

Panel for Historical Engineering Works [PHEW]**Scottish Group**

Objectives: *To record and promote knowledge of works illustrative of the history and development of civil engineering and to encourage excellence in the conservation of significant examples*

Gordon Mackie
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Dear Mr Mackie

Subject Managing Change in the Historic Environment – Engineering Structures

Thank you for the opportunity to comment on this consultation draft covering Scotland. As you will see from our objectives above the Panel, which has been in existence now for more than 40 years, has a significant interest in what you are trying to achieve in this document.

Basically, we are of a view that the draft document is excellent and it has the Scottish Group of the Panel's full support. Notwithstanding this I have made below a few suggested additions for your consideration which might strengthen the document.

p.2. **Key Issues.** Another possible entry:

8. The Institution of Civil Engineers' Panel for Historical Engineering Works, based on its extensive record coverage and specialist knowledge provides advice on the historical engineering merit of engineering works with a view to encouraging excellence in the conservation of significant examples.

p.3. In the photograph adjoining 'Spandrel' might be added, 'Tapering pilasters' which are a distinctive feature of many Highland bridges from c.1804. Below the left hand 'Spandrel' at the start of the arch could perhaps be added the word 'Springing' The arch ring stones are of course 'Voussoirs', the top side of which form the 'Extrados' of the arch.

p.4. **Historic Bridges – Iron and steel**, after 'welding.' add, 'The use of carbon fibre to replace or strengthen missing material is sometimes another minimal intervention option.'

p.5. After 'inspection' in '**Vooids**', add, 'These should be retained whenever practicable as grouting them with a concrete fill would increase the weight on the foundations and may . . .'

p.5. At the 3rd line from the bottom after 'stay' add 'as at Laigh Milton Viaduct (near Kilmarnock) conservation in 1996, . . .'

p.6. Add at the top of page '**Adjoining trees and shrubs**. Where such vegetation, often self seeded and neglected, causes deterioration of the structure through dampness or spoils its appearance, such as at Telford's fine bridge and toll house at Hamilton on the old Glasgow to Carlisle Road. Every effort should be made to reverse and manage this situation.

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p.6. **'Harbours, Piers and Docks'**. After 'docks' in line 2 add 'and ferry slips, . . .'

p.9. Under 'Other selected publications and links', add the Panel's compilation of a record of more than 500 significant engineering works in Scotland under '**Paxton R. and Shipway J. *Civil Engineering Heritage – Lowlands and Borders and Highlands and Islands. Thomas Telford (2007).***'

As regards your consultation questions.

The Panel's background and objectives have been covered in this letter.

The document is basically presented in a clear and consistent manner, which is important for trying to have the issues better understood and, hopefully, acted upon.

The layout is easy to read and the images are appropriate for the issues they illustrate. The distorted arch retained at Laigh Milton Viaduct with Historic Scotland's blessing is particularly striking (see attachment – a better image could be obtained if necessary) would be a good example of this issue.

The Panel hopes that you will find this response helpful and has no objection to its views being made public.

Yours sincerely

Roland Paxton
Chairman,
Scottish Group of PHEW

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