

#### **Municipality of Anchorage**

#### **Geotechnical Advisory Commission**

#### AGENDA

Tuesday, July 25, 2023 Noon – 1:30 p.m.

Regular Meeting (Hybrid format)

#### **In-Person Physical Location**

or

#### via Microsoft Teams

Training Room
Planning and Development Center
4700 Elmore Road
Anchorage, Alaska

Click here to join the meeting

Download Teams | Join on the web

Meeting ID: 269 718 563 018, Passcode: yoWmD2

Or Join by Conference Call: Dial-in Number: 907-519-0237 Conference ID: 655 600 897#

- I. CALL TO ORDER
  - A. Establishment of Quorum
  - B. Disclosures
- II. MINUTES
  - A. April 11, 2023, Special
  - B. May 23, 2023
  - C. June 27, 2023
- III. OLD BUSINESS
  - A. Scope of Potential Project for Seismic Hazard Analysis and Mapping
  - B. Resolution for GAC Case 2023-02: Geopier Foundation Design for Anchorage FedEx Sorting Facility
- IV. NEW BUSINESS
- 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

Next Regular Meeting - August 22, 2023



## **Municipality of Anchorage Geotechnical Advisory Commission**

#### **ACTION SUMMARY**

Tuesday, April 11, 2023 12:00 Noon

#### Special Meeting

Hybrid Meeting – In-person and Virtual via Teams

Planning Conference Room 170 Planning and Development Center 4700 Elmore Road

#### I. CALL TO ORDER

The meeting was called to order at 12:03 p.m.

#### A. Establishment of Quorum

A quorum was present.

Present: Dennis Berry

Kyle Brennan, Vice Chair

Steven Halcomb David Hemstreet Cody Kreitel Keri Nutter Amy Steiner

John Thornley, Chair

Absent: Thomas Krzewinski

Staff: Tom Davis, Senior Planner, Planning Department

Wayne Bolen\*, Plan Reviewer, Building Safety, Development Services Department Tim Huntting\*, Geotechnical Lab Manager, Project Management & Engineering Dept.

Amanda Loach\*, Director, Office of Emergency Management

Guests: John Daley\*, PAMP Engineer Manager, Port of Alaska

Eric Adams\*, Jacobs Engineering

Geotechnical Advisory Commission Summary for April 11, 2023 Meeting Page 2

#### B. Disclosures

Chair Thornley reported that he and Commissioner Halcomb had provided disclosures in the previous meeting regarding their firms' involvement in the Port of Alaska PAMP, and that the commissioners had agreed that both could participate in commission discussion regarding the Port of Alaska PAMP, but that Commissioner Brennan, Vice Chair, should lead discussions regarding the Port of Alaska. Chair Thornley asked the Commissioners if there was anything to revisit related to those disclosures. Hearing none, Chair Thornley determined that he and Commissioner Halcomb could continue to participate and requested Commissioner Brennan to lead the discussion regarding agenda item II.

There were no other disclosures.

#### II. GAC RESOLUTION NO. 2023-01, PORT OF ALASKA UPDATE

Commissioner Brennan recounted the previous meeting of the GAC which was a work session on Tuesday and the Assembly Work Session on Friday. Commissioner Brennan requested Tom Davis to share the latest revised draft GAC Resolution regarding the Port of Alaska PAMP on the screen, which Mr. Davis had sent out to the Commission in advance of the meeting. Commissioner Hemstreet explained some of his proposed edits in the latest draft. Commissioners then discussed additional edits to the draft Resolution as shared. After the group discussion of edits was completed, Commissioner Brennan requested a motion to approve the draft resolution as edited.

Commissioner Steiner moved to approve the revised draft resolution with the edits discussed at the meeting. Commissioner Hemstreet seconded the motion.

The motion to approve the revised draft resolution with the edits discussed at the meeting passed unanimously.

#### V. PERSONS TO BE HEARD (3-minute limit)

*Eric Adams* asked if the resolution would be submitted the Assembly in time for its meeting this evening. *Tom Davis* responded affirmatively.

#### IX. ADJOURNMENT

Commissioner Kreitel moved to adjourn. Commissioner Halcomb seconded.

The meeting adjourned at 1:16 p.m.



# **Municipality of Anchorage Geotechnical Advisory Commission**

#### **ACTION SUMMARY**

Tuesday, May 23, 2023 12:00 Noon

**Regular Meeting**Virtual via Teams

#### I. CALL TO ORDER

The meeting was called to order at 12:01 p.m.

#### A. Establishment of Quorum

A quorum was present.

Present: Steven Halcomb, Vice Chair

Cody Kreitel Keri Nutter Amy Steiner John Thornley, Chair

Staff: Daniel Mckenna-Foster, Senior Planner, Planning Department

Wayne Bolen, Plan Reviewer, Building Safety, Development Services Department

Timothy Huntting, Geotechnical Lab Manager Project Management & Engineering Department

#### B. Disclosures

*Chair Thornley* disclosed that, regarding Old Business Item III.A., his firm WSP Alaska is involved in the Port of Alaska PAMP project. However, no action regarding the Port is expected today.

No other disclosures.

#### II. SPECIAL ORDER OF BUSINESS

#### A. Election of Vice Chair

Chair Thornley explained that with the expiration of Kyle Brennan's term, the Commission no longer has a Vice Chair, so the first order of business for the Commission is to elect a new Vice Chair. He explained the nomination process and then opened the floor to nominations and discussion.

Geotechnical Advisory Commission Summary for May 23, 2023 Meeting Page 2

Commissioners Kreitel and Nutter nominated Commissioner Halcomb for Vice Chair. There were no other nominations. Chair Thornley called for a vote on the nomination for GAC Vice Chair.

Commissioner Halcomb was elected Vice Chair by a unanimous vote.

III. MINUTES (none)

#### IV. OLD BUSINESS

#### A. Port of Alaska Update

*Chair Thornley* reported that the PAMP team is looking at impacts of GAC's comments in GAC Resolution No. 2023-01 regarding the design of Terminal 1.

#### B. Scope of Potential Project for Seismic Hazard Analysis and Mapping

Chair Thornley explained that the scope is still under development. The project will be put out for competitive bid. The objective for the GAC will be to provide feedback to staff regarding the draft scope. Tim Huntting reported that the grant has been approved. There will be further administrative steps that will take several months before the grant funding is released and work can begin. Mr. Huntting indicated that staff would put a revised draft scope together for the GAC to comment on.

- V. NEW BUSINESS (none)
- VI. PERSONS TO BE HEARD (3-minute limit) (none)

#### VII. COMMITTEE REPORTS

#### A. Communications Committee

Commissioner Nutter invited the other commissioners to volunteer to join her on the Communications Committee. One project is to review the outreach letter that the GAC sent last year to target agencies and officials and to prepare a recap of GAC accomplishments this year.

#### **B.** Hazard Mitigation Committee

Chair Thornley reported there has been no recent activity.

Geotechnical Advisory Commission Summary for May 23, 2023 Meeting Page 3

#### C. Seismic Hazard Committee

Chair Thornley reported that the USGS Alaska Seismic Hazard Map Update is still in progress, and he is on the review panel for that update. The USGS held its workshop regarding the 50-state update this past month. The review panel has requested the USGS to review some aspects of its modelling used to estimate the probabilistic aspects of some of the seismic hazard. The USGS is still aiming to have its Alaska Hazard Map Update in 2023 to meet other deadlines including a code update cycle. There will be more to come.

#### VIII. OTHER BUSINESS

Chair Thornley proposed the development of a resolution recognizing former GAC Commissioner Tom Krzewinski, who passed away this year, and to thank his family for his years of service on the Geotechnical Advisory Commission. The Commissioners agreed. Chair Thornley indicated he would request staff to assist in researching Tom Krzewinski's service history.

Chair Thornley also raised the possibility of resolutions thanking the three former commissioners whose terms recently expired. Commissioner Halcomb volunteered to first contact each of the three to determine their interest in rejoining the GAC.

Chair Thornley expressed that because there are four empty seats it will be important for the GAC to continue to meet regularly and thanked the commissioners for attending today's meeting. The commissioners discussed encouraging the Municipality to fill the vacant seats. Chair Thornley explained that in the past the balance of commissioners included a representative from academia (Joey Yang) and structural engineers (John Aho and Dennis Berry). Those perspectives are missing now along with the four empty seats.

#### VIII. STAFF REPORTS

Daniel Mckenna-Foster reported that other commissions staffed by the Long-Range Planning Division have experienced challenges with appointments and filling empty seats.

Wayne Bolen reported that AS&G has proposed to amend its existing Conditional Use at the Sand Lake fill site to extend the material fill operations and potentially add structures such as seating, which the Building Safety Division may bring to GAC for advice.

#### IX. ADJOURNMENT

Commissioner Nutter moved to adjourn the meeting. Commissioner Steiner seconded.

The meeting adjourned at 12:30 p.m.



## **Municipality of Anchorage Geotechnical Advisory Commission**

#### **ACTION SUMMARY**

Tuesday, June 27, 2023 12:00 Noon

**Regular Meeting**Virtual via Teams

#### I. CALL TO ORDER

The meeting was called to order at 12:01 p.m.

#### A. Establishment of Quorum

A quorum was present.

Present: Steven Halcomb, Vice Chair

Cody Kreitel Keri Nutter Amy Steiner John Thornley, Chair

Staff: Tom Davis, Senior Planner, Planning Department

Wayne Bolen, Plan Reviewer, Building Safety, Development Services Department

Timothy Huntting, Geotechnical Lab Manager Project Management & Engineering Department

#### B. Disclosures

Commissioner Halcomb had a disclosure regarding New Business agenda item IV.A., GAC Case 2023-02, Geopier Foundation Design for Anchorage FedEx Sorting Facility. His firm CRW was retained by the developer only to perform geotechnical services and recommendations for the site. CRW had nothing to do with the proposed Geopier shallow foundation option to be reviewed by the GAC. The development project's general contractor brought the Geopier proposal forward.

Commissioner Halcomb has been in communication with Geopier only as Geopier has requested information from CRW. CRW has not conducted any review, additional design work, or construction verification for the Geopier ground improvement approach. Commissioner Halcomb has no financial interest in what becomes of the Geopier foundation proposal.

Geotechnical Advisory Commission Summary for June 27, 2023 Meeting Page 2

Commissioner Halcomb explained that he had emailed a written response (provided in the packet) to the following set of questions used by the Municipality to determine if a conflict of interest exists.

Does the member have a substantial financial interest or substantial private interest in the business item before the body and is that interest:

- 1. A substantial part of the present action of the commission on this item?
- 2. One that varies directly and substantially with the outcome of the commission's actions?
- 3. Immediate and known or inconclusive (conjectural) and dependent on factors beyond the commission's actions?
- 4. Significantly monetarily?
- 5. Generally possessed by a large group, or only by the individual member?

Chair Thornley summarized the questions above and stated that he found no conflict issue. He asked if there were any comments or concerns from the other commissioners. There were none. Chair Thornley concluded that Commissioner Halcomb could participate in the deliberations regarding item IV.A.

There were no other disclosures.

#### II. MINUTES (none)

#### III. OLD BUSINESS

#### A. Port of Alaska Update

Chair Thornley and staff reported no update.

#### B. Scope of Potential Project for Seismic Hazard Analysis and Mapping

Tim Huntting and Tom Davis reported that the grant has been approved; however, there are some administrative steps to get through. It is possible that the Municipality will receive funding and goahead to begin work in the fall. Mr. Davis explained that the intent of bringing the agenda item to the GAC now is to provide an opportunity for commissioners to advise between now and the fall regarding the draft scope provided in the meeting packet. The total funding amount for professional consultant services will be \$700,000.

Chair Thornley requested that the commissioners look at the draft scope and discuss this as the main agenda item at the July GAC meeting. Mr. Davis agreed to send the most recent version of the scope and request to the GAC with the July meeting packet materials.

#### **IV. NEW BUSINESS** (The Commission moved this item up to come before Old Business.)

### A. GAC Case 2023-02: Geopier Foundation Design for Anchorage FedEx Sorting Facility

Wayne Bolen summarized the request from Building Safety Division for the GAC review and recommendations, and the case materials provided in the packet for the 6-27 meeting. He confirmed the developer has submitted for a building permit. *Mr. Bolen* stated the main concern from Building Safety: Does the Geopier foundation design adequately address seismic lateral load stability?

Commissioner Halcomb provided a summary of the geotechnical conditions of the development site. The site is located to the west of the TSAIA post office and has organics at the surface ranging from about 1 to 14 feet in thickness which would be costly to remove. He explained that his firm CRW originally recommended a pier foundation and surcharging the organics. The project's general contractor decided to propose the Geopier foundation as an alternative as a cost-saving measure for the owner. Commissioner Halcomb found that the calculations provided to the Municipality for the Geopier foundation address the gravity load and although he has comments regarding cleaning up some of the calculations, he is generally okay with the calculations provided. His understanding was that the structural engineer firm on the project designed a conventional shallow foundation design with the Geopiers reinforcing the organics and transferring the gravity load to the better soils down below the organics.

Chair Thornley asked for a clarification that conventional shallow foundations are provided capacity by bridging pier-to-pier. Commissioner Halcomb responded affirmatively that the piers would be spaced to provide arching for the slab from the building between the piers, with a certain number of piers below each footer. Commissioner Halcomb said that his understanding is that the proposed design is not tying the shallow foundation to the piers at all.

Mr. Bolen said that it seems from the applicant's responses to Building Safety's questions that the Geopiers are not a part of the building foundation. Commissioner Kreitel expressed his understanding that the Geopiers are a means to improve the load bearing capacity of the ground below the foundation; the construction of the foundation itself is a traditional concrete foundation.

Mr. Bolen expressed the main concern that, although the Geopier design reinforces the ground's load bearing capacity against vertical gravity forces, it is questionable if the design reinforces for lateral seismic forces as well. Commissioner Kreitel responded that Geopiers do nothing to provide lateral seismic stability. Chair Thornley questioned what numbers the applicant used to calculate the capacity. Mr. Bolen asked how far past the building footprint reinforced section should there need to be regular fill to reduce the lateral loads? Commissioner Halcomb explained that the site plan would include 4 to 9 feet of surcharged fill around the perimeter of the building (around the exterior of the building footprint.

Chair Thornley raised several issues. There will be primary settlement of the peat that will continue after the construction. Commissioner Kreitel agreed the peat will settle at least some. Commissioner Halcomb responded that he believed there will be structural slab.

Geotechnical Advisory Commission Summary for June 27, 2023 Meeting Page 4

Tim Huntting explained that the structure can use friction between concrete slap and the granular fill pad and the Geopiers; but it must be lateral through the peat, which is an issue because the peat must resist the sheer force of the seismic load.

Commissioners Halcomb and Steiner commented regarding the columns beyond the building, adequate bearing layer, required adjusting plan mentioned in the geotechnical report.

Chair Thornley explained that the GAC has historically not supported Geopier-type foundations in Anchorage for a host of reasons. His understanding was that it is generally not a good practice for addressing lateral forces in peat soils. This is a large facility. He asked Wayne Bolen if there has been any newer observational data from large earthquakes in peat soils as a proof of concept. There has not been evidence provided to show that this foundation will be able to handle the lateral loading.

Mr. Bolen responded that with the proposed shallow foundation the Geopiers will just transfer the lateral loading (movement) to the building itself. He did not understand how it will work for seismic. Commissioner Kreitel expressed that with lateral seismic forces being a concern it would make sense to surcharge the entire site.

Chair Thornley asked Mr. Bolen if it is possible to recommend a third-party review of the Geopier foundation design. Mr. Bolen responded that Building Safety Division is seeking a recommendation from the GAC as to whether to require third-party review. If the GAC recommends a third-party review, then Building Safety will direct the applicant to get a third-party review the proposed foundation regarding the lateral forces on the peat soils. The commissioners discussed what might be the appropriate USGS site class for the subject property.

Commissioner Halcomb moved to recommend there be third-party review of the Geopier foundation design. Commissioner Kreitel seconded.

#### The motion was approved unanimously.

Commissioner Steiner left the meeting at 12:47 p.m., and the formal meeting of the GAC was officially adjourned.

Commission discussion of agenda items V., VI., VII., and VIII. continued as a worksession.

#### V. PERSONS TO BE HEARD (3-minute limit) (none)

#### VI. COMMITTEE REPORTS

#### A. Communications Committee

Commissioner Nutter reported she is seeking new commissioner volunteers to join the Communications Committee.

#### **B.** Hazard Mitigation Committee (no report)

Geotechnical Advisory Commission Summary for June 27, 2023 Meeting Page 5

#### C. Seismic Hazard Committee (no report)

#### VII. OTHER BUSINESS (none)

#### VIII. STAFF REPORTS

Tom Davis reported that the Administration is re-reviewing the commissioner reappointment applications of Dennis Berry, David Hemstreet, and Kyle Brennan, and the applications of two others, Bryan Odell and James Coles, with the intent to potentially nominate 3 or 4 of them at an upcoming Assembly meeting. Mr. Davis explained that the Administration's staff responsible for boards and commissions has been made aware that this is a technical advisory commission whose members need to have a geologist, geotechnical engineering, or structural engineering specialization, and it is important to have at least two structural engineers, of which Dennis Berry was one. If we find that the Administration needs more names, staff will follow up with current and former commissioners to seek qualified candidates.

Tom Davis reported that the Long-Range Planning Manager, who staffs the Anchorage Historic Preservation Commission (HPC), is retiring at the end of July and that he may be inheriting her HPC duties in his position as the urban design planner. If reassigned to HPC, then it is likely that Daniel Mckenna-Foster, another senior planner, would be assigned as staff to the GAC, and there will be a transition period in July and August.

#### IX. ADJOURNMENT

Commissioner Nutter moved to adjourn the worksession. Commissioner Halcomb seconded.

The worksession adjourned at 1:05 p.m.





# Municipality of Anchorage Planning Department

Memorandum



Date: February 28, 2023

**To:** Geotechnical Advisory Commission

**From:** Tom Davis, AICP, Senior Planner

**Subject:** Scope of a Potential Project for Seismic Hazard Analysis and Mapping

The Municipality of Anchorage (MOA) has applied for a CDBG Disaster Recovery (DR) grant of \$750,000 to update seismic hazard mapping within the inhabited communities of the MOA. The Project Management & Engineering (PM&E), GIS, Planning, and Development Services Departments collaborated to submit the general project scope shown on the next page.

If the Municipality is awarded the grant, these agencies will form a working group to carry out the project with the assistance of professional consulting services and with the advice of the Geotechnical Advisory Commission. Tim Huntting would lead the agency working group with assistance from Tom Davis.

The general project scope shown on the next page is very broad for the purposes of the grant application submittal. A specific scope that identifies and prioritizes what kinds of hazard data, data collection tasks, and products needs to be determined. The project may include organizing existing data into an integrated spatial data application. It may include updating or expanding certain spatial data.

The agency working group requests guidance from the Geotechnical Advisory Commission in establishing requirements for deliverables, identifying specific tasks required to produce those deliverables, and developing specifications for a scope of services for contracting professional consulting services that are consistent with the stated goals to determine the most useful kinds of seismic hazard spatial data to collect, update, and map; and the products such as databases, reports, and/or mapping applications.

Geotechnical Advisory Commission - Scope of a Seismic Hazard Analysis and Mapping Project February 28, 2023 Page 2

#### **GENERAL PROJECT SCOPE:**

**Seismic Hazards Analysis and Mapping with Building Code Update** for the purpose of updating seismic hazard spatial data used by the Municipality of Anchorage (MOA) and other agencies.

**Description:** This project includes geological/seismic hazard mapping and data integration and acquisition for seismic hazard mitigation activities. These updates will enable the MOA Development Services Department to revise the Anchorage Building Code (Title 23) such as code provisions to identify where geotechnical investigations would be required. This project may educate the public on the seismic zones and geological hazards within MOA by creating a website to clarify code requirements for communities by an advisory committee for overall communication review and guidance.

This project includes updating the seismic hazard data within the inhabited communities of the Anchorage Bowl, Chugiak-Eagle River, Turnagain Arm communities, and Girdwood, and evaluating structures and site development characteristics in each area. It will include research of all published geology, seismology, groundwater, and geotechnical reports applicable in the MOA communities. Examples of data that may be utilized includes:

- MOA soil boring data
- MOA geotechnical reports (site specific locations and PDF reports)
- MOA INFOR November 2018 Earthquake building status
- MOA seismically induced ground failure hazard mapping (c. 1979 Harding-Lawson Report)
- USDA soils data
- USGS surficial geology
- Sheer wave velocity mapping

#### **Deliverables**

- 1. GIS data and maps (static and interactive), available on the MOA website for the public.
- 2. Final technical report document(s), including recommended next actions to be taken by the MOA.
- 3. Potential updated Building Code regulations with respect to seismic hazards.
- 4. Public outreach and engagement, including meetings with the Geotechnical Advisory Commission, Building Board, Planning and Zoning Commission, and Anchorage Assembly.

<u>Goals</u>: This project will increase knowledge and awareness by decision-makers in private- and public-sector development to reduce risks to public health, safety, and welfare from geological hazards, as follows:

- Improve accuracy, amount, integration, public access, and awareness of seismic hazard data identifying areas of geological hazard and relevant geological and soils characteristics in the inhabited areas of the MOA, and provide a data platform that can be expanded in the future to map other natural hazards.
- Inform infrastructure investments, private development decision-making, and MOA decision-making regarding proposed developments and area plans.

Timeline: July 2023 - December 2026.

**Budget:** \$750,000. The budget amount available to perform the actual work will be less.

2. Seismic Hazards Analysis and Mapping with Building Code Update – DCCED will provide \$750,000 to Municipality of Anchorage (MOA) for the purpose of updating seismic hazard spatial data used by MOA and other agencies.

#### **Planning Activity Description:**

This project includes geological/seismic hazard mapping and data integration and acquisition for seismic hazard mitigation activities as authorized by 24 CFR 570.205 and 24 CFR 570.208(d)(4). These updates will enable the MOA Development Services Department to revise the Anchorage Building Code (Title 23) such as code provisions to identify where geotechnical investigations would be required. This project may educate the public on the seismic zones and geological hazards within MOA by creating a website to clarify code requirements for communities by an advisory committee for overall communication review and guidance. This project includes updating the seismic hazard data within the inhabited communities of the Anchorage Bowl, Chugiak-Eagle River, Turnagain Arm communities, and Girdwood, and evaluating structures and site development characteristics in each area. It will include research of all published geology, seismology, groundwater, and geotechnical reports applicable in the MOA communities. Partners: Anchorage Geotechnical Advisory Commission, GDIC, development community.

- MOA soil boring data
- MOA geotechnical reports (site specific locations and PDF reports)
- MOA INFOR November 2018 Earthquake building status
- MOA seismically induced ground failure hazard mapping (c1979 Harding-Lawson Report)
- USDA soils data
- USGS surficial geology
- Sheer wave velocity mapping

#### **Planning Activity Deliverables:**

- 1. GIS data and maps (static and interactive), available on the Municipal website for the public.
- 2. Final technical report document(s), including recommended next actions to be taken by the MOA.
- 3. Potential updated Building Code regulations with respect to seismic hazards.
- 4. Public outreach and engagement, including meetings with the Geotechnical Advisory Commission. Building Board, Planning and Zoning Commission, and Anchorage Assembly.

#### **Planning Activity Goals:**

- To increase knowledge and awareness by decision makers in private and public sector development to reduce risks to public health, safety, and welfare from geological hazards, as follows:
- Improve accuracy, amount, integration, public access, and awareness of seismic hazard data identifying areas of geological hazard and relevant geological and soils characteristics in the inhabited areas of the MOA and provide a data platform that can be expanded in the future to map other natural hazards.
- Inform infrastructure investments, private development decision making, and MOA decision making regarding proposed developments and area plans.

**Planning Activity Timeline:** July 2023 – December 2026.

#### **Planning Activity Budget:**

Staffing-salary and benefits \$25,000
 Consultant Studies and Report \$725,000

#### **Budget Narrative:**

Consultant will research geology, seismology, groundwater, geotechnical, and 2018 Earthquake Inspection reports, extrapolate research into actions (\$350,000), participate in the steering team (\$50,000), contribute to map production, draft and final online data platform (\$200,000) draft/ final reports (\$100,000). MOA Staffing (\$50,000).

List of Project Staff: Tim Hunttington, P.E.; Tom Davis, Senior Planner.

III.B.

## MUNICIPALITY OF ANCHORAGE GEOTECHNICAL ADVISORY COMMISSION RESOLUTION NO. 2023-02

## A RESOLUTION REGARDING THIRD-PARTY REVIEW OF THE GEOPIER FOUNDATION DESIGN FOR THE ANCHORAGE FEDEX SORTING FACILITY.

1	G	$\Delta C$	Case	No	2023-	.02)
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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 met on June 27, 2023, and reviewed GAC Case 2023-02, the Geopier Foundation Design for the Anchorage FedEx Sorting Facility; and

WHEREAS, the proposed Anchorage FedEx Sorting Facility will be a large structural facility and is proposed to be located on a site with peat soils; and

WHEREAS, there was Commission discussion regarding the concern that the proposed Geopier foundation design would not adequately address lateral seismic forces in peat soils; and

WHEREAS, the GAC historically has not supported Geopier-type foundations in Anchorage because of concerns about lateral seismic load stability, and there does not appear to be newer observational data or literature to demonstrate that the proposed Geopier foundation design will address lateral loading in peat soils; and

WHEREAS, the building permit application submittal for the Anchorage FedEx Sorting Facility reviewed by the GAC did not include calculations or information to demonstrate the proposed Geopier foundation design would adequately addresses lateral seismic forces in peat soils.

NOW, THEREFORE, BE IT RESOLVED that the Anchorage Geotechnical Advisory Commission recommends a third-party review of the Geopier Foundation Design for the Anchorage FedEx Sorting Facility.

PASSED AND APPROVED unanimously by the Anchorage Geotechnical Advisory Commission on this 27th day of June 2023.

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