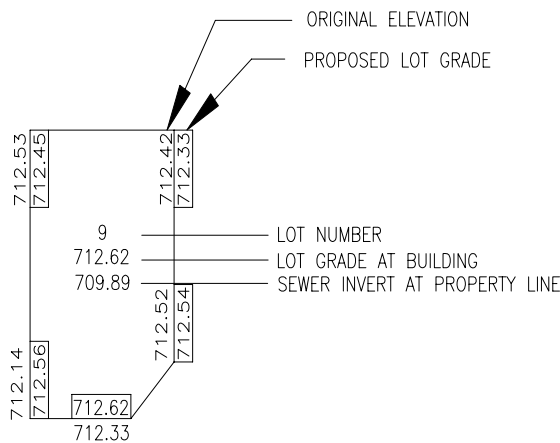




Lot grades at infill sites should be maintained at the same elevation as the previous development on the site, so that the new development does not create drainage problems. Also, when building a garage or shed, lane elevations should be determined so that the structure is built at an elevation that will avoid drainage issues.

EXAMPLE 1: LOT GRADES ON SITE PLAN.



ALL ELEVATIONS ARE GEODETIC
 ALL ELEVATIONS ARE 700 METERS +
 FB — FULL BASEMENT REQUIRED

REMINDER:

CAUTION - Call before you dig! Call for **FREE** utility locate service at least two working days in advance.

- ELECTRIC:**
City of Medicine Hat 1-800-242-3447
- GAS:**
City of Medicine Hat 1-800-242-3447
- Medicine Hat Water/Sewer 1-403-529-8176
- Shaw 1-866-DIG-SHAW
- Telus 1-800-242-3447

APPLICANTS MUST SUBMIT ORIGINAL LOCATE SLIPS

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Planning & Building Services
 580 First Street S.E.
 Medicine Hat, Alberta
 T1A 8E6
 Phone: (403) 529-8374
 Fax: (403) 502-8038

LOT GRADES

PREVENTING LOT DRAINAGE PROBLEMS

Building a safe & sustainable community together



Tel: (403) 529-8374

Lot Grades

When a new subdivision has been designed, one of the most important tasks done by design engineers is the assignment of lot grades. Proper lot grading ensures that sudden changes in elevation within a subdivision are minimized. More importantly, lot grading ensures that proper drainage will occur in the new subdivisions.

Drainage is designed to run towards the public roadway or rear lane, and be carried away from there. Inadvertent surface drainage onto adjacent properties is not desirable, since it often creates problems for the neighbors.

Therefore, it is essential that the established lot grades not be altered by developers or homeowners. It is the property owner's responsibility to ensure that future developments do not interfere with the proper drainage and cause water problems for neighbors.

Definitions

The following are definitions of lot grade terms used in site plans:

- *Lot Grade at Building*
The finished landscape elevation (including lawn) at the building after construction is completed.
- *Sewer Invert at Property Line*
The elevation at the invert or the bottom inside sewer service at the property line.
- *Full Basement Requirements*
There are two general reasons why full basements are required on some lots. The first is that the lot was leveled with significant fill during the initial grading. A full basement ensures the house footings rest on undisturbed soil. The full basement requirements may also be put on a lot with a significant slope from front to back or back to front. The full basement requirement again ensures the footings rest on undisturbed soil, and to allow for adequate frost protection. The placement of footings on undisturbed soil minimizes settlement and shifting of the structure.

- *Walkout Basements*
Walkout basements are viable when the difference between the lot grades at the building and the finished elevation at the rear of the lot meets or exceeds 2 metres.

- *Direction of Drainage*
The finished grade at the foundation is generally 20 cm higher than at the lot line so that the lot drains away from the house in all directions. On any lot where a portion of the lot is higher than the lot grade at the building, the drainage directions on the subdivision elevation maps shown must be maintained.

Certain types of lots accommodate certain types of houses. For instance, grade discrepancies can be minimized if a split level home has the high side of the house on the high side of the lot.

CITY OF MEDICINE HAT

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