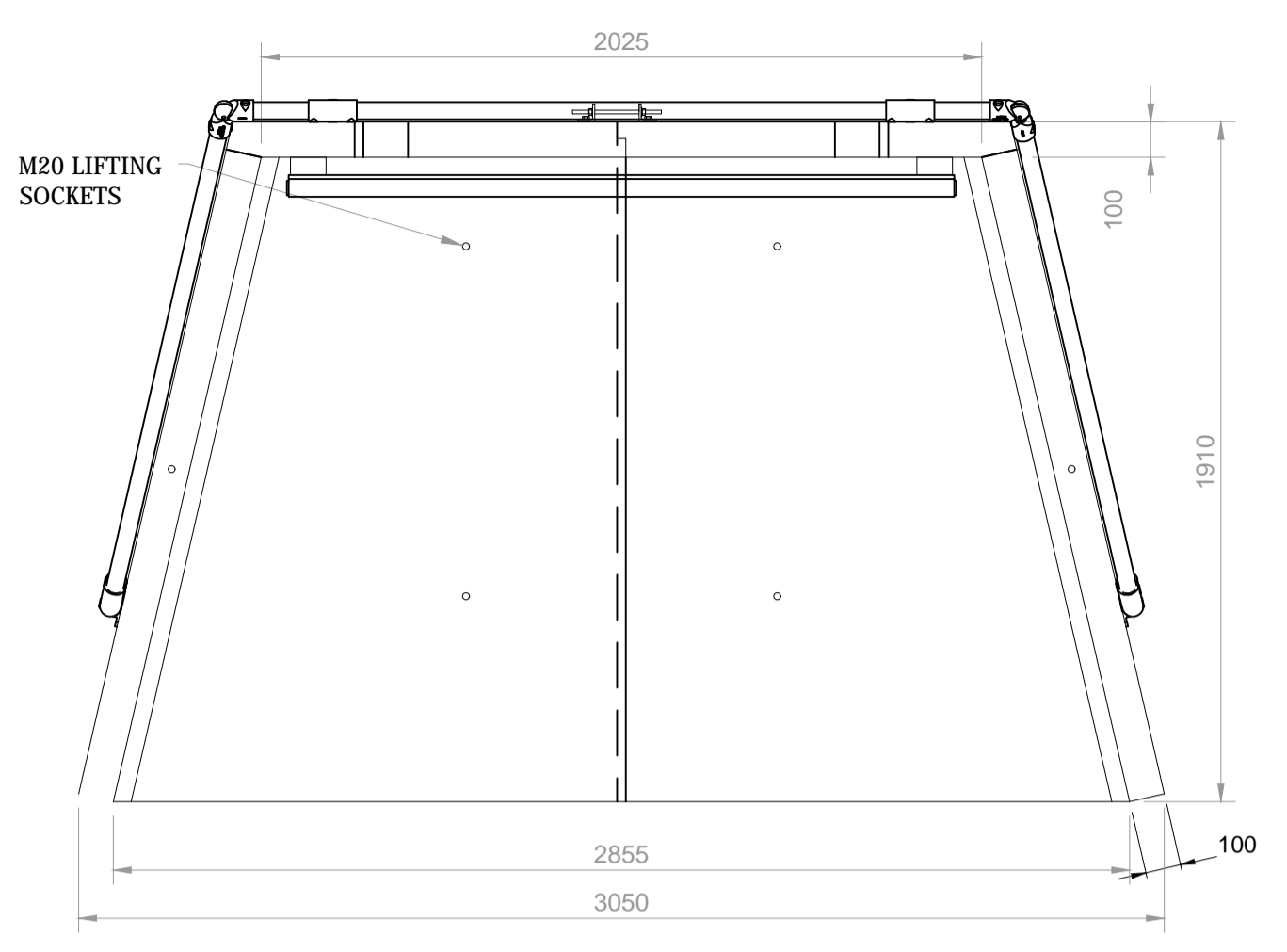
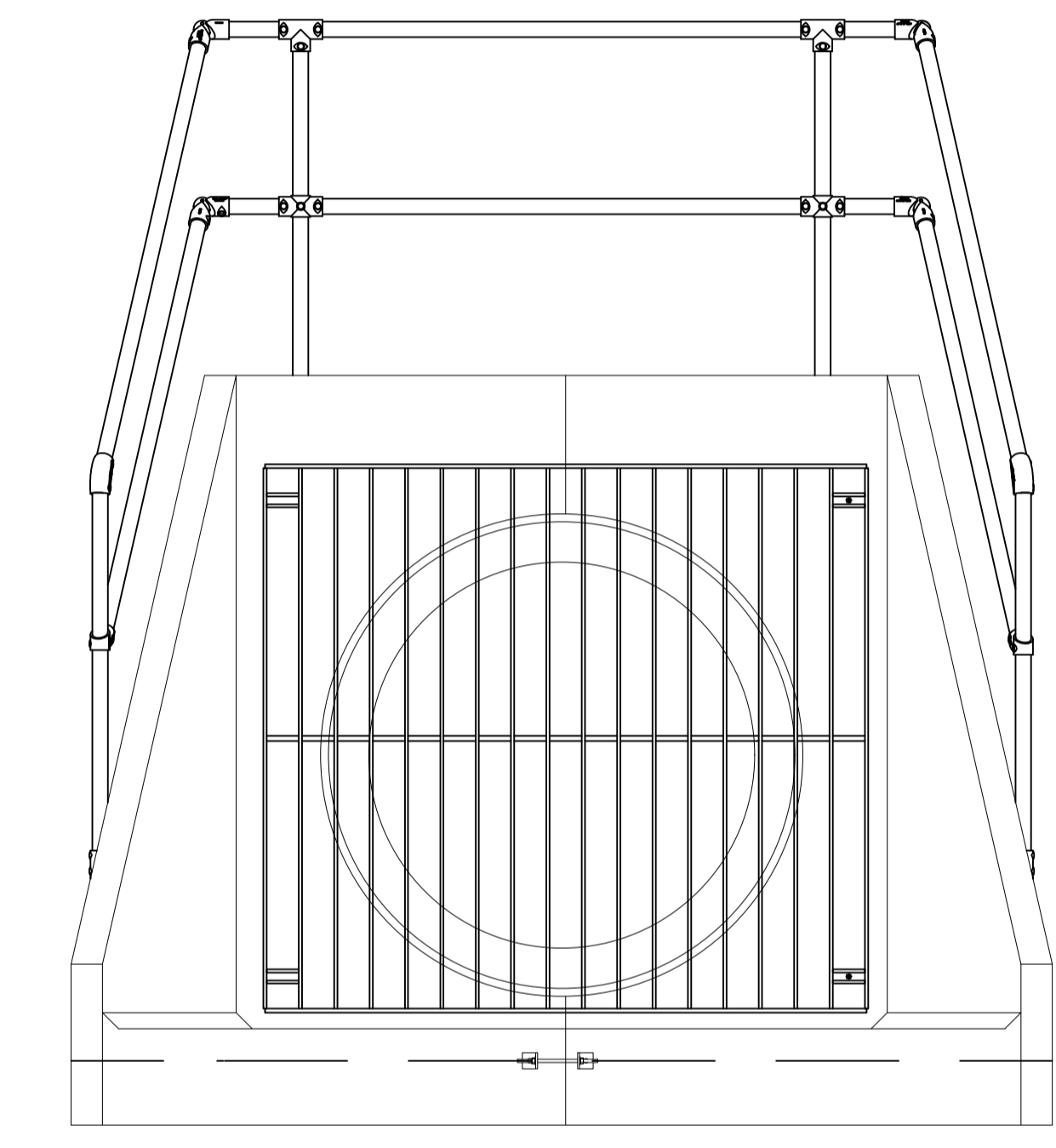
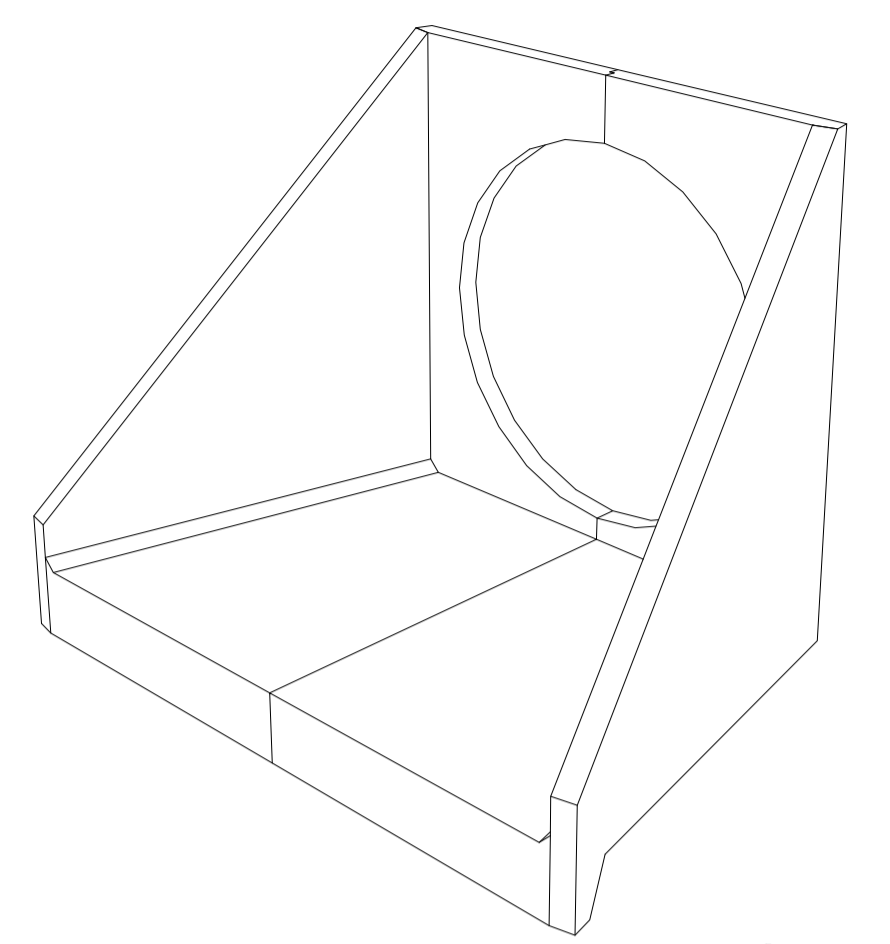


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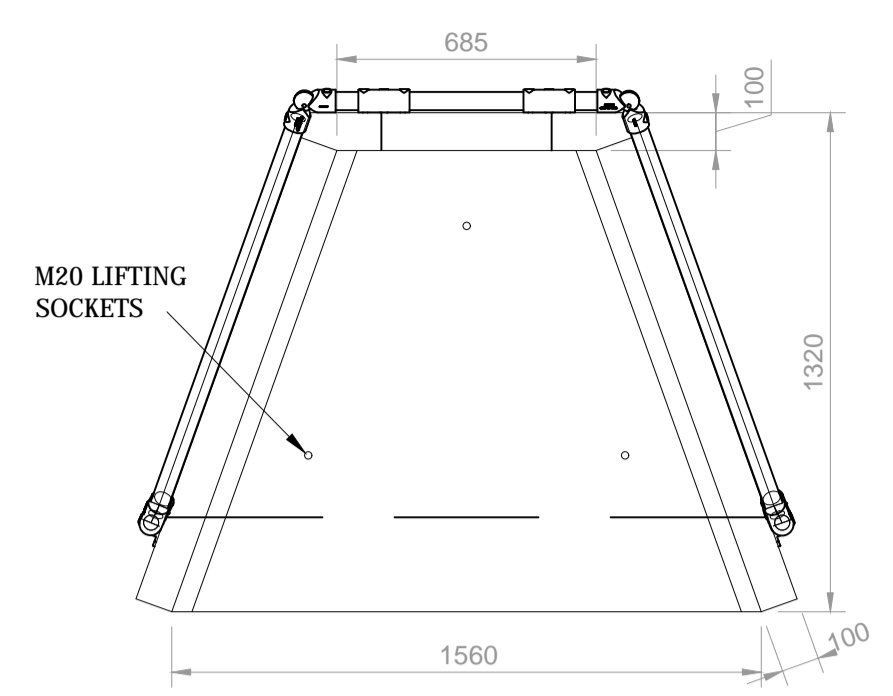
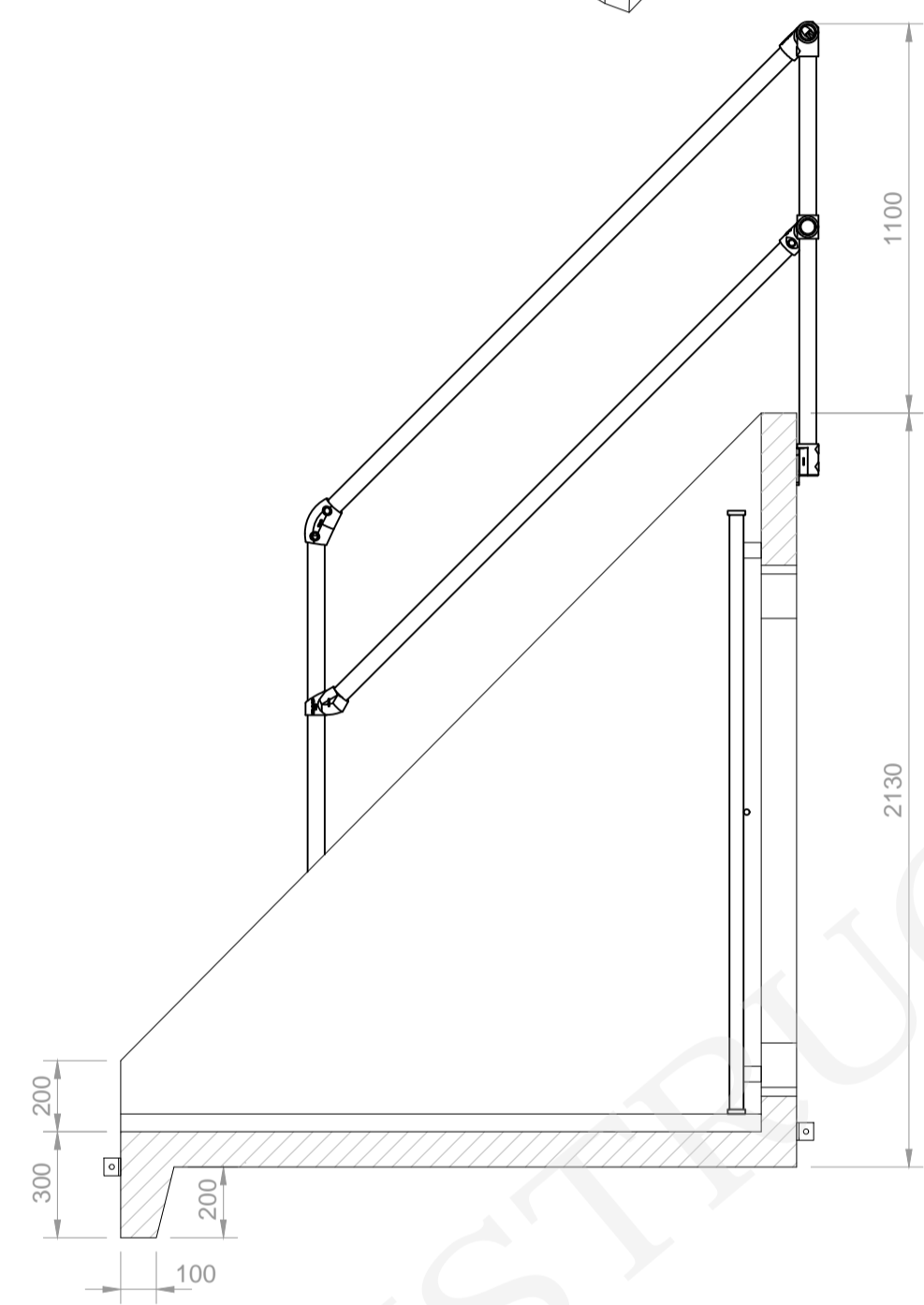
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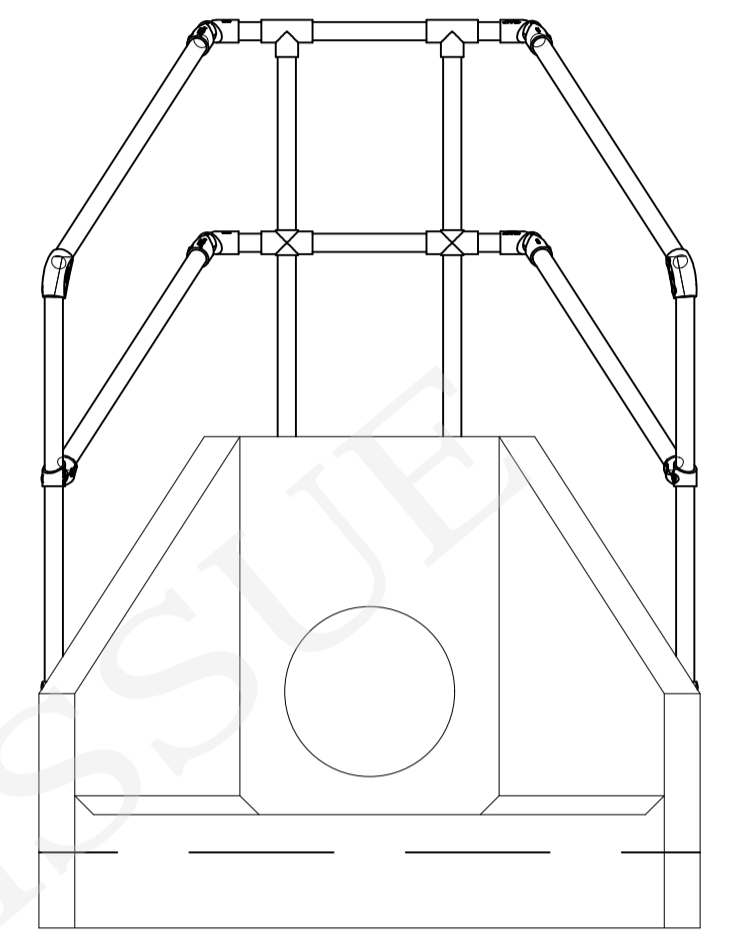
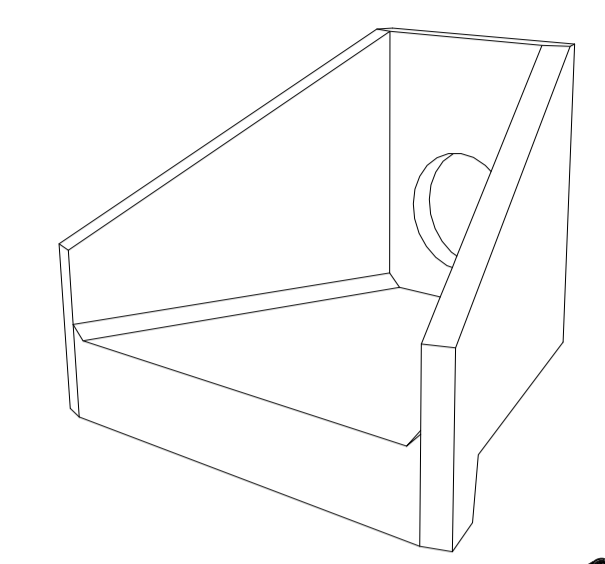
NOTE: ISOMETRIC DRAWING IS FOR REFERENCE ONLY. DETAILS MAY NOT ACCURATELY REPRESENT ACTUAL DESIGN - PLEASE SEE DETAILED VIEWS FOR TECHNICAL INFORMATION



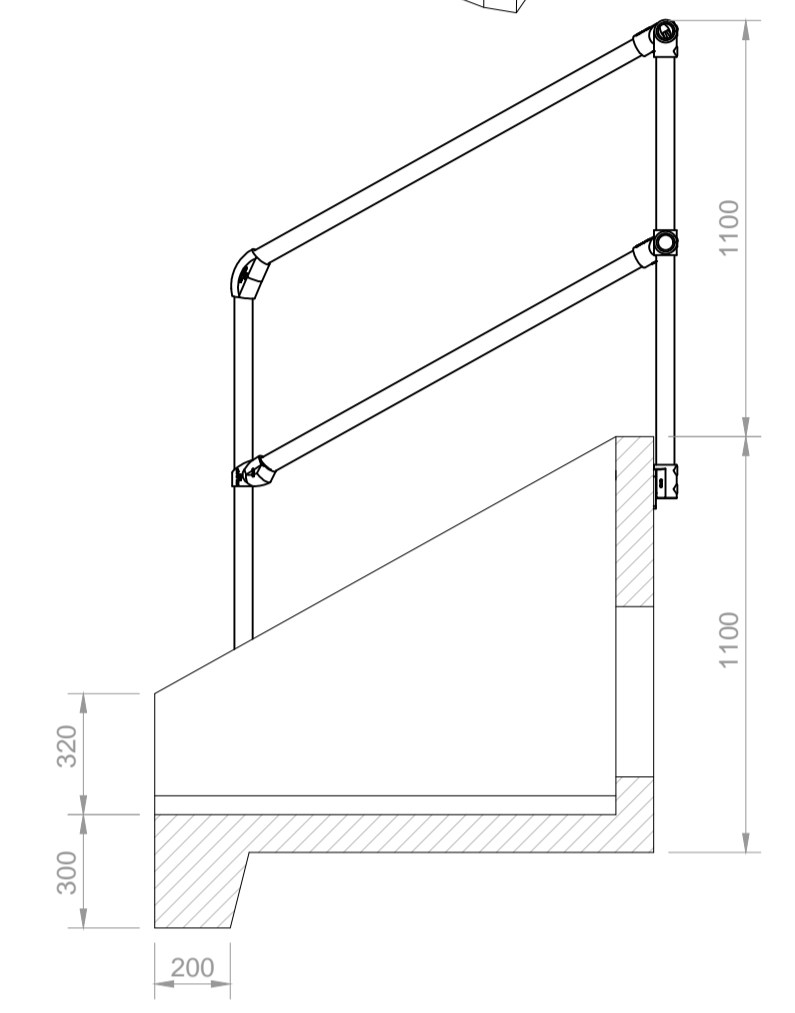
**ALTHON H20CC HEADWALL  
SECTIONS & TYPICAL DETAILS**  
SCALE 1:20



NOTE: ISOMETRIC DRAWING IS FOR REFERENCE ONLY. DETAILS MAY NOT ACCURATELY REPRESENT ACTUAL DESIGN - PLEASE SEE DETAILED VIEWS FOR TECHNICAL INFORMATION

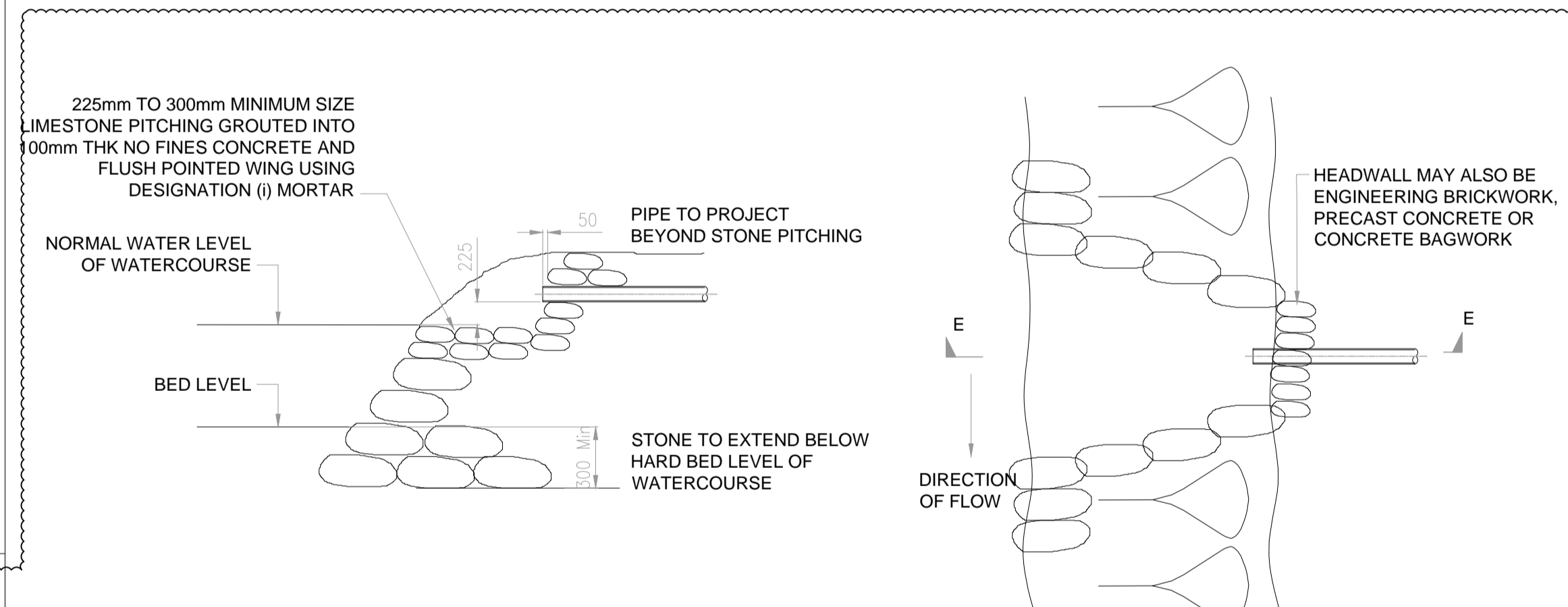
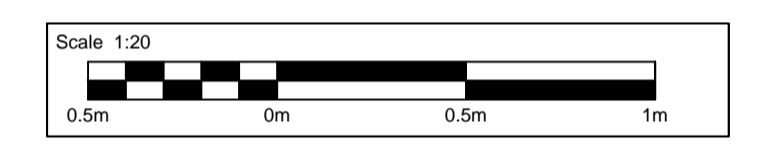


**ALTHON H6CA HEADWALL  
SECTIONS & TYPICAL DETAILS**  
SCALE 1:20



**NOTES:**

1. ALL DIMENSIONS IN MM
2. ALL MEASUREMENTS ± 1MM
3. FOR HIGHWAY DRAINAGE DETAILED KEY & NOTES REFER TO DRAWING: STDC\_HWY-ATK-HDG-PR-DR-CD-000001.
4. FOR HIGHWAY DRAINAGE LAYOUT REFER TO DRAWINGS: STDC\_HWY-ATK-HDG-PR-DE-CD-000002 TO 010.
5. FOR HOLME BECK WATERCOURSE LAYOUT AND STANDARD DETAILS REFER TO DRAWINGS: STDC\_HWY-ATK-HDG-PR\_XS-DE-CD-000001 TO 003.
6. REFER TO DESIGN RISK REGISTER: XXXXX
7. FOR HEADWALL (INLET & OUTLET) ARRANGEMENTS IN RELATION TO BOX CULVERTS UNDER THE EAST LINK AND NORTH LINK ACCESS, THESE ARE TO BE DETERMINED AS CONTRACTOR DESIGNED. ALLOWANCE SHOULD BE MADE FOR GRADIENT OF WATERCOURSE EARTHWORKS TIE-INS AS SHOWN.
8. TO BE READ IN CONJUNCTION WITH THE DRAINAGE AND EARTHWORKS SPECIFICATIONS.



**SECTION TAKEN ON LINE E-E**

**GENERAL NOTES**

1. PIPE OUTFALL EXIT VELOCITY SHOULD NOT EXCEED 1.2m/s
2. THE HEADWALL AND WINGWALLS SHOULD NOT PROJECT BEYOND OR ABOVE THE LINE OF THE BANK
3. NO PART OF THE STRUCTURE SHOULD CUT INTO ANY FLOOD EMBANKMENT.
4. SULPHATE RESISTANT CEMENT TO BE USED IN MORTAR CONCRETE WHERE REQUIRED.
5. STONE SHALL BE OF GOOD, HARD, DURABLE QUALITY, UNIFORM TEXTURE AND FREE FROM IRON BANDS, SPOTS, SAND HOLES, FLAWS, SHAKES AND OTHER IMPERFECTIONS
6. MATERIAL SPECIFICATIONS ARE AS FOLLOWS:
  - I) STONE WORK TO CLAUSE 2413
  - II) MORTAR DESIGNATION (i) TO CLAUSE 2404
  - III) POROUS NO-FINES CONCRETE TO CLAUSE 2603
7. THE EXACT LOCATION OF THE OUTFALL TO BE DETERMINED AND AGREED ON SITE WITH DESIGNERS REPRESENTATIVES

**STANDARD OUTFALL TO WATERCOURSE  
(SUPPLIED BY ENVIRONMENT AGENCY)**  
SCALE NTS

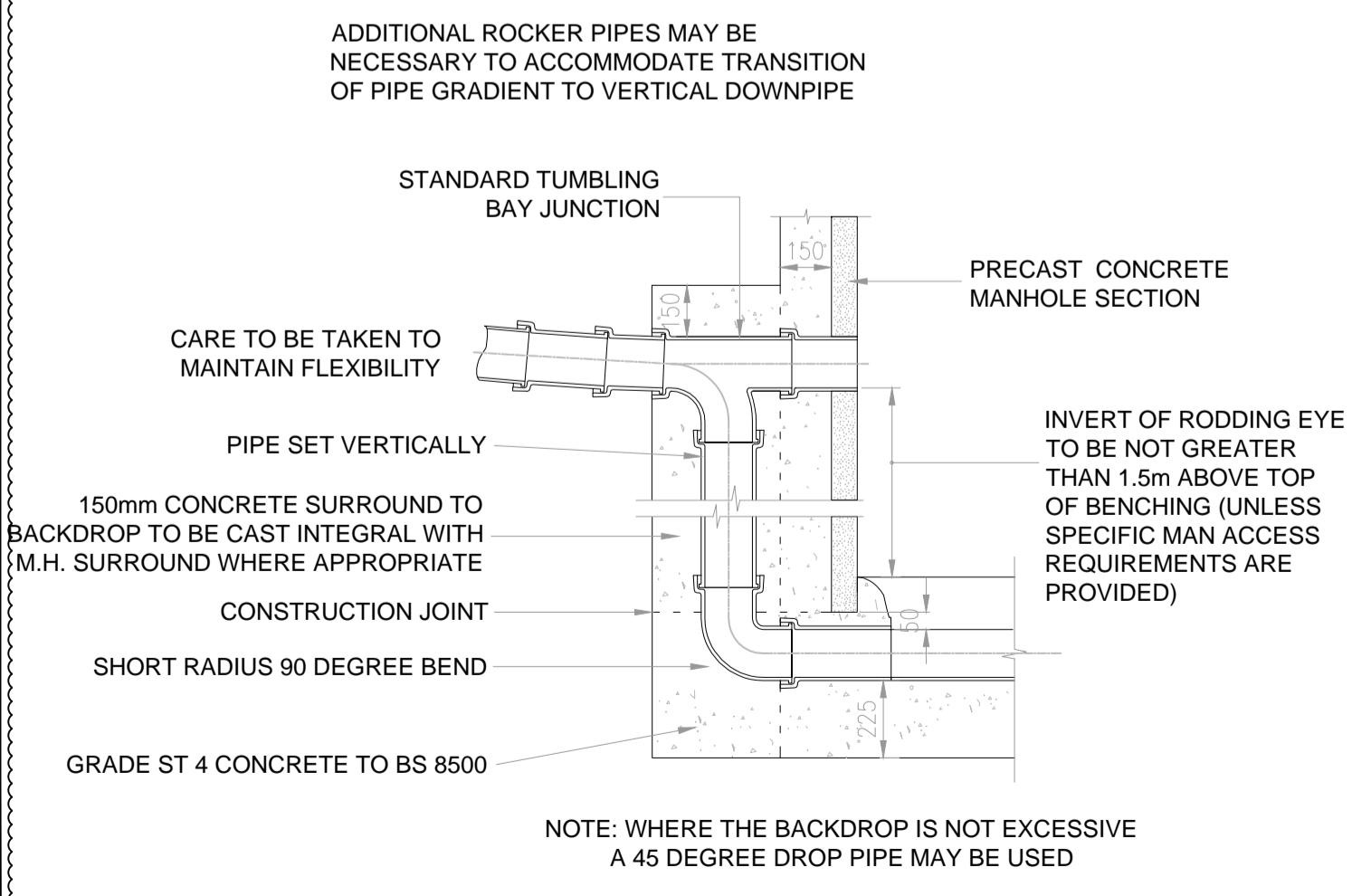
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Status	Revision	Drawn	Checked	Reviewed	Authorised	Issue Date
ISSUED FOR REVIEW AND COMMENT						
S3	PO1	CE	JR	MT	---	06/02/21
ISSUED FOR PIPED CULVERT APPROVAL TO RCBC / STDC						
A1	CO1	MT	DS	MT	DS	14/05/21
UPDATED FOR PRE-CONSTRUCTION CHANGES						
A3	CO2	MT	DS	DMA	DS	21/05/21
Drawing Suitability						Status
APPROVED - CONSTRUCTION						A3

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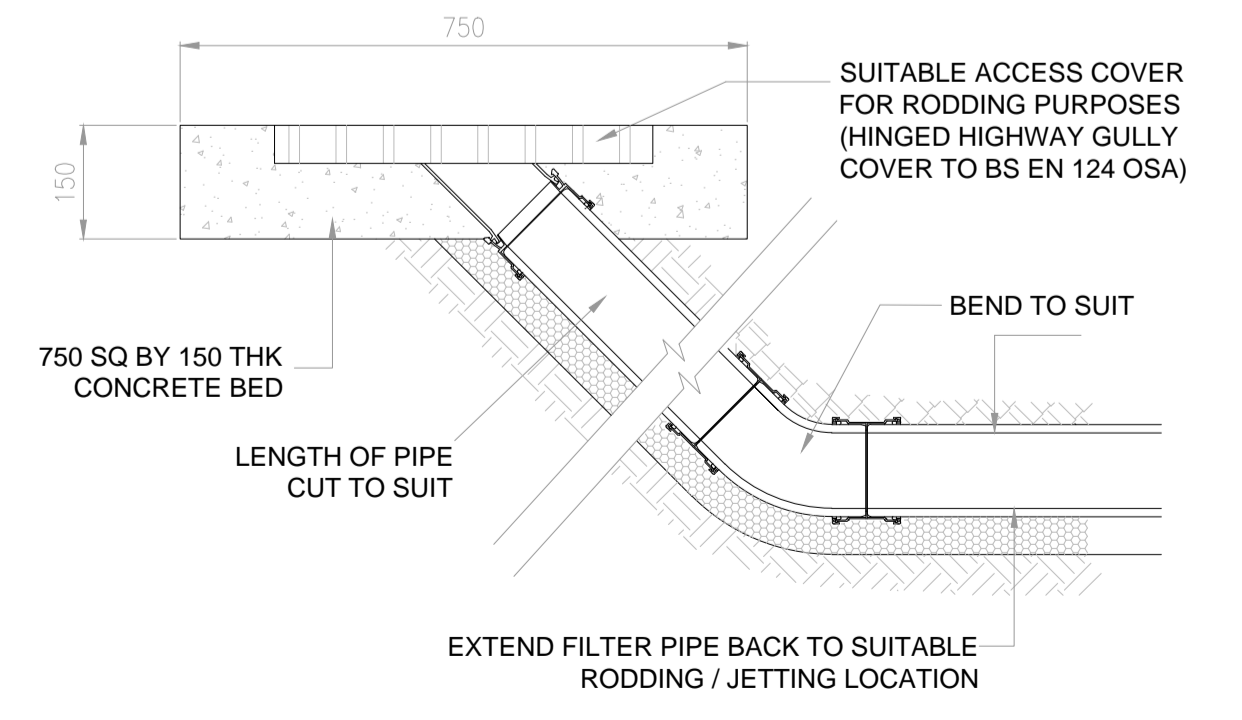
**TEESWORKS**  
The UK's largest industrial zone

Project Title: **SOUTH TEES DEVELOPMENT CORPORATION**  
Drawing Title: **DETAILED DESIGN of ESTON ROAD HIGHWAYS SCHEME HOLME BECK WATERCOURSE OTHER STANDARD DETAIL**

Original Scale: <b>A1</b>	Scale: 1:20	Project Ref. No.: 5198022	Sheet: 3 of 3	Rev: <b>C02</b>
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**TYPICAL VERTICAL BACKDROP DETAIL  
(MANHOLES ONLY)**  
SCALE NTS



**TYPICAL FILTER DRAIN RODDING POINT**  
SCALE NTS

C01