

ALL PROPOSED DRAINAGE IS
CURRENTLY PRELIMINARY
SUBJECT TO DETAILED DRAINAGE
DESIGN BEING COMPLETED.

HYDROBRAKE FLOW CONTROL UNIT TO LIMIT DISCHARGE TO 5.0 L/s @ 1.2m DESIGN HEAD
103mm DIAMETER ORIFICE
REF: SHE-0103-0000-1000-5000

1500 INLET FROM TANK

FIRST JOINT POSITIONED AS CLOSE AS PRACTICAL TO MANHOLE, 600mm ROCKER PIPE

OUTLINE OF MANHOLE COVER ABOVE

STEPS AT 250mm VERTICAL CENTRES

1000 INLET FROM TANK

FIRST JOINT POSITIONED AS CLOSE AS PRACTICAL TO MANHOLE, 600mm ROCKER PIPE

1500 OUTLET TO DOME

FIRST JOINT POSITIONED AS CLOSE AS PRACTICAL TO MANHOLE, 600mm ROCKER PIPE

BENCHING FORMED WITH GEN 3 CONCRETE WITH A HIGH STRENGTH TOPPING MIN. 40mm THICK WITH A SMOOTH AND NEAT FINISH

SW02 VORTEX FLOW CONTROL CHAMBER

PLAN

COVER FRAME TO BE BEDDED ON CLASS M1 MORTAR

MANHOLE COVER VARIES. SIZE DETERMINED BY CATCHPIT DEPTH.

HEAVY DUTY PRECAST CONCRETE REDUCER SLAB WITH 600mm OPENING

675 MAX.

2 MINIMUM, 4 MAXIMUM COURSES CLASS B ENGINEERING BRICK ON 1:3 CEMENT/SAND MORTAR FLUSH POINTED ON INSIDE FACE. CLASS B ENGINEERING BRICKS SHALL NOT CONTAIN FROGS OR HOLES

250

STEPS AT 250mm VERTICAL CENTRES WHERE REQUIRED

VARIES

P.C. CONCRETE MANHOLE RINGS TO BS 5911 WITH 150mm CLASS C20 CONCRETE SURROUND

300mm MIN. SUMP BETWEEN LOWEST PIPE INVERT LEVEL AND BASE OF CATCHPIT

300

C20 CONCRETE BASE

THE BOTTOM CHAMBER SECTION TO BE BUILT INTO BASE CONCRETE MINIMUM 100mm

225mm TO CATCHPIT BASE

1 LAYER A193 MESH WITH 40mm COVER TO UNDERSIDE OF MANHOLE RINGS

TYPICAL CATCHPIT DETAIL

1200mm x 675mm B125 MANHOLE COVER

PULL HANDLE AND EYE BRACKET FOR STEEL OPERATING ROPE

C.L. 34,300mAO

HEAVY DUTY NONE ROCKING HINGED SINGLE TRIANGULAR SURFACE BOX WITH 100mm CLEAR OPENING TO ALLOW OPERATION OF THE PIVOTING BYPASS DOOR

HEAVY DUTY REINFORCED CONCRETE COVER SLAB TO BS EN 1917 BEDDED ON PC CHAMBER SECTION WITH MORTAR, PROPRIETARY BITUMEN OR RESIN MASTIC SEALANT

150 MIN. THICKNESS GEN 3 CONCRETE SURROUND TO CHAMBER

1500 DIAMETER P.C. CONCRETE MANHOLE RINGS TO BS 5911

1500 INLET FROM TANK

1000 INLET FROM ACO

1500 INLET TO CHW2

HYDROBRAKE FLOW CONTROL UNIT TO LIMIT DISCHARGE TO 5.0 L/s @ 1.2m DESIGN HEAD
103mm DIAMETER ORIFICE
REF: SHE-0103-5000-1000-5000

1500 OUTLET TO CHW2

T12 STARTER BARS 600mm LONG AT 200 c/c TO BOTH FACES OF WALL CAST INTO BASE SLAB TO TIE INTO WALL REINFORCING

300mm THICK C30 INSITU REINFORCED CONCRETE BASE SLAB FORMED IN SULPHATE RESISTANT R40 CONCRETE WITH TWO LAYERS OF A393 MESH IN BOTH TOP AND BOTTOM FACES. MIN. COVER 50mm ON 50mm concrete BLINDING

BENCHING FORMED WITH GEN 3 CONCRETE WITH A HIGH STRENGTH TOPPING MIN. 40mm THICK WITH A SMOOTH AND NEAT FINISH

75mm C7.5 BLINDING

FIRST JOINT POSITIONED AS CLOSE AS PRACTICAL TO MANHOLE WITH COMPRESSIBLE FILLER. 600mm ROCKER PIPE

SW02 VORTEX FLOW CONTROL CHAMBER SECTION

A-A

PULL HANDLE AND EYE BRACKET
FOR STEEL OPERATING ROPE

C.L. 34.300m AOD

HEAVY DUTY NONE RACKING HINGED
SINGLE TRIANGULAR SURFACE BOX WITH
100mm CLEAR OPENING TO ALLOW
OPERATION OF THE PIVOTING BYPASS DOOR

150mm GEN 3
CONCRETE SURROUND

HEAVY DUTY REINFORCED CONCRETE COVER
SLAB TO BS EN 1917 BEDDED ON PC CHAMBER
SECTION WITH MORTAR, PROPRIETARY
BITUMEN OR RESIN MASTIC SEALANT

P.C. CONCRETE
MANHOLE RINGS TO
BS 5911

HYDROBRAKE FLOW CONTROL UNIT TO LIMIT
DISCHARGE TO 5.0 L/s @ 1.2m DESIGN HEAD
103mm DIAMETER ORIFICE
REF: SHE-0103-5000-1000-5000

PIVOTING
BYPASS DOOR

T12 STARTER BARS 600mm LONG
AT 200 c/c TO BOTH FACES OF
WALL CAST INTO BASE SLAB TO TIE
INTO WALL REINFORCING

300mm THICK C30 INSITU REINFORCED CONCRETE BASE SLAB
FORMED IN SULPHATE RESISTANT RC40 CONCRETE WITH TWO
LAYERS OF A393 MESH IN BOTH TOP AND BOTTOM FACES. MIN.
COVER 50mm ON 50mm CONCRETE BLINDING

75mm C7.5 BLINDING

1000mm INLET
FROM ACO

I.L. 33.080m AOD

1500
755
895
360
550

**SW02 VORTEX FLOW CONTROL CHAMBER
SECTION B-B**

P01	27.01.2023	RIBA - STAGE 3					JJR	JRS	PB
REV	DATE	DESCRIPTION					BY	CHK	APP
DRAWING STATUS:									
PRELIMINARY									
CLIENT:									
NHS INTEGRATED HEALTH PROJECTS									
ARCHITECT:									
GILLING DOD									
PROJECT:									
THE CHRISTIE HOSPITAL TIF WARD									
TITLE:									
BELOW GROUND DRAINAGE FLOW CONTROL CHAMBERS & TYPICAL CATCHPIT DETAIL									
STATUS:	PROJECT NUMBER:	PROJECT	ORIGINATOR	VOLU/S	LEVEL	TYPE	ROLE	DRAWING No.:	REV:
S2	222-164	CHRCWW-AJP-V4			-V4	-00	DR	C - 0005	P01
SCALE @ A1: 1:20	DESIGNED: JJR	DRAWN: JJR	CHECKED: JRS		APPROVED: PB		DATE: JAN 2023		
 ajp consulting engineers est. 1978 %0151 227 1462 ✉info@ajpltd.co.uk 📍1 Dale Street, Liverpool, L2 2ET									