



(PROJECT)

LINKING ECOLOGIES AND  
ARCHITECTURE

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THE  
INTERDISCIPLINARY  
IMPACT OF  
CREATIVE PRACTICE  
RESEARCH  
(SYMPOSIUM)

(VENUE)  
MADA,  
MONASH  
UNIVERSITY

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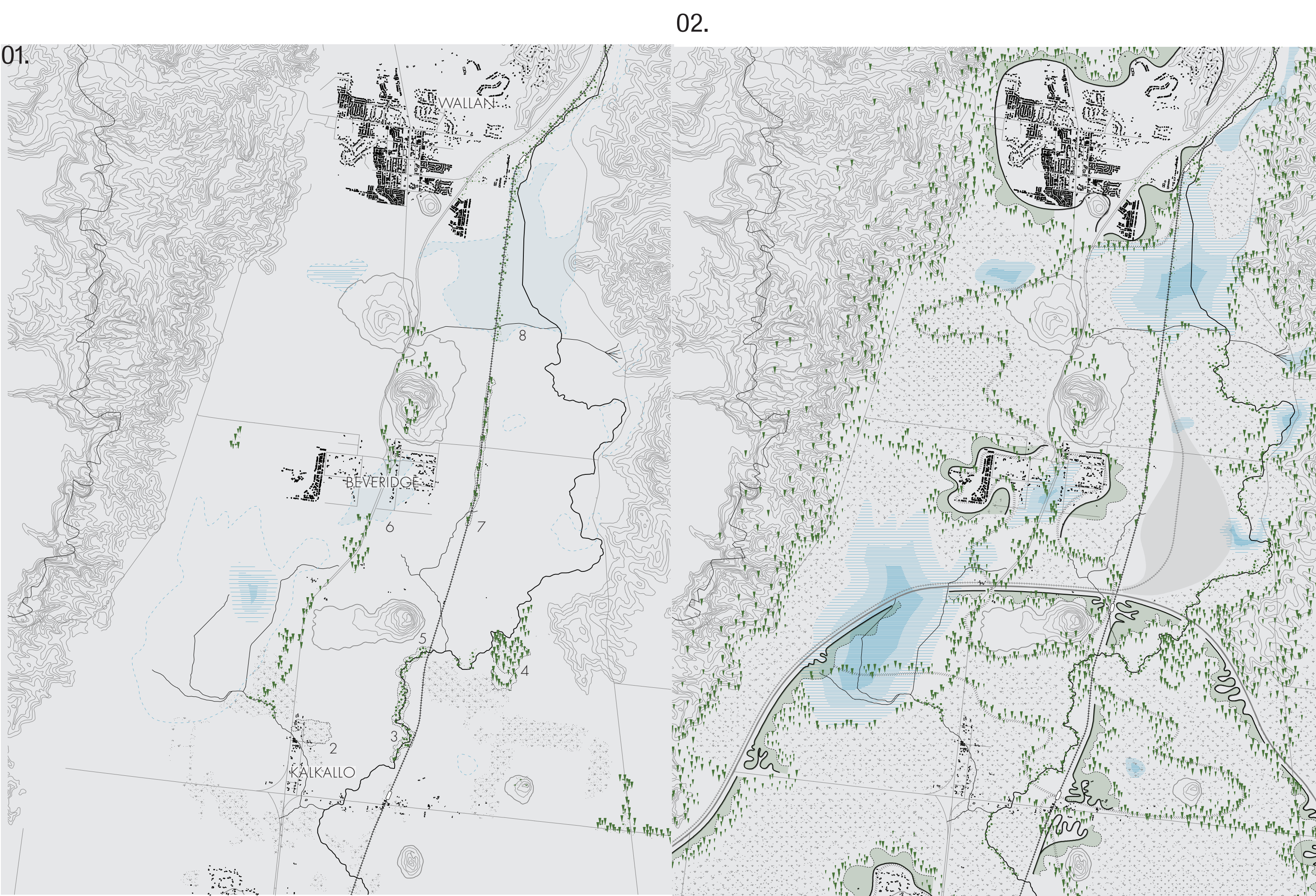
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- 01. Existing site's natural ecology
- 02. Proposed site's natural ecology is enhanced and reinstated; urban filaments are located along existing and planned infrastructure, containing built footprint and buffering vegetated areas
- 03. Grey kangaroos in native grasslands between residential areas and the Hume Highway, Thomastown  
Photo © Brian Bainbridge
- 04. Copper Street native grasslands including Lemon beauty heads Photo © Brian Bainbridge
- 05. Native grassland remnant in Western Melbourne Photo © Ryan Chisholm
- 06. Golden-headed cisticola on Common reed, Hernes Swamp, Wallan Photo © Brian Bainbridge
- 07. Baracco + Wright 'Garden House', Westernport Victoria 2014 Photo © Erieta Attali

## LINKING ECOLOGY AND ARCHITECTURE

A research project undertaken by staff from the Schools of Architecture and Design, and GUSS-Global Urban and Social Studies, RMIT University

### RESEARCH PROJECT – DESCRIPTION

This project sought to challenge conventional thinking about built form and urban setting by exploring potential synergies between biodiversity conservation, architecture and urban design. It sought to demonstrate the conditions under which built form and open space can enhance biodiversity while at the same time improving the livability and resilience of these places.

Current approaches to built form suffer a range of critical challenges related to livability, human health and climate change adaptation. At the same time, cities and built form are encroaching on natural systems and the biodiversity that they support.

Currently these challenges are considered separately. This research project explored alternative ways by testing urban design and architectural resolutions through closer levels of integration integrating between built and open vegetated space.

### RESEARCH METHOD

The project consisted of three components: a research working group, a design exercise and an industry forum.

1. A 1-day workshop was arranged to bring together a working group, including researchers from ecology, architecture, landscape architecture, design and planning. Participants discussed the strengths and limitations of approaching design from individual disciplines, and identified a framework for an integrated approach to the design of built environments, including key knowledge gaps and opportunities for future research.

2. Drawing on workshop outcomes, a speculative project for around 20,000 new dwellings and various related servicing programs was undertaken through an extensive area in Melbourne's northern growth corridor, including the precincts of Kalkallo, Donnybrook and Beveridge, from the top of Craigieburn to the south edge of Wallan, along Merri Creek north catchment area. This area was deliberately selected as a relevant case study – as a ground that offered the chance to compare the speculative design approach of the research project to a typical residential settlement that has been recently completed in the same area. The characteristics of the natural ecology of this area was also considered highly relevant to the project as it is inclusive of peaks of extinct volcanoes and expansive areas of plains grasslands and grassy woodlands, interspersed with agricultural land.

3. Project findings and outputs were presented in a research forum that was designed to strengthen existing partnerships and develop new relationships with targeted potential industry research partners (eg. prominent development and construction companies). A brochure illustrating and describing the research projects outcomes and related studies from both schools, was produced and distributed through the forum. This half-day event provided an opportunity to lay the groundwork for an ARC linkage grant application (currently in working process), and cement RMIT's reputation as a leader in sustainable design.