

Intensive green roof area assumed for Development Area 2: 1787m2

Extensive green roof area assumed for Development Area 2: 369m2

LEGEND

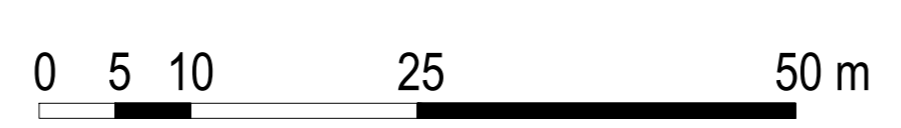
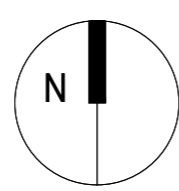
GENERAL

	Semi-natural vegetation
	Intensive green roof
	Standard trees Soil volume equivalent to at least two thirds of the projected canopy
	Extensive green roof
	Rain gardens
	Hedges
	Standard trees Soil volume less than two thirds of the projected canopy area of the mature tree
	Flower-rich perennial planting
	Amenity grassland
	Water features Chlorinated
	Permeable paving

rev	details	by	date
P00	Issued for planning submission	WQ	11.03.2022

Notes

1.0 Do not scale from drawing, use figured dimensions only
 1.1 All dimensions to be checked onsite
 1.2 This drawing to be read in conjunction with all other Gillespies drawings and specifications



Project title
STAG BREWERY

Drawing title
URBAN GREENING FACTOR - SITE WIDE

Drawing number P10736-00-004-GIL-0802	Revision
PLANNING	P00
Date 11.03.2022	Scale 1:500 @ AD
Drawn WQ	Checked JG

Client
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M. Foul Flow Estimate

Appendices

The Former Stag Brewery, Mortlake

Project Number: WIE18671

Document Reference: WIE18671-104-R-11-7-1-DS



Project Title: **Stag Brewery**
 Calculations Title: **Existing Foul Flow Estimate**

Sheet No: 1 of 3 Project No: WIE18671
 By: M Stuart Date: 18/02/2022
 Checked: B McCarthy Date: 18/02/2022

	Dry Weather Flow Rate (per day)	Source	Number of	Factor	Profile (hours)	Peak Flow Rate (litres/second)
Residential				2.12	24	
Existing property = 160 litres/person/day	368.0 litres per unit	Thames Water Guidelines (2016)	0 existing units			0.0
New property = 125 litres/person/day	287.5 litres per unit	Thames Water Guidelines (2016)	0 proposed units			0.0
Occupancy = 2.3 persons						
Hotel	500.0 litres per room	British Water (2013)	15 rooms		3 24	0.3
Student Accommodation	200.0 litres per bed	Thames Water Guidelines (2016)	0 beds		3 24	0.0
Offices	750.0 litres per 100m ²	Jones (1992)	2318 m ²		3 10	1.4
Retail	400.0 litres per 100m ²	Jones (1992)	0 m ²		3 12	0.0
Cinema	10.0 litres per seat	Jones (1992)	0 seats*		3 8	0.0
Health Club/Sports Centre	50.0 litres per customer	British Water (2013)	168 customers**		3 16	0.4
Day School	90.0 litres per pupil	British Water (2013)	0 pupils		3 10	0.0
Boarding School	175.0 litres per pupil	British Water (2013)	0 pupils		3 24	0.0
Hospital	625.0 litres per bed	Jones (1992)	0 beds		3 24	0.0
Nursing Home	350.0 litres per bed	British Water (2013)	0 beds		3 24	0.0
Restaurant	30.0 litres per cover	British Water (2013)	0 covers		3 8	0.0
Pub/Club	15.0 litres per customer	Butler and Davies (2004)	0 customers***		3 12	0.0
Warehouse	150.0 litres per 100m ²	Jones (1992)	0 m ²		3 12	0.0
Manufacturing	550.0 litres per 100m ²	Jones (1992)	28671 m ²		3 12	11.0
Commercial	300.0 litres per 100m ²	Jones (1992)	0 m ²		3 12	0.0
SUB TOTAL						13.1
Infiltration percentage 10%						1.3
TOTAL						14.4

* Foul flow rate needs to be calculated based on number of seats. An allowance of 4m² has been made for each seat.

Floor area = 0 m² 4 m² per person

** Foul flow rate needs to be calculated based on number of customers. An allowance of 4m² has been made for each customer.

Floor area = 672 m² 4 m² per person

*** Foul flow rate needs to be calculated based on number of customers. An allowance of 4m² has been made for each customer.

Floor area = 0 m² 4 m² per person



Project Title: **Stag Brewery**
 Calculations Title: **Proposed Foul Flow Estimate**

Sheet No: 2 of 2 Project No: WIE18671
 By: S Whelan Date: 02/08/2022
 Checked: B McCarthy Date: 02/08/2022

	Dry Weather Flow Rate (per day)	Source	Number of	Factor	Profile (hours)	Peak Flow Rate (litres/second)
Residential				2.12	24	
Existing property = 160 litres/person/day	400.0 litres per unit	Thames Water Guidelines (2016)	0 existing units			0.0
New property = 125 litres/person/day	312.5 litres per unit	Thames Water Guidelines (2016)	1071 proposed units			8.2
Occupancy = 2.5 persons						
Hotel	500.0 litres per room	British Water (2013)	15 rooms	3	24	0.3
Student Accommodation	200.0 litres per bed	Thames Water Guidelines (2016)	0 beds	3	24	0.0
Offices	750.0 litres per 100m ²	Jones (1992)	4468 m ²	3	10	2.8
Retail	400.0 litres per 100m ²	Jones (1992)	4782 m ²	3	12	1.3
Cinema	10.0 litres per seat	Jones (1992)	334 seats*	3	8	0.3
Health Club/Sports Centre	50.0 litres per customer	British Water (2013)	0 customers**	3	16	0.0
Day School	90.0 litres per pupil	British Water (2013)	1200 pupils	3	10	9.0
Boarding School	175.0 litres per pupil	British Water (2013)	0 pupils	3	24	0.0
Hospital	625.0 litres per bed	Jones (1992)	0 beds	3	24	0.0
Nursing Home	350.0 litres per bed	British Water (2013)	0 beds	3	24	0.0
Restaurant	30.0 litres per cover	British Water (2013)	0 covers	3	8	0.0
Pub/Club	15.0 litres per customer	Butler and Davies (2004)	0 customers***	3	12	0.0
Warehouse	150.0 litres per 100m ²	Jones (1992)	0 m ²	3	12	0.0
Manufacturing	550.0 litres per 100m ²	Jones (1992)	0 m ²	3	12	0.0
Commercial	300.0 litres per 100m ²	Jones (1992)	0 m ²	3	12	0.0
SUB TOTAL						21.9
Infiltration percentage 10%						2.2
TOTAL						24.1

* Foul flow rate needs to be calculated based on number of seats. An allowance of 4m² has been made for each seat.

Floor area = 1606 m² 4 m² per person

** Foul flow rate needs to be calculated based on number of customers. An allowance of 4m² has been made for each customer.

Floor area = 0 m² 4 m² per person

*** Foul flow rate needs to be calculated based on number of customers. An allowance of 4m² has been made for each customer.

Floor area = 0 m² 4 m² per person



Sheet No: 3 of 3 Project No: WIE18671
By: S Whelan Date: 02/08/2022
Checked: B McCarthy Date: 02/08/2022

Project Title: Stag Brewery
Proposed Foul Flow Estimate by development
Calculations Title: block

Description: **The proposed foul flows per development block have been calculated based on the number of residential units, commercial floor space, cinema seating, hotel rooms, and number of students attending the school, as captured within the proposed foul flow estimate calculation (Sheet 2 of 3) and the development proposals (Appendix A).**

Development Block	TW Manhole ref	Foul Flow (l/s)
1	4902	2.0
2	3005	1.1
3	4101	0.4
4	4101	0.3
5	4903	1.8
6	4901	0.3
7	4101	0.8
8	4101	0.9
9	6003	0.2
10	6901	0.3
11	6003	0.5
12	6003	0.5
13	3005	0.3
14	3901	0.3
15	3901	0.9
16	3007	0.6
17	3005	0.6
18	3007	0.9
19	3007	0.4
20	3007	0.1
21	3007	0.1
School	2801	9.0
Total	-	21.9

Our vision

“Engineering a better environment for people and the planet”

Our mission

“To solve complex problems for the benefit of clients, communities and the climate”

Our values

People orientated

Individually and collectively, people are our business. We strive to create environments for everyone to flourish and thrive.

Flexible

Pragmatic by nature and dedicated to getting the job done to the highest possible standard.

Professional

Operating at pace with integrity to deliver technical and robust solutions.

Environmentally aware

We understand our responsibility to the environment, it shapes our decision making and informs our practice.

Innovative

Our forensic questioning provides the ability to deliver appropriate innovations at every stage on every project.

Relationship focused

We value individuality and the benefits of working collaboratively to achieve positive outcomes for all.

