

Cork City Council  
Housing at Boherboy Road,  
Mayfield, Cork

## ENGINEERING SERVICES REPORT

Engineering Services Report for Part 8 Application

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OM28R002 Engineering Services Report for Part 8 Application

Rev. A

1 of 8



## Document Control Sheet

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## Review

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Date: 31<sup>st</sup> May 2021  
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Engineering Services Report for Part 8 Application



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## 1.0 Introduction

Cork City Council are submitting Planning Application for a number of units to be included with the Housing development at Boherboy Road Mayfield Cork granted under Cork County Council Planning Ref: 16/7292 and the ABP appeal Ref: 249376

This development will comprise of the following:

- Construction of 7 no. 2 bed units

The following is an Engineering services report in support of a planning application for the above development. This report addresses the following engineering issues:

- a. Foul Effluent Disposal
- b. Surface Water Disposal
- c. Water Supply



## 2.0 Report

### a. Foul Effluent Disposal

The following is the proposed strategy for the disposal of foul effluent generated by the additional units:

The foul drainage from the 6 proposed dwellings to the south of the site will be collected by a gravity foul system, which will discharge to the existing public combined sewer system on Boherboy Road. The unit to the north of the site as part of this application will connect into the newly laid foul network constructed as part of Cork County Council Planning Ref: 16/7292 and the ABP appeal Ref: 249376

For details of the above, see Appendix A: Drg. No. OM28-050 Rev A – Proposed Drainage Layout.

### b. Surface Water Disposal

The following is the proposed strategy for the disposal of storm water generated by the new residential development.

It is proposed that all surface water generated by the proposed development will be collected and discharged to a new gravity storm system.

This gravity system servicing the 6 units to the south of the site will discharge to the existing combined sewer on Boherboy Road. However, the rate of discharge to the public system will be controlled by means of a flow restrictor so as to reflect the green field run off from the site (circa 2 litres/sec). Attenuated water will be collected in an online attenuation tank, which will be sized to reflect the volume of water attenuated. The surface water drainage from the unit to the north of the site will discharge into the newly laid surface water network constructed as part of Cork County Council Planning Ref: 16/7292 and the ABP appeal Ref: 249376



The volume associated with this unit have already been catered for as part of the original planning application for the entire scheme

For details of the above, see Appendix A: Drg. OM28-050 Rev A – Proposed Drainage Layout

c. Water Supply

It is proposed to serve the proposed residential units by taking a connection from the newly laid watermain serving the development granted under Cork County Council Planning Ref: 16/7292 and the ABP appeal Ref: 249376

Fire hydrants will be installed to serve the new development and their number and position will be compliant with the Fire Safety Certificate for the development.

A sluice valve will be located immediately upstream of the proposed connection point to the existing watermain.

For details of the above, see Appendix A: Drg. No. OM28-051 Rev A – Proposed Watermain Layout.

Watermain installation (mains, sluice valves & hydrants) shall be installed in accordance with the requirements of Irish water and the Water services section of Cork City Council.

**Note:** A pre-connection enquiry was submitted to Irish water on 21<sup>st</sup> of October 2019, in which the above strategy for foul, storm water and water supply were proposed for the entire development for 153 units. This application is for 7 units some of which are changes to that previously submitted giving the overall net increase in units of 1 i.e. 153 units to 154 units. A connection application was submitted on the 21<sup>st</sup> of August 2020 CDS 19007614. For Phase 1 of the original development.

Please refer to Appendix B for Confirmation of Feasibility from Irish Water received on the 20<sup>th</sup> of November 2019.



## **Appendix A -**

Site Services Drawings:

Drg. No. OM28-050 Rev A    Proposed Drainage Layout

Drg. No. OM28-051 Rev A    Proposed Watermain Layout



## Appendix B – Confirmation of Feasibility from Irish Water



Niall Fitzgerald

20 November 2019

Dear Niall Fitzgerald,

**Re: Connection Reference No CDS19007614 pre-connection enquiry -  
Subject to contract | Contract denied**

**Connection for Mixed Use Development of 154 unit(s) at Boherboy Road, Mayfield, Co.Cork.**

Irish Water has reviewed your pre-connection enquiry in relation to a Water & Wastewater connection at Boherboy Road, Mayfield, Co.Cork.

Based upon the details that you have provided with your pre-connection enquiry and on the capacity currently available in the network(s), as assessed by Irish Water, we wish to advise you that, subject to a valid connection agreement being put in place, your proposed connection to the Irish Water network(s) can be facilitated.

**Water:**

New connection to the existing network is feasible without upgrade.

This Confirmation of Feasibility to connect to the Irish Water infrastructure also does not extend to your fire flow requirements. Please note that Irish Water can not guarantee a flow rate to meet fire flow requirements and in order to guarantee a flow to meet the Fire Authority requirements, you should provide adequate fire storage capacity within your development.

In order to determine the potential flow that could be delivered during normal operational conditions, an on site assessment of the existing network is required.

**Wastewater:**

In order to accommodate the proposed connection at the Premises, significant upgrade works are required to the Irish Water network. Upsizing of the receiving sewer on Old Youghal Road and the Interceptor No.1 from 225mm to 300mm, for approximately 420m, would be required. Irish Water currently does not have any plans to upgrade its network in this area. Should you wish to progress with the connection you will be required to fund this network extension (please find attached Irish Water GIS record of the area as a general guide only).

Furthermore, upgrade to the Ballyvolane Pumping Station is necessary to facilitate a connection. There is an ongoing Irish Water project to upgrade this pumping station, however the additional discharge from this development will require additional upgrades to the pumping station over and above the current project scope. A Cork City Drainage Area Plan will be completed early next year that will allow us to quantify the needed upgrades and the need to separate foul and surface water within the catchment. It will be necessary for you to contribute marginal costs for these additional works. Please contact Irish Water for further information.

**Strategic Housing Development**

Irish Water notes that the scale of this development dictates that it is subject to the Strategic Housing Development planning process. Therefore:

**A.** In advance of submitting your full application to An Bord Pleanála for assessment, you must have reviewed this development with Irish Water and received a Statement of Design Acceptance in relation to the layout of water and wastewater services.

**B.** In advance of submitting this development to An Bord Pleanála for full assessment, the Developer is required to have entered into a Project Works Services Agreement to deliver studies and/or investigations to determine the full extent of any upgrades which may be required to be completed to Irish Water infrastructure.

All infrastructure should be designed and installed in accordance with the Irish Water Codes of Practice and Standard Details. A design proposal for the water and/or wastewater infrastructure should be submitted to Irish Water for assessment. Prior to submitting your planning application, you are required to submit these detailed design proposals to Irish Water for review.

You are advised that this correspondence does not constitute an offer in whole or in part to provide a connection to any Irish Water infrastructure and is provided subject to a connection agreement being signed at a later date.

A connection agreement can be applied for by completing the connection application form available at **[www.water.ie/connections](http://www.water.ie/connections)**. Irish Water's current charges for water and wastewater connections are set out in the Water Charges Plan as approved by the Commission for Regulation of Utilities.

If you have any further questions, please contact Marko Komso from the design team on (022) 54611 or email [mkomso@water.ie](mailto:mkomso@water.ie). For further information, visit [www.water.ie/connections](http://www.water.ie/connections).

Yours sincerely,



**Maria O'Dwyer**

**Connections and Developer Services**

Required upgrades to the sewer network  
Connection Reference No CDS19007614; Pre-connection enquiry

