

GENERAL DRAINAGE NOTES:

- All sewers to comply with the requirements of the water authorities publication "Design and Construction Guidance, Version 2.1" together with Independent Water Network Addendum.
- All public sewers are to be the subject of a Section 104 agreement of the Water Industry Act 1991.
- Invert levels of existing manholes and sewers are to be checked on site before construction commences and results reported to engineers.
- All manhole ironworks to comply with BS EN124, and be stamped with BS1 Kitemark. Covers to suit loading as below;
 - Carriageways and Roads - E600
 - Driveways and Verges - C250
 - Footways and Pedestrian Areas - B125
 - Gardens/Landscaping - A15
- All sewer pipes, up to, and including 225mm are to be vitrified clay to BS EN255. All sewer pipes 300mm diameter and above to concrete pipes to BS EN1916.
- All drainage shall be installed and tested strictly in accordance with the Manufacturers' printed instructions, BS EN 752, BS EN 1501, Local Water Authority requirements and the Building Regulations.
- All bedding shall be Class 5 unless noted otherwise.
- All trenches under existing and proposed public highways are to be backfilled with thoroughly compacted Type 1 granular sub-base material.
- Drainage laid beneath roads and areas of vehicular access (car parking etc) with less than 1200mm of cover shall be encased in concrete bed and surround with associated movement joints. Drainage laid beneath paths, footways and pedestrian areas with less than 900mm of cover shall be similarly treated.
- Chambers with outgoing pipes greater than 600mm diameter shall be fitted with guard bars, safety chains or other approved safety devices.
- The use of precast concrete products made with sulphate resisting cement is mandatory, unless a laboratory report proves such precautions are not necessary.
- All gully connections to use a minimum diameter pipe of 150mm and to be surrounded by a minimum of 150mm of grade C8/C10 concrete over its full length (which should not exceed 15m) and its connection to the carrier system.

ALL PIPE BEDDING TO BE CLASS
'S' GRANULAR SURROUND
UNLESS NOTED OTHERWISE ON
THE DRAWING

Manhole diagrams are indicative and do not show every incoming sewer/gully connection. Refer to Engineering Layouts for additional information.

Manhole cover levels are derived from a 3D digital terrain model, final cover levels to suit finished surfaces onsite.

Manhole covers to be located wholly within one surface i.e grass or hard standing/road. Manhole covers are to be fully accessible to users.

KEY:

- EXISTING GROUND PROFILE
- PROPOSED CENTRELINE PROFILE
- PROPOSED FOUL SEWER
- PROPOSED STORM SEWER
- PROPOSED CONCRETE PROTECTION

