ACE
Aquatic Control Engineering



Elton Tang Flood Defence

Client: AE Yates
Location: Ellesmere Port, Chester

Situation

Working with AE Yates, the project at Elton Tang required a tailored flood defence solution that could also support environmental performance. The client specifically requested a stainless steel flap valve and needed a setup that would facilitate the safe passage of fish and eels — in line with regulatory requirements and best practice guidance.

The Project

ACE designed and supplied a bespoke eel damper mechanism integrated with a stainless steel flap valve. The adjustable spring system allows the closing point of the flap to be fine-tuned on site by the client, creating a controlled closure that permits a brief window for aquatic species to pass safely.

In addition, ACE delivered an off-seating penstock to serve as a secondary flood defence. This backup measure ensures that if the flap valve does not seal due to debris or obstruction, the penstock can provide a reliable barrier against water ingress.

Summary

The flap valve solution included a unique eel damper with adjustable springs, allowing precise control of the door's closing force to create safe migration windows for fish and eels.

By using stainless steel construction throughout, ACE delivered a durable, corrosion-resistant system that meets the client's longevity and performance expectations.

An additional off-seating penstock was installed to provide a second line of defence, ensuring the site remains protected even in scenarios where the flap valve is obstructed.

The completed solution meets both operational and environmental priorities, offering a dependable defence system that aligns with ecological and regulatory goals.





ACE
Aquatic Control Engineering

Acclaim Accreditation · Achilles UVDB AUDITED · Constructionline Gold Member

Get in Touch

T: 01777 249080
E: info@aquaticcontrol.co.uk
W: aquaticcontrol.co.uk