Committee(s):	Date(s):
Streets & Walkways Sub-Committee **Projects Sub-Committee**	**7 April 2014** **7 May 2014**

Subject: Outcome Report - Cannon Street Station – Combined Security Enhancement and Highway Works Scheme	**Public**
Report of: Director of the Department for the Built Environment	**For Decision**

Summary

Dashboard

- Project Status - Green
- Project Stage - Gateway 7 – Outcome Report
- Total Funding Identified S106/278- £3,195,650
- Approved Budget - £3,176,138
- Estimated Final Cost - £ 2,458,420
- Overall project risk - Green

Brief description of project

The Cannon Street Station project was a complex and high profile project with national significance given its importance as a major transport hub within the City and its importance to the 2012 London Olympics travel plan. The project consisted of Security and Environmental Enhancements at both the Cannon Street Network Rail and London Underground Stations. Not only did the City deliver the requirements of the Station & 78 Cannon Street development on programme (Dec 2011-March 2013) but also delivered a complex communications strategy and innovative engineering solutions to deal with issues such as a very shallow bridge deck underneath the carriageway, security bollards, and numerous utilities diversions. Coupled with the successful delivery of the project was the City's ability to undertake highway works whilst still maintaining a live Station which handles approximately 90,000 passengers per day and over 20.5million passengers per year.

The project was implemented using a combination of Section 106 and Section 278 monies agreed with the 78 Cannon Street Partnership (Hines & Network Rail Infrastructure Ltd).

The Security Enhancement element of the proposals involved the installation of security infrastructure around areas of the Station complex.

The City and its contractors successfully achieved the deadline for installation of the security infrastructure with the majority of the highway works also being

completed before the Olympic works embargo.

Once the Olympic embargo on highways works around key train and tube stations had been lifted the City was able to re-engage with local stakeholders to outline the remaining works programme. All City works were completed to programme by March 2013.

Potential funding was sourced externally by way of a Section 278 agreement under the Highways Act 1980 - £2,823,250 and a Section 106 agreement - £372,400 with the developers of 78 Cannon Street. The total potential funding of £3,195,650 was based on "worst case" estimates provided by the City's term contractor in order to mitigate the financial risk to the City.

Following detailed design, the cost of the project was estimated to cost £3,176,138 (i.e. less than the potential funding available). This was approved by Members in July 2011. As agreed with the project board the project estimate included a significant contingency budget which was not expected to be utilised.

Recommendations

Outcome Report recommendation

That Members:

1. Approve the closure of this project; and

2. Subject to the completion of the final accounts, return any unspent funds to NRIL as per the conditions of the Cannon Street Station S.278 agreement.

Overview

1. Evidence of Need	NRIL and LUL, in conjunction with the British Transport Police, determined that a need existed to provide enhanced security protection to Cannon Street station to afford the maximum possible protection. The Security and Environmental Enhancements Works would provide protection to a key item of national infrastructure and provide public benefits through improved functionality of the adjacent highway and public realm.
2. Project Scope and Exclusions	There are no notable exclusions.
3. Link to Strategic Aims	This project seeks to deliver against the following Strategic Aim:

	• To support and promote 'The City' as the world leader in international finance and business services. This will be delivered by ensuring that the needs of the local business community are met fully.
4. Within which category does the project fit	(4) Substantially reimbursable (fully funded by the developer)
5. What is the priority of the project?	A. Essential
6. Resources Expended	£2,458,419.67 is the anticipated final spend for the practical completion of the project. The final account for this project is in the process of being verified. See paragraph 9 and appendix A for further financial details**.**

Outturn Assessment

7. Assessment of project against Success Criteria	1. The success of this project was measured against the need for it to be largely delivered prior to the Olympic Games and completion of works to the Station. This was achieved. 2. The Security and Environmental Enhancements improvements were considered to provide benefit for a key item of national infrastructure and to the public through improved functionality of the adjacent highway and public realm. The above objective was achieved with the City taking a landmark decision to install its own bespoke security bollards. The implementation of the City bollards was an innovative approach to mitigate problems such as a lack of carriageway and footway depth above the station bridge deck and utilities congestion issues. The security infrastructure and widening of the adjacent footways were both completed on programme and to a high standard. 3. The effectiveness of the communications strategy. The aim of having a communications officer and strategy for this project was to present information consistently, be a single point of contact for general queries and to manage

the message that was being sent out. This did not mean that other members of the team were not involved, but it did mean that it reduced the need of the construction team to deal with lots of repetitive queries giving them the time needed to focus on keeping to programme. Via the establishment of a communications strategy tasks were identified that would be vital to the success of the project. The tasks established within the project proved so successful that they now form part of the City's standard communications strategy for all projects.

4. Management of construction and its impact with users of Cannon Street Station.

Cannon Street Station handles approximately 90,000 users per day. The ability of the delivery team to react to problems swiftly and decisively ensured that the station could operate at full capacity during the works and allowed for the works to be completed to programme. In addition to the exceptional site management and working practises of the City's term contractor a "City first" was achieved whereby audio updates within Cannon Street Station were provided to inform passengers of localised works and when times of disruption would be likely.

5. Proactive use of risk management tools to foresee key risks to the project programme and deliverability of the scheme.

This was achieved by setting up well defined roles within the delivery team who fed into the Project Board's decision making processes.

The use of cutting edge technology i.e. Radar Surveys also allowed the delivery team to identify and present to the project board key construction risks prior to implementation.

6. Reducing accidents in line with the City's Road Danger Reduction Plan.

Table 1:

Accident Analysis 2009 to 2013 (Cannon St between Abchurch Lane-Dowgate Hill)

CANNON ST ACCIDENTS			
	Fatal	Serious	Slight
2009	0	2	4
2010	0	0	0
2011	0	1	1
2012	0	0	0
2013	0	0	2

	<table><tr><td>Totals</td><td>0</td><td>3</td><td>7</td></tr></table> From Table 1 above it can be seen that as whole, serious and slight accidents have reduced since the commencement of the project in 2012 and subsequent completion in March 2013. No discernable accident patterns were noted for this reduction. As such it can be concluded that this project is accident neutral.
8. Programme	The key programme constraint for this project related to the implementation of the Security Enhancement Scheme prior to the 2012 London Olympics and to a lesser extent the 2012 London Marathon. The above constraints were able to be mitigated by the City taking a decision to install security bollards. The implementation of the shallow foundation bollards was an innovative approach to mitigate problems such as a lack of carriageway and footway depth above the station bridge deck and utilities congestion issues. The use of cutting edge technology i.e. Radar Surveys also allowed the delivery team to identify key construction risks prior to implementation and design around them, It was agreed via the Project Board decision making process that the remaining Highways Enhancement works i.e. western side of Dowgate Hill, could be completed post Olympics. This deadline date was also consistent with the programmed completion date of the London Underground Station concourse and the completion of the main 'fit out' phase of the 78 Cannon Street office building above the Station complex in late June 2012. Once the embargo had been lifted post Olympics, the City was able to re-engage with local stakeholders, resume works, and complete the last element of work to programme by March 2013. This also allowed for the project to undertake the smooth transition from the City's incumbent (FM Conway) to their successor (JB Riney).
9. Budget	The agreed budget at evaluation approval stage in 2011 for the combined scheme was £3,180,000. The budget and estimated final spend is summarised as: **Table 2:**

Description	Budget (£)	Spend (£)	Variance (£)
Security Works	2,287,138	1,668,888	(618,250)
Highways Works	880,000	787,124	(92,876)
Revenue	9,000	2,408	(6,592)
Total	**3,176,138**	**2,458,420**	**(717,718)**

*Please see Appendix A for detailed breakdown

The underspend is principally due to management of the following risks:

- £717,718 cost savings largely due to the estimates being provided in advance of the detailed design being carried out. By estimating the scope of the civil engineering works for a worst-case scenario and by securing substantial contingency deposits (50%) over and above the predicted costs it enabled the project to be completed prior to the 2012 London Olympics and to a lesser extent the London Marathon 2012. This was further mitigated for by establishing robust engineering and working practices to drive down costs where possible over the course of the project;
- As the Cannon Street project had an immovable deadline, there was a high risk of spiralling costs, and a serious reputational risk to the City, the only possible mitigation available was through allocation of significant contingency funds;
- The City's term contract, rates, and estimates provided for the scheme were audited by an independent quantity surveyor (QS) who was working for the external funding partners. The rates and estimates were deemed to be accurate by the QS and external funders and were shown to represent value for money, given the risks identified due to the lack of time afforded to the City by TRANSEC who belatedly introduced security requirements into the scheme.
- On completion of the detailed design the provisional estimates were reassessed through value engineering such as undertaking radar surveys, efficient working practices, through communications with utilities and local stakeholders, inclusive of financial risk management.

Appendix A (Tables 3-4) show the financial information for this project in greater detail including all areas of expenditure and the amounts to be returned to the developer.

Under the terms of the S278 agreement, unspent funds are to be returned to the developer including any interest that

	has accrued.
10. Risk	Low
11. Communications	Given the importance of this nationally significant project it was decided that a project board and communications strategy would be established early on in the project to manage risk, define roles within the project, and enable high level decisions to be made with the agreement of all parties allowing for the project to be delivered efficiently and to programme. Regular communication with TfL, NRIL and the developer were an important component in planning this project. This in turn allowed for quick turnaround of approvals from TfL and the signing of legal agreements with the developer which all stemmed from the success of the project board and communications strategy. Building on the experiences from the Cheapside Communications Strategy, a detailed Cannon Street Communications Strategy and key tasks were devised. Communications Strategy and Key Tasks: • Appoint a dedicated communications officer (Gillian Howard); • Pre-construction and construction engagement meetings with Members/Ward Members/Key Stakeholders; • Area wide mail drops throughout the project providing key information; • Site Boards displaying information for each works phase; • Articles and information pieces were also written and distributed to City Resident Magazine, the London Service Permit Bulletins for bus and coach operators as well as the Confederation of passenger transport, and taxi magazine Our website was updated to have the relevant information on as well as contact details for further information; • Weekly update email bulletins; • Audio updates within Cannon Street Station to inform passengers of localised works and when times of disruption would be likely; and • One to one meetings with shop frontages, businesses, and local stakeholders. The overriding feedback from Stakeholders and senior Officers was that the Communications Strategy was

	instrumental in the smooth delivery and overall success of the Project as a whole. The tasks established within the project proved so successful that they now form part of the City's standard communications strategy for all projects within the City's Transport & Public Realm Division. Though the communications strategy proved to be highly successful it must be noted that the key tasks outlined above required significantly more staff time and effort/cost than originally anticipated and that future communications strategies should account for similar uplifts in time and effort/cost from the outset. Statutory traffic order consultation also took place as part of this project.
12. Benefits achieved to date	• The Security Enhancement affords the maximum possible protection to the Network Rail and London Underground Stations; • Effective use of the local streets for local needs, without detrimental impact on local stakeholders and the operation of the surrounding highway network; and • Changes to the Cannon Street / Dowgate Hill junction have delivered decreased vehicular waiting times at the pedestrian crossing adjacent to Cannon Street Station. This fits with the City and TfL's network management duty for the expeditious movement of traffic on the Strategic Road Network (SRN) of which Cannon Street is currently designated .It must be noted however, that the current signal timing arrangement has resulted in an increased delay to pedestrians. TfL are currently reviewing this situation in the hope that improvements can be made in the future.
13. Strategy for continued achievement of benefits	The City will continue to maintain the streets around the site for which we are the Highway Authority.
14. Outstanding actions	Return any unspent funds to the developer and close the project.

Review of Team Performance

15. Governance arrangements	Following Committee approval to commence the evaluation process a Project Board was set up to provide high level direction and governance for the project. The Project Board was made up of representatives from the organisations listed below and allowed a far higher degree of transparency in the design process than would otherwise be possible. 1. City of London Transport & Public Realm Division; 2. City of London Town Clerk's Department; 3. City of London Police; 4. City of London Security (Corporate); 5. Network Rail Infrastructure Ltd; 6. 78 Cannon Street Partnership (Hines); 7. London Underground Ltd; 8. Transport for London; 9. TRANSEC (DfT); 10. Alderman for the Ward (as an observer); and 11. British Transport Police. Note: The Responsible Officer in attendance from each Organisation was to be Director level or higher. Decisions and discussions were subsequently fed to the project delivery team to ensure communication lines were maintained and clear at all stages. The Board generally met at two monthly intervals. All important decisions were debated by the Project Board to ensure transparency in all areas of the project and all decisions were by unanimous agreement. The Project Board met for the 13th and final time on 23 July 2012.
16. Key strengths	• Project Board • Clear Project Leadership • Communications Strategy • Ability to manage the project during transition in term contractor from FM Conway to JB Riney • Ability to manage external bodies • Coordination with utility companies • Negotiation • Design and delivery team (CoL/Contractor) • The management of risk during the design and

	construction phase of the project • The strength of the City's term contract. By having the City's term contract and rates audited by independent QS who was working for the external funding partners and subsequent approval by Network Rail and Hines it shows that the City is achieving value for money. Note: Due to the successful delivery of the project in exceptional circumstances both Hines and Network Rail have formally written to the City to commend officers for their hard work and diligence over the course of the project.
17. Areas for improvement	• The ability for time constrained (5 year) commuted sums for maintenance to be held in a designated account in perpetuity to cover defect periods for long life materials and infrastructure i.e. bollards, kerbs, carriageways, and trees. As such consideration should be given to extending the period to either 20 years or for a capped sum to be paid to the City to be used for maintenance when the need arises around the development.
18. Special recognition	City officers that deserve special recognition for supporting the delivery of this project within a technically difficult project with an extremely tight programme are: Iain Simmons – Project Director Ben Buttimore (No longer works for the City) Graham Beattie (No longer works for the City Jonathan Russell - Highways Gillian Howard – Communications Officer FM Conway Management and Operatives JB Riney Management and Operatives

Lessons Learnt

19. Key lessons and how they will be used and applied	1. The Project Boards decision to combine both the Security and Environmental Enhancement elements of the project at an early stage meant that the City was able to achieve greater value from the Section 106 'Highway Works' allocation than would otherwise have been possible. 2. Early public engagement and a robust communications strategy led to efficiencies in dealing with queries during the project and

	enabled issues to be resolved at the first point of contact. Communications tasks such as those outlined in section 11 of this report now form part of the City's standard communications strategy processes for projects within the Transport & Public Realm Division. 3. That when undertaking works around rail or underground stations a crowd management plan should be created to specifically deal with crowd safety and the impacts that the works could have on the stations operation and surrounding highway network, and resources within the team made available to review performance of the plan until it has settled in.

Appendices

Appendix A	Detailed Finance Breakdown
Appendix B	General Arrangement Drawing
Appendix C	Before & After Photographs

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APPENDIX A – DETAILED FINANCE BREAKDOWN

Table 3 - DETAILED PROJECT SPEND			
Description	**Budget (£)**	**Spend (£)**	**Variance (£)**
Pre-evaluation	180,383	160,514	19,869
Security Works	2,106,755	1,508,374	598,381
Highways Works	880,000	787,124	92,876
Revenue Expenditure	9,000	2,408	6,592
Total Spend	**3,176,138**	**2,458,420**	**717,718**
Revenue Maintenance	72,500	72,500	-
Total	**3,248,638**	**2,530,920**	**717,718**

*EXCLUDES INTEREST

Table 4 - UNSPENT MONIES	
Description	**(£)**
s106 Received	(372,400)
s278 received	(2,823,250)
Total Received	**(3,195,650)**
s106 Expenditure	356,823
s278 Expenditure	2,101,597
Total Expenditure	**2,458,420**
Less - sums to be retained	
Retention	72,500
Balance of s106 monies	15,577
Outturn costs	4,000
Bollard Impact Assessment	7,335
Total Sum Retained	**99,412**
Sum returned (December 2013)	**515,377**
Balance to return *	**(122,441)**

*EXCLUDES INTEREST