

Policy Manual

Municipality of North Cowichan DEVELOPMENT SERVICES

SUBJECT: Security and Completion Policy for Landscaping, Irrigation, Retaining,

Park/Trail, Tree Protection, Bio-retention Management System, Natural

Environment Rehabilitation and Protection

AUTHORITY: Local Government Act s.925 requirement for security

POLICY NO: **DS-001** VERSION: 1

SEE: Delegation of Authority Bylaw VERSION DATE: March 20, 2014

Purpose

As per the *Local Government Act* s.925 and specifically 925 (4) requirement for security, as stated in the Delegation of Authority Bylaw will be provided on the basis of the estimated costs as determined by a qualified professional, or another person as determined by the Delegation of Authority Bylaw No. 3444 (Delegated Authority).

For the purposes of this policy, the intent is to address the modification and enhancement of a site or development through:

- 1. "soft landscaping" consisting of vegetation such as trees, shrubs, hedges, grass and other ground cover;
- 2. "hard landscaping" consisting of non-vegetation materials including but not limited to brick, stone, concrete, tile and wood, furnishings such as benches, signs, garbage and recycling containers, bicycle racks trails, retaining walls, and related structures, irrigation systems but excluding roads, curbs, sidewalks and services such as water, or sewer, or utilities;
- 3. the alteration of any grades or elevations of the surface of the site which is not done solely for purposes of drainage control; and
- 4. Bio-retention management systems¹, which are modeled after the biological and physical characteristics of the natural environment.

¹ Bio-retention systems are storm water best management practices (BMP's) that use filtration to treat storm water runoff. Bio-retention systems are modeled after the biological and physical characteristics of the natural environment. These systems use vegetation, such as trees, shrubs, and grasses, to remove pollutants from storm water runoff. Sources of runoff are diverted into bio-retention systems directly as overland flow or through a stormwater drainage system. Alternatively, a bio-retention system can be constructed directly in a drainage channel or swale.



Further, the purpose of this policy is to provide greater clarity to staff and applicants in regards to the application of security and substantial completion requirements for the above, to address unsafe conditions, and to protect, enhance and remediate the natural environment for the following application type or development:

- **D** Development Permits
- **D** Subdivisions
- D Parks, Trails and Public Rights of Ways

Further, this policy sets expectations to address Municipal budgets for the on-going maintenance of works provided to the Municipality.

Background

Due to the increasing complexity of the provision of landscaping to address climate change, environmental protection, to achieve public realm and site development goals through zoning regulation and design guidelines this policy is intended to clarify requirements for procedures for the application of security, substantial completion and security refund.

Policy

Part 1: Landscape, Retaining, Trail, Bio-retention Design:

- 1. Unless otherwise determined by the Delegated Authority, professionally sealed plans are required.
- All landscaping plans must be provided and certified by a professional Landscape Architect
 and/or member of BC Landscape Architects (BCLA) association as part of a complete application
 and include provision of Schedules L-1 and L-2 bearing the stamp of a member in good
 standing.
 - a) Designers without this designation must have a Landscape Architect sign / seal their drawings and specifications.
 - b) On minor projects, at the discretion of the Development Authority, a Landscape Architect may not be required.
- 3. Irrigation Plans must be provided by a certified Irrigation Industry Association of British Columbia (IIABC) designer and meet or exceed the minimum standards for landscape irrigations systems as established by the IIABC.
- 4. Where a tree preservation and protection plan is required, it will be completed by an ISA Certified Arborist in consultation with the landscape architect to ensure consistency between the two plans and all tree work shall be completed under the supervision of an ISA Certified Arborist.



- 5. Where retaining walls (over 0.6 m in height or slopes greater than 1:3), bridges, or other structural elements are incorporated into the site development as part of the landscape and site works, sealed plans and certification from a Professional Engineer (geotechnical/structural) registered to practice in the Province of British Columbia is required.
- 6. For water body crossings or work within 30m of a water body the guidelines for DPA -3 (Natural Environment) apply.
- 7. Where bio-retention management systems are incorporated into the site development:
 - a) Bio-retention management systems may require certification from a Professional Engineer registered to practice in the Province of British Columbia. Confirm water management requirements with Municipality's Engineering Department.
 - b) Where both the professional Landscape Architect and the Professional Engineer develop the landscaped bio-retention management system each must certify by letter that the landscaping plan and bio-retention system have been coordinated, and will achieve targeted results set out by the Municipality's Engineering Department.
 - c) Drainage right of way or a standard charge terms for drainage may need to be registered on the title of the property to permit Municipal access for maintenance purposes.
- 8. Where parks and trails are incorporated into the development plan:
 - a) Trail structural elements such as bridges or retaining walls are required to be certified by a professional geotechnical engineer.
 - b) Trail design and specifications to be coordinated with and subject to approval from Municipality's Parks and Recreation Department.
 - c) Where trails are intended for public use a Public Right of Way Standard Charge Terms, as modified per circumstances, must be registered on the title of private property to permit public and municipal staff to access the park/trail and to allow the Municipality to maintain agreed upon facilities.
- 9. All plans are to be developed in consultation with the Municipality and will be reviewed by Development Services, Parks and Recreation, and Engineering Departments as appropriate.
 - a) Municipal review will consider such things as interaction with public space for safety, local and municipal guidelines, rain water management, and interconnection with area active transportation (non-motorized) provisions, and whether or not and how land will be used as parks.
 - b) In some cases requirements to ensure the systems are appropriately maintained and retain functionality will be set out as follows for the use of the owner (for example: the Municipality, or a strata corporation). Requirements may include:
 - i. Operational and maintenance manuals for use by the Owner, and
 - ii. Estimates for on-going maintenance costs for Owner's budgeting purposes.



Part 2: Landscape, Park/Trail, Bio-retention Security

- 1. When plans have been approved by the Municipality, and prior to the issuance of any construction approval or building permits, the developer will be required to provide security for 100 per cent of the estimated value of the accepted plans described above in the form of either a cheque or an irrevocable bank <u>letter of credit</u> for a time period as outlined in Table 1. A bank letter of credit is encouraged for any security estimated to be \$10,000 or more.
 - a) The letter of credit terms are subject to the approval of the Municipality.
 - b) An estimate of the works including at minimum a 10% contingency must be provided to staff from the qualified professional for the purpose of determining project bonding requirements:
 - i. by the professional(s) noted in Part 1 and will be based on all costs (including all base and sub-base material, soft and hard landscape material, furnishings (for example, bike racks, benches, garbage, recycling containers), irrigation, installation, inspection, labour, taxes of a complete installation of the approved landscape, and/or bio-retention management system, and/or natural environment Protection/Enhancement/Mitigation plan. Due to unknown site conditions the professional will determine an appropriate contingency higher than the minimum.

Part 3: Landscape, Park/Trail, Bio-retention Acceptance

- 1. Acceptance of the installed work will be provided by the Municipality upon receipt of Letters of Substantial Completion and receipt of Schedule C-B, L1 and L2 bearing the professional seal of the project professional involved (civil/plumbing, landscape architect, geotechnical engineer as appropriate).
- 2. As determined by the Development Authority the following may be required prior to Municipal acceptance:
 - a) Professional Engineer field reviews must be performed as per the requirements set out in construction approval.
 - b) Landscape Architect must include field reviews for those requirements noted in Table 2. In addition certifying that:
 - i. All plant material must be either inspected at the nursery or on-site upon delivery no planting is to occur prior to the Landscape Architectural field review.
 - c) Any deviation from the approved plans must be approved by the related project professional and the municipality. As determined by the delegated authority, deviations from the approved plans may require application for amendments to permits or construction approvals.
 - i. All substitutions must be approved by the appropriate project professional and the Municipality.



ii. Any shop drawings must be approved by the appropriate project professional.

Part 4: Landscape, Trail, Bio-retention Release of Security

- 1. The timing for the release of security will be upon receipt of letters of Substantial Completion from the design professional(s) of the development. The date of Municipal acceptance of the works will trigger the time frame outlined in Table 1.
 - a) Bio-retention management systems require confirmation from both professionals (the Landscape Architect and the Engineer as identified in Part 1 above) that the bio-retention system meets the expected design requirements, has passed all required field reviews and is considered complete including all previous deficiencies.
 - b) Natural Environment Protection and Enhancement projects require confirmation from the Qualified Environmental Professional indicating that all requirements of the development permit, Riparian Area Report or associated reports have been met and are acceptable.
- 2. Despite Table 1, where the value of the security is less than \$5,000.00, 100% of the security will be refunded 12 months after receipt of letters of Substantial Completion from the design professional(s) of the development.



TABLE 1: Security Release by Municipality - Timeframe and Percentage				
Landscaping	Security	Basic	Bio-retention Management	Natural Environment Protection and/or Rehabilitation
Soft landscaping	Partial release upon Municipal acceptance of works:	75% of security refunded	75% of security refunded	75% of security refunded
	Full Release upon Municipal acceptance of works:	25% held for 24 months from date of substantial completion	25% held for 24 months from date of substantial completion	25% held for 24 months from date of substantial completion
Hard landscaping	Refunded upon Municipal acceptance of works:	100% of security refunded	100% of security refunded	100% of security refunded

TABLE 2: FIELD REVIEWS FOR BASIC LANDSCAPING

Field Review Requirements – Soft Landscaping
The following is to be included in the field reviews:

- 1. Existing vegetation protection measures (if necessary),
- 2. Soil source and soil test,
- 3. Irrigation trench and system test (prior to backfilling),
- 4. Base and/or sub-base for all paving,
- 5. Base and/or sub-base and formwork for all Landscape Architectural concrete features,
- 6. Tree wells and planting beds sub-grade condition and depth, and
- 7. Plant material.

Additional field reviews may be required – refer to the project drawings and specifications.