

SuDS REPORT

For Development at:

**JANSONS ROAD,
HARINGEY,
LONDON, N15 4RU**

MARKS HEELEY LTD

Revision	Description	Date	By

September 2025

Author:

A handwritten signature in cursive script that reads "A Flack". The signature is written in dark ink on a white background.

Adam Flack
BSc (Eng.)

Co-Author/Checked:

A handwritten signature in cursive script that reads "M Newman". The signature is written in dark ink on a white background.

Mark Newman
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1.0 INTRODUCTION

- 1.1 This Suds report has been prepared in support of Panning Condition 16 of the approved application HGY/2021/0030.
- 1.2 This report is prepared following the previously submitted and approved 'planning statement SuDS Strategy' prepared by Eight Associates (Ref: 4633 - Jansons Road-SuDS Strategy-2012-18rm).

2.0 SURFACE WATER ATTENUATION DESIGN

- 2.1 Refer to Appendix A for final sizing of the on site attenuation required to achieve the proposed 3.6 l/sec outfall.
- 2.2 Attenuation of size 2m x 3m x 0.8m deep (4.8m³) will be provided. Permeable surfacing on site will drain to the SW drainage on site via perforated land drains laid in the permeable sub-base.
- 2.3 Due to depths of the existing surface water drains in the vicinity of the site, the outfall from the attenuation will be required to be served by a pump chamber, before gravity outfall to the existing manhole.
- 2.4 Final detailed drainage drawings are included, Appendix B.

3.0 MANAGEMENT AND MAINTENANCE

Design considerations include providing source control, ease of access, health and safety and potential cost of maintaining features. During and at the end of construction, inspection is necessary to ensure the system will not require remedial works.

Maintenance of SuDS fits within an overall asset management process:

- ☐ Mapping of SuDS assets
- ☐ Inspection / monitoring
- ☐ Routine light (regular) maintenance
- ☐ Routine heavy (infrequent) maintenance
- ☐ Remedial maintenance

There should also be regular reviews of maintenance regimes to ensure that they are being effective and the performance of the systems are being maintained. Such regular reviews may also allow maintenance to be reduced.

Most Manufacturers provide guidance on the maintenance requirements for Engineered solutions, these include the following for this site;

- *Surface Water Pump Chamber*
- *Polystorm PSM1A geocellular crates*
- *Porous Surfacing*

MAINTENANCE RESPONSIBILITY

The responsibility for the enacting of this SuDS Maintenance Plan is entrusted to Haringey Council's Housing team.

Costs associated with the ongoing maintenance regime are the responsibility of Haringey Council's Housing team.

The developer will provide this SuDS Maintenance Plan in addition to an Operation and Maintenance Manual to the hotel for their records/ action.

The Operation and Maintenance Manual shall be passed on to subsequent future owners of the development. This will include engineering drawings that detail the design and installation of the SuDS components so that persons undertaking any maintenance works will have a point of reference for the required specification of each of these. Where applicable, the engineering drawings shall make reference to this SuDS Maintenance Plan

Following construction but prior to practical completion, the responsibility for maintenance shall lie with the developer.

TIMESCALES FOR MAINTENANCE

The duties of maintenance will come into effect prior to occupation of the residential flats, following practical completion and handover.

Installation to be inspected immediately following the first storm event, whenever this should occur post installation.

Maintenance of to be no less frequent than at monthly intervals for the first three months and thereafter:

ELEMENT	VISUAL INSPECTION/ MONITORING	REGULAR MAINTENANCE (Typically spring and Autumn following leaf fall)	INFREQUENT MAINTENANCE
Pump chamber	Monthly	Should be maintenance free. Inspect chamber and remove debris observed when completing monthly visual inspection	Annually: To be serviced by pump manufacturer or recommended contractor
Polystorm Crates	Monthly	6 monthly: Sediment and debris to be removed if required (flush with jetting as required)	N/A
Porous surfacing	Monthly	6 monthly: Sweep surface to clear debris and contamination.	Annually: Suction road sweeper as required to remove silt build-up.

Appendix A

Attenuation calculations

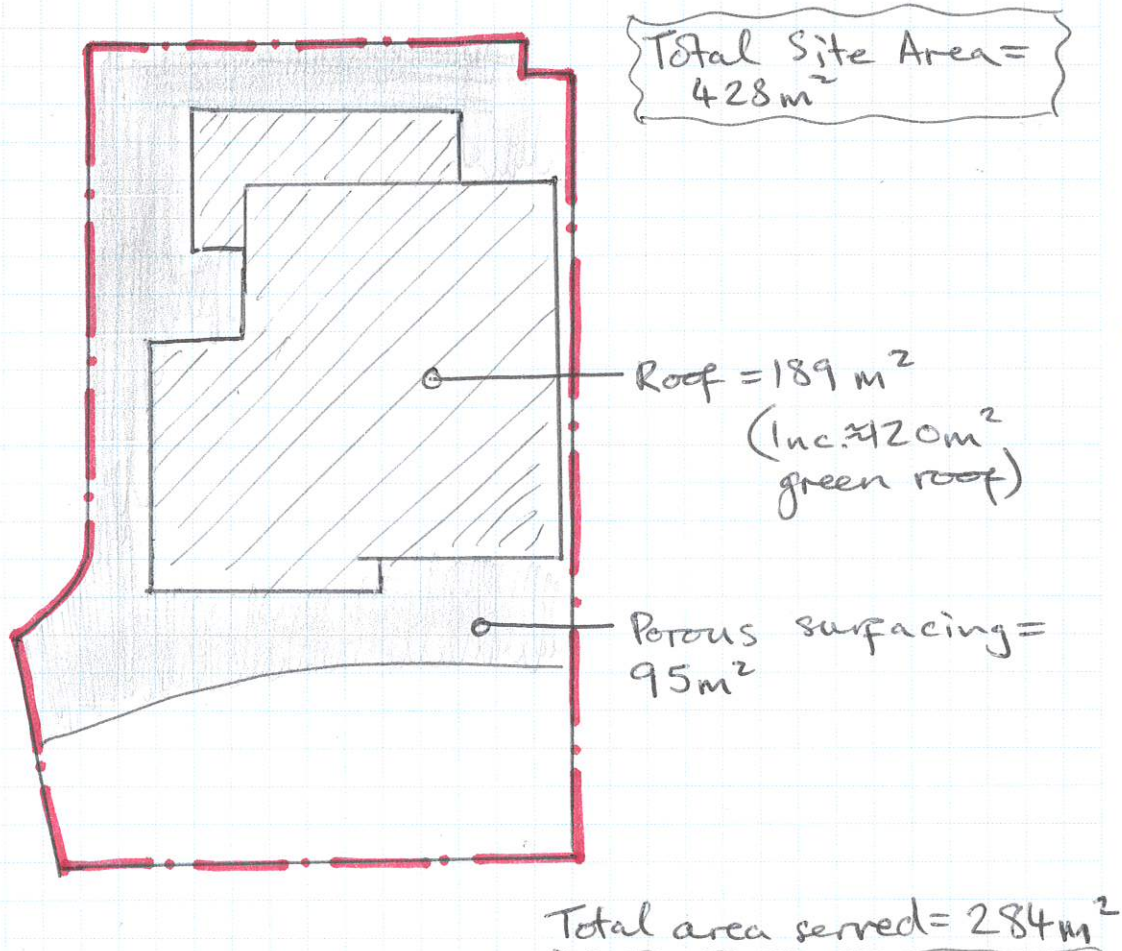
MARKS HEELEY

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JOB No: H18808PROJECT: Jansons Road.REF: Catchment Areas &
Attenuation requirements.PAGE No: 1

REV:

DATE: Sept ' 2025BY: AFCHKD: GN

Allow urban creep =
 $+10\% = (189 + 95) \times 1.1 = \underline{310 \text{ m}^2}$ (areas to surface water drain).

Proposed discharge rate from Planning approval = 3.6 l/sec.

Therefore provide attenuation of $3 \times 2 \times 0.8 \text{ dp}$

Refer to Microdrainage calcs over page.

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The Stables
Cannons Mill Lane
Bishops Stortford CM23 2BN

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Summary of Results for 100 year Return Period (+40%)

Half Drain Time : 11 minutes.

Storm Event	Max Level (m)	Max Depth (m)	Max Infiltration (l/s)	Max Control (l/s)	Max Σ Outflow (l/s)	Max Volume (m³)	Status
15 min Summer	98.546	0.546	0.0	3.6	3.6	3.1	O K
30 min Summer	98.650	0.650	0.0	3.6	3.6	3.7	O K
60 min Summer	98.675	0.675	0.0	3.6	3.6	3.8	O K
120 min Summer	98.546	0.546	0.0	3.6	3.6	3.1	O K
180 min Summer	98.378	0.378	0.0	3.6	3.6	2.2	O K
240 min Summer	98.256	0.256	0.0	3.6	3.6	1.5	O K
360 min Summer	98.175	0.175	0.0	3.2	3.2	1.0	O K
480 min Summer	98.146	0.146	0.0	2.6	2.6	0.8	O K
600 min Summer	98.126	0.126	0.0	2.3	2.3	0.7	O K
720 min Summer	98.111	0.111	0.0	2.0	2.0	0.6	O K
960 min Summer	98.090	0.090	0.0	1.6	1.6	0.5	O K
1440 min Summer	98.067	0.067	0.0	1.2	1.2	0.4	O K
2160 min Summer	98.049	0.049	0.0	0.9	0.9	0.3	O K
2880 min Summer	98.039	0.039	0.0	0.7	0.7	0.2	O K
4320 min Summer	98.028	0.028	0.0	0.5	0.5	0.2	O K
5760 min Summer	98.022	0.022	0.0	0.4	0.4	0.1	O K
7200 min Summer	98.018	0.018	0.0	0.3	0.3	0.1	O K
8640 min Summer	98.016	0.016	0.0	0.3	0.3	0.1	O K
10080 min Summer	98.014	0.014	0.0	0.2	0.2	0.1	O K
15 min Winter	98.653	0.653	0.0	3.6	3.6	3.7	O K

Storm Event	Rain (mm/hr)	Flooded Volume (m³)	Discharge Volume (m³)	Time-Peak (mins)
15 min Summer	138.153	0.0	7.4	16
30 min Summer	90.705	0.0	9.9	26
60 min Summer	56.713	0.0	12.5	42
120 min Summer	34.246	0.0	15.3	76
180 min Summer	25.149	0.0	16.9	106
240 min Summer	20.078	0.0	18.0	132
360 min Summer	14.585	0.0	19.6	188
480 min Summer	11.622	0.0	20.9	248
600 min Summer	9.738	0.0	21.9	308
720 min Summer	8.424	0.0	22.7	368
960 min Summer	6.697	0.0	24.1	490
1440 min Summer	4.839	0.0	26.0	734
2160 min Summer	3.490	0.0	28.1	1100
2880 min Summer	2.766	0.0	29.5	1468
4320 min Summer	1.989	0.0	31.6	2168
5760 min Summer	1.573	0.0	33.1	2912
7200 min Summer	1.311	0.0	34.2	3616
8640 min Summer	1.129	0.0	35.0	4352
10080 min Summer	0.994	0.0	35.7	4968
15 min Winter	138.153	0.0	8.4	16

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Rainfall Details

Rainfall Model	FSR	Winter Storms	Yes
Return Period (years)	100	Cv (Summer)	0.750
Region	England and Wales	Cv (Winter)	0.840
M5-60 (mm)	20.000	Shortest Storm (mins)	15
Ratio R	0.400	Longest Storm (mins)	10080
Summer Storms	Yes	Climate Change %	+40

Green Roof

Area (m³)	120	Evaporation (mm/day)	3
Depression Storage (mm)	5	Decay Coefficient	0.050

Time (mins) From:	Time (mins) To:	Area (ha)	Time (mins) From:	Time (mins) To:	Area (ha)	Time (mins) From:	Time (mins) To:	Area (ha)	Time (mins) From:	Time (mins) To:	Area (ha)
0	4	0.002181	32	36	0.000440	64	68	0.000089	96	100	0.000018
4	8	0.001785	36	40	0.000360	68	72	0.000073	100	104	0.000015
8	12	0.001462	40	44	0.000295	72	76	0.000060	104	108	0.000012
12	16	0.001197	44	48	0.000242	76	80	0.000049	108	112	0.000010
16	20	0.000980	48	52	0.000198	80	84	0.000040	112	116	0.000008
20	24	0.000802	52	56	0.000162	84	88	0.000033	116	120	0.000007
24	28	0.000657	56	60	0.000133	88	92	0.000027			
28	32	0.000538	60	64	0.000109	92	96	0.000022			

Time Area Diagram

Total Area (ha) 0.019

Time (mins)	Area (ha)
From:	To:

0	4	0.019
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Time Area Diagram

Total Area (ha) 0.000

Time (mins)	Area (ha)
From:	To:

0	4	0.000
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Model Details

Storage is Online Cover Level (m) 100.000

Cellular Storage Structure

Invert Level (m) 98.000 Safety Factor 2.0
 Infiltration Coefficient Base (m/hr) 0.00000 Porosity 0.95
 Infiltration Coefficient Side (m/hr) 0.00000

Depth (m)	Area (m ²)	Inf. Area (m ²)	Depth (m)	Area (m ²)	Inf. Area (m ²)
0.000	6.0	6.0	0.900	0.0	14.0
0.800	6.0	14.0			

Pump Outflow Control

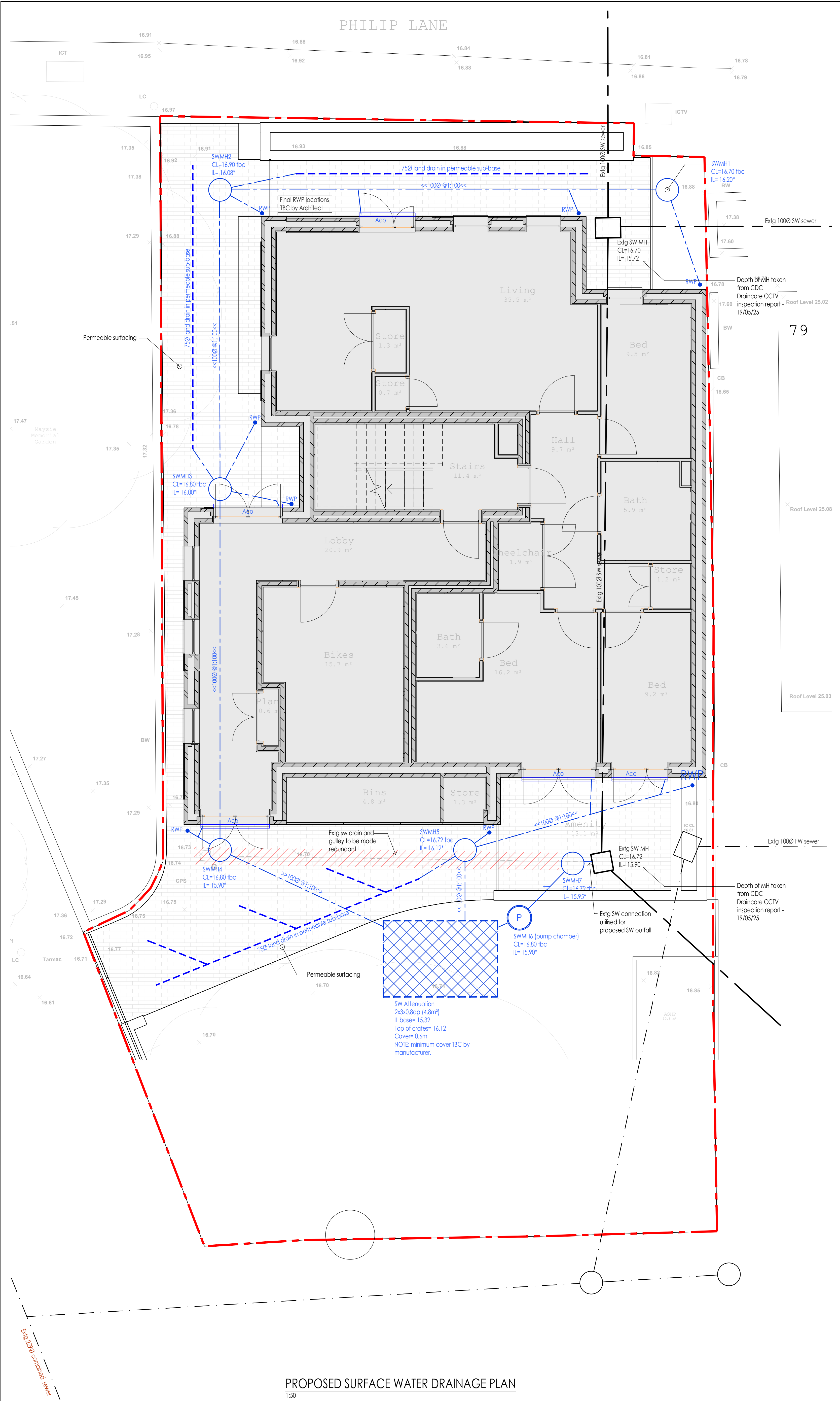
Invert Level (m) 98.000

Depth (m)	Flow (l/s)	Depth (m)	Flow (l/s)	Depth (m)	Flow (l/s)	Depth (m)	Flow (l/s)
0.200	3.6000	1.800	3.6000	3.400	3.6000	5.000	3.6000
0.400	3.6000	2.000	3.6000	3.600	3.6000	5.200	3.6000
0.600	3.6000	2.200	3.6000	3.800	3.6000	5.400	3.6000
0.800	3.6000	2.400	3.6000	4.000	3.6000	5.600	3.6000
1.000	3.6000	2.600	3.6000	4.200	3.6000	5.800	3.6000
1.200	3.6000	2.800	3.6000	4.400	3.6000	6.000	3.6000
1.400	3.6000	3.000	3.6000	4.600	3.6000		
1.600	3.6000	3.200	3.6000	4.800	3.6000		

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Appendix B

Drainage drawings



PROPOSED SURFACE WATER DRAINAGE PLAN
1:50

- GENERAL NOTES:
- This drawing is copyright (C).
 - This drawing is to be read in conjunction with all relevant drawings and specifications.
 - This drawing shall not be scaled; use only figured dimensions. All dimensions are shown in millimetres and levels in metres above OS Datum.
 - Dimensions and conditions shall be verified on site. Any discrepancies between this drawing and site conditions shall be brought to the attention of the Engineer for resolution prior to placing orders or construction.
 - All work shall comply with the Building Regulations and the requirements of the Local Authority, current Codes of practice and British Standards.
 - Dimensions indicated thus: *are to be confirmed on site.
 - For remainder of notes see drawing sheet 78.
 - Our design is based upon the assumptions: Existing blockwork is assumed to be 100mm 3.5N in 1:6 mortar. Existing blockwork to be 20.5N in 1:6 mortar. Existing timbers to be grade C16. Unless assumed to exist over all existing openings. Wall ties assumed to be in good condition. Assumed minimum party wall thickness to be 225mm solid masonry wall construction.
 - Waterproofing details shown are indicative only. Architect to confirm first details.
 - Splice requirements to new steel beams to be allowed for by contractor as required. Splice design assumed responsibility of fabricator, unless specifically requested of S.Eng.
 - All structural steelwork shall be to BS EN 10225 & BS EN 10210, Grade S355 unless noted otherwise. All beams to be CE marked.
 - High risk of saturation and freezing (masonry most vulnerable is situated 150mm above and 150mm below finished ground level) durability classification to be a W3.2, F2, S2 or S1.

PRELIMINARY

Rev	Description	By	Date	Chk'd	Auth
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Client					
Project					
JANSONS ROAD, HARINGEY, LONDON, N15 4RU					
Title					
PROPOSED SURFACE WATER DRAINAGE PLAN					
Sheet Size	Original Scale	Designed/Drawn	Checked	Authorised	
A1	1:50	AF	GN	GN	
Status	Drawing Number	Date	Date	Date	Rev
P	H18808/ D1	Sept'25	Sept'25	Sept'25	-

GENERAL USE	MINIMUM GROUND COVER
LANDSCAPED AREAS (NON TRAFFICKED)	400mm
CAR PARKS, VEHICLE MASS $\leq$ 2500 kg	600mm
CAR PARKS, OCCASIONAL VEHICLE MASS $>$ 2500 kg	800mm
ROADS, TRAFFIC LOADING $<$ 44 tonnes	800mm

Support frame and cover.
Cast-in-place / precast concrete support collar.
(If cast-in-place, ensure external shaft corrugations are not filled with concrete)

100

Finished surface
(refer to external works plan)

Top and side fill.
minimum 100mm deep, 10mm single sized pea gravel
then native earth mixture backfill

Polystorm PSM1A system.
2 block's deep
full block layer height = 400mm
all blocks and inspect chambers = 100mm long x 500mm wide

Bottom.
minimum 100mm deep, 10mm single sized pea gravel

Undistributed earth.
Structurally sound, level and free of debris.
refer to project plans and specifications.

Butyl liner with sealed joints
to manufacturers details

The diagram illustrates a cross-section of a drainage system. The layers, from top to bottom, are:

- Aquaflo blocks**: The top layer of drainage blocks.
- 5mm Clean stone***: A thin layer of clean stone directly beneath the Aquaflo blocks.
- 50mm sharp sand bedding course**: A layer of sharp sand beneath the clean stone.
- 100mm Upper sub-base 20-5mm stone***: A layer of 20-5mm stone beneath the sand.
- 250mm Lower sub-base 63-10mm stone***: The bottom layer of the sub-base, consisting of 63-10mm stone.

Geotextile and SC membrane layers are shown as follows:

- SC Geotextile**: A blue line representing the geotextile layer, located between the 5mm clean stone and the 50mm sharp sand bedding course.
- SC Intergrit**: A pink line representing the intergrit layer, located between the 100mm upper sub-base and the 250mm lower sub-base.
- SC membrane**: A red line representing the SC membrane, located between the 250mm lower sub-base and the 100mm upper sub-base.

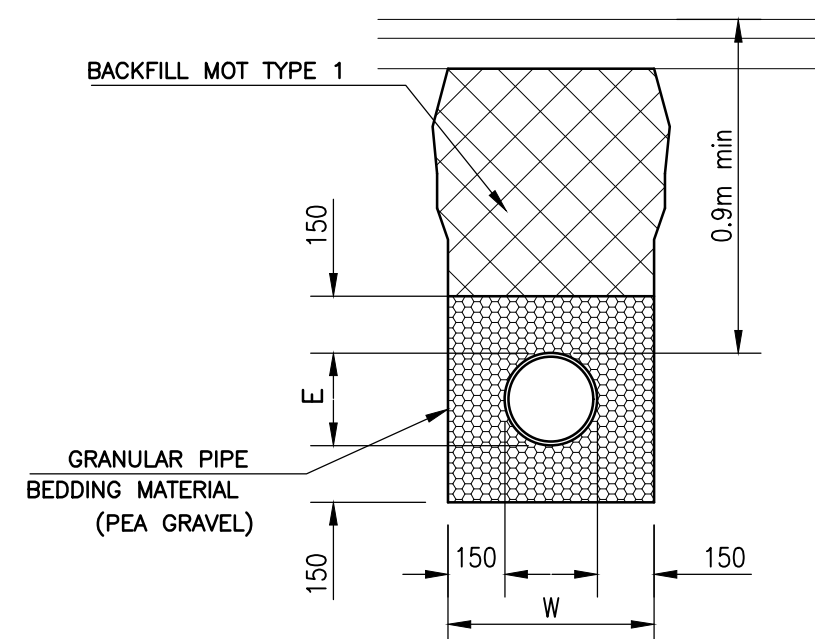
Other components include:

- Standard kerb block**: A concrete block on the right side of the drainage system.
- Hydraway fin drain connected to 110mm PVC-U pipe with SC seal**: A drainage outlet on the right side, connected to a pipe.
- Geotextile and SC membrane brought up to haunched Kerb and cut off flush with surface of Aquaflo blocks**: A note indicating the termination of the geotextile and SC membrane at the kerb.

*** Specification for sub-base and laying course:-
the crushed stone must possess well defined edges
and have a minimum 10% fines value of 150kN
when tested in accordance with BS812 Part iii.**

SIEVE SIZE	% PASSING
100mm	100
63mm	90-100
37.5mm	60-80
20mm	15-30
10mm	0-5

Tanked system section - Aquaflow pavement with undersealing membrane



1:20



1:20

1:20

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5. All work shall comply with the Building Regulations and the requirements of the Local Authority, current Codes of practice and British Standards.
6. Dimensions indicated thus: *are to be confirmed on site.

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Rev	Description	By	Date	Chk'd	Auth
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Project

PROPOSED DRAINAGE DETAILS

Sheet Size A1	Original Scale 1:20	Designed/Drawn AF	Checked GN	Authorised GN
Status	Drawing Number	Date Sept'25	Date Sept'25	Date Sept'25
P	H18808/ D2			-