Statement of Need Swiss Cottage Library – Solar PV installation

Introduction

This Statement of Need has been prepared to support planning application number **2016/2911/P** and should be read in connection with the Design and Access Statement, the Heritage Assessment and documentation submitted with this planning application.

Section 1. General information

Swiss Cottage Library has on average 402,142 visitors per year and provides various activities for the community:

- Rhyme Time 1.30-11am for 18 months+ (approx. 100 attend) on Mondays
- Baby bounce 2-2.30pm (approx. 100 attend) on Fridays
- Shape Up weight management course 10.30-2pm (approx. 15 attend each session) 3 times weekly
- Learning Workshop homework club (school term time): Mondays 4.30-6.30pm and Wednesdays 4-5pm for 7-11 year olds and 5-6pm for 12-16 year olds.
- Summer Reading Challenge launches on July 16 for children aged 5 to 11.
- Tai Chi class 12 -1pm (approx. 25 attend) on Thursdays
- Beginners computer classes drop in 11am -1pm (approx. 10 attend) on Tuesdays
- Reading groups various (approx.10 attend each group)
- Neighbourhood Police drop-in sessions (3 times weekly)
- Other ad hoc activities

The installation of solar photovoltaic (PV) panels would generate renewable electricity for Swiss Cottage Library for 20 years supporting the delivery of its activities and the service to the wide community of library users. The project is part of the Carbon Management Programme to reduce carbon emissions and is supported by the Council's Carbon Reduction Fund.

Section 2. What do you need?

The installation of solar PV panels will:

- address the recent budget cuts for the public sector (please refer to the Camden Future Libraries Consultation and <u>proposed changes</u>) and the continuous need to identify and deliver savings
- address the challenge of climate change and the need to reduce the carbon emissions
- generate renewable energy reducing the demand for carbon intensive electricity supply and contribute to an increased local energy resilience
- raise awareness of environmental issues and renewable energy generation within the community.

Section 3. The proposal

Following a feasibility study completed by Atkins, it is proposed to install a 48kWp solar PV system that would maximise the electricity generation and economic benefits of Feed in Tariff income for the project. Energy generation display will be

installed in the library to raise awareness on renewable energy generation amongst library users.

The existing chiller and associated HVAC plant on the roof are mounted on pads and there are no penetrations through the structure for fixing bolts. With this is mind it is recommended that a similar pad based ballast system is employed for the PV mounting system. The existing riser cupboard will be utilised to feed cables back to the main electrical intake located within the basement. Therefore the installation will not impact on the historic fabric of the building.

It is also planned that the PV panels are set a metre back from the parapet surrounding the roof. This will ensure that the panels will not be visible from ground level.

Section 4. Why do you need it and why do you need it now?

The project would deliver economic and environmental benefits, i.e.:

- It is estimated that the proposed solar PV system could generate around 40,800 kWh per year, which is ~7.5% of the electricity demand for the site. The renewable electricity will be generated for ~25 years.
- Majority of the electricity generated will be consumed onsite, and any additional generation will be exported to the grid offering further income (e.g. if it is decided for the library to be closed on Sundays).
- Overall, the project would deliver nearly £7k savings on electricity cost per annum.
- It is important to implement the project at the earliest possible time due to decreasing Feed in Tariff rates that is an additional income for renewable energy generation that is guaranteed for 20 years.
- The project would deliver over 20 tonnes of CO₂e savings per annum contributing to the Council's carbon reduction target of 40% by 2020.

Section 5. Justification

The project offers economic and environmental benefits that fulfil Camden's Policy requirements, i.e.:

- **Camden Plan**: carbon emission reduction targets of 27% by 2017 and 40% by 2020 for the Council's own estate and operations.
- **Camden's Core Strategy: CS14** Reduce impact on climate change and contribute to carbon emission reduction targets
- **Camden's Core Strategy: CS13** Tackling climate change through promoting higher environmental standards (generating renewable energy on-site)
- **Camden Development Policy DP25:** Help tackle climate change (supporting proposals that reduce the energy consumption of listed buildings, also renewable energy technologies, provided that they do not cause harm to the special architectural and historic interest of the building).

Swiss Cottage Library is a Grade II listed building and according to the Heritage Statement, the impact of the proposed project to the building will be low. The solar PV panels will not impact the external façade or original design features of the building. The PV panels will not be seen from street level and will not impact the adjacent surrounding buildings.