

## **SECTION B – GENERAL**

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### **Attachment B1: Agglomeration Boundary**



**Legend**

- WTP Treatment Plant
- Updated IW Agglomeration Boundary



Coordinate System: TM65 Irish Grid  
Projection: Transverse Mercator

Scale @ A3: 1:5,500

Drawing No.: IW-AGG-2015-0001

Drawn By: E.Laurinaviciute

Checked By: K.Conroy

Approved By: K.Conroy

Drawn Date: 03/12/2015

Checked Date: 03/12/2015

Approved Date: 03/12/2015



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Map Template Design: kcarroll@water.ie

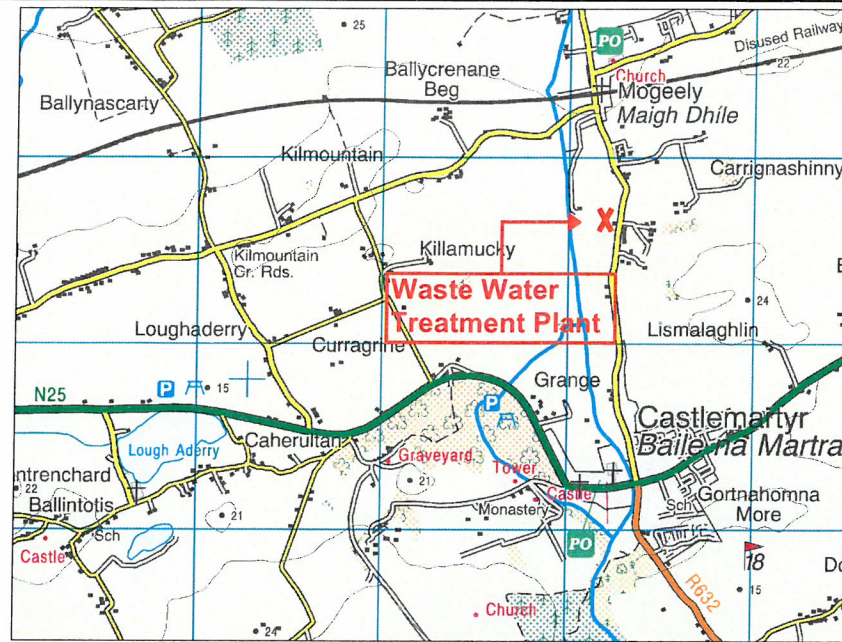
## Agglomeration Boundary - Final Mogeely - Cert

## **SECTION B – GENERAL**

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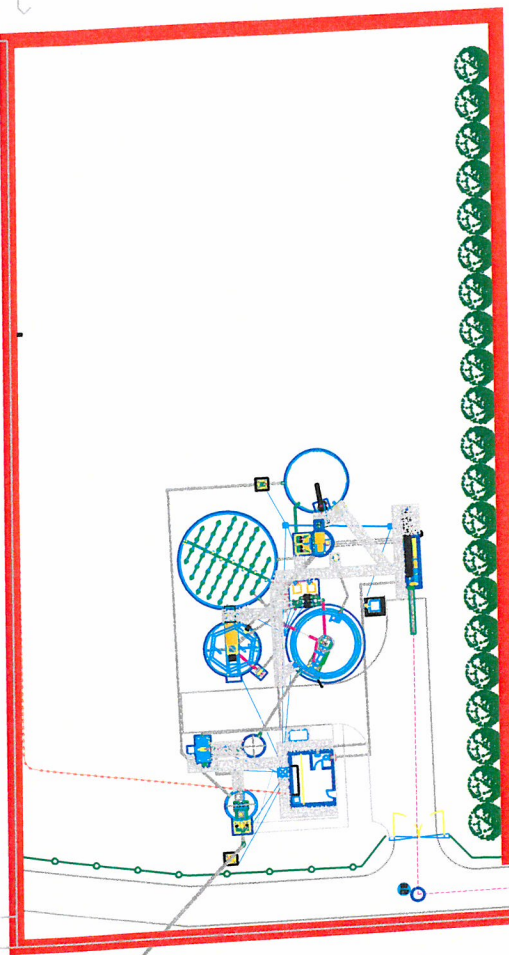
### **Attachment B2: Location of Wastewater Treatment Plant**

- **Attachment B.2: WWTP Location Plan**



Key Map  
Not to Scale

ant



MOGEELY



13.7

CASTLEMARTYR



14.6

LEGEND



— WWTP SITE BOUNDARY

- NOTES
1. FIGURED DIMENSIONS ONLY TO BE TAKEN FROM THIS DRAWING
  2. ALL DRAWINGS TO BE CHECKED BY THE CONTRACTOR ON SITE
  3. ENGINEER TO BE INFORMED BY THE CONTRACTOR OF ANY DISCREPANCIES BEFORE ANY WORK COMMENCES
  4. ALL LEVELS SHOWN RELATE TO ORDNANCE SURVEY DATUM AT MALIN HEAD

Rev	Date	Description	By	Chkd.
D-01	19.11.15	ISSUE TO IRISH WATER	RK	B.G.

Client:  
**IRISH WATER**

Project:  
**MOGEELY CERTIFICATE OF AUTHORISATION**

Title:  
**LOCATION PLAN OF WASTEWATER TREATMENT PLANT (SECTION / ATTACHMENT A.1)**

Scale @ A3: **1 : 750**

Prepared by: **R.K.** Checked: **D.M.** Date: **OCT 15**

Project Director: **MMcD**

Drawing No.: **A1-MAP1** D-01

## **SECTION B – GENERAL**

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### **Attachment B3: Location of Primary Discharge Point**

LEGEND



NOTES

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Rev	Date	Description	By	Chkd.
D-01	19.11.15	ISSUE TO IRISH WATER	RK	B.G.

Client:

IRISH WATER

Project:

MOGEELY  
CERTIFICATE OF  
AUTHORISATION

Title:

LOCATION OF  
PRIMARY DISCHARGE  
POINT

( SECTION / ATTACHMENT B.3 )

Scale @ A3: 1 : 1,000

Prepared by: R.K.      Checked: D.M.      Date: OCT 15

Project Director: MMCD



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Drawing No.: B3- MAP 6 D-01

Water Treatment Plant

DairyGold  
Creamery

Water  
Treatment  
Plant

**SW01MOGE**  
PRIMARY DISCHARGE  
POINT  
E : 196,000  
N : 74,644

**EFFLUENT SAMPLING  
POINT**  
E : 196119  
N : 74669

14.6

13.7

13.1

River

## **SECTION B – GENERAL**

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### **Attachment B5: Location of Stormwater Overflow**

LEGEND



Water Treatment Plant

DairyGold Creamery

Water Treatment Plant

14.6

13.7

13.1

**SW02MOGE**  
STORMWATER OVERFLOW  
OUTFALL  
E : 196,000  
N : 74,644

**EFFLUENT SAMPLING  
POINT**  
E : 196119  
N : 74669

NOTES

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Rev	Date	Description	By	Chkd.
D-01	19.11.15	ISSUE TO IRISH WATER	RK	B.G.

Client: IRISH WATER

Project: MOGEELY CERTIFICATE OF AUTHORISATION

Title: LOCATION OF STORMWATER OVERFLOW ( SECTION / ATTACHMENT B.5 )

Scale @ A3: 1 : 1,000  
Prepared by: R.K. Checked: D.M. Date: OCT 15  
Project Director: MMcD

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Drawing No.: B5- MAP 8 D-01

River



## **SECTION B – GENERAL**

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### **Attachment B6: Relevant Planning Authority**

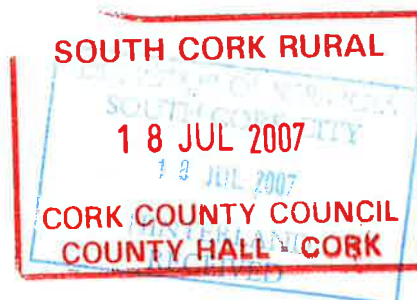
- **Part VIII Planning Report relating to proposed Mogeely Waste Water Treatment Plant and Sewerage Network Upgrade Works**

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Mr. Kevin O'Regan  
Administrative Officer  
Water Services Capital  
South Cork Rural  
Floor 4.



17<sup>th</sup> July, 2007.

Re: Report under Article 179(3)(b) of the Planning & Development Act, 2000.  
Report under Article 81 of the Planning & Development Regulations, 2001.

Proposed Construction of a Wastewater Treatment Plant at Mogeely, Co. Cork.

At the meeting of Cork County Council held on 9<sup>th</sup> July, 2007, the recommendation of the Southern Committee was approved in respect of the above.

I attach copy letter dated 9<sup>th</sup> July, 2007, from the Senior Executive Officer, Corporate Affairs.

S. O'Donovan

P.P. VALERIE HAYES

A/SENIOR EXECUTIVE OFFICER  
SOUTH CORK HINTERLAND.

# Comhairle Contae Chorcaí Cork County Council

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A/Senior Executive Officer,  
South Cork – City Hinterland.

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*Direct Dial: 021-4285457*  
*Email: [helen.bowman@corkcoco.ie](mailto:helen.bowman@corkcoco.ie)*

9<sup>th</sup> July, 2007.

**Re: Report under Article 179(3)(b) of the Planning & Development Act, 2000**

- **Proposed extension to the Waste Water Treatment Plant and Construction of an Underground Pumping Station at Killeens, Co. Cork.**
- **Proposed extension/upgrade to the Waste Water Treatment Plant in Cloughduv, Co. Cork.**
- **Construction of 3 no. Houses at Richmond Court, Bandon, Co. Cork.**
- **Proposed Construction of a Waste Water Treatment Plant at Mogeely, Co. Cork.**

I refer to your letter dated 19<sup>th</sup> June, 2007, in connection with the above.

At the meeting of Cork County Council held on 9<sup>th</sup> July, 2007 the recommendations of the Southern Committee were approved.

**MAURICE MANNING,  
SENIOR EXECUTIVE OFFICER.**

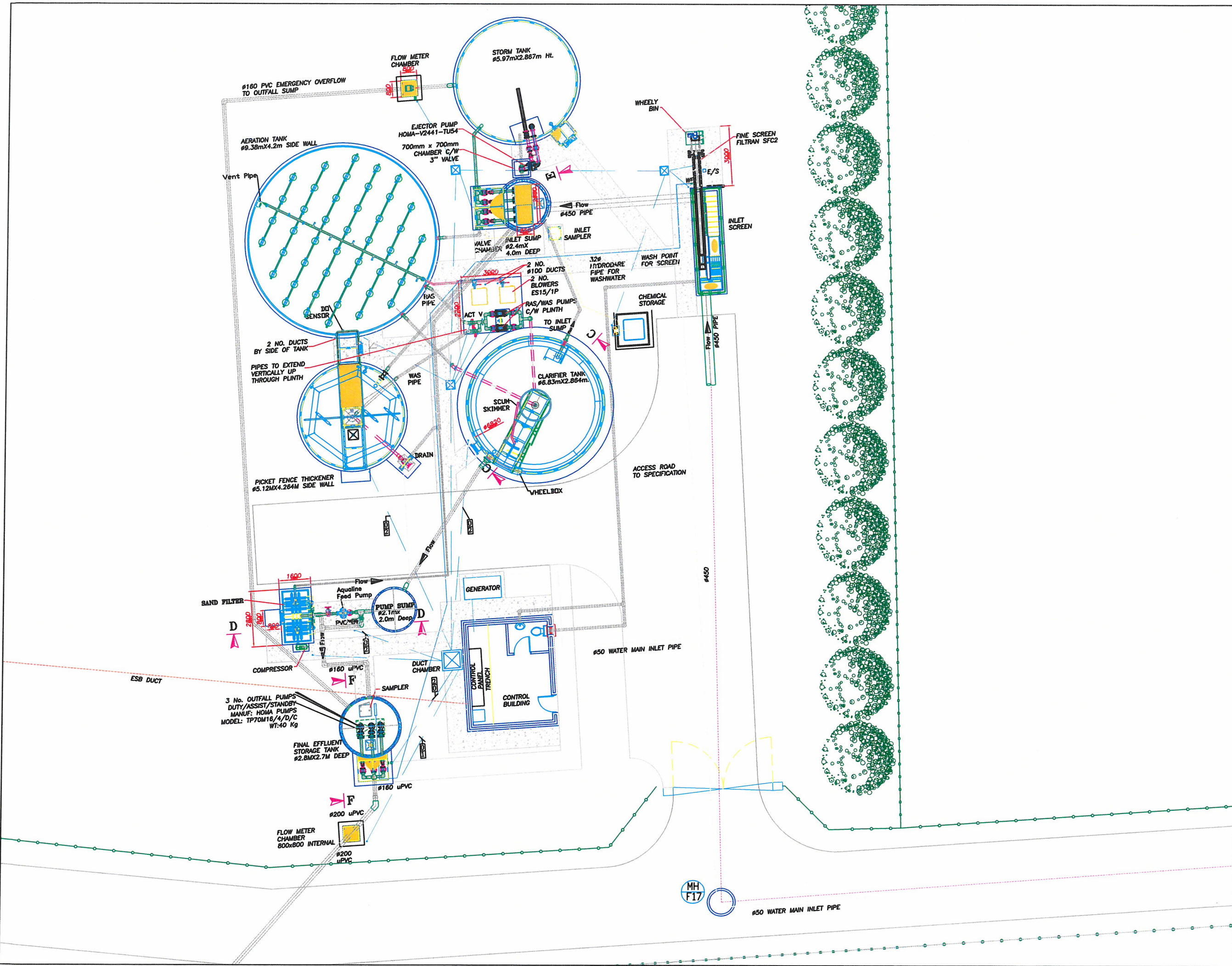


## **SECTION C – INFRASTRUCTURE & OPERATION**

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### **Attachment C1: Operational Information Requirements**

- **Attachment C.1(A): Plant Process Site Layout**
- **Attachment C.1(B): Plant Process Flow Diagram**



LEGEND



THIS DRAWING HAS BEEN SUPPLIED BY: EPS

- NOTES
1. FIGURED DIMENSIONS ONLY TO BE TAKEN FROM THIS DRAWING
  2. ALL DRAWINGS TO BE CHECKED BY THE CONTRACTOR ON SITE
  3. ENGINEER TO BE INFORMED BY THE CONTRACTOR OF ANY DISCREPANCIES BEFORE ANY WORK COMMENCES
  4. ALL LEVELS SHOWN RELATE TO ORDNANCE SURVEY DATUM AT MALIN HEAD

Rev	Date	Description	By	Chkd
D-01	19.11.15	ISSUE TO IRISH WATER	RK	BG

Client: IRISH WATER

Project: MOGEELY CERTIFICATE OF AUTHORISATION

Title: PLANT PROCESS SITE PLAN  
(SECTION / ATTACHMENT C.1)

Scale @ A3: 1 : 1,250

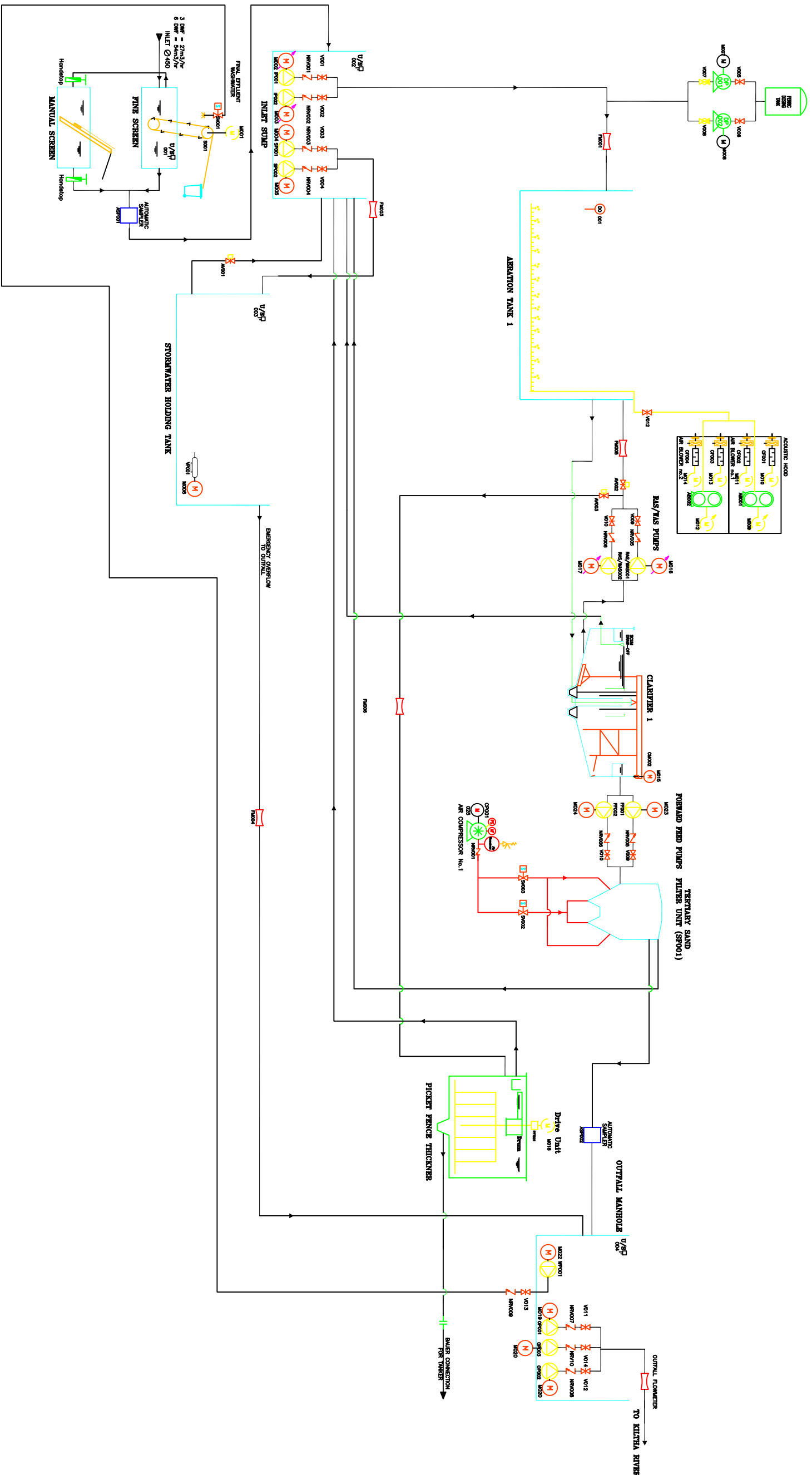
Prepared by: R.K. Checked: D.M. Date: OCT 15

Project Director: MMcD

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Drawing No.: C1- DWG 1 D-01



**LEGEND**

- GATE/BUTTERFLY VALVE
- NON RETURN VALVE
- ACTUATED VALVE
- FLOWMETER
- PUMP
- FLOW INDICATOR
- ULTRASONIC LEVEL SENSOR
- DO PROBE
- MOTOR c/w VSD
- AIR BLOWER
- HANDSTOP
- COMPRESSOR
- SCREEN
- MANUAL SCREEN
- PUMP
- BLOWER
- MOTOR
- ACTUATED VALVE
- SOLENOID VALVE
- NON RETURN VALVE
- INLINE FLOWMETER
- FLOAT SWITCHER
- AUTO SAMPLER
- ULTRASONIC LEVEL PROBE
- DISSOLVED OXYGEN

**NOTES**

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Rev	Date	Description	By	CHKD.
D-01	18.11.15	ISSUE TO INSIT WATER	RK	BG

Client: **IRISH WATER**

Project: **MOGEEELY CERTIFICATE OF AUTHORISATION**

Title: **PLANT PROCESS FLOW DIAGRAM (SECTION / ATTACHMENT C-1)**

Scale @ A3: **N.T.S.**

Prepared by: **R.K.** Date: **OCT 15**

Checked: **D.M.**

Project Director: **MMCD**

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Drawing No.: **C1-DWG 3 D-01**

## SECTION D – DISCHARGES TO THE AQUATIC ENVIRONMENT

---

### Attachment D1: Discharges to Surface Waters

- **Table D.1(i)(a): Emissions to Surface/Ground Waters (Primary Discharge Point)**
- **Table D.1(i)(b): Emissions to Surface/Ground Waters – Characteristics of the Emission (Primary Discharge Point)**
- **Table D.1(i)(c): Dangerous Substance Emissions to Surface/Ground Waters – Characteristics of the Emission (Primary Discharge Point)**  
*Note, monitoring data not available*

**WWD Certificate of Authorisation Application Annex I**

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

<b>Volume emitted m<sup>3</sup> (i)</b>					
Normal/day	67.28	Maximum/day	294.98		
Maximum rate/hour	12.29		min/hr	hr/day	day/year
Dry Weather Flow/sec	0.0008	Period of emission (avg)	60.00	24.00	365.00

Current PE 299

Future PE 437



**Table D.1(i)(b): EMISSIONS TO SURFACE/GROUND WATERS - Characteristics of The Emission (Primary Discharge Point)**

1	pH	NT	
2	Temperature	NT	
3	Electrical Conductivity (@ 25 °C)	NT	
	<b>Max. daily average per day</b>	<b>(mg/l)</b>	<b>kg/day</b>
4	Suspended Solids	16.00	1.076
5	Ammonia as (N)	NT	
6	Biochemical Oxygen Demand	4.30	0.289
7	Chemical Oxygen Demand	43.00	2.893
8	Total Nitrogen (as N)	NT	
9	Nitrite (as N)	NT	
10	Nitrate (as N)	NT	
11	Total Phosphorus (as P)	NT	
12	Orthophosphate (as P)	NT	
13	Sulphate (SO <sub>4</sub> )	NT	
		<b>(µg/l)</b>	
14	Phenols	NT	

Normal Flow rate= 67.28

**Note:** The maximum daily average determined based on the latest effluent sampling data obtained from October 2015 to October 2016 included in Attachment E.4 (a) of this application. All effluent samples were obtained with use of a composite sampler.

**Table D.1(i)(c) : DANGEROUS SUBSTANCE EMISSIONS TO SURFACE/GROUND WATERS - Characteristics of The Emission (Primary Discharge Point)**

Substance	Unit of Measurement	Sampling Method	Max dailyAvg.	kg/day
Dichloromethane	µg/l	Grab	< NT	
Simazine	µg/l	Grab	< NT	
Toluene	µg/l	Grab	< NT	
Tributyltin	µg/l	Grab	< NT	
Xylenes	µg/l	Grab	< NT	
Arsenic	µg/l	Grab	= NT	
Chromium	µg/l	Grab	= NT	
Copper	µg/l	Grab	= NT	
Cyanide	µg/l	Grab	< NT	
Flouride	µg/l	Grab	= NT	
Lead	µg/l	Grab	= NT	
Nickel	µg/l	Grab	= NT	
Zinc	µg/l	Grab	= NT	
Boron	µg/l	Grab	= NT	
Cadmium	µg/l	Grab	= NT	
Mercury	µg/l	Grab	< NT	
Selenium	µg/l	Grab	= NT	
Barium	µg/l	Grab	= NT	

NEW FLOW RATE:

67.28

**Note:** The treated effluent from the relatively new Mogeely WWTP was not tested for dangerous substances listed in Water Quality (Dangerous Substances) Regulations, 2001 (S.I. 12 of 2001). However as the raw influent discharged to the WWTP originates mostly from domestic properties, hence it is not expected to have a significant industrial influence.

## **SECTION E – MONITORING**

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### **Attachment E1: Wastewater Discharge Frequency & Quantities – Existing**

- **Table E.1(i): Waste Water Frequency and Quantity of Discharge Primary Discharge Points**
- **Table E.1(ii): Waste Water Frequency and Quantity of Discharge Stormwater Overflows**

**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)
SW1MOGE	365	24,555

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

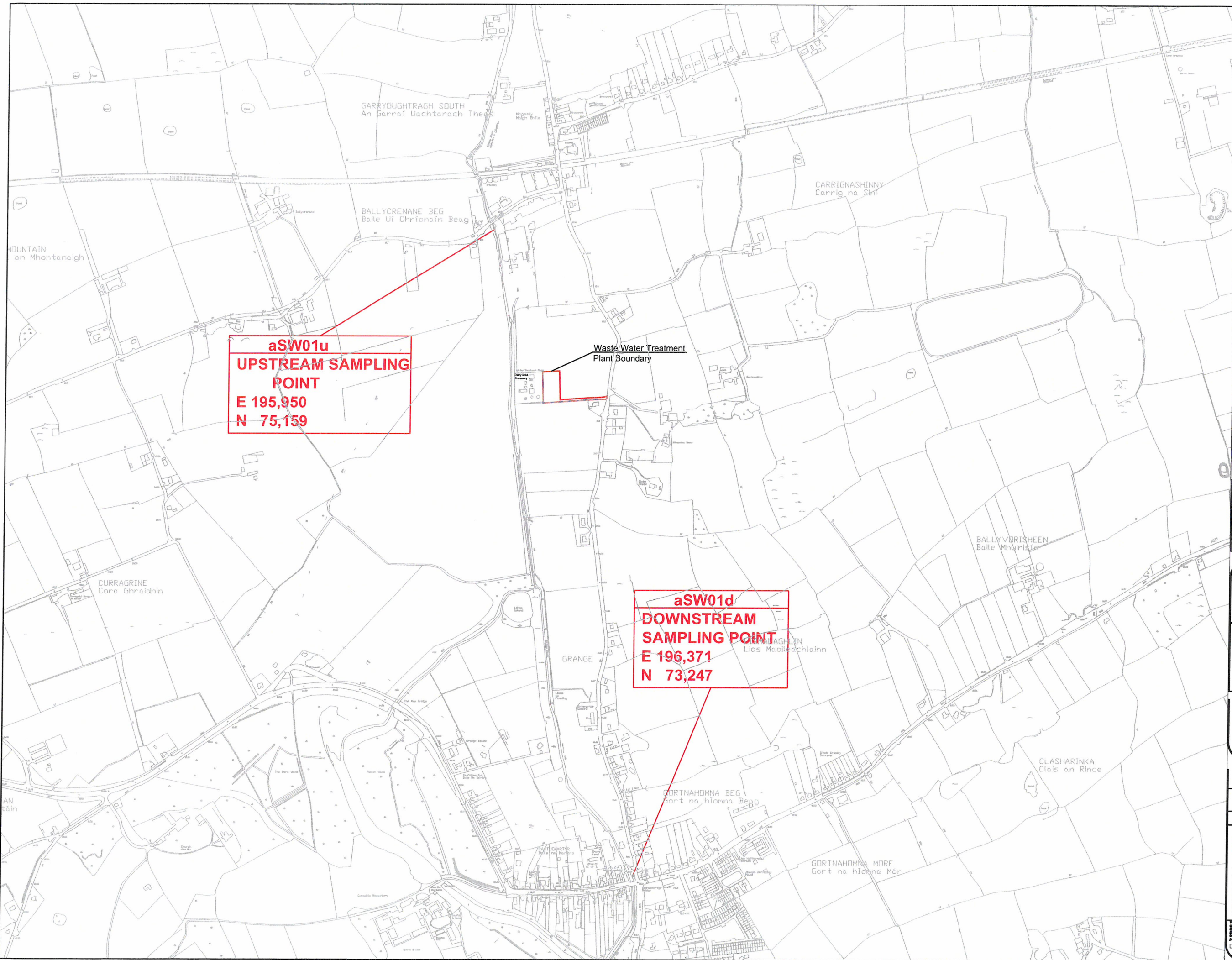
Identification code for discharge point	Frequency of discharge (days/annum)	Quantity of Waste Water Discharged (m <sup>3</sup> /annum)	Complies with Definition of Storm Water Overflow
SW2MOGE	None	N/A	Yes

## **SECTION E – MONITORING**

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### **Attachment E2: Monitoring & Sampling Points**

- **Attachment E.2: Map of Monitoring and Sampling Points**



**aSW01u**  
**UPSTREAM SAMPLING POINT**  
**E 195,950**  
**N 75,159**

**aSW01d**  
**DOWNSTREAM SAMPLING POINT**  
**E 196,371**  
**N 73,247**

LEGEND



— WWTP SITE BOUNDARY

NOTES

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Rev	Date	Description	By	Chkd.
D-01	19.11.16	ISSUE TO IRISH WATER	RK	BG

Client: **IRISH WATER**

Project: **MOGEELY CERTIFICATE OF AUTHORISATION**

Title: **ALL UPSTREAM & DOWNSTREAM MONITORING & SAMPLING POINTS (SECTION / ATTACHMENT E.2)**

Scale @ A3: **1 : 10,000**

Prepared by: **R.K.** Checked: **D.M.** Date: **OCT 15**

Project Director: **MMcD**

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 www.tobin.ie

Drawing No.: **E2-MAP 11D-01**

## **SECTION E – MONITORING**

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### **Attachment E4: Sampling Data**

- **Attachment E.4: Table of Effluent Sampling Data**

Effluent Sampling Location eSW-1

Water Management Unit	Sample Template	Sample Date	Sample Time	Sample Method	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
					Ammonium NH4-N	Biological Oxygen Demand	COD Chemical Oxygen Demand	Ortho-Phosphate P	Suspended Solids	Total Nitrogen N	Total Phosphorus P	Nitrite	Nitrate
					--	--	Varies	--	Varies	--	--	--	--
					--	--	Varies	--	Varies	--	--	--	--
					--	--	--	--	--	--	--	--	--
Womanagh Catchment	Effluent_WWDL	13/02/2014	-	Composite	-	1.9	27	-	5	-	-	-	-
Womanagh Catchment	Effluent_WWDL	09/04/2014	-	Composite	-	1.9	34	-	6	-	-	-	-
Womanagh Catchment	Effluent_WWDL	05/06/2014	-	Composite	-	-	1.25	-	-	-	-	-	-
Womanagh Catchment	Effluent_WWDL	25/06/2014	-	Composite	-	1.4	25	-	3	-	-	-	-
Womanagh Catchment	Effluent_WWDL	27/08/2014	-	Composite	-	4	39	-	24	-	-	-	-
Womanagh Catchment	Effluent_WWDL	22/10/2014	-	Composite	-	2.1	23	-	3	-	-	-	-
Womanagh Catchment	Effluent_WWDL	11/02/2015	-	Composite	-	1.8	10.5	-	4	-	-	-	-
Womanagh Catchment	Effluent_WWDL	15/04/2015	-	Composite	-	2.4	28	-	10	-	-	-	-
Womanagh Catchment	Effluent_WWDL	04/06/2015	-	Composite	-	2.2	10.5	-	9	-	-	-	-
Womanagh Catchment	Effluent_WWDL	26/08/2015	-	Composite	-	1.3	21	-	5	-	-	-	-
Womanagh Catchment	Effluent_WWDL	21/10/2015	-	Composite	-	2	28	-	2.5	-	-	-	-
Womanagh Catchment	Effluent_WWDL	17/02/2016	-	Composite	-	2	21	-	3	-	-	-	-
Womanagh Catchment	Effluent_WWDL	13/04/2016	-	Composite	-	1.6	21	-	2.5	-	-	-	-
Womanagh Catchment	Effluent_WWDL	08/06/2016	-	Composite	-	4.3	34	-	5	-	-	-	-
Womanagh Catchment	Effluent_WWDL	30/08/2016	-	Composite	-	4	43	-	16	-	-	-	-
Womanagh Catchment	Effluent_WWDL	04/10/2016	-	Composite	-	1.7	26	-	7	-	-	-	-