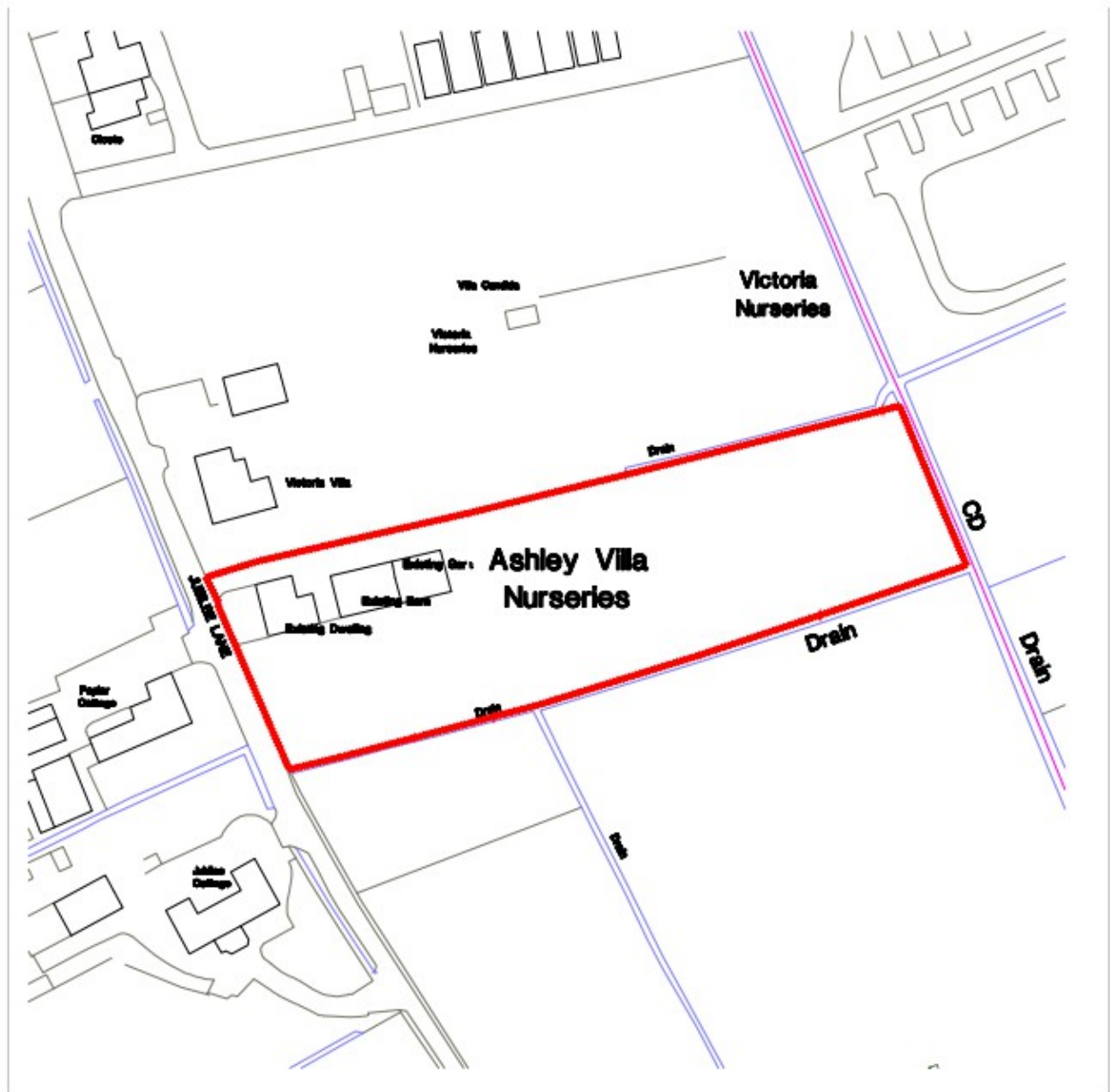


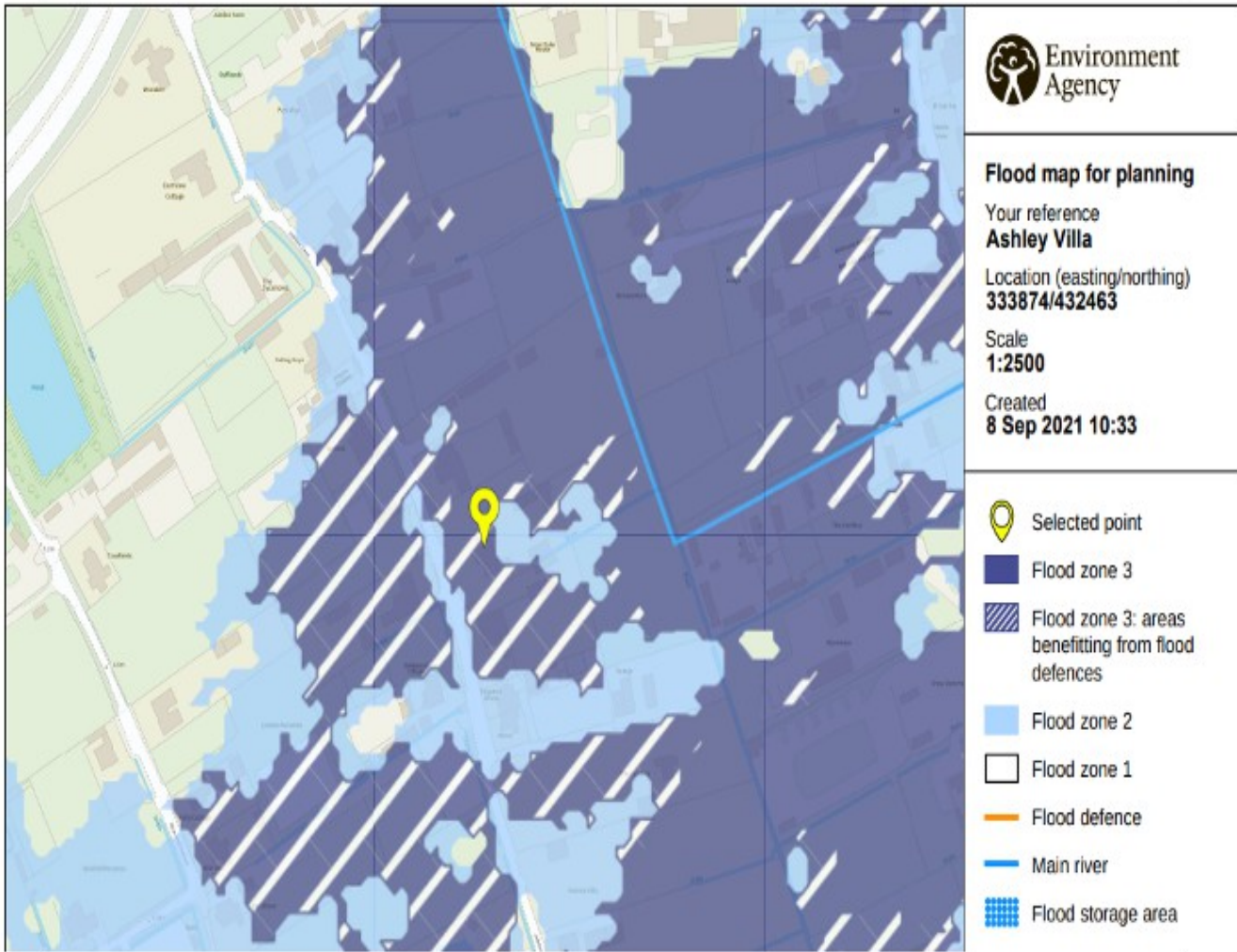
**FLOOD RISK ASSESSMENT**

Ashley Villa Nurseries Jubilee Lane Marton Moss Blackpool FY4 5EP

DATED : 23 SEPTMBER 2021



**SITE PLAN**



## Flood map for planning

Your reference  
**Ashley Villa**

Location (easting/northing)  
**333874/432463**

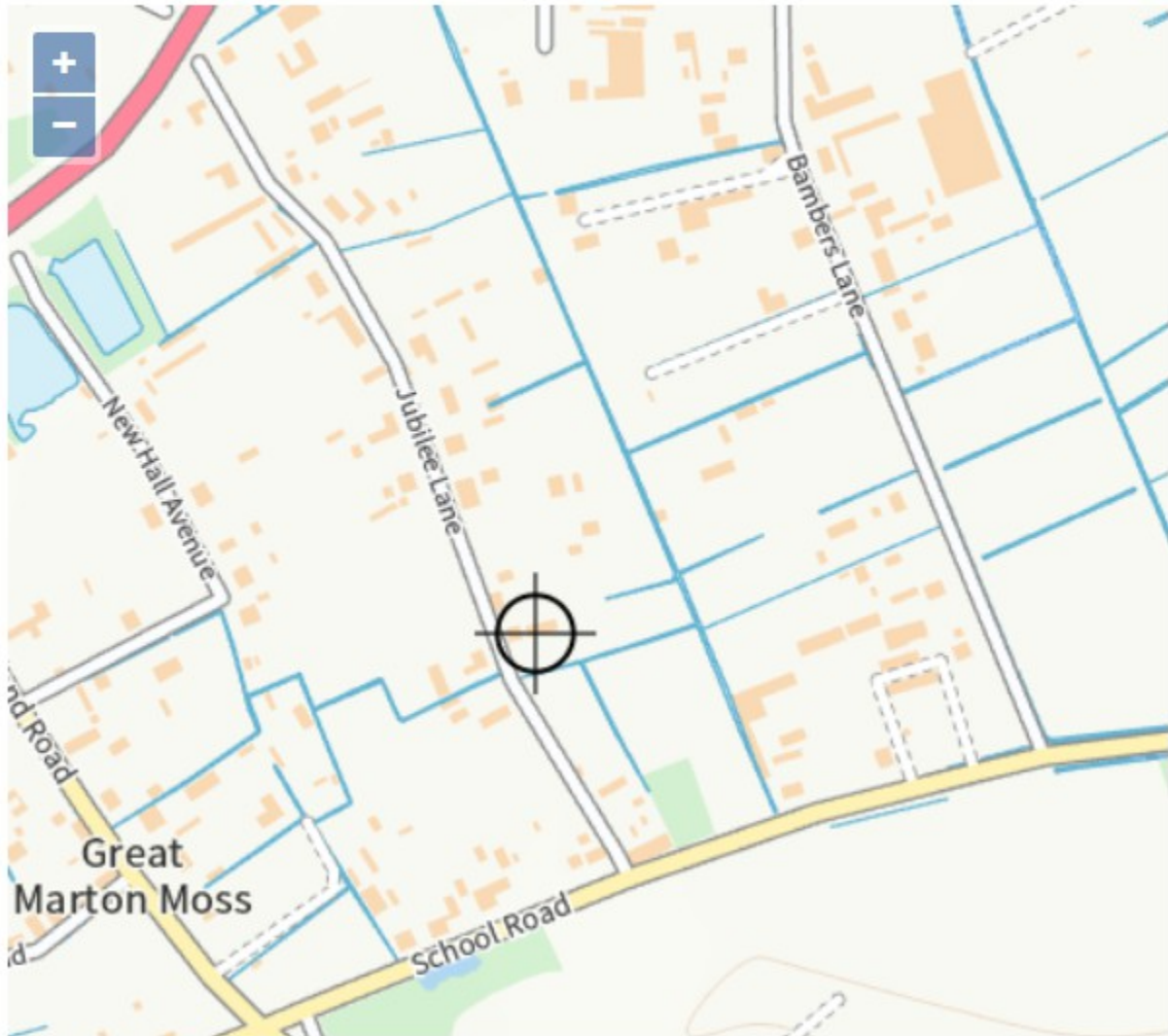
Created  
**8 Sep 2021 10:33**

**Your selected location is in flood zone 3 – an area with a high probability of flooding that benefits from flood defences.**

## ENVIROMENT AGENCY FLOOD MAPPING FOR SURFACE WATER

Flood risk

Medium risk: depth



The EA accepts that the threat from surface water flooding is “very low”

The “medium” risk is the equivalent of the the 1 in 100 flood return.



**PROPOSED DEMOLITION OF EXISTING BARN/OUTBUILDING AND REPLACEMENT WITH A RESIDENTIAL DEVELOPMENT ON VIRTUALLY THE SAME FOOTPRINT AT ASHLEY VILLA NURSERIES JUBILEE LANE MARTON MOSS BLACKPOOL FY4 5EP**

**FLOOD RISK ASSESSMENT REPORT / DESK TOP STUDY.**

This report is compiled for a planning application . Detailed plans are supplied by the applicant within the application. It is written under the criteria within the National Planning Policy Framework (NPPF) and the Environment Agency (EA) Guidance notes to local authorities.

It is proposed to change the site of the barn to the rear of the existing house from storage to residential development . This means that the flood risk classification would be “more vulnerable” due to the residential element involved.

EA mapping shows the site in Flood Zone 3 but the hatching shows that it is protected by flood defences. There is no history of flooding at the site.

The proposal is to knock down an existing barn come outhouse and replace it with a two and one storey residential property contained on much the same footprint, It is also proposed that there will be an orangery between the two buildings to connect one with the other.

The overall difference in footprint is 16sq.metres which would be taken up to a great extent by the proposed orangery.

There are no bedrooms on the ground floor but there will be stairs to the floor above which would have one master bedroom with storage space.

The applicant is concerned that there is not enough room in the existing house for family occupation and he would like to address this by making room for family members to keep the family together in the years to come. The development of the outhouse would enable this to be achieved by using the developed site as an extension to the existing property .

The site falls near the Marton Moss area of Blackpool. Marton Moss is a flat semi-rural district on the eastern hinterland of Blackpool, historically a centre of market gardening and characterised by scattered dwellings along narrow lanes crossing the drained mosslands that give the area its name.

Ashley Villa was the principal property of what was originally a large nursery, which is no longer in operation and whose glasshouses have now all been demolished. It was one of the earliest nurseries to be established in the area. The local authority is now considering Marston Moss for further development opportunities in liaison with a body set up to represent local interests.

When one considers flooding at Blackpool the immediate thought is with regard to the sea

but a flood risk assessment has to consider all sources of flooding .

The most serious incursion in Blackpool in the last 50 years resulted from the storms of 11/12 November 1977 when a combination of high tides, high winds, overtopping and rainfall estimated as a 1 in 100 year event caused major inundation in the Anchorholme area of North Blackpool with flooding up to one kilometre inland effecting hundreds of properties.

However the site under assessment lies 2.5 kilometres inland so would not have been affected.

Also massive improvements to the sea defences were constructed in 1981 to further protect people and properties in the Blackpool area.

A significant problem in the Blackpool area is the state of the mains drainage. There have been a number of instances of the drainage surcharging causing localised flooding. Records show that there have been two instances of drainage flooding in Jubilee Lane but these are not shown to have affected the site under assessment. The record of these does not mention any property inundation.

Flood risk vulnerability is laid out in a chart from the NPPF and this shows that the site is appropriate but the exception test needs to be carried out . This covered in this report

**Table 2 - Flood Risk Vulnerability and Flood Zone ‘Compatibility’**

Flood Risk Vulnerability Classification	Essential Infrastructure	Water Compatible	Highly Vulnerable	More Vulnerable	Less Vulnerable
Zone 1	✓	✓	✓	✓	✓
Zone 2	✓	✓	Exception test required	✓	✓
Zone 3a	Exception test required	✓	✗	Exception test required	✓
Zone 3b ‘Functional Floodplain’	Exception test required	✓	✗	✗	✗

**Key:** ✓ : Development is appropriate, ✗ : Development should not be permitted.

Anecdotal evidence shows the site has not been subject to flooding from any source

But the principal threat is said to be fluvial , from the Bambers Lane water course which is 250 metres from the site. This has been the subject of hydraulic modelling and the results are included in this report.

Once again the site is protected by flood defences from this source so any possible flooding would be residual.

So in common with the seaborne threat the risk to the site is low.

When contour mapping is viewed the topography of the areas between the Bambers Lane



area and Jubilee Road shows there is a 2 metre uplift to Jubilee Lane . The actual flood path would follow the three metre contour to the South and the North and East of Bamber Lane. There would be a residual flow to the West but this would not get as far as Jubilee Lane due to it being at a higher level.

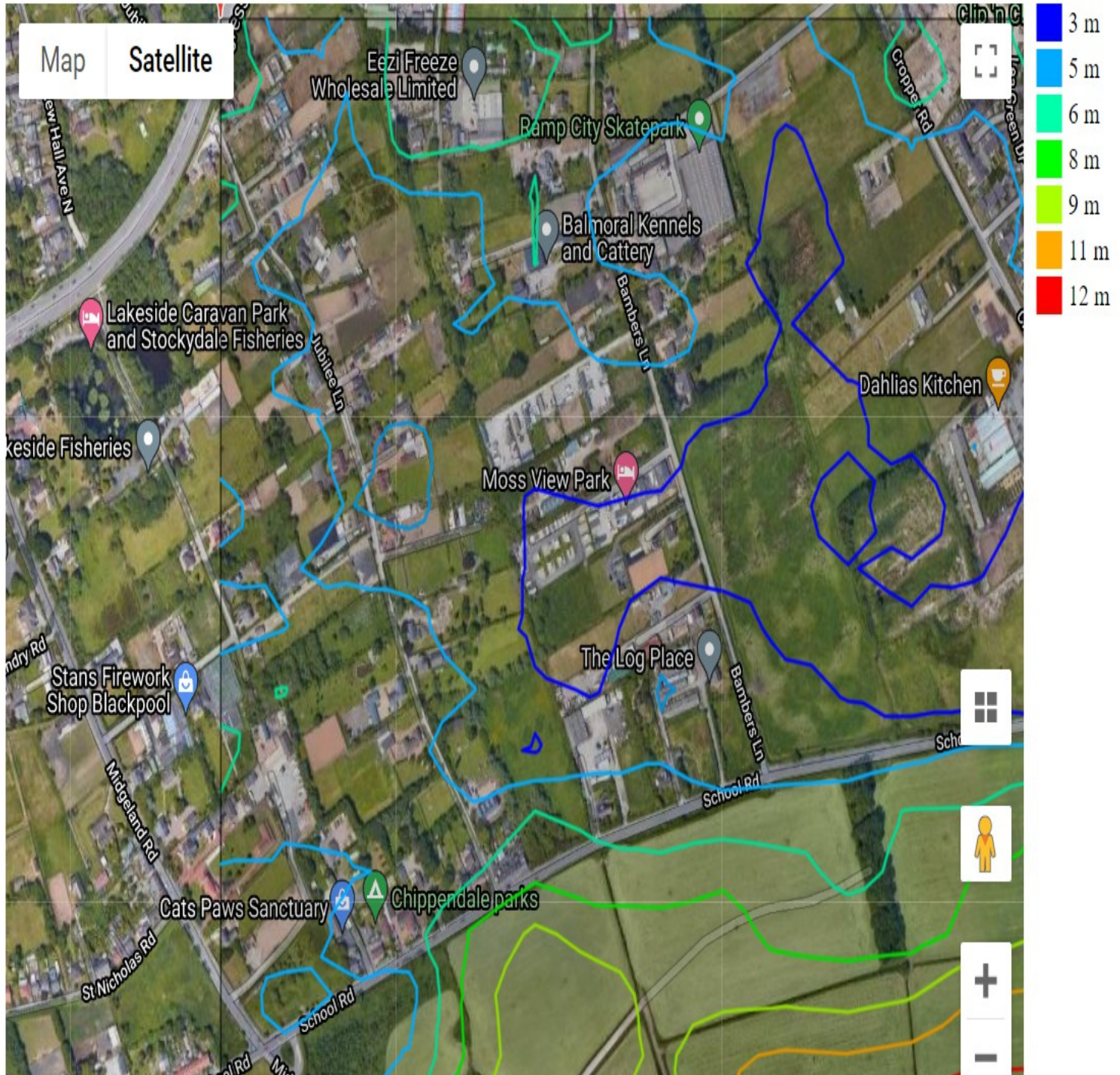
## Contour Map Creator

0.314

[improvement ideas](#)

fy4 5ep UK

search



The topography therefore would convey any flood water away from the site

Major works have also been carried out to improve the performance of drainage in the Blackpool area.

So it is considered that the threat to the site from drainage malfunction has been reduced. The threat from this source is now low.

### **Groundwater Threat**

Investigations have been made in the BGS Groundwater Flooding Hazard map. This shows the susceptibility to groundwater flooding is very low

### **Surface Water Flood thret**

The EA flood mapping for this possible source of flooding shows it is “very low”

### **Sewer Flooding**

Considerable works have been undertaken to improve sewer drainage in the Blackpool area.

### **Flooding from impounded water sources**

There are none close enough to the site to be a threat.

### **AOD Levels**

Levels have been obtained for both flooding and ground levels. These have been compared to analyse the actual flood risk to the site in the defended and scenario. The flood levels are derived taking into account the EA guidance of February 2016 which considers main river basins rather than the previous information based on a national flood level analysis.

### **Fluvial Defended Modelled Flood Levels and Flows**

<b>Parameter</b>	<b>20</b>	<b>100</b>	<b>100 +30%</b>	<b>100 +70%</b>	<b>1000</b>
Level (mAOD)	3.30	3.49	3.63	3.79	3.86
Flow (m <sup>3</sup> /s)	2.38	4.59	5.97	7.80	10.98
Level (mAOD)	3.29	3.48	3.63	3.79	3.86
Flow (m <sup>3</sup> /s)	0.97	0.97	0.96	0.97	0.97
Level (mAOD)	3.29	3.48	3.63	3.79	3.86
Flow (m <sup>3</sup> /s)	0.89	2.33	3.23	4.37	5.53

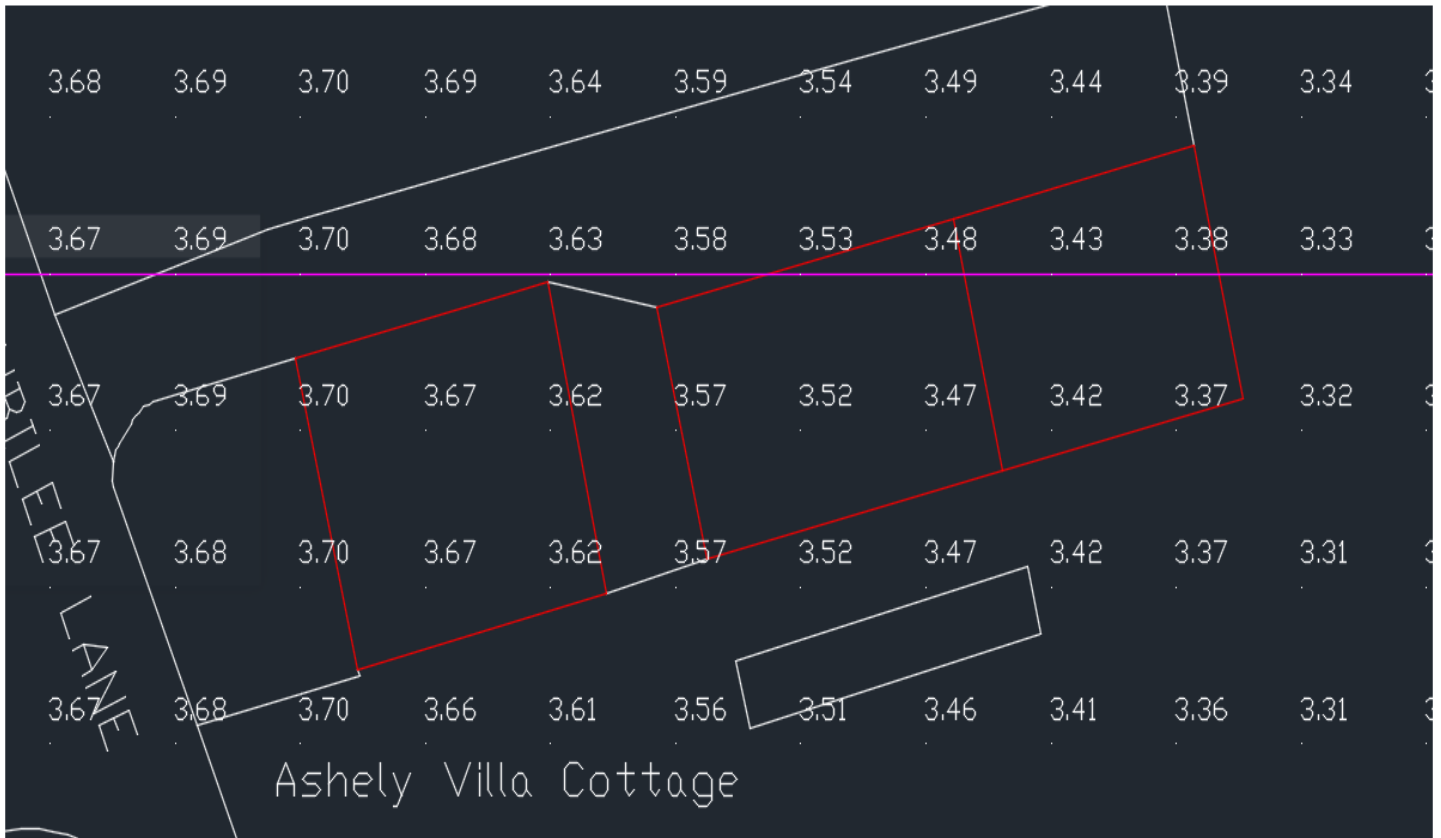
Considering the low threat to the site the 100 year plus 30 percent is chosen from the above .

This stands at the flood level of 3.63 AOD.

These are levels in consideration of overtopping or breach of the defences.



## SITE LEVELS TO ORDNANCE DATUM.



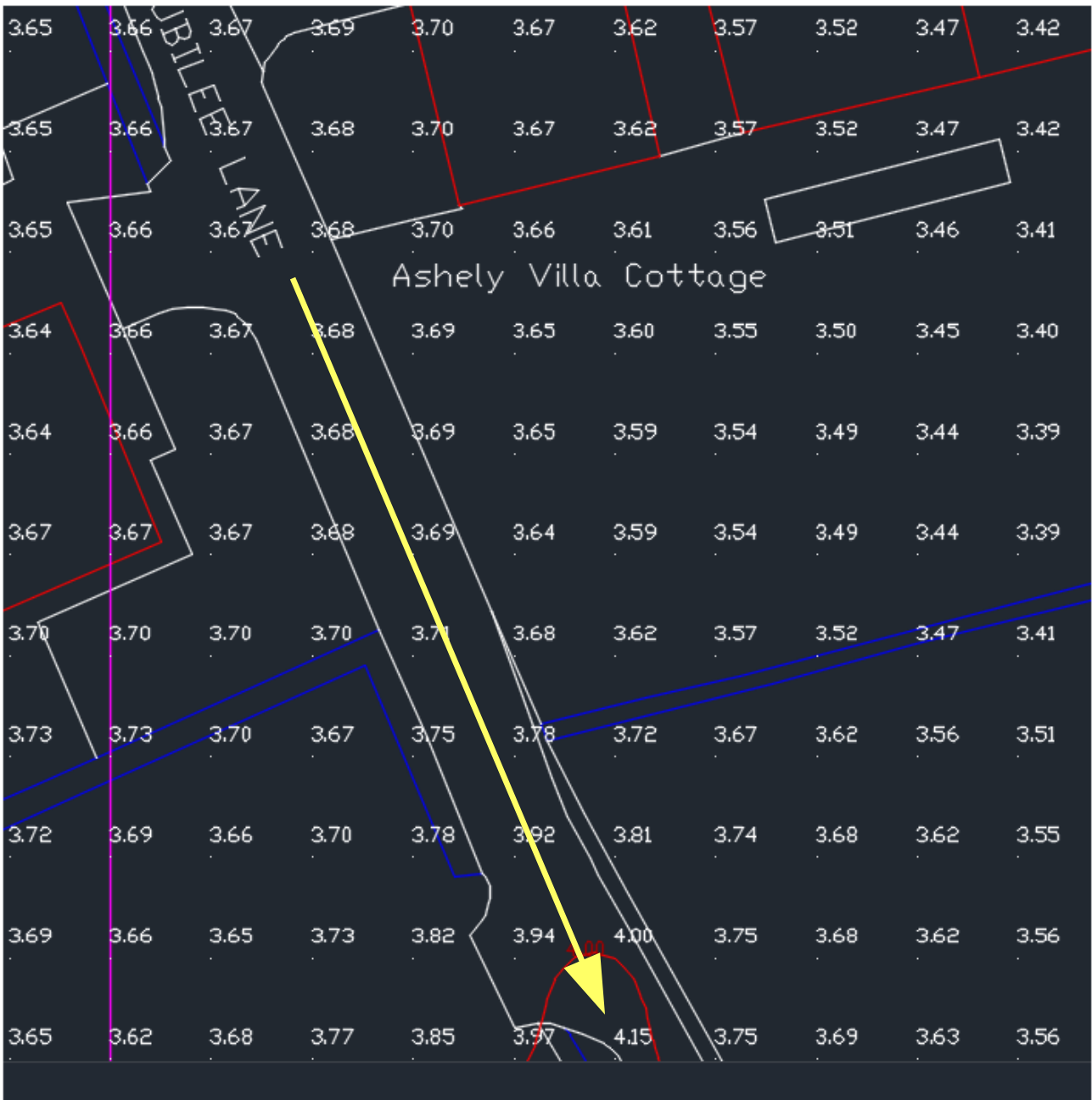
The highest level on the proposed site to the rear of the existing house is 3.57AOD and the lowest level is at 3.37AOD. The mean level across the site is therefore 3.47AOD.

The flood level on site would therefore be 3.63 minus 3.47 which equates to 0.16mm

This is well within the 300mm allowance for safe passage through flood water as defined by DEFRA. Also emergency vehicles would not be prevented from gaining ingress-egress to and from the property.

The access to the site would be at 3.67AOD which is higher than the flood level. The road from the access to Jubilee Lane rises to at least 4.15 to the South. Well above the flood level.

Please see mapping below.



This would mean that there would be dry ingress/egress to the site.

Because of this an evacuation plan would not be required.

However as a new building is being established it should have a ground floor level and a threshold of 300mm above the flood level which would be 3.93AOD. This would also mean the ground level of the Orangery would also be 3.93AOD with a step down to the main (existing) house.

### **Flood Evacuation Procedure**

This would not be required as the road would be above the flood level and rising to the South.

## **Flood Resilience Measures**

These would not be required as the property under assessment would be above the flood level. So would the orangery.

## **Compensation**

This is considered not to be required as the increase in footprint would be minimal. Both the main house and the new build would occupy existing footprints with only the orangery being added.

## **Sustainable drainage.**

BGS information shows the site is probably underlain with peat. However it is recommended that ground tests be carried to check groundwater levels and also permeability as a condition of planning. This is the only safe way to investigate ground conditions to avoid any offsite implications.

With regard to peat it can hold twenty times its weight in water so should be appropriate for soakaways. This requires liaison with the authority's building control department.

If the applicant decides to use mains drainage as a receptor for site run off then interceptors should be fitted to make sure only clean water enters the receptor and also flow control mechanisms- such as hydro-brakes – should be fitted to make sure there is no “surge” into the mains drainage.

## **CONCLUSION**

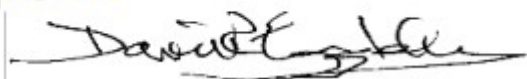
The site in question acts as an extension to the main house. The properties would be joined by an orangery which will provide an intersection between the properties. This enables the two properties to be expanded as one house to provide enough room for the development to cater for it being a family house in the years to come.

An in-depth analysis of the flood risk to the site has been carried out and this considers all sources of possible flooding are at a “low” classification. There is no record of the main house being flooded and this is borne out by anecdotal evidence and contour mapping within this report.

It also has to be borne in mind that the EA accedes to the fact that its mapping is of a very general nature , not to be relied upon and totally inappropriate for individual site specific assessment.

I see no reason why this application should fail on flood risk grounds.

Signed



David Eggleton  
Managing Director.