



**PROPOSED CHANGE OF  
USE OF EXISTING BARNs  
AT THE FRING HALL  
ESTATE, DOCKING ROAD,  
FRING, NORFOLK**

**FLOOD RISK ASSESSMENT**

**JULY 2020**

**REPORT REF: 2536/RE/07-20/01**

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## **CONTRACT**

Evans Rivers and Coastal Ltd has been commissioned by Oykel Farms Ltd to carry out a Flood Risk Assessment for a proposed change of use of existing barns at the Fring Hall Estate, Docking Road, Fring, Norfolk.

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## 1. INTRODUCTION

### 1.1 Project Scope

1.1.1 □ Evans Rivers and Coastal Ltd has been commissioned by Oykel Farms Ltd to carry out a Flood Risk Assessment for a proposed change of use of existing barns at the Fring Hall Estate, Docking Road, Fring, Norfolk.

1.1.2 □ It is understood that this Flood Risk Assessment will be submitted to the Planning Authority as part of a planning application. Specifically, this assessment intends to:

- 1) □ Carry out an appraisal of flood risk from all sources as required by NPPF;
- 2) □ Review any literature and guidance specific to this area;
- 3) □ Assess the risks to people and property and propose mitigation measures accordingly;
- 4) □ Review existing evacuation and warning procedures for the area;
- 5) □ Report findings and recommendations.

1.1.3 □ This assessment is carried out in accordance with the requirements of the National Planning Policy Framework (NPPF) dated 2019. Other documents which have been consulted include:

- □ DEFRA/EA document entitled *Framework and guidance for assessing and managing flood risk for new development Phase 2 (FD2320/TR2)*, 2005;
- □ Communities and Local Government 2007. *Improving the Flood Performance of New Buildings*. HMSO.
- □ DEFRA/EA document entitled *The flood risks to people methodology (FD2321/TR1)*, 2006;
- □ EA *Supplementary Note on Flood Hazard Ratings and Thresholds for Development Planning and Control Purpose*, 2008;
- □ National Planning Practice Guidance – Flood Risk and Coastal Change.
- □ Kings Lynn and West Norfolk Strategic Flood Risk Assessment dated 2007/8.
- □ JBA Consulting *King's Lynn and West Norfolk Strategic Flood Risk Assessment (SFRA)* dated 2017.
- □ Norfolk County Council document entitled *Lead Local Flood Authority Statutory Consultee for Planning – Guidance Document* dated March 2019.
- □ Kings Lynn and West Norfolk *Surface Water Management Plan (SWMP)* dated 2010 and 2012.
- □ Norfolk County Council *Flood Investigation Report* dated 2015.

## **2. DATA COLLECTION**

2.1 To assist with this report, the data collected included:

- Ordnance Survey 1:10,000 street view map obtained via Promap (Evans Rivers and Coastal Ltd OS licence number 100049458).
- British Geological Survey, *Online Geology of Britain Viewer*.
- British Geological Society, *Groundwater Flooding Susceptibility Map* obtained via Promap.
- 1:250,000 *Soil Map of Eastern England* (Sheet 4) published by Cranfield University and Soil Survey of England and Wales 1983.
- 1:625,000 *Hydrogeological Map of England and Wales*, published in 1977 by the Institute of Geological Sciences (now the British Geological Survey).
- Filtered LIDAR data at 1m resolution.
- Topographical survey carried out by Rigour Surveys Ltd (shown on Drawing Number RS-1205-01).
- Flood Zone extents as GIS files (from EA Geodata [www.data.gov.uk](http://www.data.gov.uk)).



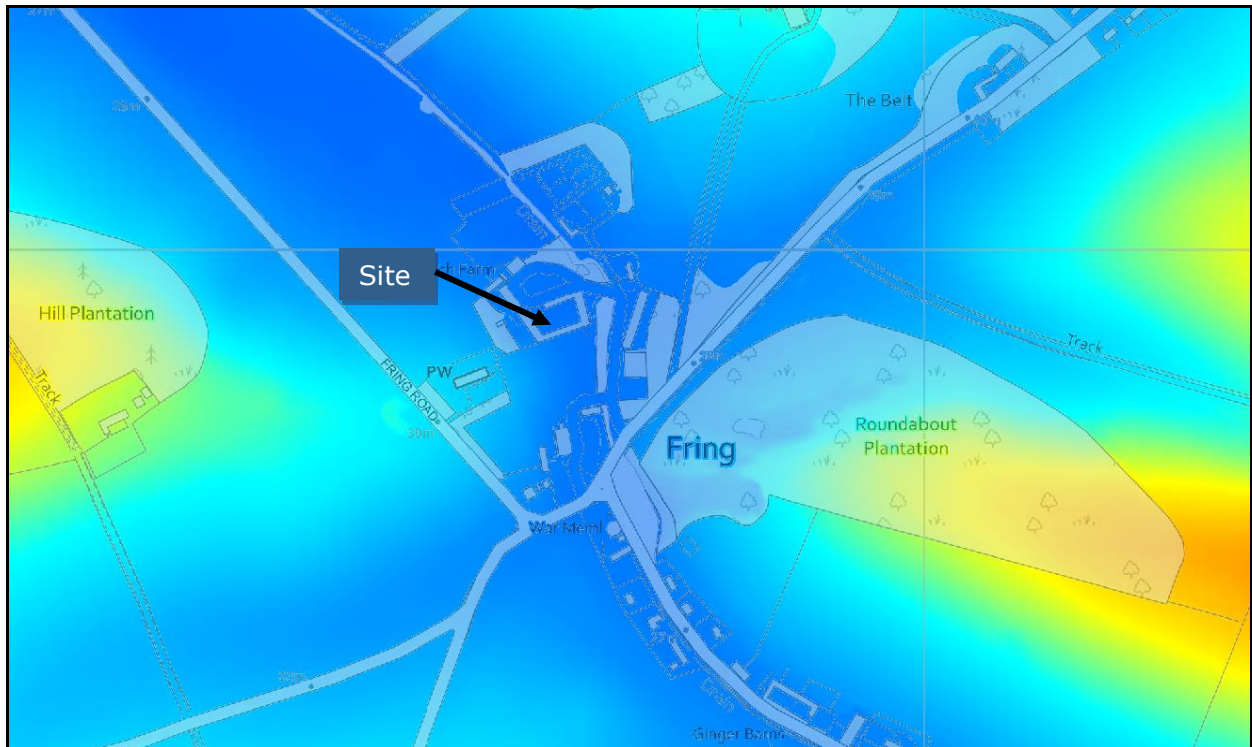


**Figure 2: Proposed barns to be converted**



**Figure 3: View looking at southern (upstream) extent of existing online pond**





**Figure 4: Filtered LIDAR survey of the site and surrounding area combined with OS**

### 3.2 Site Proposals

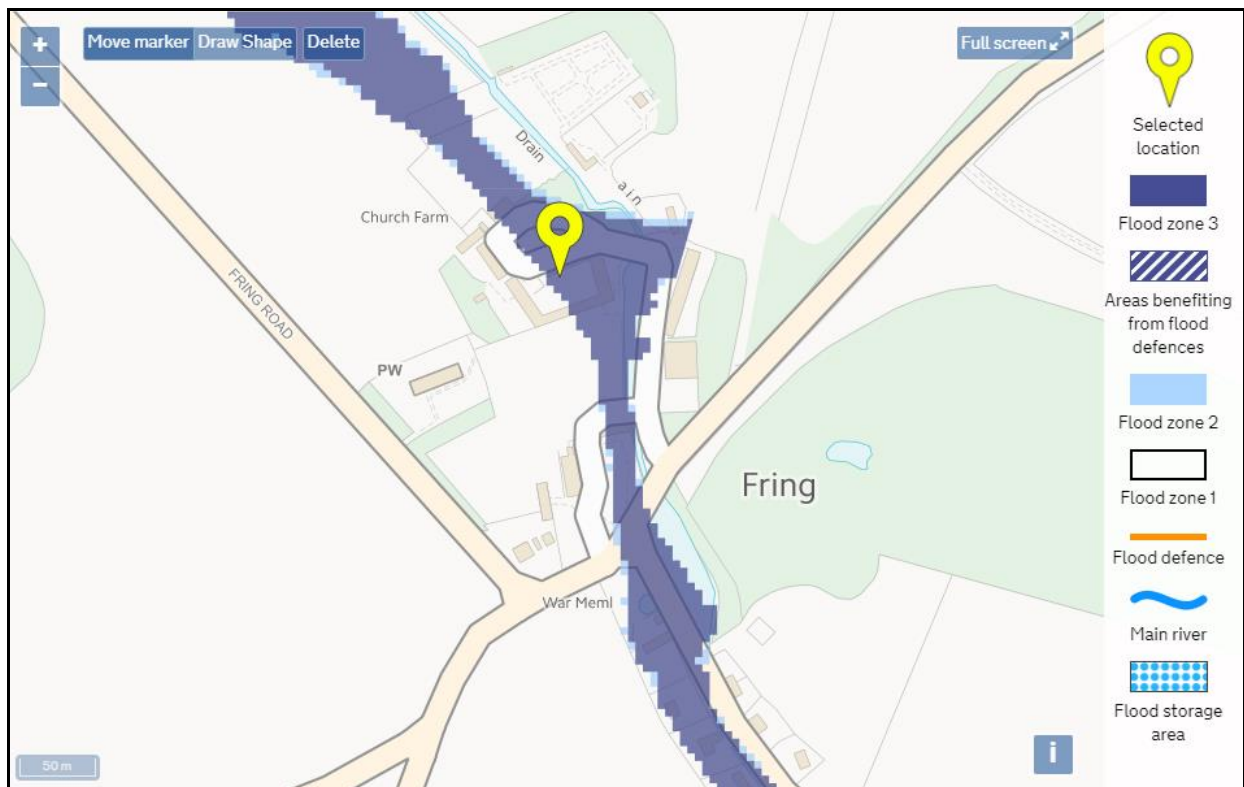
- 3.2.1 It is the Client's intention to convert barns A-D to function rooms such as weddings and conferences together with games room and kitchen. The remaining barns E-J will be used for holiday accommodation.
- 3.2.2 Paragraph 048 (ID 7-048-20140306A) of the NPPF Planning Practice Guidance states that "...change in use may involve an increase in flood risk if the vulnerability classification of the development is changed". Appropriate warning and mitigation measures outlined in this report will ensure that the risk to occupants is not increased and this assessment provides an opportunity to raise the awareness of flood risk to occupants and improve the flood resilience of the property.
- 3.2.3 Paragraph 33 (ID 7-033-20140306) of the NPPF Planning Practice Guidance (NPPG) states that the Sequential Test does not apply to change of use applications.
- 3.2.4 The proposals are classified as a "more-vulnerable" use according to Table 2 of the NPPF Planning Practice Guidance.



#### 4. BASELINE INFORMATION

##### 4.1 Environment Agency Flood Zone Map

- 4.1.1□ The Environment Agency Flood Map (Figure 5) and 2017 SFRA map KL\_16 show that the site is located within Flood Zone 3, 2 and 1 associated with the Heacham River.
- 4.1.2□ Barns A-D, barn J and part of barn E are shown to be located within Flood Zone 3, with remaining barns located within Flood Zone 1.
- 4.1.3□ The Flood Zone 3 is divided into two sub-categories, the Flood Zone 3a and Flood Zone 3b. The extent of the Flood Zone 3a 'High Probability' is defined as the 1 in 100 year return period fluvial event in this case.
- 4.1.4 Flood Zone 3b functional floodplain is defined in Table 1 of the NPPG as the area where water flows or is stored during flood events. The functional floodplain is generally defined by the limit of the 1 in 20 year flood envelope. The 2017 SFRA map KL\_16 shows that the site is not located within the NPPF defined Flood Zone 3b but within the Indicative Flood Zone 3b which follows the extent of the Flood Zone 3a.
- 4.1.5□ The Flood Zone 2 'Medium Probability' floodplain is defined as having between a 1 in 100 year annual probability and 1 in 1000 year annual probability of flooding. The threshold of the Flood Zone 2 floodplain is the 1 in 1000 year extreme event.
- 4.1.6□ The NPPF Flood Zone 1, 'Low Probability' comprises land as having less than a 1 in 1000 year annual probability of fluvial or tidal flooding (i.e. an event more severe than the extreme 1 in 1000 year event). NPPF states that all uses of land are appropriate in this zone.



**Figure 5: Environment Agency Flood Map (Source: Environment Agency, 2020)**

## 4.2 Environment Agency Flood Levels

- 4.2.1 There are no flood defences along the watercourse at this location. Modelled flood levels were not available from the Environment Agency at the time of writing and flood modelling is outside the scope of this assessment.
- 4.2.2 The EA flood zone GIS layers have been downloaded as GIS files from EA Geodata [www.data.gov.uk](http://www.data.gov.uk). The flood zone 3 and 2 extents are identical across the area occupied by the barns, and when importing them onto the survey data the flood contour during the (Zone 3/2) 1 in 100/1000 year event is approximately set at 25.89m AOD across the area occupied by the barns.
- 4.2.3 The 2017 SFRA suggests that where no detailed hydraulic models are present, Flood Zone 2 can be used as a proxy when considering climate change impacts (i.e. 25.89m AOD).

## 4.3 Flood Warning and Emergency Planning

- 4.3.1 The site is located within Environment Agency Flood Alert Area 052WAFWNR – North West Norfolk Rivers.
- 4.3.2 Sites at risk of fluvial flooding could have a minimum of 2 hours warning before any of the levels of flood warning is issued.
- 4.3.3 Flood Alerts, Flood Warnings and Severe Flood Warnings are issued to residents and businesses within flood risk areas by the Agency's *Floodline Warnings Direct* (FWD) service. This system is managed by the Environment Agency and dials out a message to the recipient when a particular category of flood warning is being advised. The message is conveyed by a constant ringing of the telephone or can alternatively be communicated to mobile phones and computers. The system functions at all times, issuing flood warnings and alerts in conjunction with announcements on radio and other media. Owners and occupiers of dwellings or businesses thought to be at risk can sign up to the scheme. **The owners are encouraged to confirm details with the Agency and to sign up for these warnings.**
- 4.3.4 The various flood warning codes can be seen on Figure 6.

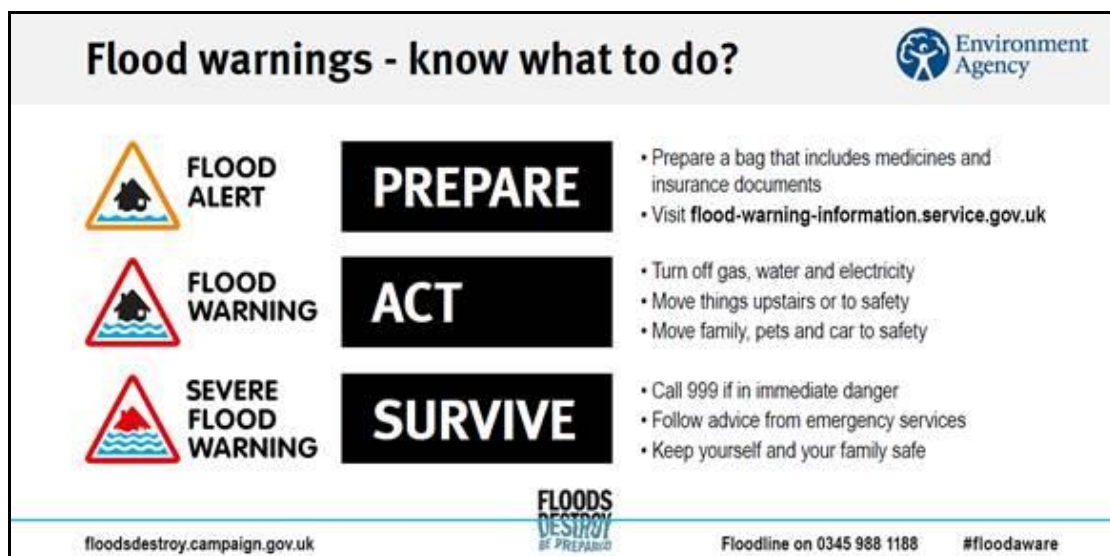


Figure 6: Flood warning codes (Source: Environment Agency)

- 4.3.5 It is understood that in the event of flooding, evacuation is managed by a multi-agency team in conjunction with the Police. The multi-agency team provides suitable premises for shelter, first aid, refreshments and possible transportation with consideration given to the elderly and vulnerable groups. It is essential that occupants produce robust Emergency Flood Plans to avoid putting themselves or emergency services at risk and that they do not rely solely on emergency services during the event.

**5. FLUVIAL FLOOD RISK**

- 5.1 It has been calculated in Section 4.2 above that the flood level during the present day 1 in 100/1000 year event is approximately 25.89m AOD.
- 5.2 When considering climate change allowances the flood level is also 25.89m AOD.
- 5.3 The floor levels of the barns are set above the Flood Zone 2/climate change level. This will provide safe refuge and no internal flooding.

## **6. FLOOD RISK MITIGATION AND EVACUATION**


### **6.1 Reducing Exposure to the Hazard**

- 6.1.1 In order to assess and reduce the exposure to the hazard and the vulnerability to the hazard after the site has been developed, the guidance outlined in the DCLG/DEFRA/EA document entitled *Flood Risk Assessment Guidance for New Development Phase 2; Flood Risks to People, Phase 2; Improving the Flood Performance of New Buildings* has been consulted.
- 6.1.2 Paragraph 060 (ID 7-060-20140306) of the NPPF Planning Practice Guidance states that the first preference is to avoid flood risk by raising floor levels above the flood level.
- 6.1.3 □ As discussed in Chapter 5, the barns are set above the flood level and the hazard to people would be *Very low* thus complying with the NPPG.

### **6.2 Reducing Vulnerability to the Hazard**

- 6.2.1 Customers at the site are unlikely to have detailed knowledge of the dynamics of the flood event and the storminess of the event could result in people panicking or becoming anxious, particularly if they observe flooding across the site. The site management should provide information to customers during check-in and inform them of the procedures they should take in the event of a flood.
- 6.2.2 The Agency aims to provide up to 2 hours notice before the issue of a *Flood Alert* for fluvial events. It is understood that the police and other emergency services will assist in the evacuation to rest centres operated by the Council. People at the site will need to make a judgment themselves with regards to the flood hazard if evacuation is attempted and not solely rely on the emergency services.
- 6.2.3 It is highly likely that holiday-makers will either cancel their holiday or leave the area early and return home. Site management should also notify visitors who have not yet reached the site about the dangers. Safe refuge is available across the barns.
- 6.2.4 It is recommended that the site management liaise with the Agency in order to register with the Agency's Flood Warnings Direct and ensure that they are aware of the flood risk so that they can evacuate upon receipt of a *Flood Alert*.
- 6.2.5 Site management should not solely rely on the Agency's flood warning service or emergency services and should make a judgment on evacuating the site before, during or after the event. Site management will need to make a judgment with regards to the flood hazard if evacuation is attempted.
- 6.2.6 Signs and information plaques should be located regularly across the site to inform people of the flood risk. Site management should regularly review weather warnings and other media prior to permitting people onto the site.
- 6.2.7 It is recommended that a *Business Flood Plan* is developed and would include information on what to do during an event, together with evacuation procedures and routes. Flood wardens (i.e. duty manager) would be responsible for co-ordinating the closing of the site. Checklists would also be useful to prioritise procedures.

**Table 1: Flood Event Action Plan**

Environment Agency Flood Warning Code	What to do!	Evacuate?
<p><b>Flood Alert</b> (Flooding Possible. Be aware/prepared! Watch Out).</p> 	<ul style="list-style-type: none"> <li>• <input type="checkbox"/> Monitor flood risk through media and Floodline Warnings Direct.</li> <li>• <input type="checkbox"/> Locate people and inform them of risk. If away from the site make assessment on risk if considering returning to site (i.e. how long it will take to return etc).</li> <li>• <input type="checkbox"/> Begin to implement Flood Plan.</li> <li>• <input type="checkbox"/> Gather Flood Kit and provisions in the event that evacuation is not possible.</li> <li>• <input type="checkbox"/> Consider advice given from emergency services/Environment Agency.</li> </ul>	<p>Preferable, although up to occupants discretion.</p> <p>Drive carefully if evacuating as roads may be flooded or closed.</p> <p>If evacuation is not possible people should reside across the barns with their flood kit.</p>
<p><b>Warnings no longer in force</b> (No further flooding is expected in the area. Be careful).</p>	<ul style="list-style-type: none"> <li>• <input type="checkbox"/> Return to site upon instruction from emergency services and assess any damage.</li> <li>• <input type="checkbox"/> Contact insurance company depending on damage caused.</li> <li>• <input type="checkbox"/> Beware of flood debris.</li> <li>• <input type="checkbox"/> Do not touch sources of electricity.</li> </ul>	<p>Not applicable.</p>

### 6.3 Vulnerable Groups

6.3.1 People at the site may include vulnerable groups such as elderly people, those with sensory or physical disabilities, minority ethnic groups, or the infirm. Priority will need to be given to these people during the flood event.

6.3.2 Vulnerable groups should be identified by the site management and priority should be given to these groups.

### 6.4 Safe Access/Egress

6.4.1 By consulting the fluvial flood level, survey data and OS map, it can be seen that during the peak of the flood event, the hazard to people leaving the site would be *Very low* when using the hazard categories outlined in Table 13.1 of *FD2320/TR2*.

6.4.2 A flood response plan will be compiled to ensure that the occupants are aware of the flood risk and procedures to take before, during and after a flood.

### 6.5 Insurance

6.5.1 The Association of British Insurers (ABI) published a guidance document in 2012 entitled *Guidance on Insurance and Planning in Flood Risk Areas for Local Planning Authorities in England*.

- 6.5.2 The ABI guidance sets out the requirements of the insurance industry when considering flood risk and insurability of the property. The guidance suggests that properties should be protected for flood events up to the climate change 1 in 100 year event in order to access insurance at a competitive price.
- 6.5.3 The guidance also states that insurers would of course prefer to cover properties which are not at risk of flooding, however, for those properties which are at risk of flooding insurers would prefer that the properties are raised above the flood level, over resistance measures which prevent floodwater from entering the building, or resilience measures which allows floodwater to enter the building.
- 6.5.4 The barns are set above the flood level, therefore, the ABI's requirement of protection during a climate change 1 in 100 year event will be met and there will be a good chance of the property being insured at a competitive rate.



## **7. OTHER SOURCES OF FLOODING**

### **7.1 Groundwater Flooding**

- 7.1.1 In order to assess the potential for groundwater flooding during higher return period rainfall events, the Jacobs/DEFRA report entitled *Strategy for Flood and Coastal Erosion Risk Management: Groundwater Flooding Scoping Study*, published in May 2004, was consulted, together with the guidance offered within the document entitled *Groundwater flooding records collation, monitoring and risk assessment (ref HA5)*, commissioned by DEFRA and carried out by Jacobs in 2006.

#### **Soil and Geology at the Site**

- 7.1.2 To assist with determining the soil and geology at the site, the various soil and hydrogeological data, listed in Section 2 has been referred to.
- 7.1.3 The British Geological Survey's *Online Geology of Britain Viewer* indicates that the soils beneath the site comprise clay, silt, sand and gravel.

#### **Groundwater Flooding Potential at the Site**

- 7.1.4 There have been no recorded groundwater flood events across the area between 2000 and 2003, as indicated by the Jacobs study. The BGS Groundwater Flooding Susceptibility Map indicates that there is "Potential for Groundwater Flooding to Occur at Surface", however, the 2017 SFRA map KL\_16 shows that there is a less than 25% probability of flooding from groundwater.
- 7.1.5 Figure 6.1 of the SWMP shows that there have been no recorded incidents of groundwater flooding at the site.
- 7.1.6 It is likely that the risk of groundwater flooding is low considering the existing building footprints and hardstanding will confine the water table.

### **7.2 Surface Water Flooding and Sewer Flooding**

- 7.2.1 Surface water and sewer flooding across urban areas is often a result of high intensity storm events which exceed the capacity of the sewer thus causing it to surcharge and flood. Poorly maintained sewer networks and blockages can also exacerbate the potential for sewer flooding. Surface water flooding can also occur as a result of overland flow across poorly drained rural areas.
- 7.2.2 The Norfolk County Council Flood Investigation Report for the 2014 event indicates that the site was not affected. Figure 6.3 of the SWMP shows that there have been no recorded incidents of surface water or sewer flooding at the site.
- 7.2.3 The Agency's Surface Water Flooding Map (Figure 7) indicates that there is a very low to high surface water flooding risk (less than 1 in 1000 year chance to events greater than 1 in 30 years).
- 7.2.4 Figure KL\_16 of the 2017 SFRA shows that the site would also be affected during the climate change 1 in 100 year event, however, no depth data is provided. Therefore, it is recognised in the Norfolk County Council document entitled *Lead Local Flood Authority Statutory Consultee for Planning – Guidance Document* dated March 2019, that the low risk/1000yr flood event on the Agency's map (which does provide depth data), is used

as a substitute for the climate change 1 in 100 year event to provide a worst-case scenario.

- 7.2.5 The Agency's map generally shows lower areas of ground where water may pond during storm events and identify areas which receive subsequent runoff from surrounding land during heavy rainfall events. The site is shown to be located within a flow path as identified on the Agency's velocity map which occurs in a north westerly direction and follows the route of the watercourse.
- 7.2.6 Due to the resolution of the online maps, in order to improve the accuracy of the flood risk to the site, further more detailed data has been obtained via the Data.gov.uk site. The flood extent, depth and hazard GIS *shape file* was downloaded from Data.gov.uk (for tile TF\_73), and compared with the survey data.
- 7.2.7 By comparing the flood extent to the survey data it can be seen that the flood contour is set at approximately 25.89m AOD during worst-case low risk events (i.e. between 1 in 1000 years and 1 in 100 years/climate change 1 in 100 year event).
- 7.2.8 It should be noted that in this instance the surface water flood level is the same as the fluvial Flood Zone 2/climate change level. This is to be expected as the surface water flood map shows that there is a strong relationship between the flood extent and route of the watercourse.



**Figure 7: Environment Agency Surface Water Flooding Map (Source: Environment Agency, 2020)**

- 7.2.9 Paragraph 060 (ID 7-060-20140306) of the NPPF Planning Practice Guidance states that the first preference is to avoid flood risk by raising floor levels above the design flood level.

7.2.10 The ground floor levels of the barns are set above the flood level and the hazard to people would be *Very low* thus complying with the NPPG.

### **7.3 Reservoirs, Canals And Other Artificial Sources**

7.3.1 The failure of man-made infrastructure such as flood defences and other structures can result in unexpected flooding. Flooding from artificial sources such as reservoirs, canals and lakes can occur suddenly and without warning, leading to high depths and velocities of flood water which pose a safety risk to people and property.

7.3.2 The Environment Agency's "Risk of flooding from reservoirs" map suggests that the site is at risk of flooding from reservoirs.

7.3.3 However, as the information associated with the maps suggest, it is considered that reservoir flooding is extremely unlikely to happen and such features are regularly inspected by qualified engineers under the Reservoir Act 1975.

## 8. CONCLUSIONS

- The site is shown to be located within Flood Zone 3, 2 and 1.
- The fluvial 1 in 100/1000 year flood level has been estimated to be 25.89m AOD and the climate change flood level is also 25.89m AOD.
- The low risk (1000yr/100yr plus climate change) surface water flood level across the site has been estimated to also be 25.89m AOD.
- The ground floor levels of the barns are set above the flood level and the hazard to people would be *Very low* thus complying with the NPPG.
- It is considered that there is a low groundwater flood risk.
- A warning and evacuation strategy has been developed within this assessment. It is proposed that the site management register with the Agency's *Flood Warnings Direct* and prepare a *Business Flood Plan*.
- Safe access/egress can be achieved during the peak of the event, however, it is recommended that the occupants evacuate the site during the early warning stages.

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## **DRAWINGS**





### DRAWING SYMBOLS & ABBREVIATIONS

AV	AIR VALVE	FE	FLOOR FINISH	ST	STAKE
AV	ARCH VALVE	GD	GULLY GRATE	SV	SHUTTER VALVE
BN	BOREROLE	GV	GAS VALVE	TC	TELECOM COVER
BS	BED LEVEL	IL	INSULATION COVER LEVEL	TL	TRAP LEVEL
BS	BUS STOP	KB	KEYPAD	TL	TRAFFIC LIGHT
BS	BUS STOP	KB	KEYPAD	TL	TRAFFIC LIGHT
BS	BUS STOP	KB	KEYPAD	TL	TRAFFIC LIGHT
BS	BUS STOP	KB	KEYPAD	TL	TRAFFIC LIGHT
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BS	BUS STOP	KB	KEYPAD	TL	TRAFFIC LIGHT
BS	BUS STOP	KB	KEYPAD	TL	TRAFFIC LIGHT

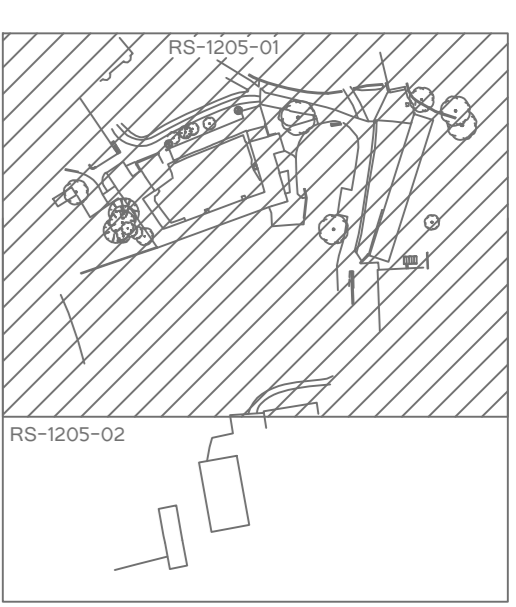
### DRAWING NOTES

**TOPOGRAPHICAL SURVEYS**  
 THIS DRAWING IS A SCALE DRAWING OF AN AVERAGE CANOPY SPREAD. DESCRIPTIONS AND HEIGHTS SHOULD BE USED AS A GUIDE ONLY.  
 ALL BELOW GROUND DETAILS INCLUDING DRAINAGE, VOIDS AND SERVICES HAVE BEEN IDENTIFIED FROM ABOVE GROUND AND THEREFORE ALL DETAILS RELATING TO THESE FEATURES INCLUDING SIZES, DEPTHS, DESCRIPTIONS SHALL BE APPROXIMATE ONLY. ALL CRITICAL DIMENSIONS AND CONNECTIONS SHOULD BE CHECKED AND VERIFIED PRIOR TO STARTING WORK.  
 DETAIL SERVICES AND FEATURES MAY NOT HAVE BEEN SURVEYED IF OBSTRUCTED OR NOT READILY VISIBLE AT THE TIME OF THE SURVEY.

**MEASURED BUILDING SURVEYS**  
 MEASUREMENTS TO INTERNAL WALLS ARE TAKEN TO THE WALL FINISHES AT APPROXIMATE 9M ABOVE THE FLOOR LEVEL AND THE WALL ASSIGNED TO BE VERTICAL.

**ADDITIONAL NOTES**  
 THE CLIENT MUST CHECK AND VERIFY ALL SITE AND BUILDING DIMENSIONS, LEVELS, UTILITIES AND DRAINAGE DETAILS PRIOR TO COMMENCING WORK. ANY ERRORS OR DISCREPANCIES MUST BE REPORTED TO RIGOUR SURVEY IMMEDIATELY.  
 THE ACCURACY OF THE DIGITAL DATA IS THE SAME AS THE PLOTTING SCALE UNLESS ALL DIMENSIONS ARE IN METRES UNLESS OTHERWISE STATED.  
 THE SURVEY CONTROL, BS LISTED ARE ONLY TO BE USED FOR TOPOGRAPHICAL SURVEYS AT THE STATED SCALE.  
 ALL CONTROLS MUST BE CHECKED AND VERIFIED PRIOR TO USE.  
 © RIGOUR SURVEY LTD. WITH THE CONSENT TO AS THE INFORMATION CONTAINED WITHIN THIS DOCUMENT AND THEIR WRITTEN CONSENT MUST BE OBTAINED BEFORE USING THE DATA OTHER THAN FOR THE PURPOSES IT WAS ORIGINALLY SUPPLIED.  
 DO NOT SCALE FROM THIS DRAWING.

### SHEET & ELEVATION PLAN



### SURFACE NOTES

NO SURFACE NOTES ARE PRESENT ON THIS SHEET.

### CONTROL SCHEDULE

CONTROL ID	EASTING	NORTHING	ELEVATION	DESCRIPTION
RS01	573665.514	334895.383	26.273	PEG & NAIL
RS02	573662.091	334896.776	26.445	MAG NAIL
RS03	573668.101	334925.699	25.962	MAG NAIL
RS04	573692.252	334950.581	26.052	MAG NAIL
RS05	573659.080	334954.377	26.240	PEG & NAIL
RS06	573630.064	334940.004	25.974	PEG & NAIL

### SURVEY GRID & LEVEL DATUM

ORDNANCE SURVEY NATIONAL GRID COORDINATES & LEVEL HAVE BEEN ESTABLISHED FOR SURVEY CONTROL POINTS. LEVELS ARE SHOWN AND RELATED TO OSTNAD AND ORDNANCE. THE SURVEY GRID IS ORIENTATED TO GRID NORTH WITH A SCALE FACTOR OF 1.000.

REVISION	DESCRIPTION	DRAWN	DATE
1	ISSUED FOR TENDERS	FCB	10/02/2017
2	ISSUED FOR CONSTRUCTION	FCB	10/02/2017



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PROJECT INFORMATION	
FRING BARN COMPLEX FRING, NORFOLK, ENGLAND	
TOPOGRAPHICAL SURVEY SHEET 1 OF 2	
CLIENT INFORMATION	
F & C BRUN	
DATE	SCALE
10/02/2017	1:200
REVISION	DATE
1	10/02/2017





