

CABINET

19 SEPTEMBER 2007

HOCKLEY VIADUCT

REPORT OF HEAD OF ESTATES

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RECENT REFERENCES:

None.

EXECUTIVE SUMMARY:

This report considers the available options for the repair of Hockley Viaduct's deteriorating structure.

Since its acquisition by the Council in the late 1960s, minimal repairs and maintenance of the structure have taken place. Although undoubtedly a significant liability the advice received is that a repairing programme needs to be put in place to avoid the need for emergency repairs and the structure becoming dangerous.

The recommendations are for the Council to undertake a rolling programme of repairs thereby spreading the cost over a number of years. Upgrading of the structure to accommodate other than casual use would not take place without other funding.

RECOMMENDATIONS:

1. That the Council agrees in principle to carry out limited progressive repairs to Hockley Viaduct over 12 years to be added to the Council's capital programme.
2. That before a commitment is made, a specification and programme for the works is prepared and tendered on the basis of Option 5 (a) outlined in the report, with a parapet height of 1400mm, taking full account of the specialist nature of the work.
3. That a supplementary revenue estimate of £5,000 is approved to cover consultant's costs in preparing specifications and the tendering of the works.

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1 History/Background

- 1.1 Hockley Viaduct was designed by engineer W R Galbraith as part of the link between the Didcot, Newbury and Southampton Railway at Winchester and the London and South Western line at Shawford. The viaduct was renovated in 1943-4 in the run up to D-day. It became disused as a railway viaduct from 1966 and ownership transferred to Winchester City Council as part of a larger purchase of railway land. Proposals to demolish the viaduct in 1984 were abandoned partly when it was discovered that it had a mass concrete core and partly as a result of public opinion.
- 1.2 The viaduct consists of thirty two 9.14m (30ft) arch spans with a total length of 360m, it is the longest viaduct in Hampshire. There is at present little active use of the viaduct and it is in a state of growing disrepair. The Council continues to monitor the structure on a monthly basis, ensuring that any necessary safety measures are undertaken whilst consideration is given to its future.
- 1.3 The route over the viaduct is not a dedicated highway but is available for public use (a permissive footpath only). It joins the Hockley Link Road at its southern/eastern end and has a stepped access onto Five Bridges Road bridleway at the northern/western end.
- 1.4 The Council and campaigners including the Friends of Hockley Viaduct have attempted to obtain listed status for the property, without success, on several occasions. Whilst recognising that the viaduct is an impressive engineering structure, it is understood that the English Heritage inspectors considered that it did not have sufficient architectural interest or be sufficiently technologically innovative to merit listing. A number of other similar structures in the south west of England were considered to be more significant and the best surviving ones listed. None the less, the Council's Principal Conservation Officer considers that Hockley Viaduct is clearly of local architectural and historic interest and important to the setting of Winchester. As such it is included in the Buildings at Risk Register.
- 1.5 In 1998 the Council commissioned a feasibility report 'Hockley Viaduct Access Project' which included a condition survey, structural assessment and costings. This report was updated in 2005 by consulting engineers Waterman Civils and apart from a 'close the bridge option' gave three options for repairing the viaduct (minimum, maintenance or desirable repairs) ranging from £569,100 to £1,066,100.

2 Funding

- 2.1 In 2000 the then Chief Estates Officer looked into funding via the Heritage Lottery Fund and the Onyx Environmental Trust (Landfill Tax). However, because the structure was not listed, funding was not available via these routes. The Railway Heritage Trust could not assist because they can only give financial support to bodies devolved from British Rail on privatisation such as Railtrack.

- 2.2 More recently it was hoped that funds may be available via the Itchen Navigation heritage trail project. This project is currently the subject of a Heritage Lottery bid which relates to an 11 mile stretch of formerly navigable waterway linking Winchester with Southampton. It is essentially a heritage conservation project which aims to enhance and improve the internationally renowned chalk river system to celebrate its wildlife, history and value to local people. Therefore, financial assistance for structures such as the viaduct will not be available.
- 2.3 The development of the park and ride at Compton provides some hope that the viaduct and the line of the old railway and bridleway can be used as an alternative park and cycle/walk route to the City. Contact with Sustrans the national cycleway charity and has been maintained and discussions with them and Hampshire County Council will be progressed to investigate a possible partnership scheme. If additional funding, linked to park and ride and cycle routes through to Otterbourne, can be attracted, it could be used to accelerate the repairs programme and to pay for upgrading the surface and replacing missing sections of the route, and future maintenance. This possibility also suggests that reducing the parapets below 1400mm would not be sensible, see paragraph 3.7 below.

3 Considerations

- 3.1 As funding without listed status is not likely to be available, the consulting engineers were requested to inspect the viaduct again early in 2007, with a view to recommending a progressive repairs option, which would spread the cost of carrying out essential repairs and help to save the viaduct from further deterioration.
- 3.2 Health and safety issues are also of increasing concern with a structure in disrepair and it is therefore essential to have continuing inspections and advice from structural engineers.
- 3.3 In carrying out any repairs the Council also have to be aware of the ecological impact. A survey undertaken in 1999 indicates that the viaduct has developed a locally valuable chalk grassland vegetation on the track bed and a flora associated with old walls and that it is desirable to seek opportunities to conserve the vegetation and flora and enhance the potential of the viaduct for nature conservation and its interpretation, whilst preventing further growth of large trees and shrubs.
- 3.4 The survey report recommended saving and replacing the soils with seed and roots of chalk grassland plants and replacing. The report also recommended using lime mortar instead of cement base mortars to all the walls. As the viaduct is well located in terms of surrounding bat feeding habitats, the report recommended various measures to encourage bats. An allowance for the cost of implementing the recommendations of the Ecological Survey must therefore be added to any repairing option.
- 3.5 The viaduct is located over the River Itchen a site of special scientific interest (SSSI) and again there may prove to be special requirements in carrying out repairs to the viaduct to ensure that there is no detrimental impact on this area.
- 3.6 There is little 'active' use of the Viaduct as it literally does not lead anywhere and although the Friends of Hockley Viaduct are anxious to conserve it for the benefit of all, a more 'active' use and resulting public awareness would assist both funding and the prospect of repair. The Hockley Viaduct Access Project was an attempt at increasing the viaduct's use, the viaduct and bridges along a stretch of this former railway line would have been repaired, a bridge would have been erected over the Five Bridges Road and the surface made suitable for all including cyclists and the disabled. This floundered

because of the lack of funding, bringing additional 'active' use to the viaduct does not appear to be affordable. The park and ride interest may rekindle this project.

- 3.7 The engineer's recommend that the parapets of the viaduct are reduced in height to 1150mm to facilitate an economic repairing option. Although this would limit the viaduct to pedestrians only, it would enable the public to view easily the countryside and surrounding area. In any case, the viaduct at present is only easily accessible to cyclists at one end and not suitable for equestrian use. If the viaduct was open to cyclists the parapet height would need to be 1400mm, for equestrian use an 1800mm height would be required which is the actual height of the existing parapets. The Council could compromise and re-build the parapets to 1400mm which may have a marginal effect on the budget costings. There is also scope to leave the parapets at their original height where they only need re-pointing and reducing the level of the parapets at the sections which need re-building and also to infill gaps with more substantial fencing/railings. At 1400mm high, ability for the public to view over the parapets is greatly enhanced.
- 3.8 The Friends of Hockley Viaduct have made offers to assist with non technical work such as removal of the vegetation from the viaduct. Where such work can be carried out safely the take up of such offers will be encouraged.

4 Waterman Civils' Report

- 4.1 The most recent report by Waterman Civils recommends, in view of the limited funding, only two real options, 'Close and Demolish' or 'Keep Open and Progressive Repair'. The full range of option is outlined in Appendix A.
- 4.2 The report advises that vegetation has been the primary cause of deterioration and distress of the structure. Therefore, removing this and waterproofing the structure should help to prevent further deterioration. By undertaking repair works three arches at a time, the cost could be spread over 12 years.
- 4.3 The report advises a cost estimate of £6,000 to carry out initial vegetation clearance, a yearly cost of £1,800 to keep vegetation down and a cost of £18,500 for repairing/rebuilding each 30.9 metre strip. The build works estimate of £18,500 has been increased to £26,000 to allow for project management and supervision and a contingency.
- 4.4 The report also points out that there are two other much smaller bridge structures that the Council is responsible for, which will also require repairs over the period and these should also be included in the works programme.

5 Recommendations

- 5.1 The inability to list the viaduct has resulted in a lack of external funds to assist in the carrying out a full repair and access project. Rather than do nothing and ignore the problem, it is recommended that rolling programme of repairs is started, carried out progressively over a 12-year period to help to avoid further deterioration of the structure (Option 5(a) in Appendix A).
- 5.2 A scheme of repairs that replaced like with like would be supported by the Friends of Hockley Viaduct and the conservation team. However, this would be a more expensive option and only recommended if the viaduct was listed. A sensible compromise of reducing the height of the parapets to 1400mm from their original height of 1800mm is recommended where this is the most cost effective option. Reducing the parapet height below 1400mm is not recommended as it would prevent continuing use of the viaduct by cycles.

- 5.3 As the costs presented are budget costs only, it is recommended that engineers are instructed to prepare a specification and seek tenders from builders for a long term contract based upon Option 5(a) in order that the Council are aware of the actual figures before making a commitment to carry out this progressive repairing option. The advice will extend to how cost inflation will be dealt with over a long term contract and recommendations as to break clause provisions.

OTHER CONSIDERATIONS:

6 CORPORATE STRATEGY (RELEVANCE TO):

- 6.1 Hockley Viaduct is an important local historic structure which contributes to the high quality environment, in undertaking the repair works this historic environment is preserved and enhanced.
- 6.2 Improved access will encourage walking and cycling and the enjoyment of a healthy active life by residents and visitors.

7 RESOURCE IMPLICATIONS:

- 7.1 The budget estimates for the initial cost are set out in the appendix. This budget figure is however subject to a number of caveats relating the specialist nature of the structure and its location. The indications are that the cost of the recommended option would be £350,000 - £500,000 over 12 years; this sum would need to be added to the capital programme and suitable funding identified. The capital programme is considered elsewhere on this agenda.
- 7.2 The costs to draw up a full specification and programme for the works and for that to be tendered is estimated to be a maximum of £5,000 which it is suggested is met from a supplementary revenue estimate.

8 BACKGROUND DOCUMENT:

Watermans Civils Hockley Viaduct report dated January 2007

9 APPENDICES:

Appendix A – Hockley Viaduct Options

