clearwater case study

Tanderrum Way Streetscape Upgrade

Hume City Council
Tanderrum Way, Broadmeadows

Overview

Tanderrum Way is located within the Broadmeadows Activities Area (BAA). It is the access point for Hume Secondary College and Hume Leisure Centre and connects to an existing street accessing Council Offices and the Broadmeadows train station.

The streetscape upgrade of Tanderrum Way in Broadmeadows was initiated by the Urban Design Team at Hume City Council. This project provided an opportunity to deliver a high level of public amenity as well as best practice sustainability and stormwater management. It was the first of its kind for this Council and required a shift in thinking from delivery of standard streetscape works, and as such called for support and buy-in from multiple levels within Council.

The Water Sensitive Urban Design (WSUD) features of this project include an inverted road profile which collects and drains stormwater to the centre of the road rather than to the standard side kerb and channel. This central section consists of a linear bio-retention swale and a conveyance system with permeable pavers to allow pedestrian access. There are additional vegetated raingardens flanking the outer edges of the street which receive stormwater for treatment and passive irrigation. The site contains a total of 200m² of permeable pavement, over 250m² of raingardens in 25 locations and over 120 trees.

This project has won multiple industry awards since completion including the 2010 Australian Institute of Landscape Architects Urban Design Award and a Merit in the 2010 Stormwater Victoria Awards.

Organisations

Hume City Council (Responsible Council)
Storm Consulting (Design Consultant)
Outlines Landscape Architecture (Landscape Architects)
Melbourne Water – Living Rivers Program (Funding Partner)
Department of Planning and Community Development (DPCD) (Funding Partner)

Cost

Entire project cost: $3.6 million, with contributions from:

- Melbourne Water – Living Rivers: $285,400
- DPCD: $1.5 million

Timeframe

Initial concept development: 2008-2009
Concept and detailed design: 2009-2010
Construction: 2010

Local community utilising the new space (photo courtesy of Hume City Council)

The inverted road profile allows the collection of stormwater in the centre of the road and facilitates the conveyance of larger floods (photo courtesy of Hume City Council)

clearwater case study

Objectives

The State Government (DPCD) highlighted the Broadmeadows Activities Area as a priority revitalisation project in the region. The construction of a new road in this high activity site provided an ideal opportunity to:

- generate a strong sense of place and community pride through an innovative public place design
- apply best practice stormwater management to both improve stormwater runoff quality and reduce peak flows.

> *'An opportunity to deliver a high level of public amenity as well as best practice sustainability and stormwater management'*

Outcomes

- The upgrade of Tanderrum Way produced a public space that generates a strong sense of place and civic pride.
- Innovative design elements allow the street to prioritise pedestrian traffic over vehicular movements without compromising the safety of either.
- The inverted road profile not only allows the collection of stormwater in the centre of the road, but also facilitates the conveyance of larger floods.
- In addition to enhanced aesthetics, the integration of WSUD into the streetscape brought along multiple environmental benefits, which include:
  - savings in irrigation costs and resources - additional stormwater runoff from footpaths is directed to adjacent garden beds for passive irrigation of trees and vegetation
  - a cooler urban environment - the passively irrigated vegetation plays an important role in creating a cooler microclimate to counter urban heat island effects
  - benefits for the local creek - in addition to decreasing stormwater pollutant loads, the project has reduced peak flows to the local creek, which moderates erosion impacts.

Lessons learnt

- Inter-departmental and inter-agency collaboration was a key contributing factor to the success of this project. Having urban designers, landscape architects and maintenance staff involved from the onset of the project helped build a common understanding of each team's objectives and improved everyone's knowledge about available technologies.
- Maintenance staff in particular were involved throughout the life of the project:
  - Their input into the selection of plant species and the establishment of the irrigation system ensured the success of the landscape features.
  - Their presence during construction contributed to building their knowledge and confidence in the technologies and their ongoing requirements.
- Provision of on-street parking has caused some challenges with vehicles running over the kerb. Council is currently revising the design of the kerb in order to facilitate easier vehicle access.
- Using a number of community engagement activities contributed to the overall success of the project:
  - The 'Name Main Street' community competition for example generated interest and ownership of the space. 'Tanderrum' is derived from the Wurundjeri language and represents a ceremonial dance that welcomes people of diverse backgrounds to the land.
  - A festival to celebrate the new community asset provided the opportunity to inform local residents of ways to contribute to a water sensitive community from within their own home.
- A significant learning process has been undertaken through the delivery of this project. Council's internal capacity to deliver such works has been greatly enhanced and it has given council the confidence to deliver further works of this nature.

Contact

Matthew Wilson
T 03 9205 2200 or E contactus@hume.vic.gov.au