MOUNT MACEDON SURVEY CAIRN

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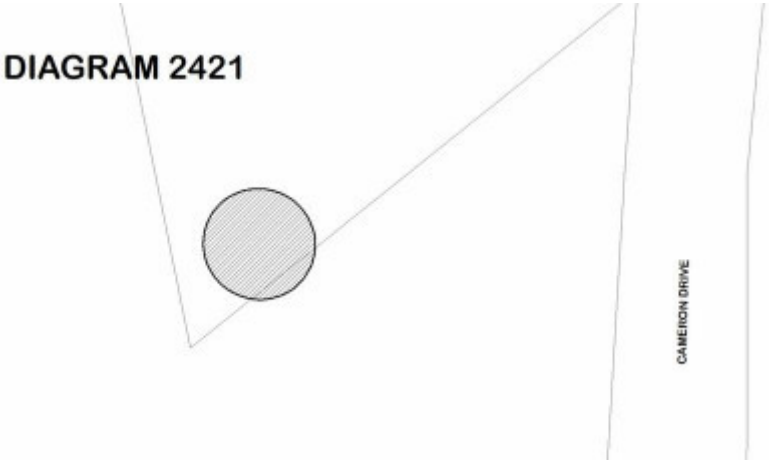

DIAGRAM 2421

Location

MEMORIAL CROSS LOOP ROAD MOUNT MACEDON, MACEDON RANGES SHIRE

Municipality

MACEDON RANGES SHIRE

Level of significance

Registered

Victorian Heritage Register (VHR) Number

H2421

VHR Registration

November 17, 2022

Heritage Listing

Victorian Heritage Register

Statement of Significance

Last updated on - November 21, 2022

What is significant?
The Mount Macedon Survey Cairn, a mortared stone cairn approximately ten metres in height, constructed in c.1860 for the Geodetic Survey of Victoria (1858-72).

How is it significant?
The Mount Macedon Survey Cairn is of historical significance to the State of Victoria. It satisfies the following criterion for inclusion in the Victorian Heritage Register:

Criterion A

Importance to the course, or pattern, of Victoria's cultural history.

Criterion B

Possession of uncommon, rare or endangered aspects of Victoria's cultural history.

Criterion D

Importance in demonstrating the principal characteristics of a class of cultural places and objects.

Why is it significant?
The Mount Macedon Survey Cairn is historically significant as an outstanding example of the type of survey cairns that were key to the Geodetic Survey of Victoria (1858-72), the earliest comprehensive land survey undertaken of Victoria. Prompted by the 1850s immigration boom, the Geodetic Survey facilitated the widespread sales of alienated Crown land, broader European settlement of the colony and the forcible displacement and disconnection of Aboriginal people from their traditional lands. The Geodetic Survey also established Victoria's first reliable survey control network, which is still used to this day. As a particularly monumental, intact, well documented and highly accessible survey cairn, it makes an important contribution to the understanding of the Geodetic Survey. [Criterion A]

The Mount Macedon Survey Cairn belongs in a class of places which are endangered to the point of rarity in Victoria. Although more than 250 stone survey cairns were erected for the Geodetic Survey, many have deteriorated or been lost due to exposure to harsh environmental conditions. [Criterion B]

The Mount Macedon Survey Cairn is notable as a fine and highly intact example of a stone survey cairn. In comparison to other stone survey cairns of its vintage, the Mount Macedon Survey Cairn displays workmanship that is of a higher quality, namely its tapered and monumental composition, the use of mortar and a permanent

foundation. [Criterion D]

Permit Exemptions

General Exemptions:

General exemptions apply to all places and objects included in the Victorian Heritage Register (VHR). General exemptions have been designed to allow everyday activities, maintenance and changes to your property, which don't harm its cultural heritage significance, to proceed without the need to obtain approvals under the Heritage Act 2017.

Places of worship: In some circumstances, you can alter a place of worship to accommodate religious practices without a permit, but you must notify the Executive Director of Heritage Victoria before you start the works or activities at least 20 business days before the works or activities are to commence.

Subdivision/consolidation: Permit exemptions exist for some subdivisions and consolidations. If the subdivision or consolidation is in accordance with a planning permit granted under Part 4 of the *Planning and Environment Act 1987* and the application for the planning permit was referred to the Executive Director of Heritage Victoria as a determining referral authority, a permit is not required.

Specific exemptions may also apply to your registered place or object. If applicable, these are listed below. Specific exemptions are tailored to the conservation and management needs of an individual registered place or object and set out works and activities that are exempt from the requirements of a permit. Specific exemptions prevail if they conflict with general exemptions.

Find out more about heritage permit exemptions here.

Specific Exemptions:

Permit Exemptions

The following permit exemptions are not considered to cause harm to the cultural heritage significance of the Mount Macedon Survey Cairn. They have been developed in consultation with the Office of the Surveyor-General and Parks Victoria.

General

- Minor repairs and maintenance which replaces like with like. Repairs and maintenance must maximise protection and retention of fabric and include the conservation of existing details or elements. Any repairs and maintenance must not exacerbate the decay of fabric due to chemical incompatibility of new materials, obscure fabric or limit access to such fabric for future maintenance.
- Works or activities, including emergency stabilisation, necessary to secure safety in an emergency where a structure or part of a structure has been irreparably damaged or destabilised and poses a safety risk to its users or the public. The Executive Director must be notified within seven days of the commencement of these works or activities.
- Painting of previously painted surfaces in the same colour, finish and product type provided that preparation or painting does not remove all evidence of earlier paint finishes or schemes.
- Cleaning including the removal of surface deposits by the use of low-pressure water (to maximum of 300 psi at the surface being cleaned) and neutral detergents and mild brushing and scrubbing with plastic (not wire) brushes.

Public places

- Removal and replacement of information, interpretive and directional signage, providing that any new signage is not affixed to the stone cairn or within the perimeter fence line around the cairn.

Landscape

Hard landscaping and services

- Subsurface works to existing systems provided these are outside the canopy edge of trees and do not involve trenching in new locations.
- Like for like repair and maintenance of existing hard landscaping including footpaths, driveways, bollards and fencing where the materials, scale, form and design is unchanged.
- Like for like repair and replacement of interpretive signage providing the scale and form is unchanged.
- Installation of physical barriers or traps to enable vegetation protection and management of vermin such as rats, mice and possums.
- Fire suppression and firefighting activities such as fuel reduction burns and fire control line construction, provided all heritage features and values of the place are identified and protected.

Gardening, trees and plants

- The processes of gardening including mowing, pruning, mulching, fertilising, removal of dead or diseased plants, replanting of existing garden beds, disease and weed control and maintenance to care for existing plants.
- Removal of tree seedlings and suckers without the use of herbicides.
- Management and maintenance of trees including formative and remedial pruning, removal of deadwood and pest and disease control.
- Emergency tree works to maintain public safety provided the Executive Director is notified within seven days of the removal or works occurring.

Telecommunications station

- All works required for the routine maintenance and operation of the telecommunications facility, providing such works are confined within the existing wire fence line.

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Theme

2. Peopling Victoria's places and landscapes

Construction dates	1860,
Heritage Act Categories	Registered place,
Other Names	SURVEY CAIRN, MACEDON CAIRN,
Hermes Number	207061
Property Number	

History

Land surveying in Victoria (1830s-1850s)

The earliest European land surveys in Victoria were spurred by the exploration and settlement of the former Port Phillip District during the 1830s. Expeditions such as those undertaken by Major Thomas Mitchell (1836), Robert Russell (1836) and Robert Hoddle (1837) focused on the documentation of fertile land, geological features and interactions with Aboriginal people, with the goal of identifying land for sale and settlement.[1] This exploratory work and the resulting settlement of Europeans across the Port Phillip District also culminated in Aboriginal people being rapidly displaced from their lands.

From the late 1830s, increasing European settlement in the Port Phillip District necessitated ‘special’ surveys to facilitate land sales and create parish maps. These surveys were primarily concerned with defining municipal, township and property boundaries and the laying out of essential services such as roads. The newly founded towns of Melbourne, Kilmore, Mornington, Port Fairy and Warrnambool were among the earliest localities surveyed and subdivided. Between 1836 and 1839, a more ambitious venture was made to survey and determine the border between the Port Phillip District and South Australia.[2]

Although best efforts were made to ensure the accuracy of these early surveys, they were often problematic due to factors such as faulty equipment, inconsistent application of surveying methods and lack of cohesion with pre-existing surveys.[3] Most surveys were carried out with little regard for existing surveys of neighbouring areas, which led to overlapping property boundaries and conflicting descriptions of municipal limits.[4]

Trigonometric surveys in Victoria

In some areas of the Port Phillip District, and later the colony of Victoria, land surveys were carried out using the method of triangulation. Such surveys were referred to as ‘trigonometric’ or ‘geodetic’ surveys, as they relied on the basic principles of trigonometry and an understanding of the curvature of the earth. Trigonometric surveys commenced with the measuring of two control points, forming the survey ‘baseline’, and the establishment of additional markers across the land being surveyed. From the baseline, surveyors would calculate the distance to each marker by using a theodolite to measure the angles between the three established control points. During the nineteenth century, this was the most precise means of conducting a land survey and had been utilised to complete large-scale surveys of Great Britain and Ireland (1791-1853) and India (1802-71).[5]

In the early years of European settlement in the Port Phillip District, small-scale trigonometric surveys were carried out in remote regions by Major Thomas Mitchell (Cape Nelson, 1836), Robert Russell (1836) and Charles Tyers (1839-40 and 1849). Other limited trigonometric surveys included those at Hobsons Bay (1854), Ballarat and Mount Macedon (c.1854), the Wimmera (1856) and Ararat (1857). Each was intended as a finite exercise and completed with varying degrees of accuracy.[6] The earliest recorded attempt at connecting existing surveys was undertaken by Clement Hodgkinson in 1852, although this did not extend beyond present-day metropolitan Melbourne.[7]

By the early 1850s, these issues became glaringly apparent with the onset of the Victorian gold rush. The sudden influx of immigrants and subsequent establishment of regional towns led to a demand for more land sales, and the corresponding need for a comprehensive survey of the entire colony.

Land surveys and dispossession

The early exploratory work and special surveys of the early-to-mid nineteenth century had a profound and irreversible impact on Victorian Aboriginal people. Despite being subject to the British doctrine of *terra nullius* (‘nobody’s land’), the surveyed lands of Port Phillip District were not unoccupied and were never ceded by their Traditional Owners. Frontier conflicts of the 1830s and 1840s were directly correlated with the movement of European settlers across Aboriginal lands as they sought prime locations to establish towns. As this pattern intensified throughout the nineteenth century, Aboriginal people were often forcibly and violently displaced from their traditional lands.
The ensuing Geodetic Survey of Victoria (1858-72) reinforced the notion of *terra nullius* and consolidated Britain’s claim on traditional Aboriginal lands.

The Geodetic Survey of Victoria (1858-72)

Following a Commission of Inquiry in 1854, preparatory work commenced for the Geodetic Survey of Victoria – the earliest attempted comprehensive land survey of the colony. The Commission recommended that a trigonometric survey be undertaken, beginning with the determination of a survey baseline and the selection of conspicuous locations to serve as survey stations.[8] Under the command of Captain Andrew Clarke, teams of sappers and miners worked across Victoria to clear the colony's most prominent mountain tops for the construction of survey stations.[9] Prior to 1860, it was typical for the construction of a single station to cost up to £500.[10]

The Geodetic Survey formally began in 1858 with the determination of the Geodetic Survey Baseline (VHR H1957), which reached from Werribee to Green Hill, near Eynesbury. The survey was a joint venture between the Office of the Surveyor General (Charles Whybrow Ligar, 1811-1881) and the Office of the Government Astronomer (Robert Lewis John Ellery, 1827-1908) and had three primary goals:

1. To survey and describe all of Victoria's geological features to facilitate settlement and land sales
2. To consolidate the various earlier, isolated and inaccurate surveys
3. To create a reliable framework upon which all future land surveys could be based.

From its commencement, there was much professional and political disagreement over the best approach for this survey. The initial work of clearing bush and constructing survey stations (£5,451 in the first year alone) was costly and time-consuming, which prompted Surveyor General Ligar to propose a quicker and less expensive method.[11] Although the Commission had recommended a trigonometric survey, Ligar favoured a method which involved dividing the colony into 'geodetic blocks' along true meridians and parallels, the boundaries of which would become parish boundaries.[12] Ligar's method was used primarily until the end of 1859, by which point the trigonometric approach was introduced.[13]

Between 1858 and 1872, two to seven survey parties operated across Victoria at any given time.[14] Survey parties typically consisted of a foreman (usually a salaried employee of the Surveyor General), three axemen, one or two bullock drivers and a cook.[15] Although some clearing and construction had been done during the 1850s, many survey parties from the 1860s onwards were tasked with the laborious work of felling and clearing timber, as well as quarrying and breaking stone for the construction of new survey stations.[16]

The placement of each station was indicated by a stone and metal marker, which the survey party partially buried into the ground to serve as a permanent reference point in case the station itself was destroyed.[17] The survey station was then erected over the marker, generally to a height which was visible from nearby cleared mountain tops. In most instances, survey parties fashioned a simple stone cairn of less than five metres, supported or surmounted by a timber pole, which served as a beacon to surveyors making observations from other mountain tops.

Observations were made initially from the survey stations immediately north of Melbourne and in the western district, with Mount Macedon as one of the earliest observation sites. By mid-1861, most of north and western Victoria were surveyed and parties progressed into Gippsland.[18] Throughout the 1860s, surveyed land was gradually allotted and made available for lease or purchase under the various iterations of the *Land Act 1862*.[19]

Although not intended as a finite exercise, the Geodetic Survey concluded with the determination of the Victoria-New South Wales border and the Black-Allan Line in 1872 (the straight line from Cape Howe to the headwaters of the Murray River and that forms the border between Victoria and New South Wales).[20] Further surveys were carried out from the 1870s, but these focused on mapping the cadastral system in specific localities.[21] At the survey's conclusion, 257 survey stations had been constructed across Victoria.[22]

[1] Cannon, M. and MacFarlane, I. (ed.), *Surveyors' problems and achievements, 1836-1839*, Institution of Surveyors, 1998, pp.6-7.
[2] Chappel, K., *Surveying for land settlement in Victoria, 1836-1960*, Office of Surveyor-General, 1966, pp.6-10, pp.11-19.
[3] *Ibid*, p.43.
[4] 'Further notes on survey history in Victoria – an extract from an article', Surveyor-General (DELWP).
[5] Bowie, W., 'Triangulation: how is it done and what is it for?', *Scientific American*, vol. 144, no. 6, June 1931, pp.369-73.
[6] Chappel, 1966, pp.45-50.
[7] 'Further notes on survey history in Victoria – an extract from an article', Surveyor-General (DELWP).
[8] Chappel, 1966, pp.59-60.

[9] ‘Further notes on survey history in Victoria – an extract from an article’, Surveyor-General (DELWP).
[10] Ligar, C., *Memorandum, Map and Reports*, 30 January 1860, VPRS 15905.
[11] Chappel, 1966, pp. 72-3.
[12] *Ibid*, pp.72-3.
[13] *Ibid*, p.76.
[14] Ellery, RLJ, *The Age*, 5 July 1873, p.7.
[15] Benwell, G.N., ‘Tracking Turton in Gippsland’, *Victorian Historical Journal*, vol. 62, no. 3, p.120; Stuart, I., ‘The surveyors’ lot: making landscapes in New South Wales’, *Australasian Historical Archaeology*, vol. 25, 2007, p.46.
[16] Benwell, 2007 pp.121-23.
[17] Ellery, RLJ, *The Age*, 5 July 1873, p.7.
[18] Ellery, R. in ‘Memorandum, Geodetic Survey’, PROV VPRS 15905, 15 May 1861.
[19] Chappel, 1966, p.80.
[20] Ellery, R., *Brief Sketch of the Geodetic Survey of Victoria*, September 1891.
[21] Benwell, 2007, p.119.
[22] Ellery, RLJ, *The Age*, 5 July 1873, p.7.

Extent of Registration

NOTICE OF REGISTRATION

As Executive Director for the purpose of the **Heritage Act 2017**, I give notice under section 53 that the Victorian Heritage Register is amended by including a place in the Heritage Register:

Number: H2421
Category: Registered Place
Place: Mount Macedon Survey Cairn
Location: Memorial Cross Loop Road, Mount Macedon
Municipality: Macedon Ranges Shire

All of the place shown hatched in Diagram 2421 encompassing part of Allotment 33 Section 2 Parish of Macedon and part of Allotment 19R Section 2 Parish of Newham within a 10 metre radius from the base of the cairn.

17 November 2022
STEVEN AVERY
Executive Director

This place/object may be included in the Victorian Heritage Register pursuant to the Heritage Act 2017. Check the Victorian Heritage Database, selecting 'Heritage Victoria' as the place source.

For further details about Heritage Overlay places, contact the relevant local council or go to Planning Schemes Online http://planningschemes.dpcd.vic.gov.au/