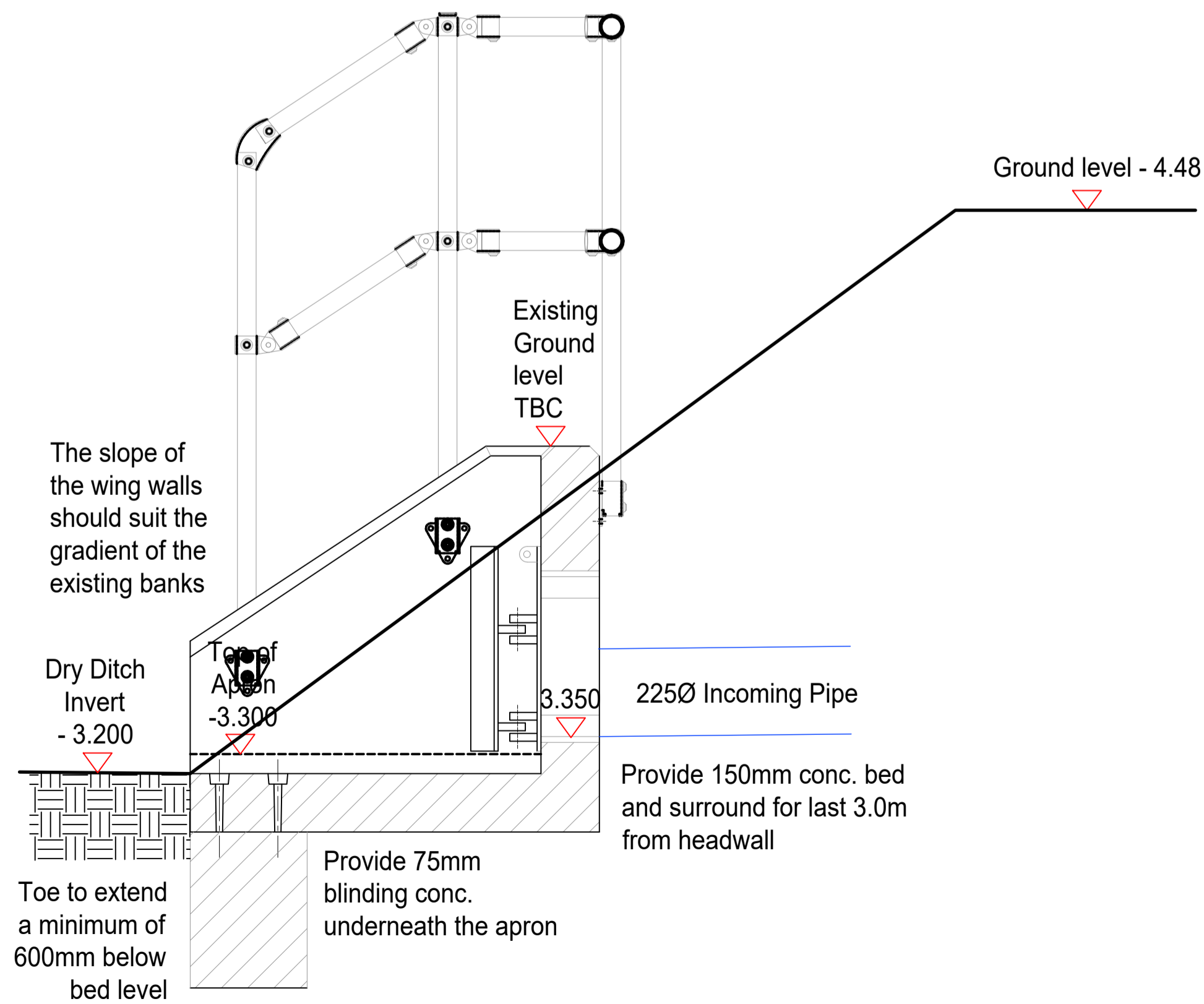
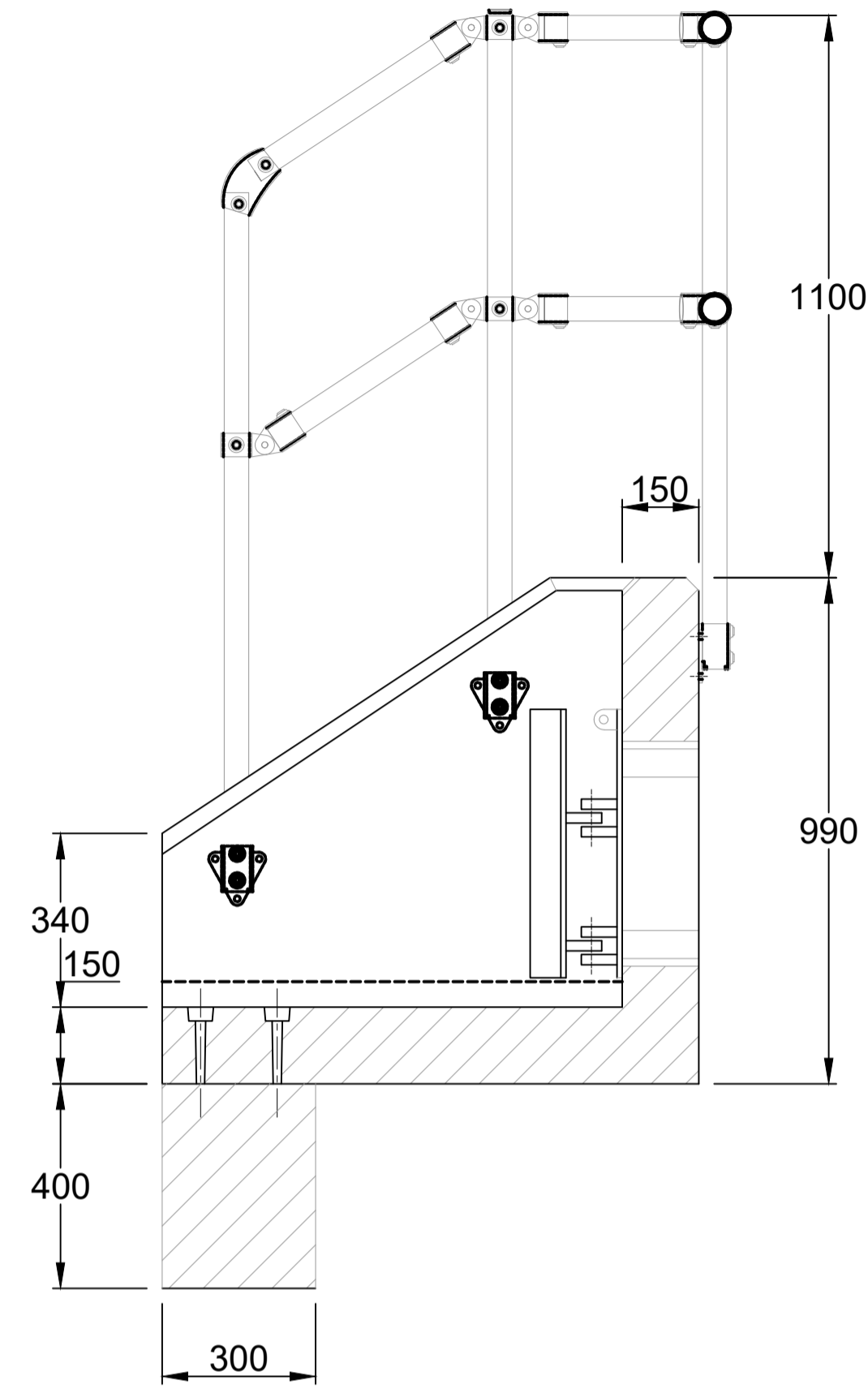
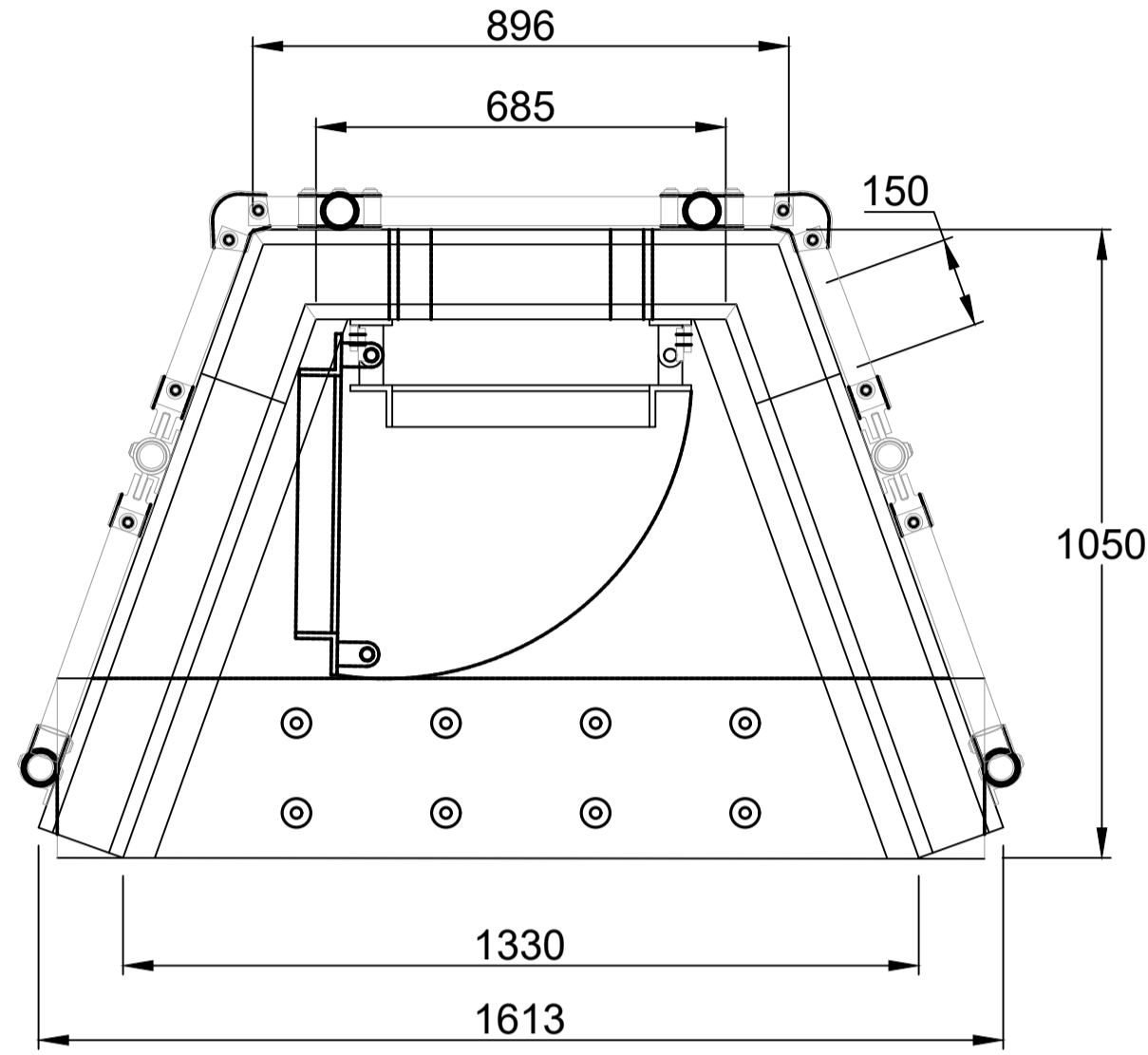


- Sewers for Adoption / Sewers for Scotland Outfall Safety Grille - SFA1 300
- In accordance with Figure C.6 Typical Outfall Safety Grille - for outfalls of 350mm diameter of greater - Sewers for Adoption 7th Edition
 - Material Grade is to be: BS EN 10025 S275
 - All mild steel to be hot dipped galvanized after fabrication
 - Galvanizing to BS EN: 1461
 - Welding to BS EN 1011-2:2001
 - Hinged on one side with padlock facility
 - Weight Approx: 40kg



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).
 Sit the headwall level or with a slight fall 1:50 from pipe to spill mouth.
- Handling**
- 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 D4/DS4 Mix
 - Lifting strength based on 2 cubes = 20N/mm²
 - Characteristic 28 day cube strength = 50N/mm²
 - Concrete provides Design Chemical Class 4 (DC4) 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 | 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**
- Concrete design to EC2
 - Albion 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
- | Min Cover | Cover Back Size (mm) | Min Cover Size (mm) | Max Cover Size (mm) |
|-----------|----------------------|---------------------|---------------------|
| All Faces | 55 | 50 | 60 |
- | Exposure Classification | Exposure induced by Chloride | Corrosion induced by Chloride | Freeze/thaw attack | Chemical attack |
|-------------------------|------------------------------|-------------------------------|--------------------|-----------------|
| All Faces | XC3/4 | | XF4 | XA3 |
- Fabrication Specification**
- Manufacture IAW EN 1090-2 EXC CLASS 3
 - Material grade is to be: BS EN 10025 S275
 - Welding carried out IAW 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 flats are fully welded both sides where possible.
 - All sharp edges and burrs are to be removed.
 - Remove all weld spatter.
 - Holes by punching are permitted with reaming.
 - Galvanizing is carried out after fabrication to BS EN:150 1461
- Handrail Specification**
- See Handrail 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 8118, BS 6180, BS 6399 & BS 7818, Civil Engineering Specification for the Water Industry (CESWI) 7th Edition Clause 2.60 Handrails & Balusters & 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

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Rev:	Date:	Amendment:	DRN	CHK	APR
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BRYAN G HALL

CONSULTING CIVIL & TRANSPORTATION PLANNING ENGINEERS

LEEDS T 0113 246 1555 LONDON T 0203 5532336

Suite E15 | Josephs Well
 Hanover Walk | LEEDS | LS3 1AB
 W www.bryanghall.co.uk
 E transportleeds@bryanghall.co.uk

Client: Newett Homes

Scale: 1:20
 Size: A1 - 841 x 594
 Drawn: JI
 Chkd: NB
 Appvd: IE

Project: Residential Development
 Owston Road, Carcroft, Doncaster

Title: Outfall Detail To
 Watercourse

Drawing No: 23/347/500/006
 Job No: 23-347
 Revision: 22.07.24
 Date: 22.07.24