

# ENGINEERING HERITAGE AUSTRALIA

## ENGINEERING HERITAGE PRACTICE NOTES



ENGINEERS  
AUSTRALIA

### PRACTICE NOTE No. 7

## Assessment and Conservation of Movable Heritage

### Purpose

The purpose of this practice note is to provide engineers and others with essential background information on the assessment and conservation of a movable heritage item.

It deals specifically with items of engineering significance and work will involve, for example, standalone machines, machines as part of other elements, equipment used in processing and manufacturing, items constructed for energy generation and energy transmission and for communications.



Duck Reach Water Turbine 1895



ABT Locomotive 1896

### Preamble

The assessment and conservation of a movable heritage item is more complicated than assessment and conservation works for other items.

Previous Practice Notes have had direct reference to the Burra Charter which relates an item to a place.

Additional Principles for a Movable Heritage Item are :-

1. The common theme of movable heritage is that items are not tied to a place. The item may gain significance from its place but the operation, design principles, development history and location in the story line of the use and development of the technology of the item are more significant.
2. The continuing use of a movable heritage item is a powerful factor in demonstrating all of these considerations but operation and public safety requirements may require unacceptable alterations to materials, structure and appearance. If this is the case then a museum situation is likely to be the only viable option.
3. The determination of an acceptable end use becomes of primary importance in the assessment with conservation following on the determination.

The Burra Charter is the best currently available document and its principles and approach can be successfully used with only minor modification to these principles.

The story behind the item has a high significance and more so than many other heritage items and requires interpretation and presentation.

### **The Assessment Procedure**

Reference should be made to Practice Notes 1 – 4.

The procedure gathers information and analyses it for use in the conservation procedure.

Determine:-

- The structural and fabric condition of the item.
- The capability of the item to be operated. Check compliance with current operation and safety standards. Check for toxins including asbestos and lead paint.
- The history of the item.
- The history and achievements of the people involved in the design construction and operation.
- The design, construction and operating features. Special or unusual components.
- Alterations, additions and repairs.
- The usefulness of additions.
- The technology used in the design and construction with attention to materials and their properties, construction techniques and details.
- Where the item fits in the timeline of development of its type.
- The options for end use.

All of these dot points require engineering expertise.

### **The Conservation Procedure**

The procedure applies the assessment to obtain the available options enabling a best choice decision to be made

The principles and techniques are those of the Australian Burra Charter set out in Practice Note 1 together with the additional principles above.

Conservation of the item involves a number of ordered steps as follows:-

- Determine the significance of the item as a whole.
- Determine which components are highly significant, which components have some significance and which components have no significance
- Determine if there are individual components which require removal, restoration or reconstruction or adaptation and assess whether the impact of the alterations diminishes the significance of the item.
- Assess public safety issues. Consider structural and fabric consequences and their impact on conservation options.
- Examine the defects in design and construction and whether improvements can be made so as to not repeat past mistakes or to provide better performance of the fabric and structure.
- Evaluate whether an alteration is acceptable including visual appearance.
- Determine acceptable end uses of the item based on the above.
- Assess the practicality of carrying out the conservation works decided upon. This includes considering the impact of introducing new materials. The extent of new materials may be minimised by reuse of material from elsewhere.
- Carry out the conservation works to the above.

## **Interpretation and Presentation**

This has high importance for a movable heritage item.

Very few movable items of past generations still exist; we have descriptions, for example, of siege engines but none exist. We have present examples of movable items being neglected and disappearing and they will be conserved only if their story is told and the community want it.

**Interpretation** is the process of communicating messages and stories relating to the item from the item to the onlooker. It must be based on factual data about the item.

However, any interpretation which does not tell a story and which does not relate to the observer is sterile.

The item must tell its story and must involve the onlooker.

The story must deal with the whole of the item and not concentrate upon a part.

It must present more than factual data.

**Presentation** is the manner or way in which the interpretation is given to the onlooker.

It may, for example, be informational panels, museum display or a working demonstration.

It is used to give the story to the onlooker and should involve the onlooker emotionally.

The best presentation relates the item to the people behind it linking them to the people now looking at it.