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PRELIMINARY DRAWING FOR
CONSENTING PURPOSES - NOT
FOR CONSTRUCTION

Project:

Plas Farm

Client:

Richard Bowen

Drawing Title:

Intake

File Name:

PF-DWG-Intake-C-220524-ARC

Scale:

1:30 @ A3

Revision:

C

Sheet:

1 OF 1

Drawn by:

ARC

Date:

22/05/2024

Taken from DS Mastermap 1:1250
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NOTES:

LAND OWNERSHIP
All land for development is owned by the
applicant.

CONSTRUCTION NOTES
The penstock is a 200mm HDPE (polyethylene)
pipe buried along its length (approx. 600m
long).

For access, burial and management of
excavated soils etc., a minimum of 3m
easement is required along the route of
the penstock pipe.

TOLERANCES
The final route of the pipeline may vary
marginally as site conditions dictate.

Revisions

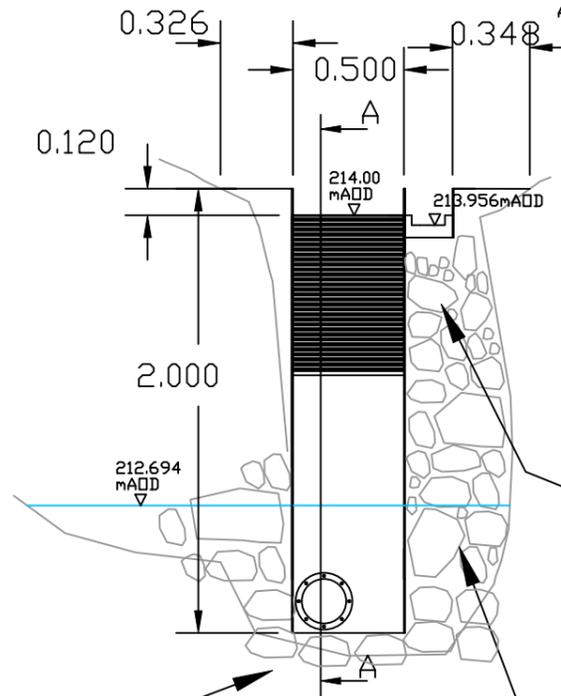
Rev	Description	Approved	Issued
A	Original	ARC	21/02/24
B	HOE updated	ARC	19/03/24
C	HOE notch width updated and illustration updated to show structure in centre of channel	ARC	22/05/24

NOTES:

The intake structure has been designed to limit on site construction by assembling all possible structures off site.

The Intake screen and tank will be constructed as a single box fabrication.

All dimensions in meters



HoF will be faced with mortared stone to both lower visual impact but also direct the flow of water into the plunge pool. To be a gentle slope.

Stone and mortar will be used to raise the bed level to produce a foundation around the intake structure.

Stone and mortar cladding will help reduce visual impact and protect the intake structure in high flows.



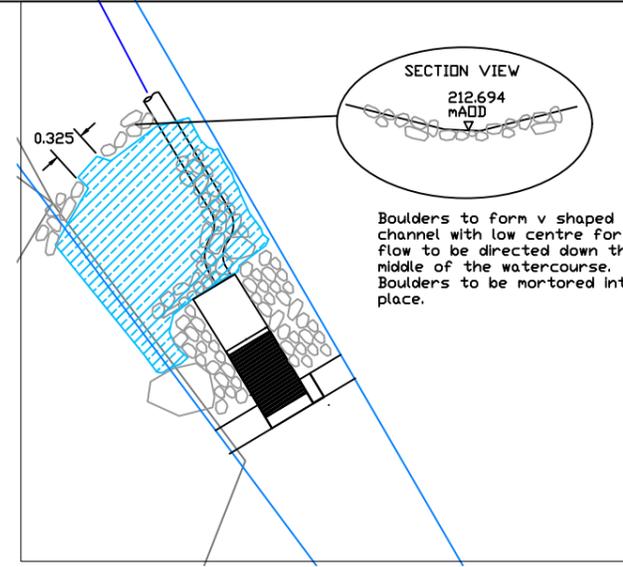
A half height 700mm wide and 1.3mm aperture coanda screen will be used.

200mm Penstock pipe will lead away from the intake tank along the river bank. The pipe will be faced with stone and mortar to both protect from heavy flows and lower visual impact. Stone and mortar will be installed to create a plunge pool (min depth of plunge pool to be 300mm)

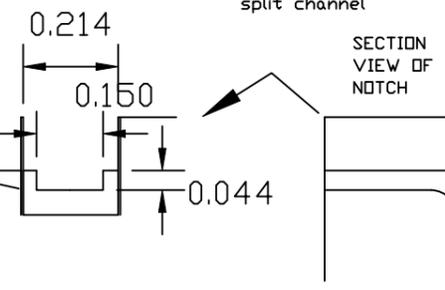
Intake structure is both screen and settling tank, a head level sensor is housed within the settling tank

Any space between the between the intake structure and the waterfall wall will be back filled with washed stones

Penstock pipe will lead away from the intake tank along the river bank. The pipe will be faced with stone and mortar to both protect from heavy flows and lower visual impact.



HoF will be constructed in concrete as part of the wingwall. A open rectangular notch will allow a flow of 2.3lps (Q95) to always pass through the derogated reach. (150mm wide by 44mm deep notch) 214mm wide flow split channel



Section A-A