

# Newtown, Mt Victoria & Lyall Bay Water Main Renewal



**VALUE:** \$1,300,000.00 **LOCATION:** Wellington **COMPLETION DATE:** 30<sup>th</sup> June 2009

**CONTACT:** David Wilson CTE Sarath Amarasekera Capacity

## Scope of Works

Install new water mains ranging in size from 20mm to 300mm in PVC, PE, Copper and Ductile Iron, including connections to individual properties, fire hydrants and services, valves in 7 WCC Roads in Newtown, Mt Victoria and Lyall Bay.

Project	Value	Project Details
<b>Pipe Laying</b>	\$650,000.00	<p><b>Vogel Street:</b> Install 55m of 100mm Ductile Iron main</p> <p><b>Earls Tee:</b> Install 210m of 100mm Ductile Iron main</p> <p><b>Rixion Grove:</b> Install 130m, 650m and 185m of 100mm PVC respectively</p> <p><b>Constable St:</b> Install 710m of 150mm Ductile Iron by open trenching</p> <p>Install 220m of 20mm Copper laterals by open trenching</p> <p>Install 180m of 25mm PE by Thrusting</p> <p>Palm Ave: 450 metres of 150mm UPVC</p> <p>Boston Terrace: 150 metres of 150mm UPVC</p> <p>Bruges Ave:100 metres of 150mm UPVC</p>
<b>Pavement &amp; Resurfacing</b>	\$350,000.00	<p>Removal of 700m of Reinforced Concrete tram tracks ranging in thickness from 400mm to 1100mm.</p> <p>Reinstatement of 240 m<sup>3</sup> of concrete, including 9 connections to side street.</p>
<b>Health &amp; Safety</b>	\$55,000.00	We are a company committed to Health and Safety. We had an internal audit on the site by our Health and Safety Representative and all the works complied.
<b>Traffic Management</b>	\$75,000.00	Working on various streets in Wellington, maintaining full traffic management. The biggest one was maintaining two way, two lane traffic on Constable Street in Newtown. This is a main route with a bus passing every two minutes.
<b>Environmental Management</b>	\$50,000.00	Maintaining noise to air emissions below the district plans levels while using a concrete breaker on a twenty tonne digger in a built up urban environment.
<b>Tender Price:</b>	\$1,115,500.00	
<b>Final Contract Price</b>	\$1,350,000.00	The contract ran over budget due to the tram tracks in Constable St. They were 1 metre thick and had to be reinstated. This was all unforeseen at the time of tender by all parties. We used Trenchless technology to help reduce costs where we could however the council's strict reinstatement requirements meant there was no way the works could be completed on budget. These tram tracks added \$350,000.00 to the work cost,
<b>Contractors Performance</b>		<p>The project was completed on time and within budget. Vogel Street is a 55m long steep set of stairs. connecting Hawker St to Earls Terrace. With the use of mini excavators and pure man power, we successfully hand dug the trench and lifted the 120kg pipes into position.</p> <p>Constable St handles approximately 10,000 vehicles per day, including a Trolley Bus each direction</p>

every 5 minutes. Excavating through such a heavily trafficked area required a high standard of traffic management. During excavation we also encountered old tram tracks that ran the length of Constable St. These tracks were made of railway irons covered in steel reinforced concrete and had to be removed using a 13.5 tonne excavator and a concrete breaker.

Constable St is not only a busy thoroughfare but also contains a large number of business and private properties. Establishing a good relationship with the community was therefore imperative to the success of this project. Positive relationships were maintained thanks to the outstanding people skills demonstrated by our onsite staff. The project was completed to a high standard of workmanship and one of the best records for public relations WCC has seen.

<b>Commencement dates</b>	<b>Completion Date</b>	<b>Original Due Date</b>	<b>Extended Due Date</b>	<b>Explanation of Differing Dates</b>
Nov 2008	June 2009	April 2009	100 Days	The concrete tram tracks added time to the works and reinstatement methods fell into critical path every day which added time.