





PRoW Signage Plan
Scale 1:1000

Materials

Render

Bricks

Tiles

PRoW

Webber Ivory Render

Hardwicke Welbeck

Russell Bute 3 Red

Tarmac

Mellor Red Multi

Russell Bute 3 Grey

Waymarker

Fingerpost

Boundary Treatments

1.2m Instant Hedge

1.2m Post and Rail

Elevation Details

Fascias and Soffits- Black UPVC

Rainwater goods- Black UPVC

Front Window Design - Cottage as per planning house type pack- White UPVC

Front Door Design - Cottage as per planning house type pack

Front Door Colours -Black (garage doors Black)

Note: Images are for illustration purposes only may not represent exact specifications of materials

LEGEND	
	Site Boundary
	1.8m Closeboard Fence
	1.8m Brick Wall (to match adjacent house)
	1.2m Post & Rail Fence
	0.45m Knee Rail Fence (pitch rule)
	1.2M Instant Hedge
	Hardwicke Red Multi with Red feature Brick
	Mellor Red Multi with Blue feature Brick
	Grey Roof Tile
	Red Roof Tile
	Indicative GRP Chimney plots
	Render Ivory
	EV Point
	Public Right of Way (PRoW)

F	31.03.25	PRoW signage information added	J.
E	13.03.25	PRoW specification updated	J.
D	10.03.25	Updated in-line with the layout Rev E	J.
C	17.02.25	HT blocks updated, floor points added, hoggin footpath outside plot 1-3 amended, general layout amended in-line with engineering comments, plot 25 and 28 amended to 30' - fence serving plots 1-4 amended, plot 20.21, 25, 36-37 & 45-46 parking amended & plot 22, 36-37 and 46 moved forwards.	AB
B	13.01.25	Materials Key updated	KOE
A	16.12.24	Layout amended to reflect planning comments.	AB
REVISION	DATE	DESCRIPTION	DRAWN
			ALLISON HOMES LARKFLEET HOUSE SOUTHFIELDS BUSINESS PARK BOURNE LINCOLNSHIRE PE10 0FF TEL: 01778 391150
PROJECT			
Stanton Under Bardon			
DRAWING TITLE			
Materials Layout			
SCALE	DATE	DRAWN	APPROVED
1:500@ A2	20.08.24	AB	-
DRAWING NO.			REVISION
SUB/ML/001			F

> CONNECTIVITY STATEMENT



PROJECT NAME: Main Road, Stanton under Barton, Hinkley and Bosworth, Leicestershire, LE67 9TL

Our Gig connection adheres to the highest industry standards and specifications, ensuring that it not only meets but also exceeds the stringent criteria set forth by Part R of the Building Regulations. We have meticulously designed and implemented our Gig connection infrastructure to guarantee optimal performance, reliability, and safety in residential and commercial buildings, in accordance with the relevant regulations and guidelines.

In addition to satisfying Part R of the Building Regulations, our Gig connection is engineered to fulfil all necessary prerequisites for NHBC applications. We understand the importance of NHBC approval in the construction and housing sectors, and we have taken every measure to ensure that our Gig connection aligns seamlessly with NHBC requirements.

By choosing Pulse Fibre for your Gig connection needs, you can have confidence that you are selecting a solution that not only provides exceptional internet connectivity but also meets the essential criteria for regulatory compliance and NHBC applications.

A handwritten signature in black ink, appearing to read 'R. Buckingham', with a long, sweeping horizontal line extending to the right.

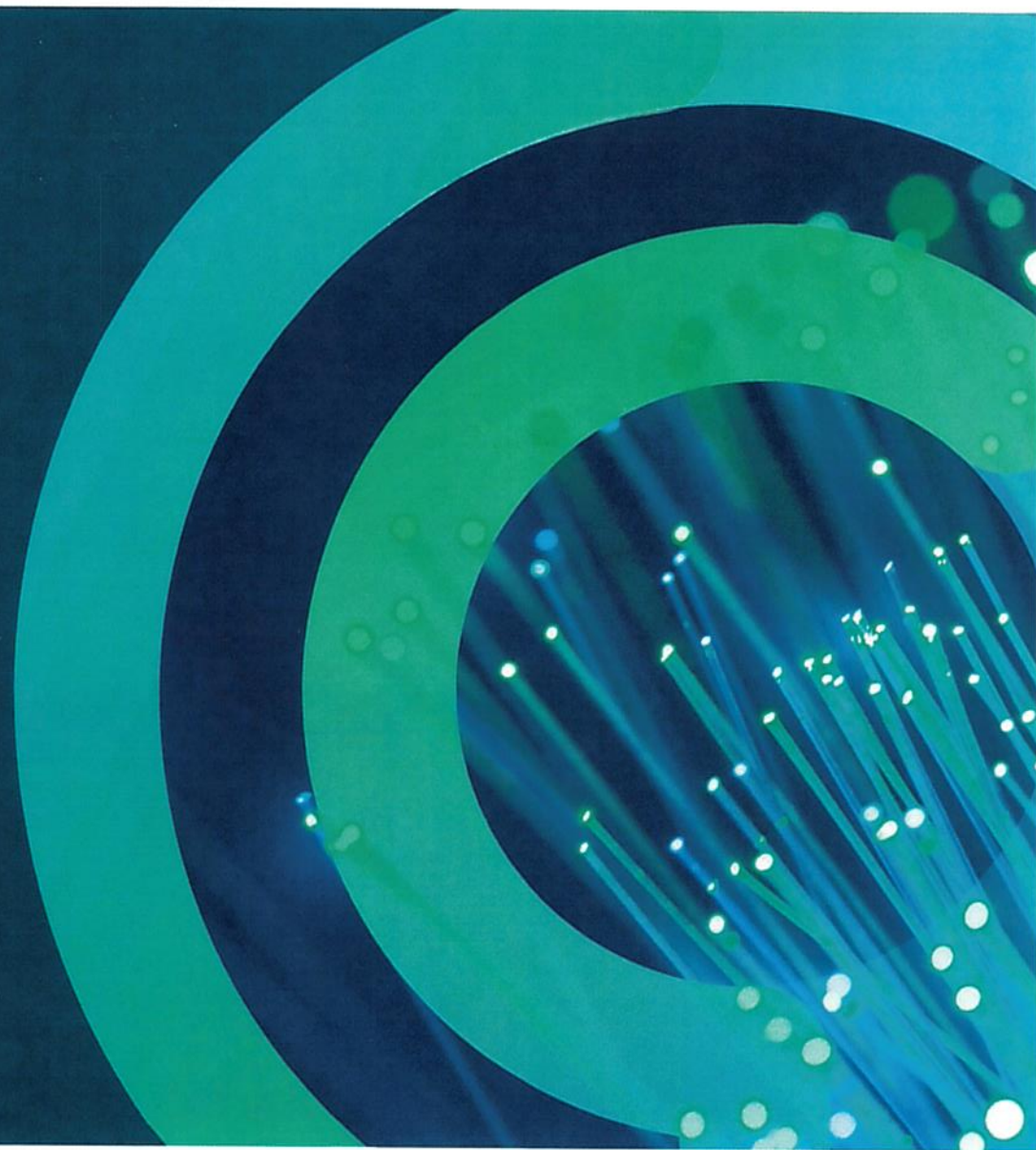
ROBERT BUCKINGHAM
OPERATIONS DIRECTOR

If you have any further questions or require additional information regarding the compliance of our Gig connection with Part R, please do not hesitate to contact us. We are committed to delivering top-quality services and ensuring that our solutions meet and exceed industry standards.

[Pulse Fibre – Developer Terms & Conditions](#)



Your Pulse Fibre Proposal



Working with Pulse Fibre

By working with Pulse Fibre, both the Developer and Customer will receive multiple benefits.

The Developer will benefit from:



Construction Mode

Providing broadband to all units during construction from 2nd fix to enable the configuration of IoT devices such as car charges, nest heating systems and more



Site Compound Connection

Free broadband and/or phone connection to your site compound and sales hubs, subject to feasibility



Dedicated Support

Your site teams will have a dedicated Pulse Fibre project team for each development, including your sales team who will have training and access to a Pulse Fibre representative who will provide training, support and marketing materials

Your Customers will benefit from:



Symmetrical speeds

Upload and download speeds up to 10Gb/s



Day One Connectivity

Enhance customer satisfaction by offering internet connection the day residents move in. With Pulse Fibre, we ensure seamless activation, making the move in process smoother than ever.



One month free

Your customers will enjoy one month with no charge

➤ INCLUSIONS & EXCLUSIONS

KEY:
 PF - Pulse Fibre
 CL - Client
 SDU - Single dwelling
 MDU - Multi dwelling

FIBRE SCOPE	DESIGN	SUPPLY	INSTALL
Backhaul – Off-site connection and any network reinforcement	PF	PF	PF
Cabinet Root	PF	PF	CL
Preparation of base	PF	CL	CL
Siting the cabinet on the base	PF	PF	PF
Metered power to the base (LV power pull)	PF	CL	CL
Connecting the power internally within the cabinet and cut out installation	PF	PF	CL
Meter installation	PF	PF	PF
Metered power to MDU Rack (MDU development)	PF	CL	CL
Fibre to the Cabinet / Rack, from chamber to internals	PF	PF	PF
Main spine – Ducting from cabinet to chambers	PF	PF	CL
Service duct carrying the incoming fibre cable – service duct from chamber to agreed ONT location We will also supply any corresponding end caps, connectors and gas seals.	PF	PF	CL
Onsite chambers – footway and carriageway	PF	CL	CL
Onsite chamber lids – footway (concrete) and carriageway (iron)	PF	PF	CL
Fibre cabling – from cabinet to ONT	PF	PF	PF
MDU onsite fibre containment trays	CL	CL	CL
MDU service drops from individual apartments to designated riser(s)	PF	PF	CL
Plot – Brush plate and power for ONT and Router – 2 x 13amp sockets adjacent to agreed ONT location	CL	CL	CL
Plot – External entry capping (if applicable)	PF	PF	PF
Option 1: Plot – ONT/Router installation	PF	PF	PF

> FIBRE DELIVERY ORDER FORM



DATE: 10 February 2025

YOUR DETAILS

Company Name Allison Homes
Registration No 04546642
Contact Name Carter Newbury
Contact Email Carter.Newbury@allison-homes.com
Contact Phone 01332 439020

SITE DETAILS

Developer Allison Homes
Site Name Meadow Lane
Site Address Stanton-Under-Barton, Hinkley and Bosworth, Leicestershire, LE67 9TL
Units 50
Rebate*

*Rebate proposals are valid for 90 days from the date of the order form.

Special Conditions

DEVELOPER SELF-INSTALL

☐ Yes ☒ No

Installing at your own convenience.

AUTHORITY

I confirm that I am an authorised signatory and that I have read and agree to the **Pulse Fibre Limited** terms and conditions located at www.pulsefibre.co.uk/developer-terms/

FOR CLIENT

C. Newbury
SIGNATURE

Carter Newbury
NAME

11/02/25
DATE

FOR PULSE
FIBRE ONLY

SIGNATURE

NAME

DATE

GENERAL NOTES

- DO NOT SCALE.
- This drawing is to be read in conjunction with all other relevant drawings and details.
- Should there be any conflict between the details indicated on this drawing and other drawings the Engineer should be informed PRIOR to construction on site.
- Until technical approval has been obtained from the relevant Authority, it should be understood that all drawings issued are Preliminary and NOT for construction. Should the Contractor commence site works prior to such approval being provided it is entirely at their own risk.
- Sketch proposals are for illustrative purposes only and as such are subject to detailed site investigation including ground conditions, contaminants, drainage, design and planning / design regulations.
- All dimensions are in metres unless otherwise stated.
- The Designer's Risk Assessment(s) for this project must be reviewed PRIOR to the commencement of any works.
- Any discrepancies noted on site are to be reported to the Engineer immediately.
- The Contractor shall check all tie-ins for line and level with existing before commencing any works and notify the Engineer of any discrepancies immediately in writing.
- It is the responsibility of the Contractor to locate any service apparatus in the vicinity of the works. BM Civil Engineering will accept no claims whatsoever in respect of any losses or damages caused in respect of such apparatus, however caused.
- 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 CDM Regulations 2015. The Contractor will be deemed to have allowed for full compliance including full liaison with the Principal Designer within his rates.
- The Contractor is responsible for ensuring that all works are to the satisfaction of the Site Engineer, and is to include any necessary testing within his rates.
- The Contractor will be responsible for providing all necessary de-watering and trench support to execute the works in a satisfactory manner, and shall be deemed to have allowed for the same within his rates.
- All buried concrete products and mortar shall be made using sulphate resistant cement.
- No deep rooted trees or shrubs to be planted within 5m of a public highway or prospective public sewer.
- All highway works to be carried out to satisfy Leicestershire County Council's requirements and in accordance with South Yorkshire Residential Design Guide specifications.
- Traffic signs and road markings shall comply with the requirements of chapters 3, 4 & 5 of the Traffic Signs Manual as modified by the Traffic Signs Regulations and General Directions 2016.
- All road markings shall be laid in thermoplastic scored with added salt and shall comply with the requirements of clause 512 of the Specification for Highway Works.
- Sewers shall be constructed to the satisfaction of WML and in accordance with Appendix C of the UK Water Sewerage Sector Guidance: Design and Construction Guidance 2020.
- All pipes shall be laid with soft-to-soft connections unless otherwise stated.
- At pipe crossing points, pipe trench is to be lined with 1000 gauge impermeable membrane to eliminate any chances of cross contamination.
- Walls covers and frames within block paved areas are not to be used.
- Excavations at any change of width should be 3.0m either side of the pipe shown.
- All manhole covers to be 675 x 675mm with cover and frame to maintain 600 x 600mm clear opening, unless otherwise stated, in accordance with BS EN 54 Class D400 and embossed with RW or SW as appropriate.
- Covers and frames to be identified.
- Protective concrete cover slabs to be used on pipes in non-trafficked areas which don't achieve 900mm cover and in trafficked areas that don't achieve 1200mm cover.
- Precast concrete manhole rings are not to be cut under any circumstances.
- All proposed landscaping and tree planting adjacent to sewers shall be in accordance with clauses BS 10 & BS 7.
- All drainage offered for adoption has been designed to not attenuate flows in excess of 130 year storm return period.

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DE73 8LF
T: 017875 636281
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Client
ALLISON HOMES

Project
MAIN STREET
STANTON UNDER BARDON

Drawing Title
ADOPTABLE DRAINAGE
CONSTRUCTION DETAILS

Status
FOR APPROVAL

Scale
As Shown @ A1

Drawn
BRM

Checked
13.01.25

Revision
24005-BMC-25-XX-DR-C-503

Scale Bar
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Health and safety symbols refer to reference numbers indicated on Designers Risk Assessment number: 24005-BMC-24-XX-HS-C-0001

Health & Safety Information Key

Used to provide design specific safety information that may not be obvious to a competent contractor but may be useful

Used to restrict/prevent a possible action, e.g. stop construction traffic from entering an area

Used to warn of significant design hazards, adding recommendations

Used to encourage a positive action, e.g. use of robust protection for inspection chambers

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Design Settings

Rainfall Methodology	FSR	Maximum Time of Concentration (mins)	30.00
Return Period (years)	100	Maximum Rainfall (mm/hr)	50.0
Additional Flow (%)	40	Minimum Velocity (m/s)	1.00
FSR Region	England and Wales	Connection Type	Level Soffits
M5-60 (mm)	20.000	Minimum Backdrop Height (m)	0.200
Ratio-R	0.400	Preferred Cover Depth (m)	1.200
CV	0.750	Include Intermediate Ground	✓
Time of Entry (mins)	5.00	Enforce best practice design rules	x

Nodes

Name	Area (ha)	T of E (mins)	Cover Level (m)	Diameter (mm)	Easting (m)	Northing (m)	Depth (m)
S1L	0.017	5.00	165.000	450	446567.352	310029.082	1.350
S1	0.030	5.00	164.893	1200	446570.505	310034.186	1.725
S2			165.629	1200	446587.138	310023.913	2.576
S3	0.017	5.00	165.424	1200	446594.767	310009.925	2.465
S4	0.016	5.00	164.763	1200	446593.461	309993.083	1.903
S5	0.016	5.00	164.103	1200	446637.208	309972.578	1.527
S6L	0.105	5.00	164.500	450	446647.415	309964.142	1.650
S6	0.020	5.00	164.103	1200	446641.841	309961.210	1.725
S7L	0.047	5.00	162.950	450	446625.942	309939.776	1.350
S7	0.013	5.00	162.839	1500	446631.442	309937.380	1.725
S8	0.019	5.00	162.357	1200	446633.065	309929.036	1.725
S9L	0.034	5.00	161.950	450	446645.185	309926.758	1.500
S9			161.682	1200	446644.221	309922.363	1.725
S10			161.118	1200	446657.263	309919.500	1.725
S11L	0.102	5.00	160.500	450	446688.505	309927.040	1.400
S11	0.010	5.00	160.413	1500	446677.294	309922.761	1.483
S12	0.041	5.00	160.782	1500	446669.318	309920.398	2.200
HW1			157.975	1200	446676.195	309891.709	1.484
S13L	0.068	5.00	163.250	450	446573.828	309969.225	1.400
S13	0.048	5.00	163.111	1500	446579.305	309966.776	1.425
S14L	0.104	5.00	161.600	600	446560.465	309939.338	1.425
S14	0.039	5.00	161.465	1500	446565.942	309936.889	1.425
S15L	0.055	5.00	161.675	450	446571.136	309933.002	1.700
S15			161.025	1200	446569.092	309928.439	1.700
S16L	0.047	5.00	161.150	450	446615.067	309910.376	1.450
S16			160.675	1200	446612.735	309904.042	1.800
HW2			157.975	1200	446666.215	309888.224	1.484
HW3		5.00	157.975	1200	446691.086	309887.372	1.500
S17 FCU			158.375	2700	446694.580	309880.175	2.275
HW4			155.580	1200	446696.787	309871.760	0.350

Links

Name	US Node	DS Node	Length (m)	ks (mm) / n	US IL (m)	DS IL (m)	Fall (m)	Slope (1:X)	Dia (mm)	T of C (mins)	Rain (mm/hr)
S1L	S1L	S1	5.999	0.600	163.650	163.243	0.407	14.7	150	5.04	50.0
1.000	S1	S2	19.550	0.600	163.168	163.053	0.115	170.0	225	5.36	50.0
1.001	S2	S3	15.933	0.600	163.053	162.959	0.094	170.0	225	5.63	50.0
1.002	S3	S4	16.893	0.600	162.959	162.860	0.099	170.0	225	5.91	50.0
1.003	S4	S5	48.314	0.600	162.860	162.576	0.284	170.0	225	6.72	50.0
1.004	S5	S6	12.276	0.600	162.576	162.418	0.158	77.7	225	6.85	50.0
S6L	S6L	S6	6.298	0.600	162.850	162.453	0.397	15.9	150	5.04	50.0
1.005	S6	S7	26.000	0.600	162.378	161.114	1.264	20.6	225	7.00	50.0
S7L	S7L	S7	5.999	0.600	161.600	161.189	0.411	14.6	150	5.04	50.0
1.006	S7	S8	8.500	0.600	161.114	160.632	0.482	17.6	225	7.05	50.0
1.007	S8	S9	12.999	0.600	160.632	159.957	0.675	19.3	225	7.12	50.0
S9L	S9L	S9	4.499	0.600	160.450	160.032	0.418	10.8	150	5.02	50.0
1.008	S9	S10	13.353	0.600	159.957	159.393	0.564	23.7	225	7.20	50.0
1.009	S10	S12	12.088	0.600	159.393	158.657	0.736	16.4	225	7.27	50.0
S11L	S11L	S11	12.000	0.600	159.100	159.005	0.095	126.3	150	5.22	50.0
2.000	S11	S12	8.319	0.600	158.930	158.657	0.273	30.5	225	5.28	50.0
1.010	S12	HW1	29.502	0.600	158.582	156.700	1.882	15.7	300	7.39	50.0
S13L	S13L	S13	6.000	0.600	161.850	161.761	0.089	67.4	150	5.08	50.0
3.000	S13	S14	32.738	0.600	161.686	160.040	1.646	19.9	225	5.27	50.0
S14L	S14L	S14	6.000	0.600	160.175	160.040	0.135	44.4	225	5.05	50.0
3.001	S14	S15	9.018	0.600	160.040	159.400	0.640	14.1	225	5.31	50.0
S15L	S15L	S15	5.000	0.600	159.975	159.475	0.500	10.0	150	5.03	50.0
3.002	S15	S16	49.999	0.600	159.325	158.875	0.450	111.1	300	5.87	50.0
S16L	S16L	S16	6.750	0.600	159.700	159.025	0.675	10.0	150	5.04	50.0

Name	Vel (m/s)	Cap (l/s)	Flow (l/s)	US Depth (m)	DS Depth (m)	Σ Area (ha)	Σ Add Inflow (l/s)	Pro Depth (mm)	Pro Velocity (m/s)
S1L	2.637	46.6	3.2	1.200	1.500	0.017	0.0	27	1.519
1.000	1.000	39.7	8.9	1.500	2.351	0.047	0.0	73	0.811
1.001	1.000	39.7	8.9	2.351	2.240	0.047	0.0	73	0.811
1.002	1.000	39.7	12.1	2.240	1.678	0.064	0.0	85	0.879
1.003	1.000	39.7	15.2	1.678	1.302	0.080	0.0	96	0.934
1.004	1.485	59.0	18.2	1.302	1.460	0.096	0.0	86	1.312
S6L	2.541	44.9	19.9	1.500	1.500	0.105	0.0	70	2.468
1.005	2.898	115.2	41.9	1.500	1.500	0.221	0.0	94	2.673
S7L	2.650	46.8	8.9	1.200	1.500	0.047	0.0	44	2.047
1.006	3.130	124.5	53.3	1.500	1.500	0.281	0.0	102	3.008
1.007	2.995	119.1	56.9	1.500	1.500	0.300	0.0	109	2.961
S9L	3.088	54.6	6.5	1.350	1.500	0.034	0.0	35	2.087
1.008	2.700	107.4	63.4	1.500	1.500	0.334	0.0	124	2.807
1.009	3.244	129.0	63.4	1.500	1.900	0.334	0.0	111	3.229
S11L	0.892	15.8	19.4	1.250	1.258	0.102	0.0	150	0.909
2.000	2.378	94.6	21.3	1.258	1.900	0.112	0.0	73	1.932
1.010	3.990	282.0	92.4	1.900	0.975	0.487	0.0	118	3.589
S13L	1.226	21.7	12.9	1.250	1.200	0.068	0.0	83	1.279
3.000	2.947	117.2	22.0	1.200	1.200	0.116	0.0	65	2.269
S14L	1.967	78.2	19.7	1.200	1.200	0.104	0.0	77	1.647
3.001	3.504	139.3	49.1	1.200	1.400	0.259	0.0	92	3.204
S15L	3.204	56.6	10.4	1.550	1.400	0.055	0.0	44	2.458
3.002	1.491	105.4	59.6	1.400	1.500	0.314	0.0	161	1.534
S16L	3.204	56.6	8.9	1.300	1.500	0.047	0.0	40	2.347

Pipeline Schedule

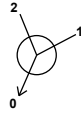
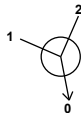
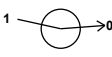
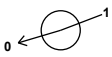
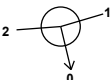
Link	Length (m)	Slope (1:X)	Dia (mm)	Link Type	US CL (m)	US IL (m)	US Depth (m)	DS CL (m)	DS IL (m)	DS Depth (m)
S13L	6.000	67.4	150	Circular_Default Sewer Type	163.250	161.850	1.250	163.111	161.761	1.200
3.000	32.738	19.9	225	Circular_Default Sewer Type	163.111	161.686	1.200	161.465	160.040	1.200
S14L	6.000	44.4	225	Circular_Default Sewer Type	161.600	160.175	1.200	161.465	160.040	1.200
3.001	9.018	14.1	225	Circular_Default Sewer Type	161.465	160.040	1.200	161.025	159.400	1.400
S15L	5.000	10.0	150	Circular_Default Sewer Type	161.675	159.975	1.550	161.025	159.475	1.400
3.002	49.999	111.1	300	Circular_Default Sewer Type	161.025	159.325	1.400	160.675	158.875	1.500
S16L	6.750	10.0	150	Circular_Default Sewer Type	161.150	159.700	1.300	160.675	159.025	1.500
3.005	55.770	25.6	300	Circular_Default Sewer Type	160.675	158.875	1.500	157.975	156.700	0.975
1.011	8.000	21.3	225	Circular_Default Sewer Type	157.975	156.475	1.275	158.375	156.100	2.050
1.012	8.700	10.0	225	Circular_Default Sewer Type	158.375	156.100	2.050	155.580	155.230	0.125

Link	US Node	Dia (mm)	Node Type	MH Type	DS Node	Dia (mm)	Node Type	MH Type
S13L	S13L	450	Manhole	Adoptable	S13	1500	Manhole	Adoptable
3.000	S13	1500	Manhole	Adoptable	S14	1500	Manhole	Adoptable
S14L	S14L	600	Manhole	Adoptable	S14	1500	Manhole	Adoptable
3.001	S14	1500	Manhole	Adoptable	S15	1200	Manhole	Adoptable
S15L	S15L	450	Manhole	Adoptable	S15	1200	Manhole	Adoptable
3.002	S15	1200	Manhole	Adoptable	S16	1200	Manhole	Adoptable
S16L	S16L	450	Manhole	Adoptable	S16	1200	Manhole	Adoptable
3.005	S16	1200	Manhole	Adoptable	HW2	1200	Manhole	Adoptable
1.011	HW3	1200	Manhole	Adoptable	S17 FCU	2700	Manhole	Adoptable
1.012	S17 FCU	2700	Manhole	Adoptable	HW4	1200	Manhole	Adoptable

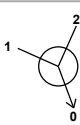
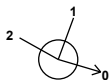
Manhole Schedule

Node	Easting (m)	Northing (m)	CL (m)	Depth (m)	Dia (mm)	Connections	Link	IL (m)	Dia (mm)	
S1L	446567.352	310029.082	165.000	1.350	450					
						0	S1L	163.650	150	
S1	446570.505	310034.186	164.893	1.725	1200		1	S1L	163.243	150
						0	1.000	163.168	225	
S2	446587.138	310023.913	165.629	2.576	1200		1	1.000	163.053	225
						0	1.001	163.053	225	
S3	446594.767	310009.925	165.424	2.465	1200		1	1.001	162.959	225
						0	1.002	162.959	225	
S4	446593.461	309993.083	164.763	1.903	1200		1	1.002	162.860	225
						0	1.003	162.860	225	
S5	446637.208	309972.578	164.103	1.527	1200		1	1.003	162.576	225
						0	1.004	162.576	225	

Manhole Schedule

Node	Easting (m)	Northing (m)	CL (m)	Depth (m)	Dia (mm)	Connections	Link	IL (m)	Dia (mm)	
S6L	446647.415	309964.142	164.500	1.650	450		0	S6L	162.850	150
S6	446641.841	309961.210	164.103	1.725	1200		1	S6L	162.453	150
							2	1.004	162.418	225
							0	1.005	162.378	225
S7L	446625.942	309939.776	162.950	1.350	450		0	S7L	161.600	150
S7	446631.442	309937.380	162.839	1.725	1500		1	S7L	161.189	150
							2	1.005	161.114	225
							0	1.006	161.114	225
S8	446633.065	309929.036	162.357	1.725	1200		1	1.006	160.632	225
							0	1.007	160.632	225
S9L	446645.185	309926.758	161.950	1.500	450		0	S9L	160.450	150
S9	446644.221	309922.363	161.682	1.725	1200		1	S9L	160.032	150
							2	1.007	159.957	225
							0	1.008	159.957	225
S10	446657.263	309919.500	161.118	1.725	1200		1	1.008	159.393	225
							0	1.009	159.393	225
S11L	446688.505	309927.040	160.500	1.400	450		0	S11L	159.100	150
S11	446677.294	309922.761	160.413	1.483	1500		1	S11L	159.005	150
							0	2.000	158.930	225
S12	446669.318	309920.398	160.782	2.200	1500		1	2.000	158.657	225
							2	1.009	158.657	225
							0	1.010	158.582	300
HW1	446676.195	309891.709	157.975	1.484	1200		1	1.010	156.700	300
S13L	446573.828	309969.225	163.250	1.400	450		0	S13L	161.850	150

Manhole Schedule

Node	Easting (m)	Northing (m)	CL (m)	Depth (m)	Dia (mm)	Connections	Link	IL (m)	Dia (mm)	
S13	446579.305	309966.776	163.111	1.425	1500		1	S13L 161.761	150	
						0	3.000	161.686	225	
S14L	446560.465	309939.338	161.600	1.425	600		0	S14L 160.175	225	
S14	446565.942	309936.889	161.465	1.425	1500		1	S14L 160.040	225	
						2	3.000	160.040	225	
						0	3.001	160.040	225	
S15L	446571.136	309933.002	161.675	1.700	450		0	S15L 159.975	150	
S15	446569.092	309928.439	161.025	1.700	1200		1	S15L 159.475	150	
						2	3.001	159.400	225	
						0	3.002	159.325	300	
S16L	446615.067	309910.376	161.150	1.450	450		0	S16L 159.700	150	
S16	446612.735	309904.042	160.675	1.800	1200		1	S16L 159.025	150	
						2	3.002	158.875	300	
						0	3.005	158.875	300	
HW2	446666.215	309888.224	157.975	1.484	1200		1	3.005	156.700	300
HW3	446691.086	309887.372	157.975	1.500	1200		0	1.011	156.475	225
S17 FCU	446694.580	309880.175	158.375	2.275	2700		1	1.011	156.100	225
						0	1.012	156.100	225	
HW4	446696.787	309871.760	155.580	0.350	1200		1	1.012	155.230	225

Simulation Settings

Rainfall Methodology FSR
Rainfall Events Singular
FSR Region England and Wales
M5-60 (mm) 20.000
Ratio-R 0.400
Summer CV 0.750

Winter CV 0.840
Analysis Speed Detailed
Skip Steady State x
Drain Down Time (mins) 240
Additional Storage (m³/ha) 0.0
Starting Level (m)

Simulation Settings

Check Discharge Rate(s) x | Check Discharge Volume x

Storm Durations

15 | 30 | 60 | 120 | 180 | 240 | 360 | 480 | 600 | 720 | 960 | 1440

Return Period (years)	Climate Change (CC %)	Additional Area (A %)	Additional Flow (Q %)
1	0	0	0
30	0	0	0
100	40	0	0

Node S17 FCU Online Hydro-Brake® Control

Flap Valve	x	Objective	(HE) Minimise upstream storage
Replaces Downstream Link	✓	Sump Available	✓
Invert Level (m)	156.100	Product Number	CTL-SHE-0135-9700-1575-9700
Design Depth (m)	1.575	Min Outlet Diameter (m)	0.150
Design Flow (l/s)	9.7	Min Node Diameter (mm)	0

Node HW1 Online Orifice Control

Flap Valve	x	Invert Level (m)	156.491	Discharge Coefficient	0.600
Replaces Downstream Link	x	Diameter (m)	0.375		

Node HW2 Online Orifice Control

Flap Valve	x	Invert Level (m)	156.491	Discharge Coefficient	0.600
Replaces Downstream Link	x	Diameter (m)	0.450		

Node HW3 Flow through Pond Storage Structure

Base Inf Coefficient (m/hr)	0.00000	Porosity	1.00	Main Channel Length (m)	16.000
Side Inf Coefficient (m/hr)	0.00000	Invert Level (m)	156.475	Main Channel Slope (1:X)	1000.0
Safety Factor	2.0	Time to half empty (mins)		Main Channel n	0.020

Inlets

HW2 | HW1

Depth (m)	Area (m²)	Inf Area (m²)	Depth (m)	Area (m²)	Inf Area (m²)	Depth (m)	Area (m²)	Inf Area (m²)	Depth (m)	Area (m²)	Inf Area (m²)
0.000	202.1	0.0	0.400	297.8	0.0	0.800	402.5	0.0	1.200	516.2	0.0
0.100	225.2	0.0	0.500	323.1	0.0	0.900	430.1	0.0	1.300	546.1	0.0
0.200	248.8	0.0	0.600	349.0	0.0	1.000	458.2	0.0	1.400	576.5	0.0
0.300	273.0	0.0	0.700	375.4	0.0	1.100	486.9	0.0	1.500	607.5	0.0

Results for 1 year Critical Storm Duration. Lowest mass balance: 99.39%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute winter	S1L	10	163.674	0.024	2.4	0.0038	0.0000	OK
15 minute winter	S1	10	163.231	0.063	6.6	0.0715	0.0000	OK
15 minute winter	S2	11	163.115	0.062	6.5	0.0705	0.0000	OK
15 minute winter	S3	11	163.034	0.075	8.8	0.0845	0.0000	OK
15 minute winter	S4	11	162.942	0.082	10.9	0.0929	0.0000	OK
15 minute winter	S5	11	162.651	0.075	13.0	0.0848	0.0000	OK
15 minute winter	S6L	10	162.916	0.066	14.8	0.0104	0.0000	OK
15 minute winter	S6	11	162.455	0.077	29.3	0.0872	0.0000	OK
15 minute winter	S7L	10	161.641	0.041	6.6	0.0064	0.0000	OK
15 minute winter	S7	11	161.207	0.093	37.3	0.1641	0.0000	OK
15 minute winter	S8	11	160.726	0.094	39.8	0.1058	0.0000	OK
15 minute winter	S9L	10	160.482	0.032	4.8	0.0050	0.0000	OK
15 minute winter	S9	11	160.067	0.110	44.4	0.1249	0.0000	OK
15 minute winter	S10	11	159.493	0.100	44.4	0.1127	0.0000	OK
15 minute winter	S11L	10	159.221	0.121	14.4	0.0193	0.0000	OK
15 minute winter	S11	10	158.996	0.066	15.5	0.1171	0.0000	OK
15 minute winter	S12	11	158.684	0.102	65.1	0.1802	0.0000	OK
15 minute winter	HW1	11	156.746	0.255	65.4	0.2884	0.0000	OK
15 minute winter	S13L	10	161.927	0.077	9.6	0.0123	0.0000	OK
15 minute winter	S13	10	161.742	0.056	16.3	0.0994	0.0000	OK
15 minute winter	S14L	10	160.248	0.073	14.7	0.0206	0.0000	OK
15 minute winter	S14	10	160.126	0.086	36.3	0.1521	0.0000	OK
15 minute winter	S15L	10	160.016	0.041	7.8	0.0064	0.0000	OK
15 minute winter	S15	10	159.468	0.143	43.6	0.1614	0.0000	OK
15 minute winter	S16L	10	159.736	0.036	6.6	0.0058	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 winter	S1L	S1L	S1	2.4	1.353	0.051	0.0106	
15 minute winter	S1	1.000	S2	6.5	0.724	0.164	0.1760	
15 minute winter	S2	1.001	S3	6.5	0.637	0.163	0.1629	
15 minute winter	S3	1.002	S4	8.8	0.720	0.223	0.2078	
15 minute winter	S4	1.003	S5	10.9	0.883	0.274	0.5957	
15 minute winter	S5	1.004	S6	12.7	1.149	0.216	0.1361	
15 minute winter	S6L	S6L	S6	14.7	2.129	0.328	0.0436	
15 minute winter	S6	1.005	S7	29.3	2.140	0.255	0.3569	
15 minute winter	S7L	S7L	S7	6.6	1.790	0.140	0.0220	
15 minute winter	S7	1.006	S8	37.3	2.406	0.300	0.1319	
15 minute winter	S8	1.007	S9	39.9	2.282	0.335	0.2272	
15 minute winter	S9L	S9L	S9	4.8	1.780	0.088	0.0127	
15 minute winter	S9	1.008	S10	44.4	2.448	0.414	0.2425	
15 minute winter	S10	1.009	S12	44.5	2.789	0.345	0.1930	
15 minute winter	S11L	S11L	S11	14.1	0.970	0.893	0.1746	
15 minute winter	S11	2.000	S12	15.3	1.667	0.162	0.0767	
15 minute winter	S12	1.010	HW1	65.4	3.195	0.232	0.6038	
15 minute winter	HW1	Flow through pond	HW3	72.2	0.134	0.002	43.0373	
15 minute winter	S13L	S13L	S13	9.5	1.113	0.439	0.0512	
15 minute winter	S13	3.000	S14	16.2	1.502	0.138	0.3551	
15 minute winter	S14L	S14L	S14	14.6	1.171	0.187	0.0750	
15 minute winter	S14	3.001	S15	35.9	2.754	0.257	0.1175	
15 minute winter	S15L	S15L	S15	7.8	2.133	0.137	0.0182	
15 minute winter	S15	3.002	S16	43.3	1.643	0.411	1.3213	
15 minute winter	S16L	S16L	S16	6.6	2.066	0.116	0.0214	

**Results for 1 year Critical Storm Duration. Lowest mass balance: 99.39%**

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute winter	S16	11	158.974	0.099	49.5	0.1116	0.0000	OK
60 minute winter	HW2	60	156.739	0.248	26.3	0.2802	0.0000	OK
60 minute winter	HW3	59	156.738	0.263	48.1	0.2977	0.0000	SURCHARGED
60 minute winter	S17 FCU	60	156.734	0.634	22.6	3.6301	0.0000	SURCHARGED
15 minute summer	HW4	1	155.230	0.000	9.7	0.0000	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 winter	S16	3.005	HW2	49.9	2.518	0.227	1.1061	
60 minute winter	HW2	Flow through pond	HW3	48.1	0.076	0.001	59.3125	
60 minute winter	HW3	1.011	S17 FCU	22.6	1.159	0.200	0.3182	
60 minute winter	S17 FCU	Hydro-Brake®	HW4	9.7				90.7

Results for 30 year Critical Storm Duration. Lowest mass balance: 99.39%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute winter	S1L	10	163.688	0.038	5.9	0.0061	0.0000	OK
15 minute winter	S1	10	163.273	0.105	16.3	0.1182	0.0000	OK
15 minute winter	S2	11	163.157	0.104	16.0	0.1176	0.0000	OK
15 minute winter	S3	11	163.086	0.127	21.6	0.1441	0.0000	OK
15 minute winter	S4	11	163.000	0.139	26.9	0.1577	0.0000	OK
15 minute winter	S5	11	162.705	0.129	32.1	0.1460	0.0000	OK
15 minute winter	S6L	10	162.976	0.126	36.3	0.0200	0.0000	OK
15 minute winter	S6	10	162.507	0.129	72.6	0.1458	0.0000	OK
15 minute winter	S7L	10	161.663	0.063	16.3	0.0100	0.0000	OK
15 minute winter	S7	11	161.309	0.195	92.3	0.3448	0.0000	OK
15 minute winter	S8	11	160.959	0.327	97.3	0.3693	0.0000	SURCHARGED
15 minute winter	S9L	10	160.497	0.047	11.8	0.0075	0.0000	OK
15 minute winter	S9	11	160.351	0.394	106.5	0.4460	0.0000	SURCHARGED
15 minute winter	S10	12	159.580	0.187	105.2	0.2112	0.0000	OK
15 minute winter	S11L	10	159.699	0.599	35.3	0.0952	0.0000	SURCHARGED
15 minute winter	S11	11	159.042	0.112	37.5	0.1975	0.0000	OK
15 minute winter	S12	11	158.740	0.157	155.6	0.2782	0.0000	OK
120 minute winter	HW1	120	157.170	0.679	52.6	0.7678	0.0000	OK
15 minute winter	S13L	10	162.049	0.199	23.5	0.0316	0.0000	SURCHARGED
15 minute winter	S13	10	161.776	0.089	39.7	0.1581	0.0000	OK
15 minute winter	S14L	10	160.305	0.130	36.0	0.0369	0.0000	OK
15 minute winter	S14	10	160.188	0.148	88.7	0.2610	0.0000	OK
15 minute winter	S15L	10	160.036	0.061	19.0	0.0097	0.0000	OK
15 minute winter	S15	11	159.594	0.269	106.8	0.3043	0.0000	OK
15 minute winter	S16L	10	159.760	0.060	16.3	0.0096	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 winter	S1L	S1L	S1	5.9	1.731	0.126	0.0203	
15 minute winter	S1	1.000	S2	16.0	0.892	0.404	0.3515	
15 minute winter	S2	1.001	S3	15.9	0.774	0.400	0.3274	
15 minute winter	S3	1.002	S4	21.7	0.884	0.545	0.4141	
15 minute winter	S4	1.003	S5	26.9	1.090	0.677	1.1933	
15 minute winter	S5	1.004	S6	31.7	1.432	0.537	0.2718	
15 minute winter	S6L	S6L	S6	36.1	2.513	0.803	0.0898	
15 minute winter	S6	1.005	S7	72.7	2.517	0.631	0.7811	
15 minute winter	S7L	S7L	S7	16.3	2.077	0.347	0.0647	
15 minute winter	S7	1.006	S8	90.9	2.719	0.730	0.3245	
15 minute winter	S8	1.007	S9	95.4	2.542	0.801	0.5170	
15 minute winter	S9L	S9L	S9	11.8	1.792	0.216	0.0503	
15 minute winter	S9	1.008	S10	105.2	2.733	0.980	0.5008	
15 minute winter	S10	1.009	S12	105.6	3.278	0.819	0.3875	
15 minute winter	S11L	S11L	S11	34.0	1.933	2.158	0.2091	
15 minute winter	S11	2.000	S12	37.5	2.070	0.396	0.1507	
15 minute winter	S12	1.010	HW1	155.5	3.545	0.551	1.5911	
120 minute winter	HW1	Flow through pond	HW3	50.1	0.071	0.001	195.7132	
15 minute winter	S13L	S13L	S13	23.1	1.313	1.066	0.1031	
15 minute winter	S13	3.000	S14	39.4	1.858	0.336	0.6927	
15 minute winter	S14L	S14L	S14	35.8	1.391	0.458	0.1544	
15 minute winter	S14	3.001	S15	87.9	2.906	0.631	0.2875	
15 minute winter	S15L	S15L	S15	19.0	2.448	0.335	0.0536	
15 minute winter	S15	3.002	S16	106.1	1.986	1.007	2.6469	
15 minute winter	S16L	S16L	S16	16.2	2.607	0.287	0.0420	

Results for 30 year Critical Storm Duration. Lowest mass balance: 99.39%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute winter	S16	11	159.039	0.164	121.5	0.1850	0.0000	OK
120 minute winter	HW2	122	157.170	0.679	39.2	0.7677	0.0000	OK
120 minute winter	HW3	122	157.170	0.695	50.1	0.7856	0.0000	SURCHARGED
120 minute winter	S17 FCU	122	157.167	1.067	16.7	6.1071	0.0000	SURCHARGED
15 minute summer	HW4	1	155.230	0.000	9.7	0.0000	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 winter	S16	3.005	HW2	123.8	3.118	0.562	2.2921	
120 minute winter	HW2	Flow through pond	HW3	50.1	0.071	0.001	195.7132	
120 minute winter	HW3	1.011	S17 FCU	16.7	1.170	0.148	0.3182	
120 minute winter	S17 FCU	Hydro-Brake®	HW4	9.7				174.8

Results for 100 year +40% CC Critical Storm Duration. Lowest mass balance: 99.39%

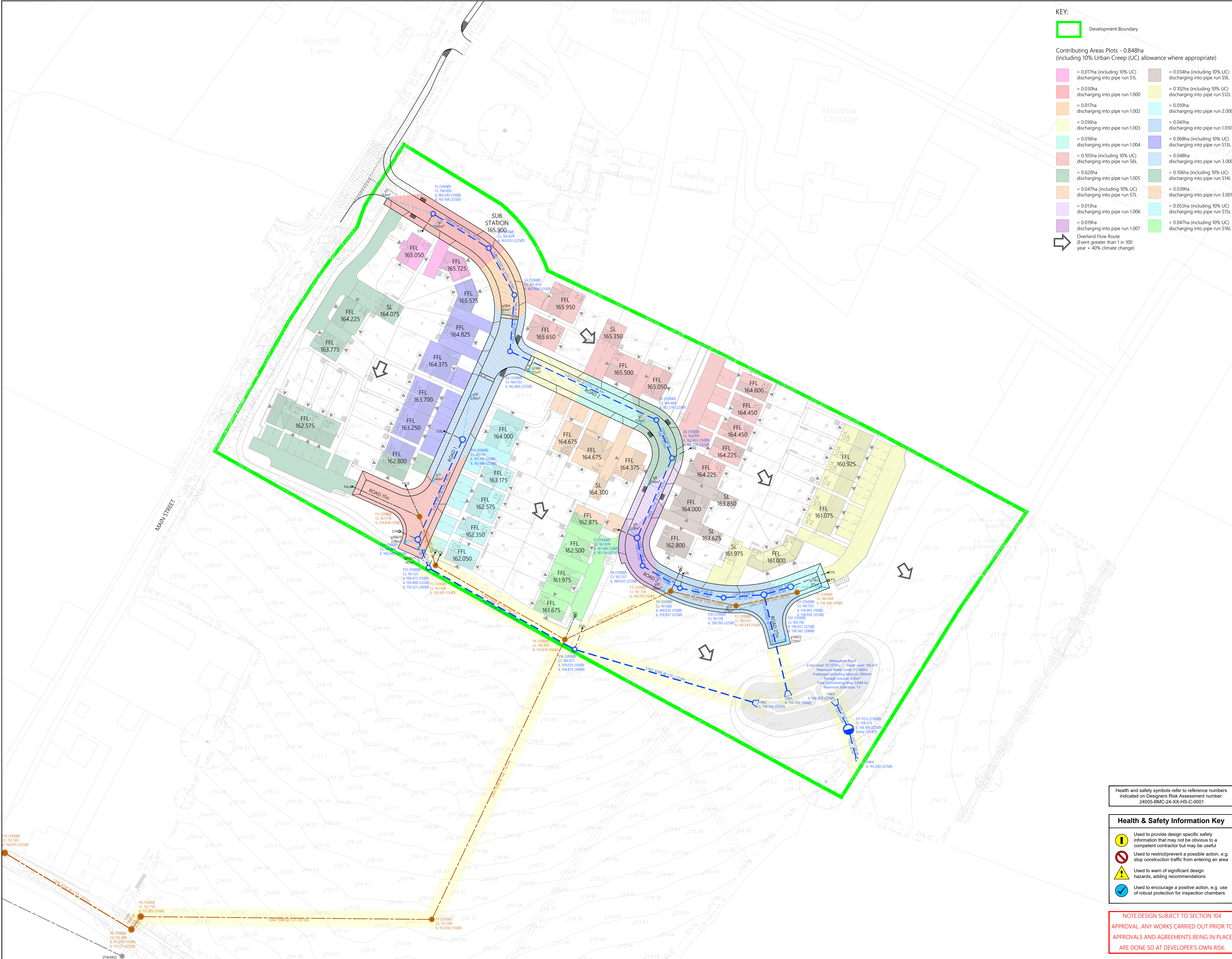
Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute winter	S1L	13	164.024	0.373	10.7	0.0594	0.0000	SURCHARGED
15 minute winter	S1	13	164.014	0.846	29.6	0.9565	0.0000	SURCHARGED
15 minute winter	S2	13	163.990	0.937	30.6	1.0598	0.0000	SURCHARGED
15 minute winter	S3	13	163.969	1.010	35.0	1.1418	0.0000	SURCHARGED
15 minute winter	S4	13	163.928	1.068	42.2	1.2081	0.0000	SURCHARGED
15 minute winter	S5	13	163.767	1.191	47.2	1.3473	0.0000	SURCHARGED
15 minute winter	S6L	12	164.496	1.646	66.0	0.2616	0.0000	FLOOD RISK
15 minute winter	S6	13	163.689	1.311	95.7	1.4825	0.0000	SURCHARGED
15 minute winter	S7L	12	162.912	1.312	29.5	0.2086	0.0000	FLOOD RISK
15 minute winter	S7	13	162.800	1.686	118.7	2.9799	0.0000	FLOOD RISK
15 minute winter	S8	13	162.179	1.547	121.9	1.7492	0.0000	FLOOD RISK
15 minute winter	S9L	12	161.256	0.806	21.4	0.1281	0.0000	SURCHARGED
15 minute winter	S9	13	161.214	1.257	135.6	1.4215	0.0000	SURCHARGED
15 minute winter	S10	13	159.988	0.595	134.4	0.6733	0.0000	SURCHARGED
15 minute winter	S11L	10	160.500	1.400	64.1	0.2226	1.0519	FLOOD
15 minute winter	S11	10	159.084	0.154	59.7	0.2723	0.0000	OK
15 minute winter	S12	12	158.806	0.224	212.6	0.3958	0.0000	OK
240 minute winter	HW1	236	157.689	1.198	57.2	1.3549	0.0000	OK
15 minute winter	S13L	10	162.394	0.544	42.7	0.0865	0.0000	SURCHARGED
15 minute winter	S13	12	161.969	0.283	71.9	0.5008	0.0000	SURCHARGED
15 minute winter	S14L	11	161.547	1.372	65.4	0.3883	0.0000	FLOOD RISK
15 minute winter	S14	12	161.422	1.382	151.0	2.4424	0.0000	FLOOD RISK
15 minute winter	S15L	12	160.669	0.694	34.6	0.1103	0.0000	SURCHARGED
15 minute winter	S15	12	160.471	1.146	169.8	1.2959	0.0000	SURCHARGED
15 minute winter	S16L	10	159.788	0.088	29.5	0.0140	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 winter	S1L	S1L	S1	10.7	1.731	0.229	0.1056	
15 minute winter	S1	1.000	S2	30.6	0.985	0.769	0.7775	
15 minute winter	S2	1.001	S3	24.9	0.822	0.627	0.6337	
15 minute winter	S3	1.002	S4	33.0	0.949	0.829	0.6719	
15 minute winter	S4	1.003	S5	40.8	1.178	1.026	1.9215	
15 minute winter	S5	1.004	S6	49.5	1.563	0.838	0.4882	
15 minute winter	S6L	S6L	S6	58.4	3.316	1.300	0.1109	
15 minute winter	S6	1.005	S7	88.1	2.452	0.764	1.0340	
15 minute winter	S7L	S7L	S7	23.3	2.056	0.498	0.1056	
15 minute winter	S7	1.006	S8	112.6	2.832	0.905	0.3381	
15 minute winter	S8	1.007	S9	120.5	3.029	1.012	0.5170	
15 minute winter	S9L	S9L	S9	17.1	1.893	0.313	0.0792	
15 minute winter	S9	1.008	S10	134.4	3.380	1.252	0.5311	
15 minute winter	S10	1.009	S12	134.6	3.385	1.044	0.4807	
15 minute winter	S11L	S11L	S11	53.4	3.036	3.389	0.2091	
15 minute winter	S11	2.000	S12	59.7	2.273	0.631	0.2328	
15 minute winter	S12	1.010	HW1	211.6	3.450	0.750	1.8710	
240 minute winter	HW1	Flow through pond	HW3	54.4	0.058	0.002	425.8692	
15 minute winter	S13L	S13L	S13	41.7	2.367	1.923	0.1056	
15 minute winter	S13	3.000	S14	68.3	1.841	0.583	1.3020	
15 minute winter	S14L	S14L	S14	58.3	1.465	0.745	0.2386	
15 minute winter	S14	3.001	S15	139.7	3.514	1.003	0.3587	
15 minute winter	S15L	S15L	S15	30.0	2.440	0.531	0.0880	
15 minute winter	S15	3.002	S16	165.9	2.469	1.574	3.1096	
15 minute winter	S16L	S16L	S16	29.4	2.974	0.519	0.0667	

Results for 100 year +40% CC Critical Storm Duration. Lowest mass balance: 99.39%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute winter	S16	12	159.090	0.215	189.3	0.2429	0.0000	OK
240 minute winter	HW2	236	157.689	1.198	42.4	1.3545	0.0000	OK
240 minute winter	HW3	236	157.689	1.213	54.4	1.3725	0.0000	FLOOD RISK
240 minute winter	S17 FCU	240	157.684	1.584	14.7	9.0703	0.0000	SURCHARGED
15 minute summer	HW4	1	155.230	0.000	9.7	0.0000	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 winter	S16	3.005	HW2	189.3	3.168	0.859	3.4686	
240 minute winter	HW2	Flow through pond	HW3	54.4	0.058	0.002	425.8692	
240 minute winter	HW3	1.011	S17 FCU	14.7	1.083	0.130	0.3182	
240 minute winter	S17 FCU	Hydro-Brake®	HW4	9.7				257.2



KEY:

Development Boundary

Contributing Areas Plots - 0.848ha
(including 10% Urban Creep (UC) allowance where appropriate)

- = 0.017ha (including 10% UC) discharging into pipe run S1L
- = 0.030ha discharging into pipe run 1.000
- = 0.017ha discharging into pipe run 1.002
- = 0.016ha discharging into pipe run 1.003
- = 0.016ha discharging into pipe run 1.004
- = 0.105ha (including 10% UC) discharging into pipe run S6L
- = 0.020ha discharging into pipe run 1.005
- = 0.047ha (including 10% UC) discharging into pipe run S7L
- = 0.013ha discharging into pipe run 1.006
- = 0.019ha discharging into pipe run 1.007
- = 0.034ha (including 10% UC) discharging into pipe run S9L
- = 0.102ha (including 10% UC) discharging into pipe run S12L
- = 0.010ha discharging into pipe run 2.000
- = 0.041ha discharging into pipe run 1.010
- = 0.068ha (including 10% UC) discharging into pipe run S13L
- = 0.048ha discharging into pipe run 3.000
- = 0.106ha (including 10% UC) discharging into pipe run S14L
- = 0.039ha discharging into pipe run 3.001
- = 0.055ha discharging into pipe run S15L
- = 0.047ha (including 10% UC) discharging into pipe run S16L

Overland Flow Route
(Event greater than 1 in 100 year + 40% climate change)

- GENERAL NOTES
- DO NOT SCALE.
 - This drawing is to be read in conjunction with all other relevant drawings and details.
 - Should there be any conflict between the details indicated on this drawing and other drawings the Engineer should be informed PRIOR to construction on site.
 - Until technical approval has been obtained from the relevant Authority, it should be understood that all drawings issued are Preliminary and NOT for construction. Should the Contractor commence site works prior to such approval being provided it is entirely at their own risk.
 - Sketch proposals are for illustrative purposes only and as such are subject to detailed site investigation including ground conditions, contaminants, drainage, design and planning / density negotiations.
 - All dimensions are in metres unless otherwise stated.
 - The Designer's Risk Assessment(s) for this project must be reviewed PRIOR to the commencement of any works.
 - Any discrepancies noted on site are to be reported to the Engineer immediately.
 - The Contractor shall check all tie-ins for line and level with existing before commencing any works and notify the Engineer of any discrepancies immediately in writing.
 - It is the responsibility of the Contractor to locate any service apparatus in the vicinity of the works. BM Civil Engineering will accept no claims whatsoever in respect of any losses or damages caused in respect of such apparatus, however caused.
 - 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 CDM Regulations 2015. The Contractor will be deemed to have allowed for full compliance, including full liaison with the Principal Designer within his rates.
 - The Contractor is responsible for ensuring that all works are to the satisfaction of the Site Engineer, and is to include any necessary testing within his rates.
 - The Contractor will be responsible for providing all necessary de-watering and trench support to execute the works in a satisfactory manner, and shall be deemed to have allowed for the same within his rates.
 - All buried concrete products and mortar shall be made using sulphate resistant cement.
 - No deep rooted trees or shrubs to be planted within 5m of a public highway or prospective public sewer.
 - All highway works to be carried out to satisfy Leicestershire County Council's requirements and in accordance with Leicestershire Design Guide specifications.
 - Traffic signs and road markings shall comply with the requirements of chapters 3, 4 & 5 of the Traffic Signs Manual as modified by the Traffic Signs Regulations and General Directions 2016.
 - All road markings shall be laid in thermoplastic screed with added ballast and shall comply with the requirements of clause 1212 of the Specification for Highway Works.
 - Sewers shall be constructed to the satisfaction of IWNL and in accordance with Appendix C of the UK Water Sewerage Sector Guidance 'Design and Construction Guidance' 2020.
 - All pipes shall be laid with from-soffit-to-soffit connections unless otherwise stated.
 - At pipe crossing points, pipe trench is to be lined with 1,000 gauge impermeable membrane to eliminate any chances of cross contamination.
 - Infill covers and frames within block paved areas are not to be used.
 - Easements at any change of width should be 3.0m either side of the pipes shown.
 - All manhole covers to be 675 x 675mm with cover and frame to maintain 600 x 600mm clear opening, unless otherwise stated, in accordance with BS EN 124 Class D400 and embossed with FW or SW as appropriate.
 - Covers and frames to be kitemarked.
 - Protective concrete cover slabs to be used on pipes in non-trafficked areas which don't achieve 900mm cover and in trafficked areas that don't achieve 1,200mm cover.
 - Precast concrete manhole rings are not to be cut under any circumstances.
 - All proposed landscaping and tree planting adjacent to sewers shall be in accordance with clauses B5.1.10 & B7.6.
 - All drainage offered for adoption has been designed to not attenuate flows in excess of 1:30 year storm return period.

P06	27.03.25	Areas updated to suit changes to parcel serving plots 18-31.	BRM	-
P05	20.03.25	Drainage areas coordinated with amended site layout.	BRM	-
P04	17.02.25	Impermeable areas coordinated with plot repositioning and mirroring as required.	BRM	-
P03	04.02.25	Gravity solution into existing STW foul sewer shown following survey of existing asset depth. Impermeable areas updated to suit widened parking bays and distribution coordinated with private drainage proposals.	BRM	-
P02	25.01.25		BRM	-
P01	13.01.25	Issued for approval.	BRM	-
Rev	Date	Amendments	By	Chk

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Client
ALLISON HOMES

Project
MAIN STREET
STANTON UNDER BARDON

Drawing Title
DRAINAGE AREA PLAN

Status
FOR APPROVAL

Scale	Drawn	Checked	Date
1:500 @ A1	BRM	-	13.01.25

Drawing Number	Revision
24005-BMC-25-XX-DR-C-501	P06

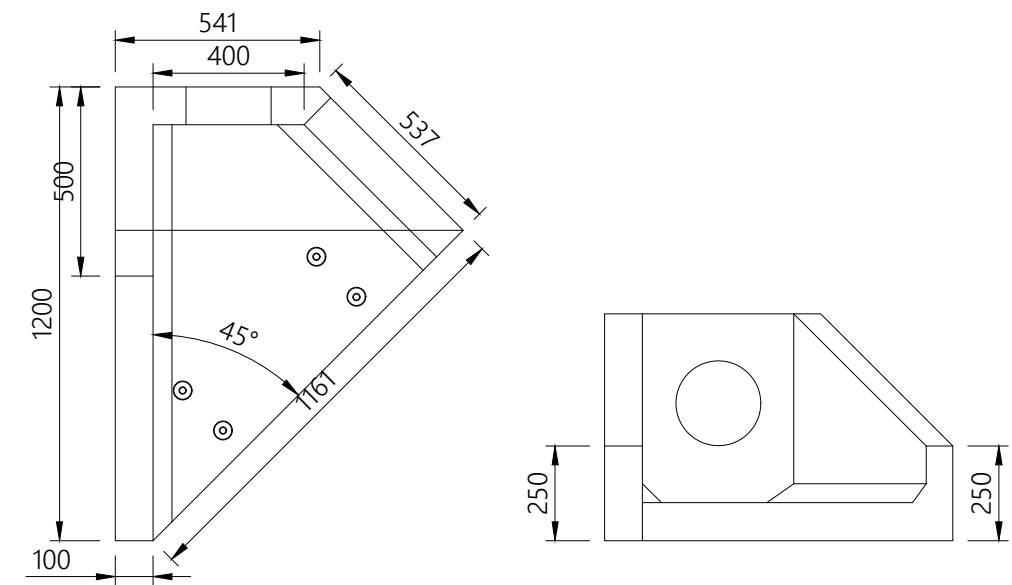
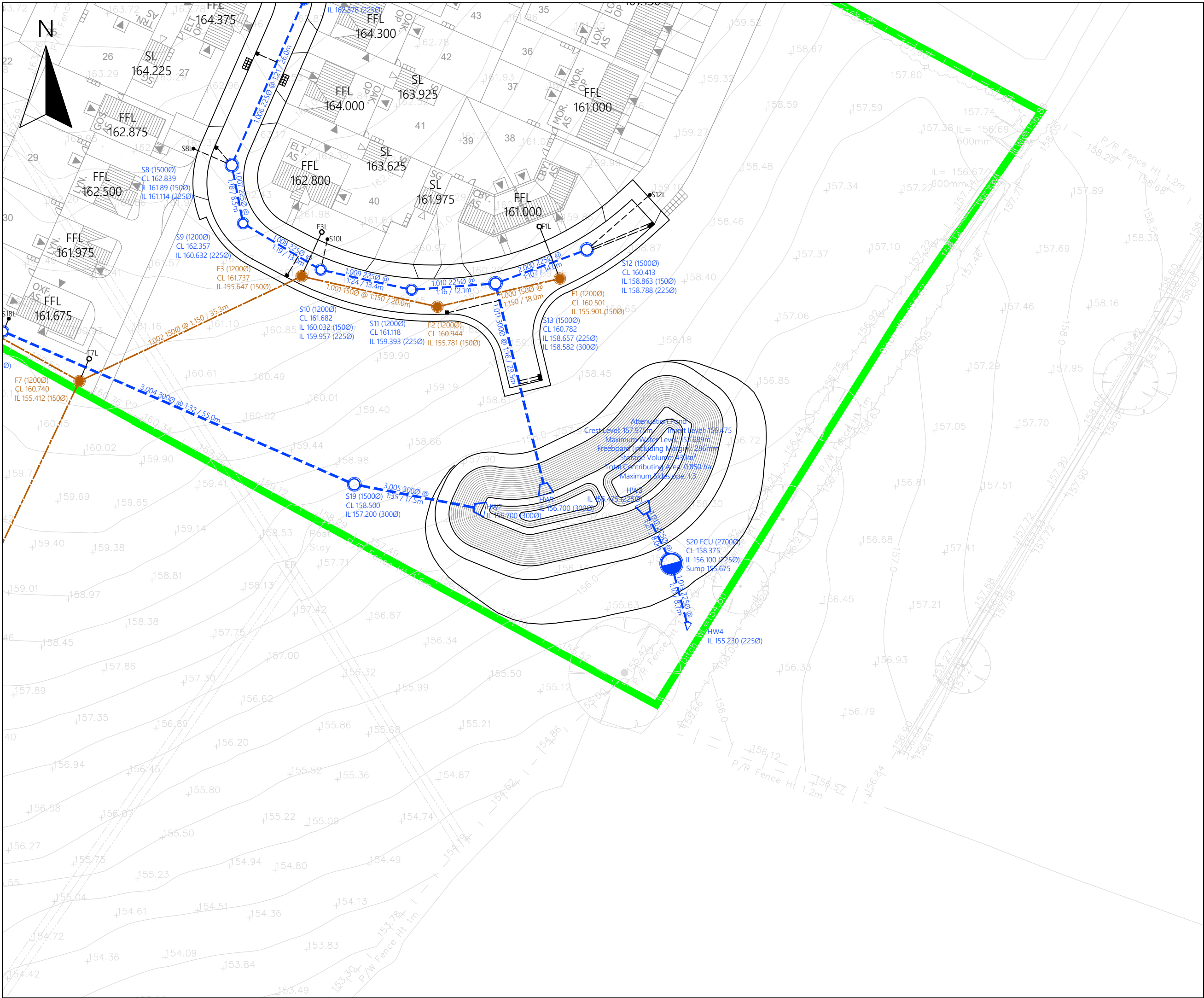
Scale Bar
Copyright © BMC Engineering Ltd

Health and safety symbols refer to reference numbers indicated on Designers Risk Assessment number: 24005-BMC-24-XX-HS-C-0001

Health & Safety Information Key

- Used to provide design specific safety information that may not be obvious to a competent contractor but may be useful
- Used to restrict/prevent a possible action, e.g. stop construction traffic from entering an area
- Used to warn of significant design hazards, adding recommendations
- Used to encourage a positive action, e.g. use of robust protection for inspection chambers

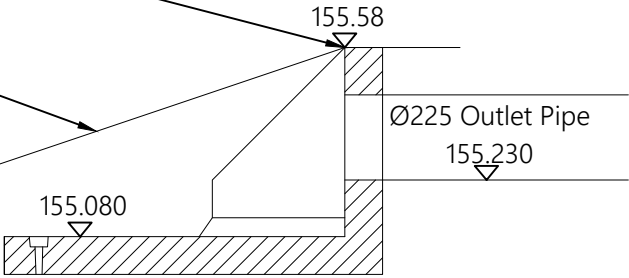
NOTE-DESIGN SUBJECT TO SECTION 104
APPROVAL ANY WORKS CARRIED OUT PRIOR TO
APPROVALS AND AGREEMENTS BEING IN PLACE
ARE DONE SO AT DEVELOPER'S OWN RISK.



AH4C - Outfall Headwall (HW4)
Scale 1:20

Proposed headwall is to be set back into existing bank profile to prevent obstruction to flows.

Temporary mesh screening and/or straw bales to be installed to prevent construction debris entering the watercourse.



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- Sketch proposals are for illustrative purposes only and as such are subject to detailed site investigation including ground conditions, contaminants, drainage, design and planning / density negotiations.
- All dimensions are in metres unless otherwise stated.
- The Designer's Risk Assessment(s) for this project must be reviewed PRIOR to the commencement of any works.

KEY:

- Development Boundary
- Proposed Section 104 Adoptable SW Sewer

P01	25.01.25	Issued for approval.	BRM	-
Rev	Date	Amendments	By	Chk



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Client

ALLISON HOMES

Project

MAIN STREET
STANTON UNDER BARDON

Drawing Title

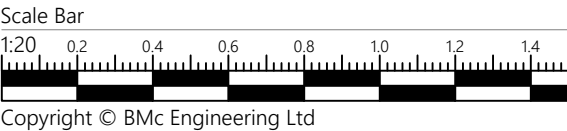
ORDINARY WATERCOURSE
CONSENT

Status

FOR APPROVAL

Scale	Drawn	Checked	Date
1:20 / 1:500 @ A2	BRM	-	25.01.25

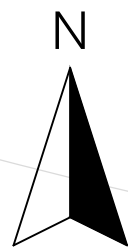
Drawing Number	Revision
24005-BMC-25-XX-DR-C-504	P01



Health and safety symbols refer to reference numbers indicated on Designers Risk Assessment number: 24005-BMC-24-XX-HS-C-0001

Health & Safety Information Key

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-  Used to restrict/prevent a possible action, e.g. stop construction traffic from entering an area
-  Used to warn of significant design hazards, adding recommendations
-  Used to encourage a positive action, e.g. use of robust protection for inspection chambers



General Notes

1. The Contractor shall check all tie-ins for line and level with existing before commencing any works. The Engineer shall be notified immediately, in writing, should any errors be found.
2. Any discrepancies, of whatever nature, must be reported to the Engineer prior to the commencement or continuance of any further works.
3. 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 CDM Co-ordinator, within his rates.
4. All private drainage works to be in accordance with the requirements of Building Regulations 2015, Part H, "Drainage and waste disposal". Pipes with less than 600mm cover to be protected in accordance with Part H, Diagram 11.
5. All pipes to be 100 or 110mm dia. and laid at 1 in 80 unless stated otherwise.
6. All pipes, chambers and fittings to be installed, bedded and backfilled in accordance with the manufacturers instructions.
7. Pipes which run adjacent to buildings shall be installed in strict accordance with Part H, Clauses 2.23 to 2.25.
8. All manholes and inspection chambers situated in areas subject to vehicular loading to have class D400 covers and frames to BS EN124 and those not subject to vehicular loading to have class A15 covers and frames.
9. All drains in the vicinity of existing or proposed trees to be constructed in accordance with the requirements of NHBC Practice Note 3.
10. All existing land drains encountered on site during construction to be re-connected.
11. Should any departure from the slab level be considered, agreement shall be sought from the Engineer immediately and prior to commencement or continuance of any works, and should take full account of all restrictions to the slab level.
12. Where a drive slopes towards a garage there is to be a 20mm upstand to the garage slab.
13. All dimensions in metres unless otherwise stated.

KEY:

- Development Boundary
- Ø100 / Ø150mm Foul Water Drain (Ø100mm pipework unless otherwise shown)
- Foul Water Backdrop (bd)
- Ø320mm Foul Water Inspection Chamber (Maximum depth 0.9m)
- Ø450mm Foul Water Inspection Chamber (Maximum depth 3.0m & non-man entry required for depths > 1.2m)
- Ø100 / Ø150mm Storm Water Drain (Ø100mm pipework unless otherwise shown)
- Storm Water Backdrop (bd)
- Sealed Rodding Eye
- Storm Water Yard Gully
- Ø450mm Storm Water Inspection Chamber (Maximum Depth 3.0m & Non-man entry required for depths > 1.2m)
- Ø600mm Storm Water Catchpit Chamber (Must allow for 300mm deep sump)
- ACO Channel Drain (or similar approved)

P04	27.03.25	Drainage updated to suit parcel amendments to plots 18-31	BRM	-
P03	20.03.25	Drainage updated to suit revised plot and road positioning	BRM	-
P02	17.02.25	Private drainage updated to suit repositioned plots and mirroring of plots 25 and 28	BRM	-
P01	25.01.25	Issued for approval	BRM	-
Rev	Date	Amendments	By	Chk



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Client **ALLISON HOMES**

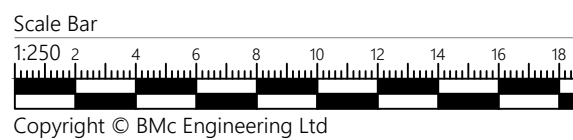
Project **MAIN STREET
STANTON UNDER BARDON**

Drawing Title
**PRIVATE DRAINAGE
SHEET 1 OF 2**

Status
FOR APPROVAL

Scale	Drawn	Checked	Date
1:250 @ A1	BRM	-	25.01.25

Drawing Number	Revision
24005-BMC-25-XX-DR-C-530	P04



Health and safety symbols refer to reference numbers indicated on Designers Risk Assessment number: 24005-BMC-24-XX-HS-C-0001

Health & Safety Information Key

 Used to provide design specific safety information that may not be obvious to a competent contractor but may be useful

 Used to restrict/prevent a possible action, e.g. stop construction traffic from entering an area

 Used to warn of significant design hazards, adding recommendations

 Used to encourage a positive action, e.g. use of robust protection for inspection chambers



- General Notes**
1. The Contractor shall check all tie-ins for line and level with existing before commencing any works. The Engineer shall be notified immediately, in writing, should any errors be found.
 2. Any discrepancies, of whatever nature, must be reported to the Engineer prior to the commencement or continuance of any further works.
 3. 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 CDM Co-ordinator, within his rates.
 4. All private drainage works to be in accordance with the requirements of Building Regulations 2015, Part H, "Drainage and waste disposal". Pipes with less than 600mm cover to be protected in accordance with Part H, Diagram 11.
 5. All pipes to be 100 or 110mm dia. and laid at 1 in 80 unless stated otherwise.
 6. All pipes, chambers and fittings to be installed, bedded and backfilled in accordance with the manufacturers instructions.
 7. Pipes which run adjacent to buildings shall be installed in strict accordance with Part H, Clauses 2.23 to 2.25.
 8. All manholes and inspection chambers situated in areas subject to vehicular loading to have class D400 covers and frames to BS EN124 and those not subject to vehicular loading to have class A15 covers and frames.
 9. All drains in the vicinity of existing or proposed trees to be constructed in accordance with the requirements of NHBC Practice Note 3.
 10. All existing land drains encountered on site during construction to be re-connected.
 11. Should any departure from the slab level be considered, agreement shall be sought from the Engineer immediately and prior to commencement or continuance of any works, and should take full account of all restrictions to the slab level.
 12. Where a drive slopes towards a garage there is to be a 20mm upstand to the garage slab.
 13. All dimensions in metres unless otherwise stated.

- KEY:**
- Development Boundary
 - Ø100 / Ø150mm Foul Water Drain (Ø100mm pipework unless otherwise shown)
 - Foul Water Backdrop (bd)
 - Ø320mm Foul Water Inspection Chamber (Maximum depth 0.9m)
 - Ø450mm Foul Water Inspection Chamber (Maximum depth 3.0m & non-man entry required for depths > 1.2m)
 - Ø100 / Ø150mm Storm Water Drain (Ø100mm pipework unless otherwise shown)
 - Storm Water Backdrop (bd)
 - Sealed Rodding Eye
 - Storm Water Yard Gully
 - Ø450mm Storm Water Inspection Chamber (Maximum Depth 3.0m & Non-man entry required for depths > 1.2m)
 - Ø600mm Storm Water Catchpit Chamber (Must allow for 300mm deep sump)
 - ACO Channel Drain (or similar approved)

Health and safety symbols refer to reference numbers indicated on Designers Risk Assessment number: 24005-BMC-24-XX-HS-C-0001

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P03	20.03.25	Drainage updated to suit revised plot and road positioning	BRM	-
P02	17.02.25	Private drainage updated to suit repositioned plots and mirroring of plots 25 and 28	BRM	-
P01	25.01.25	Issued for approval	BRM	-
Rev	Date	Amendments	By	Chk

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Client
ALLISON HOMES

Project
**MAIN STREET
STANTON UNDER BARDON**

Drawing Title
**PRIVATE DRAINAGE
SHEET 2 OF 2**

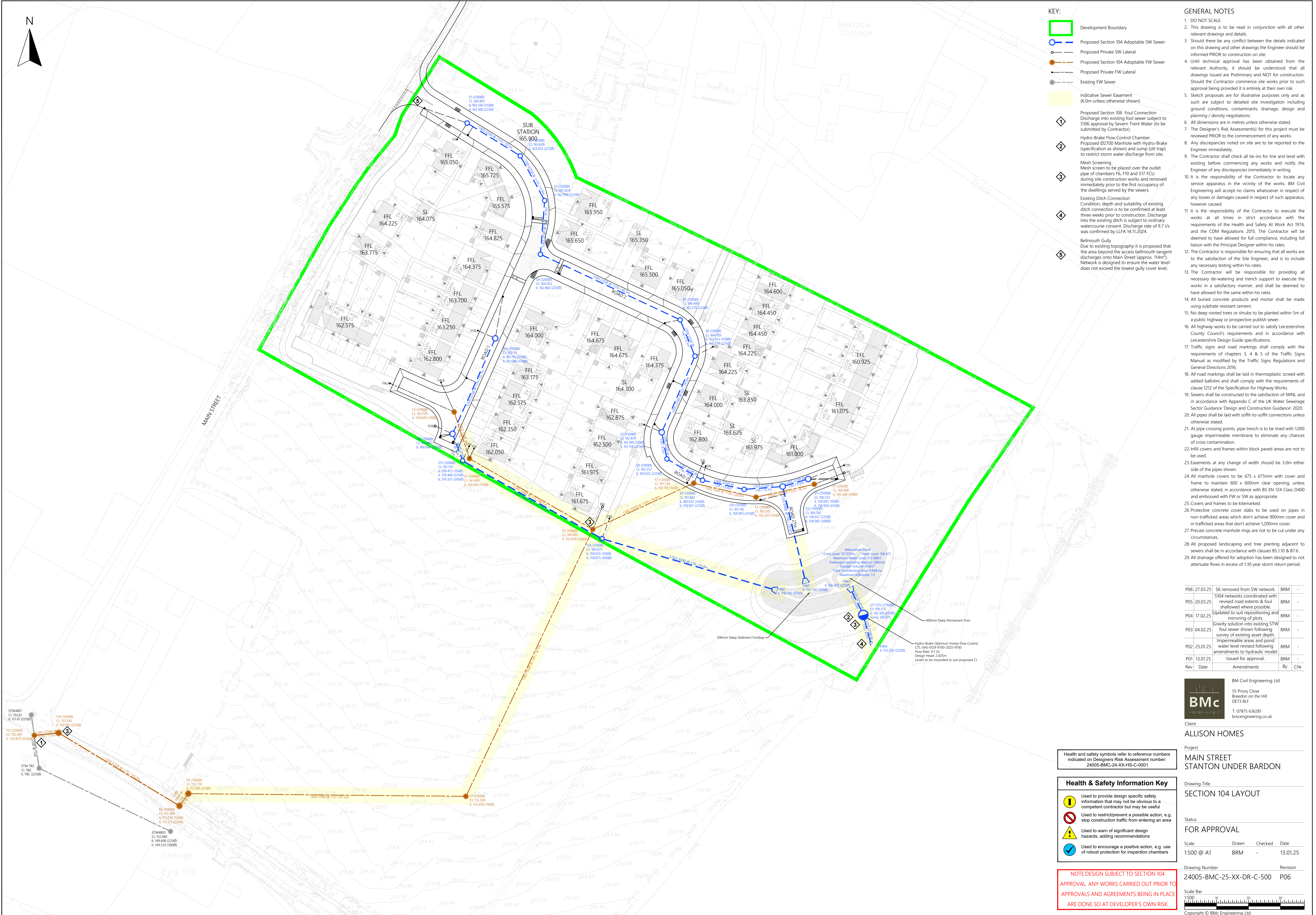
Status
FOR APPROVAL

Scale	Drawn	Checked	Date
1:250 @ A1	BRM	-	25.01.25

Drawing Number	Revision
24005-BMC-25-XX-DR-C-531	P04

Scale Bar
1:250

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KEY:

- Development Boundary
- Proposed Section 104 Adoptable SW Sewer
- Proposed Private SW Lateral
- Proposed Section 104 Adoptable FW Sewer
- Proposed Private FW Lateral
- Existing FW Sewer
- Indicative Sewer Easement (6.0m unless otherwise shown)
- Proposed Section 106 Foul Connection Discharge into existing foul sewer subject to S106 approval by Severn Trent Water (to be submitted by Contractor).
- Hydro-Brake Flow Control Chamber Proposed Ø2700 Manhole with Hydro-Brake (specification as shown) and sump (silt trap) to restrict storm water discharge from site.
- Mesh Screening Mesh screen to be placed over the outlet pipe of chambers F6, F10 and S17 FCU during site construction works and removed immediately prior to the first occupancy of the dwellings served by the sewers.
- Existing Ditch Connection Condition, depth and suitability of existing ditch connection is to be confirmed at least three weeks prior to construction. Discharge into the existing ditch is subject to ordinary watercourse consent. Discharge rate of 9.7 l/s was confirmed by LLFA 14.11.2024.
- Bellmouth Gully Due to existing topography it is proposed that the area beyond the access bellmouth tangent discharges onto Main Street (approx. 114m). Network is designed to ensure the water level does not exceed the lowest gully cover level.

GENERAL NOTES

- DO NOT SCALE.
- This drawing is to be read in conjunction with all other relevant drawings and details.
- Should there be any conflict between the details indicated on this drawing and other drawings the Engineer should be informed PRIOR to construction on site.
- Until technical approval has been obtained from the relevant Authority, it should be understood that all drawings issued are Preliminary and NOT for construction. Should the Contractor commence site works prior to such approval being provided it is entirely at their own risk.
- Sketch proposals are for illustrative purposes only and as such are subject to detailed site investigation including ground conditions, contaminants, drainage, design and planning / density negotiations.
- All dimensions are in metres unless otherwise stated.
- The Designer's Risk Assessment(s) for this project must be reviewed PRIOR to the commencement of any works.
- Any discrepancies noted on site are to be reported to the Engineer immediately.
- The Contractor shall check all tie-ins for line and level with existing before commencing any works and notify the Engineer of any discrepancies immediately in writing.
- It is the responsibility of the Contractor to locate any service apparatus in the vicinity of the works. BM Civil Engineering will accept no claims whatsoever in respect of any losses or damages caused in respect of such apparatus, however caused.
- 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 CDM Regulations 2015. The Contractor will be deemed to have allowed for full compliance, including full liaison with the Principal Designer within his rates.
- The Contractor is responsible for ensuring that all works are to the satisfaction of the Site Engineer, and is to include any necessary testing within his rates.
- The Contractor will be responsible for providing all necessary de-watering and trench support to execute the works in a satisfactory manner, and shall be deemed to have allowed for the same within his rates.
- All highway works to be carried out to satisfy Leicestershire County Council's requirements and in accordance with Leicestershire Design Guide specifications.
- Traffic signs and road markings shall comply with the requirements of chapters 3, 4 & 5 of the Traffic Signs Manual as modified by the Traffic Signs Regulations and General Directions 2016.
- All road markings shall be laid in thermoplastic screed with added ballotini and shall comply with the requirements of clause 1212 of the Specification for Highway Works.
- Sewers shall be constructed to the satisfaction of IWNL and in accordance with Appendix C of the UK Water Sewerage Sector Guidance 'Design and Construction Guidance' 2020.
- All pipes shall be laid with soffit-to-soffit connections unless otherwise stated.
- At pipe crossing points, pipe trench is to be lined with 1,000 gauge impermeable membrane to eliminate any chances of cross contamination.
- Infill covers and frames within block paved areas are not to be used.
- Easements at any change of width should be 3.0m either side of the pipes shown.
- All manhole covers to be 675 x 675mm with cover and frame to maintain 600 x 600mm clear opening, unless otherwise stated, in accordance with BS EN 124 Class D400 and embossed with FW or SW as appropriate.
- Covers and frames to be kitemarked.
- Protective concrete cover slabs to be used on pipes in non-trafficked areas which don't achieve 900mm cover and in trafficked areas that don't achieve 1,200mm cover.
- Precast concrete manhole rings are not to be cut under any circumstances.
- All proposed landscaping and tree planting adjacent to sewers shall be in accordance with clauses BS 5110 & BS 76.
- All drainage offered for adoption has been designed to not attenuate flows in excess of 130 year storm return period.

P06	27.03.25	S6 removed from SW network.	BRM	-
P05	20.03.25	S104 networks coordinated with revised road extents & foul shallowed where possible.	BRM	-
P04	17.02.25	Updated to suit repositioning and mirroring of plots.	BRM	-
P03	04.02.25	Gravity solution into existing STW foul sewer shown following survey of existing asset depth.	BRM	-
P02	25.01.25	Impermeable areas and pond water level revised following amendments to hydraulic model.	BRM	-
P01	13.01.25	Issued for approval.	BRM	-
Rev	Date	Amendments	By	Chk



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Client

ALLISON HOMES

Project

MAIN STREET
STANTON UNDER BARDON

Drawing Title

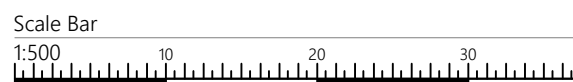
SECTION 104 LAYOUT

Status

FOR APPROVAL

Scale	Drawn	Checked	Date
1:500 @ A1	BRM	-	13.01.25

Drawing Number	Revision
24005-BMC-25-XX-DR-C-500	P06



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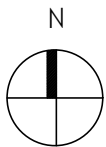
Health & Safety Information Key

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NOTE-DESIGN SUBJECT TO SECTION 104
APPROVAL ANY WORKS CARRIED OUT PRIOR TO
APPROVALS AND AGREEMENTS BEING IN PLACE
ARE DONE SO AT DEVELOPER'S OWN RISK.

- NOTES:**
1. Watercourse to be protected with silt fencing during the construction phase of the attenuation basin, the watercourse and attenuation basin then to be protected while the risk of contamination is present.
 2. Attenuation basin and flow control measures to be constructed as part of initial construction works.

- KEY:**
- Silt fencing, see detail 6
 - Watercourse
 - Fall
 - Outfall to watercourse



A 27.03.25 Silt protection measures reviewed			JL
rev	date	comment(s)	name



**ALLISON
HOMES**

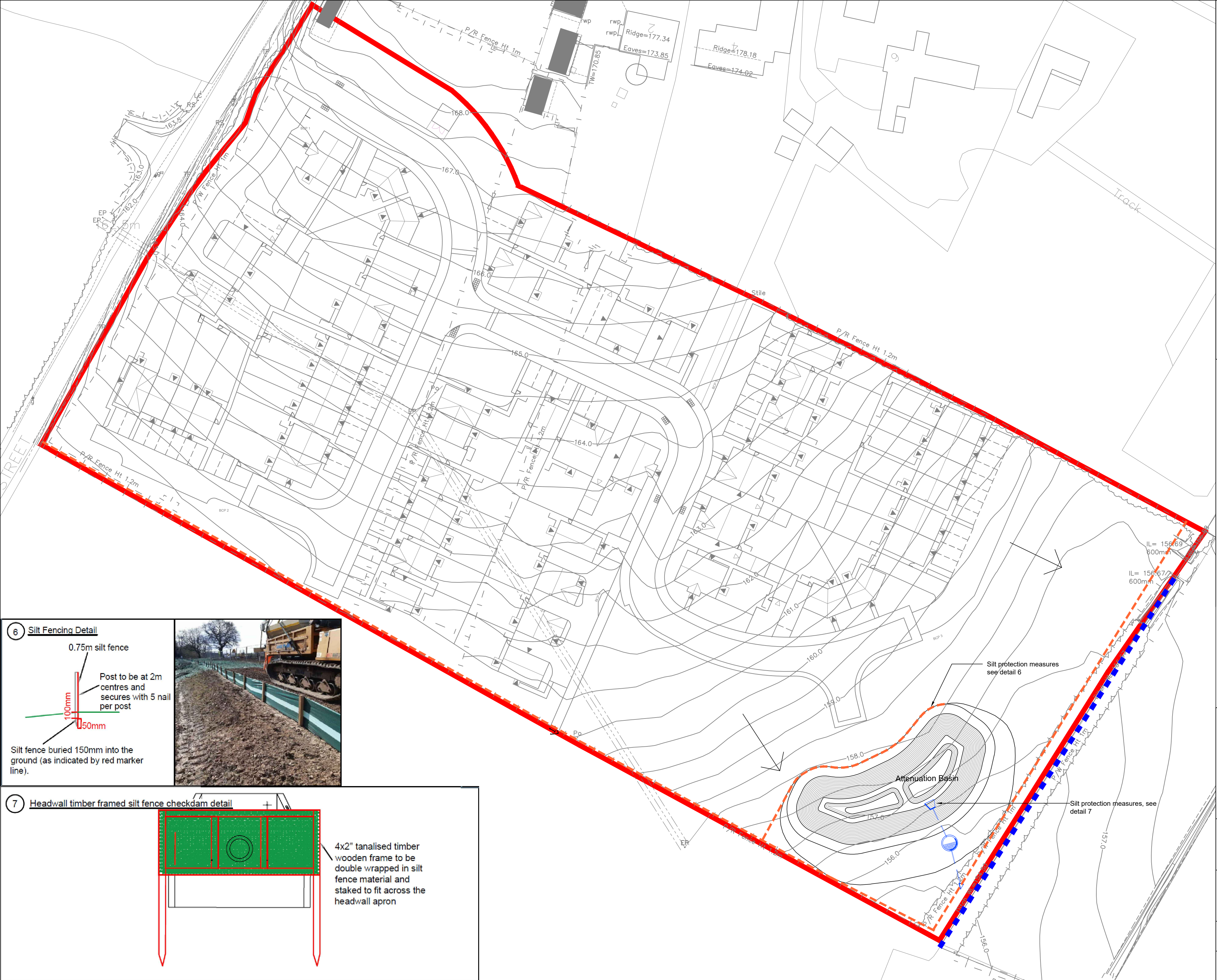
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PROJECT
STANTON UNDER BARDON

DRAWING TITLE
**Surface Water
Management Plan**

SCALE 1:500 @ A2	DATE 27.01.25	DRAWN JL	APPROVED -
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DRAWING NO. SUB/SWMP/01	REVISION A
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6 Silt Fencing Detail

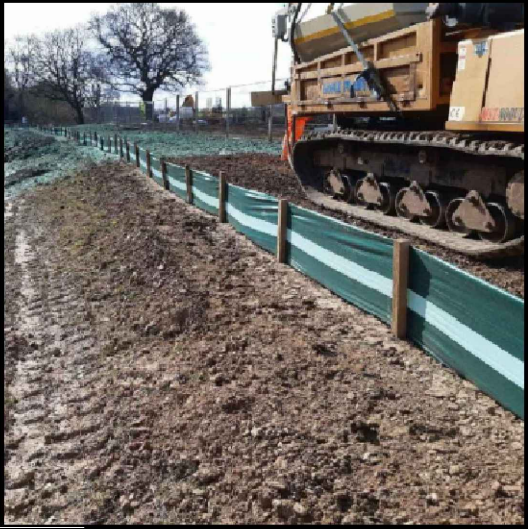
0.75m silt fence

Post to be at 2m centres and secures with 5 nail per post

100mm

150mm

Silt fence buried 150mm into the ground (as indicated by red marker line).



7 Headwall timber framed silt fence checkdam detail

4x2" tanalised timber wooden frame to be double wrapped in silt fence material and staked to fit across the headwall apron