or 25 mm in any 24-hour period.

Stabilized means, in relation to parcel surfaces, vegetated or otherwise managed such that soil at the surface is not susceptible to erosion by wind or water.

Stormwater Infiltration System means any portion of the drainage system intended to manage stormwater through the process of infiltration into surrounding soil.

Subdivision Services Agreement means an agreement pursuant to S. 509(2) of the *Local Government Act*.

Town means the Town of Comox.

Tree means a tree with a trunk circumference of at least 65 cm measured at 1.5 metres above the tree base.

INTERPRETATION

3. A reference in this Bylaw to any enactment of British Columbia is a reference to the enactment as amended, revised, consolidated or replaced from time to time.
4. A reference in this Bylaw to any bylaw, policy or form of the Town is a reference to the bylaw, policy or form as amended, revised, consolidated or replaced from time to time.

APPLICATION

5. This Bylaw shall be applicable to all lands within the Town.

PROHIBITION OF DISCHARGE

6. No person shall cause or permit any Prohibited Material, or substance containing Prohibited Material to be released, directly or indirectly into the Drainage System.
7. No person shall obstruct or impede the flow or operation of any Drainage System.

EXEMPTIONS

8. In an emergency as determined by the Municipal Engineer, all maintenance work on the Drainage System undertaken by the Town to deal with the emergency is exempt from the provisions of this Bylaw.
9. Despite section 10 or 11 of this Bylaw, the Municipal Engineer may waive the requirement for either an ESC plan or a Security Deposit or both, should the proposed Construction Works be unlikely to cause or permit any Prohibited Material, or substance containing Prohibited Material to be released, directly or indirectly into the Drainage System taking into account only the following factors:
 - (a) size and location of the proposed Construction Works with respect to the perimeter and sensitivity of the parcel on which the Construction Works will take place;
 - (b) the soil conditions on the parcel;
 - (c) existing vegetation and growth on the parcel; and
 - (d) topographical conditions of the parcel pertinent to drainage.

CONSTRUCTION AND DEVELOPMENT

10. A Developer
 - (a) undertaking Construction Works to provide services required for subdivision approval including pursuant to S. 506, S. 507 and S. 509 of the *Local Government Act*;

- (b) applying for a building permit other than for Minor Development that requires Construction Works on the Parcel;
- (c) undertaking to deposit or remove soil on land exceeding a depth of 1.0 metre above or below existing ground elevations and covering an area exceeding 150 m²; or
- (d) undertaking to remove ten or more Trees on a parcel exceeding one hectare and one or more of the following circumstances apply:
 - (i) the area to be cleared has a slope of greater than 10% measured over any horizontal dimension of the area to be cleared;
 - (ii) the area to be cleared is in a tree cutting permit area, designated pursuant to Comox Tree Cutting in Hazardous Areas Bylaw, 1992; or
 - (iii) more than 35% of the Trees on a parcel are to be removed,

shall submit an application and an ESC plan in conformance with this Bylaw, and obtain a permit under this Bylaw before any other permits, approvals or authorizations necessary for the activities are given or issued. Applications and ESC plans under 10(a) shall be submitted to the Approving Officer as part of the subdivision application engineering design drawings. Applications and ESC plans under 10(b) shall be submitted as part of the building permit application to the Building Inspector. Applications and ESC plans under 10(c) and (d) shall be submitted to the Municipal Engineer.

WRITTEN VERIFICATION

11. Every Developer applying for a building permit for Minor Development that requires Construction Works on a Parcel
- (a) except as specified in section 11(b), need not provide an ESC plan but must comply with the erosion and sediment control requirements for Minor Development as set out in Schedule A for the duration of the Construction Works, and any ESC plan of which the Developer has been provided a copy under section 20(b), until an occupancy permit has been issued and the maintenance of planting and revegetated areas for a minimum 1-year period; and
 - (b) where any of the following variables apply, must submit as part of the building permit application to the Building Inspector an application and ESC plan complying with Schedule A, this Bylaw and any ESC plan of which the Developer has been provided a copy under section 20(b), prepared by a Designated Environmental Monitor for each Parcel:
 - (i) Construction Works would occur between October 15 and May 15 inclusive;
 - (ii) Parcel on which Minor Development would occur has soil types consisting predominantly of clays or fines;
 - (iii) Parcel on which Minor Development would occur has a proposed disturbed area greater than 1.0 hectare;
 - (iv) Parcel on which Minor Development would occur has a natural or graded slope greater

than 15% percent measured horizontally over any dimension of the Parcel; or

- (v) Developer proposes Construction Works on five or more Parcels that abut one another, and for the purpose of this subsection “abut” means sharing a boundary with, or separated by a highway or strata plan access route from and having any portion directly opposite a Parcel that is the subject of the application.

12. All ESC facilities described in an ESC plan required by section 10 or 11(b) must be:

- (a) installed, constructed, and operational in accordance with an ESC plan for which a permit has been issued by the Municipal Engineer; and
- (b) certified as installed, constructed, and operational by a Designated Environmental Monitor before any Construction Works begin.

EROSION AND SEDIMENT CONTROL PLAN

13. ESC plans for activities enumerated in section 10 must

- (a) comply with the stormwater management practices set out in the following guides as amended or replaced from time to time:
 - (i) Section 3 “Erosion and Sediment Control and Site Development Practices” of Land Development Guidelines for the Protection of Aquatic Habitat, Fisheries and Oceans, Ministry of Environment, Lands and Parks, May 1992;
 - (ii) Manual of Control of Erosion and Shallow Slope Movement, Ministry of Transportation and Highways, August 22, 1997; and
 - (iii) Design for Effective Sediment and Erosion Control on Construction Sites, Jerald S. Fifield, Ph.D. CPESC, Forester Communications Inc., 2004;
 - (iv) Environmental Guidelines For Urban and Rural Land Development in British Columbia, 2014 (Ministry of Environment & Ministry of Forests, Lands, and Natural Resource Operations), Appendix B
- (b) utilize pervious infiltration areas wherever possible;
- (c) emphasize source control as the primary method for dealing with erosion and sediment runoff, by:
 - (i) incorporating in the ESC Plan construction measures listed in Schedule C to this Bylaw to the extent that is practicable, and including in the ESC Plan an initialed copy of Schedule C to indicate that each erosion and sediment control measure has been considered; and
 - (ii) utilizing an iterative, adaptive approach to construction management whereby information derived from monitoring of construction impacts and consideration of potential impacts is used to adapt or modify erosion and sediment control measures as construction proceeds; and
- (d) Provide primary erosion and sediment source controls including:

- (i) sediment control ponds;
 - (ii) outfall mitigation;
 - (iii) temporary fencing to physically delineate clearing boundaries;
 - (iv) perimeter ditches, swales, and interceptor ditches that divert runoff away from cleared areas during phased development and into staged primary and auxiliary sediment traps or sediment ponds where appropriate, prior to discharge off site;
 - (v) restriction of vehicle/machinery access to and from a Parcel to gravel access pads, gravel staging areas, or pavement constructed and maintained to minimize soil disturbance and the migration of sediment into the Drainage System including
 1. wheel wash facilities during the period from October 15 to May 15, and
 2. gravel access pad and staging area of a minimum 4.5 m width and minimum of 150 mm depth and comprised of 100 mm diameter angular rock;
 - (vi) prevention of concrete truck wash and construction wash of exposed aggregate surfaces from entering the Drainage System;
 - (vii) sweeping and cleaning specifications for road rights of way, including road pavement, boulevards, curbs and sidewalks, abutting Parcels being developed, at least once per day and more frequently during rain events, and prohibition of roadway flushing;
 - (viii) silt fences;
 - (ix) filter fabric donuts inside all road frontage catch basins and lawn basins collecting runoff from the Parcel;
 - (x) immediate surface protection using polyethylene sheeting or tarps when rain events are expected, where slopes exceed three metres in height and are steeper than five percent at any point, or where soil types consist predominantly of clays or fines;
 - (xi) erosion protection for temporary graded areas such as straw, mulch or polyethylene tarps in non-traffic areas and a gravel cap in zones of construction traffic;
 - (xii) seeding and stabilization with native vegetative species prior to October 15th of all bare and exposed areas that will be left dormant for longer than 30 days;
 - (xiii) no native or non-native soils stockpiled or unloaded on road rights of way including road pavement, boulevards, curbs and sidewalks or within 2.0 metres of ESC facilities;
 - (xiv) covering of native or non-native soil stockpiles with weighted polyethylene sheeting;
 - (xv) sediment and stormwater management controls for waters captured within building foundations, sediment ponds, or when flushing ESC facilities; and
 - (xvi) methodology to verify the operation and acceptable condition of the Drainage System prior to, and subsequent to, decommissioning of the ESC facilities;
- (e) include a schedule for the maintenance and final decommissioning of ESC facilities for each of the phases;
- (f) include re-vegetation and stabilization measures for restoring disturbed or exposed soil areas which for Construction Works described in section 10(a) must occur before the Approving Officer approves the subdivision plan where there is no Subdivision Services Agreement, or the Town acknowledges in any manner that the works required by any Subdivision Services Agreement have been satisfactorily provided;
- (g) include the maintenance of planting and revegetated areas for a minimum 1-year period;
- (h) include the signed and sealed certification of a Designated Professional Engineer that the ESC plan has been prepared in accordance with this Bylaw to prevent any Prohibited Material or substance containing Prohibited Material from being released directly or

indirectly into the Drainage System or in any other way impair its operation during Construction Works;

- (i) include detailed plans, a phased construction schedule, water sampling schedule for total suspended solids and turbidity analysis, and design calculations prepared by the Designated Professional Engineer; and
 - (j) be accompanied by a completed Schedule B.
14. Any modification of an ESC plan for activities enumerated in section 10 must be approved by the Designated Professional Engineer, who must notify the Municipal Engineer in writing within 24 hours of making a modification and confirm that the ESC plan continues to conform to this Bylaw.
15. An ESC plan for activities enumerated in section 11(b) must be accompanied by a completed Schedule B signed by the Designated Environmental Monitor.
16. An ESC plan for activities enumerated in section 10 or 11(b) must be accompanied by
- (a) written confirmation by the Developer and the Designated Environmental Monitor of the appointment of the Monitor to perform duties under this Bylaw; and
 - (b) any Security Deposit required by this Bylaw.
17. The Designated Environmental Monitor for activities enumerated in section 10 must
- (a) be retained for the duration of the Construction Works until the completion of all obligations in accordance with section 21;
 - (b) sample and obtain total suspended solids and turbidity analysis of the water being discharged from the Parcel in accordance with ESC plan specifications;
 - (c) where there is Excessive Suspended Solids Discharge or Excessive Turbidity, consult the Designated Professional Engineer and implement corrective measures immediately;
 - (d) advise the Municipal Engineer of exceedance and corrective measures taken within 24 hours of knowledge of excessive suspended solids discharge or excessive turbidity; and
 - (e) certify in writing that all ESC plan requirements have been completed in accordance with section 21.
18. The Designated Environmental Monitor for activities enumerated in section 11(b) must
- (a) be retained for the duration of the Construction Works until an occupancy permit has been issued.
 - (b) approve any modification of the ESC plan;

- (c) notify the Municipal Engineer in writing within 24 hours of making a modification; and
 - (d) certify in writing to the Building Inspector that all ESC plan requirements have been completed including final decommissioning of ESC facilities, proper disposal of any waste materials, and disturbed or exposed soil areas have been re-vegetated and stabilized pursuant to the approved ESC plan excluding the maintenance of planting and revegetated areas for a minimum 1-year period before the Building Inspector issues an occupancy permit.
19. The Designated Environmental Monitor for activities enumerated in section 10 and 11(b) must
- (a) inspect and provide written certification to the Municipal Engineer in relation to activities enumerated in section 10(a), (c) and (d) and the Building Inspector in relation to activities enumerated in section 10(b) and 11(b) that all required ESC facilities have been installed, constructed and are operational in accordance with the ESC plan for which a permit has been issued before any Construction Works begin;
 - (b) direct the maintenance of ESC facilities and modification or halting of Construction Works as may be required to ensure compliance with the ESC plan and this Bylaw;
 - (c) undertake onsite inspections at least once a day during construction on any day rain is anticipated or occurs, and the subsequent day after a Significant Rainfall Event, and a minimum of once a week otherwise;
 - (d) submit a record of onsite inspections bi-monthly to the Municipal Engineer in relation to activities enumerated in section 10(a), (c) and (d) and to the Building Inspector in relation to activities enumerated in section 10(b) and 11(b);
 - (e) notify the Municipal Engineer of any onsite or off-site deficiencies or infractions of this bylaw that have not been resolved within 24 hours; and
 - (f) notify the Municipal Engineer in relation to activities enumerated in section 10(a), (c) and (d) and the Building Inspector in relation to activities enumerated in section 10(b) and 11(b) in writing within 24 hours of any changes with respect to the engagement of the Designated Environmental Monitor by the Developer.
20. The Developer must:
- (a) post a waterproof copy of the ESC plan for which a permit has been issued in respect of activities enumerated in section 10 or 11(b) including detailed plans and where applicable phased construction schedule, the emergency contact information for the Parcel owner, the Designated Professional Engineer where applicable, and the Designated Environmental Monitor for the Parcel on a sign in a location visible from outside the Parcel at the main vehicle access point, for the duration of the Construction Works; and
 - (b) provide a copy of the ESC plan to any transferee of any Parcel created by the subdivision for which the ESC plan was prepared.
21. The ESC facilities required by an ESC plan for which a permit has been issued for activities enumerated under section 10 shall be installed, constructed, maintained and operated by the

Developer performing the Construction Works:

- (a) where the ESC plan was submitted in conjunction with an application for subdivision approval under section 10(a), until
 - (i) the later of the date of Approving Officer approval of the subdivision plan and the date of fulfillment of the terms of a Subdivision Services Agreement excluding any terms dealing with the correction of defects or deficiencies in the works appearing within the warranty period, and
 - (ii) the Designated Environmental Monitor has certified in writing to the Municipal Engineer that all ESC plan requirements have been completed including
 1. the construction of gravel access pads for each Parcel,
 2. final decommissioning of ESC facilities for each of the phases,
 3. proper disposal of any waste materials, and
 4. disturbed or exposed soil areas have been re-vegetated and stabilized including the maintenance of planting and revegetated areas for a minimum 1-year period pursuant to the ESC plan for which a permit has been issued.Municipal Engineer receipt of the Designated Environmental Monitor certification of ESC plan completion excluding the maintenance of planting and revegetated areas for a minimum 1-year period is required before the Approving Officer approves the subdivision plan where there is no Subdivision Services Agreement or the Town acknowledges in any manner that the works required by any Subdivision Services Agreement have been satisfactorily provided;

- (b) where the ESC plan was submitted in conjunction with an application for a Building Permit under section 10(b), until
 - (i) the issuance of an occupancy permit, and
 - (ii) certification by the Designated Environmental Monitor has been received by the Building Inspector that all ESC plan requirements have been completed including
 1. final decommissioning of ESC facilities for each of the phases,
 2. proper disposal of any waste materials, and
 3. disturbed or exposed soil areas have been re-vegetated and stabilized including the maintenance of planting and revegetated areas for a minimum 1-year period pursuant to the ESC plan for which a permit has been issued.Building Inspector receipt of the Designated Environmental Monitor certification of ESC plan completion excluding the maintenance of planting and revegetated areas for a minimum 1-year period is required before Building Inspector issuance of an occupancy permit;

- (c) where the ESC plan was submitted prior to the deposition or removal of soil under section 10(c), until certification by the Designated Environmental Monitor has been received by the Municipal Engineer that all Construction Works involving soil removal or soil deposit, or both, have been completed pursuant to the ESC plan for which a permit has been issued including
 - (i) final decommissioning of ESC facilities for each of the phases,
 - (ii) proper disposal of any waste materials, and
 - (iii) disturbed or exposed soil areas have been re-vegetated and stabilized including the maintenance of planting and revegetated areas for a minimum 1-year period pursuant to the approved ESC plan.Municipal Engineer receipt of the Designated Environmental Monitor certification of ESC

plan completion excluding the maintenance of planting and revegetated areas for a minimum 1-year period is required.

- (d) where the ESC plan was submitted prior to the removal of Trees under section 10(d), until certification by the Designated Environmental Monitor has been received by the Municipal Engineer that all Construction Works involving Tree removal have been fully completed in compliance with the ESC plan for which a permit has been issued including
 - (i) final decommissioning of ESC facilities, for each of the phases,
 - (ii) proper disposal of any waste materials, and
 - (iii) disturbed or exposed soil areas have been re-vegetated and stabilized including the maintenance of planting and revegetated areas for a minimum 1-year period pursuant to the approved ESC plan.

Municipal Engineer receipt of the Designated Environmental Monitor certification of ESC plan completion excluding the maintenance of planting and revegetated areas for a minimum 1-year period is required.

- 22. The ESC facilities required by an ESC plan for which a permit has been issued for activities enumerated under section 11(b) shall be installed, constructed, maintained and operated by the Developer performing the Construction Work until issuance of an occupancy permit and the maintenance of planting and revegetated areas for a minimum 1-year period.

APPLICATION FEES

- 23. Applications under this bylaw must be accompanied by a non-refundable \$500.00 fee.
- 24. If, upon initial receipt of an application, the Town determines that an application is incomplete, the application may be returned to the applicant for completion with the balance of the application fee, less \$250 for preliminary review. The full application fee will be required to accompany the resubmission of the application.

ADMINISTRATION AND ENFORCEMENT

- 25. Information submitted for all applications under this Bylaw shall be in the form specified by the Municipal Engineer and shall include any drawings and specifications required by the Municipal Engineer to enable the Town to evaluate the application in relation to all applicable bylaws, and a completed Schedule B.
- 26. The Municipal Engineer may prescribe application forms for the purposes of this Bylaw and in doing so may prescribe different forms for different categories of applications based on the nature or complexity of the proposed development.
- 27. Excepting statutory notifications, and unless email is specifically excluded, wherever a notice is required by this Bylaw or permitted in this Bylaw, at the Town's discretion, delivery of a notice may be by email or postal mail.
- 28. A notice delivered by the Town, other than a notice required by statute, is deemed to have

been received on the day it is sent by email and on the third day following the day of mailing if sent by postal mail.

29. The Municipal Engineer, Bylaw Enforcement Officer, Director of Development Services, Building Inspector and all Town employees under their direction shall have the right at all reasonable hours and with such notice as is required by the *Community Charter* to enter upon and inspect any land or premises in the Town to determine if the provisions of this Bylaw are being met.
30. In the event of a breach of the provisions of this Bylaw or works in contravention of an ESC plan for which a permit has been issued, the Municipal Engineer, Superintendent of Public Works, Bylaw Enforcement Officer, or Building Inspector may post a stop work notice on the sign provided in section 20, and if there is no such sign then anywhere on the Parcel. Upon the posting of such notice all Construction Works other than those specifically exempted in the notice shall cease until the breach or contravention has been remedied, and the Municipal Engineer, Superintendent of Public Works, Bylaw Enforcement Officer, or Building Inspector, has authorized them to recommence.
31. Bylaw Enforcement Officers, Building Inspectors, the Superintendent of Public Works and the Municipal Engineer are designated to enforce this Bylaw pursuant to Section 264(1)(b) of the *Community Charter*.
32. Pursuant to section 269(1) of the *Community Charter*, authorization is hereby delegated to a Bylaw Enforcement Officer, Administrator or Corporate Officer to refer tickets issued with respect to this bylaw to the Provincial Court for a hearing.

SECURITY DEPOSIT

33. The submission of security in accordance with this Bylaw must be either in cash or by a clean unconditional and irrevocable letter of credit, which letter of credit shall be issued by a Canadian Chartered Bank or other financial institution satisfactory to the Director of Finance and negotiable at a branch of the bank or other issuer in the Town of Comox or the City of Courtenay. Any letter of credit must be in favour of the Town, must be automatically self-renewing, and shall not expire but shall be maintained throughout the duration of the Construction Works and until
 - (a) in respect of section 10, completion of all obligations in accordance with section 21 and the completion of a 1-year maintenance period for all plantings and re-vegetated areas; and
 - (b) in respect of section 11(a) and (b), an occupancy permit has been issued and the completion of a 1-year maintenance period for all plantings and re-vegetated areas.
34. The submission of an ESC plan pursuant to section 10 must be accompanied by a Security Deposit in the following amount:
 - (a) in respect of section 10(a), a minimum of \$10,000.00, and if more than ten (10) Parcels are to be created, \$1,000.00 per Parcel up to a maximum of \$100,000.00; however no Security Deposit is required where a security pursuant to a subdivision services agreement

is provided, and such agreement expressly provides that the security under it is given for the purposes of this Bylaw;

- (b) in respect of section 10(b), 2.5% of the value of the Construction Works disclosed on the Building Permit application; and
 - (c) in respect of sections 10(c) and (d) \$3,000.00 per Parcel on which soil deposit or removal or tree cutting operations are proposed.
35. The submission of a building permit application in respect of section 11(a) must be accompanied by a Security Deposit of \$3,000.00 per Parcel.
36. The submission of a building permit application in respect of section 11(b) must be accompanied by a Security Deposit of \$10,000.00 per Parcel. In the case of an application in respect of section 11(b)(i), the Security Deposit may be reduced to \$3,000.00 per Parcel upon completion of backfilling of foundation excavations to within 0.6 m of the top of the foundation, backfilling of all other excavations on the lot to correspond with adjacent grade, and completion of construction of the building envelope including the installation of roofing, siding and all exterior windows and doors.
37. Any person who provides a Security Deposit to the Town pursuant to this Bylaw may by written authorization provided to the Town, authorize the Town to return the Security Deposit to a person identified in the authorization, provided that the authorization is accompanied by a current state of title certificate or title search print showing that person as a registered owner of the parcel in respect of which the Security Deposit was provided. No person who is entitled in this manner to receive a returned Security Deposit may authorize the Town to return the Security Deposit to any other person.
38. In the event of a breach of this Bylaw, in addition to a stop work notice (section 30) or prosecution (section 43), the Town may, but shall not be obligated to, draw down on any letter of credit and use the proceeds to remedy the breach and for such purpose the provision of a Security Deposit hereunder is deemed to include the grant of an unqualified and irrevocable license to the Town to enter onto the land subject of the ESC plan and to do all such work as is necessary to remedy the breach.
39. Any letter of credit or cash held by the Town after
- (a) in respect of section 10, completion of all obligations in accordance with section 22 and the completion of a 1-year maintenance period for all plantings and re-vegetated areas; and
 - (b) in respect of section 11(a) and (b), an occupancy permit has been issued and the completion of a 1-year maintenance period for all plantings and re-vegetated areas
- shall be returned less any monies owing the Town arising from actions taken pursuant to 38.

APPLICATION ABANDONMENT, SUSPENSION AND EXTENSION

40. Where additional information has been required after an application has been accepted, the application will be held for up to 90 days, pending submission of the required information. If the

required information has not been submitted by that time, the applicant will be notified that the application is deemed to have been abandoned and the application fee will not be refunded.

41. Prior to the Municipal Engineer issuing a permit under this Bylaw; an applicant may request that processing of the application be suspended for a period not exceeding 240 days from the date of the request, and, only one suspension of processing will be granted.
42. Upon written request for an extension made prior to the expiry of an applicable period of time specified in section 40, the Municipal Engineer may extend the period, but not more than two such maximum 90 day extensions may be granted.

OFFENCE

43. Any Developer who:
 - (a) violates any provision of this Bylaw or neglects or fails to do anything required to be done by this Bylaw; or
 - (b) causes or permits any other person to violate any provision of this Bylaw or to neglect or fail to do anything required to be done by this Bylaw with respect to real property of which he or she is the registered owner, occupant, lessee, licensee or contractor

commits an offence under this Bylaw and is subject to the imposition of any and all penalties or remedies available to the Town pursuant Section 44 or 45 of this Bylaw and any other applicable bylaws or legislation.

PENALTY

44. (a) Every person who commits an offence under this Bylaw in addition to being subject to any remedies specifically provided for in this Bylaw is subject to prosecution in the Provincial Court of British Columbia and upon summary conviction will be subject to a fine of not more than \$10,000.00 for each and every offence, provided that at the discretion of the Town a municipal ticket in the form prescribed by B.C. Reg. 425/2003 may be issued by an official mentioned in Section 31 for the offences listed in Column 1 of the Table in Section 45 of this Bylaw corresponding to the bylaw section number listed in Column 2. Where the offence is a continuing one, each day that the offence is continued shall constitute a separate offence.
- (b) A person receiving a ticket must either pay the fine prescribed in Column 3 of the Table in Section 45 in respect of the offence that has been charged or dispute the ticket within 14 days of receipt of the ticket, and if the person receiving the ticket chooses to dispute the ticket, such person must dispute the ticket in writing or in person as provided in Sections 267 (1) (b) and (2) and (3) of the Community Charter.

45.

Column 1	Column 2	Column 3
Offence	Bylaw Section	Fine Amount
Unlawful discharge of prohibited material	6	\$1000.00
Unlawful alteration of drainage system	7	\$250.00
Failure to comply with erosion and sediment control requirements	11(a)	\$250.00
Failure to obtain permit	10	\$500.00
Failure to provide ESC Plan with building permit application	11(b)	\$500.00
Failure to comply with ESC Plan	12(a)	\$500.00
Failure to provide certification	12(b)	\$500.00
Unlawful modification of ESC Plan	14	\$500.00
Failure to notify of ESC Plan modification	14	\$250.00
Failure to retain Designated Environmental Monitor	17(a)	\$1000.00
Failure to sample and test	17(b)	\$500.00
Failure to implement corrective actions	17(c)	\$1000.00
Failure to notify	17(d)	\$250.00
Failure to provide certification	17(e)	\$500.00
Failure to retain Designated Environmental Monitor	18(a)	\$500.00
Unlawful modification of Erosion and Sediment Control Plan	18(b)	\$500.00
Failure to notify of ESC Plan modification	18(c)	\$250.00
Failure to submit certification	18(d)	\$250.00
Failure to provide confirmation of compliance	19(a)	\$500.00
Failure to ensure compliance	19(b)	\$500.00

Column 1	Column 2	Column 3
Offence	Bylaw Section	Fine Amount
Failure to inspect	19(c)	\$250.00
Failure to submit record of inspections	19(d)	\$250.00
Failure to notify	19(e)	\$500.00
Failure to notify	19(f)	\$250.00
Failure to post ESC Plan	20(a)	\$250.00
Failure to install, construct, maintain or operate ESC Facilities	21(a)	\$500.00
Failure to install, construct, maintain or operate ESC Facilities	21(b)	\$500.00
Failure to install, construct, maintain or operate ESC Facilities	21(c)	\$500.00
Failure to install, construct, maintain or operate ESC Facilities	21(d)	\$500.00
Failure to install, construct, maintain or operate ESC Facilities	22	\$500.00

SEVERABILITY

46. If any section or lesser portion of this Bylaw is held invalid, it shall be severed and the validity of the remaining provisions of this shall not be affected.

ADOPTION

READ A FIRST TIME this	16 th day of June, 2021
READ a SECOND TIME this	16 th day of June, 2021
READ A THIRD TIME this	8 th day of September, 2021
THIRD READING RESCINDED this	6 th day of October, 2021
AMENDED this	6 th day of October, 2021
READ A THIRD TIME AS AMENDED this	6 th day of October, 2021
ADOPTED this	20 th day of October, 2021



MAYOR



CORPORATE OFFICER

Comox Drainage Infrastructure Protection Bylaw 1824

Schedule A EROSION AND SEDIMENT CONTROL FOR MINOR DEVELOPMENT

Access, Staging Areas, and Soil Protection

1. Excavated/imported soils must not be stockpiled/unloaded on road rights of way, including road pavement, boulevards, curbs and sidewalks. If soils are stockpiled within the boundary of the Parcel, then the stockpiles shall be covered with polyethylene sheeting and weighted down.
2. All catchbasins within proposed development as well as those immediately downstream as required shall be protected with a catch basin donuts.
3. Stockpiled material (native and non-native soils) must not be placed closer than 2 metres from sediment and erosion control facilities (catch basins, conveyance trenches/ditches, swales or others).
4. Provide access area and a staging area for heavy construction vehicles in the form of a paved driveway or gravel pad (minimum 4.5m wide, minimum 150 mm depth and minimum 100 mm diameter angular rock). Pad must be wholly located on the parcel and large enough to cover the staging and cleanup areas where heavy construction vehicle traffic is expected such as lumber trucks, excavators, dump trucks, or pumper trucks.
5. Vehicles/machinery shall not be permitted to park/drive upon boulevard areas (i.e. areas between the curb and sidewalk comprised of soils and/or grass sod).
6. No major grade changes (must be less than 0.5 metres difference from existing grade) and/or re-contouring of landscape exceeding 100 square metres of the entire Parcel are allowed without written permission from the Municipal Engineer.
7. Cover all exposed soils during rain events, when rains are expected, or when a construction area is not being immediately used for more than 3 consecutive days with polyethylene / tarps and weighted down.
8. Stop heavy construction work activity and use of heavy construction vehicles on Parcel during any precipitation event, which meets or exceeds 10 mm/hour, or 25 mm in any 24-hour period at the discretion of the Designated Environmental Monitor and where the retention of a Designated Environmental Monitor is not required by Comox Drainage Infrastructure Protection Bylaw 1824, the contractor.

Erosion and Sediment Control Measures

9. Management of erosion and sediment on Parcel must include the following:
 - Retain existing vegetation and ground cover where possible.
 - Install a silt fence on the lowest point of the Parcel abutting a road rights of way and around disturbed slopes within 50 metres of a watercourse, ditch, or body of water.
 - Divert runoff away from disturbed areas and road rights of way by use of perimeter ditches and diversion swales to onsite sediment controls or vegetated areas.
 - To facilitate velocity reduction / water detention and sediment retention, line all drainage ditches installed within the boundaries of the Parcel with clean rock or other acceptable and permeable material and cross-berm ditches with check-dams and silt fences at 3 and 5m

intervals respectively.

- Collect sediment runoff into on site sediment traps, sediment ponds, or vegetated areas within the Parcel to take advantage of natural infiltration of soils where appropriate.
 - Pump waters captured within the building foundation into the excavated sump, or extract by pumper truck do not discharge onto surrounding exposed soils or road rights of way.
 - Re-vegetate disturbed areas as soon as practically possible and within 30 days of completion of construction works.
10. Line cutoff swales, perimeter drains, and the sump with rock; connect a perforated riser pipe (surrounded with drain rock) within the sump to the lead that discharges to the Drainage System;

Maintenance

11. Sweep pavement within road rights of way (fronting the relevant Parcels) free and clean of accumulated soils, fines/sediments on a regular basis (at least once a day during rain events). No flushing of these soils on the road rights of way, including road pavement, boulevards, curbs and sidewalks, is permitted.
12. Concrete truck wash and construction wash of exposed aggregate surfaces must not be directed into any drainage system or catch basin.
13. The contractor and/or the Designated Environmental Monitor must inspect the Parcel on a regular basis to ensure all sediment traps, sediment ponds, silt fences, access pads, and any other erosion or sediment control facilities are maintained. The contractor and/or Designated Environmental Monitor must maintain and provide for inspection by the Building Inspector an Inspection Log.
14. Maintain a tidy site during construction. Disposal of waste off-site shall occur on a regular basis.
15. Remove all temporary erosion and sediment control measures and construction materials at the end of the project. Ensure that the Parcel has been cleaned up, vegetated, and stabilized after construction works are complete to the satisfaction of the Building Inspector prior to application for occupancy permit.
16. Maintenance of planting and revegetated areas for a minimum 1-year period.

COMOX DRAINAGE INFRASTRUCTURE PROTECTION BYLAW 1824

SCHEDULE B

ACKNOWLEDGEMENTS AND CERTIFICATIONS (to be attached to Erosion and Sediment Control Plan)

PROPERTY DESCRIPTION

Civic Address: _____

Legal Description: _____

Check one <input type="checkbox"/>	Type of development	Bylaw 1824 Section Number	Parts of this form required
<input type="checkbox"/>	Subdivision	10(a)	1,2(a),3(a),4,5
<input type="checkbox"/>	Building permit – minor development	11(b)	2(b),3(b),4,5
<input type="checkbox"/>	Building permit – other development	10(b)	1,2(a),3(a),4,5
<input type="checkbox"/>	Soil removal or deposit	10(c)	1,2(a),3(a),4,5
<input type="checkbox"/>	Tree cutting	10(d)	1,2(a),3(a),4,5

("Minor development": the construction of, addition to or alteration of a maximum of one single- or two-family dwelling, coach house, secondary suite, bed and breakfast accommodation, home occupation, or accessory buildings and structures thereto where Comox Zoning Bylaw 1850 does not permit more than one single- or two-family dwelling on a parcel.)

PART 1: DESIGNATED PROFESSIONAL ENGINEER'S CERTIFICATION

The undersigned member of the Association of Professional Engineers and Geoscientists of British Columbia certifies that the Erosion and Sediment Control Plan to which this certification is attached complies in all respects with Comox Drainage Infrastructure Protection Bylaw 1824 including the external standards referenced in s. 13(a) of the Bylaw.

Name of Engineer or Geoscientist: _____

Signature: _____

Telephone Contact Number: _____

Email address: _____

Seal:

PART 2(a): DESIGNATION OF ENVIRONMENTAL MONITOR AND OWNER'S ACKNOWLEDGEMENTS

The undersigned owner of the land described above acknowledges and represents to the Town of Comox that:

1. I have engaged _____ (the “Designated Environmental Monitor”) to monitor the work that is the subject of the Erosion and Sediment Control Plan to which this certification is attached, including without limitation to sample and analyse in accordance with the Plan surface water that is being discharged from the land; to deal with any incidents of excess turbidity or suspended solids in accordance with the Bylaw and the Plan including by halting all work until the incident is resolved; to modify the Plan as required and secure the Town’s approval of any such modifications and, the approval of the professional engineer or geoscientist who prepared the Plan; to notify the Municipal Engineer of any onsite or off-site deficiencies or infractions of the Bylaw that have not been resolved in 24 hours; to provide certifications to the Town preceding and following the completion of the work that the work has been performed in accordance with the Plan; and generally to ensure that the work is performed in accordance with Comox Drainage Infrastructure Protection Bylaw 1824;
2. I will not terminate the engagement of the Designated Environmental Monitor before the certifications mentioned above are provided to the Town, without engaging a replacement Designated Environmental Monitor and providing to the Town a replacement for this document with the replacement Designated Environmental Monitor’s acknowledgement of appointment; and
3. The Town may, in the event of any contravention of the Bylaw or failure to comply with and implement the Erosion and Sediment Control Plan, at its discretion issue a Stop Work Order, commence a prosecution, issue a municipal ticket or use security that I have provided to remedy the contravention.

Name of Owner: _____

Signature of Owner: _____

Telephone Contact Number: _____

Email address: _____

PART 2(b): DESIGNATION OF ENVIRONMENTAL MONITOR AND OWNER’S ACKNOWLEDGEMENTS

The undersigned owner of the land described above acknowledges and represents to the Town of Comox that:

1. I have engaged _____ (the “Designated Environmental Monitor”) to monitor the work that is the subject of the Erosion and Sediment Control Plan to which this certification is attached, including without limitation to monitor and direct the maintenance of ESC facilities and modification or halting of Construction Works as may be required to ensure compliance with the ESC Plan and the Bylaw; to modify the Plan as required and secure the Town’s approval of any such modifications; to notify the Municipal Engineer of any onsite or off-site deficiencies or infractions of the Bylaw that have not been resolved in 24 hours; to provide certifications to the Town preceding and following the completion of the work that the work has been performed in accordance with the Plan; and generally to ensure that the work is performed in accordance with Comox Drainage Infrastructure Protection Bylaw 1824;
2. I will not terminate the engagement of the Designated Environmental Monitor before the certifications mentioned above are provided to the Town, without engaging a replacement Designated Environmental Monitor and providing to the Town a replacement for this document with the replacement Designated Environmental Monitor’s acknowledgement of appointment; and

3. The Town may, in the event of any contravention of the Bylaw or failure to comply with and implement the Erosion and Sediment Control Plan, at its discretion issue a Stop Work Order, commence a prosecution, issue a municipal ticket or use security that I have provided to remedy the contravention.

Name of Owner: _____

Signature of Owner: _____

Telephone Contact Number: _____

Email address: _____

PART 3(a): DESIGNATED MONITOR'S CERTIFICATION

The above-named and undersigned Designated Environmental Monitor, being an engineer, registered professional biologist, geoscientist, applied science technologist or applied science technician who is registered and in good standing in British Columbia, is trained in designing and implementing ESC plans, is responsible for inspecting, monitoring and reporting on the ESC facilities constructed and installed pursuant to an ESC plan under the Bylaw, certifies that:

1. the Erosion and Sediment Control Plan to which this certification is attached in my opinion complies in all respects with Comox Drainage Infrastructure Protection Bylaw 1824 including the external standards referenced in s. 13(a) of the Bylaw; and
2. I have been engaged by the above signed owner of the land described above to monitor the work that is the subject of the Erosion and Sediment Control Plan, including without limitation to sample and analyse in accordance with the Plan surface water that is being discharged from the land; to deal with any incidents of excess turbidity or suspended solids in accordance with the Bylaw and the Plan including by halting all work until the incident is resolved; to modify the Plan as required and secure the Town's approval of any such modifications and, the approval of the professional engineer or geoscientist who prepared the Plan; to notify the Municipal Engineer of any onsite or off-site deficiencies or infractions of the Bylaw that have not been resolved in 24 hours; to provide certifications to the Town preceding and following the completion of the work that the work has been performed in accordance with the Plan; and generally to ensure that the work is performed in accordance with Comox Drainage Infrastructure Protection Bylaw 1824, and I acknowledge my duties to the Town in that regard.

Name of Designated Environmental Monitor: _____

Professional Designation: _____

Telephone Contact Number: _____

Email address: _____

Signature: _____

PART 3(b): DESIGNATED ENVIRONMENTAL MONITOR'S CERTIFICATION

The above-named and undersigned Environmental Monitor, being an engineer, registered professional biologist, geoscientist, applied science technologist or applied science technician who is registered and in good standing in British Columbia, is trained in designing and implementing ESC plans, is responsible for the preparation of the ESC plan under the Bylaw and inspecting, monitoring and reporting on the ESC facilities constructed and installed pursuant to the

ESC plan under the Bylaw, certifies that:

1. The Erosion and Sediment Control Plan to which this certification is attached in my opinion complies in all respects with Comox Drainage Infrastructure Protection Bylaw 1824 including Schedule A; and
2. I have been engaged by the above signed owner of the land described above to monitor the work that is the subject of the Erosion and Sediment Control Plan, including without limitation to monitor and direct the maintenance of ESC facilities and modification or by halting all work as may be required to ensure compliance with the ESC Plan and the Bylaw; to modify the Plan as required and secure the Town's approval of any such modifications; to notify the Municipal Engineer of any onsite or off-site deficiencies or infractions of the Bylaw that have not been resolved in 24 hours; to provide certifications to the Town preceding and following the completion of the work that the work has been performed in accordance with the Plan; and generally to ensure that the work is performed in accordance with Comox Drainage Infrastructure Protection Bylaw 1824, and I acknowledge my duties to the Town in that regard.

Name of Designated Environmental Monitor: _____

Professional Designation: _____

Telephone Contact Number: _____

Email address: _____

Signature: _____

PART 4: PRE-CONSTRUCTION CERTIFICATION OF DESIGNATED ENVIRONMENTAL MONITOR

The undersigned certifies that all pre-construction erosion and sediment control facilities and measures identified in the Erosion and Sediment Control Plan to which this certification is attached have been installed and are operational. I acknowledge that the Town will be relying on this certification in issuing a building permit, tree cutting permit or subdivision approval.

Name of Designated Environmental Monitor: _____

Signature: _____

PART 5: POST-CONSTRUCTION CERTIFICATION OF DESIGNATED ENVIRONMENTAL MONITOR

The undersigned certifies that the Erosion and Sediment Control Plan to which this certification is attached has been implemented, that all temporary erosion and sediment control facilities have been decommissioned, that all waste materials have been properly disposed of, and that all exposed soil areas have been stabilized and revegetated including / excluding the maintenance of planting and revegetated areas for a minimum 1 year period, all in accordance with Comox Drainage Infrastructure Protection Bylaw 1824. I acknowledge that the Town will be relying on this certification in determining compliance with the bylaw.

Name of Designated Environmental Monitor: _____

Signature: _____

TOWN OF COMOX
Drainage Infrastructure Protection Bylaw 1824
SCHEDULE C

Recommended Phased Scheduling for Construction Works
 (to be initialed by the Designated Professional Engineer)

Initial	Construction Activity	Scheduling Sequence
	Construction Access	
	Construction entrance, construction routes, equipment parking and individual lot access areas.	First land-disturbing activity. Stabilize bare areas immediately with gravel pads, gravel staging area, street sweeping, and temporary silt fencing or appropriate ground cover as land disturbances take place.
	Sediment Traps and Barriers	
	Sediment traps, silt fences, and check dams and inlet and outlet protection.	Install principal erosion source controls and sediment traps after construction site is accessed. Install additional temporary traps as needed during grading.
	Runoff Control	
	Diversions, perimeter ditches or dykes, water bars, outlet protection.	Install key ESC facilities and sediment basins after principal sediment traps and before extensive lot site grading.
	Runoff Conveyance	
	Stabilize stream-banks (if applicable), setback areas, tree protection, channels, ditches, inlet and outlet protection, temporary slope drains.	If necessary, stabilize stream-banks and setback areas to protect against construction activities. Install additional principal runoff conveyance systems with runoff control measures if necessary. Install remainder of system after grading.
	Land Clearing and Grading	
	Site preparation - cutting, filling and grading, sediment traps, barriers, diversions, drains, surface roughening.	Begin major clearing and grading after principal sediment and runoff control measures are installed. Clear borrow and disposal areas only as needed. Install additional temporary protection measures as grading progresses. Maintain respect for riparian setback areas, environmentally sensitive areas and ESC facilities.

Initial	Construction Activity	Scheduling Sequence
_____	Surface Stabilization Temporary and permanent seeding, mulching, tarping (poly), sodding, rip rap.	Apply temporary or permanent stabilization measures immediately on all disturbed areas (exposed soils) when cutting / filling is delayed or completed within time limits.
_____	Building Construction Buildings, utilities, paving.	Install any additional necessary erosion and sedimentation control practices as work takes place. Maintain all sediment control facilities daily or after each rain event.
_____	Final Stabilization Top-soiling, permanent seeding, riprap, landscape boulevard, restoration, or landscaping requirements.	Last construction phase. Stabilize all disturbed areas except for areas of active construction. Remove and stabilize all temporary control measures. Complete all lot surface treatment and landscaping requirements.