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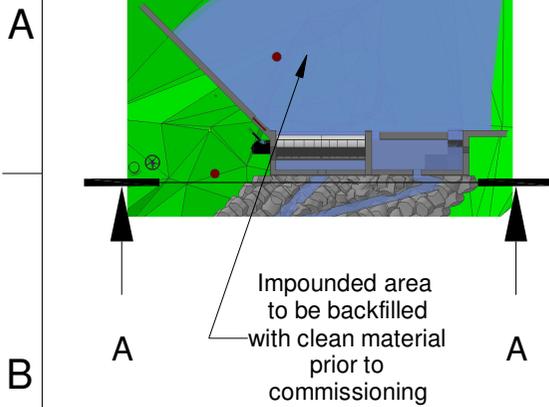
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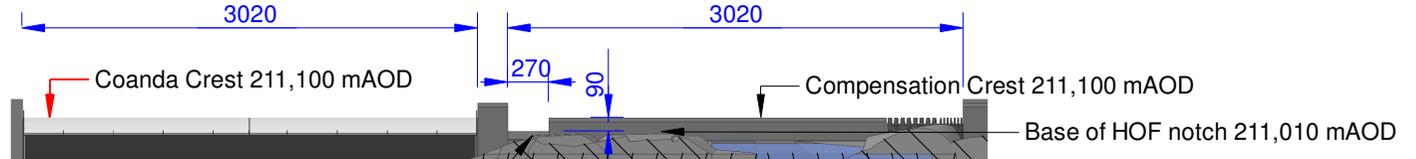
Dylan Jones Intake Front Elevation, Levels and Take Calculations

Point	Level
Top Peg A	211,000
Top Peg B	212,660
Crest	211,100
Base of Screen	210,650
Reference X1	215,354
Reference X2	213,755

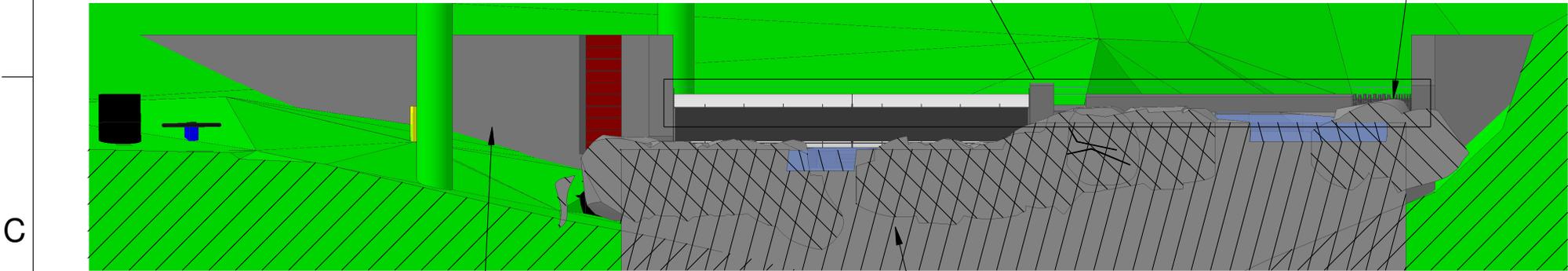
Plan View
Scale 1 : 250



Detail A



Section A-A



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

Mortared Rocky Ramp downstream of fishpools

Take

Total Crest Width : 3020mm + 3020mm = 6040mm
 Screen Width : 3020mm
 Take : 3020/6040 = 50%

Note on Hands-off-flow

No water will be abstracted until the watercourse's flow exceeds 13.0l/s. Both the HoF notch (11.5l/s) and the eel pass notch (2.5l/s) have to be satisfied before water flows over the coanda's crest

Hands-off-flow

Calculation of flow over rectangular broad notch in stop log:

Discharge coefficient, Cd = 1.6
 Notch depth, h = 0.090m
 Notch width, w = 0.270m

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

$$= 1.6 * 0.270 * 0.090^{1.5}$$

$$= 0.01166 \text{ m}^3 / \text{sec}$$

$$= 11.7 \text{ lps}$$



All levels relative to Newlyn. All dimensions in mm.

Client : Dylan Jones
 Address : Ty Mawr, Mallwyd
 Machynlleth, SY20 9HS
 Drawn By : MJP

Date : 30/12/22
 Scale : 1 : 50 @ A4
 Drawing No : 22123001
 Version : 3

Revision Details
 v2 : Fish and eel passage and HoF notch revised
 v3 : Fish passage gradient reduced



Greenearth Hydro Limited
 Siop Newydd, Rhiw, Pwllheli, LL53 8AE
 Tel: 07980 670046 www.greenearthhydro.co.uk
 Company Registration Number 7417466
 MCS Hydro Transition Installer 123

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