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Public Excluded

Report PE-00.280

9 May 2000

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Report to the Utility Services Committee
from Murray Kennedy, Strategy and Asset Manager and
David Benham, Divisional Manager Utility Services

Pipeline Purchase

1. Purpose

To obtain approval for an option to purchase the **Thorndon to Macalister Park** Reservoir pipeline **from** Wellington City Council (WCC) preceded by a one year lease.

2. Exclusion of the Public

Grounds for exclusion of the public under section 48 (1) of the *Local Government Official Information and Meetings Act 1987* are:

That the public conduct of the whole or relevant part of the proceedings of the meeting would be likely to result in the disclosure of information for which good reason for withholding would exist, i. e. ; commercial negotiations.

3. Background

Wellington City's water supply network has always been intrinsically linked with what is today, the wholesale water supply system. This was initially through the City's development of the Wainuiomata Water Supply scheme in the 1880's followed by the formation of the Wellington City and Suburban Water Supply Board in 1927. In 1973 the Wellington Regional Water Board was formed and various water supply assets, including the wholesale assets owned by the WCC, were vested in the new Board.

4. **Wellington Regional Water Board's Supply Obligations**

The Water Board was absorbed into the Wellington Regional Council. However, many of the provisions of the Water Board Act remain in force.

Clause 38 (3) of the Act states:

Every supply of water shall be delivered to the inlet of the service reservoirs or to the first reticulation branch or such other point or points as may be agreed upon between the Board and the constituent authority to be supplied, within the district of that authority.

Generally the point of supply is a customer reservoir or customer owned pumping station. For example **Hutt** City commissioned the **Rahui** reservoir last year. The inlet pipeline to the reservoir is owned by the **WRC**.

There is one major and two minor anomalies in the system where the point of supply is not at a customer reservoir or pumping station. At **Thorndon**, Wellington City is supplied from the **WRC** trunk main through a meter and into the **WCC's** 800 mm diameter pipeline which in turn delivers into the **Macalister** Park Reservoir.

The first of the minor anomalies is the supply to **Hutt** City Council (**HCC**). The pipeline from the Waterloo water treatment plant (**WTP**) to **HCC's** **Naenae** reservoir is owned by the **WRC**. Because of pressure problems **HCC** has elected to take some of their water **from** the pipeline before the reservoir. Metering is at the Waterloo **WTP**. The second minor anomaly is the pipeline into the **Aro** Valley where the supply point is at the end of a **WRC** owned tunnel.

5. **Water Supply to Wellington City's Low Level Zone**

Wellington City Council's low-level supply zone is largely supplied from a trunk main in **Thorndon** and the **Macalister** Park reservoir with all water being metered at **Thorndon**.

Wellington City Council constructed a new pipeline from **Thorndon** to Taranaki Street in 1983, which was an extension of the **WRC's** trunk main from Wainuiomata. This **WCC** pipeline was extended to the **Macalister** Park reservoir, when the reservoir was built in 1992.

Wellington City Council's low level zone is the largest zone supplied by the wholesale system. Attachment 1 shows the major pipes reservoirs and pumping stations in Wellington City. In the metering year ended in March 2000 the low level zone and associated higher level zones took 32 percent of the water sold to our four customers. The next point of supply, in terms of size, is **Naenae** with 13 percent.

From a wholesale operational point of view how the Wellington City low level zone functions is critical. The issue can be compounded if water is supplied to the low level zone from the **Karori** facilities through a secondary route.

Operationally there are no major problems at present because **WRC** holds the facilities management contract for the **WCC** that includes system control. The City acknowledges the role of the **Thorndon** to **Macalister** Park pipeline. They state in their current Water Supply Asset Management Plan,

“The city’s main trunk from Thorndon to the Macalister Park reservoir is essentially an extension of the incoming Hutt Road pipelines which deliver approximately 90% of Wainuiomata head works output directly into Wellington city”.

When the **Karori** open reservoir was available a few hundred ML of water was on hand under **WRC** control to meet any fluctuations in demand within Wellington City. **Ngauranga** reservoir, at 20ML capacity, holds only a small fraction of the water previously available in the **Karori** reservoir. Accordingly, the wholesale water supply system now has to operate between closer limits and is less forgiving of operational problems.

A terminal reservoir for the Wainuiomata/Waterloo source of supply has been planned since 1990. **Initially** construction was to start in 1996/97. For the last three Business Plans construction has been scheduled to start in 2002/03. Once the proposed terminal reservoir is completed, the **WCC** system could be made more independent of the wholesale water supply. The reservoir would be filled as appropriate and would cycle between upper and lower limits according to daily demand.

The new reservoir comes at some cost. Six million dollars has been allowed for in the current capital works programme. It is not certain it can be constructed for this amount, which will be significantly influenced by the available sites. The reservoir would be positioned about 100 metres above sea level, possibly on a rock ledge. In contrast, the **Ngauranga** reservoir has a top water level of 154m above sea level.

At present the **Macalister** Park reservoir is used for storage purposes and as the terminal point in the system. Water level and flow rate signals are sent from **Macalister** Park to the water treatment plants.

If the **Macalister** Park reservoir is to function as a terminal reservoir, then ideally the **WRC** requires control of the pipeline from **Thorndon** to **Macalister** Park and the supplementary route from **Karori** to **Macalister** Park. Otherwise whoever is responsible for the **WCC** system control, and to some extent the pipework maintenance, could interfere with wholesale water supply operations. The pipeline has a number of cross connections in the city, which as the wholesaler we prefer to be closed. From a **WCC** point of view though there may be some advantages if they are open.

Ideally the **WRC** should purchase the **Thorndon** to **Macalister** pipeline and make it part of the wholesale water supply network. This would then allow the new terminal reservoir project to be cancelled. The pipeline has a value of approximately **\$4.7M**.

6. **Wellington City Council Proposals**

Wellington City Council has the expectation that it can save about **\$600,000** a year on its city water supply operations by making the various components contestable. Proposals were being advanced to:

- Call tenders for the facilities management (**pipework** repairs and similar work). This is currently contracted to the **WRC's** Utility Services.
- Transfer information and regulatory work to the **WCC's** Professional Services and **ECBU** Groups. This work is currently carried out by the Utility Services Engineering **Consultancy** Group supported by the Network Group.
- Leaving control of the Wellington City System with the **WRC** as an interim arrangement.

Apart from the staff implications for the **WRC** and the **disaggregating** effect that would have, the proposal could also make controlling of the wholesale water system difficult. If the new facilities contractor is not the **WRC**, then there would be three parties involved who could influence the way the city and **WRC** systems are operated. Namely the **WCC**, **WRC** and the contractor.

To avoid this situation occurring, a package has been submitted to the **WCC** and accepted by them in principle. Essentially the **WRC** will retain the work it presently does for the **WCC** while integration initiatives are progressed. Part of the package **concerns** the pipeline from **Thorndon** to the **Macalister** Park reservoir.

7. **Thorndon to Macalister Park Pipeline Proposal**

It is proposed the **WRC** leases the **Thorndon** to **Macalister** Park pipeline for one year with the **WRC** holding an option to purchase the pipeline. This is an interim position while the current water integration initiatives continue.

If water integration proceeds, then subject to further investigations, it is probable the pipeline would become part of the wholesale water supply system. In this case the option-to purchase can be exercised, with the lease fee being offset against the purchase price.

Should integration not proceed and the WRC reduces the scale of its operations so it is only a wholesaler, then it is probable the new terminal reservoir will need to be built. This then enables the WCC to have full control over how the city system is managed without affecting the wholesale supply system. Under these circumstances the city would retain the amount paid for the one year pipeline lease.

8. **Lease Payment**

The Thorndon to Macalister Park reservoir pipeline has a depreciated replacement cost of \$4,678,000. After discussion with our property advisors a fair rate of return is considered to be seven percent.

Annual lease payment = \$4,678,000 x 0.07 = say \$330,000.

9. **Environmental Issues**

The proposal concerns existing infrastructure and its control. There are no environmental issues created by the proposal.

10. **Publicity Issues**

This is a private arrangement to correct an unsatisfactory operational situation. It may be appropriate to allude to the lease and purchase option prior to integration, if it proceeds. Otherwise it can be covered in the 2000/01 Water Group Business Report. In the meantime the issue should remain private.

11. **Summary**

Potentially the investment of \$4.7m to purchase an existing pipeline will more than offset \$6M plus, to be spent on a new reservoir.

In order to maintain the status quo while the investigations continue, it is proposed to lease the pipeline from the WCC for one year with the WRC having an option to purchase after that period.

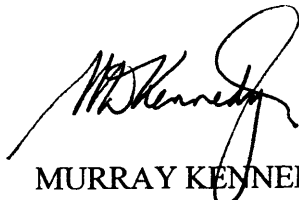
12. **Recommendations**

It is recommended the committee:

- (1) *Approves a lease for the period 1 July 2000 to 30 June 2001, of the WCC pipeline from Thorndon to Macalister Park; with an option to purchase the pipeline.*

- (2) *Notes the one year lease payment will be \$330,000 and the purchase cost approximately \$4,700,000.*
- (3) *Approves the provision of \$330,000, to meet the lease cost, and to be funded from the current year water surplus.*
- (4) *Directs officers to report back to the Committee when details are concluded.*

Report prepared by:



MURRAY KENNEDY
Strategy and Asset Manager

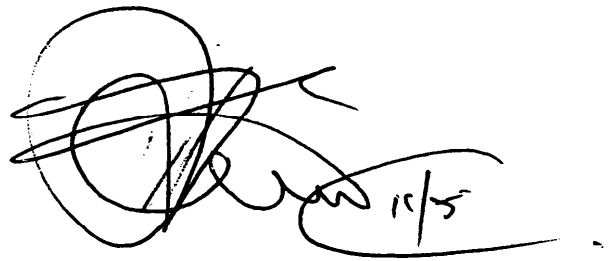


DAVID BENHAM
Divisional Manager, Utility Services

Endorsed by:

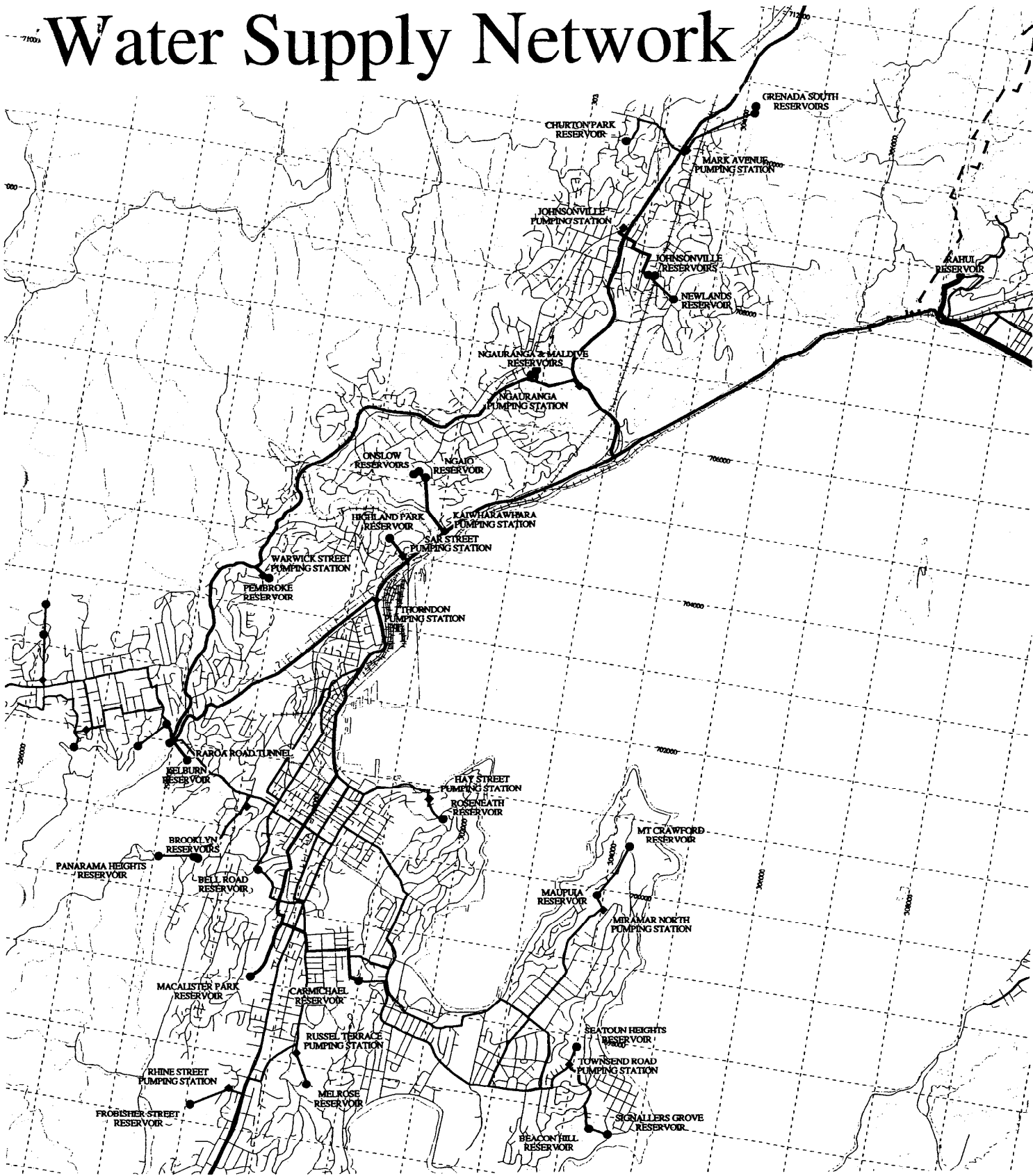


GREG SCHOLLUM
Chief Financial Officer



HOWARD STONE
General Manager

Water Supply Network



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- General Legend**
- RIVERS, LAKES, COASTLINE
 - ROADS
 - RAILWAY LINES
 - - - 100M CONTOURS
 - - - TA BOUNDARY
- Water Supply Legend**
- WHOLESALESUPPLY MAIN
 - LOCAL SUPPLY ARTERIAL MAIN
 - LOCAL SUPPLY TRUNK MAIN
 - RAW WATER MAIN
 - RESERVOIR
 - ◆ PUMPING STATION
 - ▲ PRESSURE REGULATOR



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Utility Services Committee

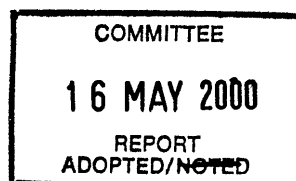
Minute extract from meeting held on 16 May 2000

Pipeline Purchase

Recommendation

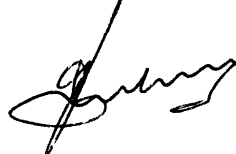
Resolved

- (1) *That a lease for the period 1 July 2000 to 30 June 2001, of the WCC pipeline from Thordon to Macalister Park with an option to purchase the pipeline, be approved*
- (2) *That the one year lease payment will be \$330,000 and the purchase cost approximately \$4,700,000, be noted*
- (3) *That the provision of \$330,000, to meet the lease cost, and to be funded from the current year water surplus, be approved*
- (4) *That officers to report back to the Committee when details are concluded be directed*




Des Darroch
Senior Committee Secretary

Mr. Benhar

 31/5/00