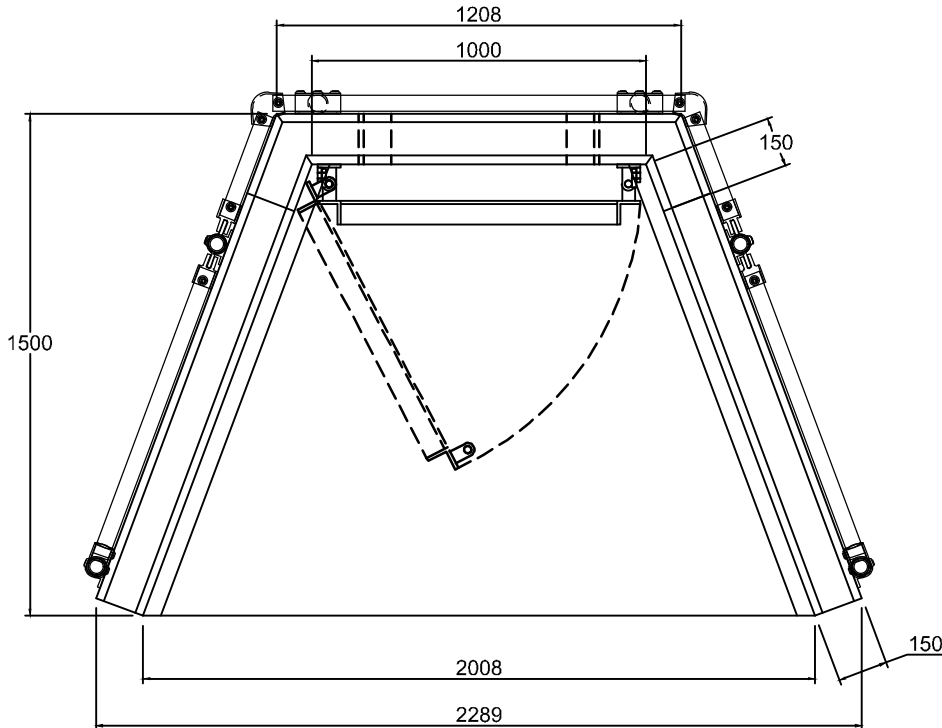
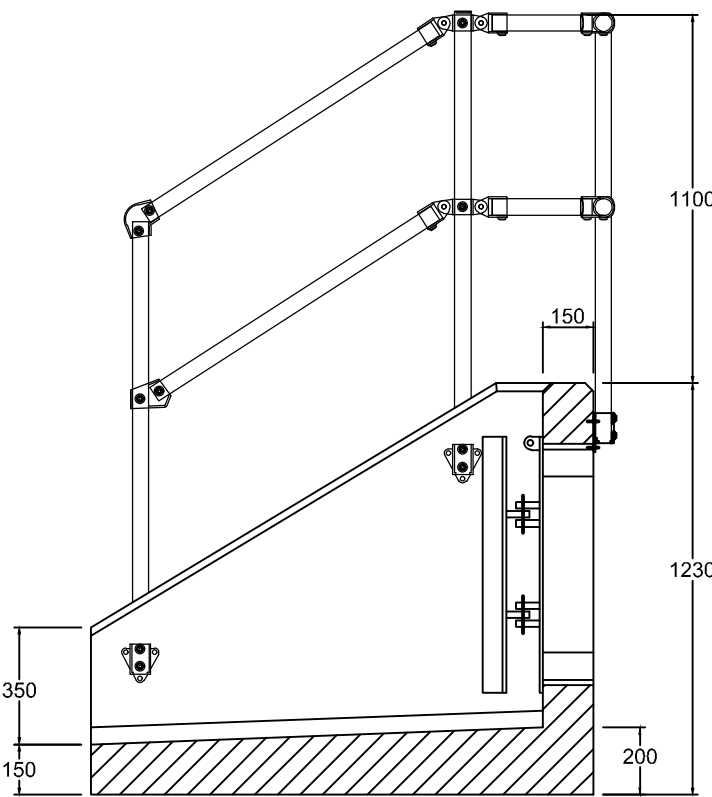
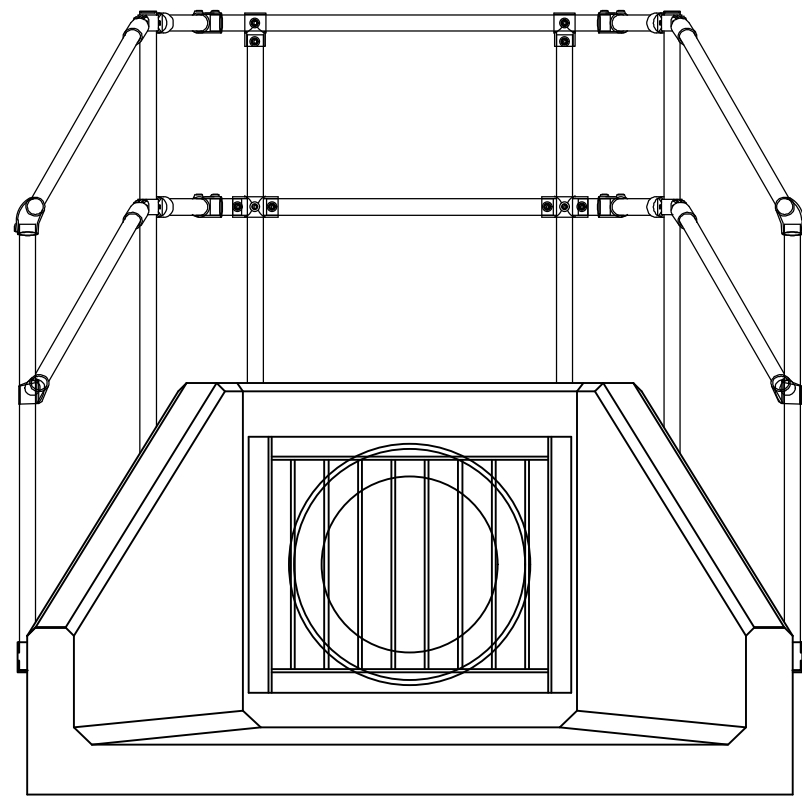
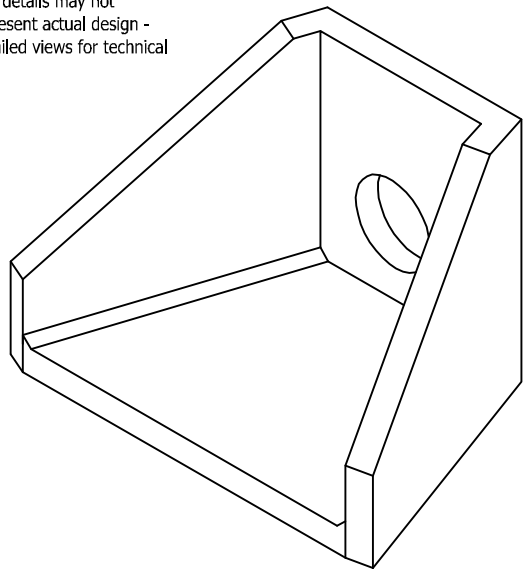




Note: Isometric drawing is for reference only, details may not accurately represent actual design - please see detailed views for technical information



SFA10C HEADWALL
SFA1 525 OUTFALL SAFETY GRILLE
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
- Invert level of pipe can be set to your specification

Headwall Installation

Units should be bedded on minimum 200mm thick well compacted Class 6A* selected well graded granular material.

*Manual of contract documents for Highway Works: Volume (MCHW1) specification for Highway Works, Series 600 (Nov.09),
Set the headwall level or with a slight fall 1:50 from pipe to spill mouth.

Lifting

- Weight of concrete is based on 2.4 tonne/m³+5% is recommended for sizing lifting equipment.
- All lifting points shall be used as specified below
- Unit to be lifted as per lifting diagram

Concrete

- Mix ref: Self-compacting DCA/DSH Mix
- Lifting strength based on 2 cubes = 20N/mm²
- Characteristic 28 day cube strength = 50N/mm²
- Concrete provides Design Chemical Class 4 (DCA) to special Digest 1, Table F2.

Reinforcement

- Reinforcement to BS EN 13369
- Scheduling, dimensioning, bending & cutting to BS8666
- Cage to be machine tied with steel wire

Manufacture

- Manufacture to BS EN 15258:2008 precast concrete products - Retaining wall elements, Factory Production Control certificate number: 0086-CPR-650448 & BS EN 13369
- Tolerances to BS EN 13369 clause 4.3.1.1

Finishing

- Top
- Sides
- Base
- Face of back wall

- Class
- 0
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- Marking: Units shall be indelibly marked to show:
- Mould reference code
- De-mould date
- Job reference number & unique product number
- Unit weight (kg)

Design

- Concrete design to EC2
- Althon have designed the concrete units only, the site conditions should be assessed for suitability by the scheme designer
- Units are designed to withstand a vertical live load surcharge of 10kN/m²
- Weight of soil = 18kN/m³
- Angle of internal friction = 30 Deg.
- Design Life: >100 years

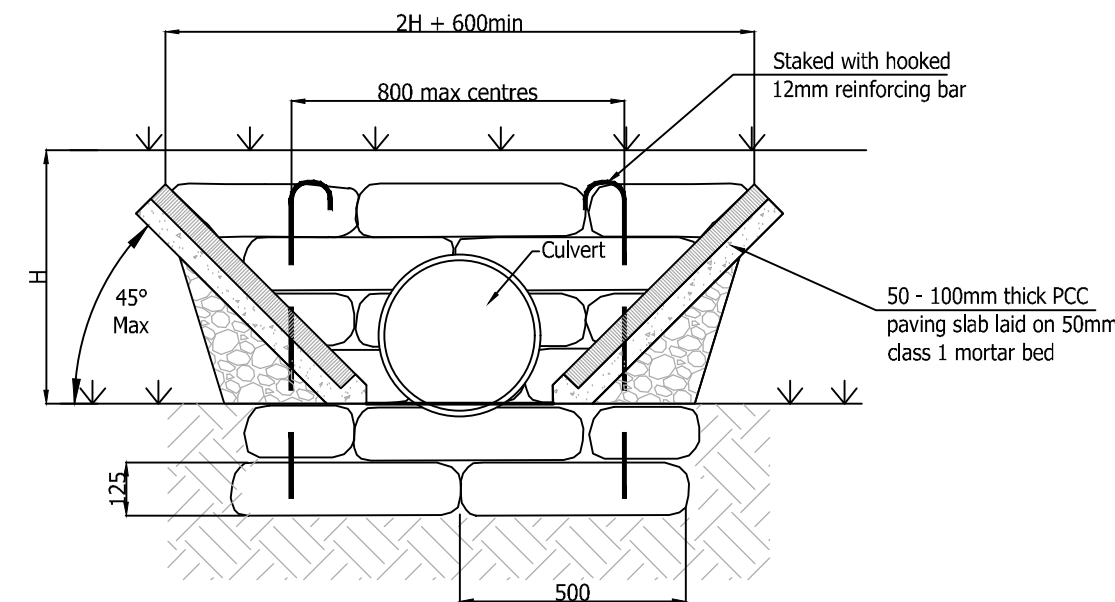
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Size (mm)	Size (mm)	Size (mm)	Size (mm)	Size (mm)	Size (mm)
50	50	50	50	50	50
All Faces	All Faces	All Faces	All Faces	All Faces	All Faces

Fabrication Specification

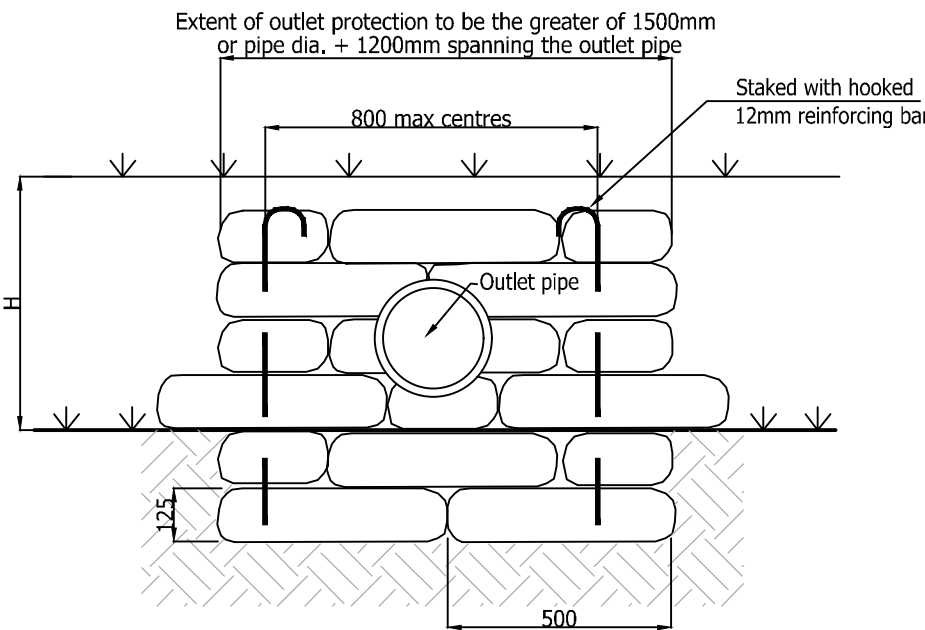
- Manufacture JAW EN 1090-2 EXC CLASS 1
- Material grade is to be: BS EN 10025 S275
- Welding carried out JAW EN 1090-2 PARA 7.5.4 ~ 7.5.18
- All fillet and butt welds to have a minimum throat thickness of 6mm & joints to be fully welded where possible.
- Ensure vertical fillets are fully welded both sides where possible.
- All sharp edges and burrs are to be removed.
- Remove all weld splatter.
- Holes by punching are permitted with reaming.
- Galvanising is carried out after fabrication to BS EN150 1461

Handrail Specification

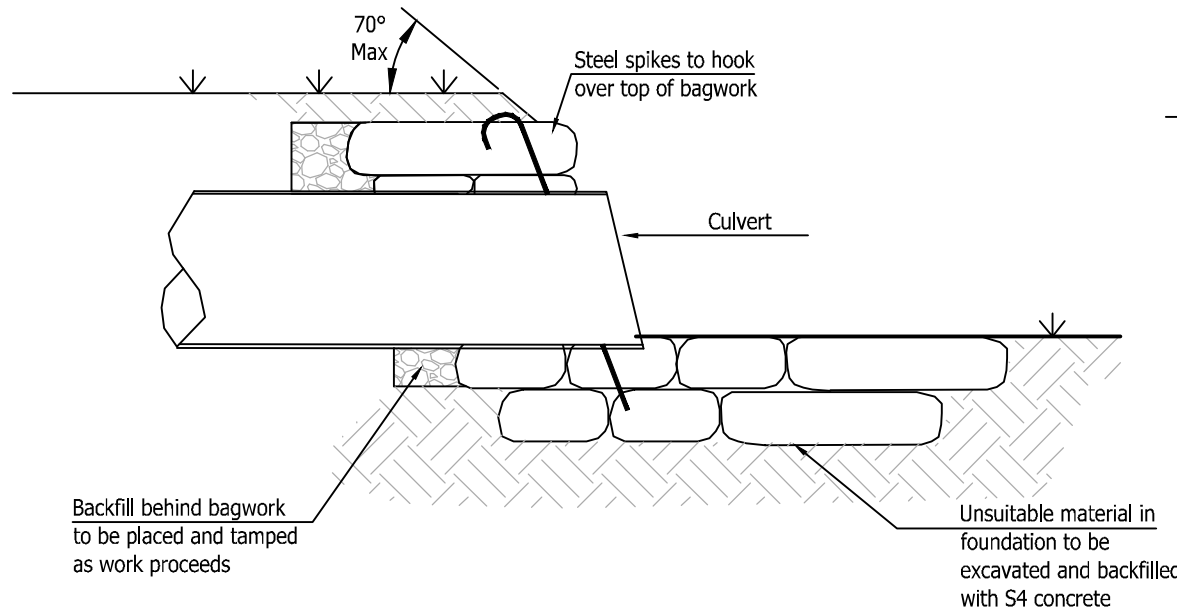
- Kee Klamp®, Galvanised Size 8 Fittings
- Size 8 48.3mm OD 3.2mm Wall Thickness Galvanised Medium Duty Tube to BS EN 10255
- 360N/m Design Load as stated in BS 6118, BS 6180, BS 6399 & BS 7618, C4 Engineering Specification for the Water Industry (CESWI) 7th Edition Clause 2.6.0 Handrails & Balustrades & The Engineering Equipment and Materials Users' Association (EEMUA) Publication 105 7th Edition Factory Stairways, Ladders and Handrails
- Other design loads available on request
- GRP/FRP Handrails also available



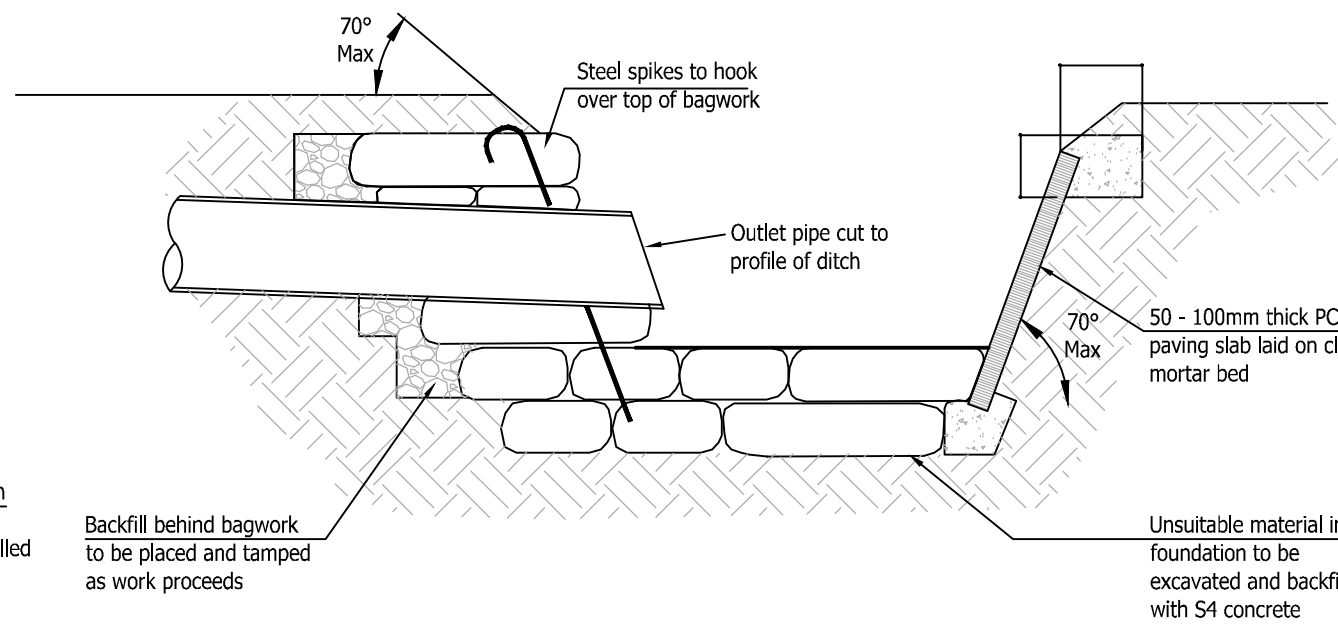
ELEVATION OF HEADWALL
OUTFALL TO END OF DITCH



ELEVATION OF HEADWALL
OUTFALL TO POND/SIDE OF DITCH



HEADWALL SECTION
OUTFALL TO END OF DITCH



HEADWALL SECTION
OUTFALL TO SIDE OF DITCH

- Bags shall be of Hessian or Canvas and shall be of a size to provide a wall thickness of 500mm.
- Concrete bagwork shall be to Clause 519 and be three quarter filled with 25mm slump ST4 concrete immediately prior to placing with the ends sewn.
- The bags shall be placed in a modified Flemish bond so as to 'break joint' with the mouths away from the surface and be tamped into position to form a rectangular block.
- Extent of outlet protection to be the greater of 1500mm or pipe diameter + 1200mm spanning the outlet pipe.
- Headwall design may need to be adjusted to on site conditions following approval from ESCC Inspector.
- For vehicular crossings of ditches pipes shall be min 450mm diameter and be set to invert of ditch. Ditch to be regraded to achieve satisfactory falls.
- For H>600 appropriate vehicular or pedestrian containment shall be installed.
- The nearest edge of any carriageway shall be set back at least H from the base of the ditch
- All exposed pipework to be certified UV stable.

GENERAL NOTES

1. The location, size, depth and identification of existing services that may be shown or referred to on this drawing have been assessed from non intrusive observations, record drawings or the like. The contractor shall safely carry out intrusive investigations, trial holes or soundings prior to commencing work to satisfy himself that it is safe to proceed and that the assessments are accurate. Any discrepancies shall be notified to gta prior to works commencing.

2. Tender or billing drawings shall not be used for construction or the ordering of materials.

3. Do not scale. All dimensions and levels to be site confirmed.

4. This drawing shall be read in conjunction with all relevant architects, consultants drawings and specifications, together with H&S plan requirements.

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C1	CONSTRUCTION ISSUE	19.01.26	DT	MR
P1	INITIAL ISSUE	03.10.25	DT	MR
Rev	Amendments	Date	Dsn	Chk
Status	CONSTRUCTION			
Client	NORTHGATE PROPERTIES LTD			
Architect				
Project	SUMMER LANE, PAGHAM WEST SUSSEX			
Title	ESTATE ROAD MAIN DRAINAGE DETAILS SHEET 2			
Date	OCTOBER 2025	Scale @ A1	NTS	
Clients Ref.	Project Ref.		13226	
 Maple House, 192-198 London Road, Burgess Hill, West Sussex, RH15 9RD Tel:01444 871444 Web: www.gtacivils.co.uk				
Drawing Number			Rev.	C1
13226/1552				