

# Rolfe Judd

Planning

On behalf of Rolfe Judd Planning Limited

# Hammersmith Bridge Ferry

Site Address

Circular Economy Statement

RJP: P08106

11<sup>th</sup> June 2021

---

# Contents

1.0	Introduction	1
1.2	Background	1
2.0	The Scheme	3
2.1	Summary	3
3.0	What is a Circular Economy?	5
3.1	Summary	5
3.2	Policy	5
4.0	Proposed Development	8
4.1	Construction of the Temporary Bridge	8
4.2	Construction Waste	8
4.3	Reinstatement	9
5.0	Circular Economy commitments	10

# 1.0 Introduction

- 1.1.1 This Circular Economy Statement has been prepared by Rolfe Judd Planning, on behalf of Transport for London (TfL), in support of full planning applications for a two temporary river piers providing a ferry service for pedestrians and cyclists enabling them to cross the River Thames between Hammersmith and Barnes.
- 1.1.2 The proposed temporary piers will lie to the east of the Grade II\* listed Hammersmith Bridge which is closed to all traffic.
- 1.1.3 The Application proposes a new temporary river ferry service connecting Queen Caroline Street in the London Borough of Hammersmith and Fulham and the Land to the north east of Riverview Gardens and East of Hammersmith Bridge in the London Borough Richmond (“application sites”) through the construction of two new piers. Alongside the proposed piers the application scheme includes new temporary landscaping, public realm and pedestrian walkways.
- 1.1.4 The application sites on both sides of the River Thames have been identified due to their high levels of accessibility and proximity to the existing bridge. The proposed piers and associated brow and temporary in nature and are designed to reduce any impact on the surrounding area during their construction, operation and dismantling.

## 1.2 Background to the Scheme

- 1.2.1 Hammersmith Bridge was closed to road traffic indefinitely in April 2019, as it was found to have critical faults which required an immediate reduction in its live loading to prevent a catastrophic collapse.
- 1.2.2 Hammersmith Bridge provides a major link between Richmond and Hammersmith and beyond. For people living south of the River Thames it provides access to London Underground services at Hammersmith station. Until its closure, four bus routes provided regular services across the bridge. Alternative crossing points are a significant distance away with Chiswick and Putney Bridges both being approximately 4km to the west and east respectively.
- 1.2.3 Until 2020, Hammersmith Bridge remained open for pedestrians and cyclists and the numbers had significantly increased with the termination of bus routes either end of the bridge. The hot weather in August 2020 caused a deterioration to key parts of the suspension structure and an increased risk to public safety and the bridge had to be closed to pedestrians and river traffic passing underneath.
- 1.2.4 The objectives for this project are:
- to enable pedestrians and cyclists to be able to cross the River Thames safely during the restoration of the Hammersmith Bridge;

- to maintain connectivity across the River Thames in the vicinity of Hammersmith Bridge to allow uninterrupted crossing for pedestrians and cyclists until the restoration of the Hammersmith Bridge is complete; and
- to facilitate the efficient delivery of the restoration of Hammersmith Bridge.

1.2.5 It should be noted that TfL was previously in the process of preparing planning applications for a temporary pedestrian and cyclist bridge at this location in 2020. In late 2020, however, the Department for Transport's Hammersmith Bridge Taskforce determined that a temporary ferry service would be the best means of restoring a river crossing for pedestrians and cyclists at this location in the short term. TfL's plans for a temporary bridge were therefore put on hold. The plans had reached an advanced stage and so a significant amount of that work associated with the temporary bridge has been used to inform this application.

## 2.0 The Scheme

### 2.1 Summary

- 2.1.1 The two piers are formed of similar structures which seek to respond to the immediate surroundings and their interaction with the respective land site environments.
- 2.1.2 A brief summary of the proposed schemes is provided below. For additional detail please refer to the Design and Access Statement prepared by Beckett Rankine enclosed with this application.

#### Hammersmith and Fulham

- 2.1.3 The proposed Hammersmith Pier is to land on the slipway located at the end of Queen Caroline Street. The slipway is seldom used and is closed off with timber flood boards. Access to the pier is to be via a lightweight steel ramp which will span over the flood boards.
- 2.1.4 A 125m long modular floating walkway (using units by EZ Dock) will span between the flood defence wall and a second-hand barge, modified for use as a pier. The walkway will be restrained by 12 tubular piles of up to 0.5m diameter. The required piling is to be minimised to avoid major impacts and disturbance of the river environment.
- 2.1.5 The barge will be restrained by a pair of spud legs – these have been selected given their temporary nature and lesser impact when compared to piles. The pier is skewed downstream to facilitate passage of large vessels beneath Hammersmith bridge (the bridge is open for occasional navigation when no works are in progress on the bridge).

#### Richmond

- 2.1.6 The proposed Barnes Pier is formed from the old Savoy pier, itself a temporary structure, which will be repurposed for this development. The pontoon will be modified such that is restrained by a pair of spud legs rather than its current radial arms to minimise impact on the foreshore.
- 2.1.7 Access to the pier is by a 35m aluminium linkspan, with clear width 2.4m, connecting to the landside tow path.
- 2.1.8 The towpath is located beneath flood defence level and floods on large tides. As part of the works, a 45m lightweight steel frame walkway will be installed to allow dry access to the pier., the clear width of this structure will be a minimum of 2.5m to suit segregated pedestrian and cycle traffic.
- 2.1.9 The majority of the two piers are made from second-hand material thus drastically reducing the carbon footprint of the scheme. The shorter design life of the piers allows for further value engineering to be undertaken on the amount of structural material required. The majority of the infrastructure for the temporary piers will be repurposed upon decommissioning of the temporary ferry service.
- 2.1.10 The vessels to be used are Class V passenger vessels and are 62-seater catamarans with twin glass fibre-reinforced plastic hulls and aluminium superstructure. The vessels are propelled by two water jets powered by diesel engines. These vessels are part of the existing Thames Clippers fleet. They will undergo minor

modifications to the stern boarding points to allow cyclists to board the ferry with their bikes. The boats have been reused from existing fleet operations and thus substantially save on carbon emissions of use of materials as they will not be constructed new.

## 3.0 What is a Circular Economy?

### 3.1 Summary

- 3.1.1 It has long been known that with a growing world population our environment is being affected. To ensure that there is enough food, water and an acceptable standard of living for all, the need to switch from a linear economy model to a circular economy has been identified. The current model of behaviour is unsustainable and failure to adjust to a more sustainable way of life could have catastrophic consequences.
- 3.1.2 The circular economy is based on the principle of reduce, reuse and recycle. It seeks to maintain the value of a product for much longer by reusing, repurposing or recycling, so the original product becomes the basis of new products. The circular economy encourages buildings and structures to be designed for adaptability and repurposing.
- 3.1.3 This statement will set out how this proposal to construct new temporary piers associated with a ferry service across the River Thames between Hammersmith and Barnes, complies with the emerging Circular Economy Policy.

### 3.2 Policy

- 3.2.1 The Mayor has set out his vision of London transitioning to a circular economy in his *Environment Strategy* and the *London Plan*. As part of achieving his vision for good growth, the Mayor's *London Plan* includes measures to help London transition to a circular economy model.

#### London Environment Strategy, May 2018

- 3.2.2 The London Environment Strategy sets out overarching aims of achieving a Circular Economy. Chapter 10 specifically considers the 'Transition to a low carbon circular economy'. It sets out that a low carbon circular economy is needed to help create a framework to protect the planet, tackle climate change, end poverty, and reduce inequality. The transition to a low carbon circular economy will create both opportunities and challenges for businesses. The Mayor will play a key role in creating, enabling and benefitting the transition to the circular economy.
- 3.2.3 Objective 10.1 of the Environment Strategy is to 'Enable the transition to a low carbon circular economy'. This objective is defined through policies 10.1.1 and 10.1.2 which focus on how to build on London's strengths and 'grow the low carbon and environmental goods and services sector' and 'enable London's businesses, academia and citizens to actively compete in and contribute to the low carbon circular economy'.
- 3.2.4 Of particular relevance to the built environment, the Environment Strategy's circular approach to the use of resources is encouraged, ensuring that materials stay in use as long as possible, the amount of virgin materials required is reduced and recycling maximised.

#### London Plan, 2021

- 3.2.5 The London Plan builds on the London Environment Strategy. The key policy is S17 'Reducing Waste and supporting the circular economy'.
- 3.2.6 Para 3.1.10 sets out that to minimise the use of new materials, the following circular economy principles should be taken into account at the start of the design process:
- building in layers - ensuring that different parts of the building are accessible and can be maintained and replaced where necessary
  - designing out waste - ensuring that waste reduction is planned in from project inception to completion, including consideration of standardised components, modular build and re-use of secondary products and materials
  - designing for adaptability
  - designing for disassembly
  - using materials that can be re-used and recycled.
- 3.2.7 Part A of Policy S17 considers waste reduction, increases in material reuse and recycling and reductions in waste going for disposal. This policy seeks to:
- promote a more circular economy that improves resource efficiency and innovation to keep products and materials at their highest use for as long as possible;
  - encourage waste minimisation and waste avoidance through the reuse of materials and using fewer resources in the production and distribution of products;
  - ensure that there is zero biodegradable or recyclable waste to landfill by 2026;
  - meet or exceed the recycling targets for each of the following waste streams and generating low-carbon energy in London from suitable remaining waste:
    - municipal waste – 65 per cent by 2030
  - construction, and demolition and excavation waste – 95 per cent by 2020 designing developments with adequate and easily accessible storage space that supports the separate collection of dry recyclables (at least card, paper, mixed plastics, metals, glass) and food.
- 3.2.8 Part B of Policy S17 sets out that Circular Economy Statements should demonstrate:
- How the materials arising from demolition and remediation works will be reused and / or recycled
  - How the proposal's design and construction will enable building materials components and products to be disassembled and reused at the end of their useful life

- Opportunities for managing as much waste as possible on site
- Adequate and easily accessible storage space to support recycling and reuse
- How much waste the proposal is expected to generate and how and where the waste will be handled.

'Design for a Circular Economy' Primer

3.2.9 The Mayor of London has published a Primer entitled 'Design for a Circular Economy'. This provides an outline of the technical guidance that will be produced to support Policy S17.

## 4.0 Proposed Development

### 4.1 Construction of the New Temporary Piers

- 4.1.1 The Hammersmith floating walkway piles will be transported via the river and will be vibrated into the ground using an excavator and floating barges. Once the piles are installed, the floating walkway units will be delivered to site via Queen Caroline Street and lifted onto the slipway using a Hiab crane or similar temporarily located on the Thames Path. The units of the walkway are then joined together in the river.
- 4.1.2 The Hammersmith pontoon will be transported to the site via the river, manoeuvred into position and then restrained by vibrating the spud legs into the riverbed using a jack-up barge.
- 4.1.3 Similarly, the Barnes pontoon will be transported to the site and restrained by two spud legs. Access to the Barnes Pier will be via a 35m aluminium brow. This will also be delivered to site via the river and lifted into place, supported by a concrete bankseat installed on the Thames Path, with the other end supported by the pontoon.
- 4.1.4 As previously mentioned, both pontoons are existing structures. They are undergoing required modifications such that they are fit for a passenger ferry service of this nature. The Barnes pontoon is being modified to accommodate the new brow and also being extended to increase the trafficable area on the pier. The Hammersmith pontoon requires very little structural modifications. Both pontoons will be fitted out with standard ferry pier equipment such as lighting, handrailing, shelter, boarding gates, life buoys and safety ladders.
- 4.1.5 The modular design of each pier means that all elements are prefabricated off site and then are simply delivered to site and assembled/installed requiring minimal site works.
- 4.1.6 The use of modular components encourages waste minimisation and waste avoidance through the reuse of materials and using fewer resources in the production and distribution of products as encouraged by S17 in the London Plan.
- 4.1.7 When the ferry service is decommissioned, these pontoons and the brow will be used for similar temporary services in East London where there are minimal river crossings. The floating walkway pontoons will be kept and used for temporary access situations in emergencies or construction sites.

### 4.2 Construction Waste

- 4.2.1 There will be very waste material arising from the site due to the efficient construction technique of factory construction of the various components and off-site fabrication. Some waste material will arise from preparing the site for the installation of the piles however this will be minimal given the number and diameter of piles required. There may also be waste material following the decommissioning of the piers however it is envisaged the piers will be used elsewhere and waste will also in-turn be kept to a minimum.

## 4.3 Service

- 4.3.1 As the boats are already existing the major carbon and material impact has already been mitigated. The boats will operate at relatively low speed as this will be highly fuel efficient not needing to operate at high RPM's. In addition to safeguard the environment and reduce waste the ferry service will undertake the following.

### General waste:

- 4.3.2 The companies Garbage Management Plan details the responsibilities, procedures and implementation of the company's arrangements for handling garbage TCOP 33. The vessels will comply with the regulatory requirements under Marpol 73/78 regulations and PLA local byelaws which amongst other things requires that all garbage landed ashore will be separated by type placed only in approved shore-side receptacles. Amounts will be logged on board and receipted by volume. No waste matter is to be thrown overboard.

### Waste Oil and Black bilge water:

- 4.3.3 All waste oil or black bilge water will be removed and stored in the approved shore-side tank. This will then be collected by a waterborne mobile approved contractor for recycling. The onboard oil record book will be signed by the duty engineer; this record is then collected or sent to the engineering office for archiving of records.

### Fuel

- 4.3.4 All fuel oil will be delivered by an approved waterborne supplier using a mobile fuel barge, during bunkering operations the companies approved bunkering procedures will be followed along with the completion of a bunker record sheet. Drips, spills and any pollution are to be promptly treated using the fuel spill kits that are contained in the yellow mobile spill kit bins kept on both north and south-side piers. The loading of fuel is to be carried out with the utmost care on all occasions it takes place and it is never to be seen as routine despite the frequency with which it takes place.

## 4.4 Reinstatement

- 4.4.1 The erection of the Temporary Piers will have a localised impact on its location by virtue of establishing a landing area for the piers each side of the river. In recognition of this the planning application is accompanied by a Landscaping Reinstatement Strategy (within the External Design and Landscape Document).
- 4.4.2 This sets out the principles to be considered in the design of the reinstatement scheme following the decommissioning of the piers including the aspiration to improve the biodiversity of the site. Reinstating the site following the removal of the piers is an important consideration of this project. The idea is to minimise the impact on the environment both by reuse of the structure and improving the local area.

## 5.0 Circular Economy commitments

5.1.1 This project is committed to limiting the impact of the project on the environment. It will do this by:

- Constructing the new piers out of reusable steel components that can be taken apart, stored and reused in other projects following the decommissioning of the piers;
- Recycling of any smaller steel components that cannot be reused;
- Landscaping following the removal of the piers strategy to reinstate and potentially improve the area; and
- Aiming for biodiversity net gain following the removal of the bridge and completed landscaping.



## **Rolfe Judd**

Old Church Court,  
Claylands Road,  
London, SW8 1NZ  
T +44 (0)20 7556 1500

[www.rolfe-judd.co.uk](http://www.rolfe-judd.co.uk)