

SUBDIVISION DEVELOPMENT

Procedures, Standards and Guidelines,
Summary of Major Changes – April 2011



Foreword and Disclaimer

- This addition of the City of Moncton Subdivision Development – Procedures, Standards and Guidelines replaces the March 2009 edition. This document provides information regarding the procedures, standards and requirements that must be met for Subdivision Development in the City of Moncton primarily for residential housing projects.
- Throughout the document, reference is made to various Manuals, Acts and By-laws. The latest edition of these publications, in use at the time an application is submitted for subdivision approval, shall be referred to.

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Section 1.4.3 – Temporary Turn Arounds

- Temporary turn arounds shall be constructed to public street standards, gravel only, at the end of all dead end streets including stub streets and shall be designated on the subdivision plan as a Future Street as defined within the Community Planning Act. **Temporary turn arounds are for City of Moncton use for safely maneuvering large vehicles and as such, turn arounds shall not be impeded in any way. Parking vehicles or trailers or storing construction materials or debris is strictly prohibited.**

Section 1.4.16 – Erosion and Sediment Control

- Developers must **submit an Erosion and Sediment Control Plan prepared by a qualified Professional Engineer**, to the satisfaction of the City of Moncton. The erosion and sediment control plan must be an integral part of the site development plans and must prescribe all the necessary steps, including scheduling, to assure proper erosion and sediment control during all phases of construction. The plan must include both a narrative report and a site plan.

Erosion and Sedimentation?

- **Erosion** is the removal of soil by the action of wind, rainfall and surface runoff
- Can be affected by climate, soil type, topography and vegetation
- When the eroded particles are deposited, it is known as **sedimentation**
- Construction activities can speed up the process of erosion due to land clearing

Potential Impacts



- Degrades water quality
- Destroys fish habitat
- Loss of wetland
- Effects infrastructure
- Increases frequency of flooding

It's the Law

The Fisheries Act (Fisheries and Oceans Canada)

- Prohibits the deposit of a deleterious substance to fish bearing waters
- Allowed TSS limit: 25 mg/L above background levels
- Fines: \$300,000 to \$1,000,000 or imprisonment

The Clean Water Act (NBD OE)

- Prohibits the release of a contaminant into water
- Fines: \$500 to \$1,000,000

City of Moncton By-law P-209

- TSS limit: 15 mg/L (will be revised to be 25 mg/L)
- Fines: \$1,070 per day

E&S Control Requirements

Subdivision Development Guidelines

- Section 1.4.16

Commercial Development Guidelines

- Section 2.4

Municipal Specifications

- Section 25

Erosion & Sediment Control Guidelines are available on our website www.moncton.ca

E&S Control Requirements

Narrative Report

- Project description
- Major land-disturbing activities
- Brief analysis of local drainage factors and potential problems
- Description of erosion and sediment control measures to be used
- Inspection and maintenance program and schedule

Site Plan

- Topographic features
- Available soil information
- The proposed alteration of the area (project boundary, limits or clearing and grubbing, location of stockpiles, etc)
- Erosion and sediment control measures to be used (location, type, dimensions)

Examples of Poor E&S Control



Best Management Practices

- Minimize area of disturbed soil
- Limit the time the disturbed area is exposed
- Preserve existing vegetation cover wherever possible
- Prevent runoff from flowing across disturbed areas
- Reduce runoff velocity
- Remove the sediment from onsite runoff before it leaves the site
- Develop and implement a thorough monitoring and maintenance program

E&S Control Measures

Erosion Control

- Surface roughening
- Re-vegetation
- Mulching
- Matting
- Geotextiles
- Rock riprap
- Buffer zones

Sediment Control

- Earth Dike
- Drainage swale
- Stone filter berm
- Sediment control fence
- Straw bale filter barriers
- Check dams
- Sediment control ponds
- Storm drain inlet protection

Examples of Effective Erosion Control



Examples of Effective Sediment Control Practices



Stabilized Construction Entrance

Final Thoughts

- The development will not be approved without a proper erosion and sediment control plan prepared by a qualified engineer
- The E&S control plan must be implemented at the very start of the project and maintained
- Site visits will be conducted by City staff and erosion and sediment control measures will be verified
- Water samples will be collected as deemed necessary to verify compliance with by-law P-209

Section 1.5.6 – Subdivision Agreement

- **If the Subdivision Agreement is in default in any way, it may affect future phasing approvals until such time as the default has been satisfactorily rectified.**

Section 1.9 – Final Subdivision Plan Endorsement

- Final subdivision Mylar Plans **will not be accepted or processed for registration if they contain a label or sticker to either correct an error or to label missing information.** Should the City of Moncton receive Mylars containing a label or sticker, the plan will be returned for reprinting.

Section 2.0 – Subdivision Construction – Standards & Guidelines

- Construction plans expire after one year from date of issuance or upon adoption of a new City of Moncton Standard Municipal Specification.

Section 2.2.10 – Commencement of Construction

- Prior to starting construction an on-site inspection of erosion and sedimentation control measures has been conducted by the Developer, Consultant, Contractor and City of Moncton officials.

Section 2.3.3.4 - Construction

The construction of all roadway elements shall conform to the details and requirements contained in the City of Moncton Standard Municipal Specifications. ***Winter construction from December 1 to March 31 is prohibited unless written approval has been obtained from the City Engineer.***

Section 2.3.6 - Complete Street Construction

The City of Moncton is embracing the concept of Complete Streets design. This design approach enhances a safe, attractive, and comfortable access and travel for all users. Pedestrians, bicyclists, motorists and public transport users of all ages and abilities are able to safely and comfortably move along and across neighbourhoods.

In order to achieve complete streets design, the City Engineer will be requesting that developers add features within the public right-of-way. These additions may include traffic calming initiatives, trail connections, wider sidewalks, etc.

These features will be identified and requested during development review, the City Engineering Department will provide guidance and standards on any of the requested features

Section 2.4.1 General

- Asphalt concrete pavement (including base and seal), concrete curb and gutter and concrete sidewalk (if required), and landscaping / topsoil must be completed before **July 15, 2012**, unless otherwise approved by the City Engineer.

Section 2.4.3 Cost Sharing

- Invoicing for any cost sharing will only be considered the year following signing of the Subdivision Agreement. Payment by the City will only be processed after Capital Works budget approvals by the Capital Borrowing Board. Also, all deficiencies must be corrected and the Aboveground Provisional Package processed by the City prior to any payments on cost sharing items

Section 2.4.4 Curb and Gutter

- Curb and gutter shall be constructed as per the City of Moncton Standard Municipal Specifications and as illustrated on Drawing No. S/D 11. The curb shall be barrier type in accordance with the requirement of the street classification. ***Should curb and gutter be installed and the asphalt not installed until the following year, the Developer will, at his cost, bring in stone to the top of the gutter for protection from possible plow damage.***

Section 2.4.5 Asphalt

- Asphalt shall be placed as per the City of Moncton Standard Municipal Specifications and as illustrated on Drawing No. S/D 12. The asphalt shall be in accordance with the requirement of the street classification.
- **Penalties, applied against the Developer's security, will be assessed on asphalt work which does not meet City of Moncton Specifications.**

Section 2.4.5.1 Asphalt Tonnage

- Asphalt Base cores and Asphalt Base tonnage slips must be submitted to the City of Moncton for review **prior to Asphalt Seal being placed**. Should the base cores or tonnage fail to meet the minimum City of Moncton Standard Municipal Specifications a determination will be completed on how to remedy the deficient asphalt and shall be carried out before the placement of Asphalt Seal. After placement of Asphalt Seal, cores and tonnage slips shall again be submitted to the City of Moncton to determine if the seal thickness and tonnage meet city specifications.

Section 2.4.5.2 Asphalt Compaction

- Please see Table 8.6.5.A “Unit Price Adjustment for Field Compaction”, within the City of Moncton Standard Municipal Specifications, for how penalties will be applied against the Developer’s security.

% of Maximum Theoretical Density	Unit Price Adjustment \$ per Tonne
92.5 to 93.0	+1.00
92.5	0.00
92.5 to 92.0	-1.00
92.0 to 91.5	-2.00
91.5 to 91.0	-4.00
91.0 to 90.5	-8.00
90.5 to 90.0	-12.00
<90.0	rejectable

Table 8.6.5.A Unit Price Adjustment for Field Compaction

Section 2.4.5.2 Asphalt Compaction

- The City of Moncton will not accept any asphalt that is less than 90.0% of the Theoretical Maximum Relative Density and shall require all asphalt to be removed and replaced full width and in the project's entirety at the Developer's expense.
- A bonus shall be paid to the Developer as per Table 8.6.5.A "Unit Price Adjustment for Field Compaction", within the City of Moncton Standard Municipal Specifications.

Section 2.4.8 Decorative Street Lights

- 2.4.8.1.2 The Owner agrees to provide the City of Moncton with a complete set of specifications of the lighting they wish to install. Further, the owner agrees to provide the City of Moncton with a number of additional lighting units which will be stored by the City of Moncton for maintenance purposes. The number of spare lights will be determined at the time subdivision design

Section 3.2 Testing and Materials

- Any additional testing required due to failure of original testing shall clearly indicate what test it is being completed for. Re-Videoring of storm and sanitary shall be completed from Manhole to Manhole and shall include a re-inspection of the total pipe length, all services and the defects noted and inspected.

Section 3.3 Warranty and Maintenance Period

- The City of Moncton will not undertake snow clearing operations until issuance of either the Certificate of Substantial Completion or the Certificate of Provisional Acceptance for the initial phase of construction. Following issuance of either of these Certificates and until concrete curb and gutter and asphalt have been installed, the City will not be responsible for any damage to manholes, valve boxes or other infrastructure including the crushed stone roadbed as a result of snow plowing operations. **Requests to have snow-clearing operations undertaken by the City must be received in writing no later than October 1st of the year the plowing is to commence. Further to this Inspections must be completed by October 15th. Fill out appendix Q to request snow plowing**

Section 3.3 Warranty and Maintenance Period

- The City of Moncton will not undertake ice clearing operations until issuance of the Certificate of Aboveground Provisional Acceptance for this phase of construction.

Section 3.3 Warranty and Maintenance Period Security

- The Developer shall provide the necessary insurance and securities as stipulated in the Subdivision Agreement. These instruments must be automatically renewed as required and remain in effect until completion and Final Acceptance of all works as stipulated in Schedule “A”. Reductions may be permitted after acceptance of the Certificate of Provisional Acceptance for the Above Ground Phase of construction. The developer shall also provide a warranty security equal to fifteen percent (15%) of the amount of Aboveground work security and will be kept for two (2) years or upon acceptance of the Certificate of Final Acceptance for Above Ground work, whichever is the longer

Section 3.4 Certificate of Substantial Completion

- In order for consideration of the Certificate of Substantial Completion to be issued the following major works must be completed, the installation of sanitary and storm sewer mains, water mains and their appurtenances, all roadbed gravels and major drain swales

Section 3.5 Certificate of Provisional Acceptance

- Following completion of all construction and deficiencies, the Developer or Consultant / Engineer shall advise the Engineering Department. Within ten (10) working days following receipt of notification, a complete on-site inspection involving all required City staff together with the Developer and/or Consultant / Engineer will be conducted. ***Inspections will not be conducted when there is snow on the ground***

Appendices

- Appendix “C” – Subdivision Agreement
- Appendix “N” – Performance Bonds are no longer accepted by The City of Moncton as security under a Subdivision Agreement.
- Appendix “P” – Certificate of Approval to Construct
- Appendix “Q” – Request for Snow Clearing
- Appendix “R” – Items Required Prior to Commencement of Construction

Appendix C Subdivision Agreement

8.12 The Developer agrees not to foul any roads within or outside the limits of the subdivision as shown on Schedule “B”, and further agrees to be responsible for the clean-up and repair of all public streets, upon which obstructions, mud or dust are created as a result of construction activity in the subdivision, regardless of the person(s) responsible for the obstruction, mud, dust or damage, and to provide the necessary persons and equipment to be available on reasonable notice at all times to keep such roads clean and that all trucks making deliveries to or taking materials from the subdivision shall be adequately covered and reasonably loaded so as not to scatter refuse, rubbish, or debris on the abutting highways and streets. This shall apply up until issuance of the Certificate of Final acceptance. If the Owner fails to comply, the Municipality shall be entitled to arrange for the necessary work to be undertaken at the Owner's expense and to draw upon any security provided under this Agreement to the extent necessary to pay such costs in connection therewith.

Appendix P - Certificate of Approval to Construct

APPLICANT INFORMATION

Name of Subdivision: _____

Developer: _____ No: _____

If company name, _____ No: _____

provide names of signing officers _____ No: _____

Consultant Engineer: _____ No: _____

Consultant Inspector: _____ No: _____

Street(s): _____

The Applicant/Developer hereby agrees to follow all rules and standards as stipulated in the City of Moncton Municipal Specification, Subdivision Guidelines and Subdivision Agreement and further agrees to notify the City of Moncton Engineering Department of any changes required to the construction plans which were accepted for construction on _____.

Applicant's Signature: X _____ *Date* _____

Approval Signature: X _____ *Date* _____

The approval herein provided shall not be deemed an approval of the design or acceptance of the works by the City or an assumption by the City of any liability in connection therewith and shall not release the Owner from any of its obligations under this Agreement.

APPENDIX "Q"
February 2011

CITY OF MONCTON ENGINEERING AND ENVIRONMENTAL SERVICES

REQUEST FOR SNOW CLEARING

Requests to have snow-clearing operations undertaken by the City must be received in writing no later than November 1 of the year the plowing is to commence. Further to this Inspections must be completed by October 15

Failure to have the required inspections done or applications completed and submitted by the dates stated above will result in the Developer having to provide snow clearing for his Subdivision, in which case, it will be incumbent upon the Developer to undertake snow clearing operations in a timely manner. In the event the Developer fails to provide adequate snow clearing for the Subdivision, the City shall be entitled to arrange for the necessary work to be undertaken at the Developer's expense and to draw upon any security provided under the Subdivision Agreement to the extent necessary to pay such costs in connection therewith.

Subdivision: _____

Unit: _____

Phase: _____

Agreement No.: _____

LIST ALL STREET WITHIN THE DEVELOPMENT
THAT ARE REQUIRED TO BE PLOWED.

Street	From	To	Length (m)

The City of Moncton will not undertake snow clearing operations until issuance of either the Certificate of Substantial Completion or the Certificate of Provisional Acceptance for the initial phase of construction. Following issuance of either of these Certificates and until concrete curb and gutter and asphalt have been installed, the City will not be responsible for any damage to manholes, valve boxes or other infrastructure including the crushed stone roadbed as a result of snow plowing operations

PLEASE FORWARD ALL CORRESPONDENCE TO:

The City of Moncton Engineering and Environmental Services
655 Main Street
Moncton, NB E1C 1E8
Phone: (506) 853-3525 Fax: (506) 853-3543

APPENDIX "Q"
February 2011

The City of Moncton will not undertake ice clearing operations until issuance of the Certificate of Aboveground Provisional Acceptance for this unit and phase of construction.

Deficiencies of a non-emergency nature must be repaired within one (1) week of observation or after receipt of instructions in writing to do so.

Deficiencies of an urgent or emergency nature must be repaired immediately upon observation or upon receipt of notification from an Official of the City of Moncton Engineering and Environmental Services Department. Every effort possible must be made by the Developer to repair such deficiencies immediately. Failure to make the necessary repairs or corrections due to availability of a contractor, lack of equipment, material, labor or any reasons whatsoever will result in the City causing the works to be done at the expense of the Developer.

The Applicant/Developer agrees with the above noted conditions and hereby certifies that the above noted streets within this Unit and Phase of development meet City of Moncton Municipal Specification and all infrastructure is properly prepared for winter snow clearing operations.

I, _____
Developer have read and understand the above and agree to the conditions and requirements as stated herein.

Signed: _____ Date: _____

I, _____
Consultant do hereby certify that the above listed streets have been inspected and are provisionally ready for winter plowing.

Signed: _____ Date: _____



Engineers Stamp

PLEASE FORWARD ALL CORRESPONDENCE TO:

**The City of Moncton Engineering and Environmental Services
655 Main Street
Moncton, NB E1C 1E8
Phone: (506) 853-3525 Fax: (506) 853-3543**

Appendix “R” – Items Required Prior to Commencement of Construction

- Tentative Subdivision
- Issued for Review Construction Plan(s)
- Design Brief
- Issued for Construction Plans with all changes made and reviewed by the City of Moncton, Engineering and Environmental Services Department
- Engineering Estimate
- Completed Environmental Issues Checklist
- Digital PDF of Projects Unit and Phase
- Digital PDF of Drainage Plan
- ACAD file of Projects Unit and Phase (Parcels)
- Work Safe NB letter in good standing

Appendix “R” – Items Required Prior to Commencement of Construction

- Contractors Comprehensive General Liability Insurance Policy
- NBDOE Certificate of Approval to Construct
- Subdivision Plan - Does it match Town Plannings version
- Signed Subdivision Agreement
- Copy of Signed Subdivision Agreement given to Consultant
- Letter Regarding Full Time Inspection from Consultant
- Environmental Site Inspection
- Pre-Construction Meeting
- Street Opening Permit
- Valve Operating Plan

Thank You!

Please contact the City of Moncton,
Engineering and Environmental Services for
more information at 853-3525

Also, check out our website at
www.moncton.ca