

Municipality of Anchorage

Geotechnical Advisory Commission

AGENDA

Tuesday, November 28, 2023 12:00 Noon – 1:30 p.m.

Regular Meeting (Hybrid format)

or

In-Person Physical Location

Planning Conference Room 170
Planning and Development Center
4700 Elmore Road
Anchorage, Alaska

via Microsoft Teams

Click here to join the meeting

Download Teams | Join on the web

Meeting ID: 255 017 304 013, Passcode: FP3CLR

Or Join by Conference Call: Dial-in Number: 907-519-0237 Conference ID: 471 313 00#

- I. CALL TO ORDER
 - A. Establishment of Quorum
 - B. Disclosures
- II. MINUTES
 - A. October 24, 2023
- III. OLD BUSINESS
 - A. Scope of Potential Project for Seismic Hazard Analysis and Mapping
 - B. GAC 2023-02, Geopier Foundation Design for the Anchorage FedEx Sorting Facility, Third-Party Review
- IV. NEW BUSINESS
 - A. Discussion of Girdwood Future Land Use Plan Map
 - B. Discussion of Goals, End-of-Year Report (Communications Committee)
- V. PERSONS TO BE HEARD (3-minute limit)
- VI. COMMITTEE REPORTS
 - A. Communications Committee
 - B. Hazard Mitigation Committee
 - C. Seismic Hazard Committee
- VII. OTHER BUSINESS
- VIII. STAFF REPORTS
- IX. ADJOURNMENT



Municipality of Anchorage

Geotechnical Advisory Commission

AGENDA

Tuesday, October 24, 2023 12:00 Noon – 1:30 p.m.

Regular Meeting (Hybrid format)

Members	Staff	Guests
 Chair John Thornley Vice Chair Steven Halcomb Dave Hemstreet Keri Nutter Kyle Brennan Dennis Berry Cody Kreitel EXCUSED: Amy Steiner 	 Daniel Mckenna-Foster, Senior Planner Ryan Yelle Long-Range Planning Manager 	 Tim Huntting, MOA Project Management & Engineering Grant Gephardt, MOA Development Services Daniel King, MOA Development Services Ross Noffsinger, MOA Development Services Amanda Loach, MOA EOC Dr. Elena Suleimani, Geophysical Institute, UAF

I. CALL TO ORDER

- A. Establishment of Quorum
- B. Disclosures:

Commissioner Berry is the structural engineer on item 3B regarding the FedEx facility. **Chair Thornley** asked if he would recuse himself; **Commissioner Berry** said he will recuse himself and answer any questions.

Commissioner Halcomb explained he is involved in the process but is not involved in the design of the project.

New Business item IV.A. was taken up before II. Minutes and III. Old Business.

Presentation by **Dr. Elena Suleimani**, Geophysical Institute, University of Alaska Fairbanks, regarding Tsunami Inundation Maps of Anchorage and Upper Cook Inlet.

II. MINUTES

- A. September 26, 2023: Minutes approved unanimously with following changes:
 - On page 2, acronyms corrected to SEAAK (Structural Engineers Association of Alaska), EERI (Earthquake Engineering Research Institute), and MASS (Municipality of Anchorage Standard Specifications).
 - On page 2, in last paragraph: Changed to "Daniel King, MOA, explained that the 2024 IBC will be referencing ASCE 7 2022 version."

Revised: 11/27/2023

III. OLD BUSINESS

A. <u>Scope of Potential Project for Seismic Hazard Analysis and Mapping</u>

Tim Huntting Update: On track to come with track changes next week. Add this to the agenda for November.

Commissioner Berry: We might want Tim to attend in case we have questions. Discussion of whether there might be conflicts with Tim being on the selection committee. Discussion of an "executive session" type thing. Discussion of whether references in any documents should be in the public domain or not.

B. GAC 2023-02, Geopier Foundation Design for the Anchorage FedEx Sorting Facility, Third-party Review.

Grant Gephardt with MOA Plan Review received the review; not much chance to look at it internally yet; wanted to ask if GAC had any opinions with the approach.

Chair Thornley: Is there time to discuss at the next meeting? Does it need to go tomorrow?

Commissioner Berry: Roe is the one to respond more, as the owner's rep on the thing.

Grant Gephardt: Not a huge rush; we'd still like to discuss it internally.

Vice Chair Halcomb: Seems like the ball might be in MOA court.

Commissioner Berry: We've gone through one round of comments, and now we're at a second round. My guess is that FedEx would not be super excited if this were another 4-5 weeks out.

Chair Thornley: We have the option to have special meetings. (Group discussed.)

Vice Chair Halcomb: A work session might be best.

Tim Huntting: Had question about a specific of the report.

Chair Thornley: Clarification for geopier maybe: they cite something with an example of a light-rail embankment. They also cite 3 other examples in high-seismic areas; not clear whether these are high seismic areas AND peat; would be nice to clarify that.

Daniel King: I got that those were NOT with peat.

Commissioner Berry: Another thing to mention is that none of these have gone through a seismic event yet.

Commissioners Brennan and Halcomb: Would be interested in a work session.

Commissioner Halcomb: Main question—do they scan private reports?

Tim Huntting: Once it is submitted to the MOA, it becomes public domain. Can these be put on the internet? from Scanning MOA reports:

Tim Huntting: We scanned mostly MOA stuff, but we have anything else that might come in through private development. Would eventually like to get things digitized and connected to maps, etc. This would help with boring reports. We are in the process of pulling out full title, author, date, number of borings, quadrants covered, doing QAQC, then we connect that with the record drawing apps.

Chair Thornley: Boring logs should be associated with reports. Report with a log is probably the best practice—this allows you to look at the equipment used, etc. This brings up the issue of the whole report and whether this can be relied on more than just the "stick log." Then there's also the issue of people looking through old geotechnical reports in order to penalize someone.

There was a discussion of logs and reports. Current procedure—if someone calls, we try to find it. Sometimes we'll look at any comparable projects from comparable properties, but this sort of assigns liability across properties, which can be complicated.

IV. NEW BUSINESS

- A. (Taken up before Agenda Item II. Minutes) Tsunami Inundation Maps of Anchorage and Upper Cook Inlet— Presentation by Dr. Elena Suleimani, UAF
- B. Soil Boring Map on Municipal Website for Geotechnical Reports Vice Chair Halcomb
- V. PERSONS TO BE HEARD (none)
- VI. COMMITTEE REPORTS
 - A. Communications Committee

Report by Commissioner Nutter. Commissioner Brennan sent out the notice to the seismic hazard commission. Commissioner Nutter informed the Chair "I owe you a letter to the assembly about how these things are being addressed, etc."

Chair Thornley asked if the commission would like to have a discussion about that. Next Communications Committee meeting is 10/31/2023 at noon. Commission could use this as work session time if needed.

- B. Hazard Mitigation Committee: Nothing to report
- C. Seismic Hazard Committee: Nothing to report.

Vice Chair Halcomb: looked at State committee; they don't meet until December; will look at SEAAK (Structural Engineers Association of Alaska).

VII. OTHER BUSINESS

A. Board of Ethics Response Regarding Conflict of Interest with Port of Alaska:

Chair Thornley explained the matter and talked about his meeting with the Ethics Board. There was a discussion of the process.

VIII. STAFF REPORTS

At the next meeting we can talk about the Girdwood future land use map.

IX. ADJOURNMENT

Commissioner Kreitel moved to adjourn, and Commissioner Halcomb seconded. 1:17pm

Next Regular Meeting – November 28, 2023

III.B.

MUNICIPALITY OF ANCHORAGE GEOTECHNICAL ADVISORY COMMISSION RESOLUTION NO. 2023-03

A RESOLUTION REGARDING PROPOSED GROUND IMPROVEMENTS AT A NEW FEDEX SORTING FACILITY AT TED STEVENS ANCHORAGE INTERNATIONAL AIRPORT.

1	GA	Γ	Case	Nο	2023	-02)
ı	U.F	\sim	Case	INU.	4 043	-041

WHEREAS, the Municipality of Anchorage (MOA) Geotechnical Advisory Commission (GAC) is established in the Anchorage Municipal Code (AMC) to act in an advisory capacity to the Assembly, the Mayor, boards, commissions, and heads of municipal departments and agencies on geotechnical engineering issues and natural hazards risk mitigation (AMC 21.02.080); and

WHEREAS, the GAC held a work session on November 17, 2023, to discuss the peer review of use of Geopier technology in a new FedEx sorting facility at Ted Stevens Anchorage International Airport; and

WHEREAS, the GAC discussed concerns relating to the use of this technology for a large structure in Alaska, in peat conditions, and various aspects of life-safety.

NOW, THEREFORE, BE IT RESOLVED that the Anchorage Geotechnical Advisory Commission finds that:

- A. Based on analysis provided in the October 24, 2023 meeting packet, the Armorpact pier should perform adequately when subject to seismic conditions; and
- B. The Armorpact system shell consists of a heavy-duty HDPE composite that will have a ductile response and provides confinement of the aggregate, which prevents bulging or deformation of the pier and no loss of strength or support under seismic conditions. Furthermore, the Armorpact system is an end-bearing element and will bear in non-liquefiable soil below the peat.

PASSED AND APPROVED unanimously by the Anchorage Geotechnical Advisory Commission on this 28th day of November 2023.

Craig H. Lyon	John D. Thornley, PhD, PE, D.GE
Secretary	Chair

MUNICIPALITY OF ANCHORAGE GEOTECHNICAL ADVISORY COMMISSION RESOLUTION NO. 2023-03

A RESOLUTION REGARDING PROPOSED GROUND IMPROVEMENTS AT A NEW FEDEX SORTING FACILITY AT TED STEVENS ANCHORAGE INTERNATIONAL AIRPORT.

(GAC	Case	No	2023-	-02)
\mathbf{O}_{I}	Casc	110.	2023	04

WHEREAS, the Municipality of Anchorage (MOA) Geotechnical Advisory Commission (GAC) is established in the Anchorage Municipal Code (AMC) to act in an advisory capacity to the Assembly, the Mayor, boards, commissions, and heads of municipal departments and agencies on geotechnical engineering issues and natural hazards risk mitigation (AMC 21.02.080); and

WHEREAS, the GAC held a work session on November 17, 2023, to discuss the peer review of use of Geopier technology in a new FedEx sorting facility at Ted Stevens Anchorage International Airport; and

WHEREAS, the GAC discussed concerns relating to the use of this technology for a large structure in Alaska, in peat conditions, and various aspects of life-safety.

NOW, THEREFORE, BE IT RESOLVED that the Anchorage Geotechnical Advisory Commission finds that:

- A. The Commission did not come to a consensus on the viability of the proposed engineering solution, based on analysis provided in the October 24, 2023 meeting packet; and
- B. There were concerns about the ability of the proposed system to maintain adequate levels of support during under seismic conditions in this particular location.

PASSED AND APPROVED unanimously by the Anchorage Geotechnical Advisory Commission on this 28th day of November 2023.

Craig H. Lyon	John D. Thornley, PhD, PE, D.GE
Secretary	Chair