

# CAPITAL INVESTMENT BUSINESS CASE

## Big 4 Decarbonisation Project



### EXECUTIVE SUMMARY

*The Executive Summary is a short summary of the Business Case and should be the last section you complete, this will enable you to extract or only the key facts from relevant sections i.e. 'project on a page'. The summary is a 'snapshot' of the business case which will need to tell the story and sell the proposal.*

Following an approved Mandate the four sites chosen for Public Sector Decarbonisation Scheme (PSDS) grant and the proposed measures are as follows:

1. **Guildhall Cluster:** High temperature Air Source Heat Pump located at the Guildhall with district heating connections to Council House, Law Courts and Midland House. Solar PV array on Guildhall and Midland to help electrical demand of HP.
2. **Ballard House:** High temperature ASHP & controls with insulation of the 'ceiling' in the basement and external roof insulation.
3. **Elliot Terrace:** High temperature ASHP, located on the roof, with draught proofing and secondary glazing. Solar PV array to help electrical demand of HP.
4. **Poole Farm:** ASHP

These four sites are among the top carbon emitters of PCC's corporate estate.

PCC has been able to apply to the PSDS fund quickly, as significant work has already been completed showing that the projects are technically feasible but would benefit from grant funding. Technical de-risking, further techno-economic modelling has been completed (funded by Salix Skills grant) and the design developed to a point that enables a planning and listed building consent applications to be submitted and prepare for a design and build tender.

It is proposed that, should the application for grant funding be successful, that PCC accept the grant and approve the additional funding required from S106 and Ballard refurbishment / maintenance.

The project will increase Corporate Landlord revenue marginally by about 11% in year 1 and reduce to only 4% increase by year 20. For SP&I a saving of £456 in year 1 results, increasing to £629 by year 20.

The revenue pressure is balanced against the significant carbon reduction (almost 5,000 tonnes over the life) achieved and the related contribution to PCCs adopted Corporate Carbon Reduction Plan. Without such interventions, which capitalise on a lower carbon grid connection for electricity, it is unlikely PCC would be able to deliver its pledges.

The overall project cost is £3,135,555, with 74% covered by the PSDS grant, 13% by S106, 7% by PCC (Ballard roof and basement) and the rest (6% for PM/QS/Principle Designer and commercialisation) by Salix Project Delivery grant. A total of 93% is grant funded & S106 and the rest is already in the capital programme (Ballard improvement) or revenue budgets (maintenance).

PSDS condition requires that contracts are signed by the end of March 2021 and the projects are completed by the end of September 2021.

The main constraint to deliver this programme is extremely short deadlines prescribed by funding terms to source contracts. Procurement and project team have packaged requirements into four separate elements in the programme:

1. Solar element – utilise the Council’s current contract for Solar Panels. The original contract shall be varied to include this additional provision.
2. Insulation of Roof and Basement – use the existing Hard FM contract with JNE for General Building Repairs. JNE will be instructed to deliver best value through obtaining further quotation.
3. Secondary Glazing – a RFQ for low value procurements shall be carried out in line with the Council Contracts Standing Orders.
4. M&E and Supply and Installation of Air Source Heat Pumps – this is a brand new provision of a medium to high value (circa £2m - £3m), which the Council does not have an appropriate contract for. Furthermore, no appropriate national frameworks have been identified. The Council will invite 3 to 5 suppliers to bid for this opportunity using an appropriate tender portal.

The project team is considering splitting this contract to two Lots:

Lot 1 – For industrial heat pumps

Lot 2 – for smaller domestic heat pumps

The Guildhall Cluster will also facilitate the pending Civic Centre redevelopment and allow the majority of its heat load to be served by a low carbon heat source from day one.

Heat networks are already a key component of the City’s strategy (**Plymouth Plan Policy GR07**) as well as PCCs adopted Climate Emergency Action Plan. These policies are also reflected in the submitted **Plymouth and South West Devon Joint Local Plan (policy DEV 34)**

#### **Key risks - Mitigations:**

- Limited availability of heat pumps due to high market demand thereby increasing the tender period and supplier lead times - Regular contact with potential suppliers, share PCC details of the delivery plan to choose the most appropriate contractors/suppliers.
- The time available to undertake the required procurements and deliver the projects of different work packages of varying complexity - Single point of contact in the procurement team to help minimise the time, existing frameworks and local suppliers will be used, work packages structured to maximise value for money opportunities and provide flexibility.
- Building regulation approval – In discussion with Building Control Team.
- Pipework route to Midland House may not be feasible (across land owned by the Law Courts) – PCC sells power to Law Courts and there is support for proposed heat network project, easement negotiations are underway, there are no major services, an alternative route if not feasible and possible to commission the heat pump and delay the connection to Midland House.
- Return temperatures to the heat pump are too high and incompatible with the heat pump operation - Temperature data is being collected through the winter to help with detailed design, threshold return temperature should be able to be achieved with weather compensation, boilers retained to provide heat should the heat pump fail, . Phase 2 (Civic Centre) will help to reduce return temperatures.
- Planning consent not be granted within timescale - Planning applications were submitted in early November and December, consent should be granted in January 2021.
- A suitable location cannot be found for the Ballard evaporators – Structural surveys of the roof are complete, flexible height of roof cradles can accommodate the evaporator, roof repairs may cause delay.

#### **Outcomes and Benefits**

- Availability of grant funding
- Offset future carbon, maintenance and accommodation costs of occupied PCC buildings (increase longevity and reduce dilapidation)

- Carbon savings of nearly 5,000 tonnes
- Comfortable PCC accommodation
- Cleaner air (reduction of gas emissions)

Planning have been consulted, applications submitted with decisions expected in January 2021.

## SECTION I: PROJECT DETAIL

<b>Project Value (indicate capital or revenue)</b>	The total project value is <b>£3.136m</b>	<b>Contingency (show as £ and % of project value)</b>	Of this <b>£115k</b> is contingency (4%)
<b>Programme</b>	Low Carbon	<b>Directorate</b>	Place
<b>Portfolio Holder</b>	Cllr Sue Dann, Environment and Street Scene	<b>Service Director</b>	Paul Barnard (Strategic Planning & Infrastructure)
<b>Senior Responsible Officer (client)</b>	Kat Deeney	<b>Project Manager</b>	Alastair Gets
<b>Address and Post Code</b>	Various	<b>Ward</b>	Citywide

**Current Situation:** *(Provide a brief, concise paragraph outlining the current situation and explain the current business need, problem, opportunity or change of circumstances that needs to be resolved)*

The four sites chosen for the first tranche of decarbonisation works to be grant funded by the Public Sector Decarbonisation Scheme (PSDS) are near 'shovel ready'. Detailed feasibility work has been carried out and a mandate for the 'Big 4' was approved in October.

The four sites are as follows:

1. **Guildhall Cluster:** Guildhall, Council House, Law courts, Midland House – Part of the Civic DH project
2. **Ballard House**
3. **Elliot Terrace**
4. **Poole Farm**

These four sites are among the top carbon emitters of PCC's corporate estate.

Decarbonisation of heating and fabric improvement can be challenging due to long paybacks and revenue pressure. Replacing cheap mains gas heating to meet PCC's carbon targets, with low carbon alternatives, currently electric heat pumps (HP), can result in increased monthly costs due to the current higher cost of electricity compared to gas.

Using the Salix administered Government Public Sector Decarbonisation grant for a high percentage of the capital costs, reduces this risk significantly. Combining HPs with other measures, such as building fabric improvements, can help increase the thermal efficiency of the buildings and reduce heating needs which in turn reduce revenue pressure of the HP electrical costs. Other measures such as solar PV and CHP also help to provide lower cost, or free electricity, to reduce the running costs further.

There is a possibility that Renewable Heat Incentive (RHI) funding could be secured for the Guildhall Cluster and this could have a positive impact on the project economics. However, an application introduces other uncertainties, for example meeting RHI eligibility criteria and it may have programme implications. It would also mean losing the grant on the heat pump element of the works and the benefits could therefore be marginal. While RHI will be investigated for the

purposes of the BC, it is excluded, as it complicates the financial assessment. Moreover, the Government's cap on RHI could be reached at any time in the near future.

PCC has been able to apply to the PSDS fund quickly, as significant work has already been completed on the first three sites over the past year, using grant funding from BEIS (HNDU), EIB (ELENA), ERDF-Interreg (SUNPeople). Feasibility work has shown that the projects are technically feasible and financially challenged. However, work has progressed to the technical de-risking stage, further techno-economic modelling has been completed and the design developed to a point that enables a planning and listed building consent applications to be submitted. The Guildhall, Council House and Poole Farm applications were submitted in early November.

An initial grant from Salix for £85k has been approved for the final development and de-risking of the first three sites (confirming siting and structural capacity for the heat pumps installations, planning applications, noise surveys and final QS input into project capital costs). It will also fund the technical and financial feasibility of the fourth site (which is also technically feasible). This work has enabled PCC to submit a robust capital grant application to Salix.

**Proposal:** *(Provide a brief, concise paragraph outlining your scheme and explain how the business proposal will address the current situation above or take advantage of the business opportunity) and (What would happen if we didn't proceed with this scheme?)*

It is proposed that, should the application for grant funding be successful (submitted to Salix under the PSDS on 23 November 2020 with approval scheduled by 11 December 2020), that PCC accept the grant and approve the additional funding required.

The PSDS grant application covers the following:

- **Guildhall Cluster:** High temperature Air Source Heat Pump located at the Guildhall with district heating connections to Council House, Law Courts and Midland House. Solar PV array on Guildhall and Midland to help electrical demand of HP.
- **Ballard House:** High temperature ASHP & controls with insulation of the 'ceiling' in the basement and external roof insulation.
- **Elliot Terrace:** High temperature ASHP, located on the roof, with draught proofing and secondary glazing. Solar PV array to help electrical demand of HP.
- **Poole Farm:** ASHP

In addition to the grant funding, there are several additional sources of funding contributing to the overall budget:

- £400,000 of Section 106 funds has been secured to contribute to the district heat connection to Midland House and a Combined Heat and Power (CHP) unit at the Guildhall. The CHP will generate electricity, which will help reduce grid electricity running costs for operating the heat pump. The connection to Midland House helps achieve the PSDS limit of £500 of capex per tonne of carbon saved. The connection to the Plymouth Combined Courts, adjacent to the Guildhall, is also included, following recent discussions with the HMCTS (Ministry of Justice) as it also wishes to decarbonise its estate. PCC currently supply the Courts with electricity through a private wire network and this underpins the opportunity for a low carbon heat connection.
- For Ballard House, roof and basement repairs and insulation are required to remain within the aggregated £500/tCO<sub>2</sub>e saved over the life of the measures. To achieve this, only £186,500 of grant money could be applied for to contribute towards the overall cost of this measure. A balance of £214k is therefore required from PCC to make up the balance. Repairs to the roof and basement at Ballard House were part of a refurbishment budget (~£67k and ~£42k respectively). Contingency of approx. £100k may also be available from the Lorne Stewart contract for the refurbishment (totalling some £200k). Finally FM will contribute the balance. The roof repair is on the critical path because another

decarbonisation project, roof top solar PV, is planned and the ASHP evaporators of this project are to be placed on the roof.

Following optimisation of the economic model, the revenue implications are that the overall cost of providing heat across the four projects, currently some £110,861, will increase marginally by about 11%. However, over the lifetime of the heat pump and PV installations, namely 20 years, the project operations will only cost 4% extra.

Installation of the ASHP at Poole Farm (SP&I service area) results in a saving of £456 in year 1 and increases to £629 by year 20.

Installation of the ASHPs and measures at the Guildhall Cluster, Ballard House & Elliot Terrace (HR/FM service area) results in a £13,097 increase in costs in year 1 which reduces to a £4,974 increase by year 20.

This initial revenue risk should be balanced against the significant carbon reduction achieved and the related contribution to PCCs adopted Corporate Carbon Reduction Plan and PCC's pledge to be net-zero carbon by 2030. Without such interventions, which capitalise on a lower carbon grid connection for electricity, it is unlikely PCC would be able to deliver its pledges.

Overall, the measures proposed will result in almost 5,000 tonnes of carbon savings over the life of the measures.

A swift BC approval is needed to secure the use of this short term funding, to meet its CCRP and CEAP, especially as further funding is uncertain.

The overall project cost is £3,135,555, with 74% covered by the PSDS grant, 13% by S106, 7% by PCC (Ballard roof and basement) and the rest (6% for PM/QS/Principle Designer and commercialisation) by Salix Project Delivery grant. A total of 93% is grant funded and S106 and the rest is already in the capital programme (Ballard improvement) or revenue budgets (maintenance).

PSDS condition requires that contracts are signed by the end of March 2021 and the projects are completed by the end of September 2021.

The main constraint to deliver this programme is extremely short deadlines prescribed by funding terms to source contracts compliantly. In the interest of time and efficiency, Procurement and project team packaged requirements into four separate elements in the programme. The most efficient and appropriate sourcing strategies have been allocated to individual elements of the program. All for elements and recommended sourcing strategies are listed below:

5. Solar element – This is a low value requirement.  
**Recommendation:** utilise the Council's current contract for Solar Panels. The original contract shall be varied to include this additional provision. This provision shall be subject to terms and conditions of the original contract. Estimated value for this provision is circa £50,000
6. Insulation of Roof and Basement – This is a low to medium value requirement, under Works contract.  
**Recommendation:** use the existing Hard FM contract with JNE for General Building Repairs. JNE will be instructed to deliver best value through obtaining further quotation. This provision shall be subject to terms and conditions of the original contract. Estimated value of this provision is circa £400,000
7. Secondary Glazing – This is a low value requirement. The Council does not have appropriate contract to use for this requirement.  
**Recommendation:** A RFQ for low value procurements shall be carried out in line with the Council Contracts Standing Orders. Three suppliers will be invited to take part in the RFQ using an appropriate tender portal. Estimated value of this provision is circa £60,000. It is proposed that the latest form of the JCT Contract be used which is an industry

acceptable contract for delivering schemes such as this. Where required, external legal support should be sourced to advise on the detail of the contract and variations to the standard form.

8. M&E and Supply and Installation of Air Source Heat Pumps – this is a brand new provision of a medium to high value (circa £2m - £3m), which the Council does not have an appropriate contract for. Furthermore, no appropriate national frameworks have been identified.

**Recommendation:** Therefore, the recommended option is to carry out a PCC's own tender, which is compliant with the Council Contracts Standing Orders. The Council will invite 3 to 5 suppliers to bid for this opportunity using an appropriate tender portal.

The project team is considering splitting this contract to two Lots:

- Lot 1 – For industrial heat pumps
- Lot 2 – for smaller domestic heat pumps

The decision, regarding the split into Lots, shall be taken by project team following pre-tender market engagement with potential suppliers.

It is proposed that the latest form of the JCT Contract be used which is an industry acceptable contract for delivering schemes such as this. Alternative advice of external consultants will be considered. Where required, external legal support should be sourced to advise on the detail of the contract and variations to the standard form.

The Salix grant application was submitted on 23 November for £2,325,050

The Guildhall Cluster will also facilitate the Civic Centre redevelopment and allow the majority of its heat load to be served by a low carbon heat source from day one. It is anticipated that this will come forward for completion later in 2022 or early 2023. The significant additional heat load will increase the revenue of the scheme, but also reduce the carbon emissions of this redevelopment by up to 30%.

Heat networks are already a key component of the City's strategy (**Plymouth Plan Policy GR07**) which outlines a target to halve 2005 levels of carbon emissions by 2034 through the deployment of low carbon and renewable energy and specifically district energy networks and smart energy networks, as well as PCCs adopted Climate Emergency Action Plan. These policies are also reflected in the submitted **Plymouth and South West Devon Joint Local Plan (policy DEV 34)**.

Strategic Case:	
<b>Which Corporate Plan priorities does this project deliver?</b>	a green sustainable city that cares about the environment reduced health inequalities people feel safe in Plymouth
<b>Explain how the project delivers or supports delivery of Joint Local Plan/Plymouth Plan Policies (include policy references)</b>	This project helps deliver: <b>DEV32</b> – Delivering low carbon development by reducing the energy load <b>DEV33</b> – Renewable and low carbon energy (including heat) through delivering low carbon energy that will be used in Plymouth to help towards reducing carbon emissions. This project will have minimum impact on the landscape of Plymouth as the installations will be within existing buildings.

<b>Who are the key customers and Stakeholders</b>	PCC HMCTS (MoJ) Plymouth residents Users of facilities	<b>Which Partners are you working with</b>	
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## SECTION 2: PROJECT RISK, OUTCOMES AND BENEFITS

**Risk Register:** The Risk Register/Risk Log is a master document created during the early stages of a project. It includes information about each identified risk, level of risk, who owns it and what measures are in place to mitigate the risks (cut and paste more boxes if required).

<b>Potential Risks Identified</b>		<b>Likelihood</b>	<b>Impact</b>	<b>Overall Rating</b>
<b>Common Risks to all Projects</b>				
<ol style="list-style-type: none"> <li>1. Guildhall, Council House, Midland House and Law Courts</li> <li>2. Ballard House</li> <li>3. Elliot Terrace</li> <li>4. Poole Farm</li> </ol>				
<b>Risk</b>	Limited availability of heat pumps due to high market demand thereby increasing the tender period and supplier lead times jeopardising the heat-on dates and completion of the projects by end September 2021.	Medium	High	Medium
<b>Mitigation</b>	Regular contact maintained with potential suppliers, especially of high temperatures heat pumps, e.g. Solid Energy, to understand anticipated constraints and current lead times, to share PCC details of the delivery plan and to enable the Council to choose the most appropriate contractors/suppliers.	Low	Medium	Low
<b>Calculated risk value in £</b> <b>(Extent of financial risk)</b>	£	<b>Risk Owner</b>	PCC Project Team supported by Engineer, Buro Happold	
<b>Risk</b>	The time available to undertake the required procurements and deliver the projects may be insufficient to meet the end September 2021 completion deadline as each project comprises different work packages of varying complexity.	Medium	High	Medium
<b>Mitigation</b>	PCC has a single point of contact in the procurement team for all projects. This will help minimise the time taken to issue and assess tenders and award contracts. Where appropriate, existing frameworks and local suppliers will be used to minimise the tender periods and mobilisation time. Work packages will also be structured to maximise value for money opportunities and provide flexibility in terms of the commencement and completion of each work package.	Low	Medium	Low
<b>Calculated risk value in £</b> <b>(Extent of financial risk)</b>	£	<b>Risk Owner</b>	PCC Project Team	
<b>Risk</b>	Building regulation approval for some elements of the work will be required, for example, for vibration/noise performance of heat pump installations and for glazing and insulation compliance and this could extend the time to completion.	Medium	Medium	Medium

<b>Mitigation</b>	Discussions are currently taking place with the Building Control Team. Depending on the design and procurement progress, responsibility for the approval of some elements may be delegated to the selected contractor/s to minimise potential delays to the programme.	Low	Medium	Low
<b>Calculated risk value in £ (Extent of financial risk)</b>	£	<b>Risk Owner</b>	PCC Project Team supported by PCC Building Control	
<b>Project Specific Risks</b> <b>Guildhall, Council House, Midland House and Law Courts</b>				
<b>Risk</b>	The route to lay pipework to Midland House may not be feasible as it requires access across land owned by the Law Courts.	High	High	High
<b>Mitigation</b>	The Law Courts currently purchases power from PCC via a private wire connection and a dialogue has been established regarding the proposed heat network project. Negotiations for an easement are underway and documentation will be drawn up by the end of the year. Record drawings indicate there are no major services. However, a GPR survey will be carried out to identify an alternative route if the proposed route is not feasible. If permission were delayed, it would be possible to commission the heat pump and delay the connection to Midland House without jeopardising the long term decarbonisation potential of the network.	Medium	Medium	Medium
<b>Calculated risk value in £ (Extent of financial risk)</b>	£	<b>Risk Owner</b>	PCC Project Team supported by the PCC Property Team	
<b>Risk</b>	The return temperatures to the heat pump are too high and incompatible with the heat pump operation.	Medium	High	High
<b>Mitigation</b>	Current system operating temperature data will be collected through the winter to provide the contractor with valuable information for the detailed design. Based on the early appraisal of potential interventions, the design and costing of these secondary control systems should allow the threshold return temperature to be achieved. Staged installation of this element of work would provide early visibility of the return temperatures and will be considered. Boilers are also being retained to provide heat should the heat pump fail. Phase 2 (Civic Centre) will also help to reduce return temperatures significantly.	Medium	Medium	Medium
<b>Calculated risk value in £ (Extent of financial risk)</b>	£	<b>Risk Owner</b>	Engineer – Buro Happold, supported by the PCC Project and Facilities Management Teams	
<b>Risk</b>	Agreement for a heat connection to Law Courts may not be achieved by the target completion date of the end September 2021. Key risk issues that will impact on the delivery of a connection include the commercial arrangements, return temperature and noise considerations.	High	Medium	High



<b>Mitigation</b>	A working dialogue has been established with the Law Courts about the planned installation of a high temperature heat pump in the adjacent Guildhall. This will allow commercial negotiations to take place in early 2021 when the project as received funding and final approval. Potential noise impact has been assessed and forms part of the current planning application. Return temperature analyses will be carried out as part of the detailed design.	Medium	Medium	Medium
<b>Calculated risk value in £ (Extent of financial risk)</b>	£	<b>Risk Owner</b>	PCC Project Team	
<b>Risk</b>	Planning consent will not be granted within the requisite timescale and could impact on the project delivery programme.	Medium	Medium	Medium
<b>Mitigation</b>	Planning applications for both the Guildhall heat pump and the services alterations in the Council House were submitted in early November, together with Poole Farm. Other applications for Elliott Terrace and Ballard House are being prepared for submission on 4 <sup>th</sup> December. Consent should be granted within an eight week period, that is, in January 2021.	Low	Medium	Low
<b>Calculated risk value in £ (Extent of financial risk)</b>	£	<b>Risk Owner</b>	PCC Project Team	
<b>Ballard House</b>				
<b>Risk</b>	Planning consent will not be granted within the requisite timescale and could impact on the delivery programme.	Medium	Medium	Medium
<b>Mitigation</b>	Planning applications will be submitted by the end of November and consent should be granted by the end of January 2021.	Low	Medium	Low
<b>Calculated risk value in £ (Extent of financial risk)</b>	£	<b>Risk Owner</b>	PCC Project Team supported by PCC Planning Team	
<b>Risk</b>	The system temperatures are incompatible with the heat pump.	Medium	High	Medium
<b>Mitigation</b>	Design documentation for the secondary system will be reviewed to establish design conditions and any oversizing of the system to reduce operating temperatures. Weather compensation is specified which should produce compatible temperatures across most of the year. It is understood that the secondary system is compatible with variable temperatures. Staged installation of the work would provide early visibility of the return temperatures and this will be considered. Boilers will be retained to provide heat in the event the heat pump fails.	Low	Medium	Medium
<b>Calculated risk value in £ (Extent of financial risk)</b>	£	<b>Risk Owner</b>	Engineer – Buro Happold, supported by the PCC Project and Facilities Management Teams	
<b>Risk</b>	A suitable location cannot be found for the compressor and evaporators for the heat pump which could jeopardise the programme and delivery of the project.	Medium	High	High

<b>Mitigation</b>	Record drawings have been reviewed for the preferred location of the compressor and the design will accommodate those services identified. However, GPR surveys will be carried out to confirm service locations. If the proposed location proves unsuitable, it will be technically possible to locate the compressor at an alternative location adjacent to the building.  Structural surveys of the building roof for locating the evaporator are underway and will be completed by the end of November. The existing rooftop cradle, used for building access, is flexible in height and can accommodate the proposed evaporator. Some fabric repairs may be required to the roof and may cause delay. If the roof is structurally unsuitable, an alternative location for the evaporators will be investigated in the car park adjacent to the building.	Medium	Medium	Medium
<b>Calculated risk value in £ (Extent of financial risk)</b>	£	<b>Risk Owner</b>	Engineer – Buro Happold, supported by the PCC Project and Facilities Management Teams	
<b>Elliot Terrace</b>				
<b>Risk</b>	Planning consent will not be granted within the requisite timescale and could impact on the delivery programme.	Medium	Medium	Medium
<b>Mitigation</b>	A planning application will be submitted by the end of November. Subject to concluding the on-going positive consultation with Historic England regarding the design of the secondary glazing, consent should be granted by the end of January 2021.	Low	Medium	Low
<b>Calculated risk value in £ (Extent of financial risk)</b>	£	<b>Risk Owner</b>	PCC Project Team supported by PCC Planning Team	
<b>Risk</b>	The system temperatures are incompatible with the heat pump.	Medium	High	Medium
<b>Mitigation</b>	Weather compensation is specified which should produce compatible temperatures across most of the year. It is understood that the secondary system is compatible with variable temperatures. Staged installation of the work would provide early visibility of the return temperatures and this will be considered. Boilers will be retained to provide heat in the event the heat pump fails.	Low	Medium	Medium
<b>Calculated risk value in £ (Extent of financial risk)</b>	£	<b>Risk Owner</b>	Engineer – Buro Happold, supported by the PCC Project and Facilities Management Teams	
<b>Risk</b>	The identified heat pump location is unsuitable.	Medium	High	Medium
<b>Mitigation</b>	Structural surveys have indicated that the proposed location can accommodate the heat pump. Noise monitoring is underway to establish acoustic mitigation measures.	Low	Medium	Medium
<b>Calculated risk value in £ (Extent of financial risk)</b>	£	<b>Risk Owner</b>	Engineer – Buro Happold, supported by the PCC Project	

			and Facilities Management Teams		
<b>Poole Farm</b>					
<b>Risk</b>	Planning consent will not be granted within the requisite timescale and could impact on the delivery programme.		Low	Medium	Low
<b>Mitigation</b>	A planning application was submitted during the second week of November and consent should be granted by the middle of January 2021.		Low	Low	Low
<b>Calculated risk value in £ (Extent of financial risk)</b>	£	<b>Risk Owner</b>	PCC Project Team supported by PCC Planning Team		
<b>Risk</b>			Select value	Select value	Select value
<b>Mitigation</b>			Select value	Select value	Select value
<b>Calculated risk value in £ (Extent of financial risk)</b>	£	<b>Risk Owner</b>			

<b>Outcomes and Benefits</b>	
<b>Financial outcomes and benefits:</b>	<b>Non-financial outcomes and benefits:</b>
Availability of grant funding Doing improvement works now will offset future carbon, maintenance and accommodation costs of occupied PCC buildings (increase longevity and reduce dilapidation).	Carbon savings of nearly 5,000 tonnes Comfortable PCC accommodation Cleaner air (reduction of gas emissions)
<b>Have you engaged with Planning Department.</b> <i>(If no, please state the reason)</i>	<b>Yes</b>
<b>If yes, summarise the planning requirements.</b> <i>(If PP is required ensure you engage with planning prior to seeking approval of this Business Case)</i>	Planning application lodged for Guildhall and Council House and validated 3rd/ 4th November (decision 8 weeks) Any secondary glazing or insulation works would need separate Listed Building Consent applications for each building. Poole Farm lodged 13/11/20 (decision 8 weeks) Ballard (depending on ASHP location still to be determined) to be lodged 04/12/20 (decision 8 weeks) Elliott Terrace to be lodged 04/12/20 (decision 8 weeks) – includes heat pump, secondary glazing and solar
<b>Is the budget cost reflective of planning requirements</b>	YES for Elliott Terrace, current Council House and Guildhall application, Poole Farm and Ballard
<b>Who is the Planning Officer you consulted with.</b>	Amy Thompson and Mike Stone
<b>Planning Consent Date</b>	Guildhall and Council House: expected 30/12/20 Poole Farm: expected 08/01/21 Ballard House : expected 04/02/21 Elliott Terrace: expected 04/02/21

<b>Have you engaged with Building Control.</b> <i>(If no, please state the reason)</i>	<b>Yes</b>
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<b>Is the Building Control pre-application registered</b>	N/A
<b>What is the pre-application number</b>	N/A
<b>Is this classed as a HRRB building</b>	No
<b>Is this building classed as 'high risk'</b>	No
<b>Who is the Building Control Case Officer</b>	Chris Maslen

<b>Low Carbon</b>	
<b>What is the anticipated impact of the proposal on carbon emissions</b>	The carbon emissions of the four sites will be reduced by over 5,000 tonnes over the 20 year life of the heating systems.
<b>How does it contribute to the Council becoming Carbon neutral by 2030</b>	The reduction in carbon emissions contributes to mitigating the need to offset carbon to achieve carbon neutral operation by 2030.

<b>Which Members have you engaged with and how have they been consulted</b> <i>(including the Leader, Portfolio Holders and Ward Members)</i>	Cllr Sue Dann
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<b>Equalities Impact Assessment completed</b> <i>(This is a working document which should inform the project throughout its development. The final version will need to be submitted with your Executive Decision)</i>	Yes
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## SECTION 4: FINANCIAL ASSESSMENT

**FINANCIAL ASSESSMENT** : *In this section the robustness of the proposals should be set out in financial terms. The Project Manager will need to work closely with the capital and revenue finance teams to ensure that these sections demonstrate the affordability of the proposals to the Council as a whole.*

### CAPITAL COSTS AND FINANCING

<b>Breakdown of project costs including fees surveys and contingency</b>	<b>Prev. Yr.</b>	<b>20/21</b>	<b>21/22</b>	<b>22/23</b>	<b>23/24</b>	<b>24/25</b>	<b>Future Yrs.</b>	<b>Total</b>
	<b>£m</b>	<b>£m</b>	<b>£m</b>	<b>£m</b>	<b>£m</b>	<b>£m</b>	<b>£m</b>	<b>£m</b>
Design & Engineering			0.177					0.177
Main equip capital			1.414					1.414
Install & Commission			1.233					1.233
Commercialisation			0.082					0.082
PM/QS/PD			0.115					0.115
Contingency			0.115					0.115
<b>Total capital spend</b>			<b>3.136</b>					<b>3.136</b>

<b>Provide details of proposed funding: Funding to match with Project Value</b>								
<b>Breakdown of proposed funding</b>	<b>Prev. Yr. £m</b>	<b>20/21 £m</b>	<b>21/22 £m</b>	<b>22/23 £m</b>	<b>23/24 £m</b>	<b>24/25 £m</b>	<b>Future Yrs. £m</b>	<b>Total £m</b>
Salix PSDS			2.325					2.325
S106			0.400					0.400
PCC (Ballard insul)			0.214					0.214
Salix Proj Delivery			0.197					0.197
<b>Total funding</b>			<b>3.136</b>					<b>3.136</b>

<b>S106 or CIL</b> (Provide Planning App or site numbers)	<ul style="list-style-type: none"> <li>Spend certificate 7A6 2787 (being raised): 16/00028/FUL - Derrys Development, Plymouth £83,608.89 (second payment)</li> <li>Spend Certificate 2787 7A6: 16/00028/FUL - Derrys Development, Plymouth £75,000 &amp; 11/00750/FUL- Land At North Yard H. M. Naval Base Devonport £175,000 (remainder of spend not allocated £153k)</li> <li>11/00750/FUL- Land At North Yard H. M. Naval Base Devonport: £163,391.11</li> </ul>
<b>Which alternative external funding sources been explored</b> (Provide evidence)	Salix PSDS providing 76% of the funding (and S106: 13%)
<b>Are there any bidding constraints and/or any restrictions or conditions attached to your funding</b>	<p>The PSDS grant has none besides that procurement must be within internal procurement guidelines and financial regulations.</p> <p>Once the grant is approved, there is a timeline requirement: the project must be contracted by the end of March 2021 and completed by the end of September 2021.</p>
<b>Tax and VAT implications</b>	<p>The sites proposed for the decarbonisation works include some premises which are leased out or where the Council receives income from lettings, for example the Guildhall. This means that a significant proportion of the VAT incurred on the capital cost of the works will be directly attributable to a VAT-exempt activity of the Council, 75% at the Guildhall based on income. VAT will still be recoverable on the cost of the project but a proportion of the VAT will need to be included in the Council's partial exemption calculation which is required to ensure that the Council is able to fully recover VAT relating to all of its VAT-exempt activities and does not exceed its limit. Expenditure on the project must be regularly monitored, therefore, to determine the amount of VAT to be included in the calculation.</p>
<b>Tax and VAT reviewed by</b>	Sarah Scott
<b>Will this project deliver capital receipts?</b> (If so please provide details)	

Schemes in excess of £0.5m should be supported by a Cost Benefit Analysis. Calculations undertaken should be attached as an appendix to support financial implications shown below. Please contact your revenue accountant for assistance with this section.

<b>Is the capital ask greater than £0.5m</b>	No (90% grant & S106 funded)	<b>If the answer is yes, have you attached the Cost Benefit Analysis</b>	No
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## REVENUE COSTS AND IMPLICATIONS

### Cost of Developing the Capital Project (To be incurred at risk to Service area)

<b>Total Cost of developing the project</b>	£
<b>Revenue cost code for the development costs</b>	All grant funded (BEIS (HNDU & Salix), EIB (ELENA), ERDF-Interreg (SUNPeople))
<b>Revenue costs incurred for developing the project are to be included in the capital total, some of the expenditure could be capitalised if it meets the criteria</b>	No
<b>Budget Managers Name</b>	N/A

### Ongoing Revenue Implications for Service Area (SP&I)

<b>Pool Farm</b>	<b>Prev. Yr.</b>	<b>21/22 £</b>	<b>22/23 £</b>	<b>23/24 £</b>	<b>24/25 £</b>	<b>25/26 £</b>	<b>Year 20</b>
<b>Service area revenue cost</b>							
<b>Loan repayment</b> (terms agreed with Treasury Management)	N/A	N/A	N/A	N/A	N/A	N/A	N/A
<b>Other</b> (Operating costs including maintenance, utilities etc. for heat pump)		281	283	285	290	297	289
<b>Total Revenue Cost (A)</b>		281	283	285	290	297	289
<b>Service area revenue benefits/savings</b>							
<b>Annual revenue savings</b> (gas boiler operating costs)		737	766	805	845	855	918
<b>Total Revenue Savings (B)</b>		737	766	805	845	855	918
<b>Service area net (benefit) cost (A-B)</b>		<b>(456)</b>	<b>(483)</b>	<b>(520)</b>	<b>(555)</b>	<b>(558)</b>	<b>(629)</b>
<b>Has the revenue cost been budgeted for or would this make a revenue pressure</b>	This is revenue savings						
<b>Which cost centre would the revenue pressure be shown</b>	6042	<b>Has this been reviewed by the budget manager</b>				Yes	
<b>Name of budget manager</b>	Kat Deenev						
<b>Loan value</b> £		<b>Interest Rate</b>	%	<b>Term Years</b>		<b>Annual Repayment</b> £	
<b>Revenue code for annual repayments</b>	N/A						

<b>Service area or corporate borrowing</b>	N/A
<b>Revenue implications reviewed by</b>	Stephen Coker

<b>Ongoing Revenue Implications for Service Area (HR/FM)</b>							
<b>Guildhall, Council House, Midland House and Law Courts; Ballard House; and Elliot Terrace</b>	<b>Prev. Yr.</b>	<b>22/23 £</b>	<b>23/24 £</b>	<b>24/25 £</b>	<b>25/26 £</b>	<b>26/27 £</b>	<b>Year 20</b>
<b>Service area revenue cost</b>							
<b>Loan repayment</b> (terms agreed with Treasury Management)	N/A	N/A	N/A	N/A	N/A	N/A	N/A
<b>Other</b> (Operating costs including maintenance, utilities etc. for heat pumps, CHP and PV)		110,581	111,993	113,597	115,768	117,462	117,966
<b>Total Revenue Cost (A)</b>		110,581	111,993	113,597	115,768	117,462	117,966
<b>Service area revenue benefits/savings</b>							
<b>Annual revenue savings</b> (gas boiler operating costs)		97,483	99,876	104,303	107,606	108,960	112,992
<b>Total Revenue Savings (B)</b>		97,483	99,876	104,303	107,606	108,960	112,992
<b>Service area net (benefit) cost (A-B)</b>		<b>13,097</b>	<b>12,116</b>	<b>9,295</b>	<b>8,162</b>	<b>8,502</b>	<b>4,974</b>
<b>Has the revenue cost been budgeted for or would this make a revenue pressure</b>	The revenue pressure (as above) has not been budgeted for. It is a cost associated with decarbonisation and the net zero ambition.						
<b>Which cost centre would the revenue pressure be shown</b>	ELLIOT TERRACE: 5688/XXXX/C3976 BALLARD HOUSE: 2244/XXXX/C4356 GUILDHALL/LAW COURTS: 2248/XXXX/C3983 COUNCIL HOUSE: 2253/XXXX/C6326 MIDLAND HOUSE: 2246/XXXX/C4244			<b>Has this been reviewed by the budget manager</b>		Yes	
<b>Name of budget manager</b>	Ralph Bint						
<b>Loan value</b>	£	<b>Interest Rate</b>	%	<b>Term Years</b>		<b>Annual Repayment</b>	£
<b>Revenue code for annual repayments</b>	N/A						
<b>Service area or corporate borrowing</b>	N/A						
<b>Revenue implications reviewed by</b>	Stephen Coker						

**Version Control:** (The version control table must be updated and signed off each time a change is made to the document to provide an audit trail for the revision and update of draft and final versions)

Author of Business Case	Date	Document Version	Reviewed By	Date
Alastair Gets	26/11/2020	v 1.0	Chris Flower, Stephen Coker,	16/12/2020
	18/11/2020	v 2.0	Gosia Anthony, Ralph Bint, Kat Deeney	22/12/2020

## SECTION 6: RECOMMENDATION AND ENDORSEMENT

- **Recommended Decision**
- **It is recommended that the Leader of the Council:**
- Approves the Business Case
- Allocates £2.922m into the Capital Programme funded by £2.522m from the Salix PSDS & Skills Funds £0.400m from S106 funds
- Vire £0.214m from the Ballard House refurbishment project to this project.
- Authorises the procurement process
- Delegates the acceptance of the Salix grants to the S151 Officer
- Delegates the award of the contract to Service Director for SP&I

<b>Cllr Sue Dann, Environment and Street Scene</b>		<b>Service Director: Kim Brown, HR</b>	
<b>Either email dated:</b>	Date 9/02/2021	<b>Either email dated:</b>	Date 8/2/2021
<b>Or signed:</b>		<b>Signed:</b>	
<b>Date:</b>		<b>Date:</b>	
		<b>Service Director: Paul Barnard, SP&amp;I</b>	
		<b>Either email dated:</b>	04/01/2021
		<b>Signed:</b>	
		<b>Date:</b>	