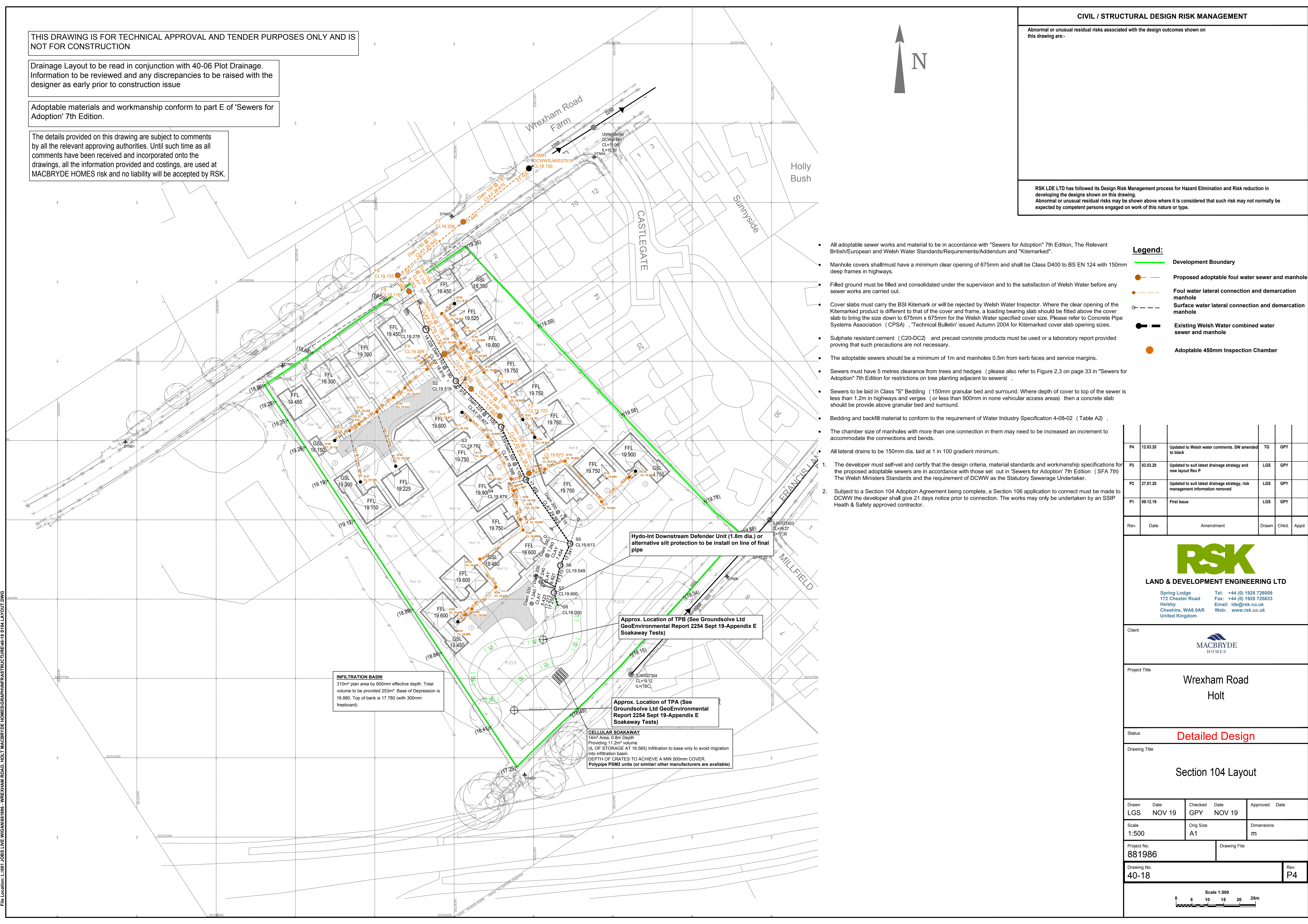


THIS DRAWING IS FOR TECHNICAL APPROVAL AND TENDER PURPOSES ONLY AND IS NOT FOR CONSTRUCTION

Drainage Layout to be read in conjunction with 40-06 Plot Drainage. Information to be reviewed and any discrepancies to be raised with the designer as early prior to construction issue

Adoptable materials and workmanship conform to part E of 'Sewers for Adoption' 7th Edition.

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 MACBRYDE HOMES risk and no liability will be accepted by RSK.



- All adoptable sewer works and material to be in accordance with "Sewers for Adoption" 7th Edition, The Relevant British/European and Welsh Water Standards/Requirements/Addendum and "Kitemarked".
 - Manhole covers shall have a minimum clear opening of 675mm and shall be Class D400 to BS EN 124 with 150mm deep frames in highways.
 - Filled ground must be filled and consolidated under the supervision and to the satisfaction of Welsh Water before any sewer works are carried out.
 - Cover slabs must carry the BSI Kitemark or will be rejected by Welsh Water Inspector. Where the clear opening of the Kitemarked product is different to that of the cover and frame, a loading bearing slab should be fitted above the cover slab to bring the size down to 675mm x 675mm for the Welsh Water specified cover size. Please refer to Concrete Pipe Systems Association (CPSA), "Technical Bulletin" issued Autumn 2004 for Kitemarked cover slab opening sizes.
 - Sulphate resistant cement (C20-DC2) and precast concrete products must be used or a laboratory report provided proving that such precautions are not necessary.
 - The adoptable sewers should be a minimum of 1m and manholes 0.5m from kerb faces and service margins.
 - Sewers must have 5 metres clearance from trees and hedges (please also refer to Figure 2.3 on page 33 in "Sewers for Adoption" 7th Edition for restrictions on tree planting adjacent to sewers).
 - Sewers to be laid in Class "S" Bedding (150mm granular bed and surround. Where depth of cover to top of the sewer is less than 1.2m in highways and verges (or less than 900mm in none vehicular access areas) then a concrete slab should be provide above granular bed and surround.
 - Bedding and backfill material to conform to the requirement of Water Industry Specification 4-08-02 (Table A2).
 - The chamber size of manholes with more than one connection in them may need to be increased an increment to accommodate the connections and bends.
 - All lateral drains to be 150mm dia, laid at 1 in 100 gradient minimum.
- The developer must self-vet and certify that the design criteria, material standards and workmanship specifications for the proposed adoptable sewers are in accordance with those set out in 'Sewers for Adoption' 7th Edition (SFA 7th) The Welsh Ministers Standards and the requirement of DCWW as the Statutory Sewerage Undertaker.
 - Subject to a Section 104 Adoption Agreement being complete, a Section 106 application to connect must be made to DCWW the developer shall give 21 days notice prior to connection. The works may only be undertaken by an SSIP Health & Safety approved contractor.

Legend:

- Development Boundary
- Proposed adoptable foul water sewer and manhole
- Foul water lateral connection and demarcation manhole
- Surface water lateral connection and demarcation manhole
- Existing Welsh Water combined water sewer and manhole
- Adoptable 450mm Inspection Chamber

P4	12.03.20	Updated to Welsh water comments. SW amended to black	TG	GPY	
P3	03.03.20	Updated to suit latest drainage strategy and new layout Rev P	LGS	GPY	
P2	27.01.20	Updated to suit latest drainage strategy, risk management information removed	LGS	GPY	
P1	09.12.19	First Issue	LGS	GPY	
Rev.	Date	Amendment	Drawn	Chkd.	Appd.

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Client

Project Title

Wrexham Road
Holt

Status

Detailed Design

Drawing Title

Section 104 Layout

Drawn	Date	Checked	Date	Approved	Date
LGS	NOV 19	GPY	NOV 19		

Scale	Orig Size	Dimensions
1:500	A1	m

Project No.	Drawing File
881986	

Drawing No.	Rev.
40-18	P4

Scale 1:500