

Tunnels and Arches Improvement Strategy

Executive Summary

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spacia
Flexible business space



Executive Summary

1. Introduction

Colin Buchanan & Partners (CBP) in association with Robert Skene Consulting Ltd were commissioned by Spacia and the Pool of London Partnership (PLP), in August 2003, to develop a strategy for improving the tunnels and arches under the railway viaduct between London Bridge and Abbey Street in the South Pool of London, SE1 area.

The aim of the strategy is to improve and enhance the environment surrounding the tunnels & arches for both local businesses and residents and to encourage pedestrian movement around the area.

The main objectives of the study were:

- To audit the tunnel network to compile baseline information;
- To establish maintenance regimes, areas of responsibility and key improvements;
- Appraisal of existing business usage and the impact of their activity upon the environment and the public realm;
- Identification of minimum standards, necessary improvements and realistic maintenance regimes;
- Identify under utilised areas, potential uses and potential road closures;
- Development of an improvement strategy covering areas of structural engineering issues, public realm, traffic usage and business and community needs; and
- Following this a prioritised costed list identifying the areas requiring capital investment.

The study was conducted in close liaison with the local businesses, residents and the steering group as well as with the 'Light at the End of the Tunnel' project officer to ensure that priorities of the PLP commission were closely linked to the strategic study.

2. Study Context

The study area is set within a key strategic location driven by specific policy guidance, including the London Mayor's Spatial Development Strategy and London Borough of Southwark's Unitary Development Plan (UDP), which aim to ensure the continuous economic development of the area and environmental, infrastructure and accessibility improvements over time. This wide ranging regeneration activity is set to determine and shape the future activity within the tunnels and arches between London Bridge and Tower Bridge.



3. Framework for Design

Railway viaducts and embankments often form a barrier in an urban environment. In the past 150 years the viaduct between London Bridge Station and Greenwich has increased in size enormously restricting pedestrian movement and impairing the quality of the public realm in the area. While the study focuses on the 16 road tunnels and arches under the railway viaduct, a long term solution for wider renewal is the maximum integration of the viaduct into its urban surroundings.

The overall vision for the tunnel and arches is to provide an attractive and enjoyable place for visitors, residents and workers and provide opportunities for economic development in the area.

The design framework for the tunnels & arches is based on five principal elements that are considered to constitute 'good design'. These include functionality, impact, build standard, sustainability and safety & accessibility. The framework responds to these principles by aiming to utilise the arches as vibrant spaces for businesses and communities and connect them to the surrounding public realm by high quality design for the build structures as well as the surrounding streets and roads to enhance the permeability and safety of the area.

4. Key Improvement Themes

The principle elements of the improvement themes encompass the following areas:

Arches

- Businesses & Business activity

Tunnels

- Structural improvements
- Lighting strategy
- Traffic & movement
- Architecture

Environment

- Signage
- Cleaning & Tidying
- Street clutter
- Maintenance and enforcement
- Public realm
- Public art



Improvement Areas

Business Arches

The arches are home to a range of business uses and activity from storage units, leisure and museum space, workshop and industrial space, retail and office use, and a large percentage of vacant space. Many of the arches are large cavernous spaces which to some extent restricts their use.

A postal survey was conducted of the 93 businesses occupying the arches. Only 18 tenants responded to the survey. The findings from these responses show that 35% of respondents to the business survey have resided in the arches for between three and seven years, 35% less than three years and 30% had occupied their premises for more than seven years. Of these businesses, 46% employ between four and seven staff, 31% between eight and 12. The majority of the respondents are micro businesses.

The survey identified a diverse range of problems with the surrounding environment which included poor signage, inadequate customer parking, loading and unloading problems, although the respondents were generally happy with their business premises.

Key recommendations:

- Establish a tenants forum to feed back to the Landlord and Local authority;
- The commission of an annual survey of business tenants to understand key concerns and to assist in improving the quality of the environment;
- Setting of baseline indicators to measure improvement in services;
- Marketing and promotion of regeneration activity and business support services;
- Integration of existing arch activity in to new developments



Future Potential

The arches are located close to London Bridge which is a major commuter gateway and is currently experiencing major redevelopment activity. 75% of the businesses predicted that their business will grow over the next three years. The intensification of commercial development at London Bridge toward greater office, commercial and leisure uses such as retail and cafes will no doubt impact on the industrial activity within the area if property rental values continue to rise. The tunnels and arches have the potential to accommodate a range of business activity and growth and because of their flexible lease arrangements are suitable for small to medium enterprises (SMEs).

Key Recommendations:

- Relocation of tenants to form 'clusters' such as of retail and cultural activity, office space, light industrial uses;
- Discussion with major service providers such as the health service and major supermarkets to consider the potential for the arches to provide services for the local community and expanding work population;
- Targeted maintenance regimes and greater parking controls to enhance the environment.

Premises Design and Innovation

A number of the arch units have been refurbished into a common house style. Spacia have a strong brand image to distinguish them from their competitors and the principles of design they utilise are deemed to be innovative by the consultant team, (a copy of the Guiding Principles of Arch Design- Spacia can be found in the appendix 3).

Key Recommendations:

- Encourage a 'sense of ownership' of the area by the tenants through themed identity, such as colour, extended to bridge structures and tunnels;
- Innovative use of materials, lighting and artwork, but in sympathy with the surrounding architectural features.

Tunnels

A number of elements contribute to the structural quality of the bridges and tunnels. Due to the nature of construction some defects are consistent throughout the stretch of bridges.

Structural Integrity

The bridge structures appear to be in sound condition and free from major defects with only one severe problem of a transverse crack at Gedling Place. Throughout the stretch of bridges there is water leakage into pedestrian areas and ponding on pavements. Many of the bridges sport gutters and downpipes which are damaged, although the damage is not great and have only failed due to lack of routine maintenance. The brickwork of the tunnel structures is affected by environmental factors such as pollution, graffiti and aggressive cleaning techniques

Key Recommendations:

- Immediate action at Gedling Place
- Remedial measures to address issues of water leakage;
- Effective cleaning of brickwork and application of suitable prevention measures to protect brickwork from graffiti and damage.

Lighting

The overall quality of lighting is variable and the level of illumination varies from good to unacceptably poor at night time. Many of the lighting systems have been targeted at vehicular traffic and there is a need for enhanced lighting to improve safety in the majority of tunnels which must be applied in conjunction with the recommendations of lighting specialists. Lighting should be practical in terms of ease of access to replace units but at the same time should not compromise good design.

Key Recommendations:

- The need to ensure a regular maintenance and cleansing routine is essential; and
- Specialist advice to be sought in conjunction with key partners such as TfL & LB Southwark to ensure conformity.

Traffic & movement

A number of the tunnels in the study form part of the key traffic routes from the south of the City of London to the North. These routes accommodate large numbers of pedestrian, vehicular and cyclist activity and require reconfiguration of existing traffic arrangements. Recommendations have been made in conjunction with the wider study of the St. Olave's Estate Environs Study.



Architecture

There are a number of attractive architectural features on the Up side of the viaduct in the vicinity of London Bridge. Alongside this there are also a number of listed bridge structures.

Key Recommendations:

- Enhance and upgrade the architectural features; and
- Consider reinstating original retail uses

Environment

The public realm and environment surrounding the tunnels and arches requires a degree of upgrade. This may be through a number of measures including an improved management and maintenance regime and the use of public art. The following areas were identified as areas of concern:

Street Cleaning

The level of street cleaning is relatively good with only small quantities of litter observed. Of greater concern is the level of litter and refuse that obstructs pavements as a result of tenant activity.

Concealed recesses, service entrances and gates

There are a number of concealed entrances and recesses that pose a perceived threat to personal safety and which also attract litter and pests. These areas may provide fire exits for the businesses but a number are unnecessary.

Pest Infestation

Pigeon infestation is evident at a number of bridges and may be the result of available food sources, such as at Skivers Snack Kiosk. Pigeon netting has been applied in a number of areas but regular maintenance activity is required to ensure that these measures continue to be successful.

Flyposting & graffiti

There is evidence of attack in areas of heavy usage such as at Borough High Street, but it is evident that there is an aggressive campaign of cleansing to remove fly-posting on bridges.

Signage & Street Clutter

There are a number of different types of signage including traffic signs, advertisements, informative signs and business signage which add to a cluttered public realm in many places in the study area.

Public Art

At present there is very little artistic input to the tunnel and arch structures. This can be used advantageously and can also engage local communities in the design, which may create a greater sense of ownership of the area.

Key Recommendations:

- There is a need for an ongoing management and maintenance regime to continue to address issues of street cleansing, management and maintenance;
- Upgrade of concealed entrances and service gates to improve security and personal safety;
- Monitoring of pigeon activity and utilisation of measures to address the problem such as installation and maintenance of pigeon netting and reduction of food sources.
- Regular cycles of inspection and removal of graffiti and flyposting;
- Integration of signage into the environment and co-ordination of design with the exterior of the arches;
- Removal of redundant street clutter; and
- Creation of a common theme for public art.

5. Programme of Activity

A series of actions is required to enhance the study area. A number of agencies, such as Spacia, Transport for London, London Borough of Southwark, PLP in conjunction with Network Rail and Cross River Partnership are working together to improve the structural integrity, the environment, traffic conditions and the public realm of the wider area surrounding the tunnels & arches.

The study sets out a recommended programme of activity at a number of levels: an overall area wide level; at a business arch level; and at an individual tunnel level.

Overall Area Strategy

A series of recommendations have been made across the following areas:

- Structural integrity;
- Lighting;
- Environmental enhancement;
- Traffic reconfiguration;
- Site development;
- Timing & integration with London Bridge redevelopment;
- Boundary treatments;
- Open space improvement projects;
- Key public art projects

Business Arch Strategy

A series of recommendations for improvements to enhance the business environment and protect the business space including:

- Encouraging cultural and retail uses;
- Small business units;
- Lighting;
- Refuse collection;
- Letting policy;
- Types and impacts of tenancies

Specific Actions for Each Tunnel

This section provides a review of the individual tunnels and the measures required to improve the tunnels, their environment and the public realm. Detailed audit proformas can be found in the appendix and are also held on a database.

6. Prioritised Work Programme

The prioritisation schedule is driven by the overall priorities and implementation plans of PLP. The core objectives mirror that found in the Public Spaces Framework Strategy, those being:

“to encompass issues related to traffic management, pedestrian safety, and security, streetscape improvement, parking, play provision, community facilities and green spaces. They identify important links and destinations which can bind the urban fabric”

In addition the priorities of Spacia who aim to:

“maximise the potential of buildings and believe that brownfield regeneration is vital to the health of both local and national economies”

Alongside these objectives the strategic study, ‘Light at the End of the Tunnel’ and their implementation strategy, the major developments surrounding London Bridge and the opportunities presented within the London Bridge area as a result of its designation as an ‘Opportunity Area’ have all informed the prioritisation exercise.

The study team are not aware of any new legal or statutory requirements that will affect the 16 bridge and tunnel structures however maintaining structures in a safe condition and elimination of health and safety hazards is a requirement of law and therefore mandatory.



Business Priorities

A series of short, medium and long term recommendations have been identified and are summarised as follows:

- **Short term:** Meeting the needs of business tenants
- **Medium term:** Improvements to surrounding area
- **Long term:** Encouraging policies to promote the use of arches and to encourage vitality

Priority Ranking

The following priority ranking is categorised by high, medium and low priority activity and has been analysed in conjunction with the priorities of a number of agencies and schedules of work.

High Priority

- Bermondsey Street
- Joiner Street
- Whites Grounds/ Crucifix Lane/ Brunswick Court/ Barnham Street complex

Medium Priority

- Tower Bridge Road
- Roper Lane
- Borough High Street
- Tanner Street
- Shand Street
- Millstream Road

Low Priority

- Abbey Street
- Weston Street
- Stainer Street
- Gedling Place



7. Management and Maintenance

The maintenance responsibility is currently split between a number of parties with each being responsible for a different facet of maintenance. In places the split responsibility seems to cause confusion as there is no clear outline of organisational responsibility. This is a generally acknowledged area of difficulty:

“There is a confusing division of responsibilities between different Local Authorities and different departments leading to lack of coherent design and management ethos”

‘Paving the Way’ CABE 2002

Scheduling of work is driven by a range of factors including safety issues, funding cycles and the need for crucial services works which have to be balanced with the need to keep the tunnels, roads and transport network running efficiently. Maintenance is seen as a priority project for investment to ensure that capital works conducted in the refurbishment programme are maintained effectively and efficiently.

Responsibilities

Network Rail are responsible for above ground tunnel structures and their maintenance including structural and routine maintenance. London Borough of Southwark is responsible for environmental maintenance and are responsible for all roads including the TLRN network. The council already has an active programme of street cleansing, with scheduling of cleansing based on the type of road and its role in the road network . LB Southwark are also responsible for lighting but with financial assistance from the Council, TfL and Cross River Partnership in the overall programme of refurbishment through ‘Light at the end of the Tunnel’. Spacia are responsible for the business arch space and tenancies, although the activity of tenants, such as parking and refuse is the responsibility of LB Southwark.



The way forward

The study sets out a series of recommendations across the area of management and maintenance and suggests alternative measures, such as the formation of a Development Trust or a Business Improvement District.

This alternative approach may include the establishment of an independent trust or management organization to be responsible for street improvements and upgrade. This idea is supported by the 'Light at the End of the Tunnel' strategy. The operation of Business Improvement Districts (BID) would allow the local businesses to vote on which additional services they wish to pay for to improve their operating environment and would contribute to the effective maintenance of the area.

Working in partnership is essential to identify and dedicate responsibility to key partners for the development of an effective management and maintenance regime. The current maintenance regime needs to be revised to correct any shortcomings and ensure the long-term effectiveness of the maintenance strategy. If an entirely new regime needs to be considered it should be backed up with a thorough business plan