



Client

Byron Shire Council

Installation

Jul - Nov 2025
by RCC Civil

Location

Mullumbimby, NSW

Product

Iplex BlackMax
DN225, DN450, DN600,
DN750 and DN900

Upgrading Stormwater Infrastructure with BlackMax: A Mullumbimby Success Story

Byron Shire Council undertook an upgrade of the Station Street's stormwater network to improve capacity and reliability. BlackMax pipes were chosen and installed by RCC Civil offering faster installation, durability and improved hydraulic performance compared to alternative concrete pipes.

Project Summary

The project focused on upgrading a stormwater system within a highly constrained urban environment. The team faced challenges, including a demanding schedule requiring efficient installation. The solution needed to enhance flow capacity to handle intense rainfall events, ensure compliance with Australian standards and maintain structural integrity under heavy traffic loads.

Solution

BlackMax structured wall polypropylene pipes were selected over concrete pipes for several key advantages:

- **Cost Efficiency:** Lower transport and installation costs due to lightweight design
- **Safety:** Reduced manual handling risks and no silica dust exposure during cutting
- **Ease of Installation:** Lightweight pipes allowed faster placement without large cranes
- **Hydraulic Performance:** Smooth internal bore improved flow efficiency and reduced sediment build-up
- **Fewer Joints:** Pipe lengths reduced installation time
- **Durability:** Corrosion-resistant material ensures a service life exceeding 100 years if installed, operated and maintained in accordance with the relevant product and installation standards and manufacturer's guides.

Implementation

The project involved installing BlackMax pipes to replace and upgrade the existing infrastructure. To ensure durability and performance, a Rubber Ring Joint (RRJ) system was used, providing leak-tight connections and effective resistance to root intrusion. The lightweight design and longer pipe lengths meant the installation process was streamlined, reducing handling time and minimising joints required.

Results

BlackMax delivered significant benefits to RCC Civil including:

- **Time Saving:** Faster installation
- **Cost Efficiency:** Lower labour and equipment costs
- **Performance:** Enhanced hydraulic capacity, reducing risk of blockages
- **Safety:** Improved worker safety and reduced exposure to hazards
- **Sustainability:** Lightweight pipes reduced transport emissions and environmental impact

Conclusion

The Station Street upgrade demonstrates how BlackMax delivers cost-effective, safe and high-performance stormwater solutions. With engineering support from Iplex and expert installation by RCC, improved hydraulic efficiency, compliance with standards, and long-term durability were achieved quickly and efficiently.

Need help? | Merchants 1300 0 47539 | Civil 13 10 86

www.iple.com.au