



ARTC

SJ23-0631-RPT

**Benalla Signal Hut
Revisit Inspection Report**




25 April 2024



ARTC

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RECORD OF DOCUMENT CONTROL

REVISION	TASK	COMPANY	NAME	SIGNATURE	DATE
Benalla Signal Hut – Revisit Inspection Report					
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INTRODUCTION

Sterling was initially engaged by ARTC to undertake a visual inspection of the Benalla Signal Hut (the Hut) to assess its current structural condition and provide advice regarding the feasibility of re-purposing salvageable portions of the signal hut. The initial inspection took place on 12th July 2023, and the recommendations provided by Sterling included propping as soon as possible, removal of loose roof sheeting and demolition or major strengthening works within 6 months.

ARTC have since installed props providing critical support to structural members highlighted in the initial report, and removed loose roof sheeting, and installed signage warning pedestrians not to enter the Hut.

Sterling recommends that ARTC implement an inspection regime which includes follow-up assessments on site every 6 months, to monitor and reassess the condition of the structure until a permanent solution can be implemented. Alternatively, ARTC could proceed with the dismantlement/demolition and salvaging parts of the structure per the original report.

OBSERVATIONS

During our revisit to the Signal Hut, the following observations were made:

1. Structural props have been installed to support the structural members affected by the vehicle impact damage.
2. There was no discernible difference in the previous defects observed.
3. Termites were found in the upstairs floor members, as well as suspected termite induced decay. Termites were the suspected cause of some timber defects in the initial report.

IMPACT DAMAGE

Impact damage on the northern wall had destroyed one of the columns and a number of surrounding timber wall studs, raising concern regarding the structural integrity of the building. Remediation works have since been undertaken which included the installation of multiple steel props to replace the destroyed column and wall studs, shown in Photo 1 below. Sterling did not confirm adequacy or provide advice regarding the steel props.



Photo 1: Steel Propping Installed

COLUMNS

Previously, the northwest and southwest columns were both exhibiting signs of splitting and deterioration. Inspectors found no additional deterioration of the columns over the last 6 months.

Furthermore, the 8 No. steel columns supporting the staircase and 4 No. timber columns at each corner of the Hut were observed to be in the upright position, with no inclination recorded below 89.5°. The northwest and southwest can be observed in Photos 2 and 3.



Photo 2: Southwest Column



Photo 3: Northwest Column

TERMITES

During the revisit, inspectors found the step into the upstairs level was severely rotted. On closer inspection, termites were found to be present in the timber. Photos 4 and 5 display the rotting and termites present in the timber.



Photo 4: Upstairs Step rotting



Photo 5: Termites present in timber

DISCUSSION AND RECOMMENDATIONS

The termite decay observed necessitates termite treatment to reduce the rate of further decay. Access to the Hut must remain restricted due to the risk associated with termite-decayed timber. While termites were not found in primary structural members during this inspection, our previous report found potential evidence of termites in some structural columns.

With respect to Sterling's previously raised concerns regarding the global stability of the Hut, periodic ongoing structural inspections every 6 months are required to ensure early detection of any change in stability, until a permanent solution can be implemented, such as demolition, dismantlement, or major strengthening works.