Appendix F
Proposed Drainage Layout

A1

0[m]

SUDS basin in open space

Control Chamber
HydroBrake Optimum
Design Flow: 18.2 l/s
Design Head: 1.200m
Reference: MD-SHE-0188-1820-1200-1820

Marginal Bench
Bench Level 123.780m

Open Water
Bed Level 123.260m

Aquatic Bench
Bed Level 123.560m

Sediment Forebay
Base Level 123.460m

Permeable Berm
Top Level 123.760m

Safety Bench
Width: 3.50m

Catchpit

Connection into Honey Glade surface water sewer network

Hydrobrake Flow Control Chamber
CL: 128.300
IL: 124.750
Design Head: 1.60m
Discharge Rate: 1.0 l/s

Crated below ground attenuation.
CL: 127.500
IL: 124.820
Lid Level: 126.820
Area: 105.7m²
Height: 2.0m
Vol: 200.8m³ (95% Voids)

Foul Water connection onto Honey Glade manhole F6

Lined linear filter strip beneath driveways.

Health & Safety Note :

Refer to standard detail drawings 100 to 108 for additional health & safety notes

The sub-contractor should be familiar with the contents of the geo-environmental reports and protect against any risks that arise.

The sub-contractor is responsible for obtaining copies of service and drainage record plans and taking all care to ensure that existing services are protected or disconnected

All waste material should be placed in appropriate skips or removed from site to avoid trip hazards

The following items require method statements:-

- Any excavations including safe access and support
- Working in confined spaces
- Working in or adjacent to the public highway
- Working in or connecting to live sewers
- Working near live or overhead services
- Protection to trees and landscaping
- Handling & erection of all steelwork, precast concrete units & pad stones & any units greater than 20kg in weight.
- Protection from risk of fall into all excavations and from exposed faces (including floor slabs) where changes in level where falls could cause an injury

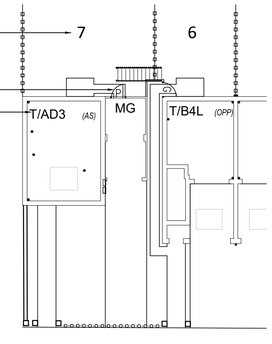
OS Grid Reference: ST8281647978

Key

Plot No

Pedestrian Door to Garage

House Type



Sewers and Drains

- Adoptable Surface Water Sewer
- Adoptable Foul Water Sewer
- Legal Boundary
- Sewer Easement (3m either side of Pipe)
- Existing Pond
- Existing Ditch

Storm S1 S31 Foul F1 F11

[48.80]
(48.80)

Manholes and Chambers

Precast Concrete Adoptable Standard Manhole (Type A1, A2, B or C_J)
Brick Chamber (Type C_1 or E_J)
Inspection Chamber - Max. Depth 3m (Type D)
Inspection Chamber - Max. Depth 2m (Type E_J)
Headwall - As per Dwg 230-122

Drainage Ancillaries

Surface water invert levels
Foul water invert levels

Crated below ground attenuation tank

NOTE
All Laterals to be Plastic unless specified otherwise.

DO NOT SCALE FROM THIS DRAWING

All dimensions to be checked on site prior to manufacture of prefabricated items. Any discrepancy or query to be reported and clarified before associated work proceeds. All construction to be in accordance with relevant Trade and Professional Standards and Guidelines, Statutory requirements and product manufacturers' specifications. Read in conjunction with Finishing specification, Workmanship specification, all other associated drawings issued and details which may be issued from time to time.

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1. All levels relate to Ordnance Datum.
2. For adoptable roads and sewer details refer to drawing 111 to 122.
3. For finished level details refer to drawing 142.

ADOPTABLE DRAINAGE NOTES

4. The planning, design and construction of sewers shall be in accordance with The Design and Construction Guidance contained within the Sewerage Sector Guidance 25th October 2019 and the Civil Engineering Specification for the Water Industry 7th Edition.
5. All type A & B manholes should have a concrete surround. Concrete rings shall be sealed using "Tokstrip" and lifting eyes pointed with resin modified mortar.
6. Manhole covers & frames shall be ductile iron with a minimum square opening of 600x600mm. Covers shall be double triangle for 600mm square openings and be provided with loose bolted connections. Frame depths shall be 100mm within the Residential Development and 150mm in Existing Highways.
7. The use of ladders or steps in manholes, wet wells and valve chambers shall comply with the following: Mild steel plastic encapsulated manhole single steps shall not be used in manholes of a greater depth than 1.0m. Mild steel plastic encapsulated double steps may be provided in manholes up to 3.0m in depth. Ladders shall be provided in accordance with BS4211 in manholes between 3.0 to 6.0m deep.
8. Hot dipped galvanized mild steel ladders should be installed in type A manholes.
9. Proposed adoptable sewers are only permitted to have other sewer/gully connections and other services laid at angle of between 45 degrees and 90 degrees across the line with a vertical clearance in excess of 300mm.
10. All ironwork to be kite marked by BSI or certified by equal inspection authority.
11. Red coloured plastic marker tape at least 150mm wide shall be laid at a minimum of 200mm above the soffit of the pipe. The tape shall be printed with the words gravity sewer in bold capital letters throughout its length and at intervals not exceeding 700mm and shall incorporate a corrosion resistant tracing system for non-metallic pipes. For rising mains the tape should be 300mm above the top of the pipe, this shall be printed with rising main in bold capital letters throughout its length and at intervals not exceeding 700mm.
12. All CLAY pipework is to be Extra Strength Vitrified Clayware to BS EN 295.
13. All PLASTIC pipework is to be Thermoplastic Structured Wall pipe to BS EN 13476 Part 1 and 2 or 3, stamped SN8, no longer than 3m and if found deformed by more than 6% are to be replaced, unless explicity stated otherwise on the drawings.
14. All CONC pipework is to be Class M Flexible Jointed Concrete Pipework to BS 5911 : Part 100
15. All pipework is to have a Class S Granular Bed and Surround unless indicated as Concrete Surround.
16. First manhole upstream from the connection point to the public sewer to be fitted with a temporary debris screen to prevent debris entering the public sewer. Screen to be removed prior to occupation of dwellings.

Building Drainage

17. All storm connections to adoptable manholes from private building drainage to be 150mm diameter pipes unless otherwise specified.
18. All house drainage to be 100mm dia unless otherwise stated, and laid in accordance with current Building Regulations and BS8301 : 1985.
19. Pipes are to be either extra strength vitrified clay to BSEN295 : Part1 with flexible joints, or P.V.C. complying with the relevant provisions of BS4660, or BS5480 and kitemark certified.
20. Pipe bedding material is to be Class S with 100mm minimum thickness surround. Bed thickness to be increased to 150mm in rocky ground. Granular material to be 10mm nominal size.
21. Where pipes are beneath drives or parking courts and less than 500mm depth to soffit, the pipe bedding shall be minimum 100mm Concrete Surround
22. Backfill is to be be with selected fill free of stones larger than 40mm, lumps of clay over 100mm, timber, frozen material and vegetable matter.
23. Pipes entering and leaving manholes/inspection chambers shall include a rocker pipe, 600mm in length.
24. Brickwork to chambers shall be Class B Engineering to BS3921.

REV		DATE	INITIAL
C	Amended layout to show a vehicle crossover access. Attenuation tank position amended and size increased. Flow control details added with updated rate.	12.09.23	AJH
B	Amended to suit revised planning layout.	05.09.23	AJH
A	Scale bar added.	07.07.23	AJH
-	First Issue	28.06.23	AJH

Newland HOMES

Land North of Cleyhill Gardens, Chapmanslade

S104 Agreement Plan (On Site Sewers)

AJH
Drawn

1:250 @ A1
Scale

28/06/2023
First Issue

853a-102
Drawing No.

C
Revision