



**Municipality of Anchorage  
Geotechnical Advisory Commission**

**A G E N D A**

**Tuesday, October 26, 2021**

**Noon – 1:30 p.m.**

**Regular Meeting**

**Virtual Meeting via Microsoft Teams**

Join by Link: [Click here to join the meeting](#)  
and/or

Join by Conference Call:

Teams Meeting Dial-in Number: **(907) 519-0237**

Meeting Conference ID: **449 883 285#**

- I. CALL TO ORDER
  - A. Establishment of Quorum
  - B. Disclosures
- II. MINUTES
  - A. September 28, 2021
- III. OLD BUSINESS
  - A. Resolution No. 2021-02, GAC Changes to AO No. 2020-85 and/or Omnibus Ordinance AO No. 2021-88 for Title 23 and Local Amendments to the 2018 IBC
  - B. Harding-Lawson Associates Maps Briefing Paper: Suggested Edits
- IV. NEW BUSINESS
  - A. Commission Bylaws and Objectives
- V. PERSONS TO BE HEARD (3-minute limit)
- VI. COMMITTEE REPORTS
- VII. OTHER BUSINESS
- VIII. STAFF REPORTS
- IX. ADJOURNMENT

**Next Regular Meeting: November 23, 2021, via Teams**

## II.A.

September 28, 2021 minutes will be emailed if available by meeting time.

## MUNICIPALITY OF ANCHORAGE

## GEOTECHNICAL ADVISORY COMMISSION RESOLUTION NO. 2021-02

**A RESOLUTION TO THE ANCHORAGE ASSEMBLY REGARDING AO NO. 2021-88, OMNIBUS ORDINANCE AMENDING AMC TITLE 23, RECOMMENDING BUILDING CODE MODIFICATION TO SECTION 23.15.1803.5.12.**

---

WHEREAS, the Geotechnical Advisory Commission (GAC) has been requested by the Building Safety Division of the Development Services Department to provide explanatory language related to the recommendation for modification of the local amendments to the municipal building code, specifically, Section 23.15.1803.5.12; and

WHEREAS, the GAC originally recommended the highlighted edits in Exhibit A (attached) to the local amendments in 2019, but these were missed in the final edits of the originally proposed International Building Code (IBC) 2018 local amendments submitted for approval to the Assembly in 2020 (AO No. 2020-85); and

WHEREAS, the GAC recommends adoption of the proposed language in the edits recommended in Exhibit A because the existing language is no longer applicable to the current building code; and

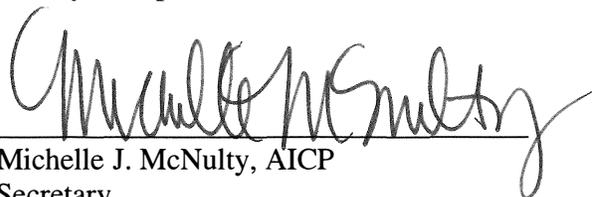
WHEREAS, the current version of the local amendment IBC language assisted engineers in calculating Peak Ground Acceleration (PGA) when there were no code-based maps available; however, the IBC documents have recently started including maps of PGA values, so Anchorage's current local amendment language regarding PGA values is no longer needed because PGA is directly provided in the IBC; and

WHEREAS, the local amendments to the IBC directly apply to commercial structures and residential housing in Seismically-Induced Ground Failure Hazard Zones 4 and 5; and, therefore, the amendment does not affect the majority of new residential structures within the Municipality of Anchorage because they fall under the 2018 International Residential Code; and

WHEREAS, the GAC provided the recommended edits to the Municipality of Anchorage's Building Board prior to the Building Board's consideration of this matter on September 22, 2021.

NOW, THEREFORE, BE IT RESOLVED that the GAC recommends that the Anchorage Assembly adopt the Commission's edits to the revision of the local amendments to IBC Section 23.15.1803.5.12, as shown in Exhibit A, attached.

PASSED AND APPROVED unanimously by the Geotechnical Advisory Commission on this 28th day of September 2021.



---

Michelle J. McNulty, AICP  
Secretary



---

John Thornley, PhD, PE  
Chair

**Exhibit A**  
**of**  
**GAC Resolution No. 2021-02**

**Geotechnical Advisory Commission Edits to AO 2021-88,  
Anchorage Municipal Code Section 23.15.1803.5.12**

**Section 18.** Anchorage Municipal Code section 23.15.1803.5.12 is hereby amended to read as follows (*the remainder of the section is not affected and therefore not set out*):

**23.15.1803.5.12 Seismic Design Categories D through F.**

- \*\*\*      \*\*\*      \*\*\*
5.      A slope shall be considered stable if, based on a limit equilibrium analysis, the minimum factor of safety:
- \*\*\*      \*\*\*      \*\*\*
- b.      Equals or exceeds 1.10 under earthquake loading conditions using a horizontal seismic coefficient of 0.30 in Seismically-Induced Ground Failure Zones 1, 2, 3; and 0.20 in Seismically-Induced Ground Failure Zones 4 and 5.

For slopes that do not satisfy all of the above criteria, the building official may approve an evaluation of the slope performance using a displacement-based method, including methods derived from Newmark sliding block model, or more advanced numerical modeling. Evaluations of slopes using any displacement-based method shall be based on site-specific probabilistic or deterministic ground motions predicted in accordance with Section 21.1 of [ASCE 7, WITH A 2 PERCENT PROBABILITY OF EXCEEDANCE WITHIN A 50-YEAR PERIOD.]ASCE 7-16, with the maximum considered earthquake (MCE).

\*\*\*      \*\*\*      \*\*\*

~~[7. FOR RISK CATEGORY I AND II STRUCTURES THAT ARE LOCATED IN SEISMICALLY INDUCED GROUND FAILURE ZONES 1, 2, OR 3, IT IS PERMITTED TO EVALUATE THE POTENTIAL FOR, AND CONSEQUENCES OF, LIQUEFACTION AND SOIL STRENGTH LOSS DESCRIBED ABOVE USING SIMPLIFIED SCREENING METHODS BASED ON HISTORIC RECORDS, SURFICIAL GEOLOGY, A MINIMUM PEAK GROUND ACCELERATION OF 0.4 TIMES THE DESIGN SHORT PERIOD SPECTRAL ACCELERATION ( $S^{DS}$ ), AND MAGNITUDES OF THE CHARACTERISTIC EARTHQUAKES ON ALL KNOWN ACTIVE FAULTS WITH THE SITE REGION.]~~

([AO No. 2020-85](#), §1, 10-27-20)

---

# Geotechnical Advisory Commission (GAC) Charter

---

## GAC Vision

*The Geotechnical Advisory Commission (GAC) shall provide professional advice to the Municipality of Anchorage on issues relating to natural hazards risk mitigation and be recognized as a premiere advisory group.*

## GAC Mission

### *Act in an Advisory Capacity*

Act in an advisory capacity to the Assembly, the Mayor, Heads of Executive Departments, the Planning and Zoning Commission, the Platting Board, the Building Board, Building Safety, and the professional design community.

### *Provide Information and Technical Guidance*

Recommend studies and identify program changes that will mitigate the risks associated with natural hazards.

### *Sponsor Educational Programs*

Sponsor, and take an active part in, programs that will disseminate information to government agencies, the public, and out peers.

### *Support Natural Hazards Risk Mitigation Efforts*

Provide support to efforts by others to address the issues related to natural hazards risk mitigation

*By achieving this mission, we create an opportunity to be an effective body in mitigating the potential damaging efforts of natural hazards events.*

## GAC Values

The GAC shall:

- give professional advice,
- recommend studies,
- receive peer recognition,
- provide value to stakeholders,
- be operated with integrity,
- be objective, reasonable, non-bureaucratic,
- disseminate information
- recommend program changes
- sponsor education programs
- recommend/support special studies
- be advocates for natural hazards risk mitigation, and
- make the “right” decisions

## Key Success Factors and Measures of Success

Success Factor	Measure
<ul style="list-style-type: none"> <li>Stakeholder Satisfaction</li> </ul>	<ul style="list-style-type: none"> <li>Meet or exceed MOA expectations</li> <li>Advice is sought</li> <li>Advice is accepted</li> <li>MOA endorsement</li> <li>Feedback from Staff</li> </ul>
<ul style="list-style-type: none"> <li>Advocate of Risk Mitigation Programs</li> </ul>	<ul style="list-style-type: none"> <li>Support post-earthquake damage assessment training</li> <li>Participate in the ANSS</li> <li>Participate on Microzonation Advisory Panel</li> <li>Develop stakeholder support</li> </ul>
<ul style="list-style-type: none"> <li>Support Public Education in Natural Hazards</li> </ul>	<ul style="list-style-type: none"> <li>Foster social environment where natural hazards risk mitigation is accepted</li> <li>Examine ADES programs</li> <li>Examine MOA OEM programs</li> <li>Learn about ASTF programs</li> <li>Community Council presentations</li> <li>Presentations to schools</li> </ul>
<ul style="list-style-type: none"> <li>Recommended Programs for Risk Mitigation</li> </ul>	<ul style="list-style-type: none"> <li>Ground failure map update</li> <li>Avalanche ordinance update</li> <li>Support microzonation implementation</li> <li>Participate in IBC &amp; IRC review/amendments</li> <li>Support responsible development in the MOA</li> </ul>

## ENDORSEMENT

We, the members of the Municipality of Anchorage Geotechnical Advisory Commission, enthusiastically and fully endorse this Commission Charter for guiding and enhancing efforts in natural hazards risk mitigation.

**John Aho/Chairman**

---

**Dave Cole/Vice Chairman**

---

**Peter Haeussler**

---

**Rodney Kinney, Jr.**

---

**Keith Mobley**

---

**Mark Musial**

---

**Robert Scher**

---

**Steve Teller**

---

**Howard Thomas**

---

**MUNICIPALITY OF ANCHORAGE**  
**GEOTECHNICAL ADVISORY COMMISSION**  
**RULES OF PROCEDURE**

---

**ARTICLE I – OFFICERS**

1. The commission shall annually organize and elect a Chair and Vice-Chair at its first meeting in January.
2. The Chair shall preside over the meetings of the Commission and shall exercise all the powers usually incident to the office, and shall be a voting member with full right to have their vote recorded in all deliberations of the Commission. The Chair or a designated appointee shall attend Anchorage Assembly, Platting Board, and Planning and Zoning Commission meetings at which important Commission recommendations are presented and shall speak on behalf of the Commission.
3. The Vice-Chair shall assume the duties of the Chair in their absence. In case of the absence of the Chair and Vice-Chair, the members present may elect for the meeting a Temporary Chair, who shall during such meeting have full powers of the Chair.
4. The Director of Planning shall be the Secretary. In the Director of Planning's absence, another member of the planning staff shall act as Secretary. The Secretary shall keep a record of all meetings of the Commission and shall keep such files as may be required.

**MUNICIPALITY OF ANCHORAGE**  
**GEOTECHNICAL ADVISORY COMMISSION**  
**RULES OF PROCEDURE**

---

**ARTICLE II - MEETINGS**

1. Regular meetings of the Commission shall be held on the fourth Tuesday of the month at 12:00 noon, unless notice of postponement is given each member at least twenty-four hours prior to that time. Should the Commission be unable to complete all of the required business at a regular meeting, the Commission shall continue the meeting to the immediate following Tuesday.
2. Special meetings may be called by the Chair or Secretary, provided that at least twenty-four hours notice of special meeting is given each member at their established business or residence.
3. Meeting of the Commission shall be held at a designated place unless notice of another meeting place is given each member at least twenty-four hours prior to the meeting and a public posting is made at the regular meeting place informing the public of the change of meeting location.
4. All meetings of the Commission shall be open to the public, except that any question permitted by law may be discussed in an executive session, which is closed to the public, provided that no final action is taken on any question in that session.
5. A majority of the membership of the Commission shall constitute a quorum for the transaction of business. Action by the Commission shall require the favorable vote of a majority of the full membership of the Commission. Full membership means a majority of nine, less the number of Commissioners excused for conflicts of interest.

**MUNICIPALITY OF ANCHORAGE**  
**GEOTECHNICAL ADVISORY COMMISSION**  
**RULES OF PROCEDURE**

---

6. Any member who has a substantial direct or indirect financial interest in any question being voted shall identify their interest but shall not be excused from voting hereon except with the concurrence of the majority of the other members present.
7. Any member of the Commission anticipating an extended period of absence from Commission meetings shall so advise the Commission at a prior meeting. A member who misses three consecutive regular meetings without prior excuse shall automatically be recommended to the Mayor and Assembly for replacement.
8. In all matters not covered by these rules, Roberts Rules of Order, Revised, shall govern.
9. All recommendations by the Commission to the Anchorage Assembly, Platting Board, or Planning and Zoning Commission shall be made by resolution. Resolutions shall be numbered consecutively within each year, according to the sequence of approval, shall be signed by the Chair and the Secretary, and the motion adopting the resolution shall show the vote of each member.
10. The agenda for each regular meeting of the Commission shall be prepared by the Secretary and shall be distributed to each member at least twenty-four hours prior to the meetings.

**MUNICIPALITY OF ANCHORAGE**  
**GEOTECHNICAL ADVISORY COMMISSION**  
**RULES OF PROCEDURE**

---

The order of business at all meetings of the Commission shall be as follows:

1. Roll Call
2. Minutes
3. Special Order of Business
4. Old Business
5. New Business
6. Persons to Be Heard
7. Committee Reports
8. Staff Report
9. Adjournment

11. The deadline for adjournment of all meetings shall be as designated by a majority vote of the members present.

**ARTICLE III - CHANGE OF RULES**

1. The Rules of Procedure may be amended at any regular or special meeting of the Commission by a majority vote of the membership of the Commission.

Approved: 12-17-02

Amended: 10-26-04 [regular meetings changed from every fourth Tuesday to every fourth Wednesday]

Amended: 12-28-04 [regular meetings changed from every fourth Wednesday to every fourth Tuesday]

Amended: 07-26-05 [officer elections changed to regular meeting in January of each year instead of the regular meeting in July]

**MUNICIPALITY OF ANCHORAGE**  
**GEOTECHNICAL ADVISORY COMMISSION**  
**RULES OF PROCEDURE**

---

**Anchorage Municipal Code**  
**Title 4 (current 2021)**

**4.50.050 Geotechnical Advisory Commission**

- A. There is established a geotechnical advisory commission composed of nine members.
- B. Due consideration shall be given to technical qualifications. The director of planning shall function as an ex officio member of the commission, and shall serve as secretary to the commission.
- C. The commission shall act in an advisory capacity to the assembly, the mayor, and heads of executive departments, and shall have the following powers and duties:
  - 1. To make recommendations and give advice on geotechnical matters, including but not limited to revisions to the Anchorage coastal resources map.
  - 2. To make such special studies on geotechnical matters as may be designated from time to time.
  - 3. To act in an advisory capacity to the platting board and planning and zoning commission.
- D. The sunset provisions in section 4.05.150 shall not apply to this board.

(AO No. 62-75; AO No. 77-136; AO No. 88-36; AO No. 95-223, § 1, expires 1-20-1998; AO No. 99-7, § 1, 1-26-99, expires 1-20-02; AO No. 2001-189, § 2, expires 1-20-05; AO No. 2004-96, § 1, 6-8-04; AO No. 2011-64(S-1), § 4, 6-28-11; AO No. 2011-81, § 2, 8-30-11)

Cross reference(s)—Environmental protection, tit. 15; land use planning, tit. 21; building codes, tit. 23.