

1.0 INTRODUCTION

Moffett Property Management Ardee Ltd of Lisgrew, Emyvale, Co.Monaghan is the landowner of lands affected by proposed Material Alteration ARD7 extending to approximately 3 hectares (7.3 acres). The submission lands form part of a larger landholding extending to 19.82hectares. ARD7 involves the material alteration of these lands from E1 General Employment as they appear in the draft Louth County Development Plan 2021-2027 to H1 Open Space. We note the Material Alterations document as published contains an error stating ARD7 relates to a map change from A2 Residential to H1 Open Space.

This submission seeks that the proposed material alteration to change the zoning from 'E1 General Employment' to 'H1 Open Space' is not adopted and that the E1 General Employment zoning as per the draft Plan is adopted.

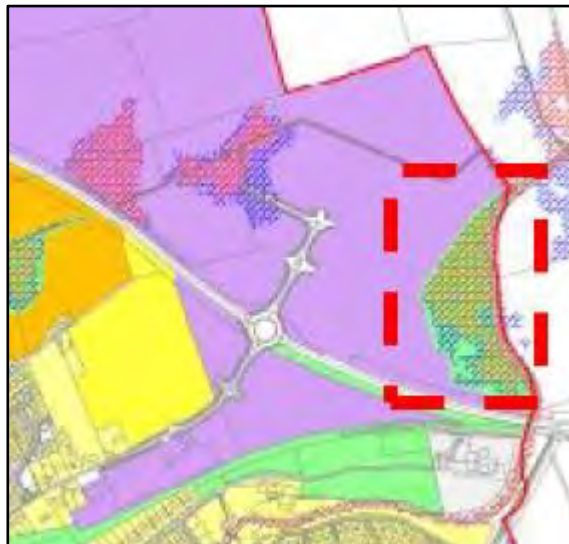


Figure 1: Extract from ARD7 as contained in the Material Alterations to Maps document

2.0 SUITABILITY OF SUBMISSION LANDS FOR E1 ZONING

2.1 Site History – Live Planning Permission

The submission lands affected by ARD7 form part of a wider landholding with planning permission for a light industrial/business part under P.A. Ref. 09/509 (as extended under P.A. Ref. 20/135 until 27-05-2025). The extension of duration was granted on the basis of substantial works comprising enabling roads infrastructure including internal road, new roundabouts, new junction on the N33 and associated footpaths, cycle ways, drainage and services infrastructure.

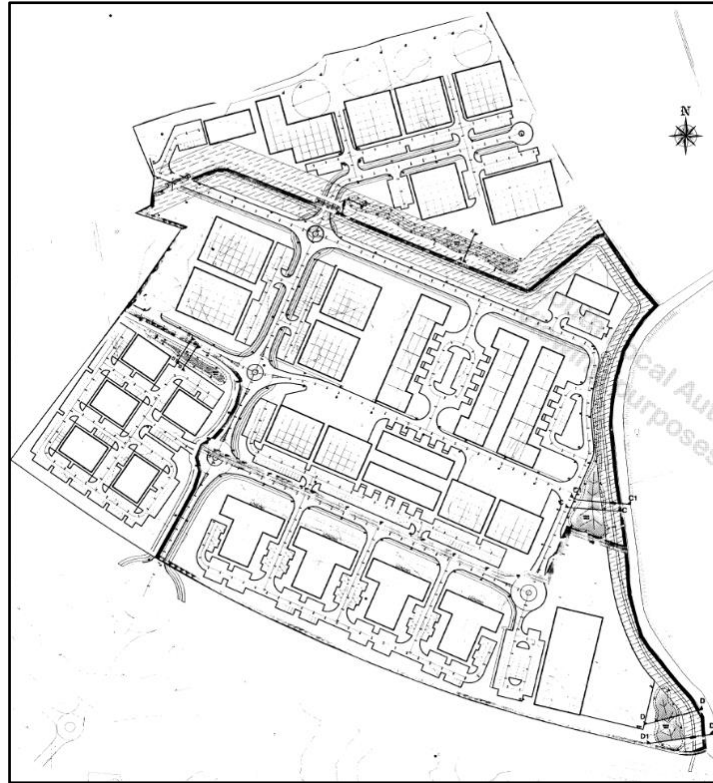


Figure 2: Extract from Waterman Moylan drawing submitted with further information response P.A. Ref. 09/509

P.A. Ref. 20/749 was granted planning permission in December 2020 subject to conditions and relates to the area north of the third roundabout within the application site relating to P.A. Ref. 09/509.

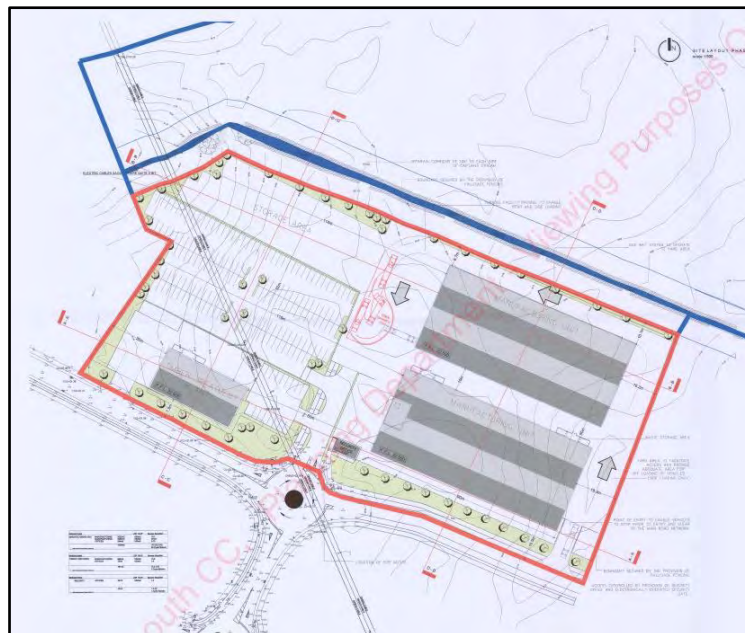


Figure 3: Extract from drawing submitted with P.A. Ref. 20/749 by McGuigan Architects

Also of relevance is P.A.Ref 19/1 and P.A. Ref. 20/569 which extend development permitted within this employment area into lands to the west of P.A.Ref. 09/509.

Submission for Moffett Property Management Ardee Ltd, Ardee, Co.Louth

The planning permissions detailed above that have been approved since the parent permission P.A. Ref. 09/509, have been permitted notwithstanding the inclusion lands identified as Flood Zone A and B. It is submitted that there is sufficient provision within policies the draft Development Plan, specifically policy objective IU25, to ensure that any development proposed within Flood Zones A or B is subject to a site specific flood risk assessment and avoid significant risks of flooding and not exacerbate flooding elsewhere without rezoning the submission lands to H1 Open Space.

As recognised by the draft Development Plan at section 2.15, Ardee is an important local service centre providing a range of employment opportunities with a strong jobs to workers ratio. The submission lands are part of a larger employment area with planning permission to the north of Ardee and adjacent to future Residential development lands. Roads, footpaths cycle lands and public lighting are already in place that will facilitate the build out of development permitted under P.A. Ref. 09/509. The submission lands are well located for easy access to the National road network and M1 to the east without having to cross the town centre and should remain zoned for E1 General Employment use in keeping with the pattern of permitted development on adjoining lands.

2.2 Justification Test

We note the proposed material alteration ARD7 is in response to submission no. 629. This submission was made by the OPW. The OPW highlights the need for a Sequential Approach to managing flood risk. The OPW comment in their submission no.629, “It would appear that land use zoning within Flood Zones that would be considered inappropriate or require application of the Justification Test, in accordance with Table 3.2 of the Guidelines, has been proposed in a number of settlements”. Ardee is one of the settlements listed on page 4 of the submission which states;

“Highly vulnerable New Residential, and Less Vulnerable Strategic Reserve and General Employment developments are proposed in Flood Zone A.

The proposed New Residential, Strategic Reserve and General Employment sites overlaps with the potential future scenarios flood extent maps prepared under the National CFRAM Programme, which take account of climate change impacts”.

The OPW states that the Justification Test as set out in the Guidelines does not appear to have been applied or reported in the preparation of the Plan, noting that the Justification Test applies only to the urban centre (i.e., the core area of a city, town or village which acts as a centre for a broad range of employment, retail, community, residential and transport functions), and would not be applicable to the periphery of urban areas (p.2).

Submission for Moffett Property Management Ardee Ltd, Ardee, Co.Louth

The Material Alteration documentation is accompanied by an 'Updated Strategic Flood Risk Assessment – Inclusion of Justification Tests' document as Part 5 which applies the Justification Test for Development Plans where locations have been identified in the draft Development Plan that are at a high or moderate risk of flooding. In response to submission no.629, Ardee has been subject to a Justification Test. The submission lands are referred to as 'Site 4' under this assessment. Two other sites to the west of the submission lands also zoned E1 in the draft Plan were also subject to the justification test (Ref. Site 2 and Site 3).

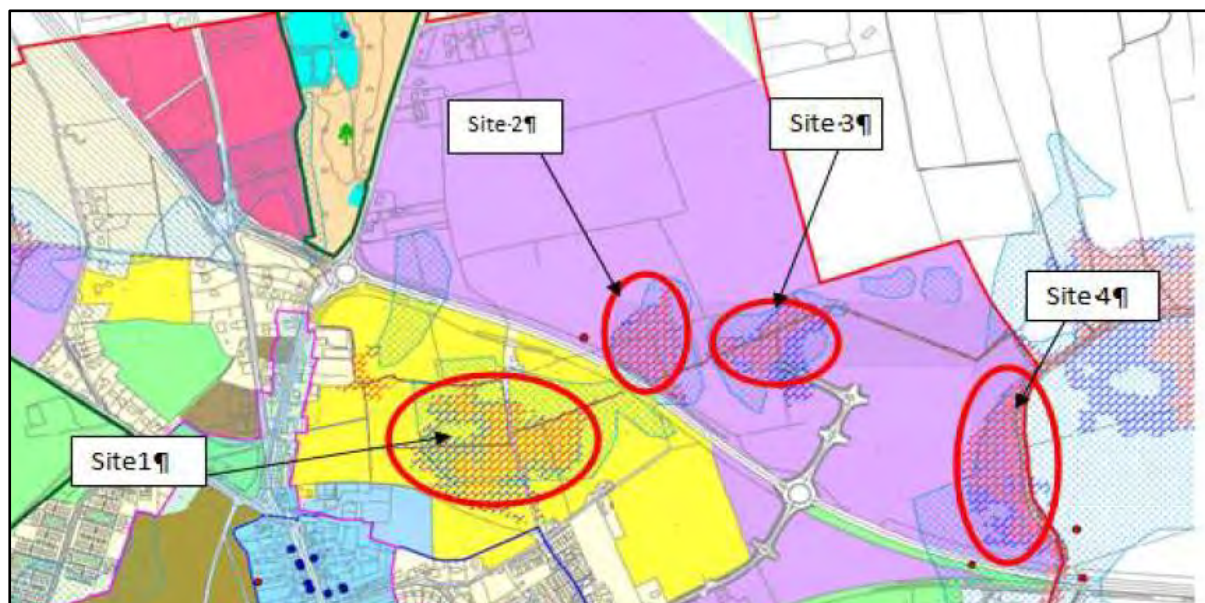


Figure 4: Extract from Updated Strategic Flood Risk Assessment – Inclusion of Justification Tests' page 6

According to the justification test for Ardee as detailed on page 7;

“Site 2: The lands are zoned ‘General Employment’ (E1) and a portion are vulnerable to fluvial flooding and in Flood Zones A and B.

As the vast portion of these zoned lands is not identified for potential flood risk and is located within Flood Zone C it is anticipated that flood risk mitigation measures could be designed to allow development of the wider site, as necessary. Development of the site will require a Site Specific FRA which should consider the Sequential Approach within the site, allocating vulnerable and less vulnerable development to Flood Zone C and only water compatible development (e.g. amenity open space, sports and recreations etc) to Flood Zones A and B.

Site 3: The lands are zoned ‘General Employment’ (E1) and a portion are vulnerable to fluvial flooding and in Flood Zones A and B. These lands are centrally located and take access off the adjoining N33 and associated roundabout. To date planning permission has been granted for development on a portion of these lands under Reg. Ref. No’s: 19/1 and 20/749. In the case of the former application this was accompanied by an engineering report which addressed the issues of fluvial flooding whilst in the latter a Site Specific FRA accompanied the planning application.

Submission for Moffett Property Management Ardee Ltd, Ardee, Co.Louth

Site 4: *Rezone lands zoned ‘General Employment’ (E1) which are vulnerable to flooding and in Flood Zone A and B. The uses generally permitted within this land use category are not compatible with Flood Zones A and B, and it is considered that the application of the Justification Test is not appropriate on this occasion given the peripheral location of the site within the overall employment lands. Rezone the lands to ‘Open Space’.*

It is submitted that there is no justification for allowing site 2 and 3 to be zoned E1 with development subject to site specific FRA and not site 4. As quoted above, the Justification Test refers to the “peripheral location” of the site. The submission lands as illustrated by figures above is an integral part of the existing planning permission on site which includes lands referred to in the assessment of Site 3 under P.A. Ref. 20/279. It is strongly suggested that there is no difference in the position of Site 2 and Site 4 in terms of proximity to Ardee given that they are accessed via the same road network which connects to the N33 to the south. The parent permission P.A. Ref. 09/905 which has been extended in duration to 2025 and includes the lands under P.A. Ref. 20/749 was subject to EIA and included a comprehensive surface water design including SUDS methods.

2.3 Flood Risk on Submission Lands

This submission is accompanied by a flood risk review prepared by Finn Design Partnership attached at Appendix A. This assessment is based on the flood maps available to view on the OPW portal, www.floodinfo.ie, including those for potential future scenarios taking account of the possible impacts of climate change. Map N06AEE_EXFCD_F0_05 provides information relevant to the submission lands.

Finn Design Partnership have taken the information attained from a review of map N06AEE_EXFCD_F0_05 and applied it to the area affected by ARD7 to identify the areas affected by the highest predicted water level for a 1% event and 0.1% event. This information has been illustrated on drawing no. 004 in relation to the development permitted under P.A. Ref. 09/905 (Appendix A). According to this assessment, the area proposed to be zoned H1 Open Space does not accurately reflect the predicted flood levels for this site. As illustrated by drawing no. 004 (extract below), a much smaller proportion of the submission lands are located within Flood Zone A. In addition, there are no records of extensive flooding having occurred in the past on the submission land. It is submitted that the assessment undertaken by Finn Design Partnership highlights the importance of undertaking site specific flood risk assessments to determine future development potential as part of the development management process.

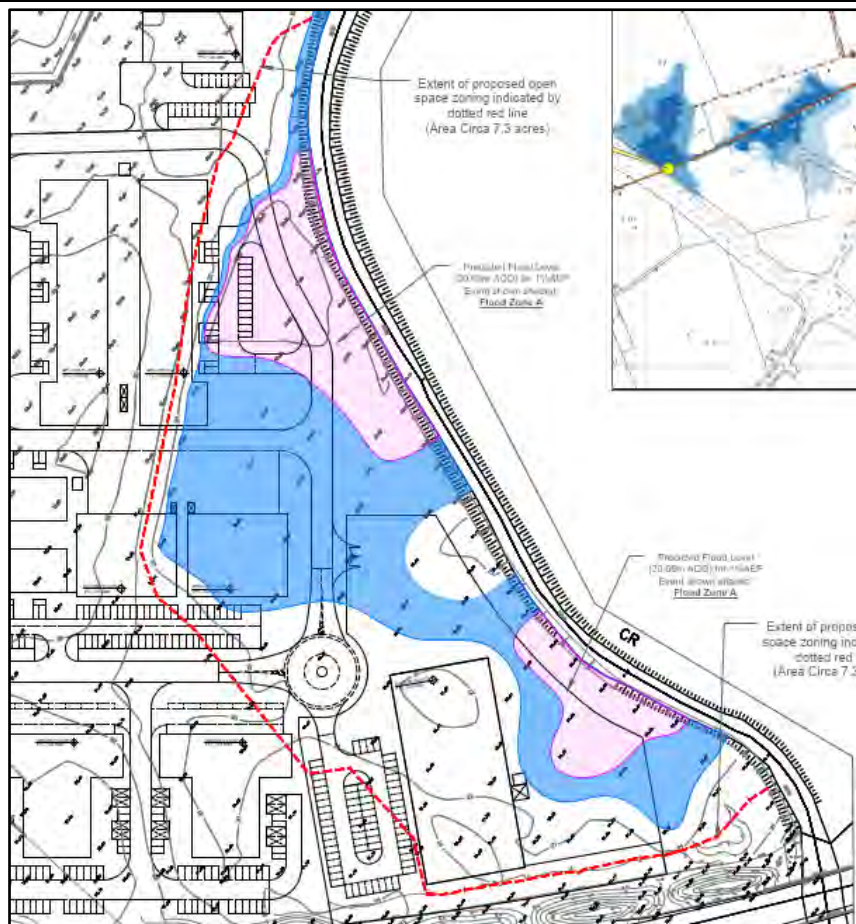


Figure 5: Extract from Drawing No. 004 by Finn Design Partnership attached at Appendix A

The submission lands are zoned E1 General Employment by the draft Louth County Development Plan. The majority of land uses indicated as permitted in principle on lands within this zoning objective would be considered as 'less vulnerable'. It is submitted that material alteration ARD7 should not be adopted and the ***E1 General Employment zoning should be applied as per the draft Plan subject to a site specific flood risk assessment being provided within any future planning applications.***

It is also submitted it makes no sense in terms of the proper planning and sustainable development of the area to zone this part of an industrial estate development for open space.



Moffett Property Management (Ardee) Ltd

Commercial & Business Zoned Lands @

Cappocksgreen, Ardee, Co Louth

Flood Risk Review

DOCUMENT CONTROL SHEET

Client	Moffett Property Management (Ardee) Ltd					
Project Title	Commercial& Business Zoned Lands @ Cappocksgreen, Ardee, Co. Louth					
Document Title	Flood Risk Review					
Document No.						
This Document Comprises	DCS	TOC	List of Tables	List of Figures	Pages of Text	Appendices
		Yes	N/A	N/A	Yes.	Yes.

Revision	Status	Author(s)	Reviewed By	Approved By	Issue Date
-	Original	T.Finn	T.Finn		25 th April 2021

Table of Contents

1.0	Introduction.....	4
1.01	Instructions.....	4
1.02	General	4
1.03	Site Topography	5
1.04	Review of Proposed Zoning.....	5
1.05	Review of Ardee Fluvial Flood Map.....	6
1.06	Development in the Context of the Guidelines.....	7
2.0	Summary & Conclusion	8

1.0 Introduction

1.01 Instructions

Finn Design Partnership has been commissioned by Moffett Property Management (Ardee) Ltd to review the proposed zoning of part of their commercial and business zoned lands as open space within the Draft Louth County Development Plan 2021-2027. The purpose of the review is to consider the extent of the open space zoning being proposed and its validity in terms of the predicted flood levels relative to the topography of the lands.

1.02 General

The development lands extend along the North edge of the N33 where they are bounded on the East by the River Dee, agricultural lands to the North and commercial/business zoned lands to the West. The lands are accessed from the N33 via the existing roundabout, which also serves zoned lands to the South of the N33 and provides a link to the town centre of Ardee. A significant section of the internal service access roadway is in place from the roundabout where foul drainage and potable water services are available to the lands.

The total area of the lands extends to approximately 19.82 hectares.



Figure 1.0 Extent of Lands Outlined in Red

1.03 Site Topography

The proposed development site slopes moderately in an easterly direction towards the River Dee from West. Ground elevations range from 22.95mOD (Malin) near the western side of the lands to the lowest level along the River Dee of 20.63.

1.04 Review of Proposed Zoning

As noted previously, a large portion of the lands are proposed for commercial and business zoning (C3) within Draft Louth County Development Plan 2021-2027 where an area extending to circa 7.3 acres adjoining the river Dee is proposed for open space zoning. See Fig 2.0 below. It is noted that this open space zoning has been derived from the updated strategic flood risk assessment that was completed as part of the development plan review.

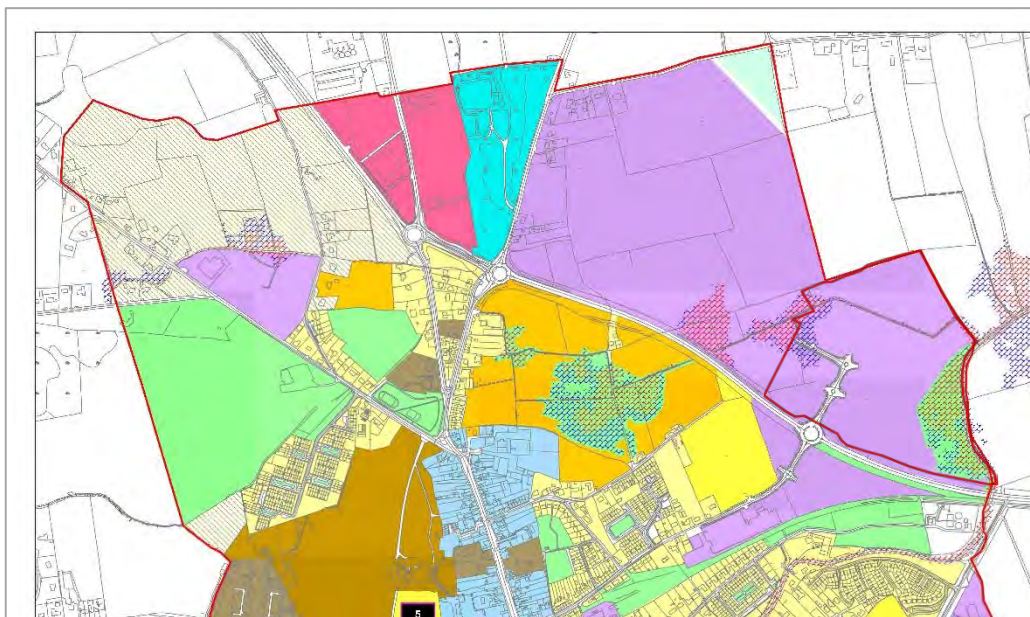


Figure 2.0 Zoned Lands Outlined in Red

The particular area proposed for open space is identified as site 4 within the areas for further assessment under the CFRAM Programme. The following extract relates explicitly to site 4: -

'Rezone lands zoned 'General Employment' (E1) which are vulnerable to flooding and in Flood Zone A and B. The uses generally permitted within this land use category are not compatible with Flood Zones A and B, and it is considered that the application of the Justification Test is not appropriate on this occasion given the peripheral location of the site within the overall employment lands. Rezone the lands to 'Open Space'

It is noted that the lands are not being zoned General Employment (E1).

1.05 Review of Ardee Fluvial Flood Map

A review of the flood map N06AEE_EXFCD_F0_05 obtained from the OPW website (floodinfo.ie/maps/floodmaps) provides substantive and valuable information on the predicted flood levels occurring along the River Dee during different storm events and its effect on the adjoining lands. This map provides the primary information for determining whether the lands proposed for open space zoning are within Flood Zone A or B. The information contained in drawing N06AEE_EXFCD_F0_05 has been used to assess the extent of flooding that would occur under the different AEP events and prepare the attached drawing 2003-ENG-004.

The most relevant nodal point for the lands is 0602M01775. This point states that the highest predicted water level (OD) for a 1% (1 in 100) event is 20.68m where the highest predicted water level (OD) for a 0.1% (1 in 1000) event is 20.84.

In taking this information and applying it to the area being proposed for open space zoning, a portion of the area is located within the 0.1% area where only a small part is contained within the 1% area.

See image 3.0 below.

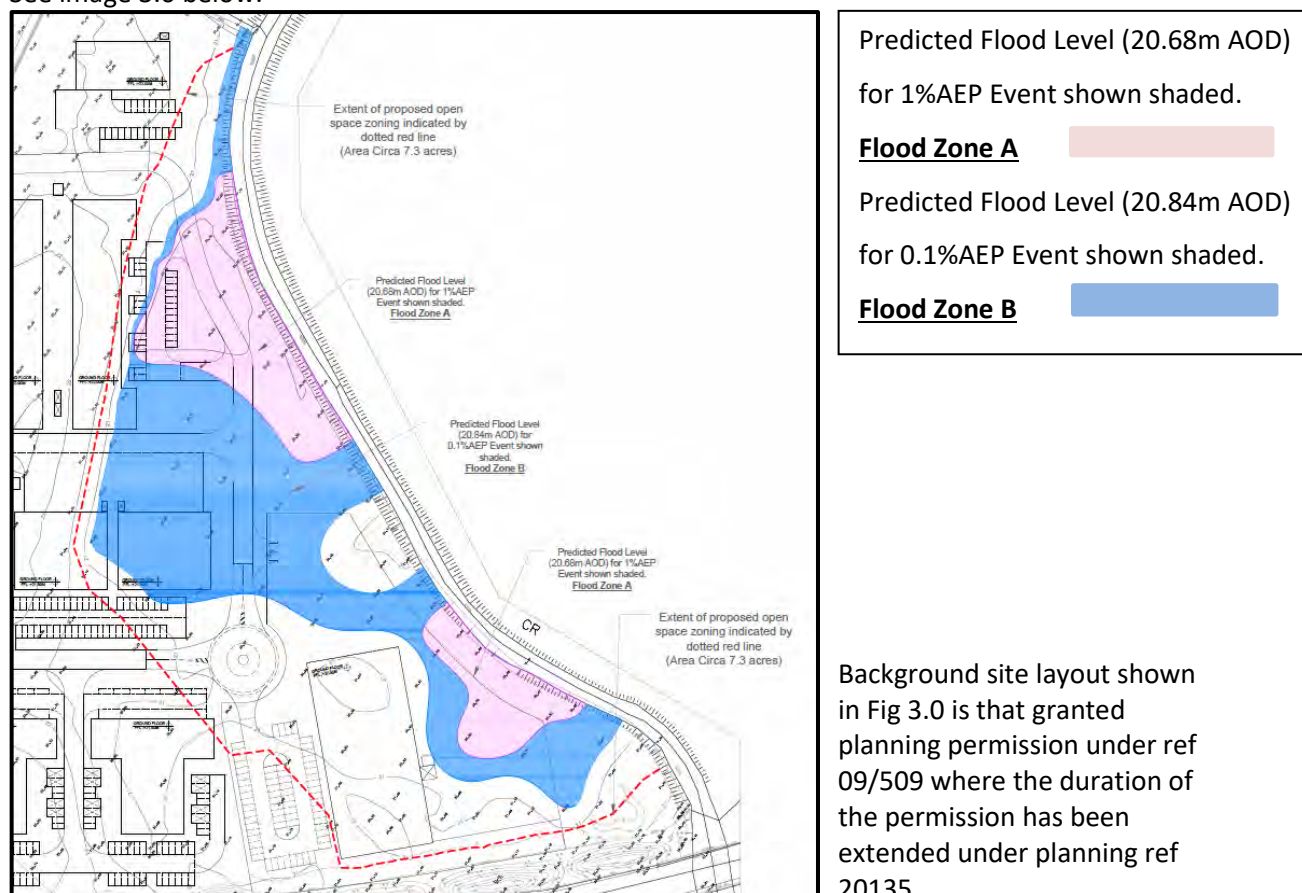


Figure 3.0 Predicted Flooding with Open Space Zoned Lands

1.06 Development in the Context of the Guidelines

In the context of the 'Planning System and Flood Risk Management Guidelines, DOEHLG, 2009' three flood zones are designated in consideration of flood risk to a particular development site.

Flood Zone 'A' – where the probability of flooding from rivers and watercourses is the highest (greater than 1% or 1 in 100 year for river and watercourse flooding and 0.5% or 1 on 200 for coastal or tidal flooding).

Flood Zone 'B' – where the probability of flooding from rivers and watercourses is moderate (between 0.1% or 1 in 1000 year for river and watercourse flooding and 0.5% or 1 on 200 for coastal or tidal flooding).

Flood Zone 'C' – where the probability of flooding from rivers and watercourses is low or negligible (less than 0.1% of 1 in 1000 year for both river and watercourse and coastal flooding). Flood Zone 'C' covers all areas that are not in Zones 'A' or 'B'.

The 'Planning System and Flood Risk Management Guidelines' list the planning implications for each flood zone, as summarised below:-

Zone A – High Probability of Flooding. Most types of development would not be considered in this zone. Development in this zone should be only be considered in exceptional circumstances, such as in city and town center's, or in the case of essential infrastructure that cannot be located elsewhere, and where the 'Planning System and Flood Risk Management Guidelines' justification test has been applied. Only water-compatible development, such as docks and marinas, dockside activities that require a waterside location, amenity open space and outdoor sports and reaction would be considered appropriate in this zone.

Zone B – Moderate Probability of Flooding. Highly vulnerable development such as hospitals, residential care homes, Garda, fire and ambulance stations, dwelling houses, strategic transport, and essential utilities infrastructure would generally be considered inappropriate in this zone, unless the justification test requirements can be met. Less vulnerable development such as retail, commercial and industrial uses and recreational facilities might be considered appropriate in this zone. In general however, less vulnerable development should only be considered in this zone if adequate lands or sites are not available in Zone 'C' and subject to a flood risk assessment to the appropriate level of detail to demonstrate that flood risk to the development can be adequately managed and that development in this zone will not adversely affect adjacent lands and properties.

Zone C – Low to Negligible Probability of Flooding. Development in this zone is appropriate from a flood risk perspective. Developments in this zone are generally not considered at risk of fluvial flooding and would not adversely affect adjacent lands and properties from a flood risk perspective.

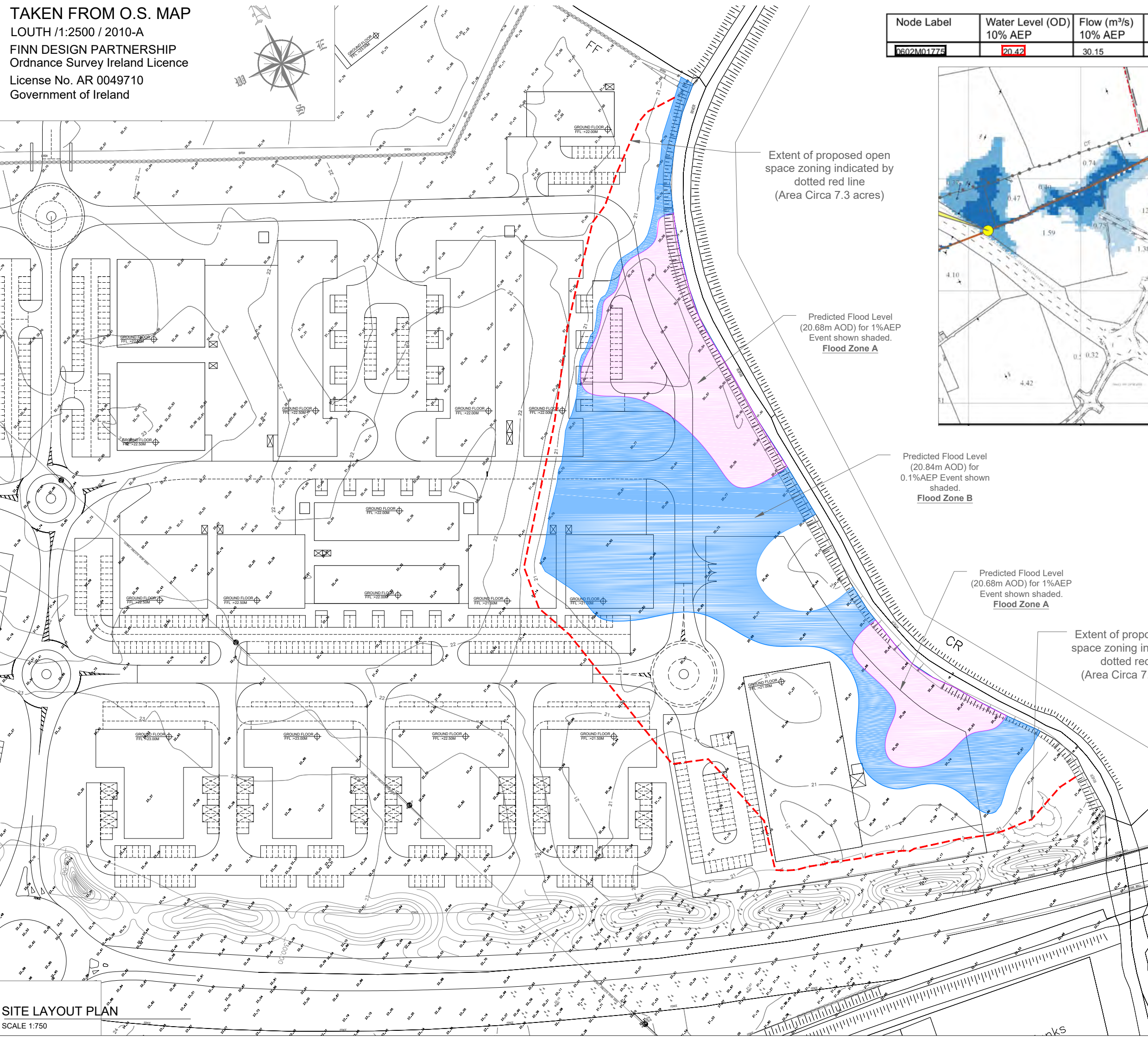
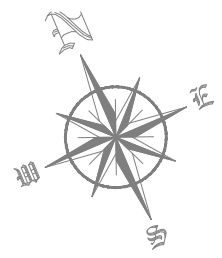
	Flood Zone A	Flood Zone B	Flood Zone C
Highly vulnerable development (including essential infrastructure)	Justification Test	Justification Test	Appropriate
Less Vulnerable Development	Justification Test	Appropriate	Appropriate
Water-Compatible Development	Appropriate	Appropriate	Appropriate

Table 3: “Appropriateness” Matrix

2.0 Summary & Conclusion

In consideration of the findings of this review, the following conclusions are made:-

- The area proposed for open space zoning does not accurately relate to the predicted flood levels included in the Ardee Fluvial Flood Map (N06AEE_EXFCD_F0_05)
- Only a small portion of the lands that are proposed for open space zoning are located within flood zone A. There are no developments proposed within these areas under the current planning permission 09/509
- The proposed General Employment Zoning (E1) for the entire lands allows for developments classified as less vulnerable developments, where such developments are appropriate in Flood Zone B, as shown on the appropriateness matrix included in table 3 above.
- There are no records of extensive flooding having occurred on the lands, in the past.
- Site-specific flood risk assessments should be submitted with any future planning applications for developments within Flood Zones B.



Extent of proposed open space zoning indicated by dotted red line (Area Circa 7.3 acres)

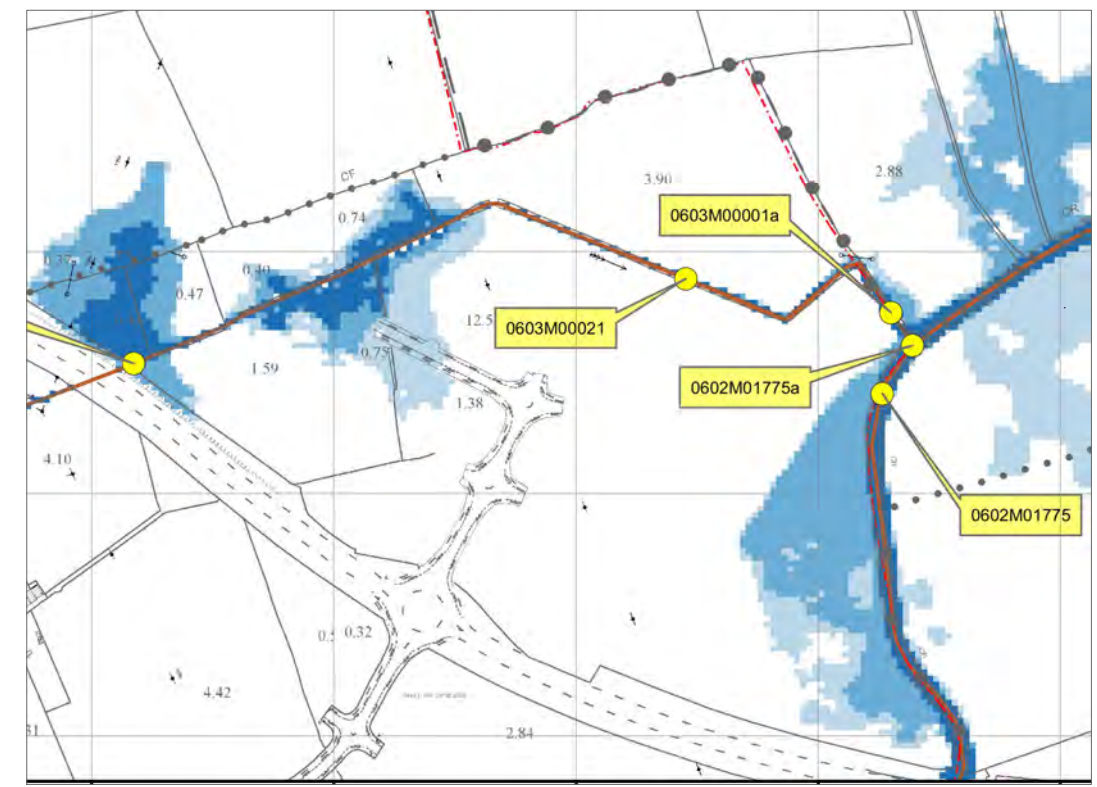
Predicted Flood Level (20.68m AOD) for 1%AEP Event shown shaded. **Flood Zone A**

Predicted Flood Level (20.84m AOD) for 0.1%AEP Event shown shaded. **Flood Zone B**

Predicted Flood Level (20.68m AOD) for 1%AEP Event shown shaded. **Flood Zone A**

Extent of proposed open space zoning indicated by dotted red line (Area Circa 7.3 acres)

Node Label	Water Level (OD) 10% AEP	Flow (m³/s) 10% AEP	Water Level (OD) 1% AEP	Flow (m³/s) 1% AEP	Water Level (OD) 0.1% AEP	Flow (m³/s) 0.1% AEP
0602M0177F	20.42	30.15	20.68	33.53	20.84	35.59



REV. NO.	DESCRIPTION	DATE	INITIALS

finn
 DESIGN PARTNERSHIP
 Blakestown, Ardee, Co. Louth, Ireland
 t 041 6857200 f 041 6857201 e info@finn.ie w www.finn.ie

DRAWING NO: **004** -

ENG

TITLE: **Flood Studies Review**

PROJECT: **The Link Business Park Site Entrance**

CLIENT: **Moffet Property Management Ltd
 Lisgew, Emlyvale,
 Monaghan, H18 Y362**

SCALE: 1:500 DRAWN: -

DATE: April 2021 CHECKED: AA

STATUS: **For Discussion**

JOB NO: **2003**

NOTES
 1. Copyright Reserved 2021 ©
 2. Work to figure dimensions only. Do not scale drawings.
 3. The contractor is responsible for checking all levels and dimensions on site and shall refer all discrepancies to the Architect.
 4. Where appropriate, for details of r.c. structure, or mechanical and electrical details, see Engineers drawings.
 5. Proprietary items shall be fixed in strict accordance with manufacturers instructions.
 6. Sizes of proprietary items shall be checked with manufacturer.
 7. The contractor shall be responsible for the coordination of structure, finishes and services.

© CIVIL, STRUCTURAL, ENGINEERING PROJECT MANAGEMENT