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**Cork County Council**  
**South Cork Division**



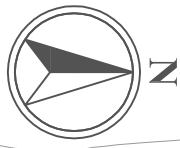
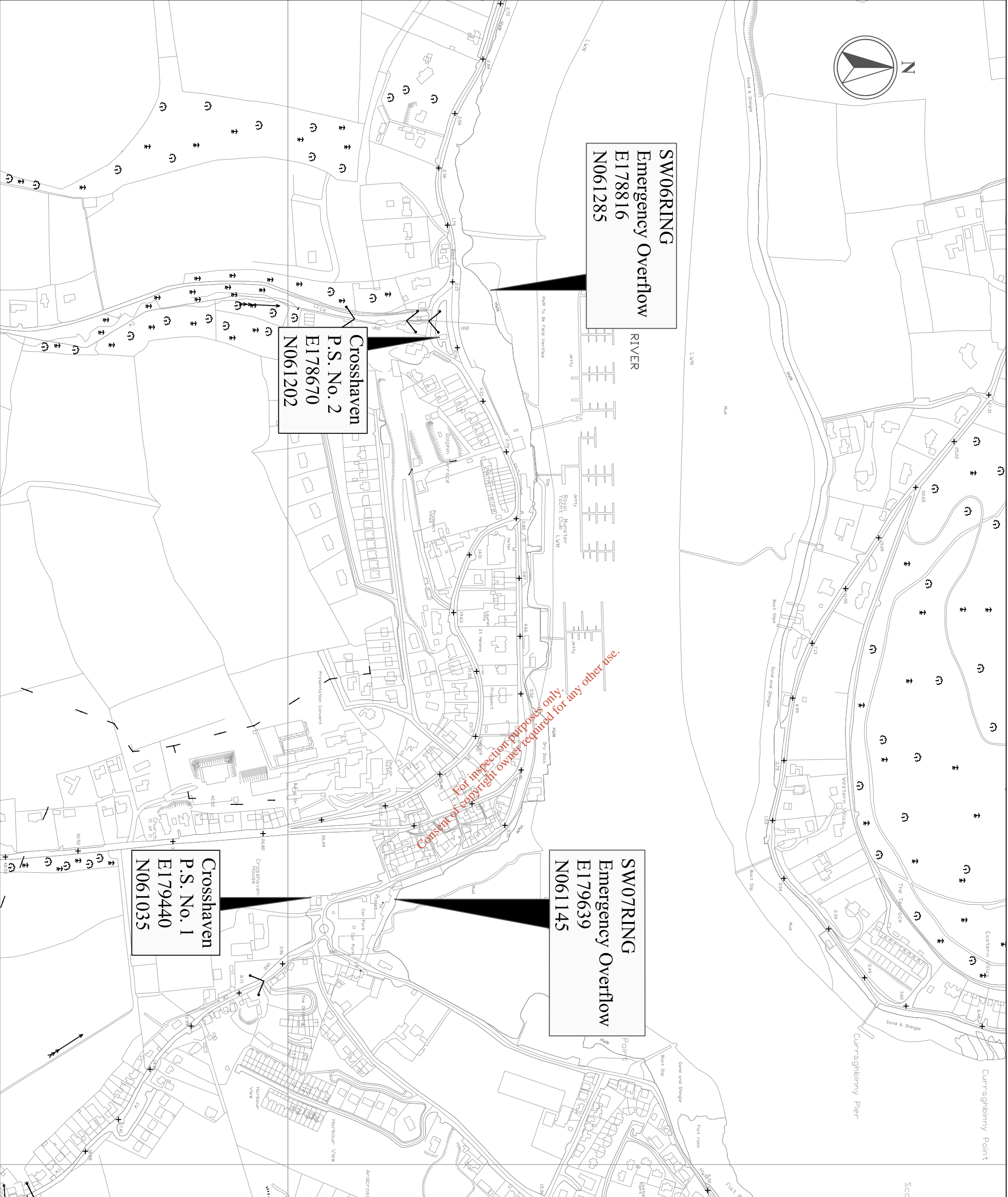
N. O'Keefe, B.Eng., C.Eng., Eur. Ing., F.I.E.I., M.I.C.E.,  
 Acting County Engineer  
 County Hall, Cork.

P. Power  
 Director of Services  
 South Cork.

**Project:**  
**EPA LICENCE APPLICATION**  
 Crosshaven - Carrigaline - Ringaskiddy

**Title:**  
**Section B.3. - Location of Primary Discharge Point.**

Designed:	Checked:	Scale:	Drawing No. 06
BOL	FW	1:15,000	
Drawn:	Approved:	Date:	
BOL	FW	16/11/07	



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**Cork County Council  
South Cork Division**



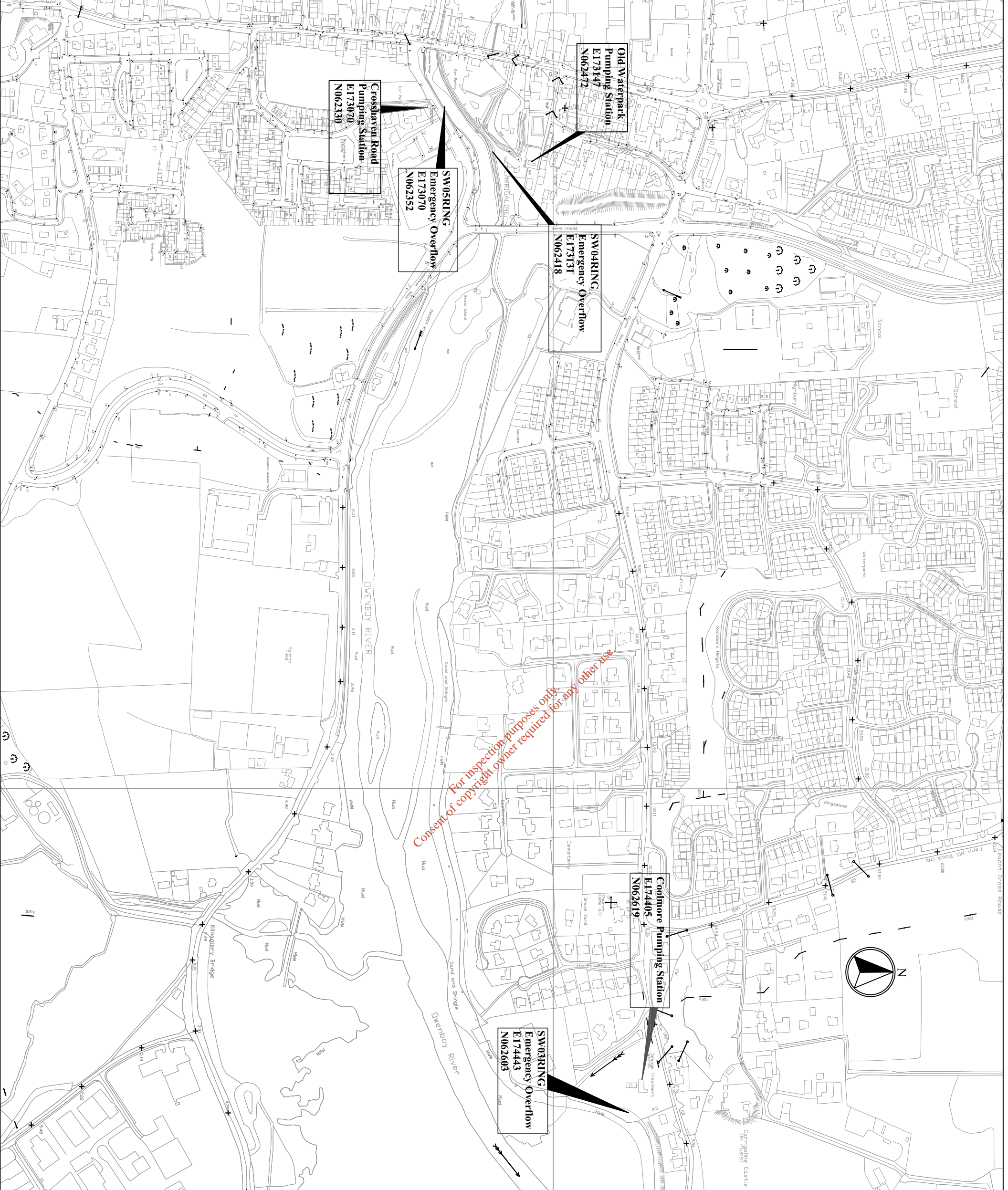
N. O'Keefe, B.Eng., C.Eng., Eur. Ing., F.I.E.L., M.I.C.E.,  
Acting County Engineer  
County Hall, Cork.

P. Power  
Director of Services  
South Cork.

**Project:**  
EPA LICENCE APPLICATION  
Crosshaven - Carrigaline - Ringaskiddy

**Title:**  
Section B4  
Location of Emergency  
Overflows - Crosshaven

Designed:	Checked:	Scale:	Drawing No. <b>07</b>
BOL	FW	1:5,000	
Drawn:	Approved:	Date:	
BOL	FW	13/11/07	



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**Cork County Council**  
 South Cork Division

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 Acting County Engineer  
 County Hall, Cork.

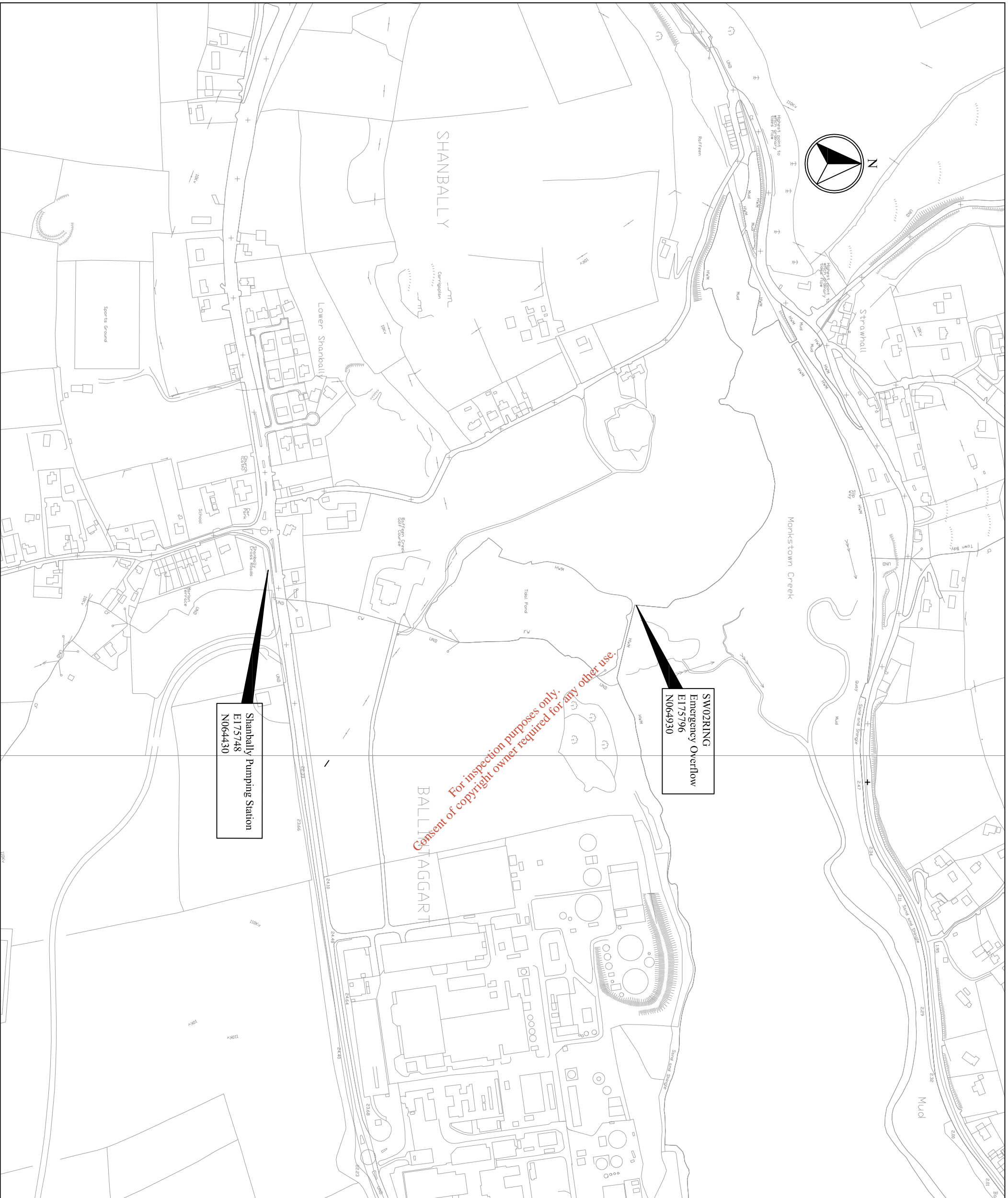
P. Power  
 Director of Services  
 South Cork.



Project:  
**EPA LICENCE APPLICATION**  
 Crosshaven - Carrigaline - Ringaskiddy

Title:  
**Section B.4.**  
**Location of Emergency**  
**Overflow - Carrigaline**

Designed: <b>BOL</b>	Checked: <b>FW</b>	Scale: <b>1:5000</b>	Drawing No. <b>08</b>
Drawn: <b>BOL</b>	Approved: <b>FW</b>	Date: <b>13/11/07</b>	



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**Cork County Council  
South Cork Division**



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Acting County Engineer  
County Hall, Cork.

P. Power  
Director of Services  
South Cork.

**Project:**  
**EPA LICENCE APPLICATION**  
Crosshaven - Carrigaline - Ringaskiddy

**Title:**  
**Section B.4.**  
**Location of Emergency**  
**Overflow - Shanbally**

Designed: <b>BOL</b>	Checked: <b>FW</b>	Scale: <b>1:5000</b>	Drawing No.
Drawn: <b>BOL</b>	Approved: <b>FW</b>	Date: <b>26/11/07</b>	<b>09</b>



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**Cork County Council**  
South Cork Division



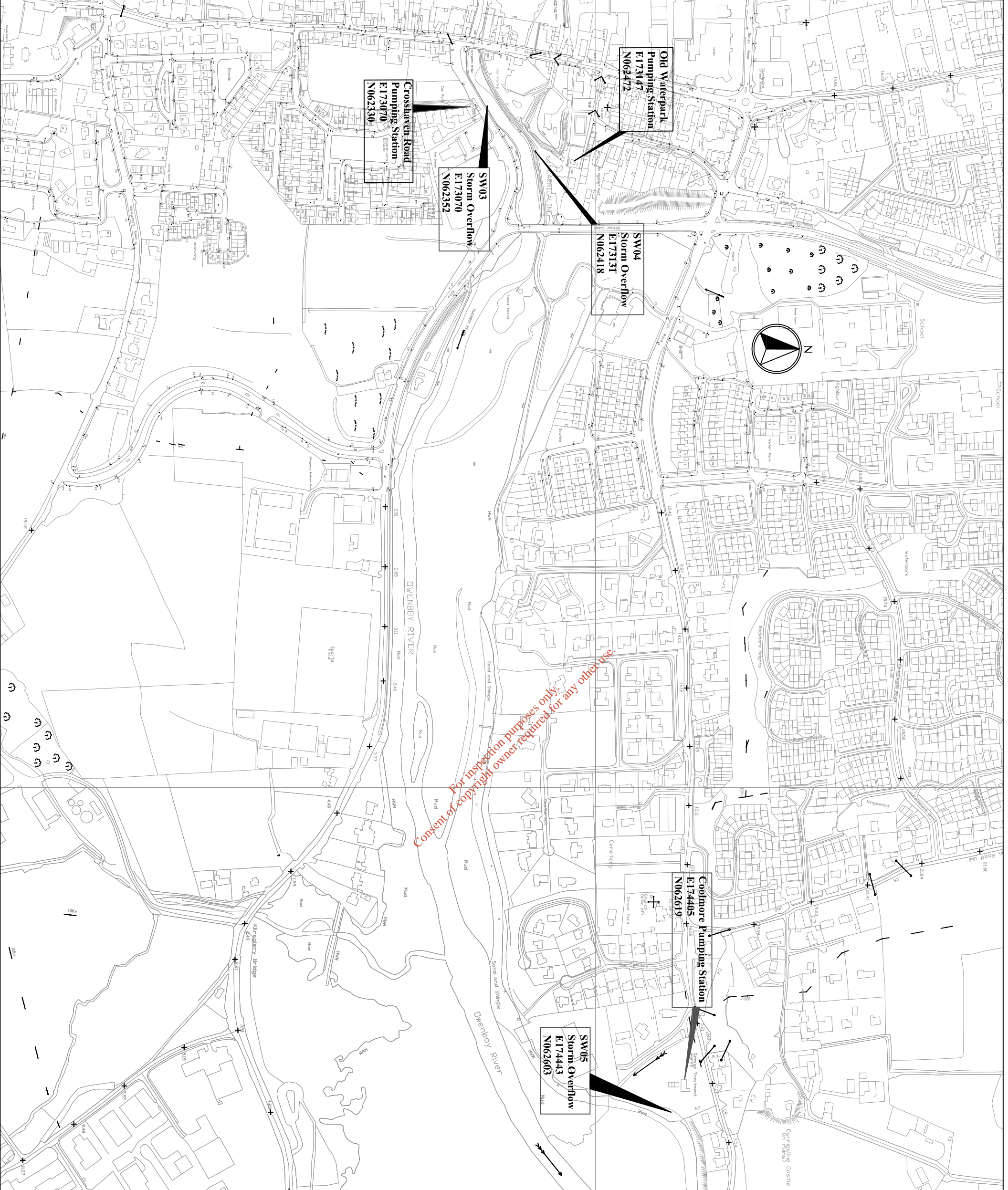
N. O'Keefe, B.Eng., C.Eng., Eur. Ing., F.I.E.L., M.I.C.E.,  
Acting County Engineer  
County Hall, Cork.

P. Power  
Director of Services  
South Cork.

**Project:**  
EPA LICENCE APPLICATION  
Crosshaven - Carrigaline - Ringaskiddy

**Title:**  
Section B5  
Location of Storm Water  
Overflows - Crosshaven

Designed: <b>BOL</b>	Checked: <b>FW</b>	Scale: <b>1:5,000</b>	Drawing No. <b>10</b>
Drawn: <b>BOL</b>	Approved: <b>FW</b>	Date: <b>13/11/07</b>	



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**Cork County Council**  
**South Cork Division**

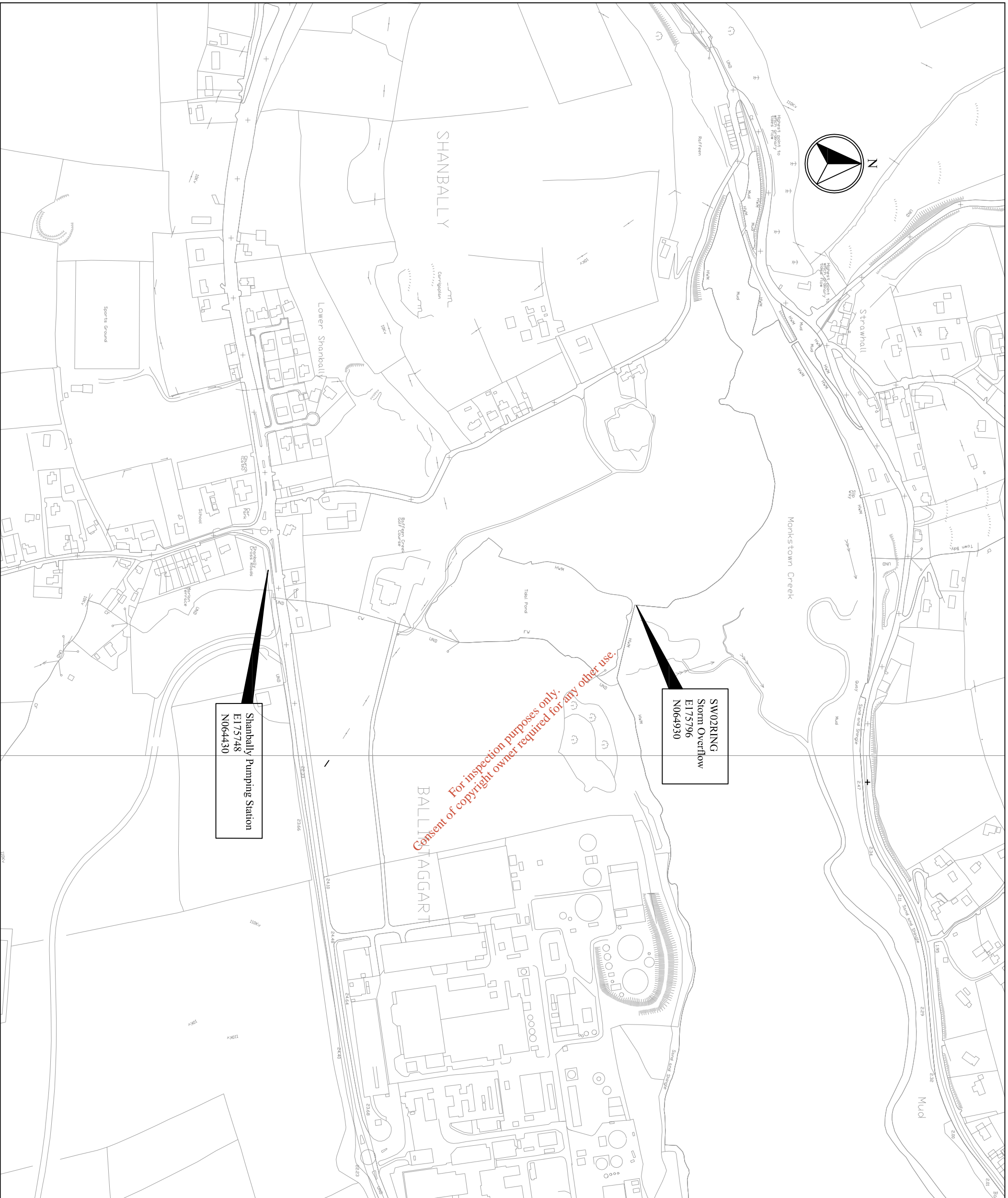


N. O'Keefe, B.Eng., C.Eng., Furling, F.I.E.I., M.I.C.E.,  
 Acting County Engineer  
 County Hall, Cork.  
 P. Power  
 Director of Services  
 South Cork.

**Project:**  
**EPA LICENCE APPLICATION**  
 Crosshaven - Carrigaline - Ringaskiddy

**Title:**  
**Section B.5.**  
**Location of Storm Water**  
**Overflow - Carrigaline**

Designed: <b>BOL</b>	Checked: <b>FW</b>	Scale: <b>1:5000</b>	Drawing No. <b>11</b>
Drawn: <b>BOL</b>	Approved: <b>FW</b>	Date: <b>13/11/07</b>	



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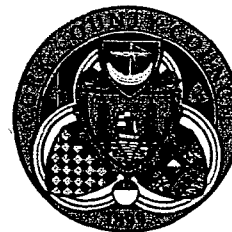
**Project:**  
**EPA LICENCE APPLICATION**  
 Crosshaven - Carrigaline - Ringaskiddy

**Title:**  
**Section B.5.**  
**Location of Storm Water**  
**Overflow - Shanbally**

Designed: <b>BOL</b>	Checked: <b>FW</b>	Scale: <b>1:5000</b>	Drawing No.
Drawn: <b>BOL</b>	Approved: <b>FW</b>	Date: <b>26/11/07</b>	<b>12</b>

# Comhairle Contae Chorcaí Cork County Council

County Hall,  
Cork, Ireland.  
Tel: (021) 4276891 • Fax: (021) 4276321  
Web: [www.corkcoco.ie](http://www.corkcoco.ie)  
Halla an Chontae,  
Corcaigh, Éire.  
Fón: (021) 4276891 • Faics: (021) 4276321  
Suíomh Gréasáin: [www.corkcoco.ie](http://www.corkcoco.ie)



Kevin Sugrue,  
Senior Engineer,  
Water Services


29<sup>th</sup> November 2007

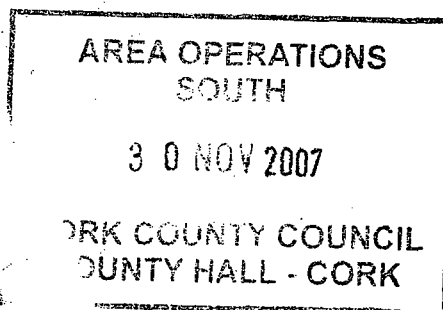
## Re: Lower Harbour SS

## Environmental Impact Statement

The above scheme encompasses the agglomerations of Cobh, Passage West, Monkstown, Carrigaline, Ringaskiddy and Shanbally to be served by a single wastewater treatment plant near Ringaskiddy. The effluent from the proposed plant will discharge to the 'IDA' sewer which runs adjacent to the proposed site and which discharges to deep water in Cork Harbour near the Dognose Bank.

McDonald Pettit, Consulting Engineers, are preparing the EIS which is at an advanced stage and which the Council plans to submit to An Bord Pleanála before the end of 2007. Additional hardcopies (6No.) and electronic pdf copies (2 No.) will be made available to you as soon as possible after that, say first week in January 08.

  
Robert O'Farrell,  
Senior Engineer







# CORK COUNTY COUNCIL

## COMHAIRE CONTAÉ CHORCAÍ

### PLANNING

#### CORK COUNTY COUNCIL (NORTH)

##### NOTICE UNDER SECTION 179 OF THE PLANNING & DEVELOPMENT ACT 2000 & PART 8, ARTICLE 81 AND ARTICLE 83 OF THE PLANNING & DEVELOPMENT REGULATIONS 2001 (AS AMENDED BY ARTICLES 17 AND 19 OF THE PLANNING & DEVELOPMENT REGULATIONS 2006)

Pursuant to the requirements of Part 8 of the Planning & Development Regulations 2001 (as amended by Articles 17 and 19 of the Planning & Development Regulations 2006), notice is hereby given that Cork County Council (North) proposes to carry out a development, particulars of which are set out in the schedule hereunder.

Plans and particulars of the proposed development will be available for inspection or purchase at the Water Services Department, Council Offices, Annabella, Malloy, from 9.00 a.m. to 5.00 p.m. and at the Council Offices, Midleton from 9.00 a.m. to 1.00 p.m. and 2.00 p.m. to 5.00 p.m. on each day during which said offices are open for the transaction of business (excluding Bank Holidays) for a period ending 18th January 2008.

Submissions or observations with regard to the proposed development, dealing with the proper planning and development of the area in which the development would be situated, may be made in writing to the Senior Engineer, Water Services Department, Cork County Council (North), Annabella, Malloy, Co. Cork, not later than 5.00 p.m. 5th February 2008.

SCHEDULE	Location	Nature and Extent of Development
1	Coole More, Lyre, Midleton, Co. Cork.	Construction of a new 700m <sup>3</sup> over ground precast concrete water storage reservoir, pump house, site fencing and associated works.

Mr. Tom Stritch, Director of Services, Annabella, Malloy, Co. Cork.

30th November 2007

#### CORK COUNTY COUNCIL (NORTH)

##### NOTICE UNDER SECTION 179 OF THE PLANNING & DEVELOPMENT ACT 2000 & PART 8, ARTICLE 81 AND ARTICLE 83 OF THE PLANNING & DEVELOPMENT REGULATIONS 2001 (AS AMENDED BY ARTICLES 17 AND 19 OF THE PLANNING & DEVELOPMENT REGULATIONS 2006)

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Submissions or observations with regard to the proposed development, dealing with the proper planning and development of the area in which the development would be situated, may be made in writing to the Senior Engineer, Water Services Department, Cork County Council (North), Annabella, Malloy, Co. Cork, not later than 5.00 p.m. 5th February 2008.

SCHEDULE	Location	Nature and Extent of Development
1	Knockavada, Bening, Malloy, Co. Cork.	Construction of a new 450m <sup>3</sup> over ground precast concrete water storage reservoir, demolition of existing concrete reservoir, site fencing and associated works.

Mr. Tom Stritch, Director of Services, Annabella, Malloy, Co. Cork.

30th November 2007

#### CORK COUNTY COUNCIL (NORTH)

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SCHEDULE	Location	Nature and Extent of Development
1	Knockhill Upper, Cullen, Malloy, Co. Cork.	Construction of a new 700m <sup>3</sup> over ground precast concrete water storage reservoir, existing concrete reservoir, site, fencing and associated works.

Mr. Tom Stritch, Director of Services, Annabella, Malloy, Co. Cork.

30th November 2007

#### CORK COUNTY COUNCIL (NORTH)

##### NOTICE UNDER SECTION 179 OF THE PLANNING & DEVELOPMENT ACT 2000 & PART 8, ARTICLE 81 AND ARTICLE 83 OF THE PLANNING & DEVELOPMENT REGULATIONS 2001 (AS AMENDED BY ARTICLES 17 AND 19 OF THE PLANNING & DEVELOPMENT REGULATIONS 2006)

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SCHEDULE	Location	Nature and Extent of Development
1	Knockhill Upper, Cullen, Malloy, Co. Cork.	Construction of a new 700m <sup>3</sup> over ground precast concrete water storage reservoir, existing concrete reservoir, site, fencing and associated works.

Mr. Tom Stritch, Director of Services, Annabella, Malloy, Co. Cork.

30th November 2007

#### CORK COUNTY COUNCIL (NORTH)

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SCHEDULE	Location	Nature and Extent of Development
1	Knockhill Upper, Cullen, Malloy, Co. Cork.	Construction of a new 700m <sup>3</sup> over ground precast concrete water storage reservoir, existing concrete reservoir, site, fencing and associated works.

Mr. Tom Stritch, Director of Services, Annabella, Malloy, Co. Cork.

30th November 2007

#### CORK COUNTY COUNCIL (NORTH)

##### NOTICE UNDER SECTION 179 OF THE PLANNING & DEVELOPMENT ACT 2000 & PART 8, ARTICLE 81 AND ARTICLE 83 OF THE PLANNING & DEVELOPMENT REGULATIONS 2001 (AS AMENDED BY ARTICLES 17 AND 19 OF THE PLANNING & DEVELOPMENT REGULATIONS 2006)

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SCHEDULE	Location	Nature and Extent of Development
1	Knockhill Upper, Cullen, Malloy, Co. Cork.	Construction of a new 700m <sup>3</sup> over ground precast concrete water storage reservoir, existing concrete reservoir, site, fencing and associated works.

Mr. Tom Stritch, Director of Services, Annabella, Malloy, Co. Cork.

30th November 2007

### PUBLIC NOTICES CONT'D

#### Cork County Council Northern Division

##### APPLICATION TO THE ENVIRONMENTAL PROTECTION AGENCY FOR A WASTEWATER DISCHARGE LICENCE

In accordance with the Waste Water Discharge (Authorisation) Regulations 2007 S.I. No. 684 of 2007, Water Services Northern Division, Cork County Council, Annabella, Malloy, Co. Cork is applying to the Environmental Protection Agency for a Waste Water Discharge Licence for Fermoy Water Treatment Plant, Courthouse Road, Fermoy at the following location:

Plant Name	Location	National Grid Ref.
Fermoy WWTP	Courthouse Road, Fermoy Townland Of Strawhill	E182231 N098765

Discharge	Function	Townland	Receptor	Grid Reference
Primary	Main	Strawhill	Blackwater	E182231 N098819
Secondary	Emergency	Strawhill	Blackwater	E182193 N098780
Secondary	Emergency	Carrigrohane	Blackwater	E114652 N098719
Secondary	Emergency	Carrigrohane	Blackwater	E181232 N098624
Secondary	Emergency	Carrigrohane	Blackwater	E181191 N098622
Secondary	Emergency	Fermoy	Blackwater	E181400 N098557
Secondary	Emergency	Fermoy	Blackwater	E181212 N098500
Secondary	Emergency	Fermoy	Blackwater	E180936 N098498

It is intended to submit the Environmental Impact Statement associated with the recently completed upgrading of the Waste Water Treatment Plant to the Agency along with the Application.

A copy of the application for the Waste Water Discharge Licence, the Environmental Impact Statement and 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 Environmental Protection Agency, PO Box 3000, Johnstown Castle Estate, Co. Wexford, Lo Call 1890 335 599 Telephone: 053-9160600 Fax: 053-9160699 Email:info@epa.ie and at  
Cork County Council Offices, Annabella, Malloy, Co. Cork, Telephone: 022 21123 Fax: 022 21983.

Submissions in relation to the application may be made to the Environmental Protection Agency at its headquarters described above.

#### Cork County Council Southern Division

##### APPLICATION TO THE ENVIRONMENTAL PROTECTION AGENCY FOR A WASTEWATER DISCHARGE LICENCE

In accordance with the Waste Water Discharge (Authorisation) Regulations 2007 S.I. No. 684 of 2007, Water Services Southern Division, Cork County Council, County Hall, Carrigrohane Road, Cork is applying to the Environmental Protection Agency for a Waste Water Discharge Licence in respect of Blarney Water Treatment Plant serving the agglomeration of Blarney.

Plant Name	Location	National Grid Ref.
Blarney WWTP	River Estate, Tower, Co. Cork Townland Of Kilmuckry	E159196 N74918

Discharge	Function	Townland	Receptor	Grid Reference
Primary	Main Outfall	Kilmuckry	River Shournagh	E160261 N74935
Secondary	Emergency	Woodside	River Shournagh	E160341 N73241
Secondary	Emergency	Clough	Dromannagh	E157528 N746410
Secondary	Emergency	Shan Lower	Hill Race	E161892 N73262

It is intended to submit the Environmental Impact Statement associated with the proposed upgrading of the Waste Water Treatment Plant to the Agency along with the Application.

A copy of the application for the Waste Water Discharge Licence, the Environmental Impact Statement and 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 Environmental Protection Agency, PO Box 3000, Johnstown Castle Estate, Co. Wexford, Lo Call 1890 335 599 Telephone: 053-9160600 Fax: 053-9160699 Email:info@epa.ie and at  
Cork County Council Offices, Water Services South, County Hall, Carrigrohane Road, Co. Cork, Telephone: 021-4276891 Fax: 021-4276321.

Submissions in relation to the application may be made to the Environmental Protection Agency at its headquarters described above.

#### Cork County Council Southern Division

##### APPLICATION TO THE ENVIRONMENTAL PROTECTION AGENCY FOR A WASTEWATER DISCHARGE LICENCE

In accordance with the Waste Water Discharge (Authorisation) Regulations 2007 S.I. No. 684 of 2007, Water Services Southern Division of Cork County Council, County Hall, Carrigrohane Road, Cork is applying to the Environmental Protection Agency for a Waste Water Discharge Licence in respect of Carrigrohane Water Treatment Plant serving the agglomeration of Carrigrohane.

Plant Name	Location	National Grid Ref.
Carrigrohane WWTP	Tullagreen Carrigrohane, Co. Cork Townland Of Carrigrohane	E181177 N72228

Discharge	Function	Townland	Receptor	Grid Reference
Primary	Main Outfall	Tullagreen	Slarty Waters Cork Harbour	E180791 N72278
Secondary	Emergency	Tullagreen	Barrycreek Stream	E181731 N72685

It is intended to submit the Environmental Impact Statement associated with the proposed upgrading of the Waste Water Treatment Plant to the Agency along with the Application.

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The Environmental Protection Agency, PO Box 3000, Johnstown Castle Estate, Co. Wexford, Lo Call 1890 335 599 Telephone: 053-9160600 Fax: 053-9160699 Email:info@epa.ie and at  
Cork County Council Offices, Water Services South, County Hall, Carrigrohane Road, Co. Cork, Telephone: 021-4276891 Fax: 021-4276321.

Submissions in relation to the application may be made to the Environmental Protection Agency at its headquarters described above.

#### Cork County Council Southern Division

##### APPLICATION TO THE ENVIRONMENTAL PROTECTION AGENCY FOR A WASTEWATER DISCHARGE LICENCE

In accordance with the Waste Water Discharge (Authorisation) Regulations 2007 S.I. No. 684 of 2007, Water Services Southern Division of Cork County Council, County Hall, Carrigrohane Road, Cork is applying to the Environmental Protection Agency for a Waste Water Discharge Licence in respect of Ballinacloy Water Treatment Plant serving the agglomeration of Ballinacloy.

Plant Name	Location	National Grid Ref.
Ballinacloy WWTP	Powdermilla Ballinacloy, Co. Cork Townland Of Ballinacloy	E159203 N71139

Discharge	Function	Townland	Receptor	Grid Reference
Primary	Main Outfall	Ballinacloy	River Lee	E159240 N71520
Secondary	Emergency	Ballinacloy	River Maglin	E159686 N70700
Secondary	Emergency	Ballinacloy	River Maglin	E159686 N70700
Secondary	Emergency	Carrigrohane	River Lee	E181021 N71619

A copy of the application for the Waste Water Discharge Licence and 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 Environmental Protection Agency, PO Box 3000, Johnstown Castle Estate, Co. Wexford, Lo Call 1890 335 599 Telephone: 053-9160600 Fax: 053-9160699 Email:info@epa.ie and at  
Cork County Council Offices, Water Services South, County Hall, Carrigrohane Road, Co. Cork, Telephone: 021-4276891 Fax: 021-4276321.

Submissions in relation to the application may be made to the Environmental Protection Agency at its headquarters described above.

#### Cork County Council Southern Division

##### APPLICATION TO THE ENVIRONMENTAL PROTECTION AGENCY FOR A WASTEWATER DISCHARGE LICENCE

In accordance with the Waste Water Discharge (Authorisation) Regulations 2007 S.I. No. 684 of 2007, Water Services Southern Division of Cork County Council, County Hall, Carrigrohane Road, Cork is applying to the Environmental Protection Agency for a Waste Water Discharge Licence for the agglomeration of Cobh Rural and Cobh Urban at the following location:

Discharge	Function	Receptor	Townland	Grid Reference
Primary	Main Outfall	Cork Harbour	Ringiscolig	E179218 N68588
Secondary	Minor Outfall	Cork Harbour	Ringiscolig	E179247 N68548
Secondary	Minor Outfall	Cork Harbour	Ringiscolig	E179593 N68510
Secondary	Minor Outfall	Cork Harbour	Ringiscolig	E179629 N68507
Secondary	Minor Outfall	Cork Harbour	Ballinbryn	E179676 N68413
Secondary	Minor Outfall	Cork Harbour	Kilgarvan	E179807 N68372
Secondary	Minor Outfall	Cork Harbour	Kilgarvan	E179818 N68369
Secondary	Minor Outfall	Cork Harbour	Carrigrohane	E180439 N68315
Secondary	Minor Outfall	Cork Harbour	Carrigrohane	E180518 N68266
Secondary	Minor Outfall	Cork Harbour	Carrigrohane	E180518 N68266
Secondary	Minor Outfall	Cork Harbour	Carrigrohane	E180795 N68247
Secondary	Emergency	Cork Harbour	Ringiscolig	E179218 N68588
Secondary	Emergency	Cork Harbour	Ringiscolig	E179247 N68548
Secondary	Emergency	Cork Harbour	Ringiscolig	E179593 N68510
Secondary	Emergency	Cork Harbour	Ringiscolig	E179629 N68507
Secondary	Emergency	Cork Harbour	Ballinbryn	E179676 N68413
Secondary	Emergency	Cork Harbour	Kilgarvan	E179807 N68372
Secondary	Emergency	Cork Harbour	Kilgarvan	E179818 N68369
Secondary	Emergency	Cork Harbour	Carrigrohane	E180439 N68315
Secondary	Emergency	Cork Harbour	Carrigrohane	E180518 N68266

It is intended to submit the Environmental Impact Statement associated with the proposed provision of a Waste Water Treatment Plant in the Lower Harbour to the Agency along with the Application.

A copy of the application for the Waste Water Discharge Licence, the Environmental Impact Statement and 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 Environmental Protection Agency, PO Box 3000, Johnstown Castle Estate, Co. Wexford, Lo Call 1890 335 599 Telephone: 053-9160600 Fax: 053-9160699 Email:info@epa.ie and at  
Cork County Council Offices, Water Services South, County Hall, Carrigrohane Road, Co. Cork, Telephone: 021-4276891 Fax: 021-4276321.

Submissions in relation to the application may be made to the Environmental Protection Agency at its headquarters described above.

### PUBLIC NOTICES CONT'D

#### Cork County Council Southern Division

##### APPLICATION TO THE ENVIRONMENTAL PROTECTION AGENCY FOR A WASTEWATER DISCHARGE LICENCE

In accordance with the Waste Water Discharge (Authorisation) Regulations 2007 S.I. No. 684 of 2007, Water Services Southern Division of Cork County Council, County Hall, Carrigrohane Road, Cork is applying to the Environmental Protection Agency for a Waste Water Discharge Licence in respect of Rathcove outfall which includes the agglomeration of Midleton and trade effluent discharges from the Midleton area.

Plant Name	Location	National Grid Ref.
Midleton WWTP	Ballynann, Midleton Townland Of Carrystuff	E187506 N72801

Discharge	Function	Townland	Receptor	Grid Reference
Primary	Main	Rathcove	Ballynacorra River / Estuary	E186177 N08506
Secondary	Emergency	Ballynacorra	Ballynacorra Rv	E188366 N71791
Secondary	Emergency	Ballynacorra	West	E188520 N71783
Secondary	Emergency	Ballynacorra	West	E188520 N71783
Secondary	Emergency	Midleton	Ballynacorra Rv	E187973 N731272
Secondary	Emergency	Midleton	Ballynacorra Rv	E188045 N725138
Secondary	Emergency	Midleton	Ballynacorra Rv	E188268 N72058

It is intended to submit the Environmental Impact Statement associated with the provision of a Waste Water Treatment Plant to the Agency along with the Application.

A copy of the application for the Waste Water Discharge Licence, the Environmental Impact Statement and 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 Environmental Protection Agency, PO Box 3000, Johnstown Castle Estate, Co. Wexford, Lo Call 1890 335 599 Telephone: 053-9160600 Fax: 053-9160699 Email:info@epa.ie and at  
Cork County Council Offices, Water Services South, County Hall, Carrigrohane Road, Co. Cork, Telephone: 021-4276891 Fax: 021-



# CORK COUNTY COUNCIL

## SITE NOTICE

### APPLICATION TO THE ENVIRONMENTAL PROTECTION AGENCY FOR A WASTEWATER DISCHARGE LICENCE

In accordance with the Waste Water Discharge (Authorisation) Regulations 2007, S.I. No. 684 of 2007, Water Services Southern Division, Cork County Council, County Hall, Carrigrohane Road, Cork is applying to the Environmental Protection Agency for a Waste Water Discharge Licence in respect of Ringaskiddy outfall which includes the agglomeration of Carrigaline and Crosshaven and trade effluent discharges from the Ringaskiddy area

Discharge	Function	Townland	Receptor	Grid Reference
Primary	Main Outfall	Ringaskiddy	Cork Harbour	E181358, N062521
Secondary	Emergency	Crosshaven	Owenboy River	E179639, N061145
Secondary	Emergency	Crosshaven	Owenboy River	E178816, N061285
Secondary	Emergency	Carrigaline Middle	Owenboy River	E173070, N062352
Secondary	Emergency	Carrigaline Middle	Owenboy River	E173131, N062418
Secondary	Emergency	Carrigaline East	Owenboy River	E174443, N062603
Secondary	Emergency	Shanbally	Monkstown Creek	E175796, N064930

It is intended to submit the Environmental Impact Statement associated with the proposed provision of a Waste Water Treatment Plant in the Lower Harbour to the Agency along with the Application.

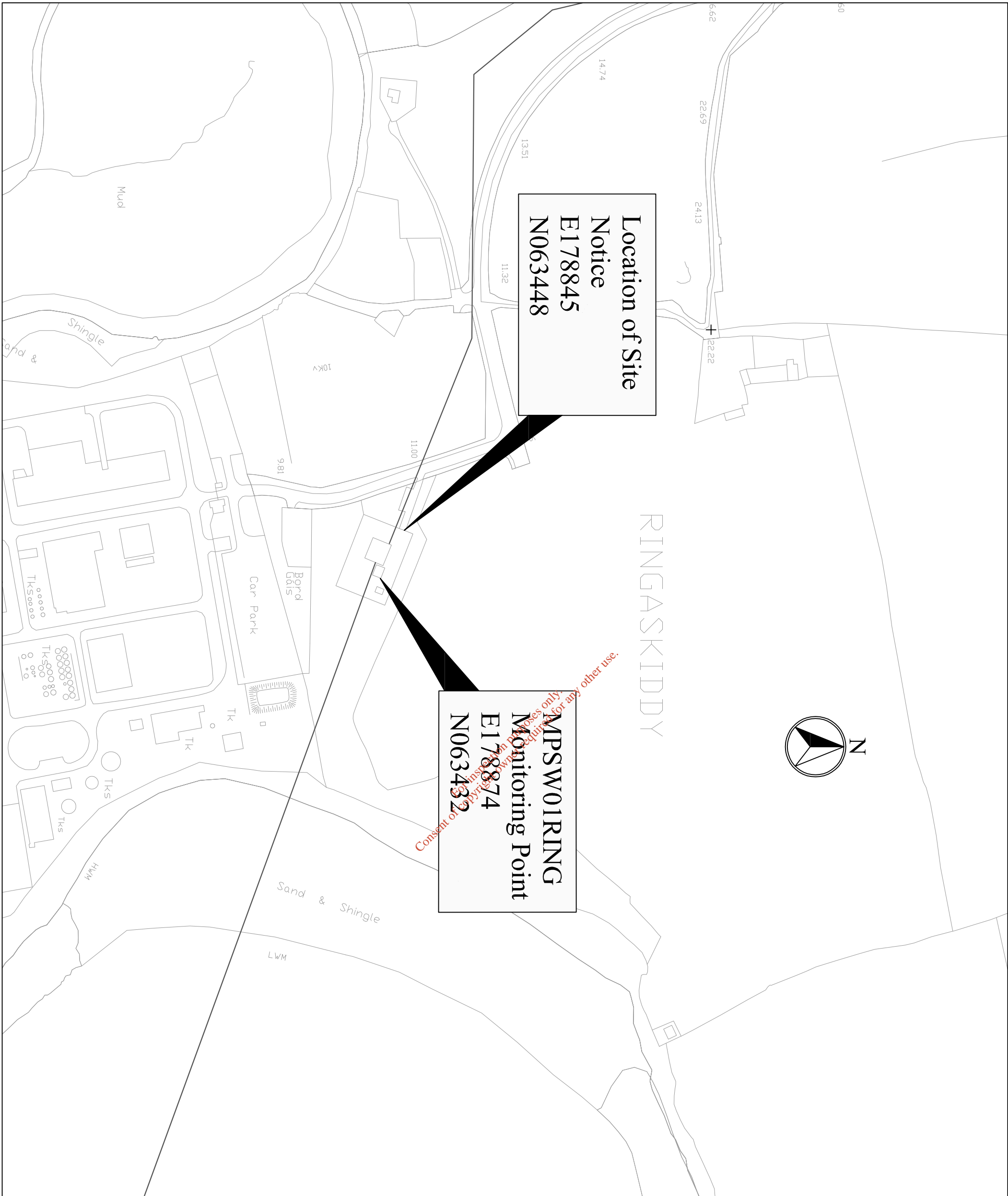
A copy of the application for the Waste Water Discharge Licence, the Environmental Impact Statement and such further information relating to the application as may be furnished to the Agency in the course of the Agency's consideration of the Application shall as soon as is practicable after receipt by the Agency be available for inspection or purchase at the

- Environmental Protection Agency, PO Box 3000, Johnstown Castle Estate, Co. Wexford, Lo Call 1890 335599 Telephone: 053-9160600 Fax: 053-9160699 Email: info@epa.ie

and at

- Cork County Council Offices, Water Services South, County Hall, Carrigrohane Road, Cork, Telephone: 021-4276891 Fax: 021-4276321.

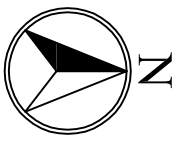
Submissions in relation to the application may be made to the Environmental Protection Agency at its headquarters described above.



**Location of Site Notice**  
**E178845**  
**N063448**


**MPSW01RING**  
**Monitoring Point**  
**E178874**  
**N063432**

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**Cork County Council**  
**South Cork Division**



N. O'Keefe, B.Eng., C.Eng., Eur. Ing., F.I.E.I., M.I.C.E.,  
 Acting County Engineer  
 County Hall, Cork.  
 P. Power  
 Director of Services  
 South Cork.

**Project:**  
**EPA LICENCE APPLICATION**  
 Crosshaven - Carrigaline - Ringaskiddy

**Title:**  
**Section B.8. - Location of Site Notice.**

Designed: <b>BOL</b>	Checked: <b>FW</b>	Scale: <b>1:2500</b>	Drawing No. <b>13</b>
Drawn: <b>BOL</b>	Approved: <b>FW</b>	Date: <b>16/11/07</b>	

Kevin Sugrue,  
Senior Engineer,  
Water Services

**Re: Licensing of Discharges**

**Ballincollig-** Donald Cronin is preparing a response in respect of Ballincollig

**Blarney-** The Council has recently completed an upgrade of the wastewater treatment plant at Blarney to 13,000 p.e. and has no immediate proposals to increase that capacity. The plant at Blarney has two independent secondary treatment processes with the wastewater load being split approximately evenly between them. One stream has biological nutrient removal and the other has chemical nutrient removal. There is concern in relation to the nutrient levels in the river catchments north of Cork City and the Council has obtained approval to carry out a drainage study, the City Environs (CASP) Drainage Study which is being funded under the Water Services Investment Programme 2007-2009. This study will consider the drainage options available for the catchment concerned having regard to existing and planned developments in the area. The Council is currently preparing a brief for the appointment of a consultant and expects to advertise the appointment in early January 2008 and to have the study completed in approx six months thereafter.

**Crosshaven-** wastewater from Crosshaven is collected and discharged to the Carrigaline network and ultimately discharges to Cork Harbour via the 'IDA' sewer at the Dognose Bank. The discharge is currently untreated but will ultimately be served by the Lower Harbour SS, the treatment plant for which will be located at Carrigaline East and the effluent from this plant will discharge through the 'IDA' outfall to the harbour. The EIS for the wastewater treatment plant is being prepared and the Council hopes to lodge it with ABP by end of 2007. Nutrient removal is not being proposed as the receiving waters are not designated sensitive. The PR for the Scheme will be lodged with the DEHLG shortly after the EIS is sent to ABP but approval to the PR will not issue until after the EIS is approved, say mid 2008. The Lower Harbour SS is being funded under the Water Services Investment Programme 2007-2009 and the scheme is expected to be fully operational before the end of 2012.

**Cobh** – this also forms part of the proposed Lower Harbour SS and a significant upgrading of the Cobh sewer network is envisaged with the wastewater being pumped across the harbour to the proposed WWTP at Carrigaline East. The current estimated design capacity required is 80,000 p.e.

**Carrigaline-** this wastewater is discharged (see Crosshaven) via the 'IDA' sewer and will ultimately form part of the Lower Harbour SS

**Ringaskiddy** – as for Carrigaline

**Carrigtwohill** –EIS under preparation and expected to be submitted to ABP March '08. The anticipated first phase will be to increase treatment capacity to 45000 p.e. from the current 8500 p.e. . The works are to be funded under the Serviced land Initiative . Nutrient removal will be included in the EIS and the PR as the Lee Estuary/Lough Mahon Area is currently designated a sensitive water.

The above information should be read in conjunction with earlier correspondence on the same matter and in particular you should cross-reference with response received from Duane O'Brien in relation to Carrigtwohill.

Regards,

R O'Farrell,  
Senior Engineer,  
WSIP Projects Office  
4<sup>th</sup> December 2007

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**Kevin Sugrue**

I have examined B.10 Capital Investment Programme and I have broken down the request to its constituent parts as shown below and have addressed them in the table to the best of my ability. You should attach a copy of the Assessment of Needs and the published WSIP.

Regards,

ROF

10<sup>th</sup> December 2007

**B.10 Capital Investment Programme**

Provide details of

1/any proposed infrastructural development for the waste water works which has been prioritised in the water services authority 'Assessment of Needs' study.

2/ State whether this development work has been allocated funding under local or national **Water Services Investment Plans**.

If so, provide details

2a/ on the extent and type of work to be undertaken,

2b/ the likely timeframes for this work to be completed and

2c/ the level of funding being provided.

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**Table B10.**

AGGLOMERATION	ASSESSMENT OF NEEDS	WATER SERVICES INVESTMENT PLANS.	EXTENT AND TYPE OF WORK	LIKELY TIMEFRAMES	LEVEL OF FUNDING
1	Blarney	No	Blarney (Blarney/Tower) has recently been upgraded to 13,000 p.e. secondary treatment and <u>includes nutrient removal</u> . No additional upgrading is proposed at this time.	N/A	N/A
2	Crosshaven	Yes	Forms an element of the proposed Lower Harbour SS. Crosshaven collection systems connected to Carrigaline SS from where it is pumped onwards to the 'IDA' outfall discharging at the Dognose Bank.	Element is completed and commissioned.	€ 5m 80% DEHLG grant , 20% local funding
3	Cobh	Yes	Forms part of the proposed Lower Harbour SS that includes major upgrading of the Cobh collection system and transfer of the wastewater across Cork Harbour to a proposed new 80,000 p.e. secondary WWTP to be constructed at Carrigaline East, Ringaskiddy and which will discharge to the 'IDA' outfall. Nutrient removal is not being proposed as discharge is not to a sensitive area.	EIS for WWTP to be submitted to An Bored Pleanála Jan '08. PR for Lower Harbour SS expected to be approved Sept. 08. Construction to commence March 2010, completion March 2012	€76m Estimated 80% DEHLG grant and 20% local funding
4	Carrigaline	Yes	Forms part of the proposed Lower Harbour SS. The effluent from Carrigaline, which now includes Crosshaven, discharges untreated via the 'IDA' outfall at the Dognose Bank. It will be served by the proposed new 80,000 p.e. secondary WWTP to be constructed at Carrigaline East, Ringaskiddy, and which will discharge to the 'IDA' outfall.	As for Cobh	As for Cobh
5	Ringaskiddy	Yes	Forms part of the proposed Lower Harbour SS. Wastewater from Ringaskiddy will be pumped to the new WWTP at Carrigaline East Ringaskiddy	As for Cobh	As for Cobh
6	Carrigwohill	Yes	First phase proposal is to increase capacity to 45,000 p.e. secondary treatment. Nutrient removal is being proposed in the EIS and PR as the discharge area is currently designated a sensitive area.	EIS to ABP March '08	€20m - To be funded as an SLI Scheme i.e. 40% DEHLG funding and 60% local funding

**Attachment included  
1/ Assessment of Needs  
2/ Water Services Investment Programme  
2007-2009**

Yes	No
Yes	
Yes	

# Cork County

## Water Services Investment Programme 2007 - 2009

Schemes at Construction	W/S	Est. Cost		W/S	Est. Cost
<b>Cork North</b>					
Mitchelstown Sewerage Scheme (Nutrient Removal)	S	221,000			
<b>Cork South</b>					
Ballyvourney/ Ballymakeery Sewerage Scheme	S	3,049,000			
Cobh/ Midleton/ Carrigwohill Water Supply Scheme	W	10,135,000			
Cork Lower Harbour Sewerage Scheme (Crosshaven SS) (G)	S	4,850,000			
Cork Water Strategy Study (G)	W	941,000			
Kinsale Sewerage Scheme	S	20,000,000			
Midleton Sewerage Scheme (Infiltration Reduction) (G)	S	2,078,000			
		<b>41,274,000</b>			
<b>Schemes to start 2007</b>					
<b>Cork North</b>					
North Cork Grouped DBO Wastewater Treatment Plant (Buttevant, Doneraile & Kilbrin)	S	5,150,000			
<b>Cork West</b>					
Skibbereen Sewerage Scheme	S	20,000,000			
		<b>25,150,000</b>			
<b>Schemes to start 2008</b>					
<b>Cork North</b>					
Mallow/ Ballyvinter Regional Water Supply Scheme (H) (W)	W	8,652,000			
Mallow Sewerage Scheme (H)	S	5,408,000			
<b>Cork South</b>					
Ballincollig Sewerage Scheme (Nutrient Removal) (G)	S	948,000			
Ballingearry Sewerage Scheme	S	1,296,000			
Bandon Sewerage Scheme Stage 2	S	14,729,000			
City Environs (CASP) Strategic Study (G)	S	153,000			
Cloghroe Sewerage Scheme (Upgrade)	S	683,000			
Coachford Water Supply Scheme	W	1,318,000			
Garretstown Sewerage Scheme	S	2,153,000			
Inniscarra Water Treatment Plant Extension Phase 1	W	2,678,000			
Little Island Sewerage Scheme (G)	S	2,200,000			
<b>Cork West</b>					
Bantry Sewerage Scheme	S	7,148,000			
Dunmanway Sewerage Scheme	S	2,153,000			
Leap/ Baltimore Water Supply Scheme	W	6,365,000			
Schull Water Supply Scheme	W	5,253,000			
		<b>61,137,000</b>			
<b>Schemes to start 2009</b>					
<b>Cork North</b>					
Banteer/Dromahane Regional Water Supply Scheme	W	1,576,000			
Conna Regional Water Supply Scheme Extension	W	2,627,000			
Cork NE Water Supply Scheme	W	4,326,000			
Cork NW Regional Water Supply Scheme	W	6,046,000			
Millstreet Wastewater Treatment Plant (Upgrade)	S	1,628,000			
<b>Cork South</b>					
Ballincollig Sewerage Scheme (Upgrade) (G)	S	22,248,000			
Cork Lower Harbour Sewerage Scheme (excl. Crosshaven SS)	S	73,542,000			
Shannagarry/ Garyvoe/ Ballycotton Sewerage Scheme	S	3,780,000			
Youghal Sewerage Scheme	S	14,420,000			
<b>Cork West</b>					
Ballydehob Sewerage Scheme	S	683,000			
Bantry Water Supply Scheme	W	14,935,000			
Clonakilty Sewerage Scheme (Plant Capacity Increase)	S	3,677,000			
Courtmacsherry/ Timoleague Sewerage Scheme	S	2,472,000			
Dunmanway Regional Water Supply Scheme Stage 1	W	12,669,000			
		<b>164,629,000</b>			
<b>Serviced Land Initiative</b>					
<b>Cork North</b>					
Ballyclough Water Supply Scheme	W	139,000			
Ballydooley Improvement Scheme	W/S	139,000			
Broggill/Rathgoggin Sewerage Scheme	S	406,000			
Bweeng Water Supply Scheme	W	115,000			
Churchtown Sewerage Scheme (incl. Water)	W/S	543,000			
Clondulane Sewage Treatment Plant	S	417,000			
Freemount Sewerage Scheme	S	150,000			
Pike Road Sewerage Scheme (incl. Water)	W/S	2,080,000			
Rathcormac Sewerage Scheme (incl. Water)	W/S	555,000			
Spa Glen Sewerage Scheme	S	736,000			
Uplands Fermoy Sewerage Scheme (incl. Water)	W/S	1,174,000			
Watergrasshill Water Supply Scheme (incl. Sewerage) (G)	W/S	4,151,000			
<b>Cork South</b>					
Ballincollig Sewerage Scheme (Bary's Rd Foul and Storm Drainage) (G)	S	1,164,000			
Belgooley, Water Supply Scheme (incl. Sewerage)	W/S	2,913,000			
Blamey Water Supply Scheme (Ext. to Station Rd) (G)	W	416,000			
Carrigwohill Sewerage Scheme (Treatment and Storm Drain) (G)	S	7,632,000			
Castlematr Wastewater Treatment Plant Extension	S	1,200,000			
Crookstown Sewerage Scheme (incl. Water)	W/S	1,200,000			
Dripsey Water Supply Scheme (incl. Sewerage)	W/S	1,112,000			
Glounthane Sewerage Scheme (G)	S	1,576,000			
Innishannon Sewerage Scheme	S	277,000			
Innishannon Wastewater Treatment Plant	S	694,000			
Kerrypike Sewerage Scheme	S	832,000			
Kerrypike Water Supply Scheme	W	416,000			
Killeagh Wastewater Treatment Plant Extension	S	1,200,000			
Killeagh Water Supply Scheme (includes Sewerage)	W/S	485,000			
Killeens Sewerage Scheme	S	420,000			
Kilnagleary Sewerage Scheme	S	694,000			
Midleton Wastewater Treatment Plant Extension	S	4,050,000			



# Cork County contd.

## Water Services Investment Programme 2007 - 2009

	W/S	Est. Cost		W/S	Est. Cost
Mogeely, Castlemartyr & Ladysbridge Water Supply Scheme	W	2,566,000	<b>Cork South</b>		
North Cobh Sewerage Scheme (G)	S	3,193,000	Carrigwohill Sewerage Scheme (G)	S	20,000,000
Riverstick Water Supply Scheme (incl. Sewerage)	W/S	525,000	Cork Sludge Management (G)	S	14,420,000
Rochestown Water Supply Scheme	W	2,700,000	Cork Water Supply Scheme (Storage - Mount Emla)		
Saleen Sewerage Scheme	S	1,051,000	Ballincollig & Chetwind (G)	W	8,500,000
Youghal Water Supply Scheme	W	2,300,000	Inniscarra Water Treatment Plant (Sludge Treatment)(G)W		5,356,000
			Macroon Sewerage Scheme	S	5,150,000
<b>Cork West</b>			Minane Bridge Water Supply Scheme	W	1,421,000
Castletownshend Sewerage Scheme	S	1,576,000			
		<b>50,797,000</b>	<b>Cork West</b>		
<b>Rural Towns &amp; Villages Initiative</b>			Bantry Regional Water Supply Scheme (Distribution)	W	9,455,000
			Cape Clear Water Supply Scheme	W	1,679,000
<b>Cork North</b>			Castletownbere Regional Water Supply Scheme	W	8,405,000
Buttevant Sewerage Scheme (Collection System)	S	2,446,000	Glengarriff Sewerage Scheme	S	2,500,000
Doneraile Sewerage Scheme (Collection System)	S	1,738,000	Roscarberry/Owenahincha Sewerage Scheme	S	1,576,000
			Skibbereen Regional Water Supply Scheme Stage 4	W	7,880,000
<b>Cork South</b>					<b>95,646,000</b>
Innishannon (Ballinadee/ Ballinspittle/ Garrettstown)			<b>Water Conservation Allocation</b>		<b>12,206,000</b>
Water Supply Scheme	W	6,726,000			
			<b>Asset Management Study</b>		<b>300,000</b>
<b>Cork West</b>					
Ballylicky Sewerage Scheme	S	2,153,000	<b>South Western River Basin District (WFD) Project<sup>1</sup></b>		<b>9,400,000</b>
Baltimore Sewerage Scheme	S	3,162,000			
Castletownbere Sewerage Scheme	S	5,202,000			
Schull Sewerage Scheme	S	3,523,000			
		<b>24,950,000</b>	<b>Programme Total</b>		<b>485,489,000</b>
<b>Schemes to Advance through Planning</b>					
<b>Cork North</b>					
Mitchelstown North Galtees Water Supply Scheme	W	3,152,000			
Mitchelstown Sewerage Scheme	S	3,000,000			
Newmarket Sewerage Scheme	S	3,152,000			

<sup>1</sup> This project is being led by Cork County Council on behalf of other authorities in the River Basin District

(H) Refers to a Hub as designated in the National Spatial Strategy

(G) Refers to a Gateway as designated in the National Spatial Strategy

## SECTION C: INFRASTRUCTURE & OPERATION

Advice on completing this section is provided in the accompanying Guidance Note.

### C.1 Operational Information Requirements

Provide a description of the plant, process and design capacity for the areas of the waste water works where discharges occur, to include a copy of such plans, drawings or maps, (site plans and location maps, process flow diagrams), and such other particulars, reports and supporting documentation as are necessary to describe all aspects of the area of the waste water works discharging to the aquatic environment. Maps and drawings must be no larger than A3 size.

**Attachment C.1** should contain supporting documentation with regard to the plant and process capacity, systems, storm water overflows, emergency overflows, etc., including flow diagrams of each with any relevant additional information. These drawings / maps should also be provided as geo-referenced digital drawing files (e.g. ESRI Shapefile, MapInfo Tab, AutoCAD or other upon agreement) in Irish National Grid Projection. This data should be provided to the Agency on a separate CD-Rom containing sections B.1, B.2, B.3, B.4, B.5, D.2, E.3 and F.2.

Attachment included	Yes	No
		✓

### C.2 Outfall Design and Construction

Provide details on the primary discharge point & secondary discharge points and storm overflows to include reference, location, design criteria and construction detail.

**Attachment C.2** should contain any supporting documentation on the design and construction of any and all discharge outfalls, including stormwater overflows, from the waste water works.

Attachment included	Yes	No
	✓	

### **C. 1 Operational Information.**

There is no wastewater treatment plant serving the agglomeration at present. There are 6 Sewage Pumping Stations in the agglomeration with emergency overflows. No flow data is available for these discharges.

#### **Pumping Station 1 at The Square, Crosshaven.**

Pumps: 3 foul pumps, (2 duty, 1 standby).

3 storm pumps (2 duty, 1 standby)

Storm holding tank provided 100 m<sup>3</sup>.

#### **Pumping Station 2 at The Glen, Crosshaven.**

Pumps: 8 foul pumps

4 pumps to each of two rising mains (160 mm and 225 mm) from PS2 to Kilnaglery Bridge in Carrigaline.

Storm holding tank: 155 m<sup>3</sup>. With a high level gravity emergency overflow.

Screens are in place prior to overflow. No overflow events have been experienced since the pumping station was commissioned.

#### **Old Waterpark Pumping Station, Carrigaline**

Pumps: 2 foul pumps(1 duty, 1 standby); 2 Storm Pumps (1 duty, 1 standby).

Storm Holding: 70m<sup>3</sup> storm holding tank.

Influent flows in excess of the capacity of the foul pumps, overflows into the storm holding tank. A flap valve is incorporated in the holding tank to return stored effluent to the foul sump when the level in the foul sump returns to normal operating levels.

An overflow from the storm holding tank discharges to the storm pump sump.

During low tide any overflow would discharge directly to the river. At high tides the storm pumps are intended to lift the overflow to a header chamber above high tide level.

#### **Crosshaven Road Pumping Station, Carrigaline**

Description: wet Well/dry well

Pumps: two foul pumps (1 duty, 1 standby).

#### **Coolmore Pumping Station**

Description: Wet well/dry well structure with a Comminutor chamber immediately upstream of the wet well.

Pumps: four foul pumps (2 duty and 2 assist).

Pumping Capacity: 480 l/sec.

Average Daily flow: 4516 m<sup>3</sup>/day

Rising Main: twin 500 mm diameter AC rising mains.

#### **Shanbally Pumping Station.**

Description: wet well, submersible pumps.

Pumps: 2 pumps (1 duty, 1 standby).

## **C.2. Outfall Design and Construction.**

### **Primary Discharge:**

The outfall pipe consists of a 1400 mm internal diameter continuously welded steel pipe with diffuser discharge. The outfall pipe discharges approximately 2.6km from the shore near the Dognose Bank at a depth of approximately 30 below sea level.

There is also a flushing system to keep the outfall pipe clear. This consists of a flushing pump which extracts sea water and pumps it at a rate of 1200 litres per second into the trunk sewer upstream of the outfall. At present the flushing pump is operated for one hour each day at high tide thus pumping approximately 4320 m3 of sea water per day.

The outfall pipe was designed for a flow of 30 million gals/day [ 136,350 m3/day ]  
The current average daily flow is 10,024 m3/day.

### **Secondary Discharges:**

There are emergency overflows from the 6 pumping stations in the agglomeration.

SW02RING Shanbally SPS

Emergency overflow discharges to existing storm sewer pipe.

Outfall 450 mm diameter with Non return flap valve

SW03RING Coolmore SPS, Carrigaline

600mm Ø P.C.C. overflow pipe.

SW04RING, Old Waterpark Pumping Station.

Discharges to 450 mm storm sewer outfall with Non return flap Valve

SW05RING, Crosshaven Road Pumping Station, Carrigaline.

300mm Ø A.C. overflow pipe with Non return flap valve.

SW06RING Crosshaven PS2.

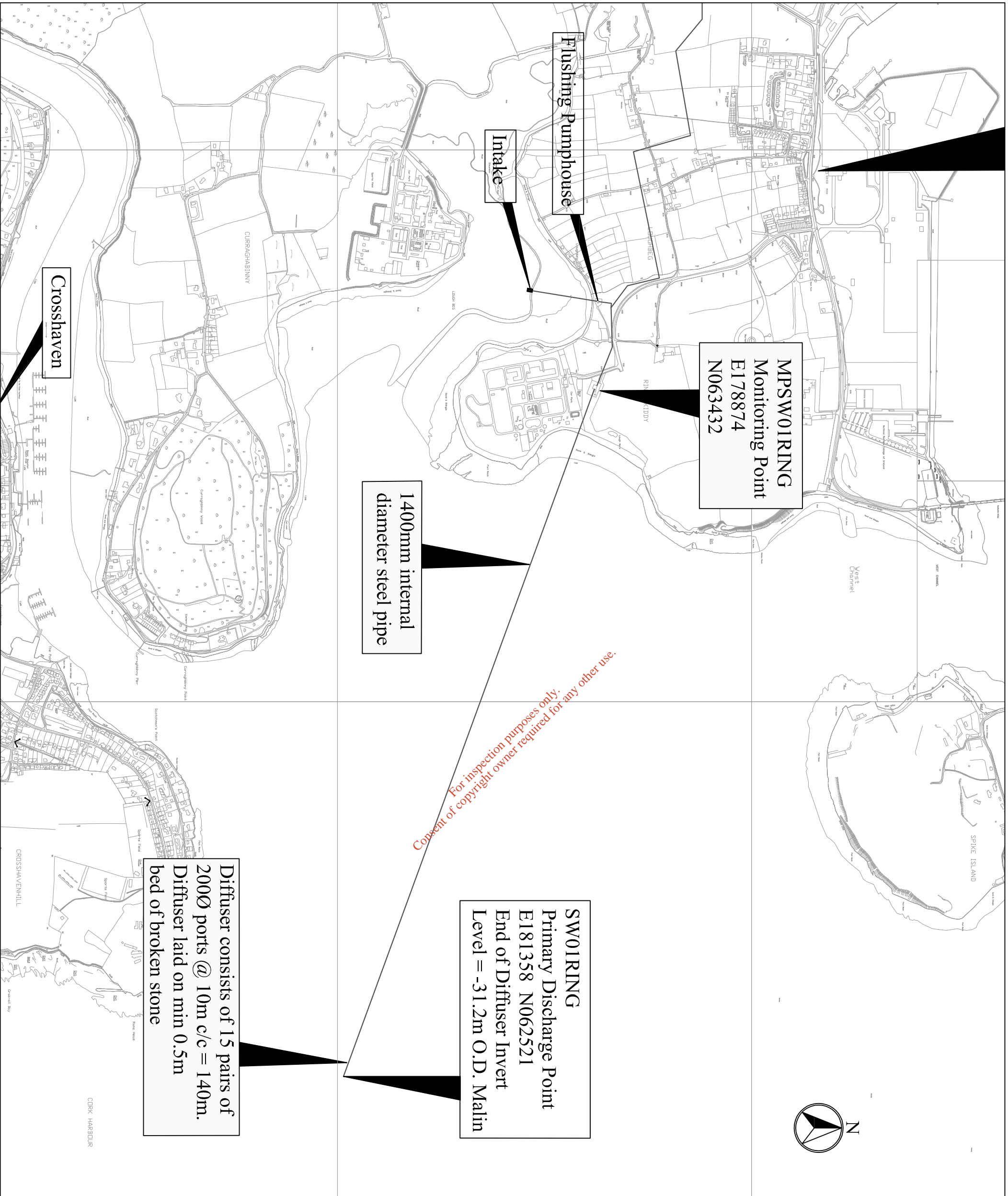
Overflow discharges to existing storm sewer system.

Outfall: 600mm Ø storm sewer with Non return flap valve

SW07RING Crosshaven PS1.

Overflow 400 mm diameter HPPE pipe discharges to existing storm sewer.

Outfall with Non return flap valve



**Notes:**

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All dimensions to be checked on site.

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**Cork County Council**

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**Project:**  
EPA LICENCE APPLICATION  
Crosshaven - Carrigaline - Ringaskiddy

**Title:**  
Section C.2. - Outfall Design and  
Construction

Designed:	Checked:	Scale:	Drawing No. 14
BOL	FW	1:15,000	
Drawn:	Approved:	Date:	
BOL	FW	16/11/07	

## SECTION D: DISCHARGES TO THE AQUATIC ENVIRONMENT

*Advice on completing this section is provided in the accompanying Guidance Note.*

**Give particulars of the source, location, nature, composition, quantity, level and rate of discharges arising from the agglomeration and, where relevant, the period or periods during which such emissions are made or are to be made.**

***The applicant should address in particular all discharge points where the substances outlined in Tables D.1(i), (b) & (c) and D.1(ii), (b) & (c) of Annex 1 are emitted.***

**Where it is considered that any of the substances listed in Annex X of the Water Framework Directive (2000/60/EC) or any of the Relevant Pollutants listed in Annex VIII of the Water Framework Directive (2000/60/EC) are being discharged from the waste water works or are seen to be present in the receiving water environment downstream of a discharge from the works (as a result of any monitoring programme) the applicant shall screen the discharge for the relevant substance.**

### **D.1 Discharges to Surface Waters**

Details of all discharges of waste water from the agglomeration should be supplied. Tables D.1(i)(a), (b) & (c), should be completed for the primary discharge point from the agglomeration and Tables D.1(ii)(a), (b) & (c) of Annex 1 should be completed for **each** secondary discharge point, where relevant. Table D.1(iii)(a) should be completed for **each** storm water overflow. Individual Tables must be completed for each discharge point.

#### **Sources of Discharges:**

Emissions from this agglomeration arise from two main sources:

Domestic Loading and Non Domestic Loading.

#### **Domestic Loading/ Emissions.**

The following Population figures are used to estimate the domestic loading:

Crosshaven: 1,669 [Census 2006]

Carrigaline: 12,835. [Census 2006]

Shanbally: 360 [estimated from house count].

Total Population for the Agglomeration: 14,864.

#### **Non domestic loading/emissions.**

Non Domestic Loading arises from discharges from industry.

A number of industries in the catchment are licensed to discharge effluent - either by the EPA or by Cork County Council.

The Population Equivalent [PE] of the licensed discharges is estimated to be 82,692

The Total PE of all current discharges is 97,556.

Details of locations of discharges are given in Sections B3, B4, B5.

Supporting information should form **Attachment D.1**

<b>Attachment included</b>	<b>Yes</b>	<b>No</b>
	✓	

## D.2 Tabular Data on Discharge Points

Applicants should submit the following information for each discharge point:

**Table D.2:**

PT_CD	PT_TYPE	LA_NAME	RWB_TYPE	RWB_NAME	DESIGNATION	EASTING	NORTHING
Point Code Provide label ID's	Point Type (e.g., Primary/Secondary/Storm Water Overflow)	Local Authority Name (e.g., Donegal County Council)	Receiving Water Body Type (e.g., River, Lake, Groundwater, Transitional Coastal)	Receiving Water Body Name (e.g., River Suir)	Protected Area Type (e.g., SAC, candidate SAC, NHA, SPA etc.)	6E-digit GPS Irish National Grid Reference	6N-digit GPS Irish National Grid Reference

An individual record (i.e. row) is required for each discharge point. Acceptable file formats include Excel, Access or other upon agreement with the Agency. A standard Excel template can be downloaded from the EPA website at [www.epa.ie](http://www.epa.ie). This data should be submitted to the Agency on a separate CD-Rom containing sections B.1, B.2, B.3, B.4, B.5, C.1, E.3 and F.2.

**TABLE D.1(i)(a): EMISSIONS TO SURFACE/GROUND WATERS  
(Primary Discharge Point)**

**Discharge Point Code: SW01RING**

Source of Emission:	Crosshaven – Carrigaline – Ringaskiddy Agglomeration
Location:	Cork Lower Harbour Townland Ringaskiddy
Grid Ref. (12 digit, 6E, 6N):	E181358 N062521
Name of receiving waters:	Cork Harbour
River Basin District:	South Western River Basin District
Designation of receiving waters:	None
Flow rate in receiving waters:	Tidal _____ m <sup>3</sup> .sec <sup>-1</sup> Dry Weather Flow _____ m <sup>3</sup> .sec <sup>-1</sup> 95%ile flow

**Emission Details:**

(i) Volume emitted			
Normal/day	10,000m <sup>3</sup>	Maximum/day	14,000m <sup>3</sup>
Maximum rate/hour	800m <sup>3</sup>	Period of emission (avg)	____ 60 ____ min/hr ____ 24 ____ hr/day ____ 365 ____ day/yr
Dry Weather Flow	9,000m <sup>3</sup> /day		



**TABLE D.1(i)(b): EMISSIONS TO SURFACE/GROUND WATERS - Characteristics of the emission  
(Primary Discharge Point)**

**Discharge Point Code:** SW01Ring

Number	Substance	As discharged	
		Max. daily average	
1	pH	8.04	
2	Temperature	Not available	
3	Electrical Conductivity(@20°C)	2100	
		Max. daily average (mg/l)	kg/day
4	Suspended Solids	73.7	740.6
5	Ammonia (as N)	4.1	41.1
6	Biochemical Oxygen Demand	106	1065.6
7	Chemical Oxygen Demand	151.8	1525.5
8	Total Nitrogen (as N)	15.0	151.2
9	Nitrite (as N)	Not available	Not available
10	Nitrate (as N)	3.9	39.4
11	Total Phosphorus (as P)	3.9	39.5
12	Orthophosphate (as P) <sup>Note 1</sup>	5.9	60.3
13	Sulphate (SO <sub>4</sub> )	275.9	2773.8
14	Phenols (sum) <sup>Note 2</sup> (ug/l)	<0.10	<0.001

Note 1: For waste water samples this monitoring should be undertaken on a sample filtered on a 0.45µm filter paper.

Note 2: USEPA Method 604, AWWA Standard Method 6240, or equivalent.

**TABLE D.1(i)(c): DANGEROUS SUBSTANCE EMISSIONS TO SURFACE/GROUND WATERS**

Primary Discharge Point - Characteristics of the emission

Discharge Point Code: SW01Ring

Number	Substance	As discharged		
		Max. daily average (µg/l)	kg/day	kg/year
1	Atrazine	<0.01	<0.0001	<0.0365
2	Dichloromethane	<1	<0.0100	<3.65
3	Simazine	<0.01	<0.0001	<0.0365
4	Toluene	<0.01	<0.0001	<0.0365
5	Tributyltin	<0.02	<0.0002	<0.0730
6	Xylenes	<0.01	<0.0001	<0.0365
7	Arsenic	7	0.0704	25.7
8	Chromium	<20	<0.2010	<73.4
9	Copper	60	0.6031	220.1
10	Cyanide	<5	<0.0503	<18.4
11	Fluoride	660	6.6349	2421.7
12	Lead	<20	<0.2011	<73.4
13	Nickel	<20	<0.2011	<73.4
14	Zinc	<20	<0.2011	<73.4
15	Boron	5110	51.3706	18750.3
16	Cadmium	<20	<0.2011	<73.4
17	Mercury	0.9	0.0090	3.3
18	Selenium	4	0.0402	14.7
19	Barium	<20	<0.2011	<73.4

**TABLE D.1(ii)(a): EMISSIONS TO SURFACE/GROUND WATERS  
(Secondary Discharge Point) (1 table per discharge point)**

**Discharge Point Code: SW02RING**

Source of Emission:	Shanbally Pumping Station		
Location:	Shanbally Townland Shanbally		
Grid Ref. (12 digit, 6E, 6N):	E175796, N064930		
Name of receiving waters:	Monkstown Creek		
River Basin District:	South Western River Basin District		
Designation of receiving waters:	NHA		
Flow rate in receiving waters:		Tidal Waters _____ m <sup>3</sup> .sec <sup>-1</sup>	Dry Weather Flow _____ m <sup>3</sup> .sec <sup>-1</sup> 95%ile flow

**Emission Details:**

(i) Volume emitted			
Normal/day	Not Available	Maximum/day	Not Available
Maximum rate/hour	Not Available	Period of emission (avg)	Not Available
Dry Weather Flow	Not available		

**TABLE D.1(ii)(b): EMISSIONS TO SURFACE/GROUND WATERS - Characteristics of the emission (1 table per discharge point)  
(Secondary Discharge Point)**

**Discharge Point Code: SW02Ring**

Number	Substance	As discharged	
		Max. daily average	
<b>1</b>	pH	Not available	
<b>2</b>	Temperature	Not available	
<b>3</b>	Electrical Conductivity (@25°C)	Not available	
		Max. daily average (mg/l)	kg/day
<b>4</b>	Suspended Solids	Not available	Not available
<b>5</b>	Ammonia (as N)	Not available	Not available
<b>6</b>	Biochemical Oxygen Demand	Not available	Not available
<b>7</b>	Chemical Oxygen Demand	Not available	Not available
<b>8</b>	Total Nitrogen (as N)	Not available	Not available
<b>9</b>	Nitrite (as N)	Not available	Not available
<b>10</b>	Nitrate (as N)	Not available	Not available
<b>11</b>	Total Phosphorus (as P) <sup>Note 1</sup>	Not available	Not available
<b>12</b>	Orthophosphate (as P)	Not available	Not available
<b>13</b>	Sulphate (SO <sub>4</sub> )	Not available	Not available
<b>14</b>	Phenols (sum) <sup>Note 2</sup> (ug/l)	Not available	Not available

Note 1: For waste water samples this monitoring should be undertaken on a sample filtered on 0.45µm filter paper.

Note 2: USEPA Method 604, AWWA Standard Method 6240, or equivalent.

**TABLE D.1(ii)(c): DANGEROUS SUBSTANCE EMISSIONS TO SURFACE/GROUND WATERS**

**Secondary Discharge Point - Characteristics of the emission (1 table per discharge point)**

**Discharge Point Code: SW02Ring**

Number	Substance	As discharged		
		Max. daily average (µg/l)	kg/day	kg/year
1	Atrazine	Not available	Not available	Not available
2	Dichloromethane	Not available	Not available	Not available
3	Simazine	Not available	Not available	Not available
4	Toluene	Not available	Not available	Not available
5	Tributyltin	Not available	Not available	Not available
6	Xylenes	Not available	Not available	Not available
7	Arsenic	Not available	Not available	Not available
8	Chromium	Not available	Not available	Not available
9	Copper	Not available	Not available	Not available
10	Cyanide	Not available	Not available	Not available
11	Fluoride	Not available	Not available	Not available
12	Lead	Not available	Not available	Not available
13	Nickel	Not available	Not available	Not available
14	Zinc	Not available	Not available	Not available
15	Boron	Not available	Not available	Not available
16	Cadmium	Not available	Not available	Not available
17	Mercury	Not available	Not available	Not available
18	Selenium	Not available	Not available	Not available
19	Barium	Not available	Not available	Not available

**TABLE D.1(ii)(a) cont. :**

**Discharge Point Code: SW03RING**

Source of Emission:	Coolmore Pumping Station
Location:	Carrigaline Townland Carrigaline East
Grid Ref. (12 digit, 6E, 6N):	E174443, N062603
Name of receiving waters:	Owenboy River
River Basin District:	South Western River Basin District
Designation of receiving waters:	NHA
Flow rate in receiving waters:	<p>Tidal Waters _____ m<sup>3</sup>.sec<sup>-1</sup> Dry Weather Flow</p> <p>_____ m<sup>3</sup>.sec<sup>-1</sup> 95%ile flow</p>

**Emission Details:**

(i) Volume emitted			
Normal/day	Not Available	Maximum/day	Not Available
Maximum rate/hour	Not Available	Period of emission (avg)	Not Available
Dry Weather Flow	Not Available		

**TABLE D.1(ii)(b): EMISSIONS TO SURFACE/GROUND WATERS - Characteristics of the emission (1 table per discharge point)  
(Secondary Discharge Point)**

**Discharge Point Code: SW03Ring**

Number	Substance	As discharged	
		Max. daily average	
<b>1</b>	pH	Not available	
<b>2</b>	Temperature	Not available	
<b>3</b>	Electrical Conductivity (@25°C)	Not available	
		Max. daily average (mg/l)	kg/day
<b>4</b>	Suspended Solids	Not available	Not available
<b>5</b>	Ammonia (as N)	Not available	Not available
<b>6</b>	Biochemical Oxygen Demand	Not available	Not available
<b>7</b>	Chemical Oxygen Demand	Not available	Not available
<b>8</b>	Total Nitrogen (as N)	Not available	Not available
<b>9</b>	Nitrite (as N)	Not available	Not available
<b>10</b>	Nitrate (as N)	Not available	Not available
<b>11</b>	Total Phosphorus (as P) <sup>Note 1</sup>	Not available	Not available
<b>12</b>	Orthophosphate (as P)	Not available	Not available
<b>13</b>	Sulphate (SO <sub>4</sub> )	Not available	Not available
<b>14</b>	Phenols (sum) <sup>Note 2</sup> (ug/l)	Not available	Not available

Note 1: For waste water samples this monitoring should be undertaken on a sample filtered on 0.45µm filter paper.

Note 2: USEPA Method 604, AWWA Standard Method 6240, or equivalent.

**TABLE D.1(ii)(c): DANGEROUS SUBSTANCE EMISSIONS TO SURFACE/GROUND WATERS**

**Secondary Discharge Point - Characteristics of the emission (1 table per discharge point)**

**Discharge Point Code: SW03Ring**

Number	Substance	As discharged		
		Max. daily average (µg/l)	kg/day	kg/year
1	Atrazine	Not available	Not available	Not available
2	Dichloromethane	Not available	Not available	Not available
3	Simazine	Not available	Not available	Not available
4	Toluene	Not available	Not available	Not available
5	Tributyltin	Not available	Not available	Not available
6	Xylenes	Not available	Not available	Not available
7	Arsenic	Not available	Not available	Not available
8	Chromium	Not available	Not available	Not available
9	Copper	Not available	Not available	Not available
10	Cyanide	Not available	Not available	Not available
11	Fluoride	Not available	Not available	Not available
12	Lead	Not available	Not available	Not available
13	Nickel	Not available	Not available	Not available
14	Zinc	Not available	Not available	Not available
15	Boron	Not available	Not available	Not available
16	Cadmium	Not available	Not available	Not available
17	Mercury	Not available	Not available	Not available
18	Selenium	Not available	Not available	Not available
19	Barium	Not available	Not available	Not available



**TABLE D.1(ii)(a) cont. :**  
**Discharge Point Code: SW04RING**

Source of Emission:	Old Waterpark Pumping Station		
Location:	Carrigaline Townland Carrigaline		
Grid Ref. (12 digit, 6E, 6N):	E173131, N062418		
Name of receiving waters:	Owenboy River		
River Basin District:	South Western River Basin District		
Designation of receiving waters:	None		
Flow rate in receiving waters:		Tidal Waters _____ m <sup>3</sup> .sec <sup>-1</sup>	Dry Weather Flow _____ m <sup>3</sup> .sec <sup>-1</sup> 95%ile flow

**Emission Details:**

(i) Volume emitted			
Normal/day	Not Available	Maximum/day	Not Available
Maximum rate/hour	Not Available	Period of emission (avg)	Not Available
Dry Weather Flow	Not Available		

**TABLE D.1(ii)(b): EMISSIONS TO SURFACE/GROUND WATERS - Characteristics of the emission (1 table per discharge point)  
(Secondary Discharge Point)**

**Discharge Point Code: SW04Ring**

Number	Substance	As discharged	
		Max. daily average	
<b>1</b>	pH	Not available	
<b>2</b>	Temperature	Not available	
<b>3</b>	Electrical Conductivity (@25°C)	Not available	
		Max. daily average (mg/l)	kg/day
<b>4</b>	Suspended Solids	Not available	Not available
<b>5</b>	Ammonia (as N)	Not available	Not available
<b>6</b>	Biochemical Oxygen Demand	Not available	Not available
<b>7</b>	Chemical Oxygen Demand	Not available	Not available
<b>8</b>	Total Nitrogen (as N)	Not available	Not available
<b>9</b>	Nitrite (as N)	Not available	Not available
<b>10</b>	Nitrate (as N)	Not available	Not available
<b>11</b>	Total Phosphorus (as P) <sup>Note 1</sup>	Not available	Not available
<b>12</b>	Orthophosphate (as P)	Not available	Not available
<b>13</b>	Sulphate (SO <sub>4</sub> )	Not available	Not available
<b>14</b>	Phenols (sum) <sup>Note 2</sup> (ug/l)	Not available	Not available

Note 1: For waste water samples this monitoring should be undertaken on a sample filtered on 0.45µm filter paper.

Note 2: USEPA Method 604, AWWA Standard Method 6240, or equivalent.

**TABLE D.1(ii)(c): DANGEROUS SUBSTANCE EMISSIONS TO SURFACE/GROUND WATERS**

**Secondary Discharge Point - Characteristics of the emission (1 table per discharge point)**

**Discharge Point Code: SW04Ring**

Number	Substance	As discharged		
		Max. daily average (µg/l)	kg/day	kg/year
1	Atrazine	Not available	Not available	Not available
2	Dichloromethane	Not available	Not available	Not available
3	Simazine	Not available	Not available	Not available
4	Toluene	Not available	Not available	Not available
5	Tributyltin	Not available	Not available	Not available
6	Xylenes	Not available	Not available	Not available
7	Arsenic	Not available	Not available	Not available
8	Chromium	Not available	Not available	Not available
9	Copper	Not available	Not available	Not available
10	Cyanide	Not available	Not available	Not available
11	Fluoride	Not available	Not available	Not available
12	Lead	Not available	Not available	Not available
13	Nickel	Not available	Not available	Not available
14	Zinc	Not available	Not available	Not available
15	Boron	Not available	Not available	Not available
16	Cadmium	Not available	Not available	Not available
17	Mercury	Not available	Not available	Not available
18	Selenium	Not available	Not available	Not available
19	Barium	Not available	Not available	Not available

**TABLE D.1(ii)(a) cont.. :**  
**Discharge Point Code: SW05RING**

Source of Emission:	Crosshaven Road Pumping Station
Location:	Carrigaline Townland Carrigaline
Grid Ref. (12 digit, 6E, 6N):	E173070, N062352
Name of receiving waters:	Owenboy River
River Basin District:	South Western River Basin District
Designation of receiving waters:	None
Flow rate in receiving waters:	<div style="display: flex; justify-content: space-between;"> <span>Tidal Water</span> <span>m<sup>3</sup>.sec<sup>-1</sup> Dry Weather Flow</span> </div> <div style="display: flex; justify-content: space-between;"> <span>_____</span> <span>m<sup>3</sup>.sec<sup>-1</sup> 95%ile flow</span> </div>

**Emission Details:**

(i) Volume emitted			
Normal/day	Not Available	Maximum/day	Not Available
Maximum rate/hour	Not Available	Period of emission (avg)	Not Available
Dry Weather Flow	Not Available		

**TABLE D.1(ii)(b): EMISSIONS TO SURFACE/GROUND WATERS - Characteristics of the emission (1 table per discharge point)  
(Secondary Discharge Point)**

**Discharge Point Code: SW05Ring**

Number	Substance	As discharged	
		Max. daily average	
<b>1</b>	pH	Not available	
<b>2</b>	Temperature	Not available	
<b>3</b>	Electrical Conductivity (@25°C)	Not available	
		Max. daily average (mg/l)	kg/day
<b>4</b>	Suspended Solids	Not available	Not available
<b>5</b>	Ammonia (as N)	Not available	Not available
<b>6</b>	Biochemical Oxygen Demand	Not available	Not available
<b>7</b>	Chemical Oxygen Demand	Not available	Not available
<b>8</b>	Total Nitrogen (as N)	Not available	Not available
<b>9</b>	Nitrite (as N)	Not available	Not available
<b>10</b>	Nitrate (as N)	Not available	Not available
<b>11</b>	Total Phosphorus (as P) <sup>Note 1</sup>	Not available	Not available
<b>12</b>	Orthophosphate (as P)	Not available	Not available
<b>13</b>	Sulphate (SO <sub>4</sub> )	Not available	Not available
<b>14</b>	Phenols (sum) <sup>Note 2</sup> (ug/l)	Not available	Not available

Note 1: For waste water samples this monitoring should be undertaken on a sample filtered on 0.45µm filter paper.

Note 2: USEPA Method 604, AWWA Standard Method 6240, or equivalent.

**TABLE D.1(ii)(c): DANGEROUS SUBSTANCE EMISSIONS TO SURFACE/GROUND WATERS**

**Secondary Discharge Point - Characteristics of the emission (1 table per discharge point)**

**Discharge Point Code: SW05Ring**

Number	Substance	As discharged		
		Max. daily average (µg/l)	kg/day	kg/year
1	Atrazine	Not available	Not available	Not available
2	Dichloromethane	Not available	Not available	Not available
3	Simazine	Not available	Not available	Not available
4	Toluene	Not available	Not available	Not available
5	Tributyltin	Not available	Not available	Not available
6	Xylenes	Not available	Not available	Not available
7	Arsenic	Not available	Not available	Not available
8	Chromium	Not available	Not available	Not available
9	Copper	Not available	Not available	Not available
10	Cyanide	Not available	Not available	Not available
11	Fluoride	Not available	Not available	Not available
12	Lead	Not available	Not available	Not available
13	Nickel	Not available	Not available	Not available
14	Zinc	Not available	Not available	Not available
15	Boron	Not available	Not available	Not available
16	Cadmium	Not available	Not available	Not available
17	Mercury	Not available	Not available	Not available
18	Selenium	Not available	Not available	Not available
19	Barium	Not available	Not available	Not available

**TABLE D.1(ii)(a) cont. :**  
**Discharge Point Code: SW06RING**

Source of Emission:	Crosshaven Road Pumping Station No.2
Location:	Crosshaven Townland Crosshaven
Grid Ref. (12 digit, 6E, 6N):	E178816, N061285
Name of receiving waters:	Owenboy River
River Basin District:	South Western River Basin District
Designation of receiving waters:	None
Flow rate in receiving waters:	_____ Tidal _____ m <sup>3</sup> .sec <sup>-1</sup> Dry Weather Flow _____ m <sup>3</sup> .sec <sup>-1</sup> 95%ile flow

**Emission Details:**

(i) Volume emitted			
Normal/day	Not Available	Maximum/day	Not Available
Maximum rate/hour	Not Available	Period of emission (avg)	Not Available
Dry Weather Flow	Not Available		

**TABLE D.1(ii)(b): EMISSIONS TO SURFACE/GROUND WATERS - Characteristics of the emission (1 table per discharge point)  
(Secondary Discharge Point)**

**Discharge Point Code: SW06Ring**

Number	Substance	As discharged	
		Max. daily average	
<b>1</b>	pH	Not available	
<b>2</b>	Temperature	Not available	
<b>3</b>	Electrical Conductivity (@25°C)	Not available	
		Max. daily average (mg/l)	kg/day
<b>4</b>	Suspended Solids	Not available	Not available
<b>5</b>	Ammonia (as N)	Not available	Not available
<b>6</b>	Biochemical Oxygen Demand	Not available	Not available
<b>7</b>	Chemical Oxygen Demand	Not available	Not available
<b>8</b>	Total Nitrogen (as N)	Not available	Not available
<b>9</b>	Nitrite (as N)	Not available	Not available
<b>10</b>	Nitrate (as N)	Not available	Not available
<b>11</b>	Total Phosphorus (as P) <sup>Note 1</sup>	Not available	Not available
<b>12</b>	Orthophosphate (as P)	Not available	Not available
<b>13</b>	Sulphate (SO <sub>4</sub> )	Not available	Not available
<b>14</b>	Phenols (sum) <sup>Note 2</sup> (ug/l)	Not available	Not available

Note 1: For waste water samples this monitoring should be undertaken on a sample filtered on 0.45µm filter paper.

Note 2: USEPA Method 604, AWWA Standard Method 6240, or equivalent.



**TABLE D.1(ii)(c): DANGEROUS SUBSTANCE EMISSIONS TO SURFACE/GROUND WATERS**

**Secondary Discharge Point - Characteristics of the emission (1 table per discharge point)**

**Discharge Point Code: SW06Ring**

Number	Substance	As discharged		
		Max. daily average (µg/l)	kg/day	kg/year
1	Atrazine	Not available	Not available	Not available
2	Dichloromethane	Not available	Not available	Not available
3	Simazine	Not available	Not available	Not available
4	Toluene	Not available	Not available	Not available
5	Tributyltin	Not available	Not available	Not available
6	Xylenes	Not available	Not available	Not available
7	Arsenic	Not available	Not available	Not available
8	Chromium	Not available	Not available	Not available
9	Copper	Not available	Not available	Not available
10	Cyanide	Not available	Not available	Not available
11	Fluoride	Not available	Not available	Not available
12	Lead	Not available	Not available	Not available
13	Nickel	Not available	Not available	Not available
14	Zinc	Not available	Not available	Not available
15	Boron	Not available	Not available	Not available
16	Cadmium	Not available	Not available	Not available
17	Mercury	Not available	Not available	Not available
18	Selenium	Not available	Not available	Not available
19	Barium	Not available	Not available	Not available

**TABLE D.1(ii)(a) cont. :**  
**Discharge Point Code: SW07RING**

Source of Emission:	Crosshaven Pumping Station No 1
Location:	Crosshaven Townland Crosshaven
Grid Ref. (12 digit, 6E, 6N):	E179639, N061145
Name of receiving waters:	Owenboy River
River Basin District:	South Western River Basin District
Designation of receiving waters:	None
Flow rate in receiving waters:	<div style="display: flex; justify-content: space-between;"> <span>Tidal Water</span> <span>m<sup>3</sup>.sec<sup>-1</sup> Dry Weather Flow</span> </div> <div style="display: flex; justify-content: space-between;"> <span>_____</span> <span>m<sup>3</sup>.sec<sup>-1</sup> 95%ile flow</span> </div>

**Emission Details:**

(i) Volume emitted			
Normal/day	Not Available	Maximum/day	Not Available
Maximum rate/hour	Not Available	Period of emission (avg)	Not Available
Dry Weather Flow	Not Available		

**TABLE D.1(ii)(b): EMISSIONS TO SURFACE/GROUND WATERS - Characteristics of the emission (1 table per discharge point)  
(Secondary Discharge Point)**

**Discharge Point Code: SW07Ring**

Number	Substance	As discharged	
		Max. daily average	
<b>1</b>	pH	Not available	
<b>2</b>	Temperature	Not available	
<b>3</b>	Electrical Conductivity (@25°C)	Not available	
		Max. daily average (mg/l)	kg/day
<b>4</b>	Suspended Solids	Not available	Not available
<b>5</b>	Ammonia (as N)	Not available	Not available
<b>6</b>	Biochemical Oxygen Demand	Not available	Not available
<b>7</b>	Chemical Oxygen Demand	Not available	Not available
<b>8</b>	Total Nitrogen (as N)	Not available	Not available
<b>9</b>	Nitrite (as N)	Not available	Not available
<b>10</b>	Nitrate (as N)	Not available	Not available
<b>11</b>	Total Phosphorus (as P) <sup>Note 1</sup>	Not available	Not available
<b>12</b>	Orthophosphate (as P)	Not available	Not available
<b>13</b>	Sulphate (SO <sub>4</sub> )	Not available	Not available
<b>14</b>	Phenols (sum) <sup>Note 2</sup> (ug/l)	Not available	Not available

Note 1: For waste water samples this monitoring should be undertaken on a sample filtered on 0.45µm filter paper.

Note 2: USEPA Method 604, AWWA Standard Method 6240, or equivalent.

**TABLE D.1(ii)(c): DANGEROUS SUBSTANCE EMISSIONS TO SURFACE/GROUND WATERS**

**Secondary Discharge Point - Characteristics of the emission (1 table per discharge point)**

**Discharge Point Code: SW07Ring**

Number	Substance	As discharged		
		Max. daily average (µg/l)	kg/day	kg/year
1	Atrazine	Not available	Not available	Not available
2	Dichloromethane	Not available	Not available	Not available
3	Simazine	Not available	Not available	Not available
4	Toluene	Not available	Not available	Not available
5	Tributyltin	Not available	Not available	Not available
6	Xylenes	Not available	Not available	Not available
7	Arsenic	Not available	Not available	Not available
8	Chromium	Not available	Not available	Not available
9	Copper	Not available	Not available	Not available
10	Cyanide	Not available	Not available	Not available
11	Fluoride	Not available	Not available	Not available
12	Lead	Not available	Not available	Not available
13	Nickel	Not available	Not available	Not available
14	Zinc	Not available	Not available	Not available
15	Boron	Not available	Not available	Not available
16	Cadmium	Not available	Not available	Not available
17	Mercury	Not available	Not available	Not available
18	Selenium	Not available	Not available	Not available
19	Barium	Not available	Not available	Not available

**TABLE D.1(iii)(a): EMISSIONS TO SURFACE/GROUND WATERS  
(Storm Water Overflow) (1 table per discharge point)**

**Discharge Point Code: SW02RING**

Source of Emission:	Shanbally Pumping Station		
Location:	Shanbally Townland Shanbally		
Grid Ref. (12 digit, 6E, 6N):	E175796, N064930		
Name of receiving waters:	Monkstown Creek		
River Basin District:	South Western River Basin District		
Designation of receiving waters:	NHA		
Flow rate in receiving waters:		Tidal Waters _____ m <sup>3</sup> .sec <sup>-1</sup>	Dry Weather Flow _____ m <sup>3</sup> .sec <sup>-1</sup> 95%ile flow

**Emission Details:**

(i) Volume emitted			
Normal/day	Not Available	Maximum/day	Not Available
Maximum rate/hour	Not Available	Period of emission (avg)	Not Available

**TABLE D.1(iii)(a) cont. :**  
**Discharge Point Code: SW03RING**

Source of Emission:	Coolmore Pumping Station
Location:	Carrigaline Townland Carrigaline East
Grid Ref. (12 digit, 6E, 6N):	E174443, N062603
Name of receiving waters:	Owenboy River
River Basin District:	South Western River Basin District
Designation of receiving waters:	NHA
Flow rate in receiving waters:	<p style="text-align: right;">Tidal Water _____ m<sup>3</sup>.sec<sup>-1</sup> Dry Weather Flow</p> <p style="text-align: right;">_____ m<sup>3</sup>.sec<sup>-1</sup> 95%ile flow</p>

**Emission Details:**

(i) Volume emitted			
Normal/day	Not Available	Maximum/day	Not Available
Maximum rate/hour	Not Available	Period of emission (avg)	Not Available

**TABLE D.1(iii)(a) cont. :**  
**Discharge Point Code: SW04RING**

Source of Emission:	Old Waterpark Pumping Station
Location:	Carrigaline Townland Carrigaline
Grid Ref. (12 digit, 6E, 6N):	E173131, N062418
Name of receiving waters:	Owenboy River
River Basin District:	South Western River Basin District
Designation of receiving waters:	None
Flow rate in receiving waters:	<p style="text-align: right;">Tidal Waters _____ m<sup>3</sup>.sec<sup>-1</sup> Dry Weather Flow</p> <p style="text-align: right;">_____ m<sup>3</sup>.sec<sup>-1</sup> 95%ile flow</p>

**Emission Details:**

(i) Volume emitted			
Normal/day	Not Available	Maximum/day	Not Available
Maximum rate/hour	Not Available	Period of emission (avg)	Not Available

**TABLE D.1(iii)(a) cont. :**  
**Discharge Point Code: SW05RING**

Source of Emission:	Crosshaven Road Pumping Station 1
Location:	Carrigaline Townland Carrigaline
Grid Ref. (12 digit, 6E, 6N):	E173070, N062352
Name of receiving waters:	Owenboy River
River Basin District:	South Western River Basin District
Designation of receiving waters:	None
Flow rate in receiving waters:	Tidal Waters _____ m <sup>3</sup> .sec <sup>-1</sup> Dry Weather Flow _____ m <sup>3</sup> .sec <sup>-1</sup> 95%ile flow

**Emission Details:**

(i) Volume emitted			
Normal/day	Not Available	Maximum/day	Not Available
Maximum rate/hour	Not Available	Period of emission (avg)	Not Available



**TABLE D.1(iii)(a) cont. :**  
**Discharge Point Code: SW06RING**

Source of Emission:	Crosshaven Pumping Station No. 2
Location:	Crosshaven Townland Crosshaven
Grid Ref. (12 digit, 6E, 6N):	E178816, N061285
Name of receiving waters:	Owenboy River
River Basin District:	South Western River Basin District
Designation of receiving waters:	None
Flow rate in receiving waters:	<p style="text-align: right;">Tidal Waters _____ m<sup>3</sup>.sec<sup>-1</sup> Dry Weather Flow</p> <p style="text-align: right;">_____ m<sup>3</sup>.sec<sup>-1</sup> 95%ile flow</p>

**Emission Details:**

(i) Volume emitted			
Normal/day	Not Available	Maximum/day	Not Available
Maximum rate/hour	Not Available	Period of emission (avg)	Not Available

**TABLE D.1(iii)(a) cont. :**  
**Discharge Point Code: SW07RING**

Source of Emission:	Crosshaven Pumping Station No. 1		
Location:	Crosshaven Townland Crosshaven		
Grid Ref. (12 digit, 6E, 6N):	E179639, N061145		
Name of receiving waters:	Owenboy River		
River Basin District:	South Western River Basin District		
Designation of receiving waters:	None		
Flow rate in receiving waters:		Tidal Waters _____ m <sup>3</sup> .sec <sup>-1</sup>	Dry Weather Flow _____ m <sup>3</sup> .sec <sup>-1</sup> 95%ile flow

**Emission Details:**

(i) Volume emitted			
Normal/day	Not Available	Maximum/day	Not Available
Maximum rate/hour	Not Available	Period of emission (avg)	Not Available

**Table D2 table of Discharge Points**

PT_CD	PT_TYPE	LA_NAME	RWB_TYP E	RWB_NAME	DESIGNATIO N	EASTIN G	NORTHIN G	VERIFIE D
SW01RIN G	Primary	Cork County Council	Coastal	Cork Harbour	none	181358	62521	N
SW02RIN G	Secondary	Cork County Council	Transitional	Monkstown Creek	NHA	175796	64930	Y
SW03RIN G	Secondary	Cork County Council	Transitional	East Owenaboy River	NHA	174443	62603	Y
SW04RIN G	Secondary	Cork County Council	Transitional	Middle Owenaboy River	none	173131	62418	Y
SW05RIN G	Secondary	Cork County Council	Transitional	Middle Owenaboy River	none	173070	62352	Y
SW06RIN G	Secondary	Cork County Council	Transitional	Owenaboy River	None	178816	61285	N
SW07RIN G	Secondary	Cork County Council	Transitional	Owenaboy River	none	179639	61145	Y
SW02RIN G	Storm Water Overflow	Cork County Council	Transitional	Monkstown Creek	NHA	175796	64930	Y
SW03RIN G	Storm Water Overflow	Cork County Council	Transitional	East Owenaboy River	NHA	174443	62603	Y
SW04RIN G	Storm Water Overflow	Cork County Council	Transitional	Middle Owenaboy River	none	173131	62418	Y
SW05RIN G	Storm Water Overflow	Cork County Council	Transitional	Middle Owenaboy River	none	173070	62352	Y
SW06RIN G	Storm Water Overflow	Cork County Council	Transitional	Owenaboy River	none	178816	61285	N
SW07RIN G	Storm Water Overflow	Cork County Council	Transitional	Owenaboy River	none	179639	61145	Y

## SECTION E MONITORING

Advice on completing this section is provided in the accompanying Guidance Note.

### E.1 Waste Water Discharge Frequency and Quantities – Existing & Proposed

Provide an estimation of the quantity of waste water likely to be emitted in relation to all primary and secondary discharge points applied for. This information should be included in Table E.1(i) of the Annex. The primary discharge shall be annotated with a **(P)**.

Provide an estimation of the quantity of waste water likely to be emitted in relation to all storm water overflows within the agglomeration applied for. This information should be included in Table E.1(ii) of the Annex.

### E.2. Monitoring and Sampling Points

Programmes for environmental monitoring should be submitted as part of the application. These programmes should be provided as Attachment E.2.

Reference should be made to, provision of sampling points and safe means of access, sampling methods, analytical and quality control procedures, including equipment calibration, equipment maintenance and data recording/reporting procedures to be carried out in order to ensure accurate and reliable monitoring.

In determining the sampling programme to be carried out, the variability of the emission and its effect on the receiving environment should be considered.

Details of any accreditation or certification of analysis should be included.

**Attachment E.2** should contain any supporting information

Attachment included	Yes	No

### E.3. Tabular data on Monitoring and Sampling Points

Applicants should submit the following information for each monitoring and sampling point:

PT_CD	PT_TYPE	MON_TYPE	EASTING	NORTHING	VERIFIED
Point Code Provide label ID's assigned in section E of application	Point Type (e.g., Primary, Secondary, Storm Water Overflow)	Monitoring Type M = Monitoring S = Sampling	6E-digit GPS Irish National Grid Reference	6N-digit GPS Irish National Grid Reference	Y = GPS used N = GPS not used

An individual record (i.e., row) is required for each discharge point. Acceptable file formats include Excel, Access or other upon agreement with the Agency. A standard Excel template can be downloaded from the EPA website at [www.epa.ie](http://www.epa.ie). This data should be submitted to the Agency on a separate CD-Rom containing sections B.1, B.2, B.3, B.4, B.5, C.1, D.2 and F.2.

**E.4 Sampling Data - Not applicable**

Regulation 16(1)(h) of the Waste Water Discharge (Authorisation) Regulations 2007 requires all applicants in the case of an existing waste water treatment plant to specify the sampling data pertaining to the discharge based on the samples taken in the 12 months preceding the making of the application.

Regulation 16(1)(l) of the regulations requires applicants to give details of compliance with any applicable monitoring requirements and treatment standards.

**Attachment E.4** should contain any supporting information.

**E4 attachment contains sampling information relating to the primary discharges which are the subject of the application**

Attachment included	Yes	No
	√	

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**TABLE E.1(i): WASTE WATER FREQUENCY AND QUANTITY OF DISCHARGE – Primary and Secondary Discharge Points**

Identification Code for Discharge point	Frequency of discharge (days/annum)	Quantity of Waste Water Discharged (m <sup>3</sup> /annum)
SW01RING <b>(P)</b>	365	3,658,760
SW02RING	Not available	Not Available
SW03RING	Not available	Not Available
SW04RING	Not available	Not Available
SW05RING	Not available	Not Available
SW06RING	Not available	Not Available
SW07RING	Not available	Not Available

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**TABLE E.1(ii): WASTE WATER FREQUENCY AND QUANTITY OF DISCHARGE – Storm Water Overflows**

Identification Code for Discharge point	Frequency of discharge (days/annum)	Quantity of Waste Water Discharged (m <sup>3</sup> /annum)	Complies with Definition of Storm Water Overflow
SW02RING	Not Available	Not Available	N
SW03RING	Not Available	Not Available	N
SW04RING	Not Available	Not Available	Y
SW05RING	Not Available	Not Available	N
SW06RING	Not Available	Not Available	Y
SW07RING	Not Available	Not Available	Y

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## Attachment E2

Cork County Council operate a refrigerated composite sampler on the primary discharge outlet from the Ringaskiddy outfall to sea . This sampler operates on a 28 day rolling cycle and collects samples presently on a 24 hour basis per sample . There is no safe access to the discharge pipe at sea as the pipe discharges into deep water off the coast therefore the only location that is accessible and is safe for personnel is at the channel prior to discharge to sea . Samples have generally been collected on a fortnightly basis at this location from the composite sampler .It is proposed to continue with this arrangement as part of the licencing process .Samples are generally analysed for COD, Ammonia, pH ,Suspended Solids, Total Nitrogen Total Phosphorus ,Ortho phosphate(in recent times) and Sulphates. The samples are periodically checked for BOD but as the main component of the discharge is treated industrial wastewaters from the industries located in Ringaskiddy the principal focus has been on parameters that may be present in industrial effluents. There is a flow meter and pH meter installed in the outfall location however the reported pH results relate solely to the composite samples collected by the Environment directorate of Cork County Council.

The wastewater Laboratory of Cork County Council are accredited for a number of analytical tests under the Irish National Accreditation Board (INAB) under the ISO 17025 international standard . We currently are accredited for the following parameters under the ISO 17025 system

- pH
- Biochemical Oxygen Demand
- Chemical Oxygen Demand
- Suspended Solids
- Ammonia
- Ortho Phosphate
- Total Phosphate
- Chloride
- Sulphate

The laboratory perform a number of analytical tests e.g. Fats Oil, Grease &Metals using an ICP-OES system and while we are not currently accredited for extra tests the analytical procedures and protocol are adhered to by the laboratory as if the tests are accredited,. The laboratory also participate in proficiency testing schemes which measure the accuracy of results and performance of the laboratory in both the EPA scheme and the WRC Aquacheck scheme from the UK. The performance of the laboratory in these schemes is excellent and the non accredited tests are within the performance criteria for the schemes as evaluated by the scheme coordinators.



**Table E3 Monitoring and sampling locations**

PT_CD	PT_TYPE	MON_TYPE	EASTING	NORTHING	VERIFIED
SW01RING	Primary	Sampling	178871	63434	N
SW02RING	Secondary	Monitoring	175796	64930	Y
SW03RING	Secondary	Monitoring	174443	62603	Y
SW04RING	Secondary	Monitoring	173131	62418	Y
SW05RING	Secondary	Monitoring	173070	62352	Y
SW06RING	Secondary	Monitoring	178816	61285	N
SW07RING	Secondary	Monitoring	179639	61145	Y
SW02RING	Storm Water Overflow	Not available	175796	64930	Y
SW03RING	Storm Water Overflow	Not available	174443	62603	Y
SW04RING	Storm Water Overflow	Not available	173131	62418	Y
SW05RING	Storm Water Overflow	Not available	173070	62352	Y
SW06RING	Storm Water Overflow	Not available	178816	61285	N
SW07RING	Storm Water Overflow	Not available	179639	61145	Y

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E4 : Monitoring Data

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### Carrigaline Pumping Station

Sample Date	Sample	pH	BOD mg/L	COD mg/L	SS mg/L	TP mg/L	TN mg/L	NH <sub>3</sub> mg/L	SO <sub>4</sub>	O-PO <sub>4</sub> -P	Flow	Cond 20c	Chromium	Copper	Lead	Nickel	Zinc	Barium	Cadmium	Boron	Nitrate as N
24/10/2007	Pumping Station	8.2	138	357	84	6.38	54	36.4	108	11.19	3500	1679	<0.02	<0.02	<0.02	<0.02	0.045	<0.02	<0.02	0.068	7.99
	Average	8.20	106	357	84	6.38	54	36.4	108	11.19	3500		<0.02	<0.02	<0.02	<0.02	0.045	<0.02	<0.02	0.068	7.99
	Kg/Day		483	1249.5	294	22.33	189	127.4	378	39.165			<0.07	<0.07	<0.07	<0.07	0.1575	<0.07	<0.07	0.238	27.965
Parameter	Method	Result	Units	Source	Kg/Day																
Arsenic (OES)	ICP-OES	6	ug/L	GR1031 24/10/07 Carrigaline Pumping Station	0.021																
Atrazine	HPLC	<0.01	ug/L	GR1031 24/10/07 Carrigaline Pumping Station	<0.000035																
Cyanide	Colorimetry	8	ug/L	GR1031 24/10/07 Carrigaline Pumping Station	0.028																
Dichloromethane	GC-MS 1	<1	ug/L	GR1031 24/10/07 Carrigaline Pumping Station	<0.0035																
EPH	GC-FID	7.3	ug/L	GR1031 24/10/07 Carrigaline Pumping Station	0.02555																
Mercury (OES)	ICP-OES	0.9	ug/L	GR1031 24/10/07 Carrigaline Pumping Station	0.00315																
Phenols (Total)	GC-MS 2	<0.10	ug/L	GR1031 24/10/07 Carrigaline Pumping Station	<0.00035																
Polycyclic Aromatic Hydrocarbons	HPLC	<0.01	ug/L	GR1031 24/10/07 Carrigaline Pumping Station	<0.000035																
Selenium (OES)	ICP-OES	6	ug/L	GR1031 24/10/07 Carrigaline Pumping Station	0.021																
Simazine	HPLC	<0.01	ug/L	GR1031 24/10/07 Carrigaline Pumping Station	<0.000035																
Toluene	GC-MS 1	<0.01	ug/L	GR1031 24/10/07 Carrigaline Pumping Station	0.000035																
Total Organic Carbon	TOC analyser (NPOC)	61.6	mg/L	GR1031 24/10/07 Carrigaline Pumping Station	215.6																
TPH C10-C36	GC-FID	7.3	ug/L	GR1031 24/10/07 Carrigaline Pumping Station	0.02555																
Tributyltin*	GC-MS 1	NS	ug/L as Sn	GR1031 24/10/07 Carrigaline Pumping Station																	
Xylene	GC-MS 1	<1	ug/L	GR1031 24/10/07 Carrigaline Pumping Station	<0.00035																

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# Ringaskiddy Outfall

Sample Date	Sample	pH	BOD mg/L	COD mg/L	SS mg/L	TP mg/L	TN mg/L	NH <sub>3</sub> mg/L	SO <sub>4</sub>	O-P <sub>04</sub> -P	Flow	Cond 20C	Cadmium	Chromium	Copper	Lead	Nickel	Zinc	Barium	Boron	Fluoride	Nitrate as N	
17/01/2007	Outfall	8		63	12	2.47	40	0.3			11399.5												
01/02/2007	Outfall	7.7		127	61	3.58	12.9	2.4			5559												
07/06/2007	Outfall	8.4		52	17	2.5	5.7	<0.1			13843												
04/04/2007	Outfall	8.1		99	42	1.74	6.75	1			17574												
20/06/2007	Outfall	8		90	32	2.35	7.5	1.2			17671				0.1	<0.02	<0.02						
24/05/2007	Outfall	8.7		153	89	2.41		<0.1			6189.9											<0.02	
30/05/2007	Outfall	7.5		339	158	8.93	14.4	10.6			7715												
04/07/2007	Outfall	8.2		111	69	3.25					8365												
24/07/2007	Outfall	8		108	51	5.28	11	1.2			8891												
01/08/2007	Outfall	7.9		203	130	8.5	15.1	1.8			8555												
05/09/2007	Outfall	8.4		165	111		16.1	<0.1			6525												
24/10/2007	Outfall	7.6	106	311	112	2.21	21	14.2		5.63	8248												
	Average	8.04	106	151.75	73.66667	3.929091	15.045	4.0875		6.36	10052.95	2100	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	5.11	0.66	3.92
	Kg/Day		1065.6127	1525.5852	740.5673	39.49895	151.2466	41.09143313		5.995	275.9167	2100	<0.201059	<0.201059	0.603177	<0.20104	<0.20104	<0.20104	<0.20104	<0.20104	51.3706	6.634947	39.407564

Parameter	Method	Result	Units	Source	Kg/Day
Arsenic (OES)	ICP-OES	7	ug/L	GR1030 24/10/07 Ringaskiddy Pumping Station Outfall	0.070371
Atrazine	HPLC	<0.01	ug/L	GR1030 24/10/07 Ringaskiddy Pumping Station Outfall	<0.000101
Cyanide	Colorimetry	<5	ug/L	GR1030 24/10/07 Ringaskiddy Pumping Station Outfall	<0.050266
Dichloromethane	GC-MS 1	<1	ug/L	GR1030 24/10/07 Ringaskiddy Pumping Station Outfall	<0.010063
EPH	GC-FID	4.1	ug/l	GR1030 24/10/07 Ringaskiddy Pumping Station Outfall	0.041217
Mercury (OES)	ICP-OES	0.9	ug/L	GR1030 24/10/07 Ringaskiddy Pumping Station Outfall	0.099048
Phenols (Total)	GC-MS 2	<0.10	ug/L	GR1030 24/10/07 Ringaskiddy Pumping Station Outfall	<0.001005
Polyaromatic Hydrocarbons	HPLC	<0.01	ug/L	GR1030 24/10/07 Ringaskiddy Pumping Station Outfall	<0.000101
Selenium (OES)	ICP-OES	4	ug/L	GR1030 24/10/07 Ringaskiddy Pumping Station Outfall	0.040212
Simazine	HPLC	<0.01	ug/L	GR1030 24/10/07 Ringaskiddy Pumping Station Outfall	<0.000101
Toluene	GC-MS 1	<0.01	ug/L	GR1030 24/10/07 Ringaskiddy Pumping Station Outfall	<0.000101
Total Organic Carbon	TOC analyser (NPOC)	49.00	mg/L	GR1030 24/10/07 Ringaskiddy Pumping Station Outfall	492.5946
TPH C10-C36	GC-FID	4.1	ug/L	GR1030 24/10/07 Ringaskiddy Pumping Station Outfall	0.041217
Tributyltin*	GC-MS 1	<0.02	ug/L as Sn	GR1030 24/10/07 Ringaskiddy Pumping Station Outfall	<0.000201
Xylene	GC-MS 1	<0.01	ug/L	GR1030 24/10/07 Ringaskiddy Pumping Station Outfall	<0.000101

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## SECTION F: EXISTING ENVIRONMENT & IMPACT OF THE DISCHARGE(S)

*Advice on completing this section is provided in the accompanying Guidance Note.*

Detailed information is required to enable the Agency to assess the existing receiving environment. This section requires the provision of information on the ambient environmental conditions within the receiving water(s) upstream and downstream of any discharge(s).

Where development is proposed to be carried out, being development which is of a class for the time being specified under Article 24 (First Schedule) of the Environmental Impact Assessment Regulations, the information on the state of the existing environment should be addressed in the EIS. **In such cases, it will suffice for the purposes of this section to provide adequate cross-references to the relevant sections in the EIS.**

### F.1. Assessment of Impact on Receiving Surface or Ground Water

- Give summary details and an assessment of the impacts of any existing or proposed emissions on the environment, including environmental media other than those into which the emissions are to be made.
- Tables F.1(i)(a) & (b) should be completed for the primary discharge point. Surface water monitoring locations upstream and downstream of the discharge point shall be screened for those substances listed in Tables F.1(i)(a) & (b). Monitoring of surface water shall be carried out at not less than two points, one upstream from the discharge location and one downstream.
- For discharges from secondary discharge points Tables F.1(ii)(a) & (b) should be completed. Furthermore, provide summary details and an assessment of the impacts of any existing or proposed emissions on the surface water or ground (aquifers, soils, sub-soils and rock environment), including any impact on environmental media other than those into which the emissions are to be made.
- Provide details of the extent and type of ground emissions at the works. For larger discharges to groundwaters, e.g., from Integrated Constructed Wetlands, large scale percolation areas, etc., a comprehensive report must be completed which should include, inter alia, topography, meteorological data, water quality, geology, hydrology, and hydrogeology. The latter must in particular present the aquifer classification and vulnerability. The Geological Survey of Ireland Groundwater Protection Scheme Dept of the Environment and Local Government, Geological Survey of Ireland, EPA (1999) methodology should be used for any such classification. This report should also identify all surface water bodies and water wells that may be at risk as a result of the ground discharge.
- Describe the existing environment in terms of water quality with particular reference to environmental quality standards or other legislative standards. Submit a copy of the most recent water quality management plan or catchment management plan in place for the receiving water body. Give details of any designation under any Council Directive or Regulations that apply in relation to the receiving water.
- Provide a statement as to whether or not emissions of main polluting substances (as defined in the *Dangerous Substances Regulations S.I. No. 12 of 2001*) to water are likely to impair the environment.

- In circumstances where water abstraction points exist downstream of any discharge describe measures to be undertaken to ensure that discharges from the waste water works will not have a significant effect on faecal coliform, salmonella and protozoan pathogen numbers, e.g., Cryptosporidium and Giardia, in the receiving water environment.
  - Indicate whether or not emissions from the agglomeration or any plant, methods, processes, operating procedures or other factors which affect such emissions are likely to have a significant effect on –
    - (a) a site (until the adoption, in respect of the site, of a decision by the European Commission under Article 21 of Council Directive 92/43/EEC for the purposes of the third paragraph of Article 4(2) of that Directive) –
      - (i) notified for the purposes of Regulation 4 of the Natural Habitats Regulations, subject to any amendments made to it by virtue of Regulation 5 of those Regulations,
      - (ii) details of which have been transmitted to the Commission in accordance with Regulation 5(4) of the Natural Habitats Regulations, or
      - (iii) added by virtue of Regulation 6 of the Natural Habitats Regulations to the list transmitted to the Commission in accordance with Regulation 5(4) of those Regulations,
    - (b) a site adopted by the European Commission as a site of Community importance for the purposes of Article 4(2) of Council Directive 92/43/EEC<sup>1</sup> in accordance with the procedures laid down in Article 21 of that Directive,
    - (c) a special area of conservation within the meaning of the Natural Habitats Regulations, or
    - (d) an area classified pursuant to Article 4(1) or 4(2) of Council Directive 79/409/EEC<sup>2</sup>;
- <sup>1</sup>Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora (OJ No. L 206, 22.07.1992)
- <sup>2</sup>Council Directive 79/409/EEC of 2 April 1979 on the conservation of wild birds (OJ No. L 103, 25.4.1979)
- Describe, where appropriate, measures for minimising pollution over long distances or in the territory of other states.
  - This section should also contain full details of any modelling of discharges from the agglomeration. Full details of the assessment and any other relevant information on the receiving environment should be submitted as **Attachment F.1.**

Attachment included	Yes	No
	x	

## F.2 Tabular Data on Drinking Water Abstraction Point(s)

### Not applicable

Applicants should submit the following information for each downstream or downgradient drinking water abstraction point. The zone of contribution for the abstraction point should be delineated and any potential risks from the waste water discharge to the water quality at that abstraction point identified.

ABS_CD	AGG_SERVED	ABS_VOL	PT_CD	DIS_DS	EASTING	NORTHING	VERIFIED
Abstraction Code	Agglomeration served	Abstraction Volume in m <sup>3</sup> /day	Point Code Provide label ID's	Distance Downstream in meters from Emission Point to Abstraction Point	6E-digit GPS Irish National Grid Reference	6N-digit GPS Irish National Grid Reference	Y = GPS used N = GPS not used

**Note:** Attach any risk assessment that may have been carried out in relation to the abstraction point(s) listed.

An individual record (i.e. row) is required for each abstraction point. Acceptable file formats include Excel, Access or other upon agreement with the Agency. A standard Excel template can be downloaded from the EPA website at [www.epa.ie](http://www.epa.ie). This data should be submitted to the Agency on a separate CD-Rom containing sections B.1, B.2, B.3, B.4, B.5, C.1, D.2 and E.3.

**Attachment F.2** should contain any supporting information. **Not applicable**



**TABLE F.1(i)(a): SURFACE/GROUND WATER MONITORING**

(Primary Discharge Point – one table per upstream and downstream location)

**Discharge Point Code:** SW01Ring

**MONITORING POINT CODE:** SW01Ring

Parameter	Results (mg/l <sup>Note 1</sup> )				Sampling method (grab, drift etc.)	Limit of Quantitation	Analysis method / technique
	July 24	Aug 01	Sept 05	Oct 24			
<b>2007</b>							
pH	8.0	7.9	8.4	7.6	Composite	2	Electrochemical
Temperature	NA	NA	NA	NA	Composite	N/A	N/A
Electrical Conductivity (@20°C)	NA	NA	NA	2100	Composite	0.5 µmhos/cm	Electrochemical
Suspended Solids	51	130	111	112	Composite	0.5 mg/L	Gravimetric
Ammonia (as N)	1.2	1.8	<0.1	14.2	Composite	0.02 mg/L	Colorimetric
Biochemical Oxygen Demand	NA	NA	NA	106	Composite	0.06 mg/L	Electrochemical
Chemical Oxygen Demand	108	203	165	311	Composite	8 mg/L	Digestion + Colorimetric
Dissolved Oxygen	NA	NA	NA	NA	Composite	N/A	N/A
Hardness (as CaCO <sub>3</sub> )	NA	NA	NA	NA	Composite	N/A	N/A
Total Nitrogen (as N)	11	15.1	16.1	21	Composite	0.5 mg/L	Digestion + Colorimetric
Nitrite (as N)	NA	NA	NA	NA	Composite	N/A	N/A
Nitrate (as N)	NA	NA	NA	3.92	Composite	0.5 mg/L	Colorimetric
Total Phosphorus (as P)	5.28	8.5	NA	2.21	Composite	0.2 mg/L	Digestion + Colorimetric
Orthophosphate (as P) - unfiltered	NA	NA	5.63	6.36	Composite	0.02 mg/L	Colorimetric
Sulphate (SO <sub>4</sub> )	NA	NA	360.8	160	Composite	30 mg/L	Turbidimetric
Phenols (sum) <sup>Note 2</sup> (ug/l)	NA	NA	NA	<0.10	Composite	0.1 µg/L	GC-MS 2

Note 1: Or other unit as appropriate – please specify.

Note 2: USEPA Method 604, AWWA Standard Method 6240, or equivalent.

**TABLE F.1(i)(b): SURFACE/GROUND WATER MONITORING (Dangerous Substances)**  
**(Primary Discharge Point - one table per upstream and downstream location)**

**Discharge Point Code:** SW01 Ring

**MONITORING POINT CODE:** SW01Ring

Parameter	Results (µg/l)				Sampling method (grab, drift etc.)	Limit of Quantitation	Analysis method / technique
	July 24	Aug 01	Sept 05	Oct 24			
<b>2007</b>							
Atrazine	NA	NA	NA	<0.01	Composite	0.96 µg/L	HPLC
Dichloromethane	NA	NA	NA	<1	Composite	1 µg/L	GC-MS 1
Simazine	NA	NA	NA	<0.01	Composite	0.01 µg/L	HPLC
Toluene	NA	NA	NA	<0.01	Composite	0.02 µg/L	GC-MS 1
Tributyltin	NA	NA	NA	<0.02	Composite	0.02 µg/L as Sn	GC-MS 1
Xylenes	NA	NA	NA	<0.01	Composite	1 µg/L	GC-MS 1
Arsenic	NA	NA	NA	7	Composite	0.96 µg/L	ICP-MS
Chromium	NA	NA	NA	<20	Composite	20 µg/L	ICP-OES
Copper	NA	NA	NA	<20	Composite	20 µg/L	ICP-OES
Cyanide	NA	NA	NA	<5	Composite	5 µg/L	Colorimetric
Fluoride	NA	NA	NA	660	Composite	100 µg/L	ISE
Lead	NA	NA	NA	<20	Composite	20 µg/L	ICP-OES
Nickel	NA	NA	NA	<20	Composite	20 µg/L	ICP-OES
Zinc	NA	NA	NA	<20	Composite	20 µg/L	ICP-OES
Boron	NA	NA	NA	5.11	Composite	20 µg/L	ICP-OES
Cadmium	NA	NA	NA	<20	Composite	20 µg/L	ICP-OES
Mercury	NA	NA	NA	0.9	Composite	0.2 µg/L	ICP-MS
Selenium	NA	NA	NA	4	Composite	0.74 µg/L	ICP-MS
Barium	NA	NA	NA	<20	Composite	20 µg/L	ICP-OES

**TABLE F.1(ii)(a): SURFACE/GROUND WATER MONITORING - (1 table per discharge point upstream and downstream locations)  
(Secondary Discharge Point)**

**Discharge Point Code:** SW02Ring

**MONITORING POINT CODE:** SW02Ring

Parameter	Results (mg/l <sup>Note 1</sup> )				Sampling method (grab, drift etc.)	Limit of Quantitation	Analysis method / technique
	July 24	Aug 01	Sept 05	Oct 24			
<b>2007</b>							
pH	NA	NA	NA	NA	NA	2	Electrochemical
Temperature	NA	NA	NA	NA	NA	N/A	N/A
Electrical Conductivity (@25°C)	NA	NA	NA	NA	NA	0.5 µmhos/cm	Electrochemical
Suspended Solids	NA	NA	NA	NA	NA	0.5 mg/L	Gravimetric
Ammonia (as N)	NA	NA	NA	NA	NA	0.02 mg/L	Colorimetric
Biochemical Oxygen Demand	NA	NA	NA	NA	NA	0.06 mg/L	Electrochemical
Chemical Oxygen Demand	NA	NA	NA	NA	NA	8 mg/L	Digestion + Colorimetric
Dissolved Oxygen	NA	NA	NA	NA	NA	N/A	N/A
Hardness (as CaCO <sub>3</sub> )	NA	NA	NA	NA	NA	N/A	N/A
Total Nitrogen (as N)	NA	NA	NA	NA	NA	0.5 mg/L	Digestion + Colorimetric
Nitrite (as N)	NA	NA	NA	NA	NA	N/A	N/A
Nitrate (as N)	NA	NA	NA	NA	NA	0.5 mg/L	Colorimetric
Total Phosphorus (as P)	NA	NA	NA	NA	NA	0.2 mg/L	Digestion + Colorimetric
Orthophosphate (as P) - unfiltered	NA	NA	NA	NA	NA	0.02 mg/L	Colorimetric
Sulphate (SO <sub>4</sub> )	NA	NA	NA	NA	NA	30 mg/L	Turbidimetric
Phenols (sum) <sup>Note 2</sup> (µg/l)	NA	NA	NA	NA	NA	0.1 µg/L	GC-MS 2

Note 1: Or other unit as appropriate – please specify.

Note 2: USEPA Method 604, AWWA Standard Method 6240, or equivalent.

**TABLE F.1(ii)(b): SURFACE/GROUND WATER MONITORING - (1 table per discharge point upstream and downstream locations)  
(Secondary Discharge Point)**

**Discharge Point Code:** SW02Ring

**MONITORING POINT CODE:** SW02Ring

Parameter	Results (µg/l)				Sampling method (grab, drift etc.)	Limit of Quantitation	Analysis method / technique
	July 24	Aug 01	Sept 05	Oct 24			
<b>2007</b>							
Atrazine	NA	NA	NA	NA	NA	0.96 µg/L	HPLC
Dichloromethane	NA	NA	NA	NA	NA	1 µg/L	GC-MS 1
Simazine	NA	NA	NA	NA	NA	0.01 µg/L	HPLC
Toluene	NA	NA	NA	NA	NA	0.02 µg/L	GC-MS 1
Tributyltin	NA	NA	NA	NA	NA	0.02 µg/L as Sn	GC-MS 1
Xylenes	NA	NA	NA	NA	NA	1 µg/L	GC-MS 1
Arsenic	NA	NA	NA	NA	NA	0.96 µg/L	ICP-MS
Chromium	NA	NA	NA	NA	NA	20 µg/L	ICP-OES
Copper	NA	NA	NA	NA	NA	20 µg/L	ICP-OES
Cyanide	NA	NA	NA	NA	NA	5 µg/L	Colorimetric
Fluoride	NA	NA	NA	NA	NA	100 µg/L	ISE
Lead	NA	NA	NA	NA	NA	20 µg/L	ICP-OES
Nickel	NA	NA	NA	NA	NA	20 µg/L	ICP-OES
Zinc	NA	NA	NA	NA	NA	20 µg/L	ICP-OES
Boron	NA	NA	NA	NA	NA	20 µg/L	ICP-OES
Cadmium	NA	NA	NA	NA	NA	20 µg/L	ICP-OES
Mercury	NA	NA	NA	NA	NA	0.2 µg/L	ICP-MS
Selenium	NA	NA	NA	NA	NA	0.74 µg/L	ICP-MS
Barium	NA	NA	NA	NA	NA	20 µg/L	ICP-OES

**TABLE F.1(ii)(a): SURFACE/GROUND WATER MONITORING - (1 table per discharge point upstream and downstream locations)  
(Secondary Discharge Point)**

**Discharge Point Code:** SW03Ring

**MONITORING POINT CODE:** SW03Ring

Parameter	Results (mg/l <sup>Note 1</sup> )				Sampling method (grab, drift etc.)	Limit of Quantitation	Analysis method / technique
	July 24	Aug 01	Sept 05	Oct 24			
<b>2007</b>							
pH	NA	NA	NA	NA	NA	2	Electrochemical
Temperature	NA	NA	NA	NA	NA	N/A	N/A
Electrical Conductivity (@25°C)	NA	NA	NA	NA	NA	0.5 µmhos/cm	Electrochemical
Suspended Solids	NA	NA	NA	NA	NA	0.5 mg/L	Gravimetric
Ammonia (as N)	NA	NA	NA	NA	NA	0.02 mg/L	Colorimetric
Biochemical Oxygen Demand	NA	NA	NA	NA	NA	0.06 mg/L	Electrochemical
Chemical Oxygen Demand	NA	NA	NA	NA	NA	8 mg/L	Digestion + Colorimetric
Dissolved Oxygen	NA	NA	NA	NA	NA	N/A	N/A
Hardness (as CaCO <sub>3</sub> )	NA	NA	NA	NA	NA	N/A	N/A
Total Nitrogen (as N)	NA	NA	NA	NA	NA	0.5 mg/L	Digestion + Colorimetric
Nitrite (as N)	NA	NA	NA	NA	NA	N/A	N/A
Nitrate (as N)	NA	NA	NA	NA	NA	0.5 mg/L	Colorimetric
Total Phosphorus (as P)	NA	NA	NA	NA	NA	0.2 mg/L	Digestion + Colorimetric
Orthophosphate (as P) - unfiltered	NA	NA	NA	NA	NA	0.02 mg/L	Colorimetric
Sulphate (SO <sub>4</sub> )	NA	NA	NA	NA	NA	30 mg/L	Turbidimetric
Phenols (sum) <sup>Note 2</sup> (µg/l)	NA	NA	NA	NA	NA	0.1 µg/L	GC-MS 2

Note 1: Or other unit as appropriate – please specify.

Note 2: USEPA Method 604, AWWA Standard Method 6240, or equivalent.

**TABLE F.1(ii)(b): SURFACE/GROUND WATER MONITORING - (1 table per discharge point upstream and downstream locations)  
(Secondary Discharge Point)**

**Discharge Point Code:** SW03Ring

**MONITORING POINT CODE:** SW03Ring

Parameter	Results (µg/l)				Sampling method (grab, drift etc.)	Limit of Quantitation	Analysis method / technique
	July 24	Aug 01	Sept 05	Oct 24			
<b>2007</b>							
Atrazine	NA	NA	NA	NA	NA	0.96 µg/L	HPLC
Dichloromethane	NA	NA	NA	NA	NA	1 µg/L	GC-MS 1
Simazine	NA	NA	NA	NA	NA	0.01 µg/L	HPLC
Toluene	NA	NA	NA	NA	NA	0.02 µg/L	GC-MS 1
Tributyltin	NA	NA	NA	NA	NA	0.02 µg/L as Sn	GC-MS 1
Xylenes	NA	NA	NA	NA	NA	1 µg/L	GC-MS 1
Arsenic	NA	NA	NA	NA	NA	0.96 µg/L	ICP-MS
Chromium	NA	NA	NA	NA	NA	20 µg/L	ICP-OES
Copper	NA	NA	NA	NA	NA	20 µg/L	ICP-OES
Cyanide	NA	NA	NA	NA	NA	5 µg/L	Colorimetric
Fluoride	NA	NA	NA	NA	NA	100 µg/L	ISE
Lead	NA	NA	NA	NA	NA	20 µg/L	ICP-OES
Nickel	NA	NA	NA	NA	NA	20 µg/L	ICP-OES
Zinc	NA	NA	NA	NA	NA	20 µg/L	ICP-OES
Boron	NA	NA	NA	NA	NA	20 µg/L	ICP-OES
Cadmium	NA	NA	NA	NA	NA	20 µg/L	ICP-OES
Mercury	NA	NA	NA	NA	NA	0.2 µg/L	ICP-MS
Selenium	NA	NA	NA	NA	NA	0.74 µg/L	ICP-MS
Barium	NA	NA	NA	NA	NA	20 µg/L	ICP-OES

**TABLE F.1(ii)(a): SURFACE/GROUND WATER MONITORING - (1 table per discharge point upstream and downstream locations)  
(Secondary Discharge Point)**

**Discharge Point Code:** SW04Ring

**MONITORING POINT CODE:** SW04Ring

Parameter	Results (mg/l <sup>Note 1</sup> )				Sampling method (grab, drift etc.)	Limit of Quantitation	Analysis method / technique
	July 24	Aug 01	Sept 05	Oct 24			
<b>2007</b>							
pH	NA	NA	NA	NA	NA	2	Electrochemical
Temperature	NA	NA	NA	NA	NA	N/A	N/A
Electrical Conductivity (@25°C)	NA	NA	NA	NA	NA	0.5 µmhos/cm	Electrochemical
Suspended Solids	NA	NA	NA	NA	NA	0.5 mg/L	Gravimetric
Ammonia (as N)	NA	NA	NA	NA	NA	0.02 mg/L	Colorimetric
Biochemical Oxygen Demand	NA	NA	NA	NA	NA	0.06 mg/L	Electrochemical
Chemical Oxygen Demand	NA	NA	NA	NA	NA	8 mg/L	Digestion + Colorimetric
Dissolved Oxygen	NA	NA	NA	NA	NA	N/A	N/A
Hardness (as CaCO <sub>3</sub> )	NA	NA	NA	NA	NA	N/A	N/A
Total Nitrogen (as N)	NA	NA	NA	NA	NA	0.5 mg/L	Digestion + Colorimetric
Nitrite (as N)	NA	NA	NA	NA	NA	N/A	N/A
Nitrate (as N)	NA	NA	NA	NA	NA	0.5 mg/L	Colorimetric
Total Phosphorus (as P)	NA	NA	NA	NA	NA	0.2 mg/L	Digestion + Colorimetric
Orthophosphate (as P) - unfiltered	NA	NA	NA	NA	NA	0.02 mg/L	Colorimetric
Sulphate (SO <sub>4</sub> )	NA	NA	NA	NA	NA	30 mg/L	Turbidimetric
Phenols (sum) <sup>Note 2</sup> (µg/l)	NA	NA	NA	NA	NA	0.1 µg/L	GC-MS 2

Note 1: Or other unit as appropriate – please specify.

Note 2: USEPA Method 604, AWWA Standard Method 6240, or equivalent.

**TABLE F.1(ii)(b): SURFACE/GROUND WATER MONITORING - (1 table per discharge point upstream and downstream locations)  
(Secondary Discharge Point)**

**Discharge Point Code:** SW04Ring

**MONITORING POINT CODE:** SW04Ring

Parameter	Results (µg/l)				Sampling method (grab, drift etc.)	Limit of Quantitation	Analysis method / technique
	July 24	Aug 01	Sept 05	Oct 24			
<b>2007</b>							
Atrazine	NA	NA	NA	NA	NA	0.96 µg/L	HPLC
Dichloromethane	NA	NA	NA	NA	NA	1 µg/L	GC-MS 1
Simazine	NA	NA	NA	NA	NA	0.01 µg/L	HPLC
Toluene	NA	NA	NA	NA	NA	0.02 µg/L	GC-MS 1
Tributyltin	NA	NA	NA	NA	NA	0.02 µg/L as Sn	GC-MS 1
Xylenes	NA	NA	NA	NA	NA	1 µg/L	GC-MS 1
Arsenic	NA	NA	NA	NA	NA	0.96 µg/L	ICP-MS
Chromium	NA	NA	NA	NA	NA	20 µg/L	ICP-OES
Copper	NA	NA	NA	NA	NA	20 µg/L	ICP-OES
Cyanide	NA	NA	NA	NA	NA	5 µg/L	Colorimetric
Fluoride	NA	NA	NA	NA	NA	100 µg/L	ISE
Lead	NA	NA	NA	NA	NA	20 µg/L	ICP-OES
Nickel	NA	NA	NA	NA	NA	20 µg/L	ICP-OES
Zinc	NA	NA	NA	NA	NA	20 µg/L	ICP-OES
Boron	NA	NA	NA	NA	NA	20 µg/L	ICP-OES
Cadmium	NA	NA	NA	NA	NA	20 µg/L	ICP-OES
Mercury	NA	NA	NA	NA	NA	0.2 µg/L	ICP-MS
Selenium	NA	NA	NA	NA	NA	0.74 µg/L	ICP-MS
Barium	NA	NA	NA	NA	NA	20 µg/L	ICP-OES



**TABLE F.1(ii)(a): SURFACE/GROUND WATER MONITORING - (1 table per discharge point upstream and downstream locations)  
(Secondary Discharge Point)**

**Discharge Point Code:** SW05Ring

**MONITORING POINT CODE:** SW05Ring

Parameter	Results (mg/l <sup>Note 1</sup> )				Sampling method (grab, drift etc.)	Limit of Quantitation	Analysis method / technique
	July 24	Aug 01	Sept 05	Oct 24			
<b>2007</b>							
pH	NA	NA	NA	NA	NA	2	Electrochemical
Temperature	NA	NA	NA	NA	NA	N/A	N/A
Electrical Conductivity (@25°C)	NA	NA	NA	NA	NA	0.5 µmhos/cm	Electrochemical
Suspended Solids	NA	NA	NA	NA	NA	0.5 mg/L	Gravimetric
Ammonia (as N)	NA	NA	NA	NA	NA	0.02 mg/L	Colorimetric
Biochemical Oxygen Demand	NA	NA	NA	NA	NA	0.06 mg/L	Electrochemical
Chemical Oxygen Demand	NA	NA	NA	NA	NA	8 mg/L	Digestion + Colorimetric
Dissolved Oxygen	NA	NA	NA	NA	NA	N/A	N/A
Hardness (as CaCO <sub>3</sub> )	NA	NA	NA	NA	NA	N/A	N/A
Total Nitrogen (as N)	NA	NA	NA	NA	NA	0.5 mg/L	Digestion + Colorimetric
Nitrite (as N)	NA	NA	NA	NA	NA	N/A	N/A
Nitrate (as N)	NA	NA	NA	NA	NA	0.5 mg/L	Colorimetric
Total Phosphorus (as P)	NA	NA	NA	NA	NA	0.2 mg/L	Digestion + Colorimetric
Orthophosphate (as P) - unfiltered	NA	NA	NA	NA	NA	0.02 mg/L	Colorimetric
Sulphate (SO <sub>4</sub> )	NA	NA	NA	NA	NA	30 mg/L	Turbidimetric
Phenols (sum) <sup>Note 2</sup> (µg/l)	NA	NA	NA	NA	NA	0.1 µg/L	GC-MS 2

Note 1: Or other unit as appropriate – please specify.

Note 2: USEPA Method 604, AWWA Standard Method 6240, or equivalent.

**TABLE F.1(ii)(b): SURFACE/GROUND WATER MONITORING - (1 table per discharge point upstream and downstream locations)  
(Secondary Discharge Point)**

**Discharge Point Code:** SW05Ring

**MONITORING POINT CODE:** SW05Ring

Parameter	Results (µg/l)				Sampling method (grab, drift etc.)	Limit of Quantitation	Analysis method / technique
	July 24	Aug 01	Sept 05	Oct 24			
<b>2007</b>							
Atrazine	NA	NA	NA	NA	NA	0.96 µg/L	HPLC
Dichloromethane	NA	NA	NA	NA	NA	1 µg/L	GC-MS 1
Simazine	NA	NA	NA	NA	NA	0.01 µg/L	HPLC
Toluene	NA	NA	NA	NA	NA	0.02 µg/L	GC-MS 1
Tributyltin	NA	NA	NA	NA	NA	0.02 µg/L as Sn	GC-MS 1
Xylenes	NA	NA	NA	NA	NA	1 µg/L	GC-MS 1
Arsenic	NA	NA	NA	NA	NA	0.96 µg/L	ICP-MS
Chromium	NA	NA	NA	NA	NA	20 µg/L	ICP-OES
Copper	NA	NA	NA	NA	NA	20 µg/L	ICP-OES
Cyanide	NA	NA	NA	NA	NA	5 µg/L	Colorimetric
Fluoride	NA	NA	NA	NA	NA	100 µg/L	ISE
Lead	NA	NA	NA	NA	NA	20 µg/L	ICP-OES
Nickel	NA	NA	NA	NA	NA	20 µg/L	ICP-OES
Zinc	NA	NA	NA	NA	NA	20 µg/L	ICP-OES
Boron	NA	NA	NA	NA	NA	20 µg/L	ICP-OES
Cadmium	NA	NA	NA	NA	NA	20 µg/L	ICP-OES
Mercury	NA	NA	NA	NA	NA	0.2 µg/L	ICP-MS
Selenium	NA	NA	NA	NA	NA	0.74 µg/L	ICP-MS
Barium	NA	NA	NA	NA	NA	20 µg/L	ICP-OES

**TABLE F.1(ii)(a): SURFACE/GROUND WATER MONITORING - (1 table per discharge point upstream and downstream locations)  
(Secondary Discharge Point)**

**Discharge Point Code:** SW06Ring

**MONITORING POINT CODE:** SW06Ring

Parameter	Results (mg/l <sup>Note 1</sup> )				Sampling method (grab, drift etc.)	Limit of Quantitation	Analysis method / technique
	July 24	Aug 01	Sept 05	Oct 24			
<b>2007</b>							
pH	NA	NA	NA	NA	NA	2	Electrochemical
Temperature	NA	NA	NA	NA	NA	N/A	N/A
Electrical Conductivity (@25°C)	NA	NA	NA	NA	NA	0.5 µmhos/cm	Electrochemical
Suspended Solids	NA	NA	NA	NA	NA	0.5 mg/L	Gravimetric
Ammonia (as N)	NA	NA	NA	NA	NA	0.02 mg/L	Colorimetric
Biochemical Oxygen Demand	NA	NA	NA	NA	NA	0.06 mg/L	Electrochemical
Chemical Oxygen Demand	NA	NA	NA	NA	NA	8 mg/L	Digestion + Colorimetric
Dissolved Oxygen	NA	NA	NA	NA	NA	N/A	N/A
Hardness (as CaCO <sub>3</sub> )	NA	NA	NA	NA	NA	N/A	N/A
Total Nitrogen (as N)	NA	NA	NA	NA	NA	0.5 mg/L	Digestion + Colorimetric
Nitrite (as N)	NA	NA	NA	NA	NA	N/A	N/A
Nitrate (as N)	NA	NA	NA	NA	NA	0.5 mg/L	Colorimetric
Total Phosphorus (as P)	NA	NA	NA	NA	NA	0.2 mg/L	Digestion + Colorimetric
Orthophosphate (as P) - unfiltered	NA	NA	NA	NA	NA	0.02 mg/L	Colorimetric
Sulphate (SO <sub>4</sub> )	NA	NA	NA	NA	NA	30 mg/L	Turbidimetric
Phenols (sum) <sup>Note 2</sup> (ug/l)	NA	NA	NA	NA	NA	0.1 µg/L	GC-MS 2

Note 1: Or other unit as appropriate – please specify.

Note 2: USEPA Method 604, AWWA Standard Method 6240, or equivalent.

**TABLE F.1(ii)(b): SURFACE/GROUND WATER MONITORING - (1 table per discharge point upstream and downstream locations)  
(Secondary Discharge Point)**

**Discharge Point Code:** SW06Ring

**MONITORING POINT CODE:** SW06Ring

Parameter	Results (µg/l)				Sampling method (grab, drift etc.)	Limit of Quantitation	Analysis method / technique
	July 24	Aug 01	Sept 05	Oct 24			
<b>2007</b>							
Atrazine	NA	NA	NA	NA	NA	0.96 µg/L	HPLC
Dichloromethane	NA	NA	NA	NA	NA	1 µg/L	GC-MS 1
Simazine	NA	NA	NA	NA	NA	0.01 µg/L	HPLC
Toluene	NA	NA	NA	NA	NA	0.02 µg/L	GC-MS 1
Tributyltin	NA	NA	NA	NA	NA	0.02 µg/L as Sn	GC-MS 1
Xylenes	NA	NA	NA	NA	NA	1 µg/L	GC-MS 1
Arsenic	NA	NA	NA	NA	NA	0.96 µg/L	ICP-MS
Chromium	NA	NA	NA	NA	NA	20 µg/L	ICP-OES
Copper	NA	NA	NA	NA	NA	20 µg/L	ICP-OES
Cyanide	NA	NA	NA	NA	NA	5 µg/L	Colorimetric
Fluoride	NA	NA	NA	NA	NA	100 µg/L	ISE
Lead	NA	NA	NA	NA	NA	20 µg/L	ICP-OES
Nickel	NA	NA	NA	NA	NA	20 µg/L	ICP-OES
Zinc	NA	NA	NA	NA	NA	20 µg/L	ICP-OES
Boron	NA	NA	NA	NA	NA	20 µg/L	ICP-OES
Cadmium	NA	NA	NA	NA	NA	20 µg/L	ICP-OES
Mercury	NA	NA	NA	NA	NA	0.2 µg/L	ICP-MS
Selenium	NA	NA	NA	NA	NA	0.74 µg/L	ICP-MS
Barium	NA	NA	NA	NA	NA	20 µg/L	ICP-OES

**TABLE F.1(ii)(a): SURFACE/GROUND WATER MONITORING - (1 table per discharge point upstream and downstream locations)  
(Secondary Discharge Point)**

**Discharge Point Code:** SW07Ring

**MONITORING POINT CODE:** SW07Ring

Parameter	Results (mg/l <sup>Note 1</sup> )				Sampling method (grab, drift etc.)	Limit of Quantitation	Analysis method / technique
	July 24	Aug 01	Sept 05	Oct 24			
<b>2007</b>							
pH	NA	NA	NA	NA	NA	2	Electrochemical
Temperature	NA	NA	NA	NA	NA	N/A	N/A
Electrical Conductivity (@25°C)	NA	NA	NA	NA	NA	0.5 µmhos/cm	Electrochemical
Suspended Solids	NA	NA	NA	NA	NA	0.5 mg/L	Gravimetric
Ammonia (as N)	NA	NA	NA	NA	NA	0.02 mg/L	Colorimetric
Biochemical Oxygen Demand	NA	NA	NA	NA	NA	0.06 mg/L	Electrochemical
Chemical Oxygen Demand	NA	NA	NA	NA	NA	8 mg/L	Digestion + Colorimetric
Dissolved Oxygen	NA	NA	NA	NA	NA	N/A	N/A
Hardness (as CaCO <sub>3</sub> )	NA	NA	NA	NA	NA	N/A	N/A
Total Nitrogen (as N)	NA	NA	NA	NA	NA	0.5 mg/L	Digestion + Colorimetric
Nitrite (as N)	NA	NA	NA	NA	NA	N/A	N/A
Nitrate (as N)	NA	NA	NA	NA	NA	0.5 mg/L	Colorimetric
Total Phosphorus (as P)	NA	NA	NA	NA	NA	0.2 mg/L	Digestion + Colorimetric
Orthophosphate (as P) - unfiltered	NA	NA	NA	NA	NA	0.02 mg/L	Colorimetric
Sulphate (SO <sub>4</sub> )	NA	NA	NA	NA	NA	30 mg/L	Turbidimetric
Phenols (sum) <sup>Note 2</sup> (ug/l)	NA	NA	NA	NA	NA	0.1 µg/L	GC-MS 2

Note 1: Or other unit as appropriate – please specify.

Note 2: USEPA Method 604, AWWA Standard Method 6240, or equivalent.

**TABLE F.1(ii)(b): SURFACE/GROUND WATER MONITORING - (1 table per discharge point upstream and downstream locations)  
(Secondary Discharge Point)**

**Discharge Point Code:** SW07Ring

**MONITORING POINT CODE:** SW07Ring

Parameter	Results (µg/l)				Sampling method (grab, drift etc.)	Limit of Quantitation	Analysis method / technique
	July 24	Aug 01	Sept 05	Oct 24			
<b>2007</b>							
Atrazine	NA	NA	NA	NA	NA	0.96 µg/L	HPLC
Dichloromethane	NA	NA	NA	NA	NA	1 µg/L	GC-MS 1
Simazine	NA	NA	NA	NA	NA	0.01 µg/L	HPLC
Toluene	NA	NA	NA	NA	NA	0.02 µg/L	GC-MS 1
Tributyltin	NA	NA	NA	NA	NA	0.02 µg/L as Sn	GC-MS 1
Xylenes	NA	NA	NA	NA	NA	1 µg/L	GC-MS 1
Arsenic	NA	NA	NA	NA	NA	0.96 µg/L	ICP-MS
Chromium	NA	NA	NA	NA	NA	20 µg/L	ICP-OES
Copper	NA	NA	NA	NA	NA	20 µg/L	ICP-OES
Cyanide	NA	NA	NA	NA	NA	5 µg/L	Colorimetric
Fluoride	NA	NA	NA	NA	NA	100 µg/L	ISE
Lead	NA	NA	NA	NA	NA	20 µg/L	ICP-OES
Nickel	NA	NA	NA	NA	NA	20 µg/L	ICP-OES
Zinc	NA	NA	NA	NA	NA	20 µg/L	ICP-OES
Boron	NA	NA	NA	NA	NA	20 µg/L	ICP-OES
Cadmium	NA	NA	NA	NA	NA	20 µg/L	ICP-OES
Mercury	NA	NA	NA	NA	NA	0.2 µg/L	ICP-MS
Selenium	NA	NA	NA	NA	NA	0.74 µg/L	ICP-MS
Barium	NA	NA	NA	NA	NA	20 µg/L	ICP-OES

Section G:

**Table G**

AGGLOMERATION	G1- COMPLIANCE WITH COUNCIL DIRECTIVES	G2- COMPLIANCE WITH QUALITY STANDARDS FOR PHOSPHOROUS REGULATIONS (SI No. 258 of 1998)	G3-IMPACT MITIGATION	G4- STORM OVERFLOWS.
1	Blarney No information to hand on this.	Blarney (Blarney/Tower) has recently been upgraded to 13,000 p.e. secondary treatment and <u>includes nutrient removal</u> . No additional upgrading is proposed at this time.	No further works identified as necessary at this time.	No programme of improvements at this time
2	Crosshaven Forms an element of the proposed Lower Harbour SS. Will be served by the Lower Harbour Wastewater Treatment Plant the EIS for which will be lodged with An Bord Pleanála at end 2007. The Preliminary Report is also at an advanced stage and will be lodged with DEHLG in February 2008. The reports will address all relevant environmental and drainage issues.	Nutrient removal is not envisaged as discharge is not to sensitive waters	No interim mitigation measures are proposed	Will be addressed in the Preliminary Report
3	Cobh As for Crosshaven	As for Crosshaven	As for Crosshaven	As for Crosshaven
4	Carrigaline As for Crosshaven	As for Crosshaven	As for Crosshaven	As for Crosshaven
5	Ringaskiddy As for Crosshaven	As for Crosshaven	As for Crosshaven	As for Crosshaven
6	Carrigtwohill First phase proposal is to increase capacity to 45,000 p.e. secondary treatment. EIS and PR will address these issues	Nutrient removal is being proposed in the EIS and PR as the discharge area is currently designated a sensitive area.	No interim proposals	EIS to ABP March '08

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<b>Attachment included</b> <b>1/ Assessment of Needs</b> <b>2/ Water Services Investment programme</b> <b>2007-2009</b>	<b>Yes</b>	<b>No</b>
	Yes	Yes

Kevin Sugrue,  
Senior Engineer,  
Water Services

**Re: Licensing of Discharges**

**Ballincollig-** Donald Cronin is preparing a response in respect of Ballincollig

**Blarney-** The Council has recently completed an upgrade of the wastewater treatment plant at Blarney to 13,000 p.e. and has no immediate proposals to increase that capacity. The plant at Blarney has two independent secondary treatment processes with the wastewater load being split approximately evenly between them. One stream has biological nutrient removal and the other has chemical nutrient removal. There is concern in relation to the nutrient levels in the river catchments north of Cork City and the Council has obtained approval to carry out a drainage study, the City Environs (CASP) Drainage Study which is being funded under the Water Services Investment Programme 2007-2009. This study will consider the drainage options available for the catchment concerned having regard to existing and planned developments in the area. The Council is currently preparing a brief for the appointment of a consultant and expects to advertise the appointment in early January 2008 and to have the study completed in approx six months thereafter.

**Crosshaven-** wastewater from Crosshaven is collected and discharged to the Carrigaline network and ultimately discharges to Cork Harbour via the 'IDA' sewer at the Dognose Bank. The discharge is currently untreated but will ultimately be served by the Lower Harbour SS, the treatment plant for which will be located at Carrigaline East and the effluent from this plant will discharge through the 'IDA' outfall to the harbour. The EIS for the wastewater treatment plant is being prepared and the Council hopes to lodge it with ABP by end of 2007. Nutrient removal is not being proposed as the receiving waters are not designated sensitive. The PR for the Scheme will be lodged with the DEHLG shortly after the EIS is sent to ABP but approval to the PR will not issue until after the EIS is approved, say mid 2008. The Lower Harbour SS is being funded under the Water Services Investment Programme 2007-2009 and the scheme is expected to be fully operational before the end of 2012.

**Cobh** – this also forms part of the proposed Lower Harbour SS and a significant upgrading of the Cobh sewer network is envisaged with the wastewater being pumped across the harbour to the proposed WWTP at Carrigaline East. The current estimated design capacity required is 80,000 p.e.

**Carrigaline-** this wastewater is discharged (see Crosshaven) via the 'IDA' sewer and will ultimately form part of the Lower Harbour SS

**Ringaskiddy** – as for Carrigaline

**Carrigtwohill** –EIS under preparation and expected to be submitted to ABP March '08. The anticipated first phase will be to increase treatment capacity to 45000 p.e. from the current 8500 p.e. . The works are to be funded under the Serviced land Initiative. Nutrient removal will be included in the EIS and the PR as the Lee Estuary/Lough Mahon Area is currently designated a sensitive water.

The above information should be read in conjunction with earlier correspondence on the same matter and in particular you should cross-reference with response received from Duane O'Brien in relation to Carrigtwohill.

Regards,

R O'Farrell,  
Senior Engineer,  
WSIP Projects Office  
4<sup>th</sup> December 2007



# Cork County

## Water Services Investment Programme 2007 - 2009

Schemes at Construction	W/S	Est. Cost		W/S	Est. Cost
<b>Cork North</b>			<b>Cork South</b>		
Michelstown Sewerage Scheme (Nutrient Removal)	S	221,000	Ballincollig Sewerage Scheme (Upgrade) (G)	S	22,248,000
<b>Cork South</b>			Cork Lower Harbour Sewerage Scheme (excl. Crosshaven SS)	S	73,542,000
Ballyourney/ Ballymakeery Sewerage Scheme	S	3,049,000	Shannagary/ Garryvoe/ Ballycotton Sewerage Scheme	S	3,780,000
Cobh/ Middleton/ Carrigtwohill Water Supply Scheme	W	10,135,000	Youghal Sewerage Scheme	S	14,420,000
Cork Lower Harbour Sewerage Scheme (Crosshaven SS) (G)	S	4,850,000	<b>Cork West</b>		
Cork Water Strategy Study (G)	W	941,000	Ballydenob Sewerage Scheme	S	683,000
Kinsale Sewerage Scheme	S	20,000,000	Bantry Water Supply Scheme	W	14,935,000
Middleton Sewerage Scheme (Infiltration Reduction) (G)	S	2,078,000	Clonakilty Sewerage Scheme (Plant Capacity Increase)	S	3,677,000
		<b>41,274,000</b>	Courtmacsherry/ Timoleague Sewerage Scheme	S	2,472,000
<b>Schemes to start 2007</b>			Dunmanway Regional Water Supply Scheme Stage 1	W	12,669,000
<b>Cork North</b>					<b>164,629,000</b>
North Cork Grouped DBO Wastewater Treatment Plant (Buttevant, Doneraile & Kilbrin)	S	5,150,000	<b>Serviced Land Initiative</b>		
<b>Cork West</b>			<b>Cork North</b>		
Skibbereen Sewerage Scheme	S	20,000,000	Ballycough Water Supply Scheme	W	139,000
		<b>25,150,000</b>	Ballycoley Improvement Scheme	W/S	139,000
<b>Schemes to start 2008</b>			Broggill/Rathgoggin Sewerage Scheme	S	406,000
<b>Cork North</b>			Bweeng Water Supply Scheme	W	115,000
Mallow/ Ballyvinter Regional Water Supply Scheme (H) W		8,652,000	Churchtown Sewerage Scheme (incl. Water)	W/S	543,000
Mallow Sewerage Scheme (H)	S	5,408,000	Clondulane Sewage Treatment Plant	S	417,000
<b>Cork South</b>			Freemount Sewerage Scheme	S	150,000
Ballincollig Sewerage Scheme (Nutrient Removal) (G)	S	948,000	Pike Road Sewerage Scheme (incl. Water)	W/S	2,080,000
Ballingeary Sewerage Scheme	S	1,296,000	Rathcoormac Sewerage Scheme (incl. Water)	W/S	555,000
Bandon Sewerage Scheme Stage 2	S	14,729,000	Spa Glen Sewerage Scheme	S	736,000
City Environs (CASP) Strategic Study (G)	S	153,000	Uplands Fermoy Sewerage Scheme (incl. Water)	W/S	1,174,000
Cloghroe Sewerage Scheme (Upgrade)	S	683,000	Watergrasshill Water Supply Scheme (incl. Sewerage) (G)	W/S	4,151,000
Coachford Water Supply Scheme	W	1,318,000	<b>Cork South</b>		
Garrettstown Sewerage Scheme	S	2,153,000	Ballincollig Sewerage Scheme (Barry's Rd Foul and Storm Drainage) (G)	S	1,164,000
Inniscarra Water Treatment Plant Extension Phase 1	W	2,678,000	Belgooley Water Supply Scheme (incl. Sewerage)	W/S	2,913,000
Little Island Sewerage Scheme (G)	S	2,200,000	Blarney Water Supply Scheme (Ext. to Station Rd) (G)	W	416,000
<b>Cork West</b>			Carrigtwohill Sewerage Scheme (Treatment and Storm Drain) (G)	S	7,632,000
Bantry Sewerage Scheme	S	7,148,000	Castlemayr Wastewater Treatment Plant Extension	S	1,200,000
Dunmanway Sewerage Scheme	S	2,153,000	Crookstown Sewerage Scheme (incl. Water)	W/S	1,200,000
Leap/ Baltimore Water Supply Scheme	W	6,365,000	Dripsey Water Supply Scheme (incl. Sewerage)	W/S	1,112,000
Schull Water Supply Scheme	W	5,253,000	Giourthane Sewerage Scheme (G)	S	1,576,000
		<b>61,137,000</b>	Innishannon Sewerage Scheme	S	277,000
<b>Schemes to start 2009</b>			Innishannon Wastewater Treatment Plant	S	694,000
<b>Cork North</b>			Kerynpike Sewerage Scheme	S	832,000
Banteer/Dromahane Regional Water Supply Scheme	W	1,576,000	Kerynpike Water Supply Scheme	W	416,000
Conna Regional Water Supply Scheme Extension	W	2,627,000	Killeagh Wastewater Treatment Plant Extension	S	1,200,000
Cork NE Water Supply Scheme	W	4,326,000	Killeagh Water Supply Scheme (includes Sewerage)	W/S	485,000
Cork NW Regional Water Supply Scheme	W	6,046,000	Killeens Sewerage Scheme	S	420,000
Millstreet Wastewater Treatment Plant (Upgrade)	S	1,628,000	Kinagleary Sewerage Scheme	S	694,000
			Middleton Wastewater Treatment Plant Extension	S	4,050,000

# Cork County contd.

## Water Services Investment Programme 2007 - 2009

	W/S	Est. Cost		W/S	Est. Cost
Mogeely, Castlemartyr & Ladysbridge Water Supply Scheme	W	2,566,000	<b>Cork South</b>		
North Cobh Sewerage Scheme (G)	S	3,193,000	Carrigtwohill Sewerage Scheme (G)	S	20,000,000
Riverstick Water Supply Scheme (incl. Sewerage)	W/S	525,000	Cork Sludge Management (G)	S	14,420,000
Rochestown Water Supply Scheme	W	2,700,000	Cork Water Supply Scheme (Storage - Mount Emla		
Saleen Sewerage Scheme	S	1,051,000	Ballincöllig & Chetwind) (G)	W	8,500,000
Youghal Water Supply Scheme	W	2,300,000	Inniscarra Water Treatment Plant (Sludge Treatment) (G) W		5,356,000
			Macroon Sewerage Scheme	S	5,150,000
<b>Cork West</b>			Minane Bridge Water Supply Scheme	W	1,421,000
Castletownshend Sewerage Scheme	S	1,576,000			
		<b>50,797,000</b>	<b>Cork West</b>		
<b>Rural Towns &amp; Villages Initiative</b>			Bantry Regional Water Supply Scheme (Distribution)	W	9,455,000
			Cape Clear Water Supply Scheme	W	1,679,000
<b>Cork North</b>			Castletownbere Regional Water Supply Scheme	W	8,405,000
Buttevant Sewerage Scheme (Collection System)	S	2,446,000	Glengarriff Sewerage Scheme	S	2,500,000
Doneraile Sewerage Scheme (Collection System)	S	1,738,000	Roscarberry/Owenahincha Sewerage Scheme	S	1,576,000
			Slibbereen Regional Water Supply Scheme Stage 4	W	7,880,000
<b>Cork South</b>					<b>95,646,000</b>
Innishannon (Ballinadee/ Ballinspittle/ Garrettstown)			<b>Water Conservation Allocation</b>		<b>12,206,000</b>
Water Supply Scheme	W	6,726,000			
			<b>Asset Management Study</b>		<b>300,000</b>
<b>Cork West</b>			<b>South Western River Basin District (WFD) Project<sup>1</sup></b>		<b>9,400,000</b>
Ballylicky Sewerage Scheme	S	2,153,000			
Baltimore Sewerage Scheme	S	3,162,000			
Castletownbere Sewerage Scheme	S	5,202,000			
Schull Sewerage Scheme	S	3,523,000			
		<b>24,950,000</b>	<b>Programme Total</b>		<b>485,489,000</b>
<b>Schemes to Advance through Planning</b>					
<b>Cork North</b>					
Mitchelstown North Galtees Water Supply Scheme	W	3,152,000			
Mitchelstown Sewerage Scheme	S	3,000,000			
Newmarket Sewerage Scheme	S	3,152,000			

<sup>1</sup> This project is being led by Cork County Council on behalf of other authorities in the River Basin District

(H) Refers to a Hub as designated in the National Spatial Strategy

(G) Refers to a Gateway as designated in the National Spatial Strategy

## Ringaskiddy :ANNEX 2: Check List For Regulation 16 Compliance

Regulation 16 of the Waste Water Discharge. (Authorisation) Regulations, 2007 (S.I. No. 684 of 2007) sets out the information which must, in all cases, accompany a discharge licence application. In order to ensure that the application fully complies with the legal requirements of Regulation 16 of the 2007 Regulations, all applicants should complete the following.

In each case, refer to the attachment number(s) of your application which contain(s) the information requested in the appropriate sub-article.

<b>Regulation 16(1) In the case of an application for a waste water discharge licence, the application shall -</b>		<b>Attachment Number</b>	<b>Checked by Applicant ✓</b>
<b>(a)</b>	give the name, address, telefax number (if any) and telephone number of the applicant (and, if different, of the operator of any treatment plant concerned) and the address to which correspondence relating to the application should be sent and, if the operator is a body corporate, the address of its registered office or principal office,	<b>B1</b>	✓
<b>(b)</b>	give the name of the water services authority in whose functional area the relevant waste water discharge takes place or is to take place, if different from that of the applicant,	<b>B7</b>	✓
<b>(c)</b>	give the location or postal address (including where appropriate, the name of the townland or townlands) and the National Grid reference of the location of the waste water treatment plant and/or the waste water discharge point or points to which the application relates,	<b>B2</b>	✓
<b>(d)</b>	state the population equivalent of the agglomeration to which the application relates,	<b>B9</b>	✓
<b>(e)</b>	specify the content and extent of the waste water discharge, the level of treatment provided, if any, and the flow and type of discharge,	<b>C,D</b>	✓
<b>(f)</b>	give details of the receiving water body, including its protected area status, if any, and details of any sensitive areas or protected areas or both in the vicinity of the discharge point or points likely to be affected by the discharge concerned, and for discharges to ground provide details of groundwater protection schemes in place for the receiving water body and all associated hydrogeological and geological assessments related to the receiving water environment in the vicinity of the discharge.	<b>D2</b>	✓

**Regulation 16(1) continued.../**

	<b>Attachment Number</b>	<b>Checked by Applicant</b>
<b>(g)</b> identify monitoring and sampling points and indicate proposed arrangements for the monitoring of discharges and, if Regulation 17 does not apply, provide details of the likely environmental consequences of any such discharges,	<b>E3</b>	✓
<b>(h)</b> in the case of an existing waste water treatment plant, specify the sampling data pertaining to the discharge based on the samples taken in the 12 months preceding the making of the application,	<b>E4</b>	✓
<b>(i)</b> describe the existing or proposed measures, including emergency procedures, to prevent unintended waste water discharges and to minimise the impact on the environment of any such discharges,	<b>G</b>	✓
<b>(j)</b> give particulars of the nearest downstream drinking water abstraction point or points to the discharge point or points,	<b>Not applicable</b>	✓
<b>(k)</b> give details, and an assessment of the effects, of any existing or proposed emissions on the environment, including any environmental medium other than those into which the emissions are, or are to be made, and of proposed measures to prevent or eliminate or, where that is not practicable, to limit any pollution caused in such discharges,	<b>F1</b>	✓
<b>(l)</b> give detail of compliance with relevant monitoring requirements and treatment standards contained in any applicable Council Directives of Regulations,	<b>G</b>	✓
<b>(m)</b> give details of any work necessary to meet relevant effluent discharge standards and a timeframe and schedule for such work.	<b>G3</b>	✓
<b>(n)</b> Any other information as may be stipulated by the Agency.	<b>X</b>	<b>X</b>

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	Regulation 16(3) Without prejudice to Regulation 16 (1) and (2), an application for a licence shall be accompanied by -	Attachment Number	Checked by the applicant ✓
(a)	a copy of the notice of intention to make an application given pursuant to Regulation 9,	B8	✓
(b)	where appropriate, a copy of the notice given to a relevant water services authority under Regulation 13,	Not applicable	✓
(c)	Such other particulars, drawings, maps, reports and supporting documentation as are necessary to identify and describe, as appropriate - (i) the point or points, including storm water overflows, from which a discharge or discharges take place or are to take place, and (ii) the point or points at which monitoring and sampling are undertaken or are to be undertaken,	B5 E3	✓ ✓
(d)	such fee as is appropriate having regard to the provisions of Regulations 38 and 39. <b>Regulation 16(4)</b> An original application shall be accompanied by 2 copies of it and of all accompanying documents and particulars as required under Regulation 16(3) in hardcopy or in an electronic or other format as specified by the Agency. <b>Regulation 16(5)</b> For the purpose of paragraph (4), all or part of the 2 copies of the said application and associated documents and particulars may, with the agreement of the Agency.	B9(ii)	✓ ✓
	Signed original.		✓
	2 hardcopies of application provided or 2 CD versions of application (PDF files) provided.		✓
	1 CD of geo-referenced digital files provided.		✓
<b>Regulation 17</b>	Where a treatment plant associated with the relevant waste water works is or has been subject to the European Communities (Environmental Impact Assessment) Regulations 1989 to 2001, in addition to compliance with the requirements of Regulation 16, an application in respect of the relevant discharge shall be accompanied by a copy of an environmental impact statement and approval in accordance with the Act of 2000 in respect of the said development and may be submitted in an electronic or other format specified by the Agency		✓
	EIA provided if applicable		✓
	2 hardcopies of EIS provided if applicable.		✓
	2 CD versions of EIS, as PDF files, provided.		✓

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**SECTION H: DECLARATION**

**Declaration**

I hereby make application for a waste water discharge licence/revised licence, pursuant to the provisions of the Waste Water Discharge (Authorisation) Regulations, 2007 (S.I. No. 684 of 2007).

I certify that the information given in this application is truthful, accurate and complete.

I give consent to the EPA to copy this application for its own use and to make it available for inspection and copying by the public, both in the form of paper files available for inspection at EPA and local authority offices, and via the EPA's website.

This consent relates to this application itself and to any further information or submission, whether provided by me as Applicant, any person acting on the Applicant's behalf, or any other person.

Signed by: *Patricia Power* Date: 14<sup>th</sup> Dec 07  
(on behalf of the organisation)

Print signature name: PATRICIA POWER

Position in organisation: Director of Services

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