

PACKAGE TREATMENT PLANT

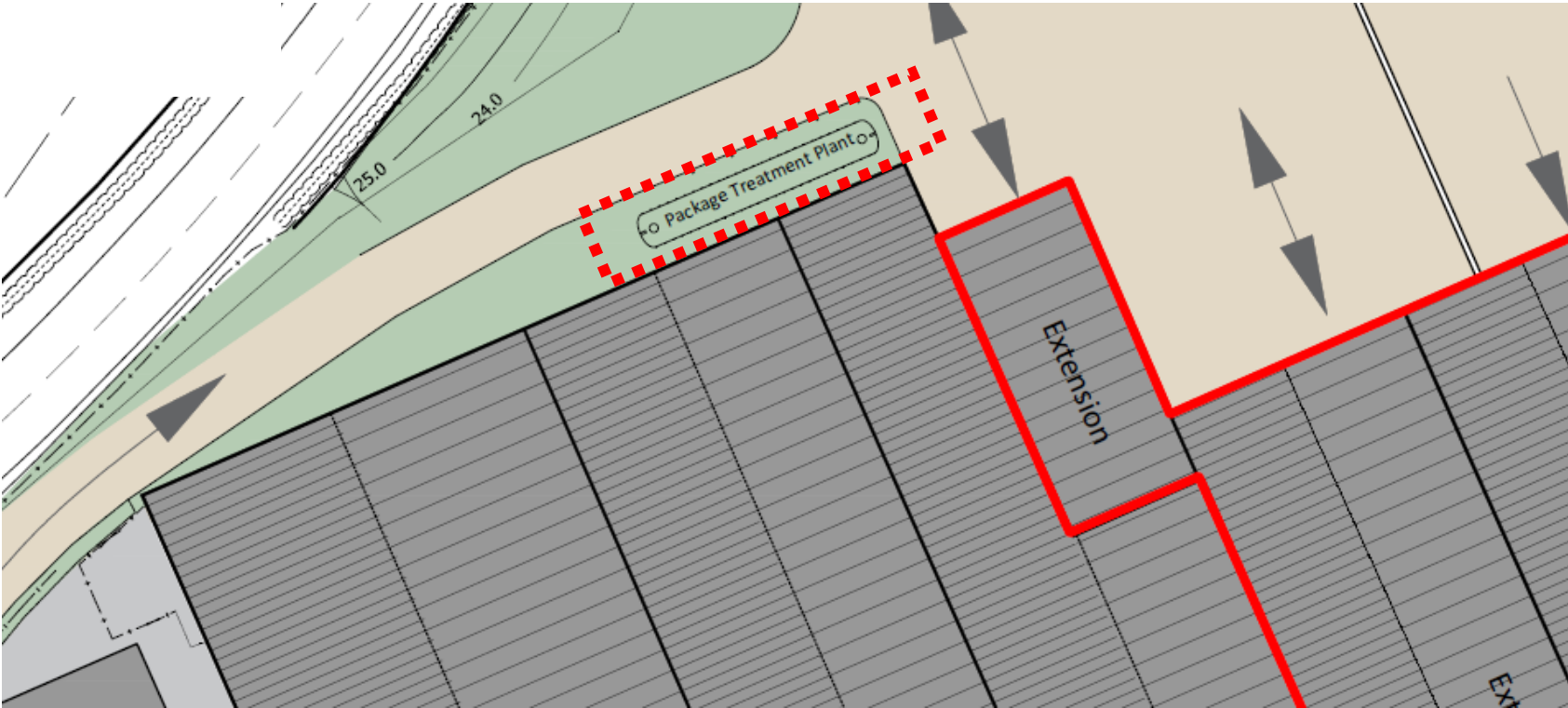
USE: treatment of domestic foul waste to serve the staff facilities for the site as a whole.

AMOUNT: one system with sufficient capacity.

LAYOUT: the proposed package treatment plant is to be located to the north of the site and buried underground. The area will benefit from improved soft landscaping and realignment of the roadway to ensure clear separation of the proposed tank and vehicle movement.

APPEARANCE: the treatment plant will be buried underground. Visible elements will comprise inspection chambers / sampling chamber / services kiosk.

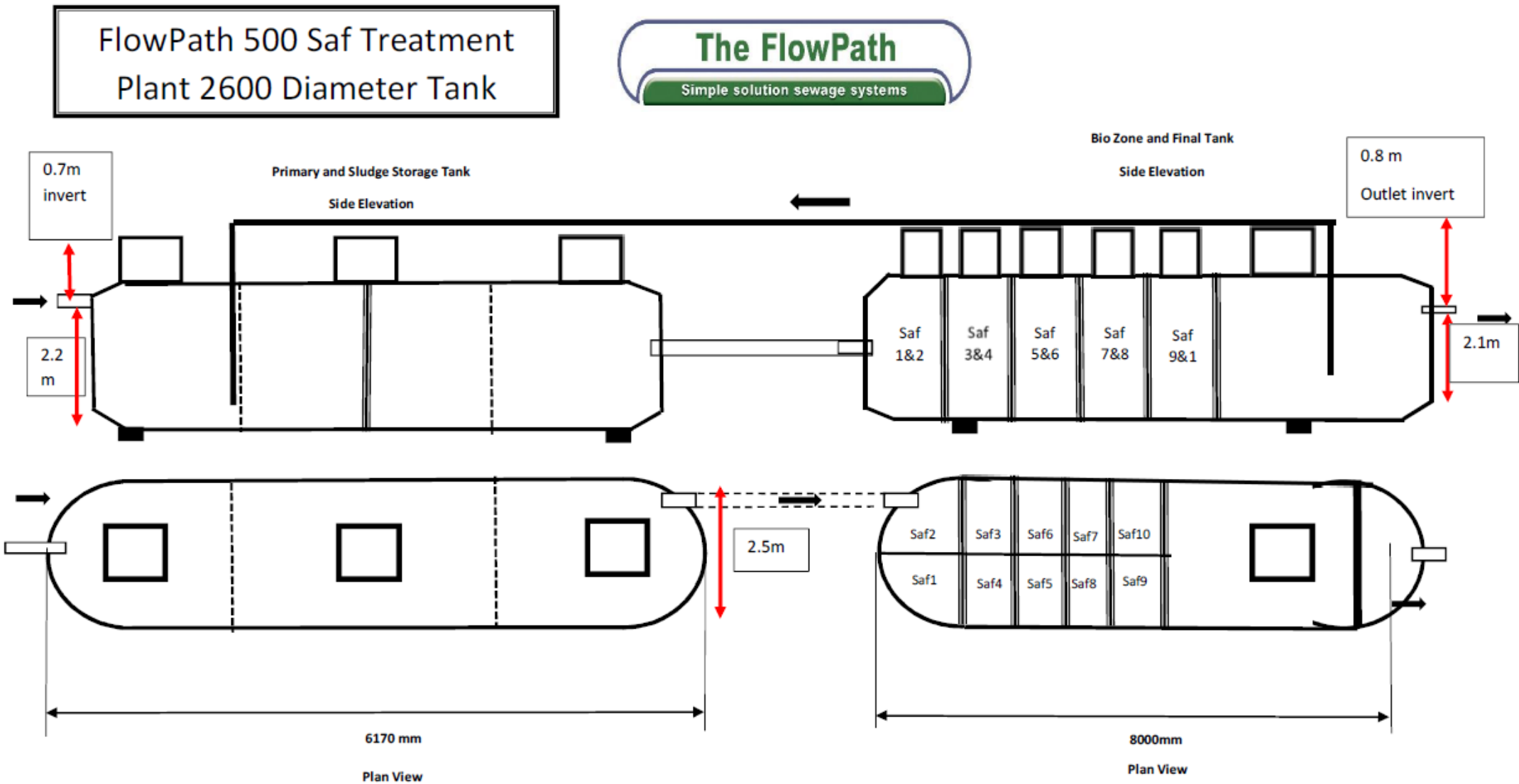
SCALE: circa 18.0 m in length



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Drainage channel
(domestic waste water)



PACKAGE
TREATMENT
PLANT



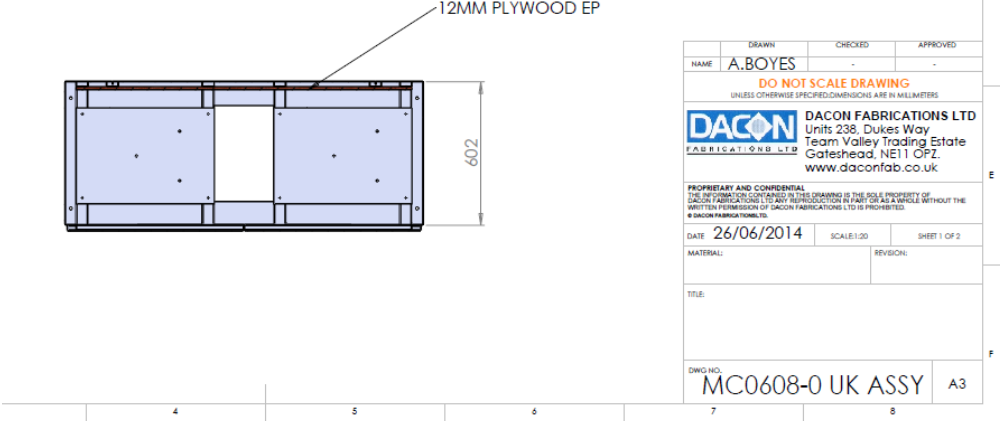
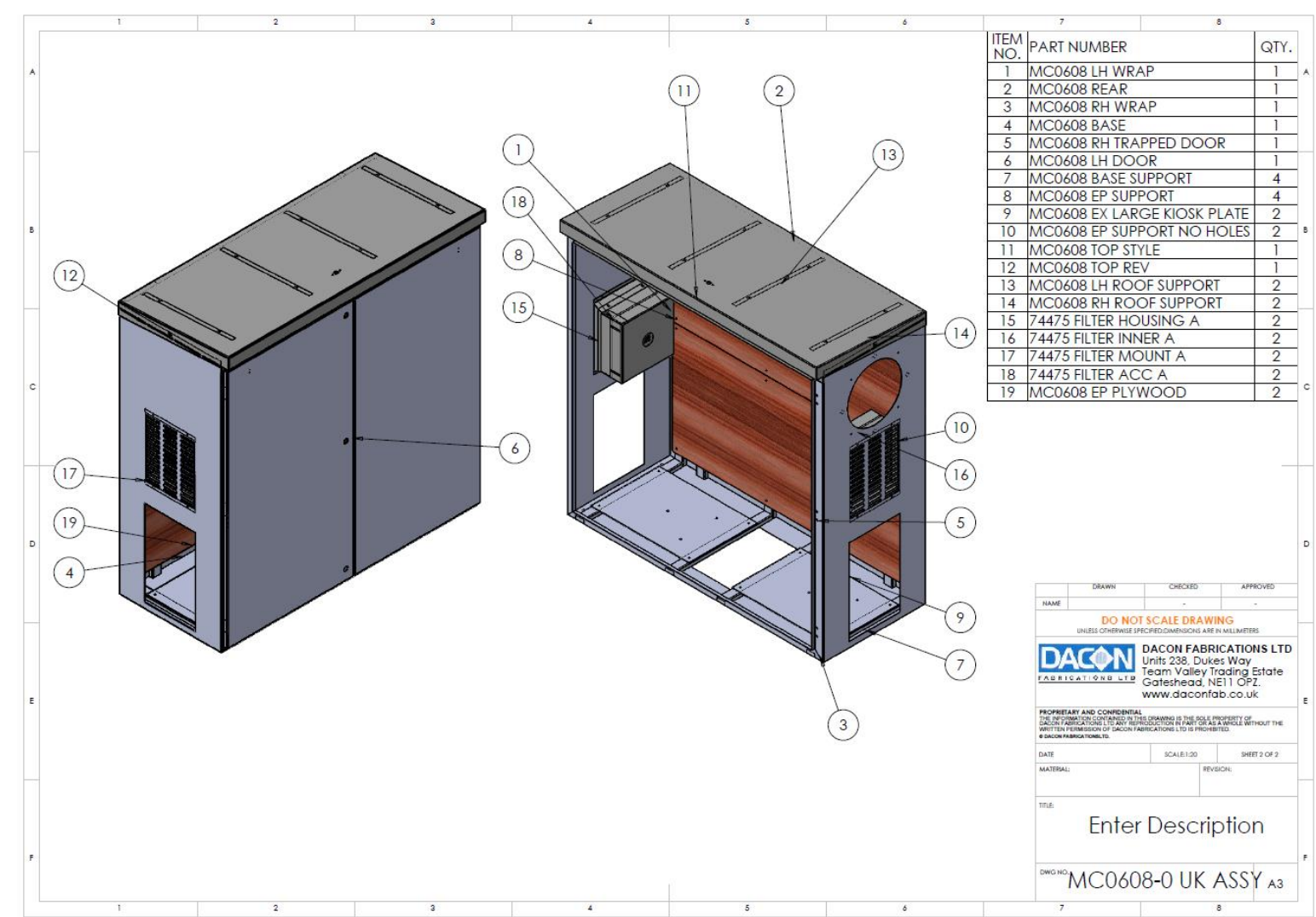
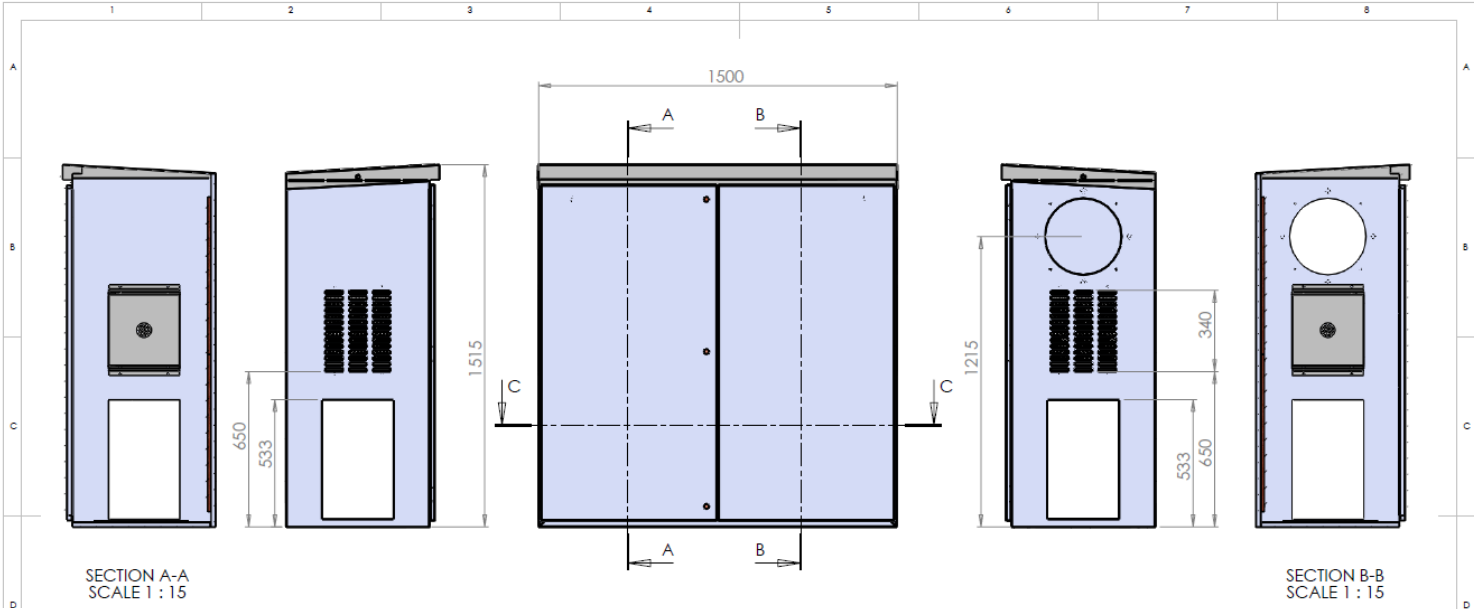
Domestic sewage
Per capita flow: 150l/hd/day
Max flow: 3DWF
BOD load: 60g/hd/day
NH3 load: 8g/hd/day
Solids load: 70g/hd/day
Consent Standard: 30mg/l suspended solids and 20mg/l BOD (95%ile)

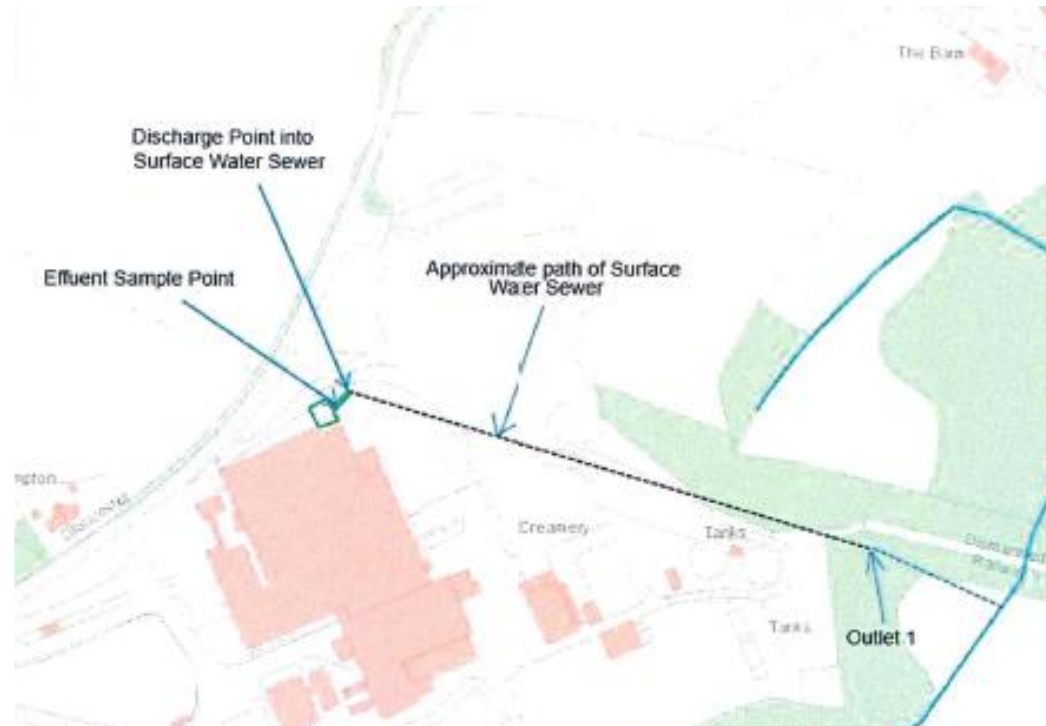
Population Equivalent: 500
DWF: 36m3/day
Max flow 3DWF: 108m3/day
Crude BOD load: 14.4kg/day
Crude Solids load: 16.8kg/day
Crude NH3 load: 1.92kg/day
Sludge storage: 60days

Primary and sludge tank: 27m3
Primary settlement zone: 11m3
Sludge storage zone: 16m3
SAF media/tank volume: 22m3
Media specific surface area: 220m2/m3
Media voidage: 95%
No. of SAF compartments: 8 minimum
Final settlement volume: 12.5m3
Return humus sludge: 0.4m3/day
Oxygen requirement: 40kgO2/day

LH/FP500/DEC15

PACKAGE TREATMENT PLANT
– M+E KIOSK





Permit

The Environmental Permitting (England and Wales) Regulations 2010

Permit number

EPR/WB3990HT

The Natural Resources Body for Wales ("Natural Resources Wales") authorises, under regulation 13 of the Environmental Permitting (England and Wales) Regulations 2010

Maelor Poultry Limited ("the operator"),
whose registered office is

Salisbury House
Vulcan Road
Bilston
West Midlands
WV14 7HT

company registration number **09156025**

to operate a water discharge activity at

Maelor Poultry Limited
Pickhill Lane
Cross Lanes
Wrexham
LL13 0UE

to the extent authorised by and subject to the conditions of this permit.

Table S3.1 Point Source emissions to water (other than sewer) – emission limits and monitoring requirements

Discharge source and discharge point ref. & location	Parameter	Limit (including unit)	Reference Period	Limit of effective range	Monitoring frequency	Compliance Statistic
Secondary treated sewage effluent via Outlet 1	Maximum daily discharge volume	15 m ³ /day	Total daily volume	N/A	N/A	Maximum
	ATU-BOD as O ₂	20 mg/l	Instantaneous (spot sample)	N/A	N/A	Maximum
	Suspended solids (measured after drying at 105° C)	35 mg/l	Instantaneous (spot sample)	N/A	N/A	Maximum
	Ammoniacal nitrogen (expressed as N)	5 mg/l	Instantaneous (spot sample)	N/A	N/A	Maximum
	Visible oil or grease	No significant trace present	Instantaneous (spot sample)	N/A	N/A	No significant trace

Table S3.2 Discharge point

Effluent Name	Discharge Point	Discharge point NGR	Receiving water
Secondary treated sewage effluent	Outlet 1	SJ 38754 46716	Unnamed tributary of the River Dee via a surface water sewer.

Table S3.3 Monitoring point

Effluent and discharge point	Monitoring type	Monitoring point NGR
Secondary treated sewage effluent via Outlet 1	Effluent sample point	SJ 38501 46780