

MAGEE RANCH GEOLOGIC HAZARD ABATEMENT DISTRICT (GHAD)
REGULAR SESSION OF THE BOARD OF DIRECTORS
AUGUST 28, 2025, AGENDA
ENGEO OFFICE, 2633 CAMINO RAMON, SUITE 250, SAN RAMON, CA 94583
ZOOM INFORMATION:
By Computer: <http://bit.ly/4fnJGEu>
By Phone: 1 (669) 900-9128 Meeting ID: 854 6820 1392 Password: 930096

- Agendas and staff reports are posted on the GHAD's internet website (www.MageeRanchHOA.com/GHAD)
- A packet of information containing staff reports and exhibits related to each item is available for public review at least 72 hours prior to a GHAD Board meeting, or in the event that it is delivered to Boardmembers less than 72 hours prior to a GHAD Board meeting, as soon as it is delivered.

REGULAR SESSION 6:00 P.M.

1. Call to Order and Roll Call- Andrew Rodgers, Keith Witz, Troy Gaspar, Susan Tully, Paul McAlpine
 - A. Confirmation of Agenda Posting
2. Public Forum: Members of the Public May Comment (3 minutes per speaker)
At this time, the public is permitted to address the GHAD Board on non-agendized items. In accordance with State law, no action or discussion may take place on an item not appearing on the posted agenda. The Board may respond to statements made or questions asked or may request staff to report back at a future meeting concerning the matter.
3. New Business
 - A. Subject: Administration of Oath of Office
From: GHAD Manager
 - B. Subject: Resolution No. 2025-01 Determining Terms of Service for the Magee Ranch GHAD Board of Directors
From: GHAD Manager
 - C. Subject: Resolution No. 2025-02 Electing a Chair and Vice Chair of the Magee Ranch GHAD Board of Directors
From: GHAD Manager
 - D. Subject: Resolution No. 2025-03 Appointing a GHAD Clerk for the Magee Ranch GHAD
From: GHAD Manager
 - E. Subject: Resolution No. 2025-04 Appointing a GHAD Treasurer for the Magee Ranch GHAD
From: GHAD Manager
 - F. Subject: Resolution No. 2025-05 Appointing a GHAD Manager for the Magee Ranch GHAD
From: GHAD Manager
 - G. Subject: Discuss Long-Term Funding Options Based on 2023 Reserve Fund Study
From: GHAD Manager
4. GHAD Manager's Report
 - A. Brown Act

**MAGEE RANCH GEOLOGIC HAZARD ABATEMENT DISTRICT (GHAD)
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- B. Plan of Control Update
 - C. Annual Budget
 - D. Maintenance Contractor
 - E. General Liability Insurance
5. Board Comments and Upcoming Topics of Discussion
6. Adjournment

OATH OF OFFICE

FOR PUBLIC OFFICERS AND EMPLOYEES (State
Constitution, Art. XX, Sec. 3 as amended)

STATE OF CALIFORNIA)
) ss.
COUNTY OF CONTRA COSTA)

I, _____ do solemnly swear (or affirm) that I will support and defend the Constitution of the United States and the Constitution of the State of California against all enemies, foreign and domestic; that I will bear true faith and allegiance to the Constitution of the United States and the Constitution of the State of California; that I take this obligation freely, without any mental reservation or purpose of evasion; and that I will well and faithfully discharge the duties upon which I am about to enter.

Signature

Subscribed and sworn to before me this _____day of _____,

Signature of Person Administering Oath

Printed Name and Title of Person Administering Oath

**MAGEE RANCH GEOLOGIC HAZARD ABATEMENT DISTRICT
STAFF REPORT**

TO: Magee Ranch Geologic Hazard Abatement District (GHAD) Board of Directors

FROM: GHAD Manager, ENGEO, represented by Haley Ralston

BOARD MEETING DATE: August 28, 2025

SUBJECT: Adopt Resolution 2025-01 Determining Terms of Service for the Board of Directors of the Magee Ranch GHAD

RECOMMENDATION(S):

Adopt Resolution 2025-01 to establish terms of service for each of the Board of Directors for the Magee Ranch GHAD.

BACKGROUND:

On August 4, 1992, the Danville Town Council adopted Resolution No. 124-92 approving and ordering the formation of the Magee Ranch GHAD ("GHAD") and appointing five property owners to serve as the Magee Ranch GHAD Board of Directors ("Board"). The term of office of the initially appointed board members has expired. At various times, previously appointed and successor Board members have resigned from the Board, and the Board opted to fill the vacancies by appointing successor board members.

On August 12, 2025, the Danville Town Council approved Resolution No. 57-2025 appointing five new property owners to serve as the Board for the GHAD.

Pursuant to Elections Code § 10505(c), GHAD Board must determine which three board members shall have four years of service and which two board members shall have two years of service.

ATTACHMENTS:

- A. Resolution 2025-01, Determining Terms of Service for the Board of Directors of the Magee Ranch GHAD.

**BOARD OF DIRECTORS OF THE
MAGEE RANCH GEOLOGIC HAZARD ABATEMENT DISTRICT**

RESOLUTION NO. 2025-01

**DETERMINING TERMS OF SERVICE FOR THE BOARD OF DIRECTORS OF THE MAGEE
RANCH GEOLOGIC HAZARD ABATEMENT DISTRICT**

WHEREAS, on August 2, 1992, the Danville Town Council adopted Resolution No. 124-92 approving and ordering the formation of the Magee Ranch Geologic Hazard Abatement District ("Magee Ranch GHAD") and appointing five property owners to serve as the Magee Ranch GHAD Board of Directors; and

WHEREAS, the Magee Ranch GHAD is a political subdivision of the State of California, governed by state law (Pub. Res. Code § 26500 *et seq.*), and constitutes a legal entity separate and distinct from the Town of Danville ("Town"), with operations independent of Town functions; and

WHEREAS, at various times, previously appointed and successor Board of Directors have resigned from the GHAD Board of Directors; and

WHEREAS, on August 12, 2025, the Danville Town Council adopted Resolution No. 57-2025 appointing five new property owners to serve as the Board of Directors of the Magee Ranch GHAD; and

WHEREAS, pursuant to Elections Code § 10505(c), the directors elected at the first general district election held in a district, and at a formation election held at the same time as the general district election, shall meet as soon as practicable after taking office and classify themselves by lot into two classes, as nearly equal in number as possible, and the terms of office of the class having the greater number shall be four years and the terms of office of the class having the lesser number shall be two years; and

THE MAGEE RANCH BOARD OF DIRECTORS HEREBY RESOLVES THAT:

1. The following three (3) board members shall have four years of service; and

2. The following two (2) board members shall have two years of service; and

3. This Resolution shall become effective immediately upon its passage and adoption.

DATED: August 28, 2025

I, _____, Clerk of the Magee Ranch Geologic Hazard Abatement District, certify that the foregoing resolution was duly adopted by the Board of Directors of the District at a regular meeting held on the 28th day of August 2025 by the following vote:

AYES:

NOES:

ABSENT:

ABSTAIN:

Clerk of the Magee Ranch GHAD

**MAGEE RANCH GEOLOGIC HAZARD ABATEMENT DISTRICT
STAFF REPORT**

TO: Magee Ranch Geologic Hazard Abatement District (GHAD) Board of Directors

FROM: ENGEO, GHAD Manager, represented by Haley Ralston

BOARD MEETING DATE: August 28, 2025

SUBJECT: Adopt Resolution 2025-02 Electing a Chairperson and Vice Chairperson of the Magee Ranch Geologic Hazard Abatement District Board of Directors

RECOMMENDATION(S):

1. ADOPT the attached Resolution No. 2025-02 to do the following:

- (a) ELECT a board member to be Chairperson; and
- (b) ELECT a board member to be Vice Chairperson.

BACKGROUND:

On August 4, 1992, the Danville Town Council adopted Resolution No. 124-92 approving and ordering the formation of the Magee Ranch GHAD ("GHAD") and appointing five property owners to serve as the Magee Ranch GHAD Board of Directors ("Board"). On August 12, 2025, the Danville Town Council approved Resolution No. 57-2025 appointing five new property owners to serve as the Board for the GHAD.

As one of the duties of the Board, it must identify a Board Chairperson and Vice Chairperson. The Board Chair would be authorized to execute all resolutions and official actions by the Board, to lead meetings of the Board, and to fulfill the responsibilities delegated to the Chair by the Board. If the Chairperson is not available to serve as the Board Chair, the Vice Chairperson should serve in this position.

The term for each Chairperson and Vice Chairperson is two years; therefore, the Board should appoint a Chair and a Vice Chair to serve until December 2026 then appoint a new Chair and Vice Chairperson in December 2024 for two additional years ending in December 2028, to coincide with the general election cycle.

ATTACHMENTS:

- A. Resolution No. 2025-02, Electing a Chairperson and Vice Chairperson of the Magee Ranch Geologic Hazard Abatement District Board of Directors.

**BOARD OF DIRECTORS OF THE
MAGEE RANCH GEOLOGIC HAZARD ABATEMENT DISTRICT**

RESOLUTION NO. 2025-02

**ELECTING A CHAIRPERSON AND VICE CHAIRPERSON OF THE MAGEE RANCH
GEOLOGIC HAZARD ABATEMENT DISTRICT FOR THE TERM BEGINNING AUGUST 28,
2025, AND ENDING WITH THE FIRST BOARD MEETING IN DECEMBER 2026**

WHEREAS, on August 2, 1992, the Danville Town Council adopted Resolution No. 124-92 approving and ordering the formation of the Magee Ranch Geologic Hazard Abatement District ("Magee Ranch GHAD") and appointing five property owners to serve as the Magee Ranch GHAD Board of Directors; and

WHEREAS, the Magee Ranch GHAD is a political subdivision of the State of California, governed by state law (Pub. Res. Code § 26500 *et seq.*), and constitutes a legal entity separate and distinct from the Town of Danville ("Town"), with operations independent of Town functions; and

WHEREAS, a member of the board of directors of the GHAD ("Board") should be appointed to serve as the Board Chairperson; and

WHEREAS, a Board member should be appointed to serve as the Board Vice Chairperson if the Board Chairperson is not able to serve as the Chairperson of the Board; and

WHEREAS, the Board Chairperson would be authorized to execute all resolutions and official actions by the GHAD Board, to lead meetings of the Board, and to fulfill the responsibilities delegated to the Chairperson by the Board; and therefore,

THE MAGEE RANCH BOARD OF DIRECTORS HEREBY RESOLVES THAT:

1. Boardmember _____, is elected Chairperson of the GHAD Board; and
2. If the Chairperson is not available to serve, Boardmember _____, is hereby elected to act as the Vice Chairperson of the GHAD Board; and
3. This Resolution shall become effective immediately upon its passage and adoption.

DATED: August 28, 2025

I, _____, Clerk of the Magee Ranch Geologic Hazard Abatement District, certify that the foregoing resolution was duly adopted by the Board of Directors of the District at a regular meeting held on the 28th day of August 2025 by the following vote:

AYES:

NOES:

ABSENT:

ABSTAIN:

Clerk of the Magee Ranch GHAD Board

**MAGEE RANCH GEOLOGIC HAZARD ABATEMENT DISTRICT
STAFF REPORT**

TO: Magee Ranch Geologic Hazard Abatement District (GHAD) Board of Directors

FROM: GHAD Manager, ENGEO, represented by Haley Ralston

BOARD MEETING DATE: August 28, 2025

SUBJECT: Adopt Resolution 2025-03 Appointing _____ to Serve as GHAD Clerk for the Magee Ranch GHAD

RECOMMENDATION(S):

Adopt Resolution 2025-03 to appoint _____ to serve as GHAD Clerk for the Magee Ranch GHAD pursuant to Public Resources Code Section 26584.

BACKGROUND:

On August 4, 1992, the Danville Town Council adopted Resolution No. 124-92 approving and ordering the formation of the Magee Ranch GHAD ("GHAD") and appointing five property owners to serve as the Magee Ranch GHAD Board of Directors ("Board"). Pursuant to Public Resources Code Section 26584, the GHAD is required to appoint a Clerk for the GHAD. The GHAD is responsible for hiring its own staff (or contracting with outside parties to perform staff services), including all workers involved in the operation, maintenance, replacement, repair, or other activities of the GHAD. GHADs are not subject to public contracting law; therefore, the GHAD does not need to prepare a request for qualification for GHAD staff.

Outside parties who typically serve as GHAD Clerk include, but are not limited to, firms experienced in GHAD management, homeowner association management firms, legal firms familiar with GHAD operations, and individuals.

Staff recommends that the GHAD Board contract with an outside consultant to perform staff services for the GHAD, based on the unique and technical expertise needed for this role.

ATTACHMENTS:

Resolution 2025-03 appointing _____ to serve as GHAD Clerk for the Magee Ranch GHAD pursuant to Public Resources Code Section 26584.

**BOARD OF DIRECTORS OF THE
MAGEE RANCH GEOLOGIC HAZARD ABATEMENT DISTRICT**

RESOLUTION NO. 2025-03

**APPOINTING _____ TO SERVE AS GHAD CLERK FOR THE MAGEE RANCH
GEOLOGIC HAZARD ABATEMENT DISTRICT PURSUANT TO PUBLIC RESOURCES
CODE SECTION 26584**

WHEREAS, on August 4, 1992, the Danville Town Council adopted Resolution 124-92 approving the formation of the Magee Ranch Geologic Hazard Abatement District (GHAD) and appointed five property owners to serve as the GHAD Board of Directors; and

WHEREAS, pursuant to Public Resources Code section 26584, the Board of Directors must appoint a Clerk; and

WHEREAS, the GHAD Board of Directors desires to appoint _____ to serve as Clerk of the GHAD.

NOW, THEREFORE, BE IT RESOLVED that the Board of Directors of the Magee Ranch GHAD hereby declares:

1. _____ is hereby appointed as the Magee Ranch GHAD Clerk.
2. This Resolution shall become effective immediately upon its passage and adoption.

I, _____, Clerk of the Magee Ranch Geologic Hazard Abatement District, certify that the foregoing resolution was duly adopted by the Board of Directors of the District at a regular meeting held on the 28th day of August 2025 by the following vote:

AYES:

NOES:

ABSENT:

ABSTAIN:

Clerk of the Magee Ranch GHAD Board

**MAGEE RANCH GEOLOGIC HAZARD ABATEMENT DISTRICT
STAFF REPORT**

TO: Magee Ranch Geologic Hazard Abatement District (GHAD) Board of Directors

FROM: GHAD Manager, ENGEO, represented by Haley Ralston

BOARD MEETING DATE: August 28, 2025

SUBJECT: Adopt Resolution 2025-04 Appointing _____ to Serve as GHAD Treasurer for the Magee Ranch GHAD

RECOMMENDATION:

Adopt Resolution 2025-04 to appoint _____ to serve as GHAD Treasurer for the Magee Ranch GHAD pursuant to Public Resources Code Section 26585.

BACKGROUND:

On August 4, 1992, the Danville Town Council adopted Resolution No. 124-92 approving and ordering the formation of the Magee Ranch GHAD ("GHAD") and appointing five property owners to serve as the Magee Ranch GHAD Board of Directors ("Board"). Pursuant to Public Resources Code Section 26585, the GHAD is required to appoint a Treasurer for the GHAD. The GHAD is responsible for hiring its own staff (or contracting with outside parties to perform staff services), including all workers involved in the operation, maintenance, replacement, repair, or other activities of the GHAD. GHADs are not subject to public contracting law; therefore, the GHAD is not required to prepare a request for qualifications for GHAD staff.

Outside parties who typically serve as GHAD treasurers are financial firms familiar with a GHAD's financial obligations and importance of building long-term reserves for emergency geologic hazard response.

Staff recommends that the GHAD Board contract with an outside consultant to perform staff services for the GHAD, based on the unique and technical expertise needed for this role.

ATTACHMENTS:

Resolution 2025-04 appointing _____ to serve as GHAD Treasurer for the Magee Ranch GHAD pursuant to Public Resources Code Section 26585.

**BOARD OF DIRECTORS OF THE
MAGEE RANCH GEOLOGIC HAZARD ABATEMENT DISTRICT**

RESOLUTION NO. 2025-04

**APPOINTING _____ TO SERVE AS GHAD TREASURER FOR THE MAGEE RANCH
GEOLOGIC HAZARD ABATEMENT DISTRICT PURSUANT TO PUBLIC RESOURCES
CODE SECTION 26585**

WHEREAS, on August 4, 1992, the Danville Town Council adopted Resolution 124-92 approving the formation of the Magee Ranch Geologic Hazard Abatement District (GHAD) and appointed five property owners to serve as the GHAD Board of Directors; and,

WHEREAS, pursuant to Public Resources Code section 26585, the Board of Directors must appoint a Treasurer; and,

WHEREAS, the GHAD Board of Directors desires to appoint _____ to serve as the Treasurer of the GHAD.

NOW, THEREFORE, BE IT RESOLVED that the Board of the Directors of the Magee Ranch GHAD hereby declares:

1. _____ is hereby appointed as the Magee Ranch GHAD Treasurer.
2. This Resolution shall become effective immediately upon its passage and adoption.

I, _____, Clerk of the Magee Ranch Geologic Hazard Abatement District, certify that the foregoing resolution was duly adopted by the Board of Directors of the District at a regular meeting held on the 28th day of August 2025 by the following vote:

AYES:

NOES:

ABSENT:

ABSTAIN:

Clerk of the Magee Ranch GHAD Board

**MAGEE RANCH GEOLOGIC HAZARD ABATEMENT DISTRICT
STAFF REPORT**

TO: Magee Ranch Geologic Hazard Abatement District (GHAD) Board of Directors

FROM: ENGEO, represented by Haley Ralston

BOARD MEETING DATE: August 28, 2025

SUBJECT: Adopt Resolution 2025-05 Appointing _____ to Serve as GHAD Manager for the Magee Ranch GHAD

RECOMMENDATION:

Adopt Resolution 2025-05 to appoint _____ to serve as GHAD Manager for the Magee Ranch GHAD pursuant to Public Resources Code Section 26586.

BACKGROUND:

On August 4, 1992, the Danville Town Council adopted Resolution No. 124-92 approving and ordering the formation of the Magee Ranch GHAD ("GHAD") and appointing five property owners to serve as the Magee Ranch GHAD Board of Directors ("Board"). Pursuant to Public Resources Code Section 26586, the GHAD is allowed to appoint other officer for the GHAD. The GHAD is responsible for hiring its own staff (or contracting with outside parties to perform staff services), including all workers involved in the operation, maintenance, replacement, repair, or other activities of the GHAD. GHADs are not subject to public contracting law; therefore, the GHAD is not required to prepare a request for qualifications for GHAD staff.

Outside parties who typically serve as GHAD managers are firms familiar with GHAD management and are able to provide geologic and geotechnical engineering services for the GHAD.

Staff recommends that the GHAD Board contract with an outside consultant to perform staff services for the GHAD, based on the unique and technical expertise needed for this role.

ATTACHMENTS:

Resolution 2025-05 appointing _____ to serve as GHAD Manager of the Magee Ranch GHAD pursuant to Public Resources Code Section 26586.

**BOARD OF DIRECTORS OF THE
MAGEE RANCH GEOLOGIC HAZARD ABATEMENT DISTRICT**

RESOLUTION NO. 2025-05

**APPOINTING _____ TO SERVE AS GHAD MANAGER FOR THE MAGEE
RANCH GEOLOGIC HAZARD ABATEMENT DISTRICT PURSUANT TO PUBLIC
RESOURCES CODE SECTION 26586**

WHEREAS, on August 4, 1992, the Danville Town Council adopted Resolution 124-92 approving the formation of the Magee Ranch Geologic Hazard Abatement District (GHAD) and appointed five property owners to serve as the GHAD Board of Directors; and,

WHEREAS, pursuant to Public Resources Code section 26586, the Board of Directors may appoint other officers; and,

WHEREAS, the GHAD Board of Directors desires to appoint _____ to serve as Manager of the GHAD.

NOW, THEREFORE, BE IT RESOLVED that the Board of Directors of the Magee Ranch GHAD hereby declares:

1. _____ is hereby appointed as the Magee Ranch GHAD Manager.
2. This Resolution shall become effective immediately upon its passage and adoption.

I, _____, Clerk of the Magee Ranch Geologic Hazard Abatement District, certify that the foregoing resolution was duly adopted by the Board of Directors of the District at a regular meeting held on the 28th day of August 2025 by the following vote:

AYES:

NOES:

ABSENT:

ABSTAIN:

Clerk of the Magee Ranch GHAD Board

**MAGEE RANCH GEOLOGIC HAZARD ABATEMENT DISTRICT
STAFF REPORT**

TO: Magee Ranch Geologic Hazard Abatement District (GHAD) Board of Directors

FROM: GHAD Manager, ENGEO, represented by Haley Ralston

BOARD MEETING DATE: August 28, 2025

SUBJECT: Discuss Long-Term Funding Options for the GHAD

RECOMMENDATION):

Receive staff report from GHAD Manager and provide direction to GHAD staff.

BACKGROUND:

On August 4, 1992, the Danville Town Council adopted Resolution No. 124-92 approving and ordering the formation of the Magee Ranch GHAD ("GHAD") and appointing five property owners to serve as the Magee Ranch GHAD Board of Directors ("Board").

In the Magee Ranch GHAD Plan of Control included with Resolution No. 124-92 is a projected annual operating budget of \$77,700, anticipating an income of \$300 per residence per year, in 1992/1993 dollars. In October 2023, ENGEO provided a reserve-fund study for the GHAD. Adjusted to 2023/2024 dollars as presented in the reserve fund study, the annual operating budget for the initial Plan of Control would be \$172,781 with an annual assessment of \$719 per residence. Additionally, the projected annual operating budget anticipated an annual reserve contribution of \$24,700 in 1992/1993 dollars, which, if went unused, would have accumulated to approximately \$1.24M in 2023/2024 dollars.

The purpose of the reserve-fund study was to review the GHAD's duties described in the initial Plan of Control and projected budget, and determine an appropriate reserve fund target amount and related annual assessment levy to contribute to the reserve and fund annual maintenance and operations based on current costs. The reserve-fund study indicated an annual assessment of \$648 (2023/2024 dollars) per residence would be required to fund the GHAD's annual responsibilities without contributing to long-term reserves. An assessment of \$1,117 (2023/2024 dollars) would be required to fund annual maintenance and operations and contribute to a reasonable reserve target of approximately \$4M (2023/2024 dollars).

DISCUSSION:

GHAD Manager supports an appropriate assessment levy to fund annual maintenance and operations in addition to reserve accumulation. Currently, the GHAD is funded by a portion of the homeowners association dues. Typically, GHADs are funded through supplemental property assessments via a Proposition-218 assessment-vote process. GHAD Manager believes either avenue is viable, and there are pros and cons to each.

ATTACHMENTS:

A. Magee Ranch GHAD Reserve Fund Study, October 9, 2023.

October 9, 2023

Project No.
3417.000.001

Mr. Terry Woram
154 Sunhaven Road
Danville, CA 94506

Subject: Magee Ranch Geologic Hazard Abatement District
Danville, California

RESERVE FUND STUDY

Dear Mr. Woram:

ENGEO is pleased to provide this Reserve Fund Study for the Magee Ranch Geologic Hazard Abatement District (GHAD) in Danville, California. The Magee Ranch GHAD was formed in 1992 and is a Geologic Hazard Abatement District (GHAD) within the meaning of Public Resources Code Division 17. The boundary of the GHAD encompasses a total of approximately 438 acres with approximately 252 acres of common-area open space. The GHAD includes 259 single-family residential lots. It is our understanding that the GHAD has been responsible for monitoring and maintenance activities, as provided in the adopted Plan of Control, since 1992 (Reference 1). The Board of Directors consists of five property owners within the GHAD.

This reserve study was undertaken to forecast expenses that can reasonably be expected in the decades ahead and to confirm that sufficient funds are being set aside in the GHAD's reserve to pay for these expenses.

The reserve fund study is based on:

- Expenditures expected to address existing maintenance and repair responsibilities focusing on those that occurred during the 2022/23 winter.
- Expenditures expected to address future monitoring, maintenance, and repair responsibilities, as outlined in the Plan of Control (Reference 1).
- Long-term reserves to address larger geologic events. The projected long-term reserve requirement is based on the published work, "Estimating an Appropriate Maintenance and Monitoring District (GHAD) Reserve" and is provided as an attachment to this study.

REVENUE

Fund Assessment and Reserve

A projected budget included in the adopted Plan of Control anticipated an income of \$300 per residence per year. With 259 residential lots, the assessment totaled \$77,700 per year in fiscal year (FY) 1992/1993 dollars. For the purposes of this reserve study and as used by the State of California and most local governmental agencies, we are using a FY for the Magee Ranch GHAD that starts annually on July 1 and ends on June 30. The budget included in the Plan of Control would be \$172,781 in FY 2023/2024 dollars when adjusted for inflation. The current assessment to support this budget would be \$719.01 per year per residential lot. For this reserve study, we have used the U.S. Bureau of Labor Statistics Consumer Price Index for San Francisco-Oakland-Hayward, California, All Urban Consumers to adjust the GHAD's income and expenses.

The projected budget in the Plan of Control anticipated an annual reserve amount of \$24,700 in FY 1992/1993. If the GHAD reserves had not been needed for expenses between the formation of the GHAD and the present, the GHAD would have an account balance of approximately \$1.24M from this planned surplus. The cumulative reserve balance does not consider any investment income generated from unused reserve funds. As reported to us, the account balance was approximately \$254,000 on July 1, 2023.

Inflation and Investment Estimates

For this reserve study, we are estimating an annual investment return of 1.5 percent for the 40-year pro forma budget. The investment return is based on a review of 2017 through 2022 actual returns, which averaged 0.15% for this period. For inflation, we are estimating an annual inflation rate of 2.5 percent. This is near the inflation target of 2 percent adopted by the Federal Open Market Committee in January 2012 (Reference 5). In their recent economic projections, Federal Reserve Bank policymakers forecast that inflation for the next 3 years would be at 4.1 percent in 2023, 2.7 percent in 2024, and 2.3 percent in 2025, which is above the estimates used in this reserve study, although the reserve study pro forma budget analyzes a period of 40 years.

Higher real rates of return decrease the assessment necessary to support the operations of the GHAD and maintain an appropriate target reserve. If the real rate of return is negative, as is projected in this reserve study, a portion of the assessment is applied to achieving and maintaining constant-dollar value for the target reserve funds. If the GHAD is able to obtain a positive real rate of return over the long term, this could allow for an annual levy below the assessment limit or a reduction in the assessment limit.

GHAD RESPONSIBILITIES

Based on the District's Plan of Control (Reference 1), GHAD monitoring, maintenance, and repair responsibilities include the following.

- Storm retention basins and embankments
- Concrete-lined drainage ditches and associated inlets and outlets
- Storm drain improvements servicing the open space areas
- Subdrains and horizontal drains
- Slopes
- Drainageways
- Gabion retention structures
- Sanitary sewer access road

As provided in the Plan of Control, *"The Town of Danville shall maintain all facilities, other than those of other public agencies, within the public right-of-way or easements, as shown on the final maps for Subdivisions 7058, 7355, 7668, and 7669. The GHAD is responsible for all subdrains and private storm drain facilities (as designated in the approved improvement plans) to the point of their connection with a public facility."* In addition, the Plan of Control states, *"The District will not be responsible for repairs that are wholly within individual private parcels."*

PROJECTED EXPENSES

Expense Estimates

To prepare the current GHAD reserve fund amount, we reviewed the following documents and conditions.

- 1992 plan of control projected budget (adjusted for inflation)
- 2023 reserve study
- 2021 and 2022 site monitoring reports
- 2017 through 2022 revenue and expense statements
- 2023 site visit

A projected budget was included in the adopted Plan of Control, as discussed in the Fund Assessment and Reserve section above. Some of the initial expense estimates remain valid, but other amounts have been adjusted to account for site performance, “as-built” conditions, a cost estimate for repair from events during the winter of 2022/2023, and cost estimate bids for maintenance and emergency response items received by other GHADs in the Bay Area. Adjusted for inflation, annualized GHAD expenses calculated from the adopted 1992 Plan of Control would be \$127,026, excluding contribution to the planned reserve. As shown in Exhibit A and used in the calculations for Exhibit B, the current annualized GHAD expenses are estimated at \$164,554, which does not include accumulating funds for achieving the target reserve described below.

It appears that routine maintenance of some GHAD-maintained improvements has been deferred. Since a major benefit of being within a GHAD is the ability to conduct preventive maintenance and, therefore, likely reduce repair costs, this reserve study anticipates a prudent level of scheduled preventive maintenance.

Large-Scale Repair

As identified in the referenced Tryhorn Site Visit report, significant erosion and slope instability events have occurred within Magee Ranch during high precipitation periods, which occurred in 1997-98, 2002, 2012, and in 2016-17. In addition, a heavy rainfall period occurred in 2023, as identified in the Cal Engineering and Geology reports. Since the GHAD’s formation in 1992, a high-precipitation event has occurred on average every 6 years. While expense information was not available for 1997-98, 2002, or 2012, we reviewed the 2017 financial statement and the referenced B.C. McCosker and ENGEO bids for repairs from the 2023 repairs for these events, which were \$99,135 and approximately \$1.1M, respectively. For this reserve study, we have estimated a large-scale landslide or other geologic hazard (estimated at \$200,000 in FY 2023/24 dollars every 8 years). As shown in the Estimated Expense section, we have provided \$37,500 annually for minor repairs as may occur in average or below average rainfall years.

Although the Magee Ranch GHAD had a reserve balance of approximately \$254,000 as of July 1, 2023, we understand that current expenses to complete ongoing repairs will exhaust these funds and will likely require additional funding, which would be obtained through HOA fees. For the purposes of this reserve study, we assumed no reserve funds are available to the GHAD at the start of the analysis.

RESERVE ESTIMATION AND METHODOLOGY

For this reserve study, we estimated the reserve appropriate for the Magee Ranch GHAD using the following factors from the attached paper titled, “Estimating an Appropriate GHAD Reserve” dated July 6, 1999 (Exhibit C).

- Number of assessed units (n)
- Level of geotechnical risk within the development boundaries (g)
- Average value of assessed properties (v)
- Relative density of construction (d)

Table 1 provides the inputs and target reserve amounts used in the calculation.

TABLE 1: Target Reserve Calculations

| | |
|--|-------------|
| Magee Ranch Target Reserve | $R=v(d+gn)$ |
| Number of Assessed Units (n) | 259 |
| Average Value of each residence (v) | \$2,670,000 |
| Geotechnical Risk Factor (g) | 0.002 |
| Density Factor (d) | 1 |
| Target Reserve (Rounded) | \$4,053,000 |

For this analysis, a total of 259 residential units are expected to be subject to the levy of a GHAD assessment. The average value of assessed residential properties is used as a surrogate index to represent local construction costs over time. The average value of assessed properties is based on current values derived from web-based sources.

Items considered in determining the level of geotechnical risk include the following.

- Site geology including seismic hazards
- Corrective grading and other geotechnical mitigation measures
- Proximity of geologic hazards to GHAD-maintained improvements
- Performance of the site improvements

It does not appear that the corrective grading and geotechnical mitigation improvements are significantly different from those completed during the mass grading for the development and as accounted for in the initial projected budget included in the Plan of Control. Likewise, the proximity of geologic hazards to GHAD-maintained improvements does not appear significantly different from those encountered during mass grading for the site. The geotechnical risk factor used in the target reserve calculation ranges between 0.001 to 0.01, where 0.001 represents the lowest risk and 0.01 represents a site with the highest risk.

The relative density of construction is the maximum number of units expected to be impacted by a major geologic event. The existing configuration of the development footprint is similar to that on the site plans available at the time of the initial mass grading.

Based on these parameters, we estimate that an appropriate long-term reserve for the GHAD for 259 units would be approximately \$4,053,000 in current dollars. The \$4,053,000 reserve amount would allow the GHAD to respond to anticipated events within the GHAD, while still having funds to continue its other administration, maintenance, and monitoring functions.

DISCUSSION AND CONCLUSIONS

Based on the assumptions listed above, an annual assessment of \$648 per unit per year would be required to fund the GHAD's responsibilities, excluding the accumulation of what we consider a prudent target reserve. To fund the GHAD's responsibilities as outlined in the Plan of Control and achieve an adequate target reserve of approximately \$4,053,000 over a 40-year period, we recommend an annual assessment of \$1,117 per residential lot per year in 2023/24 dollars. The proposed initial assessment level will be automatically adjusted annually on June 30 to reflect the percentage change in the San Francisco-Oakland-Hayward Consumers Price Index for All Urban Consumers.

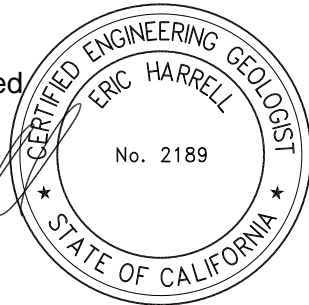
As noted above, higher real rates of return decrease the assessment necessary to support the operations of the GHAD and maintain an appropriate target reserve. If the real rate of return is negative, as is projected in this reserve study, a portion of the assessment is applied to achieving and maintaining constant-dollar value for the target reserve funds. With the assumptions used in this reserve study, for each increase of 1% in the long-term real rate of return on GHAD reserves, the assessment would be lowered by approximately \$100 per residential unit annually.


If you have any questions regarding the contents of this letter, please do not hesitate to contact us.

Sincerely,

ENGEO Incorporated


Eric Harrell, CEG




Uri Eliahu, GE

eh/ue/ar

Attachments: Selected References

Exhibit A: Expense Details

Exhibit B: Pro Forma Budget with \$4,053,000 Reserve Target (2023/24 dollars)

Exhibit C: Estimating an Appropriate GHAD Reserve

SELECTED REFERENCES

1. Nystrom Engineering. 1992. Plan of Control, Magee Ranch Geologic Hazard Abatement, Danville, California. Attached with Petition for Formation dated May 5, 1992.
2. Association Reserves. 2022. Reserve Study Update “No-Site-Visit”, Magee Ranch GHAD, Danville, California. August 12, 2022. Report No: 20912-11.
3. Diablo Ranch Development Company. 1989. Declaration of Covenants, Conditions and Restrictions for Magee Ranch Planned Development, December 11, 1989.
4. Gagen, McCoy, McMahon, and Armstrong. 1992. Petition for Geologic Hazard Abatement District Magee Ranch, Danville, California, May 6, 1992.
5. Danville, Town of, Administrative Staff Report, Petition for Geologic Hazard Abatement District, June 2, 1992.
6. Danville, Town of, Resolution No. 82-92, Setting a Public Hearing to form a Geologic Hazard Abatement District in the Magee Ranch Subdivision, June 2, 1992.
7. Danville, Town of, Administrative Staff Report, Formation of Magee Ranch Geologic Hazard Abatement District, August 4, 1992.
8. Danville, Town of, Resolution No. 124-92, Formation of a Geologic Hazard Abatement District in the Magee Ranch Subdivision, August 4, 1992.
9. United States Federal Reserve Board of Governors, Federal Open Market Committee Statement of Longer-Run Goals and Policy Strategy, Press Release, January 25, 2012.
10. ENGEO. 2023. Request for Proposals, Magee Ranch Geologic Hazard Abatement District, Geotechnical and Geological Consultation Related to Recent Storm Events, Danville, California. March 27, 2023, Revised March 30, 2023. Project No. 3417.000.001.
11. BC McCosker Construction, Inc. 2023. Magee Ranch GHAD, Slope Failure Repair Budget Revised, August 21, 2023.
12. ENGEO. 2023. Proposal for Testing and Observation Services, Magee Ranch GHAD Repairs, Danville, California. September 27, 2023. Project No. 3417.000.002.
13. Tryhorn Consulting. 2021. Biennial (2019 through 2020 Geological Site Visit, Magee Ranch, Danville, California, TC Number 1006-900, February 17, 2021.
14. Cal Engineering and Geology. 2022. Preliminary Geologic and Geotechnical Evaluation and Annual Observation Services, Magee Ranch Open Space, Danville, California, GE&G Document 202560-001, September 22, 2022.
15. Levy, Erlanger, and Company LLP. 2023. Magee Ranch Homeowners Association, Financial Statements and Independent Accountant’s Review Report, Years Ended December 31, 2022 and 2021, Transmittal from Howe Association Management, Inc. dated February 21, 2023.

SELECTED REFERENCES (Continued)

16. Levy, Erlanger, and Company LLP. 2021. Magee Ranch Homeowners Association, Financial Statements and Independent Accountant's Review Report, Years Ended December 31, 2021 and 2020.
17. Levy, Erlanger, and Company LLP. 2020. Magee Ranch Homeowners Association, Financial Statements and Independent Accountant's Review Report, Year Ended December 31, 2019, Transmittal from Howe Association Management, Inc. dated March 6, 2020.
18. Levy, Erlanger, and Company LLP. 2019. Magee Ranch Homeowners Association, Financial Statements and Independent Accountant's Review Report, Years Ended December 31, 2018 and 2017, Transmittal from Howe Association Management, Inc. dated March 20, 2019.
19. Levy, Erlanger, and Company LLP. 2018. Magee Ranch Homeowners Association, Financial Statements and Independent Accountant's Review Report, Year Ended December 31, 2017, Transmittal from Howe Association Management, Inc. dated February 20, 2018.

EXHIBIT A
Expense Details

Magee Ranch Geologic Hazard Abatement District (GHAD) Budget
Reserve Study Expense Details

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| Item No. | Description | Unit | Quantity | Unit Price | Total Cost | Reoccurrence Interval (Years) | Annual Total Budget | Comments |
|----------|---|-----------|----------|------------|------------|-------------------------------|---------------------|--|
| 1 | Administration and Accounting | | | | | | | |
| | GHAD Manager | monthly | 12 | \$1,500 | \$18,000 | 1.0 | \$18,000 | We have reviewed approved budget records for the existing GHADs in the region and these have provided a basis for the Administration and Accounting cost estimate. |
| | GHAD Treasurer | quarterly | 4 | \$425 | \$1,700 | 1.0 | \$1,700 | This cost estimate is based on fees currently charged to GHADs in Contra Costa County for these services. |
| | GHAD Clerk | ls | 1 | \$1,500 | \$1,500 | 1.0 | \$1,500 | This cost estimate is based on fees currently charged to GHADs in Contra Costa County for these services. |
| | Legal Counsel | ls | 1 | \$4,000 | \$4,000 | 1.0 | \$4,000 | This cost estimate is based on fees currently charged to GHADs in Contra Costa County for these services. |
| | Insurance - Open Space Areas | acre | 252 | \$12 | \$3,024 | 1.0 | \$3,024 | This cost estimate is based on fees currently charged to GHADs in California through the California Association of GHADs. |
| | Membership dues for the California Association of Geologic Hazard Abatement Districts | ls | 1 | \$165 | \$165 | 1.0 | \$165 | This cost estimate is based on membership fees currently charged by the California Association of GHADs (\$100 plus \$0.25/residential parcel). |
| | Contra Costa County Assessor's Fees | ls | 1 | \$470 | \$470 | 1.0 | \$470 | Assumes an assessment is approved under the provisions of Proposition 218 |
| | Assessment Roll and Levy Update | ls | 1 | \$1,500 | \$1,500 | 1.0 | \$1,500 | Assumes an assessment is approved under the provisions of Proposition 218 |
| | | | | | | Subtotal | \$30,359 | |

Magee Ranch Geologic Hazard Abatement District (GHAD) Budget
Reserve Study Expense Details

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| Item No. | Description | Unit | Quantity | Unit Price | Total Cost | Reoccurrence Interval (Years) | Annual Total Budget | Comments |
|----------|---|------|----------|------------|------------|-------------------------------|---------------------|--|
| 2 | Professional Services | | | | | | | |
| | GHAD Monitoring Event including instrumentation - April and October | ls | 1 | \$8,000 | \$8,000 | 1.0 | \$8,000 | The frequency of monitoring is based on the adopted Plan of Control requirements for Magee Ranch. Monitoring budget estimates are based on the fees these services are currently being provided to the GHAD for other GHAD's within Contra Costa County. |
| | Heavy Rainfall Event Monitoring | ls | 1 | \$4,000 | \$4,000 | 1.0 | \$4,000 | The frequency of monitoring is based on the adopted Plan of Control requirements for Magee Ranch. Monitoring budget estimates are based on the fees these services are currently being provided to the GHAD for other GHAD's within Contra Costa County. |
| | | | | | | Subtotal | \$12,000 | |

Magee Ranch Geologic Hazard Abatement District (GHAD) Budget
Reserve Study Expense Details

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| Item No. | Description | Unit | Quantity | Unit Price | Total Cost | Reoccurrence Interval (Years) | Annual Total Budget | Comments |
|----------|---|------|----------|------------|-----------------|-------------------------------|---------------------|---|
| 3 | Maintenance & Operation | | | | | | | |
| | Subdrains and outlets | each | 29 | \$100 | \$2,900 | 5.0 | \$580 | We do not anticipate regular maintenance on the subdrain outfalls which tend to have low flow volumes, but this budget figure allows for maintenance or repair as may be necessary. |
| | Sediment/debris removal from concrete-lined drainage ditches and associated drop inlets. | lf | 26,200 | \$0.50 | \$13,100 | 1.0 | \$13,100 | Services currently contracted by the other GHADs. Includes concrete-lined ditches in open space and private lots as provided in the Plan of Control. |
| | Asphaltic concrete surfaced sanitary sewer access roadway (Partial Resurface) | sf | 24,778 | \$5.29 | \$131,076 | 15.0 | \$8,738 | Adapted from 2023 Reserve Study |
| | Asphaltic concrete surfaced sanitary sewer access roadway - (Seal/Repair) | sf | 49,555 | \$0.64 | \$31,715 | 5.0 | \$6,343 | Adapted from 2023 Reserve Study |
| | Minor slope instability and erosion | ls | 1 | \$75,000 | \$75,000 | 2.0 | \$37,500 | Adapted from Plan of Control budget and 2017 through 2022 expense records. |
| | Maintenance of the 6 onsite sedimentation basins and associated rock walls including sediment and debris removal. | each | 6 | \$1,500 | \$9,000 | 6.0 | \$1,500 | Vegetation, sediment, and debris removal with proper offsite disposal. |
| | Open space storm drain pipeline (4,800 lf), drop inlets (54 each), basin inlets, and outlets. | ls | 1 | \$5,000 | \$5,000 | 1.0 | \$5,000 | Adapted from 2023 Reserve Study |
| | Retention Basins - Shadewell Drive and Windover Drive includes basin, embankments, inlet and outlet structures, and fencing | each | 2 | \$12,000 | \$24,000 | 6.0 | \$4,000 | Adapted from 2023 Reserve Study |
| | | | | | Subtotal | | \$76,761 | |

Magee Ranch Geologic Hazard Abatement District (GHAD) Budget
Reserve Study Expense Details

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| Item No. | Description | Unit | Quantity | Unit Price | Total Cost | Reoccurrence Interval (Years) | Annual Total Budget | Comments |
|----------|---|------|----------|------------|-----------------|-------------------------------|---------------------|---|
| 4 | Capital Improvements | | | | | | | |
| | Concrete-lined drainage ditch replacement | lf | 26,200 | \$50 | \$1,310,000 | 75.0 | \$8,733 | We have provided for a 75-year replacement cycle for the concrete-lined drainage ditches for 50 percent of the ditches. This replacement quantity applies to concrete lined drainage ditch that is not involved with slope instability. Drainage ditches that are involved with slope instability would be repaired or replaced during corrective work for the individual events. |
| | Open space storm drain pipeline, drop inlets (50), basin inlets, and outlets. | lf | 4,800 | \$250 | \$1,200,000 | 75.0 | \$8,000 | We have provided for a 75-year replacement cycle for 50 percent of the open space storm drain pipelines and associated facilities. This replacement quantity applies to system components that are not damaged due to slope instability. |
| | Wood retaining walls | lf | 250 | \$30 | \$7,500 | 15.0 | \$500 | Existing open space wooden retaining walls. |
| | Rock walls | lf | 480 | \$200 | \$96,000 | 30.0 | \$3,200 | Existing open space rock walls. |
| | | | | | Subtotal | | \$20,433 | |

Magee Ranch Geologic Hazard Abatement District (GHAD) Budget
Reserve Study Expense Details

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| Item No. | Description | Unit | Quantity | Unit Price | Total Cost | Reoccurrence Interval (Years) | Annual Total Budget | Comments |
|----------|---------------------------|------|----------|------------|------------|-------------------------------|---------------------|---|
| 5 | Major Repair (Annualized) | ls | 1 | \$200,000 | \$200,000 | 8.0 | \$25,000 | This figure represents the annualized repair cost estimate for a \$200,000 repair event that occurs on average every 8 years. This has been estimated based on frequency of heavy rainfall events documented since the GHAD's formation in 1992 and the cost or cost estimates from the 2016-17 and 2023 repair work. |
| | | | | | | Subtotal | \$25,000 | |
| | | | | | | TOTAL | \$164,554 | |

EXHIBIT B

**Pro Forma Budget with \$4,053,000 Reserve
(2023/24 dollars)**

Magee Ranch Geologic Hazard Abatement District

Estimated Budget - October 9, 2023

| FISCAL YEAR (Starting July 1) | <u>2023</u> | <u>2024</u> | <u>2025</u> | <u>2026</u> | <u>2027</u> | <u>2028</u> | <u>2029</u> | <u>2030</u> | <u>2031</u> | <u>2032</u> | <u>2033</u> | <u>2034</u> | <u>2035</u> | <u>2036</u> | <u>2037</u> | <u>2038</u> |
|--------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Cumulative No. of Units (Equivalent) | 259 | 259 | 259 | 259 | 259 | 259 | 259 | 259 | 259 | 259 | 259 | 259 | 259 | 259 | 259 | 259 |
| A. INCOME | | | | | | | | | | | | | | | | |
| Assessment | 289,284 | 296,516 | 303,929 | 311,528 | 319,316 | 327,299 | 335,481 | 343,868 | 352,465 | 361,276 | 370,308 | 379,566 | 389,055 | 398,782 | 408,751 | 418,970 |
| B. PROJECTED EXPENSES | | | | | | | | | | | | | | | | |
| 1. Administration and Accounting | 30,359 | 31,118 | 31,896 | 32,693 | 33,511 | 34,348 | 35,207 | 36,087 | 36,989 | 37,914 | 38,862 | 39,834 | 40,829 | 41,850 | 42,896 | 43,969 |
| Solano County Assessor's Fees | 4,918 | 5,041 | 5,167 | 5,296 | 5,428 | 5,564 | 5,703 | 5,846 | 5,992 | 6,142 | 6,295 | 6,453 | 6,614 | 6,779 | 6,949 | 7,122 |
| 2. Professional Services | 12,000 | 12,300 | 12,608 | 12,923 | 13,246 | 13,577 | 13,916 | 14,264 | 14,621 | 14,986 | 15,361 | 15,745 | 16,139 | 16,542 | 16,956 | 17,380 |
| 3. Maintenance & Operation | 39,261 | 40,243 | 41,249 | 42,280 | 43,337 | 44,420 | 45,531 | 46,669 | 47,836 | 49,032 | 50,257 | 51,514 | 52,802 | 54,122 | 55,475 | 56,862 |
| 4. Slope-Erosion Stabilization | 37,500 | 38,438 | 39,398 | 40,383 | 41,393 | 42,428 | 43,489 | 44,576 | 45,690 | 46,832 | 48,003 | 49,203 | 50,433 | 51,694 | 52,987 | 54,311 |
| 5. Repair | - | - | - | - | - | - | - | - | 243,681 | - | - | - | - | - | - | - |
| 6. Capital Improvement | 20,433 | 20,944 | 21,467 | 22,004 | 22,554 | 23,118 | 23,696 | 24,288 | 24,896 | 25,518 | 26,156 | 26,810 | 27,480 | 28,167 | 28,871 | 29,593 |
| 7. Misc. Expenses | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| SUBTOTAL - EXPENSES | 144,471 | 148,083 | 151,785 | 155,579 | 159,469 | 163,455 | 167,542 | 171,730 | 419,704 | 180,424 | 184,935 | 189,558 | 194,297 | 199,155 | 204,134 | 209,237 |
| RESERVE | 144,813 | 148,434 | 152,145 | 155,948 | 159,847 | 163,843 | 167,939 | 172,138 | (67,239) | 180,852 | 185,374 | 190,008 | 194,758 | 199,627 | 204,618 | 209,733 |
| EARNINGS | - | 2,172 | 4,431 | 6,780 | 9,221 | 11,757 | 14,391 | 17,126 | 19,965 | 19,256 | 22,257 | 25,372 | 28,602 | 31,953 | 35,427 | 39,027 |
| CUMULATIVE RESERVE | 144,813 | 295,420 | 451,995 | 614,724 | 783,792 | 959,392 | 1,141,722 | 1,330,985 | 1,283,711 | 1,483,819 | 1,691,449 | 1,906,829 | 2,130,189 | 2,361,769 | 2,601,813 | 2,850,574 |

| | |
|---|-----------|
| ria | |
| ASSUMPTIONS | |
| Total No. of Units (equivalent) | 259 |
| Annual Assessment per Unit | \$1,117 |
| Annual Increase in Assessment | 2.50% |
| Inflation | 2.50% |
| Investment Earnings | 1.5% |
| Initial Seed Fund | \$0 |
| Amount Financed | \$0 |
| Borrowing Rate | 8.0% |
| Term of Loan (yrs.) | 10 |
| Frequency of Large-Scale Repair (yrs.) | 8 |
| Cost of Large-Scale Repair (current \$) | \$200,000 |
| Assessment Cap (per residential unit) | 9999 |
| Expense Deferral Period (Yrs.) | 0 |

| ESTIMATED ANNUAL EXPENSES IN 2023/24 DOLLARS | | PROFORMA CATEGORY |
|--|------------|--|
| Administration & Accounting | \$30,359 | Administration & Accounting |
| GHAD Monitoring Program | \$12,000 | Professional Services |
| Sediment/Debris Removal Drainage Improvements | \$13,100 | Maintenance and Operation |
| Sedimentation Basins | \$10,500 | Maintenance and Operation |
| Maintenance Roads | \$15,081 | Maintenance and Operation |
| Subdrains | \$580 | Maintenance and Operation |
| Erosion -Slope Stabilization (incl. minor landsliding) | \$37,500 | Slope Stabilization and Erosion Protection |
| Ditch and Storm Drain Replacement | \$16,733 | Capital Improvement |
| Wall Replacement | \$3,700 | Capital Improvement |
| Major Repair (Annualized) | \$25,000 | Major Repair |
| Contingency | <u>\$0</u> | Miscellaneous Expenses |
| TOTAL | \$164,553 | |

| <u>2039</u> | <u>2040</u> | <u>2041</u> | <u>2042</u> | <u>2043</u> | <u>2044</u> | <u>2045</u> | <u>2046</u> | <u>2047</u> | <u>2048</u> | <u>2049</u> | <u>2050</u> | <u>2051</u> | <u>2052</u> | <u>2053</u> | <u>2054</u> | <u>2055</u> | <u>2056</u> | <u>2057</u> |
|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| 259 | 259 | 259 | 259 | 259 | 259 | 259 | 259 | 259 | 259 | 259 | 259 | 259 | 259 | 259 | 259 | 259 | 259 | 259 |
| 429,444 | 440,180 | 451,185 | 462,464 | 474,026 | 485,877 | 498,024 | 510,474 | 523,236 | 536,317 | 549,725 | 563,468 | 577,555 | 591,994 | 606,793 | 621,963 | 637,512 | 653,450 | 669,786 |
| 45,068 | 46,195 | 47,350 | 48,533 | 49,747 | 50,990 | 52,265 | 53,572 | 54,911 | 56,284 | 57,691 | 59,133 | 60,612 | 62,127 | 63,680 | 65,272 | 66,904 | 68,576 | 70,291 |
| 7,301 | 7,483 | 7,670 | 7,862 | 8,058 | 8,260 | 8,466 | 8,678 | 8,895 | 9,117 | 9,345 | 9,579 | 9,818 | 10,064 | 10,315 | 10,573 | 10,838 | 11,109 | 11,386 |
| 17,814 | 18,259 | 18,716 | 19,184 | 19,663 | 20,155 | 20,659 | 21,175 | 21,705 | 22,247 | 22,804 | 23,374 | 23,958 | 24,557 | 25,171 | 25,800 | 26,445 | 27,106 | 27,784 |
| 58,283 | 59,740 | 61,234 | 62,765 | 64,334 | 65,942 | 67,591 | 69,280 | 71,012 | 72,788 | 74,607 | 76,473 | 78,384 | 80,344 | 82,353 | 84,411 | 86,522 | 88,685 | 90,902 |
| 55,669 | 57,061 | 58,487 | 59,949 | 61,448 | 62,984 | 64,559 | 66,173 | 67,827 | 69,523 | 71,261 | 73,043 | 74,869 | 76,740 | 78,659 | 80,625 | 82,641 | 84,707 | 86,825 |
| 296,901 | - | - | - | - | - | - | - | 361,745 | - | - | - | - | - | - | - | 440,751 | - | - |
| 30,333 | 31,091 | 31,869 | 32,665 | 33,482 | 34,319 | 35,177 | 36,056 | 36,958 | 37,882 | 38,829 | 39,799 | 40,794 | 41,814 | 42,860 | 43,931 | 45,029 | 46,155 | 47,309 |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 511,369 | 219,829 | 225,325 | 230,958 | 236,732 | 242,651 | 248,717 | 254,935 | 623,053 | 267,841 | 274,537 | 281,400 | 288,435 | 295,646 | 303,037 | 310,613 | 759,130 | 326,338 | 334,497 |
| (81,925) | 220,351 | 225,860 | 231,506 | 237,294 | 243,226 | 249,307 | 255,539 | (99,817) | 268,476 | 275,188 | 282,068 | 289,119 | 296,347 | 303,756 | 311,350 | (121,618) | 327,112 | 335,290 |
| 42,759 | 42,171 | 46,109 | 50,188 | 54,414 | 58,790 | 63,320 | 68,009 | 72,862 | 72,458 | 77,572 | 82,863 | 88,337 | 93,999 | 99,854 | 105,909 | 112,168 | 112,026 | 118,613 |
| 2,811,408 | 3,073,930 | 3,345,898 | 3,627,593 | 3,919,300 | 4,221,316 | 4,533,942 | 4,857,491 | 4,830,536 | 5,171,470 | 5,524,230 | 5,889,162 | 6,266,618 | 6,656,965 | 7,060,576 | 7,477,834 | 7,468,384 | 7,907,522 | 8,361,425 |

| <u>2058</u> | <u>2059</u> | <u>2060</u> | <u>2061</u> | <u>2062</u> | <u>2063</u> |
|-------------|-------------|-------------|--------------------|-------------|-------------|
| 259 | 259 | 259 | 259 | 259 | 259 |
| 686,531 | 703,694 | 721,287 | 739,319 | 757,802 | 776,747 |
| 72,048 | 73,849 | 75,696 | 77,588 | 79,528 | 81,516 |
| 11,671 | 11,963 | 12,262 | 12,568 | 12,883 | 13,205 |
| 28,478 | 29,190 | 29,920 | 30,668 | 31,435 | 32,221 |
| 93,174 | 95,504 | 97,891 | 100,339 | 102,847 | 105,418 |
| 88,995 | 91,220 | 93,501 | 95,838 | 98,234 | 100,690 |
| - | - | - | - | - | 537,013 |
| 48,492 | 49,704 | 50,947 | 52,220 | 53,526 | 54,864 |
| - | - | - | - | - | - |
| 342,859 | 351,430 | 360,216 | 369,222 | 378,452 | 924,926 |
| 343,672 | 352,264 | 361,071 | 370,097 | 379,350 | (148,179) |
| 125,421 | 132,458 | 139,729 | 147,241 | 155,001 | 163,016 |
| 8,830,518 | 9,315,240 | 9,816,039 | 10,333,377 | 10,867,727 | 10,882,564 |
| | | | Reserve in Dollars | | 2,023 |
| | | | | | 4,053,000 |

EXHIBIT C

Estimating an Appropriate GHAD Reserve

ESTIMATING AN APPROPRIATE GHAD RESERVE

Uri Eliahu G.E., ENGEO Incorporated, June 1999

An important parameter in establishing initial GHAD budgets and in assessing the financial health of mature GHADs is the appropriate level of reserve needed to address probable future geologic events. The reserve must be unique to each GHAD, and must consider several factors, not all of which are geotechnical in nature.

As an initial approach, a loss history can be compiled based on records of actual losses that have occurred in the region in the last 20 years. If the last 20 years can be assumed to be representative of future years, this loss history can be distilled to obtain a current net present value (NPV) of the statistically-expected loss over a given time period. This can be expressed per dwelling unit, per parcel, or per dollar value of improvements. If, based on historic geologic and rainfall records, it is believed that the last two decades do not represent the full range of expected geologic activity, a correction factor can be applied to the calculated risk to arrive at the expected loss rate.



In converting the expected loss rate to an estimated reserve (**R**), consideration must be given to the following factors.

Number of assessed units (**n**) in the GHAD.

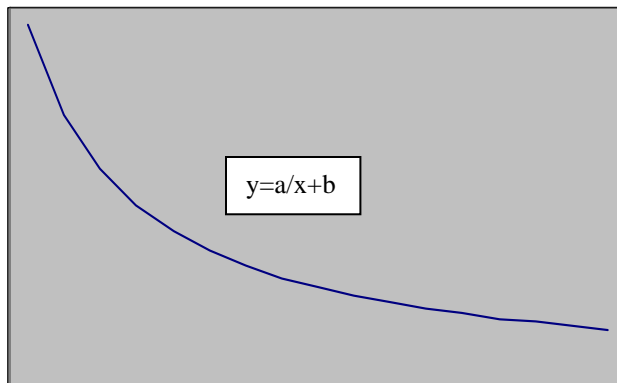
The reserve per dwelling unit (**R/n** or **average reserve**) should, in theory, diminish asymptotically with increasing unit count to a “floor” value.

Level of geotechnical risk (**g**) within the GHAD boundaries. Depending on geology, terrain, prior mitigation measures, grading techniques, irrigation and age, geotechnical risk may vary, even within a particular region.

Average value of assessed properties (**v**). In areas of high property values, repair or reconstruction of private improvements may be more costly and may require greater average reserves.

Relative density of construction (**d**). The number of units likely to be affected during a major geologic event will have an impact on the total reserve.

In consideration of the foregoing, an expression describing the average reserve may take the general hyperbolic form, $y = a/x + b$



Intuitively, this general expression may be applied to a GHAD reserve formula by substituting R/n for y , n for x , dv for a , and gv for b , to arrive at the relationship $R/n = dv/n + gv$ where:

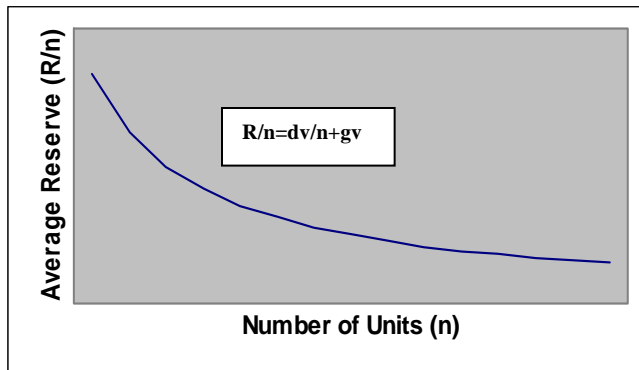
R is the total reserve

n is the total number of assessed parcels

v is the average value of each residence

g is the geotechnical risk factor

d is a density factor related to the maximum number of units expected to be impacted in a major geologic event (eg. landslide)



This formula can be simplified to $R = dv + gvn$ or $R = v(d + gn)$

To apply this to a specific situation, g can be estimated based on historical data as described above, and d can be estimated by comparing regional landslide sizes to average lot sizes. Preliminarily, it appears that d may range from approximately 2 to 10 and g may range from 0.001 to 0.01, depending on the physical characteristics of the assessed areas as described above.

