

BABERGH DISTRICT COUNCIL

FROM: Project and Programme Executive
and Head of Contract and Asset
Management

REPORT NUMBER: **G 172**

TO: STRATEGY COMMITTEE

DATE OF MEETING: 10 January 2008

HADLEIGH SWIMMING POOL AND OTHER FACILITIES

1. PURPOSE OF REPORT

- 1.1 To report the results of the structural assessment of the pool tank.
- 1.2 To advise that the Hadleigh Swimming Pool Steering Group consider that the pool should remain open for as long as possible.
- 1.3 To report on proposals for further public consultation on stand alone community/leisure facilities adjoining the existing pool and including an assessment of the pavilion site in Calais Street.

2. RECOMMENDATIONS

- 2.1 That the report on the structural assessment of the pool tank be noted.
- 2.2 That Hadleigh Swimming Pool remains open for as long as possible on the understanding that prior to any major repair or maintenance work being undertaken authority will be sought from Members.
- 2.3 That the further consultation on a new building adjoining the pool be agreed.
- 2.4 That Committee decides the role it wishes to take in authorising the details of the consultation process.

3. FINANCIAL IMPLICATIONS

- 3.1 There are no financial implications in undertaking additional consultation other than officer time.
- 3.2 The Council's draft revenue budget for 2008/09 includes £25,000 for continuing essential repairs and maintenance to Hadleigh Swimming Pool.
- 3.3 The capital programme includes £21,000 for the feasibility study referred to in the report.

4. RISK ASSESSMENT

- 4.1 This report is most closely linked with the Council's Significant Business Risk No.9 (Management of major programmes and projects). Key risks are set out below:

Risk Description	Likelihood	Seriousness or Impact	Mitigation Measures
Providing a new building which does not meet local needs or has unaffordable running costs	D	II	Adequate community consultation and detailed business case to be prepared.

5. **KEY INFORMATION**

5.1 This project is being led by a Steering Group made up of Babergh Councillors (Nick Ridley, Sue Wigglesworth, Michael Miller and Brian Riley), Hadleigh Town Councillors and South Suffolk Leisure.

5.2 The remit of the Steering Group has been twofold:-

- (a) To ascertain what additional facilities could be provided in conjunction with a refurbished swimming pool and
- (b) if, for cost or technical reasons, a refurbished pool was not possible what facilities could be provided in a stand alone building adjacent to the pool which would continue as an independent facility when the pool closed.

5.3 In considering the above the Steering Group has also been asked to make an assessment of the future of the pavilion site in Calais Street.

Structural Assessment of the Pool Tank

5.4 At its meeting on 12 December the Steering Group received a summary of the report from the engineers. A copy of that summary is attached to this report. The view of the engineers is not to commit any large investment which is dependent on the present pool tank's condition, because there is a significant risk of future deterioration.

5.5 A representative from the engineers, Scott, White and Hookins, will be present at the meeting. It would be helpful if any detailed questions could be notified in advance to Ryan Jones to ensure an answer is available at the meeting.

5.6 The Committee is asked to note the report and that the Steering Group is united in the view that the pool should remain open for as long as possible. However, if any significant repairs or maintenance work is necessary authority will be sought from Members first.

Stand Alone Building adjacent to current pool

5.7 In order to reach a view on the range of facilities to be included in the facility the Steering Group agreed for a stakeholder event to be undertaken.

5.8 Attendees at the stakeholder meeting on 28 November were asked for views on the two main priorities plus, in order to make the debate as inclusive as possible, the third priority as shown below:-

Priority 1 – Refurbishment of the existing pool.

Priority 2 - Community facilities that provide revenue which makes a contribution to the running costs of the pool.

Priority 3 - Non-revenue providing facilities that lend themselves to different uses.

5.9 The conclusions drawn from the stakeholder meeting are:

- Considerable awareness of the need for investment in services such as new community facilities, tempered by the realisation of the very tight budgetary situation facing all councils, and not just Babergh.
- Investment in other facilities (e.g. the leisure centre, Layham Road Sports Ground) would have a far bigger impact on the social infrastructure of the town, particularly young people, than a refurbished pool.
- A strong view amongst some participants in favour of treating investment in swimming facilities as the greatest single priority.

In considering the issue there was also reference to the growth in the town in the past three years and the influx of young families. The potential detrimental impact of new revenue earning facilities i.e. a gym and dance studio, on the leisure centre were also raised.

Based on discussions and consultations undertaken it was suggested the building be a two storey one with the following accommodation schedule:-

Ground floor:

- Open space for casual hire (e.g. clubs, SCC youth services).
- Social area – seating, catering (vending) and IT facilities.
- Toilets.
- Services and access to first floor.

First floor:

- 35 station fitness gym
- 150m² dance studio
- changing facilities/showers/toilets

5.10 Whilst acknowledging the value of the work undertaken, the Steering Group felt that further engagement with a broader range of interested parties in the Hadleigh community was needed. It was also felt that in view of the comments expressed at the stakeholder event, and the need to ensure scarce resources achieve the maximum impact, now would seem an opportune time to also examine the possibilities for investment in existing facilities owned by other agencies. A comparison can then be made between the need, costs and benefits of a new building and investment in those already in existence.

- 5.11 There will also be a need to identify the commitment and level of funding support from Hadleigh Town Council and any other funding sources. The Steering Group will then be able to assess the costs against affordability and commitment from other partners.
- 5.12 Subject to the support of the Committee to the principle it is intended that the Steering Group consider the process for the consultation at its next meeting on 17 January. It would then make recommendations to this Committee at its meeting on 7 February unless Strategy Committee is prepared to allow the Steering Group to agree the consultation process.

Timetable

ITEM	DATE
5.13 Steering Group agrees consultation	17 January 2008
Strategy Committee approval to consultation process (if necessary)	7 February 2008
Consultation period	6 weeks
Steering Group considers consultation outcomes	April 2008
Strategy Committee	1 May 2008
Feasibility study on new building	May – July 2008
Assessment and preparation of outline business case	August 2008
Steering Group consideration	Early September 2008
Strategy Committee	18 September 2008

6. **APPENDICES**

- (a) Summary of Structural Engineer's report.

7. **BACKGROUND PAPERS REFERRED TO:**

Hadleigh Pool Structural Inspection and Assessment from Scott, White & Hookins dated 4 December 2007.

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HADLEIGH POOL – STRUCTURAL REPORT

The Structural Report for Hadleigh Pool has been commissioned from Scott White & Hookins (civil & structural engineers). The final report is to be delivered in accordance with a 'Structural Engineer Brief' issued by BDC in September 2007.

The brief required the following:

1. Details of the appointed structural engineer (actually provided at tender stage)
2. Details of previous experience on swimming pools (again provided at tender stage)
3. Details of investigative work to be undertaken
4. Details of testing and sampling results
5. Details of calculations undertaken
6. A summary of findings
7. A recommendation on the integrity of the pool tank and its canopy for the next 15 years.

The report has been received from Scott White & Hookins, supported by a supplementary report from their testing specialists, Ian Farmer Associates.

In order to fully appreciate the content of the structural report it would be useful first of all to understand the content of the supplementary report from the testing specialists, and then consider the report from the structural engineers.

1. Supplementary Report from Ian Farmer Associates (Geotechnical & Environmental Specialists)

1.1 Testing on site was undertaken on the 29th October

1.2 Work undertaken:

- (a) Map the reinforcing steel in the base of the pool tank using ground penetrating radar (GPR) and a digital Koleytric covermeter
- (b) Prove this non-destructive testing work (NDT) by coring the full depth of the base in one location so as to cut through the reinforcement
- (c) Determine the pool wall construction using GPR and coring
- (d) Check for levels of chloride contamination in accordance with BS 1881
- (e) Generally survey the condition of the pool tank by visual inspection and soundings
- (f) Break out a corrosion damaged base to a support column
- (g) Measure the paint thickness on the steel columns using an Elcometer

1.3 Test results:

- (a) The pool base varies in thickness from 242mm to 302mm, and is formed in Marbellite (6mm), cement/sand screed (36mm), and reinforced concrete slab (200 – 260mm)
- (b) The top layer of reinforcement in the concrete slab is not evenly distributed and laid to an irregular pattern. Cover to the steel ranges from 115mm to 185mm.
- (c) The lower layer of reinforcement in the concrete slab is also not evenly distributed and laid to an irregular pattern. Cover to the steel ranges from 80mm to 10mm.
- (d) There is limited cracking to the Marbellite and the screed, but not to the concrete slab.
- (e) Chloride levels in the concrete slab are high.
- (f) There are localised areas of excess voids or delamination in the concrete slab.
- (g) The concrete slab rests on a thin polythene membrane.
- (h) Underneath the membrane is a layer of 50mm single size gravel.
- (i) Walls are 243mm thick, and are formed in Marbellite (6mm), cement render (7mm) and hollow concrete blocks (230mm). Cavities to the blocks are filled with concrete and reinforcing bars, with some reinforcing bars in the horizontal joints to the blocks
- (j) Chloride levels in the walls are low
- (k) The steel columns have suffered some corrosion at lower levels, but demonstrate no loss of section
- (l) Paint thicknesses are good and well-bonded

2. Main Report from Scott White & Hookins, Civil and Structural Engineers

2.1 Findings are based on test results from Ian Farmer Associates and calculations based on information from these results, and can be summarised as follows:

2.2 Design and workmanship in constructing the pool slab was deficient in a number of respects:

- i. The floor of the pool tank is a reinforced concrete slab with two layers of steel reinforcement. This is generally in accordance with design recommendations at the time of construction (CP2007:1970) except that no movement joints have been included

- ii. Concrete cover to the reinforcement in the top of the slab is excessive ranging from 115 to 185mm (*against an expected 75mm*). This can lead to excessive cracking
- iii. Concrete cover to the reinforcement in the bottom of the slab is inadequate ranging from 10 to 80mm (*against an expected 75mm*). This can lead to corrosion of the reinforcement
- iv. The concrete slab has voids or delamination in certain areas, which demonstrates poor compaction during construction
- v. The upper levels of the slab are suffering from chlorine contamination, which can cause corrosion of reinforcement
- vi. The slab has been laid directly on single size aggregate without an intervening screed. This has resulted in an uneven thickness to the slab and inadequate cover to the lower layer of reinforcement.

2.3 The design and workmanship in constructing the pool walls was also deficient in some respects:

- The construction of the pool walls in hollow concrete blocks was not compliant with design code recommendations the time of construction.
- There is vertical and horizontal reinforcement in one long wall, but no vertical reinforcement in the other
- Concrete is discontinuous in places in one wall (*i.e. no continuous bond*)

2.4 There is localised corrosion to some of the steel columns, which can be remedied by minor exposure and protection works.

3. In summary the pool tank and steelwork appear to be in a reasonable condition at present. However the tank design and construction does not comply with current codes of practice, nor those current at the time of construction. Poor construction methods were adopted resulting in an irregular thickness concrete slab with steel reinforcement in the wrong location. There is risk of deterioration in the pool slab due to chlorine attack. The steel framework only requires local remedial work.

4. CONCLUSION

The Structural Report carries the following recommendations:

- (a) Based on the findings of the inspection and assessment of the pool enclosure steelwork, it can be retained and should remain serviceable for a number of years if properly maintained. The feet of the columns require further investigation, removal of any corrosion products and protection against future corrosion.
- (b) The enclosure cladding has a number of defects requiring attention. Consideration should be given to replacement of the present cladding in any proposed new development.

- (c) However, we would not recommend committing any large investment which is dependent on the present pool tank's continuing good performance, because there is a significant risk of future deterioration in its condition.