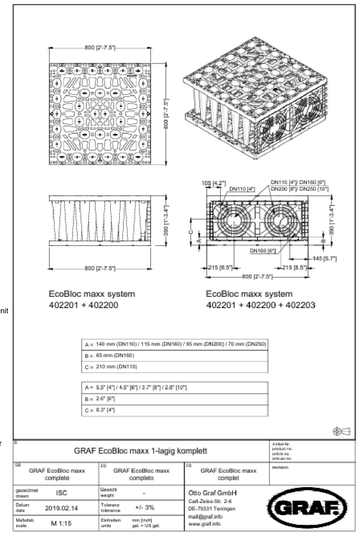
Key.

- F1 (1200Ø) CL 130.900 IL 130.000 — Proposed foul sewer (Invert level shown)
- C1 (1200Ø) CL 130.900 IL 130.000 — Proposed Combined water sewer
- S1G (1200Ø) CL 131.050 IL 128.391 — Proposed surface water drain (roof water/ highway/treated external area flows only)
- 600/460/225 "non -accessible" inspection chambers
- Minimum 1200Ø "accessible" manholes
- Proposed road gully and lateral Connection
- RE — Proposed Rodding Eye point
- Proposed channel drainage system - hauraton faserfix super or similar approved. .
- Proposed surface water attenuation/soakaway unit
- Proposed surface water flow control unit
- Proposed surface water attenuation/unit suds planter
- Existing drain - to remain - Foul/combined water
- Existing drain - to remain - Surface water
- Existing sewers to be diverted/made redundant /built over
- Filter drainage trench - SUDS . 600mm wide 600mm deep.
- FFL 130.000 — Proposed Finished Floor Level
- x131.05m — Proposed site levels
- 1:35 — Proposed Gradients
- Embankment (@1:3 unless stated)
- Porous surfacing drive/path construction

Note: All pumps and Treatment units noted are for indicative costing purposes only. Full detailed design specification to be obtained from the manufactures prior to any orders being placed.

Levels provided are indicative only to assist with completion of drainage design works. For precise level information refer to architects/landscaping information

RWP and internal foul points positions are indicative only



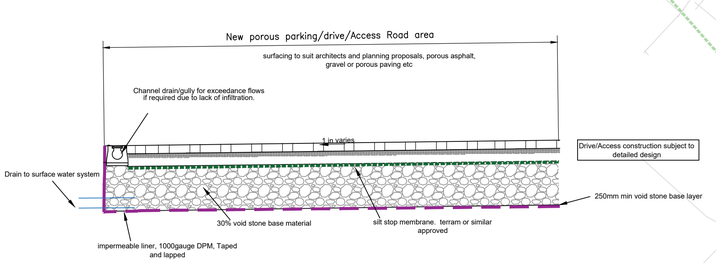
Graf Ecobloc Max detail - Crate Attenuation

Suds SW Treatment. C753 guidance - REQUIRED

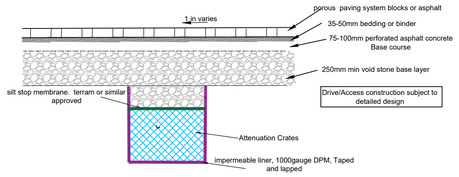
Load Use	Pollution Hazard Level	Total suspended Solids (TSS)	Metals	Hydrocarbons
Roofs (non residential)	Low	0.3	0.2	0.05
Commercial yards and delivery areas (non residential parking)	Medium	0.7	0.6	0.7
Residential roofs	Very Low	0.2	0.2	0.05
Residential parking (individual drives and parking, low traffic roads)	Low	0.5	0.4	0.4

Suds SW Treatment. C753 guidance - PROVIDED

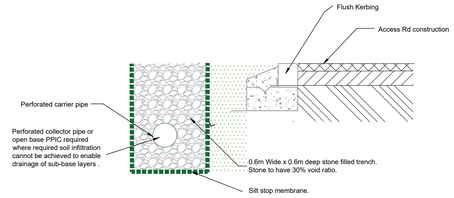
Type Of Suds Components	TSS	Metals	Hydrocarbons
Permeable paving	0.7	0.6	0.7
Filtration drains and systems	0.4	0.4	0.4



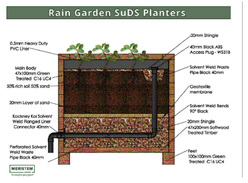
Typical Cross Section through porous parking/Drive area - nts

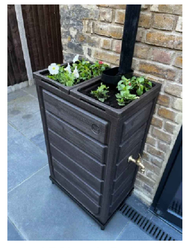


Typical Cross Section through Attenuation detail - nts



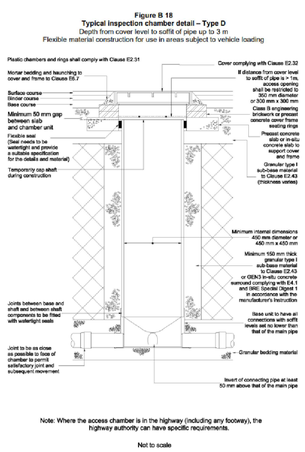
Typical Cross Section through Filter Trench - nts



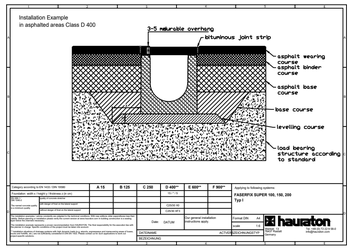


150L minRain water Suds planter example

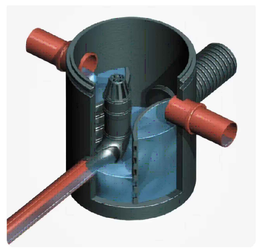
Note: HYDRO PLANTERS NOTE REQUIRED FOR ATTENUATION - TREATMENT ONLY. UNDERGROUND STORAGE CRATES PROVIDES ATTENUATION
- Planters connected to below ground surface water system



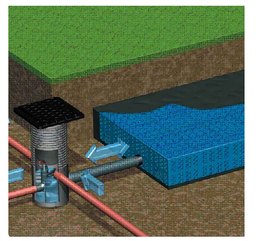
PPIC inspection Chamber - Typical detail



Channel Drain Detail - Hauraton Faserfix super 100



Flow Control Unit - Wavin Garastor unit or similar approved



General Notes

Do not scale this drawing. If in doubt, consult with the Engineer

1. This drawing is to be read in conjunction with all other relevant Engineers, Architects and Specialist design drawings and specifications.
2. All dimensions and levels are in metres unless noted otherwise.
3. This drawing is for information purposes and all information displayed is subject to detailed design.
4. Cover levels noted are indicative or best design levels. constructed levels should take into account as-built surfacing levels and gradients.
5. The Contractor shall be responsible for checking all tie-ins for line and level with existing foul and surface water systems before commencing any works.
6. The Engineer shall be notified immediately, in writing, should any errors or discrepancies be found prior to the commencement or continuation of any works. All work is to be carried out in accordance with current British Standards, Building Regulations and NHBC Standards.
7. All drainage work is to be strictly in accordance with the requirements of the Building Regulations 2010, Approved Document Part H, "Drainage and waste disposal".
8. It is the responsibility of the Contractor to execute the works at all times in strict accordance with the requirements of the Health and Safety at Work Act 1974, and the C.D.M. Regulations 2015. The Contractor will be deemed to have allowed for full compliance, including full liaison with the Principle Contractor, within his rates.
9. All existing land drains encountered on site during construction are to be re-connected.
10. Should any departure from the proposed slab or external levels be considered, agreement shall be sought from the Engineer immediately and prior to the commencement or continuation of any works. Proposals should take full account of all restrictions to the slab level.
11. Temporary protection to be provided to drainage work during construction as necessary.
12. Power supply to separator/treatment units, alarm, panel, vent etc to be provided by contractor in accordance with manufacturers recommendations.
13. Topographical survey shown is based upon - DCI Architects Drawing 1255-TM-01
14. Architects layout shown is based upon DCI Architects Drawing 1255-TM-01
    This layout may be subject to change and is intended for indicative purposes only.

Specification Notes

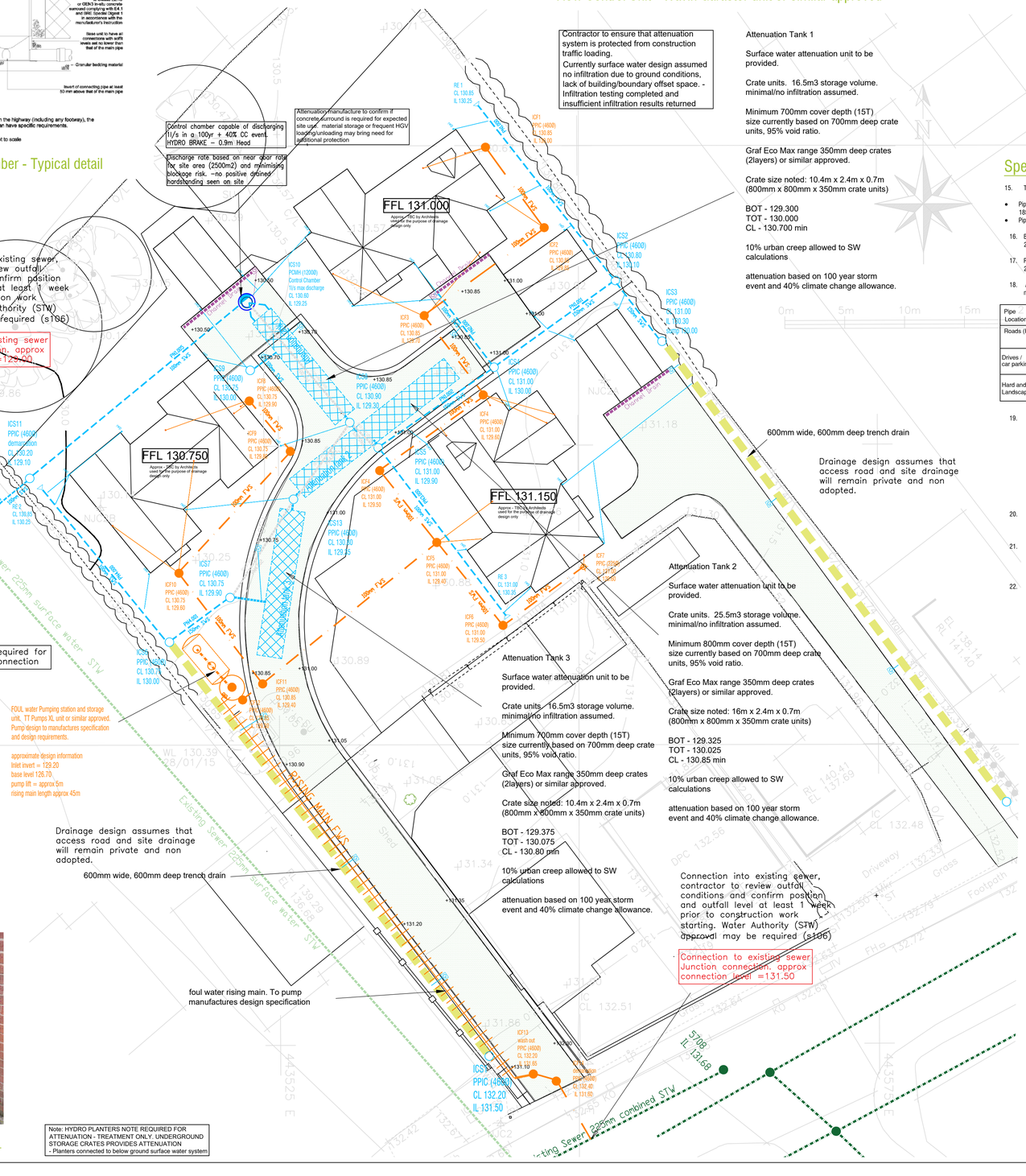
15. The following types of pipe may be used unless noted or agreed otherwise;
    - Pipes up to 300mm diameter to be Structured Walled to BS EN 13476, Polypropylene to BS EN 1852 or PVC-U to BS EN 1401.
    - Pipes 300mm diameter or over to be Concrete to BS 5911.
16. Both Clay and Concrete pipes shall be strength class 120 (100/150mm min crushing strength 28kN/m). Thermoplastic pipes shall have a minimum ring stiffness of SN4.
17. Pipes which run adjacent to buildings shall be installed in strict accordance with Part H, Clauses 2.23 to 2.25.
18. All pipes, chambers and fittings shall be installed, bedded and backfilled in accordance with the manufacturers instructions subject to the following minimum requirements;

Pipe Location	Cover to crown	Clay/Concrete Pipe * Bedding	Plastic Pipe Bedding	Backfill
Roads (HGV)	>1.2m	Class S	Class S (S1or2)	Type 1Granular
	<1.2m	Class 'A' (Concrete)	Class 'A' (Concrete)	
Drives / car parking	>0.9m <0.9m	Class S Class 'A' (Concrete)	Class S (S1or2) Class 'A' (Concrete)	Type 1 Granular
Hard and soft Landscaping	>0.6m <0.6m	Class S Class 'A' (Concrete)	Class S (S1or2) Class 'A' (Concrete)	Suitable as dug material

19. The first flexible joint in pipes adjoining a manhole shall be a maximum length of 600mm from the inside face of the manhole, connecting to a rocker pipe. The length of the rocker pipe shall be as follows;

Pipe diameter	Length of Rocker pipe
150-600mm	600mm
675-750mm	1000mm
over 750mm	1250mm

20. All manholes and inspection chambers situated in areas subject to vehicular loading to have class D400 covers and frames to BS EN1124 and those not subject to vehicular loading to have class minimum class B125 covers and frames.
21. Drainage frames must be tied to manhole risers by use of manufacturers ties (eg. Polypipe ref FRK500 fixing kit and FRK501 black ties.) The ground works contractor will be held fully responsible for any accidents due to incorrect fitting or failure to use the correct manufacturers fixing equipment.
22. All drains in the vicinity of existing or proposed trees to be constructed in accordance with the requirements of NHBC Practice Note 3.



REV	DATE	DESCRIPTION	BY
P01	05.03.26	Planning Aproval/B regs approval issue	BD

CLIENT
Tony Morris Builders Ltd

PROJECT
Residential Development
Land R/O No 84 Leicester Road, Hinckley, Leics

DRAWING TITLE
Below Ground Drainage Strategy
Approval/Information

BACE
07745 643638
bendaykin@benjaminallen-ce.co.uk
benjaminallen-ce.co.uk
Benjamin Allen Consulting Engineers

DRAWN BY	BD	DATE	05.03.26
CHECKED BY		SCALE	1:200

PROJECT No	SHEET SIZE	REVISION
77675A	A1	P01

DRAWING No
77675A-BACE-26-00-DR-C-500

Copyright © Benjamin Allen Consulting Engineering