The Forth Bridge

1. World Heritage Property Data

1.1 - Name of World Heritage property
The Forth Bridge

1.2 - World Heritage property details

1.3 - Geographic information table

1.4 - Map(s)

Title	Date	Link to source
The Forth Bridge - map of inscribed property	2015	

Comment
The World Heritage Centre identified in December 2022 that they did not hold an up-to-date clear map which showed the delimitation of the property. We are in the process of producing the requested map in line with the World Heritage Centre's technical requirements, with support from Historic England. It will be submitted for the approval of the World Heritage Committee in advance of 46COM along with others from the UK State Party.

1.5 - Web and Social Media data of the property (if applicable)

Comment
https://www.theforthbridges.org/ or https://www.theforthbridges.org/about-the-forth-bridges/forth-bridge/ Twitter @TheForthBridges
https://www.facebook.com/theforthbridges

2. Other Conventions/Programmes under which the World Heritage property is protected (if applicable)

2.1 - Records indicate that your World Heritage property (in whole or in part) is designated and/or protected under the Conventions/programmes shown in the prefilled table below. Please check and amend as necessary.

		The World Heritage property (in whole or in part) is designated and/or protected under this convention/programme	The World Heritage property (in whole or in part) is not designated and/or protected under this convention/programme
2.1.1	**International Register of Cultural Property under Special Protection** (1954 Hague Convention for the Protection of Cultural Property in the Event of Armed Conflict)		✖
2.1.2	**List of Cultural Property under Enhanced Protection** (Second Protocol to the 1954 Hague Convention for the Protection of Cultural Property in the Event of Armed Conflict)		✖
2.1.3	**The List of Wetlands of International Importance (The Ramsar List)** (Convention on Wetlands of International Importance (Ramsar Convention))		✖
2.1.4	**World Network of Biosphere Reserves** Man and the Biosphere (MAB) Programme		✖
2.1.5	**Global Geoparks Network** UNESCO Global Geoparks		✖

2.2 - Please provide comments on 2.1 if necessary

2.3 - Do your national authorities intend to request the granting of Enhanced Protection (if relevant) under the Second Protocol to the 1954 Hague Convention for the Protection of Cultural Property in the Event of Armed Conflict for the World Heritage property in the next three years?
No

2.4 - Do your national authorities intend to designate whole or part of the World Heritage property for inclusion in the List of Wetlands of International Importance (The Ramsar List), if relevant, in the next three years?
No

2.5 - Do your national authorities intend to designate whole or part of the World Heritage property as a Man and Biosphere Reserve (if relevant) in the next three years?
No

2.6 - Do your national authorities intend to apply for whole or part of World Heritage property to be designated as a UNESCO Global Geopark (if relevant) in the next three years?

No

2.7 - Please indicate the level of cooperation at property level between designations under different Conventions/Programmes

2.7.1	**1954 Hague Convention for the Protection of Cultural Property in the Event of Armed Conflict**	
2.7.1	There is **no contact** with the Focal Point(s) of this designation/programme.	✖
2.7.2	The World Heritage Site Manager **occasionally** communicates with the Focal Point(s) of this designation/programme.	
2.7.3	The World Heritage Site Manager **regularly** communicates with the Focal Point(s) of this designation/programme.	
2.7.4	The World Heritage Site Manager **also manages** this designation/programme.	
2.7.2	**Second Protocol to the 1954 Hague Convention for the Protection of Cultural Property in the Event of Armed Conflict**	
2.7.1	There is **no contact** with the Focal Point(s) of this designation/programme.	✖
2.7.2	The World Heritage Site Manager **occasionally** communicates with the Focal Point(s) of this designation/programme.	
2.7.3	The World Heritage Site Manager **regularly** communicates with the Focal Point(s) of this designation/programme.	
2.7.4	The World Heritage Site Manager **also manages** this designation/programme.	
2.7.3	**Convention on Wetlands of International Importance (Ramsar Convention)**	
2.7.1	There is **no contact** with the Focal Point(s) of this designation/programme.	✖
2.7.2	The World Heritage Site Manager **occasionally** communicates with the Focal Point(s) of this designation/programme.	
2.7.3	The World Heritage Site Manager **regularly** communicates with the Focal Point(s) of this designation/programme.	
2.7.4	The World Heritage Site Manager **also manages** this designation/programme.	
2.7.4	**Man and the Biosphere (MAB) Programme**	
2.7.1	There is **no contact** with the Focal Point(s) of this designation/programme.	✖
2.7.2	The World Heritage Site Manager **occasionally** communicates with the Focal Point(s) of this designation/programme.	
2.7.3	The World Heritage Site Manager **regularly** communicates with the Focal Point(s) of this designation/programme.	
2.7.4	The World Heritage Site Manager **also manages** this designation/programme.	
2.7.5	**UNESCO Global Geoparks**	
2.7.1	There is **no contact** with the Focal Point(s) of this designation/programme.	✖
2.7.2	The World Heritage Site Manager **occasionally** communicates with the Focal Point(s) of this designation/programme.	
2.7.3	The World Heritage Site Manager **regularly** communicates with the Focal Point(s) of this designation/programme.	
2.7.4	The World Heritage Site Manager **also manages** this designation/programme.	

2.8 - Please add any further comments on cooperation with the other designation(s)/programme(s)

2.9 - Are you aware of any elements associated with the World Heritage property that have been inscribed on the Representative List of the Intangible Cultural Heritage?

No

2.10 - Please list any elements associated with the World Heritage property inscribed under the Convention for the Safeguarding of the Intangible Cultural Heritage of which you are aware

2.11 - Are you aware of any documentary heritage listed under the Memory of the World Programme associated with the World Heritage property?

No

2.12 - Please list any documentary heritage associated with the World Heritage property listed under the Memory of the World Programme of which you aware.

3. Statement of Outstanding Universal Value

3.1 - Statement of Outstanding Universal Value for the property as adopted by the World Heritage Committee

Statement of Outstanding Universal Value
Brief synthesis

The Forth Bridge, which spans the estuary (Firth) of the River Forth in eastern Scotland to link Fife to Edinburgh by railway, was the world's earliest great multispan cantilever bridge, and at 2,529 m remains one of the longest. It opened in 1890 and continues to operate as an important passenger and freight rail bridge. This enormous structure, with its distinctive industrial aesthetic and striking red colour, was conceived and built using advanced civil engineering design principles and construction methods. Innovative in design, materials, and scale, the Forth Bridge is an extraordinary and impressive milestone in bridge design and construction during the period when railways came to dominate long-distance land travel.

This large-scale engineering work's appearance is the result of a forthright, unadorned display of its structural elements. It is comprised of about 54,000 tons of mild steel plate rolled and riveted into 4m diameter tubes used in compression, and lighter steel spans used in tension. The use of mild steel, a relatively new material in the 1880s, on such a large-scale project was innovative, and helped to bolster its reputation. The superstructure of the bridge takes the form of three double-cantilever towers rising 110 m above their granite pier foundations, with cantilever arms to each side. The cantilever arms each project 207 m from the towers and are linked together by two suspended spans, each 107 m long. The resulting 521-m spans formed by the three towers were individually the longest in the world for 28 years, and remain collectively the longest in a multi-span cantilever bridge. The Forth Bridge is the culmination of its typology, scarcely repeated but widely admired as an engineering wonder of the world.

Criterion (i): The Forth Bridge is a masterpiece of creative genius because of its distinctive industrial aesthetic, which is the result of a forthright, unadorned display of its massive, functional structural elements.

Criterion (iv): The Forth Bridge is an extraordinary and impressive milestone in the evolution of bridge design and construction during the period when railways came to dominate long-distance land travel, innovative in its concept, its use of mild steel, and its enormous scale.

Integrity

The property contains all the elements necessary to express the Outstanding Universal Value of The Forth Bridge, including granite piers and steel superstructure. The 7.5-ha property is of adequate size to ensure the complete representation of the features and processes that convey the property's significance, and it does not suffer from adverse effects of development or neglect.

Authenticity

The Forth Bridge is fully authentic in form and design, which are virtually unaltered; materials and substance, which have undergone only minimal changes; and use and function, which have continued as originally intended. The links between the Outstanding Universal Value of the bridge and its attributes are therefore truthfully expressed, and the attributes fully convey the value of the property.

Protection and management requirements

The Forth Bridge is listed at Category 'A' as a building of special architectural or historic interest, giving the property the highest level of statutory protection. Its immediate surroundings are also protected by means of a suite of cultural and natural heritage designations. Owned by Network Rail Limited, the property will be managed in accordance with a Property Management Plan by the bodies that have a statutory planning function. The Forth Bridges Forum partnership has been established to ensure that local stakeholders' interests remain at the core of the management of the Forth bridges.

Specific long-term expectations related to key issues include maintenance of strong community support, broadening understanding in the context of world bridges, attention to developments within key views, risk management, and inspiring others.

3.2 - Please list the key attributes of Outstanding Universal Value of your property and give an assessment of their condition. As a guideline, it is suggested to focus on approximately five key attributes (no more than 15 overall).

	Brief identification of attribute	Preserved	Compromised	Seriously compromised	Lost
3.2.1	Form -strength, grace	✕			
3.2.2	Function -connecting people	✕			
3.2.3	Fabric -materiality	✕			
3.2.4	Symbolism - gateway. links	✕			
3.2.5	Coating -red; a never ending task	✕			
3.2.6	Kinetic experience to travellers on the move at sea, in the air and over bridges	✕			
3.2.7	Scale, contrasted with piers, houses, bothies	✕			
3.2.8	Engineering achievement	✕			
3.2.9					
3.2.10					
3.2.11					
3.2.12					
3.2.13					
3.2.14					
3.2.15					

3.3 - Comments, conclusions and/or recommendations related to Statement of Outstanding Universal Value

The Nomination lists more attributes at 3.1.c and d, from which these are boiled down, derived from values, and underscoring integrity and authenticity. Overall conservation of OUV is good. Specific expectations at inscription in 2015: 1. community support -maintained 2. broader context of world bridges -underway 3. attention to developments within key viewsheds - 9 noted in Local Development Plans for monitoring 4. risk management -Network Rail/ others 5. inspiring others -never stops

4. Factors Affecting the Property

4.1. Buildings and Development

4.1.1 - Housing

Relevant	✖ Not relevant

4.1.2 - Commercial development

Relevant	✖ Not relevant

4.1.3 - Industrial areas

Relevant	✖ Not relevant

4.1.4 - Major visitor accommodation and associated infrastructure

Relevant	✖ Not relevant

4.1.5 - Interpretative and visitation facilities

✖ Relevant		Not relevant				

	Impact		Origin		Trend of impact		
Impact	**Current**	**Potential**	**Inside**	**Outside**	**Decreasing**	**Stable**	**Increasing**
⊕ Positive ✖	✖			✖		→	
⊖ Negative							

4.1.6 - Please comment as necessary on how the factors selected as relevant in 4.1 are affecting the property either negatively or positively

Signage is already present in the vicinity of the property. This has recently been upgraded, is better designed and more informative about the WHS and a lot of other local history. Some older and unauthorised signage has been removed. Moorings and marker buoys are found at the ferry slips near the property, and a lifeboat station (RNLI) that reflect the location's role as a centuries-old crossing point. The major moorings are further away, at Port Edgar and Dalgety Bay 2-4 km from the WHS.

4.2. Transportation Infrastructure

4.2.1 - Ground transport infrastructure

✖ Relevant		Not relevant				

	Impact		Origin		Trend of impact		
Impact	**Current**	**Potential**	**Inside**	**Outside**	**Decreasing**	**Stable**	**Increasing**
⊕ Positive ✖	✖		✖	✖		→	
⊖ Negative							

4.2.2 - Underground transport infrastructure

Relevant	✖ Not relevant

4.2.3 - Air transport infrastructure

Relevant	✖ Not relevant

4.2.4 - Marine transport infrastructure

✖ Relevant		Not relevant				

	Impact		Origin		Trend of impact		
Impact	**Current**	**Potential**	**Inside**	**Outside**	**Decreasing**	**Stable**	**Increasing**
⊕ Positive ✖	✖			✖		→	
⊖ Negative							

4.2.5 - Effects arising from use of transportation infrastructure

✖ Relevant		Not relevant				

	Impact		Origin		Trend of impact		
Impact	**Current**	**Potential**	**Inside**	**Outside**	**Decreasing**	**Stable**	**Increasing**
⊕ Positive ✖	✖		✖	✖			↗

● Negative						

4.2.6 - Please comment as necessary on how the factors selected as relevant in 4.2 are affecting the property either negatively or positively

4.2.5 The property is a rail bridge, functioning as part of the national public transport network. Two road bridges, opened in 1964 and 2017, have taken heavy road traffic away from the nearest settlements. The 1964 suspension bridge is now better able to serve as a point from which to view the WHS on foot, by cycle or by light local buses. Flight paths are planned to change to give better views of the bridges as gateways, and noise to residents. Freeport freight shipping upstream may grow.

4.3. Services Infrastructures

4.3.1 - Water infrastructure

Relevant	✖ Not relevant

4.3.2 - Renewable energy facilities

Relevant	✖ Not relevant

4.3.3 - Non-renewable energy facilities

Relevant	✖ Not relevant

4.3.4 - Localised utilities

Relevant	✖ Not relevant

4.3.5 - Major linear utilities

✖ Relevant	Not relevant

	Impact		Origin		Trend of impact		
Impact	🚩 **Current**	🚩 **Potential**	⊙ **Inside**	⟲ **Outside**	↘ **Decreasing**	⇒ **Stable**	↗ **Increasing**
⊕ Positive							
● Negative ✖	✖			✖		→	

4.3.6 - Please comment as necessary on how the factors selected as relevant in 4.3 are affecting the property either negatively or positively

4.3.5 an oil pipe line on the seabed runs underneath the Forth Bridge between Hound Point (where oil tankers moor so as to not pass under the bridge) and Grangemouth refineries. It is in a very deep channel so is not considered a threat, having been there for 30-40 years.

4.4. Pollution

4.4.1 - Pollution of marine waters

✖ Relevant	Not relevant

	Impact		Origin		Trend of impact		
Impact	🚩 **Current**	🚩 **Potential**	⊙ **Inside**	⟲ **Outside**	↘ **Decreasing**	⇒ **Stable**	↗ **Increasing**
⊕ Positive							
● Negative ✖	✖		✖		↘		

4.4.2 - Ground water pollution

Relevant	✖ Not relevant

4.4.3 - Surface water pollution

Relevant	✖ Not relevant

4.4.4 - Air pollution

✖ Relevant	Not relevant

	Impact		Origin		Trend of impact		
Impact	🚩 **Current**	🚩 **Potential**	⊙ **Inside**	⟲ **Outside**	↘ **Decreasing**	⇒ **Stable**	↗ **Increasing**
⊕ Positive							
● Negative ✖	✖		✖		↘		

4.4.5 - Solid waste

Relevant	Not relevant

4.4.6 - Input of excess energy

✖ Relevant				Not relevant			

	Impact		Origin		Trend of impact		
Impact	🏴 **Current**	🏴 **Potential**	⊙ **Inside**	🏳 **Outside**	↘ **Decreasing**	→ **Stable**	↗ **Increasing**
⊕ Positive ✖		✖	✖				↗
⊖ Negative ✖					↘		

4.4.7 - Please comment as necessary on how the factors selected as relevant in 4.4 are affecting the property either negatively or positively

Marine pollution was avoided by full encapsulation during the refurb, 2000-12. Air pollution will fall with electrification replacing diesel trains, and very few steam trains. Floodlighting installed in 1989 was distracting, failing and hard to access, so was replaced within 10 years by a better, less intrusive set of cantilevered platforms. Impact is steadily reducing so it is planned to replace them with low energy LED, at which point the energy will not be excess.

4.5. Biological resource use/modification

4.5.1 - Fishing/collecting aquatic resources

Relevant	✖ Not relevant

4.5.2 - Aquaculture

Relevant	✖ Not relevant

4.5.3 - Land conversion

Relevant	✖ Not relevant

4.5.4 - Livestock farming/Grazing of domesticated animals

Relevant	✖ Not relevant

4.5.5 - Crop production

Relevant	✖ Not relevant

4.5.6 - Commercial wild plant collection

Relevant	✖ Not relevant

4.5.7 - Subsistence wild plant collection

Relevant	✖ Not relevant

4.5.8 - Commercial hunting

Relevant	✖ Not relevant

4.5.9 - Subsistence hunting

Relevant	✖ Not relevant

4.5.10 - Forestry/Wood production

Relevant	✖ Not relevant

4.5.11 - Please comment as necessary on how the factors selected as relevant in 4.5 are affecting the property either negatively or positively

4.6. Physical resource extraction

4.6.1 - Mining

Relevant	✖ Not relevant

4.6.2 - Quarrying

Relevant	✖ Not relevant

4.6.3 - Oil and gas

Relevant	✖ Not relevant

4.6.4 - Water (extraction)

Relevant	✖ Not relevant

4.6.5 - Please comment as necessary on how the factors selected as relevant in 4.6 are affecting the property either negatively or positively

4.7. Local conditions affecting physical fabric

4.7.1 - Wind

Relevant	✖ Not relevant

4.7.2 - Relative humidity

Relevant	✖ Not relevant

4.7.3 - Temperature

Relevant	✖ Not relevant

4.7.4 - Radiation/Light

✖ Relevant		Not relevant	

	Impact		Origin		Trend of impact		
Impact	🚩 **Current**	🚩 **Potential**	◉ **Inside**	⬀ **Outside**	↘ **Decreasing**	→ **Stable**	↗ **Increasing**
⊕ Positive							
⊖ Negative ✖		✖		✖			↗

4.7.5 - Dust

Relevant	✖ Not relevant

4.7.6 - Water (rain/water table)

Relevant	✖ Not relevant

4.7.7 - Pests

Relevant	✖ Not relevant

4.7.8 - Micro-organisms

Relevant	✖ Not relevant

4.7.9 - Please comment as necessary on how the factors selected as relevant in 4.7 are affecting the property either negatively or positively

4.7.4 sunlight will make the paint colour fade, as it did in the past in inaccessible and high parts of the bridge. However it takes a long time for that to actually effect paint performance, particularly with the new glass fibre component, so the effect is long term and aesthetic.

4.8. Social/Cultural uses of heritage

4.8.1 - Ritual/Spiritual/Religious and associative uses

Relevant	✖ Not relevant

4.8.2 - Society's valuing of heritage

Relevant	✖ Not relevant

4.8.3 - Indigenous hunting, gathering and collecting

Relevant	✖ Not relevant

4.8.4 - Changes in traditional ways of life and knowledge system

Relevant	✖ Not relevant

4.8.5 - Identity, social cohesion, changes in local population and community

✖ Relevant		Not relevant	

	Impact	Origin	Trend of impact

Impact	Current	Potential	Inside	Outside	Decreasing	Stable	Increasing
🟢 Positive ✖	✖			✖			🖊
⛔ Negative							

4.8.6 - Impacts of tourism/Visitation/Recreation

✖ Relevant		Not relevant

	Impact		Origin		Trend of impact		
Impact	🚩 **Current**	🚩 **Potential**	⦿ **Inside**	🌲 **Outside**	↘ **Decreasing**	⇒ **Stable**	🖊 **Increasing**
🟢 Positive ✖	✖			✖			🖊
⛔ Negative							

4.8.7 - Please comment as necessary on how the factors selected as relevant in 4.8 are affecting the property either negatively or positively

4.8.5. The population of South Queensferry grew 10%, 2011-2021. This is a positive: the area as desirable, but concern is voiced by the local community. Incomers integrate and enthusiastically adopt local traditions- like the Burry Man. Stresses on the large school roll at Kirkliston are reported, but not attributed to the WHS. Their impact on OUV is nil. North Queensferry numbers stayed static. 4.8.6 Interpretation signs improved in 2022. All vendors & most visitors stay outside the property.

4.9. Other human activities

4.9.1 - Illegal activities

Relevant	✖ Not relevant

4.9.2 - Deliberate destruction of heritage

Relevant	✖ Not relevant

4.9.3 - Military training

Relevant	✖ Not relevant

4.9.4 - War

Relevant	✖ Not relevant

4.9.5 - Terrorism

Relevant	✖ Not relevant

4.9.6 - Civil unrest

Relevant	✖ Not relevant

4.9.7 - Please comment as necessary on how the factors selected as relevant in 4.9 are affecting the property either negatively or positively

4.9.2 There is no graffiti on the bridge, but the potential is acknowledged when compared to other bridges. Nor has there yet been impact by war, terrorism or civil unrest.

4.10. Climate change and severe weather events

4.10.1 - Storms

✖ Relevant		Not relevant

	Impact		Origin		Trend of impact		
Impact	🚩 **Current**	🚩 **Potential**	⦿ **Inside**	🌲 **Outside**	↘ **Decreasing**	⇒ **Stable**	🖊 **Increasing**
🟢 Positive							
⛔ Negative ✖	✖			✖			🖊

4.10.2 - Flooding

Relevant	✖ Not relevant

4.10.3 - Drought

Relevant	✖ Not relevant

4.10.4 - Desertification

Relevant	✖ Not relevant

4.10.5 - Changes to oceanic waters

Relevant	✖ Not relevant

4.10.6 - Temperature change

Relevant	✖ Not relevant

4.10.7 - Other climate change impacts

Relevant	✖ Not relevant

4.10.8 - Please comment as necessary on how the factors selected as relevant in 4.10 are affecting the property either negatively or positively

A climate vulnerability index exercise, a collaborative process by and with communities and experts, has been carried out at some of the world heritage sites in Scotland but not yet this one. It is so robust that climate change is unlikely to affect its performance. Increased storminess (4.10.1) is predicted as a general trend, and some sea level rise but the bridge is able to absorb this trend.

4.11. Sudden ecological or geological events

4.11.1 - Volcanic eruption

Relevant	✖ Not relevant

4.11.2 - Earthquake

Relevant	✖ Not relevant

4.11.3 - Tsunami/Tidal wave

Relevant	✖ Not relevant

4.11.4 - Avalanche/Landslide

Relevant	✖ Not relevant

4.11.5 - Erosion and siltation/Deposition

✖ Relevant					Not relevant		

	Impact		Origin		Trend of impact		
Impact	🚩 **Current**	🚩 **Potential**	⦿ **Inside**	🏳 **Outside**	↘ **Decreasing**	➡ **Stable**	↗ **Increasing**
⊕ Positive							
⊖ Negative ✖		✖		✖		➡	

4.11.6 - Fire (wildfire)

Relevant	✖ Not relevant

4.11.7 - Please comment as necessary on how the factors selected as relevant in 4.11 are affecting the property either negatively or positively

Network Rail monitors and reduces the potential for trees to block the line, (and hence also woodland fires) but also keeps planting young trees to secure the earthen embankments against erosion, particularly since a fatal accident caused by erosion of ballast between Stonehaven and Montrose. The embanked track approaches to each end of the bridge are not within the property but are essential to its operation.

4.12. Invasive/alien species or hyper-abundant species

4.12.1 - Translocated species

Relevant	✖ Not relevant

4.12.2 - Invasive/Alien terrestrial species

Relevant	✖ Not relevant

4.12.3 - Invasive/Alien freshwater species

Relevant	✖ Not relevant

4.12.4 - Invasive/Alien marine species

Relevant	✖ Not relevant

4.12.5 - Hyper-abundant species

Relevant	✖ Not relevant

4.12.6 - Modified genetic material

Relevant	✖ Not relevant

4.12.7 - Please comment as necessary on how the factors selected as relevant in 4.12 are affecting the property either negatively or positively

4.13. Management and institutional factors

4.13.1 - Management system/Management plan

✖ Relevant	Not relevant

Impact	Impact		Origin		Trend of impact		
	🚩 Current	🚩 Potential	◉ Inside	🗺 Outside	↘ Decreasing	➡ Stable	↗ Increasing
⊕ Positive ✖		✖	✖				↗
⊖ Negative							

4.13.2 - Legal framework

✖ Relevant	Not relevant

Impact	Impact		Origin		Trend of impact		
	🚩 Current	🚩 Potential	◉ Inside	🗺 Outside	↘ Decreasing	➡ Stable	↗ Increasing
⊕ Positive ✖	✖			✖			↗
⊖ Negative							

4.13.3 - Governance

✖ Relevant	Not relevant

Impact	Impact		Origin		Trend of impact		
	🚩 Current	🚩 Potential	◉ Inside	🗺 Outside	↘ Decreasing	➡ Stable	↗ Increasing
⊕ Positive ✖	✖		✖			➡	
⊖ Negative							

4.13.4 - Management activities

✖ Relevant	Not relevant

Impact	Impact		Origin		Trend of impact		
	🚩 Current	🚩 Potential	◉ Inside	🗺 Outside	↘ Decreasing	➡ Stable	↗ Increasing
⊕ Positive ✖	✖		✖	✖		➡	
⊖ Negative							

4.13.5 - Financial resources

✖ Relevant	Not relevant

Impact	Impact		Origin		Trend of impact		
	🚩 Current	🚩 Potential	◉ Inside	🗺 Outside	↘ Decreasing	➡ Stable	↗ Increasing
⊕ Positive ✖	✖	✖	✖	✖		➡	
⊖ Negative							

4.13.6 - Human resources

✖ Relevant	Not relevant

Impact	Impact		Origin		Trend of impact		
Impact	🚩 Current	🚩 Potential	◉ Inside	🗺 Outside	↘ Decreasing	➡ Stable	↗ Increasing

	Impact		Origin		Trend of impact		
	Current	**Potential**	**Inside**	**Outside**	**Decreasing**	**Stable**	**Increasing**
⊕ Positive ✖	✖	✖	✖	✖			✎
⊖ Negative							

4.13.7 - Low impact research/monitoring activities

✖ Relevant	Not relevant

	Impact		Origin		Trend of impact		
Impact	🏳 **Current**	🏳 **Potential**	◉ **Inside**	🏴 **Outside**	↘ **Decreasing**	→ **Stable**	✎ **Increasing**
⊕ Positive ✖	✖	✖	✖	✖			✎
⊖ Negative							

4.13.8 - High impact research/monitoring activities

Relevant	✖ Not relevant

4.13.9 - Please comment as necessary on how the factors selected as relevant in 4.13 are affecting the property either negatively or positively

The trend is positive on all counts, with the likely appointment in 2023 of a world heritage coordinator funded by local and national resources. The broad governance of Network Rail will change, with both the infrastructure and the operator coming more under the purview of Transport Scotland, part of the Scottish Government, at the same time as Great British Railways comes into being for the rest of the UK. The impact will be felt in the next periodic report.

4.14. Other factor(s)

4.14.1 - Other factor(s)

4.15. Factors Summary Table

4.15.1 - Factors Summary Table

Name	Impact		Origin		Trend
4.1 Buildings and Development					
4.1.5 Interpretative and visitation facilities	⊕	🏳		🏴	→
4.2 Transportation Infrastructure					
4.2.1 Ground transport infrastructure	⊕	🏳	◉	🏴	→
4.2.4 Marine transport infrastructure	⊕	🏳		🏴	→
4.2.5 Effects arising from use of transportation infrastructure	⊕	🏳	◉	🏴	✎
4.3 Services Infrastructures					
4.3.5 Major linear utilities					
	⊖	🏳		🏴	→
4.4 Pollution					
4.4.1 Pollution of marine waters					
	⊖	🏳	◉		↘
4.4.4 Air pollution					
	⊖	🏳	◉		↘
4.4.6 Input of excess energy	⊕		🏳	◉	✎
	⊖				↘
4.7 Local conditions affecting physical fabric					
4.7.4 Radiation/Light					
	⊖		🏳	🏴	✎

4.8 Social/Cultural uses of heritage						
4.8.5 Identity, social cohesion, changes in local population and community	Positive	Current			Outside	↗
4.8.6 Impacts of tourism/Visitation/Recreation	Positive	Current			Outside	↗
4.10 Climate change and severe weather events						
4.10.1 Storms	Negative	Current			Outside	↗
4.11 Sudden ecological or geological events						
4.11.5 Erosion and siltation/Deposition	Negative		Potential		Outside	→
4.13 Management and institutional factors						
4.13.1 Management system/Management plan	Positive		Potential	Inside		↗
4.13.2 Legal framework	Positive	Current			Outside	↗
4.13.3 Governance	Positive	Current		Inside		→
4.13.4 Management activities	Positive	Current		Inside	Outside	→
4.13.5 Financial resources	Positive	Current	Potential	Inside	Outside	→
4.13.6 Human resources	Positive	Current	Potential	Inside	Outside	↗
4.13.7 Low impact research/monitoring activities	Positive	Current	Potential	Inside	Outside	↗

Legend	🚩 Current	🚩 Potential	⊖ Negative	⊕ Positive	⊙ Inside	Outside

4.16. Assessment of current and potential positive and negative factors

4.16.1 - Assessment of current and potential negative and positive factors

4.1 Buildings and Development

Name	Impact			Origin	Trend
4.1.5 Interpretative and visitation facilities	Positive	Current		Outside	→

Spatial scale - Area affected by the factor	
	Restricted
✖	Localised
	Extensive
	Widespread
Temporal scale - Occurence of the impact	
✖	One off or rare
	Intermittent or sporadic

	Frequent
	On-going

Impact - Impact on the attributes

	Insignificant
✖	Minor
	Significant
	Major

Management response - Capacity of management to respond

	High capacity
✖	Medium capacity
	Low capacity
	No capacity and / or resources

Trend - Developement over the last 6 years

	Decreasing
	Static
✖	Increasing

4.2 Transportation Infrastructure

Name	Impact			Origin		Trend
4.2.1 Ground transport infrastructure	🟢	🚩		◎	☞	➡

Spatial scale - Area affected by the factor

	Restricted
	Localised
✖	Extensive
	Widespread

Temporal scale - Occurence of the impact

	One off or rare
	Intermittent or sporadic
	Frequent
✖	On-going

Impact - Impact on the attributes

	Insignificant
	Minor
✖	Significant
	Major

Management response - Capacity of management to respond

✖	High capacity
	Medium capacity
	Low capacity
	No capacity and / or resources

Trend - Developement over the last 6 years

	Decreasing
✖	Static
	Increasing

Name		Impact			Origin		Trend
4.2.4 Marine transport infrastructure		⊕	🚩			⟲	→

Spatial scale - Area affected by the factor

	Restricted
✖	Localised
	Extensive
	Widespread

Temporal scale - Occurence of the impact

	One off or rare
	Intermittent or sporadic
✖	Frequent
	On-going

Impact - Impact on the attributes

	Insignificant
✖	Minor
	Significant
	Major

Management response - Capacity of management to respond

	High capacity
✖	Medium capacity
	Low capacity
	No capacity and / or resources

Trend - Developement over the last 6 years

	Decreasing
	Static
✖	Increasing

Name		Impact			Origin		Trend
4.2.5 Effects arising from use of transportation infrastructure		⊕	🚩		⊙	⟲	↗

Spatial scale - Area affected by the factor

	Restricted
	Localised
	Extensive
✖	Widespread

Temporal scale - Occurence of the impact

	One off or rare

	Intermittent or sporadic
	Frequent
✖	On-going

Impact - Impact on the attributes	
	Insignificant
	Minor
	Significant
✖	Major

Management response - Capacity of management to respond	
✖	High capacity
	Medium capacity
	Low capacity
	No capacity and / or resources

Trend - Developement over the last 6 years	
	Decreasing
	Static
✖	Increasing

4.3 Services Infrastructures

Name	Impact			Origin		Trend
4.3.5 Major linear utilities						
	⊖	◀			⟳	→

Spatial scale - Area affected by the factor	
✖	Restricted
	Localised
	Extensive
	Widespread

Temporal scale - Occurence of the impact	
✖	One off or rare
	Intermittent or sporadic
	Frequent
	On-going

Impact - Impact on the attributes	
✖	Insignificant
	Minor
	Significant
	Major

Management response - Capacity of management to respond	
	High capacity
✖	Medium capacity
	Low capacity
	No capacity and / or resources

Trend - Developement over the last 6 years	
	Decreasing
✖	Static
	Increasing

4.4 Pollution

Name	Impact			Origin		Trend
4.4.1 Pollution of marine waters						
	⊖	⚑		◉		↘

Spatial scale - Area affected by the factor	
	Restricted
	Localised
✖	Extensive
	Widespread

Temporal scale - Occurence of the impact	
	One off or rare
✖	Intermittent or sporadic
	Frequent
	On-going

Impact - Impact on the attributes	
	Insignificant
✖	Minor
	Significant
	Major

Management response - Capacity of management to respond	
✖	High capacity
	Medium capacity
	Low capacity
	No capacity and / or resources

Trend - Developement over the last 6 years	
✖	Decreasing
	Static
	Increasing

Name	Impact			Origin		Trend
4.4.4 Air pollution						
	⊖	⚑		◉		↘

Spatial scale - Area affected by the factor	
	Restricted
	Localised
✖	Extensive
	Widespread

Temporal scale - Occurence of the impact	
	One off or rare
	Intermittent or sporadic
	Frequent
✖	On-going

Impact - Impact on the attributes	
	Insignificant
✖	Minor
	Significant
	Major

Management response - Capacity of management to respond	
✖	High capacity
	Medium capacity
	Low capacity
	No capacity and / or resources

Trend - Developement over the last 6 years	
	Decreasing
✖	Static
	Increasing

Name	Impact			Origin		Trend
4.4.6 Input of excess energy	🟢		🚩	◉		↗
	🔴					↘

Spatial scale - Area affected by the factor	
	Restricted
✖	Localised
	Extensive
	Widespread

Temporal scale - Occurence of the impact	
	One off or rare
	Intermittent or sporadic
	Frequent
✖	On-going

Impact - Impact on the attributes	
	Insignificant
✖	Minor
	Significant
	Major

Management response - Capacity of management to respond	
✖	High capacity
	Medium capacity
	Low capacity

| | No capacity and / or resources | | | | |

Trend - Developement over the last 6 years					
✖	Decreasing				
	Static				
	Increasing				

4.7 Local conditions affecting physical fabric

Name	Impact			Origin	Trend
4.7.4 Radiation/Light					
	🔴		🚩	🌀	🔧

Spatial scale - Area affected by the factor	
✖	Restricted
	Localised
	Extensive
	Widespread

Temporal scale - Occurence of the impact	
	One off or rare
	Intermittent or sporadic
	Frequent
✖	On-going

Impact - Impact on the attributes	
✖	Insignificant
	Minor
	Significant
	Major

Management response - Capacity of management to respond	
✖	High capacity
	Medium capacity
	Low capacity
	No capacity and / or resources

Trend - Developement over the last 6 years	
	Decreasing
	Static
✖	Increasing

4.8 Social/Cultural uses of heritage

Name	Impact			Origin	Trend
4.8.5 Identity, social cohesion, changes in local population and community	🟢	🚩		🌀	🔧

Spatial scale - Area affected by the factor	
	Restricted

	Localised
✖	
	Extensive
	Widespread

Temporal scale - Occurence of the impact

	One off or rare
✖	Intermittent or sporadic
	Frequent
	On-going

Impact - Impact on the attributes

✖	Insignificant
	Minor
	Significant
	Major

Management response - Capacity of management to respond

	High capacity
✖	Medium capacity
	Low capacity
	No capacity and / or resources

Trend - Developement over the last 6 years

	Decreasing
	Static
✖	Increasing

Name	Impact			Origin		Trend
4.8.6 Impacts of tourism/Visitation/Recreation	🟢	🚩			🔵	🖊

Spatial scale - Area affected by the factor

	Restricted
✖	Localised
	Extensive
	Widespread

Temporal scale - Occurence of the impact

	One off or rare
	Intermittent or sporadic
	Frequent
✖	On-going

Impact - Impact on the attributes

✖	Insignificant
	Minor
	Significant
	Major

Management response - Capacity of management to respond

	High capacity
	Medium capacity
✖	Low capacity
	No capacity and / or resources

Trend - Developement over the last 6 years
	Decreasing
✖	Static
	Increasing

4.10 Climate change and severe weather events

Name	Impact			Origin		Trend
4.10.1 Storms						
	⊖	⚑			⚐	↗

Spatial scale - Area affected by the factor	
	Restricted
	Localised
	Extensive
✖	Widespread

Temporal scale - Occurence of the impact	
	One off or rare
✖	Intermittent or sporadic
	Frequent
	On-going

Impact - Impact on the attributes	
✖	Insignificant
	Minor
	Significant
	Major

Management response - Capacity of management to respond	
✖	High capacity
	Medium capacity
	Low capacity
	No capacity and / or resources

Trend - Developement over the last 6 years	
	Decreasing
	Static
✖	Increasing

4.11 Sudden ecological or geological events

Name	Impact	Origin	Trend
4.11.5 Erosion and siltation/Deposition			

				⊖		◀		☞	→

Spatial scale - Area affected by the factor	
✖	Restricted
	Localised
	Extensive
	Widespread

Temporal scale - Occurence of the impact	
✖	One off or rare
	Intermittent or sporadic
	Frequent
	On-going

Impact - Impact on the attributes	
	Insignificant
✖	Minor
	Significant
	Major

Management response - Capacity of management to respond	
✖	High capacity
	Medium capacity
	Low capacity
	No capacity and / or resources

Trend - Developement over the last 6 years	
	Decreasing
✖	Static
	Increasing

4.13 Management and institutional factors

Name	Impact			Origin		Trend
4.13.1 Management system/Management plan	⊕		◀	◉		✎

Spatial scale - Area affected by the factor						
	Restricted					
	Localised					
	Extensive					
✖	Widespread					

Temporal scale - Occurence of the impact						
	One off or rare					
	Intermittent or sporadic		⊖		◀	☞
	Frequent					
✖	On-going					

Impact - Impact on the attributes	

✖	Insignificant
	Minor
	Significant
	Major

Management response - Capacity of management to respond

✖	High capacity
	Medium capacity
	Low capacity
	No capacity and / or resources

Trend - Developement over the last 6 years

	Decreasing
✖	Static
	Increasing

Name	Impact			Origin		Trend
4.13.2 Legal framework	⊕	⚑			☞	➚

Spatial scale - Area affected by the factor

	Restricted
	Localised
	Extensive
✖	Widespread

Temporal scale - Occurence of the impact

	One off or rare
	Intermittent or sporadic
	Frequent
✖	On-going

Impact - Impact on the attributes

	Insignificant
	Minor
✖	Significant
	Major

Management response - Capacity of management to respond

✖	High capacity
	Medium capacity
	Low capacity
	No capacity and / or resources

Trend - Developement over the last 6 years

	Decreasing
	Static
✖	Increasing

Name	Impact	Origin	Trend

4.13.3 Governance		⊕	⚑		◉		→

Spatial scale - Area affected by the factor		
	Restricted	
✖	Localised	→
	Extensive	
	Widespread	

Temporal scale - Occurence of the impact	
	One off or rare
	Intermittent or sporadic
	Frequent
✖	On-going

Impact - Impact on the attributes	
	Insignificant
	Minor
✖	Significant
	Major

Management response - Capacity of management to respond	
✖	High capacity
	Medium capacity
	Low capacity
	No capacity and / or resources

Trend - Developement over the last 6 years	
	Decreasing
	Static
✖	Increasing

Name	Impact			Origin		Trend
4.13.4 Management activities	⊕	⚑		◉	⬔	→

Spatial scale - Area affected by the factor		
	Restricted	
	Localised	
✖	Extensive	
	Widespread	

Temporal scale - Occurence of the impact			
	One off or rare		
	Intermittent or sporadic		
✖	Frequent	⊕ ⚑	◉
	On-going		

Impact - Impact on the attributes	
	Insignificant

	Minor
✖	Significant
	Major

Management response - Capacity of management to respond

✖	High capacity
	Medium capacity
	Low capacity
	No capacity and / or resources

Trend - Developement over the last 6 years

	Decreasing
	Static
✖	Increasing

Name	Impact			Origin		Trend
4.13.5 Financial resources	⊕	🚩	🚩	◉	☞	➡

Spatial scale - Area affected by the factor

	Restricted
✖	Localised
	Extensive
	Widespread

Temporal scale - Occurence of the impact

	One off or rare
	Intermittent or sporadic
	Frequent
✖	On-going

Impact - Impact on the attributes

	Insignificant
	Minor
✖	Significant
	Major

Management response - Capacity of management to respond

✖	High capacity
	Medium capacity
	Low capacity
	No capacity and / or resources

Trend - Developement over the last 6 years

	Decreasing
	Static
✖	Increasing

Name	Impact			Origin		Trend
4.13.6 Human resources	⊕	🚩	🚩	◉	☞	✎

Spatial scale - Area affected by the factor

✖	Restricted	
	Localised	
	Extensive	
	Widespread	

Temporal scale - Occurence of the impact

	One off or rare	
	Intermittent or sporadic	
	Frequent	
✖	On-going	

Impact - Impact on the attributes

	Insignificant	
	Minor	
✖	Significant	
	Major	

Management response - Capacity of management to respond

✖	High capacity	
	Medium capacity	
	Low capacity	
	No capacity and / or resources	

Trend - Developement over the last 6 years

	Decreasing	
	Static	
✖	Increasing	

Name	Impact			Origin		Trend
4.13.7 Low impact research/monitoring activities	🟢	🚩	🚩	◉	☞	➚

Spatial scale - Area affected by the factor

	Restricted	
✖	Localised	
	Extensive	
	Widespread	

Temporal scale - Occurence of the impact

	One off or rare	
✖	Intermittent or sporadic	
	Frequent	
	On-going	

Impact - Impact on the attributes

	Insignificant	
✖	Minor	

	Significant			
	Major			
Management response - Capacity of management to respond				
✖	High capacity			
	Medium capacity			
	Low capacity			
	No capacity and / or resources			
Trend - Developement over the last 6 years				
	Decreasing			
	Static			
✖	Increasing			

4.17. Serial inscriptions (national or transnational)

4.17.1 - If your property is a serial inscription (national or transnational) please identify which components of the property are impacted by each factor

4.18. Prediction of the state of conservation at next cycle of Periodic Reporting.

4.18.1 - Please predict what the state of conservation of each attribute will be approximately 6 years from now (at the time of the next cycle of Periodic Reporting)

	Attribute	Preserved	Compromised	Seriously compromised	Lost
4.18.1.1	Form- strength and grace	✖			
4.18.1.2	Function- connecting people	✖			
4.18.1.3	Fabric- material authenticity	✖			
4.18.1.4	Symbolism- gateway, icon	✖			
4.18.1.5	Coating- red, a continuous task	✖			

5. Protection and Management of the Property

5.1. Boundaries and Buffer Zones

5.1.1 - Are the boundaries of the World Heritage property adequate to maintain the property's Outstanding Universal Value?
The boundaries are **adequate to maintain** the property's Outstanding Universal Value

5.1.2 - Are the boundaries of the World Heritage property known and recognised?
The boundaries **are known by both** the management authority and local communities/landowners

5.1.3 - Are the buffer zone(s) of the World Heritage property adequate to maintain the property's Outstanding Universal Value?
The property has **no buffer zone** and **does not need one**

5.1.4 - Are the boundaries of the buffer zones known and recognised?
The property has **no known and recognised** buffer zone

5.1.5 - Comments, conclusions and/or recommendations related to boundaries and buffer zones of the World Heritage property
The extent of the property is clearly understood: where embankments end and the attributes begin. Given visibility of the bridge from 20+ km away no buffer zone could control its setting, and its outer edge wherever set would not be understandable by residents. So the state party, councils, ICOMOS and UNESCO agreed a concept of nine monitored view cones, besides consideration of impact on setting made by developments inside the conservation areas at each end (Bridgehead) of the property.

5.2. Protective Measures

5.2.1 - Protective designation (legal, regulatory, contractual, planning, institutional and/or traditional).

Comment
There is no prefilled information and no second cycle reporting in the case of this property. Section 1 of the Periodic Reporting questionnaire by the United Kingdom states that an export from the UNESCO database for the UK has been amended to include legislation enacted since the last cycle of Periodic Reporting. By agreement with the WHC this is being submitted via email. The full range of protective legislation is to be found in the nomination of the Forth Bridge at 7b (p134). Some changes since 2014 include the fact that the umbrella National Planning Framework NPF4 for Scotland has replaced SPP (Scottish Planning Policy). It says "The impact of proposed development upon the outstanding universal value, including its authenticity and integrity, of a World Heritage Site and its setting is a material consideration in determining planning applications." The communities living at the two ends of the bridge are within conservation areas last appraised in pdf downloads here: North Queensferry (2011) https://www.fife.gov.uk/kb/docs/articles/planning-and-building2/built-and-natural-heritage/conservation-areas Queensferry

(2014, and public consultation 2015) https://consultationhub.edinburgh.gov.uk/sfc/queensferry-caca/

5.2.2 - Please list any legislation and other measures (regulatory -including spatial planning- contractual, institutional or traditional) not included in 5.2.1 and indicate the category

2023 / National Planning Framework 4 / National Planning Framework 4 /
https://www.gov.scot/publications/national-planning-framework-4/

2016 / Edinburgh Local Development Plan / Edinburgh Local Development Plan /
https://www.edinburgh.gov.uk/local-development-plan-guidance-1/edinburgh-local-development-plan

2017 / Fife Development Plan / FifePlan / FifePlan /
https://fife-consult.objective.co.uk/kse/event/30240/section/4395822 and
https://www.fife.gov.uk/kb/docs/articles/planning-and-building2/planning/development-plan-and-planning-guidance/local-development-plan-fifeplan

5.2.3 - Is the legal framework (i.e. legislation and/or regulation including spatial planning) adequate for maintaining the Outstanding Universal Value including conditions of Integrity and/or Authenticity of the property?

The **legal framework** for maintaining of the Outstanding Universal Value including conditions of Authenticity and/or Integrity of the World Heritage property provides an **adequate basis for effective management and protection**

5.2.4 - Is the legal framework (i.e. legislation and/or regulation) adequate in the buffer zone for maintaining the Outstanding Universal Value including conditions of Integrity and/or Authenticity of the property?

The property has **no buffer zone**

5.2.5 - Is the legal framework (i.e. legislation and/or regulation) in the broader setting of the World Heritage property adequate for maintaining the Outstanding Universal Value including conditions of Integrity and/or Authenticity of the property?

The **legal framework** for the broader setting of the World Heritage property provides an **adequate basis for** effective management and protection of the property, contributing to the maintenance of its Outstanding Universal Value including conditions of Authenticity and/or Integrity

5.2.6 - Can the legal framework (i.e. legislation and/or regulation) be enforced?

There is **adequate capacity/resources** to enforce legislation and/or regulation in the World Heritage property

5.2.7 - Please provide a short summary of how the legislation, including spatial planning and other regulation, works in practice

The planning system permits change within parameters set by the Local Development Plans of City of Edinburgh and Fife Councils. Both of these are in replacement cycles, in light of the new NPF4 adopted in February 2023, replacing Scottish Planning Policy SPP. It says "The impact of proposed development upon the outstanding universal value, including its authenticity and integrity, of a World Heritage Site and its setting is a material consideration in determining planning applications".

5.2.8 - Comments, conclusions and/or recommendations about the information related to the measures taken to protect the World Heritage property

The setting of the property is safeguarded by identification of 9 long views overland into which development might intrude, by national planning policy, policies in the 2 local development plans, and as supplementary planning guidance the conservation area appraisals for Queensferry and North Queensferry Conservation Areas. Careful consideration of options prior to nomination of the property concluded that a buffer zone with a vague outer edge would be less effective than these measures.

5.3. Management System/Management Plan

5.3.1 - Please check the box which most closely match the character of the governance and management system of the property

Public management system joint national/ local

If 'Other', please specify

5.3.2 - Management System: Please indicate which of the various management tools listed below are used to help protect the property.

A statutory Management Plan or zoning plan for the property.

Other forms of statutory or non-statutory plans (e.g. strategic plans)

Agreed 'Memorandums of Understanding' between different managing institutions, groups or others, including documents agreed with local communities for management

A code of practice developed by industry

An integrated management plan combining World Heritage and any other designations

A management plan

An annual work plan or business plan

5.3.3 - Please give a brief description of the management system currently in place at your property

The management plan is under review, as a task to be carried out by the World Heritage coordinator that was appointed in June 2023. Much of it is about managing the benefits, harms, if any, and expectations external to the property. Management as part of the railway infrastructure network continues in any case by Network Rail, which in Scotland will move closer to the oversight of the Scottish Government agency Transport Scotland.

5.3.4 - Management Documents

Comment

Nothing is prefilled here, but the management plan and relevant documents are on the WHC website

5.3.5 - Has any use been made of the 2011 Recommendation on the Historic Urban Landscape in developing policies and best

practices for the protection of this property?

Some use has been made of the 2011 Recommendation on the Historic Urban Landscape

5.3.6 - If the Historic Urban Landscape Recommendation has been used at this property, please describe briefly what has been done.

The Historic Urban Landscape Recommendation is a toolkit familiar to professional planners and is used to engage civic society about change and Sustainable Development Goals in cities. The village of North Queensferry and town of Queensferry together have a population of 11,400, and would not be considered urban or on a par with the exemplar cities in the HUL guidebook. Change management in those conservation areas follows HUL principles.

5.3.7 - Has any use been made of the Policy Document on the Impacts of Climate Change on World Heritage Properties at the property?

No use has been made of the World Heritage Policy for Climate Change

5.3.8 - If the Climate Change policy has been used, please briefly describe what has been done along with any research on the impacts of Climate Change on the property:

5.3.9 - Has any use been made of the Strategy for Reducing Risks from Disasters at World Heritage Properties at the property ?

No use has been made of the Strategy for Reducing Risks from Disasters at World Heritage Properties

5.3.10 - If the Strategy for Reducing Risks from Disasters at World Heritage Properties has been used, please briefly describe what has been done

We are familiar with guidance published by ICCROM and UNESCO. Network Rail has experience of handling disasters on its network. The two strategies intersect.

5.3.11 - Rate the coordination between the various levels of administration (i.e. national/federal; regional/provincial/state; local/municipal etc.) involved in the management of the World Heritage property

There is **adequate coordination** between all bodies/levels involved in the management of the property

5.3.12 - Is the management system/plan adequate to maintain the property's Outstanding Universal Value?

The management system/plan is **fully adequate** to maintain the property's Outstanding Universal Value

5.3.13 - Is the management system being implemented?

The management system is being **fully implemented and monitored**

5.3.14 - Is there an annual work/action plan and is it being implemented?

An annual work/action plan **exists and many of its activities are being implemented**

5.3.15 - Does the management system include formal mechanisms and procedures that ensure participation and contribution of the following groups, living within or near the World Heritage property and/or buffer zone in management decisions that maintain the Outstanding Universal Value of the property?

		Not applicable	No mechanisms for participation	Some participation	Direct participation	Transformative participation in all relevant decision processes
5.3.15.1	Local communities				✖	
5.3.15.2	Local authorities				✖	
5.3.15.3	Landowners in the property and the buffer zone				✖	
5.3.15.4	Indigenous peoples	✖				
5.3.15.5	Women				✖	
5.3.15.6	Other specific groups	✖				
	If you selected, 'Other specific groups' please specify					

5.3.16 - Please rate the cooperation/relationship between the World Heritage property managers/coordinators/staff and the following groups

		Not applicable	Non-existent	Poor	Fair	Good
5.3.16.1	Local communities				✖	
5.3.16.2	Local/Municipal authorities					✖
5.3.16.3	Indigenous peoples	✖				
5.3.16.4	Landowners					✖
5.3.16.5	Women					✖
5.3.16.6	Youth/Children					✖
5.3.16.7	Researchers					✖

5.3.16.8	Local Visitors/Tourists				✕
5.3.16.9	National/International tourists				✕
5.3.16.10	Tourism Industry				✕
5.3.16.11	Local businesses and industries				✕
5.3.16.12	NGOs			✕	
5.3.16.13	Other specific groups	✕			
	If you selected 'Other specific groups', please specify				

5.3.17 - Please rate the extent to which the management system of your property contributes towards achieving the objectives of the World Heritage Committee's Policy for the Integration of a Sustainable Development Perspective into the Processes of the *World Heritage Convention*

		Not applicable	No contribution	Limited	Significant	Full achievement
5.3.17.1	The management system of the property contributes to gender equality			✕		
5.3.17.2	The management system of the property provides ecosystem services/benefits to the local community (e.g. fresh air, water, food, medicinal plants)		✕			
5.3.17.3	The management system of the property contributes to social inclusion and equity, improving opportunities for all, irrespective of age, sex, disability, ethnicity, origin, religion or economic or other status			✕		
5.3.17.4	The management system of the property integrates a human rights-based approach			✕		
5.3.17.5	The management system of the property contributes to fostering inclusive local economic development, and to enhancing livelihood				✕	
5.3.17.6	The management system of the property contributes to conflict prevention, including respect for cultural diversity within and around the World Heritage property			✕		

5.3.18 - Please provide further details on the ratings of the management system given in the table above

The ability of a bridge without inhabitants to influence sustainable development goals set in the United Nations for state parties should not be exaggerated.

5.3.19 - Comments, conclusions and/or recommendations related to the management system/plan

Management of the property by its sole owner is straightforward. There is a risk that introducing extraneous factors outwith the property will make that management far more complex, without obviously measurable benefits.

6. Financial and Human Resources

6.1. Funding

6.1.1 - If your funding sources do not exactly fit those shown, put the relevant amounts against the funding type that most closely represents your situation, and use the comment box below to provide more details.

		Project costs	Running costs
6.1.1.1	Multilateral funding (GEF, World Bank, etc.)	0 %	0 %
6.1.1.2	Bilateral international funding	0 %	0 %
6.1.1.3	World Heritage Fund (International Assistance)	0 %	0 %
6.1.1.4	Contribution from other conventions and programmes	0 %	0 %
6.1.1.5	International donations (NGOs, foundations, etc.)	0 %	0 %
6.1.1.6	Governmental (national/federal)	100 %	96 %
6.1.1.7	Governmental (regional/provincial/state)	0 %	4 %
6.1.1.8	Governmental (local/municipal)	0 %	0 %
6.1.1.9	In-country donations (NGOs, foundations, etc.)	0 %	0 %
6.1.1.10	Individual visitor charges (e.g. entry, toilets, parking, camping fees, etc.)	0 %	0 %
6.1.1.11	Commercial activities (e.g. merchandising and catering, filming permit, concessions, etc.)	0 %	0 %
6.1.1.12	Other	0 %	0 %
		Total 100 %	Total 100 %

6.1.2 - Please comment here on any other aspects of funding sources not covered in the table above

National Government funds Network Rail which is fully responsible for maintenance of the entire property. A portion of that comes from train ticket sales by users of the national rail network. It is not possible to distinguish the amount of that derived from passengers crossing the bridge as part of those journeys. Any money raised by charity events at the bridge stays entirely with those charities, helped in kind by Network Rail and its contractors.

6.1.3 - Is the current budget sufficient to manage the World Heritage property effectively?

The available **budget is acceptable** but **could be further improved** to fully meet the management needs

6.1.4 - Are the existing sources of funding secure and likely to remain so?

The existing sources of funding are **secure over the medium-term** and **planning is underway to secure funding over the long-term**

6.1.5 - Comments, conclusion, and/or recommendations related to finance and infrastructure

Resources are secured to enable the tourism coordinator to become a World Heritage Coordinator in 2023. In the longer run, with more running cost, and capital, a Bridge Walk experience could be delivered on the ground at South Queensferry. A full visitor centre at the foot of the bridge is not currently being pursued. Options considered for an extended Three Bridges centre, closest to the Forth Road Bridge, found the cost too high to be implemented.

6.1.6 - Estimate the distribution of men and women involved in the management, conservation, interpretation of the World Heritage properties and the extent to which they are drawn from local communities.

		From local communities %	From elsewhere %
6.1.6.1	Men	55 %	60 %
6.1.6.2	Women	45 %	40 %
		Total 100 %	Total 100 %

6.1.7 - Are available human resources adequate to manage the World Heritage property?

Human resources are **adequate** for management needs

6.1.8 - Considering the management needs of the World Heritage property, please rate the availability of professionals in the following disciplines

Conservation	Good
Environmental sustainability	Good
Community participation and inclusion	Good
Risk preparedness	Good
Capacity development and education	Good
Administration	Good
Research and monitoring	Good
Awareness raising and public information/communication	Good
Marketing and promotion	Good
Interpretation	Good
Visitor management/tourism	Good
Enforcement (custodians, police)	Good

6.1.9 - Please rate the availability of training opportunities for the management of the World Heritage property in the following disciplines

Conservation	Good
Environmental sustainability	Good
Community participation and inclusion	Good
Risk preparedness	Good
Capacity development and education	Good
Administration	Good
Research and monitoring	Good
Awareness raising and public information/communication	Good
Marketing and promotion	Good
Interpretation	Good
Visitor management/tourism	Good

Enforcement (custodians, police)	Good

6.1.10 - Has any use been made of the World Heritage Strategy for Capacity Building at the property?
No use has been made of the World Heritage Strategy for Capacity Building

6.1.11 - If the World Heritage Strategy for Capacity Building has been used, please briefly describe what has been done.

6.1.12 - Are there site-specific capacity building plans or programmes that develop local expertise and that contribute to the transfer of skills for the conservation and management of the World Heritage property?
A site-based capacity building plan or programme is in place and partially implemented; some technical skills are being transferred to those managing the property locally, **but most technical work is carried out by external staff**

6.1.13 - Comments, conclusions and/or recommendations related to human resources, expertise and training
The management of the modern railway system is arranged centrally in Glasgow by highly-skilled staff and there is no likelihood, or desire, to transfer that role to local residents simply because they are local. Promotion and education is more locally-driven. A Conservation Area Regeneration Scheme in nearby Inverkeithing promotes traditional building local skills that will sustain conservation outside of the WHS.

7. Scientific Studies and Research Projects

7.1 - Is there adequate knowledge (scientific or traditional) about the values and attributes of the World Heritage property to support planning, management and decision-making to ensure that Outstanding Universal Value is maintained?
Knowledge about the values and attributes of the World Heritage property is **acceptable** for most key areas but there are gaps

7.2 - Is there a planned programme of research at the property which is directed towards management needs and/or improving understanding of Outstanding Universal Value?
There is a **comprehensive, integrated programme** of research, which is relevant to management needs and/or improving understanding of Outstanding Universal Value

7.3 - Are results from research programmes publicly available and disseminated?
Research results **are shared** widely **with active outreach** to local communities and national and international audiences

7.4 - Comments, conclusions and/or recommendations related to scientific studies and research projects
Historic connections & comparisons of major steel structures can be developed from the few on the World Heritage list. Local research is shared. Conservation methods trialled here by the team that delivered the recoating of the Forth Bridge went into work on the Tay Rail Bridge. Lessons learned could go further internationally, e.g. via Big Stuff conferences. New de-rusting techniques offer potential to retain fabric & aesthetic at low cost, but needs testing- contacts in Germany and Canada.

8. Education, Information and Awareness Building

8.1 - Please rate the awareness and understanding of the existence and justification for inscription of the World Heritage property amongst the following groups

Local communities	Poor
Local/municipal authorities	Good
Indigenous peoples	Not applicable
Landowners	Good
Women	Fair
Youth/children	Fair
Researchers	Good
Local visitors	Fair
National/international tourists	Fair
Tourism industry	Fair
Local businesses and industries	Fair
NGOs	Fair
Other specific groups	Not applicable
If you selected 'Other specific groups', please describe	

8.2 - Does the property have a heritage education programme(s) for children and/or youth, that can contribute to a better understanding of heritage, promote diversity and foster intercultural dialogue?
There is a planned education and awareness programme for children and/or youth **but it only partly meets the needs**

8.3 - Who are the target audiences for education and awareness programmes at your property?

Youth/children

Researchers	
Local Visitors	
Tourism industry	

8.4 - Please rate the adequacy of the following visitor facilities and services at the World Heritage property for education, information, interpretation and awareness building

Visitor centre	Not provided but needed
Site museum	Fair
Information booths	Not needed
Guided tours	Fair
Trails/routes	Good
Printed information materials	Fair
Online (website, social media, etc.)	Good
Transportation facilities	Good
Other	Not needed
If 'Other' is selected, please specify	

8.5 - Comments, conclusions and/or recommendations related to education, information and awareness building

A Contact and Education Centre provided by Transport Scotland facilitates school visits. These started in 2015 during construction of Queensferry Crossing, were paused in 2020-2022 but will resume in 2023. Also the digital scanning of the Forth Bridge offers an educational tool to all Scottish schools. Guided tours are exceptional events for charities. A regular Bridge Walk has permission but has not yet been implemented.

9. Visitor Management

9.1 - Please provide estimated annual visitor numbers (including national and international visitors) since the last Periodic Report

750 / 0 / 0 / 600 / 500 /

9.2 - What information sources are used to collect visitor statistics?

Other
see 9.4

9.3 - What is the average length stay of a visitor to the World Heritage property?
One to three hours

9.4 - Please provide the source of information

Visitors to the property counted above are only those who participate in the "Your View" charity event over three days in each September. They sell out immediately and don't measure trends, but the impact of Covid is detectable, when it didn't run. https://www.theforthbridges.org/news-from-the-forth-bridges/view-from-the-bridge/ Counting the rail or boat passengers, or people in Queensferry would produce high numbers but most are not there only to experience the World Heritage property.

9.5 - What is the approximate average daily visitor expenditure? (Please provide an estimated monetary figure in USD)

0 / 10 / 7 / 0 / 0 / 5 /

9.6 - Please provide the source of information

1. Economist and consultant to UNESCO, James Rebanks' report: "Forth Bridge : Making Heritage Work for communities." 2. Mainly personal observation subsequently. A Business Improvement District operated in Queensferry for a year and gathered figures, but has been wound up because it lacked a consensus among businesses in favour of continuing it. The new WHS coordinator will improve on the figures for regular data analysis of visitor impact. Lodging income can't be assigned to the WHS alone.

9.7 - Does the management system/plan for the World Heritage property include a strategy with an action plan to manage visitors, tourism activity and its derived economic, socio-cultural and environmental impacts?

There **is a strategy** to manage visitors, tourism activity and its derived impacts on the World Heritage property but there are **some deficiencies in implementation**

9.8 - Please provide any comments relating to the answer provided above in question 9.7

The derived impacts of visitors near to the World Heritage property have no impact on the OUV of the property.

9.9 - Is visitor use effectively managed to maintain the Outstanding Universal Value of the property?

Visitor use of the World Heritage property is **effectively managed and does not impact its Outstanding Universal Value**

9.10 - Is the effectiveness of tourism management regularly monitored?
No

If a different system, please specify

assessment tool not located

9.11 - How does the tourism industry cooperate with the site management to improve visitor experiences and maintain the Outstanding Universal Value of the World Heritage property?

There is **good cooperation** between those responsible for the World Heritage property and the tourism industry **to present the Outstanding Universal Value and increase appreciation**

9.12 - How well is the information on the Outstanding Universal Value of the property presented and interpreted?

The presentation and interpretation of the Outstanding Universal Value of the property **is acceptable but improvements could be made**

9.13 - At how many locations is the World Heritage emblem displayed at the property?

In **many locations** and **easily visible** to visitors

9.14 - How does visitor/tourism revenue (e.g. entry charges, permits) contribute to the management of the World Heritage property?

No fees are collected

9.15 - Are there locally driven sustainable tourism initiatives?

Yes

If 'Yes', please specify

Boats; tours by bus and on foot.

9.16 - Are the benefits of tourism shared with local communities?

Yes

If 'Yes', please specify

Shops and cafes are mostly locally-owned by nearby residents, and not by multiple chains. Tax revenues and wages go into local communities.

9.17 - Comments, conclusions and/or recommendations related to visitation/tourism/public use of the World Heritage property

There is no visitor centre for the WHS, and no presentation about world heritage in general- a hub for world heritage at Tron Kirk in the Old Town of Edinburgh closed in 2020. A Bridge Walk has detailed planning permission, for a small building near the south end of the property, but is not yet implemented by Network Rail, which may need a partner to provide this for small numbers of closely-managed people. 9.5: revenues for lodging etc cannot be attributed to the WHS alone.

10. Monitoring

10.1 - Is there a monitoring programme at the property directed towards management needs and/or towards improving the understanding of the Outstanding Universal Value?

There is **considerable monitoring** but it is not directed towards management needs and/or improving the understanding of Outstanding Universal Value

10.2 - Is necessary information available in order to define key indicators for measuring the state of conservation and are they used in monitoring how the Outstanding Universal Value of the property is being maintained?

Information on the values of the World Heritage property is **adequate and key indicators have been defined** for measuring the state of conservation and **are being used in monitoring** of how the Outstanding Universal value of the property is being maintained

10.3 - Are key indicators defined and in place for the following principal aspects of the property?

	Extend of indicators	Not applicable	No indicators	Indicators have been defined but are not yet in use	Indicators are in place and in use since the last Periodic Reporting cycle
10.3.1	State of conservation				✖
10.3.2	Effectiveness of the management system		✖		
10.3.3	Character of governance	✖			
10.3.4	Appropriate synergy with other conservation designations				✖
10.3.5	Contribution to sustainable development		✖		
10.3.6	Capacity development	✖			

10.4 - Please provide information on relevant key indicators adopted at the property

These are set out in the nomination and management plan, relating to OUV and not to the character of governance etc.

10.5 - Please rate the level of involvement in monitoring of the following groups:

World Heritage managers/coordinators and staff	Good
Local/municipal authorities	Good
Local communities	Poor
Indigenous peoples	Not applicable
Landowners	Good
Women	Not applicable

Researchers	Fair
Tourism industry	Fair
Local businesses and industry	Poor
NGOs	Fair
Other specific groups	Not applicable
If you selected 'Other specific groups', please specify	

10.6 - Has the State Party implemented relevant recommendations arising from the World Heritage Committee?

Implementation is complete

10.7 - Please provide comments relevant to the implementation of recommendations from the World Heritage Committee.

Recommendations at inscription by WHC related to the interpretive plan, monitoring indicators and setting. These were implemented, underlined in a 2016 SOC and 2017 WHC report: a) monitoring indicators related more directly to the attributes that convey OUV show almost no decline b) a tourism plan was launched in 2017 and interpretation panels installed in 2022/2023 c) no planning application has been made for a visitor centre. Only facilities for a bridge walk not yet implemented.

10.8 - Comments, conclusions and/or recommendations related to Monitoring

The tourism plan is here: https://www.theforthbridges.org/media/dtycfghk/forth-bridges-area-tourism-strategy-2019-2029.pdf Is there a need to go back to the WHC on this or other updates, given that it has a lot to do, not only about this world heritage site, but heritage worldwide?

11. Identification of Priority Management Needs

11.1 - Identification of Priority Management Needs

5.1	**Boundaries and Buffer Zones**	
5.1.3	The property has **no buffer zone**	
5.1.4	The property has **no known and recognised buffer zone**	
5.2	**Protective Measures**	
5.2.4	The property has **no buffer zone**	
5.3	**Management System/Management Plan**	
5.3.5	**Some use** has been made of the Historic Urban Landscape Recommendation to develop policies and best practices for the protection of the property	✖
5.3.7	**No use** has been made of the Policy Document on the Impacts of Climate Change on World Heritage Properties at the property	✖
5.3.9	**No use** has been made of the Strategy for Reducing Risks from Disasters at World Heritage Properties at the property	✖
5.3.17	**In a limited manner**, the management system of the World Heritage property does **contribute to gender equality** - The management system of the World Heritage property **does not provide ecosystem services/benefits to the local community (e.g. fresh air, water, food, medicinal plants)** **In a limited manner**, the management system of the World Heritage property does **contribute to social inclusion and equity, improving opportunities for all, irrespective of age, sex, disability, ethnicity, origin, religion or economic or other status** **In a limited manner**, the management system of the World Heritage property does **integrate a human rights-based approach** **In a limited manner**, the management system of the World Heritage property does **contribute to conflict prevention, including respect for cultural diversity within and around the World Heritage property**	✖
6.1	**Funding**	
6.1.3	The available **budget is acceptable** but **could be further improved** to fully meet the management needs of the World Heritage property	✖
6.1.10	**No use** has been made of the World Heritage Strategy for Capacity Development at the World Heritage property	✖
6.1.12	**A site-based** capacity building plan or programme is in place and partially implemented; some technical skills are being transferred to those managing the property locally, **but most technical work is carried out by external staff**	
8	**Education, Information and Awareness Building**	
8.2	There is a planned education and awareness programme for children and/or youth **but it only partly meets the needs**	✖
9	**Visitor Management**	
9.7	There **is a strategy** to manage visitors, tourism activity and its derived impacts on the World Heritage property but there are **some deficiencies in implementation**	✖
9.12	The presentation and interpretation of the Outstanding Universal Value of the property **is acceptable but improvements could be made**	✖
10	**Monitoring**	
10.1	There is **considerable monitoring** at the World Heritage property but it is not directed towards management needs and/or improving understanding of Outstanding Universal Value	✖

12. Summary and Conclusions

12.1. Summary - Factors affecting the Property

12.1.1 - Summary - Factors affecting the Property

4.3	Services Infrastructures					
4.3.5	Major linear utilities	(i) and (iv); attributes 2, 3 and 4	Monitoring	Monitored by those responsible for that item of infrastructure	On going. The pipeline has been on the seabed without incident for decades.	The Crown Estate. Forth Ports PLC.	The pipeline is out of sight on the seabed, connecting Hound Point oil terminal to refineries in Grangemouth while avoiding the risks caused by the alternative of oil tankers passing under bridges into the Inner Forth.

4.4	Pollution					
4.4.1	Pollution of marine waters	(i) and (iv). Attributes 3 and 5	Any incidents caused by use or maintenance of the bridge is to be reported to Network Rail, whose contractors take care to avoid spills.	The condition of sea waters, and the Ramsar site for migratory birds below east and west of the property, is overseen and reported by the Forth Estuary Forum.	Continuous	Forth Estuary Forum; the Crown Estate; SEPA	Care was taken in the shot blasting and repainting of the bridge to fully encapsulate the steelwork and thereby avoid letting any pollution debris fall into the sea.
4.4.4	Air pollution	(i) and (iv). Attribute 5, coatings.	Monitor any deterioration in the paintwork.	Monitoring of the condition of the paint coating is done by abseil teams.	Very long term	Network Rail	The expected change from fossil fuels to electric traction will lead to still less damage to the paintwork.

4.7	Local conditions affecting physical fabric					
4.7.4	Radiation/Light	(i) and (iv). Attribute 5, coatings.	The recoating of the whole bridge 12-23 years ago was in part prompted by the slow deterioration of paint surfaces in accessible locations on the bridge, particularly the top exposed to UV light.	Network Rail regularly uses specialist abseil teams to access these areas and monitor condition.	Ongoing, but the glass fibre in the new paint system should last much longer and retain its colour,	Network Rail	In case full scaffolding may be needed again the bridge is 'future proofed' by the addition of steelwork to which scaffolding may easily be fixed. This is only visible from above.

4.10	Climate change and severe weather events					
4.10.1	Storms	Criteria (i) and (iv). Attributes 1 and 2.	Monitor wind strength to determine whether the bridge need be closed to trains.	Transport Scotland/ Forth Bridges Forum monitors wind strength in particular at two road bridges which might close to high-sided vehicles before the same might be needed at the railway bridge.	Transport Scotland/ Forth Bridges Forum	Transport Scotland/ Forth Bridges Forum/ Network Rail.	The Forth Bridge was designed to be exceptional strong in resisting lateral winds, hence attributes like the Holbein straddle. This was in light of the Tay Bridge Disaster, 1879, which strongly influenced this bridge.

4.11	Sudden ecological or geological events					
4.11.5	Erosion and siltation/Deposition	Criteria (i) and (iv). Attribute 2 and 6.	Monitoring vegetation, replanting trees while keeping them small, and ballast.	On going	Continuous yearly	Network Rail	This relates to erosion of the embankments carrying trains to and from either end of the property, and hence its function as part of the railway network.

12.2. Summary - Management Needs

12.2.1 - Summary - Management Needs

5.3	Management System/Management Plan				
		Actions	**Timeframe**	**Lead agency (and others involved)**	**More info / comment**
5.3.5	**Some use** has been made of the Historic Urban Landscape Recommendation to develop policies and best practices for the protection of the property	Refer to HUL in the revision of conservation area appraisals, and in assessing planning applications that may impact on the setting of the property.	Four years.	Historic Environment Scotland, Fife Council, City of Edinburgh Council	A limited number of planning applications are made within the conservation areas at each end of the bridge, outside of the property. They may offer opportunity to implement HUL
5.3.7	**No use** has been made of the Policy Document on the Impacts of Climate Change on World Heritage Properties at the property	Review the Policy Document on the Impacts of Climate Change on World Heritage Properties and consider whether the Climate Vulnerability Index adopted at some WHS in Scotland will be the best way to implement the recommendations.	Three years	Historic Environment Scotland	The Forth Bridge mitigates climate change by virtue of its role in a public transport network, increasingly using green energy as the network electrifies. It is very robust and unlikely to need to adapt to rising sea levels for many decades.
5.3.9	**No use** has been made of the Strategy for Reducing Risks from Disasters at World Heritage Properties at the property	Review the Strategy for Reducing Risks from Disasters at World Heritage Properties and consider what risk preparedness is not already in place.	Three years.	Network Rail, Historic Environment Scotland	ICCROM, and UNESCO management plan guidance on risk, is already a consideration.
5.3.17	• **In a limited manner**, the management system of the World Heritage property does **contribute to gender equality** • The management system of the World Heritage property **does not provide ecosystem services/benefits to the local community (e.g. fresh air, water, food, medicinal plants)** • **In a limited manner**, the management system of the World Heritage property does **contribute to social inclusion and equity, improving opportunities for all, irrespective of age, sex, disability, ethnicity, origin, religion or economic or other status** • **In a limited manner**, the management system of the World Heritage property does **integrate a human rights-based approach** • **In a limited manner**, the	Consider whether the property can contribute towards advancing these goals in more than a limited manner	Two years	World Heritage Management Plan Group	The World Heritage property provides ecosystem services/benefits to the local community in the form of public transport benefits that reduce dependence on private cars.

6.1	Funding				
	management system of the World Heritage property does **contribute to conflict prevention, including respect for cultural diversity within and around the World Heritage property**				

6.1	**Funding**				
6.1.3	The available **budget is acceptable** but **could be further improved** to fully meet the management needs of the World Heritage property	Review expenditure and outcomes	Two years	World Heritage Management Plan Group and principally those with funding resources in the Forth Bridges Forum.	Partnership funding is becoming more secure but will never be predictable beyond 3-4 years. It has to be justified in light of the funders' objectives.
6.1.10	**No use** has been made of the World Heritage Strategy for Capacity Development at the World Heritage property	The World Heritage Property can only be maintained by in-house specialists. It is not appropriate or safe to entrust that to local people. However local groups can and do support historical research and collections related to the property.	Two years	World Heritage Management Plan Group	Capacity is now being developed through the Conservation Area Regeneration Scheme in Inverkeithing, just north of North Queensferry, open to all, which has a few more years to run and promotes understanding of traditional building skills.

8	**Education, Information and Awareness Building**				
8.2	There is a planned education and awareness programme for children and/or youth **but it only partly meets the needs**	Review the education and awareness of children, and what young people with agency can do for the property.	Two years	Contact and Education Centre, Forth Bridges Forum, World Heritage Management Plan Group	3D scans of the bridge are distributed to schools, and a teacher was seconded to diffuse this into educational programmes. The current educational provision and visits relate to all three bridges -more to be done about World Heritage in Young Hands

9	**Visitor Management**				
9.7	There **is a strategy** to manage visitors, tourism activity and its derived impacts on the World Heritage property but there are **some deficiencies in implementation**	The Tourism Strategy 2019-2029 is at this link, being about derived impacts from the three bridges. Monitoring indicators need consistency. https://www.theforthbridges.org/media/dtycfghk/forth-bridges-area-tourism-strate gy-2019-2029.pdf	Two years	The Forth Bridges Tourism Management Group	Derived impacts made by the property, and all three bridges, are considered in the strategy. It does not consider impact by visitors on OUV because there are none.
9.12	The presentation and interpretation of the Outstanding Universal Value of the property **is acceptable but improvements could be made**	Review presentation and interpretation of the Outstanding Universal Value of the property in light of audience feedback, and seek out those audiences not yet reached	Two years	World Heritage Management Plan Group	A visitor centre specific to the Forth Bridge is not high priority, but would assist in interpreting the world heritage convention.

10	**Monitoring**				

| 10.1 | There is **considerable monitoring** at the World Heritage property but it is not directed towards management needs and/or improving understanding of Outstanding Universal Value | Monitoring could be better tailored towards management needs and should be consistently applied towards the variable factors that might indicate change. In most cases this will be change to neighbouring places rather than to the property itself. | Ongoing | World Heritage Management Group; Network Rail | Understanding of OUV as a basis for the world heritage listing is good, but could be more widely understood in the context of other bridges. |

Summary - Management Needs completed

12.3. Conclusions on the State of Conservation of the Property

12.3.1 - Following the analysis undertaken for this report, what is the current state of Authenticity of the World Heritage property?

The Authenticity of the World Heritage property **has been preserved**

12.3.2 - Following the analysis undertaken for this report, what is the current state of Integrity of the World Heritage property?

The Integrity of the World Heritage property is **intact**

12.3.3 - Following the analysis undertaken for this report, what is the current state of the World Heritage property's Outstanding Universal Value?

The World Heritage property's Outstanding Universal Value has been **maintained**.

12.3.4 - What is the current state of the property's other values?

Other important cultural and/or natural values and the state of conservation of the World Heritage property are **intact**

12.3.5 - Comments. conclusions and/or recommendations related to the state of conservation of the property.

The property is in as good a physical condition as it ever has been following a comprehensive refurbishment. It is in its desired state of conservation, and the World Heritage Management Group recognises that it needs monitoring and maintenance by Network Rail to keep it for as long as it can at that baseline.

13. Impact of World Heritage Status

13.1 - Please rate the impacts of World Heritage status of the property in relation to the following areas

Conservation	Positive
Research and monitoring	Positive
Management effectiveness	Positive
Quality of life for local communities and indigenous peoples	No impact
Recognition	Positive
Education	Positive
Infrastructure development	No impact
Funding for the property	Positive
International cooperation	Positive
Political support for conservation	Positive
Legal/Policy framework	Positive
Advocacy	No impact
Institutional coordination	Positive
Security	No impact
Gender equality	No impact
Provision of ecosystem services/ benefits to local communities	No impact
Social inclusion and equity, and improvement of opportunities for all, irrespective of age, sex, disability, ethnicity, origin, religion, or economic or other status	No impact
Fostering inclusive local economic development and enhancing livelihood	No impact
Contributing to conflict prevention, including respect for cultural diversity within and around heritage properties	No impact
Other	Not applicable

If 'Other', please specify	

13.2 - Comments, conclusions and/or recommendations related to World Heritage status and its impacts

Most of the impacts here are already part of the law of the land regarding equalities and so on. The impact made by the World Heritage Listing can only have marginal impact beyond that. That is why quite a few answers are "no impact".

14. Good Practice in the Implementation of the World Heritage Convention

14.1 - Example of good practice in World Heritage protection, identification, conservation or management at the property level

The project to include the Forth Bridge in the UNESCO World Heritage List and thereafter to deliver instrumental benefits from that international recognition has meant synergies with those managing and promoting other major steel structures worldwide. Thus, the Forth Bridge experience has been relayed at meetings among bridge experts working towards a serial nomination of arched steel railway bridges, and those conferring about the eight transporter bridges of the world that might make a similar group. Vizcaya Transporter Bridge already is one of the four UNESCO world heritage bridges alongside the Forth Bridge and two Ottoman-era bridges in Bosnia-Herzegovina (discounting the bridges that are elements in broader world heritage canals, railways, landscapes and cities). The number of major steel structures on the World Heritage List will stay small, but there are some countries now under-represented in the list where steel infrastructure forms a significant part of their built cultural identities, so the Forth and Vizcaya bridges establish a standard. An engineer who worked on the refurbishment of the Forth Bridge has visited those responsible for Quebec Bridge -a smaller structure whose one main span is just a little longer than two main spans at the Forth Bridge – at its centenary. Another has viewed the access arrangements for bridge climbs at Sidney Harbour Bridge. Best practice in conservation of steel structures is evolving, and information is shared about techniques to halt corrosion in steel structures in Germany and North America, which may be more economical and less of a dramatic intervention than had been the total encapsulation and repaint of bare metal that occurred at the Forth Bridge 13-20 years ago. The way the Forth Bridge was made to achieve the best possible state of conservation is probably the current gold standard for bridge preservation, and yet technical knowledge continues to grow and to be shared in the historic engineering community.

14.2 - Define which topics are covered by this example of best practice at the property level

Synergies
State of Conservation

15. Assessment of the Periodic Reporting Exercise

15.1. Relevance of Periodic Reporting

15.1.1 - Has the Periodic Reporting process improved the understanding of the following?

The *World Heritage Convention*
Management effectiveness to maintain the Outstanding Universal Value
Monitoring and reporting

15.1.2 - Please rate the follow-up to conclusions and recommendations from previous Periodic Reporting exercise by the following entities

State Party	Not needed
Site Managers	Not needed
UNESCO World Heritage Centre	Not needed
Advisory Bodies (ICOMOS, IUCN, ICCROM)	Not needed

15.2. Use of Data

15.2.1 - How do the authorities in charge of the property plan to use the data recorded from this cycle of Periodic Reporting?

Revision of priorities/strategies/policies for the protection, management and conservation of heritage
Update of management plans
Advocacy

15.2.2 - Comments on use of data from the Cycle of Periodic Reporting

This is the first periodic report for this property, which was inscribed in 2015. Therefore the answers to 15.1.2 should really be N/A = not applicable and not "not needed".

15.3. Timing and resources

15.3.1 - Entities involved in the filling out of this online questionnaire (tick as many boxes as applicable)

Governmental institutions responsible for cultural and natural heritage
Site Manager/Coordinator World Heritage property staff
Staff from other World Heritage properties
Local communities
External experts

15.3.2 - Has a gender balanced contribution and participation been considered in the filling out of this questionnaire?

Gender balance has **not been explicitly** considered or implemented in the process.

15.3.3 - Were you given adequate time (i.e. roughly ten months) to gather necessary information and to fill in this questionnaire?

Yes

15.3.4 - Please estimate the time (working hours) needed to complete this questionnaire

15 / 28 / 32 /

15.3.5 - Did you mobilise any additional resources to fill out this questionnaire?

	Additional resources	No	Yes
15.3.5.1	Human resources	✖	
15.3.5.2	Financial resources for organizing consultation meetings/ training	✖	

15.4. Format and content of the Periodic Report

15.4.1 - How accessible was the information required to complete this questionnaire?

Most required information was accessible.

15.4.2 - Was the questionnaire easy to use and clear to understand?

		Very Difficult	Difficult	Easy	Very easy
15.4.2.1	Ease of use of questionnaire		✖		
15.4.2.2	Clarity of questions		✖		

15.4.3 - Please provide suggestions for improvement of the Periodic Reporting questionnaire

The automatic assumptions behind the limited range of answers that may be given and then lead on to further questions do not and cannot fit the unique circumstances of each world heritage property.

15.5. Training and Guidance

15.5.1 - Please rate the level of support in terms of training and guidance from the following entities in completing this questionnaire

UNESCO World Heritage Centre	Good
UNESCO (other sectors/field offices)	Not applicable
UNESCO National Commission	Not applicable
ICOMOS International	Not applicable
IUCN International	Not applicable
ICCROM international/regional	Not applicable
ICOMOS national/regional	Not applicable
IUCN national/regional	Not applicable

15.5.2 - Please rate the level of support for completing the Periodic Reporting questionnaire from the following entities

UNESCO World Heritage Centre	Fair
State Party Representative (national Focal Point)	Good
UNESCO other sectors (e.g. field office)	Not applicable
National Commission for UNESCO	Not applicable
ICOMOS International	Not applicable
ICCROM International/regional	Not applicable
ICOMOS national/regional	Not applicable
IUCN national/regional	Not applicable
IUCN International	Not applicable

15.5.3 - Were the online training resources prepared by the World Heritage Centre regarding Periodic Reporting adequate for you to complete this questionnaire?

Yes

15.5.4 - If you found that the online training resources were not adequate, what changes would you like to see implemented?

15.6. Actions that will require formal consideration by the World Heritage Committee

15.6.1 - Summary of actions that will require formal consideration by the World Heritage Committee

- **Map(s)**

  Reason for update: The World Heritage Centre identified in December 2022 that they did not hold an up-to-date clear map which showed the delimitation of the property. We are in the process of producing the requested map in line with the World Heritage Centre's technical requirements, with support from Historic England. It will be submitted for the approval of the World Heritage Committee in advance of 46COM along with others from the UK State Party.

Changes to these items will need to go through the proper processes.

15.7. Comments, conclusions and/or recommendations related to the Assessment of the Periodic Reporting Exercise

15.7.1 - Comments, conclusions and/or recommendations related to the Assessment of the Periodic Reporting Exercise

The map at 1.4 correctly delineates the property and includes mapped information about nine cultural and natural types of designation in the vicinity, which you say should be avoided. The map in the nomination 1e, the executive summary and management plan 1a, has in the key only "Nominated Property" and nothing else. We can send you another digital copy of that map if you wish. We are content that either map be used. Neither map gives the area in hectares: believed still to be 7.5

15.7.2 - Thank you for having filled in all the questions. Please contact your National Focal Point for validation.