IN PARTNERSHIP WITH

LEADSUN | ALWAYS DEPENDABLE
EST. 2005

City of Melville

CASE STUDY

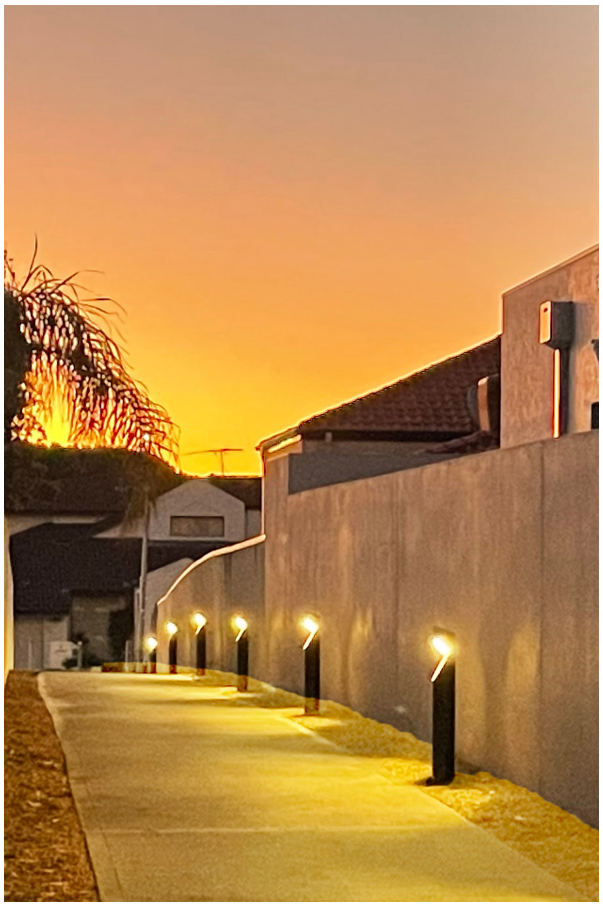
CLIENT
City of Melville

PROJECT
Kardinya Pedestrian Access Way

TRADITIONAL CUSTODIANS
Whadjuk Nyoongar People

Pedestrian Access Way Transformed with Solar Powered Bollards

A dark pedestrian access way (PAW) in Kardinya, Western Australia is now safer and more inviting at night thanks to an innovative new path lighting system powered by the sun.



Residents Demand Better Path Lighting

Kardinya is a low-density residential suburb 13 kilometers south of Perth. Consisting mainly of single-family detached homes, residents had become concerned about a dark PAW connecting two local streets. Low visibility made it unsafe at night and residents were avoiding the area, taking the long way home via a busy arterial road instead.

Responding to community concerns, The City of Melville reached out to Leadsun's Western Australia Distributor, BMH Electrics to enquire about illuminating the laneway.

Project Challenge

Solar power with limited sunlight

Solar powered path lighting was the preferred solution, not just for sustainability reasons but because it would be quicker, easier and cheaper to install and maintain. Unfortunately, two-storey detached homes on either side of the narrow PAW meant that there was limited direct sunlight available to power the system, especially in winter.

Path lighting without light pollution

With residential properties located on either side of the laneway, a sensitive lighting solution was needed to reduce light spill into adjacent homes.

42 Greens Rd, Dandenong Sth,
Victoria 3175, Australia

1300 Leadsun
1300 532 378

sales@leadsun.com.au
www.leadsun.com.au

Robust, Vandal Resistant Bollards powered by a Remote Energy Storage System (RESS)

Eight robust solar bollards were installed along the length of the PAW to reduce light spill into adjacent properties. Only a meter high, the attractive powder coated bollards feature a concealed LED luminaire recessed downwards at a 45° angle to reduce glare.

To avoid overshadowing issues, a single solar powered Remote Energy Storage System (RESS) with onboard battery was used. Located at one end of the PAW to gain maximum sunlight exposure, the RESS is able to generate enough energy to power all eight bollards, even on cloudy days and in winter.

Safe passage for residents at night

The new path lighting system has transformed what was once a dark and unsafe PAW avoided by locals into a well-lit passageway. Local residents are thrilled with the outcome and can sleep at night thanks to the low-glare, low mounted Leadsun solar bollards installed.

BMH Electrics Operations Manager, Josh Browne was delighted with how smoothly the project went, despite the challenges. “The project went smoothly despite the site constraints and residents were clearly very happy with the outcome when I returned recently to take some night time photos”, Josh said.

Leadsun Products Used

Solar module series	AE3 series
Solar PV size	90W
LED output programming	1.5W, dusk until dawn
Pole	EzyTilt

We acknowledge the Traditional Custodians of the land on which this project was undertaken, the Whadjuk Nyoongar people. We recognise their continuing connection to land, waters and culture, and we pay our respects to Elders past, present and emerging.

42 Greens Rd, Dandenong Sth,
Victoria 3175, Australia

1300 Leadsun
1300 532 378

sales@leadsun.com.au
www.leadsun.com.au