
CONTRACT: WICKENDEN MANOR

7238

DATE: JULY 2026

BY: CC

DRAINAGE STRATEGY

ISSUE HISTORY

Revision	Date	Comments
P1	31/07/2026	Planning Submission

Contents

ISSUE HISTORY	2
Introduction	4
Site Description	4
Development Proposals	4
SuDS Standards	4
Surface Water Drainage Discharge	5
Re-Use	5
Infiltration	5
Alternative Drainage Options	7
Drainage Design	7
Surface Water – Roofs	7
Surface Water – Hard Landscaping	7
Proposed Site Discharge Rates	8
Finished Floor Levels	8
Maintenance	8
Planters	9
Pond	10
Geo-Cellular Attenuation	11
Foul Water	12
Conclusion	12
Appendix A - Proposed Drainage Drawings	13



CONTRACT WICKENDEN MANOR
PAGE No. FD3
CONTRACT No. 7238
DATE JULY 2026
BY CC

Appendix B - Surface Water Calculations	14
Appendix C - Thames Water Sewer Map	15
Appendix D – Borehole Logs	16
Appendix E – Sewage Treatment Plant Assessment.....	17
Appendix F – Environment Agency Permit	18

Introduction

This drainage strategy has been developed as part of the planning application to show the site is being developed in a sustainable manner.

This report is to accompany TZG Partnership drawings 7238-D001 to D003 (Proposed Drainage Layout), 7238-D011 (Proposed Drainage Details), 7238-D013 (Proposed Manhole Schedules) and 7238-D014 (Proposed Detention Basin Section), and its purpose is to support and explain the methodology behind the drainage strategy for the site.

The following sections describes in detail the methods and assumptions behind the drainage strategy and how the site is proposed to drain in a sustainable manner.

Site Description

The site is an existing Manor development located at Chilling Street, Sharpthorne, West Sussex, RH19 4JB. The centre of the site is located at approximately TQ 38842 31956.

Development Proposals

The proposals are for alterations and an extension to Wickenden Manor.

SuDS Standards

The proposed drainage design has incorporated the 7 SuDS Standards as follows:

1. Runoff Destination – the proposed development will look to re-use rainwater in the form of water butts to rainwater downpipes and surface water will discharge to a watercourse, due to infiltration assess as not being viable.
2. Interception – rainwater downpipes from the existing buildings and proposed extension will discharge into SuDS Pods, which will consist of a planter with an integrated water butt.
3. Management of Extreme Rainfall – surface water discharge has been restricted as close as is reasonably practicable to greenfield runoff rates and hydraulic calculations have been included to demonstrate the proposed network has sufficient capacity.
4. Water Quality – planters, in the form of SuDS Pods, are proposed to rainwater downpipes and the proposed surface water network will utilise an existing pond for attenuation.
5. Amenity – high quality planting is proposed to rainwater planters.
6. Biodiversity – the surface water network will utilise an existing pond for attenuation, which will promote the existing biodiversity associated with the pond.
7. Drainage Management – the construction stage has been addressed in the CEMP document and operation/maintenance schedules have been included in this report.

Surface Water Drainage Discharge

For new developments there is a requirement to apply sustainable drainage principles (SuDS) to the disposal of surface water from the site. Generally, the aim should be to discharge surface water as high up the following hierarchy of drainage options as reasonably practicable:

1. Re-use;
2. Into the ground (infiltration);
3. To a surface water body;
4. To a surface water sewer or highway drain;
5. To a combined sewer.

Re-Use

Rainwater harvesting has been considered, however, there is insufficient room for a header tank. Therefore, water butts to rainwater downpipes are proposed, in order for rainwater re-use for soft landscaping.

Infiltration

Infiltration is the preferred method of water disposal as this reflects the natural ground conditions, recharges aquifers, lowers the risk of flooding as a result of urbanisation and lowers the chance of 'flash flooding'.

Intrusive ground investigation has been undertaken, which revealed shallow groundwater, likely due to the shallow bedrock. Infiltration is therefore not a viable means for disposing of surface water. Borehole logs have been included as **Appendix D**.

The bedrock geology local to the development site is identified as the Ashdown Formation - Sandstone and siltstone.

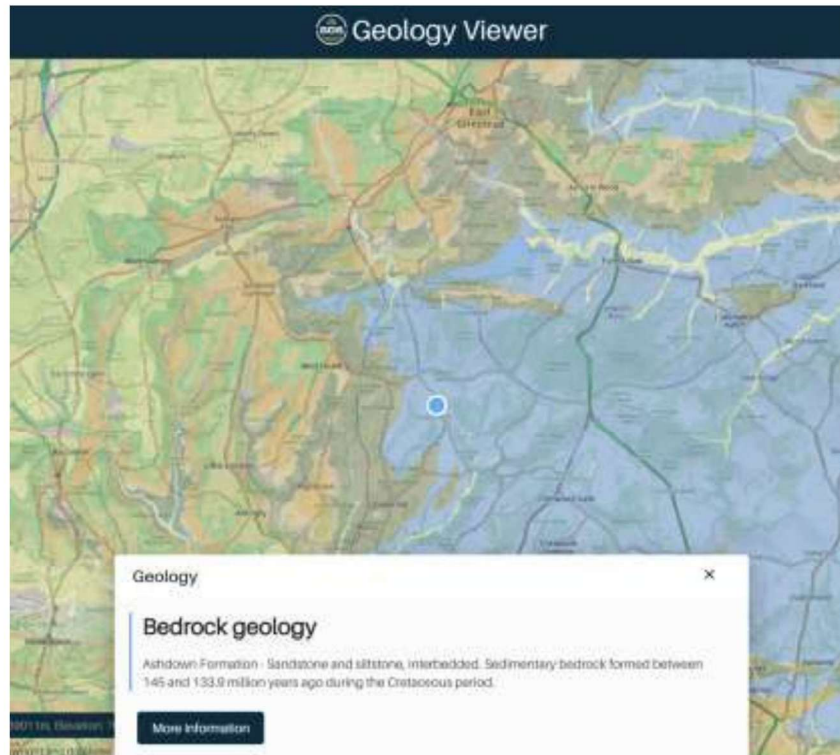


Figure 1 – Geological Map (Source: BGS Maps)

A search of the DEFRA 'Magic Map' shows that the development site is within the vicinity of a 'Source Protection Zone', however infiltration devices are not considered viable. Figure 2 below is an extract from the DEFRA 'Magic Map' showing 'Source Protection Zone' indicatively presented in coloured layers.

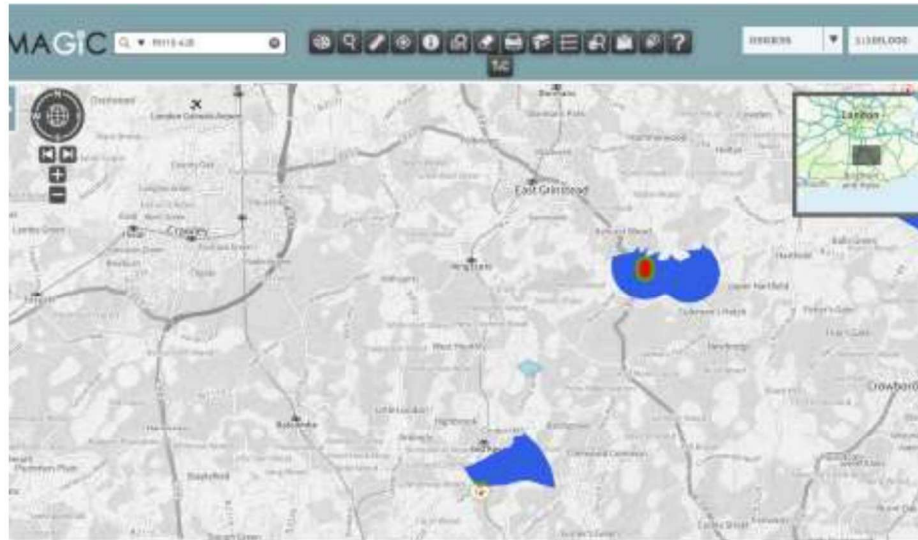


Figure 2 - Source Protection Zones (Source: DEFRA Magic Map)

Alternative Drainage Options

Discharge options for the proposed building have been assessed in accordance with the hierarchical approach set out in CIRIA's The SuDS Manual and The Building Regulations.

Infiltration is not viable, therefore an alternative method for disposing of surface water will need to be identified.

There is watercourse within the curtilage of the site, into which a connection could be made, subject to land drainage consent. Surface water discharge from the proposed development will therefore be via a watercourse.

Drainage Design

Surface Water – Roofs

Roof water will be collected via guttering and directed towards downpipes. The downpipes from the roof water will discharge into planters with integrated water butts that will have an overflow into a below ground gravity drainage system. The proposed surface water drainage system will discharge into the watercourse south of the site at a restricted flow rate, with attenuation in the form of geo-cellular storage and freeboard to an existing pond within the curtilage of the site. Drawings including a Proposed Drainage Layout and Details have been included in **Appendix A**.

Surface Water – Hard Landscaping

All proposed hard landscaping will consist of permeable construction (e.g. reinforced gravel), in order to not contribute to the overall impermeable area of the site.

Proposed Site Discharge Rates

Discharge from the proposed development will be restricted as close as is reasonably practicable to greenfield runoff rates, which has been calculated at 2.8 l/s. This would also provide significant betterment to the existing site, as shown below:

Return Periods/Peak Flows and Volumes for Impermeable Surfaces Only	1 in 2 year	1 in 30 year	1 in 100 year
Existing Flow Rate	25.9 l/s	48.1 l/s	78.4 l/s
Proposed Flow Rate	2.2 l/s	2.7 l/s	2.8 l/s
Betterment on Existing Flows	91.5%	94.4%	96.4%

Hydraulic calculations have been included as **Appendix B** which demonstrate that the attenuation has been sized appropriately to ensure no flooding in the critical 1%AEP storm event including a 45% allowance for climate change.

Finished Floor Levels

In line with best practice and in accordance with Building Regulations, the finished ground floor levels will generally be raised 150mm above proposed levels, other than local areas where level access is to be provided.

Maintenance

It is crucial that the elements mentioned in the drainage elements and water quality are maintained to a sufficient standard to ensure that the devices can still function. Generally, the maintenance requirements are either from CIRIA 753, or manufacturer's guidance.

Planters

Maintenance schedule	Required action	Typical frequency
Regular inspections	Inspect infiltration surfaces for silting and ponding, record de-watering time of the facility and assess standing water levels in underdrain (if appropriate) to determine if maintenance is necessary	Quarterly
	Check operation of underdrains by inspection of flows after rain	Annually
	Assess plants for disease infection, poor growth, invasive species etc and replace as necessary	Quarterly
	Inspect inlets and outlets for blockage	Quarterly
Regular maintenance	Remove litter and surface debris and weeds	Quarterly (or more frequently for tidiness or aesthetic reasons)
	Replace any plants, to maintain planting density	As required
	Remove sediment, litter and debris build-up from around inlets or from forebays	Quarterly to biannually
Occasional maintenance	Infill any holes or scour in the filter medium, improve erosion protection if required	As required
	Repair minor accumulations of silt by raking away surface mulch, scarifying surface of medium and replacing mulch	As required
Remedial actions	Remove and replace filter medium and vegetation above	As required but likely to be > 20 years

Figure 3 – Planter Maintenance Requirements (Source: CIRIA 753)

Pond

Maintenance schedule	Required action	Typical frequency
Regular maintenance	Remove litter and debris	Monthly (or as required)
	Cut the grass – public areas	Monthly (during growing season)
	Cut the meadow grass	Half yearly (spring, before nesting season, and autumn)
	Inspect marginal and bankside vegetation and remove nuisance plants (for first 3 years)	Monthly (at start, then as required)
	Inspect inlets, outlets, banksides, structures, pipework etc for evidence of blockage and/or physical damage	Monthly
	Inspect water body for signs of poor water quality	Monthly (May – October)
	Inspect silt accumulation rates in any forebay and in main body of the pond and establish appropriate removal frequencies; undertake contamination testing once some build-up has occurred, to inform management and disposal options	Half yearly
	Check any mechanical devices, eg penstocks	Half yearly
	Hand cut submerged and emergent aquatic plants (at minimum of 0.1 m above pond base; include max 25% of pond surface)	Annually
	Remove 25% of bank vegetation from water's edge to a minimum of 1 m above water level	Annually
	Tidy all dead growth (scrub clearance) before start of growing season (Note: tree maintenance is usually part of overall landscape management contract)	Annually
	Remove sediment from any forebay.	Every 1–5 years, or as required
	Remove sediment and planting from one quadrant of the main body of ponds without sediment forebays.	Every 5 years, or as required
Occasional maintenance	Remove sediment from the main body of big ponds when pool volume is reduced by 20%	With effective pre-treatment, this will only be required rarely, eg every 25–50 years
Remedial actions	Repair erosion or other damage	As required
	Replant, where necessary	As required
	Aerate pond when signs of eutrophication are detected	As required
	Realign rip-rap or repair other damage	As required
	Repair / rehabilitate inlets, outlets and overflows.	As required

Figure 4 – Pond Maintenance Requirements (Source: CIRIA 753)

Geo-Cellular Attenuation

Maintenance schedule	Required action	Typical frequency
Regular maintenance	Inspect and identify any areas that are not operating correctly. If required, take remedial action	Monthly for 3 months, then annually
	Remove debris from the catchment surface (where it may cause risks to performance)	Monthly
	For systems where rainfall infiltrates into the tank from above, check surface of filter for blockage by sediment, algae or other matter; remove and replace surface infiltration medium as necessary.	Annually
	Remove sediment from pre-treatment structures and/or internal forebays	Annually, or as required
Remedial actions	Repair/rehabilitate inlets, outlet, overflows and vents	As required
Monitoring	Inspect/check all inlets, outlets, vents and overflows to ensure that they are in good condition and operating as designed	Annually
	Survey inside of tank for sediment build-up and remove if necessary	Every 5 years or as required

Figure 5 – Geo-Cellular Attenuation Maintenance Requirements (Source: CIRIA 753)

Foul Water

The existing site is served by a sewage treatment plant, which discharges into the watercourse south of the site. An assessment has been undertaken by Moody Sewage and included as Appendix E. The current system is assessed to have a capacity for 15m³/day of foul flows, with a current environmental permit for the same amount.

The proposed development is calculated to produce a total of 14.25m³/day foul flows, and therefore the existing sewage treatment plant will have sufficient capacity for the proposed foul flows.

The assessment produced by Moody Sewage proposed repairs and maintenance to the existing sewage treatment system, which should be undertaken prior to completion of the proposed development.

Conclusion

- This drainage strategy document demonstrates that the site can be drained appropriately including the use of a Sustainable Drainage System.
- All storm water, up to and including the 1 in 100 year event + 40% climate change events are stored below ground.
- The proposals do not increase the risk of flooding and are therefore compatible with the requirements of NPPF.
- Infiltration is not viable due to high groundwater.
- A proposed drainage layout can be found in TZG Partnership drawings 7238-D001 to D003.
- Finished floor levels will be set at a minimum of 150mm above existing ground levels. The finished floor levels shown on the drawings are indicative only and are subject to change to suit the specific plot drainage.
- The existing sewage treatment plant has sufficient capacity for the foul flows generated from the proposed development.
- Repairs and maintenance to the existing sewage treatment plant, as recommended by Moody Sewage's assessment report, should be undertaken prior to completion of the proposed development.



CONTRACT	.....	WICKENDEN MANOR
PAGE No.	.....	FD13
CONTRACT No.	.....	7238
DATE	.....	JULY 2026
BY	.....	CC

Appendix A - Proposed Drainage Drawings



NOTES
1. It is recommended that no work is carried out until Building Regulations approval has been obtained. 2. It is essential that T2G are notified of any discrepancies or subsequent changes prior to them being implemented. 3. Do not scale from this drawing. 4. This drg is to be read in conjunction with the specification and architects drawings.

- Drainage Notes**
- All 100Ø proposed drainage pipes shown are to be laid at a minimum gradient of 1:80.
- All 150Ø proposed drainage pipes shown are to be laid at a minimum gradient of 1:150.
- All existing land drains encountered on site during construction are to be re-connected.
- Temporary protection to be provided to drainage work during construction as necessary.
- Topographical survey and architectural layout based on third party information.
- Topographical information taken from a survey to a temporary benchmark/datum, and not Ordnance Datum.
- Anticipated foul flow rates calculated using discharge unit method to BS EN 12056-2.
- Drawing to be read in conjunction with Causeway Flow design pack.
- Pipes to be structured walled to BS EN 13476, Polypropylene to BE EN 1852 or PVC U to BS EN 1401.
- Both clay and concrete pipes shall be strength class 120 (100/150mm min crushing strength 28kN/m). Thermoplastic pipes shall have a minimum ring stiffness of SN4
- Pipes which run adjacent to buildings shall be installed in strict accordance with Building Regulations Part H, clauses 2.23 to 2.25
- Class Z concrete bed and surround to all foul and surface water pipes with less than 900mm cover depth. Type S granular bed and surround to all foul and surface water pipes with greater than 900mm cover depth.
- All manholes and inspection chambers subject to vehicular trafficking to have D400 load-rated covers and frames to BS EN 124. All manholes and inspection chambers not subject vehicular trafficking to have B125 load-rated covers and frames to BS EN 124.
- Concrete to be GEN1 unless specified otherwise.
- The first flexible joint in pipes adjoining a manhole shall be a maximum length of 600mm from the inside face of the manhole, connecting to a rocker pipe. The length of the rocker pipe shall be 600mm.
- All foul and surface water pipes to be constructed to Building Regulations Part H.

- DM Requirements**
- Task** - Deep excavation
- Control method** - Contractor to design trench support to depths shown on drawings and the manhole schedule, appropriate to the ground conditions.
- Task** - Water ingress into excavations, including ground water
- Control method** - Contractor to specify method of dealing with ingress of water into excavations, in particular if ground water is experienced. Contractor to undertake trench inspections prior to entry into any excavation, and again if left overnight or if conditions change.

Key		
	Proposed Surface Water Drainage	
	Proposed Linear Drain	
	Existing Drainage	
	Proposed Foul Water Drainage	
	Proposed Inspection Chamber	
	Proposed Manhole	
	Proposed Rainwater Pipe (to planter/water butt)	
	Proposed Foul Pop-Up (with rodding access)	
	Proposed Headwall	
	Proposed Bund/Berm	
	Proposed Detention Basin (extension to existing pond)	

P1	31/07/2026	Drainage layout
REV.	DATE	DESCRIPTION
CLIENT		
Netherhall Education Association		
CONTRACT		
Wickenden Manor		
TITLE		
Proposed Drainage Layout		
1 of 3		
T2G PARTNERSHIP ENGINEERING CONSULTANTS Orchard House, 114-118 Cherry Orchard Road, Croydon CR0 8BA T: +44(0)20 8881 2137 F: +44(0)20 8867 1328 E: admin@t2gpartnership.com W: www.t2gpartnership.com		
SCALE	1:250@A1	DRAWN CC DATE July '26
CONTRACT No.	7238	DRG. No. D001 REVISION P1

Proposed Drainage Layout
Scale 1:250



Proposed Drainage Layout
Scale 1:250

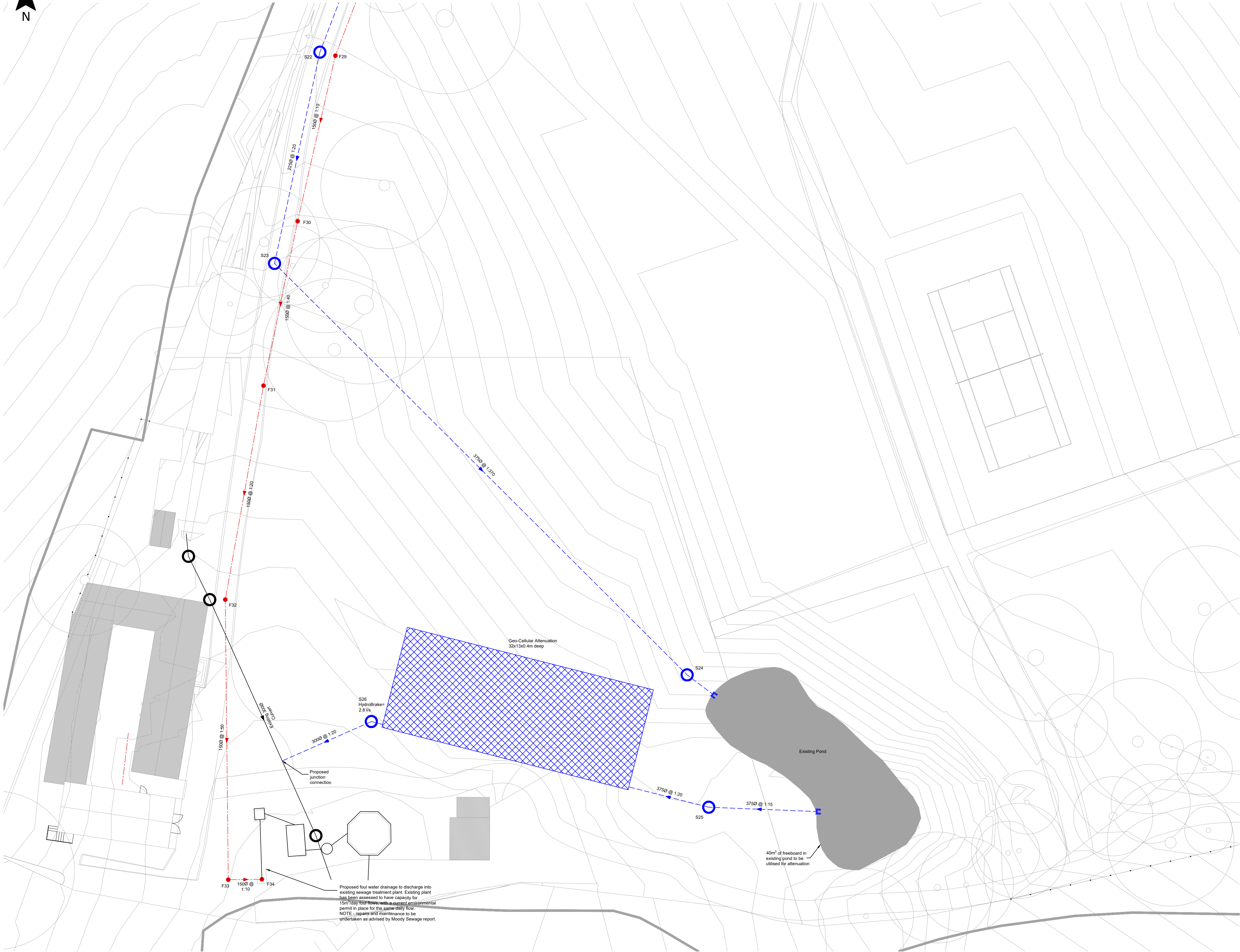
NOTES
1. It is recommended that no work is carried out until Building Regulations approval has been obtained. 2. It is essential that T2G are notified of any discrepancies or subsequent changes prior to them being implemented. 3. Do not scale from this drawing. 4. This drg is to be read in conjunction with the specification and architects drawings.

- Drainage Notes**
- All 1000 proposed drainage pipes shown are to be laid at a minimum gradient of 1:80.
 - All 1500 proposed drainage pipes shown are to be laid at a minimum gradient of 1:150.
 - All existing land drains encountered on site during construction are to be re-connected.
 - Temporary protection to be provided to drainage work during construction as necessary.
 - Topographical survey and architectural layout based on third party information.
 - Topographical information taken from a survey to a temporary benchmark/datum, and not Ordnance Datum.
 - Anticipated foul flow rates calculated using discharge unit method to BS EN 12056-2.
 - Drawing to be read in conjunction with Causeway Flow design pack.
 - Pipes to be structured walled to BS EN 13476, Polypropylene to BE EN 1852 or PVC-U to BS EN 1401.
 - Both clay and concrete pipes shall be strength class 120 (100/150mm min crushing strength 28kN/m). Thermoplastic pipes shall have a minimum ring stiffness of SN4.
 - Pipes which run adjacent to buildings shall be installed in strict accordance with Building Regulations Part H, clauses 2.23 to 2.25.
 - Class Z concrete bed and surround to all foul and surface water pipes with less than 900mm cover depth. Type S granular bed and surround to all foul and surface water pipes with greater than 900mm cover depth.
 - All manholes and inspection chambers subject to vehicular trafficking to have D400 load-rated covers and frames to BS EN 124. All manholes and inspection chambers not subject vehicular trafficking to have B125 load-rated covers and frames to BS EN 124.
 - Concrete to be GEN1 unless specified otherwise.
 - The first flexible joint in pipes adjoining a manhole shall be a maximum length of 600mm from the inside face of the manhole, connecting to a rocker pipe. The length of the rocker pipe shall be 600mm.
 - All foul and surface water pipes to be constructed to Building Regulations Part H.

- CDM Requirements**
Risk - Deep excavation
Control method - Contractor to design trench support to depths shown on drawings and in the manhole schedule, appropriate to the ground conditions.
Risk - Water ingress into excavations, including ground water
Control method - Contractor to specify method of dealing with ingress of water into excavations, in particular if ground water is experienced. Contractor to undertake trench inspections prior to entry into any excavation, and again if left overnight or if conditions change.

Key	
	Proposed Surface Water Drainage
	Proposed Linear Drain
	Existing Drainage
	Proposed Foul Water Drainage
	Proposed Inspection Chamber
	Proposed Manhole
	Proposed Rainwater Pipe (to planter/water butt)
	Proposed Foul Pop-Up (with rodding access)
	Proposed Headwall
	Proposed Bund/Berm
	Proposed Detention Basin (extension to existing pond)

P1	31/07/2026	Drainage layout
REV.	DATE	DESCRIPTION
CLIENT		
Netherhall Education Association		
CONTRACT		
Wickenden Manor		
TITLE		
Proposed Drainage Layout 2 of 3		
T2G PARTNERSHIP ENGINEERING CONSULTANTS Orchard House, 114-116 Cherry Orchard Road, Croydon CR0 6BA T: +44(0)20 8861 2137 F: +44(0)20 8867 1328 E: admin@t2gpartnership.com W: www.t2gpartnership.com		
SCALE	1:250@A1	DRAWN CC DATE July '26
CONTRACT No.	7238	DRG. No. D002 REVISION P1



Proposed Drainage Layout
Scale 1:250

NOTES

1. It is recommended that no work is carried out until Building Regulations approval has been obtained.
2. It is essential that TZG are notified of any discrepancies or subsequent changes prior to them being implemented.
3. Do not scale from this drawing.
4. This drg is to be read in conjunction with the specification and architects drawings.

Drainage Notes

1. All 1000Ø proposed drainage pipes shown are to be laid at a minimum gradient of 1:80.
2. All 1500Ø proposed drainage pipes shown are to be laid at a minimum gradient of 1:150.
3. All existing land drains encountered on site during construction are to be re-connected.
4. Temporary protection to be provided to drainage work during construction as necessary.
5. Topographical survey and architectural layout based on third party information.
6. Topographical information taken from a survey to a temporary benchmark/datum, and not Ordnance Datum.
7. Anticipated foul flow rates calculated using discharge unit method to BS EN 12056-2.
8. Drawing to be read in conjunction with Causeway Flow design pack.
9. Pipes to be structured walled to BS EN 13476, Polypropylene to BE EN 1852 or PVC-U to BS EN 1401.
10. Both clay and concrete pipes shall be strength class 120 (100/150mm min crushing strength 28kN/m). Thermoplastic pipes shall have a minimum ring stiffness of SN4.
11. Pipes which run adjacent to buildings shall be installed in strict accordance with Building Regulations Part H, clauses 2.23 to 2.25.
12. Class Z concrete bed and surround to all foul and surface water pipes with less than 900mm cover depth. Type S granular bed and surround to all foul and surface water pipes with greater than 900mm cover depth.
13. All manholes and inspection chambers subject to vehicular trafficking to have D400 load-rated covers and frames to BS EN 124. All manholes and inspection chambers not subject vehicular trafficking to have B125 load-rated covers and frames to BS EN 124.
14. Concrete to be GEN1 unless specified otherwise.
15. The first flexible joint in pipes adjoining a manhole shall be a maximum length of 600mm from the inside face of the manhole, connecting to a rocker pipe. The length of the rocker pipe shall be 600mm.
16. All foul and surface water pipes to be constructed to Building Regulations Part H.

CDM Requirements

Risk - Deep excavation

Control method - Contractor to design trench support to depths shown on drawings and in the manhole schedule, appropriate to the ground conditions.

Risk - Water ingress into excavations, including ground water

Control method - Contractor to specify method of dealing with ingress of water into excavations, in particular if ground water is experienced. Contractor to undertake trench inspections prior to entry into any excavation, and again if left overnight or if conditions change.

Key

- Proposed Surface Water Drainage
- Proposed Linear Drain
- Existing Drainage
- Proposed Foul Water Drainage
- Proposed Inspection Chamber
- Proposed Manhole
- Proposed Rainwater Pipe (to planter/water butt)
- Proposed Foul Pop-Up (with rodding access)
- Proposed Headwall
- Proposed Geo-Cellular Attenuation

P1

31/07/2026

Drainage layout

REV.

DATE

DESCRIPTION

CLIENT

Netherhall Education Association

CONTRACT

Wickenden Manor

TITLE

Proposed Drainage Layout
3 of 3



TZG PARTNERSHIP
ENGINEERING CONSULTANTS
Orchard House, 114-118 Cherry Orchard Road, Croydon CR9 6BA
T: +44(0)20 8661 2137 F: +44(0)20 8667 1328
E: admin@tzgpartnership.com W: www.tzgpartnership.com

SCALE

1:250@A1

DRAWN

CC

DATE

July '26

CONTRACT No.

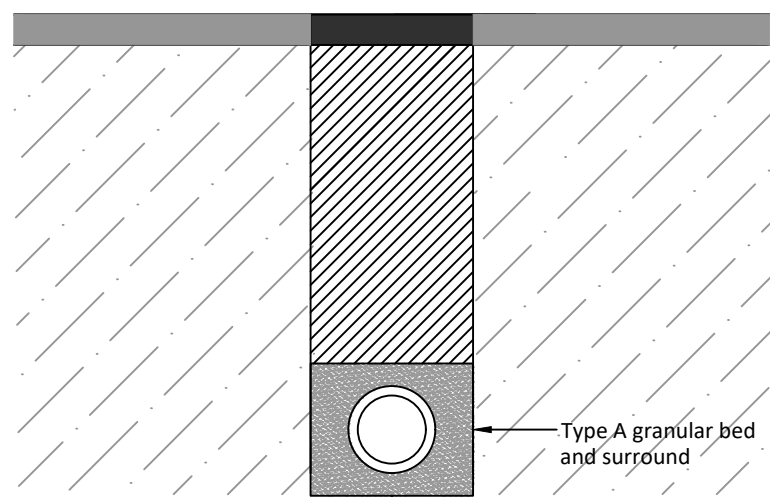
7238

DRG. No.

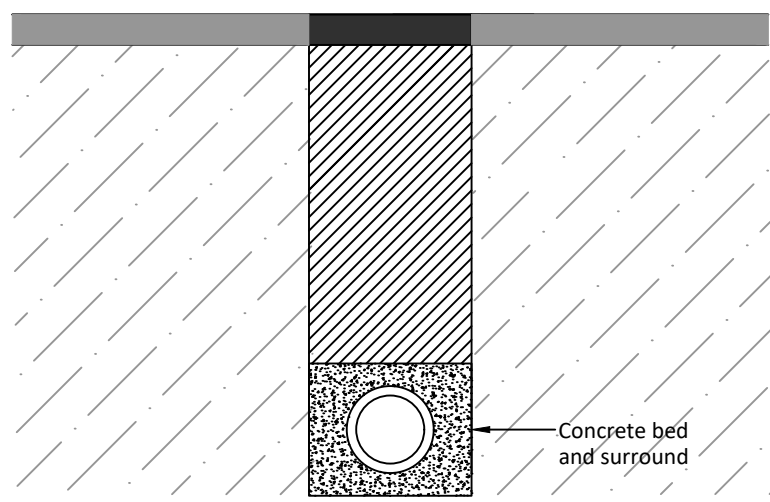
D003

REVISION

P1



Class S granular bed and surround -
pipe cover depth >900mm
(>600mm non-trafficked areas)

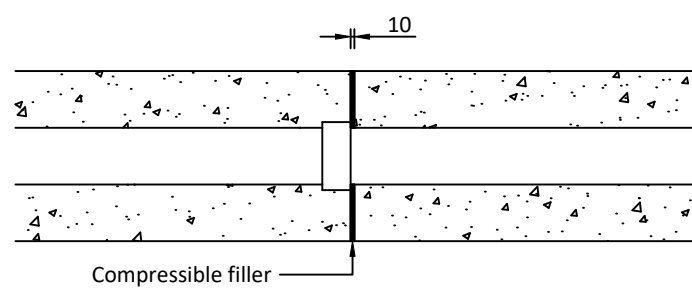


Class Z concrete bed and surround -
pipe cover depth <900mm
(<600mm non-trafficked areas)

Typical Pipe Bedding Details

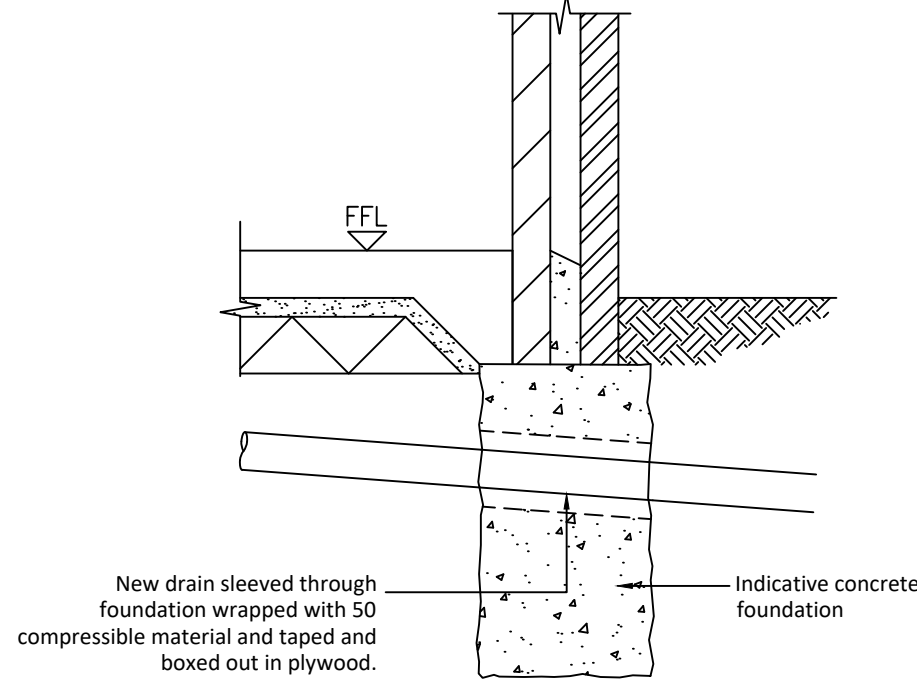
Scale 1:50

- Selected backfill material
- Granular bedding material
- Concrete bedding material
- Surface reinstatement as per soft or hard landscaping specification



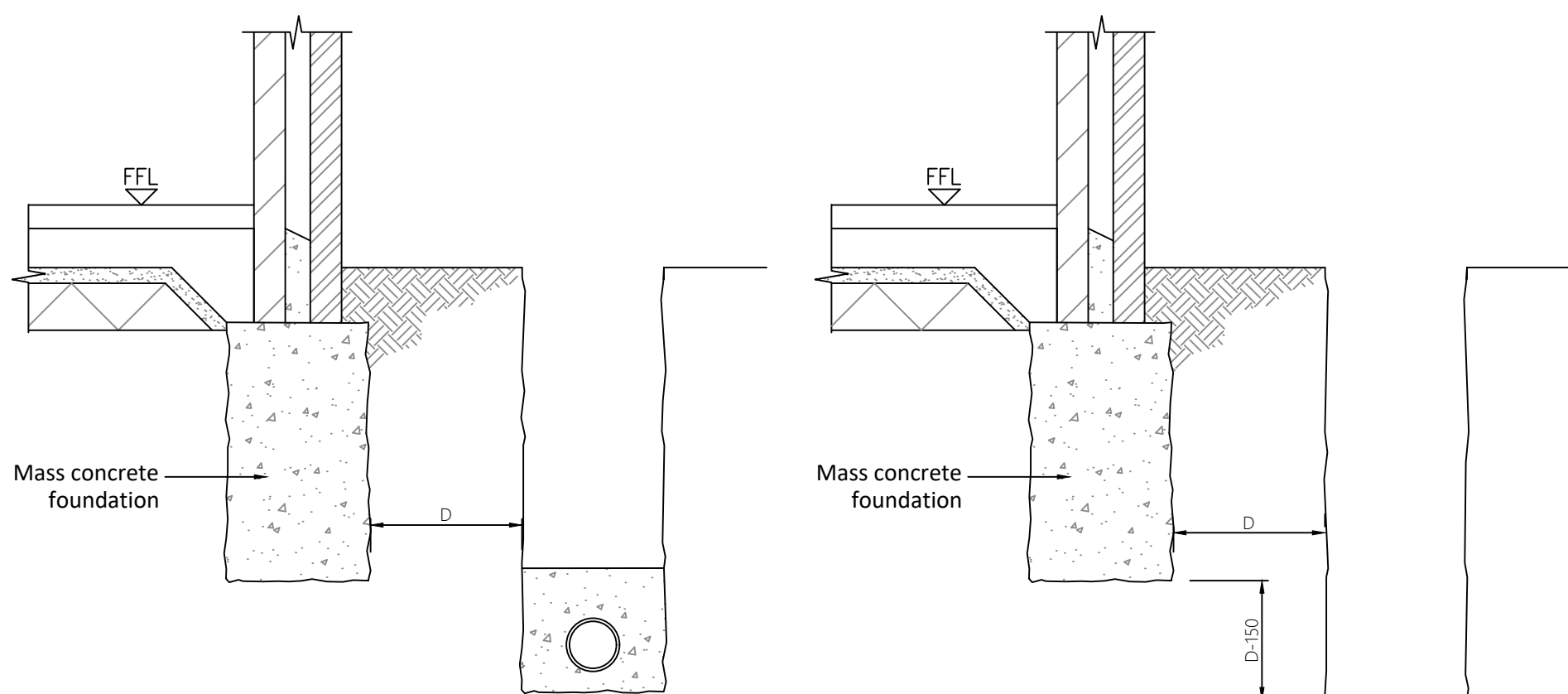
Typical Flexible Joint to Concrete Bed and Surround Details

Scale 1:20



Drain Sleeved Through Foundation Detail

Scale 1:20

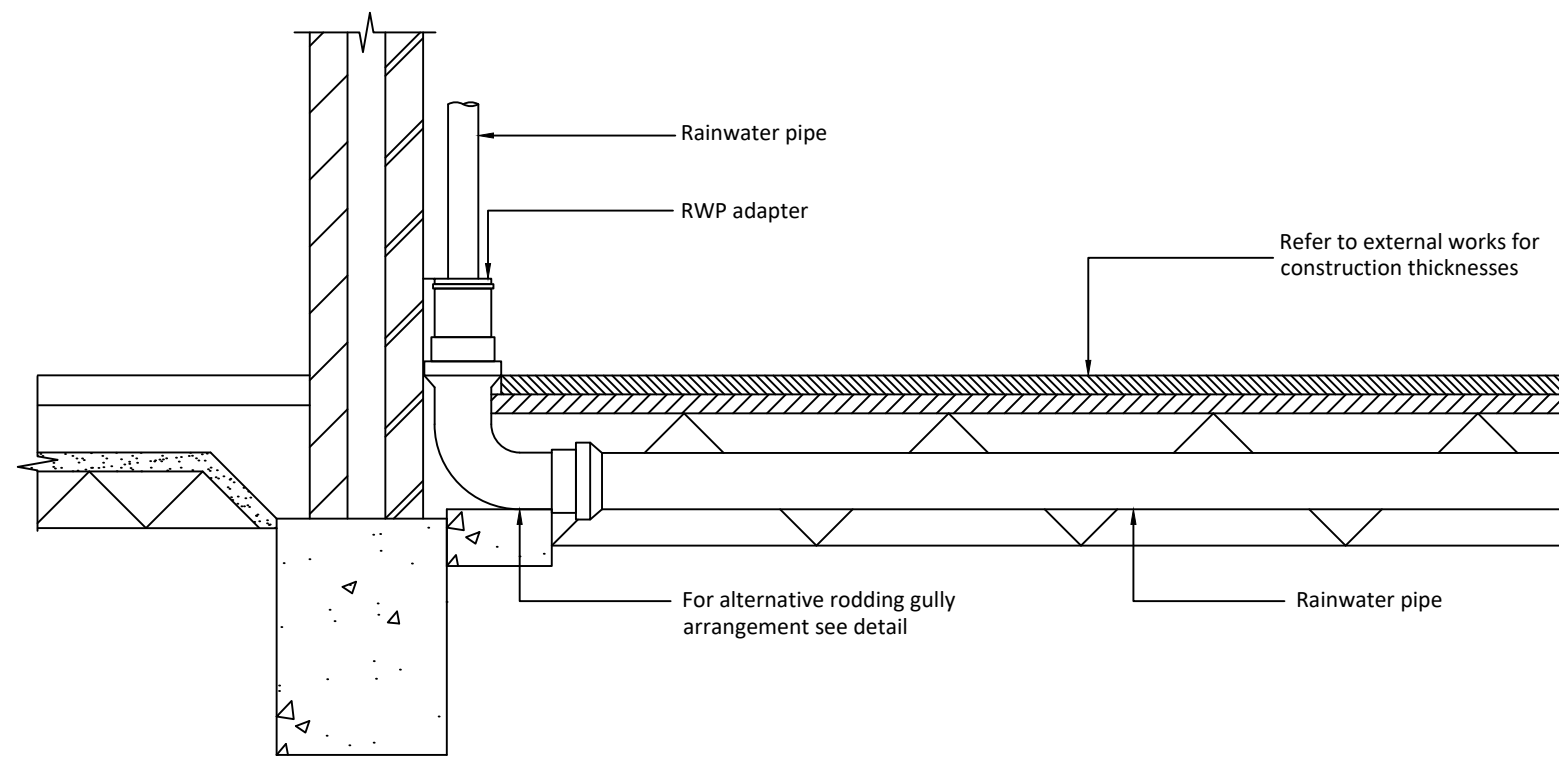


When D is less than 1000, concrete
fill to level of foundation bottom

When D is 1000 or more, concrete fill to
within D-150 of level of foundation
bottom

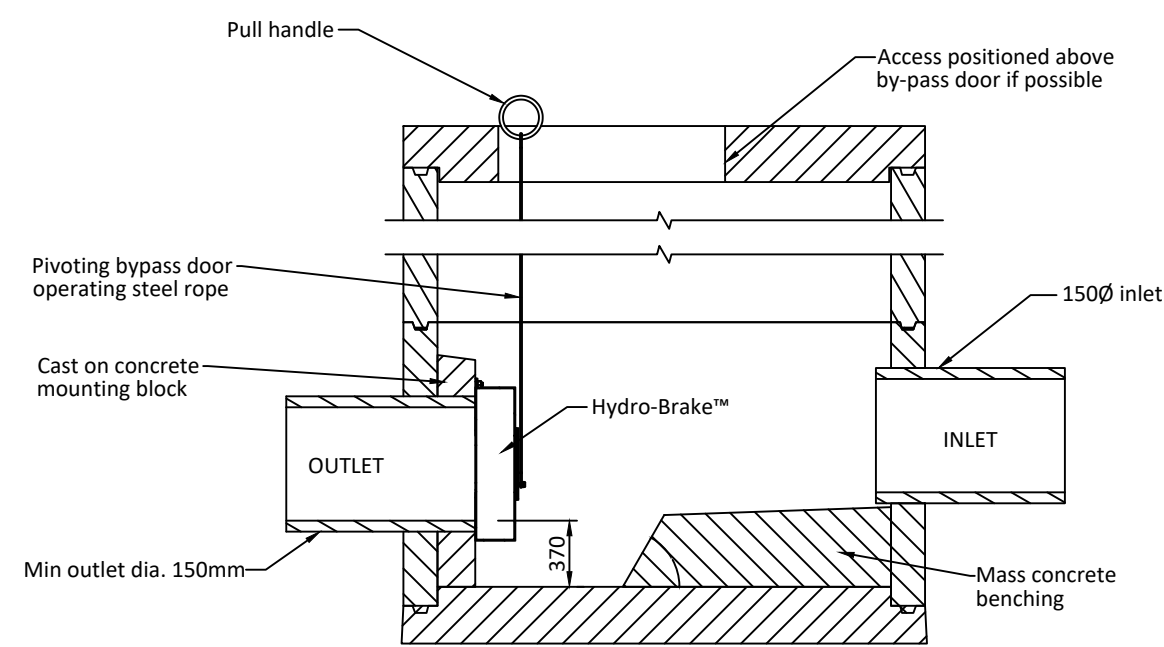
Pipe Protection Near Foundation Details

Scale 1:20



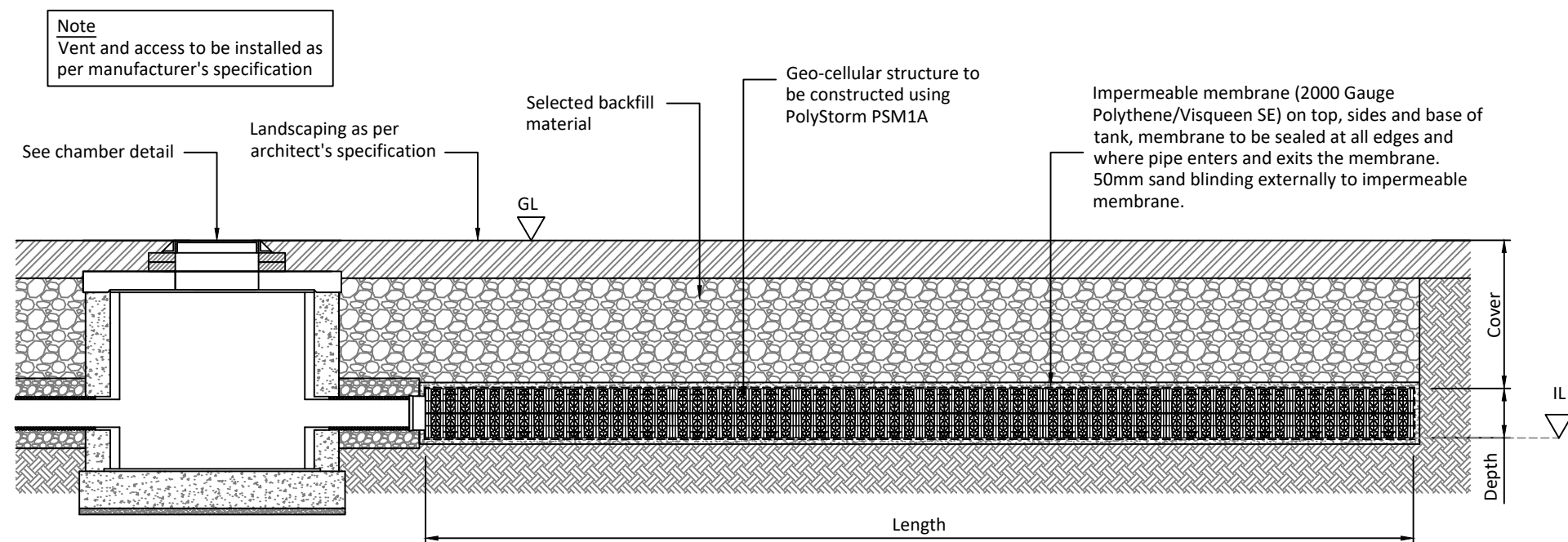
Typical Rainwater Pipe Detail

Scale 1:20



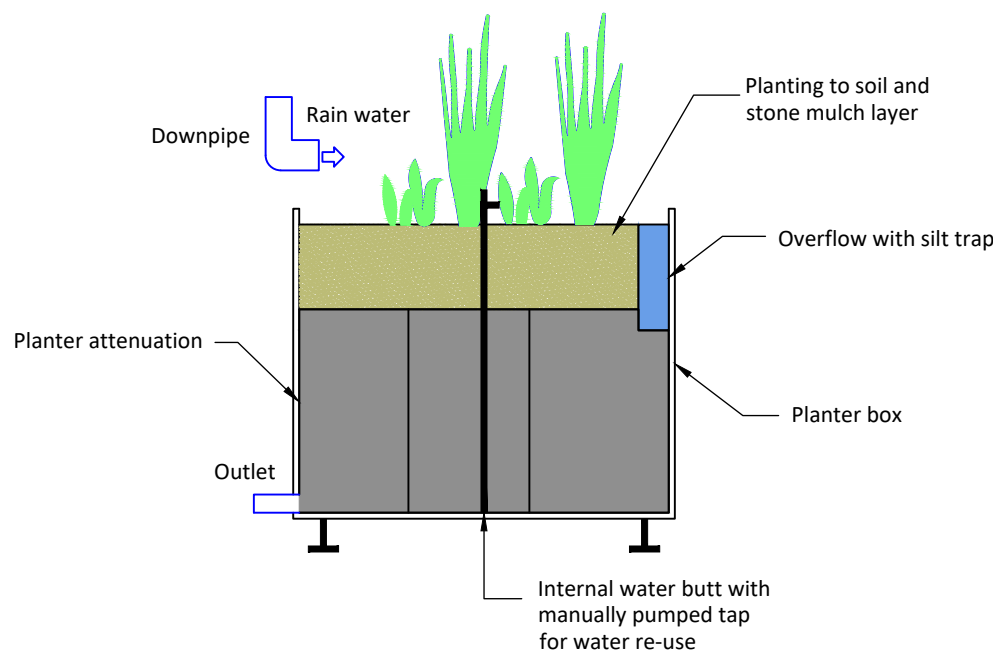
Typical HydroBrake Chamber Detail

Scale 1:20



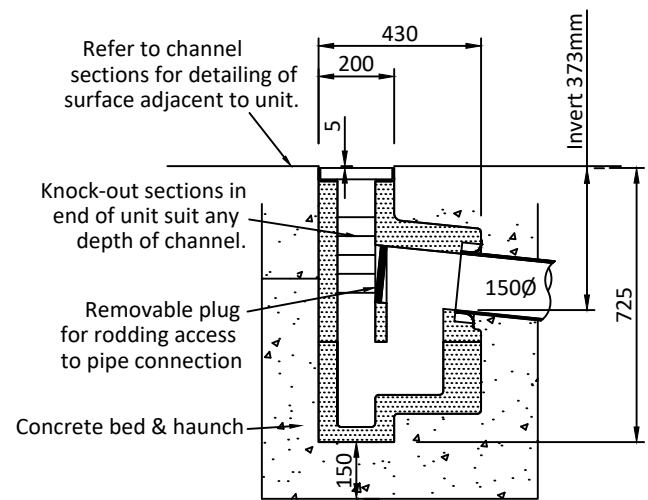
Typical Geo-Cellular Attenuation Detail

Scale 1:50



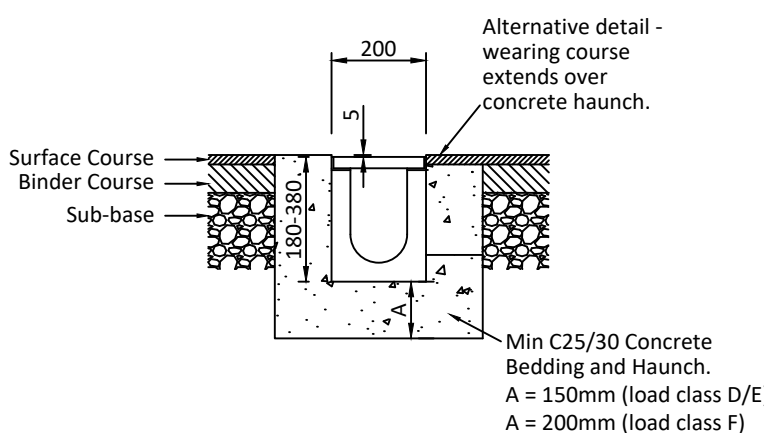
Typical SuDS Pod Planter Detail

Scale 1:25



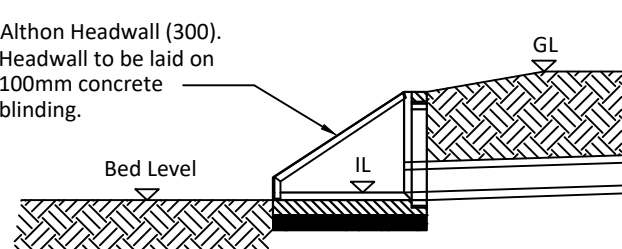
Typical Linear Drain Outfall Detail

Scale 1:20



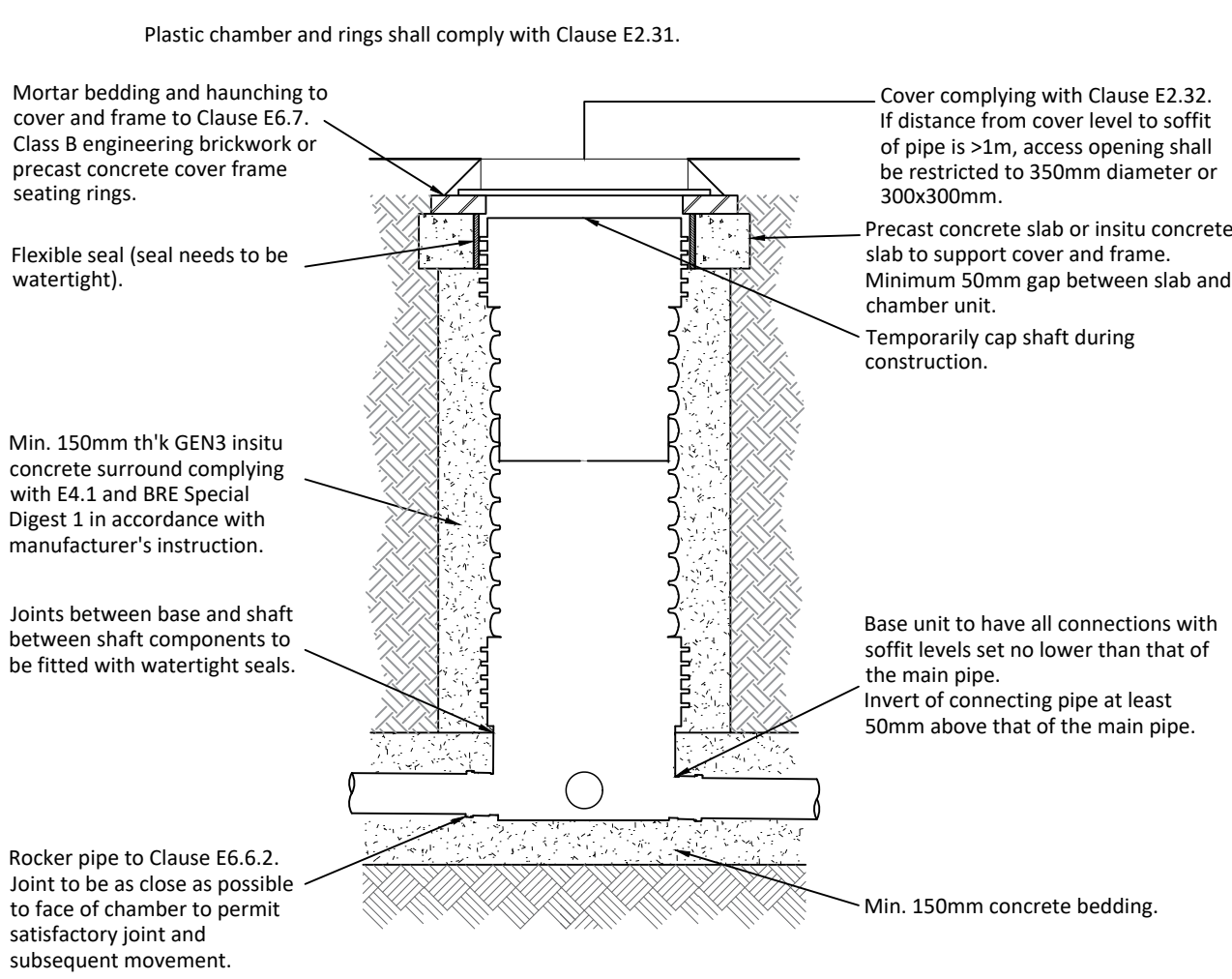
Typical Linear Drain Detail

Scale 1:20



Typical Headwall Detail

Scale 1:50



Typical Inspection Chamber Detail

Scale 1:20

NOTES

1. It is recommended that no work is carried out until Building Regulations approval has been obtained.
2. It is essential that TZG are notified of any discrepancies or subsequent changes prior to them being implemented.
3. Do not scale from this drawing.
4. This drg is to be read in conjunction with the specification and architects drawings.

Drainage Notes

1. All 1000Ø proposed drainage pipes shown are to be laid at a minimum gradient of 1:80.
2. All 150Ø proposed drainage pipes shown are to be laid at a minimum gradient of 1:150.
3. All existing land drains encountered on site during construction are to be re-connected.
4. Temporary protection to be provided to drainage work during construction as necessary.
5. Topographical survey and architectural layout based on third party information.
6. Topographical information taken from a survey to a temporary benchmark/datum, and not Ordnance Datum.
7. Anticipated foul flow rates calculated using discharge unit method to BS EN 12056-2.
8. Drawing to be read in conjunction with Causeway Flow design pack.
9. Pipes to be structured walled to BS EN 13476, Polypropylene to BE EN 1852 or PVC-U to BS EN 1401.
10. Both clay and concrete pipes shall be strength class 120 (100/150mm min crushing strength 28kN/m). Thermoplastic pipes shall have a minimum ring stiffness of SN4.
11. Pipes which run adjacent to buildings shall be installed in strict accordance with Building Regulations Part H, clauses 2.23 to 2.25.
12. Class Z concrete bed and surround to all foul and surface water pipes with less than 900mm cover depth. Type S granular bed and surround to all foul and surface water pipes with greater than 900mm cover depth.
13. All manholes and inspection chambers subject to vehicular trafficking to have D400 load-rated covers and frames to BS EN 124. All manholes and inspection chambers not subject vehicular trafficking to have B125 load-rated covers and frames to BS EN 124.
14. Concrete to be GEN1 unless specified otherwise.
15. The first flexible joint in pipes adjoining a manhole shall be a maximum length of 600mm from the inside face of the manhole, connecting to a rocker pipe. The length of the rocker pipe shall be 600mm.
16. All foul and surface water pipes to be constructed to Building Regulations Part H.

CDM Requirements

Risk - Deep excavation

Control method - Contractor to design trench support to depths shown on drawings and in the manhole schedule, appropriate to the ground conditions.

Risk - Water ingress into excavations, including ground water

Control method - Contractor to specify method of dealing with ingress of water into excavations, in particular if ground water is experienced. Contractor to undertake trench inspections prior to entry into any excavation, and again if left overnight or if conditions change.

P1	31/07/2026	Details
REV.	DATE	DESCRIPTION
CLIENT		
Netherhall Education Association		
CONTRACT		
Wickenden Manor		
TITLE		
Proposed Drainage Details		
TZG PARTNERSHIP ENGINEERING CONSULTANTS Orchard House, 114-118 Cherry Orchard Road, Croydon CR9 6BA T: +44(0)20 8661 2137 F: +44(0)20 8667 1328 E: info@tzgpartnership.com W: www.tzgpartnership.com		
SCALE	Varies@A1	DRAWN CC
CONTRACT No.	7238	DATE July '26
DRG. No.	D011	REVISION P1

Chamber Reference	Easting (m)	Northing (m)	CL (m)	Depth (m)	Dia (mm)	Chamber Type	Connections	IL (m)	Dia (mm)
F1	538715	131951	151.000	0.700	450	PPIC		150.300	100
F2	538704	131945	149.700	0.700	450	PPIC		149.000	100
F3	538699	131954	149.700	0.962	450	PPIC		149.000	100
F4	538696	131970	150.900	0.700	450	PPIC		148.738	100
F5	538692	131965	149.500	1.679	450	PPIC		148.738	100
F6	538673	131967	146.700	1.626	450	PPIC		147.871	100
F7	538662	131947	144.500	2.657	450	PPIC		147.871	100
F8	538644	131911	139.400	3.324	450	PPIC		147.821	150
F9	538668	131853	141.600	0.700	450	PPIC		145.074	150
F10	538681	131848	141.600	1.057	450	PPIC		145.074	150
F11	538707	131838	141.600	1.459	450	PPIC		141.843	150
F12	538709	131843	141.700	1.593	450	PPIC		141.843	150
F13	538711	131847	141.700	1.624	450	PPIC		136.076	150
F14	538713	131853	141.700	1.664	450	PPIC		136.076	150
F15	538715	131858	141.700	1.702	450	PPIC		140.900	100
F16	538707	131861	141.900	1.961	450	PPIC		140.543	100
F17	538701	131862	141.900	2.000	450	PPIC		140.543	100
F18	538691	131866	141.900	2.073	450	PPIC		140.191	100
F19	538686	131869	141.900	0.700	450	PPIC		140.141	150
F20	538691	131871	141.900	2.106	450	PPIC		140.107	150
F21	538691	131887	143.500	3.810	450	PPIC		140.107	150
F22	538676	131897	141.500	1.927	450	PPIC		140.076	150
F23	538670	131899	141.400	1.874	450	PPIC		140.036	150

Foul Water Manhole Schedules									
Chamber Reference	Easting (m)	Northing (m)	CL (m)	Depth (m)	Dia (mm)	Chamber Type	Connections	IL (m)	Dia (mm)
F24	538669	131897	141.400	1.888	450	PPIC		139.512	150
							0	139.512	150
F25	538659	131902	140.500	1.065	450	PPIC		139.435	150
							0	139.435	150
F26	538652	131885	138.750	0.750	450	PPIC		138.000	150
							0	138.000	150
F27	538623	131874	135.600	1.620	450	PPIC		133.980	150
							2	133.980	150
							0	133.980	150
F28	538608	131834	133.000	0.750	450	PPIC		132.250	150
							0	132.250	150
F29	538591	131790	129.000	0.750	450	PPIC		128.250	150
							0	128.250	150
F30	538586	131769	127.500	2.308	450	PPIC		125.192	150
							0	125.192	150
F31	538582	131748	125.600	0.937	450	PPIC		124.663	150
							0	124.663	150
F32	538577	131721	123.700	0.750	450	PPIC		122.950	150
							0	122.950	150
F33	538577	131686	122.900	0.750	450	PPIC		122.150	150
							0	122.150	150
F34	538581	131686	122.400	0.750	450	PPIC		121.650	150

Surface Water Manhole Schedules										
Chamber Reference	Easting (m)	Northing (m)	CL (m)	Depth (m)	Dia (mm)	Sump (m)	Chamber Type	Connections	IL (m)	Dia (mm)
S1	538715	131960	151.200	1.000	450		PPIC			
								0	150.200	100
S2	538719	131951	151.200	1.164	450		PPIC		150.036	100
								0	150.036	100
S3	538702	131942	149.200	1.000	450		PPIC		148.200	100
								0	148.200	100
S4	538701	131980	151.200	1.000	450		PPIC			
								0	150.200	100
S5	538690	131967	149.400	1.000	450		PPIC		148.400	100
								0	148.400	100
S6	538689	131956	148.000	1.050	450		PPIC		147.000	100
								2	147.000	100
								0	146.950	150
S7	538661	131949	144.200	1.050	450		PPIC		143.150	150
								0	143.150	150
S8	538642	131912	139.400	1.050	450		PPIC		138.350	150

Surface Water Manhole Schedules											
Chamber Reference	Easting (m)	Northing (m)	CL (m)	Depth (m)	Dia (mm)	Sump (m)	Chamber Type	Connections	IL (m)	Dia (mm)	
S11	538708	131837	141.500	1.500	450		PPIC		1	140.000	150
								0	140.000	150	
S12	538716	131858	141.800	2.103	1200		PCC		1	139.772	150
								0	139.697	225	
S13	538692	131871	141.900	2.363	1200		PCC		1	139.537	225
								0	139.537	225	
S14	538692	131886	143.500	4.057	1200		PCC		1	139.443	225
								0	139.443	225	
S15	538676	131898	141.500	2.171	1200		PCC		1	139.329	225
								0	139.329	225	
S16	538656	131905	140.500	1.295	1200		PCC		1	139.205	225
								0	139.205	225	
S17	538649	131887	138.750	1.125	1200		PCC		1	137.625	225
								0	137.625	225	
S18	538651	131873	138.600	1.000	450		PPIC				
								0	137.600	100	
S19	538633	131882	137.500	1.125	1200		PCC		1	136.500	100
								2	136.375	225	
								0	136.375	225	
S20	538621	131875	135.600	1.125	1200		PCC		1	134.550	150
								2	134.475	225	
								0	134.475	225	
S21	538606	131835	133.000	1.125	1200		PCC		1	131.875	225
								0	131.875	225	
S22	538589	131790	129.000	1.125	1200		PCC		1	127.875	225
								0	127.875	225	
S23	538583	131764	127.000	0.850	1200		PCC		1	126.300	225
								0	126.150	375	
S24	538635	131712	128.500	2.550	1200		PCC		1	125.950	375
								0	125.950	375	
S25	538638	131695	126.000	1.275	1200		PCC		1	124.725	375
								0	124.725	375	
S26	538595	131706	123.500	1.645	1200	0.370	PCC		1	122.225	375

1. It is recommended that no work is carried out until Building Regulations approval has been obtained.
2. It is essential that TZG are notified of any discrepancies or subsequent changes prior to them being implemented.
3. Do not scale from this drawing.
4. This drg is to be read in conjunction with the specification and architects drawings.

1. All 1000 proposed drainage pipes shown are to be laid at a minimum gradient of 1:80.
2. All 1500 proposed drainage pipes shown are to be laid at a minimum gradient of 1:150.
3. All existing land drains encountered on site during construction are to be re-connected.
4. Temporary protection to be provided to drainage work during construction as necessary.
5. Topographical survey and architectural layout based on third party information.
6. Topographical information taken from a survey to a temporary benchmark/datum, and not Ordnance Datum.
7. Anticipated foul flow rates calculated using discharge unit method to BS EN 12056-2.
8. Drawing to be read in conjunction with Causeway Flow design pack.
9. Pipes to be structured walled to BS EN 13476, Polypropylene to BE EN 1852 or PVC-U to BS EN 1401.
10. Both clay and concrete pipes shall be strength class 120 (100/1500 min crushing strength 28kN/m²). Thermoplastic pipes shall have a minimum ring stiffness of S₁₅.
11. Pipes which run adjacent to buildings shall be installed in strict accordance with Building Regulations Part H, clauses 2.23 to 2.25.
12. Class 2 concrete bed and surround to all foul and surface water pipes with less than 900mm cover depth. Type S granular bed and surround to all foul and surface water pipes with greater than 900mm cover depth.
13. All manholes and inspection chambers subject to vehicular trafficking to have D400 load-rated covers and frames to BS EN 124. All manholes and inspection chambers not subject vehicular trafficking to have B125 load-rated covers and frames to BS EN 124.
14. Concrete to be GEN1 unless specified otherwise.
15. The first flexible joint in pipes adjoining a manhole shall be a maximum length of 600mm from the inside face of the manhole, connecting to a rocker pipe. The length of the rocker pipe shall be 600mm.
16. All foul and surface water pipes to be constructed to Building Regulations Part H.

Risk - Deep excavation
Control method - Contractor to design trench support to depths shown on drawings and in the manhole schedule, appropriate to the ground conditions.
Risk - Water ingress into excavations, including ground water
Control method - Contractor to specify method of dealing with ingress of water into excavations, in particular if ground water is experienced. Contractor to undertake trench inspections prior to entry into any excavation, and again if left overnight or if conditions change.

P1	31/07/2028	Manhole schedules	
REV.	DATE	DESCRIPTION	
CLIENT			
Netherhall Education Association			
CONTRACT			
Wickenden Manor			
TITLE			
Proposed Manhole Schedules			
 T2G PARTNERSHIP ENGINEERING CONSULTANTS Orchard House, 115-118 Cherry Orchard Road, Croydon CR9 6BA Tel: +44(0)20 8661 2137 F: +44(0)20 8661 1328 Email: admin@t2gpartnership.com W: www.t2gpartnership.com			
SCALE	NTS@A1	DRAWN	CC
		DATE	July '26
CONTRACT No.	7238	DRG. No.	D013
		REVISION	P1



CONTRACT WICKENDEN MANOR
PAGE No. FD14
CONTRACT No. 7238
DATE JULY 2026
BY CC

Appendix B - Surface Water Calculations

Calculated by:	Craig Cook
Site name:	Wickenden Manor
Site location:	East Grinstead

This is an estimation of the greenfield runoff rates that are used to meet normal best practice criteria in line with Environment Agency guidance "Rainfall runoff management for developments", SC030219 (2013) , the SuDS Manual C753 (Ciria, 2015) and the non-statutory standards for SuDS (Defra, 2015). This information on greenfield runoff rates may be the basis for setting consents for the drainage of surface water runoff from sites.

Site Details

Latitude:	51.06921° N
Longitude:	0.02146° W
Reference:	696580944
Date:	Mar 27 2024 13:59

Runoff estimation approach

IH124

Site characteristics

Total site area (ha):	0.46
-----------------------	------

Methodology

Q_{BAR} estimation method:	Calculate from SPR and SAAR
SPR estimation method:	Calculate from SOIL type

Notes

(1) Is $Q_{BAR} < 2.0$ l/s/ha?

When Q_{BAR} is < 2.0 l/s/ha then limiting discharge rates are set at 2.0 l/s/ha.

Soil characteristics

	Default	Edited
SOIL type:	4	4
HOST class:	N/A	N/A
SPR/SPRHOST:	0.47	0.47

(2) Are flow rates < 5.0 l/s?

Where flow rates are less than 5.0 l/s consent for discharge is usually set at 5.0 l/s if blockage from vegetation and other materials is possible. Lower consent flow rates may be set where the blockage risk is addressed by using appropriate drainage elements.

Hydrological characteristics

	Default	Edited
SAAR (mm):	857	857
Hydrological region:	7	7
Growth curve factor 1 year:	0.85	0.85
Growth curve factor 30 years:	2.3	2.3
Growth curve factor 100 years:	3.19	3.19
Growth curve factor 200 years:	3.74	3.74

(3) Is $SPR/SPRHOST \leq 0.3$?

Where groundwater levels are low enough the use of soakaways to avoid discharge offsite would normally be preferred for disposal of surface water runoff.

Greenfield runoff rates

	Default	Edited
Q_{BAR} (l/s):	2.81	2.81
1 in 1 year (l/s):	2.39	2.39
1 in 30 years (l/s):	6.47	6.47
1 in 100 year (l/s):	8.98	8.98
1 in 200 years (l/s):	10.52	10.52

This report was produced using the greenfield runoff tool developed by HR Wallingford and available at www.uksuds.com. The use of this tool is subject to the UK SuDS terms and conditions and licence agreement , which can both be found at www.uksuds.com/terms-and-conditions.htm. The outputs from this tool are estimates of greenfield runoff rates. The use of these results is the responsibility of the users of this tool. No liability will be accepted by HR Wallingford, the Environment Agency, CEH, Hydrosolutions or any other organisation for the use of this data in the design or operational characteristics of any drainage scheme.

Design Settings

Rainfall Methodology	FEH-22	Minimum Velocity (m/s)	1.00
Return Period (years)	2	Connection Type	Level Soffits
Additional Flow (%)	0	Minimum Backdrop Height (m)	2.000
CV	1.000	Preferred Cover Depth (m)	0.900
Time of Entry (mins)	4.00	Include Intermediate Ground	✓
Maximum Time of Concentration (mins)	30.00	Enforce best practice design rules	✓
Maximum Rainfall (mm/hr)	50.0		

Nodes

Name	Area (ha)	T of E (mins)	Cover Level (m)	Diameter (mm)	Easting (m)	Northing (m)	Depth (m)	Invert Level (m)
S1	0.006	4.00	151.200	450	538714.931	131959.676	1.000	150.200
S2	0.006	4.00	151.200	450	538719.485	131951.068	1.164	150.036
S3	0.006	4.00	149.200	450	538702.462	131941.978	1.000	148.200
S4	0.006	4.00	151.200	450	538700.701	131980.092	1.000	150.200
S5	0.006	4.00	149.400	450	538690.067	131966.735	1.000	148.400
S6	0.006	4.00	148.000	450	538688.541	131956.173	1.050	146.950
S7			144.200	450	538661.159	131948.704	1.050	143.150
S8			139.400	450	538641.720	131911.749	1.050	138.350
S9	0.014	4.00	141.500	450	538665.609	131852.370	1.050	140.450
S10	0.014	4.00	141.500	450	538684.689	131845.618	1.251	140.249
S11	0.014	4.00	141.500	450	538708.214	131836.873	1.500	140.000
S12	0.014	4.00	141.800	1200	538716.230	131858.435	2.103	139.697
S13	0.014	4.00	141.900	1200	538692.047	131870.613	2.363	139.537
S14	0.014	4.00	143.500	1200	538691.656	131886.439	4.057	139.443
S15	0.014	4.00	141.500	1200	538675.941	131897.693	2.171	139.329
S16	0.014	4.00	140.500	1200	538656.342	131904.953	1.295	139.205
S17	0.014	4.00	138.750	1200	538649.251	131886.657	1.125	137.625
S18	0.014	4.00	138.600	450	538650.646	131873.240	1.000	137.600
S19			137.500	1200	538632.854	131881.683	1.125	136.375
S20			135.600	1200	538621.287	131874.988	1.125	134.475
S21			133.000	1200	538605.884	131834.938	1.125	131.875
S22			129.000	1200	538588.726	131790.186	1.125	127.875
S23			127.000	1200	538583.009	131763.549	0.850	126.150
S24			128.500	1200	538635.010	131711.670	2.550	125.950
S25			126.000	1200	538637.732	131694.985	1.275	124.725
S26			123.500	1200	538595.210	131705.789	1.645	121.855
EX			122.800				1.275	121.525

Links

Name	US Node	DS Node	Length (m)	ks (mm) / n	US IL (m)	DS IL (m)	Fall (m)	Slope (1:X)	Dia (mm)	T of C (mins)	Rain (mm/hr)
3.000	S1	S2	9.738	0.600	150.200	150.036	0.164	59.4	100	4.16	50.0
3.001	S2	S3	19.298	0.600	150.036	148.200	1.836	10.5	100	4.30	50.0
3.002	S3	S6	19.882	0.600	148.200	147.000	1.200	16.6	100	4.47	50.0
4.000	S4	S5	17.073	0.600	150.200	148.400	1.800	9.5	100	4.11	50.0
4.001	S5	S6	10.672	0.600	148.400	147.000	1.400	7.6	100	4.18	50.0
3.003	S6	S7	28.382	0.600	146.950	143.150	3.800	7.5	150	4.60	50.0
3.004	S7	S8	41.756	0.600	143.150	138.350	4.800	8.7	150	4.80	50.0
3.005	S8	S20	42.058	0.600	138.350	134.550	3.800	11.1	150	5.03	50.0
1.000	S9	S10	20.239	0.600	140.450	140.249	0.201	100.7	150	4.34	50.0
1.001	S10	S11	25.098	0.600	140.249	140.000	0.249	100.8	150	4.76	50.0
1.002	S11	S12	23.004	0.600	140.000	139.772	0.228	100.9	150	5.14	50.0
1.003	S12	S13	27.076	0.600	139.697	139.537	0.160	169.2	225	5.59	50.0
1.004	S13	S14	15.831	0.600	139.537	139.443	0.094	168.4	225	5.85	50.0
1.005	S14	S15	19.329	0.600	139.443	139.329	0.114	169.6	225	6.17	49.5
1.006	S15	S16	20.900	0.600	139.329	139.205	0.124	168.6	225	6.52	48.3
1.007	S16	S17	19.622	0.600	139.205	137.625	1.580	12.4	225	6.61	48.0
1.008	S17	S19	17.135	0.600	137.625	136.375	1.250	13.7	225	6.69	47.8
2.000	S18	S19	19.694	0.600	137.600	136.500	1.100	17.9	100	4.18	50.0
1.009	S19	S20	13.365	0.600	136.375	134.475	1.900	7.0	225	6.73	47.6
1.010	S20	S21	42.910	0.600	134.475	131.875	2.600	16.5	225	6.95	46.9
1.011	S21	S22	47.928	0.600	131.875	127.875	4.000	12.0	225	7.16	46.2
1.012	S22	S23	27.244	0.600	127.875	126.300	1.575	17.3	225	7.31	45.8
1.013	S23	S24	73.454	0.600	126.150	125.950	0.200	367.3	375	8.61	42.3
1.014	S24	S25	16.906	0.600	125.950	124.725	1.225	13.8	375	8.67	42.2

Name	Vel (m/s)	Cap (l/s)	Flow (l/s)	US Depth (m)	DS Depth (m)	Σ Area (ha)	Σ Add Inflow (l/s)	Pro Depth (mm)	Pro Velocity (m/s)
3.000	1.001	7.9	1.1	0.900	1.064	0.006	0.0	25	0.706
3.001	2.397	18.8	2.2	1.064	0.900	0.012	0.0	23	1.601
3.002	1.907	15.0	3.3	0.900	0.900	0.018	0.0	32	1.524
4.000	2.524	19.8	1.1	0.900	0.900	0.006	0.0	16	1.350
4.001	2.817	22.1	2.2	0.900	0.900	0.012	0.0	21	1.806
3.003	3.710	65.6	6.5	0.900	0.900	0.036	0.0	32	2.383
3.004	3.437	60.7	6.5	0.900	0.900	0.036	0.0	33	2.254
3.005	3.045	53.8	6.5	0.900	0.900	0.036	0.0	35	2.058
1.000	1.001	17.7	2.5	0.900	1.101	0.014	0.0	38	0.713
1.001	1.001	17.7	5.1	1.101	1.350	0.028	0.0	55	0.864
1.002	1.000	17.7	7.6	1.350	1.878	0.042	0.0	69	0.964
1.003	1.002	39.8	10.1	1.878	2.138	0.056	0.0	77	0.838
1.004	1.004	39.9	12.6	2.138	3.832	0.070	0.0	87	0.892
1.005	1.001	39.8	15.0	3.832	1.946	0.084	0.0	95	0.931
1.006	1.004	39.9	17.1	1.946	1.070	0.098	0.0	103	0.968
1.007	3.733	148.4	19.4	1.070	0.900	0.112	0.0	55	2.609
1.008	3.552	141.2	21.8	0.900	0.900	0.126	0.0	59	2.592
2.000	1.834	14.4	2.5	0.900	0.900	0.014	0.0	29	1.384
1.009	4.964	197.4	24.1	0.900	0.900	0.140	0.0	53	3.408
1.010	3.236	128.7	29.8	0.900	0.900	0.176	0.0	73	2.647
1.011	3.801	151.1	29.4	0.900	0.900	0.176	0.0	67	2.969
1.012	3.161	125.7	29.2	0.900	0.475	0.176	0.0	73	2.585
1.013	0.939	103.7	26.9	0.475	2.175	0.176	0.0	130	0.793
1.014	4.898	541.0	26.8	2.175	0.900	0.176	0.0	56	2.592

Links

Name	US Node	DS Node	Length (m)	ks (mm) / n	US IL (m)	DS IL (m)	Fall (m)	Slope (1:X)	Dia (mm)	T of C (mins)	Rain (mm/hr)
1.015	S25	S26	43.873	0.600	124.725	122.225	2.500	17.5	375	8.84	41.8
1.016	S26	EX	1.000	0.600	122.225	121.525	0.700	1.4	375	8.84	41.8

Name	Vel (m/s)	Cap (l/s)	Flow (l/s)	US Depth (m)	DS Depth (m)	Σ Area (ha)	Σ Add Inflow (l/s)	Pro Depth (mm)	Pro Velocity (m/s)
1.015	4.342	479.6	26.6	0.900	0.900	0.176	0.0	59	2.368
1.016	15.253	1684.6	26.6	0.900	0.900	0.176	0.0	33	5.787

Pipeline Schedule

Link	Length (m)	Slope (1:X)	Dia (mm)	Link Type	US CL (m)	US IL (m)	US Depth (m)	DS CL (m)	DS IL (m)	DS Depth (m)
3.000	9.738	59.4	100	Circular	151.200	150.200	0.900	151.200	150.036	1.064
3.001	19.298	10.5	100	Circular	151.200	150.036	1.064	149.200	148.200	0.900
3.002	19.882	16.6	100	Circular	149.200	148.200	0.900	148.000	147.000	0.900
4.000	17.073	9.5	100	Circular	151.200	150.200	0.900	149.400	148.400	0.900
4.001	10.672	7.6	100	Circular	149.400	148.400	0.900	148.000	147.000	0.900
3.003	28.382	7.5	150	Circular	148.000	146.950	0.900	144.200	143.150	0.900
3.004	41.756	8.7	150	Circular	144.200	143.150	0.900	139.400	138.350	0.900
3.005	42.058	11.1	150	Circular	139.400	138.350	0.900	135.600	134.550	0.900
1.000	20.239	100.7	150	Circular	141.500	140.450	0.900	141.500	140.249	1.101
1.001	25.098	100.8	150	Circular	141.500	140.249	1.101	141.500	140.000	1.350
1.002	23.004	100.9	150	Circular	141.500	140.000	1.350	141.800	139.772	1.878
1.003	27.076	169.2	225	Circular	141.800	139.697	1.878	141.900	139.537	2.138
1.004	15.831	168.4	225	Circular	141.900	139.537	2.138	143.500	139.443	3.832
1.005	19.329	169.6	225	Circular	143.500	139.443	3.832	141.500	139.329	1.946
1.006	20.900	168.6	225	Circular	141.500	139.329	1.946	140.500	139.205	1.070
1.007	19.622	12.4	225	Circular	140.500	139.205	1.070	138.750	137.625	0.900
1.008	17.135	13.7	225	Circular	138.750	137.625	0.900	137.500	136.375	0.900
2.000	19.694	17.9	100	Circular	138.600	137.600	0.900	137.500	136.500	0.900

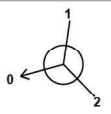
Link	US Node	Dia (mm)	Node Type	MH Type	DS Node	Dia (mm)	Node Type	MH Type
3.000	S1	450	Manhole	PPIC	S2	450	Manhole	PPIC
3.001	S2	450	Manhole	PPIC	S3	450	Manhole	PPIC
3.002	S3	450	Manhole	PPIC	S6	450	Manhole	PPIC
4.000	S4	450	Manhole	PPIC	S5	450	Manhole	PPIC
4.001	S5	450	Manhole	PPIC	S6	450	Manhole	PPIC
3.003	S6	450	Manhole	PPIC	S7	450	Manhole	PPIC
3.004	S7	450	Manhole	PPIC	S8	450	Manhole	PPIC
3.005	S8	450	Manhole	PPIC	S20	1200	Manhole	PPIC
1.000	S9	450	Manhole	PPIC	S10	450	Manhole	PPIC
1.001	S10	450	Manhole	PPIC	S11	450	Manhole	PPIC
1.002	S11	450	Manhole	PPIC	S12	1200	Manhole	PPIC
1.003	S12	1200	Manhole	PPIC	S13	1200	Manhole	PPIC
1.004	S13	1200	Manhole	PPIC	S14	1200	Manhole	PPIC
1.005	S14	1200	Manhole	PPIC	S15	1200	Manhole	PPIC
1.006	S15	1200	Manhole	PPIC	S16	1200	Manhole	PPIC
1.007	S16	1200	Manhole	PPIC	S17	1200	Manhole	PPIC
1.008	S17	1200	Manhole	PPIC	S19	1200	Manhole	PPIC
2.000	S18	450	Manhole	PPIC	S19	1200	Manhole	PPIC

Pipeline Schedule

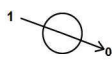
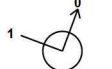
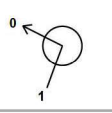
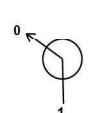
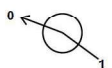
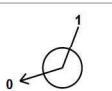
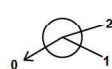
Link	Length (m)	Slope (1:X)	Dia (mm)	Link Type	US CL (m)	US IL (m)	US Depth (m)	DS CL (m)	DS IL (m)	DS Depth (m)
1.009	13.365	7.0	225	Circular	137.500	136.375	0.900	135.600	134.475	0.900
1.010	42.910	16.5	225	Circular	135.600	134.475	0.900	133.000	131.875	0.900
1.011	47.928	12.0	225	Circular	133.000	131.875	0.900	129.000	127.875	0.900
1.012	27.244	17.3	225	Circular	129.000	127.875	0.900	127.000	126.300	0.475
1.013	73.454	367.3	375	Circular	127.000	126.150	0.475	128.500	125.950	2.175
1.014	16.906	13.8	375	Circular	128.500	125.950	2.175	126.000	124.725	0.900
1.015	43.873	17.5	375	Circular	126.000	124.725	0.900	123.500	122.225	0.900
1.016	1.000	1.4	375	Circular	123.500	122.225	0.900	122.800	121.525	0.900

Link	US Node	Dia (mm)	Node Type	MH Type	DS Node	Dia (mm)	Node Type	MH Type
1.009	S19	1200	Manhole	PPIC	S20	1200	Manhole	PPIC
1.010	S20	1200	Manhole	PPIC	S21	1200	Manhole	PPIC
1.011	S21	1200	Manhole	PPIC	S22	1200	Manhole	PPIC
1.012	S22	1200	Manhole	PPIC	S23	1200	Manhole	PPIC
1.013	S23	1200	Manhole	PPIC	S24	1200	Manhole	PPIC
1.014	S24	1200	Manhole	PPIC	S25	1200	Manhole	PPIC
1.015	S25	1200	Manhole	PPIC	S26	1200	Manhole	PPIC
1.016	S26	1200	Manhole	PPIC	EX		Junction	

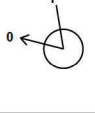
Manhole Schedule

Node	Easting (m)	Northing (m)	CL (m)	Depth (m)	Dia (mm)	Connections	Link	IL (m)	Dia (mm)	
S1	538714.931	131959.676	151.200	1.000	450		0	3.000	150.200	100
S2	538719.485	131951.068	151.200	1.164	450		1	3.000	150.036	100
							0	3.001	150.036	100
S3	538702.462	131941.978	149.200	1.000	450		1	3.001	148.200	100
							0	3.002	148.200	100
S4	538700.701	131980.092	151.200	1.000	450		0	4.000	150.200	100
S5	538690.067	131966.735	149.400	1.000	450		1	4.000	148.400	100
							0	4.001	148.400	100
S6	538688.541	131956.173	148.000	1.050	450		1	4.001	147.000	100
							2	3.002	147.000	100
							0	3.003	146.950	150
S7	538661.159	131948.704	144.200	1.050	450		1	3.003	143.150	150
							0	3.004	143.150	150

Manhole Schedule

Node	Easting (m)	Northing (m)	CL (m)	Depth (m)	Dia (mm)	Connections	Link	IL (m)	Dia (mm)
S8	538641.720	131911.749	139.400	1.050	450		1 3.004	138.350	150
						0 3.005		138.350	150
S9	538665.609	131852.370	141.500	1.050	450		0 1.000	140.450	150
						1 1.000		140.249	150
S10	538684.689	131845.618	141.500	1.251	450		0 1.001	140.249	150
						1 1.001		140.000	150
S11	538708.214	131836.873	141.500	1.500	450		0 1.002	140.000	150
						1 1.002		139.772	150
S12	538716.230	131858.435	141.800	2.103	1200		0 1.003	139.697	225
						1 1.003		139.537	225
S13	538692.047	131870.613	141.900	2.363	1200		0 1.004	139.537	225
						1 1.004		139.443	225
S14	538691.656	131886.439	143.500	4.057	1200		0 1.005	139.443	225
						1 1.005		139.329	225
S15	538675.941	131897.693	141.500	2.171	1200		0 1.006	139.329	225
						1 1.006		139.205	225
S16	538656.342	131904.953	140.500	1.295	1200		0 1.007	139.205	225
						1 1.007		137.625	225
S17	538649.251	131886.657	138.750	1.125	1200		0 1.008	137.625	225
						1 2.000		137.600	100
S18	538650.646	131873.240	138.600	1.000	450		0 2.000	136.500	100
						1 1.008		136.375	225
S19	538632.854	131881.683	137.500	1.125	1200		0 1.009	136.375	225
						1 3.005		134.550	150
S20	538621.287	131874.988	135.600	1.125	1200		0 1.009	134.475	225
						2 1.010		134.475	225

Manhole Schedule

Node	Easting (m)	Northing (m)	CL (m)	Depth (m)	Dia (mm)	Connections	Link	IL (m)	Dia (mm)	
S21	538605.884	131834.938	133.000	1.125	1200		1	1.010	131.875	225
S22	538588.726	131790.186	129.000	1.125	1200		1	1.011	131.875	225
						0	1.012	127.875	225	
S23	538583.009	131763.549	127.000	0.850	1200		1	1.012	126.300	225
						0	1.013	126.150	375	
S24	538635.010	131711.670	128.500	2.550	1200		1	1.013	125.950	375
						0	1.014	125.950	375	
S25	538637.732	131694.985	126.000	1.275	1200		1	1.014	124.725	375
						0	1.015	124.725	375	
S26	538595.210	131705.789	123.500	1.645	1200		1	1.015	122.225	375
						0	1.016	122.225	375	
EX			122.800	1.275			1	1.016	121.525	375

Simulation Settings

Rainfall Methodology	FEH-22	Analysis Speed	Normal	Starting Level (m)	
Rainfall Events	Singular	Skip Steady State	x	Check Discharge Rate(s)	x
Summer CV	1.000	Drain Down Time (mins)	240	Check Discharge Volume	x
Winter CV	1.000	Additional Storage (m³/ha)	20.0		

Storm Durations

15 | 30 | 60 | 120 | 180 | 240 | 360 | 480 | 600 | 720 | 960 | 1440

Return Period (years)	Climate Change (CC %)	Additional Area (A %)	Additional Flow (Q %)
2	0	0	0
30	45	0	0
100	45	0	0

Node S26 Online Hydro-Brake® Control

Flap Valve	x	Objective	(HE) Minimise upstream storage
Replaces Downstream Link	x	Sump Available	✓
Invert Level (m)	122.225	Product Number	CTL-SHE-0078-2800-1125-2800
Design Depth (m)	1.125	Min Outlet Diameter (m)	0.100
Design Flow (l/s)	2.8	Min Node Diameter (mm)	1200

Node S25 Depth/Area Storage Structure

Base Inf Coefficient (m/hr)	0.00000	Safety Factor	2.0	Invert Level (m)	124.725
Side Inf Coefficient (m/hr)	0.00000	Porosity	1.00	Time to half empty (mins)	0

Depth (m)	Area (m²)	Inf Area (m²)	Depth (m)	Area (m²)	Inf Area (m²)
0.000	297.0	297.0	0.100	320.0	320.8

Node S26 Soakaway Storage Structure

Base Inf Coefficient (m/hr)	0.00000	Invert Level (m)	122.225	Depth (m)	0.400
Side Inf Coefficient (m/hr)	0.00000	Time to half empty (mins)		Inf Depth (m)	
Safety Factor	2.0	Pit Width (m)	13.000	Number Required	1
Porosity	0.95	Pit Length (m)	32.000		

Results for 2 year Critical Storm Duration. Lowest mass balance: 99.64%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute summer	S1	10	150.228	0.027	1.2	0.0077	0.0000	OK
15 minute summer	S2	10	150.060	0.024	2.4	0.0063	0.0000	OK
15 minute summer	S3	10	148.234	0.034	3.6	0.0095	0.0000	OK
15 minute summer	S4	10	150.217	0.017	1.2	0.0047	0.0000	OK
15 minute summer	S5	10	148.423	0.023	2.4	0.0064	0.0000	OK
15 minute summer	S6	10	146.984	0.034	7.2	0.0092	0.0000	OK
15 minute summer	S7	10	143.185	0.035	7.2	0.0055	0.0000	OK
15 minute summer	S8	10	138.387	0.037	7.2	0.0059	0.0000	OK
15 minute summer	S9	10	140.490	0.040	2.8	0.0172	0.0000	OK
15 minute summer	S10	10	140.307	0.058	5.6	0.0221	0.0000	OK
15 minute summer	S11	10	140.074	0.074	8.4	0.0256	0.0000	OK
15 minute summer	S12	10	139.778	0.081	10.9	0.1025	0.0000	OK
15 minute summer	S13	11	139.631	0.094	13.5	0.1178	0.0000	OK
15 minute summer	S14	11	139.547	0.104	15.7	0.1244	0.0000	OK
15 minute summer	S15	11	139.443	0.114	18.3	0.1433	0.0000	OK
15 minute summer	S16	11	139.262	0.057	20.7	0.0765	0.0000	OK
15 minute summer	S17	11	137.691	0.065	23.0	0.0903	0.0000	OK
15 minute summer	S18	10	137.630	0.030	2.8	0.0134	0.0000	OK
15 minute summer	S19	11	136.429	0.054	25.5	0.0615	0.0000	OK
15 minute summer	S20	11	134.555	0.080	32.4	0.0905	0.0000	OK
15 minute summer	S21	11	131.945	0.070	32.5	0.0796	0.0000	OK
15 minute summer	S22	11	127.955	0.080	32.3	0.0900	0.0000	OK
15 minute summer	S23	12	126.295	0.145	31.6	0.1645	0.0000	OK
15 minute summer	S24	11	126.055	0.105	32.1	0.1189	0.0000	OK
120 minute summer	S25	72	124.770	0.045	16.7	13.5576	0.0000	OK

Link Event (Upstream Depth)	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
15 minute summer	S1	3.000	S2	1.2	0.750	0.153	0.0156	
15 minute summer	S2	3.001	S3	2.4	1.268	0.127	0.0368	
15 minute summer	S3	3.002	S6	3.6	1.548	0.240	0.0462	
15 minute summer	S4	4.000	S5	1.2	1.097	0.061	0.0188	
15 minute summer	S5	4.001	S6	2.4	1.819	0.108	0.0141	
15 minute summer	S6	3.003	S7	7.2	2.372	0.110	0.0861	
15 minute summer	S7	3.004	S8	7.2	2.218	0.118	0.1352	
15 minute summer	S8	3.005	S20	7.0	2.092	0.130	0.1408	
15 minute summer	S9	1.000	S10	2.8	0.561	0.158	0.1016	
15 minute summer	S10	1.001	S11	5.6	0.749	0.315	0.1870	
15 minute summer	S11	1.002	S12	8.1	0.964	0.460	0.1943	
15 minute summer	S12	1.003	S13	10.7	0.756	0.269	0.3845	
15 minute summer	S13	1.004	S14	13.4	0.796	0.335	0.2661	
15 minute summer	S14	1.005	S15	16.0	0.841	0.401	0.3669	
15 minute summer	S15	1.006	S16	18.4	1.334	0.460	0.2920	
15 minute summer	S16	1.007	S17	20.7	2.379	0.139	0.1709	
15 minute summer	S17	1.008	S19	23.0	2.723	0.163	0.1452	
15 minute summer	S18	2.000	S19	2.8	1.405	0.194	0.0392	
15 minute summer	S19	1.009	S20	25.5	2.566	0.129	0.1337	
15 minute summer	S20	1.010	S21	32.5	2.801	0.253	0.4986	
15 minute summer	S21	1.011	S22	32.3	2.795	0.214	0.5549	
15 minute summer	S22	1.012	S23	31.6	2.593	0.252	0.3331	
15 minute summer	S23	1.013	S24	32.1	1.097	0.310	2.3168	
15 minute summer	S24	1.014	S25	37.1	3.852	0.068	0.2162	
120 minute summer	S25	1.015	S26	11.3	2.603	0.024	0.2953	

Results for 2 year Critical Storm Duration. Lowest mass balance: 99.64%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m ³)	Flood (m ³)	Status
480 minute summer	S26	344	122.310	0.085	6.6	33.6232	0.0000	OK
480 minute summer	EX	344	121.534	0.009	1.7	0.0000	0.0000	OK

Link Event (Upstream Depth)	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m ³)	Discharge Vol (m ³)
480 minute summer	S26	1.016	EX	1.7	2.535	0.001	0.0007	37.0

Results for 30 year +45% CC Critical Storm Duration. Lowest mass balance: 99.88%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute summer	S1	10	150.259	0.059	4.6	0.0164	0.0000	OK
15 minute summer	S2	10	150.086	0.049	9.2	0.0130	0.0000	OK
15 minute summer	S3	10	148.281	0.081	13.8	0.0225	0.0000	OK
15 minute summer	S4	10	150.233	0.033	4.6	0.0092	0.0000	OK
15 minute summer	S5	10	148.447	0.047	9.2	0.0132	0.0000	OK
15 minute summer	S6	10	147.019	0.069	27.6	0.0189	0.0000	OK
15 minute summer	S7	10	143.222	0.071	27.6	0.0114	0.0000	OK
15 minute summer	S8	10	138.426	0.076	27.6	0.0121	0.0000	OK
15 minute summer	S9	11	140.889	0.439	10.7	0.1869	0.0000	SURCHARGED
15 minute summer	S10	11	140.844	0.595	18.2	0.2278	0.0000	SURCHARGED
15 minute summer	S11	11	140.625	0.625	25.8	0.2162	0.0000	SURCHARGED
15 minute summer	S12	11	140.160	0.463	33.2	0.5851	0.0000	SURCHARGED
15 minute summer	S13	11	140.039	0.502	43.2	0.6275	0.0000	SURCHARGED
15 minute summer	S14	11	139.916	0.473	48.6	0.5677	0.0000	SURCHARGED
15 minute summer	S15	11	139.703	0.374	57.1	0.4713	0.0000	SURCHARGED
15 minute summer	S16	11	139.312	0.107	65.6	0.1438	0.0000	OK
15 minute summer	S17	11	137.755	0.130	74.5	0.1795	0.0000	OK
15 minute summer	S18	10	137.667	0.067	10.7	0.0294	0.0000	OK
15 minute summer	S19	11	136.477	0.102	83.8	0.1151	0.0000	OK
15 minute summer	S20	11	134.650	0.175	110.9	0.1984	0.0000	OK
15 minute summer	S21	11	132.018	0.143	111.2	0.1616	0.0000	OK
15 minute summer	S22	11	128.057	0.182	111.7	0.2061	0.0000	OK
15 minute summer	S23	11	126.455	0.304	111.6	0.3444	0.0000	OK
15 minute summer	S24	10	126.108	0.158	110.0	0.1784	0.0000	OK
30 minute summer	S25	23	124.836	0.111	103.4	34.5546	0.0000	OK

Link Event (Upstream Depth)	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
15 minute summer	S1	3.000	S2	4.6	1.064	0.585	0.0421	
15 minute summer	S2	3.001	S3	9.2	1.736	0.489	0.1024	
15 minute summer	S3	3.002	S6	13.8	2.098	0.921	0.1306	
15 minute summer	S4	4.000	S5	4.6	1.571	0.232	0.0502	
15 minute summer	S5	4.001	S6	9.2	2.606	0.416	0.0377	
15 minute summer	S6	3.003	S7	27.6	3.402	0.421	0.2301	
15 minute summer	S7	3.004	S8	27.6	3.202	0.454	0.3598	
15 minute summer	S8	3.005	S20	27.5	2.718	0.511	0.4481	
15 minute summer	S9	1.000	S10	8.1	0.736	0.457	0.3563	
15 minute summer	S10	1.001	S11	15.6	0.940	0.882	0.4418	
15 minute summer	S11	1.002	S12	23.4	1.330	1.324	0.4050	
15 minute summer	S12	1.003	S13	32.6	0.887	0.817	1.0768	
15 minute summer	S13	1.004	S14	39.7	0.999	0.995	0.6296	
15 minute summer	S14	1.005	S15	48.3	1.214	1.213	0.7687	
15 minute summer	S15	1.006	S16	56.7	1.689	1.420	0.6094	
15 minute summer	S16	1.007	S17	65.6	3.099	0.442	0.4152	
15 minute summer	S17	1.008	S19	74.7	3.623	0.529	0.3530	
15 minute summer	S18	2.000	S19	10.7	1.961	0.743	0.1074	
15 minute summer	S19	1.009	S20	84.0	3.293	0.426	0.3384	
15 minute summer	S20	1.010	S21	111.2	3.705	0.864	1.2829	
15 minute summer	S21	1.011	S22	111.7	3.669	0.739	1.4626	
15 minute summer	S22	1.012	S23	111.6	3.410	0.888	0.8905	
15 minute summer	S23	1.013	S24	110.0	1.651	1.060	5.0413	
15 minute summer	S24	1.014	S25	113.5	4.780	0.210	0.4354	
30 minute summer	S25	1.015	S26	67.7	4.297	0.141	0.9308	

Results for 30 year +45% CC Critical Storm Duration. Lowest mass balance: 99.88%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m ³)	Flood (m ³)	Status
600 minute summer	S26	465	122.485	0.260	16.2	103.1085	0.0000	OK
600 minute summer	EX	465	121.536	0.011	2.7	0.0000	0.0000	OK

Link Event (Upstream Depth)	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m ³)	Discharge Vol (m ³)
600 minute summer	S26	1.016	EX	2.7	2.941	0.002	0.0009	95.1

Results for 100 year +45% CC Critical Storm Duration. Lowest mass balance: 99.88%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute summer	S1	10	150.269	0.069	5.8	0.0192	0.0000	OK
15 minute summer	S2	10	150.093	0.057	11.6	0.0149	0.0000	OK
15 minute summer	S3	11	148.533	0.333	17.4	0.0930	0.0000	SURCHARGED
15 minute summer	S4	10	150.237	0.037	5.8	0.0104	0.0000	OK
15 minute summer	S5	10	148.455	0.055	11.6	0.0152	0.0000	OK
15 minute summer	S6	10	147.026	0.076	32.4	0.0208	0.0000	OK
15 minute summer	S7	10	143.229	0.079	32.3	0.0125	0.0000	OK
15 minute summer	S8	10	138.433	0.083	32.2	0.0132	0.0000	OK
15 minute summer	S9	12	141.403	0.953	13.5	0.4061	0.0000	FLOOD RISK
15 minute summer	S10	12	141.342	1.093	21.7	0.4188	0.0000	FLOOD RISK
15 minute summer	S11	11	141.053	1.053	29.2	0.3642	0.0000	SURCHARGED
15 minute summer	S12	11	140.465	0.768	37.7	0.9707	0.0000	SURCHARGED
15 minute summer	S13	11	140.307	0.770	47.1	0.9614	0.0000	SURCHARGED
15 minute summer	S14	11	140.141	0.698	57.3	0.8371	0.0000	SURCHARGED
15 minute summer	S15	11	139.847	0.518	67.8	0.6531	0.0000	SURCHARGED
15 minute summer	S16	11	139.324	0.119	78.2	0.1601	0.0000	OK
15 minute summer	S17	11	137.773	0.148	89.4	0.2039	0.0000	OK
15 minute summer	S18	10	137.682	0.082	13.5	0.0360	0.0000	OK
15 minute summer	S19	11	136.490	0.115	101.4	0.1296	0.0000	OK
15 minute summer	S20	12	134.969	0.494	133.0	0.5586	0.0000	SURCHARGED
30 minute summer	S21	19	132.030	0.155	125.6	0.1757	0.0000	OK
30 minute summer	S22	20	128.153	0.278	125.6	0.3139	0.0000	SURCHARGED
15 minute winter	S23	12	126.490	0.340	125.0	0.3845	0.0000	OK
15 minute winter	S24	8	126.123	0.173	124.6	0.1961	0.0000	OK
30 minute summer	S25	23	124.853	0.128	124.7	40.0057	0.0000	OK

Link Event (Upstream Depth)	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
15 minute summer	S1	3.000	S2	5.8	1.117	0.738	0.0505	
15 minute summer	S2	3.001	S3	11.6	1.771	0.616	0.1199	
15 minute summer	S3	3.002	S6	15.4	2.056	1.028	0.1556	
15 minute summer	S4	4.000	S5	5.8	1.658	0.293	0.0598	
15 minute summer	S5	4.001	S6	11.6	2.752	0.524	0.0450	
15 minute summer	S6	3.003	S7	32.3	3.533	0.493	0.2599	
15 minute summer	S7	3.004	S8	32.2	3.331	0.531	0.4046	
15 minute summer	S8	3.005	S20	32.0	2.766	0.594	0.5814	
15 minute summer	S9	1.000	S10	10.3	0.693	0.583	0.3563	
15 minute summer	S10	1.001	S11	17.8	1.010	1.006	0.4418	
15 minute summer	S11	1.002	S12	26.9	1.525	1.519	0.4050	
15 minute summer	S12	1.003	S13	36.7	0.922	0.921	1.0768	
15 minute summer	S13	1.004	S14	46.3	1.165	1.160	0.6296	
15 minute summer	S14	1.005	S15	56.6	1.423	1.422	0.7687	
15 minute summer	S15	1.006	S16	67.0	1.934	1.679	0.6379	
15 minute summer	S16	1.007	S17	78.2	3.201	0.527	0.4797	
15 minute summer	S17	1.008	S19	89.8	3.739	0.636	0.4107	
15 minute summer	S18	2.000	S19	13.5	2.019	0.937	0.1316	
15 minute summer	S19	1.009	S20	101.3	3.355	0.513	0.4015	
15 minute summer	S20	1.010	S21	122.4	3.689	0.951	1.4740	
30 minute summer	S21	1.011	S22	125.6	3.713	0.831	1.6484	
30 minute summer	S22	1.012	S23	123.6	3.400	0.983	1.0804	
15 minute winter	S23	1.013	S24	124.6	1.712	1.201	5.3034	
15 minute winter	S24	1.014	S25	126.4	4.816	0.234	0.5062	
30 minute summer	S25	1.015	S26	91.7	4.514	0.191	1.3031	

Results for 100 year +45% CC Critical Storm Duration. Lowest mass balance: 99.88%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m ³)	Flood (m ³)	Status
720 minute winter	S26	585	122.562	0.337	12.3	133.5772	0.0000	OK
720 minute winter	EX	585	121.536	0.011	2.8	0.0000	0.0000	OK

Link Event (Upstream Depth)	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m ³)	Discharge Vol (m ³)
720 minute winter	S26	1.016	EX	2.8	2.956	0.002	0.0009	116.6



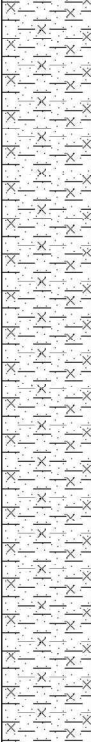
CONTRACT	.....	WICKENDEN MANOR
PAGE No.	.....	FD15
CONTRACT No.	.....	7238
DATE	.....	JULY 2026
BY	.....	CC

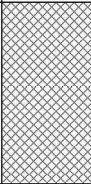
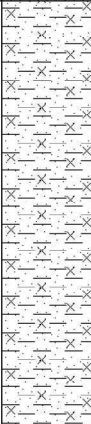
Appendix C - Thames Water Sewer Map



CONTRACT	.....	WICKENDEN MANOR
PAGE No.	.....	FD16
CONTRACT No.	.....	7238
DATE	.....	JULY 2026
BY	.....	CC

Appendix D – Borehole Logs

 Risk Management Limited Unit 10 Coopers Place Combe Lane Godalming Surrey GU8 5SZ		Borehole Log				Borehole No. BH1 Sheet 1 of 1				
Project No. RML 8673		Coordinates:		Drilling Technique: Light Percussion Rig		Level (m):				
Site Address: Wickenden Manor, Chilling Street, East Grinstead, West Sussex, RH19 4JB		Date: 04/01/2024		Diameter (mm): 131		Scale: 1:25				
	Stratum Description	Legend	Depth (m)	Level (m)	Samples and In Situ Testing				Water Strikes	Well
					Depth (m)	Sample Type	Test Type	Results		
	Grass over Topsoil		0.12		0.15	D1				
	Orange-brown silty sandy CLAY with roots.				0.50	D2				
1					1.00	D3	SPT	N=6 (2,1/1,2,2,1)		
	with grey mottling from 1.50m depth				1.50	D4				
2					2.00	D5	SPT	N=22 (2,3/3,5,6,8)		
	with occasional fragments of sandstone from 2.00m depth				2.50	D6				
	Borehole terminated at 2.60m depth		2.60		2.60	SPT	50 (11,16/50 for 95mm)			
3										
4										
5										
Remarks: Service pit excavated to 1.00m depth. Water seepage noted from 0.10m depth. Borehole terminated at 2.60m depth owing to SPT 'N' values in excess of 50.					KEY D = Disturbed Sample U = Undisturbed Sample B = Bulk Sample W = Water Sample CPT = Cone Penetration Test SPT = Standard Penetration Test V = Vane Test PP = Pocket Penetrometer MEXE = Insitu CBR test					

 Risk Management Limited Unit 10 Coopers Place Combe Lane Godalming Surrey GU8 5SZ		Borehole Log				Borehole No. BH2 Sheet 1 of 1				
Project No. RML 8673		Coordinates:		Drilling Technique: Light Percussion Rig		Level (m):				
Site Address: Wickenden Manor, Chilling Street, East Grinstead, West Sussex, RH19 4JB		Date: 04/01/2024		Diameter (mm): 131		Scale: 1:25				
	Stratum Description	Legend	Depth (m)	Level (m)	Samples and In Situ Testing				Water Strikes	Well
					Depth (m)	Sample Type	Test Type	Results		
1	MADE GROUND (crushed brick, concrete and gravel).		0.60		0.15	D1	SPT	N=9 (2,3/3,2,2,2)		
2	Orange-brown mottled grey silty sandy CLAY.		2.00		1.00	D3	SPT	N=54 (11,14/14,16,11,13)		
3	with occasional fragments of sandstone from 1.30m depth				1.50	D4				
4	Borehole terminated at 2.00m depth				2.00	D5	SPT			
5										
Remarks: Service pit excavated to 1.00m depth. Groundwater not noted during boring.. Borehole terminated at 2.60m depth owing to SPT 'N' values in excess of 50.					KEY D = Disturbed Sample U = Undisturbed Sample B = Bulk Sample W = Water Sample CPT = Cone Penetration Test SPT = Standard Penetration Test V = Vane Test PP = Pocket Penetrometer MEXE = Insitu CBR test					

Borehole Log

Borehole No.

BH3

Sheet 1 of 1

Project No. RML 8673

Coordinates:

Drilling Technique:

Light Percussion Rig

Level (m):

Site Address: Wickenden Manor, Chilling Street, East Grinstead, West Sussex, RH19 4JB

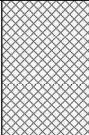
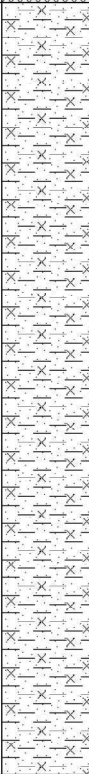
Date: 03/01/2024

Diameter (mm):

131

Scale:

1:25

	Stratum Description	Legend	Depth (m)	Level (m)	Samples and In Situ Testing				Water Strikes	Well
					Depth (m)	Sample Type	Test Type	Results		
	MADE GROUND (crushed brick fill).		0.45		0.15	D1	SPT	N=9 (2,2/2,3,2,2)		
	Orange-brown mottled grey silty sandy CLAY.				0.50	D2				
1					1.00	D3				
					1.50	D4				
					2.00	D5				
					2.50	D6				
	<i>becoming very sandy from 1.60m depth</i>		3.00	D7	SPT	N=64 (4,7/8,16,18,22)				
2	Borehole terminated at 3.00m depth									
3										
4										
5										

Remarks:

Service pit excavated to 1.00m depth. Water seepage noted from 0.10m depth. Borehole terminated at 2.60m depth owing to SPT 'N' values in excess of 50.

KEY

D = Disturbed Sample
U = Undisturbed Sample
B = Bulk Sample
W = Water Sample

CPT = Cone Penetration Test
SPT = Standard Penetration Test
V = Vane Test
PP = Pocket Penetrometer
MEXE = Insitu CBR test





CONTRACT WICKENDEN MANOR
PAGE No. FD17
CONTRACT No. 7238
DATE FEBRUARY 2024
BY CC

Appendix E – Sewage Treatment Plant Assessment



POUND HILL,
POUND LANE,
UCKFIELD,
FRAMFIELD,
EAST SUSSEX,
TN22 5RR
01825 890294

THE SEWAGE FACILITIES AT

Wickenden Manor, Chilling Street, Sharpthorne, RH19 4JB.

Contents

1) CLIENT BRIEF	3
2) SITE AND SYSTEM OVERVIEW	4
3) FLOW AND LOADINGS	5
4) CURRENT SITE STATUS.....	6
5) SYSTEM OBSERVATIONS.....	7
6) ENVIRONMENTAL PERMIT AND DISCHARGE INVESTIGATION	12
7) REQUIRED SOLUTIONS	13
8) OTHER CONSIDERATIONS	14
9) PAYMENT TERMS.....	15
10)TERMS AND CONDITIONS	16
11)OUR WARRANTIES.....	17
12)TANKERING & SERVICING AGREEMENT	18
13)CONFIRMATION AND ACCEPTANCE OF WORKS - INSTALLATION.....	20

1) CLIENT BRIEF

- a) To carry out a survey with recommendations on the sewage facilities at Wickenden Manor, Chilling Street, Sharpthorne, RH19 4JB.
- b) The date of the survey was on the 4th of January 2024.
 - i) The findings are based on the condition of the existing facilities at the time of the survey.

2) SITE AND SYSTEM OVERVIEW

- a) The site consists of a main property with multiple occupancies.
- b) Sewage produced from within the properties is connected by a network of sewers that terminates into a Sewage Treatment Plant.
- c) The sewage management facilities consist of the following parts:-
 - i) A primary settlement/ septic tank located at the bottom of the site.
 - 1) The volume of the tank is estimated at 30,000 litres.
 - 2) A more accurate size of the system can be achieved by emptying it if required.
 - ii) A discharge pipe from the primary tank passing into a small pumping station.
 - (1) The working volume of the pumping station is 650 litres.
 - iii) A discharge pipe from the pumping station to an above ground biological clinker filter.
 - (1) The filter contains approximately 40 cubic metres of clinker.
 - iv) A discharge pipe from the clinker filter bed passing into a humus tank.
 - (1) The volume of the humus tank is approximately 7,000 litres.
 - v) A discharge pipe from the hummus tank passing into a culvert.
 - vi) A final point of discharge into the stream.

3) FLOW AND LOADINGS

- a) It has been confirmed that the sewage produced from this location is classified as domestic.
- b) Some surface water enters the foul sewers.
 - i) It is recommended that surface water is kept separate from the foul sewers as it can dramatically affect the performance of sewage management facilities.
- c) **The current consented discharge amount for this system is as follows:-**

	Consented Discharge Amount
Sewage produced per day (litres)	15000
Biochemical Oxygen Demand per day (grams)	5180
Ammonia per day (grams)	664
Population Equivalent Flow in terms of amount	83
Population Equivalent Flow in terms of sewage strength	83

4) CURRENT SITE STATUS

a) The current methods of managing the sewage **are not in breach** of the Environmental Laws due to:

i) The production of a visually high quality effluent passing into the stream.

(1) A formal sample can be taken if required.

ii) There is currently an active Environmental Permit:-

(1) The permit number is P.3663/S/P/91.

(2) The permit was granted on the 4th November 1992.

(3) The permit allows the discharge of up to 15 cubic metres of treated effluent per day which must not contain in excess of:-

(a) 30 mg/l Biochemical Oxygen Demand.

(b) 45 mg/l Suspended Solids.

(c) 20 mg/l Ammoniacal Nitrogen as N.

Breach(es) of Environmental Laws are a prosecutable offence, enforced by the Environment Agency. Prosecution can result in the waste producers or owners receiving significant fines if not resolved correctly.

5) SYSTEM OBSERVATIONS

- a) The system at Wickenden Manor has been maintained by Moody Sewage for many years and has always produced a high quality effluent with regular weekly maintenance.
 - i) Weekly maintenance at present is not being carried out by Moody Sewage and is now undertaken by the staff at Wickenden Manor.
- b) On inspection the sewage treatment facilities were producing a visually good effluent with all aspects of the system working.
- c) The feed inspection chambers do not have scum lines or signs of any historical blockages.
- d) The feed inspection chambers appear to be in a reasonable condition with inspection covers that are clean with no significant corrosion or deterioration.



- e) The main management system is based around a traditional clinker filter bed sewage management facility.
- f) Sewage flows from the property and into the primary tank.
- g) The tank is constructed from GRP, does not appear to have any leaks, and appears to be in a reasonable condition.
- h) This tank was repaired due to a split in the side of the tank by Moody Sewage some years ago.



- i) The tank has an approximate capacity of 30,000 litres, which would make it suitable for successful solids retention for up to 150 people.

The Facts! - Septic Tanks

- A Septic Tank's main function is to separate the heavy solids from the liquid. It's recommended by both us, and the Environment Agency, that solids should be removed by tanker at least once a year.
- Septic tanks do not produce dischargeable effluent of sufficient quality, as required by Law to pass into watercourse, ditch or onto land. At best, it produces a biological breakdown of sewage that could result in a discharge being only 20% cleaner.
- The discharging liquid (which is still approximately 80% raw sewage) from the tank will flow via the outlet pipe and will either then discharge or flow into a further stage of treatment.

- j) The effluent from the septic tank flows into a rudimentary pumping station located at the side of the enclosure.
- k) The pumping station is fitted with a single effluent dosing pump which moves the sewage up and onto the clinker filter bed.
- l) On inspection the system was operational, however the control float which actuates the recirculation pump requires replacement as the cable has become stiff and its performance reduced.



- m) The discharge pipe from the pumping station passes across and up and onto the biological filter.
- n) **This pipe is too small bore and due to the growth of bacteria within the actual discharge pipe does require urgent attention so that the flow between the pumping station and filter is not heavily restricted.**
- o) The filter bed itself was in an operational condition however, **the level of discharge over the bed requires improvement.**



The Facts! - Clinker Beds

- A clinker filter bed is predominantly the main part of any treatment system in terms of "cleaning" the sewage. Its principle is as follows:-
- The volume of stone are stacked in a pile, typically within a brick built container. The stones are packed in such away that air can easily pass around them.
- Settled sewage is then dosed over the filter bed allowing the sewage to pass down and through the clinker (stones).
- Bacteria grows on the clinker and digest the "foulness" in the sewage before it is collected at the bottom of the filter.
- The process is completely aerobic; meaning the air freely flows in between the clinker and down to the lower levels, usually by dedicated air pipes at the side of the bed.
- Once the sewage has passed through the filter, the final effluent is then settled one last time in a tank called a humus tank to remove any sludge particles.

p) The bed itself is constructed from a brick surround and is rendered.

q) Sewage is distributed over the clinker using a rotational Monojet system.

i) The distribution is operational but could be improved.

r) The system has sufficient venting from dedicated pipe work around the edge.

s) The treated effluent from the filter then flows through to a substantial humus chamber which is fitted with a recirculation pump.



- i) Recirculation is installed on systems so that there is a constant flow passing through the biological filters at all times and helps prevent negative effects from surge flows.
- ii) The recirculation system was operational on inspection.
- t) The discharging effluent passes out and into the culvert into a stream which was confirmed by a dye test.



- u) **To conclude, on inspection the system was operating reasonably and producing a visually good effluent however there are some issues that need to be addressed.**
 - i) If required a sample can be taken from the effluent for formal testing.
 - v) Taking all into consideration, the system at Wickenden Manor should continue to be adequate to treat the current consented flow rates by design.

6) ENVIRONMENTAL PERMIT AND DISCHARGE INVESTIGATION

a) The site currently has an active Environmental Permit.

The Facts! - Environmental Permits

- Waste water, sewage management and discharges are governed by the Environmental Permitting Regulations 2014 and are enforced by the Environment Agency.
- You require by Law an Environmental Permit for the discharge of sewage or treated effluent from a septic tank or sewage treatment plant.
- There are exceptions as defined by the General Binding Rules for small sewage discharges, effective from 1st January 2015. This is applicable to everyone who has a septic tank or sewage treatment plant. An example of the General Binding Rules for small sewage discharges can be provided on request.

7) REQUIRED SOLUTIONS

a) SOLUTION 1

To supply and install a new control float for the recirculation system operation.

Cost of works	
Estimated Cost of Works	£195.00
VAT @ 20.0%	£39.00
Estimate Total	£234.00

b) SOLUTION 2 (Urgent)

To supply and install a new 63mm MDPE pipe passing from the pumping station passing up to the biological filter together with new accessible distribution pipe work into the filter tray.

- i) An alliance of 25 metres of pipework are included within this illustration.
- ii) In addition the pipework passing up and over the filter will be changed so that it can be taken apart for maintenance purposes.
- iii) The operation of the MonoJet system will be optimised.
- iv) This works is estimated to take up to 2 days to complete.

Cost of works	
Estimated Cost of Works	£5,290.00
VAT @ 20.0%	£1,058.00
Estimate Total	£6,348.00

ALL RECOMMENDED SOLUTIONS FROM MOODY SEWAGE LIMITED ARE FULLY GUARANTEED AND INDEMNITY BACKED. THIS MEANS AS LONG AS THE SYSTEM IS REGULARLY SERVICED AND EMPTIED THEN MOODY SEWAGE WILL GUARANTEE THE SYSTEM (SUBJECT TO CONDITIONS).

MOODY SEWAGE DOES NOT PROVIDE A WARRANTY ON ANY EXISTING SEWAGE MANAGEMENT FACILITIES THAT ARE UTILISED WITHIN ANY SOLUTION.

8) OTHER CONSIDERATIONS

i) Excess soil is to be spread to site, unless otherwise instructed by the client:-

- 1) A third party waste company can be arranged by Moody Sewage or the client for the collection of the soil.
 - 2) Fees for soil removal remain the responsibility of the client and are paid in addition direct to the relevant third party company.
- ii) There is no allowance for any additional finishing materials such as topsoil or turf. This can be brought to site at additional cost if required.

iii) Trench support or excavation bracing is not included in any estimate:-

- (1) If this is required once works has started, the cost will be brought to the clients attention and charged over and above any estimate sum.
- (2) Alternatively test holes can be carried out prior to the installation. On completion the enclosed estimates will then be updated.
 - (a) The cost for this works will be £2,100.00 plus VAT.

iv) All efforts are made so that the estimate of works are as accurate as possible and are based on all the available knowledge collected at the time of the report.

- 1) In some circumstances it is possible that due to unforeseen conditions or variations of specifications, further work may be required at additional cost to the estimate.
- 2) This works will be reported to the client prior to implementation.
- 3) Any additional days over and above the estimated will be charged at cost, being £600.00 plus VAT per day.

9) PAYMENT TERMS

A 45% deposit of of the sum is payable on instruction, followed payment of 50% 5 days before commencement and a final completion payment **due on the final day of the works:**

	Solution 1	Solution 2
Deposit: 45%	£105.30	£2,856.60
Commencement of Work: 50%	£117.00	£3,174.00
Estimated Final Completion Payment	£11.70	£317.40
Total Installation Costs	£234.00	£6,348.00

10)TERMS AND CONDITIONS

Moody Sewage Ltd (We/Us/The Company) of Pound Hill, Pound Lane, Framfield, Uckfield, East Sussex, TN22 5RR will undertake the completion of work as detailed in this contract for (You/The Client), subject to the following Terms and Conditions:

- a) **Planning Permission and Regulations:** Planning permission and/or building regulation approval can be obtained by Moody Sewage Limited on request from the client. Any professional or local authority fees incurred as part of the process are the responsibility of the client.
- b) **Underground Services:** All underground services (e.g electricity cables or gas pipes) **must** be identified to Moody Sewage Ltd prior to work commencing. In the event of an unidentified service being damaged, the repair (including any loss) remains the responsibility of the client.
- c) **Access:** Any necessary easement and rights of access remain the responsibility of the client unless otherwise agreed.
- d) **Excess and Waste Soil:** Excess or waste soil will be spread to site at a location chosen by the client. If excess soil cannot be spread to site then Moody Sewage will help arrange for its removal and any additional cost incurred will be charge to the client, in addition to the contractual sum outline.
- e) **Removal of liquid or other waste materials.** If liquid waste or other types of waste needs to be removed from site, this can be arranged by Moody Sewage, which will be charged to the client, in addition to the sum outlined.
- f) **Labour & Materials:** The sum is an estimate for the allowance of this works based on all the available knowledge at the time of preparation. Any variations to the planned worked (for example but not explicit to) as a result of client request, unforeseen conditions or changes to site between the time of estimation and installation, will be charged in addition to the original estimate sum. In either event, any additional work being required and the costs will be brought to the clients attention before implementation.
- g) **Deposit & Payments:** A deposit of **45% of the estimated cost of works** is payable on instruction. A payment of **50% of the estimated cost of works**, is to be paid five working days before commencement of work. Upon completion of the work, a final payment of **5% of the estimated cost of works plus any additional costs incurred are to be paid on the final day.**

- h) **Delays to Work:** If the commencement of works is delayed by events outside of Moody Sewage's control for a period exceeding 6 months from order, Moody Sewage may review the estimate to ensure that the cost of parts, materials, plant and labour are up to date.
- i) **Installed Equipment:** The installed equipment including any plant, cabling, electromechanical, mechanical, tanks, and aggregates remain the property of Moody Sewage Limited until the balance of the works is settled in full. Moody Sewage reserve the right to remove any of the above in the event of not receiving payment in full.
- j) **Cancellation of Agreement.** If work is cancelled by the client, the deposit is not refundable.
- k) **Payment Details:** Deposit and payments for the Installation work are solely to be made by Payment Card (Debit or Credit).
- l) This illustration of works and recommendation are valid for 28 days from the date provided.

11) OUR WARRANTIES

- a) All recommended solution designs by Moody Sewage Limited are fully Guaranteed and Indemnified. for the lifetime of the recommended service, maintenance and tankering schedule. This is subject to the conditions in item 12.d and 12.e below.
- c) **Parts and Labour** are fully warranted and guaranteed by Moody Sewage Ltd for a period of 12 months from the completion date - subject to regular servicing, emptying and correct usage as recommended and undertaken by Moody Sewage Ltd.
- d) **Existing facilities and Tanks.** Moody Sewage does not provide a warranty on any existing sewage management facilities and/or existing facilities that are used within any solution.
- e) **Exclusions to the warranty** will be incurred in the event of one or all of the following:
 - 1. Abuse or incorrect operation of the system, including usage over and above the original design specification.
 - 2. Accidental Damage by the client or third party.
 - 3. Natural Disasters such: flooding, subsidence, erosion, storm damage etc.
 - 4. Electrical failure, due to lack of power supply as a result of power cuts, or from the a faulty electrical system within the supporting property.
 - 5. Theft or third party interjections.
 - 6. Existing facility, e.g Pipework Septic Tanks/Holding tanks and treatment facilities.

12) TANKERING & SERVICING AGREEMENT

The Moody Sewage Ltd warranty on Parts and Labour for systems the Company installs are only valid when regular Servicing and Emptying is undertaken by Moody Sewage, as the recommended requirements.

Servicing

The system is to be serviced, as a minimum as per the recommendations and price advised within the report.

Tankering/Emptying

The system is to be emptied, as a minimum each year or unless advised within the report..

Our charges for Emptying:

1. **£11.00** per 100 gallons of sewage removed - a minimum charge of **£160.00** for up to 900 gallons applies.
2. Surcharges (where applicable):
 - a) £75.00 for additional pipe if the distance between Tanker and tank is greater than 50 metres
 - b) £60.00 for every additional onsite half hour over the first hour

VAT is not chargeable on Household waste. Businesses are subject to an additional charge of VAT at 20%

System Owner Responsibility: It is the responsibility of the you the owner to ensure that the system is safe for all concerned.

In the event of an Exclusion (see warranty section), or beyond the 12 months Parts and Labour warranty, the costs for repairs, renewal and/or reconstruction will remain with you, The Client.

The client will be advised on how the system is performing and if it's a danger to the environment. Responsibility for compliance with Environmental Standards as set by the Law is with you the owner.

Making Changes: We may have to change our prices for both Tankering and Servicing from time to time, due to factors that are outside our control. Such as additional cost due to changing regulations, Water Company disposal costs or for other reasons.

However, if we do increase our prices, we promise to notify you in advance of any change. We will assume your acceptance of the price changes if you do not contact us, to say otherwise, before the start date that the new prices take effect.

Payment: Payments can be made either by Debit/Credit Card, or by Direct Debit. Payment details must be provided in advance of any work being undertaken. Payments will only be taken by either Direct Debit or Card once the work has been completed. Late payment renders you The Client liable to a surcharge of 5% per month on all outstanding charges, at the discretion of The Company.

Cancellation: If for any reason you wish to cancel The Contract for Servicing and Tankering, please provide confirmation in writing to The Company's Pound Hill address, or by email: info@moodysewage.com.

We just ask that you provide at least 30 Days before the next scheduled visit, and any outstanding charges will need to be paid, before the cancellation can be completed.

Please note: if the event that you cancel your Servicing and/or Emptying contract, we will be unable to guarantee the quality of the effluent or provide a warrantee on Parts and Labour with the 12 month following completion.

The Company can cancel The Contact at their discretion at any time, if this happens, we will aim to give you at least 30 days' notice. If we feel our colleagues have been threatened, or are subject to any unpleasant behaviour, we will cancel The Contract without notice.

Your Data: We promise to take the upmost care of your data, and to never sell it to a third party. For more information, please visit www.moodysewage.com/privacy

From time to time, we'd love to update you about our product and services that we provide. Please tick the box(es) below to show which form of communication you would prefer to be contacted by:

By Post ☐ Email ☐ Phone ☐ SMS/Text ☐

13) CONFIRMATION AND ACCEPTANCE OF WORKS - INSTALLATION

I confirm that I have selected option: , and instruct Moody Sewage Ltd to carry out the proposed recommendations as per the Report and supporting Terms and Conditions.

Signature: _____

Print Name _____

Date _____

JDH25012024



CONTRACT	.....	WICKENDEN MANOR
PAGE No.	.....	FD18
CONTRACT No.	.....	7238
DATE	.....	JULY 2026
BY	.....	CC

Appendix F – Environment Agency Permit

Credit Note

Environment Agency
Shared Services Connected Ltd, Sortation Ref 601
Phoenix House
Newport
NP10 8FZ

ea_fsc_ar@gov.sscl.com

004924 002641 EA1E505A 2 of 2 89432
NETHERHALL EDUCATIONAL ASSOCIA
18A NETHERHALL GARDENS
LONDON
NW3 5TH



Vat No : GB 662 4901 34

Credit No : 148181ST
Date : July 25, 2024
Page No : 1/2

Customer No.
218479 - S00951826C

Credit for subsistence charges in respect of a permit(s) held under or subject to the Environmental Permitting (England and Wales) Regulations 2016

Line	Description	Amount
1	Discharge Location: WICKENDEN MANOR, CHILLING STREET, SHARPThorNE, EAST GRINSTEAD, WEST SUSSEX Consent no P03633/1/1 Charge period 01/06/24 - 31/03/25 Permit category code 2.3.18 Pro-rata days 304/365 Permit category description Sewage effluent discharge Baseline charge 89000 >5m3 a day and <=20m3 a day; OR discharge to surface water: secondary treated domestic sewage between 5 and 20m3 a day.	-741.26
2	Discharge Location: WICKENDEN MANOR, CHILLING STREET, SHARPThorNE, EAST GRINSTEAD, WEST SUSSEX Consent no P03633/1/1 Charge period 01/06/24 - 31/03/25 Permit category code 2.3.18 Pro-rata days 304/365	739.59

Credit Note

Environment Agency
Shared Services Connected Ltd, Sortation Ref 601
Phoenix House
Newport
NP10 8FZ

ea_fsc_ar@gov.sscsl.com



Environment
Agency

Vat No : GB 662 4901 34

Credit No : 148181ST

Date : July 25, 2024

Page No: 2/2

Line	Description	Amount
	Permit category description Sewage effluent discharge Baseline charge >5m3 a day and <=20m3 a day, OR discharge to surface water; secondary treated domestic sewage between 5 and 20m3 a day.	88800
	VAT : UK OUT OF SCOPE	0.00
	Total	£ -1.67

The Hazardous Waste Regulations 2005: Consignment Note



Environment
Agency

CARRIER'S COPY

PART A Notification details

1 Consignment note code: **ORS353/NE16B**

2 The waste described below is to be removed from (name, address, postcode, telephone, e-mail, facsimile):

**WICKENDEN MANOR, Chilling Street,
Sharpthorne, RH19 4JB**

4 The waste will be taken to (name, address and postcode):

**Viridor Waste (Thames) Ltd
Camberley, GU15 3YL**

5 The waste producer was (if different from 2) (name, address, postcode, telephone, e-mail, facsimile):

As A2

3 Premises code (where applicable): **ORS353**

If continuation sheet used, tick here ☐

PART B Description of the waste

1 The process giving rise to the waste(s) was: **Cess Pit**

2 SIC for the process giving rise to the waste: **55.23/9**

3 WASTE DETAILS (where more than one waste type is collected all of the information given below must be completed for each EWC identified)

Description of waste	List of wastes (EWC code)(6 digits)	Quantity (kg)	The chemical/biological components of the waste and their concentrations are:		Physical form (gas, liquid, solid, powder, sludge or mixed)	Hazard code(s)	Container type, number and size
			Component	Concentration (% or mg/kg)			
Water, Oil & Sewage	130506	2000g	Oil		Liquid	HP7	Tanker

The information given below is to be completed for each EWC identified

EWC code	Packing group(s)	UN identification number(s)	Proper shipping name(s)	UN class(es)	Special handling requirements

PART C Carrier's certificate

(If more than one carrier is used, please attach schedule for subsequent carriers. If a schedule of carriers is attached tick here. ☐)

I certify that I today collected the consignment and that the details in A2, A4 and B3 are correct and I have been advised of any specific handling requirements.

1 Carrier name: **Moody Sewage Ltd**

On behalf of (name, address, postcode, telephone, e-mail, facsimile):

**Moody Sewage Ltd, Pound Hill, Pound Lane
Framfield, East Sussex, TN22 5RR**

2 Carrier registration no./reason for exemption:

SSU/878990/CB

3 Vehicle registration no. (or mode of transport, if not road):

RA65 ODY

Signature

Date **09/02/2016** Time **0756**

PART D Consignor's certificate

I certify that the information in A, B and C above is correct, that the carrier is registered or exempt and was advised of the appropriate precautionary measures. All of the waste is packaged and labelled correctly and the carrier has been advised of any special handling requirements.

1 Consignor name: **Netherhall Educational Ltd**

On behalf of (name, address, postcode, telephone, e-mail, facsimile):

**WICKENDEN MANOR, Chilling Street,
Sharpthorne, RH19 4JB
Judy Reynolds - 01342 810419**

Signature

Date **09/02/2016** Time **0756**

PART E Consignee's certificate (where more than one waste type is collected all of the information given below must be completed for each EWC)

Individual EWC code(s) received	Quantity of each EWC code received (kg)	EWC code accepted/rejected	Waste management operation (R or D code)
130506	9000	ACCEPTED	D09

1 I received this waste at the address given in A4 on: Date **09-2-2016** Time **0945**

2 Vehicle registration no. (or mode of transport if not road):

RA65 ODY

3 Where waste is rejected please provide details:

I certify that waste management licence/permit/authorised exemption no(s).

CP 3936LL

authorises the management of the waste described in B at the address given in A4.

Name: **RM WICKENDEN**
On behalf of (name, address, postcode, telephone, e-mail, facsimile):

**Viridor Waste (Thames) Limited
30 Doman Road, Camberley, Surrey GU15 3DF
Tel: (01276) 686075 Fax: (01276) 683625**

Signature

Date **09-2-2016** Time **0945**

The Hazardous Waste Regulations 2005: Consignment Note


**Environment
Agency**
PRODUCER'S/HOLDER'S/CONSIGNOR'S COPY (Delete as appropriate)

PART A Notification details

1 Consignment note code: **ORS353/NE16E**

2 The waste described below is to be removed from (name, address, postcode, telephone, e-mail, facsimile):

**WICKENDEN MANOR, Chilling Street,
Sharpthorne, RH19 4JB**

4 The waste will be taken to (name, address and postcode):

**Viridor Waste (Thames) Ltd
Camberley, GU15 3YL**

5 The waste producer was (if different from 2) (name, address, postcode, telephone, e-mail, facsimile):

As A2

3 Premises code (where applicable): **ORS353**
PART B Description of the waste

If continuation sheet used, tick here ☐

1 The process giving rise to the waste(s) was: **Cess Pit**

2 SIC for the process giving rise to the waste: **55.23/9**

3 WASTE DETAILS (where more than one waste type is collected all of the information given below must be completed for each EWC identified)

Description of waste	List of wastes (EWC code)(6 digits)	Quantity (kg)	The chemical/biological components of the waste and their concentrations are:		Physical form (gas, liquid, solid, powder, sludge or mixed)	Hazard code(s)	Container type, number and size
			Component	Concentration (% or mg/kg)			
Water, Oil & Sewage	130506	1000	Oil		Liquid		Tanker

The information given below is to be completed for each EWC identified

EWC code	Packing group(s)	UN identification number(s)	Proper shipping name(s)	UN class(es)	Special handling requirements

PART C Carrier's certificate

(If more than one carrier is used, please attach schedule for subsequent carriers. If a schedule of carriers is attached tick here. ☐)

I certify that I today collected the consignment and that the details in A2, A4 and B3 are correct and I have been advised of any specific handling requirements.

1 Carrier name: **Moody Sewage Ltd**

On behalf of (name, address, postcode, telephone, e-mail, facsimile):

**Moody Sewage Ltd, Pound Hill, Pound Lane
Framfield, East Sussex, TN22 5RR**

2 Carrier registration no./reason for exemption:

SSU/878990/CB

3 Vehicle registration no. (or mode of transport, if not road):

RA65 ODT

Signature

Date **09/02/2016** Time **13:56**
PART D Consignor's certificate

I certify that the information in A, B and C above is correct, that the carrier is registered or exempt and was advised of the appropriate precautionary measures. All of the waste is packaged and labelled correctly and the carrier has been advised of any special handling requirements.

1 Consignor name: **Netherhall Educational Ltd**

On behalf of (name, address, postcode, telephone, e-mail, facsimile):

**WICKENDEN MANOR, Chilling Street,
Sharpthorne, RH19 4JB
Judy Reynolds - 01342 810419**

Signature

Date **09/02/2016** Time **13:36**
PART E Consignee's certificate (where more than one waste type is collected all of the information given below must be completed for each EWC)

Individual EWC code(s) received	Quantity of each EWC code received (kg)	EWC code accepted/rejected	Waste management operation (R or D code)
130506	4500	RECEIVED	D09

1 I received this waste at the address given in A4 on: Date **09/02/2016** Time **15:20**

2 Vehicle registration no. (or mode of transport if not road):

RA65 ODT

3 Where waste is rejected please provide details:

I certify that waste management licence/permit/authorised exemption no(s).

CP3936LL

authorises the management of the waste described in B at the address given in A4.

Name: **N. Reynolds**

On behalf of (name, address, postcode, telephone, e-mail, facsimile):

**Viridor Waste (Thames) Limited
30 Doman Road, Camberley, Surrey GU15 3DL
Tel: (01276) 686075 Fax: (01276) 683625**

Signature

Date **09/02/2016** Time **15:20**

The Hazardous Waste Regulations 2005: Consignment Note

PRODUCER'S/HOLDER'S/CONSIGNOR'S COPY (Delete as appropriate)

PART A Notification details

- 1 Consignment note code: **ORS353 / NE16D**
- 2 The waste described below is to be removed from (name, address, postcode, telephone, e-mail, facsimile):
**WICKENDEN MANOR, Chilling Street,
Sharpthorne, RH19 4JB**
- 3 Premises code (where applicable): **ORS353**
- 4 The waste will be taken to (name, address and postcode):
**Viridor Waste (Thames) Ltd
Camberley, GU15 3YL**
- 5 The waste producer was (if different from 2) (name, address, postcode, telephone, e-mail, facsimile):
As A2

PART B Description of the waste

If continuation sheet used, tick here ☐

- 1 The process giving rise to the waste(s) was: **Cess Pit**
- 2 SIC for the process giving rise to the waste: **55.23 / 9**
- 3 WASTE DETAILS (where more than one waste type is collected all of the information given below must be completed for each EWC identified)

Description of waste	List of wastes (EWC code)(6 digits)	Quantity (kg)	The chemical/biological components of the waste and their concentrations are:		Physical form (gas, liquid, solid, powder, sludge or mixed)	Hazard code(s)	Container type, number and size
			Component	Concentration (% or mg/kg)			
Water, Oil & Sewage	130506	2000 g	Oil		Liquid		Tanker

The information given below is to be completed for each EWC identified

EWC code	Packing group(s)	UN identification number(s)	Proper shipping name(s)	UN class(es)	Special handling requirements

PART C Carrier's certificate

(If more than one carrier is used, please attach schedule for subsequent carriers. If a schedule of carriers is attached tick here. ☐)

I certify that I today collected the consignment and that the details in A2, A4 and B3 are correct and I have been advised of any specific handling requirements.

1 Carrier name: **Moody Sewage Ltd**

On behalf of (name, address, postcode, telephone, e-mail, facsimile):

**Moody Sewage Ltd, Pound Hill, Pound Lane
Framfield, East Sussex, TN22 5RR**

2 Carrier registration no./reason for exemption:

SSU/878990/CB

3 Vehicle registration no. (or mode of transport, if not road):

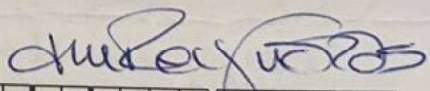
RA65 ODYSignature Date **09/02/2016** Time **01:37**

PART D Consignor's certificate

I certify that the information in A, B and C above is correct, that the carrier is registered or exempt and was advised of the appropriate precautionary measures. All of the waste is packaged and labelled correctly and the carrier has been advised of any special handling requirements.

1 Consignor name: **Netherhall Educational Ltd**

On behalf of (name, address, postcode, telephone, e-mail, facsimile):

**WICKENDEN MANOR, Chilling Street,
Sharpthorne, RH19 4JB
Judy Reynolds - 01342 810419**Signature Date **09/02/2016** Time **01:37**

PART E Consignee's certificate (where more than one waste type is collected all of the information given below must be completed for each EWC)

Individual EWC code(s) received	Quantity of each EWC code received (kg)	EWC code accepted/rejected	Waste management operation (R or D code)
130506	2000	Accepted	R09

1 I received this waste at the address given in A4 on: Date **09/02/2016** Time **19:25**

2 Vehicle registration no. (or mode of transport if not road):

RA65 ODY

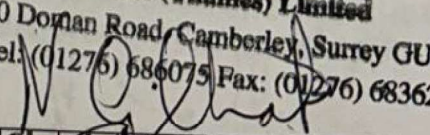
3 Where waste is rejected please provide details:

I certify that waste management licence/permit/authorised exemption no(s).

authorises the management of the waste described in B at the address given in A4.

Name:

On behalf of (name, address, postcode, telephone, e-mail, facsimile):

**Viridor Waste (Thames) Limited
30 Doman Road, Camberley, Surrey GU15 3DF
Tel: (01276) 686075 Fax: (01276) 683625**Signature Date **09/02/2016** Time **19:25**

The Hazardous Waste Regulations 2005: Consignment Note


**Environment
Agency**
PRODUCER'S/HOLDER'S/CONSIGNOR'S COPY (Delete as appropriate)

PART A Notification details

 1 Consignment note code: **ORS353 / NE16A**

2 The waste described below is to be removed from (name, address, postcode, telephone, e-mail, facsimile):

**WICKENDEN MANOR, Chilling Street,
Sharpthorne, RH19 4JB**

4 The waste will be taken to (name, address and postcode):

**Viridor Waste (Thames) Ltd
Camberley, GU15 3YL**

5 The waste producer was (if different from 2) (name, address, postcode, telephone, e-mail, facsimile):

As A2

 3 Premises code (where applicable): **ORS353**
PART B Description of the waste

 If continuation sheet used, tick here ☐

 1 The process giving rise to the waste(s) was: **Cess Pit**

 2 SIC for the process giving rise to the waste: **55.23/9**

3 WASTE DETAILS (where more than one waste type is collected all of the information given below must be completed for each EWC identified)

Description of waste	List of wastes (EWC code)(6 digits)	Quantity (kg)	The chemical/biological components of the waste and their concentrations are:		Physical form (gas, liquid, solid, powder, sludge or mixed)	Hazard code(s)	Container type, number and size
			Component	Concentration (% or mg/kg)			
Water, Oil & Sewage	130506		Oil		Liquid		Tanker
	130899	9000				HF7	

The information given below is to be completed for each EWC identified

EWC code	Packing group(s)	UN identification number(s)	Proper shipping name(s)	UN class(es)	Special handling requirements

PART C Carrier's certificate

 (If more than one carrier is used, please attach schedule for subsequent carriers. If a schedule of carriers is attached tick here. ☐)

I certify that I today collected the consignment and that the details in A2, A4 and B3 are correct and I have been advised of any specific handling requirements.

 1 Carrier name: **Moody Sewage Ltd**

On behalf of (name, address, postcode, telephone, e-mail, facsimile):

**Moody Sewage Ltd, Pound Hill, Pound Lane
Framfield, East Sussex, TN22 5RR**

2 Carrier registration no./reason for exemption:

SSU/878990/CB

3 Vehicle registration no. (or mode of transport, if not road):

RA65 ODY

Signature

 Date **27/01/2016** Time **0817**
PART D Consignor's certificate

I certify that the information in A, B and C above is correct, that the carrier is registered or exempt and was advised of the appropriate precautionary measures. All of the waste is packaged and labelled correctly and the carrier has been advised of any special handling requirements.

 1 Consignor name: **Netherhall Educational Ltd**

On behalf of (name, address, postcode, telephone, e-mail, facsimile):

**WICKENDEN MANOR, Chilling Street,
Sharpthorne, RH19 4JB**
Judy Daisy - 01342 810419

Signature

 Date **27/01/2016** Time **0830**
PART E Consignee's certificate (where more than one waste type is collected all of the information given below must be completed for each EWC)

Individual EWC code(s) received	Quantity of each EWC code received (kg)	EWC code accepted/rejected	Waste management operation (R or D code)
130899	9000	ACCEPTED	D09

 1 I received this waste at the address given in A4 on: Date **27-1-2016** Time **1030**

2 Vehicle registration no. (or mode of transport if not road):

RA65 ODY

3 Where waste is rejected please provide details:

I certify that waste management licence/permit/authorised exemption no(s).

CP3936LL

authorises the management of the waste described in B at the address given in A4.

 Name: **R M WHEELER**

On behalf of (name, address, postcode, telephone, e-mail, facsimile):

Viridor Waste (Thames) Limited
30 Doman Road, Camberley, Surrey GU15 3DF
Tel: (01276) 686075 Fax: (01276) 683625

Signature

 Date **27-1-2016** Time **1030**

The Hazardous Waste Regulations 2005: Consignment Note



PRODUCER'S/HOLDER'S/CONSIGNOR'S COPY (Delete as appropriate)

PART A Notification details

1 Consignment note code: **ORS353 / NE16A**

2 The waste described below is to be removed from (name, address, postcode, telephone, e-mail, facsimile):

**WICKENDEN MANOR, Chilling Street,
Sharpthorne, RH19 4JB**

4 The waste will be taken to (name, address and postcode):

**Viridor Waste (Thames) Ltd
Camberley, GU15 3YL**

5 The waste producer was (if different from 2) (name, address, postcode, telephone, e-mail, facsimile):

As A2

3 Premises code (where applicable): **ORS353**

If continuation sheet used, tick here ☐

PART B Description of the waste

1 The process giving rise to the waste(s) was: **Cess Pit**

2 SIC for the process giving rise to the waste: **55 . 23 / 9**

3 WASTE DETAILS (where more than one waste type is collected all of the information given below must be completed for each EWC identified)

Description of waste	List of wastes (EWC code)(6 digits)	Quantity (kg)	The chemical/biological components of the waste and their concentrations are:		Physical form (gas, liquid, solid, powder, sludge or mixed)	Hazard code(s)	Container type, number and size
			Component	Concentration (% or mg/kg)			
Water, Oil & Sewage	1 3 0 5 0 6		Oil		Liquid		Tanker
	1 3 0 8 9 9	9000				Hf 7	

The information given below is to be completed for each EWC identified

EWC code	Packing group(s)	UN identification number(s)	Proper shipping name(s)	UN class(es)	Special handling requirements

PART C Carrier's certificate

(If more than one carrier is used, please attach schedule for subsequent carriers. If a schedule of carriers is attached tick here. ☐)

I certify that I today collected the consignment and that the details in A2, A4 and B3 are correct and I have been advised of any specific handling requirements.

1 Carrier name: **Moody Sewage Ltd**

On behalf of (name, address, postcode, telephone, e-mail, facsimile):

**Moody Sewage Ltd, Pound Hill, Pound Lane
Framfield, East Sussex, TN22 5RR**

2 Carrier registration no./reason for exemption:

SSU/878990/CB

3 Vehicle registration no. (or mode of transport, if not road):

RA65 ODY

Signature

Date **27/01/2016** Time **0817**

PART D Consignor's certificate

I certify that the information in A, B and C above is correct, that the carrier is registered or exempt and was advised of the appropriate precautionary measures. All of the waste is packaged and labelled correctly and the carrier has been advised of any special handling requirements.

1 Consignor name: **Netherhall Educational Ltd**

On behalf of (name, address, postcode, telephone, e-mail, facsimile):

**WICKENDEN MANOR, Chilling Street,
Sharpthorne, RH19 4JB**

Judy Daisy - 01342 810419

Signature

Date **27/01/2016** Time **0830**

PART E Consignee's certificate (where more than one waste type is collected all of the information given below must be completed for each EWC)

Individual EWC code(s) received	Quantity of each EWC code received (kg)	EWC code accepted/rejected	Waste management operation (R or D code)
130899	9000	ACCEPTED	D09

1 I received this waste at the address given in A4 on: Date **27-11-2016** Time **1030**

2 Vehicle registration no. (or mode of transport if not road):

RA65 ODY

3 Where waste is rejected please provide details:

I certify that waste management licence/permit/authorised exemption no(s).

CP393644

authorises the management of the waste described in B at the address given in A4.

Name: **R M WHEAT**

On behalf of (name, address, postcode, telephone, e-mail, facsimile):

Viridor Waste (Thames) Limited

30 Doman Road, Camberley, Surrey GU15 3DF

Tel: (01276) 686075 Fax: (01276) 683625

Signature

Date **27-11-2016** Time **1030**

The Hazardous Waste Regulations 2005: Consignment Note



Environment
Agency

CARRIER'S COPY

PART A Notification details

1 Consignment note code: **ORS353 / NE16C**

2 The waste described below is to be removed from (name, address, postcode, telephone, e-mail, facsimile):

**WICKENDEN MANOR, Chilling Street,
Sharpthorne, RH19 4JB**

3 Premises code (where applicable): **ORS353**

4 The waste will be taken to (name, address and postcode):

**Viridor Waste (Thames) Ltd
Camberley, GU15 3YL**

5 The waste producer was (if different from 2) (name, address, postcode, telephone, e-mail, facsimile):

As A2

PART B Description of the waste

If continuation sheet used, tick here ☐

1 The process giving rise to the waste(s) was: **Cess Pit**

2 SIC for the process giving rise to the waste: **55.23/9**

3 WASTE DETAILS (where more than one waste type is collected all of the information given below must be completed for each EWC identified)

Description of waste	List of wastes (EWC code)(6 digits)	Quantity (kg)	The chemical/biological components of the waste and their concentrations are:		Physical form (gas, liquid, solid, powder, sludge or mixed)	Hazard code(s)	Container type, number and size
			Component	Concentration (% or mg/kg)			
Water, Oil & Sewage	130506	2000	Oil		Liquid	H411	Tanker

The information given below is to be completed for each EWC identified

EWC code	Packing group(s)	UN identification number(s)	Proper shipping name(s)	UN class(es)	Special handling requirements

PART C Carrier's certificate

(If more than one carrier is used, please attach schedule for subsequent carriers. If a schedule of carriers is attached tick here. ☐)

I certify that I today collected the consignment and that the details in A2, A4 and B3 are correct and I have been advised of any specific handling requirements.

1 Carrier name: **Moody Sewage Ltd**

On behalf of (name, address, postcode, telephone, e-mail, facsimile):

**Moody Sewage Ltd, Pound Hill, Pound Lane
Framfield, East Sussex, TN22 5RR**

2 Carrier registration no./reason for exemption:

SSU/878990/CB

3 Vehicle registration no. (or mode of transport, if not road):

RA65 ODT

Signature

Date **09/04/2016** Time **11:11**

PART D Consignor's certificate

I certify that the information in A, B and C above is correct, that the carrier is registered or exempt and was advised of the appropriate precautionary measures. All of the waste is packaged and labelled correctly and the carrier has been advised of any special handling requirements.

1 Consignor name: **Netherhall Educational Ltd**

On behalf of (name, address, postcode, telephone, e-mail, facsimile):

**WICKENDEN MANOR, Chilling Street,
Sharpthorne, RH19 4JB
Judy Reynolds - 01342 810419**

Signature

Date **09/04/2016** Time **11:11**

PART E Consignee's certificate (where more than one waste type is collected all of the information given below must be completed for each EWC)

Individual EWC code(s) received	Quantity of each EWC code received (kg)	EWC code accepted/rejected	Waste management operation (R or D code)
130506	9000	ACCEPTED	D09

1 I received this waste at the address given in A4 on: Date **09-04-2016** Time **0950**

2 Vehicle registration no. (or mode of transport if not road):

RA 65 ODT

3 Where waste is rejected please provide details:

I certify that waste management licence/permit/authorised exemption no(s).

CP 3936LL

authorises the management of the waste described in B at the address given in A4.

Name: **R M Wheeler**
On behalf of (name, address, postcode, telephone, e-mail, facsimile):

Viridor Waste (Thames) Limited

30 Doman Road, Camberley, Surrey GU15 3DF

Tel: (01276) 686075 Fax: (01276) 683625

Signature

Date **09-04-2016** Time **0950**

Water Resources Act 1991
as amended by the Environment Act 1995
Consent to Discharge
Certificate of Holder



**ENVIRONMENT
AGENCY**

Part A

Date: 7 November 1996

**To: Manager
WICKENDEN MANOR
CHILLING STREET**

**SHARPTHORNE
WEST SUSSEX
RH19 4JB**

The Environment Agency ("the Agency") hereby confirm that the above named person is a/the registered holder of consent **P.3633/S/P/91 (Ref:P03633/2/1) issued 4/11/92**

Nature of Discharge(s); **SEWAGE - Treated Effluent**

at **WICKENDEN MANOR CHILLING STREET
SHARPTHORNE EAST GRINSTEAD, WEST SUSSEX**

Note: This certificate should be kept with the consent document for future reference. If you transfer responsibility for the discharge to somebody else you must pass the consent to them and tell the Agency within 21 days. **Responsibility for the consent cannot be disclaimed by the holder but the registration of holder may be transferred to a successor.** To do this please complete the form below, then tear it off and return it to the address shown. If you fail to transfer the consent, even though you are no longer on the site, you may still be liable for prosecution for pollution. If you transfer the consent but do not tell us, you will be committing an offence. In case of any queries please contact your local Environment Agency office.

Part B Please complete in block capitals or type.

**To: ENVIRONMENT AGENCY, Southern Region, Guildbourne House, Chatsworth Road,
Worthing, West Sussex, BN11 1LD. Tel: 01903 832000 FAX: 01903 821832**

Water Resources Act 1991: Notice of transfer of consent to discharge

Consent: **Name:**
Address:

I/We* hereby serve notice on the Agency that I/we* am/are* no longer a/the* Holder of the above consent which will be/was* transferred to: * delete as appropriate

Name(s) of new holder(s):
Address:

Post Code:

Date of Transfer to new Holder(s);

Signed:..... Dated:.....

Name (block capitals):..... Position:

WV3/5/96

(to be completed when signing
on behalf of corporate bodies)



COPY

NOTICE TO THE ENVIRONMENT AGENCY*

Environment Act 1995, Schedule 23, para 21(2)(b)(ii)



*The notes below may help in completing this notice.

WITH RESPECT TO THE FOLLOWING CONSENT [as given by the National Rivers Authority (or its predecessors)] WHICH WAS IN FORCE ON 31st MARCH 1996,

Name on former NRA Register on 31/3/96 NETHERHALL EDUCATIONAL ASSOCIATION

Consent Number P.3633/S/P/91 Date consent was given 4.11.1992
or last reviewed

for the making of a discharge/several discharges of SEWAGE - TREATED EFFLUENT
at Discharge Site Address WICKENDEN MANOR CHILLING STREET
SHARPTHORNE WEST SUSSEX RH19 4JB

I HEREBY GIVE NOTICE TO THE ENVIRONMENT AGENCY THAT I AM THE PERSON MAKING THE DISCHARGE(S) REFERRED TO ABOVE AND THAT I PROPOSE TO RELY ON this consent / the consents as on the attached signed and dated list** *Delete as appropriate*
AFTER 1st OCTOBER 1996 AND WISH TO BE REGISTERED AS THE CONSENT HOLDER.

Name of Consent Holder ('the Discharger') WICKENDEN MANOR: PART OF NETHERHALL EDUCATIONAL ASSOCIATION
<If you are a body corporate please complete with the registered name/address of the body corporate - see note 2 below>

Address WICKENDEN MANOR CHILLING STREET
SHARPTHORNE WEST SUSSEX Post Code RH19 4JB

SIGNED A Bennett DATED 30.9.96

<job title MANAGER>
<being the person with the delegated authority to sign on behalf of a body corporate - see note 2 below>

NOTES TO HELP YOU TO COMPLETE THIS NOTICE

1. If you are attaching a list of consents (as prepared by us from the NRA Register as on 31/3/96) then please overwrite the top section of this notice with the words 'Consents as on attached signed and dated list'. You should thoroughly check this list and modify and initial where necessary before signing and dating each page of the list and attaching to this completed notice. You may of course use your own list of consents you propose to rely on provided that the information above is included in full and each page is signed and dated.

2. In addition to an individual, a 'person' in legal terms may refer to a 'body corporate' (e.g. public limited company ('plc'), limited company, local authority etc.). In these cases the body corporate will be registered as the consent holder. The person signing on behalf of the body corporate will be the person who has the power to do so (usually the Company Secretary for a plc or limited company, the Chief Executive for a local authority etc). The legal validity of the signatory is the responsibility of the body corporate. If you are signing with the delegated authority of the body corporate, please indicate your job title.

3. Legal advice may be advisable for some situations (e.g. grant maintained schools outside of local authority control).

4. If you are a partnership or registered charity then up to 4 partners/trustees should individually complete this notice. These partners/trustees will then be registered as joint consent holders.

5. If you share the making of the discharge(s) with another person(s) then you should all complete the notice and be registered as joint consent holders. (e.g. householders individually and severally discharging via a common private sewage treatment works).

6. If in doubt, it may help to consider the 'person' as the person, either individually or severally, who would apply for the consent if an application were in future to be made to the Environment Agency. Under the amended legislation, ONLY the registered consent holder may in future apply to the Agency for a variation of the consent.

NOTE: The responsibility for this notice rests entirely with you and the Agency cannot be held responsible in any way for mistakes made as a result of the notes above (or otherwise) which are given in good faith.



Reference: CS
24th October 2006

WICKENDEN MANOR
WICKENDEN MANOR
CHILLING STREET, SHARPTHORNE
EAST GRINSTEAD
WEST SUSSEX
RH19 4JB

For attention of: NETHERHALL EDUCATIONAL FOUNDN

Sampling Point: F0014853 WICKENDEN MANOR STW
Purpose: COMPLIANCE AUDIT (PERMIT) Mechanism: SPOT Material: FINAL
SEWAGE EFFLUENT

Dear Sirs

The discharge for the above site was sampled at 12.03 hours on 11 October 2006 and you will find below the measurements and analysis carried out on the sample.

Determinand		Reading	Consent Limit
Ammonia - As N	mg/l	5.21	20
Bod At 20 As O2	mg/l	13.6	30
Solids Suspended @105c	mg/l	19.8	40
Ph - As Ph Units	PHUN	7.6	
Conductivity @20c	uS/c	600	
Temperature Water	CEL	16.69	
Nitrogen Total Oxidised - As N	mg/l	5.1	
Nitrate - As N	mg/l	4.43	
Nitrite - As N	mg/l	.67	
Chloride Ion - As Cl	mg/l	69	
Orthophosphate - As P	mg/l	2.87	

I am pleased to note that the discharge at this time was satisfactory but if you have any queries please do not hesitate to contact me at this office.

Yours sincerely

Carina Strutt
Environment Management Team Leader (Ouse)

