PIXB – West Disbury

SUDS Drainage Verification Report



boothking

Doc. Ref.	15094-BKP-XX-XX-RP-C-0004	**Status**	A5	**Date**	30/09/2026
Client	Whitbread Plc.	**Revision**	P01	**Stage**	Stage 5
Prepared by	Z. Harrington (BEng)	**Project No.**	15094		
Checked by	SP - BEng	**Approved by**	A Isherwood – BSc, PgDip, CEng, MIStructE		

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2: Concept
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5: Construction
6: Handover

Scope

BKP Ltd. have been appointed by Whitbread PLC to provide Civil and Structural Engineering consultancy services for the proposed Premier Inn Manchester West Didsbury Hotel.

BKP Ltd. have been requested to provide a verification report to confirm the drainage SuDS features were installed in accordance with the approved drainage designs.

Planning Conditions

As per the current planning conditions, the following areas have been assessed and addressed under said headings.

Condition 5.

Prior to the first occupation/use of the development hereby approved details of the implementation, maintenance and management of the surface water drainage scheme, as approved by Condition 4, shall be submitted for approval in writing by the City Council, as Local Planning Authority. Those details shall include:

- *Verification report providing photographic evidence of constructed flow control and SuDS components as per design drawings approved as part of Condition 4.*

- *Provide As Built construction drawings OR confirm that they align with the original design construction drawings.*

- *Management and maintenance plan for the lifetime of the development which shall include the arrangements for adoption by any public body or statutory undertaker, or any other arrangements to secure the operation of the sustainable drainage scheme throughout its lifetime.*
  - *Management plan has been submitted to and approved by Planning.*

The scheme shall be implemented and thereafter managed and maintained in accordance with the approved details.

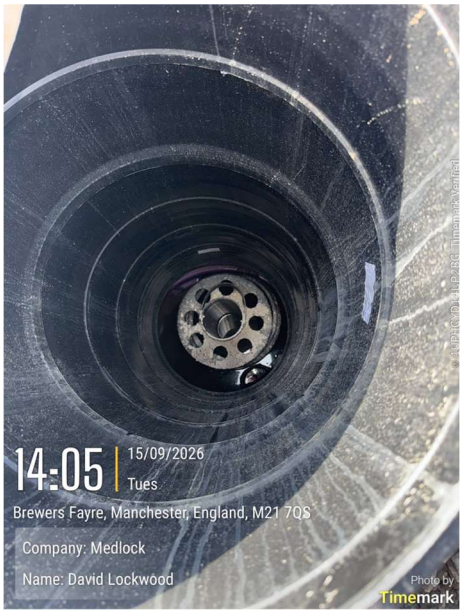
Response to Condition 5 – Verification Report and As-Built Drawings

The SuDS components as per design drawings approved as part of Condition 4 have been installed on site with supporting photographic evidence listed below:

1. Perforated Pipe
Perforated pipe surrounded by gravel with membranes ready to overwrap at junction with manhole.



2. – Petrol Interceptor
As installed petrol interceptor



3. Flow Control
As installed Vortiflo unit made by Turtle (See **Appendix B** for data sheet)



4. Attenuation Tank
Trench excavated, protective geotextile and impermeable geomembrane wrapping the Polypipe Polystorm PSM1 storage crates and backfilled.



Photo 1 – Protective geotextile membrane laid first followed by impermeable geomembrane and Polystorm storage crates

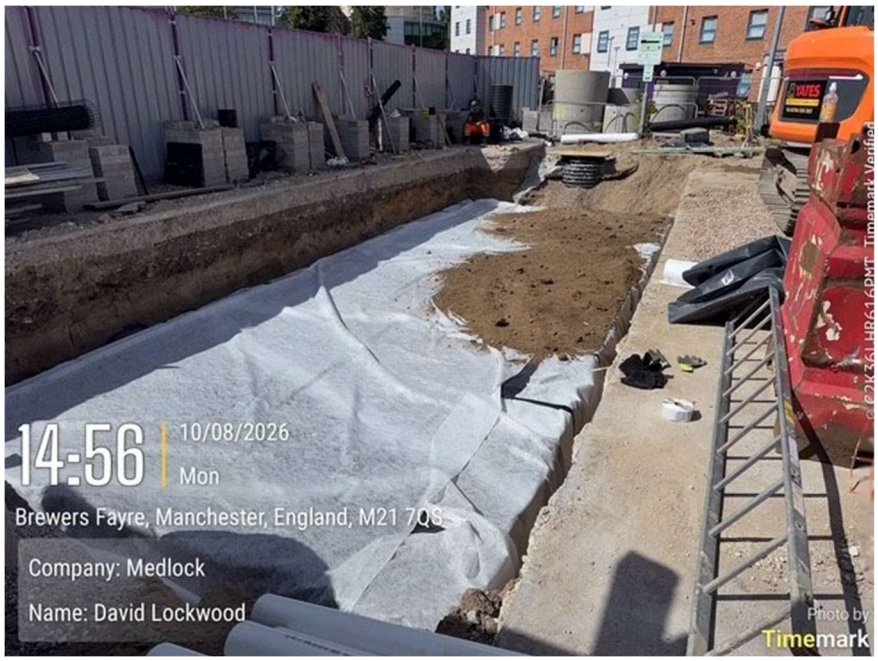


Photo 2 – Wrapping of Polystorm storage crates and commencement of backfill

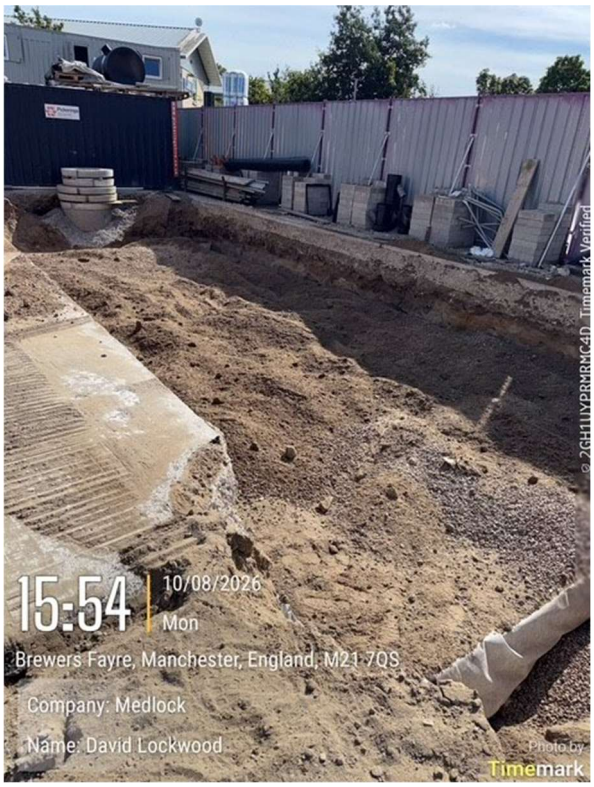


Photo 3 – Backfill over Polystorm storage crates

Appendix A – BKP As-Built Drawings

TOPOGRAPHICAL NOTES:

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NOTES:

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2. This drawing is copyright and is sent to you in confidence. It must not be copied, used or disclosed, in whole or in part, to third parties without written permission. It remains the property of Booth King Partnership Ltd. (BKPL) and must be returned on request.
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FOR DETAILED PROPOSED DRAINAGE GA REFER TO:
15094-BKP-XX-XX-DR-C-0511 - PROPOSED DRAINAGE GA - SHEET 1

FOR DETAILED PROPOSED DRAINAGE GA REFER TO:
15094-BKP-XX-XX-DR-C-0512 - PROPOSED DRAINAGE GA - SHEET 2

REV.	DATE	REVISION DETAILS	INITIALS
C12	30.09.26	SW FLOW CONTROL SPEC UPDATED. AS BUILT RECORDS ISSUE	CM
C11	15.09.26	UPDATED TO SUIT LATEST ARCHITECTS SITE LAYOUT	PA
C10	30.07.26	ACO CHANNEL ADDED	PA
C09	18.02.26	UPDATED TO AVOID GAS MAIN	EZ
C08	27.01.26	SHEET EXTENTS UPDATED	PA
C07	16.01.26	UPDATED TO LATEST SITE PLAN	CM
C06	11.12.25	STAGE 4 - ISSUED FOR CONSTRUCTION	PA
C05	15.08.25	STAGE 4 - ISSUED FOR CONSTRUCTION	PA
C04	27.06.25	STAGE 4 - ISSUED FOR CONSTRUCTION	PA
C03	17.03.25	STAGE 3 - ISSUED FOR TENDER	PA
C02	03.09.24	STAGE 3 - PLANNING APPROVAL	PA
C01	12.06.24	STAGE 3 - PLANNING APPROVAL	CM
		CURRENT DRAWING REVISION CHECKED BY	SP
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DRAWING STATUS: A5

PROJECT STAGE: STAGE 5

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RAMSBOTTOM Tel: 01706 822 022 | **MANCHESTER** Tel: 0161 694 7087 | **EDINBURGH** Tel: 0131 229 1547

PROJECT:

Premier Inn Extension Manchester West Didsbury

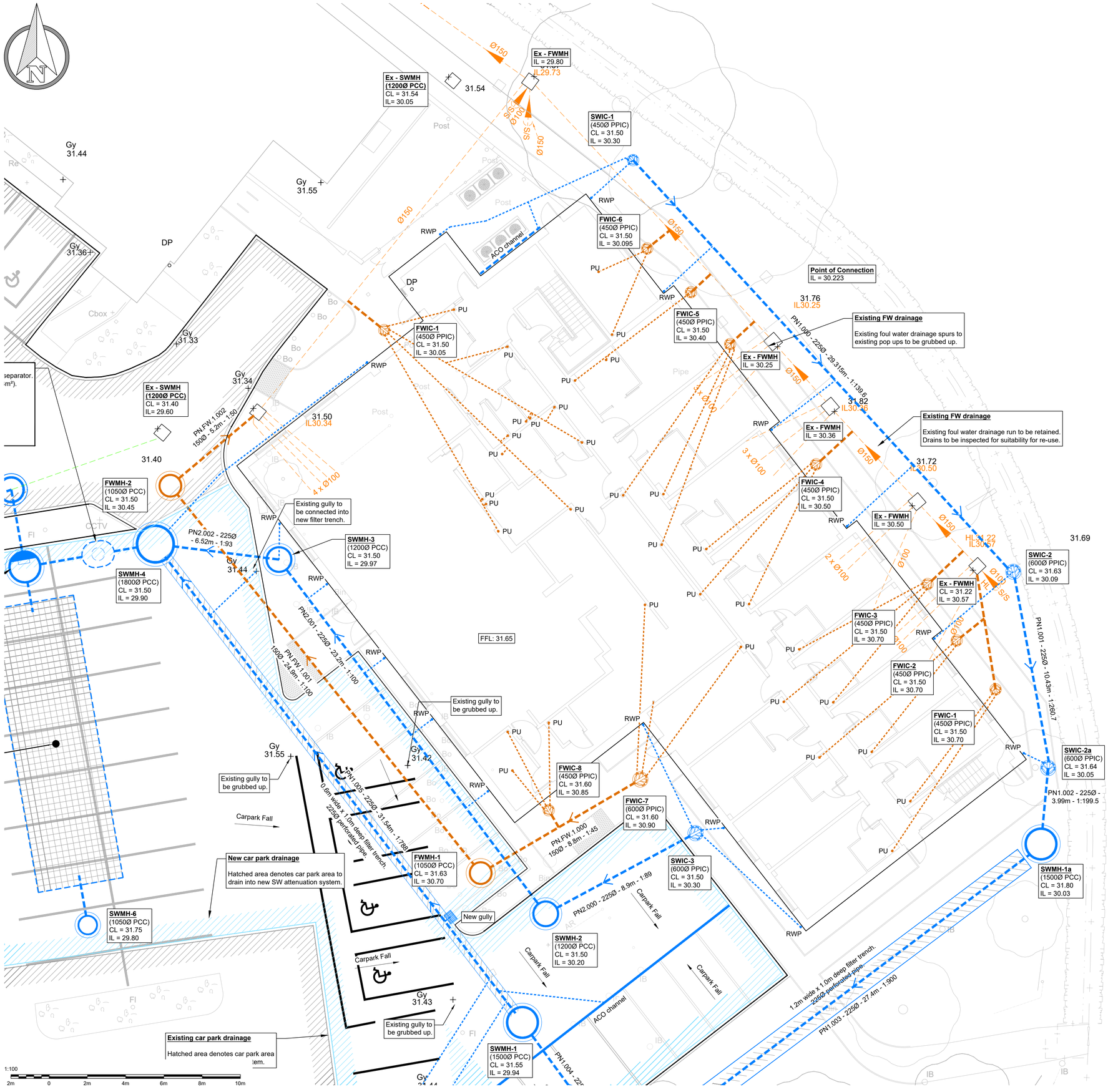
TITLE:

Drainage Key Plan

SCALE (A1)	AUTHOR	DATE	REVISION	BKPL No.
1:200	PA	June 24	C12	15094

DRAWING REF: 15094-BKP-XX-XX-DR-C-0510

1:200
4m 0 4m 8m 12m 16m 20m



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DRAINAGE NOTES:

1. All adoptable works to be in accordance with SSG appendix C where applicable.
2. All manhole cover levels to be confirmed by Architect.
3. Clay pipes to be flexibly jointed and comply with the requirements of BS EN 295.
4. Concrete pipes to be flexibly jointed and comply with the requirements of BSEN 1916 and BS 5911.
5. Plastic pipes (PVC-U) to be flexibly jointed and comply with the requirements of BS EN 1401-1 1998.
6. All surface water pipes to be laid at a gradient no flatter than 1:80 (UNO).
7. All foul water pipes to be laid at a gradient no flatter than 1:40 (UNO).
8. For minimum depths requiring pipe protection refer to drainage details drawings.
9. Protection to drains and gully connections may be concrete bed surround between cover depths of 450mm to 200mm.
10. Until final surface is placed, heavy traffic is not to be allowed over pipe trenches without special precautions.
11. Pipes and fittings are to be laid in accordance with the manufacturers recommendations.
12. All Manholes should be concrete manhole rings (UNO).
13. All SVP & RWP positions TBC by Architect.
14. Rodding access is to be provided at all pop-ups.
15. For setting out of all pop-up positions refer to Architect's details.
16. Civil engineering contractor to arrange for:
    a. Own services and temporary supplies.
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17. The contractor should confirm the locations for existing services prior construction.

DRAINAGE ANNOTATION KEY:

REF.	DESCRIPTION
SW	Surface water drainage
FWC	Foul water drainage
W	Combined water drainage
MH	Manhole
IC	Inspection chamber
PCC	Precast concrete chamber
PPIC	Polypropylene inspection chamber
GU	Gully
CL	Cover level (m)
IL	Invert level (m)
SVP	Soil vent pipe
PU	Pop up
RWP	Rainwater downpipe

DRAINAGE LINE TYPES KEY:

REF.	DESCRIPTION
	Existing FW network
	Existing SW network
	Existing drainage to be grubbed up
	Proposed FW network
	Proposed SW network

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C13	30.09.26	SW FLOW CONTROL SPEC UPDATED. AS BUILT RECORDS ISSUE	CM
C12	15.09.26	UPDATED TO SUIT LATEST ARCHITECTS SITE LAYOUT	PA
C11	08.09.26	ACO CHANNEL EXTENTS WITHIN AC COMPOUND UPDATED	CM
C10	30.07.26	ACO CHANNEL ADDED	PA
C09	18.02.26	UPDATED TO AVOID GAS MAIN	EZ
C08	27.01.26	COVER LEVELS AMENDED	PA
C07	16.01.26	UPDATED TO LATEST SITE PLAN	CM
C06	11.12.25	STAGE 4 - ISSUED FOR CONSTRUCTION	EZ
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PROJECT STAGE: STAGE 5

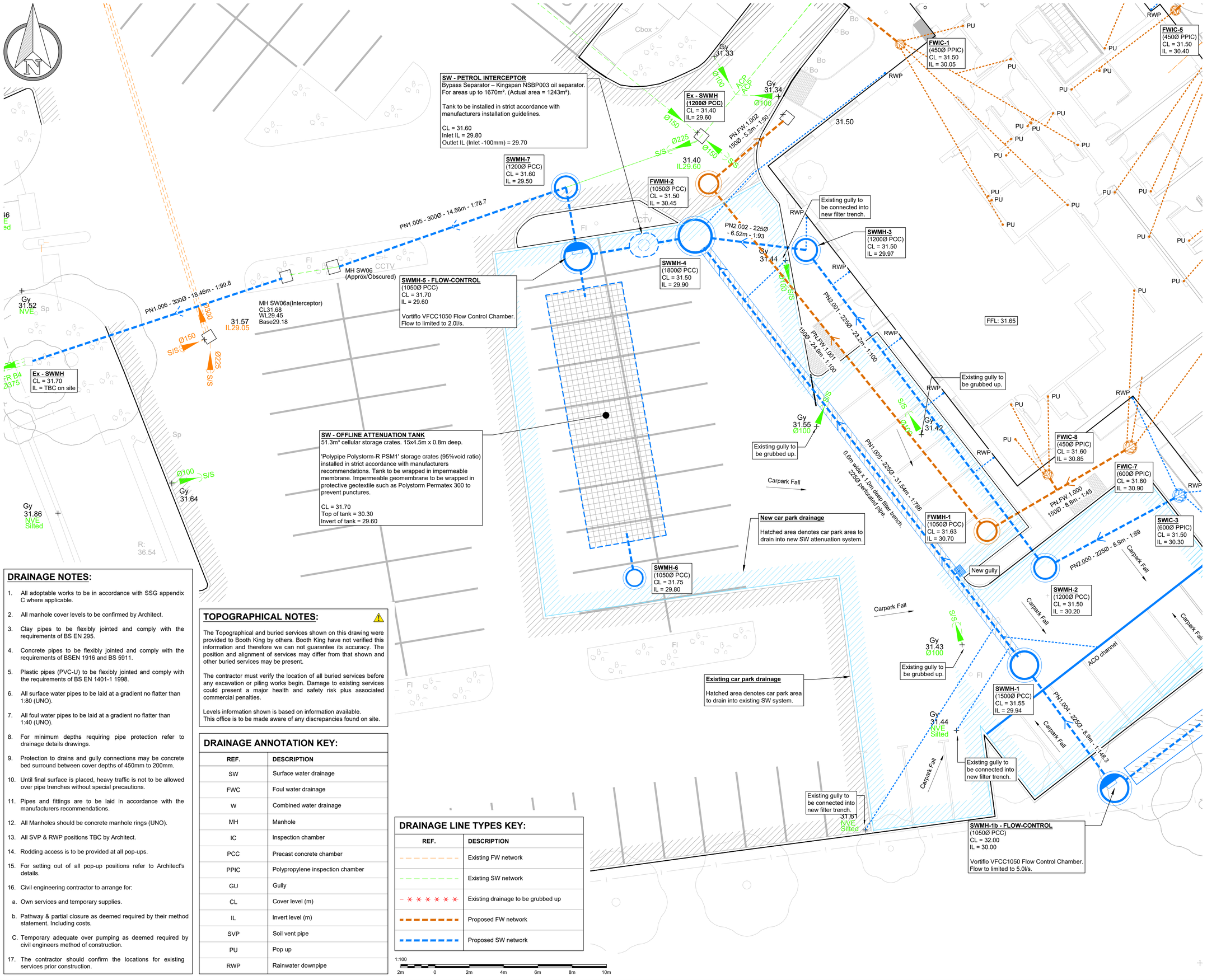
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PROJECT:
Premier Inn Extension Manchester West Didsbury

TITLE:
Proposed Drainage GA Sheet 1

SCALE (A1)	AUTHOR	DATE	REVISION	BKPL No.
1:100	PA	June 24	C13	15094

DRAWING REF:
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	Proposed SW network

1:100
2m 0 2m 4m 6m 8m 10m

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C08	27.01.26	UPDATED TO SHOW SWHM-1b	PA
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PROJECT STAGE: STAGE 5

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PROJECT:
Premier Inn Extension Manchester West Didsbury

TITLE:
Proposed Drainage GA Sheet 2

SCALE (A1)	AUTHOR	DATE	REVISION	BKPL No.
1:100	PA	June 24	C11	15094

DRAWING REF:
15094-BKP-XX-XX-DR-C-0512

Appendix B – Flow Control Data Sheet

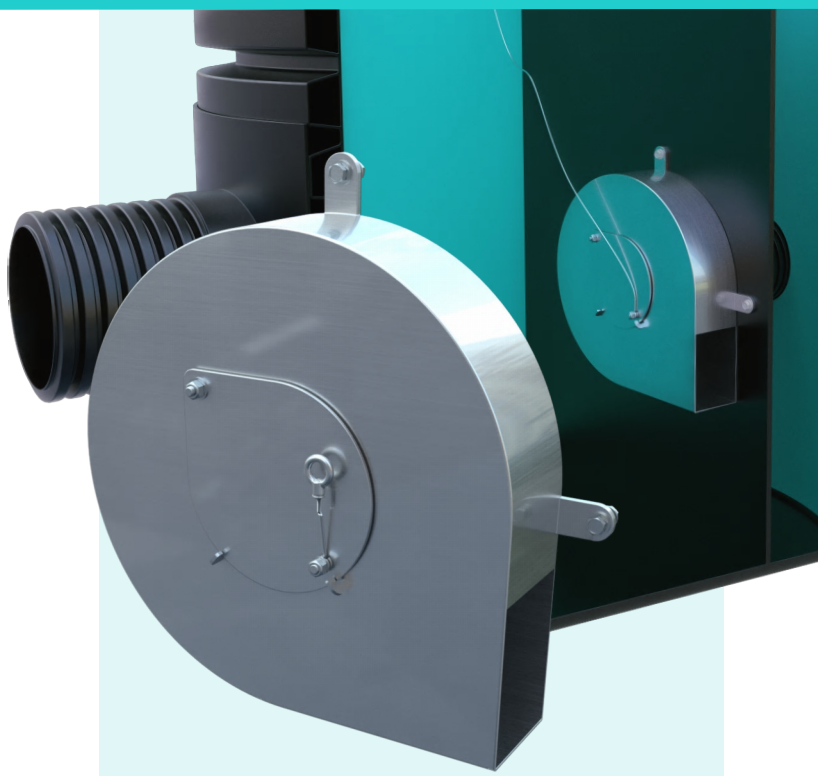


VORTIFLO®

Ø1050mm – DIAMETER CHAMBER

Fabricated Vortex Flow Control Chambers

MODEL: **VFCC1050**



Introduction

The Vortiflo VFCC1050 Flow Control Chambers are specifically designed for controlling the flow of storm water from large volume attenuation systems with a higher typical discharge flow rate requirement.

Chamber Specification

All chambers come as a single piece units, manufactured in our factory. The main chamber is manufactured from Ø1050mm - high density polyethylene twinwall pipe.

The Flow Control is pre fitted onto the headwall within the chamber, so the unit is ready for immediate installation on site.

The range comes in five depths and there is a choice of pipework diameters available, with extra inlets available on request. **(See Fig 1 below for options).**

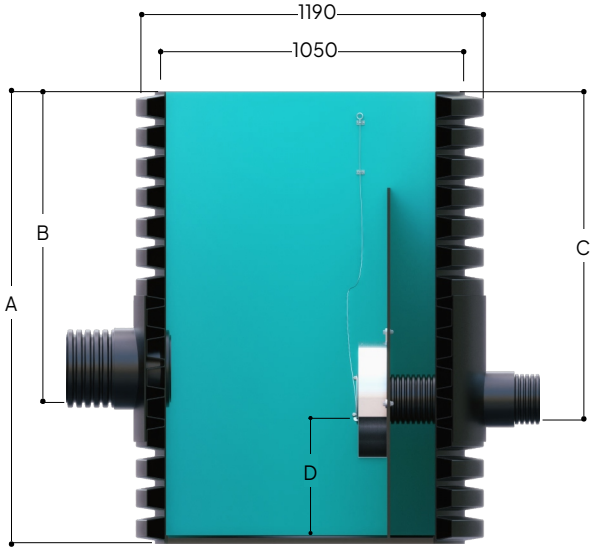
Flow Control Specification

The flow controls in these models are manufactured from 304 Grade stainless steel and approved to ISO 9001: 2015, which applies to the provision of Flow Control Devices. Control units are available in sizes to suit an extensive range of flow rate specifications up to . Each flow control comes with design flow graph, which shows the performance curve of the unit for the given specification.

What information do we need to design your Vortiflo chamber?

1. **The Design Flow – Maximum Discharge**
2. **The Design Head – Invert to Top Water Level**
3. **Pipework sizes and configurations**
4. **Invert Depths**

From this information we can then size and design the Vortiflo Chamber to meet the design criteria and to suit the proposed infrastructure.

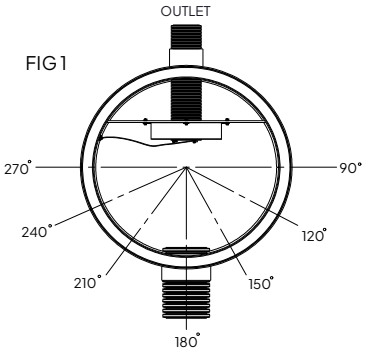


Product Code	Main pipework options Ø (mm)	Optional Inlets Ø (mm)	Overall Depth A (mm)	Inlet Invert B (mm)	Outlet Invert C (mm)	Sump Depth D (mm)
VFCC1050/1.5	110 - 450	110 - 300	1535	Optional	1035	500
VFCC1050/2	110 - 450	110 - 300	1975	Optional	1475	500
VFCC1050/2.4	110 - 450	110 - 300	2395	Optional	1895	500
VFCC1050/3	110 - 450	110 - 300	2915	Optional	2415	500
VFCC1050/3.5	110 - 450	110 - 300	3435	Optional	2935	500

NB: Ladders can also be fitted if required, at extra cost.

Please Note: Further inlets can be manufactured into the unit if required, as shown in the plan view adjacent. **If further inlets are required please speak to one of our sales or technical team, who will advise accordingly.**

FIG 1



turtle
email: sales@turtleenviro.co.uk | sales & technical support: tel. 01913036315 | www.turtleenviro.co.uk

boothking

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Company No. 06206269

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