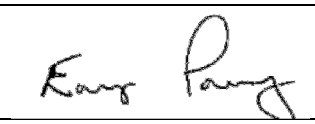
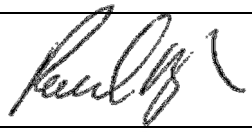
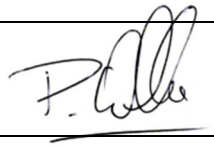
Proposed Development
At
63-71 High Street, Hampton Hill
TW12 1LZ

JOINT MEMORANDUM

Proposed Drainage Strategy

Document Control Sheet

			Signature
Prepared by	**Name:**	Emyr Parry	
	Job Title:	Partner	
	Date:	04.01.17	
Checked	**Name:**	Paul Monaghan	
	Job Title:	Partner	
	Date:	04.01.17	
Approved	**Name:**	Paul Withers	
	Job Title:	Senior Partner	
	Date:	04.01.17	

Issue Record

Issue No.	Description	Date
1	First Issue	04.01.17

CONTENT

APPENDICES

1. INTRODUCTION

HBPW LLP are appointed for the provision of Civil and Structural Engineering design services associated with the Pre-Planning stages on the Proposed Development at 63-71 High Street, Hampton Hill, London Borough of Richmond.

RAB Consultants are appointed to prepare a Flood Risk Assessment (FRA) in support of the development.

The following Memorandum is intended to clarify an inconsistency within the following documents:-

- HBPW LLP's Drainage Strategy Issue 4
- RAB Consultants' Flood Risk Assessment and Drainage Strategy – Version 2.3 dated 18.10.16

Both documents have been submitted to the London Borough of Richmond as part of the Planning submission for the development. It is intended for this Memorandum to be read in conjunction with the above referenced documents.

The inconsistency applies to the proposed connection of foul and surface water from the development into the existing sewer located in the High Street, Hampton Hill. The inconsistency is described below:-

HBPW LLP's Drainage Strategy describes in section 4:-

"Thames Water sewer records indicate that there is no available public surface water sewer to connect into local to the development boundary. It is proposed therefore to combine the foul and surface water from the development at the final manhole before discharging by gravity into the public foul sewer located in the High Street"

HBPW LLP's Drainage Design Drawings numbered SL05030.401 rev B and SL05030.402 rev B included in Appendix 4 of the Drainage Strategy and included again in Appendix 1 of this Memorandum show a single connection into the existing Foul Water Sewer located in the High Street, It is proposed that attenuated surface water; and foul water flows from the development will discharge into a single combined manhole prior to discharging into the Existing Foul Sewer. Surface Water flows shall be attenuated to restricted rates agreed in principle with Thames Water.

RAB Consultants' FRA has included in 'Appendix B – Drainage Design', drawing number SL05030.401 (no revision) prepared by HBPW LLP. This drawing shows the

surface water from the development being connected to an existing Surface Water sewer in the High Street and the foul water from the development being connected Into an existing Foul Water sewer in the High Street. This is contradictory and inconsistent to the proposals set out in HBPW LLP's Drainage Strategy.

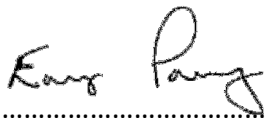
2. CLARIFICATION

Drawing SL05030.401 (no Revision), included in RAB Consultants' FRA does not show the correct proposed drainage strategy, HBPW LLP Drainage Strategy and proposals shown on drawings SL05030.401 rev B and SL05030.402 rev B included in Appendix 4 of the Drainage Strategy and included again in Appendix 1 of this Memorandum is the correct drainage strategy for the development.

When reading the RAB Consultants FRA; drawing SL05030.401 (no revision) should be replaced with drawings SL05030.401 rev B and SL05030.402 rev B.

3. SIGNATORIES

The Memorandum is prepared by HBPW LLP in conjunction with RAB Consultants



……

Signed on behalf of **HBPW LLP**

Name: Emyr Parry

Date: 4th January 2017

……

Signed on behalf of **RAB Consultants**

Name: Dr Alexandros Tsavdaris

Date: 4th January 2017

Appendix 1

Drainage Design Drawings

DO NOT SCALE - IF IN DOUBT ASK

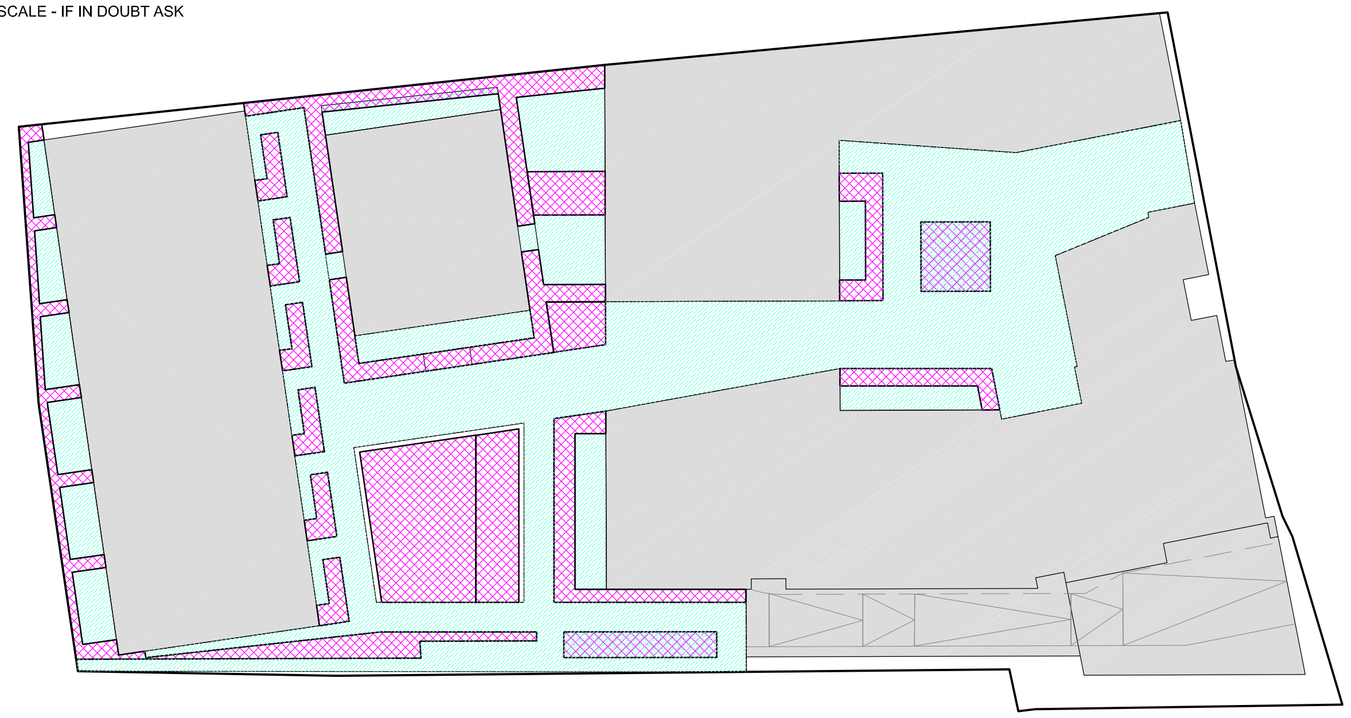
KEY	
RWP	Rainwater Pipe
SVP	Soil Vent Pipe
G	Gully
SW — SW	Surface water sewer
FW — FW	Foul Water sewer
→	Surface fall/gradient

Site Area: 2365 m² (approx.)

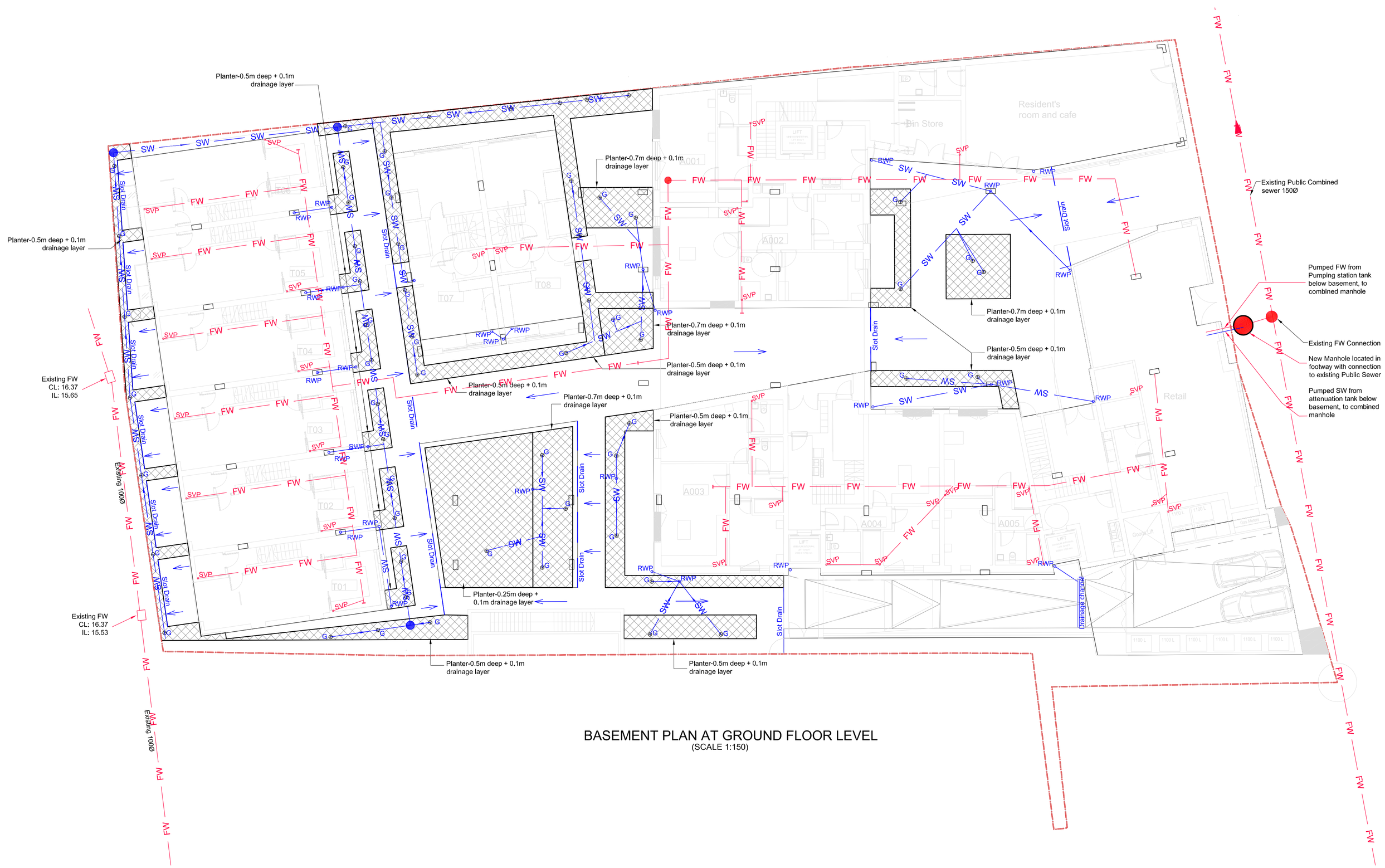
Roof/Paved area: 1420m² - Impermeable drained area with no 1st stage interception.

Rain Garden/Bio retention system comprising: 311m² recessed planters with soil and drainage layer and connection to drainage system under, providing interception, temporary storage and treatment

Paved areas: 635m² - Impermeable drained area, run off directed to Bio retention system prior to discharge to drainage system



DRAINAGE AREAS
(SCALE 1:250)



BASEMENT PLAN AT GROUND FLOOR LEVEL
(SCALE 1:150)

0 10 20 30 40 50 60 70 80 90 100
MILLIMETRES AT ORIGINAL DRAWING SIZE

A1

General Notes

1. DO NOT SCALE.
2. This drawing is to be read in conjunction with all other relevant drawings and details.
3. Should there be any conflict between the details indicated on this drawing and those indicated on other drawings the Engineer should be informed PRIOR to construction on site.
4. Until technical approval has been obtained from the relevant Authority, it should be understood that all drawings issued are Preliminary and NOT for construction. Should the contractor commence site work prior to such approval being given, it is entirely at his own risk.
5. All dimensions are in millimetres unless otherwise stated.
6. All access and gradients to be in accordance with Building Regulations Part M: Access to and use of buildings.
7. Drainage to be in accordance with Building Regulations Part H: Drainage and Waste Disposal & relevant British Standards.
8. Linear drainage /kerb drain sizing and gully capacity are to be confirmed by manufacturer.
9. Where banking steeper than 1:3 is proposed, appropriate slope stabilisation measures are to be provided.
10. Gravel margin around building perimeter to ensure the integrity of the DPC at client discretion.
11. Contractor to obtain any necessary approvals from the water authority prior to operation.
12. External threshold drains to be provided at level access to buildings where necessary due to approach gradients.
13. All planting within 5m of proposed drainage to be specified so as not to cause root damage to drainage, or be provided with suitable root protection measures.
14. Any positions of RWPs and foul connection points shown are for information only and to be confirmed by others - refer to architects drawings for setting out information.
15. Cover class to manholes/inspection chambers are to suit anticipated vehicle loadings in accordance with BS EN 124 (D400 where potential for HGV loading, C250/B125 in footway/lightly trafficked areas). A15 covers may be used only in areas not accessible by vehicles.
16. Buried concrete should be specified in accordance with the requirements of BRE Special Digest 1: 2005 Concrete in Aggressive Ground (Ref. 8.13). Design Sulphate Class and required Aggressive Chemical Environment for Concrete Class to be confirmed by SI.
17. Before handover, all manholes shall be inspected, all rubble removed, and the whole system shall be thoroughly flushed and cleaned.

HEALTH, SAFETY AND ENVIRONMENTAL INFORMATION

In addition to the hazards/ risks associated with the types of work detailed on this drawing please note the following:

Construction:
1)
2)
3)
etc

Cleaning / Maintenance:
1)
2)
3)
etc

Demolition:
1)
2)
3)
etc

It is assumed that all works will be carried out by a competent contractor working, where appropriate, to an approved method statement

DESCRIPTION	REV	DATE	BY	CHKD	APPR
Layout updated	B	18.10.16	RB	EP	PW
Drawing updated	A	04.10.16	RB	EP	PW
1st Issue	-	27.05.16	RB	EP	PW

HBPW LLP
Civil & Structural Engineering Services
43 Bridgegate
Retford
Nottinghamshire
DN22 7UX
Tel: (01777) 869896
Fax: (01777) 862491

STATUS
PLANNING

CLIENT
GREAT PLANET LTD

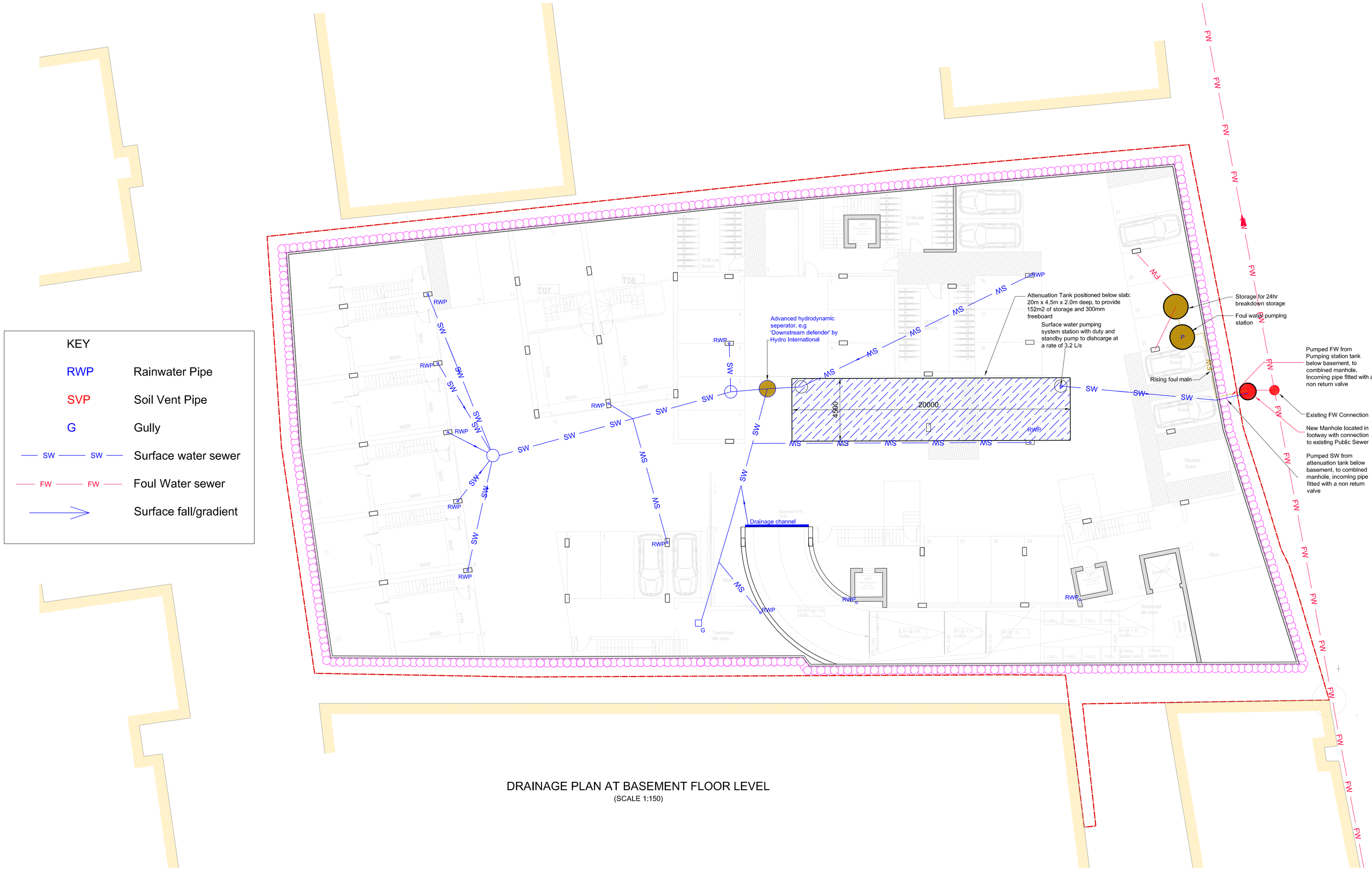
PROJECT
63-71 HIGH STREET
HAMPTON HILL

DRAWING TITLE
DRAINAGE LAYOUT AT GROUND FLOOR LEVEL

DRAWN	EP	DATE	MAY 2016
PROJECT ENGINEER	EP		
CHECKED	SS	SCALE	AS SHOWN @ A1
APPROVED	EP		

DRAWING NUMBER	REVISION
SL05030.401	B

DO NOT SCALE - IF IN DOUBT ASK



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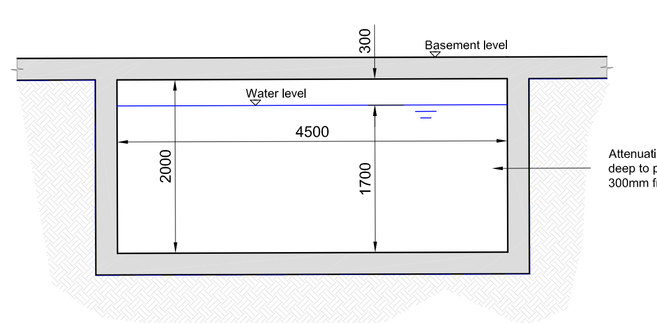
(SCALE 1:150)



TYPICAL SECTION THROUGH ATTENUATION TANK
(SCALE 1:50)

0 10 20 30 40 50 60 70 80 90 100
MILLIMETRES AT ORIGINAL DRAWING SIZE

A1

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APPROVED	EP		

DRAWING NUMBER	REVISION
SL05030.402	B