2028 – THE SAWMILL PENISTONE

ENGINEERS REPORT FOR THE SAWMILL FAÇADE RETENTION ALONG THE GREEN, PENISTONE.

BJB Consulting LLP were appointed by Mr. Ciaran Donnelly to undertake a visual building inspection of the building known as The Sawmill at the junction with The Green and Green Road, Penistone. The inspection was carried out on the 19th December 2011.

The purpose of the investigation was specifically to evaluate the existing facades which affront The Green (photos 1 & 2) and also directly adjacent to the gable of residential properties Nos. 1 to 5 inclusive (photo 3), as these have been suggested for retention as part of the redevelopment of the site.

From an internal inspection it is apparent that the stone wall running the length of The Green is acting as a retaining wall to the footpath and highway. The height of the retaining wall varies from approximately 1.9m at the Green Road end to approximately 1.7m at the opposite end adjacent to the residential properties. The condition of the internal face of this wall is in extremely poor condition. Moisture has penetrated the wall resulting in the loss of mortar, also the stone is becoming soft and fragile (photo 4).

At first floor level timber joists have been pocketed into the stone, over time and due to the presence of moisture the ends of the joists have rotted away leaving the timber first floor sagging and voids within the stone wall. Damp has extensively penetrated the wall leaving the stone soft and fragile and the mortar needing replacement (photo 5).

Externally the wall is in an extremely poor condition, repeated wetting along the bottom of the wall from road spray has left the stonework in a highly weathered condition, in certain locations the mortar is non existent (photo 6). Substantial large cracks are evident at numerous locations along the wall and have likely been caused by failed timber lintels and settlement of the structure (photos 7, 8 & 9). Many of these problems are likely to have been worsened by the close proximity of the highway and vibrations induced by vehicles travelling along them.

Conclusions

Consideration had been given to temporarily prop the wall in order to carry out repairs however this has been discounted. The wall is in extremely close proximity to the highway with the footpath being only approximately 800mm wide, any propping system would pose significant safety risks and also hamper the extensive mortar repairs and stone replacement which would be necessary.

It is the professional opinion of BJB Consulting LLP that the existing wall is unsafe to be retained and also beyond economic repair.

We would recommend that the existing wall is demolished to ground level with the highway retained portion left in situ following the construction of a new fully waterproofed highway retaining wall being built slightly within the site boundary, this new wall would provide a long term highway retaining solution whilst also acting as a foundation for the new façade.

Moving the new façade further back from the highway would provide a degree of protection from road spray which is currently have a detrimental affect upon the integrity of existing wall.

Chris Neill
Project Engineer – BJB Consulting LLP 9th January 2012

APPENDIX A



Photo 1



Photo 2



Photo 3



Photo 4



Photo 5



Photo 6



Photo 7



Photo 8



Photo 9