



Feasibility Study

Rainwater Harvesting

for

City of Glen Eira
Town Hall



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C O N S U L T I N G E N G I N E E R S

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DRA = Design Risk Assessment.

EXECUTIVE SUMMARY

The City of Glen Eira engaged Hydrautech Designs Pty Ltd to prepare a Feasibility Study for Rainwater Harvesting for the City of Glen Eira Town Hall.

The report outlines the following key objectives;

- To identify the most viable rainwater harvesting initiatives according to on-site investigation and reuse opportunities.
- To model climate data and predict rainwater catchment yield.
- To identify an efficient method of catchment collection and design to reduce energy consumption.
- To identify the required water storages and possible site locations.
- To estimate potable water savings.
- To estimate the capital costs associated with the proposed water saving initiatives.
- To estimate the water resource savings as compared to capital and ongoing costs associated with the proposed water saving initiatives; the payback period.
- To outline the best way to implement the proposed water saving initiatives and to provide a clear plan forward for the stakeholders of the facility.
- To identify the environmental and financial benefits associated with the proposed water saving initiatives.
- To identify the servicing and maintenance requirements applicable to the proposed water saving initiatives.
- To provide a life cycle analysis for the proposed water saving initiatives.

The findings of the report outline a recommendation for rainwater harvesting for sanitary flushing. This initiative represents the following;

- | | |
|---------------------------------------------------|----------------------------------|
| • A budget capital cost of | \$97,700 AUD+GST |
| • An annual water saving of | 500 kL |
| • An annual CO ₂ emission reduction of | 920 kg of CO ₂ / year |
| • An annual water cost saving of | \$2,020 AUD inc.GST |
| • An estimated payback of | 48 years |

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