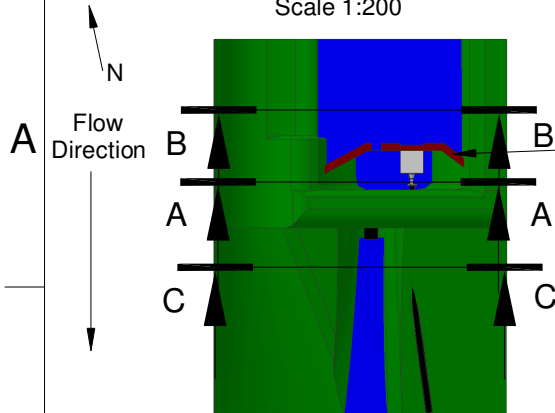


Dimbath Intake 1 : Front Elevation and Calculations

Plan view
Scale 1:200



Flow Direction

A

B

C

D

Hands-off-flow

Calculation of flow over rectangular broad notch in weir:

Discharge coefficient, $C_d = 1.6$

Notch depth, $h = 0.024\text{m}$

Notch width, $w = 0.257\text{m}$

$$Q = C_d * w * h^{1.5}$$

$$= 1.6 * 0.257 * 0.024^{1.5}$$

$$= 0.0015 \text{ m}^3 / \text{sec}$$

$$= 1.5 \text{ lps}$$

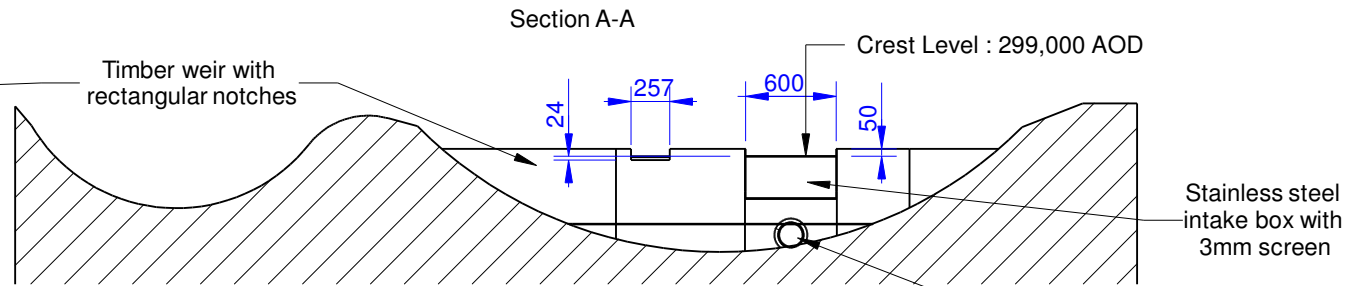
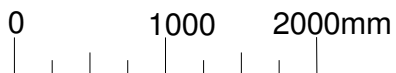
Take

Total Crest Width : $600\text{mm} + 257\text{mm} = 857\text{mm}$

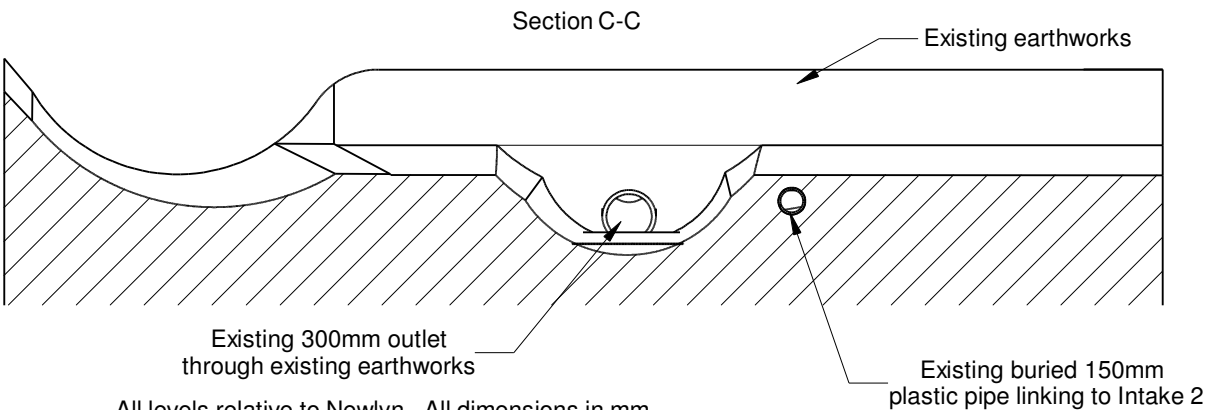
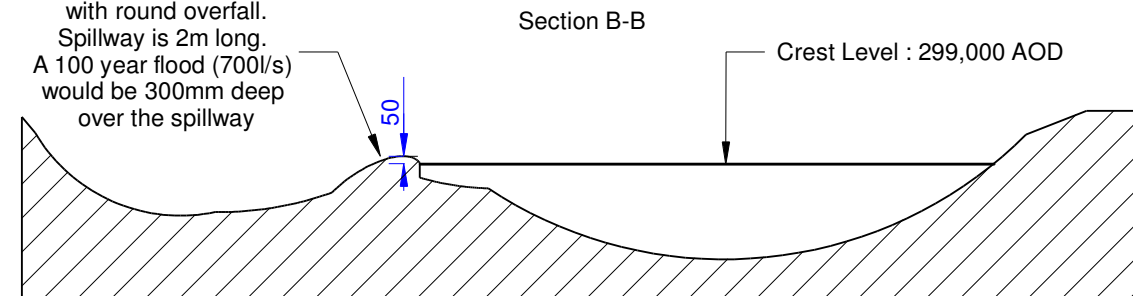
Screen Width : 600mm

Take : $600/857 = 70\%$

Notch overall depth provides at least 46mm flow depth over crest required for design flow through screen



Earth and rock spillway with round overfall. Spillway is 2m long. A 100 year flood (700l/s) would be 300mm deep over the spillway



Client : Dimbath
Address :

Drawn By : MJP

Date : 24/10/21
Scale : 1 : 50 @ A4
Drawing No : 21102401
Version : 1

Revision Details

Greeneearth
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