Heritage Insight P/L 53 Stubbs Street Kensington VIC 3031
T: +61 3 9376 6569 INQUIRIES: archaeology@heritageinsight.com
WEB: www.heritageinsight.com

Our Ref: 1825

October 21, 2024

Allan Carlsson
Development Manager
Kataland
Level 10/278 Collins Street
Melbourne. Vic. 3000.

RE: Subdivision of Lot A/PS821090 at Halletts Way, Bacchus Marsh: Aboriginal Heritage

Dear Mr Carlsson,

As requested, I have undertaken a review of the proposed five lot subdivision of Lot A on Plan of Subdivision 821090 at 'Werribee Vale Road, Bacchus Marsh', in order to ascertain what (if any) heritage obligations you have in relation to the proposed development. The plan for the five proposed lots (A, B, C, D and E) is presented in Figure 1 (hereafter 'the study area').

This letter provides a review of ground disturbance in the study to show that entirety of the study area has been subject to significant ground disturbance.

Regulation 7 of the Aboriginal Heritage Regulations 2018 makes provision for when a Cultural Heritage Management Plan (CHMP) is required:

> **7 When a cultural heritage management plan is required**
>
> A cultural heritage management plan is required for an activity if-
>
> (a) all or part of the activity area for the activity is an area of cultural heritage sensitivity; and
>
> (b) all or part of the activity is a high impact activity.

The study area is within an area of cultural heritage sensitivity as defined by regulation 26 (waterways) (Figure 2):

> **26 Waterways**
>
> (1) Subject to sub-regulation (2), land within 200 metres of a waterway is an area of cultural heritage sensitivity.
>
> (2) If part of the land specified in sub-regulation (1) has been subject to significant ground disturbance, that part is not an area of cultural heritage sensitivity.

Definition of Significant Ground Disturbance

Significant ground disturbance as defined in regulation 5 of the *Aboriginal Heritage Regulations 2018* means:

> disturbance of-
>
> (a) the topsoil or surface rock layer of the ground; or
> (b) a waterway
>
> by machinery in the course of grading, excavating, digging, dredging or deep ripping, but does not include ploughing other than deep ripping.

Aerial images taken from Google Earth and Nearmap between 2002 and 2020 are attached as Figures 3 – 9. These aerial images show that ground disturbance has occurred across the study area during three specific phases, the initial and most complete 'vineyard phase', the widespread 'Halletts road phase' and then partially during the 'construction phase'.

Vineyard Phase

A 2002 aerial image (Figure 3) shows that the study area in 2002 was a vineyard. It is common knowledge that deep ripping of soils is a key component of soil preparation for a vineyard. A 2005 report from the Agricultural Machinery Research Design Centre, University of South Australia, to the Australian Government Grape and Wine Research and Development Corporation summarises the need to deep rip as follows (see also Cass et al. 1995 for further information on deep ripping:

> Deeper soil loosening means a greater soil volume exploration by roots for better access to stored water and nutrients. Deeper root systems give direct benefits, decrease reliance on irrigation water and improve consistency in both grape yield and quality across vineyards and between vintages.
>
> (Desbiolles, Slattery & Saunders 2005)

Figure 3 shows that the entire study area (i.e., proposed lots A, B, C, D and E) was formerly a vineyard. Deep ripping of the study has likely occurred as part of the establishment of the vineyard as this is standard industry practice. Deep ripping meets the definition of disturbance to the topsoil by machinery and as such this event, in the first instance, has caused significant ground disturbance to the study area.

Halletts Road Phase

Aerial images taken between December 2016 and August 2017 show widespread ground disturbances caused by the construction of Halletts Way road extension (Figures 4 – 6).

In December 2016, the initial cuts had been made for the road (Figure 4). These works impacted land to the east end of the road extension, across proposed lots D and E, but not to the whole of these areas at that time. By March 2017 however, a large portion the study area to both the east and west of the roadway had been stripped and crushed rock laid on the ground surface (Figure 5). Figure 6 shows the study area on either side of Halletts Way after works were completed in August 2017. The entire ground surface on the east side of Halletts Way (proposed Lots D and E), and most of the ground surface on the west side (proposed Lots A, B and C), has been disturbed by the road construction works. A small area of land in the NW corner of proposed Lot A remained undisturbed during this phase of disturbance.

Figures 4 and 5 show machinery carrying out earthworks across the study area. It is unclear why large parts of the study area were stripped during these road construction works but these works quite clearly meet the definition of disturbance to the topsoil by machinery in the course of grading and excavating and as can be seen in Figure 6 most of the study area was subject to significant ground disturbance at this time.

Construction Phase

Aerial images taken between September 2018 and October 2019 show substantial ground disturbance to the western half of the study area (proposed Lots A, B and the western part of proposed Lot C) has occurred.

In September 2018, proposed Lots A, B and C were stripped and used as stockpiling areas, laydown areas, site sheds and construction yards (Figure7). By May 2019 these construction areas cover the entirety of proposed Lots A, B and C and have encroached on the western part of proposed Lots D and E (Figure 8). By October 2019 these areas had been cleaned up and the topsoils reinstated (Figure 9).

These figures show that the area spared of ground disturbance during the Halletts Road phase was used as a stockpiling area. Whilst it is unclear whether ground disturbance was caused here during the emplacement of the stockpiles, it is impossible that the topsoil could not disturbed during the removal of this stockpile and the subsequent grading and reinstatement of the topsoil across proposed Lots A, B and C as part of the clean-up works.

The aerial images show that the entirety of proposed Lots A, B and C were subject to landscaping works to support the nearby construction works. These works quite clearly meet the definition of disturbance to the topsoil by machinery in the course of grading and excavating and as can be seen in Figure 9 any part of the study area which was not impacted during the Halletts Way phase was definitely subject to significant ground disturbance during the construction phase.

Conclusion

The entire study area, including the entirety of proposed Lots A, B, C, D and E, provide direct evidence of multiple phases of significant ground disturbance as defined by the *Aboriginal Heritage Regulations 2018*. This disturbance occurred during three specific phases, including the initial 'vineyard phase' which on its own meets the criteria of significant ground disturbance in the course of deep ripping of the whole area of cultural heritage sensitivity, the 'Halletts road phase' which subsequently impacted almost the study area in the course of grading and excavating, and the 'construction phase' which impacted the part of the study area which was unaffected by the 'Halletts Way phase' in the course of grading and excavating.

In accordance with regulation 26(2) the area of cultural heritage sensitivity within the study area has been subject to significant ground disturbance and is therefore not an area of cultural heritage sensitivity.

In this case, criterion (a) of regulation 7 is not met, as the study area does not contain an area of cultural heritage sensitivity, and therefore **a mandatory CHMP is not required** by the *Aboriginal Heritage Regulations 2018*.

Although a mandatory CHMP is not required for the activity, the client should be aware that the Act provides blanket protection for Aboriginal cultural heritage. Under sections 27 and 28 of the Act, it is an offence to knowingly, recklessly or negligently, by act or omission, harm Aboriginal cultural heritage. A voluntary CHMP could be carried out for the purposes of risk management.

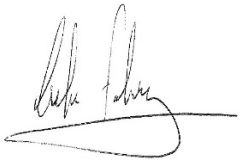
In the event that suspected Aboriginal cultural heritage is found during the works within the study area, the following protocol MUST be followed to ensure compliance with the Act.

- All works within 10m of the relevant discovery area must cease immediately and if necessary protective fencing erected around the relevant area;
- The person making the discovery must immediately notify an appropriately qualified heritage advisor;

- The heritage advisor must be engaged to evaluate and record the findings, as well as inform First Peoples – State Relations and the Wurundjeri Woi-Wurrung Cultural Heritage Aboriginal Corporation; and
- If the material is demonstrated to by Aboriginal cultural material, approval for the activity under the *Aboriginal Heritage Act 2006* must be sought.

If you have any questions or would like to discuss anything further, please contact me on (03) 9376 6569 or 0447 771 173, or via email.

Regards



Luke Falvey
Executive Archaeologist
Heritage Insight Pty Ltd
www.heritageinsight.com

References

Cass, A, Cockroft, B, Lanyon, D, Olsson, K & Bourne, J 1995, *Profitable Soil Management for Orchards in the Goulburn Valley*, Soil and Land Management, Adelaide.

Desbiolles, J, Slattery, M & Saunders, C 2005, *Soil Improvement Technologies for Established Vineyards*, Agricultural Machinery Research Design Centre, University of South Australia, Adelaide.

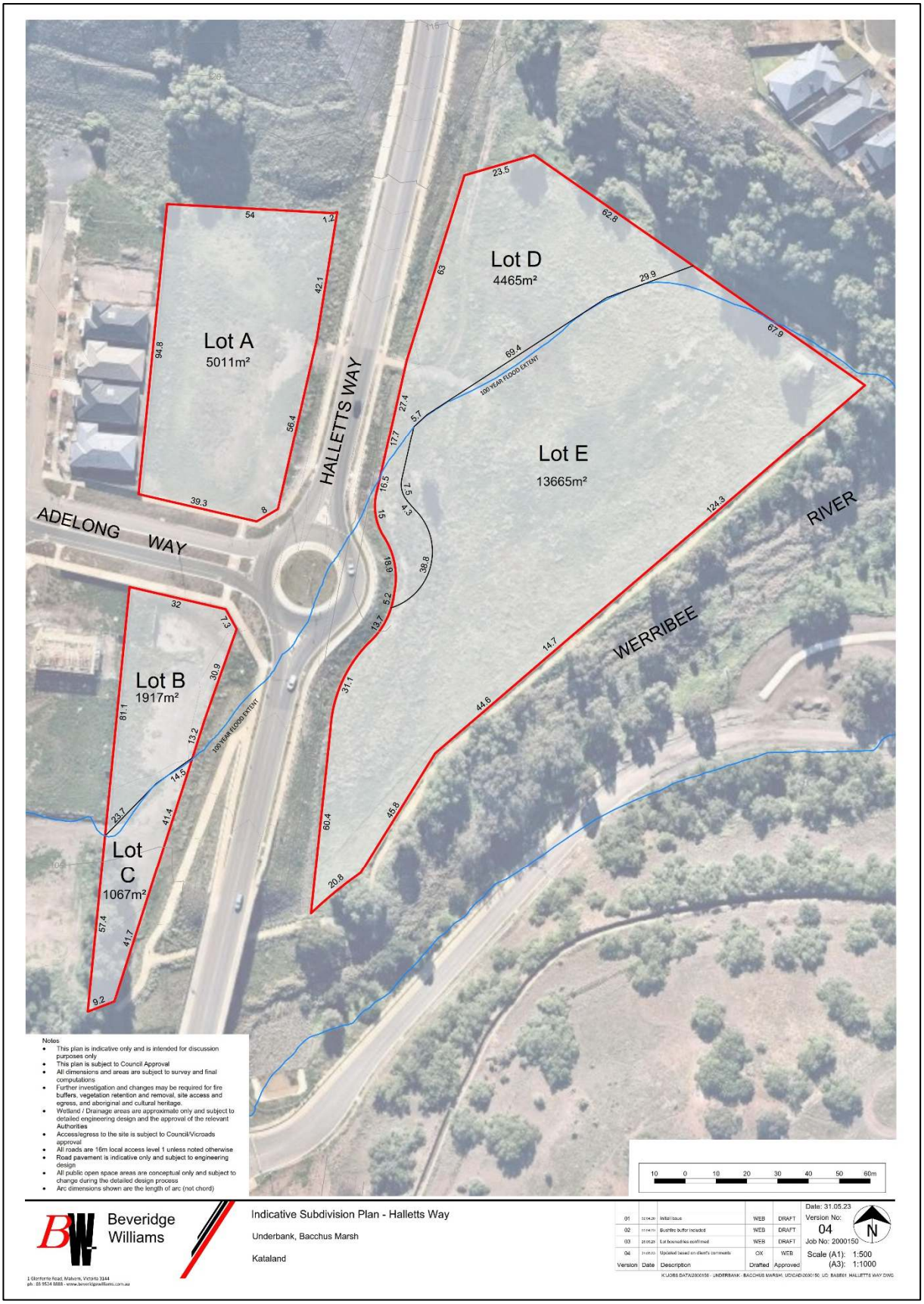


Figure 1: Indicative Subdivision Plan

Figure 2: Showing area of cultural heritage sensitivity across the study area.

Figure 3: 2002 Google Earth aerial image of the study area

Figure 4: 2016 Nearmap aerial image of the study area

Figure 5: March 2017 Nearmap aerial image of the study area

Figure 6: August 2017 Nearmap aerial image of the study area

Figure 7: September 2018 Nearmap aerial image of the study area

Figure 8: May 2019 Nearmap aerial image of the study area

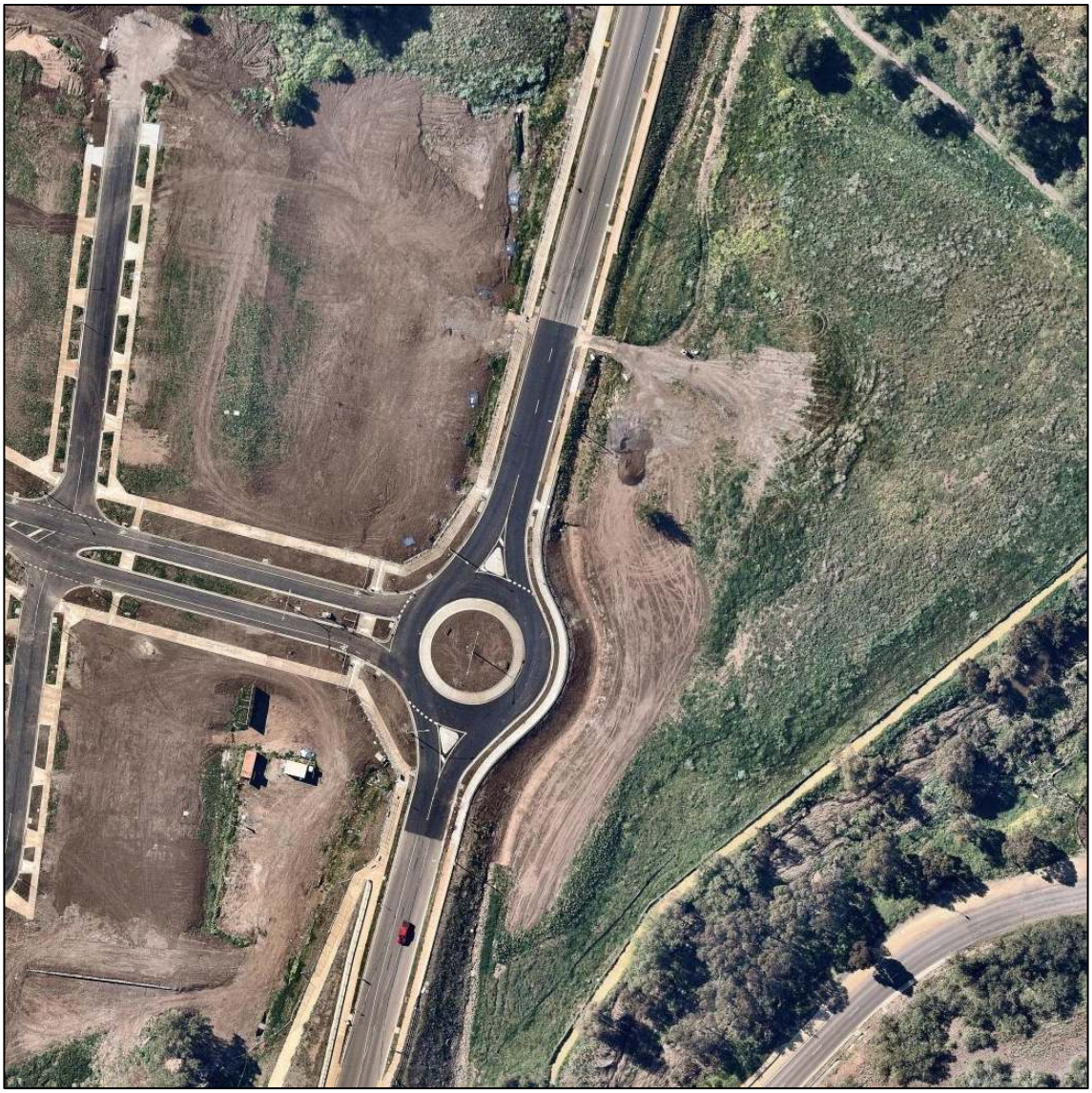


Figure 9: October 2019 Nearmap aerial image of the study area