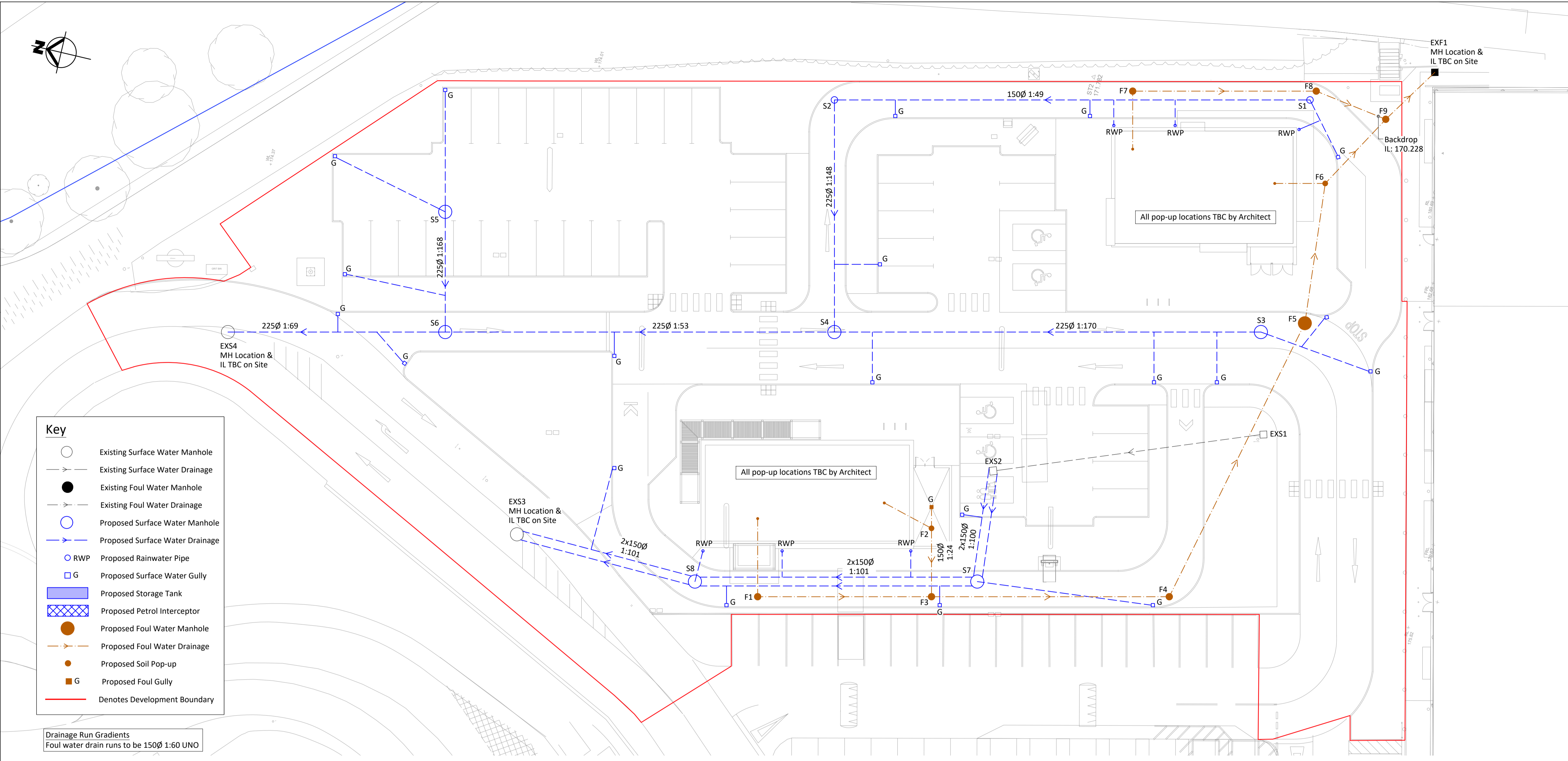


- ### Drainage & Pipe Laying Notes
- Design subject to review following receipt of further drainage survey information.
 - Should there be any conflict between the details indicated on this drawing and those indicated on other documents the Engineer should be informed PRIOR to construction on site.
 - Existing drainage information based on CT Surveys drawing No. 5850JH dated July 2023.
 - All work is to be undertaken in accordance with the following standards;
BS EN 1610:2015 - Construction & Testing of Drains & Sewers.
Building Regulations Document Part H.
 - All pipe laying works are to proceed upstream unless noted otherwise.
 - All drainage runs shall be completed in advance of the external works.
 - Manhole locations where full setting out is not provided shall be fixed at the best location that suits the criteria indicated on the drawings (i.e. pipe gradients, lengths, incoming connections). Such manholes shall have their placement confirmed to the contract administrator.
 - Flows into the network should be avoided until the outfalls are established. If water entry is unavoidable prior to this, a sump should be constructed to be pumped out as required.
 - Existing invert levels at final discharge points to be checked prior to construction.
 - Where additional connections to the network are instructed by others (or shown on their drawings) such connections shall not be made without confirmation from the contract administrator.
 - Any existing pipes, french drains, streams or water entries encountered during pipe laying or elsewhere within the contract boundary should be reported to the contract administrator immediately.
 - Manhole cover and frame to suit manhole/inspection chamber ϕ , in accordance with EN 124.
 - Concrete pipes to comply with the requirements of BS 5911 and to be flexibly jointed.
 - Plastic pipes and fittings to the following;
UPVC - to BS EN 1401
Polypropylene - to BS EN 1852
 - Clay pipes to be vitrified clay extra strength, plain end pipes and fittings with plastic sleeve joints to BS 65:1981.
 - Pipes and fittings are to be laid in accordance with manufacturers recommendations.
 - Pipe work beneath buildings to have concrete bed and surround.
 - Where cover to adopted pipes is less than 1200mm and 900mm to private pipes in roads and hard standings concrete protection is to be provided. All drain runs near buildings shall also receive concrete protection - refer to details.
 - Where surface water pipes cross foul water pipes both pipes to have concrete bed, surround and infill between.
 - All pipe trenches shall have selected excavated material for backfill, except for those which pass beneath any buildings or external pavements which shall have type 2 material for backfill.
 - All pipe trenches shall have selected excavated material for backfill, except for those which pass beneath any buildings or external pavements which shall have type 2 material for backfill.

- Excavated material for reuse in reinstatements shall be:
- Generally unsaturated, uniform and readily compacted.
 - Free of clay lumps, bricks, stones and the like in excess of 75mm nominal size.
 - Free of tree roots, bushes, building rubbish and the like.
- Until final surface is placed, heavy traffic is not to be allowed over pipe trenches without special provisions
 - All landscaping, footpaths and street furniture to architects specification and details.



Plan
Scale 1:200

| SURFACE MANHOLE SCHEDULE | | | | | | | | |
|--------------------------|----------|----------|-------------|----------------------|-------------------------|-----------|-----------|----------|
| MH Ref | MH CL, m | MH IL, m | MH Depth, m | Incoming Pipe IL (m) | Incoming Pipe Size (mm) | MH Dia, m | MH Type | MH Cover |
| S1 | 172.000 | 170.950 | 1.050 | 170.950 | 150 | 0.600 | TYPE D | D400 |
| S2 | 171.120 | 169.995 | 1.125 | 170.070 | 150 | 0.600 | TYPE D | D400 |
| S3 | 171.206 | 170.081 | 1.125 | 170.081 | 225 | 1.200 | TYPE B1/E | D400 |
| S4 | 171.160 | 169.853 | 1.307 | 169.853 | 225 | 1.200 | TYPE B1/E | D400 |
| S5 | 170.150 | 169.025 | 1.125 | 169.025 | 225 | 1.200 | TYPE B1/E | D400 |
| S6 | 170.310 | 168.960 | 1.350 | 168.960 | 225 | 1.200 | TYPE B1/E | D400 |
| S7 | 171.500 | 169.669 | 1.831 | 169.669 | 2x150 | 1.200 | TYPE B | D400 |
| S8 | 171.040 | 169.415 | 1.625 | 169.415 | 2x150 | 1.200 | TYPE B | D400 |

| FOUL MANHOLE SCHEDULE | | | | | | | | |
|-----------------------|----------|----------|-------------|----------------------|-------------------------|-----------|-----------|----------|
| MH Ref | MH CL, m | MH IL, m | MH Depth, m | Incoming Pipe IL (m) | Incoming Pipe Size (mm) | MH Dia, m | MH Type | MH Cover |
| F1 | 171.300 | 170.250 | 1.050 | 170.250 | 150 | 0.600 | TYPE D | D400 |
| F2 | 171.410 | 170.250 | 1.160 | 170.250 | 150 | 0.600 | TYPE D | D400 |
| F3 | 171.330 | 169.987 | 1.343 | 169.987 | 150 | 0.600 | TYPE D | D400 |
| F4 | 171.900 | 169.627 | 2.273 | 169.627 | 150 | 0.600 | TYPE D | D400 |
| F5 | 171.140 | 169.166 | 1.974 | 169.166 | 150 | 1.200 | TYPE B1/E | D400 |
| F6 | 171.020 | 168.952 | 2.068 | 168.952 | 150 | 0.600 | TYPE D | D400 |
| F7 | 171.670 | 170.620 | 1.050 | 170.620 | 150 | 0.600 | TYPE D | D400 |
| F8 | 172.000 | 170.342 | 1.658 | 170.342 | 150 | 0.600 | TYPE D | D400 |
| F9 | 172.200 | 168.818 | 3.382 | 170.228 | 150 | 0.600 | TYPE D | D400 |

| DESCRIPTION | REV | DATE | CHK | APR |
|---|-----|---------------|------------|-----|
| Beam Consulting 14 Bond Street Wakefield WF1 2QP Tel: 01924 361653 Fax: 01924 364631 | | | | |
| PROJECT | | | | |
| Tesco Featherstall Road, Chadderton | | | | |
| DRAWING TITLE | | | | |
| Detailed Drainage General Arrangement | | | | |
| CLIENT | | | | |
| Tesco Stores Ltd | | | | |
| STATUS | | | | |
| Information | | | | |
| DRAWN | GWF | DATE | 31/08/2023 | |
| CHECKED | MB | SCALE | | |
| APPROVED | KGP | AS SHOWN @ A1 | | |
| DRAWING NUMBER | | REVISION | | |
| 171-53-500 | | - | | |