

Project No.
7993.002.024

May 14, 2025

Ms. Laurie Sucgang
Fallon Crossing Geologic Hazard Abatement District
100 Civic Plaza
Dublin, CA 94568

Subject: Chateau Development
Dublin, California

GEOLOGIC HAZARD ABATEMENT DISTRICT MONITORING - SPRING 2025

Reference: Berlogar Stevens & Associates. 2011. Plan of Control Fallon Crossing GHAD, Tassajara Road, Dublin, California. Job No. 3058.000. May 25, 2011.

Dear Ms. Sucgang:

ENGEO is pleased to submit this monitoring report for the Fallon Crossing Geologic Hazard Abatement District (GHAD). The Chateau Development (Figure 1) was accepted for transfer of maintenance responsibilities for GHAD-maintained facilities to the Fallon Crossing GHAD by the Board of Directors on April 16, 2024, by adoption of Resolution No. 02-24. As described in the above-referenced Fallon Crossing Plan of Control, the purpose of this monitoring was to observe and report on the conditions of the open space and associated improvements within the Chateau development (Figure 2). This monitoring event was completed on May 6, 2025.

SCOPE

Site monitoring included observation of the following features.

- Open-space slopes located adjacent to improvements
- Retaining walls
- Drainage courses/swales
- Concrete surface drainage ditches
- Debris benches
- Storm drain system improvements
- Subdrain outlets installed during mass grading
- Detention basins
- Emergency vehicle and maintenance access roadways
- Fences, locks, and signage

OPEN-SPACE SLOPES, DEBRIS BENCHES, AND SWALES

Open-space slopes, debris benches, and swales were observed for evidence of slope instability, including landslides, mudflows, erosion, diverted drainage, or standing water. It should be noted that there are a number of unrepaired landslides within the ungraded portions of the GHAD-owned parcels. These landslides have moved in the past and will likely move again in the future when wet conditions occur. The landslides within the ungraded portion of the site appear to be in a similar condition to that described during original development of the site.

During this monitoring event, we observed that the site slopes at some locations were disturbed by animal burrowing activity. This activity can result in surface voids and seasonal bare soil. We will continue to monitor these disturbed areas in the future for instability.

RETAINING WALLS

In general, the retaining walls were observed to be in good condition on the GHAD-accepted parcels. No maintenance measures are recommended at this time.

DRAINAGE COURSES

The channel of Moller Creek runs along the northwestern boundary of the GHAD-owned open space (Parcel H). In general, the creek has a moderately to highly incised channel with moderate to dense vegetation cover. Some segments of the creek banks are over-steepened due to previous downcutting, but are generally in a stable condition. We expect that local creek bank failures will continue to occur in the future as the creek banks adjust to lowered creek bed levels. As stated in the Plan of Control, the GHAD shall not have responsibility to control isolated or remote slope instability that do not involve damage to or pose a significant threat to damage site improvements, with the exception of the mitigation/riparian enhancement area within Parcel H. During this monitoring event, we did not observe areas of the creek channels with the potential to impact site improvements.

CONCRETE SURFACE DRAINAGE DITCHES

Concrete-lined drainage ditches were checked for accumulation of debris/sediment and for obvious distress, such as cracking or shifting of the concrete. As shown in Figure 2, there are approximately 4,833 linear feet of concrete-lined drainage ditches within the Fallon Crossing GHAD – Chateau Development. As part of the scheduled routine site maintenance, the GHAD removes vegetation, soil, and other unwanted material from the concrete-lined ditches. We observed minor cracks in the concrete ditches. At the time of the site visit, these minor cracks did not appear to compromise the integrity of the concrete-lined drainage ditches and will be repaired, as needed.

STORM DRAIN IMPROVEMENTS

Storm drain inlets and outlets within the open-space area of the GHAD appeared to be relatively clear of debris. The storm drain inlets are cleaned as part of annual routine maintenance.

SUBDRAIN OUTLETS

Eight subdrain outlets were observed and monitored during this monitoring event. Discharge levels flowing from the subdrain outlets are shown in Table A. One subdrain outlet (SD-7) was unable to monitor, as noted in Table A. As needed, the GHAD will maintain subdrain outlets for future monitoring.

DETENTION BASINS

Two water quality basins/ponds and one hydromodification basin/pond are located within the boundaries of the Fallon Crossing GHAD – Chateau Development. In the above-referenced Plan of Control, the basins are identified as Upper Water Quality Pond, Lower Water Quality Pond, and Hydromodification Pond (Figure 2). Monitoring of the basins was conducted as part of the open-space monitoring. The observed conditions for the water quality and hydromodification basins are described in the attached monitoring reports.

EMERGENCY VEHICLE AND MAINTENANCE ACCESS ROADWAYS

We observed the conditions of the gravel-covered access roadways within the GHAD, and the gravel-surfaced roadways appeared to be in good condition. Vegetation removal and ongoing vegetation management of the access roadways are included in the GHAD's scheduled annual maintenance.

During this monitoring event, distress cracks were observed on the surface of the access roadway directly adjacent to the rear property slope of 3581 Syrah Drive (Site Condition A, Appendix A, Figure 2), and a portion of the rear property fence was tilted in the downslope direction. The distress cracks and tilted fence are an indication of soil creep on the adjacent slope caused by irrigation of the existing slope vegetation/landscaping. Soil creep involves the downslope movement of expansive soil due to wetting and drying of the soil. Fluctuations in moisture regimes of expansive soil may result in movement of soil related to shrinkage and swelling, which can result in an adverse impact to overlying improvements. The GHAD will continue to monitor this condition during future monitoring.

FENCES, LOCKS, AND SIGNAGE

Fences, locks, and signage within the GHAD were checked for function, damage, or loss and, generally, appeared to be in good condition during this monitoring event.

If you have any questions concerning the observations made during this reconnaissance, please do not hesitate to contact us.

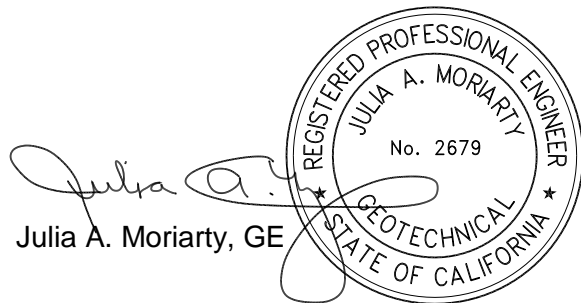
Sincerely,

ENGEO Incorporated



Greg Hudson

gh/jam/ar



Julia A. Moriarty, GE

Attachments: Table A – Subdrains
Figures 1 and 2
Appendix A – Site Conditions
Monitoring Reports - Water Quality and Hydromodification Basins

TABLE A

Subdrains

TABLE A: Subdrains

SUBDRAIN LABEL	FLOW (gallons/day)	COMMENTS
SD-1	0	Dry
SD-2	11	EST, UTA, outlet visible in drainage inlet
SD-3	0	Wet, outlet visible in drainage inlet
SD-4	0	Dry, outlet visible in drainage inlet
SD-5	11	EST, UTA, outlet visible in drainage inlet
SD-6	11	EST, UTA, outlet visible in drainage inlet
SD-7	-	UTM, outlet obstructed by vegetation, visible drainage
SD-8	22	

LEGEND:

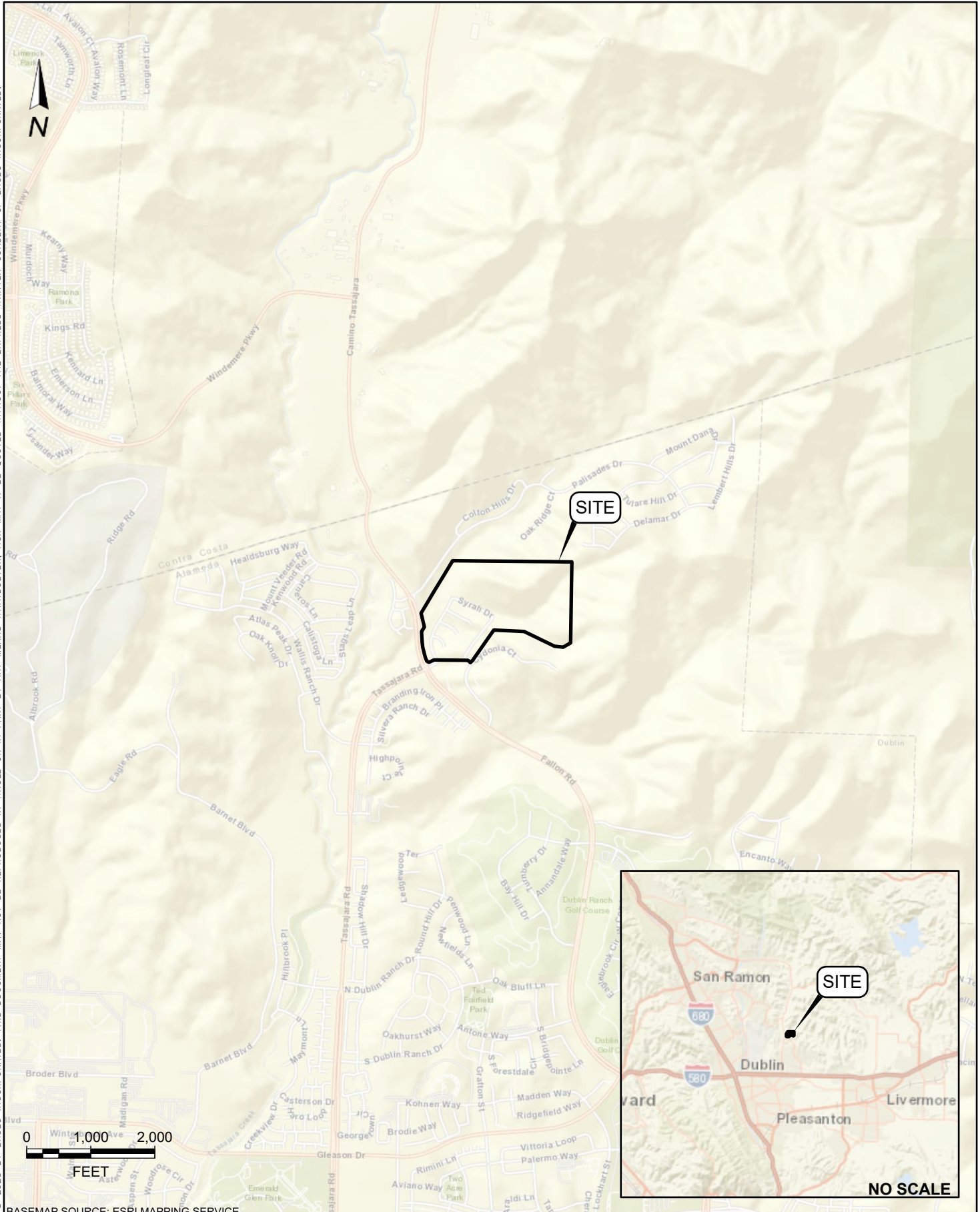
EST – Estimate
 UTM – Unable to monitor
 UTL – Unable to locate
 UTA – Unable to access

FIGURES

Figure 1: Vicinity Map

Figure 2: Site Plan – Chateau Development

COPYRIGHT © 2025 BY ENGEO INCORPORATED. THIS DOCUMENT MAY NOT BE REPRODUCED IN WHOLE OR IN PART BY ANY MEANS WHATSOEVER, NOR MAY IT BE QUOTED WITHOUT THE EXPRESS WRITTEN CONSENT OF ENGEO INCORPORATED.



BASEMAP SOURCE: ESRI MAPPING SERVICE



VICINITY MAP
FALLON CROSSING GHAD
DUBLIN, CALIFORNIA

PROJECT NO. :	7993.002.024
SCALE:	AS SHOWN
DRAWN BY: LM	CHECKED BY: GH

FIGURE NO.
1



EXPLANATION
ALL LOCATIONS ARE APPROXIMATE

GHAD Boundary

A

Site Condition (Spring 2025)

Culvert

Basin Inlet/Outlet

Subdrain Outlet

Drainage Ditch

Gravel Surface

Grasses and Basin Maintenance

Slope Maintenance

APPENDIX A

Site Conditions

Site Condition: A
Observation Date: 05/06/2025
Description: Distress cracking along EVA road surface
adjacent to homeowner property slope.
Recommendation: Continue to monitor.
Field Representative: GH



MONITORING REPORTS

Water Quality and Hydromodification Basins

MONITORING REPORT

Upper Water Quality Pond
Fallon Crossings GHAD - Chateau Development
Dublin, CA

DETENTION BASIN OPERATIONS AND MAINTENANCE SITE MONITORING AND MAINTENANCE REPORT FORM

Inspector: Greg Hudson **Date:** May 6, 2025
Weather Conditions: Sunny
Days since last rainfall: 14
Basin Water Level: 0 inches
Dry season/Wet season: Wet
Noteworthy Sediment Accumulated since Last Monitoring Event: None

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	
4. Have the debris racks been cleaned and are they in good condition?	X			
5. Are the embankments surrounding the basin in good condition without rills or failures?	X			
6. Is woody vegetation less than 5 feet in height?	X			
7. Are embankment slopes protected with mulch or vegetation?			X	Basin perimeter comprised of MSE retaining wall.

MONITORED CONTROL	YES	NO	N/A	COMMENTS/SUGGESTED MAINTENANCE
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. Is there evidence of chemical sheen or odor, contaminated runoff, litter or blowing debris in or near the basin?		X		
11. Do any basin devices require maintenance to provide more effective function?		X		
12. Are there signs of leaking irrigation systems?			X	
13. Are there any signs of vandalism?		X		
14. Are mosquitoes evident?		X		
15. Has mosquito abatement been undertaken since the last monitoring event?		X		
16. Are there other remedial/repair tasks that should be undertaken in the near future?		X		
17. 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 8-17 may require corrective action.

MONITORING REPORT

Lower Water Quality Pond
Fallon Crossings GHAD - Chateau Development
Dublin, CA

DETENTION BASIN OPERATIONS AND MAINTENANCE SITE MONITORING AND MAINTENANCE REPORT FORM

Inspector: Greg Hudson **Date:** May 6, 2025
Weather Conditions: Sunny
Days since last rainfall: 14
Basin Water Level: 0 inches
Dry season/Wet season: Wet
Noteworthy Sediment Accumulated since Last Monitoring Event: None

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	
4. Have the debris racks been cleaned and are they in good condition?	X			
5. Are the embankments surrounding the basin in good condition without rills or failures?	X			
6. Is woody vegetation less than 5 feet in height?	X			Existing tree within basin. Tree does not significantly impact basin capacity; however, the GHAD will continue to monitor in the future and will remove if basin capacity is affected by tree growth.
7. Are embankment slopes protected with mulch or vegetation?			X	Basin perimeter comprised of MSE retaining wall and riprap spillway.

MONITORED CONTROL	YES	NO	N/A	COMMENTS/SUGGESTED MAINTENANCE
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. Is there evidence of chemical sheen or odor, contaminated runoff, litter or blowing debris in or near the basin?		X		
11. Do any basin devices require maintenance to provide more effective function?		X		
12. Are there signs of leaking irrigation systems?			X	
13. Are there any signs of vandalism?		X		
14. Are mosquitoes evident?		X		
15. Has mosquito abatement been undertaken since the last monitoring event?		X		
16. Are there other remedial/repair tasks that should be undertaken in the near future?		X		
17. 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 8-17 may require corrective action.

MONITORING REPORT

Hydromodification Pond
Fallon Crossings GHAD - Chateau Development
Dublin, CA

DETENTION BASIN OPERATIONS AND MAINTENANCE SITE MONITORING AND MAINTENANCE REPORT FORM

Inspector: Greg Hudson **Date:** May 6, 2025
Weather Conditions: Sunny
Days since last rainfall: 14
Basin Water Level: 0 inches
Dry season/Wet season: Wet
Noteworthy Sediment Accumulated since Last Monitoring Event: None

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	
4. Have the debris racks been cleaned and are they in good condition?	X			
5. Are the embankments surrounding the basin in good condition without rills or failures?	X			
6. Is woody vegetation less than 5 feet in height?	X			Existing tree within basin. Tree does not significantly impact basin capacity; however, the GHAD will continue to monitor in the future and will remove if basin capacity is affected by tree growth.
7. Are embankment slopes protected with mulch or vegetation?	X			

MONITORED CONTROL	YES	NO	N/A	COMMENTS/SUGGESTED MAINTENANCE
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. Is there evidence of chemical sheen or odor, contaminated runoff, litter or blowing debris in or near the basin?		X		
11. Do any basin devices require maintenance to provide more effective function?		X		
12. Are there signs of leaking irrigation systems?			X	
13. Are there any signs of vandalism?		X		
14. Are mosquitoes evident?		X		
15. Has mosquito abatement been undertaken since the last monitoring event?		X		
16. Are there other remedial/repair tasks that should be undertaken in the near future?		X		
17. 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 8-17 may require corrective action.