



Streets and Walkways Sub (Planning and Transportation) Committee

Date: MONDAY, 23 FEBRUARY 2015
Time: 1.45 pm
Venue: COMMITTEE ROOMS, 2ND FLOOR, WEST WING, GUILDHALL

- 5C) Crossrail Liverpool Street**
Report of the Director of the Built Environment.

**For Decision
(Pages 1 - 20)**

Item received too late for circulation in conjunction with the Agenda.

John Barradell
Town Clerk and Chief Executive

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Committees:	Dates:	Item no.
Streets and Walkways Sub-Committee Projects Sub-Committee	23 February 2015 23 February 2015	
Subject: EE096 Crossrail Liverpool Street Integration Gateway 4 (Stage 1) – Crossrail worksite	Gateway 4 (Stage 1) Detailed Options Appraisal	Public
Report of: Director of the Built Environment	For Decision	

Summary

Dashboard

- Project Status: Green
- Timeline: Approval of replacement design for the Crossrail worksite
- Total Estimated Cost: £2.0-£3.5M
- Spend to Date: £79,105
- Overall project risk: Green

Context:

This report seeks approval of the preferred design option for the integration of the Liverpool Street Crossrail entrance into the Liverpool Street public realm (site location plan at Appendix 1). The proposals are at the 'General Arrangement' level of detail. It has been agreed with Crossrail that a revised and agreed General Arrangement plan (replacing a plan originally produced by Crossrail's consultant in 2011) will allow Crossrail to co-ordinate the design and development of the area under their responsibility with the City's wider public realm proposals for the area. It is expected that Crossrail will submit for planning approval for the public realm works for their area in mid-2015. The detailed design developed in accordance with the agreed General Arrangement plan will be submitted to Members for consideration in due course.

Officers will continue to coordinate the City's wider public realm proposals for the areas adjoining Liverpool Street and report these together with the detailed worksite design at Gateway 4 (Stage 2).

Background:

Crossrail submitted draft proposals for the Liverpool Street Crossrail station integration project in 2011, which needed to be revised to accord with the City's strategy for the Liverpool Street Area, as adopted in 2013, with input from key stakeholders. It was agreed with Crossrail that the design would be progressed through a Working Group process leading to an amended design developed in partnership with the City and neighbouring stakeholders. In order to allow Crossrail to proceed on their timetable, the City was originally required to have agreement from Members by December 2014. The December deadline was then extended to February 2015 at Crossrail's request to align with the Crossrail Moorgate project.

Gateway 3 approval was given in July 2014 to proceed to Gateway 4 via a two stage reporting process.

Gateway 4 (Stage 1) is intended to develop detailed design proposals for the Crossrail worksite area (see plan at Appendix 2), which is essentially immediately around the

station entrance at the western end of Liverpool Street. It also includes outline design proposals for a broader area of primary interest that includes the eastern end of Liverpool Street. To meet Crossrail's deadline this needs to have Member approval by February 2015. The February deadline enables Crossrail to develop the detailed design of their works area as part of their integration project and submit an application for approval of planning matters to the City under the Crossrail Act in mid-2015, ahead of the opening of Crossrail in 2018.

Gateway 4 (Stage 2) will report back on any outstanding traffic management issues in the area covered by Crossrail in conjunction with an assessment of the wider area works required to provide for the predicted increase in pedestrian numbers on the road network managed by the City.

Progress to date:

Since Gateway 3 approval in July, officers have appointed landscape design and transportation consultants in line with the approved project brief to review and prepare the design proposals in Appendices 3 and 4. The proposals have been informed by the City's aspirations via the Liverpool Street Area Enhancement Strategy and engagement with the stakeholder Working Party and these proposals refine Crossrail's 2011 public realm designs.

A summary of spend to date is shown in Table 1, which includes commitments to date.

Table 1 – Financial summary: Spend to date			
<i>Item description</i>	<i>Approved budget (£)</i>	<i>Spend to date (£)</i>	<i>Balance (£)</i>
Fees (Landscape design and Transportation Consultants)	70,000	62,970	7,030
Staff Costs	65,513	16,135	49,378
<i>subtotal</i>	<i>135,513</i>	<i>79,105</i>	<i>56,408</i>

Overview of Options:

The options prepared are based on core design principles to maximise pedestrian access to/from the significant transport interchange of Liverpool Street station, to remove unnecessary clutter from the public realm, to improve road safety and to create a space that will allow a flexibility of use that utilises the City's standard palette of materials.

Two key options became apparent during the design appraisal process for the Crossrail Worksite area:

- Option 1 improves the public realm arrangement and accessibility of the area by removing all traffic from the western end of Liverpool Street; and
- Option 2 improves the public realm arrangement whilst retaining London Buses through the western end of Liverpool Street (as per situation pre-Crossrail).

Key aspects to both of the options include:

- Higher quality specification and greater visual consistency in the use of materials and lighting;

- Increased footway capacity where possible to assist with pedestrian dispersal;
- Improvement to the above ground interchange between transport modes; and
- Introduction of security measures to protect the Crossrail station entrance.

It should be noted that either option would produce an acceptable outcome for the area however Option 1 maximises the benefits to the City community by fully integrating the Crossrail Liverpool Street entrance within the surrounding public realm.

Funding strategy:

At Gateway 3, officers estimated that £390,000 would be required to progress the project to Gateway 4 (Stage 2). A review of the funding required to reach this Gateway has been carried out and the estimate of costs is reduced to £250,513 (refer to Table 3). The lower revised estimate is largely due to a reduced need for consultant fees as a result of the project scope and complexity having been further clarified as the evaluation process has been completed.

The funding strategy for the wider area works remains unchanged from Gateway 3 and identifies 5 Broadgate and 201 Bishopsgate Section 106 agreements as the primary funding sources. This position will be updated in more detail at Gateway 4 (Stage 2) and Gateway 5.

Proposed way forward:

Officers recommend Option 1. This option delivers full integration of the Crossrail entrance by removing the traffic from the western end of Liverpool Street and will deliver the maximum benefit for the City community by prioritising pedestrian movement, improving the appearance of the area and prioritising the function of the space as a major transport interchange. Station security measures would also be introduced and will be finalised at next Gateway. This option will transform Liverpool Street to be a destination within the City for local workers, residents and visitors in line with Corporate objectives e.g. *To provide modern, efficient and high quality local services within the Square Mile for workers, residents and visitors.*

London Buses support both proposed options and officers will continue to work with key stakeholders such as London Buses to optimise the outcomes of Option 1 and will report back in the Gateway 4 (Stage 2) report.

Implementation of the proposal will also be subject to any necessary traffic orders and/or a Section 278 Agreement if security measures need to be placed on the public highway, for which any necessary authority will be sort through the Gateway 4 (Stage 2) report.

Procurement approach:

The public realm works to the Crossrail worksite area (refer to the yellow shaded area on the plan at Appendix 2) will be fully procured, funded and delivered by Crossrail.

For public highway works outside Crossrail’s worksite (refer to the red line boundary on the plan at Appendix 2), the works are anticipated to be carried out by the City’s term contractor, JB Riney. This will be further confirmed via the Gateway 4 (Stage 2) report.

Recommendations:

- 1) Approval is given for the design proposal Option 1 in Appendix 3 and allow the project to progress to Gateway 4 (Stage 2);

- 2) Approval is given for an additional £115k from the 5 Broadgate Section 106 contribution for a total revised budget of £250k to complete Gateway 4 (Stage 2);
- 3) Approval is given for City officers to obtain any necessary planning, listed building, traffic order or other consents as may be necessary to implement the project as described in this report;
- 4) Approval is given for officers to seek funding from Crossrail to provide a maintenance contribution for hard landscaping.

Options Appraisal Matrix

See attached matrix.

Appendices

Appendix 1	Location map
Appendix 2	Extent of Crossrail worksite and area of Primary interest
Appendix 3	Option 1 - General Arrangement Plan and scheme montages
Appendix 4	Option 2 - General Arrangement Plan and scheme montage

Contact

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Options Appraisal Matrix

<i>Option</i>	<i>Option 1</i>	<i>Option 2</i>
<p>1. Brief description</p>	<p>Full integration of the Crossrail Liverpool Street entrance within the surrounding public realm by removing traffic from the western end of Liverpool Street and prioritising pedestrian/cyclist movement (see Appendix 3).</p>	<p>Partial integration of the Crossrail Liverpool Street entrance within in the surrounding public realm whilst retaining bus movement through the western end of Liverpool Street (see Appendix 4).</p>
<p>2. Key Design Elements</p>	<ul style="list-style-type: none"> - Significantly improved public realm of Liverpool Street through introduction of improved materials and design; - Removal of traffic from the western end of Liverpool Street to provide a pedestrian plaza for ease of movement and to accommodate the increased pedestrian numbers once Crossrail is operational; - Supports Liverpool Street station as a major transport interchange; - Potential to raise existing carriageway to footway level and change the material to York stone; - Improves local road safety by separating conflicting uses; - Provides a sense of destination for this part of the City; - Accommodates the security infrastructure required for the Crossrail station; - Compliments the surrounding 	<ul style="list-style-type: none"> - Improves the public realm of Liverpool Street through introduction of improved materials and design; - Retention of London Buses in western end of Liverpool Street; - Supports Liverpool Street station as a major transport interchange; - Accommodates the security infrastructure required for the Crossrail station; - Compliments the Conservation Areas.

Option	Option 1	Option 2
	Conservation Areas.	
3. Scope and Exclusions	The scope of the works described in this Gateway 4 (Stage 1) report relates only to the area covered by the Crossrail worksite (as shown in yellow in appendix 2). The wider area works (Area of Primary Interest as shown by red outline in appendix 2) are being developed to compliment the Crossrail worksite and will be reported separately under the Gateway 4 (Stage 2) report in mid-2015.	
Project Planning		
4. Programme and Key dates	<ul style="list-style-type: none"> - February 2015 – Agreement of replacement design option for Crossrail worksite area; - Early - mid 2015 – Detailed design of Crossrail worksite area; - Early 2015 – Design options for wider area works (Area of Primary Interest); - Mid 2015 – Detailed design of wider area works (Area of Primary Interest); - July 2015 – Crossrail submit Schedule 7 application for Planning Permission for worksite area; - 2016/17 – Implementation of Crossrail worksite area works; - 2016/17 – Implementation of wider area works will be coordinated with the implementation of the Crossrail worksite area works; - 2018 – Crossrail station becomes operational. 	
5. Risk implications	<p>The project is considered to be Low Risk overall.</p> <p>The main risk relating to the Crossrail worksite element of the project currently relates to programme and the need to agree a replacement design option with Crossrail by February 2015 to coordinate with their programme. Officers have taken the following specific risk mitigation actions:</p> <ul style="list-style-type: none"> • City officers have worked cooperatively with Crossrail and the key local stakeholders and occupiers throughout the design review process in 2014 to ensure a replacement design is agreed by key stakeholders in time to report to Members for approval in February 2015. 	

Option	Option 1	Option 2
	<p>Another risk relates to uncertainty around any defects/liability period for the Crossrail works.</p> <ul style="list-style-type: none"> • City officers will work with Crossrail to obtain assurances that the City will not be left with liabilities due to works completed by Crossrail's contractors on City highway. This may be formalised through such mechanisms as a S278 Agreement but will be reported in more detail at Gateway 4 (Stage 2). 	
<p>6. Benefits and disbenefits</p>	<p><u>Benefits:</u></p> <ul style="list-style-type: none"> - Significantly improved public realm; - Coordinated/unified appearance of public realm; - Prioritising pedestrian movement to/from Liverpool Street Crossrail, overground and underground stations and providing more space for movement/circulation; - Improved road safety in Liverpool Street by removing traffic, improving lighting and encouraging appropriate use of the space; - Ensuring streets are inclusive and accessible, particularly improving access through the area for those with limited mobility/pushchairs; - Increased security for the Crossrail station; - Transforming Liverpool Street into a destination and a gateway into the City; - Delivery of the preferred option from the Liverpool Street Crossrail Working Party group; 	<p><u>Benefits:</u></p> <ul style="list-style-type: none"> - Improved public realm; - Improved appearance of public realm; - Improved pedestrian movement to/from Liverpool Street Crossrail, overground and underground stations and providing more space for movement/circulation; - Increased security for the Crossrail station; - No disruption to London Buses network. <p><u>Disbenefits:</u></p> <ul style="list-style-type: none"> - The City would miss the opportunity to deliver maximum benefit to the public realm and City community; - Prioritising bus movements over pedestrian/cyclist movement along Liverpool Street; - Would not be prioritising pedestrian movement to/from Liverpool Street Crossrail, overground and underground stations; - Lesser improvement to public/road safety in Liverpool Street;

Option	Option 1	Option 2
	<ul style="list-style-type: none"> - Improved cycle provision based on traffic free, potential quiet way route; - Delivery of the highest priority project in the Liverpool Street Area Enhancement Strategy; - The proposal will deliver the maximum benefit for the City community by utilising a comprehensive approach to the enhancement of the space thereby creating a destination for local workers, residents and visitors in line with Corporate objectives. <p><u>Disbenefits:</u></p> <ul style="list-style-type: none"> - Potential increase to journey times for certain bus routes accessing Liverpool Street bus station; - Some servicing may have be trolleyed into premises along western end of Liverpool Street. 	<ul style="list-style-type: none"> - Less movement space for increasing numbers of pedestrians; - Urban realm severed by bus movements along Liverpool Street; - Not in accordance with key occupier feedback; - Not the preferred option from project working party.
<p>7. Stakeholders and consultees</p>	<p>Officers established the Liverpool Street Crossrail Working Party following approval of the Gateway 3 report in July 2014 and have been conducting monthly Working Party meetings to ensure all relevant views and parties are considered.</p> <p>Key stakeholders include Crossrail, Network Rail, London Underground, London Buses/Transport for London, Aviva, British Land, the Andaz Hotel, and local occupiers.</p> <p>Ongoing consultation will continue with this Working Party, particularly TfL Buses to ensure the optimal outcome for their network following agreement of the proposed option.</p> <p>In addition further internal consultation will be conducted as the preferred option for the Crossrail</p>	

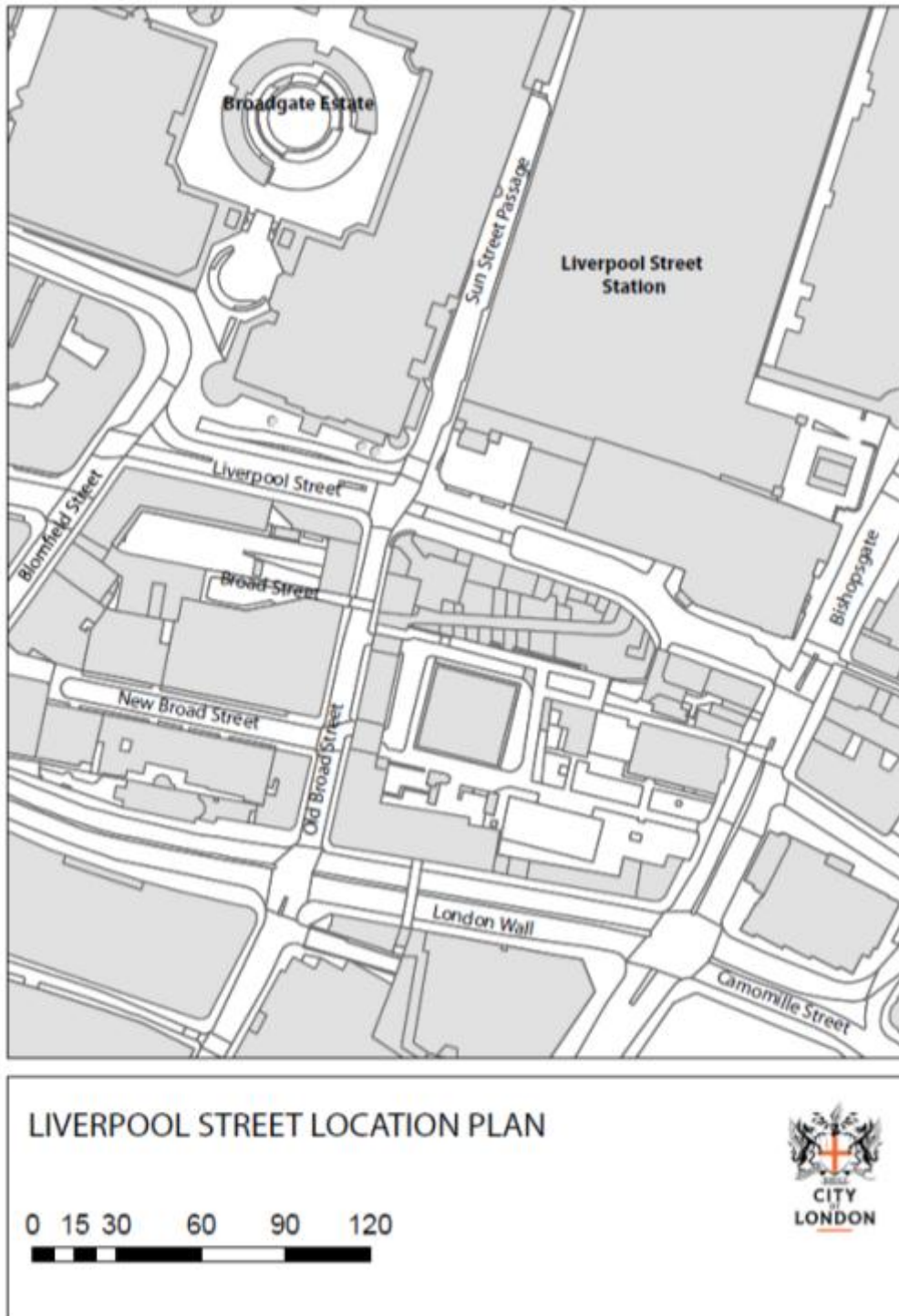
Option	Option 1	Option 2
	Worksite area is detailed up and specific design details agreed.	
Resource Implications		
8. Total Estimated Cost	<p>The total estimated cost range of the project is between £2,000,000 and £3,500,000 for either option. An accurate total cost will be known at Gateway 4 (Stage 2) and the Crossrail Worksite area works will be fully funded by Crossrail.</p> <p>Although Option 1 would remove traffic from the western end of Liverpool Street, the street would have to be constructed to Highway loading given the need to accommodate access for emergency vehicles and/or possibly infrequent servicing vehicles. Given this, the key difference in cost between the options would be material type for the carriageway area treatment, being either York stone paving (Option 1) or tarmac (Option 2). Given the carriageway is relatively small in area it would not have a major impact on the overall cost.</p>	
9. Funding Strategy	<p>All costs for the delivery of the recommended option (Option 1) for the Crossrail worksite area will be fully funded by Crossrail.</p> <p>All costs for the wider area works that will be reported back at Gateway 4 (Stage 2) will be funded from Section 106 contributions.</p>	
10. Estimated capital value/return	Not applicable.	
11. Ongoing Revenue Implications	<p>It is anticipated that the project will be largely revenue neutral as the recommended design (Option 1) removes traffic from the western end of Liverpool Street, thus reducing the need for highway maintenance, and replaces this area as footway.</p> <p>The additional footway area would require cleansing but the area would be of a scale and design to facilitate mechanical sweeping to minimise the associated cleansing costs.</p> <p>Crossrail are funding the delivery of the works, following which the maintenance costs would revert to the City programmes/budgets as existing. Should Members think it prudent officers can explore</p>	

Option	Option 1	Option 2
	<p>whether Crossrail are able to provide a maintenance contribution for the hard landscaping elements of the works.</p> <p>The cost of maintaining/repairing/replacing any security elements of the project that are located on City Highway would remain the responsibility of Crossrail (or it's successors) in perpetuity, and this provision will be formalised in a Section 278 agreement.</p>	
12. Investment Appraisal	Not applicable.	
13. Affordability	Either option for the Crossrail Work site will be fully funded by Crossrail. The estimated cost of the wider area works is anticipated to be deliverable within the funding strategy identified at Gateway 3.	
14. Procurement Strategy	<p>All works within the Crossrail worksite area will be procured and completed by Crossrail and their appointed sub-contractors under the powers of the Crossrail Act, which therefore does not require them to use the City's term contractor.</p> <p>All works the wider area of primary interest (i.e. outside the Crossrail worksite) will be undertaken by the City's term contractor JB Riney and this will reported on in more detail at Gateway 4 (Stage).</p>	
15. Legal Implications	<p>The City may need to negotiate a S278 agreement with Crossrail (or its successors) to formalise the funding and maintenance of any security infrastructure required on public highway.</p> <p>Section 278 of the Highways Act 1980 provides the ability for the City, as highway authority, to enter into an agreement to secure funding for works (and maintenance) relating to highway.</p>	
16. Corporate property implications	None.	
17. Traffic Implications	There would be minor traffic implications for the delivery of both options. Crossrail currently have a long term closure of the western end of Liverpool Street due to their station worksite with London Buses diverting along Old Broad Street. This arrangement would be formalised permanently under Option 1 and may increase journey time for some bus routes however the City has worked with	

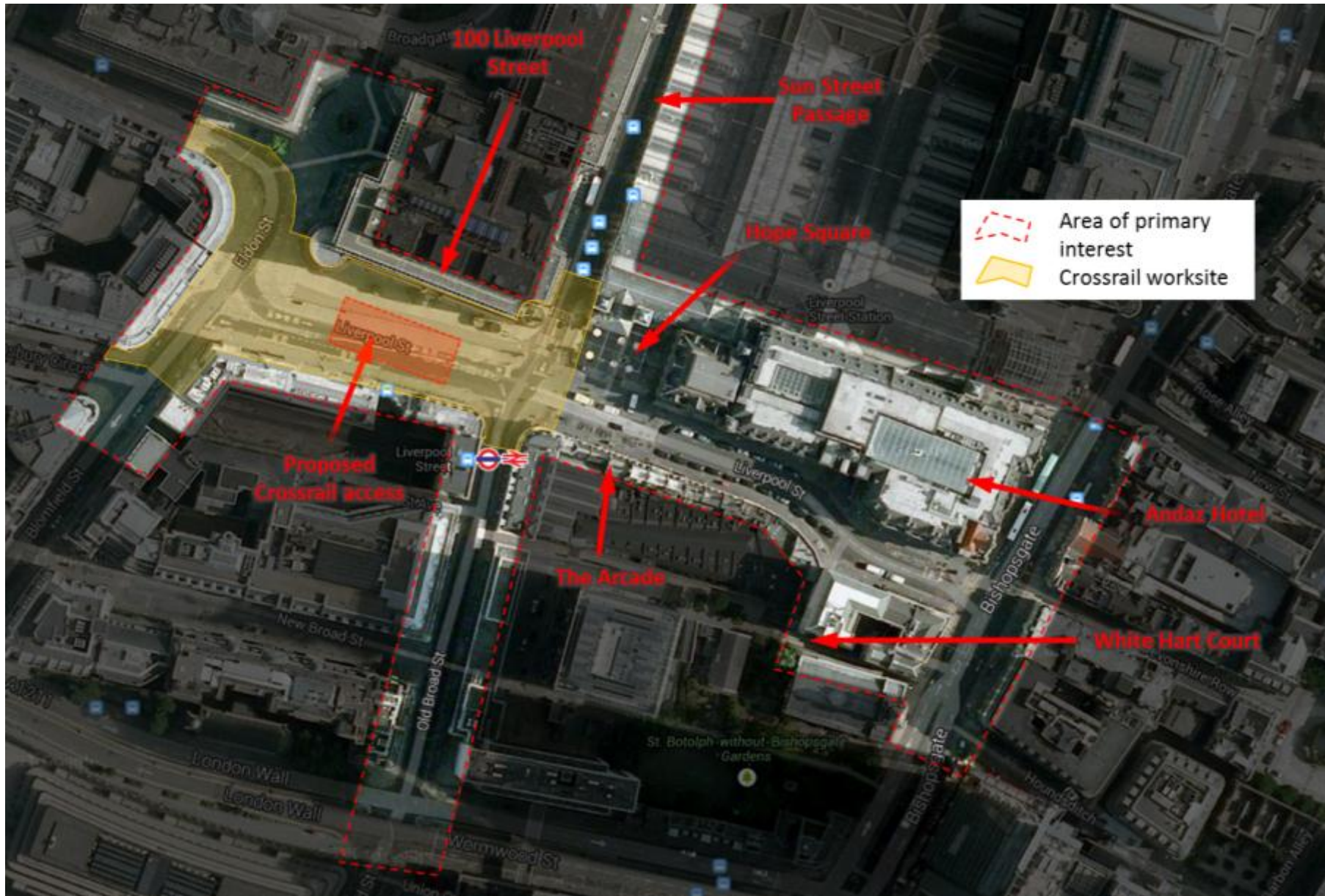
Option	Option 1	Option 2
	<p>London Buses to identify potential locations for new bus stands and stops in the local area that would negate the need for certain routes to enter Liverpool Street bus station. London Buses are agreeable with this approach and the City will continue to work with them in the design of the wider area works. In addition Crossrail's transport assessment indicates there will be less demand for bus travel post-Crossrail becoming operational.</p> <p>The wider area works require a lot of further investigation, particular with Network Rail and London Taxis regarding the eastern end of Liverpool Street. This will be reported back at Gateway 4 (Stage 2).</p>	
18. Sustainability and energy implications	Crossrail will have to utilise materials from the City's standard palette, namely sustainably sourced York Stone and granite.	
19. IS implications	None.	
20. Equality Impact Assessment	An Equality Impact Assessment (EQIA) has been carried out for the project and it is considered to have positive impacts upon the users of the City's streets and spaces.	
21. Recommendation	Recommended	Not Recommended
22. Next Gateway	Gateway 4 (Stage 2) – Detailed design for Crossrail worksite area and options appraisal for wider area improvements.	
23. Resource requirements to reach next Gateway	<p>An additional £115,000 is now required to reach the Gateway 4 (Stage 2) as per Table 2 below. Any underspend from the previous Gateway is to be brought forward to Gateway 4 (Stage 2).</p> <p>Table 2 – Additional Resource Requirements to reach next Gateway</p>	

Option	Option 1		Option 2	
	Item	Reason	Cost (£)	Funding Source
	Consultants Fees	Transport assessment, urban design, topo/radar surveys	80,000	<ul style="list-style-type: none"> 5 Broadgate S106 (Local Community & Environmental Improvement Works)
	Staff costs	Project management, stakeholder liaison, reporting, communication and administration.	35,000	<ul style="list-style-type: none"> 5 Broadgate S106 (Local Community & Environmental Improvement Works)
	Total		115,000	
<p>The total revised budget to reach Gateway 4 (Stage 2) is £250k as per Table 3 below.</p> <p>Table 3 – Total Revised Budget</p>				
	Item	Reason	Cost (£)	Funding Source
	Consultants Fees	Transport assessment, urban design, topo/radar surveys	150,000	<ul style="list-style-type: none"> 5 Broadgate S106 (Local Community & Environmental Improvement Works)
	Staff costs	Project management, stakeholder liaison, reporting, communication and administration.	100,513	<ul style="list-style-type: none"> 5 Broadgate S106 (Local Community & Environmental Improvement Works)
	Total		250,513	

APPENDIX 1: LOCATION PLAN

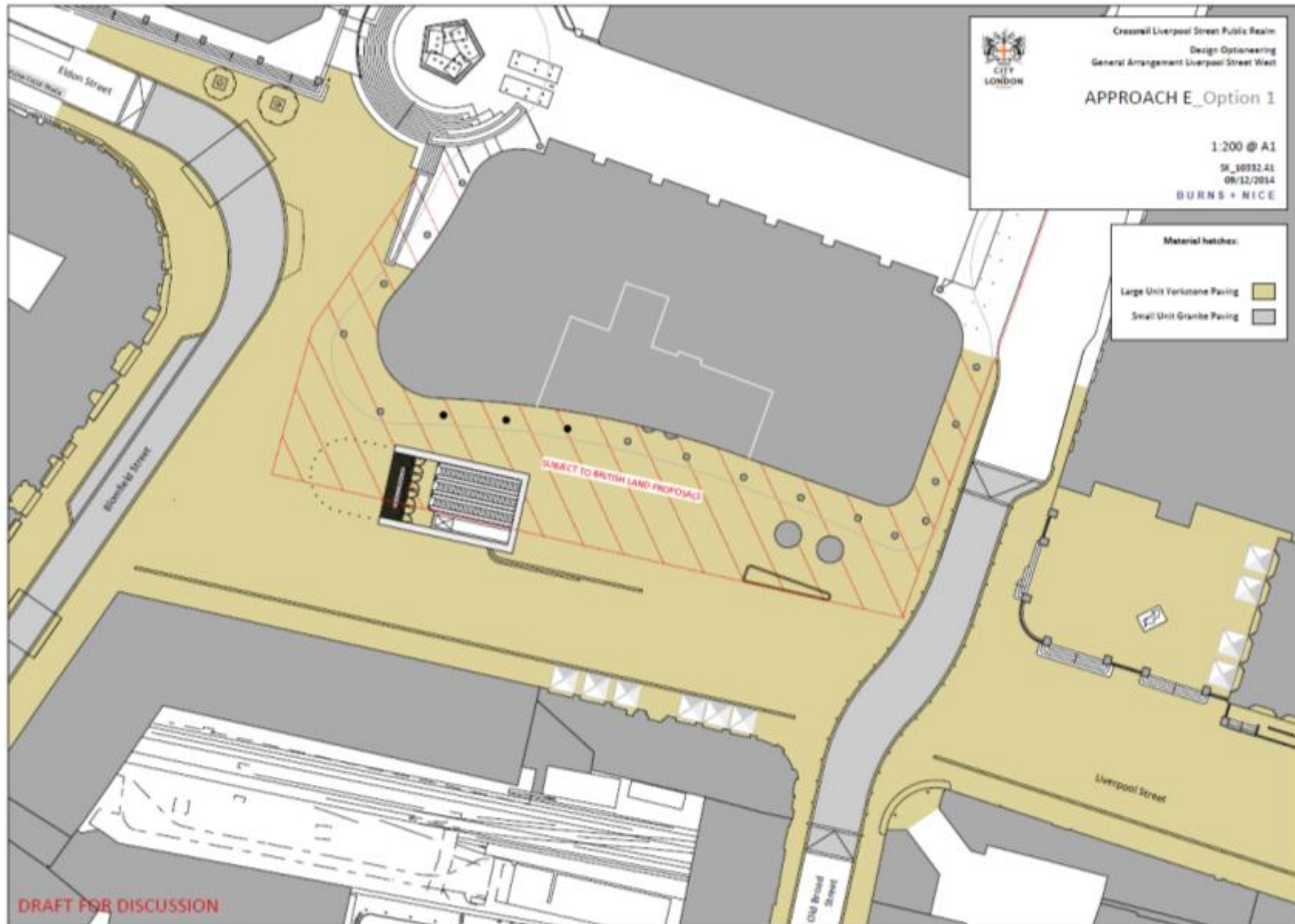


APPENDIX 2: EXTENT OF CROSSRAIL WORKSITE AND AREA OF PRIMARY INTEREST



APPENDIX 3: OPTION 1 PLAN AND MONTAGES

OPTION 1 – GENERAL ARRANGEMENT PLAN – TRAFFIC REMOVED FROM WESTERN END OF LIVERPOOL STREET



BIRDSEYE VIEW OF OPTION 1 FROM BLOMFIELD STREET LOOKING EAST ALONG LIVERPOOL STREET

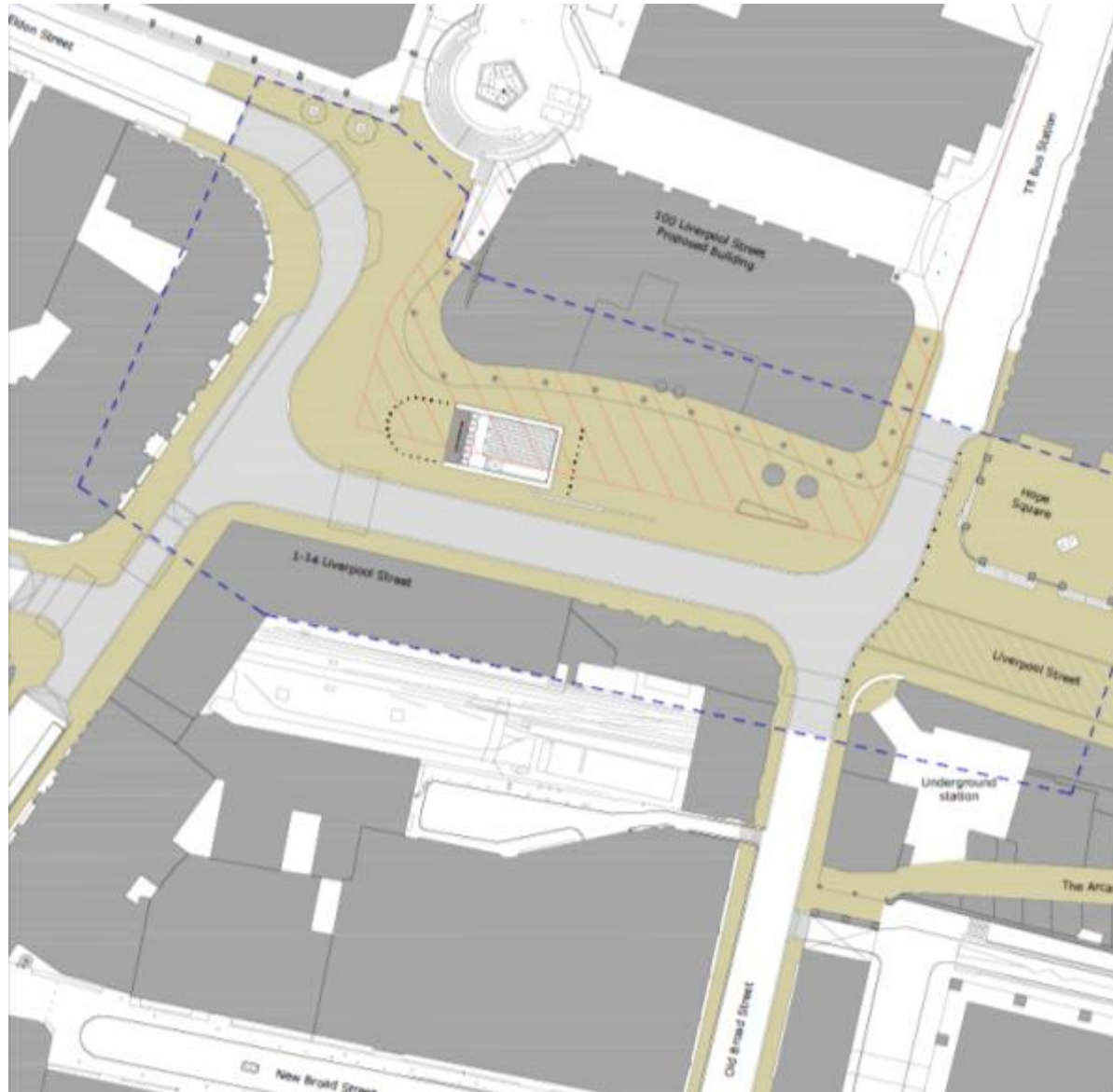


BIRDSEYE VIEW OF OPTION 1 FROM HOPE SQUARE LOOKING WEST ALONG LIVERPOOL STREET



APPENDIX 4: OPTION 2 PLAN AND MONTAGE

OPTION 2 – GENERAL ARRANGEMENT PLAN – TRAFFIC RETAINED IN WESTERN END OF LIVERPOOL STREET



STREET LEVEL VIEW OF OPTION 2 FROM ELDON STREET LOOKING EAST ALONG LIVERPOOL STREET



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