PROPOSED DEVELOPMENT AT THE REAR OF GLENDALE, 61, STATION ROAD, LONG SUTTON, PE12 9BS

FLOOD RISK ASSESSMENT



View of site looking south

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69 Charlotte Way,
Peterborough,
PE3 9ER

This flood risk assessment has been prepared solely to support the planning application for a development at 61 Station Road, Long Sutton. The author has made every effort to provide an accurate assessment of the flood risk but accepts no liability should the information be found to be incorrect or incomplete, or if it is used for any other purposes other than for which it was originally commissioned.

Introduction

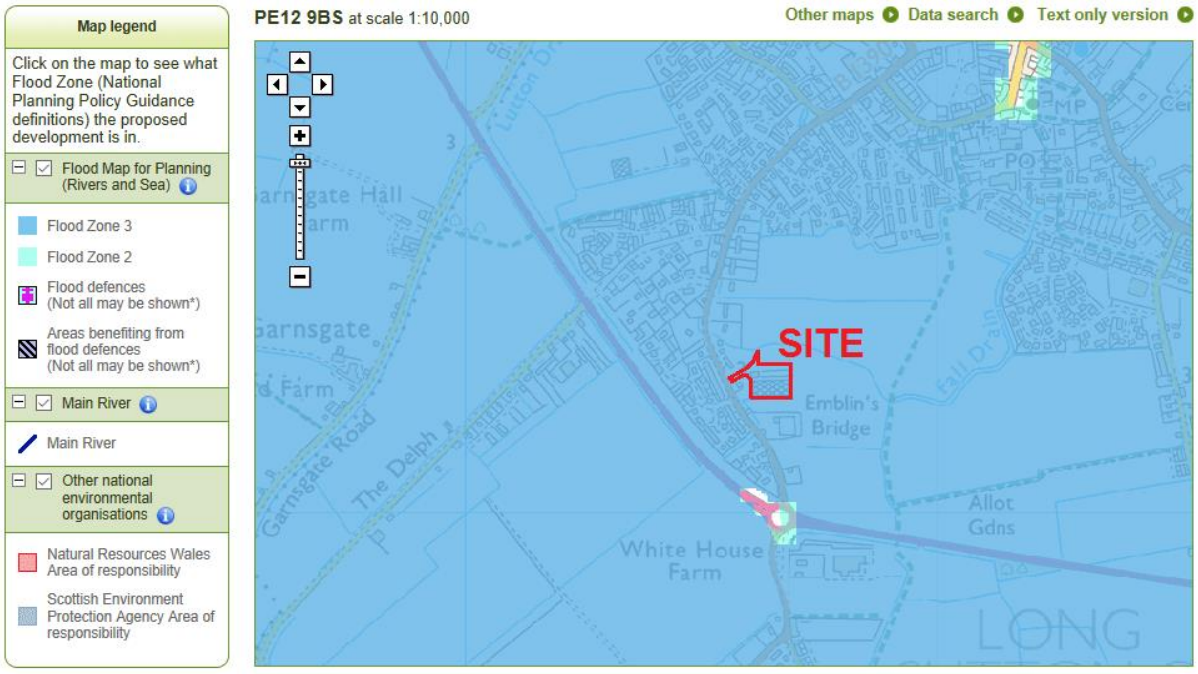
A Planning application is due to be submitted to South Holland District Council to construct a small development east of the house called Glendale, 61, Station Road, Long Sutton, PE12 9BS. At present there are glasshouses on part of the site which are now not used.

The site is in Flood Zone 3 as shown on the Environment Agency's Flood Zone map. The flood zone maps do not take into account existing flood defences.

The Planning Application therefore requires a flood risk assessment to be carried out as required in the Planning Practice Guidance to the National Planning Policy Framework Development and Flood Risk. The site is within a defended area as specified in the South Holland District Council's Strategic Flood Risk Assessment and is located in the South Holland Internal Drainage Board District.

Environment Agency (EA) Flood Zones

The map below is taken from the Environment agency website and shows the whole area is within flood zone 3.



Application Site

The site is located 1 km south west of the centre of Long Sutton, 6.0 km from the tidal defences of the River Nene between the South Holland Main Drain Outfall and the A17 Bridge, and at least 10km south of the tidal defences of the Wash.

The National Grid Reference of the site is 542650 322280, and the extent of the site is shown on the plan at the end of this document.

As the site is within a defended area the proposed development can be considered to be within Flood Zone 3(a) “High Probability” as defined in Table 1 of the Technical Guidance.

Applying the flood risk vulnerability classification in Table 2 of the Guidance, the development is classified as “more vulnerable”. Table 3 of the Guidance states that residential development is only permitted in Flood Zone 3(a) after the sequential and exception test has been followed.

Sequential Test

The aim of the Sequential Test, as set out in the Planning Practice Guidance, is to ensure that a sequential approach is followed to steer new development to areas with the lowest probability of flooding. The flood zones as defined in the Strategic Flood Risk Assessment for the area provide the basis for applying the Test. The aim is to steer new development to Flood Zone 1 (areas with a low probability of river or sea flooding). Where there are no reasonably available sites in Flood Zone 1, local planning authorities in their decision making should take into account the flood risk vulnerability of land uses and consider reasonably available sites in Flood Zone 2 (areas with a medium probability of river or sea flooding), applying the Exception Test if required. Only where there are no reasonably available sites in Flood Zones 1 or 2 should the suitability of sites in Flood Zone 3 (areas with a high probability of river or sea flooding) be considered, taking into account the flood risk vulnerability of land uses and applying the Exception Test if required.

As can be seen from the map on page 2 of this report the whole of the area of Long Sutton is in Flood Zone 3(a).

Taking into account the guidance, it can be seen that it is extremely unlikely that an alternative site with a lower flood risk could be found in Long Sutton. The safety of the development will be delivered by ensuring the floor level of the proposed new dwelling is above predicted residual flood levels for this area.

The South Holland District Council Core Strategy states that there is a limited number of sites in the South Holland DC area available for residential development. Some further land will need to be identified to enable the Council to meet the RSS and Structure Plan requirement for 2021. Therefore there is a requirement for further land to be brought forward and used for residential development.

Therefore I consider that the sequential test has been passed.

Exception Test

The Sequential Test has demonstrated that it is not possible, consistent with wider sustainability objectives, for the development to be located in zones with a lower probability of flooding. Therefore the Exception Test must be applied and for this to be passed:

- It must be demonstrated that the development provides wider sustainability benefits to the community that outweigh flood risks, informed by the Strategic Flood Risk Assessment; and
- A site-specific flood risk assessment must demonstrate that the development will be safe for its lifetime taking into account of the vulnerability of its users, without increasing flood risk elsewhere, and where possible will reduce flood risk overall.

Both parts of this test must be satisfied in order for the development to be considered appropriate in terms of flood risk. There must be robust evidence in support of every part of the test.

The first section will be demonstrated by the Supporting Planning Statement and compliance with South Holland District Council's planning policies.

This flood risk assessment will demonstrate that the development will be safe for its lifetime and it will not increase flood risk elsewhere.

Strategic Flood Risk Assessment

The following information about the flood risk in the location of this development has been sourced from the maps and reports in the South Holland District Council's Strategic Flood Risk Assessment (SHDC SFRA).

Report Maps

Map 3 shows that site is within flood zone 3.

Map 5 shows that the site is at low or medium risk, but reliant on flood defences for this standard.

Map 6 indicates the peak depth is zero for the present day 1% fluvial and 0.5% tidal event probability.

Map 7 indicates the peak velocity is zero for the present day 1% fluvial and 0.5% tidal event probability.

Map 12 indicates the actual risk is low or medium for the year 2055 1% fluvial and 0.5% tidal event probability.

Map 13 indicates the actual risk is low or medium for the year 2115 1% fluvial and 0.5% tidal event probability.

Map 16 shows that the site is not within a rapid inundation zone.

Flood Maps Table D1

The actual flood hazard for the present day and 2115 is shown as follows:

Depth of flooding..... zero

Extent of flooding..... zero

Velocity ..... nil

The residual flood hazard for the present day and 2115 is shown as follows:

Depth of flooding..... zero

Extent of flooding..... zero

Velocity ..... nil

Maximum flood level and bank levels in the River Nene

The maximum levels in this tidal section of the River Nene 6km east of the site are as follows:

	2007	2115
Peak 1 in 200 year level	5.86	6.20
Peak 1 in 1000 year level	7.00	7.35

The defence level (top of left bank) between South Holland Main Drain and the A17 Bridge are approximately 7.00m OD. However there is a low section adjacent to the bridge itself at a level of 5.95m OD. Levels of the defence north of the A17 bridge are approximately 6.30m OD.

Environment Agency Tidal Breach Hazard Mapping

The Environment Agency published mapping in 2012 which predicts the following depths, velocities and hazard for a 1 in 200 year and a 1 in 1000 year event in 2115. The maps have been produced by modelling breaches along the whole length of the tidal defences and combining these into one map.

Maximum velocity	0 – 0.3 metres/second
Maximum depth	0.5 metres to 1.0 metre
Maximum hazard	1.25 to 2.0 (danger for most)

The maps supplied by the Environment Agency are reproduced on pages 13 and 14 of this report.

Existing Flood Alleviation Measures

The site is within a defended flood plain, as defined in Appendix 1 of the Environment Agency's "Policy and Practice for the Protection of Flood Plains", which is considered to be passive until such time that a flood greater than the defences can withstand occurs. The likelihood of flooding occurring due to overtopping or failures of the defences is considered to be very low.

The site is located approximately 6.0 km from the tidal section of the River Nene and 10.0km from the Wash defences at the nearest point. The tidal defence banks to all of these are maintained by the Environment Agency.

The major watercourses in the area are maintained by South Holland IDB, which has carried out improvement schemes so that IDB watercourses generally provide at least a 1 in 50 year standard against flooding of agricultural land and aim to provide a 1 in 100 year standard to urban areas.

Existing Ground Levels and Proposed Levels of Buildings

The level of the concreted areas on the site varies between 2.90 and 3.00m OD. The agricultural land on the northern side of the development is 2.70m OD and the level inside the existing glasshouses on the southern side of the development site is 2.82m OD.

The ground floor level of the existing house on the site is 3.23m OD and the level of Station Road west of the house is between 2.80 and 2.90m OD. The water level in the IDB drain on the northern boundary was 0.88m OD on the 25th January 2017.

A plan showing all these levels is shown on sheet 11 of this report.

Potential Sources of Flooding

The potential sources of flooding to the site are:-

1. Failure or overtopping of tidal defences of the River Nene.
2. High water levels in IDB drainage channels.
3. Localised flooding due to failure of highway drainage

1. Failure or overtopping of tidal defences of the River Nene

The west bank of the River Nene is approximately 6.0 km east of the site of the proposed development, and the Wash Banks are 10km north of the site at their nearest point. The hazard from the River Nene east of the development site if a breach occurred in the length of bank between the South Holland Main Drain Outfall and the A17 bridge will be considered to be the major risk to the site. If the banks north of the A17 bridge or the Wash banks breached the flood water would be extremely unlikely to flow as far as the southern part of Long Sutton.

The predicted levels in the SFRA indicate that the west bank of the River Nene between the bridge and the outfall will not be overtopped unless there is an event greater than 1 in 1000 years at the present time. However in 2115 although it will not be overtopped in a 1 in 200 year event, it will be overtopped in a 1 in 1000 year event.

The maps in the SFRA indicate that the depth of flooding in a 1 in 200 year event in 2115 will be zero, and from this it can be deduced that the flood water will not flow as far as the development site. However the breach mapping undertaken by the EA predicts flood depths of between 500mm and 1.0 metre.

Therefore from this evidence there seems to be a possibility that flood water from a breach could reach the site in an extreme event when climate change is factored in. It is likely that this flood water will take at least 24 hours to reach the site, during which time residents will have been warned of the eventuality. It is also likely that the possible flood depth will be less than 1.0 metre and velocity only 0.1metres/second which will reduce the hazard accordingly. The EA breach mapping also assumes no attempt is made to immediately repair the breach. It is also likely that the EA will undertake further bank raising within the next 100 years to ensure that there is a continuing 1 in 200 year defence to Long Sutton and Sutton Bridge.

2. High Water Levels in IDB drains

Although the whole of this area is below high tide level and levels in the rivers, the retained water levels in the drainage channels ensure that the risk of flooding is extremely low. South Holland IDB maintains a system of sluices, pumping stations, and drainage channels which convey surface water into the River Nene and the wash and control water levels throughout the South Holland IDB area.

The surface water from this site in Station Road is drained by an IDB watercourse that runs along the north side of the development site. This flows eastwards then southwards through a network of drainage channels and discharges into the South Holland Main Drain. It then flows eastwards and discharges into the River Nene through the outfall sluice.

The channels maintained by South Holland IDB in urban areas are classified as high priority watercourses and as such receive a higher maintenance priority.

There are possibilities of failure of outfall sluices, but these are mitigated by the high level of maintenance given to these structures by the IDB. If a failure did occur the IDB would immediately be warned of the problem by their telemetry system and take action to repair the fault or to bring in temporary pumps to reduce the risk of any flooding in the area. Similarly any failures of culverts or other blockages would be dealt with immediately.

IDB systems are designed to provide a freeboard of between 600mm and 1000mm to all land in a 1 in 10 year return period rainfall event. This normally provides a standard of service of between 1 in 50 years and 1 in 100 years against flooding. In an extreme event water levels will rise but this will be a slow process and it would be at least 24 hours before levels were high enough to begin to flood low land in the area, and after this the level of the flood water would need to rise another 1.0 metre before the development site would be affected.

Therefore the risk of flooding from IDB drainage channels can be considered to be extremely low.

3. Localised Flooding due to failure of highway drainage

There is an adequate highway drainage system in Station Road. However if for some reason there was a blockage in this system there is a possibility that some flooding could occur in low areas in adjoining properties. The recommended floor levels of the proposed property will be above the level of Station Road which will provide adequate mitigation against this source of flooding.

The surface water from the proposed properties will be discharged into soakaways and roadways will be constructed of permeable paving. If percolation tests indicate soakaways will not operate satisfactorily then the surface water will be attenuated and discharged at a low flow rate into the IDB drain on the northern boundary of the site. This will ensure that no flooding occurs on the site itself.

Extent of known Flooding

During the preparation of this assessment, no evidence was discovered of the site or any of the adjoining properties having been flooded in the past.

Probabilities and Trends of Flooding

The probability of this development flooding from Environment Agency main river is very low. In an extreme event any effect on this location would not be sudden and there would be time for residents to take precautionary measures to limit the impact of any flooding that may occur.

Residual Risk – Extreme Events

The residual risk from extreme events is very low on this site. The major risk to the site is from a breach or overtopping of the tidal defences

The risk of this happening in this case is low and the hazard from any flooding is also low.

Climate Change

The recommendations for flood depths for this flood risk assessment use information provided by the Environment Agency which was produced in 2006. The EA have issued new guidance on recommended contingency allowances for predicted sea rises, fluvial flows and rainfall intensities which from 19th February 2016 needs to be considered in the FRA. The effects of these new recommendations are considered in Appendix A of this report (pages 16 to 19). It is concluded that no extra mitigation measures are necessary to comply with the new guidance on climate change.

Conclusions

The risk of flooding caused by overtopping or bank breaches in EA rivers has been considered and shown to be remote. This is also seen by the results of the maps in

the SFRA which show that no predicted actual or residual flooding will occur following a breach in a 1 in 200 year event in 2115.

The predictions from the breach analysis undertaken by the EA show that flood water may reach the site after a major breach of the defences, and this could be up to 1.0m in depth in a 1 in 200 year or a 1 in 1000 year scenario in 2115. If you consider the levels taken on the site the lowest level found was 2.63m OD. Therefore taking this level and assuming a 1.0 metre depth of flooding the maximum flood level would be 3.63m OD.

Therefore a ground floor level of 3.65m OD is proposed for the new properties, which is 750mm above the road level immediately outside the entrance (which is 2.90m OD) and 420mm above the existing ground floor level of the property called Glendale (which is 3.23m OD). This level would be above any foreseeable flood levels following any failures or overtopping of the IDB drainage system.

The National Planning Policy Framework Planning Practice Guidance states that:

“Where development needs to be in locations where there is a risk of flooding as alternative sites are not available, local planning authorities, developers, should ensure development is appropriately flood resilient and resistant, safe for its users for the development’s lifetime, and will not increase flood risk overall.”

The raising of floor levels by approximately 1000mm above the lowest ground level and including flood resilient and resistant measures to 300mm above ground level will ensure that the building itself is adequately protected against flooding. More details of the proposed measures are shown in Appendix A on page 15 of this report.

Residents will be safe if a greater depth of flooding occurs because:

1) They will have been warned by the Environment Agency of the event at least 24 hours before it is due to occur and they will have adequate time to carry out preventative measures to reduce the impact of the flooding.
2) In the last resort they will be able to shelter safely on the first floor until the flood water subsides.

Therefore it is considered that people and property will be safe at this location for its lifetime.

Recommendations

In any area at risk of flooding, even though in this case the risk is extremely low, it is recommended that new dwellings should be of two story construction with all bedrooms at first floor level. This will provide a refuge for residents if the building becomes flooded after a major breach of the tidal bank, and ensure there is no danger to residents when they are asleep.

The ground floor level of the proposed buildings should be a minimum of 1.0 metre above the lowest existing ground level at a level of 3.65m OD, which is 420mm above the ground floor level of the existing house on the site.

Although there is a risk of flooding if there is a breach of the defences 6km away this should not cause flooding for at least 24 hours after the breach occurs. The risk of any flooding occurring is remote and could only occur days after a serious breach of the defences, and the defences remaining unrepaired.

Occupiers of the property should register with the Environment Agency's Floodline Warnings Direct Service. If a very high tide is predicted (greater than 6.50m OD) then the occupiers are advised that they should make preparations to monitor the situation and evacuate the building for the duration of the very high tide. They should drive or walk to the central area of Long Sutton or be advised of a safer place to go.

The building should be designed incorporating flood resistant/resilient techniques to allow it to be refurbished after being flooding to a depth of approximately 300mm above floor level. Consideration should be given to the electrics and heating pipes being distributed at ceiling level rather than at floor level. Materials used for the floor and walls should be able to withstand flooding for a period of at least a week. Recommendations for this are shown in Appendix A on page 15.

On site surface water drainage should be discharged into soakaways and these should be designed to BRE Digest 365 and approved under Building regulations. Any roadways planned on the site should be constructed with permeable surfacing which will allow surface water to soakaway into the sub strata. If percolation tests indicate that soakaways will not operate satisfactorily at this location then a suitable surface water storage system should be designed and the surface water discharged at a low rate into the IDB drain on the northern end of the site, subject to the agreement of South Holland IDB. This will ensure no surface water will flow off the site and affect any of the adjoining properties or agricultural land.

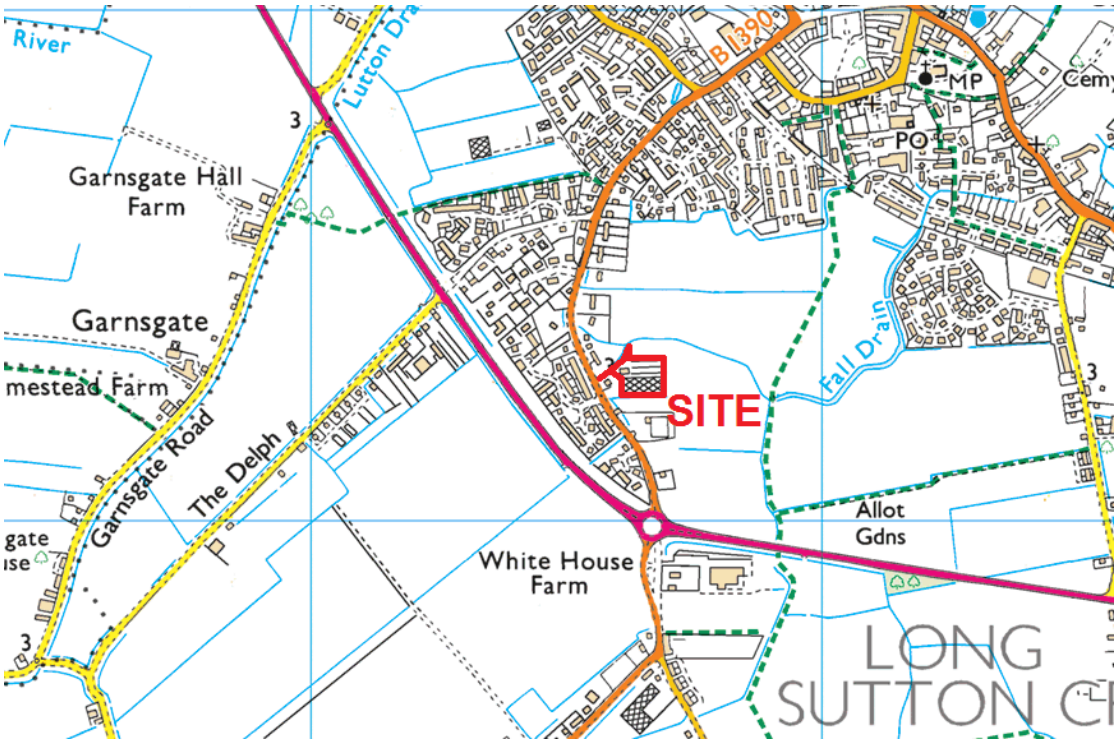
All future owners and occupiers of the building should be given a copy of the Flood Risk Assessment so that they are fully aware of the risk of flooding in this area.

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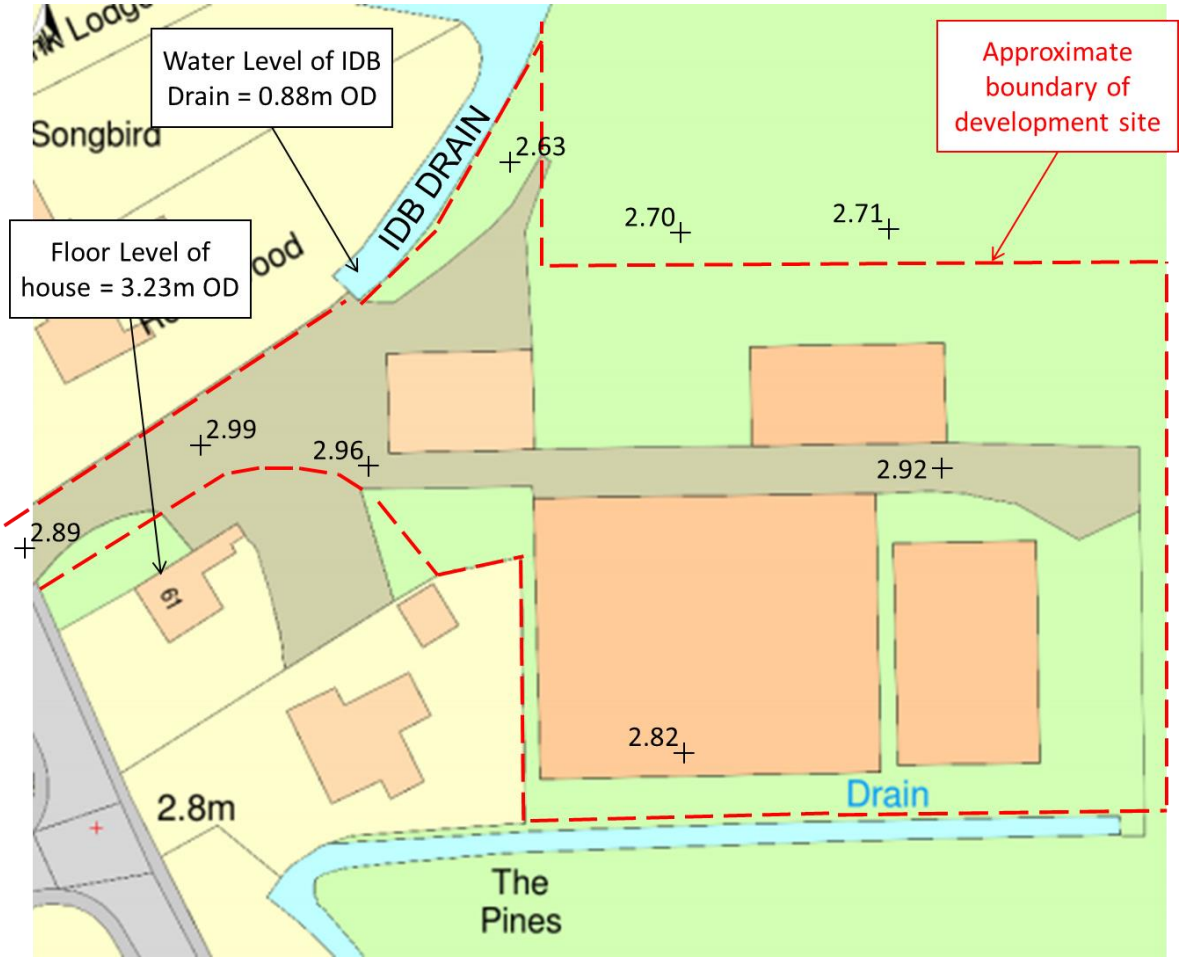
stuart.hemmings@btinternet.com

12th February 2017.

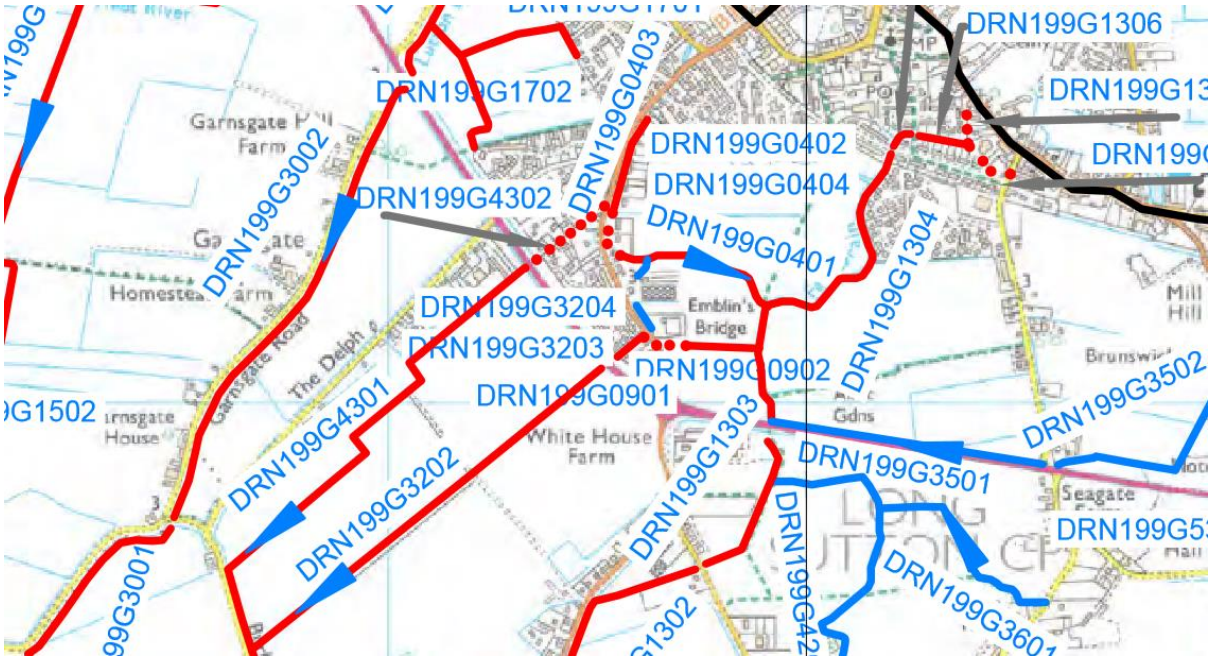
LOCATION PLAN



SITE LEVELS

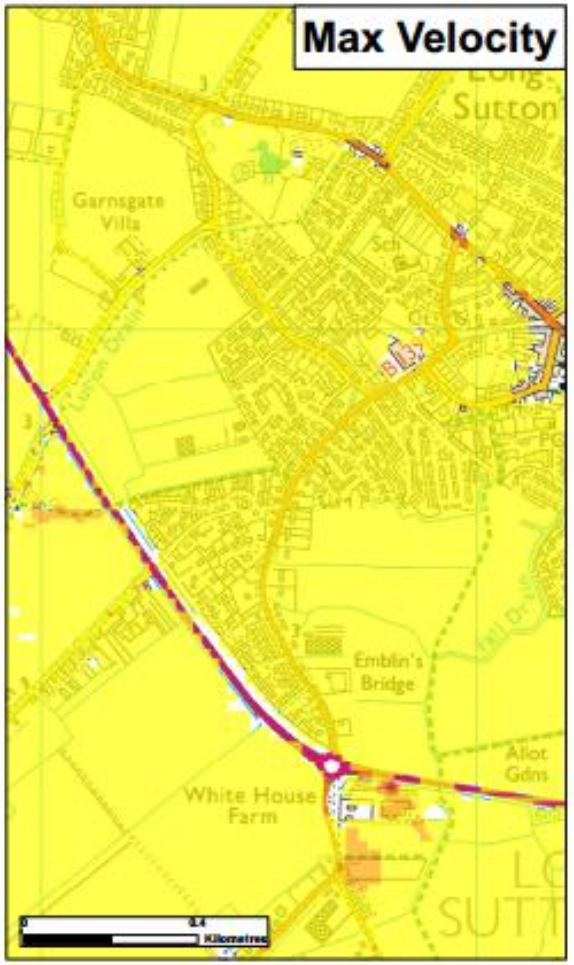


PLAN OF AREA SHOWING IDB WATERCOURSES









★ Modelled Breach Locations

Max Hazard
(Flood Risk to People : FD2320)

- Less than 0.75 (Low Hazard)
- Between 0.75 and 1.25 (Danger for Some)
- Between 1.25 and 2.0 (Danger for Most)
- Greater than 2.0 (Danger for All)

Max Depth (m)

- 0 - 0.25
- 0.25 - 0.50
- 0.50 - 1.0
- 1.0 - 2.0
- 2.0 +

Max Velocity (m/s)

- 0 - 0.3
- 0.3 - 1.0
- 1.0 - 1.5
- 1.5 - 2.5
- 2.5 +

Date Printed	December 2015	Scenario year	2115	Scenario Annual Chance	0.5% (1 in 200)	CCN Number	CCN-2015-510

This map shows the level of flood hazard to people (called a hazard rating) if our flood defences are breached at certain locations, for a range of scenarios. The hazard rating depends on the depth and velocity of floodwater, and maximum values of these are also mapped.

The map is based on computer modelling of simulated breaches at specific locations. Each breach has been modelled individually and the results combined to create this map. Multiple breaches, other combinations of breaches, different sized tidal surges or flood flows may all give different results.

The map only considers the consequences of a breach, it does not make any assumption about the likelihood of a breach occurring. The likelihood of a breach occurring will depend on a number of different factors, including the construction and condition of the defences in the area. A breach is less likely where defences are of a good standard, but a risk of breaching remains.

General Enquiries: 03708 506 506. Week day Daytime calls cost 5p plus up to 6p per minute from BT Weekend Unlimited. Mobile and other providers' charges may vary.

Environment Agency

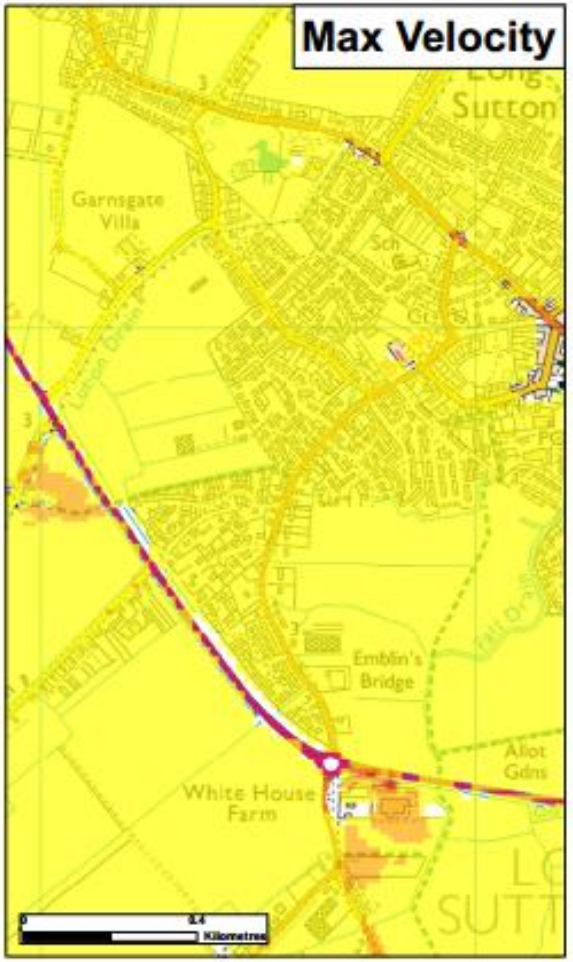
Lincolnshire and Northamptonshire Tidal Breaching Hazard Mapping

Map Centred on TF 42564 23845

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★ Modelled Breach Locations • see also the accompanying plan "Location of Modelled Breaches"

Max Hazard
(Flood Risk to People : FD2320)

- Less than 0.75 (Low Hazard)
- Between 0.75 and 1.25 (Danger for Some)
- Between 1.25 and 2.0 (Danger for Most)
- Greater than 2.0 (Danger for All)

Max Depth (m)

- 0 - 0.25
- 0.25 - 0.50
- 0.50 - 1.0
- 1.0 - 2.0
- 2.0 +

Max Velocity (m/s)

- 0 - 0.3
- 0.3 - 1.0
- 1.0 - 1.5
- 1.5 - 2.5
- 2.5 +

Date Printed	December 2015	Scenario year	2115	Scenario Annual Chance	0.1% (1 in 1000)	CCN Number	CCN-2015-510

This map shows the level of flood hazard to people (called a hazard rating) if our flood defences are breached at certain locations, for a range of scenarios. The hazard rating depends on the depth and velocity of floodwater, and maximum values of these are also mapped.

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Environment Agency

Lincolnshire and Northamptonshire Tidal Breaching Hazard Mapping

Map Centred on TF 42564 23645

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APPENDIX A

RECOMMENDATIONS ON LIMITING FLOOD DAMAGE TO BUILDING

Walls:	Construction to first floor level should be carried out with good quality brickwork. Specification for blockwork should be checked and only blockwork that does not absorb water should be used. If possible brickwork should be used instead of blockwork to first floor level. Construction below DPC should be carried out with engineering brickwork.
Ground Floor:	Either precast concrete beams with concrete infill, or concrete above made up ground should be used. Dense concrete screeds should be used.
Doors:	Doors should be solid construction, or plastic should be considered. Butt hinges should be fitted to allow doors to be removed and placed in a dry area prior to any flooding.
Kitchens:	Install plastic base feet and if possible other plastic items to reduce damage from low level flooding. Raise fitted ovens as high as possible.
Electrical Services:	Place all of electrical wiring at first floor level and drop wiring down to sockets at least 800mm above ground level.
General:	The developer should follow the guidance issued by the Department of the Communities and Local Government “Improving the Flood Performance of New Buildings: flood resilient construction (2007)”.

APPENDIX B CLIMATE CHANGE

The Environment Agency has issued revised guidance on climate change and have now stated that the new predictions should be considered and incorporated into all flood risk assessments produced after 19th February 2016.

The maps issued by the EA were produced in 2006 and used the climate change impacts published by Defra in October 2006 which are reproduced below.

Table 1: Regional net sea level rise allowances

Administrative or Devolved Region	***Assumed Vertical Land Movement (mm/yr)***	***Net Sea-Level Rise (mm/yr)***				***Previous allowances***
		1990-2025	***2025-2055***	***2055-2085***	***2085-2115***	
East of England, East Midlands, London, SE England (south of Flamborough Head)	-0.8	4.0	8.5	12.0	15.0	6mm/yr* constant

Table 2: Indicative Sensitivity Ranges

Parameter	***1990-2025***	***2025-2055***	***2055-2085***	***2085-2115***
Peak rainfall intensity (preferably for small catchments)	*+5%*	**+10%**	*+20%*	*+30%*
Peak river flow (preferably for larger catchments)	+10%	**+20%**		
Offshore wind speed	*+5%*		**+10%**	*+10%*
Extreme wave height	*+5%*		**+10%**	*+10%*

Revised 2016 EA Guidance

Table 1 peak river flow allowances by river basin district (use 1961 to 1990 baseline)

River basin district	Allowance category	Total potential change anticipated for '2020s' (2015 to 39)	Total potential change anticipated for '2050s' (2040 to 2069)	Total potential change anticipated for '2080s' (2070 to 2115)
Anglian	Upper end	25%	35%	65%
	Higher central	15%	20%	35%
	Central	10%	15%	25%

For more vulnerable development in flood zone 3(a) the higher central and upper end should be used to assess the range of allowances.

Table 2 peak rainfall intensity allowance in small and urban catchments (use 1961 to 1990 baseline)

Applies across all of England	Total potential change anticipated for 2010 to 2039	Total potential change anticipated for 2040 to 2059	Total potential change anticipated for 2060 to 2115
Upper end	10%	20%	40%
Central	5%	10%	20%

Table 3 sea level allowance for each epoch in millimetres (mm) per year with cumulative sea level rise for each epoch in brackets (use 1990 baseline)

Area of England	1990 to 2025	2026 to 2050	2051 to 2080	2081 to 2115	Cumulative rise 1990 to 2115 / metres (m)
East, east midlands, London, south east	4 (140 mm)	8.5 (212.5 mm)	12 (360 mm)	15 (525 mm)	1.24 m

Table 4 offshore wind speed and extreme wave height allowance (use 1990 baseline)

Applies around all the English coast	1990 to 2050	2051 to 2115
Offshore wind speed allowance	+5%	+10%
Offshore wind speed sensitivity test	+10%	+10%
Extreme wave height allowance	+5%	+10%
Extreme wave height sensitivity test	+10%	+10%

Effects on Predictions of Flood Risk in FRA

Effects on Predictions of Flood Risk in FRA

The FRA has identified the main source of flooding where the new climate change recommendations could affect the predictions of flood levels in 2115 at the development site is flooding from the tidal River Nene

The contingency allowance in metres for the years 2055 and 2115 using 1990 as a baseline in the SFRA compared with the guidelines is as follows

Year	SFRA	2013 guidance	Revised 2016 guidance
2055	0.33	0.395	0.412
2115	1.14	1.205	1.24

Therefore it can be seen that the revised guidance increases the maximum allowance for sea rise in 2115 by 100mm. This will not have the effect of increasing the predicted flood level at the site in a 1 in 200 year breach event in 2115 by the maximum of 100mm, but it will probably be only between 10mm and 50mm. It is unlikely that this increase will significantly change the maps of flood risk at present issued by the Environment Agency.

Flooding from IDB drainage system

As the development is in flood zone 3 and is classed as more vulnerable, the advice from the Environment Agency is that the higher central climate change allowance, which is 35%, should be considered. After considering the effects of this increase the upper end allowance, which is 65%, should be considered to assess the effect of this.

IDB's have been using an allowance of 20% for climate change over the past few years in their assessments and modelling of their systems. Generally IDB's are happy that their systems provide a 1 in 100 year standard to most urban areas at the present time.

South Holland IDB, and all IDB's, are aware that climate change will affect the operations of pumping stations, sluices and drainage channels. Pumping stations and sluices only have a 30 year life and will need to be refurbished or rebuilt within this timespan. It is assumed that South Holland IDB will continue to review the modelling they have already carried out and when the Board consider these refurbishments adequate arrangements will be made to incorporate the latest climate change projections in order that the Board continues to provide the same standard of service as the present day.

Therefore it is considered that the mitigation proposed for the development, with the recommendation that the floor levels should be a minimum level of 750mm above the level of Station Road immediately in front of the property, which is a level of 3.65m OD, is satisfactory.