Committees: Dates: Corporate Projects Board [for information] 30 May 2019 Planning and Transportation Committee [for information] 18 June 2019 Projects Sub-Committee [for information] 19 June 2019 Subject: Issue Report London Bridge Waterproofing and Complex Bearing Replacement **Next gateway to be passed: Unique Project Identifier: 12017** Gateway 5 For Information Report of: Director of the Built Environment Report Author: Trina de Silva **PUBLIC**

1. Status update **Project Description:** Replace waterproofing and bearings in north and south abutments on London Bridge. **RAG Status:** Red (Green at last report to committee) **Risk Status:** Medium (Low at last report to committee) Total Estimated Cost of Project (excluding risk): £4,280,000 Change in Total Estimated Cost of Project (excluding risk): none Spend to Date: £57,319 Costed Risk Provision Utilised: none; **Slippage:** start of work to be delayed until March 2020. 2. Requested Requested Decisions: decisions Committees are to note the change in the start date for these works. 3. Budget There is no change in the project budget. The total project cost is £5 million, which includes a costed risk provision of £720,000. A breakdown of the budget (as well as a list of the costed risk provision items) is included as Appendix 2. The risk register is included in Appendix 3. Bridge House Estates will be funding these works, and the BHE 50 year plan will be amended in line with the new timescales. Programme for capital expenditure: Q3 2020 Pre works Q1 2020 Q2 2020 £0.06m £0.83m £2.11m £2m

4. Issue Description	Cadent Gas have been working intermittently on Cannon St over the last year and will close Cannon St from April to the end of 2019. Cannon St forms part of the proposed diversion route for this project. Transport for London will not allow the works to London Bridge to proceed until after Cadent Gas reopen Cannon St at the end of the year. To avoid the risk of working during the wet winter weather, it is recommended to start the works in March 2020.
5. Options	 Delay start of works until March 2020. Seek a delay of Cadent Gas' works. The imminent safety risks which have required the gas works mean that there is no practical chance of this succeeding.

Appendices

Appendix 1	Project Coversheet
Appendix 2	Project Budget
Appendix 3	Risk Register

Contact

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Appendix 1 – Project Coversheet

Project Coversheet

[1] Ownership

Unique Project Identifier: 12017 Report Date: 03.04.2019

Core Project Name: London Bridge Waterproofing and Bearing Replacement

Programme Affiliation (if applicable): n/a

Project Manager: Trina deSilva

Next Gateway to be passed: Gateway 5

[2] Project Brief

Project Mission statement: Replacement of the waterproofing on London Bridge deck. Replacement of bearings in the north and south abutments of the bridge. **Definition of need:** Reduce leakage through the structure. Ensure structure is able to expand and contract as designed.

Key measures of success:

- 1) Reduction of leakage through the structure. Reduction of risk to stability of the structure from further leakage and corrosion.
- 2) No risk to bridge movement (expansion/contraction) from further deterioriation of the bearing plates or the bearings themselves.
- 3) Minimised traffic disruption.

[3] Highlights

Finance:

Total anticipated cost to deliver: £4.1 million (works cost)

Total potential project liability (cost): £5 million

Total anticipated on-going commitment post-delivery [£]:n/a

Programme Affiliation [£]:n/a

[A] Budget Approved to Date*	[B] New Financial Requests	[C] New Budget Total (Post approval)
£84,000	£0	£84,000
[D] Previous Total Estimated Cost of Project	[E] New Total Estimated Cost of Project	[F] Variance in Total Estimated Cost of Project (since last report)
£5 million	£5 million	£0
[G] Spend to Date	[H] Anticipated future budget requests	
£57,319	£4,942,681	

Headline Financial changes: None

The last report was a combined G1-4 report, in which a budget of £84,000 was approved to take the project to the next gateway. A budget of £5million was reported as the overall project cost.

Project Status:

Overall RAG rating: Red Previous RAG rating: Green

[4] Member Decisions and Delegated Authority

None. A remeasurement contract will be used for these works, to remove the contractor's priced risk for the volume of surfacing being higher than expected. Delegated approval will be obtained prior to tendering, as outlined in the Gateway previous report from June/July 2018.

[5] Narrative and change

Date and type of last report:

G1-4 report, June/July 2018

Key headline updates and change since last report.

Design completed, negotiations underway with Transport for London for closures. Cadent Gas will undertake gas main replacement on Cannon St, which forms part of the proposed diversion route. This has pushed the start date for works back until March 2020.

Headline Scope/Design changes, reasons why, impact of change:

Since 'Project Proposal' (G2) report:

None

Since 'Options Appraisal and Design' (G3-4 report):

Design completed, negotiations underway with Transport for London for closures. Cadent Gas will undertake gas main replacement on Cannon St, which forms part of the proposed diversion route. This has pushed the start date for works back until March 2020.

Since 'Authority to Start Work' (G5) report:

n/a

Timetable and Milestones:

Expected timeframe for the project delivery: Complete by October 2020. **Milestones:**

- 1) Gateway 5 October 2019
- 2) Works on Site March to September 2020

3)

Are we on track for this stage of the project against the plan/major milestones?

Draft tender documents have been produced. Investigative works are nearly complete, one out of nine trial holes remains to be completed.

Are we on track for completing the project against the expected timeframe for project delivery? N

Cadent Gas will be working on Cannon St from April until December 2019. To avoid significant congestion, it is recommended to delay the start of the bridge maintenance works until after Cadent Gas works are complete. To avoid additional risk to the bridge works programme from completing work over the wetter winter period, it is recommended to start the works in March 2020.

Risks and Issues

Top 3 risks:

Issue Description	Mitigation taken and remaining		
Broken paving slabs and	labs and Extra time allowed in programme for take up and		
kerbs	relaying of granite kerbs. Site inspection: several		
	slabs on eastern footway broken where guardrail		
	columns were. Incomplete trial pits: slabs on eastern		

	footway very strongly adhered into the bedding mortar and difficult to remove. Allowance for replacement slabs increased from previous estimate to account for this.	
Lane closures not agreed for times required	Early liaison with TfL has resulted in agreed proposals for the works. TM drawings are being agreed as a basis for this, and will be used in tendering. It is recommended that the programme of work is moved to avoid conflict with other works. This item remains a risk as firm approval will need to be obtained by the appointed contractor. Lane closures to be agreed before any site establishment is permitted.	
Third Party Delays	Agree dates in advance and ensure CoLP, TfL, Met Police etc are aware of impact if work not completed in time. Arrange works to give maximum flexibility in the dates third party works occurs. Undertake works ourselves as far as possible. Once contractor appointed, ensure they keep TfL's CCTV camera out of the area of central reservation to be removed for the contraflow and temporary pedestrian crossing. Works programme amended to include notice periods for removal and replacement of CCTV cameras, HVM barriers etc.	

Top 3 issues realised:

Issue Description	Impact and action taken	Realised Cost
Services in bridge	0,	£3000
damaged by	·	
jacking	works, no responses received. Visit to	
	bridge to identify 'at risk' services – only	
	our cast iron drainage pipes are at risk, and will be replaced as part of works.	
Bridge doesn't	Current proposal has jacks under each	£0
move as one unit	move as one unit diaphragm. Jacking restricted to 2mm.	
during jacking	during jacking	
Access ladders	Access ladders have been sufficient for	£3000
and gantries not		
sufficient for works	·	
	Contractor to assess whether they	
	would need to remove any of the	
	existing equipment, replacements	
	should be provided at the end of the	
	works.	

Has this project generated public or media impact and response which the City of London has needed to manage or is managing?
No.

Appendix 2 – Project Budget

Item	Cost (£'000s)
Pre works costs	64
Works costs	
Waterproofing	2550
Bearings	609
Access	250
TM estimate	657
Sub-total	4066
Third Parties (temp cameras on north approach)	80
Risk allowance (see below for breakdown)	720
Fees/staff costs	70
Total cost	5000
Risk Allowance	
	30
Joints damaged during works	
Condition of concrete not acceptable Third Party delay (Met Police, TfL structures approval,	100
CoL Police)	200
Connections between bridge deck and gym	
ceiling/walls.	10
Broken paving slabs and kerbs	380
Total requested risk allowance	720

Appendix 3 – Risk Register