Project No.
3586.002.022

October 17, 2022

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

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 FALL 2022

Dear Chair Burgis and Boardmembers:

ENGEO is pleased to submit this monitoring report for the Red Hawk development, formerly the Podva Property, in Danville, California. The site-monitoring event occurred on September 23, 2022. As described in the Podva Property Plan of Control (Reference 1), the purpose of this monitoring is to observe and report on the open space and associated improvements within the Red Hawk development. The Wiedemann Ranch Geologic Hazard Abatement District (GHAD) has acquired monitoring and maintenance responsibilities for all the parcels within the Red Hawk development (Reference 2). These parcels are listed in Table 1.

TABLE 1: Wiedemann Ranch GHAD Accepted Parcels – Red Hawk Development

ASSESSOR'S PARCEL NUMBER (APN)	PARCEL LABEL	ADDRESS/Description
208-810-001	Lot 1	302 Wingfield Court
208-810-002	Lot 2	306 Wingfield Court
208-810-003	Lot 3	310 Wingfield Court
208-810-004	Lot 4	316 Wingfield Court
208-810-005	Lot 5	320 Wingfield Court
208-810-006	Lot 6	327 Wingfield Court
208-810-007	Lot 7	323 Wingfield Court
208-810-008	Lot 8	319 Wingfield Court
208-810-009	Lot 9	315 Wingfield Court
208-810-010	Lot 10	309 Wingfield Court
208-810-011	Lot 11	305 Wingfield Court
208-810-012	Lot 12	301 Wingfield Court
208-810-013	Lot 13	11 Red Tail Court
208-810-014	Lot 14	17 Red Tail Court
208-810-015	Lot 15	21 Red Tail Court

ASSESSOR'S PARCEL NUMBER (APN)	PARCEL LABEL	ADDRESS/Description
208-810-016	Lot 16	20 Red Tail Court
208-810-017	Lot 17	18 Red Tail Court
208-810-018	Lot 18	16 Red Tail Court
208-810-019	Lot 19	12 Red Tail Court
208-810-020	Lot 20	10 Red Tail Court
208-810-021	Parcel A	Bioretention
208-810-022	Parcel B	Open Space with Scenic Easement
		Red Tail Court
		Wingfield Court

SCOPE

Site monitoring included observation of the following features.

- Common area and open-space slopes located adjacent to improvements
- Access roadways
- 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, mudflows, erosion, diverted drainage, or standing water. In general, we observed the open space and slopes to be in a satisfactory condition. During our spring 2022 monitoring event, we noted that the swale on the north end of the property had been filled with soil and appeared to have been graded with equipment. The GHAD notified the responsible party that the added soil should be removed from the GHAD-maintained parcel and the swale should be restored to pre-disturbed grades. During this monitoring event, we observed that the soil removal and swale grade restoration had been completed. We also observed unauthorized bike trail construction and minor slope grade disturbances along the southern side of Lots 4 and 5 (Site Condition B, Appendix A, Figure 1). The GHAD has requested that the Homeowner's Association (HOA) inform homeowners that recreational and grading activities are prohibited within open-space area and slopes. The GHAD will backfill and restore slope grades.

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 the spring 2022 monitoring event, we noted that some segments of the drainage ditches needed clearing of minor soil and

vegetation. During this monitoring event, we observed the segment of ditch had been cleaned as part of the routine GHAD maintenance. We observed minor cracks and voids in the concrete ditches; however, the minor cracks do not appear to compromise the integrity of the concrete-lined drainage ditches. As part of the routine maintenance, the minor cracks and voids will be resealed, as needed, to maintain ditch integrity.

MECAHNICALLY STABILIZED EARTH (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. We noted in our spring 2022 monitoring that soil had been disturbed and a soil ramp had been built up at the end of the maintenance road south of Wingfield Court. During this monitoring event, we observed additional disturbed locations and ramps along the perimeter of the maintenance road easement (Site Condition C, Appendix A, Figure 1). The GHAD will remove the ramps and restore disturbed locations to its original state to maintain proper access and function of the maintenance road.

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

A number of 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 adjacent to 1065 Westridge Avenue. As summarized in Reference 3, on December 23, 2021, the creek overflowed the trash rack and the GHAD conducted cleanup operations on Parcel B and 1065 Westridge Avenue. At the time of our monitoring, the trash rack was in satisfactory condition and appeared to have adequate capacity.

SUBDRAINS

The following subdrain outlets were observed and monitored during the site visit. Discharge levels flowing from the subdrain outlets are summarized on Table 2.

TABLE 2: Subdrains

LABEL	FLOW (GALLONS/DAY)	COMMENTS
S-4	0	Outlets into storm drain inlet, wet
S-5	228 est.	Unable to monitor, outlet not visible in storm drain inlet, audible flow
S-6	0	Outlets into storm drain inlet, wet
RW-1	0	Dry

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.

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. During our Spring 2022 monitoring, we noted that a portion of the GHAD property fencing north of Lots 15 and 16 was leaning and damaged. During this monitoring event, we observed that the fence had been partially re-instated but still had portions of leaning and damaged fence (Site Condition A, Appendix A, Figure 1). The fencing will be repaired/replaced by the GHAD.

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

Jeffrey A. Adams, PhD, PE

REGISTERED PROFESSIONAL ENGINEER
JEFFREY A. ADAMS
No. 69633
CIVIL
STATE OF CALIFORNIA

gh/jaa/ca

Attachments: List of Selected References
Appendix A
Figure 1 – Site Plan
Detention Basin Site Monitoring and Maintenance Form

SELECTED REFERENCES

1. ENGEO. 2016. Plan of Control, Podva Property, Danville, California. June 18, 2015, Revised January 7, 2016. Project No. 9160.000.001.

2. ENGEO. 2021. Wiedemann Ranch Geologic Hazard Abatement District Plan of Control Acceptance, Red Hawk (Podva), Subdivision 9309, Danville, California. May 3, 2021. Project No. 9160.000.001.

3. ENGEO. 2022. Observation Services During Creek Debris Emergency Cleanup, Red Hawk Development Parcel “B” and 1065 Westridge Avenue, Danville, California. April 26, 2022. Project No. 3586.002.021.

APPENDIX A

Appendix A

Site Condition Summary with Photographs

Wiedemann Ranch - Red Hawk

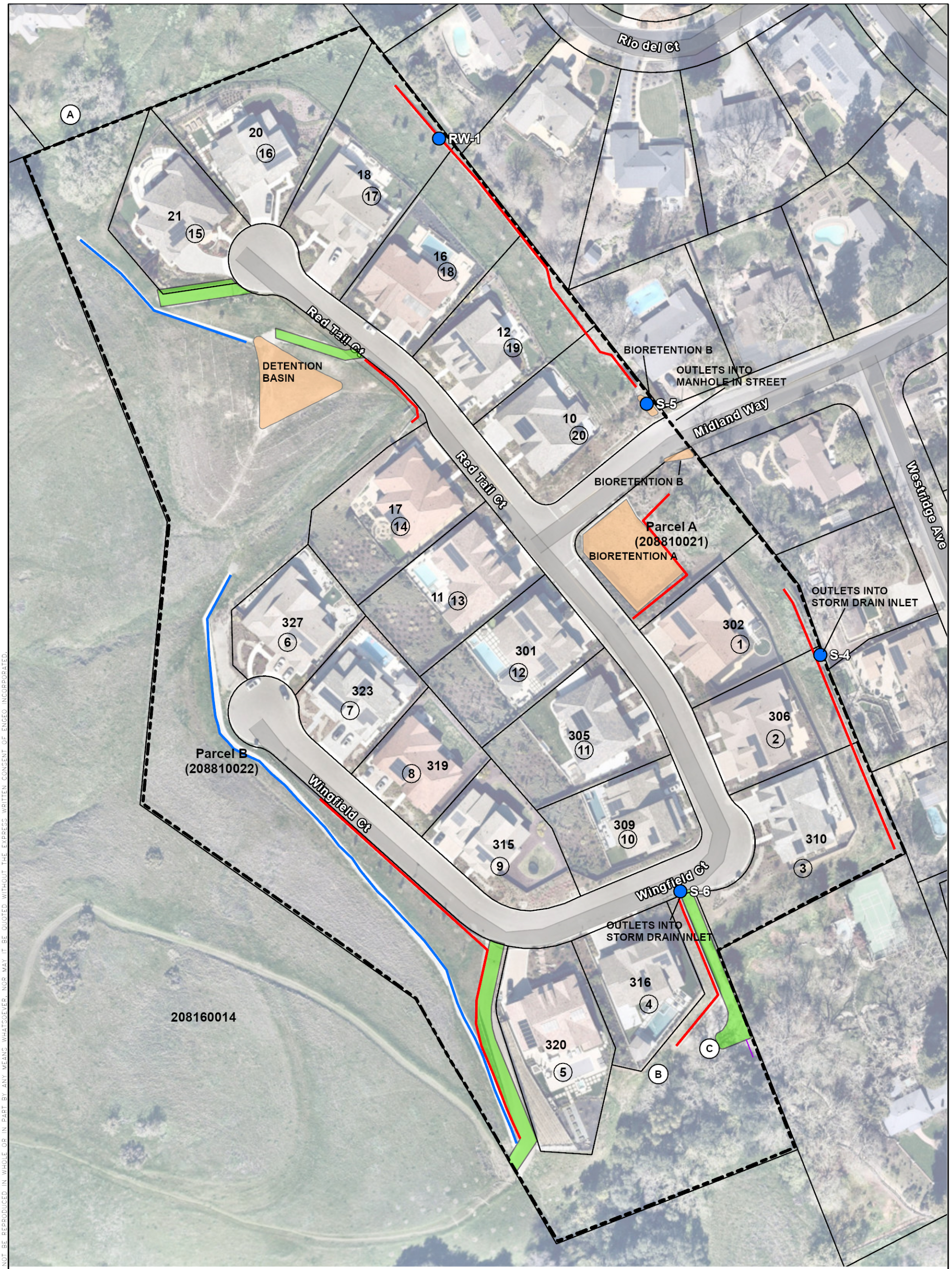
Site Condition:	A
Observation Date:	09/23/2022
Description:	Leaning/damaged fence.
Recommendation:	Fence to be repaired/replaced.
Field Representative:	GH

Site Condition:	B
Observation Date:	09/23/2022
Description:	Unauthorized bike trail construction and disturbed soil.
Recommendation:	Area-use to be restricted and disturbed soil to be backfilled and restored to original conditions.
Field Representative:	GH

Site Condition:	C
Observation Date:	09/23/2022
Description:	Unauthorized bike ramps and disturbed soil.
Recommendation:	Area to be backfilled and restored to original conditions.
Field Representative:	GH

FIGURE

Figure 1 – Site Plan



EXPLANATION

ALL LOCATIONS ARE APPROXIMATE

- GEOLOGIC HAZARD ABATEMENT DISTRICT BOUNDARY
- (A) SITE CONDITION (FALL 2022)
- (1) LOT NUMBER
- **320** ADDRESS
- SUBDRAIN OUTLET
- CONCRETE-LINED DRAINAGE DITCH
- RETAINING WALL
- TRASH RACK
- **208160014** ASSESSOR'S PARCEL NUMBER
- DETENTION BASIN/ BIORETENTION CELL
- MAINTENANCE ROAD

N

0 60 120

FEET

BASEMAP SOURCE: NEARMAP MAPPING SERVICE 2022

ENGEO Expect Excellence

SITE PLAN

WIEDEMANN RANCH GHAD - RED HAWK DEVELOPMENT

DANVILLE, CALIFORNIA

PROJECT NO. : 03586.002.022

SCALE: AS SHOWN

DRAWN BY: MAT | CHECKED BY: HR

FIGURE NO. 1

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PATH: G:\DRAFTING\PROJECTS\3586\3586002022\GHAD-WIEDEMANN RANCH-REDHAWK\3586002022-GHAD-WIEDEMANN-REDHAWK.APRX
LAYOUT: SITE PLAN USER: MTORRES

ORIGINAL FIGURE PRINTED IN COLOR

MONITORING REPORT

Red Hawk Development
Danville, CA

DETENTION BASIN OPERATIONS AND MAINTENANCE
SITE MONITORING AND MAINTENANCE
REPORT FORM

Inspector: Greg Hudson Date: September 23, 2022
Weather Conditions: Sunny
Days since last rainfall: 1 Dry season? X Wet season?
Basin Water Level: Dry
Noteworthy Sediment Accumulated since Last Monitoring Event: NA

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			Weed abatement needed on access road
3. Is all perimeter fencing in good condition without breaks, gaps, or damage?			X	
4. Is the emergency outlet grate free of debris and is it in good condition?	X			

MONITORED CONTROL	YES	NO	N/A	COMMENTS/ SUGGESTED MAINTENANCE
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		
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	

MONITORED CONTROL	YES	NO	N/A	COMMENTS/ SUGGESTED MAINTENANCE
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	
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		

MONITORED CONTROL	YES	NO	N/A	COMMENTS/ SUGGESTED MAINTENANCE
17. Are there other remedial/repair tasks that should be undertaken in the near future?		X		
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.