

Hallam Valley Manhole

Date

October to December 2008

Location

HVM4 Oaktree Drive, Hampton Park

Project Value

\$750,000

Project Description

Hallam Valley Manhole 4 required urgent structural rehabilitation in order for Melbourne Water to maintain operations. Significant corrosion within the manhole had caused loss of concrete and exposed reinforcement. This had significantly compromised the structural integrity of the upper landing and vortex support structure within the manhole.

Quality & Innovation

Innovations developed and successfully delivered included the use of wet sprayed concrete to rebuild the upper landing and vortex support beam slab within the confined space of a sewer manhole. By repairing rather than completely demolishing and rebuilding, significant construction and operational risks were reduced.

A Linabond PVC lining system was also successfully used for the first time within Melbourne Waters Sewer Network. This now provides a longer design life of 50 years compared to the expected 25 years with previously used coatings.

Schedule and Project Planning

Microsoft Project was used for each phase of the project. A control baseline was set; the phases were then managed using Earned Value Methodology. Scheduling was updated weekly, with status and progress against the baseline reported to the client on a monthly basis.

Stakeholder Management

Key stakeholders; Melbourne Water, EPA, local Council and local residents. As the project took place in a residential street, particularly affecting several residents' backyards, stakeholder management and good relationships were critical. Such was the relationship developed that a resident allowed the manhole to remain open over Christmas/New Year rather than requiring it be sealed, saving the Client financially.

Environmental Management

With obvious impacts relating to noise, dust and odour in a residential area, site impacts had to be carefully managed. To the teams credit, no environmental incidents, concerns or complaints were recorded, to the satisfaction of the Client.

Major Lessons Learned

Including our experience during early phases of design ensured the project incorporated solutions to potential issues up front. Risks were identified early and engineered out well before project commencement. To the teams credit the projects success was again endorsed by an independent Stakeholder Survey, which achieved 100%. The project was completed on time and within budget, and to the satisfaction of the client.

Client References

Client Representative for Melbourne Water – Mark McLean

