

DECISION-MAKER:	Cabinet Council
SUBJECT:	River Itchen Flood Alleviation Scheme
DATE OF DECISION:	15 November 2021 17 November 2021
REPORT OF:	Councillor Galton Cabinet Member for Environment

CONTACT DETAILS			
Executive Director	Title:	Executive Director of Place	
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STATEMENT OF CONFIDENTIALITY

Not Applicable.

BRIEF SUMMARY

Currently 153 homes and 288 businesses are at risk of flooding on the west bank of the River Itchen. Southampton City Council (SCC) has an opportunity to better protect homes and businesses and support future regeneration opportunities by reducing flood risk through the delivery of the River Itchen Flood Alleviation Scheme (RIFAS); a partnership project between the Environment Agency (leading the design and construction) and SCC (leading the communications, investment and supporting the delivery). Approval is sought from Members on the leading option, a mix of setback and frontline flood defences, and £3M Community Infrastructure Levy (CIL) investment in the scheme.

The leading option identifies Drivers Wharf as a viable setback defence. SCC owns approximately 45% of the land area, which includes part of the existing quay wall that is in a failing state, and therefore has an opportunity to invest in Drivers Wharf now to deliver a frontline defence, which will reduce flood risk to the whole site and eliminate the requirement for a 2nd scheme within the next 10 years. Approval is sought from Members to invest £7.2M CIL (additional cost required to upgrade to a frontline defence, from a setback, at Drivers Wharf) as it offers efficiencies through design and delivery as part of the RIFAS. If not approved, the RIFAS will continue as setback on this site, and SCC will need to address the quay wall later as a separate scheme.

RECOMMENDATIONS FOR CABINET

	(i)	Notes and recommends to Council the option; a mix of setback and frontline flood defences.
	(ii)	Notes this option involves a contribution of £3M from the Council to secure scheme funding of £31.5M from a Flood and Coastal Erosion Risk Management (FCERM) grant-in-aid (GiA) external grant.
	(iii)	Notes and recommends to Council the approval of the alignment on Drivers Wharf as a frontline.
	(iv)	Notes this option involves a further contribution of £7.2M from the Council, bringing the total contribution to £10.2M, to be funded from CIL in full.

RECOMMENDATIONS FOR COUNCIL

	(i)	To approve the addition of £10.2M to the Growth capital programme as a contribution to the flood alleviation scheme which will be delivered by the Environment Agency. The £10.2M will be funded from Strategic CIL developer contributions; the Investment Strategy, to be delivered as part of the Outline Business Case in Spring 2022, will profile when the investment will be required (by financial year) during the project. The profile will be presented as part of the Capital Programme in February 2022 for capital programme budget setting.
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	(ii)	Agrees that the addition of £10.2M to the Growth Programme is subject to approval to spend. Approval to spend will be sought once the final project and its costings are agreed with the Environment Agency following the submission of the final Outline Business Case (likely to be in Spring 2022).
REASONS FOR REPORT RECOMMENDATIONS		
1.		Current flood risk to 153 homes, 288 businesses, short sections of mainline railway, parts of the A3024 Northam Road, and various critical infrastructure sites (electrical substations, pumping stations). By 2120, the flood risk increases to 1,167 homes and 1,033 businesses, with potential flood depths of up to 1.8m.
2.		Better protection to Northam Estate, a large SCC housing stock and community within 10% most deprived areas in England.
3.		Improve the opportunity for regeneration by reducing flood risk to the area, without precluding development of waterside sites in the future.
4.		Replacement of SCC owned quay wall at Drivers Wharf required within 10 years.
ALTERNATIVE OPTIONS CONSIDERED AND REJECTED		
5.		Do Nothing (£0) – no intervention. Rejected as leaves homes (including SCC Housing stocks) and businesses exposed to present-day flood risk. Drivers Wharf quay wall at risk of failure within 10 years.
6.		Full setback (£27.1M) – a raised wall with an alignment taking the shortest viable route across the scheme area. Rejected as it leaves large areas at risk of flooding. Drivers Wharf quay wall at risk of failure within 10 years.
7.		Full frontline (£122.9M) – new raised wall (steel sheet piles) along the length of the riverbank. Rejected as unaffordable.
DETAIL (Including consultation carried out)		
8.		There is a history of flooding events within the scheme area. Recent recorded events include 1999, 2005, 2008/9 and 2014. Flooding, recorded on 14 February 2014, damaged vehicles and impacted businesses, roads and footways. It is believed that many more incidents of flooding have historically been experienced but not recorded due to the predominately private ownership in the area.
9.		The scheme seeks to install flood risk management infrastructure to reduce the risk of tidal flooding along the west bank of the River Itchen – a 3.6km stretch from Mount Pleasant Industrial Estate to the Southampton Water Activities Centre. The frontage is heavily urbanised and dominated by a variety of commercial businesses.
10.		<p>A timeline of the RIFAS programme to date:</p> <p>November 2012 – The Southampton Coastal Flood and Erosion Risk Management Strategy identified the west bank of the River Itchen as a priority area for intervention due to the high flood risk.</p> <p>2014-2015 – The RIFAS Preliminary Study identified two options: a frontline and setback defence.</p> <p>2015-2016 – The RIFAS Outline Business Case determined the frontline defence as the preferred option.</p> <p>February 2016 – At a Cabinet meeting, it was recorded that, ‘Two options have been identified, A Front Route Option and a Back Option. The Front Route Option was recommended and agreed as the preferred option’.</p> <p>June 2017 – Planning Permission approved for the RIFAS Front Route Option with conditions.</p> <p>2017 – Cost review of Front Route Option by Balfour Beatty and the Environment Agency. Costs escalated from ~£40M to ~£80M. The RIFAS stopped due to the Front Route Option being unaffordable and a lack of resource to deliver.</p> <p>February 2018 - At Council meeting it was recorded that, ‘Due to the large scale of the project, work still ongoing to assess potential additional external funds, alongside alternative proposals should funding not be secured’.</p>

	<p>May 2019 – Partnership arrangement agreed between SCC and the Environment Agency to deliver the RIFAS.</p> <p>2019-2022 – Joint Project Team (SCC, the Environment Agency and consultants and contractors) progressing the scheme through option development to Outline Business Case submission in Spring 2022.</p> <p>2019 and 2020 – Consultation workshops with internal SCC departments to ensure that the scheme aligns, as far as possible, with other council aspirations, plans and strategies, and to consider placemaking opportunities.</p> <p>2021 – Stakeholder engagement took place with landowners and businesses that may be impacted by the scheme (presenting all options).</p> <p>September – November 2021 – Papers and Outline Business Cases (OBCs) have been presented at SCC Governance forums and the recommendations for the preferred scheme option, Drivers Wharf frontline alignment and CIL investment were supported at Place Leadership Team, Change Authority Board, Capital Review Group and by the Cabinet Members for Environment, Growth and Finance and Capital Assets. Leader briefing arranged for 25/10/21.</p>
11.	<p><u>Advantages of the leading scheme option:</u></p> <p>Affordable – the leading option is affordable with Grant-in-Aid.</p> <p>Reduces flood risk – better protects all existing homes, including the Northam Estate which is a large SCC Housing stock.</p> <p>Environment – significantly less encroachment into the Itchen Estuary which is a designated Special Protection Area (SPA).</p> <p>Carbon – significantly lower carbon footprint, when compared to frontline, meeting the aspirations of the Southampton Green City Plan (2020) to reduce carbon from SCC schemes.</p> <p>Aligns to the current Local Plan (2012) – supports delivery of the mixed-use frontage as set out within the Local Plan and City Centre Master Plan (2013). These plans note the need for strategic flood defences to unlock development potential in a high-risk flood zone.</p> <p>Regeneration (area wide) – reduction in flood risk promotes development in all areas benefiting from the defence.</p> <p>Regeneration (development and access) – setback is more adaptable to future waterside land use; more flexibility in matching frontline infrastructure to a future land use, providing opportunity for enhanced public realm and waterside access.</p>
12.	<p><u>Disadvantages of the leading scheme option:</u></p> <p>Remaining risk – approximately 30 businesses with land or buildings remaining riverside of the defence and at risk of flooding. Most are ‘water compatible’ and likely to recover quickly following a flood event.</p> <p>Wall heights – vary between 1.4 - 1.8m depending on current land heights. Setback areas will help screen industrial areas, but frontline areas may limit waterside access and public realm.</p> <p>Flood gates – operation and maintenance of gates will be considered once outline design is complete and a total requirement for gates is assessed. Flood gates are a feature in both frontline and setback alignments.</p>
13.	<p><u>Advantages of frontline alignment at Drivers Wharf:</u></p> <p>Reduces liabilities that could arise from a collapse or breach of the existing quay wall – health and safety, damages and contamination of a Special Protection Area (SPA). Outline design for a frontline flood defence is included in the current outline design work for the OBC as part of the RIFAS.</p> <p>Cost savings – addressing flood risk and quay wall replacement (current structure is failing) with delivery as a single scheme, generating efficiencies with procurement, staff resources and less compensation to land users for disruption as single scheme.</p> <p>Flood risk reduction to maximum land area – improving viability for regeneration of SCC and third-party land interests in the future (noting other constraints on this site</p>

	including contamination, pollution and highway capacity issues).																						
14.	<p><u>Disadvantages of frontline alignment at Drivers Wharf:</u></p> <p>Some disruption – to waterside businesses during construction phase (but less than delivery of two schemes if a setback alignment is designed at this location).</p> <p>Frontline defence acceptance – one stakeholder on site has expressed concern during recent stakeholder engagement.</p> <p>Frontline wall heights in region of 1.7m – may reduce access to waterside in future land uses, as well as operations of existing land uses.</p>																						
RESOURCE IMPLICATIONS																							
<u>Revenue</u>																							
15.	The scheme is being delivered by the Environment Agency (design and construction), with SCC staff leading the communications, investment and supporting the delivery. The revenue resource required from SCC to deliver the scheme has been identified as 1.72 FTE across eight members of staff and is included in the Flood Risk Management team's existing. It is expected that the resource requirement will reduce for the construction delivery stage, which commences in 2024 (due for completion in 2027).																						
<u>Capital</u>																							
16.	The capital investment needed to deliver the leading scheme option is estimated to be £32M (which includes Drivers Wharf as a setback alignment). This will be an Environment Agency led scheme who will the majority of the scheme cost. SCC is expected to contribute £3.0M (which unlocks £31.5M FCERM GiA external grant funding). An additional £7.2M is required (difference between cost of setback and frontline) to change the alignment of the defence at Drivers Wharf and enable the replacement of the failing SCC owned quay wall. The total of £10.2M will be funded by Strategic CIL developer contributions.																						
17.	The anticipated phasing of the council's contribution is shown in Appendix 2, although this is provisional at an early stage of the project. The protracted timeframes will allow for future CIL proceeds to assist funding this project, so it is not expected to mean that current CIL funds held and 'banked' already have to be assigned.																						
18.	<p>Details of the overall scheme costs and investment are set out in the table below:</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">Cost</th> <th style="text-align: right;">£M</th> </tr> </thead> <tbody> <tr> <td>Main Scheme (Env Agency)</td> <td style="text-align: right;">32.00</td> </tr> <tr> <td>Drivers Wharf</td> <td style="text-align: right;">7.20</td> </tr> <tr> <td>Contingency</td> <td style="text-align: right;">3.50</td> </tr> <tr> <td>Total Cost</td> <td style="text-align: right;">42.70</td> </tr> <tr> <td colspan="2"><hr/></td> </tr> <tr> <th style="text-align: left;">Investment</th> <th style="text-align: right;">£M</th> </tr> <tr> <td>FCERM GiA</td> <td style="text-align: right;">-31.50</td> </tr> <tr> <td>CIL (SCC contribution)</td> <td style="text-align: right;">-10.20</td> </tr> <tr> <td>Ext. Contributions</td> <td style="text-align: right;">-1.00</td> </tr> <tr> <td>Total Funding</td> <td style="text-align: right;">-42.70</td> </tr> </tbody> </table>	Cost	£M	Main Scheme (Env Agency)	32.00	Drivers Wharf	7.20	Contingency	3.50	Total Cost	42.70	<hr/>		Investment	£M	FCERM GiA	-31.50	CIL (SCC contribution)	-10.20	Ext. Contributions	-1.00	Total Funding	-42.70
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19.	Most of the Environment Agency funding will be secured through FCERM GiA. The maximum FCERM GiA available for the recommended scheme is £31.5M, which is capped by the number of properties protected and damages avoided over the lifetime of the scheme. This funding is only accessible if the whole scheme cost can be secured and can only be used for the viable scheme design and delivery.																						
20.	The SCC contribution to the scheme cost is the target for contributions recommended by the Department for Environment Food and Rural Affairs (DEFRA) and the excess (above scheme cost) can be used to contribute towards public realm and other green initiatives associated within the overall scheme.																						

21.	<p>The CIL contribution will be applied to the scheme throughout the delivery period of 2021/22 – 2027/28 in a way that best fits the Council’s capital programme and will be specified in the project’s Investment Strategy and agreed as part of the Full Business Case (FBC) to be delivered in 2024. The current forecast for the SCC contribution is profiled as follows by financial year:</p> <table border="1" data-bbox="318 281 1352 537"> <thead> <tr> <th data-bbox="318 281 500 344">SCC contribution</th> <th data-bbox="508 281 613 344">2023/24 £M</th> <th data-bbox="621 281 743 344">2024/25 £M</th> <th data-bbox="751 281 873 344">2025/26 £M</th> <th data-bbox="881 281 1003 344">2026/27 £M</th> <th data-bbox="1011 281 1133 344">2027/28 £M</th> <th data-bbox="1141 281 1263 344">2027/28 £M</th> <th data-bbox="1271 281 1352 344">Total £M</th> </tr> </thead> <tbody> <tr> <td data-bbox="318 344 500 407">SCC contribution</td> <td data-bbox="508 344 613 407">0.5</td> <td data-bbox="621 344 743 407">4.0</td> <td data-bbox="751 344 873 407">4.2</td> <td data-bbox="881 344 1003 407">0.5</td> <td data-bbox="1011 344 1133 407">0.5</td> <td data-bbox="1141 344 1263 407">0.5</td> <td data-bbox="1271 344 1352 407">10.2</td> </tr> <tr> <td data-bbox="318 407 500 501">Funded by: draw from CIL</td> <td data-bbox="508 407 613 501">0.5</td> <td data-bbox="621 407 743 501">4.0</td> <td data-bbox="751 407 873 501">4.2</td> <td data-bbox="881 407 1003 501">0.5</td> <td data-bbox="1011 407 1133 501">0.5</td> <td data-bbox="1141 407 1263 501">0.5</td> <td data-bbox="1271 407 1352 501">10.2</td> </tr> <tr> <td data-bbox="318 501 500 537">Net</td> <td data-bbox="508 501 613 537">0</td> <td data-bbox="621 501 743 537">0</td> <td data-bbox="751 501 873 537">0</td> <td data-bbox="881 501 1003 537">0</td> <td data-bbox="1011 501 1133 537">0</td> <td data-bbox="1141 501 1263 537">0</td> <td data-bbox="1271 501 1352 537">0</td> </tr> </tbody> </table>	SCC contribution	2023/24 £M	2024/25 £M	2025/26 £M	2026/27 £M	2027/28 £M	2027/28 £M	Total £M	SCC contribution	0.5	4.0	4.2	0.5	0.5	0.5	10.2	Funded by: draw from CIL	0.5	4.0	4.2	0.5	0.5	0.5	10.2	Net	0	0	0	0	0	0	0
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Net	0	0	0	0	0	0	0																										
22.	<p>Other sources of external funding are being sought, which, if successful, will be swapped to reduce the need for the £10.2M contribution to be funded solely from CIL contributions. For example, £1M is currently being secured through Local Levy from the Southern Regional Flood and Coastal Committee (SRFCC) and the Department of Education.</p>																																
Property/ Other																																	
23.	<p>Reduction in current and longer-term flood risk to private homes and businesses, four schools and SCC owned buildings, including Northam Community Centre, the units at Paget Street and housing stock within the Northam Estate.</p>																																
24.	<p>The RIFAS may increase the viability of future regeneration on Council owned land at Drivers Wharf as it reduces the constraint of flood risk. Further improvement to viability will be gained by combining the replacement quay wall with a frontline defence.</p>																																
25.	<p>The RIFAS does not preclude future regeneration opportunities.</p>																																
LEGAL IMPLICATIONS																																	
<u>Statutory power to undertake proposals in the report</u>																																	
26.	<p>The Environment Agency will lead scheme delivery in accordance with the Environment Agency permissive powers assigned under the Land Drainage Act 1991.</p>																																
27.	<p>Statutory powers to undertake proposals to manage flood and erosion risks are held by SCC under the Coast Protection Act 1949, the Land Drainage Act 1991 and the Flood and Water Management Act 2010, although these are permissive powers only. Where necessary, and to facilitate delivery of the scheme by the Environment Agency, they can be appointed as the Council’s agents to deliver in accordance with the Council’s discretionary legal powers.</p>																																
28.	<p>Planning permission together with any other regulatory consents will be required prior to construction (commencement 2024).</p>																																
<u>Other Legal Implications</u>																																	
29.	<p>An Environmental Impact Assessment to minimise the impact to the environment will be carried out as detailed design progresses.</p>																																
30.	<p>An Equality and Safety Impact Assessment under the Equalities Act 2010 has been carried out. Most person types will not be negatively impacted by the RIFAS, including age, gender reassignment, marriage and civil partnership, race, religion or belief, sex, sexual orientation, and those affected by poverty. Negative issues and impacts include; approximately 30 businesses with land or buildings will remain waterside and therefore at risk of flooding – most are ‘water compatible’ and likely to recover quickly following a flood event and the project will aim to support the businesses with alternative flood risk mitigation measures; some disruption to public access areas which may impact people with a disability, e.g., footpaths during construction – to be mitigated where possible with temporary or permanent alternatives; flood gates required for the scheme may negatively impact businesses that remain waterside in the event of a flood event – flood gates will be designed out where possible, evacuation plans will be produced, and a flood warning system will provide early notification to evacuate; increased carbon during construction</p>																																

	which may impact health and wellbeing – materials and construction techniques will be sought to minimise impact; and, disruption to businesses during construction – will be minimised by ongoing stakeholder engagement.
RISK MANAGEMENT IMPLICATIONS	
31.	The project uses a Risk Register to identify, monitor and manage any high, medium and low project risks from design through to construction.
32.	Financial – scheme costs include a risk allowance, however there may be increases in costs identified following completion of outline and subsequent detailed design.
33.	Stakeholder – approximately 30 businesses with land or buildings are likely to remain waterside of the defence. A majority of these are ‘water-compatible’ operations and evacuation plans will be produced as a project deliverable.
34.	Reputational – should SCC decide not to proceed with the RIFAS, there may be reputational risks associated with future flood events.
35.	Asset maintenance and flood gate operation – a Management and Maintenance Plan will be developed during detailed design as part of the FBC. This will identify any responsibilities of future flood gate maintenance and operation.
36.	Drivers Wharf asset – if not addressed through the RIFAS, SCC will be responsible for managing the replacement quay wall separately.
POLICY FRAMEWORK IMPLICATIONS	
37.	The RIFAS will deliver the first phase of flood defence infrastructure to Southampton’s highest flood risk area as set out within the Southampton FCERM Strategy (2012), and Local Flood Risk Management Strategy (2014).
38.	The RIFAS contributes to the delivery of the Southampton City of Opportunity Corporate Plan (2021-2025) by better protecting homes, businesses and communities from the risk of flooding and climate change, while improving longer term regeneration opportunities.
39.	The RIFAS will contribute towards the delivery of the Green City Plan 2030 by improving the city’s resilience against flooding, climate change and sea level rise over the next 100 years.

KEY DECISION?	Yes
WARDS/ COMMUNITIES AFFECTED:	Bevois Bargate Northam Estate
SUPPORTING DOCUMENTATION	
Appendices	
1.	RIFAS: Supplementary Figures
2.	RIFAS Indicative Spend Profile Proposal
Documents In Members’ Rooms	
1.	Link to Southampton Coastal Flood and Erosion Risk Management Strategy
Equality Impact Assessment	
Do the implications/ subject of the report require an Equality and Safety Impact Assessment (ESIA) to be carried out.	Yes
Data Protection Impact Assessment	
Do the implications/ subject of the report require a Data Protection Impact Assessment (DPIA) to be carried out.	No
Other Background Documents	
Other Background documents available for inspection at:	
Title of Background Paper(s)	Relevant Paragraph of the Access to Information Procedure Rules/ Schedule 12A allowing document to be Exempt/Confidential (if applicable)
1.	

