



Attenuation Storage:
Event Storage: 1.4 m³
(1 in 30 year event)
Event retention on site volume : 3.8 m³ - 5.1 m³
(1 in 100 year event + climate change (CC))

KEY

- Site Boundary
- Proposed SW Manhole (MH)
- Proposed SW Pipe
- Storage/ Attenuation Tank
- Rodding Eye (RE)
- Linear Drain
- Gully (G)
- Existing SW MH
- Perforated Pipe

DRAINAGE NOTES

- This drawing shall be read in conjunction with all other relevant drawings
- Any ambiguities, omissions and errors on Drawings, shall be brought to the Architects attention immediately.
- The Contractor shall confirm the location and level of existing drainage outfalls prior to commencement of the drainage works.
- Exact locations of proposed manholes and inspection chambers to be determined on site.
- All pipes built into the manhole inverts shall be installed with soffits levels. Unless shown otherwise.
- Connections to road gulleys shall be in 150mm nominal bore. Connections to other terminal fittings shall be in 100mm nominal bore pipe. Unless shown otherwise.
- Cover levels shown are based upon a datum and shall be adjusted and confirmed on site by the Contractor.
- The Contractor shall control accurate line and level of pipe laying by use of an optical laser.
- The Contractor shall protect the pipelines from damage by site traffic during construction.
- Locations of pipework and fittings associated with the roof drainage shall be detailed by the Architect and Engineer following manufacturers recommendations.
- All drains passing through walls or foundations to have 600mm long rocker pipes either side with concrete surround and soft joint at coupling.
- All SVP and stub stack connections to have sealed access covers for rodding and cleaning.
- Pipework with less than 1200mm cover from finished public road level shall be protected with a 150mm GEN1/S1 concrete bed and surround. Flexible joints shall be maintained at 5 metre centres on pipe joints with compressable sheet 18mm thick.
- Trenches in highways and car parking areas shall be backfilled with Type 1 granular sub-base.
- Soft spots in the trench formation shall be removed and replaced with granular bedding unless instructed otherwise.
- Road gulleys shall be constructed using a 750mm deep x 375mm diameter gully pot, surrounded by 150mm thickness GEN1/S1 concrete, with rodding eye and chained stopper.
- Gully covers shall be Grade C 250 captive hinged ductile iron to BS EN 124 black coated.
- Unless noted otherwise manhole covers shall be ductile iron to BS EN 124 black coated with 600 x 600 square opening as follows:-
 - Highways - Grade D 400
 - Car Parks - Grade C 250
 - Landscaped - Grade B 125
- Connections in pipes between manholes runs shall be formed by using purpose made junction fittings. Bend fittings shall be provided where appropriate to direct the flow into the main runs.
- The Contractor shall confirm the location of all existing statutory undertakers apparatus and service connections by trial pits prior to opening up for the works.

Materials

- Protection to drains and gully connections may be concrete bed and surround between cover depths of 450mm to 1.2m
- All pipes and joints for use in drains shall comply with the manufacturers requirements.

Thermoplastic Pipes and Fittings

- Thermoplastic pipes, joints and fittings for gravity sewers shall comply with the relevant provisions of BS EN 1401-1, BS EN 1852 and BS EN 12666-1.
- Thermoplastic structured wall sewer pipes shall comply with the relevant provisions of BS EN 13476-1, 2 and 3 and well as W154-35-01. Pipes shall be BSI kite marked or have equivalent third party certification.

Pipe bedding and backfill

- All bedding and backfilling of Underground pipes should be in accordance with HA 40/01 (DMRB).
- Where pipes pass through a wall or foundations of a building, they should be protected by a lintel or sleeve.

Shallow drains

- Where there is risk of damage, pipes laid at less than 600mm depth (not under a road) should be protected by use of a paving slab or similar. A minimum 75mm cushioning layer of granular material must be laid between any slab and the crown of the pipe.

Pipes laid under roads

- The minimum cover under roads should be 1.2m from the top of the pipe. Where this is less than 1.2m additional protection is required ie. concrete encasement.

Do not scale from this drawing & work from marked dimensions only. All dimensions & features should be confirmed on site by the Contractor. Where this drawing includes information provided to LK Consult Ltd by others, LK Consult Ltd gives no warranty, representation or assurance as to the accuracy of such information.



SAC Propety Developments Ltd

Meadway, Bury

Surface Water Drainage Strategy

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