

LIBRARY

Department of Biodiversity,
Conservation and Attractions

This PDF has been created for digital preservation. It may be used for research but is not suitable for other purposes. It may be superseded by a more current version or just be out-of-date and have no relevance to current situations.



Construction of the Tree Top Walk



The tingle forest has long held a fascination for people wanting to get up close to these very special trees. Years ago, people used to drive their cars right inside a giant old tingle tree for a great photo opportunity. Unfortunately, this led to the tree being 'loved to death' and it fell down in 1990. Tingle trees have shallow roots and are very sensitive to compaction of the soil from people walking or driving around their bases.

A tree top walk in the south-west was first proposed in 1994 to protect the tingle forest and allow the ever increasing number of visitors to gain an enhanced experience. A design team was selected from an Australia-wide competition for the Valley of the Giants project, with construction started in 1995.

The Tree Top Walk was designed to minimise the impact of humans on the tingle trees, with an emphasis on the protection of the environment. For this reason, the walk was built using a minimum of machinery. Specifically, no helicopters or cranes were involved, with the pylons erected by riggers using scaffolding.

The spans used were prefabricated in Fremantle and moved onto the site using backhoes and light trucks before being bolted together on the forest floor. They were hoisted into their positions between each of the pylons using hydraulic jacks and winches.

The walk consists of six 60m lightweight bridge spans on seven pylons, reaching a maximum height of 40m, over a small creek at the bottom of the valley.

The spans were especially designed to sway slightly as you walk in order to create the sensation of being in the canopy of the forest.

The see-through steel decking reinforces the sensation of being high up in the forest canopy.

The inspiration for the design of the pylon platforms and the trusses was the tassel flower (*Leucopogon verticillatus*) and sword

grass (*Lepidosperma effusum*) – both understorey plants of the tingle forest. The pylons were constructed from Austen steel, which oxidises and develops a rusty colour that blends into the forest to give the impression of the walk being suspended in the air.

The Tree Top Walk opened on 6 August 1996. The entire Valley of the Giants project, including the Ancient Empire boardwalk, cost \$1.8 million. By 2015, the Tree Top Walk had attracted more than 3.2 million visitors.

Ancient Empire

'... the place was whisper quiet. It was magic and I was mesmerised by simple pleasures... such as pockets of light that would filter down past the canopy to the forest floor, the shades of green, the survival of relic plants ...'

Rowena Howard, Ancient Empire landscape architect.

The Ancient Empire was built at the same time as the Tree Top Walk and provides a ground level experience of the tingle forest. Jarrah decking and bitumen paths lead visitors around and even through the giant tingle trees. Viewing platforms and seats provide people with the opportunity to pause and observe the forest and maybe even spot some of the local birdlife. Interpretive signs around the walk tell the story of the tingle forest and its inhabitants.



Facts and figures

Key statistics

Ancient Empire Walk length	600m
Tree Top Walk length	600m
Length and width of wooden jetty	74m x 3m
Width of walkway of steel trusses	0.9m
Height of walkway from forest floor	9–40m
Weight of a steel truss	10 tonne
Diameter of platforms	3m
Number of pylons	7
Diameter of pylons	0.6m
Strength of guy wire	85 tonne
Foundation type	Steel grillage



Timbers used in the Valley of the Giants

Ancient Empire boardwalk	Jarrah
Decking and stud work around discovery centre and gift shop	Jarrah
Light coloured cladding	Hoop pine
Dark coloured cladding	Karri
Shop counters	Red tingle and jarrah



With thanks to

Architects	Donaldson and Warn
Structural engineers	Ove Arup
Environmental artist	David Jones
Fabrication and erection	Future Engineering and Communication
Graphic design	Stumpfel Shaw
Signage	Compaq Marketing
Ancient Empire landscape architect and interpretive designer	Rowena Howard
Site managed by	Department of Parks and Wildlife
Arborist	Arborguy
Maintenance	Precision Contracting



For more information contact:

Valley of the Giants
 Department of Parks and Wildlife
 502 Valley of the Giants Road
 (off South Coast Hwy between
 Denmark and Walpole)
 TINGLEDAL WA 6333

Ph: (08) 9840 8263
 Email: ttw@dpaw.wa.gov.au
 Web: parks.dpaw.wa.gov.au

