

UK Tentative List of Potential Sites for World Heritage Nomination: Application form

Please save the application to your computer, fill in and email to: <u>UKTL.Application@culture.gsi.gov.uk</u>

The application form should be completed using the boxes provided under each question, and, where possible, within the word limit indicated.

Please read the <u>Information Sheets</u> before completing the application form. It is also essential to refer to the accompanying <u>Guidance Note</u> for help with each question, and to the relevant paragraphs of UNESCO's *Operational Guidelines for the Implementation of the World Heritage Convention, (OG)* available at: <u>http://whc.unesco.org/en/guidelines</u>

Applicants should provide only the information requested at this stage. Further information may be sought in due course.

(1) Name of Proposed World Heritage Site

The Forth Bridge (Rail)

(2) Geographical Location

Name of country/region

Fife, Scotland, United Kingdom.

Grid reference to centre of site

NT 13480 79540

Please enclose a map preferably A4-size, a plan of the site, and 6 photographs, preferably electronically.

(3) Type of Site

Please indicate category:

| Natural | ural 🖂 | Mixed | | tural Landsca | ne [|
|-------------|--------|---------|------|----------------|------|
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(4) Description

Please provide a brief description of the proposed site, including the physical characteristics. 200 words

The Forth Bridge represents the pinnacle of 19th century iron and steel bridge construction. A truly, world class Victorian engineering marvel, the Forth Bridge is arguably the world's greatest and most famous cantilever bridge.

Of counterbalanced cantilever design, each of the two main spans of the bridge consists of two 680ft (207m) cantilevers with a 350ft (107m) suspended span giving a total length of 1,710ft (521m). When opened in 1890, it was the greatest example of its type.

An iconic symbol of Victorian engineering and a world wonder of its age, the Bridge's record span was only broken in 1917 and then only by a construction of unsightly and infererior design. No steel canitlever bridge has ever matched the perfect balance of structural elegance and quality of design represented by the Forth Bridge.

Still operating today as an important passenger and freight rail bridge, the Bridge's incredible iconic profile is recognised the world over. Indeed, the Bridge is internationally known as not only one of the world's first and greatest steel bridges, but also as the world's most famous cantilever.

(5) History

Please provide a short summary statement of any significant events in the history of the site. 200 words

A regular ferry has crossed the Forth since at least the 12th century.

In 1805 plans for tunnel from Queensferry to Rosyth were seriously considered but the plan was abandoned in 1807.

In 1818 an over-bold suspension bridge proposal was made but never implemented.

By 1840 the railway system had established itself as the main transport system in Scotland, but with no bridge and with no easy way around the Forth Estuary, trains were forced to unload their passengers and freight on to ferries to make the crossing.

In 1850, the world's first "floating railway" was established. Using a route between Burntisland in Fife and Granton in Lothian, whole trains were carried across the forth on specially designed rail ferries. Although a great improvement on the earlier system of crossing, the system had major drawbacks and could of course not operate in rough weather, which meant much of the winter period.

In 1870 a suspension bridge was again proposed. Work began on this design but was halted at an early stage in 1879 after the Tay Bridge disaster raised concerns that the design being employed was probably flawed.

In 1883 work began on the present bridge. Designed by Sir John Fowler and Benjamin Baker, the cantilever design proposed was built by Sir William Arrol. The bridge opened in 1890 and is still in use today.

(6) Why do you think this site should be inscribed as a World Heritage Site? Give reasons. 200 words In recognition of its fundamental importance as a keystone achievement in the world history of bridge building.

In recognition of its fundamental importance as a keystone achievement in the world history of monumental steel and iron construction.

In recognition of its world wide iconic status.

In recognition of its status as a globally important example of 19th century industrial ambition.

As a triumph of historic engineering.

But principally in virtue of its Outstanding Universal Value, values that are justifiably recognised as unique by informed specialists, by experts and in specialized literature on the subject.

Values that are aesthetic, artistic, historic, typological and that represent unsurpassed creativity and genius of design along with a uniqueness and rarity value which balanced against the Bridge's excellent condition and its operational and economically viable future makes this monument a truly globally important example of its type.

(7) Please say why the site has Outstanding Universal Value and specify the main features which underpin its importance. 200 words

It has Outstanding Universal Value as its unique values are recognised by informed specialists, by experts and in specialized literature on the subject.

It has internationally recognised values that are aesthetic, artistic, historic, typological and that represent unsurpassed creativity and genius of design along with a uniqueness and rarity value.

Because it was the first monumental scale steel cantilever bridge ever built, because when built and for 27 years after, it was the longest span cantilever bridge in the world, because the genius of its design is at once both structural and aesthetic and because it perfectly encapsulates the 19th century aspiration of ambition that reinforced the belief in mankind's ultimate ability to overcome any obstacle and to make the impossible possible.

But fundamentally, because the ideas encapsulated in this ionic industrial monument had worldwide scientific and architectural application that significantly advanced the condition of mankind and society across the world.

(8) Outstanding Universal Value

Please state which of the <u>10 UNESCO criteria for Outstanding Universal Value</u> the proposed site meets, and describe briefly why the criteria were chosen. Please see criteria note at the end of the form.

| UNESCO criterion | \boxtimes | Why was this criterion chosen? 100 words |
|---------------------|-------------|---|
| (i) | | As a design solution employing new scientific thought and new materials, the steel-built cantilever design adopted represents a unique level of new human creative genius in overcoming a problem that had never before been overcome by man. |
| (ii) | | |
| (iii) | | |
| (iv) | | Because when built the Bridge was revolutionary in its design, in its thought, in its materials and in its truly incredible scale. It was a fundamental departure from everything that had gone before and it illustrates a unique milestone in the evolution of bridge and monumental steel construction; a landmark event in science and architecture that went on to profoundly influence rest of society and mankind. |
| (v) | | |
| (vi) | | |
| (vii) | | |
| (viii) | | |

| UNESCO criterion | \boxtimes | Why was this criterion chosen? 100 words |
|---------------------|-------------|--|
| (ix) | | |
| (x) | | |

(9) Authenticity (for cultural or mixed sites only)

Authenticity concerns the current state of conservation of a cultural or mixed site; especially whether its importance, its Outstanding Universal Value, is still obvious from its physical condition. Please outline the condition of the site. 200 words

As both a wonder of its age and as an iconic symbol of industrial achievement, the Bridge has been described, drawn, painted and photographed in infinite detail. The original plans, drawings and documentation relating to its commission, design and build are all still in existence and permit the original to be compared to the present in exacting detail.

Thus, based upon the unparalleled degree of documentation and later studies covering the Bridge's 120 year lifespan, it is possible to assert with complete confidence that the structure as it appears today is a near mirror reflection of its original planned form and finish.

(10) Integrity

For cultural or mixed sites, please state how much original fabric is included in the proposed site, and its condition. For guidance on how the test of integrity is met for natural sites under criteria (vii) – (x), please refer to the OG 90-94. Information Sheet 6 also provides help on this point. 200 words

The Bridge exists today in a uniquely unchanged form. It was designed as a railway bridge intended for use by independently powered steam locomotives and it is still used today, some 120 years later by independently powered (diesel) locomotives. It thus remains free of electrification equipment and of almost any other modern addition.

As a fully functioning railway bridge in daily commercial use, the Bridge is maintained to an exacting standard. It has been and continues to be the focus of considerable investment in its maintenance, a feature which has ensured that its present-day form and condition are essentially unchanged from the day it was opened.

There has been negligible fabric replacement or addition and no structural

| alteration. The structure standing today is essentially entirely the structure built |
|--|
| 120 years ago. |
| |
| |
| |
| |
| |
| (11) Are there other examples of this kind of site already on the World Heritage List? |
| Yes 🗌 No 🖂 |
| f yes, please list. 100 words |
| There are historic bridges on the list including the 19 th cetnury Vizcaya steel bridge in Spain, but there are no comparable bridges on the List in terms of form, scale or style. |
| |
| |

(12) What distinguishes this site from other similar sites?

150 words

The originality and genius of its design, its size and scale, the revolutionary use of steel in its construction and the incredible degree of ambition in its conception.

(13) How does the site contribute to meeting UNESCO's priorities for a balanced World Heritage List?

200 words

The site falls into a class of industrial archaeological monuments which is poorly represented on the World Heritage List.

The significance of the Bridge transcends its spatial location and its effect has been felt in terms of the influence it came to assert on the practice of engineering and architecture around the world.

This is not another European historic site; it is the physical manifestation of a defining moment in the shared human history of structural engineering.

(14) What benefits do you think World Heritage Site inscription would bring?

Please indicate the main opportunities and benefits.

| Education | \boxtimes | Tourism | \boxtimes | Regeneration | |
|--------------|-------------|------------|-------------|----------------|-------------|
| Conservation | | Protection | | Other benefits | \boxtimes |

Please describe. 100 words.

| Education and tourism would be further encouraged on the back of full |
|--|
| inscription but it is national pride and international recognition of Scotland's |
| place in the history of engineering that underpina the widespread Scottish |
| national desire to see this monument inscribed. |

(15) Are there any known threats to the proposed World Heritage Site?

| Yes | \square | No | \square |
|-----|-----------|-----|-----------|
| 100 | | 110 | |

Please indicate any proposed developments, or other potential impacts on the site.

| Impact | \boxtimes | Please describe. 100 words for each issue. |
|-------------|-------------|---|
| Development | | A new Forth road bridge will be constructed in 2011, approximately 1 km to the west of the Bridge. However, this new bridge is sufficiently far enough away to have no impact on the setting or the integrity of the Forth Rail Bridge. |

| Environmental | |
|---------------|--|
| Other | |

(16) Legal Protection

Please list any legal and other protections, including cultural and natural designations, which cover the whole or part of the proposed site. 200 words

The Bridge is A-Listed and has been desiganted by Fife Council as an Archaeological Site of Regional Importance.

The Town and Country Planning (Development Management Procedure) (Scotland) Regulations 2008 require a desing statement to accompnay any development proposal within the curtialge or setting of an A-Listed building.

The immediate setting of the Bridge includes numerous listed buildings. One of the bridge piers rests on an island (Inchgarvie) which is a scheduled ancient monument.

The immediate bridgehead area is almost entirely protected through various natural heritage designations including extensive areas zoned as a SSSI and a Ramsar site.

(17) Ownership

Please list the main owners of the site, where possible.

The Bridge is owned by Network Rail.

The Bridge owner does not supprt the application at this time. However, positive discussions are ongoing and there is a weight of expectation that this position might change.

Do the owners support the application? Yes \Box No \boxtimes

A statement of support from the principle owners of the proposed site should be attached to the application, preferably electronically.

(18) Local Authority support for the site

Please list all Local Authorities with an interest in the proposed site.

| Fife Council City of Edinburgh Council |
|---|
| I have attached copies of Committee reports from both Fife Council and Edinburgh City Councils that outline joined-up local authority support for this nomination. |
| Does the proposed site have local Authority support? Yes \square No \square |
| Please attach a statement of support from each one in relation to the application. |
| Please indicate whether the site is included in the local plan/s by specific policies. |
| Yes 🖾 No 🗌 Partly 🗌 |
| Please describe. 200 words. |
| Yes. Numerous local plan policies relate to the built historic environment and are applicable to the Bridge, both Fife Council and City of Edinburgh Council policies. |
| The Fife Structure Plan policies include: |
| Built Environment 4.11 Fife has some of the most important historic built environments in the country, some of which are of international significance. The preservation and enhancement of these historic assets is important in achieving the overall strategy. The most important historic environments, including St Andrews, Dunfermline, Falkland and Culross, will be identified in the Local Plans. The archaeological heritage is a very fragile resource which, once lost, cannot be replaced. It is important therefore to protect this heritage, particularly where it is of national and regional importance, from the adverse effects of development. |
| SS1: Settlement Development Strategy provides a strategic framework for local planning and the assessment of development proposals. It requires the Council to have regard to the protection of the built heritage and the historic environment. |
| Policy env5: Built Environment |

"The character, appearance and setting of designated built or cultural heritage sites will be protected from harmful development. Local Plan policies will provide protection for the built and historic environments and for archaeology."

(19) Stakeholders

Please list the main parties with an interest in the site. 100 words

Fife Council City of Edinburgh Council Network Rail The North Queensferry Heritage Trust The Forth Bridges Visitor Centre Trust

(20) How will the Site be managed?

Please outline the management arrangements for the proposed World Heritage Site, including where the responsibilities lie. 200 words

The statutory controls afforded through the Bridge's A-Listed status will be the main mechanism guiding any future change but it is planned that a management group comprising Fife and Edinburgh City Councils, Network Rail, key stakeholders, recognised heritage and engineering experts along with the advice/membership of Historic Scotland would be formed to manage the site as a World Heritage Site.

(21) Funding: the nomination

Please indicate how the preparation of the nomination would be funded. 100 words

The full nomination proposal, including management plan etc, would be resourced by Fife Council, working in partnership and with the support of the City of Edinburgh Council and Historic Scotland.

(22) Funding: management

Please outline how the future management would be funded. 100 words

Network Rail would continue to maintain the Bridge as part of the national railway infrastructure.

Fife Council, working in partnership and with the City of Edinburgh Council would resource certain elements of the costs explicitly connected with the site's World Heritage Site status.

Partnership working with other key stakeholders would yield in-kind support, eg, The North Queensferry Heritage Trust is currently preparing a Heritage Lottery Fund bid for the restoration of the North Queenesferry old railway station. It is hoped that in partnerhsip with the The Forth Bridges Visitor Centre Trust that the old station would become an visitor/interpretation centre.

| Name | Douglas Speirs |
|-----------|---|
| Status | Archaeologist |
| Address | Fife Council Development Services Town House 2 Wemyssfield Kirkcaldy KY1 1XW |
| Telephone | VOIP: (08451 55 55 55) 473748 |
| Email | |

Name and Contact Details of Applicant

Completed applications should be forwarded, preferably in electronic format, to the World Heritage Team, Department for Culture, Media and Sport at the following email address: <u>UKTL.Application@culture.gsi.gov.uk</u>

Any material that cannot be sent electronically should be sent to the following address:

World Heritage Team, Department for Culture, Media and Sport 2-4 Cockspur Street London SW1 5DH

The closing date for applications is 11th June 2010

UNESCO's criteria for the assessment of Outstanding Universal Value (para 77 of the Operational Guidelines)

(i) represent a masterpiece of human creative genius;

(ii) exhibit an important interchange of human values, over a span of time or within a cultural area of the world, on developments in architecture or technology, monumental arts, town-planning or landscape design;

(iii) bear a unique or at least exceptional testimony to a cultural tradition or to a civilization which is living or which has disappeared;

(iv) be an outstanding example of a type of building, architectural or technological ensemble or landscape which illustrates (a) significant stage(s) in human history;

(v) be an outstanding example of a traditional human settlement, land-use, or sea-use which is representative of a culture (or cultures), or human interaction with the environment especially when it has become vulnerable under the impact of irreversible change;

(vi) be directly or tangibly associated with events or living traditions, with ideas, or with beliefs, with artistic and literary works of outstanding universal significance.

(vii) contain superlative natural phenomena or areas of exceptional natural beauty and aesthetic importance;

(viii) be outstanding examples representing major stages of earth's history, including the record of life, significant on-going geological processes in the development of landforms, or significant geomorphic or physiographic features;

(ix) be outstanding examples representing significant ongoing ecological and biological processes in the evolution and development of terrestrial, fresh water, coastal and marine ecosystems and communities of plants and animals;

(x) contain the most important and significant natural habitats for in-situ conservation of biological diversity, including those containing threatened species of outstanding universal value from the point of view of science or conservation.