

Sutton Decentralised Energy Network (SDEN) Planning and Architecture Support

Specification of Requirements

1. Introduction

Sutton has ambitions to become London's most sustainable borough and has adopted the One Planet principles. The development of a Sutton Decentralised Energy Network (SDEN) utilising renewable and low carbon fuel sources will support the ambition of achieving 'Zero Carbon' emissions. The project will utilise waste heat from the Beddington Energy Recovery Facility (ERF) and existing landfill gas engines to provide low carbon heat energy and hot water across South London. In addition, the project will increase fuel security and provide revenue which can be used to reduce fuel poverty.

In July 2013, the London Borough of Sutton's Strategy and Resources Committee (S&R) approved the development of a district heating network in Sutton through the wholly owned Special Purpose Vehicle, Opportunity Sutton Limited, with funding of £4.5m. The SDEN prospectus, published November 2015, details the benefits of the scheme which include:

- Very low carbon heat supplies which will reduce carbon emissions by over 5,000 tonnes per year;
- A resilient heat supply which will provide a constant supply of hot water;
- Social benefits, such as reduced fuel poverty, through the reinvestment of profits generated; and
- Creation of new jobs from the construction and operation of the network.

In June 2012, the London Borough of Sutton launched 'Opportunity Sutton' – the Council's economic regeneration and investment arm. The SDEN is one of seven priority projects within the Opportunity Sutton programme for economic growth, and the SDEN will not only deliver significant environmental benefits but also has the potential to drive economic regeneration.

The SDEN is supported by the Greater London Authority's Decentralised Energy Network Delivery Unit.

2. Planning Background

In 2012, the London Borough of Sutton granted planning approval for the construction of an Energy Recovery Facility which included Combined Heat and Power (CHP) pipes up to the green line boundary of the site (see Appendix A). Planning permission is required from this demarcation point into the proposed Felnex energy centre, which is currently being considered by the London Borough of Sutton's Development Management team under a separate application. The CHP pipe route requiring planning permission, of which this scope of work covers, is shown in red in Appendix A.

For supporting documentation to the ERF planning application please see the following link: <https://viridor.co.uk/our-developments/beddington-erf/planning-updates/>

The highly insulated pipes will be a total of circa 300 metres in length, be buried at a depth of circa 1 metre and will come above ground to cross a railway line using a 'pipe bridge' (Network Rail have granted in-principle approval to this proposal).

3. Subregional Context

Phase 1 of the development will supply heat to approximately 725 homes and a supermarket at the new Felnex development in the northeast of the borough. Expansion of the network will look to provide heat to 19,000 new homes across South London.

4. Corporate Plan – Strategic Objectives

Sutton Council has four priorities, as set out in the Corporate Plan 2014/15-2018/19. The SDEN will help to deliver three of these priorities:

- *A Green Council* – Making Sutton more attractive and sustainable to build on our reputation as a green borough.
- *A Fair Council* – Building safe, strong and healthy communities, and increasing economic growth and investment in Sutton making it a place of choice to live and work.
- *A Smart Council* – Transforming our ways of working to manage reduced budgets and increasing demand, and developing an engaged, skilled and entrepreneurial workforce.

The SDEN will help to deliver significant carbon emission savings in line with Sutton's One Planet Borough principles. In addition the SDEN will create a surplus that can be reinvested to support Council services and initiatives to reduce fuel poverty.

5. Objectives

The aim of this tender is to select an organisation to submit a planning application, along with all necessary supporting documentation, for the construction of district heating pipes from the edge of the Viridor site boundary to an energy centre on the adjacent Felnex site (see Appendix A) on behalf of the Authority.

The pipe will leave the Viridor site, pass under the A237 road bridge and then cross the railway line via a pipe bridge. The pipe bridge will be a separate structure to the existing road bridge and the architectural finishes should be designed to have a minimal adverse visual impact on the adjacent properties. Once the pipe has crossed the railway it will be buried and travel South West into the proposed Felnex energy centre.

Our objective is to ensure the successful delivery of Phase 1 of the SDEN through the granting of planning permission for the construction of the additional pipe network to the energy centre on the Felnex site.

6. Scope of work

Engage in pre application meetings with the London Borough of Sutton's Development Management team.

Prepare all supporting documents, including relevant drawings, to submit a planning application to the London Borough of Sutton's Development Management team by the 30th April 2016.

Submit a screening request for an Environmental Impact Assessment (EIA) to the Local Planning Authority. This will need to be submitted as part of the supporting documentation. Should it be determined that an EIA is required then this will be a separate commission.

7. Delivery Outputs

The consultants will be expected to deliver:

- A complete and successful planning application submitted to the London Borough of Sutton's Development Management team no later than the 30th April 2016.
- Production of all necessary supporting documentation, including elevations and drawings.
- Submission of a screening request for an EIA.

8. Key Messages

- The SDEN will deliver low carbon energy to potentially 19,000 homes across South London, using heat sources that would otherwise be wasted. The heat will be delivered as hot water which can be used to meet the heating and domestic hot water requirements of connected buildings.
- The Felnex site in the north east of Sutton is the first development to benefit from a connection to the SDEN (Phase 1). This will deliver approximately 3.3 GWh of heat and save 900 tonnes of CO₂ emissions per annum, with future phases expected to increase this to over 5,000 tonnes.
- The SDEN will not only deliver environmental benefits but also has the potential to drive economic regeneration by enabling developers and building owners to meet their planning and regulatory obligations in respect of sustainability, as well as reducing costs.
- Heat charges will offer parity with the whole life cycle cost of alternative energy sources such as gas-fired boilers.
- Heat supplies will be completely resilient and available throughout the year, with top-up and backup boilers providing security during maintenance.

- Any profits from the scheme will be reinvested to benefit the residents of the borough, such as measures to address fuel poverty.

9. Challenges and External Factors

The SDEN project is politically contentious, the Planning Application for the Energy Recovery Facility and CHP Pipes was Judicially Reviewed and it is considered likely that this planning application will also be judicially reviewed. Consultants should be aware of this when carrying out the work specified in this brief.

10. Consultants Personnel

The consultant should ensure in undertaking this work that there will be no conflicts of interest with existing or forthcoming commissions.

The consultant will provide details of the expertise and experience of all staff/contractors to be employed on the project and their individual responsibilities. The consultant will set out their individual cost rates and expected time allocated to the project as per Table 1 Price Schedule contained within the 'Attachments' section on the portal.

The Council will have the right to veto the use of particular staff, if in the reasonable view of the Council they are not suitable for particular tasks. Any additions or substitutions to the original specified staff will need to be agreed with the Council prior to any such staff being engaged on the project.

The consultant should appoint a named project manager who is empowered to act on behalf of the consultant for all purposes connected with this brief.

The Council will not be providing any staff to undertake any aspects of the work, although assistance will be provided in relation to background information, documentation and stakeholder workshops set out in the method statement.

11. Insurance

The supplier must hold the following levels of insurances throughout for the duration of the contract: Public Liability to a minimum of £5,000,000 (five million pounds) per occurrence and Employers Liability to a minimum of £5,000,000 (five million pounds).

12. Key Performance Indicators

- Successful planning application
- Documentation to support successful planning application

13. Budget

There is a budget available of between £10,000 and £15,000.