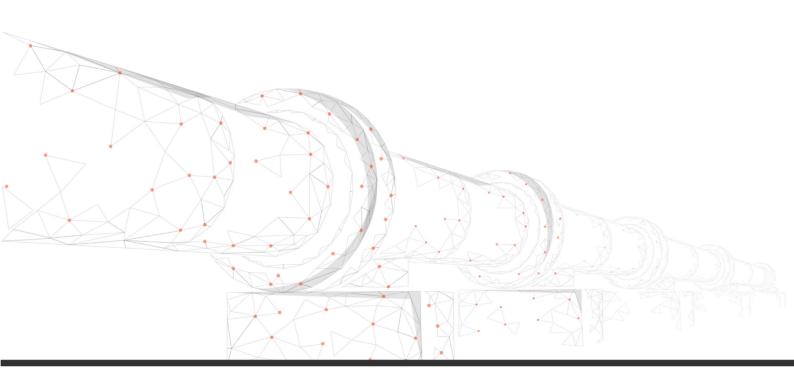
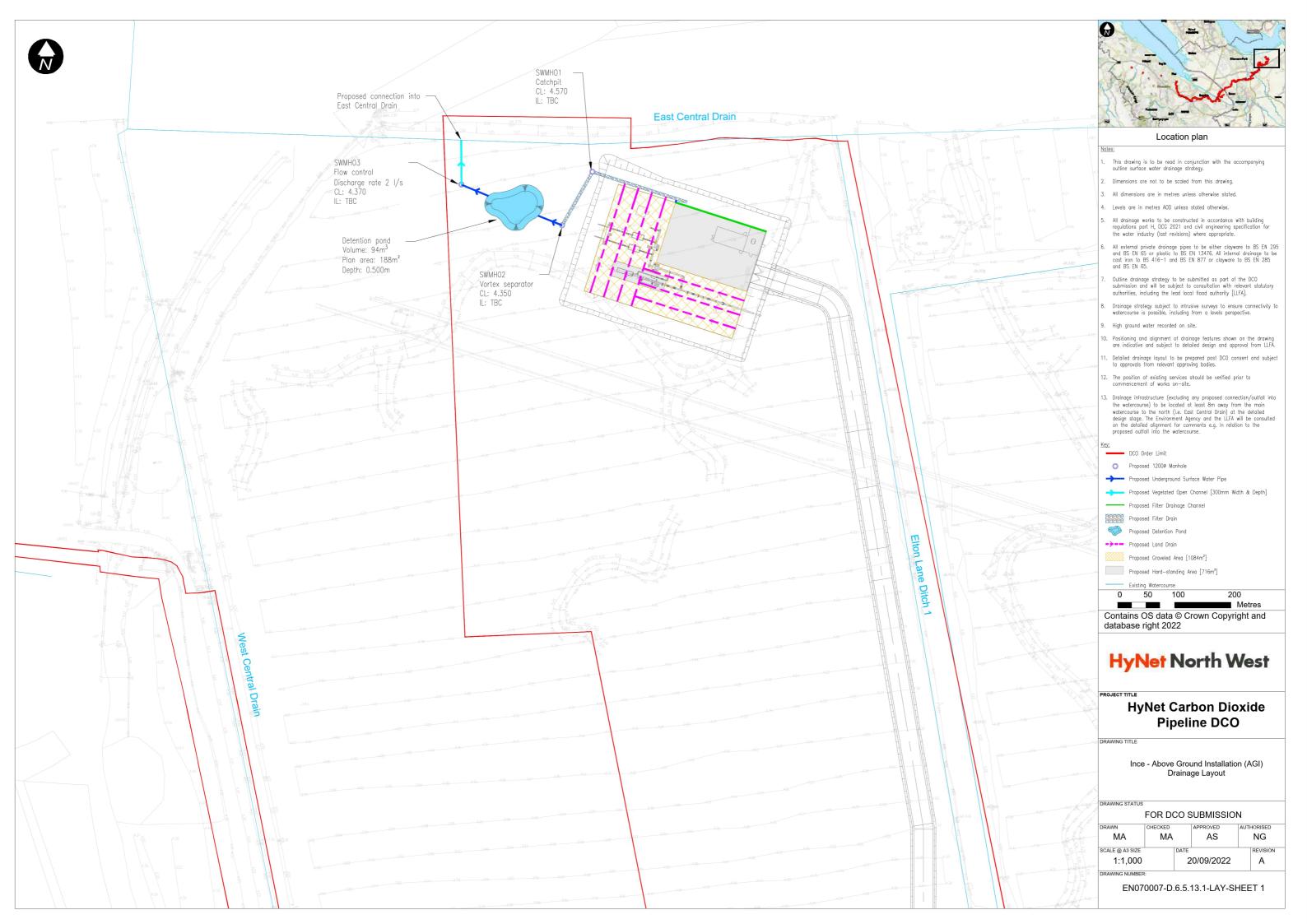
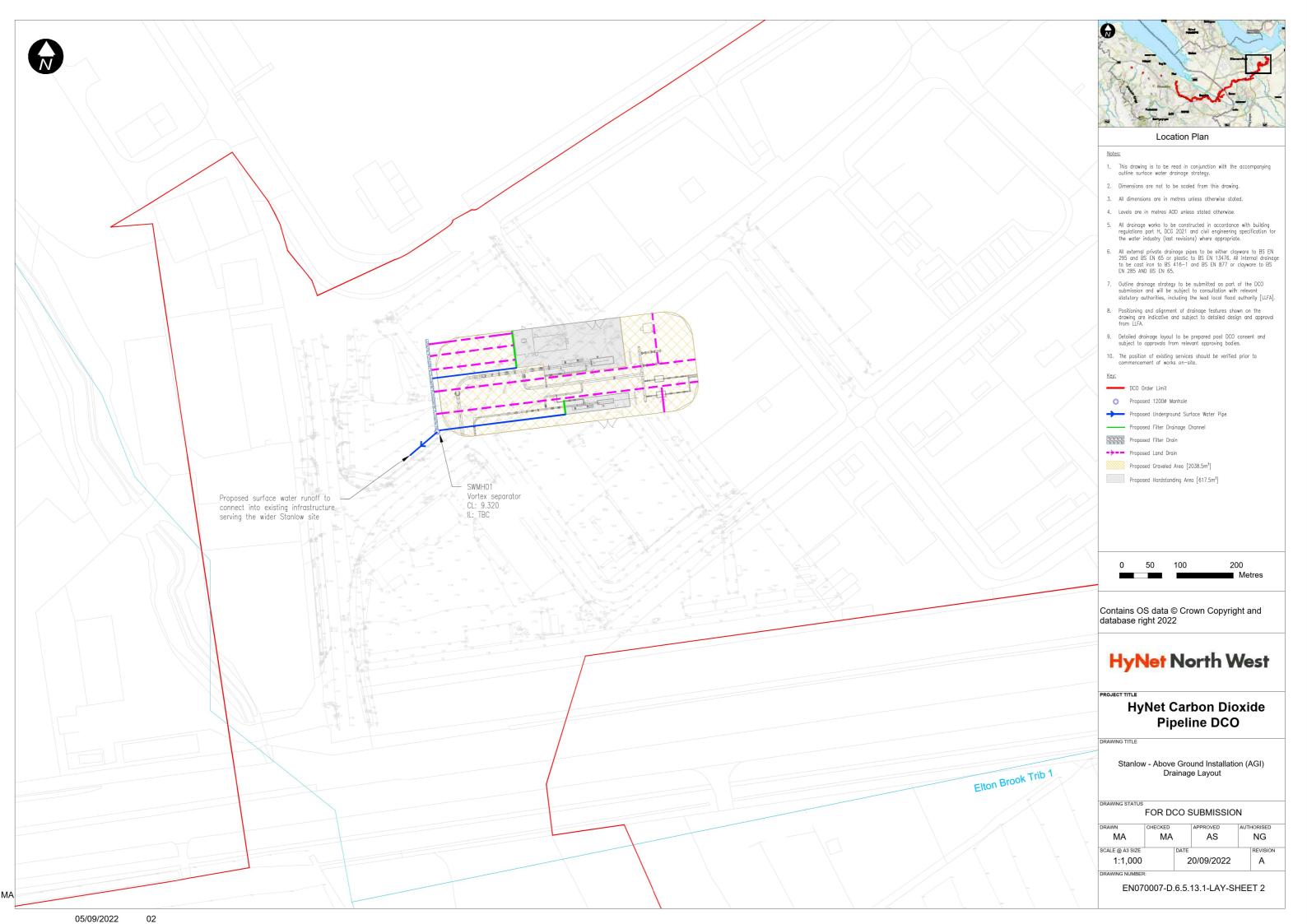
# **HyNet North West**

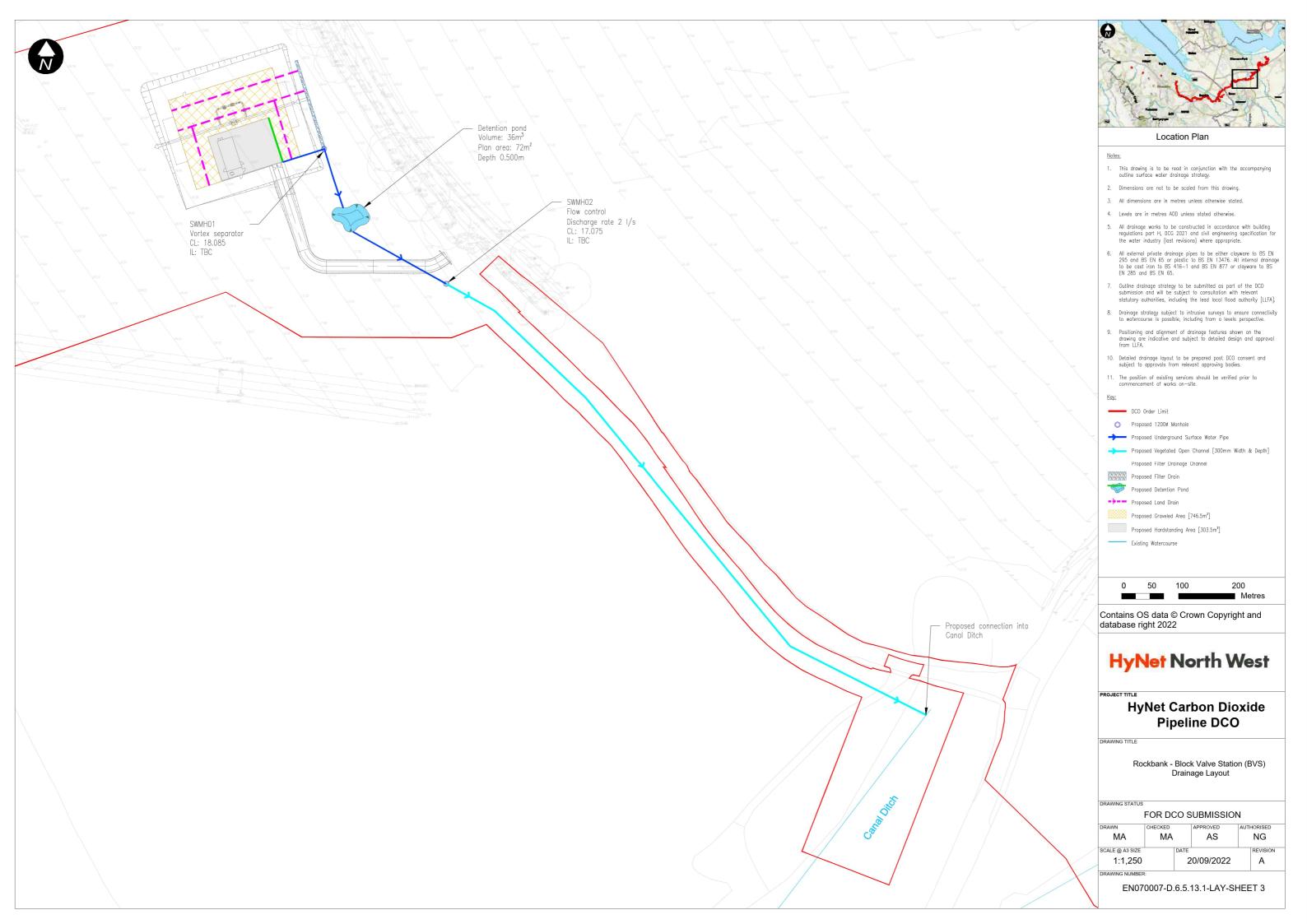
# **Annex B**

# PROPOSED CONCEPTUAL DRAINAGE LAYOUTS AND TYPICAL DRAINAGE CONSTRUCTION DETAILS Rev B



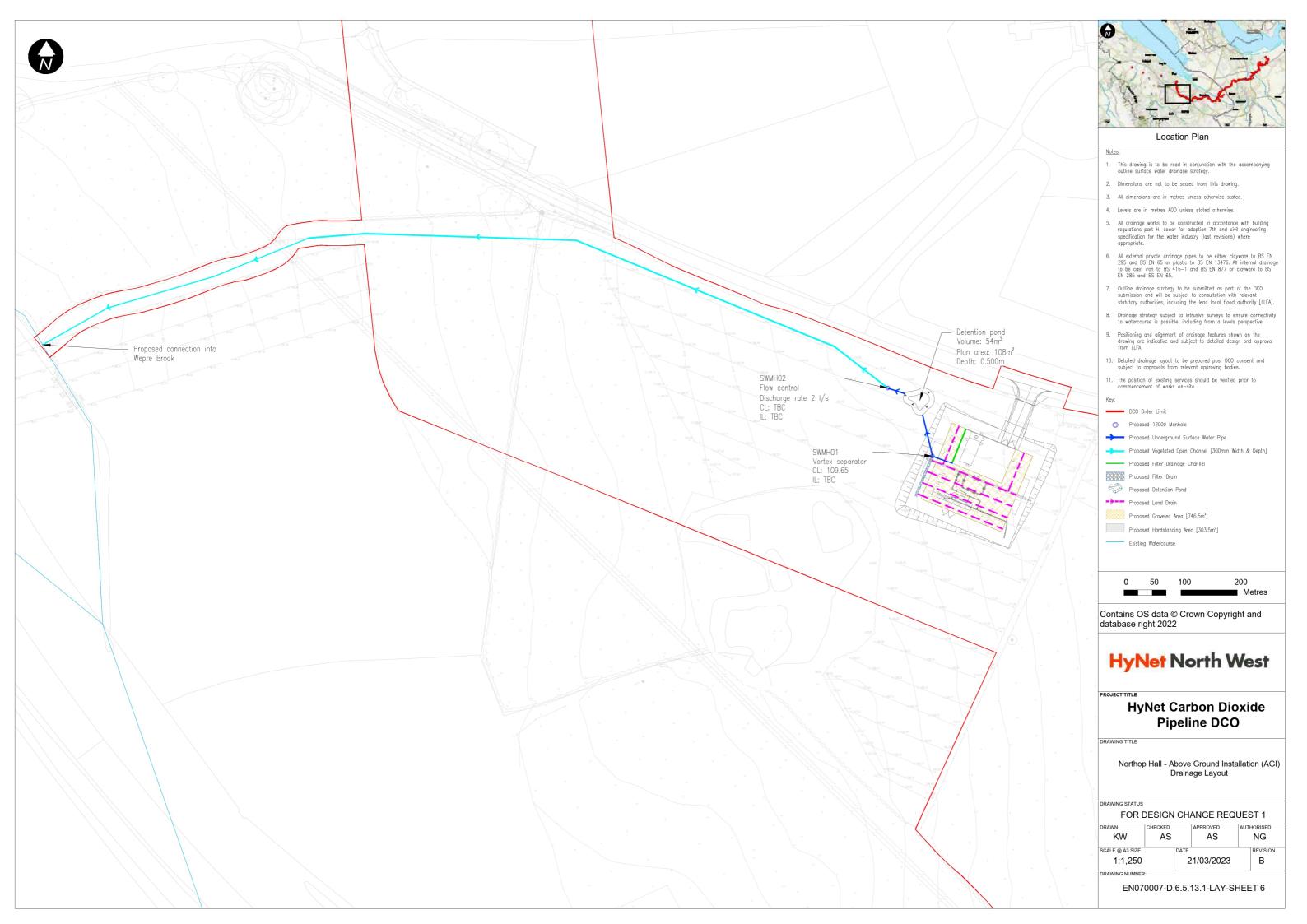






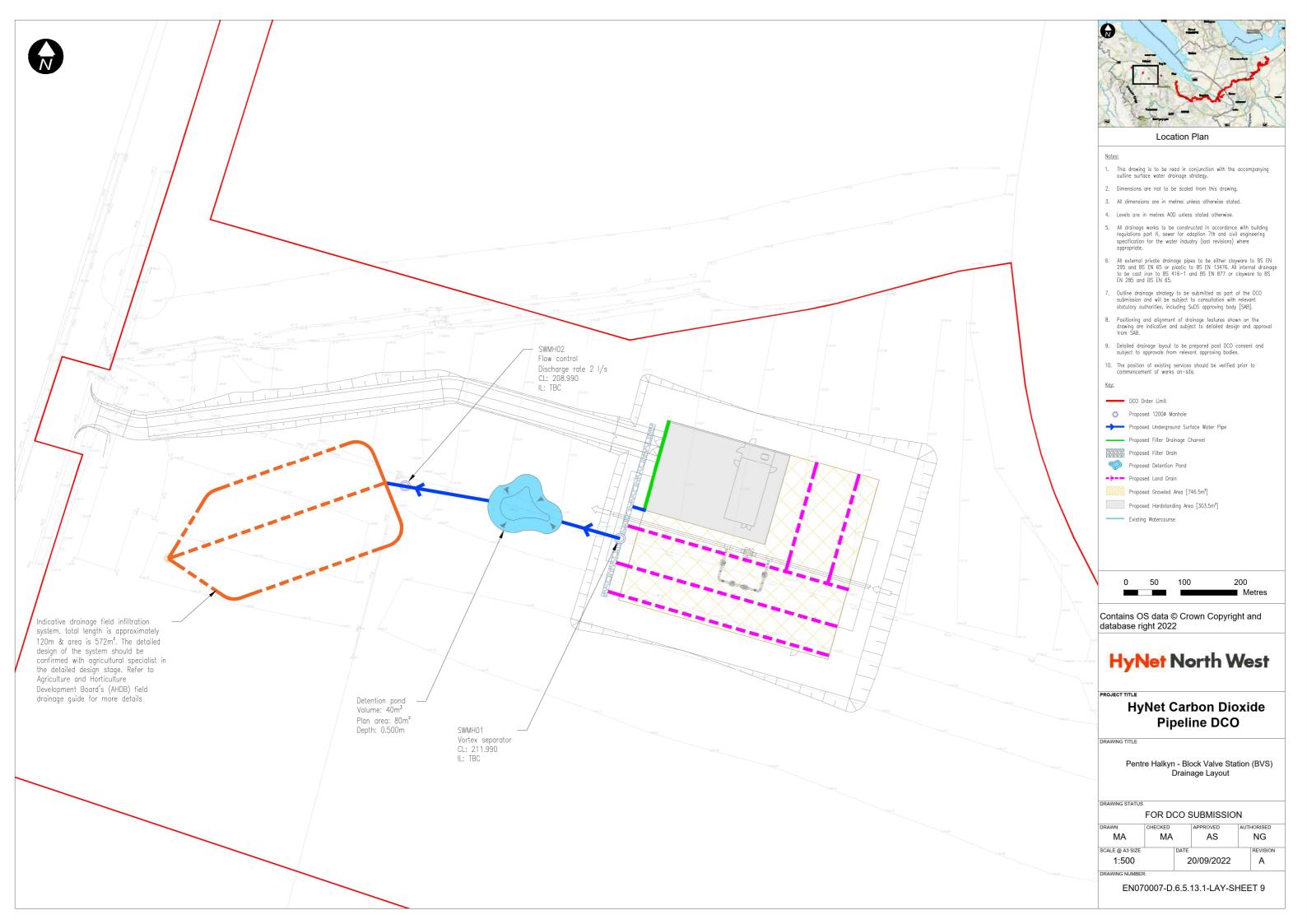


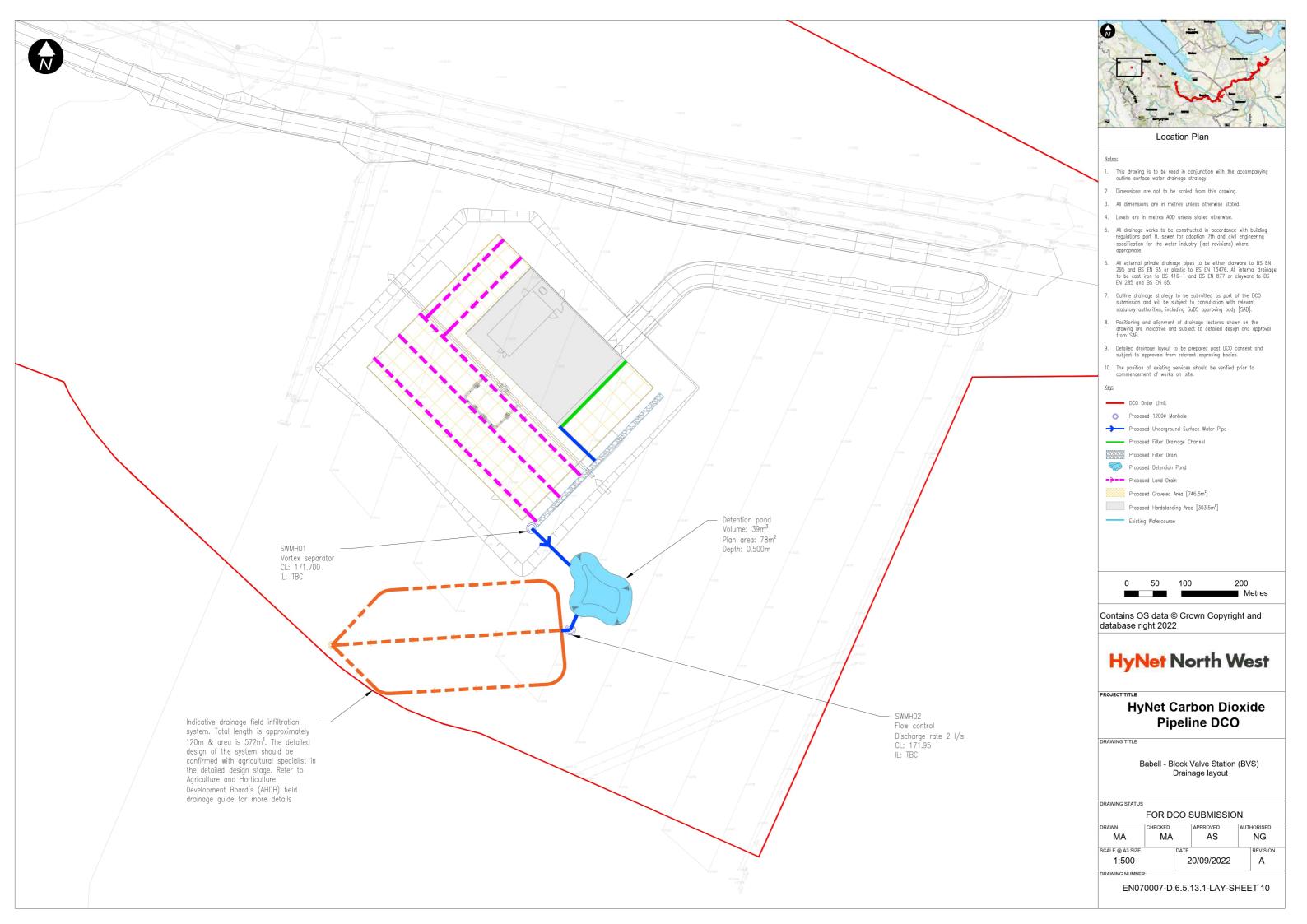


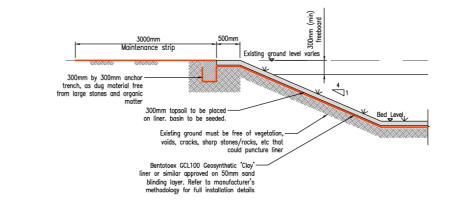






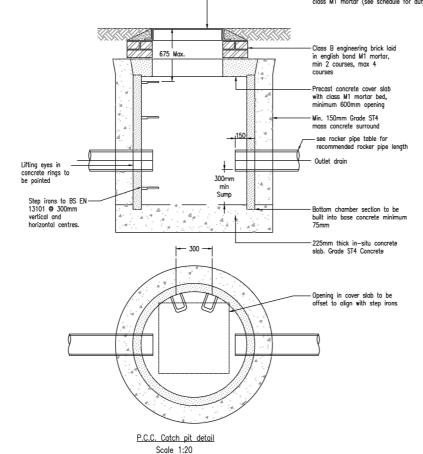






Detention basin scale 1:50

## -Cover & frame bedded & haunched with class M1 mortar (see schedule for duty)



600 mm x 600 mm clear opening

cover complying with BS EN 124 and BS 7903

Minimum clear access 600 mm

Precast concrete manhole sections and cover slab to be bedded with mortar, plastomeric or elastomeric seal conforming to BS EN 1917 and BS 5911-3 see clause E2.29

150 mm concrete surround

The bottom precast manhole ring to be built into base concrete minimum 75 mm

Distance between top of pipe

225 mm to underside of channel

See figure B.14 and clause E6.6.2 for rocker pipe details

Rocker Pipe Lengths

Nominal diameter (mm) Effective length (mm)

1000

1250

150-600

601-750 Over 750

and underside of precast section to be minimum 50 mm to maximum 300 mm

Chamber height (not less than 900 mm)

Mortar bedding and haunching to cover and frame to clause E6.7

Minimum 2 courses of class B

step rung from cover level

High—strength concrete topping to be brought up to a dense, smooth face, neatly shaped and finished to all branch connections (minimum thickness 20 mm)

Self-cleaning toe holes to be provided where channel

Joint to be as close as possible to face of machale topermit satisfactory joint and

Pipe joint with channel to be located minimum 100 mm inside face of manhole

Double step rungs in accordance with BS EN 13101 see clause E2.33 for double

using channel pipes

exceeds 600 mm wide

engineering bricks or precast 675 mm maximum to first

In-situ concrete to be GEN3 (designed to BRE special digest 1 concrete in aggressive ground) Clause B3.2.13 for PC ring diameter

Typical manhole detail - type 2 maximum depth from cover level

to soffit of pipe 3.0m

-81.2

Suitable backfill material.

Selected sidefill and surround. Class 8 lower trench fill table 6/1 SHW

Single size granular material. Table 5/3 SHW to BS 13242 coarse aggregate clause 4.3.2

GEN3 concrete bed and surround. DN = Nominal internal diameter of pipe. BC = Outside diameter of pipe.

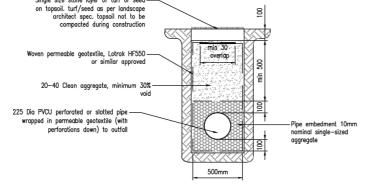
Difficusion		
Class	Machine Dug Uniform Soil	Rock or Mixed Soils
S	Note (i)	Note (ii)
Z	Note (ii)	Note (ii)

BC+600 MAX Granular bed and surround class 'S'

Pipe bedding details

(i) Y=BC/6, with min 100 under (f) 1-50/0, with min for druce barrels (50 for sleeve jointed) and min 50 under sockets, whichever is the greater, with max of 400.

(ii) Y=BC/4, with min 200 under barrels (150 for sleeve jointed) and min 150 under sockets, whichever is the greater, with a max of 400.



Single size stone layer or turf or seed-

Typical filter drain

scale 1:20

#### Notes:

- This drawing is to be read in conjunction with all relevant architects, services and engineers drawings together with relevant specifications.
- 2. Dimensions are not to be scaled from this drawing.
- 3. All dimensions are in millimeters unless otherwise stated.
- This drawing is to be read in conjunction with all relevant project documentation and drawings.



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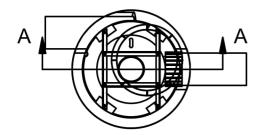
### **HyNet North West**

#### **HyNet Carbon Dioxide Pipeline DCO**

TYPICAL CONSTRUCTION DETAILS

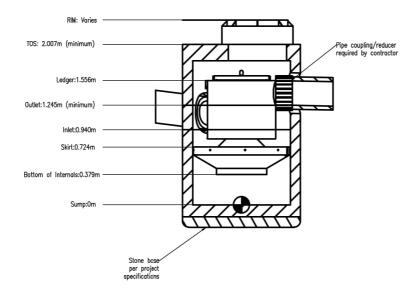
FOR DCO SUBMISSION							
DRAWN	CHECKED		APPROVED		AUTHORISED		
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SCALE @ A3 SIZE		DATE			REVISION		
NTS		20/09/2022			Α		

EN070007-D.6.5.13.1-DET-SHEET 1

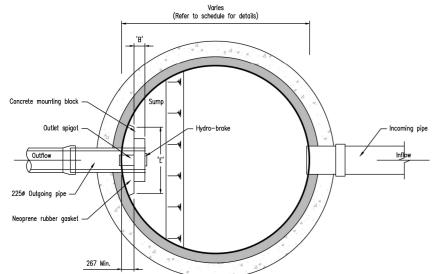




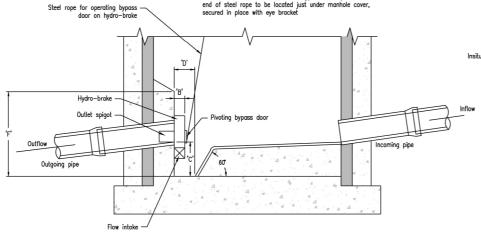
Hydro frame and cover (included) grade rings by others as required

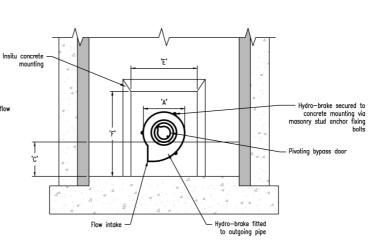


Section a-a



Plan on flow control chamber





Section through Flow control chamber elevation on hydro-brake

Hydro-brake Dimension Table- (All dimmensions in mm)										
Chamber reference	Hydro international hydro—brake reference	'A' (Hydro-brake width)	'B' (Hydro-brake depth)	'C' (Sump depth)	'p' (Sump width)	'E' (Mounting block width)	'F' (Mounting block height)	Outgoing pipe size	Outgoing pipe invert level	Chamber invert level
SMH	SHE-0143-1320-2480-1320	865	150	480	200	1070	1215	Refer to layout	Refer to layout	Refer to layout

Hydro-brake to be installed in strict accordance with manufacturers details & specifications

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## **HyNet North West**

PROJECT TITLE

## HyNet Carbon Dioxide Pipeline DCO

DRAWING TITL

Typical Construction Details Sheet 2 Of 2

DRAWING STATUS

FOR DCO SUBMISSION							
DRAWN CHECKED		APPROVED		AUTHORISED			
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