

Head of Housing Services
Southampton City Council
Ground Floor West Wing
Civic Centre
Southampton
SO14 7LY

FAO: Nick Cross

Date: 27/10/14

Our ref: VQ13335

Dear Sirs,

Re: Thornhill Community Heating Network

We are pleased to provide our proposal for the design, build, operation and maintenance of a new biomass and natural gas fired community heating network for the Thornhill community in Southampton, as follows:

1. Consortium

This proposal should be read in conjunction with proposals provided separately by our consortium partners: -

- MITIE Property Services, who will be undertaking the internal heating system installations or heating system modifications to serve 904 properties. For clarity the price for these MITIE Property Services heating system works have been included within this proposal letter.
- nPower who will be providing ECO funding for the project and will also provide certain sub-contractor / supplier services, working as a sub-contractor to MITIE Property Services or Vital Energi. For clarity the price for works to be undertaken by nPower have been included within this proposal letter, but the ECO contribution towards the project has not been shown in this proposal letter.

2. Scope

The scope of our proposal includes: -

- > Design, supply, installation and commissioning of a new energy centre building including foundations, building, roadways, and boundary fencing, all on the plot of land adjacent to the Eastpoint Centre, Bursledon Road, Thornhill, Southampton
- > Design, supply, installation and commissioning of an energy centre including 1 No wood chip fired biomass boiler rated at 990kW, 3 No gas fired boilers rated at 2MW, 2 No 100m³ thermal stores, building management system, circulation pumps, pressurisation unit, flues and chimney, associated mechanical and electrical works
- > Design, supply, installation and commissioning of an underground heating network, consisting of pre-insulated pipework to connect to 54 No apartment blocks
- > Design, supply, installation and commissioning of primary heat substations for the P1 blocks only
- > Design, supply, installation and commissioning of riser and lateral pipework to connect to serve 904 properties
- > Internal heating systems within the properties will be designed by Vital Energi, but installed and commissioned by MITIE Property Services, to serve 904 properties

- > Supply of heat interface units with integral heat meter for installation by MITIE Property Services, but commissioning onto the network by Vital Energi
- > Supply, installation and commissioning of Tenant pre-payment systems
- > Operation and maintenance services for a 30 year term: -
 - o Including operation, planned and reactive maintenance, life cycle repairs and replacements, metering and billing
 - o Our operation and maintenance scope includes the energy centre, the heat network, risers and laterals up to and including the HIUs and heat metering systems
 - o We have excluded maintenance of the heating systems within the flats

3. Charges

Our charges will be: -

- > For the design, supply, installation and commissioning works detailed above £12,459,465 (twelve million, four hundred and fifty nine thousand, four hundred and sixty five pounds)
- > For operation and maintenance services £310,363 per year (three hundred and ten thousand three hundred and sixty three pounds)

Our charge for design, supply, installation and commissioning works includes some provisional sums, as detailed in Appendix 1.

The above charges will be subject to VAT at the applicable rate.

4. Basis of Proposal

Our proposal is submitted as a firm offer, however due to programme constraints we have been unable to complete all of the design activities necessary to firm up all elements of our proposal. Where necessary we have allowed our estimate of likely cost and have shown these as provisional sums within our charges above, and will firm up these up fully during the next development stages. These include:

- > Detailed site investigation to be undertaken, which could impact: -
 - o Building layout, orientation and foundation design for the energy centre
 - o Routing for the underground heat network
 - o Disposal of any contaminated excavations
- > Planning application and air dispersion modeling to be submitted, which could impact:
 - o Building design and architectural finish
 - o Chimney height
- > Utility connection applications to be submitted, which could impact: -
 - o Cost for electricity, water, sewerage and gas connections to the Energy Centre
- > Iconic architectural features or specialist landscaping requirements
- > Local Highways particular costs for 278 requirements (traffic lights/ signaling etc.)

5. Terms and Conditions

Our offer is subject to contract, and has been based on our understanding of the: -

- > Proposed contractual structure, as per our discussions with your colleague Colin Rowland, Luke Mann from Utilyx and Bevan Britten
- > Works undertaken as per programme attached as Appendix 3, assuming that works are completed in an uninterrupted period and based on a normal weekday working of 40 hours/week
- > Allocation of responsibilities and risks as shown in the risk matrix which we have shared with you previously (via Utilyx), also attached for reference as Appendix 8

We have previously issued a draft project development agreement, and we assume that this will be executed to form the basis for us to proceed with the further development works up to execution of formal design and build and O&M contracts.

6. Supporting Information

We have provided the following supporting information, which we hope you will accept is commercially sensitive. In this respect, we trust that the following appendices will not be made available publicly:

- > Appendix 1 – Capital cost breakdown
- > Appendix 2 – Operating cost breakdown
- > Appendix 3 – Indicative construction programme
- > Appendix 4 – Community heating network drawing
- > Appendix 5 – Drawing of typical heating systems layout in properties
- > Appendix 6 – Energy centre block plan layout and location
- > Appendix 7 – Schedule of properties Included in this proposal
- > Appendix 8 – Risk matrix

I hope that this document provides all of the information that you need at this stage. We would welcome the opportunity to meet with you to present our proposals. If you have any questions, please do not hesitate to contact me.

Yours faithfully



Nick Gosling
Director of Energy Strategy

M: 07887 416550

Cc: Luke Mann, Utiyx
Lee Elliott, MITIE Property Services
Nick Gardner, nPower

Appendix 1 – Capital Cost Breakdown

COMMERCIALLY SENSITIVE INFORMATION

Item	£ Excl VAT
1. Preliminaries and Design	988,321
2. Energy Centre Construction	771,863
3. Biomass Boiler System	398,498
4. Energy Centre Mechanical Works	688,121
5. Energy Centre Electrical Works	314,589
6. DH Distribution	2,838,602
7. HIUs to Dwellings	1,180,060
8. Tenant Pre-Payment system	562,695
9. Heat Sub Stations to 3 No Tower Blocks	67,355
10. Provisional Sums	265,000
11. Temporary Boiler	60,000
12. Risers and Laterals	1,672,407
13. Internal Heating Systems	2,651,954
Grand Total	12,459,465

Provisional Sums (included in table above)

Item	£ Excl VAT
1. Incoming gas supply	50,000
2. Incoming mains cold water supply	20,000
3. Incoming electricity supply	100,000
4. Incoming communications	5,000
5. Drainage	15,000
6. Architectural enhancement	75,000
Grand Total	265,000

Appendix 2 – Operating Cost Breakdown

COMMERCIALLY SENSITIVE INFORMATION

Item	£/Year Excl VAT
1. Management and Supervision	5,769
2. Operations	46,886
3. Energy Centre Maintenance	55,750
4. Heat Network Maintenance	17,071
5. HIU, Heat Meter and Pre-Payment System O&M	114,769
6. Life-cycle replacements	70,119
Grand Total	310,363

Appendix 3 – Construction Programme**COMMERCIALLY SENSITIVE INFORMATION**

Please refer to separate attachment reference: VE Thornhill Proposal Oct 2014 – Appendix 3 - Programme

Appendix 4 – Community Heating Network Drawing**COMMERCIALLY SENSITIVE INFORMATION**

Please refer to separate attachment reference: VE Thornhill Proposal Oct 2014 –Appendix 4 – DH Network Drawing

Appendix 5 – Drawing of typical heating systems layout in properties**COMMERCIALLY SENSITIVE INFORMATION**

Please refer to separate attachments reference: VE Thornhill Proposal Oct 2014 –Appendix 5.1 to 5.11, which provide schematics and layout drawing for the heating systems in the typical block constructions

Appendix 6 – Energy centre block plan layout and location**COMMERCIALLY SENSITIVE INFORMATION**

Please refer to separate attachment reference: VE Thornhill Proposal Oct 2014 –Appendix 6 – Energy Centre Drawing

Appendix 7 – Schedule of Properties Included**COMMERCIALLY SENSITIVE INFORMATION**

Please refer to separate attachment reference: VE Thornhill Proposal Oct 2014 –Appendix 7 – Schedule of Properties Included

Appendix 8 – Proposed Risk Matrix**COMMERCIALLY SENSITIVE INFORMATION**

Please refer to separate attachment reference: VE Thornhill Proposal Oct 2014 –Appendix 8 – Risk Matrix