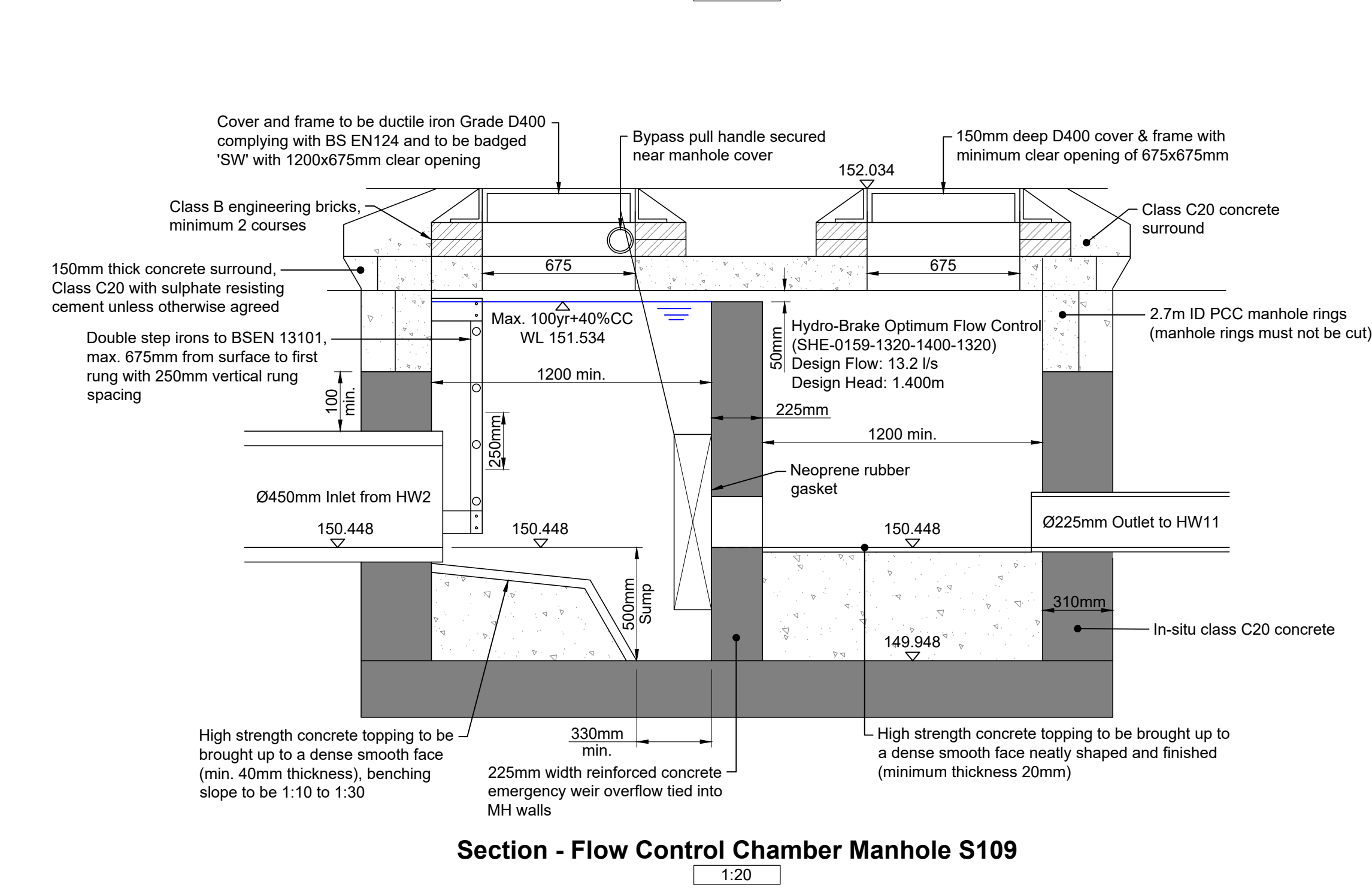


1. DO NOT SCALE.
2. This drawing is to be read in conjunction with all other relevant drawings and details.
3. Should there be any conflict between the details indicated on this drawing and those on other drawings the Engineer should be informed PRIOR to construction on site.
4. Until technical approval 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.
5. 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.
6. All dimensions are in millimetres unless otherwise stated.
7. The Farrow Walsh Designers Risk Assessments for this project must be reviewed PRIOR to the commencement of any works on site.

1. This drawing is to be read in conjunction with all other relevant Engineers and Architects' details.
2. All works to be completed out in accordance with the current British Standards, codes of practice, building regulations and Sewer Service Guidance.
3. All drainage offered for adoption has been designed to not attenuate flows in excess of the 1.30 year return storm event.
4. The exact position, level, size and use of existing sewers to be confirmed on site by the Contractor. Any discrepancies to be reported to the Engineer prior to commencement of works.
5. All uncovered and shallow pipework to be protected against construction traffic as part of the Contractor's temporary works requirements.
6. Exact location line and level of existing stubs to existing manholes in the road to be confirmed on site prior to construction.
7. All connections to road gullies and stubs shall be 150mm nominal bore pipework. No pipe work to be used in the direction of flow.
8. Connections to four terminal fittings to be 100mm nominal bore pipework subject to confirmation of above ground pipe diameters and/or design flow. No pipe work to be used in the direction of flow.
9. All pipework to be u-PVC type in accordance with WIS 4-35-01 unless otherwise noted.
10. All pipes connecting to adopted manholes up to and including 300mm dia. to be HDPE or Polypropylene.
11. All pipes connecting to adopted manholes greater than 300mm dia. to be Concrete or Polypropylene Rigidsewer.
12. Pipes of different diameters entering manholes should be installed with soffits at the same level.
13. Pre-formed channels to be used at all manholes.
14. High strength concrete benching to be steel trowelled to a dense smooth face neatly shaped and finished to all branch connections and laid in accordance with the specification.
15. Precast concrete manhole rings will not be cut under any circumstances. Other options, manhole built up with concrete or brick work to the top of the pipe.
16. All catchpits shall not be used.
17. Pipe bends to be provided to suit direction of flow.
18. All manhole covers to comply with Clause E.3.2, 600x600mm minimum clear opening in accordance with the new Design and Construction Guidance V2, 2019. All manhole covers shall be of the type specified in the design, e.g. double triangular type, embossed 'FW' or 'SW' as appropriate, where applicable.
19. All new drainage to be constructed adjacent new and proposed tree planting to be installed to the root cut and backfilled with a minimum of 2m free root intrusion in accordance with Sewer Service Guidance, section B7.6.
20. First flexible joint in pipes adjacent to a manhole shall be 600mm max. From inside face of manhole, connecting to rooker pipe. For pipe diameters 150mm - 450mm the rooker pipe shall show a minimum of 100mm of the rooker pipe diameters 451mm - 675mm the rooker pipe length shall be 750mm - 1000mm.
21. Manholes with outgoing pipes greater than 600mm dia. shall be fitted with guard bars, safety chains or other approved safety devices.
22. Sewer easements at any change in width, these should be 1.2m each side from the pipe OD.
23. Protective concrete cover slabs to be used on pipes in non-traffic area which doesn't achieve a 9m/300m cover level and 1/2/200m pipes in traffic area and have concrete slab protection.
24. Where pipe crossing, membrane to be used for protection to eliminate any changes in level.
25. The outside of the sewer should be in vehicle carriageway (not footpath) and be at least 1.0m away from the kerb line. The inside of manholes should be at least 0.5m away from the kerb line.
26. All soil spots encountered in the trench formation to be removed and replaced with graded granular material unless instructed otherwise.
27. Where the formation of a pipe trench is above or below ground, levels are to be made up with compacted DTP Type 2 material or better.
28. All buried concrete must carry at least Class 2 sulphates conditions in accordance with Table 1 of BRE Digest 363.
29. Concrete protection shall be provided to all pipes with less than 300mm cover in



**farrow
walsh** 62 Highcross Street, Leicester LE1 4NN
321 Bradford Street, Birmingham B5 6ET
☎ 0330 100 0363
www.farrowwalsh.com

Title:
Adoptable Drainage Construction Details
Sheet 2 of 5

Drawing No. **FW2127-P2-C-010-02** Revision: **A3**

1. Infill curbs and frames in black paved areas are not to be used
2. Catchpits shall not be adopted.
3. Essentails at any change in width should be 2.5m to each side of the centre pipe line.
4. A 100mm thick concrete membrane to be used for protection to eliminate any chances of cross contamination.
5. All concrete drop curbs, steeper gradients are preferred to use of back drops.
6. Precast concrete manhole rings will not be cut under any circumstances. Other options are preferred, manhole built up with concrete or brickwork to the top of the pipe.
7. The kerbs to the left of the manhole should be at least 0.5m from the manhole achieving a 0.9m/300mm cover level and 1.2m/1200mm cover in traffic area.
8. The outside of the sewer should be in vehicle category (not footpath) and be at least 1m from the kerb to the left of the manhole.
9. Trees on the drawing are existing or proposed and adhere to B.3.1.11 of SG5. The tree should be removed if it is not possible to achieve a minimum clearance with vegetation is not achievable, appropriate root protection will be provided per B7.6.
10. All proposed manhole covers & frames at a minimum 675mmx675mm to maintain clear opening and frames to be 1000mmx1000mm and 75mm standard.
11. The materials to be used are suitable for the ground conditions.
12. Temporary sewer to be fitted during construction works to avoid debris going into the existing sewer.
13. Cover and frames should be lettermarked.