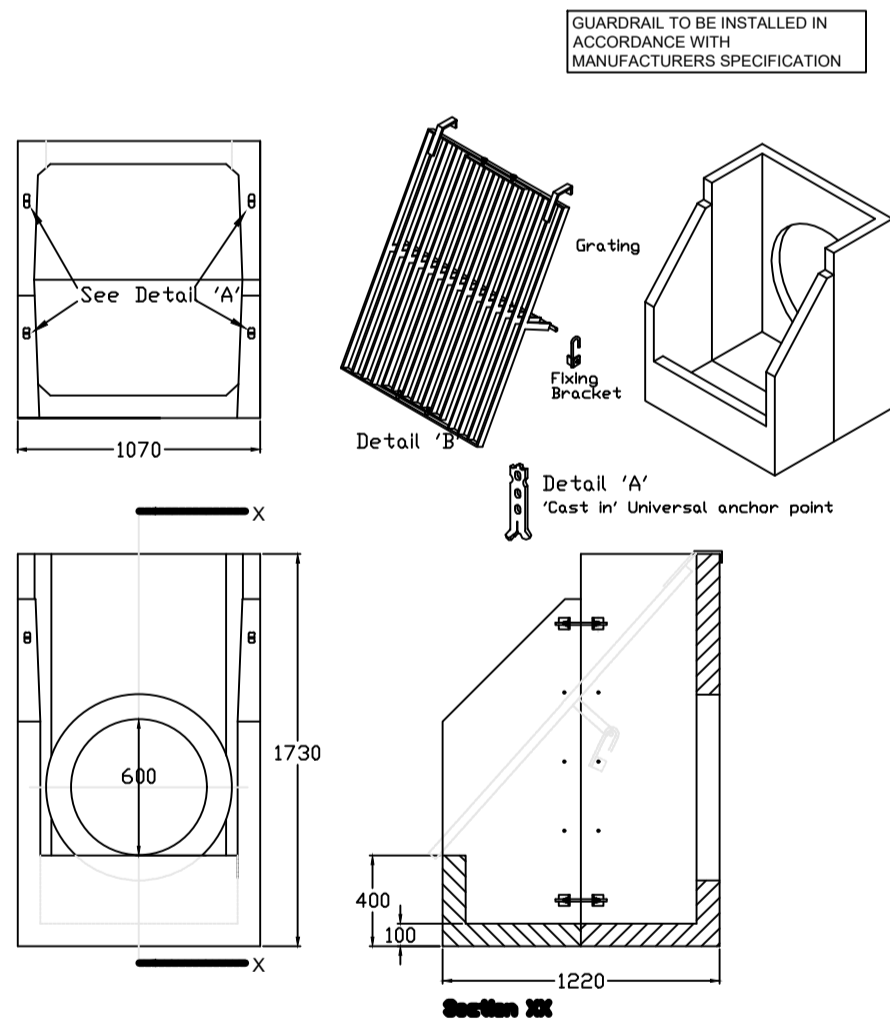


1. Handling				
a) Unit Volume / Weight:				
Part	Vol (m³)	Weight (T)	Wt + 5% (T)	
100 MMW	0.74	1.92	2.02	
Weight is based on 2.6 T/m³				
+ 5% is recommended for sizing lifting equipment.				
b) All lifting points shall be used as specified below:				
System	Total Qty	Reference	Capacity	
Through Sockets and Lugs	3	RD 24	25	
c) Lifting Loops can be bought from FP McCann				
d) Unit to be lifted as per lifting diagram				
2. Concrete				
a) Mix ref: Wet Cast Mix				
b) Lifting strength based on 2 cubes = 15N/mm²				
c) Characteristic 28 day cube strength = 50 N/mm²				
d) Concrete provides Design Chemical Class 4 (DCC4) to Special Digest 1, Table F2.				
3. Reinforcement				
a) Reinforcement to BS4446				
b) Scheduling, dimensioning, bending and cutting to BS8666				
c) Cage to be tack welded and or tied with 17 gauge annealed tying wire.				
4. Manufacture				
a) Manufactured to BS EN 13369: 2013				
b) Tolerances to BS EN 13369: 2013, Clause 4.3.1.1				
c) Finishing:				
Class	Underside	Soffit	Sides	Top
Class	Wood Finish	A	A	A
d) Marking: Units shall be indelibly marked to show:				
• unit reference				
• cast date				
• contract number or name				
• unit weight				
5. Design				
a) Concrete design to EC2				
b) Design Loading: Soil density = 20kN/m³, Surcharge of 10kPa & h = 0.72				
c) F.P. McCann have designed the concrete units only, the stability of the support conditions should be checked by the overall scheme designer;				
d) Design Life: >100years.				
Min cover	Cover block size (mm)	Min cover (mm)	Max cover (mm)	
All faces	35	30	40	
Exposure				
All faces	XC3/4	XD1	XF4	

TYPICAL INSTALLATION WITH GUARD RAIL



ALTHON 2PHDST A SILT TRAP



NOTES:

2PHDST Specification Information

- Opening in back wall cast to suit outside diameter of the pipework
- 2PHDST A suitable for pipework up to 600mm ID Twinwall or Concrete

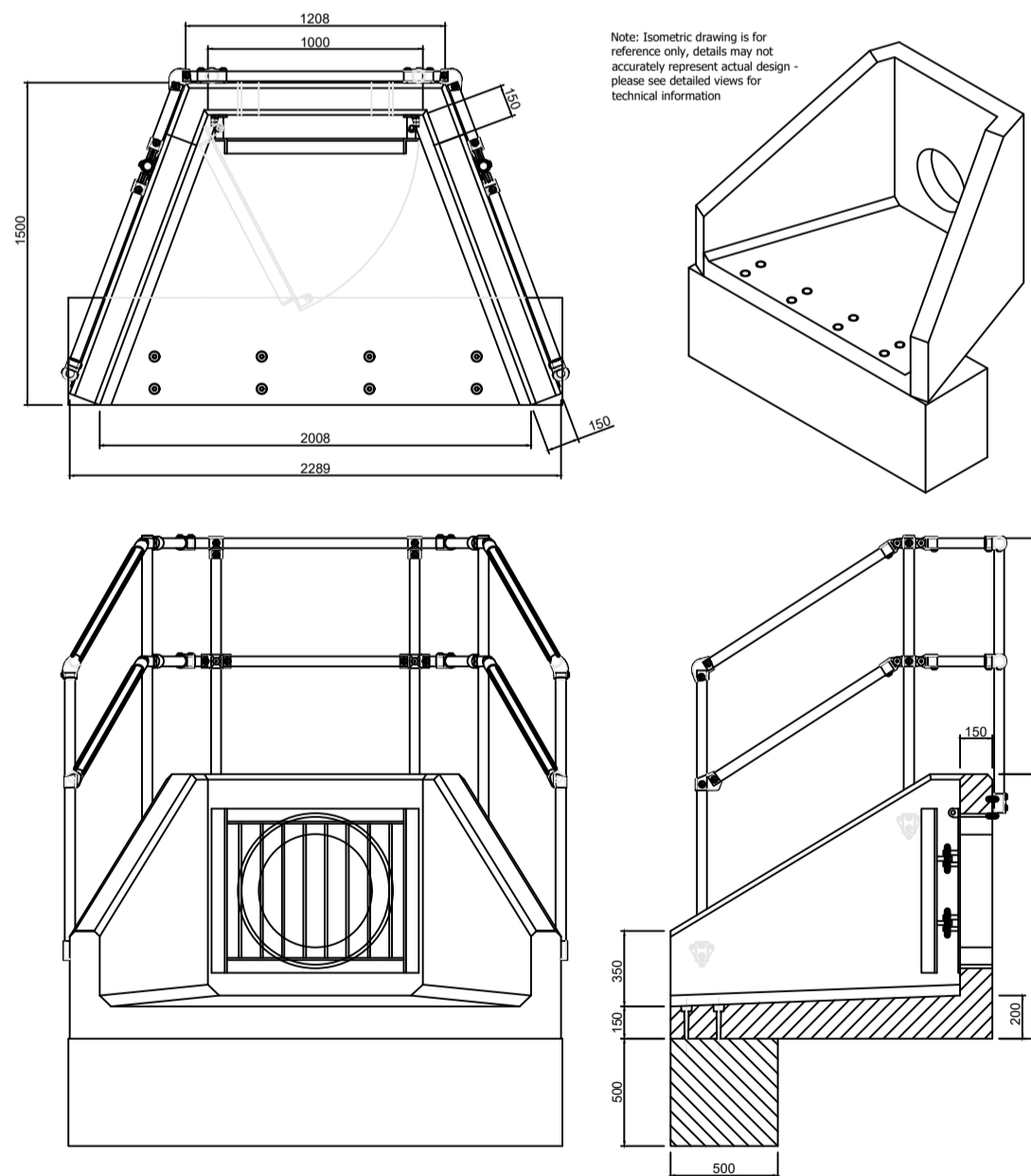
Althon 2PHDST Silt Trap Installation

Units should be bedded on minimum 100mm of semi-dry concrete. Sit the headwall level or with a slight fall 1:50 from pipe to spill mouth.
Material: Reinforced Concrete
Weight approximately 1350kg
All dimensions in mm

HEADWALL S35



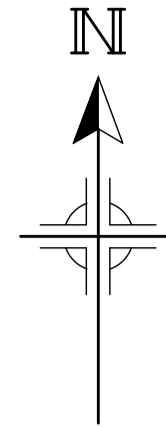
ALTHON SFA 10C HEADWALL 500x500 TOE WITH 525 OUTFALL SAFETY GRILLE AND 3 SIDED KEE KLAMP



NOTES:

- All dimensions in mm
- All measurements ± 1mm
- Specification Information
- Opening in back wall cast to suit outside diameter of the pipework
- Advert level of pipe can be set to your specification
- Headwall Installation
- Units should be bedded on minimum 300mm thick well compacted Class 6A* selected well or good granular material.
- Characteristic 28 day cube strength = 50N/mm²
- Specification for Highway Works, Series 600 (Nov 05).
- Sit the headwall level or with a slight fall 1:50 from pipe to spill mouth.
- Handling
- A.Weight of concrete is based on 2.4 tonnes/m³+5% is recommended for sizing lifting equipment.
- B.All lifting points shall be used as specified below
- C.Unit to be lifted as per lifting diagram
- Concrete
- A.Mix ref: Self compacting DCC/1004 Mix
- B.Lifting strength based on 2 cubes = 20N/mm²
- C.Characteristic 28 day cube strength = 50N/mm²
- D.Concrete provides Design Chemical Class 4 (DCC4) to special Digest 1, Table F2.
- Reinforcement
- A.Reinforcement to BS EN 13369
- B.Scheduling, dimensioning, bending and cutting to BS8666
- C.Cage to be machine tied with steel wire
- Manufacture
- A.Manufacture to BS EN 15258:2008 precast concrete products - Retaining wall elements, Factory Production Control certificate number: 0586-CR-05046 & BS EN 13369
- B.Tolerances to BS EN 13369 clause 4.3.1.1
- C.Finishing:
- Class
- Underside Soffit Sides
- Class
- Wood Finish A A
- D.Marking: Units shall be indelibly marked to show:
- mould reference code
- De mould date
- Job reference number & unique product number
- Unit weight (kg)
- Design
- A.Concrete design to EC2
- B.Althon have designed the concrete units only, the site conditions should be assessed for suitability by the scheme designer
- C.Units are designed to withstand a vertical live load surcharge of 10kN/m²
- D.Weight of soil = 18kN/m³
- E.Angle of internal friction = 30 Deg.
- F.Design Life: > 100 years
- Minimum Cover over Reinforcement
- Min cover (mm)
- Max cover (mm)
- Min cover (mm)
- Max cover (mm)
- Exposure
- All faces
- XC3/4
- XD1
- XF4
- Fabrication Specification
- A.Manufacture IAW EN 1090-2 EXC CLASS 1
- B.Chemical grade is to be: BS EN 10025 S275
- C.Welding carried out IAW EN 1090-2 PARA 7.5.4 - 7.5.18
- D.All fillet and butt welds to have a minimum throat thickness of 6mm & joints to be fully welded where possible.
- E.Ensure vertical ribs are fully welded both sides where possible.
- F.All sharp edges and burrs are to be removed.
- G.Remove all weld spatter.
- H.Make by punching are permitted with rimping.
- I.Galvanizing is carried out after fabrication to BS EN ISO 1461
- Handrail Specification
- A.Kit handrail Galvalloy Size B Fittings
- B.Size B 48.3mm OD 3.2mm Wall Thickness Galvalloy Medium Duty Tube to BS EN 10255
- C.360Nm Design Load as stated in BS 8118, BS 6189, BS 6399 & BS 7818, Civil Engineering Specification for the Water Industry (CESWI) 7th Edition Clause 2.6.60 Handrails & Balusters & The Engineering Equipment and Materials Users' Association (EEMUA) Publication 150 7th Edition Factory Stairways, Ladders and Handrails
- D.Other design loads available on request
- E.GRP/FRP Handrails also available
- Outfall Safety Grille
- Material grade to be: BS EN 10025 S275
- 1.All mild steel to be hot dipped galvanized after fabrication
- 2.Galvanizing to BS EN: 1461
- 3.Welding to BS EN 1011:2-2001
- 4.Hinged on one side with padlock facility
- 5.Weight approx: 70kg

HEADWALL S18 and S34



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P1	FIRST ISSUE	JM	MH	26/06/24
REV	AMENDMENT	BY	CKD	DATE

CLIENT

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PROJECT

DALZELL STREET
MOOR ROW

DRAWING TITLE

SUDS DETAILS
SHEET 2



Beckwith & Hanlon
Consulting Engineers Limited
F22 Willow Court, Marquis Court,
Team Valley Trading Estate,
Gateshead, NE11 0RU
tel: 0191 273 7582

SCALE	NTS	BY	JH	CHECKED	JM	DATE	JUNE '24
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DRAWING NO.	24-011-237
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STATUS	CONSTRUCTION	REV	C1
		SIZE	A0