

**SUPPLEMENTARY  
BUSINESS PAPER**

**PLANNING MEETING**

**Wednesday, 17 December, 2008  
at 6:30 pm**

**TABLE OF CONTENTS**

**SUPPLEMENTARY ITEMS**

Item 11 MM10/08 Hornsby Quarry - Pumping Requirements ..... 1

## 11 HORNSBY QUARRY - PUMPING REQUIREMENTS

---

Councillors will be aware that the Geotechnical Study undertaken for Council by Pells Sullivan Meynink recommended that Council closely monitor water levels in the Hornsby Quarry, and institute arrangements to manage the level of water in the quarry pit if it wished to avoid the risk of a collapse of a number of faces of the former quarry.

I am advised that Council officers last measured the water level in the quarry on 8 December 2008, where it was noted that the level was RL 38.6 (AHD). PSM have recommended a maximum water level of RL 40 be maintained to minimise the risk of instability of the quarry walls. Given that there is a lead time of greater than 10 weeks for the assembly of suitable pumping equipment, Council needs to consider the purchase of equipment that will enable this recommendation to be addressed. Council staff have considered a number of pumping options, and have taken advice from companies that specialise in such tasks. A preferred pumping option has been identified, involving the use of a submersible pump attached to a diesel motor. This arrangement will be capable of pumping the water level down to approximately RL 20. Down to this level, the quality of the water currently collected in the quarry pit is suitable for discharge without further analysis and treatment. Removal of water below this level will require further consideration. The attached layout plan illustrates the proposed arrangement, and an alternative option in the event that the infrastructure currently in place is not able to be used.

A preliminary estimate of costs to manage the water level in the quarry pit has been prepared, in the total of approximately \$300,000. Annual running costs of approximately \$50,000 are anticipated. Details are summarised in Attachment 2 to this Minute. Additional monitoring, water treatment and pumping costs may be incurred if water is to be discharged below RL 20.

Quotations were sought from two companies with the relevant expertise in this area, to assist Council in the development of the preferred option, and in identifying the most appropriate motor and pump package. Preliminary indications are that a suitable pump and motor can be sourced and installed for an approximate cost of \$100,000 (exclusive of GST). The lead time required to manufacture the pump and install the equipment is such that an order should be placed in the immediate future.

It is proposed that pumping proceed during the hours of 7.00am to 6.00pm Monday to Friday, and 8.00am to 1.00pm Saturdays. The equipment will be located within the quarry void, in such a manner as to minimise risk to maintenance personnel, and to the installed equipment. The existing fuel tanks located on the western side of the quarry are proposed to be used for fuel storage purposes. A review of environmental factors has concluded that the work will have minimal environmental impact. To lower the water level to RL 20 as recommended will take approximately two years.

Council has not allocated funds to enable this work to proceed.

In the circumstances, it is now proposed that funds totalling \$300,000 be made available to enable the work to proceed. Pending identification of an appropriate source of funding for this work, it is proposed that working funds be utilised, with a source of funding identified for consideration as part of the December or March Reviews. Council will be further considering a strategic direction for the Quarry site in 2009. The action now proposed should not be inconsistent with any direction Council may wish to take.

THAT

1. The General Manager be authorised to proceed with lowering of the water level in the Hornsby Quarry, and funds totalling \$300,000 be made available for this purpose.
2. Further consideration be given to identifying the source of funding as part of future budget reviews.

NICK BERMAN

Mayor

**Attachments:**

1. Pumping Layout Plan
2. Estimate of Works

File Reference: F2006/00622

Document Number: D01070564