

Report	08.534
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CommitteeParks, Forests and UtilitiesAuthorTony Shaw, Manager, Engineering Services

Stuart Macaskill Lake 1: Apron joint repair

1. Purpose

To inform the Committee of the work required to replace the joint seal and seek approval for it to be carried out within the 2008/09 wholesale water capital expenditure programme.

2. Significance of the decision

The matters in this report **do not** trigger the significance policy of the Council or otherwise trigger section 76(3)(b) of the Local Government Act 2002 at this stage.

3. Introduction

At the end of last summer Lake 1 was almost empty, so the opportunity was taken to completely drain the lake and carry out an inspection and minor repair work. Lake 1 has not been emptied and inspected for approximately 20 years.

The inspection showed that the flexible seal between the tower base and the surrounding concrete apron had failed in that it no longer bonded to both concrete surfaces. The purpose of the joint is to allow the tower and apron to move independently whilst maintaining a waterproof seal.

The designers of the lake structure have been consulted and have proposed a replacement joint seal that is similar to the modification carried out in 1990 to the apron joint of Lake 2.

4. Background

The proposed replacement joint seal for Lake 1 consists of a permanent flexible bandage seal fixed to both concrete surfaces over its full length by stainless steel strips and anchors. A large amount of high grade stainless steel is required to fix the bandage seal.

There is reluctance to refill the lake without undertaking this repair due to the risk of water leakage through the faulty seal. It is desirable that the lake is

refilled by the end of November for a possible low rainfall summer, with refilling commencing early in September. Since the seal repair is expected to take six weeks, it is important to proceed immediately. As a result, the materials for the repair have been purchased and preliminary work is underway.

The work will be capitalised as a replacement and enhancement for a 20 yearold seal that has now failed.

Although all prices have not yet been received, we believe \$140,000 is a realistic estimate of the cost with an appropriate contingency included. Approximately half of this cost is in the materials. The cost represents about 2.8% of the annual capital expenditure budget. Based on past experience, there is a reasonable degree of confidence that it could be contained within the capital expenditure budget. This can be monitored and reconsidered if necessary at the half yearly review.

5. Communications

A press release was issued at the time Lake 1 was emptied. No further communication is seen as necessary.

6. Recommendations

That the Committee:

- (1) **Receives** the report and notes its content.
- (2) *Approves* the repair of Lake 1 apron seal within the 2008/09 wholesale water capital works programme.
- (3) *Notes* that the funding for this repair may be reconsidered at the half yearly review.

Report prepared by:

Report approved by:

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