Statement

The Upfield bike path runs along the Upfield train line from Melbourne heading north. Moreland City Council were looking to illuminate a 500m section of the path in accordance with AS/NZS1158.3.1.2005 P4, starting at Moreland station, heading north and finishing at Reynard street.

The path has train tracks running down one side, separated by a fence, and has residential properties on the other side. There were many limitations outlined in the brief we had to consider. Spill light was a major concern, both onto the train tracks and into nearby residential windows. Glare also had to be considered, both for the path users, among which a high percentage were bike users, and also train drivers, and local residents.

The fence between the path and the train tracks was 1m high, and had a hollow galvanised tube running horizontally across the top, similar to a typical handrail. On the other side of the path was a higher fence, separating the path from the residential back yards. Due to width limitations, mounting lights on poles or bollards would have reduced the safe operating area in an already restricted space. Even if we were able to find some suitable locations, this type of installation would have provided a great deal of spill and obtrusive light.

Therefore Moreland Council considered mounting some sort of lighting in the handrail in the fence between the path and the train tracks. Klik Systems had recently developed a new product called LEDPOD, which was designed to be mounted directly into the handrail. This was done by cutting a 25mm hole directly on the underside of the handrail, at 1200mm spacings, and inserting the LEDPOD into the hole, and it is then held in place securely by a retaining clip. All cables, wiring and drivers are also small enough to be concealed within the handrail. The LEDPOD is mounted directly on the underside of the handrail, and using an asymmetrical reflector, it ensures the light is thrown down and out to one side only, meaning it falls directly onto the path. There was no light thrown back onto the train tracks, or into neighbouring residential properties and no glare in the faces of pedestrians and cyclists.

Moreland Council also ran the PODS off 5 solar panels [by others], and at 0.9W per POD our total power consumption for the entire 500m of the path was 374.4W.

Able to be retrofitted to an existing fence, easy to install [no tooling required], this installation offered an excellent solution to the Councils brief and project requirements and comfortably achieved all the parameters outlined in AS/NZS1150.3.1.2005. The asymmetrical nature of the LEDPOD's ensured a well lit path, with excellent uniformity, offering a much safer and pleasant journey, whether it be on foot or bike.