



# Response to Further Information Request: Item 8 Biodiversity and Item 10 Ornithology Plan

Sand and Gravel Extraction, Knockroe, Bandon, Co. Cork  
(P. Ref. 25/04666)

Keohane Readymix Ltd.

Prepared by:

SLR Environmental Consulting (Ireland) Ltd

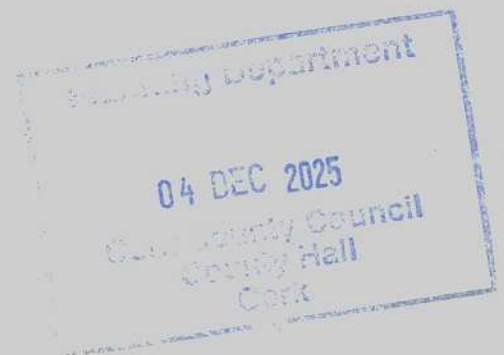
7 Dundrum Business Park, Windy Arbour, Dublin, D14  
N2Y7

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254666-04/12/2025-FI Item 8 Biodiversity & Item 10  
Ornithology Plan

## Revision Record

Revision	Date	Prepared By	Checked By	Authorised By
02	2 December 2025	Faolán Linnane	Michael Bailey	T. Paul

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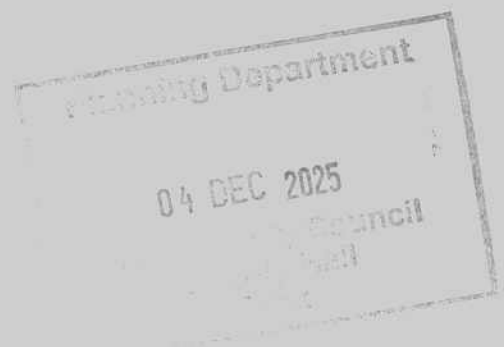
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## 1.0 Introduction

The following has been devised to address Item 8 and Item 10 of a request for further information (RFI) from Cork County Council (CCC) in relation to the planning application 25/04666. The Planning application is for the following;

*“Permission for extraction of sand & gravel over an area c3.5 ha; extraction by dry working to a level 2 metres above ground water level at a maximum rate of 100,000 tonnes per year; transport of the extracted sand & gravel to the adjacent Dromkeen pit (plan ref. 23/04780) for use in concrete production; upgrading of the existing internal access road and use of the existing access onto the local road L3204; provision of wheelwash and welfare unit (c8.3sqm) and restoration of the lands to agricultural and natural habitat use, all within an application area of c4.0 hectares. Permission is sought for 15 years plus two years for final restoration (total duration of seventeen years). The planning application will be accompanied by an Environmental Impact Assessment Report (EIAR)”.*

Items 8 and 10, for which this response has been prepared, read as follows:

**ITEM 8)** *In addition to the above you are requested to submit a revised EIAR Biodiversity Chapter which includes the following:*

- a) *Assessment of potential impacts to scrub habitat, including the extent of removal, as a result of the proposed development.*
- b) *Clarification on the potential loss of woodland habitat as a result of the installation of the welfare unit (per drawing no. PL05).*
- c) *Results of a breeding bird survey and information on the use of the site as a roosting or foraging site for overwintering birds, informed by surveys (given the proximity to Bandon Estuary).*
- d) *Biodiversity net gain measures at the end of the development, per the restoration plan, are not sufficient as they are planned for over 15 years after the removal of scrub habitat. More immediate measures to address the net loss of biodiversity are required. The revised Chapter should include these measures and have reference to the Tree Survey Report.*

**ITEM 10)** *The proposed quarry may, in time, provide suitable nesting opportunities for breeding sand martins. You are requested to submit a detailed Ornithology Plan for the quarry. The plan should include a programme of annual monitoring for sand martin, and any other nesting birds, to be carried out by an experienced ornithologist. The plan should also include details of mitigation measures to be implemented, including measures to provide for undisturbed buffers around breeding sites for these species.*



## 2.0 Responses

### 2.1 Item 8 Biodiversity

**a) Assessment of potential impacts to scrub habitat, including the extent of removal, as a result of the proposed development.**

A revised version of the EIAR Biodiversity chapter has been completed with all amendments regarding scrub habitat being addressed. The revised Biodiversity chapter has been submitted along with this document as part of the overall FI response. This revised chapter outlines the potential impact to scrub habitat as a result of the proposed project including the extent and significance of the removal.

**b) Clarification on the potential loss of woodland habitat as a result of the installation of the welfare unit (per drawing no. PL05).**

There will be no loss of woodland habitat to facilitate the installation of the welfare unit. The original **Drawing PL05** (see Error! Reference source not found. below) did not properly distinguish between woodland habitat and scrub / open scrub mosaic habitat. However, the more accurate habitat map, Figure 5-1, submitted as part of the Biodiversity Chapter of the original EIAR (see **Figure 5-1** in Error! Reference source not found. below). It is clear from Drawing PL05 and Figure 5-1 that the welfare unit will be installed within an area that is currently a mix of scrub and open scrub mosaic habitat. These scrub and woodland habitats have been further assessed within this document and the revised EIAR, and with the suitable mitigation implemented there will be no significant residual effects on the woodland habitat or any other habitats of the Site following the removal of a small amount of vegetation to allow for the new welfare unit.

**c) Results of a breeding bird survey and information on the use of the site as a roosting or foraging site for overwintering birds, informed by surveys (given the proximity to Bandon Estuary).**

#### **Breeding Birds**

The field surveys were carried out at the Site in September 2024 and although this was outside the bird breeding season, the survey deemed that the Site provided a limited range of habitats suitable for use by breeding birds. As such, a precautionary principle was applied to the assessment of the breeding bird potential of the Site. In the first instance a desk study was carried out to identify historical records of bird species at the Site and surrounding area using data from the National Biodiversity Data Centre (NBDC); the results of NBDC search can be seen in **Table 1**. Records of five species which are categorised as Red listed on the Birds of Conservation Concern in Ireland 4: 2020-2026 (BoCCI)<sup>1</sup> were returned for this Site. These

<sup>1</sup> <https://birdwatchireland.ie/app/uploads/2021/04/BOCCI-2020-2026.pdf>



include common kestrel *Falco tinnunculus*, common redshank *Tringa totanus*, common swift *Apus apus* and yellowhammer *Emberiza citronella*. There are ten species that are listed as Amber on the BOCCI list. These species are barn swallow *Hirundo rustica*, common kingfisher *Alcedo atthis*, common shelduck *Tadorna tadorna*, eurasian teal *Anas crecca*, house martin *Delichon urbicum*, lesser black-backed gull *Larus fuscus*, mallard *Anas platyrhynchos*, mute swan *Cygnus olor*, sand martin *Riparia riparia* and spotted flycatcher *Muscicapa striata*.

The original biodiversity chapter describes the habitats on Site as being of local importance to birds but does not expand on the potential impact on breeding birds from the removal of locally important habitats in the context of the surrounding landscape.

The total amount of agricultural grassland habitat being lost is approximately 4.06 hectares. This loss is negligible when considering the surrounding landscape which is dominated by agricultural fields that stretch from the Site to Bandon over 4.5km east and Kilmacsimon 2 km south, equating to over 1000 hectares of land dominated by agricultural grassland immediately around and to the east of the Site. The agricultural field offers some foraging habitat for species such as kestrel, yellowhammer and lesser blacked gull. However, the loss of this proportionately small area of habitat will be negligible for foraging birds in the context of the surrounding land use. Furthermore, the loss of this habitat will be temporary as the Site will be returned to its original agricultural land use following completion of the lifespan of the proposed development.

The extent of the scrub habitat that will be removed is approximately 0.048 hectares. This habitat offers limited opportunities for breeding birds. Of the birds recorded in the NBDC records there is only potential for yellowhammer and spotted flycatcher to utilise the scrub for breeding. Immediately surrounding this scrub habitat on both sides is approximately 2.08 hectares of woodland habitat which is of considerably higher significance for breeding birds, and which will not be disturbed by the proposed development. It is anticipated that a very small number of breeding birds will be affected by the loss of this small section of scrub habitat when much more valuable breeding habitat is present. Even still, using the precautionary principle, mitigations measures are to be implemented as part of the proposed development to ensure there are no significant impacts on breeding bird assemblages from the removal of any habitat. These mitigations are outlined in paragraph 5.169 of the accompanying revised biodiversity chapter and read as follows;

*“Vegetation removal required for the proposed development (refer to EIAR Figure 2-6) will be undertaken outside the nesting bird season (i.e., vegetation removal will be limited to September to February) in order to avoid risking harm or disturbance to nesting birds. Any vegetation removal that must be undertaken within the nesting bird season must undergo a nesting bird check by a qualified ecologist. Any nesting birds will be protected by an appropriate buffer to be determined following the nesting bird check”.*

Furthermore, as outlined in Section 2.4 Compensatory Planting Details and figure RFI 9-1 of the accompanying Tree Survey report submitted as part of the Further Information response; upon commencement of the proposed development a 660 m long native hedgerow will be planted along the boundary of the Site. This habitat will compensate for the removal of the small area of scrub with a further 800 m<sup>2</sup> of a diverse native tree mix being planted in two pockets on the pit floor when the extraction works are completed. This planting regime will ensure a net gain in terms of the habitat area within the Site for breeding birds in both the short and long term.

Given all this, applying a precautionary principle and the appropriate mitigation in place, including the temporary removal of negligible areas of locally suitable habitat for breeding birds, and the planting regimes, it has been assessed that there will be no significant residual impacts on breeding birds as a result of the proposed project.



**Table1: Results of the NBDC database search**

Species	Date of Last Record	No. of Records	Conservation Status	Dataset
Common kestrel <i>Falco tinnunculus</i>	2011	2	Birds of Conservation Concern: <b>Red</b>	Bird Atlas 2007 – 2011
Barn swallow <i>Hirundo rustica</i>	2020	4	Birds of Conservation Concern: <b>Amber</b>	Birds of Ireland
Common kingfisher <i>Alcedo atthis</i>	2020	3	Birds of Conservation Concern: <b>Amber</b> EU Birds Directive: Annex I	Birds of Ireland
Common redshank <i>Tringa totanus</i>	2011	1	Birds of Conservation Concern: <b>Red</b>	Bird Atlas 2007 – 2011
Common shelduck <i>Tadorna tadorna</i>	1991	1	Birds of Conservation Concern: <b>Amber</b>	The Second Atlas of Breeding Birds in Britain and Ireland: 1988-1991
Common swift <i>Apus apus</i>	2023	4	Birds of Conservation Concern: <b>Red</b>	Swifts of Ireland
Eurasian curlew <i>Numenius arquata</i>	2011	1	Birds of Conservation Concern: <b>Red</b>	Bird Atlas 2007 – 2011
Eurasian teal <i>Anas crecca</i>	2011	1	Birds of Conservation Concern: <b>Amber</b>	Bird Atlas 2007 – 2011 04 DEC 2025
House martin <i>Delichon urbicum</i>	2011	1	Birds of Conservation Concern: <b>Amber</b>	Bird Atlas 2007 – 2011
Lesser black-backed gull <i>Larus fuscus</i>	2011	1	Birds of Conservation Concern: <b>Amber</b>	Bird Atlas 2007 – 2011
Little egret <i>Egretta garzetta</i>	2019	3	Birds of Conservation Concern: <b>Green</b> EU Birds Directive: Annex I	Birds of Ireland
Mallard <i>Anas platyrhynchos</i>	2020	6	Birds of Conservation Concern: <b>Amber</b>	Birds of Ireland
Mute swan <i>Cygnus olor</i>	2020	4	Birds of Conservation Concern: <b>Amber</b>	Birds of Ireland
Peregrine falcon <i>Falco peregrinus</i>	2019	1	Birds of Conservation Concern: <b>Green</b> EU Birds Directive: Annex I	Birds of Ireland
Sand martin <i>Riparia riparia</i>	2011	1	Birds of Conservation Concern: <b>Amber</b>	Bird Atlas 2007 – 2011
Spotted flycatcher <i>Muscicapa striata</i>	2011	2	Birds of Conservation Concern: <b>Amber</b>	Bird Atlas 2007 – 2011
Yellowhammer <i>Emberiza citrinella</i>	2011	1	Birds of Conservation Concern: <b>Red</b>	Bird Atlas 2007 – 2011



### **Over-wintering Birds**

The use of the Site and surrounding areas as roosting or foraging sites for overwintering birds is currently being assessed through a series of monthly surveys which commenced in November 2025. The surveys are ongoing and will be completed in March 2026.

The bird survey methodology and the findings to date are presented below.

### **Bird Survey Methodology**

The methodology for the surveys is in line with best practice bird survey guidelines<sup>234</sup> and are as follows;

#### **Feeding Distribution Surveys:**

Diurnal searches of suitable terrestrial foraging habitat for over-wintering and/or resident populations of swans, geese, wildfowl and waders (target species) within 2km of the Site are being conducted every fortnight for each month during the winter period (November to March). This is undertaken by a driven transect with selected stopping points adjacent to and surrounding the Site; all foraging swans, geese, wildfowl and waders will be recorded on a map. Surveys are also conducted on foot where suitable habitat exists within the Site that cannot be viewed from vehicle or roadside.

#### **Roost Surveys**

In order to determine the potential or actual use of the Site by roosting birds, dawn / dusk roost surveys are being conducted between November 2025 and March 2026. The dawn watches commence at civil twilight i.e. 30 minutes before sunrise and continue for 1.5 hours after sunrise. The dusk watches start at civil twilight i.e. 1.5 hours before the time of sunset and continue for 30 minutes after sunset. These surveys are being conducted at the Site and at various pre-selected locations which provide good coverage of the suitable habitats surrounding the Site which may be utilised by the target species.

### **Summary of Survey Findings to Date**

A summary of the results of the November 2025 survey visits and the first round of December 2025 surveys can be seen in **Table 2** below:

**Table 2: Summary of Results from the November and first survey of December 2025**

<b>Season</b>	<b>Date Month</b>	<b>Survey Type</b>	<b>Survey Hours</b>	<b>Notes</b>
Non – Breeding Season 2025 / 2026	18 Nov 2025	Feeding Distribution	10:15 – 12:15	<ul style="list-style-type: none"> <li>• There were no limitations to the Survey</li> <li>• No target or incidental species were recorded within the Site.</li> <li>• Black – headed gulls (BH), lesser black backed gulls (LB) and black tailed godwits (BW) were all recorded utilising the Bandon River within 2km of the Site. Table 2</li> </ul>

<sup>2</sup> <https://birdsurveyguidelines.org/non-breeding-walkover-survey/>

<sup>3</sup> [Recommended bird survey methods to inform impact assessment of onshore windfarms | NatureScot](#)

<sup>4</sup> Gilbert, G., Gibbons, D.W., & Evans, J. (1998) Bird Monitoring Methods: A Manual of Techniques for UK Key Species. The Royal Society for the protection of Birds, Sandy, Bedfordshire, England.



Non – Breeding Season 2025 / 2026	18 Nov 2025	Dawn Roost Survey	07:30 – 09:30	<ul style="list-style-type: none"> <li>• There were no limitations to the Survey</li> <li>• There were no target or incidental species recorded utilising the Site.</li> <li>• A number of incidental species were recorded flying over the Site including 7 x black headed gulls (BH), 11 x lesser black backed gulls (LB) and 1 x heron (H)</li> </ul>
Non – Breeding Season 2025 / 2026	27 Nov 2025	Feeding Distribution		<ul style="list-style-type: none"> <li>• There were no limitations to the Survey</li> <li>• There were no target or incidental species recorded utilising the Site.</li> <li>• 200 Golden Plover (GP) were recorded flying over fields approximately 2.1 km east of the Site.</li> </ul>
Non – Breeding Season 2025 / 2026	27 Nov 2025	Dusk Roost Survey		<ul style="list-style-type: none"> <li>• There were no limitations to the Survey</li> <li>• There were no target or incidental species recorded utilising the Site.</li> <li>• 1 BH flight line (19 individuals), 1 Herring Gull (HG) flight line (1 individual) and 1 Raven (RN) flight line were recorded during the survey. All individuals were recorded flying west over the Site toward the River Bandon but none utilised the Site.</li> </ul>
Non – Breeding Season 2025 / 2026	02 Dec 2025	Feeding Distribution	10:30 – 12:30	<ul style="list-style-type: none"> <li>• There were no limitations to the Survey</li> <li>• There were no target or incidental species recorded utilising the Site.</li> <li>• BH, HG, LB, BW, H and Curlew (CU) were all recorded utilising the River Bandon within 2 km of the Site but none were recorded in the surrounding fields.</li> </ul>
Non – Breeding Season 2025 / 2026	02 Dec 2025	Dawn Roost Survey	07:50 – 09:50	<ul style="list-style-type: none"> <li>• There were no limitations to the Survey</li> <li>• There were no target or incidental species recorded utilising the Site.</li> <li>• 1 Lb flight line (1 individual) and 5 BH flight lines (58 individuals) were recorded. All birds flew from over</li> </ul>



				the River Bandon to the west of the Site in an eastward direction.
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To date no target species (swans, geese, wildfowl and waders) have been observed utilising the habitats within or adjacent to the Site for foraging or roosting purposes.

***d) Biodiversity net gain measures at the end of the development, per the restoration plan, are not sufficient as they are planned for over 15 years after the removal of scrub habitat. More immediate measures to address the net loss of biodiversity are required. The revised Chapter should include these measures and have reference to the Tree Survey Report.***

It is envisaged that the final restoration will take 2 years following permanent cessation of extraction (15-year lifespan). However, the final 2 years is for the “restoration phase” and encompasses returning the pit floor to agricultural grassland and adding pockets of native trees on the pit floor as per (EIAR Figure 2-5 in Appendix A).

There will be a “landscape phase” which will comprise a planting scheme and habitat creation that will take place upon commencement of the development. The landscape phase will include the following elements:

- Retention of all existing trees/scrub/woodland vegetation within the land interest boundary with the exception of the small number of trees/scrub vegetation along the proposed access track, refer to separate Tree Survey report submitted in response to Item 9 of the Request for Further Information.
- The planting of 660 m of diverse native hedgerow along the northern and part of the south-western and eastern boundaries of the proposed extraction area to mark/secure the edge of the pit slopes, provide habitat linkage and compensate for the loss of existing tree/scrub, refer to Figure RFI 9-1 Compensatory Planting Map and Details submitted in response to Item 9 of the Request for Further Information.

Details of the landscape and restoration phases can be seen in **EIAR Figure 2-5 in Appendix A.**

This initial planting is significantly larger and more valuable than the habitat than the poor condition scrub that will be removed and that will mitigate against the loss of scrub at the Site and ensure a net gain for biodiversity at an early stage of the development.

The supplemental but significant planting during the restoration phase of the project at the end of its lifespan will only further enhance the biodiversity value at the Site although it is not a direct or immediate replacement of the initial scrub habitat which will be removed.

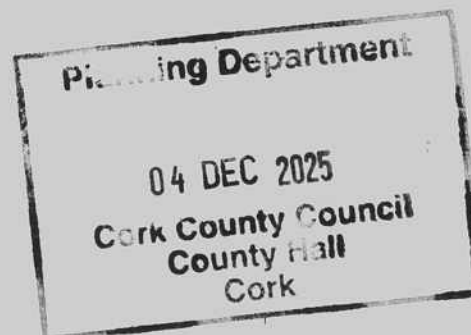
A tree survey was carried out and a report prepared out as requested by CCC. This Tree Report has been submitted as a separate item under FI response Item 9, and details the extent of the removal of scrub required as well as detailing additional mitigation measures for the protection and monitoring of large trees adjacent to the Site.

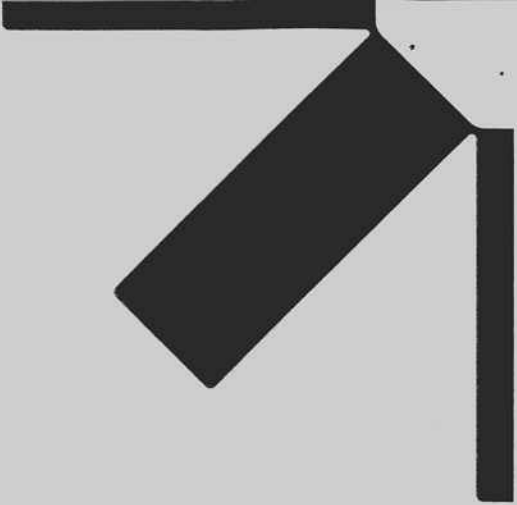


## 2.2 Item 10 Ornithology Plan

***The proposed quarry may, in time, provide suitable nesting opportunities for breeding sand martins. You are requested to submit a detailed Ornithology Plan for the quarry. The plan should include a programme of annual monitoring for sand martin, and any other nesting birds, to be carried out by an experienced ornithologist. The plan should also include details of mitigation measures to be implemented, including measures to provide for undisturbed buffers around breeding sites for these species.***

An Ornithology Plan has been prepared which outlines a detailed methodology for carrying out annual surveying, mitigation and monitoring of the Site for breeding birds, with a particular focus on potential breeding sand martin colonies; the Plan has been submitted as a separate report with the FI response. Sections 6.1.1 and 6.1.2 of the Plan include measures for provision of undisturbed buffers / exclusion zones around breeding sites.





# **Appendix A    Drawing PL05, Figure 5-1 Habitat Map and Figure 2-5 Landscape & Restoration Plan from EIAR**

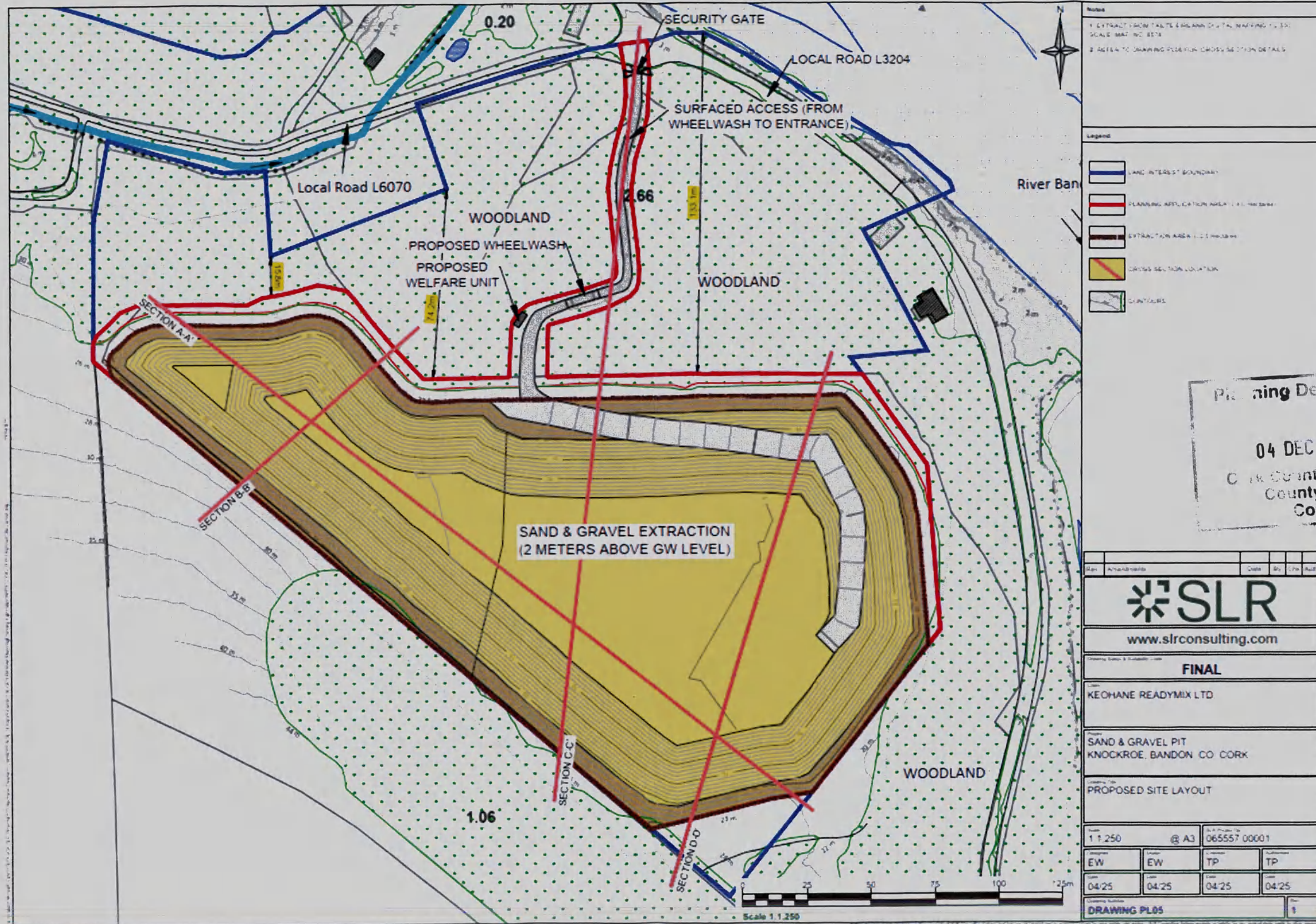
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**Sand and Gravel Extraction, Knockroe, Bandon, Co. Cork (P. Ref. 25/04666),  
Knockroe, Bandon, Co. Cork**

Keohane Readymix Ltd.

SLR Project No.: 501.065557.00001

28 November 2025



Notes  
 1. EXTRACT FROM TABLES & RELATED DRAWINGS TO SCALE. MAP NO. 8578  
 2. REFER TO DRAWING FOR CROSS SECTION DETAILS

Legend

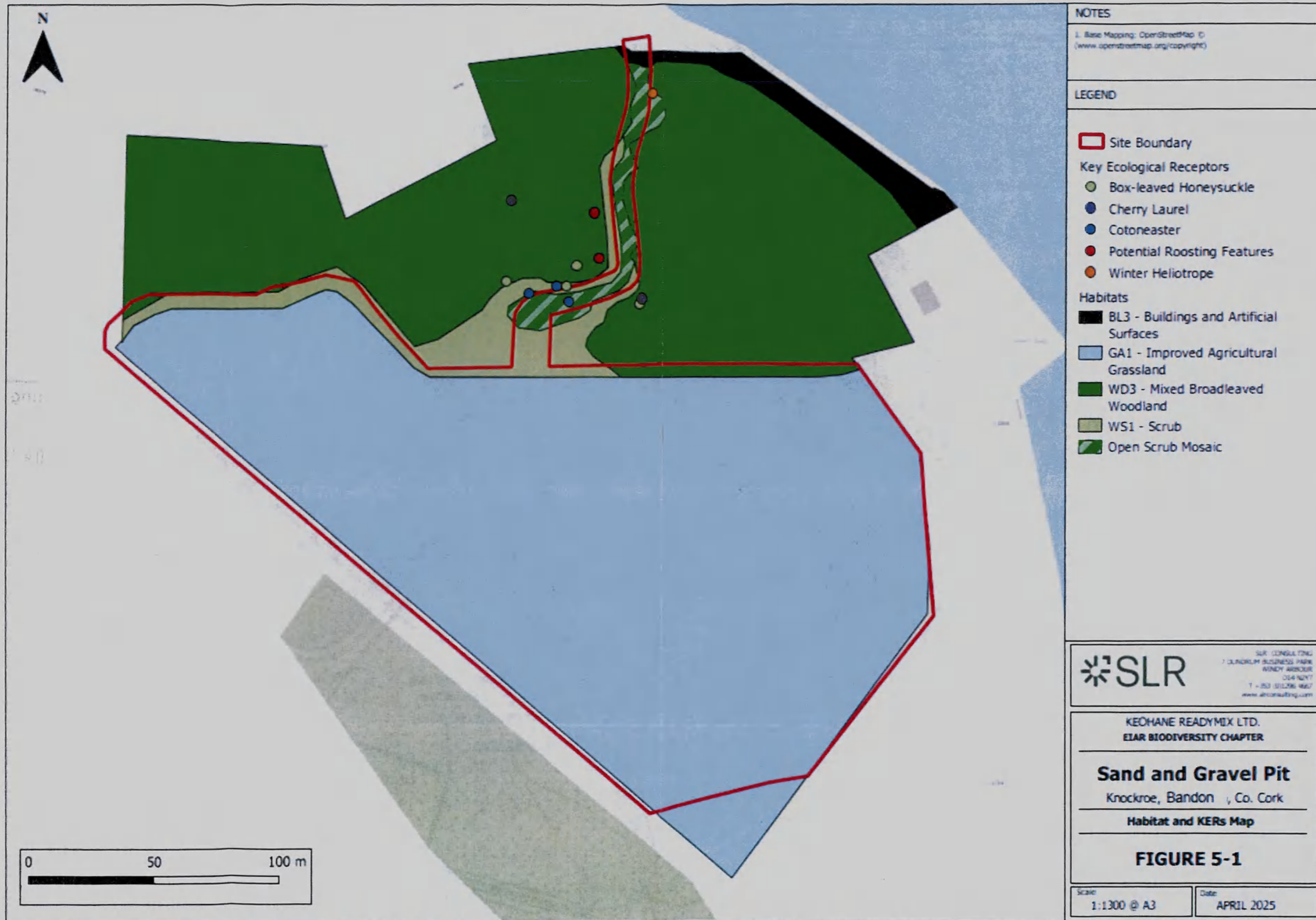
	LAND INTEREST BOUNDARY
	PLANNING APPLICATION AREA (1:1 HATCH)
	EXTRACTION AREA (1:1 HATCH)
	CROSS SECTION LOCATION
	CONTOURS

Planning Department  
 04 DEC 2025  
 Cork County Council  
 County Hall  
 Cork

Rev.	Amendment	Date	By	Chk	Aut
www.slrconsulting.com					
Drawing Status & Submittal Code					
<b>FINAL</b>					
Client: KEOHANE READYMIX LTD.					
Project: SAND & GRAVEL PIT KNOCKROE, BANDON CO. CORK					
Drawing Title: PROPOSED SITE LAYOUT					
Scale: 1:1,250		Sheet: @ A3		Project No: 065557.00001	
Author: EW	Checker: EW	TP	TP		
Date: 04/25	Date: 04/25	Date: 04/25	Date: 04/25		
Drawing Number: <b>DRAWING PL05</b>					

Drawing PL05: showing Proposed Site Layout and access route through woodland habitat





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Figure 5-1: Habitats and KERs Map from Biodiversity chapter of the EIAR



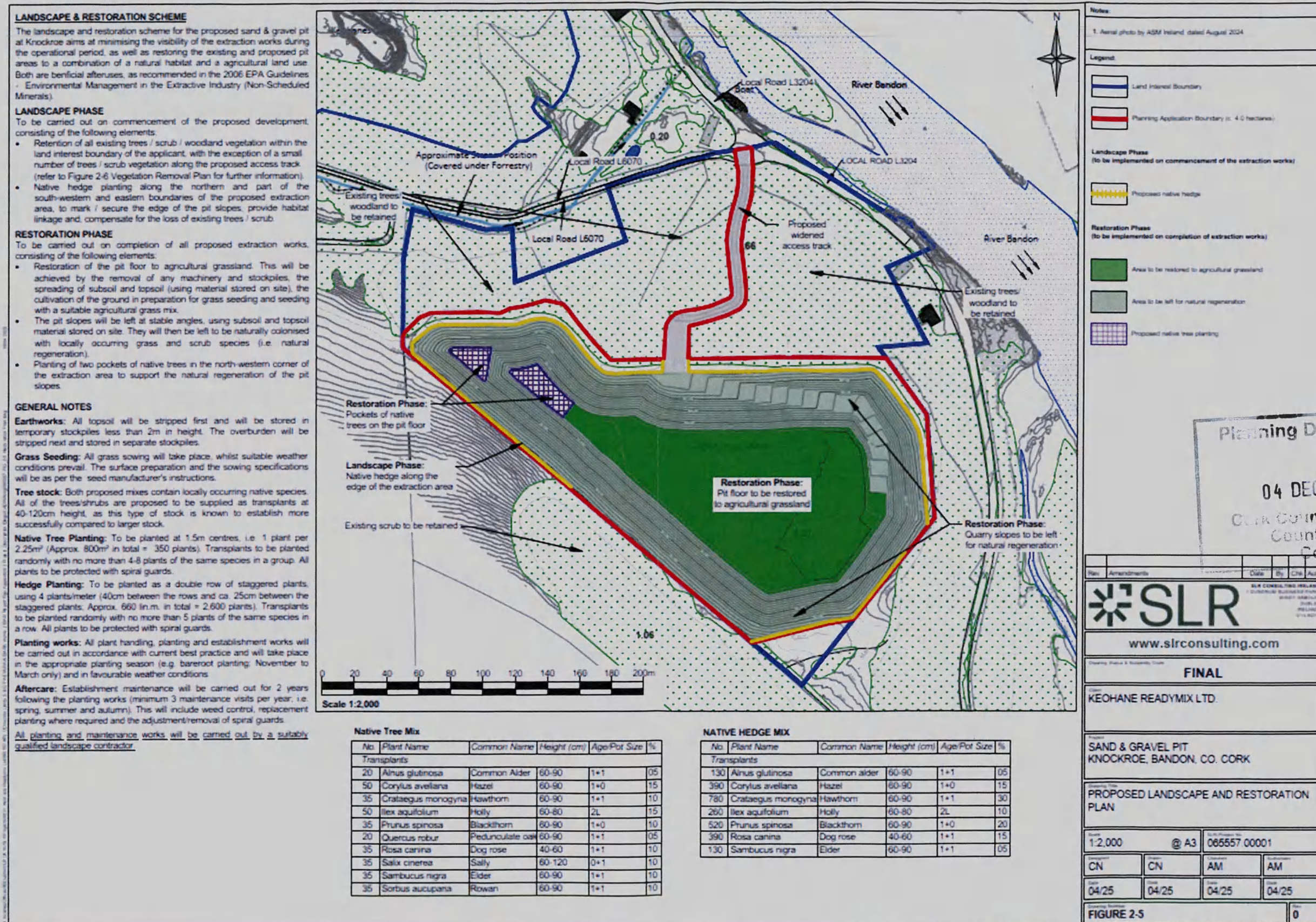
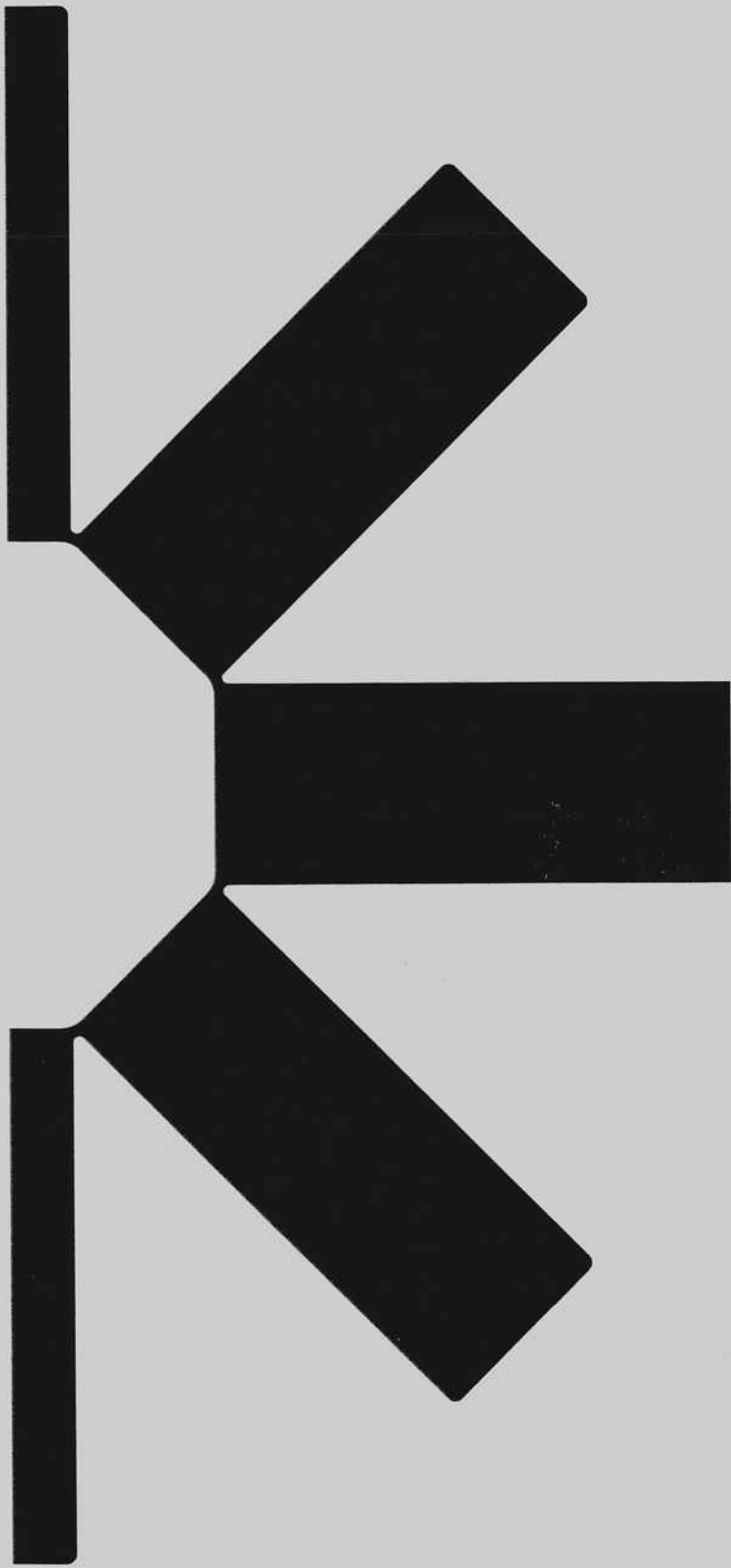


Figure 2-5 of EIAR: proposed restoration plan showing replanting of native tree plots





Planning Department  
04 DEC 2025  
Cork County Council  
County Hall  
Cork