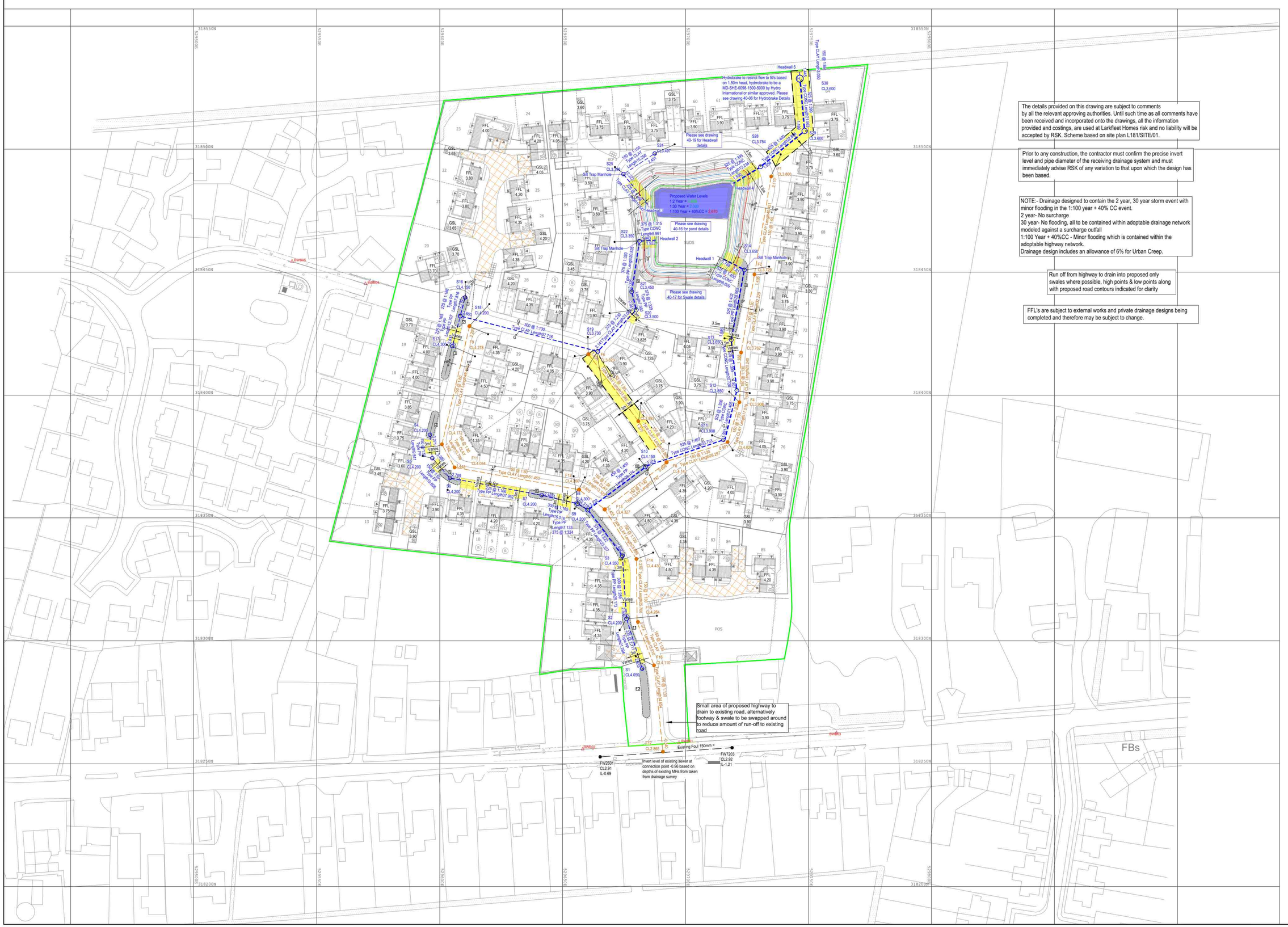


CIVIL / STRUCTURAL DESIGN RISK MANAGEMENT

Abnormal or unusual residual risks associated with the design outcomes shown on this drawing are:-

RSK LDE LTD has followed its Design Risk Management process for Hazard Elimination and Risk reduction in developing the designs shown on this drawing.
Abnormal or unusual residual risks may be shown above where it is considered that such risk may not normally be expected by competent persons engaged on work of this nature or type.

Notes:

1. This drawing is to be read in conjunction with all Engineering Drawings, Standard Details and specifications.
2. No works shall commence on site until all relevant technical approvals are in place and agreed in writing with the appropriate approval body, any works implemented prior to approval is at risk and is the responsibility of the Principal Contractor.
3. All drains and connections to be 100mm diameter, unless noted otherwise.
4. This drawing is schematic for clarity, and where possible drains should be laid within 2m of houses, and connections kept as short as possible.
5. Where pipes pass under buildings, unless beam & block floors are used, they are to be surrounded in concrete.
6. All branch drains, or connections, are to discharge to the collectors obliquely, and in the direction of the main flow.
7. House levels are Finished Floor Levels (FFL's).
8. Figures quoted next to manholes / PIC's are cover & invert level, in metres AOD.
9. Footpaths are to be laid with a crossfall (1 in 40) to allow drainage to carriageways or soft landscaped areas.
10. Where possible all drainage runs shall be kept a minimum of 4.0m from any existing tree that is to be retained.
11. All drainage design is subject to technical approval, no connections shall be made to any public sewers / existing watercourse without written consent from the drainage authority / EA.
12. The location of SS/SVP's/RWP's are subject to confirmation by the Architect.
13. Where proposed trees/existing trees are located within proximity to below ground drainage, root barriers should be provided in accordance with the Landscape Architect's details and specification.
14. Proposed main foul and surface water sewers are to be offered for adoption to Anglian Water in accordance with SFA 6th.
15. An allowance should be made for flap/non-return valves to all surface water outfall pipes, subject to confirmation by the EA.
16. All proposed surface and foul water outfall invert levels to be confirmed to the Engineer prior to commencement of any drainage works.
17. For locations of concrete pipe protection, refer to the road long sections.

The details provided on this drawing are subject to comments by all the relevant approving authorities. Until such time as all comments have been received and incorporated onto the drawings, all the information provided and costings, are used at Larkfleet Homes risk and no liability will be accepted by RSK. Scheme based on site plan L181/SITE/01.

Prior to any construction, the contractor must confirm the precise invert level and pipe diameter of the receiving drainage system and must immediately advise RSK of any variation to that upon which the design has been based.

NOTE:- Drainage designed to contain the 2 year, 30 year storm event with minor flooding in the 1:100 year + 40% CC event.
2 year- No surcharge
30 year- No flooding, all to be contained within adoptable drainage network modeled against a surcharge outfall
1:100 Year + 40%CC - Minor flooding which is contained within the adoptable highway network.
Drainage design includes an allowance of 6% for Urban Creep.

Run off from highway to drain into proposed only swales where possible, high points & low points along with proposed road contours indicated for clarity

FFL's are subject to external works and private drainage designs being completed and therefore may be subject to change.

Drainage Legend:

- Site Boundary
- Water Course
- Existing combined sewer and manhole
- Existing surface water sewer and manhole
- Proposed foul water sewer and manhole (F1)
- Proposed surface water sewer and manhole (S1)
- Proposed foul water lateral and connection
- Proposed surface water lateral and connection
- Proposed road gully with Ø150 connecting pipe
- Public sewer easement
- Proposed Dry Swale
- Proposed Dry Swale Number (1)
- Porous Paving depth TBC by specialists
- PP = Performed Pipe

Note: The drainage works are subject to Technical Approval from Anglian Water & Lincolnshire County Council and may therefore change

Notes:

1. The specification in all respects shall be in accordance with the Lincolnshire County Council Development Road and Sustainable Drainage Specification and Construction
2. Within the catchment of traditional drainage design, the minimum longitudinal fall for highways, without channel block shall be 1 in 150 and with channel blocks 1 in 250
3. General deterioration of the existing highway/footway/verges created through construction of the new Section 38 Development will be reinstated to the Development Road and Sustainable Drainage Specification and Construction at the developers' own cost at the agreement of the inspecting Development Management Officer.
4. No private surface water shall discharge onto the adoptable highway
5. No private structural features shall overhang the adoptable highway
6. No retaining walls exceeding 1.37 meters shall be within 3.66 meters of the highway boundary.

Rev.	Date	Amendment	Drawn	Chkd.	Appd.
P8	26.11.22	Plots 12-23 FFL's updated	KD	MS	
P7	14.07.22	Plots 13-21 FFL'S updated	LGS	MAR	

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Web: www.rsk.co.uk

Client: Larkfleet Homes

Project Title: Moulton Chapel Spalding

Status: DETAILED DESIGN

Drawing Title: Adoptable Drainage Layout

Drawn	Date	Checked	Date	Approved	Date
JW	JUL 19	MAR	JUL 19		

Scale	Orig Size	Dimensions
1:500	A0	

Project No.: 881565
Drawing File:
Drawing No.: 40-01
Rev.: P8

Scale 1:500
0 5 10 15 20 25m

File Location: L:\001 JOBS\LIVE WORKING\881565 - MOULTON CHAPEL - SPALDING LARKFLEET\ORIGINS\INFRASTRUCTURE\40-01 ADOPTABLE DRAINAGE LAYOUT.DWG