

**Project Specification
(Memorandum of Information)**



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Extending District Heating and Combined Heat and Power in Leicester

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1.0 Introduction

1.1 Introduction

The City Council owns and manages several district heating schemes supplying heat (and in some instances hot water) from seven separate boiler houses to around 2800 Council homes; 9 nurseries and schools; 4 adult or community centres; a library and a swimming pool, through established pipe networks. Currently supplying the St. Matthews, St. Marks, St. Andrews and St. Peters inner city estates, along with the Aikman Avenue and Beatty Avenue localities, the Council is aiming to extend and connect the four existing schemes serving the inner-city to incorporate the University of Leicester, HM Prison Leicester and other City Council corporate and public buildings, with the potential to include other private buildings, along with new buildings and developments introduced to the City. Although excluded from connection to the proposed extended city centre district heating scheme due to geographical location, district heating schemes at Aikman Avenue and Beatty Avenue are included as part of the overall Project.

Cabinet decided on 14th July 2008 to proceed with a private sector led approach as the preferred delivery mechanism to ensure an expertly run scheme that will deliver the required outcomes yet will minimise capital and ongoing operating costs as well as risk to the Council.

~~Leicester City Council wishes to pre-qualify potential suppliers to receive the Project Prospectus prior to provision of bids and entering the Competitive Dialogue process with preferred bidders. This document hereby invites those interested parties to submit their company information and expression of interest as detailed in the separate PQQ document. The closing date for receipt of submissions is 10th September 2009.~~

1.2 Background to the Project

In 2003 Ove Arup & Partners Ltd. were commissioned by Leicester City Council to assess the technical and financial feasibility of developing an in-house inner city district heating and combined heat and power (CHP) scheme. Although the scheme was postponed and associated grant funding was forfeited, Arup re-assessed the proposal in 2007 in line with the economic, environmental and technical opportunities and constraints of the time and ascertained that sufficient economic and environmental justification still remains for the scheme to proceed. The resulting feasibility study identified a number of environmental, social and economic benefits to the City Council and other senior users.

In July 2008 Leicester City Council Cabinet took the decision to proceed with procurement of the indicative scheme, i.e. the scope detailed by the Arup feasibility study, on the basis that the City Council will confer the rights to a third party to design, build, finance, own, operate and maintain the CHP plant and district heating scheme for an agreed contract period. A Project Manager was appointed, and a Project Working Group established, with the directive to *“Procure for Leicester City Council and other users the provision of controllable and reliable warmth to a group of buildings at an affordable price, minimising CO₂ emissions and using Combined Heat and Power, with waste heat converted to hot water for distribution via a District Heating System”*.

1.3 Project Objectives

As an important part of the One Leicester strategy, it is the vision of Leicester City Council and Leicester Partnership to transform Leicester into Britain’s Sustainable City over the next 25 years, with one of the priorities to reduce our carbon footprint. Leicester City Council has set an objective for the City of a 50% reduction in CO₂ (on 1990 levels) by 2025, with 20% of the City Council’s energy consumption to be from renewable energy sources by 2020.

With ambitious environmental and social objectives, the scheme must ensure that the following benefits are realised:

- To provide affordable, reliable and controllable heat to a number of Council and residential buildings and other senior users
- To reduce carbon emissions for the Council and the City, contributing towards achievement of One Leicester objectives with the ambition to transform Leicester in to Britain’s Sustainable City over the next 25 years
- To establish a secure and sustainable energy supply (energy security anticipated to be achieved through identification and development of renewable fuels and a secure supply chain)

- To have the potential to expand the benefits to users not currently identified in the feasibility study, enabling them to connect to the network, contribute to carbon reduction in Leicester - providing an opportunity for extended partnership working.

The Project is also expected to make a contribution to tackling fuel poverty with immediate cost savings anticipated to be available to consumers compared to conventionally supplied energy at current market rates.

The feasibility study - based on an indicative scheme (see 3.2 below) - identified achievable reductions in CO₂ of more than 13,000 tonnes per year for the City, including a 15% reduction in the City Council's own emissions. Further reductions are expected over time and, as such, LCC is looking for a creative approach that transcends the base case identified in the feasibility study and provides achievement of increasingly stringent targets for CO₂ emissions reductions to be agreed as part of the dialogue process and defined in Output Specification Tables.

1.4 Anticipated Opportunities

A number of additional opportunities will be available to the preferred supplier enabling the City Council, other senior users and potential users to derive a benefit:

- Extending the district heating scheme and introducing CHP provides the foundation for an ongoing and increasing reduction of CO₂ over time, initially reducing in line with increased efficiency of the system, and in future, the use of renewable fuels or inputs would provide significantly larger carbon savings.
- Whilst demand from and support of existing users of the district heating scheme is already in place and formal commitment to the scheme has been made by Leicester City Council, the opportunity to connect to the district heating network should be offered to other public/private organisations to support those sectors (along with Regeneration Area initiatives) to comply with Local Plan requirements on energy.
- The district heating schemes at Aikman and Beatty Avenue represent an opportunity for the development of additional networks outside of the City Centre.
- Both the University of Leicester and HM Prison Leicester have been involved in the Project feasibility study and development of the Scheme proposals and will form part of the Competitive Dialogue process including membership of the user panel feeding in to the evaluation panel responsible for selecting a preferred supplier. Contractual commitment to the scheme for HM Prison - via a heat supply agreement - will be forthcoming depending on a competitive bid.
- The University of Leicester have a requirement for both heat and power and, as such, are planning to develop an energy centre on site (see overview Appendix 3).
- If physically and commercially feasible, the network could include pipes carrying hot water for heating, domestic hot water, chilled water for cooling and electricity cables, with the supplier developing a proposal to supply these services to a number of buildings from one or more Energy Centres. Given Leicester's sustainability objective there may be potential for future contract negotiations for the procurement of locally-based power generation for energy security purposes – this could include distribution/wholesale and/or retail of electricity.
- ~~Consideration has previously been given and there may be potential for the introduction of alternative fuels at both St Marks and St Matthews boiler houses prior to the Effective Date. Should either of these installations go ahead, additional plant and service details will be provided.~~

2.0 Contacts

All correspondence and enquiries should be directed to the Project Manager appointed by Leicester City Council:

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3.0 Project Description

3.1 Project Location

The indicative scheme, based in the City of Leicester, has an anticipated CHP network route as identified by the map in Appendix 1 ([Volume 2 of the IPD](#)).

The district heating schemes in Aikman Avenue and Beatty Avenue shown in Appendix 1a ([Volume 2 of the IPD](#)) - to the north west and the north east of the city respectively - are included as an integral part of the overall Project as satellite schemes.

3.2 Project Description (the indicative scheme based on the feasibility study)

An extension of the existing district heating network currently supplying heat (and in some instances hot water) to four inner city estates – St Matthews, St Marks, St Peters and St Andrews – and anticipated to incorporate the University of Leicester, HM Prison Leicester, other City Council corporate and public buildings (with the potential to include other public and private buildings within the city boundary yet to be identified), phased over a number of years. With the achievement of environmental and social objectives a priority, supplier design and installation is expected to commence in ~~April 2010~~ [September 2010](#).

The description below is based on the work of consultants who identified a methodology that splits the overall scheme into two projects, as detailed in the feasibility study. Whilst the study accurately identifies the scope of the Project, the methodology is regarded as indicative only and there is no fixed requirement for the Project to be approached and phased as indicated:

Project 1: With an expected construction period of three years and an anticipated commencement date of April 2010, Project 1 is based on existing energy users with identifiable and predictable needs - essentially the City Council (supplying c.2800 tenants and potentially upwards of 40 buildings), the University of Leicester and HM Prison on Welford Road. On this basis, output would be c.37Mwe/year (49Mwth/year - see pages 24 to 28 of the feasibility study), with 67% of the identified heat production consumed by the City Council. It includes:

- Phase 1 - Linking existing community heating schemes at St Marks and St Matthews and introducing a new CHP plant. This includes a school, community buildings and other LCC properties on the estates.
- Phase 2 - Linking both of these with the St Peters community heating scheme and providing new CHP plant. This includes two schools, Moat Community College, community buildings and other LCC properties.
- Phase 3 - Connecting all of these with the main University of Leicester campus where new CHP plant would be hosted.
- Phase 3 - Connecting with additional City Council and other properties where available, including De Montfort Hall.
- Phase 3 - Connecting St Andrews estate and community heating system, including an EPH day nursery, and commercial premises, along with HM Prison Leicester.

In addition, Project 1 would include the operation and maintenance of the district heating schemes served by the boiler houses at Aikman Avenue and Beatty Avenue and the ongoing provision of heat (and in some instances hot water) to existing consumers.

Project 1 includes buildings and heat demand that are already in existence with almost 70% of consumption by the public sector.

Project 2: Originally envisaged by the consultants to start in 2015 with a 4 year construction period, the scheme could supply c.3000 residential occupiers/tenants and potentially in excess of 50 buildings. Output would be c.67Mwe/year (88Mwth/year - see page 29 of the feasibility study).

With demand from Leicester City Council operational buildings currently in existence, other predicted users are more uncertain as some of the heat demand for Project 2 will not materialise until after 2012. The proposal will therefore be explored further with potential developers on the basis that the risk would be underwritten by the supplier. Potential users could include:

- Phase 4 - The City Council's current central operational buildings (may be subject to later revision) including New Walk Centre; Phoenix House; Welford House; Marlborough House; 16 New Walk; Sovereign House; Greyfriars; Central Library and York Road.

- Phase 5 - New Community (St Georges West); Wolsey Island residential and Abbey Meadows Science and Technology Park; Office Quarter; Waterside (all partially qualified users only).
- Phase 5 - Additional connections along the route may include planned and anticipated development along Burleys and Vaughan Way; the Highcross area new development; the retail core; and De Montfort University.

Project 2, whilst more speculative, includes existing demand by Leicester City Council operational buildings and provides an opportunity for any supplier to extend the network and increase connections. This will be supported by the City Council's planning framework.

Although the project description identifies the project scope and offers an indicative approach based on two projects, it should be strategically and economically advantageous to all parties that all phases/potential phases of the proposed network should be subject to a single approval and procurement process (this process). This will provide potential suppliers with a chance to identify opportunities to optimise the Scheme timetable and phasing in line with achievement of environmental objectives and commercial viability.

3.3 Buildings

Whilst the supplier will make a district heating connection to each of the **existing buildings** listed below, further details of the existing buildings - along with proposed future developments - to be included in the Project, their consumption levels, heat load profiles, current boiler capacity, and anticipated thermal and electrical outputs for the scheme (Project 1 and Project 2) are identified in the feasibility study pages 18 to 29 in Appendix 2 (**Volume 2 of the IPD**), along with page 77 of the same document.

Existing District Heating Connections (no. buildings/meters if more than 1)	Boiler House Connection	Fuel Type	Proposed New Scheme Connections
St Marks Residential Estate (58) (892)	St Marks	Gas	Willowbrook Workshop
Herrick Lodge EPH / WAA	St Marks	Gas	De Montfort Hall
St Matthews Residential Estate (990)	St Matthews	Gas	Moat Community College
Taylor Road School	St Matthews	Gas	Sparkenhoe Street Theatre
St Matthews Community Centre	St Matthews	Gas	Sparkenhoe Primary School
Prince Philip House	St Matthews	Gas	Melbourne Road 96 – Community Centre
Douglas Bader House	St Matthews	Gas	Seymour Street 6
Catherine Street School	St Matthews Marks	Gas	Highfields Primary School
St Peters Residential Estate (898)	St Peters	Gas	St Matthews Neighbourhood Centre (duplicated)
Islamic DaWah Academy	St Peters	Gas	Malabar Road Library (already connected)
Highfields Library	St Peters	Gas	Garendon Street Workshop
Uplands Infant School	St Peters	Gas	St Peters Neighbourhood Housing Office
Uplands Junior School	St Peters	Gas	1-3 Greyfriars
St Peters Nursery	St Peters	Gas	Marlborough House
Highfields Youth & Community Centre	St Peters	Gas	Attenborough House
St Andrews Residential Estate (58)	St Andrews	Recycled veg oil	Town Hall Square
St Andrews Nursery School / Playbuilding	St Andrews	Recycled veg oil	New Walk Centre – A Block
Aikman Avenue Residential Estate (381)	Aikman Ave	Gas	New Walk Centre – B Block
Forest Lodge Adults Centre	Aikman Ave	Gas	Pilot House
Forest Lodge Primary School	Aikman Ave	Gas	Phoenix House
Aikman Avenue Swimming Pool	Aikman Ave	Gas	Welford House
Aikman Avenue Community Centre	Aikman Ave	Gas	16 New Walk
New College School	Aikman Ave	Gas	Belgrave Neighbourhood Centre
Beatty Avenue 1 (94)	Beatty Ave	Gas	Abbey Primary School
Beatty Avenue 2	Beatty Ave	Gas	Abbey Primary Community
			Leicester Adult Education College
Total existing (2007) heat consumption- LCC buildings: c. 80Mwhr/year			

Additional Potential Connections (as identified in feasibility study)			
HM Prison Leicester (tbc)	Prison	Gas	See feasibility study for further detail
University of Leicester Main Campus (tbc)	University	Gas	25 buildings (on the main campus site)
Future City Centre Link			Additional potential city centre loads
Future Outer Ring			Proposed Leicester Regeneration developments

4.0 Project Agreement

4.1 Heads of Terms

~~Draft Heads of Terms are included in Appendix 8 and will be considered in detail as part of the competitive dialogue process. Final Heads of Terms will be included in the invitation to submit Final Tenders.~~

4.2 Model Terms and Conditions

~~The proposed Terms and Conditions will be made available as part of the descriptive documents (see Appendix 9). This will be the subject of detailed consideration as part of the competitive dialogue process with final **second draft** terms and conditions being made available when Invitation to submit final Tenders is made.~~

4.3 Key Project Parameters / Requirements

4.3.1 General Requirements

The objective of the Contract is for the supplier to operate, maintain and extend the existing district heating schemes in the City of Leicester. The consumers will include Leicester City Council and, dependent on a competitive offer, may also include HM Prison Leicester with potential for dialogue with the University of Leicester regarding their requirements. The supplier will take over responsibility for providing heat (and in some instances hot water) to buildings - as identified in 3.3 - for the period of the Contract.

It is anticipated that this will require the supplier to carry out the following activities as a minimum:

- Design, build, finance, maintain and operate the Scheme
- Install the necessary infrastructure to establish a linked network and to distribute the heat to each building (and in some instances hot water) via the network
- Take over responsibility for the operation and maintenance of all existing boiler houses and plant therein
- Purchase all primary energy required by the scheme, although it may be beneficial to purchase fuel under Leicester City Council's existing group purchasing arrangements
- Install meters to measure the quantity of heat (and in some instances hot water) used and meter and bill residential tenants and leaseholders individually based on their consumption
- Meter and bill Leicester City Council and other senior users for heat consumed.

The Scheme must:

- Provide affordable, reliable and controllable heat to a number of Council and residential buildings and other senior users
- Reduce carbon emissions for the Council and the City, contributing towards achievement of One Leicester objectives with the ambition to transform Leicester in to Britain's Sustainable City over the next 25 years
- Establish a secure and sustainable energy supply (energy security anticipated to be achieved through identification and development of renewable fuels)
- Have the potential to expand the benefits to users not currently identified in the feasibility study, enabling them to connect to the network and contribute to carbon reduction in Leicester - providing an opportunity for extended partnership working.

The Project is also expected to make a contribution to tackling fuel poverty with immediate cost savings anticipated to be available to consumers compared to conventionally supplied energy at current market rates.

In providing the required service - and throughout development of the infrastructure - the supplier must provide service continuity and value for money.

4.3.2 Ownership and Control

A single operator is required, i.e. the Council is seeking to contract with a single legal entity. Therefore, consortia are expected to establish a project-specific Development and Operating Vehicle (DOVe) or Special Purpose Vehicle (SPV) operating to best industry practice. LCC have no fixed idea regarding ownership of the DOVe and are looking for supplier views and possibilities. The proposal must take in to consideration that LCC will not provide capital investment funding and want to minimise risk to LCC.

The supplier will therefore design, build, operate, maintain and wholly finance the scheme. It is expected that the role of the DOVe will be to manage the Project Contract(s) and heat supply agreements, and to expand the network.

4.3.3 Partnering Provisions

LCC would require the establishment of a “formal partnership board or committee” to include stakeholder / user representatives (LCC officers, tenants / leaseholders, the University of Leicester and HM Prison Leicester) to oversee the development, implementation and evaluation of policy and service including, but not limited to:

- Tariff structure / level of end user charges and heat agreements, along with methodology for introducing changes to heat charges
- Service improvements and customer care charter
- Metering approach
- Billing, collection and debt recovery proposals including policy on disconnections
- Monitoring and reporting

4.3.4 Monitoring and Reporting

The supplier is to provide the “partnership committee” with quarterly and annual reports on the performance of the Scheme including cost; consumption; emissions information; faults and repairs; and customer satisfaction surveys to be agreed as part of the dialogue process and detailed in the Model Contract.

4.3.5 Period of Agreement / Contracts

For the purpose of evaluation the Council would anticipate initial solutions and financial modelling to be based on a contract term of 25 years, although alternative terms can be included and discussed as part of the dialogue process. As the Council has no fixed period in mind, the term of the Project contract will be determined by the commerciality of the Project - likely to be in the region of 20 to 30 years - with the underlying objective to bring elements of the supply chain to market from time to time so as not to lock in end users in perpetuity (see PPS1 – Supplement on Planning and Climate Change Clause 28).

For the protection of users the Project Contract should allow for certain elements to be benchmarked at pre-determined periods (probably 5-yearly), including sub-contracted elements such as emergency call-out, repairs and maintenance and all new works.

Where consumers / end users are not the responsibility of LCC, the supplier / DOVe will enter into a separate Heat Supply Agreement with the third party. Where reasonable this should be fixed for a period, or have review periods, that are co-terminous with the Capital Contract.

Any supply contracts dependent on the Project Capital Contract should be co-terminous with the Project Contract, **and should not adversely impact the primary service, i.e. the service provided to the Council.**

The period and terms of the Project Contract(s) should be such as to enable the scheme assets and infrastructure to revert to the ownership of Leicester City Council at the point of expiry without a requirement for the Council to make any lump sum payment to the supplier at the end of the term. This will allow the Council to go to the market, with the existing supplier having an opportunity to retender at this point.

4.3.6 Leicester City Council Existing Agreements

LCC has existing arrangements with partners and contractors for, but not limited to, the following: gas (and vegetable oil) purchase; mechanical and electrical plant and infrastructure service and maintenance; utilities; chemical dosing; Building Energy Management System (BEMS) contract. Whilst the Council will endeavour to ensure that each of the agreements can be concluded by the Effective Date, it may be beneficial for the supplier to consider / negotiate their continuance for an agreed period on a sub-contract / re-assignment basis to ensure continuity of service and commerciality.

Should the supplier wish, for an interim period after the Effective Date, to “second” or “buy-in” expertise from Leicester City Council in terms of Technical Services relating to the district heating infrastructure, this would be subject to negotiation.

4.3.7 Capital Works

Whilst there is an opportunity for innovation in respect of plant location, provided it is commercially viable and able to meet LCC Project objectives and requirement for progressively reducing CO₂ emissions, the main heat generation plant could be enclosed within the existing plant rooms. Where a new building is a requirement the supplier will be responsible for obtaining the necessary licences and permissions both from Leicester City Council and other regulatory bodies to construct this building.

Where the supplier utilises existing plant, the maximum sound generated should not exceed that currently generated by the existing plant. Construction / ground works and day to day operations will be subject to a noise survey conducted by the supplier with noise monitoring to be conducted by the City Council. Any new equipment installed will be assessed using, and expected to comply with, BS 4142 to ensure that noise levels are such that they are unlikely to cause nuisance to residents.

4.3.8 Demarcation of Responsibility

The supplier will identify suitably-qualified personnel to manage the design, construction/installation, operation and administration phases, ensuring responsibilities are accurately and clearly scoped, and work with the Project Manager and Project Working Group to manage and coordinate handover arrangements for the City Council to ensure a smooth transition of the Scheme to the supplier.

The demarcation point of development and operational responsibility, unless otherwise agreed, will be at the point of meter. The supplier will be responsible for the construction, maintenance and operation of the systems up to and including the heat meter and demarcation valves. Prior to the installation of meters in each individual residential property, the demarcation of operational responsibility will be from a specified point, dependent on infrastructure complexities of the existing systems, and to be agreed as part of the Competitive Dialogue process.

The supplier will be responsible for maintaining and operating the systems within the buildings including, but not limited to, distribution pipework, valves, circulating pumps and heat controls.

The supplier will be expected to manage relationships with end users (including tenants and leaseholders) from bid stage through development and operation of the district heating network. The “partnership committee” should be advised where sub-contactors will be interfacing with the end user.

Allocation of risk should be in line with the attached risk transfer matrix below:

Risk	DOVe	Shared	LCC	End Users
Engineering design	√			
Capital cost over-run	√			
Cost of capital borrowing	√			
Time to completion	√			
Failure to meet output specification	√			
Failure of plant	√			
Long-term plant replacement	√			
Return of installation at the end of the contract period (residual condition)	√			
Insurances (including damage to property)	√			
Non-payment by domestic customers	√			
Non payment by non-domestic customers	√			
Force majeure event		√		
Operating cost	√			
Plant efficiency	√			
Maintenance	√			
Statutory inspections	√			
Variations in national fuel prices (pricing changes in line with agreed procedure)				√
Legal and regulatory changes		√		
Health and safety	√			
Reduction in occupancy (fixed costs)		√		
Demand not realised	√			
Unforeseen conditions as a result of implementation processes	√			
Planning issues	√			
Land contamination	√			

The risk associated with (and liabilities arising out of) the costs and maintenance of all boiler houses, plant, and distribution systems up to the point of consumer interface is to be with the supplier in both domestic and non-domestic buildings.

4.3.9 Existing Plant / Infrastructure

In addition to the guaranteed heat demand the existing Council-owned district heating schemes comprise assets including land, buildings, and plant and machinery that are expected to be transferred to the ownership of the private supplier (land and buildings to be leased for the period of the Project Contract) and add considerable value to the Project.

LCC regard the existing district heating schemes as an asset having a value in return for which they should receive a consideration. The most appropriate consideration, e.g. profit share; capital sum; metering; price subsidy; should be finalised as part of the Competitive Dialogue process. For further detail please see the independent valuation report and the asset register in Appendix 4 (Asset Register and Valuation Report by King Sturge) and Appendix 5 (Technical Guidance provided by Technical Services) along with the feasibility study survey (Appendix 2 pages 60 to 66) completed in May 2007 (in Volume 2 of the IPD).

The residual condition of the existing and newly-developed plant and infrastructure forms part of the Project Contract(s), with the supplier to maintain the scheme infrastructure in good condition up to the point at which it reverts back to Leicester City Council ownership, on expiry of the contract term, or on termination of the contract. The supplier should ensure that the scheme infrastructure has a reasonable service life (as determined by the Project contract) beyond the contract expiry date.

The supplier will also be responsible for undertaking any statutory inspections required for plant and equipment in the boiler houses and obtaining any necessary licences.

Additional details of existing boiler plant on site at the University of Leicester and HM Prison Leicester can be found on pages 68 to 76 of the feasibility study in Appendix 2.

4.3.10 Minimum Service Requirements

The supplier shall be required to design, build, finance, operate and maintain all systems necessary to provide heat (and in some instances hot water) at all times to the end users, with clearly defined and acceptable standards to be agreed as part of the Competitive Dialogue process and described in the form of Output Specification Tables. Separate arrangements may be developed with other senior users - HM Prison Leicester and the University of Leicester - via the Competitive Dialogue process.

Whilst no particular technology or fuel is specified, the final agreement will contain Output Specification Tables (see sample layout in Appendix 6) that require the supplier to provide heat (and hot water) for the Scheme as follows:

- In particular, heat and hot water will be delivered every day. In the event of heat and/or hot water supply being interrupted, service should be restored within timescales agreed and in a priority order as identified by the end users as part of the Competitive Dialogue process, with the end users imposing revenue deductions / penalties relative to failure to meet the Output Specification and agreed Service Level Criteria.
- Within certain temperature ranges as identified in Appendix 5.
- Compliant with requirements contained in, or arising of, all relevant environmental legislation, including the Clean Air Act 1993; the Local Air Quality Management Regime as set out in Part IV of the Environment Act 1995 and Guidance issued thereunder; and Part III of the Environment Act 1990 (statutory nuisance), with proposals to be assessed for Air Pollution and Noise implications by the City Council Environmental Services Division.
- To achieve agreed reductions in CO₂ emissions and to ensure that the scheme is energy efficient and progressively reduces carbon emissions in line with targets to be specified in the Output Specification Tables. Minimum requirements will be based on savings identified in the feasibility study (Appendix 2 – page 41) of 7,300 tonnes per annum by 2015 and 13,100 tonnes by 2019, with ongoing savings thereafter. As contributing to the City of Leicester's climate change objectives of a 50% reduction in CO₂ by 2025 is a priority for the Council and the Project, evaluation criteria at bid stage will be weighted to take account of this priority.
- Back-up plant and alternative fuel types should be available to provide security of supply. Service availability should be as near to 100% as possible with an acceptable level of planned and unplanned outages; timescale for fixes and penalty charges applicable for failure to achieve service levels to be agreed during contract negotiations and specified in the Output Specification Tables. It is therefore anticipated that existing plant will be updated and additional plant developed to take advantage of efficiencies to be gained from new technologies and innovation in fuels and utilisation of those fuels.

4.3.11 Phasing

It is expected that existing buildings (as detailed in Section 3.3) are to be connected to the network in a priority order linked to the achievement of carbon emissions reduction targets - although phasing, including routing of the heat main, can be determined to some extent by commerciality. The same phasing expectations will be applicable for new developments requiring connection to the network.

4.3.12 Project Delivery

Meeting Council requirements in terms of delivery timescales, project priorities, and limiting impact of construction works is a high priority for Leicester City Council. The supplier must be able to evidence their ability to achieve the agreed Operational Start Date / Effective Date and, in addition to limiting the impact of construction works (as much as possible) it is a requirement that the heat and hot water service remains uninterrupted during the construction and transition period.

The supplier should provide BCP arrangements as part of their final bid.

4.3.13 Residential Metering Requirements – a mandatory variant

The supplier is expected to provide heat meters in each non-residential building. In addition it is anticipated that the supplier shall provide each individual residence / dwelling with demarcation isolating valves and a heat meter which will be used as the basis for charging for consumption of heat (and in some instances hot water).

There are 2811 residential homes requiring meters, the type (pre-payment or credit) and location of meter will be considered as part of dialogue and agreed prior to the Effective Date, although phasing of the installation is to be determined by achievement of carbon reduction targets and commerciality.

Meters should allow for remote reading confirming the quantity of heat (and hot water) consumed in each dwelling, with residents / end users able to monitor their own consumption and temperature of hot water supplied. Whilst an innovative approach is welcomed, meters should comply with appropriate quality and accuracy standards.

The supplier will carry out periodic testing of meters to monitor accuracy with the procedure for doing so to be proposed by the supplier and negotiated and agreed prior to the Effective Date, with results to be fed back to the “committee” as part of the monitoring and reporting process.

4.3.14 Retailing Heat to Residential Consumers

Currently residential customers pay for their heat and hot water via a flat charge incorporated within their rental agreement. However, LCC prefers that the supplier retails heat directly to the end user, i.e. the supplier will be responsible for metering and billing each individual (residential and non-residential) consumer. The credit risk for collecting payment from residential and non-residential consumers will therefore lie with the supplier, subject to an agreed policy on residential disconnection with input and ongoing review by the “partnership board or committee”. Prior to the installation of meters and subject to agreement LCC may, as an Agent for the supplier, continue to collect payments from residential consumers.

It is expected part of the bid process will be in the form of end-user consultation, including a consultation programme with tenants and leaseholders regarding methods of payment and location and impact of meters, including proposals for minimising disruption.

The supplier will be expected to provide advice to residential customers including instructions on heating controls and efficient use of their systems.

4.3.15 Customer Satisfaction

In addition to the development of a customer care charter, the supplier will be expected to undertake an annual customer satisfaction survey to assess the level of satisfaction amongst the end user / consumers and the quality, efficiency and effectiveness of the services, with the findings to be shared with the “partnership committee” as part of an overall performance report. **In addition, the Council may wish to request market testing of specific service elements – to be agreed with Bidders - at given points during the term of the contract.**

Whilst the format of such a report will be agreed during Competitive Dialogue it should contain an analysis of the performance of the Scheme and the results from the survey together with proposals for improving either the supplier’s performance or the standards / levels of the services taking into account changes in, and the best available, technology for delivering the services.

4.3.16 Charging Structure / Indexation

Fixed and variable charges are to be clearly identified, with a transparent pricing policy - whether determined by business case or benchmarking - with competitors enabling the “partnership committee” to evaluate how the supplier has arrived at a price for heat for each end user (for example - better than the next best alternative as

defined against a basket of suppliers). A method of price indexation will also be agreed during the period of Dialogue.

It is anticipated that the “partnership committee” and the supplier will review the cost base of the Scheme as contained in the financial model every five years from the fifth anniversary of the Operational Start Date.

4.3.17 Scheme Expansion and Development

It is anticipated that the extended scheme will initially be fuelled by gas with a policy in place, and a commitment by the supplier, to provide for future use of renewable fuels.

LCC expects that the Scheme will grow with additional third party connections to be added when technically and commercially feasible to do so, and that the supplier will be sufficiently flexible to take advantage of emerging opportunities and be proactive in terms of expanding the network and increasing the number of network connections. LCC will support by seeking to ensure conformity with current planning policies and will require all new buildings / developments in the vicinity to connect to Combined Heat and Power where physically feasible to do so – in line with policy BE17 of the City of Leicester Local Plan.

4.3.18 Aikman Avenue and Beatty Avenue

Whilst the supplier is expected to take over the operation at both Aikman Avenue and Beatty Avenue, including the installation of meters at domestic and non-domestic properties and the retailing of heat to each individual end user, development of the sites to increase efficiency and reduce cost and carbon emissions would not be essential. An improvement strategy would however, be viewed favourably in the selection and evaluation process, given the potential to further reduce CO₂ emissions.

4.3.19 Connection Charges

It is anticipated that there will be no connection fee chargeable to existing or early connections to the proposed extended network. In addition, as the Project leader Leicester City Council have played an active role in enabling (and any consequent growth of) the network and, in return, would envisage receiving an element of “profit share” - from any new chargeable connections - to invest into energy efficiency measures for buildings. Proposals for connection charges for end users and the possibility of LCC receiving a return for new connections will be subject to negotiation as part of Competitive Dialogue, with agreement to be reached prior to the Effective Date.

4.3.20 Consents and Permits

Where necessary consents and permits are not in place, it will be the responsibility of the supplier to ensure that they are in place to allow commencement of the Scheme development to the required / agreed timetable.

Whilst the supplier may be treated as a statutory utility for works in highways and LCC will seek to aid and facilitate planning consents by establishing a formal liaison mechanism with the relevant Council departments, all licences, wayleaves and easements related to third parties will be the responsibility of (applied for and obtained by) the supplier.

4.3.21 TUPE Implications

LCC does not envisage any TUPE implications (nor related requirements for the supplier to provide a comparable pension for transferees), although the situation will continue to be monitored throughout the procurement process and the brief updated as part of Competitive Dialogue. Leicester City Council will indemnify the supplier against claims arising from TUPE legislation.

4.3.22 Indemnity and Insurance

The supplier will be responsible for ensuring that all necessary insurances are in place prior to the Effective Date.

This includes:

Public and Products Liability Insurance	Level of Cover £ [10] Million
Employer’s Liability Insurance	Level of Cover £ [10] Million
Professional Indemnity Insurance	Level of Cover £ [10] Million

In addition, the supplier will be expected to insure against all risks of material damage for the replacement value of plant and associated Increased Cost of Working (ICOW) risks – to include temporary energy supply provision.

4.3.23 Safety Measures

The supplier will be expected to comply with the requirements of the Health and Safety at Work Act 1974 and of any other Acts Regulations or Orders pertaining to the health and safety of employees, members of the public and or the works or service covered by this contract and shall indemnify the Council in respect of any breach. The supplier will be required to provide a general statement of their safety policy before the commencement of this Agreement and to nominate a person to be responsible for health and safety matters. Whilst on Council premises

the supplier shall ensure that his employees comply with the Council's general statement of safety policy and with the lawful requirements of the Council's Safety Officer.

The supplier will be required to submit a sample risk assessment and must be capable of submitting job-specific risk assessments and method statements as part of any final bid.

4.3.24 General Obligations of Leicester City Council

- Senior users will undertake to facilitate access to funding streams and grant programmes as appropriate.
- Leicester City Council will support development and expansion of the Scheme network through its planning framework and planning obligations (policy BE17 of the City of Leicester Local Plan refers – see Appendix 2 feasibility study page 57).
- Leicester City Council will declare any intention to vacate or redevelop sites affecting occupancy, consumption, and the economics of the Scheme.
- Leicester City Council will continue to invest in energy efficiency measures in existing buildings.

4.3.25 Termination

At termination of the Project Contract any lease or licence that the supplier has to remain on the premises will expire. **As part of the Final Bid, each Bidder should comment on their specific circumstances and expectations in relation to compensation should the contract be terminated prior to the expiry date.**

4.3.26 Legal and Regulatory Changes

In such circumstances all parties would carry out a reappraisal of the financial model.

5.0 Anticipated Procurement Timetable

The attached procurement timetable (part of the ITSFB supporting documents) is based on the City Council utilising the Competitive Dialogue procedure under the Public Contract Regulations 2006. ~~It assumes that we will look to take up to a maximum of five bidders into the first phase of dialogue; that the dialogue process will have two stages; and that only three prospective bidders will be invited to the second stage before formal tenders are requested.~~

6.0 Appendices

Please note that at PQQ stage only appendices 1 and 1a will be provided, with appendices 2 to 9 to be provided at the Invitation to Participate in Dialogue (ITPD) stage. None attached to the specification.