

<b>Committees:</b>		<b>Dates:</b>
Policy and Resource Committee – for information		19 January 2017
Project Sub-Committee – for decision		31 January 2017
Corporate Asset Sub-Committee – for information		10 February 2017
<b>Subject:</b> Guildhall Great Hall Stonework Defect	<b>Gateway 1&amp;2 Project Proposal</b> Regular	<b>Public</b>
<b>Report of:</b> City Surveyor <b>Report Author:</b> Dorian Price, Guildhall Manager		<b>For Information</b>

### Recommendations

1. Approval track and next Gateway	Approval track: 2. Regular Next Gateway: Gateway 3/4 - Options Appraisal (Regular)			
2. Resource requirements to reach next Gateway	Item	Reason	Funds/ Source of Funding	Cost (£)
	Staff funding for 5 days	To consider options for scaffolding	Local Risk	£500
	Staff funding for 10 days	To consider options for repair of stonework	Local Risk	£1,000
	Temporary Crash-Deck Scaffold Construction Estimate	Due to urgency, this crash-deck was installed 21/11/16.  Cost includes hoarding, decorating, lights and hire to 20/01/17	2016/17 City's Cash Provision for New Schemes	£37,500
	Temporary Crash-Deck Scaffold	Estimated cost for ongoing hire of the scaffold.  £800 per week to 28/04/17	2016/17 City's Cash Provision for New Schemes	£11,200
	Scaffold Design Fees	To carry out preliminary assessment and initial design.	2016/17 City's Cash Provision for New Schemes	£2,000

	Pinnacle Scaffold Construction Estimate	Estimated costs for specialist scaffold up to and around Pinnacle	2016/17 City's Cash Provision for New Schemes	£70,000	
	Structural Engineer Fees	To carry out preliminary assessment and design solution.	2016/17 City's Cash Provision for New Schemes	£5,000	
	Stonework Conservation Design Fees	To carry out preliminary assessment and initial design.	2016/17 City's Cash Provision for New Schemes	£4,500	
			<b>Estimated Total</b>	<b>£131,700*</b>	
* Subject to further technical investigation					
<b>3. Next steps</b>	<p>3.1 Construct specialist scaffold to enable close inspection of the stonework defects.</p> <p>3.2 To employ a consultant structural engineer to carry out a detailed inspection of the west pinnacle of the Great Hall and produce a structural survey report and advise on proposed repair methods.</p> <p>3.3 Structural engineer to review photographic drone survey results of the east pinnacle.</p> <p>3.3 Engage a stonework conservation consultant to provide design options for remedial works in conjunction with the structural engineer.</p>				

### **Project Summary**

<b>4. Context</b>	<p>4.1 A photographic drone survey conducted in July 2016 on the Great Hall identified a small number of cracks in some stonework on the pinnacle of the Great Hall roof, at the apex of the west gable, which required further closer inspection. The inspection carried out on Saturday 19th November by Stone Technical Services Ltd, identified stonework on the west gable pinnacle that was determined to be unsafe and a risk of falling masonry.</p> <p>4.2 Due to the condition of the masonry, Stone Technical Services were not able to carry out any remedial works to consolidate the loose masonry for fear of dropping any loose</p>
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	<p>elements, or causing a partial collapse of the pinnacle onto the glazing below.</p> <p>4.3 Due to the risk of falling masonry, specialist scaffold is required to inspect the stonework and dismantle, if necessary, safely and without the risk of partial collapse and causing damage to the area below.</p> <p>4.4 The first priority was to make area safe, Officers implemented immediate control measures and the closure of the West ambulatory corridor while our contractor, a crash-deck tunnel structure was built underneath the West ambulatory glass canopy.</p> <p>4.5 This crash-deck tunnel was installed on 21<sup>st</sup> November and will enable further specialist scaffold to be built up and around the pinnacle.</p>
<b>5. Brief description of project</b>	5.1 To access the west gable pinnacle by specialist scaffolding, and undertake any necessary repairs to prevent falling masonry.
<b>6. Consequences if project not approved</b>	6.1 Loose masonry, or a partial collapse of the pinnacle onto the glazing below.
<b>7. SMART Objectives</b>	<p>7.1 To repair the high level Great Hall cracks to the stone Pinnacle at a high quality standard.</p> <p>7.2 To ensure repair work is within cost approved.</p> <p>7.3 Repairs are conducted in a timely manner with minimal impact to events.</p> <p>7.4 Repairs are carried out safely and all risks are mitigated.</p> <p>7.5 Repair complies with the legal obligation to maintain our historical asset, and on-going monitoring is undertaken to ensure the repair is successful.</p> <p>7.6 Key milestone dates are identified as;</p> <ul style="list-style-type: none"> <li>• Scaffold Design Proposal – January/February 2017</li> <li>• Stone survey assessment – January/February 2017</li> <li>• Remedial works undertaken – March 2017</li> </ul>
<b>8. Success criteria</b>	<p>The project will be measured by the following outcomes;</p> <p>8.1 Repair will be conducted on time and within budget.</p> <p>8.2 No operational impact to the use of the Great Hall.</p>
<b>9. Key Benefits</b>	<p>9.1 Repair and maintain a heritage asset.</p> <p>9.2 Improved stability and an even loading to all corners of the structure.</p> <p>9.3 Reduces the health and safety risk of falling masonry.</p>

<b>10. Notable exclusions</b>	10.1 No further action will be undertaken to small hairline cracks identified, other than continual monitoring.
<b>11. Governance arrangements</b>	<b>Spending Committee:</b> Finance Committee <b>Senior Responsible Officer:</b> Guildhall Manager <b>Project Board:</b> No

### Prioritisation

<b>12. Link to Strategic Aims</b>	2. To provide modern, efficient and high quality local services, including policing, within the Square Mile for workers, residents and visitors
<b>13. Links to existing strategies, programmes and projects</b>	13.1 The City Surveyor Business Plan includes strategic priorities of promoting Health and Safety compliance. 13.2 The department is monitoring and managing health and safety risks in accordance with the City Corporation's current risk management framework. 13.3 The Guildhall conservation management plan.
<b>14. Project category</b>	1. Health and safety
<b>15. Project priority</b>	A. Essential

### Options Appraisal

<b>16. Overview of options</b>	16.1 Undertake repairs - The recommended option is to install specialist scaffolding and undertake repairs as advised by a consultant structural engineer. 16.2 To rebuild the Pinnacle if assessed as necessary.
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### Project Planning

<b>17. Programme and key dates</b>	<b>Overall programme:</b> Up to 6 months <b>Key dates:</b> <ul style="list-style-type: none"> <li>Scaffold Design Proposal – January/February 2017</li> <li>Stone survey assessment – January/February 2017</li> </ul> <b>Other works dates to coordinate:</b> Gateway 3/4 – February/March 2017
<b>18. Risk implications</b>	<b>Overall project risk:</b> Amber The proposals outlined in this report identify health and safety and reputational risks and although the risk of falling masonry has been temporarily mitigated, there is continued cost and inconvenience of a having scaffold in place and the repair delayed for any extended period.

<b>19. Stakeholders and consultees</b>	19.1 Town Clerks 19.2 Comptroller and City Solicitor's 19.3 DBE – Building Control and Historic Environment 19.4 Remembrancer 19.5 Chamberlain 19.6 Procurement
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### **Resource Implications**

20. Total estimated cost	Likely cost range: 1. Under £250k																													
21. Funding strategy	Choose 1: No funding confirmed	Choose 1: Internal - Funded wholly by City's own resource																												
	<table><tr><th>Funds/Sources of Funding</th><th>Cost (£)</th></tr><tr><td>Staff funding for 10 days</td><td>£1,500</td></tr><tr><td>Emergency Crash-Deck Scaffold Construction cost (currently funded from Local risk up to 20/01/17, but to be transferred to project costs)</td><td>£37,500</td></tr><tr><td>On-going Crash-Deck scaffold estimated hire cost (£800 per week to 28/04/17)</td><td>£11,200</td></tr><tr><td>Scaffold Design Fees</td><td>£2,000</td></tr><tr><td>Pinnacle Specialist Scaffold Construction Estimate</td><td>£70,000</td></tr><tr><td>Structural Engineer Fees</td><td>£5,000</td></tr><tr><td>Stonework Conservation Design Fees</td><td>£4,500</td></tr><tr><td>Estimated Total <u>to reach the next Gateway</u>**</td><td>£131,700*</td></tr><tr><td><u>Funded By:</u></td><td></td></tr><tr><td>City Surveyor's Existing Local Risk Budget</td><td>£1,500</td></tr><tr><td>2016/17 City's Cash Provision for New Schemes</td><td>£130,200</td></tr><tr><td>2016/17 City's Cash Provision for New Schemes***</td><td>£50,000</td></tr><tr><td>Total Funding</td><td>£181,700</td></tr></table>		Funds/Sources of Funding	Cost (£)	Staff funding for 10 days	£1,500	Emergency Crash-Deck Scaffold Construction cost (currently funded from Local risk up to 20/01/17, but to be transferred to project costs)	£37,500	On-going Crash-Deck scaffold estimated hire cost (£800 per week to 28/04/17)	£11,200	Scaffold Design Fees	£2,000	Pinnacle Specialist Scaffold Construction Estimate	£70,000	Structural Engineer Fees	£5,000	Stonework Conservation Design Fees	£4,500	Estimated Total <u>to reach the next Gateway</u> **	£131,700*	<u>Funded By:</u>		City Surveyor's Existing Local Risk Budget	£1,500	2016/17 City's Cash Provision for New Schemes	£130,200	2016/17 City's Cash Provision for New Schemes***	£50,000	Total Funding	£181,700
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	<p>* Subject to further technical investigation</p> <p>** Funding to undertake the repair works, currently estimated at £50k, will also be subject to a bid to the Resource Allocation Sub and Policy and Resources Committees from the City's Cash Provision for New Schemes.</p> <p>*** Subject to approval of the Resource Allocation Sub and Policy and Resources Committees</p>
<b>22. On-going revenue implications</b>	Successful completion of repair works will reduce future maintenance and repair works to the Pinnacle stonework.
<b>23. Investment appraisal</b>	Not applicable
<b>24. Procurement strategy/Route to Market</b>	<p>24.1 If structural survey results indicate a simple solution to undertake stonework remedial works or making safe works, costing up to £50k. Then procurement through the Interim Minor Works Framework is proposed.</p> <p>24.2 If however the structural survey indicates that more extensive works are required, then the Gateway 3/4 report would be presented outlining the costs and options.</p>
<b>25. Legal implications</b>	<p>25.1 Listed Building Status</p> <p>25.2 Health and Safety</p>
<b>26. Corporate property implications</b>	<p>26.1 Operational Assets remain in a good safe and statutory compliant condition and;</p> <p>26.2. Operational Assets are fit for purpose and meet service delivery needs;</p>
<b>27. Traffic implications</b>	Access to Guildhall Yard will be controlled, together with general deliveries and any activities taking place in the Yard.
<b>28. Sustainability and energy implications</b>	Specialist structural engineer advice is required to in order to meet sustainability and energy implications.
<b>29. IS implications</b>	Nil
<b>30. Equality Impact Assessment</b>	An equality impact assessment will be undertaken

### Contact

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