

# HACKNEY ROAD SEWER RELOCATION - O BAHN



**LOCATION**

Hackney Rd, SA

**CONTRACT VALUE**

\$1,300,000

**CONSTRUCTION PERIOD**

December 2015 –  
January 2016

**FORM OF CONTRACT**

AS2545-1993

**CLIENT**

Fulton Hogan

**PROJECT SUPERVISOR:**

Dylan Hiscock

**REFEREE**

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**DESCRIPTION OF PROJECT:**

As part of the future O’Bahn extension we were engaged to lay approx. 360m of sewer trunk main along North Terrace and Botanic Road. Due to the traffic management requirements in the busy metropolitan area the works were done at night under a strict timeline. Contraflow traffic was required to be maintained throughout the whole project.

This existing main to be replaced was required to be kept live throughout the project until a bypass system was implemented to divert flows into the new main. Works also involved crossing Hackney Rd with the sewer encased in a 16m mild steel cement lined (MSCL) pipe. The trunk main had an average depth of around 5m and was comprised of both 450 and 525dia rib lock pipe. It involved the installation of 7 new man holes that were made up of pre cast bases to minimise the time spent constructing them in situ.

Once laid, the downstream end of the new system was livened up to allow the 6 existing connections to be sequentially transferred over to the new main. After the new main became fully operational the existing man holes were broken down 1m below surface level and grout filled with the old main.

**PROJECT CHALLENGES:**

One of the biggest challenges in the project was the number of existing services found to be crossing the new trench alignment. For example, in the 10m run between the first set of man holes there were 12 unknown services not shown on the DBYD drawings. Due to the frequency of these services hydro excavation was required in these areas. Alternative shoring methods were also necessary to substitute for the boxes that wouldn’t fit between the services. Careful excavation techniques were needed for the entire job so that unknown services encountered were not damaged, all of which were treated as live.

The MSCL encasing pipe for the Hackney Rd crossing was required to be installed in one piece. The DPTI requirements for oversized transport meant the pipe had to be delivered outside of peak hours during the day and parked in a slip lane until the trench was excavated at night. A 20t franna was then mobilised which placed the MSCL pipe ‘on grade’ in the trench. Surveyors were present on site during this process to ensure the levels of the pipe were accurate.

After each night shift the road was required to be reinstated to be fully operational. Therefore trench was dug and pipe laid until approximately midnight, with the rest of the night backfilling and installing asphalt. Steel plates were used to leave the stub of the pipe exposed, with a cold mix surround to prevent tyre puncture.

Program was a major driver for Fulton Hogan as these works impact on the future O Bahn tunnel. There were also requirements to be completed before the Tour Down Under commenced which were achieved without any acceleration costs.