



## Streets and Walkways Sub (Planning and Transportation) Committee

**Date:** TUESDAY, 27 SEPTEMBER 2016

**Time:** 1.45 pm

**Venue:** COMMITTEE ROOMS, 2ND FLOOR, WEST WING, GUILDHALL

**Members:** Christopher Hayward (Chairman) Alderman Alison Gowman (Ex-Officio Member)  
Graham Packham (Deputy Chairman) Deputy Brian Harris  
Randall Anderson Gregory Jones QC  
Deputy John Barker (Ex-Officio Member) Deputy Alastair Moss  
Emma Edhem Jeremy Simons (Ex-Officio Member)  
Marianne Fredericks Tom Sleigh

**Enquiries:** Amanda Thompson  
tel. no.: 020 7332 3414  
amanda.thompson@cityoflondon.gov.uk

Lunch will be served in Guildhall Club at 12.30PM  
**NB: Part of this meeting could be the subject of audio or video recording**

**John Barradell**  
Town Clerk and Chief Executive

# AGENDA

## Part 1 - Public Agenda

1. **APOLOGIES FOR ABSENCE**
2. **MEMBERS' DECLARATIONS UNDER THE CODE OF CONDUCT IN RESPECT OF ITEMS ON THE AGENDA**
3. **MINUTES**  
To agree the public minutes and summary of the meeting held on 25 July 2016.  

**For Decision**  
(Pages 1 - 12)
4. **OUTSTANDING REFERENCES**  
Report of the Town Clerk.  

**For Information**  
(Pages 13 - 18)
5. **REPORTS OF THE DIRECTOR OF THE BUILT ENVIRONMENT :-**
  - a) London Wall Place Section S278 Highway and Public Realm Improvements  
(Pages 19 - 38)  

**For Decision**
  - b) City Public Realm Projects Consolidated Outcome Report - Gateway 7 (Pages 39 - 64)  

**For Decision**
  - c) Ludgate Hill crossing (30 Old Bailey) (Pages 65 - 76)  

**For Decision**
  - d) Moorgate Strategy (Pages 77 - 84)  

**For Decision**
  - e) Street Lighting Review (Pages 85 - 90)  

**For Decision**
  - f) Bank Junction Experimental Safety Scheme (Pages 91 - 98)  

**For Decision**
  - g) Middlesex Street Area Enhancement Phase 2 (Pages 99 - 112)  

**For Decision**
  - h) Aldgate Highway Changes and Public Realm Enhancement (Pages 113 - 120)  

**For Decision**
  - i) Cultural Hub Look & Feel Strategy (Pages 121 - 134)  

**For Decision**

j) Major Highway Works for 2016/17 (Pages 135 - 162)

**For Information**

6. **TUDOR STREET SAFETY REPORTS**

**For Information**  
(Pages 163 - 206)

7. **QUESTIONS ON MATTERS RELATING TO THE WORK OF THE SUB COMMITTEE**

8. **ANY OTHER BUSINESS THAT THE CHAIRMAN CONSIDERS URGENT**

9. **EXCLUSION OF THE PUBLIC**

MOTION – That under Section 100A(4) of the Local Government Act 1972, the public be excluded from the meeting on the grounds that they involve the likely disclosure of exempt information as defined in Part I of Schedule 12A of the Local Government Act.

**For Decision**

**Part 2 - Non-public Agenda**

10. **CITY WALKWAY BYELAWS**

Report of the Comptroller & City Solicitor

**For Information**  
(Pages 207 - 212)

11. **NON-PUBLIC QUESTIONS ON MATTERS RELATING TO THE WORK OF THE SUB COMMITTEE**

12. **ANY OTHER BUSINESS THAT THE CHAIRMAN CONSIDERS URGENT AND WHICH THE SUB COMMITTEE AGREES SHOULD BE CONSIDERED WHILST THE PUBLIC ARE EXCLUDED**

This page is intentionally left blank

## **STREETS AND WALKWAYS SUB (PLANNING AND TRANSPORTATION) COMMITTEE**

**Monday, 25 July 2016**

Minutes of the meeting of the Streets and Walkways Sub (Planning and Transportation) Committee held at Committee Rooms, 2nd Floor, West Wing, Guildhall on Monday, 25 July 2016 at 11.30 am

### **Present**

#### **Members:**

Christopher Hayward (Chairman)	Marianne Fredericks
Graham Packham (Deputy Chairman)	Alderman Alison Gowman (Ex-Officio Member)
Randall Anderson	Deputy Brian Harris (Deputy Chairman)
Emma Edhem	Jeremy Simons (Ex-Officio Member)

### **In Attendance**

#### **Officers:**

Amanda Thompson	- Town Clerk's Department
Steve Presland	- Department of the Built Environment
Iain Simmons	- Department of the Built Environment
Ian Hughes	- Department of the Built Environment
Alan Rickwood	- City of London Police
Karen McHugh	- Comptroller & City Solicitor's Department
Sam Lee	- Built Environment
Simon Glynn	- Department of the Built Environment

#### **1. APOLOGIES FOR ABSENCE**

Apologies for absence were received from Deputy John Barker, Gregory Jones QC, Deputy Alastair Moss and Tom Sleigh.

#### **2. MEMBERS' DECLARATIONS UNDER THE CODE OF CONDUCT IN RESPECT OF ITEMS ON THE AGENDA**

There were no declarations of interest.

#### **3. MINUTES**

The minutes of the meeting held on 21 June 2016 were agreed as a correct record subject to the following amendments:

#### **Agenda Item 3 – Minutes of the Meeting held on 9 May 2016**

Cycle Super Highway – Tudor Street

The inclusion of the following:

'Marianne Fredericks proposed a motion proposing that immediate steps be taken - including the possible temporary closure of Tudor Street - to make the highway safe. This was not supported although the Sub-Committee felt there was a need for quick and immediate action'.

### **Agenda Item 6 – Questions Relating to the Work of the Sub-Committee**

#### **Newgate Street Closure**

The inclusion of 'Ludgate Circus' to describe the location of the yellow box junction.

#### **Matters Arising**

The Sub-Committee agreed that the independent consultant's safety reports in relation to Tudor Street should be on the agenda for the next meeting.

#### **4. OUTSTANDING REFERENCES**

**RESOLVED** – That the list of outstanding references be noted and updated as appropriate.

#### **20mph Speed Limit**

As requested at the previous meeting the Sub-Committee asked for the update to be circulated as part of the agenda. In addition the City of London Police were, in future, requested to provide a written report to each committee meeting including historic trend data and analysis.

#### **Mayor's Vision for Cycling**

An update in relation to the safety of cyclists using the proposed Quietways along Primrose Street was provided and the Sub-Committee was advised that Bishopsgate was part of the Transport for London Road Network and TfL were proposing to improve the junction as part of the wider Cycle Grid proposals. The proposal included Advance Stop Lines on all approaches and early green start for cyclists. These would provide a better and safer use of the junction. However, as there were no further improvements for cyclists along Bishopsgate or Norton Folgate, eastbound cyclists would be encouraged (with the use of signage or road markings) to proceed straight across the junction and use Spital Square. Spital Square was much quieter and also part of a possible future Quietways route.

#### **Local Byelaws**

The Sub-Committee asked for a report back to the next meeting on the steps that needed to be taken to amend the existing byelaws in relation to the use of wheeled modes of transport on the City walkways.

5. **WARDMOTE**

**RESOLVED** – That the resolutions arising from the Annual Wardmotes of Bishopsgate, Broad Street, Farringdon Without and Portsoken be noted and the responses agreed.

6. **REPORTS OF THE DIRECTOR OF THE BUILT ENVIRONMENT :-**

6.1 **Holborn Circus Area Enhancement - Gateway 7 Outcome Report**

The Sub-Committee considered a report of the Director of the Built Environment which provided the outcomes of the Holborn Circus Area Enhancement Project.

Members commented that this had been an excellent project, brought in below budget and which had made the junction significantly safer, and complimented the risk sharing, information provision, engagement work and accident reduction delivered.

**RESOLVED** – That the final cost of the project and lessons learnt are noted and the project closed.

6.2 **Mitre Square - Phase 2**

The Sub-Committee considered a report of the Director of the Built Environment which presented the proposed design for Phase 2 of the Mitre Square project. This would provide an enhanced public space in Mitre Square, additional seating and improved lighting, while retaining vehicle access to the Sir John Cass Foundation Primary School.

In response to a question concerning the water fountains project, and whether any consideration had been given to installing a fountain at this site, the Sub-Committee was advised that funding for ongoing maintenance was an issue although the possibility of incorporating this into the design plan would be explored.

**RESOLVED** – That the Sub-Committee:

- a) approves the design for Phase 2, as shown in appendix 2 of the report; and
- b) approves the implementation budget for Phase 2 of the works to Mitre Square (£728,998), as set out in section 5 and appendix 3 of this report, fully funded from the Section 106 agreement.

6.3 **Cloth Fair Noise Disturbance**

The Committee received a report of the Director of the Built Environment detailing the options available to mitigate the noise disturbance in Cloth Fair, following two resolutions for which had been received from the Grand Court of

Wardmote in May 2015 and again in 2016. The Chairman advised that the consideration of bollard removal would not be considered as part of this report but would be reviewed separately.

The Committee was advised that officers had made progress to resolve the noise complaints as quickly as possible and a range of highway proposals had been investigated and consulted on and approval was now being sought to proceed with an experimental scheme to reduce or mitigate the noise disturbance.

The Committee was further advised that officers considered that the overnight point road closure (and associated extension of the two-way traffic operation) was the best option to discourage overnight parking or idling, as the closure would make the street a less convenient place to stop.

In response to a question the Director of the Built Environment advised that the overnight point road closure would be enforced by retractable bollards or a gate to physically prevent through access. However as the street was still open, there was no guarantee that this proposal would be fully successful. It was therefore proposed to introduce these measures on an experimental basis and if this was found to be successful, it could then be made permanent.

A Member commented that lawful users of the road would be punished by restricted late access because others were causing a nuisance by idling their engines and legitimate businesses should not suffer as the result of the actions of others.

Members raised a number of questions in relation to enforcement options, the consultation results, traffic flow and survey data, exactly what constituted statutory noise nuisance and the process in relation to the reporting protocol for this particular Wardmote. Officers set out that the road in question was a local access road and therefore was not suitable for rat running traffic. Further that the double yellow lining option might cause difficulties for some residents and guest parking as well as for users of the church. It was further explained that it would be difficult to enforce illegal parking unless there was a constant CEO present.

Arising from the discussion the Sub-Committee considered that the option of installing double yellow lines to prohibit parking required further exploration and consultation.

**RESOLVED** – That the report be deferred for Officer's further alternative recommendations.

## 7. **TUDOR STREET UPDATE**

The Chairman reported that a proposal to alleviate the problems at Tudor Street was currently being explored with the Temples following which there would be an opportunity for all parties to meet again to discuss the issue. The Chairman also stated that TfL are due to commence their experimental Traffic



Order to legitimise the existing arrangements at the New Bridge Street junctions with Tudor Street and Bridewell Place from 5<sup>th</sup> August 2016.

As noted under matters arising at the start of the meeting the safety reports would be brought to the next Sub-Committee meeting in September.

8. **QUESTIONS ON MATTERS RELATING TO THE WORK OF THE SUB COMMITTEE**

Officers were asked to provide responses to the following questions to be added to the list of Outstanding References.

'A ward resident has raised the issue of inconsistent marking of parking on raised carriageways at the last two Castle Baynard ward meetings. On some raised areas the marking is single yellow lines on others it is double. In fact parking on these areas is an offence irrespective of the marking. The resident believes that this amounts to entrapment and I agree. This has been raised at previous S&W meetings and despite assurances that this will be addressed nothing has happened. While recognising that this has been delayed because of staff shortages can officers provide an update and also commit to a time table for addressing this please?'

'Last week a bus broke down on Fleet St in the section containing the long police island. This caused gridlock as traffic behind the bus was unable to proceed by bypassing the vehicle. Can officers investigate and determine by consultation with the CoLP what exactly do these islands accomplish? And more importantly can they be removed or at least shortened so that disruption of this nature does not occur (or is minimised) in the future?'

9. **ANY OTHER BUSINESS THAT THE CHAIRMAN CONSIDERS URGENT**

There were no items of urgent business.

**The meeting ended at 1.40 pm**

-----  
Chairman

**Contact Officer: Amanda Thompson**  
**tel. no.: 020 7332 3414**  
**amanda.thompson@cityoflondon.gov.uk**

This page is intentionally left blank

**STREETS AND WALKWAYS SUB (PLANNING AND TRANSPORTATION)  
COMMITTEE**

**Monday, 25 July 2016**

Minutes of the meeting of the Streets and Walkways Sub (Planning and Transportation) Committee held at Committee Rooms, 2nd Floor, West Wing, Guildhall on Monday, 25 July 2016 at 11.30 am

**Present**

**Members:**

Christopher Hayward (Chairman)	Marianne Fredericks
Graham Packham (Deputy Chairman)	Alderman Alison Gowman (Ex-Officio Member)
Randall Anderson	Deputy Brian Harris (Deputy Chairman)
Emma Edhem	Jeremy Simons (Ex-Officio Member)

**In Attendance**

**Officers:**

Amanda Thompson	- Town Clerk's Department
Steve Presland	- Department of the Built Environment
Iain Simmons	- Department of the Built Environment
Ian Hughes	- Department of the Built Environment
Alan Rickwood	- City of London Police
Karen McHugh	- Comptroller & City Solicitor's Department
Sam Lee	- Built Environment
Simon Glynn	- Department of the Built Environment

**1. APOLOGIES FOR ABSENCE**

Apologies for absence were received from Deputy John Barker, Gregory Jones QC, Deputy Alastair Moss and Tom Sleigh.

**2. MEMBERS' DECLARATIONS UNDER THE CODE OF CONDUCT IN RESPECT OF ITEMS ON THE AGENDA**

There were no declarations of interest.

**3. MINUTES**

The minutes of the meeting held on 21 June 2016 were agreed as a correct record subject to the following amendments:

**Agenda Item 3 – Minutes of the Meeting held on 9 May 2016**

Cycle Super Highway – Tudor Street

The inclusion of the following:

'Marianne Fredericks proposed a motion proposing that immediate steps be taken - including the possible temporary closure of Tudor Street - to make the highway safe. This was not supported although the Sub-Committee felt there was a need for quick and immediate action'.

### **Agenda Item 6 – Questions Relating to the Work of the Sub-Committee**

#### **Newgate Street Closure**

The inclusion of 'Ludgate Circus' to describe the location of the yellow box junction.

#### **Matters Arising**

The Sub-Committee agreed that the independent consultant's safety reports in relation to Tudor Street should be on the agenda for the next meeting.

#### **4. OUTSTANDING REFERENCES**

**RESOLVED** – That the list of outstanding references be noted and updated as appropriate.

#### **20mph Speed Limit**

As requested at the previous meeting the Sub-Committee asked for the update to be circulated as part of the agenda. In addition the City of London Police were, in future, requested to provide a written report to each committee meeting including historic trend data and analysis.

#### **Mayor's Vision for Cycling**

An update in relation to the safety of cyclists using the proposed Quietways along Primrose Street was provided and the Sub-Committee was advised that Bishopsgate was part of the Transport for London Road Network and TfL were proposing to improve the junction as part of the wider Cycle Grid proposals. The proposal included Advance Stop Lines on all approaches and early green start for cyclists. These would provide a better and safer use of the junction. However, as there were no further improvements for cyclists along Bishopsgate or Norton Folgate, eastbound cyclists would be encouraged (with the use of signage or road markings) to proceed straight across the junction and use Spital Square. Spital Square was much quieter and also part of a possible future Quietways route.

#### **Local Byelaws**

The Sub-Committee asked for a report back to the next meeting on the steps that needed to be taken to amend the existing byelaws in relation to the use of wheeled modes of transport on the City walkways.

5. **WARDMOTE**

**RESOLVED** – That the resolutions arising from the Annual Wardmotes of Bishopsgate, Broad Street, Farringdon Without and Portsoken be noted and the responses agreed.

6. **REPORTS OF THE DIRECTOR OF THE BUILT ENVIRONMENT :-**

6.1 **Holborn Circus Area Enhancement - Gateway 7 Outcome Report**

The Sub-Committee considered a report of the Director of the Built Environment which provided the outcomes of the Holborn Circus Area Enhancement Project.

Members commented that this had been an excellent project, brought in below budget and which had made the junction significantly safer, and complimented the risk sharing, information provision, engagement work and accident reduction delivered.

**RESOLVED** – That the final cost of the project and lessons learnt are noted and the project closed.

6.2 **Mitre Square - Phase 2**

The Sub-Committee considered a report of the Director of the Built Environment which presented the proposed design for Phase 2 of the Mitre Square project. This would provide an enhanced public space in Mitre Square, additional seating and improved lighting, while retaining vehicle access to the Sir John Cass Foundation Primary School.

In response to a question concerning the water fountains project, and whether any consideration had been given to installing a fountain at this site, the Sub-Committee was advised that funding for ongoing maintenance was an issue although the possibility of incorporating this into the design plan would be explored.

**RESOLVED** – That the Sub-Committee:

- a) approves the design for Phase 2, as shown in appendix 2 of the report; and
- b) approves the implementation budget for Phase 2 of the works to Mitre Square (£728,998), as set out in section 5 and appendix 3 of this report, fully funded from the Section 106 agreement.

6.3 **Cloth Fair Noise Disturbance**

The Committee received a report of the Director of the Built Environment detailing the options available to mitigate the noise disturbance in Cloth Fair, following two resolutions for which had been received from the Grand Court of

Wardmote in May 2015 and again in 2016. The Chairman advised that the consideration of bollard removal would not be considered as part of this report but would be reviewed separately.

The Committee was advised that officers had made progress to resolve the noise complaints as quickly as possible and a range of highway proposals had been investigated and consulted on and approval was now being sought to proceed with an experimental scheme to reduce or mitigate the noise disturbance.

The Committee was further advised that officers considered that the overnight point road closure (and associated extension of the two-way traffic operation) was the best option to discourage overnight parking or idling, as the closure would make the street a less convenient place to stop.

In response to a question the Director of the Built Environment advised that the overnight point road closure would be enforced by retractable bollards or a gate to physically prevent through access. However as the street was still open, there was no guarantee that this proposal would be fully successful. It was therefore proposed to introduce these measures on an experimental basis and if this was found to be successful, it could then be made permanent.

A Member commented that lawful users of the road would be punished by restricted late access because others were causing a nuisance by idling their engines and legitimate businesses should not suffer as the result of the actions of others.

Members raised a number of questions in relation to enforcement options, the consultation results, traffic flow and survey data, exactly what constituted statutory noise nuisance and the process in relation to the reporting protocol for this particular Wardmote. Officers set out that the road in question was a local access road and therefore was not suitable for rat running traffic. Further that the double yellow lining option might cause difficulties for some residents and guest parking as well as for users of the church. It was further explained that it would be difficult to enforce illegal parking unless there was a constant CEO present.

Arising from the discussion the Sub-Committee considered that the option of installing double yellow lines to prohibit parking required further exploration and consultation.

**RESOLVED** – That the report be deferred for Officer's further alternative recommendations.

## 7. **TUDOR STREET UPDATE**

The Chairman reported that a proposal to alleviate the problems at Tudor Street was currently being explored with the Temples following which there would be an opportunity for all parties to meet again to discuss the issue. The Chairman also stated that TfL are due to commence their experimental Traffic

Order to legitimise the existing arrangements at the New Bridge Street junctions with Tudor Street and Bridewell Place from 5<sup>th</sup> August 2016.

As noted under matters arising at the start of the meeting the safety reports would be brought to the next Sub-Committee meeting in September.

8. **QUESTIONS ON MATTERS RELATING TO THE WORK OF THE SUB COMMITTEE**

Officers were asked to provide responses to the following questions to be added to the list of Outstanding References.

'A ward resident has raised the issue of inconsistent marking of parking on raised carriageways at the last two Castle Baynard ward meetings. On some raised areas the marking is single yellow lines on others it is double. In fact parking on these areas is an offence irrespective of the marking. The resident believes that this amounts to entrapment and I agree. This has been raised at previous S&W meetings and despite assurances that this will be addressed nothing has happened. While recognising that this has been delayed because of staff shortages can officers provide an update and also commit to a time table for addressing this please?'

'Last week a bus broke down on Fleet St in the section containing the long police island. This caused gridlock as traffic behind the bus was unable to proceed by bypassing the vehicle. Can officers investigate and determine by consultation with the CoLP what exactly do these islands accomplish? And more importantly can they be removed or at least shortened so that disruption of this nature does not occur (or is minimised) in the future?'

9. **ANY OTHER BUSINESS THAT THE CHAIRMAN CONSIDERS URGENT**

There were no items of urgent business.

**The meeting ended at 1.40 pm**

-----  
Chairman

**Contact Officer: Amanda Thompson**  
**tel. no.: 020 7332 3414**  
**amanda.thompson@cityoflondon.gov.uk**

This page is intentionally left blank



Outstanding References - Streets and Walkways Sub Committee

<i>Date</i>	<i>Action</i>	<i>Officer responsible</i>	<i>To be completed/ progressed to next stage</i>	<i>Notes/Progress to date</i>
<b>25 July 2016</b>	<p><b>Parking for Motorcyclists</b></p> <p>As part of the review of fees and charges for car parks, consideration be given to the implications on motorcycle parking. A further report to be submitted to the Sub Committee regarding the framework for charging, provision of more parking bays and theft of motorcycles</p>	<p>Director of the Built Environment</p> <p>Director of the Built Environment</p>	Ongoing	The parking policy for motor cyclists has been held up pending the outcome of the review of car parking availability. It is proposed this matter now be moved to the 2016/17 work programme and included within the restructured City Transportation teams work plan.
<p><b>Ongoing action</b></p> <p><b>25 July 2016</b></p>	<p><b>20mph speed limit</b></p> <p>In May 2016 there were 60 persons identified as exceeding the 20 mph restriction with 45 offered Driver Awareness Courses, 8 were given penalty tickets and 7 were summoned to attend court. In June 2016 there were 43 persons identified as exceeding the 20 mph restriction with 31 offered Driver Awareness Courses, 11 were given penalty tickets and 1 was summoned to attend court.</p> <p>In May 121 tickets were issued during a mobile phone and seatbelt campaign, and 125 were issued in June.</p>	COLP	Ongoing	<p>To receive regular updates.</p> <p>The Sub-Committee asked that this information be circulated as a written report with the agenda in future and in addition that it include historic trend data and analysis.</p> <p><b>Chairman to Update.</b></p>
<p><b>Ongoing Action</b></p> <p><b>25 July 2016</b></p>	<p><b>Swan Pier</b></p> <p>Swan Pier area is to be tidied up in conjunction with the delivery of the</p>	Director of the Built Environment	Ongoing	To receive any update

Outstanding References - Streets and Walkways Sub Committee

	Fishmongers Ramp project which is due for completion Summer 2016			
<b>25 July 2016</b>	<p><b>Cloth Fair Noise Disturbance</b></p> <p>Arising from the discussion the Sub-Committee considered that the option of installing double yellow lines to prohibit parking required further exploration and consultation.</p> <p><b>RESOLVED</b> – That the report be deferred for Officer’s further alternative recommendations.</p>	Director of the Built Environment	Ongoing	To receive any update
<p><b>4 April 2016</b></p> <p><b>9 May 2016</b></p> <p><b>21 June 2016</b></p> <p><b>25 July 2016</b></p>	<p><b>1 Angel Court Improvements GW4-5 V9</b></p> <p>Members asked if the height of the benches could be raised, both to improve the comfort for less mobile users and to further deter skateboarding. Officers undertook to investigate the proposal.</p>	Director of the Built Environment	Ongoing	Completed.
<p><b>4 April 2016</b></p> <p><b>9 May 2016</b></p> <p><b>21 June 2016</b></p> <p><b>25 July 2016</b></p>	<p><b>Street Lighting Review</b></p> <p>Members asked that details of the IT project and the work that would be required to fit the hubs be circulated to members of the Committee as well as included in the report for its consideration at Projects sub-committee.</p>	Director of the Built Environment	Ongoing	<p>To receive any update</p> <p><u>21 June Update</u> Report scheduled for after the recess to coincide with the 600<sup>th</sup> Anniversary of Street Lighting.</p>

Outstanding References - Streets and Walkways Sub Committee

<p><b>21 June 2016</b> <b>25 July 2016</b></p>	<p><b>Mayor's Vision for Cycling</b></p> <p>A Member raised a question concerning safety issues at Primrose Street and it was agreed that an update would be given at the next meeting</p>	<p>Director of the Built Environment</p>		<p>25 July 2016</p> <p>An update in relation to the safety of cyclists using the proposed Quietways along Primrose Street was provided and the Sub-Committee was advised that Bishopsgate was part of the Transport for London Road Network and TfL were proposing to improve the junction as part of the wider Cycle Grid proposals. The proposal included Advance Stop Lines on all approaches and early green start for cyclists. These would provide a better and safer use of the junction. However, as there were no further improvements for cyclists along Bishopsgate or Norton Folgate, eastbound cyclists would be encouraged (with the use of signage or road markings) to proceed straight across the junction and use Spital Square. Spital Square was much quieter and also part of a possible future Quietways route.</p>
<p><b>21 June 2016</b> <b>25 July 2016</b></p>	<p><b>Local Byelaws</b></p> <p>The Sub-Committee asked the City Solicitor to review existing byelaws to establish what the definition of a 'vehicle' was, whether it included other wheeled transport such as scooters, and to also establish the process required (if needed) to include other wheeled modes of transport to be prohibited from City Walkway.</p>	<p>Comptroller &amp; City Solicitor</p>	<p>Ongoing</p>	<p>September 2016 – <b>On Agenda</b></p> <p>The Sub-Committee asked for a report back to the next meeting on the steps that needed to be taken to amend the existing byelaws in relation to the use of wheeled modes of transport on the City walkways.</p>

Outstanding References - Streets and Walkways Sub Committee

<p><b>25 July 2016</b></p> <p><b>Members Question</b></p>	<p><u>Inconsistent Road markings</u></p> <p>‘A ward resident has raised the issue of inconsistent marking of parking on raised carriageways at the last two Castle Baynard ward meetings. On some raised areas the marking is single yellow lines on others it is double. In fact parking on these areas is an offence irrespective of the marking. The resident believes that this amounts to entrapment and I agree. This has been raised at previous S&amp;W meetings and despite assurances that this will be addressed nothing has happened. While recognising that this has been delayed because of staff shortages can officers provide an update and also commit to a time table for addressing this please?’</p>	<p>Director of the Built Environment</p>		<p>Officers advised that this matter would be programmed once staff have been recruited into the post.</p>
<p><b>25 July 2016</b></p>	<p><u>Police Islands</u></p> <p>‘Last week a bus broke down on Fleet St in the section containing the long police island. This caused gridlock as traffic behind the bus was unable to proceed by bypassing the vehicle. Can officers investigate and determine by consultation with the CoLP what exactly do these islands</p>	<p>Director of the Built Environment/ CoLP</p>		<p>The islands at either end of Fleet Street form the entry points to the ‘Ring of Steel’ zone in the west of the City. A programme of work is being undertaken to upgrade the technology that supports the ‘Ring of Steel’. However, the current layout supports the current technology and methods by which the City of London Police observe and stop vehicles. It is not possible to change the infrastructure at the moment.</p>

Outstanding References - Streets and Walkways Sub Committee

	accomplish? And more importantly can they be removed or at least shortened so that disruption of this nature does not occur (or is minimised) in the future?			The islands have been in place since 2003 and this is the first time that a broken down vehicle has blocked the carriageway; as far as officers are aware.
--	--	--	--	--

This page is intentionally left blank

<b>Committees:</b>	<b>Dates:</b>	<b>Item no.</b>
Streets and Walkways Sub-Committee Projects Sub	26/09/2016 11/10/2016	
<b>Subject:</b> London Wall Place Section S278 Highway and Public Realm Improvements	<b>Gateway 5 -</b> Authority to Start Work	<b>Public</b>
<b>Report of:</b> Director of the Built Environment		<b>For Decision</b>

## Summary

### Dashboard

- Project Status: Green
- Timeline: Gateway 5 – Construction anticipated to commence November 2016
- Project estimated cost: Circa £ 3.6M
- Spent to date: £585,245 of approved budget of £758,500 (as at 31 July 2016)
- Overall project risk: Green
- Importance to Cultural Hub: Medium

### Progress to date

Planning permission for the London Wall Place development at the former St. Alphage House site was granted in June 2011. This project relates to the Section 278 funded highway changes and public realm improvements required to integrate the development into the public highway.

The Gateway 4 report was approved in January 2016 where approval was given for the detailed design of the highway works around the London Wall Place development.

The project involves a wide range of measures on the highway around the development that: enables safe access to the new buildings for people and vehicles; enables and enhances provision for pedestrians by providing improved footways and crossings; and enhances the public realm in St. Alphage Gardens to provide an improved environment for the high number of workers, residents and visitors expected in the area.

A public consultation exercise with local residents, businesses and other stakeholders was undertaken in April 2016. The main elements of the highway and public realm works are supported, feedback relating to the landscape design in St. Alphage Gardens has been used to improve the design approach.

Since the project commenced in September 2013, a total of £585,245 of an approved budget of £758,500 has been expended as shown in Appendix 3.

The project is deemed of Medium importance to the Cultural Hub as the highway works involve changes to the public highway on London Wall, which is a key route for pedestrian access in the area.

### Proposed way forward

The detailed design and cost estimates for the highway works have now been produced and are included in this report. It is proposed that Members approve these elements, and give authority for the highway works to be implemented.

At Gateway 4 it was identified that the public realm improvements for the St. Alphage Garden element of the project would be funded by the development's Section 106. Due to a number of technical and archaeological issues in the Gardens (which will take several months to resolve), it is now proposed to seek Gateway 5 approval for the St. Alphage Gardens public realm improvements as a separate sub project to the wider Section 278 Highway Improvements programme. This will allow the highway works to be implemented without delay in time for the practical completion of the development.

The first Section 278 Agreement for the evaluation and design stage of the project was signed in 2014. A second Section 278 Agreement, for the implementation of the highway works, is to be signed with the developer on approval of the recommendations in this report. Works will not commence until funding has been received from the developer.

**Recommendations**

It is recommended that Members:

1. Approve the implementation of the highway works with an estimated total cost of £3.6 million as shown in Table 1;
2. Delegate authority for any adjustments between elements of the £3.6 million budget to the Director of the Built Environment in conjunction with the Chamberlain's Head of Finance provided the total approved budget of £3.6 million is not exceeded;
3. Authorise Officers to seek relevant regulatory and statutory consents, orders and approvals as may be required to progress and implement the scheme (e.g. traffic orders); and
4. Note that the St. Alphage Gardens scheme (Section 106 funded) will be progressed independently of the (Section 278 funded) highway works and a separate Gateway 5 report will be submitted to the Open Spaces and City Gardens Committee and Projects Sub Committee in February 2017.

**Main Report**

<p><b>1. Design summary</b></p>	<p>The design of the highway works are detailed in Appendix 1 and include:</p> <ul style="list-style-type: none"> <li>• Widening of the footway on the northern side of London Wall between Wood Street and Fore Street Avenue;</li> <li>• Remarking the eastbound carriageway as one advisory cycle lane and one general traffic lane;</li> <li>• Upgrading the London Wall / Wood Street junction, this includes a new pedestrian crossing on the eastern arm of the junction;</li> <li>• Renewal of structural joints and waterproofing on London Wall;</li> <li>• Repaving of footways around the development in York stone;</li> <li>• A courtesy crossing on Fore Street Avenue;</li> <li>• Relocation of the Cycle Hire station on Fore Street;</li> <li>• Two raised speed tables on London Wall with the dual purpose of lowering traffic speeds and providing crossing points for pedestrians.</li> </ul>
---------------------------------	---



	<p>At Gateway 4 it was reported that a decision would be taken at Gateway 5 on the option for arranging the highway layout on London Wall (eastbound) between Wood Street and Fore Street Avenue:</p> <ul style="list-style-type: none"> <li>• Option 1 – two traffic lanes (removal of cycle lane);</li> <li>• Option 2 – one traffic lane and one cycle lane (removal of 1 traffic lane); and</li> <li>• Option 3 – one bus lane and one traffic lane (converting 1 traffic lane to a bus lane that can be used by buses and cyclists)</li> </ul> <p>Option 3 has been discounted as the number of buses travelling along London Wall in the immediate future (12-36 months) is insufficient for a bus lane to operate effectively.</p> <p><u>It is proposed that Option 2 provides the most appropriate balance between the traffic carrying function of London Wall and providing good quality facilities for cyclists.</u> This approach is also conducive to lower traffic speeds by narrowing the visual perception of traffic lanes on London Wall, where compliance with the City’s 20mph speed limit is an ongoing issue.</p> <p>Traffic modelling has been carried out and the traffic impacts of Option 2 have been found to be minimal as no changes are proposed to the approaches to the Moorgate junction (which is the main traffic constraint in the area). There is no traffic impact to the west at the Rotunda.</p> <p>The overall eastbound carriageway width on London Wall will be 6.4m, sufficient to revert to two traffic lanes in the event this is required in the future for network resilience or major events. The construction programme does not affect the Lord Mayors Show and the final arrangement will continue to allow London Wall to be used as an assembly area for the show.</p> <p>As part of the design of the London Wall / Wood Street junction, the feasibility of introducing a right hand turn into Wood Street north from London Wall westbound has been investigated. This was found to increase delays to westbound traffic waiting for right turning vehicles and in addition there are safety concerns to introducing a right hand turn across two lanes of traffic in the darkened environment where the junction is under 125 London Wall. Therefore the introduction of this right hand turn is not recommended.</p>
<p><b>2. Delivery team</b></p>	<p>Project management, stakeholder engagement and communication services will be provided by the project team within City Transportation.</p> <p>Highway construction works will be delivered by the City’s Highway</p>

	Term Contractor (J.B.Riney & Co. Limited) with construction supervision undertaken in-house by City Highway Engineers. Specialist sub-contractors sourced through the Term Contractor will be used for specific structural works on London Wall Car Park.																							
<b>3. Programme and key dates</b>	Authority to Start Work – October 2016 Preliminary Construction works - November/December 2016 Main construction works – January 2017 to December 2017																							
<b>4. Outstanding risks</b>	<p><b>Overall project risk: Low</b></p> <ul style="list-style-type: none"> <li>a) Possible damage to the London Wall Car Park Structure caused by the City’s Contractor;</li> <li>b) The resurfacing of London Wall reveals historic defects on London Wall Car Park that require repairs;</li> <li>c) Traffic orders and other licenses and consents (such as planning permission for the relocated cycle hire site which could receive public objections) cannot be predetermined, and will need to be applied for and processed;</li> <li>d) Reputational risk if the fit-out of the development is delayed due to the highway works not being completed on time;</li> <li>e) Possible delays to commencing the highway works if the second Section 278 Agreement is delayed;</li> <li>f) Transport for London are delayed in delivering the traffic signal works.</li> </ul>																							
<b>5. Budget</b>	<p>The London Wall Place Highway Works are fully funded by the developer through a Section 278 Agreement between the City and the developer.</p> <p>Table 1 below shows the estimated total costs of the approved design:</p> <table border="1"> <thead> <tr> <th>Item</th> <th>Description</th> <th>Estimated Cost</th> </tr> </thead> <tbody> <tr> <td rowspan="4"><b>Works Costs</b></td> <td>Highways Construction</td> <td>1,892,263</td> </tr> <tr> <td>Utility works</td> <td>396,593</td> </tr> <tr> <td>Transport for London: Cycle Hire relocation</td> <td>35,073</td> </tr> <tr> <td><b>Total</b></td> <td><b>£2,323,929</b></td> </tr> <tr> <td rowspan="5"><b>Staff Costs</b></td> <td>City Transportation: Project Management, Stakeholder Engagement &amp; Communications</td> <td>294,151</td> </tr> <tr> <td>Highways: Design, quantity surveying and construction supervision</td> <td>382,617</td> </tr> <tr> <td>Open Spaces</td> <td>1,252</td> </tr> <tr> <td>DBE Structures: design, technical advice and construction supervision</td> <td>8,660</td> </tr> <tr> <td><b>Total</b></td> <td><b>£686,680</b></td> </tr> </tbody> </table>	Item	Description	Estimated Cost	<b>Works Costs</b>	Highways Construction	1,892,263	Utility works	396,593	Transport for London: Cycle Hire relocation	35,073	<b>Total</b>	<b>£2,323,929</b>	<b>Staff Costs</b>	City Transportation: Project Management, Stakeholder Engagement & Communications	294,151	Highways: Design, quantity surveying and construction supervision	382,617	Open Spaces	1,252	DBE Structures: design, technical advice and construction supervision	8,660	<b>Total</b>	<b>£686,680</b>
Item	Description	Estimated Cost																						
<b>Works Costs</b>	Highways Construction	1,892,263																						
	Utility works	396,593																						
	Transport for London: Cycle Hire relocation	35,073																						
	<b>Total</b>	<b>£2,323,929</b>																						
<b>Staff Costs</b>	City Transportation: Project Management, Stakeholder Engagement & Communications	294,151																						
	Highways: Design, quantity surveying and construction supervision	382,617																						
	Open Spaces	1,252																						
	DBE Structures: design, technical advice and construction supervision	8,660																						
	<b>Total</b>	<b>£686,680</b>																						

	<b>Professional Fees</b>	Surveys, utility surveys, further structural design, traffic consultant & modelling, traffic order advertisements, stakeholder engagement material	£384,520
		Transport for London: Traffic Signal infrastructure and design	65,000
		<b>Total</b>	<b>£449,520</b>
	<b>Section 278 Estimated Total Costs</b>		
	Highway maintenance commuted sum (20 years)		185,000
<b>Estimated Total Costs including Maintenance</b>		<b>£3,645,129</b>	
<b>6. Success criteria</b>	<p>a) Work with the developer to ensure timely delivery of high quality highway improvements which successfully integrate the development into the local highway network;</p> <p>b) Work with the developer to meet their desire for an enhanced public realm;</p> <p>c) The reduction in traffic speeds to support the City's 20 mph policy and improve road safety for all users;</p> <p>d) The implemented measures lead to no increase in traffic congestion; and</p> <p>e) Improved facilities for pedestrians and cyclists.</p>		
<b>7. Progress reporting</b>	Monthly updates to be provided via Project Vision and any project changes will be sought by exception via Issue Report to Spending and Projects Sub Committees		

### Appendices

<b>Appendix 1</b>	Project Design summary
<b>Appendix 2</b>	London Wall Highway Layout
<b>Appendix 3</b>	Section 278 Highway Works General Arrangement Drawings
<b>Appendix 4</b>	London Wall Raised Speed Tables
<b>Appendix 5</b>	Expenditure to date

### Contact

<b>Report Author</b>	Kristian Turner
<b>Email Address</b>	<a href="mailto:Kristian.turner@cityoflondon.gov.uk">Kristian.turner@cityoflondon.gov.uk</a>
<b>Telephone Number</b>	020 7332 1745

This page is intentionally left blank

Fore St / Wood St kerbside provision, changes to parking/waiting restrictions

Relocated Cycle Hire Docking Station

St. ALPHAGE GARDENS PUBLIC REALM IMPROVEMENTS

Courtesy Crossing

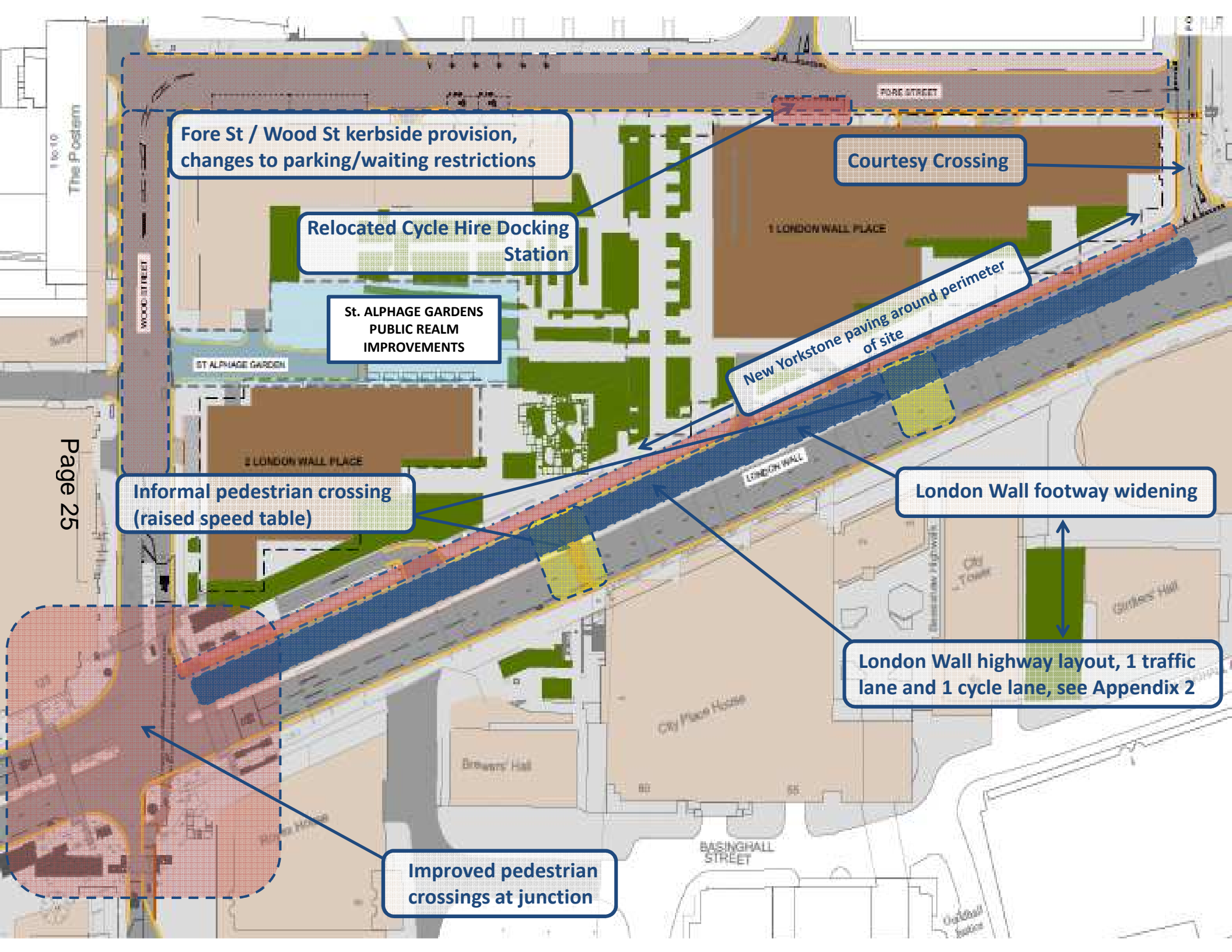
New Yorkstone paving around perimeter of site

Informal pedestrian crossing (raised speed table)

London Wall footway widening

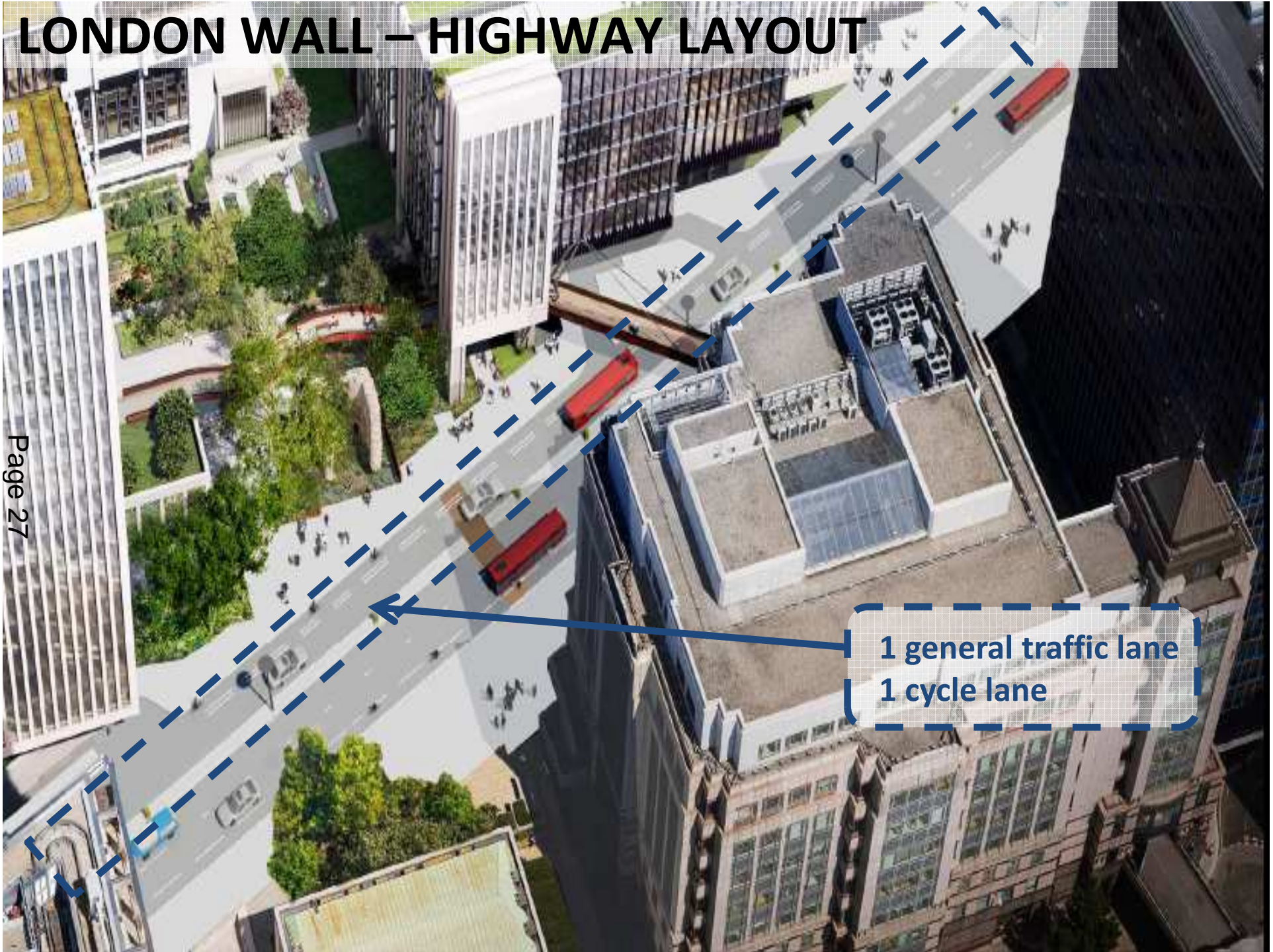
London Wall highway layout, 1 traffic lane and 1 cycle lane, see Appendix 2

Improved pedestrian crossings at junction



This page is intentionally left blank

# LONDON WALL – HIGHWAY LAYOUT

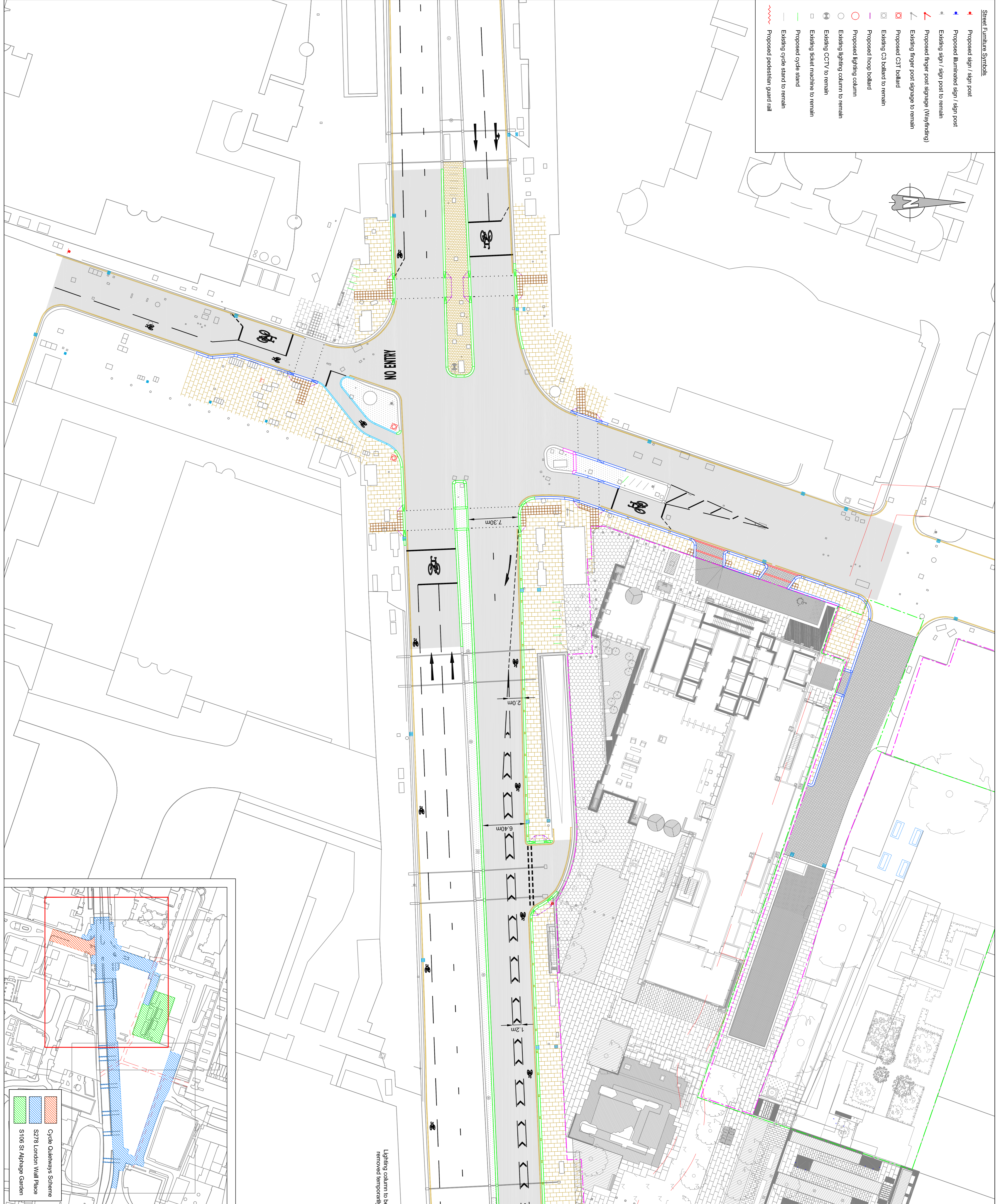
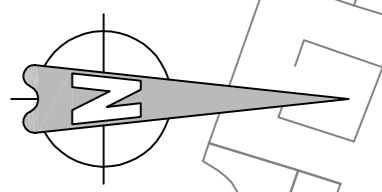


1 general traffic lane  
1 cycle lane

This page is intentionally left blank



- Street Furniture Symbols**
- Proposed sign / sign post
  - Proposed illuminated sign / sign post
  - Existing sign / sign post to remain
  - Proposed finger post signage (Wayfinding)
  - Existing finger post signage to remain
  - Proposed C3T bollard
  - Existing C3 bollard to remain
  - Proposed hoop bollard
  - Proposed lighting column
  - Existing lighting column to remain
  - Existing CCTV to remain
  - Existing ticket machine to remain
  - Proposed cycle stand
  - Existing cycle stand to remain
  - Proposed pedestrian guard rail



Lighting column to be removed temporarily

- NOTES**
1. NO INFORMATION TO BE SCALED FROM THIS DRAWING.
  2. YORKSTONE PAVING TO BE LAID PERPENDICULAR TO ADJACENT KERB.
  3. WORKS SHALL COMPLY WITH THE CURRENT CITY OF LONDON SPECIFICATION FOR HIGHWAY WORKS.
  4. ALL HARD MATERIAL BROKEN OUT UNDER THE CONTRACT IS TO BE DISPOSED OF TO CONTRACTOR'S TIP.
  5. REUSE OF ANY EXISTING ROAD SIGNS AND OTHER DISCRETION.
  6. ACCESS TO BUSINESS TO BE MAINTAINED AT ALL TIMES.
  7. THE CONTRACTOR WILL BE HELD RESPONSIBLE FOR ANY DAMAGE CAUSED TO PRIVATE HIGHWAYS AND PRIVATELY OWNED STREET FURNITURE.

- KEY**
- NEW 75MM YORKSTONE PAVING, 600MM WIDE VARYING LENGTHS
  - NEW 300 X 200MM YORKSTONE PAVING
  - NEW MASTIC ASPHALT SURFACE
  - NEW 400 X 400 X 75MM YORKSTONE TACTILE PAVING
  - NEW 70% SILVER GREY, 30% MID GREY, 300 X 150 X 150MM GRANITE SETTS
  - ASPHALT RESURFACING AS SPECIFIED ELSEWHERE
  - NEW 300 X 200MM FLAMED TEXTURED SILVER GREY GRANITE KERB
  - NEW 300 X 150MM FLAMED TEXTURED SILVER GREY GRANITE KERB
  - NEW 150 X 300MM RETAINING KERB
  - NEW TRIEF KERBS
  - HIGH LEVEL WALKWAYS
  - ST ALPHAGE WORKS
  - HIGHWAY BOUNDARY
  - GULLY / WEIR GULLY
  - 300 X 300MM STAINLESS STEEL FOOTWAY GULLY GRATING
  - SMOKE OUTLET

Rev No.	Date	Description	By

PROJECT: **LONDON WALL PLACE SECTION 278 HIGHWAY ENABLING WORKS**

TITLE: **ANNEX B GENERAL ARRANGEMENT DRAWING 1 OF 3**

CLIENT: **HIGHWAY DESIGN AND CONSTRUCTION**

DEPARTMENT OF THE BUILT ENVIRONMENT  
 PO BOX 270  
 GUILDHALL  
 EC2P 2EJ  
 LONDON  
 TEL: 020 7606 3030

Scale & Drawing Size: 1:250 @ A1

Sheet: SHEET 1 of 3

Date: 15/09/2016

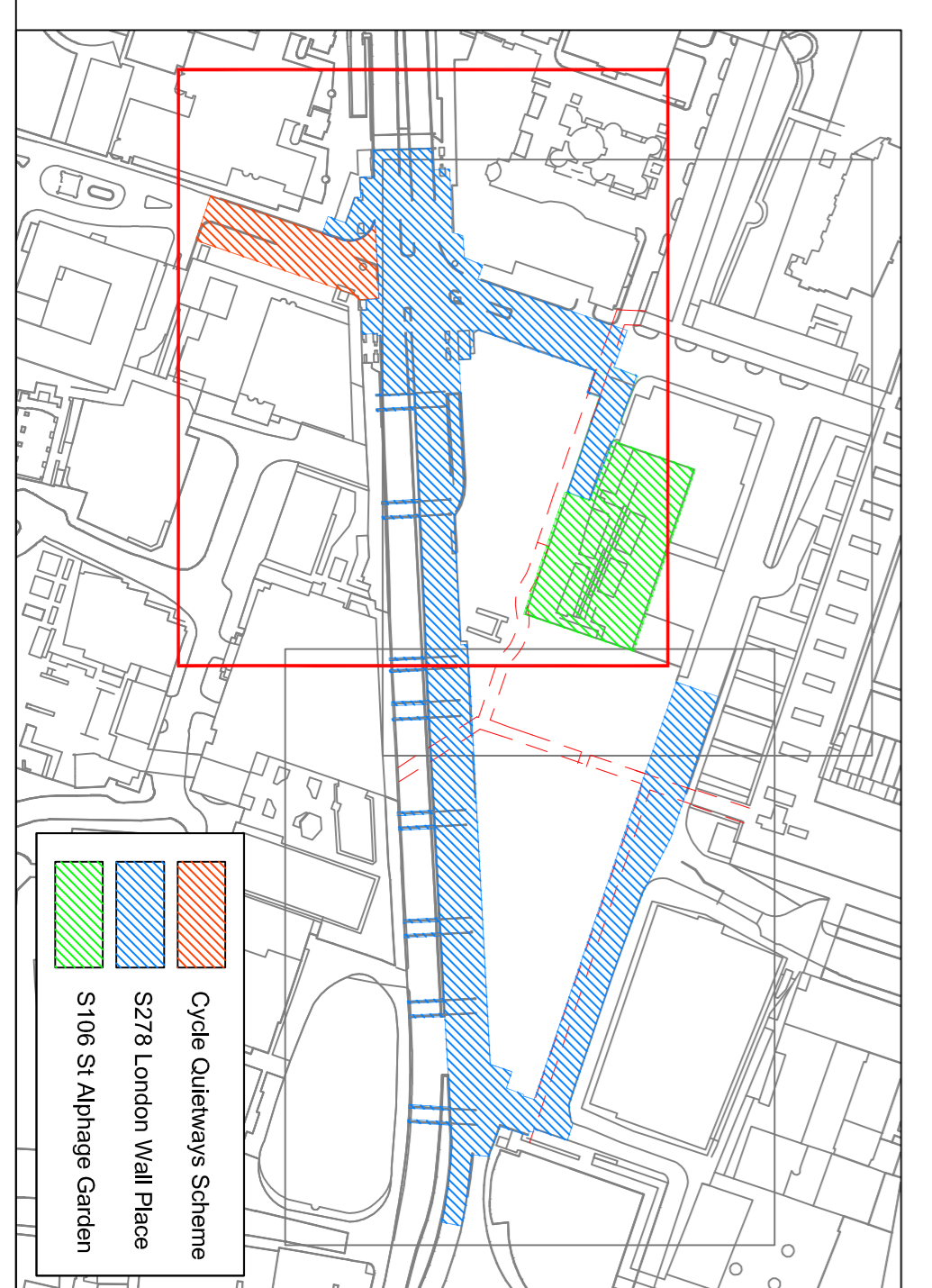
Designed by: JMT

Checked by: JF

Reviewed: 16100279/S278/GA/1

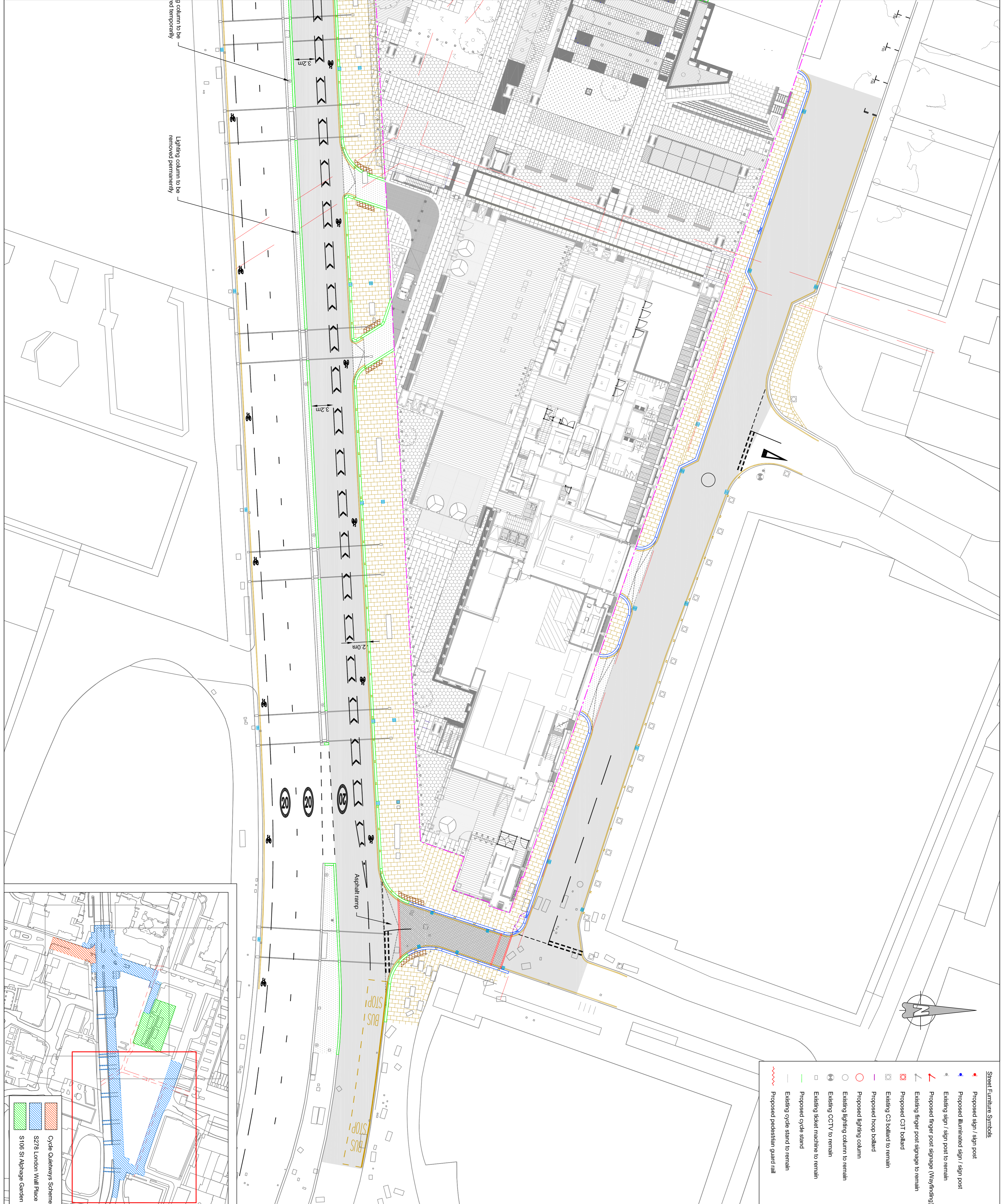
THIS MAP IS REPRODUCED FROM ORDINANCE SURVEY DATA ON BEHALF OF THE CONTROLLER OF HER MAJESTY'S STATIONERY OFFICE © CROWN COPYRIGHT UNAUTHORISED REPRODUCTION INFRINGES CROWN COPYRIGHT AND MAY LEAD TO PROSECUTION OF CIVIL PROCEDURE. CITY OF LONDON 150825/25 53 15.

**CITY OF LONDON**



- Cycle Quietways Scheme
- S278 London Wall Place
- S106 St Alphage Garden

This page is intentionally left blank



**NOTES**

1. NO INFORMATION TO BE SCALED FROM THIS DRAWING.
2. YORKSTONE PAVING TO BE LAID PERPENDICULAR TO ADJACENT KERB.
3. WORKS SHALL COMPLY WITH THE CURRENT CITY OF LONDON SPECIFICATION FOR HIGHWAY WORKS.
4. ALL HARD MATERIAL BROKEN OUT UNDER THE CONTRACT IS TO BE DISPOSED OF TO CONTRACTOR'S TIP.
5. REUSE OF ANY EXISTING ROAD SIGNS AND OTHER INFRASTRUCTURE IS AT THE CITY OF LONDON DISCRETION.
6. ACCESS TO BUSINESS TO BE MAINTAINED AT ALL TIMES.
7. THE CONTRACTOR WILL BE HELD RESPONSIBLE FOR ANY DAMAGE CAUSED TO PRIVATE HIGHWAYS AND PRIVATELY OWNED STREET FURNITURE.

**KEY**

- NEW 75MM YORKSTONE PAVING, 600MM WIDE, VARYING LENGTHS
- NEW 300 X 200MM YORKSTONE PAVING
- NEW MASTIC ASPHALT SURFACE
- NEW 400 X 400 X 75MM YORKSTONE TACTILE PAVING
- NEW 70% SILVER GREY, 30% MID GREY, 300 X 150 X 150MM GRANITE SETTS ELSEWHERE
- NEW 300 X 200MM FLAMED TEXTURED SILVER GREY GRANITE KERB
- NEW 300 X 150MM FLAMED TEXTURED SILVER GREY GRANITE KERB
- NEW 150 X 300MM RETAINING KERB
- NEW TRIEF KERBS
- HIGH LEVEL WALKWAYS
- ST ALPHAGE WORKS
- HIGHWAY BOUNDARY
- GULLY / WEIR GULLY
- 300 X 300MM STAINLESS STEEL FOOTWAY GULLY GRATING
- SMOKE OUTLET

**Street Furniture Symbols**

- Proposed sign / sign post
- Proposed illuminated sign / sign post
- Existing sign / sign post to remain
- Proposed finger post signage (Wayfinding)
- Existing finger post signage to remain
- Proposed C31 bollard
- Existing C3 bollard to remain
- Proposed hoop bollard
- Proposed lighting column
- Existing lighting column to remain
- Existing CCTV to remain
- Existing ticket machine to remain
- Proposed cycle stand
- Existing cycle stand to remain
- Proposed pedestrian guard rail

**Scale & Drawing Size**

1:250 @ A1

**ANNEX B**

**GENERAL ARRANGEMENT**

**DRAWING 2 OF 3**

**CLIENT:**  
HIGHWAY DESIGN AND CONSTRUCTION

**DEPARTMENT OF THE BUILT ENVIRONMENT**  
CITY OF LONDON  
EC2P2EJ  
TEL: 020 7606 3030

**PROJECT:**  
LONDON WALL PLACE  
SECTION 278  
HIGHWAY ENABLING WORKS

**Rev No.**    **Date**    **Description**    **By**

--	--	--	--

**Sheet:** SHEET 2 of 3

**Date:** 15/09/2016

**Designed by:** JMT

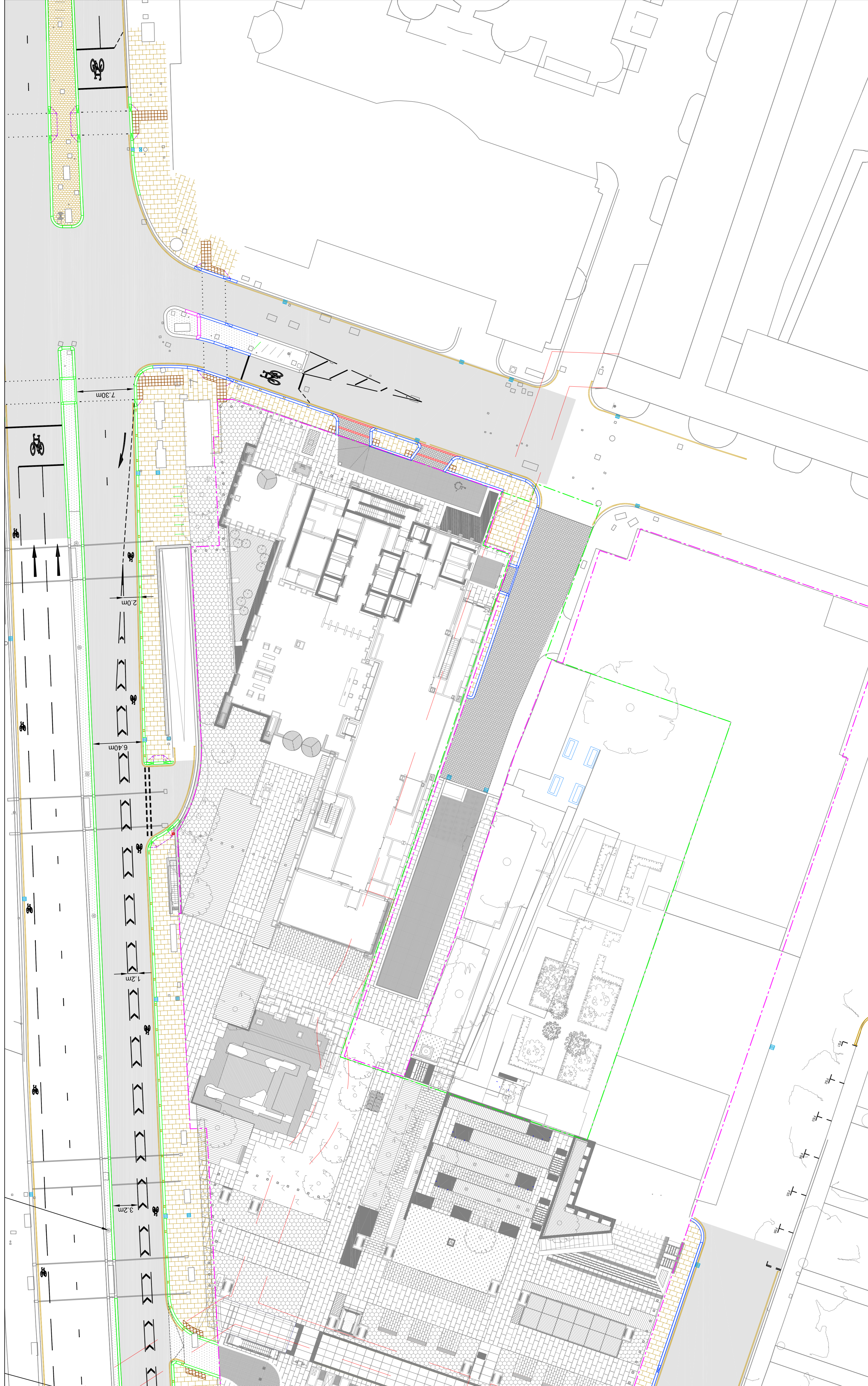
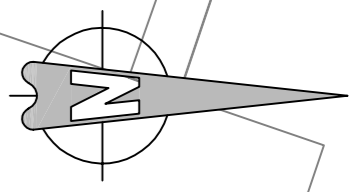
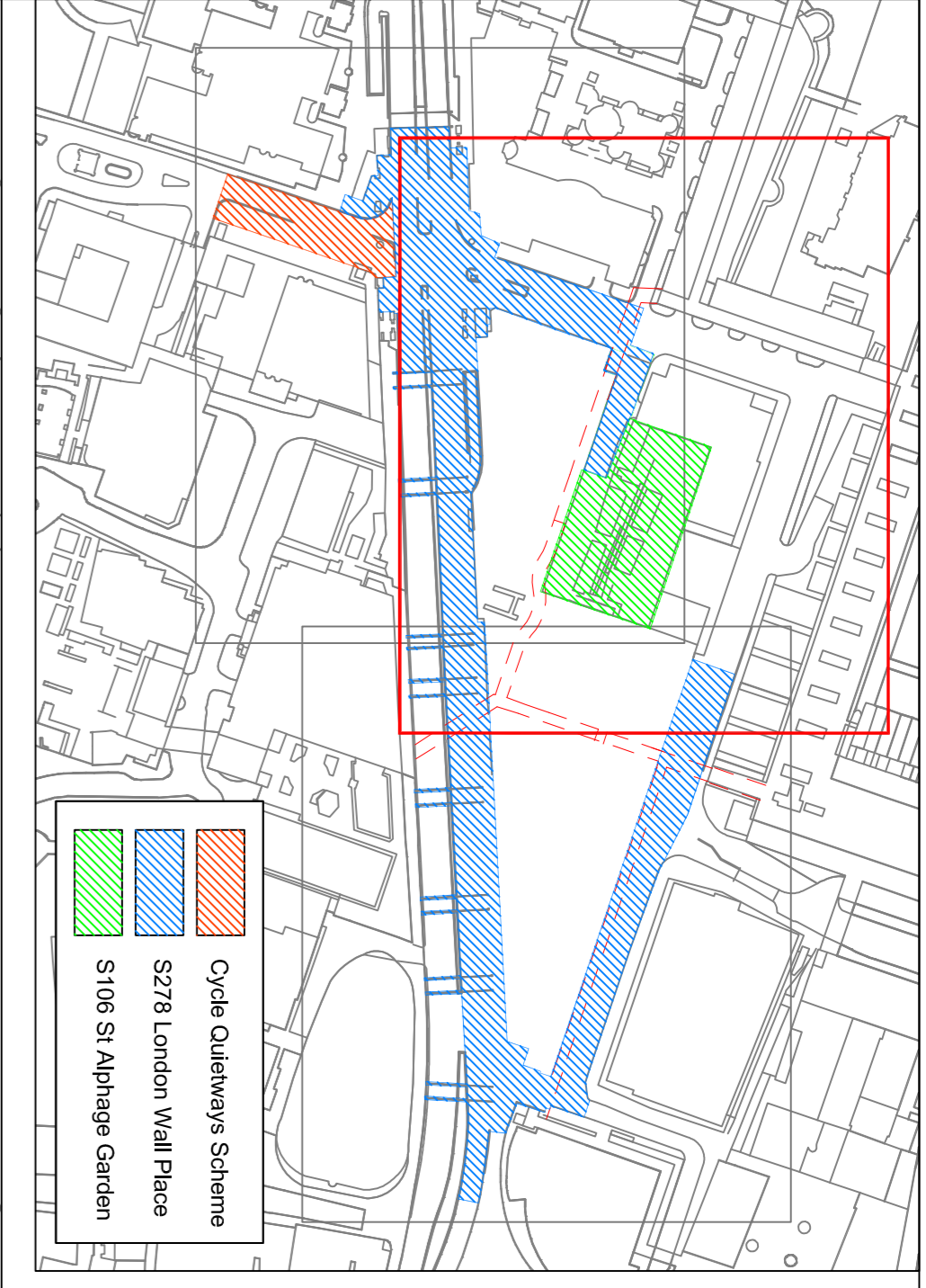
**Checked by:** JF

**Scale & Drawing Size:** 1:250 @ A1

THIS MAP IS REPRODUCED FROM ORDINANCE SURVEY ON BEHALF OF THE CONTROLLER OF HER MAJESTY'S STATIONERY OFFICE © CROWN COPYRIGHT UNAUTHORISED REPRODUCTION INFRINGES CROWN COPYRIGHT AND MAY LEAD TO PROSECUTION OR CIVIL PROCEEDINGS. CITY OF LONDON 150925/25 53 15.

**Drawing No:** 161100279/S278/GA2

This page is intentionally left blank



**Street Furniture Symbols**

Proposed sign / sign post
Proposed illuminated sign / sign post
Existing sign / sign post to remain
Proposed finger post signage (Wayfinding)
Existing finger post signage to remain
Proposed C31 bollard
Existing C3 bollard to remain
Proposed hoop bollard
Proposed lighting column
Existing lighting column to remain
Existing CCTV to remain
Existing ticket machine to remain
Proposed cycle stand
Existing cycle stand to remain
Proposed pedestrian guard rail

- NOTES**
1. NO INFORMATION TO BE SCALED FROM THIS DRAWING.
  2. YORKSTONE PAVING TO BE LAID PERPENDICULAR TO ADJACENT KERB.
  3. WORKS SHALL COMPLY WITH THE CURRENT CITY OF LONDON SPECIFICATION FOR HIGHWAY WORKS.
  4. ALL HARD MATERIAL BROKEN OUT UNDER THE CONTRACT IS TO BE DISPOSED OF TO CONTRACTOR'S TIP. REUSE OF ANY EXISTING ROAD SIGNS AND OTHER EQUIPMENT IS AT THE CITY OF LONDON DISCRETION.
  5. ACCESS TO BUSINESS TO BE MAINTAINED AT ALL TIMES.
  6. THE CONTRACTOR WILL BE HELD RESPONSIBLE FOR ANY DAMAGE CAUSED TO PRIVATE HIGHWAYS AND PRIVATELY OWNED STREET FURNITURE.

**KEY**

[Pattern]	NEW 75MM YORKSTONE PAVING, 600MM WIDE, VARYING LENGTHS
[Pattern]	NEW 300 X 200MM YORKSTONE PAVING
[Pattern]	NEW MASTIC ASPHALT SURFACE
[Pattern]	NEW 400 X 400 X 75MM YORKSTONE TACTILE PAVING
[Pattern]	NEW 70% SILVER GREY, 30% MID GREY, 300 X 150 X 150MM GRANITE SETTS ELSEWHERE
[Pattern]	ASPHALT RESURFACING AS SPECIFIED ELSEWHERE
[Pattern]	NEW 300 X 200MM FLAMED TEXTURED SILVER GREY GRANITE KERB
[Pattern]	NEW 300 X 150MM FLAMED TEXTURED SILVER GREY GRANITE KERB
[Pattern]	NEW 150 X 300MM RETAINING KERB
[Pattern]	NEW TRIEF KERBS
[Pattern]	HIGH LEVEL WALKWAYS
[Pattern]	ST ALPHAGE WORKS
[Pattern]	HIGHWAY BOUNDARY
[Pattern]	GULLY / WEIR GULLY
[Pattern]	300 X 300MM STAINLESS STEEL FOOTWAY GULLY GRATING
[Pattern]	SMOKE OUTLET

Rev No. \_\_\_\_\_ Date \_\_\_\_\_ Description \_\_\_\_\_ By \_\_\_\_\_

Revision \_\_\_\_\_

**PROJECT:**  
LONDON WALL PLACE  
SECTION 278  
HIGHWAY ENABLING WORKS

**TITLE:**  
ANNEX B  
GENERAL ARRANGEMENT  
DRAWING 3 OF 3

**CLIENT:**  
HIGHWAY DESIGN  
AND CONSTRUCTION

DEPARTMENT OF THE BUILT ENVIRONMENT  
PO BOX 270  
CULINDON  
ECP2EJL

TEL: 020 7606 3030

**LONDON CITY OF LONDON**

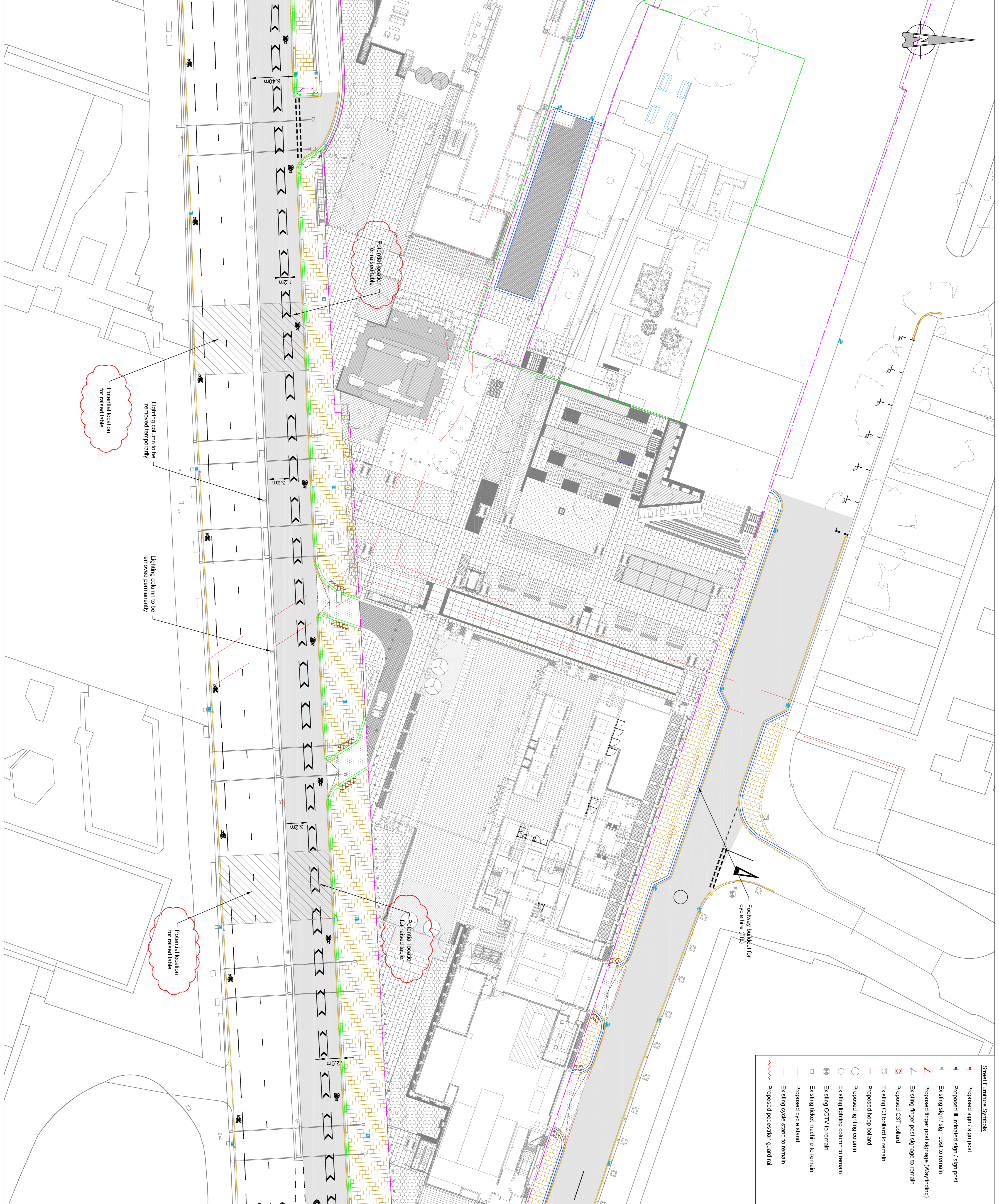
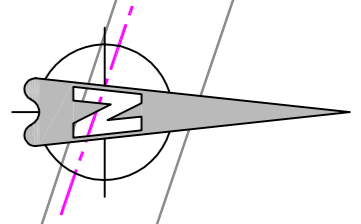
Sheet: SHEET 3 of 3  
Date: 15/09/2016  
Designed by: JMT  
Checked by: JF

Scale & Drawing Size: 1:250 @ A1

Drawing No: 161100279/S278/GA/3

THIS MAP IS REPRODUCED FROM ORDINANCE SURVEY DATA AND IS NOT TO BE USED FOR ANY OTHER PURPOSE WITHOUT THE PERMISSION OF THE CONTROLLER OF HER MAJESTY'S STATIONERY OFFICE © CROWN COPYRIGHT UNAUTHORISED REPRODUCTION INFRINGES CROWN COPYRIGHT AND MAY LEAD TO PROSECUTION OR CIVIL PROCEEDINGS. CITY OF LONDON 15/09/2016 29 15.

This page is intentionally left blank



**Street Furniture Symbols**

Proposed sign / sign post
Proposed illuminated sign / sign post
Existing sign / sign post to remain
Proposed finger post signage (Wayfinding)
Existing finger post signage to remain
Proposed C31 bollard
Existing C3 bollard to remain
Proposed hoop bollard
Proposed lighting column
Existing lighting column to remain
Existing CCTV to remain
Existing ticket machine to remain
Proposed cycle stand
Existing cycle stand to remain
Proposed pedestrian guard rail

- NOTES**
1. NO INFORMATION TO BE SCALED FROM THIS DRAWING.
  2. YORKSTONE PAVING TO BE LAID PERPENDICULAR TO ADJACENT KERB.
  3. WORKS SHALL COMPLY WITH THE CURRENT CITY OF LONDON SPECIFICATION FOR HIGHWAY WORKS.
  4. ALL HARD MATERIAL BROKEN OUT UNDER THE CONTRACT IS TO BE DISPOSED OF TO CONTRACTOR'S TIRP.
  5. REUSE OF ANY EXISTING ROAD SIGNS AND OTHER DISCRETION.
  6. ACCESS TO BUSINESS TO BE MAINTAINED AT ALL TIMES.
  7. THE CONTRACTOR WILL BE HELD RESPONSIBLE FOR ANY DAMAGE CAUSED TO PRIVATE HIGHWAYS AND PRIVATELY OWNED STREET FURNITURE.

**KEY**

New 75mm Yorkstone Paving, 600mm Wide, Varying Lengths
New 300 x 200mm Yorkstone Paving
New Mastic Asphalt Surface
New 400 x 400 x 75mm Yorkstone Tactile Paving
New 70% Silver Grey, 30% Mid Grey, 300 x 150 x 150mm Granite Setts
Asphalt Resurfacing as Specified Elsewhere
New 300 x 200mm Flamed Textured Silver Grey Granite Kerbs
New 300 x 150mm Flamed Textured Silver Grey Granite Kerbs
New 150 x 300mm Retaining Kerbs
New Trief Kerbs
High Level Walkways
St Alphage Works
Highway Boundary
Gully / Weir Gully
300 x 300mm Stainless Steel Footway Gully Grating
Smoke Outlet
Issue to be Resolved

**CLIENT:**  
**HIGHWAY DESIGN AND CONSTRUCTION**  
 DEPARTMENT OF THE BUILT ENVIRONMENT  
 PO BOX 270  
 LONDON  
 EC2P 2EU  
 TEL: 020 7606 3030

**CITY OF LONDON**

**PROJECT:**  
**LONDON WALL PLACE**

**TITLE:**  
**LONDON WALL RAISED TABLE**

Rev No.	Date	Description	By

**Scale & Drawing Size:** 1:250@A1  
**Revision:** LWP/RAISEDTABLE

**Sheet:** SHEET 1  
**Date:** 04/04/2016  
**Designed by:** JMT  
**Checked by:** JF

THIS MAP IS REPRODUCED FROM ORDNANCE SURVEY DATA. THE INFORMATION IS PROVIDED ON BEHALF OF THE CONTROLLER OF HER MAJESTY'S STATIONERY OFFICE © CROWN COPYRIGHT UNAUTHORISED REPRODUCTION INFRINGES CROWN COPYRIGHT AND MAY LEAD TO PROSECUTION OR CIVIL PROCEEDINGS. CITY OF LONDON 1902/2016 53 16.

This page is intentionally left blank



## Appendix 5 - Expenditure to date

<b>16800279 – London Wall Place S278 – Highway Works</b>			
<b>Description</b>	<b>Approved Budget (£)</b>	<b>Expenditure (£)</b>	<b>Balance (£)</b>
PreEv Env Servs Staff Costs	30,899	30,899	-
PreEv Open Spaces Staff Costs	480	480	-
PreEv P&T Staff Costs	167,548	165,301	2,248
PreEv P&T Fees	168,840	168,840	-
<b>TOTAL</b>	<b>367,766</b>	<b>365,519</b>	<b>2,248</b>
<b>16100279 - London Wall Place S278 – Highway Works</b>			
DBE Structures Staff Costs	17,000	-	17,000
Env Servs Staff Costs	119,000	80,394	38,606
P&T Staff Costs	109,500	28,842	80,658
P&T Fees	145,234	110,489	34,745
<b>TOTAL</b>	<b>390,734</b>	<b>219,726</b>	<b>171,008</b>
<b>GRAND TOTAL</b>	<b>758,500</b>	<b>585,245</b>	<b>173,255</b>

This page is intentionally left blank

Committee(s):	Date(s):	Item no.
Streets and Walkways Sub	27 September 2016	
Projects Sub	11 October 2016	
<b>Subject:</b> City Public Realm projects consolidated outcome report – Gateway 7		<b>Public</b>
<b>Report of:</b> The Director of the Built Environment		<b>For Decision</b>
<b><u>Summary</u></b>		
<p>This report consolidates the outcome reports for three City Public Realm projects:</p> <ul style="list-style-type: none"> <li>● Mariner House street scene enhancements</li> <li>● Austin Friars environmental enhancements</li> <li>● Shoe Lane street enhancement scheme</li> </ul> <p>These projects have delivered enhancements across the City. Key benefits include:</p> <ul style="list-style-type: none"> <li>● An enhanced pedestrian experience and new public spaces;</li> <li>● The addition of tree planting and greenery</li> <li>● A more accessible public realm.</li> </ul> <p>The projects have been largely externally funded from Section 106 receipts, Section 278 voluntary Agreements and Transport for London (TfL). The Shoe Lane project was also part-funded by the on-street parking reserve. The two Section 106 funded schemes have underspends which will be available to utilise for further improvements in the local area, subject to the agreement of the developer and subsequent Committee approvals.</p> <p>A financial summary is set out in Table 1. Individual reports on the projects are provided in Annexes 1-3.</p> <p><b>Recommendations</b> It is recommended that:</p> <p>(i) The outcome information is received and recommendations on individual reports approved</p>		

## Overview

<b>1. Link to Strategic Aims</b>	<p>The various projects support the following strategic aims:</p> <ul style="list-style-type: none"> <li>● To provide modern, efficient and high quality local services, including policing, within the Square Mile for workers, residents and visitors</li> <li>● To provide valued services, such as education, employment, culture and leisure, to London and the nation, through the delivery of an enhanced public realm for the benefit of all.</li> </ul>
<b>2. Benefits achieved to date</b>	<p>High quality spaces between buildings are an essential component for a successful City. A well-designed and managed public realm improves the City's liveability, enables it to</p>

	<p>comfortably accommodate future growth and delivers sustainable outcomes.</p> <p>When taken together, the three individual schemes, represent a major package of environmental enhancements and highway improvements that have transformed parts of the City.</p> <p>Benefits include:</p> <ul style="list-style-type: none"> <li>• An enhanced pedestrian experience through the creation of more space for pedestrians, new public spaces and seating areas with associated lighting improvements;</li> <li>• The addition of tree planting and greenery which softens the environment, supports climate change mitigation strategies, contributes to improved air quality and supports biodiversity;</li> <li>• A more accessible public realm through raised carriageways improved crossings and widened footways.</li> </ul> <p>Through the delivery of these projects, officers have worked closely in partnership with developers and other project partners. This successful partnership working has enabled funding to be secured for enhancements and has strengthened relationships with key City occupiers.</p>
<b>3. Within which category does the project fit</b>	Various ranging from advisable to desirable.
<b>4. Resources Expended</b>	Expenditure is summarised in Table1 below. Please also see the appended reports for an outturn assessment of each project.

### Outturn Assessment

<b>5. Budget</b>	<p>The projects were largely funded from Section 106 receipts, Section 278 voluntary contributions and TfL. The City's on-street parking reserve was also used to match-fund the Shoe Lane Quarter scheme as part of a partnership project with a key City occupier. Details of the individual outturn assessments are set out in the appended reports and summarised in Table1below.</p> <p>The Section 106 funded schemes have underspends which will be available to utilise for other projects, subject to the agreement of the developer and subsequent committee approvals.</p> <p>All project finances have been verified and checked.</p>
<b>6. Outstanding actions</b>	See enclosed reports

## Lessons Learnt

<b>7. Key lessons and how they are being used and applied</b>	Key lessons are summarised below. All lessons learnt are set out in full in Appendix 1. <ul style="list-style-type: none"><li>• Close communication with local occupiers has been vital to the success of projects. This enabled officers to adapt construction timings and methodologies to accommodate deliveries and minimise disruption.</li><li>• Partnerships with stakeholders were instrumental in developing projects and accessing external funding for their implementation.</li><li>• Officers have gained expertise in a number of areas such as security and this knowledge has been successfully applied to subsequent projects.</li></ul>
<b>8. Legal Implications</b>	Included within the reports.

## Appendices and Annexes

<b>Appendix 1</b>	Schedule of Lessons Learnt
<b>Annex 1</b>	Mariner House street scene enhancements
<b>Annex 2</b>	Austin Friars environmental enhancements
<b>Annex 3</b>	Shoe Lane street enhancement scheme

## Contact

<b>Report Author</b>	Melanie Charalambous
<b>Email Address</b>	Melanie.charalambous@cityoflondon.gov.uk
<b>Telephone Number</b>	020 7332 3155

**Table 1: Summary of Project Finances**

<b>Project</b>	<b>Funding Source</b>	<b>Approved Budget (£)</b>	<b>Expenditure (£)</b>	<b>Variance (£)</b>
Mariner House street scene enhancements	Section 106	590,158	461,575	128,583
Austin Friars environmental enhancements	Section 106/TfL	639,500	613,127	26,373
Shoe Lane street enhancement scheme	Voluntary S278/On-street Parking Reserve	1,869,673	1,719,564	150,109
<b>TOTAL</b>		<b>3,099,331</b>	<b>2,794,265</b>	<b>305,066</b>

**Appendix 1**  
**Schedule of lessons learnt from individual project reports**

Annex	Project name	Lessons Learnt
1	Mariner House street scene enhancements	<ul style="list-style-type: none"> <li>• Identifying key stakeholders early on and ongoing communication was key to the success of the scheme. This enabled a design to be developed that satisfied all stakeholders.</li> <li>• The Section 106 agreement included a restricted plan area where enhancements could be carried out. This restriction has meant that not all funds were able to be spent and a variation is now required. Such restrictive Agreements are no longer used.</li> </ul>
2	Austin Friars environmental enhancements	<ul style="list-style-type: none"> <li>• Given the highly constrained nature of the area, the need to maintain access for servicing and deliveries, and the short timetable for delivery of the works, a considerable amount of stakeholder engagement was undertaken. The upfront time and cost associated with such in-depth stakeholder engagement was worthwhile as it created strong relationships with influential groups and enabled the construction process to be adapted to meet the delivery requirements of occupiers.</li> <li>• There were a few complaints regarding noise levels of the works due to the narrow street widths and offices based within single glazed historic buildings. In response to this, the noise levels were reduced by incorporating an enclosure for cutting materials, which is something that could be considered on schemes of a similar scale and character.</li> <li>• A basement condition survey was carried out prior to works commencing in order to reduce the risk of claims for damage from occupiers.</li> </ul>
3	Shoe Lane street enhancement scheme	<ul style="list-style-type: none"> <li>• This was the first major public realm partnership project with a City business, setting a positive precedent and giving confidence to other organisations in the ability of the Corporation to deliver successful projects.</li> <li>• The security infrastructure and associated management process was the first of its kind in a dense urban area, and the complementary enhancements to the public realm helped to reduce the visual impact of the security infrastructure.</li> </ul>

		<ul style="list-style-type: none"><li>• Officers received training and security clearance which allowed them to work on this and future security-driven projects, a skill which has been retained and further developed within the Built Environment department.</li></ul>
--	--	--



## Annex 1

**Project Name:** Mariner House Section 106 Improvement Works

### Summary

#### Brief description of project

This project included enhancements to streets and spaces within the vicinity of the Mariner House redevelopment. Works included:

- The pedestrianisation of the northern section of Savage Gardens to create a linear public space with trees and seating
- Lighting improvements under the railway bridge
- Widening of a narrow section of the Crutched Friars northern footway to improve the pedestrian experience
- A contribution towards the re-landscaping of St Olave's Churchyard

#### Recommendation

It is recommended that Members:

- Note the lessons learnt and authorise closure of the project.
- Authorise officers to approach the developer to seek to vary the S106 to allow the remaining funds to be spent on other enhancement projects in the City.

### Outturn Assessment

<p><b>1. Assessment of project against success criteria</b></p>	<ul style="list-style-type: none"> <li>● The creation of a more pleasant street environment, with more space for pedestrians, enhanced greenery and places to rest               <ul style="list-style-type: none"> <li>○ The pedestrianisation of the northern section of Savage Gardens, provided a much needed amenity that was lacking in the area. The introduction of 8 street trees and managed seating enhanced the pedestrian experience by increasing greenery and providing areas of rest.</li> <li>○ The widening of a section of Crutched Friars footway provided more space for pedestrians. The footway was previously quite narrow and crowded at peak times.</li> <li>○ The improvement works to St Olave's Churchyard provided a much needed upgrade to a space that was a little dated, by introducing new planting and seating.</li> </ul> </li> <li>● Improved accessibility in the area               <ul style="list-style-type: none"> <li>○ The northern carriageway of Savage Gardens was raised to footway level to improve accessibility.</li> <li>○ Improved way finding signage was introduced.</li> </ul> </li> <li>● Improved safety through better lighting of covered sections of the streets               <ul style="list-style-type: none"> <li>○ A lighting plan was developed that resulted in decorative lighting being introduced to the pedestrianised footway at Savage Gardens as well as the railway arches at Savage Gardens, Crutched Friars and Cooper's Row</li> </ul> </li> </ul>
<p><b>2. Programme</b></p>	<p>The works were primarily completed by April 2015 with remaining lighting</p>

	works completed in spring 2016 and minor outstanding items planned by December 2016.																				
<b>3. Budget</b>	The project has been completed within the agreed budget inclusive of any minor outstanding items noted in paragraph 2.																				
	<table border="1"> <thead> <tr> <th>Item Task</th> <th>Approval Budget (£)</th> <th>Amount Spent (£)</th> <th>Amount Unspent (£)</th> </tr> </thead> <tbody> <tr> <td>Staff Costs</td> <td>156,170</td> <td>148,399</td> <td>7,772</td> </tr> <tr> <td>Fees</td> <td>70,394</td> <td>61,975</td> <td>8,418</td> </tr> <tr> <td>Works</td> <td>363,594</td> <td>251,201</td> <td>112,393</td> </tr> <tr> <td><b>TOTAL</b></td> <td><b>590,158</b></td> <td><b>461,575</b></td> <td><b>128,583</b></td> </tr> </tbody> </table>	Item Task	Approval Budget (£)	Amount Spent (£)	Amount Unspent (£)	Staff Costs	156,170	148,399	7,772	Fees	70,394	61,975	8,418	Works	363,594	251,201	112,393	<b>TOTAL</b>	<b>590,158</b>	<b>461,575</b>	<b>128,583</b>
Item Task	Approval Budget (£)	Amount Spent (£)	Amount Unspent (£)																		
Staff Costs	156,170	148,399	7,772																		
Fees	70,394	61,975	8,418																		
Works	363,594	251,201	112,393																		
<b>TOTAL</b>	<b>590,158</b>	<b>461,575</b>	<b>128,583</b>																		
<b>Final Account Verification</b>	Verified																				
<b>4. Outstanding Actions</b>	<p>Although works are largely complete there are some outstanding snagging works which will be completed by the end of the year. These are as follows:</p> <ul style="list-style-type: none"> <li>• <u>Lighting</u>: The installation of the final LED lighting in Savage Gardens was delayed to accommodate Network Rail's scheduled maintenance works. Works to complete the installation will now take place by the end of the year.</li> <li>• <u>Soft Landscaping</u>: Some adjustments to the soft landscaping approved as part of the final phase of works is required and will be carried out by the end of the year to coincide with the Open Spaces planting season.</li> </ul>																				

### Lessons Learnt

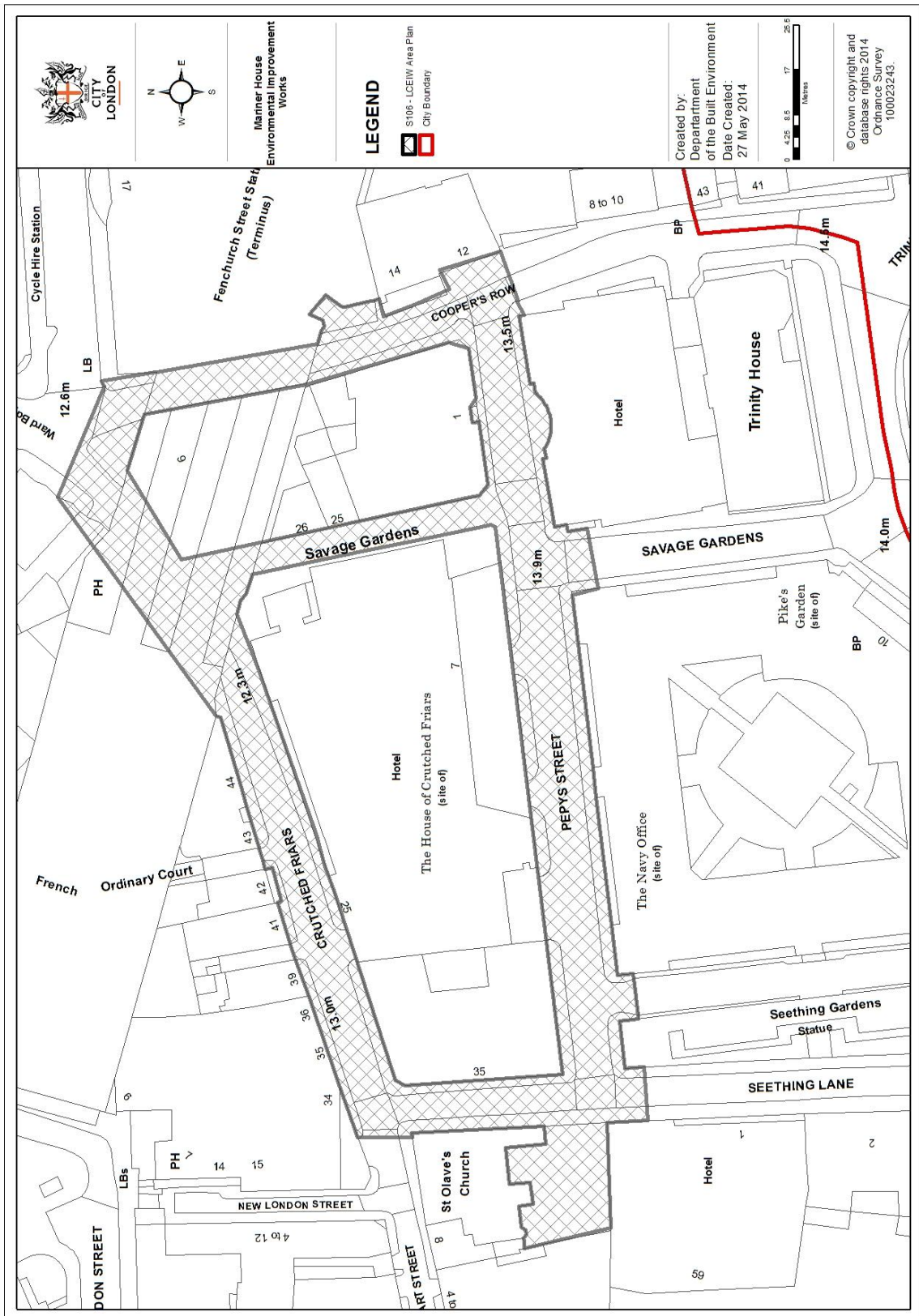
<b>5. Key lessons</b>	<ul style="list-style-type: none"> <li>• Identifying key stakeholders early on and ongoing communication was key to the success of the scheme. This enabled a design to be developed that satisfied all stakeholders.</li> <li>• The Section 106 agreement included a restricted plan area where enhancements could be carried out. This restriction has meant that all the funds were unable to be spent and a variation is now required. Such restrictive Agreements are no longer used.</li> </ul>
<b>6. Implementation plan for lessons learnt</b>	Lessons learnt to be shared at Team Meetings and through consultation of this Gateway report.

### Appendices

<b>Appendix 1</b>	Site Plan
<b>Appendix 2</b>	Site Images

### Contact

<b>Report Author</b>	Emmanuel Ojugo
<b>Email Address</b>	<a href="mailto:emmanuel.ojugo@cityoflondon.gov.uk">emmanuel.ojugo@cityoflondon.gov.uk</a>
<b>Telephone Number</b>	020 7332 1158

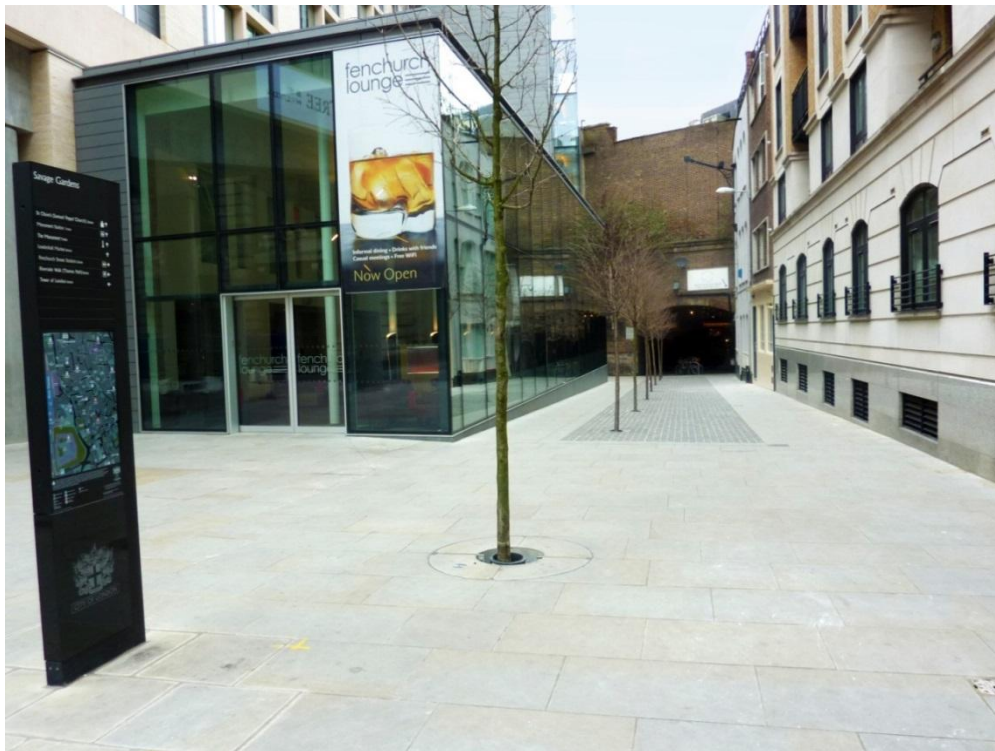


**Appendix 1: Site Plan**

## Appendix 2: Site Images



Savage Gardens Prior to Environmental Improvement Works



Savage Gardens Following Environmental Improvement Works



**Savage Gardens viewed from the upper floor of the completed hotel development**

## Annex 2

**Project Name:** Austin Friars environmental enhancements

### Summary

#### Brief description of project

Identified as one of the high priority projects within the Bank Area Enhancement Strategy (2013), the enhancement of Austin Friars was established, in consultation with key stakeholders, to support the east-west movement of pedestrians along alternative routes to 'by-pass' Bank Junction. In August 2014 a successful funding bid was made to TfL to supplement the S106 funds and enable enhancements to the entire length of the lane to deliver all of the aspirations set out within the Area Strategy.

A design for Austin Friars was developed in conjunction with key stakeholders as follows:

- A raised carriageway, resurfaced in granite setts for the length of the lane;
- A raised surface treatment in York stone to Austin Friars Square;
- New York stone footways throughout;
- New strip lighting to Austin Friars Square;
- New lighting under the entrance archway into Austin Friars and upgraded lighting along the lane;
- Increased cycle parking provision;
- New seating;
- New wayfinding signage;
- Bollards along the length of the lane to protect adjacent properties and increase pedestrian safety.

In addition to the physical measures set out above, the need to increase pedestrian safety and reduce the dominance of vehicles in the area was identified as a key element to the success of an enhancement scheme in this area. In order to achieve this, an experimental Traffic Order was introduced which included a timed restriction to vehicles entering Austin Friars between 11.00a.m. and 4.00p.m. as well as a width restriction of 2.3m. The consultation on this Traffic Order ran from October 2015 until April 2016 with no formal comments received. The Traffic Order was made permanent in May 2016.

#### Recommendation

It is recommended that Members:

- Note the lessons learnt and authorise closure of the project.
- Authorise officers to approach the developer to seek to vary the S106 to allow the remaining funds to be spent on other enhancement projects in the City.

## Outturn Assessment

<p><b>1. Assessment of project against success criteria</b></p>	<p>The project has managed to achieve a dramatic improvement in pedestrian accessibility, with new raised carriageway creating a fully accessible public realm along the entire length of the lane.</p> <p>New lighting, seating, and pedestrian wayfinding signage have all contributed to improving the pedestrian environment along Austin Friars.</p> <p>The construction works took place over an eight month period between February and October 2015. Due to the highly restricted character of the area it was necessary to close Austin Friars for all access and servicing vehicles throughout the construction period, with alternative servicing locations provided on Old Broad Street and Great Winchester Street. The works were completed in line with the pre-agreed programme and regular communications with stakeholders throughout this period ensured that any negative impacts of the works were minimised or dealt with in a swift and effective manner.</p> <p>Based on a study of vehicle movements before and after the works there appears to have been a significant reduction in vehicles using Austin Friars from an average of 238 per day before the works to an average of 97 following completion.</p> <p>An assessment was also undertaken of the potential improvement in air quality, with the results showing a predicted reduction in NO<sub>2</sub> concentrations all along Austin Friars, with most of the street now predicted to fall below the nitrogen dioxide health based standard (40µg/m<sup>3</sup>), whereas previously, approximately two thirds of the street was over the health based standard.</p> <p>There are objectives set out in the Bank Area Strategy around adding more greenery into Austin Friars, but following consideration at the design stage additional planting was not considered to be achievable due to narrow street widths. This may be achievable in a future enhancement front of the Dutch Church, which is private land.</p> <p>The project was funded by TfL and Section 106 receipts. The Section 106 funds are underspent and so it is proposed to approach the developer to vary the agreement to allow the remaining funds to be spent on other projects in the local area or elsewhere in the City.</p>														
<p><b>2. Programme</b></p>	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: center;">Task</th> <th style="text-align: center;">Programme</th> </tr> </thead> <tbody> <tr> <td>Project Initiation</td> <td>May 2014 – July 2014</td> </tr> <tr> <td>Concept Design</td> <td>Aug – Sept 2014</td> </tr> <tr> <td>Stakeholder Engagement</td> <td>Oct – Nov 2014</td> </tr> <tr> <td>Detailed Design</td> <td>Dec 2014 – Jan 2015</td> </tr> <tr> <td>Construction</td> <td>Feb 2015 – Oct 2015</td> </tr> <tr> <td>Experimental Traffic Order</td> <td>Oct 2015 – April 2016</td> </tr> </tbody> </table>	Task	Programme	Project Initiation	May 2014 – July 2014	Concept Design	Aug – Sept 2014	Stakeholder Engagement	Oct – Nov 2014	Detailed Design	Dec 2014 – Jan 2015	Construction	Feb 2015 – Oct 2015	Experimental Traffic Order	Oct 2015 – April 2016
Task	Programme														
Project Initiation	May 2014 – July 2014														
Concept Design	Aug – Sept 2014														
Stakeholder Engagement	Oct – Nov 2014														
Detailed Design	Dec 2014 – Jan 2015														
Construction	Feb 2015 – Oct 2015														
Experimental Traffic Order	Oct 2015 – April 2016														

<b>3. Budget</b>	The project was completed within the agreed budget			
		<b>Approved Budget (£)</b>	<b>Expenditure (£)</b>	<b>Variance (£)</b>
	Staff Costs Total:	145,096	144,633	463
	Fees Total:	27,828	26,587	1,241
	Works Total:	457,988	441,907	16,081
	Contingency Total:	8,588	0	8,588
	<b>Grand Total</b>	639,500	613,127	26,377
<b>Final Account Verification</b>	Verified			
<b>4. Outstanding Actions</b>	None			

### Lessons Learnt

<b>5. Key lessons</b>	<ul style="list-style-type: none"> <li>Given the highly constrained nature of the area, the need to maintain access for servicing and deliveries, and the short timetable for delivery of the works, a considerable amount of stakeholder engagement was undertaken. The upfront time and cost associated with such in-depth stakeholder engagement was worthwhile as it created strong relationships with influential groups and enabled the construction process to be adapted to meet the delivery requirements of occupiers.</li> <li>There were a few complaints regarding noise levels of the works due to the narrow street widths and offices based within single glazed historic buildings. In response to this, the noise levels were reduced by introducing an enclosure for cutting materials on site, which is something that could be considered on schemes of a similar scale and character.</li> <li>A basement condition survey was carried out prior to works commencing in order to reduce the risk of claims for damage from occupiers.</li> </ul>
<b>6. Implementation plan for lessons learnt</b>	Lessons learnt to be shared at Team Meetings and through consultation of this Gateway report.



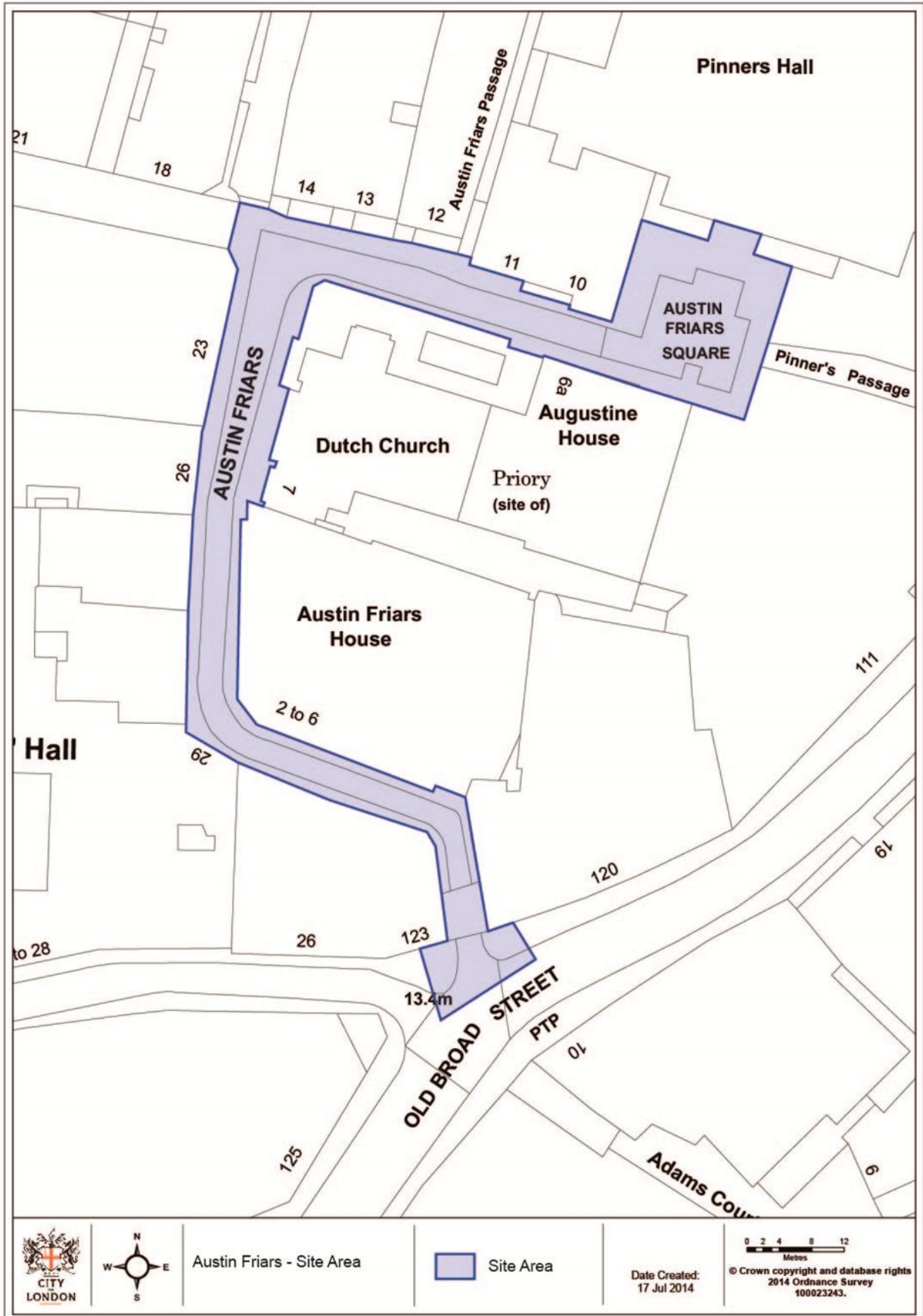
## Appendices

<b>Appendix 1</b>	Site Plan
<b>Appendix 2</b>	Before and After Photographs

## Contact

<b>Report Author</b>	Luke Joyce
<b>Email Address</b>	luke.joyce@cityoflondon.gov.uk
<b>Telephone Number</b>	020 7332 1928

# Appendix 1 - Site Plan



## Appendix 2 – Before and After Photographs



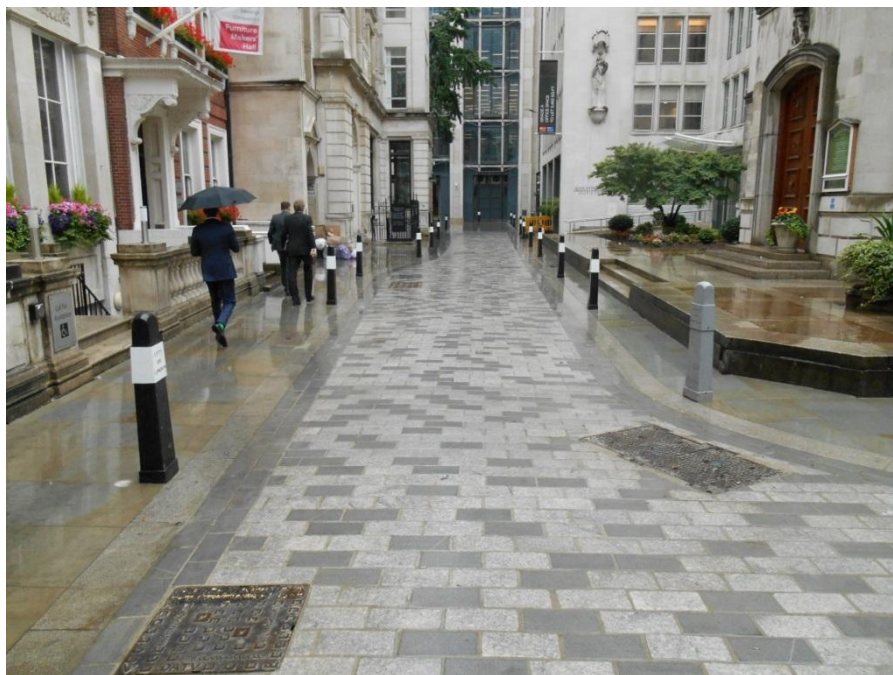
Austin Friars Central Section – Before works



Austin Friars Central Section – After works



Austin Friars– Before works



Austin Friars– After works

## Annex 3

**Project Name:** Shoe Lane street enhancement scheme

### Summary

#### Brief description of project

The Shoe Lane Quarter project was developed as part of the Street Scene Challenge initiative, a scheme that involved collaboration with local businesses to develop environmental enhancement projects across the City. This particular project was progressed with input from a key local occupier, who provided match-funding and worked with the City to develop the design. This partnership working was pioneering at the time, and paved the way for future collaborations between the City and occupiers.

The primary driver behind the project was to deliver enhanced security measures for a key City occupier. The security scheme was a first for the Square Mile, and for urban areas in general, introducing managed access for vehicles whilst improving conditions and maintaining continuous access for pedestrians and cyclists.

Alongside the security measures, a range of public realm enhancements, including new York stone footways, planters and street trees, improved cycling facilities, and public art were implemented. This ensured that the security measures did not dominate the public realm, but were incorporated into the wider enhancement scheme to provide an overall benefit for the City. A plan of the completed scheme is shown in Appendix 1.

Phase 1 was completed in 2008, with completion of Phase 2 following in 2009. Phase 3 of the project was not fully progressed owing to the emergence of the redevelopment of Plumtree Court.

#### Recommendation

It is recommended that Members:

- Note the lessons learnt and authorise closure of the project.

### Outturn Assessment

<p><b>1. Assessment of project against success criteria</b></p>	<p>The main objective of the project was to deliver security measures and public realm enhancements which was achieved in Phases 1 and 2 of the project.</p> <p>The closure of the southern end of St Bride Street created a new public space with seating and planting with improved facilities for pedestrians and cyclists, whilst having minimal impacts on traffic flows.</p> <p>The <i>Resolution</i> sculpture by Antony Gormley was the first 'modern' public art piece to be permanently installed in the City as part of this project, paving the way for future works to be introduced across the Square Mile.</p>
---	---

<p><b>2. Programme</b></p>	<p>The project was completed within the agreed programme.</p> <p>Phase 3 was intended to deliver enhancement to Wine Office Court; however, an adjacent development prevented this Phase to be implemented at the time. The requirement for the infrastructure has now been superseded by the current development at Plumtree Court, and so it is proposed that this final phase be curtailed.</p>																								
<p><b>3. Budget</b></p> <p><b>Final Account Verification</b></p>	<p>The project was completed within the agreed budget.</p> <p>The project was match-funded between the City of London and the occupier through a voluntary S278 agreement. The project came in under budget as shown in table 1 below; with a total underspend of £150,108. This has resulted in a reduced draw down from the On Street Parking Reserve (OSPR) of £51,989.</p> <p>A summary of the total project finances is shown in table 1 below. A full breakdown of the project finances by phase is shown in Appendix 2.</p> <p>Table 1</p> <table border="1" data-bbox="443 913 1468 1198"> <thead> <tr> <th>Description</th> <th>Approved (£)</th> <th>Expenditure (£)</th> <th>Balance (£)</th> </tr> </thead> <tbody> <tr> <td>Staff Costs</td> <td>231,549</td> <td>201,965</td> <td>29,584</td> </tr> <tr> <td>Fees</td> <td>208,090</td> <td>162,411</td> <td>45,679</td> </tr> <tr> <td>Works</td> <td>1,388,099</td> <td>1,313,254</td> <td>74,845</td> </tr> <tr> <td>Revenue (for maintenance)</td> <td>41,935</td> <td>41,935</td> <td>0</td> </tr> <tr> <td><b>Grand Total *</b></td> <td><b>1,869,673</b></td> <td><b>1,719,564</b></td> <td><b>150,108</b></td> </tr> </tbody> </table> <p>* excludes total maintenance costs of £36,420</p> <p>Verified.</p>	Description	Approved (£)	Expenditure (£)	Balance (£)	Staff Costs	231,549	201,965	29,584	Fees	208,090	162,411	45,679	Works	1,388,099	1,313,254	74,845	Revenue (for maintenance)	41,935	41,935	0	<b>Grand Total *</b>	<b>1,869,673</b>	<b>1,719,564</b>	<b>150,108</b>
Description	Approved (£)	Expenditure (£)	Balance (£)																						
Staff Costs	231,549	201,965	29,584																						
Fees	208,090	162,411	45,679																						
Works	1,388,099	1,313,254	74,845																						
Revenue (for maintenance)	41,935	41,935	0																						
<b>Grand Total *</b>	<b>1,869,673</b>	<b>1,719,564</b>	<b>150,108</b>																						
<p><b>4. Outstanding Actions</b></p>	<p>Minor changes to the cycle route at the southern end of St Bride Street may be required in order to better direct cyclists through the area. This will be considered by officers and addressed in due course as part of business as usual.</p>																								

**Lessons Learnt**

<p><b>5. Key lessons</b></p>	<ul style="list-style-type: none"> <li>• <b>Successful partnership established with a key City occupier, including joint funding of projects</b> – This was the first major public realm partnership project with a City business, setting a positive precedent and giving confidence to other organisations in the ability of the Corporation to deliver successful projects. The City has since forged numerous successful partnerships with developers and occupiers, often including joint funding arrangements.</li> </ul>
------------------------------	---

	<ul style="list-style-type: none"> <li>• <b>Pioneering and innovative design for security measures in urban areas</b> – the security infrastructure and associated management process was the first of its kind in a dense urban area, and the complementary enhancements to the public realm helped to reduce the visual impact of the security infrastructure. The City has since delivered a number of high-profile security projects, in part by utilising the skills and knowledge acquired through this project.</li> <li>• <b>Developing the capacity to manage security-driven projects</b> – officers received training and security clearance which allowed them to work on this and future security-driven projects, a skill which has been retained and further developed within the Built Environment department.</li> <li>• <b>Collaboration with a world-renowned artist</b> – the partnership with Sir Antony Gormley to deliver the ‘Resolution’ sculpture was the first of its kind in the City. This has paved the way for future partnerships for public art, most notably through the establishment of the City Arts Initiative, which has proved a successful platform for introducing new temporary and permanent artworks to the Square Mile.</li> </ul>
<b>6. Implementation plan for lessons learnt</b>	<p>The majority of the lessons noted above are already being implemented. They will also continue to be shared at Team Meetings and through consultation of this Gateway report.</p>

### Appendices

<b>Appendix 1</b>	Site plan
<b>Appendix 2</b>	Before and after photos
<b>Appendix 3</b>	Finance tables

### Contact

<b>Report Author</b>	Tom Noble
<b>Email Address</b>	tom.noble@cityoflondon.gov.uk
<b>Telephone Number</b>	020 7332 1057

**Appendix 1: Site plan**





## Appendix 2: Before and after photos

St Bride Street



Shoe Lane



### Appendix 3: Finance tables

Table 1 – Overall project summary & funding contributions

Funding	Agreed (£)	Received (£)	Balance (not required) (£)
TfL	10,000	10,000	0
Developer	927,047	861,286	65,761
City Funds (OSPR)	927,047	875,058	51,989
<b>Total Funding</b>	<b>1,864,094</b>	<b>1,746,344</b>	<b>117,750</b>

Table 2 – Total Project Cost

Description	Approved (£)	Spent (£)	Balance (£)
Capital cost	1,827,738	1,677,629	150,108
Revenue (maintenance) cost	41,935	41,935	0
<b>Total Project Sum *</b>	<b>1,869,673</b>	<b>1,719,564</b>	<b>150,109</b>

Table 3 – Project expenditure by phase

Shoe Lane - Phase 1	Approved Budget (£)	Spend to date (£)	Balance (£)
Staff Costs	131,627	131,627	0
Fees	60,083	56,457	3,626
Works	819,307	819,166	141
<b>Total Shoe Lane Phase 1 *</b>	<b>1,011,017</b>	<b>1,007,250</b>	<b>3,767</b>

\* excludes maintenance cost of £10,900

Shoe Lane - Phase 2	Approved Budget (£)	Spend to date (£)	Balance (£)
Staff Costs	81,378	53,428	27,950
Fees	141,690	104,819	36,871
Works	495,049	492,992	2,057
<b>Total Shoe Lane Phase 2 *</b>	<b>718,117</b>	<b>651,239</b>	<b>66,878</b>

\* excludes maintenance cost of £14,524

Shoe Lane - Phase 3	Approved Budget (£)	Spend to date (£)	Balance (£)
Staff Costs	18,544	16,909	1,635
Fees	6,317	1,135	5,182
Works	73,743	1,096	72,647
<b>Total Shoe Lane Phase 3 *</b>	<b>98,604</b>	<b>19,140</b>	<b>79,464</b>

\* excludes maintenance cost of £10,996

This page is intentionally left blank

<b>Committees:</b>	<b>Dates:</b>	<b>Item no.</b>
Streets and Walkways Sub-Committee Projects Sub	27/09/2016 11/10/2016	
<b>Subject:</b> Ludgate Hill crossing (30 Old Bailey)	<b>Gateway 6</b> Progress Report	<b>Public</b>
<b>Report of:</b> Director of the Built Environment		<b>For Decision</b>

## Summary

### Dashboard

**Project status:** Green

**Timeline:** Trial of the signalised crossing concluded in May 2016

**Project estimated cost:** £275,676

**Spend to date:** £235,094 (as of 17 August 2016)

**Overall project risk:** Low

### Last Gateway approved

A Gateway 4-5 report was approved in November 2014. This gave authority to implement a signalised crossing in place of the existing zebra crossing on a trial basis, and also to introduce permanent improvements to the footways adjacent to the crossing. The purpose of the trial is to assess the impact of a signalised pedestrian crossing on all users, including vehicle traffic.

### Progress to date

The permanent works were completed in February 2015, and monitoring of the trial commenced shortly afterwards. The monitoring concluded that, while traffic flows on Ludgate Hill are largely unchanged, there has been a reduction in vehicle queue lengths from the crossing. Bus journey times have generally decreased.

A Stage 3 Road Safety Audit (RSA) was undertaken. Although it did not identify any major issues, it was recommended that the carriageway in the vicinity of the crossing be resurfaced. Several comments were received from stakeholders; While there is lessened priority for pedestrians when compared to the previous zebra crossing configuration, comments from stakeholders gave universal praise for the footway widening, and the majority commented favourably on the improvements to traffic flows.

### Recommendations

It is recommended that Members:

- 1) Approve the retention of the signalised crossing;
- 2) Authorise the utilisation of the remaining Works and Contingency budget of £34,340 to contribute towards the cost resurfacing of the carriageway in the vicinity of the crossing, as recommended by the Stage 3 Road Safety Audit.

## Main Report

<p><b>1. Reporting period</b></p>	<p>1.1 This report covers the period since the Gateway 4-5 approval in November 2014, which gave authority to implement a trial of a signalised pedestrian crossing in place of the existing zebra crossing. The report also gave approval to introduce permanent changes to the footways adjacent to the crossing, which would deliver improvements to the public realm regardless of the outcome of the trial (see Appendix 1).</p>
<p><b>2. Progress to date</b></p>	<p>2.1 The physical works to install the signalised crossing were completed in February 2015. The signals incorporate a 'countdown' technology which is now standard at new crossing installations. A traffic consultant was commissioned to monitor the performance of the crossing, and the impact on all users including pedestrians, cyclists and motor vehicles. A summary of the findings is given below, with further details and tables contained in Appendix 2. It should be noted that the monitoring took place before the construction of the Cycle Superhighways, and also before the current utilities works in Newgate Street commenced, and so the data is not affected by these two significant workstreams.</p> <p>2.2 The monitoring indicated that the introduction of the signalised crossing did not lead to a significant increase or decrease of traffic flows along Ludgate Hill, but that there has been a reduction in vehicle queue lengths from the crossing. Bus journey times have generally decreased during the survey period, although this change is negligible in the peak periods where westbound buses experience a slight increase and eastbound buses a slight decrease.</p> <p>2.3 The monitoring also indicates that there has been no significant change to footway flows in the area, although there has been an expected change in crossing behaviour. A greater number of people accumulate on the footways as they wait for the green man phase (although this is offset by the widening of the footways), and more pedestrians now cross informally instead of waiting. The informal crossing activity has particularly increased to the west of the formal crossing, between this and City Thameslink station. Although outside the scope of this project, this informal crossing activity may lend support to further changes to the carriageways and footways on the remainder of Ludgate Hill.</p> <p>2.4 The RSA did not identify any major safety concerns with the new arrangement. However, it did highlight the need for the carriageway in the vicinity of the crossing to be resurfaced, to ensure the correct anti-skid protection is in place and to further improve conditions for all road users. An extract from the RSA detailing the issues and recommendation is shown in Appendix</p>

	<p>3.</p> <p>2.5 Several comments have been received in respect of the new crossing, from organisations including Transport for London, Living Streets and St Paul’s Cathedral. There was universal praise for the widened footways, and most noted the perceived improvement in traffic flows. However, some also noted the disadvantages to pedestrians, who no longer have priority to cross as they did with the zebra crossing.</p>
<b>3. Next steps</b>	<p>3.1 Taking the monitoring data and feedback into consideration, officers recommend that the signalised crossing is retained on a permanent basis. It is considered that the improvements to traffic flow, and the enhanced public realm in terms of the widened footway on the south side, offset the disbenefit of pedestrians having to wait.</p> <p>3.2 It is also recommended that the current underspend on the Works and Contingency sub-tasks (£34,340) should be utilised to contribute to the resurfacing the carriageway in the vicinity of the crossing using the appropriate anti-skid surfacing (the total cost of which is approximately £40,000, with the balance met from the highways maintenance budget). This will ensure that the standard of the quality of the carriageway matches that of the surrounding footways, and that pedestrian and vehicle safety is further improved.</p> <p>3.3 Should Members concur with these recommendations, the outstanding work will be completed and a Gateway 7 report will be produced in due course.</p>

### **Appendices**

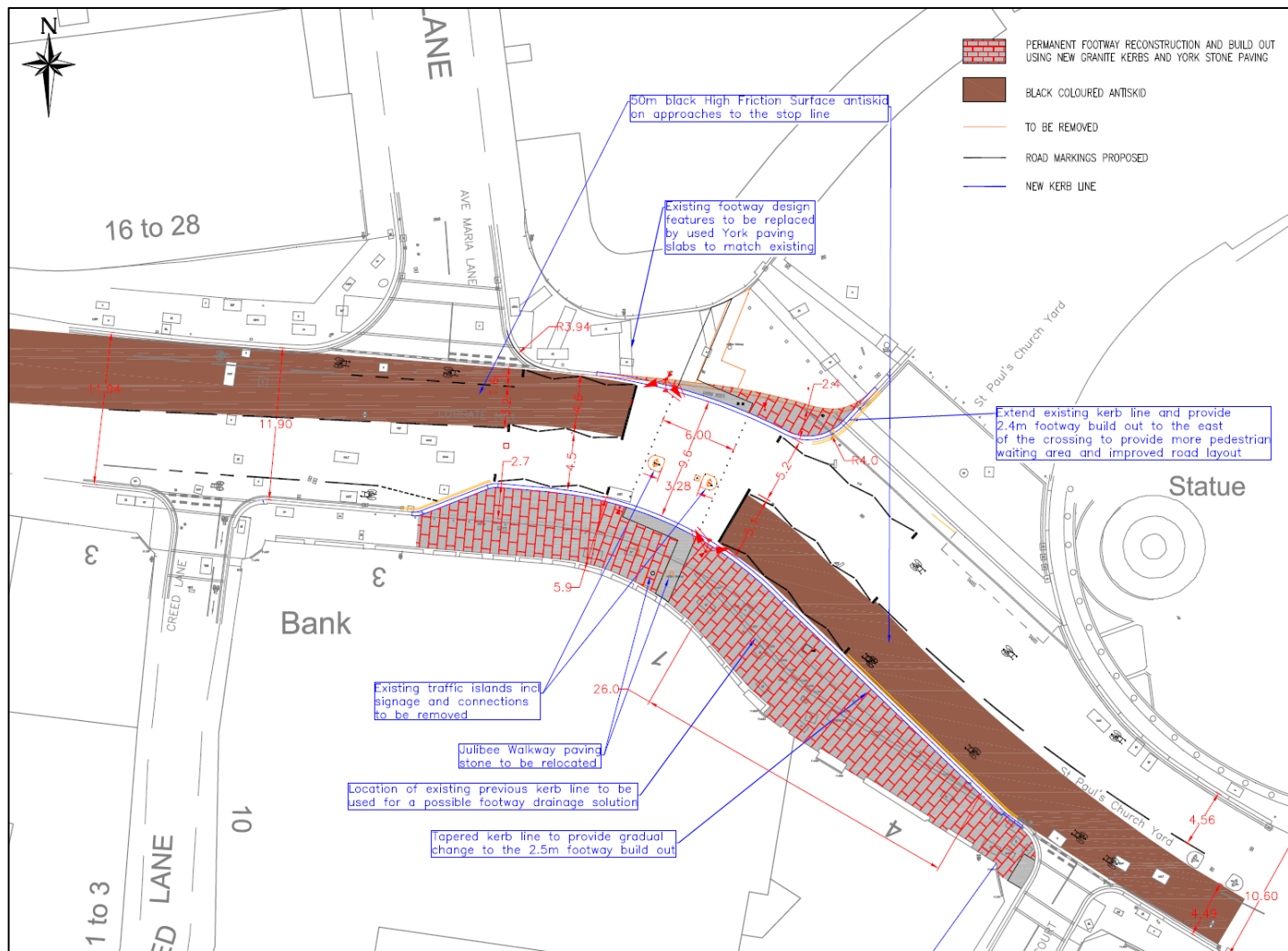
<b>Appendix 1</b>	Plan and photos of the new crossing
<b>Appendix 2</b>	Summary of monitoring results
<b>Appendix 3</b>	Extract from Road Safety Audit (Stage 3)
<b>Appendix 4</b>	Finance tables

### **Contact**

<b>Report Author</b>	Tom Noble
<b>Email Address</b>	tom.noble@cityoflondon.gov.uk
<b>Telephone Number</b>	020 7332 1057

# Appendix 1 – plan and photos of the new crossing

Page 68







## Appendix 2 – summary of monitoring results

The monitoring process involved the commissioning of four sets of surveys, two prior to construction and two post-construction. The survey dates were:

- Thursday 3 July 2014
- Wednesday 15 October 2014
- Monday 23 and Thursday 26 March 2015
- Monday 11 to Thursday 14 May 2015

Where surveys were undertaken across more than one day in the week the daily variance across the week was reviewed to ensure that the results were consistent.

### Traffic flows

Table 1 shows that overall there is only a limited change between the pre and post implementation traffic flows. There was a drop in flows (200 vehicles) in March 2015 which is often observed shortly after the completion (February) of schemes as traffic diverts away from the area to avoid the disruption caused by the works and takes some time following the completion of the scheme to realise the disruption is over and divert back.

Table 1. Summary of Two-Way Traffic Flows (Total Survey Period, AM and PM Peak Hours)

Survey Day	07:00-19:00	08:00-09:00	17:00-18:00
<b>Pre-implementation</b>			
July 2014	9,804	860	1,005
Oct 2014	9,353	910	799
<b>Post-implementation</b>			
Mar 2015	8,911	732	859
May 2015	10,055	960	861

### Queue lengths

The queue length survey recorded maximum vehicle queue length back from the pedestrian crossing every 5 minutes during the survey period. Table 2 shows that the longest queue lengths are recorded in the 2014 pre-scheme surveys. This pattern is consistent during the survey periods with the AM, lunchtime and PM peak hours all showing higher queues recorded in the 2014 surveys than the post implementation 2015 survey results. Table 2 confirms that queue lengths have reduced from the pre-scheme to the post implementation period. The queue lengths have reduced in all peak hours and generally across the day in both the eastbound and westbound direction.

**Table 2. Queue Length Survey – Average Queue Lengths (m)**

Survey Period	July 2014	October 2014	March 2015	May 2015
<b>Morning Peak Hour</b>				
Eastbound	93	77	28	33
Westbound	107	65	61	33
<b>Total</b>	<b>200</b>	<b>142</b>	<b>89</b>	<b>66</b>
<b>Lunchtime Peak Hour</b>				
Eastbound	92	96	50	72
Westbound	105	84	112	41
<b>Total</b>	<b>197</b>	<b>180</b>	<b>162</b>	<b>113</b>
<b>Evening Peak Hour</b>				
Eastbound	100	67	45	43
Westbound	63	60	44	28
<b>Total</b>	<b>163</b>	<b>117</b>	<b>89</b>	<b>71</b>
<b>Daily Average (07:00 to 19:00)</b>				
Eastbound	78	75	44	51
Westbound	70	72	90	40
<b>Total</b>	<b>148</b>	<b>147</b>	<b>135</b>	<b>91</b>

### Bus services

Table 3 shows the average differences and percentage difference of all services eastbound and westbound over a seven day period; Negative numbers indicate an improved situation. The average bus journey times have improved overall, although this change is negligible in the peak periods where westbound buses experience a slight increase and eastbound buses a slight decrease.

**Table 3: bus journey times**

Route	Difference in Run Times Year-on-Year for a period of 7 days (seconds)	Difference (%)
<b>Daily Average (07:00 - 22:00)</b>		
Eastbound	-24	-4.7
Westbound	-42	-8.4
<b>Morning Peak (07:00 - 10:00)</b>		
Eastbound	-12	-3.3
Westbound	6	3.0
<b>Evening Peak (16:00 - 19:00)</b>		
Eastbound	-12	-1.4
Westbound	6	2.8

## Pedestrian flows

Figure 1 shows that pre and post implementation results had similar trends with fairly pronounced morning, lunchtime and evening peak periods. Generally the graph shows that there has been an overall increase in pedestrian flows especially during peak periods.

**Figure 1: Total pedestrian flows of adjacent footways**

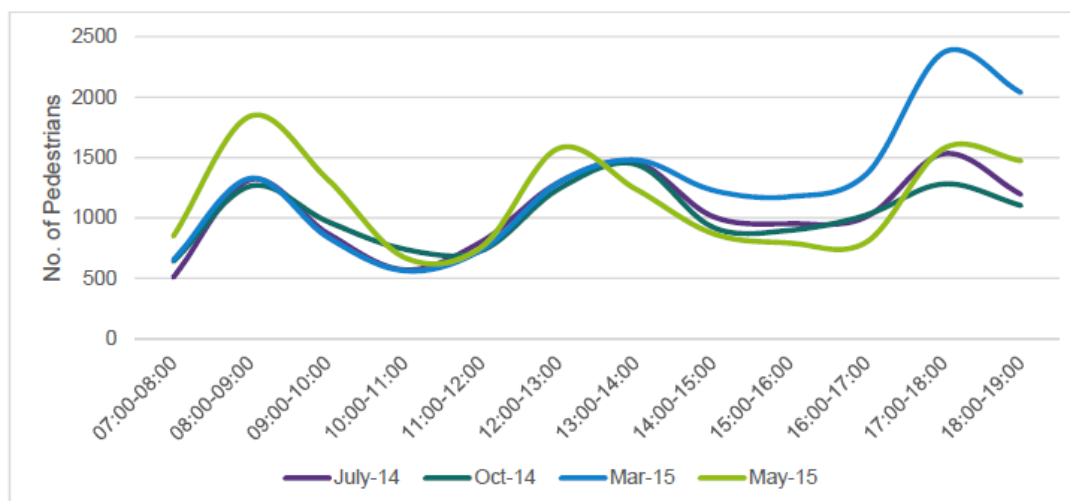


Table 4 shows that, since the implementation of the signalised crossing, more people are choosing to walk along the northern footway rather than the southern footway. The likely cause of the change is that pedestrians are choosing to cross prior to reaching the crossing. A key attraction is St Pauls Churchyard for office workers in the morning on their route from the City Thameslink station near Ludgate Circus to the offices at Paternoster Square and for tourists to St Pauls Cathedral throughout the day.

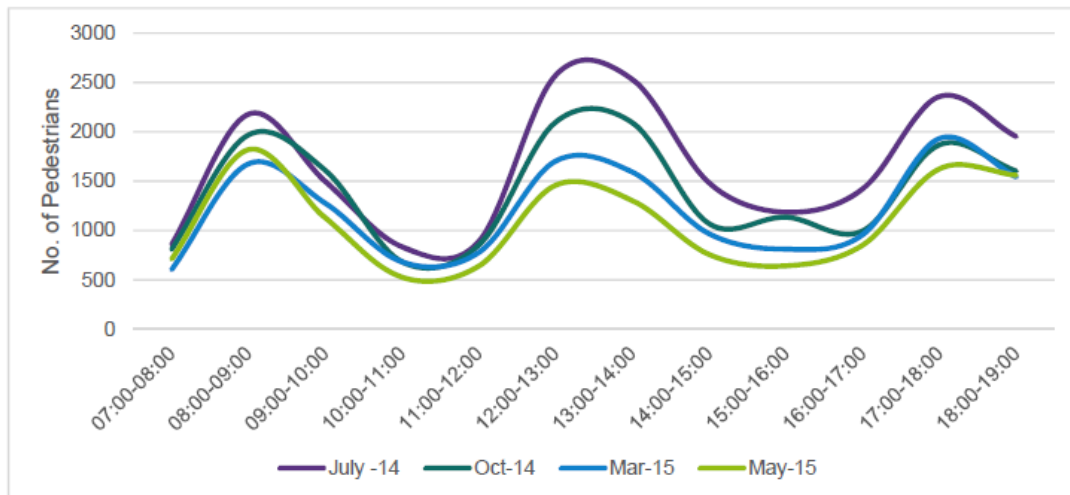
**Table 4. Pedestrian Flows on Footways**

Survey Period	July 2014	October 2014	March 2015	May 2015
<b>Morning Peak Hour (08:00-09:00)</b>				
North	431	443	754	1,011
South	885	820	574	832
<b>Total</b>	<b>1,316</b>	<b>1,263</b>	<b>1,328</b>	<b>1,843</b>
<b>Lunchtime Peak Hour (12:30-13:30)</b>				
North	676	647	1,068	875
South	815	784	297	561
<b>Total</b>	<b>1,491</b>	<b>1,431</b>	<b>1,365</b>	<b>1,436</b>
<b>Evening Peak Hour (17:00-18:00)</b>				
North	560	474	1592	830
South	972	807	780	746
<b>Total</b>	<b>1,532</b>	<b>1,281</b>	<b>2,372</b>	<b>1,576</b>
<b>Daily Total (07:00 to 19:00)</b>				
North	5,239	5,180	10,284	8,149
South	7,286	7,072	4,787	5,623
<b>Total</b>	<b>12,525</b>	<b>12,252</b>	<b>15,071</b>	<b>13,772</b>

### Pedestrian crossings

Figure 2 shows hourly total crossing counts (formal crossing) throughout the survey period. This shows that changing the crossing facility from a zebra to a signalised crossing has resulted in an overall reduction in the number of pedestrians using the formal crossing.

**Figure 2: Total hourly formal pedestrian crossing counts**



Before implementing the scheme, on average 50 pedestrians per hour were crossing informally in July and 22 pedestrians per hour in October. However post implementation results indicate that there was a big increase in informal crossing with an average of 85 pedestrian per hour crossing informally in March and 110 pedestrians per hour in May respectively. Figure 3 shows that overall there has been an increase in the amount of pedestrians crossing informally. It should be noted that due to an issue with the survey footage the October 2014 survey only counted informal crossing in a limited area so has been excluded from this comparison.

**Figure 3: Total hourly informal pedestrian crossing counts**

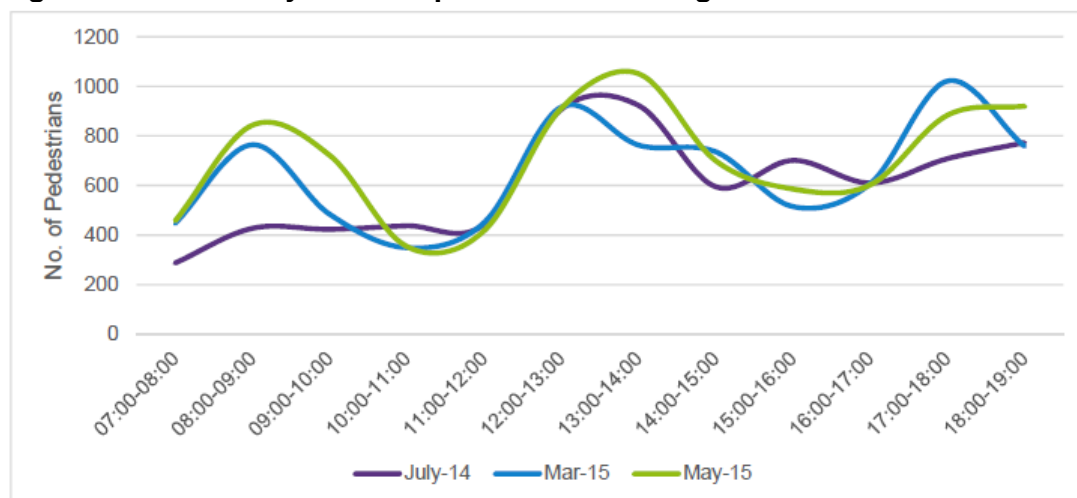


Table 3 shows a breakdown of the informal crossing by whether the crossing took place to the east or west of the formal crossing. The split between informal crossing to the east and west of the formal crossing shows that informal crossing to the east of the crossing has remained similar to what it was before the implementation of the scheme.

Informal crossing levels to the east are high due to the provision of a crossing island which assists pedestrians crossing informally. To the west there has been a significant increase in informal crossing, this is likely to be due to people crossing in the shadow of the crossing and through queuing traffic on the popular route between the City Thameslink train station (on Ludgate Hill to the west of the crossing) and St Pauls Churchyard (to the east of the crossing).

**Table 4: Informal crossing counts**

Survey Period	July 2014	March 2015	May 2015
<b>Morning Peak Hour (08:00-09:00)</b>			
East	368	476	587
West	59	288	256
<b>Total</b>	<b>427</b>	<b>764</b>	<b>843</b>
<b>Lunchtime Peak Hour (12:30-13:30)</b>			
East	865	682	784
West	126	221	317
<b>Total</b>	<b>991</b>	<b>903</b>	<b>1,101</b>
<b>Evening Peak Hour (17:00-18:00)</b>			
East	600	756	584
West	108	265	299
<b>Total</b>	<b>708</b>	<b>1,021</b>	<b>883</b>
<b>Daily Average (07:00 to 19:00)</b>			
East	6,341	5,605	6,061
West	892	2,205	2,385
<b>Total</b>	<b>7,233</b>	<b>7,810</b>	<b>8,446</b>

**Appendix 3 – extract from Road Safety Audit (Stage 3)**

**Location:** General to scheme, multiple locations

**Summary:** Carriageway surface may pose a hazard to road users

The Audit Team are concerned that the carriageway surface may pose a hazard to road users, namely:

- On the westbound approach to the pedestrian crossing the higher friction surface (HFS) has not been laid, but the centre line marking has been relocated northwards. As a result, the nearside of the lane has the pre-existing HFS but the offside has no HFS installed. Westbound drivers may be subject to differential skid resistance, particularly in inclement weather conditions. An exacerbated potential for loss of control type collisions may exist as a result.
- In the centre of the crossing carpet a number of service covers have sunk. The sunken covers may pose a trip hazard to pedestrians with an exacerbated potential for trips and falls as a result.
- On the eastbound approach to the pedestrian crossing a trench has been cut and reinstated through the higher friction surface (HFS). As a result, the nearside of the lane has the pre-existing HFS but the offside has no HFS installed. Westbound drivers may be subject to differential skid resistance, particularly in inclement weather conditions. An exacerbated potential for loss of control type collisions may exist as a result.



**RECOMMENDATION**

Provide a consistent and adequate carriageway surface through the pedestrian crossing and its approaches. This may require the provision of higher friction surfacing and the raising of sunken service covers, or, resurfacing the carriageway.

<b>Design Organisation Response</b>	<b>Accepted / Part Accepted / Rejected</b>
[Leave blank for Design Organisation's Response]	
<b>Client Organisation Comments</b>	
[Leave blank for Client Organisation's Comments]	

**Appendix 4 – finance table**

<b>Expenditure to date</b>			
<b>Description</b>	<b>Approved Budget (£)</b>	<b>Expenditure (£)</b>	<b>Balance (£)</b>
Evaluation	20,789	20,789	0
Highways Staff Cost	8,000	7,047	953
CT/EE Staff Costs	45,787	42,466	3,321
Fees	32,400	30,431	1,969
Works	158,701	134,361	24,340
Contingency	10,000	0	10,000
<b>TOTAL</b>	<b>275,677</b>	<b>235,094</b>	<b>40,583</b>



<b>Committee(s):</b>	<b>Date(s):</b>
Planning & Transportation - For decision	13/09/2016
Streets & Walkways Sub - For decision	27/09/2016
<b>Subject:</b> Moorgate Area Enhancement Strategy	<b>Public</b>
<b>Report of:</b> The Director of the Built Environment	<b>For Decision</b>
<b>Summary</b>	
<p>An area-based approach for the City’s public realm is set out within the City Public Realm SPD, adopted in July 2016 (Appendix 1). Area Enhancement Strategies have been approved for all except 4 of the 16 City districts, one of which is the Moorgate area.</p> <p>Moorgate is undergoing significant change at present. There are a number of developments within the area that are recently completed, consented or currently under consideration (Appendix 2), many of which have an impact on the adjacent public realm. The creation of a new Crossrail station in Moorgate and Moorfields and associated development will lead to a sharp increase in pedestrian numbers, along with a likely increase in development pressure as a result of the improved connectivity. In addition to this, the emerging proposals for the Cultural Hub to the west mean that there is now an increasing emphasis on the quality of the walking and arrival experience.</p> <p>It is proposed to develop an area enhancement strategy for the Moorgate area in order to provide a framework for future public realm enhancements and address the needs of the changing area. There are a number of key issues that the strategy will cover:</p> <ul style="list-style-type: none"> <li>• New developments in the area would benefit from a clear and coordinated design approach to the adjacent public realm;</li> <li>• There is now a greater understanding of the implications of Crossrail on pedestrian flows that requires a review of footway capacity and key junctions;</li> <li>• There is a need to develop a greater sense of place around Moorgate, which is a Principal Shopping Centre, in order to enhance its future vitality and role within the City. Much of the area is also within a conservation area and Finsbury Circus is an Historic Park and Garden;</li> <li>• There is a need to improve the arrival experience and key walking routes between the Cultural Hub and both Moorgate and Liverpool Street stations;</li> <li>• There may be opportunities to create more green spaces and plant trees to enhance the environment and mitigate the impacts of pollution.</li> </ul> <p>It is proposed to adjust the strategy boundary to include the whole of Moorgate and its side streets. This will enable a coordinated approach for the street and its junctions to be developed as well as improved connections between Crossrail and the Cultural Hub.</p>	

**Recommendation:** It is recommended that:

- Officers undertake the production of a Moorgate Area Enhancement Strategy at a total estimated cost of £80,000, funded from the 2016/17 TfL Local Implementation Plan allocation (£40,000) and the River Plate House (7-11 Finsbury Circus) Section 106 Agreement (£40,000).

## **Main Report**

### **Background**

1. An area-based approach for the City's public realm is set out within the City Public Realm SPD (adopted July 2016) with Area Enhancement Strategies already approved for the majority of the 16 City areas. The four areas that do not yet have a strategy in place are Moorgate, St Pauls, Holborn and Temple & Whitefriars. Of these, Moorgate is considered to be a priority due to the significant amount of change that the area is experiencing and its proximity to Crossrail and the Cultural Hub.
2. The Liverpool Street Area Enhancement Strategy, approved by Members in September 2013, contains guidance on the northern section of Moorgate, but does not cover the streets to the south, east and west. The Barbican & Golden Lane Area Strategy (December 2015) addresses some of the streets to the west of Moorgate by introducing the principle of a 'Moorgate Quarter' but this does not extend beyond Moor Lane.
3. The proposed Moorgate Strategy area will provide a critical link between existing strategies and will be the missing piece of the jigsaw in addressing public realm proposals in this area.

### **Current Position**

4. Moorgate as a whole suffers from a lack of clear identity or sense of place. Although the area has one of the busiest stations in the City, is one of the City's Principal Shopping Centres and contains a number of designated heritage assets, the focus of the urban experience is on movement and transition, rather than as a place or destination.
5. There are a number of redevelopments in the Moorgate area that are either recently completed, consented or currently being considered (Appendix 2) with a general trend towards increased retail provision on Moorgate and the enhancement of east-west pedestrian routes along historic lanes. There is a clear need to develop a coordinated approach to the public realm which addresses the changing character of this part of Moorgate and identifies opportunities for improvements in the surrounding streets and spaces.
6. There is now a greater understanding of the likely pedestrian flows and comfort levels around Moorgate that will result from the opening of Crossrail. Findings from recent studies have revealed very low pedestrian comfort levels at the junctions of London Wall and Ropemaker Street post Crossrail

completion as well as poor accessibility. In order to deliver a safe and attractive public realm that will successfully accommodate the increasing pressures in this area, a review of the design and operational capacity of these junctions needs to be undertaken, with particular attention given to the wider changes to the strategic network such as the proposals at Bank Junction.

7. The emergence of the Cultural Hub and the identification of a number of projects within the Barbican & Golden Lane Area Strategy mean that further consideration must be given to the role that Moorgate will play as a gateway into the area, particularly for pedestrians moving west from the new Crossrail station, towards the Barbican and Cultural Hub.
8. Finsbury Circus sits between Liverpool Street and Moorgate and is one of the largest green spaces in the City. Crossrail are required to submit for approval under Schedule 7 of the Crossrail Act proposals for the reinstatement of the public realm that fall within the site area. Discussions are in progress to ensure that the works would be constructed to the City's specifications and standards. The proposed Strategy will enable officers to also consider opportunities for complementary improvements to connecting streets.
9. There is a general need throughout this area for an improved street environment and the predicted increase in pedestrian numbers will only intensify this position. In addition to increasing tree planting and the enhancement of townscape and public spaces, an improvement in air quality will be paramount to the future success of the area, particularly given that parts of it fall within the City's pilot Low Emissions Neighbourhood. The area is also vulnerable to flooding from surface water/sewer overflow and the potential for sustainable drainage measures will need to be taken into account.

## **Proposal**

10. The creation of a Moorgate Area Enhancement Strategy will not only fill the current gap in public realm guidance and proposals, but will develop a strategy that addresses the increasingly important role that this part of the City will play in delivering an attractive, accessible and safe public realm, whilst accommodating significant increases in pedestrian numbers and delivering all of the functional requirements of the street network.
11. In order to develop a clear scope for the strategy, a review of the boundary line of the strategy area has been undertaken and it is proposed to include the northern section of Moorgate and areas to the east and west of the street. This updated strategy boundary will ensure that opportunities and changes are captured that may not have been fully resolved in previous area strategies, in particular around Crossrail, the Cultural Hub, Finsbury Circus and Moorgate as a Principal Shopping Centre.
12. The proposed strategy will also seek to address utilities and maintenance issues in any design proposals.
13. Given that much of the background data is already available, it is proposed that a streamlined approach to the production of this strategy is undertaken

with a shorter programme for delivery and a targeted consultation process. It is anticipated that the strategy would be completed, consulted upon and submitted to committees for adoption within 12 months.

### **Corporate & Strategic Implications**

14. This project will contribute to the delivery of Key Policy Priority 1 from the City's Corporate Plan: Supporting and promoting the UK financial based services sector throughout the world for the benefit of the wider UK economy. This specifically mentions the need to seek continued investment in transport and other infrastructure projects and continue our support for key cross-London projects including Crossrail.

15. There are several Local Plan Policies that are of relevance to the Moorgate area strategy and these will be taken into account in the preparation of the document.

16. A new Moorgate Area Enhancement Strategy will principally aim to progress two of the key delivery themes from within the Departmental Business Plan 2016/19:

**Future Key Places** – To focus on key places in the City including supporting and enabling the development of a vibrant Cultural Hub in a world class setting.

**Future Streets & Public Realm** – To deliver a distinctive, attractive, inclusive and safe public realm in the City by:

- Upgrading busy key public realm areas including the Crossrail environs.
- Transforming traffic junctions to create calmer, safer, more attractive places in the heart of the City

17. The City has recently secured funding for a Low Emissions Neighbourhood, which partly falls within the proposed strategy area. Where possible, opportunities to complement this approach and improve local air quality will be explored as part of this process.

18. The City is currently developing a Noise Strategy which shall be considered during the development of proposals, particularly where there may be opportunities to enhance the acoustic environment to complement physical and visual landscape measures.

### **Financial Implications**

19. The total estimated cost of the preparation of the strategy (including consultation) is £80,000. This estimate is based on the cost of a similar strategy that was recently produced for the Cheapside and Guildhall area. The proposed funding approach for the Moorgate Area Strategy is to utilise £40,000 from the 2016/17 TfL Local Implementation Plan allocation and £40,000 from the Local Community Facilities and Environmental Improvement Works payment from the River Plate House (7-11 Finsbury Circus) Section 106 Agreement dated 10 May 2013.

20. The funds from the S106 Agreement may only be expended on works and facilities within the area specified in the agreement. This only covers part of the Moorgate strategy area. Therefore, it is proposed that the rest of the strategy will be funded by the TfL Local Implementation Plan allocation for 2016/17.

**Table 1: Estimated cost of the Moorgate Area Enhancement Strategy**

<b>Item</b>	<b>Estimated Cost (£'s)</b>
Staff costs	40,000
Fees	40,000
<b>TOTAL</b>	<b>80,000</b>

### **Conclusion**

21. Given the significant change and increasing development pressure in the Moorgate area, there is a clear need for a public realm strategy to provide a well-functioning and attractive public realm to accommodate increasing numbers of pedestrians and deliver a street level environment that is commensurate with a Principal Shopping Centre, key transport interchange and arrival point to the Cultural Hub.

### **Appendices**

- Appendix 1 – Area Strategies Map
- Appendix 2 – Strategy Area and Development Activity

**Luke Joyce**

**Project Manager**

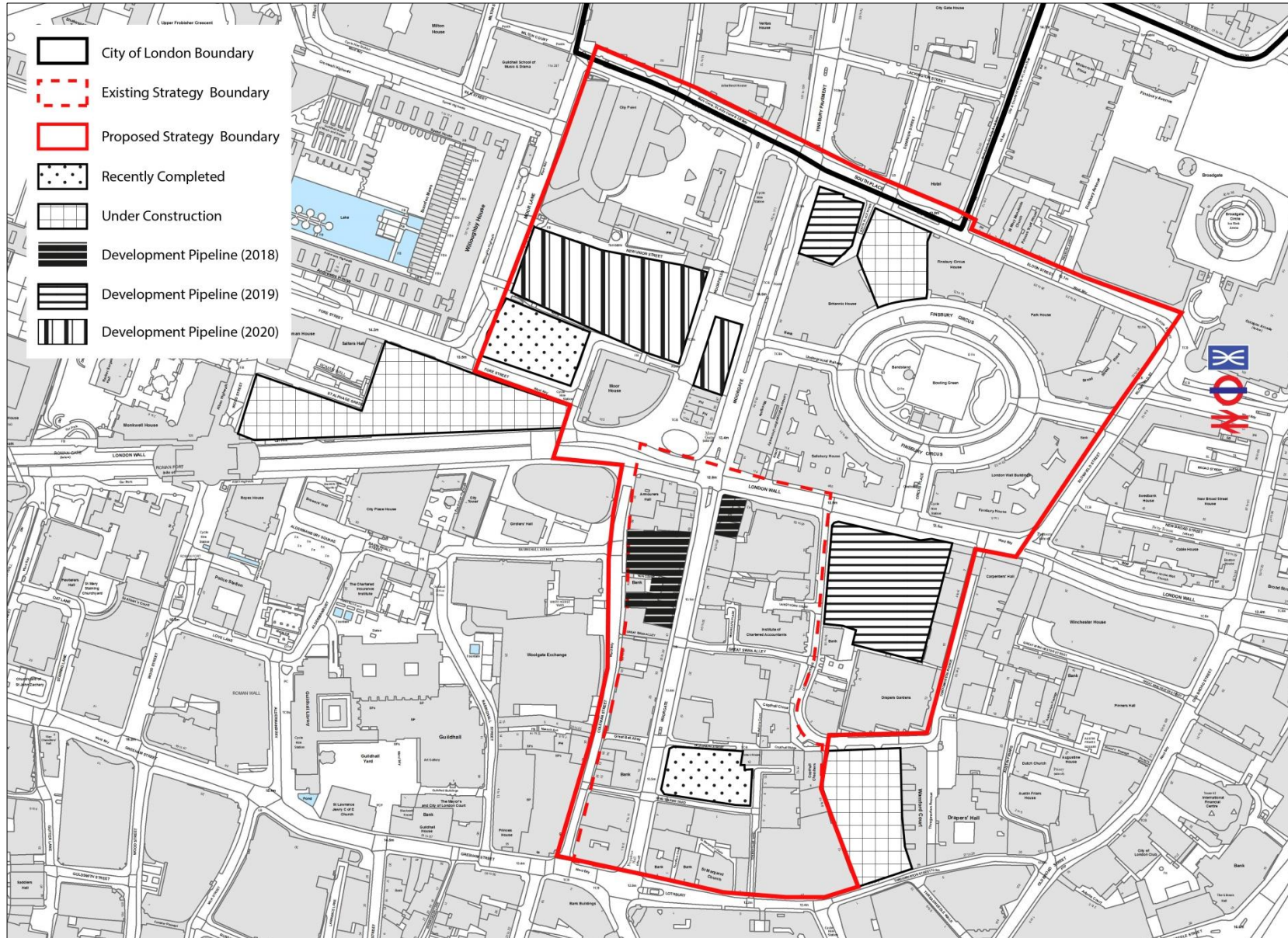
T: 020 7332 1928

E: [luke.joyce@cityoflondon.gov.uk](mailto:luke.joyce@cityoflondon.gov.uk)

Appendix 1 – Area Strategies Map



# Appendix 2 – Strategy Area and Development Activity



This page is intentionally left blank



<b>Committees:</b> Streets and Walkways Sub-Committee Projects Sub	<b>Dates:</b> 27 Sept 2016 11 Oct 2016
<b>Subject:</b> Issue Report: Street Lighting Replacement Project	<b>Public</b>
<b>Report of:</b> Director of the Built Environment	<b>For Decision</b>

### Summary

- Dashboard:
  - Project Status: Green
  - Timeline: Gateway 5 in February 2017
  - Total Estimated Cost: £4m
  - Spend to date: £77,826
  - Overall project risk: Amber
- Last Gateway approved: 3/4 (April 2016)
- Progress to date including resources expended:

The majority of the City's street lighting stock is now over 30 years old and is reaching the end of its serviceable life. Maintenance costs are accelerating, energy costs are high and rising, and the Government's carbon tax on energy has further added to the cost of lighting the highway. To address this issue, a technical equipment evaluation of a Light Emitting Diode (LED) solution for street lighting has been underway for some time to understand the reliability of the equipment and evaluate the potential savings should the City install it.

In addition, the system the City uses to trigger and control its street lighting has also reached the end of its useful life and has become vulnerable to system failure. The supplier of this equipment is pressing for its urgent replacement at a cost of around £660k, but there are significant risks associated with having a major commitment to a small contractor maintaining a bespoke system that's unique to the City, and is reliant on a network of 16 UK Power Networks (UKPN) transformers based around the City.

- Summary of issues:

#### Street lighting & Smart City

In response to the Gateway 3/4 report, Members asked for further information from officers regarding how this project might interface with other similar corporate initiatives such as the Joint Command & Control Room (JCCR), and equally how the project would help deliver the City's broader Smart City objectives.

This report summarises that position, explaining how the technology used to

create a radio frequency (RF) mesh to send signals to control the street lights can also be used to send and receive other small packets of data from other sensors placed around the City.

Although the function, selection and provision of those sensors is outside the scope of this project, creating a network to facilitate them is a clear benefit. The RF mesh has the potential to enable data to be made available centrally for the JCCR and Safer Communities project under the One Safe City programme, as well as providing an opportunity to develop more efficient services in monitoring air quality & noise pollution, transportation and refuse collection needs.

Equally this report summaries how the technology used for street lighting is separate to the 4G wireless concession tender and City wifi provision, and that these projects can be moved forward separately but in parallel.

### UK Power Networks

This report also updates Members on a key development with UKPN around our current street lighting operation that highlights the need to progress this project as quickly as possible.

UKPN have said that due to a lack of equipment, experience and funding, as well as the unique nature of the City's bespoke system, they are unable to support the transformers that are vital to the existing Cyclocontrol system, and that if and when the system fails, they may not have the ability to repair it.

Such a failure would mean the City would be unable to switch on and off its street lights, and those lights would have to be fixed on 24/7.

### Conclusion

As the 'Do Nothing' option on this project would seem to expose the City to significant and increasing financial and reputational risk, the clear solution is to ensure that a wireless Control Management System solution becomes a key deliverable of the project. In doing so, it also provides the technology platform to support the City's wider Smart City objectives of using sensor technology to capture new data and delivery improved services.

#### • Proposed way forward :

It is now proposed to seek final costs for the project (including tenders where appropriate) so that a Gateway 5 report can be brought forward early in 2017. That report will present the final cost / benefit assessment of switching to LED street lighting, controlled by a central management system using a radio frequency mesh, and will seek final approval to start.

In the meantime we will explore a temporary fallback position with UKPN regarding their transformers to minimise the risk of a major lighting issue developing from a unit failure, albeit such a position may not prove feasible.

### **Recommendations**

It is recommended that Members:

- Agree the approach outlined above, with the project moving to Gateway 5.

## Main Report

<b>1. Issue description</b>	<p><b><u>Integration with Smart City</u></b></p> <p><u>Background</u></p> <p>The current Cyclocontrol system for street lights (which uses the power supply itself to switch them on and off) is life expired, no longer fit for purpose and requires considerable investment to upgrade.</p> <p>Previous equipment trials to replace it have failed due to the problems caused by the City's canyon effect and the need to reach street lights in narrow alleyways.</p> <p>Through a series of trials with three separate suppliers, officers have now successfully tested low spectrum Radio Frequency (RF) technology that not only solves this problem, but also creates wider opportunities for the Smart City.</p> <p><u>Technical scope</u></p> <p>The system works by sending out an RF signal from a small number of 'access points', aiming to reach the node contained in each &amp; every street light.</p> <p>Each node has its own ip (internet protocol) address &amp; acts as a relay to every other node, thereby creating the 'mesh'.</p> <p>The mesh network is automatically self-forming and self-healing (ie if one node fails, the mesh reforms around it).</p> <p>RF technology is also strong enough to send signals through buildings as well as around them, solving the canyon and alleyway problem.</p> <p>It allows two way communication; to get data (eg energy use), to send a command (eg switch on) or send a notification (eg light failed).</p> <p>That communication can be via desk-top or mobile device, with secure access available for authorised users (that could include the City Police &amp; JCCR).</p> <p>Networking standards are designed to allow compatibility &amp; interoperability with different devices, and the mesh concept is also scalable, with bandwidth available to accept new devices.</p> <p><u>Street lighting concept</u></p> <p>In the street lighting perspective, use of this equipment will enable:</p> <ul style="list-style-type: none"><li>• <u>Active fault reporting</u>; the units will tell us when they're not</li></ul>
-----------------------------	--

working and why, establishing an optimised asset management regime with depreciation modelling and whole-life costing to save maintenance and scouting costs

- Comprehensive energy management information; this means real-time metered supplies (rather than estimates), reducing energy bills & carbon tax payments
- Each street light is individually controlled; having unique ip addresses allows each individual light to be given its own lighting profile to better meet local needs and reduce energy costs
- Real-time adaptive lighting control; each unit can be switched on / off / dimmed in real time, either:
  - automatically via a programme
  - in response to an instruction (eg a police incident or planned event)
  - in conjunction with a sensor (eg measuring daylight or movement)

#### Smart City Vision

The street lighting mesh creates a canopy that can carry more than just street light information. It also creates an intelligent asset platform for a multitude of other uses.

That platform is deliberately designed to be an open one:

- enabling the Smart City agenda
- generating 'Big Data' for joined up services
- providing the opportunity for more efficient services & savings
- facilitating innovation, particularly for SMEs
- creating the potential for revenue-generating 3rd party access

It will offer a complementary network to the existing high spectrum wifi, mobile phone & fibre networks, but in the long-term it may be better suited to support certain Smart City functions, in particular low cost sensor technology.

#### Wider opportunities

The key Smart City opportunity lies with integrating sensor technology with the RF mesh; every sensor has its own unique ip address and uses the mesh to gather, transmit and report information in a simple, reliable and joined up fashion.

In discussion with the potential mesh suppliers, other departments and officers, the potential data gathering opportunities of this intelligent asset platform could include:

- Noise, enabling a better understanding of background noise levels in the City, as well as real time monitoring of

potential noisy locations such as night clubs and building sites

- Air quality, generating data at a more localised level than currently available
- Security / crime & disorder / anti-social behaviour, sensing and flagging untypical activity in specific locations
- Transport, covering the volume and speed of vehicle movement, as well as the number of cycle and pedestrian activities
- Parking, making it possible to monitor the availability of parking bays, particularly important for disabled drivers
- Environmental monitoring, from wind measurement around tall buildings to weather and temperature information for gritting and resurfacing
- Health & Safety, checking for air quality, toxic fumes and fire in our underground confined spaces & pipe subways
- Refuse collection, triggering a reactive response when bins are full
- Potential licensed 3rd party access to the mesh network, such as to UKPN for energy readings

Using this approach, data collected via the RF mesh can be presented together in a simple but comprehensive dashboard, allowing tailored access to individual systems, as well as joined up oversight of the City's environment.

This is ideal for joined up functions such as the JCCR, and fully enables the 'Internet of Things' concept of machine-to-machine communication to enhance City services.

### **UK Power Networks**

The City's bespoke Cyclocontrol system for triggering and controlling its street lighting works by sending a pulse along the electrical wire from one of 16 UKPN substations spread around the City to trigger the street lights on and off.

Other systems such as timers, photocells and 'line of sight' control systems are used elsewhere, but the City committed to Cyclocontrol 30+ years ago as it promised a more efficient and effective method of control to overcome its combination of urban canyon effect and narrow streets & alleyways.

However, similarly to the street lights themselves, that Cyclocontrol system has also started to reach the end of its useful life and has become vulnerable to system failure.

The supplier of this equipment (Energy Controls) has been pressing for its urgent replacement at a cost of around £660k, but in investigating this option, UKPN have come to the conclusion that due to a lack of equipment, experience and funding, as well as the unique nature of the City's bespoke

	<p>system, they are unable to continue to support the transformers that are vital to the system.</p> <p>That means that if and when a transformer fails, UKPN may not have the ability to repair it, which would mean the City losing its ability to switch on and off its street lights in the vicinity of that substation. In other words, street lights would have to be on 24/7, which would not only attract criticism about wasting energy, but would also have a significant impact on the City's energy bill.</p> <p>Officers are actively working with UKPN to see what short term alternatives might be used should this scenario happen. These are likely to involve revisiting alternatives previously discounted, such as the costly and time-consuming retro-fitting of photocells directly onto streetlights across a widespread area.</p> <p>However, beyond the next 2-3 years, the risk of major UKPN transformer failure is likely to become significant, which reinforces the case to shift to a wireless CMS system and make this a key deliverable of the overall street lighting project.</p>
<p><b>2. Last approved limit</b></p>	<p>A total of £77,826 (of the originally agreed £100k budget) has been used in reaching Gateway 4, leaving £22,173 remaining.</p> <p>From the current equipment trials, as well as an initial assessment of the condition of the City's lighting infrastructure (wiring, brackets etc), the cost of replacing the City's street lighting stock has been estimated to be approximately £4m (including staff, installation and CMS costs), with payback expected to be around seven years from full implementation.</p>
<p><b>3. Options</b></p>	<p>It is now proposed to bring forward a Gateway 5 report early in the new year. This report will present the final cost / benefit assessment of switching to LED street lighting, controlled by a central management system using a radio frequency mesh, and it will also seek final approval to start.</p>

**Appendices**

N/A	
-----	--

**Contact**

<b>Report Author</b>	Assistant Director (Highways)
<b>Email Address</b>	ian.hughes@cityoflondon.gov.uk
<b>Telephone Number</b>	020 7332 1977

<b>Committees:</b>	<b>Dates:</b>	
Streets and Walkways Sub-Committee	27 September 2016	
Resource Allocation Sub-Committee	06 October 2016	
Projects Sub-Committee	11 October 2016	
<b>Subject:</b> Bank junction Improvements: Experimental Safety Scheme	<b>Issue Report</b>	<b>Public</b>
<b>Report of:</b> Director of the Built Environment	<b>For Decision</b>	
<p><u>Summary</u></p> <ul style="list-style-type: none"> <li>• <u>Dashboard</u></li> </ul> <p>Project Status: Amber            Timeline: next Gateway - 4/5 December 2016 (previously September 2016)            Total Estimated Cost: – £500,000 – £620,000 (Issues report Feb 2016)            Spend to Date: approximately £205,000            Approved Budget: £300,000 (Issues report February 2016)            Overall Project Risk: Green</p> <ul style="list-style-type: none"> <li>• <u>Last Gateway approved</u> Gateway 3 (December 2015)</li> <li>• <u>Summary of issue</u></li> </ul> <ol style="list-style-type: none"> <li>1. Following a decision by Transport for London (TfL) that the traffic model work required for this project should be undertaken to forecast into 2018, rather than 2016 as the original feasibility modelling had been; there has been an extension to the programme and cost to this project. It is estimated that a further £87,100 is required to reach gateway 4/5. It had been hoped that officers would be able to reduce the programme time for the revised traffic modelling scope, but this has not been achieved.</li> <li>2. The extra funds are requested to complete the following activities:               <ol style="list-style-type: none"> <li>a) A longer programme for the traffic modelling element of the work which is also more complex than first anticipated requiring more fees than originally budgeted for;</li> <li>b) A delay in the programme meaning that the Gateway report, originally planned for September 2016, will now be submitted in December 2016. This incurs additional staff cost in managing activity over a longer period of time; and</li> <li>c) An increase in expected staff hours for the design and engagement activities ensuring that appropriate pre-planning activity is undertaken, should the scheme be approved in December.</li> </ol> </li> <li>3. In 2015/16, Transport for London allocated £120,000 to the project. The City was unable to utilise all of this in the relevant financial year given that the programme for the traffic modelling did not progress as quickly as anticipated. This left £11,471 unspent and this funding could not be rolled</li> </ol>		

forward into the new financial year. Therefore this has left a short fall of £11,471 of available funds from the approved budget of £300,000.

- Background

4. The Bank Junction experimental safety scheme is proposed to tackle safety concerns ahead of a longer term programme for changes at Bank Junction which are being developed in parallel. The experimental safety scheme, if approved, would see a motor vehicle restriction at Bank Junction, Monday to Friday 0700 to 1900. It is likely that bus and pedal cycle only will be allowed across the junction, however technical work is still being undertaken regarding whether taxis will be included in the restriction. This tackles the time period when 75% of collisions occur.

- Progress to date including resources expended

5. Significant progress has been made on the detailed design on the proposal for a timed motor vehicle restriction through Bank Junction, Monday to Friday 0700 to 1900 since the February 2016 Issues report, which advised of a contribution of £120,000 from Transport for London.

6. Progress includes:

- Continued work on the development of the traffic model with TfL which will, when finalised, give detailed:
  - indicative routings for the reassigned vehicular traffic;
  - expected journey times for both buses and general traffic through the traffic modelling area; and
  - the best options for optimising signal timings within the traffic modelling area as a result of less vehicles going through Bank.

This is an important area of the work, but it also technically complex due to the size of the model and is taking longer to approve than originally thought.

- Engagement with businesses which are most likely to be noticeably impacted by the proposal in terms of their ease of access, delivery and servicing by motor vehicles. 46 businesses so far have had discussions with the City about their current activities and this has helped to develop the detailed design proposals to better accommodate their needs. Discussions are still ongoing for some locations which are more difficult to find alternative solutions for. Further engagement with businesses further away from the junction, but within the zone of influence, is planned to start in September. In these cases, vehicles may have to change routing or there maybe loading and waiting implications.
- Plans for the location of signs, types of signs, and the need for electrical connections has also been detailed.
- Work continues in detailing the enforcement strategy for the restriction and looking at possible resilience plans for when there are street works elsewhere on the network.



7. A budget of £300,000 was previously approved to reach the next gateway, of which approximately £205,000 has been spent to date, full details in Appendix 1, table1.

- Proposed way forward

8. Additional funding of £98,571 is needed to reach the next gateway (4/5) to give a total budget of £387,100. It is proposed to use a number of S106 deposits which have relatively small amounts of funds still available from the interest payments on the original principal sums. One of these funds is required to be returned to the developer in February 2017 if unused. They have been identified as being appropriate to be used at Bank. Full details can be found in Appendix 1, table 3.

### **Recommendations**

The Streets and Walkway Sub Committee and Projects Sub Committees are recommended to approve an increase in the fees and staff costs budget of £87,100 making a total budget of £387,100 now required to reach the next gateway;

The Resource Allocation Sub-Committee is recommended to approve the reallocation of the S106 deposits set out in table 3 of Appendix 1, totalling £98,571 to the Bank Junction experimental safety scheme.

### **Main Report**

<b>1. Issue description</b>	<ol style="list-style-type: none"> <li>1. In the Gateway 3 report in December 2015, officers estimated that an experimental safety scheme at Bank, if approved, could be delivered in 12 months. It has become apparent that it is not possible to deliver the scheme by December 2016 following the requirement to model the proposal in the 2018 future traffic scenario and officers being unable to negotiate a reduced timetable for this work with TfL.</li> <li>2. The traffic modelling work, which will give TfL the information they need in order to make a decision to approve the scheme under the Traffic Management Act 2004, is unlikely to conclude until November 2016. Officers believe it will be challenging but possible to provide Members with a Gateway 4/5 report in December, with a view to implementing the scheme in early April 2017.</li> <li>3. The budget that was agreed in February 2016 of £300,000 is not going to be sufficient to reach the next gateway. This is due to the need to create the new 2018 traffic modelling base,</li> </ol>
-----------------------------	---

	<p>the increased level of engagement with stakeholders ahead of finalising the proposals and the need to undertake pre-planning work ahead of the approvals to ensure delivery of the scheme as quickly as possible, if approved. This report seeks approval of a further £87,100 to complete the necessary work to cover increased fees and increased staff time. A breakdown of this can be seen in Appendix 1, table 2.</p> <p>4. It is estimated that a budget of £387,100 is required to reach gateway 4/5. The extra funds are requested to cover the following changes:</p> <ul style="list-style-type: none"> <li>a) A longer programme for the traffic modelling element of the work which is also more complex than first anticipated requiring more fees than originally budgeted for;</li> <li>b) A delay in the programme meaning that the Gateway report, originally planned for September 2016, will now be submitted in December 2016. This incurs additional staff cost in managing activity over a longer period of time; and</li> <li>c) An increase in expected staff hours for the design and engagement activities to design out more issues ahead of the experimental traffic order to reduce the risk to the success of the experiment, and to keep local stakeholders informed of progress.</li> </ul> <p>5. It is also worth noting at this stage that the whole project cost is likely to increase. A variety of options for how we sign and enforce the scheme is being estimated to allow flexibility, improved enforcement and improved aesthetics. A full breakdown of costs will be provided at the gateway 4/5 report once detailed design and cost estimates are completed and collated.</p>
<p><b>2. Last approved limit</b></p>	<p>6. The previous committee report (an issues report in February 2016) stated that an allocation of £300,000 was necessary to get to the next gateway (4/5).</p> <p>7. Table 1 in the Appendix shows the budget, spend and commitments at the end of August 2016.</p>
<p><b>3. Options</b></p>	<p>8. At this time the most practical option to recommend to fund the required £98,571, is to utilise funds from a small number of section 106 projects, as shown in Appendix 1, table 3. This uses interest accrued from those agreements which has not been utilised nor currently allocated or needed for other schemes. The 125 Old Broad Street transport (interest) contribution is required to be returned to the developer in February 2017 if unused, and the principal sum is already allocated to the Bank Junction Programme. Likewise the Mondial House transport principal contribution is already</p>

	<p>allocated to this project, and therefore would be sensible to allocate the remaining associated interest. The other deposits are in small amounts and individually are unlikely to deliver anything of significance in their original project location. These funds can all be used at Bank.</p> <p>9. Transport for London (TfL) have already contributed almost £170,000 towards this scheme and do not have any further funds available from the Major Schemes pot at the present time. They have communicated that they will consider further funds towards the implementation of the scheme.</p>
--	--

**Appendices**

<b>Appendix – Table 1</b>	Spend to date
<b>Appendix – Table 2</b>	Proposed budget changes
<b>Appendix – Table 3</b>	Proposed funding sources

**Contact**

<b>Report Author</b>	Gillian Howard
<b>Email Address</b>	Gillian.Howard@cityoflondon.gov.uk
<b>Telephone Number</b>	020 7332 3139

This page is intentionally left blank

Appendix - Financial Information

Table 1 - Spend to-date

<b>16100335 - Bank Junction Interim Safety Scheme</b>				
<b>Description</b>	<b>Current Budget</b>	<b>Commitments</b>	<b>Spent</b>	<b>Balance</b>
Highways	30,000	5,213	9,788	14,998
P&T Staff Costs	155,000	29,997	103,863	21,140
Fees	115,000	43,897	71,046	56
<b>TOTAL</b>	<b>300,000</b>	<b>79,108</b>	<b>184,698</b>	<b>36,195</b>

Includes spend and commitments until the end of Aug 2016

Table 2 - Proposed Budget required to reach next Gateway (4/5)

	<b>Current Budget</b>	<b>Proposed Adjustment</b>	<b>Proposed New Budget</b>	<b>% Change</b>
Highways Staff Costs	30,000	-	30,000	
P&T Staff Costs	155,000	64,800	219,800	
<b>Staff Costs Total</b>	<b>185,000</b>	<b>64,800</b>	<b>249,800</b>	<b>35%</b>
<b>Fees</b>	<b>115,000</b>	<b>22,300</b>	<b>137,300</b>	<b>19%</b>
<b>TOTAL</b>	<b>£ 300,000</b>	<b>£ 87,100</b>	<b>£ 387,100</b>	<b>29%</b>

Table 3 - Funding Sources

<b>Description</b>	
<b>Existing Funding:</b>	
TfL Financial Year 2015/16 - Major Schemes	120,000
TfL Financial Year 2015/16 - Major Schemes unspent	-11,471
Mondial House s106 - Transport	120,000
TfL 2016/17 - Major Schemes	60,000
<b>New Funding Sources:</b>	
125 Old Broad Street - Transport (interest)	47,837
Faraday Bldgs s106 - Transport (interest)	10,274
New Court (1-10 St Swithin's Lane) S106 - Transport (interest)	8,772
Mariner House S106 - Transport (interest)	5,399
Mondial House S106 - Transport (interest)	26,289
<b>TOTAL</b>	<b>387,100</b>

This page is intentionally left blank

<b>Committees:</b>	<b>Dates:</b>	<b>Item no:</b>
Streets and Walkways Sub Committee(for decision)	27/09/2016	
Projects Sub Committee (for decision)	11/10/2016	
Port Health and Environmental Services(for decision)	22/11/2016	
Middlesex Street Area Enhancement Phase 2	<b>Update Report</b>	<b>Public</b>
<b>Report of:</b> Director of the Built Environment Director of Markets and Consumer Protection		<b>For Decision</b>

## Summary

### Dashboard

- (i) Project status: Green
- (ii) Timeline: Gateway 1 /2 was approved in 2012
- (iii) Total project estimated cost:  
Phase 2: c £2-4m cost range, for public realm enhancements and market improvements.
- (iv) Phase 2 spend to date: £0 (costs accounted for in Phase 1 as part of wider Middlesex Street Area Enhancement project)
- (v) Estimated cost to reach next Gateway: £50,000
- (vi) Overall project risk: low

### Last Gateway approved

Gateway 1/2 for the Phase 2 element of the works.

This Progress Report relates exclusively to Phase 2 of the Middlesex Street Area works; Phases 1 and 3 have been reported to committee separately.

For information, Phase 1, comprises public realm and enhancement works at the northern end of Middlesex Street, Widegate Street, Sandys Row and Rose Lane, and was last reported at Gateway 5. Works began on site in August 2016 and are scheduled for completion in June 2017. Phase 3 comprises the removal of Middlesex Street Estate ramps and new landscaped space at Artisan Street, and has been approved at Gateway 4. Works are expected to commence in late 2016.

### Progress to Date

This report advises Members of progress to Phase 2 of the Middlesex Street Area project, and sets out a strategy for progressing the project to Gateway 3.

The project aims to enhance Petticoat Lane Market and the central section of Middlesex street between Sandys Row and St Botolph Street, celebrating the character and history of the area whilst improving the visitor experience. The project will require working in partnership with the London Borough of Tower Hamlets, and in consultation with market traders and other local stakeholders.

To date, following Gateway 2 approval the City has commissioned two studies: one of

potential environmental improvements and one on the market offer and operations. The recommendations of both studies are informed by extensive stakeholder and market trader consultation undertaken in 2013 and 2015. Subject to Member approval these recommendations will form the basis of a consultant brief to develop public realm enhancement design proposals for Middlesex Street and a strategy/ delivery plan for changes associated with the market operation.

**Recommendations**

It is recommended that Members approve the funding required to reach Gateway 3 of £50,000, to be funded from Section 106 contributions relating to the 5 Broadgate development (Section 106 agreement dated 29<sup>th</sup> July 2011).

**Main Report**

<p><b>1. Reporting Period</b></p>	<p>2012-current</p>
<p><b>2. Progress to Date</b></p>	<ol style="list-style-type: none"> <li>1. This report relates to Phase 2 of the Middlesex Street Area project, which is concerned with public realm improvements in the central section of Middlesex Street between Sandys Row and St. Botolph Street, alongside the enhancement of Petticoat Lane Market located in Wentworth Street (in the London Borough of Tower Hamlets). See the map at Appendix 1 for the project area.</li> <li>2. Middlesex Street and adjacent streets are on the eastern fringe of the City. The area is well-known due to its central London location and the fame of the historic Petticoat Lane Market. However, both Middlesex Street and the market are in need of improvement. To the north, Spitalfields Market is an attractive visitor destination, whilst to the south, Aldgate is currently being redeveloped to create significant new public spaces. Middlesex Street could form an enhanced pedestrian route between these two key areas.</li> <li>3. The enhancement of the Middlesex Street area is a high priority project of the Liverpool Street Area Enhancement Strategy (adopted in 2013). With the opening of Liverpool Street and Whitechapel Crossrail stations, the number of pedestrians in the area is anticipated to significantly increase.</li> <li>4. The project area is along the border with the London Borough of Tower Hamlets (LBTH). LBTH manage the middle and southern parts of the Petticoat Lane Market, and the eastern side of Middlesex Street lies in Tower Hamlets. The need for an improved setting for the market and local retail offer has been endorsed through a public</li> </ol>



consultation exercise carried out with LB Tower Hamlets.

#### Background

5. In March 2012 a Gateway 1/ 2 report initiating the Middlesex Street Area enhancement project was agreed by Members.
6. A public consultation and a traffic study were carried out from January to March 2013 and highlighted the need to provide an enhanced environment and improve traffic movement in the area. In October 2013 Members considered an Options Appraisal (Gateway 4) report, and approved splitting the project into two phases: Phase 1 being enhancements to the northern end of Middlesex street; and Phase 2 being enhancements to the central section of Middlesex Street and the enhancements to Petticoat Lane Market. A third phase was later added that incorporated enhancements to Middlesex Street Estate/ Artisan Street. See Appendix 2 for an overview of Phases 1 and 3.
7. Phase 1 of the project has recently been approved at Gateway 5 (April 2016). Works began in August 2016, in Middlesex Street (northern end), Widegate Street, and Sandys Row. They include transforming two traffic islands into pedestrian spaces, raising carriageways, improvement the streetscape, rationalising parking and loading arrangements, and experimental traffic changes.
8. This progress report now updates Members on the work that has been undertaken specifically on the Phase 2 elements of the work.

#### Consultant work to date

9. A Traffic study was undertaken by Atkins in April 2013. The study presented findings relevant to the operation of Petticoat Lane Market, including the pedestrian numbers entering the market on Sundays and their direction of travel – largely entering and exiting the area from Bishopsgate. It also detailed the parking and loading peak periods for vehicles on market day.
10. Architects 'The Facility' were commissioned in 2013 to recommend measures to improve the Middlesex Street area. As part of their work they undertook a consultation of local stakeholders including market traders, market users, shopkeepers, residents, local freeholders, leaseholders and lessees, local groups and organisations, visitors to the area, and the wider public (via a website).
11. In addition, in-depth work relating specifically to the operation of the market was required. In 2014 market

consultants The Retail Group completed a review of the market operation in both the City and Tower Hamlets. This included surveys of traders and visitors, alongside peer reviews, and identified a number of issues in the area.

Consultants' findings:

12. The consultants identified a number of issues, including:

- Poor presentation of stalls
- Lack of sense of arrival at the market
- Inappropriate stall structures being used and often left on the public highway when not in use
- Lack of facilities such as toilets
- Lack of branding
- Lack of diversity in terms of the merchandise on sale
- Clear divergence of the overall quality of the market with the retail offer in the area
- A key issue on market day was a need to strengthen the enforcement policy of both stall layout and parking.

13. The consultants made a number of recommendations specific to the operation of the Market, including:

- Facilities and public amenities including covered spaces for use in poor weather, more and better located seating, cycle parking, temporary seating on pavements, and new public toilets
- Improving Market operations, including new market stalls/rigs, the reorganisation of layout, storage, and management of stalls, road closures at certain times, and proper consideration of trader car/ van parking.
- New market offer including food
- New management structure for ongoing market operations, and clear enforcement policies
- Petticoat Lane Market Development Group to be formed, to suggest and promote improvements to the Market.
- Better trader engagement
- Additional events including visiting or temporary markets
- Offers and collective promotions introduced
- Public realm works including improved paving and widened pavements, more planting, better lighting, commissioning public art
- Conservation work to improve the local shopfronts
- Raising the profile of the market and a branding strategy which highlights the history of the area
- Signage/ wayfinding including improved signage and visibility from Bishopsgate, and new signs and maps on Middlesex Street

A more comprehensive list of the recommendations from the various reports is provided in Appendix 3.

14. In order to make the suggested changes, the consultants

	<p>outlined a process that included: partnership with Tower Hamlets (LBTH) throughout; development of design for the enhancement of the area; establishment of a Working Group focused on Petticoat Lane Market with Ward Members, local traders, businesses, residents, and landowners; and exploring funding options. The aim would be to revitalise the local economy and develop Petticoat Lane Market as a destination.</p> <p>15. Then in October 2015, The Retail Group organised a day of stall trials with market traders. New stall types were erected and traders were consulted on them, with a variety of responses. The responses focused on a number of themes:</p> <ul style="list-style-type: none"> <li>- Ownership of and responsibility for the stalls</li> <li>- Payment for the stalls</li> <li>- Security and storage</li> <li>- Branding of stalls</li> <li>- The timetable for the introduction of the new stalls</li> <li>- Other general comments about the market: need for public toilets, need for better signage, better food offer</li> </ul> <p>16. The findings of these consultants' reports will be the basis for officers' work in the next stage of this project.</p> <p><u>Context: Aldgate and other related developments</u></p> <p>17. Works are underway to create significant new public spaces and increased amenities for residents, workers, and visitors in the Aldgate area. The enhanced area of Aldgate is adjacent to the southern end of Middlesex Street, and would form an attractive gateway to the market. The enhancement of Petticoat Lane Market therefore would align closely with the improvements in Aldgate, and local businesses represented by The Aldgate Partnership business group have expressed their desire for Market improvements.</p> <p>18. The journey from Spitalfields to Aldgate, via Middlesex Street and Petticoat Lane Market has been identified as a potentially important route for visitors and locals in the area, which would bring together the area's historic market places.</p> <p>19. As part of the Phase 1 works, officers have been liaising with the market traders, local businesses and other stakeholders in the area. It is timely to progress with the phase 2 project now given that these relationships have been built and the expectation among stakeholders is for the works to continue.</p>

<p><b>3. Next Steps</b></p>	<p>20. Phase 2 of the Middlesex Street Area enhancement project will include both improvements to the public realm in the area, as well as measures to enhance Petticoat Lane Market.</p> <p>21. A Project Team will be set up to manage the project, with the City Public Realm team in partnership with colleagues from the Markets and Consumer Protection Team and the London Borough of Tower Hamlets.</p> <p>22. A key next step will be to set up a Working Group to set the project's aims, guide the project through its various stages, and promote community consultation, comprising:</p> <ul style="list-style-type: none"> <li>- City of London Ward Members</li> <li>- Tower Hamlets Ward Members</li> <li>- Market traders representatives</li> <li>- the East End Traders Guild</li> <li>- local residents</li> <li>- local businesses</li> <li>- Widegate Traders Association</li> <li>- East Anglia University</li> <li>- Local landowners</li> <li>- Other key stakeholders</li> </ul> <p>23. Appoint the following specialist consultants:</p> <ul style="list-style-type: none"> <li>– Market consultants to undertake second stage of work, to create Action Plan and guidance on delivering changes to the market</li> <li>– Landscape architects/designers commissioned to design public realm improvements in the area (possibly including a separate graphic design/branding consultant to advise on signage and area branding)</li> </ul> <p>24. Legal advice will be sought in relation to the bye laws and primary legislation that governs the operations and siting of the market. In addition, relevant policies – for example, those which relate to trading hours or positioning of stalls within the area – will be reviewed.</p> <p>25. Traffic movement and servicing of local areas will be considered, updating the traffic survey already undertaken in light of recent and upcoming changes to the area.</p> <p>26. Subsequent to this work, an overview of options for the enhancement of the market and associated costs will be reported to Members at Gateway 3 in early 2017.</p> <p>27. Other relevant departments and stakeholders will be consulted including Open Spaces, City Surveyors, Chamberlains, Access Team, Planning and historic environment, highways, cleansing.</p>

	<p><u>Financial Implications</u></p> <p>28. The enhancement of the Middlesex Street area is a high priority of the Liverpool Area Enhancement Strategy (adopted in 2013). It is proposed to be part funded from the Section 106 contributions relating to the 5 Broadgate development, with other sources of funding including from the LBTH. Funding sources to be confirmed at Gateway 3.</p> <p>29. The resource estimated to be required to reach the next gateway is:</p> <ul style="list-style-type: none"> <li>- £40,000 fees</li> <li>- £10,000 staff costs</li> </ul>

**Appendices**

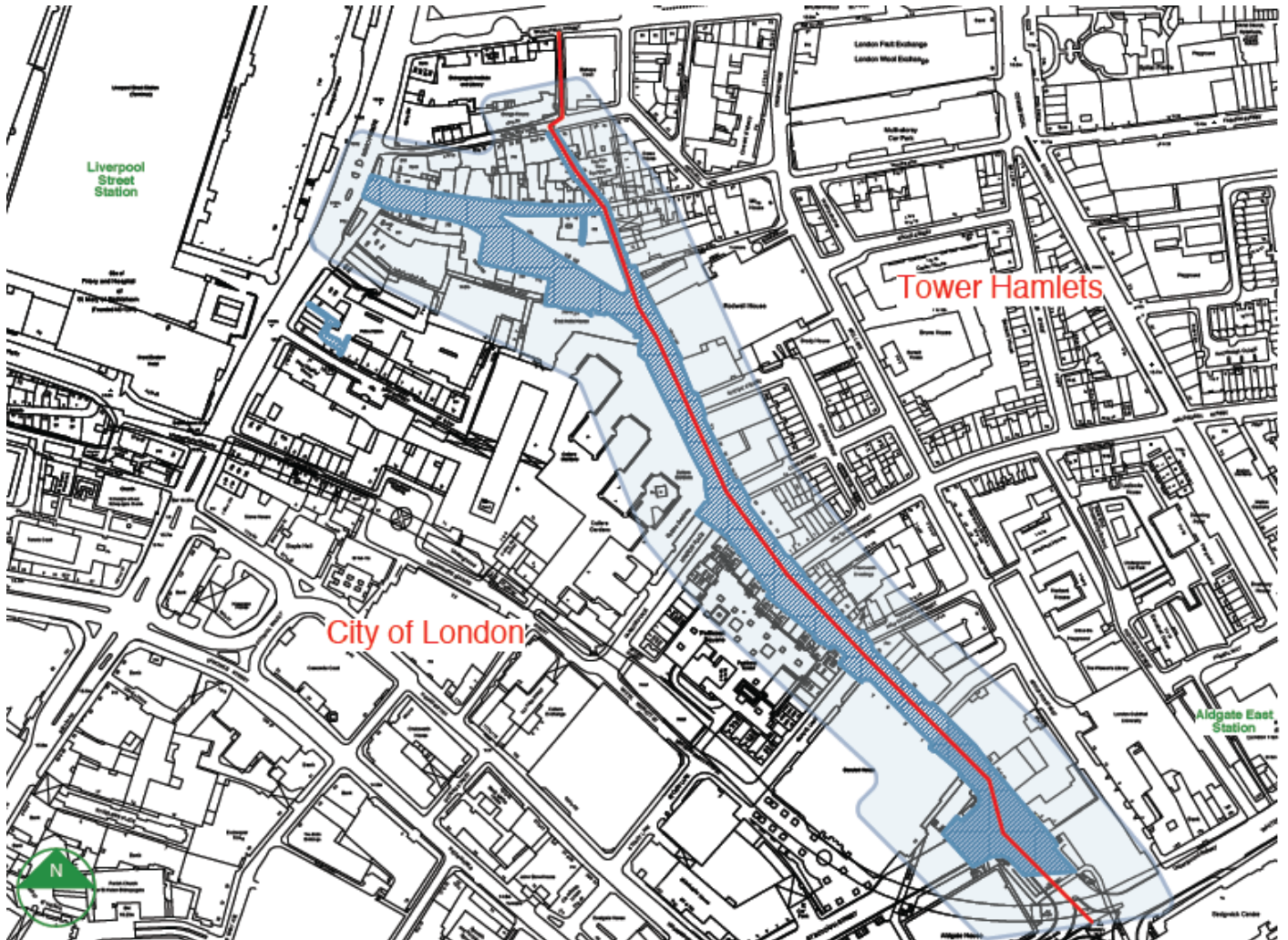
<b>Appendix 1</b>	Plan of project area
<b>Appendix 2</b>	Middlesex Street phases 1 and 3
<b>Appendix 3</b>	Recommendations from consultants' reports

**Contact**

<b>Report Author</b>	Helen Kearney
<b>Email Address</b>	<a href="mailto:helen.kearney@cityoflondon.gov.uk">helen.kearney@cityoflondon.gov.uk</a>
<b>Telephone Number</b>	020 7332 3526

<b>Report Author</b>	Steve Blake
<b>Email Address</b>	<a href="mailto:steve.blake@cityoflondon.gov.uk">steve.blake@cityoflondon.gov.uk</a>
<b>Telephone Number</b>	020 7332 1604

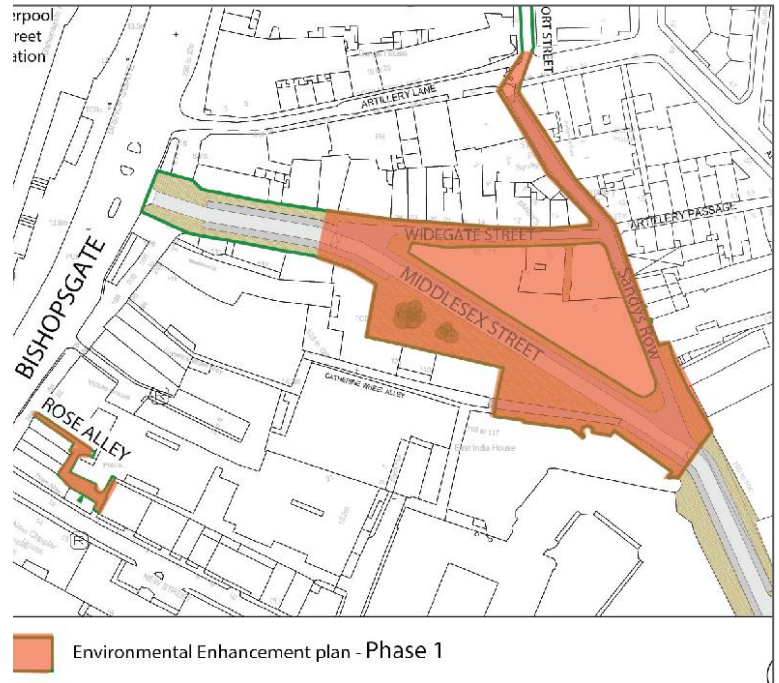
**Appendix 1:  
Middlesex Street, showing boundary between City and Tower Hamlets**



## Appendix 2: Phases 1 and 3, Middlesex Street Area

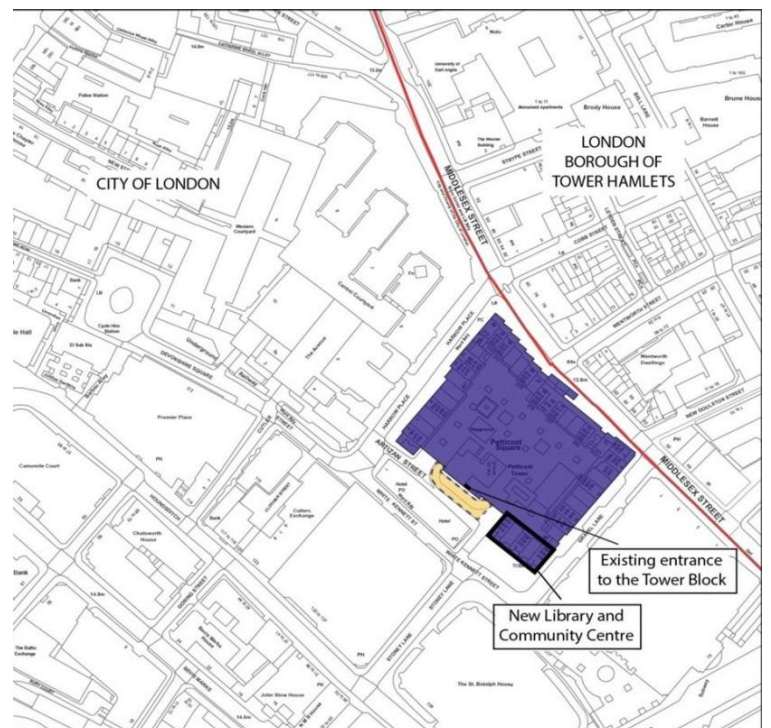
### Phase 1

- Public realm improvements to the Northern end of Middlesex Street, Widegate Street, Sandys Row and Rose Alley
- Transform traffic islands along Middlesex Street into public spaces
- Market Parking and Loading arrangements
- Traffic experiments
- Works commence summer 2016



### Phase 3

- Removal of car park ramp next to Artisan Street Library
- Road and paving improvements including raised carriageway
- New 'Green Oasis' garden with planting and vertical garden
- Community-led project



## Appendix 3

### Summary of Recommendations from:

- a) The Facility Architects
- b) The Retail Group

#### a) The Facility Architects

As part of the work of the Facility Architects, they undertook a consultation of local stakeholders including market traders, market users, shopkeepers, residents, local freeholders, leaseholders and lessees, local groups and organisations, students, visitors to the area, and the wider public (via a website).

From their findings, a set of recommendations were put together. These included Phases 1 and 2 of the project. The recommendations specifically related to Phase 2 were:

Public realm works	<ul style="list-style-type: none"> <li>○ Aim to create a ‘green link’ pedestrian route from Bishopsgate to Aldgate, e.g. through more trees and planting along the street.</li> <li>○ Improved paving, widening the pavement/ narrowing the carriageway</li> <li>○ Coherent streetscape of both sides of street (City and LBTH sides)</li> <li>○ Less street clutter, e.g. bollards</li> <li>○ ‘Playful’ approach to street furniture and lighting</li> <li>○ Improved lighting; lighting strategy – including making the street safe and pleasant in the evening</li> <li>○ Granite paving demarcating market stall areas</li> <li>○ New covered public space/s</li> <li>○ New public square in area of traffic islands</li> <li>○ Commissioning of new public art and installations</li> <li>○ Possible staircase removal and new space in western pavement</li> </ul>
Conservation work	<ul style="list-style-type: none"> <li>○ Improved shop fronts; shopfront conservation scheme</li> <li>○ Possible grants programme to facilitate shopfront improvements</li> <li>○ Improved and extended shop units under Middlesex Street estate</li> </ul>
Raising profile and Branding	<ul style="list-style-type: none"> <li>○ Improve profile of market</li> <li>○ Changing name of the street to ‘Petticoat Lane’</li> <li>○ Design specific locally- relevant street furniture to highlight the history of the area, e.g. referencing</li> </ul>



	the cloth/ textile industry
Market operations	<ul style="list-style-type: none"> <li>○ Reorganisation and planning of market stalls</li> <li>○ Weekday market on Middlesex Street</li> <li>○ Variations in market stall offer</li> <li>○ Food market on Thursday/ Friday</li> <li>○ New stalls</li> <li>○ Alterations to management</li> <li>○ Pedestrianisation or timed closures in local streets</li> <li>○ Farmers market or fresh food stalls during the week</li> <li>○ Commission specific 'Petticoat Lane' stalls to suit local conditions: storage, assembly, size</li> <li>○ Storage and management of new stalls to be considered</li> <li>○ Rationalisation of market stalls, layout and numbers</li> <li>○ New market layout which can match the numbers of stalls to the existing number</li> <li>○ Parking for market traders considered</li> <li>○ Market to address shopfronts, rather than ignoring them</li> </ul>
Facilities and public amenities	<ul style="list-style-type: none"> <li>○ Covered spaces to encourage market use in poor weather</li> <li>○ More seating; better located seating</li> <li>○ More cycle parking; better located cycle parking</li> <li>○ Temporary seating for local restaurants/ cafes on pavements</li> </ul>
Signage/ wayfinding	<ul style="list-style-type: none"> <li>○ Clarify access routes, providing visual markers for visitors, including directions in and out of the market area</li> <li>○ Provide 'Legible London' standard for signage</li> <li>○ Improved signage and visibility from Bishopsgate</li> <li>○ New signs and maps on the street</li> </ul>

In order to make these changes, the consultants outlined a process that included:

- a) Partnership with Tower Hamlets (LBTH) key throughout
- b) Urban design developed, including with an understanding and planning of pedestrian routes
- c) Develop a Working Group focused on Petticoat Lane with local traders, businesses, residents, landowners, and LBTH
- d) Working Group to put together Urban design Strategy that recaptures the public imagination and spirit of the area.
- e) Working Group to put together aims including:
  - Put 'Petticoat Lane' back on the map
  - Revitalise local economy
  - Uncover historic context of area
  - New and exciting public spaces

- Catalyst for creativity and local regeneration
  - Development of a 'destination'
  - f) Funding strategies to be explored, including S106, CIL, local business investment, and crowd funding
- 

## b) The Retail Group

The Retail Group were commissioned to undertake a review of the market operation in both the City and Tower Hamlets. This included surveys of traders and visitors, alongside peer reviews, and then presented an action plan for the regeneration of Petticoat Lane Market. This extensive review emphasised the strength of the history of the market and its potential in a changing area, but identified a number of issues in the area including:

- Poor presentation of stalls
- Lack of sense of arrival at the market
- Inappropriate stall structures being used and often left on the public highway when not in use
- Lack of facilities such as toilets
- Lack of branding
- Lack of diversity in terms of the merchandise on sale
- Clear divergence of the overall quality of the market with the retail offer in the area and also the offer of surrounding markets such as Spitalfields and Brick Lane

The Retail Group report made a number of recommendations specific to the operation of the Market, including:

- Public toilets
- New Market stalls/ rigs, with ease of storage and assembly, high quality, robustness, potential for branding, flexibility, and ability to tailor to product. Clear procedure for who is responsible for maintaining, storing, and putting up and taking down the rigs, how their design is chosen, rig branding etc.
- New management structure that includes traders and representatives and that has proactive focus on improving the market
- Petticoat Lane Market Development Group to be formed. Focus on improving the market, and consisting of traders, local retailers, City and LBTH and other stakeholders. 'Local champion' appointed. Direct and monitor the market business plan
- Improved signage/ wayfinding that includes arrival point signage (including Aldgate, Bishopsgate, Commercial Road), directional signage from other markets/places,
- Branding including banners and light posts along the length of the market. Strong branding at Aldgate and Bishopsgate ends of market. Brand for Petticoat Lane, along with website showing heritage and information
- Seating – temporary and permanent
- Use of side streets; good for customer seating for example
- Changing areas
- Layout/ improve aisle widths
- Trader engagement through regular news bulletins, communication through a dedicated Petticoat Lane Traders Association, meetings,

appointment to management group, publishing actions and findings of studies, trader involvement in planning and evaluating initiatives, and in public realm plans.

- Trading guidelines including layout of stall guidance, rationalising size and number of stalls, maintain central 'arcade'
- Parking – no parking (including trader parking) in the market and local side streets, use nearby streets instead.
- Events including visiting or temporary markets
- Offers and collective promotions
- They also put together a set of next steps.

In October 2015, The Retail Group organised a day of stall trials with market traders. New stall types were erected and traders were consulted on them, with a variety of responses. The responses included a number of issues such as:

- Ownership of and responsibility for the stalls
- Payment for the stalls
- Security and storage
- Branding of stalls
- The timetable for the introduction of the new stalls
- Other general comments about the market: need for public toilets, need for better signage, better food offer

This page is intentionally left blank

Committees:	Dates:	Item no.
Streets and Walkways Sub-Committee	27 September '16	
Projects Sub-Committee	11 October '16	
<b>Subject:</b> Aldgate Highway Changes and Public Realm Enhancement	<b>Gateway 6 Progress Report</b>	<b>Public</b>
<b>Report of:</b> Director of the Built Environment		<b>For Decision</b>

## Summary

### Dashboard

- Project status: Amber.
- Timeline: Construction Phase – current forecast completion date is Nov '17.
- Approved Spend (assuming current Urgency Report approved): £23.2M
- Spend to Date: £19.2M includes commitments of £4.7M
- Overall Project Risk: Amber.

In the Gateway 5 report for this project, Officers committed to produce regular update reports in order to update Members of progress on the project. Additional issues reports have also been brought to Members during construction. This report is the fifth update report on the project.

At the time of writing this report an Urgency Report is in process. The report is written on the assumption that the Urgency Report has been approved.

This G6 report:

- Advises on the current programme for the project;
- Confirms the current position with regards to budgets and funding; and
- Advises on the current governance structure for the project.

***It is recommended that:***

- ***Members note the contents of this report***

## Main Report

<b>1. Reporting period</b>	1.1 January 2016 to August 2016 inclusive.
<b>2. Progress to date</b>	2.1 The project is forecast to be delivered for the approved budget and be completed by November '17.

## Programme

2.2 As has been reported in previous Gateway 6 reports, issues have arisen on certain elements of the project. In light of these issues, the project programme has been reviewed and amended. Progress on each of the main elements of the project is set out below. For reference, Appendix One provides a plan illustrating the location of each of the project elements.

2.3 The **Highway** element of the project was delivered to programme in April '16. Work on the **Gardens** between the Churchyard and Aldgate Square is on-going, for completion in December '16.

2.4 As outlined in the recent City Surveyor Urgency report regarding the **Pavilion**, the pavilion construction is now due to start in October '16. The programmed completion of the pavilion is July '17.

2.5 Previous issues reports have outlined delay due to difficulties procuring structural design and the failed in fill material. The **Eastern Space** delivery was affected by this. Further, key materials received on site were damaged or missing (literally having fallen off the delivery vehicle) and replacement material lead-in times have added further delay. It is now expected that the Eastern Space will be completed in November '16.

2.6 The **Churchyard** improvements were expected to be delivered during the road closure of Aldgate earlier this year. However, in response to requests from the Church, we have made various changes to the original design. These changes required a revised planning permission, plus new Faculty and building control approvals. As a result, the Churchyard design is now being finalised, and construction is due to begin in late October '16, and be completed in June '17.

2.7 The Churchyard and pavilion programmes detailed above have negatively impacted upon the delivery of the **Aldgate Square**. It had been assumed that we would complete the southern half of the Aldgate Square in April '17. However, following Churchyard and Pavilion completion, working south to north, the expected completion for the whole Square is November '17. The programming of the respective work elements is such that work will flow seamlessly from one element to the other.

2.8 **Arts Events and Play** (AEP) is a key deliverable of the project. The delivery of this element has floated with the changing overall project completion date; AEP requires finished spaces to be effective.

2.9 Table one below summarises the programmed completion dates for the various elements of the project.

<b>Construction Element</b>	<b>Programmed Completion Date</b>
Highway Work (substantial)	April '16
Eastern Space	Nov '16
Gardens adjacent to Churchyard	Dec '16
St. Botolph's Row	Mar'17*
St. Botolph's Churchyard	June '17
Pavilion	July '17
Aldgate Square	Nov '17
Arts, Events, Play	N/A
<b>Completion of Project (substantial)</b>	<b>Nov '17</b>

\* *Developer-led project, delivered via S278.*

**Table 1: Programmed completion dates.**

### **Budget**

2.10 The recent Urgency report increased the project budget from £21.4M to £23.2M. The project will be completed to the new budget.

### **Governance**

2.11 The officer governance of the project has evolved to match the changing needs of the project. The current structure has three sub-projects, as follows:

- Arts Events & Play (currently managed by the Department of the Built Environment);
- The Pavilion (managed by the City Surveyors); and
- Reparations, Highways, Public Realm, programme management and project close-out (managed by the Department of the Built Environment).

2.12 Each sub-project will be reported to Streets and Walkways Sub Committee as the Client Spend Committee, overseeing each of the three project streams, as well as Projects Sub Committee.

2.13 The three sub projects will continue to be reported as a single

	<p>overall project on Project Vision (to Projects Sub Committee).</p> <p>2.14 The revised structure is captured in Appendix Two.</p> <p><b>Funding</b></p> <p>2.15 The project has received an additional £1.5M from Transport for London (TfL), S106 and S278 sources, bringing the total funding from these sources to £14.7M. Therefore the original underwriting sum committed to the project from the On Street Parking Reserve (OSPR) can be reduced by £1.5M to £8.5M.</p> <p>2.16 A summary of the latest funding position is as follows:</p> <table border="1" data-bbox="466 683 1259 1413"> <thead> <tr> <th colspan="2">Funding sources</th> <th>Value</th> </tr> </thead> <tbody> <tr> <td rowspan="3">Received</td> <td>S106</td> <td>£4,115,832</td> </tr> <tr> <td>S278</td> <td>£1,145,983</td> </tr> <tr> <td>TfL</td> <td>£9,458,000</td> </tr> <tr> <td><b>Total Received</b></td> <td></td> <td><b>£14,719,815</b></td> </tr> <tr> <td rowspan="3">Expected</td> <td>S106</td> <td>£981,000</td> </tr> <tr> <td>S278</td> <td>£80,000</td> </tr> <tr> <td>TfL</td> <td>Nil</td> </tr> <tr> <td><b>Total Expected</b></td> <td></td> <td><b>£1,061,000</b></td> </tr> <tr> <td>Agreed in principle, awaiting signatures</td> <td>S106</td> <td>£4,551,827</td> </tr> <tr> <td>Subject to renegotiation</td> <td>S106</td> <td>£5,769,534</td> </tr> <tr> <td><b>Total</b></td> <td></td> <td><b>£26,102,176</b></td> </tr> </tbody> </table> <p><i>Table 2: Progress for securing project funding sources.</i></p>	Funding sources		Value	Received	S106	£4,115,832	S278	£1,145,983	TfL	£9,458,000	<b>Total Received</b>		<b>£14,719,815</b>	Expected	S106	£981,000	S278	£80,000	TfL	Nil	<b>Total Expected</b>		<b>£1,061,000</b>	Agreed in principle, awaiting signatures	S106	£4,551,827	Subject to renegotiation	S106	£5,769,534	<b>Total</b>		<b>£26,102,176</b>
Funding sources		Value																															
Received	S106	£4,115,832																															
	S278	£1,145,983																															
	TfL	£9,458,000																															
<b>Total Received</b>		<b>£14,719,815</b>																															
Expected	S106	£981,000																															
	S278	£80,000																															
	TfL	Nil																															
<b>Total Expected</b>		<b>£1,061,000</b>																															
Agreed in principle, awaiting signatures	S106	£4,551,827																															
Subject to renegotiation	S106	£5,769,534																															
<b>Total</b>		<b>£26,102,176</b>																															
<p><b>3. Next steps</b></p>	<p>The next Gateway Six report will be in early 2017.</p>																																

**Appendices**

<p><b>Appendix 1</b></p>	<p>Map of project ‘areas’</p>
<p><b>Appendix 2</b></p>	<p>Officer project governance</p>


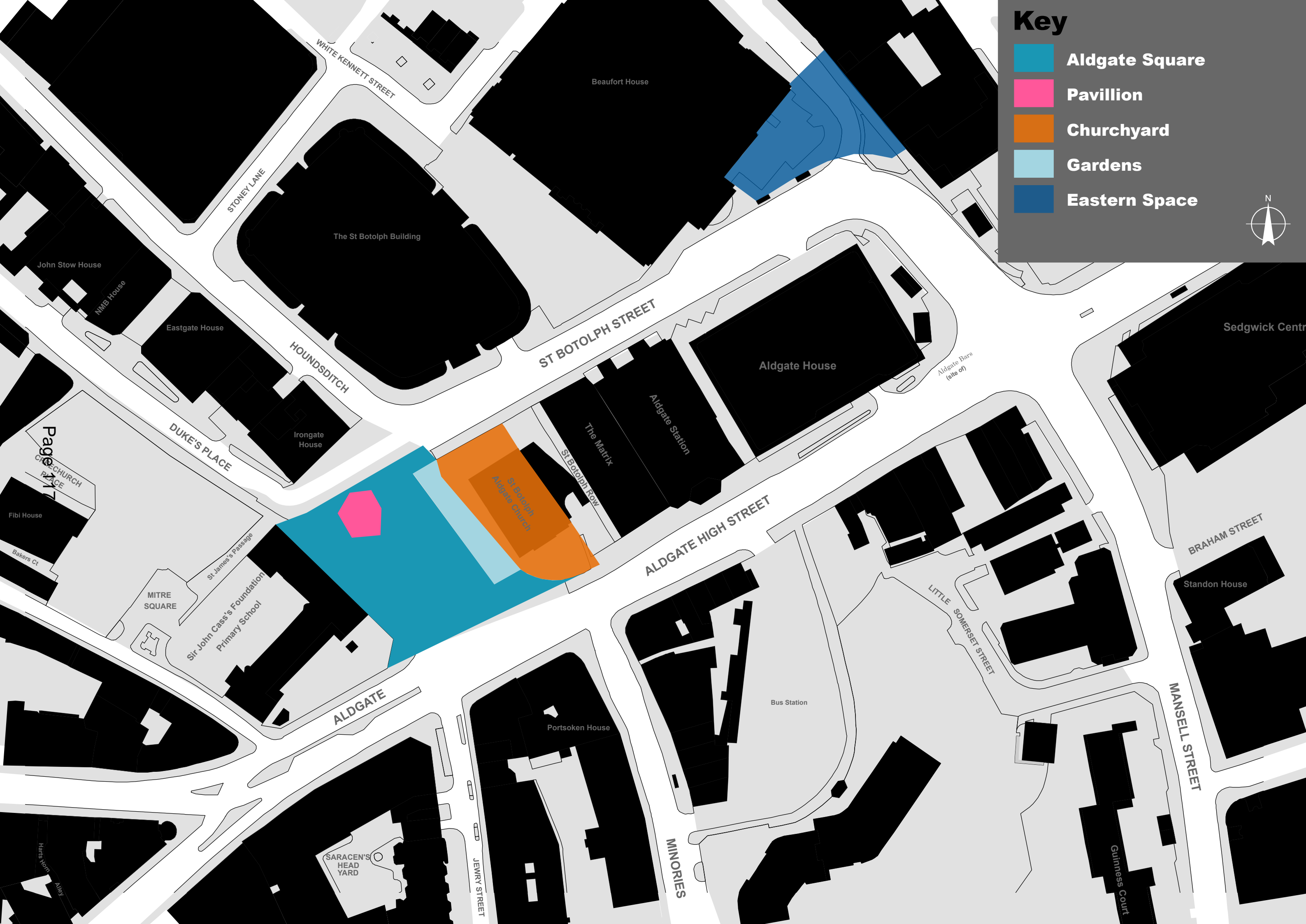
**Contact**

<p><b>Report Author</b></p>	<p>Jon Wallace</p>
<p><b>Email Address</b></p>	<p><a href="mailto:Jon.wallace@cityoflondon.gov.uk">Jon.wallace@cityoflondon.gov.uk</a></p>
<p><b>Telephone Number</b></p>	<p>020 7314 1589</p>



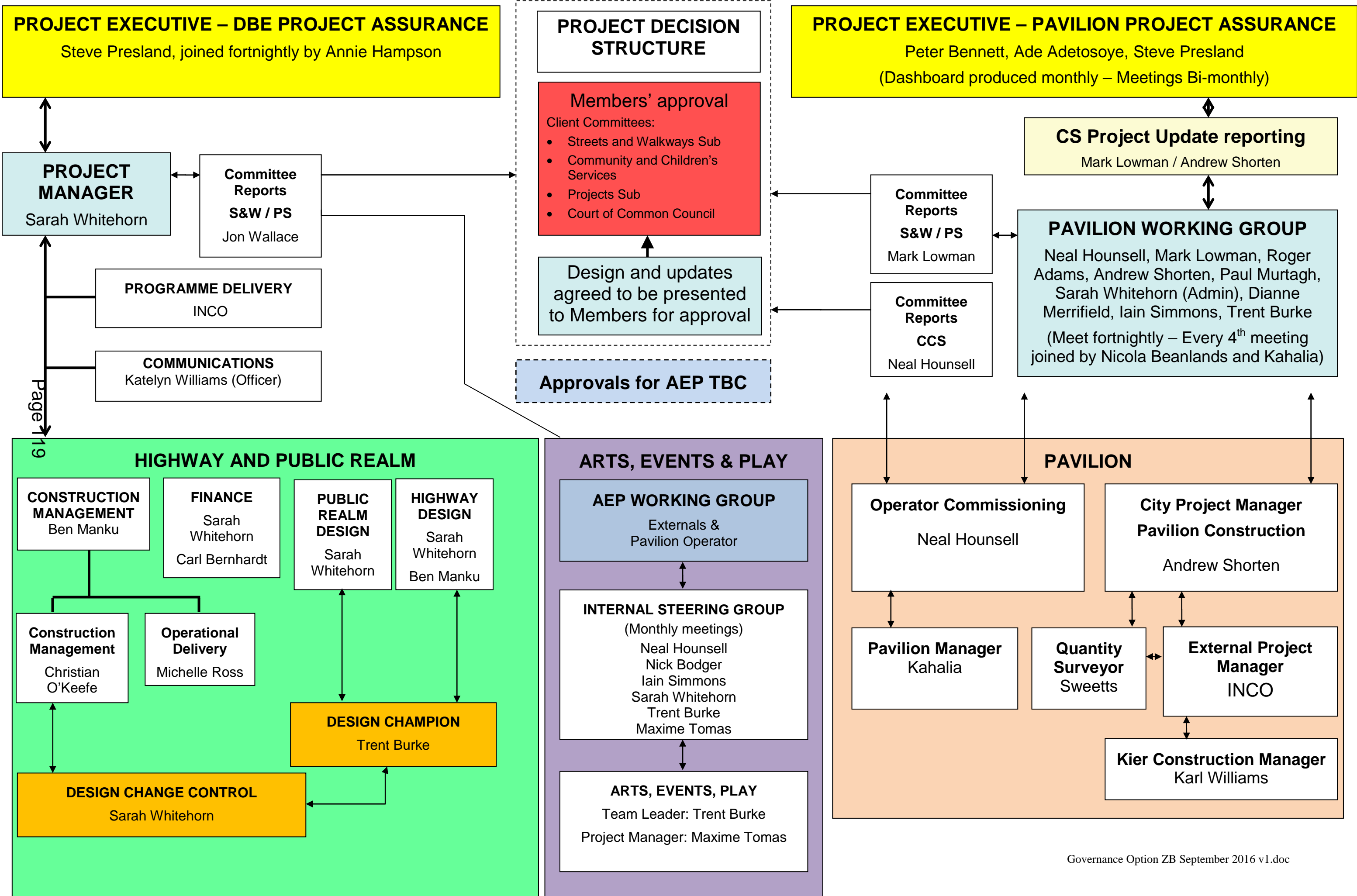
# Key

- Aldgate Square
- Pavillion
- Churchyard
- Gardens
- Eastern Space

This page is intentionally left blank

# ALDGATE – HIGHWAY CHANGES AND PUBLIC REALM PROJECT



This page is intentionally left blank

<b>Committees</b> Streets & Walkways Sub Committee – For information Planning and Transportation Committee – For decision Policy and Resources Committee – For information Cultural Hub Working Party – For information	<b>Dated:</b> 27 <sup>th</sup> September 2016 4 <sup>th</sup> October 2016 6 <sup>th</sup> October 2016 17 <sup>th</sup> October 2016
<b>Subject:</b> Cultural Hub - Look and Feel Strategy	<b>Public</b>
<b>Report of:</b> Department of the Built Environment	<b>For Decision</b>
<b>Report author:</b> Director of the Department of the Built Environment	

## Summary

This report sets out a proposal to develop a distinct ‘Look and Feel’ Strategy for the public realm in the area covered by the City’s Cultural Hub, located in the north-west of the City (see map in Appendix 1).

Cities across the world are realising the importance of investing in their cultural infrastructure, from Hong Kong, to Los Angeles, to Paris, Berlin and across the UK. Against this backdrop, the positioning and unifying identity of the City of London’s Cultural Hub becomes increasingly important. The opening of the City’s new Crossrail stations in 2018, in particular, will present a once-in-a-generation opportunity for the Corporation and its partner institutions to capture new audiences.

The benefits of creating a coherent and unified scheme for lighting, greening, public art and other public realm improvements have been seen in the creation of cultural districts globally. The regeneration of Kings Cross is one recent, London-based example, in which public realm has contributed significantly to the economic regeneration of an area. The City’s ambitions for the Cultural Hub public realm will be given clear and demonstrable direction through a ‘Look and Feel’ Strategy, which will facilitate the delivery of change in the Cultural Hub area in the most efficient and coordinated manner.

The City has developed a vision for the Cultural Hub along with its four partners the Barbican, Guildhall School, London Symphony Orchestra and Museum of London, which states: ‘The City of London Cultural Hub – the creative heart of the Square Mile – is an internationally renowned, distinctive, vibrant and welcoming centre of arts, heritage and learning.’ That vision is now being developed with a branding and identity project to give the public communication of the Hub a clear focus, and this will inform the look and feel initiative. The Cultural Hub initiative comprises three main strands; Creative Content, Property and Public Realm; each will contribute to the public impact of the Hub.

The Cultural Hub vision and principles were used as the basis for developing a set of specific objectives to guide the look and feel of the Cultural Hub’s public realm during a key stakeholder workshop in April 2016. These objectives will provide the framework for a Look and Feel Strategy, similar to an Area Enhancement Strategy, which will guide a consistent design approach to public realm elements within the Cultural Hub area. The design approach will have regard to the adopted City policy

in the Public Realm SPD and technical guidance. Once completed, the Strategy will inform public realm works within the Cultural Hub. The key themes to be explored by the Strategy are:

- Lighting
- Way finding
- Public information
- Public art and place activation
- Greening
- Servicing, infrastructure and management
- Low Emission Neighbourhood (LEN)

A number of related activities in the Cultural Hub area will need the guidance provided by a Look and Feel Strategy within the next 12 months to align the City's preferred approach with the timing of key decisions on public realm design and projects such as Beech Street. This includes activities led by external parties (Crossrail Partnership), partner institutions (Museum of London) and activities within Department of Built Environment (Citywide Way-finding Review) and Town Clerks Department (Cultural Hub Identity and Branding Strategy).

In addition external partnerships are currently being scoped out with a range of organisations in the Cultural Hub area, and these will need to be involved in the roll-out of identity, wayfinding, and look and feel. This includes partnerships with neighbouring boroughs to ensure a consistent approach to the public realm and wayfinding- for example around Farringdon Crossrail station.

The 'Look and Feel Strategy' is an essential tool to enable the delivery of change on street in the Cultural Hub area in the most efficient and coordinated manner. An officer-level working party is proposed to be established to help guide the delivery of the Strategy, to realise the benefits, to ensure the project is undertaken in collaboration with relevant City departments, and to agree priorities.

The Strategy is to be fully funded from money allocated for Cultural Hub funding, from 2015/16 corporate underspend.

#### **Recommendation:**

#### **Members are asked to: -**

- **approve the initiation of the Look and Feel Strategy, utilising up to £350k from the Cultural Hub funding allocation in the Town Clerk's local risk budget, derived from 2015/16 corporate underspend; and;**
- **note that the release of each phase of funding will be authorised by the Town Clerk on the recommendation of the officer level working party overseeing this programme.**

### **Main Report**

#### **Background**

1. The Cultural Hub, directed by a Cultural Hub Working Party and a Cultural Hub Programme Board, was initiated in 2013 and is guided by a vision and set of principles adopted by the Court of Common Council in 2015. The Working Party is exploring possibilities for the transformation of a place with outstanding arts institutions supported by the City of London Corporation, but which inhabits an underwhelming, tired and unwelcoming environment.
2. Much progress has been made over the past two years in exploring how to shape a distinctive, vibrant and welcoming cultural district for London. The core area of the Hub has broadly been defined and a “Vision for the City of London Cultural Hub” has been established. The Barbican and Golden Lane Area Enhancement Strategy has also provided a comprehensive analysis of the area, as well as developing outline principles for the Hub (see Appendix 2). A property strategy has been developed, and initial feasibility work on a priority project, improving Beech Street, is already being developed. Since the Area Strategy was completed, two major new potential projects have been initiated: a new Museum of London in Smithfield, and the possibility of a new Centre for Music on the present Museum site. Guiding all of this work is a governance structure for the Cultural Hub that utilises the in-house expertise of the City across the areas of creative content, property, and public realm. The public realm steering group has grouped its projects into four different work-streams, namely East-West Route, North-South route, Moorgate Quarter and the Cultural Hub Look and Feel (See Appendix 3). The full Cultural Hub programme is monitored and directed by the joint Member and Chief Officer-level Cultural Hub Working Party.
3. The arrival of Crossrail in 2018/19, bringing an estimated 1.5m additional people to within a 45 minutes journey of the City, will present an incredible once in a generation opportunity for the City of London Corporation and the core partners to capture new audiences. In order to welcome this new audience and attract it to the cultural offer, and to anticipate the future needs and provide coordinated approach for the public realm of this new cultural district, a strategy that clearly sets out the intended look and feel of the area is essential.
4. Accordingly, the need for a ‘Look and Feel’ strategy has been identified, led by the Department for the Built Environment, in collaboration with other relevant City departments in the Hub, and to be overseen by the Cultural Hub Working Party. This will plan and direct a range of improvements within the public realm, which are complementary to the approach adopted City-wide in the Public Realm SPD whilst allowing a distinctive, cohesive sense of place and sense of arrival to be created that will draw audiences to the cultural district. A look and feel workshop was attended on 20 April 2016 by key stakeholders from across the five core partner organisations in the cultural hub; with the purpose of establishing the main principles of the ‘look and feel’ of the area (see Appendix 4).
5. Since that workshop funding for the strategy stage of the project has been identified as part of a Cultural Hub funding provision from general underspend 2015/16.

## Current Position

6. The City, having established the principal of transforming the area into a 'cultural hub', has built up considerable momentum in getting the project off the ground, which make the timing of the Look and Feel Strategy particularly pertinent now. There are currently a number of substantial projects being undertaken that will all contribute to the development of the area, in particular:
  - i. Crossrail, opening in 2018/19, will bring with it many more potential visitors to the area both from London and environs, and internationally with this area becoming connected quickly and easily to Heathrow. The City is liaising with Crossrail about a number of issues arising from this major development. Routes from Crossrail stations within and immediately outside of the City to cultural venues in the City will need to be fitting for a world class city. Crossrail is due to finalise its designs for its stations, public realm and wayfinding in the next year, with a considerable amount of work already undertaken to ensure the creation of distinctive and attractive arrival points with a sense of place that is beyond the functional requirements of moving people from A to B. There is now an opportunity to build on this work to deliver a wayfinding strategy and public realm design that is commensurate with the creation of a world class cultural destination.
  - ii. The Museum of London has recently announced the winner of the architectural competition for its new site, which is expected to be located on the western end of the Cultural Hub, at Smithfield Market. The designs for the site are now progressing and will have huge implications for the public realm in the area, as this site will bring many new visitors to that part of the City. Officers will work with the Museum to ensure that the spaces around the museum are fitting for its use and attractive to visitors whilst being sensitive to/aware of the operational needs of Smithfield Market and St Bartholomew's Hospital, and the Look and Feel Strategy will complement and enhance the Museum's plans. Equally, the plan for a Centre for Music on the current Museum site would involve improvements to the urban realm and transport infrastructure of the area, which would be aligned to the Look and Feel Strategy
  - iii. The City's Built Environment Department has Gateway 1 and 2 Member approval to undertake a Citywide Way-finding Review, which will investigate and deliver a fit-for-purpose signage system and complementary way-finding measures such as digital signage, lighting, and the use of cues and clues to aid navigation. This project includes a management system that enables future changes, and a funding stream for the ongoing maintenance of the City's signage. The Look and Feel Strategy will make recommendations on Cultural Hub-specific way-finding, which will dovetail in with the City's wider scheme, with the Cultural Hub work building on the Citywide Way-finding Review project.



- iv. Finally, funding for an Identity and Marketing/Communications Strategy was approved by Members in May 2016. This work will provide: a name for the Cultural Hub; a website; signage designs; a logo/ visual identity; and a detailed communications plan setting out the implementation of the new identity. This work has been progressing over the summer months and much of this will inform the Look and Feel Strategy.

## Proposals

7. Staff costs are included in the total to cover the costs of staff from the Transportation and Public Realm division; Open Spaces; Barbican Centre and others. This project will use the in-house expertise of a number of different departments across the City. It is also proposed that funding is provided to employ a specialist agency/ agencies to assist the City of London Corporation in developing an effective Look and Feel Strategy for the public realm in the Cultural Hub.
8. The Strategy will comprise: research, stakeholder engagement, design options, trials, and recommendations for a coordinated approach for design and implementation. Recommendations from the identity and branding exercise that are linked to the public realm – such as colour schemes, lighting and visual cues - will be developed in this Strategy. Work will be undertaken across a range of areas:
  - a) Lighting. Innovative, sustainable lighting technologies and alternative approaches designed to enhance the feeling of the place, and that can be altered to meet different functions, will be considered. Understanding the specifics of lighting spaces that are architecturally distinctive, whilst simultaneously linking them together into a coherent look and feel, will be crucial to this work.
  - b) Wayfinding. The wayfinding in the area is notoriously difficult. The Strategy will recommend new signage, but also consider a broader approach to wayfinding: suggesting a variety of methods to make movement around the area much more intuitive. This piece of work will inform the Citywide Wayfinding Review ‘clues, cues and themes’ workstream, which will be undertaken in partnership with the City Public Realm team.
  - c) Public information. Concentrating on how to deliver information about the Cultural Hub to visitors, across many different platforms, the Strategy will consider the way information is portrayed about the Cultural Hub in a holistic way- from digital information both remotely and on site, travel information and physical signage placed on the street, whilst respecting the area’s heritage assets.
  - d) Public art and place activation. An approach to public art and place activation in the Cultural Hub, to maximise the investment in the public realm by generating activity in public spaces, will be created. The Strategy will set out principles for public art and place activation in the area, from

management of spaces and curatorial strategy to understanding how the art programme will engage with the users of the streets. Professional expertise will be necessary to deliver this public art strategy.

- e) Greening and Climate Resilience. There are opportunities for further greening, which will assist in reducing vulnerability to climate change, in the Cultural Hub. This work will assess how best to introduce trees, climate resilient planting and sustainable drainage (SuDS) to complement the cultural activities and increase the dwell time of visitors in the area. Working with the Open Spaces Department, an on-going management plan will also be developed to ensure the sustainability of the initiative, including for example the recent City Churchyards collaboration.
  - f) Servicing, infrastructure and management. The servicing, security, and other infrastructure required throughout the Cultural Hub public realm will be considered. Recommendations may consider timed closure of streets to accommodate different uses in weekdays, evenings and weekends. These developments will need to be managed alongside the needs of servicing residents, local businesses and the many audiences to key sites such as the Museum of London and the Barbican. Recommendations for the future management and operations specific to the Cultural Hub public realm will be put forward.
  - g) A Low Emission Neighbourhood (LEN) project has been approved that will include work-streams that crossover with the 'Look and Feel' Strategy. The LEN work will complement the broader, higher-level Freight Strategy and other strategic transportation initiatives being delivered by the Directorate of the Built Environment. Workstreams impacting the Cultural Hub area are expected to include: a 'zero emissions network' of local organisations; engagement with TfL about emissions from local buses; establishing a 'City Freight Forum' to reduce freight; new planning guidance and policies; new Non-Road Mobile Machinery emissions targets; a no idling zone set up; exploring access restrictions to Beech Street; possible loading bay restrictions; Electric Vehicle charging and cycle parking; a greening programme; the creation of an area-wide delivery and service plan; creation of a micro consolidation centre; new cycle quietways; and Zero Emission capable-only taxi ranks. Officers will consider the results of these workstreams and integrate them with the emerging Look and Feel Strategy.
9. The different workstreams will require a high level of technical knowledge in a wide variety of different subjects. Accordingly, the appointed consultants will be required to demonstrate their expertise across these areas, and sub-contracting or entering into partnerships with different consultants where appropriate. The work will be managed by the City Public Realm Team. In addition, other City departments will contribute their in-house technical knowledge where required – for example, the Barbican and Museum in relation to public art curatorial work, and DBE for highways/transportation issues.
10. An officer-level working party will be set up to guide the delivery of the Strategy. As a Cultural Hub project, the development of the Strategy is subject to the existing governance arrangements for the Cultural Hub, and therefore project

updates will be reported to the Cultural Hub Programme Board and Working Party on a regular basis.

11. The benefits of creating a coherent and unified scheme for lighting, greening, public art and other public realm improvements has been seen in the creation of cultural districts all over the world. The City's ambitions for the Cultural Hub public realm will be given clear and demonstrable direction through the Look and Feel Strategy.

### **Corporate & Strategic Implications**

12. Work towards the transformation of the north-west of the City and the creation of a global cultural destination supports strategic objectives 2 and 3 of the City of London Corporate Plan 2015-19 and relates to one of the 'Key City Places' identified in the City of London Local Plan 2015. It further supports Key Policy Priority 5 within that document to 'Increase the output and impact of the City's cultural, heritage and leisure contribution to the life of London and the nation'.
13. The City has adopted a set of Area Strategies which set out the priorities for public realm projects. This Look and Feel Strategy is not an Area Strategy, but will sit alongside them, and will be linked to the Area Strategies which deal with the areas covered by the 'Cultural Hub'. For example, a number of the recommendations included in the City's approved Area Strategy for the Barbican and Golden Lane will be addressed through this Look and Feel Strategy. In addition, the West Smithfield Area Strategy, which is due to be reviewed, will be considered as part of the Look and feel work.

### **Key Risks**

14. The key risks are:
  - Public realm in certain parts of this area is tired and in need of repair. Doing nothing will mean the area falls further behind.
  - The 'Do nothing' option risks audiences being drawn away by the increasingly dynamic range of activities in existing and new areas across London. Without a distinct look and feel the proposed new developments at West Smithfield, London Wall and Beech Street risk lacking cohesion. This could lead to audiences feeling further confused, disconnected, and less attracted to the area.
  - The City of London is minded to guard against uncertainty derived from the EU referendum results. The lack of investment in attracting tourism and visitors could leave the City behind other national or international cultural destinations.

### **Financial Implications**

15. The estimated cost of developing and managing the programme is covered as part of the £350,000 (CoL staff costs and fees). This includes programme management, site surveys and assessments. The work is both wide-ranging and highly technical, and therefore a number of different consultants will be used, alongside a range of in-house expertise. It is anticipated that this extensive piece of work will be completed within approximately 12 months.

16. At this stage, indicative costs for the project are as follows:

Item	Estimated Cost (£)
<b>External consultant fees</b>	
Initial research, analysis, mapping, and consultation stage	35,000
Development of Strategy for: <ul style="list-style-type: none"> <li>• Lighting</li> <li>• Wayfinding</li> <li>• Public information Art and place activation</li> <li>• Greening</li> <li>• Street furniture</li> <li>• LEN</li> </ul> As detailed in Para.8 and 9.	125,000
Develop management guidelines for servicing, management, security	40,000
<b>Total fees</b>	<b>200,000</b>
<b>Staff costs</b>	
Including: City Public Realm (project management); Open Spaces; Barbican/ Museum; Other technical DBE advice. A number of partnerships across the City will be put in place to help deliver this work – see para. 8 and 9 above for detail.	
Research phase	30,000
Development of the Strategy and consultation	65,000
Development of management guidelines and consultation	55,000
<b>Total staff costs</b>	<b>150,000</b>
<b>TOTAL COSTS</b>	<b>350,000</b>

17. The consultant/s will be selected via a tender exercise overseen by the City of London Procurement Service. Given the wide-reaching scope of the project, tendering consultants will be invited to state how they plan to either sub-contract work or enter into partnerships with other consultants to present the right level of expertise in each distinctive area.

18. It is proposed that costs of up to £350,000 be allocated from the Cultural Hub funding allocation in the Town Clerk's local risk budget, derived from 2015/16 corporate underspend.. The release of each phase of funding will be authorised by the Town Clerk following recommendation from the officer level working party.

## Conclusion

19. The City of London's ambition is to create a new cultural destination that has his own character and is recognisable within the City. A specialist input is now needed to deliver a Look and Feel Strategy that will allow a coordinated approach to this work in tandem with the branding and identity work for the hub. It is therefore recommended that Members approve the proposals set out in this report.

### **Appendices**

- Appendix 1 – Map of the Cultural Hub
- Appendix 2 – Cultural Hub Principles
- Appendix 3 – Cultural Hub Public Realm steering group programmes
- Appendix 4 – Key Principles of the Look and Feel Programme

### **Clarisse Tavin**

Projects Officer

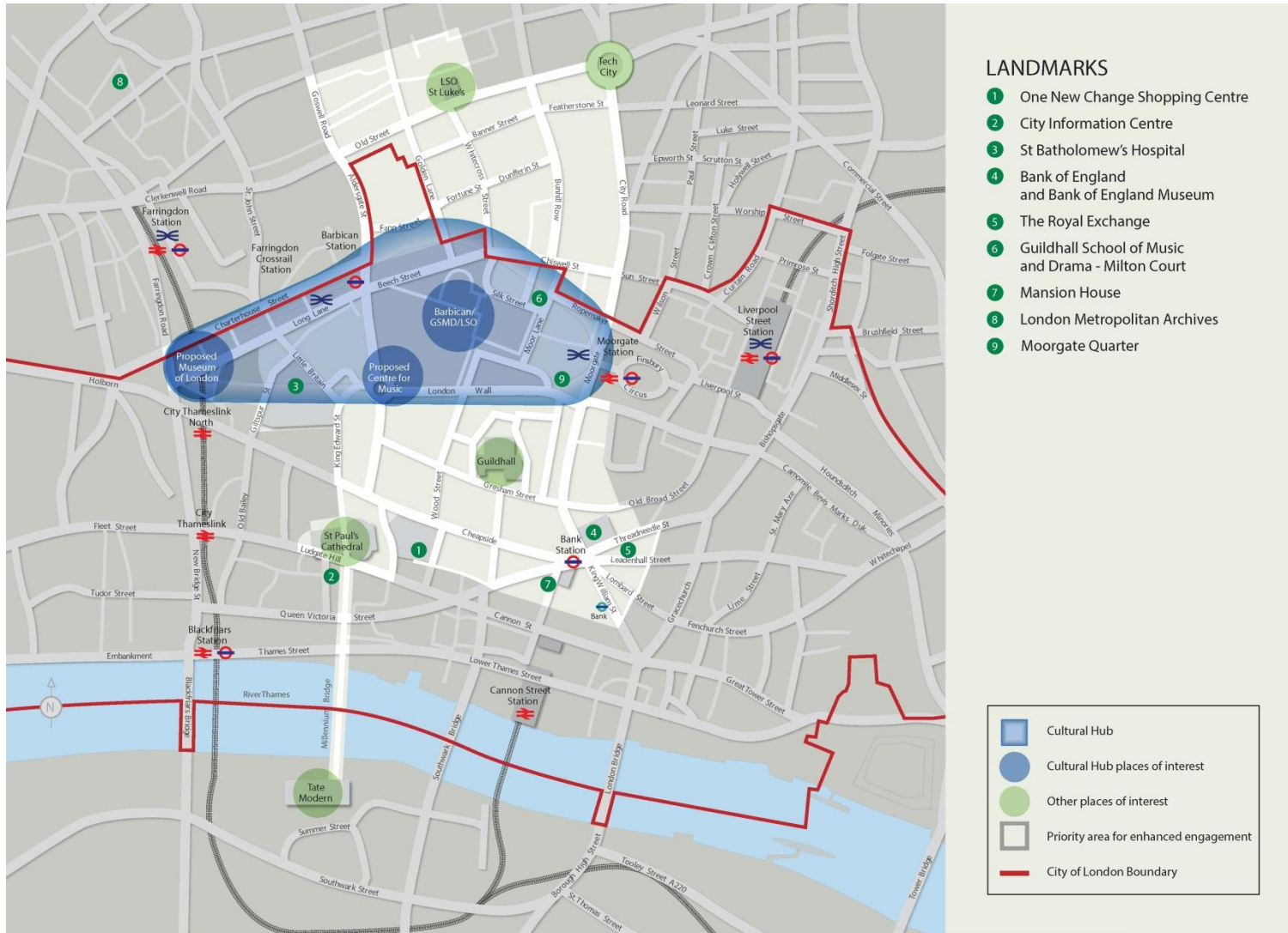
City Public Realm Team

Department of the Built environment

T: 020 7332 3634

E: [clarisse.tavin@cityoflondon.gov.uk](mailto:clarisse.tavin@cityoflondon.gov.uk)

# Appendix 1 – DRAFT Map of the Cultural Hub



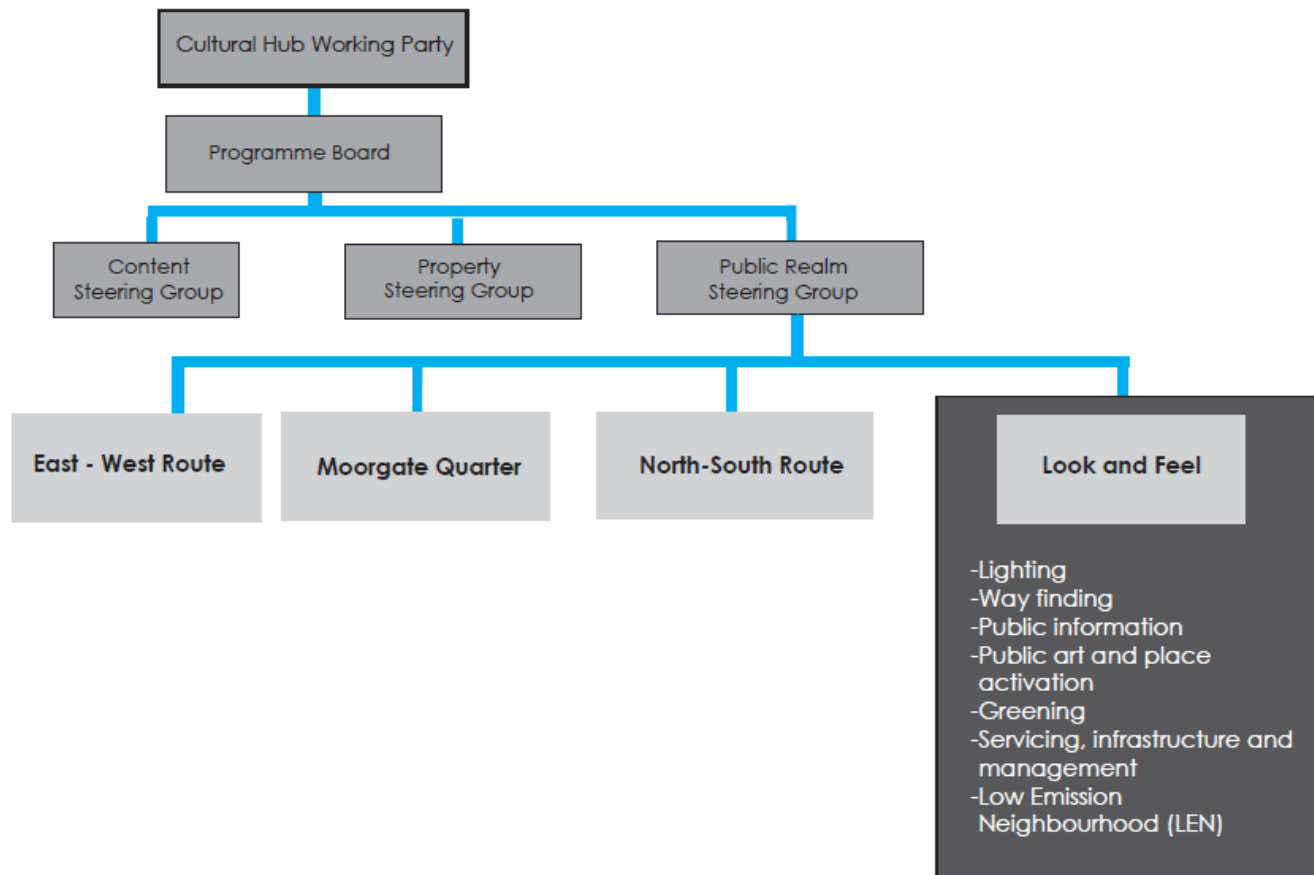
## Appendix 2 – Principles of the Cultural Hub (Barbican Area Enhancement Strategy - 2015)

### PRINCIPLES OF THE CULTURAL HUB

- 1 The cultural hub acts a cultural leader and pioneer; it explores, researches and experiments, promoting and showcasing new cultural forms and understandings of culture, as well as the highest international standards of cultural production and curation
- 2 The cultural hub recognises and celebrates the unique character and heritage of the area in which it is located
- 3 The cultural hub values and promotes the processes of cultural production, providing a supportive environment for artists, dancers, actors, musicians, designers, technicians, curators, and all of those involved in the creative industries
- 4 The cultural hub is committed to delivering the highest quality education, outreach and learning for all
- 5 The cultural hub is committed to enabling access to culture for all, and to providing a welcoming environment for the widest possible range of visitors, residents and workers
- 6 The cultural hub functions as a unified group of organisations, institutions and individuals, working together towards shared goals and subscribing to a set of shared values. (The cultural hub recognises that, through collaboration, its whole can be greater than the sum of its parts)
- 7 The cultural hub is an open-minded place, which willingly embraces new ideas and opportunities
- 8 The cultural hub is a physically accessible and connected place
- 9 The cultural hub explicitly communicates its vision and aims beyond the hub, and informs visitors about its events and facilities
- 10 The cultural hub celebrates the diversity of its partners, recognising their extensive range of skills, experience, viewpoints and resources that contribute to the hub's unique character

### Appendix 3 – Public Realm steering group programme

#### Cultural hub - Public Realm steering group programmes





## Appendix 4 - Cultural Hub - Look and Feel programme principles

Look	
LO1	That the Cultural Hub area will be the focus for a distinctive 'look and feel' across public realm, property and cultural content with key landmarks identified and promoted.
LO2	That new development and upgraded properties are designed to be welcoming and open, when cultural and public uses are proposed.
LO3	That information relating to cultural activities is visible and accessible to the public using the most appropriate media.
LO4	That the right type of lighting is provided in the right location at the right time.
LO5	That more high quality and greener public space exists for people to move through, dwell and enjoy.
LO6	That the brand strategy is represented in the aspects of the public realm including lighting and colours, digital infrastructure, street furniture, gateway entry points, intuitive way-finding, greening, public arts and events.
Feel	
FO1	That the area is a recognised part of London, known for its cultural activity nationally and internationally (also see LO6).
FO2	That the look and feel of the area successfully harnesses the distinct characteristics of places within it, highlighting attractive architecture and spaces and creating complementary 'zones' of cultural activity
FO3	That visitors want to come to the Cultural Hub area just to 'be' and experience the atmosphere, not simply to come in for a show and then immediately leave.
FO4	That the local economy is enhanced as a result of changes to the look and feel of the Cultural Hub area.
Function	
CO1	That a high quality network of public spaces is identified, enhanced and where necessary created to provide the location for positive, shared cultural experiences.
CO2	That the largest public spaces provide the focal point for congregation and are seen as the welcoming face of the area.
CO3	That unique and curated on-street cultural and learning programmes exist that successfully connect the content between the institutions and attracts a broad demographic, including local workers and residents.
CO4	That transport nodes are recognisable 'gateways' into the Cultural Hub and that information on the Cultural Hub is provided from platform to the door of the cultural institution (from platform to performance)
CO5	That first time visitors can find their way from key arrival points to the cultural institutions and main public spaces quickly and easily and that anyone in the Cultural Hub knows where they are or where they can find information to help at any point in their

	journey.
CO6	That a comprehensive and modern digital infrastructure exists to improve the interactive experience in the Cultural Hub.
CO7	That the Cultural Hub is actively managed to ensure high quality environment at all time (cleansing, servicing, highways safety, security and air quality).
CO8	That the design of public realm, whilst distinctive, remains consistent with City wide design policy and supports the need for robust maintenance and cleansing regimes.
Funding and governance	
GO1	That retail and leisure spend and ticket sales increase in the area resulting in a ring-fenced income stream to support on-going cultural activities in the area and higher level of active management (maintenance, cleansing and security) where this is required.
GO2	That all partners agree to participate fully and developing and implementing look and feel in the area and actively break down silos that lead to better outcomes.
GO3	That principles and tasks identified by partners in respect of look and feel in the Cultural Hub are priorities, owned, implemented and reported in a timely manner.

<b>Committee(s):</b>	<b>Date(s):</b>
Streets and Walkways Sub Planning & Transportation Policy & Resources	27 September 2016 4 October 2016 6 October 2016
<b>Subject:</b> Major Highway Works for 2016/17	<b>Public</b>
<b>Report of:</b> Director of the Built Environment	<b>For Information</b>
<b>Summary</b>	
<p>As predicted in last year's report, the volume of activity taking place in the Square Mile has placed increasing demands on the City's highway network. In particular, the sheer scale of schemes such as Crossrail, the Bank Northern Line upgrade and the imminent Thames Tideway project means that long-term co-ordination of works is vital to keep the City moving.</p> <p>In addition, the City currently has the largest volume of building development taking place since 2008, and although this is traditionally the sign of a thriving Square Mile, this activity brings with it a need for road space, additional streetworks connections and additional heavy vehicle traffic.</p> <p>The most significant impact on the City's road network in the last 12 months has been the construction and subsequent operation of TfL's cycle super highway, and although it is too early to reach definitive conclusions, observations would suggest that areas of traffic congestion can frequently be found on those roads directly affected by the scheme, and a degree of network resilience to absorb other temporary activities has been lost as road capacity has been reallocated.</p> <p>Otherwise, the City has a statutory responsibility to minimise disruption as part of its Network Management Duty, and so officers will continue to work to ensure the co-operation of major project sponsors, utility companies and developers in co-ordinating their works and minimising disruption. The key objectives remain:</p> <ul style="list-style-type: none"> <li>• balancing the need to keep projects on track with the need to minimise congestion and limit the impact on traffic and pedestrians (especially vulnerable road users);</li> <li>• ensuring the needs of the City's wider stakeholders (ie businesses, residents and visitors) are also considered;</li> <li>• maximising the opportunity to combine works together to minimise their overall impact;</li> <li>• working with Transport for London and our neighbouring authorities to ensure the needs of the wider transport network are considered.</li> </ul> <p>Key to that effort remains:</p> <ul style="list-style-type: none"> <li>• the close level of contact established by officers with individual utilities, developments and projects;</li> </ul>	

- the ability of officers to find, influence and negotiate innovative solutions to construction problems and programmes with contractors;
- understanding, programming and managing the City's own long-term programme of projects;
- continuing the development of the City's various communication channels through which upcoming activities are publicised.

### **Recommendation(s)**

Members are recommended to receive this report.

## **Main Report**

### **Background**

1. The Highways team within the Transportation and Public Realm Division of the Department of the Built Environment (DBE) is tasked with co-ordinating all major activities on the highway, and has officers involved in negotiating, approving and facilitating the extent and timing of:
  - All road closures and diversions
  - Major building site operations, including mobile crane works
  - Special events, including the Lord Mayor's Show
  - Street works by utilities
  - Major street scene and transportation projects by the City
  - Resurfacing & highway repairs by the City's term contractor, JB Riney
  - Works by major transport infrastructure providers, such as Crossrail
  - Works by TfL on the 'Red Routes', and by the City's neighbouring authorities on the City fringe
  - Large scale deliveries and building removals through the parking 'dispensation' system
  - Large film shoots and outside broadcasts
  - Parking bay suspensions
2. To deliver this function, officers have well-established links with the City's Environmental Health and Highway Structure teams, the emergency services, Transport for London and other key City stakeholders so that information can be shared, co-ordinated and publicised to the general public.
3. The demand for room on the City's streets remains high, and officers try to accommodate the needs of applicants and works promoters whenever they can. However, the Highways team seeks to ensure that the needs of the public are not forgotten, and that a balance is struck between their needs and those of the works promoters.
4. As an example, when considering road closures, the following general approach is adopted:

- no works are allowed that directly conflict with each other;
- no diversions that use the same streets;
- no parallel streets to be affected;
- local access to be maintained as much as possible;
- ideally two 'north / south' and 'east / west' routes through the City to be kept clear of disruption at all times;
- no more than four major daytime closures in the City at any one time, ideally spread across the Square Mile (albeit this number may have to be reduced as a consequence of changes in network capacity from schemes such as the cycle super highway).

#### Limitations to the Consent Process

5. The City exercises its authority to control activity on-street through the issue of scaffold & hoarding licences, permits to dig up the street, traffic orders to allow roads to be closed, approval of Construction Logistics Plans for developments, and the agreement for parking dispensations & bay suspensions for lorries to deliver.
6. However, the City has to act reasonably in exercising these powers, and its ability to control the pace and detail behind major works has a number of limitations. This can often mean using the power of influence to co-ordinate and manage that activity, rather than what might be a limited regulatory authority. For example:
  - The utilities retain wide-ranging statutory powers to excavate the highway; the City's authority is more about timing and impact than the works per se.
  - A developer can decide when they wish to trigger a planning application that leads to a major building site, and highway reparation or enhancement works around the site typically need to be delivered before the building is occupied.
  - As Strategic Transport Authority, TfL have the authority to implement Mayoral transport policy such as the construction of the cycle super highway on their road network.
  - Crossrail, the Bank Northern Line upgrade and Thames Tideway come with bespoke powers enabled by Acts of Parliament that assume primacy of their works over other projects. They disapply many of the City's normal controls, and are deliberately drafted to limit the ability of a local authority to prevent, delay or control those works.
7. Where the City does have full control is obviously in relation to its own works, and these are programmed to ensure they only proceed with a full understanding of their scale, timing and impact on-street, plus any consequences for network resilience. That means looking to avoid other major projects and works on-street, or equally the main special events.

## Current Position

### Activity Levels

8. The first half of this report looks back at the last year, and despite the volume of street works in the City remaining more than 30% below pre-Olympic levels, the demand for space on the City's highway network has continued to be tested by the largest concentration of major construction initiatives in the Square Mile for many years. Overall, those works can be categorised into four areas:
- Development activities
  - Major transport projects
  - Utility works
  - City of London works
9. Although utilities are traditionally thought to be the main source of disruption to the highway network, the scale of major projects such as the cycle super highway, Crossrail, Bank Northern Line upgrade and Thames Tideway has changed that profile. Such projects have had a wide ranging impact, but the City is also enjoying the largest boom in building development since 2008, and although this is usually to be welcomed as a sign of a healthy City economy, the current concentration of development requires road space for scaffolds, hoardings, lorries and logistics, as well as associated utility connections.
10. The table below shows the breakdown of road closure applications by source over the last six years.

#### Road Closure Application Volumes

Type / Year	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16
Developments	145	99	107	101	155	231
Utilities	96	68	52	62	67	89
Emergencies	48	92	69	26	57	68
CoL	47	22	25	40	85	89
Other	11	18	8	3	18	17
<b>Total</b>	<b>347</b>	<b>299</b>	<b>261</b>	<b>232</b>	<b>382</b>	<b>494</b>

11. The continuing surge in development activity has fuelled an increase in building-related applications of more than 130% in the last two years, and although most of these applications are for side streets and at weekends (for things like crane operations), a significant number are for much longer periods to facilitate day to day construction activity.
12. In parallel, the number of road closure applications from utilities has increased by a third in the last year, which is also thought to be linked to development activity as most developments require upgraded and diverse supplies from multiple utilities.

13. The table also indicates that last year's increase in road closure applications by the City itself has been maintained. This results from a more proactive approach to highway maintenance issues, where additional funding has been secured to deliver essential road resurfacing and repairs. However, in contrast to building sites, these closures are typically short term and confined to evenings and weekends.
14. As in previous years, officers continue to identify opportunities to combine works from different contractors, thereby reducing the need for yet more closures. This resulted in 584 days of disruption saved on the network between January and July this year - an exceptionally high number for any highway authority - and reflects the pro-active forward looking approach by officers and the level of co-operation by utilities in using round table discussions to draw out medium and long-term works plans.

### Traffic Congestion

15. The first half of 2016 saw the delivery of a number of major highway schemes, including:
  - the north / south and east / west cycle super highways by TfL
  - a major gas main upgrade in Newgate Street by National Grid Gas
  - power supply connections by UK Power Networks in Old Broad Street for the Angel Court development
  - the closure of Liverpool St bus station for Crossrail works
  - the closure of the Fenchurch St / Leadenhall St / Aldgate junction for the final major road element of the City's Aldgate scheme.
16. Even with careful advance planning and publicity, each of these works inevitably created pockets of congestion that had to be addressed. One example was the closure of Newgate Street, which in the past had been successfully managed with a diversion through Ludgate Circus. However, with the cycle super highway reducing capacity at that key junction, traffic congestion was greater than previously experienced, and this led City officers, Members and TfL colleagues to identify and implement a new box junction at Ludgate Circus, adjust four bus diversion routes to create capacity, and increase parking enforcement coverage at pinch points, all to mitigate this effect.
17. With so many temporary activities needing to be accommodated, it can be difficult to appreciate and understand the real background level of traffic congestion, but a dedicated officer was brought in and tasked with monitoring the road network in the past six months to try to identify consistent hotspots, and to tackle those hotspots in real time as best they can.
18. To begin with, those observations suggest that the number of occasions when traffic is actually at a standstill is really very low, and when it does happen, the cause is usually traceable to one-off incidents such as a vehicle collision, a badly parked lorry or another form of temporary activity. An example of this

was the fatal accident on 29<sup>th</sup> March that closed Old Street and Great Eastern Street, causing gridlock as far away as Aldgate.

19. Nevertheless, it is accepted that slow moving traffic can be a regular feature of some localised parts of the City, although by contrast other parts of the City can equally flow freely on most days. Observations would suggest that when the network is free from other disruptions, congestion generally happens in the same geographical areas, and is slightly worse in the afternoon peak as traffic leaves both the City and the West End together (see Appendix 8).
20. In terms of those localised areas, they can typically be divided in two, namely the Bank junction and its approaches, and those streets affected by the cycle super highway.
21. The capacity issues at Bank have, of course, been known for some time and are linked to the very nature of the junction and the safety of those who use it. Together with the Monument junction (see below), Bank remains a key pinch point for the City's network, and as Members are no doubt aware, a project is already underway to consider how best to approach the issue of making the junction operate more safely and efficiently. Interestingly enough, the Crossrail project's closure of Moorgate has had a beneficial impact at Bank as this has removed pressure from the Princes Street approach, which in turn has reduced congestion at the junction.
22. Away from Bank, one other consistent theme from our observations has been traffic congestion on those streets carrying the north / south and east / west cycle super highways (Farringdon St / New Bridge St and Upper / Lower Thames St respectively), as well as the primary alternative to the east / west route from Fleet Street to Great Tower Street via Ludgate Hill and Cannon Street.
23. That impact is particularly felt at two locations, namely:
  - Monument junction, which is having to balance normal traffic flows of a five way junction with the additional impact of the Arthur Street closure (by TfL), the Tooley Street closure (by Network Rail), a lane closure on London Bridge (for the redevelopment of 33 King William Street) and displaced traffic from the east / west cycle super highway. This will be further complicated by the upcoming diversion for the City's closure of Tower Bridge from October.
  - Ludgate Circus, which now has to accommodate new signal phases as well as an 'all red' pedestrian element for the cycle super highway. This has affected the capacity on all four arms, resulting in queues on the approaches extending further than before, and reducing the junction's ability to cope with other temporary activities on the network.
24. As noted earlier, Monument junction remains a key consideration in the overall Bank project, and TfL's attention will no doubt return to Ludgate Circus once Newgate Street reopens following the completion of the gas works there. However, it is understood that TfL will continue to dynamically fine-tune the balance of traffic signal timings at both locations in response to local conditions.



25. Otherwise, TfL continue to do their own monitoring in relation to both general traffic congestion and the impact of the cycle super highway, and some of that information is shared with City officers on a daily basis. These Network Performance Reports largely support our observations of localised traffic congestion on certain routes, but on the wider front, they also suggest that traffic congestion across central London is still limited to known major pinch points (often influenced by construction works), and in other areas the network performs well with a high degree of journey time reliability.
26. Finally, as mentioned earlier, this year DBE has had a dedicated officer troubleshooting issues that might be the cause of slow moving traffic, as well as monitoring the network to identify weekday congestion hotspots. This is primarily done using the City's CCTV coverage, but problems are often investigated on the ground and solved through liaison with any number of key stakeholders, such as:
- Requesting additional parking enforcement from the City's parking contractor, asking for Civil Enforcement Officers to attend to vehicles parked in contravention
  - Contacting TfL's Road Traffic Enforcement Officers for assistance on the Red Routes
  - Highlighting information to be put out via the City's social media channels
  - Seeking assistance from fellow City officers in relation to streetworks and building sites under the umbrella of the Considerate Contractor Scheme
  - Contacting TfL to report traffic signal faults or requesting TfL's Traffic Control Centre to adjust traffic signal phasings
  - Liaison with the City Police regarding the appropriate response to incidents and accidents

### **Details of Major Works and Schemes 2016/17**

27. The second half of this report looks ahead to the major works expected to take place in the next 12 months from October 2016, including details of how officers have sought to assess, co-ordinate and influence each project in turn. Summary details can be found in the appendices to this report, including an outline calendar of major works proposed in 2016/17 and a map of the locations of these various projects.

### **Major Transportation Projects**

#### Crossrail

28. Crossrail continues to have a major presence in the Square Mile, but thanks to the close co-operation between the City and the five surface-level construction sites at Moorgate, Liverpool Street, Blomfield Street, Finsbury Circus and Lindsey Street, complaints from the public remain at a very low level, and its impact has been 'manageable'. The scale of the project may be

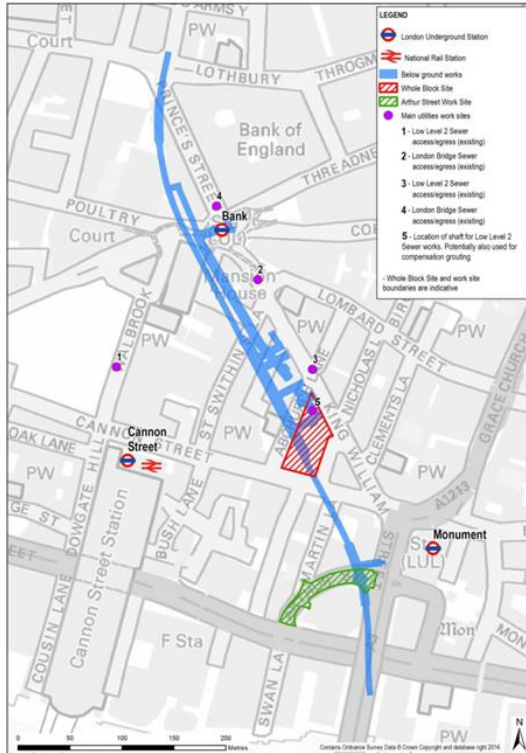
much larger than a 'normal' set of building sites, but Crossrail has managed to become part of the background activity in the City.

29. Moorfields, Moor Place, Finsbury Circus (west arm), Liverpool Street (west), Hayne Street and Charterhouse Square (westbound) all remained closed throughout the last year, and will likely stay closed until the completion of the project. In a repeat of an earlier closure, Moorgate (southbound) closed again in July to facilitate the station construction, and this is currently expected to be in place until March 2017.
30. Now marking five years of close liaison and co-operation, Crossrail and the City continue to meet fortnightly to plan and review the project's highway works, and Crossrail continues to recognise that without this level of commitment, the project would be well behind schedule and have had a far more disruptive impact on City life.

### Bank Northern Line Upgrade

31. This project will deliver a new Northern Line tunnel for Bank station by 2022, plus a new ticket hall in Cannon Street, various new interchanges underground, and lift access from street level direct to the Docklands Light Railway.
32. At surface level, the project now has two main worksites, namely Cannon Street for the new station entrance and Arthur Street, where a new shaft will connect to the tunnelling operation.

### Bank Northern Line Upgrade: Works Location Plan



33. TfL have had Arthur Street closed for some time to move the utilities in the highway and to start the shaft's construction, and they have now started

demolition of the building above the second construction site, closing both Abchurch Lane and Nicholas Lane in order to do this safely.

34. There is still a possibility that TfL will require at least one major road closure away from Arthur Street to complete their advance utility works which are needed to protect utility plant from the vibration and potential settlement of the tunnelling. The key remaining issue involves a gas main directly underneath the pedestrian passageways for Bank station, but given the difficulty in gaining access to that main, National Grid Gas and London Underground are still reviewing how this can be done.
35. City officers have been involved in the overall planning of the Bank project's construction activity since its inception, and continue to meet the project team on a fortnightly basis to discuss the progress of works. Both sides also meet on a regular strategic level to discuss planning considerations, legal consents, noise issues, local stakeholder engagement, adjacent development activity and TfL's overall programme.

### Cycle Super Highway

36. As Members are no doubt aware, work to construct the Mayor's separated cycle lane corridors, north / south and east / west across London, has largely completed. Snagging of those works continue with TfL, who are also monitoring a small number of locations where a redesign of the localised network may be needed.
37. However, there are two main locations where TfL are expected to undertake cycle super highway-related works in the next 12 months:
  - TfL have committed to amending the junction of Tower Hill and Trinity Square to facilitate a movement into the Square 'at any time', but funding is not available in the current financial year. Therefore works are expected to start in Q2 2017, with lane closures on Tower Hill as utilities need to be relocated and kerbs realigned.
  - TfL have also just completed a public consultation on an extension to the north / south super highway, starting in Farringdon Street by Stonecutter Street and heading north towards Kings Cross. Proposals are still subject to detailed design and approval by TfL's Project Board in March next year, but if approved, works (with lane closures) are likely to start in July 2017.
38. As with the previous super highway programme, City officers will work closely with TfL colleagues to understand the impact of the construction, monitor & inspect any works on City Corporation streets, and co-ordinate activity on the rest of the network.

### Thameslink

39. The Thameslink works to upgrade London Bridge station continue, and as part of those works, Network Rail have now closed Tooley Street eastbound until February 2018. As noted earlier, this has placed additional pressure on London Bridge and the Monument junction, and given the upcoming closure of Tower Bridge, TfL will continue to monitor traffic flows in the area and adjust traffic signals to try to balance the needs of all road users.

40. However, it is worth noting that TfL have modelled the combined impact of Tooley Street being closed on the Tower Bridge diversions, and in consultation with the City and LB Southwark, TfL feel the Tooley Street closure will not have a material impact on the congestion from the works at Tower Bridge.

### Utilities

41. The volume of utility work taking place in the City has continued to remain low compared to its peak level just before the Olympics, when the pressure to accelerate works prior to the 2012 moratorium coincided with Thames Water's Victorian Mains Replacement programme.

Year	2010	2011	2012	2013	2014	2015	2016
<b>Total Permit Applications</b>	3755	4379	3331	3319	3099	3074	3115*

\* Projection based on permit application volumes from Jan-June 2016.

42. Since the Olympics, only National Grid Gas have sought to undertake proactive capital upgrade works to their infrastructure, leaving the remaining utilities to focus on development connections, faults and emergencies. This low volume of work (compared to 2011) is reflected in a relatively low number of permits applications, with just a small increase expected this year over 2015.
43. However, looking into these figures in more detail, officers believe the impact of the development boom is being felt, and the proportion of permits within these figures that relate to the delivery of additional power, heating, cooling and telecom requirements for new developments is increasing.

### Citigen: Customer Connection to the Barts Square Development

44. Citigen are currently installing a heating & cooling supply to the new development in Bartholomew Close from the mains connection in Aldersgate St. These works are much larger than a typical utility operation, involving the installation of four 320mm pipes, 2m below the road surface, beneath the existing utility and drainage networks already in place.
45. This project began in early 2016 and won't be finished until Spring 2017, just in time for the first occupation of Helical Bar's Bartholomew Square development. Having laid pipes along Bartholomew Close and Newbury Street, the current phase involves a closure of Long Lane eastbound and 'no right turns' at the Aldersgate Street / Long Lane junction, as Citigen cope with the needs of local premises, through traffic, and the fact that these pipes will lie just above the Tube lines.
46. Works have been closely co-ordinated with residents, Smithfield, TfL and Crossrail, and in particular, Citigen will reopen Long Lane in December in recognition of the needs of the Market, who require all access & egress points to be available during their peak festive period.

### Combined Utility Works: Cornhill / Leadenhall St

47. Three utilities have highlighted their need to undertake major works along the east / west corridor of Cornhill and Leadenhall St. They are:

- BT, who need to demolish and rebuild a major carriageway chamber in Cornhill that is starting to fail.
  - Thames Water, who need to undertake a series of new connections, some left over from the Victorian Mains Replacement project.
  - UK Power Networks, who need to complete the permanent power supply connections to the Scalpel and 10 Fenchurch Ave developments
48. These three sets of works (plus the City's work at Aldgate – see below) are all expected to require directional road closures lasting several weeks, so City officers are proceeding on the basis of combining those works into one combined corridor closure, minimising the extent of their individual impacts. This is likely to take place in early 2017, once the works at Tower Bridge have finished.

#### Water Main Repair: Old Broad St

49. During the recent closure of Old Broad Street by UK Power Networks, a whole series of other utility works were combined into the closure and then the road was resurfaced by the City. During that work, Thames Water disappointingly identified that the majority of the Victorian Mains Replacement work that they thought had been completed in Old Broad Street was in fact unfinished, and they have since requested the opportunity to return to fix this.
50. However, given the street has just been resurfaced, City officers are not inclined to prioritise an immediate excavation, although Thames Water's long-term need to tackle potential sources of leakage is fully recognised. Other planned works also mean an immediate working window is not available.
51. As a result, works are likely to take place sometime next year, but as part of these discussions, Thames Water will be pressed to resurface a wider part of the street to compensate for the disturbance to our new road surface (as opposed to just a narrow reinstatement of their works area).

#### Thames Water: Thames Tideway Tunnel

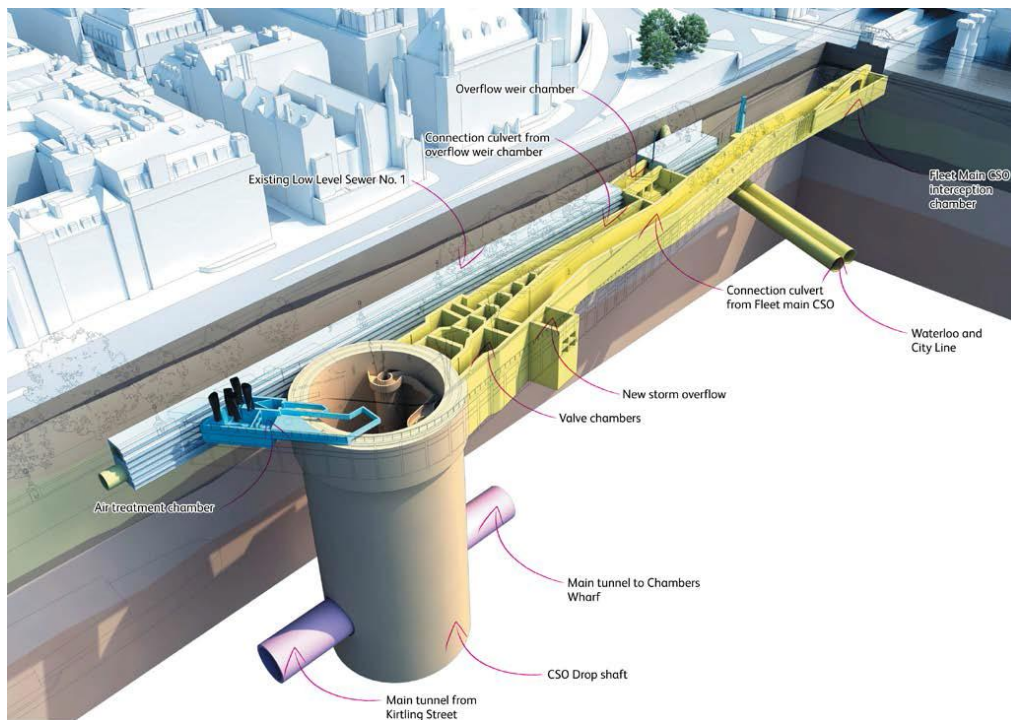
52. Thames Water's project will involve a large construction site in the Thames connecting London's 'super sewer' to the outfall of the River Fleet, just west of Blackfriars Bridge. This particular outfall is high on Thames Water's priority list as it still discharges around 500,000 tonnes of raw sewage into the Thames every year.
53. Enabling works have already started, with a new pedestrian lift under construction, and Blackfriars Pier about to be relocated east of Blackfriars Rail bridge. Main site construction will begin in March 2017, with two main consequences:
- Firstly, the works will involve the removal of the riverside walkway to enable the shaft, overflows and valve chambers to be constructed. This will close the riverside footpath, and requires pedestrians to be diverted via the new lift, across the Blackfriars junction and towards Temple Ave.
  - Secondly, the site will be located at the intersection of the north / south and east / west cycle super highways, and will require the closure of

the down ramp from Blackfriars Bridge to the Embankment. This is currently occupied by the connecting link between the two cycle routes, and will require a significant revision of TfL's scheme. TfL and Thames Tideway have been scoping several options to divert this interchange, and are expected to bring those to the City very shortly.

Thames Tideway Tunnel Location at Blackfriars



Thames Tideway Tunnel Cut-away at Blackfriars

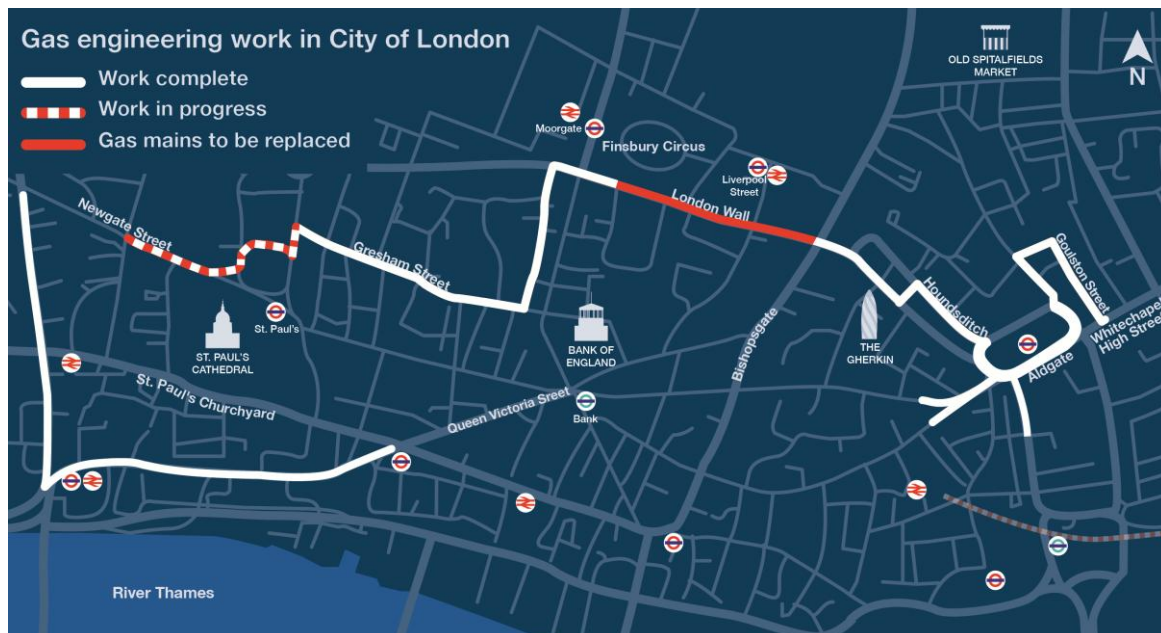


54. As with Crossrail, City officers now meet the Thames Tideway project team fortnightly to discuss these highway aspects, and a forum for higher level cross-borough strategic discussions has been in place for several years. However, the City expect Thames Tideway's local level stakeholder engagement to accelerate in the next few months as they move towards the mobilisation of their major site works.

National Grid Gas: Gas Main Replacement Programme

55. National Grid Gas (NGG) are replacing and upgrading their Victorian gas mains with new, more durable pipes across the City, from Aldgate in the east to Farringdon and Blackfriars in the west. The works are part of a wider long-term programme agreed with Ofgem and the HSE to replace ageing gas mains, and are essential to reduce leakage and maintain a safe and reliable gas supply.
56. As Members will know, in the last year NGG have completed this process in the Aldgate area, Gresham Street, St Martins le Grand, Angel Street and (most recently) Newgate Street. The map below indicates that the last remaining part of their network needing to be upgraded is in London Wall by Circus Place, which Members may know has been subject to a number of leaks and emergency road closures in the last six months.

National Grid Gas: Works Complete (white) / Outstanding (red)



57. Given the size of the main involved and its location under several other utilities, the works in London Wall will be a major undertaking, likely to need a closure in one direction to facilitate work at several places at once. Each existing main has to be exposed at both ends to allow the new main to be inserted inside the old one, and this process has to begin again every time there is a bend in the pipe.
58. In their work so far, NGG have sought to minimise the duration of their works by using a number of methods including the use of robotic cameras to pinpoint any bends or obstructions inside the gas main, extended working hours

agreed with City Environmental Health, and new techniques to excavate the road known as core & vac.

59. We will expect them to adopt the same practices here, and to fully publicise the works to the widest possible extent beforehand. In the City's wider programme, the ideal time for this work is in summer 2017, co-ordinated with Crossrail and a number of other utility works in the vicinity. In addition, this timing will be when traffic levels are at their lowest, and the gas mains pressure is best suited for this work.

### **Development Activities**

60. Once a developer has a planning consent in place, the City cannot control when a development wants to start, nor do we have the power to stop a development just because other activities are taking place in the vicinity. In other words, we are unable to set an arbitrary limit on the volume of development taking place in any one area.
61. In many ways, redevelopment of the City has historically been seen as an indication of a thriving Square Mile, but given the overall level of on-street activity is noticeably higher, work sites will inevitably overlap in places as they bring with them a need for road space, a reduction in network capacity and additional heavy vehicle traffic to our streets.
62. However, those same streets still need to function for residents, businesses and visitors, and be safe for motor vehicles, cyclists and pedestrians. To that end, we have staff dedicated to liaising with building sites to understand their construction needs, to working with the major projects to help manage their impacts, and to co-ordinating activities so that works overlap as little as possible.
63. That typically involves making the best use we can of the tools we have at our disposal, including our Considerate Contractor Scheme (which currently has over sixty active building sites as members) and Construction Logistics Plans for sites that are conditioned from the Planning approval process.
64. For the next 12 months, the key activities relating to building developments in the City are briefly as follows.

### **London Wall Place**

65. Works will be required to reinstate the highway and enhance the public realm around the London Wall Place development in London Wall, Fore Street and Wood Street (see Appendix 4). The largest element will be in London Wall itself, where the footway will need to be extended over the underground car park to accommodate the new building design, albeit the construction space required is likely to mirror the same eastbound lane closure currently used by the site's lorries.
66. Works will be phased in stages around the development from November 2016 to January 2018, with the key London Wall element taking place in the first half of 2017.

### **Bloomberg**

67. Similarly, works have already started in Walbrook to implement the new public realm and highway design around the Bloomberg development at Cannon St /



Queen Victoria St. This 20 month programme involves new paving, kerb lines, trees and lighting on all four sides of the site, co-ordinated in phases with the completion of the development (see Appendix 5).

68. Works have already been integrated into the wider City programme, including the closure of Tower Bridge and the implementation of the 'Bank on Safety' project. This advance planning process led to a major reprogramming exercise when the original first phase in Cannon St was thought to clash with Tower Bridge, and now this phase has been delayed until Q1 2017 in order to fit between that project and the likely Bank implementation date.

#### Eastern Cluster

69. The greatest concentration of activity in the City is still in the Eastern Cluster, where the number of individual building sites proposed or already underway has increased to 24 (see Appendix 6).
70. It is almost inevitable that works for 100 Bishopsgate, Creechurch Place, the Scalpel, the Matrix Hotel, 80 Fenchurch St, 75 Fenchurch St and 120 Fenchurch St will overlap, but the City continues to meet these sites together once a month to co-ordinate their respective programmes, and to combine (or separate) their utility works, crane operations and construction logistics. This also allows officers the opportunity to feed in our plans for Aldgate and Tower Bridge, look ahead to the future enhancement of Fenchurch Street and keep key stakeholders such as Lloyds of London informed.

#### **City of London Works**

71. Although most of the City Corporation's own schemes for public realm enhancement, road danger reduction or highway maintenance are due to take place with little if any disruption to the network, three significant schemes are worthy of note.

#### Tower Bridge

72. The City's project to re-deck the bascules of Tower Bridge and to waterproof the viaduct approaches will result in a three month closure of road and river traffic at Tower Bridge from October to December, including three weekends when the bridge will be closed to pedestrians as well. This will also require the diversion of the Congestion Charge Ring Road through the City, via London Bridge, Southwark Bridge, Eastcheap and Fenchurch Street.
73. Closing Tower Bridge will have a significant impact on traffic throughout much of the City (see TfL's assessment in Appendix 7), and it will be the dominant planned activity throughout that period. As a result, all other major network activities (beyond Crossrail and the Bank Northern Line Upgrade) have already been brought forward or delayed, and the publicity campaign to raise awareness of the works has already started.

#### Aldgate

74. Members will be fully aware of the City's own programme of works to regenerate and redefine the Aldgate gyratory. In the context of this report, the City has now completed the highway works elements, leaving the completion of the pavilion and the landscape spaces.

75. The only major road closure required relates to the completion of the western landscape space directly adjacent to Aldgate High Street, and an eastbound closure lasting a month may be required to complete this in early 2017. However, in order to minimise the impact of these works, the City intends to include this within the closure of the east / west corridor mentioned earlier for BT, Thames Water & UKPN.
76. As before, works will be carefully planned with TfL, traffic will be advised beforehand and there will be wide publicity to those who live and work in the area via our well-established communications channels and co-ordination protocols.

### Bank Junction

77. As the 'Bank on Safety' project progresses towards the consideration of an experimental scheme, Highways officers are working with the Bank team to understand the network resilience implications of removing traffic from Bank. In both the interim design and the permanent options, the on-going need to manage temporary activities and road closures on the network will be factored into this assessment.
78. The current programme suggests that if approved, the 'Bank on Safety' scheme will be implemented in April 2017, and so all the works programmes listed above, both overlapping this date and subsequent to it, will have to be considered in the context of this new traffic environment.

### **Communications**

79. The Highways team continues to strengthen its communications with the public, helping to mitigate the impact of all these works. These channels include:
  - 2,900 followers to the Highways Twitter feed (@squarehighways), providing up-to-date information on road closures, special events and road safety initiatives.
  - Nearly 1,200 people receive the weekly e-mailed Traffic Management Bulletin, covering major highway works and events for the week ahead.
  - Over 53,000 people visited our road closure web pages in the first half of the year, and another 14,000 used our interactive map of streetworks.
  - The recent post on our Facebook page regarding the Tower Bridge works ([www.facebook.com/squarehighways](http://www.facebook.com/squarehighways)) reached almost 4,000 people.

### **Summary**

80. The approach from officers remains to identify the needs of these major projects early, to combine them where possible, and to keep them apart when necessary. This requires officers to:
  - establish the dependency between separate projects;
  - understand their potential conflicts and impacts, and;

- engage with project managers at an early stage (and frequently thereafter) to ensure that disruption can be minimised through a combination of regulation, negotiation and influence.

## **Conclusion**

81. With projects such as Crossrail, Thames Tideway and Bank Northern Line Upgrade now well underway, co-ordinating works on the City's road network will remain a challenge into the longer term, but officers will continue to work to ensure the co-operation of major project sponsors, utility companies and developers in co-ordinating their works programmes, as well as regulating the City's own activity into that picture.
82. The aim will remain to ensure there is a balance between the need to keep projects on track and the need to limit both the direct and cumulative impact they cause on the public at large.

## **Appendices**

- Appendix 1 – Major Works Timeline (2016/17)
- Appendix 2 – Major Works Map (2016/17)
- Appendix 3 - Major Works Details (2016/17)
- Appendix 4 – London Wall Place Highway Works: Phasing Plan
- Appendix 5 - Bloomberg Highway Works: Phasing Plan
- Appendix 6 – Current and proposed sites in the Eastern Cluster
- Appendix 7 – Tower Bridge Diversions & Impact
- Appendix 8 – Cycle Super Highway Congestion Impact Corridors

## **Ian Hughes**

Assistant Director (Highways)

T: 020 7332 1977

E: [ian.hughes@cityoflondon.gov.uk](mailto:ian.hughes@cityoflondon.gov.uk)

**Appendix 1: Major Works Timeline 2016/17** (High, Medium & Low Impact schemes)

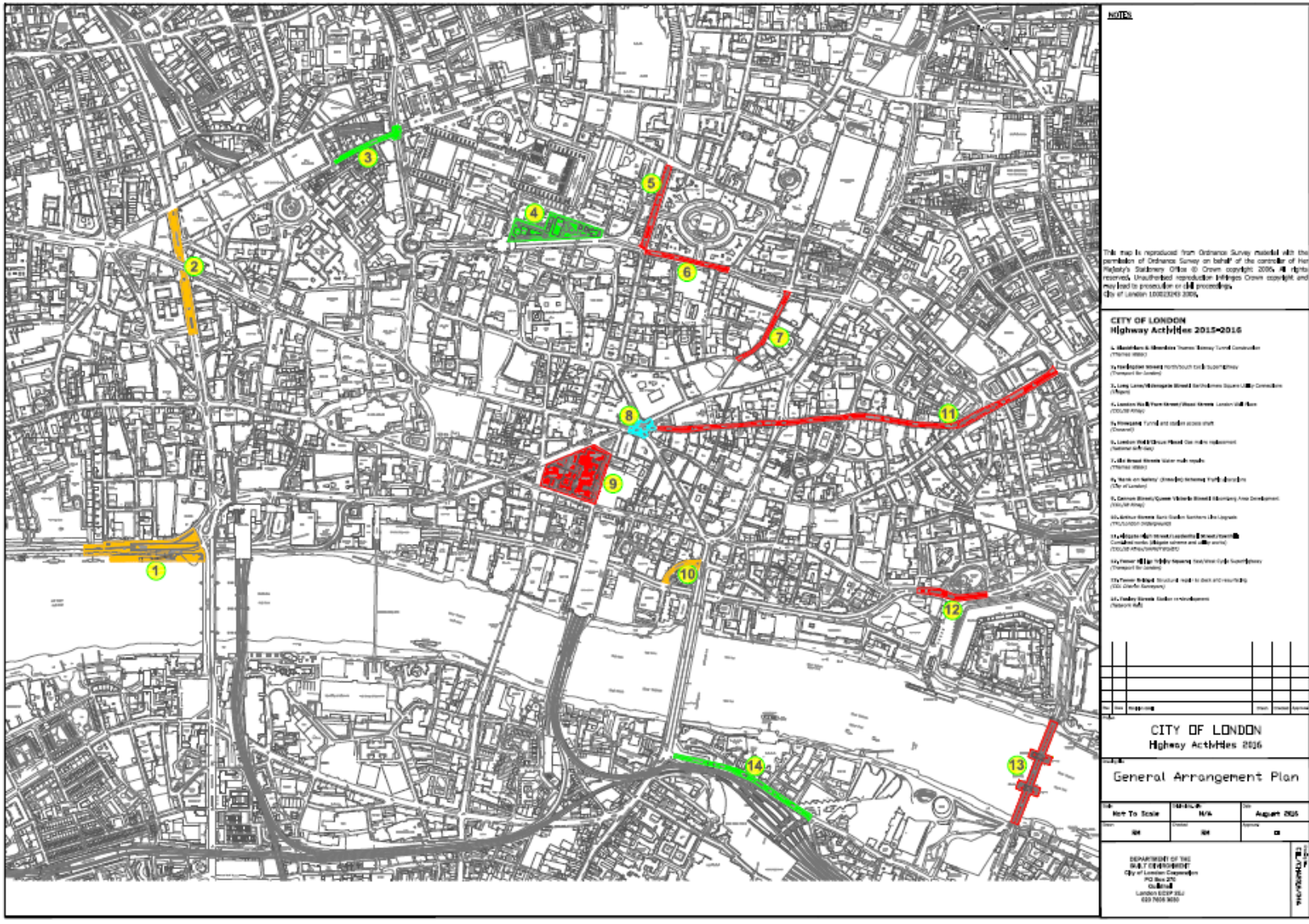
Q4	<p><b>October</b></p> <p>Tower Bridge (CoL) Moorgate S/B (Crossrail)</p> <p>Arthur St (TfL / LUL)</p> <p>Tooley St (Network Rail) Long Ln / Aldersgate St (Citigen)</p>	<p><b>November</b></p> <p>Tower Bridge (CoL) Moorgate S/B (Crossrail)</p> <p>Arthur St (TfL / LUL)</p> <p>Tooley St (Network Rail) Long Ln / Aldersgate St (Citigen)</p>	<p><b>December</b></p> <p>Tower Bridge (CoL) Moorgate S/B (Crossrail)</p> <p>Arthur St (TfL / LUL)</p> <p>Tooley St (Network Rail)</p>
Q1	<p><b>January</b></p> <p>Moorgate S/B (Crossrail) Cannon St W/B (Bl'mberg)</p> <p>Arthur St (TfL / LUL)</p> <p>Tooley St (Network Rail) Long Ln / Aldersgate St (Citigen)</p>	<p><b>February</b></p> <p>Moorgate S/B (Crossrail) Cannon St W/B (Bl'mberg)</p> <p>Arthur St (TfL / LUL)</p> <p>Tooley St (Network Rail) Long Ln / Aldersgate St (Citigen) London Wall Place (E/B)</p>	<p><b>March</b></p> <p>Moorgate S/B (Crossrail) Cannon St W/B (Bl'mberg)</p> <p>Arthur St (TfL / LUL) B'friars/Vic Embank (TTT)</p> <p>Tooley St (Network Rail) London Wall Place (E/B)</p>
Q2	<p><b>April</b></p> <p>Cannon St W/B (Bl'mberg)</p> <p>Arthur St (TfL / LUL) B'friars/Vic Embank (TTT)</p> <p>Tooley St (Network Rail) London Wall Place (E/B)</p> <p>*'Bank on Safety' (CoL)</p>	<p><b>May</b></p> <p>Queen Vic St (Bl'mberg)</p> <p>Arthur St (TfL / LUL) B'friars/Vic Embank (TTT)</p> <p>Tooley St (Network Rail) London Wall Place (E/B)</p>	<p><b>June</b></p> <p>Queen Vic St (Bl'mberg)</p> <p>Arthur St (TfL / LUL) B'friars/Vic Embank (TTT)</p> <p>Tooley St (Network Rail) London Wall Place (E/B)</p>
Q3	<p><b>July</b></p> <p>Cannon St W/B (Bl'mberg)</p> <p>Arthur St (TfL / LUL) B'friars/Vic Embank (TTT) Farringdon St (TfL CSH)</p> <p>Tooley St (Network Rail)</p>	<p><b>August</b></p> <p>Queen Vic St (Bl'mberg)</p> <p>Arthur St (TfL / LUL) B'friars/Vic Embank (TTT) Farringdon St (TfL CSH)</p> <p>Tooley St (Network Rail)</p>	<p><b>Sept</b></p> <p>Queen Vic St (Bl'mberg)</p> <p>Arthur St (TfL / LUL) B'friars/Vic Embank (TTT) Farringdon St (TfL CSH)</p> <p>Tooley St (Network Rail)</p>

\* This notes the anticipated date for the introduction of the 'Bank on Safety' scheme.

**To be programmed:**

<b>Location</b>	<b>Contractor</b>	<b>Works</b>	<b>TM</b>	<b>Duration</b>	<b>Timing</b>
Leadenhall St	UKPN	Customer connection	E/B closure	TBC	Q1 2017
Aldgate High St	CoL Highways	Aldgate scheme	E/B closure	1 month	Q1 2017
Cornhill	TWU / BT	Combined utility works	Full/part closure	10 weeks	Q1 2017
Old Broad St	Thames Water	Mains repair	Full closure	12-20 weeks	Q1-Q2 2017
London Wall / Circus Place	NGG	Gas governor	E/B closure	TBC	Q2-Q3 2017
Byward St / Trinity Square	TfL	Cycle Super Highway	Lane closure	TBC	Q2/Q3 2017

## Appendix 2 – Major Works Map 2016/17



**Appendix 3: Major Works Details 2016/17**

No.	Location	Activity	Contractor	Traffic Mgt	Impact	Start	Finish	Cert.*	Powers
1	Blackfriars & Riverside	Thames Tideway Tunnel construction	Thames Tideway Tunnel (Thames Water)	Slip road closure & lane restrictions	Med	March 2017	2021	High	TWA
2	Farringdon Street	North / south cycle super highway	TfL	Lane restrictions & side road closure	Med	July 2017	Dec 2017	Med	TfL / CoL
3	Long Lane / Aldersgate Street	Utility connections for Barts Square development	Citigen	E/B road closure & No Right Turns	Low	In progress	Feb 2017	High	CoL
4	London Wall / Fore Street / Wood Street	Area enhancement around London Wall Place	CoL (Riney)	Eastbound lane closure	Low	Feb 2017	June 2017	High	CoL
5	Moorgate	Tunnel & station access shaft	Crossrail	Southbound road closure	High	In progress	March 2017	High	TWA
6	London Wall / Circus Place	Gas mains replacement	National Grid Gas	London Wall closed E/B	High	Q2 2017	Q3 2017	High	CoL / TfL
7	Old Broad Street	Water main repairs	Thames Water	Road closure	High	Q1 2017	Q2 2017	Low	CoL
8	'Bank on Safety' experimental scheme	Traffic alteration	CoL	TBC	TBC	April 2017	April 2017	Med	CoL / TfL
9	Cannon Street / Queen Victoria Street	Area enhancement around Bloomberg development	CoL (Riney)	Westbound road closures	High	Jan 2017	Oct 2017	High	CoL / TfL
10	Arthur Street	Bank Northern Line Upgrade construction	TfL (London Underground)	Road closure	Med	In progress	2022	High	TWA
11	Aldgate High St / Leadenhall St / Cornhill	Combined works (Aldgate scheme & utility works)	CoL (Riney), UKPN, TWU, BT	Eastbound road closure	High	Q1 2017	Q1 2017	Low	CoL / TfL

12	Tower Hill by Trinity Square	East / West cycle super highway	TfL	Lane restrictions & side road closures	High	Q2 2017	Q3 2017	Med	TfL / CoL / LBTH
13	Tower Bridge	Structural repair to deck & resurfacing	CoL (District Surveyors)	Road & (part) pedestrian closure	High	Oct 2016	Dec 2016	High	TfL / PLA
14	Tooley St	Station redevelopment	Network Rail	Eastbound road closure	Low	In progress	Feb 2018	High	TfL

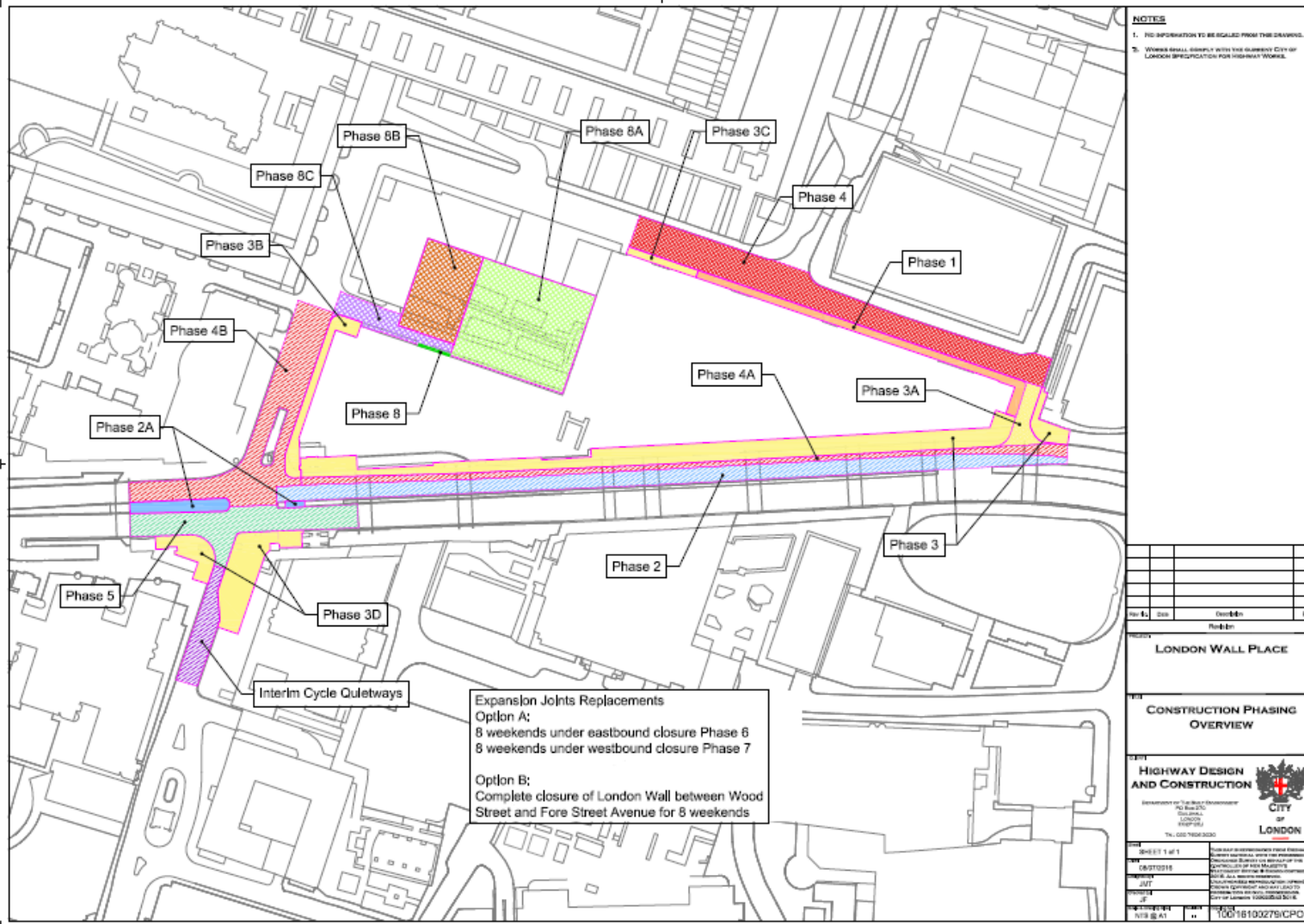
\* Cert = Certainty, or how likely the programme is currently expected to be met

### **Powers**

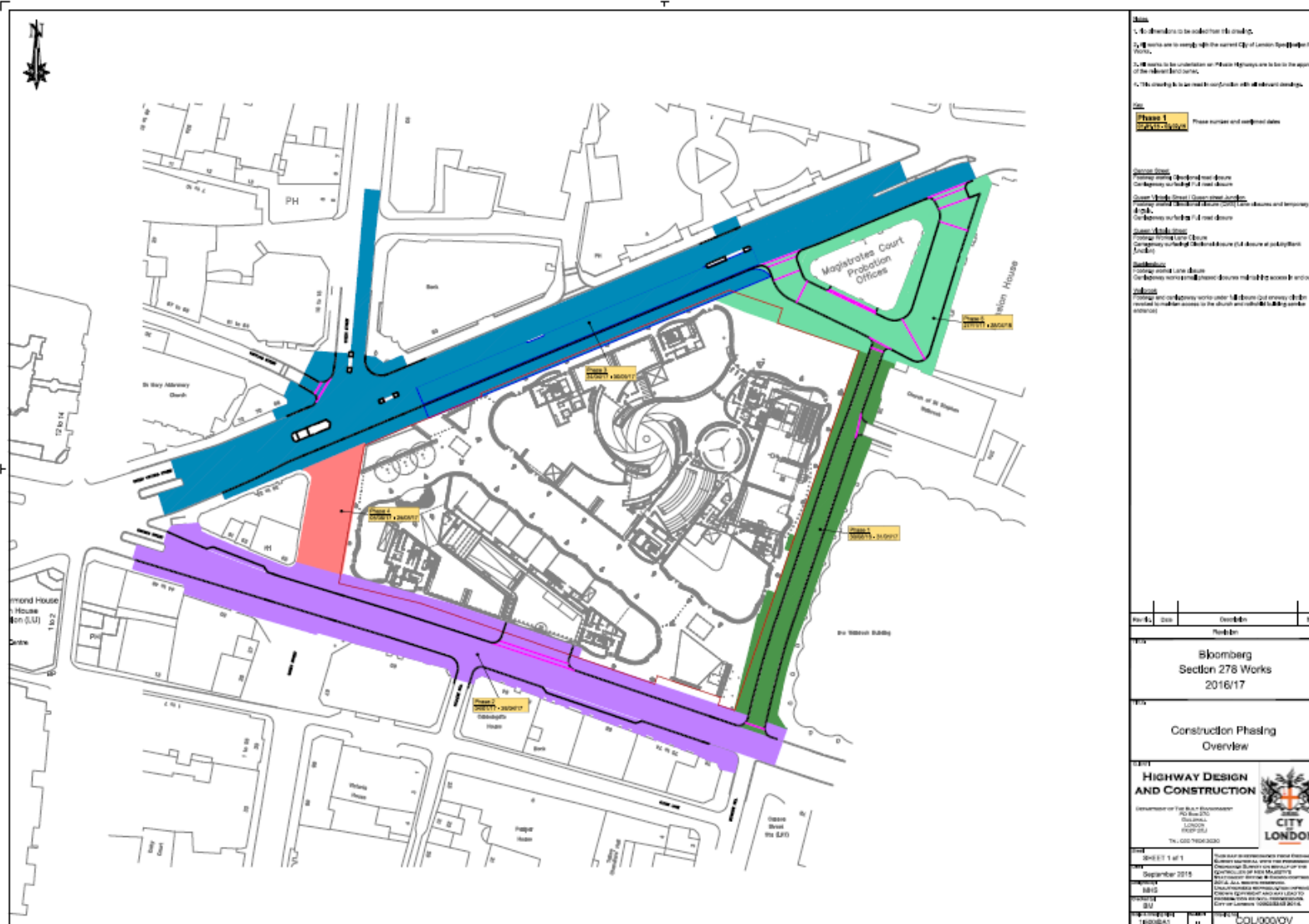
- CoL = City Corporation authority required
- TfL = TfL authority required (either as highway authority on the Red Routes, or as overall Strategic Transport Authority)
- LBTH = London Borough of Tower Hamlets authority required
- TWA = Transport & Works Act granting bespoke powers to the work promoter (Crossrail Act, Northern Line upgrade, Thames Tideway)
- PLA = Port of London Authority approval required



# Appendix 4 – London Wall Place Highway Works: Phasing Plan



# Appendix 5 – Bloomberg Highway Works: Phasing Plan



**Notes**

1. All dimensions to be taken from the road edge.
2. All works are to comply with the current City of London Street Works Byelaws.
3. All works to be undertaken on 14-hour Highway works to be in the approval of the relevant local council.
4. The phasing plan is to be read in conjunction with all relevant drawings.

**Scale**

**Phase 1**  
**Construction** Phase number and completion date

**General Notes**

- 1. Temporary works to be installed prior to start of Phase 1 works.
- 2. Temporary works to be installed prior to start of Phase 1 works.
- 3. Temporary works to be installed prior to start of Phase 1 works.
- 4. Temporary works to be installed prior to start of Phase 1 works.
- 5. Temporary works to be installed prior to start of Phase 1 works.
- 6. Temporary works to be installed prior to start of Phase 1 works.

**Scale**

**Notes**


**Revision**

Rev.	Date	Description	By
01		Issue for tender	

**Project**  
Bloomberg  
Section 278 Works  
2016/17

**Title**  
Construction Phasing  
Overview

**Client**  
**HIGHWAY DESIGN AND CONSTRUCTION**  
Department of The Mayor's Office  
PO Box 270  
London  
EC3P 2EU  
Tel: 020 7660 3030



**Scale**  
A3 (1) 1 of 1

**Revision**  
01

**Issue Date**  
September 2016

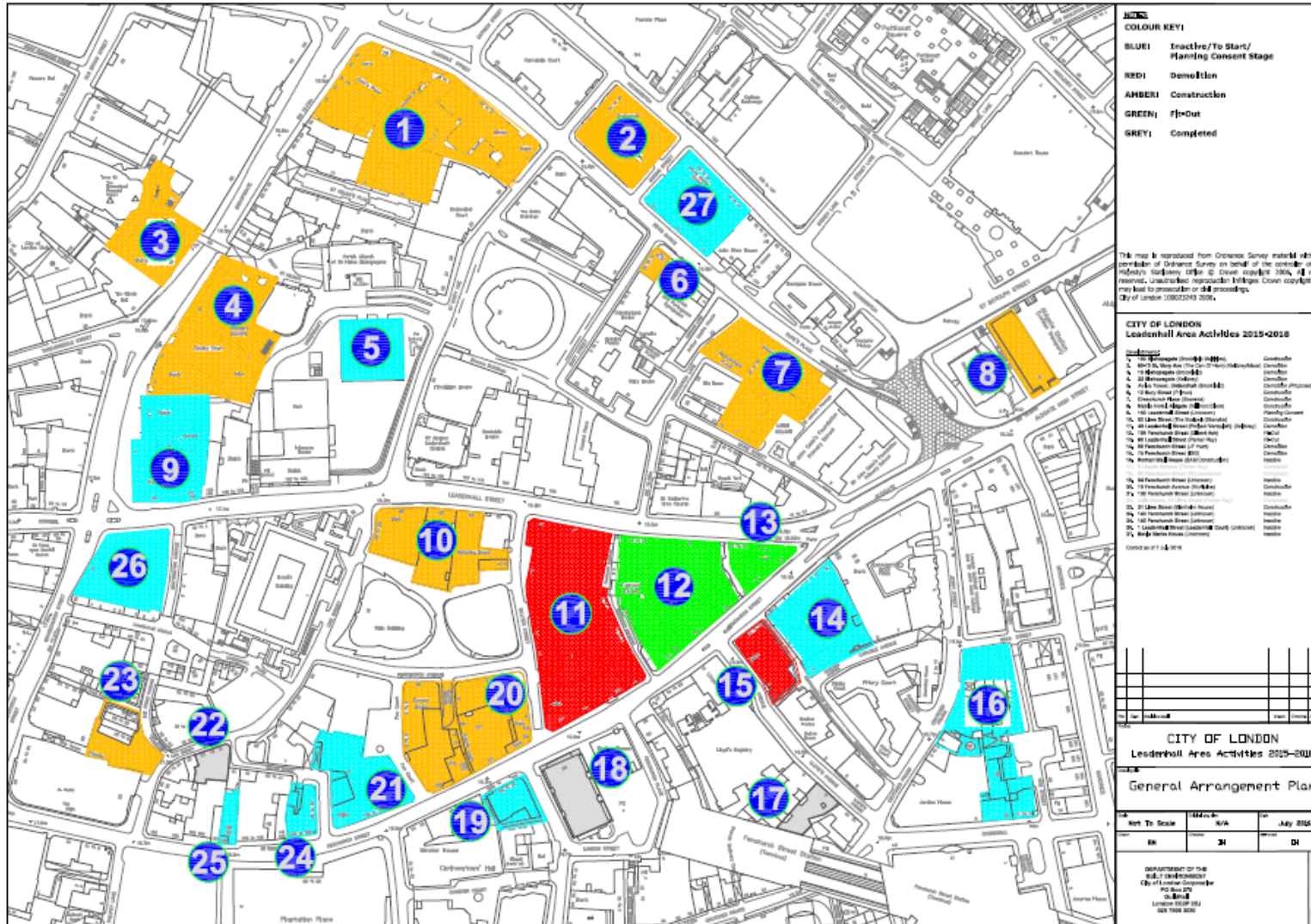
**Project**  
Bloomberg

**Client**  
City of London

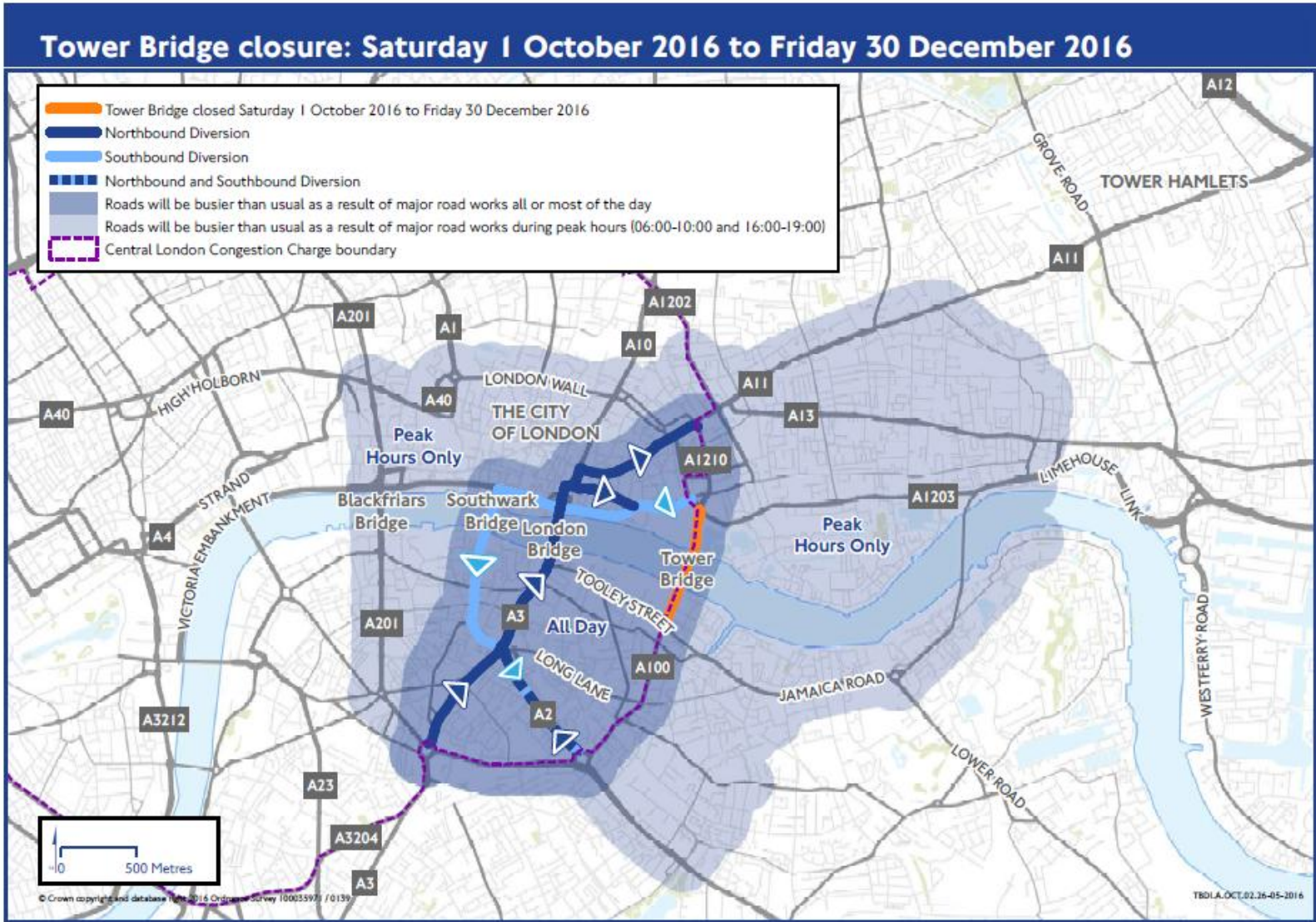
**Contract**  
S278

**Program**  
COL00000V

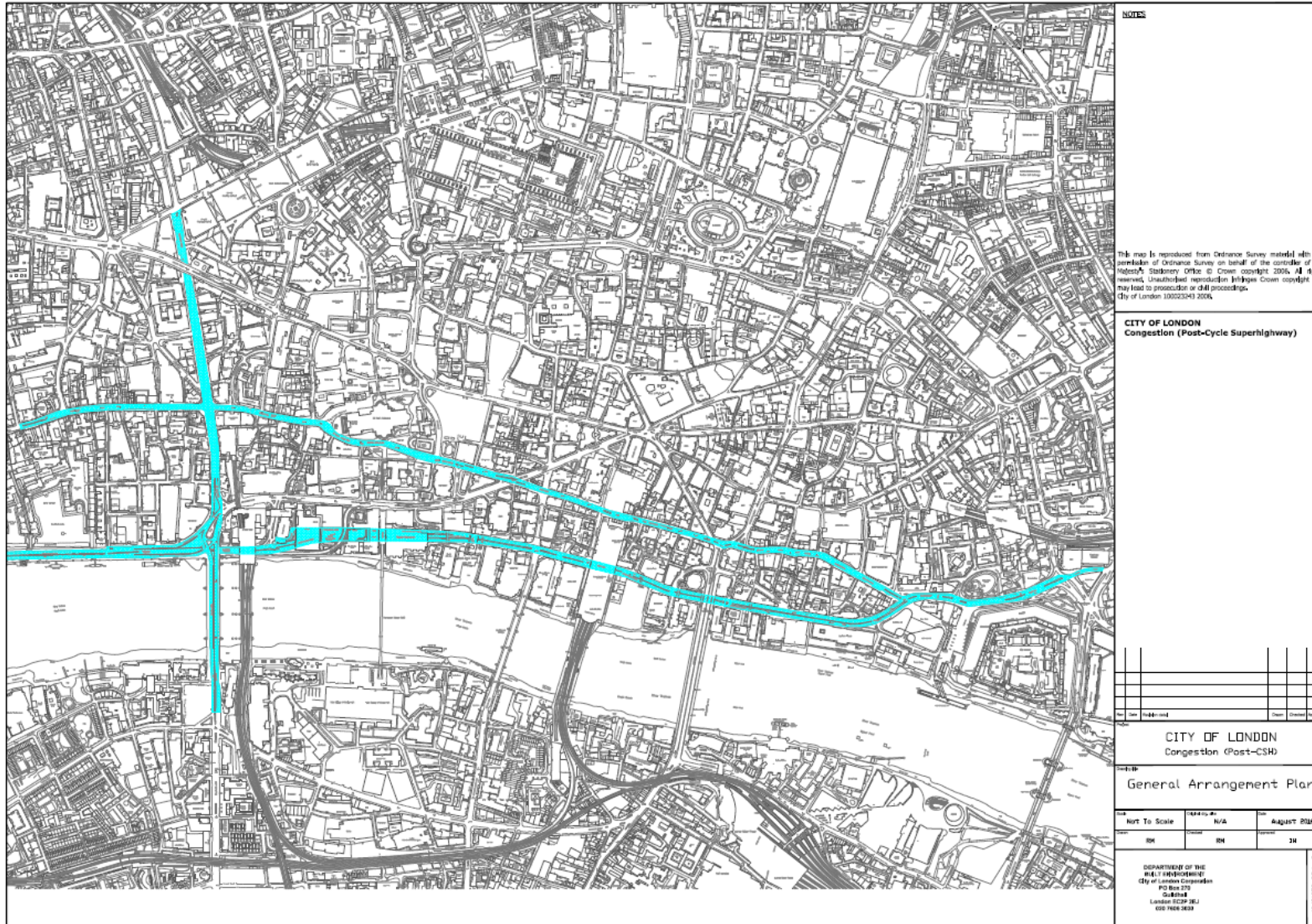
**Appendix 6: Current and proposed sites in the Eastern Cluster**



**Appendix 7 – Tower Bridge Diversions & Impact**



## Appendix 8 - Cycle Super Highway Congestion Impact Corridors



This page is intentionally left blank



safer roads for everyone

**Temple Area, City of London**

**Road Safety Risk Assessment**

on behalf of City of London Corporation

**TMS Project No: 1673**

**Date: 31<sup>st</sup> May 2016**



## Contents

<b>1.0</b>	<b>Introduction</b>	<b>1</b>
<b>2.0</b>	<b>Background</b>	<b>2</b>
<b>3.0</b>	<b>Methodology</b>	<b>4</b>
<b>4.0</b>	<b>Site Assessment Findings</b>	<b>6</b>
<b>5.0</b>	<b>Summary and Conclusion</b>	<b>13</b>
<b>6.0</b>	<b>Assessor</b>	<b>15</b>

### Appendix A – Site Plan



---

## Temple Area, City of London

### Road Safety Risk Assessment

---

#### 1.0 Introduction

- 1.1 TMS Consultancy has been commissioned by City of London Corporation (CoL) to carry out an independent road safety risk assessment of the Temple Area side streets, following the introduction of the north-south Cycle Superhighway (CS6) on A201 Farringdon Street, New Bridge Street and Blackfriars Bridge. The purpose of the commission is to provide CoL with advice on whether the Cycle Superhighway traffic arrangements have introduced unacceptable risks to users of the Temple Area side streets, and vice versa.
- 1.2 The road safety risk assessment was carried out at by TMS at the same time as a post construction road safety audit, also carried out by TMS (report ref. 12809) and commissioned by CoL.
- 1.3 TMS Consultancy has extensive experience in providing specialist consultancy, research and training services in traffic management and road safety engineering to a wide client base in both the public and private sectors in the UK and overseas.

## 2.0 Background

2.1 Transport for London (TfL) has recently constructed a north-south Cycle Superhighway, CS6, through the City of London, which includes alterations to traffic movements to and from the Temple Area side streets onto the roads upon which CS6 has been constructed. CS6 takes the form of a bi-directional cycle track at carriageway level, and shares Farringdon Street, New Bridge Street and Blackfriars Bridge with general traffic, albeit separated from the general traffic with a solid raised median strip. CS6 travels along the western side of these streets. A site plan is included in **Appendix A** of this report.

2.2 To enable CS6 to be as safe as possible, arrangements for the management of traffic across it, such as traffic signals and priority junctions (at which cyclists have priority), have been proposed:

- At the Tudor Street/New Bridge Street priority junction TfL proposed to allow only cyclists to enter and leave CS6 whereas the previous arrangement allowed general traffic to turn left out of Tudor Street and both left and right into Tudor Street, and
- At the Bridewell Place/New Bridge Street traffic signals the one-way exit from Bridewell Place turning right only onto New Bridge Street has been replaced with an arrangement allowing traffic to turn both right out, and left into Bridewell Place, still under signal control. The left turn out, and the right turn into Bridewell place remain banned.

Whilst the latter of these proposals has been implemented, the former still allows general traffic to turn left from Tudor Street onto New Bridge Street, through CS6 using a temporary arrangement.

2.3 With the proposed closure of the Tudor Street/New Bridge Road priority junction to all but cycle traffic, further arrangements have been introduced in the Temple Area to allow traffic to exit and travel north along New Bridge Road:-

- Carmelite Street, formerly closed to all but cycle traffic at Victoria Embankment, has been opened up to allow traffic to enter Victoria

Embankment. No Entry signs preclude vehicle entering it from Victoria Embankment.

- Temple Avenue (formerly only allowing traffic to exit onto Victoria Embankment but with two-way cycling) now only allows two-way cycling through a new closure to general traffic.

2.4 As before the introduction of the north-south CS6, general traffic from the Temple Area can also access the major highway network along Whitefriars Street (one-way northbound) at Fleet Street (left and right turns onto Fleet Street available). General traffic can also still gain access to the Temple Area from Fleet Street by using the Bouverie Street, Salisbury Court/Dorset Rise and Bride Lane, each of which are one-way southbound but with a northbound, contraflow cycle lane.

2.5 The purpose of the commission is to provide CoL with advice on whether the CS6 traffic arrangements have introduced unacceptable risks to users of the Temple Area side streets, and vice versa. Although all roads in the area were inspected, TMS has been asked to focus, in particular, on roads and junctions in the Temple area with the following priority:-

First Priority Locations:

- Junctions of New Bridge Street with Tudor Street and with Bridewell Place
- Bridewell Place (whole length)
- Tudor Street (New Bridge Street to Dorset Rise)
- Junction of Tudor Street, Bouverie Street and Temple Avenue, and
- Bouverie Street (whole length).

Second Priority Locations:

- Tudor Street (Bouverie Street to Dorset Rise)
- Whitefriars Street (whole length), and
- Carmelite Street (whole length)
- Kingscote Street and Watergate.

### **3.0 Methodology**

- 3.1 This Site Safety Assessment has been carried out by Paul Martin, the Managing Director of TMS Consultancy, visiting all roads and junctions within the Temple area and its peripheral junctions with New Bridge Street, Victoria Embankment and Fleet Street. The assessment has been carried out using engineering judgement based on the assessor's experience in road safety engineering, risk assessment and accident analysis.
- 3.2 Background information relating to the access proposals was provided by Albert Cheung in e-mail format during May 2016. Alan Rickwood from the City of London Police also provided background information during the site visit.
- 3.3 Mr Martin visited the site in daylight on Thursday 26<sup>th</sup> May 2016, between 07:45 and 09.15 hours (morning peak traffic) to gain an understanding of the area, observe any conflicts involving road users and identify any hazards associated with the highway environment. The weather at the time was fine and dry. Vehicle flows along New Bridge Street were heavy with queuing in both direction, the queues being worse southbound towards the New Bridge Road / Victoria Embankment junction. Pedestrian and cycle flows were also heavy on New Bridge Street. Traffic, cycle and pedestrian flows throughout the Temple area were light throughout the morning peak hours. Mr. Martin also visited the junctions on CS6 during the evening peak hour on 25<sup>th</sup> May during the road safety audit of CS6 and also draws upon observations during that period for this risk assessment.



3.4 To determine the level of risk associated with the various conflicts, a risk assessment matrix was used, which is provided in the IHT guidelines on road safety audit (2008). The table is shown below:

		Frequency of collision			
		More than one per year	One every 1-4 years	One every 5-10 years	Less than one per 10 years
Severity	Fatal	Very high	High	High	Medium
	Serious	High	High	Medium	Medium
	Slight	High	Medium	Medium	Low
	Damage	Medium	Medium	Low	Low

## 4.0 Safety Assessment Findings

### First Priority Locations

#### **Tudor Street junction with New Bridge Street**

- 4.1 The layout of the junction of New Bridge Street with Tudor Street is in a temporary state due to the lack of consensus of the final layout between CoL and TfL – see photo 1.



**Photo 1: Looking east towards New Bridge Street from Tudor Street**

- 4.2 TfL's General Arrangement drawing shows that Tudor Street is to be closed off to vehicular traffic. In its temporary state, however, vehicles can egress from Tudor Street and make a left turn manoeuvre onto New Bridge Street. In doing so, drivers were observed to wait at the give way, check for cyclists before crossing CS6 and wait for a gap to complete their manoeuvre. Gaps in the relatively busy CS6 are frequent as cyclists arrive in platoons, regulated by the traffic signals on either side (Watergate junction to the south and Bridewell Place junction to the north). The assessor noted that these left turns were carried out relatively easily,

without conflict with cyclists, albeit the vehicles involved were all small, being private cars, taxis or light goods vehicles. In the event, however, that a large vehicle carries out this left turn manoeuvre, it could obstruct CS6 for a longer period of time whilst waiting for a gap in the general traffic lanes, increasing the likelihood of collisions with cyclists on CS6. The likelihood of the left turn resulting in a collision with a cyclist is estimated to be more frequently than once a year. As cyclists approaching a vehicle blocking CS6 are likely to arrive in a platoon and can see the offending vehicle with a good degree of visibility and advanced warning, their speed would be slow and the severity of a collision is likely to be low i.e. damage to vehicle/cycle or slight injury, putting it in the **Medium to High** category in the risk matrix.

- 4.3 Of equal if not greater concern, though, is the risk of an illegal right turner into Tudor Street colliding with a fast moving southbound cyclist on CS6. One such movement was observed during the evening peak hour site visit for the associated road safety audit. The driver of an illegal right turning vehicle would have difficulty in looking over their shoulder, through the door pillar, towards a southbound cyclist, and their rear view mirror would be at the wrong angle to spot a fast moving cyclist approaching them from the north. The offending driver might make the manoeuvre on the spur of the moment and then do so quickly due to its illegal nature. The cyclist would not be expecting this illegal manoeuvre and could be travelling at a relatively high speed. The resulting impact could be at relatively high speed increasing the risk of high severity injuries to the cyclist. The likelihood of it occurring would, again, be more than once each year because, although there would be fewer illegal right turners than legal left turners, the probability of the illegal right turn resulting in a collision is much greater for the above mentioned reasons. This puts this risk into the **High to Very High** category.

#### **Bridewell place junction with New Bridge Street**

- 4.4 This junction appears to function safely, the staging ensuring that CS6 is stopped in both directions so that the turning movements of general traffic can take place safely. During the morning and evening peak hours there is a risk of a large right

turning vehicle blocking, or partially blocking, CS6, but cyclists are aware of this as it is a common occurrence at all traffic signalled junctions in London. The likelihood of a vehicle/cycle collision occurring due to blocking would therefore be less than once a year, and the likely severity damage or slight injury, putting this is the **Low to Medium** risk category. This risk level could be reduced further by replacing the temporary 'Cycle Lanes – Look Both Ways' sign with a permanent version of the same sign mounted at lorry driver eye height on the approach to the signals. The temporary sign is shown in photo 2.



Photo 2: Looking north-east from Bridewell Place

- 4.5 During the morning peak hour a cyclist on CS6 was observed illegally turning right from the north into Bridewell Place, a manoeuvre that can only be carried out at low speed due to the right angle turn and is therefore likely to result in either damage or slight injury to another cyclist or a pedestrian crossing Bridewell Place during the pedestrian phase (green man). Given that this illegal manoeuvre could be occurring several times a day, the likely frequency of a



collision could be more than once a year, making the risk rating in the **Medium to High** category.

#### **Bridewell Place and Tudor Street (New Bridge Street to Dorset Rise)**

- 4.6 Traffic, cycle and pedestrian flows are light during the peak traffic hours on these roads. Visibility is adequate at the Tudor Street junctions even when lorries and vans are loading/unloading on the single yellow lines. Although Tudor Street is virtually straight in alignment traffic speeds are low, helped by the short length of single lane dualling between Dorset Street and Bridewell Place. The risk of collisions on these streets is therefore **Low**.

#### **Bouverie Street and its junction with Tudor Street/Temple Avenue**

- 4.7 Bouverie Street is one-way southbound with a contra-flow cycle lane on the offside of general traffic – see photo 3. This appears to work well, the clear road markings encouraging good lane discipline. Traffic, cycle and pedestrian flows are light during the peak traffic hours. Visibility from Bouverie Street and Temple Avenue onto Tudor Street is adequate, even with the on-street parking relatively close to the junction to the east.



**Photo 3: Looking north along Bouverie Street from Tudor Street**

Consequently the risk of collisions on Bouverie Street and its junction with Tudor Street is **Low**.

## **Second Priority Locations**

### **Tudor Street (Dorset Rise to Bouverie Street)**

- 4.8 Traffic, cycle and pedestrian flows are light during the peak traffic hours on this stretch, but speeds can build up as the alignment is straight. This combination can catch out pedestrians crossing the road and drivers wanting to u-turn, the controlled on-street parking exacerbating the risk of collisions. Collisions could occur more frequently than every five years and could be of a slight or serious severity. This puts this stretch of Tudor Street into the **Medium to High** category of the risk matrix.

### **Carmelite Street**

- 4.9 Now open at its southern end it will experience higher traffic flows than before CS6 was opened, having to cope with traffic diverted from Temple Avenue (southbound). Should the Tudor Street/New Bridge Street priority junction be closed to general traffic movements it will have to cope with the proportion of this traffic that wants to travel north along New Bridge Street. With good visibility onto, and light traffic on, Victoria Embankment the Carmelite Street/Victoria Embankment junction should be able to cope with what is likely to be a relatively light traffic flow safely. Carmelite Street is straight, coping with two-way traffic travelling at low speed, and at its central junction visibility from Tallis Street is adequate in all directions. Collisions are unlikely to occur more frequently than once every five years and if they do occur are likely to be damage only or of low severity. This would put Carmelite Street and its junction with Victoria Embankment into the **Low to Medium** category of the risk matrix.

### **Whitefriars Street**

- 4.10 Being one of the narrower streets providing access to Fleet Street (one-way northbound with a southbound, contra-flow cycle lane) and with controlled on-street parking narrowing the road further, traffic speeds are low. Consequently, even though the southbound cycle lane disappears for a short section and cyclists travel outside parking on the east side, the risk of collisions is still **Low to Medium**. The Whitefriars junction with Fleet Street enjoys adequate visibility in

both directions, the right turn onto Fleet Street being assisted by gaps in traffic flow created by the nearby Pelican crossing.

### **Kingscote Street and Watergate**

- 4.11 One-way for general traffic south and eastwards, with a contra-flow cycle lane northwards on Kingscote Street, these roads can cope with moderate traffic given the traffic signals at Watergate/New Bridge Street allowing controlled access back onto the major road network. Both being short roads traffic speeds are low and current peak hours traffic, pedestrian and cycle flows are light. The risk of collisions is in the **Low to Medium** category of the risk matrix.

### **Lowest Priority Locations**

#### **South of Tudor Street**

- 4.12 Temple Avenue and John Carpenter Street are straight roads, not too long, and of good width with some controlled parking. Traffic and pedestrian flows are low, and cycle flows low to medium in volume. The Temple Avenue/Victoria Embankment junction is now closed to general traffic as it coincides with the new Toucan crossing on Victoria Embankment giving access for cyclists to Cycle Superhighway CS3. On John Carpenter Street cyclists have access to Victoria Embankment through the unchanged pedestrian/cycle area at its southern end. With the reduced traffic flows along the southern portion of Temple Avenue, these roads remain in the **Low** category of the risk matrix.

#### **North of Tudor Street**

- 4.13 Salisbury Court/Dorset Rise is lightly trafficked, being one way southbound with a northbound contra-flow cycle lane. Like Whitefriars Street it is a relatively narrow street, giving access to the Temple area from Fleet Street and traffic speeds are consequently low. All of other roads (Temple Lane, Lombard Lane and Bride lane) are very lightly trafficked, very narrow and traffic speeds are consequently low. Bride Lane can be used by rat-running traffic seeking to head south along New Bridge Street from Fleet Street as the right turn from Fleet Street into New Bridge Street is banned. All of these roads sit in the **Low** category of the risk matrix.

## 5.0 Summary and Conclusion

- 5.1 This safety risk assessment has considered background information relating to the construction of Cycle Superhighway CS6 and associate traffic management alterations in the Temple side streets area.
- 5.2 The assessment has concluded that, for the majority of roads and junctions in the Temple side streets area the risk of collisions involving personal injury, or damage to vehicles or property, is **Low to Medium**. This means that collisions are unlikely to occur more frequently than once a year, and when they do occur they are unlikely to result in anything worse than a slight injury, or only damage to a vehicle or property. This level of risk is considered acceptable and tolerable in road safety terms.
- 5.3 There are three exceptions to the general range of Low to Medium risk:-
- 1) Tudor Street (Dorset Rise to Bouverie Street) – **Medium to High Risk** – higher speeds and parking/turning activity resulting in likely collisions every one to five years with any class of severity as the likely outcome.
  - 2) New Bridge Street/Bridewell Place – **Medium to High Risk** – illegal right turns by cyclist into Bridewell Place resulting in likely collisions more frequently than once a year with non-fatal severities as the likely outcome.
  - 3) Tudor Street/New Bridge Street – **High to Very High Risk** – illegal right turns at the current temporary arrangement resulting in likely collisions more frequently than once a year with any class of severity as the likely outcome.
- 5.4 Considering how to reduce these risk levels, the imposition of additional engineering measures for the first two locations mentioned above would be likely to be disproportionate to the amount of risk reduction that could be achieved by doing so. For example, installing speed cushions on Tudor Street may still allow motorcyclists and four wheel drive cars to continue at high speed and may also be inappropriate for this area. Additional risk reduction could be achieved by

increased enforcement/education by the police, targeting speeding vehicles and illegal cycle right turners, stopping and warning them before prosecution.

- 5.5 At the Tudor Street/New Bridge Street junction, where the temporary arrangement is currently used, the risk levels are a category higher, and should be mitigated as soon as possible. It is recommended, therefore, that either TfL's proposal to close off this junction to all but cycle movements, or full signalisation of the left turn out of Tudor Street for general traffic, are implemented. Given the alternative exits from the Temple area, via Carmelite Street and Whitefriars Street, the former of these alternatives is favoured, especially as additional traffic signals also increase the risk of further rear shunt type collisions on both Tudor Street and New Bridge Street.



**6. Assessor:**

Paul Martin - BSc (Hons), CEng, AMICE, MCIHT, FSoRSA  
HA Approved Certificate of Competency  
Managing Director – TMS Consultancy

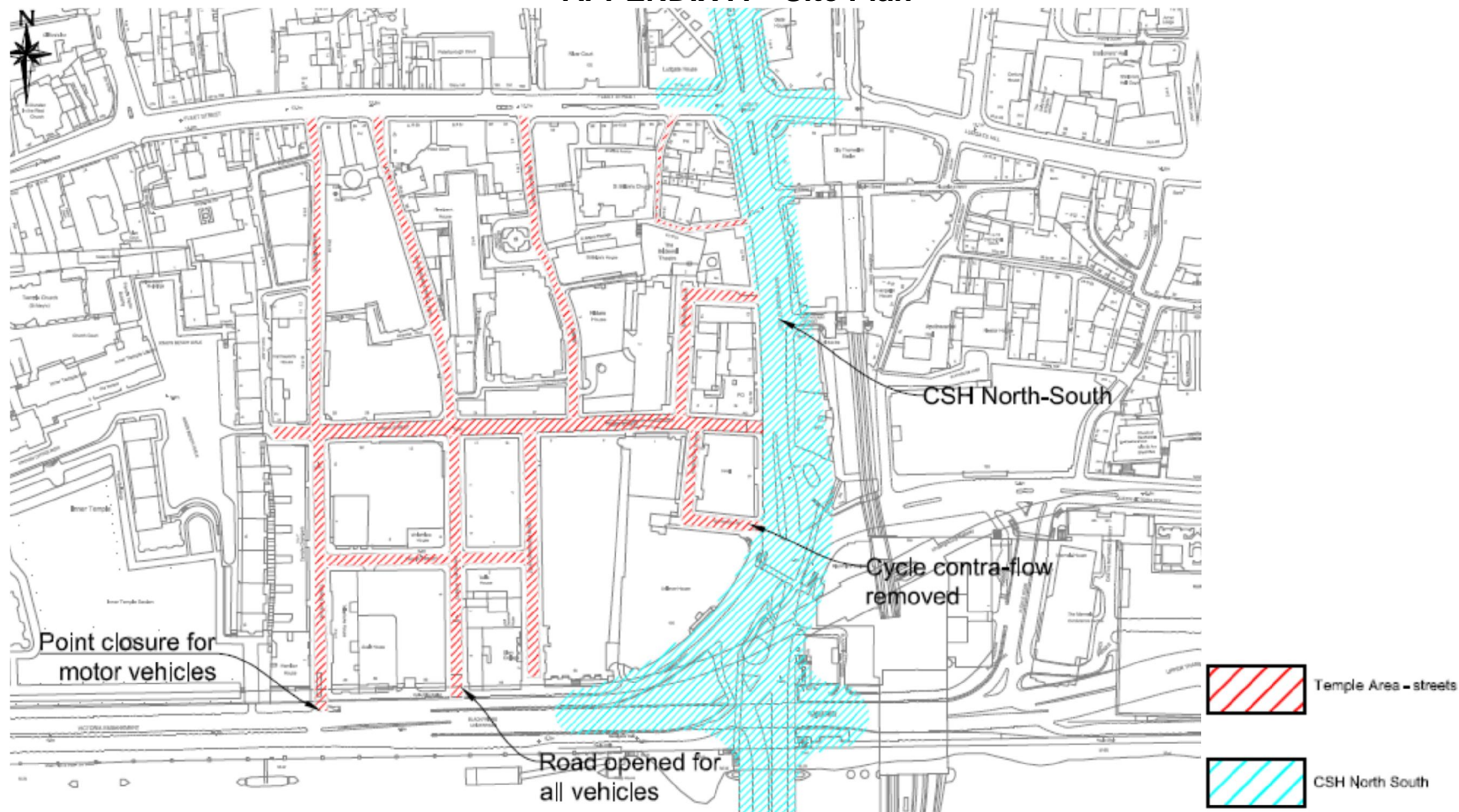
Signed .....  .....

Date .....31<sup>st</sup> May 2016.....

**TMS Consultancy**  
Unit 1b, Sovereign Court 2,  
University of Warwick Science Park  
Sir William Lyons Road  
Coventry, CV4 7EZ

 + 44 (0)24 7669 0900  
 [info@tmsconsultancy.co.uk](mailto:info@tmsconsultancy.co.uk)  
[haulak@tmsconsultancy.co.uk](mailto:haulak@tmsconsultancy.co.uk)  
 [www.tmsconsultancy.co.uk](http://www.tmsconsultancy.co.uk)

### APPENDIX A – Site Plan







safer roads for everyone

## North – South Cycle Superhighway, London

### Road Safety Audit Stage 3

on behalf of City of London

**TMS reference no: 12809**

---

## North – South Cycle Superhighway, London

### Road Safety Audit Stage 3

---

#### 1. Introduction

1.1 This report describes a Stage 3 Road Safety Audit carried out on a section of the Cycle Superhighway (CSH6), London that runs north – south along the A201 between A201 Farringdon Street junction with Bear Alley at the northern end and the south side of Blackfriars Bridge at the southern end (junction with Upper Ground), on behalf of City of London.

1.2 The audit team members were as follows:-

Darren Newbold – MSc, BSc (Hons), MCIHT, MSoRSA  
HE Approved RSA Certificate of Competency  
Senior Engineer, TMS Consultancy

Paul Martin - BSc (Hons), CEng, MCIHT, AMICE, FSoRSA  
HE Approved RSA Certificate of Competency  
Managing Director, TMS Consultancy

1.3 The audit comprised a daylight examination of the site by the Audit Team on 25<sup>th</sup> May 2016 between 5pm and 7pm. The weather was fine and dry. Traffic flows were heavy. Pedestrian and cycle flows were heavy.

Also present during the daylight examination was:

- Alan Rickwood – City of London Police

*An additional daylight examination of the site by the Audit Team was carried out on 26<sup>th</sup> May 2016 between 8am and 8.45am on New Bridge Street between the junctions of Bridewell Place and Tudor Street.*

The Audit Team visited the site during darkness on 25<sup>th</sup> May 2016 at 9.30pm. The weather was fine and dry. Traffic, pedestrian and cycle flows were moderate.

1.4 The terms of reference of the audit are as described in HD 19/15. The team has examined and reported only on the road safety implications of the scheme as presented and has not examined or verified the compliance of the design to any other criteria.



- 1.5 All of the problems described in this report are considered by the audit team to require action in order to improve the safety of the scheme and minimise accident occurrence. The locations of specific problems are referenced on the plan in **Appendix A**.
  
- 1.6 The scheme consists of a section of the Cycle Superhighway (CSH6), London that runs north – south along the A201 between A201 Farringdon Street junction with Bear Alley at the northern end and the south side of Blackfriars Bridge at the southern end (junction with Upper Ground).

## 2. Items resulting from this Stage 3 Audit

*The Problems in this report are generally presented from south to north along the route and are listed as per the General Arrangement Drawings for the scheme. The North – South Cycle Super Highway will be referred to as CSH 6 throughout the remainder of this report.*

### **General Arrangement Sheet 16**

*No specific road safety problems identified with this element of the scheme.*

### **General Arrangement Sheet 17**

*No specific road safety problems identified with this element of the scheme.*

---

## **General Arrangement Sheet 18**

### **2.1 PROBLEM**

Location – A201 Blackfriars Bridge; pedestrian crossing at CSH 6

Summary: Potential cycle to pedestrian collisions

It was noted at the site visit that whilst a large percentage of cyclists are compliant with the CSH signals, a small number are continuing to travel through the red signal. This was particularly noticeable at the controlled pedestrian crossing that crosses CSH 6 on the northern side of Blackfriars Bridge. Pedestrians using the crossing will be at risk of being struck by cycles if cyclists continue to proceed through a red signal.

### **RECOMMENDATION**

It is acknowledged that the scheme is new and a high proportion of cyclists are compliant with the signals. However, enhanced signage should be provided or greater enforcement should target red light running of cyclists.

## 2.2 PROBLEM

Location – East – West CSH junction with CSH 6

Summary: Potential hazard and obstruction to pedestrians

There is a pole located within the footway that does not feature a sign. It is unclear if the pole is redundant or new and awaiting installation of a sign face. However, the pole is within the middle of the footway and as such is a hazard and obstruction to pedestrians, particularly to those with visual or mobility impairments.



## RECOMMENDATION

The pole should be removed if redundant. If still required for a new sign, the pole should be relocated to the rear of the footway.

## 2.3 PROBLEM

Location – Victoria Embankment off slip junction with A201

Summary: Potential vehicle to pedestrian collisions

The Victoria Embankment on / off slip road is two-way. The Audit Team has been informed that this was previously only one-way, which is why there is a need for temporary 'Pedestrians Look Both Ways' signs at the controlled crossing at the top of the slip road at the junction with the A201. These temporary signs may in time get stolen, fall over or become displaced. Some pedestrians when using the crossing may be expecting traffic in one direction only, which may result in pedestrians stepping out into the carriageway in front of oncoming traffic.

### RECOMMENDATION

Permanent 'Look Both Ways' carriageway markings should be provided on both sides of the crossing.

## 2.4 PROBLEM

Location – South bound cycle lane from Queen Victoria Street onto A201 (outside Blackfriars Station)

Summary: Potential collisions between all road users

There is a long length of mandatory cycle lane on the east side of the A201 from Queen Victoria Street outside Blackfriars Station prior to the cycle switch over to CSH 6. However, there are no cycle symbol markings in this lane. The lack of markings may lead to the cycle lane being misused by other vehicles, leading to vehicle/cycle collisions.

### RECOMMENDATION

Cycle symbol markings should be provided in the cycle lane at regular intervals (as per General Arrangement Drawing 18).

## 2.5 PROBLEM

Location – A201 cycle switch from A201 southbound to East – West CSH and CSH 6

Summary: Potential cycle collisions with pedestrians and vehicles

Although it appeared to be well used and understood at the time of the site visit, the switch to take cyclists from the cycle lane on the southbound A201 across to the East – West CSH and CSH 6 is a critical section of the route. Temporary signs are in place at present, however these signs may in time get stolen, fall over or become displaced. New cyclists may not comprehend the layout, with confusion leading to collisions with other road users.

### RECOMMENDATION

Permanent signs should be provided for guidance to cyclists.



## 2.6 PROBLEM

Location – New Bridge Street pedestrian crossing

Summary: Potential hazard to visually impaired pedestrians

It was noted at the time of the site visit that neither of the push button demand units, and associated rotating cones, on the east side of the pedestrian crossing on New Bridge Street were working. Visually impaired pedestrians may be vulnerable when attempting to cross at this location as they have no control or tactile aid to help them use the crossing. Vehicle/pedestrian collisions may result if pedestrians attempt to cross during traffic phases.

### RECOMMENDATION

The push button demand units and rotating cones should be checked and repaired as necessary.

## **General Arrangement Sheet 19**

### **2.7 PROBLEM**

Location – New Bridge Street junction with Tudor Street

Summary: Potential vehicle collisions with cycles

The layout of the junction of New Bridge Street with Tudor Street is in a temporary state. The General Arrangement shows that Tudor Street is to be closed off to vehicular traffic, however, in its temporary state vehicles can egress from Tudor Street and make a left turn manoeuvre onto New Bridge Street. Although only observed on a small number of occasions (both am and pm peak periods), drivers wait at the give way, check for cyclists before crossing CSH 6 and wait for a gap to complete their manoeuvre. These have been carried out without conflict with cyclists and the vehicles involved have either been private cars, taxis or light goods vehicles. However, in the event that a large vehicle was to carry out this manoeuvre, they could end up blocking the CSH 6 for a longer period of time, increasing the likelihood of collisions with cyclists.

### **RECOMMENDATION**

The feasibility of closing off Tudor Street at its junction with New Bridge Street should be assessed, assuming that vehicles have alternative routes to exit from the Temple Area.

Alternatively, if the left out manoeuvre is to remain permitted for vehicles, all of the existing temporary signage at the junction should be replaced with permanent signage, and transverse give way markings installed at the entry into the general traffic lane, similar to the Bride lane junction with New Bridge Street.

## 2.8 PROBLEM

Location – New Bridge Street junction with Tudor Street

Summary: Potential vehicle collisions with cycles in hours of darkness

During the site visit in darkness, it was noted that the general area of New Bridge Street junction with Tudor Street was quiet dark, due to a number of lighting columns not being illuminated, most noticeably the floodlight column in the median strip between CSH6 and the main carriageway, just to the south of Tudor Street. Poor illumination of the junction in darkness may exacerbate the risk of collisions as described in Problem 2.7.

### RECOMMENDATION

Localised lighting should be checked and lighting units repaired as necessary.

## 2.9 PROBLEM

Location – A201 New Bridge Street junction with Bridewell Place

Summary: Potential collisions between all road users

There are a number of prohibited movements at the A201 new Bridge Street junction with Bridewell Place all currently signed with temporary signs. However these signs may in time get stolen, fall over or become displaced leaving drivers / cyclists unaware of the restrictions. Collisions may occur between all road users if drivers / riders fail to appreciate the prohibited movements.

### RECOMMENDATION

The temporary signs should be replaced with permanent signs.

## **General Arrangement Sheet 20**

### **2.10 PROBLEM**

Location – Bride Lane junction with A201 New Bridge Street

Summary: Potential vehicle to cycle collisions

On exit from Bride Lane, temporary signs have been placed on the footway (red cycle warning symbol with uni-directional arrows) to show warn drivers that they are going to egress across CSH6. These signs are not consistent with the 'Cycle Lanes Look Both Ways' signs used at other locations throughout the scheme (i.e. Tudor Street). The red cycle warning sign is not as clear to drivers that they have to cross a cycle lane. Misleading information may lead to vehicles pulling out of Bride Lane into the path of cyclists on the CSH6.

#### **RECOMMENDATION**

The temporary signs should be replaced with permanent 'Cycle Lanes Look Both Ways' signs to be consistent with the rest of the route.

### **2.11 PROBLEM**

Location – A201 New Bridge Street / Fleet Street / Ludgate Hill

Summary: Potential vehicle collisions

Northbound drivers on the A201 New Bridge Street approach to the junction with Fleet Street / Ludgate Hill, drivers and cyclists are informed that there is a right turn prohibition into Ludgate Hill 'except in two stages'. The Audit Team has been informed that there is a bus route that requires right turn manoeuvres from A201 New Bridge Street into Ludgate Hill. Vehicle collisions may occur if other drivers are not expecting buses to make right turn manoeuvres.

#### **RECOMMENDATION**

The requirement for buses to make the right turn from A201 New Bridge Street into Ludgate Hill should be clarified and if necessary 'except buses' should be added to the traffic signals.

## 2.12 PROBLEM

Location – A201 New Bridge Street / Fleet Street / Ludgate Hill

Summary: Potential vehicle collisions with cycles in hours of darkness

During the site visit in darkness, it was noted that the general area of the A201 New Bridge Street / Fleet Street / Ludgate Hill junction was quite dark, due to a number of lighting columns not being illuminated. Poor illumination of the junction may result in darkness related vehicle collisions.

### RECOMMENDATION

Localised lighting should be checked and lighting units repaired as necessary.

## **General Arrangement Sheet 21**

### **2.13 PROBLEM**

Location – Farringdon Street / Bear Alley

Summary: Potential vehicle to cycle collisions

On the east side of Farringdon Street adjacent to Bear Alley, the southbound cycle track diverges away from the main carriageway. This is to enable cyclists to make the switch from the southbound cycle track across to CSH6. This area has not been constructed as per general Arrangement Sheet 21. The open nature of this area may be 'inviting' for drivers to enter / park, which may result in vehicle/cycle collisions.

#### **RECOMMENDATION**

This area should be formalised with appropriate signage (it is noted that there is a sign pole present without a sign face), carriageway 'cycle symbols', and different coloured surfacing to highlight the area as being for cyclists only.

## **General Locations**

### **2.14 PROBLEM**

Location – CSH6 Route

Summary: Potential collisions between all road users

As well as in the specific locations identified in Problems 2.3, 2.5 and 2.9, the signage in general along the route is all temporary. However these signs may in time get stolen, fall over or become displaced, leaving drivers / cyclists unaware of restrictions, turning prohibitions, cycle tracks etc. Poor comprehension of the road layout may result in collisions between all road users.

#### RECOMMENDATION

The temporary signage should be replaced with permanent signs.

### **2.15 PROBLEM**

Location – CSH6 Route

Summary: Potential slip / skid hazard to cyclists

It was noted that whilst unavoidable, there was a large number of metal service covers located within the CSH 6 route. Metal service covers can become polished in time and therefore a potential slip / skid hazard to cycles, particularly in wet or icy conditions. This issue may be exacerbated as cyclists travel at speed along the route. Given the high usage of the route, in the event that a rider becomes de-stabilised and falls from their cycle, there is a risk of being struck by other cyclists on the route.

#### RECOMMENDATION

The feasibility of treating all the metal service covers along the CSH 6 route with a non-slip surface should be investigated.



### 3.16 PROBLEM

Location – CSH 6 Route

Summary: Potential darkness related collisions between all road users

As well as the specific locations identified in Problems 3.8 and 3.12, it was noted there were a number of intermittent lighting columns not illuminated during the site visit in darkness, particularly on the section north of Blackfriars Bridge. Poor illumination may result in darkness related collisions between all road users.

### RECOMMENDATION

Localised lighting should be checked and lighting units repaired as necessary.

### 3.17 OTHER ISSUE

A 'buses only' right turn lane pocket is provided to enable buses to make U-turns from A201 southbound to northbound at the north side of Blackfriars Bridge. However, 'buses only' is marked on the carriageway and the upright signs states 'buses and taxis'. This should be clarified and a consistent signage or road marking provided.



### 3. Audit Team Statement

We certify that the terms of reference of the audit are as described in HD 19/15.

#### Audit Team Leader

Darren Newbold – MSc, BSc (Hons), MCIHT, MSoRSA  
HE Approved RSA Certificate of Competency  
Senior Engineer, TMS Consultancy

Signed 

Date 31<sup>st</sup> May 2016

#### Audit Team Member

Paul Martin - BSc (Hons), CEng, MCIHT, AMICE, FSoRSA  
HE Approved RSA Certificate of Competency  
Managing Director, TMS Consultancy

Signed 

Date 31<sup>st</sup> May 2016

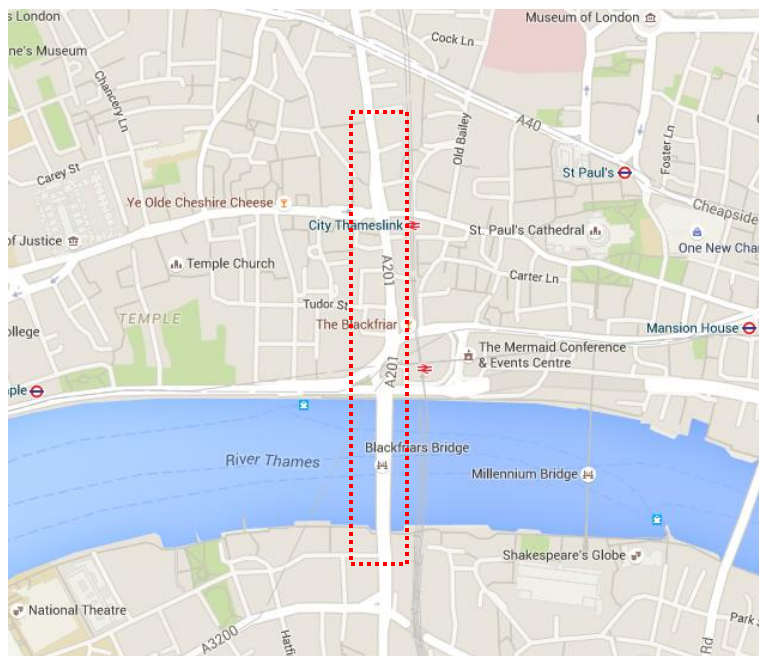
TMS Consultancy  
Unit 1b, Sovereign Court 2,  
University of Warwick Science Park  
Sir William Lyons Road  
Coventry, CV4 7EZ

 + 44 (0)24 7669 0900  
 [info@tmsconsultancy.co.uk](mailto:info@tmsconsultancy.co.uk)  
 [www.tmsconsultancy.co.uk](http://www.tmsconsultancy.co.uk)

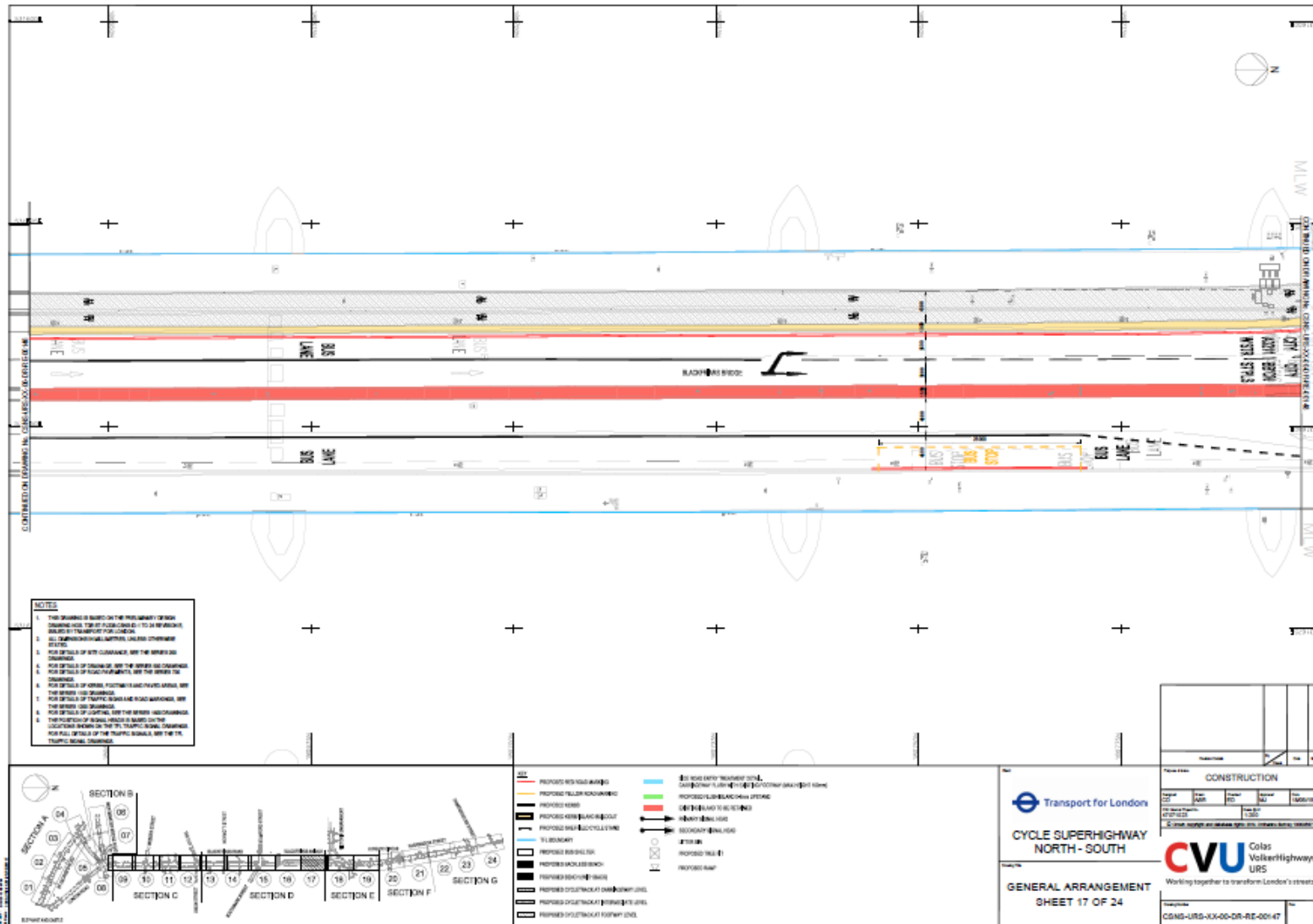
## Appendix A

Please refer to the following page for a plan illustrating the locations of the problems identified as part of this audit (location numbers refer to paragraph numbers in the report).

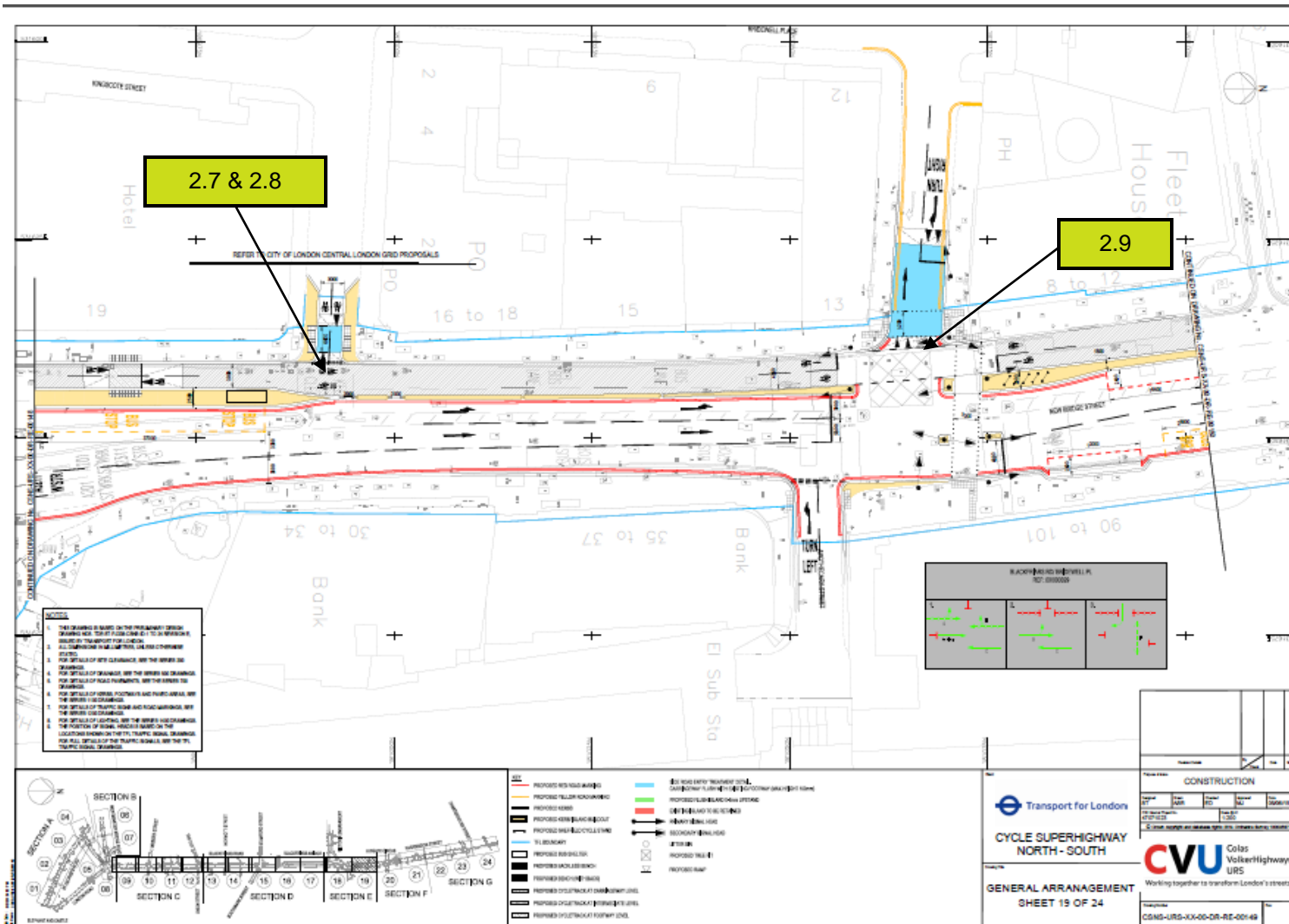
The location of the scheme is shown below

















This page is intentionally left blank

By virtue of paragraph(s) 3 of Part 1 of Schedule 12A of the Local Government Act 1972.

Document is Restricted

This page is intentionally left blank