

Protection Measures for Ecological Sensitivities of Graiguenamanagh Tinnahinch

Appropriate design and mechanisms

Ecological factors have influenced the flow control mechanism. A Hydro-Brake is a sustainable, low-maintenance, no power solution to alleviate flooding.

Hydro-Brakes are fish-friendly minimising the impact of the fish population (including protected species of the River Barrow and Nore SAC) as they migrate through the watercourse as water velocities are lower.

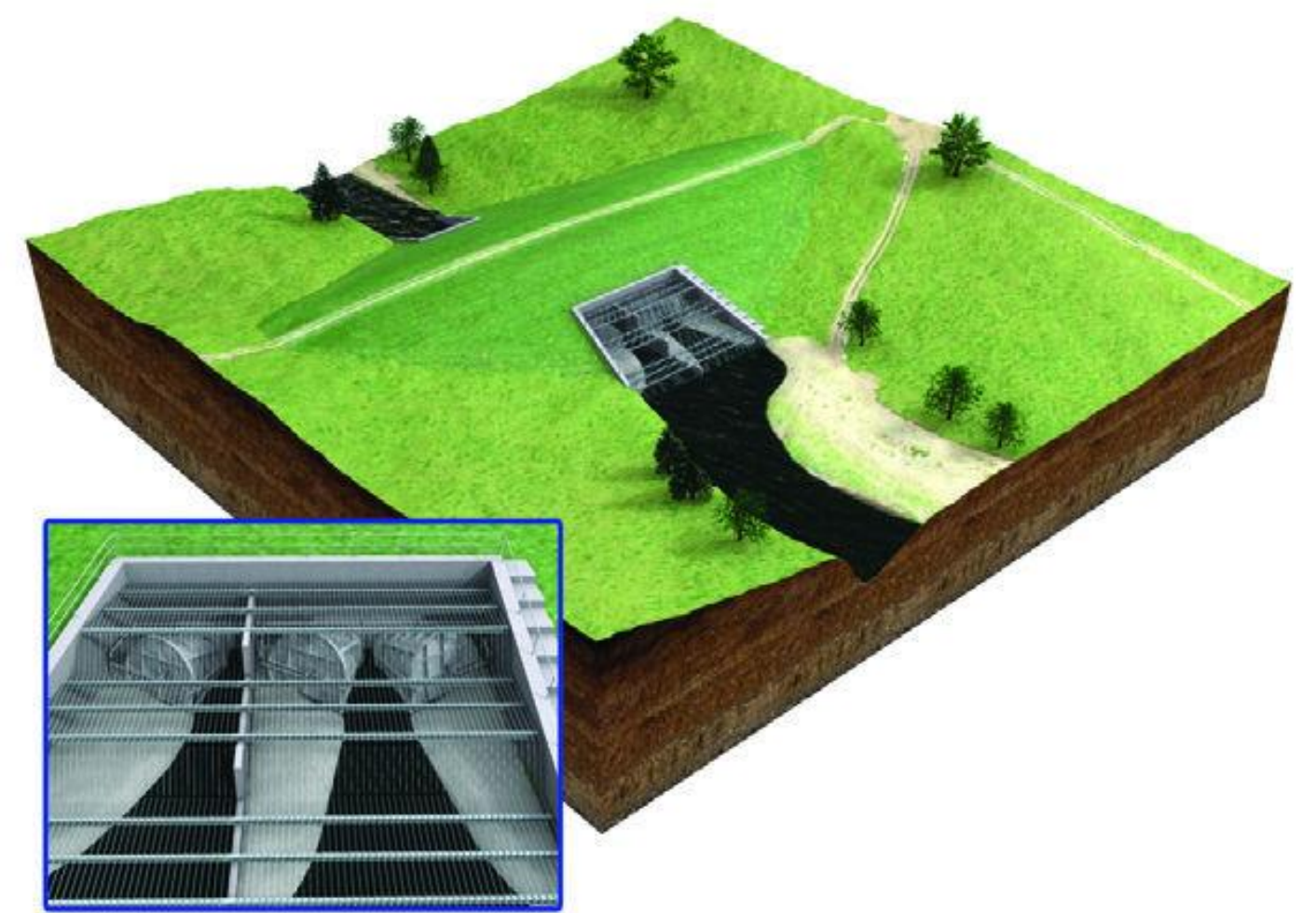
Another benefit of the Hydro-Brake Flood is the ability to adapt for climate change variations providing future-proofing.



Example of storage area with flow control (River Feagle, Clonakilty)



Hydro-Brake Flood flow control for flood prevention



Mock-up of Hydro-Brake Flood flow control for flood prevention) which allows constant passage of fish through the watercourse

Biodiversity Enhancement

To replace the trees/vegetation to be removed, planting of native species will take place throughout the scheme area. This planting will be largely concentrated in the upstream storage area as indicated in this drawing (right). This will provide habitats for birds and bats. Other standalone vegetation will also provide ecological and landscape value as seen in the below photomontage.

LEGEND	
	UPGRADE EXISTING WALL
	PROPOSED FLOOD DEFENCE WALL
	PROPOSED FLOOD DEFENCE WALL WITH GLASS PANELS
	PROPOSED FLOOD GATES
	PROPOSED SLIDING FLOOD GATES WITH GLASS PANELS
	PROPOSED FLOOD DEFENCE RAMP, EMBANKMENT & RAISED GROUND
	EXISTING VEGETATION RETAINED - TREES & HEDGEROW
	EXISTING VEGETATION TO BE REMOVED
	PROPOSED TREE PLANTING
	PROPOSED WOODLAND PLANTING
	PROPOSED LOW WOODLAND EDGE PLANTING
	PROPOSED HEDGE PLANTING
	PROPOSED SHRUB PLANTING
	PROPOSED RIPARIAN PLANTING - WOODLAND
	PROPOSED RIPARIAN PLANTING - LOW
	PROPOSED WILDFLOWER PLANTING
	PROPOSED AMENITY GRASS
	EXISTING ROAD
	EXISTING FOOTPATH
	PROPOSED ASPHALT SURFACE (BUFF COLOUR)
	PROPOSED RESIN BOUND GRAVEL (BUFF COLOUR) AREA FOR SEATING, PLANTING...
	PROPOSED GRANITE PAVING TO FOOTPATH
	PROPOSED GRANITE SETTS TO TRANSITIONAL MATERIAL
	PROPOSED GRANITE (FLUSH) KERB
	PROPOSED INFORMAL FOOTPATH - GRAVEL OR BARKMULCH
	PROPOSED SURFACE MARKING
	PROPOSED TACTILE (BLISTER) PAVING - CONCRETE
	PROPOSED TACTILE (CORDUROY) PAVING - CONCRETE
	PROPOSED SEATING
	PROPOSED GUARDRAIL
	PROPOSED REMOVABLE BOLLARDS
	PROPOSED WHEEL STOP

