Land at Climping

West Sussex

OWNERS MANUAL

Relating to Surface Water Drainage Maintenance

The site has been designed in accordance with Sustainable Drainage Systems (SuDS) techniques.

An extract from the SuDS Manual (CIRIA C753) states “Sedimentation is one of the primary removal mechanisms in SUDS. Most pollution in runoff is attached to sediment particles and therefore removal of sediment results in a significant reduction in pollutant loads..”.

In order to remove sedimentation, the surface water drainage design utilises deep seal trapped gullies throughout, along with catchpit manholes and bio-retention areas and forebays within the attenuation basins.

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1) Explanation of the Surface Water Drainage System

The Principle of SUDs has been adopted for the whole of the site, calculations have been carried out using MicroDrainage with a storm return period of 100 years and an allowance of 45% for climate change and 10% allowance for urban creep.

Generally, roof water drains direct to the domestic drainage system within each curtilage and from there will be directed to the below ground surface water network. Hardstanding areas and access roads and drives drain to trapped gullies of which of these systems outfall to the surface water drainage system within the site.

The five attenuation basins, one swale and two geo-cellular storage tanks provide temporary storage of the surface water by slowing down the flows at key manholes S25, S158, S159 and S163 through the use of Hydrobrake flow controls, which are located inside of these manholes. During peak storm events the water levels in the basins will rise temporarily and after the rainfall event will drop back down. Both basins have bioretention areas which will remain wet. Both basins feature forebays to provide additional sediment control and are lined.

2) Operating and Maintenance Responsibility

Foreman Homes (FMH) are responsible for maintaining the surface water drainage systems on this site during the construction period. The management company appointed by FMH during the construction period will have FMH as the sole directors. Upon handover and occupation, this will be handed over to residents who will take over as Directors for the domestic drainage.

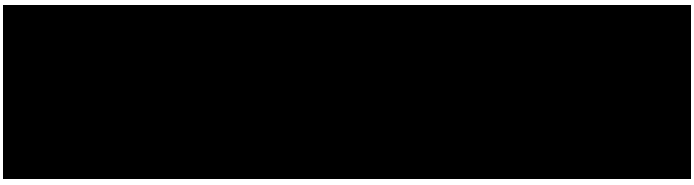
The Management Company will then appoint a managing agent who will ensure that the SuDS are maintained as set out in this document.

An OFWAT regulated sewerage authority will adopt and maintain the public surface and foul water sewers which run beneath the main roads of the site. Major components of the drainage system will replaced as required by the sewerage authority as part of their respective asset management plan.

Access to the western and southern basins can be gained via the internal site roads, if required the bollards can be lowered to use the emergency access. The southern ditch can be accessed from Pound Close and/or Field Close.

Emergency Contact Information:

Foreman Homes



3) Maintenance Schedule for catchpits, control chambers, flow control devices and gullies

Hydro-Brake Flow Control Maintenance

Normally, little maintenance is required as there are no moving parts within the Flow Control. The Flow Control is fitted with a pivoting by-pass door, which allows the manhole to be drained down should blockage occur. This is operated by a steel tensile rope attached to a pull handle located beneath the cover of the manhole-refer to the hydro international Technical specification sheet appended which indicates this arrangement. It is recommended that each unit be inspected monthly for three months and thereafter at six monthly intervals with hose down if required. All flow controls are typically manufactured from grade 304 Stainless Steel which has an estimated life span in excess of the design life of drainage systems. Also Refer to the Hydro International Maintenance and safety Sheet

Maintenance Schedule	Required Action	Recommended Frequency
Regular maintenance	Inspect and identify any areas that are not operating correctly. If required, take remedial action.	Monthly for 3 months, then six monthly
	Debris removal from catchment surface (where may cause risks to performance)	Monthly
	Remove sediment and oil deposits from all trapped gullies.	Annually, or as required.
Remedial actions	Repair/rehabilitation of inlets, outlets, 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 and after large storms

4) Maintenance Schedule for Attenuation basins and bio-retention areas

The basins will be lined with a Bentonite clay liner which has self-sealing properties. Therefore, if an object punctures the liner, it will seal around it. This prevents water from entering or exiting beneath the liner. The liner shall also be confined under 300mm of cover material.

Any silts, oils or detritus removed from the basins will undergo WAC testing once removed to determine its waste classification, prior to being transported to landfill.

Maintenance Schedule	Required Action	Recommended Frequency
Regular maintenance	Litter and debris removal.	Monthly
	Grass cutting – for spillways and access routes. Removal of tree samplings that seed themselves.	Monthly (during growing season), or as required.
	Grass cutting – meadow grass in and around basin. Ensure that the meadow grass is not cut lower than 10cm. No vehicle should track within 3-5m of the toe of the bank. All clippings and arisings to disposed at the appropriate recycling facility.	50% of the area annually during late autumn period (eg 1 side/bank of the system each year or 50% in area terms spread out amongst the system). Adjust as required should any survey show Water voles are present.
	Manage other vegetation and remove nuisance plants.	Monthly (at start, then as required).
	Tidy all dead growth before start of growing season.	Annually.
	Remove sediment from inlets, outlet and forebay.	Annually (or as required).
Occasional maintenance	Check for poor vegetation growth due to lack of sunlight or leaf dropping litter and cut back adjacent vegetation where possible/	Annually
	Re-seed areas of poor vegetation growth. Alter plant types to better suit conditions, if required	Annually, or if bare soil is exposed over 10% or more of the basin/swale treatment area
	Prune and trim trees and remove cuttings.	2 years (or as required). Ensure this is undertaken outside of bird nesting season.
	Make sure signage around basins is clean and easily visible.	Annually
Remedial actions	Repair of erosion or other damage by re-turfing or reseeding.	As required
	Re-level uneven surfaces and reinstate design levels.	As required.
	Repair/rehabilitation of inlets, outlets and overflows.	As required.
	Remove and dispose of oils or petrol residues using safe standard practices	As required
	Remove and replace and broken/damaged knee railing fencing/posts.	As required
	Remove and replace and broken/damaged signage around the basins.	As required

Monitoring	Inspect inlets, outlets and overflows for blockages, and clear if required.	Monthly/ after large storms.
	Inspect banksides, structures, pipework etc. for evidence of physical damage.	Monthly/ after large storms.
	Inspect signs and knee railing fences around basins for damage.	Monthly/ after large storms.
	Inspect inlets and facility surface for silt accumulation. Establish appropriate silt removal frequencies.	Half yearly.
	Check flow control device and other mechanical devices.	Half yearly.

5) Maintenance Schedule for Althon Grilles to Headwalls.

Maintenance Schedule	Required Action	Recommended Frequency
Regular maintenance	Litter and debris removal.	Monthly (or as required) or after heavy rainfall events
Occasional maintenance	Check moving parts and locks. Oil and ensure free moving. Replace when necessary.	As required.
Remedial actions	Remove build-up of sediment.	As required.
Monitoring	Inspect for blockages, and clear if required.	Monthly
	Inspect inlets and facility surface for silt accumulation. Establish appropriate silt removal frequencies.	Half yearly.

This schedule is also to be read in conjunction with the Althon Maintenance specification document appended to this manual.

6) Maintenance Schedule for solid wall pipes & Manholes

Maintenance Schedule	Required Action	Recommended Frequency
Regular maintenance	Inspect and identify any areas that are not operating correctly. If required, take remedial action.	Monthly for 3 months, then six monthly.
	Debris removal from catchment surface (where may cause risks to performance)	Monthly
	Sediment removal from catchpit sumps.	Monthly
	Inspect chambers and manholes for evidence of pipes operating correctly and take remedial action if necessary, to include jetting of pipework.	Monthly for 3 months, then annually

7) Maintenance Schedule Ditches and Headwalls

Maintenance Schedule	Required Action	Recommended Frequency
Regular maintenance	Litter and debris removal.	Monthly (or as required).
	Grass cutting – to retain grass height within specified design range. Close cut around outlet & structure. 100 – 150mm generally.	Monthly (during growing season), or as required.
	Manage other vegetation and remove nuisance plants.	Monthly (at start, then as required).
Occasional maintenance	Check for poor vegetation growth due to lack of sunlight or dropping of leaf litter, and cut back adjacent vegetation where possible.	Annually
	Re-seed areas of poor vegetation growth. Alter plant types to better suit conditions, if required.	Annually, or if bare soil is exposed over 10% or more of the swale treatment area.
Remedial actions	Repair erosion or other damage by re-turfing or reseeding.	As required
	Re-level uneven surfaces and reinstate design levels.	As required.
	Remove build-up of sediment on upstream gravel trench, flow spreader or at top of filter strip.	As required.
	Remove and dispose of oils or petrol residues using safe standard practices.	As required.
Monitoring	Inspect inlets, outlets and overflows for blockages, and clear if required.	Monthly
	Inspect infiltration surfaces for ponding, compaction, silt accumulation. Record areas where water is ponding for >48 hours.	Monthly, or when required.
	Inspect inlets and facility surface for silt accumulation. Establish appropriate silt removal frequencies.	Half yearly.

This schedule should be read in conjunction with the Althon SFA10 Maintenance documents appended to this manual.

8) Maintenance Schedule for Attenuation Tanks

Maintenance Schedule	Required Action	Recommended 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
	Re-level uneven surfaces and reinstate design levels.	Every 5 years or as required

9) Reasons for Maintenance

Surface water contains variable amounts of sediment which settles out at certain locations and could cause blockages if left. Road gullies also trap oil and prevent it entering the surface water sewer system.

10) Management and Maintenance

Some of the proposed drainage system is to be adopted by IWNL (S104 agreement has received technical approval). Therefore, the maintenance responsibility of those parts of the system will remain with them. IWNL has confirmed that they will be carrying out maintenance in accordance with the requirements of the DCG.

The parts of the system not adopted will be maintained either by the assigned management company or individual property owner.

Drainage infrastructure which serves a single plot will be the sole responsibility of the owner/occupier of the associated plot.

Any other parts of the drainage system i.e. the basins and shared (serving more than a single plot and/or being outside of any individual plot's

curtilage) unadopted infrastructure will be the responsibility of the management company.

The watercourse within the sites boundary will be maintained by the assigned management company in-line with the land owners legal obligations under the Land Drainage Act 1991/2010.

Any additional maintenance activities beyond this will be the responsibility of the management company, to be appointed by the developer upon completion of the development.

11)Funding

The funding of the maintenance will be the responsibility of the end users as follows:

- Adopted parts of the system will be maintained by IWNL Water, annual fees will be paid to IWNL by the owners/occupiers of the plots.
- Shared non-adopted infrastructure will be maintained by the management company and annual fees will be paid to the management company by the owners/occupiers of the plots.
- Private parts of the system will be the responsibility of individual plot owners who will be responsible for funding their own drainage system.

12)Record Keeping

Records shall be kept of maintenance undertaken which will help establish a long-term maintenance regime.

It is recommended that a record of maintenance carried out is kept, which should include the following information:

Date of maintenance:				
Location	Maintenance Carried Out	Silt Depth	Notes/Faults	Date of Next Inspection

Appendix (A)
Althon Headwall & Grille Manufacturer
Maintenance Specifications

December 2014

Maintenance of Headwalls, Silt Traps & Chambers.

With respect to the maintenance of any exposed surfaces of concrete components, only routine (Annual) cleaning **may** be necessary with a Power Washer and possibly some mild detergent to any exposed surfaces to maintain appearance; however all sites are unique and environmental impact of cleaning should be taken into account. Where cleaning is required and environmental conditions prevent mild detergent, using clean water and a power washer/stiff brush should suffice. Concrete units are often expected to "weather" and some coverage will help them to blend into their environment.

If damage to the structure of any pre-cast concrete components occurs we recommend their replacement not repair. If there is minor damage to corners during their normal life by grass cutting equipment etc. then repair with an epoxy compound such as 'Mason Mate 0868PR380 Polyester Resin'.

To dispose of any Pre-Cast concrete components the preferred method is to recycle the material by crushing and grading, but if the quantity is too small to be cost effective then disposal in conventional landfill is acceptable as all the concrete components are inert with regard to having any environmental impact.

Maintenance of Galvanised Grates & Handrails.

Annual/bi-annual visual checks are basic recommendations. If gratings are in a water course subject to a higher level of debris/weed, then more regular checks may be required. Clearing of debris/weeds from the grate will ensure no disruption to the flow, or backing up of the water course. Handrails should also only require a visual inspection – annually or at the same time as the headwall & grates.

SFA10 Headwall Range

Up to 750mm Pipework
800mm - 1520mm Backwall Height

300 and 500mm Thick Toe

Althon Sewers for Adoption precast headwalls should be used when a concrete headwall is part of a Section 104 Agreement and the sewers are to be adopted once completed by the local Water Company. The materials used and installation must comply with the 'Sewers for Adoption' guidelines. Althon SFA precast concrete headwalls offer a cost effective alternative to in-situ structures for connecting pipework discharging into open watercourses.

There are four sizes of Sewers for Adoption concrete headwalls available catering for pipe sizes up to and including 1500mm. Each size of SFA precast concrete headwall comes with three depths of toe and four back wall heights offering wing wall profiles to suit most applications.

Althon Sewers for Adoption precast concrete headwalls are cast to suit the diameter and type of pipe being used and can be provided with fixings cast in at the time of manufacture to accommodate gratings, trash screens, flap valves, penstocks, ladders, Kee Klamp® handrails and flow and depth monitoring equipment.

Our Sewers for Adoption compliant precast headwalls are available with toe extensions either 300 or 500mm thick with depths ranging from 450 to 1000mm. We also manufacture Sewers for Adoption compliant outfall safety grilles to suit our concrete headwalls.

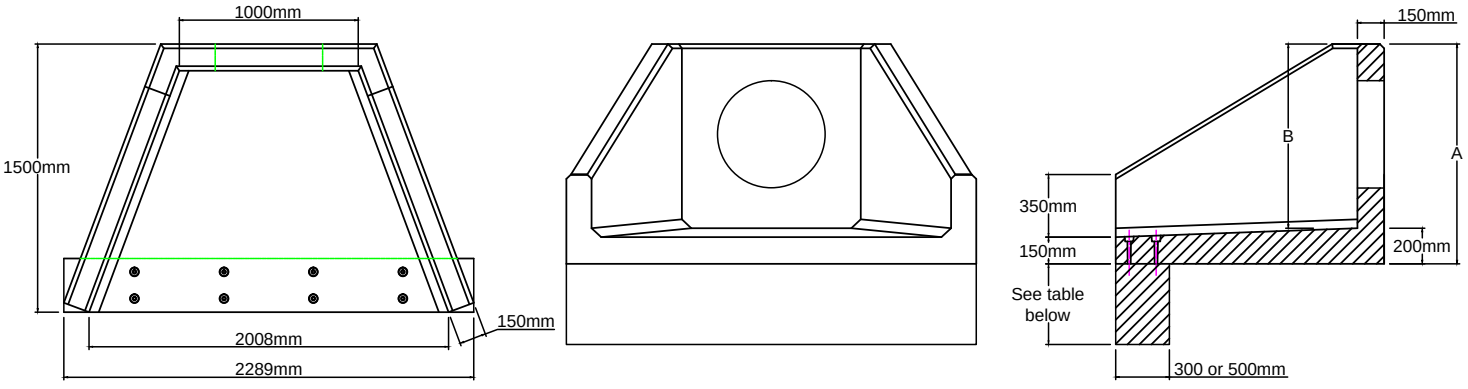
SFA10 A
800mm Backwall

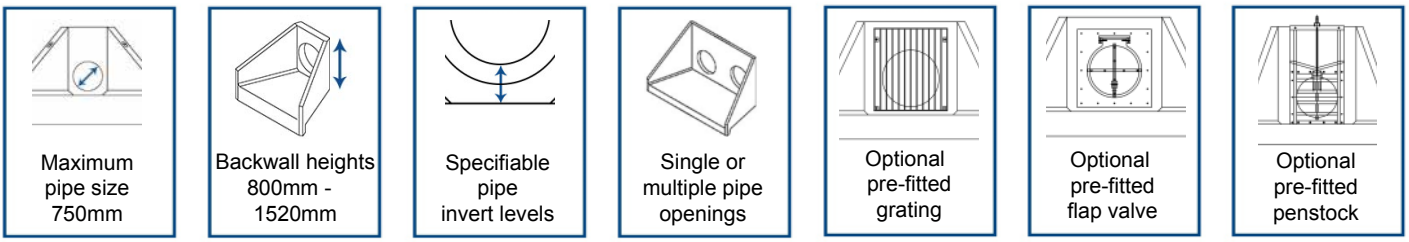
SFA10 B
1040mm Backwall

SFA10 C
1230mm Backwall

SFA10 D
1520mm Backwall

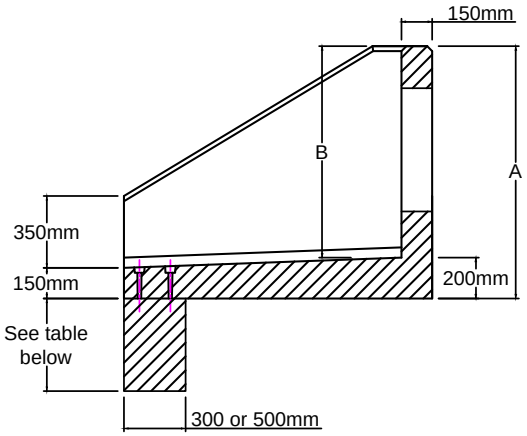
Optional Kee Klamp handrail





SFA10 Headwall Range

Up to 750mm Pipework
800mm - 1520mm Backwall Height



300mm Thick Toe

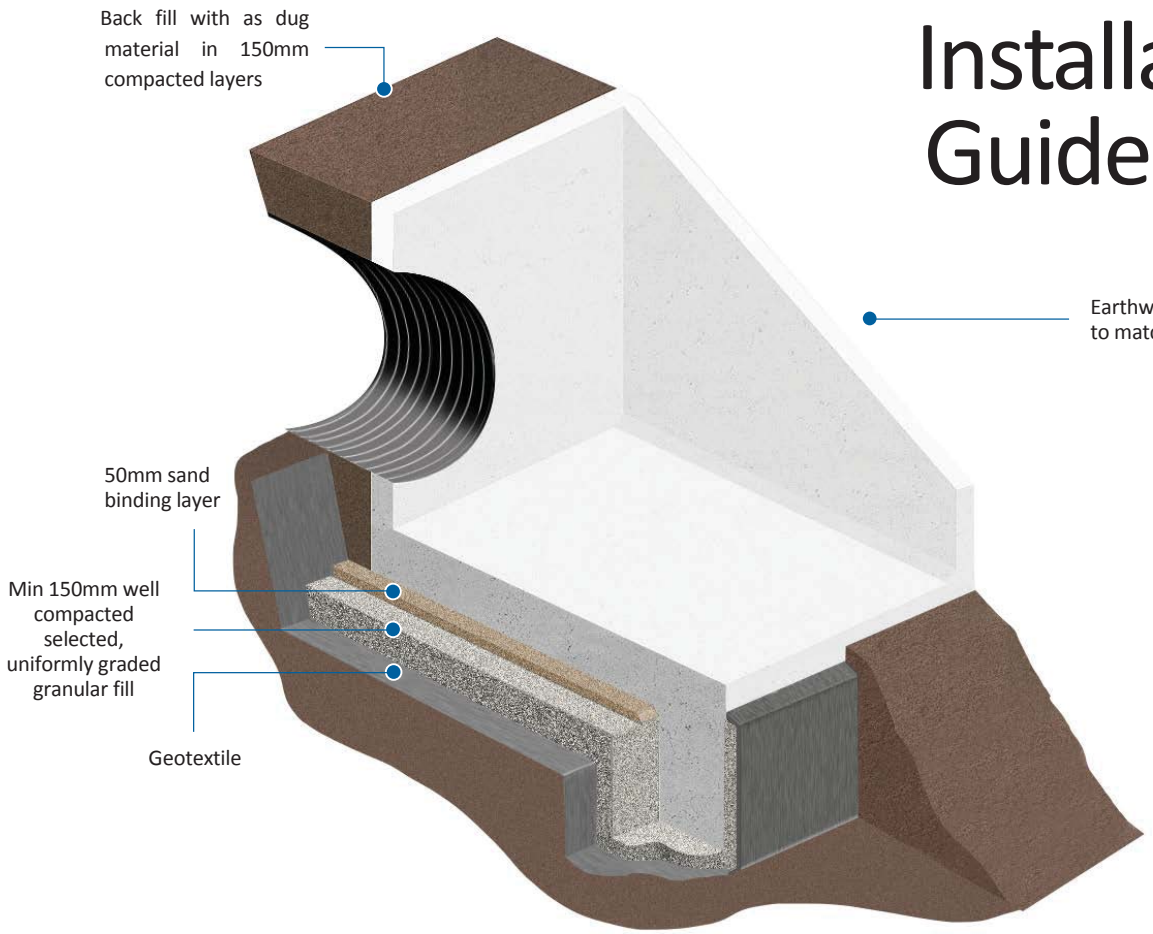
Headwall Ref	Back Wall Height A	Back Wall Height B	Wing Wall Profile	Weight	Weight with Toe			Max Pipe Opening	Max Pipe Opening	Max Pipe Opening	Max Pipe Opening	Max Pipe Opening	Max Pipe Opening
					450mm	700mm	1000mm	Invert Level with Apron		100mm Invert Level		225mm Invert Level	
								TW / Clay	Concrete	TW / Clay	Concrete	TW / Clay	Concrete
	mm	mm		kg	kg	kg	kg	mm	mm	mm	mm	mm	mm
SFA10A	800	600	1:4	1882	2636	3042	3542	400	375	300	300	150	N/A
SFA10B	1040	840	1:2	2124	2878	3284	3784	600	600	500	450	450	375
SFA10C	1230	1030	1:1.5	2315	3069	3475	3975	750	675	600	600	600	525
SFA10D	1520	1320	1:1	2607	3361	3767	5267	750	675	750	675	750	675

500mm Thick Toe

Headwall Ref	Back Wall Height A	Back Wall Height B	Wing Wall Profile	Weight	Weight with Toe			Max Pipe Opening	Max Pipe Opening	Max Pipe Opening	Max Pipe Opening	Max Pipe Opening	Max Pipe Opening
					500mm	750mm	1000mm	Invert Level with Apron		100mm Invert Level		225mm Invert Level	
								TW / Clay	Concrete	TW / Clay	Concrete	TW / Clay	Concrete
	mm	mm		kg	kg	kg	kg	mm	mm	mm	mm	mm	mm
SFA10A	800	600	1:4	1882	3262	3952	4642	400	375	300	300	150	N/A
SFA10B	1040	840	1:2	2124	3504	4194	4884	600	600	500	450	450	375
SFA10C	1230	1030	1:1.5	2315	3695	4385	5075	750	675	600	600	600	525
SFA10D	1520	1320	1:1	2607	3987	4677	5367	750	675	750	675	750	675

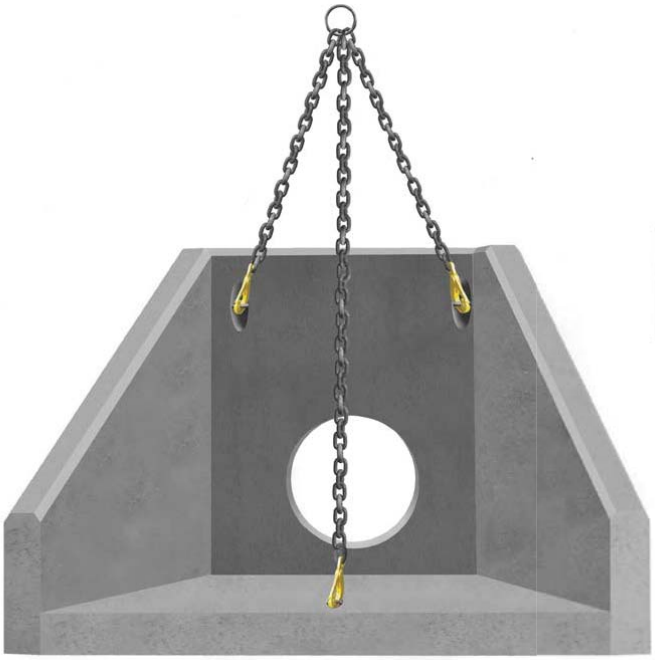
Note - Approximate headwall weights are based on a headwall with no hole cast in

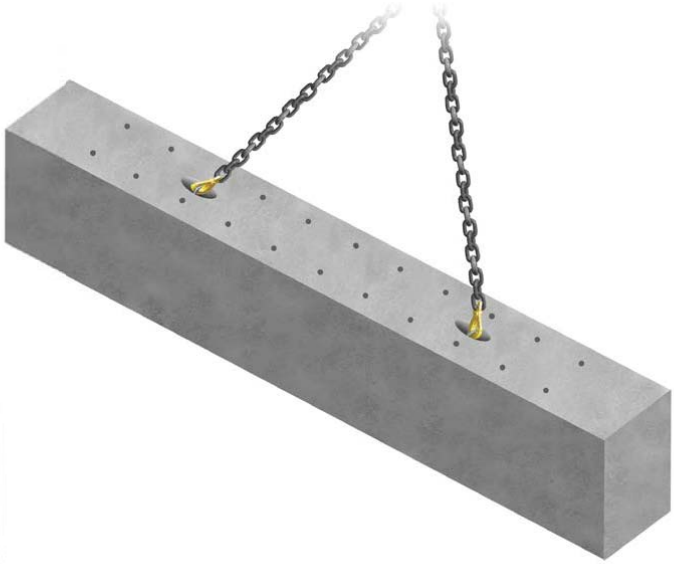
Installation Guidelines



1. Ensure that first or last spigot/butt or socket/butt pipe that is to be fitted to the Headwall is in position and free from backfill.
2. Dig out the bank of the watercourse to take the size of the headwall making sure that the Headwall will not protrude into the path of the water flow. The angle of the excavation to the rear of the Headwall should be roughly the same as the existing bank profile.
3. Dig out sufficient size trench to take the toe along the front of the foundation.
4. Line toe foundation with Geotextile then place selected, uniformly graded granular fill in the base and compact well. Lift Toe into position and level then fill around the toe with selected, uniformly graded granular fill and compact well. Insert supplied threaded rod into the sockets cast into the top of the toe.
5. Line the base of the rest of excavation with Geotextile then place a minimum bed of 150mm Class 6N or 6K* well graded granular Material on the base & compact well, especially around the back of the toe, then a 50mm topping of fine material (Class 6L*) to ensure units are level and stable. Lift Headwall into position, over the end of the pipe & locate over threaded rod protruding from the toe and level. Place washer over threaded rod in recess in Headwall apron and tighten nut. Fill recess with high strength non-shrink grout.
6. The pipe should be flush with the front of the back wall if fitting grating or flap valve, or protruding by 50mm if not.
7. Shim the pipe until it is central within the opening then fill void with sand cement mortar or high strength non-shrink grout.
8. If flap valve or grating is supplied, this will need to be removed before the pipe is inserted and sealed into place. Then reinstall using stainless steel fixing bolts into cast in sockets. (When bolting flap valves against headwall, use a good quality sealant but do not over tighten bolts or distortion may occur resulting in the valve not seating correctly.
9. Backfill pipe section first then backfill all around Headwall with as dug material. Make good at front of toe with as dug material ensuring river bank is returned to its original profile. It may be necessary to provide protection in front of the toe, please refer to engineers' recommendation.

*Manual of Contract Documents for Highway Works: Volume 1 (MCHW1), Specification for Highway Works, Series 600 (Nov 09)





Rapid-Lift Lifting Anchors

All Althon SFA Headwalls and Toes are fitted with Rapid-Lift lifting anchors. The Althon Rapid-Lift system allows the SFA Headwalls & Toes to be offloaded, transported and located in their final position without the need for any specialised lifting equipment. Standard lifting hooks and chains can be used with the three lifting points (two lifting points on Toes). The minimum chain leg length for all units is 1500mm.

Althon Precast Concrete SFA Headwall Safety Sheet

Althon Limited manufacture pre-cast concrete SFA Headwalls using :-

6 - 14mm aggregate · 0/4mm Sharp sand · Portland cement BS EN 197-1- Cem 1 52.5 · Cryso Fluid Premia 205 Varit Superplasticiser

When units have been manufactured and cured they are in a chemically inert state. But the following information should be considered.

- It is advisable to wear toe cap safety footwear when handling any concrete products. Please refer to your company Safety Policy for specific details on manual handling.
- When cutting with masonry grinding discs or drilling with masonry drill bits it is necessary to wear eye protection and a dust mask. It is also recommended to wear ear protection during either of these two processes.
- Due to some units having sharp edges it is advisable to wear protective gloves when handling Althon products.
- When fitting or removing some of the larger accessories it is necessary to use a mechanical system to prevent risk of back injury.

Maintenance of SFA Headwalls

With respect to the maintenance of any exposed surfaces of concrete components, only routine (Annual) cleaning may be necessary with a Power Washer and possibly some mild detergent to any exposed surfaces to maintain appearance; however all sites are unique and environmental impact of cleaning should be taken into account. Where cleaning is required and environmental conditions prevent mild detergent, using clean water and a power washer/stiff brush should suffice. Concrete units are often expected to "weather" and some coverage will help them to blend into their environment.

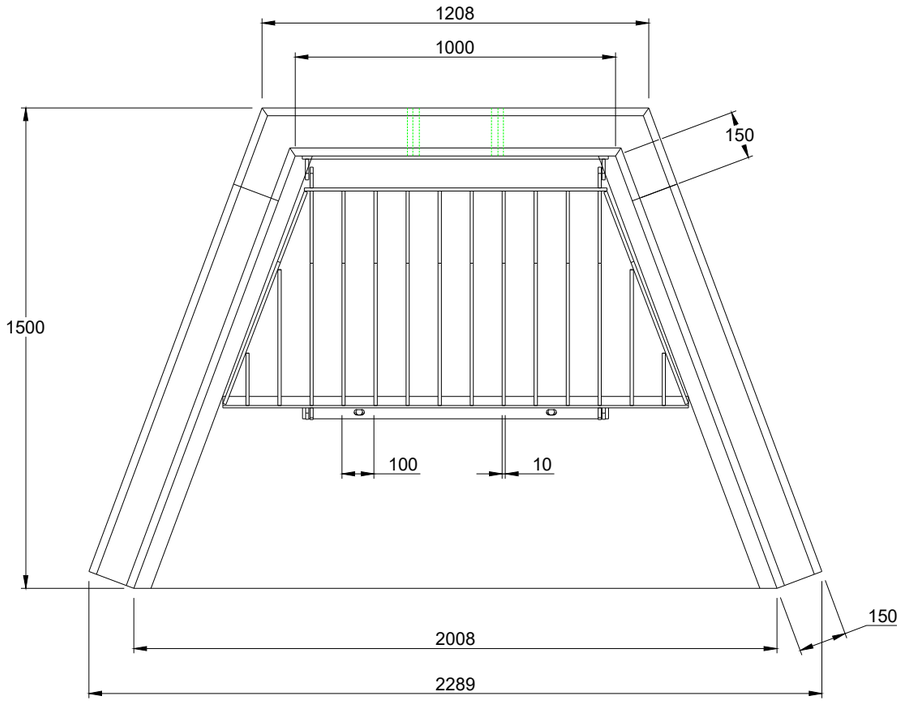
If damage to the structure of any pre-cast concrete components occurs we recommend their replacement not repair. If there is minor damage to corners during their normal life by grass cutting equipment etc. then repair with an epoxy compound such as 'Mason Mate 0868PR380 Polyester Resin'.

To dispose of any Pre-Cast concrete components the preferred method is to recycle the material by crushing and grading, but if the quantity is too small to be cost effective then disposal in conventional landfill is acceptable as all the concrete components are inert with regard to having any environmental impact.

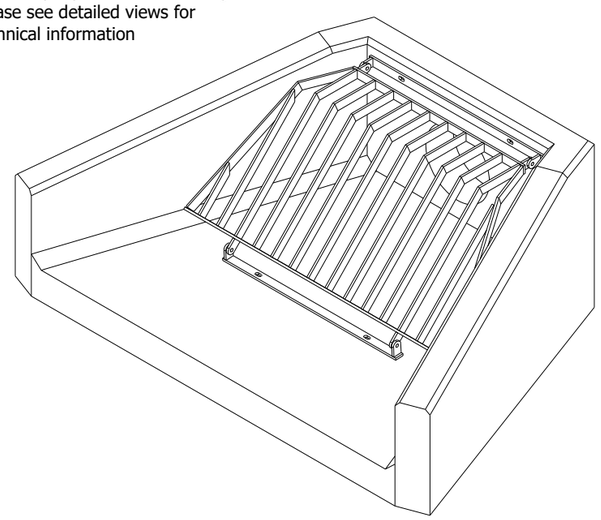
Maintenance of Galvanised Grates & Handrails.

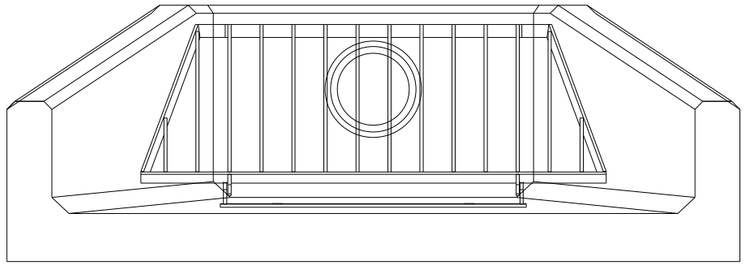
Annual/bi-annual visual checks are basic recommendations. If gratings are in a water course subject to a higher level of debris/weed, then more regular checks may be required. Clearing of debris/weeds from the grate will ensure no disruption to the flow, or backing up of the water course. Handrails should also only require a visual inspection – annually or at the same time as the headwall & grates.

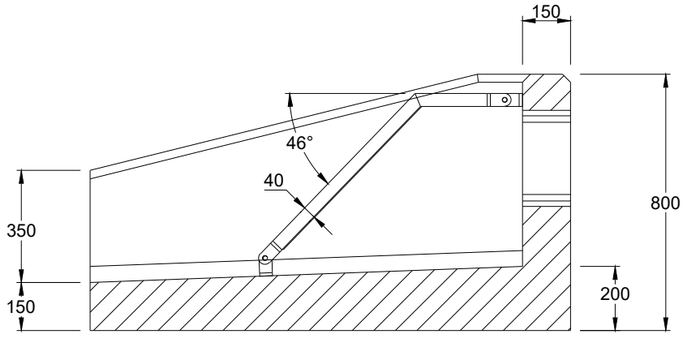
Opening in back wall cast to suit the outside diameter of the pipe at invert height required.



Note: Isometric drawing is for reference only, details may not accurately represent actual design - please see detailed views for technical information







NOTES:

- All dimensions in mm
- All measurements ± 1mm

Specification Information
- Opening in back wall cast to suit outside diameter of the pipework
- Invert level of pipe can be set to your specification

Headwall Installation
Units should be bedded on minimum 200mm thick well compacted Class 6A* selected well graded granular material.
*Manual of contract documents for Highway Works: Volume (MCHW1) specification for Highway Works, Series 600 (Nov.09).
Sit the headwall level or with a slight fall 1:50 from pipe to spill mouth.

Handling
A. Weight of concrete is based on 2.4 tonne/m³+5% is recommended for sizing lifting equipment.
B. All lifting points shall be used as specified below
C. Unit to be lifted as per lifting diagram

Concrete
A. Mix ref: Self-compacting DC4/DS4 Mix
B. Lifting strength based on 2 cubes = 20N/mm²
C. Characteristic 28 day cube strength = 50N/mm²
D. Concrete provides Design Chemical Class 4 (DC4) to special Digest 1, Table F2.

Reinforcement
A. Reinforcement to BS EN 13369
B. Scheduling, dimensioning, bending & cutting to BS8666
C. Cage to be machine tied with steel wire

Manufacture
A. Manufacture to BS EN 15258:2008 precast concrete products - Retaining wall elements, Factory Production Control certificate number: 0086-CPR-650448 & BS EN 13369
B. Tolerances to BS EN 13369 clause 4.3.1.1
C. Finishing:

	Top	Sides	Base	Rear of back wall
Class	A	A	A	Self - Levelled

D. Marking: Units shall be indelibly marked to show:
- Mould reference code
- De-mould date
- Job reference number & unique product number
- Unit weight (kg)

Design
A. Concrete design to EC2
B. Althon have designed the concrete units only, the site conditions should be assessed for suitability by the scheme designer
C. Units are designed to withstand a vertical live load surcharge of 10kN/M²
D. Weight of soil = 18kN/M²
E. Angle of internal friction = 30 Deg.
F. Design Life: >120 years

Min Cover	Cover Block Size (mm)	Min Cover Size (mm)	Max Cover Size (mm)
All Faces	55	50	60

Exposure Classification	Exposure induced by Carbonation	Corrosion induced by Chloride	Freeze/thaw attack	Chemical attack
All Faces	XC3/4	XD3	XF4	XA3

Fabrication Specification
A. Manufacture IAW EN 1090-2 EXC CLASS 1
B. Material grade is to be: BS EN 10025 S275
C. Welding carried out IAW EN 1090-2 PARA 7.5.4 - 7.5.18
D. All fillet and butt welds to have a minimum throat thickness of 6mm & joints to be fully welded where possible.
E. Ensure vertical flats are fully welded both sides where possible.
F. All sharp edges and burrs are to be removed.
G. Remove all weld splatter.
H. Holes by punching are permitted with reaming.
I. Galvanising is carried out after fabrication to BS EN:ISO 1461

Handrail Specification
A. Kee Klamp® Galvanised Size 8 Fittings
B. Size 8 48.3mm OD 3.2mm Wall Thickness Galvanised Medium Duty Tube to BS EN 10255
C. 360N/m Design Load at stated in BS 8118, BS 6180, BS 6399 & BS 7818, Civil Engineering Specification for the Water Industry (CESWI) 7th Edition Clause 2.60 Handrails & Balusters & The Engineering Equipment and Materials Users' Association (EEMUA) Publication 105 7th Edition Factory Stairways, Ladders and Handrails
D. Other design loads available on request
E. GRP/FRP Handrails also available

REV NO	DATE	DESCRIPTION

Althon

ADDRESS: ALTHON LIMITED
VULCAN ROAD SOUTH
NORWICH
NR6 6AF

TEL: 01603 488700
FAX: 01603 488598
EMAIL: sales@althon.co.uk
WEBSITE: www.althon.co.uk

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DRAWING TITLE / PROJECT:

SFA10A Headwall
Cranked Grating

CLIENT:

SCALE:	PAPER:	SHEET NO:	DATE:
NTS	A3	01 OF 01	27 - 11 - 19

HEADWALL WEIGHT:	TOE WEIGHT:	GRATING WEIGHT:
1900kg	N/A	52kg

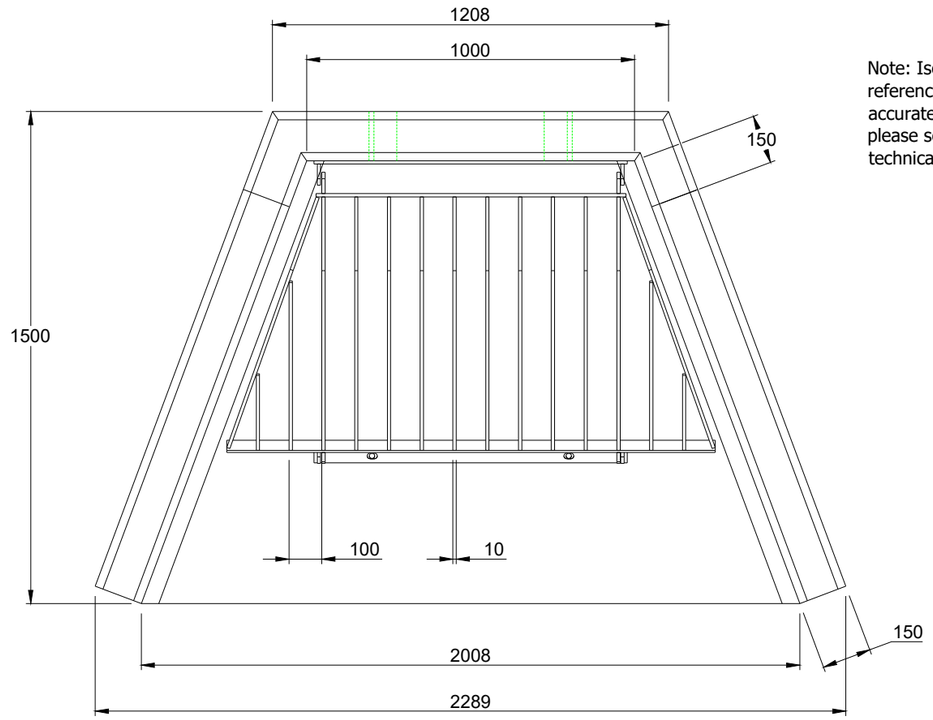
PRODUCT NAME: SFA10A

DRAWING No:

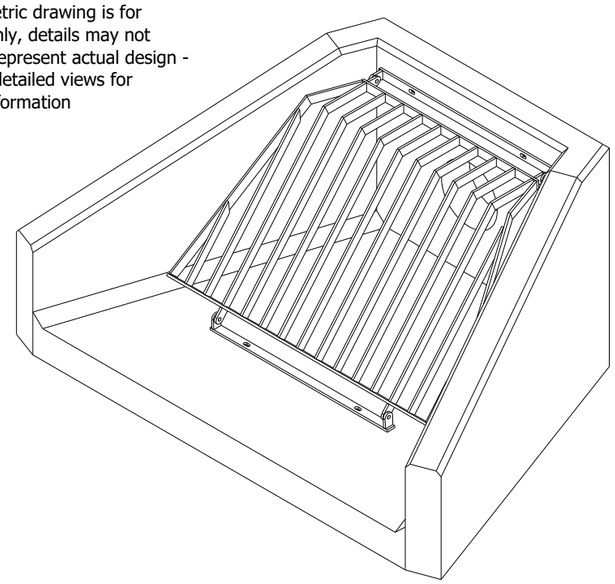
CE

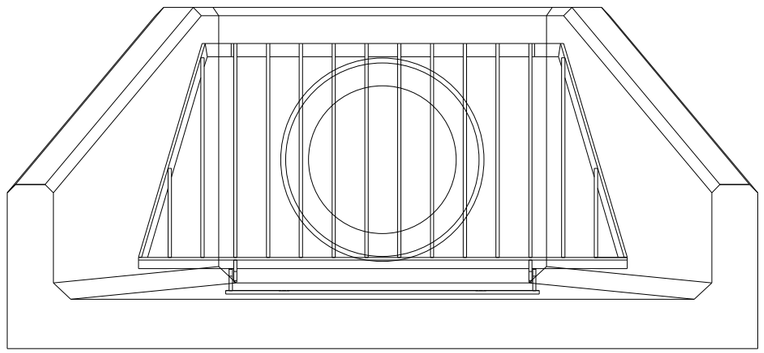
DO NOT SCALE DRAWING

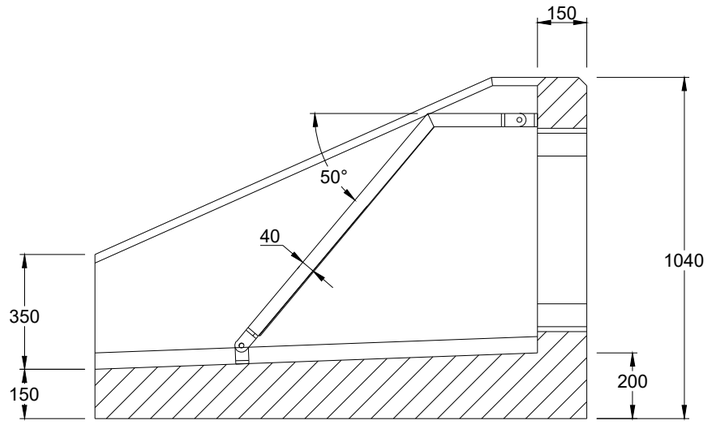
Opening in back wall cast to suit the outside diameter of the pipe at invert height required.



Note: Isometric drawing is for reference only, details may not accurately represent actual design - please see detailed views for technical information







NOTES:

- All dimensions in mm
- All measurements ± 1mm

Specification Information
- Opening in back wall cast to suit outside diameter of the pipework
- Invert level of pipe can be set to your specification

Headwall Installation
Units should be bedded on minimum 200mm thick well compacted Class 6A* selected well graded granular material.
*Manual of contract documents for Highway Works: Volume (MCHW1) specification for Highway Works, Series 600 (Nov.09).
Sit the headwall level or with a slight fall 1:50 from pipe to spill mouth.

Handling
A. Weight of concrete is based on 2.4 tonne/m³+5% is recommended for sizing lifting equipment.
B. All lifting points shall be used as specified below
C. Unit to be lifted as per lifting diagram

Concrete
A. Mix ref: Self-compacting DC4/DS4 Mix
B. Lifting strength based on 2 cubes = 20N/mm²
C. Characteristic 28 day cube strength = 50N/mm²
D. Concrete provides Design Chemical Class 4 (DC4) to special Digest 1, Table F2.

Reinforcement
A. Reinforcement to BS EN 13369
B. Scheduling, dimensioning, bending & cutting to BS8666
C. Cage to be machine tied with steel wire

Manufacture
A. Manufacture to BS EN 15258:2008 precast concrete products - Retaining wall elements, Factory Production Control certificate number: 0086-CPR-650448 & BS EN 13369
B. Tolerances to BS EN 13369 clause 4.3.1.1
C. Finishing:

	Top	Sides	Base	Rear of back wall
Class	A	A	A	Self - Levelled

D. Marking: Units shall be indelibly marked to show:
- Mould reference code
- De-mould date
- Job reference number & unique product number
- Unit weight (kg)

Design
A. Concrete design to EC2
B. Althon have designed the concrete units only, the site conditions should be assessed for suitability by the scheme designer
C. Units are designed to withstand a vertical live load surcharge of 10kN/M²
D. Weight of soil = 18kN/M²
E. Angle of internal friction = 30 Deg.
F. Design Life: >120 years

Min Cover	Cover Block Size (mm)	Min Cover Size (mm)	Max Cover Size (mm)
All Faces	55	50	60

Exposure Classification	Exposure induced by Carbonation	Corrosion induced by Chloride	Freeze/thaw attack	Chemical attack
All Faces	XC3/4	XD3	XF4	XA3

Fabrication Specification
A. Manufacture IAW EN 1090-2 EXC CLASS 1
B. Material grade is to be: BS EN 10025 S275
C. Welding carried out IAW EN 1090-2 PARA 7.5.4 - 7.5.18
D. All fillet and butt welds to have a minimum throat thickness of 6mm & joints to be fully welded where possible.
E. Ensure vertical flats are fully welded both sides where possible.
F. All sharp edges and burrs are to be removed.
G. Remove all weld splatter.
H. Holes by punching are permitted with reaming.
I. Galvanising is carried out after fabrication to BS EN:ISO 1461

Handrail Specification
A. Kee Klamp® Galvanised Size 8 Fittings
B. Size 8 48.3mm OD 3.2mm Wall Thickness Galvanised Medium Duty Tube to BS EN 10255
C. 360N/m Design Load at stated in BS 8118, BS 6180, BS 6399 & BS 7818, Civil Engineering Specification for the Water Industry (CESWI) 7th Edition Clause 2.60 Handrails & Balusters & The Engineering Equipment and Materials Users' Association (EEMUA) Publication 105 7th Edition Factory Stairways, Ladders and Handrails
D. Other design loads available on request
E. GRP/FRP Handrails also available

REV NO	DATE	DESCRIPTION

Althon

ADDRESS: ALTHON LIMITED
VULCAN ROAD SOUTH
NORWICH
NR6 6AF

TEL: 01603 488700
FAX: 01603 488598
EMAIL: sales@althon.co.uk
WEBSITE: www.althon.co.uk

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DRAWING TITLE / PROJECT:

SFA10B Headwall
Cranked Grating

CLIENT:

SCALE:	PAPER:	SHEET NO:	DATE:
NTS	A3	01 OF 01	26 - 11 - 19

HEADWALL WEIGHT:	TOE WEIGHT:	GRATING WEIGHT:
2140kg	N/A	60kg

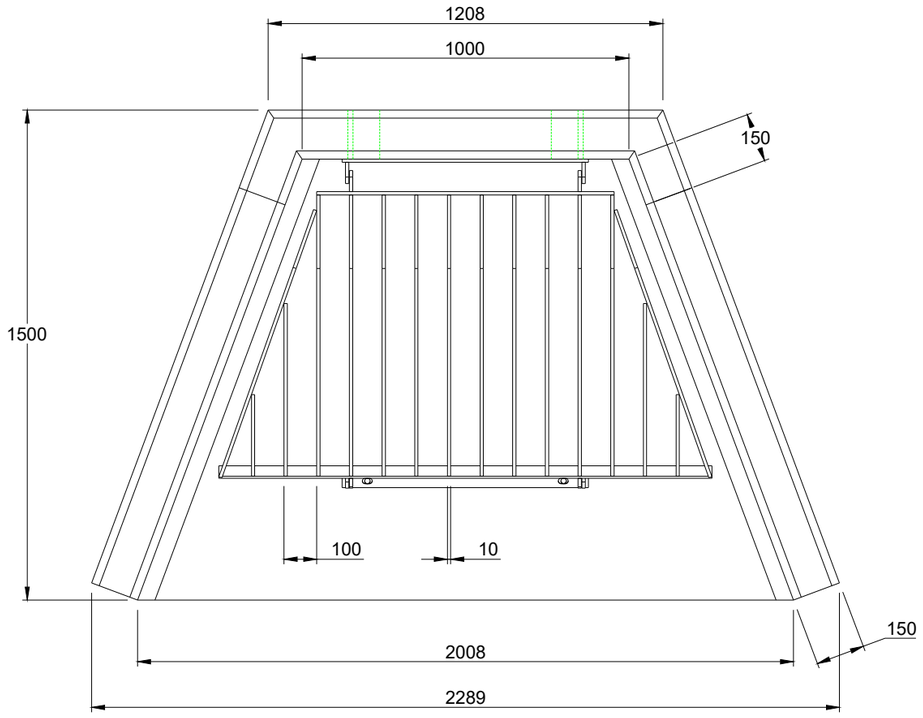
PRODUCT NAME: SFA10B

DRAWING No:

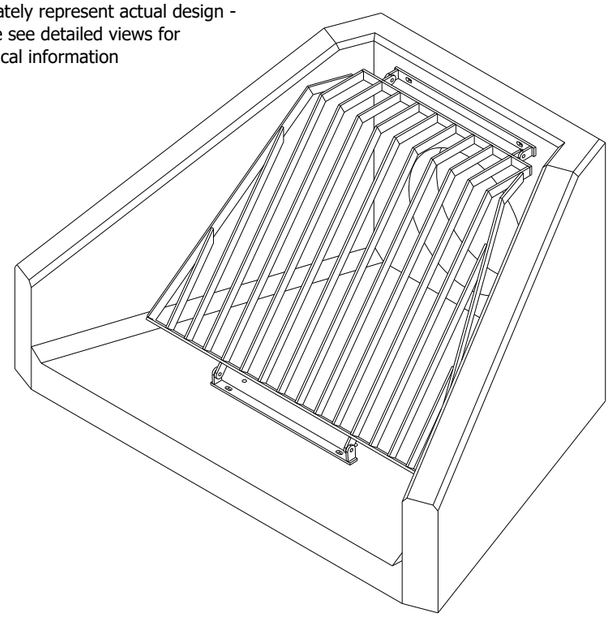
CE

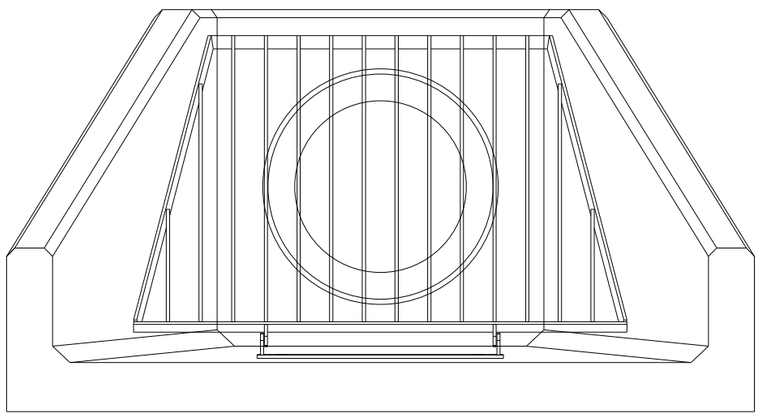
DO NOT SCALE DRAWING

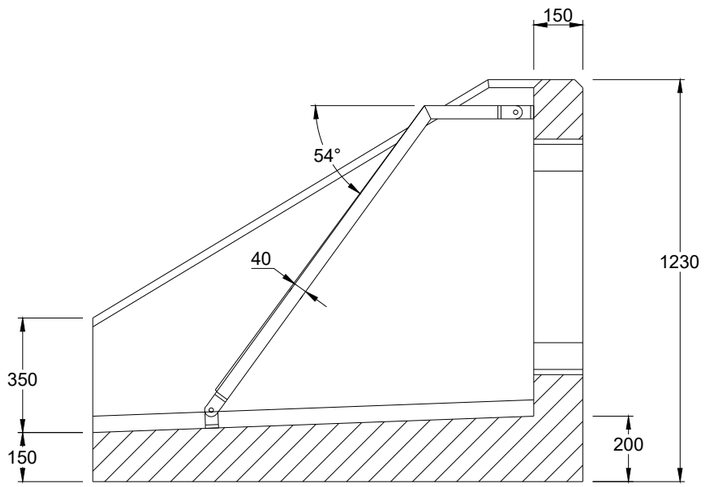
Opening in back wall cast to suit the outside diameter of the pipe at invert height required.



Note: Isometric drawing is for reference only, details may not accurately represent actual design - please see detailed views for technical information







NOTES:

- All dimensions in mm
- All measurements ± 1mm

Specification Information
- Opening in back wall cast to suit outside diameter of the pipework
- Invert level of pipe can be set to your specification

Headwall Installation
Units should be bedded on minimum 150mm thick well compacted Class 6A or 6K* well graded granular material with a 50mm topping of fine material (Class 6L*) to ensure units are level and stable.
*Manual of contract documents for Highway Works: Volume (MCHW1) specification for Highway Works, Series 600 (Nov 09).

Handling
A. Weight of concrete is based on 2.4 tonne/m³+5% is recommended for sizing lifting equipment.
B. All lifting points shall be used as specified below
C. Unit to be lifted as per lifting diagram

Concrete
A. Mix ref: Self-compacting DC4/DS4 Mix
B. Lifting strength based on 2 cubes = 20N/mm²
C. Characteristic 28 day cube strength = 50N/mm²
D. Concrete provides Design Chemical Class 4 (DC4) to special Digest 1, Table F2.

Reinforcement
A. Reinforcement to BS EN 13369
B. Scheduling, dimensioning, bending & cutting to BS8666
C. Cage to be machine tied with steel wire

Manufacture
A. Manufacture to BS EN 15258:2008 precast concrete products - Retaining wall elements, Factory Production Control certificate number: 0086-CPR-650448 & BS EN 13369
B. Tolerances to BS EN 13369 clause 4.3.1.1
C. Finishing:

	Top	Sides	Base	Rear of back wall
Class	A	A	A	Self - Levelled

D. Marking: Units shall be indelibly marked to show:
- Mould reference code
- De-mould date
- Job reference number & unique product number
- Unit weight (kg)

Design
A. Concrete design to EC2
B. Althon have designed the concrete units only, the site conditions should be assessed for suitability by the scheme designer
C. Units are designed to withstand a vertical live load surcharge of 10kN/M²
D. Weight of soil = 18kN/M²
E. Angle of internal friction = 30 Deg.
F. Design Life: >120 years

Min Cover	Cover Block Size (mm)	Min Cover Size (mm)	Max Cover Size (mm)
All Faces	55	50	60

Exposure Classification	Exposure induced by Carbonation	Corrosion induced by Chloride	Freeze/thaw attack	Chemical attack
All Faces	XC3/4	XD3	XF4	XA3

Fabrication Specification
A. Manufacture IAW EN 1090-2 EXC CLASS 1
B. Material grade is to be: BS EN 10025 S275
C. Welding carried out IAW EN 1090-2 PARA 7.5.4 - 7.5.18
D. All fillet and butt welds to have a minimum throat thickness of 6mm & joints to be fully welded where possible.
E. Ensure vertical flats are fully welded both sides where possible.
F. All sharp edges and burrs are to be removed.
G. Remove all weld splatter.
H. Holes by punching are permitted with reaming.
I. Galvanising is carried out after fabrication to BS EN:ISO 1461

Handrail Specification
A. Kee Klamp® Galvanised Size 8 Fittings
B. Size 8 48.3mm OD 3.2mm Wall Thickness Galvanised Medium Duty Tube to BS EN 10255
C. 360N/m Design Load at stated in BS 8118, BS 6180, BS 6399 & BS 7818, Civil Engineering Specification for the Water Industry (CESWI) 7th Edition Clause 2.60 Handrails & Balusters & The Engineering Equipment and Materials Users' Association (EEMUA) Publication 105 7th Edition Factory Stairways, Ladders and Handrails
D. Other design loads available on request
E. GRP/FRP Handrails also available

REV NO	DATE	DESCRIPTION

Althon

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VULCAN ROAD SOUTH
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NR6 6AF

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EMAIL: sales@althon.co.uk
WEBSITE: www.althon.co.uk

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DRAWING TITLE / PROJECT:

SFA10C Headwall
Cranked Grating

CLIENT:

SCALE:	PAPER:	SHEET NO:	DATE:
NTS	A3	01 OF 01	22 - 01 - 20

HEADWALL WEIGHT:	TOE WEIGHT:	GRATING WEIGHT:
2315kg	N/A	65kg

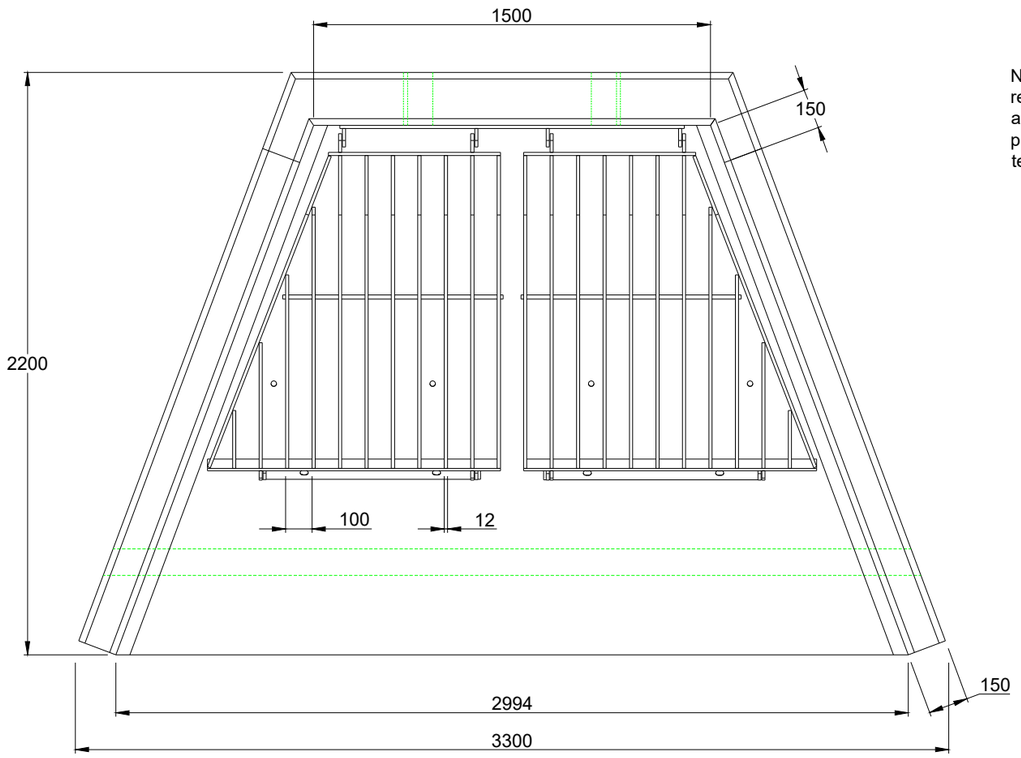
PRODUCT NAME: SFA10C

DRAWING No:

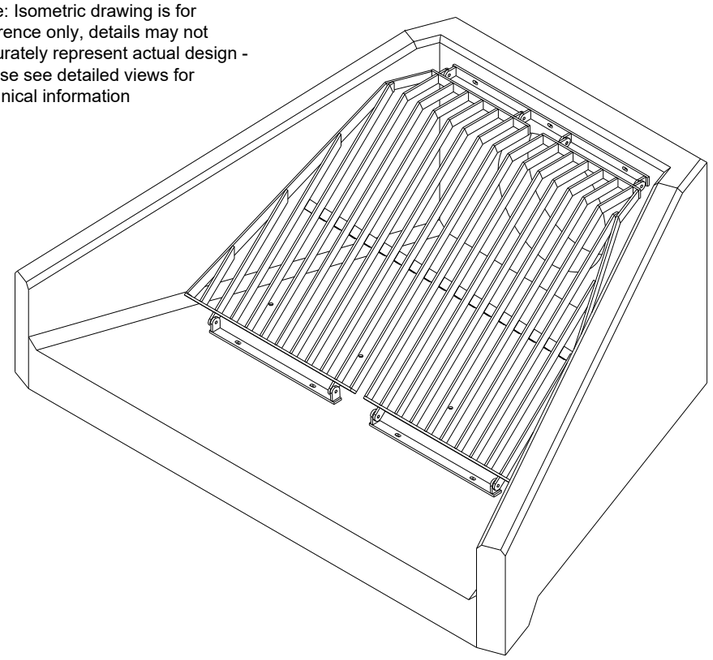
CE

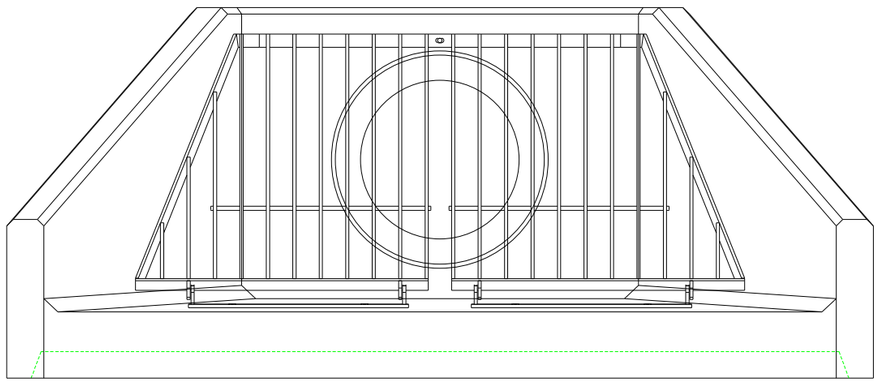
DO NOT SCALE DRAWING

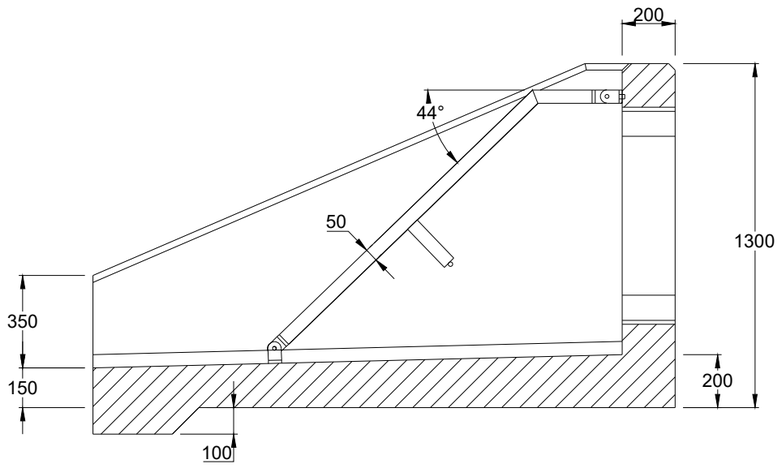
Opening in back wall cast to suit the outside diameter of the pipe at invert height required.



Note: Isometric drawing is for reference only, details may not accurately represent actual design - please see detailed views for technical information







NOTES:

- All dimensions in mm
- All measurements ± 1mm

Specification Information
- Opening in back wall cast to suit outside diameter of the pipework
- Invert level of pipe can be set to your specification

Headwall Installation
Units should be bedded on minimum 150mm thick well compacted Class 6A or 6K* well graded granular material with a 50mm topping of fine material (Class 6L*) to ensure units are level and stable.
*Manual of contract documents for Highway Works: Volume (MCHW1) specification for Highway Works, Series 600 (Nov 09).

Handling
A. Weight of concrete is based on 2.4 tonne/m³+5% is recommended for sizing lifting equipment.
B. All lifting points shall be used as specified below
C. Unit to be lifted as per lifting diagram

Concrete
A. Mix ref: Self-compacting DC4/DS4 Mix
B. Lifting strength based on 2 cubes = 20N/mm²
C. Characteristic 28 day cube strength = 50N/mm²
D. Concrete provides Design Chemical Class 4 (DC4) to special Digest 1, Table F2.

Reinforcement
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B. Scheduling, dimensioning, bending & cutting to BS8666
C. Cage to be machine tied with steel wire

Manufacture
A. Manufacture to BS EN 15258:2008 precast concrete products - Retaining wall elements, Factory Production Control certificate number: 0086-CPR-650448 & BS EN 13369
B. Tolerances to BS EN 13369 clause 4.3.1.1
C. Finishing:

	Top	Sides	Base	Rear of back wall
Class	A	A	A	Self - Levelled

D. Marking: Units shall be indelibly marked to show:
- Mould reference code
- De-mould date
- Job reference number & unique product number
- Unit weight (kg)

Design
A. Concrete design to EC2
B. Althon have designed the concrete units only, the site conditions should be assessed for suitability by the scheme designer
C. Units are designed to withstand a vertical live load surcharge of 10kN/M²
D. Weight of soil = 18kN/M²
E. Angle of internal friction = 30 Deg.
F. Design Life: >120 years

Min Cover	Cover Block Size (mm)	Min Cover Size (mm)	Max Cover Size (mm)
All Faces	55	50	60

Exposure Classification	Exposure induced by Carbonation	Corrosion induced by Chloride	Freeze/thaw attack	Chemical attack
All Faces	XC3/4	XD3	XF4	XA3

Fabrication Specification
A. Manufacture IAW EN 1090-2 EXC CLASS 1
B. Material grade is to be: BS EN 10025 S275
C. Welding carried out IAW EN 1090-2 PARA 7.5.4 - 7.5.18
D. All fillet and butt welds to have a minimum throat thickness of 6mm & joints to be fully welded where possible.
E. Ensure vertical flats are fully welded both sides where possible.
F. All sharp edges and burrs are to be removed.
G. Remove all weld splatter.
H. Holes by punching are permitted with reaming.
I. Galvanising is carried out after fabrication to BS EN ISO 1461

Handrail Specification
A. Kee Klamp® Galvanised Size 8 Fittings
B. Size 8 48.3mm OD 3.2mm Wall Thickness Galvanised Medium Duty Tube to BS EN 10255
C. 360N/m Design Load at stated in BS 8118, BS 6180, BS 6399 & BS 7818, Civil Engineering Specification for the Water Industry (CESWI) 7th Edition Clause 2.60 Handrails & Balusters & The Engineering Equipment and Materials Users' Association (EEMUA) Publication 105 7th Edition Factory Stairways, Ladders and Handrails
D. Other design loads available on request
E. GRP/FRP Handrails also available

REV NO	DATE	DESCRIPTION

Althon

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DRAWING TITLE / PROJECT:

SFA15A Headwall
Cranked Grating

CLIENT:

SCALE:	PAPER:	SHEET NO:	DATE:
NTS	A3	01 OF 01	21 - 01 - 20

HEADWALL WEIGHT:	TOE WEIGHT:	GRATING WEIGHT:
4610kg	N/A	200kg

PRODUCT NAME: SFA15A

DRAWING No:

CE

DO NOT SCALE DRAWING

Appendix (B)
Hydro International Hydro-Brake
Maintenance Specifications and Details

HYDRO-BRAKE® FLOW CONTROL

MAINTENANCE AND SAFETY DATA SHEET

MAINTENANCE

Normally, little maintenance is required as there are no moving parts within the Hydro-Brake® Flow Control. Experience has shown that if blockages occur they do so at the intake, and the cause on such occasions has been due to a lack of attention to engineering detail such as approach velocities being too low, inadequate benching, or the use of units below the minimum recommended size. Hydro-Brake® Flow Controls are fitted with a pivoting by-pass door, which allows the manhole chamber to be drained down should blockages occur. The smaller type conical units, below the minimum recommended size, are also supplied with roding facilities or vortex suppressor pipes as standard.

Following installation of the Hydro-Brake® Flow Control it is vitally important that any extraneous material i.e. Building materials are removed from the unit and the chamber. After the system is made live, and assuming that the chamber design is satisfactory, it is recommended that each unit be inspected monthly for three months and thereafter at six monthly intervals with hose down if required. If problems are experienced please do not hesitate to contact the company so that an investigation may be made.

Hydro-Brake® Flow Controls are typically manufactured from grade 304 Stainless Steel which has an estimated life span in excess of the design life of drainage systems.

COSHH

Hydro-Brake® Flow Controls are manufactured from Stainless Steel, which is not regarded as hazardous to health and exhibits no chemical hazard when used under normal circumstances for the stated applications.

MANUAL HANDLING

The handling of Hydro-Brake® Flow Controls should be in accordance with current legislation and regulations:

- The Health and Safety at Work Act 1972.
- The Management of Health and Safety at Work Regulations 1992.
- The Manual Handling Operations Regulations 1992.

All published and printed by the Health and Safety Executive.

Technical Specification

Control Point	Head (m)	Flow (l/s)
Primary Design	1.679	10.000
Flush-Flo™	0.117	3.076
Kick-Flo®	0.131	3.060
Mean Flow		6.785

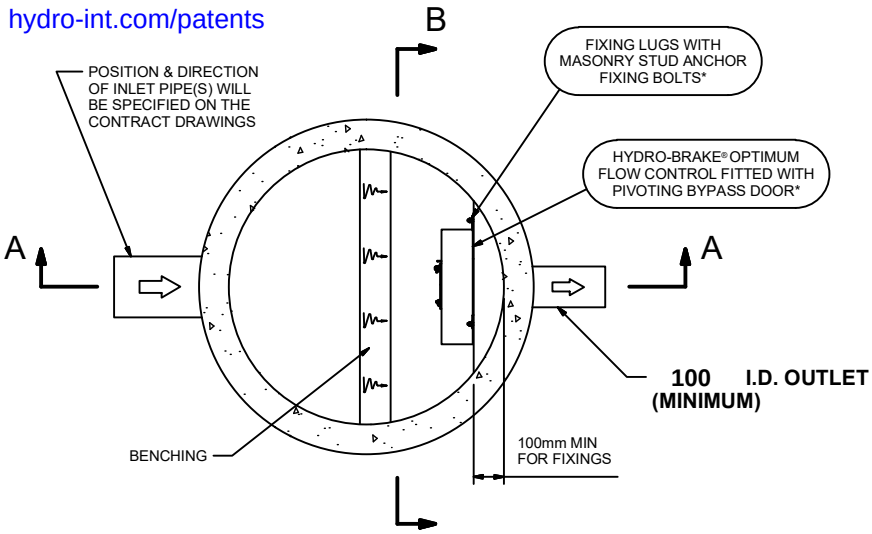
Hydro-Brake® Optimum Flow Control including:

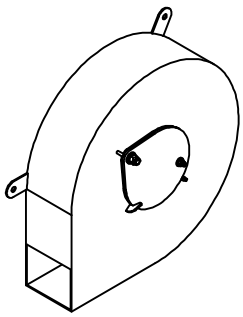
- 3 mm grade 304L stainless steel
- Integral stainless steel pivoting by-pass door allowing clear line of sight through to outlet, c/w stainless steel operating rope
- Beed blasted finish to maximise corrosion resistance
- Stainless steel fixings
- Rubber gasket to seal outlet
- Indicative Weight: 0 kg

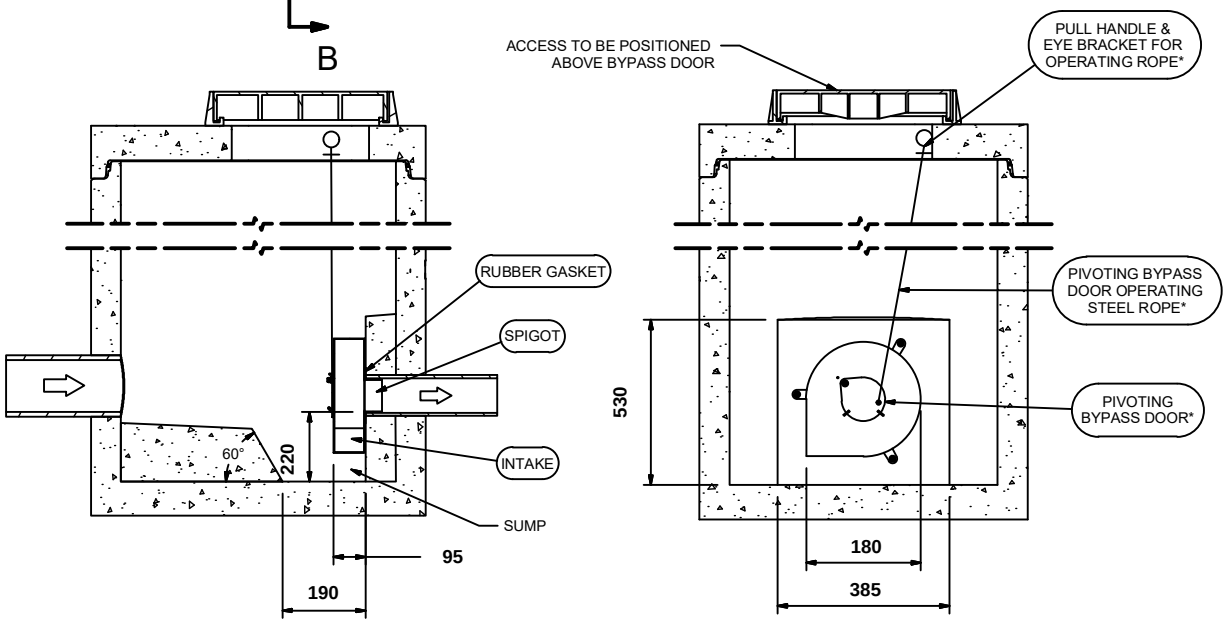
BBA APPROVAL INSPECTION TESTING CERTIFICATION CERTIFICATE 08/4596

wrc approved PT/503/0422 Valid: 01/04/2022 - 31/03/2027

hydro-int.com/patents







SECTION A-A SECTION B-B

IMPORTANT: ⬭ LIMIT OF HYDRO INTERNATIONAL SUPPLY
THE DEVICE WILL BE HANDED TO SUIT SITE CONDITIONS
FOR SITE SPECIFIC DETAILS AND MINIMUM CHAMBER SIZE REFER TO HYDRO INTERNATIONAL
ALL CIVIL AND INSTALLATION WORK BY OTHERS
* WHERE SUPPLIED
HYDRO-BRAKE® FLOW CONTROL & HYDRO-BRAKE® OPTIMUM FLOW CONTROL ARE REGISTERED TRADEMARKS FOR FLOW CONTROLS DESIGNED AND MANUFACTURED EXCLUSIVELY BY HYDRO INTERNATIONAL

THIS DESIGN LAYOUT IS FOR ILLUSTRATIVE PURPOSES ONLY. NOT TO SCALE.

DESIGN ADVICE

The head/flow characteristics of this SCU-0087-1000-1679-1000 Hydro-Brake® Optimum Flow Control are unique. Dynamic hydraulic modelling evaluates the full head/flow characteristic curve.
The use of any other flow control will invalidate any design based on this data and could constitute a flood risk.

Hydro International A CRH COMPANY

DATE	21/03/2024 15:16
SITE	Climping
DESIGNER	Meagan Weedon
REF	5139 - S159

SCU-0087-1000-1679-1000
Hydro-Brake® Optimum

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Hydro International Ltd • Unit 2, Rivermead Court • Kenn Business Park • Windmill Road • Kenn • Clevedon • BS21 6FT • Tel: 01275 878371 • www.hydro-int.com • Email: Enquiries@hydro-int.com

meagan@rcpconsultants.co.uk

Technical Specification

Control Point	Head (m)	Flow (l/s)
Primary Design	1.776	10.000
Flush-Flo™	0.111	2.989
Kick-Flo®	0.129	2.960
Mean Flow		6.786

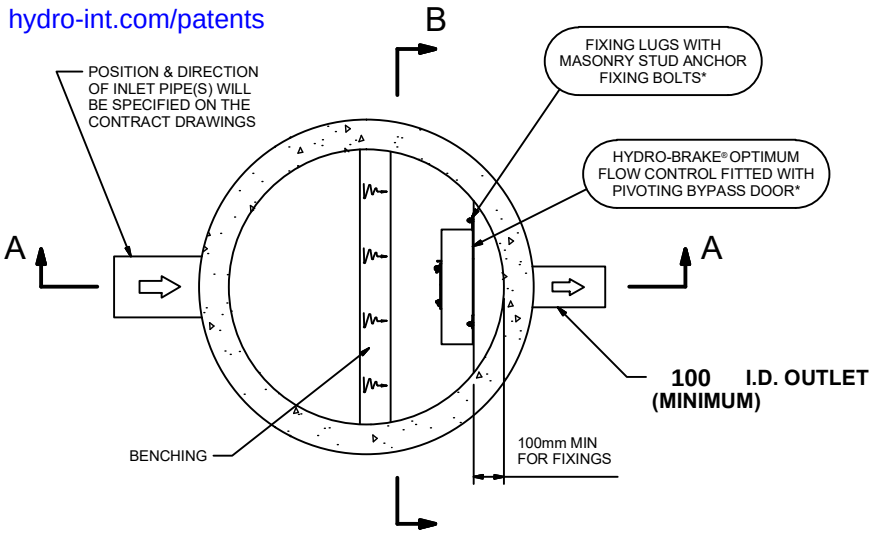
Hydro-Brake® Optimum Flow Control including:

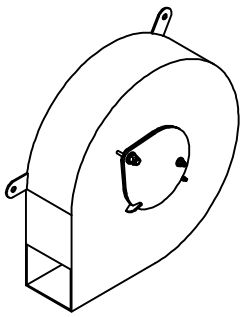
- 3 mm grade 304L stainless steel
- Integral stainless steel pivoting by-pass door allowing clear line of sight through to outlet, c/w stainless steel operating rope
- Beed blasted finish to maximise corrosion resistance
- Stainless steel fixings
- Rubber gasket to seal outlet
- Indicative Weight: 0 kg

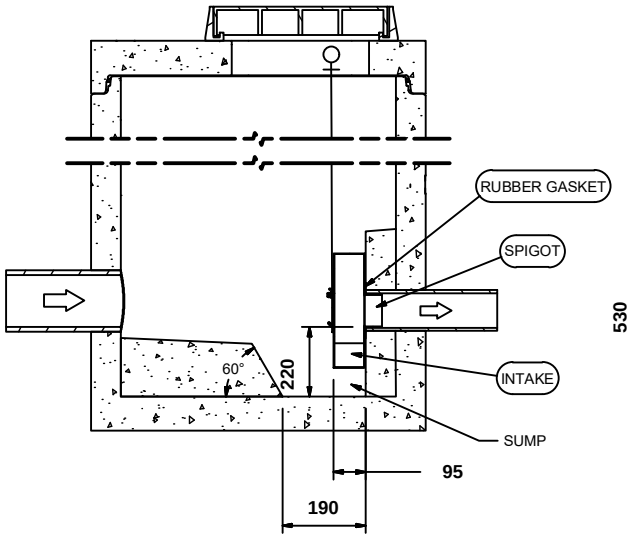
BBA APPROVAL INSPECTION TESTING CERTIFICATION CERTIFICATE 08/4596

wrc approved PT/503/0422 Valid: 01/04/2022 - 31/03/2027

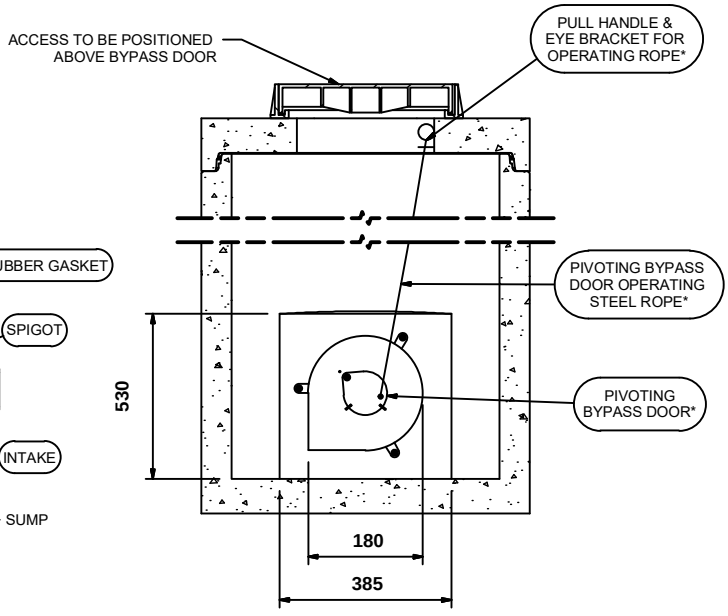
hydro-int.com/patents







SECTION A-A



SECTION B-B

IMPORTANT: LIMIT OF HYDRO INTERNATIONAL SUPPLY
THE DEVICE WILL BE HANDED TO SUIT SITE CONDITIONS
FOR SITE SPECIFIC DETAILS AND MINIMUM CHAMBER SIZE REFER TO HYDRO INTERNATIONAL
ALL CIVIL AND INSTALLATION WORK BY OTHERS
* WHERE SUPPLIED
HYDRO-BRAKE® FLOW CONTROL & HYDRO-BRAKE® OPTIMUM FLOW CONTROL ARE REGISTERED TRADEMARKS FOR FLOW CONTROLS DESIGNED AND MANUFACTURED EXCLUSIVELY BY HYDRO INTERNATIONAL

THIS DESIGN LAYOUT IS FOR ILLUSTRATIVE PURPOSES ONLY. NOT TO SCALE.

DESIGN ADVICE

The head/flow characteristics of this SCU-0086-1000-1776-1000 Hydro-Brake® Optimum Flow Control are unique. Dynamic hydraulic modelling evaluates the full head/flow characteristic curve.
The use of any other flow control will invalidate any design based on this data and could constitute a flood risk.

Hydro International A CRH COMPANY

DATE	21/03/2024 12:50
SITE	Climping
DESIGNER	Meagan Weedon
REF	5139 - S158

SCU-0086-1000-1776-1000
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meagan@rcpconsultants.co.uk

Technical Specification

Control Point	Head (m)	Flow (l/s)
Primary Design	2.378	19.000
Flush-Flo™	0.692	18.959
Kick-Flo®	1.432	14.934
Mean Flow		16.608

Hydro-Brake® Optimum Flow Control including:

- 5 mm grade 304L stainless steel
- Integral stainless steel pivoting by-pass door allowing clear line of sight through to outlet, c/w stainless steel operating rope
- Beed blasted finish to maximise corrosion resistance
- Stainless steel fixings
- Rubber gasket to seal outlet
- Indicative Weight: 90 kg

BBA APPROVAL INSPECTION TESTING CERTIFICATION CERTIFICATE 08/4596

wrc approved PT/503/0422 Valid: 01/04/2022 - 31/03/2027

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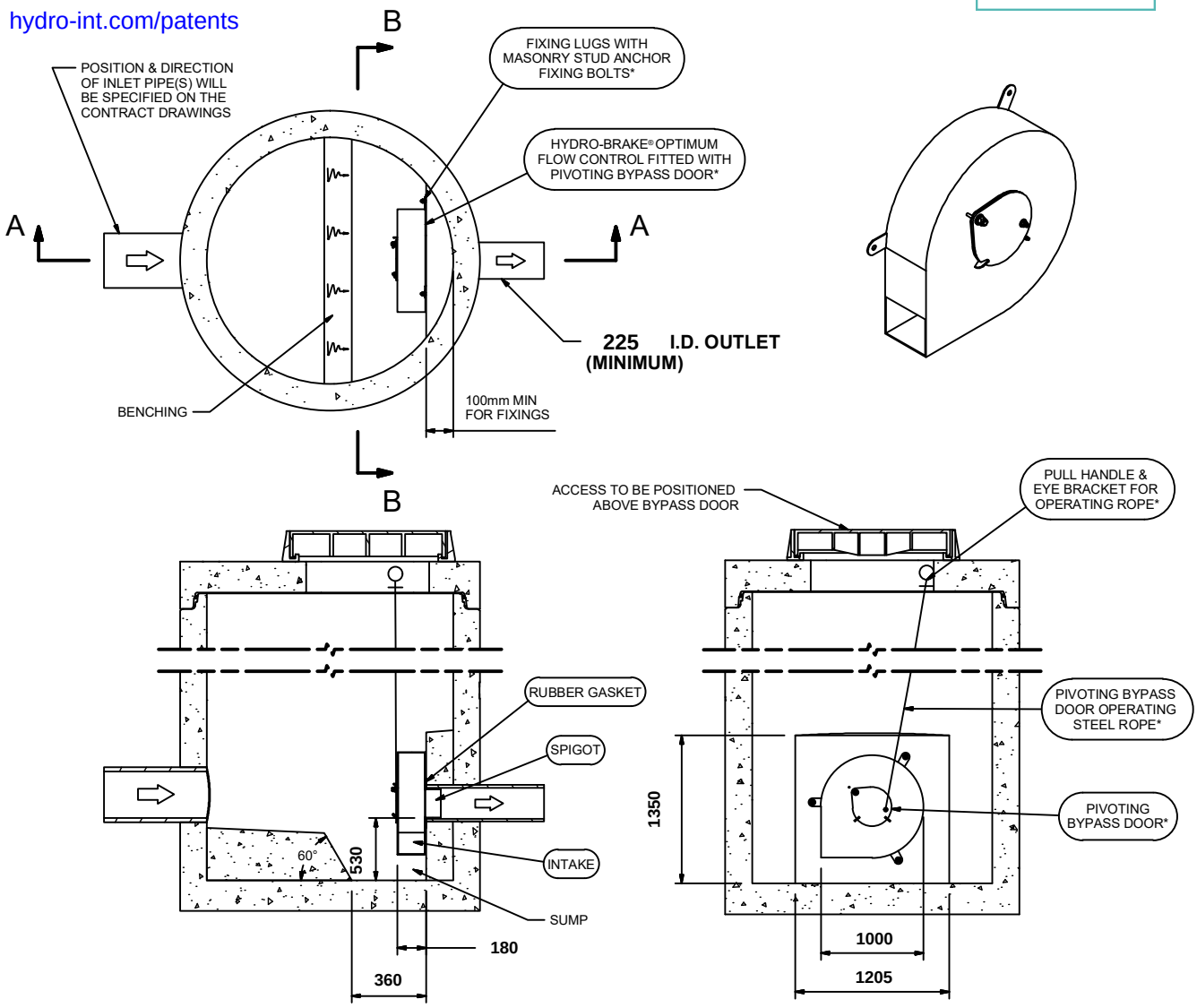

SECTION A-A

SECTION B-B

IMPORTANT: ⬭ LIMIT OF HYDRO INTERNATIONAL SUPPLY
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THIS DESIGN LAYOUT IS FOR ILLUSTRATIVE PURPOSES ONLY. NOT TO SCALE.

DESIGN ADVICE

The head/flow characteristics of this SHE-0174-1900-2378-1900 Hydro-Brake® Optimum Flow Control are unique. Dynamic hydraulic modelling evaluates the full head/flow characteristic curve.
The use of any other flow control will invalidate any design based on this data and could constitute a flood risk.

Hydro International A CRH COMPANY

DATE	21/03/2024 15:22
SITE	Climping
DESIGNER	Meagan Weedon
REF	5139 - S25

SHE-0174-1900-2378-1900
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Technical Specification

Control Point	Head (m)	Flow (l/s)
Primary Design	1.606	15.000
Flush-Flo™	0.135	5.204
Kick-Flo®	0.163	5.130
Mean Flow		10.143

Hydro-Brake® Optimum Flow Control including:

- 3 mm grade 304L stainless steel
- Integral stainless steel pivoting by-pass door allowing clear line of sight through to outlet, c/w stainless steel operating rope
- Beed blasted finish to maximise corrosion resistance
- Stainless steel fixings
- Rubber gasket to seal outlet
- Indicative Weight: 0 kg

BBA APPROVAL INSPECTION TESTING CERTIFICATION CERTIFICATE 08/4596

wrc approved PT/503/0422 Valid: 01/04/2022 - 31/03/2027

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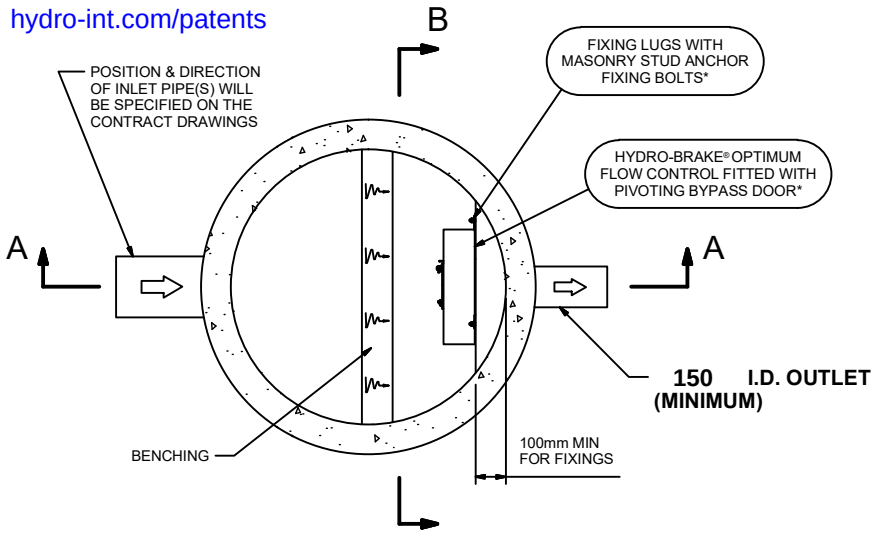
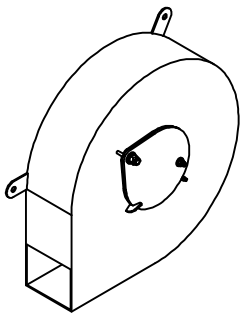
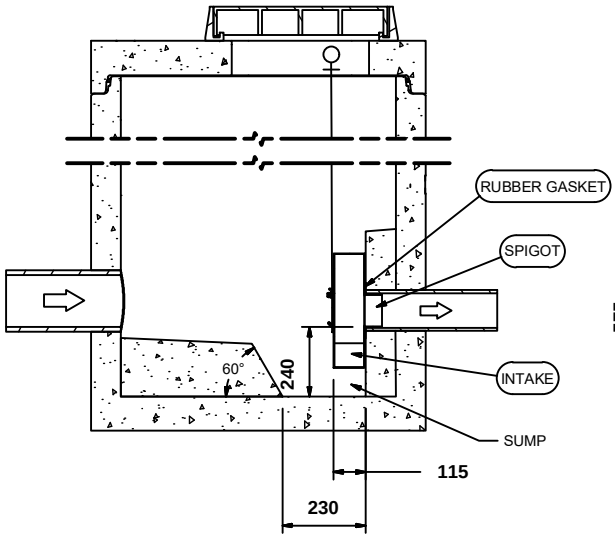
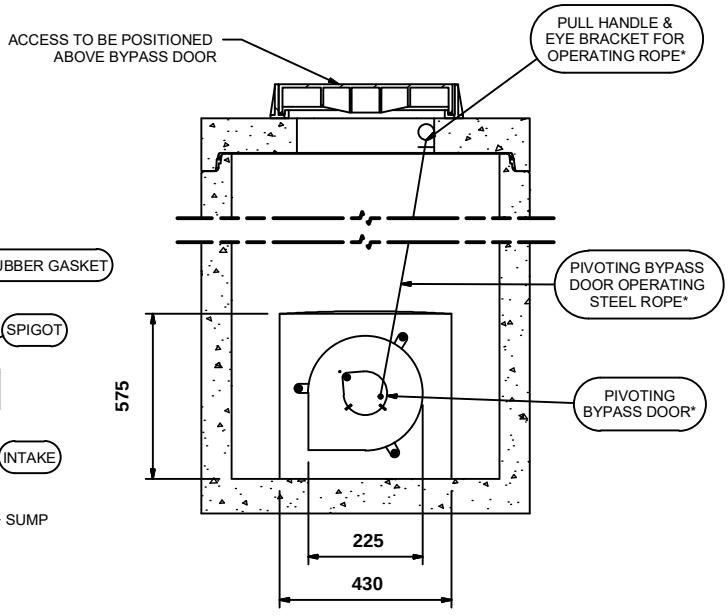






SECTION A-A



SECTION B-B

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DESIGN ADVICE

The head/flow characteristics of this SCU-0109-1500-1606-1500 Hydro-Brake® Optimum Flow Control are unique. Dynamic hydraulic modelling evaluates the full head/flow characteristic curve.
The use of any other flow control will invalidate any design based on this data and could constitute a flood risk.

Hydro International A CRH COMPANY

DATE	21/03/2024 15:18
SITE	Climping
DESIGNER	Meagan Weedon
REF	5139 - S70

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meagan@rcpconsultants.co.uk

Technical Specification

Control Point	Head (m)	Flow (l/s)
Primary Design	1.185	10.000
Flush-Flo™	0.120	3.787
Kick-Flo®	0.143	3.740
Mean Flow		6.765

Hydro-Brake® Optimum Flow Control including:

- 3 mm grade 304L stainless steel
- Integral stainless steel pivoting by-pass door allowing clear line of sight through to outlet, c/w stainless steel operating rope
- Beed blasted finish to maximise corrosion resistance
- Stainless steel fixings
- Rubber gasket to seal outlet
- Indicative Weight: 0 kg

BBA APPROVAL INSPECTION TESTING CERTIFICATION CERTIFICATE 08/4596

wrc approved PT/503/0422 Valid: 01/04/2022 - 31/03/2027

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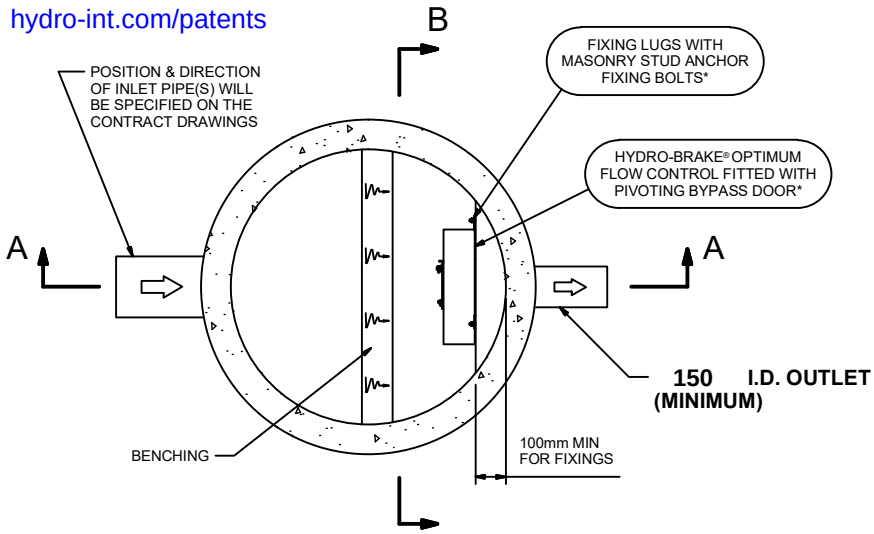
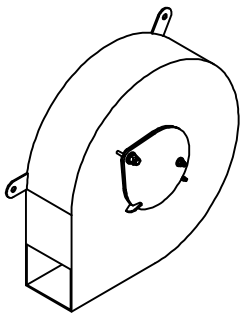
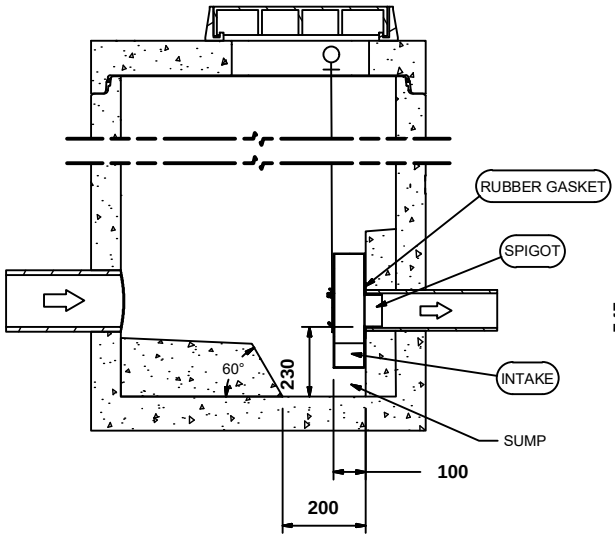
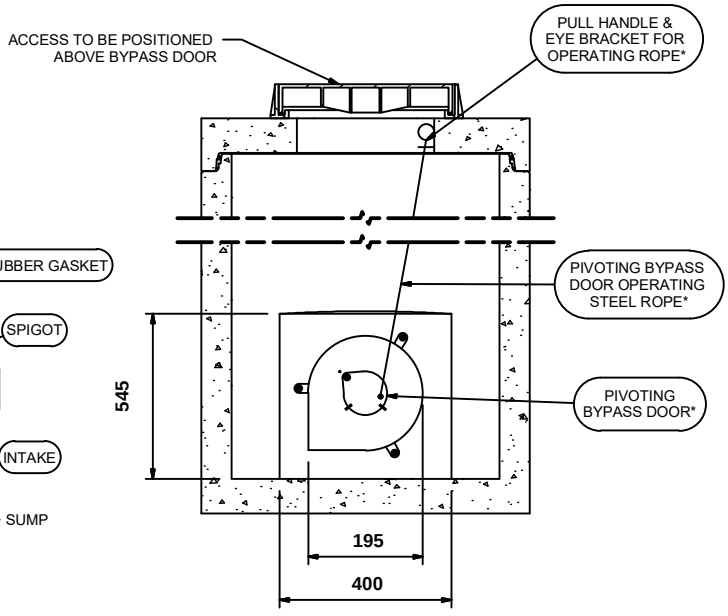






SECTION A-A



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THIS DESIGN LAYOUT IS FOR ILLUSTRATIVE PURPOSES ONLY. NOT TO SCALE.

DESIGN ADVICE

The head/flow characteristics of this SCU-0095-1000-1185-1000 Hydro-Brake® Optimum Flow Control are unique. Dynamic hydraulic modelling evaluates the full head/flow characteristic curve.
The use of any other flow control will invalidate any design based on this data and could constitute a flood risk.

Hydro International A CRH COMPANY

DATE	21/03/2024 15:19
SITE	Climping
DESIGNER	Meagan Weedon
REF	5139 - S163

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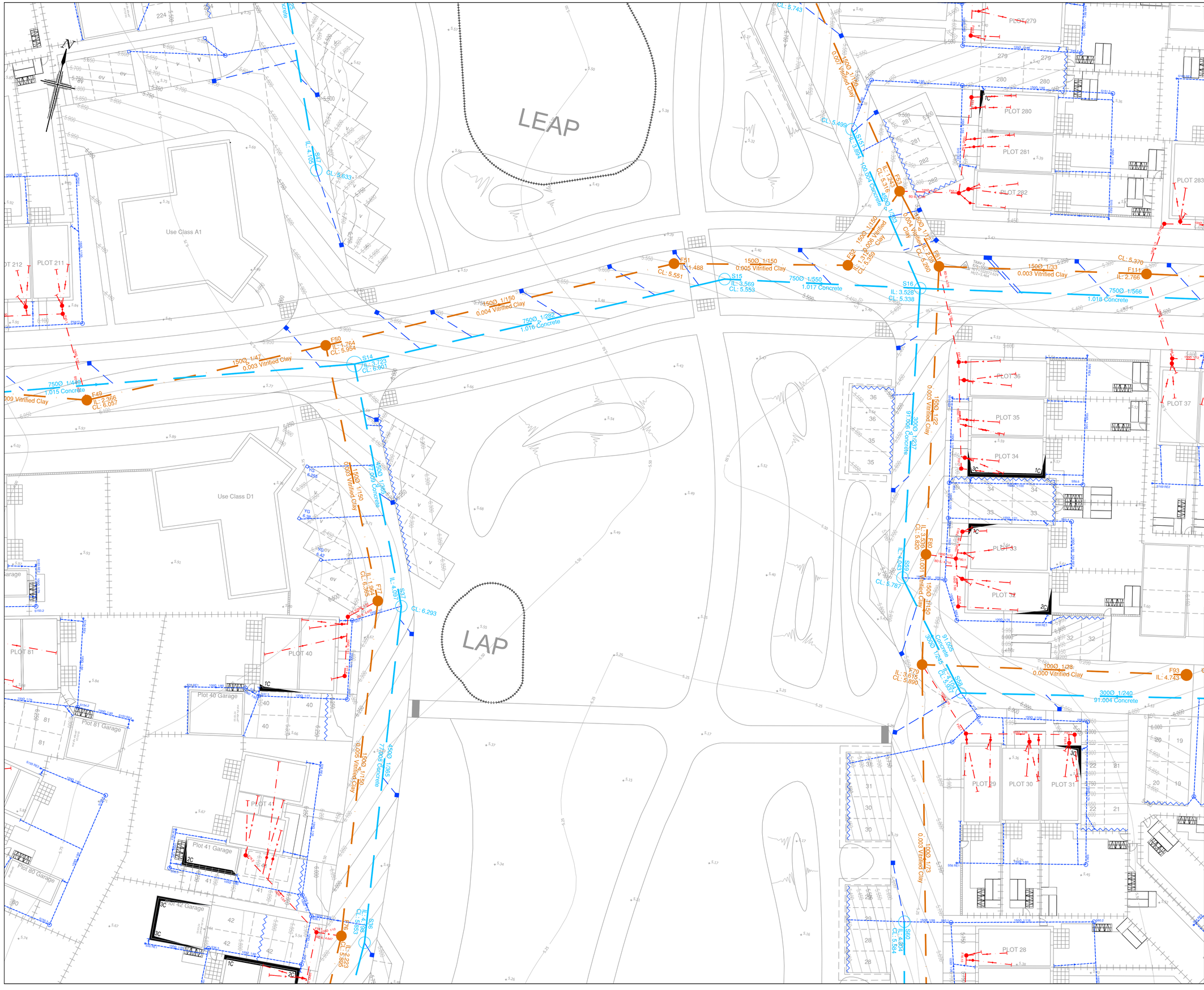
Appendix (C)
Drainage Plans and Details


LEAP
LAP
Use Class A1
Use Class D1
PLOT 279
PLOT 280
PLOT 281
PLOT 282
PLOT 283
PLOT 211
PLOT 212
PLOT 81
PLOT 40
PLOT 41
PLOT 36
PLOT 35
PLOT 34
PLOT 33
PLOT 32
PLOT 37
PLOT 29
PLOT 30
PLOT 31
PLOT 28
Plot 81 Garage
Plot 80 Garage
Plot 40 Garage
Plot 41 Garage
Plot 42 Garage
F51 IL: 1.488 CL: 5.551
S15 IL: 3.569 CL: 5.553
150Ø 1/150 0.005 Vitrified Clay
750Ø 1/550 1.017 Concrete
F52 IL: 1.343 CL: 5.339
S16 IL: 3.528 CL: 5.338
150Ø 1/33 0.003 Vitrified Clay
F111 IL: 2.766 CL: 5.379
750Ø 1/566 1.018 Concrete
F50 IL: 1.764 CL: 5.954
S14 IL: 3.723 CL: 5.601
150Ø 1/47 0.003 Vitrified Clay
750Ø 1/450 1.015 Concrete
F49 IL: 2.366 CL: 6.057
150Ø 1/150 0.004 Vitrified Clay
750Ø 1/282 1.016 Concrete
F77 IL: 1.964 CL: 6.395
S37 IL: 4.097 CL: 6.293
150Ø 1/150 0.003 Vitrified Clay
450Ø 1/25 1.009 Concrete
F76 IL: 2.223 CL: 5.805
S36 IL: 4.196 CL: 5.853
150Ø 1/150 0.003 Vitrified Clay
450Ø 1/25 1.009 Concrete
F53 IL: 7.425 CL: 5.316
S51 IL: 3.391 CL: 5.499
150Ø 1/150 0.004 Vitrified Clay
450Ø 1/25 1.009 Concrete
F54 IL: 2.205 CL: 5.260
150Ø 1/122 0.000 Vitrified Clay
300Ø 1/25 3.000 Concrete
F80 IL: 3.530 CL: 5.920
S59 IL: 4.003 CL: 5.787
150Ø 1/150 0.000 Vitrified Clay
300Ø 1/245 91.005 Concrete
F81 IL: 3.611 CL: 5.890
S58 IL: 4.363 CL: 5.637
100Ø 1/28 0.000 Vitrified Clay
F93 IL: 4.733
300Ø 1/240 91.004 Concrete
100Ø 1/73 0.000 Vitrified Clay
S60 IL: 4.374 CL: 5.584
F82 IL: 3.611 CL: 5.890
S58 IL: 4.363 CL: 5.637
300Ø 1/240 91.004 Concrete
F83 IL: 4.733
100Ø 1/28 0.000 Vitrified Clay
F84 IL: 4.733
100Ø 1/73 0.000 Vitrified Clay
S60 IL: 4.374 CL: 5.584
F85 IL: 4.733
100Ø 1/73 0.000 Vitrified Clay
S61 IL: 4.374 CL: 5.584
F86 IL: 4.733
100Ø 1/73 0.000 Vitrified Clay
S62 IL: 4.374 CL: 5.584
F87 IL: 4.733
100Ø 1/73 0.000 Vitrified Clay
S63 IL: 4.374 CL: 5.584
F88 IL: 4.733
100Ø 1/73 0.000 Vitrified Clay
S64 IL: 4.374 CL: 5.584
F89 IL: 4.733
100Ø 1/73 0.000 Vitrified Clay
S65 IL: 4.374 CL: 5.584
F90 IL: 4.733
100Ø 1/73 0.000 Vitrified Clay
S66 IL: 4.374 CL: 5.584
F91 IL: 4.733
100Ø 1/73 0.000 Vitrified Clay
S67 IL: 4.374 CL: 5.584
F92 IL: 4.733
100Ø 1/73 0.000 Vitrified Clay
S68 IL: 4.374 CL: 5.584
F94 IL: 4.733
100Ø 1/73 0.000 Vitrified Clay
S69 IL: 4.374 CL: 5.584
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100Ø 1/73 0.000 Vitrified Clay
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S79 IL: 4.374 CL: 5.584
F105 IL: 4.733
100Ø 1/73 0.000 Vitrified Clay
S80 IL: 4.374 CL: 5.584
F106 IL: 4.733
100Ø 1/73 0.000 Vitrified Clay
S81 IL: 4.374 CL: 5.584
F107 IL: 4.733
100Ø 1/73 0.000 Vitrified Clay
S82 IL: 4.374 CL: 5.584
F108 IL: 4.733
100Ø 1/73 0.000 Vitrified Clay
S83 IL: 4.374 CL: 5.584
F109 IL: 4.733
100Ø 1/73 0.000 Vitrified Clay
S84 IL: 4.374 CL: 5.584
F110 IL: 4.733
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S85 IL: 4.374 CL: 5.584
F112 IL: 4.733
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S86 IL: 4.374 CL: 5.584
F113 IL: 4.733
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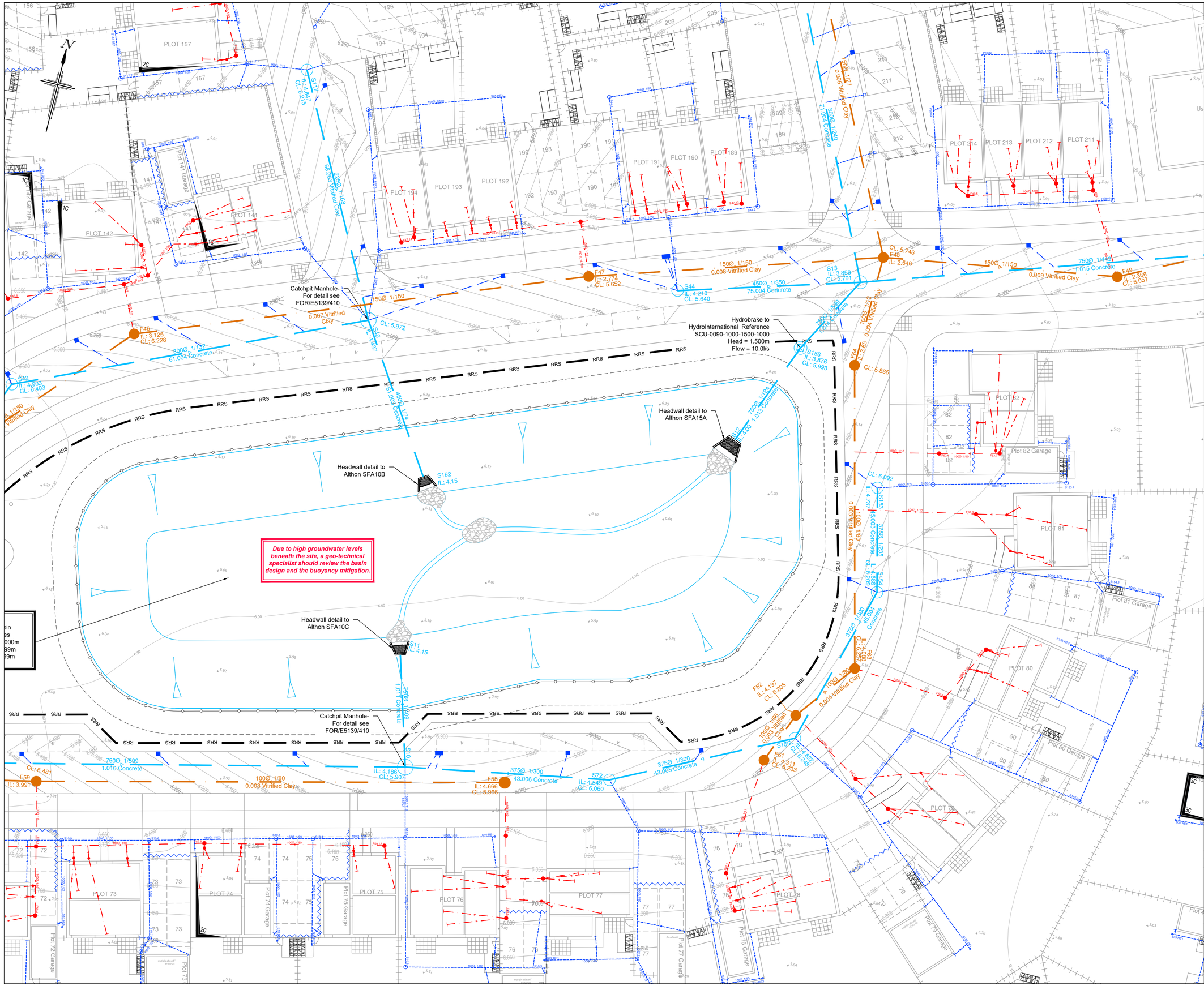
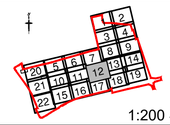
F114 IL: 4.733
100Ø 1/73 0.000 Vitrified Clay





1:200 SHEET KEY PLAN

NOTES

1. All dimensions are in metres unless stated otherwise.
2. Do not scale from this drawing. Only written dimensions are to be used.
3. FW & SW house drainage is to be constructed in accordance with the Building Regulations & BS8301 & SSG Appendix C Design and Construction Guidance Approved Version 2.3 dated 11 November 2023 and the specific requirements of IWNL Water.
4. Drains are to be constructed using flexibly jointed vitrified clay pipes to BS EN 295-1991 "Super Strength" specification (e.g. Hepworth Supersleeve or similar) or uPVC drainage pipework to BS4660 & BS2494, bedded & backfilled in accordance with manufacturers instructions.
5. Location of sewers & lateral drains to be in accordance with the SSG Appendix C Design and Construction Guidance Approved Version 2.3 dated 11 November 2023 and the specific requirements of IWNL.
6. Backfilling of drain trenches adjacent to dwelling or other structure to be in accordance with BS8301: Fig. 9.
7. Cover levels indicated on the Drainage Schedules are nominal & may be adjusted to suit finished ground levels as necessary.
8. Manhole inspection chamber covers should be Grade D400 in trafficked areas Grade B125 in parking areas and occasional traffic and A15 in pedestrian only areas.
9. Rainwater downpipes to be connected direct to drain using an appropriate adaptor & removable section of downpipe to permit rodding access.
10. The positions of SVPs, stub stacks, WC outlets, Back inlet gullies etc. & rainwater downpipes are to be accurately located from the house type working drawings.
11. Generally FW drains are to be laid to falls of 1 in 40, SW drains are to be laid to falls of 1 in 60, both in 100mm diameter pipes, SW pipes are to be 150mm diameter when serving 2 dwellings or 2 RWP connections. FW pipes are to be 150mm diameter when serving 10 dwellings or more unless stated otherwise, or where a schedule is provided.
12. 100mmØ FW Drains are to be laid to minimum fall of 1 in 80 and 150mmØ FW Drains are to be laid to minimum fall of 1 in 150.
13. Gullies situated in areas accessible to wheeled vehicles to be of suitable construction for trafficked areas.
14. Where land drain is identified on the Architect's details, connect into nearest SW system.
15. Where Private Surface Water Drainage is connected to Highway Drainage, a Type B PCC catchpit to be used.
16. This drawing should be read in conjunction with the Architect's and Structural Engineer's design drawings and specification.
17. Site layout shown in this drawing is based on Foreman Homes Approved Site Layout Plan, issued to RCP in .dwg format on 06/02/2023
18. Site Access and Section 278 Works as per RCP's dwg No. Section 278 General Arrangement (FOR-E5139-301 to 302).
19. Architectural blocks based on RCP's Substructure Layouts, issued to RCP in .dwg format on 24/03/2023 and 04/03/2024.
20. Topographical Survey as per Encompass Surveys drawing no. ENC/24082/OS/LAY1 to 10, dated September 2020.
21. This drawing should be read in conjunction with other Domestic Drainage Layouts, Foul and Surface Water Sewer Longitudinal Sections (FOR/E5139/201 to 214), Surface Water Sewer and Foul Water Sewer Manhole Schedules (FOR-E5139-415 to 416), Section 104 Drainage Construction Details (FOR-E5139-410) and Domestic Drainage Construction Details (FOR-E5139-473 to 474).
22. Where backdrop is less than 1.0m for domestic drainage, backdrop is to accommodated with internal benching.
23. Surface water from private areas is not to be discharged onto adoptable highway and vice versa.
24. All OWC works to be in accordance with Arun District Council Details, Pipe bedding at all OWC works to accord with ADC drawing 80003301 Rev C.
25. All footpath slabs shall have a crossfall to drain surface water into adjoining gardens.
26. All future private driveways, parking bays, etc to be designed to fall surface water run-off away from S36 works. If not achievable, full width ACO drainage to be provided.
27. ***ANY VARIANCE OR DISCREPANCY MUST BE REPORTED BACK TO RCP ENGINEERING BEFORE WORK BEGINS.***

TYPE	DEPTH RANGE	DESCRIPTION	LOCATION	CODE	COVER GRADE
D	Depth from cover level to soffit of pipe up to 3m	Min. 450mm diameter Flexible or Rigid access chamber (Non Entry) in areas subject to vehicle loading. (If distance from cover level to soffit of pipe is >1m, access opening shall be restricted to 350mm Ø or 300mm x 300mm.	Road Driveway Garden	R D G	D400 B125 A15
			RE	Rodding point at head of drain	

KEY

Site Boundary

Adoptable Surface Water Sewers (IWNL) — S1

Adoptable Flow Control Manhole (IWNL) — SC1

Adoptable Foul Water Sewers (IWNL) — F1

Indicative Foul Rising Main

Adoptable PCC Headwalls (IWNL)

3m SuDS Easement

Swale with Granular Drain at Base

Cellular Storage Tanks

Adoptable Road Gully & Connection — RG

Private Road Gully & Connection — RG

Private Surface Water Domestic Drainage — S1.1

Private Foul Water Domestic Drainage — F1.1

House connection via 300mm dia. shallow access chamber not more than 600mm deep *(Based on floor make-up of 75mm screed, 225mm insulation & 150mm beam & block).* ***In the event that conditions on-site result in maximum depth of 600mm being exceeded, then Type D chambers to be used.***

Rodding Eye — IE

'Aco' Channel (showing connecting pipe) or similar — YG 18.00

Yard Gully and Connection

Filter Drain (showing connecting pipe) with final 1.0m section of 100mm perforated UPVC pipe laid to nominal fall prior to connection to Surface Water Drainage Network. — FILTER DRAIN

1500mm High Knee Post and Rail Fencing at Attenuation Basins

Timber VRS with pedestrian rail — RRS

Root Protection Area and TPF

(Tree Protection Plan Based on Arboricultural's drawing number 5646:21 B, revision 03, issued to RCP in .dwg format on 01/03/2024.).

All existing ditches and culverts being retained are to be cleaned out to the satisfaction of the ADC drainage engineer

CDM NOTES

1. EXISTING SERVICES. Depth of existing services must be determined prior to works commencing. The contractor is responsible for establishing underground services in accordance with HSE Guidance note HS (G) 47. Any services which would be within the proposed construction layers must be lowered to below the sub-base.

0m 2m 4m 8m 12m 16m 20m

SCALE BAR 1:200 at A1

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Rev.	Date	Details	By	Chkd	Appd
C	30.10.24	Subject to adopting authority approval.	KG	JC	TRS
B	10.09.24	Plans updated as per client comments received 26.06.24 & as per updated SI information dated 12.08.24	JC	LAD	TRS
A	03.05.24	Updated to Initial Tender Issue	AD	MW	TRS

Client:- FOREMAN HOMES

Site:- Land West of Church Lane & Horsemere Green Lane Climping, West Sussex

Drawing Title:- DOMESTIC DRAINAGE LAYOUT

SHEET 12 OF 22

Date: April 2024 | Scales: 1:200 at A1

Drawn: AD | Checked: MW | Approved: TRS

Drawing No. FOR/E5139/462 C

FOR CONSTRUCTION

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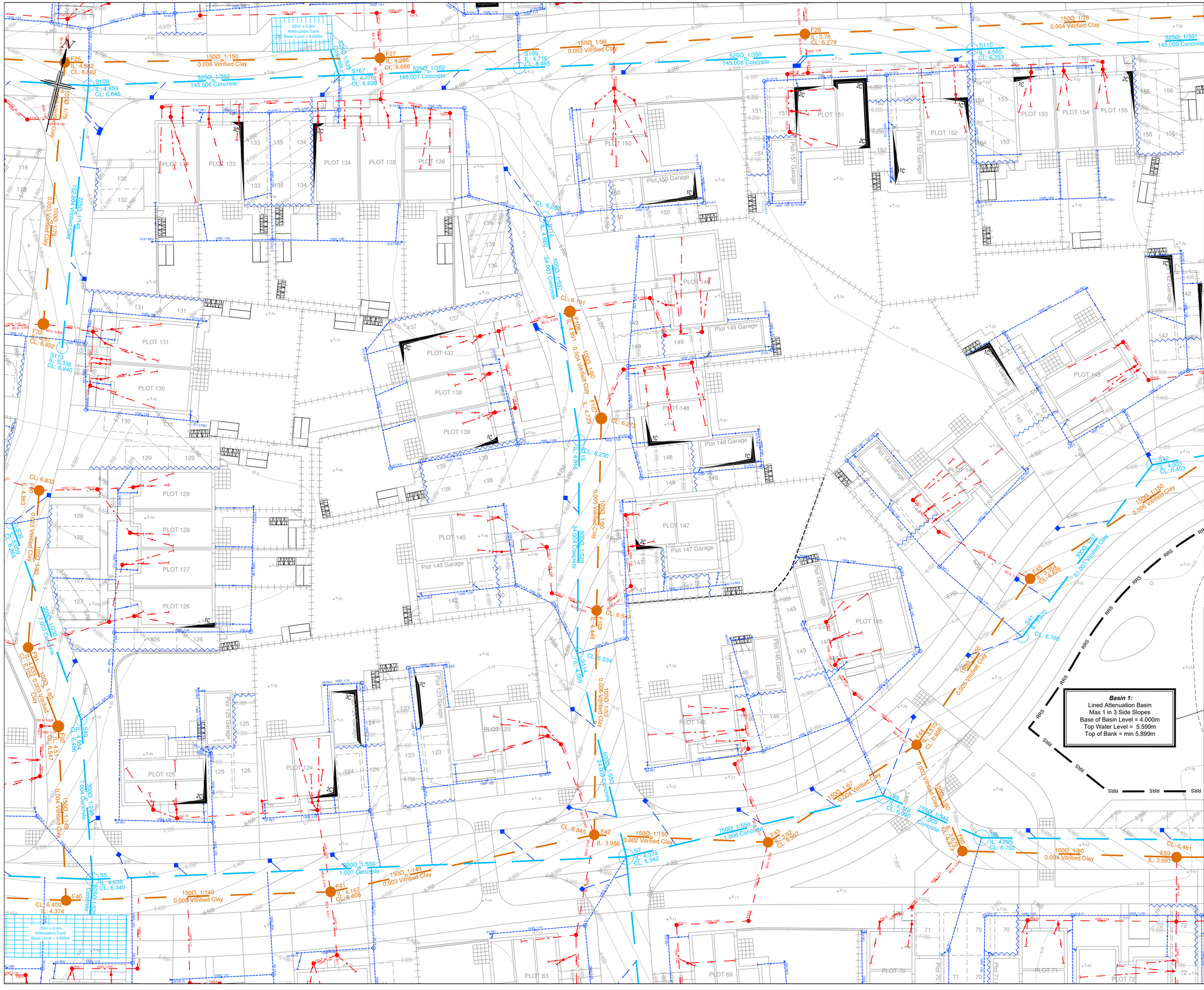

1:200 SHEET KEY PLAN

NOTES

1. All dimensions are in metres unless stated otherwise.
2. Do not scale from this drawing. Only written dimensions are to be used.
3. FW & SW house drainage is to be constructed in accordance with the Building Regulations & BS8301 & SSG Appendix C Design and Construction Guidance Approved Version 2.3 dated 11 November 2023 and the specific requirements of IWNL Water.
4. Drains are to be constructed using flexibly jointed vitrified clay pipes to BS EN 295-1991 "Super Strength" specification (e.g. Hepworth Supersleeve or similar) or uPVC drainage pipework to BS4660 & BS2494, bedded & backfilled in accordance with manufacturers instructions.
5. Location of sewers & lateral drains to be in accordance with the SSG Appendix C Design and Construction Guidance Approved Version 2.3 dated 11 November 2023 and the specific requirements of IWNL.
6. Backfilling of drain trenches adjacent to dwelling or other structure to be in accordance with BS8301- Fig. 9.
7. Cover levels indicated on the Drainage Schedules are nominal & may be adjusted to suit finished ground levels as necessary.
8. Drainage Inspection chamber covers should be Grade D400 in trafficked areas Grade B125 in parking areas and occasional traffic and A15 in pedestrian only areas.
9. Rainwater downpipes to be connected direct to drain using an appropriate adaptor & removable section of downpipe to permit rodding access.
10. The positions of SVP's, stub stacks, WC outlets, Back inlet gullies etc. & rainwater downpipes are to be accurately located from the house type working drawings.
11. Generally FW drains are to be laid to falls of 1 in 40, SW drains are to be laid to falls of 1 in 60, both in 100mm diameter pipes, SW pipes are to be 150mm diameter when serving 2 dwellings or 2 RWP connections. FW pipes are to be 150mm diameter when serving 10 dwellings or more unless stated otherwise, or where a schedule is provided.
12. 100mmØ FW Drains are to be laid to minimum fall of 1 in 80 and 150mmØ FW Drains are to be laid to minimum fall of 1 in 150.
13. Gullies situated in areas accessible to wheeled vehicles to be of suitable construction for trafficked areas.
14. Where land drain is identified on the Architect's details, connect into nearest SW system.
15. Where FW drains are laid to steep gradients, intermediate anchor bends or 135° PPC catchpit to be used.
16. This drawing should be read in conjunction with the Architect's and Structural Engineer's design drawings and specification.
17. Site layout shown in this drawing is based on Foreman Homes Approved Site Layout Plan, issued to RCP in .dwg format on 06/02/2023
18. Site Access and Section 278 Works as per RCP's dwg No. Section 278 General Arrangement (FOR-ES139-301 to 302).
19. Architectural blocks based on RCP's Substructure Layouts, issued to RCP in .dwg format on 24/03/2023 and 04/03/2024.
20. Topographical Survey as per Encompass Surveys drawing no. ENC/240920/XLL41 to 15, dated September 2020.
21. This drawing should be read in conjunction with other Domestic Drainage Layouts, Foul and Surface Water Sewer Longitudinal Sections (FOR/ES139/201 to 214), Surface Water Sewer and Foul Water Sewer Manhole Schedules (FOR-ES139-415 to 416), Section 104 Drainage Construction Details (FOR-ES139-410) and Domestic Drainage Construction Details (FOR-ES139-473 to 474).
22. Where backdrop is less than 1.0m for domestic drainage, backdrop to be accommodated with internal benching.
23. Surface water from private areas is not to be discharged onto adoptable highway and vice versa.
24. All OWC works to be in accordance with Arun District Council Details, Pipe bedding of all OWC works to accord with ADC drawing 80003001 Rev C.
25. All footpath slabs shall have a crossfall to drain surface water into adjoining gardens.
26. All future private driveways, parking bays, etc to be designed to fall surface water run-off away from S36 works. If not achievable, full width ACO drainage to be provided.
27. ***ANY VARIANCE OR DISCREPANCY MUST BE REPORTED BACK TO RCP ENGINEERING BEFORE WORK BEGINS.***

TYPE	DEPTH RANGE	DESCRIPTION	LOCATION	CODE	COVER GRADE
D	Depth from cover level to soffit of pipe up to 3m	Min. 450mm diameter Flexible or Rigid access chamber (Non Entry) in areas subject to vehicle loading. (If distance from cover level to soffit of pipe is >1m, access opening shall be restricted to 350mm Ø or 300mm x 300mm.	Road Driveway Garden	R D G	D400 B125 A15
			RE	Rodding point at head of drain	

KEY

Site Boundary

Adoptable Surface Water Sewers (IWNL)

Adoptable Flow Control Manhole (IWNL)

Adoptable Foul Water Sewers (IWNL)

Indicative Foul Rising Main

Adoptable PCC Headwalls (IWNL)

3m SuDS Easement

Swale with Granular Drain at Base

Cellular Storage Tanks

Adoptable Road Gully & Connection

Private Road Gully & Connection

Private Surface Water Domestic Drainage

Private Foul Water Domestic Drainage

House connection via 300mm dia. shallow access chamber not more than 600mm deep
(Based on floor make-up of 75mm screed, 225mm insulation & 150mm beam & block).
In the event that conditions on-site result in maximum depth of 600mm being exceeded, then Type D chambers to be used.

Rodding Eye

'Aco' Channel (showing connecting pipe) or similar

Yard Gully and Connection

Filter Drain (showing connecting pipe) with final 1.0m section of 100mm perforated UPVC pipe laid to nominal fall prior to connection to Surface Water Drainage Network.

1500mm High Knee Post and Rail Fencing at Attenuation Basins

Timber VRS with pedestrian rail

Root Protection Area and TPF
(Tree Protection Plan Based on Arboricultural's drawing number 5646/21/B, revision 03, issued to RCP in .dwg format on 01/03/2024.).

All existing ditches and culverts being retained are to be cleaned out to the satisfaction of the ADC drainage engineer

CDM NOTES

1. EXISTING SERVICES. Depth of existing services must be determined prior to works commencing. The contractor is responsible for establishing underground services in accordance with HSE Guidance note HS (G) 47. Any services which would be within the proposed construction layers must be lowered to below the sub-base.

SCALE BAR 1:200 at A1

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Rev.	Date	Details	By	Chkd	Appd
C	30.10.24	Subject to adopting authority approval.	KG	JC	TRS
B	10.09.24	Plans updated as per client comments received 26.06.24 & as per updated SI information dated 12.08.24	JC	LAD	TRS
A	03.05.24	Updated to Initial Tender Issue	AD	MW	TRS

Client:-

FOREMAN HOMES

Site:-

Land West of Church Lane & Horsemere Green Lane
Climping, West Sussex

Drawing Title:-

DOMESTIC DRAINAGE LAYOUT

SHEET 11 OF 22

Date: April 2024 | Scales: 1:200 at A1

Drawn: AD | Checked: MW | Approved: TRS

Drawing No.

FOR/E5139/461 C

FOR CONSTRUCTION

RCP ARCHITECTURE & CIVIL ENGINEERING
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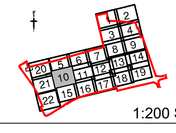

1:200 SHEET KEY PLAN

NOTES

1. All dimensions are in metres unless stated otherwise.
2. Do not scale from this drawing. Only written dimensions are to be used.
3. FW & SW house drainage is to be constructed in accordance with the Building Regulations & BS8301 & SSG Appendix C Design and Construction Guidance Approved Version 2.3 dated 11 November 2023 and the specific requirements of IWNL Water.
4. Drains are to be constructed using flexibly jointed vitrified clay pipes to BS EN 295-1991 "Super Strength" specification (e.g. Hepworth Supersleeve or similar) or uPVC drainage pipework to BS4660 & BS2494, bedded & backfilled in accordance with manufacturers instructions.
5. Location of sewers & lateral drains to be in accordance with the SSG Appendix C Design and Construction Guidance Approved Version 2.3 dated 11 November 2023 and the specific requirements of IWNL.
6. Backfilling of drain trenches adjacent to dwelling or other structure to be in accordance with BS8301- Fig. 9.
7. Cover levels indicated on the Drainage Schedules are nominal & may be adjusted to suit finished ground levels as necessary.
8. Manhole / inspection chamber covers should be Grade D400 in trafficked areas Grade B125 in parking areas and occasional traffic and A15 in pedestrian only areas.
9. Rainwater downpipes to be connected direct to drain using an appropriate adaptor & removable section of downpipe to permit rodding access.
10. The positions of SVP's, stub stacks, WC outlets, Back inlet gullies etc. & rainwater downpipes are to be accurately located from the house type working drawings.
11. Generally FW drains are to be laid to falls of 1 in 40, SW drains are to be laid to falls of 1 in 60, both in 100mm diameter pipes, SW pipes are to be 150mm diameter when serving 2 dwellings or 2 RWP connections. FW pipes are to be 150mm diameter when serving 10 dwellings or more unless stated otherwise, or where a schedule is provided.
12. 100mmØ FW Drains are to be laid to minimum fall of 1 in 80 and 150mmØ FW Drains are to be laid to minimum fall of 1 in 150.
13. Gullies situated in areas accessible to wheeled vehicles to be of suitable construction for trafficked areas.
14. Where land drain is identified on the Architect's details, connect into nearest SW system.
15. Where FW drainage is at a depth to cause problems with rodding access, a Type D chamber/ PPC catchpit to be used.
16. This drawing should be read in conjunction with the Architect's and Structural Engineer's design drawings and specification.
17. Site layout shown in this drawing is based on Foreman Homes Approved Site Layout Plan, issued to RCP in .dwg format on 06/02/2023
18. Site Access and Section 278 Works as per RCP's dwg No. Section 278 General Arrangement (FOR-E5139-301 to 302).
19. Architectural blocks based on RCP's Substructure Layouts, issued to RCP in .dwg format on 24/03/2023 and 04/03/2024.
20. Topographical Survey as per Encompass Surveys drawing no. ENC/24080/OLL4/1 to 10, dated September 2020.
21. This drawing should be read in conjunction with other Domestic Drainage Layouts, Foul and Surface Water Sewer Longitudinal Sections (FOR/E5139/201 to 214), Surface Water Sewer and Foul Water Sewer Manhole Schedules (FOR-E5139-415 to 416), Section 104 Drainage Construction Details (FOR-E5139-410) and Domestic Drainage Construction Details (FOR-E5139-473 to 474).
22. Where backdrop is less than 1.0m for domestic drainage, backdrop to be accommodated with internal benching.
23. Surface water from private areas is not to be discharged onto adoptable highway and vice versa.
24. All OWC works to be in accordance with Arun District Council Details, Pipe bedding of all OWC works to accord with ADC drawing 80003301 Rev C.
25. All footpath slabs shall have a crossfall to drain surface water into adjoining gardens.
26. All future private driveways, parking bays, etc to be designed to fall surface water run-off away from S38 works. If not achievable, full width ACO drainage to be provided.
27. ***ANY VARIANCE OR DISCREPANCY MUST BE REPORTED BACK TO RCP ENGINEERING BEFORE WORK BEGINS.***

TYPE	DEPTH RANGE	DESCRIPTION	LOCATION	CODE	COVER GRADE
D	Depth from cover level to soffit of pipe up to 3m	Min. 450mm diameter Flexible or Rigid access chamber (Non Entry) in areas subject to vehicle loading. (If distance from cover level to soffit of pipe is >1m, access opening shall be restricted to 350mm Ø or 300mm x 300mm.	Road Driveway Garden	R D G	D400 B125 A15
			RE	Rodding point at head of drain	

KEY

Site Boundary

Adoptable Surface Water Sewers (IWNL) — S1

Adoptable Flow Control Manhole (IWNL) — S1

Adoptable Foul Water Sewers (IWNL) — F1

Indicative Foul Rising Main

Adoptable PCC Headwalls (IWNL)

3m SuDS Easement

Swale with Granular Drain at Base

Cellular Storage Tanks

Adoptable Road Gully & Connection — RG

Private Road Gully & Connection — RG

Private Surface Water Domestic Drainage — S1.1

Private Foul Water Domestic Drainage — F1.1

House connection via 300mm dia. shallow access chamber not more than 600mm deep *(Based on floor make-up of 75mm screed, 225mm insulation & 150mm beam & block).* ***In the event that conditions on-site result in maximum depth of 600mm being exceeded, then Type D chambers to be used.***

Rodding Eye — RE

'Aco' Channel (showing connecting pipe) or similar

Yard Gully and Connection — YG 18.00

Filter Drain (showing connecting pipe) with final 1.0m section of 100mm perforated UPVC pipe laid to nominal fall prior to connection to Surface Water Drainage Network. — FILTER DRAIN

1500mm High Knee Post and Rail Fencing at Attenuation Basins

Timber VRS with pedestrian rail — RRS

Root Protection Area and TPF

(Tree Protection Plan Based on Arboricultural's drawing number 5646:21 B, revision 03, issued to RCP in .dwg format on 01/03/2024.)).

All existing ditches and culverts being retained are to be cleaned out to the satisfaction of the ADC drainage engineer

CDM NOTES

1. EXISTING SERVICES. Depth of existing services must be determined prior to works commencing. The contractor is responsible for establishing underground services in accordance with HSE Guidance note HS (G) 47. Any services which would be within the proposed construction layers must be lowered to below the sub-base.

0m 2m 4m 8m 12m 16m 20m

SCALE BAR 1:200 at A1

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C	30.10.24	Subject to adopting authority approval.	KG	JC	TRS
B	10.09.24	Plans updated as per client comments received 26.06.24 & as per updated SI information dated 12.08.24	JC	LAD	TRS
A	03.05.24	Updated to Initial Tender Issue	AD	MW	TRS

Client:- FOREMAN HOMES

Site:- Land West of Church Lane & Horsemere Green Lane Climping, West Sussex

Drawing Title:- DOMESTIC DRAINAGE LAYOUT

SHEET 10 OF 22

Date: April 2024 | Scales: 1:200 at A1

Drawn: AD | Checked: MW | Approved: TRS

Drawing No. FOR/E5139/460 C

FOR CONSTRUCTION

RCP ARCHITECTURE & CIVIL ENGINEERING
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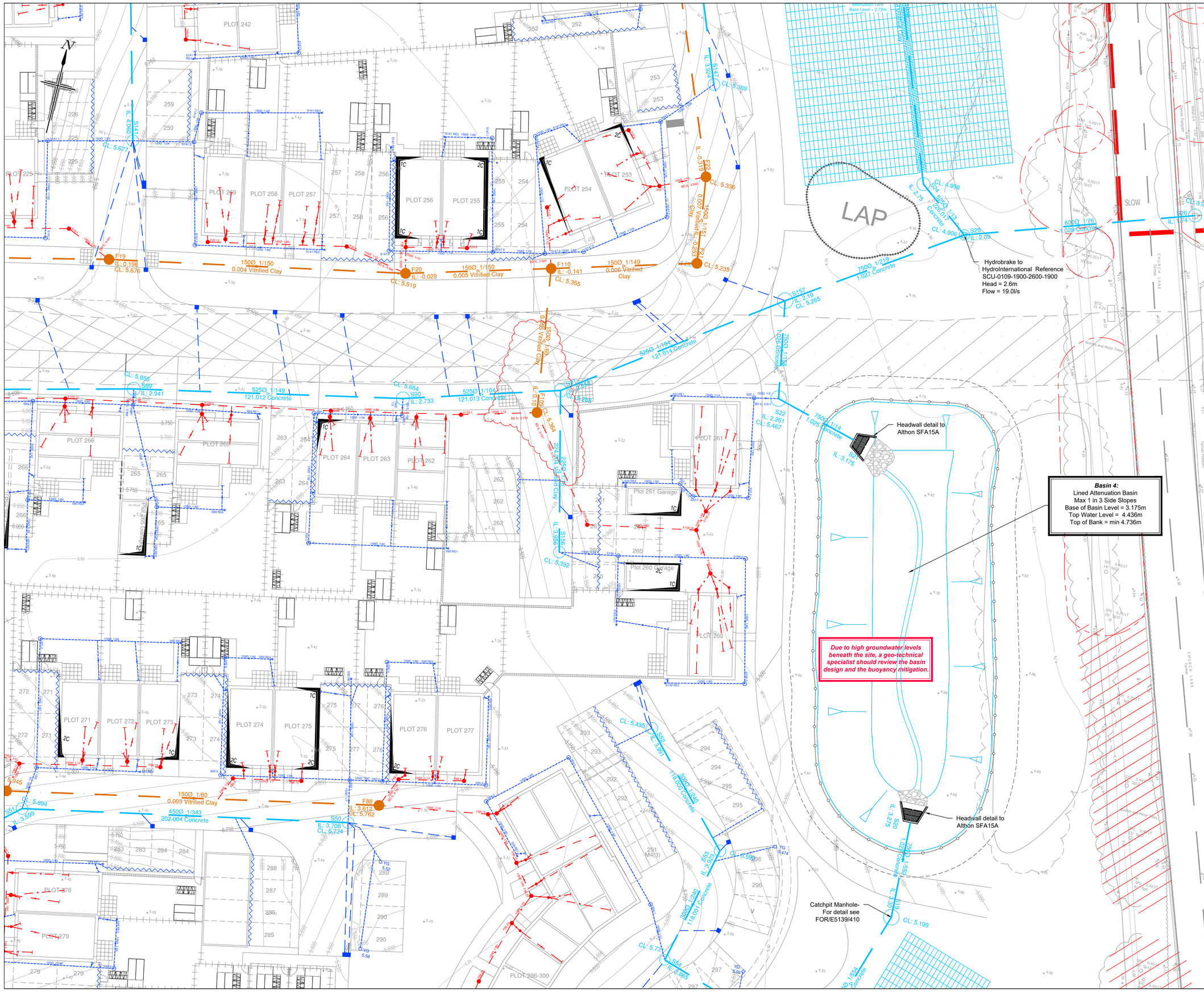

1:200 SHEET KEY PLAN

NOTES

1. All dimensions are in metres unless stated otherwise.
2. Do not scale from this drawing. Only written dimensions are to be used.
3. FW & SW house drainage is to be constructed in accordance with the Building Regulations & BS8301 & SSG Appendix C Design and Construction Guidance Approved Version 2.3 dated 11 November 2023 and the specific requirements of IWNL Water.
4. Drains are to be constructed using flexible jointed vitrified clay pipes to BS EN 295-1991 "Super Strength" specification (e.g. Hepworth Supersleeve or similar) or uPVC drainage pipework to BS4660 & BS8404, bedded & backfilled in accordance with manufacturers instructions.
5. Location of sewers & lateral drains to be in accordance with the SSG Appendix C Design and Construction Guidance Approved Version 2.3 dated 11 November 2023 and the specific requirements of IWNL.
6. Backfilling of drain trenches adjacent to dwelling or other structure to be in accordance with BS8301: Fig. 9.
7. Cover levels indicated on the Drainage Schedules are nominal & may be adjusted to suit finished ground levels as necessary.
8. Manhole inspection chamber covers should be Grade D400 in trafficked areas Grade B125 in parking areas and occasional traffic and A15 in pedestrian only areas.
9. Rainwater downpipes to be connected direct to drain using an appropriate adaptor & removable section of downpipe to permit rodding access.
10. The positions of SVP's, stub stacks, WC outlets, Back inlet gullies etc. & rainwater downpipes are to be accurately located from the house type working drawings.
11. Generally FW drains are to be laid to falls of 1 in 40, SW drains are to be laid to falls of 1 in 60, both in 100mm diameter pipes, SW pipes are to be 150mm diameter when serving 2 dwellings or 2 RWP connections. FW pipes are to be 150mm diameter when serving 10 dwellings or more unless stated otherwise, or where a schedule is provided.
12. 100mmØ FW Drains are to be laid to minimum fall of 1 in 80 and 150mmØ FW Drains are to be laid to minimum fall of 1 in 150.
13. Gullies situated in areas accessible to wheeled vehicles to be of suitable construction for trafficked areas.
14. Where land drain is identified on the Architect's details, connect into nearest SW system.
15. Where foul drainage is below the level of the nearest manhole, a Type 'D' chamber or TPC catchpit to be used.
16. This drawing should be read in conjunction with the Architect's and Structural Engineer's design drawings and specification.
17. Site layout shown in this drawing is based on Foreman Homes Approved Site Layout Plan, issued to RCP in .dwg format on 06/02/2023
18. Site Access and Section 278 Works as per RCP's.dwg file, Section 278 General Arrangement (FOR-E5139-301 to 302).
19. Architectural blocks based on RCP's Substructure Layouts, issued to RCP in .dwg format on 24/03/2023 and 04/03/2024.
20. Topographical Survey as per Encompass Surveying drawing no. ENC24/0820/SLL41 to 10, dated September 2020.
21. This drawing should be read in conjunction with other Domestic Drainage Layouts, Foul and Surface Water Sewer Longitudinal Sections (FOR/E5139/201 to 214), Surface Water Sewer and Foul Water Sewer Manhole Schedules (FOR-E5139-415 to 416), Section 104 Drainage Construction Details (FOR-E5139-410) and Domestic Drainage Construction Details (FOR-E5139-473 to 474).
22. Where backdrop is less than 1.0m for domestic drainage, backdrop to be accommodated with internal benching.
23. Surface water from private areas is not to be discharged onto adoptable highway and vice versa.
24. All CWC works to be in accordance with Arun District Council Details, Pipe bedding of all CWC works to accord with ADC drawing 80003301 Rev C.
25. All footpath slabs shall have a crossfall to drain surface water into adjoining gardens.
26. All future private driveways, parking bays, etc to be designed to fall surface water on and away from S36 works. If not achievable, full width ACO drainage to be provided.
27. ***ANY VARIANCE OR DISCREPANCY MUST BE REPORTED BACK TO RCP ENGINEERING BEFORE WORK BEGINS.***

TYPE	DEPTH RANGE	DESCRIPTION	LOCATION	CODE	COVER GRADE
D	Depth from cover level to centre of pipe up to 3m	Min. 450mm diameter Flexible or Rigid access chamber (Non Entry) in areas subject to vehicle loading. (If distance from cover level to soffit of pipe is > 1m, access opening shall be restricted to 350mm Ø or 300mm x 300mm).	Road Driveway Garden	R D G	D400 B125 A15
			RE		Rodding point at head of drain

KEY

Site Boundary

Adoptable Surface Water Sewers (IWNL) — S1

Adoptable Flow Control Manhole (IWNL) — SC1

Adoptable Foul Water Sewers (IWNL) — F1

Indicative Foul Rising Main

Adoptable PCC Headwalls (IWNL)

3m SuDS Easement

Swale with Granular Drain at Base

Cellular Storage Tanks

Adoptable Road Gully & Connection — RG

Private Road Gully & Connection — RG

Private Surface Water Domestic Drainage — S1.1

Private Foul Water Domestic Drainage — F1.1

House connection via 300mm dia. shallow access chamber not more than 600mm deep *(Based on floor make-up of 75mm screed, 225mm insulation & 150mm beam & block).* ***In the event that conditions on-site result in maximum depth of 600mm being exceeded, then Type D chambers to be used.***

Rodding Eye — RE

'Aco' Channel (showing connecting pipe) or similar — YG 18.00

Yard Gully and Connection — FILTER DRAIN

Filter Drain (showing connecting pipe) with final 1.0m section of 100mm perforated UPVC pipe laid to nominal fall prior to connection to Surface Water Drainage Network.

1500mm High Knee Post and Rail Fencing at Attenuation Basins — RRS

Timber VRS with pedestrian rail

Root Protection Area and TPF
(Tree Protection Plan Based on Arboricultural's drawing number 5646-21-B, revision 03, issued to RCP in .dwg format on 21-02-2024.))

All existing ditches and culverts being retained are to be cleaned out to the satisfaction of the ADC drainage engineer

CDM NOTES

1. EXISTING SERVICES. Depth of existing services must be determined prior to works commencing. The contractor is responsible for establishing underground services in accordance with HSE Guidance note HS (G) 47. Any services which would be within the proposed construction layers must be lowered to below the sub-base.

SCALE BAR 1:200 at A1

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Rev.	Date	Details	By	Chkd	Appd
D	30.10.24	Subject to adopting authority approval.	KG	JC	TRS
C	10.09.24	Plans updated as per client comments received 26.06.24 & as per updated SI information dated 12.08.24	JC	LAD	TRS
B	15.05.24	Updated to suit latest utility survey information.	JC	LD	TRS
A	03.05.24	Updated to Initial Tender Issue	AD	MW	TRS

Client:- FOREMAN HOMES

Site:- Land West of Church Lane & Horsemere Green Lane Climping, West Sussex

Drawing Title:- DOMESTIC DRAINAGE LAYOUT

SHEET 9 OF 22

Date: April 2024 | Scales: 1:200 at A1

Drawn: AD | Checked: MW | Approved: TRS

Drawing No. FOR/E5139/459 D

FOR CONSTRUCTION

Rogers Cory Partnership
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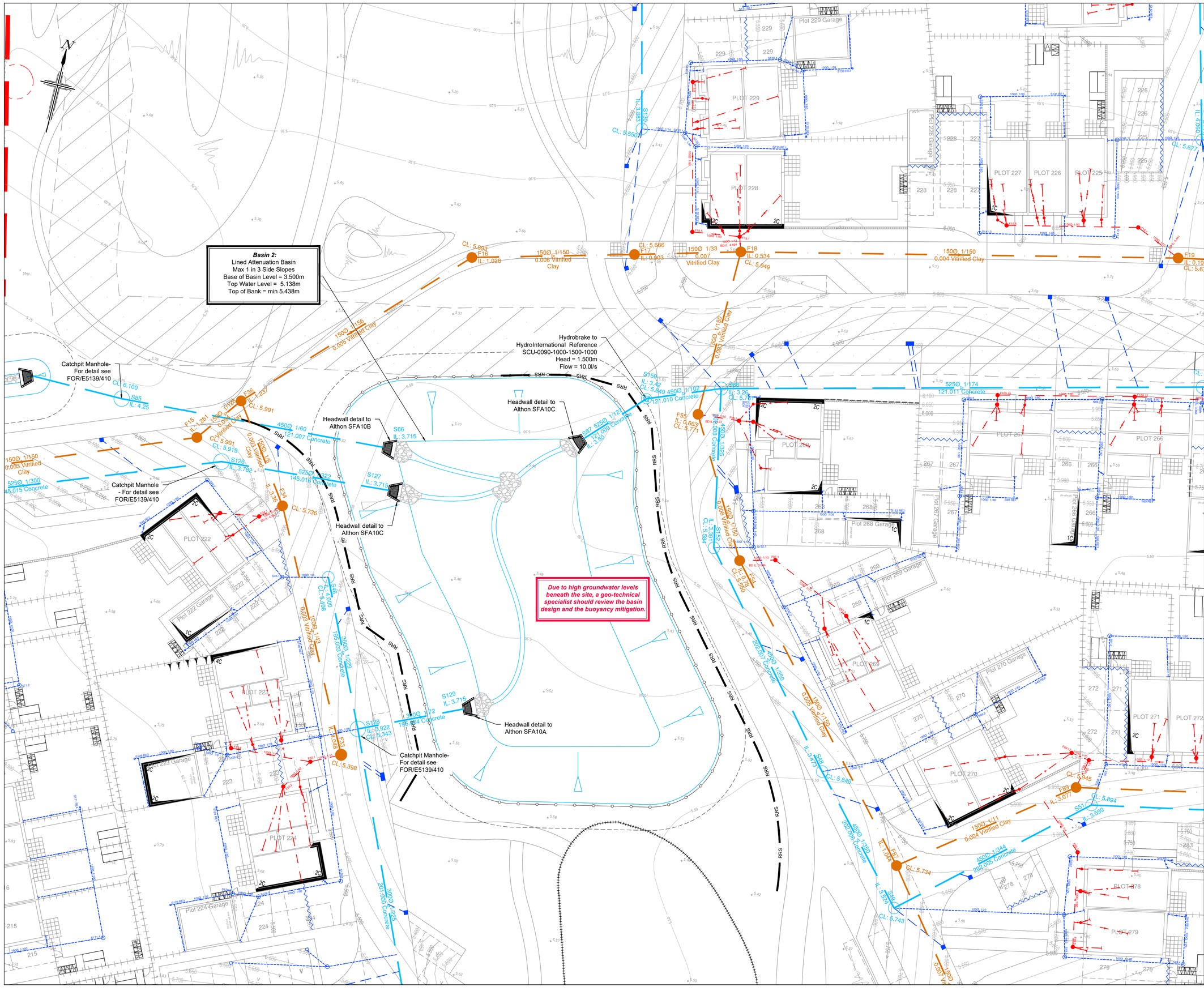
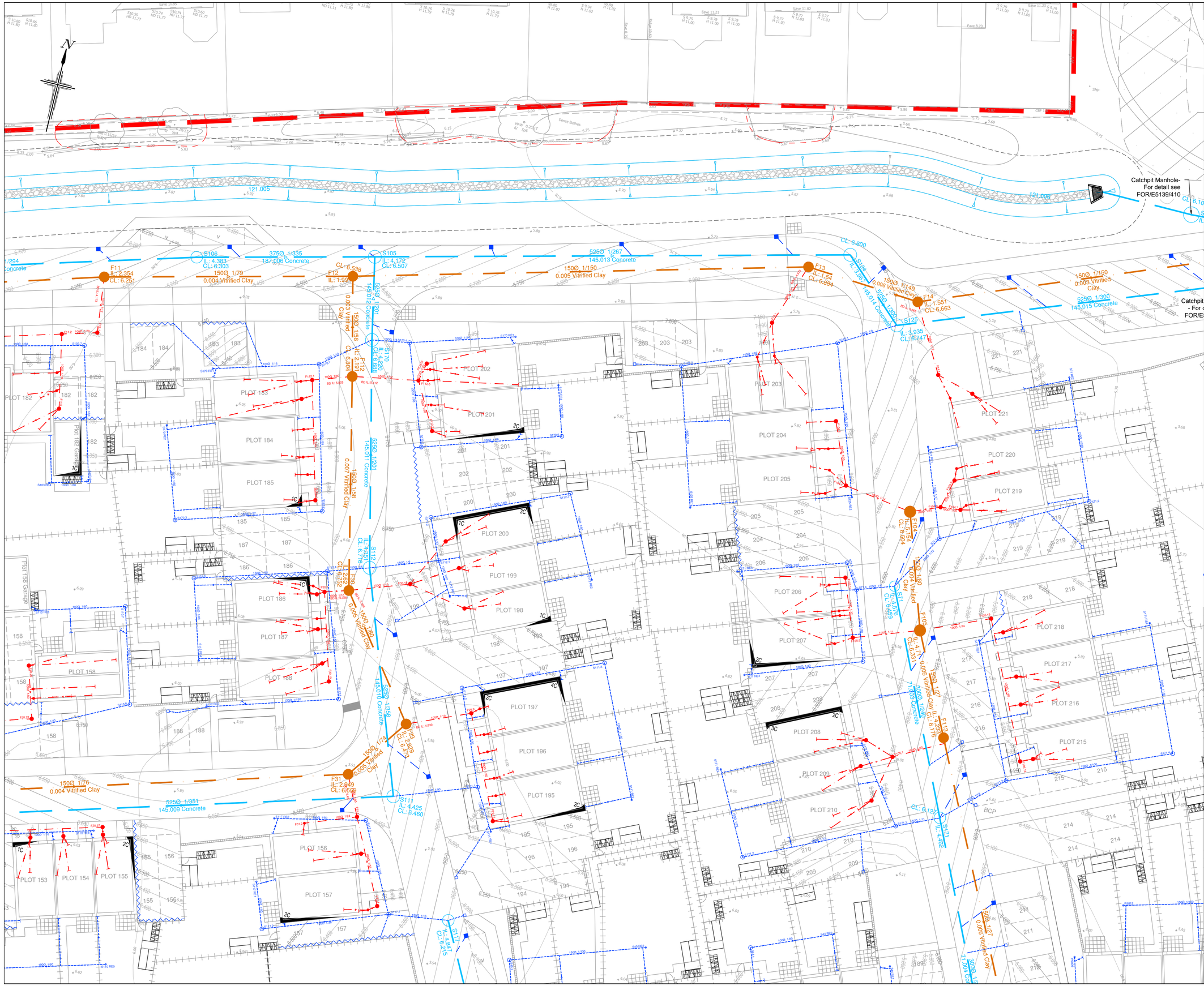

Basin 2:
Lined Attenuation Basin
Max 1 in 3 Side Slopes
Base of Basin Level = 3.500m
Top Water Level = 5.138m
Top of Bank = min 5.438m
Catchpit Manhole- For detail see FOR/E5139/410
Catchpit Manhole - For detail see FOR/E5139/410
Hydrobrake to HydroInternational Reference SCU-0090-1000-1500-1000 Head = 1.500m Flow = 10.0l/s
Headwall detail to Althon SFA10B
Headwall detail to Althon SFA10C
Headwall detail to Althon SFA10C
Headwall detail to Althon SFA10A
Catchpit Manhole- For detail see FOR/E5139/410
Due to high groundwater levels beneath the site, a geo-technical specialist should review the basin design and the buoyancy mitigation.
Plot 229 Garage
PLOT 229
PLOT 228
Plot 228 Garage
PLOT 227
PLOT 226
PLOT 225
Plot 222 Garage
PLOT 222
Plot 223 Garage
PLOT 223
PLOT 224
Plot 224 Garage
PLOT 267
Plot 268 Garage
PLOT 268
Plot 269 Garage
PLOT 269
Plot 270 Garage
PLOT 270
PLOT 271
PLOT 272
PLOT 278
PLOT 279
PLOT 266
Plot 267 Garage
1500Ø 1/150 0.006 Vitrified Clay
1500Ø 1/156 0.005 Vitrified Clay
1500Ø 1/33 0.007 Vitrified Clay
1500Ø 1/150 0.004 Vitrified Clay
1500Ø 1/150 0.003 Vitrified Clay
1500Ø 1/150 0.003 Vitrified Clay
1500Ø 1/150 0.006 Vitrified Clay
1500Ø 1/150 0.006 Vitrified Clay
1500Ø 1/150 0.004 Vitrified Clay
1000Ø 1/43 0.003 Vitrified Clay
450Ø 1/60 121.007 Concrete
525Ø 1/74 121.011 Concrete
525Ø 1/300 145.015 Concrete
3000Ø 1/229 120.003 Concrete
3000Ø 1/72 120.004 Concrete
4500Ø 1/102 121.010 Concrete
4500Ø 1/325 120.008 Concrete
4500Ø 1/350 202.006 Concrete
4500Ø 1/350 202.007 Concrete
4500Ø 1/344 202.005 Concrete
S1 IL: 3.500 CL: 5.550
S2 IL: 3.450 CL: 5.677
S85 IL: 4.25
S86 IL: 3.715
S87 IL: 3.50
S126 IL: 3.782
S127 IL: 3.715
S128 IL: 3.922 CL: 5.543
S129 IL: 3.715
S159 IL: 3.42 CL: 5.849
S158 IL: 3.26 CL: 5.71
S152 IL: 3.391 CL: 5.594
S49 IL: 3.473 CL: 5.840
S51 IL: 3.599 CL: 5.894
S49 IL: 3.524 CL: 5.743
F15 IL: 4.281
F16 IL: 1.028 CL: 5.893
F17 IL: 0.903 CL: 5.666
F18 IL: 0.534 CL: 5.649
F19 IL: 0.19 CL: 5.67
F36 IL: 1.257 CL: 5.991
F34 IL: 3.36 CL: 5.736
F33 IL: 4.048 CL: 5.398
F55 IL: 0.663 CL: 5.71
F34 IL: 0.470 CL: 5.590
F89 IL: 3.077 CL: 5.945
F87 IL: 1.004 CL: 5.734
S100 IL: 3.500 CL: 5.498
S100 IL: 3.500 CL: 5.498
S100 IL: 3.500 CL: 5.498



NOTES

1. All dimensions are in metres unless stated otherwise.
2. Do not scale from this drawing. Only written dimensions are to be used.
3. FW & SW house drainage is to be constructed in accordance with the Building Regulations & BS8301 & SSG Appendix C Design and Construction Guidance Approved Version 2.3 dated 11 November 2023 and the specific requirements of IWNL Water.
4. Drains are to be constructed using flexibly jointed vitrified clay pipes to BS EN 295-1991 "Super Strength" specification (e.g. Hepworth Supersleeve or similar) or uPVC drainage pipework to BS4660 & BS2494, bedded & backfilled in accordance with manufacturers instructions.
5. Location of sewers & lateral drains to be in accordance with the SSG Appendix C Design and Construction Guidance Approved Version 2.3 dated 11 November 2023 and the specific requirements of IWNL.
6. Backfilling of drain trenches adjacent to dwelling or other structure to be in accordance with BS8301: Fig. 9.
7. Cover levels indicated on the Drainage Schedules are nominal & may be adjusted to suit finished ground levels as necessary.
8. Manhole / inspection chamber covers should be Grade D400 in trafficked areas Grade B125 in parking areas and occasional traffic and A15 in pedestrian only areas.
9. Rainwater downpipes to be connected direct to drain using an appropriate adaptor & removable section of downpipe to permit rodding access.
10. The positions of SVP's, stub stacks, WC outlets, Back inlet gullies etc. & rainwater downpipes are to be accurately located from the house type working drawings.
11. Generally FW drains are to be laid to falls of 1 in 40, SW drains are to be laid to falls of 1 in 60, both in 100mm diameter pipes, SW pipes are to be 150mm diameter when serving 2 dwellings or 2 RWP connections. FW pipes are to be 150mm diameter when serving 10 dwellings or more unless stated otherwise, or where a schedule is provided.
12. 100mmØ FW Drains are to be laid to minimum fall of 1 in 80 and 150mmØ FW Drains are to be laid to minimum fall of 1 in 150.
13. Gullies situated in areas accessible to wheeled vehicles to be of suitable construction for trafficked areas.
14. Where land drain is identified on the Architect's details, connect into nearest SW system.
15. Where a Vitrified Clay pipe is to be connected to a concrete pipe or chamber, a PVC catchpit to be used.
16. This drawing should be read in conjunction with the Architect's and Structural Engineer's design drawings and specification.
17. Site layout shown in this drawing is based on Foreman Homes Approved Site Layout Plan, issued to RCP in .dwg format on 06/02/2023
18. Site Access and Section 278 Works as per RCP's dwg No. Section 278 General Arrangement (FOR-E5139-301 to 302).
19. Architectural blocks based on RCP's Substructure Layouts, issued to RCP in .dwg format on 24/03/2023 and 04/03/2024.
20. Topographical Survey as per Encompass Surveys drawing no. ENC/240820/OLL41 to 10, dated September 2020.
21. This drawing should be read in conjunction with other Domestic Drainage Layouts, Foul and Surface Water Sewer Longitudinal Sections (FOR/E5139/201 to 214), Surface Water Sewer and Foul Water Sewer Manhole Schedules (FOR-E5139-415 to 416), Section 104 Drainage Construction Details (FOR-E5139-410) and Domestic Drainage Construction Details (FOR-E5139-473 to 474).
22. Where backdrop is less than 1.0m for domestic drainage, backdrop to be accommodated with internal benching.
23. Surface water from private areas is not to be discharged onto adoptable highway and vice versa.
24. All OWC works to be in accordance with Arun District Council Details, Pipe bedding of all OWC works to accord with ADC drawing 80003001 Rev C.
25. All footpath slabs shall have a crossfall to drain surface water into adjoining gardens.
26. All future private driveways, parking bays, etc to be designed to fall surface water run-off away from S38 works. If not achievable, full width ACO drainage to be provided.
27. ***ANY VARIANCE OR DISCREPANCY MUST BE REPORTED BACK TO RCP ENGINEERING BEFORE WORK BEGINS.***

TYPE	DEPTH RANGE	DESCRIPTION	LOCATION	CODE	COVER GRADE
D	Depth from cover level to soffit of pipe up to 3m	Min. 450mm diameter Flexible or Rigid access chamber (Non Entry) in areas subject to vehicle loading. (If distance from cover level to soffit of pipe is >1m, access opening shall be restricted to 350mm Ø or 300mm x 300mm).	Road Driveway Garden	R D G	D400 B125 A15
			RE	Rodding point at head of drain	

KEY

Site Boundary

Adoptable Surface Water Sewers (IWNL) — S1

Adoptable Flow Control Manhole (IWNL) — S1

Adoptable Foul Water Sewers (IWNL) — F1

Indicative Foul Rising Main

Adoptable PCC Headwalls (IWNL)

3m SuDS Easement

Swale with Granular Drain at Base

Cellular Storage Tanks

Adoptable Road Gully & Connection — RG

Private Road Gully & Connection — RG

Private Surface Water Domestic Drainage — S1.1

Private Foul Water Domestic Drainage — F1.1

House connection via 300mm dia. shallow access chamber not more than 600mm deep *(Based on floor make-up of 75mm screed, 225mm insulation & 150mm beam & block).* ***In the event that conditions on-site result in maximum depth of 600mm being exceeded, then Type D chambers to be used.***

Rodding Eye — RE

'Aco' Channel (showing connecting pipe) or similar — YG 18.00

Yard Gully and Connection

Filter Drain (showing connecting pipe) with final 1.0m section of 100mm perforated UPVC pipe laid to nominal fall prior to connection to Surface Water Drainage Network. — FILTER DRAIN

1500mm High Knee Post and Rail Fencing at Attenuation Basins

Timber VRS with pedestrian rail — RRS

Root Protection Area and TPF

(Tree Protection Plan Based on Arboricultural's drawing number 5646:21 B, revision 03, issued to RCP in .dwg format on 01/03/2024.)).

All existing ditches and culverts being retained are to be cleaned out to the satisfaction of the ADC drainage engineer

CDM NOTES

1. EXISTING SERVICES. Depth of existing services must be determined prior to works commencing. The contractor is responsible for establishing underground services in accordance with HSE Guidance note HS (G) 47. Any services which would be within the proposed construction layers must be lowered to below the sub-base.

0m 2m 4m 8m 12m 16m 20m

SCALE BAR 1:200 at A1

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Rev.	Date	Details	By	Chkd	Appd
C	30.10.24	Subject to adopting authority approval.	KG	JC	TRS
B	10.09.24	Plans updated as per client comments received 26.06.24 & as per updated SI information dated 12.08.24	JC	LAD	TRS
A	03.05.24	Updated to Initial Tender Issue	AD	MW	TRS

Client:- FOREMAN HOMES

Site:-
Land West of Church Lane & Horsemere Green Lane
Climping, West Sussex

Drawing Title:-
DOMESTIC DRAINAGE DRAINAGE

SHEET 7 OF 22

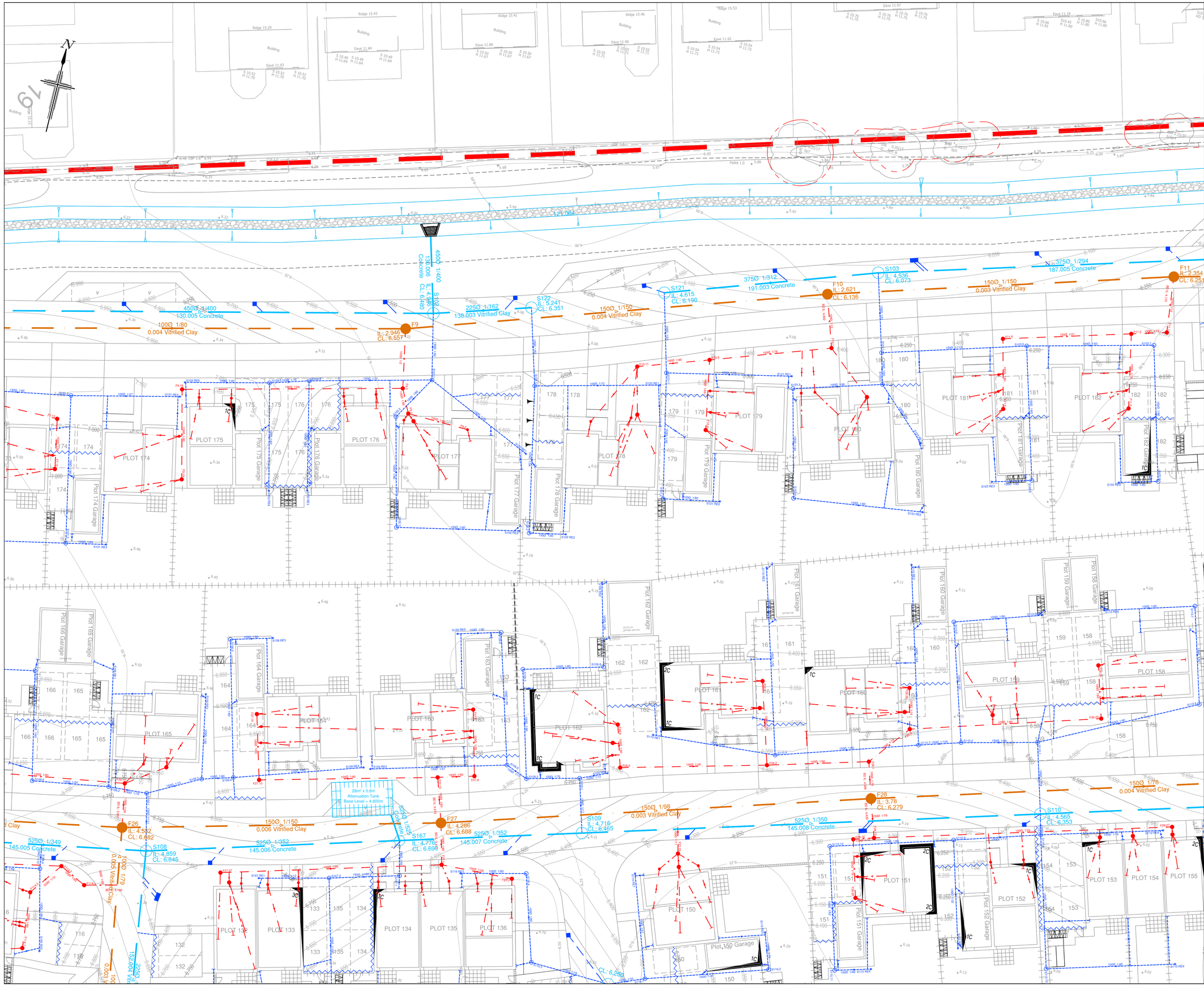
Date: April 2024 | Scales: 1:200 at A1

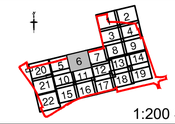
Drawn: AD | Checked: MW | Approved: TRS

Drawing No.
FOR/E5139/457 C

FOR CONSTRUCTION

Rogers Cory Partnership
Architectural and Civil Consultants
The Old School Old School Road Hook Hampshire RG27 9NJ
T: 01256 769269 E: mail@rcpconsultants.co.uk W: rcpconsultants.co.uk





1:200 SHEET KEY PLAN

NOTES

1. All dimensions are in metres unless stated otherwise.
2. Do not scale from this drawing. Only written dimensions are to be used.
3. FW & SW house drainage is to be constructed in accordance with the Building Regulations & BS8301 & SSG Appendix C Design and Construction Guidance Approved Version 2.3 dated 11 November 2023 and the specific requirements of IWNL Water.
4. Drains are to be constructed using flexibly jointed vitrified clay pipes to BS EN 295-1991 "Super Strength" specification (e.g. Hepworth Supersleve or similar) or uPVC drainage pipework to BS4660 & BS2494, bedded & backfilled in accordance with manufacturers instructions.
5. Location of sewers & lateral drains to be in accordance with the SSG Appendix C Design and Construction Guidance Approved Version 2.3 dated 11 November 2023 and the specific requirements of IWNL.
6. Backfilling of drain trenches adjacent to dwelling or other structure to be in accordance with BS8301: Fig. 9.
7. Cover levels indicated on the Drainage Schedules are nominal & may be adjusted to suit finished ground levels as necessary.
8. Drainage inspection chamber covers should be Grade D400 in trafficked areas Grade B125 in parking areas and occasional traffic and A15 in pedestrian only areas.
9. Rainwater downpipes to be connected direct to drain using an appropriate adaptor & removable section of downpipe to permit rodding access.
10. The positions of SVP's, stub stacks, WC outlets, Back inlet gullies etc. & rainwater downpipes are to be accurately located from the house type working drawings.
11. Generally FW drains are to be laid to falls of 1 in 40, SW drains are to be laid to falls of 1 in 60, both in 100mm diameter pipes, SW pipes are to be 150mm diameter when serving 2 dwellings or 2 RWP connections. FW pipes are to be 150mm diameter when serving 10 dwellings or more unless stated otherwise, or where a schedule is provided.
12. 100mmØ FW Drains are to be laid to minimum fall of 1 in 80 and 150mmØ FW Drains are to be laid to minimum fall of 1 in 150.
13. Gullies situated in areas accessible to wheeled vehicles to be of suitable construction for trafficked areas.
14. Where land drain is identified on the Architect's details, connect into nearest SW system.
15. Where SW drainage is to be laid in areas of contaminated ground, a clay plug or other PPC catchpit to be used.
16. This drawing should be read in conjunction with the Architect's and Structural Engineer's design drawings and specification.
17. Site layout shown in this drawing is based on Foreman Homes Approved Site Layout Plan, issued to RCP in .dwg format on 06/02/2023
18. Site Access and Section 278 Works as per RCP's dwg No. Section 278 General Arrangement (FOR-E5139-301 to 302).
19. Architectural blocks based on RCP's Substructure Layouts, issued to RCP in .dwg format on 24/03/2023 and 04/03/2024.
20. Topographical Survey as per Encompass Surveys drawing no. ENC/24/0820/SLL4/1 to 10, dated September 2020.
21. This drawing should be read in conjunction with other Domestic Drainage Layouts, Foul and Surface Water Sewer Longitudinal Sections (FOR/E5139/201 to 214), Surface Water Sewer and Foul Water Sewer Manhole Schedules (FOR-E5139-415 to 416), Section 104 Drainage Construction Details (FOR-E5139-410) and Domestic Drainage Construction Details (FOR-E5139-473 to 474).
22. Where backdrop is less than 1.0m for domestic drainage, backdrop to be accommodated with internal benching.
23. Surface water from private areas is not to be discharged onto adoptable highway and vice versa.
24. All OWC works to be in accordance with Arun District Council Details, Pipe bedding at all OWC works to accord with ADC drawing 80003001 Rev C.
25. All footpath slabs shall have a crossfall to drain surface water into adjoining gardens.
26. All future private driveways, parking bays, etc to be designed to fall surface water run-off away from S36 works. If not achievable, full width ACO drainage to be provided.
27. ***ANY VARIANCE OR DISCREPANCY MUST BE REPORTED BACK TO RCP ENGINEERING BEFORE WORK BEGINS.***

TYPE	DEPTH RANGE	DESCRIPTION	LOCATION	CODE	COVER GRADE
D	Depth from cover level to soffit of pipe up to 3m	Min. 450mm diameter Flexible or Rigid access chamber (Non Entry) in areas subject to vehicle loading. (If distance from cover level to soffit of pipe is >1m, access opening shall be restricted to 350mm Ø or 300mm x 300mm.	Road Driveway Garden	R D G	D400 B125 A15
			RE	Rodding point at head of drain	

KEY

Site Boundary

Adoptable Surface Water Sewers (IWNL) — S1

Adoptable Flow Control Manhole (IWNL) — S1

Adoptable Foul Water Sewers (IWNL) — F1

Indicative Foul Rising Main

Adoptable PCC Headwalls (IWNL)

3m SuDS Easement

Swale with Granular Drain at Base

Cellular Storage Tanks

Adoptable Road Gully & Connection — RG

Private Road Gully & Connection — RG

Private Surface Water Domestic Drainage — S1.1

Private Foul Water Domestic Drainage — F1.1

House connection via 300mm dia. shallow access chamber not more than 600mm deep *(Based on floor make-up of 75mm screed, 225mm insulation & 150mm beam & block).* ***In the event that construction on-site result in maximum depth of 600mm being exceeded, then Type D chambers to be used.***

Rodding Eye — RE

'Aco' Channel (showing connecting pipe) or similar — YG 18.00

Yard Gully and Connection

Filter Drain (showing connecting pipe) with final 1.0m section of 100mm perforated UPVC pipe laid to nominal fall prior to connection to Surface Water Drainage Network. — FILTER DRAIN

1500mm High Knee Post and Rail Fencing at Attenuation Basins

Timber VRS with pedestrian rail — RRS

Root Protection Area and TPF

(Tree Protection Plan Based on Arboricultural's drawing number 5646/21/B, revision 03, issued to RCP in .dwg format on 01/03/2024.).

All existing ditches and culverts being retained are to be cleaned out to the satisfaction of the ADC drainage engineer

CDM NOTES

1. EXISTING SERVICES. Depth of existing services must be determined prior to works commencing. The contractor is responsible for establishing underground services in accordance with HSE Guidance note HS (G) 47. Any services which would be within the proposed construction layers must be lowered to below the sub-base.

0m 2m 4m 6m 8m 10m 15m 20m

SCALE BAR 1:200 at A1

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Rev.	Date	Details	By	Chkd	Appd
C	30.10.24	Subject to adopting authority approval.	KG	JC	TRS
B	10.09.24	Plans updated as per client comments received 26.06.24 & as per updated SI information dated 12.08.24	JC	LAD	TRS
A	03.05.24	Updated to Initial Tender Issue	AD	MW	TRS

Client:-

FOREMAN HOMES

Site:-

Land West of Church Lane & Horsemere Green Lane
Climping, West Sussex

Drawing Title:-

DOMESTIC DRAINAGE LAYOUT

SHEET 6 OF 22

Date: April 2024 | Scales: 1:200 at A1

Drawn: AD | Checked: MW | Approved: TRS

Drawing No.

FOR/E5139/456 C

FOR CONSTRUCTION

Rogers Cory Partnership
Architectural and Civil Consultants
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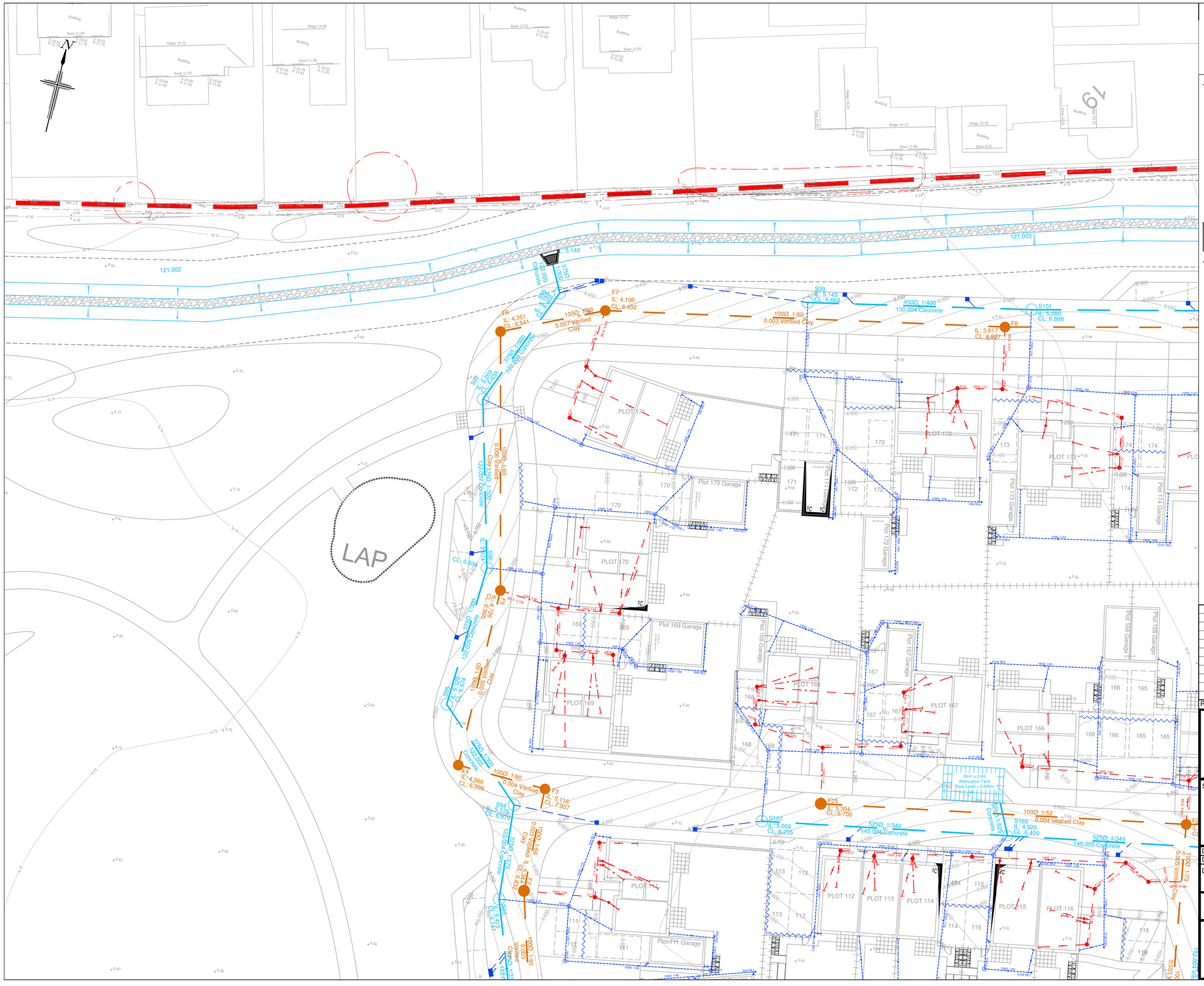

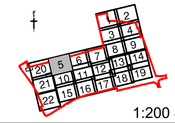

1:200 SHEET KEY PLAN

NOTES

1. All dimensions are in metres unless stated otherwise.
2. Do not scale from this drawing. Only written dimensions are to be used.
3. FW & SW house drainage is to be constructed in accordance with the Building Regulations & BS8301 & SSG Appendix C Design and Construction Guidance Approved Version 2.3 dated 11 November 2023 and the specific requirements of IWNL Water.
4. Drains are to be constructed using flexibly jointed vitrified clay pipes to BS EN 295-1991 "Super Strength" specification (e.g. Hepworth Supersleeve or similar) or uPVC drainage pipework to BS4660 & BS2494, bedded & backfilled in accordance with manufacturers instructions.
5. Location of sewers & lateral drains to be in accordance with the SSG Appendix C Design and Construction Guidance Approved Version 2.3 dated 11 November 2023 and the specific requirements of IWNL.
6. Backfilling of drain trenches adjacent to dwelling or other structure to be in accordance with BS8301- Fig. 9.
7. Cover levels indicated on the Drainage Schedules are nominal & may be adjusted to suit finished ground levels as necessary.
8. Cover to inspection chamber covers should be Grade D400 in trafficked areas Grade B125 in parking areas and occasional traffic and A15 in pedestrian only areas.
9. Rainwater downpipes to be connected direct to drain using an appropriate adaptor & removable section of downpipe to permit rodding access.
10. The positions of SVP's, stub stacks, WC outlets, Back inlet gullies etc. & rainwater downpipes are to be accurately located from the house type working drawings.
11. Generally FW drains are to be laid to falls of 1 in 40, SW drains are to be laid to falls of 1 in 60, both in 100mm diameter pipes, SW pipes are to be 150mm diameter when serving 2 dwellings or 2 RWP connections. FW pipes are to be 150mm diameter when serving 10 dwellings or more unless stated otherwise, or where a schedule is provided.
12. 100mmØ FW Drains are to be laid to minimum fall of 1 in 80 and 150mmØ FW Drains are to be laid to minimum fall of 1 in 150.
13. Gullies situated in areas accessible to wheeled vehicles to be of suitable construction for trafficked areas.
14. Where land drain is identified on the Architect's details, connect into nearest SW system.
15. Where gully grates are to be set in concrete surrounds, temporary bricks or PPC catchpit to be used.
16. This drawing should be read in conjunction with the Architect's and Structural Engineer's design drawings and specification.
17. Site layout shown in this drawing is based on Foreman Homes Approved Site Layout Plan, issued to RCP in .dwg format on 06/02/2023
18. Site Access and Section 278 Works as per RCP's dwg No. Section 278 General Arrangement (FOR-E5139-301 to 302).
19. Architectural blocks based on RCP's Substructure Layouts, issued to RCP in .dwg format on 24/03/2023 and 04/03/2024.
20. Topographical Survey as per Encompass Surveys drawing no. ENC/240820/SLL4/1 to 10, dated September 2020.
21. This drawing should be read in conjunction with other Domestic Drainage Layouts, Foul and Surface Water Sewer Longitudinal Sections (FOR/E5139/201 to 214), Surface Water Sewer and Foul Water Sewer Manhole Schedules (FOR-E5139-415 to 416), Section 104 Drainage Construction Details (FOR-E5139-410) and Domestic Drainage Construction Details (FOR-E5139-473 to 474).
22. Where backdrop is less than 1.0m for domestic drainage, backdrop to be accommodated with internal benching.
23. Surface water from private areas is not to be discharged onto adoptable highway and vice versa.
24. All CWC works to be in accordance with Arun District Council Details, Pipe bedding of all CWC works to accord with ADC drawing 80003001 Rev C.
25. All footpath slabs shall have a crossfall to drain surface water into adjoining gardens.
26. All future private driveways, parking bays, etc to be designed to fall surface water run-off away from S38 works. If not achievable, full width ACO drainage to be provided.
27. ***ANY VARIANCE OR DISCREPANCY MUST BE REPORTED BACK TO RCP ENGINEERING BEFORE WORK BEGINS.***

TYPE	DEPTH RANGE	DESCRIPTION	LOCATION	CODE	COVER GRADE
D	Depth from cover level to soffit of pipe up to 3m	Min. 450mm diameter Flexible or Rigid access chamber (Non Entry) in areas subject to vehicle loading. (If distance from cover level to soffit of pipe is >1m, access opening shall be restricted to 350mm Ø or 300mm x 300mm.	Road Driveway Garden	R D G	D400 B125 A15
			RE	Rodding point at head of drain	

KEY

- Site Boundary
- Adoptable Surface Water Sewers (IWNL) — S1
- Adoptable Flow Control Manhole (IWNL) — S1
- Adoptable Foul Water Sewers (IWNL) — F1
- Indicative Foul Rising Main
- Adoptable PCC Headwalls (IWNL)
- 3m SuDS Easement
- Swale with Granular Drain at Base
- Cellular Storage Tanks
- Adoptable Road Gully & Connection — RG
- Private Road Gully & Connection — RG
- Private Surface Water Domestic Drainage — S1.1
- Private Foul Water Domestic Drainage — F1.1
  House connection via 300mm dia. shallow access chamber not more than 600mm deep *(Based on floor make-up of 75mm screed, 225mm insulation & 150mm beam & block).* ***In the event that conditions on-site result in maximum depth of 600mm being exceeded, then Type D chambers to be used.***
- Rodding Eye — RE
- 'Aco' Channel (showing connecting pipe) or similar — YG 18.00
- Yard Gully and Connection
- Filter Drain (showing connecting pipe) with final 1.0m section of 100mm perforated UPVC pipe laid to nominal fall prior to connection to Surface Water Drainage Network. — FILTER DRAIN
- 1500mm High Knee Post and Rail Fencing at Attenuation Basins
- Timber VRS with pedestrian rail — RRS
- Root Protection Area and TPF
  (Tree Protection Plan Based on Arboricultural's drawing number 5046/21 B, revision 03, issued to RCP in .dwg format on 01/03/2024.)).

All existing ditches and culverts being retained are to be cleaned out to the satisfaction of the ADC drainage engineer

CDM NOTES

1. EXISTING SERVICES. Depth of existing services must be determined prior to works commencing. The contractor is responsible for establishing underground services in accordance with HSE Guidance note HS (G) 47. Any services which would be within the proposed construction layers must be lowered to below the sub-base.

0m 5m 10m 15m 20m

SCALE BAR 1:200 at A1

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Rev.	Date	Details	By	Chkd	Appd
C	30.10.24	Subject to adopting authority approval.	KG	JC	TRS
B	10.09.24	Plans updated as per client comments received 26.06.24 & as per updated SI information dated 12.08.24	JC	LAD	TRS
A	03.05.24	Updated to Initial Tender Issue	AD	MW	TRS

Client:- FOREMAN HOMES

Site:- Land West of Church Lane & Horsemere Green Lane Climping, West Sussex

Drawing Title:- DOMESTIC DRAINAGE LAYOUT

SHEET 5 OF 22

Date: April 2024 | Scales: 1:200 at A1

Drawn: MLM | Checked: MW | Approved: TRS

Drawing No. FOR/E5139/455 C

FOR CONSTRUCTION

Rogers Cory Partnership
Architectural and Civil Consultants
The Old School Old School Road
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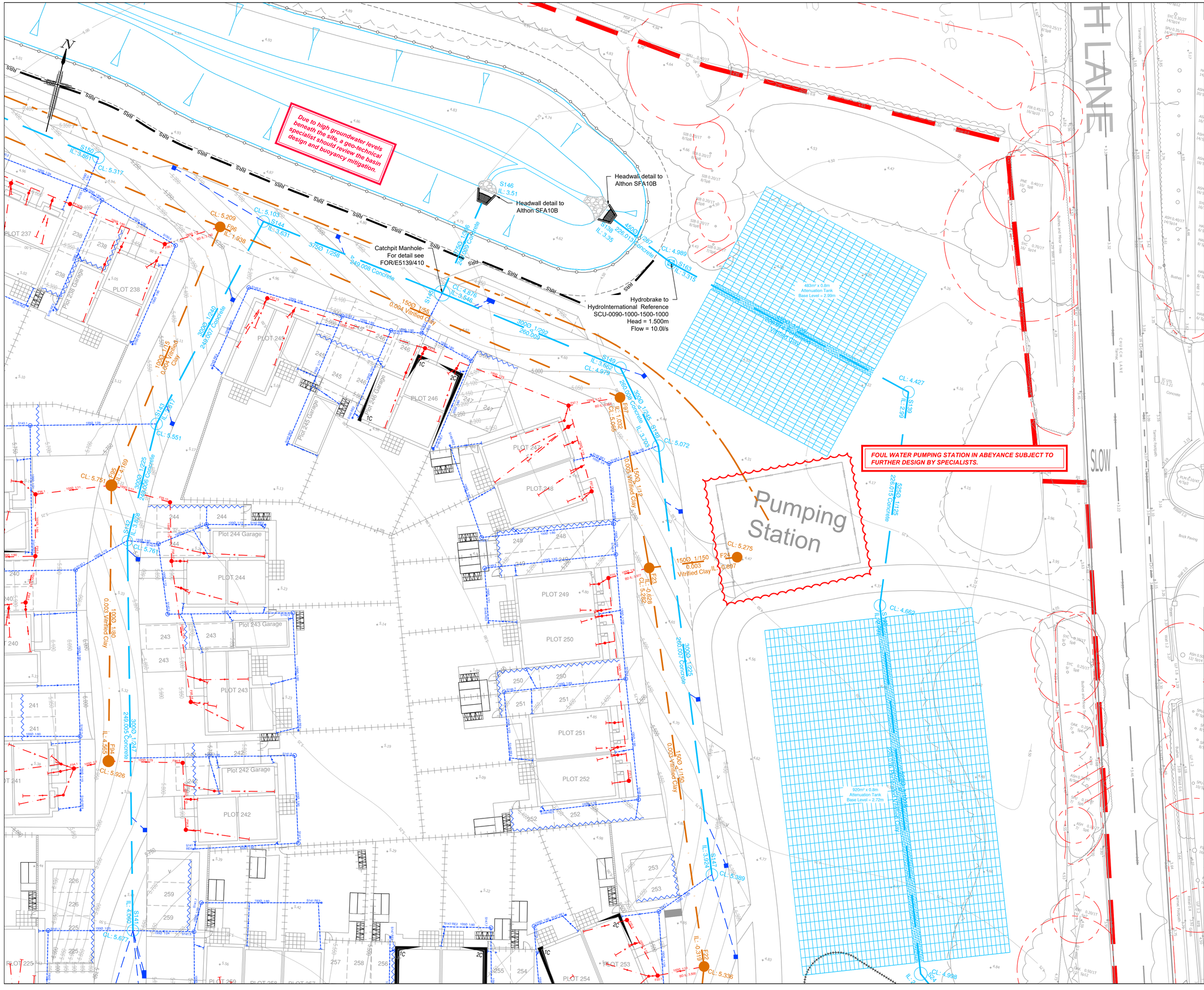

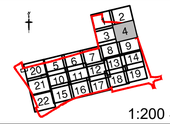

1:200 SHEET KEY PLAN

NOTES

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4. Drains are to be constructed using flexibly jointed vitrified clay pipes to BS EN 295-1991 "Super Strength" specification (e.g. Hepworth Supersleve or similar) or uPVC drainage pipework to BS4660 & BS2494, bedded & backfilled in accordance with manufacturers instructions.
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7. Cover levels indicated on the Drainage Schedules are nominal & may be adjusted to suit finished ground levels as necessary.
8. Manhole inspection chamber covers should be Grade D400 in trafficked areas Grade B125 in parking areas and occasional traffic and A15 in pedestrian only areas.
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12. 100mmØ FW Drains are to be laid to minimum fall of 1 in 80 and 150mmØ FW Drains are to be laid to minimum fall of 1 in 150.
13. Gullies situated in areas accessible to wheeled vehicles to be of suitable construction for trafficked areas.
14. Where land drain is identified on the Architect's details, connect into nearest SW system.
15. Where Cellular Storage is used, a silt trap is incorporated in the last manhole or PPC catchpit to be used.
16. This drawing should be read in conjunction with the Architect's and Structural Engineer's design drawings and specification.
17. Site layout shown in this drawing is based on Foreman Homes Approved Site Layout Plan, issued to RCP in .dwg format on 06/02/2023
18. Site Access and Section 278 Works as per RCP's dwg No. Section 278 General Arrangement (FOR-E5139-301 to 302).
19. Architectural blocks based on RCP's Substructure Layouts, issued to RCP in .dwg format on 24/03/2023 and 04/03/2024.
20. Topographical Survey as per Wordsparas Surveys drawing no. ENC/240820/OLL4/1 to 10, dated September 2020.
21. This drawing should be read in conjunction with other Domestic Drainage Layouts, Foul and Surface Water Sewer Longitudinal Sections (FOR/E5139/201 to 214), Surface Water Sewer and Foul Water Sewer Manhole Schedules (FOR-E5139-415 to 416), Section 104 Drainage Construction Details (FOR-E5139-410) and Domestic Drainage Construction Details (FOR-E5139-473 to 474).
22. Where backdrop is less than 1.0m for domestic drainage, backdrop to be accommodated with internal benching.
23. Surface water from private areas is not to be discharged onto adoptable highway and vice versa.
24. All CWC works to be in accordance with Arun District Council Details. Pipe bedding at all CWC works to accord with ADC drawing 80003301 Rev C.
25. All footpath slabs shall have a crossfall to drain surface water into adjoining gardens.
26. All future private driveways, parking bays, etc to be designed to fall surface water run-off away from S38 works. If not achievable, full width ACO drainage to be provided.
27. ***ANY VARIANCE OR DISCREPANCY MUST BE REPORTED BACK TO RCP ENGINEERING BEFORE WORK BEGINS.***

TYPE	DEPTH RANGE	DESCRIPTION	LOCATION	CODE	COVER GRADE
D	Depth from cover level to soffit of pipe up to 3m	Min. 450mm diameter Flexible or Rigid access chamber (Non Entry) in areas subject to vehicle loading. (If distance from cover level to soffit of pipe is >1m, access opening shall be restricted to 350mm Ø or 300mm x 300mm).	Road Driveway Garden	R D G	D400 B125 A15
			RE	Rodding point at head of drain	

KEY

Site Boundary

Adoptable Surface Water Sewers (IWNL)

Adoptable Flow Control Manhole (IWNL)

Adoptable Foul Water Sewers (IWNL)

Indicative Foul Rising Main

Adoptable PCC Headwalls (IWNL)

3m SuDS Easement

Swale with Granular Drain at Base

Cellular Storage Tanks

Adoptable Road Gully & Connection

Private Road Gully & Connection

Private Surface Water Domestic Drainage

Private Foul Water Domestic Drainage

House connection via 300mm dia. shallow access chamber not more than 600mm deep *(Based on floor make-up of 75mm screed, 225mm insulation & 150mm beam & block).* ***In the event invert conditions on-site result in maximum depth of 600mm being exceeded, then Type D chambers to be used.***

Rodding Eye

'Aco' Channel (showing connecting pipe) or similar

Yard Gully and Connection

Filter Drain (showing connecting pipe) with final 1.0m section of 100mm perforated UPVC pipe laid to nominal fall prior to connection to Surface Water Drainage Network.

1500mm High Knee Post and Rail Fencing at Attenuation Basins

Timber VRS with pedestrian rail

Root Protection Area and TPF

(Tree Protection Plan Based on Arboricultural's drawing number 5646:21:B, revision 03, issued to RCP in .dwg format on 01/03/2024.).

All existing ditches and culverts being retained are to be cleaned out to the satisfaction of the ADC drainage engineer

CDM NOTES

1. EXISTING SERVICES. Depth of existing services must be determined prior to works commencing. The contractor is responsible for establishing underground services in accordance with HSE Guidance note HS (G) 47. Any services which would be within the proposed construction layers must be lowered to below the sub-base.

0m 2m 4m 6m 8m 10m 15m 20m

SCALE BAR 1:200 at A1

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Rev.	Date	Details	By	Chkd	Appd
C	30.10.24	Subject to adopting authority approval.	KG	JC	TRS
B	10.09.24	Plans updated as per client comments received 26.06.24 & as per updated SI information dated 12.08.24	JC	LAD	TRS
A	03.05.24	Updated to Initial Tender Issue	AD	MW	TRS

Client:- FOREMAN HOMES

Site:- Land West of Church Lane & Horsemere Green Lane Climping, West Sussex

Drawing Title:- DOMESTIC DRAINAGE LAYOUT

SHEET 4 OF 22

Date: April 2024 | Scales: 1:200 at A1

Drawn: MLM | Checked: MW | Approved: TRS

Drawing No. FOR/E5139/454 C

FOR CONSTRUCTION

RCP ARCHITECTURE & CIVIL ENGINEERING
Rogers Cory Partnership
Architectural and Civil Consultants
The Old School Old School Road Hook Hampshire RG27 9NJ
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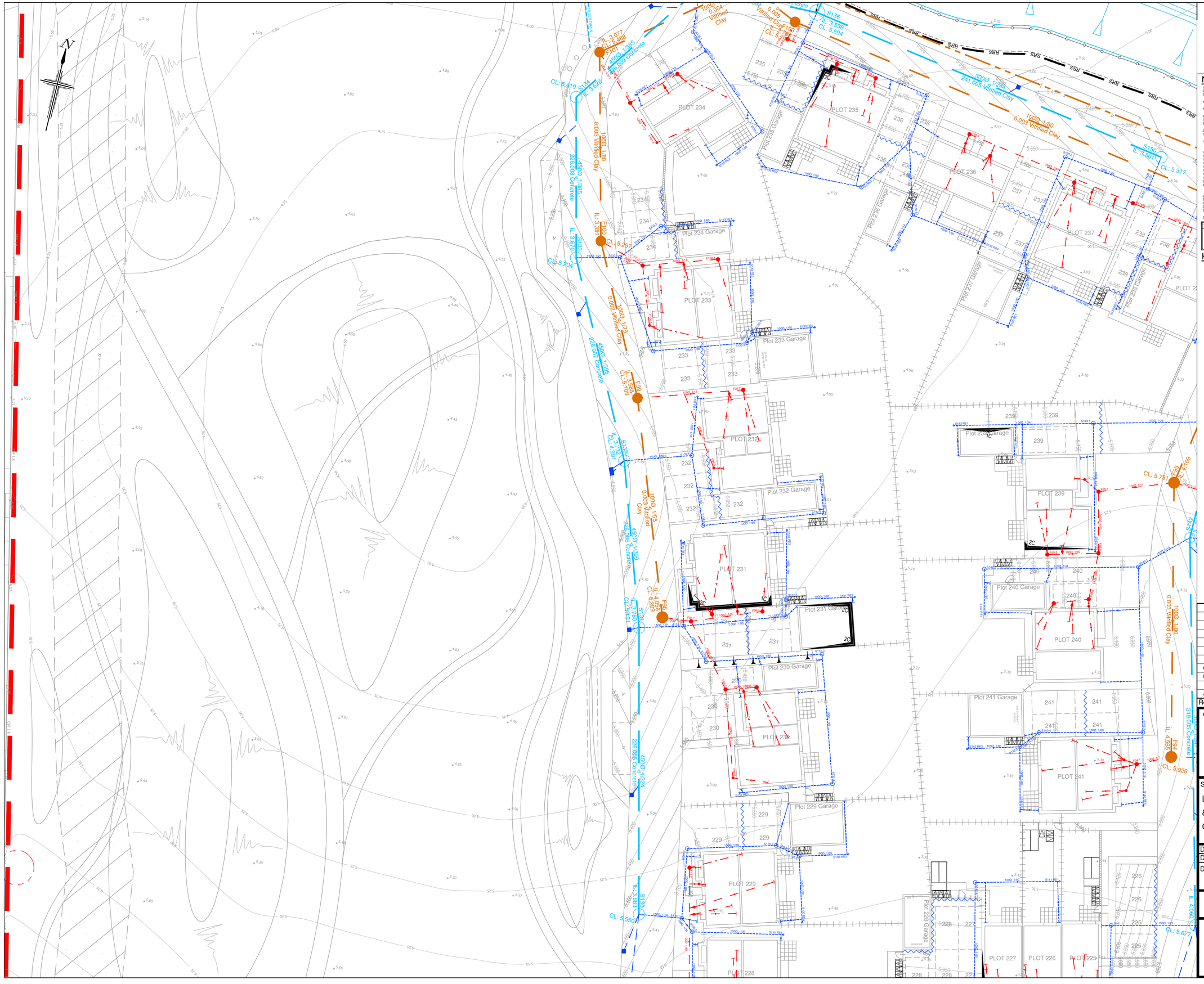

NOTES

1. All dimensions are in metres unless stated otherwise.
2. Do not scale from this drawing. Only written dimensions are to be used.
3. FW & SW house drainage is to be constructed in accordance with the Building Regulations & BS8301 & SSG Appendix C Design and Construction Guidance Approved Version 2.3 dated 11 November 2023 and the specific requirements of IWNL Water.
4. Drains are to be constructed using flexibly jointed vitrified clay pipes to BS EN 295-1991 "Super Strength" specification (e.g. Hepworth Supersleeve or similar) or uPVC drainage pipework to BS4660 & BS2494, bedded & backfilled in accordance with manufacturers instructions.
5. Location of sewers & lateral drains to be in accordance with the SSG Appendix C Design and Construction Guidance Approved Version 2.3 dated 11 November 2023 and the specific requirements of IWNL.
6. Backfilling of drain trenches adjacent to dwelling or other structure to be in accordance with BS8301- Fig. 9.
7. Cover levels indicated on the Drainage Schedules are nominal & may be adjusted to suit finished ground levels as necessary.
8. Manhole inspection chamber covers should be Grade D400 in trafficked areas Grade B125 in parking areas and occasional traffic and A15 in pedestrian only areas.
9. Rainwater downpipes to be connected direct to drain using an appropriate adaptor & removable section of downpipe to permit rodding access.
10. The positions of SVP's, stub stacks, WC outlets, Back inlet gullies etc. & rainwater downpipes are to be accurately located from the house type working drawings.
11. Generally FW drains are to be laid to falls of 1 in 40, SW drains are to be laid to falls of 1 in 60, both in 100mm diameter pipes, SW pipes are to be 150mm diameter when serving 2 dwellings or 2 RWP connections. FW pipes are to be 150mm diameter when serving 10 dwellings or more unless stated otherwise, or where a schedule is provided.
12. 100mmØ FW Drains are to be laid to minimum fall of 1 in 80 and 150mmØ FW Drains are to be laid to minimum fall of 1 in 150.
13. Gullies situated in areas accessible to wheeled vehicles to be of suitable construction for trafficked areas.
14. Where land drain is identified on the Architect's details, connect into nearest SW system.
15. Where SW drainage is to be laid in areas of permeable paving, a Hydro-Brake® or similar PPC catchpit to be used.
16. This drawing should be read in conjunction with the Architect's and Structural Engineer's design drawings and specification.
17. Site layout shown in this drawing is based on Foreman Homes Approved Site Layout Plan, issued to RCP in .dwg format on 06/02/2023
18. Site Access and Section 278 Works as per RCP's dwg No. Section 278 General Arrangement (FOR-E5139-301 to 302).
19. Architectural blocks based on RCP's Substructure Layouts, issued to RCP in .dwg format on 24/03/2023 and 04/03/2024.
20. Topographical Survey as per Encompass Surveys drawing no. ENC/24082/OLL4/1 to 10, dated September 2020.
21. This drawing should be read in conjunction with other Domestic Drainage Layouts, Foul and Surface Water Sewer Longitudinal Sections (FOR/E5139/201 to 214), Surface Water Sewer and Foul Water Sewer Manhole Schedules (FOR-E5139-415 to 416), Section 104 Drainage Construction Details (FOR-E5139-410) and Domestic Drainage Construction Details (FOR-E5139-473 to 474).
22. Where backdrop is less than 1.0m for domestic drainage, backdrop to be accommodated with internal benching.
23. Surface water from private areas is not to be discharged onto adoptable highway and vice versa.
24. All OWC works to be in accordance with Arun District Council Details, Pipe bedding of all OWC works to accord with ADC drawing 80003301 Rev C.
25. All footpath slabs shall have a crossfall to drain surface water into adjoining gardens.
26. All future private driveways, parking bays, etc to be designed to fall surface water run-off away from S38 works. If not achievable, full width ACO drainage to be provided.
27. ***ANY VARIANCE OR DISCREPANCY MUST BE REPORTED BACK TO RCP ENGINEERING BEFORE WORK BEGINS.***

TYPE	DEPTH RANGE	DESCRIPTION	LOCATION	CODE	COVER GRADE
D	Depth from cover level to soffit of pipe up to 3m	Min. 450mm diameter Flexible or Rigid access chamber (Non Entry) in areas subject to vehicle loading. (If distance from cover level to soffit of pipe is >1m, access opening shall be restricted to 350mm Ø or 300mm x 300mm.	Road Driveway Garden	R D G	D400 B125 A15
			RE	Rodding point at head of drain	

KEY

Site Boundary

Adoptable Surface Water Sewers (IWNL) — S1

Adoptable Flow Control Manhole (IWNL) — S1

Adoptable Foul Water Sewers (IWNL) — F1

Indicative Foul Rising Main

Adoptable PCC Headwalls (IWNL)

3m SuDS Easement

Swale with Granular Drain at Base

Cellular Storage Tanks

Adoptable Road Gully & Connection — RG

Private Road Gully & Connection — RG

Private Surface Water Domestic Drainage — S1.1

Private Foul Water Domestic Drainage — F1.1

House connection via 300mm dia. shallow access chamber not more than 600mm deep *(Based on floor make-up of 75mm screed, 225mm insulation & 150mm beam & block).* ***In the event that conditions on-site result in maximum depth of 600mm being exceeded, then Type D chambers to be used.***

Rodding Eye — RE

'Aco' Channel (showing connecting pipe) or similar — YG 18.00

Yard Gully and Connection

Filter Drain (showing connecting pipe) with final 1.0m section of 100mm perforated UPVC pipe laid to nominal fall prior to connection to Surface Water Drainage Network. — FILTER DRAIN

1500mm High Knee Post and Rail Fencing at Attenuation Basins

Timber VRS with pedestrian rail — RRS

Root Protection Area and TPF

(Tree Protection Plan Based on Arboricultural's drawing number 5646:21:B, revision 03, issued to RCP in .dwg format on 01/03/2024.).

All existing ditches and culverts being retained are to be cleaned out to the satisfaction of the ADC drainage engineer

CDM NOTES

1. EXISTING SERVICES. Depth of existing services must be determined prior to works commencing. The contractor is responsible for establishing underground services in accordance with HSE Guidance note HS (G) 47. Any services which would be within the proposed construction layers must be lowered to below the sub-base.

0m 2m 4m 8m 12m 16m 20m

SCALE BAR 1:200 at A1

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Rev.	Date	Details	By	Chkd	Appd
C	30.10.24	Subject to adopting authority approval.	KG	JC	TRS
B	10.09.24	Plans updated as per client comments received 26.06.24 & as per updated SI information dated 12.08.24	JC	LAD	TRS
A	03.05.24	Updated to Initial Tender Issue	AD	MW	TRS

Client:-

FOREMAN HOMES

Site:-

Land West of Church Lane & Horsemere Green Lane
Climping, West Sussex

Drawing Title:-

DOMESTIC DRAINAGE LAYOUT

SHEET 3 OF 22

Date: April 2024 | Scales: 1:200 at A1

Drawn: AD | Checked: MW | Approved: TRS

Drawing No.

FOR/E5139/453 C

FOR CONSTRUCTION

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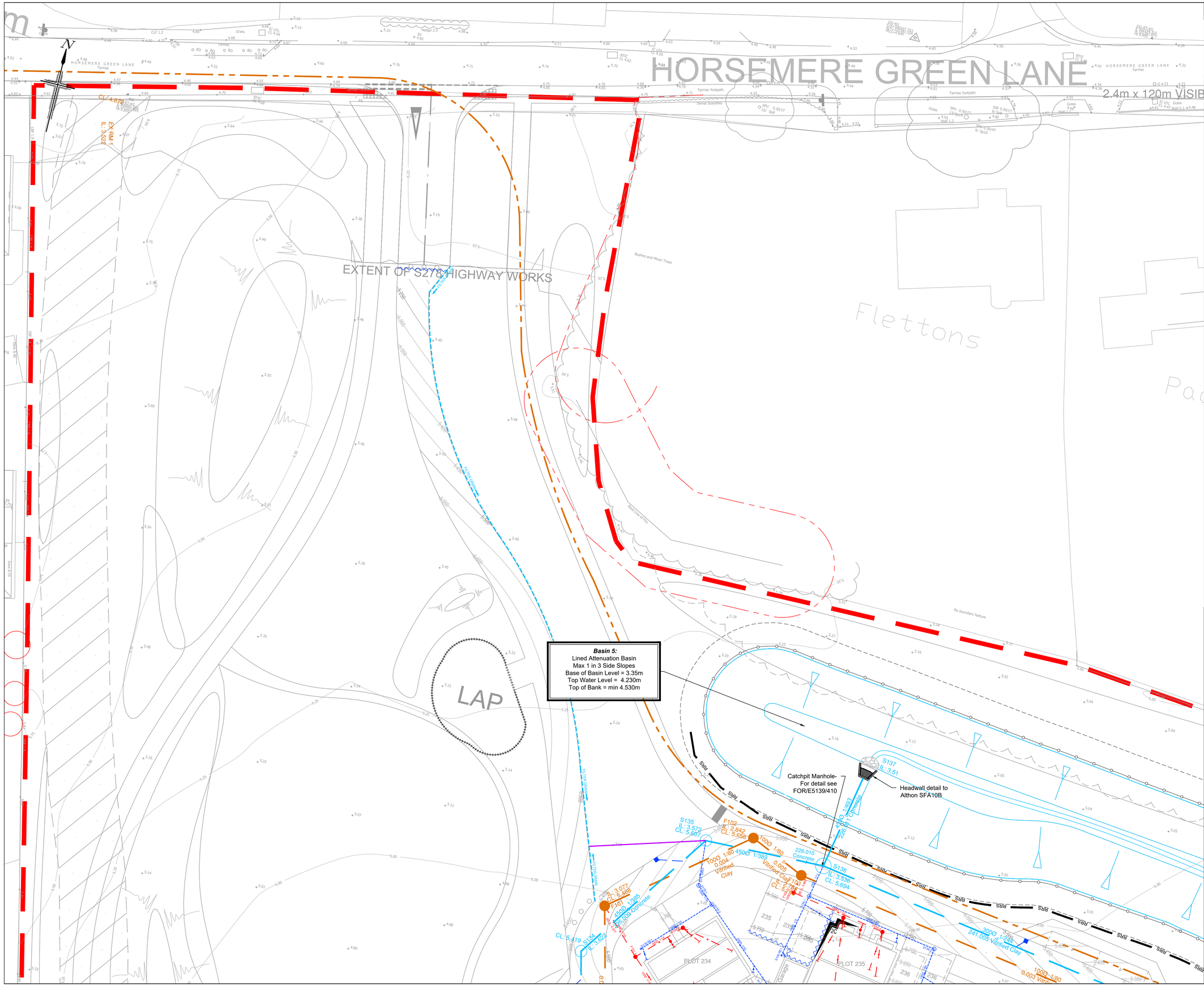
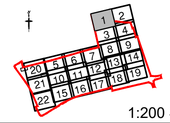
2.40m x 120m VISIBILITY SPLAY
HORSEMERE GREEN LANE
Tarmac
Grass
Wall 0.3
Wall 0.2
Tarmac footpath
Wall 1.0
Tarmac footpath
Wall 1.1
Hedge 2.2
Wall 0.6
Building
Ridge 13.51
Eave 10.39
Padang
Hobbits
The Barn
The Waggoners
THE WAGGONERS
Ridge 5.59
Church Farm Cottage
Church Farm House West
Church Farm House East
CHURCH LANE
SLOW
Tarmac
Gate
Grass
Overhead Cable
Tarmac Footpath
Fence
Bushes
Dense Bushes
Dense Brambles
Hedge 2.0
Bushes and Minor Trees
Overhead Cable
Overhead Cable
Overhead Cable
Retained Hedgerow
Retained Hedgerow
Retained Hedgerow





1:200 SHEET KEY PLAN

NOTES

1. All dimensions are in metres unless stated otherwise.
2. Do not scale from this drawing. Only written dimensions are to be used.
3. FW & SW house drainage is to be constructed in accordance with the Building Regulations & BS8301 & SSG Appendix C Design and Construction Guidance Approved Version 2.3 dated 11 November 2023 and the specific requirements of IWNL Water.
4. Drains are to be constructed using flexibly jointed vitrified clay pipes to BS EN 295-1991 "Super Strength" specification (e.g. Hepworth Supersleeve or similar) or uPVC drainage pipework to BS4660 & BS2494, bedded & backfilled in accordance with manufacturers instructions.
5. Location of sewers & lateral drains to be in accordance with the SSG Appendix C Design and Construction Guidance Approved Version 2.3 dated 11 November 2023 and the specific requirements of IWNL.
6. Backfilling of drain trenches adjacent to dwelling or other structure to be in accordance with BS8301- Fig. 9.
7. Cover levels indicated on the Drainage Schedules are nominal & may be adjusted to suit finished ground levels as necessary.
8. Buildings Inspection chamber covers should be Grade D400 in trafficked areas Grade B125 in parking areas and occasional traffic and A15 in pedestrian only areas.
9. Rainwater downpipes to be connected direct to drain using an appropriate adaptor & removable section of downpipe to permit rodding access.
10. The positions of SVP's, stub stacks, WC outlets, Back inlet gullies etc. & rainwater downpipes are to be accurately located from the house type working drawings.
11. Generally FW drains are to be laid to falls of 1 in 40, SW drains are to be laid to falls of 1 in 60, both in 100mm diameter pipes, SW pipes are to be 150mm diameter when serving 2 dwellings or 2 RWP connections. FW pipes are to be 150mm diameter when serving 10 dwellings or more unless stated otherwise, or where a schedule is provided.
12. 100mmØ FW Drains are to be laid to minimum fall of 1 in 80 and 150mmØ FW Drains are to be laid to minimum fall of 1 in 150.
13. Gullies situated in areas accessible to wheeled vehicles to be of suitable construction for trafficked areas.
14. Where land drain is identified on the Architect's details, connect into nearest SW system.
15. Where Cellular Storage is used, a silt trap manhole upstream of the Hydro-Brake® or TPC catchpit to be used.
16. This drawing should be read in conjunction with the Architect's and Structural Engineer's design drawings and specification.
17. Site layout shown in this drawing is based on Foreman Homes Approved Site Layout Plan, issued to RCP in .dwg format on 06/02/2023
18. Site Access and Section 278 Works as per RCP's dwg file, Section 278 General Arrangement (FOR-E5139-301 to 302).
19. Architectural blocks based on RCP's Substructure Layouts, issued to RCP in .dwg format on 24/03/2023 and 04/03/2024.
20. Topographical Survey as per Encompass Surveys drawing no. ENC/24080/OLL4/1 to 10, dated September 2020.
21. This drawing should be read in conjunction with other Domestic Drainage Layouts, Foul and Surface Water Sewer Longitudinal Sections (FOR/E5139/201 to 214), Surface Water Sewer and Foul Water Sewer Manhole Schedules (FOR-E5139-415 to 416), Section 104 Drainage Construction Details (FOR-E5139-410) and Domestic Drainage Construction Details (FOR-E5139-473 to 474).
22. Where backdrop is less than 1.0m for domestic drainage, backdrop to be accommodated with internal benching.
23. Surface water from private areas is not to be discharged onto adoptable highway and vice versa.
24. All CWC works to be in accordance with Arun District Council Details, Pipe bedding of all CWC works to accord with ADC drawing 80003301 Rev C.
25. All footpath slabs shall have a crossfall to drain surface water into adjoining gardens.
26. All future private driveways, parking bays, etc to be designed to fall surface water run-off away from S38 works. If not achievable, full width ACO drainage to be provided.
27. ***ANY VARIANCE OR DISCREPANCY MUST BE REPORTED BACK TO RCP ENGINEERING BEFORE WORK BEGINS.***

TYPE	DEPTH RANGE	DESCRIPTION	LOCATION	CODE	COVER GRADE
D	Depth from cover level to soffit of pipe up to 3m	Min. 450mm diameter Flexible or Rigid access chamber (Non Entry) in areas subject to vehicle loading. (If distance from cover level to soffit of pipe is >1m, access opening shall be restricted to 350mm Ø or 300mm x 300mm.	Road Driveway Garden	R D G	D400 B125 A15
			RE	Rodding point at head of drain	

KEY

Site Boundary

Adoptable Surface Water Sewers (IWNL) — S1

Adoptable Flow Control Manhole (IWNL) — S1

Adoptable Foul Water Sewers (IWNL) — F1

Indicative Foul Rising Main

Adoptable PCC Headwalls (IWNL)

3m SuDS Easement

Swale with Granular Drain at Base

Cellular Storage Tanks

Adoptable Road Gully & Connection — RG

Private Road Gully & Connection — RG

Private Surface Water Domestic Drainage — S1.1

Private Foul Water Domestic Drainage — F1.1

House connection via 300mm dia. shallow access chamber not more than 600mm deep
(Based on floor make-up of 75mm screed, 225mm insulation & 150mm beam & block).
In the event that conditions on-site result in maximum depth of 600mm being exceeded, then Type D chambers to be used.

Rodding Eye — RE

'Aco' Channel (showing connecting pipe) or similar

Yard Gully and Connection — YG 18.00

Filter Drain (showing connecting pipe) with final 1.0m section of 100mm perforated UPVC pipe laid to nominal fall prior to connection to Surface Water Drainage Network. — FILTER DRAIN

1500mm High Knee Post and Rail Fencing at Attenuation Basins

Timber VRS with pedestrian rail — RRS

Root Protection Area and TPF
(Tree Protection Plan Based on Arboricultural's drawing number 5646/21/B, revision 03, issued to RCP in .dwg format on 01/03/2024.).

All existing ditches and culverts being retained are to be cleaned out to the satisfaction of the ADC drainage engineer

CDM NOTES

1. EXISTING SERVICES. Depth of existing services must be determined prior to works commencing. The contractor is responsible for establishing underground services in accordance with HSE Guidance note HS (G) 47. Any services which would be within the proposed construction layers must be lowered to below the sub-base.

0m 2m 4m 6m 8m 10m 15m 20m

SCALE BAR 1:200 at A1

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Rev.	Date	Details	By	Chkd	Appd
C	30.10.24	Subject to adopting authority approval.	KG	JC	TRS
B	10.09.24	Plans updated as per client comments received 26.06.24 & as per updated SI information dated 12.08.24	JC	LAD	TRS
A	03.05.24	Updated to Initial Tender Issue	AD	MW	TRS

Client:- FOREMAN HOMES

Site:- Land West of Church Lane & Horsemere Green Lane Climping, West Sussex

Drawing Title:- DOMESTIC DRAINAGE LAYOUT

SHEET 1 OF 22

Date: April 2024 | Scales: 1:200 at A1

Drawn: AD | Checked: MW | Approved: TRS

Drawing No. FOR/E5139/451 C

FOR CONSTRUCTION

RCP ARCHITECTURE & CIVIL ENGINEERING
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Architectural and Civil Consultants
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Hook Hampshire RG27 9NJ
T: 01256 769269 E: mail@rcpconsultants.co.uk W: rcpconsultants.co.uk

NOTES

1. All dimensions are in metres unless stated otherwise.
2. Do not scale from this drawing. Only written dimensions are to be used.
3. All foul and surface water drainage shall comply with the Building Regulations & BS8301 & SSO Appendix C Design and Construction Guidance Approved Version 2.3 dated 1 November 2023 and the specific requirements of SWS, Water.
4. Drains are to be constructed using flexible jointed vitrified clay pipes to BS EN 295:1991 "Super Strength" specification (e.g. Hepworth Supersleve or similar) with flexible mechanical joints to BS EN 295 unless otherwise stated on the drainage construction details.
5. Location of sewers & lateral drains is to be in accordance with the SSO Appendix C Design and Construction Guidance Approved Version 2.3 dated 11 November 2023 and the specific requirements of SWS.
6. Manholes are to be constructed in accordance with the structure to be in accordance with BS8301-Fig. 9.
7. Cover levels indicated on the Drainage Schedules are nominal & may be adjusted to suit finished ground levels as necessary.
8. Generally inspection chamber covers should be Grade D400 in trafficked areas Grade E125 in parking areas and occasional traffic and A15 in pedestrian areas.
9. Rainwater downpipes to be connected direct to drain using an appropriate adaptor & removable section of downpipe to permit rodding access.
10. The positions of SVP's, stub stacks, WC outlets, Back Inlet gullies etc. & rainwater downpipes are to be accurately located from the house type working drawings.
11. Generally FW drains are to be laid to falls of 1 in 40, 225 drains are to be laid to falls of 1 in 60, both in 150mm diameter pipes, SW pipes are to be 150mm diameter when serving 2 dwellings or 2 RWP connections, FW pipes are to be 150mm diameter when serving 10 dwellings or more unless stated otherwise, see drainage construction details.
12. 100mmØ FW Drains are to be laid to minimum fall of 1 in 80 and 150mmØ FW Drains are to be laid to minimum fall of 1 in 150.
13. Gullies situated in areas accessible to wheeled vehicles to be of suitable construction for trafficked areas.
14. Where cascade chambers are shown, the invert levels are indicative only, see details.
15. Where catchpits have been shown in rear gardens connecting to kerb drains, 600mm PTFE catchpit to be used.
16. This drawing should be read in conjunction with the Architect's and Structural Engineer's design drawings and specification.
17. Site Access and Section 278 Works as per RCP's drawing No. Section 278 General Arrangement (FOR/E5139/SK/01) Rev. A dated 04/02/2025
18. Site Access and Section 278 Works as per RCP's drawing No. Section 278 General Arrangement (FOR/E5139/SK/01) Rev. A dated 04/02/2025
19. Architectural Works based on RCP's Subdivision Layouts. Issued to RCP in dwg format on 24/05/2023 and 04/10/2024.
20. Surface water from private areas is not to be discharged into adoptable highway and vice versa.
21. This drawing should be read in conjunction with other Domestic Drainage Layouts, Foul and Surface Water Sewer Longitudinal Sections (FOR/E5139/201 to 214), Surface Water Sewer and Foul Water Sewer Manhole Schedules (FOR/E5139/415 to 418), Section 104 Drainage Construction Details (FOR/E5139/401) and Surface Water Drainage Strategy (FOR/E5139/RP/01 Rev. C).
22. Where backdrop is less than 1.0m for domestic drainage, backdrop to be accommodated with internal bend/drop.
23. Surface water from private areas is not to be discharged onto adoptable highway and vice versa.
24. All surface water drainage shall be in accordance with the Surface Water Drainage Strategy by CWG works to accord with ADC drawing 8/0000/001 Rev C.
25. All footpath slabs shall have a crossfall to drain surface water into adjoining gardens.
26. All future private driveways, parking bays, etc to be designed to foul surface water run off away from SW works. If not achievable, full width ACO drainage to be provided.
27. ***ANY VARIANCE OR DISCREPANCY MUST BE REPORTED BACK TO RCP ENGINEERING BEFORE WORK BEGINS.***

TYPE	DEPTH RANGE	DESCRIPTION	LOCATION	CODE	COVER GRADE
D	Depth from cover level to invert of pipe up to 1m	Min. 450mm diameter Flexible or Rigid access chamber with a minimum 600mm dia. access opening. (If distance from cover level to soffit of pipe is >1m, access opening shall be increased to 600mm dia or 600mm x 600mm.	Road Footway Garden	R F G	D400 B125 A15
			RE	Redding point at head of drain.	

KEY

Site Boundary

Adoptable Surface Water Sewers (WNL)

Adoptable Flow Control Manhole (WNL)

Adoptable Foul Water Sewers (WNL)

Indicative Foul Rising Main

Adoptable PCC Headwalls (WNL)

3m SuDS Easement

Swale with Granular Drain at Base

Cellular Storage Tanks

Adoptable Road Gully & Connection

Private Road Gully & Connection

Private Surface Water Domestic Drainage

Private Foul Water Domestic Drainage

House connection via 300mm dia. shallow access chamber not more than 600mm deep. *(Based on floor make up of 75mm screed, 225mm insulation & 150mm beam & block).*
In the event that conditions on-site result in maximum depth of 600mm being exceeded, then Type 2 chambers to be used.

Redding Eye

'Aco' Channel (showing connecting pipe) or similar

Yard Gully and Connection

Filter Drain (showing connecting pipe) with final 1.0m section of 100mm perforated UPVC pipe laid to nominal fall prior to connection to Surface Water Drainage Network.

1500mm High Knee Rail and Rail Fencing at Attenuation Basins

Timber VRS with pedestrian rail

Root Protection Area and TPP
(Tree Protection Plan Based on Arboricultural's drawing number 9646-D1-B, revision 03, issued to RCP in .dwg format on 01/03/2024.)

All existing ditches and culverts being retained are to be cleaned out to the satisfaction of the ADC drainage engineer

CDM NOTES

1. EXISTING SERVICES. Depth of existing services must be determined prior to works commencing. The contractor is responsible for establishing underground services in accordance with HSE Guidance note HS (G) 47. Any services which would be within the proposed construction layers must be lowered to below the sub-base.

Rev.	Date	Details	By	Chkd	Appd
A	30.10.24	Subject to adopting authority approval.	KG	JC	TRS

Client:-

FOREMAN HOMES

Site:-

Land West of Church Lane & Horsemere Green Lane Climping, West Sussex

Drawing Title:-

DOMESTIC DRAINAGE LAYOUT

OVERALL LAYOUT

Date:	April 2024	Scales:	1:1000 at A1
Drawn:	MLM	Checked:	MW
		Approved:	TRS

Drawing No.

FOR/E5139/450 A

FOR CONSTRUCTION

RCP ARCHITECTURE & CIVIL ENGINEERING
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N
Track
Dense Vegetation
Dense Vegetation
Edge of Hedge/woodland
Edge of Hedge/woodland
Edge of Hedge/woodland
YAPTON ROAD
Tarmac Path
Tarmac Path
SRV 1.00/47
18/ 3018
7.38
7.17
7.15
7.14
7.07
7.03
6.99
6.94
6.95
6.82
6.86
6.78
6.87
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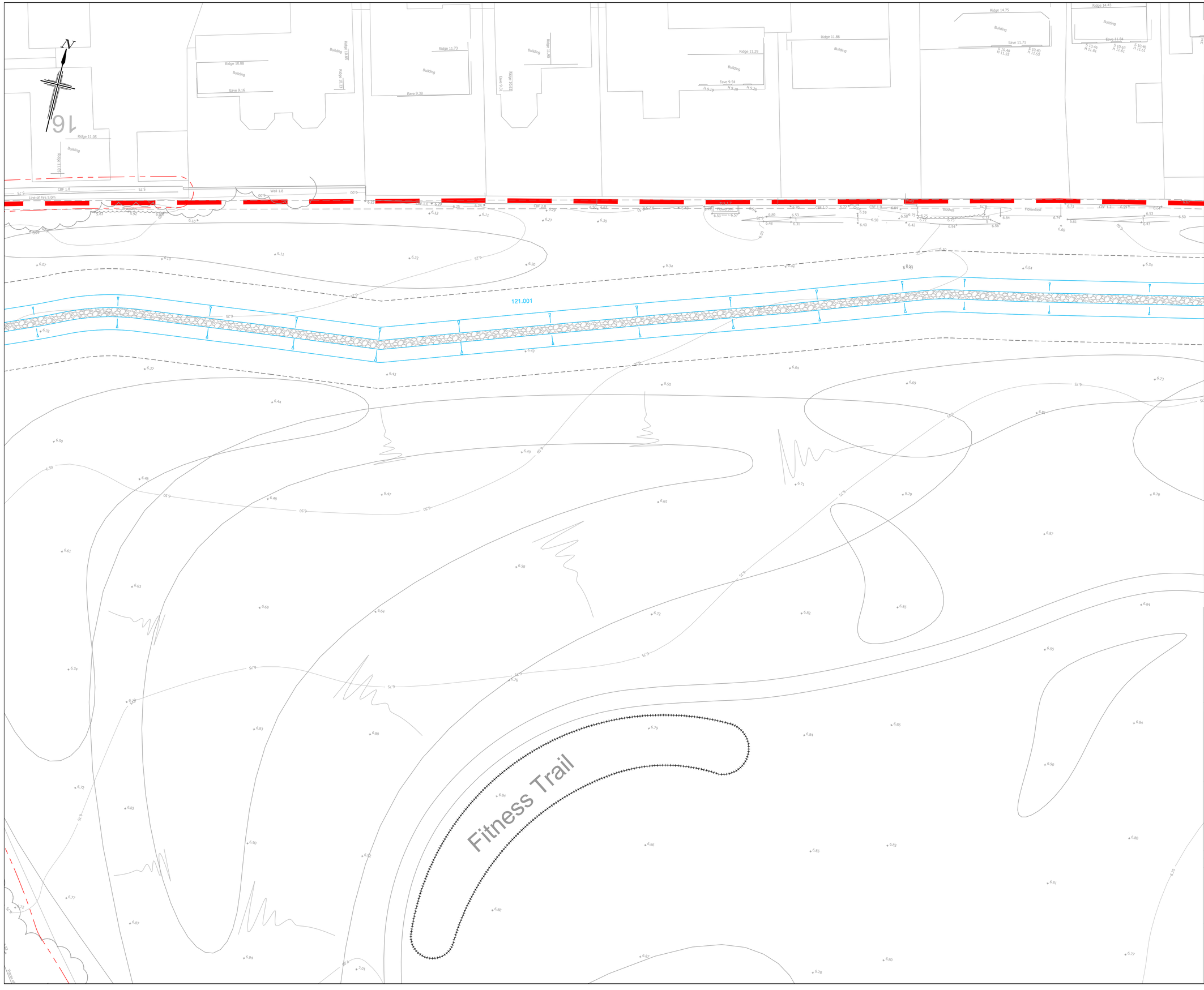

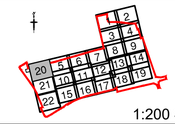

1:200 SHEET KEY PLAN

NOTES

1. All dimensions are in metres unless stated otherwise.
2. Do not scale from this drawing. Only written dimensions are to be used.
3. FW & SW house drainage is to be constructed in accordance with the Building Regulations & BS8301 & SSG Appendix C Design and Construction Guidance Approved Version 2.3 dated 11 November 2023 and the specific requirements of IWNL Water.
4. Drains are to be constructed using flexibly jointed vitrified clay pipes to BS EN 295-1991 "Super Strength" specification (e.g. Hepworth Supersleeve or similar) or uPVC drainage pipework to BS4660 & BS2494, bedded & backfilled in accordance with manufacturers instructions.
5. Location of sewers & lateral drains to be in accordance with the SSG Appendix C Design and Construction Guidance Approved Version 2.3 dated 11 November 2023 and the specific requirements of IWNL.
6. Backfilling of drain trenches adjacent to dwelling or other structure to be in accordance with BS8301 Fig. 9.
7. Cover levels indicated on the Drainage Schedules are nominal & may be adjusted to suit finished ground levels as necessary.
8. Private inspection chamber covers should be Grade D400 in trafficked areas Grade B125 in parking areas and occasional traffic and A15 in pedestrian only areas.
9. Rainwater downpipes to be connected direct to drain using an appropriate adaptor & removable section of downpipe to permit rodding access.
10. The positions of SVP's, stub stacks, WC outlets, Back inlet gullies etc. & rainwater downpipes are to be accurately located from the house type working drawings.
11. Generally FW drains are to be laid to falls of 1 in 40, SW drains are to be laid to falls of 1 in 60, both in 100mm diameter pipes, SW pipes are to be 150mm diameter when serving 2 dwellings or 2 RWP connections. FW pipes are to be 150mm diameter when serving 10 dwellings or more unless stated otherwise, or where a schedule is provided.
12. 100mmØ FW Drains are to be laid to minimum fall of 1 in 80 and 150mmØ FW Drains are to be laid to minimum fall of 1 in 150.
13. Gullies situated in areas accessible to wheeled vehicles to be of suitable construction for trafficked areas.
14. Where land drain is identified on the Architect's details, connect into nearest SW system.
15. Where Channel drains are to be used in conjunction with gullies, only the Channel TPC catchpit to be used.
16. This drawing should be read in conjunction with the Architect's and Structural Engineer's design drawings and specification.
17. Site layout shown in this drawing is based on Foreman Homes Approved Site Layout Plan, issued to RCP in .dwg format on 06/02/2023
18. Site Access and Section 278 Works as per RCP's dwg No. Section 278 General Arrangement (FOR-E5139-301 to 302).
19. Architectural blocks based on RCP's Substructure Layouts, issued to RCP in .dwg format on 24/03/2023 and 04/03/2024.
20. Topographical Survey as per Encompass Surveys drawing no. ENC/24080/OSLA1 to 10, dated September 2020.
21. This drawing should be read in conjunction with other Domestic Drainage Layouts, Foul and Surface Water Sewer Longitudinal Sections (FOR/E5139/201 to 214), Surface Water Sewer and Foul Water Sewer Manhole Schedules (FOR-E5139-415 to 416), Section 104 Drainage Construction Details (FOR-E5139-410) and Domestic Drainage Construction Details (FOR-E5139-473 to 474).
22. Where backdrop is less than 1.0m for domestic drainage, backdrop to be accommodated with internal benching.
23. Surface water from private areas is not to be discharged onto adoptable highway and vice versa.
24. All CWC works to be in accordance with Arun District Council Details, Pipe bedding of all CWC works to accord with ADC drawing 80003301 Rev C.
25. All footpath slabs shall have a crossfall to drain surface water into adjoining gardens.
26. All future private driveways, parking bays, etc to be designed to fall surface water run-off away from S38 works. If not achievable, full width ACO drainage to be provided.
27. ***ANY VARIANCE OR DISCREPANCY MUST BE REPORTED BACK TO RCP ENGINEERING BEFORE WORK BEGINS.***

TYPE	DEPTH RANGE	DESCRIPTION	LOCATION	CODE	COVER GRADE
D	Depth from cover level to soffit of pipe up to 3m	Min. 450mm diameter Flexible or Rigid access chamber (Non Entry) in areas subject to vehicle loading. (If distance from cover level to soffit of pipe is >1m, access opening shall be restricted to 350mm Ø or 300mm x 300mm.	Road Driveway Garden	R D G	D400 B125 A15
			RE	Rodding point at head of drain	

KEY

Site Boundary

Adoptable Surface Water Sewers (IWNL) — S1

Adoptable Flow Control Manhole (IWNL) — S1

Adoptable Foul Water Sewers (IWNL) — F1

Indicative Foul Rising Main

Adoptable PCC Headwalls (IWNL)

3m SuDS Easement

Swale with Granular Drain at Base

Cellular Storage Tanks

Adoptable Road Gully & Connection — RG

Private Road Gully & Connection — RG

Private Surface Water Domestic Drainage — S1.1

Private Foul Water Domestic Drainage — F1.1

House connection via 300mm dia. shallow access chamber not more than 600mm deep *(Based on floor make-up of 75mm screed, 225mm insulation & 150mm beam & block).* ***In the event that conditions on-site result in maximum depth of 600mm being exceeded, then Type D chambers to be used.***

Rodding Eyes — RE

'Aco' Channel (showing connecting pipe) or similar

Yard Gully and Connection — YG 18.00

Filter Drain (showing connecting pipe) with final 1.0m section of 100mm perforated UPVC pipe laid to nominal fall prior to connection to Surface Water Drainage Network. — FILTER DRAIN

1500mm High Knee Post and Rail Fencing at Attenuation Basins

Timber VRS with pedestrian rail — RRS

Root Protection Area and TPF
(Tree Protection Plan Based on Arboricultural's drawing number 5646:21 B, revision 03, issued to RCP in .dwg format on 01/03/2024.)).

All existing ditches and culverts being retained are to be cleaned out to the satisfaction of the ADC drainage engineer

CDM NOTES

1. EXISTING SERVICES. Depth of existing services must be determined prior to works commencing. The contractor is responsible for establishing underground services in accordance with HSE Guidance note HS (G) 47. Any services which would be within the proposed construction layers must be lowered to below the sub-base.

0m 1m 2m 5m 10m 15m 20m

SCALE BAR 1:200 at A1

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Rev.	Date	Details	By	Chkd	Appd
C	30.10.24	Subject to adopting authority approval.	KG	JC	TRS
B	10.09.24	Plans updated as per client comments received 26.06.24 & as per updated SI information dated 12.08.24	JC	LAD	TRS
A	03.05.24	Updated to Initial Tender Issue	AD	MW	TRS

Client:- FOREMAN HOMES

Site:- Land West of Church Lane & Horsemere Green Lane Climping, West Sussex

Drawing Title:- DOMESTIC DRAINAGE LAYOUT SHEET 20 OF 22

Date: April 2024 | Scales: 1:200 at A1

Drawn: AD | Checked: MW | Approved: TRS

Drawing No. FOR/E5139/470 C

FOR CONSTRUCTION

Rogers Cory Partnership
Architectural and Civil Consultants
The Old School Old School Road
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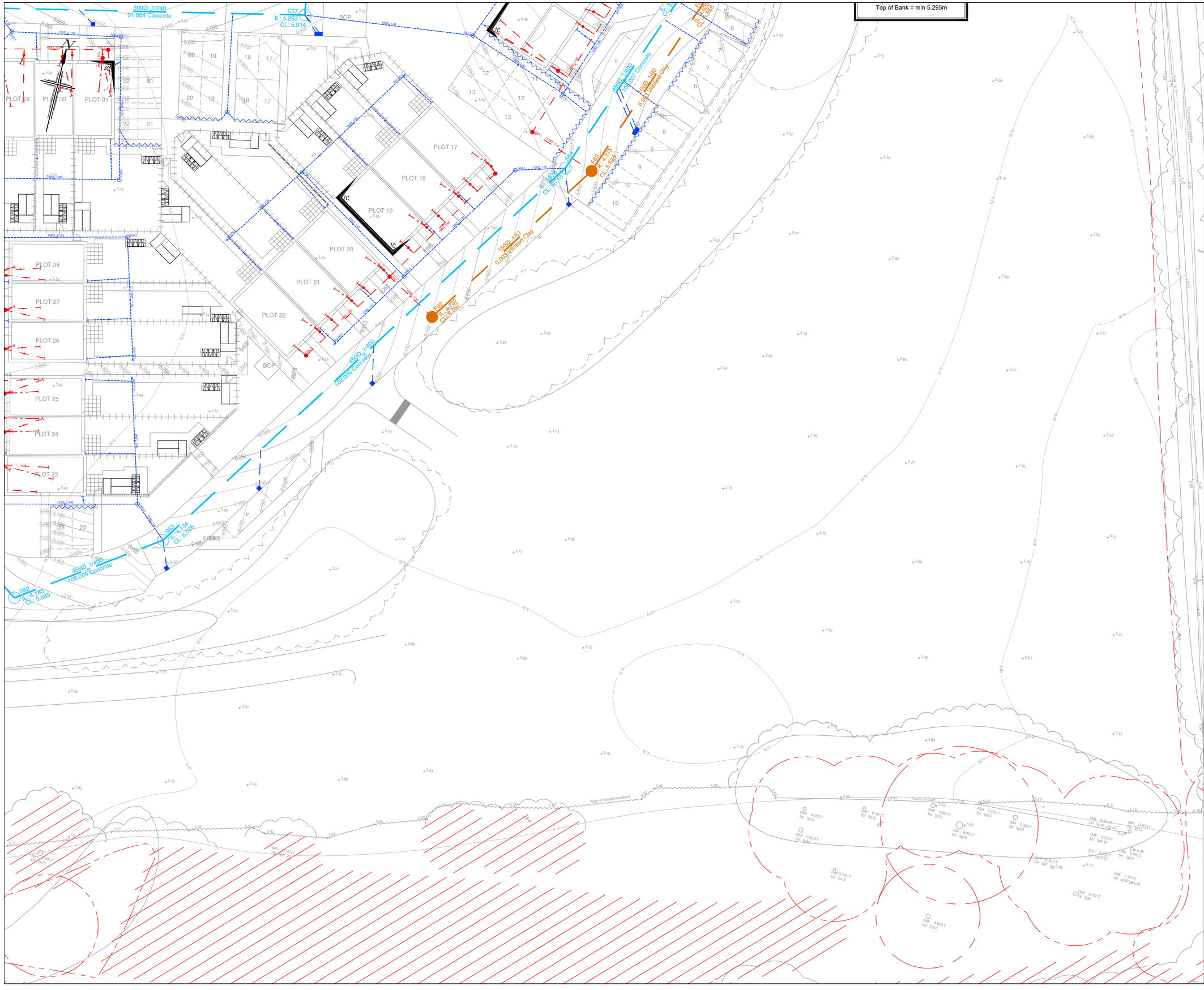
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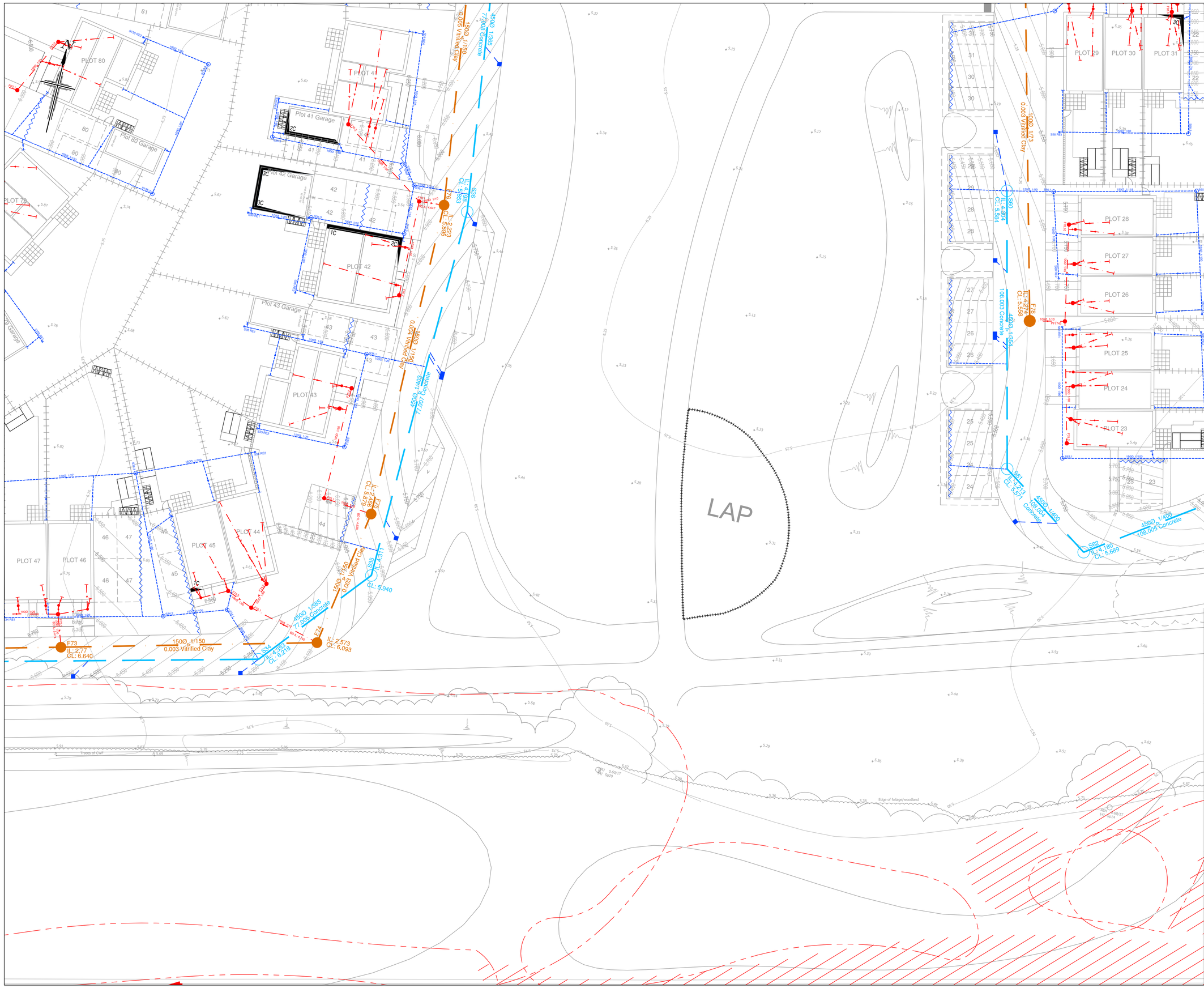
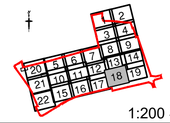
300Ø 1/240
91.004 Concrete
S57
IL: 4.253
CL: 5.934
BCP
1500 1/100
1500 1/44
1500 1/100
1500 1/100
1500 1/100





1:200 SHEET KEY PLAN

NOTES

1. All dimensions are in metres unless stated otherwise.
2. Do not scale from this drawing. Only written dimensions are to be used.
3. FW & SW house drainage is to be constructed in accordance with the Building Regulations & BS8301 & SSG Appendix C Design and Construction Guidance Approved Version 2.3 dated 11 November 2023 and the specific requirements of IWNL Water.
4. Drains are to be constructed using flexibly jointed vitrified clay pipes to BS EN 295-1991 "Super Strength" specification (e.g. Hepworth Supersleeve or similar) or uPVC drainage pipework to BS4660 & BS2494, bedded & backfilled in accordance with manufacturers instructions.
5. Location of sewers & lateral drains to be in accordance with the SSG Appendix C Design and Construction Guidance Approved Version 2.3 dated 11 November 2023 and the specific requirements of IWNL.
6. Backfilling of drain trenches adjacent to dwelling or other structure to be in accordance with BS8301- Fig. 9.
7. Cover levels indicated on the Drainage Schedules are nominal & may be adjusted to suit finished ground levels as necessary.
8. Buried inspection chamber covers should be Grade D400 in trafficked areas Grade B125 in parking areas and occasional traffic and A15 in pedestrian only areas.
9. Rainwater downpipes to be connected direct to drain using an appropriate adaptor & removable section of downpipe to permit rodding access.
10. The positions of SVP's, stub stacks, WC outlets, Back inlet gullies etc. & rainwater downpipes are to be accurately located from the house type working drawings.
11. Generally FW drains are to be laid to falls of 1 in 40, SW drains are to be laid to falls of 1 in 60, both in 100mm diameter pipes, SW pipes are to be 150mm diameter when serving 2 dwellings or 2 RWP connections. FW pipes are to be 150mm diameter when serving 10 dwellings or more unless stated otherwise, or where a schedule is provided.
12. 100mmØ FW Drains are to be laid to minimum fall of 1 in 80 and 150mmØ FW Drains are to be laid to minimum fall of 1 in 150.
13. Gullies situated in areas accessible to wheeled vehicles to be of suitable construction for trafficked areas.
14. Where land drain is identified on the Architect's details, connect into nearest SW system.
15. Where FW drainage is at risk of surcharging, consideration should be given to the use of non-return valves or PPC catchpit to be used.
16. This drawing should be read in conjunction with the Architect's and Structural Engineer's design drawings and specification.
17. Site layout shown in this drawing is based on Foreman Homes Approved Site Layout Plan, issued to RCP in .dwg format on 06/02/2023
18. Site Access and Section 278 Works as per RCP's dwg No. Section 278 General Arrangement (FOR-E5139-301 to 302).
19. Architectural blocks based on RCP's Substructure Layouts, issued to RCP in .dwg format on 24/03/2023 and 04/03/2024.
20. Topographical Survey as per Encompass Surveys drawing no. ENC/24082/OS/LAY1 to 10, dated September 2020.
21. This drawing should be read in conjunction with other Domestic Drainage Layouts, Foul and Surface Water Sewer Longitudinal Sections (FOR/E5139/201 to 214), Surface Water Sewer and Foul Water Sewer Manhole Schedules (FOR-E5139-415 to 416), Section 104 Drainage Construction Details (FOR-E5139-410) and Domestic Drainage Construction Details (FOR-E5139-473 to 474).
22. Where backdrop is less than 1.0m for domestic drainage, backdrop to be accommodated with internal benching.
23. Surface water from private areas is not to be discharged onto adoptable highway and vice versa.
24. All CWC works to be in accordance with Arun District Council Details, Pipe bedding at all CWC works to accord with ADC drawing 80003301 Rev C.
25. All footpath slabs shall have a crossfall to drain surface water into adjoining gardens.
26. All future private driveways, parking bays, etc to be designed to fall surface water run-off away from S38 works. If not achievable, full width ACO drainage to be provided.
27. ***ANY VARIANCE OR DISCREPANCY MUST BE REPORTED BACK TO RCP ENGINEERING BEFORE WORK BEGINS.***

TYPE	DEPTH RANGE	DESCRIPTION	LOCATION	CODE	COVER GRADE
D	Depth from cover level to soffit of pipe up to 3m	Min. 450mm diameter Flexible or Rigid access chamber (Non Entry) in areas subject to vehicle loading. (If distance from cover level to soffit of pipe is >1m, access opening shall be restricted to 350mm Ø or 300mm x 300mm.	Road Driveway Garden	R D G	D400 B125 A15
			RE	Rodding point at head of drain	

KEY

Site Boundary

Adoptable Surface Water Sewers (IWNL)

Adoptable Flow Control Manhole (IWNL)

Adoptable Foul Water Sewers (IWNL)

Indicative Foul Rising Main

Adoptable PCC Headwalls (IWNL)

3m SuDS Easement

Swale with Granular Drain at Base

Cellular Storage Tanks

Adoptable Road Gully & Connection

Private Road Gully & Connection

Private Surface Water Domestic Drainage

Private Foul Water Domestic Drainage

House connection via 300mm dia. shallow access chamber not more than 600mm deep *(Based on floor make-up of 75mm screed, 225mm insulation & 150mm beam & block).* ***In the event that conditions on-site result in maximum depth of 600mm being exceeded, then Type D chambers to be used.***

Rodding Eye

'Aco' Channel (showing connecting pipe) or similar

Yard Gully and Connection

Filter Drain (showing connecting pipe) with final 1.0m section of 100mm perforated UPVC pipe laid to nominal fall prior to connection to Surface Water Drainage Network.

1500mm High Knee Post and Rail Fencing at Attenuation Basins

Timber VRS with pedestrian rail

Root Protection Area and TPF

(Tree Protection Plan Based on Arboricultural's drawing number 5646:21:B, revision 03, issued to RCP in .dwg format on 01/03/2024.).

All existing ditches and culverts being retained are to be cleaned out to the satisfaction of the ADC drainage engineer

CDM NOTES

1. EXISTING SERVICES. Depth of existing services must be determined prior to works commencing. The contractor is responsible for establishing underground services in accordance with HSE Guidance note HS (G) 47. Any services which would be within the proposed construction layers must be lowered to below the sub-base.

0m 2m 4m 6m 8m 10m 16m 20m

SCALE BAR 1:200 at A1

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A	03.05.24	Updated to Initial Tender Issue	AD	MW	TRS

Client:-

FOREMAN HOMES

Site:-

Land West of Church Lane & Horsemere Green Lane
Climping, West Sussex

Drawing Title:-

DOMESTIC DRAINAGE LAYOUT

SHEET 18 OF 22

Date:	April 2024	Scales:	1:200 at A1
Drawn:	AD	Checked: MW	Approved: TRS

Drawing No.

FOR/E5139/468 C

FOR CONSTRUCTION

Rogers Cory Partnership
Architectural and Civil Consultants
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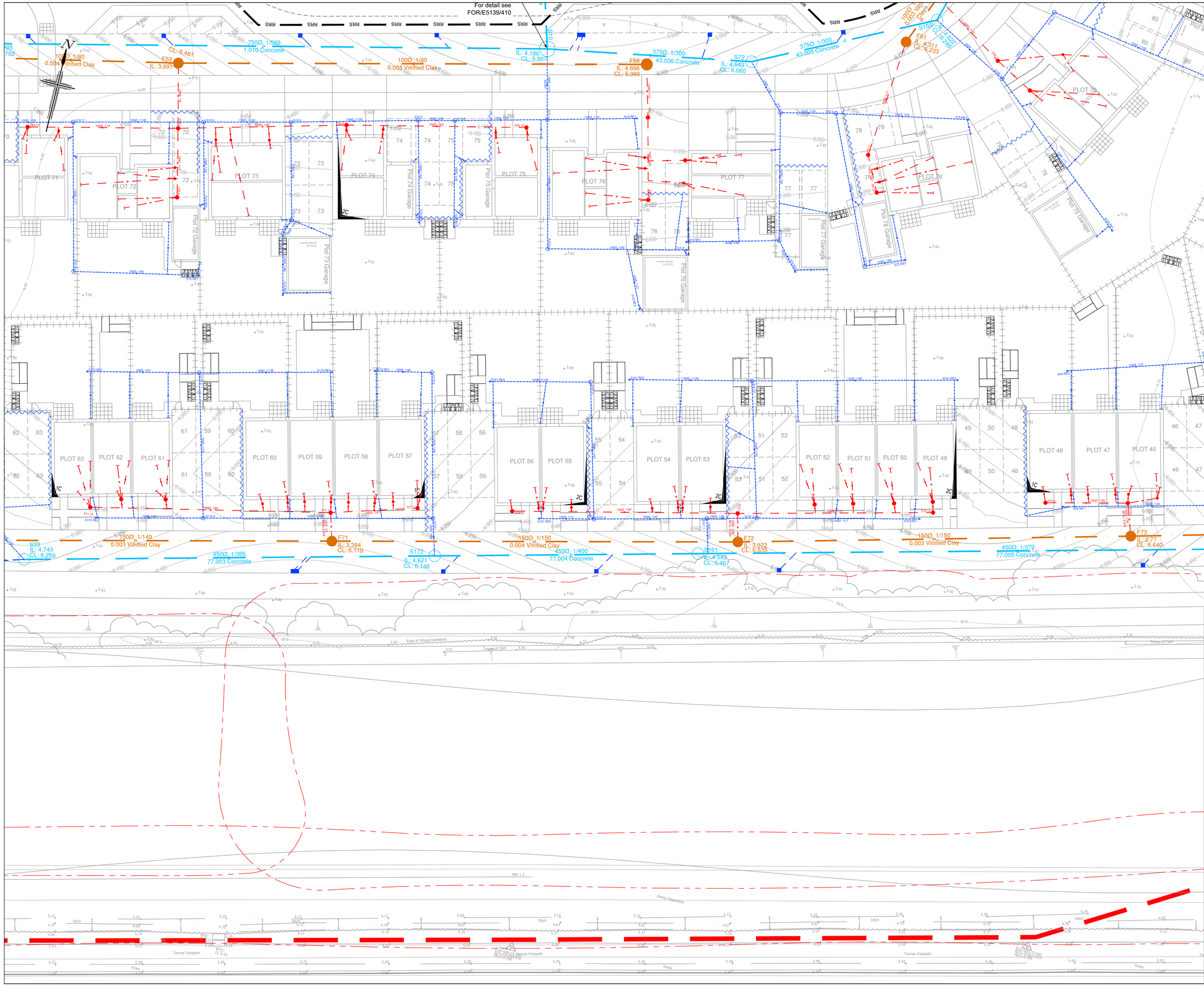

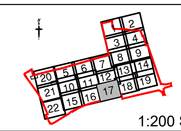

1:200 SHEET KEY PLAN

NOTES

1. All dimensions are in metres unless stated otherwise.
2. Do not scale from this drawing. Only written dimensions are to be used.
3. FW & SW house drainage is to be constructed in accordance with the Building Regulations & BS8301 & SSG Appendix C Design and Construction Guidance Approved Version 2.3 dated 11 November 2023 and the specific requirements of IWNL Water.
4. Drains are to be constructed using flexibly jointed vitrified clay pipes to BS EN 295-1991 "Super Strength" specification (e.g. Hepworth Supersleeve or similar) or uPVC drainage pipework to BS4660 & BS2494, bedded & backfilled in accordance with manufacturers instructions.
5. Location of sewers & lateral drains to be in accordance with the SSG Appendix C Design and Construction Guidance Approved Version 2.3 dated 11 November 2023 and the specific requirements of IWNL.
6. Backfilling of drain trenches adjacent to dwelling or other structure to be in accordance with BS8301: Fig. 9.
7. Cover levels indicated on the Drainage Schedules are nominal & may be adjusted to suit finished ground levels as necessary.
8. Private inspection chamber covers should be Grade D400 in trafficked areas Grade B125 in parking areas and occasional traffic and A15 in pedestrian only areas.
9. Rainwater downpipes to be connected direct to drain using an appropriate adaptor & removable section of downpipe to permit rodding access.
10. The positions of SVP's, stub stacks, WC outlets, Back inlet gullies etc. & rainwater downpipes are to be accurately located from the house type working drawings.
11. Generally FW drains are to be laid to falls of 1 in 40, SW drains are to be laid to falls of 1 in 60, both in 100mm diameter pipes, SW pipes are to be 150mm diameter when serving 2 dwellings or 2 RWP connections. FW pipes are to be 150mm diameter when serving 10 dwellings or more unless stated otherwise, or where a schedule is provided.
12. 100mmØ FW Drains are to be laid to minimum fall of 1 in 80 and 150mmØ FW Drains are to be laid to minimum fall of 1 in 150.
13. Gullies situated in areas accessible to wheeled vehicles to be of suitable construction for trafficked areas.
14. Where land drain is identified on the Architect's details, connect into nearest SW system.
15. Where gully grates are to be sited in pedestrian areas, vandal proof bolt down or 'PPC catchpit to be used.
16. This drawing should be read in conjunction with the Architect's and Structural Engineer's design drawings and specification.
17. Site layout shown in this drawing is based on Foreman Homes Approved Site Layout Plan, issued to RCP in .dwg format on 06/02/2023
18. Site Access and Section 278 Works as per RCP's dwg No. Section 278 General Arrangement (FOR-ES139-301 to 302).
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20. Topographical Survey as per Encompass Surveys drawing no. ENC/24082/SLL4/1 to 10, dated September 2020.
21. This drawing should be read in conjunction with other Domestic Drainage Layouts, Foul and Surface Water Sewer Longitudinal Sections (FOR/ES139/201 to 214), Surface Water Sewer and Foul Water Sewer Manhole Schedules (FOR-ES139-415 to 416), Section 104 Drainage Construction Details (FOR-ES139-410) and Domestic Drainage Construction Details (FOR-ES139-473 to 474).
22. Where backdrop is less than 1.0m for domestic drainage, backdrop is to accommodated with internal benching.
23. Surface water from private areas is not to be discharged onto adoptable highway and vice versa.
24. All CWC works to be in accordance with Arun District Council Details, Pipe bedding of all CWC works to accord with ADC drawing 80003001 Rev C.
25. All footpath slabs shall have a crossfall to drain surface water into adjoining gardens.
26. All future private driveways, parking bays, etc to be designed to fall surface water run-off away from S38 works. If not achievable, full width ACO drainage to be provided.
27. ***ANY VARIANCE OR DISCREPANCY MUST BE REPORTED BACK TO RCP ENGINEERING BEFORE WORK BEGINS.***

TYPE	DEPTH RANGE	DESCRIPTION	LOCATION	CODE	COVER GRADE
D	Depth from cover level to soffit of pipe up to 3m	Min. 450mm diameter Flexible or Rigid access chamber (Non Entry) in areas subject to vehicle loading. (If distance from cover level to soffit of pipe is >1m, access opening shall be restricted to 350mm Ø or 300mm x 300mm.	Road Driveway Garden	R D G	D400 B125 A15
			RE	Rodding point at head of drain	

KEY

Site Boundary

Adoptable Surface Water Sewers (IWNL) — S1

Adoptable Flow Control Manhole (IWNL) — S1

Adoptable Foul Water Sewers (IWNL) — F1

Indicative Foul Rising Main

Adoptable PCC Headwalls (IWNL)

3m SuDS Easement

Swale with Granular Drain at Base

Cellular Storage Tanks

Adoptable Road Gully & Connection — RG

Private Road Gully & Connection — RG

Private Surface Water Domestic Drainage — S1.1

Private Foul Water Domestic Drainage — F1.1

House connection via 300mm dia. shallow access chamber not more than 600mm deep *(Based on floor make-up of 75mm screed, 225mm insulation & 150mm beam & block).* ***In the event that conditions on-site result in maximum depth of 600mm being exceeded, then Type D chambers to be used.***

Rodding Eye — RE

'Aco' Channel (showing connecting pipe) or similar — YG 18.00

Yard Gully and Connection

Filter Drain (showing connecting pipe) with final 1.0m section of 100mm perforated UPVC pipe laid to nominal fall prior to connection to Surface Water Drainage Network. — FILTER DRAIN

1500mm High Knee Post and Rail Fencing at Attenuation Basins

Timber VRS with pedestrian rail — RRS

Root Protection Area and TPF

(Tree Protection Plan Based on Arboricultural's drawing number 5646:21:B, revision 03, issued to RCP in .dwg format on 01/03/2024.).

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CDM NOTES

1. EXISTING SERVICES. Depth of existing services must be determined prior to works commencing. The contractor is responsible for establishing underground services in accordance with HSE Guidance note HS (G) 47. Any services which would be within the proposed construction layers must be lowered to below the sub-base.

SCALE BAR 1:200 at A1

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C	30.10.24	Subject to adopting authority approval.	KG	JC	TRS
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A	03.05.24	Updated to Initial Tender Issue	AD	MW	TRS

Client:-

FOREMAN HOMES

Site:-

Land West of Church Lane & Horsemere Green Lane
Climping, West Sussex

Drawing Title:-

DOMESTIC DRAINAGE LAYOUT

SHEET 17 OF 22

Date: April 2024 | Scales: 1:200 at A1

Drawn: AD | Checked: MW | Approved: TRS

Drawing No.

FOR/E5139/467 C

FOR CONSTRUCTION

RCP ARCHITECTURE & CIVIL ENGINEERING
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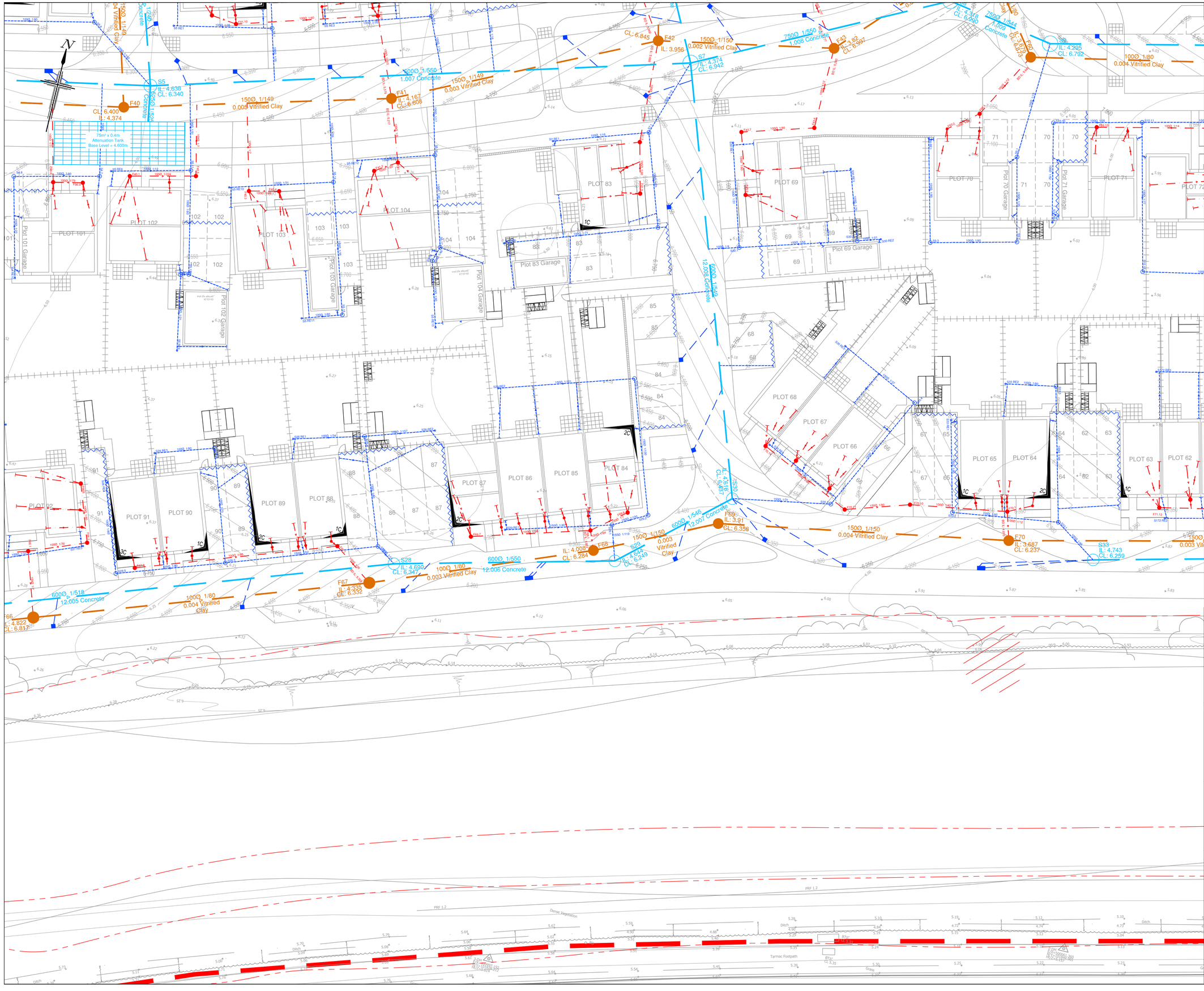
The Old School Old School Road
Hook Hampshire RG27 9NJ
T: 01256 769269 E: mail@rcpconsultants.co.uk W: rcpconsultants.co.uk



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NOTES

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6. Backfilling of drains in trenches adjacent to dwelling or other structure to be in accordance with BS8301- Fig. 9.
7. Cover levels indicated on the Drainage Schedules are nominal & may be adjusted to suit finished ground levels as necessary.
8. Proposed inspection chamber covers should be Grade D400 in trafficked areas Grade B125 in parking areas and occasional traffic and A15 in pedestrian only areas.
9. Rainwater downpipes to be connected direct to drain using an appropriate adaptor & removable section of downpipe to permit rodding access.
10. The positions of SVP's, stub stacks, WC outlets, Back inlet gullies etc. & rainwater downpipes are to be accurately located from the house type working drawings.
11. Generally FW drains are to be laid to falls of 1 in 40, SW drains are to be laid to falls of 1 in 60, both in 100mm diameter pipes, SW pipes are to be 150mm diameter when serving 2 dwellings or 2 RWP connections. FW pipes are to be 150mm diameter when serving 10 dwellings or more unless stated otherwise, or where a schedule is provided.
12. 100mmØ FW Drains are to be laid to minimum fall of 1 in 80 and 150mmØ FW Drains are to be laid to minimum fall of 1 in 150.
13. Gullies situated in areas accessible to wheeled vehicles to be of suitable construction for trafficked areas.
14. Where land drain is identified on the Architect's details, connect into nearest SW system.
15. Where Trapped gullies are to be used, proprietary anti-vandal grates to the Architect's PPC catchpit to be used.
16. This drawing should be read in conjunction with the Architect's and Structural Engineer's design drawings and specification.
17. Site layout shown in this drawing is based on Foreman Homes Approved Site Layout Plan, issued to RCP in .dwg format on 06/02/2023
18. Site Access and Section 278 Works as per RCP's dwg No. Section 278 General Arrangement (FOR-E5139-301 to 302).
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21. This drawing should be read in conjunction with other Domestic Drainage Layouts, Foul and Surface Water Sewer Longitudinal Sections (FOR-E5139/201 to 214), Surface Water Sewer and Foul Water Sewer Manhole Schedules (FOR-E5139-415 to 416), Section 104 Drainage Construction Details (FOR-E5139-410) and Domestic Drainage Construction Details (FOR-E5139-473 to 474).
22. Where backdrop is less than 1.0m for domestic drainage, backdrop to be accommodated with internal benching.
23. Surface water from private areas is not to be discharged onto adoptable highway and vice versa.
24. All CWC works to be in accordance with Arun District Council Details, Pipe bedding at all CWC works to accord with ADC drawing 80003301 Rev C.
25. All footpath slabs shall have a crossfall to drain surface water into adjoining gardens.
26. All future private driveways, parking bays, etc to be designed to fall surface water on/off away from S36 works. If not achievable, full width ACO drainage to be provided.
27. ***ANY VARIANCE OR DISCREPANCY MUST BE REPORTED BACK TO RCP ENGINEERING BEFORE WORK BEGINS.***

TYPE	DEPTH RANGE	DESCRIPTION	LOCATION	CODE	COVER GRADE
D	Depth from cover level to soffit of pipe up to 3m	Min. 450mm diameter Flexible or Rigid access chamber (Non Entry) in areas subject to vehicle loading. (If distance from cover level to soffit of pipe is >1m, access opening shall be restricted to 350mm Ø or 300mm x 300mm.	Road Driveway Garden	R D G	D400 B125 A15
			RE	Rodding point at head of drain	

KEY

Site Boundary

Adoptable Surface Water Sewers (IWNL) — S1

Adoptable Flow Control Manhole (IWNL) — S1

Adoptable Foul Water Sewers (IWNL) — F1

Indicative Foul Rising Main

Adoptable PCC Headwalls (IWNL)

3m SuDS Easement

Swale with Granular Drain at Base

Cellular Storage Tanks

Adoptable Road Gully & Connection — RG

Private Road Gully & Connection — RG

Private Surface Water Domestic Drainage — S1.1

Private Foul Water Domestic Drainage — F1.1

House connection via 300mm dia. shallow access chamber not more than 600mm deep *(Based on floor make-up of 75mm screed, 225mm insulation & 150mm beam & block).* ***In the event conditions on-site result in maximum depth of 600mm being exceeded, then Type D chambers to be used.***

Rodding Eye — RE

'Aco' Channel (showing connecting pipe) or similar — YG 18.00

Yard Gully and Connection

Filter Drain (showing connecting pipe) with final 1.0m section of 100mm perforated UPVC pipe laid to nominal fall prior to connection to Surface Water Drainage Network. — FILTER DRAIN

1500mm High Knee Post and Rail Fencing at Attenuation Basins

Timber VRS with pedestrian rail — RRS

Root Protection Area and TPF
(Tree Protection Plan Based on Arboricultural's drawing number 5645-21-B, revision 03, issued to RCP in .dwg format on 01/03/2024.).

All existing ditches and culverts being retained are to be cleaned out to the satisfaction of the ADC drainage engineer

CDM NOTES

1. EXISTING SERVICES. Depth of existing services must be determined prior to works commencing. The contractor is responsible for establishing underground services in accordance with HSE Guidance note HS (G) 47. Any services which would be within the proposed construction layers must be lowered to below the sub-base.

0m 2m 4m 8m 12m 16m 20m

SCALE BAR 1:200 at A1

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A	03.05.24	Updated to Initial Tender Issue	AD	MW	TRS

Client:-

FOREMAN HOMES

Site:-
Land West of Church Lane & Horsemere Green Lane
Climping, West Sussex

Drawing Title:-
DOMESTIC DRAINAGE LAYOUT
SHEET 16 OF 22

Date: April 2024 | Scales: 1:200 at A1
Drawn: AD | Checked: MW | Approved: TRS

Drawing No.
FOR/E5139/466 C

FOR CONSTRUCTION

Rogers Cory Partnership
Architectural and Civil Consultants
The Old School Old School Road Hook Hampshire RG27 9NJ
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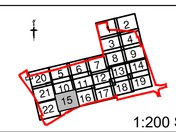

1:200 SHEET KEY PLAN

NOTES

1. All dimensions are in metres unless stated otherwise.
2. Do not scale from this drawing. Only written dimensions are to be used.
3. FW & SW house drainage is to be constructed in accordance with the Building Regulations & BS8301 & SSG Appendix C Design and Construction Guidance Approved Version 2.3 dated 11 November 2023 and the specific requirements of IWNL Water.
4. Drains are to be constructed using flexibly jointed vitrified clay pipes to BS EN 295-1991 "Super Strength" specification (e.g. Hepworth Supersleeve or similar) or uPVC drainage pipework to BS4660 & BS2494, bedded & backfilled in accordance with manufacturers instructions.
5. Location of sewers & lateral drains to be in accordance with the SSG Appendix C Design and Construction Guidance Approved Version 2.3 dated 11 November 2023 and the specific requirements of IWNL.
6. Backfilling of drain trenches adjacent to dwelling or other structure to be in accordance with BS8301- Fig. 9.
7. Cover levels indicated on the Drainage Schedules are nominal & may be adjusted to suit finished ground levels as necessary.
8. Manhole inspection chamber covers should be Grade D400 in trafficked areas Grade B125 in parking areas and occasional traffic and A15 in pedestrian only areas.
9. Rainwater downpipes to be connected direct to drain using an appropriate adaptor & removable section of downpipe to permit rodding access.
10. The positions of SVP's, stub stacks, WC outlets, Back inlet gullies etc. & rainwater downpipes are to be accurately located from the house type working drawings.
11. Generally FW drains are to be laid to falls of 1 in 40, SW drains are to be laid to falls of 1 in 60, both in 100mm diameter pipes, SW pipes are to be 150mm diameter when serving 2 dwellings or 2 RWP connections. FW pipes are to be 150mm diameter when serving 10 dwellings or more unless stated otherwise, or where a schedule is provided.
12. 100mmØ FW Drains are to be laid to minimum fall of 1 in 80 and 150mmØ FW Drains are to be laid to minimum fall of 1 in 150.
13. Gullies situated in areas accessible to wheeled vehicles to be of suitable construction for trafficked areas.
14. Where land drain is identified on the Architect's details, connect into nearest SW system.
15. Where kerb drainage is used, a slotted channel connected to a gully or a Hi-Flow kerb PPC catchpit to be used.
16. This drawing should be read in conjunction with the Architect's and Structural Engineer's design drawings and specification.
17. Site layout shown in this drawing is based on Foreman Homes Approved Site Layout Plan, issued to RCP in .dwg format on 06/02/2023
18. Site Access and Section 278 Works as per RCP's dwg No. Section 278 General Arrangement (FOR-E5139-301 to 302).
19. Architectural blocks based on RCP's Substructure Layouts, issued to RCP in .dwg format on 24/03/2023 and 04/03/2024.
20. Topographical Survey as per Encompass Surveys drawing no. ENC/24/0820/SLL4/1 to 10, dated September 2020.
21. This drawing should be read in conjunction with other Domestic Drainage Layouts, Foul and Surface Water Sewer Longitudinal Sections (FOR/E5139/201 to 214), Surface Water Sewer and Foul Water Sewer Manhole Schedules (FOR-E5139-415 to 416), Section 104 Drainage Construction Details (FOR-E5139-410) and Domestic Drainage Construction Details (FOR-E5139-473 to 474).
22. Where backdrop is less than 1.0m for domestic drainage, backdrop to be accommodated with internal benching.
23. Surface water from private areas is not to be discharged onto adoptable highway and vice versa.
24. All OWC works to be in accordance with Arun District Council Details, Pipe bedding of all OWC works to accord with ADC drawing 80003301 Rev C.
25. All footpath slabs shall have a crossfall to drain surface water into adjoining gardens.
26. All future private driveways, parking bays, etc to be designed to fall surface water run-off away from S38 works. If not achievable, full width ACO drainage to be provided.
27. ***ANY VARIANCE OR DISCREPANCY MUST BE REPORTED BACK TO RCP ENGINEERING BEFORE WORK BEGINS.***

TYPE	DEPTH RANGE	DESCRIPTION	LOCATION	CODE	COVER GRADE
D	Depth from cover level to soffit of pipe up to 3m	Min. 450mm diameter Flexible or Rigid access chamber (Non Entry) in areas subject to vehicle loading. (If distance from cover level to soffit of pipe is >1m, access opening shall be restricted to 350mm Ø or 300mm x 300mm.	Road Driveway Garden	R D G	D400 B125 A15
			RE	Rodding point at head of drain	

KEY

Site Boundary

Adoptable Surface Water Sewers (IWNL) — S1

Adoptable Flow Control Manhole (IWNL) — S1

Adoptable Foul Water Sewers (IWNL) — F1

Indicative Foul Rising Main

Adoptable PCC Headwalls (IWNL)

3m SuDS Easement

Swale with Granular Drain at Base

Cellular Storage Tanks

Adoptable Road Gully & Connection — RG

Private Road Gully & Connection — RG

Private Surface Water Domestic Drainage — S1.1

Private Foul Water Domestic Drainage — F1.1

House connection via 300mm dia. shallow access chamber not more than 600mm deep *(Based on floor make-up of 75mm screed, 225mm insulation & 150mm beam & block).* ***In the event that conditions on-site result in maximum depth of 600mm being exceeded, then Type D chambers to be used.***

Rodding Eye

'Aco' Channel (showing connecting pipe) or similar — YG 18.00

Yard Gully and Connection

Filter Drain (showing connecting pipe) with final 1.0m section of 100mm perforated UPVC pipe laid to nominal fall prior to connection to Surface Water Drainage Network. — FILTER DRAIN

1500mm High Knee Post and Rail Fencing at Attenuation Basins

Timber VRS with **pedestrian** rail — RRS

Root Protection Area and TPF

(Tree Protection Plan Based on Arboricultural's drawing number 5646:21 B, revision 03, issued to RCP in .dwg format on 01/03/2024.).

All existing ditches and culverts being retained are to be cleaned out to the satisfaction of the ADC drainage engineer

CDM NOTES

1. EXISTING SERVICES. Depth of existing services must be determined prior to works commencing. The contractor is responsible for establishing underground services in accordance with HSE Guidance note HS (G) 47. Any services which would be within the proposed construction layers must be lowered to below the sub-base.

0m 2m 4m 8m 12m 16m 20m

SCALE BAR 1:200 at A1

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Rev.	Date	Details	By	Chkd	Appd
C	30.10.24	Subject to adopting authority approval.	KG	JC	TRS
B	10.09.24	Plans updated as per client comments received 26.06.24 & as per updated SI information dated 12.08.24	JC	LAD	TRS
A	03.05.24	Updated to Initial Tender Issue	AD	MW	TRS

Client:- FOREMAN HOMES

Site:-
Land West of Church Lane
& Horsemere Green Lane
Climping, West Sussex

Drawing Title:-
DOMESTIC DRAINAGE LAYOUT
SHEET 15 OF 22

Date: April 2024 | Scales: 1:200 at A1
Drawn: AD | Checked: MW | Approved: TRS

Drawing No.
FOR/E5139/465 C

FOR CONSTRUCTION

RCP ARCHITECTURE & CIVIL ENGINEERING
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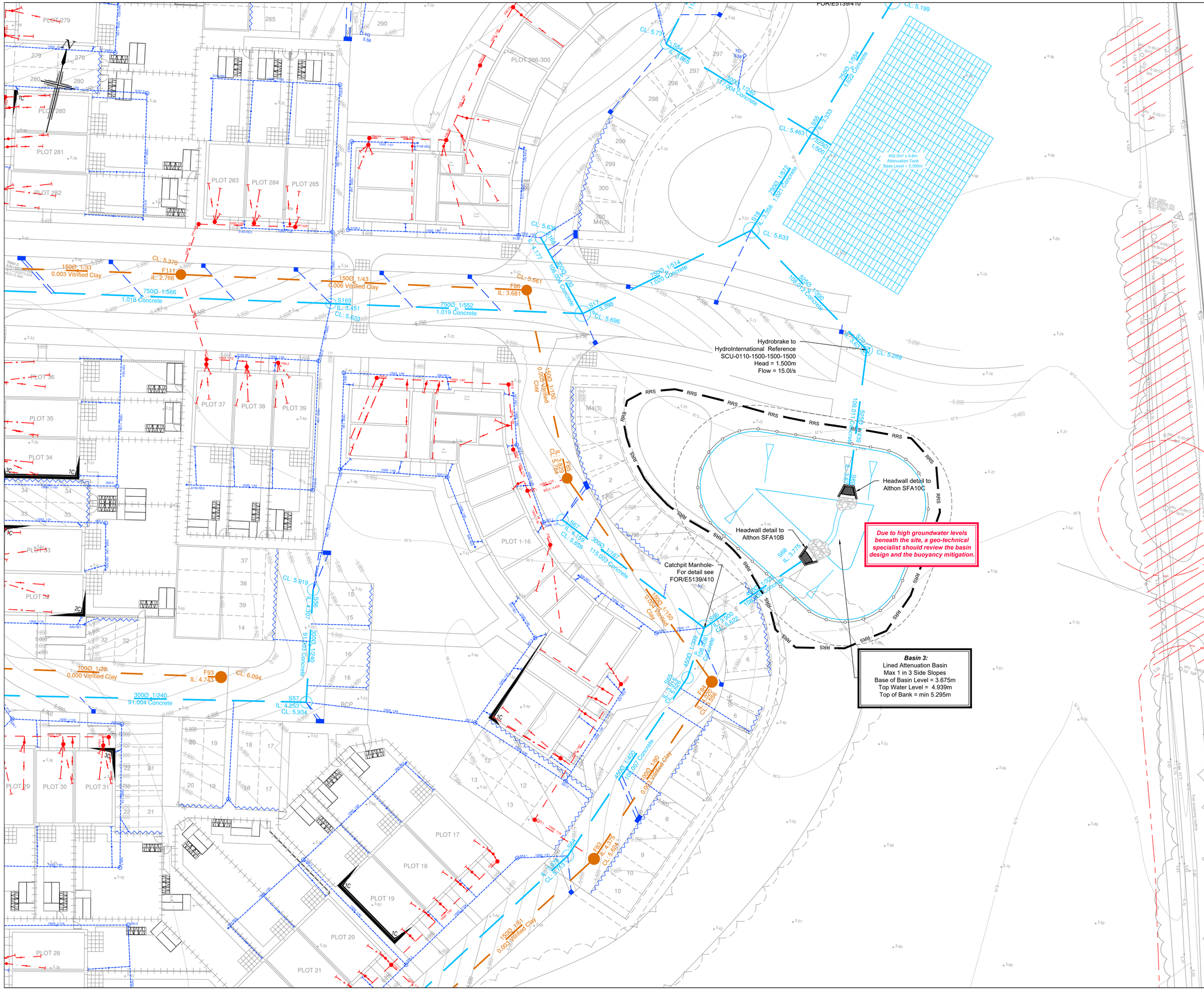
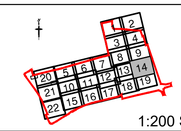
FOR/E5139/410





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15. Where ACO channel drains are to be installed, connection to be made to nearest FPC catchpit to be used.
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1500mm High Knee Post and Rail Fencing at Attenuation Basins

Timber VRS with pedestrian rail — RRS

Root Protection Area and TPF
(Tree Protection Plan Based on Arboricultural's drawing number 5640:21 B, revision 03, issued to RCP in .dwg format on 21/03/2024.)).

All existing ditches and culverts being retained are to be cleaned out to the satisfaction of the ADC drainage engineer

CDM NOTES

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0m 2m 4m 6m 8m 10m 15m 20m

SCALE BAR 1:200 at A1

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Client:-

FOREMAN HOMES

Site:-

Land West of Church Lane
& Horsemere Green Lane
Climping, West Sussex

Drawing Title:-

DOMESTIC DRAINAGE LAYOUT

SHEET 14 OF 22

Date:	April 2024	Scales:	1:200 at A1
Drawn:	AD	Checked: MW	Approved: TRS

Drawing No.

FOR/E5139/464 C

FOR CONSTRUCTION

RCP ARCHITECTURE & CIVIL ENGINEERING
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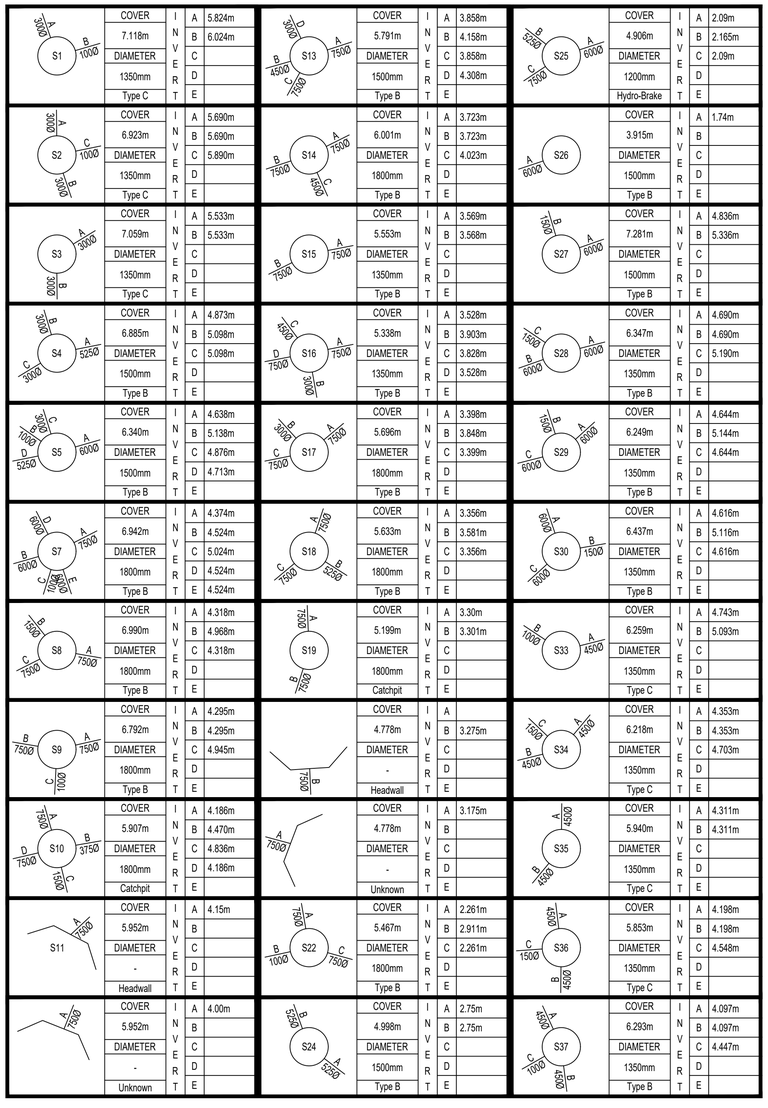
PHASE: 0

MH No.	MANHOLE DIAMETER (mm)	MANHOLE TYPE	COVER LEVEL (m)	INVERT LEVEL (m)	DEPTH TO SOFFIT (m)	EASTING (m)	NORTHING (m)
S1	1350	Type C	7.118	5.824	0.994	499865.162	101847.741
S2	1350	Type C	6.923	5.690	0.933	499857.005	101871.462
S3	1350	Type C	7.059	5.533	1.226	499856.858	101895.543
S4	1500	Type B	6.885	4.873	1.487	499870.459	101903.846
S5	1500	Type B	6.340	4.638	1.102	499935.669	101916.873
S7	1800	Type B	6.942	4.374	1.818	499995.594	101934.034
S8	1800	Type B	6.990	4.318	1.922	500023.037	101948.013
S9	1800	Type B	6.792	4.295	1.747	500035.372	101945.916
S10	1800	Catchpit	5.907	4.186	0.971	500098.974	101960.618
S11	-	Headwall	5.952	4.150	1.052	500094.899	101974.757
S12	-	Headwall	5.952	4.000	1.202	500126.198	102004.002
S13	1500	Type B	5.791	3.858	1.183	500136.893	102027.271
S14	1800	Type B	6.001	3.723	1.528	500194.551	102046.118
S15	1350	Type B	5.553	3.568	1.234	500233.723	102065.645
S16	1350	Type B	5.338	3.528	1.060	500255.887	102069.898
S17	1800	Type B	5.696	3.398	1.548	500326.798	102084.086
S18	1800	Type B	5.633	3.356	1.527	500343.377	102097.931
S19	1800	Catchpit	5.199	3.300	1.149	500352.979	102127.296
S20	-	Headwall	4.778	3.275	0.753	500352.450	102141.094
S21	-	Headwall	4.778	3.175	0.853	500338.453	102178.865
S22	1800	Type B	5.467	2.261	2.455	500326.422	102182.141
S24	1500	Type B	4.998	2.750	1.723	500336.828	102209.975
S25	1200	Hydro-brake	4.906	2.090	2.216	500342.756	102205.408
S26	1500	Type B	3.915	1.740	1.575	500368.008	102213.791
S27	1500	Type B	7.281	4.836	1.845	499904.723	101844.831
S28	1350	Type B	6.347	4.690	1.057	499975.882	101869.896
S29	1350	Type B	6.249	4.644	1.005	500000.563	101876.189
S30	1350	Type B	6.437	4.616	1.221	500011.845	101886.407
S33	1350	Type C	6.259	4.743	1.066	500054.145	101889.235
S34	1350	Type C	6.218	4.353	1.415	500200.021	101925.759
S35	1350	Type C	5.940	4.311	1.179	500210.391	101938.189
S36	1350	Type C	5.853	4.198	1.205	500210.946	101983.503
S37	1350	Type B	6.293	4.097	1.746	500206.342	102020.225
S38	1350	Type C	7.108	5.310	1.499	499858.406	101944.420
S39	1350	Type B	6.868	5.059	1.508	499916.881	101954.890
S40	1350	Type C	6.486	4.954	1.232	499930.021	101934.649
S41	1350	Type C	6.760	5.270	1.191	500034.649	101970.478
S42	1350	Type C	6.403	4.903	1.200	500044.524	101992.893
S44	1350	Type C	5.640	4.218	0.971	500116.614	102021.391
S45	1800	Catchpit	5.972	4.437	1.085	500082.763	102009.718
S46	1350	Type C	5.498	4.000	1.198	500161.299	102120.900
S47	1350	Type C	5.633	4.105	1.228	500185.023	102066.804
S48	1350	Type B	5.849	3.473	1.925	500221.885	102112.479
S49	1350	Type B	5.743	3.524	1.768	500233.642	102099.127
S50	1350	Type B	5.724	3.708	1.566	500289.773	102123.223
S51	1350	Type B	5.894	3.599	1.845	500252.983	102116.010
S52	1350	Type C	5.435	3.991	1.144	500321.147	102141.940
S53	1350	Type C	5.593	3.923	1.369	500332.055	102130.078
S54	1200	Type B	5.731	3.865	1.567	500328.836	102116.428
S55	1350	Type B	5.463	3.333	1.380	500347.553	102110.408
S56	1350	Type C	5.919	4.307	1.312	500304.126	102046.006
S57	1350	Type C	5.934	4.253	1.381	500306.390	102033.247
S58	1200	Type B	5.937	4.104	1.533	500271.407	102025.633
S59	1350	Type C	5.787	4.043	1.444	500261.730	102036.983
S60	1350	Type C	5.584	4.304	0.831	500271.243	101998.462
S61	1350	Type C	5.571	4.213	0.908	500278.783	101967.323
S62	1350	Type C	5.689	4.180	1.058	500289.598	101960.057
S63	1350	Type C	6.026	4.134	1.441	500304.698	101970.540
S64	1350	Type C	5.713	3.976	1.286	500339.729	102023.136
S65	1350	Type C	5.626	3.915	1.261	500348.295	102046.266
S66	1800	Catchpit	5.622	3.900	1.272	500348.840	102052.265
S67	1350	Type C	5.859	4.159	1.400	500330.088	102060.507
S68	-	Headwall	5.581	3.775	1.281	500359.566	102064.174
S69	-	Headwall	5.581	3.670	1.386	500361.372	102070.215
S70	1350	Hydro-brake	5.269	3.630	1.114	500359.476	102087.678
S71	1200	Type B	6.459	4.576	1.583	500110.088	102085.650
S72	1350	Type C	6.060	4.549	1.136	500122.211	101964.707
S83	-	Headwall	6.387	4.415	1.372	500098.279	102132.300
S85	1800	Catchpit	6.100	4.250	1.400	500133.310	102135.328
S86	-	Headwall	5.488	3.715	1.323	500165.482	102137.025
S87	-	Headwall	5.488	3.500	1.463	500185.086	102142.193
S88	1500	Type B	5.761	3.260	1.976	500200.220	102152.667
S89	1500	Type B	5.855	2.941	2.389	500254.155	102165.853
S90	1500	Type B	5.664	2.733	2.406	500284.478	102172.038
S91	1500	Type B	5.288	2.558	2.205	500301.857	102177.178
S92	1350	Type C	6.744	5.466	0.904	499840.259	101966.726
S93	1350	Type C	6.747	5.415	0.957	499834.843	101981.705
S94	1350	Type C	6.979	5.375	1.228	499833.974	101992.726
S95	1350	Type C	6.974	5.329	1.270	499823.652	102002.223
S96	1350	Type C	6.834	5.274	1.185	499824.478	102018.692
S97	1350	Type C	6.633	5.209	1.049	499819.431	102037.593
S98	1350	Type C	6.466	5.158	0.933	499825.212	102051.631
S99	1350	Type C	6.668	5.145	1.073	499853.400	102057.292
S100	-	Headwall	6.671	5.140	0.931	499822.827	102056.496
S101	1350	Type C	6.888	5.080	1.357	499878.767	102062.555
S102	1350	Type C	6.480	4.946	1.084	499931.165	102074.830
S103	1350	Type C	6.073	4.536	1.162	499979.938	102091.410
S105	1500	Type B	6.507	4.172	1.810	500042.940	102108.534
S106	1350	Type B	6.303	4.383	1.544	500022.989	102103.667
S107	1350	Type B	6.705	5.008	1.172	499862.307	101997.622
S108	1350	Type B	6.645	4.859	1.261	499913.502	102006.806
S109	1350	Type B	6.465	4.716	1.224	499961.873	102020.592
S110	1350	Type B	6.353	4.565	1.263	500012.739	102035.121
S111	1500	Type B	6.460	4.425	1.510	500059.606	102048.550
S112	1500	Type B	6.716	4.351	1.840	500050.767	102073.519
S113	1350	Type C	6.840	5.336	1.279	499917.572	101977.283
S114	1350	Type B	6.534	4.569	1.366	499984.476	101955.748
S115	1350	Type B	6.230	4.616	1.014	499978.880	101980.017
S116	1350	Type B	6.250	4.660	0.990	499968.880	102004.358
S117	1350	Type C	6.215	4.847	1.143	500068.497	102037.340
S118	-	Headwall	6.322	4.768	0.954	499928.197	102085.412
S121	1350	Type C	6.190	4.615	1.200	499956.496	102083.393
S122	1350	Type C	6.351	5.241	0.885	499942.011	102078.131
S124	1500	Type B	6.800	3.967	2.308	500096.169	102121.603
S125	1500	Type B	6.747	3.935	2.287	500103.293	102114.954
S126	1800	Catchpit	5.919	3.782	1.612	500146.197	102130.978
S127	-	Headwall	5.488	3.715	1.248	500167.817	102132.417
S128	1800	Catchpit	5.343	3.922	1.122	500168.703	102104.702
S129	-	Headwall	5.488	3.715	1.473	500182.277	102110.812
S130	1350	Type C	5.550	3.883	1.217	500184.311	102179.623
S131	1350	Type C	5.151	3.780	0.921	500176.529	102211.982
S132	1350	Type C	4.991	3.732	0.810	500170.324	102230.392
S133	1350	Type C	5.204	3.670	1.084	500159.373	102251.983
S134	1350	Type C	5.419	3.622	1.347	500155.016	102270.087
S135	1350	Type B	5.607	3.572	1.585	500166.008	102285.854
S136	1800	Catchpit	5.694	3.536	1.708	500179.865	102286.190
S137	-	Headwall	4.835	3.510	0.875	500182.323	102298.925
S138	-	Headwall	4.835	3.350	1.035	500280.445	102286.918
S139	1350	Type B	4.800	2.990	1.285	500319.730	102274.862
S140	1350	Type C	4.662	2.792	1.345	500322.292	102250.167
S141	1350	Type C	5.677	4.060	1.316	500247.372	102193.527
S142	1200	Type B	5.761	3.878	1.583	500236.203	102237.100
S143	1350	Type C	5.551	3.817	1.434	500236.318	102250.962
S144	1350	Type C	5.103	3.631	1.096	500242.835	102276.553
S145	1800	Catchpit	4.876	3.546	0.956	500264.792	102273.338

PHASE: 0

MH No.	MANHOLE DIAMETER (mm)	MANHOLE TYPE	COVER LEVEL (m)	INVERT LEVEL (m)	DEPTH TO SOFFIT (m)	EASTING (m)	NORTHING (m)
S146	-	Headwall	4.835	3.510	0.950	500267.092	102286.151
S147	1350	Type C	5.389	3.924	1.165	500310.745	102215.455
S148	1350	Type C	5.072	3.703	1.069	500293.143	102262.088
S149	1350	Type C	4.979	3.662	1.017	500286.785	102269.798
S150	1350	Type C	5.317	3.861	1.155	500222.625	102279.229
S151	1350	Type C	5.499	3.894	1.156	500243.906	102085.860
S152	1350	Type B	5.584	3.391	1.743	500203.704	102134.630
S153	1350	Type C	6.092	4.737	0.980	500144.358	102004.678
S154	1350	Type C	6.209	4.686	1.148	500147.130	101992.969
S155	1350	Type C	6.248	4.622	1.252	500141.872	101974.380
S156	1350	Type C	5.392	3.956	1.210	500306.069	102159.093
S157	1800	Type B	5.285	2.190	2.345	500324.522	102193.246
S158	1500	Type B	5.993	3.876	1.367	500131.948	102018.295
S159	1200	Type B	5.849	3.420	1.979	500192.124	102149.509
S161	1350	Type C	6.467	4.542	1.476	500130.644	101908.389
S162	-	Headwall	5.952	4.150	1.352	500094.262	101991.904
S163	1350	Hydro-brake	4.989	3.315	1.224	500289.620	102282.930
S165	1200	Type B	6.499	4.926	1.048	499890.380	102002.658
S167	1200	Type B	6.690	4.776	1.389	499941.638	102014.825
S168	1350	Type C	5.636	4.177	1.160	500320.075	102091.439
S169	1200	Type B	5.623	3.451	1.421	500298.416	102078.429
S170	1500	Type B	6.688	4.220	1.943	500044.869	102099.133
S171	1350	Type C	6.127	4.462	1.365	500121.432	102060.901
S172	1350	Type C	6.148	4.621	1.078	500100.061	101900.731



* Manhole type to be reviewed with Adopting Authority and therefore requires further confirmation

NOTES

1. All dimensions are in metres unless stated otherwise.
2. Do not scale from this drawing. Only written dimensions are to be used.
3. This drawing should be read in conjunction with the Architect's and Structural Engineer's design drawings and specification.
4. 100mm & 150mm diameter pipework to be extra strength vitrified clay to BS EN 295 or BS 65 on Class S bed & surround.
5. 225mm pipe work to be extra strength vitrified clay to BSEN295 or BSEN65 or concrete class M to BSEN5911 on class S bed F surround.
6. Where cover to pipes is less than 1.2m concrete bed and surround should be used. Where pipes with flexible joints are used the concrete protection shall be interrupted across its full cross-section with a compressible filler.
7. Stoppered connection end of pipe to have suitable stopper applied and connected to wire which is to be connected to a stake marking the end of the pipe at ground level if laterals are to be buried during construction phase.
8. Refer to geotechnical report for sulphate resisting class and ACEC class.
9. Whilst all main surface water and most main foul water drainage is to remain private, all construction to be in accordance with Sewerage Sector Guidance Appendix C Design and Construction Guidance v2.3 dated 11 November 2023 and specific requirements of WNL.
10. This drawing should be read in conjunction with Domestic Drainage Layout (FOR-E5139-450 to 472), S104 Drainage Construction Details (FOR-E5139-410) and Highways and Drainage Longitudinal Sections (FOR-E5139-201 to 214).
11. Cover Levels are approximate and reference should be made to the Highways and Drainage Longitudinal Sections (FOR-E5139-201 to 214).

12. ANY VARIANCE OR DISCREPANCY MUST BE REPORTED BACK TO RCP ENGINEERING BEFORE WORK BEGINS.

TYPE	DEPTH RANGE	DESCRIPTION	LOCATION	CODE	COVER GRADE
D	Depth from cover level to soffit of pipe up to 3m	Min. 450mm diameter Flexible or Rigid access chamber (Non Entry) in areas subject to vehicular loading. (If distance from cover level to soffit of pipe is greater than 3m then access restricted to 350mm Ø or 300mm x 300mm).	Road Driveway Garden	R D G	D400 B125 A15
			RE		Rodding point at head of drain

SUBJECT TO ADOPTING AUTHORITY APPROVAL WHERE APPLICABLE

CDM NOTES

1. EXISTING SERVICES. Depth of existing services must be determined prior to works commencing. The contractor is responsible for establishing underground services in accordance with HSE Guidance note HS (G) 47. Any services which would be within the proposed construction layers must be lowered to below the sub-base.

0m 2m 4m 6m 8m 12m 16m 20m

SCALE BAR 1:200 at A1

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Rev.	Date	Details	By	Chkd	Appd
B	30.10.24	Subject to adopting authority approval.	KG	JC	TRS
A	03.05.24	Updated to Initial Tender Issue.	AD	JC	TRS

Client:- FOREMAN HOMES

Site:- Land West of Church Lane & Horsemere Green Lane Climping, West Sussex

Drawing Title:- SURFACE WATER MANHOLE SCHEDULES

Sheet 1 of 4

Date: March 2024 | Scales: As shown

Drawn: MW | Checked: TRS | Approved: TRS

Drawing No. FOR/E5139/415 B

FOR CONSTRUCTION

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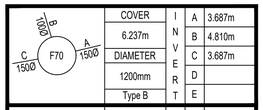
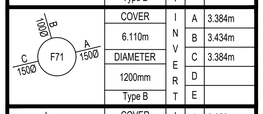
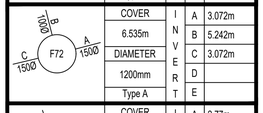
Architectural and Civil Consultants
The Old School Old School Road
Hook Hampshire RG27 9NJ
T: 01256 769269 E: mail@rcpconsultants.co.uk W: rcpconsultants.co.uk



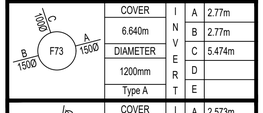
COVER	INVERT	A	3.687m
6.237m		B	4.810m
DIAMETER		C	3.687m
1200mm		D	
Type B		E	



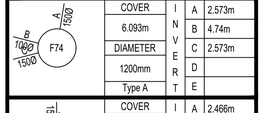
COVER	INVERT	A	3.384m
6.110m		B	3.434m
DIAMETER		C	3.384m
1200mm		D	
Type B		E	



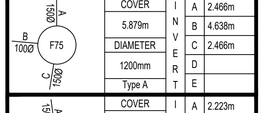
COVER	INVERT	A	3.072m
6.535m		B	5.242m
DIAMETER		C	3.072m
1200mm		D	
Type A		E	



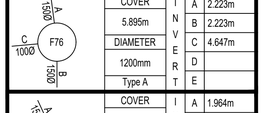
COVER	INVERT	A	2.77m
6.640m		B	2.77m
DIAMETER		C	5.474m
1200mm		D	
Type A		E	



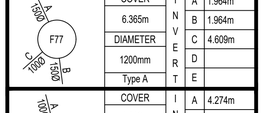
COVER	INVERT	A	2.573m
6.093m		B	4.74m
DIAMETER		C	2.573m
1200mm		D	
Type A		E	



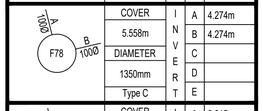
COVER	INVERT	A	2.466m
5.879m		B	4.638m
DIAMETER		C	2.466m
1200mm		D	
Type A		E	



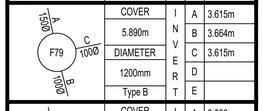
COVER	INVERT	A	2.223m
5.895m		B	2.223m
DIAMETER		C	4.647m
1200mm		D	
Type A		E	



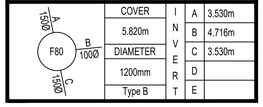
COVER	INVERT	A	1.964m
6.365m		B	1.964m
DIAMETER		C	4.609m
1200mm		D	
Type A		E	



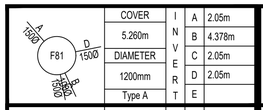
COVER	INVERT	A	4.274m
5.558m		B	4.274m
DIAMETER		C	
1350mm		D	
Type C		E	



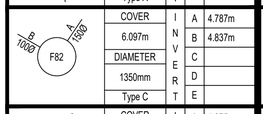
COVER	INVERT	A	3.615m
5.890m		B	3.664m
DIAMETER		C	3.615m
1200mm		D	
Type B		E	



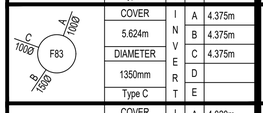
COVER	INVERT	A	3.530m
5.820m		B	4.716m
DIAMETER		C	3.530m
1200mm		D	
Type B		E	



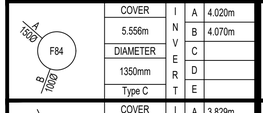
COVER	INVERT	A	2.05m
5.260m		B	4.378m
DIAMETER		C	2.05m
1200mm		D	2.05m
Type A		E	



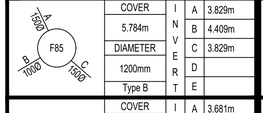
COVER	INVERT	A	4.787m
6.097m		B	4.837m
DIAMETER		C	
1350mm		D	
Type C		E	



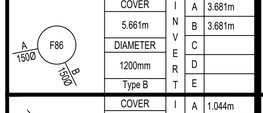
COVER	INVERT	A	4.375m
5.624m		B	4.375m
DIAMETER		C	4.375m
1350mm		D	
Type C		E	



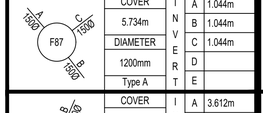
COVER	INVERT	A	4.020m
5.556m		B	4.070m
DIAMETER		C	
1350mm		D	
Type C		E	



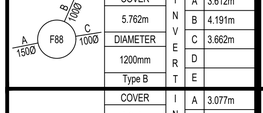
COVER	INVERT	A	3.829m
5.784m		B	4.409m
DIAMETER		C	3.829m
1200mm		D	
Type B		E	



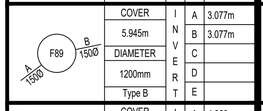
COVER	INVERT	A	3.681m
5.661m		B	3.681m
DIAMETER		C	
1200mm		D	
Type B		E	



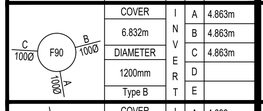
COVER	INVERT	A	1.044m
5.734m		B	1.044m
DIAMETER		C	1.044m
1200mm		D	
Type A		E	



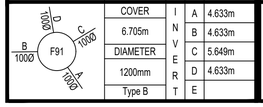
COVER	INVERT	A	3.612m
5.762m		B	4.191m
DIAMETER		C	3.662m
1200mm		D	
Type B		E	



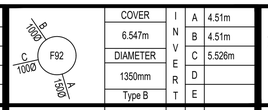
COVER	INVERT	A	3.077m
5.945m		B	3.077m
DIAMETER		C	
1200mm		D	
Type B		E	



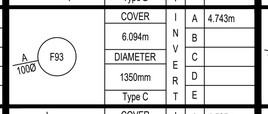
COVER	INVERT	A	4.863m
6.832m		B	4.863m
DIAMETER		C	4.863m
1200mm		D	
Type B		E	



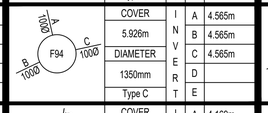
COVER	INVERT	A	4.633m
6.705m		B	4.633m
DIAMETER		C	5.649m
1200mm		D	4.633m
Type B		E	



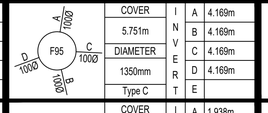
COVER	INVERT	A	4.51m
6.547m		B	4.51m
DIAMETER		C	5.526m
1350mm		D	
Type B		E	



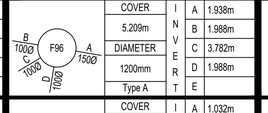
COVER	INVERT	A	4.743m
6.094m		B	
DIAMETER		C	
1350mm		D	
Type C		E	



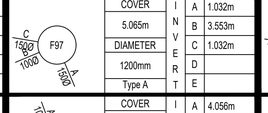
COVER	INVERT	A	4.565m
5.926m		B	4.565m
DIAMETER		C	4.565m
1350mm		D	
Type C		E	



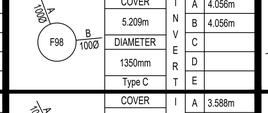
COVER	INVERT	A	4.169m
5.751m		B	4.169m
DIAMETER		C	4.169m
1350mm		D	4.169m
Type C		E	



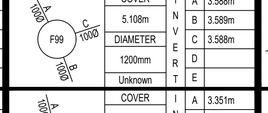
COVER	INVERT	A	1.938m
5.209m		B	1.988m
DIAMETER		C	3.782m
1200mm		D	1.988m
Type A		E	



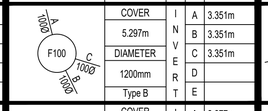
COVER	INVERT	A	1.032m
5.065m		B	3.553m
DIAMETER		C	1.032m
1200mm		D	
Type A		E	



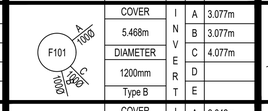
COVER	INVERT	A	4.056m
5.209m		B	4.056m
DIAMETER		C	
1350mm		D	
Type C		E	



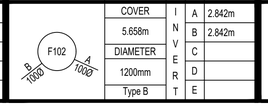
COVER	INVERT	A	3.588m
5.108m		B	3.589m
DIAMETER		C	3.588m
1200mm		D	
Unknown		E	



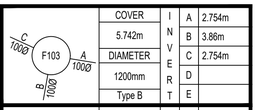
COVER	INVERT	A	3.351m
5.297m		B	3.351m
DIAMETER		C	3.351m
1200mm		D	
Type B		E	



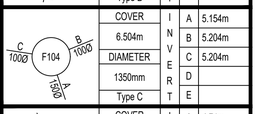
COVER	INVERT	A	3.077m
5.468m		B	3.077m
DIAMETER		C	4.077m
1200mm		D	
Type B		E	



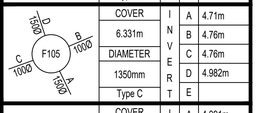
COVER	INVERT	A	2.842m
5.658m		B	2.842m
DIAMETER		C	
1200mm		D	
Type B		E	



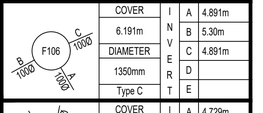
COVER	INVERT	A	2.754m
5.742m		B	3.86m
DIAMETER		C	2.754m
1200mm		D	
Type B		E	



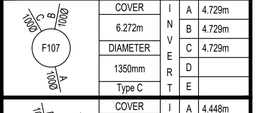
COVER	INVERT	A	5.154m
6.504m		B	5.204m
DIAMETER		C	5.204m
1350mm		D	
Type C		E	



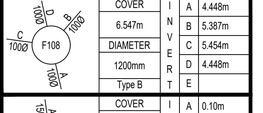
COVER	INVERT	A	4.71m
6.331m		B	4.76m
DIAMETER		C	4.76m
1350mm		D	4.982m
Type C		E	



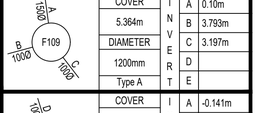
COVER	INVERT	A	4.891m
6.191m		B	5.30m
DIAMETER		C	4.891m
1350mm		D	
Type C		E	



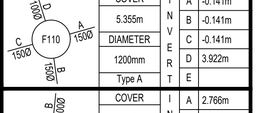
COVER	INVERT	A	4.729m
6.272m		B	4.729m
DIAMETER		C	4.729m
1350mm		D	
Type C		E	



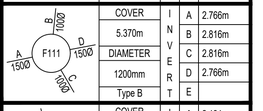
COVER	INVERT	A	4.448m
6.547m		B	5.387m
DIAMETER		C	5.454m
1200mm		D	4.448m
Type B		E	



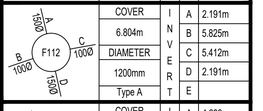
COVER	INVERT	A	0.10m
5.364m		B	3.793m
DIAMETER		C	3.197m
1200mm		D	
Type A		E	



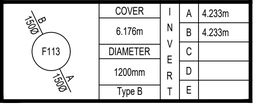
COVER	INVERT	A	-0.141m
5.355m		B	-0.141m
DIAMETER		C	-0.141m
1200mm		D	3.922m
Type A		E	



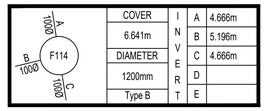
COVER	INVERT	A	2.766m
5.370m		B	2.816m
DIAMETER		C	2.816m
1200mm		D	2.766m
Type B		E	



COVER	INVERT	A	2.191m
6.804m		B	5.825m
DIAMETER		C	5.412m
1200mm		D	2.191m
Type A		E	



COVER	INVERT	A	4.233m
6.176m		B	4.233m
DIAMETER		C	
1200mm		D	
Type B		E	



COVER	INVERT	A	4.666m
6.641m		B	5.196m
DIAMETER		C	4.666m
1200mm		D	
Type B		E	

NOTES

1. All dimensions are in metres unless stated otherwise.
2. Do not scale from this drawing. Only written dimensions are to be used.
3. This drawing should be read in conjunction with the Architect's and Structural Engineer's design drawings and specification.
4. 100mm & 150mm diameter pipework to be extra strength vitrified clay to BS EN 295 or BS 65 on Class S bed & surround.
5. 225mm pipe work to be extra strength vitrified clay to BSEN295 or BSEN65 or concrete class M to BSEN5911 on class S bed F surround.
6. Where cover to pipes is less than 1.2m concrete bed and surround should be used. Where pipes with flexible joints are used the concrete protection shall be interrupted across its full cross-section with a compressible filler.
7. Stoppered connection end of pipe to have suitable stopper applied and connected to wire which is to be connected to a stake marking the end of the pipe at ground level if laterals are to be buried during construction phase.
8. Refer to geotechnical report for sulphate resisting class and ACEC class.
9. Whilst all main surface water and most main foul water drainage is to remain private, all construction to be in accordance with Sewerage Sector Guidance Appendix C Design and Construction Guidance v2.3 dated 11 November 2023 and specific requirements of IWNL.
10. This drawing should be read in conjunction with Domestic Drainage Layout (FOR-E5139-450 to 472), S104 Drainage Construction Details (FOR-E5139-410) and Highways and Drainage Longitudinal Sections (FOR-E5139-201 to 214).
11. Cover Levels are approximate and reference should be made to the Highways and Drainage Longitudinal Sections (FOR-E5139-201 to 214).
12. ***ANY VARIANCE OR DISCREPANCY MUST BE REPORTED BACK TO RCP ENGINEERING BEFORE WORK BEGINS.***

TYPE	DEPTH RANGE	DESCRIPTION	LOCATION	CODE	COVER GRADE
D	Depth from cover level to soffit of pipe up to 3m	Min. 450mm diameter Flexible or Rigid access chamber (Non Entry) in areas subject to vehicular loading. (If distance to invert of lowest pipe is greater than 3m opening shall be restricted to 350mm Ø or 300mm x 300mm).	Road Driveway Garden	R D G	D400 B125 A15
			RE	Rodding point at head of drain	

SUBJECT TO ADOPTING AUTHORITY APPROVAL WHERE APPLICABLE

CDM NOTES

1. EXISTING SERVICES. Depth of existing services must be determined prior to works commencing. The contractor is responsible for establishing underground services in accordance with HSE Guidance note HS (G) 47. Any services which would be within the proposed construction layers must be lowered to below the sub-base.

0m 2m 4m 8m 12m 16m 20m

SCALE BAR 1:200 at A1

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Rev.	Date	Details	By	Chkd	Appd
B	30.10.24	Subject to adopting authority approval.	KG	JC	TRS
A	03.05.24	Updated to Initial Tender Issue.	AD	JC	TRS

Client:- FOREMAN HOMES

Site:- Land West of Church Lane & Horsemere Green Lane Climping, West Sussex

Drawing Title:- FOUL WATER MANHOLE SCHEDULES

Sheet 4 of 4

Date: March 2024 | Scales: As shown

Drawn: MW | Checked: TRS | Approved: TRS

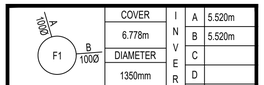
Drawing No. FOR/E5139/418 B

FOR CONSTRUCTION

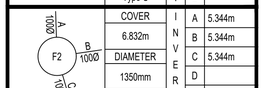
RCP ARCHITECTURE & CIVIL ENGINEERING
Rogers Cory Partnership
Architectural and Civil Consultants
The Old School Old School Road
Hook Hampshire RG27 9NJ
T: 01256 769269 E: mail@rcpconsultants.co.uk W: rcpconsultants.co.uk

PHASE: 0

MH No.	MANHOLE DIAMETER (mm)	MANHOLE TYPE	COVER LEVEL (m)	INVERT LEVEL (m)	DEPTH TO SOFFIT (m)	EASTING (m)	NORTHING (m)
F1	1350	Type C	6.778	5.520	1.158	499841.377	101969.841
F2	1350	Type C	6.832	5.344	1.388	499837.416	101983.323
F3	1200	Type B	7.007	5.116	1.791	499837.017	101995.360
F4	1200	Type B	6.999	4.986	1.913	499826.607	101995.690
F5	1200	Type B	6.905	4.726	2.079	499826.607	102016.511
F6	1200	Type B	6.541	4.351	2.090	499819.584	102045.676
F7	1200	Type B	6.492	4.196	2.196	499830.820	102050.881
F8	1200	Type A	6.927	3.617	3.210	499876.262	102059.886
F9	1200	Type A	6.557	2.946	3.461	499928.478	102072.362
F10	1200	Type A	6.136	2.621	3.365	499974.828	102087.647
F11	1200	Type A	6.251	2.354	3.747	500013.164	102098.966
F12	1200	Type A	6.538	1.990	4.398	500041.003	102105.761
F13	1200	Type A	6.884	1.640	5.094	500091.819	102119.125
F14	1200	Type A	6.663	1.551	4.962	500105.010	102118.163
F15	1200	Type A	5.901	1.281	4.470	500142.786	102133.021
F16	1200	Type A	5.893	1.028	4.715	500168.738	102160.623
F17	1200	Type A	5.686	0.903	4.633	500186.883	102165.352
F18	1200	Type A	5.949	0.534	5.265	500198.734	102168.523
F19	1200	Type A	5.676	0.198	5.328	500247.916	102179.647
F20	1200	Type A	5.519	-0.029	5.398	500281.403	102186.070
F21	1200	Type A	5.235	-0.253	5.338	500313.677	102195.043
F22	1200	Type A	5.336	-0.319	5.505	500312.357	102204.940
F23	1200	Type A	5.282	-0.628	5.760	500295.414	102248.144
F24	1200	Type A	5.275	-0.697	5.822	500304.992	102251.723
F25	1350	Type C	6.700	5.394	1.206	499868.481	102001.192
F26	1200	Type B	6.682	4.532	2.000	499910.185	102008.783
F27	1200	Type B	6.688	4.286	2.251	499945.807	102017.919
F28	1200	Type B	6.279	3.780	2.349	499993.333	102032.268
F29	1200	Type A	6.473	2.829	3.494	500059.082	102057.001
F30	1200	Type A	6.752	2.620	3.982	500049.049	102070.424
F31	1200	Type A	6.559	2.949	3.460	500053.954	102049.803
F32	1350	Type B	6.892	4.970	1.822	499914.915	101978.535
F33	1350	Type C	5.398	4.048	1.250	500167.530	102101.357
F34	1200	Type B	5.736	3.360	2.226	500154.233	102127.671
F36	1200	Type A	5.991	1.237	4.604	500145.732	102137.485
F38	1350	Type C	7.009	5.780	1.129	499860.693	101866.630
F39	1200	Type B	7.084	5.184	1.800	499857.797	101897.331
F40	1200	Type B	6.400	4.374	1.876	499933.259	101913.755
F41	1200	Type B	6.608	4.167	2.291	499963.032	101921.974
F42	1200	Type B	6.845	3.956	2.739	499991.367	101935.652
F43	1200	Type A	6.997	3.820	3.027	500011.279	101939.558
F44	1200	Type A	6.898	3.510	3.238	500025.467	101954.686
F45	1200	Type A	6.626	3.354	3.122	500033.791	101976.630
F46	1200	Type B	6.228	3.126	2.953	500056.879	102001.849
F47	1200	Type B	5.652	2.774	2.728	500106.264	102020.588
F48	1200	Type A	5.746	2.546	3.049	500138.785	102030.688
F49	1200	Type A	6.057	2.366	3.541	500165.523	102034.836
F50	1200	Type A	5.954	1.764	4.041	500190.817	102047.431
F51	1200	Type A	5.551	1.488	3.913	500227.640	102066.018
F52	1200	Type A	5.359	1.312	3.897	500247.163	102070.532
F53	1200	Type A	5.316	1.243	3.923	500250.967	102080.229
F54	1200	Type A	5.550	0.780	4.620	500206.940	102133.895
F55	1200	Type A	5.771	0.663	4.958	500198.324	102149.158
F56	1200	Type B	6.973	4.822	2.000	499868.226	101901.033
F57	1350	Type C	7.073	5.874	1.099	499855.463	101944.959
F58	1350	Type C	5.966	4.666	1.200	500110.549	101961.569
F59	1200	Type B	6.481	3.991	2.390	500058.012	101949.052
F60	1200	Type A	6.873	3.679	3.095	500033.564	101943.879
F61	1200	Type B	6.233	4.311	1.822	500139.002	101971.099
F62	1200	Type B	6.205	4.197	1.908	500141.349	101976.973
F63	1200	Type B	6.257	4.088	2.069	500146.698	101983.826
F64	1200	Type B	5.886	3.650	2.136	500138.474	102017.817
F65	1200	Type B	7.300	5.415	1.785	499892.176	101838.221
F66	1350	Type B	6.817	4.822	1.895	499936.916	101854.124
F67	1350	Type B	6.332	4.335	1.897	499973.636	101867.092
F68	1200	Type B	6.284	4.008	2.126	499997.882	101876.782
F69	1200	Type B	6.358	3.910	2.298	500011.146	101883.172
F70	1200	Type B	6.237	3.687	2.400	500044.167	101889.119
F71	1200	Type B	6.110	3.384	2.576	500088.147	101899.611
F72	1200	Type A	6.535	3.072	3.313	500133.671	101910.495
F73	1200	Type A	6.640	2.770	3.720	500177.550	101921.769
F74	1200	Type A	6.093	2.573	3.370	500206.118	101929.200
F75	1200	Type A	5.879	2.466	3.263	500208.710	101945.074
F76	1200	Type A	5.895	2.223	3.522	500208.539	101981.645
F77	1200	Type A	6.365	1.964	4.251	500203.561	102020.193
F78	1350	Type C	5.558	4.274	1.184	500277.313	101984.509
F79	1200	Type B	5.890	3.615	2.125	500266.285	102027.765
F80	1200	Type B	5.820	3.530	2.140	500263.742	102040.232
F81	1200	Type A	5.260	2.050	3.060	500257.408	102072.872
F82	1350	Type C	6.097	4.787	1.160	500328.817	102002.837
F83	1350	Type C	5.624	4.375	1.148	500342.741	102023.510
F84	1350	Type C	5.556	4.020	1.387	500351.126	102046.462
F85	1200	Type B	5.784	3.829	1.805	500329.499	102065.276
F86	1200	Type B	5.661	3.681	1.829	500319.907	102085.202
F87	1200	Type A	5.734	1.044	4.540	500232.774	102103.955
F88	1200	Type B	5.762	3.612	2.000	500292.757	102125.978
F89	1200	Type B	5.945	3.077	2.718	500250.781	102117.566
F90	1200	Type B	6.832	4.863	1.869	499918.982	101959.540
F91	1200	Type B	6.705	4.633	1.972	499922.027	101941.420
F92	1350	Type B	6.547	4.510	1.887	499927.608	101933.302
F93	1350	Type C	6.094	4.743	1.250	500297.103	102033.918
F94	1350	Type C	5.926	4.565	1.261	500240.056	102211.863
F95	1350	Type C	5.751	4.169	1.482	500232.920	102242.868
F96	1200	Type A	5.209	1.938	3.121	500238.117	102274.779
F97	1200	Type A	5.065	1.032	3.883	500287.543	102266.460
F98	1350	Type C	5.209	4.056	1.053	500178.886	102213.771
F99	1200	Type B	5.108	3.588	1.420	500170.111	102237.820
F100	1200	Type B	5.297	3.351	1.846	500161.711	102254.540
F101	1200	Type B	5.468	3.077	2.291	500156.434	102275.807
F102	1200	Type B	5.658	2.842	2.716	500171.272	102287.431
F103	1200	Type B	5.742	2.754	2.888	500177.648	102284.536
F104	1350	Type C	6.504	5.154	1.200	500109.824	102094.424
F105	1350	Type C	6.331	4.710	1.471	500114.146	102081.389
F106	1350	Type C	6.191	4.891	1.200	499974.299	101994.301
F107	1350	Type C	6.272	4.729	1.443	499980.766	101983.085
F108	1200	Type B	6.547	4.448	1.998	499985.493	101961.159
F109	1200	Type A	5.364	0.100	5.264	500299.826	102174.077
F110	1200	Type A	5.355	-0.141	5.345	500297.533	102190.537
F111	1200	Type B	5.370	2.766	2.454	500280.874	102077.631
F112	1200	Type A	6.804	2.191	4.463	500043.649	102094.513
F113	1200	Type B	6.176	4.233	1.792	500119.684	102069.993
F114	1200	Type B	6.641	4.666	1.875	499911.181	102002.194



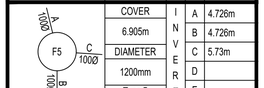
COVER	I	A	5.520m
6.778m	N	B	5.520m
DIAMETER	V	C	
1350mm	E	D	
Type C	R T	E	



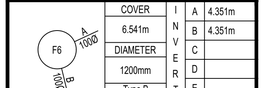
COVER	I	A	5.344m
6.832m	N	B	5.344m
DIAMETER	V	C	5.344m
1350mm	E	D	
Type C	R T	E	

COVER	I	A	5.116m
7.007m	N	B	5.166m
DIAMETER	V	C	
1200mm	E	D	
Type B	R T	E	

COVER	I	A	4.986m
6.999m	N	B	4.986m
DIAMETER	V	C	
1200mm	E	D	
Type B	R T	E	

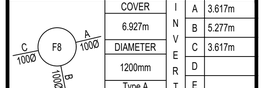


COVER	I	A	4.726m
6.905m	N	B	4.726m
DIAMETER	V	C	5.73m
1200mm	E	D	
Type B	R T	E	

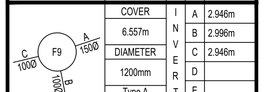


COVER	I	A	4.351m
6.541m	N	B	4.351m
DIAMETER	V	C	
1200mm	E	D	
Type B	R T	E	

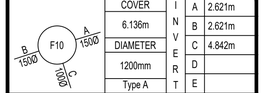
COVER	I	A	4.196m
6.492m	N	B	5.476m
DIAMETER	V	C	4.196m
1200mm	E	D	
Type B	R T	E	



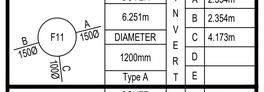
COVER	I	A	3.617m
6.927m	N	B	5.277m
DIAMETER	V	C	3.617m
1200mm	E	D	
Type A	R T	E	



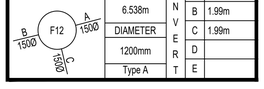
COVER	I	A	2.946m
6.557m	N	B	2.996m
DIAMETER	V	C	2.946m
1200mm	E	D	
Type A	R T	E	



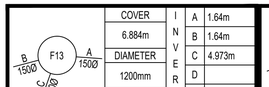
COVER	I	A	2.621m
6.136m	N	B	2.621m
DIAMETER	V	C	4.842m
1200mm	E	D	
Type A	R T	E	



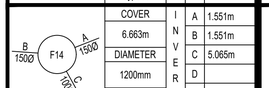
COVER	I	A	2.354m
6.251m	N	B	2.354m
DIAMETER	V	C	4.173m
1200mm	E	D	
Type A	R T	E	



COVER	I	A	1.99m
6.538m	N	B	1.99m
DIAMETER	V	C	1.99m
1200mm	E	D	
Type A	R T	E	

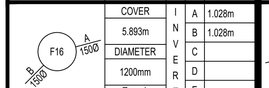


COVER	I	A	1.64m
6.884m	N	B	1.64m
DIAMETER	V	C	4.973m
1200mm	E	D	
Type A	R T	E	



COVER	I	A	1.551m
6.663m	N	B	1.551m
DIAMETER	V	C	5.065m
1200mm	E	D	
Type A	R T	E	

COVER	I	A	1.281m
5.901m	N	B	1.281m
DIAMETER	V	C	
1200mm	E	D	
Type A	R T	E	

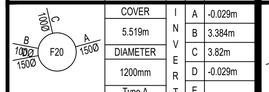


COVER	I	A	1.028m
5.893m	N	B	1.028m
DIAMETER	V	C	
1200mm	E	D	
Type A	R T	E	

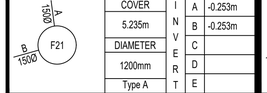
COVER	I	A	0.903m
5.686m	N	B	0.903m
DIAMETER	V	C	
1200mm	E	D	
Type A	R T	E	

COVER	I	A	0.534m
5.949m	N	B	0.534m
DIAMETER	V	C	4.494m
1200mm	E	D	0.534m
Type A	R T	E	

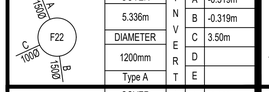
COVER	I	A	0.198m
5.676m	N	B	4.441m
DIAMETER	V	C	0.198m
1200mm	E	D	
Type A	R T	E	



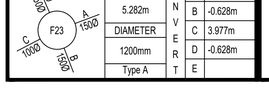
COVER	I	A	-0.029m
5.519m	N	B	3.384m
DIAMETER	V	C	3.82m
1200mm	E	D	-0.029m
Type A	R T	E	



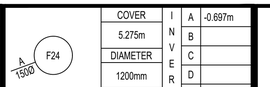
COVER	I	A	-0.253m
5.235m	N	B	-0.253m
DIAMETER	V	C	
1200mm	E	D	
Type A	R T	E	



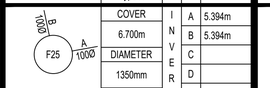
COVER	I	A	-0.319m
5.336m	N	B	-0.319m
DIAMETER	V	C	3.50m
1200mm	E	D	
Type A	R T	E	



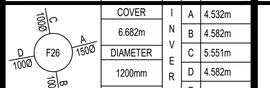
COVER	I	A	-0.628m
5.282m	N	B	-0.628m
DIAMETER	V	C	3.977m
1200mm	E	D	-0.628m
Type A	R T	E	



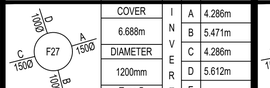
COVER	I	A	-0.697m
5.275m	N	B	
DIAMETER	V	C	
1200mm	E	D	
Type A	R T	E	



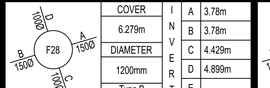
COVER	I	A	5.394m
6.700m	N	B	5.394m
DIAMETER	V	C	
1350mm	E	D	
Type C	R T	E	



COVER	I	A	4.532m
6.682m	N	B	4.582m
DIAMETER	V	C	5.551m
1200mm	E	D	4.582m
Type B	R T	E	

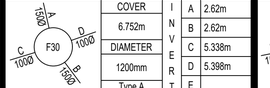


COVER	I	A	4.286m
6.688m	N	B	5.471m
DIAMETER	V	C	4.286m
1200mm	E	D	5.612m
Type B	R T	E	



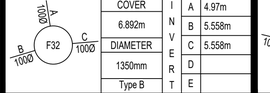
COVER	I	A	3.78m
6.279m	N	B	3.78m
DIAMETER	V	C	4.429m
1200mm	E	D	4.899m
Type B	R T	E	

COVER	I	A	2.829m
6.473m	N	B	2.829m
DIAMETER	V	C	4.83m
1200mm	E	D	
Type A	R T	E	

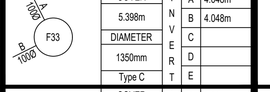


COVER	I	A	2.62m
6.752m	N	B	2.62m
DIAMETER	V	C	5.338m
1200mm	E	D	5.398m
Type A	R T	E	

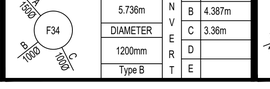
COVER	I	A	2.949m
6.559m	N	B	5.437m
DIAMETER	V	C	2.949m
1200mm	E	D	
Type A	R T	E	



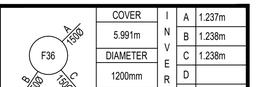
COVER	I	A	4.97m
6.892m	N	B	5.558m
DIAMETER	V	C	5.558m
1350mm	E	D	
Type B	R T	E	



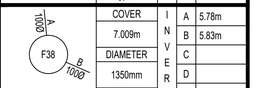
COVER	I	A	4.048m
5.398m	N	B	4.048m
DIAMETER	V	C	
1350mm	E	D	
Type C	R T	E	



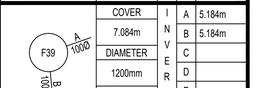
COVER	I	A	3.36m
5.736m	N	B	4.387m
DIAMETER	V	C	3.36m
1200mm	E	D	
Type B	R T	E	



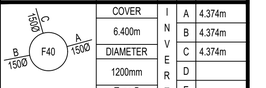
COVER	I	A	1.237m
5.991m	N	B	1.238m
DIAMETER	V	C	1.238m
1200mm	E	D	
Type A	R T	E	



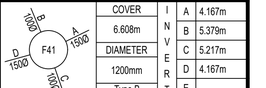
COVER	I	A	5.78m
7.009m	N	B	5.83m
DIAMETER	V	C	
1350mm	E	D	
Type C	R T	E	



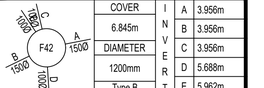
COVER	I	A	5.184m
7.084m	N	B	5.184m
DIAMETER	V	C	
1200mm	E	D	
Type B	R T	E	



COVER	I	A	4.374m
6.400m	N	B	4.374m
DIAMETER	V	C	4.374m
1200mm	E	D	
Type B	R T	E	



COVER	I	A	4.167m
6.608m	N	B	5.379m
DIAMETER	V	C	5.217m
1200mm	E	D	4.167m
Type B	R T	E	



COVER	I	A	3.956m
6.845m	N	B	3.956m
DIAMETER	V	C	3.956m
1200mm	E	D	5.688m
Type B	R T	E	5.962m

COVER	I	A	3.82m
6.997m	N	B	5.283m
DIAMETER	V	C	5.777m
1200mm	E	D	3.82m
Type A	R T	E	

COVER	I	A	3.510m
6.898m	N	B	3.510m
DIAMETER	V	C	5.432m
1200mm	E	D	3.510m
Type A	R T	E	

COVER	I	A	3.354m
6.626m	N	B	3.354m
DIAMETER	V	C	5.765m
1200mm	E	D	
Type A	R T	E	

COVER	I	A	3.126m
6.228m	N	B	3.126m
DIAMETER	V	C	3.176m
1200mm	E	D	
Type B	R T	E	

COVER	I	A	2.774m
5.652m	N	B	2.774m
DIAMETER	V	C	4.160m
1200mm	E	D	
Type B	R T	E	

COVER	I	A	2.546m
5.746m	N	B	2.546m
DIAMETER	V	C	2.589m
1200mm	E	D	2.589m
Type A	R T	E	

COVER	I	A	2.366m
6.057m	N	B	4.675m
DIAMETER	V	C	2.366m
1200mm	E	D	
Type A	R T	E	

COVER	I	A	1.764m
5.954m	N	B	1.764m
DIAMETER	V	C	1.764m
1200mm	E	D	
Type A	R T	E	

COVER	I	A	1.488m
5.551m	N	B	1.489m
DIAMETER	V	C	
1200mm	E	D	
Type A	R T	E	

COVER	I	A	1.312m
5.359m	N	B	1.355m
DIAMETER	V	C	
1200mm	E	D	
Type A	R T	E	

COVER	I	A	1.243m
5.316m	N	B	1.243m
DIAMETER	V	C	3.708m
1200mm	E	D	1.243m
Type A	R T	E	

COVER	I	A	0.78m
5.550m	N	B	0.78m
DIAMETER	V	C	3.686m
1200mm	E	D	
Type A	R T	E	

COVER	I	A	0.663m
5.771m	N	B	4.123m
DIAMETER	V	C	0.663m
1200mm	E	D	
Type A	R T	E	

COVER	I	A	4.822m
6.973m	N	B	4.873m
DIAMETER	V	C	5.473m
1200mm	E	D	4.873m
Type B	R T	E	

COVER	I	A	5.874m
7.073m	N	B	5.874m
DIAMETER	V	C	
1350mm	E	D	
Type C	R T	E	

COVER	I	A	4.666m
5.966m	N	B	4.666m
DIAMETER	V	C	
1350mm	E	D	
Type C	R T	E	

COVER	I	A	3.991m
6.481m	N	B	3.991m
DIAMETER	V	C	3.991m
1200mm	E	D	
Type B	R T	E	

COVER	I	A	3.679m
6.873m	N	B	3.679m
DIAMETER	V	C	5.641m
1200mm	E	D	
Type A	R T	E	

COVER	I	A	4.311m
6.233m	N	B	4.311m
DIAMETER	V	C	
1200mm	E	D	
Type B	R T	E	

COVER	I	A	4.197m
6.205m	N	B	4.197m
DIAMETER	V	C	
1200mm	E	D	
Type B	R T	E	

COVER	I	A	4.088m
6.257m	N	B	4.088m
DIAMETER	V	C	4.088m
1200mm	E	D	
Type B	R T	E	

COVER	I	A	3.65m
5.886m	N	B	3.65m
DIAMETER	V	C	
1200mm	E	D	
Type B	R T	E	

COVER	I	A	5.415m
7.300m	N	B	6.597m
DIAMETER	V	C	
1200mm	E	D	
Type B	R T	E	

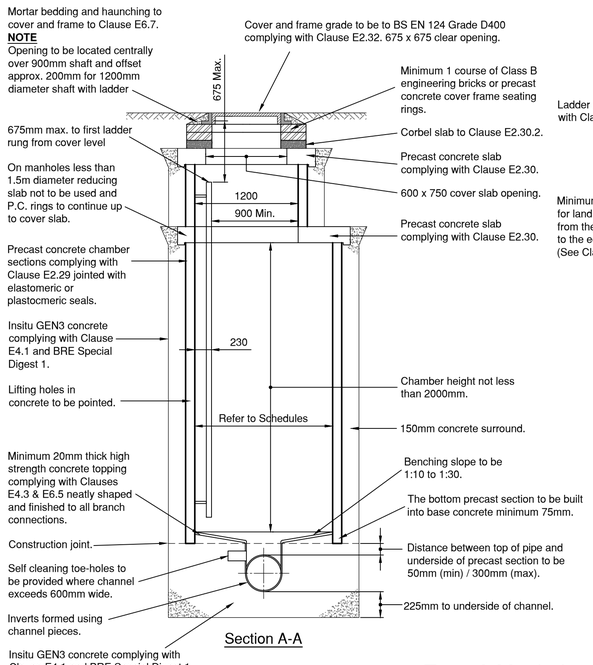
COVER	I	A	4.822m
6.817m	N	B	4.822m
DIAMETER	V	C	4.822m
1350mm	E	D	
Type B	R T	E	

COVER	I	A	4.335m
6.332m	N	B	5

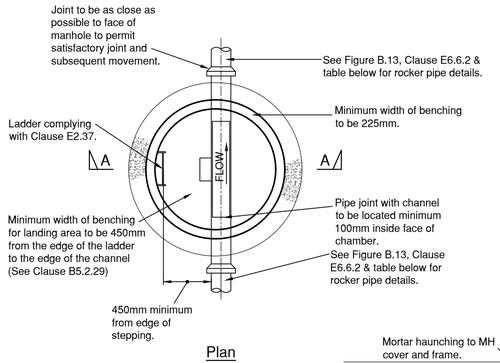
PHASE: 0 (PRIVATE)							
MH No.	MANHOLE DIAMETER (mm)	COVER LEVEL	INVERT LEVEL	DEPTH TO SOFFIT (m)	EASTING (m)	NORTHING (m)
F34.1	450	6.428	5.099	1.179	500195.157	101930.450
S1.1	450	7.366	6.527	0.739	499874.327	101850.407
S1.2	450	7.409	6.631	0.678	499881.835	101854.620
S1.3	450	7.368	6.590	0.678	499876.051	101845.401
S10.1	450	6.173	4.910	1.113	500100.886	101952.689
S10.2	450	6.105	5.146	0.859	500104.432	101938.221
S10.3	450	6.070	5.347	0.623	500120.029	101941.847
S10.4	450	6.130	5.251	0.729	500090.565	101950.091
S10.5	450	6.221	5.294	0.777	500086.450	101949.115
S10.6	450	6.384	5.441	0.794	500072.220	101945.473
S10.7	450	6.496	5.696	0.700	500079.944	101934.549
S10.8	450	6.537	5.783	0.654	500074.334	101932.788
S10.9	450	6.641	5.541	0.950	500062.440	101943.131
S10.11	450	6.865	5.692	1.024	500047.807	101939.587
S10.12	450	6.643	5.917	0.627	500051.913	101922.860
S10.13	450	6.947	6.103	0.744	500037.874	101937.140
S101.1	450	7.053	5.743	1.160	499880.543	102053.678
S101.2	450	7.046	5.898	0.998	499892.772	102055.826
S101.3	450	6.821	6.107	0.564	499896.126	102039.432
S102.1	450	6.790	5.419	1.221	499932.807	102067.333
S102.2	450	6.718	5.543	1.074	499929.774	102062.238
S102.3	450	6.719	5.703	0.916	499932.813	102049.851
S102.4	450	6.808	5.873	0.785	499919.057	102063.917
S102.5	450	6.858	6.161	0.597	499914.683	102062.619
S103.1	450	6.243	4.993	1.100	499982.461	102082.548
S103.2	450	6.219	5.120	0.999	499983.424	102078.011
S103.3	450	6.349	5.249	1.000	499973.503	102078.131
S103.4	450	6.351	5.539	0.713	499976.536	102063.840
S103.5	450	6.256	5.145	0.961	499998.544	102087.222
S103.6	450	6.358	5.389	0.869	500002.758	102072.290
S103.7	450	6.323	5.427	0.797	500012.787	102060.745
S103.8	450	6.393	5.624	0.669	500016.968	102075.484
S107.1	450	6.841	5.515	1.176	499861.089	102005.780
S107.2	450	6.677	5.700	0.827	499871.721	102007.913
S107.3	450	6.797	5.959	0.688	499869.539	102019.444
S107.4	450	6.784	6.058	0.626	499870.503	102023.260
S108.1	450	6.915	5.344	1.421	499912.011	102013.287
S108.2	450	6.718	5.430	1.168	499907.579	102012.992
S108.3	450	6.870	5.975	0.745	499917.793	102016.364
S108.4	450	6.831	6.020	0.711	499921.309	102017.395
S108.5	450	6.882	6.220	0.562	499917.237	102032.798
S108.6	450	6.868	5.812	0.756	499868.844	102011.591
S108.7	450	6.663	5.971	0.592	499896.187	102024.005
S109.1	450	6.757	5.524	1.083	499960.132	102026.679
S109.2	450	6.707	5.601	0.956	499954.74	102025.185
S109.3	450	6.694	5.759	0.835	499950.825	102037.352
S109.4	450	6.580	5.875	0.605	499959.827	102039.799
S109.5	450	6.729	5.879	0.750	499951.374	102026.133
S109.6	450	6.803	6.166	0.543	499946.996	102040.872
S110.1	450	6.518	5.066	1.302	500010.486	102043.074
S110.2	450	6.424	5.156	1.118	500001.918	102040.976
S110.3	450	6.366	5.205	1.011	499997.216	102039.557
S110.4	450	6.359	5.462	0.797	499981.416	102034.558
S110.5	450	6.445	5.845	0.500	499997.846	102054.311
S110.6	450	6.611	5.687	0.824	500027.589	102051.713
S110.7	450	6.601	5.869	0.632	500024.439	102062.596
S110.8	450	6.422	5.014	1.258	500013.391	102032.640
S110.9	450	6.306	5.105	1.051	500003.721	102029.856
S110.10	450	6.286	5.284	0.902	499990.014	102025.800
S110.11	450	6.161	5.151	0.849	499993.866	102012.174
S110.12	450	6.262	5.527	0.584	500018.031	102018.760
S111.1	450	6.490	4.958	1.382	500068.809	102051.860
S111.2	450	6.575	5.316	1.109	500064.373	102062.544
S111.3	450	6.617	5.644	0.823	500079.676	102069.220
S112.1	450	6.847	5.619	1.078	500058.287	102076.203
S112.2	450	6.785	5.691	0.944	500056.181	102081.057
S112.3	450	6.831	5.895	0.786	500071.146	102087.489
S112.4	450	6.837	5.695	0.992	500046.110	102072.001
S112.5	450	6.783	5.984	0.649	500050.834	102057.973
S112.6	450	6.682	5.875	0.657	500031.360	102067.618
S113.1	450	6.507	5.297	1.059	499920.176	101977.475
S113.2	450	6.784	5.684	1.000	499919.907	101981.326
S113.3	450	6.831	5.631	1.100	499922.097	101969.987
S113.4	450	6.913	5.727	1.039	499906.644	101975.746
S113.5	450	6.863	5.764	0.949	499906.289	101978.064
S113.6	450	6.869	6.235	0.484	499889.747	101976.044
S114.1	450	6.656	5.144	1.412	499889.662	101958.793
S114.2	450	6.526	5.270	1.156	499888.443	101951.688
S114.3	450	6.443	5.149	1.194	499880.433	101960.702
S114.4	450	6.362	5.210	1.052	499975.665	101961.802
S115.1	450	6.145	5.164	0.831	499971.984	101977.826
S115.2	450	6.143	5.265	0.728	499958.229	101971.692
S115.3	450	6.390	5.170	1.070	499984.554	101981.787
S115.4	450	6.381	5.391	0.890	499986.933	101977.421
S115.5	450	6.380	5.626	0.654	500000.261	101982.017
S115.6	450	6.256	5.316	0.789	499982.398	101989.766
S115.7	450	6.256	5.578	0.579	499998.281	101995.537
S116.1	450	6.292	5.299	0.902	499972.869	102005.965
S116.2	450	6.340	5.638	0.602	499986.509	102010.341
S116.3	450	6.446	5.731	0.615	499986.422	102030.129
S116.4	450	6.488	5.859	0.529	499956.728	102014.548
S117.1	450	6.384	5.384	0.850	500062.257	102035.186
S117.2	450	6.449	5.786	0.560	500048.455	102030.129
S117.3	450	6.552	5.776	0.676	500057.174	102045.108
S121.1	450	6.371	5.362	0.909	499958.897	102074.464
S121.2	450	6.471	5.705	0.666	499961.934	102060.262
S122.1	450	6.513	5.511	0.902	499944.482	102069.448
S122.2	450	6.482	5.829	0.553	499947.841	102052.797
S125.1	450	6.977	5.227	1.600	500097.126	102111.385
S125.2	450	6.869	5.519	1.200	500080.236	102104.587
S126.1	450	6.466	4.301	1.015	500164.686	102102.825
S128.2	450	6.535	4.735	1.701	500154.765	102098.246
S128.3	450	6.518	5.112	0.406	500151.468	102098.254
S128.4	450	6.491	4.562	0.830	500170.908	102087.179
S128.5	450	6.516	4.683	0.733	500162.104	102083.219
S128.6	450	6.497	4.720	0.677	500159.129	102082.857
S130.1	450	5.711	4.592	0.969	500169.259	102180.359
S130.2	450	5.687	4.650	0.937	500190.801	102179.100
S130.3	450	5.625	4.693	0.832	500187.991	102188.360
S130.4	450	5.597	4.822	0.675	500197.914	102191.126
S130.5	450	5.614	4.948	0.566	500200.714	102190.906
S131.1	450	5.335	4.232	0.953	500181.530	102213.355
S131.2	450	5.346	4.526	0.720	500185.032	102209.939
S131.3	450	5.248	4.695	0.453	500197.882	102213.963
S131.4	450	5.491	4.562	0.689	500202.588	102199.622
S131.5	450	5.195	4.431	0.664	500192.770	102217.226
S131.6	450	5.163	4.456	0.607	500192.960	102219.146
S132.1	450	5.115	4.145	0.870	500177.809	102232.818
S132.3	450	5.160	4.425	0.635	500194.251	102229.902
S133.1	450	4.367	4.261	1.006	500164.312	102253.220
S133.2	450	5.257	4.557	0.600	500168.342	102257.915
S133.3	450	5.222	4.405	0.717	500170.607	102243.563
S133.4	450	5.231	4.542	0.589	500180.942	102247.039
S133.5	450	5.232	4.562	0.571	500181.507	102248.450
S135.1	450	5.701	4.462	1.139	500166.415	102280.636
S135.2	450	5.653	4.496	1.057	500168.410	102278.849
S135.3	450	5.680	4.854	0.726	500176.912	102271.280
S136.1	450	5.821	4.226	1.445	500179.089	102282.396
S136.2	450	5.717	4.422	1.145	500194.531	102279.873
S136.3	450	5.654	4.813	0.641	500196.611	102267.714
S136.4	450	5.584	4.495	0.938	500193.808	102274.055
S136.5	450	5.622	4.647	0.875	500196.226	102266.264
S141.1	450	6.006	4.682	1.173	500237.871	102191.230
S141.2	450	5.987	4.734	0.953	500240.222	102180.320
S141.3	450	5.993	4.989	0.854	500224.975	102177.047
S141.4	450	5.873	5.236	0.537	500221.367	102192.369
S141.5	450	5.580	4.555	0.875	500254.245	102195.043
S141.6	450	5.676	4.753	0.823	500257.128	102183.564
S141.7	450	5.654	4.758	0.746	500254.274	102199.004
S141.8	450	5.745	4.855	0.791	500260.763	102217.525
S141.9	450	5.721	4.981	0.640	500263.530	102207.795
S142.1	450	5.923	4.741	1.032	500231.183	102232.398
S142.2	450	5.935	5.301	0.535	500213.862	102227.968
S142.3	450	5.985	4.981	0.855	500236.189	102213.873
S142.4	450	5.975	5.131	0.744	500224.493	102211.026
S142.5	450	5.972	5.163	0.709	500222.634	102209.273
S142.6	450	5.751	4.123	1.478	500239.766	102237.554
S142.7	450	5.747	4.616	1.031	500244.633	102241.044
S142.8	450	5.803	4.830	0.873	500242.701	102229.942
S142.9	450	5.779	5.010	0.669	500256.700	102233.460
S143.1	450	5.722	4.533	1.089	500222.193	102247.370
S145.1	450	5.015	4.034	0.831	500263.583	102268.316
S145.2	450	5.021	4.232	0.688	500269.860	102266.542
S145.3	450	5.029	4.079	0.800	500260.060	102267.774
S145.4	450	5.038	4.202	0.736	500254.227	102268.082
S145.5	450	5.222	4.422	0.700	500242.955	102268.732
S147.1	450	5.566	4.184	1.232	500305.793	102209.863
S147.2	450	5.456	4.272	1.034	500309.069	102199.398
S147.3	450	5.375	4.355	0.870	500300.690	102193.273
S147.4	450	5.357	4.441	0.766	500296.428	102192.040
S147.5	450	5.302	4.679	0.523	500292.207	102204.874
S147.6	450	5.334	4.553	0.680	500291.764	102191.048

PHASE: 0 (PRIVATE)							
MH No.	MANHOLE DIAMETER (mm)	COVER LEVEL	INVERT LEVEL	DEPTH TO SOFFIT (m)	EASTING (m)	NORTHING (m)
S147.7	450	5.440	4.723	0.617	500288.935	102204.335
S147.8	450	5.455	4.721	0.635	500278.951	102188.139
S148.1	450	5.270	3.995	1.125	500288.098	102258.744
S148.2	450	5.274	4.065	1.060	500299.245	102252.108
S148.3	450	5.226	4.374	0.752	500275.807	102247.023
S148.4	450	5.314	4.100	1.064	500291.321	102248.748
S148.5	450	5.187	4.587	0.500	500276.991	102243.663
S148.6	450	5.454	4.344	1.060	500296.599	102235.061
S148.7	450	5.280	4.580	0.600	500282.525	102230.314
S148.8	450	5.569	4.469	1.000	500300.493	102221.886
S150.1	450	5.428	4.140	1.138	500222.002	102275.288
S150.2	450	5.532	4.068	0.874	500217.789	102276.656
S150.3	450	5.447	4.711	0.635	500209.840	102264.559
S150.4	450	5.461	4.743	0.618	500210.362	102262.097
S150.5	450	5.403	4.218	1.085	500224.133	102274.578
S150.6	450	5.343	4.605	0.638	500233.625	102271.489
S151.1	450	5.488	4.321	1.017	500244.813	102091.922
S151.2	450	5.357	4.452	0.755	500225.126	102093.791
S151.3	450	5.417	4.689	0.598	500272.211	102096.951
S152.1	450	5.531	4.650	0.731	500208.161	102135.750
S152.2	450	5.598	4.746	0.752	500213.146	102129.874
S152.3	450	5.531	4.756	0.675	500207.155	102139.826
S153.1	450	5.671	5.093	1.078	500159.496	102006.558
S153.2	450	6.222	5.446	0.676	500165.525	102010.362
S154.1	450	6.192	5.392	0.700	500160.610	101998.697
S154.2	450	6.263	5.549	0.644	500172.795	102000.161
S155.1	450	6.352	5.122	1.080	500150.768	101969.554
S155.2	450	6.339	5.220	0.969	500154.798	101978.429
S155.3	450	6.303	5.430	0.723	500175.528	101975.014
S155.4	450	6.283	5.633	0.500	500178.317	101991.043
S156.1	450	6.316	4.323	0.893	500312.756	102160.281
S156.2	450	5.504	4.506	0.898	500327.045	102163.388
S156.3	450	5.444	4.685	0.659	500330.314	102149.411
S156.4	450	5.451	4.528	1.495	500120.557	101912.302
S161.2	450	6.599	5.000	1.449	500135.136	101913.676
S161.3	450	6.370	5.487	0.733	500130.894	101928.934
S161.4	450	6.410	5.218	1.040	500116.917	101909.166
S161.5	450	6.211	5.377	0.684	500114.843	101924.436
S165.1	450	6.568	5.379	1.039	499889.273	102000.139
S165.2	450	6.476	5.817	0.559	499891.385	101987.030
S165.3	450	6.588	5.423	1.015	499891.598	101999.283
S165.4	450	6.622	5.623	0.849	499886.400	101983.536
S165.5	450	6.722	5.562	1.010	499869.490	101996.649
S165.6	450	6.576	5.547	0.928	499902.092	102001.944
S167.1	450	6.665	5.316	1.199	499842.707	102010.882
S167.2	450	6.778	5.397	1.281	499934.753	102008.711
S167.3	450	6.555	5.552	0.853	499938.719	101993.760
S168.1	450	5.703	4.409	1.194	500317.519	102091.100
S168.2	450	5.746	4.454	0.992	500298.139	102087.129
S168.3	450	6.649	4.783	0.766	500296.332	102097.273
S169.1	450	5.880	4.762	1.018	500298.564	102071.682
S169.2	450	5.841	4.947	0.744	500301.442	102057.133
S169.3	450	5.743	4.553	1.090	500296.621	102086.457
S169.4	450	5.787	4.721	0.711	500293.524	102103.096
S170.1	450	6.867	5.309	1.409	500039.584	102094.987
S170.2	450	6.917	5.596	1.171	500043.926	102078.590
S170.3	450	6.749	5.817	0.781	500027.670	102073.626
S170.4	450	6.716	5.656	0.960	500049.153	102099.854
S170.5	450	6.793	5.786	0.857	500053.283	102088.464
S170.6	450	6.788	6.144	0.545	500068.159	102093.469
S171.1	450	6.223	5.073	1.000	500116.701	102058.790
S171.2	450	6.249	5.322	0.777	500100.394	102051.159
S171.3	450	6.213	5.073	0.900	500127.851	102066.851
S171.4	450	6.023	5.267	0.606	500145.800	102074.406
S172.1	450	6.221	4.964	1.107	500098.855	101904.875
S172.2	450	6.125	5.405	0.570	500094.801	101921.219
S172.3	450	6.175	5.178	0.847	500073.101	101898.720
S172.4	450	6.325	5.344	0.831	500068.730	101914.894
S2.2	450	7.148	6.128	0.920	499874.463	101875.062
S2.3	450	7.199	6.249	0.850	499876.766	101867.524
S2.4	450	7.263	6.313	0.850	499875.770	101865.672
S2.5	450	7.033	6.059	0.874	499861.363	101881.758
S2.6	450	7.217	6.229	0.888	499870.258	101882.242
S2.7	450	7.249	6.249	1.249	500333.765	102181.551
S2.2	450	5.421	4.220	1.101	500325.723	102170.242
S22.3	450	5.335	4.300	0.935	500319.479	102168.930
S22.4	450	5.302	4.500	0.702	500317.731	102169.989
S27.1	450	7.303	6.602	0.701	499850.240	101850.240
S27.2	450	7.277	6.317	0.860	499902.279	101851.373
S27.3	450	7.319	6.461	0.757	499899.333	101862.109
S27.4	450	7.144	5.819	1.175	499915.029	101854.231
S27.5	450	7.109	6.434	0.493	499910.231	101868.733
S27.6	450	6.965	6.001	0.814	499928.903	101858.712
S27.7	450	6.896	6.195	0.601	499924.024	101873.426
S28.1	450	6.420	5.370	0.901	499873.818	101871.413
S28.2	450	6.324	5.529	0.645	499869.141	101883.377
S28.3	450	6.638	5.711	0.777	499895.957	101865.432
S28.4	450	6.485	5.893	0.492	499952.630	101877.994
S28.5	450	6.756	5.870	0.825	499944.921	101861.286
S29.1	450	6.340	5.179	1.012	499999.279	101880.143
S29.2	450	6.309	5.222	0.938	500003.048	101882.215
S29.3	450	6.541	5.380	1.011	499997.835	101897.155
S30.1	450	6.449	5.599	0.800	500009.714	101914.921
S30.2	450	6.986	6.254	0.633	500018.956	101918.896
S30.3	450	6.469	5.492	0.827	500023.236	101888.385
S30.4	450	6.291	5.641	0.500	500002.865	101902.004
S33.2	450	6.309	5.370	0.839	500037.081	101890.748
S33.3	450	6.304	5.547	0.656	500045.231	101907.948
S34.2	450	6.467	5.173	1.144	500188.165	101928.009
S34.3	450	6.261	5.346	0.765	500181.030	101943.740
S35.1	450	6.777	4.947	0.730	500203.861	101962.848
S35.2	450	5.862	5.154	0.608	500203.891	101951.844
S36.1	450	5.955	4.600	1.205	500204.642	101983.052
S36.2	450	5.891	4.956	0.835	500204.828	101977.362
S36.3	450	5.846	5.092	0.654	500193.987	101976.662
S36.4	450	5.970	5.146	0.723	500203.048	101985.165
S36.5	450	6.273	5.454	0.719	500187.470	101984.366
S37.1	450	6.383	5.325	0.958	500201.228	102017.305
S37.2	450	6.285	5.440	0.745	500202.792	102008.323
S37.3	450	6.354	5.572	0.682	500192.785	102006.322
S37.4	450	6.354	5.591	0.663	500191.300	102008.803
S38.1	450	7.107	5.607	1.400	499859.983	101946.875
S38.2	450	7.093	6.093	0.900	499869.692	101951.620
S38.3	450	6.916	6.048	0.767	499865.822	101933.678
S38.4	450	6.951	6.195	0.656	499877.002	101937.288
S38.5	450	6.843	5.430	1.313	499872.524	101911.190
S38.6	450	6.797	5.797	0.900	499868.613	101927.216
S39.1	450	6.905	5.433	1.372	499913.224	101954.178
S39.2	450	6.747	5.550	1.097	499915.996	101942.820
S4.1	450	6.536	5.361	1.075	499910.153	101918.822
S4.2	450	6.637	5.537	1.000	499896.396	101915.848
S4.3	450	7.091	6.091	0.810	499891.981	101955.557
S4.4	450	7.053	6.304	0.649	499884.801	101881.004
S4.5	450	6.812	5.712	1.000	499901.589	101886.564
S4.6	450	6.631	5.831	0.700	499918.478	101902.413
S4.7	450	6.665	5.376	1.181	499902.417	101905.359
S4.8	450	6.594	5.494	1.000	499922.745	101903.277
S40.1	450	6.506	5.227	1.129	499932.735	101938.130
S40.2	450	6.670	5.320	1.200	499931.404	101945.471
S40.3	450	6.714	5.716	0.848	499946.827	101949.291
S41.1	450	6.708	5.716	0.892	500023.179	101975.515
S41.2	450	6.635	5.998	0.537	500009.779	101985.007
S42.1	450	6.598	5.373	1.076	500039.814	101998.223
S42.2	450	6.520	5.514	0.906	500034.729	101992.935
S42.3	450	6.555	5.705	0.750	500024.073	102003.807
S42.4	450	6.347	5.550	0.696	500045.982	102004.587
S44.1	450	6.756	4.676	0.930	500113.635	102029.383
S44.2	450	6.748	4.791	0.807	500123.406	102032.800
S44.3	450	5.652	4.741	0.761	500108.770	102027.663
S44.4	450	5.757	4.900	0.707	500103.725	102041.240
S45.1	450	6.021	4.860	0.911	500082.053	102017.795
S45.2	450	6.088	4.974	0.964	500077.026	102033.333
S45.3	450	6.102	5.013	0.989	500073.698	102016.036
S45.4	450	6.209	5.209	0.909	500059.681	102010.783
S45.5	450	6.122	5.510	0.512	500053.334	102022.943
S46.1	450	5.663	4.863	0.700	500156.103	102119.666
S46.2	450	6.018	5.339	0.579	500145.089	102128.531
S48.1	450	5.741	4.718	0.922	500228.310	102115.325
S48.2	450	5.669	4.869	0.700	500237.541	102123.086
S49.1	450	5.595	4.612	0.884	500252.867	102102.970
S49.2	450	5.661	4.842	0.719	500251.963	102109.649
S49.3	450	5.473	4.673	0.700	500254.092	102100.249
S49.4	450	5.466	4.766	0.600	500267.554	102100.634
S5.1	450	6.467	5.285	1.082	499947.749	101926.605
S5.2	450	6.386	5.386	0.900	499945.638	101934.383
S5.3	450	6.372	5.400	0.872	499944.563	101934.545
S5.4	450	6.650	5.547	1.003	499965.265	101932.271
S5.5	450	6.610	5.743	0.767	499960.878	101946.513
S5.6	450	6.740	5.627	1.013	499970.748	101936.286
S5.7	450	6.794	6.132	0.562	499965.732	101949.469
S5.8	450	6.447	5.181	1.166	499927.665	101922.485
S5.9	450	6.467	5.367	1.000	499913.214	101919.247

PHASE: 0 (PRIVATE)							
MH No.	MANHOLE DIAMETER (mm)	COVER LEVEL	INVERT LEVEL	DEPTH TO SOFFIT (m)	EASTING (m)	NORTHING (m)
S5.10	450	6.576	5.576	0.900	499909.994	101933.538
S5.11	450	6.577	5.325	1.152	499942.477	101908.489
S5.12	450	6.576	5.476	1.000	499945.062	101896.770
S5.13	450	6.577	5.560	0.917	499944.162	101896.522
S5.14	450	6.668	5.568	1.000	499958.785	101911.026
S5.15	450	6.657	6.001	0.557	499963.369	101896.388
S5.16	450	6.822	5.618	1.104	499969.432	101916.788
S5.17	450	6.850	5.850	0.850	499972.533	101906.606
S5.18	450	6.818	5.889	0.828	499971.986	101904.878
S50.1	450	5.862	4.717	0.995	500288.795	102128.023
S50.2	450	5.843	4.818	0.925	500292.473	102128.767
S50.3	450	5.870	4.997	0.752	500289.717	102142.190
S50.4	450	5.774	4.967	0.707	500304.150	102131.118
S50.5	450	5.922	4.903	0.919	500274.255	102125.091
S50.6	450	5.762	5.072	0.580	500271.529	102138.328
S51.1	450	6.013	4.812	1.101	500253.499	102120.970
S51.2	450	5.857	4.997	0.760	500250.443	102135.459
S54.1	450	5.738	4.668	0.970	500325.749	102122.237
S54.2	450	5.764	4.910	0.755	500312.650	102136.422
S54.3	450	5.748	5.043	0.604	500304.629	102129.316
S56.1	450	5.851	4.907	0.843	500303.914	102160.196
S56.2	450	5.845	5.045	0.699	500301.722	102071.026
S56.3	450	5.881	5.196	0.615	500316.053	102062.201
S57.1	450	5.827	4.895	0.831	500325.795	102035.506
S57.2	450	5.804	5.186	0.558	500330.216	102046.596
S57.3	450	5.700	5.093	0.550	500331.469	102031.413
S58.1	450	5.902	4.584	1.168	500274.702	102023.232
S58.2	450	6.044	4.704	1.191	500286.377	102025.819
S58.3	450	5.747	4.913	0.684	500290.045	102009.766
S59.1	450	5.888	4.549	1.339	500266.561	102037.868
S59.2	450	5.880	5.202	0.577	500268.977	102033.662
S59.3	450	5.841



Section A-A



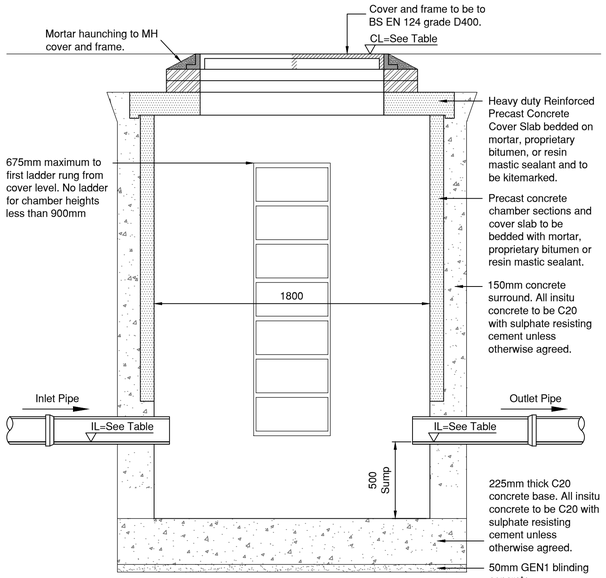
Plan

Rocker Pipe Lengths	
Nominal Dia (mm)	Effective Length (m)
150 - 600	0.6
601-750	1.00
over 750	1.25

Type A Manhole

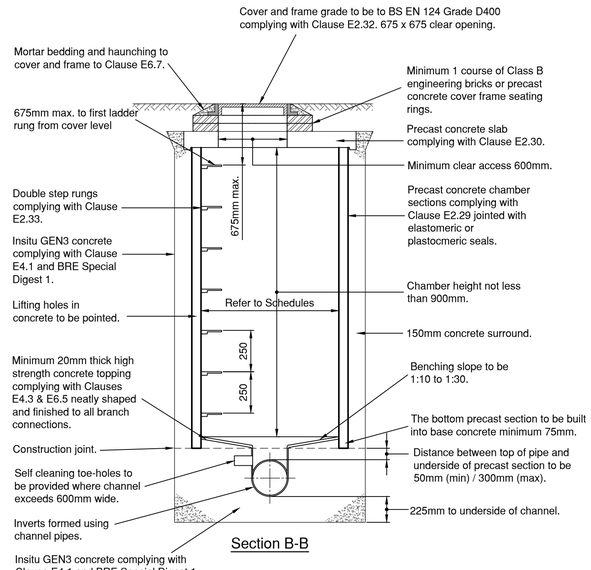
Depth from cover level to soffit of pipe 3.0m to 6.0m

Based on Figure B24 - SSG Appendix C Design and Construction Guidance v2.3



Typical Catchpit Construction Detail

Refer to Drainage Manhole Schedules FOR/E5139/450 to 472 for Catchpit Locations

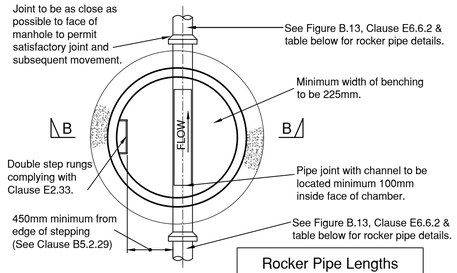


Section B-B

Type B Manhole

Depth from cover level to soffit of pipe 1.5m to 3.0m

Based on Figure B10 - SSG Appendix C Design and Construction Guidance v2.3



Plan

Rocker Pipe Lengths	
Nominal Dia (mm)	Effective Length (m)
150 - 600	0.6
601-750	1.00
over 750	1.25

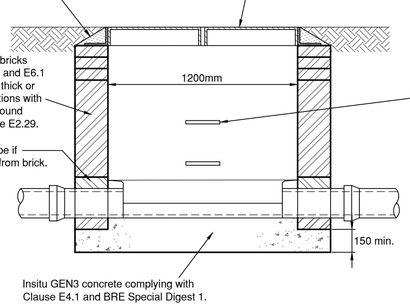
NOTES

1. This drawing should be read in conjunction with other Section 104 Drainage Construction Details, Foul and Surface Water Water Sewer Longitudinal Sections (200 Series), Foul Water Sewer and Surface Water Sewer Manhole Schedules (400 Series) & Domestic Drainage Layouts (450 Series).
2. All dimensions are in millimetres unless stated otherwise.
3. Do not scale from this drawing. Only written dimensions are to be used.
4. 150mm diameter pipework to be extra strength vitrified clay to BS EN 295 or BS 65 on Class S bed & surround.
5. 225mm diameter pipework to be extra strength vitrified clay to BS EN 295 or BS 65 or concrete Class M to BS5911 on Class S bed & surround.
6. 300mm diameter and greater pipework to be concrete Class M to BS5911 on Class B bed.
7. All construction to be in accordance with SSG Appendix C Design and Construction Guidance Version 2.3 dated 11 November and the specific requirements of IWNL.
8. Refer to geotechnical report for sulphate resisting class and ACEC class.
9. ***Outgoing pipes greater than 600mm diameter should be fitted with guard bars, safety chains [to BS EN 818-3] or other safety devices in accordance with the IWNL Water safety policy.***

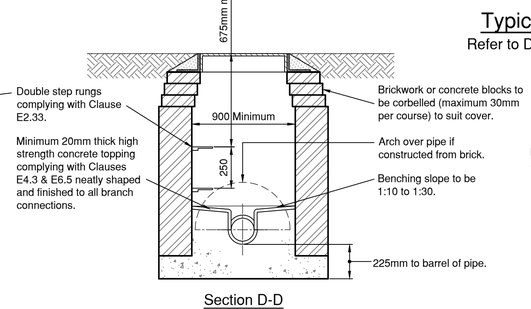
SUBJECT TO ADOPTING AUTHORITY APPROVAL

CDM NOTES

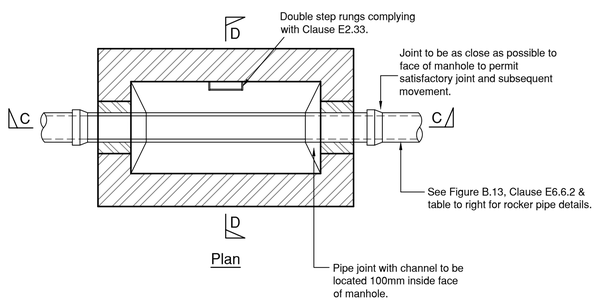
1. EXISTING SERVICES. Depth of existing services must be determined prior to works commencing. The contractor is responsible for establishing underground services in accordance with HSE Guidance note HS (G) 47. Any services which would be within the proposed construction layers must be lowered to below the sub-base.



Section C-C



Section D-D



Plan

NOTES

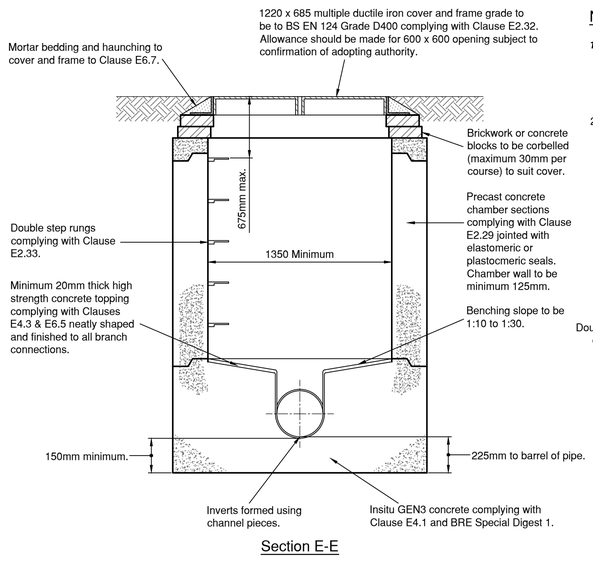
1. ***Internal dimensions of manhole normally 1200mm x 900mm but manhole width should be increased for pipes larger than 450mm diameter to give 225mm benching each side and the brickwork /masonry units corbelled down to suit cover.***
2. The use of precast concrete chamber units to Clause E2.29 with 150mm GEN3 in-situ concrete complying with Clause E4.1 and BRE Special Digest 1 in place of brickwork construction is permitted, subject to Adopting Authority Approval.

Rocker Pipe Lengths	
Nominal Dia (mm)	Effective Length (m)
150 - 600	0.6
601-750	1.00
over 750	1.25

Type C1 Manhole

Depth from cover level to soffit of pipe less than 1.5m

Based on Figure B33 - SSG Appendix C Design and Construction Guidance v2 .3

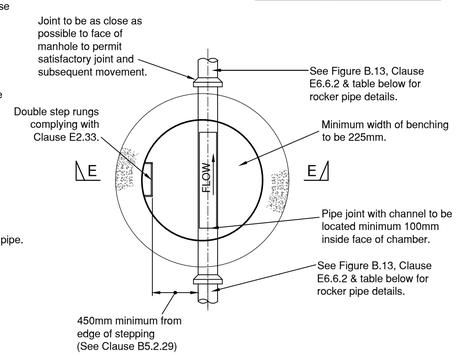


Section E-E

NOTES

1. ***Internal dimensions of manhole normally 1350mm but manhole diameter should be increased for pipes larger than 450mm diameter to give 225mm benching in accordance with Clause B5.2.29.***
2. The use of precast concrete chamber units to Clause E2.29 with 150mm GEN3 in-situ concrete complying with Clause E4.1 and BRE Special Digest 1 in place of brickwork construction is permitted, subject to Adopting Authority Approval.

Rocker Pipe Lengths	
Nominal Dia (mm)	Effective Length (m)
150 - 600	0.6
601-750	1.00
over 750	1.25



Plan

Type C2 Manhole

Depth from cover level to soffit of pipe less than 1.5m

Based on Figure B15 - SSG Appendix C Design and Construction Guidance v2.3

(Maximum pipe size 450mm diameter)

Rev.	Date	Details	By	Chkd	Appd
B	30.10.24	Subject to adopting authority approval.	KG	JC	TRS
A	03.05.24	Updated to Initial Tender Issue.	AD	JC	TRS

Client:- FOREMAN HOMES

Site:- Land West of Church Lane, & Horsemere Green Lane Climping, West Sussex

Drawing Title:- SECTION 104 DRAINAGE CONSTRUCTION DETAILS

Date: April 2024 | Scales: Not to Scale at A1

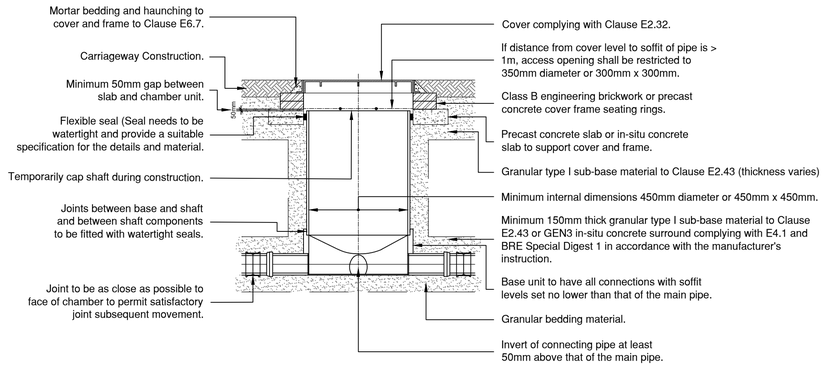
Drawn: MLM | Checked: MW | Approved: TRS

Drawing No. FOR/E5139/410 A

FOR CONSTRUCTION

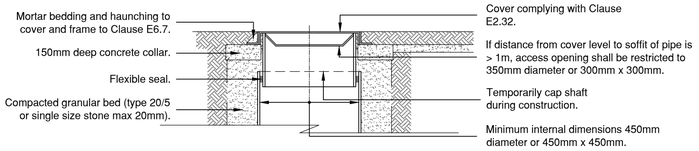
Rogers Cory Partnership
Architectural and Civil Consultants
The Old School Old School Road Hook Hampshire RG27 9NJ
T: 01256 769269 E: mail@rcpconsultants.co.uk W: rcpconsultants.co.uk

NOTE:- WHERE SCHEDULE INDICATES CATCHPIT,
BASE OF CHAMBER TO BE CONSTRUCTED
500mm SUMP IN PLACE OF BENCHED BASE



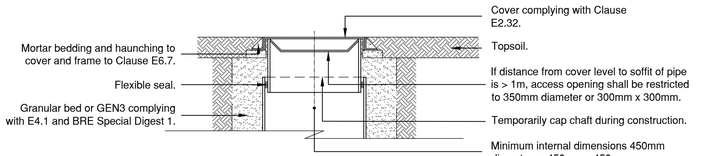
Typical Inspection Chamber Detail - Type D

Based on Figure B18 - SSG Appendix C Design and Constructio Guidance v2.3.
Depth from cover level to soffit of pipe up to 3m
Flexible material construction for use in areas subject to vehicle loading



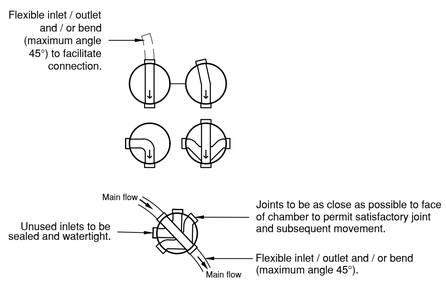
Sited In Domestic Driveways Or Footways

Based on Figure B19 - SSG Appendix C Design and Construction Guidance v2.3



Sited In Domestic Gardens

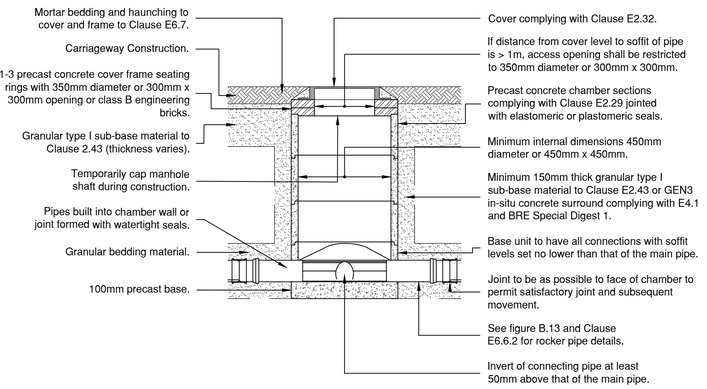
Based on Figure B19 - SSG Appendix C Design and Construction Guidance v2.3



Where chambers are positioned on 90° corners, always use the main channel by fitting a 45° bend on the inlet and outlet.

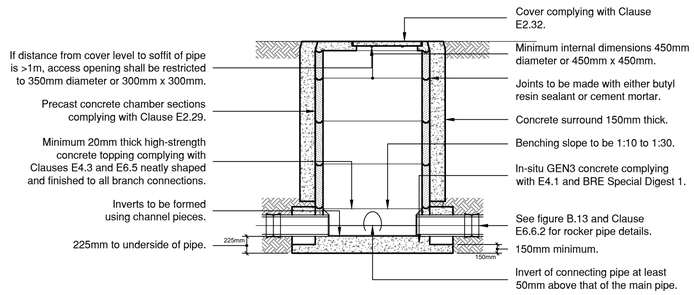
Typical Base Layouts For Type D Chambers

Based on Figure B22 - SSG Appendix C Design and Construction Guidance v2.3



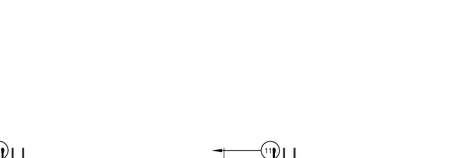
Typical Inspection Chamber Detail - Type D

Based on Figure B20 - SSG Appendix C Design and Construction Guidance v2.3.
Depth from cover level to soffit of pipe up to 3m
Rigid material construction for use in areas subject to vehicle loading

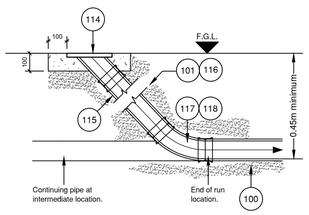


Typical Inspection Chamber Detail - Type D

Based on Figure B21 - SSG Appendix C Design and Construction Guidance v2.3.
Depth from cover level to soffit of pipe up to 3m
Rigid material construction for use in areas subject to vehicle loading or landscaped areas

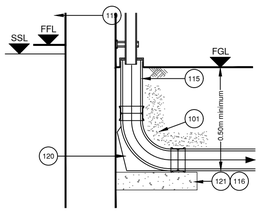


100	Granular bedding material	121	100mm bed of selected as dug or granular material; if ground conditions unstable (Site Control to confirm) use 100mm bed of GEN 4 Designated Mix insitu concrete.
101	Compacted backfill - As-dug or granular bedding material	122	Short radius 90 degree bend.
108	Class B engineering brickwork, concrete blocks 4 courses maximum or 2 courses minimum. or precast concrete cover frame seating rings	123	Square hopper with back inlet and alloy grid or sealing plate.
114	Grade C light duty oval cover, sealing ring and rodding eye in 100mm insitu concrete surround set level with finished ground level. Where located in areas subjected to vehicle loading, cover to be Hepworth square rodding point product code SRPS1/1, concrete surround to be increased to 150mm and laid below surface course.	124	Cement mortar joint/infill.
115	Pipe cut to required length.	125	Minimum 150mm thick GEN 4 concrete surround.
116	Concrete bed and surround will be required where inspection chambers are installed in soft landscaped areas subjected to heavy construction traffic.	126	Rubber plug.
117	45 degree bend.	127	Catchment bucket.
118	Oblique 45 degree junction.	128	Round or square road gully with grating and frame to BS EN 124, Grade B as detailed on drainage layout and schedules, set in 1:3 cement and sand mortar centrally over gully chamber.
119	PVCu rainwater down pipe. (CSS)	129	Round or square gully grid; black cast iron to drives with a bitumous surface and alloy finish elsewhere.
120	Rest bend, for use up to two storey only.	130	Minimum 100mm thick GEN4 concrete surround.

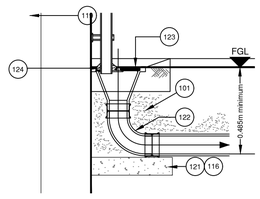


Rodding Point

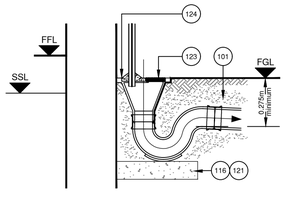
100 or 150mm dia. connections.



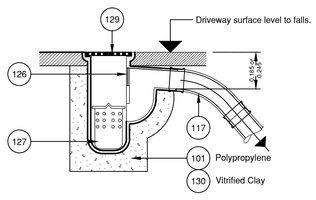
Direct Rainwater Connection



Direct Rainwater Connection through Gully

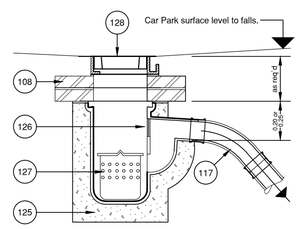


External sink waste into trapped Back inlet gully



Private Drive Gully

Round or square polypropylene or vitrified clay gully.
300mm diameter x 600mm invert depth.
100 or 150mm dia. connection.



Private Car Park Gully

Round or square polypropylene or vitrified clay gully.
300mm diameter x 600mm invert depth.
100 or 150mm dia. connection.

NOTES

1. This drawing should be read in conjunction with other Domestic Drainage Construction Details, Foul & Surface Water Sewer Longitudinal Sections (200 Series), Foul & Surface Water Sewer Manhole Schedules (400 Series) & Domestic Drainage Layouts (450 Series).
2. All dimensions are in millimetres unless stated otherwise.
3. Do not scale from this drawing. Only written dimensions are to be used.
4. All drainage construction to be in accordance with the Building Regulations & BS8301 & Sewerage Sector Guidance Appendix C Design and Construction Guidance v2.3 dated November 2023 and specific requirements of IWNL.
5. Refer to geotechnical report for sulphate resisting class and ACEC class.
6. Insitu concrete generally to be GEN 4 Designated Mix.
7. Insitu reinforced concrete to be RC 35 Designated Mix only when specified.
8. All insitu concrete to be thoroughly compacted.
9. All covers to be stamped "FW" or "SW" as appropriate.
10. For Manufacturer and specification of pipes and fittings refer to drainage layout and schedule.
11. Drainage pipes and fittings to be Hepworth vitrified clay and PVCu or Wavin Osma PVCu or other equal approved. Refer to drainage layout and schedules for details of manufacturer and specification.
12. ***Outgoing pipes greater than 600mm diameter should be fitted with guard bars, safety chains [to BS EN 818-3] or other safety devices in accordance with the IWNL Water safety policy.***

DEPTH OF PIPE COVER

The minimum depth of pipe cover to the crown of gravity pipes without protection should be as follows:

- domestic gardens and pathways without any possibility of vehicular access, 0.35m;
- domestic driveways, parking areas and yards with height restrictions to prevent entry by vehicles with a gross weight in access of 7.5 tonnes, 0.5m;
- domestic driveways, parking areas and narrow streets without footways (e.g. mews developments) with limited access for vehicles with a gross weight in excess of 7.5 tonnes, 0.9m;
- agricultural land and public open space, 0.9m;
- other highways and parking areas with unrestricted access to vehicles with a gross vehicle weight in excess of 7.5 tonnes, 1.2m.

SUBJECT TO ADOPTING AUTHORITY APPROVAL

CDM NOTES

1. EXISTING SERVICES. Depth of existing services must be determined prior to works commencing. The contractor is responsible for establishing underground services in accordance with HSE Guidance note HS (G) 47. Any services which would be within the proposed construction layers must be lowered to below the sub-base.

Rev.	Date	Details	By	Chkd	Appd
A	30.10.24	Subject to adopting authority approval.	KG	JC	TRS

Client:- FOREMAN HOMES

Site:- Land West of Church Lane, & Horsemere Green Lane Climping, West Sussex

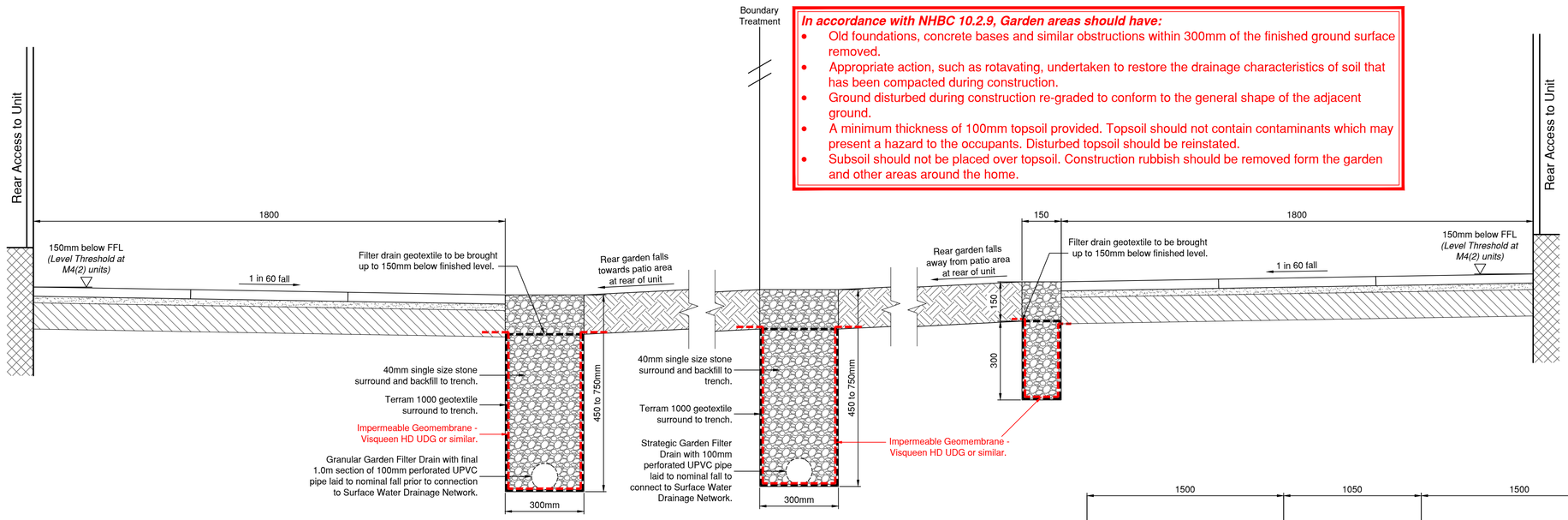
Drawing Title:- DOMESTIC DRAINAGE CONSTRUCTION DETAILS SHEET 1 OF 2

Date: May 2024 | Scales: Not to Scale at A1
Drawn: AD | Checked: MW | Approved: TRS

Drawing No. FOR/E5139/473 A

FOR CONSTRUCTION

Rogers Cory Partnership
Architectural and Civil Consultants
The Old School Old School Road Hook Hampshire RG27 9NJ
T: 01256 769269 E: mail@rcpconsultants.co.uk W: rcpconsultants.co.uk

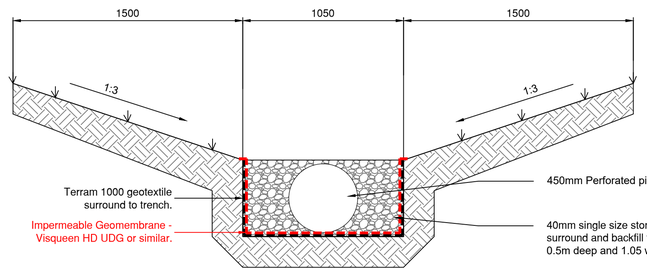


In accordance with NHBC 10.2.9, Garden areas should have:

- Old foundations, concrete bases and similar obstructions within 300mm of the finished ground surface removed.
- Appropriate action, such as rotavating, undertaken to restore the drainage characteristics of soil that has been compacted during construction.
- Ground disturbed during construction re-graded to conform to the general shape of the adjacent ground.
- A minimum thickness of 100mm topsoil provided. Topsoil should not contain contaminants which may present a hazard to the occupants. Disturbed topsoil should be reinstated.
- Subsoil should not be placed over topsoil. Construction rubbish should be removed form the garden and other areas around the home.

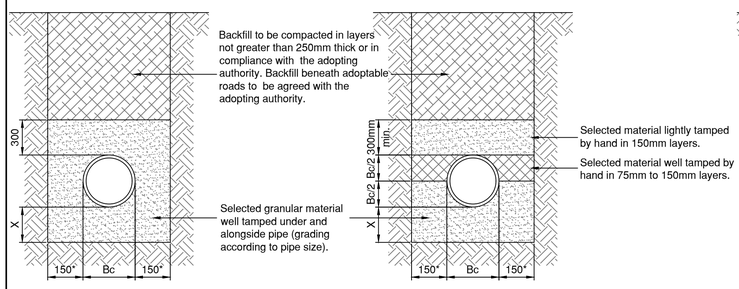
Typical Strategic Cross Section Through Rear Gardens

(This detail has been provided in the unlikely event that the conditions listed above are not met and to provide an additional means for flood mitigation in rear gardens)



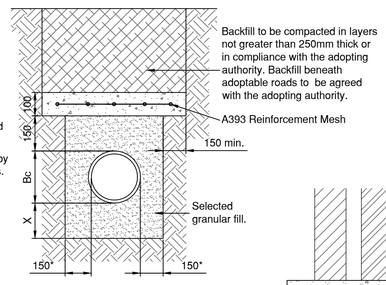
Swale with Filter Drain Typical Detail

(Not to Scale)



Class S Surround

Class B Haunch



Reinforced Concrete Slab

* = 150mm for pipe diameters up to 300mmØ and 200mm for larger pipes.

Bc = outside dia. of pipe X= 100mm min. for pipes 100mmØ or less, 150mm min for larger pipes or 200mm for trenches in rock.

Concrete to be Grade C16/20 placed in one operation. Where pipes with flexible joints are used, concrete protection shall be interrupted over its full cross section at each joint by a shaped compressible filler.

Concrete to sulphate resisting class DS-1 of Table C2 of BRE Special Digest 1:SD1 Part C (2005) ACEC class AC-1s

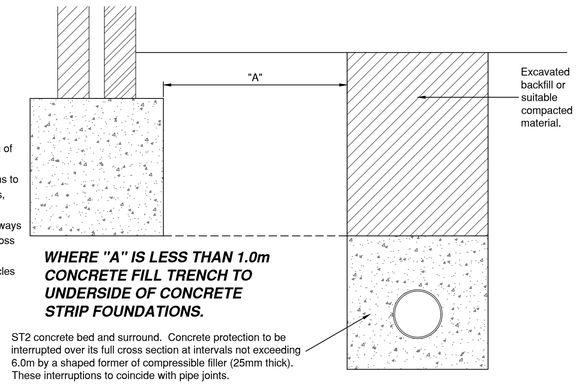
To be provided where the minimum depth of pipe cover to the crown of gravity pipes is less than:
- domestic driveways, parking areas and yards with height restrictions to prevent entry by vehicles with a gross weight in access of 7.5 tonnes, 0.5m;
- domestic driveways, parking areas and narrow streets without footways (e.g., mews developments) with limited access for vehicles with a gross weight in excess of 7.5 tonnes, 0.9m;
- other highways and parking areas with unrestricted access to vehicles with a gross vehicle weight in excess of 7.5 tonnes, 1.2m.

CHAMBER DIAMETERS		CRITICAL PIPE LENGTHS (for entering and leaving manholes) First joint as close as practicable		BEDDING MATERIAL SIZE		
PIPE SIZE mm	CHAMBER DIAMETER mm	NOMINAL DIAMETER mm	EFFECTIVE LENGTH m	NOMINAL DIAMETER mm	SINGLE SIZE mm	GRADED mm
< 375	1200	150 to 600	0.6	100 to 125	10	-
375-450	1350	601 to 750	1.00	150 to 200	10 or 14	14 to 5
500-700	1500	750 and over	1.25	225 to 300	10,14 or 20	14 to 5 or 20 to 5
750-900	1800			375 to 500	14 or 20	14 to 5 or 20 to 5
> 900	Pipe Diameter + 900			>500	14,20 or 40	14 to 5 or 20 to 5 or 40 to 5

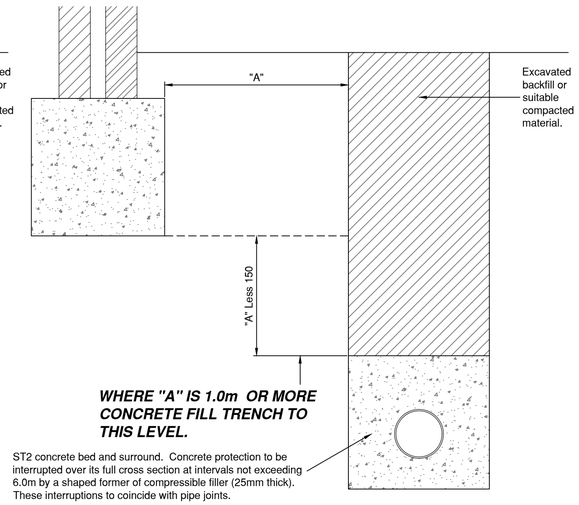
VITRIFIED CLAY PIPES to be to extra strength to BS EN 295 or BS65 size as shown on section drawing. Refer also to Clauses E2.18.1 & E2.18.2.

CONCRETE PIPES to be to BS5911 Class of pipe and size as shown on section drawing. Refer also to Clauses E2.9.2, E2.29, E2.19.1 & E2.19.3.

Pipe Bedding Details



WHERE "A" IS LESS THAN 1.0m CONCRETE FILL TRENCH TO UNDERSIDE OF CONCRETE STRIP FOUNDATIONS.



WHERE "A" IS 1.0m OR MORE CONCRETE FILL TRENCH TO THIS LEVEL.

Pipe Runs Near Buildings

NOTE: THIS DETAIL IS NOT APPLICABLE WHERE BUILDINGS HAVE PILED FOUNDATIONS.

NOTE:- WHERE SCHEDULE INDICATES CATCHPIT, BASE OF CHAMBER TO BE CONSTRUCTED 500mm SUMP IN PLACE OF BENCHED BASE

NOTES

1. This drawing should be read in conjunction with other Domestic Drainage Construction Details, Foul & Surface Water Sewer Longitudinal Sections (200 Series), Foul & Surface Water Sewer Manhole Schedules (400 Series) & Domestic Drainage Layouts (450 Series).
2. All dimensions are in millimetres unless stated otherwise.
3. Do not scale from this drawing. Only written dimensions are to be used.
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5. Refer to geotechnical report for sulphate resisting class and ACEC class.
6. Insitu concrete generally to be GEN 4 Designated Mix.
7. Insitu reinforced concrete to be RC 35 Designated Mix only when specified.
8. All insitu concrete to be thoroughly compacted.
9. All covers to be stamped "FW" or "SW" as appropriate.
10. For Manufacturer and specification of pipes and fittings refer to drainage layout and schedule.
11. Drainage pipes and fittings to be Hepworth vitrified clay and PVCu or Wavin Osma PVCu or other equal approved. Refer to drainage layout and schedules for details of manufacturer and specification.
12. ***Outgoing pipes greater than 600mm diameter should be fitted with guard bars, safety chains [to BS EN 818-3] or other safety devices in accordance with the IWNL Water safety policy.***

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- domestic driveways, parking areas and narrow streets without footways (e.g. mews developments) with limited access for vehicles with a gross weight in excess of 7.5 tonnes, 0.9m;
- agricultural land and public open space, 0.9m;
- other highways and parking areas with unrestricted access to vehicles with a gross vehicle weight in excess of 7.5 tonnes, 1.2m.

SUBJECT TO ADOPTING AUTHORITY APPROVAL

CDM NOTES

1. EXISTING SERVICES. Depth of existing services must be determined prior to works commencing. The contractor is responsible for establishing underground services in accordance with HSE Guidance note HS (G) 47. Any services which would be within the proposed construction layers must be lowered to below the sub-base.

Rev.	Date	Details	By	Chkd	Appd
A	30.10.24	Subject to adopting authority approval.	KG	JC	TRS

Client:- FOREMAN HOMES

Site:- Land West of Church Lane, & Horsemere Green Lane Climping, West Sussex

Drawing Title:- DOMESTIC DRAINAGE CONSTRUCTION DETAILS SHEET 2 OF 2

Date: May 2024 Scales: Not to Scale at A1

Drawn: AD Checked: MW Approved: TRS

Drawing No. FOR/E5139/474 A

FOR CONSTRUCTION

RCP ARCHITECTURE & CIVIL ENGINEERING
Rogers Cory Partnership
Architectural and Civil Consultants
The Old School Old School Road Hook Hampshire RG27 9NJ
T: 01256 769269 E: mail@rcpconsultants.co.uk W: rcpconsultants.co.uk

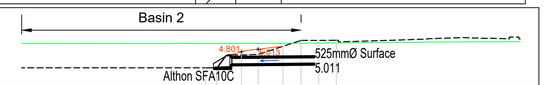
L-L

Datum: 3.000M AOD

EXISTING CHAINAGE (m)	0.000	0.859	3.279	6.998	8.231	9.882		
EXISTING LEVELS (m)	5.551			5.571		5.578		
EARTHWORK LEVELS (m)	3.500	3.500	4.378	5.541				

M-M

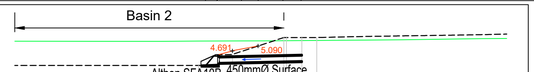
Datum: 2.000M AOD



EXISTING CHAINAGE (m)	0.000	0.908	2.933	4.300	6.319	7.806	9.239	10.682
EXISTING LEVELS (m)	5.484		5.493		5.505		5.529	
EARTHWORK LEVELS (m)	3.500	3.500	4.538	4.595	5.248	5.728		

N-N

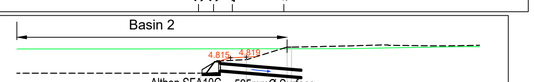
Datum: 0.000M AOD



EXISTING CHAINAGE (m)	0.000	1.225	2.756	6.959	7.174	8.436	9.644	
EXISTING LEVELS (m)	5.491			5.517	5.520		5.544	
EARTHWORK LEVELS (m)	3.500	3.587	4.399	5.781				

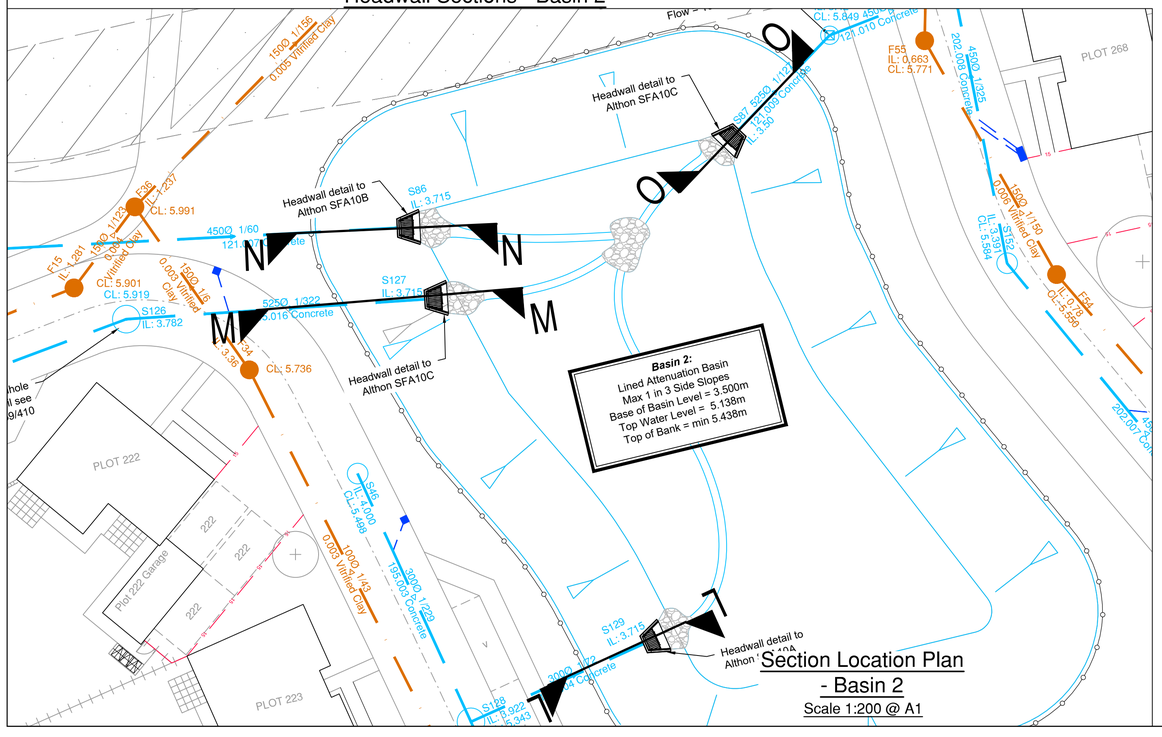
O-O

Datum: 0.000M AOD



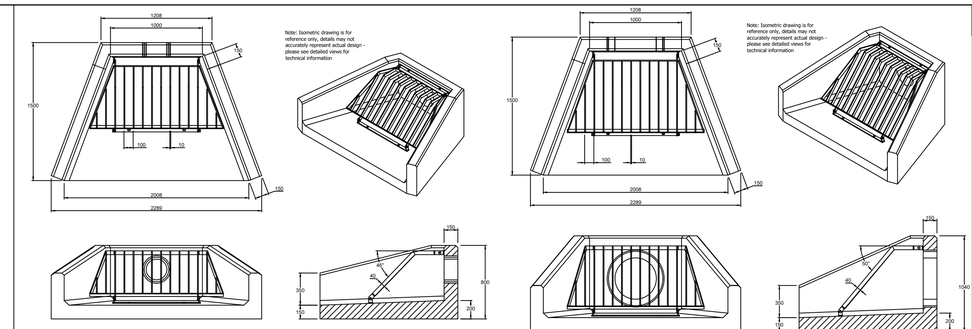
EXISTING CHAINAGE (m)	0.000	3.729	7.045	7.410	
EXISTING LEVELS (m)	5.491		5.500	5.502	
EARTHWORK LEVELS (m)	3.500	4.606	5.626		

Headwall Sections - Basin 2



Section Location Plan - Basin 2

Scale 1:200 @ A1



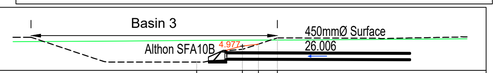
ALTHON HEADWALL SFA10A WITH CRANKED GRATING

ALTHON HEADWALL SFA10B WITH CRANKED GRATING

ALTHON HEADWALL SFA10C WITH CRANKED GRATING

P-P

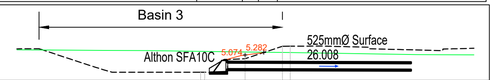
Datum: 3.000M AOD



EXISTING CHAINAGE (m)	0.000	3.725	5.041	6.580				
EXISTING LEVELS (m)	5.439			5.473				
EARTHWORK LEVELS (m)	3.675	4.709	5.142	5.647				

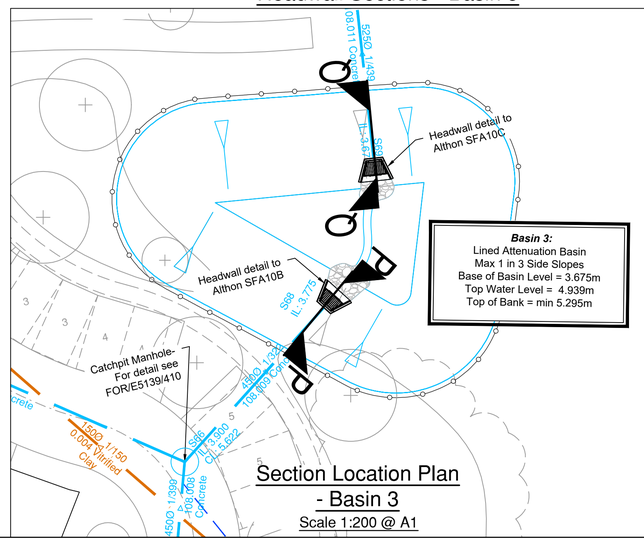
Q-Q

Datum: 3.000M AOD



EXISTING CHAINAGE (m)	0.000	0.335	3.632	6.678	7.307			
EXISTING LEVELS (m)	5.375			5.293		5.275		
EARTHWORK LEVELS (m)	3.675	3.675	4.774		5.789			

Headwall Sections - Basin 3



Section Location Plan - Basin 3

Scale 1:200 @ A1

NOTES

1. All dimensions are in metres unless stated otherwise.
2. Do not scale from this drawing. Only written dimensions are to be used.
3. FW & SW house drainage is to be constructed in accordance with the Building Regulations & BS8301 & SSG Appendix C Design and Construction Guidance Approved Version 2.3 dated 11 November 2023 and the specific requirements of TWUL Water.
4. Drains are to be constructed using flexibly jointed vitrified clay pipes to BS EN 295-1991 "Super Strength" specification (e.g. Hepworth Supersleve or similar) or uPVC drainage pipework to BS4660 & BS2494, bedded & backfilled in accordance with manufacturers instructions.
5. Location of sewers & lateral drains to be in accordance with the SSG Appendix C Design and Construction Guidance Approved Version 2.3 dated 11 November 2023 and the specific requirements of TWUL Water.
6. Manholes & inspection chambers to be constructed of concrete structure to be in accordance with BS8301-Fig. 9.
7. Cover levels indicated on the Drainage Schedules are nominal & may be adjusted to suit finished ground levels as necessary.
8. Generally Inspection chamber covers should be Grade D400 in trafficked areas Grade B125 in parking areas and occasional traffic and A15 in pedestrian only areas.
9. Rainwater downpipes to be connected direct to drain using an appropriate adaptor & removable section of downpipe to permit rodding access.
10. The positions of SVP's, stub stacks, WC outlets, Back inlet gullies etc. & rainwater downpipes are to be accurately located from the house type working drawings.
11. Generally FW drains are to be laid to falls of 1 in 40, SW drains are to be laid to falls of 1 in 60, both in 100mm diameter pipes. SW pipes are to be 150mm diameter when serving 2 dwellings or 2 RWP connections. FW pipes are to be 150mm diameter when serving 10 dwellings or more unless stated otherwise, or where a schedule is provided.
12. 100mmØ FW Drains are to be laid to minimum fall of 1 in 80 and 150mmØ FW Drains are to be laid to minimum fall of 1 in 150.
13. Where drains are laid in shallow gradients, concrete bed & surround to be used in trafficked areas.
14. Where land drain is identified on the Architect's details, connect into nearest SW system.
15. Where catchpits have been shown in rear gardens connecting to land drains, 600mm PPIC catchpit to be used.
16. This drawing should be read in conjunction with the Architect's and Structural Engineer's design drawings and specification.
17. Site layout shown in this drawing is based on Foreman Homes Approved Site Layout Plan, issued to RCP in .dwg format on 06/02/2023
18. Site Access and Section 278 Works as per RCP's dwg No, Section 278 General Arrangement (FOR/E5139-301 to 302).
19. Architectural blocks based on RCP's Substructure Layouts, issued to RCP in .dwg format on 24/03/2023 and 04/03/2024.
20. Topographical Survey as per Encompass Surveys drawing no. ENC/26082/OS/LA1 to 10, dated September 2020.
21. This drawing should be read in conjunction with other Domestic Drainage Layouts, Foul and Surface Water Sewer Longitudinal Sections (FOR/E5139/tbc), Section 104 Adoption Layout (tbc), Surface Water Sewer and Foul Water Sewer Manhole Schedules (FOR/E5139/411 & 412), Section 104 Drainage Construction Details (FOR/E5139/tbc) and Domestic Drainage Construction Details (FOR/E5139/tbc).
22. Where backdrop is less than 1.0m for domestic drainage, backdrop to be accommodated with internal benching.
23. Surface water from private areas is not to be discharged onto adoptable highway and vice versa.
24. All kerbs are to be in accordance with Arun District Council Details. Pipe bedding of all DWC works to accord with ADC drawing 80000301 Rev C.
25. All footpath slabs shall have a crossfall to drain surface water into adjoining gardens.
26. All future private driveways, parking bays, etc to be designed to fall surface water run-off away from S38 works. If not achievable, full width ACO drainage to be installed.
27. ***ANY VARIANCE OR DISCREPANCY MUST BE REPORTED BACK TO RCP ENGINEERING BEFORE WORK BEGINS.***

KEY

Site Boundary

Adoptable Surface Water Sewers (IWNL)

Adoptable Flow Control Manhole (IWNL)

Swale

Cellular Storage Tanks

Proposed Headwall

Tree to be removed

Root Protection Area and TPF
(Tree Protection Plan Based on Arboricultural's drawing number 5646/21/B, revision 03, issued to RCP in .dwg format on 01/03/2024.)

Existing Ground

Proposed Ground

Localised Ground Re-profiling (max gradient 1:3)

SUBJECT TO ADOPTING AUTHORITY APPROVAL WHERE APPLICABLE

All existing ditches and culverts being retained are to be cleaned out to the satisfaction of the ADC drainage engineer

CDM NOTES

1. EXISTING SERVICES. Depth of existing services must be determined prior to works commencing. The contractor is responsible for establishing underground services in accordance with HSE Guidance note HS (G) 47. Any services which would be within the proposed construction layers must be lowered to below the sub-base.

SCALE BAR 1:200 at A1

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Rev.	Date	Details	By	Chkd	Appd
A	30.10.24	Subject to adopting authority approval.	KG	JC	TRS

Client:- FOREMAN HOMES

Site:- Land West of Church Lane & Horsemere Green Lane Climping, West Sussex

Drawing Title:- HEADWALL DETAILS

Sheet 2 of 4

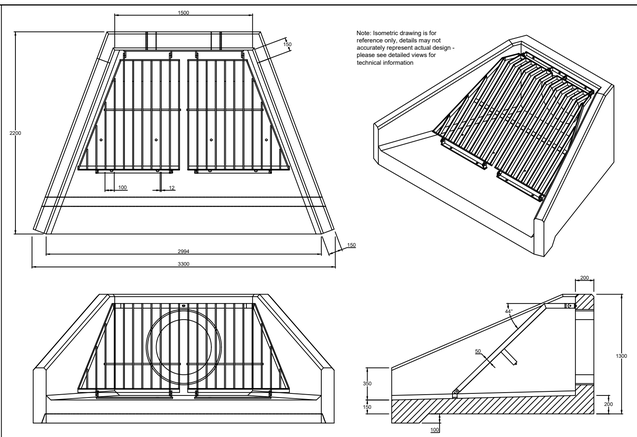
Date: April 2024 | Scales: As shown

Drawn: JC | Checked: TRS | Approved: TRS

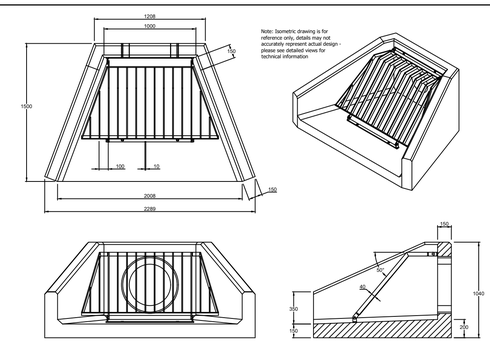
Drawing No. FOR/E5139/483 A

FOR CONSTRUCTION

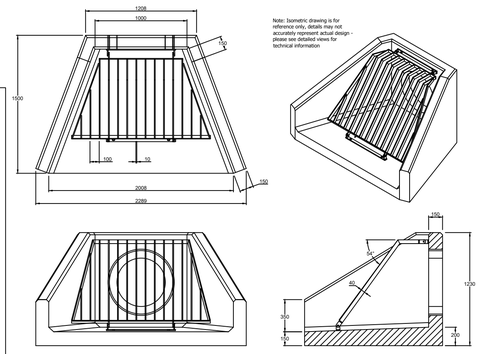
Rogers Cory Partnership
Architectural and Civil Consultants
The Old School Old School Road
Hook Hampshire RG27 9NJ
T: 01256 769269 E: mail@rcpconsultants.co.uk W: rcpconsultants.co.uk



ALTHON HEADWALL SFA15A WITH CRANKED GRATING



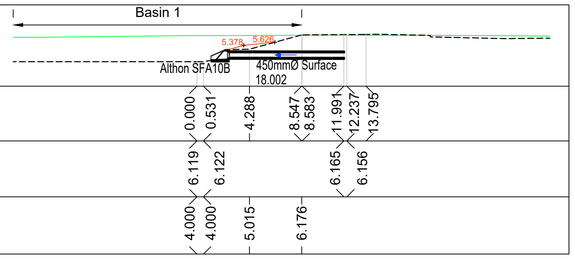
ALTHON HEADWALL SFA10B WITH CRANKED GRATING



ALTHON HEADWALL SFA10C WITH CRANKED GRATING

I-I

Datum: 2.000M AOD



EXISTING CHAINAGE (m)	0.000	0.531	4.288	8.547	8.583	11.991	12.237	13.795
EXISTING LEVELS (m)	6.119	6.122				6.165	6.156	
EARTHWORK LEVELS (m)	4.000	4.000	5.015	6.176				

J-J

Datum: 1.000M AOD

EXISTING CHAINAGE (m)	0.000	1.222	2.466	3.689	4.983	7.539	10.336	10.948	12.662
EXISTING LEVELS (m)	6.108	6.109					6.162	6.175	6.182
EARTHWORK LEVELS (m)	4.000	4.026	5.044	5.178	5.255	5.430	5.984		

K-K

Datum: 3.000M AOD

EXISTING CHAINAGE (m)	0.000	0.819	2.019	3.313	6.869	9.117	12.195
EXISTING LEVELS (m)	5.981			5.952			5.912
EARTHWORK LEVELS (m)	4.000	4.000	4.182	5.192	5.468	6.017	

Headwall Sections - Basin 1

Section Location Plan - Basin 1

Scale 1:200 @ A1

NOTES

1. All dimensions are in metres unless stated otherwise.
2. Do not scale from this drawing. Only written dimensions are to be used.
3. FW & SW house drainage is to be constructed in accordance with the Building Regulations & BS8301 & SSG Appendix C Design and Construction Guidance Approved Version 2.3 dated 11 November 2023 and the specific requirements of TWU, Water.
4. Drains are to be constructed using flexibly jointed vitrified clay pipes to BS EN 295-1991 "Super Strength" specification (e.g. Hepworth Supersleve or similar) or uPVC drainage pipework to BS4660 & BS2494, bedded & backfilled in accordance with manufacturers instructions.
5. Location of sewers & lateral drains to be in accordance with the SSG Appendix C Design and Construction Guidance Approved Version 2.3 dated 11 November 2023 and the specific requirements of TWU, Water.
6. Manholes & inspection chambers to be pre-cast concrete structure to be in accordance with BS8301-Fig. 9.
7. Cover levels indicated on the Drainage Schedules are nominal & may be adjusted to suit finished ground levels as necessary.
8. Generally Inspection chamber covers should be Grade D400 in trafficked areas Grade B125 in parking areas and occasional traffic and A15 in pedestrian only areas.
9. Rainwater downpipes to be connected direct to drain using an appropriate adaptor & removable section of downpipe to permit rodding access.
10. The positions of SVP's, stub stacks, WC outlets, Back inlet gullies etc. & rainwater downpipes are to be accurately located from the house type working drawings.
11. Generally FW drains are to be laid to falls of 1 in 40, SW drains are to be laid to falls of 1 in 60, both in 100mm diameter pipes. SW pipes are to be 150mm diameter when serving 2 dwellings or 2 RWP connections. FW pipes are to be 150mm diameter when serving 10 dwellings or more unless stated otherwise, or where a schedule is provided.
12. 100mmØ FW Drains are to be laid to minimum fall of 1 in 80 and 150mmØ FW Drains are to be laid to minimum fall of 1 in 150.
13. Where drains are laid in trafficked areas the minimum cover to the pipe crown is 600mm in trafficked areas.
14. Where land drain is identified on the Architect's details, connect into nearest SW system.
15. Where catchpits have been shown in rear gardens connecting to land drains, 600mm PPIC catchpit to be used.
16. This drawing should be read in conjunction with the Architect's and Structural Engineer's design drawings and specification.
17. Site layout shown in this drawing is based on Foreman Homes Approved Site Layout Plan, issued to RCP in .dwg format on 06/02/2023
18. Site Access and Section 278 Works as per RCP's.dwg file, Section 278 General Arrangement (FOR-ES139-301 to 302).
19. Architectural blocks based on RCP's Substructure Layouts, issued to RCP in .dwg format on 24/03/2023 and 04/03/2024.
20. Topographical Survey as per Encompass Surveys drawing no. ENC/260820/SLL41 to 10, dated September 2020.
21. This drawing should be read in conjunction with other Domestic Drainage Layouts, Foul and Surface Water Sewer Longitudinal Sections (FOR/ES139/Rbc), Section 104 Adoption Layout (tbc), Surface Water Sewer and Foul Water Sewer Manhole Schedules (FOR/ES139/411 & 412), Section 104 Drainage Construction Details (FOR/ES139/tbc) and Domestic Drainage Construction Details (FOR/ES139/tbc).
22. Where backdrop is less than 1.0m for domestic drainage, backdrop to be accommodated with internal benching.
23. Surface water from private areas is not to be discharged onto adoptable highway and vice versa.
24. All kerbs are to be in accordance with Arun District Council Details. Pipe bedding of all DWC works to accord with ADC drawing 8000301 Rev C.
25. All footpath slabs shall have a crossfall to direct surface water into adjoining gardens.
26. All future private driveways, parking bays, etc to be designed to fall surface water run-off away from S38 works. If not achievable, full width ACO drainage to be installed.
27. ***ANY VARIANCE OR DISCREPANCY MUST BE REPORTED BACK TO RCP ENGINEERING BEFORE WORK BEGINS.***

KEY

Site Boundary

Adoptable Surface Water Sewers (IWNL)

Adoptable Flow Control Manhole (IWNL)

Swale

Cellular Storage Tanks

Proposed Headwall

Tree to be removed

Root Protection Area and TPF
(Tree Protection Plan Based on Arboricultural's drawing number 5646'21 B, revision 03, issued to RCP in .dwg format on 01.03.2024.).

Existing Ground

Proposed Ground

Localised Ground Re-profiling (max gradient 1:3)

SUBJECT TO ADOPTING AUTHORITY APPROVAL WHERE APPLICABLE

All existing ditches and culverts being retained are to be cleaned out to the satisfaction of the ADC drainage engineer

CDM NOTES

1. EXISTING SERVICES. Depth of existing services must be determined prior to works commencing. The contractor is responsible for establishing underground services in accordance with HSE Guidance note HS (G) 47. Any services which would be within the proposed construction layers must be lowered to below the sub-base.

0m 2m 4m 6m 8m 10m 12m 20m

SCALE BAR 1:200 at A1

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Rev.	Date	Details	By	Chkd	Appd
A	30.10.24	Subject to adopting authority approval.	KG	JC	TRS

Client:- FOREMAN HOMES

Site:- Land West of Church Lane & Horsemere Green Lane Climping, West Sussex

Drawing Title:- HEADWALL DETAILS

Sheet 1 of 4

Date: April 2024 | Scales: As shown

Drawn: JC | Checked: TRS | Approved: TRS

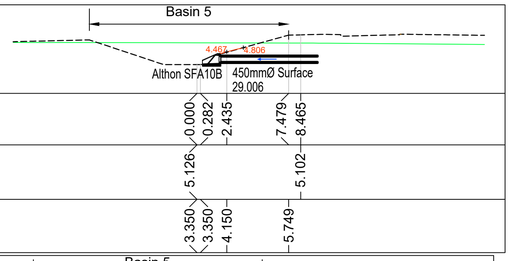
Drawing No. FOR/E5139/482 A

FOR CONSTRUCTION

RCP ARCHITECTURE & CIVIL ENGINEERING
Rogers Cory Partnership
Architectural and Civil Consultants
The Old School Old School Road
Hook Hampshire RG27 9NJ
T: 01256 769269 E: mail@rcpconsultants.co.uk W: rcpconsultants.co.uk

T-T

Datum: 1.000M AOD



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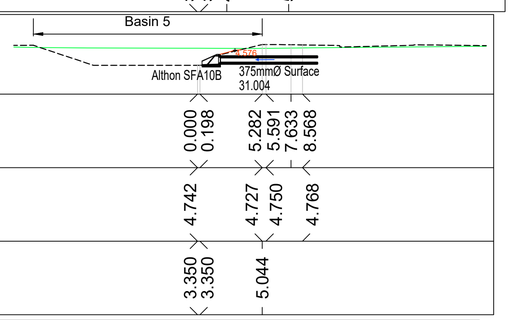

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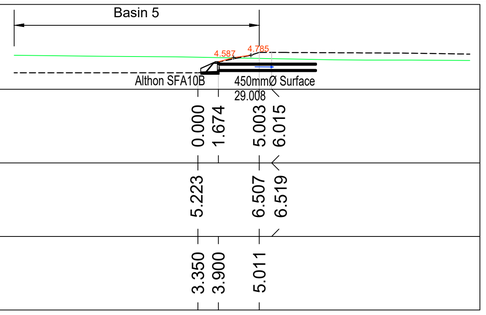
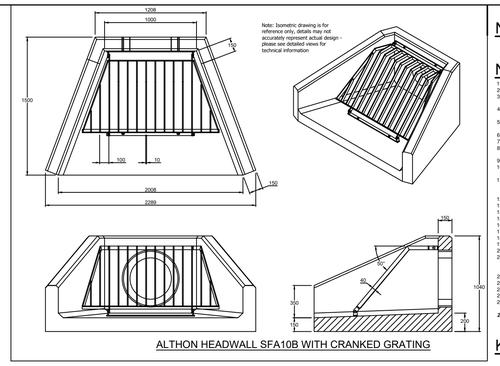


Headwall Sections - Basin 5



ALTHON HEADWALL SFA10B WITH CRANKED GRATING

NOTES

NOTES

1. All dimensions are in metres unless stated otherwise.
2. Do not scale from this drawing. Only written dimensions are to be used.
3. FW & SW house drainage is to be constructed in accordance with the Building Regulations & BS8301 & SSG Appendix C Design and Construction Guidance Approved Version 2.3 dated 11 November 2023 and the specific requirements of IWNL Water.
4. Drains are to be constructed using flexibly jointed vitrified clay pipes to BS EN 295-1991 "Super Strength" specification (e.g. Hepworth Supersleeve or similar) or uPVC drainage pipework to BS4660 & BS2494, bedded & backfilled in accordance with manufacturers instructions.
5. Manholes are to be constructed in accordance with the SSG Appendix C Design and Construction Guidance Approved Version 2.3 dated 11 November 2023 and the specific requirements of IWNL Water.
6. Backfilling of drain trenches adjacent to dwelling or other structure to be in accordance with BS8301-Fig. 9.
7. Cover levels indicated on the Drainage Schedules are nominal & may be adjusted to suit finished ground levels as necessary.
8. Generally Inspection chamber covers should be Grade D400 in trafficked areas Grade B125 in parking areas and occasional traffic and A15 in pedestrian only areas.
9. Rainwater downpipes to be connected direct to drain using an appropriate adaptor & removable section of downpipe to permit rodding access.
10. The positions of SVP's, stub stacks, WC outlets, Back inlet gullies etc. & rainwater downpipes are to be accurately located from the house type working drawings.
11. Generally FW drains are to be laid to falls of 1 in 40, SW drains are to be laid to falls of 1 in 60, both in 100mm diameter pipes. SW pipes are to be 150mm diameter when serving 2 dwellings or 2 RWP connections. FW pipes are to be 150mm diameter when serving 10 dwellings or more unless stated otherwise, or where a schedule is provided.
12. 150mm/3 FW Drains are to be laid to minimum fall of 1 in 80 and 150mm/2 FW Drains are to be laid to minimum fall of 1 in 150.
13. Surface water gullies are to be capable of withstanding wheeled vehicles to suitable construction loads in trafficked areas.
14. Where land drain is identified on the Architect's details, connect into nearest SW system.
15. Where catchpits have been shown in rear gardens connecting to land drains, 600mm PPIC catchpit to be used.
16. This drawing should be read in conjunction with the Architect's and Structural Engineer's design drawings and specification.
17. Site layout shown in this drawing is based on Foreman Homes Approved Site Layout Plan, issued to RCP in .dwg format on 06/02/2023
18. Site Access and Section 278 Works as per RCP's dwg file, Section 278 General Arrangement (FOR-ES139-301 to 302).
19. Architectural blocks based on RCP's Substructure Layouts, issued to RCP in .dwg format on 24/03/2023 and 04/03/2024.
20. Topographical Survey as per Encompass Surveys drawing no. ENC/24082/SLL41 to 10, dated September 2020.
21. This drawing should be read in conjunction with other Domestic Drainage Layouts, Foul and Surface Water Sewer Longitudinal Sections (FOR/ES139/sht), Section 104 Adoption Layout (tbc), Surface Water Sewer and Foul Water Sewer Manhole Schedules (FOR/ES139/411 & 412), Section 104 Drainage Construction Details (FOR/ES139/tbc) and Domestic Drainage Construction Details (FOR/ES139/tbc).
22. Where backdrop is less than 1.0m for domestic drainage, backdrop to be accommodated with internal benching.
23. Surface water from private areas is not to be discharged onto adoptable highway and vice versa.
24. All gullies, ACO drainage channels and manholes to be installed flush to finishing of all CWC works to accord with ADC drawing 80000301 Rev C.
25. All bodypark slabs shall have a crossfall to drain surface water into adjoining parking.
26. All future private driveways, parking bays, etc to be designed to fall surface water run-off away from S38 works. If not achievable, full width ACO drainage to be installed.
27. ***ANY VARIANCE OR DISCREPANCY MUST BE REPORTED BACK TO RCP ENGINEERING BEFORE WORK BEGINS.***

KEY

Site Boundary

Adoptable Surface Water Sewers (IWNL) — S1

Adoptable Flow Control Manhole (IWNL) — S1

Swale

Cellular Storage Tanks

Proposed Headwall

Tree to be removed

Root Protection Area and TPF
(Tree Protection Plan Based on Arboricultural's drawing number 5046/21/B, revision 03, issued to RCP in .dwg format on 01/02/2024.)

Existing Ground

Proposed Ground

Localised Ground Re-profiling (max gradient 1:3)

SUBJECT TO ADOPTING AUTHORITY APPROVAL WHERE APPLICABLE

All existing ditches and culverts being retained are to be cleaned out to the satisfaction of the ADC drainage engineer

CDM NOTES

1. EXISTING SERVICES. Depth of existing services must be determined prior to works commencing. The contractor is responsible for establishing underground services in accordance with HSE Guidance note HS (G) 47. Any services which would be within the proposed construction layers must be lowered to below the sub-base.

0m 2m 4m 8m 12m 16m 20m

SCALE BAR 1:200 at A1

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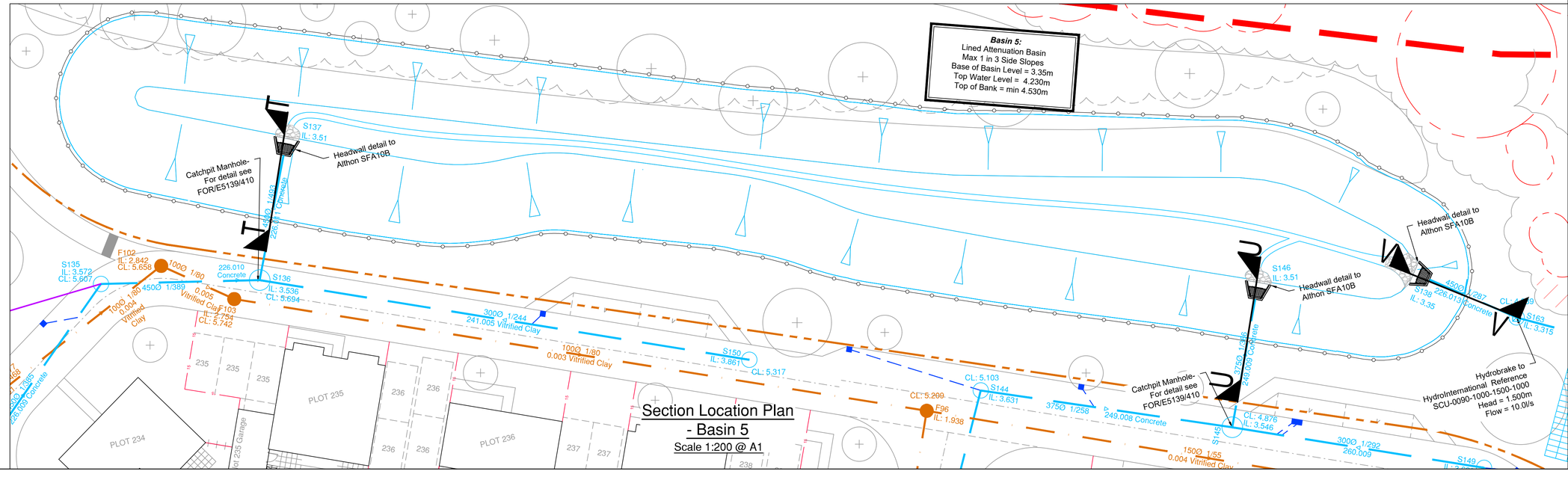


Section Location Plan - Basin 5

Scale 1:200 @ A1

Rev.	Date	Details	By	Chkd	Appd
A	30.10.24	Subject to adopting authority approval.	KG	JC	TRS

Client:- FOREMAN HOMES

Site:- Land West of Church Lane & Horsemere Green Lane Climping, West Sussex

Drawing Title:- HEADWALL DETAILS

Sheet 4 of 4

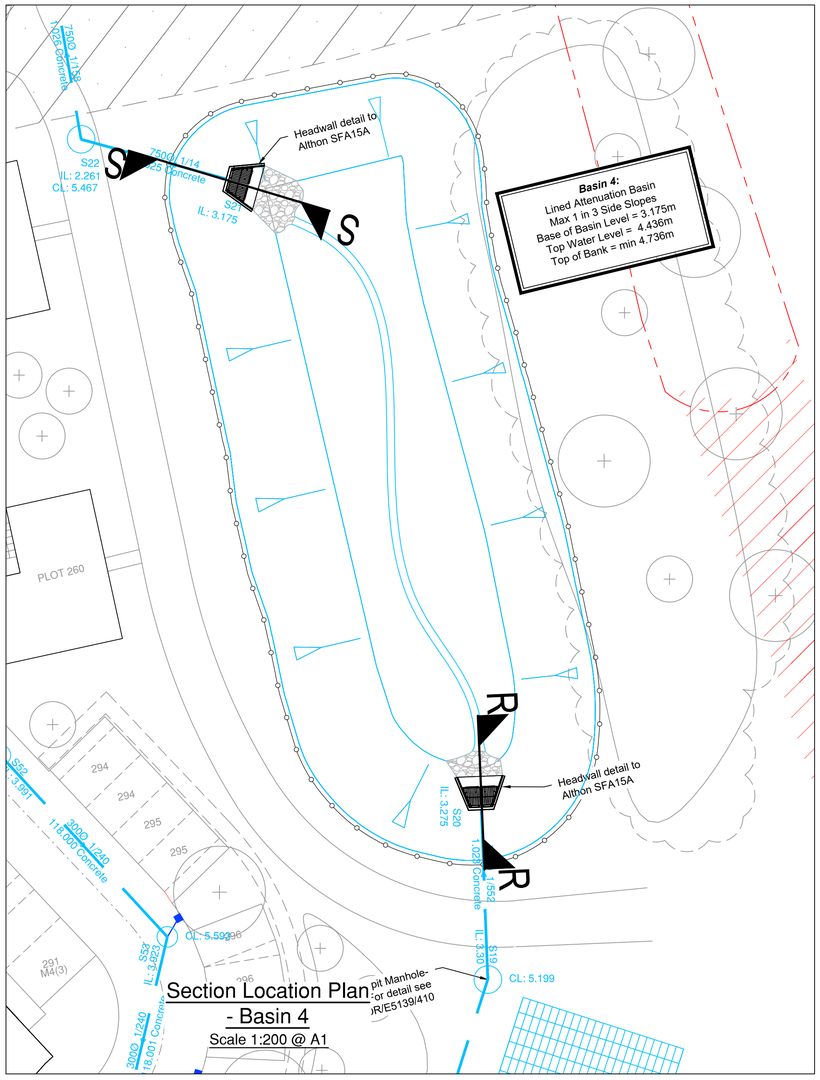
Date: April 2024 | Scales: As shown

Drawn: JC | Checked: TRS | Approved: TRS

Drawing No. FOR/E5139/485 A

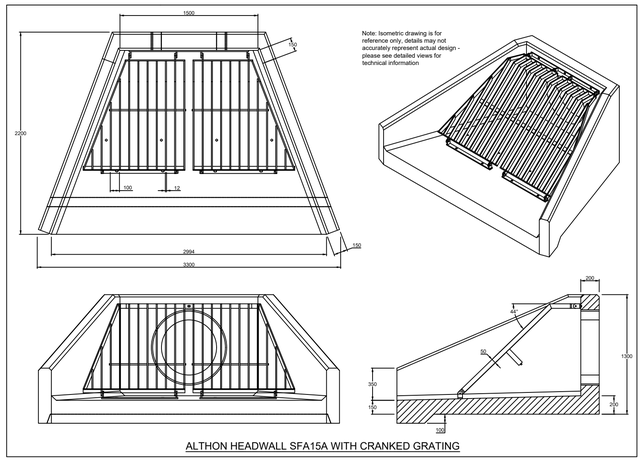
FOR CONSTRUCTION

RCP ARCHITECTURE & CIVIL ENGINEERING
Rogers Cory Partnership
Architectural and Civil Consultants
The Old School Old School Road Hook Hampshire RG27 9NJ
T: 01256 769269 E: mail@rcpconsultants.co.uk W: rcpconsultants.co.uk



Section Location Plan - Basin 4

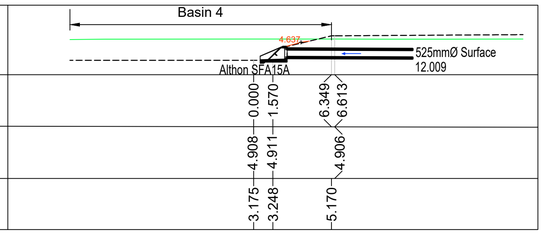
Scale 1:200 @ A1



ALTHON HEADWALL SFA15A WITH CRANKED GRATING

R-R

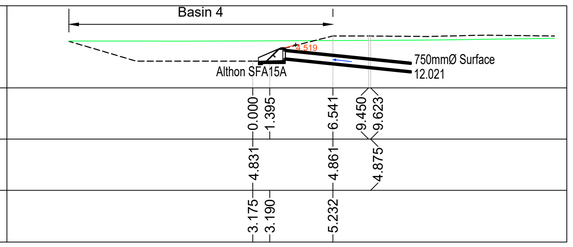
Datum: 2.000M AOD



EXISTING CHAINAGE (m)	0.000	1.570	6.349	6.613
EXISTING LEVELS (m)	4.908	4.911	4.906	
EARTHWORK LEVELS (m)	3.175	3.248	5.170	

S-S

Datum: 1.000M AOD



EXISTING CHAINAGE (m)	0.000	1.395	6.541	9.450	9.623
EXISTING LEVELS (m)	4.831		4.861	4.875	
EARTHWORK LEVELS (m)	3.175	3.190	5.232		

Headwall Sections - Basin 4

NOTES

1. All dimensions are in metres unless stated otherwise.
2. Do not scale from this drawing. Only written dimensions are to be used.
3. FW & SW house drainage is to be constructed in accordance with the Building Regulations & BS8301 & SSG Appendix C Design and Construction Guidance Approved Version 2.3 dated 11 November 2023 and the specific requirements of IWNL Water.
4. Drains are to be constructed using flexibly jointed vitrified clay pipes to BS EN 295-1991 "Super Strength" specification (e.g. Hepworth Supersleve or similar) or uPVC drainage pipework to BS4660 & BS2494, bedded & backfilled in accordance with manufacturers instructions.
5. Location of sewers & lateral drains to be in accordance with the SSG Appendix C Design and Construction Guidance Approved Version 2.3 dated 11 November 2023 and the specific requirements of IWNL Water.
6. Backfill to trenches supporting roads or other structure to be in accordance with BS8301-Fig. 9.
7. Cover levels indicated on the Drainage Schedules are nominal & may be adjusted to suit finished ground levels as necessary.
8. Generally Inspection chamber covers should be Grade D400 in trafficked areas Grade B125 in parking areas and occasional traffic and A15 in pedestrian only areas.
9. Rainwater downpipes to be connected direct to drain using an appropriate adaptor & removable section of downpipe to permit rodding access.
10. The positions of SVP's, stub stacks, WC outlets, Back inlet gullies etc. & rainwater downpipes are to be accurately located from the house type working drawings.
11. Generally FW drains are to be laid to falls of 1 in 40, SW drains are to be laid to falls of 1 in 60, both in 100mm diameter pipes. SW pipes are to be 150mm diameter when serving 2 dwellings or 2 RWP connections. FW pipes are to be 150mm diameter when serving 10 dwellings or more unless stated otherwise, or where a schedule is provided.
12. 100mmØ FW Drains are to be laid to minimum fall of 1 in 80 and 150mmØ FW Drains are to be laid to minimum fall of 1 in 150.
13. Where drains are laid in trenches under roads, the trenches are to be backfilled with type 1 sub-base in trafficked areas.
14. Where land drain is identified on the Architect's details, connect into nearest SW system.
15. Where catchpits have been shown in rear gardens connecting to land drains, 600mm PPIC catchpit to be used.
16. This drawing should be read in conjunction with the Architect's and Structural Engineer's design drawings and specification.
17. Site layout shown in this drawing is based on Foreman Homes Approved Site Layout Plan, issued to RCP in .dwg format on 06/02/2023
18. Site Access and Section 278 Works as per RCP's dwg No, Section 278 General Arrangement (FOR/E5139-301 to 302).
19. Architectural blocks based on RCP's Substructure Layouts, issued to RCP in .dwg format on 24/03/2023 and 04/03/2024.
20. Topographical Survey as per Encompass Surveys drawing no. ENC/240820/OLL41 to 10, dated September 2020.
21. This drawing should be read in conjunction with other Domestic Drainage Layouts, Foul and Surface Water Sewer Longitudinal Sections (FOR/E5139/lbc), Section 104 Adoption Layout (tbc), Surface Water Sewer and Foul Water Sewer Manhole Schedules (FOR/E5139/411 & 412), Section 104 Drainage Construction Details (FOR/E5139/lbc) and Domestic Drainage Construction Details (FOR/E5139/lbc).
22. Where backdrop is less than 1.0m for domestic drainage, backdrop to be accommodated with internal benching.
23. Surface water from private areas is not to be discharged onto adoptable highway and vice versa.
24. All SW drains are to be in accordance with Arun District Council Details. Pipe bedding of all OWC works to accord with ADC drawing 80000301 Rev C.
25. All footpath slabs shall have a crossfall to direct surface water into adjoining gardens.
26. All future private driveways, parking bays, etc to be designed to fall surface water run-off away from S38 works. If not achievable, full width ACO drainage to be installed.
27. ***ANY VARIANCE OR DISCREPANCY MUST BE REPORTED BACK TO RCP ENGINEERING BEFORE WORK BEGINS.***

KEY

Site Boundary

Adoptable Surface Water Sewers (IWNL) — S1

Adoptable Flow Control Manhole (IWNL) — S1

Swale

Cellular Storage Tanks

Proposed Headwall

Tree to be removed

Root Protection Area and TPF
(Tree Protection Plan Based on Arboricultural's drawing number 5646/21/B, revision 03, issued to RCP in .dwg format on 01/03/2024.).

Existing Ground

Proposed Ground

Localised Ground Re-profiling (max gradient 1:3)

SUBJECT TO ADOPTING AUTHORITY APPROVAL WHERE APPLICABLE

All existing ditches and culverts being retained are to be cleaned out to the satisfaction of the ADC drainage engineer

CDM NOTES

1. EXISTING SERVICES. Depth of existing services must be determined prior to works commencing. The contractor is responsible for establishing underground services in accordance with HSE Guidance note HS (G) 47. Any services which would be within the proposed construction layers must be lowered to below the sub-base.

0m 1m 2m 5m 10m 15m 20m

SCALE BAR 1:200 at A1

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Rev.	Date	Details	By	Chkd	Appd
A	30.10.24	Subject to adopting authority approval.	KG	JC	TRS

Client:- FOREMAN HOMES

Site:-
Land West of Church Lane
& Horsemere Green Lane
Climping, West Sussex

Drawing Title:-
HEADWALL DETAILS

Sheet 3 of 4

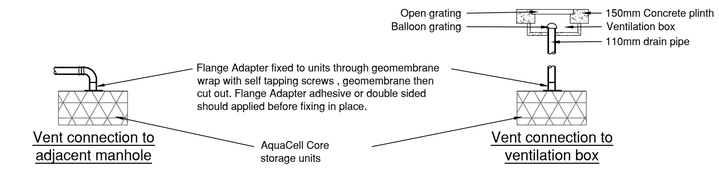
Date: April 2024 | Scales: As shown

Drawn: JC | Checked: TRS | Approved: TRS

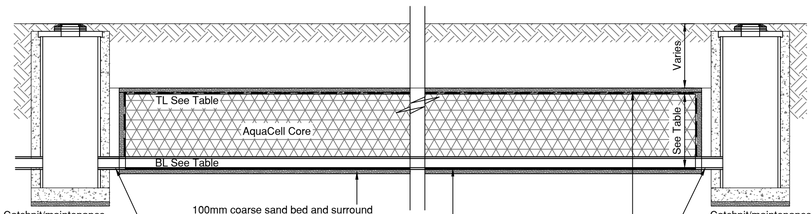
Drawing No. FOR/E5139/484 A

FOR CONSTRUCTION

RCP ARCHITECTURE & CIVIL ENGINEERING
Rogers Cory Partnership
Architectural and Civil Consultants
The Old School Old School Road
Hook Hampshire RG27 9NJ
T: 01256 769269 E: mail@rcpconsultants.co.uk W: rcpconsultants.co.uk

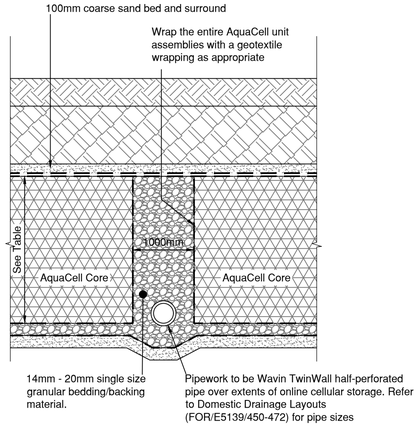


Typical Vent Detail



Cellular Storage Tank Typical Section

Not to Scale



Typical Cross Section Through Cellular Storage Tank

Not to Scale

AquaCell Core Modular Attenuation System

Technical Specification

1 Description

1.1 The AquaCell Core Attenuation and Infiltration System consists of individual, blue polypropylene modular units (see Table 1), black polypropylene shear connectors and black polypropylene clips (see Figure 1).

Table 1 Characteristics of modular unit

Element (Unit)	Value
Dimensions (nominal) (l x w x h) (mm)	1000 x 500 x 400
Volume (nominal) (m³)	0.20
Storage volume (nominal) (m³)	0.19
Porosity (void ratio) (%)	95
Ultimate compressive strength at yield (kN·m⁻²) – vertical loading on top face – lateral loading on side face	560 77.5
Short-term deflection (mm per kN·m⁻²)[1] – vertical loading on side face – lateral loading on side face	1 per 97 1 per 7
Estimated long-term deflection[2] (in)[3] (mm)	0.4705

(1) Applied load.
(2) At up to 20 years at 20°C at 141 kN·m⁻² load.
(3) Time in hours.

Figure 1 Components

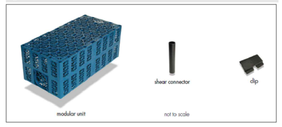


Table 9 Minimum cover depths over top of AquaCell Core units[1]

Location	Minimum cover depth (m)
Non-trafficked areas (eg landscaping)	0.50
Car parks, vehicles up to 2500 kg gross mass, Aquacell system up to three units wide in trench	0.60
Car parks, vehicles up to 2500 kg gross mass, Aquacell system greater than three units wide	0.75

(1) Assumes 27° load distribution through fill material and overlying surface of asphalt or block paving, and trafficking by occasional refuse collection trucks or similar vehicles (typically one per week).

AquaCell Plus Modular Attenuation System

Technical Specification

1 Description

1.1 The AquaCell Plus Attenuation and Infiltration System consists of individual, light blue polypropylene modular units (see Table 1), light blue polypropylene end caps, black polypropylene shear connectors and black polypropylene clips (see Figure 1).

Table 1 Characteristics of modular unit

Element (Unit	Value
Dimensions (nominal) (l x w x h) (mm)	1000 x 500 x 400
Volume (nominal) (m³)	0.20
Storage volume (nominal) (m³)	0.19
Porosity (void ratio) (%)	95
Ultimate compressive strength at yield (kN·m⁻²) – vertical loading on top face – lateral loading on side face	650 85
Short-term deflection (mm per kN·m⁻²)[1] – vertical loading on side face – lateral loading on side face	1 per 74 1 per 9
Estimated long-term deflection[2] (in)[3] (mm)	0.4755

(1) Applied load.
(2) At up to 20 years at 20°C at 222 kN·m⁻² load.
(3) Time in hours.

Figure 1 Components

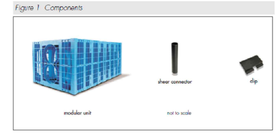


Table 9 Minimum cover depths over top of AquaCell Plus units[1]

Design load case	Minimum cover depth[2] (m)
DIN 3/3 loading (cars up to 3000 kg GVW)	0.50
DIN 9/9 loading (vehicles up to 9000 kg GVW)	0.75
DIN 60/30 loading (vehicles up to 60000 kg GVW)	1.10[2]

(1) The minimum cover depths have been assessed using the characteristic parameters for the AquaCell Plus and the guidance in CIRIA Report C680.
(2) This is less than the limiting value in CIRIA C680, but is acceptable based on the calculations.

NOTES

1. All dimensions are in metres unless stated otherwise.
2. Do not scale from this drawing. Only written dimensions are to be used.
3. FW & SW house drainage is to be constructed in accordance with the Building Regulations & BS8301 & SSG Appendix C Design and Construction Guidance Approved Version 2.3 dated 11 November 2023 and the specific requirements of TWU, Water.
4. Drains are to be constructed using flexibly jointed vitrified clay pipes to BS EN 295-1991 "Super Strength" specification (e.g. Hepworth Supersleve or similar) or uPVC drainage pipework to BS4660 & BS2494, bedded & backfilled in accordance with manufacturers instructions.
5. Location of sewers & lateral drains to be in accordance with the SSG Appendix C Design and Construction Guidance Approved Version 2.3 dated 11 November 2023 and the specific requirements of the sewerage undertaker.
6. Backdrop to be provided to manholes or chamber structure to be in accordance with BS8301-Fig. 9.
7. Cover levels indicated on the Drainage Schedules are nominal & may be adjusted to suit finished ground levels as necessary.
8. Generally Inspection chamber covers should be Grade D400 in trafficked areas Grade B125 in parking areas and occasional traffic and A15 in pedestrian only areas.
9. Rainwater downpipes to be connected direct to drain using an appropriate adaptor & removable section of downpipe to permit rodding access.
10. The positions of SVP's, stub stacks, WC outlets, Back inlet gullies etc. & rainwater downpipes are to be accurately located from the house type working drawings.
11. Generally FW drains are to be laid to falls of 1 in 40, SW drains are to be laid to falls of 1 in 60, both in 100mm diameter pipes. SW pipes are to be 150mm diameter when serving 2 dwellings or 2 RWP connections. FW pipes are to be 150mm diameter when serving 10 dwellings or more unless stated otherwise, or where a schedule is provided.
12. 100mmØ FW Drains are to be laid to minimum fall of 1 in 80 and 150mmØ FW Drains are to be laid to minimum fall of 1 in 150.
13. Where drains are to be laid under roadways, they are to be laid at a minimum depth of 900mm in trafficked areas.
14. Where land drain is identified on the Architect's details, connect into nearest SW system.
15. Where catchpits have been shown in rear gardens connecting to land drains, 600mm PPIC catchpit to be used.
16. This drawing should be read in conjunction with the Architect's and Structural Engineer's design drawings and specification.
17. Site layout shown in this drawing is based on Foreman Homes Approved Site Layout Plan, issued to RCP in .dwg format on 06/02/2023
18. Site Access and Section 278 Works as per RCP's.dwg file, Section 278 General Arrangement (FOR-ES139-301 to 302).
19. Architectural blocks based on RCP's Substructure Layouts, issued to RCP in .dwg format on 24/03/2023 and 04/03/2024.
20. Topographical Survey as per Encompass Surveys drawing no. ENC240820/DLL41 to 10, dated September 2020.
21. This drawing should be read in conjunction with other Domestic Drainage Layouts, Foul and Surface Water Sewer Longitudinal Sections (FOR/ES139/bc), Section 104 Adoption Layout (tbc), Surface Water Sewer and Foul Water Sewer Manhole Schedules (FOR/ES139/411 & 412), Section 104 Drainage Construction Details (FOR/ES139/tbc) and Domestic Drainage Construction Details (FOR/ES139/tbc).
22. Where backdrop is less than 1.0m for domestic drainage, backdrop to be accommodated with internal benching.
23. Surface water from private areas is not to be discharged onto adoptable highway and vice versa.
24. All kerbs are to be in accordance with Arun District Council Details. Pipe bedding at all DWC works to accord with ADC drawing 80000301 Rev C.
25. All footpath slabs shall have a crossfall to drain surface water into adjoining gardens.
26. All future private driveways, parking bays, etc to be designed to fall surface water run-off away from S38 works. If not achievable, full width ACO drainage to be installed.
27. ***ANY VARIANCE OR DISCREPANCY MUST BE REPORTED BACK TO RCP ENGINEERING BEFORE WORK BEGINS.***

SUBJECT TO ADOPTING AUTHORITY APPROVAL WHERE APPLICABLE

All existing ditches and culverts being retained are to be cleaned out to the satisfaction of the ADC drainage engineer

CDM NOTES

1. EXISTING SERVICES. Depth of existing services must be determined prior to works commencing. The contractor is responsible for establishing underground services in accordance with HSE Guidance note HS (G) 47. Any services which would be within the proposed construction layers must be lowered to below the sub-base.

SCALE BAR 1:200 at A1

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Rev.	Date	Details	By	Chkd	Appd
B	30.10.24	Subject to adopting authority approval.	KG	JC	TRS
A	03.05.24	Updated to Initial Tender Issue	MLM	MW	TRS

Client:- FOREMAN HOMES

Site:- Land West of Church Lane & Horsemere Green Lane Climping, West Sussex

Drawing Title:- CELLULAR STORAGE DETAILS

Sheet 2 of 2

Date: March 2024 | Scales: As shown

Drawn: MW | Checked: TRS | Approved: TRS

Drawing No. FOR/E5139/481 B

FOR CONSTRUCTION

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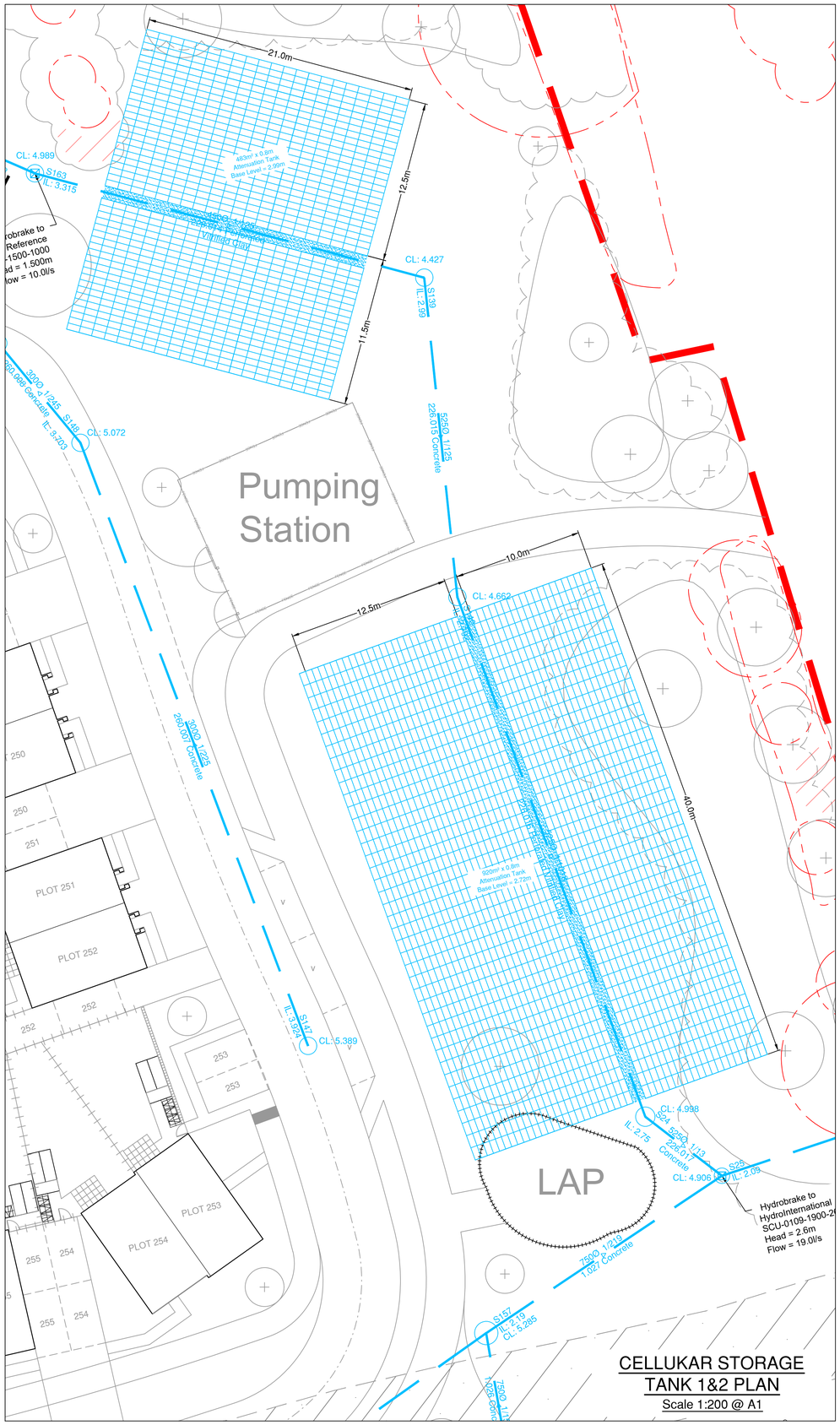

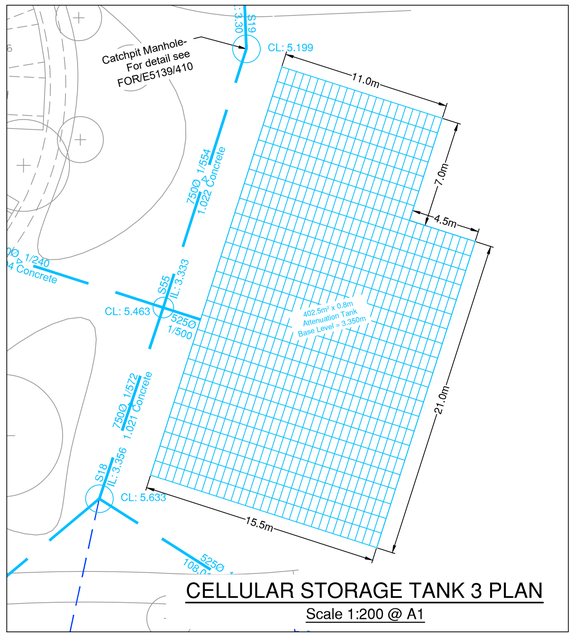

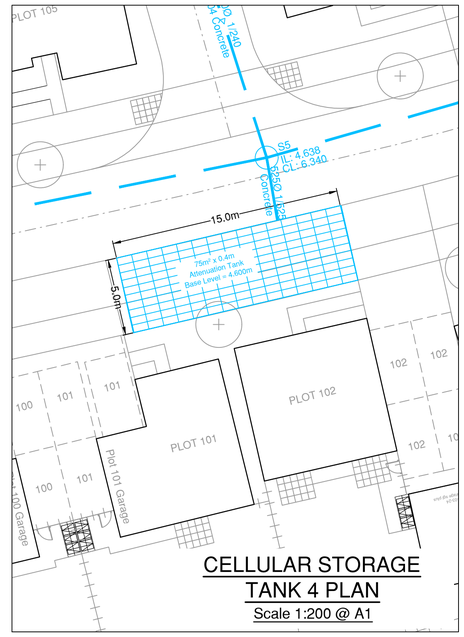

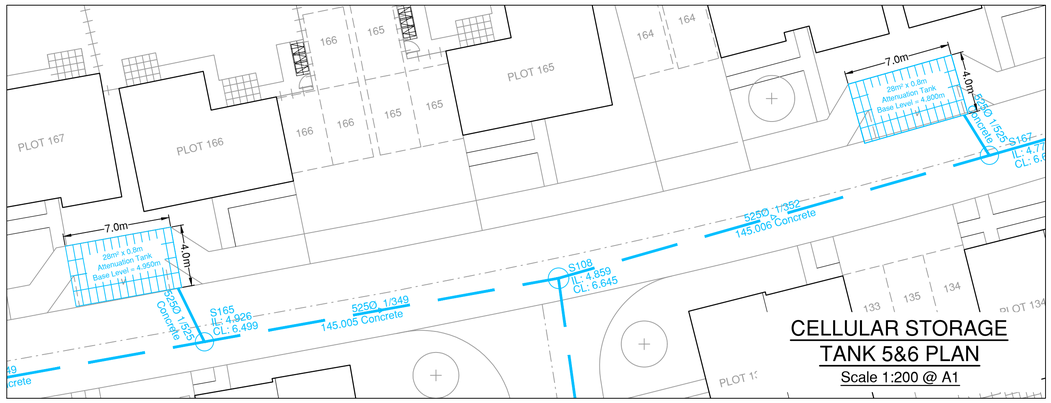

Min. Ground Level	4.503m
Max.Ground Level	5.087m
Top of Cellular Units	3.790m
Invert of Cellular Units	2.990m
Plan Dimension	Refer to plan (483m²)
Depth of Cellular Units	0.80m
No. of Cellular Units based on 1m x 0.5m x 0.4m unit	1932
Volume of Cellular Units @ 95% voids	367.080m³

Cellular Storage Tank 1 Details

Min. Ground Level	4.978m
Max.Ground Level	5.731m
Top of Cellular Units	4.133m
Invert of Cellular Units	3.333m
Plan Dimension	Refer to plan (402.5m²)
Depth of Cellular Units	0.80m
No. of Cellular Units based on 1m x 0.5m x 0.4m unit	1610
Volume of Cellular Units @ 95% voids	305.900m³

Cellular Storage Tank 3 Details

Min. Ground Level	6.593m
Max.Ground Level	6.846m
Top of Cellular Units	5.750m
Invert of Cellular Units	4.950m
Plan Dimension	Refer to plan (28m²)
Depth of Cellular Units	0.80m
No. of Cellular Units based on 1m x 0.5m x 0.4m unit	112
Volume of Cellular Units @ 95% voids	26.6m³

Cellular Storage Tank 5 Details

Min. Ground Level	4.285m
Max.Ground Level	5.215m
Top of Cellular Units	3.520m
Invert of Cellular Units	2.720m
Plan Dimension	Refer to plan (920m²)
Depth of Cellular Units	0.80m
No. of Cellular Units based on 1m x 0.5m x 0.4m unit	3680
Volume of Cellular Units @ 95% voids	699.200m³

Cellular Storage Tank 2 Details

Min. Ground Level	6.456m
Max.Ground Level	6.684m
Top of Cellular Units	5.050m
Invert of Cellular Units	4.650m
Plan Dimension	Refer to plan (75m²)
Depth of Cellular Units	0.40m
No. of Cellular Units based on 1m x 0.5m x 0.4m unit	150
Volume of Cellular Units @ 95% voids	71.250m³

Cellular Storage Tank 4 Details

Min. Ground Level	6.769m
Max.Ground Level	7.061m
Top of Cellular Units	5.600m
Invert of Cellular Units	4.800m
Plan Dimension	Refer to plan (28m²)
Depth of Cellular Units	0.80m
No. of Cellular Units based on 1m x 0.5m x 0.4m unit	112
Volume of Cellular Units @ 95% voids	26.6m³

Cellular Storage Tank 6 Details

NOTES

1. All dimensions are in metres unless stated otherwise.
2. Do not scale from this drawing. Only written dimensions are to be used.
3. FW & SW house drainage is to be constructed in accordance with the Building Regulations & BS8301 & SSG Appendix C Design and Construction Guidance Approved Version 2.3 dated 11 November 2023 and the specific requirements of TNTU, Water.
4. Drains are to be constructed using flexibly jointed vitrified clay pipes to BS EN 295-1991 "Super Strength" specification (e.g. Hepworth Supersleve or similar) or uPVC drainage pipework to BS4660 & BS2494, bedded & backfilled in accordance with manufacturers instructions.
5. Location of sewers & lateral drains to be in accordance with the SSG Appendix C Design and Construction Guidance Approved Version 2.3 dated 11 November 2023 and the specific requirements of TNTU, Water.
6. Backdrop to be provided to any manhole or chamber structure to be in accordance with BS8301-Fig. 9.
7. Cover levels indicated on the Drainage Schedules are nominal & may be adjusted to suit finished ground levels as necessary.
8. Generally Inspection chamber covers should be Grade D400 in trafficked areas Grade B125 in parking areas and occasional traffic and A15 in pedestrian only areas.
9. Rainwater downpipes to be connected direct to drain using an appropriate adaptor & removable section of downpipe to permit rodding access.
10. The positions of SVP's, bath stacks, WC outlets, Back inlet gullies etc. & rainwater downpipes are to be accurately located from the house type working drawings.
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12. 100mmØ FW Drains are to be laid to minimum fall of 1 in 80 and 150mmØ FW Drains are to be laid to minimum fall of 1 in 150.
13. Where drains are to be laid in trafficked areas, they are to be laid to a minimum depth of 900mm in trafficked areas.
14. Where land drain is identified on the Architect's details, connect into nearest SW system.
15. Where catchpits have been shown in rear gardens connecting to land drains, 600mm PPIC catchpit to be used.
16. This drawing should be read in conjunction with the Architect's and Structural Engineer's design drawings and specification.
17. Site layout shown in this drawing is based on Foreman Homes Approved Site Layout Plan, issued to RCP in .dwg format on 06/02/2023
18. Site Access and Section 278 Works as per RCP's dwg No, Section 278 General Arrangement (FOR/E5139-301 to 302).
19. Architectural blocks based on RCP's Substructure Layouts, issued to RCP in .dwg format on 24/03/2023 and 04/03/2024.
20. Topographical Survey as per Encompass Surveys drawing no. ENC/240820/OLL41 to 10, dated September 2020.
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22. Where backdrop is less than 1.0m for domestic drainage, backdrop to be accommodated with internal benching.
23. Surface water from private areas is not to be discharged onto adoptable highway and vice versa.
24. All kerbs are to be in accordance with Arun District Council Details. Pipe bedding of all DWC works to accord with ADC drawing 80000301 Rev C.
25. All footpath slabs shall have a crossfall to drain surface water into adjoining gardens.
26. All future private driveways, parking bays, etc to be designed to fall surface water run-off away from S38 works. If not achievable, full width ACO drainage to be installed.
27. ***ANY VARIANCE OR DISCREPANCY MUST BE REPORTED BACK TO RCP ENGINEERING BEFORE WORK BEGINS.***

KEY

Site Boundary

Adoptable Surface Water Sewers (IWNL)

Adoptable Flow Control Manhole (IWNL)

Swale

Cellular Storage Tanks

Root Protection Area and TPF
(Tree Protection Plan Based on Arboricultural's drawing number 5646'21 B, revision 03, issued to RCP in .dwg format on 01/03/2024.)).

Tree to be removed

SUBJECT TO ADOPTING AUTHORITY APPROVAL WHERE APPLICABLE

All existing ditches and culverts being retained are to be cleaned out to the satisfaction of the ADC drainage engineer

CDM NOTES

1. EXISTING SERVICES. Depth of existing services must be determined prior to works commencing. The contractor is responsible for establishing underground services in accordance with HSE Guidance note HS (G) 47. Any services which would be within the proposed construction layers must be lowered to below the sub-base.

0m 2m 4m 8m 12m 16m 20m

SCALE BAR 1:200 at A1

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Rev.	Date	Details	By	Chkd	Appd
B	30.10.24	Subject to adopting authority approval.	KG	JC	TRS
A	03.05.24	Updated to Initial Tender Issue	MLM	MW	TRS

Client:-

FOREMAN HOMES

Site:-

Land West of Church Lane & Horsemere Green Lane Climping, West Sussex

Drawing Title:-

CELLULAR STORAGE DETAILS

Sheet 1 of 2

Date:	March 2024	Scales:	As shown
Drawn:	MW	Checked:	TRS
		Approved:	TRS

Drawing No.

FOR/E5139/480 B

FOR CONSTRUCTION

RCP ARCHITECTURE & CIVIL ENGINEERING
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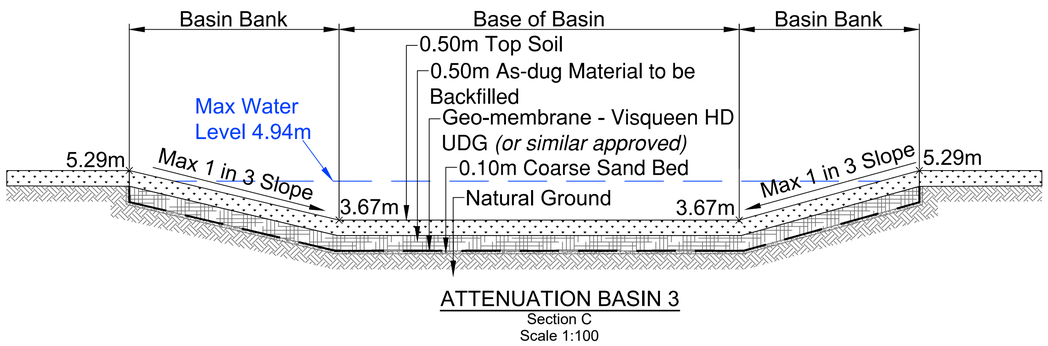
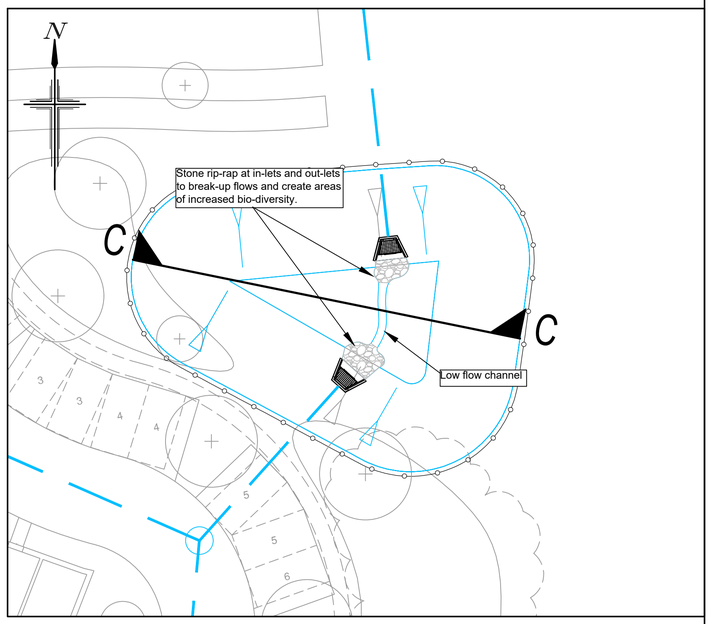
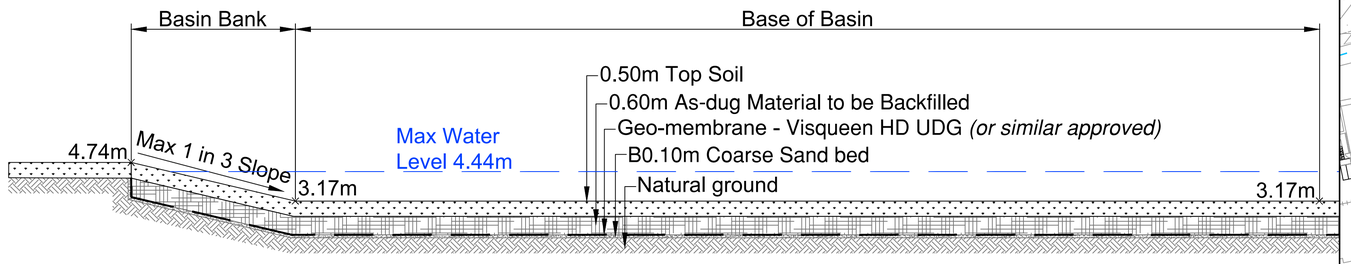


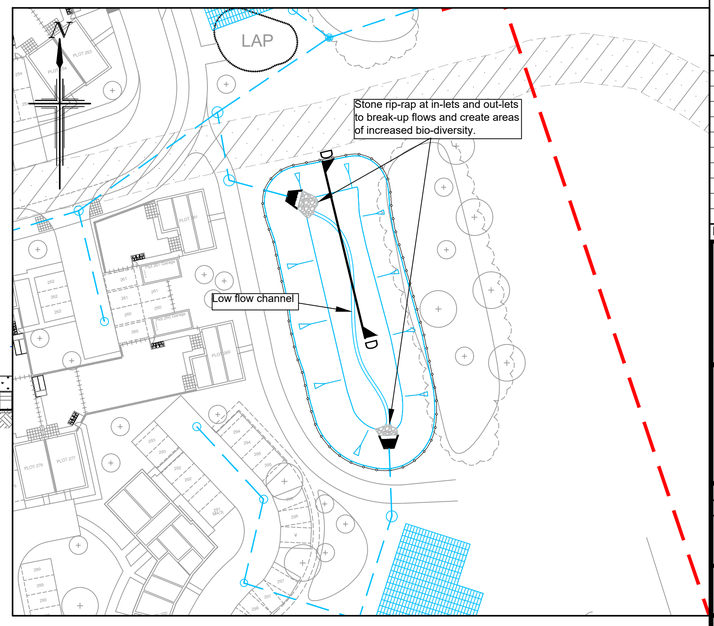
ATTENUATION BASIN 3
Section C
Scale 1:100



SCALE BAR 1:500 at A1



ATTENUATION BASIN 4
Section D
Scale 1:100



SCALE BAR 1:500 at A1

NOTES

1. All dimensions are in metres unless stated otherwise.
2. Site layout shown in this drawing is based on Foreman Homes Approved Site Layout Plan, issued to RCP in .dwg format on 06/02/2023.
3. Topographical Survey as per Encompass Surveys drawing no. ENC/240820/3LL4/1 to 10, dated September 2020.
4. Utility survey as per Encompass Surveys drawing ENC/300920/U2C3 dated September 2020.
5. ANY VARIANCE OR DISCREPANCY MUST BE REPORTED BACK TO RCP ENGINEERING BEFORE WORK BEGINS.
6. The groundwater depth used to calculate the depth of stone required to counter buoyancy is based on information supplied by Ground and Water dated 12/08/2024.
7. All earthworks relating to the basins is to be in accordance with series 600 specification of highways works.
8. For further details on the headwalls refer to drawings FOR-E5139-482 to 485.
9. For further details on the drainage design refer to drawings FOR-E5139-450 to 472.
10. Refer to basin details on sheet three for information on low flow channel and geo-membrane bank benching.

KEY

Site Boundary

Headwall

Attenuation Basin

Surface Water Drainage

1.5m Post and Rail Fence

CDM NOTES

1. EXISTING SERVICES. Depth of existing services must be determined prior to works commencing. The contractor is responsible for establishing underground services in accordance with HSE Guidance note HS (G) 47. Any services which would be within the proposed construction layers must be lowered to below the sub-base.

Rev.	Date	Details	By	Chkd	Appd
A	30.10.24	Subject to adopting authority approval.	KG	JC	TRS

Client:-

FOREMAN HOMES

Site:-
Land West of Church Lane & Horsemere Green Lane Climping, West Sussex

Drawing Title:-
ATTENUATION BASIN SECTION
Sheet 2 of 3

Date: September 2024 | Scales: 1:200 at A1
Drawn: KG | Checked: JC | Approved: TRS

Drawing No.
FOR/E5139/487

FOR CONSTRUCTION

Rogers Cory Partnership
Architectural and Civil Consultants
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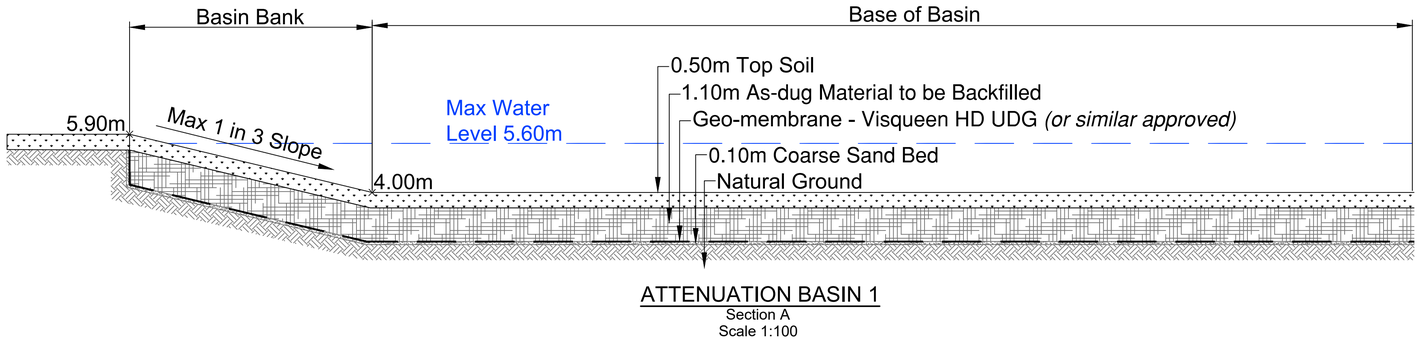
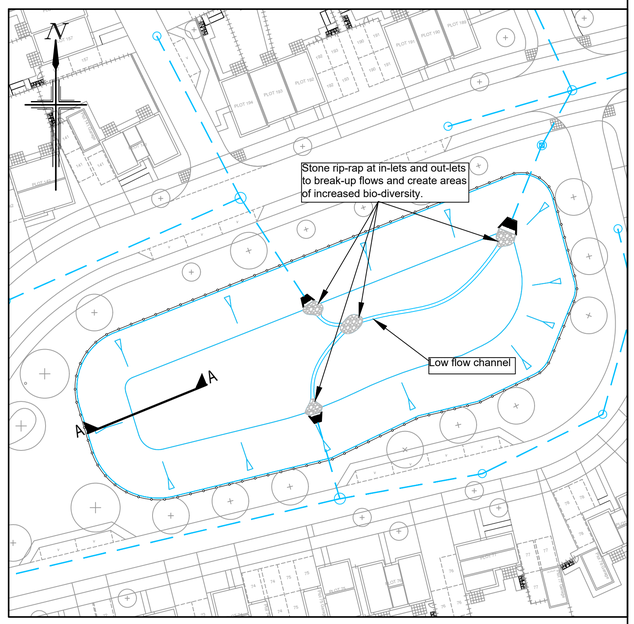


ATTENUATION BASIN 1
Section A
Scale 1:100



SCALE BAR 1:500 at A1

NOTES

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6. The groundwater depth used to calculate the depth of stone required to counter buoyancy is based on information supplied by Ground and Water dated 12/08/2024.
7. All earthworks relating to the basins is to be in accordance with series 600 specification of highways works.
8. For further details on the headwalls refer to drawings FOR-E5139-482 to 485.
9. For further details on the drainage design refer to drawings FOR-E5139-450 to 472.
10. Refer to basin details on sheet three for information on low flow channel and geo-membrane bank benching.

KEY

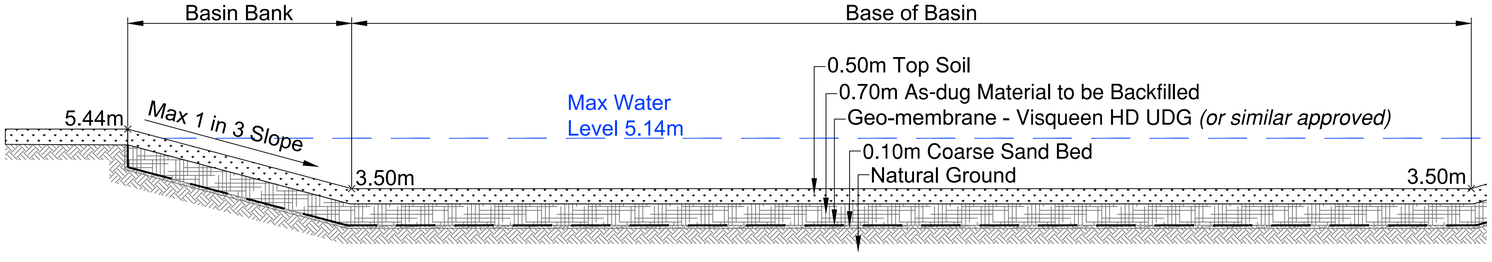
Site Boundary

Headwall

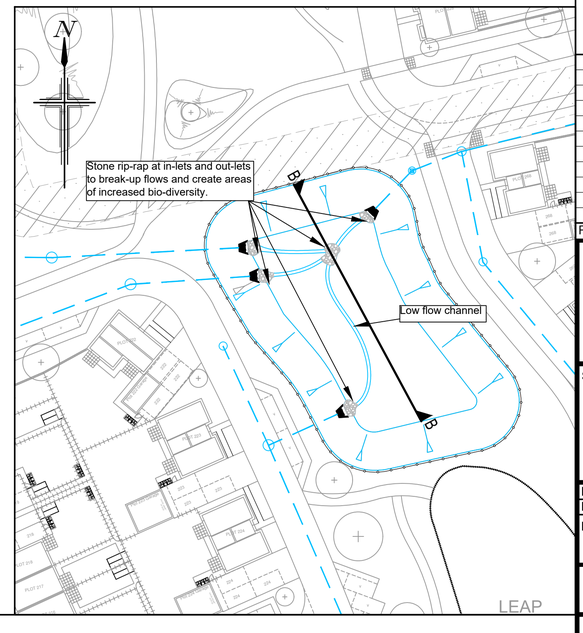
Attenuation Basin

Surface Water Drainage

1.5m Post and Rail Fence



ATTENUATION BASIN 2
Section B
Scale 1:100



SCALE BAR 1:500 at A1

CDM NOTES

1. EXISTING SERVICES. Depth of existing services must be determined prior to works commencing. The contractor is responsible for establishing underground services in accordance with HSE Guidance note HS (G) 47. Any services which would be within the proposed construction layers must be lowered to below the sub-base.

Rev.	Date	Details	By	Chkd	Appd
A	30.10.24	Subject to adopting authority approval.	KG	JC	TRS

Client:-

FOREMAN HOMES

Site:-

Land West of Church Lane
& Horsemere Green Lane
Climping, West Sussex

Drawing Title:-

ATTENUATION BASIN SECTION

Sheet 1 of 3

Date:	September 2024	Scales:	1:200 at A1
Drawn:	JC	Checked: LD	Approved: TRS

Drawing No.

FOR/E5139/486

FOR CONSTRUCTION

RCP ARCHITECTURE & CIVIL ENGINEERING
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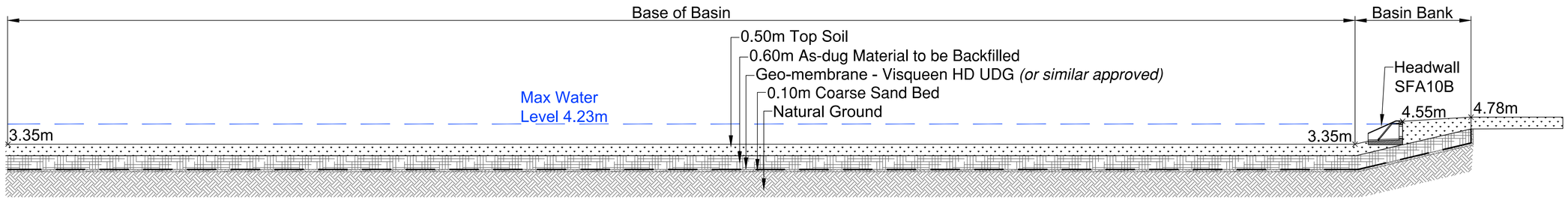
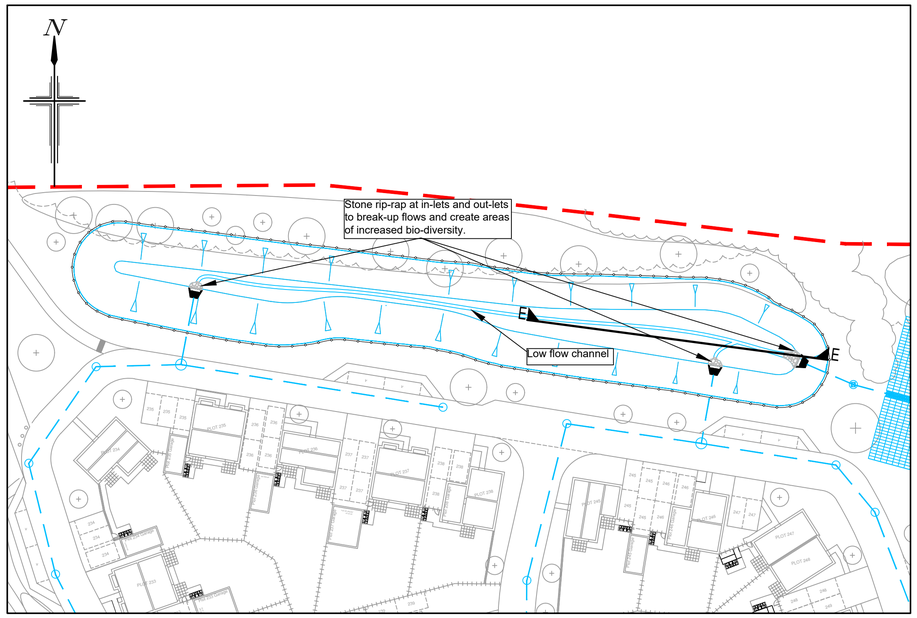
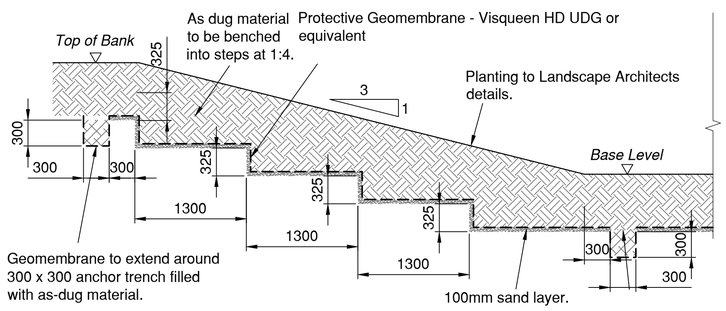
T: 01256 769269 E: mail@rcpconsultants.co.uk W: rcpconsultants.co.uk



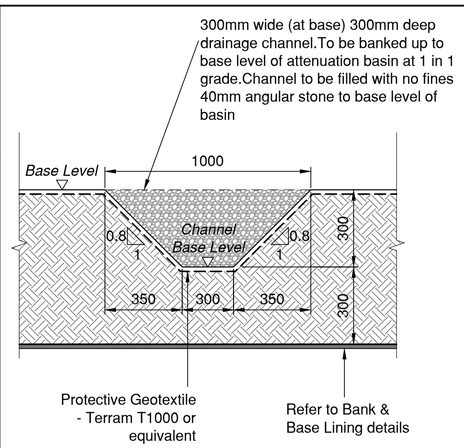
ATTENUATION BASIN 5
Section E
Scale 1:100



SCALE BAR 1:500 at A1



Basin Bank & Base Lining Detail
Not to Scale



Basin 1 300mm Wide (At Base) 40mm Angular Stone Drainage Channel Detail
Not to Scale

NOTES
1. All dimensions are in metres unless stated otherwise.
2. Site layout shown in this drawing is based on Foreman Homes Approved Site Layout Plan, issued to RCP in .dwg format on 06/02/2023.
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9. For further details on the drainage design refer to drawings FOR-E5139-450 to 472.

KEY
- Site Boundary
- Headwall
- Attenuation Basin
- Surface Water Drainage
- 1.5m Post and Rail Fence

CDM NOTES
1. EXISTING SERVICES. Depth of existing services must be determined prior to works commencing. The contractor is responsible for establishing underground services in accordance with HSE Guidance note HS (G) 47. Any services which would be within the proposed construction layers must be lowered to below the sub-base.

Rev.	Date	Details	By	Chkd	Appd
A	30.10.24	Subject to adopting authority approval.	KG	JC	TRS

Client:- FOREMAN HOMES

Site:-
Land West of Church Lane
& Horsemere Green Lane
Climping, West Sussex

Drawing Title:-
ATTENUATION BASIN SECTION
Sheet 3 of 3

Date: September 2024 | Scales: 1:200 at A1
Drawn: KG | Checked: JC | Approved: TRS

Drawing No.
FOR/E5139/488 A

FOR CONSTRUCTION

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