

# No Dig Spot Repair System (NDSR)

## Trenchless CIPP Point Repairs

Proven, cost effective rehabilitation for sewer lines and stormwater pipes



Cured-in-Place Pipe (CIPP) Spot Repair is the practical and economical alternative to traditional sewer replacement. By repairing broken, cracked or damaged sewer pipe, CIPP eliminates infiltration and exfiltration, adding to the structural integrity of the pipe.

CIPP lining consists of tube impregnated with polyester, vinylester or epoxy resin that is used for sectional pipe repairs and can reconstruct pipe diameters of 100 to 600 mm, and lengths of 0.5 to 3m. It is installed as a liner in an existing pipe and cured by the application of either heat or ambient cure. Our experienced technicians utilise trenchless 'winch in, inflate and cure' methods to install the spot repair.

### Our strength is in our people

What makes our CIPP process stand out from others are our quality installers who are carefully selected and trained. Through constant training and development our installers gain valuable experience with every project, ensuring the best possible result each and every time.

We aim to always finish the job correctly with the highest level of pride, along while supporting the supervisors and their crews that install the quality CIPP final product. We always use the highest quality resins and the highest standard felts the industry can provide. To maintain a leading role in the Cured-in-Place industry, we continue to place great importance on Research and Development.



### THE FLETCHER CONSTRUCTION COMPANY LTD TRADING AS PIPEWORKS

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# PipeWorks

# The PipeWorks NDSR Installation Process



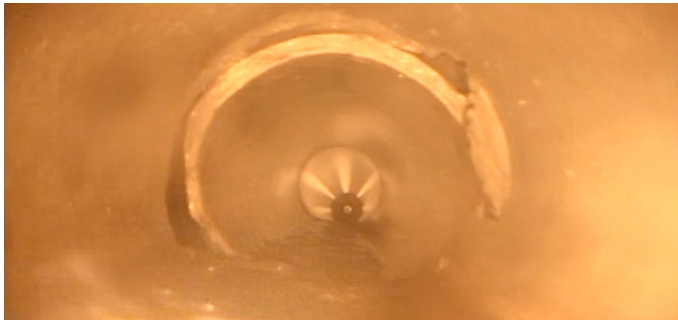
**Step 1**  
Investigation



**Step 2**  
Installation



**Step 3**  
Final Product



## Before

Pre NDSR CCTV showing a broken pipe joint with large cavities in the surrounding ground. High environmental impact if excavation attempted.



## After

As-built of NDSR in same position. No infiltration present and pipe is back to normal operation. No adverse effects on the surrounding environment.

# The NDSR Technical Envelope

<b>Diameter Range:</b>	100mm to 600mm
<b>pH Range:</b>	.5 - 10.5
<b>Effluent Temperature:</b>	up to 120°C
<b>Pipe Condition - Fully Deteriorated:</b>	Yes
<b>Pipe Condition - Partially Deteriorated:</b>	Yes
<b>Host Pipe Material:</b>	All Materials
<b>Design Standards:</b>	ASTM F1216
<b>Test Specifications:</b>	ASTM D790
<b>Design Life:</b>	50 Years
<b>Type of Resins:</b>	Polyester, Vinelester or Epoxy to suit the pipe application

## A Safe, Smart Choice

- Restores structural integrity of original pipeline
- Environmentally safe
- Manufactured to high quality standards
- Stops water infiltration and exfiltration, root intrusion and soil loss
- Repairs are completed 'trenchless' without the need of conventional methods of pipe repair such as excavation
- Pliable nature fills in cracks and bridges gaps
- Drastically reduces the public inconvenience and disturbance to the environment
- Low cost installation
- Fast installation using existing manholes
- Ground de-watering not required
- Well-trained, experienced team of installers