# Richard M Blenkiron, BA(Hons) Arch.

# ARCHITECTURAL SERVICES.

81 Owlet Road, Shipley, West Yorks, BD18 2EN. 01274 821593 or 07830291925.

# SUBSTAINABLE DESIGN AND CONSTRUTION STATEMENT. Ref 1022SBCS

ADDRESS: 3 Haw Park, Embsay, BD23 6RY.

PROPOSAL : Single storey side and rear extensions.

# PURPOSE OF THE STATEMENT.

Is to demonstrate how the proposed development would minimise resource and energy consumption compared to the minimum required under current building regulations legislation and how it could be designed to withstand the long term impacts of climate change. This is a Craven Council planning requirement that also applies to new house extensions.

# THE PROPOSAL.

Is to extend an existing bungalow to create an extra bedroom, larger kitchen and new living room.

# THE SITE.

Is a three bedroom bungalow that was built around the 1950s.

It is understood that a narrow cavity wall construction was used that was not insulated. The standard of insulation was very low then with no floor insulation and single glazed windows.

# ENERGY EFFICIENCY.

The wrapping of the existing dwelling with new extensions with modern construction provides a means of providing an insulated envelope to those parts of the building enclosed by the new structure.

This improved the overall energy efficiency of the dwelling as a whole.

The cavity wall insulation chosen can be better than current building regulations.

I,e 100mm Xtratherm cavity therm CT/PIR to give a U value of 0.17.

Windows and doors will also be better than current building regulations.

# WASTE AND RECYCLING.

The chosen builder will be employed on the basis that his quote will keep waste to a very minimum. This can be achieved by accurate working out of material quantities and good on site management. Builders have realised that waste means less profit. Thus incentive to eliminate waste.

Some small areas of the existing walls are to be demolished and it is understood that the masonry waste may be able to be used as hardcore to the base of the floors.

Any top soil that is removed will be recycled as there is a demand for top soil. People are willing to pay for it.

#### MATERIALS.

Will be to match the existing street scene. These are widely available from local builder's merchants. There is more energy efficient materials available but the Council planner would have to advice if these were acceptable in this location.

#### FLOOD RISK.

While the site is not in a flood risk area. Rainwater will have to discharge to the mains sewer as we believe having a soak away in the garden, which would have to be 6 meters away from the dwelling could cause issues to other neighbour's gardens. Thus not acceptable.

The use of a new shower room will mean less water used then having a bath. The new WC would have a dual flush mechanism.

# Biodiversity.

The site has quite a large garden with bushes at the boundaries which will be unaffected. Natural biodiversity of the neighbourhood will not be affected.

# SECURE DESIGN.

Due to the design of the extensions.

The front will remain open which means that neighbours will continue to see the front elevation windows which helps maintain neighbourhood security.

The glazed doors to the rear will also be partially visible from neighbouring properties and will incorporate the latest security locks.

# CONCLUSION.

On balance the works to be undertaken within this scheme will provide a significant improvement to the thermal performance of the existing property.

The exact affects of climate change are not totally understood at this current time.

The assumptions are that the weather will get hotter and wetter.

We believe the proposed extensions and the dwelling as a whole will be ok regard climate change. Unless advised otherwise.

Should you require any further information, then do not hesitate to contact me.

Regards,

Richard Blenkiron.