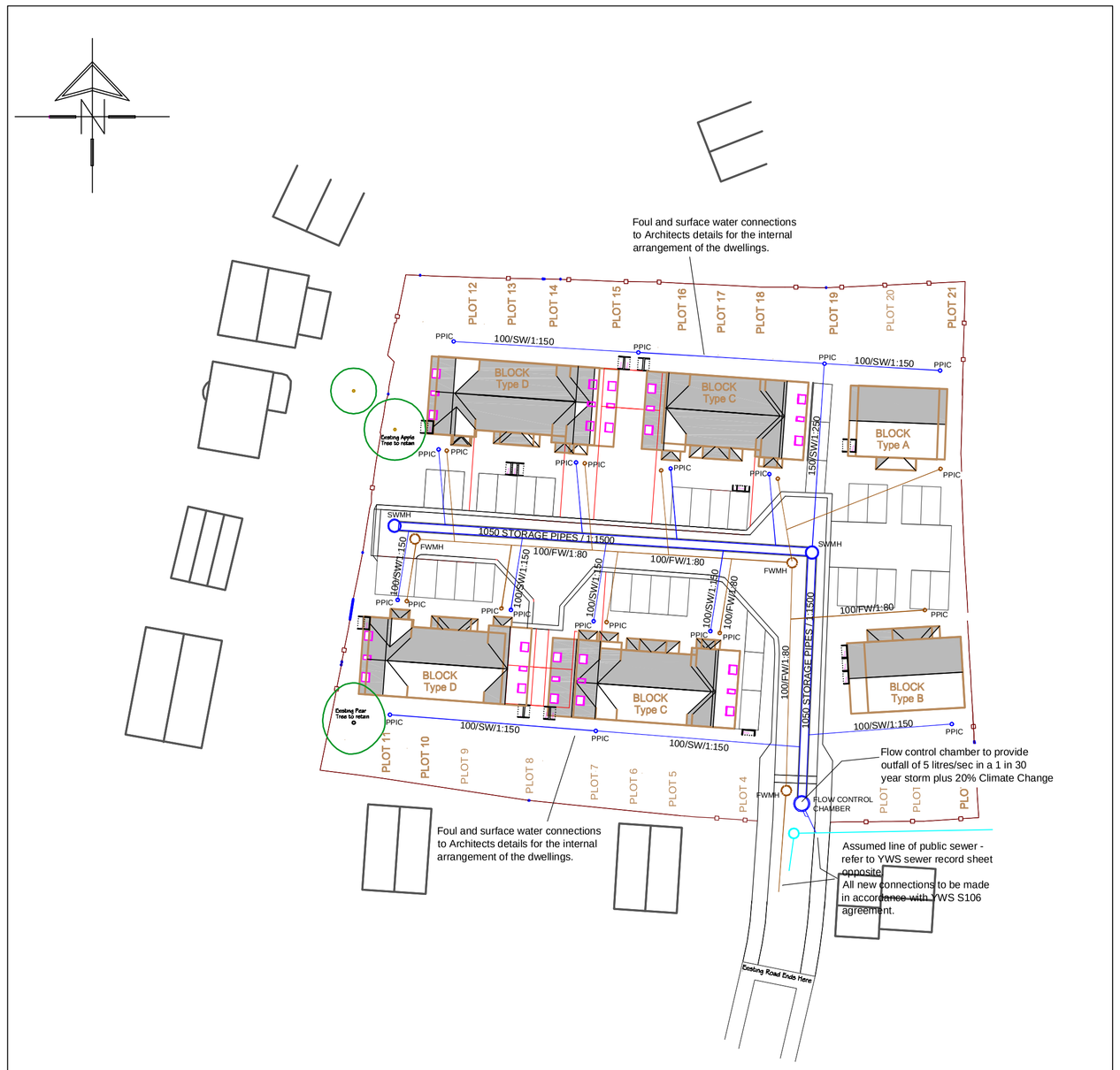
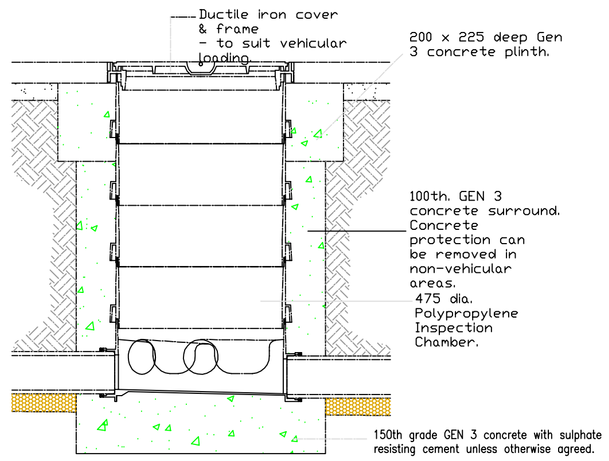


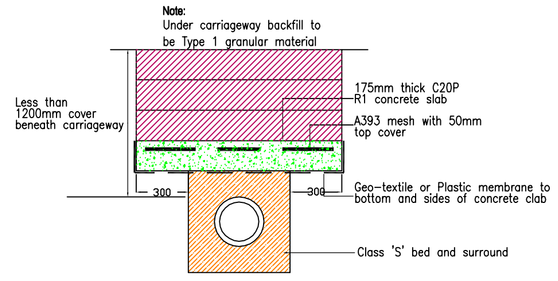
SITE PLAN - GENERAL ARRANGEMENT.

Scale Bar.

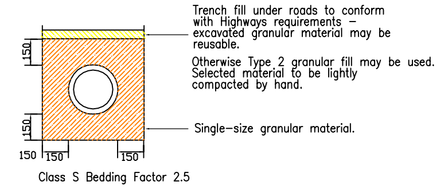


Sited in driveways / hard landscaped areas

TYPICAL INSPECTION CHAMBER DETAIL.



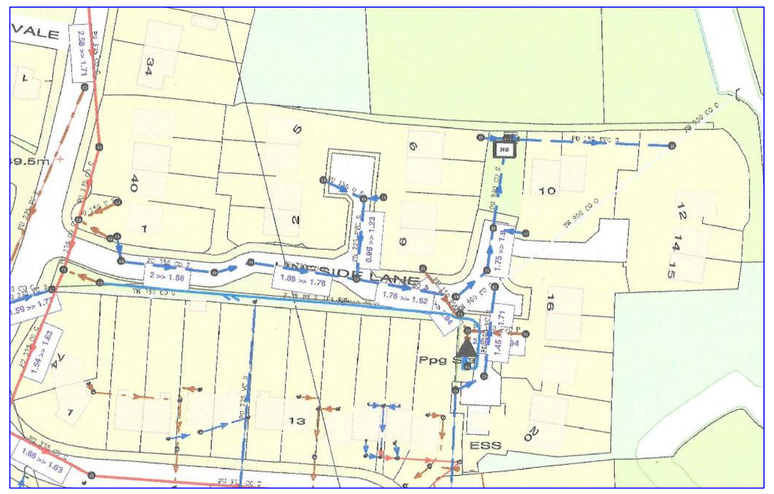
CONCRETE PIPE PROTECTION



BED AND SURROUND TO PIPES.

Nominal bore of pipe (mm)	Size mm Single sized	Size mm Graded
100–125	10	–
150–200	10 or 14	14 to 5
225–300	10, 14 or 20	14 to 5 or 20 to 5
375–500	14 or 20	14 to 5 or 20 to 5
Exceeding 500	14, 20 or 40	14 to 5, 20 to 5 or 40 to 5

All granular material to be single sized or graded in accordance with BS 882: 1983, sintered pulverized-fuel ash to BS 3797: Part 2: 1976 and air-cooled blast furnace slags to BS 1047: 1983 are suitable.



YWS SEWER RECORD DETAILS.

UNDERGROUND SEWERAGE.

All sewerage details have been produced in accordance with the rquirements of Yorkshire Water Services Limited as the approving Water Authority in this case.

The drawings, standard details and construction details provide contractual guidance for the contractor to execute the roadworks in compliance with the National Water Council - Sewers For Adoption and Yorkshire Water Addendum '6th Edition'.

Foul and surface water side branches to connect all development sites will be provided to the pipe diameters specified and laid at self cleansing gradients in each case.

All adoptable sewer works and materials to be in accordance with 'Sewers For Adoption 6th Edition and the relevant British/European and Yorkshire Water Standards/Requirements/Addendum/Kitemared.

Manhole covers shall/must have a clear opening of 600mm and shall be Class D400 to BS EN 124 with 150mm deep frames in highways.

Filled ground must be filled and consolidated under the supervision and to the satisfaction of Yorkshire Water before any sewer works are carried out.

Yorkshire Water is not obliged to accept filter drain/land drainage run-off into the public sewer network or adoptable drainage system (directly or in-directly). An alternative method of disposal of land drainage run-off will therefore be necessary and liaison with the Local Authority, Land Drainage Section with regard to the disposal of filter drain/land drainage run-off will be required in this respect.

Cover slabs must carry the BSI Kitemark or will be rejected by YWS Inspectors. Where ther clear opening of the Kitemarked product id different to that of the cover and frame, a load bearing slab should be fitted above the cover slab to bring the size down to 600mm x 600mm for the YWS specified cover size. Please refer to the CPSA 'Technical Bulletin' issued Autumn 2004 for Kitemarked cover slab openings.
Sulphate resistant cement (C20-DC2) and precast concrete products must be used or a laboratory report provided proving that such precautions are not necessary.

The adoptable sewers should have a minimun 1m and Manholes 0.5m from kerb faces and service margins.

'Sewers must have 5 metres clearance from trees and hedges'.

Sewers to be laid in Class 'S' Bedding (150mm granular bed and surround). Where the depth of cover to the top of the sewer is less than 1.2metres in highways and verges (or less than 900mm in none vehicular access areas) then a concrete slab should be provided above the granular bed and surround.

All adoptable sewers to be Kitemarked. (sertified to WIS 4-35-01).

Adoptable sewer pipes to be laid in maximun 3 metre lengths unless there is a specific operational need to lay longer lengths.

Bedding and backfill material to conform to the requirements of WIS 4-08-02 (Table A2)

Plastic channel sections in manholes are not acceptable - YWS require clayware/concrete channel sections in manholes.

The chamber size of manholes with more than one connection in them may need to be increased an increment to accommodate the connections and bends.

Yorkshire Water policy is not to accept Type 'C' brick manholes and 1050mm dia manhole rings. Instead it is preferred that the use of Type 'B' manholes is adopted with 1200mm dia or 1500mm dia rings with the opening sited over the channel where the depth of cover to the pipe soffit is 1 - 1.5 metres.

All foul and surface water side branches may be adopted to the final demarcation chamber and constructed as above.

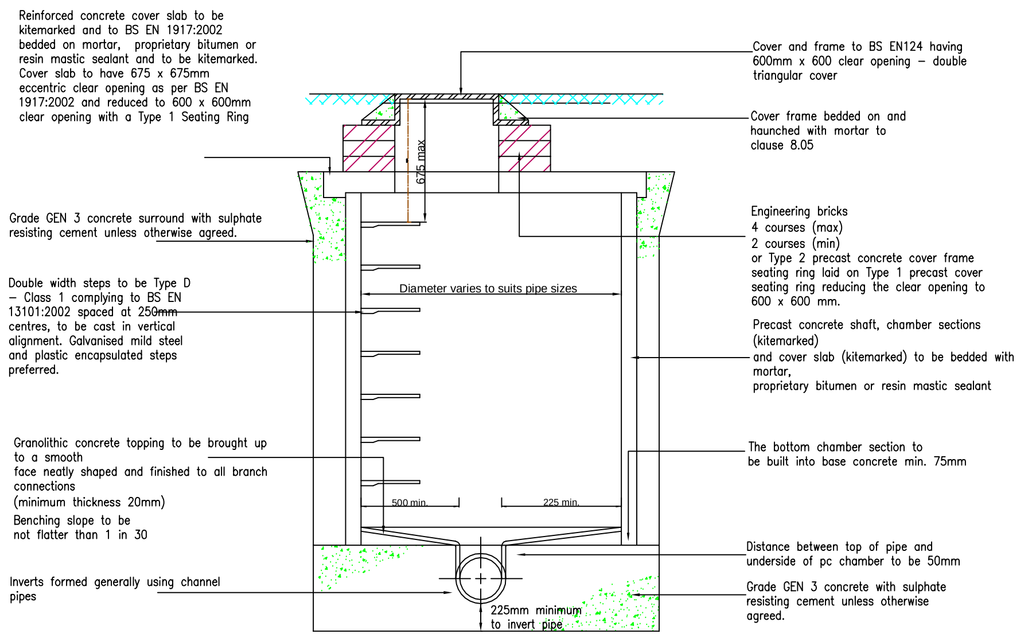
The contractor is advised that services consisting of Cables, Ducts, Sewers and Mains are present within the vicinity of the sewerage works, particularly along public highways, and the contractor will be responsible for locating, supporting and protecting all services for the duration of the works.

The whole of the sewerage works are to be completed to the entire satisfaction of the Engloyer and on completion the contractor must leave the entire site clean and restored to the previous condition which will include all public highways and adjoining land that may have been disturbed at any time.

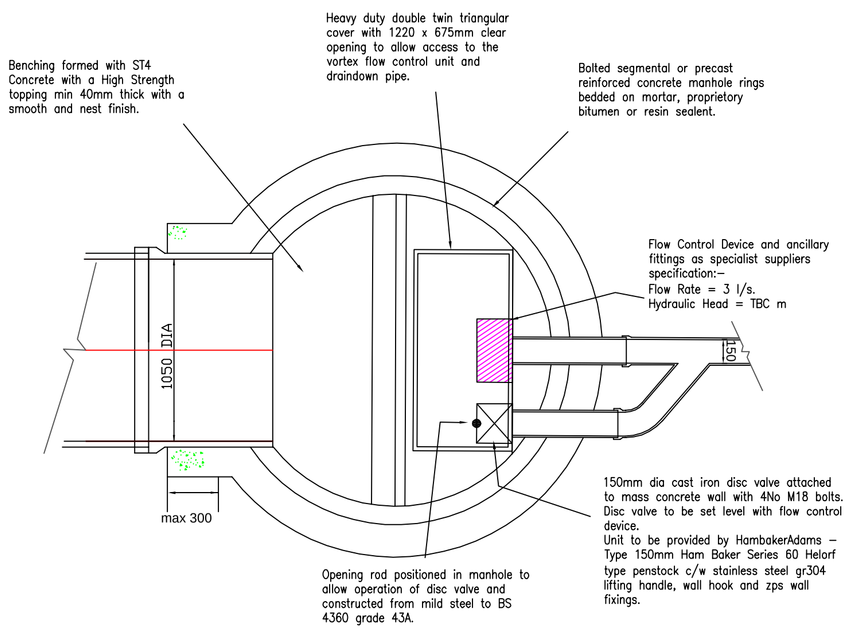
Any reference to the Highways Agency Specification shall mean the latest edition of Volume 1 of the Highways Manual of Contract Documents for Highways Works.

All highway drains for disposal of highway run-off and forming part of the adoptable highway works shall be constructed in accordance with Rotherham Metropolitan District Council - Materials and Construction Specification For Industrial Estates And Housing Developments.

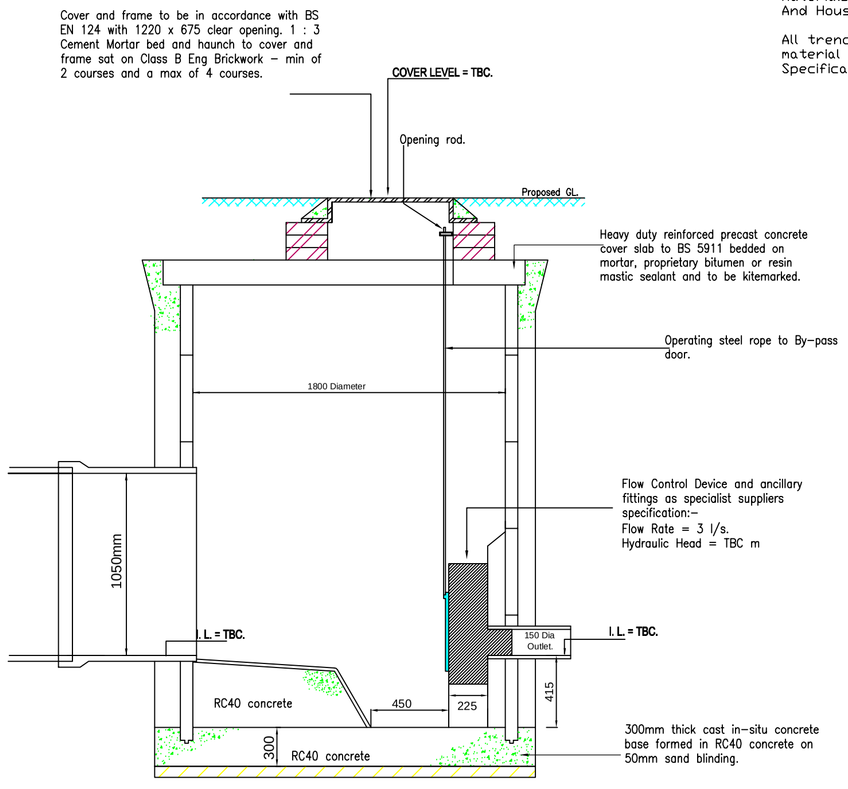
All trench backfill will be Type 1 granular sub-base or 6F2 material complying with Table 6/1 of the Highways Agency Specification.



TYPICAL MANHOLE DETAIL - TYPE 'B'.
Scale = 1/20



PLAN [Flow Control]



FLOW CONTROL MANHOLE AS YWS DRAWING FCMH/01 AND 'SEWERS FOR ADOPTION' - 6th EDITION.
Scale = 1/20

NOTE: ALL CUSTOM BUILT IRONWORK TO BE HOT-DIPPED GALVANISED PRIOR TO FINAL FIXING.

Discharge of Conditions.

Rev	Date	Comments	Init

L. D. A. Ltd.
(civils and transportation)

CIVIL ENGINEERING & DEVELOPMENT CONSULTANTS

P. O. Box 5031,
Sheffield,
S25 9EU.

Tel:- 01909 561075
email: mail@longdendesign.co.uk

Project

RESIDENTIAL DEVELOPMENT, CROSS LANE, ROYSTON.

Title

SEWERAGE DETAILS.
(Discharge of Conditions Only.)

Scale	Date	Job No	Dwg No	Rev
1:500 @ A1	04/01/17			
Drawn ML	Checked ml	982/DOC	01	