NORTH
Indicative Only

Proposed off-site connections to public sewers in High Street at new manholes as shown. Connection levels of public sewers based on STW data tables. Exact levels of public sewers at proposed connection points and at crossover point of public foul water sewer to be identified prior to construction. Surface and foul water capacity of public sewers to accept off-site discharge rates to be established with STW prior to construction.

DRAINAGE COVER LEVELS ARE INDICATIVE ONLY, TO BE ADJUSTED TO SUIT FINAL SURFACE DESIGN LEVELS.

Exact SW Manhole connection arrangement to be agreed within S106 agreement

FW01(1500)
CL117.255
IL115.260(150)
IL114.960(450)

SW01(1200)
CL117.250
BD115.660(150)
IL115.250(300)

PF07(1200)
CL117.315
IL115.340

PS13(1200)
CL117.290
IL115.715(300)
IL115.715(150)

PS13 CONTROL DETAILS
HYDROBRAKE:
Unit Ref: MD-SHE-0084-3100-1000-3100
Design Head: 1.000m
Design Flow: 3.1 l/s
Diameter: 84mm

Manhole to be orientated as shown so that cover is not within vehicle wheel track

1500Ø 1.75

PS12(300)
CL117.395
IL116.395(OUT)

PS11(300)
CL117.540
IL116.540(OUT)

1000Ø perforated pipe at bottom of sub-base laid with a slight fall to direct flow towards chamber

Permeable Paving - Lined Sub-Base for Attenuation and Water Quality Benefits
Min. Sub-Base Depth: 0.350m
Full height restraints around perimeter
Min. 1:100 fall at formation level to perforated pipe

ATTENUATION DETAILS
CELLULAR STORAGE:
Dims: 20.0m x 8.0m x 0.75m deep
Design Event: 100yr + 40% CC
Impermeable Area: 0.214ha
Storage @ 95% Void Ratio: 914m³
Min CL: 117.500
SL: 116.635
IL: 116.885

PF06(1200)
CL117.550
IL115.565

PS10(300)
CL117.445
IL116.445(OUT)

PS09(1200)
CL117.565
IL116.060(100)
IL115.935(225)
IL115.860(300)

1500Ø 1.78

PS08(300)
CL117.620
IS116.620(OUT)

Catchpit chamber

PF05(1200)
CL117.875
IL115.915(100)
IL115.860(150)

PS07(1200)
CL117.785
CL116.275(100)
IL116.225(150)
IL116.150(225)

PS06(300)
CL117.850
IL116.850(OUT)

PS05(450)
CL118.140
IL116.950

PF02B(450)
CL118.125
IL116.285

PF02A(450)
CL118.125
IL116.400

PF02(450)
CL117.650
IL116.650

PF04(450)
CL118.175
IL116.635
IL116.585

PS03(1200)
CL117.805
IL116.980(225)
IL115.905(300)

PS02(600)
CL118.125
IL116.210(150)
IL116.135(OUT)

PF03(450)
CL117.825
IL117.100

PS04(RE)
CL117.950
IL117.100

PF01A(450)
CL117.950
IL116.890

PF01(450)
CL117.950
IL116.650

WC's to connect to head of run at chamber PF01

Height of retaining wall to be confirmed on site prior to construction

PS03A(450)
CL117.725
IL117.010
IL116.990

ALL INTERNAL FOUL WATER CONNECTION POINTS TO BE CONFIRMED

FFL118.150

NB: No access to building at time of survey.

UTC upstream beyond this point due to silt.

NB: Elec assumed route through vegetation.

Boundary level assumed to be 119.000 - to be confirmed on site prior to construction

Unable to determine outfall.

Rendered building

Private dwellings

Private gardens

School playground

Brick building

Gravel

Asphalt

Grass

Existing Public 300Ø Surface Water Sewer

Existing Public 450Ø Foul Water Sewer

EXSW(2600)
CL116.430
IL114.810

MH(EXFW(2600)
CL116.430
IL114.340

DRAINAGE KEY:

- Site Boundary

FOUL WATER DRAINAGE:

- PF00 — Proposed Private Foul Water Manhole (Type B)
- Proposed Private Foul Water Access Chamber
- Proposed Private Foul Water Drain/Sewer
- FW00 — Proposed Adoptable Foul Water Manhole (Type B)

SURFACE WATER DRAINAGE:

- Proposed Private Surface Water Rain Water Pipe
- LIN — Proposed Private Surface Water Channel Linear (i.e ACO)
- PS00 — Proposed Private Surface Water Manhole (Type B)
- Proposed Private Surface Water Access Chamber
- Proposed Private Surface Water Rodding Eye
- Proposed Private Surface Water Drain/Sewer
- Proposed Private Attenuation Crates
- Proposed Private Tanked Permeable Paving
- SW00 — Proposed Adoptable Surface Water Manhole (Type B)

EXISTING DRAINAGE:

- EXSW — Existing Surface Water Sewer
- EXFW — Existing Foul Water Sewer

DRAINAGE NOTES:

Compliance with Health & Safety matters on any trench/manhole is obligatory and a permit to enter a confined space is required when connecting site drainage to the existing public sewerage system.

All levels and positions of existing manholes and sewers (shown on plan in grey) to be confirmed by the contractor prior to commencement of the drainage works

All drainage works are to commence from discharge point and commence upstream respectively

All sewers runs closer than 1.2m to a building to be protected by 150mm min C20 concrete surround and/or foundations to be positioned equal to or lower than invert, also Easement or 'Build over agreement' to be obtained where applicable

All private sewers in trafficked areas which have less than 0.9m cover to crown of pipe to have concrete bed and surround. All bedding and surround to comply with the requirements of Approved Document H and the manufacturers requirements

All private sewers in non-trafficked areas to have a min cover of 0.45m. All bedding and surround to comply with the requirements of Approved Document H and the manufacturers requirements

All private drainage pipes to be min 100mm diameter laid at min 1 in 100 for surface water and min 1 in 80 for foul water

All pipework to be installed in accordance with manufacturers requirements

All drainage spurs to be no greater than 90 degrees to the main sewer to avoid opposing the flow

All pipes connecting into manholes to be laid soffit to soffit, unless stated otherwise

Where drainage occurs in filled material, the filled material must be compacted in 150mm layers and flexible joints provided in the pipework

It is essential that the depths and locations of all existing services along the route of proposed sewers are confirmed on site prior to construction, and reported to the engineer. Services include water, gas, electricity, BT etc

Position of existing services are indicative only and are not exhaustive

CONTRACTORS MUST CHECK ALL DIMENSIONS ON SITE. ONLY FIGURED DIMENSIONS ARE TO BE WORKED FROM. DISCREPANCIES MUST BE REPORTED TO THE DESIGN TEAM BEFORE PROCEEDING. © THIS DRAWING IS COPYRIGHT.

REVISION NOTES:

1. PS13 & PF07 repositioned to within 1 metre of boundary to satisfy S106 guidance
2. Cover levels, invert levels & gradients updated to suit

REV:	DESCRIPTION:	BY:	DATE:
P4	Updated to suit S106 guidance	LW	02.05.23
P3	2no. balcony RWPs added	SDF	05.08.21
P2	Updated to suit site levels design	SDF	29.07.21
P1	Initial preliminary issue	SDF	24.06.21

STATUS: PRELIMINARY

EXPEDITE
Exeter
The Design Studio
35 Southernhay East
Exeter
EX1 1NX
t: 01392 691 631
www.expediteps.com

CLIENT: BARWELL MEDICAL CENTRE

SITE: BARWELL MEDICAL CENTRE
BARWELL
LEICESTERSHIRE

TITLE: DRAINAGE PLAN - OVERALL

SCALE AT A0:	DATE:	DRAWN:	CHECKED:
1:100	Jun 2021	GS	SDF

PROJECT NO:	DRAWING NO:	REVISION:
ES19.125	03.00	P4