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PROPOSED SOLAR PANEL INSTALLATION AT No.6 CASTLE CLOSE, EARDISLEY, HEREFORDSHIRE.

August 2011

HERITAGE STATEMENT

Castle Close is a residential development of converted farm buildings which was completed some forty years ago and has been maintained well since. No6 is a middle-terrace, three bedroom house in a two-storey block of four, and the whole group enjoys listed status.

The dwelling faces almost due south [approx. 12.5o east of south] onto an intimate courtyard with single-storey ranges which provide some privacy between the opposing terraces.

It is evident upon inspection that due consideration has been given to the structural integrity of the historic construction. For conversions of this time, the oak frame has been left remarkably intact, and one would not want to compromise in any way what has already been achieved. The dwelling is contained within two bays of a substantial frame, being three panels high, on a stone plinth. The overall span is of some 7.5m and the trusses are correspondingly massive ; the tie beam still visible has a depth of 470mm at mid-span. The truss design is functional and typically agricultural utilising a pair of inclined struts and the trusses support two pairs of purlins, averaging 240x140mm in section, laid flat to the roof slope. The interlocking tiles, though not the lightest of roof coverings, are well within the load-bearing capacity of the structure and the addition of the proposed solar panels would have negligible effect in this respect. No reinforcement of the existing structure will be needed and no materials will be modified or removed. [With the exception of the drilling of some roof tiles for panel supports – see below.] The roof is felted and there is no evidence of protected species using the roof space. There are no known habitats in the immediate vicinity which might be affected by the installation.

Concerning the visual impact of the proposal, the installation would be visible almost exclusively to the residents of Castle Close. Mention has already been made of the screening afforded by the intervening single-storey ranges and this would be quite effective from ground level viewpoints within the development. Undoubtably the 'best' viewpoints would be from the first floor level of the opposing terrace [nos.1-4] This terrace would however block the view from the adjacent churchyard, and oblique views of no.6 from the main road are only possible when travelling southward, [i.e. only the north slope of the roof can be seen.]

Nevertheless, it must be conceded that the proposal involves the covering of an appreciable area of available roof and it is only after considering other possibilities that this scheme was put forward. There are no other suitable locations, in the garden or on other buildings, available to the applicant, and, with no trees, higher roofs or chimneys nearby to cast shade, this area offers a good opportunity to make a 'green' contribution. The applicant wishes to address climate change issues [and in so doing alleviate the burden of rising energy costs] through the use of solar photo-voltaic

technology, and is fortunate in having a situation which makes this possible. The proposed array is calculated to reduce CO_2 emissions by 2144 kg/year.

BRIEF SCHEDULE OF WORK

Carefully remove selected roof tiles to permit fixing of roof hook supports to the existing rafters.

Replace tiles and seal around supports to make weatherproof. Substitute any broken tiles with matching replacements.

Fix rails to roof hook supports and mount photo-voltaic modules in true plane with upper face no more than 100mm above tiling.

Check watertightness of completed rooftop installation.

Run cables internally avoiding drilling or notching of oak timbers.