25th of August 2022

Blennerville Bridge

Re. Submission of Natura Impact Statement to the Minister for Housing, Local Government and Heritage pursuant to the requirements of Regulation 42(9)(c) of the European Communities (Birds and Natural Habitats) Regulations, 2011 (as amended).

Q1.

The Department notes the acknowledgement in your email dated 20th July 2020 (footnote 2) that the works described in the NIS constitute a project. The Department understands that TII is satisfied that the works do not require planning consent per the requirements of the Planning and Development Act, 2000, and that the project in consequently subject to the provisions of the European Communities (Birds and Natural Habitats)Regulations, 2011 (S.I. No. 477 of 2011) in respect of appropriate assessment. The Department would welcome a copy of, or summary of, any legal advice in relation the exemption of such works from requiring planning permission. This is because the Department has a legal obligation not to consent to works which require planning permission.

Answer. TII is addressing this question directly.

Q2.

The source of the sand for the sand bags is not referred to in the NIS, and needs to be clarified before the appropriate assessment is complete. The NPWS is aware of situations where finer textured material was used by contractors in 'sand bags', which were subsequently damaged and the contents realised during a storm flow in the river in which they were placed, resulting in adverse effects on the benthic ecosystem. As the substrate near the bridge appears to be the estuary habitat sub-community 'sand to sandy mud with polychaetes and bivalves community complex', it is important that the sourced sand is of an equivalent grade and chemical composition, and free from contaminants, in the event that there is any inadvertent damage to one or more of the sand-bags. It is recommended that the ecological clerk-of-works documents the sand bag content source, and checks that this is indeed what the bags contains.

Answer

The catchment of the River Lee lies within an area characterised by a range of bedrock types, but which are broadly limestone or sandstone in character – including e.g. Waulsortian Limestones, Rockfield Limestone Formation, Cracoean Reef Member (i.e. Unbedded calcilutite limestone) and Namurian (undifferentiated) (Shale & sandstone) (Source: GSI Mapviewer). Soils types are also diverse, including e.g. Clashmore (Coarse loamy drift with siliceous stones), Crosstown (Fine loamy drift with siliceous stones), Kilrush (Fine loamy drift with siliceous stones), etc. The material contributed by the River Lee catchment to the estuary around Blennerville Bridge is therefore anticipated to be of limestone or sandstone character (Source: EPA Mapviwer).

The Contractor who will undertake this work, if approved, is Cumnor Building & Civil Engineering Contractors. It was confirmed by Cumnor that the sand to be used will be sourced locally from Michael F. Quirke & Sons, Rangue, Killorglin, Co. Kerry[1]. Rocks in the townland of Rangue, Killorglin are Dinantian Limestones (undifferentiated) and Namurian (undifferentiated) Shale & sandstone. The material to be used in the sandbags at Blennerville is therefore of a type similar to that anticipated to be within the estuary around Blennerville Bridge.

Particle size of material from Michael F. Quirke & Sons, will be 0-4mm. Technical specifications are included in full in the accompanying Technical Data Sheet, which also includes information on chemical content. This range of particle sizes would include particle size characteristic of mud, fine sands and sands. The immediate environs of the bridge is characterised by estuarine muds. Should there be any spillage of particles, these would be distributed

[1] Furthermore, the proposed material is in line with I.S. EN 12620 (S.R.16) *Aggregates for Concrete* and I.S. EN 13242:2002 + A1 2007 (S.R. 21) *Aggregates for unbound and hydraulically bound materials for use in civil engineering work and road construction.*

by a combination of hydromorphological and tidal processes settling where conditions best suit each specific particle size. These are natural and ongoing processes within Tralee Bay and Magharees Peninsula, West to Cloghane SAC which contribute to the maintenance of habitats for which the SAC has been designated.

The qualifying interests *Estuaries* [1130] and *Mudflats and sandflats not covered by seawater at low tide* [1140] both occur close to the bridge and both are dependent upon the contribution and settlement of particulate material within the estuarine system. Burrowing intertidal invertebrates which characterise these habiats are unlikely to be affected by release of sand from the proposed sand bags. In the worst case scenario if a bag were to split the volume of material to be spilt would be small; the material is of a type similar to what occurs within the estuary and the Technical Data Sheet indicates that the material contains has no chemical contaminants that might be of concern.

The sand bags to be used on site will be inspected on arrival on site by the appointed Contractor to ensure none are damaged. The bags will then be checked by the Contractor, the Resident Engineer (RE) acting for Transport Infrastructure Ireland, as well as to the ecological clerk-of-works, to ensure the material within the bags is indeed as described. This will be recorded and available for review. The bags will also be checked for any signs of damage which might result in bag failure while on site. Any such bags will be rejected and not used during site works. The installation of the sandbags will also be supervised by the ecological clerk-of-works.

Following installation, thereafter daily visual inspection will be carried out by the Contractor along with regular inspection by the RE. Should any damage be noted, an plan of remedial action will be agreed between the Contractor, the Resident Engineer and the ecological clerk-of-works. Due to the tidal nature of the site it is essential that site inspections are daily. As above, findings will be recorded and available for review.

Following strict adherence to the above it is not anticipated that the installation and use of sandbags as described would result in negative impacts on the qualifying interests of Tralee Bay and Magharees Peninsula, West to Cloghane SAC.

Q3.

The intertidal sandbanks shown in Figs. 1.20 and 1.21 of the NIS are likely to be intertidal sand- and mud-flat habitat, and given the amount of access required, it is important that mitigation measures are put in place to avoid excessive erosion or compaction of this sandbank.

Answer

In order to prevent such impacts, as noted in the NIS works the works will be undertaken within temporary dry working areas located at the base of each cutwater, formed by the placement of sealed 1t sand bags, which will be placed on top of the existing reno mattress[2] at both elevations of the structure.

The dry working areas will contain any falling material from the works and prevent contamination of the surrounding intertidal habitat.

Access to the working areas will be provided from the existing bridge structure, with ladders providing access to the scaffolding erected within the working area at each cutwater (i.e. formed on the reno mattresses at each cutwater). A lane closure will be required over the structure for the duration of the works with short term road closures required to facilitate the key phases of the works, such as the installation and removal of the sand bags at the base of each cutwater.

The tidal nature of the watercourse at the location means the working areas will be overtopped at each high tide with any fallen material retrieved from the working areas prior to the overtopping and removed from site in order to prevent contamination. The water contained within the working areas once the tide has dropped below sand bag level will be pumped out to a settlement bund located adjacent to the car park at the southeast of the structure.

The reno mattresses are permanent features at the structure, providing a firm base below the structure and extending approximately 5m past both elevations. These areas will limit the access and works to this immediate footprint and thus prevent negative impacts to the surrounding habitat.

Q4.

It is recommended that the contractor is made aware of the possibility that the proposed mitigation measures, particularly in relation to fuel and fresh cement and shotcrete, may be inspected by one or more authorised NPWS officer(s), and that such an inspection, complying with necessary health and safety measures, is facilitated as far as possible. The reason for such an inspection is based on lack of adherence to mitigation measures by public authority contractors elsewhere observed by NPWS staff.

Answer

TII can confirm that the Contractor will be made aware of the above inspection requirements and will be required by TII to facilitate any such inspections by NPWS officer(s) should the need arise. Any NPWS officer(s) attending site will, however, be required to fully adhere with on-site health and safety measures whilst on site.

Q5.

It is mentioned in the NIS that the works may extend into the autumn, although there is no completion date stated. If the works extend into the late winter/early spring, then potential effects of noise on nearby wintering birds needs more detailed consideration, as waterfowl and waders will be then preparing for migration.

Answer

It can be confirmed that all works will be finalised on site by end of October 2022. It can be confirmed that the proposed works will not extend into later winter / early spring.

[2] See e.g. https://www.maccaferri.com/uk/products/reno-mattresses/reno-mattress/