

**Land to the Rear of Oaklands
Keymer Road,
Burgess Hill,
West Sussex,
RH15 0AL**

Flood Risk Assessment Report

May 2026
Final

Issue No 1
R100/10

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1. EXECUTIVE SUMMARY

- 1.1 The proposed development will consist of the erection of new detached dwelling house Land to the rear of Oaklands Keymer Road, Burgess Hill, West Sussex, RH15 0AL
- 1.2 The British Geological Survey (BGS) indicated that the site is directly underlain by bedrock geology of the Weald Clay Formation (Mudstone).
- 1.3 In-situ site infiltration/soakaway testing undertaken in accordance with the methods described in BRE Digest 365(2007) by Earth Environmental & Geotechnical (Southern) Limited recorded results of the soakaway testing, infiltration rates between 1.47×10^{-5} and 1.97×10^{-5} were achieved and indicated the general geology at the site consisted of between 0.45m to 0.60m of Made Ground overlying sandy Clay proven to a maximum depth of 1.2mbgl overlying silty Clay to a maximum proven depth of 2.0mbgl.
- 1.4 It is therefore proposed that the surface water runoff from site is to be discharged to ground via infiltration. The front section of roof will be drained using permeable paving construction and the rear section of roof with drain to a trench soakaway designed for the 1 in 100- year +45% storm +10% urban creep. The access road and parking will be constructed of permeable paving are to freely drain to ground via infiltration.
- 1.5 The Foul water drainage will discharge to the public sewer in Keymer Road via a pumping station into an existing manhole at the main entrance into the site. The pumping station will be fitted with dual pumps (working & assist) and is sized to accommodate 24hour storage in the event of a pump failure.
- 1.6 Remedial earthworks will be required prior to construction.

2 INTRODUCTION

- 2.1 TPS Civils & Design Limited has been appointed to undertake a drainage strategy report for a proposed development at Oaklands, Keymer Road Burgess Hill.
- 2.2 The proposed development will consist of the erection of a detached dwellings with detached garages following the demolition of 2 No. residential structures. The proposed development is located as OS Grid Reference 531699, 118300 and has the post code RH15 0AL.
- 2.3 The purpose of this drainage scheme is to demonstrate how the proposed development can be satisfactorily drained without increasing flood risk onsite and where appropriate, providing betterment over the existing site to reduce flood risk in the region.
- 2.4 In addition to the above, it will also demonstrate that surface water drainage is designed to meet the latest national and local drainage policies to include:-
- The results of an assessment into the potential for disposing of surface water by means of Sustainable Drainage System(SuDS).
 - Details of foul water drainage and means of disposal.

- Details of a management and maintenance plan for the drainage scheme.
- The appropriate design standard for the surface water drainage scheme must be the 1 in 100-year return period with a 45% allowance for climate change + 10% Urban Creep.

FIGURE 1. Site Location



3 SITE GEOLOGY

3.1 British Geological Survey information

- 3.1.1 The British Geological Survey confirms the underlain bedrock geology to be made up of the Weald Clay Formation (Mudstone). At the time of writing the British Geological Survey website does not have any recorded information of the Superficial.

FIGURE 2. British Geological Survey



3.2 Infiltration Testing

- 3.2.1 Site Infiltration tests undertaken by Earth Environmental & Geotechnical (Southern) Limited d (Project ref: R2962 dated June 2023). During the investigation, 2 No. trial pits were excavated and soakaway testing in accordance with BRE Digest 365(2007) in was undertaken in one trial pit and the excavation of a second pit to determine deeper ground conditions and the absence of shallow groundwater.
- 3.2.2 Trial Pit TP01 was excavated to a depth of 2.0mbgl. TP01A was excavated to a depth of 1.0mbgl. No groundwater was observed during the excavation works.
- 3.2.3 In general, the geology at the site consisted of between 0.45m to 0.60m of Made Ground overlying sandy Clay proven to a maximum depth of 1.2mbgl overlying silty Clay to a maximum proven depth of 2.0mbgl.
- 3.2.4 The results of the soakaway testing, infiltration rates between $1.47 \times 10^{-5} \text{m/s}$ and $1.97 \times 10^{-5} \text{m/s}$ were achieved. A copy of the infiltration test results can be found in Appendix.

4 EXISTING DRAINAGE

- 4.1 The site is currently landscaped and permeable access road construction and surface water runoff, discharges naturally into the ground via infiltration.
- 4.2 The foul water drainage from the Oaklands property discharges into an existing public foul water sewer main which runs adjacent to Kymer Road to the east of the site.

5 PROPOSED DRAINAGE STRATEGY

5.1 SuDS Hierarchy

- 5.1.1 All options for the destination of run-off generated on site have been assessed in line with the SuDS hierarchy as set out in Building Regulations Part H document and DEFRA's Draft National Standards for SuDS

TABLE 5.1 SuDS Hierarchy

Discharge Hierarchy	
Rainwater Harvesting	Yes - rainwater harvesting using water butts is proposed to allow rainwater reuse on site.
Discharge to Ground Yes	Yes – Surface water runoff is to be discharged to ground via proposed ring soakaway
Discharge to Watercourse	N/A due to above
Discharge to Surface Water	N/A due to above
Discharge to Other Sewer	N/A due to above

5.2 PROPOSED HYDRAULIC CALCULATION SPECIFICATIONS

TABLE 2. SuDS Hierarchy

Design Rainfall Methodology	FEH-22
Volumetric Run-off Coefficient (Cv)	1
CV Winter and Summer	1
Additional Storage (m3 / ha)	0.0
Maximum Rainfall (mm/hr)	207.40
Trench Soakaway	Base Coefficient (m/hr): 0.035
	Side Coefficient (m/hr): 0.035
	Trench Width (m): 0.8
	Trench Length (m): 41.0
	Trench Depth (m): 1.5
	Factor of Safety: 2
	Porosity: 30%
	Storm Duration 240 Minute Winter
	Time to Half Empty (mins): 184
Permeable Paving Design Access Road & Carparking Areas 1 & 2	Base Coefficient (m/hr): 0.035
	Side Coefficient (m/hr): 0.00
	Factor of Safety: 2
	Porosity: 30%
	Time to Half Empty (mins): 106 & 80

5.3 SURFACE WATER DRAINAGE

- 5.3.1 Based upon the results of the infiltration test that was conducted on site, it is determined that the discharge of surface water runoff via infiltration is viable. The surface water runoff is to be captured into a positive drainage network prior to discharging to ground via the installation of a trench soakaway and permeable paving; the trench soakaways & permeable paving have been designed to the recorded infiltration rate of $1.476 \times 10^{-5} \text{m/s}$ and store and attenuate surface water runoff for the 1 in 100-year storm +45% + 10% urban creep. The proposed trench soakaways are to be located a minimum of 5m away from any structures in addition to 2.5m away from the site boundary.
- 5.3.2 Water Butts will be installed for rainwater harvesting which will allow the reuse of rainwater within the external landscaped areas of the site.

5.3.3 The access road is to be constructed from a permeable surface which has also been designed to the recorded infiltration rate and will allow all runoff to freely drain to ground via infiltration.

5.3.4 Hydraulic calculations have been carried out which can be found at Appendix. It should be noted that a 10% urban creep has been applied to the roof areas only. This is included within the hydraulic calculations as additional area which is highlighted within the impermeable areas plan in Appendix.

5.4 WATER QUALITY

5.4.1 A key requirement of any SuDS system is that it protects the receiving water body from the risk of pollution.

5.4.1 Frequent and short duration rainfall events are those that are most loaded with potential contaminants (silts, fines, heavy metals, and various organic and inorganic contaminants) therefore the first 5-10mm of rainfall should be adequately treated with SuDS.

5.4.2 The new SuDS Manual (Ciria C753, November 2015) introduces slightly different approach compared to the previous version for the water quality management of surface water. The Manual describes risks posed by the surface water runoff to the receiving environment as a function of:

- The pollution hazard at a particular site (i.e., the pollution source)
- The effectiveness of SuDS treatment components in reducing levels of pollutants to environmentally acceptable levels
- The sensitivity of the receiving environment

5.4.3 The recommended approaches for water quality risk management are given in the SuDS Manual Table 26.1.

TABLE 26.1 from SuDS manual. Approaches to Water Quality Risk Management

Approaches to Water Quality Risk Management			
Design method	Hazard Characterisation	Risk Reduction	
		For Surface Water	For Groundwater
Simple Index Approach	Simple pollution hazard indices	Simple SuDS hazard mitigation indices (Table 26.3)	Simple SuDS hazard mitigation indices (Table 26.4)
Risk Screening Factors characterising traffic	Factors characterising traffic density and extent of infiltration like to occur (Table 26.5)	N/A	Factors characterising unsaturated soil depth and type, and predominant flow type through the soils (Table 26.5)
Detailed Risk Assessment	Site specific information used to define likely	More detailed, component specific performance information used to demonstrate that the proposed SuDS components reduce the hazard to acceptable levels	

	pollutants and their significance	
Process-based Treatment modelling	Time series rainfall used with generic pollution characteristics to determine statistical distributions of likely concentrations and loadings in the runoff	Models that represent the treatment processes in the proposed SuDS components give estimates of reductions in even mean discharge concentrations and total annual load reductions delivered by the system

5.4.4 As per Table 26.1 Simple Index approach will be used as a design method for this site.

5.4.5 Table 26.2 will provide hazard classification of different land uses. The land uses for the surface water drainage for this site are.

- Residential Roofs
- The property driveways and car parking area

5.4.6 To deliver adequate treatment, the selected SuDS components should have a total pollution mitigation index for each contaminant type that equals or exceeds the pollution hazard index for each contaminant type. Therefore, the following must be achieved for the surface running off the site.

Total SuDS mitigation index $\geq$ pollution hazard index

5.4.7 Pollution Hazard Indices are given for different land uses in Table 26.2 of the SuDS manual;

TABLE 26.2 from SuDS manual. Pollution Hazard Indices for Different Land Use Classifications

Pollution Hazard Indices for Different Land Use Classifications				
Land Use	Pollution Hazard level	Total Suspended solids	Metals	Hydro-Carbon
Residential roofs	Very Low	0.2	0.2	0.05
Other roofs (Typically commercial/industrial roofs)	Low	0.3	0.2 (up to 0.8 where there is potential for metals to leach from the roof)	0.05
Individual property driveways, residential car parks, low traffic roads (e.g., cul-de-sacs, homezones and general access roads) and non-residential car parking with infrequent change (e.g., schools, offices) i.e., < 300 traffic movements/day	Low	0.5	0.4	0.4
Commercial yard and delivery areas, nonresidential car parking with frequent change (e.g., hospitals, retail), all roads except low traffic roads and trunk roads/motorways	Medium	0.7	0.6	0.7
Sites with heavy pollution (e.g., haulage yards, lorry	High	0.8	0.8	0.9

parks, highly frequented lorry approaches to industrial estates, waste sites), sites where chemicals and fuels (other than domestic fuel oil) are to be delivered, handled, stored, used or manufactured; industrial sites; trunk roads and motorways				
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5.4.8 From Table 26.2 the following information is tabulated in Table 1

Table 3: Pollution hazard index and destination of runoff for the proposed site

Pollution hazard index and destination of runoff for the proposed site					
Land Use	Destination of Runoff	Pollution Hazard Level	Total Suspended Solids Metals Hydrocarbons	Metals	Hydrocarbons
Residential Roof	Ground Water	Very Low	0.2	0.2	0.05
Individual driveways, residential car parks and low traffic roads	Ground Water	Low	0.5	0.4	0.4

5.4.9 The SuDS mitigation index will be obtained from Table 26.4 (for groundwater) of the SuDS manual.

Table 26.4 from SuDS manual. Indicative SuDS Mitigation Indices for discharges to ground waters.

5.4.10 SuDS mitigation index are tabulated in Table 5 as followed.

Indicative SuDS Mitigation Indices for discharges to ground waters			
Characteristics of the material overlying the proposed infiltration surface, through which the runoff percolates	TSS	Metals	Hydrocarbons
A layer of dense vegetation underlain by a soil with good containment attenuation potential of at least 300mm in depth	0.6	0.5	0.6
A soil with good contaminant attenuation potential of at least 300mm in depth	0.4	0.3	0.3
Constructed permeable pavement (where a suitable filtration layer is included that provides treatment, and including a geotextile at the base separating the foundation from the subgrade) underlain by a soil with good contaminant attenuation potential of at least 300mm in depth	0.7	0.6	0.6
Bioretention underlain by a soil with good contaminant attenuation potential of at least 300mm in depth	0.8	0.8	0.8
Proprietary treatment systems	These must demonstrate that they can address each of the contaminant types to acceptable levels for inflow concentrations relevant to the contributing drainage area		

Table 4: SuDS mitigation index

SuDS mitigation index						
Runoff Source	Destination of Runoff	Mitigation Index Source	Type of SuDS Component	Total Suspended Solids (TSS)	Metals	Hydrocarbons
Individual driveways, residential car parks and low traffic roads	Ground water	Table 26.4 (for ground waters)	Permeable Pavement	0.7	0.6	0.7
Residential Roofs	Ground water	Table 26.4 (for ground waters)	Permeable Pavement	0.7	0.6	06

5.4.11 The above analysis demonstrates that the SuDS devices within the design will mitigate any pollution present within the surface water system.

5.5 FOUL WATER DRAINAGE

5.5.1

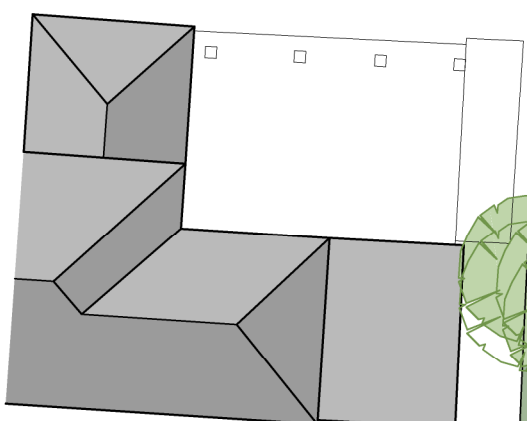
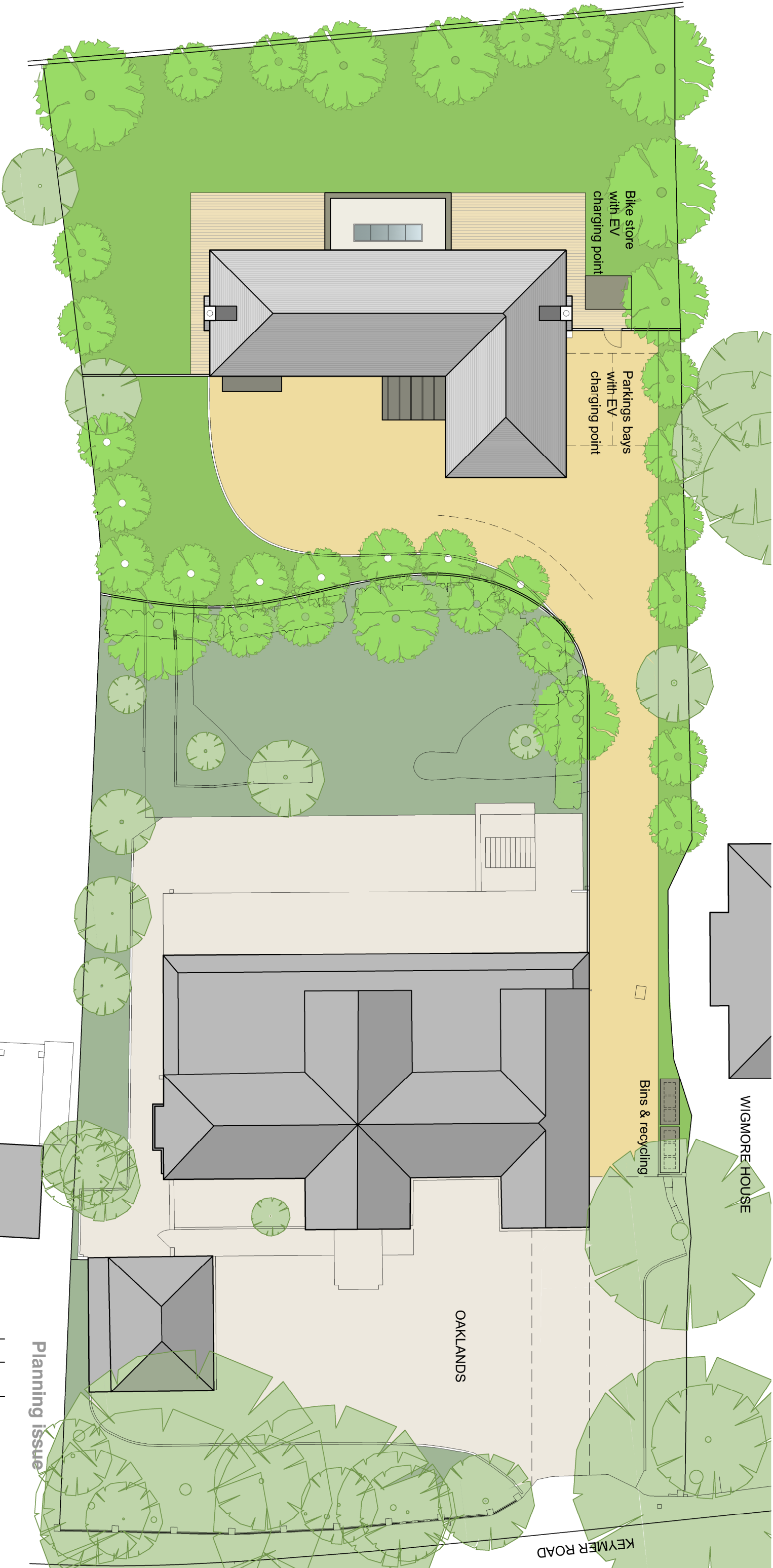
The foul water will discharge via a private package pumping station fitted with dual pumps (working & standby) and will to the public sewer in Keymer Road via a new direct connection into an existing private chamber located on site. The pumping station is design to accommodate 24hour storage capacity in the invent of the pump failure

6 SUMMARY AND CONCLUSIONS

- 6.1 TPS Civils & Design Limited has been instructed to produce a Drainage statement under National Planning Policy Framework (NPPF) to support the Planning Application for the erection of a new detached dwelling at Land to the Rear of Oakland's.
- 6.2 The Surface Water will discharge to ground via infiltration. The front section of roof area , access road and parking will drain to permeable paving system. The rear section of roof area will drain to a trench soakaway design to cater, store/attenuation for the 1 in 100-year +45% storm +10% urban creep. Hard paved areas are to freely drain to ground via infiltration
- 6.3 The Foul water will discharge into the adjacent public foul sewer via a new connection into an existing manhole on site.
- 6.4 Remedial works will be required prior to construction.
- 6.5 The report has demonstrated that the proposed drainage measures ensure that suitable means of surface water and foul drainage can be achieved for the proposed development.
- 6.6 A maintenance schedule has been written up for the drainage network including the SuDS features and can be found within the Appendix.

Appendices

Appendix A- **Site Proposal & Information**



rev.	date

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client
Stratus UK Ltd

project
Land at the rear of Oaklands
Keymer Road, Burgess Hill

drawing
Proposed site plan

scale
Shown @ A3
date
drawn

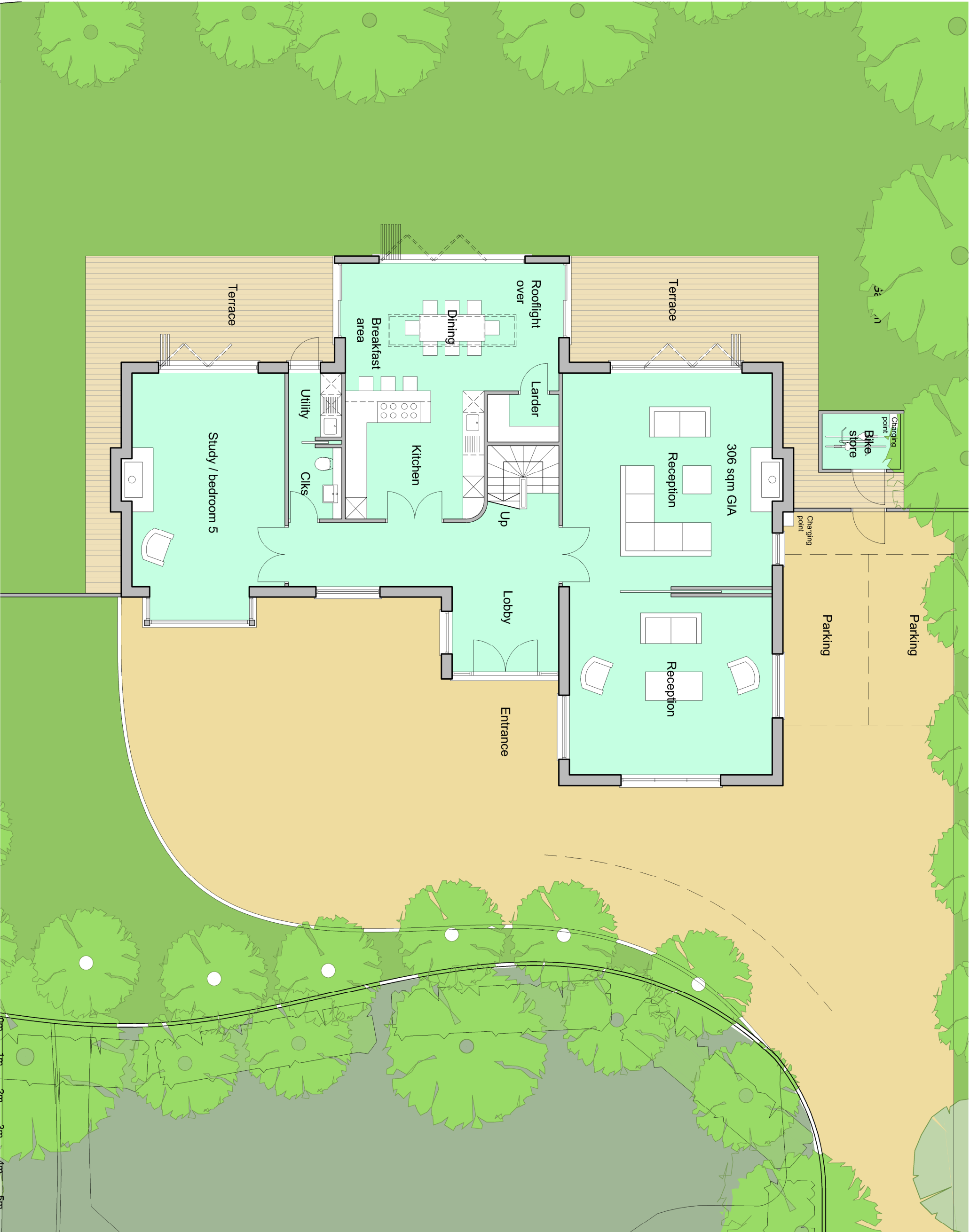
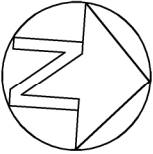
24 St Johns Road
Hove, East Sussex
BN3 2FB
tel: 01273 203230
email: info@turnerhicks.co.uk

Turner Associates
Architects and Planning Consultants

TA 1476 / 10 rev.

Proposed site plan Scale 1:200@A3





Planning issue

rev.	date

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client
Stratus UK Ltd

project
Land at the rear of Oaklands
Keymer Road, Burgess Hill

drawing
Proposed ground floor plans

scale	Shown @ A3	date	drawn

24 St Johns Road
Hove, East Sussex
BN3 2TB
tel: 01273 203230
email: info@taarchitects.co.uk

Turner Associates
Architects and Planning Consultants

Appendix B-

Drainage & Claculations

In addition to these notes, reference shall be made to the specification of works and the relevant Architect's and Specialist's drawings and specifications. The Contractor is responsible for verifying all site dimensions before commencing work.

All dimensions are in millimetres unless noted otherwise.

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The Contractor is responsible for the stability of the building whilst the works are in progress.

NOTES

1. THIS DRAWING IS BASED ON DRAWING NO.1A 1476--10 BY TURNER ARCHITECTS.
2. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH THE FOLLOWING DRAWING:
100/11 DRAINAGE DETAILS
3. CONTRACTOR IS TO TAKE NECESSARY PRECAUTIONS TO ENSURE THAT TRENCHES ARE KEPT CLEAR OF GROUND WATER DURING CONSTRUCTION.
4. ALL DRAINAGE WORKS TO BE CARRIED OUT IN ACCORDANCE WITH "SEWERS FOR ADOPTION" 7TH EDITION.
5. ALL ADOPTED PIPEWORK TO BE 1000 VITRIFIED CLAY UNLESS NOTED OTHERWISE.
6. ALL PIPEWORK THROUGH WALLS TO BE IN ACCORDANCE WITH THE BUILDING REGULATIONS.
7. ALL PIPEWORK UNDER ROADS WITH LESS THAN 900MM COVER TO HAVE 150MM CONCRETE SURROUND.
8. MINIMUM GRADIENT TO DRAINS TO BE 1:80 FOR 1100 OR 1100 FW AND 1:100 FOR 1100 SW.
9. POSITIONS OF MANHOLES SHOWN ON THIS DRAWING ARE INDICATIVE ONLY. ACTUAL LOCATIONS TO BE FINALIZED ON SITE.
10. PROVIDE CONCRETE UNTELS OVER OPENINGS WHERE PIPES PASS THROUGH WALLS. ALLOW FOR 150MM CLEARANCE ALL ROUND PIPE.

PRELIMINARY

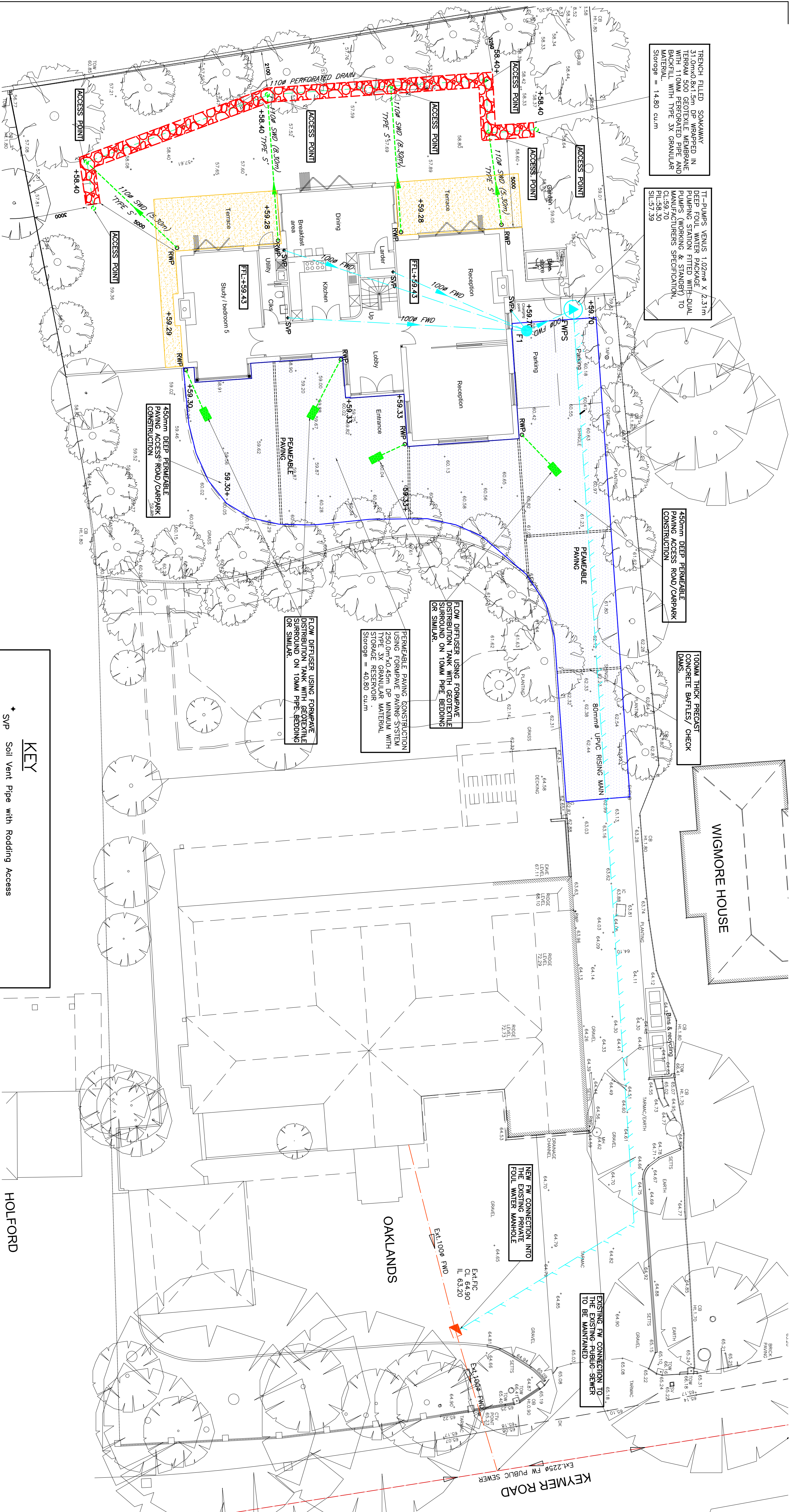
A	AMENDED SITE LAYOUT	17/05/26JS
0	ORIGINAL ISSUE	10/05/26JS
REV	DESCRIPTION	DATE BY

TPS
CIVIL DESIGN

CONTRACT	OAKLANDS KEYMER ROAD BURGESS HILL
DRAWING	DRAINAGE LAYOUT

DRAWING No.	100/10	REV	A	CHECKED	JS
SCALE	1:100@A1	DATE	18/5/26	DRAWN	MMC
AutoCAD Ref:	100/10			APPROVED	MAY2026

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TRENCH FILLED SOKAWAY
310mm Øx1.5m DP WRAPPED IN
FLEXIBLE 500 GEOTEXTILE MIRRORS
PUMPS (WORKING & STANDBY) TO
MANUFACTURERS SPECIFICATION,
BACKFILL WITH TYPE 3X GRANULAR
MATERIAL.
Storage = 14.80 cum

450mm DEEP PERMEABLE
PAVING ACCESS ROAD/CARPARK
CONSTRUCTION

100MM THICK PRECAST
CONCRETE BATTER/ CHECK
DAMS

FLOW DIFFUSER USING FORMPAVE
DISTRIBUTION TANK WITH GEOTEXTILE
SURROUND ON 100MM PIPE BEDDING
OR SIMILAR.

PERMEABLE PAVING CONSTRUCTION
USING FORMPAVE PAVING SYSTEM
WITH 150MM GRANULAR MATERIAL
STORAGE RESERVOIR .
Storage = 40.80 cum

FLOW DIFFUSER USING FORMPAVE
DISTRIBUTION TANK WITH GEOTEXTILE
SURROUND ON 100MM PIPE BEDDING
OR SIMILAR.

450mm DEEP PERMEABLE
PAVING ACCESS ROAD/CARPARK
CONSTRUCTION

- ★ SVP Soil Vent Pipe with Rodding Access
- RWP Rain Water Pipe with Rodding Access
- SS Stub Stock with Air Admittance valve
- RE Rodding Eye
- CD Channel drain
- YG Trapped Yard Gully

KEY

- SW ---Existing Private Surface Water Sewer
- FW ---Existing Private Foul Water Sewer
- FW ---Proposed Private Foul Water Sewer
- FW ---Existing Public Foul Water Sewer
- F6 Foul Manhole
- S6 Surface Water Manhole
- FWPS Foul Water Package Pumping Station
- FW ---Proposed Foul Water Pumping Main
- Trench Sockaway
- Permeable Paving Access Road & Parking Area
- Timber Decking Terrace
- EXL.FIC Existing Private Foul Water Manhole
- EXL.FWMH Existing Public Foul Water Sewer Manhole

FOUL WATER MANHOLE SCHEDULE					
M/H REF	APPROX. COVER LEVEL	INVERT LEVEL	DEPTH (M)	M/H TYPE	COVER TYPE
F1	59.70	58.40	1.30	3	B125
FWPS	59.70	PL:58.30 SIL:57.39	2.39	1100x GRP PUMPING STATION	B125 TO EXISTING FW MANHOLE

ALL DIMENSIONS AND LEVELS TO
BE CHECKED AND CONFIRMED BY
THE ARCHITECT & CONSTRUCTOR
PRIOR TO CONSTRUCTION.

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NOTES

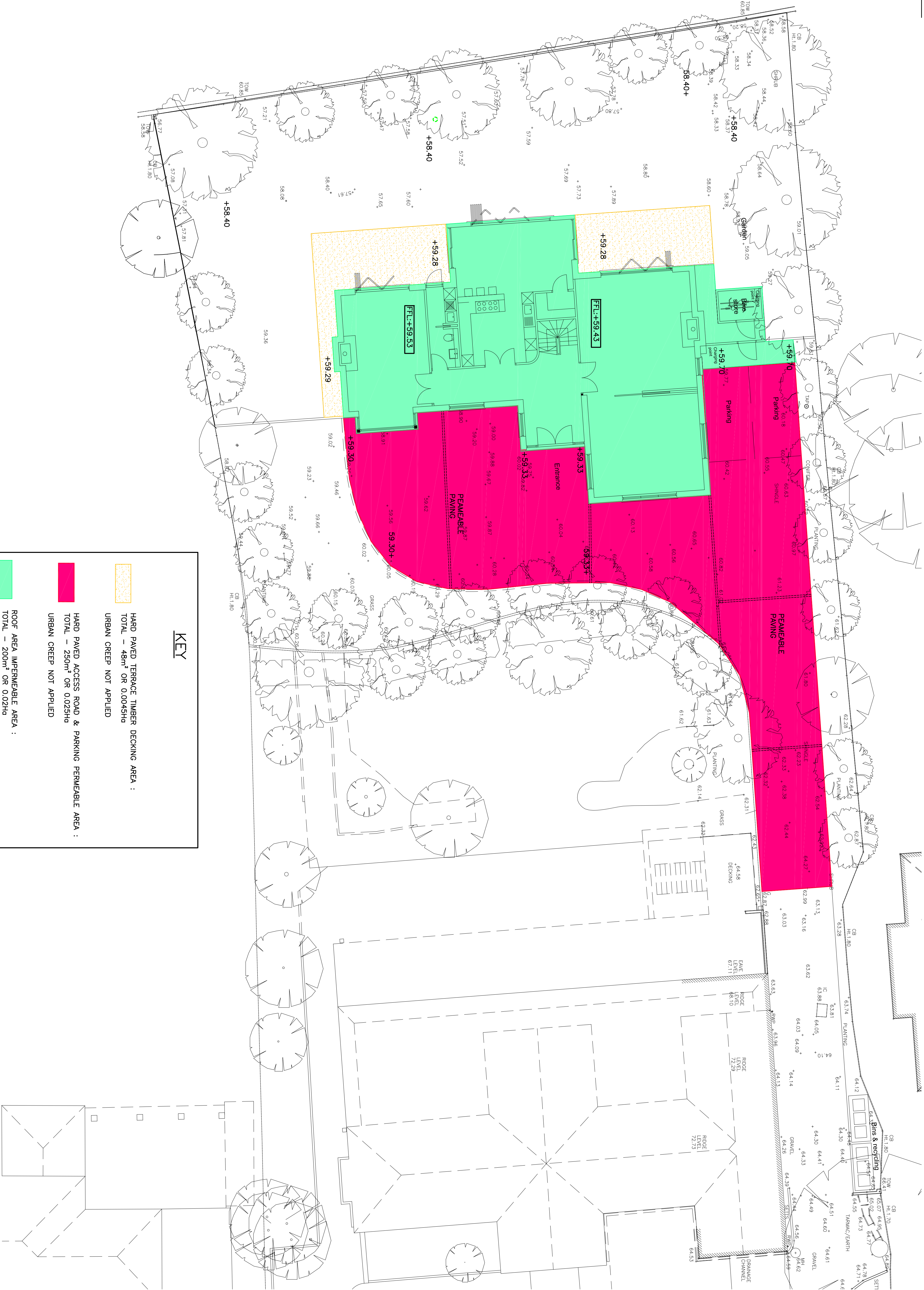
1. THIS DRAWING IS BASED ON DRAWING NO.1A 1476--10 BY TURNER ARCHITECTS.
2. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH THE FOLLOWING DRAWING:
100/10 DRAINAGE LAYOUT
100/11 DRAINAGE DETAILS
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PRELIMINARY

A	ORIGINAL ISSUE	17/06/25JS
0	ORIGINAL ISSUE	10/06/25JS
REV	DESCRIPTION	DATE BY

TPS
CIVIL DESIGN

CONTRACT			
OAKLANDS KEYMER ROAD BURGESS HILL			
DRAWING CATCHMENT AREAS & OVERLAND FLOWPATH ROUTE PLAN			
DRAWING NO.	REV	CHECKED	
100/12	A	JS	
SCALE 1:100@A1	DATE 18/5/26	DRAWN MMC	APPROVED MAY2026
AutoCAD Ref: 100/12			
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ALL DIMENSIONS AND LEVELS TO BE CHECKED AND CONFIRMED BY THE ARCHITECT & CONSTRUCTOR PRIOR TO CONSTRUCTION.

Dixon Hurst Kemp		Page 1
Victoria Court 22 St Pancras West Sussex PO1...	Oaklands, Keymer... Surface Water Dr... Greenfield Runof...	
Date May 2026 File TREANCH SOA...	Designed by TS Checked by	
Elstree Computin... Source Control w.12.6		

ICP SUDS Mean Annual Flood

Input

Return Period (years)	2	Soil	0.450
Area (ha)	0.100	Urban	0.000
SAAR (mm)	924	Region Number	Region 7

Results 1/s

QBAR Rural	0.6
QBAR Urban	0.6

Q2 years 0.5

Q1 year	0.5
Q30 years	1.4
Q100 years	1.9

Dixon Hurst Kemp		Page 1
Victoria Court 22 St Pancras West Sussex PO1...	Oaklands, Keymer... Surface Water Dr... Trench Soakaway ...	
Date May26 File FEH TRENCH ...	Designed by JS Checked by	
Elstree Computin... Source Control w.12.6		

Summary of Results for 100 year Return Period (+45%)

Half Drain Time : 186 minutes.

Storm Event	Max Level (m)	Max Depth (m)	Max Infiltration (l/s)	Max Volume (m³)	Status
15 min Summer	57.586	0.786	0.5	7.3	O K
30 min Summer	57.707	0.907	0.5	8.5	O K
60 min Summer	57.821	1.021	0.6	9.6	O K
120 min Summer	57.898	1.098	0.6	10.4	O K
180 min Summer	57.913	1.113	0.6	10.6	O K
240 min Summer	57.918	1.118	0.6	10.6	O K
360 min Summer	57.910	1.110	0.6	10.5	O K
480 min Summer	57.887	1.087	0.6	10.3	O K
600 min Summer	57.859	1.059	0.6	10.0	O K
720 min Summer	57.829	1.029	0.6	9.7	O K
960 min Summer	57.748	0.948	0.5	8.9	O K
1440 min Summer	57.619	0.819	0.5	7.7	O K
2160 min Summer	57.475	0.675	0.4	6.2	O K
2880 min Summer	57.367	0.567	0.4	5.2	O K
4320 min Summer	57.248	0.448	0.3	4.0	O K
5760 min Summer	57.160	0.360	0.3	3.1	O K
7200 min Summer	57.094	0.294	0.3	2.5	O K
8640 min Summer	57.041	0.241	0.2	2.0	O K
10080 min Summer	56.999	0.199	0.2	1.6	O K
15 min Winter	57.587	0.787	0.5	7.3	O K
30 min Winter	57.709	0.909	0.5	8.5	O K
60 min Winter	57.825	1.025	0.6	9.7	O K
120 min Winter	57.906	1.106	0.6	10.5	O K
180 min Winter	57.918	1.118	0.6	10.6	O K
240 min Winter	57.919	1.119	0.6	10.6	O K
360 min Winter	57.898	1.098	0.6	10.4	O K
480 min Winter	57.862	1.062	0.6	10.0	O K
600 min Winter	57.820	1.020	0.6	9.6	O K

Storm Event	Rain (mm/hr)	Time-Peak (mins)
15 min Summer	207.395	25
30 min Summer	123.608	39
60 min Summer	73.671	66
120 min Summer	43.908	120
180 min Summer	32.440	152
240 min Summer	26.170	184
360 min Summer	19.334	252
480 min Summer	15.597	322
600 min Summer	13.204	390
720 min Summer	11.523	460
960 min Summer	9.121	596
1440 min Summer	6.561	858
2160 min Summer	4.719	1240
2880 min Summer	3.735	1620
4320 min Summer	2.821	2344
5760 min Summer	2.311	3072
7200 min Summer	1.980	3824
8640 min Summer	1.745	4512
10080 min Summer	1.569	5248
15 min Winter	207.395	25
30 min Winter	123.608	38
60 min Winter	73.671	66
120 min Winter	43.908	120
180 min Winter	32.440	166
240 min Winter	26.170	192
360 min Winter	19.334	268
480 min Winter	15.597	344
600 min Winter	13.204	418

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Summary of Results for 100 year Return Period (+45%)

Storm Event	Max Level (m)	Max Depth (m)	Max Infiltration (l/s)	Max Volume (m³)	Status
720 min winter	57.776	0.976	0.5	9.2	O K
960 min winter	57.674	0.874	0.5	8.2	O K
1440 min winter	57.514	0.714	0.4	6.6	O K
2160 min winter	57.342	0.542	0.4	4.9	O K
2880 min winter	57.221	0.421	0.3	3.7	O K
4320 min winter	57.087	0.287	0.3	2.4	O K
5760 min winter	56.998	0.198	0.2	1.5	O K
7200 min winter	56.935	0.135	0.2	0.9	O K
8640 min winter	56.891	0.091	0.2	0.5	O K
10080 min winter	56.877	0.077	0.2	0.4	O K
Storm Event	Rain (mm/hr)		Time-Peak (mins)		
720 min winter	11.523		492		
960 min winter	9.121		634		
1440 min winter	6.561		906		
2160 min winter	4.719		1300		
2880 min winter	3.735		1676		
4320 min winter	2.821		2424		
5760 min winter	2.311		3168		
7200 min winter	1.980		3832		
8640 min winter	1.745		4496		
10080 min winter	1.569		5136		

Dixon Hurst Kemp		Page 3
Victoria Court 22 St Pancras West Sussex PO1...	Oaklands, Keymer... Surface Water Dr... Trench Soakaway ...	
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Rainfall Details

Rainfall Model	FEH
Return Period (years)	100
Site Location	GB 530850 118450 TQ 30850 18450
C (1km)	-0.026
D1 (1km)	0.373
D2 (1km)	0.307
D3 (1km)	0.427
E (1km)	0.315
F (1km)	2.479
Summer Storms	Yes
Winter Storms	Yes
CV (Summer)	1.000
CV (Winter)	1.000
Shortest Storm (mins)	15
Longest Storm (mins)	10080
Climate Change %	+45

Time / Area Diagram

Total Area (ha) 0.015

Time (mins)	Area (ha)	Time (mins)	Area (ha)	Time (mins)	Area (ha)
0-4	0.005	4-8	0.005	8-12	0.005

Dixon Hurst Kemp		Page 4
Victoria Court 22 St Pancras West Sussex PO1...	Oaklands, Keymer... Surface Water Dr... Trench Soakaway ...	
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Elstree Computin...	Source Control w.12.6	

Model Details

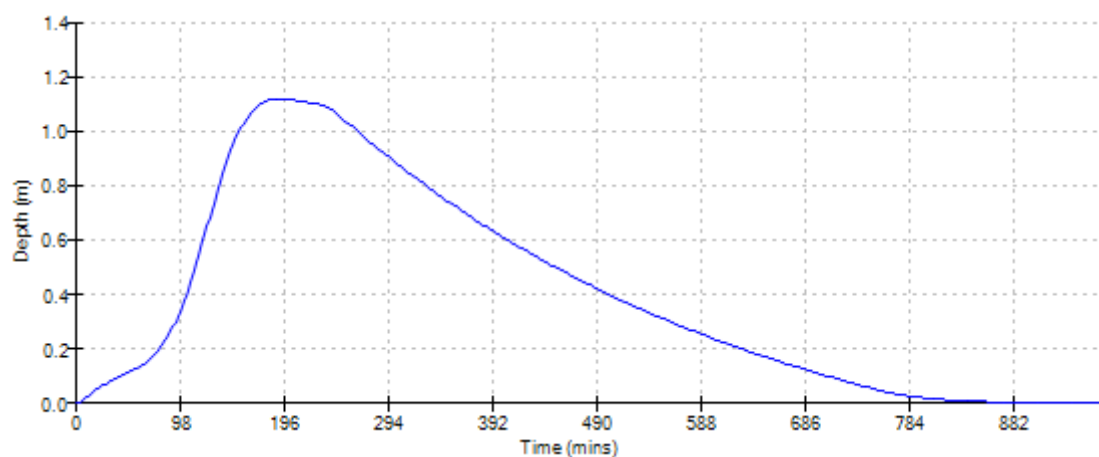
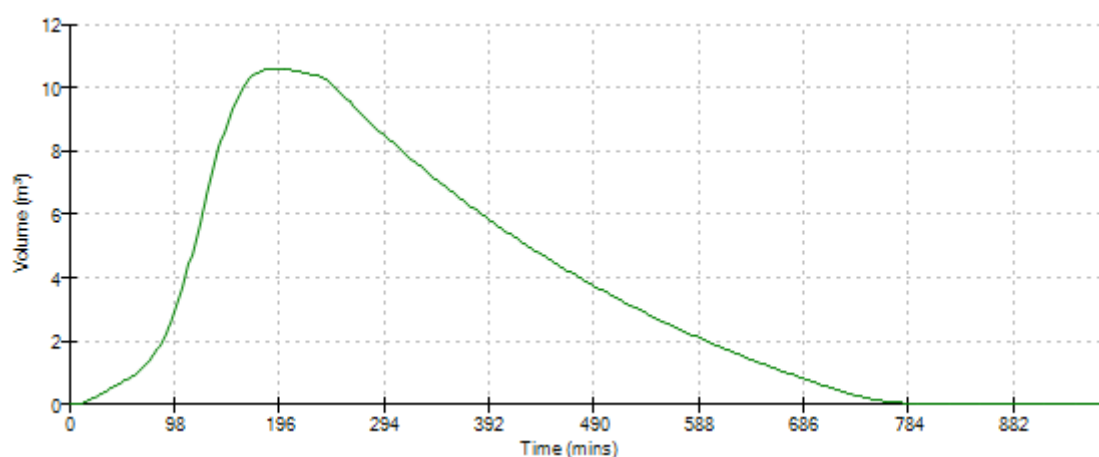
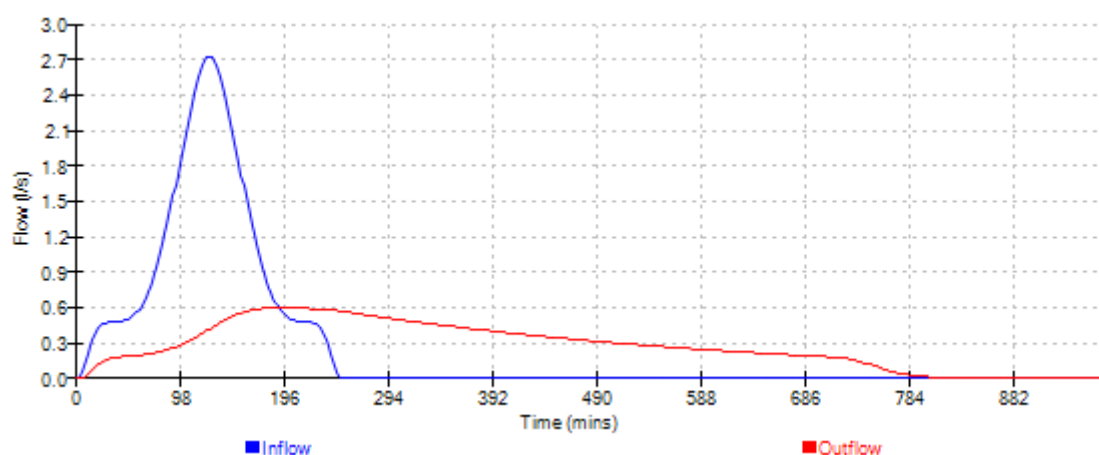
Storage is Online Cover Level (m) 58.000

Trench Soakaway Structure

Infiltration Coefficient Base (m/hr)	0.03500
Infiltration Coefficient Side (m/hr)	0.03500
Safety Factor	2.0
Porosity	0.30
Invert Level (m)	56.800
Trench Width (m)	0.8
Trench Length (m)	41.0
Slope (1:X)	500.0
Cap Volume Depth (m)	0.000
Cap Infiltration Depth (m)	0.000

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Victoria Court 22 St Pancras West Sussex PO1...	Oaklands, Keymer... Surface Water Dr... Trench Soakaway ...	
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Event: 240 min winter



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Summary of Results for 100 year Return Period (+45%)

Half Drain Time : 80 minutes.

Storm Event	Max Level (m)	Max Depth (m)	Max Infiltration (l/s)	Max Volume (m³)	Status
15 min Summer	59.387	0.137	0.6	4.0	O K
30 min Summer	59.406	0.156	0.6	4.7	O K
60 min Summer	59.421	0.171	0.6	5.2	O K
120 min Summer	59.424	0.174	0.6	5.4	O K
180 min Summer	59.421	0.171	0.6	5.2	O K
240 min Summer	59.416	0.166	0.6	5.1	O K
360 min Summer	59.402	0.152	0.6	4.6	O K
480 min Summer	59.389	0.139	0.6	4.1	O K
600 min Summer	59.375	0.125	0.6	3.6	O K
720 min Summer	59.363	0.113	0.6	3.1	O K
960 min Summer	59.339	0.089	0.6	2.3	O K
1440 min Summer	59.309	0.059	0.6	1.2	O K
2160 min Summer	59.298	0.048	0.5	0.8	O K
2880 min Summer	59.293	0.043	0.4	0.6	O K
4320 min Summer	59.287	0.037	0.3	0.5	O K
5760 min Summer	59.284	0.034	0.2	0.4	O K
7200 min Summer	59.281	0.031	0.2	0.3	O K
8640 min Summer	59.279	0.029	0.2	0.3	O K
10080 min Summer	59.278	0.028	0.2	0.3	O K
15 min Winter	59.387	0.137	0.6	4.0	O K
30 min Winter	59.406	0.156	0.6	4.7	O K
60 min Winter	59.420	0.170	0.6	5.2	O K
120 min Winter	59.422	0.172	0.6	5.3	O K
180 min Winter	59.416	0.166	0.6	5.1	O K
240 min Winter	59.407	0.157	0.6	4.8	O K
360 min Winter	59.386	0.136	0.6	4.0	O K
480 min Winter	59.365	0.115	0.6	3.2	O K
600 min Winter	59.346	0.096	0.6	2.5	O K

Storm Event	Rain (mm/hr)	Time-Peak (mins)
15 min Summer	207.395	24
30 min Summer	123.608	36
60 min Summer	73.671	62
120 min Summer	43.908	100
180 min Summer	32.440	132
240 min Summer	26.170	166
360 min Summer	19.334	234
480 min Summer	15.597	302
600 min Summer	13.204	366
720 min Summer	11.523	428
960 min Summer	9.121	546
1440 min Summer	6.561	764
2160 min Summer	4.719	1104
2880 min Summer	3.735	1468
4320 min Summer	2.821	2180
5760 min Summer	2.311	2936
7200 min Summer	1.980	3656
8640 min Summer	1.745	4336
10080 min Summer	1.569	5072
15 min Winter	207.395	24
30 min Winter	123.608	36
60 min Winter	73.671	62
120 min Winter	43.908	102
180 min Winter	32.440	140
240 min Winter	26.170	178
360 min Winter	19.334	250
480 min Winter	15.597	316
600 min Winter	13.204	378

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Summary of Results for 100 year Return Period (+45%)

Storm Event	Max Level (m)	Max Depth (m)	Max Infiltration (l/s)	Max Volume (m³)	Status
720 min winter	59.330	0.080	0.6	1.9	O K
960 min winter	59.305	0.055	0.6	1.0	O K
1440 min winter	59.295	0.045	0.4	0.7	O K
2160 min winter	59.289	0.039	0.3	0.5	O K
2880 min winter	59.284	0.034	0.3	0.4	O K
4320 min winter	59.280	0.030	0.2	0.3	O K
5760 min winter	59.277	0.027	0.2	0.2	O K
7200 min winter	59.275	0.025	0.1	0.2	O K
8640 min winter	59.273	0.023	0.1	0.2	O K
10080 min winter	59.272	0.022	0.1	0.2	O K
Storm Event	Rain (mm/hr)		Time-Peak (mins)		
720 min winter	11.523		436		
960 min winter	9.121		526		
1440 min winter	6.561		752		
2160 min winter	4.719		1096		
2880 min winter	3.735		1476		
4320 min winter	2.821		2204		
5760 min winter	2.311		2928		
7200 min winter	1.980		3680		
8640 min winter	1.745		4408		
10080 min winter	1.569		5088		

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Rainfall Details

Rainfall Model	FEH
Return Period (years)	100
Site Location	GB 530850 118450 TQ 30850 18450
C (1km)	-0.026
D1 (1km)	0.373
D2 (1km)	0.307
D3 (1km)	0.427
E (1km)	0.315
F (1km)	2.479
Summer Storms	Yes
Winter Storms	Yes
CV (Summer)	1.000
CV (Winter)	1.000
Shortest Storm (mins)	15
Longest Storm (mins)	10080
Climate Change %	+45

Time / Area Diagram

Total Area (ha) 0.010

Time (mins)	Area (ha)	Time (mins)	Area (ha)	Time (mins)	Area (ha)
0-4	0.003	4-8	0.003	8-12	0.003

Dixon Hurst Kemp		Page 4
Victoria Court 22 St Pancras West Sussex PO1...	Oaklands, Keymer ... Surface Water Dra... Permeable Pavibg...	
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Elstree Computin...	Source Control w.12.6	

Model Details

Storage is Online Cover Level (m) 63.000

Porous Car Park Structure

Infiltration Coefficient Base (m/hr)	0.03500
Membrane Percolation (mm/hr)	1000
Max Percolation (l/s)	33.8
Safety Factor	2.0
Porosity	0.30
Invert Level (m)	59.250
Width (m)	4.5
Length (m)	27.0
slope (1:X)	500.0
Depression Storage (mm)	5
Evaporation (mm/day)	3
Cap Volume Depth (m)	0.000

Victoria Court
22 St Pancras
West Sussex PO1...

Oaklinds, Keymer ...
Surface Water Dra...
Permeable Pavibg...

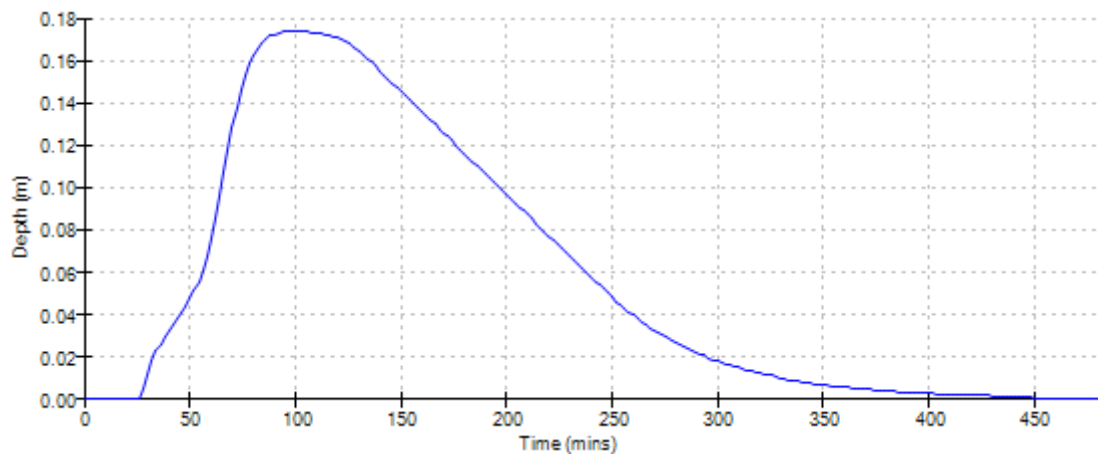
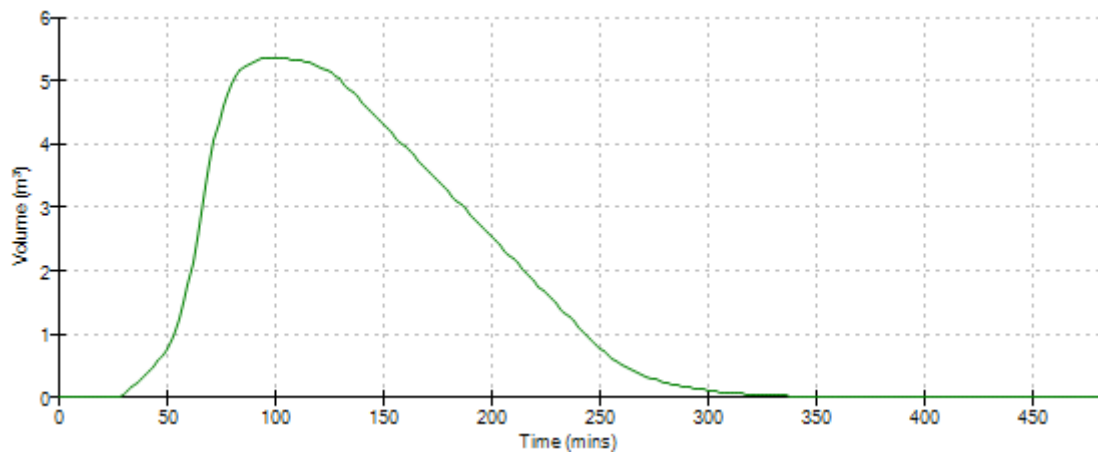
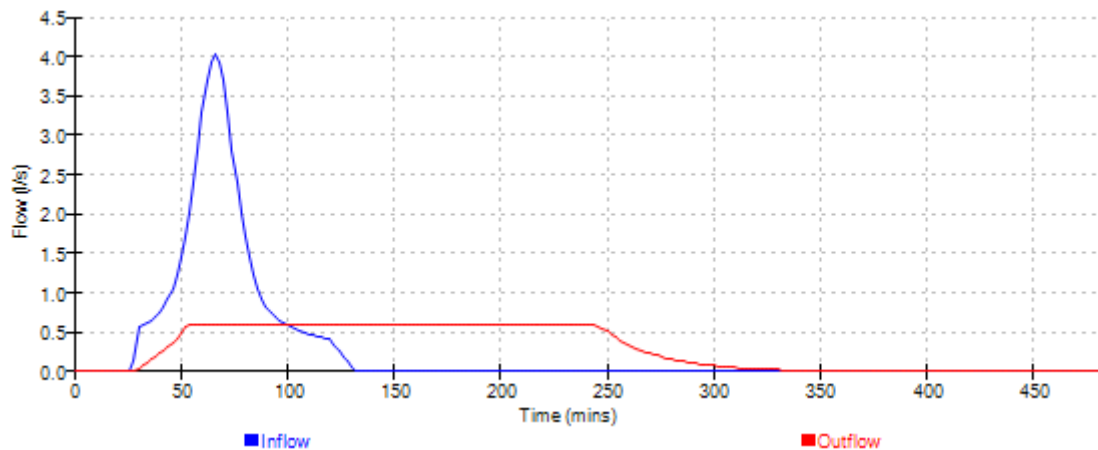
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Event: 120 min Summer



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Victoria Court 22 St Pancras West Sussex PO1...	Oaklands, Keymer... Surface Water Da... Permeable Paving...	
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Summary of Results for 100 year Return Period (+45%)

Half Drain Time : 106 minutes.

Storm Event	Max Level (m)	Max Depth (m)	Max Infiltration (l/s)	Max Volume (m³)	Status
15 min Summer	59.040	0.160	0.7	5.9	O K
30 min Summer	59.064	0.184	0.7	6.9	O K
60 min Summer	59.085	0.205	0.7	7.8	O K
120 min Summer	59.092	0.212	0.7	8.0	O K
180 min Summer	59.089	0.209	0.7	7.9	O K
240 min Summer	59.084	0.204	0.7	7.7	O K
360 min Summer	59.071	0.191	0.7	7.2	O K
480 min Summer	59.057	0.177	0.7	6.6	O K
600 min Summer	59.043	0.163	0.7	6.0	O K
720 min Summer	59.030	0.150	0.7	5.4	O K
960 min Summer	59.000	0.120	0.7	4.2	O K
1440 min Summer	58.957	0.077	0.7	2.4	O K
2160 min Summer	58.928	0.048	0.7	1.2	O K
2880 min Summer	58.921	0.041	0.6	0.9	O K
4320 min Summer	58.915	0.035	0.4	0.6	O K
5760 min Summer	58.912	0.032	0.4	0.5	O K
7200 min Summer	58.910	0.030	0.3	0.5	O K
8640 min Summer	58.908	0.028	0.3	0.4	O K
10080 min Summer	58.906	0.026	0.2	0.4	O K
15 min Winter	59.040	0.160	0.7	5.9	O K
30 min Winter	59.064	0.184	0.7	6.9	O K
60 min Winter	59.085	0.205	0.7	7.8	O K
120 min Winter	59.091	0.211	0.7	8.0	O K
180 min Winter	59.086	0.206	0.7	7.8	O K
240 min Winter	59.078	0.198	0.7	7.5	O K
360 min Winter	59.058	0.178	0.7	6.6	O K
480 min Winter	59.036	0.156	0.7	5.7	O K
600 min Winter	59.014	0.134	0.7	4.8	O K

Storm Event	Rain (mm/hr)	Time-Peak (mins)
15 min Summer	207.395	24
30 min Summer	123.608	37
60 min Summer	73.671	64
120 min Summer	43.908	108
180 min Summer	32.440	140
240 min Summer	26.170	174
360 min Summer	19.334	242
480 min Summer	15.597	310
600 min Summer	13.204	376
720 min Summer	11.523	442
960 min Summer	9.121	566
1440 min Summer	6.561	794
2160 min Summer	4.719	1112
2880 min Summer	3.735	1472
4320 min Summer	2.821	2204
5760 min Summer	2.311	2928
7200 min Summer	1.980	3632
8640 min Summer	1.745	4312
10080 min Summer	1.569	4992
15 min Winter	207.395	24
30 min Winter	123.608	37
60 min Winter	73.671	64
120 min Winter	43.908	116
180 min Winter	32.440	146
240 min Winter	26.170	184
360 min Winter	19.334	258
480 min Winter	15.597	330
600 min Winter	13.204	396

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Victoria Court 22 St Pancras West Sussex PO1...	Oaklands, Keymer... Surface Water Da... Permeable Paving...	
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Summary of Results for 100 year Return Period (+45%)

Storm Event	Max Level (m)	Max Depth (m)	Max Infiltration (l/s)	Max Volume (m³)	Status
720 min winter	58.994	0.114	0.7	4.0	O K
960 min winter	58.957	0.077	0.7	2.4	O K
1440 min winter	58.925	0.045	0.6	1.1	O K
2160 min winter	58.917	0.037	0.5	0.7	O K
2880 min winter	58.913	0.033	0.4	0.6	O K
4320 min winter	58.908	0.028	0.3	0.4	O K
5760 min winter	58.906	0.026	0.2	0.3	O K
7200 min winter	58.904	0.024	0.2	0.3	O K
8640 min winter	58.902	0.022	0.2	0.3	O K
10080 min winter	58.901	0.021	0.2	0.2	O K
Storm Event	Rain (mm/hr)		Time-Peak (mins)		
720 min winter	11.523		460		
960 min winter	9.121		572		
1440 min winter	6.561		766		
2160 min winter	4.719		1088		
2880 min winter	3.735		1460		
4320 min winter	2.821		2208		
5760 min winter	2.311		2872		
7200 min winter	1.980		3568		
8640 min winter	1.745		4272		
10080 min winter	1.569		5152		

Dixon Hurst Kemp		Page 3
Victoria Court 22 St Pancras West Sussex PO1...	Oaklands, Keymer... Surface Water Da... Permeable Paving...	
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Elstree Computin...	Source Control w.12.6	

Rainfall Details

Rainfall Model	FEH
Return Period (years)	100
Site Location	GB 530850 118450 TQ 30850 18450
C (1km)	-0.026
D1 (1km)	0.373
D2 (1km)	0.307
D3 (1km)	0.427
E (1km)	0.315
F (1km)	2.479
Summer Storms	Yes
Winter Storms	Yes
CV (Summer)	1.000
CV (Winter)	1.000
Shortest Storm (mins)	15
Longest Storm (mins)	10080
Climate Change %	+45

Time / Area Diagram

Total Area (ha) 0.014

Time (mins)	Area (ha)	Time (mins)	Area (ha)	Time (mins)	Area (ha)
0-4	0.005	4-8	0.005	8-12	0.005

Dixon Hurst Kemp		Page 4
Victoria Court 22 St Pancras West Sussex PO1...	Oaklands, Keymer... Surface Water Da... Permeable Paving...	
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Model Details

Storage is Online Cover Level (m) 59.330

Porous Car Park Structure

Infiltration Coefficient Base (m/hr)	0.03500
Membrane Percolation (mm/hr)	1000
Max Percolation (l/s)	38.9
Safety Factor	2.0
Porosity	0.30
Invert Level (m)	58.880
Width (m)	7.0
Length (m)	20.0
slope (1:X)	500.0
Depression Storage (mm)	5
Evaporation (mm/day)	3
Cap Volume Depth (m)	0.000

Victoria Court
22 St Pancras
West Sussex PO1...

Oaklands, Keymer...
Surface Water Da...
Permeable Paving...

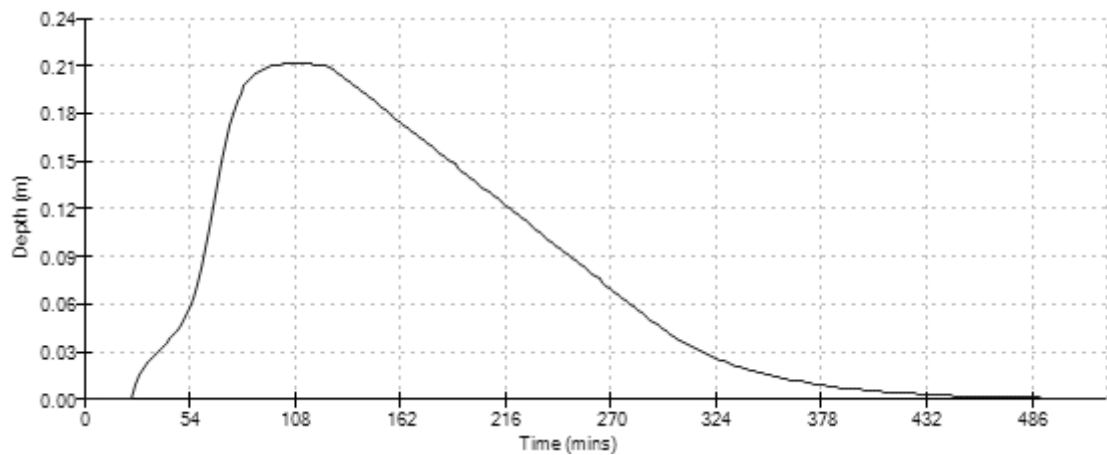
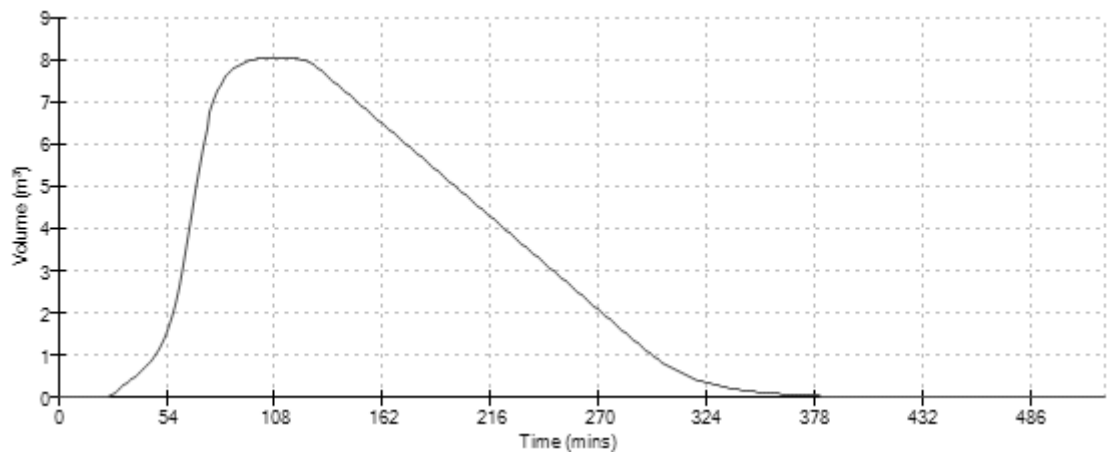
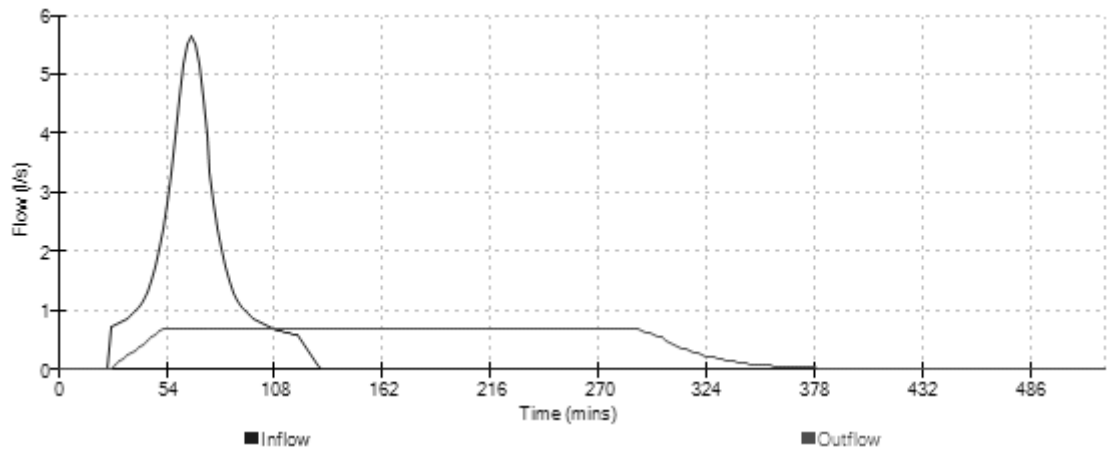
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Event: 120 min Summer



**Land to the Rear of Oaklands, Keymer Road, Burgess Hill West Sussex, RH15 0AL.
PROPOSED MAINTENANCE & INSPECTION SCHEDULE FOR BELOW GROUND DRAINAGE
(FOUL WATER AND SURFACE WATER) INCLUDING SUSTAINABLE DRAINAGE SYSTEMS (SuDS)**

1. MAINTENANCE

1.1 Introduction

- 1.1.1 During construction, the Contractor will be responsible for maintaining the drainage and SuDS (Sustainable Drainage Systems). Upon handover, the occupiers will take on the responsibility of these duties as laid out in this report.
- 1.1.2 The maintenance schedule for the proposed development will be split down into two separate categories; SuDS features and regular private drainage.
- 1.1.3 As listed in Section 5, of the SuDS Report outlines the features used on site will be Trench Soakaway, permeable paving, and Water Butts.
- 1.1.4 The SuDS features have been designed for easy maintenance and comprise:
- Regular Day-to-Day care – litter collection, regular gardening to control vegetation growth and checking inlets where water enters the SuDS features
 - Occasional tasks – checking the SuDS features and removing any silt that builds up in the SuDS feature
 - Remedial work – repairing damage where necessary
- 1.1.5 The Table 6 below outlines the maintenance specification and schedule for the SuDS features and associated site drainage

Table 6 SuDS Drainage Maintenance Specification

Item	Required Maintenance/Monitoring	Suggested Frequency	Responsibility
Surface Water Carrier Drains	Check inspection chambers and manholes for damage, condition and function	Every six months	Property Owner
	Undertake a CCTV drainage survey of the drainage network to establish condition.	Every ten years	Property Owner
	Replace or repair malfunctioning parts or structures.	As required	Specialist
Channel Drains	Check gullies and channel drains for damage, condition and function.	Every six months	Property Owner
	Remove sediment, oil/grease, litter and debris.	As necessary	Property Owner
	Replace or repair malfunctioning parts or structures.	As required	Specialist

Land to the Rear of Oaklands, Keymer Road, Burgess Hill West Sussex, RH15 0AL.
PROPOSED MAINTENANCE & INSPECTION SCHEDULE FOR BELOW GROUND DRAINAGE
(FOUL WATER AND SURFACE WATER) INCLUDING SUSTAINABLE DRAINAGE SYSTEMS (SuDS)

Surface Water Trench Soakaway	Check silt traps and inspection chambers, and note the rate of sediment accumulation.	Every month for the first year and then annually, or as conditions require	Property Owner
	Undertake a CCTV drainage survey of tanks and soakaway chambers. Note sediment build up and remove sediment/debris if present.	Every five years, or as conditions require	Specialist
Permeable Block Paving	Sweep clean of debris and inspect integrity of bedding grit. Replace bedding grit locally if required.	Every six months	Property Owner
	Lift blocks and remove bedding grit and replace and re-bed paving.	Full bedding replacement currently recommended by manufacturers every 20 years	Specialist
General	Remove sediment, litter, debris and vegetation from the surface of pathways areas	As necessary and after heavy rainfall	Property Owner
Flood Flow Routes	Ensure flood flow routes are not obstructed (i.e. lower lying portions of the land that will direct surface water runoff away from vulnerable assets in the event of drainage failure).	Every six months and during periods of heavy rainfall	Property Owner

Foul Water Drainage	Check inspection chambers and manholes for damage, condition and function.	Every six months	Property Owner
	Undertake a CCTV drainage survey of the drainage network to establish condition.	Every ten years	Specialist
	Replace or repair malfunctioning parts or structures	As required	Specialist

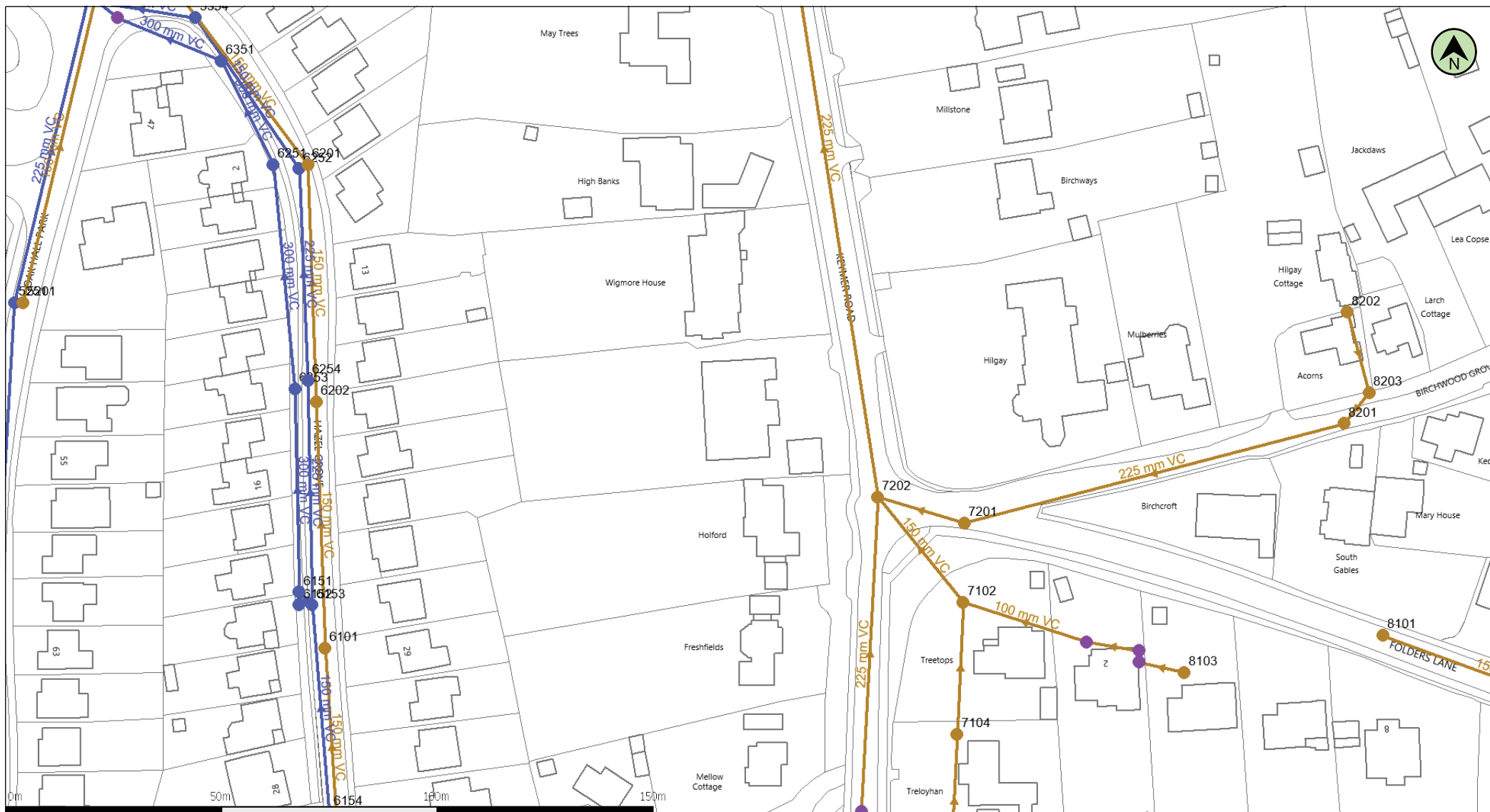
NOTES

The property owners will be responsible for the implementation of the maintenance schedule for below ground drainage or appoint appropriate persons and/or sub-consultants that are qualified to undertake these operations.

Maintenance is to be carried out by the property owners or by a specialist contractor, as noted in Responsibility column above.

This maintenance schedule has been produced with reference to the guidelines outlined in 'The SuDS Manual' (CIRIA C753: 2015). The suggested frequency of maintenance is considered a guide, and should not replace the guidance from manufacturers of proprietary systems.

Refer to Engineering drawings for location and details of below ground drainage assets and SuDS features.



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Date: 02/08/22

Scale: 1:1250

Map Centre: 531724,118233

Data updated: 21/07/22

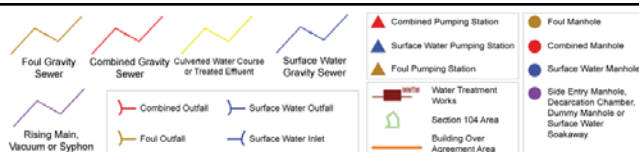
Our Ref: 915639 - 1

Wastewater Plan A4

The positions of pipes shown on this plan are believed to be correct, but Southern Water Services Ltd accept no responsibility in the event of inaccuracy. The actual positions should be determined on site. This plan is produced by Southern Water Services Ltd (c) Crown copyright and database rights 2022 Ordnance Survey 100031673. This map is to be used for the purposes of viewing the location of Southern Water plant only. Any other uses of the map data or further copies is not permitted.

WARNING: BAC pipes are constructed of Bonded Asbestos Cement.

WARNING: Unknown (UNK) materials may include Bonded Asbestos Cement.



mark@flo-consult.co.uk

Oaklands



[illegible]

Appendix C-

Infiltration Test Report



EARTH ENVIRONMENTAL
& GEOTECHNICAL

OUR REF: R2962

26th June 2023

Flo Consult Ltd
Chiltern View Studio
Buslins Lane
Chesham
Bucks
HP5 2XD

FAO Mark Symonds
By Email (mark@flo-consult.co.uk)

Dear Mark,

Land At Rear of Oaklands, Keymer Road, Burgess Hill, West Sussex, RH15
OAL- Soakaway Testing

Further to completion of the soakaway testing at the above site, our letter report is as follows:

Introduction

In-situ soakaway testing has been commissioned by Flo Consult Ltd (the client) to confirm if soakaway drainage will be suitable for a new drainage system located at Oaklands, Keymer Road, Burgess Hill.

Soakaway testing was completed over one day and in line with BRE 365 guidance. The site works were completed on the 23rd June 2023.

The Site

The assessment site comprises a large 3-storey residential building with a gravel driveway to the east of the main building and soft landscaping to the west. The site is bound by residential developments in all directions, with Keymer Road directly east of the site.

The soakaway testing was carried out in one location towards the southwest of the assessment site (TP01A). The location for the testing was determined by the client prior to site work. The test location takes into account the proposed soakaway location for the site.

From review of British Geological Survey (BGS) data it is suggested that the assessment site is directly underlain by bedrock geology of the Weald Clay Formation (Mudstone).

Soakaway Testing & Calculated Infiltration Rates

The site work was supervised by EEGSL and comprised of soakaway testing in one trial pit in accordance with the methods described in BRE Digest 365⁽²⁰⁰⁷⁾ and the excavation of a second pit to determine deeper ground conditions and the absence of shallow groundwater.

CONSULTING
ENGINEERS

Geotechnical
Environmental
Ecology
Geology
Drainage
Mining

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Middlesbrough
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Tel: 0131 5641789

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Ltd
Registered Office:
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Blackburn, Lancashire, BB1 6AY
Registered in England.
No: 8436152

TP01 was excavated to a depth of 2.0mbgl. TP01A was excavated to a depth of 1.0mbgl.

No groundwater was observed during the excavation works.

A plan showing the location of the trial pits is appended to this report.

In general, the geology at the site consisted of between 0.45m to 0.60m of Made Ground overlying sandy Clay proven to a maximum depth of 1.2mbgl overlying silty Clay to a maximum proven depth of 2.0mbgl.

As can be seen from the results of the soakaway testing, infiltration rates between 1.47×10^{-5} and 1.97×10^{-5} were achieved.

Conclusions

1. Based on the near surface ground conditions and results of soakaway testing, soakaway drainage is considered likely to be suitable in the areas tested.
2. It is recommended that the base of the soakaway is placed at a maximum depth of 1.0mbgl.

- - - - - END OF LETTER REPORT - - - - -

If you have any queries, or require any further information, please do not hesitate to contact the undersigned.

Yours Sincerely,



John Grace

Director

For and on behalf of Earth Environmental & Geotechnical (Southern) Ltd

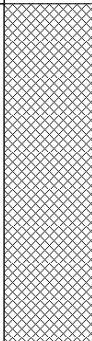
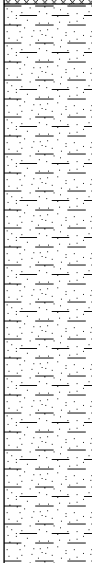
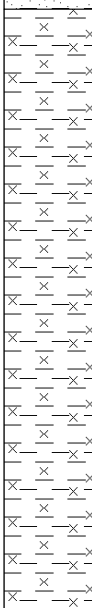
Encl. Trial Pit logs
Soakaway Test Results
Investigation Location Plan

ENCLOSURE 1

TRIAL PIT LOGS

Trial Pit Log

Project Name: Land To Rear Of Oaklands		Client: Flo Consult Ltd		Date: 23/06/2023	
Location: Keymer Road, Burgess Hill, West Sussex, RH15 0AH		Contractor: P R Nicholls Ltd			
Project No. : R2962		Crew Name: H		Equipment: Kubota U50-5	
Location Number TP01	Location Type TP	Level	Logged By CA	Scale 1:10	Page Number Sheet 1 of 1

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type	Results					
					0.45			MADE GROUND: Black slightly clayey slightly gravelly fine to coarse SAND with fragments of red brick, plastic and glass. Gravel is subangular to rounded fine to coarse of flint.	1
								Light brown sandy CLAY. Sand is fine to coarse.	
								Light brown mottled light grey slightly silty CLAY.	
					2.00			End of Borehole at 2.000m	2

Dimensions		Trench Support and Comment			Pumping Data		
Pit Length	Pit Width	Pit Stability	Shoring Used	Remarks	Date	Rate	Remarks
1.25	0.60						

Remarks No groundwater was encountered.							 EARTH ENVIRONMENTAL & GEOTECHNICAL
---	--	--	--	--	--	--	---

Trial Pit Log

Project Name: Land To Rear Of Oaklands		Client: Flo Consult Ltd		Date: 23/06/2023	
Location: Keymer Road, Burgess Hill, West Sussex, RH15 0AH		Contractor: P R Nicholls Ltd			
Project No. : R2962		Crew Name: H		Equipment: Kubota U50-5	
Location Number TP01A	Location Type TP	Level	Logged By CA	Scale 1:10	Page Number Sheet 1 of 1

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type	Results					
					0.60			MADE GROUND: Black slightly clayey slightly gravelly fine to coarse SAND with fragments of red brick, plastic and glass. Gravel is subangular to rounded fine to coarse of flint.	
					1.00			Light brown sandy CLAY. Sand is fine to coarse.	
								End of Borehole at 1.000m	1
									2

Dimensions		Trench Support and Comment			Pumping Data		
Pit Length	Pit Width	Pit Stability	Shoring Used	Remarks	Date	Rate	Remarks
1.25	0.60						

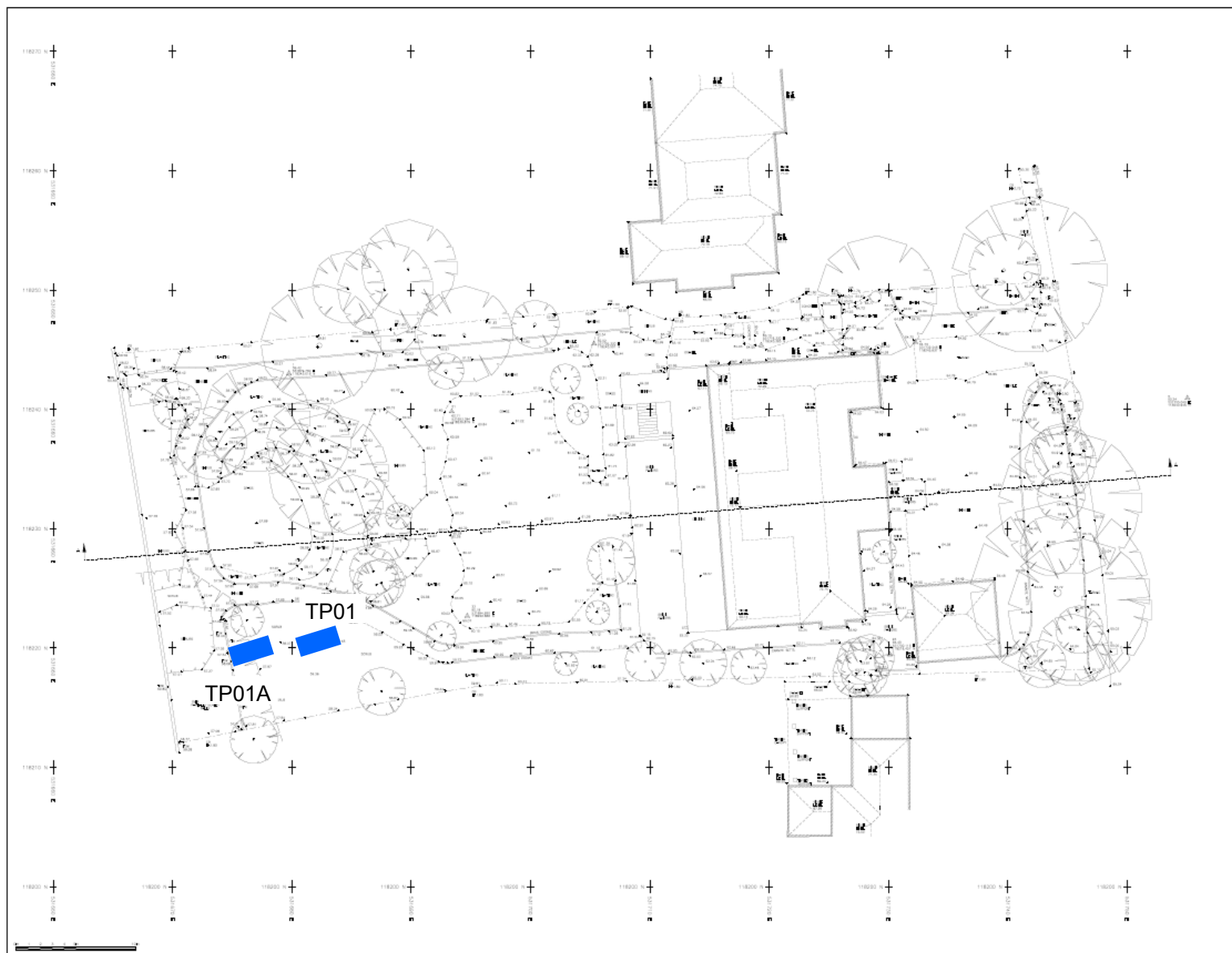
Remarks No groundwater was encountered.							 EARTH ENVIRONMENTAL & GEOTECHNICAL
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ENCLOSURE 2

SOAKAWAY TEST RESULT

ENCLOSURE 3

INVESTIGATION LOCATION PLAN



SITE: Land At Rear of Oaklands, Keymer Road, Burgess Hill

SCALE: NTS

Project NO: R2962

FIGURE TITLE: Test Location Plan

REV: 01

FIGURE NO: 01



RESEARCH SECTION,
SOUTH SIDE OFFICES,
WATERLOO. EXT. 2786.

BRITISH RAILWAYS, SOUTHERN REGION,
CHIEF CIVIL ENGINEER'S DEPARTMENT,
WATERLOO STATION, S.E.1.

DATUM FOR LEVELS :- GROUND LEVEL

GROUND LEVEL - APPROX. R.L.

POSITION :- SEE SITE PLAN.

DATE :- 17.4.59

SITE PLAN
No.

STRATA	THICKNESS	DEPTH (ft.)	KEY	WATER LEVELS	SAMPLES	REMARKS
TOP SOIL, ASHES, TRACK BALLAST AND PIECES OF CHALK	1' - 0"	1' - 0"				
DARK SOIL WITH PEA BALLAST AND LARGE ROUND BALLAST	0' - 9"	1' - 9"				
VERY DARK SOIL WITH MIXTURE OF SMALL STONES AND BRICK.	0' - 6"	2' - 3"				
WEATHERED CHALK (SOME PIECES UPTO 4" DIA.) BECOMING SOFT TO VERY SOFT.						
VERY LIGHT ORANGE SILTY CLAY	0' - 6"	8' - 1"				
LIGHT BROWN SILTY CLAY WITH LARGE CLAYSTONES	0' - 9"	9' - 4"				
DARK GREY SILTY CLAY	0' - 11"	10' - 3"				
SOFT GREENISH SILTY CLAY	1' - 0"	11' - 3"				
FIRM LIGHT BROWN/GREY MOTTLED SILTY CLAY WITH SMALL ROOTS AND SOME SMALL CLAYSTONES						
LIGHT BROWN/GREY MOTTLED CLAY. (FIRM)	2' - 7"	13' - 10"				
LIGHT BROWN/GREY MOTTLED CLAY WITH 'PER' SANDSTONE & BALLAST.	1' - 0"	14' - 10"				
FIRM LIGHT BROWN / GREY MOTTLED FISSURED SILTY CLAY WITH SOME SMALL ROOTS	1' - 2"	16' - 0"				
VERY SOFT LIGHT BROWN/GREY MOTTLED SILTY CLAY	3' - 9"	20' - 9"				
STIFF LIGHT BROWN/GREY						

standard penetration test
N=7

standard penetration test
N=3

standard penetration test
N=3 for 18 ins.

W.L. 16'-8"

RESEARCH SECTION,
SOUTH SIDE OFFICES,
WATERLOO. EXT. 2786.

BRITISH RAILWAYS, SOUTHERN REGION,
CHIEF CIVIL ENGINEER'S DEPARTMENT,
WATERLOO STATION, S.E.1.

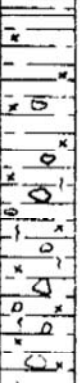
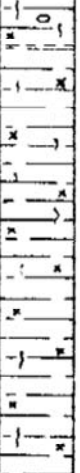
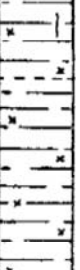
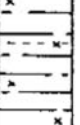
DATUM FOR LEVELS :- GROUND LEVEL

GROUND LEVEL :- APPROX. RAIL LEVEL

POSITION :- SEE SITE PLAN

DATE :- 23.4.59

SITE PLAN
No.

STRATA	THICKNESS	DEPTH (M)	KEY	WATER LEVELS	SAMPLES	REMARKS
GROUND MADE UP WITH DARK SOIL, PIECES OF WIRE, TINS & BALLAST	2'-3"	2'-3"			1'-0"	
LUMP CHALK IN 'PUG' (SHATTERED)		(0.69)			2'-6"	
" " " " "					3'-0"	T195
-----CHANGING TO-----	2'-10"	5'-1"			4'-6"	
SOFT, DARK BROWN LOAMY CLAY WITH LUMP CHALK, FLINTS AND ASHES.		(1.55)			6'-3"	
	2'-1"	7'-2"			7'-9"	T50
		(2.18)			9'-1"	T151
FIRM GREEN BROWN MOTTLED SILTY CLAY WITH FINE & MEDIUM FLINTS AND SMALL ROOTS - STRONG SMELL OF CREOSOTE - SMALL CLAYSTONES.					10'-7"	
	4'-1"	11'-3"			12'-2"	T70
		(3.43)			13'-10"	
FIRM LIGHT BROWN/GREY MOTTLED SILTY CLAY WITH SMALL ROOTS.					15'-6"	
	4'-11"	16'-2"			17'-0"	T69
		(4.93)			18'-4"	
FIRM LIGHT BROWN SILTY CLAY, SHATTERED.						T208
FIRM LIGHT BROWN/GREY MOTTLED SILTY CLAY, (WITH SMALL DECAYING ROOTS) BECOMING HARD						
	2'-5"	18'-7"				
		(5.66)				
AS ABOVE BUT CHANGING RAPIDLY TO STIFF.						