

Report of Head of Strategy and Investment, Housing Leeds and Executive Programme Manager, PPPU

Report to Director of Resources and Housing

Date: 14 December 2017

Subject: Construction of a district heating network

Capital scheme number: 32463/000/000 and 32022/FA1/000

Are specific electoral Wards affected?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
If relevant, name(s) of Ward(s): Burmantofts and Richmond Hill, City and Hunslet & Gipton and Harehills	
Are there implications for equality and diversity and cohesion and integration?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Is the decision eligible for call-in?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Does the report contain confidential or exempt information?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
If relevant, access to information procedure rule number: 10.4.3 Appendix number: 1,2,3	

Summary of main issues

1. On the 17th July 2017, Executive Board approved the construction of a spine district heating network (DHN) and ancillary infrastructure from the RERF to the city centre/Lincoln Green and the connection of up to 1,983 Housing Leeds apartments to the new DHN.
2. Executive Board provided authority to spend for:
 - The construction of the Spine District Heating Network of £21.276m funded through £17.276m supported prudential borrowing and £4m of grant from the WYCA;
 - The connection of the council housing District Heating Network of £17.42m funded through £11.3m of HRA capital and £5.774m of European Regional Development Fund (ERDF).
3. This authority was subject to:
 - the Director of Resources and Housing being satisfied with the outcome of external due diligence on the business case and securing the required heat loads; and
 - the approval of a £4m grant from the WYCA.

4. In addition, the Director of Resources and Housing was required to first consult with the Leader of Council, the Executive Member for Environment and Sustainability and those Opposition Group Leaders, prior to confirming the delivery of the project in line with the agreed delegated authority.
5. Vital Energi, the appointed contractor, were therefore asked to suspend work on the spine DHN and only carry out limited work on the housing DHN D&B contract until these conditions were met.
6. The spine DHN has now reached a critical point whereby any further delay will result in escalating project costs, potentially delay project completion and in a worst case scenario become undeliverable.
7. This report is seeking Significant Operational Decisions to enable the spine and housing D&B contracts with Vital Energi Utilities Ltd to proceed with all conditional clauses removed.

Recommendations

- 1.1 The Director of Resources and Housing is asked to note the contents of this report including its appendices, and:
 - 1.1.1 Agree the business case presented in Confidential Appendix 1 and the external due diligence conducted on the business case presented in Confidential Appendix 2.
 - 1.1.2 Agree the current position with heat loads and our plans to secure the future heat loads required in the business case presented in Confidential Appendix 1.
 - 1.1.3 Agree to proceed on the basis that the £4m grant has been approved by WYCA board and that the conditions will not be removed from Vital's contract until the grant agreement has been signed by WYCA.
 - 1.1.4 Agree the efficiencies achieved for the spine and housing contracts via the contract variation described in Confidential Appendix 4 and delegate authority to the Executive Programme Manager, Low Carbon to agree the final terms of the variation.
 - 1.1.5 Approve a limited scope of works and services for the spine DHN D&B contract as described at paragraph 3.19-3.23 of this report for a maximum sum of £1,174,398.78.
 - 1.1.6 Approve an extension to the limited scope of works and services for the housing DHN D&B contract as described at paragraph 3.25-3.26 of this report for a maximum sum of £775,740.
 - 1.1.7 Agree to remove conditionality from the Vital Energi Utilities Ltd D&B and O&M contracts for the housing and spine DHNs, subject to the Executive Programme Manager, Low Carbon agreeing the terms of the contract variation as described at recommendation 1.4.
 - 1.1.8 Grant authority to enter into the WYCA grant agreement for the partial funding of the Spine DHN for a value of £4m subject to the Executive Programme Manager, Low Carbon agreeing the detailed terms.

1. Purpose of this report

- 1.1 To seek authority to undertake all work necessary to enable the spine and housing DHN D&B and O&M contracts with Vital Energi Utilities Ltd to proceed with all conditional clauses removed.

2. Background information

- 2.1 The Council has been working to secure the benefits of district heating for a number of years and already operates small networks serving clusters of Council owned multi-storey flats (MSFs).
- 2.2 The Council now has ambitious plans to utilise heat from the Recycling and Energy Recovery Facility (RERF) to provide low carbon, lower cost heat to homes, businesses, public sector buildings and new development sites.
- 2.3 On the 17th July 2017, Executive Board approved the construction of a spine district heating network and ancillary infrastructure from the RERF to the city centre/Lincoln Green and the connection of up to 1,983 Housing Leeds apartments to the new DHN.
- 2.4 This authority to spend was subject to:
 - The Director of Resources and Housing being satisfied with the outcome of external due diligence on the business case and securing the required heat loads;
 - The approval of the grant from the WYCA; and
 - Consultation with the Leader of Council, the Executive Member for Environment and Sustainability and those Opposition Group Leaders.
- 2.5 The Council therefore instructed Vital Energi, the procured contractor, to proceed with a limited scope of work on the housing D&B contract and to suspend work on the housing O&M and spine D&B and O&M contracts.
- 2.6 This report demonstrates how these conditions have been met, thereby enabling the Council to remove the conditions on the housing D&B and O&M contracts and the spine D&B and O&M contracts so that Vital Energi can fully complete both projects.

3. Main issues

- 3.1 The Executive Board report of 17th July provided a full explanation of the two interrelated DH projects. This report therefore focusses on evidencing that the Executive Board conditions described in 2.4 above have been met.
- 3.2 **Business case and external due diligence.**
- 3.3 Since Executive Board, the Council has reviewed and refined the business case and updated it with new information where relevant. Further information is provided in Confidential Appendix 1.
- 3.4 External due diligence on the business case was undertaken by Enervate and a summary provided to the Council on 13 September 2017 presented as Confidential Appendix 2. This provided useful check and challenge which allowed the business case to be improved. The external due diligence did not identify any major flaws in the financial model so the Council now accepts this business case as being robust.

3.5 Heat Loads/Customers.

- 3.6 The Council has been working to secure interest from potential heat loads since July Executive Board. This has resulted in one approved HoTs, one HoTs close to approval and four advanced conversations with developers. However, developers are unwilling to sign HoTs ahead of the start of construction of the DHN.
- 3.7 The Council has therefore developed a number of scenarios that consider the implications on the business case, dependent on the level of customers connected. This concludes that, given the scale of development forecast for Leeds and the level of interest in connecting to the DHN, it is a manageable risk to commence construction now, with a high degree of confidence that sufficient customers will connect in order to break even.
- 3.8 Confidential Appendix 1 provides a summary of the position regarding heat loads.
- 3.9 **WYCA grant.** The £4m grant from the WYCA was approved by the WYCA Investment Committee in September 2017 and then by the Combined Authority board in October 2017. This approval contained a number of conditions precedent to be completed, some prior to the grant agreement being signed and some prior to drawdown of grant.
- 3.10 LCC officers have met with WYCA to work through these conditions, culminating in provision of a draft grant agreement on the 1st of December. This has been reviewed by the Project Team and Commercial and Legal Team in PPPU and there are no significant outstanding issues that would prevent us signing the grant agreement in due course.
- 3.11 We have agreed a programme with WYCA that allows all parties to comment on the draft agreement, with an anticipated signing date in mid-January 2018, following approval by the WYCA Managing Director.
- 3.12 It is therefore prudent to wait until the grant agreement has been signed by the Council and WYCA in order to remove this risk.
- 3.13 **Efficiencies and contract variation.**
- 3.14 As described in the Executive Board report of 17th July, Vital Energi have committed to securing efficiencies across the spine and housing projects. These efficiencies have been described in high level terms below and commercial information provided in Confidential Appendix 3. The principle changes are to:
- Delay construction of the city centre branch;
 - Reduce the overall number of energy centres across the two projects from 5 to 3 which allowed:
 - the resilient energy centre to be moved from the RERF to Saxton Gardens (subject to planning permission);
 - the transmission line from the RERF to Saxton Gardens to be reduced from 350mm to 250mm;
 - more efficient layout of pipework to serve Lincoln Green and Ebor Gardens.
 - Amend the completion dates to September 2019 (spine) and August 2020 (housing) to reflect the delays that the Council has introduced.
- 3.15 However, in order to formalise these efficiencies within the D&B and O&M contracts, Vital are required to review and resubmit several Contractors Proposals.

There will be minor changes to around 6 for each of the spine and housing projects and very significant amendments for the following for both projects:

- Theme 1: Programme (CP 1a Programme and key dates)
 - Theme 2: Design (CP 2a Design approach)
 - Theme 4: O&M (CP 4a/b Operation and maintenance plans)
 - Activity Schedule
- 3.16 Once received, these will be reviewed by the Project Team and a Technical Advisor and once acceptable, these will form a part of the D&B and O&M contracts for both the spine and housing projects.
- 3.17 In addition to the revised Contractors Proposals, the Council will need to agree a formal variation to the spine and housing D&B contracts via a series of contract variations/Compensation Events. These have been drafted by the Council and approved by Vital Energi and have been summarised within Confidential Appendix 3.
- 3.18 **Programme - Spine**
- 3.19 The instruction to suspend work on the spine D&B contract anticipated that a subsequent instruction to commence work would be issued on or before the 31st October. However, not all conditions had been fulfilled by then, so the spine D&B contract has been suspended for another month.
- 3.20 However, this is having an impact on the programme and putting at risk the contractual requirement to start supplying heat from April 2019.
- 3.21 To minimise this risk, Vital Energi have requested that they start working on a limited scope of work for the spine D&B contract, prior to agreeing the contract variation described above. The detail and justification for this is provided in Confidential Appendix 3.
- 3.22 This limited scope of work would be for a maximum sum of £1,174,398.78 to enable, amongst other items, route surveys and detailed design to be undertaken, planning permissions for the energy centre and underground DHN to commence and to place the order for a new gas connection and other utilities to Saxton Gardens. This limited scope of work is to the 31st January 2018.
- 3.23 There is a very small risk that ultimately the spine project does not progress, should this happen, the limited scope of work contract spend will need to be funded from the Resources and Housing Directorate.
- 3.24 **Programme – Housing**
- 3.25 The housing D&B contract has progressed via two instructions to undertake non-abortive work, in order to ensure that ERDF spend profiles can be met. These expire on the 31st December 2017.
- 3.26 In order to ensure that work continues as programmed a third instruction to undertake a limited scope of works contract is required. This is for a maximum sum of £775,740 to enable, amongst other items, civils works to commence, pipes to be laid and risers and laterals to commence. This limited scope of work is to the 31st January 2018.

4. Corporate considerations

4.1 Consultation and engagement

- 4.1.1 The Executive Member for Environment and Sustainability has been consulted throughout the procurement.
- 4.1.2 The Executive Member for Communities and ward members for Burmantofts and Richmond Hill where the Housing work will take place have also been consulted regularly.
- 4.1.3 Consultation with Housing Leeds tenants and leaseholders has commenced for all affected blocks. Plans have been drawn up by Vital Energi for wider engagement with all stakeholders who will be affected by the construction phase.
- 4.1.4 The Director of Resources and Housing has briefed the Leader of the Council and the Leaders of the Conservative and Liberal Democrats groups, as required by Executive Board. Cross party agreement was reached following these briefings.

4.2 Equality and diversity / cohesion and integration

- 4.2.1 An equality impact assessment has been completed and is attached as Appendix 4.
- 4.2.2 The DHN will have a positive impact on equality as it will support the compassionate city equality objective by reducing fuel poverty, helping to increase life expectancy, improving mental health and wellbeing and reducing health inequalities.

4.3 Council policies and best council plan

- 4.3.1 The unique opportunity to construct a DHN supports the aspirations set out in the Best Council Plan 2015-20 and the overall vision of becoming the best city in the UK. In particular, the project helps deliver the Councils Low Carbon priorities, which were declared for 2017/18 as:
 - Reducing emissions;
 - Tackling fuel poverty, and
 - Delivering efficient and secure energy.
- 4.3.2 The Council has made public commitments to address fuel poverty concerns. As part of the city's Affordable Warmth Partnership, there is a stated aim to improve the health and wellbeing of vulnerable people through action on increasing affordable warmth and this project supports that aspiration.
- 4.3.3 In addition, the Council is committed to reducing citywide carbon emissions by 40% between 2005 and 2020 and has already made significant progress towards this target. Indeed, the Council considers CO₂ emissions to be a crucial challenge facing the city and this has culminated in the creation of a 'breakthrough project' – under the Best Council Plan 2015-20 – titled 'Cutting carbon and improving air quality in Leeds', one of eight priority Council projects.
- 4.3.4 The Council is working towards meeting air quality targets to ensure that it complies with national requirements. The DHN will provide a contribution towards reducing the emissions generated by heating systems in the city.

4.3.5 This scheme will also allow the Council to demonstrate its ability to be enterprising and to act as an enabler for growth.

4.4 Resources and value for money

4.4.1 The Housing and Spine projects are fully funded by a combination of HRA capital, prudential borrowing and ERDF and Local Growth Fund grants.

4.4.2 The Council has modelled the cashflow for a number of realistic scenarios for the project which have been detailed in Confidential Appendix 1.

4.4.3 The overall business case has been subject to external due diligence and this did not identify any major flaws in the model. The results of this due diligence are presented in Confidential Appendix 2.

4.4.4 There is a very small risk that full conditionality is never released, should this happen, the limited scope of work contract spend will need to be funded from the Resources and Housing Directorate.

4.5 Legal implications, access to information, and call-in

4.5.1 The information contained within Confidential Appendices 1-3 to this report is designated as exempt from publication in accordance with paragraph 10.4(3) of the Access to Information Rules and Schedule 12A(3) of the Local Government Act 1972 on the grounds that it contains information relating to the financial or business affairs of any particular person (including the authority holding that information).

4.5.1.1 Confidential Appendices 1 and 2 contain detailed pricing information underpinning the Council's heat sales business case which if disclosed could damage the commercial interests of the Council.

4.5.1.2 Confidential Appendix 3 contains detailed commercial information provided by Vital Energi and disclosing this would breach confidentiality agreements with our project partner. They also provide risk based confidential advice to the decision maker from Council officers disclosure of which would prejudice the Council's commercial position.

4.5.2 Disclosure of information in the above Confidential Appendices would seriously harm the Council's negotiating position when discussing heat sales with potential customers, endanger negotiations with WYCA, disclose confidential procurement and commercial advice that would increase risk to the Council and reveal commercially confidential information provided by Vital Energi. Therefore it is considered that the public interest in maintaining the content of Confidential Appendices 1-3 as exempt outweighs the public interest in disclosing the information.

4.5.3 As the Executive Board decisions of 17th July were subject to call in and all decisions within this report flow from that report and are Significant Operational Decisions, they are not subject to call in.

4.6 Risk management

- 4.6.1 The Executive Board report of 17th July provided a detailed analysis of the significant risks associated with the project, together with mitigating measures. Some of these risks have been reduced or closed off in the intervening period and the major outstanding risks are outlined below.
- 4.6.2 **Business Case - Heat Loads/Customers.** As described in sections 3.6 and 3.7, 4.4 and Confidential Appendix 1, the business case is reliant on significant heat sales to customers outside the Council. Although HoTs have been signed with some customers, the Council still needs to conclude heat sale agreements with these customers and with developers.
- 4.6.3 Conversations with developers have been very positive and we are now finding that developers are approaching the Council to request connection to the DH, partly as this provides
- 4.6.4 The base-case business case is based on heat sales in year 2 (2020/2021) of 14.28 GWh. We currently have secured 12.6 GWh from Council tenants and 644 MWh from the Leeds College of Music. We are close to securing a further 1,000 MWh from the West Yorkshire Playhouse as part of the major refurbishment of their council owned site.
- 4.6.5 This then escalates to year 5 (2023/24) when the network is expected to supply 19.82 GWh. Although we anticipate that we will secure these loads as a minimum, this remains a risk, albeit with good mitigation in place.
- 4.6.6 **External Funding**
Any variation to an externally funded project can lead to the risk of funding withdrawal or clawback. The issues are described in more detail at Confidential Appendix 3.

5. Conclusions

- 5.1 The Council has a once in a generation opportunity to develop a citywide district heating network which will provide Leeds with a low carbon infrastructure to support the growth of the city and support residents in areas where fuel poverty is most prevalent.
- 5.2 The expansion of the city centre into the South Bank and the range of additional connection opportunities that are planned across the city means the density of opportunities makes Leeds an ideal place to develop a flagship green infrastructure project that can contribute the city's sustainable future.

6. Recommendations

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7. Background documents¹

- 7.1 None

Appendices

- Confidential Appendix 1 – business case including heat loads
- Confidential Appendix 2 – external due diligence
- Confidential Appendix 3 – realising project efficiencies
- Appendix 4 – Equalities Screening

¹ The background documents listed in this section are available to download from the Council's website, unless they contain confidential or exempt information. The list of background documents does not include published works.