DO NOT SCALE

IMPORTANT WARNING

The information concerning the location and/or depth of the public utility apparatus is provided on this drawing as an indicative guide only. No guarantee as to their correctness is given nor implied.
These drawings should not be relied upon in the event of excavations or other works made near to the apparatus, which may exist at various depths and may deviate from the marked route. It should also be noted that a single line shown on the plan may indicate the presence of more than one service.

The Contractor is required to ensure that the locations of below ground services are established/confirmed on site prior to any excavations or other works which may effect the existing service.

Prior to any works on site, the Contractor shall refer to;
HSG47 – Avoid Danger from Underground Services (by HSE)
HSG185 – Health and Safety in Excavations (by HSE)
Construction Information Sheet (CIS) 8 – Safety in Excavations (by HSE)
General Series (GS) 6 – Avoidance of Danger from Overhead Electric Lines (by HSE)

Key

- Site Boundary
- Proposed storm water drain (SWD)
- Proposed foul water drain (FWD)
- Proposed combined water drain (CWD)
- Existing foul water sewer (FWS)
- Precast concrete manhole (storm/foul)
- PPIC–09 CL=100.48 IL=99.30 — Manhole reference; Cover level based on best available information at time of issue; Invert level based on best available information at time of issue
- Polypropylene inspection chamber (storm/foul)
- FG — Foul gully with 150mm diameter branch connection
- YG — Yard gully with 100mm diameter branch connection
- RE — Rodding eye
- RWDP — Rain water down pipe
- Foul water slab penetration
- SVP — Soil vent pipe
- SS — Stub stack
- CP — Catchpit manhole/inspection chamber
- DC — Direct connection
- SG — ACO M100D or similar approved drainage channel with roddable sump gully outlet and 150mm dia branch connection. Channel to have built in fall where longitudinal gradient of grate is less than 1:150. Channel system to be designed by manufacturer based on 60mm/hr rainfall intensity.
- FFL=27.860 — Finished floor level
- Exceedance Flow — Exceedance flow path

Notes

1. The storm water drainage strategy is subject to the approval of Thames Water. The proposed below ground drainage strategy is as follows:

The development site total area is nom 2707m Sq of which post development nom 2273m Sq is impermeable.

A Flood Risk Assessment prepared by OPUS Caldecotte Consultants ref J–D1132–R03 dated October 2013 has indicated that the proposed development shall discharge at 19.46L/s for the 1:100 year event plus 30% allowance for climate change, providing a betterment of 50%.

Simpson Associates have undertaken further design calculations to determine an existing Brownfield run off rate of 29.27 L/s based on the Modified Rational Method Approach. Suggesting that the proposed development shall discharge at 14.64 L/s for the 1:100 year event plus 30% allowance for climate change, providing a betterment of 50%.

14.64 L/s shall be used as the final storm discharge to provide a worst case scenario. An new manhole constructed on an existing sewer running within Station Road is intended to be the final combined water outfall.

2. The foul water drainage strategy is subject to the approval of Thames Water. The proposed below ground drainage strategy is as follows:

The development comprises of a 260m Sq retail unit and 38 apartments is to discharge via a new below ground drainage network into the proposed combined water manhole on site before discharging into the existing sewer within Station Road. The expected foul flow rate for this is 1.82L/s

The flow rates are based upon Thames Water flow rate tables.

3. All drainage works to be carried out in accordance with all relevant British Standards, Building Regulations, Sewers For Adoption and any specific requirements of the relevant Statutory Authority.

4. Where a new connection to the existing private/public drainage system is intended, Contractor to check and confirm invert levels and pipe sizes at points of connection prior to start of drainage works. The Contractor shall report any discrepancies back to the Engineer.

5. Where sections of drains or connections are to be abandoned, the Contractor shall allow for all necessary site inspections to confirm back to Engineer that the system is redundant.

6. Prior to undertaking works near or over any existing services, the Contractor shall seek the approval of the relevant Statutory Authority. The Contractor shall also seek guidance from the Statutory Authority with regards to protection of their existing services and plant. All associated/adjacent works shall be carried out strictly in accordance with the approval of the relevant Statutory Authority.

7. This drawing shall be read in conjunction with all relevant Architects, M&E, Structural and Landscaping drawings.

8. Manhole chamber covers to be installed parallel to kerb, edging, paving joints or building lines as appropriate to location.

9. This drawing details all below ground drainage up to finished floor level. For details of drainage above finished floor level, refer to Architects & M&E drawings.

10. Works within the highway boundary shall be undertaken strictly in accordance with the requirements of the Local Highway Authority

11. Rodding access to all slab penetrations to be provided as part of M&E design. Assume small rodding access 150x100mm in line with Building Regulations.

12. Drainage with less than 1.2m cover below trafficked areas and 0.9m cover below landscaped areas shall receive class Z concrete bed and surround. Class S to be used elsewhere.

13. All foul and storm water drainage shall be 100mm dia unless stated otherwise.

CONNECTIONS TO EXISTING SEWERS ARE SUBJECT TO APPROVAL BY THAMES WATER

MK	REVISION	BY	DATE
C5	Foul drainage for Block B adjusted to flow to outfall within Station Road.	AU	17.01.18
C4	Attenuation relocated to new outfall location as per the clients requirements. Additional FW outfall added. Invert Levels adjusted to suit. Chamber references added.	AU	12.01.18
C3	Attenuation relocated to suit new outfall location as per the clients requirements. Invert Levels adjusted to suit.	AU	15.09.17
C2	Drawing updated in line with levels strategy. Linear drainage channels and gullies updated/added.	LJ	11.07.17
C1	CONSTRUCTION ISSUE	AU	30.06.17
P4	SVP 22 added as per latest architects layout	LJK	26.04.17

DRAWING STATUS

CONSTRUCTION

DRAWING TITLE

BELOW GROUND DRAINAGE GENERAL ARRANGEMENT

PROJECT — Project NumberC21319

5 STATION ROAD, WEST DRAYTON

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Unit B10
Elmbridge Court Business Park
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London, Henley-on Thames and Gloucester

Drawn	Ch'kd	Scales	Date
LJ	RW	1:100 UNO	JAN 2017

Purpose of Issue: CONSTRUCTION

Drawing Number: C21319 - 0500 — Revision: C5

A1