

Memorandum

3 Foot Grade Change Subcommittee

Date: 6/29/06

Re: Summary of Proceedings

The subcommittee has met on March 9, April 6, April 13 and May 19 to discuss the “three foot grade change” ordinance. The material we have reviewed includes:

- Zoning Ordinance Section 30-5 (b)(4)
- Meeting with Nancy Radzevich, Chief Land Use Planner
- Correspondence with John Lojek, Commissioner of Inspectional Services
- Conversation with John Daghlian, Associate City Engineer
- Review of Zoning Bylaws of Wellesley, Dennis, Natick, Medford, Cambridge, Weston, Watertown, Chelsea, Waltham, Malden and Needham
- Conversation with Needham Town Building Official
- Field observations and documentation of existing conditions

The Ordinance

Zoning Ordinance Section 30-5(b)(4) provides that the Board of Alderman may give a special permit for:

- (4) The placement or removal of sod, loam, clay, gravel or stone or other solid material, where the existing contours of the land are to be altered by more than three (3) feet except when a special permit has been issued for construction under the terms of this ordinance;

This is usually referred to as the “3 foot grade change” ordinance and it is generally interpreted to mean that any grade change in excess of three feet must be approved by the Board of Aldermen.

The Issue

There are two issues with the ordinance:

1. It is unclear what the ordinance is attempting to address. In practice, the ordinance arose from a situation in which a change of grade caused a drainage problem on a neighboring property so it is usually viewed as a drainage issue.
2. The provision is impossible to interpret literally or enforce. Early on the Commissioner of Inspectional Services realized that any foundation changes contours by more than 3 feet, and an “exception” was read into the ordinance for the footprint of a structure. In more recent years the exception has been expanded to include driveway access to a building, but the ordinance can probably not be fairly read to allow that exception.

Note on the Ordinance

The ordinance appears in the use sections of the zoning code and not in any dimensional provisions. As such it does not apply to any institutional uses subject to the Dover amendment.

Practical Issues

1. The Commissioner recognizes that grade changes within a footprint are inevitable for any building and it was not the intention of the ordinance to require a special permit for all buildings/foundations.
2. Newton is a very hilly city and the effect of the ordinance is much greater on lots that are located on hills. In some areas as many as 50% of the existing housing stock would be in violation of the 3’ grade change. Much of the 3’+ grade change is due to garage and parking spaces.
3. The Planning Department estimates that there are three to four petitions a year specifically for a grade change permit. Although a special permit for a three foot grade change is not required where another special permit is being sought, over the last few years it has become the custom for the relief to be requested in connection with other use permits even though under the ordinance it is not required. Many of the 3’ grade change petitions come in after the fact when the work has been done and the inspector notes it. Those petitions are particularly difficult because it is difficult to determine the preexisting grade.

4. The Planning Department has estimated that including initial intake, site visits, plan review, land use committee reports, land use hearings, working session reports, review of plan revisions, drafting of the board order and ancillary work the planning staff probably incurs 4-5 person-days of work in connection with a grade change review. The Engineering Department estimates approximately one half day of review of a 3 foot grade change permit. Neither estimate is scientific or measured.
5. The current procedure is for an Aldermanic special permit. Under the 2004 rules of the Board of Alderman, the pre-filing and pre-review periods added to the normal processing mean that as a practical matter a home owner wishing to put a retaining wall in his/her back yard may have a process which takes up to 200 days and involves engineering and legal costs in excess of an estimated \$15,000. A comparable process before the Board of Appeals would take perhaps 90 days at substantially less cost.
6. Because of the delays and expenses inherent in processing 3 foot grade change special permits, architects and owners are likely to design around the ordinance rather than seek the special permit. Thus we see many walls designed to 2 foot 11 inches with terraces or slopes behind them or other efforts specifically designed to avoid the process. Design may be driven by avoidance of process.
7. The Planning department views this as an aesthetic problem.
8. The engineering department views this as a drainage problem.

Other towns

We have reviewed the zoning by-laws of 10 abutting cities and towns. None of the zoning ordinances contain a reference to limitation on changes of grade except that the Malden zoning ordinances includes in its dimensional requirements a restriction that grades shall not exceed 25% and shall not include ledge cuts or retaining walls in excess of 6 feet.

City of Newton Case Studies/Research

In order for the group to gain an understanding of the problem we have photographed and documented 15 Newton properties as examples of existing three foot grade changes. Our group then assigned value judgments as to what we felt were, Acceptable, Borderline or Not Acceptable examples of the 3' (or more) grade change. See attached color photographs.

Substantive Issues to be addressed

The committee believes that the issues which the 3 foot grade change ordinance are intended to address are:

1. Drainage – The effect of the ordinance on drainage issues is a hit or miss affair because the exclusions for the Dover Amendment uses and for the building footprint and “garage under” by administrative decision take a good deal of bite out of the ordinance. On the other hand a retaining wall for a garden in the middle of a homeowner’s back yard can be caught in the ordinance causing substantial delay and expense. Planning, Engineering and Building officials all believe that there is possibly some threshold of area or volume which should either be allowed by right or approved by administrative review and some further threshold which may require some special permit perhaps by the simplified procedures of the Zoning Board of Appeals.
2. Aesthetics – the Aesthetics issue is a combination of the size and materials and placement of various retaining walls which create or re-enforce the grade changes. Members of the committee had questions as to whether zoning is intended to regulate aesthetics generally or only within setback areas or not at all. But most agreed that regulation of the dimensional sizes of retaining walls is within the scope of the zoning ordinance.

Proposed Remedies

By Memorandum dated April 27 the subcommittee proposed a range of possible options for changing the current 3’ grade change ordinance to address the drainage and aesthetic concerns of the City. The Zoning Task Force requested that the subcommittee specify a preferred option which appears in this Memorandum.

Caveat: Any change in the ordinance will have one of two effects. It will either make the ordinance more liberal, i.e. allow more proposals as a matter of right or make it more regulatory, i.e. make more people seek more permission. Every zoning change does one of those things or the other.

After review of the various options proposed in the April 27 Memorandum the subcommittee proposes a package of ordinance changes which would more directly address separately the two concerns expressed and addressed in the 3’ grade change discussion (i) aesthetic issue of retaining walls and (ii) drainage:

Aesthetic Issues – Retaining Walls

1. Define “Structure” in Section 30-1 to include any retaining wall in excess of 5’ high. The effect of that change would be that retaining walls in excess of 5’ would be prohibited in front, side and rear setbacks.
2. An earthen berm with a slope greater than 1:1 is a “retaining wall”.

3. A retaining wall height would be measured to be aggregated and include terraces unless the terraces are at least 30” wide. The effect of this would be to allow offsets to break up the mass of retaining walls.
4. Retaining walls in excess of 5’ height should be allowed by special permit issued by the Zoning Board of Appeals.

Drainage issues

1. Engineering Department review and approval of a drainage plan required of all construction or alterations of single and two family homes increasing impervious surfaces by more than a threshold. One threshold might be the lesser of (i) 5% of the lot area or (ii) 500 s.f.;
2. Engineering Department review and approval of a drainage plan required of all other construction or alterations.

Subsequent to our meeting we have seen Brookline By-Laws Section 8.26.2 which adopts the same concept in more detailed manner. The thresholds are higher, but administrative review and an Erosion and Sediment Control Plan is required for projects over the threshold. The significant elements of the Brookline By-Law are:

- Establishment of thresholds for review
- Tiered review for smaller or larger projects
- Standards of filing of the Erosion and Sediment Control Plan
- Administrative Review

The Brookline By-Law adopts the concept of administrative review and provides details for that review. The concepts behind it are the same as the concepts adopted by the Subcommittee.