

RE: Re. LC-N21-008.00 (Gortroe Bridge)

Chamberlain Greg [REDACTED]

Mon 2/1/2021 7:53 PM

To: O'Malley Vincent [REDACTED]

Cc: Nea Christian [REDACTED]

Hi Vincent

Thank you for confirmation of reasoned determination for Gortroe Bridge.

Kind Regards

Greg

From: O'Malley Vincent [REDACTED]**Sent:** Monday 1 February 2021 17:38**To:** Chamberlain Greg [REDACTED]**Cc:** Nea Christian [REDACTED]**Subject:** RE: Re. LC-N21-008.00 (Gortroe Bridge)

Greg,

Having reviewed the content of the email and the accompanying attachments from Atkins, I am happy to accept the reasoned determination set out below.

Sincerely

Vincent

From: Chamberlain Greg [REDACTED]**Sent:** Monday 1 February 2021 14:59**To:** O'Malley Vincent [REDACTED]**Cc:** Nea Christian [REDACTED]**Subject:** FW: Re. LC-N21-008.00 (Gortroe Bridge)

Vincent,

Having reviewed Paul's email below and having regard to the very minor nature of the works, I recommend that the following reasoned determination can be made:

Having performed screening for Appropriate Assessment in respect of the proposed reactive maintenance works detailed in the email received from Paul O'Donoghue dated the 1st of February, 2021, and entitled 'Re. Reactive Maintenance works at LC-N21-008.00 Gortroe Bridge', I accept the recommendations of Atkins that the proposed reactive maintenance works, individually or in combination with other plans or projects, would not be likely to have a significant effect on any European site in view of the best scientific knowledge and the site's conservation objectives. I determine that an Appropriate Assessment of these proposed works is not required, as it can be excluded on the basis of objective scientific information following the screening done that the proposed works, individually or in combination with other plans or projects, will have a significant effect on any European site.

Kind regards,

Greg

From: O'Donoghue, Paul [REDACTED]**Sent:** Monday 1 February 2021 12:50**To:** Chamberlain Greg [REDACTED]**Cc:** Nea Christian [REDACTED]

Sweeney, Niamh

Subject: Re. LC-N21-008.00 (Gortroe Bridge)

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Greg

Re. LC-N21-008.00 (Gortroe Bridge)

LC-N21-008.00 (Gortroe Bridge) is located on the N21 just outside Newcastlewest – as shown on Figure 1. The bridge is located on the N71 where it crosses the River Daar (EPA Code 24D01), a tributary of the River Deel. This in turn is a tributary of the River Shannon. The River Deel is not included within Lower River Shannon SAC (002165) or River Shannon and River Fergus Estuaries SPA (004077); both of which are downstream of Askeaton.

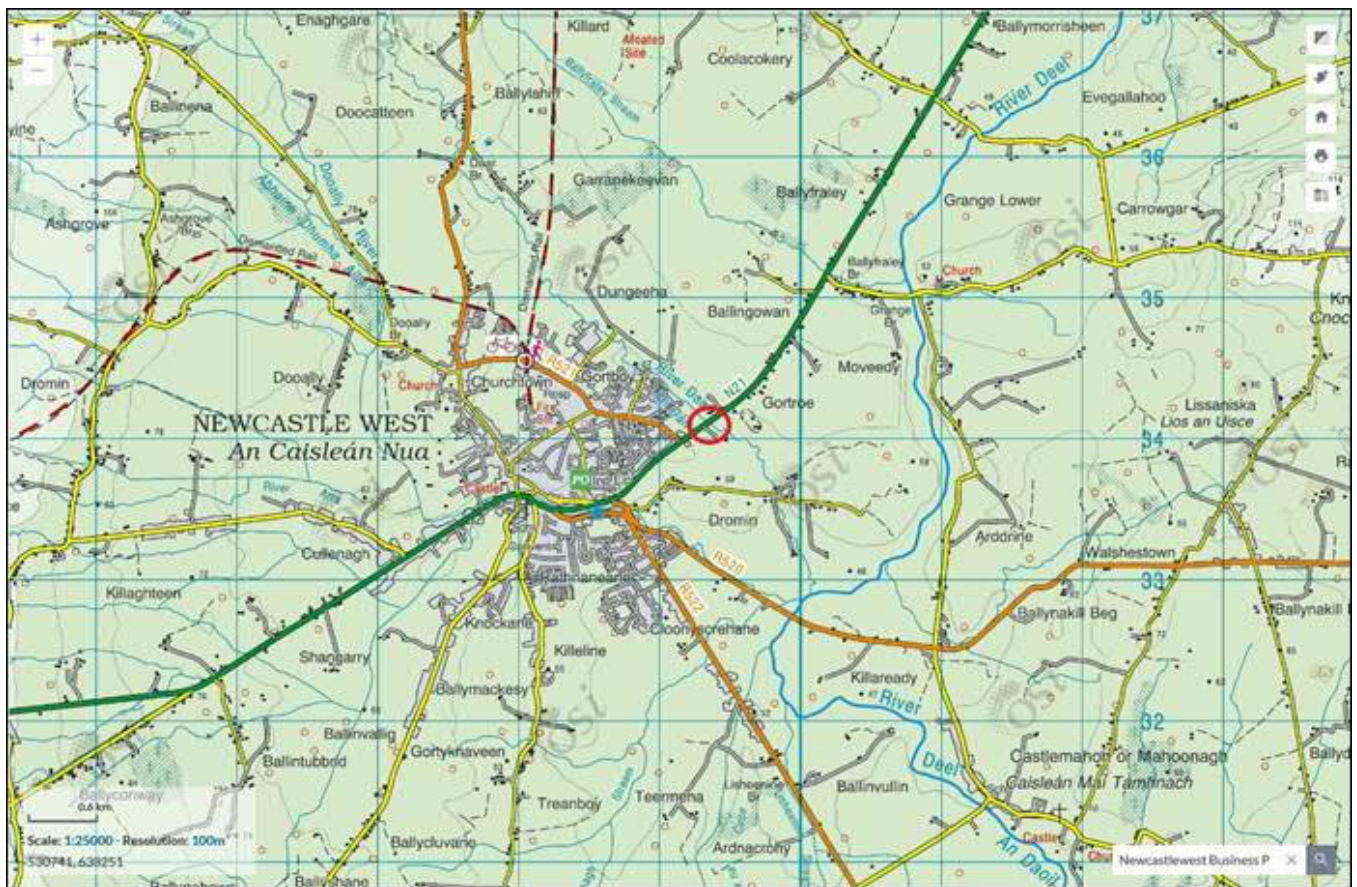
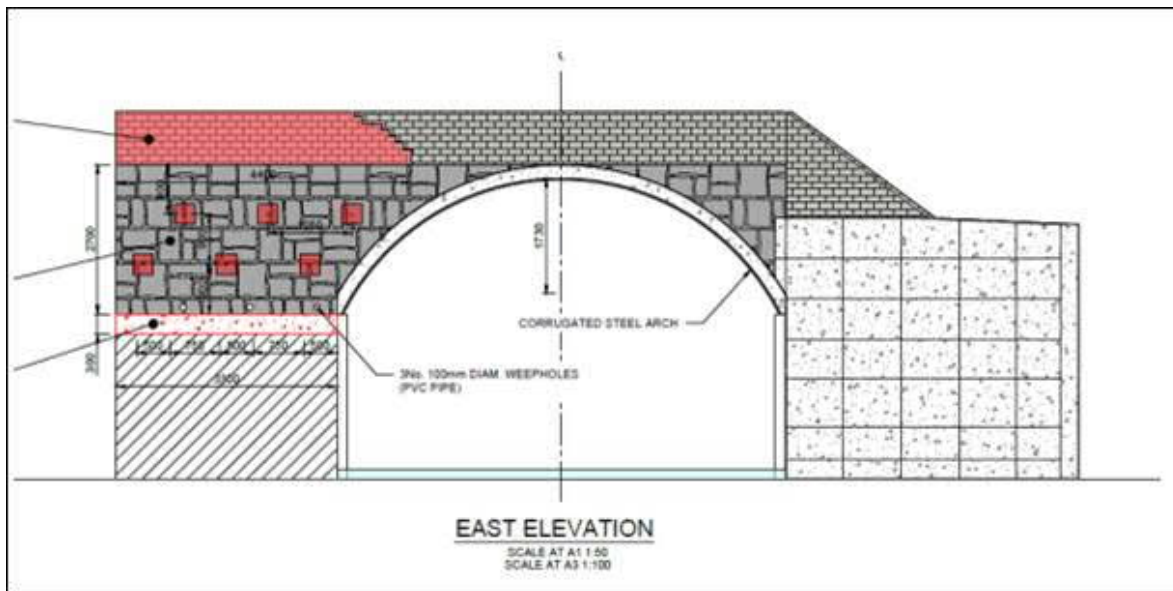


Figure 1. Location of LC-N21-008.00 (Gortroe Bridge) (circled in red). [Source: NBDC.ie].

Description of damage to parapet wall:

It is proposed to install 6 no. soil nails to the wingwall over the embankment at the SE corner. It will include the need to take down the displaced parapet and construct a new parapet. The accompanying Design Drawing includes site photographs and show the condition of the bridge. The following methods are extracted from the accompanying Method Statement.



Scaffold Erection

- No works will proceed until Method Statement has been signed by all relevant operatives.
- Access via N21.
- Traffic management to be setup by Cumnor SLG ticketholder in accordance with TM plan.
- Truck to park within traffic management setup.
- All materials to be unloaded from side of truck closest to the safety barrier.
- All materials for scaffold to be lowered to the works area by hand.
- Tiered scaffold to be erected
- Walkway to be put in place from access tower.
- Scaffold handrail to be put in place to protect leading edge.

Site Clearance

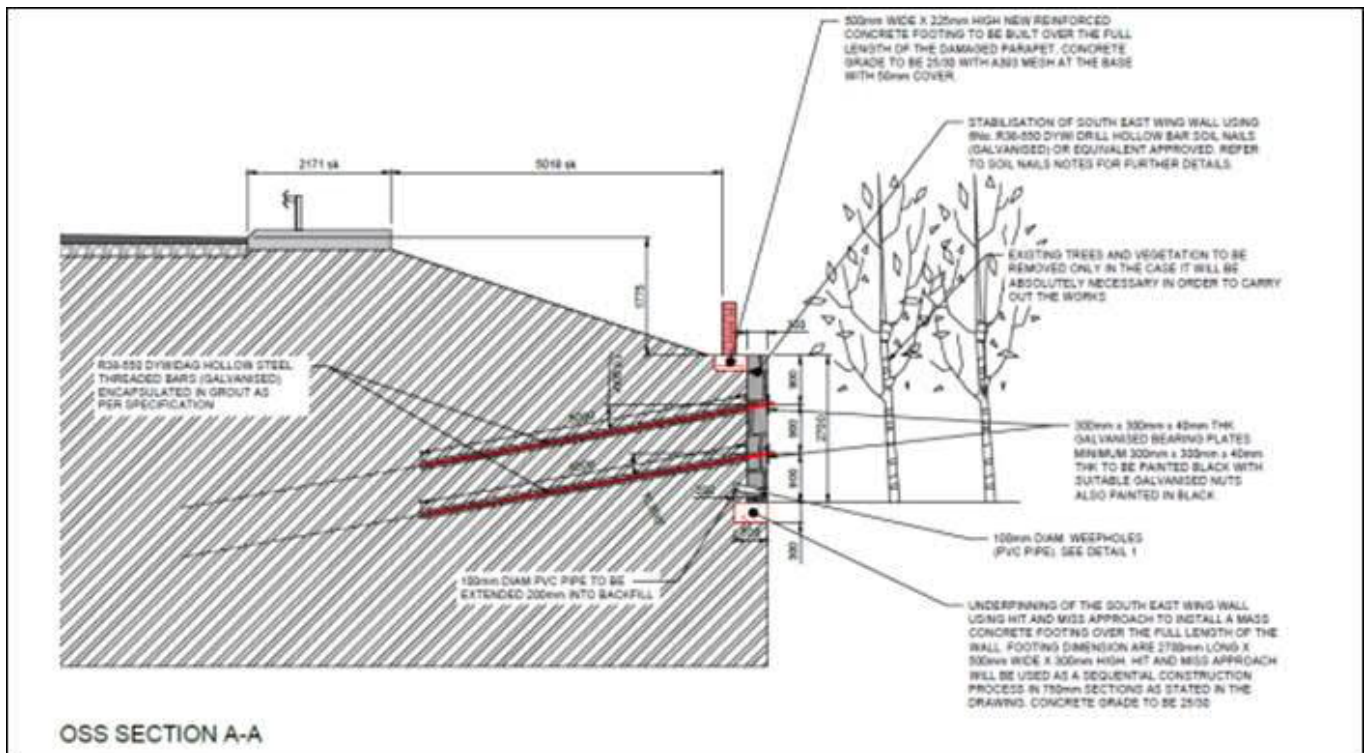
- Only if required will vegetation or trees be removed.

Removing existing parapet

- Kango hammer to be used to break up blockwork wall that has displaced.
- Blocks to be placed in 1T bags and left adjacent to bridge.
- Grab truck to park within traffic management plan and lift 1 T bags onto truck with Hiab.
- Blocks to be disposed of in licensed waste facility

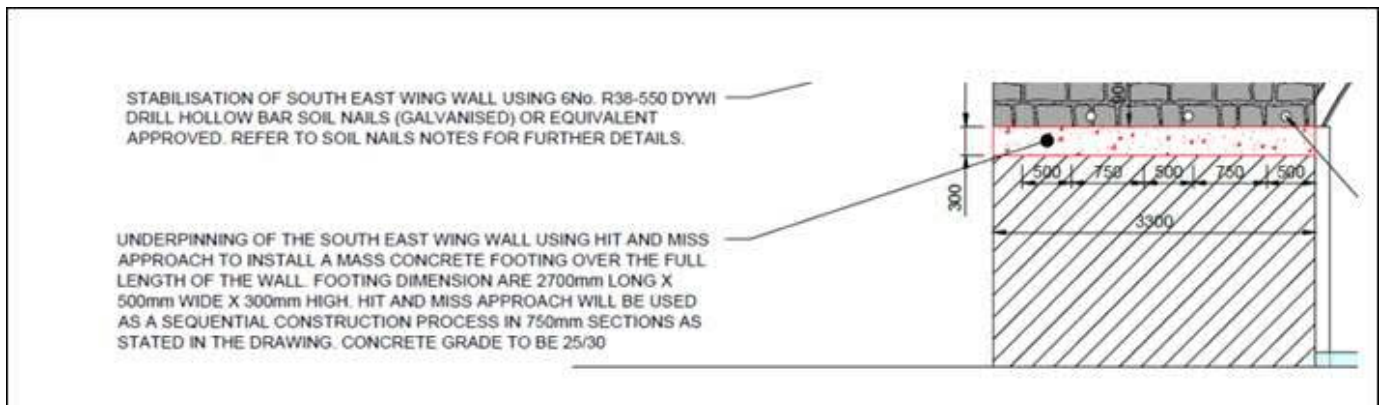
Stabilization of South East Wing wall

- Mark out soil nail positions.
- Marini Drilling Rig & power pack will be used to drill soil nails through the existing stone wall at the required angle to the horizontal.
- Drilling rig to be lowered and fixed onto the scaffold.
- The soil nailing commenced from the bottom up through the core holes.
- R38-550 dywidag galvanized hollow steel threaded bars to be used for soil nails.
- Soil nails are to be drilled to a depth of 5m at 1.250m centers.
- Soil nails to be fitted with galvanized plates and nuts.
- Grouting to be done once all soil nails are complete, grouting to be done with grout pump.



Underpinning of South East wing wall

- Hit and miss approach is to be used to underpin the required section of wing wall.
- Underpinning will be done over 2.7m.
- The new footing will be dug by hand.
- 750mm x 300mm sections will be removed at specified intervals and any material removed will be placed in 1 tonne bags to be removed off site using truck.
- Once the digging is complete each section will be shuttered and poured with C25/30 concrete.



Installing new parapet

- A new footing will be dug using a mini digger.
- Excavated material will be removed off site.
- Formwork to be installed.
- A 500mm wide x 225mm high reinforced concrete footing will be installed over full length of damaged parapet.
- Concrete grade C25/30 with A393 mesh.
- Block parapet to be rebuilt by qualified masons to match existing.

Ecological Characteristics:

The bridge is on the River Daar (EPA Code 24D01), a tributary of the River Deel. This in turn is a tributary of the River Shannon. The main channel of the Daar / Deel are not within a designated site. To the north of Askeaton, the River Shannon is designated as Lower River Shannon SAC (002165) and River Shannon and River Fergus Estuaries SPA (004077). The qualifying interests for which the Lower River Shannon SAC (002165) is designated for can be viewed at - <https://www.npws.ie/protected-sites/sac/002165>. The qualifying interests for which the River Shannon and River Fergus Estuaries SPA is designated for can be viewed at: - <https://www.npws.ie/protected-sites/spa/004077>.

The bridge to be repaired is located on stream named River Daar (EPA Code 24D01) [Source: EPA Maps - <https://gis.epa.ie/EPAMaps/>]; a 3rd order watercourse. The Daar flows downstream to the southeast to join the River Deel (1.5km downstream) – this then flows northwards to join the River Shannon (>27km). The EPA assigned a water quality status of the River Deel both upstream and downstream of the confluence with the Daar as Moderate (Q value – 3-4) when last sampled in 2017. The WFD status of both the Daar and Deel in the environs of the bridge is defined as *At Risk*.

The River Daar and much of the main channel of the River Deel are not within a Natura 2000 site. It is only where the Deel is close to the estuary of the River Shannon that it enters the Shannon European sites – this is >27km via watercourse from the works.

Otter was recorded in 1982 on the R. Daar upstream of the works area – i.e. Daar Bridge R275360 (Source: NBDC; Otter survey of Ireland 1982 - Vincent Wildlife Trust); there are also downstream records from the River Deel.

Indian balsam (*Impatiens glandulifera*) has been recorded downstream of the works area - R294340 (Source: NBDC; Limerick City and County Council - Report Invasive Plants App.). There are no records of Japanese knotweed (*Fallopia japonica*), Giant hogweed (*Heracleum mantegazzianum*) or Giant-rhubarb (*Gunnera* sp.) from the environs of the works area (Source: NBDC).

While there are no records of White-clawed crayfish (*Austropotamobius pallipes*) from the River Daar – it has been recorded from a small watercourse to the southwest of Newcastlewest (also a tributary of the River Deel) – i.e. Cork Bridge, Newcastlewest (R287334) (Source: NBDC). Crayfish plague has been recorded from the catchment of the River Deel downstream of the site – see attached image (Source: NBDC - <https://www.biodiversityireland.ie/projects/invasive-species/crayfish-plague/>).

The bridges was assessed as not being suitable to support bats. The parapet to be repaired is not suitable for use by roosting bats (refer to accompanying photos).

Potential for Impacts:

The estuarine / marine habitats or species for which the SAC are located are >27km from the works. With respect to otter, as noted above the works are to the side of the arch – movement of otter upstream / downstream will not be prevented; though works withing daylight hours will result is temporary disturbance. This would not be sufficient to negatively impact on the population of otter within the SAC. The River Daar / Deel are not within a *Margaritifera* Sensitive Area – no impacts to pearl mussel are anticipated. The Contractor will be informed of the presence of crayfish plague in the River Deel downstream of the site – all appropriate biosecurity measures will be followed.

While outside the SAC habitats such as alluvial woodland are not at the works location. None of the habitats for which Lower River Shannon SAC has been designated are located at the proposed works area.

No instream works are proposed. Care will be taken to prevent the loss of grout or cementous materials to the river. Negative impacts to freshwater habitats or species are not anticipated – as noted works will be undertaken from a scaffolding erected alongside the parapet rather than from the river bank.

Atkins Findings -

This Screening for Appropriate Assessment is based on the best available scientific information. It is concluded that the proposed project poses no likely significant effects on Natura 2000 sites, either alone or in combination with other projects. Thus, it is recommended that it is not necessary for the proposed project to proceed to Appropriate Assessment.

Findings of TII Appropriate Assessment -

Can you please provide a Reasoned Determination?

Paul O' Donoghue *BSc PhD CEnV MCIEEM*

Principal Ecologist

Ireland



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