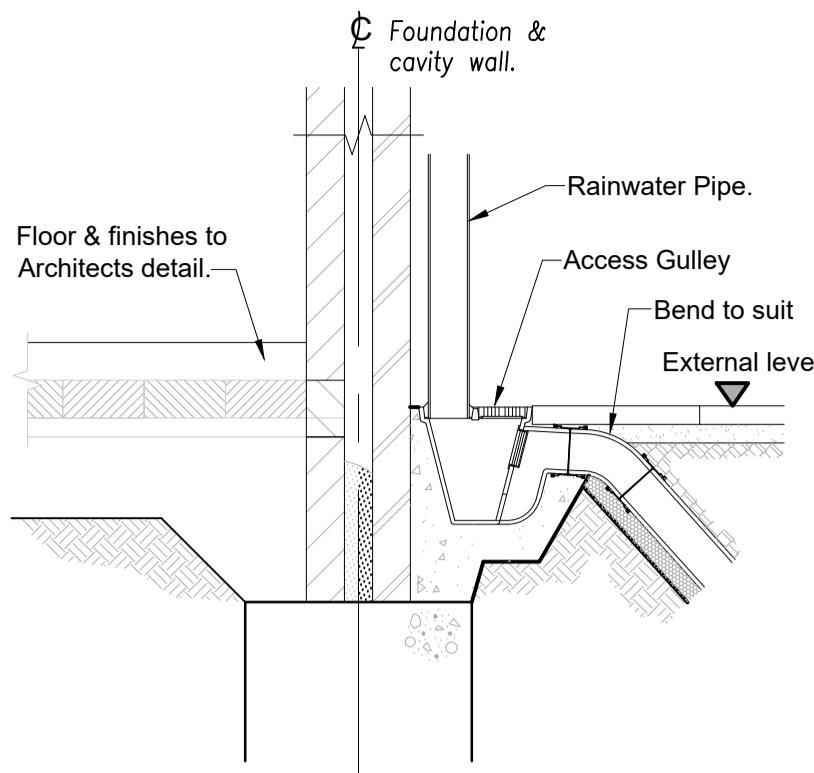
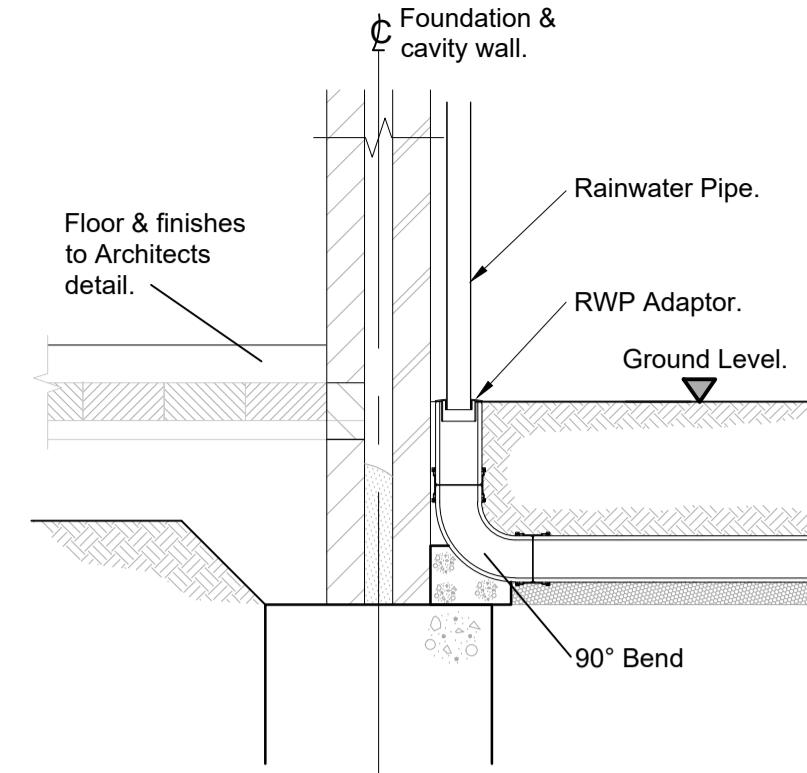


**NOTES**

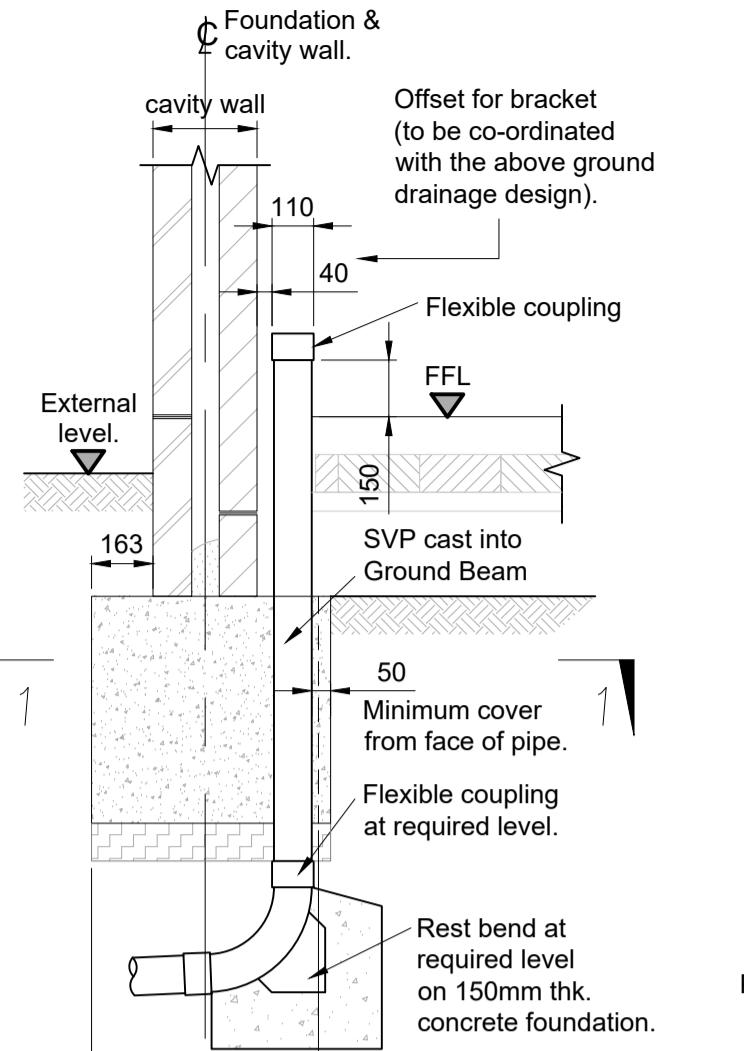
- DO NOT SCALE THIS DRAWING. WORK TO FIGURES AND SPECIFICATIONS ONLY. ALL DIMENSIONS ARE IN MILLIMETRES (mm) UNLESS NOTED OTHERWISE.
- This drawing is to be read in conjunction with all relevant Architect's, Engineer's and Specialist's drawings and their respective Specifications.
- All work to comply with the relevant British Standards, Codes of Practice and the Building Regulations.
- Any discrepancies between all working drawings, specifications and schedules of all disciplines to the relevant Building Regulations to CTP for clarity and consistency shall be referred to the architect.
- All private drainage works shall be constructed in accordance with Building Regulations Approved Document H (latest edition) and BS EN 752.
- Prior to commencement of the works the contractor shall liaise with all relevant authorities to obtain their requirements, work method approval when appropriate and the intended choice of materials.
- Refer to highways authority for details of existing site conditions and bench marks.
- Prior to commencement of the works the contractor shall liaise with all relevant authorities to locate, protect and where necessary divert all existing services affected by the works.
- The contractor shall ensure the stability of all excavations is maintained all times and all excavations shall be kept free of subsidence.
- All work in, on or near the highway shall be in accordance with the requirements of the Highway Authority. The contractor shall obtain all necessary licences required to carry out the works within the public highway.
- All levels to new or existing public sewers shall be to the approval of the local water authority and in accordance with Sewerage Sector Guidance - Latest Edition.
- Prior to commencement of the works all drainage outfall points, whether existing sewer, drain or watercourse, shall be verified on site by the contractor and the outfall to be diverted or new outfall to be installed shall be shown on the drawings, then the design amendment shall be notified immediately (significant redesign of drainage and levels may be necessary). Prior to commencement of construction on site the contractor shall install all off-site drainage connections, or satisfy highway authority that there are no obstructions or other reasons why the drainage connection cannot be made.
- All cover levels shown on this drawing are approximate, exact levels of new covers and frames are to be determined on site to match level and profile of finished surface.
- The levels of all existing chambers, gullies and their covers, gratings and frames to be improved, repaired or replaced as necessary to suit their location within the finished development.
- All covers, gratings and frames to chambers, gullies, channels etc., shall be to the relevant class as shown on the drawing.
- Load Class A125 - Footways
- Load Class B125 - Private drives
- Load Class C250 - Basements / parking bays / lightly trafficked roads
- Load Class D400 - Main roads
- All existing drainage channels, pipes and other drainage apparatus shall be protected from damage during the works. The contractor shall take all necessary measures to ensure that no material enters the drains (other than that which is destined to carry away the waste).
- Refer to site investigation report for existing ground conditions and any special requirements for buried concrete (special requirements for buried concrete shall include all pre-cast and in-situ concrete and mortars). Where appropriate refer to concrete specification for chemical resistance.
- All pre-cast and in-situ concrete and mortars used in the construction of foul drains and sewers shall be made from sulphate resisting cement.
- Unless noted otherwise all pipework shall be constructed from 'super strength' vinyl to BS 65, BS EN 295 or UPVC to BS EN 1401 beaded and backfilled as per the manufacturer's recommendations and the above listed publications.
- The contractor's attention is drawn to the 7 and 8 of the Building Regulations Approved Document H showing details of foul and surface water drainage systems. Where ground levels are used, their level shall be set to avoid clashing with drain connections.
- Exact location of gullies to be determined on site to suit low points, the contractor shall ensure that all finished surfaces are laid to falls that are sufficient for all surfaces to be watertight when in use.
- For the exact location of soil pipes, stubstacks, W.C.'s and other drainage connections refer to the large scale architectural building plans.
- Rainwater downpipes that do not connect directly to an access point, shall be fitted with a backflow preventer.
- All drainage channels to be by ACO or similar and to be of a type, size and capacity suitable for their location.
- Private access fittings, inspection chambers and manholes shall be constructed in accordance with the relevant sections of the Building Regulations Approved Document H and from the materials listed in Table 14. Access points, inspection chambers and manholes shall be constructed from products designated for the location in which they are to be used. They shall be installed in accordance with the manufacturer's/supplier's recommendations.
- Prior to commencement of any works the existing drainage must be traced to ensure that no 'live' connections remain, any such connections must be reported to the contract administrator, prior to diversion into the new drains.
- Private access fittings, inspection chambers and manholes shall be constructed in accordance with the relevant sections of the Building Regulations Approved Document H and from the materials listed in Table 14. Access points, inspection chambers and manholes shall be constructed from products designated for the location in which they are to be used. They shall be installed in accordance with the manufacturer's/supplier's recommendations.
- Pipes shall be at a min. gradient 1:40 (1:80 if minimum 1 WC is connected), unless proposed invert levels indicate otherwise.



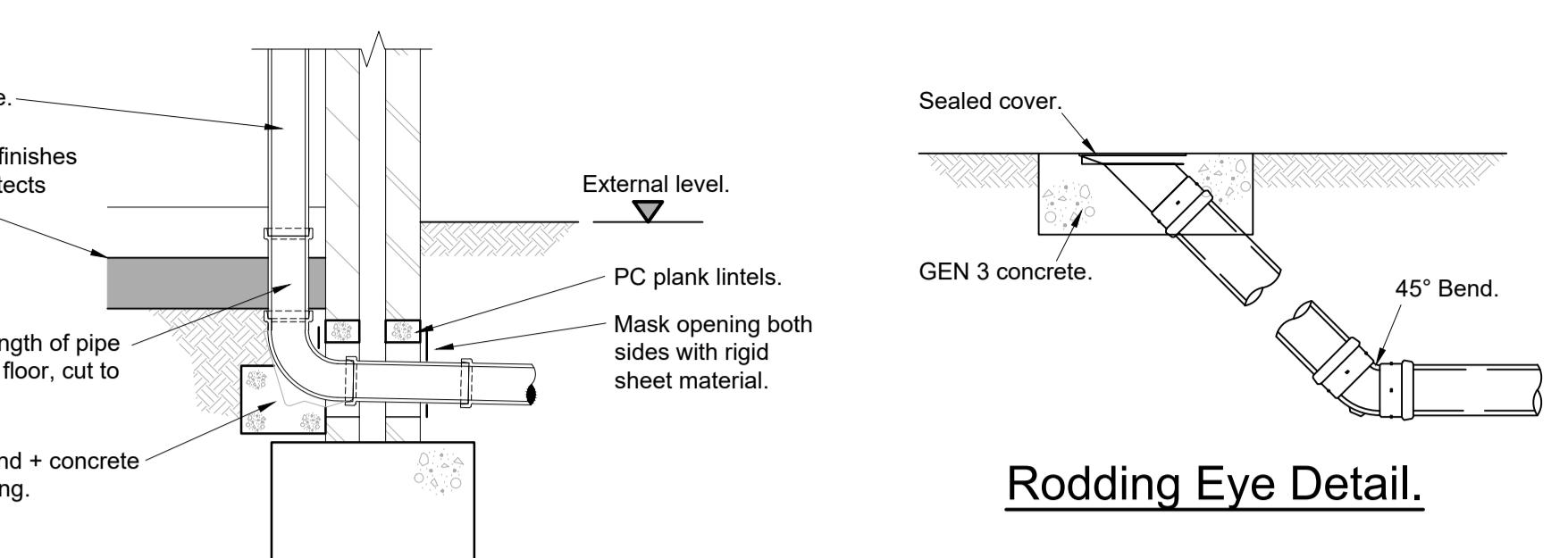
**Typical RWP Connection with Trapped Gully (rwp T)**



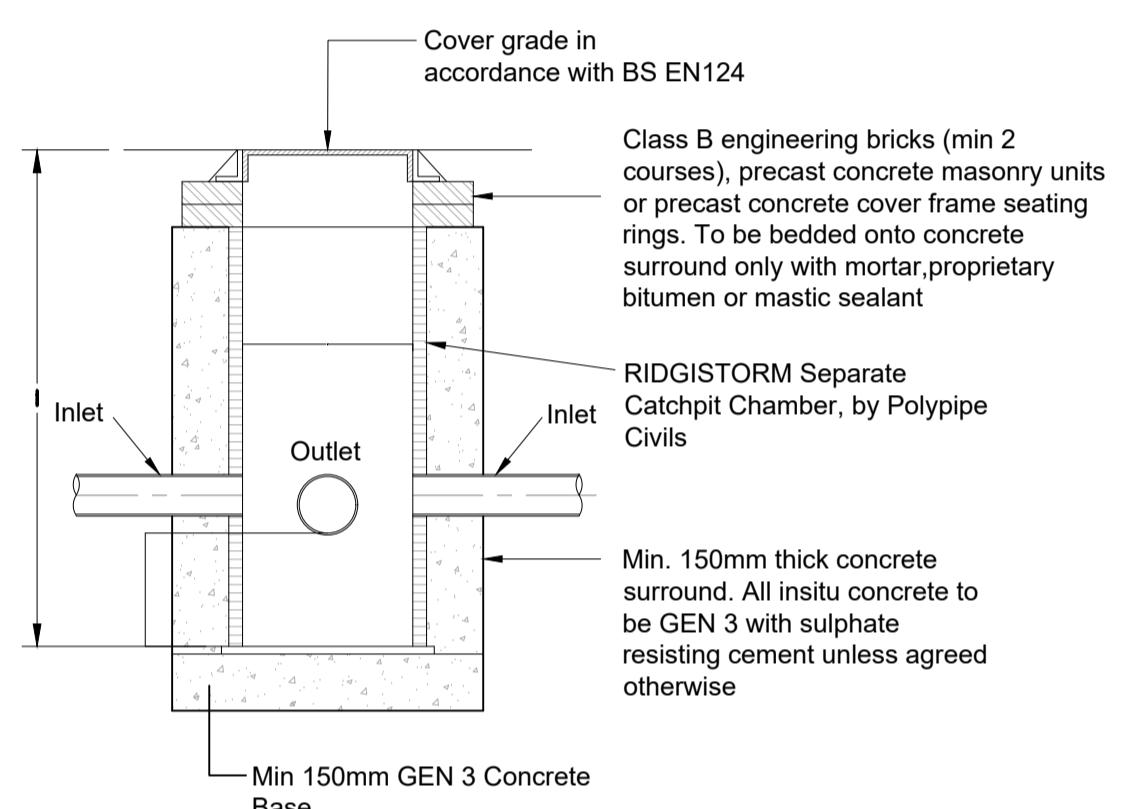
**Typical RWP Connection Detail (rwp)**



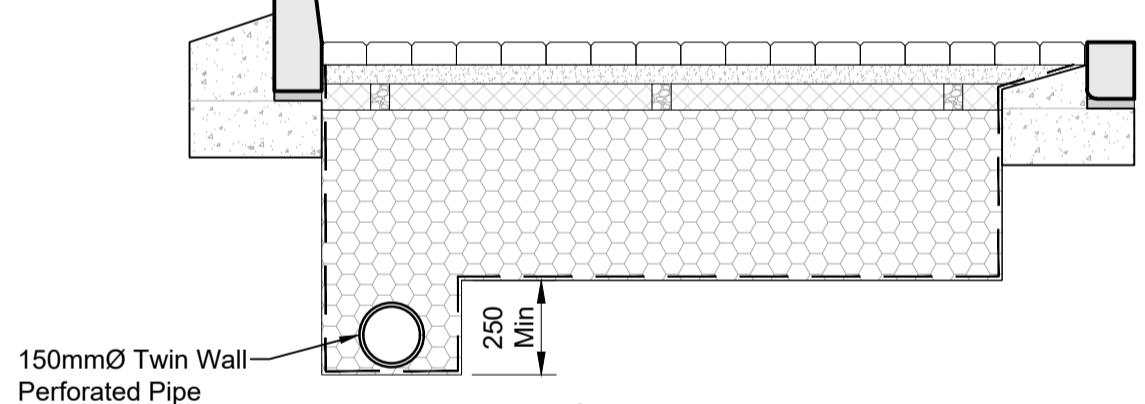
**Ground Beam/SVP Penetration Detail.**



**Rodding Eye Detail.**



**Typical Catchpit Chamber Detail - PPIC**



80mm Permeable Concrete Block Paving, Type, laying pattern and colour to Landscape Architects Specification.

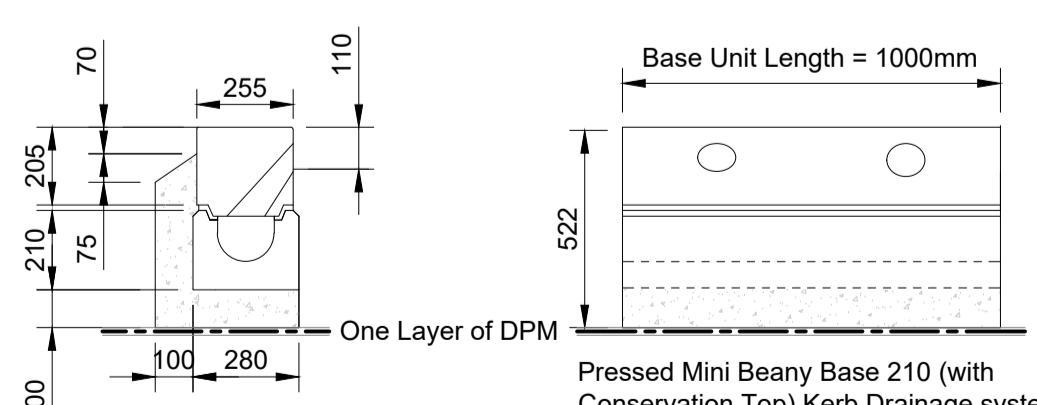
50mm bedding layer, single sized 5mm clean crushed stone to Table D.6 BS 7533-3, or as Block Manufacturer's recommendations. 70mm of 20mm dense bitumen macadam binder course (100/150 pen binder) to BS EN 13108 (2006) PT1. (AC 20 dense bin 100/150 REC BS) - to be punched through with 50mm Ø holes @ 1m centres prior to installing laying course and block paving. (holes to be filled with 6mm pea-shingle)

Type 4/20 Open Graded clean granular sub-base material (thickness varies, refer to Engineering Layout for specific depths) to BS EN 13242 and CL 505 Specification for Highway Works.

Heavy Duty Impermeable Membrane, Visqueen.

**Tanked Block Paving Parking Bay Construction**

Scale 1:20



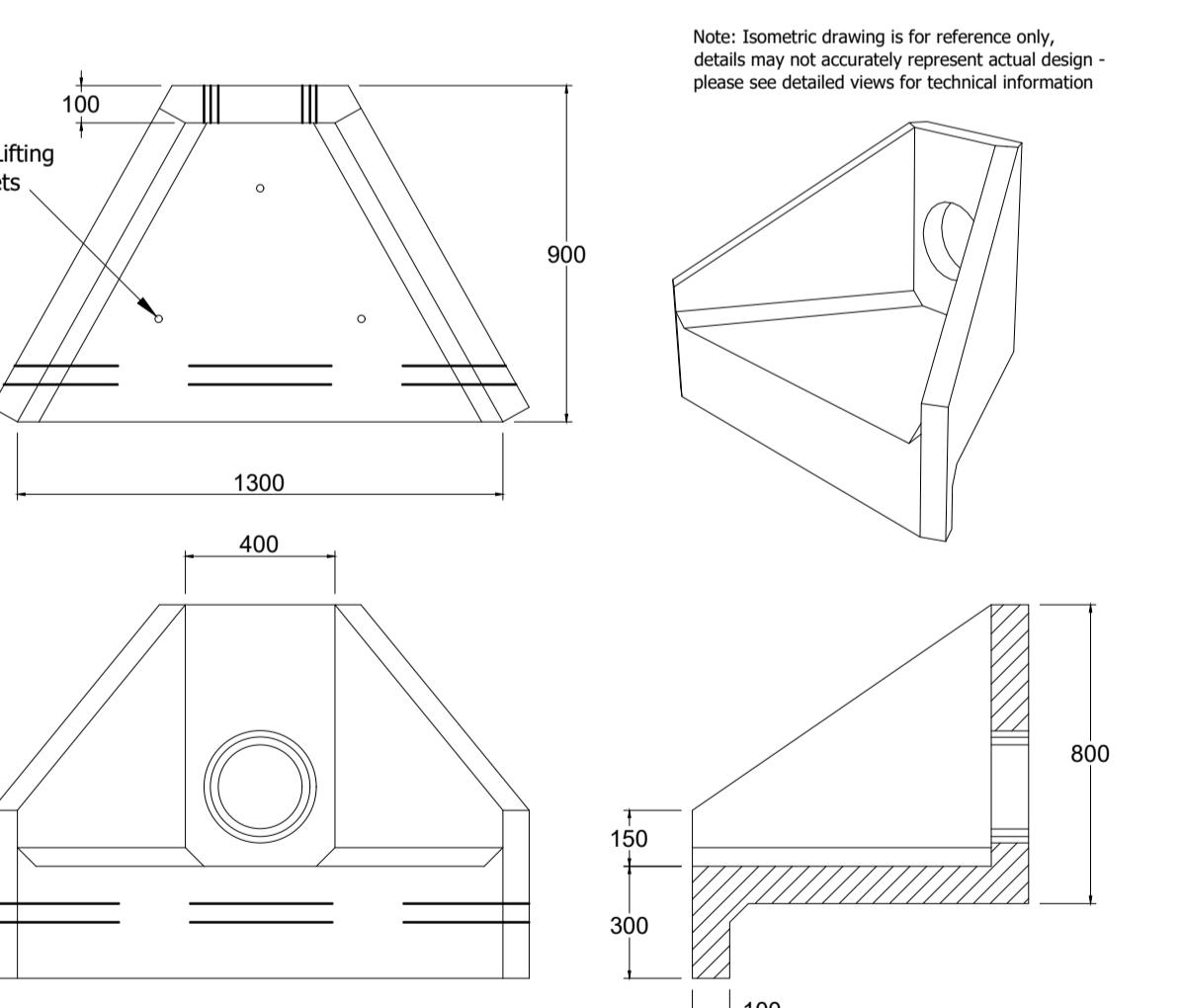
**Althorn H3C Headwall for Pipes up to 300Ø**

Scale 1:20

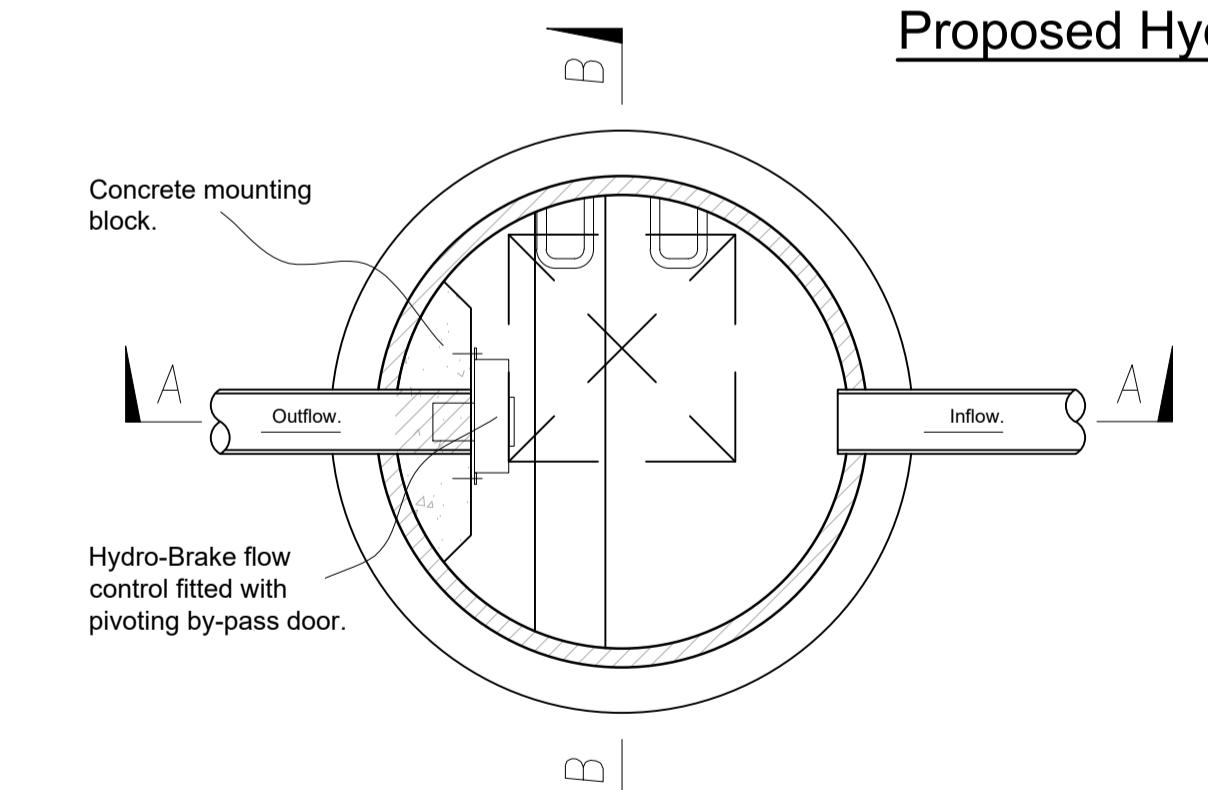
**Beany Block**

Scale 1:20

0.5m 1m 2m  
SCALE 1:20



**Section A-A.**



**Section B-B.**

**Proposed Hydro-Brake Manhole Details.**

B

A

B

A

B

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