

Hearing Session 11

ALLOCATIONS AND ALTERNATIVE SITES: GWYNEDD – SOUTH

9.30 am, Wednesday 28 September 2016

**Anglesey and Gwynedd Joint
Local Development Plan**



**CYNGOR SIR
YNNYS MON
ISLE OF ANGLESEY
COUNTY COUNCIL**

This Statement has been produced by the Isle of Anglesey County Council and Gwynedd Council to set out their response to the matters and issues raised by the Inspector for the Hearing relating to Allocations and Alternative Sites in South Gwynedd in the submitted Anglesey and Gwynedd Joint Local Development Plan.

This Statement relates to the elements of the Plan that have been raised by the Inspector as matters to be discussed. Where appropriate the Statement draws on and cross-refers to the main sources of information used in the preparation of the Plan such as the outcomes of public consultation, the Sustainability Appraisal, the Background Documents and the supporting Topic Papers. Document reference numbers are given where appropriate.

For the purpose of clarity within this statement any Matters Arising Changes suggested to the Deposit Plan and/or a Focussed Change to the Plan, is shown in bold Red and underlined. Any Focussed Change text to the Deposit Plan is shown in **Bold** underlined text.

PORTHMADOG

a) Site Reference / Name:

- Land at Penclogwyn, Porthmadog
- Rep ID: 1044 (Haf Madoc Wilson, 263)

QUESTION	COUNCILS' RESPONSE
b) What is the current status / use of the site and what is the proposed use?	Greenfield site which lies outside the Deposit Plan development boundary. The representor wishes to include the site within the development boundary for residential purposes.
c) What is the size of the site and what scale / numbers of units are proposed?	0.38ha – Based on the JLDP guidelines of 30 dwellings per hectare the site could accommodate 12 dwellings.
ch) Are there any significant obstacles to the development of the site within the Plan period?	As the Councils are not promoting the site for inclusion in the Plan, it is for the representor to demonstrate that the site is ultimately deliverable. Discussions with the Highways Department has concluded that the site has access issues.
d) What are the anticipated timescales for delivery?	As the Councils are not promoting the site for inclusion in the Plan, this is for the representor to demonstrate.
dd) Should the site be included within the settlement boundary and /or be allocated?	No. Although Porthmadog is defended against flooding, large parts of the settlement are categorised as being within flood zone C1. Although this site is not within the flood zone area it is the Councils' opinion that it is not a suitable site due to access constraints and topographical issues therefore it has been necessary to identify alternative locations in the settlement's catchment area to assist in meeting the requirement for housing. Suitable sites have been found in Penrhyndeudraeth and Criccieth to help meet Porthmadog's housing requirement.
e) Is the site necessary to ensure that the LDP is sound?	No. It is considered that the Plan meets the tests of soundness without the need for a different approach or alternative sites to deliver the evidenced need. Having considered the policy context, Plan strategy

	and other relevant material factors, it is considered there is no demonstrable need to include the site in the Plan and the inclusion of the alternative site is not considered necessary to ensure that Plan LDP is sound.
f) How would the alternative site contribute to the aims and strategic objectives of the Plan?	As the Councils are not promoting the site for inclusion in the Plan this is for the representor to demonstrate.
ff) Is the Council's site selection process reasonable and appropriate and is it founded on a robust and credible evidence base?	<p>Yes. The Council's site selection process is considered reasonable and appropriate and founded on a robust and credible evidence base. As part of the earlier evidence gathering stages the Council invited interested parties to submit Candidate Sites to provide an indication of sites available for development. Details of the Candidate Sites submitted are contained in the Candidate Site Register ((CDLL.002) The methodology for assessing the suitability of candidate sites can be found in Topic Paper 1 (PT.001) and contains a robust 3 step process to assess the suitability of the sites.</p> <p>The Joint Planning Policy Unit (JPPU) consulted on the methodology for assessing the Candidate Site between 18th August and 15th September 2011 which included engagement with statutory consultees and internal Council departments. The summary of the main issues raised and Councils' response can be found in Topic Paper 1A (PT.002).</p> <p>The site selection methodology clearly demonstrates the interrelationship between the candidate site assessment and SA appraisal of the options explored in the Deposit Plan.</p>
g) Has the alternative allocation sought been considered in respect of the Sustainability Appraisal / Strategic Environmental Assessment? Would the change be likely to have significant effects that require re-assessment? If so, has such an assessment been carried out? What was the outcome of the process?	<p>A sustainability appraisal has been submitted by the objector in support of this proposal.</p> <p>As the Councils are not promoting the site for inclusion in the Plan it is for the representor to demonstrate alignment with the SA/ SEA.</p>

a) **Site Reference / Name:**

- Land at Moelwyn Dairy, Porthmadog
- Rep ID: 101 (Bryan Rees Jones, 2737)

QUESTION	COUNCILS' RESPONSE
b) What is the current status / use of the site and what is the proposed use?	Greenfield site which lies outside the Deposit Plan development boundary. The representor wishes to include the site within the development boundary for residential purposes.
c) What is the size of the site and what scale / numbers of units are proposed?	0.77ha – Based on the JLDP guidelines of 30 dwellings per hectare the site could accommodate 23 dwellings.
ch) Are there any significant obstacles to the development of the site within the Plan period?	As the Councils are not promoting the site for inclusion in the Plan, it is for the representor to demonstrate that the site is ultimately deliverable. This site is located on a steep slope and any development would be in a high prominent location.
d) What are the anticipated timescales for delivery?	As the Councils are not promoting the site for inclusion in the Plan, this is for the representor to demonstrate.
dd) Should the site be included within the settlement boundary and /or be allocated?	No. Although Porthmadog is defended against flooding, large parts of the settlement are categorised as being within flood zone C1. Although this site is not within the flood zone area it is the Councils' opinion that it is not a suitable site due to topographical issues therefore it has been necessary to identify alternative locations in the settlement's catchment area to assist in meeting the requirement for housing. Suitable sites have been found in Penrhyndeudraeth and Criccieth to help meet Porthmadog's housing requirement.
e) Is the site necessary to ensure that the LDP is sound?	No. It is considered that the Plan meets the tests of soundness without the need for a different approach or alternative sites to deliver the evidenced need. Having considered the policy context, Plan strategy and other relevant material factors, it is considered there is no demonstrable need to include the site in the Plan and the inclusion of the alternative site is not considered necessary to ensure that Plan LDP is sound.
f) How would the alternative site contribute to the aims and strategic objectives of the	As the Councils are not promoting the site for inclusion in the Plan this is for the representor to demonstrate.

Plan?	
ff) Is the Council's site selection process reasonable and appropriate and is it founded on a robust and credible evidence base?	<p>Yes. The Council's site selection process is considered reasonable and appropriate and founded on a robust and credible evidence base. As part of the earlier evidence gathering stages the Council invited interested parties to submit Candidate Sites to provide an indication of sites available for development. Details of the Candidate Sites submitted are contained in the Candidate Site Register (CDLL002) The methodology for assessing the suitability of candidate sites can be found in Topic Paper 1 (PT.001) and contains a robust 3 step process to assess the suitability of the sites.</p> <p>The Joint Planning Policy Unit (JPPU) consulted on the methodology for assessing the Candidate Site between 18th August and 15th September 2011 which included engagement with statutory consultees and internal Council departments. The summary of the main issues raised and Councils' response can be found in Topic Paper 1A (PT.002).</p> <p>The site selection methodology clearly demonstrates the interrelationship between the candidate site assessment and SA appraisal of the options explored in the Deposit Plan.</p>
g) Has the alternative allocation sought been considered in respect of the Sustainability Appraisal / Strategic Environmental Assessment? Would the change be likely to have significant effects that require re-assessment? If so, has such an assessment been carried out? What was the outcome of the process?	<p>A sustainability appraisal has not been submitted by the objector in support of this proposal.</p> <p>As the Councils are not promoting the site for inclusion in the Plan it is for the representor to demonstrate alignment with the SA/ SEA.</p>

a) Site Reference / Name:

- Land at Moelwyn Dairy, Porthmadog
- Rep ID: 137 (Llewelyn Rhys, 2770)

QUESTION	COUNCILS' RESPONSE
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b) What is the current status / use of the site and what is the proposed use?	Greenfield site which lies outside the Deposit Plan development boundary. The representor wishes to include the site within the development boundary for residential purposes.
c) What is the size of the site and what scale / numbers of units are proposed?	3.71ha – Based on the JLDP guidelines of 30 dwellings per hectare the site could accommodate 111 dwellings.
ch) Are there any significant obstacles to the development of the site within the Plan period?	As the Councils are not promoting the site for inclusion in the Plan, it is for the representor to demonstrate that the site is ultimately deliverable. This site is located on a steep slope and any development would be in a high prominent location.
d) What are the anticipated timescales for delivery?	As the Councils are not promoting the site for inclusion in the Plan, this is for the representor to demonstrate.
dd) Should the site be included within the settlement boundary and /or be allocated?	No. Although Porthmadog is defended against flooding, large parts of the settlement are categorised as being within flood zone C1. Although this site is not within the flood zone area it is the Councils' opinion that it is not a suitable site due to topographical issues therefore it has been necessary to identify alternative locations in the settlement's catchment area to assist in meeting the requirement for housing. Suitable sites have been found in Penrhyndeudraeth and Criccieth to help meet Porthmadog's housing requirement.
e) Is the site necessary to ensure that the LDP is sound?	No. It is considered that the Plan meets the tests of soundness without the need for a different approach or alternative sites to deliver the evidenced need. Having considered the policy context, Plan strategy and other relevant material factors, it is considered there is no demonstrable need to include the site in the Plan and the inclusion of the alternative site is not considered necessary to ensure that Plan LDP is sound.
f) How would the alternative site contribute to the aims and strategic objectives of the Plan?	As the Councils are not promoting the site for inclusion in the Plan this is for the representor to demonstrate.
ff) Is the Council's site selection process reasonable and appropriate and is it founded	Yes. The Council's site selection process is considered reasonable and appropriate and founded on a robust and credible evidence base. As part of the earlier evidence gathering stages the Council invited interested parties to submit Candidate Sites to provide an indication of sites available for development.

<p>on a robust and credible evidence base?</p>	<p>Details of the Candidate Sites submitted are contained in the Candidate Site Register (CDLL.002) The methodology for assessing the suitability of candidate sites can be found in Topic Paper 1 (PT.001) and contains a robust 3 step process to assess the suitability of the sites.</p> <p>The Joint Planning Policy Unit (JPPU) consulted on the methodology for assessing the Candidate Site between 18th August and 15th September 2011 which included engagement with statutory consultees and internal Council departments. The summary of the main issues raised and Councils' response can be found in Topic Paper 1A (PT.002).</p> <p>The site selection methodology clearly demonstrates the interrelationship between the candidate site assessment and SA appraisal of the options explored in the Deposit Plan.</p>
<p>b) Has the alternative allocation sought been considered in respect of the Sustainability Appraisal / Strategic Environmental Assessment? Would the change be likely to have significant effects that require re-assessment? If so, has such an assessment been carried out? What was the outcome of the process?</p>	<p>A sustainability appraisal has not been submitted by the objector in support of this proposal.</p> <p>As the Councils are not promoting the site for inclusion in the Plan it is for the representor to demonstrate alignment with the SA/ SEA.</p>

a) Site Reference / Name:

- Land adjoining Penybryn Cottage, Porthmadog
- Rep ID: 976 (Pamela Beer, 266)

QUESTION	COUNCILS' RESPONSE
<p>b) What is the current status / use of the site and what is the proposed use?</p>	<p>Garden area which lies outside the Deposit Plan development boundary. The representor wishes to include the site within the development boundary for residential purposes.</p>
<p>c) What is the size of the site and what scale / numbers of units</p>	<p>0.08ha – Based on the JLDP guidelines of 30 dwellings per hectare the site could accommodate 2 dwellings.</p>

are proposed?	
ch) Are there any significant obstacles to the development of the site within the Plan period?	As the Councils are not promoting the site for inclusion in the Plan, it is for the representor to demonstrate that the site is ultimately deliverable.
d) What are the anticipated timescales for delivery?	As the Councils are not promoting the site for inclusion in the Plan, this is for the representor to demonstrate.
dd) Should the site be included within the settlement boundary and /or be allocated?	No. Development boundaries are drawn around the urban form of settlements and not land ownership. The site in question is not considered to be part of the Porthmadog's urban form.
e) Is the site necessary to ensure that the LDP is sound?	No. It is considered that the Plan meets the tests of soundness without the need for a different approach or alternative sites to deliver the evidenced need. Having considered the policy context, Plan strategy and other relevant material factors, it is considered there is no demonstrable need to include the site in the Plan and the inclusion of the alternative site is not considered necessary to ensure that Plan LDP is sound.
f) How would the alternative site contribute to the aims and strategic objectives of the Plan?	As the Councils are not promoting the site for inclusion in the Plan this is for the representor to demonstrate.
ff) Is the Council's site selection process reasonable and appropriate and is it founded on a robust and credible evidence base?	<p>Yes. The Council's site selection process is considered reasonable and appropriate and founded on a robust and credible evidence base. As part of the earlier evidence gathering stages the Council invited interested parties to submit Candidate Sites to provide an indication of sites available for development. Details of the Candidate Sites submitted are contained in the Candidate Site Register (CDLL.002). The methodology for assessing the suitability of candidate sites can be found in Topic Paper 1 (PT.001) and contains a robust 3 step process to assess the suitability of the sites.</p> <p>The Joint Planning Policy Unit (JPPU) consulted on the methodology for assessing the Candidate Site between 18th August and 15th September 2011 which included engagement with statutory consultees and internal Council departments. The summary of the main issues raised and Councils' response can be found in Topic Paper 1A (PT.002).</p>

	The site selection methodology clearly demonstrates the interrelationship between the candidate site assessment and SA appraisal of the options explored in the Deposit Plan.
g) Has the alternative allocation sought been considered in respect of the Sustainability Appraisal / Strategic Environmental Assessment? Would the change be likely to have significant effects that require re-assessment? If so, has such an assessment been carried out? What was the outcome of the process?	<p>A sustainability appraisal has not been submitted by the objector in support of this proposal.</p> <p>As the Councils are not promoting the site for inclusion in the Plan it is for the representor to demonstrate alignment with the SA/ SEA.</p>

a) Site Reference / Name:

- C8 – Porthmadog Buisness Park
- Rep ID: 1086 (Natural Resources Wales, 1521)

QUESTION	COUNCILS' RESPONSE
b) What is the current status / use of the site and what is the proposed use?	<ul style="list-style-type: none"> • Safeguarded Primary Employment Site • 13.5ha • B1 & B2 uses • The representor notes that the safeguarded employment site falls within a C1 Flood Risk Zone. Flood modelling work suggests that the actual risk to the site is low due to the flood defences within the area therefore a Flood Consequence Assessment would need to be prepared to support proposals for future development and to ensure that development is adequately protected.
c) What is the size of the site and what scale / numbers of units are proposed?	Total area - 13.5ha. 4ha vacant land.

ch) Are there any significant obstacles to the development of the site within the Plan period?	<p>The safeguarded employment site is located within a C1 flood zone. Safeguarding the employment site ensures that the current uses on site remain for employment purposes. In accordance with TAN15 employment uses are deemed to be less vulnerable development and following satisfaction of the criteria as set out in section 6 of TAN15 employment development within C1 flood zone may be appropriate.</p> <p>Most of the site has previously been developed and the vacant plots of land have been granted planning permission for recycling along with retail facilities. Initial groundworks relating to the permissions is currently taking place.</p> <p>The Council have commissioned a Flood Consequence Assessment to support the safeguarded employment site (Please see Appendix 2). The findings of the FCA concludes that the site is shown outside of the modelled fluvial flood extent during all events up to and including the 1 in 1000 annual probability event. The site is shown to be flood free during the defended tidal 1 in 200 annual probability event with climate change up to 2112. In light of the findings of the FCA, the Council are of the opinion that the safeguarded employment site should remain. Discussions relating to the findings of the assessment are on-going with Natural Resource Wales.</p>
d) What are the anticipated timescales for delivery?	N/A
dd) Should the site be included within the settlement boundary and /or be allocated?	Yes. Safeguarding the current employment site will ensure that the current units remain for employment purposes and continue to satisfy the required employment needs within the area.
e) Is the site necessary to ensure that the LDP is sound?	Yes, the employment allocations and their use classes are supported by the Plan's evidence base. It is considered that the Plan meets the tests of soundness without the need for a different approach or alternative sites to deliver the evidenced need.
f) How would the alternative site contribute to the aims and strategic objectives of the Plan?	As the Councils are not promoting the amendment to this site this is for the representor to demonstrate.
ff) Is the Council's site selection	Yes. The Council's site selection process is considered reasonable and appropriate and founded on a

<p>process reasonable and appropriate and is it founded on a robust and credible evidence base?</p>	<p>robust and credible evidence base. As part of the earlier evidence gathering stages the Council invited interested parties to submit Candidate Sites to provide an indication of sites available for development. Details of the Candidate Sites submitted are contained in the Candidate Site Register (Doc Ref) The methodology for assessing the suitability of candidate sites can be found in Topic Paper 1 (PT.001) and contains a robust 3 step process to assess the suitability of the sites.</p> <p>The Joint Planning Policy Unit (JPPU) consulted on the methodology for assessing the Candidate Site between 18th August and 15th September 2011 which included engagement with statutory consultees and internal Council departments. The summary of the main issues raised and Councils' response can be found in Topic Paper 1A (PT.002).</p> <p>The site selection methodology clearly demonstrates the interrelationship between the candidate site assessment and SA appraisal of the options explored in the Deposit Plan.</p> <p>The Employment Land Review (DC.004) assessed the suitability of each employment site to assess the likelihood that the sites would be developed within the Plan period. Following the assessment of the sites suitability (based upon locational and infrastructure factors) the sites were divided into prime and secondary sites. The prime sites are those thought to be most attractive to the market and are more likely to be developed in the short term. Secondary sites may be in inferior locations in terms of access/market presence compared with prime sites but they retain an important role as they represent opportunities that are highly relevant to the Energy Island Programme or serve a local need in more remote or rural areas. Within the Employment Land Review Parc Buses Porthmadog has been recognised as a primary Employment Site.</p>
<p>g) Has the alternative allocation sought been considered in respect of the Sustainability Appraisal / Strategic Environmental Assessment? Would the change be likely to have significant effects that require re-assessment? If so, has such an assessment been carried out? What was the outcome of the process?</p>	<p>A sustainability appraisal has been submitted by the objector in support of this proposal.</p> <p>As the Councils are not promoting the amendments to the site it is for the representor to demonstrate alignment with the SA/ SEA.</p> <p>This site is being supported by the Councils. All allocations have been assessed against the SA Framework found in the Sustainability Appraisal (Feb 2016) (CDLL.007).</p>

TYWYN

Site Reference / Name:

- **Not site specific**
- **Rep ID: 631 (Councillor Mike Stevens, 406)**
- The representor objects to the settlement of Tywyn being classified as a Local Centre. It is argued that the settlement should be upgraded to an Urban Centre, as none have been proposed in the southern part of Gwynedd and that it is comparable to Urban Centres in the north, such as Blaenau Ffestiniog, in terms of facilities and services.

Response

- Local planning authorities need to have a sustainable settlement network, which meets the requirements of the economy, the environment and health while respecting local diversity and protecting the character and cultural identity of the communities. The Deposit Plan identifies a Hierarchy of towns and villages with a specific role and function. A methodology has been developed and published to identify the settlements on the basis of their role, function, range and choice of facilities and services in Topic Paper 5 Developing the Settlement Strategy.
- Tywyn does not meet the criteria to be classified as an Urban Service Centre. There was no compelling evidence to justify amending the Deposit Plan in order to ensure its soundness.

a) Site Reference / Name:

- **Land adjacent to the Barn, Faenol Isaf, Tywyn**
- **Rep ID: 1051 (Tim Singh, 3195 c/o Geraint Lewis , 3196)**

QUESTION	COUNCILS' RESPONSE
b) What is the current status / use of the site and what is the proposed use?	Greenfield site which lies outside the Deposit Plan development boundary. The representor wishes to include the site within the development boundary for residential purposes.
c) What is the size of the site and what scale / numbers of units	0.29ha – Based on the JLDP guidelines of 30 dwellings per hectare the site could accommodate 9 dwellings.

are proposed?	
ch) Are there any significant obstacles to the development of the site within the Plan period?	<p>As the Councils are not promoting the site for inclusion in the Plan, it is for the representor to demonstrate that the site is ultimately deliverable.</p> <p>The entire site is located with a C2 flood risk zone.</p>
d) What are the anticipated timescales for delivery?	<p>As the Councils are not promoting the site for inclusion in the Plan, this is for the representor to demonstrate.</p>
dd) Should the site be included within the settlement boundary and /or be allocated?	<p>No. The site is located within a C2 floodrisk zone. No flood risk consequence assessment has been supplied by the representor to support his objection.</p>
e) Is the site necessary to ensure that the LDP is sound?	<p>No. It is considered that the Plan meets the tests of soundness without the need for a different approach or alternative sites to deliver the evidenced need. Having considered the policy context, Plan strategy and other relevant material factors, it is considered there is no demonstrable need to include the site in the Plan and the inclusion of the alternative site is not considered necessary to ensure that Plan LDP is sound.</p>
f) How would the alternative site contribute to the aims and strategic objectives of the Plan?	<p>As the Councils are not promoting the site for inclusion in the Plan this is for the representor to demonstrate.</p>
ff) Is the Council's site selection process reasonable and appropriate and is it founded on a robust and credible evidence base?	<p>Yes. The Council's site selection process is considered reasonable and appropriate and founded on a robust and credible evidence base. As part of the earlier evidence gathering stages the Council invited interested parties to submit Candidate Sites to provide an indication of sites available for development. Details of the Candidate Sites submitted are contained in the Candidate Site Register (CDLL.002) The methodology for assessing the suitability of candidate sites can be found in Topic Paper 1 (PT.001) and contains a robust 3 step process to assess the suitability of the sites.</p> <p>The Joint Planning Policy Unit (JPPU) consulted on the methodology for assessing the Candidate Site between 18th August and 15th September 2011 which included engagement with statutory consultees and internal Council departments. The summary of the main issues raised and Councils' response can be found in Topic Paper 1A (PT.002).</p>

	The site selection methodology clearly demonstrates the interrelationship between the candidate site assessment and SA appraisal of the options explored in the Deposit Plan.
g) Has the alternative allocation sought been considered in respect of the Sustainability Appraisal / Strategic Environmental Assessment? Would the change be likely to have significant effects that require re-assessment? If so, has such an assessment been carried out? What was the outcome of the process?	<p>A sustainability appraisal has been submitted by the objector in support of this proposal.</p> <p>As the Councils are not promoting the site for inclusion in the Plan it is for the representor to demonstrate alignment with the SA/ SEA.</p>

BARMOUTH

a) Site Reference / Name:

- Not site specific
- Rep ID: 842 (Jina Gwyrfai, 3092)
- The representor objects to the amount of land identified for housing in Barmouth and argues that there is no demographic need for more housing in the settlement which will be detriment to the Welsh speaking community.

Response

- Barmouth has been identified as a Local Service Centre. The distribution strategy was established in the first place during the process of developing the Preferred Strategy of the Plan on the basis of evidence and public participation. In spatial terms the strategy is to ensure that the detailed and strategic policies of the Plan promote developments that address the expectations of the Vision and Strategic Objectives of the Plan. It would also ensure that the Council meets national expectations in promoting sustainable development. In this regard, PPW (Part 9.2) notes that the development plans need to provide a framework that will stimulate, guide and manage change towards a more sustainable pattern of development. Need to find a sustainable settlement network, which meets the requirements of the

economy, the environment and health while respecting local diversity and protecting the character and cultural identity of the communities. The Deposit Plan identifies a Hierarchy of towns and villages with a specific role and function. A methodology has been developed and published to identify the settlements on the basis of their role, function, range and choice of facilities and services in Topic Paper 5 Developing the Settlement Strategy.

- The spatial strategy will ensure that development is directed to locations that are sustainable in terms of size, function, character, facilities, transport links, social and environmental inclusion. Therefore there will be a sustainable pattern of settlement with viable communities.
- The Welsh language has been a consideration in formulating the vision, objectives, strategies and policies of the Plan since its inception. The potential effects of the Plan on the Welsh language were considered during the Sustainability Assessment process (including the SEA), which was informed by a Language Impact Assessment. Attention should be given to the various policies of the Plan and topic documents, as well as the SPG for: planning obligations, maintaining and creating sustainable communities, affordable housing, the type and mix of housing, and development briefs.
- There was no compelling evidence to justify amending the Deposit Plan in order to ensure the soundness of the Plan.

a) Site Reference / Name:

- Land adjacent to Neuadd Mynach Hotel, Barmouth
- Rep ID: 1387 (Bruce Davies, 3305; Geraint Lewis, 3196)

QUESTION	COUNCILS' RESPONSE
b) What is the current status / use of the site and what is the proposed use?	Greenfield site which lies outside the Deposit Plan development boundary. The representor wishes to include the site within the development boundary for residential purposes.
c) What is the size of the site and what scale / numbers of units are proposed?	0.33ha –Based on the JLDP guidelines of 30 dwellings per hectare the site could accommodate 10 dwellings.
ch) Are there any significant obstacles to the development of the site within the Plan period?	As the Councils are not promoting the site for inclusion in the Plan, it is for the representor to demonstrate that the site is ultimately deliverable.
d) What are the anticipated	As the Councils are not promoting the site for inclusion in the Plan, this is for the representor to

timescales for delivery?	demonstrate.
dd) Should the site be included within the settlement boundary and /or be allocated?	No. The Deposit Plan and its supporting documents, which includes an Urban Capacity Study (Topic Paper 6, PT.0013), clearly demonstrates that there is sufficient windfall opportunities and a landbank provision within the Deposit Plan Development Boundary for Barmouth to meet the housing need identified in the Plan. Therefore, it is considered that there is no justification to include this land within the development boundary.
e) Is the site necessary to ensure that the LDP is sound?	No, there is sufficient windfall land opportunities and a landbank provision for housing development within the Deposit Plan Development Boundary for Barmouth to meet the housing need identified in the Plan. Having considered the policy context, Plan strategy and other relevant material factors, it is considered there is no demonstrable need to include the site in the Plan and the inclusion of the alternative site is not considered necessary to ensure that Plan LDP is sound. Therefore, It is considered that the Plan meets the tests of soundness without the need for a different approach or alternative sites to deliver the evidenced need.
f) How would the alternative site contribute to the aims and strategic objectives of the Plan?	As the Councils are not promoting the site for inclusion in the Plan this is for the representor to demonstrate.
ff) Is the Council's site selection process reasonable and appropriate and is it founded on a robust and credible evidence base?	<p>Yes. The Council's site selection process is considered reasonable and appropriate and founded on a robust and credible evidence base. As part of the earlier evidence gathering stages the Council invited interested parties to submit Candidate Sites to provide an indication of sites available for development. Details of the Candidate Sites submitted are contained in the Candidate Site Register (CDLL002) The methodology for assessing the suitability of candidate sites can be found in Topic Paper 1 (PT.001) and contains a robust 3 step process to assess the suitability of the sites.</p> <p>The Joint Planning Policy Unit (JPPU) consulted on the methodology for assessing the Candidate Site between 18th August and 15th September 2011 which included engagement with statutory consultees and internal Council departments. The summary of the main issues raised and Councils' response can be found in Topic Paper 1A (PT.002).</p> <p>The site selection methodology clearly demonstrates the interrelationship between the candidate site assessment and SA appraisal of the options explored in the Deposit Plan.</p>
g) Has the alternative allocation sought been considered in	A sustainability appraisal has not been submitted by the objector in support of this proposal.

<p>respect of the Sustainability Appraisal / Strategic Environmental Assessment? Would the change be likely to have significant effects that require re-assessment? If so, has such an assessment been carried out? What was the outcome of the process?</p>	<p>As the Councils are not promoting the site for inclusion in the Plan it is for the representor to demonstrate alignment with the SA/ SEA.</p>
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PENRHYNDEUDRAETH

a) Site Reference / Name:

- **Not Site specific**
- **Rep ID: 1437 (Councillor Gareth Thomas; 402)**
- The representor objects to the amount of land identified for housing in Penrhyndeudraeth.

Response

- Porthmadog is defended against flooding, large parts of the settlement are categorised as being within Zone C1. A core function of the Plan is to ensure that all development is sustainable, having regard to the implications of addressing climate change. Development proposals that would lead to a reduction in floodplain storage capacity or impede flood flows are strongly discouraged. On this basis and the lack of suitable alternative sites beyond the flood risk area, the Plan cannot allocate land for housing in Porthmadog.
- Criccieth and Penrhyndeudraeth have been chosen after taking into account a range of factors. Both Local Service Centres have good transport links with Porthmadog and each one has a good level of services that provide their residents the opportunity to walk to them to satisfy their everyday requirements, thus reducing the need for journeys to Porthmadog.
- The JPPU commissioned Ymgynghoriaeth Gwynedd Consultancy to undertake a stage 2 Strategic Flood Consequences Assessment for Porthmadog so that the Unit could address objections 1430 and 1437 and therefore ascertain whether there were any development opportunities in Porthmadog that would align with the requirements of TAN15. The SFCA2 concluded that the accessible sites for

development in the town were all subject to flood risk. As indicated in section 3 of this report the Deposit Plan contains a suite of policies and supporting text that explains how development will be managed within the areas of change, and the mechanisms by which the necessary infrastructure, services and facilities will be secured. This policy framework also includes the Councils' requirement to mitigate potential impacts of development in relation to enhancing and protecting the natural and built environment, provision of sustainable transport, community facilities, environmental assets and the careful management of development in environmentally sensitive areas or rural locations.

a) Site Reference / Name:

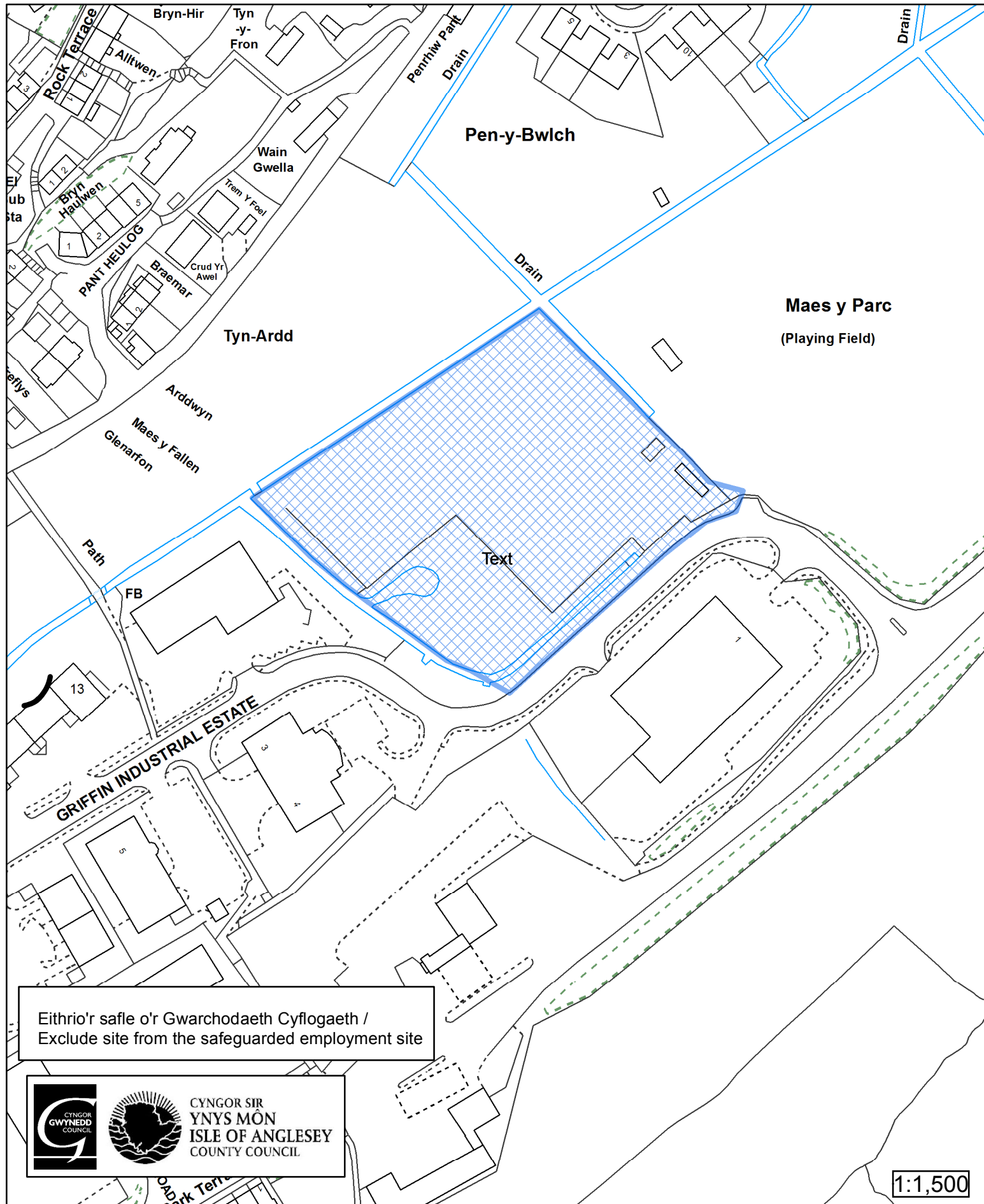
- **Site C39 – Griffin Industrial Estate, Penrhyndeudraeth**
- **Rep ID: 1083 (Natural Resources Wales, 1521)**

QUESTION	COUNCILS' RESPONSE
b) What is the current status / use of the site and what is the proposed use?	<ul style="list-style-type: none"> • Safeguarded Employment Site under policy CYF1 of the Deposit Plan • B1, B2 & B8 use
c) What is the size of the site and what scale / numbers of units are proposed?	4ha
ch) Are there any significant obstacles to the development of the site within the Plan period?	Part of the safeguarded employment site is located within the C2 flood zone. Continued engagement with Natural Resources Wales has revealed that vacant land at the Griffin Industrial Estate, Penrhyndeudraeth (C39) forms a flood storage area created when the land was developed in the 1980s. In light of this information, if deemed acceptable and appropriate by the Inspector, the Councils would therefore like to propose an amendment to the Penrhyndeudraeth Inset Map to exclude the site from the safeguarded employment sites and the development boundary to be addressed as a potential Matters Arising Change. The amendment is shown in Appendix 1 to this statement. This MAC would also require a consequential change to Policy CYF 1, which provides a schedule of employment sites. The Councils understand that Natural Resources Wales is satisfied subject to the removal of the flood storage land from allocation C39 and therefore remove their objection to this safeguarded employment site. Natural Resources Wales draws the Inspector's attention to the need for any future development proposal within this safeguarded employment site to maintain access for maintenance vehicles to the flood storage area.
d) What are the anticipated timescales for delivery?	Following the removal of the vacant land from within the safeguarded employment site the site has otherwise been fully developed.

QUESTION	COUNCILS' RESPONSE
dd) Should the site be included within the settlement boundary and /or be allocated?	<p>Yes. Safeguarding the current employment site will ensure that the current units remain for employment purposes and continue to satisfy the required employment needs within the area.</p>
e) Is the site necessary to ensure that the LDP is sound?	<p>Yes, the employment allocations and their use classes are supported by the Plan's evidence base. It is considered that the Plan meets the tests of soundness without the need for a different approach or alternative sites to deliver the evidenced need.</p>
f) How would the alternative site contribute to the aims and strategic objectives of the Plan?	<p>N/A</p>
ff) Is the Council's site selection process reasonable and appropriate and is it founded on a robust and credible evidence base?	<p>Yes (following the above referred to Matters of Arising Change). The Council's site selection process is considered reasonable and appropriate and founded on a robust and credible evidence base. As part of the earlier evidence gathering stages the Council invited interested parties to submit Candidate Sites to provide an indication of sites available for development. Details of the Candidate Sites submitted are contained in the Candidate Site Register (CDLL002) The methodology for assessing the suitability of candidate sites can be found in Topic Paper 1 (PT.001) and contains a robust 3 step process to assess the suitability of the sites.</p> <p>The Joint Planning Policy Unit (JPPU) consulted on the methodology for assessing the Candidate Site between 18th August and 15th September 2011 which included engagement with statutory consultees and internal Council departments. The summary of the main issues raised and Councils' response can be found in Topic Paper 1A (PT.002).</p> <p>The site selection methodology clearly demonstrates the interrelationship between the candidate site assessment and SA appraisal of the options explored in the Deposit Plan.</p> <p>The Employment Land Review (DC.004) assessed the suitability of each employment site to assess the likelihood that the sites would be developed within the Plan period. Following the assessment of the sites suitability (based upon locational and infrastructure factors) the sites were divided into prime and</p>

QUESTION	COUNCILS' RESPONSE
	<p>secondary sites. The prime sites are those thought to be most attractive to the market and are more likely to be developed in the short term. Secondary sites may be in inferior locations in terms of access/market presence compared with prime sites but they retain an important role as they represent opportunities that are highly relevant to the Energy Island Programme or serve a local need in more remote or rural areas. Within the Employment Land Review Griffin Industrial Estate has been recognised as a secondary Employment Site.</p>
<p>g) Has the alternative allocation sought been considered in respect of the Sustainability Appraisal / Strategic Environmental Assessment? Would the change be likely to have significant effects that require re-assessment? If so, has such an assessment been carried out? What was the outcome of the process?</p>	<p>A sustainability appraisal has been submitted by the objector in support of this proposal.</p> <p>This site is being supported by the Councils. All allocations have been assessed against the SA Framework found in the Sustainability Appraisal (Feb 2016) (CDLL.007).</p>

**Stad Diwydiannol Griffin (Newidiadau Materion sy'n Codi)
Griffin Industrial Estate (Matters Arising Change)**



Appendix 2



Porthmadog Business Park

Flood Consequences Assessment

August 2016



DOCUMENT VERIFICATION RECORD

CLIENT:	Cyngor Gwynedd Council
SCHEME:	Porthmadog Business Park – Flood Consequences Assessment
INSTRUCTION:	The instruction to carry out this Flood Consequences Assessment was received from Mr Robert Williams of Ymgynghoriaeth Gwynedd Consultancy

DOCUMENT REVIEW & APPROVAL

AUTHOR:	Johanne Williams LLB (Hons) PgDip
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APPROVER:	Aled Williams BSc (Hons)

ISSUE HISTORY

ISSUE DATE	COMMENTS
15/08/2016	First issue

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Appendix B – LiDAR Extract

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Introduction

Waterco Consultants have been instructed to prepare a Flood Consequences Assessment (FCA) to inform the Gwynedd County Council Local Development Plan in respect of land at Porthmadog Business Park, Porthmadog, LL49 9NZ.

The purpose of this report is to outline the potential flood risk to the site, the proposed measures which could be incorporated to mitigate the identified flood risk and establish any development constraints. This report has been prepared in accordance with the guidance contained in Planning Policy Wales (PPW) and the associated Technical Advice Note 15 (TAN15): Development and Flood Risk.

This report has been prepared in consultation with Natural Resources Wales (NRW) and Gwynedd County Council.

Site Description

The site forms the western end of Porthmadog and is centred on National Grid reference: 256129E 339149N. The site is currently occupied by Penamser Industrial Estate which comprises commercial and industrial units, access roads and undeveloped land. The site covers an area of approximately 13.7 hectares (ha). A location plan and an aerial image are included in Appendix A.

The site is bordered by the Cambrian railway line to the north, mixed use development (commercial, leisure and residential) to the east, and Penamser Road (A497) and greenfield land to the south and west. Access and egress is provided off Penamser Road to the south.

Topographic levels to metres Above Ordnance Datum (m AOD) have been derived from a 1m resolution Environment Agency (EA) composite 'Light Detecting and Ranging' (LiDAR) Digital Terrain Model (DTM). A review of LiDAR data shows that site levels generally vary between 2.4m AOD and 3.65m AOD. A LiDAR extract is included in Appendix B.

Flood Zone Category and Policy Context

Flood Zone Category

The Welsh Government Development Advice Map included in Appendix C shows that the site is located within Flood Zone C1 – an area considered to be at flood risk, but served by significant infrastructure, including flood defences, with a 0.1% (1 in 1000) or greater annual probability of flooding.

The Natural Resources Wales (NRW) 'Flood Risk – Rivers and Sea' map included in Appendix C shows that the site is located within Flood Zone 3 – an area considered to be at flood risk with a 0.5% (1 in 200) or greater annual probability of tidal flooding however benefits from the protection offered by flood defences.

Development Vulnerability Classification

Figure 2 of the Welsh Government's Technical Advice Note 15 – Development and Flood Risk (TAN15) categorises commercial and industrial development as less vulnerable.

TAN15 states that less vulnerable development can be considered in Flood Zone C1 subject to the application of the TAN15 Justification Test. Development will only be justified if it can be demonstrated that:

- i. Its location in zone C is necessary to assist, or be part of, a local authority regeneration initiative or a local authority strategy required to sustain an existing settlement; **or**,
- ii. Its location in zone C is necessary to contribute to key employment objectives supported by the local authority, and other key partners, to sustain an existing settlement or region;
and,
- iii. It concurs with the aims of PPW and meets the definition of previously developed land (PPW fig 2.1); and,
- iv. The potential consequences of a flooding event for the particular type of development have been considered, and in terms of the criteria contained in sections 5 and 7 and appendix 1 (of TAN15) found to be acceptable.

Consultation

NRW have been contacted in August 2016, a response is currently awaited.

Local guidance documents including the Anglesey and Gwynedd Joint Local Development Plan Strategic Flood Consequences Assessment (SFCA) (May 2013) have been reviewed for site specific information.

Sources of Flooding and Probability

Fluvial

There are a series of land drains located across the site, some of which are classified as main rivers. The land drains flow north and discharge into 'Y Cyt' (watercourse) which is located approximately 230m north-east of the site at its nearest point.

Outputs from the Afon Glaslyn and Tributaries (at Porthmadog) hydraulic model have been obtained from NRW and have been used to produce site specific fluvial flood mapping. The mapping is included in Appendix C with extracts provided overleaf. Figure 1 overleaf shows that the site is not at risk of fluvial flooding during the undefended 1 in 100 annual probability plus 30% climate change allowance event.

As shown in Figure 2 overleaf, the site is not at risk during the undefended 1 in 1000 annual probability event.

It can therefore be concluded that the site is at low risk of fluvial flooding.

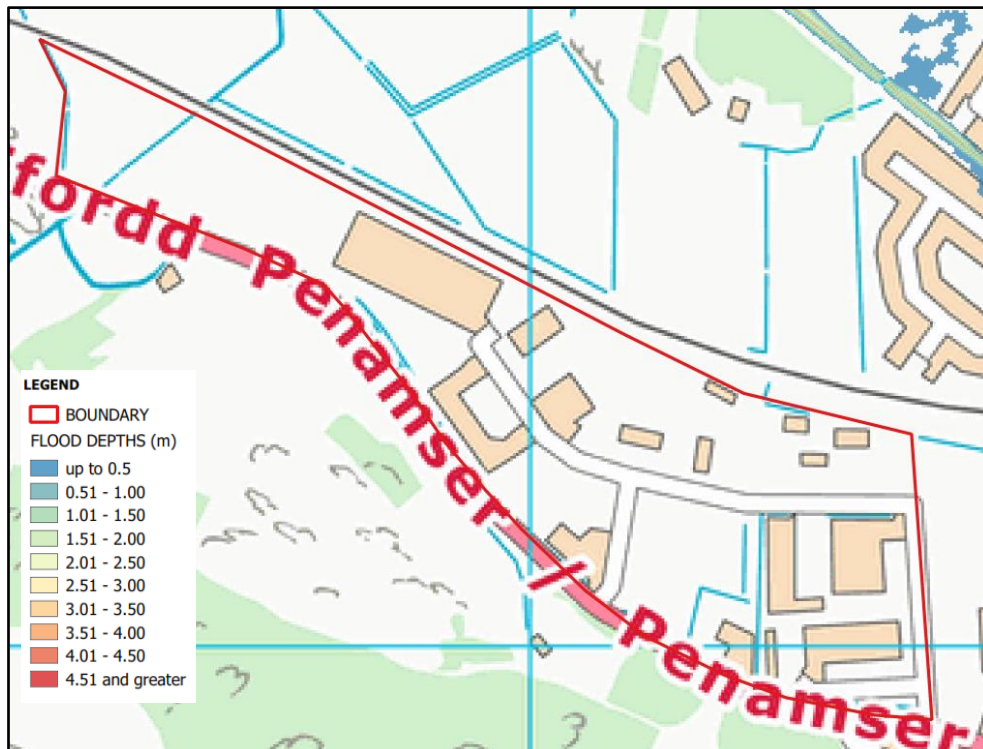


Figure 1 – Undefended 1 in 100 annual probability plus 30% CC* fluvial event
CC – Climate Change

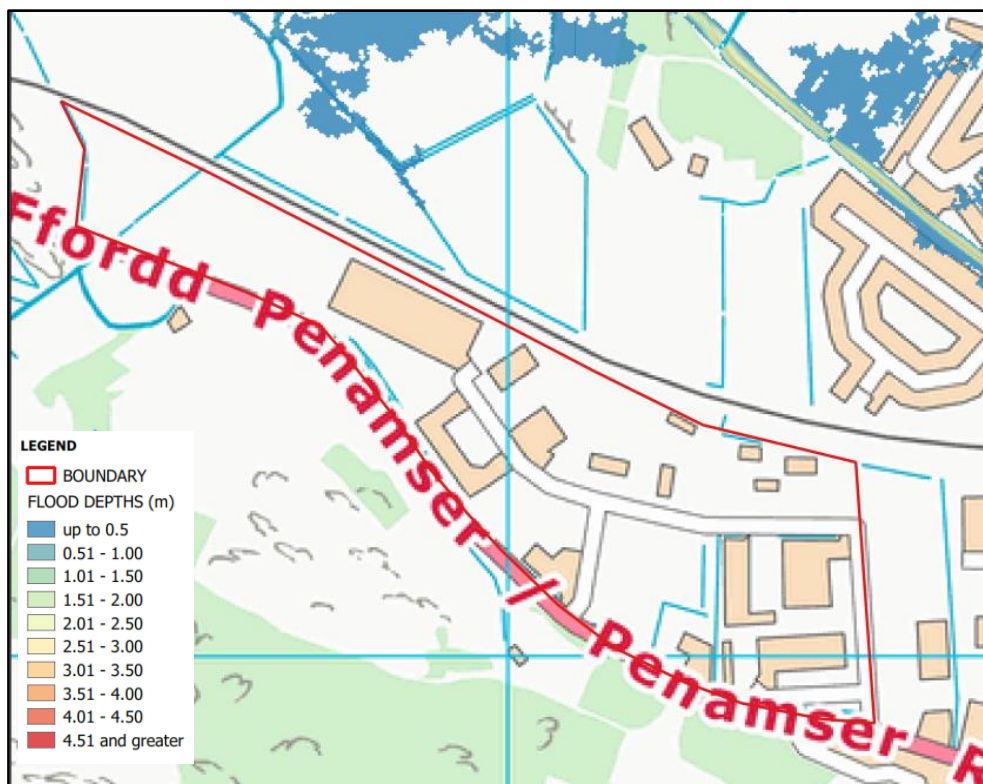


Figure 2 – Undefended 1 in 1000 annual probability fluvial event

Tidal

The site is located approximately 760m west of the Afon Glaslyn estuary.

NRW have provided the following peak still water levels for the Afon Glaslyn estuary;

- 1 in 200 annual probability (2011): 4.07m AOD
- 1 in 1000 annual probability (2011): 4.29m AOD.

The peak tidal water levels are taken from the North Wales Tidal Mapping Study Final Report by JBA Consulting, November 2011. TAN15 requires an allowance for climate change. Using the sensitivity ranges provided in Table 1 of DEFRA's note on climate change impacts, climate change allowance has been calculated as 1069mm based on a development lifetime of 100 years.

Period	Number of years	Net Sea Level Rise (mm/yr)	Total Sea Level Rise (mm)
2011-2025	14	3.5	49
2025-2055	30	8.0	240
2055-2085	30	11.5	345
2085-2115	30	14.5	435
			1069

The 1 in 200 annual probability plus 100 years climate change (2115) tidal level is therefore taken as 5.14m AOD. The 1 in 1000 annual probability plus 100 years climate change (2115) tidal level is taken as 5.36m AOD.

Tidal Defences

The development site is located in an area which benefits from flood defences in the form of raised embankments and sluice gates. The defence crest levels have been obtained from the Spatial Flood Defences with standardised attributes dataset provided by NRW and indicates that the sea defences have effective crest levels of 4.88m AOD with Porthmadog Cob raised to 5.94m AOD.

Tidal Flood Mapping

Tidal flood depth mapping has been produced from the Afon Glaslyn and Tributaries (at Porthmadog) hydraulic model outputs. The mapping is included in Appendix C with extracts provided below and overleaf.

Figure 3 below shows that the site is not at risk of tidal flooding during the defended 1 in 200 annual probability event with climate change up to the year 2112. The access (A497) is also flood free.

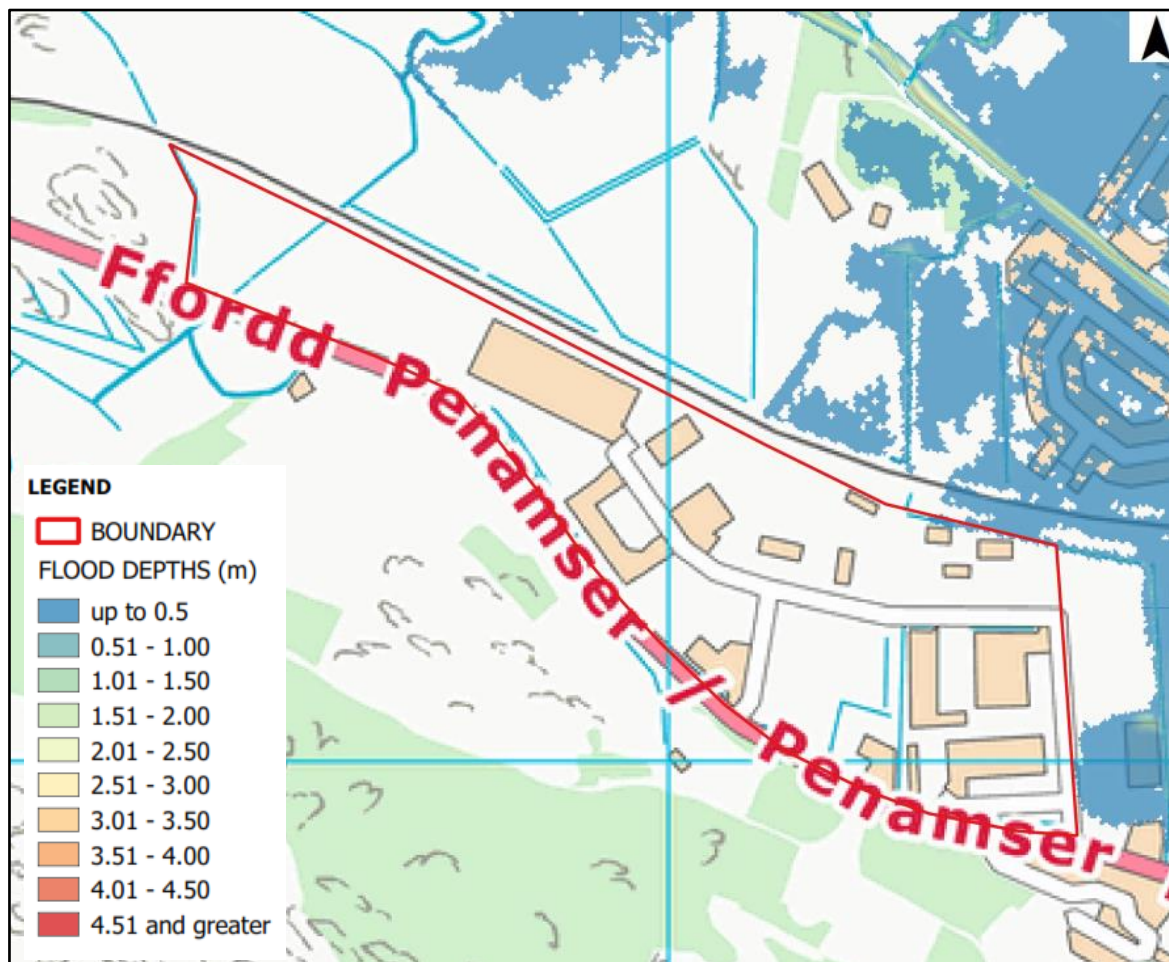


Figure 3 – Defended 1 in 200 annual probability tidal event plus CC up to the year 2112

Figure 4 overleaf shows that during an undefended 1 in 200 annual probability event with climate change up to the year 2112, the site is at risk of flooding with estimated depths up to 2m in the north-western extent. An undefended event replicates removal of all raised defences and is therefore considered very unlikely to happen. The impact of a defence breach is considered overleaf.

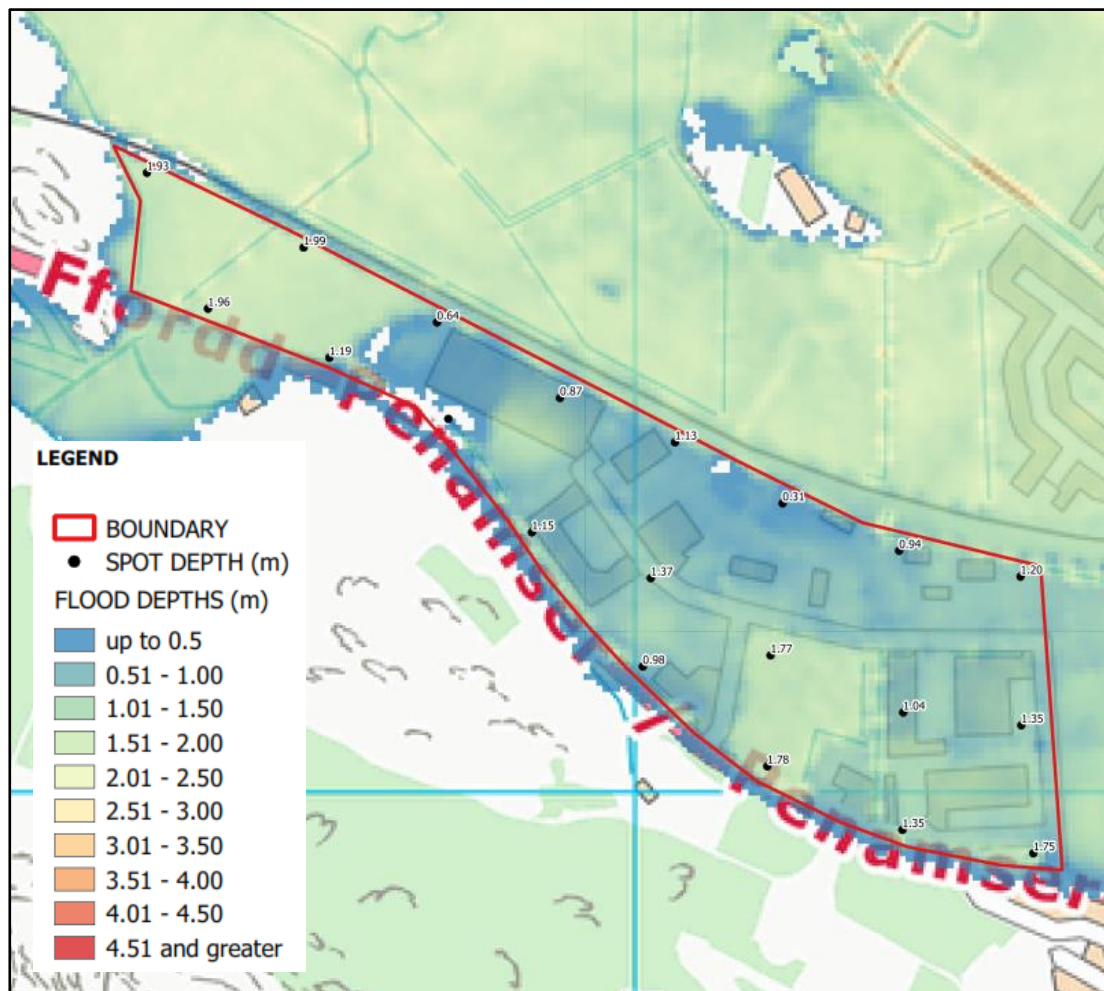


Figure 4 – Undefended 1 in 200 annual probability tidal event plus CC up to the year 2112

Breach Scenarios

Three breach locations have been considered in the NRW Afon Glaslyn and Tributaries (at Porthmadog) hydraulic model. The breach locations are shown on the individual breach flood depth maps included in Appendix C.

As shown on Figure 5 overleaf, when considering a breach of the Main Cob, coinciding with the 1 in 200 annual probability event with climate change up to the year 2112, the site is not at risk of flooding.

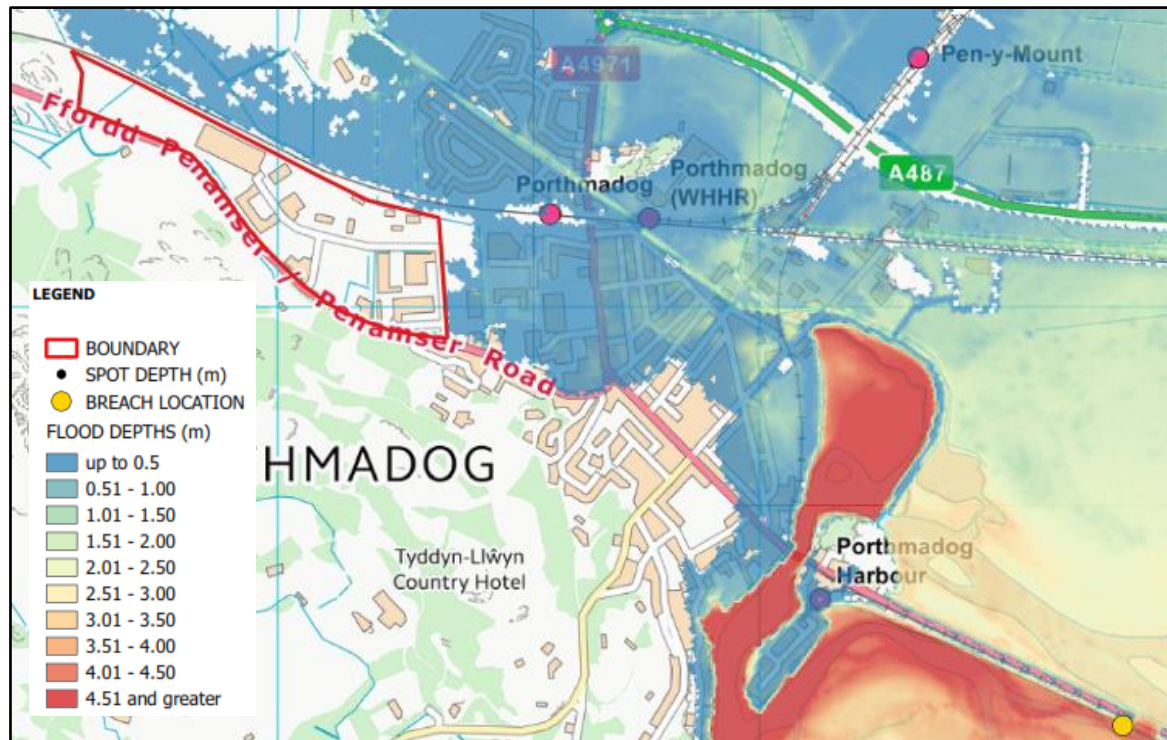


Figure 5 –1 in 200 annual probability plus CC up to the year 2112 - Main Cob breach

Similarly, as shown in Figure 6 below, the site is not at risk during a breach at Crwn Traeth coinciding with a 1 in 200 annual probability event with climate change up to the year 2112.



Figure 6 –1 in 200 annual probability plus CC up to the year 2112 - Crwn Traeth breach

However, during a breach at the Crwn Townward defence coinciding with a 1 in 200 annual probability event plus climate change up to the year 2112, the south-eastern extent of the site is

shown at risk. Estimated flood depths are minimal with maximum depths up to 110mm. The flood extent is shown on Figure 7 below:



Figure 7 – 1 in 200 annual probability plus CC up to the year 2112 - Crwn Townward breach

It can be concluded that the site is not at risk of tidal flooding during all events up to and including the 1 in 200 annual probability event plus climate change up to the year 2112 when accounting for the protection offered by flood defences.

The majority of the site is not at risk of flooding during a defence breach event. A minimal extent of the site is shown at risk of shallow depth flooding when accounting for a breach at the Crwn Townward defence.

No modelled outputs are available for the 1 in 1000 annual probability plus climate change event.

Surface Water

Surface water flooding occurs when rainwater does not drain away through the normal drainage system or soak into the ground. It is usually associated with high intensity rainfall events, but can also occur with lower intensity rainfall or melting snow where the ground is saturated, frozen or developed, resulting in overland flow and ponding in depressions in topography. Surface water flooding can occur anywhere without warning. However, flow paths can be determined by consideration of contours and relative levels.

The NRW 'Risk of Flooding from Surface Water' map (Appendix C) shows that the majority of the site is at very low risk of surface water flooding, meaning it has a less than 0.1% annual probability of flooding. The NRW map identifies pockets of the site that are at low risk of surface water flooding. Low risk is classified as having between a 1% and 0.1% annual probability of flooding. Surface water flood risk is generally constrained to land drains, sections of highway and undeveloped land.

There are no records of surface water flooding at or near to the site. Any potential surface water flooding arising at or near to the site would be directed towards the land drains on site and then north, away from the site, following the local topography.

It can be concluded that the risk of surface water flooding is low.

Sewer Flooding

Flooding from sewers can occur when a sewer is overwhelmed by heavy rainfall, becomes blocked, is damaged, or is of inadequate capacity. Flooding is mostly applicable to combined and surface water sewers.

Dŵr Cymru Welsh Water (DCWW) sewer records show that there is a foul pumping station in the western extent of the site and three combined pumping stations in the eastern extent of the site. The rising mains leading from the pumping stations are contained within existing highways.

The SFCA states that sewer flooding has arisen in Porthmadog. However, there are no records of sewer flooding occurring at or in the immediate vicinity of the site.

There are no known capacity issues at the pumping stations serving the industrial estate and it can be concluded that the risk of sewer flooding is low.

Groundwater Flooding

Groundwater flooding occurs when water levels underneath the ground rise above normal levels. Prolonged heavy rainfall soaks into the ground and can cause the ground to become saturated. This results in rising groundwater levels which leads to flooding above ground.

The SFCA states that groundwater flooding is 'not considered to be [a] significant source of flooding across the catchment'. There are no records of groundwater flooding at or near to the site.

It can therefore be concluded that the risk of groundwater flooding is low.

Artificial Sources of Flooding

There are no canals in the immediate vicinity of the site. The NRW 'Risk of Flooding from Reservoirs' map (Appendix C) shows that the site is not at risk of flooding from reservoirs.

Summary of Potential Flooding

It can be concluded that tidal flooding arising from a defence breach is the main potential source of flood risk at this site. There is also a potential risk of flooding during extreme events beyond the considered 1 in 200 annual probability event with climate change up to the year 2112.

Mitigation and Policy Compliance

The south-eastern extent of the site is identified at risk of tidal flooding from a breach at the Crwn Townward defence with maximum flood depths of 110mm during the 1 in 200 annual probability event with climate change up to the year 2112.

It is considered that any like for like development, retaining the less vulnerable use on previously developed land, would be permitted. It is recommended that flood resistance and resilience methods are incorporated wherever possible in order to minimise the impact of flooding during a breach event. In particular this should include:

- Raise finished floor levels 150mm above surrounding ground levels.
- Raise electronic sockets and control units 600mm above ground floor levels.
- Use solid flooring (tiled, resin, concrete).

Any development which constitutes intensification to existing use i.e. additional units, or development on previously undeveloped land would need to achieve compliance with TAN15, and in particular must pass the Justification Test.

For development on previously developed land, any additional units, which constitute intensification to existing use, would need to comply with Sections A1.14 and A1.15 of TAN15.

The majority of the site is flood free during the 1 in 200 annual probability plus climate change event when accounting for a defence breach and is therefore compliant with Section A1.14. To comply with Section A1.15 of TAN15, during a tidal 0.1% annual probability plus climate change event when accounting for a defence breach, the following must be achieved:

- 1) flood depths must be less than 600mm for commercial development and less than 1000mm for industrial development;
- 2) the maximum rate of rise of floodwaters must be less than 0.3m per hour;
- 3) the maximum speed of inundation to the flood risk area must be less than 2 hours;
- 4) maximum velocities of floodwaters must be less than 0.15m / second at commercial properties and less than 0.3m / second at industrial properties.

For development on undeveloped land, development would need to be classified within Flood Zone A or shown to be flood free during all events up to and including the 0.1% annual probability event when accounting for climate change and defence breach.

Any development comprising intensification to the existing use or any new development on undeveloped land would need to be supported by hydraulic modelling of the tidal 0.1% annual probability plus climate change event.

Flood Warnings and Evacuation

The NRW Flood Alert service covers this area. The NRW Flood Alert service is a free service that provides prior warning of a tidal flood event.

A safe evacuation route is available via Penamser Road (A497), heading west. Penamser Road is shown to be flood free during all events up to and including the 1 in 200 annual probability event when accounting for climate change up to the year 2112 and a defence breach.

Impact on Flood Risk Elsewhere

The majority of the site is located outside of the 1 in 200 annual probability flood extent when accounting for climate change up to the year 2112 and a defence breach. Flood depths within the modelled breach flood extent are minimal (maximum of 110mm).

Any future development has minimal potential to increase flood risk elsewhere during events up to and including the 1 in 200 annual probability plus climate change event.

Other Considerations

The flood defences which offer protection to the site and surrounding area are owned and maintained by Natural Resources Wales and Gwynedd Council.

DCWW should be consulted for any works within 3m of a rising main or within 15m of a pumping station.

Conclusions

The site is located within Flood Zone C1 on the Welsh Government Development Advice Map – an area considered at flood risk, but served by significant infrastructure, including flood defences, with a 0.1% (1 in 1000) or greater annual probability of flooding.

Site specific flood depth and extent mapping has been produced from the outputs of the Afon Glaslyn and Tributaries (at Porthmadog) hydraulic model.

The site is shown outside of the modelled fluvial flood extent during all events up to and including the 1 in 1000 annual probability event.

The site is shown to be flood free during the defended tidal 1 in 200 annual probability event with climate change up to 2112.

A small extent of the site at the south-eastern corner is shown at risk during a breach of the Crwn Townward defence coinciding with a 1 in 200 annual probability tidal event with climate change up to the year 2112. Flood depths during this event are less than 110mm.

Any like for like development, retaining the less vulnerable use on previously developed ground, would be permitted. Flood resistance and resilience should be incorporated to minimise the flood risk and provide betterment to the existing situation.

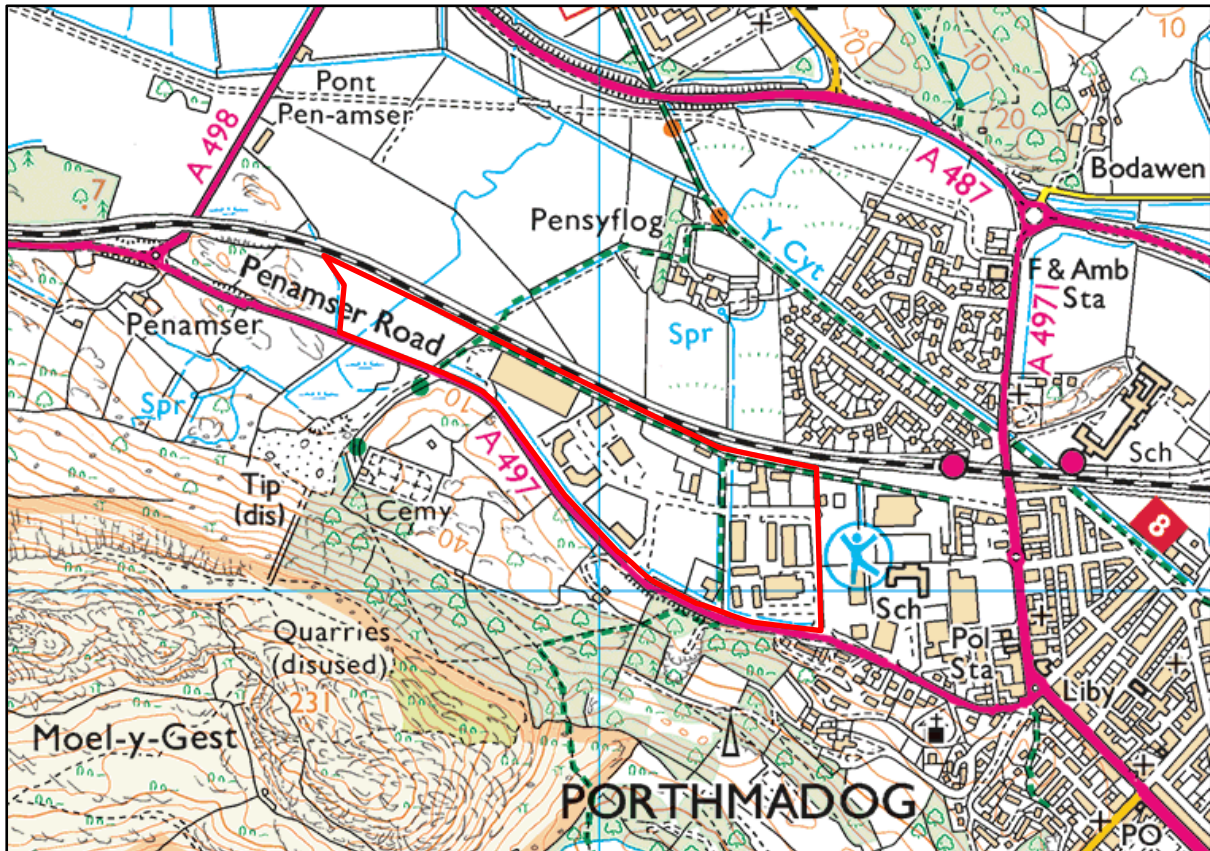
For development on previously developed land, any additional units, resulting in an intensification of site use, would need to comply with Sections A1.14 and A1.15 of TAN15.

For development on undeveloped land, development would need to be classified within Flood Zone A and as such is required to be flood free during all events up to and including the 0.1% annual probability event when accounting for climate change and defence breach.

Any development comprising intensification to the existing use or any new development on undeveloped land would need to be supported by hydraulic modelling of the tidal 0.1% annual probability plus climate change event. This would enable an assessment under Section A1.15 of TAN15.

A safe evacuation route is available from Penamser Road, heading west. The site is in an area which is served by flood alerts.

Appendix A – Location Plan & Aerial Image

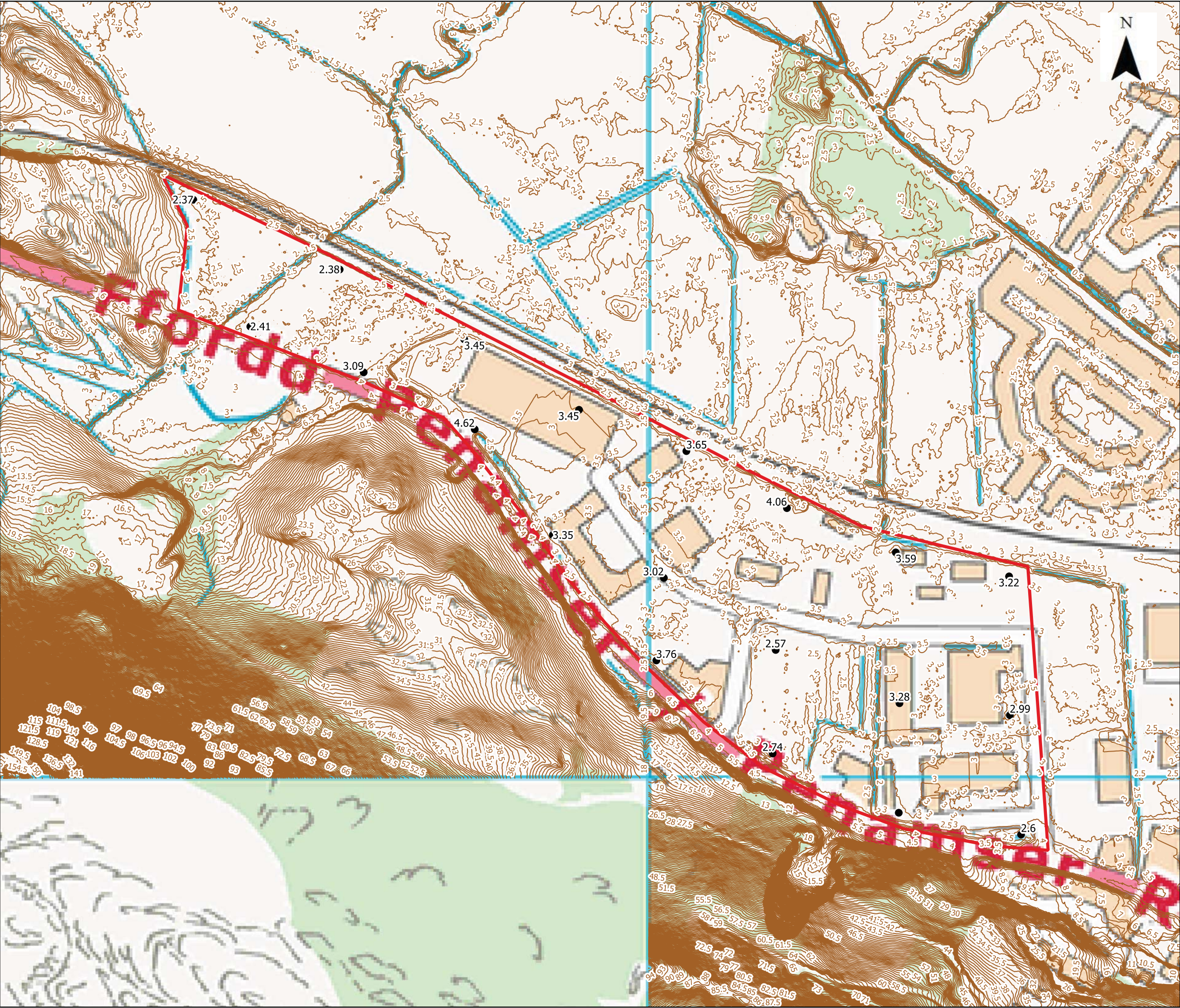


Location Plan
(Source: Streetmap – August 2016)



Aerial Image
(Source: Google Earth – August 2016)

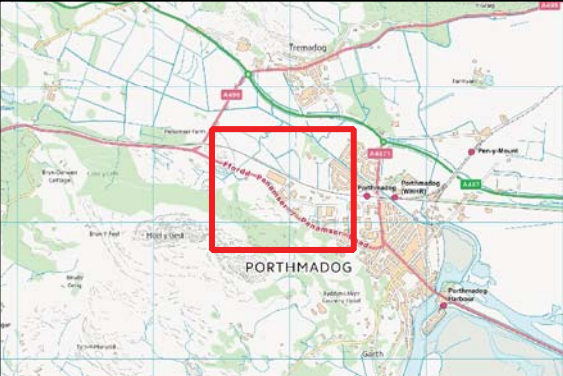
Appendix B – LiDAR Extract



LEGEND

- BOUNDARY
- SPOT LEVELS (m)
- CONTOUR

ALL LEVELS ARE TO METRES ABOVE
ORDNANCE DATUM (m AOD).



CLIENT:
GWYNEDD COUNTY COUNCIL



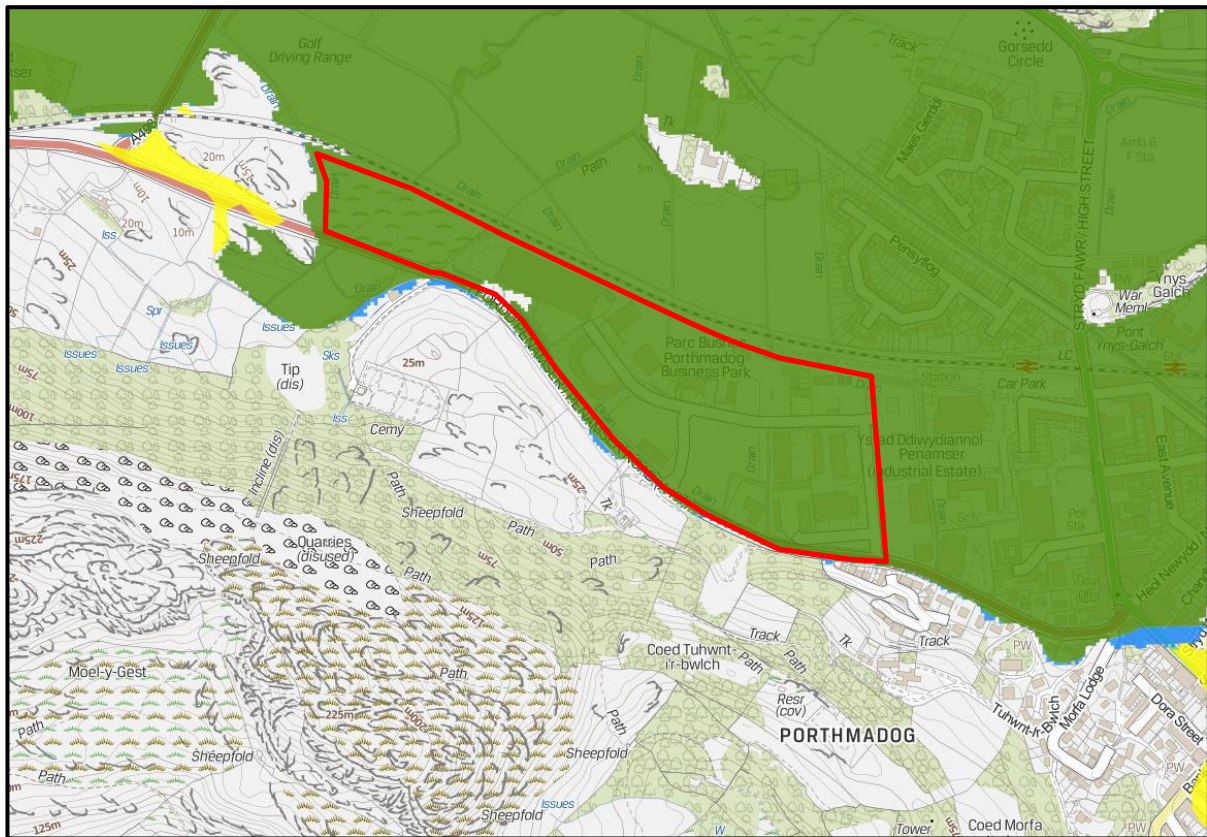
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PORTHMADOG FLOOD STUDY

PLOT TITLE:
CONTOURS AND SPOT LEVELS

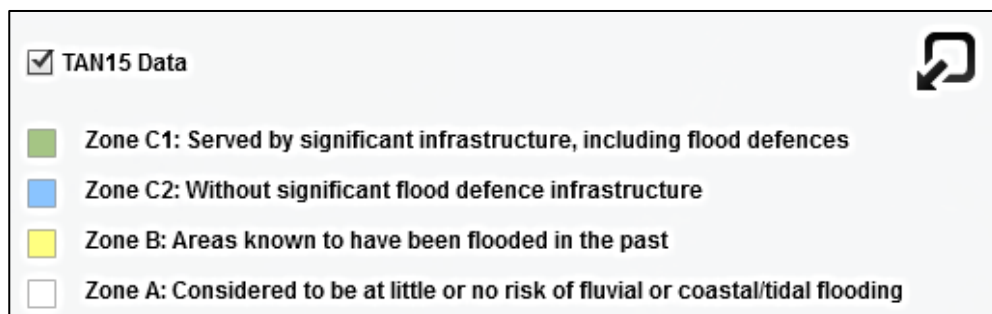
PLOT STATUS:
ISSUE

DRAWN: JW	CHECKED: AW	APPROVED: JR	PLOT SCALE @ A3: 1:2500 <small>(unless otherwise stated)</small>
DATE: 11-08-2016	PLOT NAME: w10142-CONTOUR	REV: A	

Appendix C – Flood Maps & Data



TAN15 Development Advice Map
August 2016







Map Title

Map Perygl Llifogydd / Flood Risk Map

Allwedd / Legend

-  Main rivers
-  Areas benefitting from flood defences

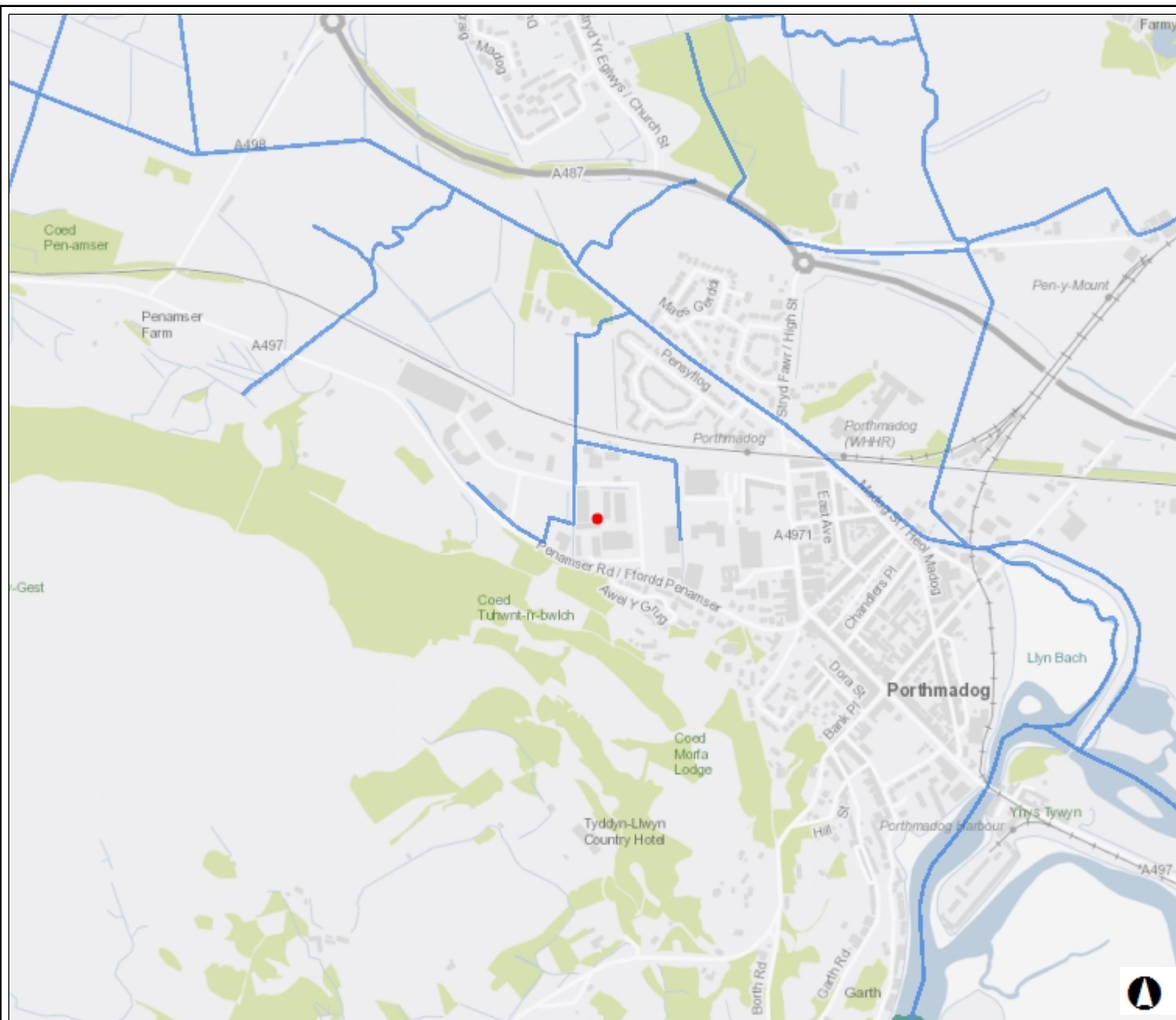
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Dyddiad / Date
10/08/2016

0.4 0 0.20 0.4 Miles

British_National_Grid

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Cyfoeth Naturiol Cymru
Natural Resources Wales

Map Title

Map Perygl Llifogydd / Flood Risk Map

Allwedd / Legend

- Main rivers
- Risk of flooding from reservoirs

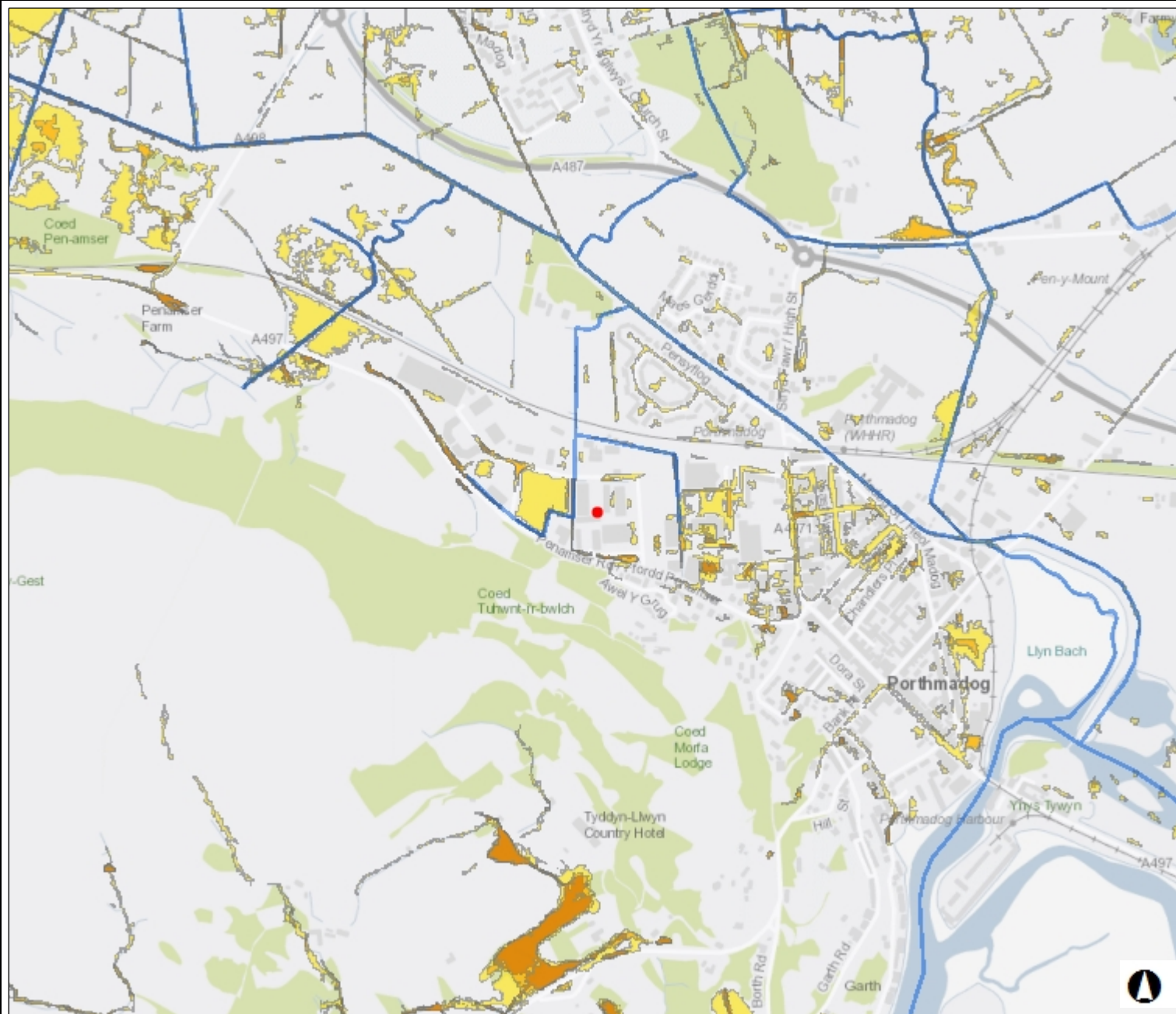
Graddfa / Scale 1: 12,434

Dyddiad / Date
10/08/2016

0.4 0 0.20 0.4 Miles

British_National_Grid

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Cyfoeth Naturiol Cymru
Natural Resources Wales

Map Title

Map Perygl Llifogydd / Flood Risk Map

Allwedd / Legend

- Main rivers
- Risk of flooding from surface water - High
- Risk of flooding from surface water - Medium
- Risk of flooding from surface water - Low

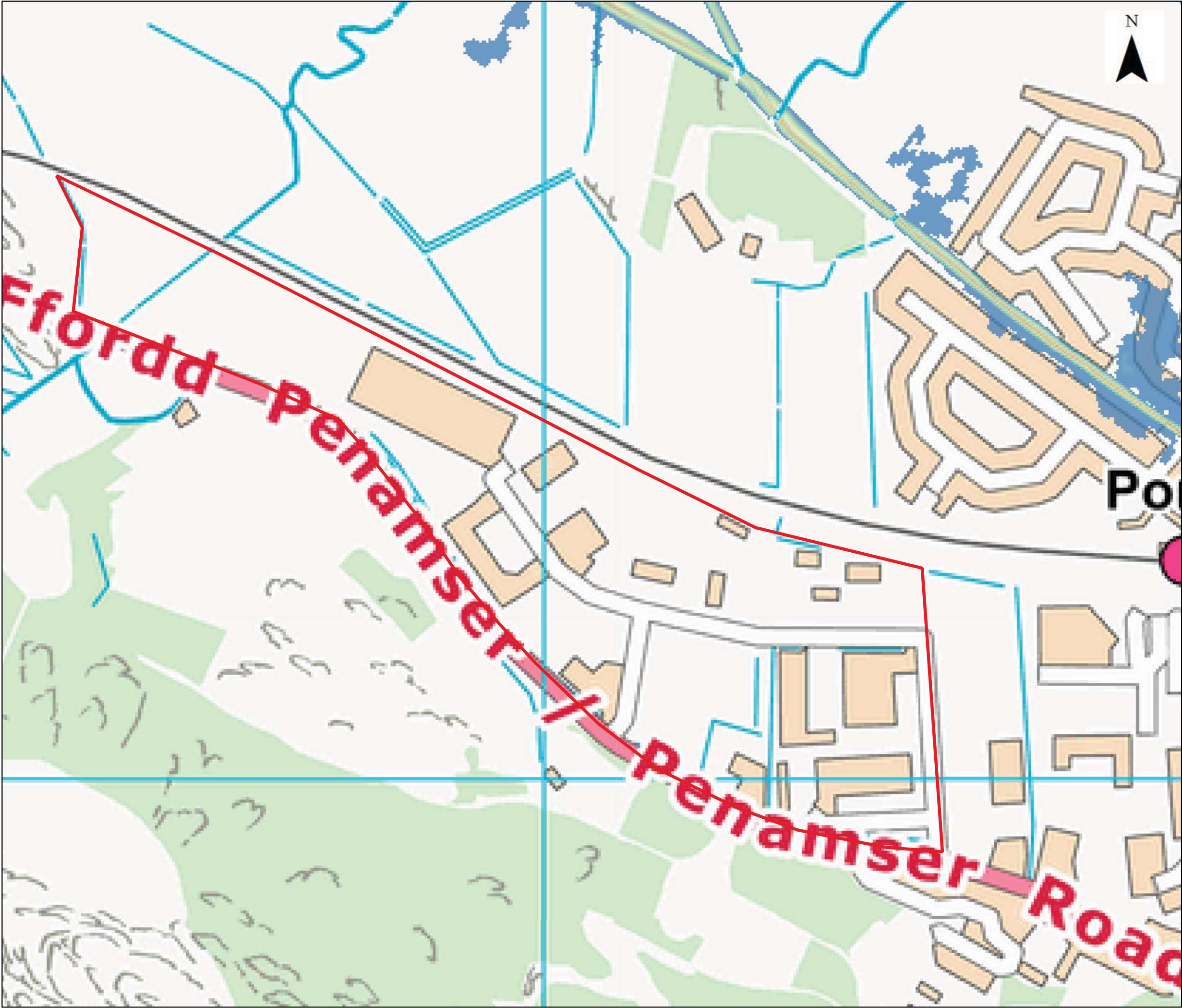
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Dyddiad / Date
10/08/2016

0.4 0 0.20 0.4 Miles

British_National_Grid

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LEGEND


 **BOUNDARY**


FLOOD DEPTHS (m)


 up to 0.5


 0.51 - 1.00


 1.01 - 1.50


 1.51 - 2.00


 2.01 - 2.50

 2.51 - 3.00

 3.01 - 3.50

 3.51 - 4.00

 4.01 - 4.50

 4.51 and greater



CLIENT:

GWYNEDD COUNTY COUNCIL



SCHEME:

PORTHMADOG FLOOD STUDY

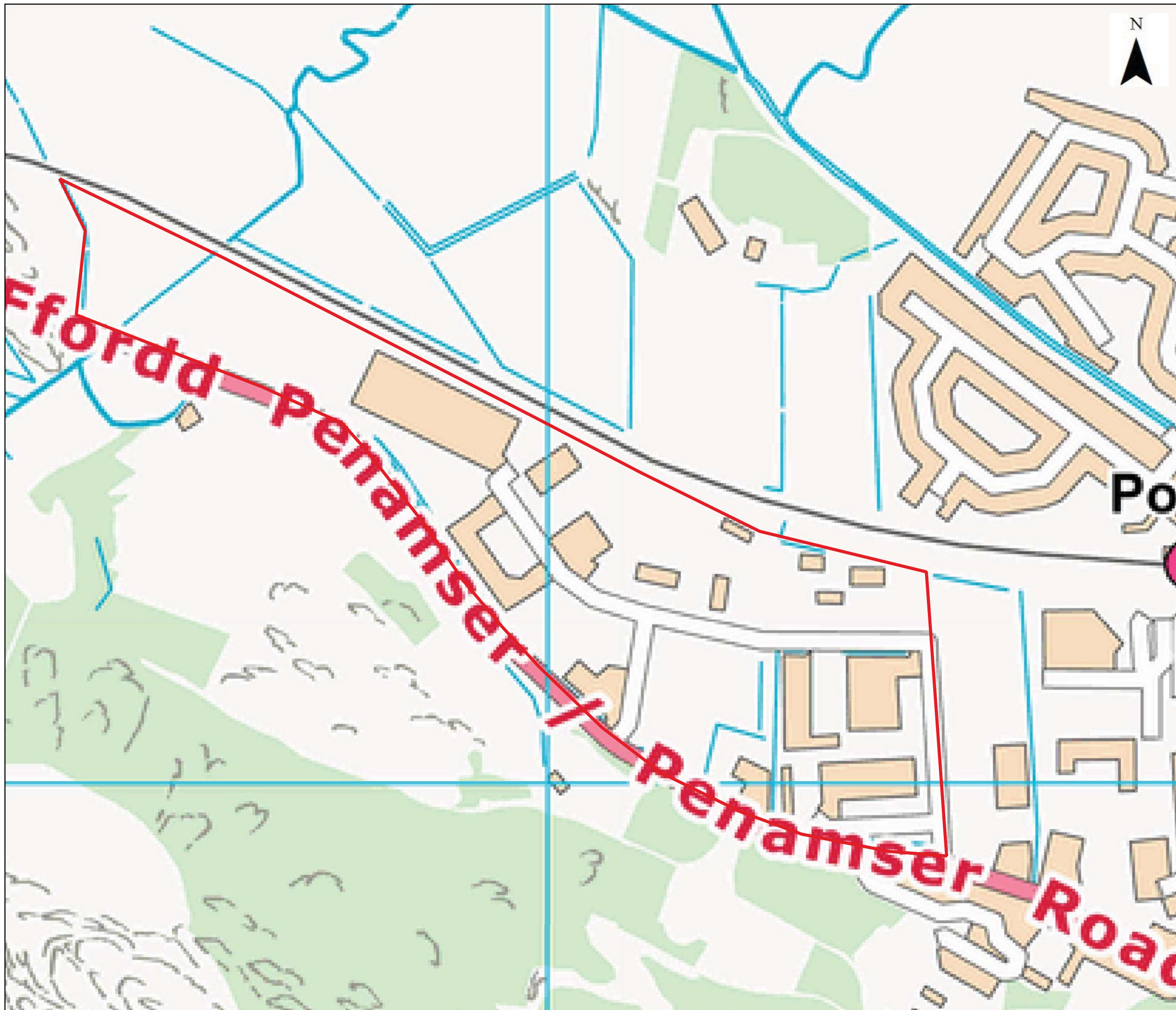
PLOT TITLE:

**1 IN 100 DEFENDED FLUVIAL FLOOD
EVENT PLUS 30% CLIMATE CHANGE
ALLOWANCE, 24HR DURATION**

PLOT STATUS:

ISSUE

DRAWN:	CHECKED:	APPROVED:	PLOT SCALE @ A3:
JW	AW	JR	1:2,500 (unless otherwise stated)
DATE:	PLOT NAME:		REV:
15-08-2016	w10042-UNDEF1000		A



LEGEND
 BOUNDARY
FLOOD DEPTHS (m)
 up to 0.5
 0.51 - 1.00
 1.01 - 1.50
 1.51 - 2.00
 2.01 - 2.50
 2.51 - 3.00
 3.01 - 3.50
 3.51 - 4.00
 4.01 - 4.50
 4.51 and greater

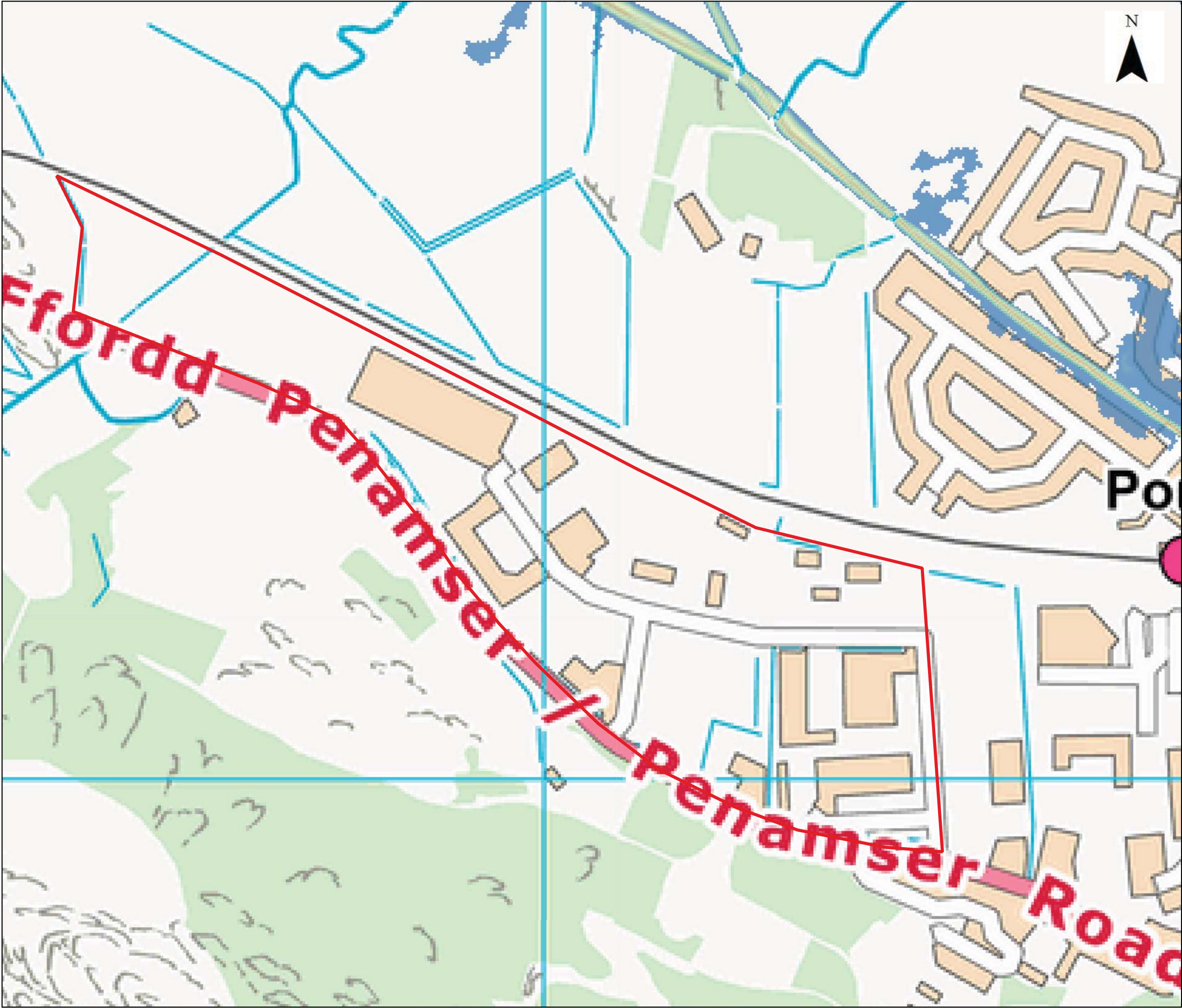
CLIENT:
GWYNEDD COUNTY COUNCIL

SCHEME:
PORTHMADOG FLOOD STUDY

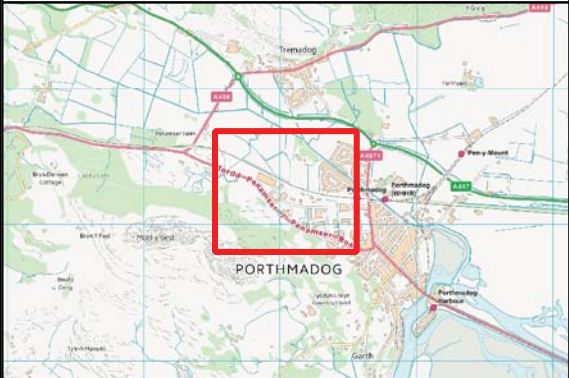
PLOT TITLE:
**1 IN 1000 DEFENDED FLUVIAL
FLOOD EVENT, 24HR DURATION**


PLOT STATUS:
ISSUE

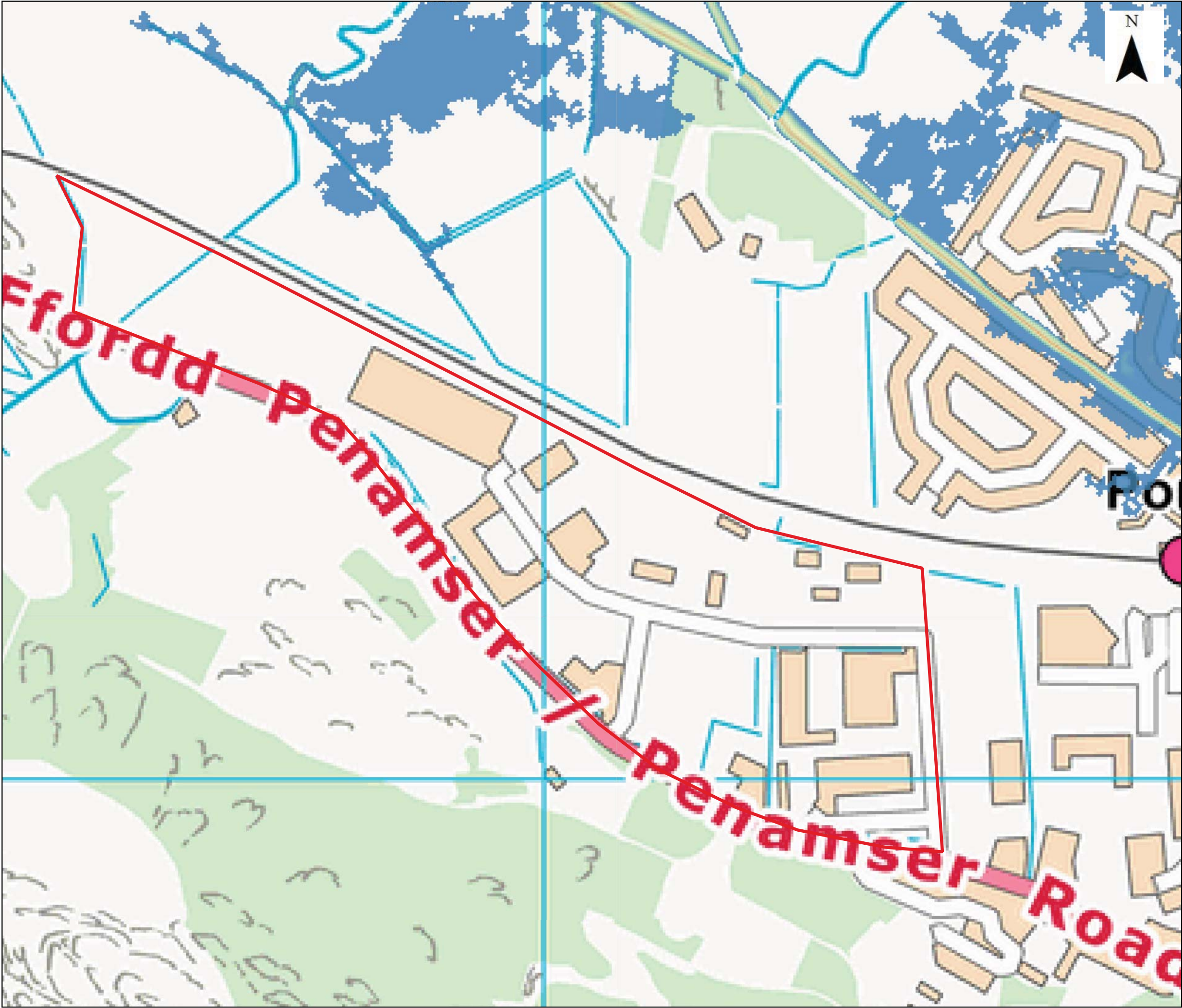
DRAWN: JW	CHECKED: AW	APPROVED: JR	PLOT SCALE @ A3: 1:2,500 <small>(unless otherwise stated)</small>
DATE: 12-08-2016		PLOT NAME: w10042-DEF1000	
		REV: A	



- LEGEND**
- BOUNDARY
- FLOOD DEPTHS (m)
- up to 0.5
 - 0.51 - 1.00
 - 1.01 - 1.50
 - 1.51 - 2.00
 - 2.01 - 2.50
 - 2.51 - 3.00
 - 3.01 - 3.50
 - 3.51 - 4.00
 - 4.01 - 4.50
 - 4.51 and greater



CLIENT: GWYNEDD COUNTY COUNCIL			
			
SCHEME: PORTHMADOG FLOOD STUDY			
PLOT TITLE: 1 IN 100 UNDEFENDED FLUVIAL FLOOD EVENT PLUS 30% CLIMATE CHANGE ALLOWANCE, 24HR DURATION			
PLOT STATUS: ISSUE			
DRAWN: JW	CHECKED: AW	APPROVED: JR	PLOT SCALE @ A3: 1:2,500 <small>(unless otherwise stated)</small>
DATE: 15-08-2016	PLOT NAME: w10042-UNDEF1000		REV: A

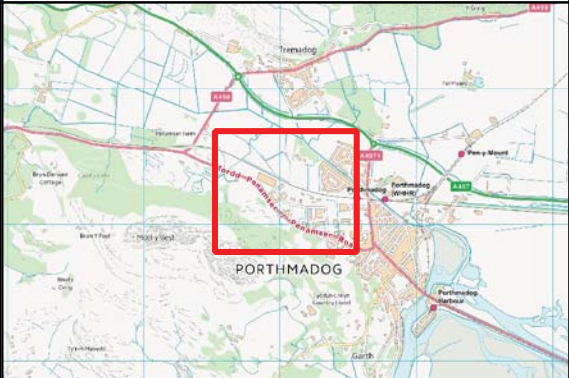


LEGEND

BOUNDARY

FLOOD DEPTHS (m)

- up to 0.5
- 0.51 - 1.00
- 1.01 - 1.50
- 1.51 - 2.00
- 2.01 - 2.50
- 2.51 - 3.00
- 3.01 - 3.50
- 3.51 - 4.00
- 4.01 - 4.50
- 4.51 and greater



CLIENT:

GWYNEDD COUNTY COUNCIL



SCHEME:

PORTHMADOG FLOOD STUDY

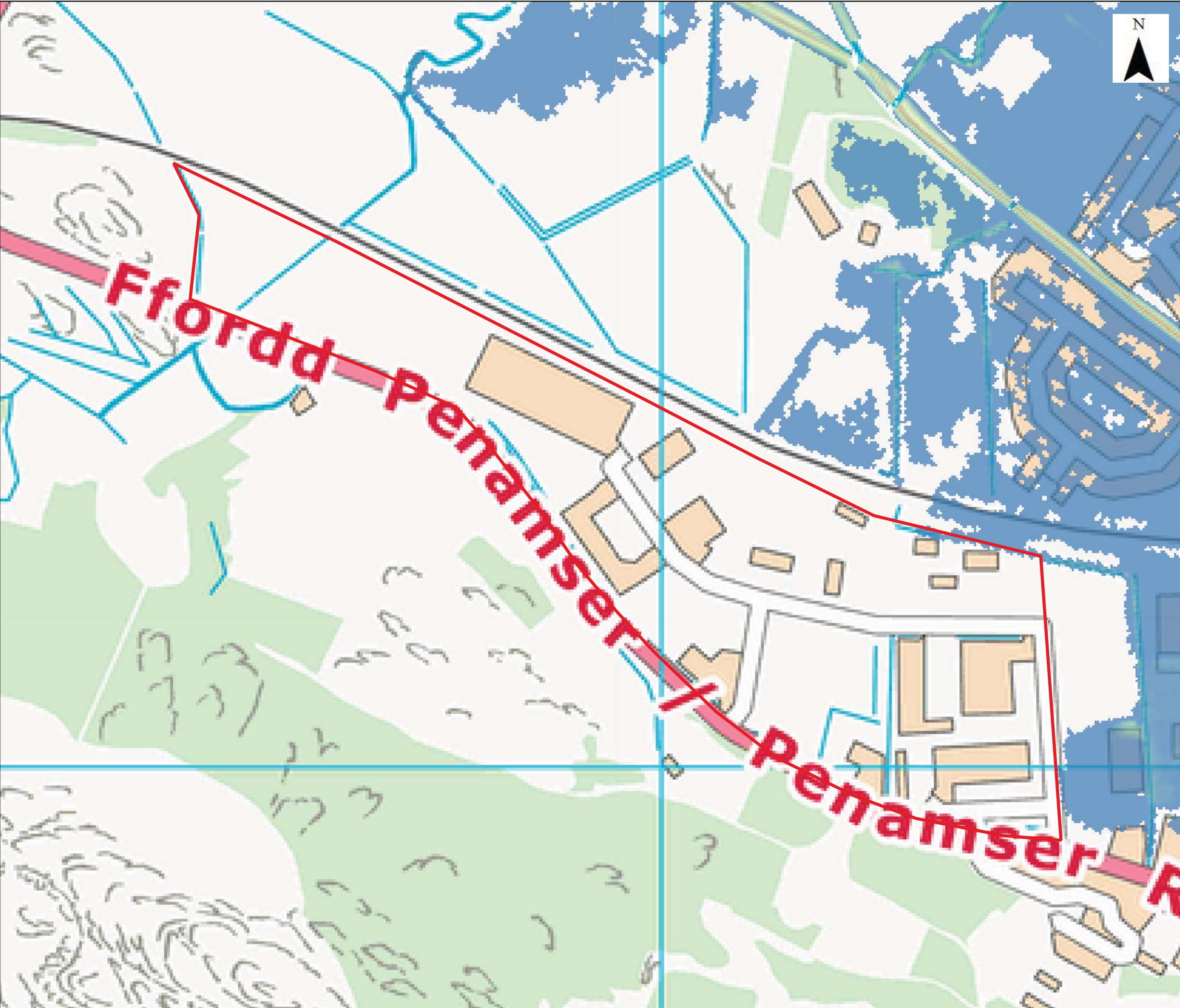
PLOT TITLE:

**1 IN 1000 UNDEFENDED FLUVIAL
FLOOD EVENT, 24HR DURATION**

PLOT STATUS:

ISSUE

DRAWN:	CHECKED:	APPROVED:	PLOT SCALE @ A3:
JW	AW	JR	1:2,500 <small>(unless otherwise stated)</small>
DATE:	PLOT NAME:		REV:
12-08-2016	w10042-UNDEF1000		A



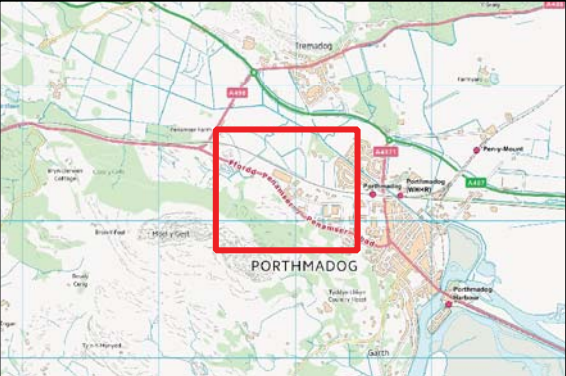
LEGEND

BOUNDARY

● **SPOT DEPTH (m)**

FLOOD DEPTHS (m)

- up to 0.5
- 0.51 - 1.00
- 1.01 - 1.50
- 1.51 - 2.00
- 2.01 - 2.50
- 2.51 - 3.00
- 3.01 - 3.50
- 3.51 - 4.00
- 4.01 - 4.50
- 4.51 and greater



CLIENT:

GWYNEDD COUNTY COUNCIL



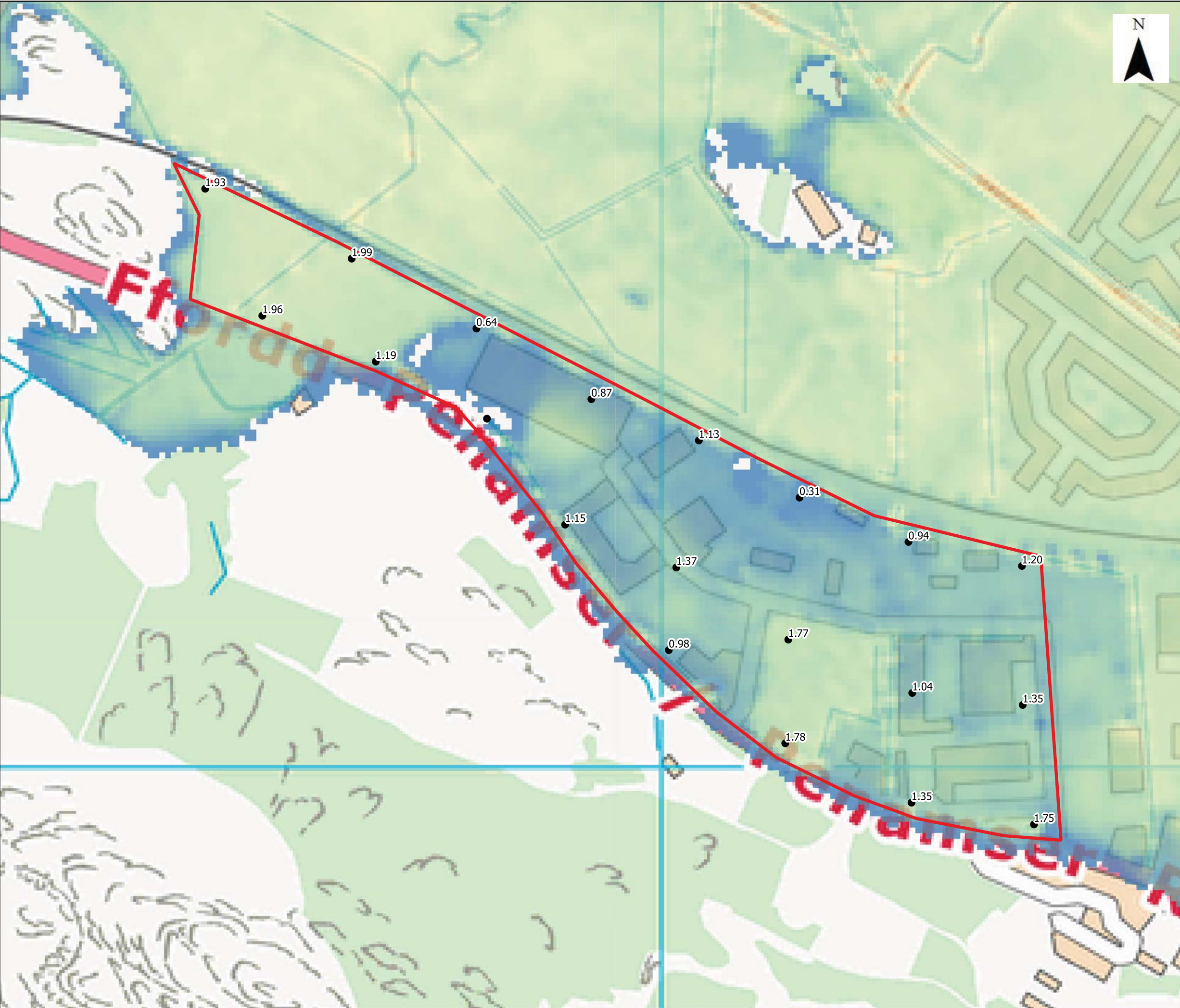
SCHEME:

PORTHMADOG FLOOD STUDY

PLOT TITLE:

1 IN 200 YEAR DEFENDED TIDAL FLOOD EVENT PLUS CLIMATE CHANGE UP TO THE YEAR 2112

PLOT STATUS:			
ISSUE			
DRAWN:	CHECKED:	APPROVED:	PLOT SCALE @ A3:
JW	AW	JR	1:2,500 <small>(unless otherwise stated)</small>
DATE:	PLOT NAME:		REV:
12-08-2016	w10142-DEF200+2112		A



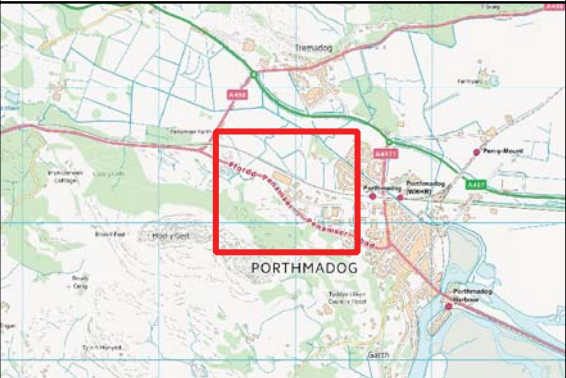
LEGEND

BOUNDARY

● **SPOT DEPTH (m)**

FLOOD DEPTHS (m)

- up to 0.5
- 0.51 - 1.00
- 1.01 - 1.50
- 1.51 - 2.00
- 2.01 - 2.50
- 2.51 - 3.00
- 3.01 - 3.50
- 3.51 - 4.00
- 4.01 - 4.50
- 4.51 and greater



CLIENT:

GWYNEDD COUNTY COUNCIL



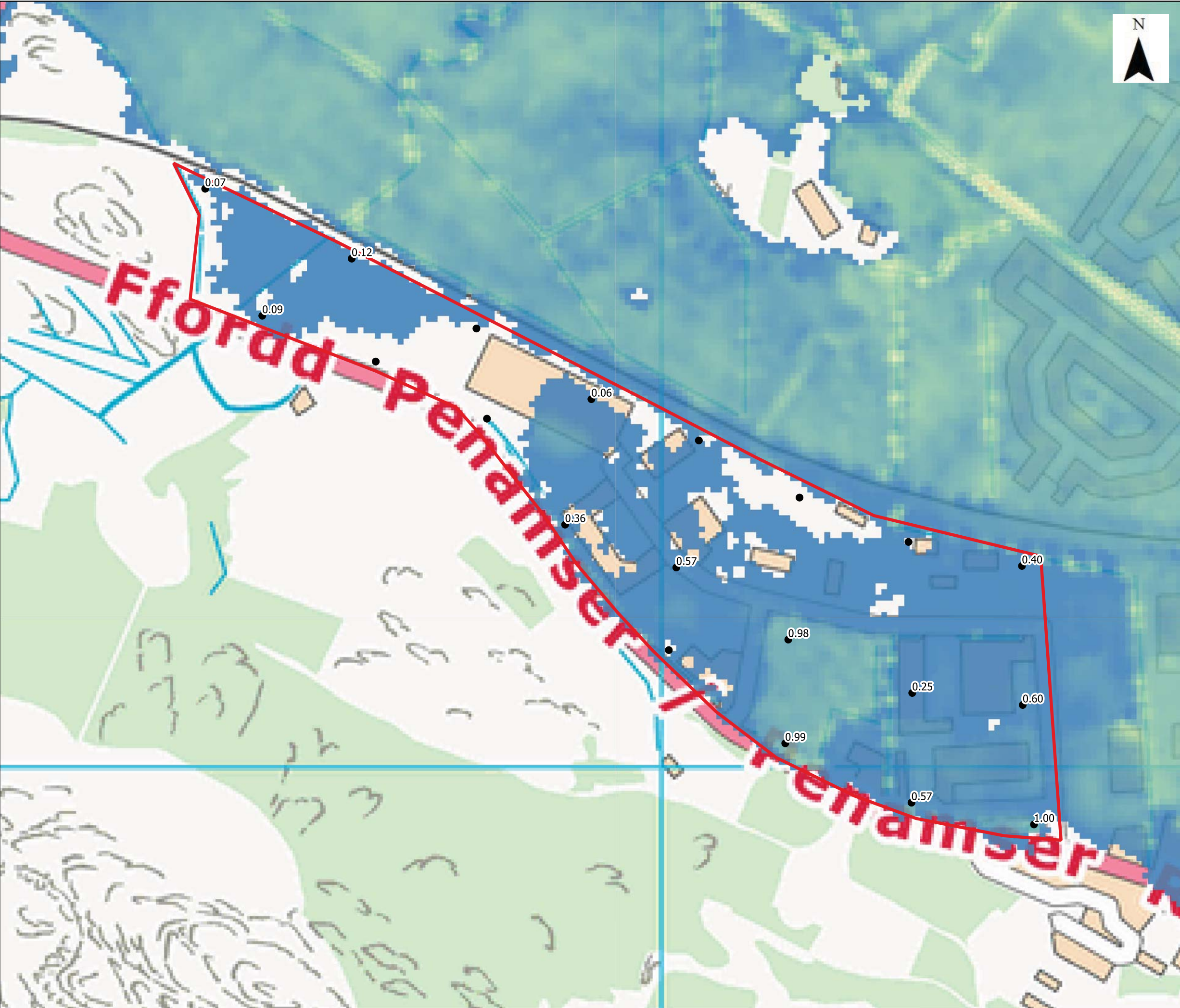
SCHEME:

PORTHMADOG FLOOD STUDY

PLOT TITLE:

1 IN 200 YEAR UNDEFENDED TIDAL FLOOD EVENT PLUS CLIMATE CHANGE UP TO THE YEAR 2112

PLOT STATUS:			
ISSUE			
DRAWN:	CHECKED:	APPROVED:	PLOT SCALE @ A3:
JW	AW	JR	1:2,500 <small>(unless otherwise stated)</small>
DATE:	PLOT NAME:		REV:
12-08-2016	w10142-UNDEF200+2112		A



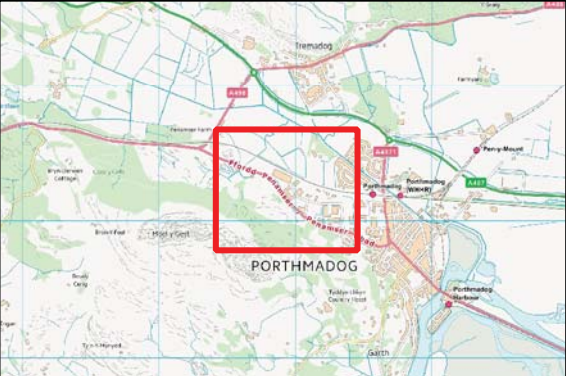
LEGEND

BOUNDARY

● SPOT DEPTH (m)

FLOOD DEPTHS (m)

	up to 0.5
	0.51 - 1.00
	1.01 - 1.50
	1.51 - 2.00
	2.01 - 2.50
	2.51 - 3.00
	3.01 - 3.50
	3.51 - 4.00
	4.01 - 4.50
	4.51 and greater



CLIENT:

GWYNEDD COUNTY COUNCIL



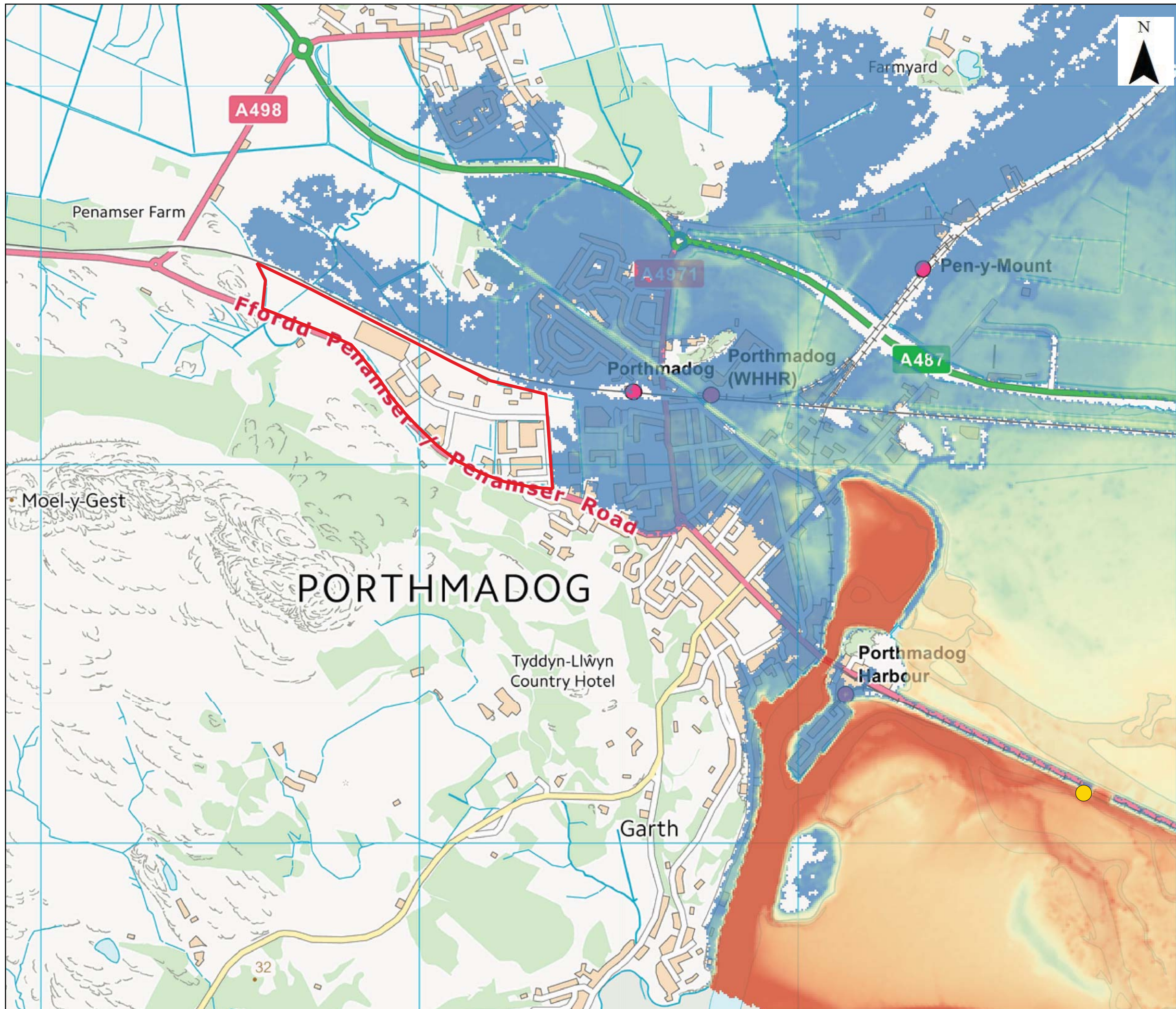
SCHEME:

PORTHMADOG FLOOD STUDY

PLOT TITLE:

1 IN 1000 YEAR UNDEFENDED TIDAL FLOOD EVENT

PLOT STATUS:			
ISSUE			
DRAWN:	CHECKED:	APPROVED:	PLOT SCALE @ A3:
JW	AW	JR	1:2,500 <small>(unless otherwise stated)</small>
DATE:	PLOT NAME:		REV:
12-08-2016	w10142-UNDEF1000		A



LEGEND

- BOUNDARY
- SPOT DEPTH (m)
- BREACH LOCATION
- FLOOD DEPTHS (m)
 - up to 0.5
 - 0.51 - 1.00
 - 1.01 - 1.50
 - 1.51 - 2.00
 - 2.01 - 2.50
 - 2.51 - 3.00
 - 3.01 - 3.50
 - 3.51 - 4.00
 - 4.01 - 4.50
 - 4.51 and greater



CLIENT:

GWYNEDD COUNTY COUNCIL



SCHEME:

PORTHMADOG FLOOD STUDY

PLOT TITLE:

MAIN COB BREACH COINCIDING
WITHIN 1 IN 200 YEAR EVENT PLUS
CLIMATE CHANGE UP TO THE YEAR
2112

PLOT STATUS:

ISSUE

DRAWN: CHECKED: APPROVED: PLOT SCALE @ A3:

JW

AW

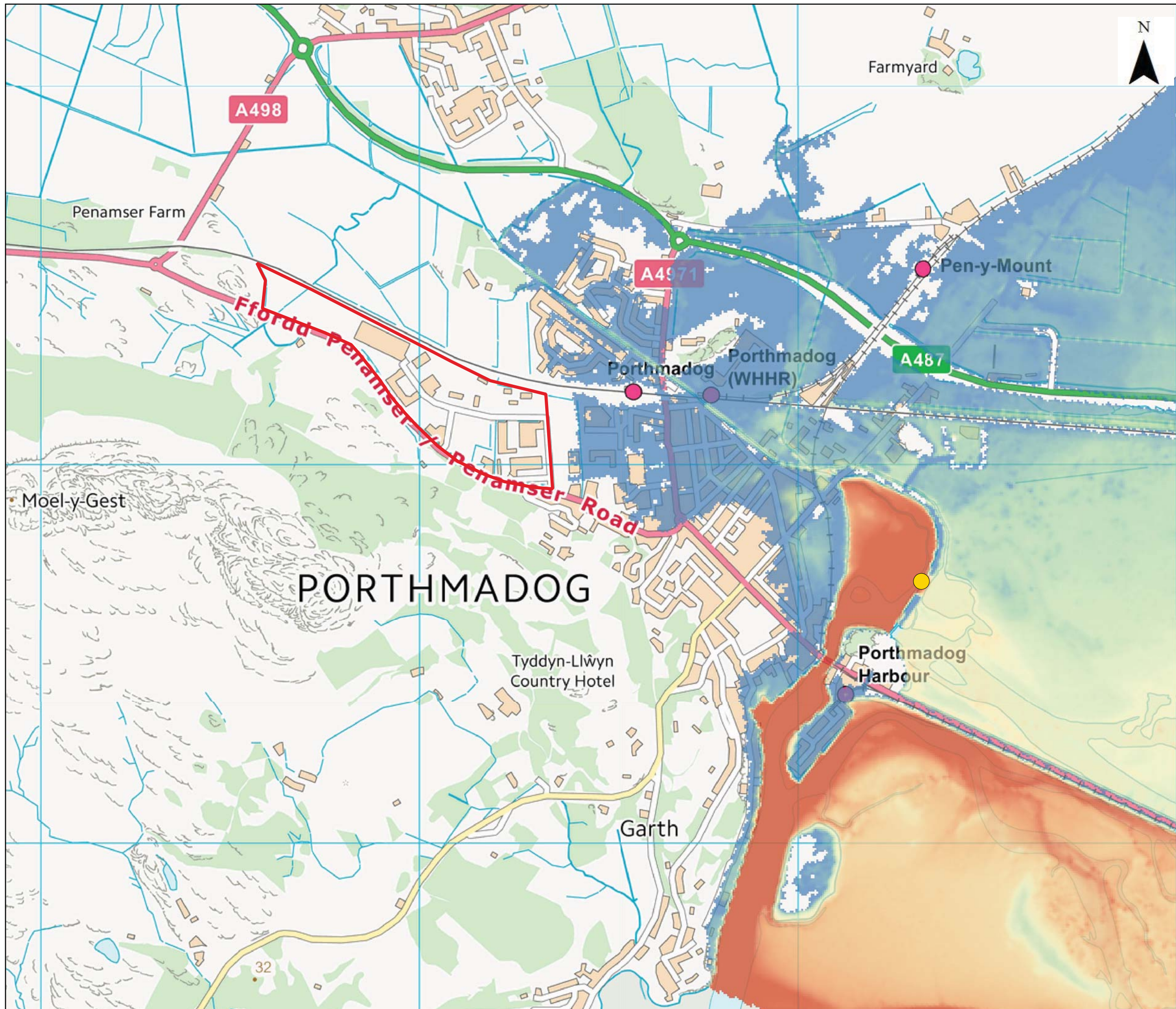
JR

1:7,500

DATE:
12-08-2016

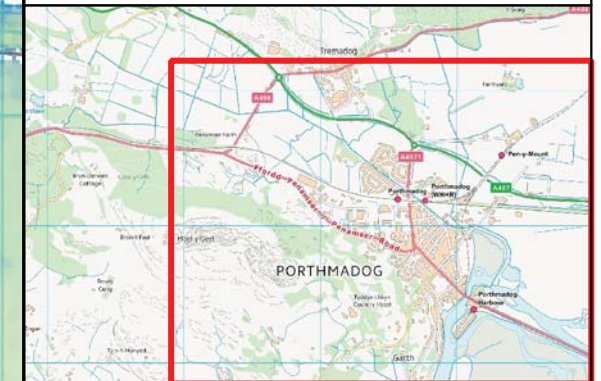
PLOT NAME:
w10142-MAIN COB

REV:
A



LEGEND

- BOUNDARY
- SPOT DEPTH (m)
- BREACH LOCATION
- FLOOD DEPTHS (m)
 - up to 0.5
 - 0.51 - 1.00
 - 1.01 - 1.50
 - 1.51 - 2.00
 - 2.01 - 2.50
 - 2.51 - 3.00
 - 3.01 - 3.50
 - 3.51 - 4.00
 - 4.01 - 4.50
 - 4.51 and greater



CLIENT:

GWYNEDD COUNTY COUNCIL



SCHEME:

PORTHMADOG FLOOD STUDY

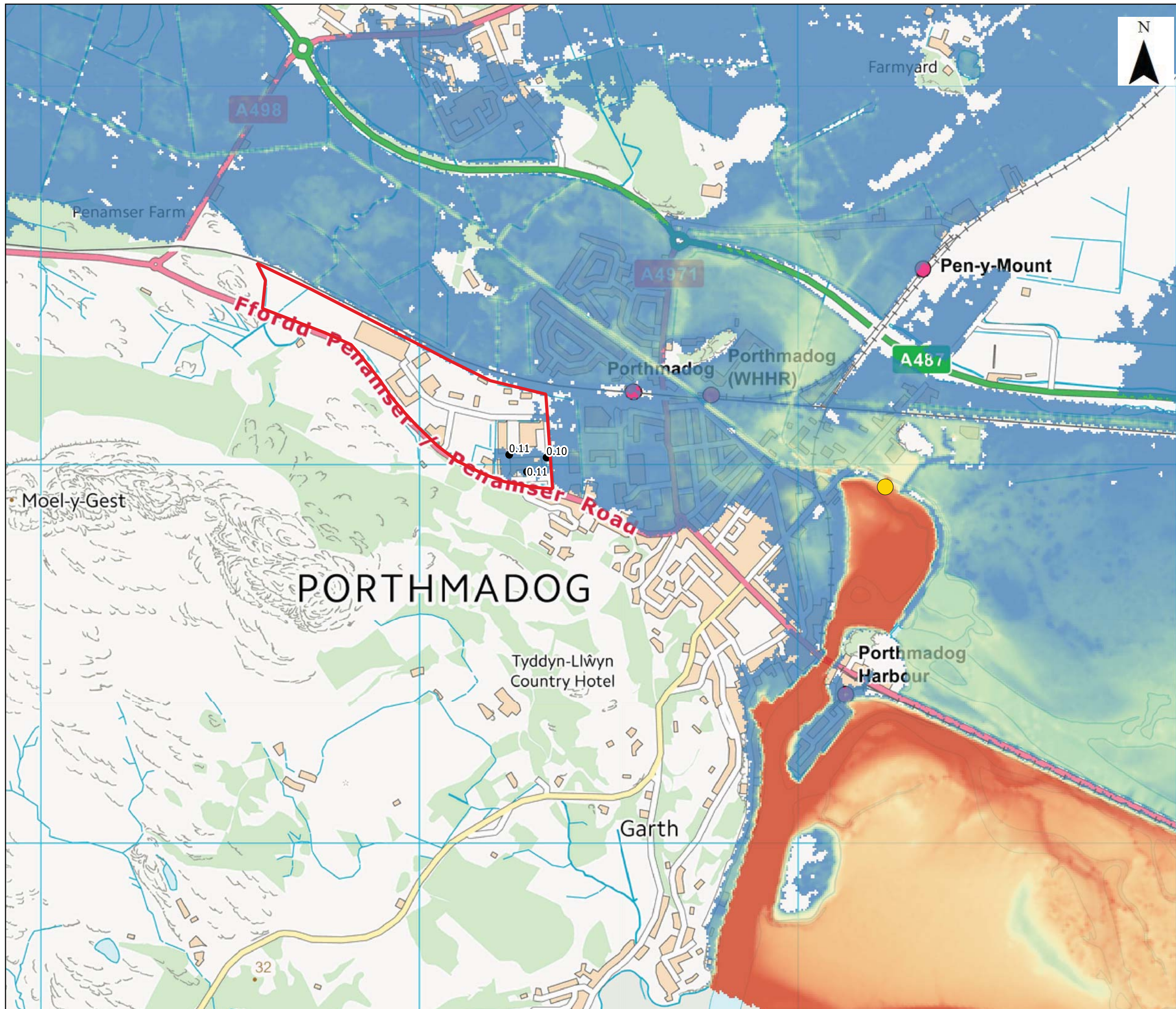
PLOT TITLE:

**CRWN TRAETH BREACH
COINCIDING WITHIN 1 IN 200 YEAR
EVENT PLUS CLIMATE CHANGE UP
TO THE YEAR 2112**

PLOT STATUS:

ISSUE

DRAWN: JW	CHECKED: AW	APPROVED: JR	PLOT SCALE @ A3: 1:7,500 (unless otherwise stated)
DATE: 12-08-2016	PLOT NAME: w10142-CRWN TRAETH	REV: A	



LEGEND

- BOUNDARY
- SPOT DEPTH (m)
- BREACH LOCATION
- FLOOD DEPTHS (m)
- up to 0.5
- 0.51 - 1.00
- 1.01 - 1.50
- 1.51 - 2.00
- 2.01 - 2.50
- 2.51 - 3.00
- 3.01 - 3.50
- 3.51 - 4.00
- 4.01 - 4.50
- 4.51 and greater



CLIENT:

GWYNEDD COUNTY COUNCIL



SCHEME:

PORTHMADOG FLOOD STUDY

PLOT TITLE:

**CRWN TRAETH BREACH
COINCIDING WITHIN 1 IN 200 YEAR
EVENT PLUS CLIMATE CHANGE UP
TO THE YEAR 2112**

PLOT STATUS:

ISSUE

DRAWN:	CHECKED:	APPROVED:	PLOT SCALE @ A3:
JW	AW	JR	1:7,500 <small>(unless otherwise stated)</small>
DATE:	PLOT NAME:		REV:
12-08-2016	w10142-CRWN TRAETH		A