

## STAFF REPORT

**TO:** Chairman and Members, Engineering Services Committee

**FROM:** Utilities Asset Manager, Jeff Cuthbertson

**REFERENCE:**

**DATE:** 12 July 2006

**SUBJECT: UTILITIES MANAGEMENT REPORT**

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### 1. CAPITAL WORKS PROJECTS

The following summarises progress on capital projects:

#### Wastewater

Location	Description	Project Status	Completion date
Richmond	Trunk Main	95% Complete	31 July 2006
	Capacity upgrades	Completed	
	Modelling/ Data collection	Progressing	
Brightwater	Storage Tank	Progressing	31 July 2006
	Renewals	Progressing	31 July 2006
Collingwood	Telemetry at Pumping Stations	Completed	
	UV Disinfection	Completed	
Kaiteriteri	Replace pumping main Riwaka	5% completed remainder deferred	
Mapua (CTA)	New Scheme	Deferred	
Motueka	Wastewater Treatment Plant upgrade	Completed	
	Renewals/ upgrades	Completed	30 June 2006
	Trewevas Area pumps	Completed	
	Thorp Street Pumps	Investigating	
Murchison	Wastewater Treatment Plant upgrade	Progressing	30 June 2006
	Waller Street Pump well	Progressing	30 June 2006
	Desludge oxidation Pond	Progressing	30 June 2006
Pohara	Sunbelt Pumping station	complete	30 June 2006
Takaka	Wastewater Treatment Plant upgrade	Deferred	
	Motupipi Pumping Stn and main	complete	30 June 2006
	Hiawatha Lane Pumping Stn	complete	30 June 2006
	Telemetry	Progressing	30 June 2006

## Water

Location	Description	Project Status	Completion date
Dovedale	General Renewals	Completed	30 June 2006
Mapua (CTA)	CTA project	Deferred	
	Flow meter replacement	Completed	
Brightwater	New Reservoir	Progressing	
Motueka	New Reticulation	Deferred	
Murchison	Hotham Street main	Progressing	
	New Reservoir	Completed	30 July 2006
	Pipe Renewals	In Progress	
Richmond	Wensley Road Mains	Completed	
	Richmond Well Pumps	Completed	
	Waimea Well Pumps	Completed	
	Flow meter replacement	Completed	
Pohara	New Reticulation	Deferred	
Tapawera	New Chlorinator	Completed	
Wakefield	New Water Source/ Trunk retic'	Progressing	ongoing

## Stormwater

Location	Description	Project status	Completion date
Brightwater	Jeffries creek improvements	Contract let	31 July 2006
Collingwood	Gibbs Road retic' improvements	Contract let	31 July 2006
	Beach Road retic' improvements	completed	30 June 2006
Kaiteriteri	Outlet Improvements	Deferred	
Mapua/ Ruby Bay	Aranui Road 900mm Dia	Completed	
	Aranui Road 1200mm Dia	Contract let	7 August 2006
Motueka	Northern Diversion	Completed	
Murchison	Cromwell Street water course	Completed	
	Cromwell Street culvert	Work progressing	30 June 2006
Richmond	Borck's creek widening	95% Complete	30 June 2006
	Bird St/ Elizabeth Street	Investigation work complete	
	Hunt/ Lowry Street	40% Complete	30 June 2006
	Reservoir Creek Culvert	Completed	
	Poutama Street outlet	Deferred	
	Beach Road Drain	Tendering	30 June 2006
Takaka	General upgrades	Work progressing	30 June 2006

## **2 WATER**

### **2.1 General**

A chlorinator fault at the Murchison treatment plant resulted in a transgression. Follow up sampling returned clear tests. The proposed telemetry upgrade and a chlorine analyser would give immediate notification of such faults.

Investigation continues to determine the feasibility of installing underground power cabling to serve telemetry for the Valhalla top reservoir, in conjunction with a subdivision. This would eliminate ongoing control problems and alarm failures.

The feasibility of upgrading telemetry for the reservoirs serving Hill Street South water reticulation is also under investigation.

Pipe breaks occurred recently in Thorp Street, Motueka. The Recreation Centre pumps have been re-programmed to alleviate peak flow pressures

### **2.2 Brightwater Reservoir**

Negotiations continue with the developer to secure an appropriate site for the additional Brightwater Reservoir. Geotechnical investigations and boundary surveys have been carried out to confirm slope stability and property boundary constraints.

### **2.3 Wensley Road Water Main Upgrade**

The final section of main between Chelsea Avenue and Bateup Road has been installed in conjunction with the Wensley Road upgrade project, this portion of main is yet to be granted Practical Completion as the project timeline has extended.

### **2.4 Murchison Watermain Upgrade**

Tender documents have been prepared for the installation of 1550 m of 150mm trunk watermain in Hotham Street, George Street and Waller Street, with construction expected to commence in September 2006.

### **2.5 Wakefield Water Augmentation**

Drilling investigations are about to commence in Spring Grove to determine the quantity and quality of water available to augment the Wakefield Water supply. Four test bores will be installed during a period of reasonable weather, tested and monitored over the next year to gain information to assess water quality and quantity, and security of the water source.

## **RURAL SCHEMES**

### **2.6 Dovedale Rural Water Supply**

Telemetry is complete and the contractor has completed the upgrade to the chlorinator unit. Minor pipe renewals work continues to complete the programme of works for this year. A closed valve at the intake, which is believed to be the result of vandalism, caused a temporary loss of water supply to the scheme reticulation.

## **2.7 88 Valley Rural Water Supply**

A transgression occurred at the treatment plant due to a chlorinator fault. Follow up samples returned clear results. Proposed telemetry will enable immediate notification of such faults. The chlorinator injector has been modified to improve performance.

## **2.8 Redwoods**

The reservoir at Maiseys was recently found to be running close to empty and caused some excessive turbidity but was soon rectified.

Some alteration and adjustment to pipework and reconfiguration of valves at the Golden Hills pumpstation has been completed, including the installation of a meter to directly measure the bore take.

## **2.9 Old Coach Road Reservoir**

In spite of the recent installation of security fencing, the solar panel was recently stolen from Old Coach Road Reservoir. Investigations are underway to install power supply to the site.

# **3 STORMWATER**

## **3.1 General**

Recent heavy periods of rain have continued to cause surface flooding and, in general, a repeat of the typical issues associated with stormwater after infiltration into wastewater systems. Flooding occurred in Motueka, Tasman, Ruby Bay/Mapua, and some areas of Richmond.

## **3.2 Aranui Road Upgrade**

The contractor is making steady progress. The works are due to be completed by 7 August 2006. Following further discussion the necessary permission has been granted for the construction of a new headwall into the estuary.

## **3.3 Borcks Creek/Headingly Lane**

The widening of Borcks Creek in the lower end of Headingly Lane is practically complete. Recent wet weather has made completion difficult. Negotiations continue with landowners before further portions of this work can be progressed.

## **3.4 Hunt/Lowry Stormwater Upgrade**

Work is complete on the upgrade to the stormwater network between Hunt/Lowry Streets and Gladstone Road via the Holiday Park. The work went well and significant benefits will be realised for residents in the lower end of Hunt/Lowry Streets.

### **3.5 Jeffries Creek and Pitture Stream Upgrade**

The upgrading work from Lord Rutherford Road to the State Highway 6 culvert and associated works commenced in June. Earthworks and stream widening is largely complete with a new culvert across Lord Rutherford Road South is 50% complete.

Discussions with landowners for the next stage of this work continue.

### **3.6 Otia Drive/ Cemetery Dam Improvements**

Work has almost been completed on the upgrading of pipework and hydraulics of the Cemetery detention basin adjacent to Otia Drive in south Richmond. Work includes concrete swale, pipework upsizing and headwall work. The project is being carried out by Works Infrastructure and is expected to be completed by end of July.

### **3.7 Collingwood Stormwater Upgrades (Gibbs Road and Beach Road)**

Works to improve the capacity of the stormwater network in these areas are largely complete, with minor works at Beach Road outstanding.

## **4 WASTEWATER**

### **4.1 General**

Overflows occurred recently in conjunction with and generally as a result of localised rainfall events at the following locations:

- Intersection of Manoy and Whakarewa Streets, Motueka resulting partially from a downstream pipe blockage.
- Number 22 Grey Street, Motueka – due to a blocked pipe.

A new [Flygtflygt](#) pump has been installed in Taits pumpstation Ruby Bay to alleviate issues.

St Arnaud #2 pumpstation continues to experience telemetry problems due to the landscape of the surrounding area which is outside the jurisdiction of Council, Reconfiguration options are under investigation.

Recent planned power outages have had no impact on systems in the Golden Bay with pre-arranged works allowing the systems to function without any issues.

### **4.2 Motueka Wastewater Treatment Plant Upgrade**

Significantly inflated inflows were experienced during recent rain events. No overflows were reported. The newly installed Step Screen is now working well, following some adjustments to operational controls.

### **4.3 Murchison Wastewater Treatment Plant**

Commissioning of the new screens, aeration pond and gravel filter beds occurred this week. Construction work at the site is largely complete, with only minor works and

fencing to be concluded. A sale and purchase agreement for the entire site is being concluded with the present landowner.

#### **4.4 Richmond Trunk Sewer Main Upgrade**

The contractor is in the final stages of completing this project. The difficult crossing of lower Queen Street was successfully completed over two consecutive nights. The Gladstone Road crossing is the final portion of work remaining. The contract is on schedule for end of July completion.

#### **Richmond Trunk Sewer Main Stage II – Completion of 'Portion C' Alignment**

Four tenders were received for this final portion of the Trunk Main project, which closed on 5 July. The tender was evaluated under the weighted attribute method and is expected to be awarded by the end of month.

#### **4.5 Takaka Sewerage Upgrade**

The current project has been granted Practical Completion following a successful testing period and commissioning. There remains some minor work at the pumpstation sites, and landscaping.

Preparation to progress the next phase including the upgrade of the treatment plant is underway.

#### **4.6 Tapawera Ponds**

Some ongoing operational issues continue with Tapawera Oxidation Pond. The rates of flow continue to fluctuate and investigation into the condition of pond wave-band, batters and base is continuing. The options for upgrading the pond are still under investigation.

## **5 REFUSE**

### **5.1 Kerbside Collection**

Kerbside bag and recycling collection continues with no substantial problems. Council is continuing to work with Streetsmart to improve customer communication and an update to the refuse and recycling guide is proposed in the near future.

Council staff are engaged in on-going discussions with the Kaiteriteri Recreation Reserve Board with the view to providing a drop-off facility for TDC bags at Kaiteriteri.

### **5.2 Resource Recovery Centres**

Council staff have concluded a weighbridge trial of commercial loads at Richmond and propose two further trials at Mariri and Takaka sites with a view to reconciling waste volumes and income. A weight-based charge is proposed for commercial loads in the near future.

MWH have been commissioned to advance the design and construction of a weighbridge at the Richmond site, in conjunction with other site improvements.

A new kiosk at the Mariri site is scheduled for construction in the first quarter of this financial year, with design of improvements at this and other sites scheduled to start in August.

## **6 WAI-ITI DAM**

Dam commissioning is proceeding successfully with the reservoir now approximately 25% full. Regular monitoring will continue through the entire commissioning phase to ensure and confirm adequate dam performance.

Initial financial contributions from new irrigators have been received in full from most new applicants with only a few part-payments still outstanding. All of these accounts are expected to be received and settled by the end of July. New irrigators have also lodged resource consent applications for new water permits for all of the new 300 hectares of irrigation. This means that effectively the Wai-iti Service Zone is now fully allocated in terms of the water permits issued under the RMA.

Arrangements and timing for an official opening is still under discussion with the Augmentation Committee and is anticipated in the September/October period.

## **7 RECOMMENDATION**

**THAT the report be received.**

Jeff Cuthbertson  
**Utilities Asset Manager**