

Inspector's Report ABP-310965-21

Development Continuance of use and proposed

extension at an existing sand and gravel pit. Proposed operational period is for 8 years plus 2 years to complete restoration (total duration sought 10 years). An Environmental Impact Assessment Report (EIAR) and a Natura Impact Statement (NIS)

have been prepared in respect of the

planning application.

Location Ballysaxhills, Kilcullen, Co. Kildare.

Planning Authority Kildare County Council

Planning Authority Reg. Ref. 21618

Applicant(s) Kilsaran Concrete (trading as

Kilsaran)

Type of Application Permission

Planning Authority Decision Refuse Permission

Type of Appeal First Party

Appellant(s) Kilsaran Concrete (trading as

Kilsaran)

Observer(s) Eco Advocacy

Ballyshannon Action Group

Date of Site Inspection 18th January 2023

Inspector Ian Boyle

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1.0 Site Location and Description

- 1.1. The appeal site comprises an existing sand and gravel pit (quarry) and a section of undeveloped land consisting of undulating agricultural fields.
- 1.2. The site is approximately 2km west of Kilcullen and 6km south of Newbridge in County Kildare. It is immediately south of The Curragh proposed Natural Heritage Area (pNHA) and The Curragh Camp (army barracks) is roughly 3km to the northwest. The M9 Motorway is to east and runs in a north south direction, generally. The R448 and R418 Regional Roads are to the southeast.
- 1.3. The overall site layout is irregular and defined on each of its boundaries by a combination of established hedgerows and quarry berms. Vehicular access is via a local road, the L6080, from the north of the site. The L6080 connects Kilcullen and the townland of Suncroft and traverses the Curragh Plains. The road leading into the quarry initially rises before meeting a gated entrance and then proceeding downwards via a steep decline into the comparatively level sand and gravel pit.
- 1.4. There is a staff and visitor car park, canteen, toilet facilities and site office on the lefthand side of the internal access road as one moves towards the centre of the site where the main quarrying activity and related infrastructure is located. The site levels for the existing sand and gravel pit floor and immediate surrounding vicinity vary between c. 105m AOD (pit floor) and up to 125 AOD (southwest) and 135m AOD (eastern boundary) where there are existing screening berms. There is no evidence of surface water courses on the site or adjacent the subject lands.
- 1.5. The active extraction area / working area comprises a concrete batching plant, concrete lab and containers, sand and gravel processing plant, silt sentiment ponds, ESB substation, bunded fuel tank, weighbridge, wheelwash, surface car park, site office, stockpile storage areas and other items of plant and equipment used in the ongoing quarrying activities. The existing pit is largely screened by constructed mounds, berms and the undulating landscape of the wider surrounding area.
- 1.6. The existing quarry is bordered on its southwestern boundary by undeveloped agricultural lands. The area consists of perennial grasses and low-lying scrub. There are subsurface deposits of sand and gravel present. The land is currently used for grazing sheep.

- 1.7. The site is roughly 500m northwest of Dún Ailinne (Hill Fort), which is of significant archaeological interest and a designated national monument. Dún Ailinne sits atop of Knockaulin Hill and is enclosed by an earthen bank and ditch. It is considered an important ancient ceremonial site that was used for ritual purposes during the Irish Iron Age. The site is visible from parts of both the existing quarry and the undeveloped area proposed for expansion. Knockaulin Hill itself is a distinctive focal point for the surrounding area given its elevated setting. Its lower sections are encircled by dense gorse and scrub and the intervening land uses between it and the subject site are predominantly expansive agricultural fields.
- 1.8. The character of the surrounding area is mainly rural agricultural comprising a mixture of pasture and arable farming land. There is also a presence of small rural enterprise and low density one-off rural housing. There are some small, wooded areas in the vicinity and two further quarries are situated a short distance to the northwest of the site (c. 50m and 300m, respectively). These quarries are not owned or operated by the Applicant and are unrelated to the subject site.
- 1.9. The site has an overall stated area of approximately 39.5ha.

2.0 **Proposed Development**

Continuation of Use

- 2.1. The proposed development comprises the continued use of the existing quarry for a further period of for eight years. This section of the subject site is approx. 28.1ha.
- 2.2. It includes the main components:
 - Extraction and processing of sand and gravel, including crushing, washing, and screening and a new holding pond.
 - Continued use of the existing batching plant (permitted under Reg. Refs 94/1109 and 90/52) and associated sand and gravel workings (permitted under Reg. Refs. 94/1109 and 89/150).
 - Site facilities including site offices, WC and wastewater treatment and percolation area, canteen, cloakroom, ESB substation and switch house, concrete lab, bunded fuel tanks and water recycling bays, weigh bridge and wheelwash (originally permitted under Reg. Ref. 06/651).

Extension to Sand and Gravel Pit

- 2.3. The proposed development also comprises an extension to the existing permitted sand and gravel pit of approx. 11.4ha. The extension area is to the west / southwest of the quarry.
- 2.4. The area for physical extraction to occur however is roughly 10.8ha. The worked-out underground resources would be processed by plant and machinery associated with the existing and permitted quarry. The remaining 0.6ha would accommodate an overburden storage area, additional screening berms and a buffer zone to preserve existing archaeological features in situ.
- 2.5. It is intended to continue the current method of extraction which is a load, haul and dump system. There is no new plant or machinery proposed as part of the extension area. No blasting would occur at the site, either as part of the existing quarry or its new extended area.

Restoration

- 2.6. The proposed development seeks to restore the entire site (permitted under Reg. Refs. 94/1109, 89/150 and 06/651) to a combination of agricultural and nature conservation areas / biodiversity afteruse.
- 2.7. The proposed operational period is for 8 years, plus 2 years to complete the restoration phase, resulting in a total duration sought of 10 years.

3.0 Planning Authority Decision

3.1. Decision

The Planning Authority refused permission for 3 no. reasons which are summarised as follows.

- The proposed area of extension, by reason of its scale, nature and proximity, would have a negative impact on the importance and setting of Dún Ailinne (a site of significant archaeological interest).
- 2) The proposed extension to the existing quarry by reason of its scale, nature and proximity to Dún Ailinne, which is included on a Tentative List submitted to UNESCO for nomination to the World Heritage List, would seriously injure

- the visual amenity of the area and disrupt the visual integrity of the historical setting of Dún Ailinne.
- 3) The proposed development would interrupt the integrity of a conspicuous ridgeline and have a negative impact on the landscape.

The full reasons for refusal are stated on the Manager's Order which is on file.

3.2. Planning Authority Reports

3.2.1. Planning Report

- The Planning Report sets out a full description of the proposed development and details of the site, its location and receiving context, as well as of the relevant policy context.
- The report summarises third party observations, the Council's internal
 technical reports and the various assessments and supporting documentation
 submitted in support of the application. It includes a planning assessment of
 the proposed development and confirms that a pre-planning meeting was held
 between the Applicant's representatives and the Council's Planning
 Department and Transportation Section in April 2021.
- The Environmental Impact Assessment (EIA) (Section 2 of the Planner's
 Report) identifies and assesses the effects of the proposed development on
 various environmental factors, and an Appropriate Assessment (AA) (Section
 3) has been completed in accordance with the provisions of the 'Appropriate
 Assessment of Plans and Projects: Guidance for Planning Authorities (2009)'.
- There are concerns regarding the conclusions drawn and impact categorisation in the Applicant's EIAR in relation to cultural heritage, and landscape and visual impact.
- The EIAR states that as the extraction works would be 'temporary' this can be considered as a form of mitigation and that the visual impacts on Dún Ailinne could be considered minor, temporary, reversible, and fully mitigated by restoration. However, this is misleading, and the Planning Authority considers that the nature and extent of the proposed works would have a significant and irreversible impact on the character and setting of Dún Ailinne. The proposed

- excavation of material would significantly alter the existing gently undulating landscape of patchwork paddocks in this area. #
- Cliff faces and deep pits are not natural features integral to the setting of the hillfort. The Planning Authority has a remit to protect the integrity of the archaeological features and their landscape setting. The proposed development would significantly alter the setting of Dún Ailinne and it should be refused for this reason.
- There are concerns regarding the concluding impact identification on the historical setting and archaeological landscape of Dún Ailinne as well as ridgelines. A moderate visual impact has been identified by the Applicant for views from the site. The overall landform will change and the Planning Authority considers the impact to be much more profound when assessed in the context of Dún Ailinne. Sand and gravel pits are referenced in the EIAR as detracting elements in the local landscape. The proposed development would detract from the hillfort, which is a significant landscape landmark and has substantial associated sub-surface archaeology in the wider area.
- The proposed development, subject to the mitigation measures outlined in the NIS (submitted as part of the application), will not adversely affect, either directly or indirectly, the integrity of any European site, either alone or in combination with other plans or projects.
- The report concludes that the remit of the Planning Authority is to balance the economic needs of economic activity in the County against environmental and social considerations and national and local policy supports extraction proposals, subject to environmental protection. However, having regard to the relevant national, regional, and local policy; the location, context, nature and use of the site and wider area; the scale, nature and extent of the existing development and proposed extraction extension area; proximity to the Curragh pNHA and its unique sensitivity landscape; and proximity to Dún Ailinne it is recommended that permission be refused for the proposed development.

3.2.2. Other Technical Reports

Water Services:

- 31st May 2021: No objection subject to conditions requiring only clean uncontained water from the development can enter the surface water system and that the soiled water management and lagoon operations must comply with the relevant statutory regulations.
- Refer application to Environment Section to review effluent and EIAR.

Heritage Officer:

- 22nd June 2021: Reviewed the EIAR (Chapters 5 'Biodiversity' and Chapter 12 'Cultural Heritage') and recommended refusal for the following reasons:
 - Potential impact on undiscovered archaeology.
 - Potential Outstanding Universal Value of the Dún Ailinne site.
- The report recommends that if further information is requested that an
 assessment should be carried out by a World Heritage expert of the potential
 impact of the proposed development on the Outstanding Universal Value of
 Dún Ailinne as part of the Royal Sites of Ireland serial nomination. The
 assessment should include photomontages of the site from the top of
 Dún Ailinne.
- The report also sets out conditions for where a grant of permission might be issued, including monitoring of groundwater to ensure the pit floor remains above the winter groundwater level, that the mitigation measures outlined in Chapters 5 and 12 of the EIAR and NIS be carried out and for an Ecological Clerk of Works (ECoW) to be appointed to ensure mitigation measures are carried out.
- The ECoW must submit yearly reports to the Planning Authority demonstrating compliance with the mitigation measures and ecological considerations during the future restoration of the quarry lands.

Roads Transportation & Public Safety Department:

• 25th June 2021: Requested further information as follows:

- Carry out a condition survey of the existing local roads and report identifying the remediation measures to ensure pavement construction is appropriate to serve the development.
- Complete a Road Safety Audit (Stages 1 and 2).
- Clarification of how internal parking areas are to be marked out shown on a drawing.
- A swept path analysis for haulage routes adjacent car parking and work zones.
- Proposal showing repairs to public roads and provision of a 6m wide carriageway and improvements to road safety.
- Measures to limit the speed of HGV's to and from the site along local roads, including potentially traffic control technology using GPS tracking to limit speed.
- Demonstrate sightlines at the site entrance are compliant with the relevant standards.
- Provision of secure onsite cycle parking, shower, changing and locker facilities.
- Clarification of where materials are to be stored and consideration of where there may be existing or future conflict between different activities onsite.
- How the link between the new wheelwash and access road will be kept clean to avoid depositing mud and debris on roads outside the site.
- Details of public lighting necessary for safe working activities.
- Provide proposals on how to limit light leakage and potential glare from floodlights for what is a rural area with wildlife, adjacent roads and households.

Chief Fire Officer:

• 17th June 2021: No objection. Applicant must obtain a Fire Safety Certificate in accordance with the requirements of the Building Control Act.

Enforcement Section:

• 18th May 2021: No current unauthorised development case is open on the site.

3.3. Prescribed Bodies

Irish Water:

• 7th May 2021: No objection, subject to conditions.

An Taisce:

- 26th May 2021: Raised concerns as follows:
 - The new quarrying area would significantly increase the existing quarrying area.
 - This over-doubling in size of the quarrying area would visually detract from the highly significant Dún Ailinne.
 - Should the subject proposal be granted permission, there would be no avoiding almost 70ha of quarried landscape at the foot of Dún Ailinne.

HSE - Environmental Health Services (HSE West)

- 10th June 2021
 - Recommends that the community be informed of the proposed development and that any issues of concern are taken into consideration for the proposed continued operation and expansion of the facility. There should be ongoing engagement with sensitive receptors and the local community during the proposed development. A system should be put in place for dealing with enquiries and/or complaints from members of the public.
 - Recommends that, should permission be granted, the water quality in private wells within 1km of the site boundary should be tested against the parameters specified in the Drinking Water Regulations (SI No. 122 of 2014) before work starts on the proposed extension, biannually during the eight years of operation of the extraction facility and once in the two-year restoration period.

- Emphasises the importance of the provision of a Class 1 bypass hydrocarbon separator to provide treatment of any run-off from hard standing area.
- Mitigations outlined in Chapter 7 of the EIAR are considered acceptable measures to protect public health. Should permission be granted, these measures should be included as planning conditions.
- Conditions recommended in relation to air and control of dust.

National Roads Design Office:

No objection.

- Recommends that a traffic impact assessment be undertaken to determine the potential impact of the proposed development on the M9 Junction.
- The proposed development is outside the 91m setback line for development adjacent the M9 Motorway and that the proposed drainage for the development would not impact on the drainage system for the motorway.
- The proposed lighting for the development would not impact driver attention on the M9 Motorway given that the proposed development is located a minimum distance of 1.5 kilometres from the M9 Motorway.

3.4. Third Party Observations

A total of 6 no. third party observations were received by the Planning Authority, which raised the following main issues:

- Amenity impacts would occur including creation of dust, noise, vibration, additional traffic movements, visual impact and impact on groundwater,
- Size, scale and extent of development is inappropriate.
- Applicant has a track record of non-compliance with conditions and enforcement action.
- The likelihood of restoration occurring is questionable.

- Negative impact on the nearby archaeological site, Dún Ailinne. The
 Development Plan seeks to protect this feature and its surrounding landscape
 through various policies and objectives.
- No local gain in terms of employment.
- Environmental impacts and that the EIA does not address the potential effect on the River Liffey, updated water sampling from the Curragh Aquifer should be provided and impacts on biodiversity, wildlife and hedgerows (including Pollardstown Fen).
- Tourism for the area would be negatively affected.
- Impact on human health due to airborne particles and dust.
- Road safety for pedestrians and cyclists.
- There are more sustainable building materials now available to the construction industry, including timber.

4.0 **Planning History**

Subject Site

ABP Ref. 302526-18 (Reg. Ref. 17/1344): The Planning Authority issued a split Decision in July 2019 which **granted permission** for the continued use of the existing development (permitted under Reg. Ref. 06/651) comprising the extraction of sand and gravel with processing that includes crushing, washing (with associated silt disposal lagoons) and screening and all ancillary works and structures on a total site measuring 37ha; restoration of the site to a combination of agricultural and nature conservation areas (including sections of the site outside the application area and provision of these works to be carried out under Section 34(4)(A) of the Planning and Development Act, 2000 (as amended); and **refused permission** for a proposed extension area of c. 3.1ha to the south of the existing quarry.

The Applicant appealed a financial condition to An Bord Pleanála and the final grant of permission was subsequently issued on 23rd July 2019. Condition no. 2 requires all extraction and processing operations on the site to cease 4 years from the date of the final grant of permission, which is 27th August 2023.

Reg. Ref. 17/188: The Planning Authority **granted** an extension of duration of permission to Reg. Ref. 06/651 in May 2017 to extend the appropriate period for the extraction of sand and gravel with processing that includes crushing, washing (with associated silt disposal lagoons), and screening and all ancillary works.

Permission extended for five years until 27th May 2022.

ABP Ref. PL09.223574 (Reg. Ref. 06/651): The Planning Authority **granted** permission in May 2007 for the extraction of sand and gravel with processing that includes crushing, washing (with associated silt disposal lagoons), and screening and all ancillary works.

A first party appeal to the Board was deemed invalid.

ABP Ref. PL09.094857 (Reg. Ref. 94/1109): An Bord Pleanála **granted** permission in 1995 for a readymix concrete batching plant and 32 hectares extension to an existing sand and gravel operation. The Planning Authority had refused permission for reasons in relation to adverse impacts on Dún Ailinne (historic monument) and the Curragh Plains, and non-compliance with previous planning conditions (enforcement matters).

Reg. Ref. 90/632: The Planning Authority **granted** permission in October 1990 for the construction of an ESB sub-station in the existing gravel pit.

Reg. Ref. 89/150: Permission **granted** for extraction and processing of sand and gravel.

ABP Ref. PL9/5/43939: Permission **granted** for the reopening of gravel and sand pit on a site of 22 acres.

Enforcement

There is note on file from the Planning Authority confirming there are no live enforcement matters in relation to the subject site / existing quarry. The most recent such case was closed in March 2018 (Ref. UD6772).

5.0 Policy Context

5.1. Kildare County Development Plan 2023-2029

- 5.1.1. The Kildare County Development Plan 2023-2029 ('Development Plan') was adopted by the Elected Members of Kildare County Council on 9th December 2022. The Plan came into effect on 28th January 2023 and replaced the previous Kildare County Development Plan 2017 2023.
- 5.1.2. The subject site is unzoned.
- 5.1.3. Chapter 15 requires the preparation of supporting assessments and reports for development proposals comprising extractive industry, depending on their size, including a Natura Impact Statement, Environmental Impact Assessment, Ecological Impact Assessment, Traffic Assessment, Road Safety Audit, a Phasing Programme for extraction and rehabilitation, restoration and aftercare proposals, and a Remediation Plan providing for environmental benefit, biodiversity, and re-wilding rather than simply re-grassing and reverting the lands back to agricultural use or sheep grazing.

Chapter 9 'Rural Economy'

<u>Section 9.9</u> is in relation to 'Mineral Resources & Extractive Industry'. Several policies and objectives are aimed at controlling the impacts of quarry developments and ensuring their appropriate location, including:

RD P8: Support and manage the appropriate future development of Kildare's natural aggregate resources in appropriate locations to ensure adequate supplies are available to meet the future needs of the county and the region in line with the principles of sustainable development and environmental management and to require operators to appropriately manage extraction sites when extraction has ceased.

RD 042: Ensure that development for aggregate extraction, processing and associated concrete production does not significantly impact the following:

- Special Areas of Conservation (SACs)
- Special Protection Areas (SPAs)

- Natural Heritage Areas (NHAs)
- Other areas of importance for the conservation of flora and fauna.
- Zones of Archaeological Potential.
- The vicinity of a recorded monument.
- Sensitive landscape areas as identified in Chapter 13 of this Plan.
- Scenic views and prospects.
- Protected Structures.
- Established rights of way and walking routes.
- Potential World Heritage Sites in Kildare on the UNESCO Tentative List,
 Ireland.

RD O45: Require, where permission is granted for quarrying / extraction of aggregates, the submission by the developer of a bond (cash deposit, bond from an insurance company or other security acceptable to the planning authority.

RD O46: Require road re-instatement work to be on-going during operations, in the interests of road and traffic safety. Works undertaken to re-instate/improve the public road should be undertaken by the quarry developer or paid by them and completed by the Council.

RD 047: Protect and safeguard the county's natural aggregate resources from inappropriate development.

RD O48: Manage the finite aggregate resources being mined by the extractive industries in the county to supply the future needs of our region while working to reach our climate change targets.

RD O49: Have regard to the following guidance documents (as may be amended, replaced, or supplemented) in the assessment of planning applications for quarries, ancillary services, restoration and after-use:

- Quarries and Ancillary Activities: Guidelines for Planning Authorities, DEHLG (2004).
- Environmental Management Guidelines Environmental Management in the Extractive Industry (Non-Scheduled Minerals), EPA (2006).

- Archaeological Code of Practice between the DEHLG and ICF (2009).
- Geological Heritage Guidelines for the Extractive Industry (2008).
- Wildlife, Habitats, and the Extractive Industry Guidelines for the protection of biodiversity within the extractive industry, NPWS (2009).

RD 050: Ensure the satisfactory and sensitive re-instatement and/or re-use of disused quarries and extraction facilities, where active extraction use has ceased. Future uses should include amenity, recreation and biodiversity areas shall be informed by an assessment of the specific site/lands and shall be subject to an ecological impact assessment or other environmental assessments as appropriate. Where it is proposed to reclaim, regenerate, or rehabilitate old quarries by filling or re-grading with inert soil or similar material, or to use worked-out quarries as disposal locations for inert materials, the acceptability of the proposal shall be evaluated against the criteria set out in Section 15.9.6 of this Plan. The Council will resist development that would significantly or unnecessarily alter the natural landscape and topography, including land infilling/ reclamation projects or projects involving significant landscape remodelling, unless it can be demonstrated that the development would enhance the landscape and / or not give rise to adverse impacts.

RD 051: Require that quarry remediation plans provide for environmental benefit, biodiversity and re-wilding in all instances. The 80% requirement for environmental/biodiversity may be waived at sites closer to urban areas where a significant portion of the site is being provided for sports, recreation, and amenity.

Chapter 11 'Built & Cultural Heritage'

<u>Section 11.6</u> is in relation to development proposals affecting archaeology.

<u>Section 11.12</u> states that Dún Ailinne, outside Kilcullen, has been included on the Tentative List as part of a larger assembly of sites namely, The Royal Sites of Ireland, which includes Cashel, Dún Ailinne, Hill of Uisneach, Rathcroghan Complex, the Tara Complex and Eamhain Mhacha.

AH P2: Protect and enhance archaeological sites, monuments and where appropriate and following detailed assessment, their setting, including those that are listed in the Record of Monuments and Places (RMP) or newly discovered archaeological sites and/or subsurface and underwater archaeological remains.

AH P4: Recognise and respect potential World Heritage Sites in Kildare on the UNESCO Tentative List-Ireland.

AH O2: Manage development in a manner that protects and conserves the archaeological heritage of County Kildare, avoids adverse impacts on sites, monuments, features or objects of significant historical or archaeological interest and secures the preservation in situ or by record of all sites and features of historical and archaeological interest, including underwater cultural heritage. The Council will favour preservation in situ in accordance with the recommendation of the Framework and Principles for the Protection of Archaeological Heritage (1999) and the Council will seek and have regard to the advice and recommendations of the Department of Housing, Local Government and Heritage.

AH O4: Ensure that development in the vicinity of a site of archaeological interest is not detrimental to the character of the archaeological site or its setting by reason of its location, scale, bulk or detailing and to ensure that such proposed developments are subject to an archaeological assessment prepared by a suitably qualified archaeologist. Such an assessment will seek to ensure that the development can be sited and designed in such a way as to avoid impacting on archaeological heritage that is of significant interest including previously unknown sites, features, objects and areas of underwater archaeological heritage.

AH O5: Require the preservation of the context, amenity, visual integrity and connection of the setting of archaeological monuments. As a general principle, views to and from archaeological monuments shall not be obscured by inappropriate development. Where appropriate, archaeological visual impact assessments will be required to demonstrate the continued preservation of an archaeological monument's siting and context.

AH O17: Protect and enhance the setting of Dun Ailinne and support managed limited public access to the site. Only sensitive development that does not undermine the archaeological and cultural significance of the site will be permitted.

AH O18: Protect and sustain the established appearance and character of views associated with Dun Ailinne. Require any development proposals within/around Dun Ailinne to demonstrate that no adverse effects will occur on the established

appearance or character of Dun Ailinne as viewed from either the Protected Panoramic Views or from surrounding public roads.

Chapter 13 'Landscape, Recreation & Amenity'

Aim: To provide for the protection, management, and enhancement of the landscape of Kildare to ensure that development does not disproportionately impact on the unique landscape character areas, scenic routes or protected views; and to support the provision of high quality and accessible recreational facilities, amenities and open spaces for residents and visitors to the County, in recognition of the contribution of all forms of recreation to quality of life, personal health and wellbeing.

LR 07: Restrict the quarrying of sensitive sites within the Landscape Character Areas in line with Table 13.3 and Table 13.4 above and to protect and conserve the ecological, archaeological, biodiversity and visual amenity surrounding quarry sites.

Landscape Sensitivity Map (Map V1-13.1)

Map V1-13.1 visually describes the various landscape character areas in the county and their sensitivity to new types of development. [Note: The map is not scaled and includes limited context to assist in identifying the precise location of the appeal site. However, it appears that the majority of the subject site, including the existing quarry, falls within the Landscape Character Area (LCA) of 'Dún Ailinne'. A partial section of the proposed extension appears to be subject to the category 'Central Undulating Lands'.]

- The Dún Ailinne LCA has a Landscape Sensitivity of Class 5 'Unique'. This
 comprises areas with a low capacity to accommodate uses without significant
 adverse effects on the appearance or character of the landscape having
 regard to special sensitivity factors.
- The Central Undulating Lands LCA has Landscape Sensitivity of Class 1 'Low Sensitivity'. This comprises areas with the capacity to generally accommodate a wide range of uses without significant adverse effects on the appearance or character of the area.

The Development Plan notes that landscape sensitivity is a measure of the ability of the landscape to accommodate change or intervention without suffering unacceptable effects to its character and values.

Landscape Sensitivity Areas (Map V1-13.2)

Map V1-13.2 'Landscape Sensitivity Areas' identifies sensitive landscape features and ridgelines in the county. Ridgelines are considered as a Principal Landscape Sensitivity Factor and are shown as red lines on the map. The nearest ridgeline is to the southeast of the subject site on the far side of Knockaulin Hill.

The map also identifies sensitive hilltop views (green asterisk) and scenic routes (dotted blue lines). However, these are not in the vicinity of the site and lie outside the 300m range identified by the Development Plan for considering such factors in the assessment of a development proposal.

Chapter 15 Development Management Standards

Section 15.9.6 is in relation to 'Extractive Industry' and sets out the assessment criteria and details required to be provided for such forms of proposed development.

5.2. National Planning Framework 2040 (NPF)

- 5.2.1. Extractive industries are important for the supply of aggregates and construction materials and minerals to a variety of sectors. The planning process will play a key role in realising the potential of the extractive industries sector by identifying and protecting important reserves of aggregates and minerals from development that might prejudice their utilisation. Aggregates and minerals extraction will continue to be enabled where this is compatible with the protection of the environment in terms of air and water quality, natural and cultural heritage, the quality of life of residents in the vicinity, and provides for appropriate site rehabilitation.
- 5.2.2. <u>National Policy Objective 23</u> states that it is an objective 'to facilitate the development of the rural economy through supporting a sustainable and economically efficient agricultural and food sector, together with forestry, fishing and aquaculture, energy and extractive industries, while at the same time noting the importance of maintaining and protecting the natural landscape and built heritage which are vital to rural tourism'.

- 5.3. Eastern and Midland Regional Spatial and Economic Strategy 2019-2031
- 5.3.1. The Eastern and Midlands Region Area (EMRA) Regional Spatial and Economic Strategy (RSES) 2019-2031 is a strategic plan for investment and growth to better manage regional planning and economic growth.
- 5.3.2. Traditional sectors such as extractive industries are supported in rural areas, in line with environmental considerations.
- 5.3.3. Regional Policy Objective (RPO) 6.7 is to 'support local authorities to develop sustainable and economically efficient rural economies through initiatives to enhance sectors such as agricultural and food, forestry, fishing and aquaculture, energy and extractive industries, the bioeconomy, tourism, and diversification into alternative onfarm and off-farm activities, while at the same time noting the importance of maintaining and protecting the natural landscape and built heritage'.

5.4. Other National Guidance

- Guidelines on the information to be contained in Environmental Impact Assessment Reports (EIAR), 2022
- Climate Action and Low Carbon Development (Amendment) Act, 2021
- Design Manual for Urban Roads and Streets, 2019
- Quarries and Ancillary Activities Guidelines for Planning Authorities, 2004
- Archaeological Code of Practice between the DEHLG and the Irish Concrete Federation, 2009
- Geological Heritage Guidelines for the Extractive Industry, 2008
- Wildlife, Habitats, and the Extractive Industry Guidelines for the protection of biodiversity within the extractive industry, NPWS, 2009

5.5. Natural Heritage Designations

No natural heritage designations apply to the subject site. The nearest European Site is Pollardstown Fen SAC (Site Code: 000396).

The distance and direction to the nearest European sites to the appeal site, including Special Areas of Conservation (SAC) and Special Protected Areas (SPAs), are listed in Table 1 below.

Table 1: European Sites

Site Code	Site Name	Distance (approx.)	Direction
000396	Pollardstown Fen SAC	6.2km	North / northwest
002162	River Barrow and River Nore SAC	8.2km	Southwest
002331	Mouds Bog SAC	9km	North
004063	Poulaphouca Reservoir SPA	13.2km	east

[The Curragh pNHA (Site Code: 000392) is situated directly north of the subject site.]

6.0 The Appeal

6.1. Grounds of Appeal

The Applicant submitted an appeal on 27th July 2021. The following main issues were raised:

Response to Reason for Refusal No. 1 (Proximity to Dún Ailinne and Protection of Archaeological Heritage)

- The proposed quarry extension is more than 0.65km from Dún Ailinne. It is further away from Dún Ailinne than the existing quarry, which was previously permitted by the Planning Authority.
- There would be no impact on the history of the monument or of archaeological remains in the wider surrounding area. A comprehensive archaeological impact assessment, including a geotechnical survey and extensive test trenching, has been completed as part of the application.
- The historic landscape surrounding Dún Ailinne is characterised by large fields enclosed by linear boundaries. This is a modern landscape type which has been subjected to human interference. It is not generally considered to

- be of high historic value in itself in the same way, for example, as parts of the Burren are.
- Despite the importance of Dún Ailinne, the landscape surrounding it is of a
 modern-day farming nature and comprises large-scale straight bounded
 fields, large agricultural sheds, ribbon development housing and overhead
 high voltage powerline and pylons. The landscape surrounding Dún Ailinne is
 therefore considered less sensitive to development.
- The subject site is classified as 'Central Undulating Lowlands' in terms of its
 Landscape Character according to the Development Plan (2017-2023). This
 is defined as Undulating Lowlands (Class 1 Sensitivity), which are 'areas with
 the capacity to generally accommodate a wide range of uses without
 significant adverse effects on the appearance or character of the area'.
- The impact on visual receptors is assessed by the EIAR (Chapter 13 Landscape). The proposal would not impact the skyline or views towards Dún Ailinne. The view from Dún Ailinne is considered high sensitivity due to its historical importance, albeit there are no designated protected views or vistas to / from the appeal site. However, the magnitude of change is slight due to the small extent of visibility of the quarry extension, its medium-term duration and reversibility. The level of visual effect is therefore considered 'moderate' only.
- During the medium term (operational stage), the proposed development will
 be screened from most surrounding inwards views due to the existing
 screening berms around the quarry, the local topography and extensive
 vegetation. Additional planting, and the phased restoration of disused
 sections of the quarry, is also proposed to assist in reducing any potential
 visual impacts from arising.
- It is acknowledged that the post-operational stage would see the existing landform altered. However, the subject lands would have a similar appearance to that of the surrounding agricultural landscape and there would be visual links to the Curragh. The predicted visual impacts would be minor negligible.

- A detailed and extensive cultural heritage assessment was undertaken prior
 to the application being lodged. This led to the decision to preserve certain
 archaeological features in situ. It is proposed to preserve by record only the
 least significant features identified in the surrounding area. This approach is
 supported by the Framework and Principles for the Protection of
 Archaeological Heritage and Policies AH1, AH2 and AH4 of the Development
 Plan (2017-2023).
- The proposed development has carefully avoided all Records of Monuments and Places (RMPs) and Urban Archaeology Survey and Archaeological Sites (SMRs) as required by Policy AH3 of the Development Plan (2017-2023).

Response to Reason for Refusal No. 2 (Proximity to Dún Ailinne and disruption of its visual integrity)

- It is possible that Dún Ailinne may not be included on the Tentative List¹ of World Heritage Properties in the future as it is currently being evaluated by an independent Expert Advisory Group.
- The impact on visual receptors is assessed by the EIAR and this confirms that the level of effect would be minor (Figures 13-1 to 13-7 and Appendix C of the Appeal refer).
- The proposed visual changes from the lowland landscape towards Dún Ailinne would be very limited and only apparent from a small area to the immediate north of the existing sand and gravel pit. The visible pit face would be pushed further back in this view (Viewpoint B on Figure 13-5, Chapter 13) and within a very narrow band of an overall wide panoramic. This means the overall scale of visual change would be very small.
- The proposed views from Dún Ailinne towards the subject site from the northern and western slopes of the hill are shown as 'Existing View', 'Year 3 -On completion of Extraction Phase 1', 'Year 8 - On completion of all extraction

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¹ Note: 'The Tentative List is an inventory of natural and/or cultural heritage sites that a State Party considers to demonstrate potential Outstanding Universal Value to humanity and therefore suitable for nomination to the World Heritage List.' (Source: World Heritage Ireland.)

works', and 'Year 10 - On completion of all restoration works'. In summary, the visual effects of the proposed development on views from Dún Ailinne were assessed as moderate reducing to minor-negligible on completion of all restoration works within 10 years.

- There are no World Heritage Sites in Co. Kildare and the proposal would not compromise any monument from being recognised in this way in the future.
- A single hedgerow and some scrub would be removed only. Then hedgerow
 is gappy and missing in sections. It is also proposed to plant native
 hedgerows and a mix of shrubs as a compensatory measure.

Response to Reason for Refusal No. 3 (Interruption of Existing Ridgeline)

- The subject site, including its extension area, is not on a ridgeline. It does not form a 'conspicuous feature' nor a 'dominant landscape focal point'.
- Map 14.2 of the Development Plan identifies ridgelines in County Kildare, and two such ridgelines are shown across the hill of Knockallinne (upon which Dún Ailinne sits). These do not affect the subject site.
- The proposed extension site is not visible from any locations in the lowland landscape area surrounding the site except for a small area immediately north of the existing quarry pit.
- The quarry extension would not break the skyline or be directly visible from in front of Dún Ailinne. As shown in the submitted Landscape and Visual Impact Assessment (LVIA) It would not interrupt any views from or towards the hillfort.

Other

 Section 3 of the Appeal provides a response to other issues and concerns raised in the Planner's Report.

6.2. Observations

The main issues raised are as follows:

Eco Advocacy

- There has been significant extraction of sand and gravel glacial deposits and eskers over the past decades.
- The Applicant (Kilsaran) is exporting large volumes of aggregate abroad to the UK market and their argument that aggregate in Ireland is badly needed is misleading.
- The proposal is incompatible with existing land uses and heritage of the area.
- Section 10.4.2 of the Kildare County Development Plan (2017-2023) is in relation to the equine industry, which is an important industry.
- The site should be restored to full agricultural use post operational stage, if permitted.
- Dún Ailinne is an important historical site and the construction of a berm around the proposed extension area would be inappropriate when viewed from this location.
- Permitting a new quarry so close to Dún Ailinne would not be in keeping with UNESCO objectives.
- The existing quarry is inappropriate and unacceptable.
- The destruction of agricultural land is contrary to the European Landscape Convention.
- The enforcement of planning laws to date has been poor and the self-policing
 of quarry operations, such as dust, noise, water levels and groundwater, has
 not worked. This has severely impacted on amenity and quality of life.

Ballyshannon Action Group

- Dún Ailinne has an important historical significance and should be protected.
- This is reinforced by a published Scientific Paper prepared by renowned archaeologists.
- The Applicant (Kilsaran) should disclose their full plans for the wider area in terms of future quarrying intentions.

Multiple quarry extensions have been permitted at Ballysaxhills since 1989,
 with each application granted before reinstatement works have commenced.

7.0 Planning Assessment

7.1. Introduction

Policy Considerations

- 7.1.1. This section of my report provides a brief overview of relevant national policy and guidelines, the planning history for the site and a brief description of the development proposal.
- 7.1.2. The NPF through National Policy Objective (NPO) 23 seeks to facilitate the development of the rural economy through supporting, amongst other sectors, a sustainable and economically efficient extractive industry sector. It seeks to do this simultaneously noting the importance of maintaining and protecting the natural landscape and built heritage, which are recognised as vital to rural tourism. The Regional Spatial and Economic Strategy for the Eastern and Midland Region (2019) supports the implementation of the NPF for the future physical, economic and social development of the region.
- 7.1.3. The 'Guidelines for Planning Authorities on Quarries and Ancillary Activities' ('the Quarry Guidelines') acknowledge that extractive industries make an important contribution to economic development in the country, while emphasising the continued need for construction aggregates. I note that the Guidelines state that quarrying operations can give rise to land use and environmental issues which can require mitigation and control through the planning system. Extractive industries are location dependent, and they are bound, by their nature, to be in areas where the sought-after material and aggregate is situated. It is generally preferable to continue operating form an existing extraction area, and to potentially extend it, as opposed to establishing a completely new extraction area elsewhere; albeit, it may be subject to measures which suitably address potential impacts arising.
- 7.1.4. I note that the Development Plan includes various policies and objectives which outline the importance of managing finite aggregate resources being mined by extractive industries in the county to supply the future needs of the region while

working to reach climate change targets (Objective RD O48); and which seek to support and manage the future development of Kildare's natural aggregate resources in appropriate locations to ensure adequate supplies are available to meet the future needs of the county, and the region, subject to the principles of sustainable development and environmental management and requiring operators to appropriately manage extraction sites when extraction has ceased (Objective RD P8).

7.1.5. Having regard to this, the continued use of the quarry and its proposed extension is broadly in accordance with the above policy provisions. However, such compliance cannot be viewed in isolation. It requires a detailed examination of other considerations including, most notably in this case, those relating to archaeological and cultural heritage, visual amenity of the area, potential impact on the receiving landscape and protection of the environment. In this regard, I note Objective LR 07 of the Development Plan which seeks to restrict the quarrying of sensitive areas within sensitive landscape character areas and to protect and conserve the ecological, archaeological, biodiversity and visual amenity surrounding quarry sites.

Planning History and Nature and Extent of Proposed Development

- 7.1.6. The appeal site comprises an existing sand and gravel pit (quarry) and a section of undeveloped land consisting of undulating agricultural fields. The character of the surrounding area is mainly rural agricultural comprising a mixture of pasture and arable farming land. There is also a presence of small rural enterprise and low density one-off rural housing. The existing quarry is roughly 500m northwest of Dún Ailinne (historic Hill Fort), which is of significant archaeological interest. The proposed pit extension would be roughly 650m away and on the western boundary of the existing pit.
- 7.1.7. There is extensive planning history associated with the appeal site for the excavation of sand and gravel (i.e., quarrying) which dates to the late 1970s / 1980s. The most recent planning decision of note is ABP Ref. 302526-18 (Reg. Ref. 17/1344) where the Planning Authority granted permission for the continued use of the existing quarry operation for a period of four years and refused a proposed extension of the quarry. The extension was directly south of the existing pit and would have resulted in the quarry moving closer to Dún Ailinne.

- 7.1.8. Six refusal reasons were included and I note that these were mainly in relation to the potential impact of the proposed extension area on the importance and setting of both Dún Ailinne and the Curragh archaeological complexes, visual impact and interruption on the landscape and integrity of important / conspicuous ridgelines (including the Curragh Landscape Area), obtrusion of the skyline and the low capability of the proposed use as a sand and gravel pit on a Class 5 'Unique Sensitivity' landscape (the Curragh). I note that the proposed area of extension sought under the application (i.e., Reg. Ref. 17/1344) encompassed an area directly south of the existing quarry. However, the current proposal is to extend the quarry mainly in a south westly direction. This is into an adjoining field on the southwestern boundary of the existing pit where further subsurface deposits of sand and gravel have been identified. The current proposal therefore comprises a different area of land, which I note is further removed from Dún Ailinne and its immediate surrounds.
- 7.1.9. The current permission on the site is due to expire in August 2023 and the subject application seeks to extend the operational life of the existing quarry pit for an additional eight years (plus two years to complete site restoration). The requirement for the development arises due to the need for replacement aggregate resources which are necessary to service active construction sites.

Continuance of Existing Quarry

- 7.1.10. The active extraction area is approximately 28.1ha and comprises a concrete batching plant, concrete lab and containers, sand and gravel processing plant, silt sentiment ponds, ESB substation, bunded fuel tank, weighbridge, wheelwash, surface car park, site office, stockpile storage areas etc., which support the ongoing quarrying activities.
- 7.1.11. The proposed continued use of the existing quarry includes the extraction and processing of sand and gravel for a further 8 no. years. It would continue utilising the existing batching plant and associated sand and gravel workings. The quarry has been operational for roughly twenty years and, should planning permission be granted, the Applicant states that the intention is for it to cease operations at the end of the stated 8-year permission period.

Proposed Extension Area

- 7.1.12. The planning application also seeks to extend the existing quarry by approx. 11.4ha. The new area would extract sub-surface materials within an area that is confined to roughly 10.8ha. The remaining 0.6ha of land would accommodate an overburden storage area, screening berms and a buffer zone to help preserve in situ existing archaeological features which were identified by the cultural heritage assessment completed for the application. The recovered materials would be transported from this new extension area to the existing onsite plant. No new plant is proposed. No blasting is be carried out.
- 7.1.13. The total recoverable reserve of sand and gravel is estimated to be in the region of c. 1.5 million tonnes. This is based on the final extraction design to a depth of c.105.5 AOD, which is roughly 1m above the winter water table. The existing development currently has a permitted average annual extraction rate of approximately 450,000 tonnes is to limit the impact of the development on the residential and rural amenities of the area (Condition 4 of Reg. Ref. 17/1344). However, I note that this is intended to be reduced to c. 200,000 tonnes p.a. under the current proposal, which equates to an extraction development life of roughly eight years and appropriate given the estimated available resources which remain.
- 7.1.14. The existing method of extraction would continue, which is a load, haul and dump system using wheeled front-end loaders. The current method of site access will also be same, which is via the L6080 to the north, and which has been upgraded and resurfaced in recent times. There are existing internal access roads within the site, an existing designated car parking area, hardstand areas around the concrete batching plant and vegetated berms along the eastern, western and northern site boundaries. However, additional berms are proposed to be constructed around the new extraction area. As noted above, the expansion area would be positioned further away from the historic landscape surrounding Dún Ailinne than the existing quarry site.
- 7.1.15. It is proposed that the lateral land-take into the proposed extension area would be worked dry above the underlying groundwater table to a depth of 106m AOD (and 107m AOD in the southwest corner). The extraction works would therefore not breach the water table.

Site Restoration

- 7.1.16. The Applicant proposes to restore the site over a two-year period to agricultural and biodiversity habitats.
- 7.1.17. All plant and machinery will be removed in accordance with the relevant EPA guidelines.

Planning Considerations

- 7.1.18. The main planning considerations arising are:
 - Archaeological Heritage
 - Visual amenity of the area and historical setting of Dún Ailinne (archaeological heritage)
 - Landscape and Visual Impact
 - Duration of Permission

7.2. Archaeological Heritage

- 7.2.1. The Planning Authority's first reason for refusal is that the proposed extended quarry extraction area, by reason of its scale, nature and proximity, would have a negative impact on the importance and setting of Dún Ailinne (a site of significant archaeological interest) and would accordingly be contrary to the protection of archaeological heritage and the policies relating to archaeological heritage contained in the Kildare County Development Plan 2017 2023 (AH1, AH2, AH3 and AH4). I note that the reason for refusal is based on concerns relating to the proposed extended extraction area only and not the existing quarry operation.
- 7.2.2. The main appeal issue, therefore, is in relation to potential impacts arising on Dún Ailinne due to the scale, nature and proximity caused by the proposed quarry extension. The Kildare County Development Plan 2023-2029 came into effect on 28th January 2023 and replaced the 2017-2023 Development Plan in the process. Chapter 11 is in relation to 'Built and Cultural Heritage'. It contains several policies and objectives which seek to protect, recognise and respect archaeological sites in the County through managing development in such a way that avoids potential related adverse impacts occurring.

- 7.2.3. I note that relevant objectives to this appeal case include AH P2 which seeks to protect and enhance archaeological sites and their setting, and AH O2 which seeks to manage development in a manner that protects and conserves the archaeological heritage of the County and to avoid adverse impacts on sites, monuments, features or objects of significant historical or archaeological interest.
- 7.2.4. Dún Ailinne (Hill Fort) is situated on private lands approximately 500m to the southeast of the proposed expansion site. It sits atop of Knockaulin Hill and is enclosed by an earthen bank and ditch. Dún Ailinne is a significant and important ancient ceremonial site that was used for ritual purposes during the Irish Iron Age and is a Recorded Monument Protected (RMP) under Section 12 of the National Monuments (Amendment) Act 1994 (Ref. KD028-03801). The submitted EIAR (Pages 12-17 to 12-18) provides a full description of the site and recognises its status a designated National Monument (Hillfort) on the Record of Monuments and Places.
- 7.2.5. I note that since the making of the application three sites have been included on the most recent Tentative List for Ireland. This includes the 'Royal Sites of Ireland', of which Dún Ailinne forms a part of. The Tentative List is an inventory of natural and cultural heritage sites that may have the potential to demonstrate Outstanding Universal Value and, therefore, could potentially be considered suitable for nomination to the World Heritage List. Therefore, it is clear that Dún Ailinne is a significant archaeological feature of national and potentially of international importance. There is no definitive timeframe as to when Dún Ailinne, as part of the Royal Sites of Ireland site, would be considered for entry onto the World Heritage List. There is also no guarantee that the site would qualify for entry into the inventory.
- 7.2.6. In assessing the potential impact on the historical character and setting of Dún Ailinne I note that the existing quarry is roughly 500m to the northwest. The proposed quarry extension is more than 650m away and therefore further away from the monument than the existing pit. There are various intervening landforms and man-made structures situated between the appeal site and Dún Ailinne. This mainly takes the form of undulating farmland and fields set out in an ad hoc pattern,

- agricultural sheds and outbuildings, dispersed one-off houses; overhead powerlines / electricity pylons and sporadic vegetation in the form of trees, hedgerows and scrub.
- 7.2.7. It is apparent that the intervening landscape between Dún Ailinne and the subject site has been subjected to human interference, in my view. It has clearly been modified by modern day farming practices and other types of recent development. I consider that the landscape that is situated between the subject site and Dún Ailinne could readily absorb certain new forms of development; albeit, provided it is designed sensitively, carefully and in a manner which takes into account the various sensitive receptors in the vicinity and potential effects on the appearance and character of its surrounding receiving landscape. I note that the Development Plan does not prohibit new forms of development which are within sensitive landscape areas and that Section 13.3.2 expressly states that each site and development proposal should be assessed on its individual merits.
- 7.2.8. Map V1-13.1 of the Development Plan shows the location and extent of various 'Landscape Character Areas' in the county. However, the map is not scaled. It also includes very limited context by way of local roads, landmarks or other physical features or topography to assist in identifying the precise location of the appeal site. I have reviewed the Council's online mapping. However, this does not appear to be up-to-date, or accurate, as the Dún Ailinne landscape character area is not visible when the relevant GIS layer for landscape character areas is switched on. Notwithstanding this, it is my opinion that the greater part of the appeal site, including its eastern portion, falls within the Landscape Character Area (LCA) of 'Dún Ailinne'. This comprises the existing pit and majority of the proposed expansion area. It appears that a partial section which is the northwestern corner of the extension area falls within the 'Central Undulating Lands' LCA.
- 7.2.9. The 'Dún Ailinne' LCA has a Landscape Sensitivity² of Class 5 'Unique' which comprises areas with a low capacity to accommodate uses without significant adverse effects on the appearance or character of the landscape having regard to special sensitivity factors. The proposed development, which is for the continuation and extension of a sand and gravel pit, is listed under Table 13.3 as having a low

² Landscape sensitivity is referenced as a measure of the ability of the landscape to accommodate change or intervention without suffering unacceptable effects to its character and values.

- compatibility rating. This is the same rating as development types 'forestry' and 'solar'. The 'Central Undulating Lands' LCA has Landscape Sensitivity of Class 1 'Low Sensitivity' which has the capacity to generally accommodate a wide range of uses without significant adverse effects on the appearance or character of the area.
- 7.2.10. The impact of the proposed development on the various visual receptors in the vicinity of the site are assessed in Chapter 13 of the EIAR (Landscape), which includes a Landscape and Visual Impact Assessment (LVIA). Chapter 12 (Cultural Heritage) makes references to the LVIA and notes that the proposed development would be screened in the vast majority of views from the surrounding area due to existing vegetated berms and local intervening topography. This meets my own experience of visiting the subject lands whereby it was difficult for me to gain uninterrupted views of the existing quarry from most of the surrounding area.
- 7.2.11. I have therefore reviewed the LVIA and its accompanying photomontages and consider the assessment and its findings accurate and consistent with my physical inspection of the site and its vicinity. The existing sand and gravel pit, and the proposed expansion area, would not be visible from the majority of external locations due to the low-lying setting of the quarry, the topography of the intervening landscape and presence of naturally occurring and planted vegetation around the site perimeter.
- 7.2.12. I further note that the extension area is relatively small. It is approximately 11.4ha, of which the physical area for extraction is roughly 10.8ha. [The remaining 0.6ha would be given over as an overburden storage area and to accommodate additional screening berms. This area would also act as a buffer zone to preserve in situ existing archaeological features which were identified as part of a geotechnical survey and test trenching exercise carried out prior to making the application.] The expansion area is situated to the west of the existing quarry and therefore would be positioned further away from Dún Ailinne. This is an important consideration in determining the potential impact on the setting of the historic monument. I note that the southern boundary of the existing sand and gravel pit is roughly 500m from Dún Ailinne, whilst the extension area would be approximately 650m away.
- 7.2.13. The continued use of the existing quarry operations is for eight years (plus two years to complete site restoration), which is a short to medium term duration. The site

- restoration approach is outlined in the enclosed drawing ('Proposed Restoration Scheme, Drawing No. 7') (also included as Figure NTS-6 of the EIAR Non-Technical Summary). I note that during the site restoration phase the subject lands would be returned to a form and appearance like that of the existing surrounding agricultural landscape.
- 7.2.14. I acknowledge that the proposed development would result in a permanent and irreversible change in the appearance of the landscape and its natural topography. The level changes within the subject lands would be visually apparent particularly upon entry into the site upon completion of the restoration plan and the various earthworks and landscaping measures proposed. However, I consider that the level of visual impact arising due to the proposed development, post the operational stage, would not be significant and in accordance with providing adequate protection to the archaeological heritage of the area, including that of Dún Ailinne. As time passes, I consider that the appearance of the site would be greatly softened as the restored areas transition into a farming and merge with existing adjoining unaffected agricultural fields. Hedgerows, landscaping and other forms of planted vegetation would gradually mature, and the subject area would progressively blend in with the surrounding landscape and its rural character.
- 7.2.15. Having regard to this, I consider that the proposed development would be in accordance with the various policies and objectives contained in the Development Plan in relation to the protection of archaeological heritage, including Policy AH P2, which seeks to protect archaeological sites and monuments and their settings, and Objectives AH O2 and AH O4 which requires the management of development in a manner that protects and conserves the archaeological heritage of the county and to avoid adverse impacts being incurred by on sites, monuments, features or objects of significant historical or archaeological interest.
- 7.2.16. I conclude that the proposed development, given its scale, nature and distance from Dún Ailinne and due to the limited visual impact that would be incurred by this sensitive archaeological site, that it would not result in unacceptable negative impacts arising on Dún Ailinne, or its setting, and that it would be in accordance with the provisions of the Kildare County Development Plan 2023 2029.

- 7.3. Visual Amenity of the area and setting of Dún Ailinne (Archaeological Site)
- 7.3.1. The Planning Authority's second reason for refusal is that the proposed extension to the existing quarry by reason of its scale, nature and proximity to Dún Ailinne would seriously injure the visual amenity of the area and disrupt the visual integrity of the historical setting of Dún Ailinne and, therefore, be contrary to the policies relating to archaeological heritage, local landscape and world heritage according to the Kildare County Development Plan (2017 2023). I note that this refusal reason is in relation to proposed extended extraction area only. It does not reference the existing quarry operation.
- 7.3.2. Section 11.12 of the Development Plan states that Dún Ailinne has been included on the World Heritage Tentative List as part of a larger assembly of sites namely, 'The Royal Sites of Ireland', which include Cashel, Dún Ailinne, Hill of Uisneach, Rathcroghan Complex, the Tara Complex and Eamhain Mhacha. Objective AH O17 seeks to protect and enhance the setting of Dún Ailinne and support managed limited public access to the site. The objective also states that only sensitive development that does not undermine the archaeological and cultural significance of the site will be permitted. Objective AH O18 requires that any development proposals within/around Dun Ailinne demonstrate that no adverse effects will occur on the established appearance or character of Dún Ailinne as viewed from either the Protected Panoramic Views or from surrounding public roads.
- 7.3.3. Section 13.3.2 of the Development Plan is in relation to impact of development on the landscape. It states that in order to determine the likely perceived impact of a particular development on the landscape, the potential impact of the development must be viewed having regard to the sensitivity of the area.
- 7.3.4. As previously noted, the precise Landscape Character Area designation that applies to the site is difficult to ascertain. This is because the relevant map in the Development Plan (Map V1-13.1) is unscaled and includes limited contextual information to help identify the extent and location of the site. However, in my opinion, the majority of the lands are within the Dún Ailinne Landscape Character Area. Also, I consider a section of the northwestern corner of the site is designated as Central Undulating Lands. The Dún Ailinne LCA is Class 5 in terms of sensitivity and, therefore, has a low capacity to accommodate new uses without significant

adverse effects being incurred on the appearance or character of the landscape. Having regard to this, only sensitivity designed, and carefully managed development proposals, should be considered in such areas. The Central Undulating Lands LCA is Class 1 (Low Sensitivity) and therefore has the general capacity to accommodate a wide range of uses, including sand and gravel pits, without significant adverse effects on landscape appearance or its character.

- 7.3.5. Map V1-13.2 'Landscape Sensitivity Areas' of the Development Plan assists in assessing the sensitivity of a particular landscape and its ability to accommodate a physical change, or intervention, without it suffering unacceptable impacts to its character or value. The 'Dún Ailinne' has a Landscape Sensitivity³ of Class 5 'Unique'. This comprises areas with a low capacity to accommodate uses without significant adverse effects being incurred in terms of eroding its appearance or character having regard to special sensitivity factors. The proposed development, which is for the continuation and extension of a sand and gravel pit, is identified under Table 13.3 as having a low compatibility. This is the same rating as development types 'forestry' and 'solar'.
- 7.3.6. The 'Central Undulating Lands' LCA has Landscape Sensitivity of Class 1 'Low Sensitivity' which has the capacity to generally accommodate a wide range of uses without significant adverse effects on the appearance or character of the area.
- 7.3.7. Map V1-13.2 also includes several designated scenic routes, scenic viewpoints, hilltop views and important ridgelines for the county. However, I note that none of these designations apply to the application site or its immediate surroundings. The nearest Hilltop View is from the top of Knockaulin Hill which is approximately 600m to the southeast. The closest designated ridgelines are on the far side of Knockaulin Hill and scenic routes are also located some distance from the subject site. However, the views towards / from Dún Ailinne from the subject site are still of high value and sensitive to new forms of development, in my opinion. This is due to the historic importance of this national monument and its value as a feature of significant archaeological interest. The recent inclusion of the monument on the Tentative List emphasises this.

³ Landscape sensitivity is referenced as a measure of the ability of the landscape to accommodate change or intervention without suffering unacceptable effects to its character and values.

- 7.3.8. In terms of assessing the compatibility of the proposed development with the visual amenity of the surrounding area, including that of Dún Ailinne, I have reviewed the imagery and photomontages accompanying Chapter 13 of the EIAR (Landscape). The information includes 6 no. viewpoints (A F) taken from various locations surrounding the site. Photomontage Sheet A (Figure 13-4) is from the top of Knockaulin Hill. It shows the existing view of the site (taken February 2021) with further photomontages of the envisaged scenarios for Year 3 (Completion of Extraction Phase 1), Year 8 (Completion of all Extraction Works) and Year 10 (Completion of all Restoration Works).
- 7.3.9. The information clearly illustrates that large parts of the existing quarry would be screened during its operational phase by existing boundary berms and landscaped areas. Some of the more significant, and potentially more visually intrusive components of the quarry, including plant and various other structures such as the concrete batching plant, processing machinery and site offices and the eastern section of the extraction area, are largely screened from view. I note also that a significant part of the new expansion area would be situated behind dense vegetation and, therefore, well screened from Knockaulin Hill. This would particularly be the case during the summer months when trees in are leaf.
- 7.3.10. In assessing the level of change caused by the proposed development, I have had regard to the comparatively small extent of visibility of the proposed quarry extension. Figure 13-4 of the LVIA shows that significant sections of the existing quarry would also behind by the existing boundary berms and landscape planting which is already in place. Much of the plant, processing machinery and onsite buildings and offices are currently hidden from view. The proposed level of screening and landscape planting is to be supplemented as part of the current application.
- 7.3.11. I acknowledge the site is mainly within the Dún Ailinne LCA, which is a sensitive landscape category (Class 5). However, I consider that the visual impacts arising on foot of the proposed development would result in a slight magnitude of change only. This is based on the locational context, setting and distance of the expansion area from Dún Ailinne and the limited visual disparity to outwards views which would be apparent from the top of Knockaulin Hill. The Development Plan states that all

developments are unique, and, at micro / local level, landscapes vary in terms of their ability to absorb development and each site should be assessed on its individual merits. In this regard, it is my view that the receiving landscape would be able to absorb the proposed quarry extension without any significant impacts being incurred to existing sensitive views.

- 7.3.12. I have considered the following factors in assessing the capacity of the surrounding landscape to accommodate the proposed development:
 - The appeal site accounts for a limited and narrow vertical view from Dún Ailinne.
 - The proposed expansion area would be largely imperceptible and avoid breaking the skyline or impeding views from Dún Ailinne towards the Curragh.
 - The proposed development does not seek to introduce any new or additional plant or buildings which could negatively impact on views, either as part of the existing quarry or proposed extension area.
 - The overall duration of permission sought is relatively short at 8 years.
 - The application does not seek to intensify the use of the quarry during the 8year period. Conversely, the estimated annual yield for resources recovered is projected to decrease over the proposed 8-year period.
 - The phased restoration of the site would return the lands to an appearance and character which is similar to that of the existing surrounding agricultural landscape. The level of visual impact arising post operational stage would therefore not be significant, in my view, and this would provide adequate visual protection to the setting of Dún Ailinne.
 - A section of the expansion area is within the 'Central Undulating Lands' landscape character area which is Landscape Sensitivity Class 1 ('Low Sensitivity'). Class 1 has the capacity to generally accommodate a wide range of uses without significant adverse effects on the appearance or character of the area. The Development Plan states that this is the 'most compatible' landscape type for accommodating a sand and gravel pit.

7.3.13. In summary, I consider that the proposed development would not be likely to seriously injure the visual amenity of the surrounding area and that it would not negatively impact the visual integrity, or historical setting, of Dún Ailinne.

7.4. Landscape and Visual Impact

- 7.4.1. The Planning Authority's third reason for refusal is that the proposed extension to the existing quarry would comprise the removal and lowering of the ridgeline, which is a conspicuous feature and performs an important role as a dominant landscape point. It considered that the proposed development would interrupt the integrity of this ridgeline and therefore contravene the Kildare County Development Plan 2017 2023. I note that this reason for refusal is in reference to the proposed extended extraction area only and that it is not in relation to the proposed continuance of the existing quarry.
- 7.4.2. In terms of the potential impact caused by the proposal on the character of the landscape and effects on visual amenity of the surrounding area, I note that the immediate vicinity of the site is characterised by an innate rural quality. This comprises undulating agricultural fields, small rural enterprise, low density one-off rural housing and other quarry operations; the latter both in terms of the current appeal site and two further two sand and gravel pits which are a short distance to the west.
- 7.4.3. The site is south of the Curragh pNHA and the Curragh Camp (army barracks) is roughly 3km to the northwest of the site. The Curragh is an open plain of high conservation value comprising an expansive area of open grassland and sporadic clumps of low-lying vegetation and gorse. Views of the existing quarry and proposed extension are very limited from this location. I note that the local road leading into the quarry from this side of the pit initially rises before meeting a gated entrance and then proceeding downwards via a steep decline into the comparatively level sand and gravel pit. I further note that views from the north and west of the site, which are from within and near the Curragh, have very limited intervisibility. The proposed extension area is situated further away from the Curragh than the existing quarry pit so that the only tops of existing boundary berms are visible from this location.

- 7.4.4. Section 13.5.1 of the Development Plan states that extensive views can be obtained from hilltops, allowing vistas over long distances, and similarly from the lowland areas the eye is drawn to the primary and secondary ridgelines that define the skyline throughout the county. It also states that ridgelines are conspicuous features of the natural landscape as they perform an important role as dominant landscape focal points.
- 7.4.5. Map V1-13.2 'Landscape Sensitivity Areas' of the Development Plan shows the location of ridgelines and other nota sensitive ble landforms in the county. Ridgelines are considered as a Principal Landscape Sensitivity Factor and are shown as red lines on the map. I note there are no such ridgelines in the vicinity of the appeal site and that the nearest such feature of this type is to the southeast on the far side of Knockaulin Hill. One of these ridgelines run in a northeast southwest direction whilst another is on a general north to south axis. The ridgelines intersect each another south of Knockaulin Hill as is shown on Map V1-13.2. The ridgelines are outside the 300m range specified by the Development Plan for the purposes of assessing the compatibility of a particular type of land use with its receiving landscape.
- 7.4.6. The appeal site, including its proposed expansion area, is not part of a conspicuous landscape and it is not focal point for the surrounding area, in my opinion. The site and the land within which it sits is relatively flat except for dugout sections of the sand and gravel pit and have only minor undulations. There is an absence of any elevated vantage points. The surrounding land comprises only occasional hills and rolling agricultural fields. There are no steep sided distinctive landforms, and the receiving landscape is relatively nondescript. I further note that there are no designated scenic routes or protected views in the vicinity of the site. I do not therefore consider that the proposed extension to the quarry would interrupt or significantly interfere with the landscape or any designated landforms for these reasons.
- 7.4.7. The proposed mitigation measures for during the operational stage include additional shrub and hedge planting and the phased restoration of disused sections of the sand and gravel pit, so that views of the quarry from Dún Ailinne and Knockaulin are kept to a minimum.

- 7.4.8. The Applicant proposes the full restoration of the pit to an agricultural afteruse. This includes areas for promoting natural habitats and improved opportunities for biodiversity and wildlife enhancement. This is in accordance with national guidance for such operations and I note that the Quarry Guidelines state that quarry restoration can not only replace, but may even add to, the diversity of plants and wildlife. In this regard, I note the third party submission which states the site should be restored to full agricultural use post operational stage, if permitted, and I acknowledge that this is in the Applicant's intention.
- 7.4.9. I note also that the Planning Authority favours the use of existing authorised and planning compliant quarries over proposals for extraction from new or greenfield sites. There are no outstanding compliance matters in relation to the existing quarry. The last previous such case was closed in March 2018 (Ref. UD6772) as evidenced by a note on the file by the Planning Authority. In relation to third party concerns in that various quarry extensions have taken place on the site since 1989, with each application granted before reinstatement works have commenced, I note that existing restoration works of certain sections of the quarry pit have either commenced or have been fully completed. The restoration of the quarry void is therefore taking place gradually and over time as the underground deposits are worked out.
- 7.4.10. There are many options for aftercare and restoration of a defunct quarry which can enable the land to be returned to an attractive and aesthetic form. In this regard, I note that the Applicant has submitted a Landscape and Restoration Plan detailing their proposed approach. The information is generally in line with best practice. It is also in accordance with Development Objective RDO O50, which seeks to ensure the satisfactory and sensitive re-instatement and/or re-use of disused quarries and extraction facilities where active extraction use has ceased, and RD Objective 051, which requires quarry remediation plans to provide for environmental benefit, biodiversity and re-wilding in all instances, respectively. However, I consider that the submission of a final restoration plan with further detailed information of site-specific restoration works, completed to the satisfaction of the Planning Authority, would be appropriate in this particular context.
- 7.4.11. In summary, I conclude that having regard to:

- the undulating and gently sloping nature of the surrounding landscape where the subject site is located, including dense pockets of vegetative screening, planted boundary berms,
- the absence of any formally designated protected views, vistas, protected landforms, ridgelines or hilltops in the area,
- the landscape and visual impact assessment included in the application and Chapter 13 of the EIAR ('Landscape'),
- my physical inspection of the site including of vantage points from the wider surrounding landscape from the public road network in the area,
- the existing and permitted use of the site for quarrying activity (and the location and scale of the proposed expansion area),
- the mitigation measures set out in the application including landscaping, berm construction, restoration of the subject lands, and capping revegetation and of the worked-out areas,
- the removal of all plant and machinery (following cessation of the quarrying activity),
- and subject to the submission of a final detailed landscape and site restoration plan, comprising the conversion of the subject site to agricultural lands with various ecological and environmental enhancement measures,

the proposed continuation of quarrying and ancillary activity and extension to the existing permitted sand and gravel pit would not seriously injure the visual amenity of the area.

7.5. Other Issues

Extent of Duration of Permission

7.5.1. The proposed development is for the continued use of the existing quarry operations on lands of approx. 28.1ha and an extension to the existing permitted pit of approximately 11.4ha for extraction (with c.10.8ha to be actively worked). The new materials recovered would be processed by the plant and infrastructure situated within the existing sand and gravel pit.

- 7.5.2. The proposed operational period is for 8 years, plus 2 years to complete the restoration phase, resulting in a total duration sought of 10 years. In this regard, I note that the Quarry Guidelines advise that, in deciding the length of planning permissions for quarries, it is normally appropriate to grant permission for a longer period of 10-20 years and that regard should be had to the expected life of the site reserves. The purpose of setting a finite period is not to anticipate that extraction should not continue after the expiry of that period, but rather to enable the Planning Authority, in conjunction with the developer and environmental authorities, to review changes in environmental standards and technology over a decade or more since the original permission was granted.
- 7.5.3. I note that the planning application documentation confirms that the quarry is operating in accordance with its permitted conditions. There are no outstanding enforcement matters identified on the file and it would appear the existing quarry facility is operating fully in compliance with the planning conditions from previous planning permission(s). I also note the significant investment which has been made by the Applicant in relation to the existing quarry operation which comprises a significant amount of plant, machinery and equipment, including the installation of a wastewater treatment plant, to eliminate potential impacts on the receiving water environment.
- 7.5.4. In summary, and in having regard to the nature and scope of the development, I consider that the granting of permission for 8 years, plus 2 years to complete site restoration (total duration 10 years), appropriate and in accordance with the provisions of the Kildare County Development Plan 2023 2029 and the Quarries and Ancillary Activities Guidelines for Planning Authorities, 2004.

8.0 Environmental Impact Assessment

8.1. Introduction

- 8.1.1. The application includes an Environmental Impact Assessment Report (EIAR). A number of the issues to be considered have already been addressed in the Planning Assessment above (Section 7.0). This section of the report should therefore be read, where necessary, in conjunction with relevant sections of the above assessment.
- 8.1.2. The proposed development has been outlined in Section 2.0 of my report above.

- 8.1.3. The EIAR contains a Non-Technical Summary (NTS). Chapters 1-3 inclusive set out an introduction, project description and proposed development. Chapter 4 sets out the existing environment; the likely significant direct, indirect and cumulative effects of the proposed development under the relevant headings listed in Article 3(1) of the 2014 EIA Directive; and an assessment of the cumulative impacts and summary of mitigation and monitoring. The NTS also includes a series of appended maps, drawings and a proposed Site Restoration Plan. I am satisfied with the contents of the NTS.
- 8.1.4. This section of my report assesses the information contained in the EIAR. It includes an independent and objective environmental impact assessment (EIA) of the proposed project in accordance with the requirements of the relevant legislation. It also addresses the potential environmental impacts of the proposed development during the construction and operational phases of the development.
- 8.1.5. In carrying out an independent assessment, I have examined the information submitted by the Applicant, including the EIAR, as well as the written submissions made to the Board including from the Planning Authority, prescribed bodies and members of the public. [This section should be read in conjunction with the planning assessment above and the Appropriate Assessment in Section 9.0, below.]
- 8.1.6. I am satisfied that the EIAR has been prepared by competent experts to ensure its completeness and quality; that the information contained in the EIAR and supplementary information adequately identifies and describes the direct, indirect and cumulative effects of the proposed development on the environment; and that it complies with article 94 of the Planning and Development Regulations 2001 (as amended).]
- 8.1.7. A Stage 2 NIS Report accompanies the application.

8.2. Project Description

8.2.1. The proposal includes the following:

Continuation of Use

• Continued use on the land of c.28.1ha of the existing permitted development,

- consisting of sand and gravel processing including crushing, washing (with associated silt disposal lagoons) and screening and all related ancillary works and structures, and
- site facilities consisting of prefabricated offices, WC and wastewater treatment and percolation area, canteen and cloakroom, ESB substation and ESB substation and switch house, concrete laboratory, bunded fuel tanks and water recycling bays, weighbridge and wheelwash permitted under Reg. Ref. 06/651.
- Continued use of the existing readymix concrete batching plant originally granted under Reg. Refs. 94/1109 and 90/52; and sand and gravel workings, with associated plant and facilities originally granted under Reg. Refs. 94/1109 and 89/150.

Proposed Extension

- The proposed development also consists of an extension (c. 11.4 hectares) to the existing permitted quarry for the extraction of sand and gravel resources over an area of c. 10.8 hectares. The materials recovered would be processed through existing processing plant and infrastructure as permitted by Reg. Refs. 17/1344 and 06/651.
- It is proposed to install an additional screening berm around the proposed extension area.

Site Restoration

- Restoration of the entire site to a combination of agricultural and nature conservation areas.
- The proposed operational period is for 8 years plus 2 years to complete restoration (total duration sought 10 years).
- 8.2.2. The main issues raised specific to EIA in the context of the proposed development can be summarised as follows:
 - Impact on the landscape from the visual impact of the proposal.
 - Impact on cultural heritage from the proposal.

These issues are addressed below under the relevant headings and, as appropriate, in the reasoned conclusions and recommendation.

8.3. Examination of Alternatives

- 8.3.1. Section 1.3 of the NTS includes a review of the alternatives and states that the proposed development is not akin to a factory or other commercial enterprise which can base itself at many other potential locations. It is a resource based development and therefore the aggregates can only be worked (extracted) where they are present in the land and the environmental effects of working them can be minimised. Other locational considerations include distance from the market, the required quality and quantity to justify capital investment, access to good quality road and infrastructure and environmental considerations.
- 8.3.2. In this case, the alternatives available to the Applicant are:
 - Further development at the existing site by extension into adjacent lands next to the existing pit, or
 - Develop a new replacement 'greenfield' development in the county to serve the established clients and markets in this region.
- 8.3.3. The Applicant has discounted the majority of other replacement sources of aggregate and development sites within the Kildare and mid-east area for the following reasons:
 - Potential environmental effects,
 - High clay content or other deleterious materials within the deposit,
 - Poor access and sub-standard roads.
 - Distance from the intended market is too far (excessive haulage costs),
 - Proximity to built-up areas.
- 8.3.4. The Applicant states that recently they sought to develop two greenfield sand and gravel pits in County Kildare Glenaree (Reg. Ref. 18/530) and Racefield (Reg. Ref. 19/1097). However, the locations were both refused by the Planning Authority in 2019 for reasons mainly to do with the local road network being substandard. [I note that the Board refused permission for the proposal at Glenaree (ABP Ref. 302152). However, the Board granted permission for the proposed development at Racefield

- (ABP Ref. 306297).] Nonetheless, I consider that it is generally favourable to continue and extend an existing quarry over developing a new quarry at a greenfield site.
- 8.3.5. The subject quarry is long-established and the local road network has proven to be suitable for this type of development.
- 8.3.6. The site at Ballysaxhills to contains high-quality reserves and is appropriate for an extractive industry for the following reasons:
 - Suitability of good quality sand and gravel reserves within the proposed extension area.
 - The proposed extension area is within the Applicant's ownership and is situated immediately adjacent the established sand and gravel pit.
 - Availability of good access and road infrastructure in proximity to the national road network and is close to key transport corridors (M7 and M9 motorways).
 - Low environmental impact as the existing topography assists with visual screening of the development and there is no significant visual intrusion on recorded monuments
 - The site is not within a designated ecological area or European site.
 - The existing quarry and proposed extension area are close to an existing concrete manufacturing facility, which would reduce energy consumption and the carbon emissions normally associated with long haulage distances.
- 8.3.7. I note that the EIAR sets out a number of design and layout considerations under Section 3.36. This includes the direction of the working area(s), proximity to dwellings in the surrounding area, presence of archaeological deposits and impact on the landscape and visual receptors. I highlight for the Board's attention that no new structures or buildings are proposed, or are required, as part of the application.
- 8.3.8. As the proposed development is for the continuance and extension of an existing long-established quarry serving markets in Kildare and further afield, I consider that the ability to consider alternatives is to an extent limited. I note from the EIAR the Applicant's planning history in terms of seeking permission for other similar forms of

- quarries on alternative lands to recover sand and gravel deposits with details provided of specific sites.
- 8.3.9. I acknowledge that aggregates can only be extracted where they occur. The resources recovered are a relatively low-value, high-volume material, and so must be located within reasonable distance of key markets to make transport costs economically viable. I am satisfied that the EIAR has satisfactorily addressed the issue of alternatives.

8.4. **Population and Human Health**

- 8.4.1. Chapter 4 of the EIAR addresses 'Population and Human Health'. As would be expected, the likely effects of the proposed development on human health are also addressed under several other headings of the EIAR and, as such, they also should be considered with regard to this chapter.
- 8.4.2. I note that this section of the EIAR also addresses socio-economic considerations, land use, the equine and bloodstock industry, health and safety and human health. Other impacts which could potentially impact on humans include potential effects on water, air quality, noise, landscape and traffic, which are discussed in the respective chapters of the EIAR.
- 8.4.3. The receiving environment is one of the existing quarry, and its surroundings, which is largely comprised of agricultural land interspersed with sporadic one-off rural housing agricultural buildings and farming land. There are two other sand and gravel pits in the general vicinity which are in third party ownership and unrelated to the subject quarry. The closest dwellings are on the local road network. There are roughly 30 one-off dwellings located within 500m of the appeal site. The closest house is c. 60m from the northwest boundary of the existing quarry site. There are six further houses to the northeast, but which are more than 100m away. The residential density of the receiving environment is low. Section 4.39 4.46 of the EIAR identifies environmental and heritage designations in the surrounding area, including the Curragh pNHA whose southern boundary is immediately north of the subject site.
- 8.4.4. The predicted construction impacts will mainly arise from the removal of vegetation, stripping of topsoil and construction of a perimeter screening berm(s). This could potentially create dust and noise and result in the leakage or spillage of materials

such as fuel into the soil and ultimately groundwater. However, a number of mitigation measures are proposed, which are outlined in Chapters 6 (Lands, Soil and Geology), 7 (Water), 8 (Air Quality), 10 (Noise), 13 (Landscape) and 14 (Traffic). These can be summarised as follows:

- Use of mobile water bowsers and sprinkler systems to suppress dust,
- Use of wheelwash facility to prevent deposition of dust on public roads,
- Ongoing maintenance of plant and managing work activities to ensure compliance with noise emission levels,
- Retention, maintenance and strengthening of existing boundary hedgerows and berms to provide acoustic, dust blow and visual screening,
- Storage of oils, chemicals and hydrocarbons within existing bunded areas and placement of same on overspill pallets, and
- Refuelling of plant and machinery over designated drained and sealed surfaces.
- 8.4.5. The predicted operational impacts will mainly arise from the physical extraction of aggregates and processing of same (crushing, washing and screening). This may potentially result in the generation of dust (particularly during dry weather), noise by operation of machinery and movement between the working face and processing plant, leakage or spillage of materials such as fuel and oil into the soil and ultimately groundwater and ongoing changes to visual amenity as the land is progressively stripped in a south westerly direction. As per above, various mitigation measures are proposed, which are outlined in Chapters 6, 7, 8, 10, 11, 13 and 14. There is no requirement for temporary plant or structures (such as canteen, wheelwash, weigh bridge, office or processing equipment) as these facilities are already provided as part of the existing permitted development.
- 8.4.6. During the post-operational phase, potential noise and air effects would largely cease and the implementation of mitigation measures would prevent groundwater impacts from arising.
- 8.4.7. I have considered this chapter and other submissions in relation to population and human health. I am satisfied that potential effects would be avoided, managed and mitigated by the measures which form part of the proposed scheme, the mitigation

measures and through suitable conditions. I am therefore satisfied that the proposed development would not have any unacceptable direct, indirect or cumulative effects on population and human health.

8.5. Biodiversity

- 8.5.1. Chapter 5 of the EIAR addresses biodiversity.
- 8.5.2. I note that the EIAR references publicly available material from several sources (including Kildare Council, EPA, NPWS, Birdwatch Ireland). A site visit was carried out by the author in the preparation of this chapter.
- 8.5.3. There would be no land take or direct loss of habitat from The Curragh pNHA. It is estimated that the annual extraction output will be reduced from the existing permitted 450,000 tonne per annum to c. 200,000, which takes into account the likely yield from the proposed extended extraction area.
- 8.5.4. The predicted construction impacts will mainly comprise the removal of a hedgerow (c. 360m) from within the site along the northwestern boundary of the proposed extension area, which has bird nesting potential. The pit face at the northern extent of the site where nesting peregrine falcon are present will be retained at all times. A pit face in which c. 80 sand martin nests were recorded will be moved towards the south of the site. However, the most significant and established colony will remain in situ, in their current location, which is behind the existing site offices. There will be a loss of sand martin breeding habitat. However, I do not consider that this would be a significant impact as alternative sufficient breeding habitats would be retained within the site. Works affecting areas where the sand martin nests are present will only be done outside of the breeding season (mid-March to September).
- 8.5.5. The hedgerow proposed to be removed is structurally poor and of low value for commuting bats. Two potential roost features with low value were identified during the site visit. These are not proposed to be removed. No night-time lighting will be required for the pit workings with the exception of the shorter winter-time period. Such works will only be done during the permitted operational hours. There would also be a loss of existing agricultural grassland, dry meadows and grassy verges. These habitats are to be restored / re-established as part of the proposed site restoration plan.

- 8.5.6. The Applicant's appeal submission acknowledges that the collapse of the pit face has the potential to cause temporary loss of sand martin nests. However, this is unlikely to occur as any such accident would realistically only have the potential to happen when the quarry is operational, and the pit face cleared of vegetation and actively being worked on. If such an event were to occur however, such a loss would not be significant as extensive areas for nesting opportunities are present for this species throughout the site.
- 8.5.7. I have considered this chapter and other submissions in relation to biodiversity. I am satisfied that potential effects would be avoided, managed and mitigated by the measures which form part of the proposed scheme, the mitigation measures and through suitable conditions. I am therefore satisfied that the proposed development would not have any unacceptable direct, indirect or cumulative effects on biodiversity.

8.6. Land, Soils and Geology

- 8.6.1. Chapter 6 of the EIAR addresses land, soils and geology.
- 8.6.2. I note that the EIAR states that the subsoils at the site have been described from both physical inspections of existing pit faces and borehole surveys and trail pits which were undertaken in 2019 and shortly before the application was lodged. The information indicates that up to 20m of potential resources and material are available within separate pit faces.
- 8.6.3. The EIAR states that the Irish Geological Heritage (IGH) section of the Geological Survey of Ireland (GSI) were consulted prior to making the application. The issues raised by them have been incorporated into the proposed development, including the restoration of the site to include exposures into the sand and gravel deposit(s). I have consulted the online Geological Survey of Ireland (GSI) database⁴ and note that it includes a map of geological heritage sites proximate to the subject lands. The subject site is partially within a site of geological heritage and is described as a 'large working sand and gravel pit' (site code: KE005).
- 8.6.4. The predicted construction impacts mainly include soil stripping and vegetation removal across the land through the use of earthmoving equipment such as

⁴ Geological Heritage (arcgis.com)

excavators and graders. During the operational stage the sand and gravel deposits recovered as part of the quarry workings would be excavated and processed onsite. The operations are required to adhere to the relevant guidelines and regulations and to limit the potential for unplanned events, such as instability of pit faces or adjacent lands. The residual impact will be a worked-out quarry void which would be subject to restoration.

- 8.6.5. I note there is no requirement to import soils or other materials to the site at any stage as referenced under Section 2.18 of the EIAR.
- 8.6.6. The mitigation measures proposed include:
 - Preparation of a specific Soil Management Plan for the site,
 - During the operational stage topsoil will be stripped off and used to construct
 the screening berm around the extension area or be stockpiled onsite ready
 for use during the future site restoration phase.
 - The stockpiling of soil at the site ready for reuse in restoration would be removed from routes involving any site traffic and avoid day-to-day activities.
 The stockpiles would not be disturbed by vehicles. This will prevent the soils from being contaminated during the operational stage of the guarry.
 - Soil deformation and minimisation of compaction by excavators and dump trucks will be achieved by such vehicles only operating on the non-soil layer, excavators only operating on the topsoil layer, the adoption of a bed/strip system which avoids the need for trucks to travel on layers and that machines will only work when ground conditions allow for maximum operating efficiency.
 - The building of soil storage mounds with excavators and dump trucks would include mounds being sited on dry ground and not in hollow.
 - Mounds would be protected from run-off and ponding and vehicles permitted to only use the dedicated haulage route and operational areas.
 - Work will be required to stop in wet conditions and topsoil storage mound must not exceed 2m in height.
- 8.6.7. I have considered this chapter and other submissions in relation to land, soils and geology. I am satisfied that potential effects would be avoided, managed and

mitigated by the measures which form part of the proposed scheme, the mitigation measures and through suitable conditions. I am therefore satisfied that the proposed development would not have any unacceptable direct, indirect or cumulative effects on land, soils and geology.

8.7. **Water**

- 8.7.1. Chapter 7 of the EIAR addresses water.
- 8.7.2. I note that the proposed extension site is to be worked dry and above the underlying winter groundwater table to a depth of 105.5m AOD. There will be no discharge from the site. There is no evidence of surface water courses at the site or adjacent the subject lands.
- 8.7.3. The nearest water course is 1.7km to the southwest of the site. This is the headwaters of the Kildoon stream which flows south-westerly until it reaches the River Barrow. The site is on the southern edge of the Curragh gravel aquifer which is classified as a Regionally Important Sand and Gravel aquifer. The EIAR notes that there is a small groundwater body labelled historic waste facility, which is to the west and downgradient of the appeal site.
- 8.7.4. GSI mapping shows that the site is within the Curragh Gravels West Groundwater Body which has been assessed as having 'good' status and the groundwater vulnerability beneath the existing pit is classified as having an 'extreme' vulnerability. A number of private wells supplying potable water to local homes have been identified from the GSI database. However, the proposed pit extension is outside the public water supply wells at the Curragh Camp and the groundwater levels beneath the site are monitored monthly.
- 8.7.5. I note that there is an existing effluent Wastewater Treatment Plant (WWTP) and associated percolation area on the appeal site. This system treats wastewater from the onsite welfare facilities. There is an existing site water management system in place for screening and washing aggregate in the production of readymix concrete.
- 8.7.6. Sensitive receptors in the receiving environment include Pollardstown Fen SAC (Site Code: 000396), which is roughly 6.2km to the north/northwest, the aforementioned regionally important gravel aquifer, public well at the Curragh and private groundwater supplies in the surrounding area.

- 8.7.7. The mitigation measures proposed include:
 - Monitoring and management groundwater quality in the boreholes at the site to check for any deterioration in water quality as a result of the construction phase,
 - Storage of fuel in the existing bunded fuel tanks and to ensure refuelling only takes place on the existing hard stand with hydrocarbon separator,
 - Availability of a spill kit with high absorbency mats in the event of a hydrocarbon spill,
 - Quarry workings are to only take place above the winter groundwater table,
 - The closed settlement lagoons will continue to treat and recirculate the process wash water which will minimise the volume of groundwater abstraction and to discharge of wash water from the site,
 - The settlement lagoons are constructed from low permeability subsoil material and sealed so that silt is prevented from entering the groundwater system,
 - All settled solids from the washing process to be incorporated as part of the restoration plan for the site post-operational phase,
 - Entrance and yard area is paved and the existing wheelwash facility will continue to be used to prevent deposition of material going on public roads, and
 - Preparation of a site-specific Environmental Management System.

Having regard to these measures no significant effect is predicted on ground or surface water quality. There are no expected impacts on the hydrology or hydrogeology of the area.

8.7.8. I note that the HSE has recommended that in the event permission is granted, that a condition be attached requiring bi-annual water quality sampling and monitoring of private wells take place within 1km of the site, including prior to the new extraction area becoming operational. The Applicant contends in their appeal submission that such monitoring would be excessive given there are c. 97 private dwellings within a 1km radius of the site and that the extraction of material will only take place above the water table.

- 8.7.9. The EIAR (Sections 7.148 7.157) sets out a detailed series of mitigation measures and these, together with the proposed decommissioning, drying out and restoration of the settlement lagoons and planting of native plant species on the site constitutes a robust water management strategy, in my opinion. The extractive works are proposed to take place above the winter groundwater table only and I consider that regular monitoring of groundwater to ensure the sand and gravel pit remains above the groundwater level at all times would be a sufficient control measure to safeguard water quality in private wells within proximity of the site. I further note that the new extraction area if permitted would not increase the anticipated annual extraction yield from the overall quarried area; and in fact, this is expected to decrease.
- 8.7.10. I consider that the monitoring approach recommended to be implemented by the HSE is therefore unnecessary in this context and that such a condition should not be required, in my view, in the event permission is granted. The HSE advises in their submission to installation a class 1 bypass hydrocarbon separator to provide adequate treatment of run-off from hardstanding areas. I consider this appropriate and that it would help ensure the removal of fuel, oil, silt, heavy metals, and other potential contaminants, as part of the wastewater treatment process, and that it should be made a requirement under condition (in the event permission is granted).
- 8.7.11. I further note that the report completed by the Council's Heritage Officer sets out conditions for where a grant of permission might be issued. This includes *inter alia* the monitoring of groundwater conditions to ensure the pit floor stays above the winter groundwater level, that an Ecological Clerk of Works be appointed to ensure mitigation measures set out in the EIAR are satisfactorily implemented and that annual water quality reports be submitted to the Planning Authority. I consider the conditions to be reasonable and that these should also form part of any decision to grant permission issued by the Board.
- 8.7.12. I have considered this chapter and other submissions in relation to water. I am satisfied that potential effects would be avoided, managed and mitigated by the measures which form part of the proposed scheme, the mitigation measures and through suitable conditions. I am therefore satisfied that the proposed development would not have any unacceptable direct, indirect or cumulative effects on water.

8.8. Air Quality

- 8.8.1. Chapter 8 of the EIAR addresses air quality.
- 8.8.2. The EIAR states that proposed development has potential to generate fugitive dust emissions and particulates, which may result in impacts on local air quality. Sources include vehicle exhaust emissions associated with the extraction and transportation of aggregates.
- 8.8.3. The development currently has a permitted average annual extraction rate of approximately 450,000 tonnes. However, it is intended under the current proposal to reduce this to c. 200,000 tonnes p.a. This would result in an average reduction of c. 32 trips from c. 87 to c. 55 HGV trips over a working day. The main potential impacts on sensitive receptors are from transport (access road and internal haulage routes); soil and overburden handling; storage of soils and overburden; excavation, storage and transfer of aggregates; and processing plant and related activities.
- 8.8.4. I note that the EIAR identifies approximately 30 no. sensitive receptors / residential dwellings within 500m of the appeal site. The site is not subject to any statutory nature conservation designation. The closest designated site is to the north, which is the Curragh (pNHA).
- 8.8.5. The mitigation measures proposed include:
 - Minimising drop heights when handling materials and placing soils directly into screening berms or progressive works,
 - Avoiding working in adverse and windy conditions,
 - Minimising distances between onsite haulage routes
 - Using water spays to moisten surfaces during dry weather,
 - Restricting vehicle speeds within the site through signage and training,
 - Seeding surfaces of completed mounds and bunds with topsoil,
 - Limiting mechanical disturbance,
 - Retaining hedgerows,
 - Utilising dust deposition monitoring will continue to be undertaken at the site with monitoring locations reviewed and revised where necessary, and

submission of dust monitoring to Kildare County Council on a regular basis for review and record purposes.

- 8.8.6. There is an established comprehensive monitoring programme in place to ensure the quarry operates within the recommended dust deposition limits as set out in best practice guidelines for the sector. This is also a condition of previous permissions on the site.
- 8.8.7. I note that the Environmental Health Service Unit (HSE) recommends that mitigation measures outlined above should be implemented in full.
- 8.8.8. I have considered this chapter and other submissions in relation to air quality. I am satisfied that potential effects would be avoided, managed and mitigated by the measures which form part of the proposed scheme, the mitigation measures and through suitable conditions. I am therefore satisfied that the proposed development would not have any unacceptable direct, indirect or cumulative effects on air quality.

8.9. Climate

- 8.9.1. Chapter 9 of the EIAR addresses climate.
- 8.9.2. The EIAR considers the baseline conditions of the site and its surrounding vicinity, climate hazards, project vulnerability and potential for greenhouse gas (GHG) emissions.
- 8.9.3. The receiving environment is described as a typical Irish climate. In the summer, dry continental air is interspersed with Atlantic frontal systems and in winter dominated by Atlantic frontal systems. The east of Ireland, which is sheltered from this Atlantic frontal system, is sunnier than the west. Tables 9.3 and 9.4 set out, respectively, the average temperature ranges and average precipitation at Dublin Airport over an annual basis. Dublin Airport is roughly 50km to the northeast of the appeal site.
- 8.9.4. The mitigation measures proposed for climate change adaption include the adaptive capacity of the development to reduce its vulnerability to climate change and increase its resilience through design that allows for future rising water levels, adequate onsite drainage, the ability to withstanding high winds and storms, and use of equipment onsite which is weather efficient.
- 8.9.5. Based on the size and scale of the proposed continuation of use and extension of the existing quarry, it is considered that GHG emissions would not make significant

contributions to the global atmosphere. However, the mitigation measures proposed for reducing GHG emissions include the option of using renewable energy sources / suppliers and low carbon construction materials, utilising energy efficient machinery, and avoiding unnecessary journeys and trips by managing travel and transportation behaviour.

8.9.6. I have considered this chapter and other submissions in relation to climate. I am satisfied that potential effects would be avoided, managed and mitigated by the measures which form part of the proposed scheme, the mitigation measures and through suitable conditions. I am therefore satisfied that the proposed development would not have any unacceptable direct, indirect or cumulative effects on climate.

8.10. Noise and Vibration

- 8.10.1. Chapter 10 of the EIAR addresses noise and vibration.
- 8.10.2. A series of environmental noise surveys were carried out to capture the typical background noise levels at various noise-sensitive receptors close to the appeal site. The main source of noise is from within the existing sand and gravel pit and caused by machinery (in the form of excavators, loading shovels, etc.), processing plant, soil stripping and other ancillary processes. I note that Figure 10-1 includes a map showing the noise monitoring locations and various sensitive receptors, including dwellings which are proximate to the site. The EIAR confirms that no blasting will be carried out meaning there is no requirement for vibration monitoring, which I could acceptable.
- 8.10.3. I note that there is already an existing programme in place for monitoring noise and vibration at the site which is in accordance with the extant permission for the existing quarry use. [Condition No. 23 of Reg. Ref. 17/1344 refers.] The noise limit is set to be a maximum of 55dB(A) between the hours of 08.00 and 18.00, Monday to Friday and 08.00 and 14.00 on Saturday (excluding bank or public holidays), and 45dB(A) at any other time.
- 8.10.4. The Applicant states that the proposed strategy to address potential noise impacts is to avoid, reduce and remedy. The mitigation measures proposed include:

Screening and Plant

- Retaining and maintaining the existing screening berms and planting which act as an acoustic barrier,
- All mobile plant and machinery to operate within accordance with the applicable guidance (including EC Directive 86/662/EEC and subsequent amendments), and
- Ongoing maintenance of plant and equipment in line with manufacturer's specs and fitting of exhaust silencers.

Traffic

- Deliveries to occur during daytime hours only,
- Minimisation of noise and disturbance during unloading of vehicles and avoidance of vehicles leaving engines running / unnecessary revving, and
- Maintenance and regular clearing or access roads and internal haul roads.
- 8.10.5. I note the concerns raised by the Planning Authority in that the EIAR does not appear to assess or identify any impacts associated with an increase in noise at the identified sensitive receptors in the vicinity of the site. The Applicant's appeal states that there will be no increase in noise levels on any sensitive receptors, that all cumulative impacts (short-term and long-term) would be negligible, and that the proposed development would not give rise to any additional noise nuisance. I further note that that as the annual extraction rate is expected to decrease and that it is likely traffic movements would reduce. There are also no proposed changes to road alignment or speed limits. As such, the impact of the proposed development on noise is considered negligible.
- 8.10.6. I am satisfied that given the distance from plant and extraction areas within the existing and proposed pit extension to the nearest sensitive receptor, and the mitigation measures and monitoring programme set out in the EIAR, that the cumulative impact of the development on noise levels in the area would not be significant, nor result in unnecessary nuisance for residents, or other receptors, in the area.

8.10.7. I have considered this chapter and other submissions in relation to noise and vibration. I am satisfied that potential effects would be avoided, managed and mitigated by the measures which form part of the proposed scheme, the mitigation measures and through suitable conditions. I am therefore satisfied that the proposed development would not have any unacceptable direct, indirect or cumulative effects on noise and vibration.

8.11. Material Assets

- 8.11.1. Chapter 11 of the EIAR addresses material assets.
- 8.11.2. The EPA Guidelines in relation to material assets refers to roads and traffic, built services and waste management. Typical topics are noted as being electricity, telecommunications, gas, water supply and infrastructure sewerage.
- 8.11.3. Section 11.75 of the EIAR states that mitigation of impacts of the proposed development in respect of noise, air quality, ecology, cultural heritage and traffic are set out in the relevant chapters of the EIAR. It is not considered that any further mitigation measures are required in respect of utilities or of sensitive receptors in the surrounding vicinity. Figure 11-1 includes a map which shows overhead powerlines (440KV Line) in relation to the application site. The powerlines run mainly to the north and west of the existing quarry lands and do not encroach onto the appeal site.
- 8.11.4. The EIAR identifies potential hazards in the form of ground and slope instability, material spillages and flooding, which are already addressed in previous chapters.
- 8.11.5. I have considered this chapter and other submissions in relation to material assets. I am satisfied that potential effects would be avoided, managed and mitigated by the measures which form part of the proposed scheme, the mitigation measures and through suitable conditions. I am therefore satisfied that the proposed development would not have any unacceptable direct, indirect or cumulative effects on material assets.

8.12. Cultural Heritage

- 8.12.1. Chapter 12 of the EIAR addresses cultural heritage.
- 8.12.2. The Board is advised that there is an overlap with Section 7.2 of the planning assessment above and with this section of the EIA assessment, which is in relation

- to cultural heritage and archaeological heritage. I recommend that the sections be read in tandem.
- 8.12.3. The main potential impact to cultural heritage relates to visual impact on Dún Ailinne (a recorded monument and site of archaeological interest) and the Curragh landscape to the north. The scale, nature and proximity of the proposed development on Dún Ailinne is one of the main concerns raised by the Planning Authority in their decision to refuse permission. The wider surrounding area is also characterised by the presence of several other recorded monuments and places.
- 8.12.4. Sections 12.81 12.83 of the EIAR describe the findings of the field assessment and completed test excavations and provide a description of the features identified. The EIAR notes that there would be direct impacts on a number of archaeological features present in the proposed area of extension.

Dún Ailinne

- 8.12.5. Dún Ailinne is a historic hill fort is situated approximately 500m to the southeast of the subject site. It sits atop of Knockaulin Hill and is enclosed by an earthen bank and ditch. Dún Ailinne was used for ritual purposes during the Irish Iron Age and is a Recorded Monument Protected (RMP) under Section 12 of the National Monuments (Amendment) Act 1994 (Ref. KD028-03801). The submitted EIAR (Pages 12-17 to 12-18) provides a full description of the site as per the Record of Monuments. [I note that since the making of the application three sites have been included on the recently compiled Tentative List for Ireland. This is an inventory of natural and cultural heritage sites that may have the potential to be considered suitable for nomination to the World Heritage List. The Tentative List includes the 'Royal Sites of Ireland' of which Dún Ailinne forms part of.]
- 8.12.6. The proposed quarry works and extension area would not physically impact on Dún Ailinne. The monument is roughly 500m / 550m to the southeast of the existing quarry and, therefore, is sufficiently far removed to prevent any such impacts from occurring. I have reviewed the landscape and visual impact assessment (LVIA) accompanying the application and consider that the views to and from Dún Ailinne to the appeal site would have a minor to moderate impact only. This is mainly due to the comparatively small extent of visibility of the existing pit, and proposed quarry extension, from this particular location (i.e. the top of Knockaulin Hill). I note that a

- significant part of the proposed expansion area would be screened behind dense strips of vegetation and a new screening berm to be positioned around the quarry perimeter.
- 8.12.7. I refer to Figure 13-4 of the LVIA which shows that large and expansive sections of the existing quarry would be screened by the existing boundary berms and landscaping. I note that extensive amounts of the existing quarry plant, machinery and various ancillary structures are hidden from view. The proposed level of screening and landscape planting would be 1further supplemented as part of the current application and I note that no additional infrastructure in the form of new buildings, processing plant or equipment forms part of the proposal. The strategy employed by the Applicant is to work out quarry resources from the new expanded area and then to transport it back the short distance to where existing plant is situated. The internal road network for the quarry is relatively low-lying and I do not consider that the potential movement of vehicles through the pit would have any significant visual impacts on Dún Ailinne either.
- 8.12.8. In my opinion, the duration of works is also a relevant consideration in assessing this appeal case. The proposal comprises the continued use of the existing quarry and proposed extension of the quarry for eight years (plus two years to complete site restoration) (total duration of permission, 10 years). The extraction works would therefore be temporary, and any visual impact incurred by Dún Ailinne would be mitigated by restoration of the site post the operational phase. Whilst it may be apparent to some that the land previously functioned as an active quarry its restored appearance would generally resemble that of undulating agricultural lands. This is an important consideration, in my view. I note also that Table 3.4 of the 'Guidelines on the information to be contained in Environmental Impact Assessment Reports (EIAR), 2022' states that medium-term effects are those that last between seven and fifteen years. The proposed development is for eight years plus two years for restoration. The views between the appeal site and Dún Ailinne are not protected in the Development Plan.
- 8.12.9. I have read and noted the report completed by the Council's Heritage Officer. In relation to the recommendation that photomontages from the top of Dún Ailinne be requested (as part of a potential request for further information), I note that the LVIA

includes a viewpoint from this location. The sheet is entitled Photomontage Sheet A (Figure 13-4) and the view is from the top of Knockaulin Hill towards the subject site. It includes various photomontages depicting the site in its current / existing form (taken in February 2021), but also the predicted scenarios for Year 3 (Completion of Extraction Phase 1), Year 8 (Completion of all Extraction Works) and Year 10 (Completion of all Restoration Works). In my opinion, this information is sufficient in terms of providing an adequate description of the likely visual impacts that would occur on foot of the proposed development.

8.12.10. Whilst I accept that the landscape will not, and cannot, be returned exactly to its original condition post quarrying, I consider that the regrading of the site – with pit slopes lowered –, landscape planting, hedgerows restored, decommissioning of settlement lagoons, the reintroduction of an agricultural afteruse, and improved natural habitats and opportunities for local biodiversity to re-establish would be appropriate and satisfactory. In this regard, I consider that the completion of the site restoration plan would enable the land to be returned to an attractive and useful form and allow it to develop an aesthetic that complements the existing character of the area.

<u>Archaeological Features</u>

- 8.12.11. The archaeological assessment addresses the cultural heritage and archaeological and historical background associated with the subject site and its surrounding area for a distance extending to 1km. The assessment been prepared by a suitably qualified archaeologist. This has influenced the siting and design of the proposed development, such that potential impacts on archaeological heritage have been avoided and minimised.
- 8.12.12. The archaeological assessment was informed by a geophysical investigation of an area of 42ha., approximately. The lands were split into Areas A, B, C and D. Following consideration of the geophysical survey, the Applicant decided not to pursue any development in Areas B, C or D, or the eastern part of Area A (in order to avoid RMP KDO28-033). The remainder of Area A was assessed by a process comprising physical test trenching carried out between July and October 2020. I note that a number of adjacent fields were omitted from test trenching due to the limited likely extent of archaeological finds to be present.

- 8.12.13. Following a review of the results of the trial excavation, the Applicant decided to preserve in situ the most significant archaeological finds and for these areas to remain fully outside of the proposed extraction area. I note that this had the effect of reducing the final proposed extraction area to 10.8ha. It was also proposed to preserve by record the 47 no. archaeological features, which were identified in the proposed extension area, but are not considered significant. These features include pits, possible pits, non-linear ditches, curvilinear ditches, and other such features. It is also proposed to preserve by record two spreads of burnt mound material.
- 8.12.14. I note for the Board's attention that notice of the application and appeal was given to the Archaeological Unit (at the Department of Tourism, Culture, Arts, Gaeltacht, Sport and Media), but no submission was received. However, the Applicant engaged and consulted with Geological Survey Ireland (GSI) at pre-application stage.

The Curragh

- 8.12.15. The proposed development avoids any conspicuous ridgelines, sensitive landscapes or elevated settings. I note that due to the topography of the site and rolling nature of the landscape in this area that the existing quarry, and its proposed extension, are not visible from the Curragh (pNHA, Site Code: 000392).
- 8.12.16. During my physical inspection of the site and its surrounds, it was not possible to observe the appeal site from any point along the public road network north of the quarry / south of the Curragh. I further note that the local road leading up to the quarry entrance initially rises before meeting a gated access and then steeply declining into the existing sand and gravel pit. The quarry therefore sits down and behind an elevated section of the landscape. The potential for visual impacts arising on the Curragh are therefore limited and would not be significant, in my opinion.
- 8.12.17. I have considered this chapter and other submissions in relation to cultural heritage. I am satisfied that potential effects would be avoided, managed and mitigated by the measures which form part of the proposed scheme, the mitigation measures and through suitable conditions. I am therefore satisfied that the proposed development would not have any unacceptable direct, indirect or cumulative effects on cultural heritage.

8.13. Landscape

- 8.13.1. Chapter 13 of the EIAR addresses landscape.
- 8.13.2. The Board is advised that there is an overlap with Sections 7.3 and 7.4 of the planning assessment above and with this section of the EIA assessment, which is in relation to Cultural Heritage. I recommend that the sections be read in tandem.
- 8.13.3. The overall site layout is described as irregular in shape and layout and defined on each of its boundaries by mature and established hedgerows. There is an existing vehicular access via a local road (the L6080) from the north of the site. The subject site is surrounded by rolling farmed landscape, except for the Curragh lands to the northwest, which are generally flat. Some areas of the existing quarry are currently being restored to grassland. Appendix 2A of the EIAR includes information and photographs of recent restoration works that have taken place at the quarry. The further planting of hedgerows and shrubs will be carried out to augment the screening provided by the existing boundary berms.
- 8.13.4. A Landscape and Visual Impact Assessment (LVIA) was completed as part of the application using a study area of 3km. The predicted impacts would be restricted to a small number of highly sensitive receptors, including Dún Ailinne (to the southeast) and the Curragh to the north and northwest, respectively.
- 8.13.5. The EIAR states that the overall scale of the development would not be increased due to its phased restoration. It also states and that the proposed development would only be visible in small narrow sections of the available views from Dún Ailinne, that there are a low number of sensitive receptors generally and the operational period for the quarry (8 no. years) is relatively short. In summary, it concludes that the visual impacts arising would be moderate (worst case scenario), and not significant. The impacts would reduce to minor negligible when all of the restoration works are complete. The proposed development would not be visible, or interrupt, any views from the Curragh towards Dún Ailinne, or be visible from any of the designated scenic routes or protected views identified in the Development Plan.
- 8.13.6. I have reviewed the LVIA and note that the appeal site, including its proposed expansion area, is not part of a conspicuous landscape or acts as a focal point for the surrounding area. The site, and its immediate surrounding landscape, is relatively non-descript. The land is relatively flat, except for dugout sections of the

existing pit, and with mainly only small hills, furrows and hedgerows as the defining features for the surrounding agricultural fields and grasslands. I note that there is a distinct absence of any elevated vantage points or ridgelines and that there are no designated scenic routes or protected views in the vicinity. I acknowledge that Dún Ailinne, to the southeast, and the Curragh to the north and northwest, respectively, are potentially sensitive receptors, however.

- 8.13.7. The proposed mitigation measures for during the operational stage include additional shrub and hedge planting and the phased restoration of disused sections of the existing pit, so that views affecting Dún Ailinne and Knockaulin Hill (designated Hilltop View) are minimised. I note also that views from the north and west of the site, which are from within and near the Curragh, have very limited intervisibility. The only part of the quarry extension visible from the Curragh would be of screening berms and planted landscaping. The proposed extension area would also be situated a greater distance from the Curragh than the existing quarry pit.
- 8.13.8. The restoration of the pit to an agricultural afteruse is an important consideration in the assessment of this appeal, in my opinion, and I note that the temporary nature of the quarry works would cease after Year 8. The restored quarry lands would largely resemble the surrounding rural landscape and the proposed grassing of the area, together with supplementary hedgerows, would allow the site to merge with surrounding farming land. In my opinion, whilst physical changes to the landscape would still likely be apparent, the visual impacts arising on foot of the proposed development in the context of its surrounding sensitive receptors would be low and not significant.
- 8.13.9. I have considered this chapter and other submissions in relation to landscape. I am satisfied that potential effects would be avoided, managed and mitigated by the measures which form part of the proposed scheme, the mitigation measures and through suitable conditions. I am therefore satisfied that the proposed development would not have any unacceptable direct, indirect or cumulative effects on landscape.

8.14. Traffic and Transport

- 8.14.1. Chapter 14 of the EIAR addresses traffic and transport.
- 8.14.2. I note that sections 14.1 14.6 of the EIAR includes an overview of the existing development. Traffic using the local road network is mainly private cars and traffic

- volumes generated by the existing quarry are considered light. Approximately 86 HGV trips (8 no. per hour) are made daily from the site. However, this can fluctuate depending on product demand. Most HGVs use a left in / right out route direction along the L6080 to the R448, which is approximately 2.2km to the east. A small number of vehicles turn west towards Newbridge and Kildare town.
- 8.14.3. The existing quarry development has a permitted average annual extraction rate of approximately 450,000 tonnes. This is intended to be reduced under the current proposal to c. 200,000 tonnes p.a., which would equate to lower traffic volumes being generated as a result (c. 55 no. HGV trips down daily from the existing number which is c. 86 no.). The vehicles would continue to use the same site entrance and local roads. It is therefore anticipated that there would be no significant impact on the local road network arising.
- 8.14.4. The mitigation measures proposed are similar to those currently employed at the site and are set out under sections 14.89 14.97 of the EIAR. This includes *inter alia* tracking of vehicles via fleet management software, a wheelwash, sprinkler system, regular maintenance of the fleet and use of a designated haulage route.
- 8.14.5. I note that the interdepartmental report completed by the Council's Roads
 Transportation & Public Safety Department. The report requested that further
 information be provided by the Applicant in relation to issues including the provision
 of a condition survey of the existing local roads, completion of a Road Safety Audit
 (Stages 1 and 2), the marking out of internal parking areas on a drawing, amongst
 others. I consider that the issue raised could be addressed by the insertion of
 appropriate conditions on any grant of permission that issues. I note neither the
 Council's Roads Department report, or submission from the National Roads Design
 Office recommended refusal or raised issues of particular concern.
- 8.14.6. I have considered this chapter and other submissions in relation to traffic and transport. I am satisfied that potential effects would be avoided, managed and mitigated by the measures which form part of the proposed scheme, the mitigation measures and through suitable conditions. I am therefore satisfied that the proposed development would not have any unacceptable direct, indirect or cumulative effects on traffic and transport.

8.15. Cumulative and Interactive Effects (Interaction of the Foregoing)

- 8.15.1. Chapter 15 of the EIAR addresses cumulative and interactive effects that could potentially arise between significant environmental impacts. The various environmental components which might be impacted at this location are identified as follows:
 - Potential effects on land use and amenity
 - Impacts on local sensitive receptors
 - Loss of natural wildlife habitats and disturbance to flora and fauna
 - Impacts on soils and sub-soils geology
 - Nuisance potential and or public health effects due to noise, dust, odour or lighting emissions
 - Impacts on local archaeology
 - Change in visual character
 - Impacts on material assets, such as infrastructure or local utilities
- 8.15.2. I note that there are two smaller sand and gravel pits to the west of the subject lands.

 These are in third party ownership and unrelated to the application.
- 8.15.3. Table 15-1 of the EIAR provides a summary of the possible interactions between the various environmental factors arising from the subject development and I note that interactions have also been assessed under each individual chapter of the EIAR. While there are potential impacts arising between elements discussed in previous chapters of the EIAR I am satisfied, having regard to the assessment carried out, and the mitigation measures set out previously, that there are no residual or cumulative significant impacts arising from the interactions of the elements assessed.
- 8.15.4. I have considered the likelihood of significant effects arising as a consequence of the interrelationship between factors. Most interactions, for example, the impact of noise and air quality on the human health, water, land, soil and biodiversity are addressed under individual topic headings. I am satisfied that effects arising due to interactions can be avoided, managed and/or mitigated by the measures which form part of the proposed development, mitigation measures, and suitable conditions. There is,

- therefore, nothing to prevent the approval of the development on the grounds of significant effects due to interactions between the environmental factors.
- 8.15.5. I am satisfied therefore that the cumulative assessment assesses the impacts of the current proposal in the context of other developments and projects.

8.16. Reasoned Conclusions

Having regard to the examination of environmental information contained above, and in particular to the EIAR and NTS, and the submissions from the planning authority, prescribed bodies and observers in the course of the application, it is considered that the main significant direct and indirect effects of the proposed development on the environment have been identified in Section 7.0 and 8.0 of this report. It is considered that the proposed development would not give rise to any significant direct or indirect impacts of the environment, and the minor direct and indirect impacts are as follows.

The project could potentially give rise to minor localised impacts on:

- Biodiversity due to the removal of hedgerows and changes to the cliff face which could result in a loss of sand martin breeding habitats. It is considered that there would be no long term significant negative impacts on any habitats or species on the site, or within its the vicinity, as sufficient breeding habitats will be retained onsite. Works affecting areas where sand martin nests are present will be done outside of the breeding season (mid-March to September) and the future site restoration plan will re-establish and provide improved opportunities for biodiversity and wildlife enhancement post operational stage.
- Groundwater and / or surface water as part of the construction phase through an absence of control of measures during excavation and construction, the mobilisation of sediments and other materials and the requirement to undertake construction activities in the vicinity of groundwater sources. The construction of the proposed project could also potentially impact negatively on ground and surface waters by way of contamination through accidents, spillages and leakages. These impacts would be mitigated by measures outlined in a Construction and Environmental Management Plan and the implementation of measures related to control and management of

- sediments, accidental spills, contamination, drainage management and maintenance of plant, machinery, and equipment.
- Cultural Heritage due to the importance and setting of Dún Ailinne (a site of significant archaeological interest) in the vicinity of the site. A significant part of the existing quarry and the proposed expansion area would be screened behind dense strips of vegetation, screening berms and because of the local topography. This includes views from the top of Knockaulin Hill and other locations around Dún Ailinne towards the site. The majority of onsite plant, processing machinery and buildings are hidden from view and the proposed extension does not include any additional plant as the recovered material would be transported to the existing infrastructure for processing and refinement purposes. In relation to the presence and preservation of onsite archaeological features, I note that the archaeological assessment accompanying the application has been prepared by a suitably qualified archaeologist. It has also influenced the siting and design of the proposed development in such a way so that it avoids and minimises the potential impact on cultural and archaeological heritage.
- Landscape as the proposed development would be partly visible from the surrounding area, including from Dún Ailinne. The appeal site itself, however, is not within a sensitive landscape and it is considered that given the scale, nature and physical distance of the development proposed from Dún Ailinne that it would not result in unacceptable negative visual impacts arising.
- Residential amenity during the construction phase in terms of noise, air
 borne emissions / dust, traffic safety and general disturbance. These impacts
 would be mitigated by the implementation of measures related to the
 protection of air quality, control of noise and dust, traffic management and the
 installation of screening berms and landscape planting by the agreement of
 measures within a Construction and Environment Management Plan.
- Quarry related vehicular traffic on the adjoining road network due to the
 continuation of the quarry and its proposed expansion would be less. The
 predicted number of HGV trips over a working day is expected to decrease in
 accordance with the reduction in the average annual extraction rate of

quarried materials from the sand and gravel pit. The mitigation of impacts on the existing road network and the adjoining land uses (including residential uses) would include limiting traffic to the haulage routes identified in the EIAR, the implementation of various dust and suppression measures, and maintenance and installation of road signage, where appropriate.

9.0 Appropriate Assessment

Compliance with Article 6(3) of the Habitats Directive

9.1.1. The requirements of Article 6(3) as related to screening the need for appropriate assessment of a project under part XAB, section 177U of the Planning and Development Act 2000 (as amended) are considered fully in this section.

Background on the Application

- 9.1.2. The application is accompanied by an Appropriate Assessment Screening Report and Natura Impact Statement ('NIS') (dated May 2021). It provides a description of the proposed development, the project site and the surrounding area. It contains a Stage 1 Screening Assessment of the development proposed in Section 4.0. It outlines the methodology used for assessing potential impacts on the habitats and species within the European Sites identified, and which have the potential to be affected by the proposed development (Section 2.0).
- 9.1.3. The Report also predicts the potential impacts for the subject site and its conservation objectives; and suggests mitigation measures, assesses incombination effects with other plans and projects, and identifies any residual effects on the European sites and their conservation objectives. The report was prepared in line with current best practice guidance and provides a description of the proposed development and identifies European Sites within a possible zone of influence of the development. It is also accompanied by an Environmental Impact Assessment Report (EIAR) and Planning Statement.
- 9.1.4. Having reviewed the NIS and the supporting documentation, I am satisfied that it provides adequate information in respect of the baseline conditions, clearly identifies the potential impacts, and uses best scientific information and knowledge. Details of mitigation measures, as outlined above, are provided. I am also satisfied that the

- information is sufficient to allow for appropriate assessment of the proposed development.
- 9.1.5. The proposed development is not directly connected to or necessary to the management of any European site and therefore is subject to the provisions of Article 6(3).

Brief Description of the Development

- 9.1.6. The Applicant provides a description of the project on Pages 4 to 6 of their NIS (and Pages 27 to 38 of the Planning Statement). It is also described under Chapter 2 of the EIAR. In summary, the development proposed comprises the continuance of use of the existing sand and gravel quarry and an extension with processing to occur within the existing plant associated with the existing development.
- 9.1.7. The subject site is described on Page 1 of the NIS. It is described as comprising an existing sand and gravel pit at Ballysaxhills, Co. Kildare. It is approximately 2km west of Kilcullen and 6km south of Newbridge. The local landscape is generally flat with some hills. Knockaulin is southeast of the site and is a distinctive hilltop focal point rising to c. 220m OAD at its summit.
- 9.1.8. The NIS states that the zone of influence is not likely to extend significantly beyond the extent of the pit due to its enclosed and localised nature combined with dry working (i.e., extraction is above the water table). There are no Natura 2000 sites within 5km of the existing and proposed extraction areas. The closest Natura 2000 site is Pollardstown Fen SAC (Site Code: 000396) which is roughly 6.2km to the north/northwest.
- 9.1.9. Pollardstown Fen SAC is a Groundwater Dependent Terrestrial Ecosystem (GWDTE) situated in the northern part of the groundwater body referred to as the Curragh Gravels West on the EPA online mapping system. The existing Ballysaxhills quarry is in the southern area of the Curragh Gravels West groundwater body. The closest watercourse to the site is the headwaters of the River Barrow c. 1.7km to the southwest. There is no connection between these headwaters and the River Barrow and River Nore SAC.

Stage 1 Screening

- 9.1.10. Screening for Appropriate Assessment was carried out by the Applicant and set out in Section 4.0 of the NIS. The Applicant considered the potential impacts and effects of the proposed development on the habitats listed as qualifying interests for Pollardstown Fen SAC having regard to the nature and scale of the development, its location relative to the SAC and any ecological and landscape connectivity.
- 9.1.11. The NIS found (Sections 4.12 4.15) there would be no direct loss of fragmentation of habitats with the SAC and the effects of dust and noise emissions are not likely to occur due to the distance from the SAC. There is no discharge of water from the site. However, groundwater abstractions, which are infrequent, are carried out within the existing pit for the provision of top-up water supply to the closed water lagoon system for the processing plant and equipment and for manufacturing ready mixed concrete onsite. Therefore, the proposed quarry extension has the potential to affect Pollardstown Fen SAC (Site Code: 000396) via groundwater pathways and there would be a risk of undermining the conservation objectives of the European Site.
- 9.1.12. Therefore, following the screening process, it has been determined that Appropriate Assessment is required as it cannot be excluded on the basis of objective information that the proposed development individually, or in combination with other plans or projects, would not have a significant effect on the following European sites (i.e., there is the *possibility* of significant effect):
 - Pollardstown Fen SAC (Site Code: 000396)

The significance of effect on groundwater is uncertain and it is considered that the project should proceed to Stage 2 Appropriate Assessment. Measures intended to reduce or avoid significant effects have not been considered in the screening process.

- 9.1.13. Having carried out Screening for Appropriate Assessment of the project, it has been concluded that the project individually (or in combination with other plans or projects) would not give rise to significant effects on the following:
 - River Barrow and River Nore SAC (002162)
 - Mouds Bog SAC (002331)
 - Poulaphouca Reservoir SPA (004063)

Table 2: AA Screening Summary Matrix

European Site	Distance / Source-Pathway	Possible effect alone	In-combination	Screening Conclusion
	Receptor		effects	
Pollardstown Fen	6.2km north / northwest.	Potential for impacts to	Possible - requires	Possible significant effects
SAC (000396)	Hydrological link – the integrity of	groundwater water quality, on	more detailed	cannot be ruled out without
	the Pollardstown Fen SAC could be	water dependent habitats and	analysis.	further analysis and assessment
	affected by the degradation of	disturbance of key species:		and the application of mitigation
	groundwater quality resulting from	development may result in		measures – Appropriate
	groundwater abstraction.	significant effects alone.		Assessment required.
River Barrow and	8.2km southwest.	No possibility of effects due to	No possibility of in-	Screened out for need for
River Nore SAC	There is no ecological connection	the separation distance from	combination effects.	appropriate assessment.
(002162)	between the River Barrow and	the development and absence		
	River Nore SAC and headwaters of	of ecological connections.		
	the River Barrow.			
Mouds Bog SAC	9km north.	No possibility of effects due to	No possibility of in-	Screened out for need for
(002331)	No hydrological connection	the separation distance from	combination effects.	appropriate assessment.
		the development and absence		
		of ecological connections.		
Poulaphouca	13.2km east.	No possibility of effects due to	No possibility of in-	Screened out for need for
Reservoir SPA	No hydrological connection	the separation distance from	combination effects.	appropriate assessment.
(004063)		the development and absence		
		of ecological connections.		

Stage 2 - Natura Impact Statement

- 9.1.14. The NIS (prepared by SLR Consulting) (dated May 2021) examines and assesses potential adverse effects of the proposed development on the integrity of Pollardstown Fen SAC (000396).
- 9.1.15. The NIS is informed by best practice guidance for such assessments. It provides a desktop and literature study, including a review of the NPWS databases and relevant conservation objectives.

Potential Impact on Pollardstown Fen

- 9.1.16. The potential impacts on the integrity of Pollardstown Fen are mainly associated with a potential future degradation of groundwater quality arising as a result of groundwater abstraction. This could result in population reduction and / or harmful effects for the qualifying interests associated with this European Site. It could also potentially reduce the distribution of suitable supporting habitats.
- 9.1.17. The integrity of the Site could also be affected by a decrease in groundwater supply to key habitats. This could indirectly affect a species through reducing suitable habitat area(s) for feeding, breeding or resting.
- 9.1.18. The effects described could undermine the conservation objectives for the qualifying interests, which would adversely affect the integrity of Pollardstown Fen SAC.
- 9.1.19. In relation to the impact on the water quality, the avoidance of water pollution on the European Site is proposed through mitigation measures. These are set out in detail in Chapters 5 (Biodiversity) and 6 of the EIAR, as well as the NIS, and summarised in my report below.

Cumulative Effects

- 9.1.20. The NIS states that cumulative effects can result from individually insignificant but collectively significant actions taking place over a period of time or concentrated in a location. Cumulative effects can also make habitats and species more vulnerable or sensitive to change. The NIS notes that other plans and projects considered for their potential to act in-combination with the proposed development include the following:
 - The Kildare County Development Plan 2017-2023 and Draft County Development Plan 2023-2029.

- The Kildare County Council planning portal¹⁶ for planning applications in the vicinity of the sand and gravel pit.
- 9.1.21. The NIS confirms that there are no strategies or objectives in the Kildare County Development Plan 2017-2023 or Draft County Development Plan 2023-2029 that are likely to result in adverse effects on the integrity of Natura 2000 sites when considered in-combination with the proposed development. There are no planning applications within the vicinity of the Site that are likely to act in-combination with the sand and gravel pit extension to adversely affect the integrity of the Natura 2000 sites.

Review of Mitigation Measures

- 9.1.22. Section 5.0 (Pages 11-14) of the NIS contains an assessment of the potential impacts of the proposed development on the identified European Site and of incombination effects.
- 9.1.23. Section 5.18 of the NIS sets out a series of specific mitigation measure to protect surface and groundwater. These are summarised as follows:
 - Ensure extraction does not breach the water table and to submit an annual topographical survey of the site to Kildare County Council to demonstrate compliance of this.
 - Completion of an annual topographical survey to demonstrate that the sand and gravel extraction has remained above the groundwater table.
 - Wash water at the ready-mix plant will be recycled and used in the concrete mix design to eliminate the need for discharge from the operation and to reduce the amount of top-up water required for manufacturing.
 - Various groundwater protection measures to be employed, such as plant and
 machinery refuelling at the dedicated refuelling area only, the concrete
 hardstand area will be provided with a hydrocarbon petrol inceptor at the
 existing bunded refuelling area, all petroleum-based products stored under
 cover must be within containers on drip trays, and plant and machinery to be
 serviced at the hardstand area only to ensure the risk of uncontrolled release
 or accidental fuel leaks is minimised.

- The Environmental Management Plan (EMP) would be updated and measures to protect the environment will be clearly set out and incorporated into standard working practices and assigned to an experienced site worker / environmental manager. The EMP will include good practice environmental and pollution controls in accordance with the relevant guidance.
- An environmental monitoring programme will be implemented at the site (outlined in Chapter 2 of the EIAR) and include monitoring of groundwater levels and quality.
- Planning condition requirements will be adhered to and assigned to individual staff responsible to oversee their implementation.

Conclusion of NIS

- 9.1.24. The NIS concluded that there would be no significant effects to the integrity of the designated site and stated that the mitigation measures outlined the report, if fully implemented, are considered sufficient to prevent any effect on qualifying interests of Pollardstown Fen SAC. It is considered that there will be no adverse effects on the integrity of Pollardstown Fen SAC, or any other Natura 2000 sites, as a result of the proposed continued use and extension of the existing sand and gravel pit.
- 9.1.25. Having reviewed the NIS and supporting documentation, I am satisfied that the information allows for a complete assessment of any adverse effects of the proposed development on the conservation objectives of the abovementioned European sites alone, or in combination with other plans and project.

Appropriate Assessment of implications of the proposed development

9.1.26. The following is a summary of the objective scientific assessment of the implications of the project on the qualifying interest features of the European sites using the best scientific knowledge in the field. All aspects of the project which could result in significant effects are assessed and mitigation measures designed to avoid or reduce any adverse effects are considered and assessed.

Potential Impact on identified European Site(s) at risk of effects

9.1.27. Pollardstown Fen SAC (000396) is subject to Appropriate Assessment and referenced in Table 3 below. A description of the site, its Conservation Objectives and Qualifying Interests, including any relevant attributes and targets for these sites,

- is set out in the NIS and summarised in Table 3 of this report as part of my assessment.
- 9.1.28. I have also examined the Natura 2000 data forms as relevant and the Conservation Objectives supporting documents for these sites available through the NPWS website.

Table 3: Qualifying Interests of European Site considered for Stage 2

Appropriate Assessment (NIS)

Site Name / Site	Qualifying Interests		
Code			
Pollardstown Fen	Calcareous fens with Cladium mariscus and species of the		
SAC (000396)	Caricion davallianae [7210]		
	Petrifying springs with tufa formation (Cratoneurion) [7220]		
	Alkaline fens [7230]		
	Vertigo geyeri (Geyer's Whorl Snail) [1013]		
	Vertigo angustior (Narrow-mouthed Whorl Snail) [1014]		
	Vertigo moulinsiana (Desmoulin's Whorl Snail) [1016]		

- 9.1.29. The conservation objectives for Pollardstown Fen SAC were reviewed as part of the NIS for each qualifying interest. They can be summarised as follows:
 - To maintain the favourable conservation condition of the habitats and species listed as qualifying interests for Pollardstown Fen SAC, which is defined by a specific list of attributes and targets.
- 9.1.30. As noted above, the main aspects of the proposed development which could adversely affect the conservation objectives of European sites include the alteration of water levels and / or water quality due to use of groundwater in the processing and manufacturing plants or discharge to groundwater. These alterations in water levels pose a risk of undermining the conservation objectives of the qualifying interests of Pollardstown Fen SAC, which are listed above in Table 3. The key habitats that could potentially be affected are groundwater dependent systems, such as petrifying springs, through a reduction in groundwater flows or release of pollutants to groundwater.

- 9.1.31. The Natura Impact Statement includes several specific mitigation measures to protect surface and groundwater in the vicinity of the subject site. These are summarised in Section 9.1.23 above. They mainly seek to prevent and avoid extraction works from breaching the water table and to eliminate potentially harmful and accidental discharges from entering surface and groundwater sources.
- 9.1.32. The proposal comprises regular monitoring of groundwater quality to ensure the sand and gravel pit remains above the groundwater level at all times. I also note the presence of the existing wastewater treatment plant and welfare facilities on the site and consider that this also would help to prevent any potential impacts on the receiving water environment. [There is no blasting proposed as part of the application which might otherwise require best practice in handling and detonation of explosive and other such mitigation measures.]
- 9.1.33. I consider that the NIS contains complete, precise and definitive findings which underpin a conclusion that no reasonable scientific doubt remains as to the absence of any potential detrimental effects on the designated site having regard to its conservation objectives.

Cumulative Effects

- 9.1.34. Sections 5.13 5.16 of the NIS provides an analysis of the in-combination effects on the European Site within the zone of influence.
- 9.1.35. The Kildare County Council online planning search function was used to identify other planning applications within the vicinity of the site. No other projects associated with the operation of the site have been identified which could lead to incombination effects on Pollardstown Fen SAC.
- 9.1.36. The Kildare County Development Plan 2017-2023 and Draft Kildare County Development Plan 2023-2029 were also reviewed for their potential to have any incombination effects together with the proposed development. In this regard, no strategies or objectives from either Plan were considered likely to result in adverse effects on any Natura 2000 Sites, together with the development proposed.
- 9.1.37. I am satisfied that the proposed development, either alone or in-combination with other plans or projects, would not adversely affect the integrity of Pollardstown Fen SAC or any other European Site.

Conclusion

- 9.1.38. The proposed development, which comprises the continued use of the existing quarry for the extraction and processing of sand and gravel (28.1ha) with a proposed extension area of roughly 11.4ha (physical area to be actively worked c. 10.8ha) has been considered in light of the assessment requirements of Sections 177U and 177V of the Planning and Development Act, 2000, as amended.
- 9.1.39. Having carried out screening for Appropriate Assessment of the project, it was concluded that having regard to best scientific evidence, it may have a significant effect on the following European site:
 - Pollardstown Fen SAC (000396)

Consequently, an Appropriate Assessment was required of the implications of the project on the qualifying interests/special conservation interests of this site in light of the conservation objectives.

- 9.1.40. Following an Appropriate Assessment, it has been ascertained that the proposed development, individually or in combination with other plans or projects would not adversely affect the integrity of this European Site or any other European site, in view of the site's Conservation Objectives. This conclusion is based on a complete assessment of all aspects of the proposed project and there is no reasonable doubt as to the absence of adverse effects.
- 9.1.41. This conclusion is based on:
 - a full and detail assessment of all aspects of the proposed project including proposed mitigation measures and environmental monitoring in relation to the Conservation Objectives of Pollardstown Fen SAC (000396),
 - an assessment of in-combination effects with other plans and projects including historical projects, current proposals and future plans, and
 - No reasonable scientific doubt as to the absence of adverse effects on the integrity of Pollardstown Fen SAC (000396).

10.0 Recommendation

I recommend that planning permission be granted for the reasons and considerations set out below.

11.0 Reasons and Considerations

Having regard to the:

- provisions of the Kildare County Development Plan 2023 2029,
- established quarry use on the site,
- proposed extension of the quarry, by reason of its location, scale, nature and distance from Dún Ailinne, which is a site of significant archaeological interest,
- established character and pattern of development in the vicinity of the site,
- absence of any sensitive or conspicuous landscape features, dominant landscape points or ridgelines in the vicinity of the site, and
- quarry extraction works are temporary and, therefore, any visual impact arising on the surrounding area would be mitigated by restoration of the site post operational phase

it is considered that, subject to compliance with the conditions set out below, the proposed development would not seriously injure the visual or residential amenities of the area, would not have a negative impact on archaeological or cultural heritage, would be acceptable in terms of traffic safety and convenience and the protection of ground and surface water quality, and would therefore be in accordance with the provisions of the Kildare County Development Plan 2023 – 2029. The proposed development would therefore be in accordance and with the proper planning and sustainable development of the area.

12.0 Conditions

1. The development shall be carried out and completed in accordance with the plans and particulars lodged with the application, except as may otherwise be required in order to comply with the following conditions. Where such conditions require details to be agreed with the planning authority, the developer shall agree such details in writing with the planning authority prior to commencement of development and the development shall be carried out and completed in accordance with the agreed particulars. In default of agreement, the matter(s) in dispute shall be referred to An Bord Pleanála for determination

Reason: In the interest of clarity.

2. The period during which the development hereby permitted may be carried out shall be 8 years from the date of this Order. The quarry use shall then cease, with all related structures removed and remedial works including reinstatement works to be carried out to the satisfaction of the planning authority, unless prior to the end of that period, planning permission has been granted for the continuance of the use for a further specified period.

The site restoration works described in the application shall be completed within 2 years of the date of cessation of quarrying activities on the site.

Reason: In the interest of visual amenity and orderly development.

3. Apart from any departures specifically authorised by this permission, the development shall be carried out and completed in accordance with the terms and conditions of the permissions granted under appeal reference numbers PL09.302526 (Reg. Ref. 17/1344) and PL09.223574 (Reg. Ref. 06/651) and any agreements entered into thereunder.

Reason: In the interest of clarity and to ensure that the overall development is carried out in accordance with the previous permissions.

4. The total volume of extracted material from the site shall not exceed 200,000 tonnes per annum.

Reason: In the interest of clarity.

5. No extraction of aggregates shall take place below the level of the water table.

Reason: To protect groundwater in the area.

- 6. The proposals, mitigation measures and commitments set out in the Environmental Impact Assessment Report received by the planning authority shall be implemented in full as part of the proposed development. **Reason**: In the interest of clarity, to mitigate the environmental effects of the proposed quarry and to protect the amenities of the area and of property in the vicinity.
- a) During the operation of the site the groundwater level shall be monitored in order to ensure that the pit floor remains fully above the winter groundwater level. In this regard, the developer shall complete
 - Monthly groundwater level measurements at groundwater monitoring boreholes at the site to ensure excavations remain above the groundwater table,
 - ii) An annual topographical survey of the site to demonstrate that the sand and gravel extraction has remained above the groundwater table, and
 - iii) An Environmental Management Plan which shall be updated regularly with annual groundwater monitoring reports and submitted to the Planning Authority to their satisfaction.
 - b) All mitigation measures outlined in Chapter 5 and Chapter 12 of the EIAR (and within the NIS) shall be carried out as specified.
 - c) Interpretation of the Geological Heritage of the site with input from Geological Survey Ireland, shall be provided during the life time of the application and before restoration is completed.
 - d) An Ecological Clerk of Works (ECoW) with suitable experience shall be appointed to ensure all mitigation measures outlined in EIAR and Natura Impact Statement shall be carried out. The Ecological Clerk of Works shall submit yearly reports shall be submitted to the planning

authority demonstrating compliance with mitigation measures and ecological considerations during restoration of the quarry.

Reason: In the interest of clarity to mitigate the environmental effects of the proposed quarry.

8. The developer shall comply with all requirements of the planning authority in relation to roads, access, lighting and parking arrangements. In default of agreement the matter(s) in dispute shall be referred to An Bord Pleanála for determination.

Reason: In the interest of amenity and of traffic and pedestrian safety.

- 9. The construction of works and operation of the site shall be managed in accordance with a Construction and Environmental Management Plan, which shall be submitted to, and agreed in writing with, the planning authority prior to commencement of development.
 - a) This plan shall provide details of intended construction practice for the development, including hours of working, noise management measures and off-site disposal of construction/demolition waste.
 - b) The plan shall comply with the requirements of the Planning Authority in relation to environmental monitoring on the site for surface water, groundwater, noise, dust deposition levels and existing and proposed monitoring stations
 - c) The Plan shall include all necessary requirement by the Planning Authority with regard to the provision of an environmental audit and any such reports necessary to ensure no environmental degradation of the site or surrounding area.

Reason: In the interests of public safety and ecological protection.

10. The development shall be operated and managed in accordance with an Environmental Management System (EMS), which shall be submitted by the developer to, and agreed in writing with, the planning authority prior to commencement of development.

Reason: In order to safeguard local amenities.

11. Prior to commencement of development the developer shall submit and agree with the planning authority measures to protect the nesting areas of sand martins within the application site.

Reason: To protect biodiversity within the application site.

- 12. a) Surface water run-off from open cut areas shall not be discharged directly to any watercourse. All such water shall be trapped and directed to temporary settling ponds.
 - b) Prior to commencement of quarrying works on the expansion site, the developer shall have installed on lands within their control, a mechanism to facilitate treatment of all discharges to surface water arising from the entire quarry complex. The specific nature, layout and location of such facility shall be submitted to, and agreed in writing with, the planning authority prior to commencement of development.
 - c) The soiled water management and lagoon operations shall comply with the relevant statutory regulations.

Reason: In the interest of public health and to protect water quality.

13. The applicant or developer shall enter into water wastewater connection agreement(s) with Irish Water, prior to commencement of development.

Reason: In the interest of public health.

14. The site shall be screened in accordance with a scheme of screening measures and boundary treatments which shall be submitted to, and agreed in writing with, the planning authority prior to commencement of development. This scheme shall include the timeframe, specific locations, and final form and height of proposed screening berms; details of all planting proposed on existing and proposed screen berms; details of the ongoing care and management of such planting; details of a phased programme of landscaping within the quarry and details of an adequate barrier to prevent unrestricted access to the top of the quarry face from adjacent lands.

Reason: In the interest of visual amenity.

15. All overground tanks containing liquids (other than water) shall be contained in a waterproof bunded area, which shall be of sufficient volume to hold 110 per cent of the volume of the tanks within the bund. All water contaminated with hydrocarbons, including stormwater, shall be discharged via a grit trap and three-way oil interceptor with sump to a watercourse. The sump shall be provided with an inspection chamber and shall be installed and operated in accordance with the written requirements of the planning authority.

Reason: In order to protect groundwater and surface water.

16. The settlement ponds shall be cleaned out at monthly intervals. Details of the proposed use, handling, and destination of the removed silt shall be submitted to, and agreed in writing with, the planning authority prior to commencement of development.

Any excavation required to accommodate the settlement ponds or cut-off drains shall be agreed in writing with the planning authority prior to such works being undertaken.

Reason: In order to ensure the efficient operation of the settlement ponds.

- a) Dust levels at the site boundary shall not exceed 350 milligrams per square metre per day averaged over a continuous period of 30 days (Bergerhoff Gauge). Details of a monitoring programme for dust shall be submitted to, and agreed in writing with, the planning authority prior to commencement of development. Details to be submitted shall include monitoring locations, commencement date and the frequency of monitoring results, and details of all dust suppression measures.
 - b) A monthly survey and monitoring programme of dust and particulate emissions shall be undertaken to provide for compliance with these limits. Details of this programme, including the location of dust monitoring stations, and details of dust suppression measures to be carried out within the site, shall be submitted to, and agreed in writing with, the planning authority prior to commencement of any quarrying works on the site. This programme shall include an annual review of all dust monitoring data, to be undertaken by a suitably qualified

person acceptable to the planning authority. The results of the reviews shall be submitted to the planning authority within two weeks of completion. The developer shall carry out any amendments to the programme required by the planning authority following this annual review.

Reason: To control dust emissions arising from the development and in the interest of the amenity of the area.

18. All loads of dry fine materials shall be either sprayed with water or covered/sheeted prior to exiting the quarry.

Reason: In order to prevent dust emissions, in the interest of amenity and traffic safety.

19. The wheels and undersides of all vehicles transporting aggregate from the site onto the public road shall, prior to the exit of such vehicles onto the public road, must be washed in a dedicated wheel-washing facility.

Reason: In the interest of traffic safety and convenience and to protect the amenities of the area.

20. Scrap metal and other waste material shall be removed at least annually from the site in accordance with the written requirements of the planning authority. Such materials shall be deemed to include scrapped trucks, other scrapped vehicles, empty oil barrels, broken or otherwise unusable truck bodies, worn out conveyor belts/chains, worn out batteries, unusable tyres and worn out conveyor/roller shafts.

Reason: To protect the amenities of the area.

- 21. During the operation phase of the proposed development, the noise level from within the boundaries of the site measured at noise sensitive locations in the vicinity, shall not exceed
 - a) an Leq, 1h value of 55 dB(A) between 08.00 and 20.00 hours
 - b) an Leq, 15 min value of 45 dB(A) at any other time. Night time emissions shall have no tonal component.

Reason: In order to protect the residential amenities of property in the vicinity.

- 22. The developer shall facilitate the preservation, recording and protection of archaeological materials or features that may exist within the site. In this regard, the developer shall
 - a) notify the planning authority in writing at least four weeks prior to the commencement of any site operation, including hydrological and geotechnical investigations, relating to the proposed development,
 - b) employ a suitably-qualified archaeologist who shall monitor all site investigations and other excavation works, and
 - c) provide arrangements, acceptable to the planning authority, for the recording and for the removal of any archaeological material which the authority considers appropriate to remove.
 - d) Agree in writing the archaeological method statements for mitigation with the Department of Culture, Heritage and the Gaeltacht, prior to commencement of any works on site

In default of agreement on any of these requirements, the matter shall be referred to An Bord Pleanála for determination.

Reason: In order to conserve the archaeological heritage of the site and to secure the preservation and protection of any remains that may exist within the site.

23. A comprehensive plan for the restoration of the entire quarry following the cessation of quarrying works shall be submitted to, and agreed in writing with, the planning authority within six months from the date of this Order. This plan shall include proposals for re-use of the quarry, measures to ensure public safety, the existing and proposed finished ground levels, landscaping proposals and a timescale for implementation. The developer shall commence implementation of the agreed site restoration within one month of cessation of extraction and shall complete the phased completion of the restoration plan within two years of commencement.

Reason: In the interest of public amenity and public safety.

24. The quarry, and all activities occurring therein, shall only operate between 0800 hours and 1800 hours, Monday to Friday and between 0800 hours and 1400 hours on Saturdays. No activity shall take place outside these hours or on Sundays or public holidays.

Reason: In order to protect the residential amenities of property in the vicinity.

25. The developer shall provide all landowners within 500 metres of the quarry complex with appropriate contact details which may be used in the event that any such landowner wishes to inform the developer of any incident, or otherwise to make a complaint in respect of an aspect of quarry operation.

Reason: In the interest of the protection of residential amenity and planning control.

26. Within six months from the date of this order, the developer shall establish a local consultative group, including representatives of the developer, and members and representatives of the local community. This group shall constitute a forum to address operational issues of the quarry which are considered to impact upon local amenity.

Reason: In the interest of the protection of residential amenity and planning control.

27. The developer shall pay to the planning authority a financial contribution in respect of public infrastructure and facilities benefiting development in the area of the planning authority that is provided or intended to be provided by or on behalf of the authority in accordance with the terms of the Development Contribution Scheme made under section 48 of the Planning and Development Act 2000, as amended. The contribution shall be paid prior to commencement of development or in such phased payments as the planning authority may facilitate and shall be subject to any applicable indexation provisions of the Scheme at the time of payment. Details of the application of the terms of the Scheme shall be agreed between the planning authority and the developer or, in default of such agreement, the matter shall be referred to

An Bord Pleanála to determine the proper application of the terms of the Scheme.

Reason: It is a requirement of the Planning and Development Act 2000, as amended, that a condition requiring a contribution in accordance with the Development Contribution Scheme made under section 48 of the Act be applied to the permission.

I confirm that this report represents my professional planning assessment, judgement and opinion on the matter assigned to me and that no person has influenced or sought to influence, directly or indirectly, the exercise of my professional judgement in an improper or inappropriate way.

Ian Boyle Senior Planning Inspector 26th April 2023