

# S1 MAIN SEWER RELINING

## About the S1 Main Sewer Upgrade

Queensland Urban Utilities is committed to ensuring the long-term sustainability and efficiency of the region's water and sewerage infrastructure.

The S1 main sewer was constructed a century ago and currently services more than 60 per cent of Brisbane. Vital maintenance of the main line sewer is now required from James Street, Fortitude Valley along Kingsford Smith Drive, Hamilton, to the Eagle Farm pump station.

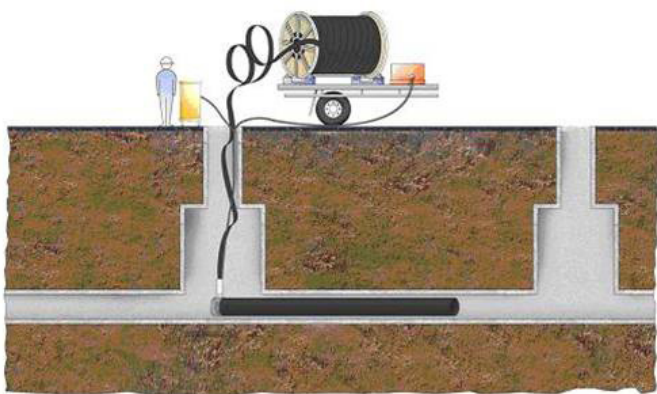
The upgrade of the S1 main sewer involves replacing or modifying existing cone top maintenance holes with wider, more accessible maintenance holes and relining the sewer to improve performance and ensure the stability of the network.

## How will the sewer be relined?

The sewer will be relined in two stages. Stage one will be done in segments between **Hunt Street and Riverview Terrace**, using a polyethylene liner reinforced with steel ribs to renew the structural integrity and flow capacity of the pipeline.

Stage two design is currently being finalised.

The spiral relining process will allow the work to be completed while some flow is still present in the sewer and will avoid the need for zero sewage diversions or isolations. In addition, spiral relining requires a relatively small site footprint and limits construction impacts.



A continuous polyethylene strip will be used to reline the sewer.

The liner will be delivered to site on spools as a continuous steel reinforced polyethylene strip (profile). It will be installed using a winding machine placed in an existing maintenance hole or access chamber.

The winding machine takes the liner profile strip and winds in a continuous helix, welding the profile edges together. After installation, the liner is encased with cement grout to fill the gap between the liner and the existing pipeline wall.



Spiral strip relining allows minimum flow conditions to be maintained.

## Why is sewer relining done at night?

Maintenance holes used to access the sewer are generally located on the edge of a road or in the median, in high traffic volume areas.

In addition, flow levels in the sewer line are lower at night and gas levels are reduced.

To ensure the safety of workers and minimise traffic disruptions, relining is usually carried out at night, between **8pm and 5am** to allow traffic diversions or flow isolations.

## What can I expect?

Relining of the S1 main line sewer will be completed in non-consecutive **segments, each lasting approximately four weeks** between Hunt Street and Riverview Terrace. To ensure the safety of workers, the pipeline will need to be ventilated at various times and some **odour may be detected** when this occurs. The odour will be monitored and mitigated, to the extent possible, without compromising safety.

Relining also involves **noise generating activities** including:

- water pressure cleaning powered by a compressor
- breaking bitumen around the maintenance hole using a jackhammer and removing concrete
- installation of a steel road plate each night to cover the works prior to reopening the road for daytime traffic
- installation of winding machinery including levelling the base of the hole if required

- spiral winding work, including the use of motorised air circulation fans for ventilation
- cement grouting powered by a compressor
- CCTV inspection and reinstatement of the maintenance hole and carriageway.

## How will construction impacts be managed?

The project team will minimise construction impacts by:

- fast tracking the works with multiple crews working at the same time between Hunt Street and Riverview Terrace, as often as possible
- programming works at night between 8pm and 5am to minimise traffic impacts
- **reopening all traffic lanes** on Kingsford Smith Drive by 5am each morning
- managing noise levels at source
- reinforcing site protocols about noise mitigation e.g. minimising loud voices
- using compressors with in-built noise suppression
- reviewing work methods each day after night work to identify if any additional measures could be implemented to further reduce impacts.

## Traffic management

Depending on the location of the maintenance hole, at least one lane on Kingsford Smith Drive will need to be closed at night between 8pm and 5am during relining. All lanes will reopen by 5am daily.

Residents are asked to travel through the area with care and observe all signposting, speed limits and any directions given by traffic controllers.

## Contact us

To find out more about the S1 Main Sewer upgrade at Kingsford Smith Drive visit [www.urbanutilities.com.au/S1mainsewer](http://www.urbanutilities.com.au/S1mainsewer). To register to receive project updates, please email [community.feedback@urbanutilities.com.au](mailto:community.feedback@urbanutilities.com.au) or call **1800 071 230** (24/7 project information line).

For more information visit  
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