

CASE STUDY

IPLEX RESTRAIN® Kingsland DN300 Stormwater Rehabilitation



The Project

This emergency repair project is located in the heart of Kingsland, one Auckland’s oldest leafiest suburbs. At the bottom of this quiet, but heavily built up cul-de-sac was a DN300 clay earthenware stormwater pipe. The old pipe which runs under several of the residents houses had collapsed causing a flood risk for the street.

The Challenge

Open trench excavation was just not an option without removing the houses above the pipeline. A trenchless application was the only suitable option for this project. Access to the pipeline was also a challenge as the invert level was approx. 4.2m deep and the access chamber was narrow and old.



Phase 1 (Preparation)

Humes Pipeline Systems (Part of Fletcher Concrete), partnered with CDS New Zealand on the project & manufactured the concrete structures. CDS NZ started by installing a new 4.2m deep, 1.8m wide flange base manhole. This would allow for safe access and easy installation of Iplex Restrain® pipe.



Iplex Restrain DN300 PN16 Pipes

Phase 2 (Installing the Iplex Restrain®)

Iplex Restrain® DN300 PN16 in 1.0m lengths was specified for the project. This allowed for easy handling down the manhole to the pipeline. A pipe reaming head was attached to the first pipe and then drawn through by a drilling rig located at the next street over.



The Benefits

The contractor chose Iplex Restrain® because of the trenchless application and the ability to install in restricted spaces. Simply threading sections of Restrain® pipe together to form the new pipeline being drawn through. Ultimately causing less disruption to the environment and to residents.



Fitting the Seal Ring



Approved Silicon Spray Lubricant Applied