



# Dunkellin River and Aggard Stream Flood Relief Scheme

## Response to National Roads Authority

### Document Control Sheet

Client:	Galway County Council
Project Title:	Dunkellin River and Aggard Stream Flood Relief Scheme
Document Title:	Response to National Roads Authority
Document No:	MGE0260RP0021

Text Pages:	4	Appendices:	0
-------------	---	-------------	---

Rev.	Status	Date	Author(s)	Reviewed By		Approved By	
F01	Final	9 <sup>th</sup> July 2015	PK, GB, ASU	PK		WM	

This report takes into account the particular instructions and requirements of the Client. It is provided for sole use of the Client and its professional advisors. Information disclosed should be treated as being strictly private and confidential. Any use which a third party makes of this document, or any reliance on or decisions to be made based on it, is the responsibility of such third parties. No responsibility is accepted by RPS for the use of this Document, in whole or in part, for any other purpose.





## TABLE OF CONTENTS

INTRODUCTION .....	1
1 ITEM 1 – RACK STREAM BRIDGE.....	2
2 ITEM 2 – FLOWS AT N18 KILCOLGAN BRIDGE.....	3
3 ITEM 3 – M17/M18 GORT TO TUAM STRATEGIC ROAD SCHEME .....	4



## INTRODUCTION

RPS was commissioned by Galway County Council in 2011 to prepare an Environmental Impact Statement (EIS) for the Dunkellin River and Aggard Stream Flood Relief Scheme, hereafter called the “scheme”, in south County Galway. The Dunkellin River and the Aggard Stream form part of the Dunkellin Drainage District which was constructed in or around 1857 and Galway County Council has a statutory maintenance responsibility for these works.

The scheme was submitted to An Bord Pleanála (ABP) in October 2014 for planning approval in line with Section 175 of the Planning and Development Act 2000, as amended. In February 2015, the Board, in accordance with Section 175(5)(a) of the Planning and Development Act, 2000, as amended, requested further information in relation to the proposed development.

Item 7 of the Board’s letter stated that, *“The applicant is invited to respond in detail to the written submissions made by parties including local residents, prescribed bodies and others.”*

The purpose of this document is to provide a response to the issues raised by the National Roads Authority (NRA) in their submission.

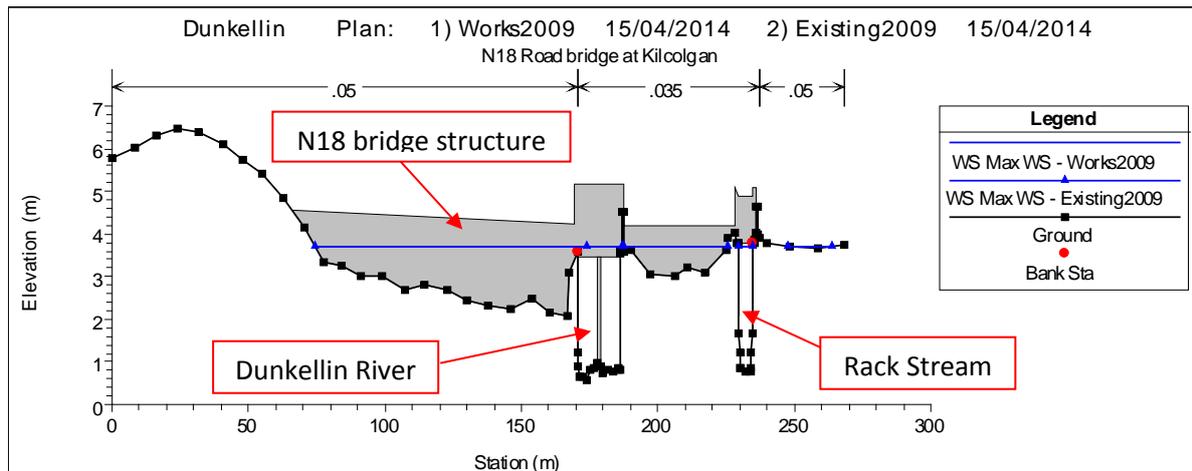
# 1 ITEM 1 – RACK STREAM BRIDGE

**1.1** *The information received by the Authority notes the N18 Bridge in Kilcolgan, however, the Authority advises that there is also a structure on the national road 50m north of the N18 Kilcolgan Bridge where the road crosses the Rack Stream, a tributary of the Dunkellin River which has been omitted from analysis. The Authority considers that this bridge requires consideration within the flood relief scheme and advises that the applicant needs to clearly demonstrate that there are no implications for the Rack Stream and hence the structure on the N18 at this location.*

The section of channel known as the Rack Stream was included in the hydraulic model used as part of the scheme’s development. The Rack Stream splits from the Dunkellin River approximately 160m upstream of the N18 Road Bridge and rejoins further downstream.

There are no proposed works on the Kilcolgan & N18 bridges; refer to Table 3-1 in the Works Description Report (Appendix A to the Main EIS).

An extract from the hydraulic model showing the N18 road bridges at Kilcolgan is given below. No perceptible change in water level or velocities is predicted by the works.



## 2 ITEM 2 – FLOWS AT N18 KILCOLGAN BRIDGE

**2.1** *The effects of the new flows in the context of the potential to erode the river bed at the [N18 Kilcolgan] bridge and cause scouring of the foundations and the effects of new turbulence at the wingwall/new approach embankment interface require full investigation.*

*The Authority considers that it would be premature to permit the proposed scheme in advance of:*

- I. **An agreed, documented assessment and evaluation by the applicant on the adequacy of the design of the N18 Kilcolgan Bridge structure to resist proposed new hydraulic forces**
- II. **A scour assessment by the applicant with scour prevention measures identified for the N18 Kilcolgan Bridge, as necessary.**

**Response:**

Referring to **Table 3-1** of the Works Description report (**Appendix A** to the Main EIS), new structures are to be provided at Killeely Beg, Dunkellin Bridge and Rinn Bridge.

The structure at Killeely Beg is a complete replacement of the existing bridge.

The new structures at Dunkellin and Rinn are new “flood eyes” which allow flood waters to bypass the existing bridges. It is not proposed to make any alterations to the existing Dunkellin and Rinn Bridges.

The underpinning at the Craughwell road bridges (R446 and old stone arch bridges) have been specified to allow for the deepening of the channel. Similarly the proposed contiguous piled structures on the Railway Bridge have also been specified to allow for the channel deepening.

All bridge works will consider the requirements of UK DMRB BA59/94 and UK DMRB97/12.

As noted in the response to Item 1, it is not proposed to modify the existing N18 Bridge as part of this scheme. No perceptible change in water level or velocities is predicted to occur at the N18 Bridge. We therefore have concluded that no additional scour protection is required at the N18 Bridge to cater for the flood relief scheme.

We shall refer to the above mentioned guidance documentation and liaise with the NRA regarding the proposed channel works at detailed design stage.

### 3 ITEM 3 – M17/M18 GORT TO TUAM STRATEGIC ROAD SCHEME

- 3.1 *In relation to the approved M17/M18 Gort to Tuam (PPP) strategic road scheme, the authority notes that the route has been identified on the flood relief scheme drawings submitted to the Board and requests that the approved road scheme is safeguarded in any decision made by the Board in relation to the proposed flood relief scheme.*

**Response:**

The proposed M17/M18 road was shown for indicative purposes only. The Dunkellin River and Aggard Stream Flood Relief scheme is independent of the M17/M18 Gort to Tuam road scheme. Referring to Drawing 6408-2204, the road is located in an area where there are no proposed flood relief works.