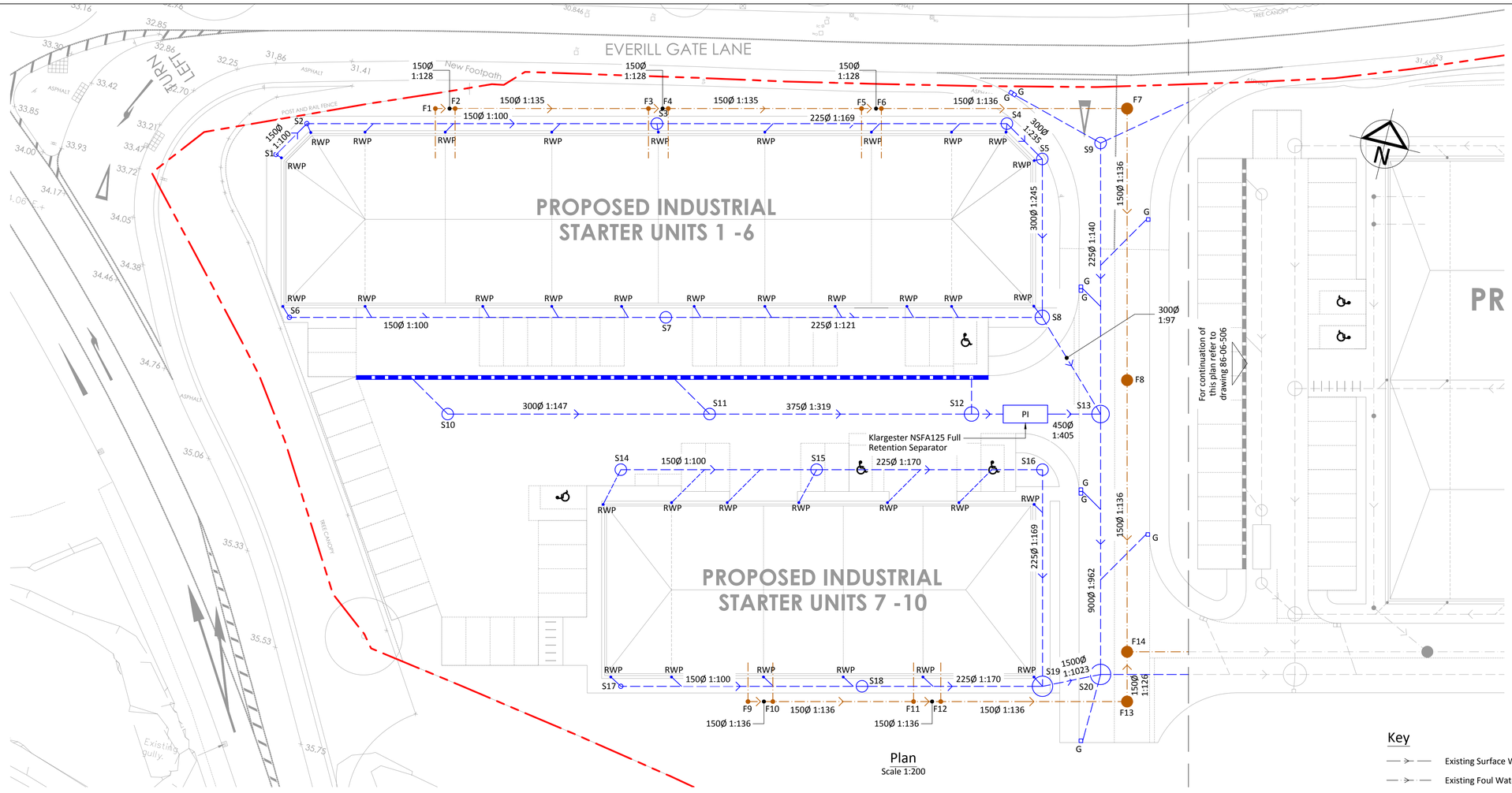



Plan
Scale 1:200

## Proposed Surface Water Manhole Table

| MH Ref | MH CL (m) | MH IL (m) | MH Depth (m) | Incoming Pipe Size (mm) | Incoming Pipe IL (m) | MH Dia (mm) | MH Type | MH Cover |
|---|---|---|---|---|---|---|---|---|
| S1 | 30.500 | 29.750 | 0.750 | 150 | 29.750 | 450 | TYPE 1 | B125 |
| S2 | 30.500 | 29.705 | 0.795 | 150 | 29.705 | 450 | TYPE 1 | B125 |
| | | | | 150 | 29.705 | | | |
| S3 | 30.500 | 29.271 | 1.229 | 150 | 29.346 | 1200 | TYPE B1/E | B125 |
| | | | | 225 | 29.271 | | | |
| S4 | 30.500 | 28.982 | 1.518 | 225 | 29.057 | 1200 | TYPE B | B125 |
| | | | | 300 | 28.982 | | | |
| S5 | 30.500 | 28.960 | 1.518 | 300 | 28.960 | 1200 | TYPE B | B125 |
| | | | | 300 | 28.960 | | | |
| S6 | 30.500 | 29.750 | 1.540 | 150 | 29.750 | 1200 | TYPE B | B125 |
| S7 | 30.500 | 29.289 | 1.211 | 150 | 29.364 | 1200 | TYPE B | B125 |
| | | | | 225 | 29.289 | | | |
| S8 | 30.500 | 28.893 | 1.607 | 225 | 28.968 | 1500 | TYPE B | B125 |
| | | | | 300 | 28.893 | | | |
| | | | | 375 | 28.893 | | | |
| S9 | 30.400 | 29.275 | 1.125 | 225 | 29.275 | 1200 | TYPE B1/E | D400 |
| S10 | 30.200 | 29.000 | 1.200 | 300 | 29.000 | 1200 | TYPE B1/E | D400 |
| S11 | 30.200 | 28.815 | 1.385 | 300 | 28.815 | 1500 | TYPE B1/E | D400 |
| | | | | 375 | 28.815 | | | |
| S12 | 30.200 | 28.655 | 1.545 | 375 | 28.730 | 1500 | TYPE B | D400 |
| | | | | 450 | 28.655 | | | |
| S13 | 30.200 | 28.172 | 2.028 | 225 | 29.075 | 2100 | TYPE B | D400 |
| | | | | 450 | 28.622 | | | |
| | | | | 375 | 28.772 | | | |
| | | | | 900 | 28.172 | | | |
| S14 | 29.800 | 28.750 | 1.050 | 150 | 28.750 | 1200 | TYPE B1/E | B125 |
| S15 | 29.800 | 28.443 | 1.357 | 150 | 28.518 | 1200 | TYPE B1/E | B125 |
| | | | | 225 | 28.443 | | | |
| S16 | 29.900 | 28.305 | 1.595 | 225 | 28.305 | 1200 | TYPE B | B125 |
| | | | | 225 | 28.305 | | | |
| S17 | 29.900 | 29.150 | 0.750 | 150 | 29.150 | 450 | TYPE 1 | B125 |
| S18 | 29.900 | 28.889 | 1.011 | 150 | 28.964 | 1200 | TYPE B1/E | B125 |
| | | | | 225 | 28.889 | | | |
| S19 | 29.900 | 27.197 | 2.703 | 225 | 28.779 | 2400 | TYPE B | B125 |
| | | | | 225 | 28.172 | | | |
| | | | | 1500 | 27.197 | | | |
| S20 | 30.200 | 27.191 | 3.009 | 1500 | 27.191 | 2400 | TYPE A | D400 |
| | | | | 900 | 28.144 | | | |
| | | | | 1500 | 27.191 | | | |

## Proposed Foul Water Manhole Table

| MH Ref | MH CL (m) | MH IL (m) | MH Depth (m) | Incoming Pipe Size (mm) | Incoming Pipe IL (m) | MH Dia (mm) | MH Type | MH Cover |
|---|---|---|---|---|---|---|---|---|
| F1 | 30.500 | 29.450 | 1.050 | 150 | 29.450 | 450 | TYPE 1 | B125 |
| F2 | 30.500 | 29.434 | 1.066 | 150 | 29.434 | 450 | TYPE 1 | B125 |
| | | | | 150 | 29.434 | | | |
| F3 | 30.500 | 29.286 | 1.214 | 150 | 29.286 | 450 | TYPE 1 | B125 |
| | | | | 150 | 29.286 | | | |
| F4 | 30.500 | 29.270 | 1.230 | 150 | 29.270 | 450 | TYPE 1 | B125 |
| | | | | 150 | 29.270 | | | |
| F5 | 30.500 | 29.122 | 1.378 | 150 | 29.122 | 450 | TYPE 1 | B125 |
| | | | | 150 | 29.122 | | | |
| F6 | 30.500 | 29.106 | 1.394 | 150 | 29.106 | 450 | TYPE 1 | B125 |
| | | | | 150 | 29.106 | | | |
| F7 | 30.400 | 28.919 | 1.481 | 150 | 28.919 | 1200 | TYPE B1/E | D400 |
| | | | | 150 | 28.919 | | | |
| F8 | 30.200 | 28.712 | 1.488 | 150 | 28.712 | 1200 | TYPE B1/E | D400 |
| | | | | 150 | 28.712 | | | |
| F9 | 30.000 | 29.250 | 0.750 | 150 | 29.250 | 450 | TYPE 1 | B125 |
| F10 | 30.000 | 29.231 | 0.769 | 150 | 29.231 | 450 | TYPE 1 | B125 |
| | | | | 150 | 29.231 | | | |
| F11 | 30.000 | 29.124 | 0.876 | 150 | 29.124 | 450 | TYPE 1 | B125 |
| | | | | 150 | 29.124 | | | |
| F12 | 30.000 | 29.103 | 0.897 | 150 | 29.103 | 450 | TYPE 1 | B125 |
| | | | | 150 | 29.103 | | | |
| F13 | 30.200 | 28.961 | 1.239 | 150 | 28.961 | 1200 | TYPE B1/E | D400 |
| | | | | 150 | 28.961 | | | |
| F14 | 30.200 | 28.398 | 1.802 | 150 | 28.920 | 1200 | TYPE B | D400 |
| | | | | 150 | 28.505 | | | |
| | | | | 150 | 28.398 | | | |

## Key

- Existing Surface Water Drainage
- Existing Foul Water Drainage
- Existing Combined Drain to Remain
- Proposed Surface Water Drain
- Proposed Foul Water Drain
- Proposed Combined Drain
- ES Existing Surface Manhole
- EF Existing Foul Manhole
- ECM Existing Combined Manhole
- S Proposed Surface Water Manhole
- F Proposed Foul Water Manhole
- C Proposed Combined Manhole
- G Proposed Surface Drainage Gully
- RWP Proposed Rainwater Pipe
- Proposed Surface Water Channel Drain
- PI Proposed Petrol Interceptor
- Denotes Site Boundary

Drainage gully locations and manhole cover levels to be confirmed by the Architect.

All drainage connecting into SW system from road gullies/drainage channels to be 150Ø in minimum 1:150 gradient.

All RWP's connecting into MH system to be 100Ø in minimum 1:100 gradient.

All pipes to be 100Ø UNO.

All pop up waste locations to be confirmed by Architect

Existing drainage information based on Yorkshire Water Sewer Network Enquiry Ref: SE4002SE dated 11/09/2019.

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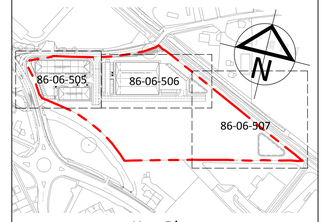
A1

## Drainage & Pipe Laying Notes

1. All work is to be undertaken in accordance with the specification.
2. All pipe laying works are to proceed upstream unless noted otherwise.
3. All drainage runs shall be completed in advance of the external works.
4. 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.
5. 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.
6. Existing invert levels at final discharge points to be checked prior to construction.
7. 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.
8. 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.
9. Manhole cover and frame to suit manhole/inspection chamber ø, in accordance with EN 124.
10. Concrete pipes to comply with the requirements of BS 5911 and to be flexibly jointed.
11. Plastic pipes and fittings to the following;
    UPVC - to BS EN 1401
    Polypropylene - to BS EN 1852
12. Clay pipes to be vitrified clay extra strength, plain end pipes and fittings with plastic sleeve joints to BS 65:1981.
13. Pipes and fittings are to be laid in accordance with manufacturers recommendations.
14. Pipe work beneath buildings to have concrete bed and surround.
15. 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.
16. Where surface water pipes cross foul water pipes both pipes to have concrete bed, surround and infill between.
17. 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.
18. Until final surface is placed, heavy traffic is not to be allowed over pipe trenches without special provisions
19. All landscaping, footpaths and street furniture to architects specification and details.

### Pipe Material Table

| Dia. of Drain (mm) | Material | Manufacturer |
|---|---|---|
| 100-300<br>450-1200 | uPVC<br>Concrete | Polypipe<br>Stanton Bonna |




Key Plan
Scale NTS

| REV | DATE | CHK | APR |
|---|---|---|---|
| B | 20/03/2020 | KA | KGP |
| A | 20/12/2019 | KA | KGP |

Revised discharge from site to 3.0 L/s as per Yorkshire Water comments

Minor amendments.

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PROJECT
Proposed Mixed Use Development
Everill Gate, Wombwell, Barnsley

DRAWING TITLE
Drainage General Arrangement
(Sheet 1 of 3)

CLIENT
Everill Gate Properties

STATUS
Information

| | | | |
|---|---|---|---|
| DRAWN | JD | DATE | 19/12/19 |
| CHECKED | KA | SCALE | AS SHOWN @ A1 |
| APPROVED | KGP | | |

DRAWING NUMBER
86-06-505

REVISION
B