

Committees: Corporate Projects Board - <i>for information</i> Planning & Transportation Committee <i>[for decision]</i> Projects Sub <i>[for decision]</i>	Dates: 28 June 2019 09 July 2019 19 July 2019
Subject: Park Street Bridge Waterproofing Unique Project Identifier: 9874	Gateway 6: Outcome Report Regular
Report of: Director of the Built Environment Report Author: Mark Bailey	For Decision
PUBLIC	

Summary

1. Status update	<p>Project Description: This project relates to essential bridge waterproofing works to this historic Bridge House Estates structure, which forms part of the south approach viaduct to Southwark Bridge.</p> <p>RAG Status: Green (Red at last report to Committee)</p> <p>Risk Status: Low (Medium at last report to committee)</p> <p>Costed Risk Provision Utilised: Not applicable</p> <p>Final Outturn Cost: £266,870</p>
2. Next steps and requested decisions	<p>Requested Decisions:</p> <p>Members are asked to approve the content of this Outcome Report and approve that the project be closed, subject to successful verification of the final account by the Chamberlain's Financial Services Division.</p>
3. Key conclusions	<p>The waterproofing works to Park Street Bridge were satisfactorily completed, in full accordance with the project objectives and specification, although delayed in completion.</p> <p>Useful information has also been gained on the condition of the road construction and sub-grade to the south viaduct which will prove extremely useful in the planning and budgeting of future waterproofing works to the rest of the approach viaducts to Southwark Bridge, particularly with respect to the amount of concrete repairs that are likely to be necessary. This will help</p>

	give increased cost certainty to this follow-on project and mitigate the extent and cost of advanced investigations required.
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Main Report

Design & Delivery Review

4. Design into delivery	As this was a routine maintenance project, the quantity and complexity of design was very limited, relying mainly on standard materials and details.
5. Options appraisal	An options appraisal was not necessary nor considered for these routine maintenance works, with standard waterproofing materials and details fully enabling the project to meet its objectives and provide long term value. They are also fully compatible with follow-up waterproofing works to the rest of the approach viaducts to Southwark Bridge which are currently proceeding through the gateway process.
6. Procurement route	<ul style="list-style-type: none"> • Works were procured through a competitive tender process, arranged in conjunction with City Procurement. • Design services were provided by the structural consultant for Bridge House Estates under their term contract rates.
7. Skills base	The City of London project team were fully capable of delivering this project, with technical support provided by the appointed term structural consultant for Bridge House Estates structures.
8. Stakeholders	In arranging for these works to be carried out within a neighbouring highway authority, full consultation was necessary with Southwark Council. Both the Council and local residents were kept fully informed of the works, with disruption to the public mitigated considerably by phasing the works in three stages which permitted free-flowing traffic in both directions at all times.

Variation Review

9. Assessment of project against key milestones	Whilst the works commenced on site as programmed at the beginning of September 2018, with a contract duration of 12 weeks, completion of the works was delayed by nearly 2 weeks due to additional concrete repairs necessary upon exposure of road substrate, in order to receive the specified waterproofing system.
10. Assessment of project against Scope	The project fully met its scope to carry out essential waterproofing works to the bridge, albeit with additional quantities and extent of concrete repairs than those originally expected.
11. Risks and issues	<ul style="list-style-type: none"> • A Costed Risk Provision for this routine maintenance project was not formally requested at Gateway 5, following the positive

	<p>results from trial investigations in advance of tender/works, albeit that <i>unforeseen conditions during construction</i> were identified as a medium risk on the project risk register, as is the case for most construction projects and contracts. Unforeseen conditions were ultimately experienced during the works, relating to the poor condition of exposed substrate, resulting in greater quantities of concrete repairs necessary to receive a bonded waterproofing membrane.</p> <ul style="list-style-type: none"> • Due to the risk of additional costs and delays to the contract, a budget increase of £50,000 was approved in response to an issues report post-GW5 (under urgency) in November 2018, which reflected our estimate at that time of the maximum total liability of the City under the contract for delays and additional resources. • However, we worked to ensure that the contractor kept within the remeasurement contract and – upon completion and remeasure, the contract sum was recalculated as £126,922 rather than the tendered sum of £149,692. The additional costs arising from unforeseen conditions and extensions of time to complete the necessary additional repairs were measured and agreed under the contract as £22,662, leading to a final contract sum of £149,583. • Hence, the final contract sum (and the total project sum) did not ultimately exceed the values approved at Gateway 5.
12. Transition to BAU	<ul style="list-style-type: none"> • <i>Business As Usual</i> was maintained throughout the duration of works, with disruption to the public kept to an absolute minimum, by:- <ul style="list-style-type: none"> a) designing/phasing the works in 3 stages, permitting free flowing vehicular traffic in both directions at all times. b) ensuring one footpath through the works was maintained at all times, with safe crossing points provided. c) Ensuring that all traffic management was immediately removed upon completion of works.

Value Review

13. Budget

Estimated Outturn Cost (G2)

Project originally initiated in 2007, prior to current Gateway process, with an original budget provision of approximately £125,000 (excluding risk). The increased final cost reflects a significantly increased extent of waterproofing on the approaches to the bridge (to assist with phasing and integration into future waterproofing works planned for the rest of the viaduct, for which there will be a consequential reduction in area) and an element of inflation.

	<i>At Authority to Start work (G5) (£)</i>	<i>Final Outturn Cost (£)</i>
<i>Pre-valuation costs (prior to 2007 report)</i>	29,664	29,664
<i>Fees</i>	32,886	32,734
<i>Staff Costs</i>	4,937	4,937
<i>Investigations</i>	51,126	49,029
<i>Works ##NOTE</i>	150,615	150,506
<i>Other Capital Expend</i>	-	
<i>Costed Risk Provision</i>	-	
<i>Recharges</i>	-	
<i>Other*</i>	-	
Total	269,228	266,870

##NOTE – These figures include the sum of £923 for works at pre-evaluation stage

Please confirm whether or not the Final Account for this project has been verified.*

The final works account of £149,583 has yet to be verified by the Chamberlain's Financial Services Division, although this has been requested.

14. Investment

Not applicable

15. Assessment of project against SMART objectives	<p>Whilst this project was originally initiated before the current gateway process or reference to SMART objectives, the following <i>Key Measures of Success</i> were subsequently incorporated into the project reporting, which we can confirm were fully met:</p> <ol style="list-style-type: none"> 1) Completion of scheduled maintenance works in accordance with the project specification (quality). 2) Improving the condition and residual value of the asset, within the allocated project budget. 3) Minimising inconvenience to members of the public. <p>Additionally, the successful implementation of these works will help facilitate the future waterproofing works planned for the rest of the south approach viaduct.</p>
16. Key benefits realised	<p>As this project was originally initiated prior to the current Gateway process, <i>Key Benefits</i> were not defined at a Gateway 2 stage. However, please refer to previous section and specifically item 2).</p>

Lessons Learned and Recommendations

17. Positive reflections	<p>The decision to phase the works in three stages worked very well in permitting free-flowing traffic in both directions at all times. This is reflected in the lack of negative feedback from public or highway authority during the works.</p>
18. Improvement reflections	<ol style="list-style-type: none"> 1) Whilst the volume of concrete repairs necessary to receive a new bonded waterproofing membrane was greater than expected - despite a large number of trial investigations – these experiences have been very useful in advance planning and budgeting for follow on works to the rest of the approach viaducts to Southwark Bridge, which are currently being planned and progressing through the Gateway process. 2) The use of a Costed Risk Provision (CRP) at Gateways 4 and 5 would have potentially avoided the need for an issue report under urgency to request additional funding for unforeseen conditions experienced during construction.
19. Sharing best practice	<p>As well as information and experiences being disseminated informally within the project team, staff within the division are encouraged to present project experiences to colleagues during lunchtime seminars within the division.</p>
20. AOB	<ol style="list-style-type: none"> 1) This project was originally commissioned prior to the current Gateway process in 2007, to address concerns over water ingress and corrosion risks to the steel girders of this bridge.

	<p>2) Commencement of works was subsequently delayed whilst further investigations into water main leakage and protracted discussions with Thames Water took place.</p> <p>3) As these were ultimately inconclusive, a decision was taken to progress with the works in 2018, in advance of a further programme of works to waterproof the rest of the viaduct masonry arches. Due to the corrosion risks associated with this specific bridge and steel components, it was felt that the waterproofing works could not be deferred any longer than they already had been.</p> <p>4) Whilst the waterproofing works to the rest of the viaduct were planned for 2019 (as reported separately to committee), these works have very recently been deferred to 2021 due to conflict with incompatible development works affronting Southwark Bridge Road.</p>
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Appendices

Appendix 1	Project Coversheet
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Contact

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