Committees:	Dates:	
Streets and Walkways Sub-Committee	23/01/2018	
Projects Sub Committee	17/01/2018	
Subject:	Gateway 4	Public
60-70 St Mary Axe (EE114)	Detailed Options	
	Appraisal	
	(Complex Route)	
Report of:		For Decision
Director of the Built Environment		
Report author:		
Na'amah Hagiladi		

Summary

Dashboard

Project status: Green

Timeline: Gateway 5 – Spring 2018

Project estimated to cost: £850k - £1.47m

Latest Approved Budget: £115,000

Spend to date: £90,177 Overall project risk: Low

Progress to Date

In June 2017 members approved a Gateway 3 report which set out a number of overarching design principles for a public realm project in the vicinity of the new development at 60-70 St Mary Axe (the "Can of Ham"). These principles are responses to a range of issues which were agreed between the City of London and the developer.

These principles (shown for information in Appendix 1) have defined the project scope, and several design options are now presented which aim to meet the project objectives, which are as follows:

- To deliver an enhanced public realm in the vicinity of 60-70 St Mary Axe;
- To reflect the objectives of the emerging Eastern City Cluster area strategy;
- To ensure that the required functions of the streets are maintained, and;
- To improve accessibility for all throughout the area.

Design approach

Initially a number of assessments were carried out in order to inform the design, namely transport assessments (including pedestrian traffic and kerbside activity surveys), and ground radar surveys to assess sub-surface conditions. The transport assessment showed that a significant number of pedestrians, around 1500 people at peak hours (morning and evening), use St Mary Axe during the day; this data corresponds with the outputs of the Citywide Pedestrian Model, which as well as verifying the current figures also predicts a substantial increase in pedestrian movement in the 2026 scenario, with pedestrian numbers predicted

to double to 3000 (in peak hours).

The pedestrian model also indicates that this section of St Mary Axe will become a major pedestrian desire line linking the new Crossrail station at Liverpool Street with the Eastern City Cluster. This increase in pedestrian movement requires a change to the way St Mary Axe is used, because there will be more pedestrians than can be safely accommodated whilst retaining the exiting footway and carriageway configuration. A landscape architect was therefore appointed to develop design options for the project, informed by the information from the aforementioned assessments and based on the project objectives approved at Gateway 3, with the primary focus on creating a re-configuration of St Mary Axe in order to support future pedestrian demand.

Overview of options

Three options have been assessed for St Mary Axe. The following provides an overview of each option; a full assessment of the three options is contained in the appraisal matrix appended to this report.

Option 1 is a direct response to current and future pedestrian demand, proposing the pedestrianisation of St Mary Axe by restricting access to all vehicles (except for occasional maintenance and emergency access) to create a new public space that will improve the experience of more vulnerable road users such as pedestrians and cyclists and deliver an enhanced public realm. This option meets all project objectives, and is also the option that is strongly favoured by the developer who is funding the project.

Option 2 attempts to provide an area of new public realm whilst retaining some vehicular access through a managed street arrangement. Whilst this option provides some benefit in terms of public realm improvement, the retention of traffic access compromises the ability to address future pedestrian demand and detracts from the sense of space. This option would also require the developer to manage the access to the street and the developer is not willing to enter into such an agreement.

Option 3 is a 'base' option which effectively enhances the current layout of St Mary Axe. This option does not provide any benefit in terms of future pedestrian demand, nor does it enhance the public realm or contribute to improved air quality. This option is also least favourable when considering the project objectives.

Independent of the three options for St Mary Axe, modest enhancement proposals have designed for Bevis Marks, Houndsditch and Goring Street to align with all three options, catering for pedestrian flows and servicing activity respectively.

Proposed way forward and summary of recommended options

It is recommended that Option 1 is taken forward for detailed assessment. This option best meets the objectives set out for the project and best provides measures to address future demands in the area. It also complements future changes needed in the Eastern City Cluster area to accommodate Crossrail and the mitigation of constructing consented schemes in the vicinity. Option 1 is supported by the City of London Police, and the developer has also written to the City of London expressing their strong preference for Option 1.

Results from the traffic survey analysis show that the surrounding road network

can adequately support the changes that may be required to mitigate the impacts of closing St Mary Axe to traffic (the plan at Appendix 6 shows an indicative revised traffic management layout). Such measures include the relocation of existing parking and disabled bays to nearby locations, as well as reversing the current direction of the one-way operation of Goring Street to run from north to south, thus maintaining resilience on the network. Removing traffic from St Mary Axe would also contribute to improved local air quality and encourage travel by more sustainable modes, in line with Corporate and Mayoral objectives, by facilitating pedestrian and cycle movement.

The next steps include developing the design in greater detail, taking sub-surface utilities and other factors into consideration; carrying out a Stage 2 Road Safety Audit; formal consultation with local stakeholders; and publishing a Traffic Order to formalise the removal of vehicle access from this section of St Mary Axe. It is anticipated that a Gateway 5 report will be submitted to the Chief Officer in spring 2018, with construction expected to commence later in 2018. This will enable the project to align with the developer's programme.

Financial implications

This scheme will be fully funded by the developer via a section 278 agreement, as set out in the terms of the relevant section 106 agreement; this includes the preevaluation work that has already been undertaken.

Table 1 below shows the resources expended to date. Table 2 sets out the resources required to reach the next gateway, and a brief explanation of the tasks to be completed with that funding.

Table 1: Resources Expended to date

Expenditure to date					
Description	Approved Budget (£)	Expenditure (£)	Balance (£)		
PreEv P&T Staff Cost	13,068	13,068	0		
PreEv Op Staff Costs	313	313			
Env Servs Staff					
Costs	20,000	6,957	13,043		
P&T Staff Costs	36,619	31,889	4,730		
Fees	45,000	37,950	7,050		
TOTAL	115,000	90,177	24,823		

Table 2: Resources required to reach the next Gateway

Item	Reason	Cost (£)	Funding Source
Fees	Traffic Regulation Order process; utilities estimates; initial archaeological assessment; public consultation, Sustainable Urban Drainage System (SUDS) assessment	£30,000	Section 278 agreement (inc. underspend from previous Gateway)
City Public Realm & City Transport staff costs	Management of the project; liaison and consultation with stakeholders; commissioning surveys and other assessments	£50,000	
Highways staff costs	Producing detailed design; liaison with utility companies; production of cost estimates; production of construction package	£80,000	
Open Spaces staff costs	Input on planting design, inc. species selection	£5,000	
Total		£165,000*	

^{*}This is the total cost for the next Gateway; the underspend of £24,823 from the previous Gateway will be utilised to meet this figure.

Recommendations

It is recommended that Members:

- 1) Approve option 1 for progression to the next Gateway;
- 2) Authorise the Gateway 5 report to be considered by the Chief Officer under Delegated Authority, as per the City's project procedure;
- 3) Authorise officers to pursue the necessary approvals, such as Traffic Regulation Orders.
- 4) Approval of funding as set out in Table 2 above.

Options Appraisal Matrix

See attached.

Appendices

Appendix 1	Schedule of Issues as approved at Gateway 3
Appendix 2	Site location plan
Appendix 3	Detail of St. Mary Axe: Option 1
Appendix 4	Detail of St. Mary Axe: Option 2
Appendix 5	Detail of St. Mary Axe: Option 3
Appendix 6	Plan of suggested alternative on-street parking and servicing locations
Appendix 7	Extract from Citywide Pedestrian Model

Contact

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Options Appraisal Matrix

	Option 1	Option 2	Option 3
1. Brief descrip	transform St Mary Axe into a new public space, by removing vehicle access (but retaining maintenance and emergency access), prioritising pedestrians and cyclists, changing the surface material and introducing tree planting and street furniture.	This option offers a mid-level enhancement of St Mary Axe, providing greater pedestrian priority but with vehicle access retained. This is achieved by defining two areas: a pedestrian-focussed section with new seating and greenery; and a shared section with vehicle and cycle access retained.	This 'base' option does not transform St Mary Axe, but simply looks at surface improvements along the street with the current layout retained.
2. Scope and exclusions	 Removal of vehicular traffic from St Mary Axe; New hard landscaping finishes; New street furniture, including planting and seating A revised traffic management layout Proportionate HVM measures in accordance with the city's police and the CPNI requirements Each option currently proposes the introduction of new York stone paving on Bevis Marks, 	 Two separated zones: vehicular path and pedestrian area; New hard landscaping finishes; New street furniture, including planting and seating A revised traffic management layout Proportionate HVM measures in accordance with the city's police and the CPNI requirements Each option currently proposes the introduction of new York stone 	Surface improvement to the existing street and pavements Each option currently proposes the introduction of new York stone paving on Bevis Marks, Houndsditch and Goring Street, as well as raised entry tables at each end of Goring Street.

		Option 1	Option 2	Option 3
		Houndsditch and Goring Street, as well as raised entry tables at each end of Goring Street.	paving on Bevis Marks, Houndsditch and Goring Street, as well as raised entry tables at each end of Goring Street.	
Pr	oject Planning			
3.	Programme and key dates	Finalised design and cost estimates: January 2018 – May 2018 Gateway 5: May 2018 Implementation: September 2018 – January 2019, which is aligned with the developer's schedule		
4.	Risk implications	1. Risk: Presence of sub-surface utilities impact on the design and cost		
		Action: Preliminary surveys have already been carried out, and trial holes would be used to further determine the extent of utilities		
		2. Risk: Delay in construction works of 60-70 St Mary Axe building affect public realm works		
		Action: Coordination meetings are planned to take place during Gateway 4 and 5 stages with all involved parties		
		3. Risk: Several construction sites or	perating in the area at the same time	
		Action: All works would be conducted	in coordination with neighbouring site	s
		4. Risk: Objections to traffic management raised through consultation process		
		Action: Early consultation with all those changes.	se occupiers which may be affected or	impacted by the wider highway

	Option 1	Option 2	Option 3
5. Benefits and disbenefits	 Creation of a new public space, including new planting and seating areas; Improved pedestrian environment, consistent with the emerging priorities of the Eastern City Cluster area strategy; Provide acceptable pedestrian comfort levels in future scenarios where pedestrian numbers increase significantly Improvement to local air quality, and the promotion of active travel; Aligns with the emerging proposals from the Eastern City Cluster Area Strategy review, and also with emerging security requirements; Does not compromise the viability of further improvements in the ECC area, such as the southern section of St Mary Axe, Leadenhall Street and the Bishopsgate / Camomile Street junction 	 Enhanced pedestrian environment, including new planting and seating areas; Limited improvements to local air quality. Disbenefits Possible conflict between vehicles, cyclists and pedestrians when vehicles are using the street Offers limited improvement to future pedestrian comfort levels; Requires a managed access agreement, with responsibility allocated to a third party. 	 Improved materials (i.e. York stone paving) in accordance with the City Public Realm SPD Disbenefits No improvements to pedestrian environment; Offers no improvement to future pedestrian comfort levels; No improvement to local air quality.

	Option 1	Option 2	Option 3
	Disbenefits:		
	 Possible conflict between pedestrians and cyclists (to be addressed prior to the next Gateway). 		
6. Stakeholders and consultees	 City Transportation Highways Team Open Spaces department TH Real Estate (developer) Foggo Associates (architects) Affected frontages Historic Environment Access Team Road Safety Team London Buses City Police 		
Resource Implications			
7. Total Estimated	£1,258,000	£1,465,000	£850,000
cost	This estimate is based on the latest available information, and may vary as the detailed design work progresses; this estimate does not include expenditure to-date.	This estimate is based on the latest available information, and may vary as the detailed design work progresses; this estimate does not include expenditure to-date.	This estimate is based on the latest available information, and may vary as the detailed design work progresses; this estimate does not include expenditure to-date.

	Option 1	Option 2	Option 3	
		This option has a higher cost due to the use of granite setts and retractable bollards.		
8. Funding strategy		Fully funded through a Section 278 agreement, and in accordance with terms of the Section 106 agreement relating to the development at 60-70 St Mary Axe.		
9. Estimated capital value/return	Not applicable	Not applicable		
10. Ongoing revenue implications	The developer has committed to a financial contribution to the maintenance of the new public space, including the planting, via the s278 agreement. The amount of maintenance funding will be confirmed at the next Gateway.			
11. Investment appraisal	Not applicable			
12. Affordability	Fully funded through a Section 278 a	Fully funded through a Section 278 agreement, with no financial liability to the City of London.		
13. Procurement Strategy	It is proposed that the detailed design process is carried out 'in house' via the City Highways team. The works would be implemented via the City's term contract for highway works.	It is proposed that the detailed design process is carried out 'in house' via the City Highways team. The works would be implemented via the City's term contract for highway works.	It is proposed that the detailed design process is carried out 'in house' via the City Highways team. The works would be implemented via the City's term contract for highway works.	
14. Legal implications	This option would require a Traffic Regulation Order to implement changes to the existing traffic	This option would require a Traffic Regulation Order to restrict vehicle access in St Mary Axe. A separate	None. The remains of the ancient City Wall crosses St Mary Axe and Goring	

	Option 1	Option 2	Option 3
	management layout, including the proposal to restrict vehicle access in St Mary Axe and to reverse the direction of the one-way operation on Goring Street (see section 13 for more details). The remains of the ancient City Wall crosses St Mary Axe and Goring street – as this is a Scheduled Ancient Monument it will require a consent for any work that may affect the monument. The proposed works would be designed to avoid any damage to the City wall and its setting.	TRO would be required to reverse the direction of the one-way operation on Goring Street (see section 13 for more details). The remains of the ancient City Wall crosses St Mary Axe and Goring street – as this is a Scheduled Ancient Monument it will require a consent for any work that may affect the monument. The proposed works would be designed to avoid any damage to the City wall and its setting.	street – as this is a Scheduled Ancient Monument it will require a consent for any work that may affect the monument. The proposed works would be designed to avoid any damage to the City wall and its setting.
15. Corporate property implications	Not applicable		
16. Traffic implications	This option proposes the permanent closure of St Mary Axe to vehicular traffic, with only maintenance and emergency access retained. A transport assessment has been carried out which demonstrates that this option can mitigate any resulting impacts	This option proposes the enhancement of St Mary Axe, but with an access management arrangement implemented to allow some traffic to access the street. The implications of this option broadly mirror those in option 1, but with some differences as set out	This option would only involve minor changes to the layout of St Mary Axe, and would therefore see Pedestrian Comfort Levels remain at level 'C' (in the 2026 scenario), which is below the acceptable level.

Option 1	Option 2	Option 3
on the surrounding highway network. The assessment took into consideration the need to extinguish the existing pay & display parking bays within St Mary Axe (a measure proposed in the original planning report for the development and contained in a subsequent condition). These bays, as well as on-street servicing activity, can be accommodated on surrounding streets without causing a negative impact on the network or on street users.	below. This option is shown to deliver a Pedestrian Comfort Level of 'B minus', in the future 2026 scenario, which is below the accepted levels within the Transport for London pedestrian comfort levels guidance document. This level would drop further at times when vehicles access this area. Possible conflict between vehicles, cyclists and pedestrians when vehicles are using the street.	
The City's Pedestrian Modelling shows that St Mary Axe will become overcrowded in the 2026 scenario with no interventions (producing a Pedestrian Comfort Level of C, as per the Transport for London pedestrian comfort guidance document). This option is shown to deliver a Pedestrian Comfort Level of 'A' with current pedestrian numbers and a PCL of 'B+' in the future 2026 scenario, both of which are acceptable levels		

	Option 1	Option 2	Option 3	
	as per the Transport for London pedestrian comfort levels guidance document and will therefore increase the attractiveness of this route. This would also serve to take some pressure off the parallel Bishopsgate, which is also forecast to experience a significant increase in pedestrian usage.			
	The option would require a direction reversal of the current one-way operation on Goring Street, to retain resilience in the network, most notably for London Buses when on diversion in the area; vehicle tracking has been completed which shows the buses can use this revised layout.			
17. Sustainability and energy implications	This option would significantly improve local air quality by removing traffic from St Mary Axe and introducing new greenery.	This option would improve local air quality by introducing new greenery and reducing vehicle numbers in St Mary Axe.	None.	
18. IS implications	Not applicable			
19. Equality Impact Assessment	This option would improve conditions for pedestrians, cyclists	This option would improve conditions for pedestrians, cyclists	This option would deliver marginal improvements for pedestrians and	

	Option 1	Option 2	Option 3
	and those with mobility impairments, through the creation of a new public space with level surfaces throughout.	and those with mobility impairments, with level surfaces throughout.	those with mobility impairments, through the introduction of new York stone paving.
20. Recommendation	Recommended	Not recommended	Not recommended
21. Next Gateway	Gateway 5 - Authority to Start Work	Gateway 5 - Authority to Start Work	Gateway 5 - Authority to Start Work

	Option 1		Option 2		Option 3			
22. Resource requirements to reach next Gateway	Realm & City Transport staff costs	Item	Reason		Cost (£)	Funding Source		
		Fees	process; u initial archa assessme consultation	nt; public on, Sustainable Urban System (SUDS)	£30,000	Section 278 agreement (inc. underspend from previous Gateway)		
			liaison and stakeholde	ent of the project; I consultation with ers; commissioning and other assessments	£50,000			
		Highways staff costs	liaison with production	detailed design; n utility companies; n of cost estimates; n of construction	£80,000			
		Open Spaces staff costs	Input on pl species se	lanting design, inc. election	£5,000			
		Total			£165,000			