DESIGN PHILOSOPHY

THIS DRAINAGE DESIGN HAS BEEN PUT TOGETHER TO DISCHARGE THE BELOW CONDITIONS ISSUED BY HORSHAM DISTRICT COUNCIL:

2 - Regulatory Condition: Within three months of the date of this decision, a drainage strategy detailing the proposed means of foul water disposal shall be submitted to the Local Planning Authority for its approval in writing. The drainage strategy shall be implemented within 3 months of such approval being given in strict accordance with the agreed details. The drainage strategy shall be retained as such thereafter.
Reason: As this matter is fundamental to ensure that the development is properly drained and to comply with Policy 38 of the Horsham District Planning Framework (2015).

3 - Regulatory Condition: Within three months of the date of this decision a detailed surface water drainage scheme, which shall include a Surface Water Drainage Statement based on sustainable drainage principles and an assessment of the hydrological and hydrogeological context of the site and development, shall be submitted to the Local Planning Authority for its approval in writing. The submitted details shall be fully coordinated with the landscape The scheme shall be implemented within 3 months of such approval being given in strict accordance with the agreed details. The drainage scheme shall be retained in that manner thereafter.
Reason: As this matter is fundamental to prevent the increased risk of flooding, to improve and protect water quality, improve habitat and amenity, and ensure future maintenance in accordance Policies 35 and 38 of the Horsham District Planning Framework (2015).

SURFACE WATER

INFILTRATION TESTING WAS UNDERTAKEN AT THE SITE (AS PER DRAINAGE STRATEGY REPORT FROM MR JOE MALONEY DATED FEBRUARY 2026). TESTS UNDERTAKEN SHOW THE SLOWEST RATE TO BE $1.32X10^{-6}$, HOWEVER, DURING EXCAVATIONS GROUNDWATER WAS POTENTIALLY ENCOUNTERED AT >1m DEPTH, AS SUCH A TYPE B PARTIALLY PERMEABLE SURFACE HAS BEEN PROPOSED IN ORDER TO PROMOTE INFILTRATION WHILST STILL GIVING AN OVERFLOW AT A LIMITED RATE INTO THE DITCH. FOR THE PURPOSES OF THE CALCULATIONS, INFILTRATION HAS NOT BEEN TAKEN INTO ACCOUNT TO BE CONSERVATIVE.

UTILISING CAUSEWAY FLOW CALCULATIONS, MCEC HAVE PROPOSED A MINIMUM SUB-BASE DEPTH OF 0.4m TO ATTENUATE THE 1 IN 100 YEAR +45% CC STORM EVENT WITHIN 3 SEPARATE AREAS.

DUE TO THE SLOPE ON SITE, IMPERMEABLE FLOW BAFFLES ARE PROPOSED TO MAXIMISE SUB-BASE USE WITH ORIFICE PLATE FLOW CONTROL TO LIMIT FLOWS FROM EACH AREA OF SUB-BASE.

THE FINAL OFFSITE FLOW CONTROL (32mm DIAMETER) IS PROPOSED TO LIMIT OFFSITE SURFACE WATER DISCHARGE TO 1.1L/S INTO THE DITCH. THIS IS AS CLOSE AS FEASIBLE TO GREENFIELD RUNOFF RATES (QBAR) DURING THE CRITICAL (1 IN 100 YEAR +45% CC) STORM EVENT. THE LIMITING FACTOR BEING HALF DRAIN TIME.

ROOF RUNOFF IS PROPOSED TO FLOW ONTO PERMEABLE SURFACE AND INTO WIDER PROPOSED DRAINAGE SYSTEM

FOUL WATER

NEW PACKAGE TREATMENT PLANT INSTALLED AS PER GEORGE WHITE PLANNING DOCUMENT REF DC/25/0982

TREATED WATER PROPOSED TO DISCHARGE VIA FOUL OUTFALL FROM SITE INTO DITCH

TANK TO BE MAINTAINED AND EMPTIED AS PER MANUFACTURERS GUIDELINES

NOTES

ALL RELEVANT CONSENTS/PERMISSIONS TO BE ACQUIRED PRIOR TO CONSTRUCTION

TO BE READ IN CONJUNCTION WITH MCEC CALCULATIONS DOCUMENT 'MC0754 Network Calcs SW FW', MR JOE MALONEY DOCUMENT 'Drainage Strategy' and GEORGE WHITE PLANNING SEWAGE DOCUMENT Ref: DC/25/0982

Item	Visual Inspection	Cleanse / De-sludge	CCTV Survey	Comments
Foul Drainage System (pipework, chambers etc.)	5 years	10 years	10 years	Cleansing to be carrie as necessary
Surface Water Drainage System (pipework, chambers etc.)	5 years	10 years	10 years	Cleansing to be carrie as necessary
Catchpits	1 year		N/A	Cleansing to be carrie as necessary
Sewage Treatment Tank	-	-	-	As per manufacturers guidelines

NORTHERN PERMEABLE SURFACE

TYPE B (PARTIAL INFILTRATION)
TOTAL CATCHMENT AREA: 300m²
PERMEABLE SURFACE SUB-BASE PLAN AREA: 300m²
MINIMUM SUB-BASE DEPTH: 400mm
FALL (INCLUDED WITHIN CALCS): 1/40

NO-DIG CONSTRUCTION WITHIN AREAS OF VEGETATION TO PROTECT ROOTS

PERFORATED PIPE TO COLLECTED AND CONVEY SURFACE WATER WITHIN SUB-BASE

NORTHERN PERMEABLE SURFACE

TYPE B (PARTIAL INFILTRATION)
TOTAL CATCHMENT AREA: 300m²
PERMEABLE SURFACE SUB-BASE PLAN AREA: 300m²
MINIMUM SUB-BASE DEPTH: 400mm
FALL (INCLUDED WITHIN CALCS): 1/40

NO-DIG CONSTRUCTION WITHIN AREAS OF VEGETATION TO PROTECT ROOTS

ACCESS TO BE RAMPED WITH CENTRAL HIGH POINT TO MITIGATE OVERLAND FLOWS ENTERING HIGHWAY FROM SITE

SOUTHERN PERMEABLE SURFACE

TYPE B (PARTIAL INFILTRATION)
TOTAL CATCHMENT AREA: 340m²
PERMEABLE SURFACE SUB-BASE PLAN AREA: 340m²
MINIMUM SUB-BASE DEPTH: 400mm
FALL (INCLUDED WITHIN CALCS): NEGLIGIBLE

NO-DIG CONSTRUCTION WITHIN AREAS OF VEGETATION TO PROTECT ROOTS

GROUND LEVELS IN THIS AREA TO BE BUILT UP TO ALLOW A GRAVITY CONNECTION TO THE DITCH AND ALSO REDIRECT OVERLAND FLOWS AWAY FROM THE HIGHWAY

TREE ROOT PROTECTION AREAS (RPA) TO BE OF NO-DIG CONSTRUCTION TO MITIGATE ROOT DAMAGE

ORIFICE PLATE FLOW CONTROL (32mm) LIMITING FLOW TO 1.1L/S DURING THE 1 IN 100 YEAR +45% CLIMATE CHANGE STORM EVENT

NEW PROPOSED SURFACE WATER AND FOUL WATER CONNECTION TO EXISTING DITCH

INVERT LEVEL: 61.40

ORIFICE PLATE FLOW CONTROL (24mm) LIMITING FLOW TO 0.4L/S DURING THE 1 IN 100 YEAR +45% CLIMATE CHANGE STORM EVENT

ORIFICE PLATE FLOW CONTROL (24mm) LIMITING FLOW TO 0.7L/S DURING THE 1 IN 100 YEAR +45% CLIMATE CHANGE STORM EVENT

IMPERMEABLE FLOW BAFFLES TO MAXIMISE STORAGE UPSTREAM

IMPERMEABLE FLOW BAFFLES TO MAXIMISE STORAGE UPSTREAM

NEW PACKAGE TREATMENT PLANT TO BE SITED MINIMUM 7m FROM STATICS

TANK TO BE MAINTAINED/EMPTIED AS PER MANUFACTURERS GUIDELINES

SPECS TO BE CONFIRMED BY MANUFACTURER

FINAL CHAMBER TO ALLOW FOR SHUT-OFF IN THE EVENT OF TREATMENT DEVICE FAILURE AND SAMPLING

Northern Sub-Base
CL 62.400
IL 61.900

Central Sub-Base
CL 62.300
IL 61.900

Southern Sub-Base
CL 62.000
IL 61.500

SW MH
CL 62.000
IL 61.444

FWM1
CL 62.800
IL 62.200

FWM2
CL 62.400
IL 61.800

FWM3
CL 62.000
IL 61.600

FWM4
CL 62.000
IL 61.511

RE1
CL 62.800
IL 62.300

RE2
CL 62.000
IL 61.600

SW1.001 100
150mm DIA @ 1in1.67

SW1.002 100
150mm DIA @ 1in1.67

FW1.001 100
150mm DIA @ 1in80.0

FW1.002 100
150mm DIA @ 1in80.0

FW1.003 100
150mm DIA @ 1in80.0

PER2.001
150mm DIA @ 1in150.0

FOUL WATER @ 0.5 LITRES PER SECOND

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b. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTURAL DRAWINGS, DETAILED SPECIFICATIONS WHERE APPLICABLE AND ALL ASSOCIATED DRAWINGS IN THIS SERIES.
c. ANY DISCREPANCY ON THIS DRAWING IS TO BE REPORTED IMMEDIATELY TO THE PARTNERSHIP FOR CLARIFICATION.
d. THE CONTRACTOR IS RESPONSIBLE FOR ALL TEMPORARY WORKS AND FOR THE STABILITY OF THE WORKS IN PROGRESS.
e. CDM REGULATIONS 2015. ALL CURRENT DRAWINGS AND SPECIFICATIONS MUST BE READ IN CONJUNCTION WITH THE DESIGNER'S HAZARD RISK AND ENVIRONMENT ASSESSMENT RECORD. DESIGN HAS BEEN PRODUCED BASED ON INFORMATION PROVIDED BY THE CLIENT/PRINCIPLE DESIGNER AVAILABLE AT TIME OF ISSUE. CONTRACTOR TO REVIEW DRAWING AND SPECIFICATION IN CONTEXT WITH THE WIDER SITE AND SPECIFIC SITE INVESTIGATION, CONTAMINATION ASSESSMENT, ASBESTOS SURVEY, ENVIRONMENTAL SURVEY, UXO SURVEY AND ANY OTHER RELEVANT INFORMATION AND MANAGE RISKS RELATING TO THE WORKS OUTLINED IN THE DRAWINGS AND SPECIFICATION. PRINCIPLE CONTRACTOR TO MAKE DESIGNER AND CLIENT AWARE OF SITE SPECIFIC RISKS THAT MAY AFFECT THE DRAWING AND SPECIFICATION.
f. CDM REGULATIONS 2015 FOR GENERIC MAINTENANCE AND MANAGEMENT RISKS REFER TO CHAPTER 36 OF CIRIA 752 SUDS MANUAL. FOR PROPRIETARY SYSTEMS SEE MANUFACTURER'S MANAGEMENT AND MAINTENANCE DETAILS AND RISK ASSESSMENT WITH REGARDS TO MAINTENANCE OF PROPRIETARY SYSTEMS.

2. CONSTRUCTION NOTE
a. THE MAIN CONTRACTOR IS RESPONSIBLE FOR THE DESIGN OF ALL TEMPORARY WORKS, AND IS ALSO RESPONSIBLE FOR THE SAFE MAINTENANCE AND STABILITY OF EXISTING BUILDINGS AT ALL TIMES.
b. THE MAIN CONTRACTOR IS RESPONSIBLE FOR ALL OCCURRENCES OF GROUND WATER DURING THE CONSTRUCTION PERIOD.
c. ANY INFORMATION GIVEN REGARDING EXISTING UNDERGROUND SERVICES IS GIVEN IN GOOD FAITH AFTER CONSULTATION WITH THE RELEVANT AUTHORITY, HOWEVER ACCURACY IS NOT CERTAIN. THE MAIN CONTRACTOR IS RESPONSIBLE FOR CHECKING ALL INFORMATION ON SITE PRIOR TO WORK COMMENCING AND TAKING DUE CARE AND ATTENTION WHILST UNDERTAKING THE WORKS.
d. THE CONTRACTOR MUST COMPLY WITH ALL CURRENT LEGISLATION RELATING TO HEALTH & SAFETY.
e. ALL PRODUCTS SPECIFIED SHALL BE INSTALLED IN STRICT ACCORDANCE WITH THE MANUFACTURERS RECOMMENDATIONS AND INSTRUCTIONS. IF THERE ARE DISCREPANCIES BETWEEN THAT INFORMATION AND THE DETAILS ON ANY MERIDIAN DRAWINGS, THE MANUFACTURERS INSTRUCTIONS MUST BE USED

3. BELOW GROUND DRAINAGE
a. UPVC-U PIPES TO BS 4660 : 2000 AND PLASTIC INSPECTION CHAMBERS AND FITTINGS TO BS EN 13598-1:2020. CLAY PIPES TO BS EN 295-1:2013. CONCRETE MANHOLE AND INSPECTION CHAMBERS TO BS EN 1917:2002
b. ALL ADOPTABLE DRAINAGE TO BE CONSTRUCTED IN ACCORDANCE WITH SEWERAGE SECTOR GUIDANCE App C - DESIGN AND CONSTRUCTION GUIDANCE AND THE RELEVANT COUNCIL DESIGN GUIDE.
c. ALL PRIVATE FOUL WATER SEWERS TO BE LAID AT 1 IN 40 AT THE HEAD OF PIPE RUNS AND 1 IN 80 ELSEWHERE UNLESS OTHERWISE STATED.
d. ALL PRIVATE FOUL SEWER PIPES TO BE 100mm DIAMETER FROM SOIL STACKS UNLESS OTHERWISE STATED ON THE DRAWING AND 150mm WHERE SERVING MORE THAN 9 PROPERTIES.
c. ALL PRIVATE SURFACE WATER SEWERS TO BE LAID AT 1 IN 100 UNLESS OTHERWISE STATED ON THE DRAWING.
d. ALL PRIVATE SURFACE WATER SEWER PIPES TO BE 100mm DIAMETER FROM DOWNPIPES AND 150mm DIAMETER ELSEWHERE UNLESS OTHERWISE STATED ON THE DRAWING.
e. ALLOW FOR RODDING ACCESS ABOVE GROUND WHERE RAINWATER DOWNPIPES OR SOIL STACKS DO NOT HAVE A DIRECT CONNECTION TO AN INSPECTION CHAMBER.
f. EXISTING SEWER PIPE TO BE RE-USED TO BE SURVEYED AND LEVELED PRIOR TO COMMENCEMENT OF THE DRAINAGE WORKS AND REFURBISHED IF NECESSARY.
g. CONNECTIONS TO AN ADOPTED SEWER ONLY TO BE MADE FOLLOWING APPROVAL FROM THE RELEVANT ADOPTING AUTHORITY.
h. ALL DRAINS, SEWER PIPES AND MANHOLES TO BE CLEANED AND TESTED FOR WATER TIGHTNESS ON COMPLETION OF CONSTRUCTION.

4. MANHOLE COVERS AND FRAMES
a. MANHOLE COVERS TO BE CLASS D400 IN HIGHWAYS, CLASS B125 IN FOOTWAYS AND VERGES, CLASS A15 IN NON-TRAFFICKED AREAS.
b. MANHOLE COVER AND FRAME TO BE BEDDED AND SURROUNDED IN 1:3 MORTAR.

LEGEND

- EXISTING DITCH AS PER CLIENTS DRAWING PROVIDED
- PROPOSED FW PIPE RUN
- PROPOSED SW PIPE RUN
- IMPERMEABLE FLOW BAFFLES
- PROPOSED PERFORATED SW DRAIN
- PROPOSED ORIFICE PLATE MANHOLE
- PACKAGED TREATMENT PLANT
- HEADWALL
- PERMEABLE PAVING - TANKED
- PROPOSED TYPE D FW INSPECTION CHAMBER
- PROPOSED TYPE E FW INSPECTION CHAMBER
- COMBINED MANHOLE
- OVERLAND FLOW
- PROPOSED LEVELS
- ROOT PROTECTION AREAS (RPA)

REV:	DESCRIPTION:	BY:	DATE:
P1	Incorporating Topo Survey	SL	01/07/26

STATUS: Preliminary

MERIDIAN
CIVIL ENGINEERING CONSULTANCY

CLIENT: Mr Maloney

SITE: Land East of Marches Road, Horsham, West Sussex, RH12 3SH

TITLE: Surface and Foul Water Drainage Strategy - Proposed Layout

SCALE AT A1:	DATE:	DRAWN:	CHECKED:
1:100	12/02/2026	SL	BB

PROJECT NO:	DRAWING NO:	REVISION:
MC0754	CIV01	P1

1:100 @ A1
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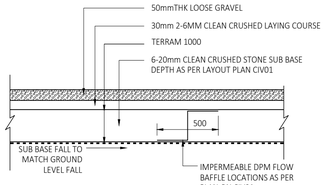
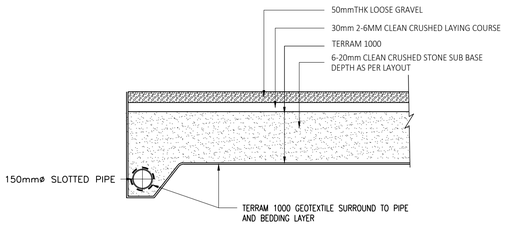


PERMEABLE SURFACE (TYPE B)

(FLOW BAFFLE CROSS SECTION)

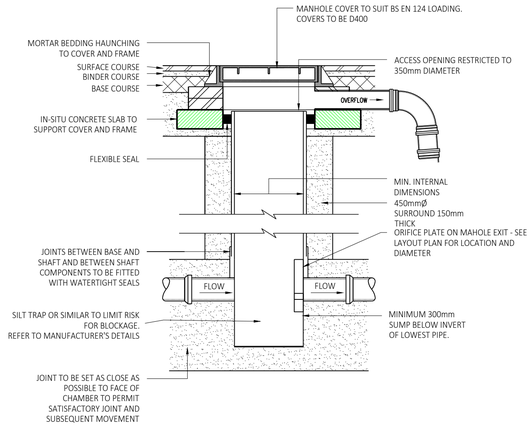
(1:20)



PERMEABLE SURFACE (TYPE B)

(1:20)

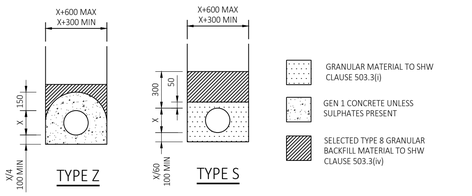
(SLOTTED COLLECTION PIPE
CROSS SECTION)



ORIFICE PLATE CHAMBER.

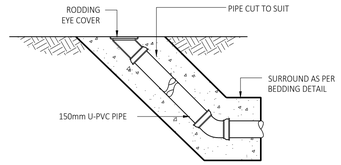
(PREFORMED POLYPIPE RIDGISTORM 450-1500Ø CATCHPIT MANHOLE OR SIMILAR),
MAX. DEPTH 3m, NON-ENTRY)

(1:20)



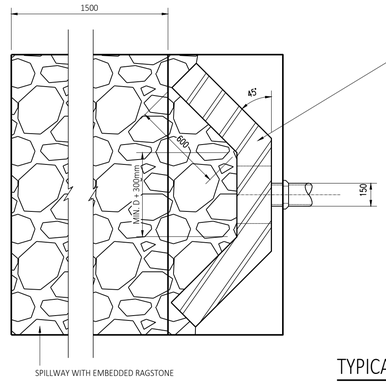
TRENCH AND BEDDING DETAILS

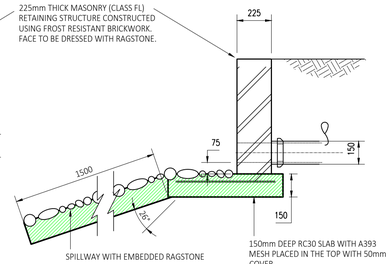
IN TRAFFICKED AREAS:	IN NON-TRAFFICKED AREAS:
TYPE S WHERE COVER >900mm	TYPE S WHERE COVER >600mm
TYPE Z WHERE COVER <900mm	TYPE Z WHERE COVER <600mm



RODDING EYE DETAIL.

(1:20)

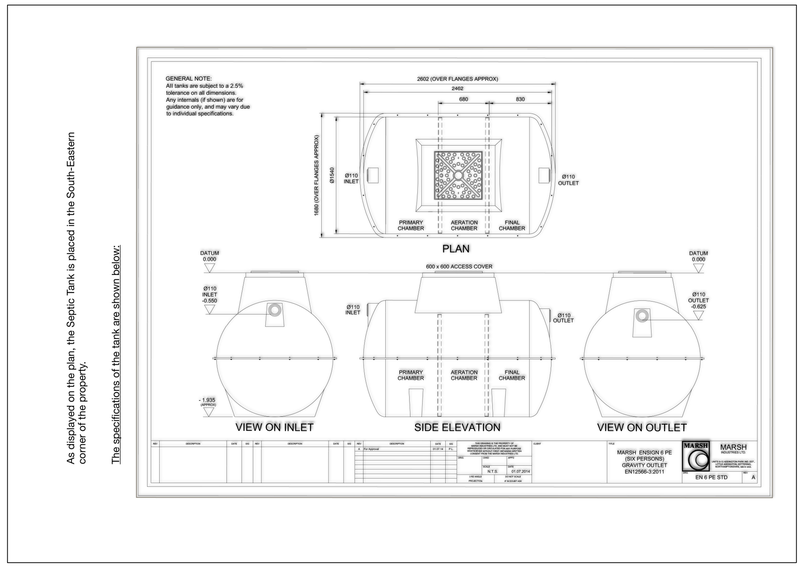




TYPICAL HEADWALL DETAIL.

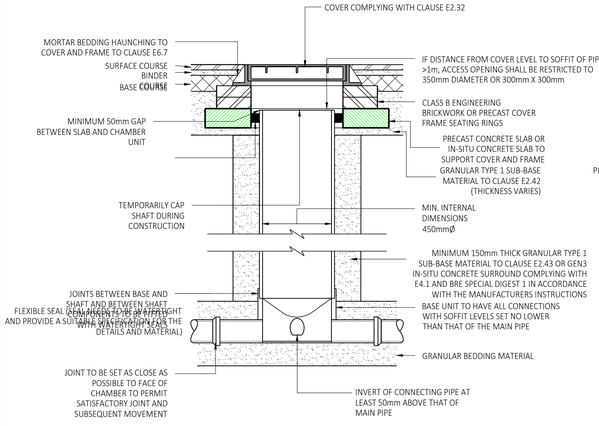
(NTS)

DETAILS TO BE CONFIRMED DEPENDING ON
DITCH DETAILS



SEPTIC TANK DETAILS PROVIDED BY CLIENT

(NTS)



NOT TO SCALE

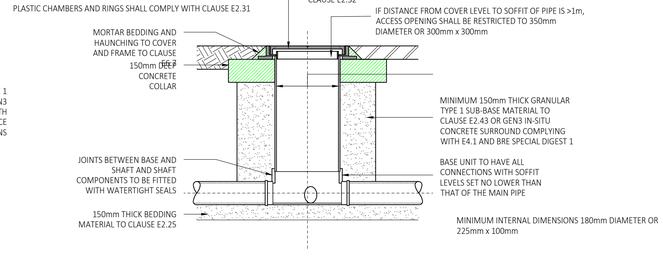
TYPE D INSPECTION CHAMBER DETAIL - FLEXIBLE MATERIAL.

(FOR USE IN AREAS SUBJECT TO VEHICLE LOADING,
DEPTH FROM COVER LEVEL TO SOFFIT OF PIPE UP TO 3M)

(1:20)

NOTE - WHERE THE ACCESS CHAMBER IS IN THE HIGHWAY(INCLUDING ANY FOOTWAY), THE HIGHWAY AUTHORITY CAN HAVE SPECIFIC REQUIREMENTS

SITED IN DRIVEWAYS/PAVED AREAS



TYPE E TYPICAL INSPECTION CHAMBER DETAIL - FLEXIBLE MATERIAL

(DEPTH FROM COVER LEVEL TO SOFFIT OF PIPE UP TO 2m)

(1:20)

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f. EXISTING SEWER PIPE TO BE RE-USED TO BE SURVEYED AND LEVELED PRIOR TO COMMENCEMENT OF THE DRAINAGE WORKS AND REFURBISHED IF NECESSARY.
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h. ALL DRAINS, SEWER PIPES AND MANHOLES TO BE CLEANED AND TESTED FOR WATER TIGHTNESS ON COMPLETION OF CONSTRUCTION.

4. MANHOLE COVERS AND FRAMES
a. MANHOLE COVERS TO BE CLASS D400 IN HIGHWAYS, CLASS B125 IN FOOTWAYS AND VERGES, CLASS A15 IN NON-TRAFFICKED AREAS.
b. MANHOLE COVER AND FRAME TO BE BEDDED AND SURROUNDED IN 1:3 MORTAR.

REV:	DESCRIPTION:	BY:	DATE:
P1	Incorporating Topo Survey	SL	01/07/26
-	-	-	-

STATUS: Preliminary

MERIDIAN
CIVIL ENGINEERING CONSULTANCY

CLIENT: Mr Maloney

SITE: Land East of Marches Road, Horsham, West Sussex, RH12 3SH

TITLE: Surface and Foul Water Drainage Strategy - Typical Details

SCALE AT A1:	DATE:	DRAWN:	CHECKED:
1:20	12/02/2026	SL	BB

PROJECT NO:	DRAWING NO:	REVISION:
MC0754	CIV02	P1

1:20 @ A1
0 200 400 600 800 1000mm

Design Settings

Rainfall Methodology	FEH-22	Minimum Velocity (m/s)	1.00
Return Period (years)	100	Connection Type	Level Soffits
Additional Flow (%)	0	Minimum Backdrop Height (m)	0.200
CV	1.000	Preferred Cover Depth (m)	1.200
Time of Entry (mins)	4.00	Include Intermediate Ground	✓
Maximum Time of Concentration (mins)	30.00	Enforce best practice design rules	x
Maximum Rainfall (mm/hr)	50.0		

Simulation Settings

Rainfall Methodology	FEH-22	Analysis Speed	Normal	Starting Level (m)	
Rainfall Events	Singular	Skip Steady State	x	Check Discharge Rate(s)	x
Summer CV	1.000	Drain Down Time (mins)	1440	Check Discharge Volume	x
Winter CV	1.000	Additional Storage (m³/ha)	0.0		

Storm Durations

15	30	60	120	180	240	360	600	960	1440	2160

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

Node Southern Sub-Base Online Orifice Control

Flap Valve	x	Invert Level (m)	61.500	Diameter (m)	0.032
Downstream Link	1.003	Design Depth (m)	0.400	Discharge Coefficient	0.600
Replaces Downstream Link	x	Design Flow (l/s)	1.4		

Node Northern Sub-base Online Orifice Control

Flap Valve	x	Invert Level (m)	61.900	Diameter (m)	0.024
Downstream Link	1.001	Design Depth (m)	0.400	Discharge Coefficient	0.600
Replaces Downstream Link	x	Design Flow (l/s)	0.8		

Node Central Sub-Base Online Orifice Control

Flap Valve	x	Invert Level (m)	61.800	Diameter (m)	0.024
Downstream Link	1.002	Design Depth (m)	0.400	Discharge Coefficient	0.600
Replaces Downstream Link	x	Design Flow (l/s)	0.8		

Flow+ v15.0 Copyright © 1988-2026 Causeway Technologies Ltd

Results for 2 year Critical Storm Duration. Lowest mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute summer	RE1	1	62.300	0.000	0.0	0.0000	0.0000	OK
15 minute summer	RE2	1	61.600	0.000	0.0	0.0000	0.0000	OK
960 minute summer	Southern Sub-Base	675	61.592	0.092	1.2	9.2392	0.0000	OK
960 minute summer	SW MH	675	61.465	0.021	0.6	0.0033	0.0000	OK
960 minute summer	5	675	61.445	0.020	0.6	0.0000	0.0000	OK
360 minute winter	Central Sub-Base	336	61.942	0.142	1.3	6.7882	0.0000	OK
240 minute summer	Northern Sub-base	168	62.038	0.138	1.8	3.4595	0.0000	OK

Link Event (Upstream Depth)	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
15 minute summer	RE1	1.000	Northern Sub-base	0.0	0.000	0.000	0.0888	
15 minute summer	RE2	2.000	Southern Sub-Base	0.0	0.000	0.000	0.0138	
960 minute summer	Southern Sub-Base	1.003	SW MH	0.6	0.392	0.039	0.0123	
960 minute summer	SW MH	1.004	5	0.6	0.396	0.039	0.0041	33.4
360 minute winter	Central Sub-Base	1.002	Southern Sub-Base	0.4	0.507	0.014	0.0580	
240 minute summer	Northern Sub-base	1.001	Central Sub-Base	0.4	0.119	0.025	0.1338	

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Results for 30 year Critical Storm Duration. Lowest mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute summer	RE1	1	62.300	0.000	0.0	0.0000	0.0000	OK
600 minute winter	RE2	555	61.665	0.065	0.0	0.0012	0.0000	OK
600 minute winter	Southern Sub-Base	540	61.665	0.165	1.9	16.7634	0.0000	SURCHARGED
600 minute winter	SW MH	540	61.469	0.025	0.8	0.0039	0.0000	OK
600 minute winter	5	540	61.449	0.024	0.8	0.0000	0.0000	OK
360 minute winter	Central Sub-Base	352	62.023	0.223	2.2	14.0491	0.0000	FLOOD RISK
180 minute winter	Northern Sub-base	176	62.132	0.232	3.1	9.7174	0.0000	FLOOD RISK

Link Event (Upstream Depth)	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
15 minute summer	RE1	1.000	Northern Sub-base	0.0	0.000	0.000	0.1204	
600 minute winter	RE2	2.000	Southern Sub-Base	0.0	-0.003	-0.002	0.1190	
600 minute winter	Southern Sub-Base	1.003	SW MH	0.8	0.433	0.056	0.0157	
600 minute winter	SW MH	1.004	5	0.8	0.437	0.056	0.0052	54.9
360 minute winter	Central Sub-Base	1.002	Southern Sub-Base	0.5	0.572	0.018	0.0946	
180 minute winter	Northern Sub-base	1.001	Central Sub-Base	0.4	0.131	0.027	0.2042	

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Results for 100 year Critical Storm Duration. Lowest mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute summer	RE1	1	62.300	0.000	0.0	0.0000	0.0000	OK
960 minute summer	RE2	690	61.705	0.105	0.0	0.0019	0.0000	OK
960 minute summer	Southern Sub-Base	675	61.705	0.205	2.4	20.8354	0.0000	FLOOD RISK
960 minute summer	SW MH	675	61.470	0.026	0.9	0.0041	0.0000	OK
960 minute summer	5	675	61.450	0.025	0.9	0.0000	0.0000	OK
600 minute winter	Central Sub-Base	570	62.060	0.260	1.9	17.4244	0.0000	FLOOD RISK
240 minute winter	Northern Sub-base	232	62.168	0.267	3.1	12.8371	0.0000	FLOOD RISK

Link Event (Upstream Depth)	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
15 minute summer	RE1	1.000	Northern Sub-base	0.0	0.000	0.000	0.1204	
960 minute summer	RE2	2.000	Southern Sub-Base	0.0	0.003	0.002	0.1467	
960 minute summer	Southern Sub-Base	1.003	SW MH	0.9	0.448	0.063	0.0171	
960 minute summer	SW MH	1.004	5	0.9	0.452	0.063	0.0057	77.1
600 minute winter	Central Sub-Base	1.002	Southern Sub-Base	0.6	0.539	0.020	0.0949	
240 minute winter	Northern Sub-base	1.001	Central Sub-Base	0.4	0.130	0.027	0.2273	

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Results for 100 year +45% CC Critical Storm Duration. Lowest mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute summer	RE1	1	62.300	0.000	0.0	0.0000	0.0000	OK
960 minute winter	RE2	735	61.795	0.195	0.0	0.0035	0.0000	FLOOD RISK
960 minute winter	Southern Sub-Base	735	61.795	0.295	2.4	29.9918	0.0000	FLOOD RISK
960 minute winter	SW MH	735	61.473	0.029	1.1	0.0046	0.0000	OK
960 minute winter	5	735	61.453	0.028	1.1	0.0000	0.0000	OK
600 minute winter	Central Sub-Base	570	62.149	0.349	2.6	25.4133	0.0000	FLOOD RISK
360 minute winter	Northern Sub-base	352	62.254	0.354	3.3	20.6344	0.0000	FLOOD RISK

Link Event (Upstream Depth)	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
15 minute summer	RE1	1.000	Northern Sub-base	0.0	0.000	0.000	0.1204	
960 minute winter	RE2	2.000	Southern Sub-Base	0.0	-0.002	-0.001	0.1677	
960 minute winter	Southern Sub-Base	1.003	SW MH	1.1	0.473	0.076	0.0197	
960 minute winter	SW MH	1.004	5	1.1	0.479	0.076	0.0065	106.8
600 minute winter	Central Sub-Base	1.002	Southern Sub-Base	0.7	0.513	0.023	0.0954	
360 minute winter	Northern Sub-base	1.001	Central Sub-Base	0.4	0.122	0.025	0.2273	

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Greenfield runoff rate estimation tool

www.uksuds.com | Greenfield runoff rate estimation tool (https://www.uksuds.com/)

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

Project details

Date	01/07/2026
Calculated by	
Reference	
Model version	2.2.3

Location

Site name	Marches Road
Site location	Horsham



Site easting (British National Grid)	514801
Site northing (British National Grid)	135674

Site details

Total site area (ha)	0.09 ha

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Greenfield runoff

Method

Method	FEH statistical (2025)

FEH statistical (2025)

	My value		Map value
SAAR9120 (mm)	844 mm		
BFIHOST19scaled	0.236		
QMed-QBar conversion	1.136		1.136
QMed (l/s)	0.7 l/s		
QBar (FEH statistical 2025) (l/s)	0.8 l/s		

Growth curve factors

	My value		Map value
Hydrological region	7		7
1 year growth factor	0.85		
2 year growth factor	0.88		
10 year growth factor	1.62		
30 year growth factor	2.3		
100 year growth factor	3.19		
200 year growth factor	3.74		

Results

Method	FEH statistical (2025)
Flow rate 1 year (l/s)	0.7 l/s
Flow rate 2 year (l/s)	0.7 l/s
Flow rate 10 years (l/s)	1.3 l/s
Flow rate 30 years (l/s)	1.9 l/s
Flow rate 100 years (l/s)	2.6 l/s
Flow rate 200 years (l/s)	3.1 l/s

Please note runoff estimation is subject to significant uncertainty. Results are therefore normally reported to only 1 decimal place. Where 2 decimal places are provided, this does not indicate accuracy to this level, it has been adopted to prevent 'zero' figures from being reported. Outputs less than 0.01 l/s are reported as 0.01 l/s.

Disclaimer

This report was produced using the Greenfield runoff rate estimation tool (2.2.3) developed by HR Wallingford and available at uksuds.com (https://www.uksuds.com/). The use of this tool is subject to the UK SuDS terms and conditions and licence agreement, which can both be found at uksuds.com/terms-conditions (https://www.uksuds.com/terms-conditions). The outputs from this tool have been used to estimate Greenfield runoff rates. The use of these results is the responsibility of the users of this tool. No liability will be accepted by HR Wallingford, the Environment Agency, Centre for Ecology and Hydrology, Wallingford Hydrosolutions or any other organisation for the use of these data in the design or operational characteristics of any drainage scheme.

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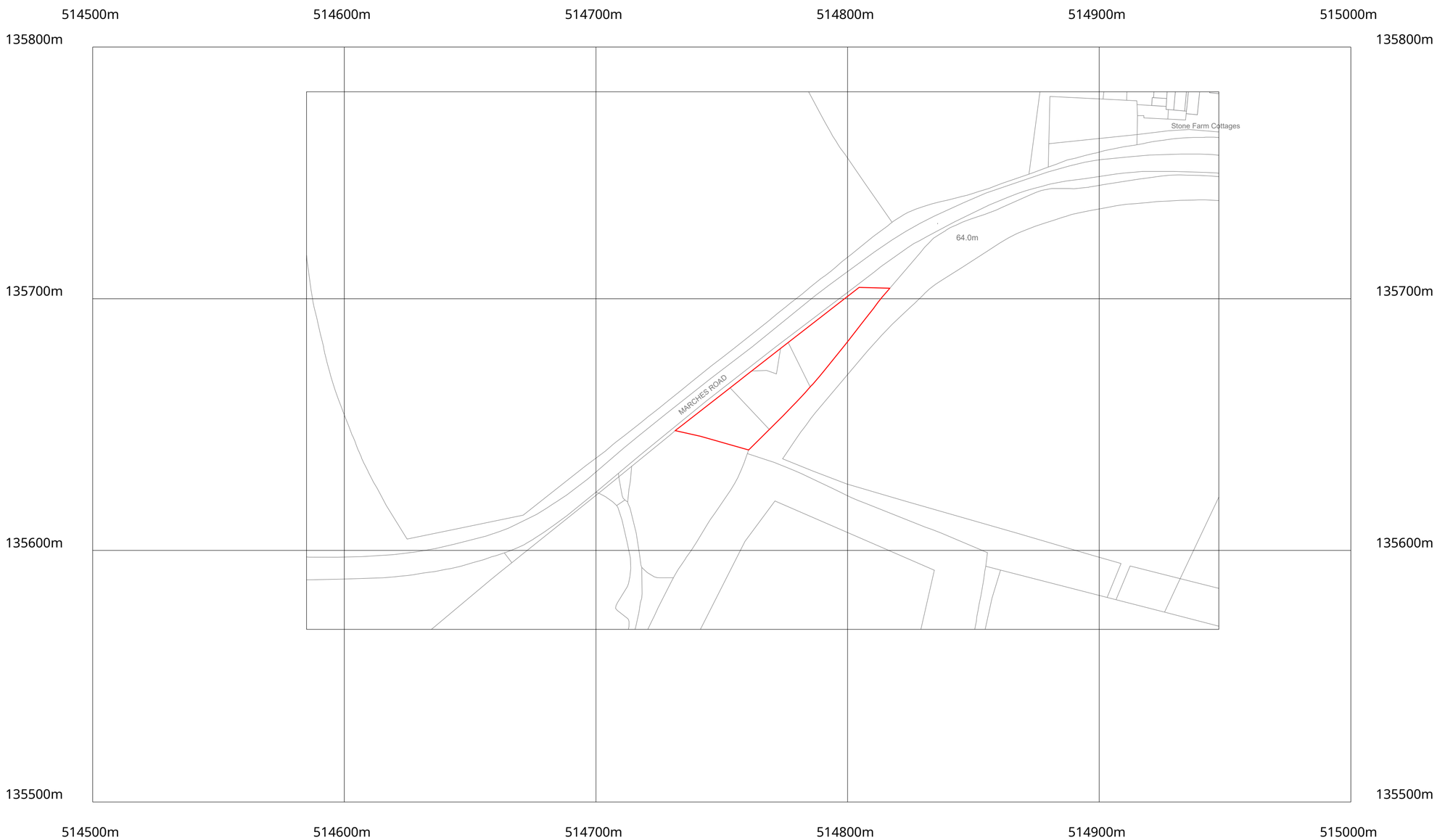

Location Plan 1:1250
drawing number GP/01/24/ rev
Licence number AC0000806982

N

20 0 20 40 60 80 100
Metres

Block Plan 1:500
Licence number AC0000806982



Drawing title	Proposed block plan
Project	Proposed traveller site
Address	Marches road, Warnham, Horsham, West Sussex
Client	
Scales	1:500
Date	June 2025
Drawing Number:	GP/03/24 Rev E

Architectural elements
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WHITE
PLANNING & ENFORCEMENT
INFO@WHITEPLANNING.CO.UK / GEORGE@WHITEPLANNING.CO.UK

Ref: DC/25/0982
14th August 2025

Recipient Address:
Horsham District Council – Planning Dept
FAO: Kate Turner

Provision of further information requested REGARDING:
DISPOSAL OF SEWAGE

Ref: DC/25/0982
Land at Marches Road Warnham

Dear Kate,

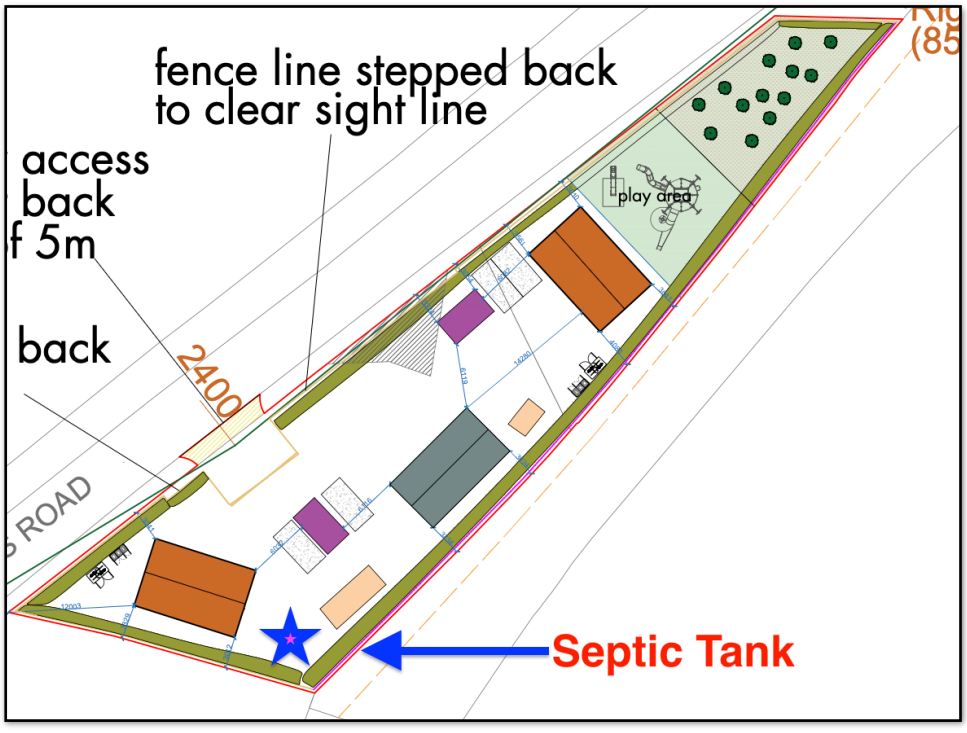
As requested by Penny Marsh, in letter dated 12th August 2025, I am providing further information in line with my client's application:

DC/25/0982 - Land at Marches Road Warnham

Please see below extracts, which detail the site's means of disposing and treating it's sewage.

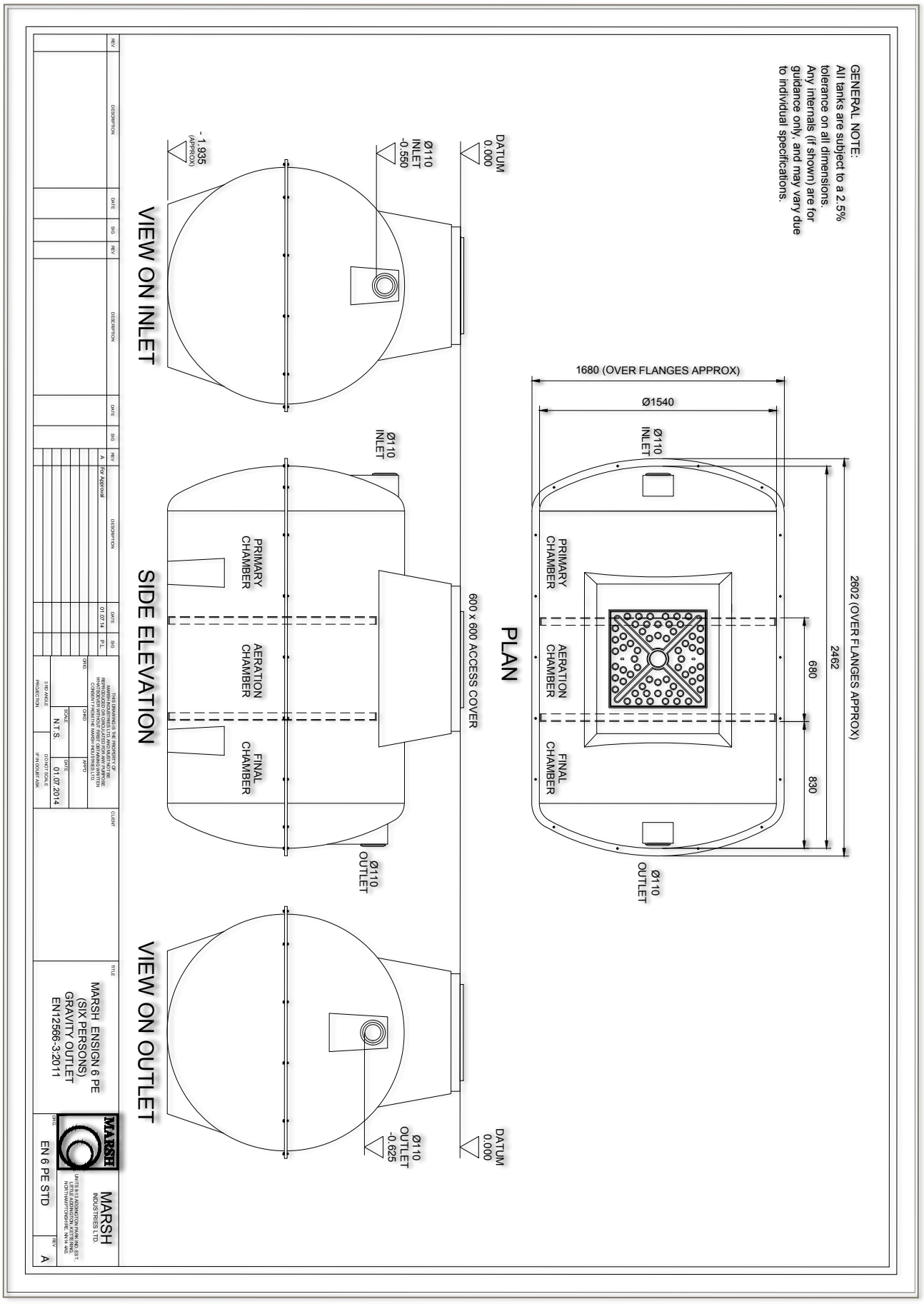
A septic tank system has been installed on site to safely manage all sewage generated by the property. Foul waste from toilets, sinks, and other wastewater outlets is directed via a sealed drainage pipe into the underground septic tank. It is located to allow for safe maintenance, desludging, and inspection. By isolating, containing, and partially treating sewage on site, the system ensures effective foul drainage management in an area without mains sewer connection, protecting public health and the local environment.

Location of The Septic Tank:



As displayed on the plan, the Septic Tank is placed in the South-Eastern corner of the property.

<u>The specifications of the tank are shown below:</u>



We trust that the information/detail submitted, is sufficient to negate any concerns surrounding sewage treatment and disposal on-site.

Kind regards,

WHITE
PLANNING & ENFORCEMENT

514700E
514750E
514800E
135700N
135650N
135600N
135550N
Hardcore
Containers
Fence Top 65.24
Fence Top 64.99
Fence Top 65.47
Hedge Top 66.25
Fence Top 64.86
Fence Top 64.20
Fence Top 64.71
Shingle
Marches Road
Electric
Cover 61.94
Fence Top 63.57
Tap
FH 61.96
Cover 61.84
Septic Tank 61.95
Fence Top 63.24
Fence Top 63.87
EVE 64.82
RIDGE 65.21
Door Level 62.77
Mobile Home
EVE 64.80
RIDGE 65.29
Door Level 62.61
Roof
Fence Top 63.08
Pipe 58.16
Culvert 58.05
58.31
57.84
Culvert 58.06
58.47

SITE AT MARCHES ROAD
Scale 1:250 A1
Surveyed 19/06/2026
Drawing No. MR01

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