

**NOTES:**

- All dimensions in mm
- All measurements ± 1mm

**Headwall Installation**

Units should be bedded on minimum 150mm thick well compacted Class 6N or 6K\* well graded granular material with a 50mm topping of fine material (Class 6L\*) to ensure units are level and stable.

\*Manual of contract documents for Highway Works: Volume (MCHW1) specification for Highway Works, Series 600 (Nov 09).

**Handling**

- A. Weight of concrete is based on 2.4 tonne/m<sup>3</sup>+5% is recommended for sizing lifting equipment.
- B. All lifting points shall be used as specified below - Anchor points 7 loops
- C. Unit to be lifted as per lifting diagram

**Concrete**

- A. Mix ref: Self-compacting DC4/DS4 Mix
- B. Lifting strength based on 2 cubes = 20N/mm<sup>2</sup>
- C. Characteristic 28 day cube strength = 50N/mm<sup>2</sup>
- D. Concrete provides Design Chemical Class 4 (DC4) to special Digest 1, Table F2.

**Reinforcement**

- E. Durus S500 48mm Macro / Embossed Monofilament Modified PP

**Manufacture**

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

**Finishing:**

	Top	Sides	Base	Rear of back wall
Class	A	A	A	Self - Levelled

- 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/m<sup>2</sup>
- D. Weight of soil = 18kN/m<sup>3</sup>
- E. Angle of internal friction = 30 Deg.
- F. Design Life: >120 years

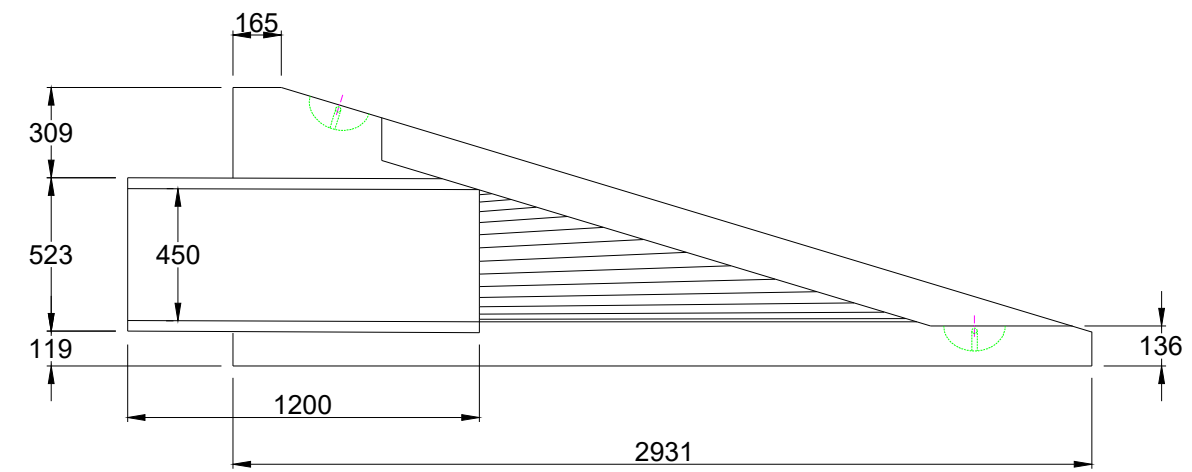
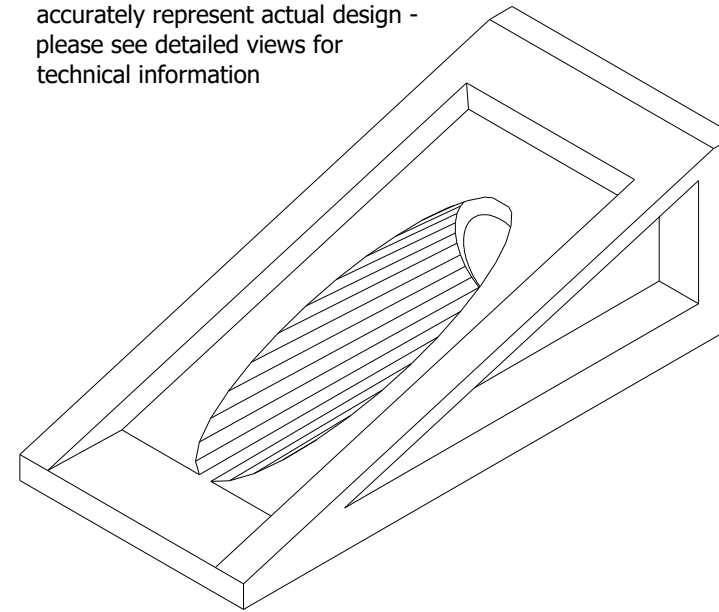
\*For products installed in aggressive environments, bitumen coating can be requested at additional cost

Exposure Classification	Exposure induced by Carbonation	Corrosion induced by Chloride	Min Cover		Freeze/thaw attack	Chemical attack
			Size (mm)	Size (mm)		
All Faces	XC3/4	XD3	55	50	XF4	XA3

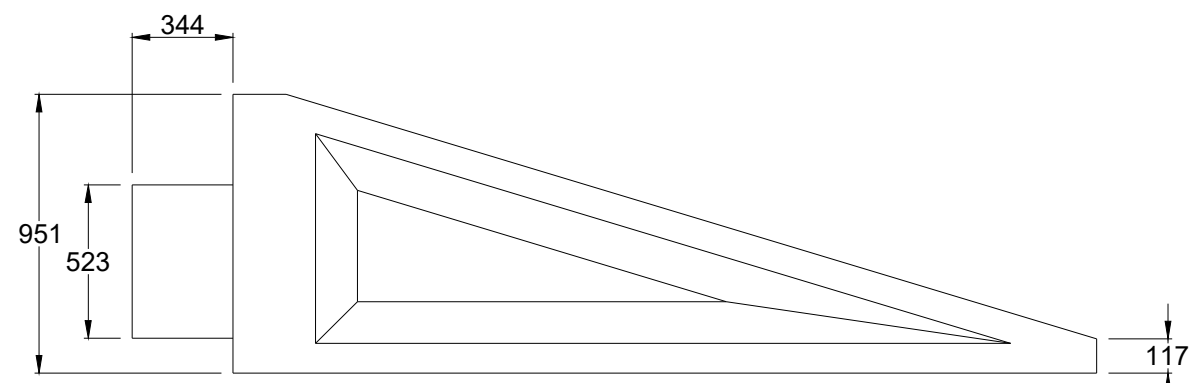
**Fabrication Specification**

- A. Manufacture IAW EN 1090-2 EXC CLASS 1
- B. Material 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 flats are fully welded both sides where possible.
- F. All sharp edges and burrs are to be removed.
- G. Remove all weld spatter.
- H. Holes by punching are permitted with reaming.
- I. Galvanising is carried out after fabrication to BS EN ISO 1461

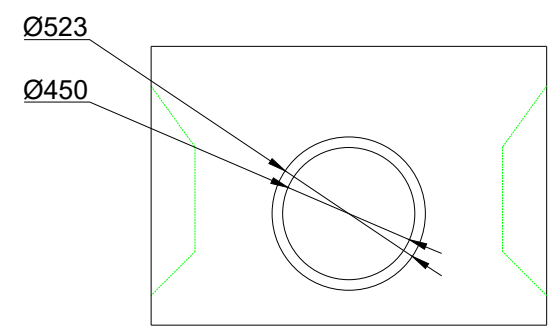
Note: Isometric drawing is for reference only, details may not accurately represent actual design - please see detailed views for technical information



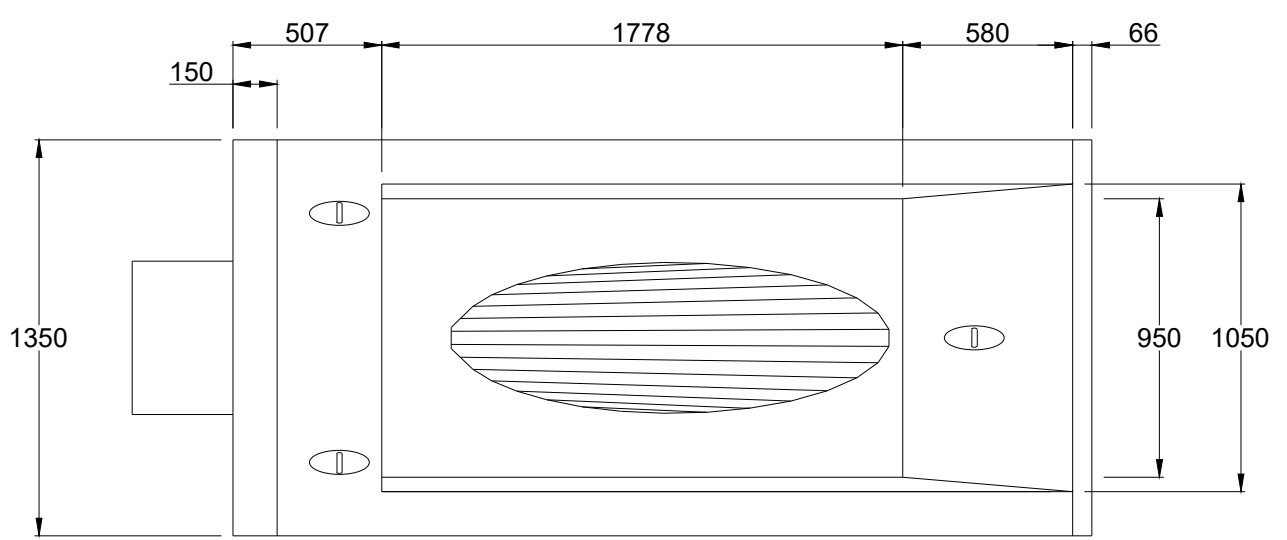
Section



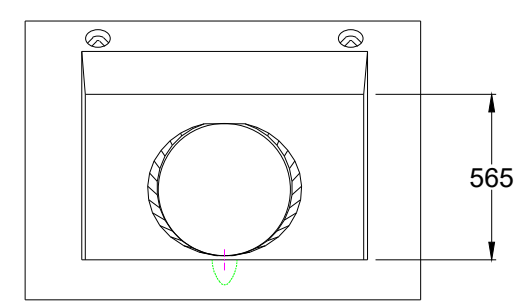
Side view showing rebate in side



Rear View



Plan View



Front View

DO NOT SCALE DRAWING

REV NO	DATE	DESCRIPTION



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DRAWING TITLE / PROJECT:

450 Mitred Headwall

CLIENT:

SCALE:	PAPER:	SHEET NO:	DATE:
NTS	A3	01 OF 01	04.11.2024

HEADWALL WEIGHT:	TOE WEIGHT:
3550kg	N/A

MISC WEIGHT:	GRATING WEIGHT:	DRAWN BY:
N/A	N/A	JW

DRAWING No: