<u>iplex</u>

Case Study





ProjectHillcrest College

ClientCity of Casey

InstallationOctober 2004

LocationClyde North, Vic

Product

Iplex BlackMax PP
stormwater pipe

BlackMax - Over a decade of durability at Hillcrest College, Clyde North, Victoria

Discover how the City of Casey's installation of DN300 BlackMax pipes at Hillcrest College, Clyde North, withstood over a decade of daily traffic from cars, school buses, and heavy vehicles.

In October 2004, the City of Casey installed BlackMax pipes at Hillcrest College, located on Soldiers Road in Clyde North, Victoria. The project involved the installation of BlackMax DN300 polypropylene pipe road culverts with a maximum cover of 80mm, equivalent to the thickness of the road pavement. This initiative was part of the councils approvals process for BlackMax and aimed to enhance the drainage at the site. BlackMax pipes were installed at both the entrance and exit of the college, areas frequently used by cars, school buses, maintenance vehicles and garbage trucks.

Despite the minimal cover and the daily heavy vehicle traffic, the BlackMax pipes under the road pavements remained undamaged. Photographs taken in 2005 and 2014 showed that both the pipes and the road pavement were unaffected. The footpath and roads exhibited no signs of damage or cracking, demonstrating the strength and structural integrity of the BlackMax pipes and their ability to support the road surface above.

Manufactured in Australia, BlackMax pipes are known for their high strength and resistance to corrosion and degradation in various soil conditions. Made from polypropylene, these pipes offer several advantages over traditional materials. They are lighter, easier to

install, and having an expected service life of over 100 years when installed and maintained according to the manufacturer's guidelines.

Key Benefits of BlackMax Pipes:

High strength and stiffness: The installation with 80mm of cover highlighted the strength and structural integrity of BlackMax pipes.

Durability: The pipes exhibited no signs of degradation or cracking.

Corrosion Resistance: BlackMax pipes are suitable for use in aggressive soil conditions, including acid sulphate soils and saline groundwater.

Impact Resistance: After decades of service, the BlackMax pipe culverts withstood the daily impact from heavy traffic loads.

The installation of BlackMax pipes at Hillcrest College is a testament to their durability and performance in challenging conditions. This case study highlights the effectiveness of BlackMax pipes in urban infrastructure projects, providing a reliable and long-lasting solution for drainage needs. As a result of the demonstrated performance of BlackMax pipes, they were approved for stormwater drainage within the City of Casey.