



Corporate Report

NO: R218

COUNCIL DATE: October 30, 2006

REGULAR COUNCIL

TO: Mayor & Council
DATE: October 26, 2006
FROM: General Manager, Engineering
FILE: 3900-20
XC: 5280-60
SUBJECT: Erosion and Sediment Control By-law

RECOMMENDATIONS

The Engineering Department recommends that Council:

1. Authorize the City Clerk to bring forward for the required readings the proposed Erosion and Sediment Control By-law (the "By-law");
2. Authorize the City Clerk to introduce a By-law to amend the Municipal Ticket Information Utilization By-law, No. 12508 to allow 'tickets' to be issued for certain infractions of the proposed Erosion and Sediment Control By-law;
3. Authorize the City Clerk to introduce a By-law to amend the Surrey Fee Setting By-law, No. 14577 to include the new fee for an Erosion and Sediment Control Permit; and
4. Instruct the City Clerk to forward the Erosion and Sediment Control By-law along with a copy of this report to the Minister of Community Services for approval, after the By-law has been given three readings.

INTENT

The intent of this report is to seek Council's approval to adopt the Erosion and Sediment Control By-law, and approve two additional staff positions for the administration and enforcement of the By-law that has been developed over the last two years in consultation with developers, environmental companies, and stakeholders.

DISCUSSION

The new Erosion and Sediment Control By-law will act to limit the discharge of sediment and sediment-laden water from construction activities into the City drainage system.

Adoption of the proposed By-law provides greater protection to our watercourses and clarifies roles and responsibilities of landowners, developers, builders, environmental professionals, and City staff in ensuring our environment is protected. The proposed By-law establishes an administrative framework for dealing effectively with erosion and sediment control concerns, utilizing current legislation, City policies, practices and procedures that are familiar to the public around the Lower Mainland. A similar By-law for erosion and sediment control is currently being proposed in the City of Abbotsford, and one has been passed recently in the Township of Langley. Appendix 1 provides a summary of the need for a new By-law, the key components of the new By-law, and the process followed.

A permit application fee of \$400 is being proposed to fund monitoring and enforcement of the By-law and associated permit. With implementation of the new By-law, developers will no longer be required to place Restrictive Covenants on individual lots within subdivisions to cover silt and erosion control facilities. The cost of registering the Restrictive Covenants is typically between \$300 to \$500 per development, which under the new system will no longer be required. The Township of Langley has currently endorsed a By-law with a permit fee that ranges from \$500 to a maximum of \$2,000, depending on the scope of the Erosion and Silt Control Plan.

Although under the proposed By-law implementation, monitoring and inspection of erosion and sediment control facilities are the responsibility of individual developers, the enforcement and the administration of the By-law will be undertaken by City By-law Enforcement officers and Engineering staff. It is envisioned that the permit fees and revenue from fines will fund the staffing complement required to implement and administer this new By-law. The economic outlook for BC remains strong and construction activities in Surrey are anticipated to continue at high levels for the foreseeable future. Given the current and expected level of construction activity, more resources are needed to support the administration of the proposed By-law. Enforcement, monitoring and administration of the new By-law approach to erosion and silt control will require extra staff resources, the cost of which will be covered by the permit fees. The new Erosion and Sediment Control By-law has been reviewed by the Legal Services Division.

CONCLUSION

The proposed By-law is a proactive approach that will ensure the implementation of effective erosion and sediment control facilities during construction. The proposed By-law is also designed to provide a clear guidance to the community with respect to the manner in which construction operations must be undertaken to conserve and protect the City of Surrey's drainage system and environment.

Paul Ham, P.Eng.
General Manager, Engineering

VL/RD/brb:rd
Attachments

APPENDIX 1

Further Discussion of the Erosion and Sediment Control By-law

BACKGROUND

The lack of, or ineffective, erosion and sediment control measures in construction activities have led to the erosion of soils, which has caused sediment to accumulate in the City drainage system and watercourses. Mitigating the effects of sediment once it has entered the City drainage system and aquatic environment is difficult, expensive, and labour intensive. The sustained rate of development in the last few years has brought an increased focus on the effects of sediment-laden water. Regulatory agencies, such as DFO, are demanding an improvement over our existing practice.

THE ISSUES AND OPPORTUNITIES

The proposed Erosion and Sediment Control By-law is a proactive approach that will:

Address Drainage Concerns and Environmental Impacts

The proposed By-law will reduce the amount of sediment discharged from construction activities and improve the City's drainage system, as well as meet environmental objectives. Current construction practices have caused a build-up of sediment in the City drainage system which can reduce the capacity of the City storm drain system; and subsequently, increase the cost of maintenance. The City currently spends well over \$500,000 each year in maintenance costs directly associated with the build-up of silt in our system at key locations on a reactive basis. In addition, sediment-laden waters are considered a deleterious substance pursuant to the Federal Fish Act. Since the City's storm drain system discharges to fish bearing waterways, the City has a responsibility for allowing sediment-laden water to be discharged to watercourses. The proposed By-law will reduce the cost of maintaining City drainage systems, improve storm water conveyance, protect our aquatic environment, and reduce potential liability.

Create a Level Playing Field for the Development Industry

Many developers are investing resources to provide adequate erosion and sediment control measures; however, many are not. This creates an uneven playing field where those who invest in protecting City drainage system, and the environment, are financially disadvantaged. The enforcement of the proposed By-law will ensure that all development activities incorporate adequate erosion and sediment control and effectively level the playing field.

Harmonize Policies and Procedures with the Official Community Plan

The City of Surrey Official Community Plan (OCP) sets out high standards of environmental protection to ensure the preservation of our natural heritage. As stated in section G-1 Surrey's OCP - "*The City will protect and enhance the natural environment including fish, wildlife and bird habitats.*" The City is committed to ensuring adequate control of sediment and erosion in runoff water as an essential component of construction practices. Furthermore, the City has expressed its desire to manage the quality and quantity of storm water runoff to help protect and enhance aquatic habitats. The proposed City Engineering Department's Sediment

Drainage Policy also commits the City to enforce the sediment discharge standards set by the Department of Fisheries and Oceans and requires developers to meet those standards.

Provide Regulatory Clarity

Many of the existing Municipal regulatory tools have not been utilized in their entirety due to lack of clarity on what is required for erosion and sediment control. Currently, the Soil Depositing By-law, Building By-law and Tree-Protection By-law do not include a clear requirement of what is needed to effectively implement Erosion and Silt Control facilities. The proposed By-law will provide the opportunity to clarify the Erosion and Silt Control requirements and provide consistency.

THE PROPOSED EROSION AND SEDIMENT CONTROL BY-LAW

Statement of Intent

The proposed By-law was developed in consultation with City Staff, Senior Government Staff, the Development Advisory Committee, Consultant Working Group, and other municipalities which have adopted Erosion and Sediment Control By-laws. The proposed By-law has been drafted to address the issues that have been discussed in this report.

To satisfy the requirement of Section 8(9) of the *Community Charter*, Council must adopt a Statement respecting the Council's reasons for adopting a By-law under Sub-Section 8(3)j. The following is a proposed "Statement of Intent for adopting the Erosion and Sediment Control By-law."

Statement of Intent

1. Whereas City drainage system and watercourses are an important resource in the City of Surrey;
2. Whereas the Surrey Official Community Plan contains policy objectives related to building a sustainable local economy, enhancing the image and character of the City, protecting the environment, and improving the quality of community;
3. Whereas development of the City should be undertaken in such a manner so that the objectives and policies of the Official Community Plan with respect to environmental protection, community character and image of the City are not compromised;
4. Whereas sustained growth and development in the City continues to generate the need for adequate erosion and sediment control measures;
5. Whereas under the authority of the Community Charter, municipalities have the authority to adopt a by-law to provide for and regulate erosion and sediment control activities; and
6. Therefore, Council intends to adopt an Erosion and Sediment Control By-law to provide for and regulate erosion and sediment discharge during construction, in order to achieve the above cited policy objectives of the Official Community Plan.

Provisions of the Proposed By-law

The following summarizes the proposed By-law:

TABLE 1 Erosion and Sediment Control By-law		
Proposed By-law	Issue	Resolution
PART 2: Prohibition of Discharge		
Section 1 & 2 sets measurable limits for the amount of sediment that may be discharged into City Drainage system.	Accumulation of sediment in the City drainage system has caused an increase in maintenance costs and the amount of sediment entering into watercourses.	ESC facilities and sediment discharge limits will reduce maintenance costs and will conform with Provincial and Federal standards. Set the limit of 75 TSS for 25mm/day or less, rainfall event.
PART 3: Erosion and Silt Control (ESC) Permit		
1. Section 3 and 4 state when an ESC Permit is required.	Although some construction sites have invested resources to provide adequate ESC facilities, many have not. A standard is needed to create an even playing field specifying when ESC facilities are required.	An ESC Permit will be required for construction sites over 2000 m ² . Sites smaller than this will be required to follow.
2. Section 5 provides an overview of the key components required for obtaining a permit, mainly: <ul style="list-style-type: none"> i. Application from Developer ii. Submission of an ESC Plan (discussed in Part 4) iii. Letter of Undertaking from the Erosion and Silt Control Supervisor 		
3. Section 6 states when an ESC Permit application may be waived.	Circumstances such as emergency works, construction timing, existing site conditions may render an ESC permit application unnecessary or not feasible.	The By-law allows for a permit application to be waived by the General Manager of Engineering.
4. Section 7 states the period the permit is valid.	ESC measures need to be in place until construction activities are complete.	Permits will be valid up to substantial completion of works to ensure compliance with the By-law.

Proposed By-law	Issue	Resolution
<p>5. Section 8 concerns the security deposit required for the permit.</p>	<p>Security deposit is needed to promote work in accordance to the By-law, and ensure compliance with the plan.</p>	<p>Establish a minimum security of \$10,000 or 120% of the cost to implement the Erosion and Silt Control Facilities.</p>
<p>PART 4: Erosion and Silt Control Plan</p>		
<p>1. Section 14 states who can prepare an ESC Plan.</p> <p>2. Section 15 provides clarification for what's required in the ESC Plan.</p>	<p>Plans must be designed to meet the sediment discharge limits.</p> <p>Minimum requirements are needed to provide assistance in assessing if the ESC Plan is sufficient to control the sediment discharge.</p>	<p>Plans must be prepared by a Professional Engineer who is experienced in preparing an Erosion and Silt Control Plan.</p> <p>Minimum information requirements are set out in Schedule A of the By-law.</p>
<p>PART 5: Monitoring and Reporting</p>		
<p>1. Section 18 articulates responsibilities of each party to the ESC Plan.</p>	<p>The City needs to make clear who is ultimately responsible for implementing the ESC Plan.</p>	<p>Since our contractual agreement is with the owner for the servicing agreement, they will be ultimately responsible for the ESC Facilities including inspection, maintenance, monitoring and reporting requirements as set out in Schedule "C". On behalf of the Owner, an Erosion and Silt Control Supervisor must be appointed to monitor and report on the facilities.</p>
<p>PART 6: Offences and Enforcement</p>		
<p>1. Section 24 states the actions City staff may take when contraventions of the By-law are observed.</p> <p>2. Section 30 provides a penalty upon summary conviction of \$2,000 - \$10,000 for failing to abide by the By-law.</p> <p>3. Section 28 provides for fines under the MTI By-law for non-compliance.</p>	<p>City inspection of sites will help determine sites that are non-conforming with the By-law.</p> <p>A need to discourage people from allowing non-conformances to continue.</p> <p>A need to quickly enforce conformance with the by-law and permit, without having to go through courts.</p>	<p>A Notice to Comply will be issued to non-conforming sites and will only allow remedial works to be conducted on site.</p> <p>Provide the City with a means to issue fines until the situation is corrected. This is consistent with other City By-laws.</p> <p>Update the MTI By-law to enable enforcement for infractions made against the Erosion and Silt Control By-law.</p>

Stakeholder input and review

The following is a summary of the stakeholder input process undertaken over the last two years in the development of this By-law:

- December 3, 2004 – Contractors & Consultants kick off liaison meeting.
- January 28, 2005 – CoS presentation and invitation to join working group.
- April 5, 2005 – Working group meeting to develop silt Plan requirements.
- May, 2005 – Presentation to DAC in response to anticipated TOL By-law.
- October 26, 2005 – Presentation to GVHBA.
- November 24, 2005 – Presentation of proposed by-law to DAC.
- March 23, 2006 – Presentation of monitoring results to DAC.
- September 28, 2006 – Update to DAC.
- October 16, 2006 – Working group meeting to present proposed By-law updates.

Concurrently, with the stakeholder process, a review process was undertaken that included:

- Liaison with Consultants and Contractors
- Liaison with other municipalities
- Monitoring Program
- Internal Review with Engineering, Planning and Development, By-law Enforcement.
- Liaison with Senior Government Agencies
- Legal Services Division Review

Following the May 2005 presentation to DAC, staff committed to a monitoring program to address concerns raised by the committee with respect to the achievability of the targets being proposed and the method of measurement. The monitoring period spanned September 2005 to March 2006 and included 35 sites, from which a total of 49 samples were taken. The results from this monitoring exercise were presented to senior environmental agencies, the working group, DAC and other municipalities to encourage communication regarding this issue. It should be noted that no other municipality had undertaken a similar exercise. Generally, it was found that by implementing reasonable Erosion and Silt Control Plans sites could meet the targets proposed in the By-law. Site without Erosion and Silt Control Plans did not meet the targets. There remained some question as to the measuring methodology in that some stakeholders felt that although the NTU measurements were less expensive to take, they were not as reliable. In an effort to alleviate this concern, the by-law uses total suspended solid (TSS) as the measuring scale for enforcement but our procedures rely on NTU readings to define when TSS samples are to be taken.

At this point, outstanding comments are related to the administration and enforcement of the by-law. We are developing guidelines and other education information to hand out with development applications and building permit applications to clearly outline the new by-law and how it will be administered and enforced.

One of the most contentious points of discussion was with respect to the responsibility of developers when homebuilders are causing most of the silt problems as they near substantial completion on a specific development. Under the proposed by-law, developers of projects larger

than 2000 m² will be responsible for the implementation of the permitted Erosion and Silt Control Plan through to substantial completion of the project. In most cases there will be a period of time when individual builders are working on sites that have been sold while the developers are still responsible for the Erosion and Silt Control Plan. The development industry has raised concerns that developers have very little power to force individual builders to implement Erosion and Silt Control facilities other than a damage deposit. The proposed Erosion and Silt Control By-law in conjunction with the provisions made in the Building By-law will allow staff to enforce erosion and control requirements on individual lots through fines and stop work orders. The developers will be expected to monitor their site and to inform individual builders of non-compliance. It will be the developer's responsibility to request action from the City on individual lots if these remain non-conforming despite their continued effort. We believe this will address the concerns of the development industry while ensuring the objectives of the by-law are met.

APPENDIX 3

Proposed Amendments to Surrey Municipal Ticket Utilization By-law, 1994, No. 12508, as amended (the "By-law")

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That the By-law be further amended as follows:

1. By deletion of the words "Schedules 2 through 24" and replacing them with words "Schedule 2 through 25" in Sections 3 and 4.
2. Amend Schedule "1" by adding a new Section 24 as follows:
 24. Surrey Erosion and Sediment Control By-law, 2006, No. _____.
 - Manager, Administration & By-law
 - Senior By-law Enforcement Officer
 - By-law Enforcement Officer
 - General Manager, Engineering
 - Designated Engineering Staff
3. By adding a new Schedule 25 as attached.

SCHEDULE 25 TO BY-LAW NO. 12508

SURREY EROSION AND SEDIMENT CONTROL BY-LAW, 2006, NO. _____

	SECTION	FINE
1. excessive sediment discharge	1	\$300.00
2. excessive sediment discharge	2	\$300.00
3. non-compliance with criteria	3	\$200.00
4. no permit	4	\$500.00
5. non-compliance with plan	17	\$200.00
6. fail to keep record	19	\$100.00
7. improper signage	21	\$100.00
8. prevent inspection	22	\$500.00

APPENDIX 4

Proposed Amendments to Schedule "D" Surrey Fee-Setting By-law, 2001, No. 14577

Proposed Amendments to Schedule "D" Surrey Fee-Setting By-law, 2001, No. 14577

1. Add new heading **ESC Permit** and new numbers 10. as follows:

10. **ESC Permit**

ESC application fee.

\$400.00 per application