STAFF REPORT

TO: Chairman and Members, Engineering Services Committee

FROM: Jeff Cuthbertson

REFERENCE:

DATE: 2 November 2005

SUBJECT: **Utilities Management Report**

6.5 **UTILITIES ASSET MANAGEMENT**

6.5.1 Capital Works Projects

The following capital projects have been tendered or are about to be tendered or constructed:

- a) Richmond Trunk Sewer main – tender assessment completed – tender still to be
- b) Motupipi and Hiawatha pumping stations and pumping main construction – budget \$1,840,000 – tenders closed 2 November 2005
- Wensley Road Watermain Replacement budget \$630,000. Tender let to c) Works Infrastructure for \$570,998. The work should commence shortly.
- d) Dovedale Rural Water Supply – watermain upgrading – budget \$150,000
- Murchison Pipeline Renewals budget \$25,000. This work has been e) undertaken.
- f) Murchison WWTP Upgrade - budget \$200,000. This work is out to public tender. Tenders close on 16 November 2005.
- Motueka WWTP improvements budget \$400,000. The mechanical plant and g) desludging of the aeration pond is complete.
- Mapua Upgrading of existing 750 mm diameter pipework in Aranui Road h) budget \$224,000. This work is approximately 80% complete.
- i) Borck's Creek widening (lower end). Council has now received a resource consent and the work is due to start mid to late November 2005.
- Motueka Northern diversion budget \$303,700. Negotiations have taken place j) with a developer for the work to be carried out as part of a total subdivision proposal.

Work has proceeded in obtaining resource consents for the following works:

- a) Takaka Wastewater Treatment Plant Upgrade
- b) Murchison Wastewater Treatment Plant Upgrade
- c) Jefferies Stream Upgrading Work

Investigation work has progressed on:

- a) Brightwater Water Reservoir (additional reservoir)
- b) Murchison Water Reservoir (additional storage)

and

- c) Wakefield Trunk Main and Bore Field Investigations
- d) Collingwood Beach Road/Gibbs Road Stormwater Upgrading
- e) Bird Street stormwater investigation is being undertaken by Opus Consultants
- f) Collingwood Sewerage New Aerators and Mechanical Screen
- g) Kaiteriteri Upgrading Lodders Lane Sewerage Pumping Main

6.5.2 Water

6.5.2.1 Pohara Valley Water Pump Station

Improvements are underway including the installation of a new flow meter and new pump. An issue has been raised with regard to the spraying of the gorse and vegetation around the intake. The practice of spraying is to be reviewed.

6.5.2.2 Murchison Water Supply

The upgrade of existing storage capacity is under investigation. Following a topographical survey of the existing reservoir site a proposed layout for extra storage tanks is being finalised. A flow meter has also been installed at the reservoir.

6.5.2.3 Collingwood Water

The work to enable the bore pump to be controlled remotely from the treatment plant to maximise the efficiency of the system is completed.

Staff are investigating the option of running pumps at night on cheaper rates – namely the commercial off peak tariff.

The future of the old Collingwood water reservoir pond is still under review

6.5.2.4 Dovedale Rural Water Supply

A new pump has been installed Wins Pump Station.

Dovedale Intake - Ongoing monitoring of the contact tank system at the head of the system is continuing. Staff are investigating the option of relocating the chlorination unit to improve the efficiency of the system.

6.5.2.5 88 Valley Rural Water Supply

The 88 Valley scheme has experienced some recent operational issues. A break in the main resulted in some debris and airlocks causing reduced flows in the system and low levels in the reservoirs. Full pressures and flows have now been restored, and the scheme is now operating satisfactorily.

6.5.2.6 Redwoods Rural Water Scheme

Staff are investigating the option of relocating a reservoir and pump station to improve access for maintenance purposes. Work is well advanced in establishing easements over all new reticulation and the parallel existing reticulation. Plans are currently under review by LINZ for final approval.

6.5.2.7 Golden Hills Road Pump Station

The chlorinator was controlled by the well pumps at Golden Hills only, and did not operate if the water was only coming from River Road. The controls have been modified to enable the chlorinator to run when needed

6.5.2.8 Waimea Wells

Waimea well electrical upgrade is completed and remedial maintenance work is ongoing. The new chlorine analyser is to be installed in the Waimea well.

6.5.2.9 Pohara Water Supply

Following approval of the Engineering Services Committee to pursue detailed design and cost estimates for the coastal margin, MWH Ltd have been commissioned to carry out this phase of feasibility work. Detailed investigation has commenced and the feasibility study is expected to be completed by end of December 2005.

6.5.2.10 Brightwater Reservoir

Feasibility studies are underway to determine appropriate locations for extra future reservoirs to increase the storage capacity for Brightwater water supply scheme. Detailed Geotechnical investigations will proceed once the appropriate site has been confirmed.

6.5.2.11 Wensley Road Watermain Upgrade

The contract to install dual high and low pressure watermains in Wensley Road between Oxford Street and the cemetery has been awarded to Works Infrastructure Ltd. The work is due to commence shortly and with a break over the Christmas period, will be complete by March 2006.

6.5.3 STORMWATER

6.5.3.1 Motueka Flood Gates

Minor refurbishment of the Wharf Road control gates is to be completed. General warning safety signage has been purchased and programmed for installation.

6.5.3.2 Reservoir Creek Dam

Options and estimates are still being reviewed for this project and expected to be completed by the end of December.

6.5.3.3 Ruby Bay Stormwater

Opus International Consultants have commenced detailed design for stormwater improvements in Stafford Drive, Ruby Bay. negotiations continue with residents to obtain the optimum route for pipework through private property.

6.5.4 WASTEWATER

6.5.4.1 Cassidy Corner Sewer Pump Station

Investigations are underway to improve drainage around the pump station. A section of stormwater pipework is likely to be required to be installed beneath the existing roadway to achieve this.

6.5.4.2 Operator Qualifications

Tasman District Council is considering upgrading some wastewater treatment plants, which will require higher levels of operator qualifications.

Tasman District Council's maintenance contractor, Works Infrastructure, will be asked to confirm staff qualifications and may be asked to upskill appropriate staff to operate the new plants.

6.5.4.3 Illegal Drug Lab Risk Awareness Workshop

Council have organised with the local Police, a workshop to raise awareness of the potentially fatal risks associated with private (illegal) drug laboratories, particularly for contract staff involved with the maintenance of sewers either on or downstream of these properties.

6.5.4.4 Motueka Ponds

Filter fabric and rock protection work to the outlet has been completed. Ongoing monitoring of the sludge layers continues with disposal of the sludge periodically when required

6.5.4.5 Tapawera Ponds

The new aerator has been installed and is running well. Investigations continue into the installation of a paddle wheel aerator to improve the efficiency of the pond.

6.5.5 CAPITAL WORKS PROJECTS

6.5.5.1 Motueka Wastewater Treatment Plant Improvements

Work on the construction of the new sand filter disposal beds and on the upgrading and rejuvenation of the existing disposal beds, is currently on hold with the discovery of human remains. Council continues to investigate the extent utilising ground radar equipment and is working through the issues with lwi.

The installation of new aerators and a mechanical screen has been undertaken as part of the upgrade works and these works have now been commissioned.

6.5.5.2 Tapawera Wastewater Treatment Plant

Upgrading of the effluent disposal system will be undertaken once resource consent has been obtained. Application for resource consent has been submitted and is currently under a Section 92 request for further information including a Cultural Impact Assessment. A new

paddle wheel aerator has been ordered for the pond so as to ensure sufficient oxygen is available to the effluent.

6.5.5.3 Murchison Wastewater Treatment Plant

The upgrading of the MWWTP has been tendered with tenders closing on 16 November 2005. A resource consent to operate the plant has also been applied for and all effort is being undertaken to acquire this consent before awarding of any tenders.

6.5.5.4 Takaka Wastewater Treatment Plant

The application for subsidy has been submitted for provisional funding. Consultation has commenced with affected parties as a requirement of the new resource consent and to proceed with the treatment plant upgrades. The next step is to complete the Assessment of Environmental Effects. Iwi have also requested a Cultural Impact Assessment.

6.5.5.5 Richmond Trunk Sewer main

The tender for the Richmond Trunk Sewer Main Upgrade is yet to be awarded. Ching Contracting Ltd have been awarded 'Preferred Tenderer' status, and a separate report details the funding availability issues that require resolution for the project to proceed. Once the tender is awarded the first portion of work is expected to commence by the end of November 2005.

6.5.5.6 Takaka Sewer Pumping System Upgrade

Tenders for this contract have been received and the contract is under evaluation. The work is programmed to commence prior to Christmas with a break over the Christmas period.

Recommendation

That the report be received.

Jeff Cuthbertson Utilities Manager