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REPORT

Archaeological Site Condition Monitoring Report –
Authority no. 2023/244
Mauao Historic Reserve, Tauranga



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ARCHAEOLOGICAL SITE
CONDITION MONITORING REPORT
AUTHORITY NO. 2023/244
MAUAO HISTORIC RESERVE
TAURANGA

29 February 2024

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s 7(2)(a) - Privacy

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Purpose

Mauao Historic Reserve is an extensive cultural heritage landscape that covers approximately 40 hectares. It is located on the eastern side of the entrance to Tauranga Harbour (Figure 1). The reserve contains components of three pā, plus associated pits, terraces, platforms, house floors and middens (Figure 2). The shell mounds in the reserve are the only known surviving examples of this type of archaeological feature within the Bay of Plenty. Mauao is gazetted as a Historic Reserve and is managed by Tauranga City Council (TCC). Mauao is protected under the provisions set out in the Mauao Vesting Act 2008. The Trustees of the Mauao Trust administer the Reserve on behalf of Ngāi Te Rangi, Ngāti Ranginui and Ngāti Pūkenga. The Reserve must be managed in a manner consistent with the requirements of the Reserves Act 1977. Mauao is also identified as a wāhi tapu on the Heritage New Zealand List (item no. 9423).

One of the key principles of historic heritage management is that the values of heritage places are clearly understood before decisions are taken that may result in change. Once the heritage values are identified and understood, the aspects of the places that possess heritage value can be conserved and protected accordingly. The visible archaeological features of the reserve were mapped in 2003 and an archaeological report was prepared by Ken Phillips. In 2004 a Conservation Plan was prepared for the reserve by Wildland Consultants Ltd, which included specialist archaeological advice to guide management and conservation of the archaeological sites within the reserve. Phillips updated the archaeological report in 2014, and there have also been other archaeological reports prepared between 2003 and 2022 relating to particular work carried out under archaeological authority conditions within the reserve.

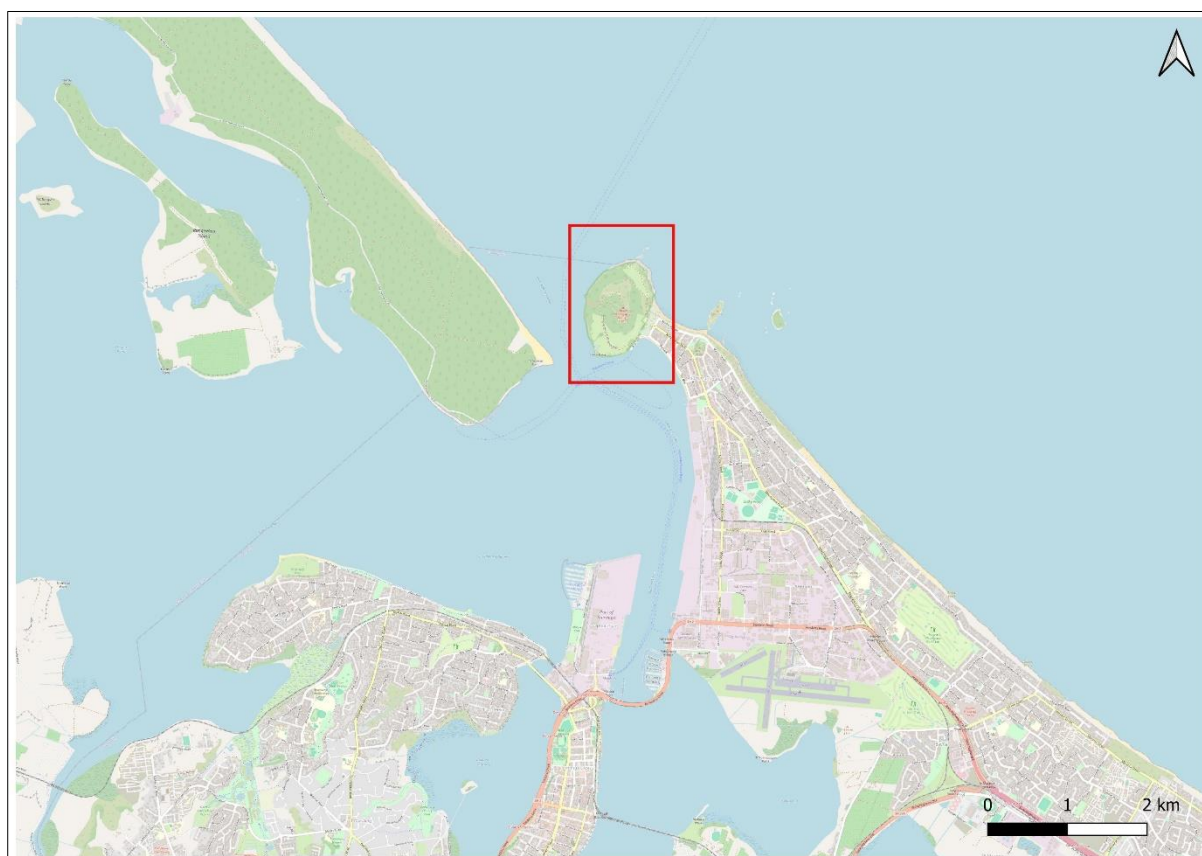


Figure 1 – Location of Mauao Historic Reserve (LINZ).

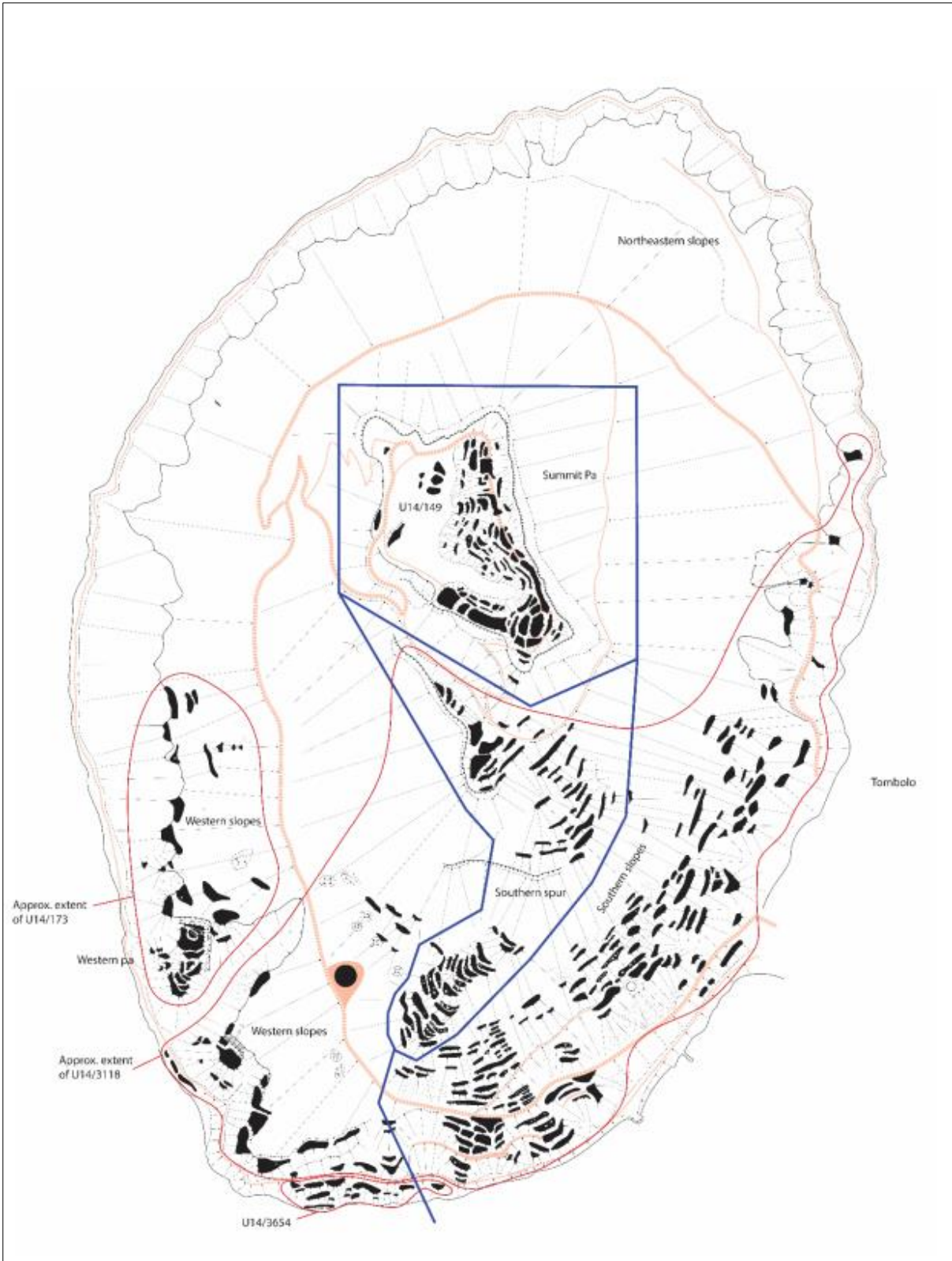


Figure 2 – 2019 plan showing recorded archaeological features on Mauao (InSitu Heritage Ltd 2019).

TCC were granted an archaeological authority (no. 2023/244) by Heritage New Zealand in November 2022, to undertake various activities associated with ongoing maintenance of the reserve. This authority replaced an earlier one (no. 2017/944) that expired in August 2022.

Heritage Management Specifications were prepared by InSitu Heritage in May 2016 to guide the work permitted under the conditions of the archaeological authority. The specifications included the establishment and maintenance of an archaeological site condition monitoring programme. The specifications were updated in August 2022 and the current archaeological authority condition 3 references both the updated specifications and 'Te Korowai o Mauao Archaeological Site Management and the Ecological Restoration of Mauao Historic Reserve, Tauranga' (InSitu Heritage 15th June 2022) as guiding documents.

Condition 7 of the archaeological authority requires that the authority holder (TCC) submit to Heritage New Zealand an annual report containing a summary of the maintenance works undertaken during the preceding year and outlining any archaeological work completed.

This condition is a continuation of the annual reports that have been prepared since 2018 (under a similar condition in the previous archaeological authority), which provided a summary of the annual work programme and archaeological site condition monitoring data.

This latest (2024) monitoring report provides a summary of the annual work programme undertaken during the period from November 2022 – November 2023; and updated data for the archaeological site condition monitoring, gathered during site visits on 23rd and 24th January 2024.

The archaeological site monitoring programme has twenty (20) condition monitoring points, most of which were established in 2018. Minor adjustments have been made to the programme in 2024 to remove redundant monitoring points, such as former rabbit activity areas; and introduction of some new monitoring points, such as around newly installed interpretation structures.

Summary of reserve archaeological work 2022/23

There was an active programme of reserve management actions during 2022/23, but little or no impact on archaeological features due to the project design and care taken during all ground disturbing works.

A Mauao Interpretation and Placemaking project is on-going and is operating under a separate archaeological authority (authority no. 2022/469).

Archaeological work specific to on-going reserve maintenance was carried out during the year as follows:

15th December 2022 – the pre-start archaeological briefing was delegated to s 6 - Maintenance by the section 45 approved person (s 7(2)(a) - Privacy). s 6 - Maintenance completed the briefing prior to minor works on the summit to improve barrier and access structures protecting archaeological features. This work had no impact on intact archaeological features.

2nd May 2022 – a drone mapping survey was completed on selected sections of Mauao to provide a high-resolution plan of visible archaeological features at potential risk of loss due to erosion. On the same day an archaeological inspection on the summit was done to check that no archaeological features would be affected by proposed re-capping work. The results of the drone survey and information about proposed archaeological research at Mauao was presented to the Mauao Trustees meeting on 3rd May 2022.

24th October 2023 – monitoring of gravel removal from terraces adjacent to the 4WD track. Run-off from the track had resulted in an accumulation of gravel on the terrace surfaces. As much as possible

has been removed without disturbing the archaeological features. Run-off material is an on-going management challenge.



Figure 3 – Location of archaeological site condition monitoring points on Mauao (LINZ).



Monitoring Site 1

Stone Jetty surrounds – stone walls

Notes: The monitoring site has been extended to include the walkway connection to the 4WD track, as there is some exposed midden which requires monitoring. Monitoring site also includes the bank down to the jetty steps entrance, which now has a well-established sward of flax. Grass and other vegetation cover significantly advanced since 2018. The karaka tree may need to be reduced in weight if it becomes an issue. Wall condition has significantly stabilised since 2018.











Monitoring Site 2

Iron Jetty and surrounds

Notes: Vegetation on the bank has reduced, but there is on-going invasion by sycamore as well as rabbit burrowing activity (location of survey pole in 2024 image), karaka growth has improved. On going active management of the trees on the concrete face of the jetty is required, although much improved since 2018. The view shaft to the iron debris has been well maintained.









Monitoring Site 3

Base Track midden erosion

Notes: Significant advance in vegetation cover over the monitoring period and the eroded face is covered by flax. Very little shell is actively eroding onto the path. The weight of the flax should be monitored.



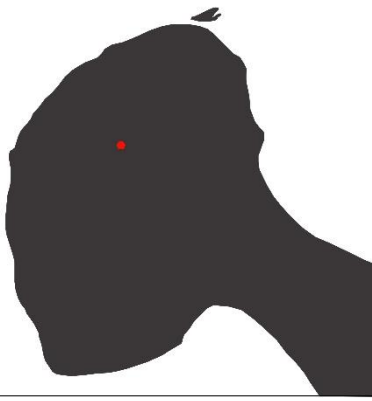


Monitoring Site 4

The Lower Summit

Notes: Newly added monitoring point. Interpretation place on lower summit. There is some wear on the grass from informal visitor tracks to get to the bench, as well as rabbit damage in the grass and some loss of the capping material which has exposed the edge of the concrete plinth.



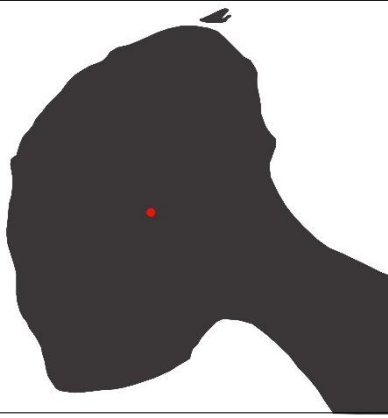


Monitoring Site 5

Repairs to summit terraces

Notes: Repair to terraces completed in 2013. The aggregate at the base of the slope was not moved as recommended as in 2019 but is now less visible. Grass cover much more robust than in 2018. Encroaching vegetation has been managed to keep terraces visible but requires on-going monitoring. There is evidence of rabbit damage which will require active management.



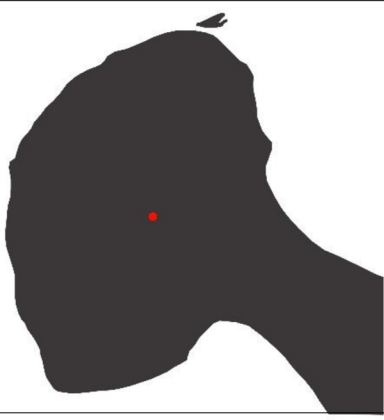


Monitoring Site 6

Terrace back scarp on summit

Notes: Newly added monitoring point. Monitoring the capping, as the terrace back scarp has visitor wear and there is also rabbit damage.





Monitoring Site 7

General monitoring of summit wear

Notes: The summit area has been redeveloped as part of the interpretation and placemaking project and has resulted in greater ground cover, but there is on-going wear of the imported armouring material on the summit and on-going recapping is required by bringing in additional material from the stockpile. Monitoring should continue. Trig was removed in June 2021, replaced with touchstone.



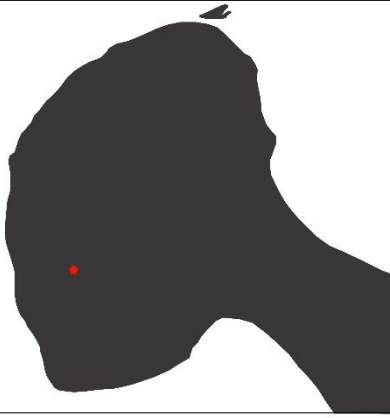


Monitoring Site 8

Desire line tracking on summit

Notes: Action to block access with planting and a fence installed in 2023 has seen a significant reduction in wear to the intact archaeological deposit. Additional fill material which was placed around the tree remains intact.





Monitoring Site 9

Erosion on Shell Mound – Stock and Vegetation Management

Notes: The temporary exclusion of stock from the shell mound in 2019/20 successfully established a good grass sward which has been maintained. The mound is significantly more stable now than when monitoring started in 2018. Rabbits are attracted to the shell, and so it is important that the dense sward and low numbers of rabbits are maintained.







Monitoring Site 10

Rabbit Damage (active)

Notes: Vegetation cover has improved as greater rabbit control measures are in place, but this should be closely monitored as there are still active rabbit burrows and accessways visible along the fence line which has exposed midden. Monitoring should be ongoing as rabbit control is still required.







Monitoring Site 11

Midden exposure west end of the Ditch

Notes: Newly added monitoring point. There is a large midden exposure at the western end of the ditch on site U14/173 (Pā). There is active exposure and slope erosion, possible slope failure risk.



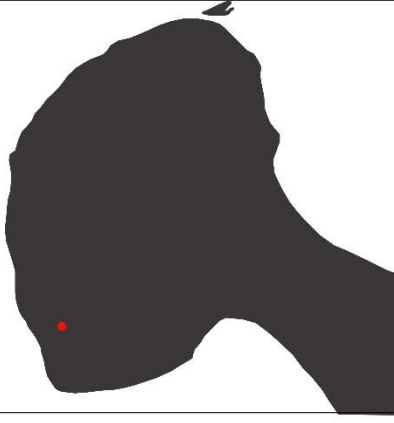


Monitoring Site 12

Rabbit damage eastern slope of Pā

Notes: Newly added monitoring site. Rabbit damage (burrows and accessways) on eastern slope of site U14/173 (Pā), in location of survey pole. Further rabbit control needed and will require monitoring to its conclusion.



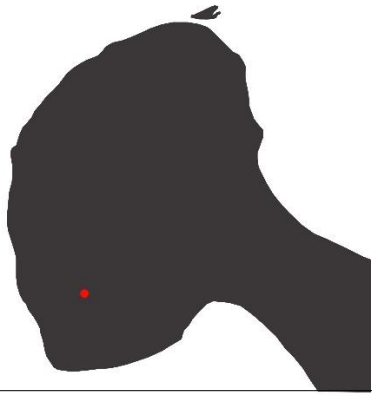


Monitoring Site 13

Pā U14/173 condition/grass cover

Notes: General views across pā to demonstrate grass cover. Site is stable with good ground cover being maintained. Rabbits are active on the eastern side of the pā, requires monitoring and control.





Monitoring Site 14

Midden and vegetation management – Pōhuehue growth

Notes: Pōhuehue cover on midden mounds above water reservoir is stable but has not spread to other mounds since monitoring began in 2018. The grass sward is kikuyu; stock have had access to the mound since December 2019. Stock numbers should continue to be closely monitored and reduced if necessary.



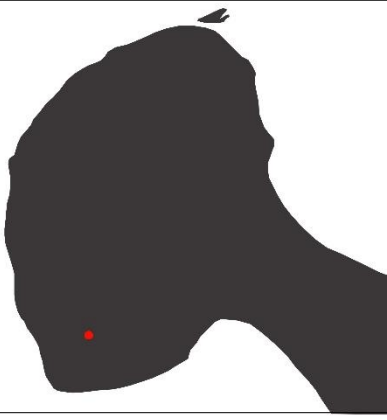


Monitoring Site 15

Land slip on southern slope

Notes: Temporary fencing has failed, the midden is still exposed and the erosion is still active, but not significantly different from the erosion and exposure seen in 2022. Recommend trying netting fencing. Rabbits have damaged parts of features nearby, including in a kūmara pit, needs control.





Monitoring Site 16

4WD Track maintenance issues – tailings management

Notes: Built up tailings were removed from terraces with archaeological supervision, although there is still a significant issue with road metal being distributed onto terraces below the track and on-going archaeological monitoring and metal removal is required. The distance between culverts, their function and the treatment of tailings needs further management attention.







Monitoring Site 17

Fence around Midden on southern slope

Notes: Fence around midden that was installed in 2003 was removed in 2018. Ground cover around karaka and midden on slope well developed.

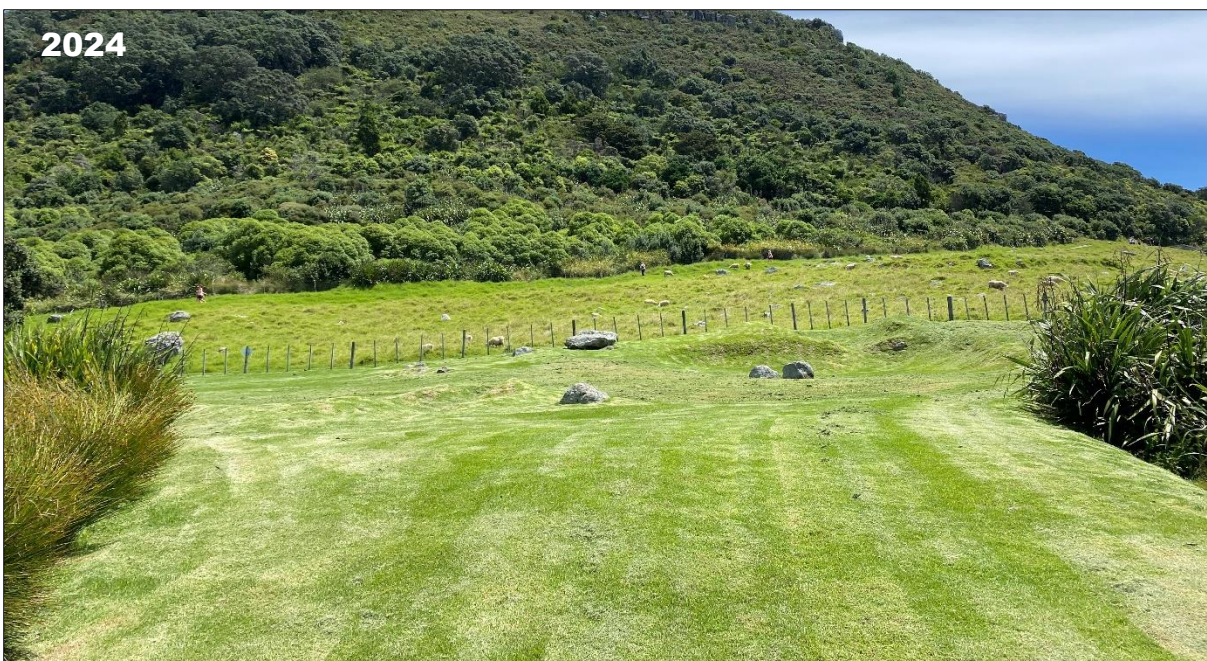


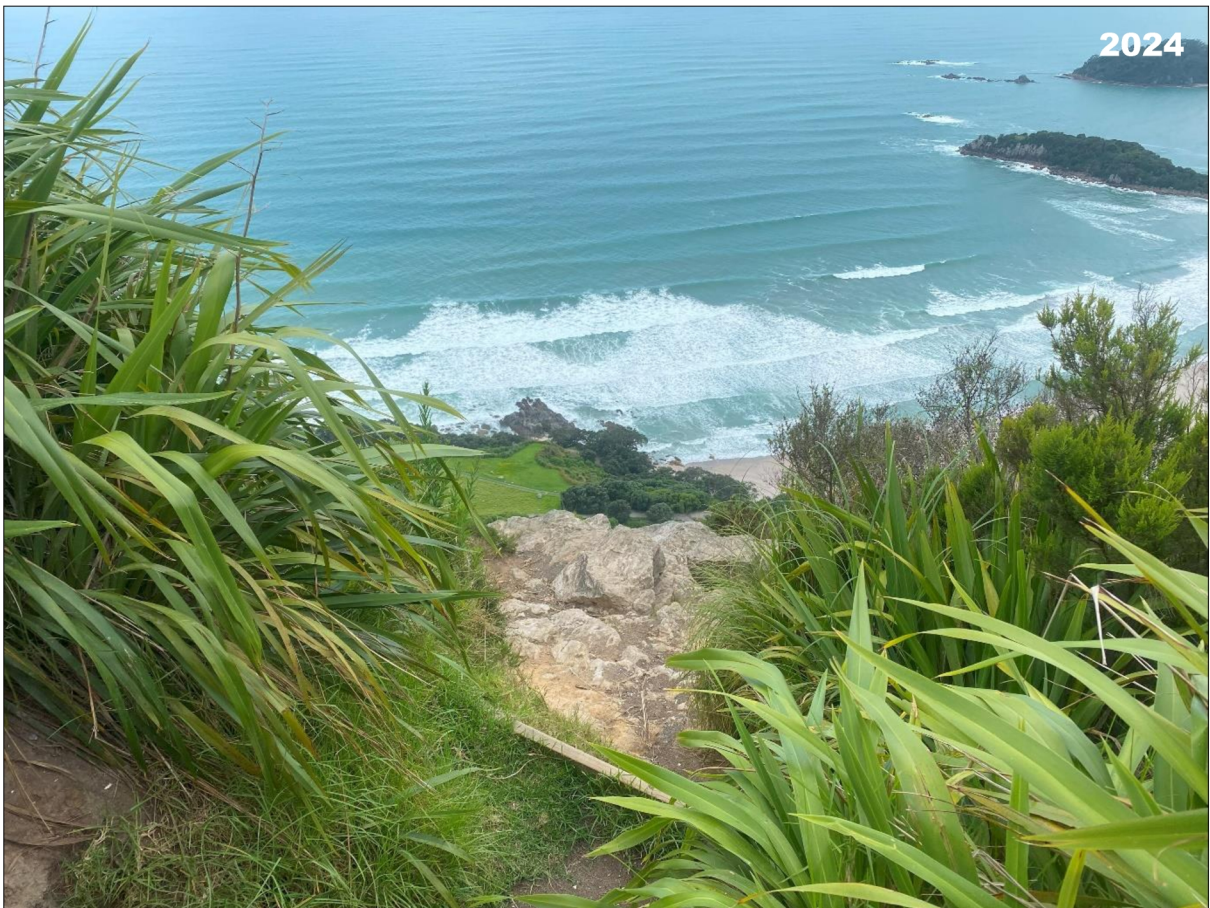
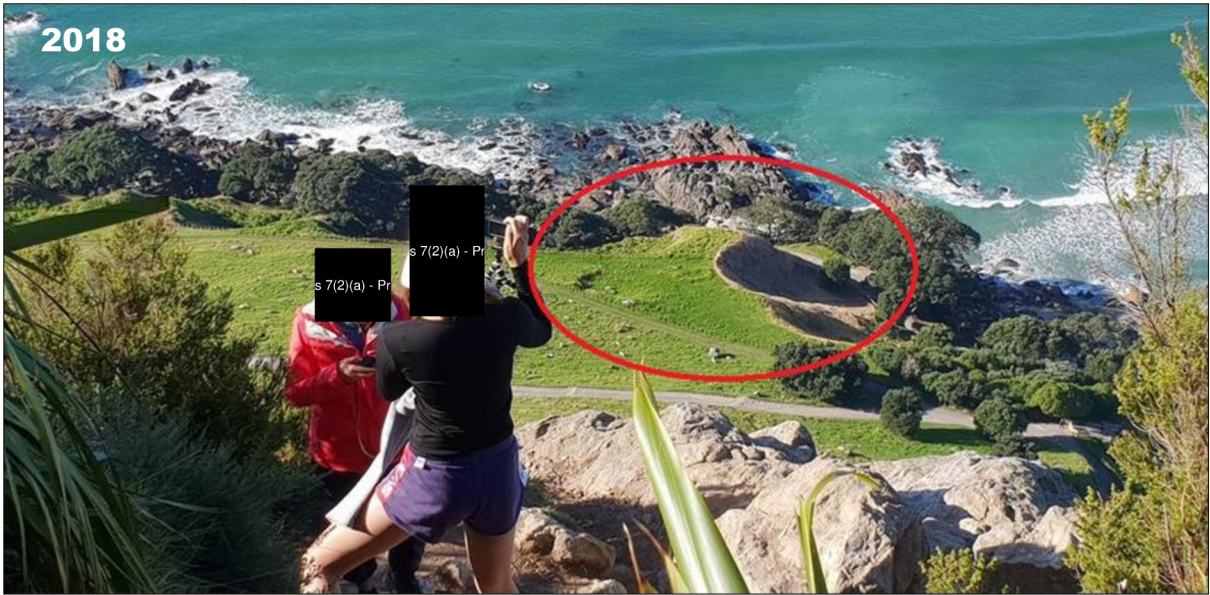


Monitoring Site 18

Area of Military Camp, helicopter pad, pits and terraces retired from grazing in 2018

Notes: Management of vegetation and site visibility has significantly improved following cessation of grazing. The length of weed eating needs to be monitored especially in summer as patches of the grass sward on the pit are broken by 'scalping'.







Monitoring Site 19

Stone Steps condition and erosion

Notes: Stonework stable at present, but erosion from desire line is still apparent. Weed spraying corridor needs to be reduced as this is encouraging desire lines. Action needed at the top of the stairs to reduce water flow and erosion, which was resolved in 2021 but has re-occurred.





Monitoring Site 20

Base of Stone Steps condition and erosion

Notes: Stonework stable and erosion from desire line is still apparent but improved since 2018. Weed spraying corridor needs to be reduced as this is encouraging desire lines. Down-stream effects of the water flow and erosion needs to be monitored and managed.



References

Phillips, K.J.S. 2003. Preliminary Archaeological Survey and Identification of threats to archaeological resources, Mauao Historic Reserve. Unpublished report to Tauranga District Council

Phillips, K. J.S. 2014. Archaeological Inspection and Conditions Assessment Mauao Historic Reserve. Unpublished report prepared for Tauranga City Council

Wildland Consultants Ltd. 2004. Conservation Plan for Mauao Historic Reserve. Unpublished report prepared for Tauranga District Council