

ENVIRONMENT DP REVIEW PROCESS

What Kind of Environmental Mechanisms Do We Have To Help Us Guide Development and Building Practices?

- OCP Environmental Natural Features Policies
- Watercourse Protection Development Permit (WPDP)
- Natural Features Development Permit (NFDP)
- Watercourse Protection Bylaw
- Soil Deposit and Fill Bylaw
- Tree Cutting Bylaw
- Senior Agency Legislation (Dept. Fisheries & Oceans, Ministry of Environment, Environment Canada etc.)

Environmental DP Review Process

I. Stage One - Pre-Application Meeting Required

At this stage, the Environmental Planner may carry out a preliminary review either by using existing environmental information system and GIS mapping or they may choose to carry out a site visit to take a look at the site to determine complexity and potential information requirements.

For larger scale development applications or around environmentally sensitive areas, the following types of information *may be required* with the application package as determined in the preliminary meeting:

- **Topographic information:** contours, hydrological features, steep slopes, rock bluffs, existing drainage patterns, outfalls, and existing or proposed structures.
- **Geotechnical or hydro geological report** to determine site suitability, potential impacts, and recommendations for mitigation or further studies.
- **Ecological inventory** that identify existing natural features that may require protection or mitigation. This includes watercourses, wetlands, unique or protected flora and fauna species, raptor nests, rock bluffs, significant wildlife or recreational movement corridors, and enhancement or restoration opportunities.
- **Tree review** to determine general location and characteristics (age, size, type) of existing mature or unique tree stands on site that exist within DP areas. The District tries to work with landowners on retention and replacement strategies.
- **Potential hazard review** to determine if the property or site is located within floodplain boundaries, escarpment or vulnerable slope areas, contaminated site, or any other known areas of concern. A conceptual storm and rainwater mgmt plan is often required along with proposed site development plan.

II. Stage Two - Application Submission and Review

Environmental section will review information submitted by applicant and their consultants. The Environmental section will carry out the following tasks:

- Recommend referral of the application to senior agencies and staff persons for their comments and approvals;
- Carry out potential site visit(s) to verify information submitted by consultants;
- Determine whether additional mitigation or compensation is required;
- Contact applicant or consultants of record to ensure coordination of information and recommendations of professionals are consistent with municipal objectives;
- Meet with file managers, applicant and consultants to determine if full environmental DP information is required or abridged version based on site specifics.
- Determine if additional detailed studies or impact assessments are required.

III. Stage Three – DP’s, Impact Assessments, and Recommendations

At the third stage, the District may require applicants to provide more detailed environmental impact assessments and recommendations for mitigation given the complexity/sensitivity of the site, potential health or safety hazards present, the type of proposed land use activity, and/or the scale of the development being proposed.

Depending on the nature of the project, the applicant may need to submit an environmental development permit application and provide the District with the following information if it has not already been provided at the preliminary application stages:

- a) **Environmental Impact Assessment** – Identify potential impacts and recommendations for watercourses, wetlands, natural features, and unique flora or fauna on site. This report must be carried out by a qualified environmental professional and recommendations should include
 - Mitigation against potential impacts to setback areas, protected features, steep slopes, wildlife corridors, or infiltration areas;
 - Enhancement or restoration opportunities for disturbed or sparsely vegetated areas found in environmental development permit areas.
 - Phased clearing, grading, and construction plan to minimize disturbance to soils and fauna where possible.
- b) **Geotechnical Assessment** – A more detailed study may be required at this stage to determine site and geotech suitability. Significant slopes greater than 25 percent must be identified for protection. Geotechnical setback lines must be established by a qualified professional using conservative factor of safety. Recommendations should be included on how the site may be safely used for its intended purposes with minimum impacts to sensitive areas.
- c) **Topographic Assessment** – A survey plan prepared by a BCLS of existing topographic features such as watercourses, wetlands, rock bluffs, existing structures, top of bank and top of ravine banks where applicable, existing drainage patterns, and one metre contours is required.
- d) **Arborist Assessment** - An arborist report with an inventory (age, species, size) and survey of the location of unique or mature tree stands (> 50 years age) **or** where tree stands have an average diameter at breast height greater than 25 cm) within Environmental DP areas outside setback areas. The plan will be submitted to the

District along with recommendations on retention of significant trees and root protection zones, hazard tree mitigation, and replanting where sparsely vegetated or disturbed areas occur along with recommendations on windfall mitigation.

- e) **Conceptual Stormwater Plan** - Demonstrate on site infiltration and exfiltration for structures and roads where possible and identify where major rainwater management and stormwater infrastructure will be located within proposed site design outside of proposed park areas.
- f) **Hazard Assessment** – Provide more detailed study and recommendations for mitigation for areas located within floodplains, escarpment setback area, steep slopes, geotech sensitive areas, windfall areas, or any other concern areas.
- g) **Hydrological Assessment** – For larger scale development within Grant Hill Aquifer area or Blue Mountain Aquifer, a hydrological impact assessment may be required.

IV. Stage Four - Detail Design Stage

Subdivision application review process begins and zoning goes to first, second, and third reading by Council once lot geometry, setbacks, and developable area has been determined to be feasible by the District.

At this stage, the District will require the applicant to submit final details including the following information submitted in a timely and coordinated manner. At this stage, review and approval has taken place between staff, consultants, and senior agencies:

- a) **Erosion and Sediment Control Plan** – reviewed and approved by environmental monitor and engineer of record for the site. This is often required after third reading.
- b) **Conceptual Detailed Stormwater Management Plan** – letter of assurance from engineer of record must comply with DFO stormwater management standards as well as demonstrate compliance with Provincial and regional GVRD site source standards where possible.
- c) **Watercourse Protection or Natural Features Development Permits** –
Final environmental plans may be required on the following:
 - Compensation measures for encroachment where applicable with clear demonstration of **NET BENEFIT** to District;
 - Enhancement or restoration works required in stream or within riparian setback areas;
 - Phased clearing and construction plans to reduce impacts from proposed construction including restoration or remediation efforts;
 - Recommendations on any further studies required.

V. Stage Five - Final Review and Approval Stage

At this time, the following documents are typically required:

- comprehensive grading plans, geotechnical plans, site design plans
- civil drawings for ESC and stormwater / rainwater management
- register documents such as covenants and dedication of parkland
- securities for enhancement and restoration required along with ESC plan
- bonding for environmental securities and maintenance agreements

Rezoning goes to Council for final reading along with DP's and variances

For each of the DP stages, it is recommended that the file managers request a meeting with the Environmental Planner to discuss and review the application. A site visit is sometimes recommended with the file manager and environmental section to review issues on the ground.

Tree Survey Requirements

Retention of trees

Those trees (>25cm dbh) that have the potential for retention will be tagged by the Project Arborist or environmental professional and protected from construction impacts with mitigation controls such as flagging and temporary snow fencing. Mitigation will include measures to ensure no disturbance to root zones of trees designated for protection.

Where development is occurring in phases, a tree retention strategy will be submitted by the arborist or qualified environmental professional that shows those trees that have the potential for retention (are they windfirm and healthy and will not be unduly impacted by the development) and how they will be protected in each phase. The arborist report must also address windfall or blowdown concerns along with recommendations for mitigation.

Removal or mitigation of trees

For each site or development phase, the arborist report will identify tree removal areas within environmental development permit areas where they are necessary. Where development or tree removal is taking place within 50 metres of a park, neighbouring properties, or within an environmental development permit area, it is expected that trees (>25cm) located on municipal owned lands or proposed parks that are within striking distance of any proposed building envelopes will be assessed for potential hazards with recommendations provided by the arborist for mitigation or removal where appropriate, along with replacement recommendations where appropriate. The Project Arborist for the applicant will carry out the tree mitigation measures and/or removal where necessary as a result of the findings from this study.

Replacement of Trees

The tree management strategy should include measures for replacement and enhancement of removed or damaged trees along with sparsely vegetated areas within the environmental development permit areas on site which will include a three to five year maintenance agreement to ensure the success of the replanting plan. A replanting plan along with an estimate of the replanting and maintenance costs as well as security deposit for 100% of the estimated costs will need to be submitted by the qualified environmental consultant.