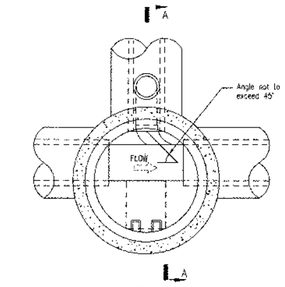
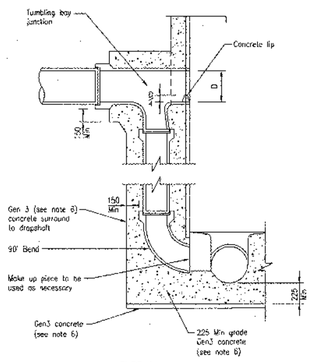
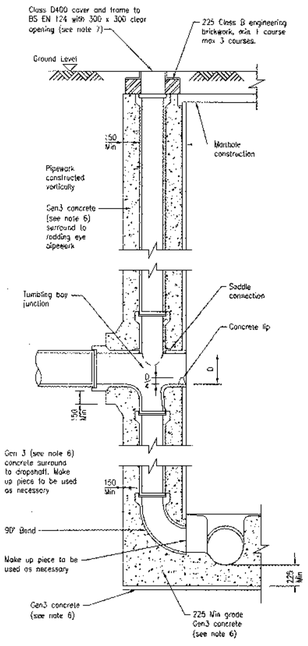


PLAN



TYPE A
SECTION A-A (PART)
STANDARD DROPSHAFT



TYPE B
SECTION A-A (PART) WHERE
ADDITIONAL RODDING EYE IS NECESSARY
(SEE NOTE 4)

NOTES:

1. Where the tumbling bay is more than 1.5m above benching special consideration for maintenance shall be given.

2.

SEWER DIAMETER (mm)	DROPSHAFT DIAMETER (mm)
225–300	225
375	300
450	375
525–600	450
675	525
750–900	600

3. The connection at the bottom of the back drop is to be made at soffit level in a manhole Type 1 and at the springing level in a manhole Type 2.

4. The vertical rodding eye may be required in situations where blockages are a high risk. (Type B).

5. The tumbling bay shall be built into the manhole chamber below the reducing slab.

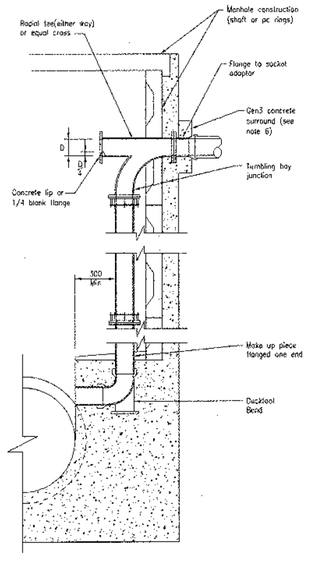
6. Designated mix reference FND3, FND4A and FND4B to be used in soil conditions with sulphate classes 3, 4A and 4B repectively (refer to specification clause 4.3.1).

7. 150mm deep covers are to be used in Category 1, 2 and 3 roads, 100mm deep covers are to be used in Category 4 roads.

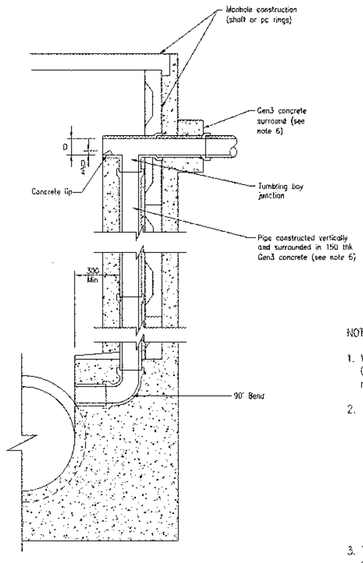
8. Specification clause references relate to CESWI 5th Edition.

TYPICAL DETAIL A
EXTERNAL BACKDROP TO MANHOLE

Formerly Drg No 0000/256/W100 Version E



ELEVATION ON
TYPICAL ARRANGEMENT FOR
FLANGED CONNECTED PIPEWORK



ELEVATION ON
TYPICAL ARRANGEMENT FOR
SPIGOT AND SOCKET PIPEWORK

TYPICAL DETAIL B
INTERNAL BACKDROP TO MANHOLE

Formerly Drg No 0000/256/W101 Version E

NOTES:

1. Where the tumbling bay is more than 1.5m above benching Consideration shall be given to providing access to the rodding eye.

2.

SEWER DIAMETER (mm)	DROPSHAFT DIAMETER (mm)
225–300	225
375	300
450	375
525–600	450
675	525
750–900	600

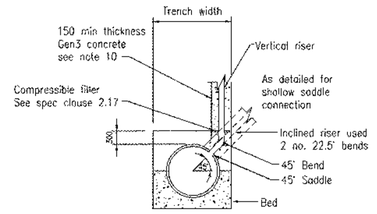
3. The connection at the bottom of the back drop is to be made at soffit level in a manhole Type 1 and at the springing level in a manhole Type 2.

4. The tumbling bay shall be built into the manhole chamber below the reducing slab.

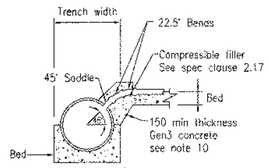
5. The use of internal dropshafts should normally be limited to use in segmental shafts.

6. Designated mix reference FND3, FND4A and FND4B to be used in soil conditions with sulphate classes 3, 4A and 4B repectively (refer to specification clause 4.3.1).

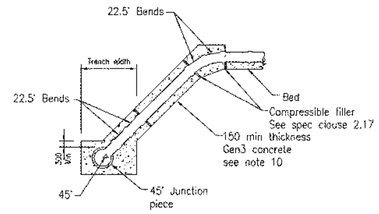
7. Specification clause references relate to CESWI 5th Edition.



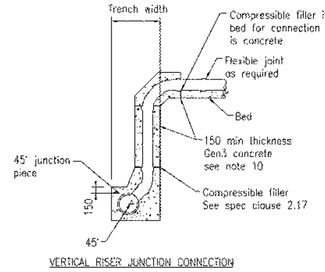
VERTICAL AND INCLINED RISER
SADDLE CONNECTION



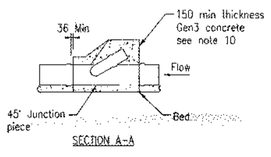
SHALLOW SADDLE CONNECTION



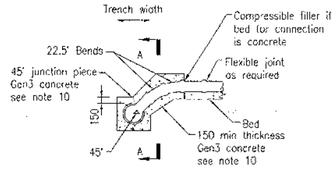
INCLINED RISER JUNCTION CONNECTION
(To apply where an existing connection pipe is not intersected within the trench limit or the difference in invert levels is less than 300Ø)



VERTICAL RISER JUNCTION CONNECTION
(To apply where an existing connection pipe is not intersected within the trench limit or the difference in invert levels is greater thanor equal to 300Ø)



SECTION A-A



SHALLOW JUNCTION CONNECTION

TYPICAL DETAIL C
TYPICAL CONNECTION DETAILS

Formerly Drg No 0000/254/W102 Version E

NOTES:

1. All dimensions in mm unless stated otherwise.

2. Where the diameter of the connection pipe is less than or equal to 600mm the min thickness of Gen 3 concrete surround to the connection pipe shall be 150mm.

3. Where the diameter of the main sewer is less than or equal to 525mm and the diameter of the connection is greater than or equal to 225mm a junction piece must be used.

4. Lobster back bends must not be used.

5. All concrete to be vibrated against adequate shutters.

6. See specification clause for restrictions on backfilling.

7. Drilling of pipework for connections is to be performed by an approved core drilling machine unless otherwise stated in writing by the Engineer.

8. Where appropriate a 90° bend may be used in lieu of 2 No. 45° bends.

9. Pipe saddles to have Class M4 mortar bed and fillet.

10. Designated mix preferences FND3, FND4A and FND4B to be used in soil conditions with sulphate classes 3, 4A and 4B repectively, (refer to specification clause 4.3.1).

11. Clause references refer to CESWI 5th Edition.

CIVIL / STRUCTURAL DESIGN RISK MANAGEMENT

Abnormal or unusual residual risks associated with the design outcomes shown on this drawing are:-

RSK LDE LTD has followed its Design Risk Management process for Hazard Elimination and Risk reduction in developing the designs shown on this drawing.
Abnormal or unusual residual risks may be shown above where it is considered that such risk may not normally be expected by competent persons engaged on work of this nature or type.

Rev.	Date	Amendment	Drawn	Chkd.	Appd.
P1	26.03.12	Issued for approval	CB	PW	IC

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Client
Taylor Wimpey (Manchester) Ltd

Project Title
Calderstones Phase 3
320120640P

Drawing Title
Drainage Construction Details. Sheet 2 of 4
Typical Backdrop & Saddle

Drawn	Date	Checked	Date	Approved	Date
CB	March 12	PW	March 12	ISC	March 12

Scale	Orig Size	Dimensions
NTS	A1	

Project No.	Drawing File
11-02	

Drawing No.	Rev
880209	P1

File Location: L:\001 JOBS LIVE\880209 - CALDERSTONES PH3 DESIGN\GRAPH\INFRASTRUCTURE\DESIGN DRAWINGS\DRAINAGE CONSTRUCTION DETAILS.DWG