

The Draft Planning (Listed Building Consent) (Canal & River Trust) Order 2018

Draft Conservation Management Methodology and Principles

Preamble

1 The conservation management methodology and principles set out here should be used as guidance in conjunction with the provisions and conditions of the Order¹ and will inform the development and design of works identified in the Trust's internal works programmes. The accompanying flowchart explains the general process for incorporating these principles into works covered by the Order.

2 The Trust's listed buildings covered by the Order are the following listed waterway structures: aqueduct, bridge, crane, lock, boundary or distance marker, milepost, tunnel, waterway or basin wall, weir or sluice. These are the structures which form the functional infrastructure of the Trust as well as the greater part of its holdings.

3 Conservation of the Trust's waterway structures covered by the Order involves managing change to them in ways that maintain their effective and safe operation and sustain their special architectural or historic interest ('special interest'). It may involve maintaining the *status quo*, intervening only as necessary to counter the effects of vegetation growth and decay, but equally may be achieved through sensitive interventions; it can be active as well as reactive. Change to a listed structure is inevitable, if only as a result of the passage of time, but can be neutral or beneficial in its effect on historic values. The special architectural or historic interest can be harmed or lost through its alteration or destruction.

¹ In this document references to "the Order" are to the proposed Draft Planning (Listed Building Consent (Canal & River Trust) Order 2018

4 Keeping a listed structure in use may require continual adaptation and change; but, provided such interventions conserve its special architectural or historic interest, they will tend to be beneficial. The Trust will look not only to conserve but also to enhance their special interest through repair or reinstatement. In this work a subtle difference between new and existing is more likely to retain the coherence of the whole asset than jarring contrast.

5 The shared public and private interest in sustaining listed structures in use demands mutual co-operation and respect between the Trust, its stakeholders and regulators. The Order and this note of methodology and principles provides a sound framework for the management of functional listed structures in the responsible long-term ownership of the Trust.

6 This note gives the methodology and principles for the conservation management of listed buildings covered by this Order, as agreed by the Canal & River Trust and Historic England, and includes a Scoping Table showing Indicative Works by way of illustration, as well as a chart showing the process agreed by the Canal & River Trust for use under this Order. The Scoping Table categorises different types of work as follows: works which require an application for listed building consent are shaded red; works for which listed building consent is granted under the draft Order are shaded yellow; and works for which listed building consent is not required are shaded green.

Core Principles

7 When the Trust undertakes works for which listed building consent is granted under the terms of the Order this document sets out the principles and processes that the Trust has agreed to follow in its decision-making to ensure that any potential harm is eliminated or at least minimised in order to protect the public interest in safeguarding those listed buildings.

8 The general principles in operation in the conservation of the historic environment and which have been taken into account in drawing up the Order and this methodology are:

1. Before making a decision about works that may affect the heritage significance of the structure, the Trust will need to understand its heritage significance to a degree necessary in order to understand the impact of the proposed works. Intrusive investigation may be necessary, but will be avoided if possible and its impact minimised where it is necessary.

2. Any tension between the conservation of the structure and the Trust's other objectives in carrying out the works should be minimised and ideally avoided altogether. This may require consideration of alternative means of achieving the same end or other designs.
3. In their decision-making the Trust will give great weight to the conservation of the listed structures. The Order grants permission for the works given in paragraph 1 (c) (i-iii) and which are covered by the methodology agreed with the Commission, that is:
 - (i) to repair or maintain the waterways structure;
 - (ii) to maintain the safe and effective operation of the waterway; or
 - (iii) to effect any of the works listed in paragraphs (i) and (ii)The Trust will ensure that it has a clear and convincing justification for any harm which may be caused by these works and that the works are necessary for the purposes set out above.
4. The Trust will take any reasonable opportunity that the carrying out of the works presents to enhance the heritage significance of the structure, for example through the removal of previous harmful alterations, undertaking items of preventative conservation or enhancing the building's setting.

Site Investigation

9 It is essential that all work undertaken within the terms of this Order is fully justified. To be sure of this, site investigation may be required. Any site investigations should seek, in the first instance, to be non-intrusive. Any investigations requiring intrusive works should be informed by desk-based research and should be the minimum that will reach the conclusions necessary to inform repair or alteration.

General works of repair which may affect the special interest

10 Effective conservation of listed structures is founded on programmes of appropriate routine management, maintenance and repair being established. This section deals with the questions raised when works may be extensive enough to affect the special interest of a listed structure.

11 When a permanent solution to identified problems is not immediately possible, temporary works should be undertaken to prevent the problems from escalating. Temporary solutions should be effective, timely and reversible, so that a previous state is restored.

12 Periodic renewal of elements of a listed structure (e.g. replacement of lock gates or paddle gearing) differs from maintenance in that it occurs on a longer cycle, involves more intervention and often has a greater visual impact. For example, replacement of a lock gate will involve the temporary loss of some historic significance, such as the patina of age, but this is likely to return within the next cycle, provided the

replacement is physically and visually compatible. This will normally involve 'like for like' replacement, to match existing, to the extent that this is practicable and sustainable, unless there is special justification for reinstatement of missing historic features (e.g. paddle gearing).

- 13 Repair of listed structures to sustain their effective operation and special interest is normally desirable if:
- a. there is sufficient information comprehensively to understand the impacts of the proposed works on the special interest of the structure; and
 - b. the long term consequences of the proposals can, from experience, be demonstrated to be benign, or the proposed works are designed not to prejudice alternative repair solutions in the future; and
 - c. the proposals are designed to avoid or minimise harm to the listed structure.

14 While sufficient work should be undertaken to achieve a lasting repair, the extent of the repair should normally be limited to what is reasonably necessary to make failing elements safe, sound, and capable of continuing to operate effectively.

15 The use of materials and techniques with a lifespan that is predictable from past performance, and which are close matches for those being repaired or replaced, will carry a low risk of harm or premature failure.

Reinstatement or replacement

- 16 Reinstatement or replacement to deal with recent damage, degradation or loss to a listed structure (e.g. replacing missing masonry parapets, or traditional paddle gearing or replacement of steel with timber gates) should normally be acceptable if:
- a. the special interest of the elements that would be restored decisively outweighs the significance of those that would be lost;
 - b. the work proposed is justified by compelling evidence of the evolution of the structure, and is executed in accordance with that evidence;
 - c. the form in which the structure currently exists is not the result of an historically-significant event;
 - d. the maintenance implications of the proposed reinstatement are considered to be sustainable.

17 Proposed works should respect previous forms of the listed structure and setting.

Proprietary repairs and those in different materials to the existing

18 Because the structures in scope of this Order are functional (despite the other values which they may embody) it may happen that they could best be repaired with new techniques or materials to fulfil their function, possibly to the extent of using proprietary systems. Such choices

will be informed by the general principles in this note. The normal presumption is that repairs and replacement of parts will be made 'like for like'. But departure from this principle may be approved where the use of historic materials is impractical, provided the impact is minimised and the previous forms are respected. See below for the corresponding procedure in relation to new work.

Alterations and extensions

19 Work of alteration or extension involves some intervention in the existing fabric of a listed structure, which may be necessary to keep it in operational use. A 'presumption in favour of preservation' (seeking to minimise any harm, or reinforcing or further revealing the special interest) does not equate to a presumption against any intervention into, or removal of, existing fabric. The Trust will ensure that it has a clear and convincing justification for any harm which may be caused by these works and that the works are necessary for the purposes set out in the Order. The addition of new elements to any site or structure will be governed by the principles of minimal damage to the existing work and minimal visual intrusion.

20 Alterations or extensions to a listed structure should normally be acceptable if:

- a. there is sufficient information comprehensively to understand the impacts of the proposed works on the special interest of the structure;
- b. the proposed works would seek to minimise any harm to the special interest which, where appropriate, would be reinforced or further revealed;
- c. the proposed works exhibit a quality of design and execution that responds to the local character and history of a listed structure and its setting and, in the specific context of waterways, acknowledges the character of that waterway;
- d. the long-term consequences of the proposals can, from experience, be demonstrated to be benign, or the proposals are designed not to prejudice alternative solutions in the future. This consideration could cover the use of proprietary materials or techniques where relevant, although such changes may more often be above scope.

21 The greater the range and strength of the special interest attached to a listed structure, the less opportunity there may be for change, but few structures are so sensitive that they, or their settings, present no opportunities for change.

22 The need for quality in new work applies at every level, from small interventions to a listed structure to major re/building works. Small changes need as much consideration as large ones, for cumulatively their effect can be comparable.

Monitoring, recording of works and issues arising

23 All works carried out by the Trust or its contractors under the provisions of the Order will be in accordance with the process flowchart set out below.

24 The Trust will record the details of which listed structure has had works together with a description of the works undertaken by or on behalf of the Trust under the Order. The details will be recorded by the Trust in an electronic register of works which will be available to consult on the Trust's public website. A summary report will be submitted to Historic England by 30 April each year.

25 A copy of the report to Historic England is to be published on a website maintained by the Trust and the website should provide an opportunity for comments to be made regarding its contents.

26 A meeting will be held in June every year for the Trust and Historic England to discuss the contents of the report and any comments received by the Trust on its website regarding the report. This meeting will provide an opportunity for officers of the two organisations to discuss the works that have taken place and any issues arising in relation to those works and also to any issues arising from the terms of the Order and the continuing 'fitness for purpose' of the Order. If any issues arise which cannot be resolved by the officers of the two organisations, then the issues are to be raised within the organisations to the respective Chief Executives to resolve matters.

Definitions

The Order only covers a listed building which is or includes a waterways structure as defined in Article 2 of the Order which is owned, controlled or managed by the Trust.

The following information may be helpful in understanding the structures covered by the Order:

- Aqueduct – includes masonry and cast-iron structures that are designed to carry water and/or boats.
- Bridge – includes all types of bridges, including fixed bridges in masonry, iron, steel, wood and concrete. Also includes moveable bridges and footbridges in iron, steel or wood.
- Crane.
- Lock – includes all types of locks and any object or structure fixed to the listed waterway structure or which is ancillary to its use or function.

- Boundary or distance marker – includes all kinds of listed company or administrative boundary posts and distance markers on lock approaches.
- Milepost – includes canal or railway company milestones and mile-plates.
- Tunnel – includes listed tunnel portals and horse and pedestrian tunnels and ventilation shafts.
- Waterway or basin wall – sometimes referred to as wash wall. Includes listed pound or basin walls, lock, bridge and aqueduct approach and transition walls.
- Weir – includes canal weirs, river and reservoir weirs, spillways and water ladders.
- Sluice – water control structure that may include masonry, metal and timber elements.

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**LISTED BUILDING CONSENT ORDER -
Canal & River Trust
SCOPING TABLE -
INDICATIVE
WORKS**

Key:		Above Scope - Consent required
		In Scope - Consent granted by Order
		Below Scope - Consent not required

A. General works of repair		Aqueduct	Bridge	Crane	Lock	Boundary or Distance Marker	Milepost	Tunnel or Horse Tunnel	Waterway wall	Weir	Sluice
1	Re-pointing i. Raking out of defective joints and re-pointing with mortar suited to host material.										
2	Re-bedding of copings i. Re-bedding of copings using mortar suited to host material.										
	ii. Re-bedding of copings using pins, anchors or cramps if necessary for reasons of structural stability and safety.										
3	Repair or replacement of lost, damaged, or defective masonry elements i. Repair or replacement of lost, damaged or defective elements, including retaining walls, approach or wing walls, parapets and piers, in accordance with original or existing materials. May include partial replacement of stone by cutting-in and the use of pins, ties or cramps if necessary for structural										

	stability and safety.									
	ii. Rebuilding or re-facing defective masonry walls, including the use of pins, ties or cramps if necessary for reasons of structural stability and safety.									
	iii. Filling of cracks or localised re-setting of adjacent masonry.									
4	Pinning and anchoring of masonry or metal elements	i. Stabilising masonry or metal elements using appropriate proprietary systems together with pins, anchors and ties of metal or fibre reinforced polymer if necessary.								
5	Repair or replacement of lost, damaged or defective elements in iron or steel	i. Repair or replacement of lost, damaged or defective elements including welding, stitching, straps, bolts, plates and rivets in accordance with original or existing materials, including the retention or replacement of square-headed bolts, where present.								
6	Repair or replacement of lost, damaged or defective timber elements	i. Repair or replacement of lost, damaged or defective timber elements in accordance with original or existing materials, design details/workmanship, and re-using existing or original timber or iron components where practicable.								

		ii. Repair or re-laying in situ of traditional and historic material including stone copings, setts, cobbles or historic pavers.									
11	Fencing and handrail repair and renewal	i. Repair and renewal of existing fences, handrails and parapet rails in timber, steel, wrought or cast iron.									
12	Repairs to concrete	i. Repairs utilising proprietary concrete repair products.									
13	Vegetation removal	i. Removal of potentially damaging flora, including shrubs, trees and heavy or overhanging vegetation on or around historic structures to prevent damage; or as an investigatory measure; or to facilitate repairs.									
		ii. Removal of roots or woody growth involving minor dismantling of masonry or other elements provided it is then re-instated/re-bedded with localised repair.									
14	Operational signage	i. Installation, reinstatement or replacement of signage for the identification of historic structures or to highlight navigational or operational risks for the safety of users.									
15	Fender replacement	i. Replacement of fenders or kerbs on approach or wing walls in timber, iron, rubber or plastic, as appropriate to match the prevailing design and details on the same section of waterway, and									

	including extending into the waterway if necessary.									
16	Lock gate quoin and liner replacement i. Replacement of gate quoins and liners in timber, cast iron or steel, as appropriate to match prevailing design and details on the same section of waterway.									
17	Gate anchor and fittings replacement i. Replacement of gate anchors and fittings in appropriate materials to match original or existing design and details on the same section of the waterway.									
18	i. Replacement of partially or completely defective lock floor or cill timbers on a cyclical basis or in response to damage.									
	ii. Stabilisation of damaged or defective cill aprons using concrete.									
19	Lock gate replacement and refurbishment i. Replacement of lock gates when no longer serviceable or when damaged beyond repair, including the replacement of fittings and balance beams, and when necessary, replacement of gate and/or ground paddle gearing and parts.									

B. Alterations		Aqueduct	Bridge	Crane	Lock	Boundary or Distance Marker	Milepost	Tunnel or Horse Tunnel	Waterway Wall	Weir	Sluice
1	<p>Structural Stabilisation Note: ground disturbance is only in scope where no other heritage constraints (eg scheduling) exist.</p> <p>i. Structural stabilisation of walls and retaining walls when necessary, using below ground concrete backing, underpinning and piling behind walls and including use of ground anchors, tiebars and soil nails.</p>										
2	<p>Grouting</p> <p>i. Grouting of weak or permeable fill behind, within, or under an historic structure to fill voids or reduce permeability, with grout types appropriate for geotechnical applications which may include lime, cements, bentonite and polymers.</p>										
3	<p>Scour protection</p> <p>i. Introduction of scour protection to waterway approaches, training walls and submerged foundations, in the form of masonry, clay puddle, piling, concrete, bag-work of concrete, sand, or clay, graded stone rip-rap, pre-cast open cellular blocks, geotextiles, or geomembranes.</p>										

4	Alteration or installation of stop plank grooves	i. Alteration or installation of stop plank grooves, including lining where necessary with steel channels to prevent damage to masonry.										
5	New surfacing	i. Installation or replacement of quadrants for operation of lock gates.										
		ii. New surfacing, involving some removal of existing defective/unsafe material, to ramps, aprons, tail-wells, approaches and other working areas in materials appropriate to the same section of waterway.										
		iii. Resurfacing, including addition of waterproof layer(s) to fixed bridges.										
6	Alteration and replacement of lock gates	i. Replacement of inappropriate modern gates (steel or composite timber/steel) with traditional timber gates.										
		ii. Installation of pull bar on beam end, anti-slip on walkways/balance beam, gate fenders and handrails if necessary in the interests of safety.										
		iii. Introduction of deflectors or baffles to paddle outlets to prevent boats flooding.										

		iv. Use of steel L and T plates on gates to strengthen joints.							
7	Replacement of paddle gearing equipment on locks and sluices	i. Replacement of worn components such as pawls and spindles and minor safety modifications on gate and ground paddles.							
		ii. Replacement of inappropriate late 20th century gearing with manual traditional gearing.							
		iii. Replacement of defective or unusable paddles and paddle frames on locks with polymer composites, but not including associated significant masonry alterations.							
8	Replacement and installation of bollards and other fixtures	i. Installation and replacement of bollards and other fixtures essential to working boats with ropes, with bollards fixed behind coping wherever possible and redundant historic fixtures, such as starting pins, preserved in situ.							
9	Safety ladders (installation, replacement and modification)	i. Replacement or modification of late 20th century safety ladders and hoops, avoiding drilling and fixing into stone copings.							
		ii. Minor extension of an existing ladder recess to ensure the minimum clearance necessary for safe use.							

10	Strengthening of load capacity on bridges	i. Construction of reinforced concrete saddle with liner between concrete and existing masonry.											
		ii. Introduction of a new arch below existing soffit, plate bonding, or raising of parapets.											
11	Navigation aids / width restriction	i. Restricting channel width or protecting masonry from boat impacts and abrasions using fenders.											
12	Alteration to existing mechanical and electrical services	i. Alteration or improvement of attached existing equipment but excluding the installation of new equipment where none was previously present.											
		ii. Removal, replacement, re-attachment of services, such as pipes and cables.											
13	Alterations to culverts, weirs and sluices	i. Introduction or alteration of grilles to lock culverts, weirs and sluices as required in the interests of water management and safety.											
14	Repair or replacement of boundary posts, distance markers or mileposts	i. Repair or replacement of missing or defective boundary posts, distance markers or mileposts historically associated with the functioning of a waterway.											
15	Restoration	i. Major rebuilding or reconstruction of listed structures or parts of structures to return them to an earlier state.											

16 Demolition	i. Demolition or partial demolition of listed structures.										
17 Removal of structures or assets	i. Removal or storage of listed structures or heritage assets.										

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**PROCESS FOR WORKS COVERED BY
NATIONAL LISTED BUILDING CONSENT ORDER**

