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BOARD OF BUILDING REGULATIONS AND STANDARDS

Geotechnical Advisory Committee (GAC) Meeting Minutes January 13, 2021 The Division of Professional Licensure Office 1000 Washington Street - Boston, MA 02118

This was a virtual Microsoft Teams meeting.

Roll Call, by GAC Chair:

Chris Erikson, Chair Scott DiFiore John Roma Erikson Damian Siebert

	absent
🛛 present	🗌 absent

Martin Rodick
Jake McManus
James Christensen
William Solberg
Rob Anderson

\boxtimes	present	absent
\boxtimes	present	absent

General notes on format of these minutes

- These minutes represent general points discussed during the meeting. The minutes are not intended to be a verbatim account of discussions.
- *Topics as numbered may\may not be in the same order as they appear on the meeting agenda.*
- The meeting agenda is listed as **EXHIBIT A**; others are listed sequentially as addresses during the meeting.

1. Introductions.

Rob Anderson explained that members of the Board of Building Regulations & Standards (BBRS) reviewed the make-up of each of its advisory committees to determine whether or not compositions adequately represented desired perspectives, determining that a building official represented should be added to the make-up of the GAC. Consequently, veteran City of Boston Building Inspector, William Solberg, was approved to serve in this capacity. Bill introduced himself to committee members, indicating that he has experience and interest in the geotechnical provisions of the code. In turn, each committee member introduced himself and welcomed Bill to the committee.

2. Discuss previous committee actions and current goals, objectives and procedures.

Rob Anderson provided a brief history of actions previously taken with regard to proposed amendments for the tenth edition of the Massachusetts code when it was proposed to be based on the 2018 International Codes. Rob Anderson reminded that committee members reviewed requirements of the 2018 International Building Code (IBC), Chapter 18 as well as ninth edition Massachusetts amendments, section by section and provided a draft for BBRS review during its June 11, 2019 meeting. Damian Siebert presented draft requirements during the meeting since Chairman Erikson was not able to attend. Although well received by BBRS members, for several reasons, it was around this time that Board

members determined that tenth edition efforts should be redirected towards adoption of modified versions of the 2021 I-Codes.

Rob identified, and others agreed, that a section by section review during committee meetings was tedious and perhaps there is a better review method. Following some discussion, in an effort to expedite efforts, it was agreed that members would be assigned certain sections of Chapter 18 for review prior to each meeting and will come prepared to discuss any changes that may be warranted. Additionally, on a **Motion** by Chris Erikson, seconded by Scott DiFiore, it was unanimously agreed by **Roll Call Vote** that committee members would meet on the second Wednesday of each month @ 10:00 am until approximately noon. Rob Anderson noted that meetings would be virtual, via TEAMS, for the foreseeable future.

Later in the meeting, Chairman Erikson asked all committee members to be prepared to discuss **Sections 1801 through 1806** during the February 10th meeting.

Damian Siebert questioned whether or not committee members would be able to address issues such as ground improvement (*not currently included in the IBC*) during this effort.

Rob Anderson explained that a draft schedule has been proposed requiring committee members to complete reviews by September this year. Although the schedule has not yet been finalized, likely that will be the expectation. Rob further explained that it is the Board's desire to adopt the I-Codes with as few amendments as possible, but recognizes some may be necessary. For this, or any proposed change, Board members will want to know reasons for the change as well as construction cost impacts.

Scott DiFiore identified that the matter is under review by the American Society of Civil Engineers (ASCE) and others, but it will be a long time before proposals are submitted to the International Code Council (ICC) for inclusion in the International Building Code (IBC).

All agreed that establishing ground improvement requirements for inclusion in the tenth edition will be a tall task, but also agreed it is necessary. Scott identified that, initially, requirements may likely be in the form of guidelines to the building official and Committee members will likely need to solicit input form ground improvement professionals.

BBRS State Fire Marshal Representative, Jen Hoyt, identified that the Department of Fire Services (DFS) sometimes includes an annex to code requirements in order to explain content and intent. Although technically not part of the code, annex guidelines can described how to appropriately apply and enforce certain code requirements and has proven successful in many instances.

Martin Rodick and Mike Oakland suggested that guidelines may provide examples of project difficulties, highlighting the need for ground improvement requirements. Damian Siebert suggested that guidelines address testing requirements.

3. Casing having to go to rock for drilled shafts.

John Roma introduced the topic indicating that the code, as currently written, reflects an old style New York caisson, yet other methods are available and acceptable. Damian Siebert indicated that the requirement, identified in IBC Section 1810.3.9.6 (*pictured below as Exhibit 2*), requires a permanent connection to rock. Mike Oakland identified that few projects adhere to this requirement.

Following a brief discussion, all agreed that the section should be revised as part of the tenth edition review to identified acceptable methods.

1810.3.9.6 Socketed drilled shafts.

Socketed drilled shafts shall have a permanent pipe or tube casing that extends down to bedrock and an uncased socket drilled into the bedrock, both filled with concrete. Socketed drilled shafts shall have reinforcement or a structural steel core for the length as indicated by an approved method of analysis.

The depth of the rock socket shall be sufficient to develop the full load-bearing capacity of the element with a minimum safety factor of two, but the depth shall be not less than the outside diameter of the pipe or tube casing. The design of the rock socket is permitted to be predicated on the sum of the allowable load-bearing pressure on the bottom of the socket plus bond along the sides of the socket.

Where a structural steel core is used, the gross cross-sectional area of the core shall not exceed 25 percent of the gross area of the drilled shaft.

- 4. Discuss: Matters not reasonably anticipated 2 business days in advance of meeting. None.
- 5. **Approve:** Adjourning the meeting.

On a **MOTION** by Chris Erikson seconded by Damian Siebert, **by Roll Call Vote**, it was unanimously agreed to adjourn the meeting @ approximately 11:32 am.

Exhibits.

- 1. Meeting Agenda
- 2. International Building Code (IBC), Section 1810.3.9.6