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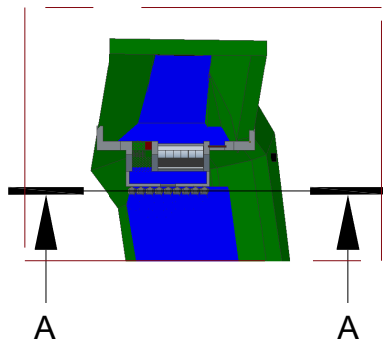
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# Mark Sealy Intake 2

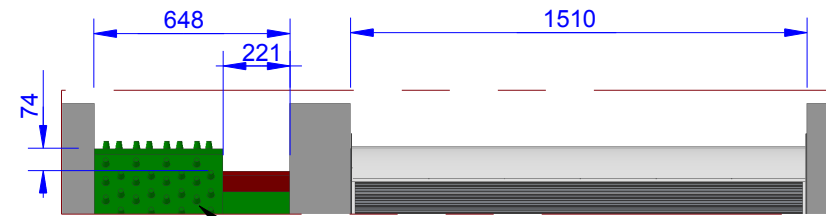
## Front Elevation, Levels and Take Calculations

Plan View : Scale 1 : 250



Point	Level
Top Peg B2	148,939
Crest	148,387
Upstream Water Level in the existing culvert	149,169
Downstream Water Level	147,734

Detail A



A

A

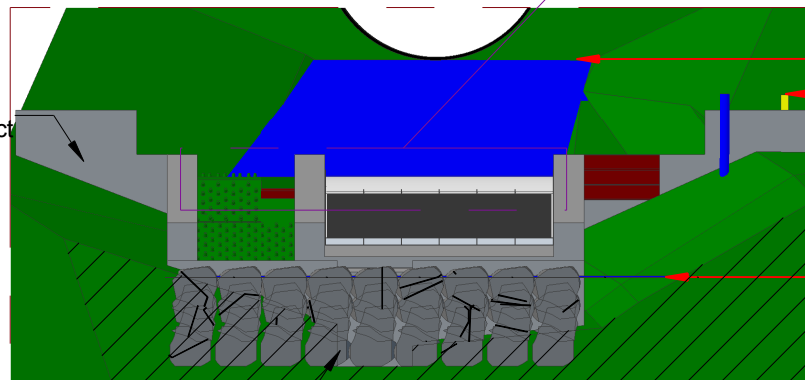
B

B

Section A-A

Scale 1 : 50

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



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

Upstream Water Level in the existing culvert will not be affected

Downstream Water Level (Unchanged)

Rocky Ramp downstream of fish pool

### Take

Total Crest Width : 1510mm + 648mm = 2158mm  
 Screen Width : 1510mm  
 Take : 1510/2158 = 70%

### Hands-off-flow

Calculation of flow over rectangular broad notch in stop log:

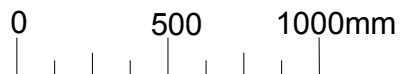
Discharge coefficient, Cd = 1.6  
 Notch depth, h = 0.074m  
 Notch width, w = 0.221m

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

$$= 1.6 * 0.221 * 0.074^{1.5}$$

$$= 0.00712 \text{ m}^3 / \text{sec}$$

$$= 7.12 \text{ lps}$$



All levels relative to Newlyn. All dimensions in mm.

D

D

Client : Mark Sealy

Address : SY20 9DT

Drawn By : MJP

Date : 20/09/18

Scale : 1 : 25 @ A4

Drawing No : 18092001

Version : 1

Revision Details



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Company Registration Number 7417466

MCS Hydro Transition Installer 123

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