

Louth County Council Screening Determination in respect of N53

1. Introduction

Atkins on behalf of LCC carried out a Sub-Threshold EIA Screening Assessment and Conclusion (April 2021). The report has been prepared to support Part 8 application by Louth County Council in relation to the upgrade of the existing N53 route between Hackballscross to Rassan in County Louth. The purpose of the report is to determine whether the proposed project requires the preparation of an Environmental Impact Assessment Report (EIAR). The proposed infrastructure project has been screened to generate a summarised overview of the potential impacts on the receiving environment, and in the context of relevant statutory requirements.

A Stage 1 Screening for Appropriate Assessment has also been prepared (Atkins, 2021). The project has been assessed with regards to the likely significant effects (either alone or in combination) of each development on European sites within the zone of influence of each proposed project. The project has been screened out at Stage 1 Screening for Appropriate Assessment, and therefore does not require the preparation of a Natura Impact Statement (NIS).

The EIA Screening Assessment reviews of Parts 1 and 2 of Schedule 5 of the PDR and has determined that the proposal does not screen in for mandatory or sub-threshold EIA on the basis of threshold set out therein. Furthermore screening assessment in respect of Roads Act has determined that the mandatory threshold is not reached. It follows that this is a sub-threshold development.

Hence a sub – threshold EIA screening has been undertaken in accordance with Schedule 7a of the PDR to as to inform an opinion whether the proposed development is likely to have significant effects on the environment and whether an EIA should be completed in respect of thereof.

2. Contents of EIA Screening Report

Section 1 – Introduction and Screening for Mandatory EIA in accordance with Schedule 5 of the Planning and Development Regulations 2001 (as amended) (PDR) and S. 50 of the Roads Act, 1993 (as amended).

Section 2 – Methodology

Section 3- Undertakes the Screening Assessment to include a number of steps

Step 1 – Mandatory screening

Step 2 – Determining if significant environmental effects are likely

Sets out criteria for determining whether the development listed in Part 2 of Schedule 5 should be subject to an EIA based on:

- Characteristics of the development
- Location of the proposed development including environmental sensitivity of geographical areas.
- Types and characteristics of potential impacts.

Step 3 – Potential for significant effects on the receiving environment,

3. Description of Development and Location of Development

The description of the development and location are detailed in Section 3.2.1 of the Screening Report. The N53 has been identified as one of the country's important National Secondary Routes, providing a strategic transport link for the northwest to the northeast of the county. The N53 serves the towns of Dundalk, and Castleblayney where it joins the N2 for its onward linkage to the northwest.

Louth County Council (LCC) proposes to upgrade this section of the existing N53 route between Hackballscross and an area approximately 350m west of the N53, L17120 junction at Annaghvacky, and the section of the road within Rassan townland. The proposed scheme will be realigned between these upgrade sections and will provide a road which is designed to comply with current TII design standards and does not present drivers with unexpected or substandard layouts.

The proposed scheme, currently at the Preliminary Design Phase, has the following characteristics:

- Length of proposed mainline: 3.4 km
- Percentage online / offline: approximately 900m online / 2,500m offline
- Mainline cross-section: Type 1 Single Carriageway (as per TII's CC-SCD-00001)
- Number of mainline junctions: 3 No. Junctions
- Side roads realigned (from west to east): L1120
- Structures: 1 No. pedestrian subway
- Townlands through which it travels: Hackballscross, Carrickastuck, Annaghvackey and
- Shanmullagh.

The type of road proposed to be constructed is a Type 1 Single Carriageway for the full length of the proposed route with the exception of chainage 3000 to chainage 3350 (approx.) where the scheme transitions into a Type 2 Single Carriageway (to facilitate the tie-in with the existing N53 at Hackballscross). A typical cross-section for this type of Carriageway is shown in the Transport Infrastructure Ireland (TII) Standard Construction Details Drawing No. CC-SCD-00001 (TII, 2017) and is shown in Figure 3-1 (note that all dimensions presented in the figure are in millimetres).

3. Description of the receiving Environment

The EIA Screening Assessment includes a description of the receiving environment in Section 3 under the following headings:

- a. Designated Conservation
- b. Soils and Geology
- c. Hydrology and Flooding
- d. Hydrogeology
- e. Biodiversity
- f. Archaeology and Cultural Heritage
- g. Landscape and Visual
- h. Noise
- i. Air Quality

4. EIA Screening Assessment Conclusion

The EIA Screening conclusion is that the proposed development does not exceed the thresholds that trigger the mandatory requirement for EIA and that the proposed development is not likely to result in significant negative environment effects by virtue of its characteristics, location, size, or potential impacts and a EIA need not be undertaken in respect of same.

5. The likely Effects on the Environment

Section 3.3.3 sets out an Assessment of Aspects of the Environmental and Significance of Impacts. The submitted information analysis is broadly acceptable in extent and in the detail of assessment and conclusions.

Key findings are further summarised at section 3.5:

- Due to the limited nature of the works it is considered that there will be no significant cumulative impacts with other developments in the general area should standard mitigation measures be implemented.
- No significant environmental / biodiversity impacts to the Annex I wetland habitat via. Perched water / groundwater or surface water sources are likely to occur as a result of the proposed scheme.
- Limited noise, vibration and dust emissions may be generated during construction and operational phase; however, this is anticipated to be minimal in effect and will cause no significant impact.
- Soil and waste will be generated during construction; however, this is not anticipated to have significant impact.

- There may be some potential impacts on surface water; however due to the nature and scale of the project and standard control procedures during construction this will not be significant.
- Earthsound Geophysics (2020) completed an Archaeological Geophysical Survey for the proposed scheme. The survey concluded that ‘the geophysical surveys undertaken for this report have revealed a series of possible archaeological features. The majority of these are likely to represent boundary features or relict agricultural divisions. One oval possible archaeological enclosure was detected to the east of the ring-barrow (LH003-019001). Two anomalies were also identified which match features shown on the historic Ordnance Survey mapping. Other possible archaeological remains include one possible pit and numerous zones of magnetic enhancement. Evidence of geological activity can be seen throughout the survey areas with the detection of multiple geological dykes. These have created both linear anomalies and zones of high magnetic responses, these responses are so strong that they may have masked any archaeological remains within the area. Evidence for cultivation was also detected as well as areas of high magnetic modern disturbance.’
- The Archaeological Geophysical Survey (Earthsound Geophysics, 2020) recommended that a number of test excavations be conducted prior to construction works. Such excavations will be undertaken at an appropriate time in the project programme.
- In summary, no significant adverse impacts to the receiving environment are likely to arise as a result of the proposed development, provided standard mitigation measures are implemented, and subject to the findings of the archaeological test excavations, which will be conducted prior to the commencement of construction works in line with TII Code of Practice (2017).

6. Assessment

Population and Human Health

The development will be constructed through agricultural land and partially along the existing N53. The route passes through a small crossroads at Annaghvacky which has a local shop and several domestic houses. The N53 also caters for significant HGV’s and by its nature, the National Secondary Route is a strategic traffic route from the northeast to the northwest and runs partly through Northern Ireland. However, the high number of local accesses and the rural environment within which it lies means there is a significant proportion of local traffic and slow-moving agricultural vehicles. These factors, combined with those already mentioned, lead to unreliable journey times.

In addition, road safety is a particular concern along the route given the poor alignment, mix of regional and local traffic, observed traffic speeds and the general lack of facilities / space for vulnerable road users.

The assessment concludes that at construction stage properties will experience temporary negative effect – noise, air, traffic delays. At operational stage the development

will provide positive effects remove improve connectivity, remove congestion and improve travel times.

The mitigation measures proposed within the screening report are such that will reduce the potential for any temporary direct and indirect effects on human health during the construction stage in particular e.g. noise, dust abatements measures. Based on the Mitigation measures proposed and the nature of the proposed development I would also conclude that the proposed development would not be likely to have significant adverse effects on the population or human health. The development will assist in the provision of a safer road network and more reliable triup times.

Flooding

A review of the OPW flood maps (OPW, 2021) did not identify any areas mapped as liable to flooding or any historical flooding events. A Stage 1-Flood Risk Assessment (FRA) has been prepared (Atkins, 2021) (document reference 5187353DG0110) to establish whether a flood risk issue currently exists or may exist in the future. Based on an examination of the data available, the FRA has demonstrated that the flood maps indicate a low risk of flooding to the proposed development. Therefore, a Stage 2 Flood Risk Assessment is not required and therefore the report shall be concluded at this point. I have no concerns relating to flooding as a result of the proposed development.

Soils and Geology

I have considered the assessment pertaining to soils and geology which covers land take, excavation and importation of soil, soil inclusions, contaminated lands, geological heritage and geology. The mitigation measures, in particular the reuse of excavated material to the minimise the importation requirement, within the screening report are such that will reduce the potential for any temporary direct and indirect effects on soils and geology during the construction stage. Having regard to the foregoing I concur, that the proposed development would not be likely to have significant adverse effects on soils and geology.

Hydrology and Hydrogeology

The Carrickastuck Stream and the Annaghvacky Stream are located north of the proposed route and flow in a general northern direction before joining with the Castletown River to the north and discharging to Dundalk Bay approximately 7km east and down hydraulic gradient of the proposed route. The Contractor will be obliged to prepare a project specific Construction Environmental Management Plan (CEMP) prior to commencement of the proposed development, which will include specific mitigation measures to be implemented to fully address any potential surface water impacts and monitoring as necessary. Due to the nature and scale of the project it is anticipated that the construction works, and operation of the proposed development will not have a significant impact on surface water quality.

I have considered the assessment and conclusions made in relation to hydrology and hydrogeology. I am satisfied that the mitigation measures proposed within the screening report are such that will reduce the potential for any temporary direct and indirect effects on flooding, water quality, hydrophology, the public water supply aquifers and ground water during the construction and operation stages.

Hydrogeology

The proposed route and surrounding area are located within the Louth Groundwater Body (GWB). There are seven registered wells within the area, however there are no reported Public Supply Source Protection Areas, Group Water Schemes or commercial or industrial groundwater abstractions. A pre-construction well survey will be carried out at all properties within 150m of the proposed scheme. Any wells which may potentially be at risk (via. resource / quality impacts) during the construction or operational phases will be identified and appropriate measures implemented in order to protect any vulnerable ground water supplies within the vicinity.

There are two ponds located within the area of cut raised over peat which are identifiable on the historical 6-inch map (1837 – 1842) and 25-inch map (1888 – 1913) (OSI, 2021) Site-specific data presented in the Ground Investigation Report (IGSL Ltd., 2021), was reviewed to determine the potential for groundwater to be encountered and potentially impacted during the construction phase of the proposed scheme.

I have considered the assessment and conclusions made in relation to hydrogeology. I am satisfied that the mitigation measures proposed within the screening report are such that any wells which potentially could be at risk will be identified and appropriate measures implemented.

Biodiversity

A review of the National Biodiversity Data Centre Biodiversity Maps identified 11 No. protected and threatened species within 2km of the proposed scheme. At least one record of these species were recorded within the last 10 years, between 2011 to 2018. No invasive species were identified within the area of the proposed scheme.

There will be a direct impact on the locally important (low value; as classified by Wetland Survey Ireland (2021)) Annaghvacky (Hackballscross) Wet Woodland habitat and the high local conservation value hedgerow habitat from the proposed route. This is due to the loss of approximately 0.465ha from the Wet Woodland and a loss of approximately 3500m from the hedgerow habitat.

Potential ecological impacts will be addressed by the implementation of ecological mitigation measures. Ecological mitigation measures are outlined in the Atkins (2021) Environmental Report (document reference: 5187353DG0118) A separate AA Screening Report has been prepared and has concluded that the Project wither individually or in combination with other plan and projects, is most likely to have no significant effect on an European Site.

Environmental Report Atkins have considered connectivity between the project site and the Annex 1 habitat, to assess potential impacts to local biodiversity (not impacts to SAC / SPAs). The project site is connected to the Annex 1 habitat (via. groundwater and perched water) – but as the Annex 1 habitat is not an SAC / SPA, then the only impacts (aside from water impacts) are local biodiversity impacts only (i.e. impacts to the wetland habitat and the flora / fauna the habitat supports).

I am satisfied having regard to the foregoing, with the conclusion that the mitigation measure set out that the proposed development would not be likely to have significant adverse effects on biodiversity. Potential impacts will be addressed as per the mitigations measures as set out in the environmental report.

Noise and Vibration

The Report has detailed that at distances of up to 25 metres from the works associated with this project at construction stage, there is potential for TII noise limit criteria to be exceeded in the absence of noise mitigation measures. At operational stage noise predicted levels exceed TII design goals in proximity in a number of properties. It is also noted that embankments have the potential to allow traffic noise to attenuate further. A detailed noise assessment of the project is to be undertaken which will ensure that construction day time noise limited will be complied at sensitive locations and mitigation measures comprising of either noise barriers/bunds, low noises surfacing or both will be provided to minimise future operational traffic noise in sensitive locations. Having regard to the foregoing, I am satisfied that the mitigation measures proposed within the screening report are such that will reduce the potential for any temporary direct and indirect effects on noises at the construction stage or operational stage.

Dust

Management of dust will be in line with relevant best practice measures such as those set out in 'Guidelines for the Treatment of Air Quality During the Planning and Construction of National Road Schemes' (NRA, 2011).

I consider due to the nature and scale of the project it is anticipated that the construction works, and operation of the proposed development will not have a significant impact on air quality. Construction will require the use of machinery and the presence of such machines may result in a temporary increase of noise or vibration. This is considered reasonable.

Three properties have been identified in the screening report as potentially impacted by noise during the operation of the scheme. A combination of low noise road surfacing along the entire scheme and noise barriers at these locations will ensure that there is no significant impact from noise during the operational phase.

Cultural Heritage

There are no Protected Structures, Architectural Conservation Areas or sites listed in the National Inventory of Architectural Conservation (NIAH) within the area of the proposed route. Sites relating to architectural heritage located along the proposed route corridor include three unregistered extant building clusters and one unregistered extant single building in the Carrickastuck and Rasan townlands as detailed further within the Atkins (2021) Environmental Report (document reference: 5187353DG0118).

Earthsound Geophysics (2020) completed an Archaeological Geophysical Survey for the proposed scheme. The survey concluded that 'the geophysical surveys undertaken for this report have revealed a series of possible archaeological features. The majority of these are likely to represent boundary features or relict agricultural divisions. The Archaeological Geophysical Survey (Earthsound Geophysics, 2020) recommended that a number of test excavations be conducted prior to construction works. Such excavations will be undertaken at an appropriate time in the project programme.

To reduce the potential for any direct and indirect effects cultural heritage, as a mitigation measure, I recommend that ground works are monitored by an archeologist. On this basis I am satisfied that the proposed development would not be likely to have significant adverse effects on cultural heritage

Landscape and Visual Amenity

EBLA (2019) report 'N53 Hackballscross to Rasan Route Selection Report: Landscape and Visual Impact Assessment' has noted from his field study that the proposed scheme has strongly undulating topography and the general area of the proposed scheme is agricultural in nature with fields of small to large scale which are 'rectangular and irregular shaped and enclosed by hedgerows and tree lines'.

There are no Tree Preservation Orders (TPO), Trees and Woodlands of Special Amenity or Areas of Outstanding Natural Beauty or Areas of High Scenic Quality / designated Scenic Routes within the general area of the proposed scheme (EBLA, 2019).

I do not consider that the proposed realignment will impact negatively on the landscape and visual amenities of the area.

Noise

There are 60 No. properties within 300m of the proposed route which include 15 No. properties between 0m – 50m; 3 No. properties between 50m – 100m; 20 No. properties between 100m – 200m and 22 No. properties between 200m – 300m (AWN, 2020).

Of these properties, there are 3 No. properties which will require noise mitigation in the form of noise barriers, to maintain noise levels within the day-evening-night limit of 60 dB (Atkins, 2021).

Due to the nature and scale of the project it is anticipated that the construction works, and operation of the proposed development will not have a significant impact on noise subject to this mitigation measure being put in place.

Interaction

At construction it is considered that given the small scale and short term nature of the interactions and mitigation measures proposed, interactions are not likely to result in significant environmental effects.

A project specific CEMP will be prepared by the appointed Contractor prior to the works commencing which will clearly set out all environmental control measures for the onsite management of any pollution / nuisance issues which could arise during the construction phase.

The main interactions at operation stage will be noise, vibration, landscape and visual and human health. These will not likely to result in significant environmental effects.

I have considered the interrelationships between factors and whether these might as a whole affect the environment, even though the effects may be acceptable when considered on an individual basis. I am satisfied that the mitigation measures are such that interactions between the above factors are reasonably addressed.

6. Summary and Conclusion

Having regard to the examination of the environmental information submitted, to the Screening Report, the Environmental Report and the mitigations measures recommended, it is considered that the main significant direct and indirect effects of the proposed development can be adequately mitigated against and are not such as have significant adverse effects on the environment. I consider taking account of the geophysical surveys undertaken and the series of archaeological features identified that the works should be supervised by an archaeologist.

I consider that the proposed development does not require an Environmental Impact Assessment as it is not likely to have significant effects on the environment by virtue, inter alia, of its nature, size or location.

Signed: 

Emer O'Callaghan

Senior Executive Planner

Date: 31/5/2021