Lot Grading

The City of Edmonton Drainage Bylaw 18093 regulates surface drainage on public and private land and includes a schedule of penalties for surface drainage offences. The City approves surface elevations and grades in two stages: Rough Grading and Final Grading. The completion of both stages is the responsibility of the property owner.

Rough Grade

This stage means shaping the lot approximately 7 to 20 cm below the proposed final grade elevations to create a drainage template for final grading and landscaping. Applications for Rough Grade Approval should occur within 18 months of the issuance of the building permit.

Final Grade

This stage means placing and shaping 7 to 20 cm of topsoil to landscape the lot and create the final surface drainage pattern. Final Grade Approval must occur within 12 months of Rough Grade Approval, within 60 days of the final grading being completed, or within 30 months of a building permit being issued for the premises. Owners of lots adjacent to stormwater management lakes, walkways, or ravines must comply with the terms of any easements, right-of-ways, covenants, or restrictive covenants registered on title.

Lot Grading Inspectors

Lot Grading Inspectors carry photo identification and are responsible for enforcing the bylaw by:

• inspecting and approving rough and final grading for all new developments and
• identifying lot grading and drainage offences in response to complaints from property owners.

Infill Housing Development

When an application is made for a permit to develop a property where there is no existing approved Lot Grading Plan, the applicant must provide a proposed Lot Grading Plan for the premises. Lot Grading Plans must be approved by the City of Edmonton prior to the construction of any buildings, additions to buildings, or alterations of surface drainage on the premises.

Grading for infill housing must convey surface drainage to a City right-of-way via drainage swales that are constructed within the property. Retaining walls must be constructed to support any elevation difference between a redeveloped property and an adjacent private property. Retaining walls must be constructed of concrete or pressure treated timbers with a minimum dimension of 10 cm x 15 cm (4” x 6”) and must project below the existing ground elevation of an adjacent property. Retaining walls must be self-supporting. Permeable walls require a permanent moisture barrier.

• Confirm the site servicing requirements for roof drainage and subsurface water drainage. Contact EPCOR Water and Sewer Servicing at 780-496-5444 or email wass.drainage@epcor.com for information relative to an existing storm service and for options to dispose of subsurface water from the foundation drainage system.

• Create a Lot Grading Plan that defines how your lot will convey surface drainage to a City right-of-way without affecting adjacent private properties. Internal side-yard swales are usually needed to achieve this requirement. Internal drainage swales must provide a minimum slope of 1.5%, a minimum depth of 10 cm, and a minimum width of 15 cm.

• Plan the demolition and reconstruction processes to ensure interim control of surface drainage during all phases of the redevelopment project. Directing or allowing surface drainage to flow onto adjacent private property is a bylaw violation.

• Common property swales may be utilized if consultation with adjacent property owners results in mutually beneficial surface lot grading management design proposals.

Things to Remember

• Property owners do not need to be present for a lot grading inspection.

• Check for settlement adjacent to foundation walls, including areas under decks and steps (Diagrams B).

• Grade any drainage swales (Diagrams C, E, and F) or internal swales (Diagram D) at a minimum 1.5% slope to convey surface drainage to a City right-of-way.

• Repair settlements, especially under downspouts and sump pump discharges (Diagram B).

• Leave the downspout extensions in the down position and directed to discharge to a location where the water will drain to a swale and towards a City right-of-way (not towards a neighbour’s lot).

• Pets should be properly secured and gates should be unlocked to allow for a trouble-free inspection.

• If a reinspection is needed, the property owner must contact 311.

• Workload and weather can impact inspection schedules.

• Property owners are responsible to maintain proper lot grading after approval has been issued for as long as they own the property.

• The City of Edmonton may at any time require maintenance on the lot grading if alterations or settlements result in lot grading problems.

Diagram F
Split Surface Drainage

Diagram E
Rear to Front Surface Drainage
Lot Grading Inspector’s Checklist
Inspectors will be looking to ensure that:

• Driveways and sidewalks are completed.
• The site is clean and free of debris and construction materials.
• The grading is uniform and free of ruts, depressions, or excess soil.
• Grading slopes away from foundation walls (Diagrams A and C).
• Swales are well defined to convey surface drainage off the lot (Diagrams C, E, and F).
• Side yards are graded, even if the adjacent lot is incomplete.
• Steps or decks are properly backfilled.
• Storm or foundation servicing complies with the design requirements. Contact EPCOR Water and Sewer Servicing to verify the servicing requirements of a property at 780-496-5444 or wass.drainage@epcor.com.
• Window wells are installed to final grade elevation.
• Grading matches the top of curb, City sidewalk, or the top of the paved lane (clay cap at Rough Grade Stage).

Lot Grading Approval Procedure

Step 1 – Obtain a Lot Grading Certificate
An Alberta Land Surveyor is hired by the property owner to survey the lot and prepare a lot grading certificate. The surveyor submits the certificate and the applicant's contact information to the City of Edmonton.

Step 2 – Arrange a Lot Grading Inspection (pre-paid at Building Permit Stage)
Upon receipt of the Lot Grading Certificate, an inspector determines if the surface elevations are within acceptable tolerance of the design elevations approved by the City of Edmonton.

A site inspection will follow within five working days (workload and weather permitting) to verify that the property complies with:

• Drainage Bylaw 18093 requirements for surface drainage, sewerage system usage, and lot grading plan, and
• terms of any restrictive covenant easement agreement or utility right-of-way in which the City has an interest.

House construction (including driveways and walkways) must be complete. A Lot Grading Inspection Report will be issued within one working day of the site inspection.

If the grading does not meet the minimum requirements, deficiencies must be corrected and a reinspection arranged within 60 days. Applicants are sent notification when the grading has been approved.
For More Information

Final Lot Grading - refer to the Lot Grading Inspections Final Grade Stage brochure.

Mailing Address:

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Lot Grading
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EPCOR Water and Sewer Servicing
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