

4 April 2025

**Our Ref:** 1222044-15  
**WR:** 21958

Mr Gerry Borghesi  
10-12 View Point Road  
MCCRAE VIC 3938

Dear Mr Borghesi,

**RE: 10-12 View Point Road MCCRAE**

Civiltest Pty Ltd attended the abovementioned site on

- ☐ 6 January 2025 to assess the landslide that occurred earlier that morning.
- ☐ 20 March 2025 to assess the further landslide that occurred on 14 January 2025.

Upon inspection of the site, it was observed that the location of the landslide appears to be a natural gully, perhaps even a very old landslide site based on the concave shape of the surrounding topography. The landslide location has a steep angle of repose, although not dramatically steeper than the rest of the surrounding area. At the time of inspection on 6 January 2025, the existing retaining wall appeared stable after the landslide, although this would end up collapsing the following week during the second landslide on 14 January 2025.



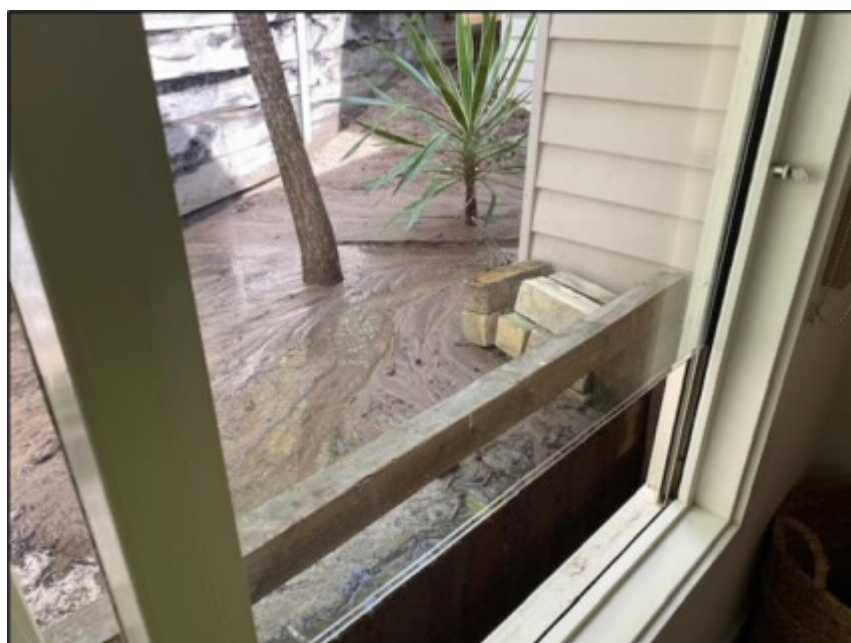
**Photograph 1:** Conditions at the time of the site visit on 6 January 2025



**Photograph 2:** Water flow observed downslope of 6 January 2025 landslide, originating from base of landslide headscarp

At the time of the 6 January inspection, a steady stream of groundwater was observed to be emanating from the lower section of the headscarp, approximately 15-20 litres per minute (not directly measured) downstream flow, shown in Photograph 2. The base of the headscarp was observed to be approximately 4-5 metres below the ground surface level behind the retaining wall. The soils in the immediate vicinity of the base of the headscarp were observed to be moist or wet, and the soils above the level where the groundwater was emanating were observed to be dry.

The streamflow was making its way down to the property at 3 Penny Lane (Photograph 3), which at the time was only partially damaged (Photograph 4).



**Photograph 3:** Streamflow from scarp (photograph taken from inside 3 Penny Lane)





**Photograph 4:** Damage to 3 Penny Lane property from 6 January 2025 landslide

The streamflow made its way under the house at 3 Penny Lane, as shown in Photographs 5 and 6. The apparent erosion grooves on the soil surface under the house indicate that water had been flowing before the 6 January landslide occurred, perhaps for weeks or much longer, although it is hard to determine exact timeframes. The erosion could also have occurred in stages over a much longer timeframe, as a result of intermittent streamflow occurring during periods where larger volumes of water are introduced to the channel upslope that ended up causing the landslide.



**Photograph 5:** Grooves observed in the surface underneath 3 Penny Lane





**Photograph 6:** Deposited sediment under 3 Penny Lane from streamflow

The site was visited again ten weeks later on 20 March 2025. The headscarp at this time (after the second landslide) is shown in Photograph 7. A close inspection could not be conducted due to access/safety issues. The scarp was observed from the adjacent garden area. No streamflow was observed downstream of the headscarp at the time of inspection, and the client indicated that the streamflow had subsided to around 12 litres per minute at most.



**Photograph 7:** Site conditions on 20 March 2025

After observing the site on 6 January 2025 and 20 March 2025, it is evident that elevated pore pressure in the subsurface soils in the location of the landslide is a major contributing factor to the two landslides that have occurred in this area. Based on the natural contours of the landslide location and surrounding area, it appears that the landslide location acts as a natural gully to which groundwater is directed. This would include sub-surface spring water, infiltrated stormwater, and damaged water assets and services as potential sources of groundwater being directed to the gully. The ongoing landslide risk in the area will be highly dependent on the volume of groundwater that is introduced to the gully at any given time. Additionally, the existence of loose soil and lack of deep rooted trees in the gully could facilitate the right conditions for elevated groundwater flow to trigger landslips. Due to the depth of groundwater seepage, trees that are large with deep strong roots would have been required to make a meaningful difference to the landslide risk of the gully.

The inspection observations reflect the conditions of the site on the dates 6 January and 20 March 2025, NOT the immediate moments after the landslides, or any other dates. The conclusions made in this report only reflect the observations made during these two inspections, combined with Civiltest's general knowledge of the site.

Should you require any further information regarding this matter, please do not hesitate to contact me (Daniel Tolan) at our Mornington office.

**REPORT PREPARED BY:****REPORT REVIEWED BY:**

I/S

Irrelevant &amp; Sensitive

**DANIEL TOLAN**  
**BEng (Hons)**  
**GEOTECHNICAL ENGINEER**  
**CIVILTEST PTY LTD**

**JINKE YU**  
**BEnv (Civil) MEng(Civil) MIEAust CPEng NER RPEV RPEQ)**  
**SENIOR GEOTECHNICAL ENGINEER**  
**CIVILTEST PTY LTD**

**REF:** DT/ws/jy/sb