



ATTACHMENT NO: B.8a

EIA SCREENING REPORT

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Irish Water

UTAS Cork Bundle

Castletownshend Sewerage Scheme-
EIA Screening Report

257589_W3301_R036

Issue 4 | 2 March 2021

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Job number 257589_00

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Document Verification

ARUP

Job title		UTAS Cork Bundle		Job number	
				257589_00	
Document title		Castletownshend Sewerage Scheme- EIA Screening Report		File reference	
				257589_00_02	
Document ref		257589_W3301_R036			
Revision	Date	Filename	257589_00PIP0001.docx		
Issue 1	17 Jan 2018	Description	Initial issue		
			Prepared by	Checked by	Approved by
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Issue 2	18 June 2019	Filename	257589_2018-01-17_Castletownshend_EIA_Screening_Issue_2		
		Description	Revised Issue		
			Prepared by	Checked by	Approved by
		Name	Owen Lynch	Kieran Thornton	Kieran Thornton
Issue 3	20 Mar 2020	Filename	257589_2018-01-17_Castletownshend_EIA_Screening_Issue_3		
		Description	Revised Issue		
			Prepared by	Checked by	Approved by
		Name	Owen Lynch	Kieran Thornton	Kieran Thornton
Issue 4	02 Mar 2021	Filename	257589_CTH_EIA_Screening_Issue_4		
		Description	Revised issue to address changes to scheme and Client comments		
			Prepared by	Checked by	Approved by
		Name	Owen Lynch	Kieran Thornton	Kieran Thornton
		Signature			
Issue Document Verification with Document					
<input checked="" type="checkbox"/>					

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Castletownshend Location Map

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Layout of Proposed Scheme

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1 Introduction

Irish Water identified 44 agglomerations in Ireland where untreated sewerage is discharged directly to receiving waters, either from sewer network outfalls or via septic tanks where the level of treatment provided is negligible.

Castletownshend is a small coastal village located in West Cork, approximately 90km south west of Cork City. The compact historic village has developed around Main Street and The Mall. Castletownshend was one of these agglomerations that has been identified.

At present, wastewater generated within the agglomeration is collected and discharged to Castle Haven Bay with little to no treatment. This practice of discharging untreated wastewater to the river is no longer acceptable and Irish Water intends to fix this problem in partnership with Cork County Council by developing a sewerage scheme.

The Castletownshend Sewerage Scheme involves the construction a new Wastewater Treatment Plant (WWTP) providing primary treatment and a pumping station. The plant will be used to treat wastewater before discharging it to Castle Haven Bay through a new outfall pipeline. A site has been identified for the scheme for a 30-year projected capacity, but the initial project objective is to provide infrastructure for the 10-year projected load.

The objective of the Castletownshend UTAS project is to provide upgrades to the network and provide a wastewater treatment plant (WWTP) capable of primary treatment. A site has been identified for the scheme for a 30-year projected capacity but the initial project objective is to provide infrastructure for the 10-year projected load.

The proposed treatment plant will provide primary treatment to achieve, as a minimum, an effluent quality that meets the requirements of the waste water discharge licence:

- BOD – 20% reduction
- SS – 50% reduction

The location of Castletownshend map is shown on the map in **Appendix A**.

2 Description of the Proposed Scheme

2.1 Current Scheme

The current sewerage scheme (SS) within the village comprises of a combined wastewater/stormwater/ groundwater culvert which runs from west to east along Main Street. This wastewater is discharged untreated into Castle Haven. The existing outfall culvert is located adjacent to the slipway at the eastern end of Main Street. The existing outfall is generally visible from the slipway.

A number of houses at St Barrahané's Avenue discharge to a septic tank which in turn discharges to the culvert noted above.

A housing estate (The Lawn) is served by a temporary wastewater treatment plant which discharges to a percolation area. This WWTP is not being maintained as the developer of the housing estate has gone into receivership.

Other properties, at the Mall and along Cross Street have their own private facilities i.e. septic tanks or direct discharge to the sea.

2.2 Proposed Scheme

The proposed development site for the wastewater treatment plant (WWTP) is an agricultural field north-east of Castletownshend village. An outfall pipe will run from the WWTP through woodland and the foreshore to discharge treated effluent to Castle Haven.

The proposed development comprises of the following:

1. The Castle pumping station (PS), a proposed underground pumping station and associated infrastructure within the curtilage of the Castle B&B (The Castle, a protected structure), including an underground pump sump, underground stormwater storage tank, vent pipe, kiosks and surge vessel.
2. Proposed extension to the existing culvert outfall adjacent to the slipway to below low tide extent
3. A proposed rising main and gravity sewer to convey flows from the Castle pump station to the Waste Water Treatment Plant (WWTP) site. The route extends along the lane from Main Street to the entrance of St Barrahané's Church to the fields to the north.
4. A proposed WWTP with associated ancillary development works including lift station, inlet works, tanks, kiosks, entrance, hardstanding and perimeter boundary fencing.
5. A proposed outfall pipe to convey treated effluent and storm flows to Castlehaven Bay.
6. All associated ancillary site development works above and below ground.

The scheme will also include the following infrastructure which is considered to be exempt from requiring planning permission in accordance with S.I. No. 29/2018 (Class 58 (b)) of the Planning and Development (Amendment) Regulations 2018.

7. Gravity sewer from the existing culvert to the Pumping Station (PS).
8. Gravity sewer from the Lawn housing estate to the header manhole.
9. Separation of waste water from existing culvert with the laying of a new gravity sewer on Main Street

Wastewater (combined foul and stormwater) flows will be diverted from the existing culvert on Main Street to a PS on the grounds of the Castle B&B.

The PS will then pump the wastewater in a north-westerly direction to a header manhole. From the header manhole, the wastewater will flow north-easterly via gravity sewer to the wastewater treatment plant (WWTP) site. The WWTP is to be located in the north east corner of a greenfield site. The WWTP will provide primary treatment before discharging the treated water into Castlehaven Bay below the low tide level.

The wastewater from the Lawn housing estate (The Lawn catchment) will be intercepted prior to entering the existing temporary treatment plant and rerouted via gravity sewer to the header manhole where it will merge with the flows from the PS before flowing to the proposed WWTP to be treated.

The existing outfall located next to the slipway near the Castle B&B will be extended into the foreshore. This will be done by introducing a drop manhole upstream of the out fall. A new outfall will then extend from the drop manhole into the foreshore, beyond the low tide level.

The pumping station and stormwater overflow have been designed in accordance with Irish Water Technical Standard IW-TEC-800-02 (Wastewater Pumping Stations and Rising Mains) and IW-TEC-800-03 (Stormwater Overflows).

The current Wastewater Discharge Licence (No. D0468-01) specifies a 20% reduction in the level of cBOD and a 50% reduction in the level of suspended solids being discharged from the agglomeration. Currently, there is little or no reduction in the levels of these parameters. The provision of a wastewater treatment plant with primary treatment will achieve the specified standards in the effluent and result in an improvement in the receiving water quality.

The proposed development is shown in the layout plan in **Appendix B**.

3 Requirements for EIA

3.1 EIA Legislation

The Environmental Impact Assessment Directive is based on the precautionary principle and on the principles that preventive action should be taken, that environmental damage should, as a priority, be rectified at source and that the polluter should pay. Effects on the environment should be taken into account at the earliest possible stage in all the technical planning and decision-making processes.

The original Environmental Impact Assessment (EIA) Directive 85/337/EEC has been amended three times (Directives 97/11/EC, 2003/35/EC and 2009/31/EC) and subsequently codified in an informal consolidated version by EIA Directive 2011/92/EU. The EIA Directive 2014/52/EU (the 'EIA Directive'), amending Directive 2011/92/EC on the assessment of the effects of certain public and private projects on the environment, came into force on the 15th May 2014 and Member States had three years to transpose the Directive (i.e. by 16th May 2017).

The EIA Screening has been prepared with reference to the provisions of Directive 2014/52/EU and the EIA regulations 2018.

The EIA Directive is implemented in Ireland by the Planning and Development Acts 2000 to 2017, the Planning and Development Regulations 2001 to 2017 and the European Communities (Environmental Impact Assessment) Regulations 1989 to 2018.

3.2 EIA Screening Methodology

EIA Screening is the first stage of the EIA process and determines whether the environmental impact of a proposed development or project will be such that an EIA is required.

EIA Screening for the proposed Scheme was undertaken with consideration of the following legislation and guidance:

- Planning and Development Acts, 2000 to 2017;
- Planning and Development Regulations, 2001 to 2017;
- Guidance on EIA Screening, European Commission, 2001;
- Guidelines on the information to be contained in EIS, EPA, 2002; and
- Draft Guidelines on the information to be contained in Environmental Impact Assessment Reports, EPA, 2017.
- Guidelines for Planning authorities and An Bord Pleanála on carrying out Environmental Impact Assessment – August 2018

3.3 EIA Screening – Consideration of Requirement for Mandatory EIA

The EIA Directive specifies the classes of project for which an EIA is required and the information which must be furnished within an Environmental Impact Assessment Report (EIAR). In accordance with Article 4(1) of the EIA Directive, all projects listed in Annex I to the EIA Directive are considered as having significant effects on the environment and shall be subject to Environmental Assessment. For projects listed in Annex II to the EIA Directive, the national authorities may determine whether an EIA is needed, either on the basis of thresholds/criteria or on a case by case examination.

The obligations as set out in the 2011 EIA Directive have been implemented into Irish law by the provisions of the Planning and Development Acts 2000 to 2017, and the Planning and Development Regulations 2001 to 2017. The provisions of the 2014 EIA Directive have been incorporated into Irish legislation through the European Union (Environmental Impact Assessment 2018).

Waste Water Treatment Plants

Schedule 5, Part 1, Class 13 requires EIA for the following:

11. Waste water treatment plants with a capacity exceeding 150,000 population equivalent as defined in Article 2, point (6), of Directive 91/271/EEC.

Schedule 5, Part 2, Class 11 requires EIA for the following:

11. Other projects

(c) Waste water treatment plants with a capacity greater than 10,000 population equivalent as defined in Article 2, point (6), of Directive 91/271/EEC not included in Part 1 of this Schedule.

The proposed Scheme does not exceed the thresholds for mandatory EIA under these classes.

Pipelines

Schedule 5, Part 1, Class 16 requires EIA for the following:

16. Pipelines with a diameter of more than 800mm and a length of more than 40km:

- for the transport of gas, oil, chemicals, and,

- for the transport of carbon dioxide (CO₂) streams for the purposes of geological storage, including associated booster stations.

The pipelines within the scheme do not have a diameter of more than 800mm, the pipelines are not more than 40km long, the pipelines are not associated with the transport of the materials set out in the legislation, and therefore Class 16 does not apply.

Extensions

Schedule 5, Part 1, Class 22 requires EIA for the following:

22. Any change to or extension of projects listed in this Annex where such a change or extension in itself meets the thresholds, if any, set out in this Annex.

Schedule 5, Part 2, Class 13 requires EIA for the following:

13. Changes, extensions, development and testing.

(a) Any change or extension of development already authorised, executed or in the process of being executed (not being a change or extension referred to in Part 1) which would: -

(i) result in the development being of a class listed in Part 1 or paragraphs 1 to 12 of Part 2 of this Schedule, and

(ii) result in an increase in size greater than –

- 25 per cent, or

- an amount equal to 50 per cent of the appropriate threshold, whichever is the greater.

The proposed Scheme does not comprise a change to or an extension to a project that meets the thresholds above. Therefore, these classes do not apply to the proposed Scheme.

As set out above, it is submitted that the proposed Scheme does not exceed the thresholds within the classes of development listed in Schedule 5 of the Planning and Development Regulations 2001-2017, and therefore, Class 15 of Part 2 does not apply to the proposed Scheme.

On the basis of the above, the proposed Scheme does not fall within the mandatory EIA requirements.

3.4 Sub-Threshold Development requiring EIA – Criteria to Determine Significance

The EIA Directive comments at paragraph 27 that “*The Screening procedure should ensure that an environmental impact assessment is only required for projects likely to have significant effects on the environment.*”

As noted above, the proposed Scheme comes within Schedule 5, Part 2, Class 13 of the Planning and Development Regulations 2001-2017. As a development within this class, but one that does not exceed the threshold for mandatory EIA, a sub-threshold assessment of the need for EIA is required based on the approach and criteria set out in Annex IIA and III of the 2014 Directive and Schedule 7 of the Planning and Development Regulations.

3.4.1 Environmental Sensitivities within the area

3.4.1.1 General

This section has regard to the environmental topics as set out within the EIA Directive, as amended, as follows:

- population, materials assets and human health;
- biodiversity;
- land and soil;
- water;
- air and climate;
- landscape and cultural heritage, including architectural and archaeological aspects; and
- the interrelationship between the environmental topics.

3.4.1.2 Population, materials assets and human health

A proposal of this nature has the potential to impact positively on population, material assets and human health by way of an enhanced waste water treatment facility.

The proposed Scheme lies within a small sparsely populated village. During construction, disturbance to local roads and paths will be managed in line with best practice mitigation to minimise effect upon the local population.

There will be some temporary negative effects to properties and residents in and around construction zones from increased construction traffic, dust, noise and vibration. There may be some short-term negative impacts on traffic during construction, particularly along roadways where pipe is being buried.

3.4.1.3 Biodiversity

An assessment has been carried out to provide relevant material to inform a decision by the public authority, as required under Article 6.3 of the EU Habitats Directive, as to whether the proposed development is likely to have any significant impacts of on the Conservation Objectives of a Natura 2000 site. European sites were isolated for consideration in the study based on the presence of qualifying features within the proposed scheme's Zone of Influence and potential connectivity to European sites. The following European sites were considered:

- Castletownshend Special Area of Conservation (SAC 001547), located within 200m to the north of the proposed WWTP site.

- Moyross Woods Special Area of Conservation (SAC 00170), located c. 5km to the northeast of the proposed development.
- Sheep's Head to Toe Head Special Protection Area (SPA 004156), located c. 5km to the southwest of the proposed development.
- Lough Hyne Reserve and Environs Special Area of Conservation (SAC 000097), located over 9km to the southwest of the proposed development.

Given the small-scale, temporary nature of the works and given that Irish Water proposes to provide primary treatment for wastewater collected in the existing collection system in Castletownshend and the current discharges to the privately owned WWTP for The Lawn housing development, it was concluded that only minimal noise disturbance and water quality impacts would occur.

The Cork County Development Plan 2014 was considered in the assessment of in-combination effects that may arise from the project in-combination with other plans and projects.

The source-receptor pathways identified are not considered to have a likely significant effect on any designated features of the European sites, acting either alone or in-combination with other plans or projects, such that would compromise the sites' Conservation Objectives. The Appropriate Assessment process should not proceed beyond stage one (Screening), and there is no requirement for a Natura Impact Statement of the works by the Competent Authority at stage two.

Following a review of the potential for impacts to these areas, it was concluded that there is no likelihood of significant effects on the conservation objectives of any qualifying interest of any SAC or SPA.

An ecological assessment was undertaken to ensure that any minor impacts to local biodiversity are identified and mitigated. A search for Protected Species was carried out using the National Parks and Wildlife website and the National Biodiversity Data Centre website. A field survey was undertaken, in which the entire terrestrial habitat within the footprint of the proposed development was walked, habitats were assessed and protected or rare species were checked for. A marine survey of habitats and species at the proposed outfall location was undertaken. Invasive species listed in the Third Schedule of the EU Birds and Habitats Regulations 2011 were checked for. While several protected plant and mammal species are reported as occurring in proximity to the subject site, none were found within the footprint of the proposed works. Several bird species, all of which are protected under the Wildlife Acts, were seen and/or heard. Marine species recorded are all common in occurrence and typical of the habitat. Given the nature of the proposal (which will improve existing water quality) together with its modest scale and use of best practice mitigation methods, it is considered that the potential for any significant impact upon protected species is highly unlikely.

Further information on the ecological assessment can be found in the Castletownshend Sewerage Scheme Planning Report which accompanies the Castletownshend Sewerage Scheme planning application.

3.4.1.4 Land and soil

The use of natural resources such as aggregates and energy will be required during the construction and operational stages of the proposed Scheme. While exact quantities of materials/resources are not known at this stage, it is not considered to be significant in the context of environmental effects.

Minimal impacts are anticipated to soils and geology. There will be some excavation of material needed in order to lay the pipeline and construct both the WWTP and pumping station.

3.4.1.5 Water

Watercourses can be sensitive to pollution, particularly suspended solids released into the water course during the construction phase of the project. Aquatic life has the potential to be disturbed during construction, be physically obstructed from migrating through the waterbody, and be impacted by accidental pollution incidents. However, construction within water bodies is limited to the proposed outfall from the WWTP and extension to the proposed outfall at the pier and as such, any impact would be of a short-term nature.

The EU Water Framework Directive (WFD) (2000/60/EC) requires all Member States to protect and improve water quality in all waters so that they achieve “good” ecological status by 2015 or, at the latest, by 2027. It was given legal effect in Ireland by the European Communities (Water Policy) Regulations 2003 (S.I. No. 722 of 2003). It applies to rivers, lakes, groundwater, and transitional coastal waters. The Directive requires that management plans be prepared and specifies a structured method for developing these plans.

The provision of a WWTP with primary treatment for Castletownshend will reduce cBOD levels by 20% and suspended solids levels by 50% and thereby assist in meeting the objective of the WFD. Further information on this is provided in the Planning Report which accompanies the Castletownshend Sewerage Scheme planning application.

A water quality near field dilution modelling study indicated that the treated effluent will not have a negative impact on the receiving waters. The Near Field Dilution Report accompanies the Castletownshend Sewerage Scheme planning application.

A Stage 1 Flood Risk Assessment was carried out to assess the flood risk to sites that are being considered for works in Castletownshend to provide a new pumping station, WWTP and associated piped connections to treat wastewater discharges arising from the village. The WWTP site was identified as not being susceptible to fluvial or coastal flooding. However, the site visit did indicate the possibility of pluvial flooding in the location. This risk will be managed by constructing adequate stormwater drainage facilities at the site. There was no indication that the pumping station site is susceptible to flooding.

The proposed development is not in itself considered to be a particularly flood vulnerable one, however, best practice would be to consider the potential to

impact on flood risk management in the wider area by way of altered run-off rates. In this regard it is noted that there would be no impact on flood risk to other developments.

The Stage 1 Flood Risk Assessment report is included as part of the Castletownshend Sewerage Scheme Planning Application. The Flood Risk Assessment report accompanies the Castletownshend Sewerage Scheme planning application.

3.4.1.6 Marine Habitats and Mammals

In May 2020, Emerald Marine Environmental Consultancy carried out a desk study investigating the possible the impacts the proposed development may have on marine habitats and marine mammals known to be present, or likely to be present within Castle Haven or the surrounding area.

Upon completion of the desk study, Emerald Marine Consultancy concluded the following;

Although the impacts on the marine benthic habitat may be complex, the overall impact of the project will have a net positive impact on biodiversity and the marine ecosystem with associated benefits for species of marine mammals and seabirds.

There will likely be some negative impacts to the marine benthic environment during the construction phase of the project, however, these are likely to be spatially and temporarily restricted with recovery predicted to be rapid. Due to the restricted nature of the works and predicted rapid recovery rates these impacts are deemed not significant.

There are also some possible negative impacts to larger marine fauna (such as fish, crustaceans, seabirds) during the construction phase of the project, however, as these species are generally mobile and the construction works are spatially and temporarily restricted, no significant impacts are expected.

There are risks posed to marine mammals during the construction phase. Appropriate mitigation measure should be applied to minimise these risks. A dedicated marine mammal observer should be deployed during the construction of the outfall pipe. The NPWS (2014) Guidance to Manage the Risk to Marine Mammals from Man-made Sound Sources in Irish Waters should be implemented and should include; establishing a mitigation zone around the source, monitoring of the mitigation zone for marine mammals prior to commencement of works, and following a soft-start procedure to commence operations. Correct application of the suggested mitigation measures will result in no significant impacts to marine mammals.

For further information, on the 'Impact on Marine Habitats and Marine Mammals' please refer to the Planning Report which has been submitted as part of the Castletownshend Sewerage Scheme planning application.

3.4.1.7 Air and climate

There may be short-term impacts to air quality during the construction phase of the proposed Scheme caused by increased construction traffic and excavation and stockpiling activities.

Wastewater facilities have the potential to generate odour and noise. A distance of 60m will be provided between the WWTP and the nearest existing development which is the recommended separating distance given in the EPA Wastewater Treatment Manual – Treatment Systems for Small Communities, Business, Leisure Centres and Hotels for WWTPs with a capacity over 161. The sludge holding tank will be covered and fitted with a passive odour control unit. Noise levels will be maintained to acceptable levels.

3.4.1.8 Landscape and Cultural Heritage, including architectural and archaeological aspects

An Archaeological Impact Assessment report was in May 2018. This report was updated in March 2020. An underwater Archaeological Impact Assessment was carried out in August 2018. The Archaeological Reports are included as part of the Castletownshend Sewerage Scheme planning application.

The site for the proposed Scheme is not situated within a Historic Town. No National Monuments or Protected structures are situated within the study area. Three Recorded Monuments are located within the general vicinity of the proposed development, with some in close proximity to certain elements of the proposed design.

These six recorded monuments are described as follows;

Recorded Monument No	Classification	ITM Co-ordinate (Easting)	ITM Co-ordinate (Northing)	Distance to Nearest proposed works
C0142-079001	Designed landscape belvedere	518554	531417	Adjacent to rising main
C0142-079002	Graveyard	518585	531431	Adjacent to rising main
C0142-079003	Church	518589	531436	33m to rising main
C0142-079004	Country house	518642	531427	52m to pumping station
C0142-079005	Designed landscape belvedere	518676	531475	147m to rising main
C0142-080	Bastioned fort	518798	531537	164m to outfall

C0142-081	Corn store	518610	531269	93m to pumping station
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The proposed pumping station is located outside of the zone of archaeological notification. No items of archaeological potential were noted in the vicinity of the proposed pumping station.

The proposed rising main extends through the zone of archaeological notification of recorded monuments C0142-079001 (Designed landscape belvedere) and C0142-079002 (Graveyard). Pre-development licensed archaeological testing of the route of the rising main will be carried out and all ground works along the rising main route will be archaeologically monitored.

No recorded archaeological monuments are located along the route of the foul sewer and no previously undetected monuments were noted on the day of survey.

In light of the archaeological potential of the area, archaeological testing and monitoring will be carried for the duration of all excavational works.

The only significant visible elements of the proposed Scheme once construction is completed will be the proposed WWTP and the pumping station kiosks and surge vessel.

At the WWTP site, green paladin fencing will be utilised to blend in with the site's greenfield surroundings. Planting of native species of shrubs and trees as well as evergreen creeper will be provided along the fence line to provide further screening. No recorded archaeological monuments are located in the immediate vicinity of the proposed WWTP nor were any newly detected monuments noted on the day of survey.

The pumping station kiosks and surge vessel will be positioned so as to minimise the visual impact. The kiosk finishes will be chosen so as to minimise the visual impact. A landscaping plan has been developed to reduce the visual impact of the pumping station.

The pipelines will all be underground and therefore not visible. It is not anticipated that the proposed Scheme will result in significant effects to the surrounding landscape.

Further information on screening at the WWTP site and the pumping station landscaping plan, please refer to the Planning Report which accompanies the Castletownshend Sewerage Scheme planning application.

3.4.1.9 The interrelationship between the environmental topics

It is considered in the case of the proposed Scheme that the most important potential interaction is that between water quality and aquatic ecology. Therefore, it is important that the project includes within its design, mitigation solutions to ensure that the water quality of the sea is not unduly harmed. A treated waste discharge of the scale proposed will not have any significant negative impact on the local environment. The proposal will result in less nutrient input to Castle

Haven than is presently the case and will therefore have a significant positive impact on the marine environment.

3.4.2 Consideration of the EIA Screening Criteria

The EIA Directive includes an updated Annex III ‘Selection Criteria Referred to in Article 4(3)’ (Criteria to determine whether the projects listed in Annex II should be subject to an Environmental Impact Assessment).

The criteria are grouped under three headings:

- characteristics of projects;
- location of projects; and
- type and characteristics of the potential impacts.

The sub criteria associated with each of the above criteria have been taken into account and are considered in the context of the proposed Scheme in the sections below.

Table 1 – Criteria for determining whether the project would or would not be likely to have a significant effect on the environment

1. Characteristics of the project	
(a) Size and design of the whole project	<p>The proposed Scheme has the potential to provide primary treatment for up to 531 people.</p> <p>At present, part of the agglomeration is not provided with any form of treatment with raw effluent discharging directly to Castle Haven. The proposed Scheme will provide primary treatment for wastewater collected in the collection network and wastewater from The Lawn housing Development and create a higher standard of discharge to Castle Haven. The potential for significant impacts as a result of the size and design of the proposed Scheme is considered unlikely.</p>
(b) Cumulation with existing and/or approved projects	<p>A search of the Cork County Council website, the County Cork Development Plan 2014, and general web searches for major infrastructure projects in West Cork has been undertaken to identify other projects that may result in cumulative impacts. The majority of recent planning applications in the vicinity of the proposed Scheme appear to be small scale domestic applications.</p> <p>In the context of the above, it is considered unlikely that there will be any significant effects either</p>

	during construction or operation of the proposed Scheme.
(c) The use of natural resources, in particular land, soil, water and biodiversity	The use of soil and rock resources associated with the development would not cause significant or adverse effects. Natural resources will be required for construction; however, given the scale of the proposed Scheme this is not considered to be significant.
(d) The production of waste	<p>There will be no major demolition works associated with the proposed Scheme. However, during construction, waste will be generated. During operation sludge waste will be produced and stored on site before being transported to a licensed facility for further treatment and disposal.</p> <p>All waste generated in any phase of the proposed Scheme will be handled, transferred and disposed of appropriately in accordance with the waste hierarchy and relevant waste management regulations / guidelines. It is not anticipated that the production of waste during either construction or operation is likely to result in a significant effect.</p> <p>The production of waste during both construction and operation is unlikely to cause significant effects.</p>
(e) Pollution and nuisances	<p>During construction and operation without mitigation, there is potential for localised pollution impacts in regard to Castle Haven. In addition, there is also potential for temporary impacts, such as noise, vibration and dust to affect property owners in the vicinity of the proposed Scheme. The likelihood and severity of construction phase impacts will be minimised through adherence to standard mitigation measures and effective construction management and this will be demonstrated by the appointed Contractor in their project specific Construction Environmental Management Plan (CEMP).</p> <p>A preliminary CEMP accompanies the Castletownshend Sewerage Scheme Planning Application.</p> <p>The measures listed in the CEMP are proposed for the protection of local water quality. The AA Screening completed for the project has placed no</p>

	<p>reliance on any of these protection measures in concluding that AA can be screened out.</p> <p>Subject to the implementation of appropriate standard mitigation, there will be no potential for significant pollution/nuisance effects during construction and operation of the proposed Scheme.</p>
<p>(f) The risk of major accidents and/or disasters which are relevant to the project concerned, including those caused by climate change, in accordance with scientific</p>	<p>The risk of any major accidents during the construction and operational stages will be managed in accordance with relevant health and safety legislation.</p> <p>All works will be in line with Irish Waters Standard Operating Procedure ‘Management of Health, Safety, Quality and Environment on Capital Projects’ IW-HSQE-SOP-021. This includes the requirement for the development of a Construction Safety and Health Plan.</p> <p>The potential for any accidents during construction and operation, such as spillages into the aquatic environment is eliminated by the implementation of appropriate standard mitigation measures.</p>
<p>(g) The risks to human health (for example due to water contamination or air pollution).</p>	<p>Human health could be impacted during the construction phase as a result of noise, dust, odour and vibration. These impacts are of a short terms nature and are not deemed to be significant.</p> <p>The effects of the proposed scheme on the surrounding environment have been considered in detail and the proposed scheme does not come within the classes of development that European and Irish legislation identify as being likely to have significant effects on the environment, as set out in Part 1 or Part 2 of Schedule 5 of the Planning and Development Regulations 2001-2017. As a result, it is considered unlikely that there will be any significant risks to human health.</p>
<p>2. Location of Project</p>	
<p>(a) The existing and approved land use</p>	<p>The proposed WWTP is to be located on a greenfield site, the proposed pumping station is to be located on a section of privately owned garden and the proposed rising main is along the existing road network and partially along a greenfield site. The gravity sewer will pass along a greenfield site.</p>

	<p>It is not considered that the location of the site, its approved or existing uses would give rise to any potential significant effects either during construction or operation.</p>
<p>(b) The relative abundance, availability, quality and regenerative capacity of natural resources (including soil, land, water and biodiversity) in the area and its underground</p>	<p>This is a small-scale project that will require a limited amount of natural resources associated with the construction phase. Construction will include materials such as steel, concrete and pipe which will be imported.</p> <p>The Discharge License states that <i>“The Licensee shall, upon completion of upgrade to provide primary treatment maintain such available capacity within the waste water works as is necessary to ensure that there is no environmental risk posed to the receiving water environment as a result of the discharge”</i>. The proposed Scheme has been designed to ensure compliance with this requirement.</p> <p>Subject to appropriate standard mitigation, it is considered unlikely that there will be any significant effects on natural resources within the area.</p>
<p>(c) The absorption capacity of the natural environment, paying particular attention to the following areas:</p> <ul style="list-style-type: none"> (i) Wetlands, riparian areas, river mouths; (ii) Coastal zones and the marine environment; (iii) Mountain and forest areas; (iv) Nature reserves and parks; (v) Areas classified or protected under legislation, Natura 2000 areas designated by Member States pursuant to Directive 	<p>Wetlands riparian areas and river mouths: There are no wetlands in the study area and there will be no significant effects upon these areas.</p> <p>Coastal Zones and the marine environment: The proposal will result in considerably less nutrient input to waters of Castle Haven than is presently the case and will therefore have a significant positive impact on the biodiversity of the marine environment.</p> <p>For further information, see the ‘Impact on Marine Habitats and Marine Mammals’ Report which accompanies the Castletownshend Planning Report which is included as part of the Castletownshend Planning submission.</p> <p>Mountain and forest areas: There are no mountain ranges in the study area. The proposed Scheme is within a small coastal village and there will be no significant effects upon any mountain or forested area.</p>

<p>92/43/EEC and Directive 2009/147/EC;</p> <p>(vi) Areas in which there has already been a failure to meet the environmental quality standards, laid down in Union legislation and relevant to the project, or in which it is considered that there is such a failure;</p> <p>(vii) Densely populated areas; Landscapes of historical, cultural or archaeological significance.</p>	<p>Nature reserves and parks: There are no Nature Reserves or Parks within the vicinity of proposed Scheme and there will be no significant effects upon these areas.</p> <p>Natura 2000 Sites: While SAC 001547 is located within 200m to the north of the proposed WWTP site, Killarney fern, its sole Qualifying Interest is a terrestrial species, growing in woodland that will not be disturbed by the proposed development.</p> <p>The Qualifying Interest of SAC 00170, located c. 5km from the proposed development, is also Killarney fern. It will not be disturbed by the proposed development.</p> <p>While it would be possible for peregrine and/or chough (the two Features of Interest of SPA 004156, located 5km to the southwest) to visit the subject site, there are no suitable nesting areas for either species here and the vegetation in the grassland is too high for chough foraging. The proposed development will not impact on the Conservation Objectives of SPA 004156.</p> <p>At a distance of approximately 12km by sea from the subject site to SAC 000097, this Natura 2000 site is outside the potential impact zone of a proposed development of this nature.</p> <p>Areas in which environmental quality standards laid down by the EU have already been exceeded: At present, the Town Network consists of a combined sewer. Sewage in this network is currently not provided with any form of treatment with raw effluent discharging directly into the waters of Castle Haven Bay. The existing Discharge License states that the holder shall identify appropriate improvements to the sewerage system, including the WWTP, which are necessary to ensure all discharges(s) from the agglomeration contribute towards achieving at least good status in accordance with the Surface Water Regulations 2009 and/or Groundwater Regulations 2010. The Proposed Scheme is required to comply with this requirement and will create a betterment of the existing situation.</p> <p>Densely populated areas: The proposed Scheme is located within the sparsely populated village of Castletownshend. The lands within the immediate</p>
--	--

	<p>vicinity of the site are primarily of a residential and agricultural nature.</p> <p>Landscapes of historical, cultural or archaeological significance: The Proposed Scheme is not situated within a Historic Town.</p> <p>No National Monuments are situated within the study area. There are several archaeological sites close to the study area (as detailed in section 3.4.1.6 above). The proposed sewerage scheme is not within the zone of influence of any national or recorded monuments or known archaeological artefact. The closest infrastructure to the recorded archaeology is the rising main. Archaeological testing and monitoring will be carried out to test for any unknown archaeology as part of the works.</p>
<p>3. Type and characteristics of the potential impact</p>	
<p>The potential significant effects of the projects on the environment must be considered in relation to the criteria set out in 1 & 2 above and having regard to the factors specified in Article 3 (1) of the EIA Directive) taking into account aspects of the impact as outlined in 9a) to (h) below.</p> <p>Article 3(1) Factors</p> <ul style="list-style-type: none"> a) Population and human health; b) Biodiversity, with particular attention to species and habitats protected under Directive 92/43/EEC and Directive 2009/147/EC; c) Land, soil, water, air and climate; d) Materials assets, cultural heritage and the landscape; e) The interaction between the factors referred to in points (a) to (d). 	
<p>(a) The magnitude and spatial extent of the impact (for example geographical area and size of the population likely to be affected)</p>	<p>The proposed Scheme is an improvement to the existing sewage scheme in place at present which discharges raw effluent directly into Castle Haven Bay. It is a betterment that will provide appropriate treatment to meet the emission limit values set out in the discharge licence.</p> <p>The site of the proposed WWTP is greenfield and is relatively small. The proposed pumping station is on a privately-owned garden area. The rising main/ gravity sewers will be underground and therefore will have minimal construction and operational impacts. The areas where pipes are laid will be reinstated upon completion.</p>

	<p>The primary source of odour is the sludge holding tank. This will be a covered tank and it will incorporate a passive odour scrubbing unit. The pumping station will be covered and will have high level ventilation stack.</p> <p>The population directly impacted by the construction of the proposed Scheme is relatively small as Castletownshend is a small village and therefore the spatial extent of any potential impact is likely to be limited. The magnitude of any potential impacts is not considered to be significant.</p>
<p>(b) The nature of the impact</p>	<p>Population and human health impact:</p> <p>During the construction period road users may experience traffic delays, noise and vibration. However, these impacts are of a short-term nature and will not result in any significant effects.</p> <p>The primary source of odour is the sludge holding tank. This will be a covered tank and it will incorporate a passive odour scrubbing unit. The pumping station will be covered and will have high level ventilation stack. There are clear positive impacts for population and human health associated with providing primary treatment to the wastewater which currently discharges untreated into Castle Haven Bay.</p> <p>Biodiversity:</p> <p>During construction, there is a potential risk for small scale water quality impacts on Castle Haven from runoff from building materials or sediment from the construction of the marine outfalls. However, these impacts would be of a short-term nature and are not considered to be significant. During operation, the treated effluent from the proposed Scheme could impact upon aquatic ecology. However, a water quality dilution study found that there would be no negative impact on receiving waters. In addition, the area of beach where the outfall is proposed is a typical area of inter-tidal estuarine habitat and all species recorded are typical, common, estuarine species and as there is already a freshwater discharge to the beach here, a treated waste discharge of the scale proposed is unlikely to have any significant negative impact on the local marine mammals and habitats.</p>

	<p>For further information, see the ‘Impact on Marine Habitats and Marine Mammals’ Report which accompanies the Castletownshend Planning Report which is included as part of the Castletownshend Planning submission.</p> <p>The potentially most significant unmitigated negative impact would be from the felling of trees with bat roosts. A tree survey was carried out which identified two trees with the potential for bat roost within the scheme footprint. Any mature trees with rot holes that could support roosting bats that need to be removed should be felled in the months of September, October or November and should be left to lie for 24 hours after cutting to allow any bats to escape.</p> <p>The oak tree which has been identified during the tree survey as a potential bat roost as well as a single mature beech are the two trees which have been identified as being of ‘good to high value’ during the tree survey. Neither tree is located along the line of the outfall pipe but rather adjacent to the route of the outfall. During construction, every effort will be made to prevent impacts on these trees</p> <p>The Tree Survey Report accompanies the Castletownshend Planning Application.</p> <p>The impact on otters foraging on the shoreline near the outfall location will be minor and temporary. Impacts on other mammal species would also be minor.</p> <p>Clearance of scrub along the route of the outfall could have a temporary negative impact on some passerine birds but will be carried out outside of the bird nesting season (March to August, inclusive).</p> <p>Other/interacting impact:</p> <p>Other impacts are considered to be minor in nature and do not have potential to significantly impact on the environment, either by themselves or in combination with other impacts.</p>
<p>(c) The transboundary nature of the impact</p>	<p>There are no transboundary impacts associated with the proposed Scheme.</p>

<p>(d) The intensity and complexity of the impact</p>	<p>The main potential impacts during construction relate to traffic, noise and vibration during construction. During operation potential impacts upon aquatic ecology are not considered to be significant or complex.</p> <p>The key positive impact as a result of the proposed Scheme is the improvement to the existing water quality of Castle Haven.</p>
<p>(e) The probability of the impact</p>	<p>The probability of a significant impact as a result of the proposed Scheme given its scale and nature is considered to be unlikely.</p> <p>The probability of any significant impacts upon aquatic ecology during operation has been reduced through design and appropriate standard mitigation. After primary treatment, the effluent will comply with the standards set out in the Urban Waste Water Treatment Regulations 2001 (S.I. No. 254/2001) for biochemical oxygen demand and total suspended solids.</p>
<p>(f) The expected onset, duration, frequency and reversibility of the impact</p>	<p>Population and human health</p> <p>Construction stage traffic will be temporary in nature. Operation stage traffic will be long term but limited to occasional maintenance and waste collection.</p> <p>Noise and vibration will occur during the construction phase but not during the operation phase. Therefore, these impacts will be of a short-term nature.</p> <p>Air quality impacts may arise during operation and have the potential to be of a long-term nature. However, with mitigation these impacts are reversible.</p> <p>The primary source of odour is the sludge holding tank. This will be a covered tank and it will incorporate a passive odour scrubbing unit. The pumping station will be covered and will have a high level ventilation stack.</p> <p>Biodiversity</p> <p>The terrestrial habitats within the subject site are of low value, in accordance with the NRA site</p>

	<p>evaluation scheme (NRA, 2009). Negative impacts on terrestrial habitats will therefore be minor.</p> <p>The proposed Scheme will introduce a higher standard of effluent treatment than that currently being discharged into the aquatic environment. The projected quality of the discharge that will meet standards for primary treatment should improve the quality of receiving waters in the Castle Haven. Damage from eutrophication is often reversible and it might be expected that the water quality and / or the fish habitat capability of Castle Haven would consequently improve.</p>
<p>(g) The cumulation of the impact with the impact of other existing and/or approved projects</p>	<p>There are no significant impacts considered likely as a result of the proposed Scheme in cumulation with other existing and/or approved projects.</p>
<p>(h) The possibility of effectively reducing the impact</p>	<p>Population and human health</p> <p>Standard traffic and construction management mitigation measures will be implemented. In addition, odour abatement measures will be put in place to reduce any potential impacts during the operation phase.</p> <p>Biodiversity</p> <p>With the application of good practice construction methods and primary treatment to the discharge effluent, no likely significant negative effects are anticipated from potential water quality changes.</p> <p>The terrestrial habitats within the subject site are of low value, in accordance with the NRA site evaluation scheme (NRA, 2009). Negative impacts on terrestrial habitats will therefore be minor.</p> <p>The recommendations given in the Castletownshend Tree Survey Report and the mitigation measures in the ‘Impact on Marine Habitats and Marine Mammals’ Report which are included as part of the Castletownshend Planning Application will be adhered to so as to effectively reduce potential impacts on biodiversity.</p>

4. Screening Decision

Having regard to the above, and in particular the nature, scale and location of the proposed Scheme, by itself and in combination with other plans and projects, it is considered that an EIA is not required in this instance.

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4 Conclusion

It is submitted that the proposed Scheme does not come within the classes of development that European and Irish legislation identify as being likely to have significant effects on the environment, as set out in Part 1 or Part 2 of Schedule 5 of the Planning and Development Regulations 2001-2017. As the proposed Scheme does not come within the specified classes, an EIA is not required for the proposed Scheme.

In addition to the above, a sub threshold assessment has been undertaken. The potential for impacts has been identified, both positive and negative but none that would be likely to have significant effects on the environment. Therefore, an EIA is not required.

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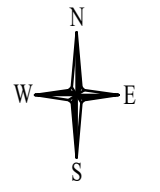
Appendix A

Castletownshend Location Map

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GENERAL NOTES



Rev	Date	Description	By	Chk	App

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PROJECT

UTAS - WASTEWATER CONSULTANCY SERVICES - CORK BUNDLE

DRAWING TITLE

CASTLETOWNSHEND
 FIGURE 01
 LOCATION MAP

STATUS

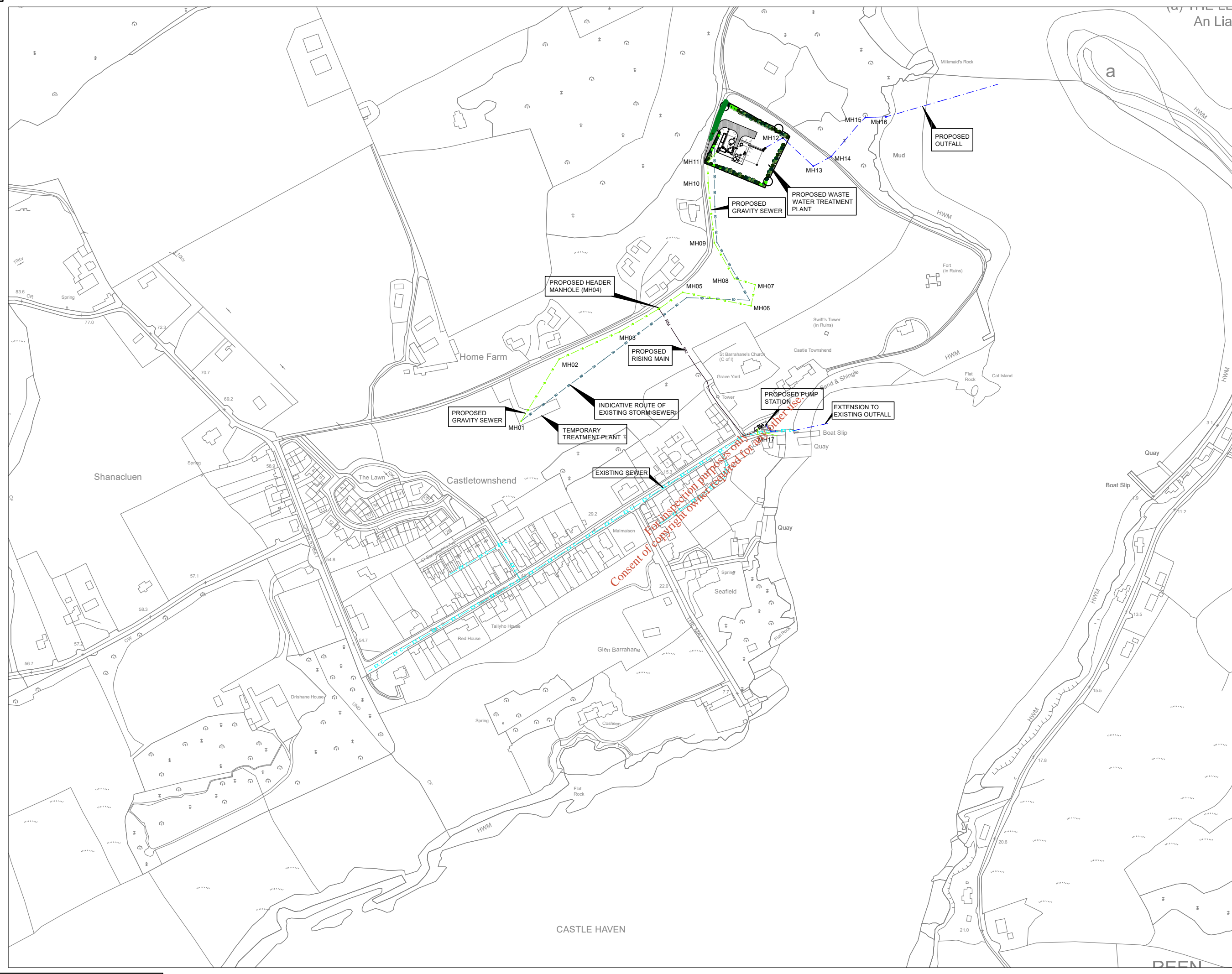
FOR INFORMATION

Date: 23.10.18	Scale: 1/5000	Drawn: NM	Chk: OL	App: KT
Project No: 257589_00	Drg. No: IW10015227-R039-FG01	Rev: -		

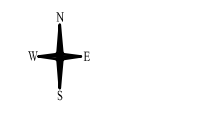
Appendix B

Layout of Proposed Scheme

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GENERAL NOTES



- NOTES:**
1. ORDNANCE SURVEY IRELAND LICENCE NUMBER EN 3-3-34.
 2. FIGURED DIMENSIONS ONLY TO BE TAKEN FROM THIS DRAWING.
 3. ALL DIMENSIONS TO BE CHECKED ON SITE.
 4. ANY QUERIES OR DISCREPANCIES SHOULD BE REFERRED TO THE EMPLOYERS REPRESENTATIVE IMMEDIATELY.
 5. EXISTING & PROPOSED PIPE LOCATIONS ARE INDICATIVE ONLY.

- LEGEND:**
- EXISTING COMBINED SEWER:
 - EXISTING STORM SEWER:
 - PROPOSED SEWER:
 - PROPOSED RISING MAIN:
 - PROPOSED OUTFALL:

FS	19.06.20	WWTP LAYOUT UPDATED	LT	OL	KT
A4	20.03.20	REVISED GRAVITY SEWER AND OUTFALL ROUTE	OL	OL	KT
A3	05.11.19	WWTP LAYOUT UPDATED	LT	OL	KT
A2	22.10.19	PIPE ROUTES REVISED, EXISTING SERVICES ADDED	LT	OL	KT
A1	22.08.19	WWTP & PS LAYOUT UPDATED	LT	OL	KT
Rev	Date	Description	By	Chk	App

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PROJECT
**UTAS - CORK BUNDLE
 CASTLETOWNSHEND**

DRAWING TITLE
PROPOSED SCHEME LAYOUT

STATUS
FOR INFORMATION

Date: 10.05.19	Scale: 1:2000	Drawn: LBR	Chk: OL	App: KT
Project No: 257589_00	Dwg. No: IW-10015228-04-01-001	F5		



ATTACHMENT NO: B.9 (i)

SITE NOTICE

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PUBLIC NOTICE

APPLICATION TO THE ENVIRONMENTAL PROTECTION AGENCY FOR THE REVIEW OF THE CASTLETOWNSHEND WASTE WATER DISCHARGE LICENCE.

Pursuant to Regulation 9 of the European Union (Waste Water Discharge) Regulations 2007 to 2020, Irish Water, Colvill House, 24-26 Talbot Street, Dublin 1, intend to apply to the Environmental Protection Agency for the review of the Castletownshend Waste Water Discharge Licence (D0468-01). The waste water works will consist of a new primary wastewater treatment plant to be located at Castletownshend, Co. Cork, 118606E and 31617N, a new primary discharge point discharging to Castle Haven Bay by way of a marine sea outfall, a pumping station with dual function Storm Water/ Emergency Overflow, a Storm Water Overflow at the waste water treatment plant and associated sewer network. Details of the location of these works are as follows:-

Waste Water Works Item	Location (townland)	National Grid Reference
Castletownshend Wastewater Treatment Plant (WWTP)	Castletownshend	118606E, 31617N
Castletownshend Wastewater Treatment Plant (WWTP) -Primary Discharge Point (SW001)	Castletownshend	118906E, 31691N

Discharges to be Decommissioned	Location (townland)	National Grid Reference
Primary discharge to be decommissioned (SW004)	Castletownshend	118671E, 31291N
Secondary discharge to be decommissioned (GW001)	Castletownshend	118377E, 31315N

Stormwater Overflow Points	Location (townland)	National Grid Reference
Pumping Station Stormwater/ Emergency Overflow (SW002)	Castletownshend	118709E, 31300N
WWTP – Stormwater Overflow (SW003)	Castletownshend	118906E, 31691N

A copy of the following documents-

- (i) the review application for a waste water discharge licence and
- (ii) such further information relating to the application as may be furnished to the Agency in the course of the Agency's consideration of the application.

shall, as soon as is practicable after receipt by the Agency, be available for inspection or purchase at the headquarters of the Environmental Protection Agency, P.O. Box 3000, Johnstown Castle Estate, Co. Wexford, at Irish Water, Colvill House, 24-26 Talbot Street, Dublin 1 and at Cork County Council, Norton House, Cork Road, Skibbereen, Co.Cork.

Submissions in relation to the review application may be made to the Environmental Protection Agency at its headquarters at P.O. Box 3000, Johnstown Castle Estate, Co. Wexford, in writing within the period of 5 weeks beginning on the date of receipt by the Agency of the application.



ATTACHMENT NO: B.9 (ii)

SITE NOTICE LOCATION

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A3

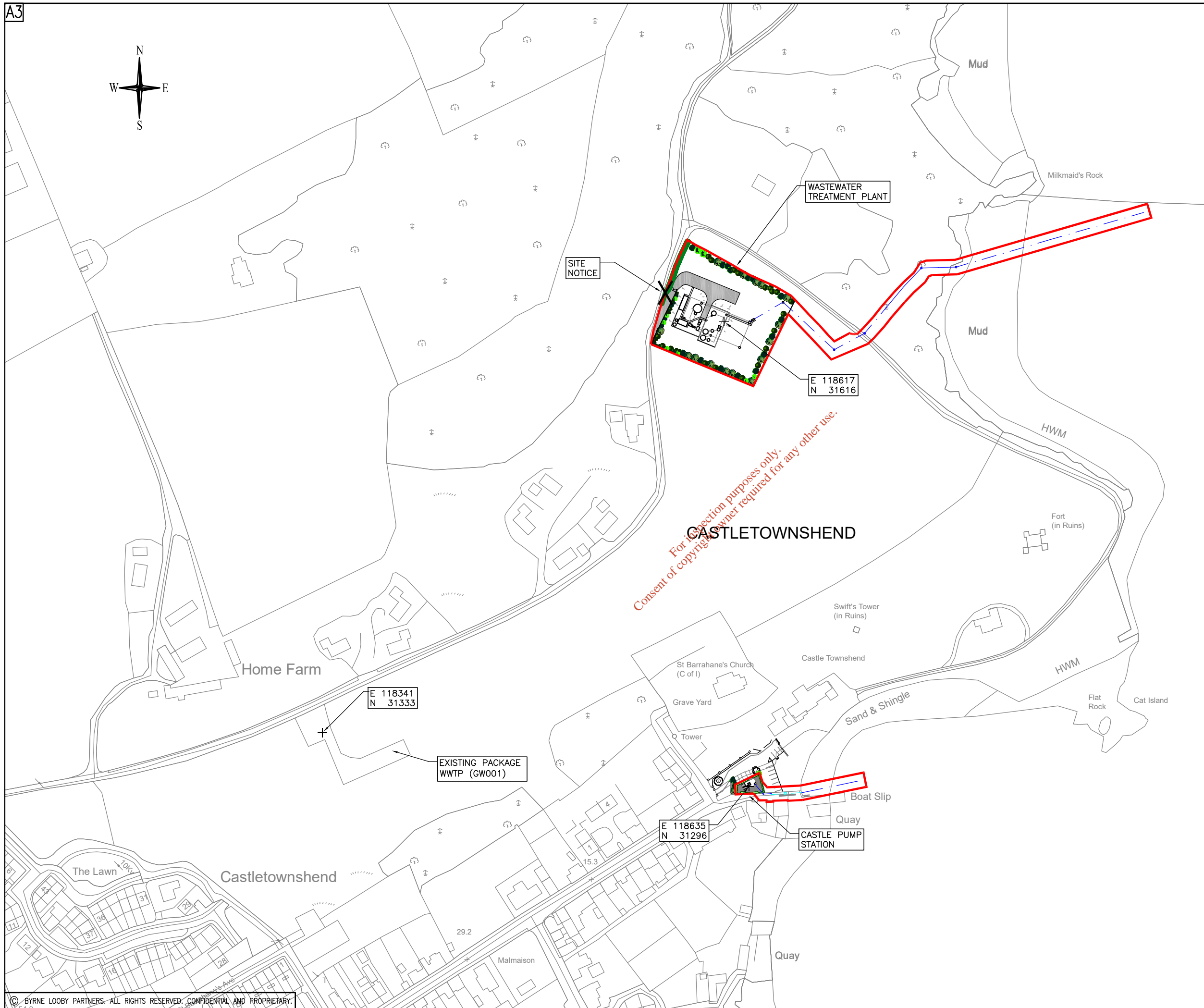
GENERAL NOTES

NOTES:

1. ORDNANCE SURVEY IRELAND LICENCE NUMBER EN 3-3-34.
2. THIS DRAWING TO BE READ IN CONJUNCTION WITH ALL OTHER RELEVANT DRAWINGS.

LEGEND:

- SITE BOUNDARY —
- LOCATIONS OF SITE NOTICES **X**



Rev	Date	Description	By	Chk	App
00	02.07.21	ISSUED FOR LICENCE APPLICATION	LT	OL	KT

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PROJECT

UTAS – CORK BUNDLE
 CASTLETOWNSHEND SEWERAGE SCHEME

DRAWING TITLE

DISCHARGE LICENCE APPLICATION
 ATTACHMENT B.9
 NOTICE LOCATIONS

STATUS

FOR LICENCE APPLICATION

Date: 15.06.21	Scale: 1:2500	Drawn: LT	Chk: OL	App: KT
Project No: 257589_00	Drg. No: IW-10015228-03-02-007	Rev:		00



ATTACHMENT NO: B.9 (iii)

NEWSPAPER NOTICE

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PUBLIC NOTICE



Application to the Environmental Protection Agency for the Review of the Castletownshend Waste Water Discharge Licence

Pursuant to Regulation 9 of the European Union (Waste Water Discharge) Regulations 2007 to 2020, Irish Water, Colville House, 24-26 Talbot Street, Dublin 1, intend to apply to the Environmental Protection Agency for the review of the Castletownshend Waste Water Discharge Licence (D0468-01). The waste water works will consist of a new primary wastewater treatment plant to be located at Castletownshend, Co. Cork, 118606E and 31617N, a new primary discharge point discharging to Castle Haven Bay by way of a marine sea outfall, a pumping station with dual function Storm Water/ Emergency Overflow, a Storm Water Overflow at the waste water treatment plant and associated sewer network. Details of the location of these works are as follows:-

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Submissions in relation to the review application may be made to the Environmental Protection Agency at its headquarters at P.O. Box 3000, Johnstown Castle Estate, Co. Wexford, in writing within the period of 5 weeks beginning on the date of receipt by the Agency of the application.



ATTACHMENT NO: C.1 (a)

PRIORITY SUBSTANCES ASSESSMENT

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Priority Substances Assessment

Agglomeration Name:	Castletownshend
Licence Register No.	D0468-01

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2.2	Review outcome of Desktop study	1
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Appendix 1 – Screening of Parameters for Priority Substances

Appendix 2 – Priority Substance Screening Flowchart

Appendix 3 – Receiving Waters Priority Substance Data

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1 Introduction

This report has been prepared for D0468-01, Castletownshend, in County Cork in accordance with the requirements of Condition 4.12 of the wastewater discharge licence for the agglomeration.

This desk top study has been undertaken to determine the necessity, if any, for analysis of the discharge to comply with the condition in the wastewater discharge licence based on the *Guidance on the Screening for Priority Substances for Waste Water Discharge Licences*, issued by the EPA. Relevant inputs to the waste water works and estimates of emissions from the discharge point have been taken into account in the preparation of this report. Relevant inputs to the waste water works, any relevant measurements / calculations / estimates of emissions from the discharge point and any relevant measurements undertaken at representative downstream monitoring locations have been taken into account in the preparation of this report.

Details of the emissions concentration for the primary discharge and impact on the receiving water are included in Appendix 1.

2 Desktop Study

2.1 Assessment of Analysis Required

A. Review of all industrial inputs into WWTP

A review of all inputs into WWTP has indicated that there are no industrial type discharges, other discharges with a likelihood of priority substances, leachate discharges or other imports. The wastewater discharged to the wastewater treatment plant, including dis is domestic in nature.

B. Discharge monitoring

Any analysis data available for the relevant parameters is included in Appendix 1 with details of the sample data and/or source of the data.

C. Downstream monitoring locations participation in relevant monitoring programme

Any analysis data available for a representative downstream monitoring location from the discharge point for the relevant parameters is included in Appendix 3 with details of the sample data and/or source of the data.

2.2 Review outcome of Desktop study

The inputs from this agglomeration are primarily domestic in nature. A review of the national monitoring programme for priority substances in wastewater is proposed to be undertaken by Irish Water in 2015 in consultation with the EPA. It is proposed that this review, in consultation with the EPA, will recommend parameters to be monitored and frequency of monitoring at Irish Water WWTP's.

3 Assessment of Significance and Recommendations

The EPA have prepared a report on priority substances, *An Inventory of Emissions to Waters in Ireland*. This document states that Ireland appears to have relatively few problems associated with the presence of Priority / Priority Hazardous substances in its surface waters. It identifies that wastewater discharges are a potential source of metals in receiving waters with lead being the main metal identified as associated with wastewater discharges. However, metals exceedences, in particular those for cadmium, lead, and nickel are primarily associated with areas of historic mining activity. Similarly PAH's have been identified in stormwater overflows but the most significant source is considered to be rainfall.

A consultation process with the EPA is proposed to be undertaken by Irish Water in 2015 to establish appropriate levels of monitoring for priority and dangerous substances, taking into account the particular requirements of the Water Framework Directive. This will allow a targeted monitoring programme to be undertaken in areas where priority substances have been identified or industrial discharges or imports provide a potential source, and where there is a shortfall of existing monitoring data.

Does the assessment use the Desk Top Study Method or Screening Analysis to determine if the discharge contains the parameters in Appendix 1 of the EPA guidance	Desk Top Study
Does the assessment include a review of Trade inputs to the works?	Yes
Does the assessment include a review of other inputs to the works?	Yes
Does the report include an assessment of the significance of the results where a listed material is present in the discharge? (e.g. impact on the relevant EQS standard for the receiving water)	Yes
Does the assessment identify that priority substances may be impacting the receiving water?	No
Does the Improvement Programme for the agglomeration include the elimination / reduction of all priority substances identified as having an impact on receiving water quality?	No

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Appendix 1 – Screening of Parameters for Priority Substances

Parameters to be Screened for in Waste Water Discharges Parameters to be Screened for in Waste Water Discharges

AA: average annual

EQS: environmental quality standards

No	Compound	Group of compounds	AA-EQS Inland SW (µg/l)	AA-EQS Other SW (µg/l)	Measured /Estimated Conc. (µg/l) ¹	Data Source [Sample / PRTR / Other (state)]	Sample Date (if applicable)	Effluent Concentration above AA concentration (Yes/No)	Effluent Concentration above AA concentration after dilution (Yes/No)
1	Benzene	VOCs	10	8					
2	Carbon tetrachloride	VOCs	12	12					
3	1,2-Dichloroethane	VOCs	10	10					
4	Dichloromethane	VOCs	20	20					
5	Tetrachloroethylene	VOCs	10	10					
6	Trichloroethylene	VOCs	10	10					
7	Trichlorobenzenes	VOCs	0.4	0.4					
8	Trichloromethane	VOCs	2.5	2.5					
9	Xylenes (all isomers)	VOCs	10	10					
10	Ethyl Benzene	VOCs	10	10					
11	Toluene	VOCs	10	10					
12	Naphthlene	PAHs	2.4	1.2					
13	Fluoranthene	PAHs	0.1	0.1					
14	Benzo[k]fluoranthene	PAHs	0.03	0.03					
15	Benzo[ghi]perylene	PAHs	0.002	0.002					
16	Indeno[1,2,3-c,d]pyrene	PAHs	0.002	0.002					
17	Benzo[b]fluoranthene	PAHs	0.03	0.03					

No .	Compound	Group of compounds	AA-EQS Inland SW (µg/l)	AA-EQS Other SW (µg/l)	Measured /Estimated Conc. (µg/l) ¹	Data Source [Sample / PRTR / Other (state)]	Sample Date (if applicable)	Effluent Concentration above AA concentration (Yes/No)	Effluent Concentration above AA concentration after dilution (Yes/No)
18	Benzo[a]pyrene	PAHs	0.05	0.05					
19	Di(2-ethylhexyl)phthalate (DEHP)	Plasticiser	1.3	1.3					
20	Isodrin	Pesticides	0.01	0.005					
21	Dieldrin	Pesticides	0.01	0.005					
22	Diuron	Pesticides	0.2	0.2					
23	Isoproturon	Pesticides	0.3	0.3					
24	Atrazine	Pesticides	0.6	0.6					
25	Simazine	Pesticides	1	1					
26	Glyphosate	Pesticides	60	-					
27	Mecoprop	Pesticides	0.02	0.02					
28	2,4-D	Pesticides	n/a	n/a				n/a	n/a
29	MCPA	Pesticides	n/a	n/a				n/a	n/a
30	Linuron	Pesticides	0.7	0.7					
31	Dichlobenil	Pesticides	n/a	n/a				n/a	n/a
32	2,6-Dichlorobenzamide	Pesticides	n/a	n/a				n/a	n/a
33	PCBs	PCBs	0.1	0.1					
34	Phenols (as Total C)	Phenols	8	8					
35	Lead	Metals	7.2	7.2					
36	Arsenic	Metals	25	20					

No .	Compound	Group of compounds	AA-EQS Inland SW (µg/l)	AA-EQS Other SW (µg/l)	Measured /Estimated Conc. (µg/l) ¹	Data Source [Sample / PRTR / Other (state)]	Sample Date (if applicable)	Effluent Concentration above AA concentration (Yes/No)	Effluent Concentration above AA concentration after dilution (Yes/No)
37	Copper	Metals	5 or 100 ²	5					
38	Zinc	Metals	8 or 50 or 100 ³	40					
39	Cadmium	Metals	0.08	0.2					
40	Mercury	Metals	0.05	0.05					
41	Chromium	Metals	3.4	0.6					
42	Selenium	Metals	5.3	5.3					
43	Antimony	Metals	0.4	0.4					
44	Molybdenum	Metals	4.3	4.3					
45	Tin	Metals	0.2	0.2					
46	Barium	Metals	1	1					
47	Boron	Metals	6.5	6.5					
48	Cobalt	Metals	0.2	0.2					
49	Vanadium	Metals	0.9	0.9					
50	Nickel	Metals	20	20					
51	Fluoride	General	500	500					
52	Chloride	General	250000	250000					
53	TOC	General	n/a	n/a				n/a	n/a
54	Cyanide	General	10	10					
	Conductivity	General	n/a	n/a				n/a	n/a
	Hardness (mg/l CaCO ₃)	General	n/a	n/a				n/a	n/a

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No .	Compound	Group of compounds	AA-EQS Inland SW (µg/l)	AA-EQS Other SW (µg/l)	Measured /Estimated Conc. (µg/l) ¹	Data Source [Sample / PRTR / Other (state)]	Sample Date (if applicable)	Effluent Concentration above AA concentration (Yes/No)	Effluent Concentration above AA concentration after dilution (Yes/No)
	pH	General	n/a	n/a				n/a	n/a

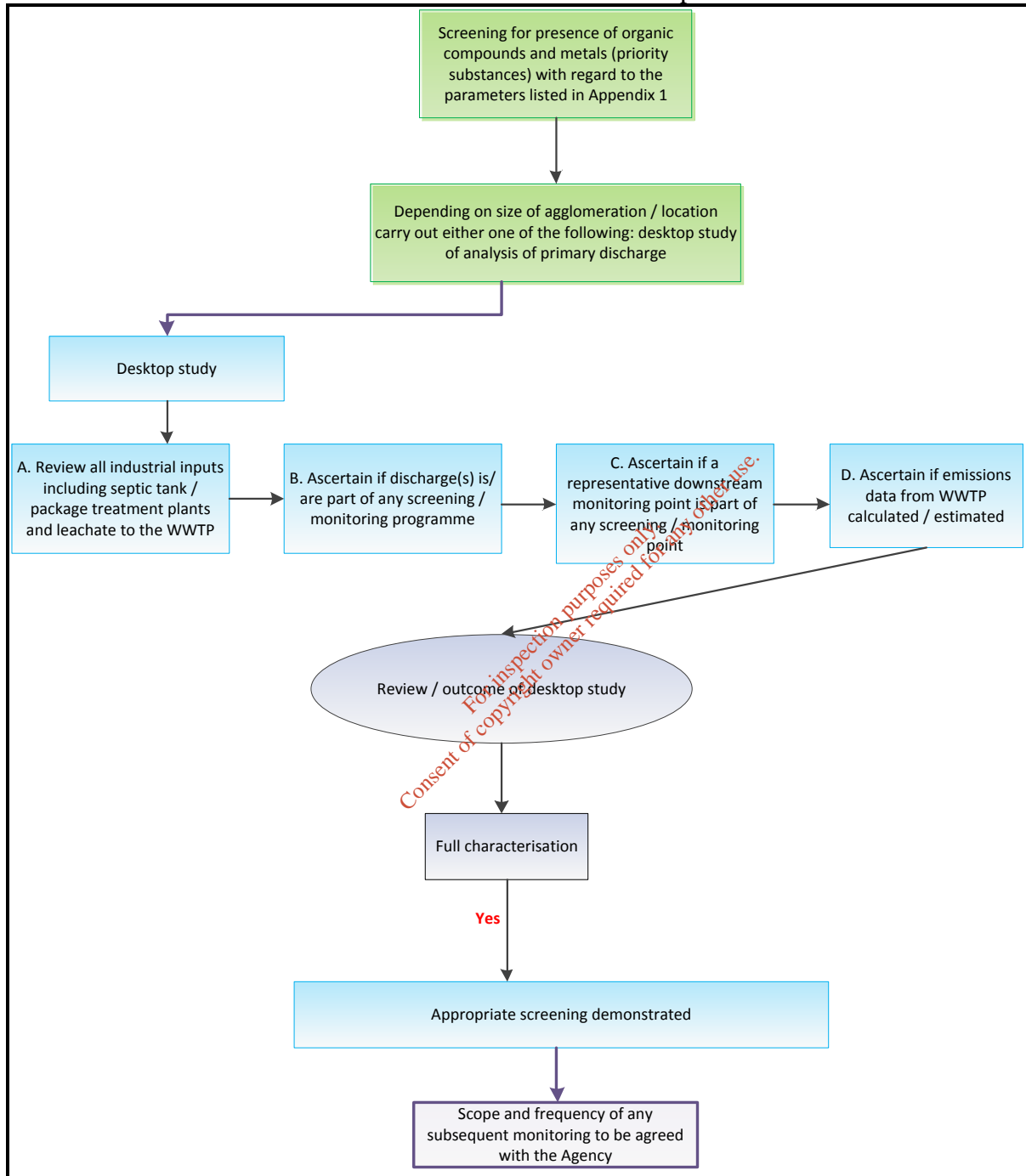
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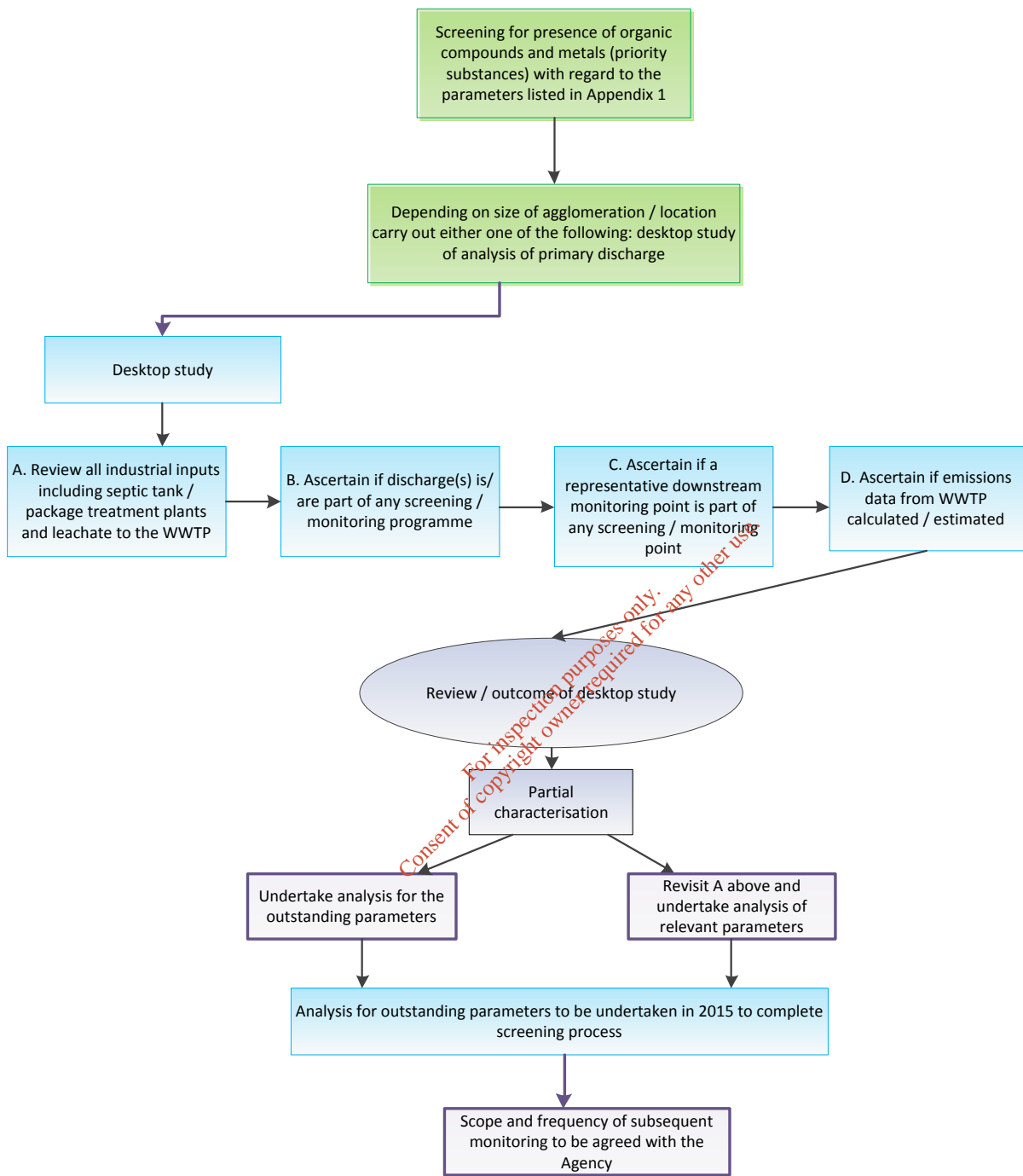
1. Where measured values are available these should be used instead of estimated values from PRTR tool.
2. In the case of Copper the value 5 applies where the water hardness measured in mg/l CaCO₃ is less than or equal to 100; the value 30 applies where the water hardness exceeds 100 mg/l CaCO₃. Estimated CaCO₃ value > 100 where no sampling data available (based on PRTR tool)
3. In the case of Zinc, the standard shall be 8 µg/l for water hardness with annual average values less than or equal to 10 mg/l CaCO₃, 50 µg/l for water hardness greater than 10 mg/l CaCO₃ and less than or equal to 100 mg/l CaCO₃ and 100 µg/l elsewhere. Estimated CaCO₃ value > 100 where no sampling data available

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Appendix 2 – Priority Substance Screening Flowchart

A flow chart for the screening of the presence of organic compounds and metals (Priority Substances) from WWTP is included below. This flowchart shows that appropriate screening has been demonstrated in line with the assessment undertaken in this report.





Appendix 3 – Receiving Waters Priority Substance Data

No Data Available

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ATTACHMENT NO: C.1 b (i)

EFFLUENT MONITORING RESULTS

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Station Name	Sample Date	Sampling	Parameter Name	Unit	Result
Castletownshend EFF	05/02/2020	Grab	BOD, 5 days with	mg/l	7.2
Castletownshend EFF	05/02/2020	Grab	COD-Cr	mg/l	<21
Castletownshend EFF	05/02/2020	Grab	Suspended Solids	mg/l	6
Castletownshend EFF	05/08/2020	Grab	BOD, 5 days with	mg/l	5.7
Castletownshend EFF	05/08/2020	Grab	COD-Cr	mg/l	28
Castletownshend EFF	05/08/2020	Grab	Suspended Solids	mg/l	19
Castletownshend EFF	02/09/2020	Grab	BOD, 5 days with	mg/l	4
Castletownshend EFF	02/09/2020	Grab	COD-Cr	mg/l	27
Castletownshend EFF	02/09/2020	Grab	Suspended Solids	mg/l	9
Castletownshend EFF	07/10/2020	Grab	BOD, 5 days with	mg/l	4.7
Castletownshend EFF	07/10/2020	Grab	COD-Cr	mg/l	31
Castletownshend EFF	07/10/2020	Grab	Suspended Solids	mg/l	7
Castletownshend EFF	05/11/2020	Grab	BOD, 5 days with	mg/l	1.4
Castletownshend EFF	05/11/2020	Grab	COD-Cr	mg/l	<21
Castletownshend EFF	05/11/2020	Grab	Suspended Solids	mg/l	3
Castletownshend EFF	03/12/2020	Grab	BOD, 5 days with	mg/l	8
Castletownshend EFF	03/12/2020	Grab	COD-Cr	mg/l	<21
Castletownshend EFF	03/12/2020	Grab	Suspended Solids	mg/l	5

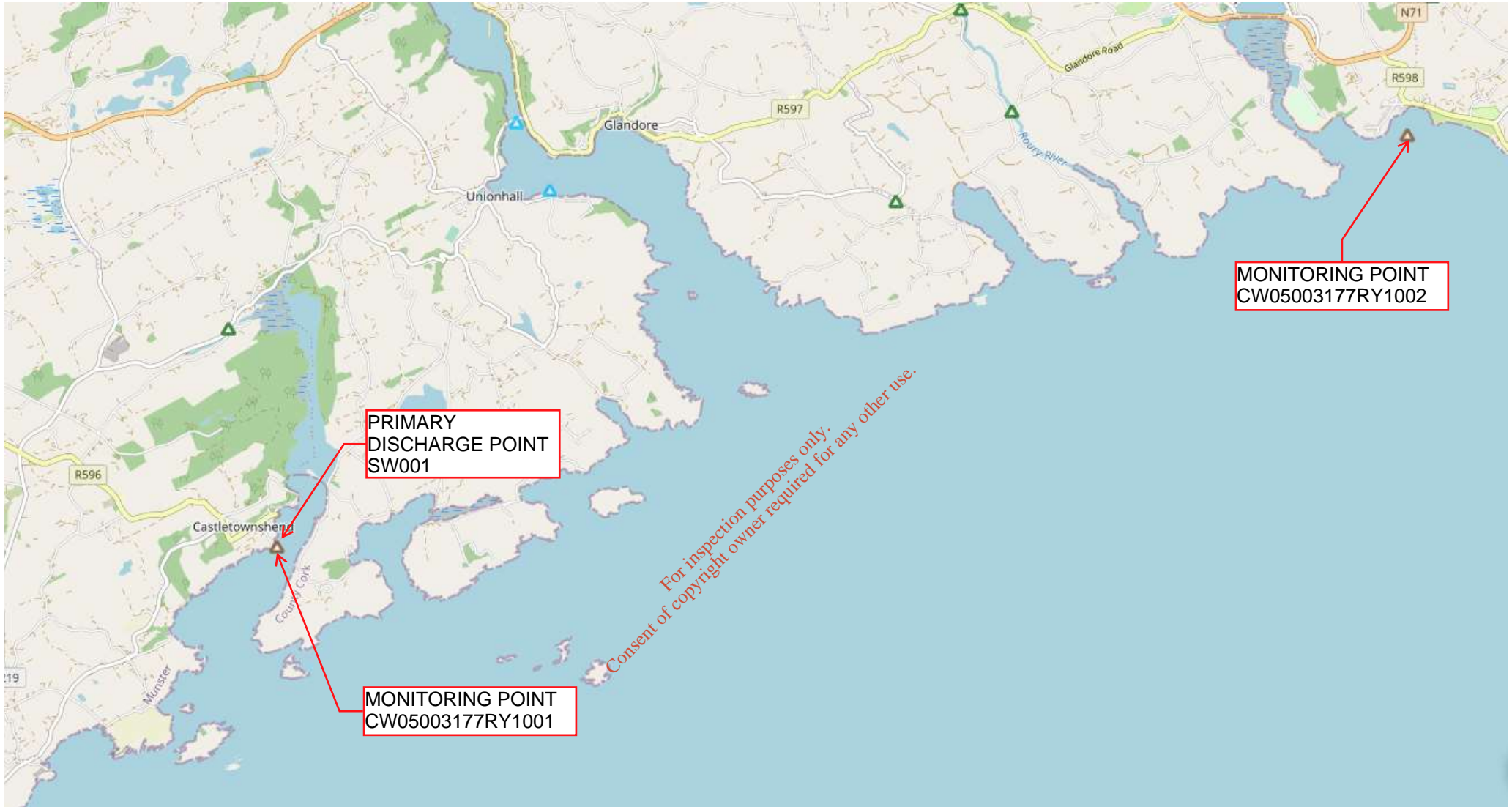
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ATTACHMENT NO: C.1 b (ii)

AMBIENT MONITORING LOCATIONS

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ATTACHMENT NO: C.1 b (iii)

AMBIENT MONITORING RESULTS

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CW05003177RY1001 – Castletownshend Ambient

WaterbodyName	MonitoringStationCod	SampleDate	ParameterName	ParameterUnit ShortCode	Result	LimitOf Detection	ReportResult	ReportTextResult
Rosscarbery Bay	CW05003177RY1001	09/03/2016	Ammonia-Total (as N)	mg/l	0.045	0	0.045	
Rosscarbery Bay	CW05003177RY1001	04/05/2016	Ammonia-Total (as N)	mg/l	0.037	0	0.037	
Rosscarbery Bay	CW05003177RY1002	17/08/2016	Ammonia-Total (as N)	mg/l	0.035	0	0.035	
Rosscarbery Bay	CW05003177RY1001	25/10/2017	Ammonia-Total (as N)	mg/l	0.031	0	0.031	
Rosscarbery Bay	CW05003177RY1002	08/11/2017	Ammonia-Total (as N)	mg/l	0.031	0	0.031	
Rosscarbery Bay	CW05003177RY1002	02/05/2018	Ammonia-Total (as N)	mg/l	0.011	0	0.011	
Rosscarbery Bay	CW05003177RY1001	06/02/2019	Ammonia-Total (as N)	mg/l		0	0.0175	<0.035
Rosscarbery Bay	CW05003177RY1001	04/10/2016	Ammonia-Total (as N)	mg/l	0.034	0	0.034	
Rosscarbery Bay	CW05003177RY1001	13/06/2018	Ammonia-Total (as N)	mg/l		0	0.0175	<0.035
Rosscarbery Bay	CW05003177RY1001	10/10/2018	Ammonia-Total (as N)	mg/l		0	0.0175	<0.0350
Rosscarbery Bay	CW05003177RY1001	19/06/2019	Ammonia-Total (as N)	mg/l		0	0.0175	<0.035
Rosscarbery Bay	CW05003177RY1002	10/07/2019	Ammonia-Total (as N)	mg/l		0	0.0175	<0.035
Rosscarbery Bay	CW05003177RY1001	05/02/2020	Ammonia-Total (as N)	mg/l		0	0.0175	<0.035
Rosscarbery Bay	CW05003177RY1001	17/08/2016	Ammonia-Total (as N)	mg/l	0.03	0	0.03	
Rosscarbery Bay	CW05003177RY1001	21/06/2017	Ammonia-Total (as N)	mg/l	0.03	0	0.03	
Rosscarbery Bay	CW05003177RY1001	02/08/2017	Ammonia-Total (as N)	mg/l	0.032	0	0.032	
Rosscarbery Bay	CW05003177RY1001	07/02/2018	Ammonia-Total (as N)	mg/l	0.014	0	0.014	
Rosscarbery Bay	CW05003177RY1002	13/06/2018	Ammonia-Total (as N)	mg/l		0	0.0175	<0.035
Rosscarbery Bay	CW05003177RY1002	01/08/2018	Ammonia-Total (as N)	mg/l	0.07	0	0.07	
Rosscarbery Bay	CW05003177RY1001	03/06/2020	Ammonia-Total (as N)	mg/l		0	0.0175	<0.035
Rosscarbery Bay	CW05003177RY1002	09/03/2016	Ammonia-Total (as N)	mg/l	0.04	0	0.04	
Rosscarbery Bay	CW05003177RY1002	20/07/2016	Ammonia-Total (as N)	mg/l	0.02	0	0.02	
Rosscarbery Bay	CW05003177RY1001	01/02/2017	Ammonia-Total (as N)	mg/l	0.032	0	0.032	
Rosscarbery Bay	CW05003177RY1001	01/08/2018	Ammonia-Total (as N)	mg/l	0.05	0	0.05	
Rosscarbery Bay	CW05003177RY1001	07/08/2019	Ammonia-Total (as N)	mg/l	0.1	0	0.1	
Rosscarbery Bay	CW05003177RY1001	16/10/2019	Ammonia-Total (as N)	mg/l		0	0.0175	<0.035
Rosscarbery Bay	CW05003177RY1001	05/08/2020	Ammonia-Total (as N)	mg/l		0	0.0175	<0.035
Rosscarbery Bay	CW05003177RY1002	18/11/2020	Ammonia-Total (as N)	mg/l		0	0.0175	<0.035
Rosscarbery Bay	CW05003177RY1001	07/10/2020	Ammonia-Total (as N)	mg/l	0.268	0	0.268	
Rosscarbery Bay	CW05003177RY1001	17/02/2021	Ammonia-Total (as N)	mg/l		0	0.0175	<0.035
Rosscarbery Bay	CW05003177RY1002	20/07/2016	BOD - 5 days (Total)	mg/l	1.2	1	1.2	
Rosscarbery Bay	CW05003177RY1001	04/10/2016	BOD - 5 days (Total)	mg/l		1	0.5	<1.0
Rosscarbery Bay	CW05003177RY1002	03/05/2017	BOD - 5 days (Total)	mg/l	1	1	1	
Rosscarbery Bay	CW05003177RY1001	10/10/2018	BOD - 5 days (Total)	mg/l		1	0.5	<1.0
Rosscarbery Bay	CW05003177RY1002	08/05/2019	BOD - 5 days (Total)	mg/l	2.2	1	2.2	
Rosscarbery Bay	CW05003177RY1002	19/06/2019	BOD - 5 days (Total)	mg/l	2.4	1	2.4	
Rosscarbery Bay	CW05003177RY1002	13/11/2019	BOD - 5 days (Total)	mg/l	1.1	1	1.1	
Rosscarbery Bay	CW05003177RY1002	21/06/2017	BOD - 5 days (Total)	mg/l	3.7	1	3.7	
Rosscarbery Bay	CW05003177RY1001	05/02/2020	BOD - 5 days (Total)	mg/l	1.6	1	1.6	
Rosscarbery Bay	CW05003177RY1001	03/06/2020	BOD - 5 days (Total)	mg/l	1	1	1	
Rosscarbery Bay	CW05003177RY1001	05/08/2020	BOD - 5 days (Total)	mg/l	1.4	1	1.4	
Rosscarbery Bay	CW05003177RY1002	18/11/2020	BOD - 5 days (Total)	mg/l	1.3	1	1.3	
Rosscarbery Bay	CW05003177RY1001	02/08/2017	BOD - 5 days (Total)	mg/l	2.3	1	2.3	
Rosscarbery Bay	CW05003177RY1002	08/11/2017	BOD - 5 days (Total)	mg/l		1	0.5	<1.0
Rosscarbery Bay	CW05003177RY1002	07/03/2018	BOD - 5 days (Total)	mg/l		1	0.5	<1.0
Rosscarbery Bay	CW05003177RY1002	04/07/2018	BOD - 5 days (Total)	mg/l		1	0.5	<1.0
Rosscarbery Bay	CW05003177RY1002	01/08/2018	BOD - 5 days (Total)	mg/l		1	0.5	<1.0
Rosscarbery Bay	CW05003177RY1001	06/02/2019	BOD - 5 days (Total)	mg/l		1	0.5	<1.0
Rosscarbery Bay	CW05003177RY1001	19/06/2019	BOD - 5 days (Total)	mg/l	1.8	1	1.8	
Rosscarbery Bay	CW05003177RY1002	04/05/2016	BOD - 5 days (Total)	mg/l	1.1	1	1.1	
Rosscarbery Bay	CW05003177RY1001	04/05/2016	BOD - 5 days (Total)	mg/l	2.6	1	2.6	
Rosscarbery Bay	CW05003177RY1002	01/06/2016	BOD - 5 days (Total)	mg/l		1	0.5	<1.0
Rosscarbery Bay	CW05003177RY1001	17/08/2016	BOD - 5 days (Total)	mg/l	1.6	1	1.6	
Rosscarbery Bay	CW05003177RY1002	15/11/2016	BOD - 5 days (Total)	mg/l		1	0.5	<1.0
Rosscarbery Bay	CW05003177RY1001	01/02/2017	BOD - 5 days (Total)	mg/l		1	0.5	<1.0
Rosscarbery Bay	CW05003177RY1002	17/08/2016	BOD - 5 days (Total)	mg/l	1.2	1	1.2	
Rosscarbery Bay	CW05003177RY1002	02/08/2017	BOD - 5 days (Total)	mg/l	1	1	1	
Rosscarbery Bay	CW05003177RY1001	25/10/2017	BOD - 5 days (Total)	mg/l		1	0.5	<1.0
Rosscarbery Bay	CW05003177RY1002	02/05/2018	BOD - 5 days (Total)	mg/l		1	0.5	<1.0
Rosscarbery Bay	CW05003177RY1002	14/11/2018	BOD - 5 days (Total)	mg/l		1	0.5	<1.0
Rosscarbery Bay	CW05003177RY1002	07/08/2019	BOD - 5 days (Total)	mg/l		1	0.5	<1.0
Rosscarbery Bay	CW05003177RY1002	05/08/2020	BOD - 5 days (Total)	mg/l	5.5	1	5.5	
Rosscarbery Bay	CW05003177RY1001	17/02/2021	BOD - 5 days (Total)	mg/l	2.6	1	2.6	
Rosscarbery Bay	CW05003177RY1002	10/03/2021	BOD - 5 days (Total)	mg/l	1.8	1	1.8	
Rosscarbery Bay	CW05003177RY1002	10/07/2019	BOD - 5 days (Total)	mg/l	1	1	1	
Rosscarbery Bay	CW05003177RY1001	07/08/2019	BOD - 5 days (Total)	mg/l		1	0.5	<1.0
Rosscarbery Bay	CW05003177RY1002	12/03/2020	BOD - 5 days (Total)	mg/l	3.1	1	3.1	
Rosscarbery Bay	CW05003177RY1002	08/07/2020	BOD - 5 days (Total)	mg/l		1	0.5	<1.0
Rosscarbery Bay	CW05003177RY1001	07/10/2020	BOD - 5 days (Total)	mg/l	1.1	1	1.1	
Rosscarbery Bay	CW05003177RY1002	09/03/2017	BOD - 5 days (Total)	mg/l		1	0.5	<1.0
Rosscarbery Bay	CW05003177RY1001	21/06/2017	BOD - 5 days (Total)	mg/l	2.1	1	2.1	
Rosscarbery Bay	CW05003177RY1002	05/07/2017	BOD - 5 days (Total)	mg/l	1.1	1	1.1	
Rosscarbery Bay	CW05003177RY1001	07/02/2018	BOD - 5 days (Total)	mg/l		1	0.5	<1.0
Rosscarbery Bay	CW05003177RY1002	13/06/2018	BOD - 5 days (Total)	mg/l	1.2	1	1.2	
Rosscarbery Bay	CW05003177RY1001	13/06/2018	BOD - 5 days (Total)	mg/l	1.4	1	1.4	

Rosscarbery Bay	CW05003177RY1001	01/08/2018	BOD - 5 days (Total)	mg/l	1.1	1	1.1	
Rosscarbery Bay	CW05003177RY1002	06/03/2019	BOD - 5 days (Total)	mg/l	1.3	1	1.3	
Rosscarbery Bay	CW05003177RY1001	16/10/2019	BOD - 5 days (Total)	mg/l		1	0.5	<1.0
Rosscarbery Bay	CW05003177RY1002	13/05/2020	BOD - 5 days (Total)	mg/l	2	1	2	
Rosscarbery Bay	CW05003177RY1002	03/06/2020	BOD - 5 days (Total)	mg/l		1	0.5	<1.0
Rosscarbery Bay	CW05003177RY1002	05/05/2021	BOD - 5 days (Total)	mg/l	1.1	1	1.1	
Rosscarbery Bay	CW05003177RY1001	09/03/2016	BOD, 5 days with Inhibition	mg/l		1	0.5	<1.0
Rosscarbery Bay	CW05003177RY1002	09/03/2016	BOD, 5 days with Inhibition	mg/l		1	0.5	<1.0
Rosscarbery Bay	CW05003177RY1002	15/11/2016	Dissolved Inorganic Nitrogen	mg/l	0.151	0	0.151	
Rosscarbery Bay	CW05003177RY1002	03/05/2017	Dissolved Inorganic Nitrogen	mg/l	0.16	0	0.16	
Rosscarbery Bay	CW05003177RY1001	25/10/2017	Dissolved Inorganic Nitrogen	mg/l	0.299	0	0.299	
Rosscarbery Bay	CW05003177RY1002	02/05/2018	Dissolved Inorganic Nitrogen	mg/l	0.118	0	0.118	
Rosscarbery Bay	CW05003177RY1002	01/08/2018	Dissolved Inorganic Nitrogen	mg/l	0.12	0	0.12	
Rosscarbery Bay	CW05003177RY1001	01/08/2018	Dissolved Inorganic Nitrogen	mg/l	0.05	0	0.05	
Rosscarbery Bay	CW05003177RY1001	05/08/2020	Dissolved Inorganic Nitrogen	mg/l	0.068	0	0.068	
Rosscarbery Bay	CW05003177RY1002	10/03/2021	Dissolved Inorganic Nitrogen	mg/l	0.444	0	0.444	
Rosscarbery Bay	CW05003177RY1002	09/03/2016	Dissolved Inorganic Nitrogen	mg/l	0.272	0	0.272	
Rosscarbery Bay	CW05003177RY1001	04/10/2016	Dissolved Inorganic Nitrogen	mg/l	0.098	0	0.098	
Rosscarbery Bay	CW05003177RY1002	08/11/2017	Dissolved Inorganic Nitrogen	mg/l	0.237	0	0.237	
Rosscarbery Bay	CW05003177RY1001	09/03/2016	Dissolved Inorganic Nitrogen	mg/l	0.388	0	0.388	
Rosscarbery Bay	CW05003177RY1002	20/07/2016	Dissolved Inorganic Nitrogen	mg/l	0.048	0	0.048	
Rosscarbery Bay	CW05003177RY1001	17/08/2016	Dissolved Inorganic Nitrogen	mg/l	0.174	0	0.174	
Rosscarbery Bay	CW05003177RY1002	09/03/2017	Dissolved Inorganic Nitrogen	mg/l	0.216	0	0.216	
Rosscarbery Bay	CW05003177RY1001	10/10/2018	Dissolved Inorganic Nitrogen	mg/l		0	0.125	<0.25
Rosscarbery Bay	CW05003177RY1002	08/05/2019	Dissolved Inorganic Nitrogen	mg/l	3.5	0	3.5	
Rosscarbery Bay	CW05003177RY1002	07/08/2019	Dissolved Inorganic Nitrogen	mg/l		0	0.0175	<0.035
Rosscarbery Bay	CW05003177RY1002	12/03/2020	Dissolved Inorganic Nitrogen	mg/l	0.57	0	0.57	
Rosscarbery Bay	CW05003177RY1002	03/06/2020	Dissolved Inorganic Nitrogen	mg/l	0.105	0	0.105	
Rosscarbery Bay	CW05003177RY1002	08/07/2020	Dissolved Inorganic Nitrogen	mg/l	0.06	0	0.06	
Rosscarbery Bay	CW05003177RY1002	05/08/2020	Dissolved Inorganic Nitrogen	mg/l		0	0.0175	<0.035
Rosscarbery Bay	CW05003177RY1001	07/10/2020	Dissolved Inorganic Nitrogen	mg/l	0.555	0	0.555	
Rosscarbery Bay	CW05003177RY1002	18/11/2020	Dissolved Inorganic Nitrogen	mg/l	0.641	0	0.641	
Rosscarbery Bay	CW05003177RY1002	07/03/2018	Dissolved Inorganic Nitrogen	mg/l	0.178	0	0.178	
Rosscarbery Bay	CW05003177RY1001	06/02/2019	Dissolved Inorganic Nitrogen	mg/l		0	0.125	<0.25
Rosscarbery Bay	CW05003177RY1002	06/03/2019	Dissolved Inorganic Nitrogen	mg/l	0.86	0	0.86	
Rosscarbery Bay	CW05003177RY1001	19/06/2019	Dissolved Inorganic Nitrogen	mg/l		0	0.03	<0.06
Rosscarbery Bay	CW05003177RY1001	07/08/2019	Dissolved Inorganic Nitrogen	mg/l		0	0.0175	<0.035
Rosscarbery Bay	CW05003177RY1001	16/10/2019	Dissolved Inorganic Nitrogen	mg/l	0.381	0	0.381	
Rosscarbery Bay	CW05003177RY1002	13/11/2019	Dissolved Inorganic Nitrogen	mg/l	0.393	0	0.393	
Rosscarbery Bay	CW05003177RY1002	13/05/2020	Dissolved Inorganic Nitrogen	mg/l		0	0.0175	<0.035
Rosscarbery Bay	CW05003177RY1001	03/06/2020	Dissolved Inorganic Nitrogen	mg/l		0	0.0175	<0.035
Rosscarbery Bay	CW05003177RY1002	01/06/2016	Dissolved Inorganic Nitrogen	mg/l	0.061	0	0.061	
Rosscarbery Bay	CW05003177RY1002	17/08/2016	Dissolved Inorganic Nitrogen	mg/l	0.066	0	0.066	
Rosscarbery Bay	CW05003177RY1002	21/06/2017	Dissolved Inorganic Nitrogen	mg/l	0.108	0	0.108	
Rosscarbery Bay	CW05003177RY1002	05/07/2017	Dissolved Inorganic Nitrogen	mg/l	0.058	0	0.058	
Rosscarbery Bay	CW05003177RY1001	02/08/2017	Dissolved Inorganic Nitrogen	mg/l	0.032	0	0.032	
Rosscarbery Bay	CW05003177RY1002	02/08/2017	Dissolved Inorganic Nitrogen	mg/l	0.075	0	0.075	
Rosscarbery Bay	CW05003177RY1001	07/02/2018	Dissolved Inorganic Nitrogen	mg/l	0.194	0	0.194	
Rosscarbery Bay	CW05003177RY1002	13/06/2018	Dissolved Inorganic Nitrogen	mg/l		0	0.125	<0.25
Rosscarbery Bay	CW05003177RY1001	13/06/2018	Dissolved Inorganic Nitrogen	mg/l		0	0.125	<0.25
Rosscarbery Bay	CW05003177RY1002	04/07/2018	Dissolved Inorganic Nitrogen	mg/l	0.14	0	0.14	
Rosscarbery Bay	CW05003177RY1002	19/06/2019	Dissolved Inorganic Nitrogen	mg/l		0	0.03	<0.06
Rosscarbery Bay	CW05003177RY1002	10/07/2019	Dissolved Inorganic Nitrogen	mg/l		0	0.0175	<0.035
Rosscarbery Bay	CW05003177RY1001	05/02/2020	Dissolved Inorganic Nitrogen	mg/l	0.183	0	0.183	
Rosscarbery Bay	CW05003177RY1001	17/02/2021	Dissolved Inorganic Nitrogen	mg/l	0.526	0	0.526	
Rosscarbery Bay	CW05003177RY1002	05/05/2021	Dissolved Inorganic Nitrogen	mg/l	1.3	0	1.3	
Rosscarbery Bay	CW05003177RY1002	13/06/2018	Dissolved Oxygen	% Saturation	103	0	103	
Rosscarbery Bay	CW05003177RY1002	01/08/2018	Dissolved Oxygen	% Saturation	98.4	0	98.4	
Rosscarbery Bay	CW05003177RY1002	14/11/2018	Dissolved Oxygen	% Saturation	100	0	100	
Rosscarbery Bay	CW05003177RY1002	06/03/2019	Dissolved Oxygen	% Saturation	100.2	0	100.2	
Rosscarbery Bay	CW05003177RY1001	07/02/2018	Dissolved Oxygen	% Saturation	100	0	100	
Rosscarbery Bay	CW05003177RY1001	13/06/2018	Dissolved Oxygen	% Saturation	104.5	0	104.5	
Rosscarbery Bay	CW05003177RY1002	04/07/2018	Dissolved Oxygen	% Saturation	101.9	0	101.9	
Rosscarbery Bay	CW05003177RY1001	10/10/2018	Dissolved Oxygen	% Saturation	101.8	0	101.8	
Rosscarbery Bay	CW05003177RY1001	07/08/2019	Dissolved Oxygen	% Saturation	99.5	0	99.5	
Rosscarbery Bay	CW05003177RY1001	05/02/2020	Dissolved Oxygen	% Saturation	105.2	0	105.2	
Rosscarbery Bay	CW05003177RY1002	12/03/2020	Dissolved Oxygen	% Saturation	102.1	0	102.1	
Rosscarbery Bay	CW05003177RY1002	13/05/2020	Dissolved Oxygen	% Saturation	102.8	0	102.8	
Rosscarbery Bay	CW05003177RY1002	08/07/2020	Dissolved Oxygen	% Saturation	98.3	0	98.3	
Rosscarbery Bay	CW05003177RY1001	17/02/2021	Dissolved Oxygen	% Saturation	100.7	0	100.7	
Rosscarbery Bay	CW05003177RY1002	05/05/2021	Dissolved Oxygen	% Saturation	101.8	0	101.8	
Rosscarbery Bay	CW05003177RY1002	10/07/2019	Dissolved Oxygen	% Saturation	100.7	0	100.7	
Rosscarbery Bay	CW05003177RY1001	16/10/2019	Dissolved Oxygen	% Saturation	98.7	0	98.7	
Rosscarbery Bay	CW05003177RY1001	03/06/2020	Dissolved Oxygen	% Saturation	133.7	0	133.7	
Rosscarbery Bay	CW05003177RY1001	07/10/2020	Dissolved Oxygen	% Saturation	100.1	0	100.1	
Rosscarbery Bay	CW05003177RY1002	07/03/2018	Dissolved Oxygen	% Saturation	100.8	0	100.8	
Rosscarbery Bay	CW05003177RY1002	02/05/2018	Dissolved Oxygen	% Saturation	102.6	0	102.6	
Rosscarbery Bay	CW05003177RY1002	07/08/2019	Dissolved Oxygen	% Saturation	97.4	0	97.4	
Rosscarbery Bay	CW05003177RY1002	13/11/2019	Dissolved Oxygen	% Saturation	98.3	0	98.3	

Rosscarbery Bay	CW05003177RY1002	18/11/2020	Dissolved Oxygen	% Saturation	100.9	0	100.9	
Rosscarbery Bay	CW05003177RY1002	10/03/2021	Dissolved Oxygen	% Saturation	100.8	0	100.8	
Rosscarbery Bay	CW05003177RY1001	01/08/2018	Dissolved Oxygen	% Saturation	98.5	0	98.5	
Rosscarbery Bay	CW05003177RY1001	06/02/2019	Dissolved Oxygen	% Saturation	99.6	0	99.6	
Rosscarbery Bay	CW05003177RY1002	08/05/2019	Dissolved Oxygen	% Saturation	100.5	0	100.5	
Rosscarbery Bay	CW05003177RY1001	19/06/2019	Dissolved Oxygen	% Saturation	103.4	0	103.4	
Rosscarbery Bay	CW05003177RY1002	19/06/2019	Dissolved Oxygen	% Saturation	105	0	105	
Rosscarbery Bay	CW05003177RY1002	03/06/2020	Dissolved Oxygen	% Saturation	106.1	0	106.1	
Rosscarbery Bay	CW05003177RY1002	05/08/2020	Dissolved Oxygen	% Saturation	100.5	0	100.5	
Rosscarbery Bay	CW05003177RY1002	02/05/2018	E. Coli	cfu/100ml	26	0	26	
Rosscarbery Bay	CW05003177RY1001	01/02/2017	E. Coli	cfu/100ml	13	0	13	
Rosscarbery Bay	CW05003177RY1002	03/05/2017	E. Coli	cfu/100ml	7	0	7	
Rosscarbery Bay	CW05003177RY1001	07/02/2018	E. Coli	cfu/100ml		0	0.5	<1
Rosscarbery Bay	CW05003177RY1001	13/06/2018	E. Coli	cfu/100ml		0	5	<10
Rosscarbery Bay	CW05003177RY1001	19/06/2019	E. Coli	no./100mls	20	0	20	
Rosscarbery Bay	CW05003177RY1001	05/02/2020	E. Coli	no./100mls		0	5	<10
Rosscarbery Bay	CW05003177RY1002	13/05/2020	E. Coli	no./100mls		0	5	<10
Rosscarbery Bay	CW05003177RY1001	06/02/2019	E. Coli	no./100mls	10	0	10	
Rosscarbery Bay	CW05003177RY1002	08/05/2019	E. Coli	no./100mls	19863	0	19863	
Rosscarbery Bay	CW05003177RY1002	19/06/2019	E. Coli	no./100mls		0	5	<10
Rosscarbery Bay	CW05003177RY1002	08/07/2020	E. Coli	no./100mls	31	0	31	
Rosscarbery Bay	CW05003177RY1001	05/08/2020	E. Coli	no./100mls	121	0	121	
Rosscarbery Bay	CW05003177RY1001	07/10/2020	E. Coli	no./100mls	5012	0	5012	
Rosscarbery Bay	CW05003177RY1002	18/11/2020	E. Coli	no./100mls	168	0	168	
Rosscarbery Bay	CW05003177RY1001	21/06/2017	E. Coli	cfu/100ml	6	0	6	
Rosscarbery Bay	CW05003177RY1001	02/08/2017	E. Coli	cfu/100ml	12	0	12	
Rosscarbery Bay	CW05003177RY1002	02/08/2017	E. Coli	cfu/100ml	10	0	10	
Rosscarbery Bay	CW05003177RY1002	15/11/2017	E. Coli	cfu/100ml	9	0	9	
Rosscarbery Bay	CW05003177RY1002	07/03/2018	E. Coli	cfu/100ml	12	0	12	
Rosscarbery Bay	CW05003177RY1002	13/06/2018	E. Coli	cfu/100ml	120	0	120	
Rosscarbery Bay	CW05003177RY1002	14/11/2018	E. Coli	no./100mls	108	0	108	
Rosscarbery Bay	CW05003177RY1002	07/08/2019	E. Coli	no./100mls	52	0	52	
Rosscarbery Bay	CW05003177RY1001	07/08/2019	E. Coli	no./100mls		0	5	<10
Rosscarbery Bay	CW05003177RY1001	16/10/2019	E. Coli	no./100mls	20	0	20	
Rosscarbery Bay	CW05003177RY1002	13/11/2019	E. Coli	no./100mls	161	0	161	
Rosscarbery Bay	CW05003177RY1002	05/08/2020	E. Coli	no./100mls	457	0	457	
Rosscarbery Bay	CW05003177RY1001	17/02/2021	E. Coli	no./100mls	374	0	374	
Rosscarbery Bay	CW05003177RY1001	17/08/2016	E. Coli	MPN/100ml	53	0	53	
Rosscarbery Bay	CW05003177RY1002	15/11/2016	E. Coli	MPN/100ml	60	0	60	
Rosscarbery Bay	CW05003177RY1002	09/03/2017	E. Coli	cfu/100ml	0	0	0	
Rosscarbery Bay	CW05003177RY1002	21/06/2017	E. Coli	cfu/100ml	9	0	9	
Rosscarbery Bay	CW05003177RY1001	25/10/2017	E. Coli	cfu/100ml		0	0.5	<1
Rosscarbery Bay	CW05003177RY1002	04/07/2018	E. Coli	cfu/100ml	20	0	20	
Rosscarbery Bay	CW05003177RY1002	01/08/2018	E. Coli	cfu/100ml	10	0	10	
Rosscarbery Bay	CW05003177RY1001	01/08/2018	E. Coli	cfu/100ml	457	0	457	
Rosscarbery Bay	CW05003177RY1001	10/10/2018	E. Coli	no./100mls		0	50	<100
Rosscarbery Bay	CW05003177RY1002	06/03/2019	E. Coli	no./100mls	833	0	833	
Rosscarbery Bay	CW05003177RY1002	10/07/2019	E. Coli	no./100mls	41	0	41	
Rosscarbery Bay	CW05003177RY1002	12/03/2020	E. Coli	no./100mls	389	0	389	
Rosscarbery Bay	CW05003177RY1001	03/06/2020	E. Coli	no./100mls	20	0	20	
Rosscarbery Bay	CW05003177RY1002	03/06/2020	E. Coli	no./100mls		0	5	<10
Rosscarbery Bay	CW05003177RY1002	10/03/2021	E. Coli	no./100mls	63	0	63	
Rosscarbery Bay	CW05003177RY1002	05/05/2021	E. Coli	no./100mls		0	5	<10
Rosscarbery Bay	CW05003177RY1001	07/02/2018	Enterococci (Intestinal)	cfu/100ml		0	0.5	<1
Rosscarbery Bay	CW05003177RY1002	13/06/2018	Enterococci (Intestinal)	cfu/100ml	41	0	41	
Rosscarbery Bay	CW05003177RY1001	06/02/2019	Enterococci (Intestinal)	no./100mls	10	0	10	
Rosscarbery Bay	CW05003177RY1002	12/03/2020	Enterococci (Intestinal)	no./100mls	63	0	63	
Rosscarbery Bay	CW05003177RY1001	17/02/2021	Enterococci (Intestinal)	no./100mls	20	0	20	
Rosscarbery Bay	CW05003177RY1002	01/08/2018	Enterococci (Intestinal)	cfu/100ml	10	0	10	
Rosscarbery Bay	CW05003177RY1001	01/08/2018	Enterococci (Intestinal)	cfu/100ml	41	0	41	
Rosscarbery Bay	CW05003177RY1001	10/10/2018	Enterococci (Intestinal)	no./100mls		0	50	<100
Rosscarbery Bay	CW05003177RY1002	06/03/2019	Enterococci (Intestinal)	no./100mls	233	0	233	
Rosscarbery Bay	CW05003177RY1001	19/06/2019	Enterococci (Intestinal)	no./100mls	10	0	10	
Rosscarbery Bay	CW05003177RY1002	07/08/2019	Enterococci (Intestinal)	no./100mls		0	5	<10
Rosscarbery Bay	CW05003177RY1002	13/11/2019	Enterococci (Intestinal)	no./100mls	10	0	10	
Rosscarbery Bay	CW05003177RY1002	05/05/2021	Enterococci (Intestinal)	no./100mls		0	5	<10
Rosscarbery Bay	CW05003177RY1001	05/02/2020	Enterococci (Intestinal)	no./100mls		0	5	<10
Rosscarbery Bay	CW05003177RY1002	05/08/2020	Enterococci (Intestinal)	no./100mls	98	0	98	
Rosscarbery Bay	CW05003177RY1001	07/10/2020	Enterococci (Intestinal)	no./100mls	520	0	520	
Rosscarbery Bay	CW05003177RY1002	14/11/2018	Enterococci (Intestinal)	no./100mls	97	0	97	
Rosscarbery Bay	CW05003177RY1002	08/05/2019	Enterococci (Intestinal)	no./100mls	985	0	985	
Rosscarbery Bay	CW05003177RY1002	19/06/2019	Enterococci (Intestinal)	no./100mls	20	0	20	
Rosscarbery Bay	CW05003177RY1002	10/07/2019	Enterococci (Intestinal)	no./100mls	30	0	30	
Rosscarbery Bay	CW05003177RY1001	16/10/2019	Enterococci (Intestinal)	no./100mls	52	0	52	
Rosscarbery Bay	CW05003177RY1002	13/05/2020	Enterococci (Intestinal)	no./100mls		0	5	<10
Rosscarbery Bay	CW05003177RY1002	03/06/2020	Enterococci (Intestinal)	no./100mls		0	5	<10
Rosscarbery Bay	CW05003177RY1001	05/08/2020	Enterococci (Intestinal)	no./100mls	85	0	85	
Rosscarbery Bay	CW05003177RY1002	18/11/2020	Enterococci (Intestinal)	no./100mls	20	0	20	
Rosscarbery Bay	CW05003177RY1002	10/03/2021	Enterococci (Intestinal)	no./100mls	74	0	74	

Rosscarbery Bay	CW05003177RY1002	02/05/2018	Enterococci (Intestinal)	cfu/100ml	5	0	5	
Rosscarbery Bay	CW05003177RY1001	07/08/2019	Enterococci (Intestinal)	no./100mls		0	5	<10
Rosscarbery Bay	CW05003177RY1001	03/06/2020	Enterococci (Intestinal)	no./100mls	10	0	10	
Rosscarbery Bay	CW05003177RY1002	08/07/2020	Enterococci (Intestinal)	no./100mls	20	0	20	
Rosscarbery Bay	CW05003177RY1002	07/03/2018	Faecal coliforms	cfu/100ml	12	0	12	
Rosscarbery Bay	CW05003177RY1002	13/06/2018	Faecal coliforms	cfu/100ml	364	0	364	
Rosscarbery Bay	CW05003177RY1001	13/06/2018	Faecal coliforms	cfu/100ml	20	0	20	
Rosscarbery Bay	CW05003177RY1002	08/05/2019	Faecal coliforms	no./100mls	12033	0	12033	
Rosscarbery Bay	CW05003177RY1001	07/08/2019	Faecal coliforms	no./100mls	20	0	20	
Rosscarbery Bay	CW05003177RY1002	13/05/2020	Faecal coliforms	no./100mls		0	5	<10
Rosscarbery Bay	CW05003177RY1002	08/07/2020	Faecal coliforms	no./100mls	52	0	52	
Rosscarbery Bay	CW05003177RY1002	01/08/2018	Faecal coliforms	cfu/100ml	41	0	41	
Rosscarbery Bay	CW05003177RY1002	14/11/2018	Faecal coliforms	no./100mls	189	0	189	
Rosscarbery Bay	CW05003177RY1002	06/03/2019	Faecal coliforms	no./100mls	1782	0	1782	
Rosscarbery Bay	CW05003177RY1001	19/06/2019	Faecal coliforms	no./100mls		0	5	<10
Rosscarbery Bay	CW05003177RY1002	19/06/2019	Faecal coliforms	no./100mls		0	5	<10
Rosscarbery Bay	CW05003177RY1002	10/07/2019	Faecal coliforms	no./100mls	30	0	30	
Rosscarbery Bay	CW05003177RY1001	16/10/2019	Faecal coliforms	no./100mls	41	0	41	
Rosscarbery Bay	CW05003177RY1001	03/06/2020	Faecal coliforms	no./100mls	31	0	31	
Rosscarbery Bay	CW05003177RY1002	05/08/2020	Faecal coliforms	no./100mls	689	0	689	
Rosscarbery Bay	CW05003177RY1001	07/10/2020	Faecal coliforms	no./100mls	15531	0	15531	
Rosscarbery Bay	CW05003177RY1002	02/05/2018	Faecal coliforms	cfu/100ml	26	0	26	
Rosscarbery Bay	CW05003177RY1002	04/07/2018	Faecal coliforms	cfu/100ml		0	5	<10
Rosscarbery Bay	CW05003177RY1001	01/08/2018	Faecal coliforms	cfu/100ml	439	0	439	
Rosscarbery Bay	CW05003177RY1001	10/10/2018	Faecal coliforms	no./100mls	100	0	100	
Rosscarbery Bay	CW05003177RY1001	06/02/2019	Faecal coliforms	no./100mls	86	0	86	
Rosscarbery Bay	CW05003177RY1002	18/11/2020	Faecal coliforms	no./100mls	148	0	148	
Rosscarbery Bay	CW05003177RY1002	01/06/2016	Faecal coliforms	no./100mls	23	0	23	
Rosscarbery Bay	CW05003177RY1001	04/10/2016	Faecal coliforms	no./100mls		0	15	<30
Rosscarbery Bay	CW05003177RY1002	09/03/2017	Faecal coliforms	cfu/100ml	0	0	0	
Rosscarbery Bay	CW05003177RY1002	03/05/2017	Faecal coliforms	cfu/100ml	7	0	7	
Rosscarbery Bay	CW05003177RY1001	07/02/2018	Faecal coliforms	cfu/100ml		0	0.5	<1
Rosscarbery Bay	CW05003177RY1002	07/08/2019	Faecal coliforms	no./100mls	63	0	63	
Rosscarbery Bay	CW05003177RY1002	13/11/2019	Faecal coliforms	no./100mls	233	0	233	
Rosscarbery Bay	CW05003177RY1001	05/02/2020	Faecal coliforms	no./100mls	10	0	10	
Rosscarbery Bay	CW05003177RY1002	12/03/2020	Faecal coliforms	no./100mls	359	0	359	
Rosscarbery Bay	CW05003177RY1002	03/06/2020	Faecal coliforms	no./100mls		0	5	<10
Rosscarbery Bay	CW05003177RY1001	05/08/2020	Faecal coliforms	no./100mls	145	0	145	
Rosscarbery Bay	CW05003177RY1001	17/02/2021	Faecal coliforms	no./100mls	228	0	228	
Rosscarbery Bay	CW05003177RY1002	10/03/2021	Faecal coliforms	no./100mls	213	0	213	
Rosscarbery Bay	CW05003177RY1002	05/05/2021	Faecal coliforms	no./100mls	10	0	10	
Rosscarbery Bay	CW05003177RY1001	21/06/2017	ortho-Phosphate (as P) - u	mg/l	0.004	0	0.004	
Rosscarbery Bay	CW05003177RY1001	13/06/2018	ortho-Phosphate (as P) - u	mg/l		0	0.005	<0.01
Rosscarbery Bay	CW05003177RY1001	10/10/2018	ortho-Phosphate (as P) - u	mg/l	0.01	0	0.01	
Rosscarbery Bay	CW05003177RY1001	19/06/2019	ortho-Phosphate (as P) - u	mg/l		0	0.005	<0.01
Rosscarbery Bay	CW05003177RY1001	04/05/2016	ortho-Phosphate (as P) - u	mg/l	0.007	0	0.007	
Rosscarbery Bay	CW05003177RY1001	01/02/2017	ortho-Phosphate (as P) - u	mg/l	0.018	0	0.018	
Rosscarbery Bay	CW05003177RY1001	02/08/2017	ortho-Phosphate (as P) - u	mg/l	0.007	0	0.007	
Rosscarbery Bay	CW05003177RY1002	13/06/2018	ortho-Phosphate (as P) - u	mg/l		0	0.005	<0.01
Rosscarbery Bay	CW05003177RY1001	06/02/2019	ortho-Phosphate (as P) - u	mg/l		0	0.005	<0.01
Rosscarbery Bay	CW05003177RY1001	05/02/2020	ortho-Phosphate (as P) - u	mg/l	0.02	0	0.02	
Rosscarbery Bay	CW05003177RY1001	07/10/2020	ortho-Phosphate (as P) - u	mg/l	0.08	0	0.08	
Rosscarbery Bay	CW05003177RY1001	25/10/2017	ortho-Phosphate (as P) - u	mg/l	0.02	0	0.02	
Rosscarbery Bay	CW05003177RY1001	07/02/2018	ortho-Phosphate (as P) - u	mg/l	0.021	0	0.021	
Rosscarbery Bay	CW05003177RY1002	02/05/2018	ortho-Phosphate (as P) - u	mg/l	0.011	0	0.011	
Rosscarbery Bay	CW05003177RY1001	01/08/2018	ortho-Phosphate (as P) - u	mg/l	0.01	0	0.01	
Rosscarbery Bay	CW05003177RY1001	07/08/2019	ortho-Phosphate (as P) - u	mg/l	0.03	0	0.03	
Rosscarbery Bay	CW05003177RY1001	03/06/2020	ortho-Phosphate (as P) - u	mg/l		0	0.005	<0.01
Rosscarbery Bay	CW05003177RY1001	17/02/2021	ortho-Phosphate (as P) - u	mg/l	0.01	0	0.01	
Rosscarbery Bay	CW05003177RY1001	09/03/2016	ortho-Phosphate (as P) - u	mg/l	0.033	0	0.033	
Rosscarbery Bay	CW05003177RY1001	17/08/2016	ortho-Phosphate (as P) - u	mg/l	0.024	0	0.024	
Rosscarbery Bay	CW05003177RY1001	04/10/2016	ortho-Phosphate (as P) - u	mg/l	0.013	0	0.013	
Rosscarbery Bay	CW05003177RY1001	16/10/2019	ortho-Phosphate (as P) - u	mg/l	0.02	0	0.02	
Rosscarbery Bay	CW05003177RY1001	05/08/2020	ortho-Phosphate (as P) - u	mg/l		0	0.005	<0.01
Rosscarbery Bay	CW05003177RY1001	01/08/2018	pH	pH units	8.1	2	8.1	
Rosscarbery Bay	CW05003177RY1002	14/11/2018	pH	pH units	8	2	8	
Rosscarbery Bay	CW05003177RY1001	06/02/2019	pH	pH units	8	2	8	
Rosscarbery Bay	CW05003177RY1002	06/03/2019	pH	pH units	8	2	8	
Rosscarbery Bay	CW05003177RY1001	19/06/2019	pH	pH units	8	2	8	
Rosscarbery Bay	CW05003177RY1002	12/03/2020	pH	pH units	7.9	2	7.9	
Rosscarbery Bay	CW05003177RY1002	13/05/2020	pH	pH units	8.1	2	8.1	
Rosscarbery Bay	CW05003177RY1001	03/06/2020	pH	pH units	8.2	2	8.2	
Rosscarbery Bay	CW05003177RY1002	05/08/2020	pH	pH units	8.2	2	8.2	
Rosscarbery Bay	CW05003177RY1001	02/08/2017	pH	pH units	8.1	2	8.1	
Rosscarbery Bay	CW05003177RY1002	02/08/2017	pH	pH units	8	2	8	
Rosscarbery Bay	CW05003177RY1002	08/11/2017	pH	pH units	8	2	8	
Rosscarbery Bay	CW05003177RY1002	07/03/2018	pH	pH units	7.9	2	7.9	
Rosscarbery Bay	CW05003177RY1002	13/06/2018	pH	pH units	8.1	2	8.1	
Rosscarbery Bay	CW05003177RY1002	04/07/2018	pH	pH units	8.1	2	8.1	

Rosscarbery Bay	CW05003177RY1002	01/08/2018	pH	pH units	8	2	8	
Rosscarbery Bay	CW05003177RY1002	08/05/2019	pH	pH units	7.7	2	7.7	
Rosscarbery Bay	CW05003177RY1002	10/07/2019	pH	pH units	8.1	2	8.1	
Rosscarbery Bay	CW05003177RY1002	07/08/2019	pH	pH units	8	2	8	
Rosscarbery Bay	CW05003177RY1002	10/03/2021	pH	pH units	7.9	2	7.9	
Rosscarbery Bay	CW05003177RY1002	09/03/2016	pH	pH units	8	2	8	
Rosscarbery Bay	CW05003177RY1002	20/07/2016	pH	pH units	8.1	2	8.1	
Rosscarbery Bay	CW05003177RY1002	09/03/2017	pH	pH units	7.9	2	7.9	
Rosscarbery Bay	CW05003177RY1001	25/10/2017	pH	pH units	7.9	2	7.9	
Rosscarbery Bay	CW05003177RY1001	07/02/2018	pH	pH units	8	2	8	
Rosscarbery Bay	CW05003177RY1001	10/10/2018	pH	pH units	8	2	8	
Rosscarbery Bay	CW05003177RY1002	19/06/2019	pH	pH units	8.1	2	8.1	
Rosscarbery Bay	CW05003177RY1001	07/08/2019	pH	pH units	8	2	8	
Rosscarbery Bay	CW05003177RY1001	05/08/2020	pH	pH units	8	2	8	
Rosscarbery Bay	CW05003177RY1002	18/11/2020	pH	pH units	7.9	2	7.9	
Rosscarbery Bay	CW05003177RY1001	17/02/2021	pH	pH units	8	2	8	
Rosscarbery Bay	CW05003177RY1002	05/05/2021	pH	pH units	8	2	8	
Rosscarbery Bay	CW05003177RY1001	04/05/2016	pH	pH units	8.3	2	8.3	
Rosscarbery Bay	CW05003177RY1002	15/11/2016	pH	pH units	8	2	8	
Rosscarbery Bay	CW05003177RY1001	01/02/2017	pH	pH units	7.9	2	7.9	
Rosscarbery Bay	CW05003177RY1002	03/05/2017	pH	pH units	8.1	2	8.1	
Rosscarbery Bay	CW05003177RY1001	21/06/2017	pH	pH units	8.3	2	8.3	
Rosscarbery Bay	CW05003177RY1002	02/05/2018	pH	pH units	8	2	8	
Rosscarbery Bay	CW05003177RY1001	13/06/2018	pH	pH units	8.2	2	8.2	
Rosscarbery Bay	CW05003177RY1001	16/10/2019	pH	pH units	8.1	2	8.1	
Rosscarbery Bay	CW05003177RY1002	13/11/2019	pH	pH units	7.9	2	7.9	
Rosscarbery Bay	CW05003177RY1001	05/02/2020	pH	pH units	7.8	2	7.8	
Rosscarbery Bay	CW05003177RY1002	03/06/2020	pH	pH units	8.1	2	8.1	
Rosscarbery Bay	CW05003177RY1002	08/07/2020	pH	pH units	7.9	2	7.9	
Rosscarbery Bay	CW05003177RY1001	07/10/2020	pH	pH units	8	2	8	
Rosscarbery Bay	CW05003177RY1002	09/03/2017	Suspended Solids	mg/l	47	2.5	47	
Rosscarbery Bay	CW05003177RY1002	04/07/2018	Suspended Solids	mg/l	15	2.5	15	
Rosscarbery Bay	CW05003177RY1002	14/11/2018	Suspended Solids	mg/l	24	2.5	24	
Rosscarbery Bay	CW05003177RY1002	06/03/2019	Suspended Solids	mg/l	33	2.5	33	
Rosscarbery Bay	CW05003177RY1002	03/06/2020	Suspended Solids	mg/l	16	2.5	16	
Rosscarbery Bay	CW05003177RY1002	08/07/2020	Suspended Solids	mg/l	43	2.5	43	
Rosscarbery Bay	CW05003177RY1002	05/05/2021	Suspended Solids	mg/l	20	2.5	20	
Rosscarbery Bay	CW05003177RY1002	17/08/2016	Suspended Solids	mg/l	11	2.5	11	
Rosscarbery Bay	CW05003177RY1002	15/11/2016	Suspended Solids	mg/l	23	2.5	23	
Rosscarbery Bay	CW05003177RY1002	05/07/2017	Suspended Solids	mg/l	10	2.5	10	
Rosscarbery Bay	CW05003177RY1002	08/11/2017	Suspended Solids	mg/l	21	2.5	21	
Rosscarbery Bay	CW05003177RY1002	07/03/2018	Suspended Solids	mg/l	19	2.5	19	
Rosscarbery Bay	CW05003177RY1002	02/05/2018	Suspended Solids	mg/l	15	2.5	15	
Rosscarbery Bay	CW05003177RY1002	10/07/2019	Suspended Solids	mg/l	21	2.5	21	
Rosscarbery Bay	CW05003177RY1002	07/08/2019	Suspended Solids	mg/l	19	2.5	19	
Rosscarbery Bay	CW05003177RY1002	13/11/2019	Suspended Solids	mg/l	23	2.5	23	
Rosscarbery Bay	CW05003177RY1002	09/03/2016	Suspended Solids	mg/l	46	2.5	46	
Rosscarbery Bay	CW05003177RY1002	20/07/2016	Suspended Solids	mg/l	19	2.5	19	
Rosscarbery Bay	CW05003177RY1002	21/06/2017	Suspended Solids	mg/l	18	2.5	18	
Rosscarbery Bay	CW05003177RY1002	01/08/2018	Suspended Solids	mg/l	18	2.5	18	
Rosscarbery Bay	CW05003177RY1002	08/05/2019	Suspended Solids	mg/l	15	2.5	15	
Rosscarbery Bay	CW05003177RY1002	12/03/2020	Suspended Solids	mg/l	35	2.5	35	
Rosscarbery Bay	CW05003177RY1002	18/11/2020	Suspended Solids	mg/l	21	2.5	21	
Rosscarbery Bay	CW05003177RY1002	10/03/2021	Suspended Solids	mg/l	36	2.5	36	
Rosscarbery Bay	CW05003177RY1002	04/05/2016	Suspended Solids	mg/l	21	2.5	21	
Rosscarbery Bay	CW05003177RY1002	01/06/2016	Suspended Solids	mg/l	24	2.5	24	
Rosscarbery Bay	CW05003177RY1002	02/08/2017	Suspended Solids	mg/l	34	2.5	34	
Rosscarbery Bay	CW05003177RY1002	13/06/2018	Suspended Solids	mg/l	17	2.5	17	
Rosscarbery Bay	CW05003177RY1002	19/06/2019	Suspended Solids	mg/l	23	2.5	23	
Rosscarbery Bay	CW05003177RY1002	13/05/2020	Suspended Solids	mg/l	13	2.5	13	
Rosscarbery Bay	CW05003177RY1002	05/08/2020	Suspended Solids	mg/l	31	2.5	31	
Rosscarbery Bay	CW05003177RY1002	09/03/2016	Temperature	°C	9.1	0	9.1	
Rosscarbery Bay	CW05003177RY1002	01/06/2016	Temperature	°C	15	0	15	
Rosscarbery Bay	CW05003177RY1002	20/07/2016	Temperature	°C	15.8	0	15.8	
Rosscarbery Bay	CW05003177RY1001	17/08/2016	Temperature	°C	18.5	0	18.5	
Rosscarbery Bay	CW05003177RY1002	09/03/2017	Temperature	°C	10.1	0	10.1	
Rosscarbery Bay	CW05003177RY1001	21/06/2017	Temperature	°C	18.8	0	18.8	
Rosscarbery Bay	CW05003177RY1002	05/07/2017	Temperature	°C	17.2	0	17.2	
Rosscarbery Bay	CW05003177RY1002	08/11/2017	Temperature	°C	11.9	0	11.9	
Rosscarbery Bay	CW05003177RY1001	07/02/2018	Temperature	°C	7.5	0	7.5	
Rosscarbery Bay	CW05003177RY1002	04/07/2018	Temperature	°C	18.2	0	18.2	
Rosscarbery Bay	CW05003177RY1001	10/10/2018	Temperature	°C	14.7	0	14.7	
Rosscarbery Bay	CW05003177RY1001	04/10/2016	Temperature	°C	14.7	0	14.7	
Rosscarbery Bay	CW05003177RY1002	15/11/2016	Temperature	°C	13.2	0	13.2	
Rosscarbery Bay	CW05003177RY1001	01/02/2017	Temperature	°C	9.9	0	9.9	
Rosscarbery Bay	CW05003177RY1002	03/05/2017	Temperature	°C	13.7	0	13.7	
Rosscarbery Bay	CW05003177RY1002	02/08/2017	Temperature	°C	15.4	0	15.4	
Rosscarbery Bay	CW05003177RY1002	13/06/2018	Temperature	°C	15.7	0	15.7	
Rosscarbery Bay	CW05003177RY1002	01/08/2018	Temperature	°C	14.2	0	14.2	

Rosscarbery Bay	CW05003177RY1001	01/08/2018	Temperature	°C	15.5	0	15.5	
Rosscarbery Bay	CW05003177RY1002	14/11/2018	Temperature	°C	12.8	0	12.8	
Rosscarbery Bay	CW05003177RY1001	19/06/2019	Temperature	°C	14.6	0	14.6	
Rosscarbery Bay	CW05003177RY1002	03/06/2020	Temperature	°C	16.1	0	16.1	
Rosscarbery Bay	CW05003177RY1002	08/07/2020	Temperature	°C	13.1	0	13.1	
Rosscarbery Bay	CW05003177RY1002	18/11/2020	Temperature	°C	11.1	0	11.1	
Rosscarbery Bay	CW05003177RY1001	06/02/2019	Temperature	°C	8.9	0	8.9	
Rosscarbery Bay	CW05003177RY1002	07/08/2019	Temperature	°C	14.9	0	14.9	
Rosscarbery Bay	CW05003177RY1001	16/10/2019	Temperature	°C	12.2	0	12.2	
Rosscarbery Bay	CW05003177RY1001	03/06/2020	Temperature	°C	17.1	0	17.1	
Rosscarbery Bay	CW05003177RY1001	07/10/2020	Temperature	°C	13.5	0	13.5	
Rosscarbery Bay	CW05003177RY1002	05/05/2021	Temperature	°C	11.1	0	11.1	
Rosscarbery Bay	CW05003177RY1001	09/03/2016	Temperature	°C	11	0	11	
Rosscarbery Bay	CW05003177RY1001	04/05/2016	Temperature	°C	13	0	13	
Rosscarbery Bay	CW05003177RY1002	17/08/2016	Temperature	°C	16.4	0	16.4	
Rosscarbery Bay	CW05003177RY1001	02/08/2017	Temperature	°C	17	0	17	
Rosscarbery Bay	CW05003177RY1002	02/05/2018	Temperature	°C	9.5	0	9.5	
Rosscarbery Bay	CW05003177RY1001	13/06/2018	Temperature	°C	17	0	17	
Rosscarbery Bay	CW05003177RY1002	08/05/2019	Temperature	°C	11.5	0	11.5	
Rosscarbery Bay	CW05003177RY1001	07/08/2019	Temperature	°C	17.6	0	17.6	
Rosscarbery Bay	CW05003177RY1002	13/11/2019	Temperature	°C	6	0	6	
Rosscarbery Bay	CW05003177RY1001	05/02/2020	Temperature	°C	12.1	0	12.1	
Rosscarbery Bay	CW05003177RY1002	12/03/2020	Temperature	°C	10	0	10	
Rosscarbery Bay	CW05003177RY1002	13/05/2020	Temperature	°C	11.3	0	11.3	
Rosscarbery Bay	CW05003177RY1001	17/02/2021	Temperature	°C	10.8	0	10.8	
Rosscarbery Bay	CW05003177RY1002	04/05/2016	Temperature	°C	10.9	0	10.9	
Rosscarbery Bay	CW05003177RY1002	21/06/2017	Temperature	°C	17	0	17	
Rosscarbery Bay	CW05003177RY1001	25/10/2017	Temperature	°C	12.5	0	12.5	
Rosscarbery Bay	CW05003177RY1002	07/03/2018	Temperature	°C	7.4	0	7.4	
Rosscarbery Bay	CW05003177RY1002	06/03/2019	Temperature	°C	9.1	0	9.1	
Rosscarbery Bay	CW05003177RY1002	19/06/2019	Temperature	°C	14.6	0	14.6	
Rosscarbery Bay	CW05003177RY1002	10/07/2019	Temperature	°C	16.4	0	16.4	
Rosscarbery Bay	CW05003177RY1002	05/08/2020	Temperature	°C	17.5	0	17.5	
Rosscarbery Bay	CW05003177RY1002	10/03/2021	Temperature	°C	9.3	0	9.3	
Rosscarbery Bay	CW05003177RY1002	04/05/2016	Total Oxidised Nitrogen (a	mg/l	0.088	0	0.088	
Rosscarbery Bay	CW05003177RY1001	17/08/2016	Total Oxidised Nitrogen (a	mg/l	0.144	0	0.144	
Rosscarbery Bay	CW05003177RY1001	02/08/2017	Total Oxidised Nitrogen (a	mg/l		0	0.005	<0.010
Rosscarbery Bay	CW05003177RY1002	01/08/2018	Total Oxidised Nitrogen (a	mg/l	0.05	0	0.05	
Rosscarbery Bay	CW05003177RY1001	10/10/2018	Total Oxidised Nitrogen (a	mg/l	0.07	0	0.07	
Rosscarbery Bay	CW05003177RY1001	03/06/2020	Total Oxidised Nitrogen (a	mg/l		0	0.01	<0.02
Rosscarbery Bay	CW05003177RY1002	18/11/2020	Total Oxidised Nitrogen (a	mg/l	0.65	0	0.65	
Rosscarbery Bay	CW05003177RY1001	17/02/2021	Total Oxidised Nitrogen (a	mg/l	0.47	0	0.47	
Rosscarbery Bay	CW05003177RY1001	04/05/2016	Total Oxidised Nitrogen (a	mg/l		0	0.005	<0.010
Rosscarbery Bay	CW05003177RY1001	04/10/2016	Total Oxidised Nitrogen (a	mg/l	0.064	0	0.064	
Rosscarbery Bay	CW05003177RY1002	21/06/2017	Total Oxidised Nitrogen (a	mg/l	0.067	0	0.067	
Rosscarbery Bay	CW05003177RY1001	25/10/2017	Total Oxidised Nitrogen (a	mg/l	0.268	0	0.268	
Rosscarbery Bay	CW05003177RY1002	08/11/2017	Total Oxidised Nitrogen (a	mg/l	0.206	0	0.206	
Rosscarbery Bay	CW05003177RY1001	07/02/2018	Total Oxidised Nitrogen (a	mg/l	0.18	0	0.18	
Rosscarbery Bay	CW05003177RY1001	13/06/2018	Total Oxidised Nitrogen (a	mg/l	0.03	0	0.03	
Rosscarbery Bay	CW05003177RY1002	10/07/2019	Total Oxidised Nitrogen (a	mg/l		0	0.01	<0.02
Rosscarbery Bay	CW05003177RY1001	07/08/2019	Total Oxidised Nitrogen (a	mg/l		0	0.01	<0.02
Rosscarbery Bay	CW05003177RY1001	09/03/2016	Total Oxidised Nitrogen (a	mg/l	0.343	0	0.343	
Rosscarbery Bay	CW05003177RY1001	16/10/2019	Total Oxidised Nitrogen (a	mg/l	0.17	0	0.17	
Rosscarbery Bay	CW05003177RY1001	05/08/2020	Total Oxidised Nitrogen (a	mg/l	0.07	0	0.07	
Rosscarbery Bay	CW05003177RY1002	17/08/2016	Total Oxidised Nitrogen (a	mg/l	0.031	0	0.031	
Rosscarbery Bay	CW05003177RY1001	21/06/2017	Total Oxidised Nitrogen (a	mg/l	0.026	0	0.026	
Rosscarbery Bay	CW05003177RY1002	13/06/2018	Total Oxidised Nitrogen (a	mg/l		0	0.01	<0.02
Rosscarbery Bay	CW05003177RY1002	04/07/2018	Total Oxidised Nitrogen (a	mg/l		0	0.01	<0.02
Rosscarbery Bay	CW05003177RY1001	05/02/2020	Total Oxidised Nitrogen (a	mg/l	0.24	0	0.24	
Rosscarbery Bay	CW05003177RY1002	09/03/2016	Total Oxidised Nitrogen (a	mg/l	0.232	0	0.232	
Rosscarbery Bay	CW05003177RY1002	20/07/2016	Total Oxidised Nitrogen (a	mg/l	0.028	0	0.028	
Rosscarbery Bay	CW05003177RY1001	01/08/2018	Total Oxidised Nitrogen (a	mg/l		0	0.01	<0.02
Rosscarbery Bay	CW05003177RY1002	14/11/2018	Total Oxidised Nitrogen (a	mg/l	0.49	0	0.49	
Rosscarbery Bay	CW05003177RY1001	06/02/2019	Total Oxidised Nitrogen (a	mg/l	0.16	0	0.16	
Rosscarbery Bay	CW05003177RY1001	19/06/2019	Total Oxidised Nitrogen (a	mg/l		0	0.01	<0.02
Rosscarbery Bay	CW05003177RY1001	07/10/2020	Total Oxidised Nitrogen (a	mg/l	0.35	0	0.35	



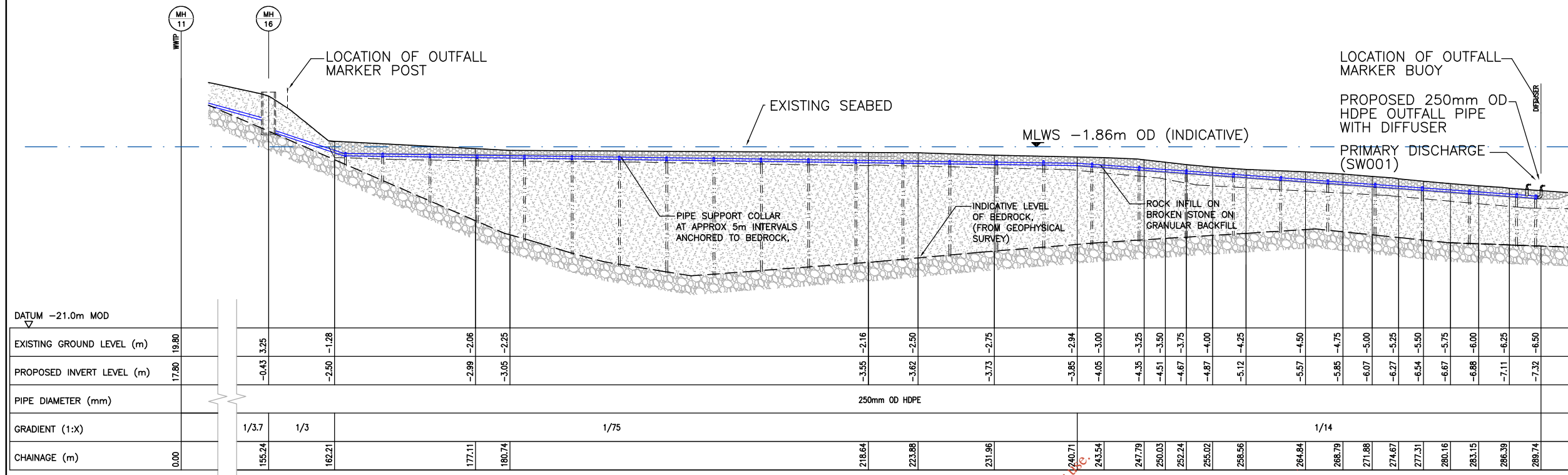
ATTACHMENT NO: C.1 c (i)

DRAWING No. 7

LONGITUDINAL SECTION OF MARINE OUTFALL &
PRIMARY DISCHARGE POINT

IW-10015228-03-02-006

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LONGITUDINAL SECTION THROUGH TREATED EFFLUENT OUTFALL IN FORESHORE
SCALE 1:500

NOTES:

1. ORDNANCE SURVEY IRELAND LICENCE NUMBER EN 3-3-34.
2. THIS DRAWING TO BE READ IN CONJUNCTION WITH ALL OTHER RELEVANT DRAWINGS.

LEGEND:

- PROPOSED OUTFALL — OUT —
- MLWS OD LEVEL - - - - -
- INDICATIVE SEABED LEVEL ———

00	02.07.21	ISSUED FOR LICENCE APPLICATION	LT	OL	KT
Rev	Date	Description	By	Chk	App

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Working in Partnership



PROJECT

UTAS – CORK BUNDLE
CASTLETOWNSHEND SEWERAGE SCHEME

DRAWING TITLE

DISCHARGE LICENCE APPLICATION
ATTACHMENT C.1
PRIMARY OUTFALL PLAN & SECTION

STATUS

FOR LICENCE APPLICATION

Date: 30.06.21	Scale: 1:500	Drawn: LT	Chk: OL	App: KT
Project No: 257589_00	Drg. No: IW-10015228-03-02-006	Rev:		00



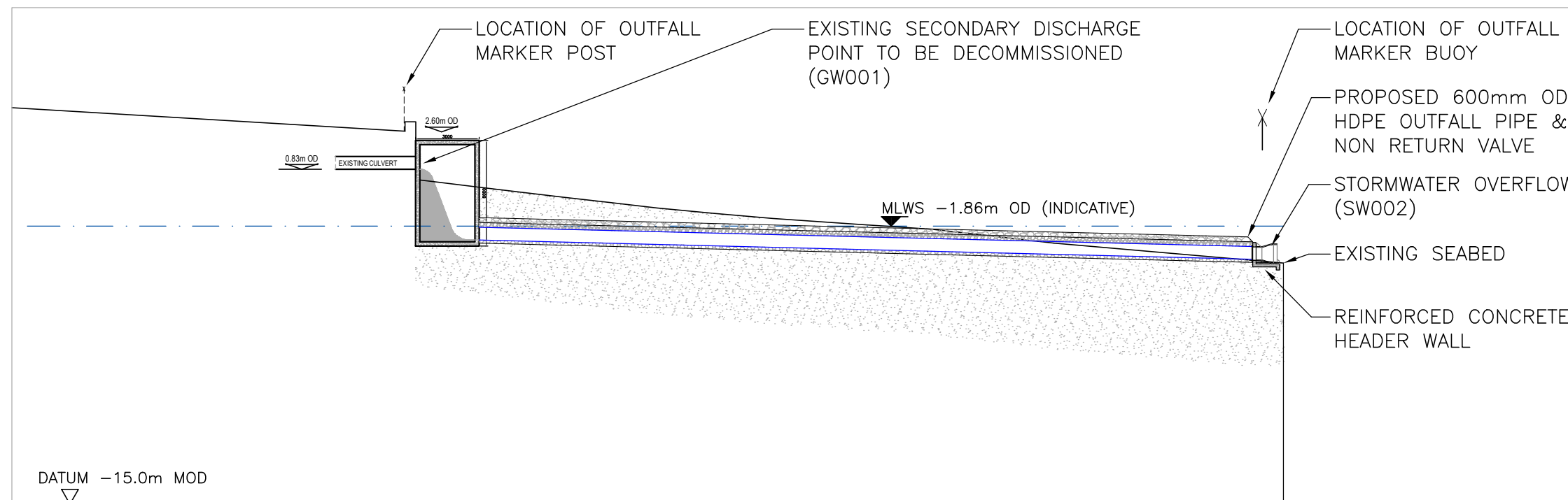
ATTACHMENT NO: C.1 c (ii)

DRAWING No. 8

LONGITUDINAL SECTION OF THE PUMPING
STATION AND STORM OVERFLOW OUTFALL

IW-10015228-03-02-006A

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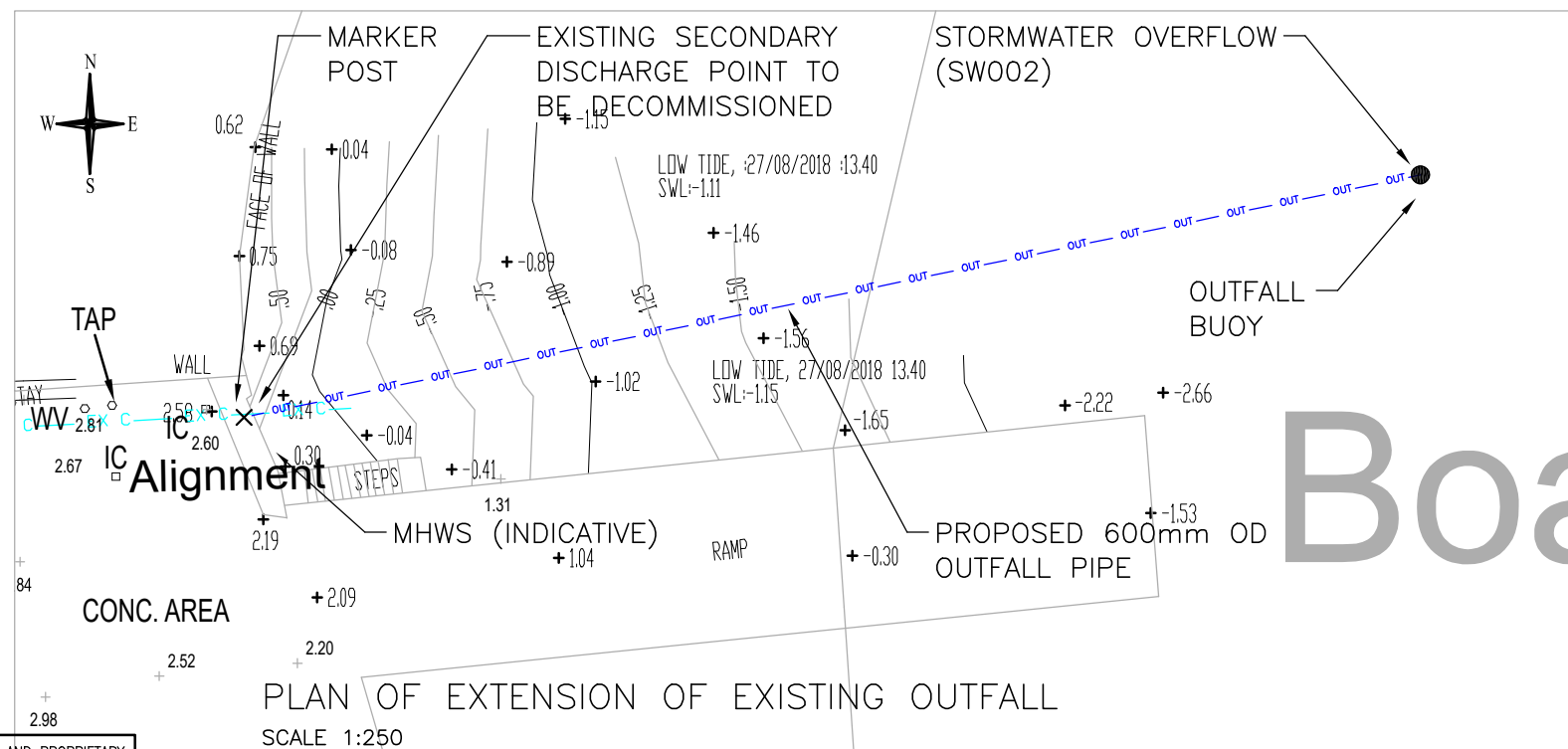


DATUM -15.0m MOD

EXISTING GROUND LEVEL (m)	0.14	0.00	-0.25	-0.50	-0.75	-1.00	-1.25	-1.50	-1.75	-2.00	-2.65	-3.55	-3.60	
PROPOSED INVERT LEVEL (m)	-2.50											-3.50		
PIPE DIAMETER (mm)	600mm OD HDPE													
GRADIENT (1:X)	1/40													
CHAINAGE (m)	0.00	1.20	2.54	4.58	6.73	8.87	11.05	13.73	16.55	20.25	24.04	29.65	40.00	41.00

LONGITUDINAL SECTION THROUGH EXTENSION OF EXISTING OUTFALL

SCALE 1:250



PLAN OF EXTENSION OF EXISTING OUTFALL

SCALE 1:250

GENERAL NOTES

NOTES:

1. ORDNANCE SURVEY IRELAND LICENCE NUMBER EN 3-3-34.
2. THIS DRAWING TO BE READ IN CONJUNCTION WITH ALL OTHER RELEVANT DRAWINGS.

LEGEND:

- PROPOSED OUTFALL ——— OUT ———
- MLWS OD LEVEL - - - - -

00	02.07.21	ISSUED FOR LICENCE APPLICATION	LT	OL	KT
Rev	Date	Description	By	Chk	App

BYRNE LOOBY

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PROJECT

UTAS – CORK BUNDLE
 CASTLETOWNSHEND SEWERAGE SCHEME

DRAWING TITLE

DISCHARGE LICENCE APPLICATION
 ATTACHMENT C.1
 STORMWATER OVERFLOW PLAN & SECTION

STATUS

FOR LICENCE APPLICATION

Date: 30.06.21	Scale: 1:1250	Drawn: LT	Chk: OL	App: KT
Project No: 257589_00	Drg. No: IW-10015228-03-02-006A	Rev: 00		