DESIGN AND ACCESS STATEMENT

Explanation of Proposal

It is proposed to replace some of the windows in the house with new, custom-built windows, identical in appearance to the present windows, but fitted with double-glazed glass panes instead of the single-glazed panes used at present.

The object is to improve security and also to reduce heat loss, both by draughts through badly-fitting windows and by conduction through the glass, and thus improve the energy efficiency of the house, whilst maintaining its original appearance.

Most of the windows are in a poor state, but some are still sound. In some windows, the wood has rotted beyond repair, and in most the construction is such that they cannot prevent draughts. The windows have no damp-proof barrier between the frame and the wall. In some cases the cills have rotted and water is now running onto the walls and damaging the structure.

The building is listed, grade 2, and the listing states:

> "*Early C19. Two storeys. Two windows. Faced with flints with red brick dressings and quoins. Hipped thatched roof with pentice to north east. Casement windows.*"

It was originally a pair of farm worker's cottages, a very attractive example of its type, with flint and brick walls and thatched roof. There are two, more recent extensions: a small porch facing west, and a 'storehouse' facing south. Both these extensions have tiled roofs, the storehouse has hand-made clay tiles and was probably built shortly after the original building, whereas the porch has what appears to be more modern factory made tiles and this was probably added quite recently - perhaps in the 1950s or 60s. When the porch was added, the window of Living room 2 was removed and was replaced with a full height window, similar to a French window but non-opening. This window and the porch are out of keeping with the original house.

The house as a whole is of relatively low quality with small rooms, small windows and generally of poor and inefficient construction. The windows are of softwood and there are considerable areas of rot in the wood. In addition, the poor quality of construction of the windows means that they do not fit correctly, and so are subject to very significant draughts and water leaks. In particular, the tops of the window frames and the cills have rotted and virtually disappeared in most of the windows, which results in water finding a direct path into the structure of the walls and this will lead to further deterioration in the near future.

It is likely that the windows were replaced or repaired over a period of time, perhaps fifty years ago, and they are clearly very poor quality, both in construction and in materials. They were probably home-made or made by a local artisan on-site, and would not be acceptable even by the building regulations of fifty years ago. There is no water barrier around the frames and no method of deflecting water from the walls.

As a result of this, there are very substantial draughts throughout the house. This leads to large amounts of dust and dirt being present everywhere in the house, and to heat loss due both to draughts and to conduction. Thus the house is very cold in winter and there is condensation inside. So the overall effect is that the structure of the house is deteriorating, both from the outside and the inside. In addition, large amounts of energy are required to heat the house in winter - the fuel bill for heating is over £2,000 pa just to keep two rooms at a reasonable temperature. To overcome this, and to safeguard the building for future generations, it is proposed (among other measures) to replace all the windows with custom-made windows, but incorporating double-glazed panels instead of the single-glazed panels currently used. The replacement windows would be identical in every respect to the existing ones, but would be draught-proof and protected against moisture ingress. In this way, the appearance of the house will be maintained, but also the deterioration of the structure of the house will be stopped, so that this example of our heritage will be preserved for future generations.

In addition, the amount of heat loss is far in excess of government guidelines, and would at present achieve an extremely low rating of energy efficiency, thus its contribution to adverse climate change is proportionately far greater than that of other houses.

The government's publication Planning Policy Statement 5: Planning for the Historic Environment, Practice Guide (para 25) says:

> *"Local planning authorities are encouraged to support home owners and developers to find solutions that minimise or avoid harm to an asset's significance while delivering improved energy performance or generation."*

Another way of reducing heat loss through windows is to install secondary glazing internally. However, the house clearly never had secondary glazing, and if installed, it would be visually instrusive from both outside and inside and would be out of character with this type of house. Also, this does not address the issue of poor quality windows contributing to the structural deterioration of the building. A far better solution would be to use double-glazed panels in new custom-built frames, which would be virtually invisible and so would detract less from the historic character of the building, whilst still contributing to a reduction in climate change and helping to protect the building.

Windows are of course a significant feature of any building, but in the case of this building the details of the windows are not mentioned in the listing, other than the description "casement". As the windows were almost certainly replaced at some point in the past, and there are currently at least four different styles of windows in the building, it could be argued that the details of the windows are less important in heritage terms than the overall appearance of the 'cottage' type windows set in the flint walls. In this case, the details of the glass panes will be unimportant compared with the overall appearance, and the extremely small visual change would be a very small price to pay in order to achieve the improvements in energy performance and the enhanced protection for the building.

The manufacturer of one make of modern sealed unit makes this statement on their website (www.slenderpane.co.uk):

> *"When Slimlite Double Glazed Units are glazed into a timber window, they are undetectable unless from close up examination.*
> *Given the Government's drive to reduce carbon dioxide emissions, Planning and Conservation Authorities should consider the use of Slimlite Double Glazed Units in Conservation and Listed or Graded Buildings as there is no change to the physical appearance of a window, but provides serious reduction in energy requirement and therefore reduction in carbon dioxide emissions."*

This shows a window in a listed building that has been fitted with the proposed double-glazed panes

The proposed windows would be fitted with an edge which is dark, rather than silver, so making the double glazed panes less obvious.

In conclusion

The amount of harm done by leaving the windows in their present state, or by failing to improve their insulation values will, in the long term, do greater damage to this historic building. The long-term conservation of the building will best be achieved by replacing the windows with custom-made windows having high insulation values and draught-proofing, which will not detract from the significance of the building, but will ensure that future generations will benefit from having this historical asset in the community.