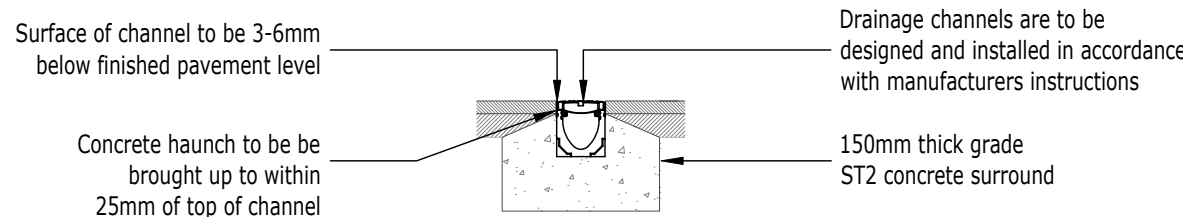
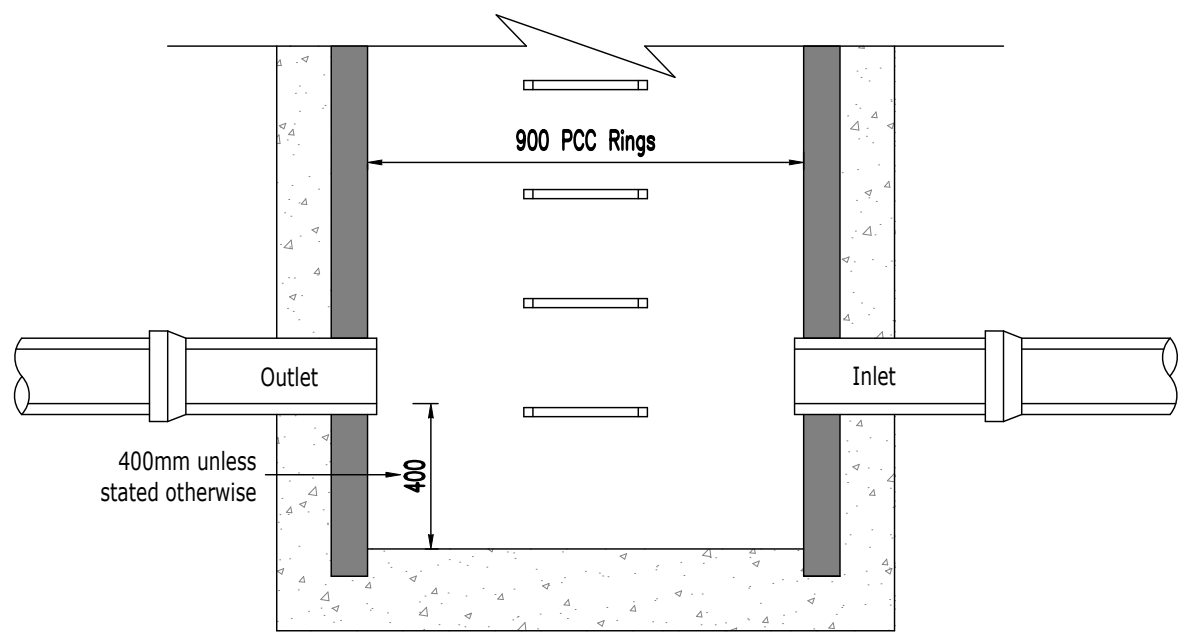


PRIVATE ATTENUATION TANK

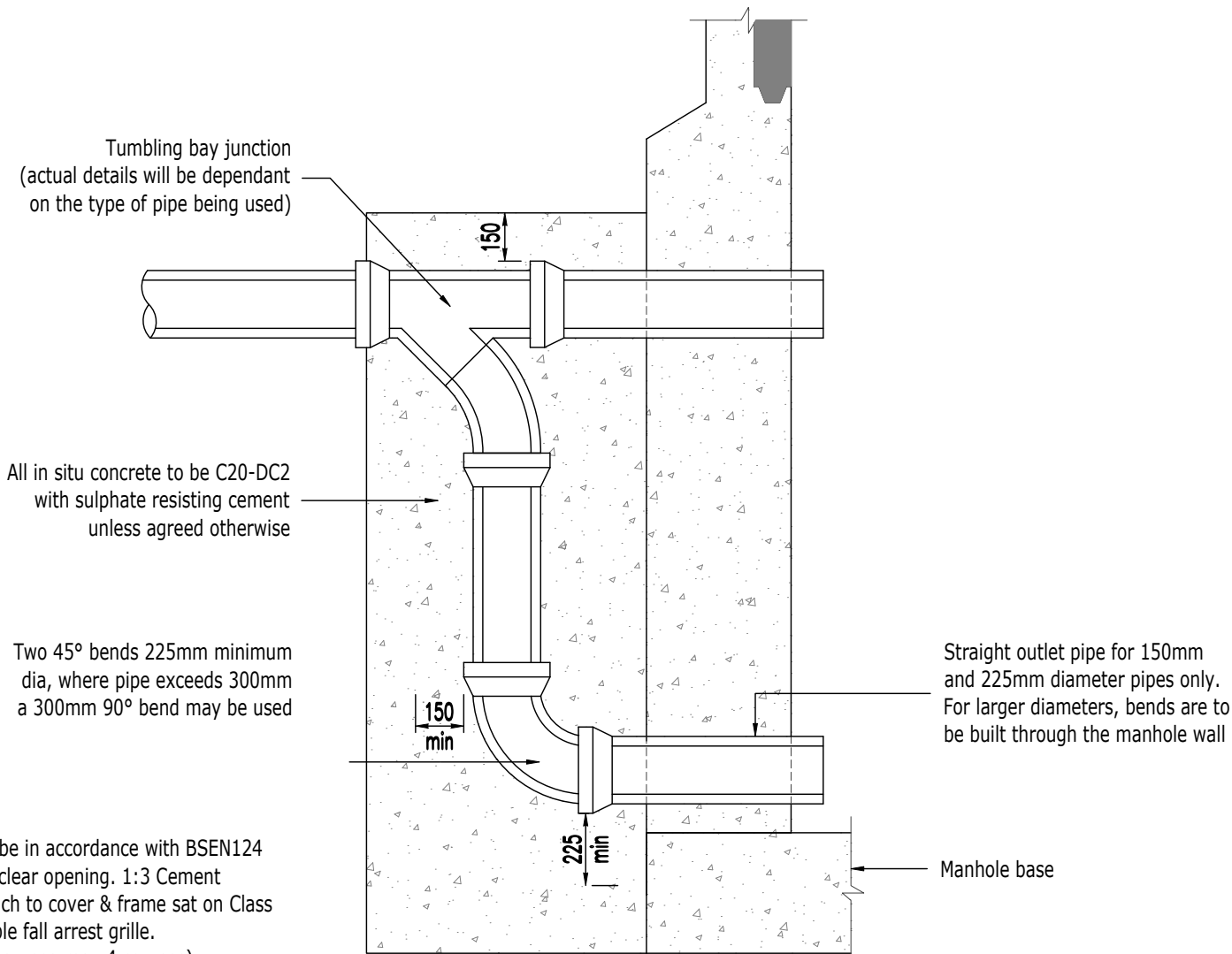
SUMP MANHOLE



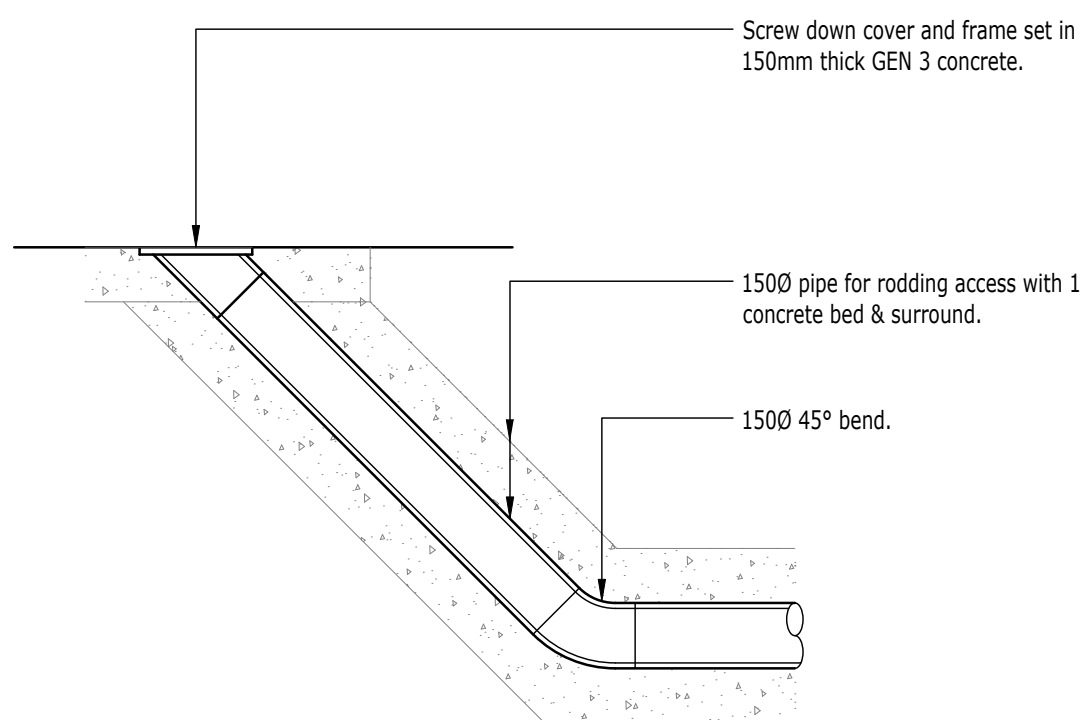
TYPICAL CHANNEL DRAIN DETAIL



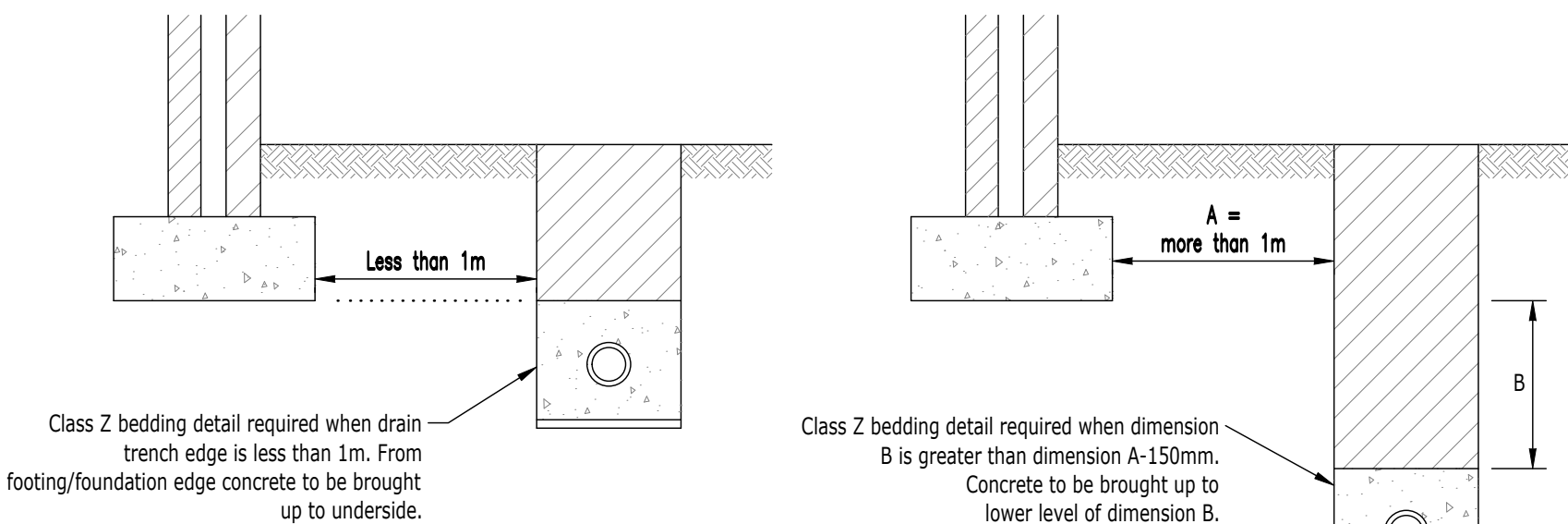
TYPICAL SUMP/CATCHPIT BASE



TYPICAL BACKDROP DETAIL



TYPICAL RODDING ACCESS DETAIL



DRAIN TRENCH EDGE LESS THAN 1m.
FROM FOOTING/FOUNDATION EDGE

DRAIN TRENCH EDGE MORE THAN 1m.
FROM FOOTING/FOUNDATION EDGE

BEDDING DETAIL IN VICINITY OF FOOTINGS/FOUNDATIONS
NOTE:- THIS IS A TYPICAL DETAIL TO BE CROSS
REFERENCED WITH STRUCTURAL DRAWINGS

CONSTRUCTION RISKS		
Collapse of excavations.	MAINTENANCE RISKS	DEMOLITION RISKS
Un-charted buried existing services.		No future abnormal demolition risks associated with Roads and Sewers.
Working on live sewers.		
Working adjacent to the public highway.		
In addition to the hazards/risks normally associated with this type of work detailed on this drawing take note of the above. ID Civils Design are only required to provide information about any significant risks associated with the design.		

Health and Safety Notes/CDM Regulations 2015

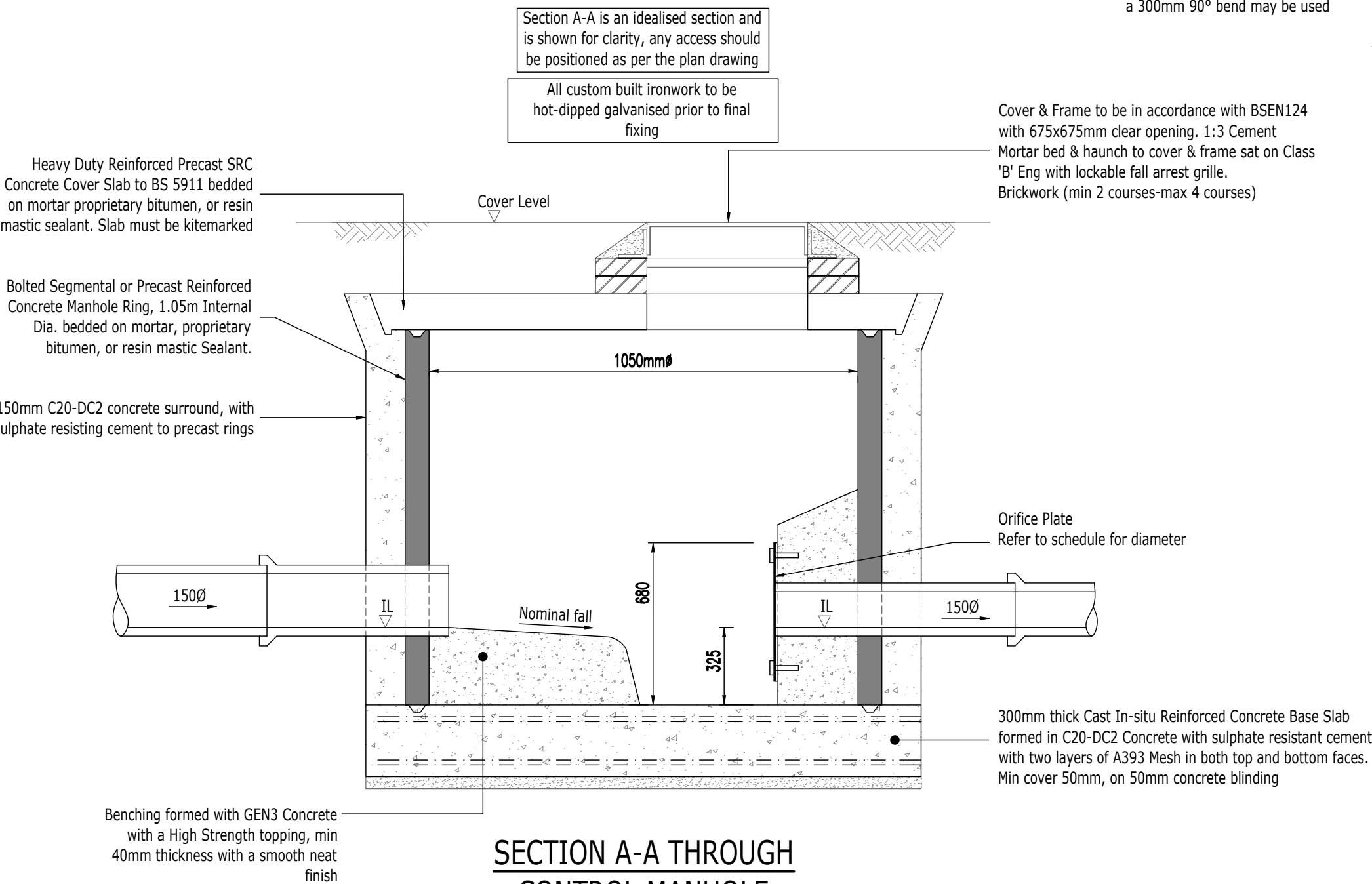
In line with the above regulations we are obliged to inform the Contractor of the abnormal risks that may be encountered in the construction of these works. As part of the design process all the relevant health & safety aspects are given full consideration and these are observed within the designs viewed on this document. Although considerable effort is undertaken to eliminate risks, the very nature of the project gives rise to some hazards and risks.

Significant risks that cannot be eliminated by design and could not be foreseen by a competent contractor are noted in the risk assessment boxes on the drawings.

- General Notes**
- This drawing is to be read in conjunction with all relevant KHY, Architects and M&E Consultants drawings and project specifications.
 - All drainage works shall be carried out in accordance with the relevant parts of BSEN 752 'Drains and Sewer Systems Outside Buildings', the current Building Regulations and the Local Authority Building Control specifications and requirements.
 - The location, size and depth of all existing drains/sewers and services shall be established by the contractor prior to commencement of works on site. Any discrepancies from the information indicated on these drawings shall immediately be brought to the attention of the engineers.
 - All levels and dimensions shall be verified on site prior to commencement of any works. Any discrepancies shall immediately be brought to the attention of the engineers.
 - The design assumes a gravity connection for the foul system is possible. If the existing sewers are not deep enough then pump stations will be required.
 - Design assumes that all works are not to be adopted.
 - All works are assumed to be within public highway or within the land owners lands & no works are required on third party land owners property.
 - All works within the public highway to be reinstated to the highway authority requirements. All drainage connections onto adoptable drainage systems shall be carried out to the water authority's approval.
 - The contractor must allow for any fee's required for road and sewer opening permits, sewer connections and make the appropriate applications.
 - All insitu and precast concrete products shall comply with class DS1 requirements for sulphate exposure in accordance with the BRE Special Digest 1, 'Concrete in Aggressive Ground (2001)' Part 1: Table 2.
 - Manhole covers and frames shall comply with the relevant provisions of BSEN 124, have 600x600mm clear openings and be of a non-rocking design without cushion inserts and be kitemarked. Load class D400 in trafficked areas and load class B125 in footways, landscaped and pedestrian areas. Where required, covers shall be recessed to receive the Architects specified finish.
 - All u-PVC pipes and fittings shall comply with WIS 4-35-01 and shall be kitemarked.
 - Pipes to be laid in Class "S" bedding (150mm granular bed and surround). Where depth of cover to the pipe barrel is less than 1.2m under vehicular trafficked areas and 0.9m under footways/gardens then a concrete slab protection should be provided above the granular bed and surround.
 - All pipes shall be laid with soffits level. All manhole/inspection chamber invert levels shown are for the outlet pipe (unless specified otherwise). All pipe runs shall be laid to the levels indicated. All pipe gradients are approximate.
 - 450mmØ chambers for depths greater than 1.2m, restricted access opening to 350mm is required for safety reasons.
 - All RWP's & SVP's connections to be 100mm dia (unless specified otherwise by the Architect). Gully connections to be 100mm dia.
 - All RWP's, SVP's and connections are shown indicatively or to the latest Architects drawings. Position of down pipes must be confirmed from Architects drawing before laying underground pipework. All down pipes should be provided with a roddable access point above the FFL.
 - Drains laid within 5 metres from deep rooting trees and hedges to have concrete bed and surround.
 - Plastic channel sections in manholes are not acceptable and clayware is to be used. Plastic channels are difficult to set in concrete and a satisfactory finish cannot be obtained on the bedding.
 - Filled ground must be filled and consolidated before any drainage works are carried out.
 - The strength of vitrified clay pipes (if used) to be 40kN/m for 1000, 40kN/m for 1500, 45kN/m for 2250 and 72kN/m for 3000. All concrete products to be Class 120.
 - All excavations in areas of high water tables and granular materials with high sand/silt contents shall be wrapped with a suitable geotextile filter membrane to prevent migration of sands/silts. Full height clay stanks across trenches and/or at manhole locations at 25m intervals to restrict water movement along the excavation shall be provided.
 - Yorkshire Water is not obliged to accept filter drain/land drainage runoff into the public sewer network or adoptable drainage system (directly or in-directly). An alternative method of disposal of the land drainage runoff will therefore be required and lison with the Land Drainage Authority with regard to the disposal of the filter drain/land drainage runoff is required.
 - Do not scale from this drawing.

Attenuation Tank	Location	Lowest Cover Level	Outfall Invert Level	Dimensions			Orifice Plate Ø	Discharge Rate l/s
				Length	Width	Height		
TANK 1	PLOTS 8-19	63.700	61.777	18	2.5	1.2	32mm	2.5
TANK 2	PLOTS 20-30	63.430	61.744	21	2.5	0.8	31mm	2.5
TANK 3	PLOTS 4-7	64.600	63.525	10	2.5	0.4	25mm	1.0
TANK 4	PLOTS 31-36	64.550	63.280	18	3.5	0.4	36mm	2.0
TANK 5	PLOTS 1-3	64.450	63.148	11	2.5	0.4	24mm	1.0
TANK 6	PLOTS 37-39	63.350	61.377	3	2.5	1.2	19mm	1.0
TANK 7	PLOTS 40-49	61.860	60.353	14	3.0	0.8	35mm	2.5

PRIVATE ATTENUATION TANK SCHEDULE



SECTION A-A THROUGH
CONTROL MANHOLE

Rev	Description	By	Date
Client:			
Keepmoat Homes			
Project Title:			
Brunswick Street, Thurnscoe			
Drawing Title:			
Drainage Details Sheet 2			
Scale		Date	
As Shown @ A1		19.08.19	
Drawing No		Revision	
5022-C-D4-02		0	
		Approval	

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