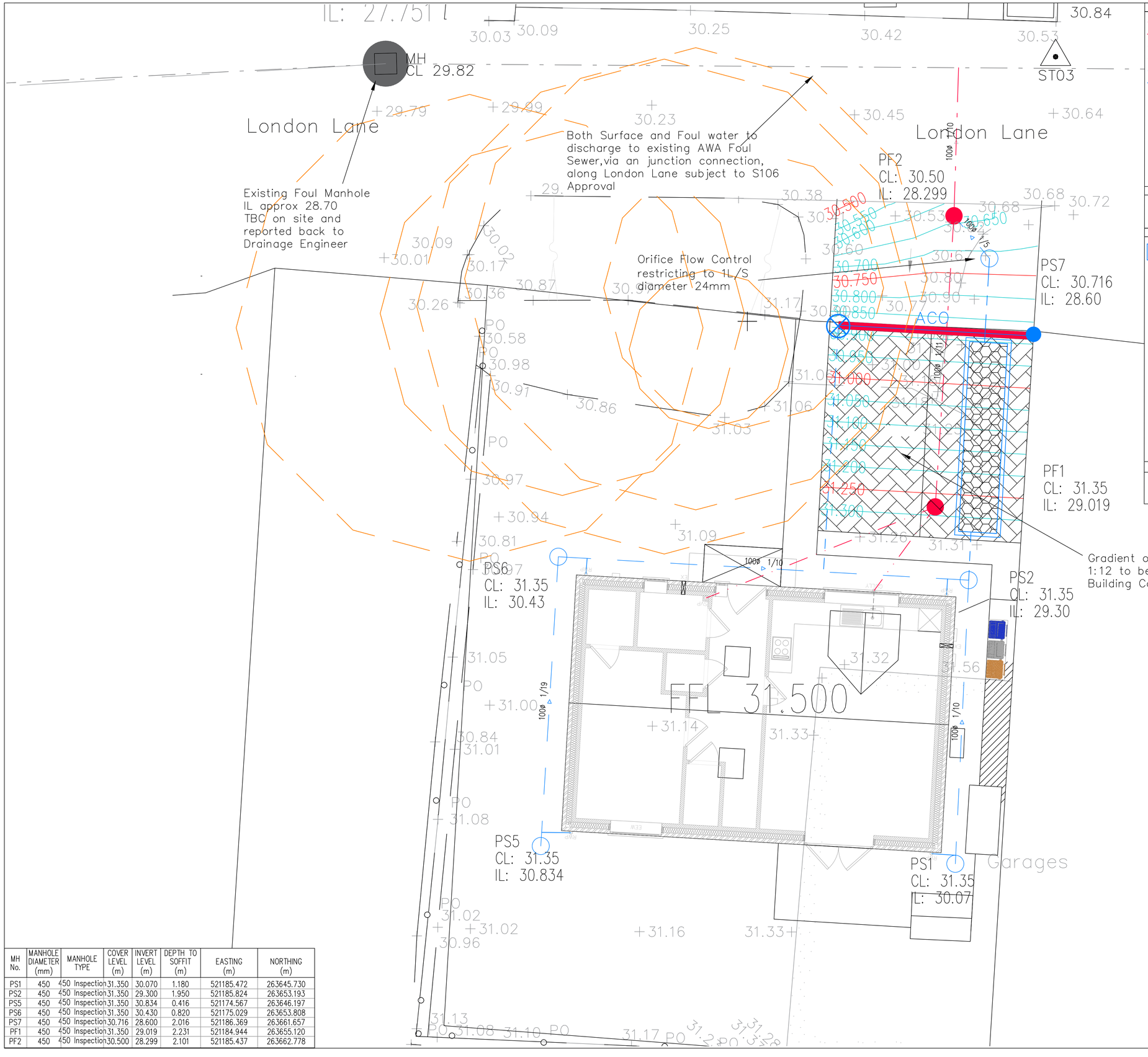


MH No.	MANHOLE DIAMETER (mm)	MANHOLE TYPE	COVER LEVEL (m)	INVERT LEVEL (m)	DEPTH TO SOFFIT (m)	EASTING (m)	NORTHING (m)
PS1	450	450 Inspection	31.350	30.070	1.180	521185.472	263645.730
PS2	450	450 Inspection	31.350	29.300	1.950	521185.824	263653.193
PS5	450	450 Inspection	31.350	30.834	0.416	521174.567	263646.197
PS6	450	450 Inspection	31.350	30.430	0.820	521175.029	263653.808
PS7	450	450 Inspection	30.716	28.600	2.016	521186.369	263661.657
PF1	450	450 Inspection	31.350	29.019	2.231	521184.944	263655.120
PF2	450	450 Inspection	30.500	28.299	2.101	521185.437	263662.778

Private Drainage Key

- Foul Inspection Chamber (Depth <0.6m [1 side connection])
- Foul Inspection Chamber (Depth <1.2m [2 side connections])
- Foul BR manhole PCC Ring (1.2–1.5m)
- Foul BR manhole PCC Ring (1.50–2.7m)
- Storm Inspection Chamber (Depth <0.6m [1 side connection])
- Storm Inspection Chamber (Depth <1.2m [2 side connections])
- Storm BR manhole PCC Ring (1.2–1.5m)
- Storm BR manhole PCC Ring (1.50–2.7m)
- Backdrop on SW Chamber
- Backdrop on FW Chamber
- French drain / Filter trench
- ACO channel or similar with gully and rodding point.
- FFL 12.50 FFL Level

Existing Sewer Key

- 150Ø83 FI(1.80) Foul sewer with pipe dia. & gradient incl. adoptable FWMH with reference & Invert.

Surface Water Attenuation

- PolyStorm-Lite (PSM2) Storm Water Management System
  Cellular storage tanks with 95% voids wrapped in an impermeable geo-membrane
- Permeable Block Paving
  Depth 300mm
  Void space of 30%

ANGLIAN WATER NOTES

ALL SECTION 104 ADOPTABLE DRAINAGE SHALL CONFORM TO THE DESIGN AND CONSTRUCTION GUIDE (DCG) FOR DEVELOPERS (SEWERAGE SECTOR GUIDANCE APPENDIX C, MARCH 2020) CURRENT AT THE TIME OF EXECUTION.

ALL COVERS AND FRAMES ON ADOPTABLE AW SEWERS ARE TO BE D400, KITEMARKED AND BE BADGED 'FW' OR 'SW' ACCORDINGLY. SUPPLIERS SHALL BE STANTON, PAUL SAVAGE, NORINCO OR WREKIN.

ADOPTABLE PIPEWORK SHALL BE TO THE FOLLOWING SPECIFICATION:

- CLAYWARE: BS EN 295–1:1991
  #150 DIA. CRUSHING STRENGTH 34KN/M
  #225 DIA. CLASS 160
- CONCRETE: BS EN 591–1:2002
  #300 DIA. CLASS 120
- PLASTIC: BS EN 13476–1
  FOUL WATER – FUNKE HS PIPEWORK 16KN/M²
  SURFACE WATER – HDPE TWIN WALL PIPEWORK SN8
  – POLYPIPE POLYSEWER (#150 – #300mm)
  – POLYPIPE RIDGISEWER (#400 – #900mm)
  – POLYPIPE RIDGISTORM–XL (#750 – #3000mm)
  – WEHOLITE APPROVED PIPEWORK

THIS DRAWING IS TO BE READ IN CONJUNCTION WITH "MTC STANDARD DETAIL 1: ADOPTABLE DRAINAGE CONSTRUCTION DETAILS (DCG APPENDIX C 2020)".

Additional Key

- Tree Root Protection Zones

North Arrow

N W E S

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. All private drainage works to be in accordance with the requirements of Building Regulations 2010, Part H, "Drainage and waste disposal", (01st October 2015).
4. All pipes to be bedded and backfilled in accordance with Part H, Diagram 10. Shallow pipes shall be protected in accordance with Part H, Diagram 11.
5. Unless otherwise stated, all private drainage to be 100mm diameter. Gradients have been shown where there are pipe capacity issues and these should be regarded as minimums. Unless there are constraints dictating otherwise, gradients shall generally be 1 in 60. 100mm diameter pipes shall not be laid flatter than 1 in 80, 150mm diameter pipes shall not be laid flatter than 1 in 150.
6. All pipes, chambers and fittings to be installed strictly 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 and Diagram 8.
8. All private manholes, inspection chambers and drainage channels to comply with BS EN124. Cover strengths to be:
   Class D400 in heavy trafficked areas (access roads, service yards etc.)
   Class C250 in lightly trafficked areas (car parks, driveways etc)
   Class B125 in Non trafficked areas
   Class A15 in landscaping areas
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. Private drainage frames must be tied to manhole risers by use of manufacturers ties (e.g. Polypipe ref. FRK500 fixing kit and FRK501 black ties.) The ground works contractor will be held fully responsible for any accidents due to incorrect fitting or failure to use the correct manufacturers fixing equipment.
11. All existing land drains encountered on site during construction to be re–connected.
12. 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.
13. Garage slabs relate to the finished level of the concrete at the front entrance of the garage.
14. Where a drive slopes towards a garage there is to be a 75mm ramp up to the garage slab.
15. Maximum gradients of gardens to be 1 in 6 (unless stated otherwise), except for designed banking works.
16. All dimensions in metres unless otherwise stated.
17. As underlying ground conditions may be variable across the site the Contractor shall undertake onsite porosity tests at the location and depth of each soakaway. Tests should be undertaken in accordance with BRE365 and results forwarded to the Engineers to allow verification of designs.
18. All existing services, sewers and drains indicated on this drawing and any other related drawings are shown only indicatively, and shall have their positions and level confirmed on site by the Contractor.
19. The invert levels of all existing sewers, drains, ditches, tanks or other features and apparatus where a new connection is to be made shall have their precise position and level confirmed on site by the Contractor prior to commencement of any construction work. The results of the investigations shall be confirmed to MTC Engineering (Cambridge) Ltd so that the design can be verified.

NOTE:
At the location of the proposed lateral connection the contractor shall establish the position and depth of any existing services to prevent any clash in level and abortive costs.

SOAKAWAY	AT–01
Lowest Cover Level (m)	31.00
Level top of Cells (m)	29.400
Base level of Cells (m)	28.600
Pipe invert (m)	28.600
Contributing area (m2)	80
Dimension on Plan (m)	5.0x1.0x0.8(d)
Cell Thickness (m)	0.8
Void Space (%)	95
Maximum Storage Volume (m3)	3.8

PRELIMINARY DESIGN
NOT FOR CONSTRUCTION

REV	DATE	DESCRIPTION/REASON FOR ISSUE	APPR
C	27.01.25	Updated Tank Positioning	JF
B	17.12.24	SWS REVISED	JTC
A	16.12.24	OUTFALL REVISED	JTC

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PROJECT
51 London Lane, Great Paxton

TITLE
Drainage Design

ORIG	DATE
JF	29.11.24
CHKD	SCALE 1:50 @ A1
APPR	DRAWING NO 3380–02 REV C

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