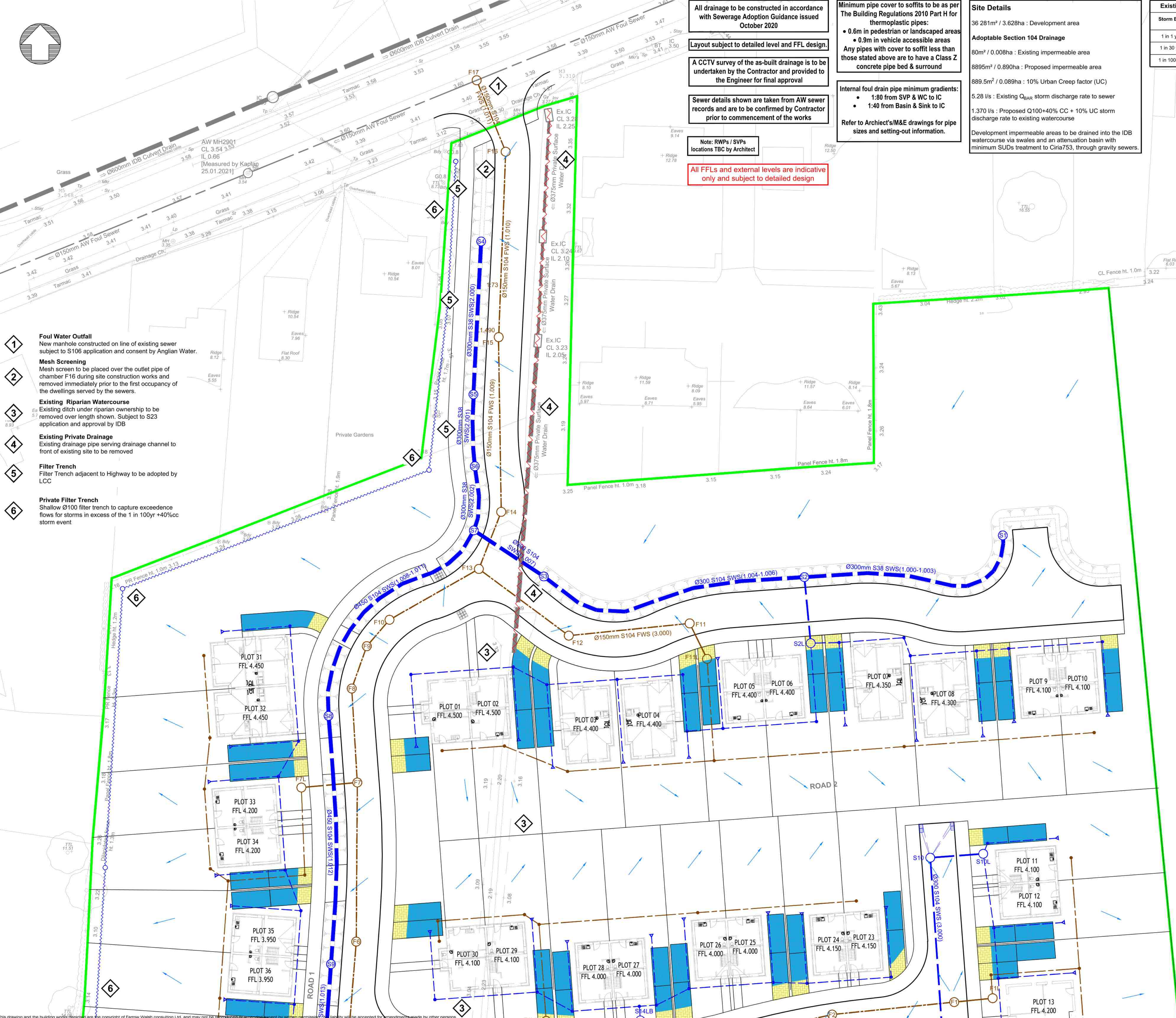
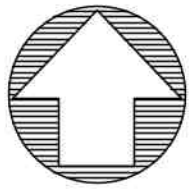




All drainage to be constructed in accordance with Sewerage Adoption Guidance issued October 2020

Layout subject to detailed level and FFL design.

A CCTV survey of the as-built drainage is to be undertaken by the Contractor and provided to the Engineer for final approval

Sewer details shown are taken from AW sewer records and are to be confirmed by Contractor prior to commencement of the works

Note: RWPs / SVPs locations TBC by Architect

All FFLs and external levels are indicative only and subject to detailed design

Minimum pipe cover to soffits to be as per The Building Regulations 2010 Part H for thermoplastic pipes:

- 0.6m in pedestrian or landscaped areas
- 0.9m in vehicle accessible areas

Any pipes with cover to soffit less than those stated above are to have a Class Z concrete pipe bed & surround

Internal foul drain pipe minimum gradients:

- 1:80 from SVP & WC to IC
- 1:40 from Basin & Sink to IC

Refer to Architect's/M&E drawings for pipe sizes and setting-out information.

Site Details

36 281m² / 3.628ha : Development area

Adoptable Section 104 Drainage

80m² / 0.008ha : Existing impermeable area

8895m² / 0.890ha : Proposed impermeable area

889.5m² / 0.089ha : 10% Urban Creep factor (UC)

5.28 l/s : Existing Q_{BAR} storm discharge rate to sewer

1.370 l/s : Proposed Q100+40% CC + 10% UC storm discharge rate to existing watercourse

Development impermeable areas to be drained into the IDB watercourse via swales and an attenuation basin with minimum SUDs treatment to Cria753, through gravity sewers.

Existing Greenfield Rate

Storm Event	Existing Max. Discharge Rate
1 in 1 year	4.6 l/s
1 in 30 year	12.95 l/s
1 in 100 year	18.81 l/s

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 those on 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 work prior to such approval being given 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 millimetres unless otherwise stated.
- The Farrow Walsh Consulting Designers Risk Assessments for this project must be reviewed PRIOR to the commencement of any works on site.

NOTES

- Information shown is FOR APPROVAL only and subject to detailed design.
- This drawing to be read in conjunction with all other relevant Engineers and Architect's details.
- All work is to be carried out in accordance with the current British Standards, codes of practice, building regulations and with Sewers for Adoption 6th Edition guidance.
- The exact position, level, size and use of existing sewers to be confirmed on site. Any discrepancies to be reported to the engineer prior to commencement of works.
- All uncovered and shallow pipework to be protected against construction traffic as part of the contractors temporary works requirements.
- Cover levels shown are approximate only, subject to the Architect's external works and landscaping scheme.
- All connections to road gullies and channels shall be 150mm nominal bore pipework.
- All pipework to be U-PVC type in accordance with WIS 4-35-01 unless otherwise noted.
- All pipes connecting to adopted manholes up to and including 300mm dia. to be U-PVC.
- All pipes connecting to adopted manholes greater than 300mm dia. to be Concrete.
- All pipework entering and exiting manholes to be connected with pipe soffits level.

LEGEND

- Development Boundary
- Self infiltrating Permeable Paving with min. 225mm Type 3 voided stone below
- Permeable Paving with Impermeable Membrane liner within 2.0m of highway boundary
- 450mm dia. IC Max Depth 3.0m
- 1500mm dia. PCC
- 1200mm dia. PCC (Laterals)
- Rodding eye (storm only)
- Surface Water
- Foul Water
- Road Gully
- Denotes under drained swale to be offered for adoption to LCC / Anglian water
- Surface Water Flow Exceedence Routing

A5	Drawing updated to suit new Development Layout, which resulted in updates to the Domestic Drainage and Adoptable Drainage, due to plot relocation.	MC	JD	xx	12.02.21
A4	Storm Drainage revised to suit Southern outflow only. Foul drainage and House's FFL updated.	RZ	OP	DM	27.10.20
A3	Drainage revised to suit inclusion of Plots 41-45, amended development area extents and layout received from Kaplan 12.08.2020.	RZ	DM	JD	05.10.20
A2	Development extents for Phase 1 shown only as requested by Kaplan 02.07.2020.	BM	OP	JD	08.07.20
A1	Issued for Approval.	BM	OP	JD	10.06.20
Rev	Description of updates	Drawn	Checked	App'd	Date
Revision Schedule					

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FOR APPROVAL

Client: Kaplan Property Group

Project: Fleet Road, Holbeach

Title: Drainage Strategy Sheet 1 of 2

Drawn: RZ	Checked: DM	Approved: JD	Date: June 2020	Scale: 1:250 @ A1
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Drawing No. FW1947-D-400-01

Revision: A5