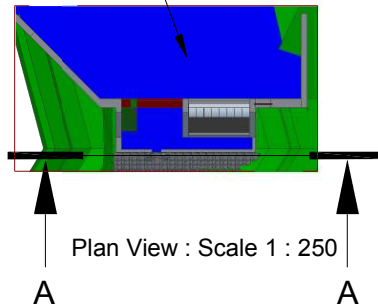


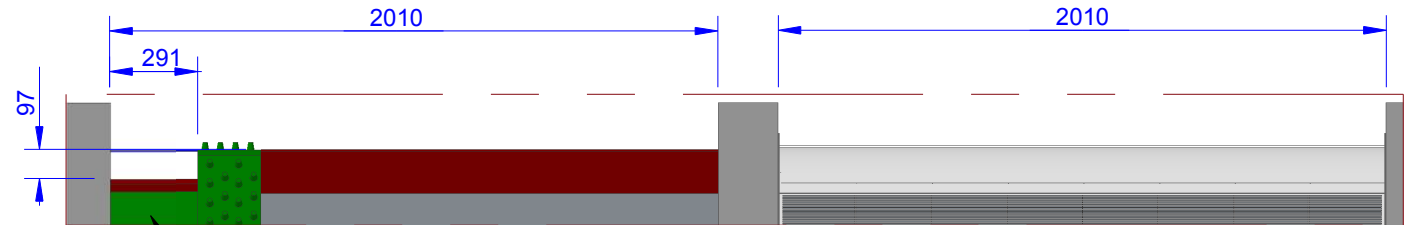
# Gerallt Griffith Intake Front Elevation, Levels and Take Calculations

Impounded area  
to be backfilled  
with clean material  
prior to  
commissioning



Plan View : Scale 1 : 250

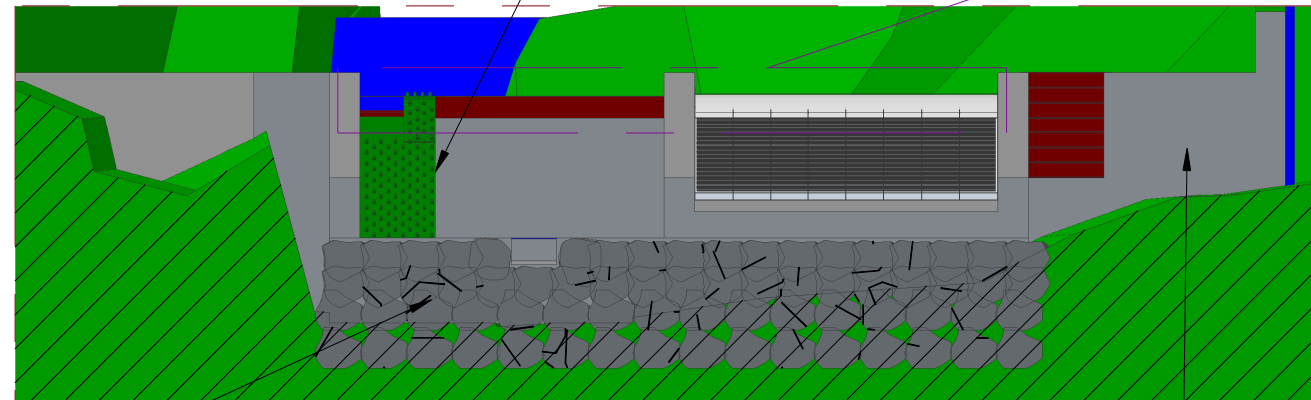
Detail A



No eel substrate immediately  
below notch to allow nappe to  
be aerated

Strip of polycarbonate boted to side of ramp  
to ensure water retained over full length

Section A-A  
Scale 1 : 50



Rocky Ramp downstream of fishpool

Areas downstream of the wing walls to be infilled with boulders to reduce visual impact

## Take

Total Crest Width : 2010mm + 2010mm = 4020mm  
Screen Width : 2010mm  
Take : 2010/4020 = 50%

## Hands-off-flow

Calculation of flow over rectangular broad notch in stop log:

Discharge coefficient,  $C_d = 1.6$   
Notch depth,  $h = 0.097\text{m}$   
Notch width,  $w = 0.291\text{m}$

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

$$= 1.6 * 0.291 * 0.097^{1.5}$$

$$= 0.01407 \text{ m}^3 / \text{sec}$$

$$= 14.07 \text{ lps}$$



All levels relative to Newlyn. All dimensions in mm.

Client : Gerallt Griffith  
Address : Doluwchadda, Llanfachreth  
Dolgellau, Gwynedd, LL40 2EH  
Drawn By : MJP

Date : 08/10/18  
Scale : 1 : 25 @ A4  
Drawing No : 18100801  
Version : 2

Revision Details  
v2 : HOF notch dimension  
corrected in Detail A  
Impoundment updated  
in plan view

Greenearth  
Hydro

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