

# Francis Sant

## Free Range Poultry Unit, Pentrefelin, Llandeilo Flood Response Plan



February 2018  
Final  
Revision A

Project	Free Range Poultry Unit, Pentrefelin, Llandeilo
Document	Flood Response Plan
Status	Final
Revision	A
Date	February 2018
Client	Mr T Davies
Consultant	Francis Sant Limited
Office	14, Queen St. Carmarthen Carmarthenshire SA31 1JT
Author	Ceirion Herbert
Telephone	01267 233833
e-mail	<a href="mailto:cherbert@francissant.com">cherbert@francissant.com</a>

This document has been produced in accordance with Francis Sant Limited Quality Management System

Signed .....

Date .....

<b>CONTENTS</b>		<b>Page</b>
1	Introduction	1
2	Location	3
3	Flood Risk	8
4	Flood Evacuation	9
Appendix A - Flood Response Procedure		

## 1 INTRODUCTION

It is proposed to build a free range poultry unit on land north of Glanmyddyfi, Pentrefelin, Llandeilo. However, the land lies within Zone C2 as defined by the development advice maps (see Figure 1.1) referred to in Technical Advice Note 15, Development and Flood Risk (TAN 15). This means that part of the site is considered to be at risk of flooding during at least the 1 in 1000 year event and is not afforded protection from recognised flood defences.

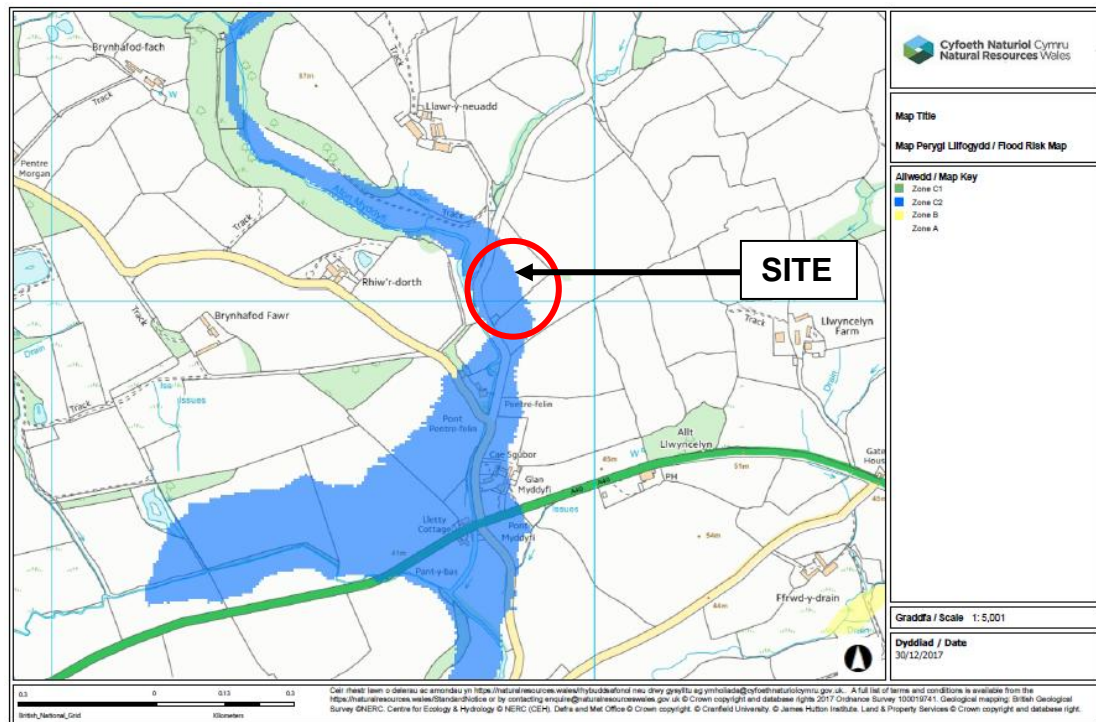


Figure 1.1 - Development Advice Flood Map

The development advice maps are based on Natural Resources Wales Flood Risk Maps (see Figure 1.2) supplemented by sediment data, held by the British Geographic Society (BGS), of historical flooding. The maps adopt the precautionary principle and are based on the best known information available at the time. Detailed assessment, however, can refine the risk of flooding to an area.

A Flood Consequence Assessment (FCA) has been prepared in support of a planning application to Carmarthenshire County Council. The report determined that while most of the site, including the hen house, is expected to be flood free the entrance of the site as well as the adjacent road could become flooded during a 1 in 100 year event. The FCA recommended, therefore, that a Flood Response Plan be prepared in the event that access to and from the site is compromised by flood water.

This document details the flood response procedures and is based on the conclusions of the FCA and should be read in conjunction with it.

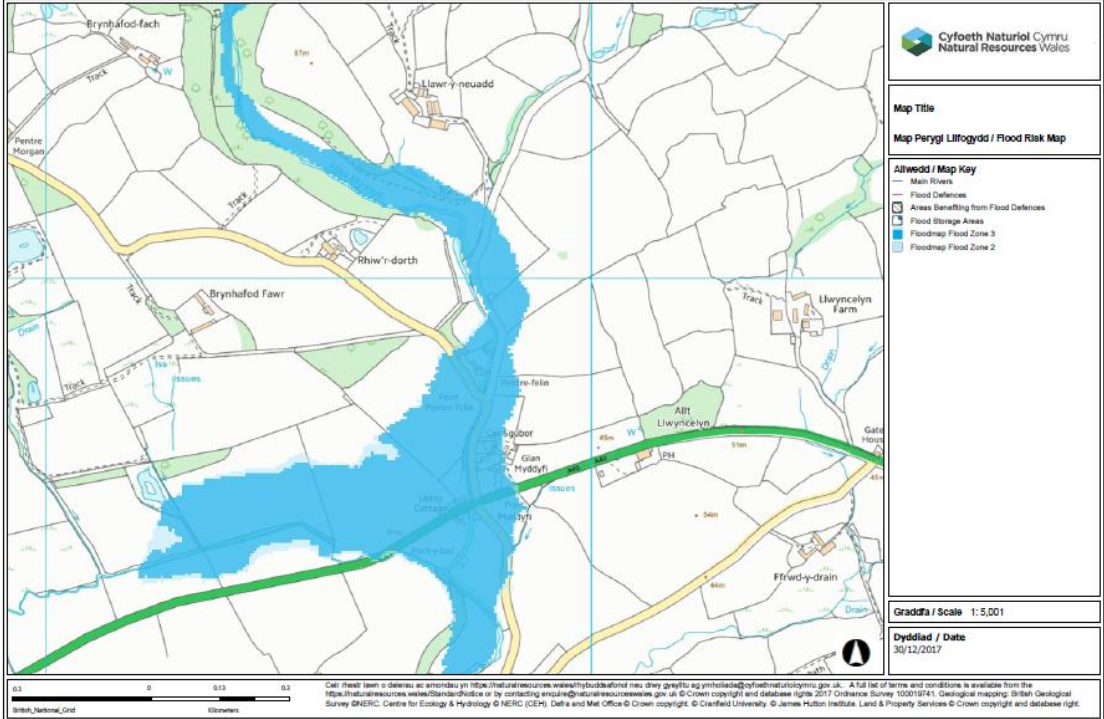
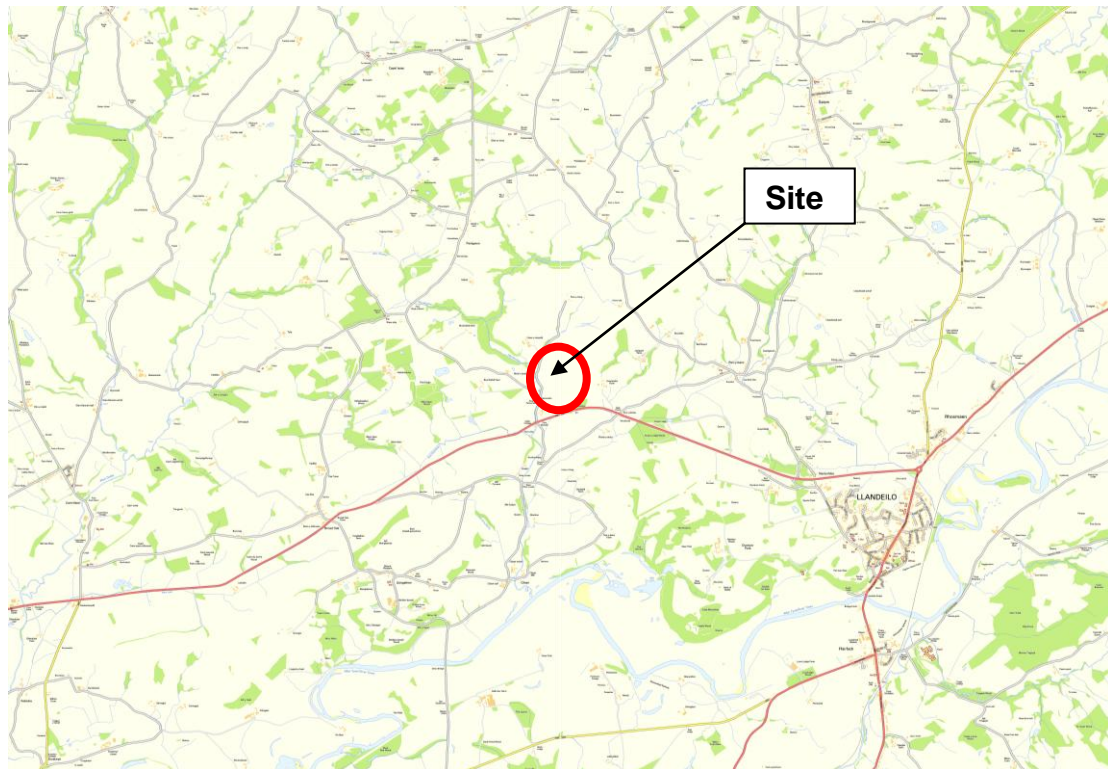


Figure 1.2 - NRW Flood Map

## **2 LOCATION**

It is proposed to develop a free range poultry unit on an open field at Pentrefelin, some 3km west of Llandeilo (coordinates E259850 N224020). The site is accessed from a minor road 400m north of the main A40(T) between Llandeilo and Carmarthen (see Figure 2.1 to 2.3). The site is in a rural location with the minor road forming the western boundary of the site and the Myddyfi stream located west of the road.



**Figure 2.1 – Location Plan**

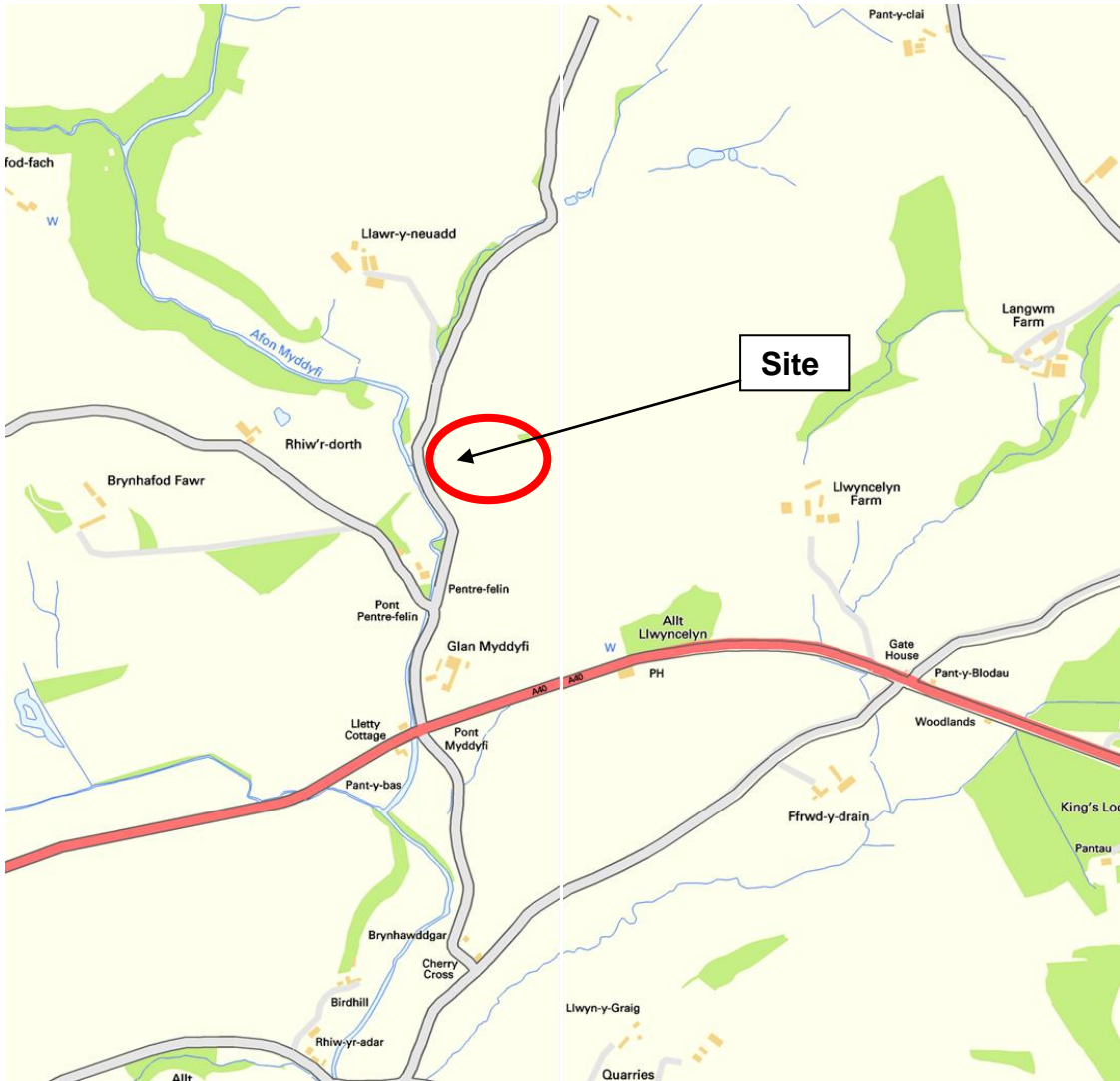


Figure 2.2 – Location of Site

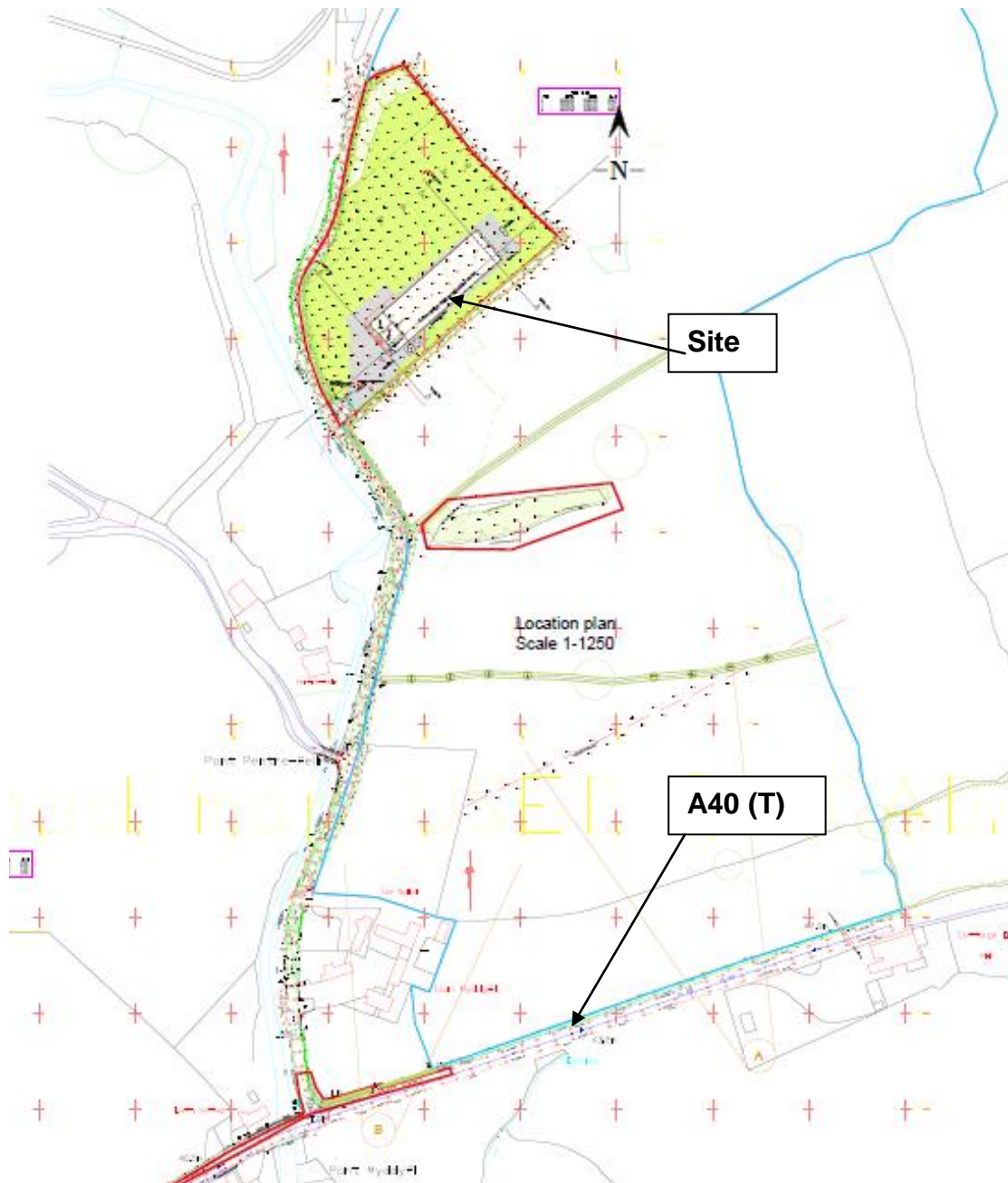


Figure 2.3 – Site Plan

### Topographic Information

A topographic survey of the site, along with the surrounding land, and the road was obtained (see Figure 2.5). This showed that the ground level on the site ranged between 45.8m AOD and 57.74m AOD with the building itself located on land ranging between 47.95m AOD and 55.4m AOD.



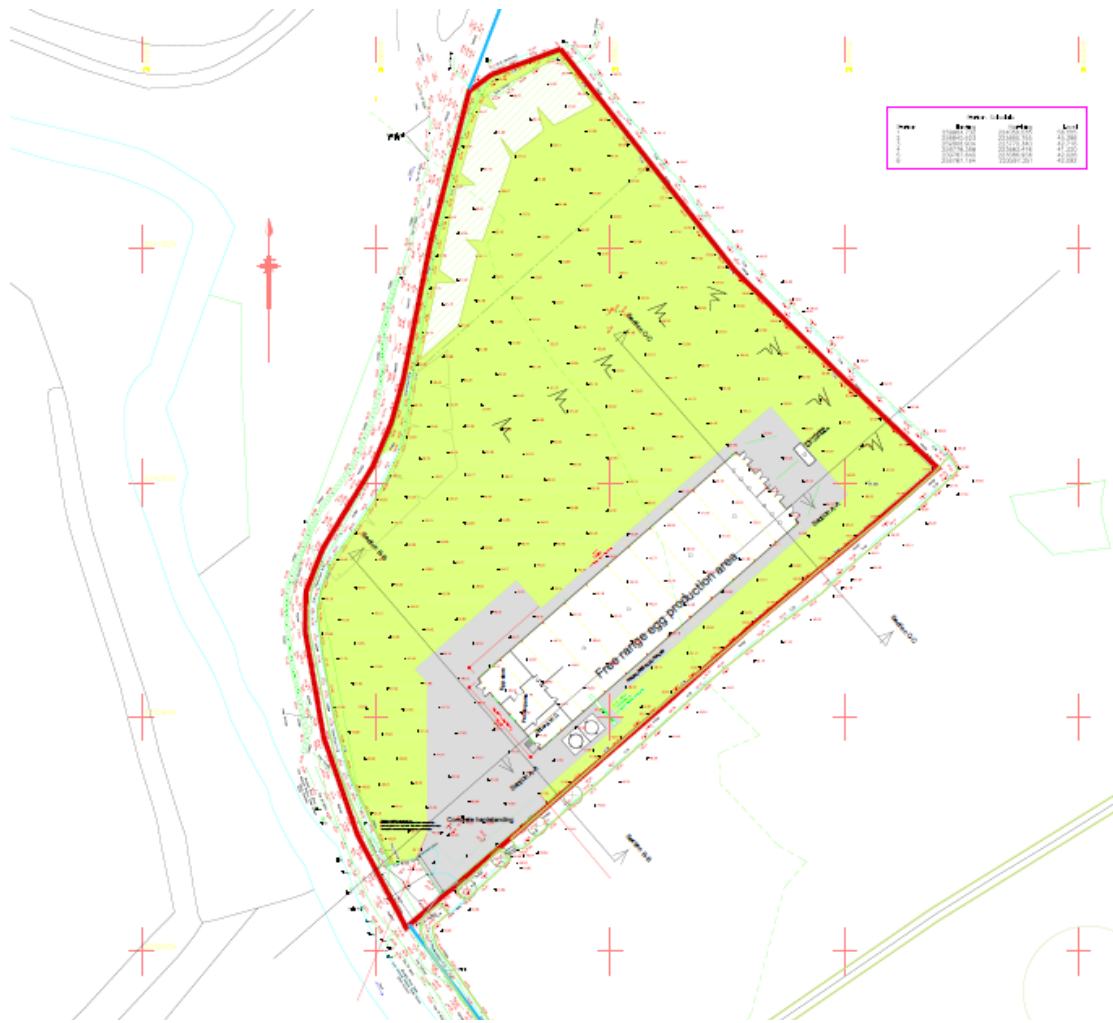


Figure 2.4 – Topographic Survey of the Site

### Development

The proposed development consists of a 73 m x 19.75m steel framed barn which will contain the free range egg production area, packing area, egg store, and office (see Figure 2.6). In addition two food silos are to be constructed on the south eastern side of the building. As mentioned the finished floor level of the building will be set at 47.75m AOD.

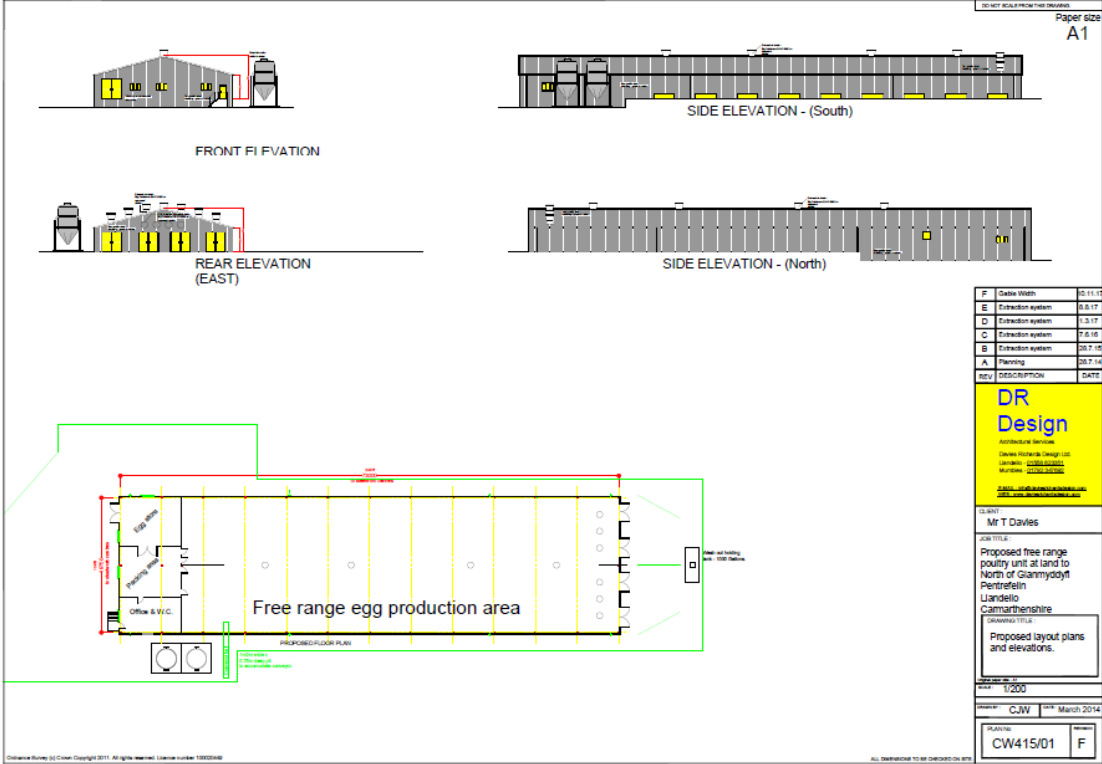


Figure 2.5 – Proposed Development

### **3 FLOOD RISK**

The NRW flood maps (see Figure 3.1) would indicate that the site is within the C2 flood zone. However, the maps are not considered to be accurate at this location with part of the stream and ravine shown to be flood free while the adjacent higher land is shown to be at risk.



**Figure 3.1 – NRW Flood Map**

A 1d model, built for the FCA, showed that the flood levels adjacent to the site entrance were expected to be 45.67m AOD during the Q100 event, 45.97m AOD during the Q100+CC and 46.35m AOD during the Q1000 event.

The development is to be constructed on ground of over 47.75m AOD and will have a slab level of 47.5m AOD. Clearly, therefore, the development itself is expected to be flood free during the considered events year event. However, the land at the entrance into the site, along with the adjacent road, could be at risk of flooding with flood depths of up to a meter during a Q1000 event with corresponding maximum velocity of around 1m/s.

Water is also expected to flood across the lane adjacent to the bridge downstream of the site, however, an alternative flood free access route is available to the A40 trunk road across adjacent fields in the ownership of the developer.

## **4 FLOOD EVACUATION**

While the development is expected to remain flood free even during the 1 in 1000 year event the access to the site along with the adjacent road could well be affected by flood water. However, it is important to be able to gain access to the site daily (feeding etc.) although most of the time it will be possible to wait until the storm has abated.

The site will be registered on Natural Resources Wales flood warning scheme, which uses the latest technology 24 hours a day to monitor rainfall, river levels and sea conditions. Combined with weather data and tidal reports from the Met Office, they can provide local area forecasts on the possibility of flooding and its likely severity.

Four different kinds of flood warning codes are issued. Three of the codes indicate the severity of the warning, and a fourth is an 'all clear', meaning the threat has passed. NRW ensure warnings are broadcasted on local radio and television, and information can also be obtained through their dedicated Floodline information service (0345 988 1188) or on their website, which is updated regularly when there is a flood risk.

The amount of warning that can be expected prior to an event is varied but could be limited considering the size of the catchment.

A member of staff will be designated as a Flood Warden and all personnel working in the organisation should be made aware who this person is. As part of the induction programme all members of staff will be made aware of the risk of flooding at the site and the procedures in place in the event of a warning being received.

On receipt of a flood warning from NRW, all on site will be made aware that a warning has been issued and its severity. The site will be closed and on site visitors will be advised on the safest means of leaving. Non essential work will be stopped and all staff that are not involved with essential tasks (eg feeding) will also leave. Access and egress to the site during an event will be via the alternative route across the fields (see Figure 4.1).

During an event mains utilities, such as electricity and water, can not be relied upon and alternative means will need to be in place.

If, for whatever reason, water is seen to be covering the access road prior to a warning being issued then once more non-essential tasks should be stopped and the alternative access route should be used.

A clear plan, showing the flood response procedure, is to be kept on site in a prominent position. The plan will be accessible to all to make them aware that the area is in a flood risk zone and what procedures are in place,

This plan is to be reviewed as necessary, but at least annually, and is to be kept in good order.

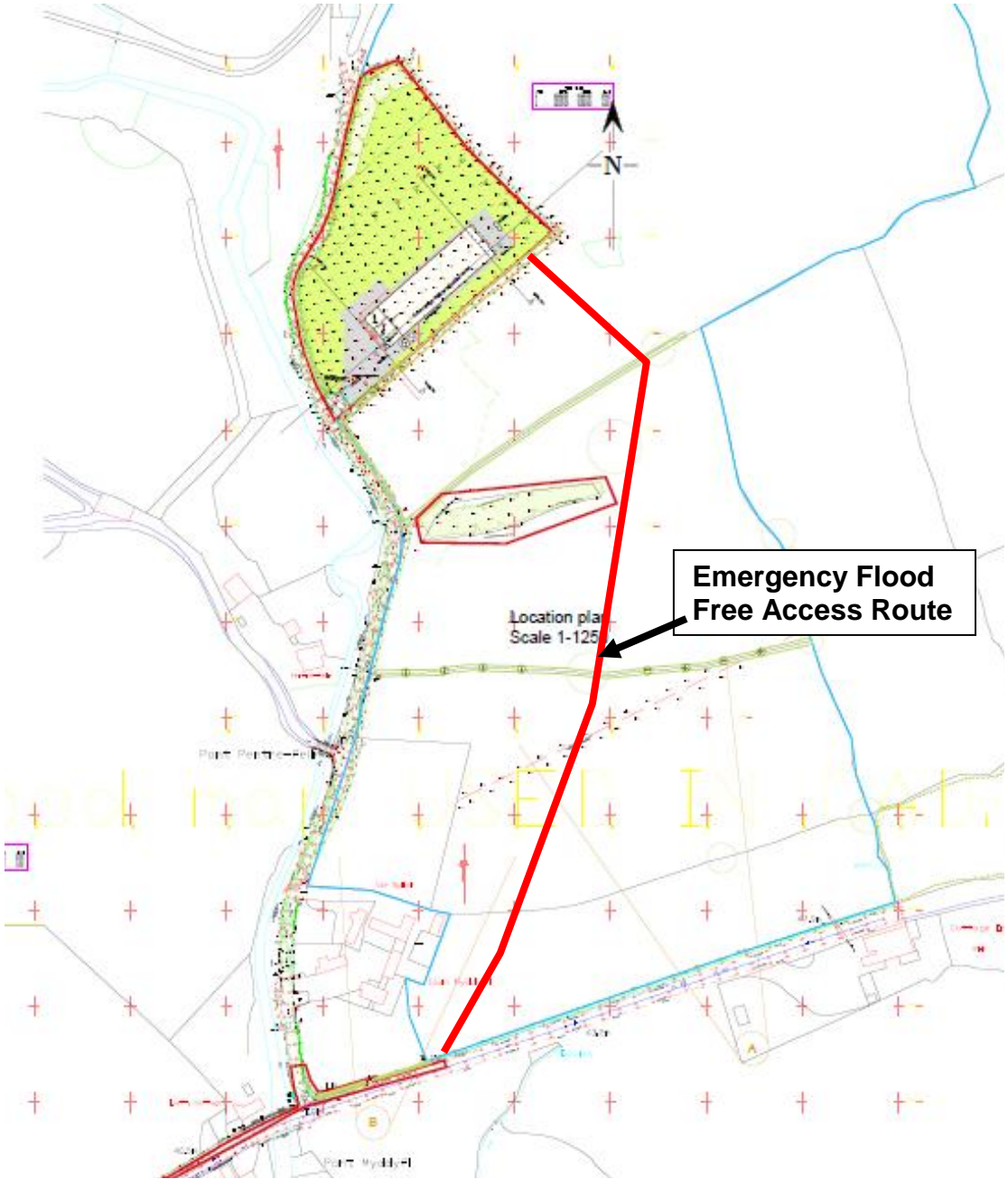


Figure 4.1 – Alternative Access Route

---

**APPENDIX A - Flood Response Procedure**

---

---

## **FLOOD RESPONSE INSTRUCTIONS**

**1** When a flood warning is issued to these premises please advise the Flood Warden as named below:

Flood Warden \_\_\_\_\_

Work Hours Tel. \_\_\_\_\_

Out of Office Tel. \_\_\_\_\_

**2** Ensure all present on site are aware that a flood warning has been issued, by Natural Resources Wales.

**3** The site is to be immediately closed to visitors who should leave the site via the safest route as directed by staff.

**4** Staff not required for essential activities should leave the site.

**5** Access and egress from the site during an event will be via the emergency flood route.

---

---

## Emergency Contact List

<b>Organisation</b>	<b>Telephone General</b>	<b>Telephone Out of Hours</b>
NRW Floodline	03708 560560	08459 881188
NRW General	03000 653000	0800 807060
South Wales Police	999	999
Dyfed Powys Police	999	999
Fire and Rescue Service	999	999
Ambulance Service	999	999
Dwr Cymru - Welsh Water	08000 853968	08000 853968
Western Power	131351	131351
RSPCA	03001 234999.	03001 234999.
Carmarthenshire County Council	01267 224519	
VET		

---