

1. Do not scale from this drawing.
2. Cover Grade shall be minimum D400 unless otherwise agreed with the Highway Inspector. 600mm x 600mm clear opening (Refer to Table 3).
3. Manhole cover and frames shall comply with the relevant provisions of BS EN 124, BS 7903 and Highway Agency Guidance Document 10A/104/10. They shall be of a non-rocking design that does not rely on the use of cushion inserts. All manhole covers shall be the non-ventilating type and shall have closed keysways. All covers formed of double triangular units shall be loosely bolted together.
4. Frames shall be bedded on a gauged Class 3 (3:1) sand/cement mortar to CL2402 of SHW Material Designation (I), and between 2 and 4 courses of Engineering Brickwork Class 'B' to BS EN 771-1:2011.
5. Rungs for manholes and other chambers shall be Type D

6. Precast concrete manhole pattern step irons at 300mm centres vertically and staggered 300mm horizontally between centres.
7. On manholes less than 1.5mØ reducing slab not to be used and PC rings to continue up to cover slab.
8. Pre-cast concrete products shall comply with the relevant provisions of BS 5911: Part 2, 200 & 230.
9. The number of incoming branches and invert levels may vary
10. Cover and frame may be installed as a 'gully top' where appropriate.
11. Mn pipe diameter for carrier pipes to be 225mm.
12. Mn pipe diameter for gully laterals to be 150mm.

TO BE USED WHERE COVER TO CROWN OF PIPE
IS LESS THAN 1200mm IN VEHICULAR AREAS OR
LESS THAN 900mm UNDER OTHER AREAS

TO BE USED WHERE COVER TO CROWN OF PIPE
IS GREATER THAN 1200mm IN VEHICULAR AREAS
OR >900MM ELSEWHERE

600mm long rocker pipe

225Ø

DIRECTION OF FLOW

800mm supported length of pipe

Pipe to project 50mm beyond the headwall

1050

150

1330

The drawing shows a rectangular frame with four vertical posts and four horizontal crossbars. The top crossbar is connected to the vertical posts by four curved, spring-like components. The bottom crossbar is connected by four similar components. In the center of the frame is a circular component with the text 'IL 3.875' and a downward-pointing triangle symbol.

S23 (Headwall)
Athlon Pre-cast SFA6 225mmØ
Scale 1:20

Technical drawing of a trench box cross-section. The diagram shows a trench box with internal bracing. Key dimensions and labels include:

- IL 5.000**: Invert level at the top left.
- 1100**: Vertical dimension from the top invert to the center of the bracing.
- 150**: Vertical dimension from the center of the bracing to the bottom invert.
- 750**: Horizontal dimension from the left wall to the center of the bracing.
- 100**: Horizontal dimension from the right wall to the bottom invert.
- IL 3.875**: Invert level at the bottom left.
- IL 3.725**: Invert level at the bottom right.
- 225Ø**: Diameter of the bracing pipes.
- Class Z concrete bedding**: Label for the bedding material.
- DIRECTION OF FLOW**: Indicated by an arrow pointing right.
- No part of structure is to encroach into profile of the ditch.**: Note indicating the structure must not encroach into the ditch profile.

600mm long rocker pipe

2250

800

685

DIRECTION OF FLOW

800mm supported length of pipe

Pipe to project 50mm beyond the headwall

1050

150

1330

S73 (Headwall)
Athlon Pre-cast SFA6 225mmØ
Scale 1:20

No part of structure is to encroach into profile of the ditch.

Hand railing is to encompass the back of the headwall only, so as to limit the incursion into the ditch profile.

1500Ø

800

1050

1330

DIRECTION OF FLOW

800mm supported length of pipe

1500 long rocker pipe

50mm project beyond the headwall

[illegible]

S33 (Headwall)
Athlon Pre-cast SFA6 150mmØ
Scale 1:20

Technical drawing of a ditch profile showing a cross-section. The drawing includes the following elements and labels:

- IL 5.125**: Invert level at the top left of the ditch profile.
- IL 5.100**: Invert level at the top of the hand railing.
- IL 4.000**: Invert level at the bottom of the hand railing.
- IL 3.640**: Invert level at the bottom right of the ditch profile.
- 1100**: Vertical dimension from the top of the hand railing to the top of the ditch profile.
- 150**: Vertical dimension from the bottom of the hand railing to the bottom of the ditch profile.
- 750**: Horizontal dimension from the left edge of the ditch profile to the right edge of the hand railing.
- 100**: Horizontal dimension from the right edge of the hand railing to the right edge of the ditch profile.
- 2250**: Horizontal dimension from the left edge of the ditch profile to the right edge of the hand railing.
- Class Z concrete bedding**: Label pointing to the hatched area at the bottom of the ditch profile.
- DIRECTION OF FLOW**: Label with an arrow pointing to the right, indicating the flow direction.
- No part of structure is to encroach into profile of the ditch.**: Note pointing to the top of the hand railing.
- Hand railing is to encompass the back of the headwall only, so as to limit the incursion into the ditch profile.**: Note pointing to the top of the hand railing.

Scale at A1 AS SHOWN	Date Feb 25	Drawn By JHL	Checked By DJL	Project No. D224
Drawing No. 000-BPC-WD-ZZ-D-H-4102				Rev. C

A1

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