IN THE MATTER OF THE INQUIRIES ACT 2014

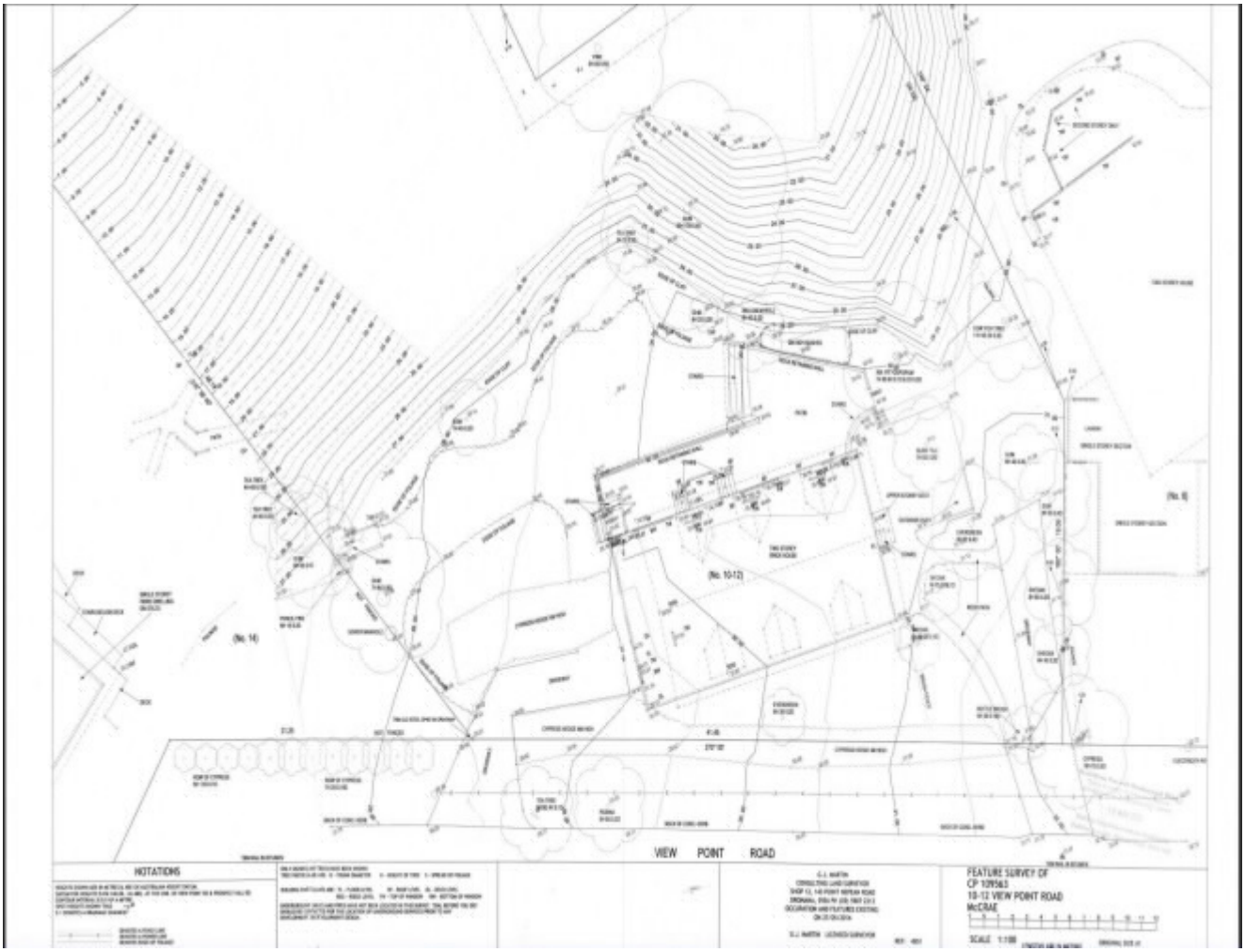
AND

IN THE MATTER OF THE BOARD OF INQUIRY INTO THE MCCRAE LANDSLIDES

ANNEXURES TO WITNESS STATEMENT OF GERRARD RAYMOND BORGHESI

GB-1

“Feature survey of the Property”

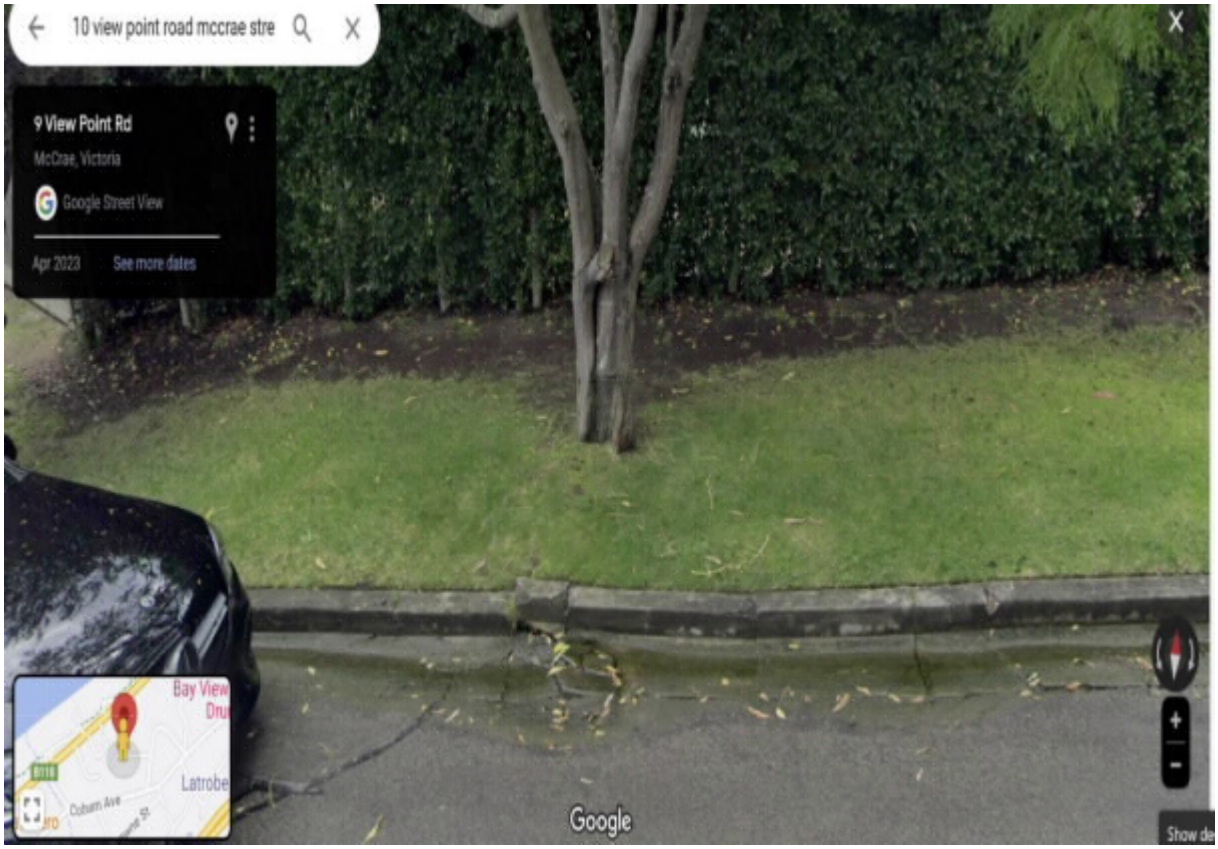


GB-2

“Photo of the Culvert”

GB-3

“Image of the cracked northern kerb of View Point Road”



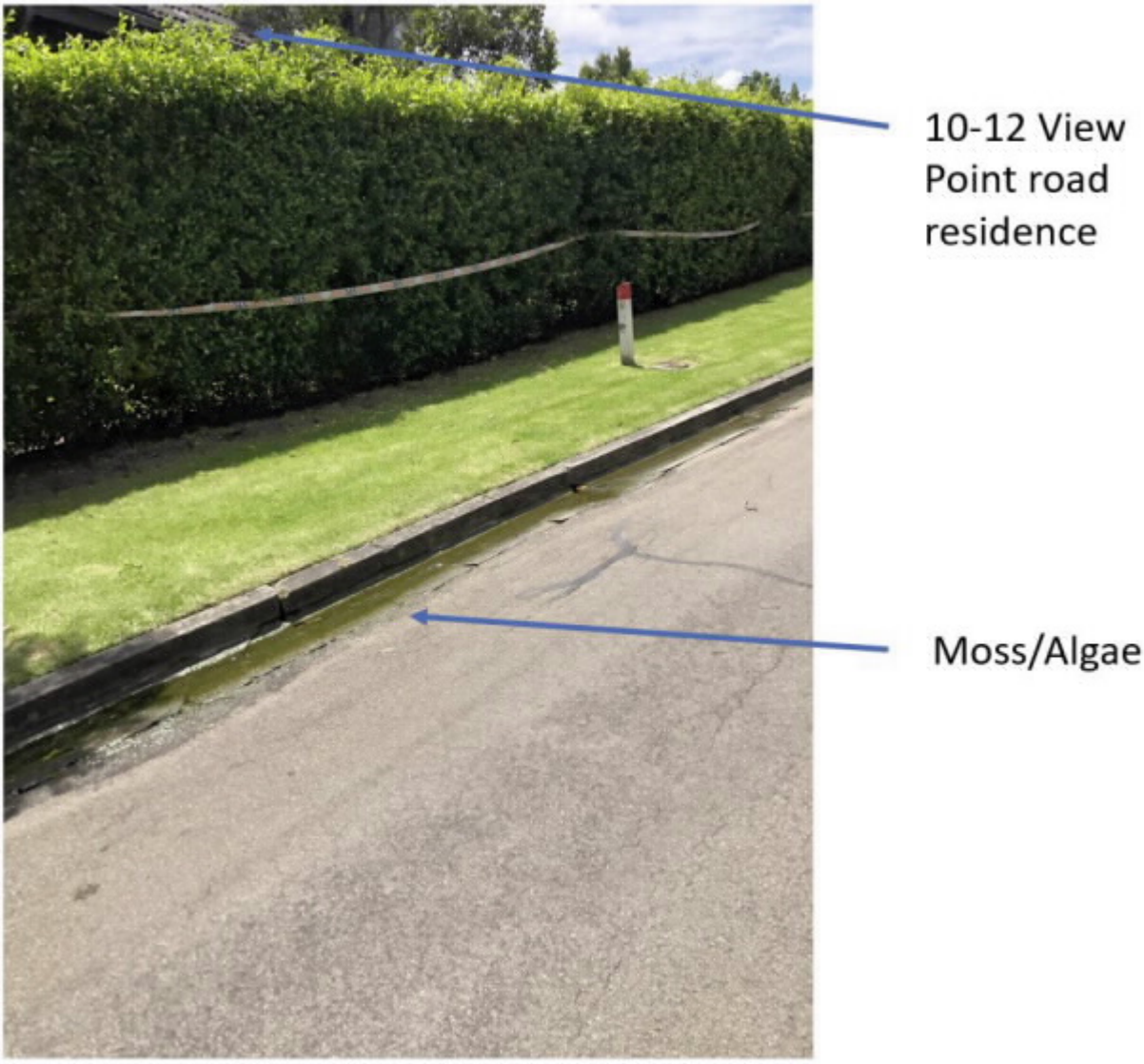
GB-4

"Seeps on Hillside"

Picture 7 – looking South over landslide
showing seeps A and B flanking the landslide

GB-5

"Moss and Algae"



GB-6

Google image of the speedhump with my notations

GB-7

“Saturated hillside where the aggie drains were installed”

GB-8

“Aggie drains’

GB-9

Photos of Council Works on View Point Road

GB-10

CivilTest Pty Ltd Technical Memorandum dated 21 December 2023

CIVILTEST PTY LTD
SOIL TESTING & GEOTECHNICAL CONSULTANTS
ABN 91 006 855 689 ACN 006 855 689

21 December 2023

Our Ref: 1222044-6
WR: 16736

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

Dear Mr Borghesi,

RE: 10-12 View Point Road MCCRAE - Technical Memorandum

At your request, Civiltest Pty Ltd attended the abovementioned site on 29 November, 2 December 2022 and 4 December 2023, to conduct a geotechnical assessment of the landslide that occurred on 15 November 2022. The aim of the assessment was to determine the nature, extent and causes of the landslide.

1. DESKTOP STUDY:

1.1. Geology and Groundwater

The site is in a geological area of Devonian Granite bordering on Quaternary Aeolian. Based on Civiltest's experience in the area, the typical natural soil profile would consist of topsoil underlain by Aeolian silty SAND / SAND, followed by residual soil of GRANITE, typically consisting of very stiff sandy CLAY and very dense clayey SAND, which grades into weathered GRANITE with depth. Deep boreholes drilled at 14-16 View Point Road McCrae in 2014 revealed a deep residual soil profile before weathered GRANITE was encountered.

Based on a groundwater resource report search provided by DELWP, the depth to the water table at this site would be 20 to 50 metres below the surface level. A permanent groundwater table is not expected to be present near the surface, however perched water is expected to occur at the interface between the Aeolian SAND formation and the granitic residual soil, i.e., sandy CLAY and/or clayey SAND.

1.2. Rainfall Statistics

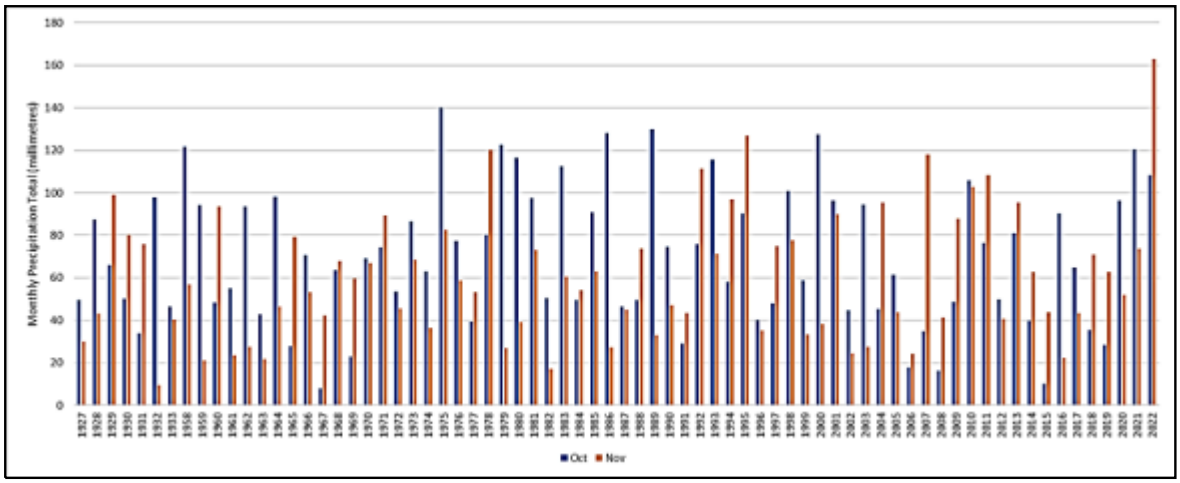


Figure 1: Historical October & November Precipitation Data

Based on the rainfall data obtained from The Australian Bureau of Meteorology (from the nearest Meteorology station at Rosebud), the October and November 2022 monthly precipitation data has been compared with all available data since 1927.

Month	Average Monthly Precipitation(mm) 1927-2022	Monthly Precipitation (mm) 2022
October	70.0	108.4
November	60.5	163.0

Table 1: Average Monthly Precipitation, October & November

The monthly precipitation in October and November 2022 was much higher than the average monthly precipitation in these months since 1927, with the monthly precipitation in November 2022 being almost triple the historical average.

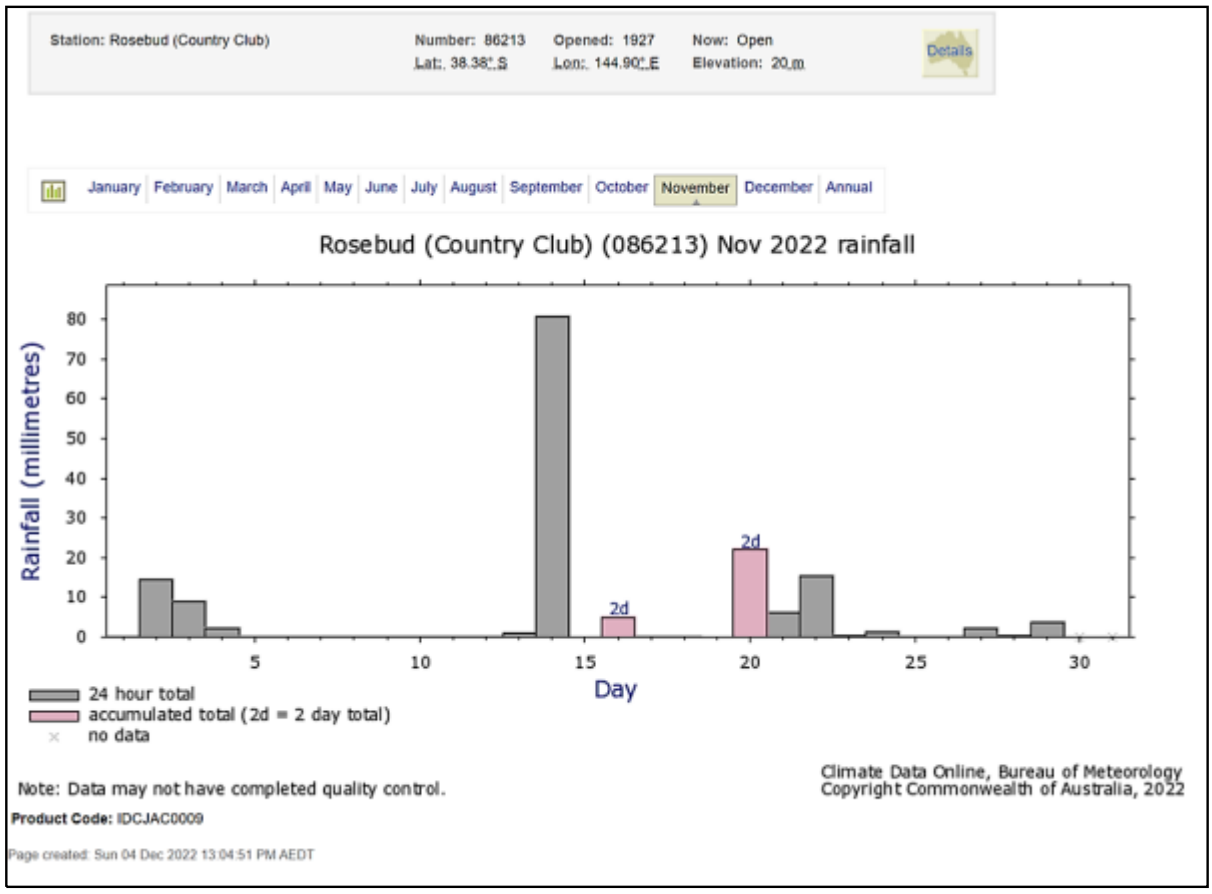


Figure 2: Daily Precipitation November 2022- Rosebud Station

The daily precipitation data for November 2022 revealed that on 14 November 2022, the precipitation for this single day exceeded 80mm, which was more than the historical November monthly average (since 1927) of 60.5mm. The property owner reported that the landslide took place around 6am on 15 November 2022. The size of the landslide reported by the owner was approximately 8m wide by 5m long. Further investigation including a drone survey was conducted to assess the extent of the landslide.

2. NATURE AND EXTENT OF THE LANDSLIDE

The inspected landslide can be classified as a Translational Earth FLOW, and this consisted of moist to wet sandy material and fine topsoil, which occurred along a distinctive planar surface of weakness. This planar surface of weakness is likely to be the interface of the upper Aeolian sandy material and the granitic residual soil, where the residual soil would be clayey and have lower permeability. Perched water could form at the abovementioned sandy material and granitic soil interface, which significantly reduces the shear strength of the material and forms a weak shear plane. The client has reported "three natural seeps" on the slope. The exposed batter near the top of the slide still showed moisture ingress at the surface at the time of the site inspection on 29 November 2022, which was conducted on a dry day. This is strong evidence of perched water forming at the materials interface due to the soil profile and topography of the area.

Figure 3: View looking down on the landslide

Figure 4: View looking up at the landslide

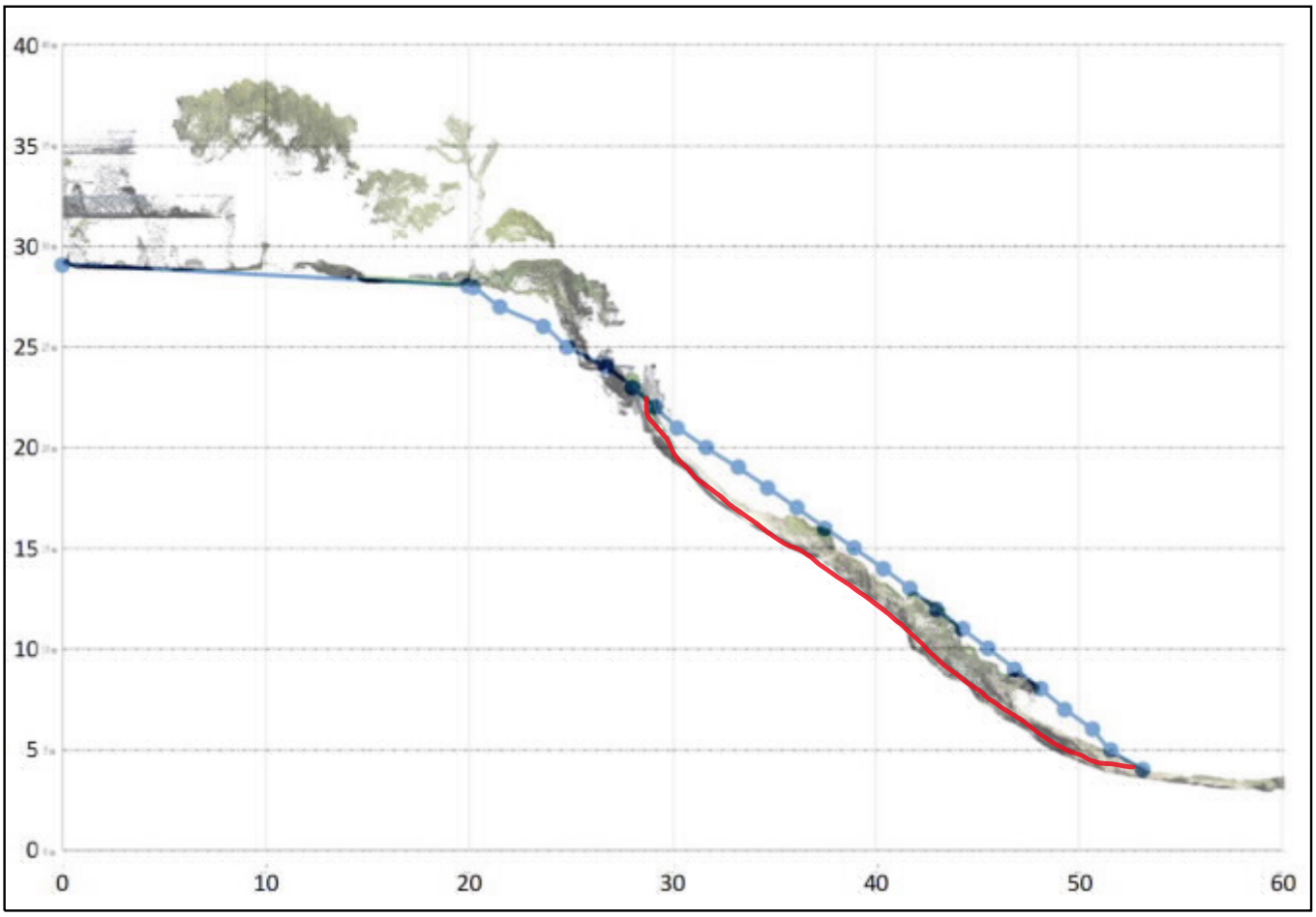


Figure 5: Before and After the Landslide, Section Comparison

A feature survey was provided by the client showing the site levels before the landslide took place. The feature survey was conducted by G.J. Martin Consulting Land Surveyors on 11 November 2022 for CP109562 and CP109563, 10-12 and 14-16 View Point Road MCCRAE.

A drone topographical survey was conducted by Civiltest on 2 December 2022.

The two surveys have been overlaid and a section (A-A) cutting through the location of the landslide has been obtained from both surveys to estimate the extent of the Earth FLOW. The section overlay is shown on **Figure 5** above. The blue dotted line represents the ground levels before the landslide. The background image showing trees represents the surface levels after the landslide event. The red line represents the estimated extent of the Translational Earth FLOW. The width of the section is approximately 8m from the top and the width varies with distance from the top. The material between the red line and blue dotted line is the residual disturbed earth that stopped moving at the middle to lower section of the slope, which did not flow down to the base of the slope. It should be noted that the contours provided in the abovementioned feature survey are at 1m intervals. The owner suggested the original slope was uniform, which is reflected in the feature survey. The original slope was approximately 35 degrees with the horizontal. It is possible that the feature survey has produced higher than actual ground levels due to the previous vegetation cover in the area and the steepness of the site, causing access issues for the Surveyor to survey the slope. Also, 1m contour intervals on the feature survey drawing would indicate the levels in between the contour lines are estimated. The estimated undisturbed part of the slope after the landslide has similar steepness, except the levels are 1m to 2m lower than the original levels, and the head scarp on the top is now much steeper, approximately 45 degrees.

Figure 6: Drone Aerial View of the Landslide Area

3. CAUSES OF THE LANDSLIDE:

3.1. Initial Assessment

The initial assessment has concluded that the main cause of the landslide, based on the author's view, is the excessive amount of precipitation on 14 November 2022 as shown in Figure 2, and the inadequate management of the drainage on View Point Road. The precipitation on that single day exceeded the historical November monthly average. Perched water had built up at the material interface due to the upper sandy profile overlying the less permeable clayey soils, which led to a lack of friction and cohesion at the interface of materials. Also, excessive precipitation on the day before the landslide, and in November 2022 in general, added weight to the soil, which leads to higher driving and lower resisting forces.

It is noted that on 29 October and 2 November 2022 (both of which were sunny days), there was continuous water flowing along the kerb drain on View Point Road. The point of discharge of the drain is at the end of View Point Road, which is not far from the subject landslide area. A hump was built onto the surface of the road to divert water from one side of the kerb on View Point Road to the other side. There were signs of cracks and bitumen patching along the kerb on View Point Road. The diverted runoff would then seep into the nature strip and flow at/along the interface of the sandy and clayey soils, following gravity, towards the landslide area. This would be the most likely trigger for the landslide, as the road drain collects surface runoff from a much larger catchment area, and the continuous flow through the cracks and possible voids would build up abnormal hydraulic pressure at the sandy and clayey soil interface, especially following the storm event that occurred the day before the landslide.

Following the landslide event, the Blueline poly pipe (flexible type of pipe) near the steps and decking was reported by a neighbour to the Client (i.e., the property owner (owner of 10-12 View Point Road) to be leaking. There was no report of leakage prior to the landslide, therefore it is highly likely the Earth FLOW has moved the pipe downslope, breaking any connections to taps, if applicable, and causing the leakage. A leakage of this type may cause some surface erosion but is highly unlikely to trigger a landslide of this magnitude.

Figure 7: Water running along the kerb on View Point Road

Based on available Nearmap aerial images, The hump shown in Figure 7 was built around 10 years ago for diverting any surface runoff from the kerb on the northern side of the road to the southern side of the road, so water can flow towards the drainage pit at the end of View Point Road. This intercepts the natural flowpath of water, which in turn led to building up of surface water on the kerb on the northern side of the road.

Figure 8: Cracks and patching along the kerb on View Point Road

3.2. Further Investigations and Findings

A pressure test was conducted by Ian Chudleigh Plumbers around mid-November 2022, which concluded that "the property held a pressure of 680kPa with no drop over a period of 10 minutes, therefore indicating there are no leaks in the water line".

A detailed investigation was carried out by Civiltest in March 2023, which confirmed the findings from the desktop review and initial assessment.The aim of the detailed investigation was to assess the risk level and provide long-term rehabilitation recommendations. A terraced retaining wall system with deep bored pier foundations was proposed, and details can be found in Civiltest Report No. 1222044-3 Issue 5. It was noted that even following the landslide, there was continuous water seepage on the exposed hillside slope, and signs of abnormal moisture conditions, even on dry days.

In May of 2023, the Mornington Peninsula Shire Council initiated a major stormwater drainage improvement project along View Point Road, which spanned a duration of 14 weeks andencompassed the installation of a 300mm stormwater conduit buried 1.5 metres beneath the road. Multiple culverts were integrated into the system, and the cracked kerbs along both sides of View Point Road was replaced. During the excavation process for the installation of the stormwater drain on View Point Road, a substantial void was unexpectedly revealed directly above the location where the landslide had previously occurred, as reported by the property owner of 10-12 View Point Road. Eight pictures/figures/images with notations are attached showing the abovementioned seepage (seeps), continuous water running along the old kerb, and the void discovered during the excavation of new road drainage installations.

On 4 December 2023, a follow up site inspection was conducted by Civitlest and it was noted that further to the renewed road drainage installation conducted by the Council, the continuous seeps on the exposed hillside slopehave dried out, as indicated in Figure 9 below.

Figure 9: Dried out head scarp (photograph taken 4 December 2023)

On 12 December 2023, a GPR scan was conducted by Safety Scan Pty Ltd to check for voids. The results summary is as follows:

> Scanning was conducted along the road surface, nature strip and front of property. GPR scan results indicated the presence of potential voids within the nature strip area. The location of the indicated voids commenced behind the kerb between trees (pictured). Due to the number of services located within the nature strip disturbing natural soil layers, a probe was utilised to physically confirm the GPR findings. The probe confirmed a void was present. When removed the probe was dry and the bottom of void was solid. The void was approximately 550mm below ground surface and 450mm deep (1.0m below ground surface). The identified void travels from the kerb line to the sewer line on the property line along View Point Road. The sewer pipe has an invert level of 1.37m entering the sewer pit, the downstream pipe exits the pit at 3.01m invert. The full extent of the void network was unable to be mapped. It is typical of water to follow the easiest route downhill. Any further voids toward the North West would be expected at a depth exceeding the 1.5m effective range of the GPR equipment within the soil conditions.

4. CONCLUSION:

The obvious shift in moisture conditions at the head scarp, both prior to (characterised by continuous seepage and abnormal wetness) and after (resulting in a drier head scarp) the road drainage improvement works strongly suggests the presence of a subsurface water pathway. This subsurface water pathway originates near the hump that has since been removed, where surface flow patterns change, and this is also near where voids were discovered during the drainage improvement works, and confirmed through subsequent GPR scanning. This pathway directs water toward the current head scarp area.

The heavy rainfall event in November 2022, particularly on the day preceding the landslide, resulted in a substantial buildup of surface runoff throughout the general View Point Road and Arthurs Seat catchment area. It is concluded that the landslide was triggered by the accumulation of subsurface water pressure, which had built up due to the presence of a cracked road kerb and the flow of water into the voids, all directed towards the affected (landslide) area downslope.

No responsibility will be taken for this document if it is altered in any way, or not reproduced in full. Should you require any further information regarding this matter, please do not hesitate to contact me at our Mornington office.

Yours faithfully,

I&S

JINKE YU
SENIOR GEOTECHNICAL ENGINEER
CIVILTEST PTY LTD

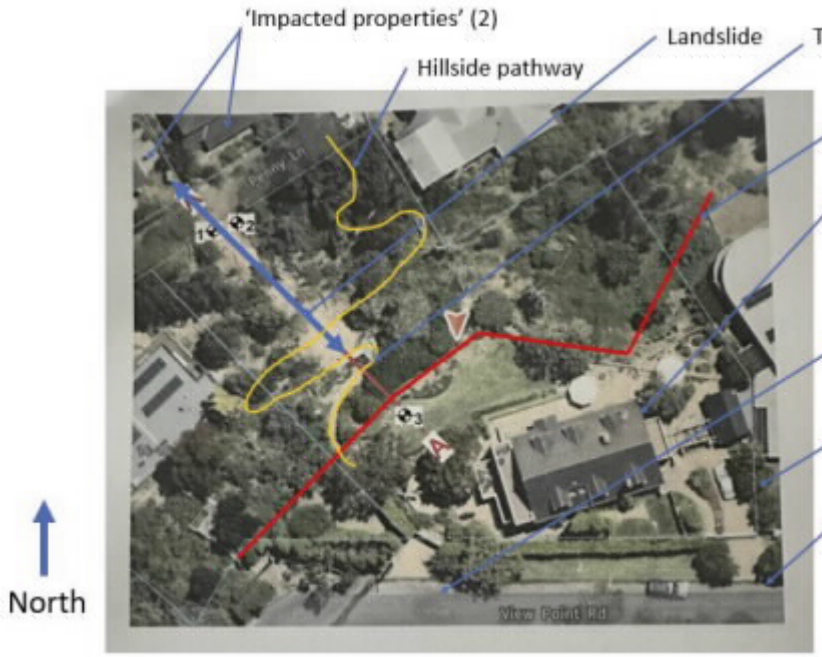
REF: JY/sb

SITE PLAN & SECTION A – A

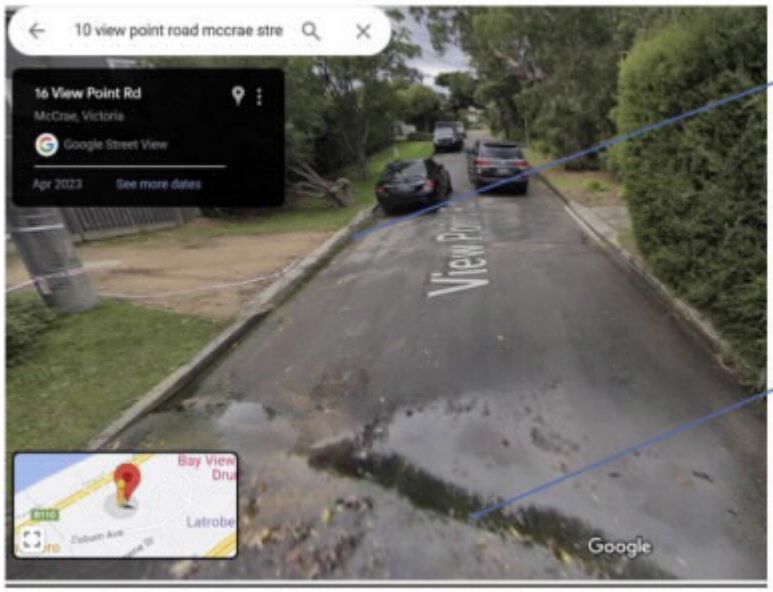
NOT TO SCALE

APPENDIX A

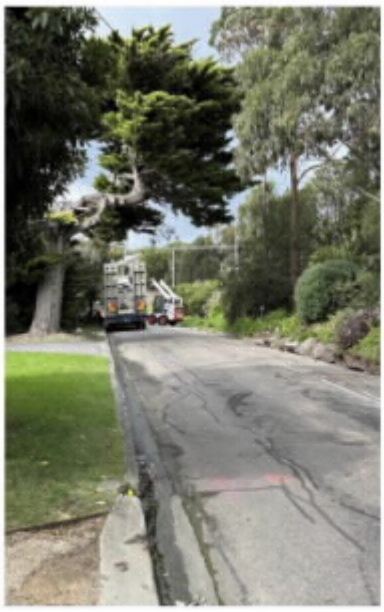
PICTURES/FIGURES/IMAGES WITH NOTATIONS



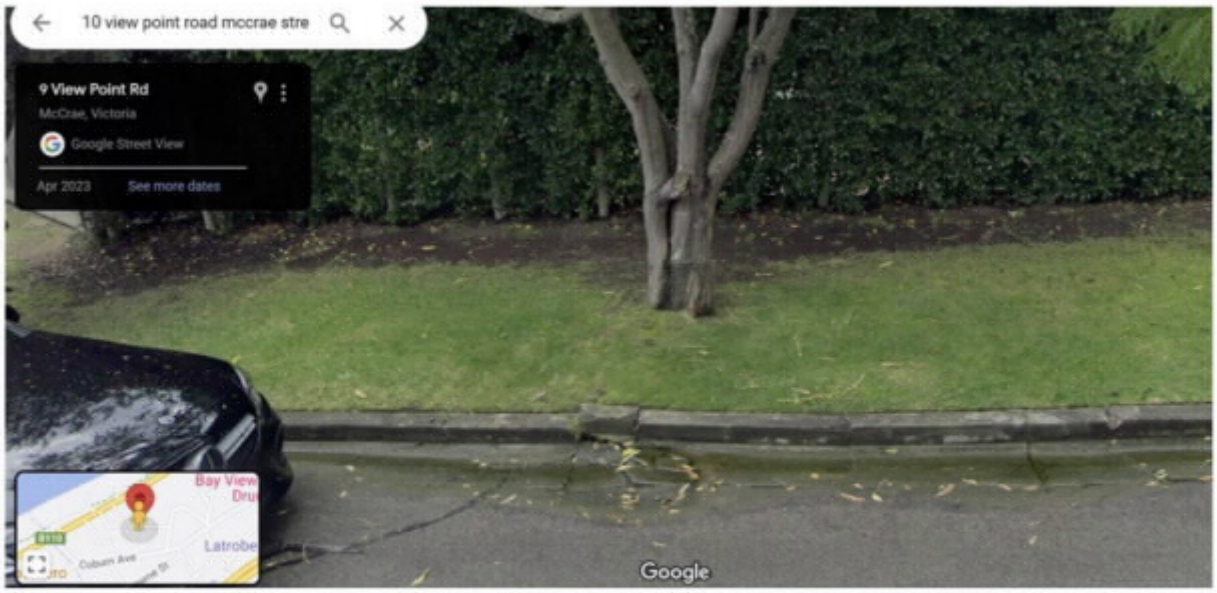
Picture 1 – Property and landslide overview



Picture 2 – View Point Road continuous water flow over cracked kerb prior mid 2023 roadworks



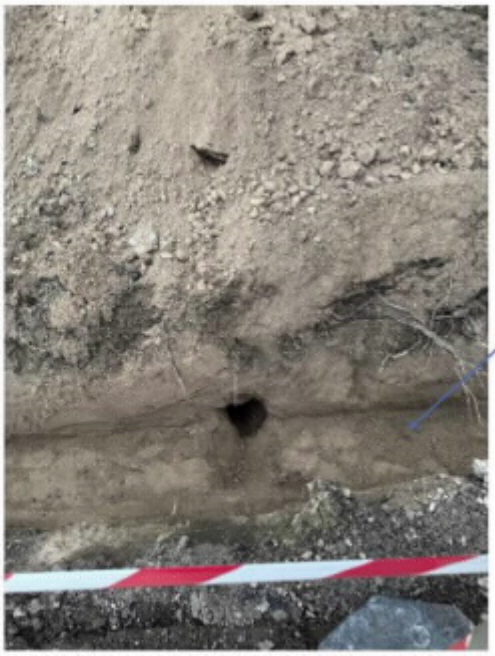
Pictures 3 and 4 – continuous water flow down View Point road, prior mid 2023 drainage works



Picture 5 – example of major cracking in View Point road kerb prior mid 2023 drainage works

Picture 6 – looking North over timber stairs showing seeps A and B after landslip November 2022

Picture 7 – looking South over landslide showing seeps A and B flanking the landslide



Bottom of excavation for new stormwater pipe, approximately 1.5m below ground

Picture 8 - Void discovered during earthworks to install drainage and new kerb on View Point road

APPENDIX B

SAFETY SCAN – VOID SCANNING REPORT

PO Box 216
Wallan, Vic 3756
M: 0407 198 418
E: safetyscan@icloud.com
ABN: 82 139 673 742

12 December 2023

HIRE DOCKET/REPORT

20231154

Client Name:	Gerry Borghesi	Contact:	Gerry Borghesi
Address:	I&S rae Vic	C. Reference:	I&S
Email:	gerryborghesi@gmail.com	Phone:	0408968498
Accounts contact:		Email:	

JOB DETAILS:

Job Address:	10-12 View Point Road, McCrae Vic			Travel:	
Start:	12 December 2023 at 3:00 pm	Break:	—	Finish:	
Waiting time:		Total:		Parking at cost $:	
Information available:	DBYD BY SAFETY SCAN				

Scope Of Work/ Work Method:

Conduct a ground penetrating radar survey from the start of the kerb of View Point road, where a void was previously physically identified.
Scanning is to be focussed on the road surface and nature strip to check for additional indication of voids between the road surface and accessible areas to the North West.

Equipment Used: Radiodetection RD8200 & IDS ground GPR unit

Results:

Scanning was conducted along the road surface, nature strip and front of property.
GPR scan results indicated the presence of potential voids within the nature strip area. The location of the indicated voids commenced behind the kerb between trees (pictured). Due to the number of services located within the nature strip disturbing natural soil layers, a probe was utilised to physically confirm the GPR findings. The probe confirmed a void was present. When removed the probe was dry and the bottom of void was solid. The void was approximately 550mm below ground surface and 450mm deep (1.0m below ground surface). The identified void travels from the kerb line to the sewer line on the property line along View Point Road.
The sewer pipe has an invert level of 1.37m entering the sewer pit, the downstream pipe exits the pit at 3.01m invert.
The full extent of the void network was unable to be mapped. It is typical of water to follow the easiest route downhill. Any further voids toward the North West would be expected at a depth exceeding the 1.5m effective range of the GPR equipment within the soil conditions.

Additional

It was noted that the land slip occurred downstream of a sewer manhole where a change of direction takes place. Further investigation would have taken place between the pit and slip location, however access was restricted.
A large area was scanned in multiple directions to get clean images to interpret. The vast majority of the scan results were impacted by in situ services, soil conditions and challenging access.

Authorised Customer Representitive: Gerry Borghesi Signature: _____

Safety Scan completed by: Cameron Blair Signature: I&S _____

Fig 1 :

Recorded scan locations included within the report indicated below
Identified void locations as marked.
Open sewer pit with invert levels and pipe directions noted in paint.

Fig 2: Services identified, along with GPR validation location.

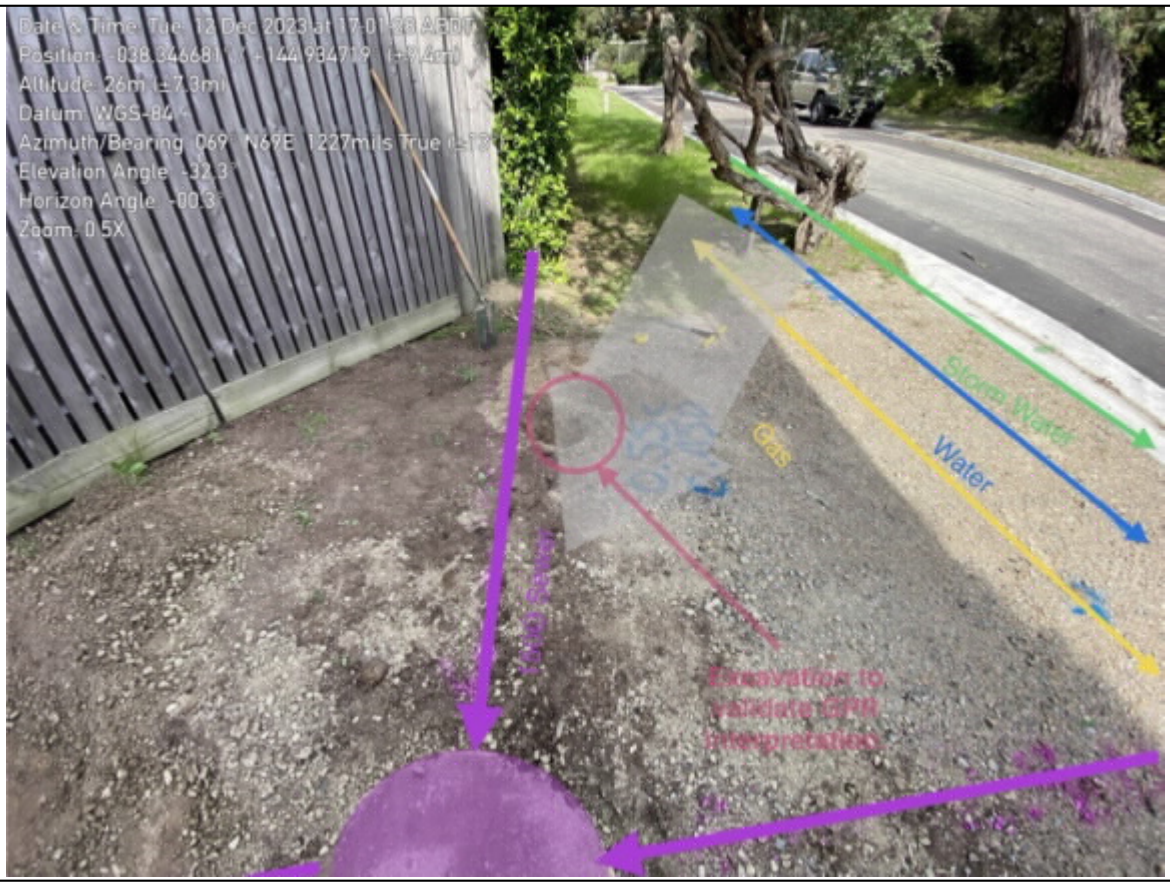


Fig 3: Scan validation location, positioned to avoid underground utilities. Void was proven with 0.55m cover.

Fig 4: Void locations indicated overlaid on South East Water GIS showing sewer and water infrastructure.

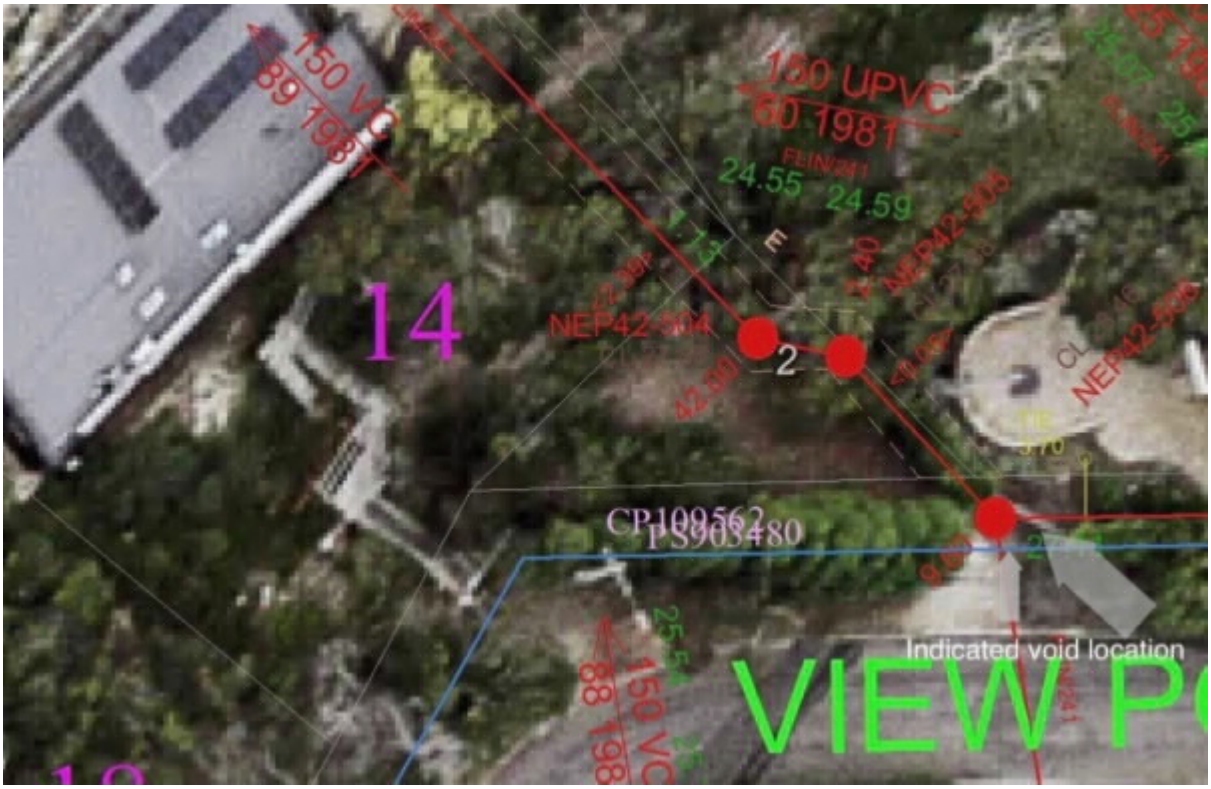


Fig 5: Scan indicating void, physically verified in nature strip.

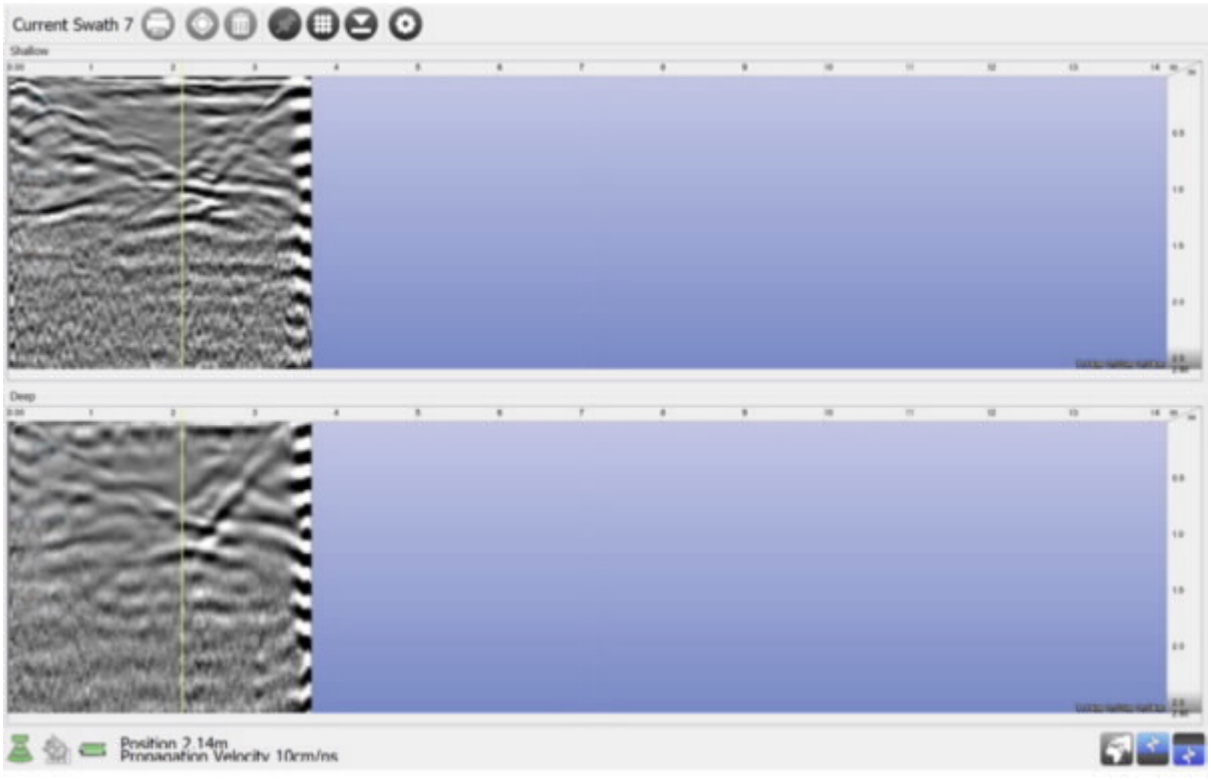


Fig 6: Cross section of identified void in nature strip, physically verified.

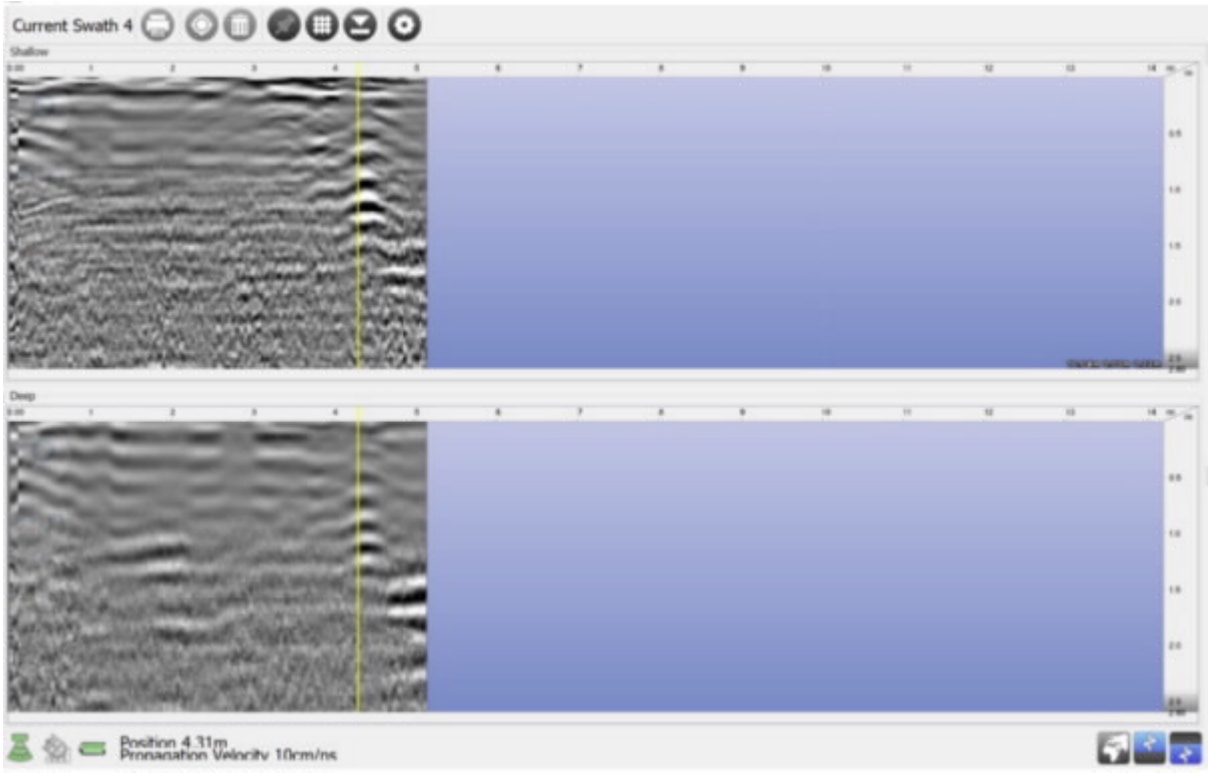
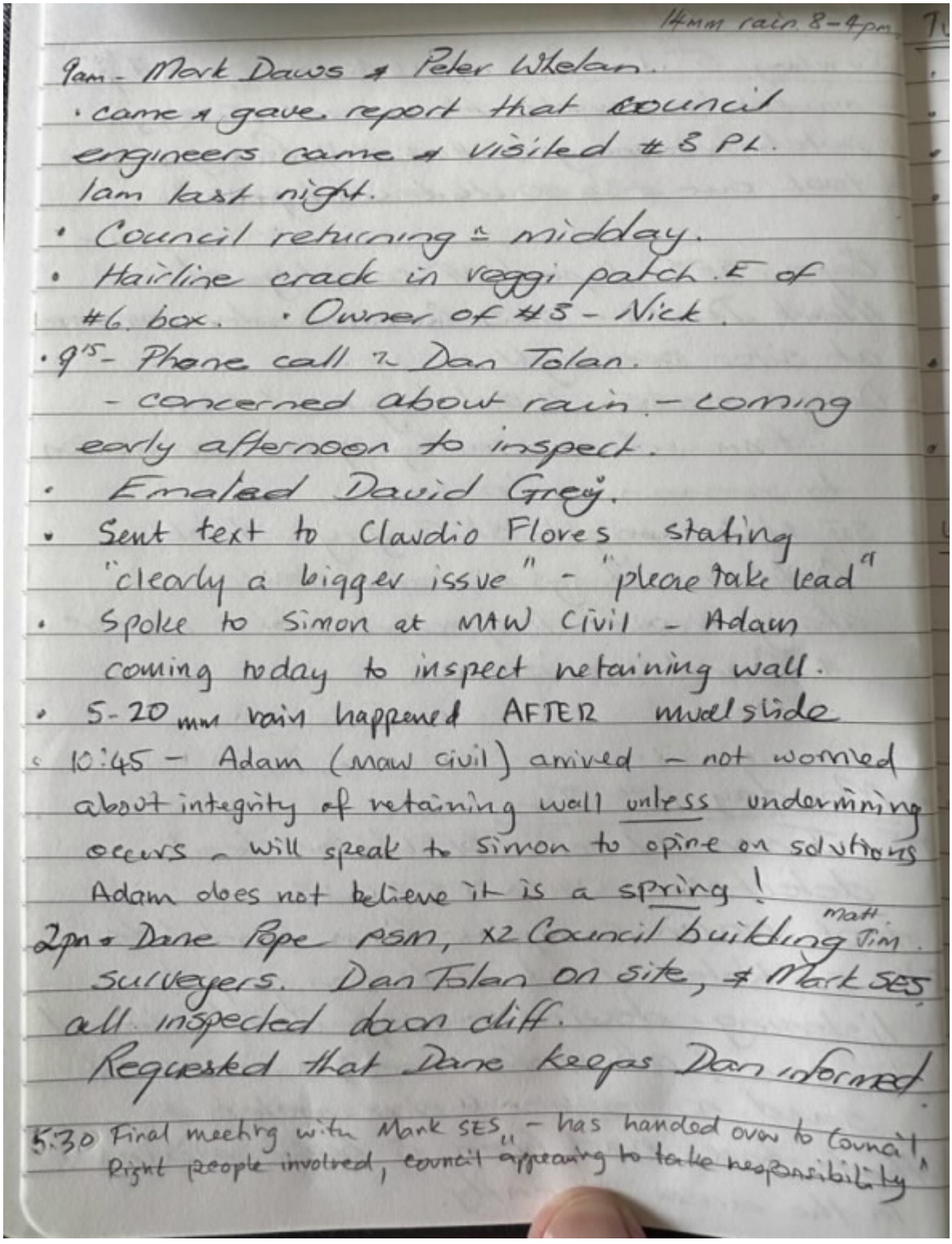


Fig 7: Still image showing void, taken from a video provided by Gerry Borghesi during Storm Water upgrade.

GB-11

Copy of diary entries, and correspondence with the Shire



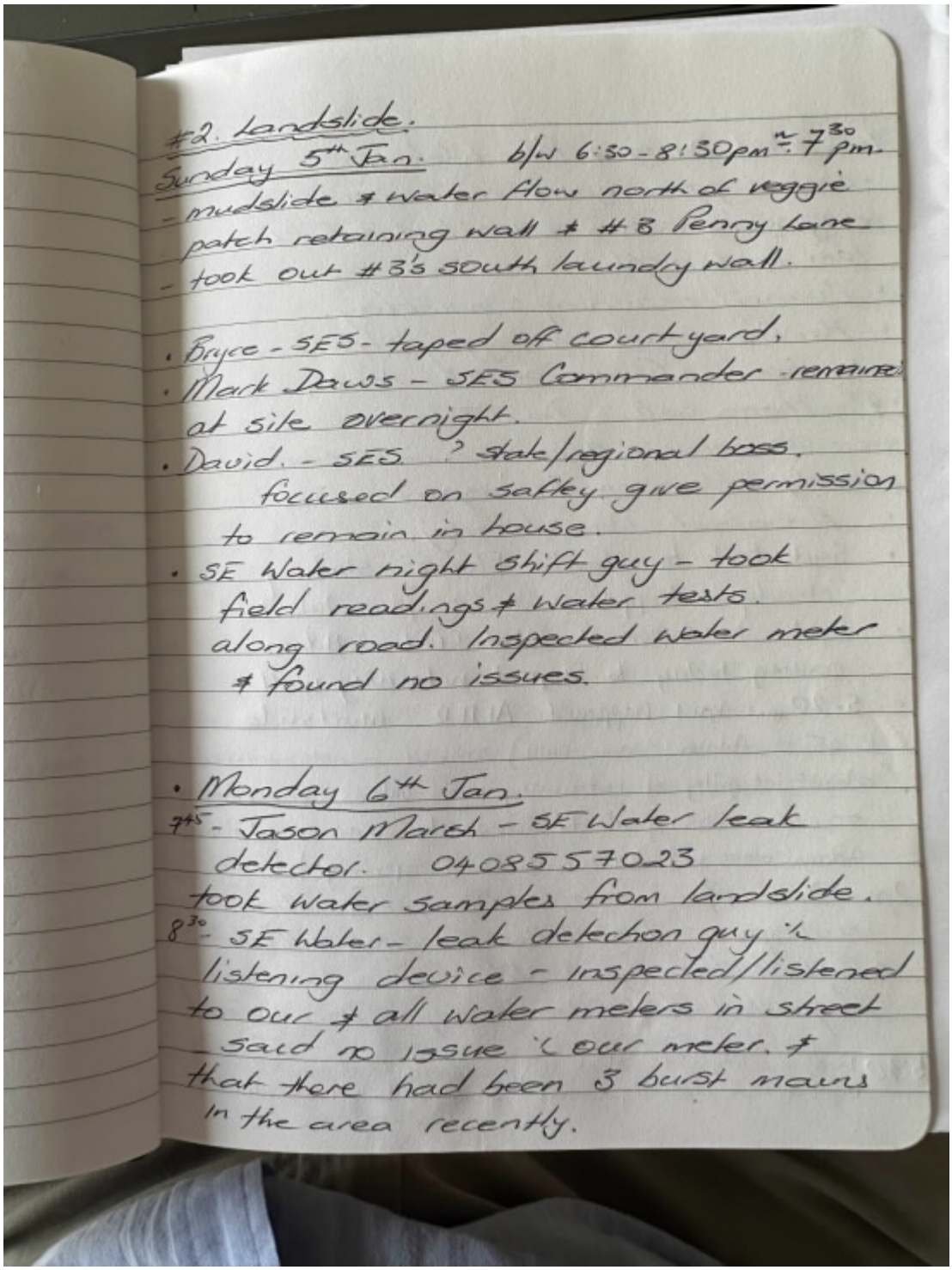
14mm rain 8-4pm

9am - Mark Daws & Peter Whelan.
- came & gave report that Council engineers came & visited #8 PL. 1am last night.
- Council returning ~ midday.
- Hairline crack in veggi patch E of #6 box. - Owner of #5 - Nick.

9:15 - Phone call w Dan Tolan.
- concerned about rain - coming early afternoon to inspect.
- Emailed David Grey.
- Sent text to Claudio Flores stating "clearly a bigger issue" - "please take lead"
- Spoke to Simon at MAW Civil - Adam coming today to inspect retaining wall.
- 5-20mm rain happened AFTER mudslide
- 10:45 - Adam (MAW Civil) arrived - not worried about integrity of retaining wall unless undermining occurs - will speak to Simon to opine on solutions Adam does not believe it is a spring!

2pm - Dane Pope PSM, x2 Council building surveyers. Matt. Tim. Dan Tolan on site, & Mark SES all inspected down cliff.
Requested that Dane keeps Dan informed.

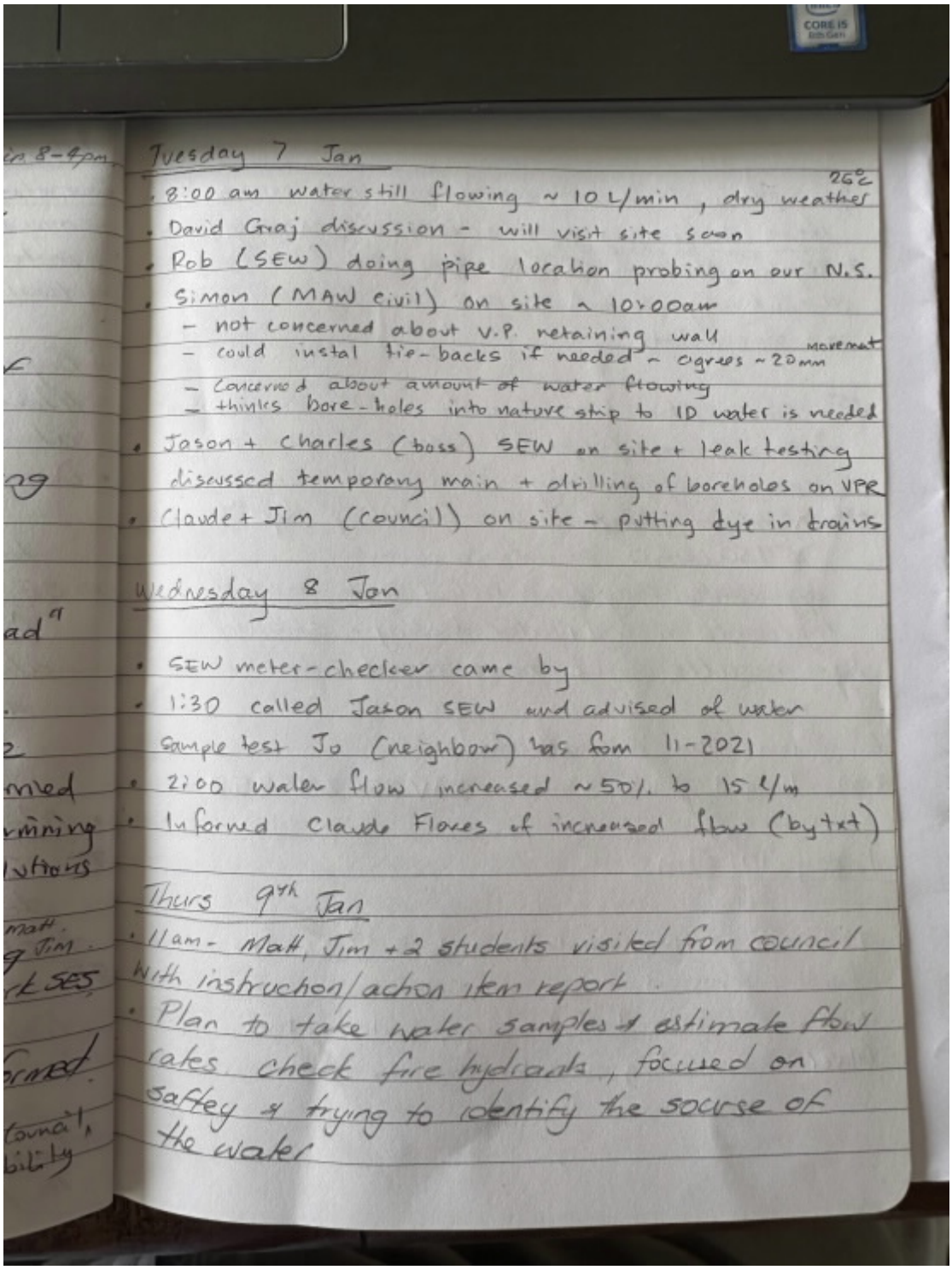
5:30 Final meeting with Mark SES - has handed over to Council, Right people involved, council appearing to take responsibility



#2. Landslide.
Sunday 5th Jan. b/w 6:50 - 8:30pm ~ 7:30pm.
- mudslide & water flow north of veggie patch retaining wall & #8 Penny Lane
- took out #3's south laundry wall.

- Bryce - SES - taped off courtyard.
- Mark Daws - SES Commander - remained at site overnight.
- David. - SES ? state/regional boss. focused on safety give permission to remain in house.
- SE Water night shift guy - took field readings & water tests along road. Inspected water meter & found no issues.

- Monday 6th Jan.
7:45 - Jason March - SE Water leak detector. 0408557023
took water samples from landslide.
8:30 - SE Water - leak detection guy & listening device - inspected/listened to our & all water meters in street - said no issue @ our meter. & that there had been 3 burst mains in the area recently.



Tuesday 7 Jan

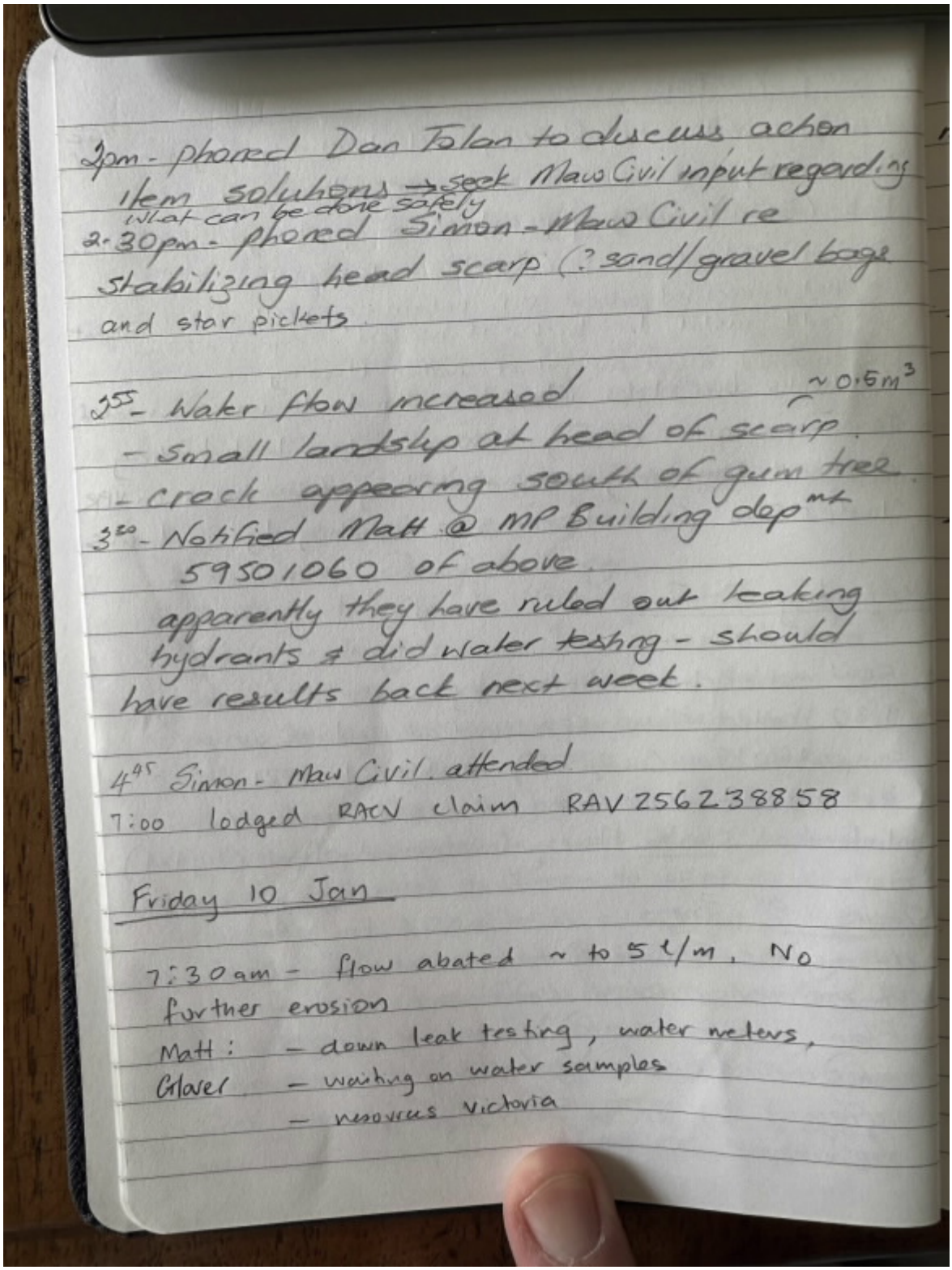
- 8:00 am water still flowing ~ 10 L/min, dry weather 26°C
- David Graj discussion - will visit site soon
- Rob (SEW) doing pipe location probing on our N.S.
- Simon (MAW civil) on site ~ 10:00am
  - not concerned about V.P. retaining wall
  - could instal tie-backs if needed ~ 0 gives ~ 20mm movement
  - Concerned about amount of water flowing
  - thinks bore-holes into nature strip to ID water is needed
- Jason + Charles (boss) SEW on site + leak testing discussed temporary main + drilling of boreholes on VPR
- Claude + Jim (council) on site - putting dye in drains

Wednesday 8 Jan

- SEW meter-checker came by
- 1:30 called Jason SEW and advised of water sample test Jo (neighbour) has from 11-2021
- 2:00 water flow increased ~ 50% to 15 L/m
- Informed Claude Flores of increased flow (by txt)

Thurs 9th Jan

- 11am - Matt, Jim + 2 students visited from council with instruction/action item report
- Plan to take water samples + estimate flow rates. check fire hydrants, focused on safety + trying to identify the source of the water



2pm - phoned Dan Tolan to discuss action item solutions → seek Maw Civil input regarding what can be done safely
2.30pm - phoned Simon - Maw Civil re stabilizing head scarp (? sand/gravel bags and star pickets

3⁵⁵ - Water flow increased ~0.5m³
- small landslip at head of scarp.
- crack appearing south of gum tree.
3⁵⁰ - Notified Matt @ MP Building dep^nt 59501060 of above.
apparently they have ruled out leaking hydrants & did water testing - should have results back next week.

4⁴⁵ Simon - Maw Civil attended
7:00 lodged RACV claim RAV2562388 58

Friday 10 Jan

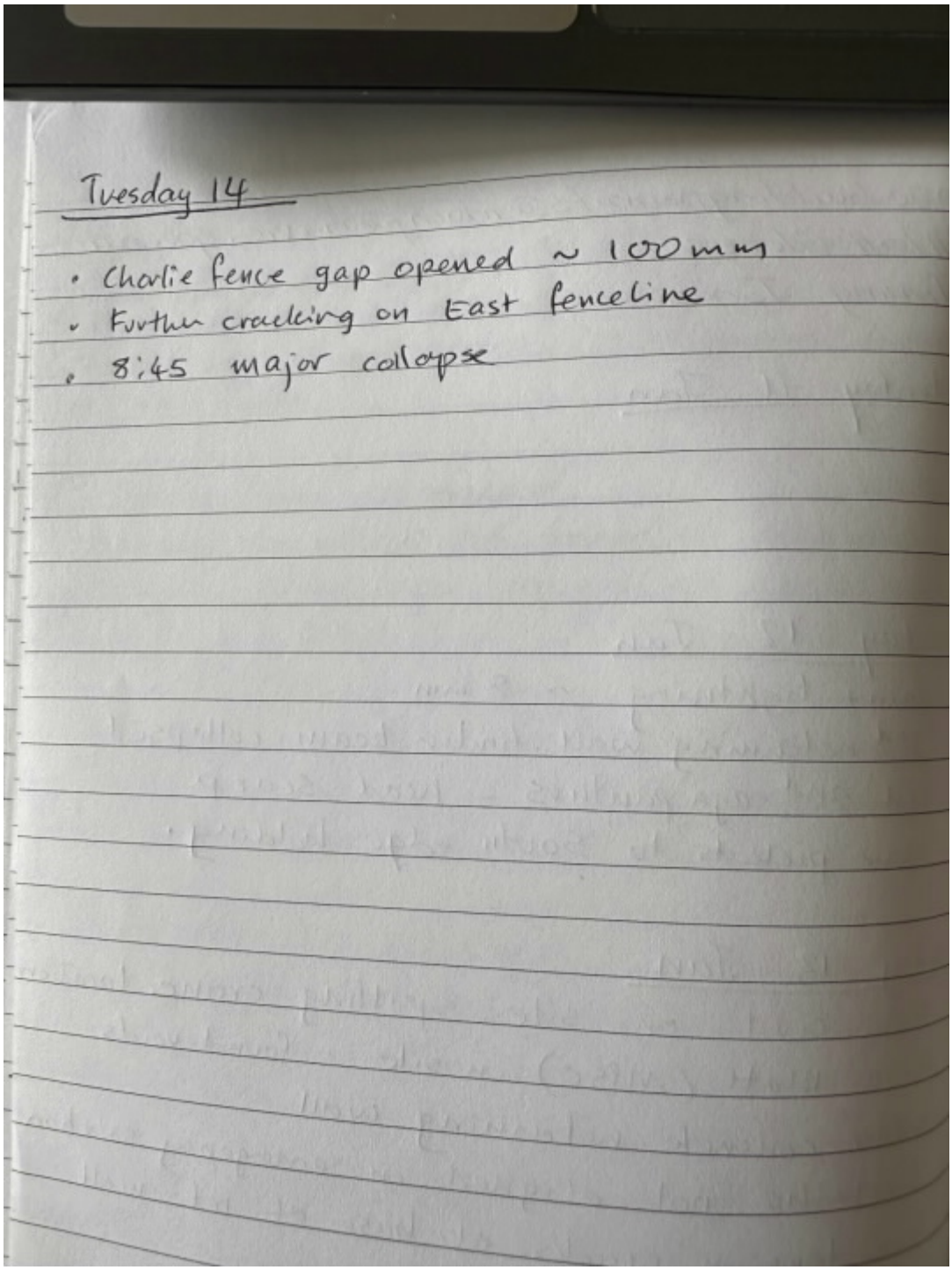
7:30 am - flow abated ~ to 5 ℓ/m. No further erosion
Matt: - down leak testing, water meters,
Glover - waiting on water samples
- resources Victoria

mpscbuildingpermits@mornpen.vic.gov.au
Matt Glover
Jimmy Jones

Saturday 11 Jan

Sunday 12 Jan
- Rain + lightning ~ 8 mm
- 2nd retaining wall timber beam collapsed
- lost 2nd aga panthus - head scarp
- stain pickets to South edge holding.

Monday 13 Jan
- Maw civil on site spotting crane location
- 9:30 Matt (MPSC) on site - found voids under concrete retaining wall
- Geotechs not aligned on emergency solution
- large tension cracks at base of ret. wall (new + longer cracks)
- Cancelled maw civil project for emergency stabilization (estimated @ $139k !!!)



Tuesday 14

- Charlie fence gap opened ~ 100 mm
- Further cracking on East fenceline
- 8:45 major collapse

From: Gerry Borghesi **I&S**
Sent: Wednesday, 16 April 2025 10:08 PM
To: submissions@mccraeinquiry.vic.gov.au
Cc: Bronwyn Borghesi **I&S**
Subject: Fw: Text Messages with MPSC MBS (Claudio Flores)

Georgie

Please find attached the text messages I exchanged with the Mornington Peninsula Shire Council relating to the 2022 landslide, with the latter ones relating to the 2025 landslide.

The Video that Cladio Flores requested (14/9/2023) was the video showing the void which was discovered in the trench during the excavation for the installation of the stormwater drainage in View Point Road, following the 2022 landslide.

This is the void that proves there was water flowing from the cracked kerb into the hillside where the landslide occurred, for many decades.

The radar scans (in the CivilTest Geotechnical report) were done in this area, where a 400mm deep void was discovered.

In summary, there are major voids leading from the kerb area to the location of the landslide that occurred in 2022.

Regards

Gerry Borghesi

From: Gerry Borghesi
Sent: Wednesday, April 16, 2025 1:50 PM
To: **I&S**
Su C MBS (Claudio Flores)

14/9/23 2:53pm
Hi Gerry, can you please send the video to my mobile as discussed.
Regards
Claudio Flores
Mornington peninsula Shire
Will do Claude
Void in View Point Rd
Claude - attached video taken while kerb was being replaced and new stormwater drain was being installed. I will send photos by email, GerryClaude
15/9/2023 6:44am
Note the two hillside photos. These were taken before the road drainage was fixed. You can clearly see the two seeps either side of the mudslip.

The right hand seep is directly below the void found under the cracked kerb on view point rd (refer to the other photo).

If you come out and inspect today, the right hand seep is completely dry. The left hand seep is drying out.

1/5/2023 3:11pm

Hi Claude

I know your lawyers are controlling everything, as they do, and we'll see you at the BAB, but if you can push to have a round table discussion on how this can be resolved, it would be helpful. There is information to be shared on just how dangerous the hillside actually is, and better ways to fix it (if needed at all) than our $1.25m proposal, and more aligned with the Willengenburgs proposal....keep in mind the drainage and repair work the council did on View Point Rd has mitigated further mudslide risk. A lowest cost, pragmatic solution that gets the Willengenburgs back home and lifts our restrictions is in everyone's best interests!!!

3/5/2023 1:27pm

Hi Gerry, I will pass this information on to legal.

Regards

Claud

14/8/2023 12:04pm

Hi Claude

Im hoping Council are going to be collaborative and very open to rational discussion today as the Geotechnical experts align on the lowest cost way to mitigate any risks on our hillside, and to the Willigenburgs. We have gone to extreme measures in cost and analysis to prove our hillside is 'safe' for our usage, but the Willigenburgs need to build a barrier on their boundary to get them back home. We have done nothing to cause this situation and were not 'building' or 'planning to build' which is where Council's authority comes from. Can you please make sure your people start doing the right thing here. No need to respond to me.

27/8/2023 1:56pm

Monday Sept 2

Looking forward to seeing you and John on Monday Sept 2. If there is any history or action I have taken you do not understand, just call me. A concern I have is Council's geotechnical report (by PSM dated June 2024) was done after the View Point Rd new drainage and kerb was installed (April-June 2023) hence the PSM report dismisses the impact of the continuous spring flowing down the cracked kerb at 10l/minute, for 15 years at least, as they never saw it! We need to get the Willigenburgs back home ASAP.

17/9/2023 1:47pm

PSM and Civiltest

Claudio - PSM (your Geotech) and Civiltest (my Geotech) have just aligned that all we need is a terracing solution, revegetation and hillside drainage to allow Willigenbergs and us to occupy our properties. This is a major step forward, and a much cheaper solution than the heavy retaining walls, and/or Geobrugg barriers etc. We have a design ready to get approved, just need Council to agree to the cost as the mis-managed spring water was the major factor causing the landslide, and for Council to cover our costs.....

6/1/2025 8:29am

Mudslide #2
Morning Claude. We had another mudslide last night. Different location, near the veggie patch. There was a lucky escape in the house below. The issue of seepage down view Point is clearly not our doing, and we would implore Council to take an active lead to investigate the cause of the seepage rather than issuing orders for others (us) to fix problems we are not causing

7/1/2025 1:51pm
Hi Claude. The green dye is running in the new pipe on VPR as expected, as the stormwater pipe is new. Suggest you put some dye further upstream, or consider some boreholes on our nature strip to identify the course of the water

7/1/2025 4:41pm
Thanks Gerry we are awaiting some advice from Dane Pope and will pass on the borehole recommendation.

8/1/2025 1:49pm
Water flow
Claude, the water flow has just recently increased about 50%, from an estimated 10l/minute to 15l/minute. No further soil collapses

9/1/2025 10:51am
Water flow
Claude, the flow rate has abated to the original rate of ~10 l/minute. Council specifically asked us to report any changes or deterioration. It would be helpful if you acknowledge receipt of these updates.

9/1/2025 2:55pm
Water flow
Claude, a small amount of soil (0.5m3) collapse from near the gum tree, the tree is at risk

14/1/2025 1:34pm
Hi Gerry I hope your ok. I am onsite and will provide further information when it becomes available.
The main thing is for MPSC and the State to start taking responsibility for the subterranean water flow that was mismanaged by Council causing landslide #1, and retract 'orders' for us to fix stuff we are mot causing, and to URGENTLY address the cause of the increased water flow rather than finding ways to avoid liability. The acting Premier is involved now and we are lucky the Coroner is not involved. MPSC needs to get its act together URGENTLY

18/1/2025 3:31pm
Hi Gerry, I hope you and your family are ok. I have issued emergency order to vacate property that you can pass on to your insurer. We are working with Dane to find a way forward.
Kind regards
Claud
Thanks Claud. Just make sure we don't get 'building orders' to fix the problem!

GB-12
Retaining Wall

GB-13

Photos of Reinforcement Wall


ROSEBUD

GB-14
"Water Flow"

GB-15
"Water Flow as shown by Green Dye"

GB-16

Correspondence with Matt Glover in relation to Interception Works

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From: Matt Glover
Sent: Monday, January 13, 2025 8:42 AM
To: Daniel.Tolan@civiltest.com.au; **I&S** Dane Pope
Subject: FW: McCrae landslide (Ja

Hi Dan, Can you please liaise with Dane Pope, who will act as council's expert on making safe arrangements, who will guide me to make a determination?

Regards,

Kind regards,

MATTEO GLOVER | Municipal Building Surveyor (AiFireE, MPIA, MAIB)
OFFICE OF THE MBS
Email: matt.glover@mornpen.vic.gov.au
Phone: 03 5950 1060 |
Private Bag 1000, Rosebud VIC 3939 **|** 2 Queen Street, Mornington VIC 3931
Follow us on social media!

My typical flexible working arrangements are: 7:15 am to 3:45 pm

Monday	Tuesday	Wednesday	Thursday	Friday

Mornington Peninsula Shire acknowledges and pays respect to the Bunurong people, the Traditional Custodians of these lands and waters.

We are committed to carbon neutrality.

From: MPSC Building Permits <MPSCBuildingPermits@mornpen.vic.gov.au>
Sent: Monday, January 13, 2025 8:15 AM
To: Matt Glover <Matt.Glover@mornpen.vic.gov.au>
Subject: FW: McCrae landslide (January 5)

From: Gerry Borghesi **I&S**
Sent: Friday, January 10, 2025 4:47 PM
To: MPSC Building Permits <mpscbuildingpermits@mornpen.vic.gov.au>
Subject: McCrae landslide (January 5)

Attention: Matt Glover

Matt, status as of 4:30pm:

MAW Civil have prepared the attached **methodology** and **stabilization scope of works** for your review. Please advise any comments as the work will commence early next week.

Dan Tolen (CivilTest) will review and approve the attached scope of work. We will forward Dan's approval once received.

The scope of works will include the extension of the existing retaining wall 'ag' drain with a non-slotted pipe to a point at least 6m downstream of the head scarp to address surface water. Dan confirmed that this action addresses MPSC' s 'Owners - action items' (received 9 January 2025) point 3.

These actions will complete the responsibilities identified for our property (P1) in the 'Owners- Action Items'

We request continued updates from MPSC on the identification of the source of the water flow and actions being taken to redirect or manage the water flow onto our property.

Regards,

Gerry and Bronwyn Borghesi

GB-17

Correspondence with Bulent Oz and Andrew Brick

Email chain 1

From: Gerry Borghesi **I&S**
Sent: Wednesday, February 5, 2025 12:47 PM
To: McCrae Recovery <mccraerecovery@mornpen.vic.gov.au>
Subject: Re: Landslide cause

Thank you Andrew

I am wanting to ensure MPSC is focused on the most appropriate, risk-balanced course of action to remove risk to life and property, as there is not much happening with regard to trying to identify 'a credible source of water' which is in a narrowly defined area, and water extraction bores or excavation is a way to 'identify a credible source of water' and could have been undertaken 2+ weeks ago.

The water enters a known ancient narrow gully, and water tends to track downhill, there have been known seeps in this area for decades, and recent water eruptions up hill...I am not sure why the obvious dots are not being joined while you await formal reports.

While the water continues to flow, it is causing further erosion threatening further landslides and elevating risk to property. This is precisely what happened between January 5 and 14, which we personally witnessed.

There is no elevated risk to life for excavation or borehole extraction works commencing in the vicinity of 6 VPR, 30-40m from the scarp, and there are no unintended consequences associated with removing a similar flow rate upstream to what is emanating from the scarp, if in fact this water can be found and intercepted.

If you have credible geotechnical or risk analysis in place that refutes this argument (apart from 'we just aren't sure about anything') I suggest you share it and place it on file now.

Happy to discuss at any time.

Gerry Borghesi

From: McCrae Recovery <mccraerecovery@mornpen.vic.gov.au>
Sent: Wednesday,
To: Gerry Borghesi **I&S**
Subject: RE: Landslide cause

Dear Mr Borghesi,

Thank you for your email.

Council is unable to comment on the cause of the landslide until the geotechnical engineers have completed their investigations and reports. For clarity, Council has not stated that the trigger of the landslide was related to dry hot weather, rather that the initial landslip occurred in dry hot weather and not following a period of high rainfall.

The geotechnical engineers are proceeding with investigative works, including the water source. Further investigative works in respect of 6 View Point Road are scheduled to commence next week with the purpose of identifying a water source. Until a credible source of water is identified, it is unable to be intercepted.

To ensure the safety of geotechnical engineers and others working around the landslip area, the above investigations were not able to be undertaken until this time.

Council will continue to update residents.

Yours faithfully

Andrew

MORNINGTON PENINSULA Shire

ANDREW BRICK (he/him) | Team Leader - Community Resilience and Emergency Management

Email: andrew.brick@mornpen.vic.gov.au

Phone: 03 5950 1389

Private Bag 1000, Rosebud VIC 3939 | 2 Queen Street, Mornington VIC 3931

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We are committed to carbon neutrality.

From: Gerry Borghesi **I&S**
Sent: Tuesday, Februa
To: McCrae Recovery <mccraerecovery@mornpen.vic.gov.au>
Subject: Landslide cause

Andrew

I am surprised by your references to 'dry hot weather' and the landslide trigger. I trust you had Dane Pope's approval for this statement. We did not have a particularly unusual or long period of dry hot weather. The failure mechanism you are alluding to is highly technical, and appears to me to be a distraction, creating delays to work that must happen immediately. A few things to consider:

1. The area was heavily vegetated and the soil not exposed to direct sunlight
2. There was no excessively or unusually long period of 'dry hot weather'
3. The failure surface of the translational land slide was 3-5m below grade, where the water continues to flow.

The failure occurred in a natural gully that has been backfilled with topsoil (particularly on 6 View Point rd) on top of centuries of natural debris.

A far more likely 'trigger' was a recent and relatively sudden redirection of subterranean water flow into the gully. Increased water saturation reduces soil shear strength and this is the likely trigger. Key factors to look into:

1. Redirection of subterranean water flow during MPSC's 2023 project to install a stormwater drain down view point road. The lower (west) section of our property where the 2022 landslide occurred, has completely dried out since this drain was installed.
2. Failure of underground water storage tanks or some other private or authority infrastructure
3. Disturbance to the natural flow of water from the natural spring emanating directly under 1 Prospect Hill Rd, that required substantial civil works to capture, and was measured at 10 litres/minute during construction in 2022.

It staggers me that no one except Dane Pope is reaching out to us to understand the history here. It is our property that has had 3 landslides in 2 years.

Finally, we and the impacted residents have been insisting on immediate works at 6 view Point Rd, to intercept the flow of water BEFORE IT GETS TO THE SCARP, where it is threatening 3-5 homes. It was the continued flow of water between January 5 and 14 that led to the major landslide and this failure mechanism is continuing to this day. If any more houses are lost, it will

make international news and drive further inquiries into 'why the delay' to urgently shut off the water. The investigation into source and location and longer term remediation is important BUT NOT THE PRIORITY.

Gerry Borghesi

From: Gerry Borghesi **I&S**
Sent: Sunday, February 9, 2025 10:46 AM
To: Bulent Oz <bulent.oz@mornpen.vic.gov.au>
Cc: 'Richard' **I&S** ; Mike ONeill **I&S**
Subject: Response to landslides of January 5 and 14

Dear Bulent

We are now **5 weeks** into the response to the landslide of January 5, and **water continues to flow over the scarp** threatening 3-5 properties, despite continuous requests for Council to conduct exploratory work to seek to identify and intercept water on View Point Road immediately uphill of the scarp.

We also note Council has **only just taken over the lead response** to the incident from the SES, after protracted negotiations on the handover.

We also note Council has **not established a clear lead responsible** for managing this emergency, the latest advice from David Gillett advising it was a 'group' responsible for leading the response.

We also note that Council has advised that there is **no criteria established for determining the earliest possible return** for each of the impacted properties.

I want you to know that all of the above is **completely unacceptable** and request that you advise:

1. What is the current criteria for placing the emergency notices on residents?
2. If in response to (1) is that Council is relying on 'observable conditions' can you explain what these are, and why immediately adjacent properties to the exclusion zone do not meet the 'observable conditions' criteria?
3. Council committed to providing a plan for the response a week ago, and to date, none has been received. What is the current plan?
4. Who in Council is resisting the immediate request to conduct Geotechnical and hydrology exploratory work on View Point Road, and what is their (a) rationale and (b) relevant qualifications to be making these decisions?
5. How often does Council practice emergency response drills, and in what capacity did you participate?
6. What was the date of the last MPSC emergency response drill and what learnings were documented from the exercise?

Looking forward to your documented response.

Regards,

Gerry Borghesi

Email Chain 2

---------- Forwarded message ---------
From: **Gerry Borghesi** **I&S**
Date: Thu, 6 Feb 2025
Subject: Re: McCrae response - January 5 and 14 landslides-subject to LPP
To: Bulent Oz <Bulent.Oz@mornpen.vic.gov.au>

Thank you for your response Bulent.

There is no risk associated with small diameter borehole drilling on the View Point Rd nature strip, at the head of the natural gully where the water is flowing, as an immediate and logical step to 'try to identify (and intercept) the source of water'.

The nature strip is 30-40m from the already-failing head scarp, and the road is open to the general public.

Let's just hope the failing head scarp, as it was doing between January 4 and 15 and continues to do now due to the flowing water, does not result in the collapse of further houses.

I'm pleased this has your urgent attention.

Regards

Gerry Borghesi

On Thu, 6 Feb 2025 at 3:08 pm, Bulent Oz <Bulent.Oz@mornpen.vic.gov.au> wrote:

Dear Mr Borghesi,

Thank you for your email.

I sincerely appreciate the concerns of both you and other impacted residents.

Council's geotechnical engineers have been investigating the landslide area to determine the risk to life to properties as well as to determine the cause of the landslide.

I can confirm that the priorities listed in your email are all already being addressed by geotechnical engineers and Council, following the process determined by geotechnical experts. Prior to excavation works or other destructive investigations being undertaken, necessary steps to ensure the safety of those working in the vicinity of the landslip area were required, including

obtaining specialised equipment and sufficient monitoring data over a period of time to evaluate the safety of the area for such works to commence and included assessing the cut/fill on the escarpment and investigating the source of the water flowing from the landslide site.

As you are aware, further works are scheduled to commence next week, including works surrounding the water source. Once a credible water source is identified, it will be addressed, however such works have to be targeted and minimise unnecessary intrusion to avoid increasing risk.

In order to ensure the safety of residents, the investigation process must be undertaken and while Council and its geotechnical engineers are utilising any efficiencies of concurrent works, there are no short cuts that can be taken in this process. Allowing residents to return to individual properties will hopefully be possible as we get further into our investigations. It is a priority for Council to get residents back into their homes as quickly as possible, and Council is making every effort with our investigations to progress towards that outcome.

Council will continue to keep impacted residents updated and work to return residents to their homes as soon as possible.

Yours faithfully,

MORNINGTON PENINSULA Shire

BULENT OZ | Chief Executive Officer

Email: bulent.oz@mornpen.vic.gov.au

Phone: 03 5950 1435 | 0403 983 960

Private Bag 1000, Rosebud VIC 3939 **|** 90 Besgrove Street, Rosebud VIC 3939

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From: Gerry Borghesi **I&S**
Sent: Wednesday, February 5, 2025 11:44 AM

To: CEO <CEO@mornpen.vic.gov.au>; Mike ONeill **I&S**
Subject: McCrae response - January 5 and 14 lands

Dear Bulent

Regarding the January 2025 landslides on 6 and 10-12 View Point road, we and the impacted residents have three priorities:

1. Stop the water flowing over the scarp, now
2. Get impacted residents back into their homes as quickly as possible, adopting specific risk assessments for each evacuated property
3. Undertake investigative work to understand the stability of the McCrae scarp, and manage water flow as far upstream as possible.

We note after more than two weeks, **no excavation works or groundwater removal activity has commenced on View Point road,** within the vicinity of the ancient gully where the landslide occurred, and the landslide scarp continues to recede. The scarp was receding between the initial January 5 and 14 landslides and continues to recede now and threaten 3-5 properties. This is despite repeated requests for action by MPSC.

I am altering you as acting CEO with executive authority that you should be addressing this matter with extreme priority.

Regards,

Gerry Borghesi

Email 3

From: Gerry Borghesi **I&S**
Sent: Sunday, February 9, 2025 10:46 AM
To: Bulent Oz <bulent.oz@mornpen.vic.gov.au>
Cc: 'Richard' **I&S** Mike ONeill **I&S**
Subject: Response to landslides of January 5 and 14

Dear Bulent

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5. How often does Council practice emergency response drills, and in what capacity did you participate?

6. What was the date of the last MPSC emergency response drill and what learnings were documented from the exercise?

Looking forward to your documented response.

Regards,

Gerry Borghesi