

May 3, 2024

Project No.
3586.002.023

Wiedemann Ranch GHAD Board of Directors
 Chair Candace Andersen
 Vice Chair Federal D. Glover
 Boardmember John M. Gioia
 Boardmember Diane Burgis
 Boardmember Ken Carlson

Wiedemann Ranch Geologic Hazard Abatement District
 651 Pine Street, Room 107
 Martinez, CA 94553-1229

Subject: Red Hawk Development
 Danville, California

**GEOLOGIC HAZARD ABATEMENT DISTRICT
 MONITORING – SPRING 2024**

Dear Chair Andersen and Boardmembers:

ENGEO is pleased to submit this monitoring report for the Red Hawk development, formerly the Podva Property, within the Wiedemann Ranch Geologic Hazard Abatement District (GHAD). This letter summarizes our observations made during our site visit on April 9, 2024, within the Red Hawk development in Danville, California. The previous fall 2023 monitoring event was completed in September 2023 (Reference 1). As described in the Podva Property Plan of Control (Reference 2), the purpose of this monitoring is to observe and report on the open space and associated improvements within the development. The Wiedemann Ranch GHAD has monitoring and maintenance responsibilities for the open-space parcels within the Red Hawk development. These parcels are listed in Table 1.

TABLE 1: Wiedemann Ranch GHAD Open-Space Parcels – Red Hawk Development

ASSESSOR'S PARCEL NUMBER (APN)	PARCEL LABEL	DESCRIPTION
208-810-021	Parcel A	Bioretention Basin
208-810-022	Parcel B	Open Space with Scenic Easement

SCOPE

Site monitoring included observation of the following features.

- Common area and open-space slopes located adjacent to improvements
- Concrete-lined surface drainage ditches
- Mechanically stabilized earth (MSE) retaining walls
- Maintenance roadways
- Storm drain inlets and trash rack
- Subdrain outlets
- Detention basin
- Bioretention areas
- Fencing, locks, and signage

COMMON AREA, OPEN-SPACE SLOPES, AND SWALES

The common area and open-space slopes were observed for evidence of slope instability, including landslides, earthflows, erosion, diverted drainage, or standing water. In general, we observed the open space and slopes to be in satisfactory condition. During this monitoring event, we observed that the site slopes in some locations were disturbed by animal burrowing activity (Figure 1, attached). This activity has resulted in surface voids and seasonal bare soil. We will continue to monitor these disturbed areas for instability in the future.

CONCRETE-LINED SURFACE DRAINAGE DITCHES

The concrete-lined drainage ditches were checked for accumulation of debris/sediment and for obvious distress such as cracking or shifting of the concrete. During this monitoring event, we observed minor soil and vegetation within the drainage ditches. Soil and vegetation will be cleaned as part of the routine GHAD maintenance. We also observed minor cracks and voids in the concrete-lined drainage ditches; however, the minor cracks do not appear to compromise the integrity of the ditches. As part of the routine maintenance, the minor cracks and voids will be resealed, as needed, to maintain ditch integrity.

MSE RETAINING WALLS

Retaining walls were inspected for significant cracking and damage. At the time of our monitoring, the MSE walls were in satisfactory condition and no visible distress was observed.

MAINTENANCE ROADWAYS

We observed the condition of the gravel-surfaced maintenance roads west of Red Tail Court and south of Wingfield Court, and in general, the roads appeared to be in good condition at the time of our monitoring. Vegetation removal is completed during scheduled routine GHAD maintenance.

The asphaltic concrete-surface roadway connecting Wingfield Court to the East Bay Regional Park District trailhead, west of the development, appeared to be in good condition at the time of our monitoring.

STORM DRAIN INLETS AND TRASH RACK

Storm drain inlets within the open-space area of the GHAD appear to be in relatively good condition. Some storm drain inlets have accumulated sediment and have overgrown vegetation in and around the inlets. As part of routine GHAD maintenance, the storm drain inlets will be cleared of vegetation.

A trash rack is located on the southeastern edge of Parcel B. At the time of our monitoring, the trash rack was in satisfactory condition and appeared to have adequate capacity.

SUBDRAIN OUTLETS

Subdrain outlet locations were observed and monitored during the site visit. Discharge levels flowing from the subdrain outlets are shown in Table A (attached).

DETENTION BASIN

A detention basin (Figure 1) is located at the end of Red Tail Court. Monitoring of the detention basin was conducted as part of the open-space monitoring. The observed conditions for the detention basin are described in the attached Red Hawk Development Detention Basin Site Monitoring and Maintenance Form. Contracted ongoing routine maintenance within the detention basin currently includes roadway maintenance, weed abatement, and woody vegetation removal. At the time of our visit, the detention basin appeared to be functioning properly and was in good condition. We noted in our fall monitoring report significant accumulation of sediment adjacent to the basin outlet structure. During this monitoring event, we observed that the accumulated sediment was naturally migrating through the basin (Site Condition A, Appendix A, Figure 1). The GHAD will continue to monitor and will remove the sediment, if needed.

BIORETENTION FACILITIES

We observed the condition of three bioretention areas adjacent to Midland Way (Figure 1). During our monitoring, the bioretention areas appeared to be free of accumulated standing water or debris and were functioning properly.

FENCING, LOCKS, AND SIGNAGE

The perimeter of the GHAD was checked for proper fencing, signage, and locks. At the time of our monitoring, the fencing, locks, and signage were in satisfactory condition.

We look forward to continuing our services on this monitoring program. If you have any questions concerning the observations made during this reconnaissance, please do not hesitate to contact us.

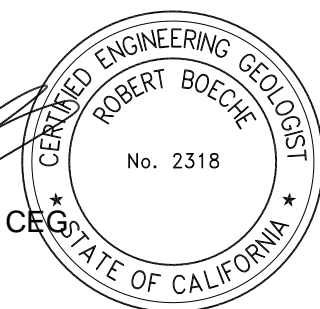

Sincerely,

ENGEO Incorporated



Greg Hudson

gh/rhb/cb



Robert H. Boeche, CEG

Attachments: Selected References
Table A - Subdrains
Monitoring Report - Detention Basin Site Monitoring and Maintenance Form
Appendix A – Site Condition Summary with Photographs
Figure 1 – Site Plan

SELECTED REFERENCES

1. ENGEO. 2023. Geologic Hazard Abatement District Monitoring – Fall 2023, Red Hawk, Danville, California. October 12, 2023. Project No. 3586.002.023.
2. ENGEO. 2016. Plan of Control, Podva Property, Danville, California. June 18, 2015, Revised January 7, 2016. Project No. 9160.000.001.

TABLE A
Subdrains

TABLE A: Subdrains

SUBDRAIN LABEL	FLOW (gallons/day)	COMMENTS
RW-1	0	Dry
S-4	456	Est. Pipe invert at bottom of SDDI
S-5	1,711	Est. UTA. pipe outlet not visible in storm drain inlet
S-6	0	Dry

LEGEND

- Est – Estimate
- UTM – Unable to monitor
- UTL – Unable to locate
- UTA – Unable to access

MONITORING REPORT

Red Hawk Development
Danville, CA

DETENTION BASIN OPERATIONS AND MAINTENANCE SITE MONITORING AND MAINTENANCE REPORT FORM

Inspector: Greg Hudson

Date: April 9, 2024

Weather Conditions: Sunny

Days since last rainfall: 4

Dry season?

Wet season? X

Basin Water Level: 6-12 inches

Noteworthy Sediment Accumulated since Last Monitoring Event: No

MONITORED CONTROL	YES	NO	N/A	COMMENTS/ SUGGESTED MAINTENANCE
1. Are inlet and outlet structures functioning properly, allowing the basin to drain and are they in satisfactory condition?	X			
2. Are access roads in satisfactory condition?	X			
3. Is all perimeter fencing in good condition without breaks, gaps, or damage?			X	

MONITORED CONTROL	YES	NO	N/A	COMMENTS/ SUGGESTED MAINTENANCE
4. Is the emergency outlet grate free of debris and is it in good condition?	X			
5. Is the embankment surrounding the basin in good condition without rills or failures?	X			
6. Is emerging woody vegetation less than 5 feet in height?	X			
7. Are embankment slopes protected with mulch or vegetation?	X			
8. Has water removal been undertaken in the last 3 months? If so, describe procedure.		X		

MONITORED CONTROL	YES	NO	N/A	COMMENTS/ SUGGESTED MAINTENANCE
9. Has sediment removal been undertaken in the last 3 months?		X		
10. If so, has it been tested as required in the Maintenance Manual?			X	
11. Is there evidence of chemical sheen or odor, contaminated runoff, litter or blowing debris in or near the basin?		X		
12. Do any pond devices require maintenance to provide more effective function?		X		
13. Are there signs of leaking irrigation systems?			X	

MONITORED CONTROL	YES	NO	N/A	COMMENTS/ SUGGESTED MAINTENANCE
14. Are there any signs of vandalism?		X		
15. Are mosquitoes evident?		X		
16. Has mosquito abatement been undertaken since the last monitoring event?		X		
17. Are there other remedial/repair tasks that should be undertaken in the near future?		X		Natural sediment migration in progress. Continue to monitor.
18. Is there any evidence or information received in the last 3 months to indicate a lengthy drain time?		X		

“No” answers to Items 1-7 or “Yes” answers to Items 8-18 may require a corrective action.

APPENDIX A

Site Condition Summary with Photographs

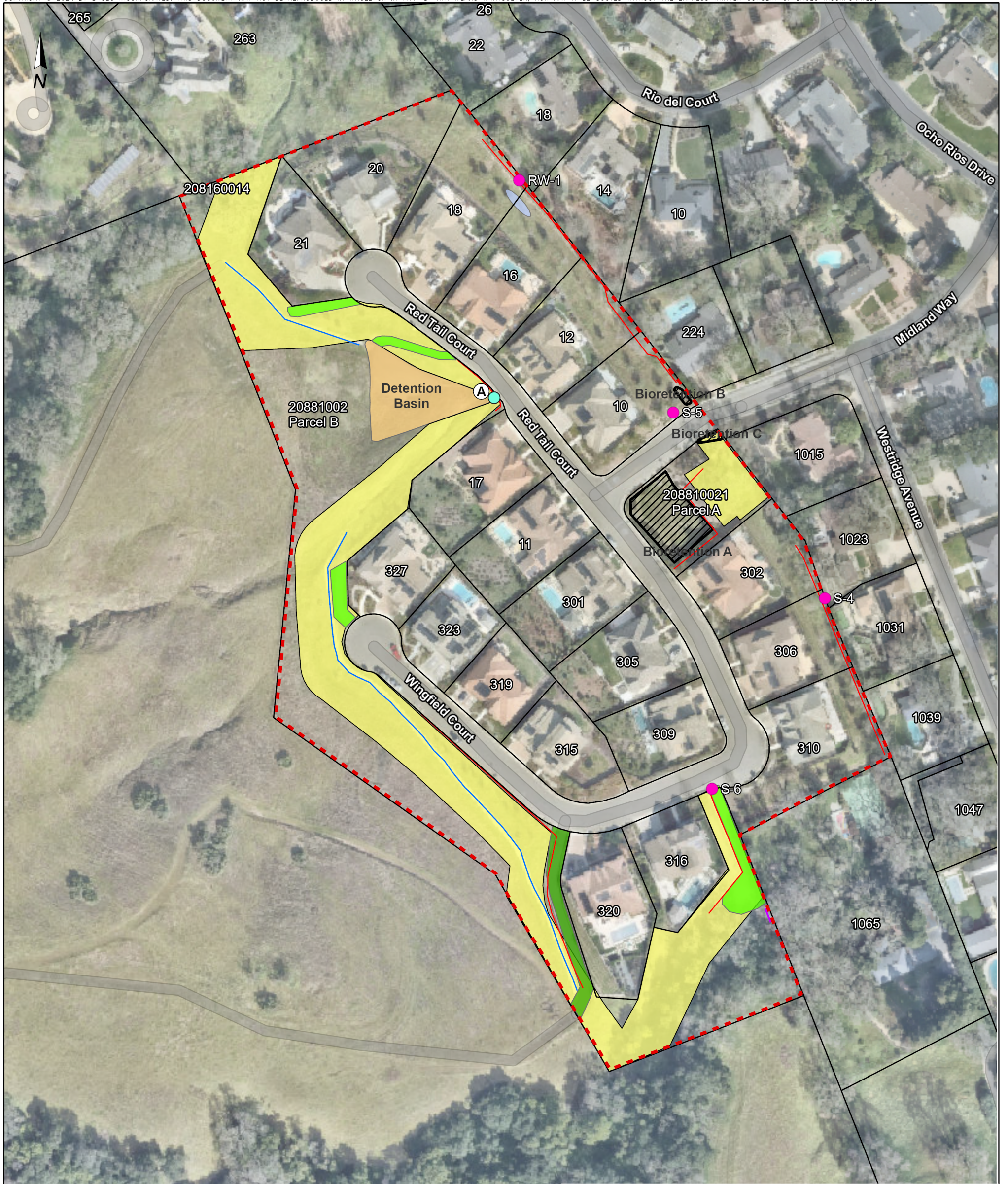
Appendix A
Site Condition Summary with Photographs
Wiedemann Ranch - Red Hawk

Site Condition: A
Observation Date: 04/09/2024
Description: Accumulated sediment at basin outlet. Natural sediment migration in progress.
Recommendation: Continue to monitor.
Field Representative: GH

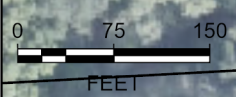


FIGURE 1

Site Plan



EXPLANATION	
ALL LOCATIONS ARE APPROXIMATE	
GHAD Boundary	Gravel Surface
Animal Burrow	Parcel Line (2022)
Vegetation Management Zone	
Grasses, Shrubs, and Trees	Retaining Wall
Grasses and Basin Maintenance	Concrete-Lined Drainage Ditch
Bioretention Basin	Trash Rack
Emergency Vehicle Access/Maintenance Road	
Paved Surface	Site Condition (Spring 2024)
	Basin Inlet/Outlet
	Subdrain Outlet



SITE PLAN - RED HAWK
 WIEDEMANN RANCH GHAD
 SAN RAMON, CALIFORNIA

PROJECT NO. :	3586.002.023	FIGURE NO.	1
SCALE:	AS SHOWN		
DRAWN BY:	CMG	CHECKED BY: RHB	