



# MCERTS - EDM Inspection Report

## Keeston WwTW

22 April 2025

Report No. CFS/ 17821





## Site Information



<b>Site Name:</b>	Keeston WwTW	
<b>Consent/Permit Holder:</b>	Dŵr Cymru Welsh Water	
<b>Site Address:</b>	Bridge Lane, Keeston, Haverfordwest SA62 6EE	
<b>Site Contact:</b>	Statutory & Regulatory Maintenance Manager	
<b>Contact Phone Number:</b>	mcerts@dwrwymru.com	
<b>Site Ref or Postcode:</b>	50644	
<b>Grid Ref (Sensor):</b>	SM 90782 18722	
<b>Consent/Permit No:</b>	BP0087901	
<b>Location of EDM Sensor:</b>	Last in line overflow	
<b>Number of EDMs:</b>	1	
<b>Instrument Type:</b>	Type A (non contact) - R	
<b>Instrument/Device(s):</b>	Vega Vegamet 862 with C 22	
<b>Level Meter Serial Number:</b>	69837819	
<b>Sensor Serial Number:</b>	69211910	
<b>Date of Inspection:</b>	22/04/2025	
<b>Inspector:</b>	Joe Ramsden - MI 25 037	
<b>Inspection Report No:</b>	CFS/ 17821	
<b>Survey Pack:</b>	I	* Kit Inventory and calibration data recorded on central QMS database
<b>Uncertainty:</b>	± 2.1 mm	<b>P A S S</b>
<b>Site Compliance:</b>	Following a site inspection, the measurement system was found to meet the requirements of the Environment Agency <i>MCERTS: requirements for installing and using event duration monitors - MCERTS Performance Standard</i> . Published 28th August 2024	

## Site Details

### Site Description

Keeston WwTW is a sewage treatment works with activated sludge plant (see process diagram).

### Location of Event Monitor(s)

The EDM is located above the Dual sided storm weirs

### Overflow Point(s) Requiring Event Monitoring

Last in line overflow (See Process Diagram.)

### Verification / Calibration

The sensor was mounted on a rigid bracket with a removable datum plate to reference the sensor height relative to the hydraulic datum. The reference height of the datum plate has been set accurately and recorded.

### Site Maintenance Arrangements, Evidence and Suitability

A routine maintenance schedule has not been confirmed but is required as part of the consent holders Quality Management System, as audited by CSA.  
The level measurement system was found to be in a satisfactory condition at the time of the Inspection.

### MCERTS Approved Product

The installed meter has a valid MCERTS Approved product certificate. Certificate number: CSA MC210360/01

### System Observed in Operation

The EDM was not observed in a storm condition during the inspection. However, there is no evidence to suggest that the system would not be suitable, during a storm event.

### Indicated Discharge Status

The indicated discharge status can be observed on site by:

The level activation - Access to telemetry required.

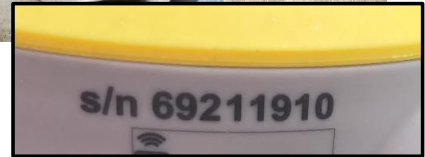
### Telemetry Arrangements

The Event Monitor data is collected on the SCADA system.  
The data is transmitted using an analogue 4/20mA signal

### Inspector's Judgements or Comments About the Installation



Storm Weir Location



Storm weir and Sensor Set Up, Sensor Serial Number



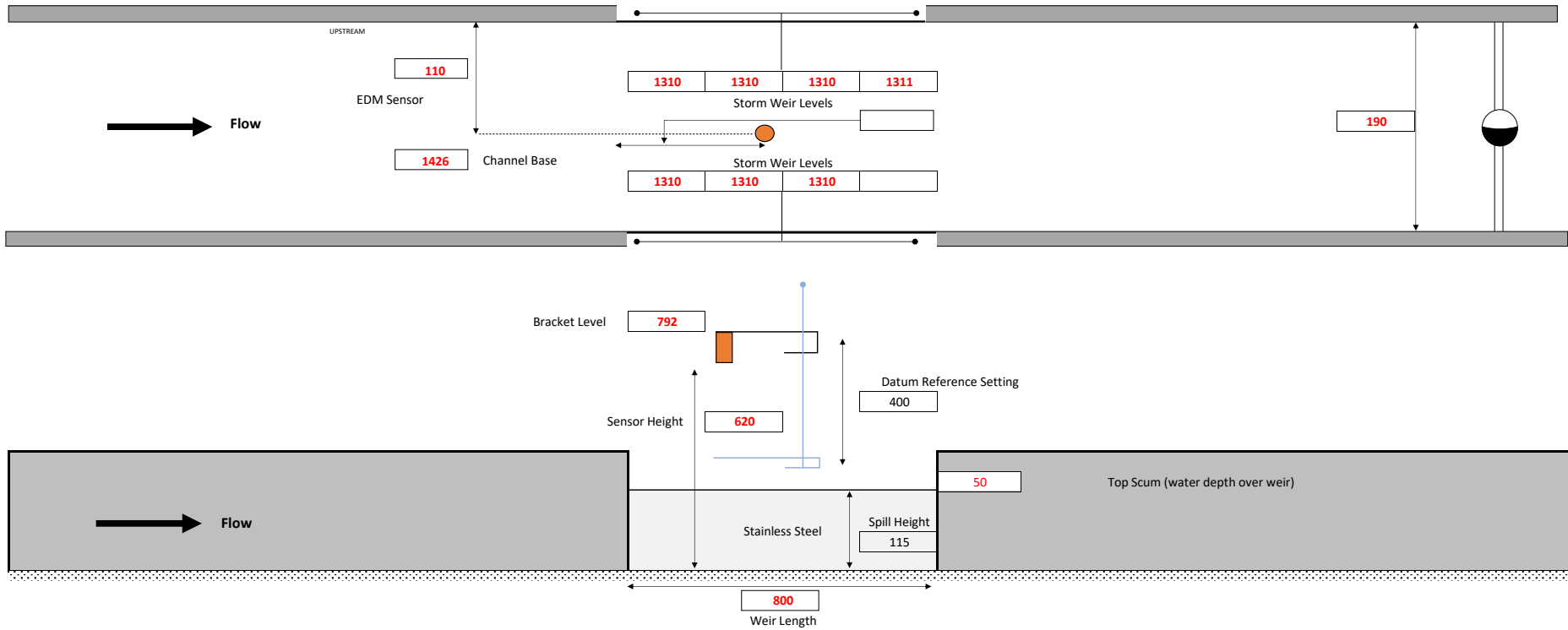
EDM Display Location



EDM Level Meter Display, Serial Number. Alarm Set Points and Datum Reference

Site Name	Keeston WwTW	EDM Level Meter	Vega Vegamet 862 with C 22	Location	Storm Overflow
Event Duration Monitor	Date	22 April 2025			
Total Uncertainty	2.1 mm				

DUAL SIDED STORM WEIRS



Depth Readings	
234	234
234	234
234	234
234	234
234	234
VAR +1	1.00

Measured Temp.	0 °C
Instrument Temp.	0 °C
<b>Error</b>	<b>0.0 mm</b>
Datum Level	234 mm
Instrument Level	234 mm
<b>Error</b>	<b>0 mm</b>
Sensor height above spill	505 mm
Accuracy	0.09 %
<b>Error</b>	<b>0.46 mm</b>
<b>Estimate of wave height</b>	<b>4 mm</b>
<b>Repeatability<sup>#1</sup></b>	<b>0.4 mm</b>

<b>Total Uncertainty</b>	<b>2.1 mm</b>
--------------------------	---------------

Sensor Height	620 mm
Base Level	1426 mm (Staff Reading)
Lowest Weir Level	1311 mm (Staff Reading)
Spill Height	115 mm

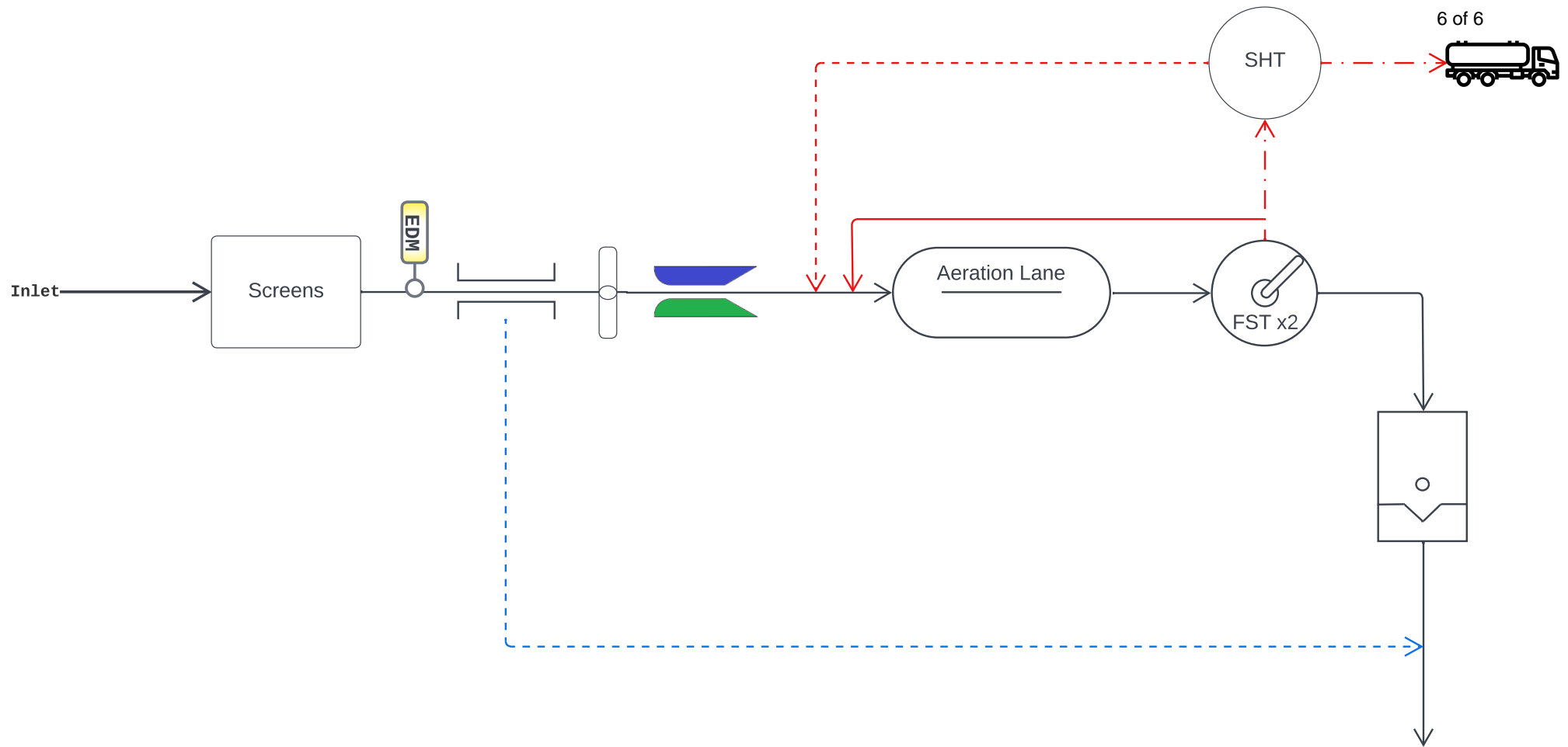
Analogue Output	0 mm - 4mA
	607 mm - 20mA
Storm Event Activated	116 mm - 7.06 mA
Event De-Activated	111 mm - 6.93 mA

Bracket Level	792	Staff Reading
Bobbin	White	(400 mm)
Datum Reference Height	234	mm

Compliance Check	
Uncertainty < ±5mm	OK
Logging Intervals <2min	OK
Sensor location upstream from weir	Not applicable
Sensor distance to weir	OK
Sensor securely mounted	OK
Sensor Height	OK
Sunshade Required	No
Sunshade Installed	No
Sensor in channel centre	OK

Notes: #1 Repeatability uses IS4359 14.5.1  
Total Uncertainty uses Error items in 'bold'

All dimensions in mm, unless stated otherwise.



Treated Flow	Process interpreted from site visit and has not been confirmed		Process Diagram - Keeston WwTW		Site Owner - DCWW	Date - 28/06/2022
Storm Flow			Rev	Date	Drawn By	Notes
Storm Overflow	Comments -	A	22/04/2025	JWR	Addition of EDM	
RAS						
Top Liquors						
SAS						
Washwater						