Appendix D

Do not scale from this drawing. Refer to figured dimensions only. RIDA Reports Ltd registered in England and Wales No. 10590566. This drawing is copyright of RIDA Reports Ltd.

Drawing Scale Bar

Drawing scale	Line length	Drawing scale	Line length
1:5 =	0.25 metres	1:200 =	10.0 metres
1:10 =	0.5 metres	1:250 =	12.5 metres
1:20 =	1.0 metres	1:500 =	25.0 metres
1:25 =	1.25 metres	1:1000 =	50.0 metres
1:50 =	2.5 metres	1:1250 =	62.5 metres
1:100 =	5.0 metres	1:2500 =	125 metres

Measure length of line above for checking of scale

GENERAL NOTES

1. All dimensions are in millimetres and levels in m AOD unless stated otherwise.

2. Do not scale. If in any doubt, consult Engineer.

3. Read in conjunction with the architects and engineers schedule drawings.

4. Check inverts and sizes of existing pipes prior to the commencement of any work. Report any discrepancies to the engineer and await instructions.

5. The location of services is shown as indicative. This drawing should be read in conjunction with the utilities drawings. No warranty to their accuracy can be given. The contractor shall take all necessary measures to satisfy himself as to the location of the existing services and connection points. Excavation should be undertaken in compliance with HSG47.

6. Concrete structures design sulphate class and ACEC concrete class unknown.

7. Pipework to be 110mm Thermoplastics U-PVC (Polypipe or similar) installed at levels marked on this drawing UNO. Pipe bedding should be class Z in pipes within 1.5m of the building or shallower than 700mm below ground level. For all other areas the pipe bedding should be class S.

8. 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. Pipes shall have a limit of 6% deformation. Pipes shall be SN8 ring stiffness and stamped accordingly. Pipe sections shall not be longer than 3m.

9. Plastic chambers and rings, including demarcation chambers,shall comply with BS EN 3598-1 or BS EN 13598-2 as appropriate.

10. Inspection chamber covers and frames shall comply with the relevant provisions of BS EN 124 and should be double sealed.

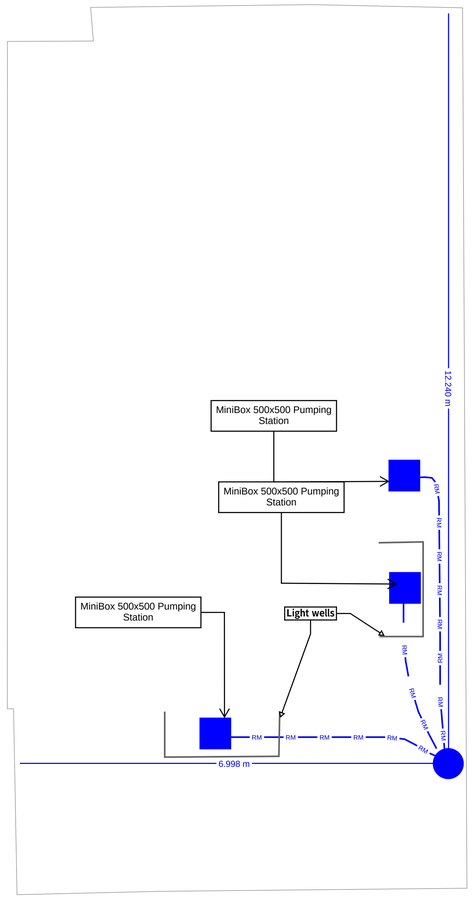
11. All inspection chamber covers shall be the non-ventilating type and shall have closed keyways.

12. Testing of pipelines should be as follow:

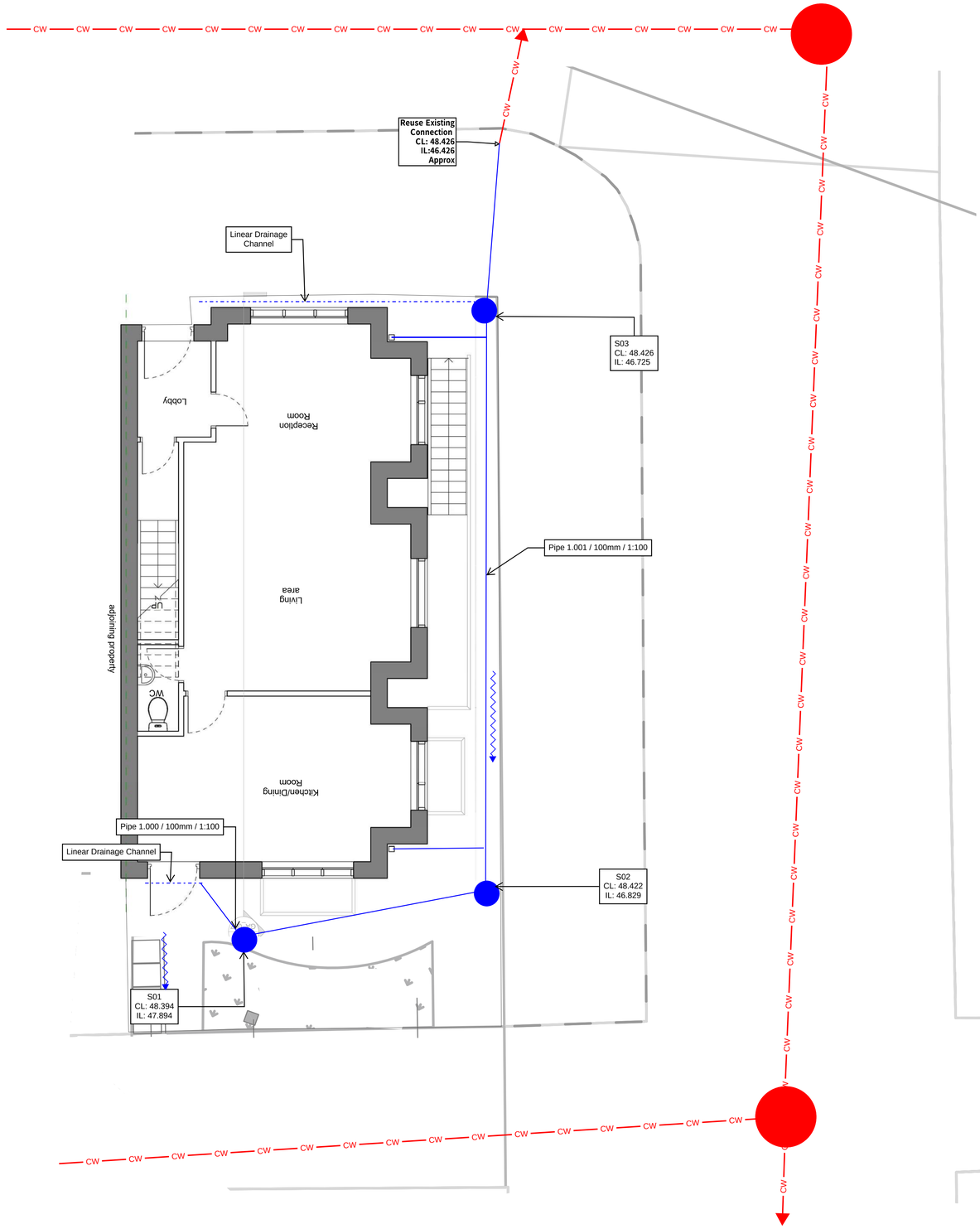
Gravity Pipework: Air pipe testing. Pipework should withstand a pressure of 100mm water gauge and this should not fall by more than 25mm in a 5minute period. However where traps or gullies are connected they should withstand a pressure of 50mm water gauge and this should not fall by more than 12mm in a 5minute period. It is recommended that pipework installations are tested in sections rather than waiting to complete in one operation.

13. Manhole covers to be set square to the building. Covers of existing manholes to be adjusted to match final ground levels.

14. Granular Bedding for pipes shall be constructed by spreading and compacting granular bedding material over the full width of the pipe trench. After the pipes have been laid, additional granular material shall, if required, be placed and compacted equally on each side of the pipes and, where practicable, this shall be done in sequence with the removal of the trench supports.



BASEMENT DRAINAGE PLAN
1:50



GROUND FLOOR DRAINAGE PLAN
1:50

KEY

- Proposed Surface Water Sewer Pipe
- Exceedance Flows
- Linear Drainage Channel
- Silt Trap
- Existing Combined Sewer Pipe

Rev	Details	Date	By	Chd

Drawing Status:
PRELIMINARY

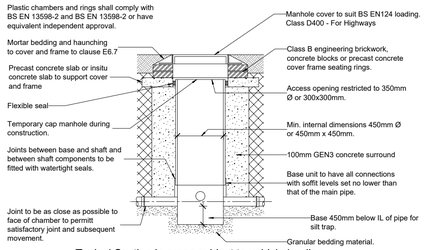
URBANWATER

Client:

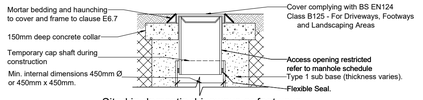
Project:
22 Honor Street, Manchester, M13 0WY

Drawing:
Proposed Drainage Strategy
Option 2

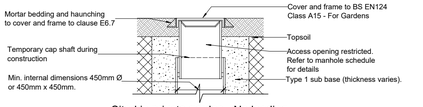
Print Size:	Scale:	Project No:	Drawing No:	Revision:
A1	1:50	0412	023	P1



Typical Section in areas subject to vehicle loading



Sited in domestic driveways or footways

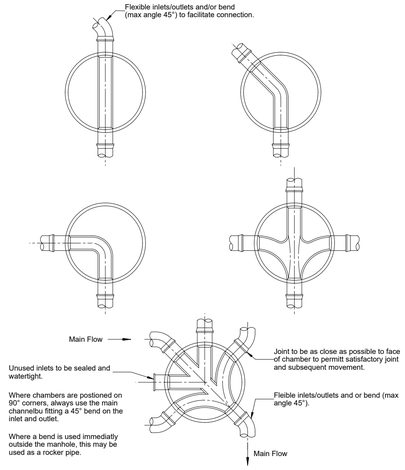


Sited in private garden - No loading

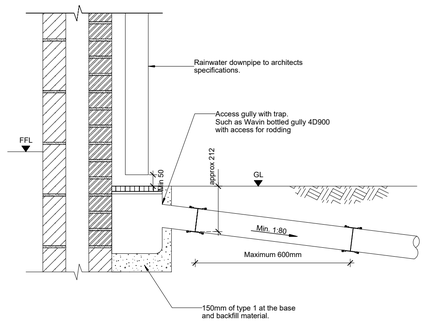
Notes:

1. Refer to drawing 8193 for base layouts.

Silt Trap Plastic



Chamber Type 3 Base Layouts

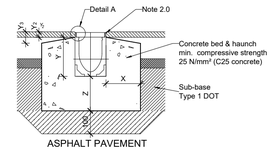


NOTES:

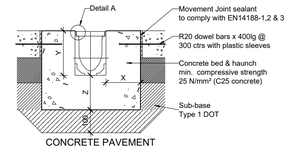
1. This details shows the standard generic arrangement.

2. The pipe and connector details will be different for each manufacturer of the components. They are to be in installed in accordance with the manufacturers recommendations.

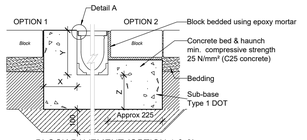
8250 - External Rainwater (High Level)



ASPHALT PAVEMENT



CONCRETE PAVEMENT



BLOCK PAVEMENT (OPTION 1 & 2)

Minimum Dimensions of Concrete Surround

Load Class		A15	B125	C250	D400*	F900
Minimum Dimensions (mm)	X	100	150	150	250	300
	Y	Full Channel Height *(Less Y2 where necessary)*				
	Z	100	150	150	250	300
Maximum Dimensions (mm)	Y_1	35	35	35	35	35
	Y_2	100	60	60	60	35

8341 - Linear Drainage Channel Detail (Steel)

PLAN VIEW

SECTION VIEW

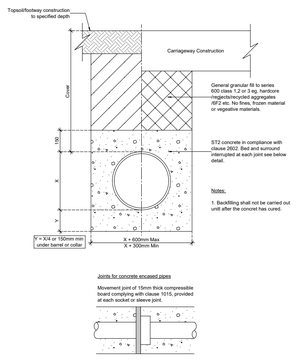
NOTES:

1. The vertical angle between the connecting pipe and the horizontal should be greater than 0° and not more than 60°.

2. Where the connection is being made to a sewer with a nominal internal diameter of 300 mm or less, connections should be made using 45° angle, or 90° angle, curved square junctions.

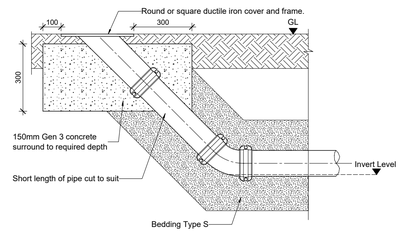
3. Connections made with junction fittings should be made by cutting the existing pipe, inserting the junction fitting and jointing with flexible repair couplings or slip couplers.

Lateral Connection to private sewer



Pipe Bedding Detail Type Z

Pipe Bedding Detail Type S



External Rodding Eye Detail

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GENERAL NOTES

Rev	Details	Date	By	Ch'd

Drawing Status:

PRELIMINARY

Client:

Project:

22 Honor Street, Manchester, M13 0WY

Drawing:

Standard Details
Option 2

Print Size:	Scale:	Project No:	Drawing No:	Revision:
A1	NTS	0412	026	P1