

File With _____

SECTION 131 FORM

Appeal NO: ABP 321806-25Defer Re O/H ☐Having considered the contents of the submission dated/ received 28/2/25
fromApplicant I recommend that section 131 of the Planning and Development Act, 2000
be/not be invoked at this stage for the following reason(s): No new planning issuesE.O.: Daniel O'ConnorDate: 4/3/25

For further consideration by SEO/SAO

Section 131 not to be invoked at this stage. ☐Section 131 to be invoked – allow 2/4 weeks for reply. ☐

S.E.O.: _____

Date: _____

S.A.O.: _____

Date: _____

M _____

Please prepare BP _____ - Section 131 notice enclosing a copy of the attached submission

to: _____ Task No: _____

Allow 2/3/4weeks – BP _____

EO: _____

Date: _____

AA: _____

Date: _____

File With _____

CORRESPONDENCE FORMAppeal No: ABP 321806-25

M _____

Please treat correspondence received on 28/2/25 as follows:

1. Update database with new agent for Applicant/Appellant _____

2. Acknowledge with BP 203. Keep copy of Board's Letter ☐

1. RETURN TO SENDER with BP _____

2. Keep Envelope: ☐3. Keep Copy of Board's letter ☐

Amendments/Comments

Applicant's response to appeal**4. Attach to file**(a) R/S ☐(d) Screening ☐(b) GIS Processing ☐(e) Inspectorate ☐(c) Processing ☐RETURN TO EO ☒D to Conner

	Plans Date Stamped <input type="checkbox"/>
	Date Stamped Filled in <input type="checkbox"/>
EO: <u>Daniel O Conner</u>	AA: <u>[Signature]</u>
Date: <u>4/3/25</u>	Date: <u>04/03/25</u>

Dan

Lita Clarke

From: Sarah de Courcy <sdecourcy@mores.ie>
Sent: Monday 3 March 2025 17:09
To: Appeals2
Cc: Gibney, Patrick; David Dwyer
Subject: Extension to Kilmacow Quarry ABP-321806-25
Attachments: 25 03 03 - E2189 - Roadstone Kilmacow Response to Third Party Appeal - Rev01.pdf

Caution: This is an **External Email** and may have malicious content. Please take care when clicking links or opening attachments. When in doubt, contact the ICT Helpdesk.

Dear Sir / Madam,

As a party to the appeal under Section 129 of the Planning and Development Act 2000 (as amended), we have prepared this First Party Response to the Third-Party Appeal received on 6th February 2025.

This response has been made on behalf of the applicant, Roadstone Limited by the Agent – Malone O'Regan Environmental.

Kind regards,

Sarah de Courcy, BA(Mod)
Senior Environmental Consultant

for and on behalf of
Malone O'Regan Environmental

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3rd March 2025

The Secretary,
An Bord Pleanála,
64 Marlborough Street,
Dublin 1,
D01 V902

Planning Ref: 24/60100

Local Authority: Kilkenny County Council

MOR Ref: E2189

ABP Ref: ABP-321806-25

By Email: appeals@pleanala.ie

Re: First Party Response to Third Party Appeal (Planning Reference: 24/60100)

Dear Sir / Madam,

This submission is made on behalf of the applicant, Roadstone Limited ('Roadstone'), on foot of an invitation from An Bord Pleanála ('ABP') dated 6th February 2025 to respond to a Third-Party Appeal against Kilkenny County Council's ('KCC') Notification of Decision to Grant Planning Permission for the extension of the authorised Kilmacow Quarry, decision dated 9th January 2025 (Planning Reference: 24/60100).

This First Party Response has been prepared in respect of the following Third-Party Appeal:

- David Williamson and Clare Buckley – ABP Correspondence dated 2nd February (henceforth referred to as 'Third Party Appeal').

This response has been prepared by an Agent – Malone O'Regan Environmental ('MOR Environmental') located at:

Ground Floor – Unit 3,
Bracken Business Park,
Bracken Road,
Sandyford,
Dublin 18,
D18V32Y.

MOR Environmental are submitting this First Party Response on behalf of the Applicant:

Roadstone
Fortunestown,
Tallaght,
Dublin 24.

1 SUBJECT OF APPEAL

MOR Environmental, on behalf of the Applicant applied to the Local Authority for permission:

for the extension of Kilmacow Quarry at Aglish North, Granny, Kilmacow, County Kilkenny, authorised via planning reference 16/700, to adjoining agricultural lands to the east with known quality reserves of aggregates. The extension will cover an area of ca.10.3 hectares and seek to complete 5 No. benches each 15m high, to a level of -45mOD, consistent with the existing permitted levels. The Proposed Development will involve blasting, extraction and processing of rock using mobile primary crushing / screening and associated plant on the quarry floor. The Proposed Development will utilise existing established quarry infrastructure including entrance, office / welfare facilities, carpark, wheel wash, weighbridge, haul routes and other ancillary infrastructure to complete the works. The Proposed Development includes for the demolition and removal of two (2No.) agricultural sheds and a small pump house and the completion of boundary berms, access tracks and associated safety features at the Site boundary. Upon completion of extraction activities, the Site will be subject to a Restoration Plan, which has been submitted as part of this application. A planning permission of 20 years is being sought for the Proposed Development. The application is accompanied by an Environmental Impact Assessment Report (EIAR) and a Natura Impact Statement (NIS). At Kilmacow Granny, Aglish North, Kilkenny.

The application, including an Environmental Impact Assessment Report ('EIAR') and Natura Impact Statement ('NIS') was received by the Local Authority on 1st March 2024 and assigned the Planning Reference: 24/60100.

The Local Authority proceeded to issue a Request for Further Information ('RFI') to aid their decision on 25th April 2024. The Applicant provided further information to the Local Authority, with receipt of same received on 10th October 2024. The Local Authority determined that this information was significant further information on the 16th October 2024. As such, public notices were updated in accordance with Article 35 of the Planning and Development Regulations 2001 (as amended).

The Local Authority issued the Notification of Decision to Grant Permission for the Proposed Development on 9th January 2025. A Third-Party Appeal was submitted to ABP from David Williamson and Clare Buckley ('the Appellants') on 2nd February 2025.

Under Section 129 of the Planning and Development Act, 2000 (as amended), as a party to the appeal, this letter has been prepared to outline relevant submissions / observations in response to the Third-Party Appeal received by ABP.

2 FIRST PARTY RESPONSE TO THIRD-PARTY APPEAL

The topics concerning the grounds for the Third-Party Appeal are presented below, along with the specific First Party Response(s). Broadly, the grounds of the appeal and objection to the decision are based on the following observations from the Appellants;

- Proximity of Proposed Quarry Extension to their Residential Dwellings;
- Direction of Extension;
- Prevailing Wind Direction;
- In adequacy of the Natura Impact Statement; and,
- Devaluation of their Properties.

MOR Environmental have prepared a response to each of the aforementioned headings below.

2.1 Proximity of Proposed Quarry Extension to Residential Dwellings

The proximity of the Proposed Development to residential dwellings and the potential for unacceptable noise, dust and vibration is a key concern of the Appellants. The Third-Party appeal also references the direct view (landscape and visual effects) to the existing quarry from their two-storey dwelling and to the general assessment of human health effects within the EIAR. These potential effects are dealt with below in more detail.

Dust

The main potential effects on air quality associated with the Proposed Development are airborne particulate matter (PM₁₀) and nuisance dust deposition (or disamenity dust).

A disamenity dust risk assessment was completed in accordance with the Institute of Air Quality Management ('IAQM') Guidance on the Assessment of Mineral Dust Impacts for Planning [1]. This assessment aimed to determine the risk of impact from dust soiling on properties (or receptors) in the vicinity of the application area (the 'Site'). All occupied receptors within 400m (including the two dwellings owned by the Appellants) or less from the Site boundary were considered.

In brief, the risk assessment followed the source-pathway-receptor concept. The assessment quantified the likely emissions from the source (dust-generating activities associated with the Proposed Development), identified the pathway effectiveness (frequency of wind >5.5m/s) and determined the distance / orientation of receptors to the source. Following the analysis, it was determined that there was a low risk of dust soiling occurring at seven of eight receptors in the absence of mitigation. The potential dust soiling at these receptors had the potential to have a slight adverse effect. Therefore, a number of site-specific mitigation measures were identified in the EIAR. It is considered that the installation of sprinklers, the use of a water cannon during crushing, and a new wheel wash within Kilmacow Quarry and the mitigation measures prescribed for the Proposed Development in the EIAR will ensure that existing and future emissions of disamenity dust from the Proposed Development will be suitably controlled. The implementation of the measures outlined in the EIAR reduces the risk of dust soiling occurring at these receptors from **low to negligible**.

Increased concentrations of dust particles in the air (PM₁₀) can affect human health. The IAQM Guidance on Mineral Dust States [1]:

"If the long-term background PM₁₀ concentration is less than 17µg/m³ there is little risk that the Process Contribution (PC) would lead to an exceedance of the annual-mean objective.....17µg/m³ is considered to be a suitable screening value for an assessment of annual mean PM₁₀ concentrations"

The most recent two-year average of background PM₁₀ concentration for Zone C is 13.2µg/m³. The predicted environmental concentration of PM₁₀ from the Proposed Development is 28.2µg/m³, which is below the annual mean objective of 32µg/m³. As such, there is little risk of the annual AQS limit being exceeded, and no further consideration of the risk posed by ambient PM₁₀ concentrations is warranted.

Noise

A noise assessment was completed in Chapter 11: Acoustics (Noise and Vibration) of the EIAR in accordance with acoustic standards and guidance documents. This assessment aimed to determine the likely change in the acoustic environment as audible at sensitive receptors and the likely site-specific noise emissions audible at sensitive receptors against standard limits for noise nuisance from quarries. Residential dwellings were considered to be the primary Noise Sensitive Receptors ('NSRs') in the noise assessment. Subsequently, all residential dwellings in close proximity to the extraction area (including those of the Appellants) were listed as NSRs.

The construction noise assessment found that all identified NSRs will experience less than a L_{Aeq,1hr} of 59dB, due to the distances between NSRs and the proposed construction works. This conclusion represents the worst-case scenario when plant will be operational on the closest boundary to each of the properties for a constant duration of 1 hour. **These values are below the typical construction noise nuisance limit of L_{Aeq,1hr} 65dB for the daytime period from the British Standard BS5228-1 [2].**

The operational noise assessment found that five NSRs had a slight local effect with a predicted change on ambient backgrounds of +3 to +6dB. The Proposed Development will, therefore, be potentially audible at these NSRs. The character of the future noise will be similar in character to the existing noise presented locally, as the same machinery and plant used for the Proposed Development will be plant moved from within the existing development. As the works progress for each bench, the noise will be reduced at NSRs due to the increasing relative height of noise sources to the berms, cliff face and NSRs. **The predicted operational noise is below the noise nuisance limit of L_{Aeq,1hr} 55dBA at sensitive receptors as issued by the Environmental Protection Agency ('EPA') [3] and Irish Concrete Federation ('ICF') [4] and presented in Condition 9 of Planning Application 16/700.**

The restoration noise assessment found that the noise during restoration works is not significant.

Noise mitigation is presented in the EIAR to reduce further the potential for noise associated with the construction, operational and restoration phases. Following the implementation of these noise mitigation measures, the effects of noise from construction, operational and restoration noise were all determined to be **not significant**.

As outlined in the RFI, Roadstone will facilitate monitoring directly from a NSR, if the owner makes such a request.

Vibration

A vibration assessment was completed in Chapter 11: Acoustics (Noise and Vibration) of the EIAR in accordance with acoustic standards and guidance documents. This assessment aimed to determine if the Proposed Development would be compliant with the blast limits at sensitive receptors as issued by the EPA [3] and ICF [4] and presented in Condition 11 of Planning Application 16/700. Subsequently, all residential dwellings in close proximity to the extraction area (including those of the Appellants) were considered to be sensitive receptors.

The construction vibration assessment determined that vibration during the construction phase **were negligible**.

Operational stage vibration will arise during quarry face blast events. However, the operational vibration assessment determined that the potential risk zone extends approximately 150m

from the extraction area. **There are no occupied residential dwellings within this buffer zone.** In addition, design methods to reduce ground-borne vibration will be implemented and blast monitoring (air over pressure and vibration monitoring) will continue at the closest NSRs to the proposed blast event. Subsequently, the effects from operational vibration, following mitigation, were determined to be **not significant**.

It was also determined that there will be no likely vibration impacts to sensitive receptors during the restoration phase. Therefore, effects associated with restoration vibration were determined to be **not significant**.

As outlined in the RFI, Roadstone has included two additional monitoring locations which will provide sufficient evidence that blasting limits **will not exceed limits set out in Condition 11 of Planning Application 16/700** during the operational phase of the Proposed Development. If any sensitive receptors (including the Appellants) request monitoring at their property, Roadstone will facilitate this monitoring.

Landscape and Visual

A Landscape and Visual Assessment ('LVIA') was completed in Chapter 12: Landscape and Visual of the EIAR. Viewshed Reference Points ('VRPs') were used as locations to study the visual impacts of the Proposed Development in detail. VRP2 is located along the local road to the east of the Site in Granny. This VRP2 is located outside the dwelling at X91 TR99 and in close proximity to the dwelling at X91 X3N8. The description and magnitude of the visual impact at VRP2 was presented in the EIAR as follows:

*A portion of the proposed screening berm along the easternmost part of the perimeter of the Site will be identifiable to the left of the existing agricultural buildings. It will marginally alter the contour of the landform, but this is unlikely to be noticeable to a casual observer. The berm will be vegetated, and once established, it will be challenging to differentiate from the adjoining agricultural fields; thus, it is not anticipated that it will detract from the visual amenity at this location. Therefore, the magnitude of the effect is deemed to be **Negligible**.*

The view shown in Photo 2 of the Third-Party Appeal depicts existing infrastructure within Kilmacow Quarry, which is permitted under KCC planning reference: 16/700. The views of the proposed extension area (marked by a red line in Photo 2) appear to be obscured by vegetation. The screening berm and associated planting presented in the EIAR and described above are considered suitable mitigation measures to protect the visual amenity at this location.

Human Health

The Third-Party Appeal also states that no reference has been made in Chapter 5 – Population and Human Health to the two residential dwellings owned by the Appellants and the potential impacts upon their residential amenity and human health. The Third-Party Appeal states that *'instead, there is an attempt to refer to other chapters of the EIAR.'*

The EPA guidelines [5] states the following in relation to the Population and Human Health chapter:

"In an EIAR, the assessment of impacts on population & human health should refer to the assessments of those factors under which human health effects might occur, as addressed elsewhere in the EIAR e.g. under the environmental factors of air, water, soil etc..." and,

"Some topics could be placed under more than one heading...The requirement for the EIAR to consider 'Interactions' addresses this issue by ensuring that effects are cross-referenced between topics thus avoiding the need to duplicate coverage of such topics."

Potential effects on human health / quality of life, particularly potential effects on residents in the immediate locality, are addressed in detail in the following specialist chapters of the EIAR:

- Chapter 7: Land, Soils and Geology;
- Chapter 8: Water (Hydrology and Hydrogeology);
- Chapter 9: Air Quality;
- Chapter 10: Climate;
- Chapter 11: Acoustics (Noise and Vibration);
- Chapter 12: Landscape and Visual;
- Chapter 13: Cultural Heritage; and,
- Chapter 14: Material Assets: Traffic and Transport.

2.2 Direction of Extension

As part of a funded programme under the National Development Plan, Aggregate Potential Mapping ('APM') has been carried out by the Geological Survey of Ireland ('GSI') for County Kilkenny. The Geological Survey of Ireland has identified the presence of 'very high potential' crushed rock aggregate present within the Site boundary.

The occurrence of high-quality rock in proximity to a well-established quarry with suitable infrastructure for exploitation of aggregate places these lands as an important strategic reserve capable of serving the County's development goals.

The Proposed Development does not seek for development beyond the red line boundary presented in the planning application, and as such, no further consideration should be given to this claim.

The EIAR submitted in support of the Proposed Development has taken full cognisance of sensitive receptors, including residential dwellings, in relation to the proposed eastward extension and has fully considered all potential effects as far as practicable.

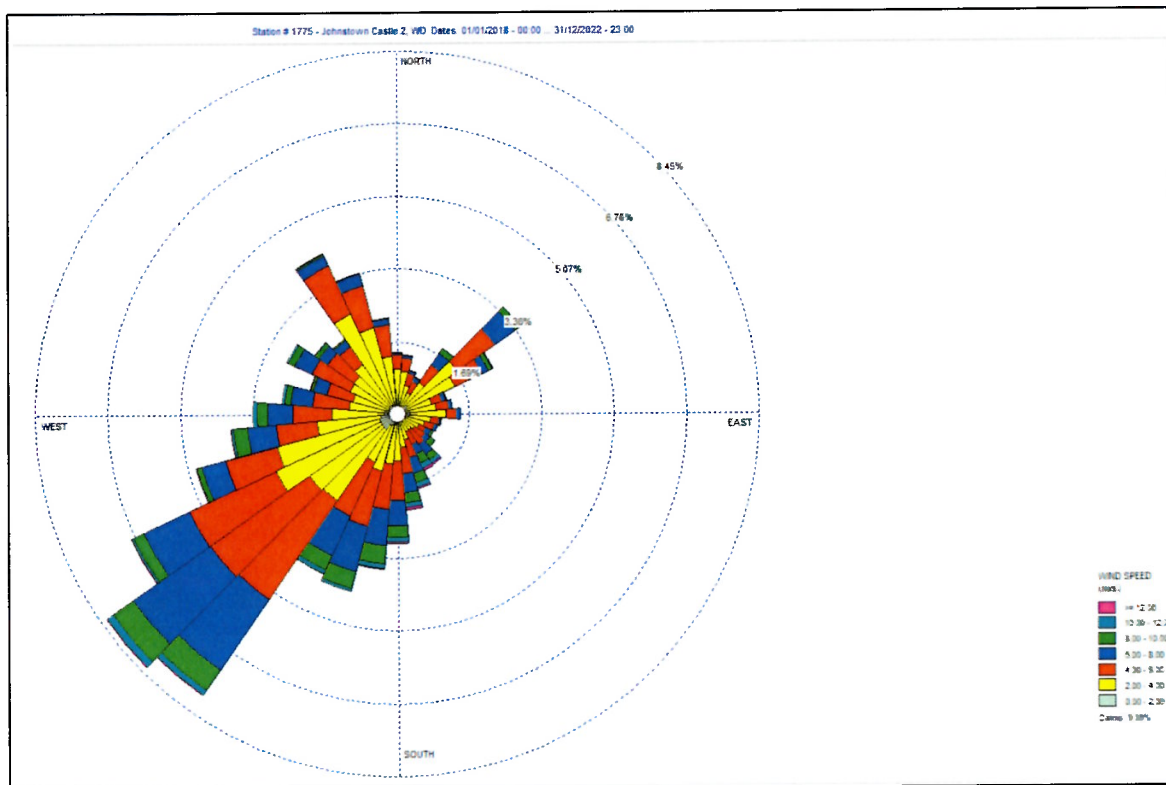
2.3 Prevailing Wind Direction

Weather conditions can have a significant effect on the dispersion of ambient dust, thus influencing the effects on nearby sensitive receptors. The influence of wind direction has been considered throughout the disamenity dust and suspended dust risk assessments.

The nearest synoptic meteorological station that provides hourly data is Johnstown Castle 2 Co Wexford. The Johnstown Castle 2 station is located ca.46km to the east of the Proposed Development.

A windrose diagram was constructed to determine the potential influence of wind direction and speed on airborne dust particles, shown in Figure 2-1 below. The meteorological data consisted of five years of data (2018-2022 inclusive).

Figure 2-1: Windrose for Johnstown Castle 2 Co. Wexford (2018-2022)



This windrose formed an essential part of the dust risk assessment completed in Chapter 9 of the EIAR. Therefore, the influence of wind direction on dust effects to sensitive receptors has been assessed.

2.4 Inadequacy of the Natura Impact Statement ('NIS') submitted

A combined Stage 1: Appropriate Assessment Screening and Stage 2: Natura Impact Statement Report was submitted as part of the application to KCC.

The initial screening assessment aimed to determine the zone of influence of the Proposed Development for each environmental aspect (e.g. air, water, noise, etc.) and the presence / absence of a source-pathway-receptor link from the Site to European sites.

The initial screening assessment determined the following:

- The Site is not located within any European sites and therefore, it can be stated that there will be no direct habitat loss as a result of the Proposed Development;
- There is a hydrological connection between the Site and two European sites: Lower River Suir Special Area of Conservation ('SAC') and the River Barrow and River Nore SAC. These European sites are ca.1.3km and ca.13.8km downstream from the Site, respectively;
- The zone of influence for potential water quality effects was determined to be the receiving waterbodies adjacent to and downstream of the Site within 5km of the proposed works. A 5km zone of influence was chosen on a precautionary basis, using professional judgement. However, it should be noted that any potential pollutants entering the river network would likely dilute or settle out of the system over the full 5km distance. The true zone of influence for potential water quality effects is likely smaller. The Lower River Suir SAC is located within this 5km zone of influence and was screened in for further assessment on a precautionary basis;

- No European sites were located within the zone of influence for potential effects from construction [6] and mineral dust [1] (i.e. 50 and 400m from the Site, respectively) and therefore, potential air quality impacts to European sites as a result of construction or mineral dust can be dismissed;
- The zone of influence for potential noise disturbance was determined to be the Site with a 300m buffer. This zone of influence is based on best practice guidance and scientific studies relating to mammals and birds [7] [8]. It is important to note that effects on aquatic species from the Proposed Development were dismissed when identifying the zone of influence given the absence of in-river works and, subsequently, the absence of underwater noise. There are no European sites within 300m of the Site. The potential for designated species, such as otter, to commute into this zone of influence from the Lower River Suir SAC was considered. However, the Flemingstown Stream is not considered suitable for this species and therefore, noise disturbance effects on otter were dismissed. No other species or habitats were identified with the potential to be affected by noise / disturbance from the Proposed Development.

Accordingly, the Lower River Suir SAC was screened in for further consideration to assess potential adverse effects resulting from the Proposed Development with a specific focus on water quality impairment and the existing hydrological connection. No other functional pathways were identified to any other European sites, and as outlined above, other environmental aspects did not warrant further study.

Following this initial assessment, more detailed screening tables were undertaken. These screening tables (Table 6-1 and 6-2 in the submitted report) assessed the potential of likely significant effects of the Proposed Development on each of the qualifying interests of the Lower River Suir SAC (Table 6-1 focused on designated Annex I Habitats and Table 6-2 on the designated Annex II species). This detailed screening assessment identified the following qualifying interests of the Lower River Suir SAC as potential receptors of significant likely effects arising from the Proposed Development in the absence of appropriate mitigation:

- Atlantic salt meadows;
- Mediterranean salt meadows;
- Watercourses of plain to montane levels with the *Ranunculus fluitantis* and *Callitriche - Batrachion* vegetation;
- Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels
- Otter;
- Salmon;
- Sea lamprey;
- River lamprey;
- Twaite shad; and,
- White-clawed crayfish.

It is important to note that the only potentially significant effect arising from the Proposed Development identified with the potential to adversely affect the qualifying interests of the Lower River Suir SAC was the potential impairment to water quality. No notable plans or projects were identified with the potential for in-combination effects with the Proposed Development at Stage 1.

The report then progressed to Stage 2 of the Appropriate Assessment process, a NIS, and further information was given on the potential risks of water quality impairment on habitats and species within the Lower River Suir, such as a reduction in prey resources, the smothering of

aquatic vegetation etc. A number of mitigation measures were included to prevent the release of suspended sediments and hydrocarbons during construction and operations. Following the implementation of these measures, it was concluded that the Proposed Development will not have any adverse effects on the water quality within the Middle Suir Estuary and subsequently, there will be no significant likely effects to qualifying features of interest within the Lower River Suir SAC. The implementation of these mitigation measures eliminates the potential for water quality impairment, which was the only potentially significant effect arising from the Proposed Development brought forward into Stage 2. As per the Stage 1 assessment, no notable plans or projects were identified with the potential for in-combination effects with the Proposed Development at Stage 2.

Therefore, it can be objectively concluded that with the implementation of these measures, the Proposed Development will not, either alone or in combination with other plans or projects, adversely affect the integrity or conservation status of any of the qualifying features of interest of the Lower River Suir SAC or any other European site in light of best scientific knowledge. No reasonable scientific doubt exists in relation to this conclusion, and therefore, the NIS is compliant with the Kelly threshold set out in paragraph 44 of CJEU Case 258/11.

It is also important to note that progression to Stage 2 was undertaken on a precautionary basis and the potential for pollutants to have a significant effect on the qualifying features of interest of the Lower River Suir SAC was considered highly unlikely pre-mitigation. This further strengthens the conclusion of the NIS that following the implementation of mitigation, significant effects arising from the Proposed Development can be eliminated.

2.5 Devaluation of Properties

The Appellants have supplied Property Appraisals for both properties. These appraisals were both authored by Smartmove Properties and dated 4th February 2025.

In brief, Smartmove Properties assigned an open market value of €1.5 million and €700,000 to X91 X3N8 and X91 TR99 respectively, with *'no condition survey completed'* as part of the appraisal. It is noted that the 'Property Valuation Guide' provided by Revenue for Local Property Tax indicates a valuation band of €200,000 – €262,000 for the Small Area where both properties are located. Although the band is for standard houses, there is a significant disparity between the 'Property Valuation Guide' provided by Revenue and the valuation supplied by Smartmove Properties.

Smartmove properties claim that if the Proposed Development was to be permitted, it would result in *"a significant loss of value or even worse could result in the property being deemed unsaleable in the future"*. The same claim is made in both appraisals, regardless of the difference in distance between the Proposed Development and either property (280m and 310m, respectively). This would suggest that regardless of distance or orientation, the same effect would be felt at both properties. These claims are completely baseless with no regard for the significant amount of evidence presented as part of the planning application and subsequent response to the RFI. For further clarification, refer to Section 2.1 in this response.

In addition, the claims made by Smartmove Properties appear to have no regard for the long history of quarrying in the area. As outlined in the EIAR, extraction at Kilmacow quarry dates back to at least 1971 (>20 years before X91 X3N8 applied for planning permission) when outline planning permission for a quarry was granted under planning reference: 1/1/1754 (ABP ref 10/5/15539). Since 1971, several extensions have been granted, with the latest permission granted in 2017 under planning reference 16/700. No evidence of property devaluation as a result of previous extensions to Kilmacow quarry has been supplied as part of the Third Party Appeal. It is also noteworthy that the 'Property Valuation Guide' is unchanged in the Small Area where the quarry is currently situated. Given Smartmove's devaluation claim, one would expect a sharp decline in the valuation guide. Refer to Section 2.3 in the EIAR for detailed information on planning history.

We hope that our submissions / observations aid ABP in their effort to find an appropriate resolution.

Yours faithfully,

for Malone O'Regan Environmental



Sarah de Courcy

CC: Mr. Patrick Gibney, Roadstone Limited

3 REFERENCES

- [1] IAQM, "Guidance on the Assessment of Mineral Dust Impacts for Planning," Institute of Air Quality Management, London, 2016.
- [2] BSI, "BS5228-1:2009+A1:2014 Code of Practice for noise and vibration control on construction and open sites. Noise," British Standards Authority , London, 2008.
- [3] EPA, "Air Quality in Ireland 2017," Environmental Protection Agency, Wexford, 2018.
- [4] ICF, "Environmental Code," 2005. [Online]. Available: <http://www.irishconcrete.ie/wp-content/uploads/2017/01/Environmental-Code.pdf>.
- [5] EPA, " Guidelines on the Information to be Contained in Environmental Impact Assessment Reports," Environmental Protection Agency, Dublin, 2022.
- [6] IAQM , "Guidance on the Assessment of Dust from Demolition and Construction," 2016.
- [7] National Roads Authority, "Guidelines for the Treatment of Otters prior to the Constrcution of National Road Schemes," National Roads Authority, 2006.
- [8] N. H. K. S. J. Cutts, "Waterbird Disturbance Mitigation Toolkit Informing Estuarine Planning and Construction Projects," 2013.