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> LAYLA R. D'EMILIA COMMISSIONER, DIVISION OF PROFESSIONAL LICENSURE

BOARD OF BUILDING REGULATIONS AND STANDARDS

Geotechnical Advisory Committee (GAC) Meeting Minutes March 16, 2022 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 Michael Oakland Damian Siebert

🛛 present	absent
present	absent
🛛 present	absent
🛛 present	absent
present	🗌 absent

Martin Rodick	
Jake McManus	
James Christensen	
William Solberg	
Rob Anderson	

present	🛛 absent
present	absent
🛛 present	absent
present	absent
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. Introduce Rich Baldacci. Rob Anderson identified that Mr. Baldacci was recently hired as the Office of Public Safety & Inspections' (OPSI), Chief of Inspections for Building & Engineering (the position Rob held before retiring.) Committee members welcomed him to the agency and meeting. Rich indicated that he was joining the meeting for purposes of information.

2. Review minutes for the GAC January 12, 2021 meeting (EXHIBIT B).

On a MOTION by Chris Erikson, seconded by Damian Siebert, it was unanimously agreed, by Roll Call Vote, to approve the minutes with the following correction. Add the highlighted language to point 2, third sentence.

However, John Roma reminded members that he would still like to consider factor of safety reduction to 2.25 regarding the dynamic testing of piles.

3. Discuss proposed amendments and new content of 2021 IBC, Chapter 18, for inclusion in the Tenth Edition of the Massachusetts Building Code (780 CMR).

Ground Improvement. Chairman Erikson explained that both he and Rob Anderson received a phone call from former GAC Chair, Steve Kraemer, regarding proposed tenth edition code ground improvement requirements. Chairman Erikson indicated that things had gone well during his February 8th presentation to members of the Board of Building Regulations & Standards (BBRS). Resultantly, BBRS members accepted the Chapter 18 draft proposal and it was added to the website for public viewing. Unofficial Tenth Edition Base Code Draft (780 CMR) | Mass.gov

Steve reviewed the proposal and had some concerns with suggested ground improvement requirements, thereby sparking the referenced phone calls. Both Chairman Erikson and Rob Anderson emphasized that this is how the system is designed to work (*i.e. proposals are posted so that interested parties may review and make comment*) and encouraged Steve to submit his concerns in writing. Prior to submitting comments, Steve further discussed concerns with Chairman Erikson and Damian Siebert. His comments are made part of these meeting minutes as **EXHIBIT C**.

Chairman Erikson suggested that committee members should first review Steve's list of concerns to determine whether or not they agree the comments have merit. Next, if the answer is yes, how the concern may be best addressed. Accordingly, members viewed Steve's written submission labeled as *Rigid Inclusion GI Issues for Code Amendment Consideration – SRK Draft*, dated 8 March 2022 as a guide. Damian explained that this 8 point document roughly identified Steve's concerns from most important to least. Members reviewed the document point by point.

The following provides a brief synopsis of comments made with regard to a few points to indicate that members did have some concerns with Steve's proposal, but ultimately determined that it should be explored further and perhaps the ground improvement section should be modified to some extent as a result.

Point 2. "Foundations with RIs typically have "hidden documentation defects" or inconsistencies due to differences between footing design bearing capacity (per design drawings) and total capacity provided by RIs. Current practice usually results in total RI capacity that is adequate for design structural loads but is less than footing bearing area multiplied by the allowable bearing pressure."

Mike Oakland identified that this issue drifts beyond typical code requirements and should be left to a project owner's discretion. Chief Baldacci was concerned that code criterion and associated documents needs to be clear for those who are reviewing it and making decisions as to its acceptability (*i.e. building code enforcement officials*).

Point 6. "RIs need a mechanism to isolate the elements from the footings and provide resilience to transient loadings (RIs are not reinforced or connected to footing). LTP consisting of 6 in. of ³/₄ in. crushed stone, or other material/thickness with equivalent load-deformation characteristics and shear resistance, shall be provided between tops of RIs and underside of footings. Typical, but not consistent, current practice."

Mike Oakland indicated that this requirement is a big step and makes sense only when there is load capacity in the soil.

On a related note, James Christensen indicated that he received comment on Section 1810.2.4.1 from someone who had viewed the posted proposal asking whether or not the requirement applies to ground improvement.

Following their review all members agreed that issues raised by Steve should be further explored. Damian, James, Mike, Scott and Chairman Erikson indicated that they would participate in further

review and to help generate revised code language where appropriate. Chairman Erikson indicated that it may be fitting to ask Steve to join as well.

John Roma asked about the request to add members to the GAC. Rob Anderson indicated that BBRS members are busy trying to complete review of tenth edition code proposals and would address the request at a later date. Rob expressed that a study had been done fairly recently about number of participants in varied advisory committees (*some were getting unwieldy and needed to be pared-back*), so he is not sure whether or not the request will be favorably viewed by BBRS members.

Chairman Erikson asked members to reserve April 13th @ 10 a.m. for a possible follow-up meeting.

4. Discuss: Matters not reasonably anticipated 2 business days in advance of meeting. None.

5. Approve: Adjourning the meeting.

On a **MOTION** by Damian Siebert seconded by Scott DiFiore, **by Roll Call Vote**, it was unanimously agreed to adjourn the meeting @ approximately 11:58 am.

Exhibits.

- A. Meeting Agenda
- B. January 12, 2022 GAC Draft Meeting Minutes.
- C. Steve Kraemer Ground Improvement Comments (in the form of a memorandum and 2 accompanying attachments).