Portakabin Total Solutions

Flood Risk Assessment

Whalley CE Primary School,
Church Lane,
Whalley,
Lancashire,
BB7 9SY.

Application Number: 3/2016/0093

February 2016

1- Introduction

This Flood Risk Assessment (FRA) accompanies an application by Blackburn Diocese (Board of Education) for the installation of a single-storey *Portakabin Ultima* building to be sited on an existing hard standing area at Whalley CE Primary School, Church Lane, Whalley, Lancashire, BB7 9SL. The proposed *Portakabin Ultima* building will be temporary for 16 Weeks.

2- The development need

The development need has arisen due to the school's existing basement classroom being damaged by water ingress in December 2015. The existing classroom is being refurbished and as an interim measure the school will hire a Portakabin Classroom building for 16 weeks to ensure the continuity of education for the children on site.

Although areas of the village of Whalley were badly affected by flooding in December 2015, the school buildings and grounds were not directly affected. The school classroom damaged in December 2015 was the schools basement classroom situated below ground level. The reason this classroom became water damaged is not absolutely clear but there are only 3 possible reasons this could have happened:

First possibility: The drain at the bottom of the stairs to the basement could have become blocked causing water to pool. If this went under the door, the pump system installed as part of the tanking that was plugged in just inside the door could have shorted out and therefore the water built up and the basement flooded.

Second possibility: Rainwater caused the electrics to short and therefore the Saniflow system on the toilets stopped working. Water in the drains backed up and flooded the basement.

Third possibility: The tanking system which was fitted 16 years ago failed. When the flooring was taken up, the joins between the plastic sheets were not sealed securely. The pressure of groundwater was so high that it forced its way through the seals and flooded the room.

3- Building Design Considerations

The temporary Portakabin classroom building will be installed on surface mounted pad foundations on the schools hard-standing play area to the south east of the school site. The pad foundations range from 50mm above ground level at the lowest point to 400mm above ground level at the highest point. The finished floor level of the building is 370mm from the top of the foundation pad. This means the building will be elevated above ground level by 420mm at the lowest point and 770mm at the highest point. As the building is raised above ground level this affords it additional protection in the unlikely event that the site should be flooded.

4- Flood evacuation procedures

The school has an emergency evacuation policy which involves the children being evacuated to either the parish church or to the Abbey grounds. A copy of this is available in school if required. In the case of a flood, the abbey grounds would not be the sensible choice as that area was flooded badly in December 2015 so the school would therefore evacuate to the church. The long term plan if the whole building was flooded would have to be formulated with support from Lancashire County Council – provision of temporary classrooms etc.

5- Conclusions

As the school buildings and grounds were not flooded in December 2015, when the area experienced the worst flooding in recent history, it is highly unlikely it will become flooded in the future. The additional mitigating factor that the building will be raised above the existing ground level of the site, affords the building increased protection from flood damage. This combined with the very short term period (16 weeks) in which the building will be on site, significantly lowers the risk the temporary Portakabin building will be affected by flooding on this site.