

RRRAP – RISK ASSESSMENT

Proposed Residential Development

Y Garnedd, Llanfairpwll

MD/200727/TN/2 - 19 January 2024

Application Background

1. SCP are retained by DU Construction Limited to provide transport planning consultancy services in respect of a planning application for a proposed residential development at Y Garnedd, Llanfairpwll.
2. A previous application was submitted to the IACC in August 2021 including a previous version of this Transport Statement produced by SCP. The planning application number is FPL/2021/231.
3. Welsh Government were consulted on the application as highway authority for the A55, which runs to the north of the site, and provided a consultation response, which is included at **Appendix A**.
4. The consultation response requested three pieces of information, the third on drainage which has been addressed separately, with the first two items being as follows:
 1. *Due to the proximity of the development to the A55, clarity will need to be obtained if a Risk Assessment complying with DMRB CD377 or similar is required. Developer must discuss scheme with WG specialist and gain written confirmation of requirements (please contact: RRRAP@gov.wales).*
 2. *Clarity required on what vehicle restraint measures are in place at the end of the access road, by proposed pumping station, to ensure that errant vehicles can't end up on the A55.*
5. This Risk Assessment has been prepared to address the above points as part of a new planning application for the proposed development.

Risk Assessment

6. Clarity has been requested on whether a Risk Assessment complying with Design Manual for Roads and Bridges CD377 (Requirements for Road Restraint Systems) or similar is required.
7. With regard to CD377, this is guidance is intended for developments on trunk roads as noted in at paragraph 1.2 under "Implementation and application", which states:

“This document shall be implemented forthwith on the Overseeing Organisations' motorway and all-purpose trunk roads with speed limits of 50 mph or more, and two-way traffic flows of 5,000 average annual daily traffic (AADT) or more, according to the implementation requirements of GG 101 [Ref 19.N].”

8. The proposed development is not on a trunk road and is accessed from a residential cul-de-sac to the south-east. The speed limit is 20mph and traffic flows are low.
9. The limit of the proposed site access layout is some 22m from the A55, segregated by an acoustic fence, earth bund and landscaping within the site, whilst a grass verge, and hard bordered landscaping are already present adjacent to the A55 carriageway. It is therefore considered that the likelihood of an errant vehicle reaching the A55 from the site is remote.
10. CD377 states at paragraph 3.20 that *“All hazards within or immediately adjacent to the highway boundary that can cause a danger to the occupants of a vehicle or give rise to a secondary event were the vehicle to reach the hazard, or affect other parties shall be identified and assessed.”*
11. A risk assessment based on Table D.1 of GG104 “Requirements for safety risk assessment” of the DMRB has therefore been undertaken to identify a risk value. A copy of this table is included at **Appendix B**.
12. As set out above the possibility of an errant vehicle reaching the A55 are remote and it is therefore considered that the risk falls under the “very unlikely, highly improbable to occur” likelihood.
13. In the highly unlikely event that this did occur it is considered that such an event could cause extreme harm.
14. In line with the table at **Appendix B** the risk value would be 5, which falls in the low risk range with the required action given as *“Ensure assumed control measures are maintained and reviewed as necessary”*.
15. Guidance contained within the DfT / UK Roads Liaison Group Guidance *“Provision of Road Restraint Systems on Local Authority Roads”* states at paragraph 10.1.1:

“In low speed environments, where vehicles are only expected to be manoeuvring (or travelling at equivalent speeds) bollards may only present a minor hazard with a collision resulting in minor or no injuries. They can be used as low cost measure to prevent a vehicle reaching a more dangerous hazard, which could result in serious or fatal injuries. As BS EN 1317-2 compliant systems are relatively expensive and only tested at very shallow angles, bollards can prove to be a more practical solution for dealing with low speed rear or frontal impacts. See BS 6180:1999 and Section 10.1.2 below for further details.

16. Given the low speed environment at the end of a cul-de-sac and that boundary to the highway is at a perpendicular angle, bollards are therefore considered appropriate in the case of this site and are shown on the proposed site layout plan included at **Appendix C**.

Conclusion

17. It is therefore concluded that the proposed bollards would be the appropriate measure to prevent the unlikely scenario of vehicles reaching the A55.

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APPENDIX A



Development Control
Isle of Anglesey County Council
Swyddfa'r Sir
Llangefni
Anglesey
LL77 7TW

Eich cyf / Your ref FPL/2021/231

Ein cyf / Our ref 21/NM-4185

07 October 2021

Dear Sir/Madam,

**TOWN AND COUNTRY PLANNING (DEVELOPMENT MANAGEMENT PROCEDURE) (WALES)
ORDER 2012:**

Land North of, Y Garnedd, Llanfair Pwllgwyngyll, LL61 5EX

Full application for the erection of 27 affordable dwellings, construction of internal access road, diversion of Public Right of Way, creation of a landscaping bund, erection of acoustic fence and associated works

I refer to your consultation of 17th September 2021 regarding the above application, and advise that the Welsh Government as highway authority for the A55 trunk road directs that planning permission is not granted at this time as the applicant has provided insufficient information to determine the application.

The applicant must provide the following information to support this application or resubmit the application with the following details;



1. Due to the proximity of the development to the A55, clarity will need to be obtained if a Risk Assessment complying with DMRB CD377 or similar is required. Developer must discuss scheme with WG specialist and gain written confirmation of requirements (please contact: RRRAP@gov.wales).
2. Clarity required on what vehicle restraint measures are in place at the end of the access road, by proposed pumping station, to ensure that errant vehicles can't end up on the A55.
3. Confirmation required that the proposed drainage design has been approved by relevant organisations. No surface water must run onto or discharge into the strategic road network drainage system. Further details will also be required to clarify the measures proposed at the bottom of the access road, by the pumping station, to ensure that all surface water will always be collected and disposed through the agreed drainage system (what secondary / emergency measures are proposed?).

If you have any further queries, please forward to the following Welsh Government Mailbox
NorthandMidWalesDevelopmentControlMailbox@gov.wales

Yours faithfully



Jason Ingram



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APPENDIX B

Table D.1 Risk value, likelihood and severity of outcomes that may be assigned to qualitative data for the purposes of assessment

Likelihood (L) x Severity (S) = Risk value (R)		Severity (S)				
		Minor harm; Minor damage or loss no injury	Moderate harm; Slight injury or illness, moderate damage or loss	Serious harm; Serious injury or illness, substantial damage or loss	Major harm; Fatal injury, major damage or loss	Extreme harm; Multiple fatalities, extreme loss or damage
Likelihood (L)	Very unlikely; Highly improbable, not known to occur	1	2	3	4	5
	Unlikely; Less than 1 per 10 years	2	4	6	8	10
	May happen; Once every 5-10 years	3	6	9	12	15
	Likely; Once every 1-4 years	4	8	12	16	20
	Almost certain; Once a year or more	5	10	15	20	25
Risk Value (R)		Required action				
Low (1-9)		Ensure assumed control measures are maintained and reviewed as necessary.				
Medium (10-19)		Additional control measures needed to reduce risk rating to a level which is equivalent to a test of "reasonably required" for the population concerned.				
High (20-25)		Activity not permitted. Hazard to be avoided or risk to be reduced to tolerable.				

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APPENDIX C



- KEY**
- LINE OF EXISTING FOUL SEWER
 - PROPOSED FOUL SEWER AND ADOPTABLE CHAMBER
 - - - PROPOSED FOUL RISING MAIN
 - - -○- - - PROPOSED SURFACE WATER DRAINAGE
 - - - PROPOSED S.W RISING MAIN
 - - -○- - - PROPOSED PERFORATED PIPE AND INSPECTION CHAMBER WITH ORIFICE FLOW CONTROL
 - (o) POROUS SURFACING TO DRIVEWAYS. UNLINED WITH 300mm THICK RESERVOIR LAYER

INFILTRATION NOT FEASIBLE AS DETERMINED BY POROSITY TESTING. REF POROSITY REPORT



CLIENT
 PROJECT LAND ADJ. Y GARNEDD, LLANFAIR PG
 TITLE PRELIMINARY DRAINAGE SCHEME



Job No. 20086	DATE 29.06.21	SCALE 1/250 @ A1
ACAD Ref. N/A	CHECKED	PASSED
DRAWN AC	DRG No. 20086/SK501	REV D