

EIAR Addendum

TED: 02/08/2024

WuXi Biologics Ireland Limited

02/08/2024

100085897

EFFLUENT BALANCING AND RESOURCE RECOVERY SYSTEM

Notice

This document and its contents have been prepared and are intended solely as information for WuXi Biologics Ireland Limited and use in relation to the EIAR Addendum prepared for this particular project.

AtkinsRéalis assumes no responsibility to any other party in respect of or arising out of or in connection with this document and/or its contents.

This document has 22 pages including the cover.

Document history

Document title: EIAR Addendum

Document reference: EIAR Addendum

Revision	Purpose description	Originated	Checked	Reviewed	Authorised	Date
0.0	Draft	JS	JS	DL	-	31/07/24
0.1	Final	JS	JS/ DL	DL	ТМ	02/08/24
			4	1.		
			X			
		0				
		~ CX				
Client si	gnott					
Client	WuXi Biologics I	reland Limited				
Project	Effluent Balancir	ig And Resource	e Recovery Sy	stem		
Job numb	er 100085897					
Client						

signature/date

Contents

		onto	Ŷ _∧	
4	Intro	duction	C.C.C.	5
ו. כ	Docid			
۷.	2 1	Description of Design Changes	e contraction de la contractio	0
	2.1	Construction Compound	le la	6
		Balancing tank/Off Specification Tanks		6
		Primary Treatment	×	6
		Aeration Tanks	C	6
		Sludge Buffering Tanks		7
		Bund		7
		Sludge Dewatering		7
		Chemical Delivery Area		
		File Access Road		1
		Odour Stack Location	S	7
	2.2	Tachnical Patianala for Design Change		
2		Periou		0
3.		Review		9
	0.1		/	
	3.2		~	9
	3.3	Consideration of Reasonable Alternatives		9
	3.4	Population and Human Health	,	9
	3.5	Biodiversity		9
	3.6	Landscape and Visual		10
		Landscape		
		Visual		
	3.7	Air Quality and Climate		11
	3.8	Noise and Vibration		11
	3.9	Traffic		11
	3.10	Land, Soil and Geology		12
	3.11	Water		12
	3.12	Archaeology		12
	3.13) Material Assets		17
	3.14	Cumulative Effects		17
	3.15	Interactions		17
	3.16	Schedule of Environmental Commitments Additional Mitigation Measures		17 17
4.	Conc	lusion		
5.	Refer	ences		19

Appendics

Арре 1.1. 1.2.	ndix 1 Louth County Council: Further Information Request Archaeological Impact Assessment (AIA): EBRRP at Haynesto	wn, Dundaik Co. Louth
1.3. Appe 3.1. 3.2.	Final Planning Pack Drawings (Glanua) andix 3 Verified Photomontages (Model Works) Review of WuXi Biologics EIAR (TMS Environment Ltd.)	19. 02-08-502 00114
Tables	Fechnical Rationale for Design Changes	505 8
Table 3-1 - 5	Summary of impacts and impact magnitude prior to mitigation	13
Table 3.2	Summary of impacts and impact magnitude after implementation of	f mitigation measures 14
	Planning Department	

1. Introduction



The original Environmental Impact Assessment Report (EIAR) for this project was submitted on 9th April 2024. On 4th June 2024, a further information request was issued by Louth County Council (LCC) (see Appendix 1.1.). This request stated that the Planning Authority had expressed concern regarding archaeological features on the subject site and the applicant should consider the relocation of the compound or alternatively siting or mitigation to ensure the Recorded Monuments and identified archaeological features and deposits located within the site of the proposed development are not impacted. Accordingly, an Archaeological Impact Assessment (AIA) has been carried out by Archaeological Consultancy Services Unit (ACSU) (see Appendix 1.2).

As requested by LCC, recommended design changes and mitigation measures featured in this report have now been incorporated into the refined design layout. All revised planning drawings are presented in Appendix 1.3.

The design changes and technical rationale for these changes are discussed in Sections 2.1 and 2.2 of this report.

These amendments have been reviewed by each of the Subject Matter Experts (SME) who prepared the EIAR, to determine if there has been any material change to their respective assessments submitted in the original EIAR document. The findings of each SME for each technical discipline is presented in Section 3.

This EIAR addendum has been prepared to summarise the key conclusions of the recently completed AIA (ACSU, 2024), to present the resulting design refinements, to document the technical review of same by the relevant SMEs, and to summarise key findings. Based on the refined design, there are no material / significant changes to the original EIAR. This addendum document has been prepared to supplement and links into the original EIAR (3no. volumes). The EIAR should therefore be considered wholly as follows:

- EIAR (AtkinsRéalis, April 2024) Volume 1-3;
- EIAR Addendum (AtkinsRéalis, August 2024).

2. Design Changes

The design of the site has been revised to incorporate the points raised by LCC in the further information (FI) request. The proposed development, as originally submitted, has been subject to further detailed design with a newly appointed contractor which has resulted in design efficiencies, and these are now reflected in a small number of updated drawings which are included within this FI response. A description of the design changes are presented in the following section.

It should be noted that the red-line boundary area and the Project Description as per the planning submission have not changed.

Refer to Appendix 1.3 for a copy of the relevant revised planning drawings.

2.1 Description of Design Changes

Construction Compound

The construction compound has been moved further south and significantly reduced in extent in line with the reduction in bund footprint to minimise the risk of impact on archaeological monuments, as per the recommendations of the AIA (ACSU, 2024) presented in Appendix 1.2.

Balancing tank/Off Specification Tanks

The balancing tanks and off specification tanks dimensions have been reworked from 6no. cells with overall external dimensions of 54.2m x 16.3m x 7.6m to 4no. cells with overall external dimensions of approximately 47.5m x 19m x 8.5m (including roof slab but excluding base slab).

In order to maintain a similar volume capacity to the tanks in the original design, the balancing and off-specification tanks are approximately 1m higher than in the previously submitted planning drawing package to LCC. The proposed roof level of 27.1mOD is still below the membrane building ridge level of 27.651mOD, however it is above the administration building ridge level 26.042mOD. It should be noted that the new proposed balancing tank and off specification tank roof level do not exceed the roof level of 27.50mOD, previously proposed for the aeration tanks.

Primary Treatment

The primary treatment stage was relocated to the North of the aeration tanks. The top of wall of any primary treatment will not exceed the existing road level of 25.5mOD.

Aeration Tanks

The sludge buffering tanks were incorporated with the aeration tanks in a common structure with internal dividing walls to optimise site footprint and ensure that the Recorded Monuments and identified archaeological features and deposits located within the site of the proposed development will not be impacted.

The aeration tanks dimensions within the new overall structure is approximately 25.2m x 9.6m x 7.5m (not including base but including for roof slab). To facilitate this optimisation of the required infrastructure, the process is operated at higher MLSS levels within membrane supplier recommendations.

The aeration tanks have been shifted slightly south from their original location, however the tanks should remain mainly screened by the building as their new estimated top of wall level of 26.1mOD is below the ridge level of 27.651mOD of the membrane building and below the ridge level of 26.042mOD of the administration building. The top of handrails are between 27.2m and 27.7mOD and therefore slightly above the ridge level of the administration building, however this was already the case in the planning drawing, where the top of handrail was at 28.6mOD and therefore 0.949m above the ridge level of the membrane building.

Sludge Buffering Tanks

The sludge buffering tanks have been relocated north of the aeration tanks and combined into a common structure. The tanks are screened by the membrane building as detailed above.

The new sludge buffering tanks constitute a 3.8m x 9.6m x 7.5m section within the overall combined 29m x 9.6m x 7.5m (not including base but including for roof slab) aeration tanks/sludge holding tanks structure as detailed above. Please note that the sludge blending tank has been removed from the design and only 2no. sludge buffering tanks have been provided.

Bund

The overall bund has been rationalised and is smaller overall, although some small areas to the south which were not previously excavated form part of the bund to facilitate the above rationalisation.

Sludge Dewatering

The sludge dewatering infrastructure has been moved further south in line with the reduction in the bund footprint.

Chemical Delivery Area

The chemical delivery area has been moved further west in line with the reduction in bund footprint. The chemical storage tanks have been moved within the common bund.

Fire Access Road

The fire access road has been moved further south in line with the reduction in the bund footprint. Drainage calculations have been reviewed and refined as a result. Refer to the revised drainage calculations submitted separately as part of this FI response.

Quantity of Pumps and Mixers

The total number of pumps and mixers associated with the application has been reduced from the original submission. The specification of the units remaining does not deviate from the original submission.

Odour Stack Location

The unit remains in the same location and the volume of the sludge tanks have reduced. The air change model in the EIAR and volumes proposed does not adversely affect or change. It is not proposed to change the odour unit currently specified.

2.2 **Technical Rationale for Design Change**

The technical rationale for all relevant design changes is presented in Table 2-1. The primary reason for these changes is to ensure that identified archaeological features will not be impacted by the development plan, and to ensure that all points raised within the FI request have been fully addressed within the refined besign of the proposed 02/08/201 development.

Balancing Tank/ Off Specification Tanks Primary Treatment	A reduction in overall footprint of tanks and bund area to mitigate
Primary Treatment	ensure identified archaeological reatures and deposits will not be impar
	Primary treatment stage relocated within the bund area following revelopments.
Aeration Tanks	A reduction in overall footprint of tanks and bund area to mitigate ensure identified archaeological features and deposits will not be impa
Sludge Buffering Tanks	Sludge buffering tanks relocated within the bund area following revealed by the suit process requirements.
Bund	A reduction in overall footprint of tanks and bund area to mitigate ensure identified archaeological features and deposits will not be impa
Sludge Dewatering	The sludge dewatering infrastructure to be relocated further sour mitigate and ensure identified archaeological features and deposits wi be impacted.
Chemical Delivery Area	The chemical delivery area to be relocated west, following the reduction the overall bund footprint to mitigate and ensure identified archaeolo features and deposits will not be impacted.
Fire Access Road	The fire access road to be relocated south, following the reduction or overall bund footprint to mitigate and ensure identified archaeolo features and deposits will not be impacted.
Construction Compound	A reduction in overall footprint of tanks and bund area to mitigate ensure identified archaeological features and deposits will not be impa
Quantity of Pumps and Mixers	Reduction in overall proposed quantity of pumps and mixers to reduce r dispersion.
Odour Stack Location	No change or impact anticipated from the initial planning submission.

Table 2-1 - Technical Rationale for Design Changes

EIAR Review 3.

3.1 Introduction and Methodology

PECEIVED. The design changes as discussed in Section 2.1, and presented in Appendix 1.3. have not resulted in any material changes to this chapter, as presented in the original EIAR (AtkinsRéalis, 2024).

Project Description 3.2

The design changes to the proposed development have been reviewed. It should be noted that the red-line boundary area and the Project Description as per the planning submission have not changed.

Whilst there is no material change to the Project Description, minor design amendments (as detailed previously in Section 2) have been made in order to address the points raised in the FI request. Accordingly, it is noted that Figures 2.2 to 2.7 in Chapter 2 - Project Description of the original EIAR (AtkinsRéalis, 2024) are now superseded by the refined planning drawings submitted as part of this EIAR Addendum. Refer to Appendix 1.3 for a copy of the relevant revised planning drawings.

It is concluded that the design changes as discussed in Section 2.1, and presented in Appendix 1.3. have not resulted in any material changes to this chapter, as presented in the original EIAR (AtkinsRéalis, 2024).

Consideration of Reasonable Alternatives 3.3

The design changes as discussed in Section 2.1, and presented in Appendix 1.3. have not resulted in any material changes to this chapter, as presented in the original EIAR (AtkinsRéalis, 2024).

Population and Human Health 3.4

The design changes to the proposed development have been reviewed. It is concluded that the design changes as discussed in Section 2.1, and presented in Appendix 1.3. have not resulted in any material changes to this chapter, as presented in the original EIAR (AtkinsRéalis, 2024).

Biodiversity 3.5

The design changes to the proposed development have been reviewed. It is concluded, as a result of the design changes, there will be a minor decrease in the amount of existing grassland habitats lost to hard standing surfaces and a minor increase in the area designated for wildflower planting (estimated ca. 0.05 hectares). No additional mitigation measures are necessitated or proposed. Given design alterations result in only a minor change to grassland and / or wildflower habitats there is no perceptible change to the ecological impact assessment of the development as detailed in the Biodiversity Chapter of the EIAR.

The changes to the design of the proposed development will have no effect on Natura 2000 sites and as such the conclusion of the Appropriate Assessment Screening Report, that the proposed Effluent Balancing and Resource Recovery System, individually or in combination with other plans and project, will not give rise to likely significant effects on any European sites remains valid.

Landscape and Visual 3.6

The changes to the proposed development have been reviewed against the findings of the original application's EIAR's Chapter 6 landscape and Visual Impact Assessment (LVIA). The verified photomontages can be found in Appendix 3.1. .02/08/

Landscape

The proposed development's minor design layout changes will have no notable changes to the previously predicted Landscape Impacts and effects, as the principle of the proposed development remains the same and the minor site layout revisions occur within the same site boundary limits. The revised design layout will have a minor reduction of the overall construction footprint resulting in the slightly reduced loss of existing grassland vegetation cover to hardstanding, but this beneficial change will be barely perceptible across the site's receiving landscape.

The potential localised impacts and effects in terms of the LVIA assessment are primarily visual and are described below following a review of the proposed changes against the original Visual Impact Assessment.

Visual

The original EIAR LVIA considered a total of eight viewpoints to be assessed which took into consideration the views/setting of the proposed development within the local context.

The revised design layout has been remodelled by Model Works, who also produced the original application's photomontage visualisations, to help determine if there would be any potential visual changes to the original assessed eight viewpoints. The set of revised photomontage visual figures are included within this report's addendum, and these can be viewed alongside the original application visualisation pack to compare the limited potential visual changes resulting from the proposed development's design layout changes.

Out of the eight original assessed viewpoints only receptors by Viewpoint 1 will experience some minor perceptible visual changes to its previously modelled predicted views due to differences in the design layout. These changes are discussed below. While the proposed design changes will not be visible from the remaining seven viewpoints of which the original proposed development was also not visible from, as indicated by the red outline on the figures.

The potential design changes which will be apparent from Viewpoint 1 include some localised visible changes in the proposed buildings/structures layout and heights. In this viewpoint's original proposed view, the proposed development structures appear to be slightly taller and of a more prominent form set behind the administration building than the that of the proposed revised design structures, as shown in the revised photomontage view. Here the proposed building is set slightly lower in the view, allowing very slight improved visibility of the mountain's outline visibility against the distant background, and slightly reduced visibility of the some of the proposed supporting vertical elements along the rooflines and walls such as lifting arms, steps and piping. The prominence of the existing WuXi Biologics building and treatment plant elements visible in the background will remain the same for both views.

Overall, these proposed design changes will result in only a slight visible change to the proposed buildings profile between the modelled visuals of the original application and revised RFI photomontages for viewpoint 1 only. Such visual changes at this viewpoint will be barely perceptible upon receptor's brief fleeting views as they pass by along the road next to the site's roadside entrance. On balance the predicted visual effects remain the same as per the original visual assessment.

Mitigation measures outlined in the original LVIA chapter will remain the same. The only change being a slight increase in the overall proposed wildflower planting area (estimated ca. 0.05 hectares) previously proposed for the original application due to the design layout alternations.

EIAR Addendum.docx 100085897 1.0 | 02/08/2024 10 Overall, the proposed design changes are only minor and would not have any materially significant changes to the findings of the original EIAR application's Chapter 6 LVIA assessment. RCEILED.

Air Quality and Climate 3.7

While none of the changes are considered significant based on initial review, the detailed proposation design detail have been considered to assess whether the proposals (i.e. refined design) affect the impact assessments completed and submitted in the EIAR with the Planning Application (see Appendix 3.2). The review findings are summarised as follows:

- There is no change to the assessment of construction phase impacts on air quality or odour as a result of the minor changes.
- There is no change to the assessment of air quality impacts during the operational phase as a result of the minor changes.

For the operational phase odour impact assessment, when the height of structures located within a certain distance of a point emission source such as the Odour Control Unit, increases there is potential for an impact on dispersion of emissions from the discharge stack on the point source. In order to test the sensitivity of the Model to the minor changes in layout and structure height, the Dispersion Model was rerun with the layout changes, and it was determined that there was no significant change to the assessment findings presented in the EIAR. There are therefore no changes to the assessment of operational phase odour impacts submitted with the Planning Application and the overall findings and conclusions remain the same.

The detailed proposals and design detail have been considered to assess whether the proposals affect the impact assessments completed and submitted in the EIAR with the Planning Application. Although there are some modifications to the layout, the changes do not result in any quantifiable or materially significant change in the impact assessments presented in the EIAR. There are therefore no changes to the assessment submitted with the Planning Application.

Noise and Vibration 3.8

The changes to the proposed development have been reviewed. It is concluded, that due to the design changes, there will be a slight change in the predicted noise levels at sensitive receptors. However, the proposed development is still compliant with the limits set out in the licensed issued by the EPA under Industrial Emissions Licence P1122-01. No additional mitigation measures are necessitated or proposed. Given the design alterations result in only a minor change in predicted noise levels, there is no perceptible change to the noise and vibration impact assessment of the development as detailed in Chapter 8 of the EIAR.

Traffic 3.9

The changes to the proposed development have been reviewed and it is noted that, in general, the size of a number of the components are anticipated to decrease. Although the change in traffic impacts are expected to be imperceptible, the design changes would result in a slight decrease in site traffic and therefore impact. As a result, no changes to any of the current documentation are proposed.

3.10 Land, Soil and Geology

The design changes to the proposed development have been reviewed. It is concluded that the design changes as discussed in Section 2.1, and presented in Appendix 1.3. have not resulted in any material/changes to this chapter, as presented in the original EIAR (AtkinsRéalis, 2024). .01/08/20,

3.11 Water

The design changes to the proposed development have been reviewed. It is concluded that the design changes as discussed in Section 2.1, and presented in Appendix 1.3. have not resulted in any material changes to this chapter, as presented in the original EIAR (AtkinsRéalis, 2024).

3.12 Archaeology

An Archaeological Impact Assessment of the new site design was issued on 8th July 2024 by Archaeological Consultancy Services Limited (ACSU) (see Appendix 1.2).

Recommendations included in this report reflect the predicted impacts from the new layout of the proposed development. In brief, the revised layout represents reduction in the overall footprint of the tanks, bund and temporary compound area, to minimise the risk of impact on archaeological remains. In particular, the size of the proposed temporary compound was significantly reduced, ensuring that it is now excluded from the minimum 20m buffer zones recommended around ring-ditch LH012-101---- to the north and enclosure LH012-102---- to the east. Despite geophysical surveys and test excavations in the mapped area of souterrain LH012-055----, the exact location of this monument has not yet been established and so it is not possible to recommend a related exclusion zone; the likelihood, however, is that it may be within the buffer zone around enclosure LH012-102----.

It can be considered that the new layout of the proposed development represents a clear reduction in the potential for impact to LH012-101---- and LH012-102----, with 20m buffer zones being respected. The new layout also represents a significant reduction in the potential for impact to LH012-055----, though the exact location of this monument remains unclear. The exact location of the souterrain LH012-055 is unknown so, it is not possible to recommend a buffer zone. However, it is likely to be within the buffer zone around enclosure LH012-102----.

The 2024 ACSU Archaeological Impact Assessment (AIA) states that there will be no direct impact to RMPs, by establishing a minimum 20m buffer zone around a ring-ditch (LH012-101----) and enclosure (LH012-102----).

Following consideration of the new layout and recommendations included in the 2024 AIA, another mitigation measure has been recommended, and should be added to the list given in Section 12.8 of the EIAR:

A 20m buffer zone within which no works shall take place should be applied to LH012-101---- and LH012-102--. This buffer zones shall be agreed with the Local Authority and National Monuments Service. The buffer zone should be established prior to commencement of works, and maintained during construction, operation and any potential decommissioning of the development.

Please note all recommendations are subject to the approval of the Louth County Council and the National Monuments Service, Department of Housing, Local Government and Heritage.

Two of the tables in the original EIAR also need to be updated.

A revised Summary of Impacts and Impact Magnitude Prior to Mitigation which reflects the revised layout is included below (see Table 12-14 in the original EIAR).

Table 3-1 - Summary of impacts and impact magnitude prior to mitigation Provide the second secon						
CH No.	Site	Impact type	Construction Phase Impact	Magnitude of Impact Prior to Implementation of Mitigation Measures	Baseline Value	Significance Level of Impact Prior to Implementation of Mitigation Measures
CH001	Souterrain	Indirect	Zone of Notification crossed by redline boundary of the proposed development. Potential subsurface archaeology associated with the monument may be impacted by the ground reduction	Moderate	Very High	Moderate O
CH003	Enclosure	Indirect	Zone of Notification crossed by redline boundary of the proposed development. Potential subsurface archaeology associated with the monument may be impacted by the ground reduction	Moderate	Very High	Moderate
CH004	Habitation site	Indirect	Zone of Notification crossed by redline boundary of the proposed development. Potential subsurface archaeology associated with the monument may be impacted by the ground reduction	Moderate	Very High	Moderate
CH026; CH029	AAPs	Direct	Subsurface archaeology will be directly impacted by the ground reduction and other groundworks associated with the construction of Effluent Balancing and Resource Recovery System, and associated access road	Moderate	High	Moderate
CH027	AAP	Indirect	Subsurface archaeology may be directly impacted by construction traffic	Slight	High	Slight

A revised Summary of impacts and impact magnitude after implementation of mitigation layout is included below (see Table 12-15 in the original EIAR):

Q

CH No	Phase	Impact Type	Mitigation Measures	Magnitude of Impact after Implementation of Mitigation Measures
CH001	Construction	Indirect	A 20m buffer zone within which no works shall take place should be applied to LH012-101 and LH012-102). This buffer zones shall be agreed with the Local Authority and National Monuments Service. The buffer zone should be established prior to commencement of works, and maintained during construction, operation and decommissioning of the development.	Sjight
			A programme of archaeological monitoring should be undertaken in all areas where groundworks and ground reduction (including enabling works and landscaping) are to be carried out. This should be undertaken by a suitably qualified archaeologist under licence, as issued by the minister (DoHLGH under Section 26 of the National Monuments Acts (1994-2014). Should any additional archaeological material be encountered mechanical excavation will cease and a strategy will be proposed to the County Archaeologist and National Monuments Service to preserve the site in situ, where possible. Where preservation in situ cannot be achieved, either in whole or in part, then a programme of full archaeological excavation will be proposed, to ensure the preservation by record of the portion of the site that will be directly impacted upon. This work should be carried out by a suitably qualified archaeologist under license and in accordance with the provisions of the National Monuments Acts 1930-2014.	
CH003	Construction	Indirect	A 20m buffer zone within which no works shall take place should be applied to LH012-101 and LH012-102). This buffer zones shall be agreed with the Local Authority and National Monuments Service. The buffer zone should be established prior to commencement of works, and maintained during construction, operation and decommissioning of the development.	Slight
			A programme of archaeological monitoring should be undertaken in all areas where groundworks and ground reduction (including enabling works and landscaping) are to be carried out. This should be undertaken by a suitably qualified archaeologist under licence, as issued by the minister (DoHLGH under Section 26 of the National Monuments Acts (1994-2014). Should any additional archaeological material be encountered mechanical excavation will cease and a strategy will be proposed to the County Archaeologist and National Monuments Service to preserve the site in situ, where possible. Where preservation in situ cannot be achieved, either in whole or in part, then a programme of full archaeological excavation will be proposed, to ensure the preservation by record of the portion of the site that will be directly impacted upon. This work should be carried out by a suitably qualified archaeologist under license and in accordance with the provisions of the National Monuments Acts 1930-2014.	
ar			EIAR Addendum.docx 100085897 1.0 02/08/2024 14	

				<i>N</i> ,
CH No	Phase	Impact Type	Mitigation Measures	Magnitude of Impact after Implementation of Mitigation Measures
CH026	Construction	Direct	The preceding archaeological assessment identified the presence of archaeological remains within the application boundary Thirty-one features identified included 10 linear deposits, 15 pits identified in isolated locations, 2 possible postholes, a hearth, and a metalled surface. As preservation in-situ is not possible, it is recommended that all archaeological features impacted by the proposed development are stripped of topsoil under archaeological supervision and preserved by record (archaeological excavation) in advance of construction.	Moderate
			A programme of archaeological monitoring should be undertaken in all areas where groundworks and ground reduction (including enabling works and landscaping) are to be carried out. This should be undertaken by a suitably qualified archaeologist under licence, as issued by the minister (DoHLGH under Section 26 of the National Monuments Acts (1994-2014). Should any additional archaeological material be encountered mechanical excavation will cease and a strategy will be proposed to the County Archaeologist and National Monuments Service to preserve the site in situ, where possible. Where preservation in situ cannot be achieved, either in whole or in part, then a programme of full archaeological excavation will be proposed, to ensure the preservation by record of the portion of the site that will be directly impacted upon. This work should be carried out by a suitably qualified archaeologist under license and in accordance with the provisions of the National Monuments Acts 1930-2014.	
CH029	Construction	Direct	The preceding archaeological assessment identified the presence of archaeological remains within the application boundary Thirty-one features identified included 10 linear deposits, 15 pits identified in isolated locations, 2 possible postholes, a hearth, and a metalled surface. As preservation in-situ is not possible, it is recommended that all archaeological features impacted by the proposed development are stripped of topsoil under archaeological supervision and preserved by record (archaeological excavation) in advance of construction.	Moderate
			A programme of archaeological monitoring should be undertaken in all areas where groundworks and ground reduction (including enabling works and landscaping) are to be carried out. This should be undertaken by a suitably qualified archaeologist under licence, as issued by the minister (DoHLGH under Section 26 of the National Monuments Acts (1994-2014). Should any additional archaeological material be encountered mechanical excavation will cease and a strategy will be proposed to the County Archaeologist and National Monuments Service to preserve the site in situ, where possible. Where preservation in situ cannot be achieved, either in whole or in part, then a programme of full archaeological excavation will be proposed, to ensure the preservation by record of the portion of the site that will be directly impacted upon. This work should be carried out by a suitably qualified archaeologist under license and in accordance with the provisions of the National Monuments Acts 1930-2014.	
a		. ₁ 2	EIAR Addendum.docx 100085897 1.0 02/08/2024 15	

CH No	Phase	Impact Type	Mitigation Measures	Magnitude of Impact after Implementation of Mitigation Measures
CH07	Construction	Indirect	The 'Area of Archaeological Concern' (CH027) identified in the preceding geophysical survey and located immediat adjacent to the proposed development site application boundary, should entirely excluded, fenced off, and protec from all development traffic or other potential impacts from the development for the duration of the construction pha	ety Negligible ted se.
			Jiewillis	
			ingpero	
or			EIAR Addendum.docx 100085897 1.0 02/08/2024 16	

3.13 Material Assets

The design changes to the proposed development have been reviewed. It is concluded that the design changes as discussed in Section 2.1 and presented in Appendix 1.3. have not resulted in any material changes to this chapter, as presented in the original EIAR (AtkinsRéalis, 2024). 02/08/

3.14 Cumulative Effects

The design changes as discussed in Section 2.1, and presented in Appendix 1.3. have not resulted in any material changes to this chapter, as presented in the original EIAR (AtkinsRéalis, 2024).

3.15 Interactions

The design changes as discussed in Section 2.1, and presented in Appendix 1.3. have not resulted in any material changes to this chapter, as presented in the original EIAR (AtkinsRéalis, 2024).

3.16 Schedule of Environmental Commitments

A technical review of the design changes to the proposed development has been carried out by all SMEs, in the context of the original EIAR (AtkinsRéalis, 2024). The findings of each technical review are presented above. Based on this review, there is one change proposed to Chapter 16 - Schedule of Environmental Commitments of the original EIAR (AtkinsRéalis, 2024).

Additional Mitigation Measures

As per the recommendations of Dr Enda O'Flaherty (Rubicon Heritage Services Ltd) and ACSU (2024), 1no. additional mitigation measure should be added to the list given in Chapter 12 – Archaeology (Section 12.8) and Chapter 16 -Schedule of Environmental Commitments of the original EIAR (AtkinsRéalis, 2024), as follows:

A 20m buffer zone within which no works shall take place should be applied to LH012-101---- and LH012-102--. This buffer zones shall be agreed with the Local Authority and National Monuments Service. The buffer zone should be established prior to commencement of works, and maintained during construction, operation and any potential decommissioning of the development.

The design changes as discussed in Section 2.1 and presented in Appendix 1.3. have not resulted in any other changes to Chapter 16 - Schedule of Environmental Commitments of the original EIAR (AtkinsRéalis, 2024).

For the purposes of clarity, the above additional mitigation measure should be added to Item 9 of the Mitigation Measures summary table, presented within Chapter 16 - Schedule of Environmental Commitments of the original EIAR (AtkinsRéalis, 2024).

Notwithstanding the above additional mitigation measure, the design changes as discussed in Section 2.1, and presented in Appendix 1.3. have not resulted in any material changes to this chapter, as presented in the original EIAR (AtkinsRéalis, 2024).

4. Conclusion

Based on the points raised by LCC in the FI request issued on 4th June 2024, the design of the proposed development has been carefully refined in order to address LCC's concerns, specifically around the location of the temporary construction compound relative to the archaeological features on subject site. Noted sites of recorded monuments include the following Souterrain (LH012-055----); Enclosure (LH012-102---) and Ring ditch (LH012-101---).

It should be noted that the red-line boundary area and the Project Description as per the planning submission have not changed.

The following key tasks have been completed:

- A suitably qualified archaeologist has carried out further archaeological impact assessment of the development. A copy of the full Archaeological Impact Assessment (ACSU, 2024) is presented within Appendix 1.2 of this EIAR Addendum. The creation of a 20m buffer zones established around the known sites of recorded monuments i.e. Souterrain, Enclosure and Ring ditch, has accordingly been included within additional proposed mitigation measures as documented in this EIAR Addendum.
- As part of the review, ACSU carried out relevant documentary research and inspected the development site. The Archaeological Impact Assessment included a detailed assessment of the new design proposals.
- A technical review of the design changes to the proposed development has also been carried out by all SMEs, in the context of the original EIAR (AtkinsRéalis, 2024). The findings of each technical review are documented within this EIAR Addendum. Based on this review, there is one change proposed to Chapter 16 - Schedule of Environmental Commitments of the original EIAR (AtkinsRéalis, 2024) as previously noted and summarised as follows:
 - <u>A 20m buffer zone within which no works shall take place should be applied to LH012-101---- and LH012-102---</u>. This buffer zones shall be agreed with the Local Authority and National Monuments Service. The buffer zone should be established prior to commencement of works, and maintained during construction, operation and any potential decommissioning of the development.
- Notwithstanding the above additional mitigation measure, and minor updates by the relevant SMEs as presented within Chapter 3 of this EIAR Addendum, the design changes as discussed in Section 2.1, and presented in Appendix 1.3. have not resulted in any material / significant changes to the original EIAR (AtkinsRéalis, 2024).

This addendum document has been prepared to supplement and links into the original EIAR (3no. volumes). The EIAR should therefore be considered wholly as follows:

- EIAR (AtkinsRéalis, April 2024) Volume 1-3;
- EIAR Addendum (AtkinsRéalis, August 2024).

5. References

Archaeological Consultancy Services Unit (ACSU). 2024. Archaeological Impact Assessment Report WuXi Biologics Ireland Ltd Effluent Balancing and Resource Recovery Plant (EBRRP), Haynestown, Dundak, Co. Louth.

AtkinsRéalis. 2024. Environmental Impact Assessment - Volume 2.

Louth County Council (LCC). 2024. Further Information Request.

Model Works. 2024. Verified Photomontages.

TMS Environmental Ltd. 2024. Re: WuXi Biologics EIAR for the Effluent Balancing and Resource Recovery System Sev. Haming Department. Viewing Pu Addendum.



Appendices

Appendix 1

- PECENED. 02/08/201 1.1. Louth County Council: Further Information Request
- **1.2.** Archaeological Impact Assessment (AIA): EBRRP at Haynestown, Dundalk, Co. Louth
- 1.3. Final Planning Pack Drawings (Glanua)

Appendix 3

- 3.1. Verified Photomontages (Model Works)
- 3.2. Review of WuXi Biologics EIAR (TMS Environment Ltd.)

Note – The above appendices are submitted as standalone files.

AtkinsRéalis



WS Atkins Ireland Limited

150-155 Airside Business Park Swords Co. Dublin K67 K5W4

Tel: +353 1 810 8000

© WS Atkins Ireland Limited except where stated otherwise

RECEIVED. OPLOBRODA