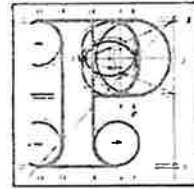


Our Case Number: ABP-318573-23
Planning Authority Reference Number:



**An
Bord
Pleanála**

HSE
c/o Carmel Lynch
Environmental Health Service
County Clinic
Navan
Co. Meath

Date: 26 February 2024

Re: A proposed Road Development comprising of the N2 Slane By-Pass and Public Realm Enhancement Scheme
Within the Townlands of Slane, County Meath

Dear Sir / Madam,

An Bord Pleanála has received your recent submission in relation to the above-mentioned proposed road development and will take it into consideration in its determination of the matter.

Please note that the proposed road development shall not be carried out unless the Board has approved it or approved it with modifications.

The Board has also received an application for confirmation of a compulsory purchase order which relates to this proposed road development. The Board has absolute discretion to hold an oral hearing in respect of any application before it, in accordance with section 218 of the Planning and Development Act 2000, as amended. Accordingly, the Board will inform you in due course on this matter. The Board shall also make a decision on both applications at the same time.

If you have any queries in relation to this matter please contact the undersigned officer of the Board at laps@pleanala.ie

Please quote the above-mentioned An Bord Pleanála reference number in any correspondence or telephone contact with the Board.

Teil	Tel	(01) 858 8100
Glaó Áitiúil	LoCall	1890 275 175
Facs	Fax	(01) 872 2684
Láithreán Gréasáin	Website	www.pleanala.ie
Ríomhphost	Email	bord@pleanala.ie

64 Sráid Maoilbhríde	64 Marlborough Street
Baile Átha Cliath 1	Dublin 1
D01 V902	D01 V902

Yours faithfully,



Eimear Reilly
Executive Officer
Direct Line: 01-8737184

HA03A

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D01 V902

64 Marlborough Street
Dublin 1
D01 V902

[REDACTED]

From: [REDACTED]
Sent: Monday 26 February 2024 14:21
To: [REDACTED]
Subject: RE: ABP Reference: HA17.318573

A Chara,

The Board acknowledges receipt of your email, official acknowledgment will issue in due course.

Kind Regards,

[REDACTED]

From: [REDACTED]
Sent: Thursday, February 15, 2024 4:58 PM
To: SIDS <sids@pleanala.ie>
Cc: [REDACTED], Meath PEHO [REDACTED]
Subject: ABP Reference: HA17.318573

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.

Hi There,

Please find attached submission from the Health Service Executive in relation to this proposal

An Bord Pleanála Ref HA17.318573

Meath County Council, in conjunction with Transport Infrastructure Ireland, are developing the N2 Slane Bypass and Public Realm Enhancement Scheme

Any queries please do not hesitate to contact me.

Kind regards

Lisa Maguire

Lisa Maguire

Oifigeach Sláinte Comhshaoil/Environmental Health Officer

HSE, An tSeirbhís Sláinte Comhshaoil, Aonad Cúraim Sláinte, Oifig Contae, An Uaimh, Co.na Mí

HSE, Environmental Health Service, County Clinic, Navan, Co Meath



This account is not monitored – Monday or Wednesday

Need information and advice on COVID-19? Go to www.hse.ie/coronavirus

"Tá an fhaisnéis sa ríomhphost seo (ceangaltáin san áireamh) faoi rún. Bainneann sé leis an té ar seoladh chuige amháin agus tá sé ar intinn go bhfaighfidh siad an amháin é agus gurb iadsan amháin a dhéanfaidh breithniú air. Más rud é nach tusa an duine ar leis é, tá cosc lomlán ar aon fhaisnéis atá ann, a úsáid, a chraobhscaoileadh, a scalpeadh, a nochtadh, a fhoilsiú, ná a chloipeáil. Seans gurb iad tuairimí pearsanta an údar atá san ríomhphost agus nach tuairimí FSS iad.

Má fuair tú an ríomhphost seo trí dhearmad, bheadh muid buíoch dá gcuirfeá in iúl don Deasc Seirbhísi ECT ar an nguthán ag [+353 818 300300](tel:+353818300300) nó ar an ríomhphost chuig service_desk@hse.ie agus ansin glan an ríomhphost seo ded' chóras."

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If this email has been received by you in error we would be grateful if you could immediately notify the ICT Service Desk by telephone at [+353 818 300300](tel:+353818300300) or by email to service_desk@hse.ie and thereafter delete this e-mail from your system"



**1:2009+A1:2014 Code of practice for noise and vibration control on construction and open sites
– Part 2 Vibration.**

Predictive modelling indicates that site enabling works at the site compounds will result in noise levels exceeding the NRA/TII construction noise limit of 70dB LAeq, 1hr at the nearest noise sensitive locations. Similarly, a number of other noise sensitive locations have been identified which may experience short periods of noise above the guideline limit during various construction works. It is expected that these works may take up to 2 months in some cases. It is accepted that noisy machinery will not operate continuously close to the noise sensitive locations throughout these periods. However, it is recommended that construction times are limited at these noise sensitive locations to minimise the impact of construction noise on local residents, as follows:

Monday to Friday	08:00 – 18:00
Saturday	09:00 – 13:00
Sundays and Public Holidays – No noisy operations on site.	

Construction outside of these hours should not be allowed without approval of the Local Authority and local residents should be notified. Night working in residential areas or areas close to healthcare settings should be avoided if at all possible to prevent sleep disturbance and protect public health.

An assessment of vibration associated with construction works in accordance with BS 5228 Part 2:2009+A1:2014 was undertaken. In the main, vibration levels are predicted to be below the NRA Guidelines however vibration could be experienced at some sensitive locations close to N51 and public realms works which may give rise to complaints. The applicant advises that the level of vibration can be tolerated if prior warning and explanation has been provided to residents. The EHS recommends that local residents who may be exposed to vibration levels above the recommended limit during construction are notified in a timely manner and that they can be assured that the level of vibration will not result in any cosmetic damage to buildings or other structures.

The 2014 NRA Guidance document specify a 60dB L_{den} design goal for receptors (noise level measured over 24 hour period). It is widely accepted that road traffic noise can result in annoyance and sleep disturbance and compliance with this limit should reduce the risk these health impacts. Road traffic noise is expected to reduce on the N2 through Slane village while noise levels are expected to increase on the N51 in line with increased traffic along this road and noise levels will increase in areas where new roads are constructed. The applicant has concluded that the vast majority of noise sensitive locations along the proposed route will experience a negligible change in noise levels when the road is operational.

Section 9.4.2 of the EIAR identified 16 noise sensitive locations using the NRA Guidelines (2004) where mitigation would be required to reduce traffic noise levels to within acceptable limits. Section 9.5.2 outlines the mitigation measures which would be implemented to reduce traffic noise at sensitive locations when the road has been completed. These measures include the use of low noise road surfaces, installation of noise barriers – walls, earthen berms, landscaping.

It is understood that mitigation measures at a number of locations will not achieve an adequate reduction in noise levels to fully comply with the NRA limits. The applicant does advise that there may be an additional unquantified reduction in predicted noise levels at these noise sensitive locations through the use of low noise road surfaces.

The applicant concludes that the proposed scheme will result in a positive aggregate residual impact under the END (Environmental Noise Directive 2002/49/EC) Noise Mapping and the DMRB (Design Manual for Roads and Bridges) impact rating which will result in beneficial environmental and health effects on the general population in the study area.



84 properties located within 50m of the existing N2. There are 5 receptors indicated on Table 10-40 who may experience a negative impact on air quality, this impact is described as substantial because the background level is already above the WHO Air Quality Guideline. The existing background level and predicted level of PM_{2.5} is substantially within the statutory limit set in the Air Quality Standards for the protection of human health.

There are no specific mitigation measures identified for the operational phase of the development. The reduction of pollutant emissions from road traffic is driven by legislation and improved fuel and engine technologies. Climate action strategies in the future should also result in a reduction of road traffic emissions to air.

5. Assessment of Water

Chapter 17 of the EIAR assesses the potential impacts of the proposed scheme on the natural water environment (surface water quality, drinking water resources, flood risk and fluvial geomorphology) during the construction and operational phases. The applicant has outlined the relevant legislation, policy and guidance which were considered when carrying out this assessment. Details of a desktop study and site specific surveys to identify hydrological receptors and existing drainage systems were provided.

Section 17.3 of the EIAR described the existing environment including the River Boyne and its tributary, the River Mattock. A flood risk assessment was carried out together with a description of measures to comply with the EU Water Framework Directive in the vicinity of the development.

There is one drinking water abstraction from the River Boyne 6km downstream from the proposed development which serves the Staleen Water Treatment Plant, this plant supplies water to approximately 90,000 people in the Drogheda and East Meath area. Groundwater is abstracted for the Slane Public Water Supply close to the proposed development. This public water supply has an excellent track record of compliance with water quality parameters.

Section 17.4 of the EIAR describes the likely significant effects of the proposed scheme during both the construction and operational phase of the development. A number of mitigation measures are outlined in various sections of the EIAR and the outline Environmental Operating Plan to ensure the protection of watercourses and ground water supplies. It is recommended that these measures are included as a condition of planning permission if granted to ensure the protection of drinking water supply sources and in turn, protect public health.

4. Assessment of Lands, Soils and Hydrogeology

Chapter 18 of the EIAR provides an assessment of the likely significant effects on land, soils, geology and hydrogeology of the proposed development during both the construction and operational phases. The applicant undertook desktop studies and site specific investigations to determine the baseline features of the receiving environment.

The proposed development will traverse greenfield lands with public realm enhancements taking place within the urban fabric of Slane village. Three individual groundwater bodies lie beneath the proposed development. A number of GSI listed wells in the vicinity of the site are provided in Table 18-11 and include both public and private water supply sources. The EIAR outlines the potential risk of localised contamination of groundwater bodies during the construction phase. The risk of silt laden runoff from soil stockpiles contaminating ground water sources and giving rise to elevated levels of suspended solids is discussed. The impacts on



4. Assessment of impacts on Human Health

Chapter 11 of the EIAR outlines the potential impacts on population and human health during the construction and operational phases of the proposed scheme. These impacts are considered in further detail throughout this report. The applicant states that the operational phase of the proposed development or scheme will have an overall positive impact on traffic, journey times, amenity and economic activities in Slane and throughout the surrounding area.

The introduction of improved active travel infrastructure and public realm improvement works is welcomed and provides an excellent opportunity for health gain for local and wider communities. The improvement of existing amenities and installation of new cycle and pedestrian paths should be prioritised and developed in tandem with the roadway to ensure that users can gain maximum health benefits.

The following general points for the protection of human health should be considered during the construction phase:

- Construction works may be undertaken close to healthcare facilities, schools and other public buildings, it is important to maintain safe access to these buildings at all times during the construction phase.
- There was no reference to rodent control measures to be found in the EIAR. The disturbance of ground and possible damage to the local public sewer network during construction may give rise to increased rodent activity. The EHS recommend that a condition regarding pest control during construction is included should permission be granted in order to prevent a nuisance and protect public health.

5. Assessment of Noise and Vibration

Chapter 9 of the EIAR considers the impact of noise and vibration from the proposed development on noise sensitive receptors. A number of site specific surveys were undertaken to establish the existing noise environment and baseline noise data. The existing noise environment surrounding the proposed development is dominated by traffic noise to varying degrees. The applicant identified 1,391 receptors including residential receptors, schools, places of worship and commercial premises. Chapter 9 of the EIAR also provides details of construction and operational noise and vibration criteria, guidance and standards which are relevant to the project.

The EIAR describes the predictive noise modelling which was carried out to predict noise levels at various sensitive receptors along the route. This modelling took into consideration several factors including topographical data, traffic impacts such as mean traffic flow, traffic speed and percentage of heavy goods vehicles to provide a prediction of noise levels at noise sensitive receptors.

The applicant advises that the construction of the proposed development will generate noise from the use of heavy plant and machinery over a short term. It is understood that construction noise will vary at different locations as the project progresses. The nature of construction activities and machinery which will be used is outlined in this chapter. Construction traffic noise was also examined along the routes that will experience an increase in road traffic and this effect is expected to be 'negligible'.

The applicant has outlined a range of mitigation measures to control noise emissions in Section 9.5.1 of the EIAR for the construction phase of the development. These measures include the installation of noise barriers, engagement with local residents if out of hours works are required, complaints procedure, noise monitoring and work practices in compliance with BS 5228-



6. Assessment of impact on Air

The assessment of potential impacts on air quality are outlined in Chapter 10 of the EIAR. The baseline air quality data was established using the EPA's monitoring data and local surveys. This data indicates poorer air quality within Slane village as a result of traffic congestion. 28 residential properties were identified as sensitive receptors and are located within 50m from the centreline of the proposed roadway.

The applicant has outlined relevant air quality assessment criteria in Section 10.2.5 of the EIAR and includes the Air Quality Standards Regulations 2011 and reference to the more stringent World Health Organisation (WHO) Recommended Air Quality Guidelines levels and interim targets (2021). The WHO guidelines have been selected by the applicant as the most appropriate assessment criteria for the protection of human health.

The construction phase of the proposed development will result in the creation of dust giving rise to soiling of surfaces locally and increased particulate matter concentration. Construction of the proposed scheme is expected to take up to 36 months and a number of construction sites at various locations along the route will operate for extended periods, therefore, dust control measures are essential to prevent nuisance and minimise adverse health impacts. The applicant outlined details of the dust risk assessment which was undertaken in line with guidance from the Institute of Air Quality Management (IAQM).

Section 10.4 of the EIR described the likely significant effects of the proposed scheme on air quality combined with existing development in the area. Approved developments which have not yet been constructed were also considered in the air quality assessment.

The applicant assessed the impact of dust emissions during the construction phase as short term slight to moderate adverse effects without mitigation. The applicant outlined a number of best practice mitigation measures in Section 10.5.1.1 to control dust emissions during the construction stage. An assessment of the impact of construction traffic on air quality concluded that it will have a moderate adverse impact on air quality for the short-term duration of material haulage, this impact will reduce for receptors located further away from haul routes. Emissions from construction plant were assessed in Section 10.4.1.3 and were predicted to have a minor adverse impact on air quality in the short term.

The potential air quality impacts of the operational phase of the proposed development were considered in Section 10.4.2.3 of the EIAR. The TII Road Emissions Model (REM) was used to calculate emissions from road transport when the road is in use. This assessment indicated that some sensitive receptors will experience improved air quality as a result of the development, while a number of receptors may experience slight increases in levels of traffic pollution.

The applicant has outlined a number of mitigation measures for the control of dust and air emissions during construction. It is accepted that these measures should minimise the impact of dust and air emissions in the vicinity of the development if fully implemented. It is recommended that these measures are included as a condition of the planning permission should it be granted in order to protect public health.

The EIAR states that the levels of NO₂ and PM₁₀ are predicted to remain below both the WHO Guidelines and the current statutory limits during the operational phase of the scheme.

The background level of PM_{2.5} in the local area is already above the WHO guideline limit of 5µg/m³ at approximately 8µg/m³. The applicant advises that levels will decrease within Slane Village while other properties closer to the new road will experience a slight increase in levels. The applicant concludes that the project will result in a positive long term air quality outcome for



lands, soils and hydrogeology are similar during the operational phase i.e. accidental fuel spillages or other chemicals.

The EHS is satisfied that the range of mitigation and monitoring measures outlined in the EIAR and outline Environmental Operating Plan should ensure that the risk of contamination of land, soil and particularly ground water will be minimised. It is recommended that these measures are included as a condition of planning permission if granted to ensure the protection of lands, soil and drinking water supply sources which will protect public health.

7. Assessment of Impact on Climate

Chapter 19 of the EIAR considered the impact the proposed development may have on the climate and the effect the changing climate may have on the proposed development. International and National Climate Change legislation and policy relevant to this project was outlined in the EIAR.

The applicant undertook a greenhouse gas emissions assessment which identified the impact of greenhouse gas emissions arising over the lifetime of the project. A Climate Change Risk Assessment identified the vulnerability of the project to climate change and considered adaption measures to increase the resilience of the project.

The applicant advises that with the implementation of control measures, the risk of climate change impact on the construction phase is considered not significant. The implementation of the Climate Action Plan should see a gradual reduction in petrol/diesel fuelled vehicles and associated emissions in the future.

The EIAR estimates that the total carbon generated during the construction phase is almost 32,000 tonnes CO₂e. The applicant has outlined their commitment to using low materials which will reduce this climate impact.

The increase in total transport emissions associated with the operation of the proposed scheme are considered minimal when compared with the existing road network.

It is recommended that the applicant uses any renewable energy technologies if available during the construction phase and continuously investigates and implements any proven technology/initiative which reduces the production of greenhouse gases. All climate mitigation measures should be included as a condition of Planning permission should it be granted to minimise the impact on climate and in turn, protect public health.



Conclusions

1. The introduction of improved active travel infrastructure and public realm improvement works is welcomed and provides an excellent opportunity for health gain for local and wider communities. The improvement of existing amenities and installation of new cycle and pedestrian paths should be prioritised and developed in tandem with the roadway to ensure that users can gain maximum health benefits.
2. The following general points for the protection of human health should be considered during the construction phase:
 - Construction works may be undertaken close to healthcare facilities, schools and other public buildings, it is important to maintain safe access to these buildings at all times during the construction phase.
 - The applicant should consider the location of food premises during the construction phase and ensure that power supply is maintained in these premises to ensure that there is no interruption to the cold chain. This measure will protect public health by preventing food borne illnesses.
 - There was no reference to rodent control measures to be found in the EIAR. The disturbance of ground and possible damage to the local public sewer network during construction may give rise to increased rodent activity. The EHS recommend that a condition regarding pest control during construction is included should permission be granted in order to prevent a nuisance and protect public health.
3. Predictive noise modelling indicates that site enabling works at the site compounds will result in noise levels exceeding the NRA/TII construction noise limit of 70dB LAeq, 1hr at the nearest noise sensitive locations. Similarly, a number of other noise sensitive locations have been identified which may experience short periods of noise above the guideline limit during various construction works. It is expected that these works may take up to 2 months in some cases. It is accepted that noisy machinery will not operate continuously close to the noise sensitive locations throughout these periods. However, it is recommended that construction times are limited at these noise sensitive locations to minimise the impact of construction noise on local residents, as follows:

Monday to Friday	08:00 – 18:00
Saturday	09:00 – 13:00

Sundays and Public Holidays - No noisy operations on site.

Construction outside of these hours should not be allowed without approval of the Local Authority and local residents should be notified. Night working in residential areas or areas close to healthcare settings should be avoided if at all possible to prevent sleep disturbance and protect public health.
4. An assessment of vibration associated with construction works in accordance with BS 5228 Part 2:2009+A1:2014 was undertaken. In the main, vibration levels are predicted to be below the NRA Guidelines however vibration could be experienced at some sensitive locations close to N51 and public realms works which may give rise to complaints. The applicant advises that the level of vibration can be tolerated if prior warning and explanation has been provided to residents. The EHS recommends that local residents who may be exposed to vibration levels above the recommended limit during construction are notified in a timely manner and that they can be assured that the level of vibration will not result in any



cosmetic damage to buildings or other structures.

5. It is understood that mitigation measures at a number of locations will not achieve an adequate reduction in noise levels to fully comply with the NRA limits. The applicant does advise that there may be an additional unquantified reduction in predicted noise levels at these noise sensitive locations through the use of low noise road surfaces.

The applicant concludes that the proposed scheme will result in a positive aggregate residual impact under the END Noise Mapping (Environmental Noise Directive 2002/49/EC) and the DMRB (Design Manual for Roads and Bridges) impact rating which will result in beneficial environmental and health effects on the general population in the study area.

6. The applicant has outlined a number of mitigation measures for the control of dust and air emissions during construction. It is accepted that these measures should minimise the impact of dust and air emissions in the vicinity of the development if fully implemented. It is recommended that these measures are included as a condition of the planning permission should it be granted in order to protect public health.
7. The EHS is satisfied that the range of mitigation and monitoring measures outlined in the EIAR and outline Environmental Operating Plan should ensure that the risk of contamination of land, soil, surface and ground waters will be minimised. It is recommended that these measures are included as a condition of planning permission if granted to ensure the protection of lands, soil and drinking water supply sources which will protect public health.
8. It is recommended that the applicant uses any renewable energy technologies if available during the construction phase and continuously investigates and implements any proven technology/initiative which reduces the production of greenhouse gases. All climate mitigation measures should be included as a condition of Planning permission should it be granted to minimise the impact on climate and in turn, protect public health.

Carmel Lynch
Environmental Health Officer
Environment and Climate Change Network Support Unit