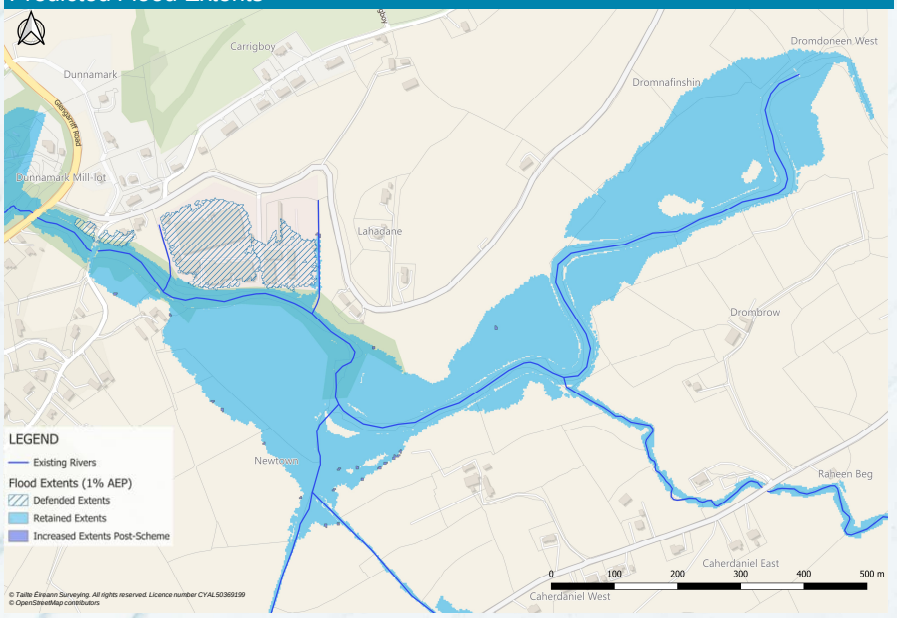
BANTRY FLOOD RELIEF SCHEME

1 Donemark & Lahadane

Predicted Flood Extents



Predicted flood extents for 1% AEP

View from Old Donemark Bridge looking north

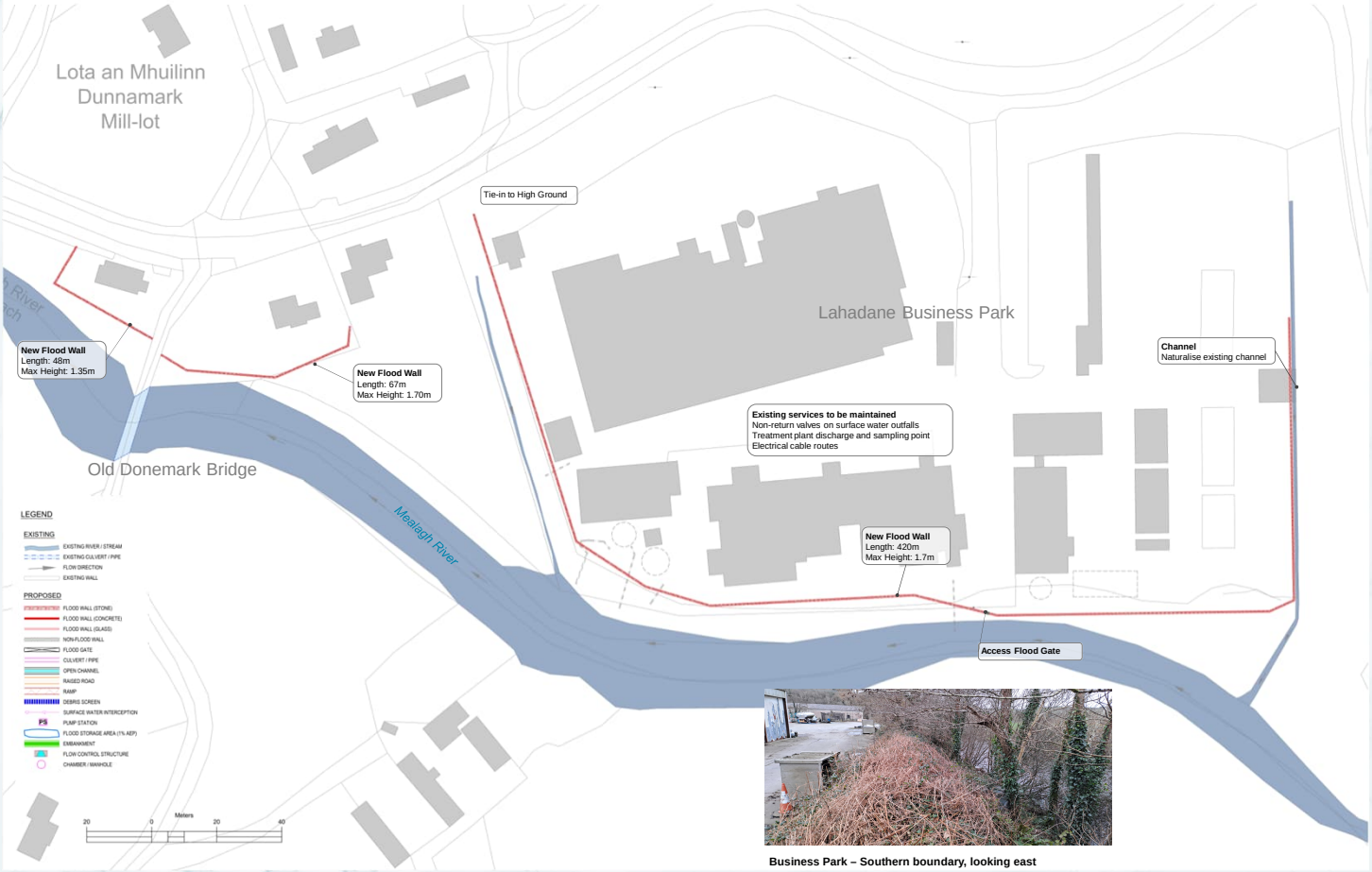
Proposal

- New flood walls to protect 2 residential properties (approx. height 1.2m).
- New flood walls to protect Lahadane Business Park (approx. height near riverbank 1.7m and running into high ground to the north).

Constraints

- Biodiversity – Impact on riverine vegetation and habitats.
- Biodiversity – Opportunity to naturalise channel along eastern boundary of business park.
- Property – Existing outfalls and services from business park to be maintained/diverted.
- Construction – Confined working space at boundary of business park. Localised demolition & rebuild may be required.

Proposed Measure

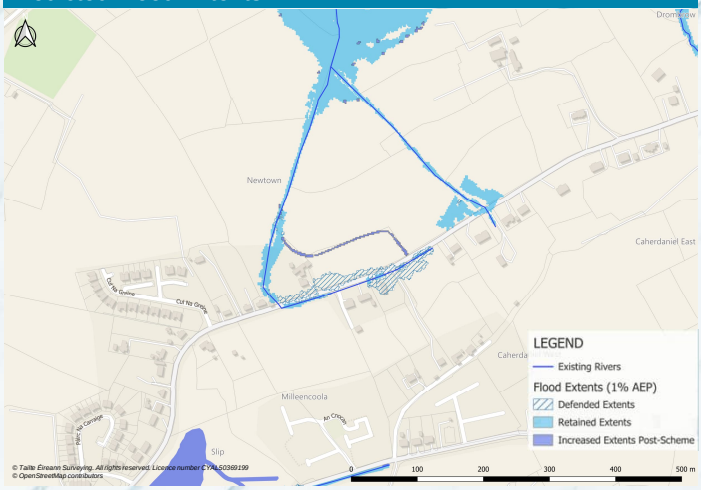


Business Park – Southern boundary, looking east

BANTRY FLOOD RELIEF SCHEME

2 Caherdaniel

Predicted Flood Extents

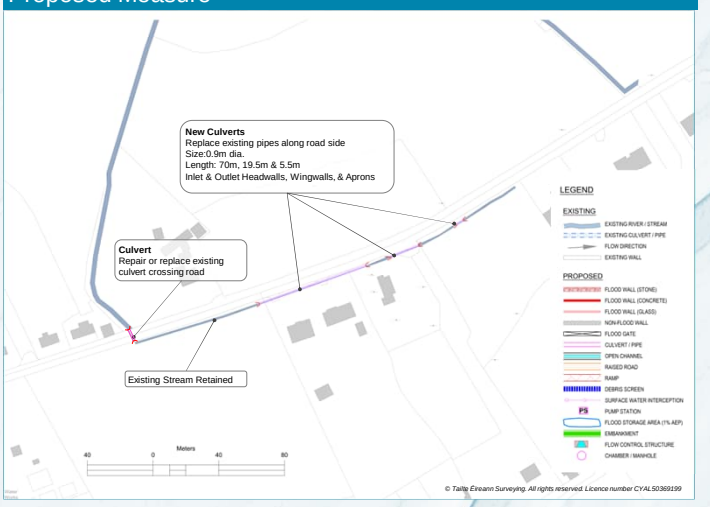


Predicted flood extents for 1% AEP Fluvial event

Existing road-side channel

ESB Substation

Proposed Measure



Proposal

- New culverts (0.9m dia.) to replace existing undercapacity pipes along road edge.
- Repair or replace existing culvert crossing road.

Constraints

- Access to properties.
- High voltage electricity lines.

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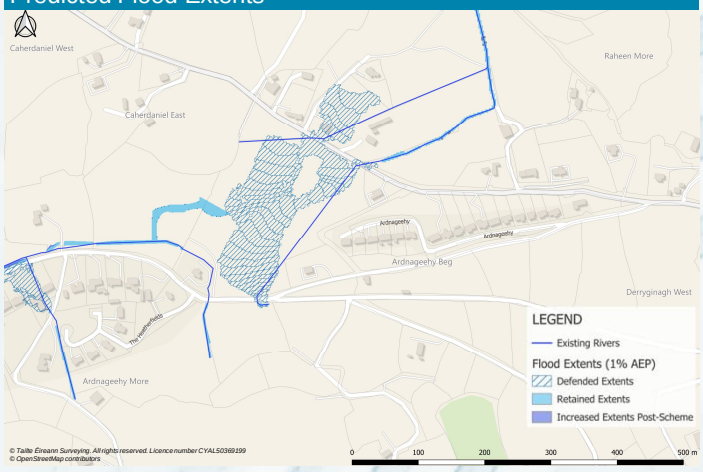
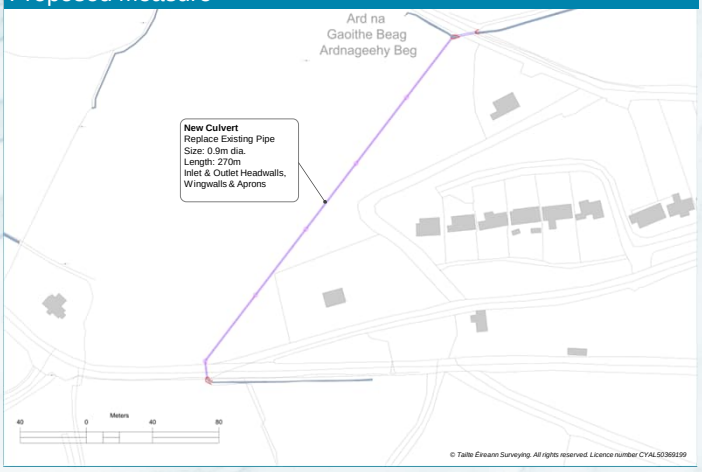
Predicted Flood Extents



Predicted flood extents for 1% AEP Fluvial event

Proposed Measure



Proposal

- New culvert (0.9m dia.) to replace existing undercapacity pipe across open field.

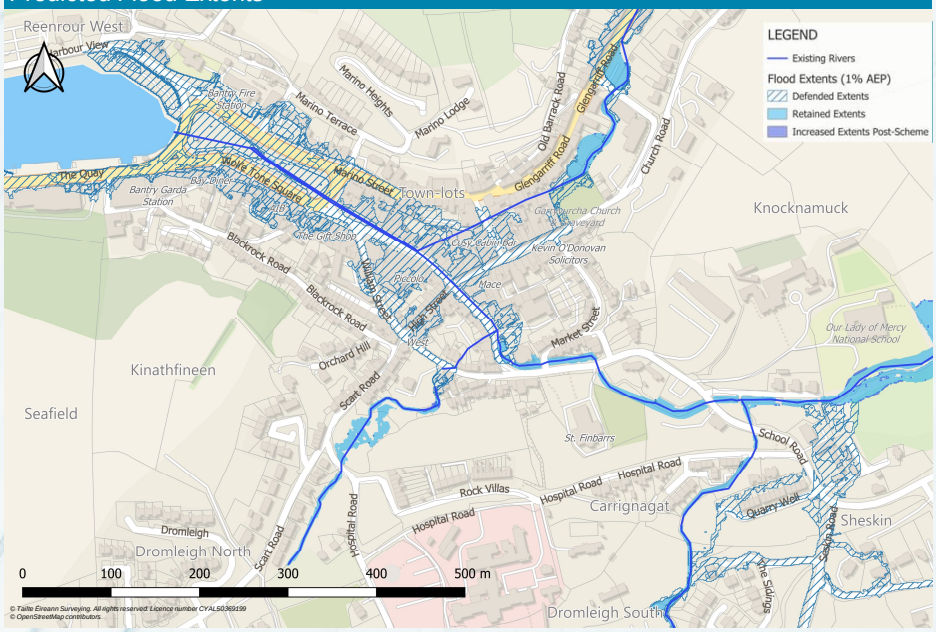
Constraints

- Existing utilities (Water, Telecoms & Medium Voltage O/H).
- Wayleave required.

BANTRY FLOOD RELIEF SCHEME

3 Scart & Library

Predicted Flood Extents



Predicted Flood Extents for 1% AEP Fluvial event (with 50% AEP coincident Tidal event)

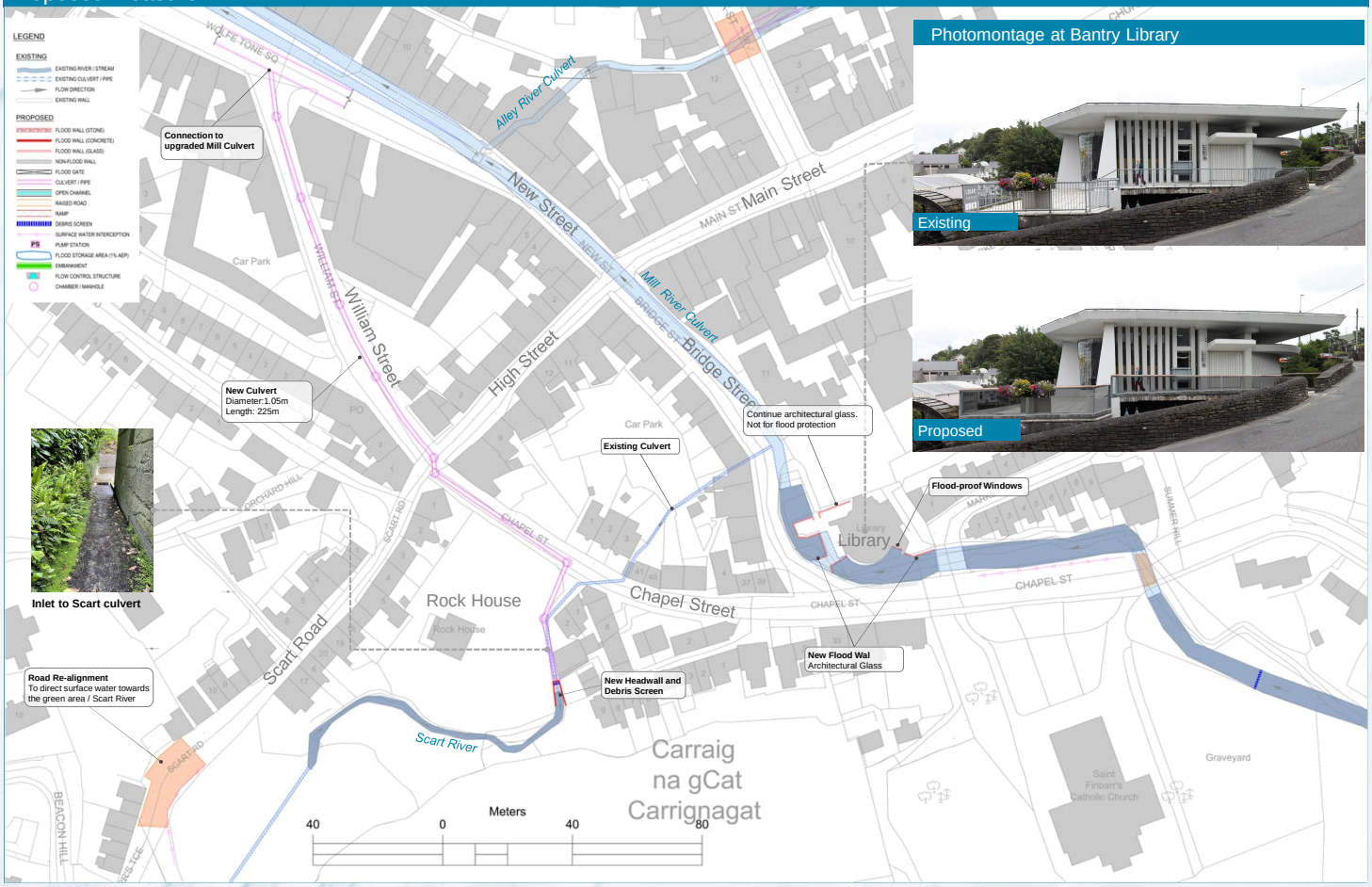
Proposal

- Culvert (1.05m dia.) to divert Scart River along Chapel Street and William Street.
- Replacing railings with glass flood defence walls at front of Bantry Library
- New flood-proof windows and concrete stub wall at rear of Bantry Library

Constraints

- Confined working area close to properties and traffic routes.
- Nearby Properties.
- Traffic Management.
- Existing services (Water, Telecoms, Low Voltage)

Proposed Measure



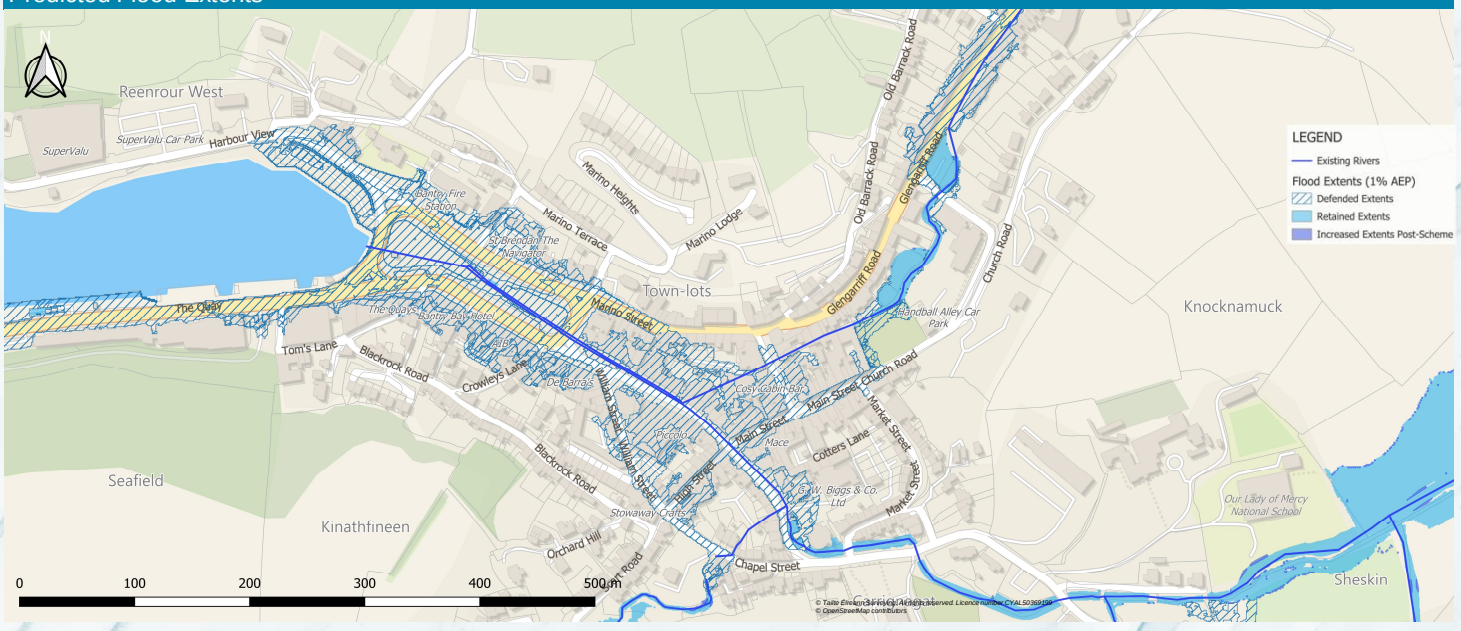
Inlet to Scart culvert

Photomontage at Bantry Library

BANTRY FLOOD RELIEF SCHEME

4 Glengarriff Road

Predicted Flood Extents



Predicted Flood Extents for 1% AEP Fluvial event (with 50% AEP coincident Tidal event)

Proposed Measure

Photomontage at Boys Club Road

Proposal

- Storage and new at Boy's Club Road carpark
- Remediation of enclosed channel under properties (Glengarriff Road).
- Replace Alley River culvert (2.3m x 0.9m) under properties (Glengarriff Road) to Barrack Street.
- New flood wall between Garryvurcha Graveyard and Men's Shed (Church Road)
- Road Raising on Barrack Street

Constraints

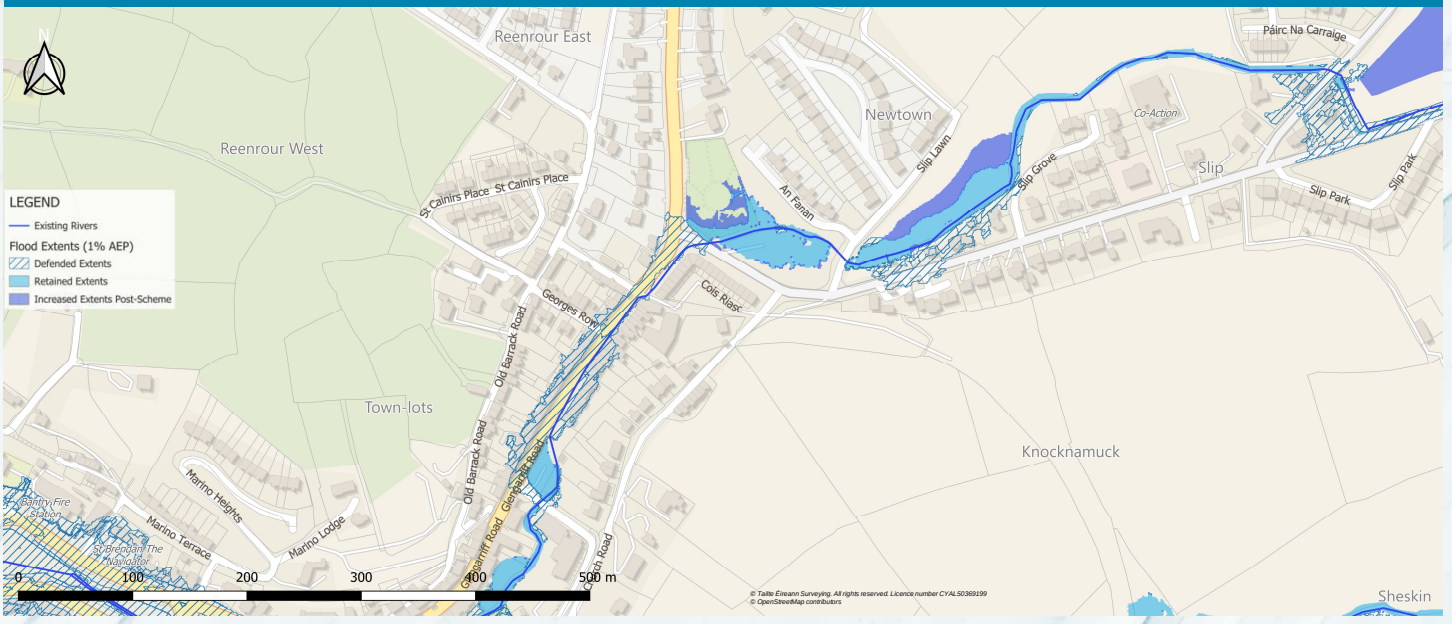
- Confined working area close to properties and traffic routes.
- Property demolition and reinstatement
- Land acquisitions
- Loss of parking
- Garryvurcha Graveyard National Monument

Comhairle Contae Chorcaí Cork County Council
OPW Oifig na nOibreacha Poiblí Office of Public Works
Tionscadal Éireann Project Ireland 2040
egis JBA consulting

BANTRY FLOOD RELIEF SCHEME

5 Cois Riasc, Playground & Community Gardens

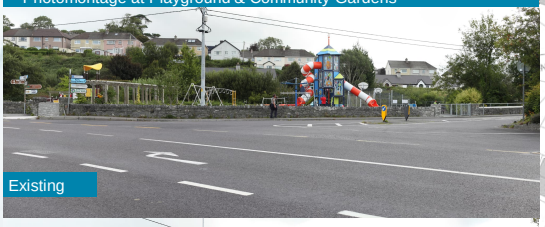
Predicted Flood Extents



Predicted Flood Extents for 1% AEP Fluvial event (with 50% AEP coincident Tidal event)

Proposed Measure

Photomontage at Playground & Community Gardens



Proposal
- Walls along Playground & Community Gardens to be raised.
- Floodgates at entrance ways to playground, gardens and carpark.
- New external ramp on footpath at southern entrance to playground.

Constraints
- Traffic Management.

Proposal
- Culvert (1.8m x 0.9m) from Cois Riasc to Boy's Club Road along Glengarriff Road

Constraints
- Confined working area close to properties and traffic routes.
- Traffic Management
- Existing Utilities (water, telecoms, U/G high voltage & O/H low voltage electricity)

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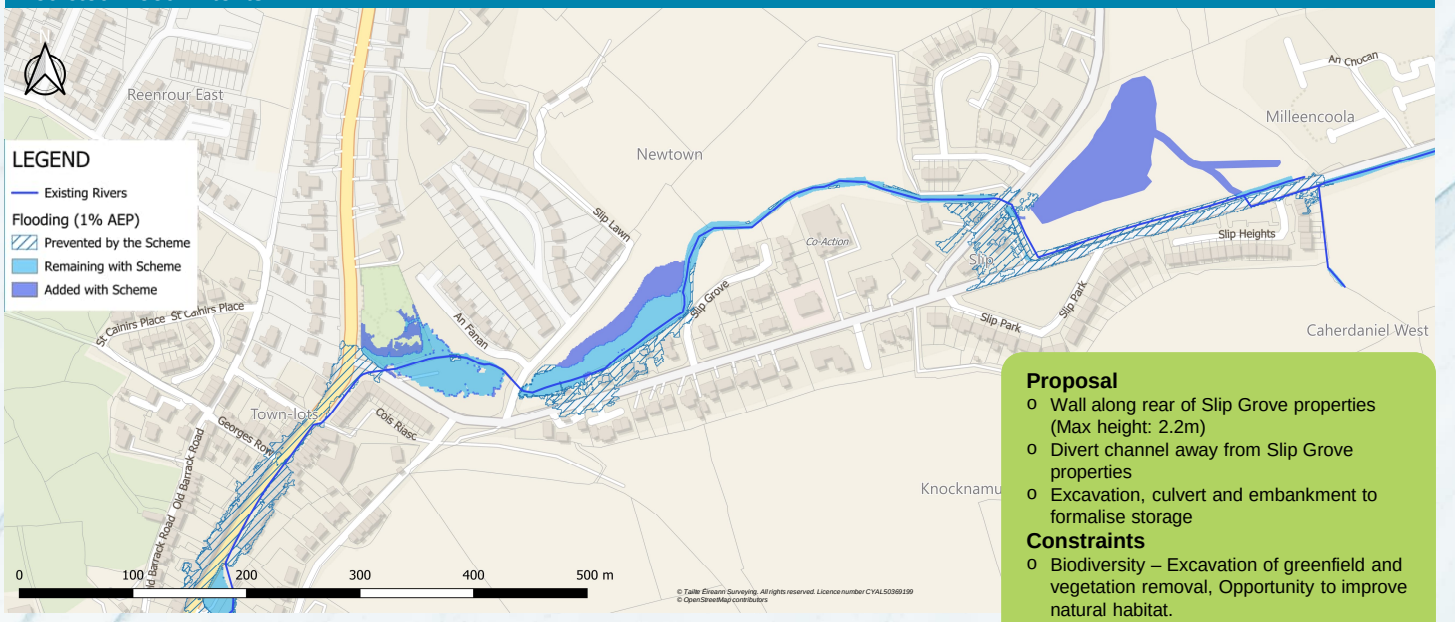
OPW Oifig na nOibreacha Poiblí Office of Public Works
Tionscadal Éireann Project Ireland 2040
egis JBA consulting

BANTRY FLOOD RELIEF SCHEME

6 Slip Grove

Predicted Flood Extents



Predicted Flood Extents for 1% AEP Fluvial event (with 50% AEP coincident Tidal event)

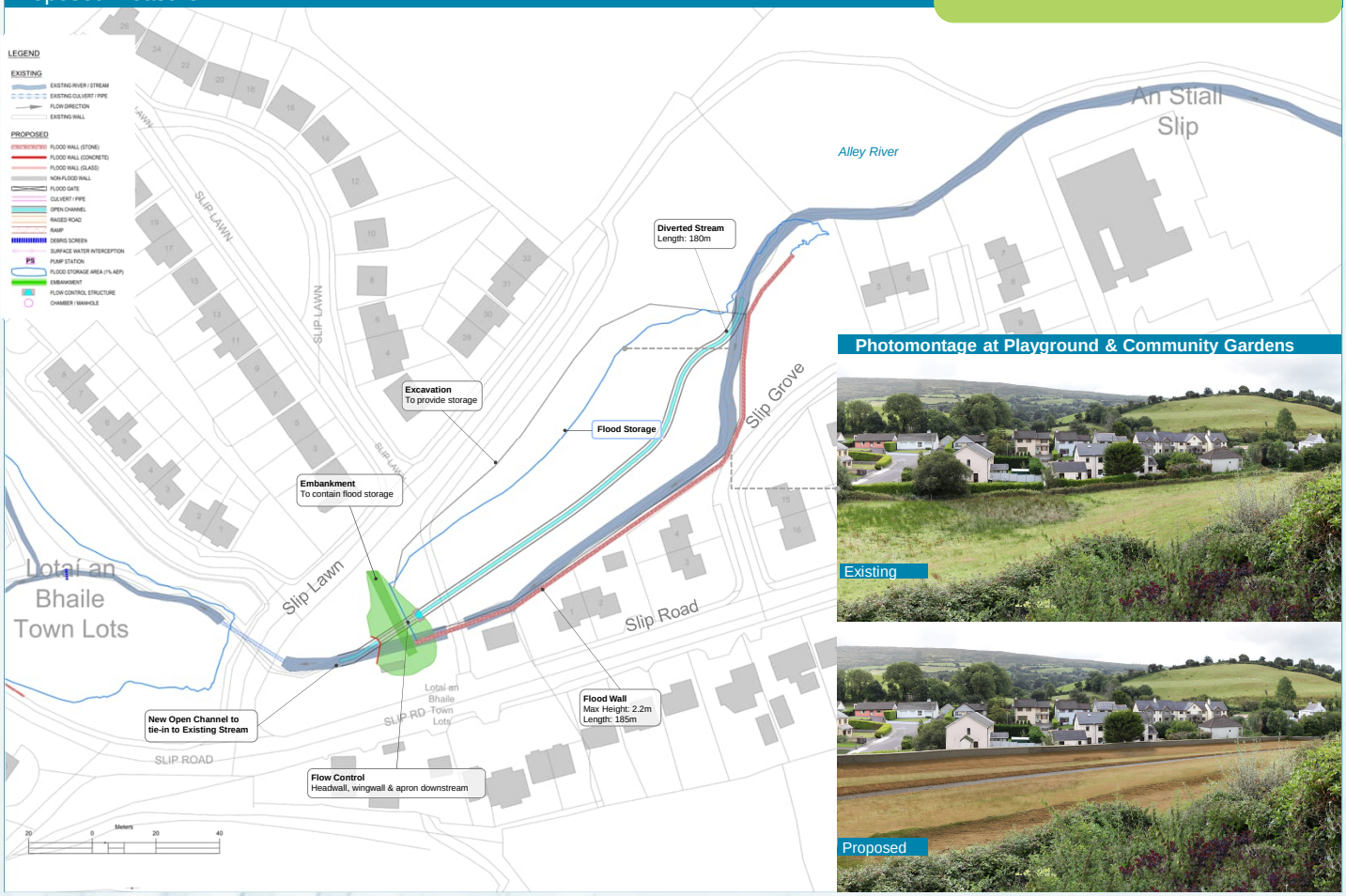
Proposal

- Wall along rear of Slip Grove properties (Max height: 2.2m)
- Divert channel away from Slip Grove properties
- Excavation, culvert and embankment to formalise storage

Constraints

- Biodiversity – Excavation of greenfield and vegetation removal, Opportunity to improve natural habitat.
- Construction – Control of sediment and watercourse impact, Land acquisition.

Proposed Measure

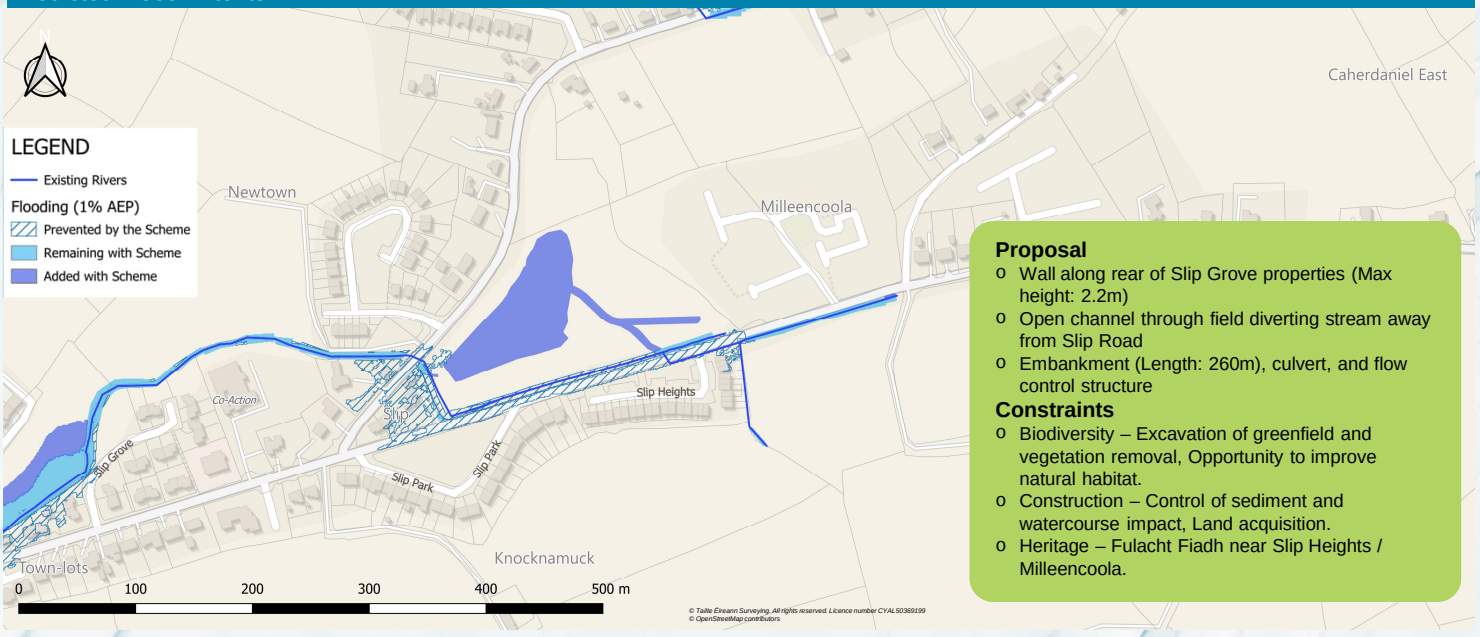


Photomontage at Playground & Community Gardens

BANTRY FLOOD RELIEF SCHEME

7 Slip Heights

Predicted Flood Extents



Proposal

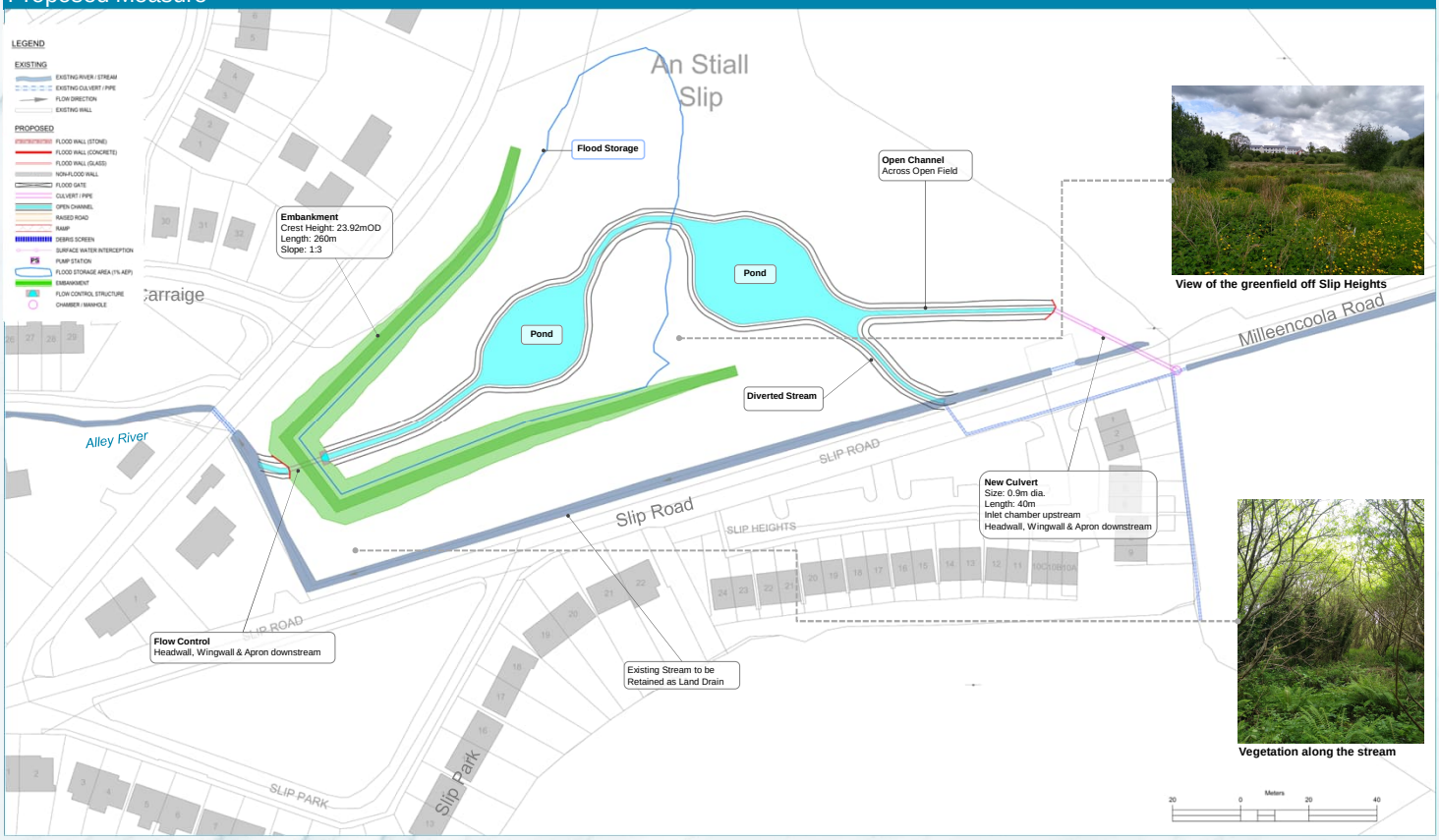
- Wall along rear of Slip Grove properties (Max height: 2.2m)
- Open channel through field diverting stream away from Slip Road
- Embankment (Length: 260m), culvert, and flow control structure

Constraints

- Biodiversity – Excavation of greenfield and vegetation removal, Opportunity to improve natural habitat.
- Construction – Control of sediment and watercourse impact, Land acquisition.
- Heritage – Fulacht Fiadh near Slip Heights / Milleencoola.

Predicted Flood Extents for 1% AEP Fluvial event

Proposed Measure



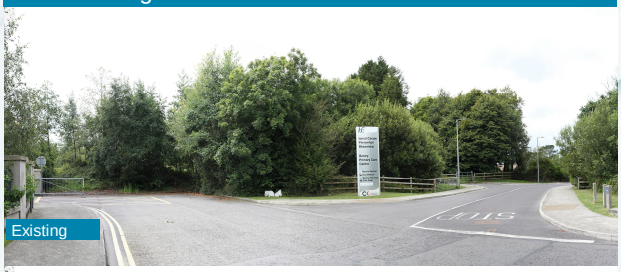
View of the greenfield off Slip Heights

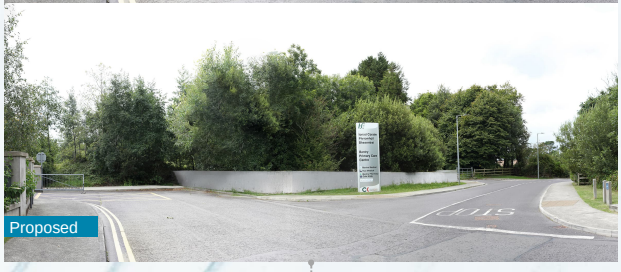
Vegetation along the stream

BANTRY FLOOD RELIEF SCHEME

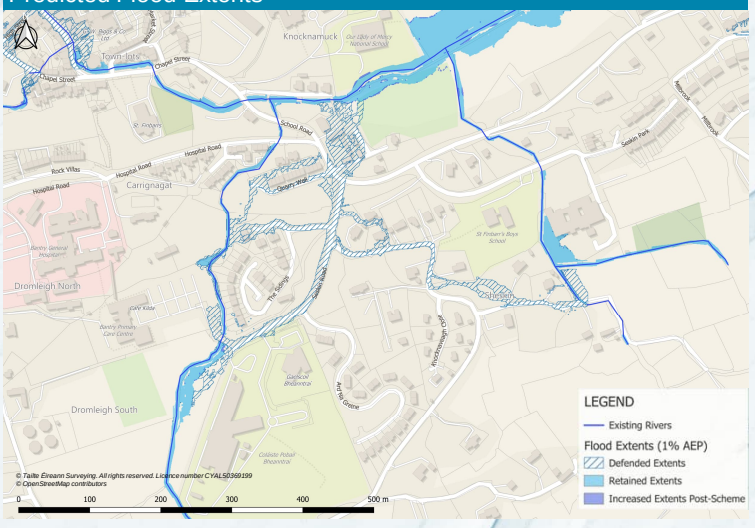
8 Sheskin & St. Finbar's

Photomontage



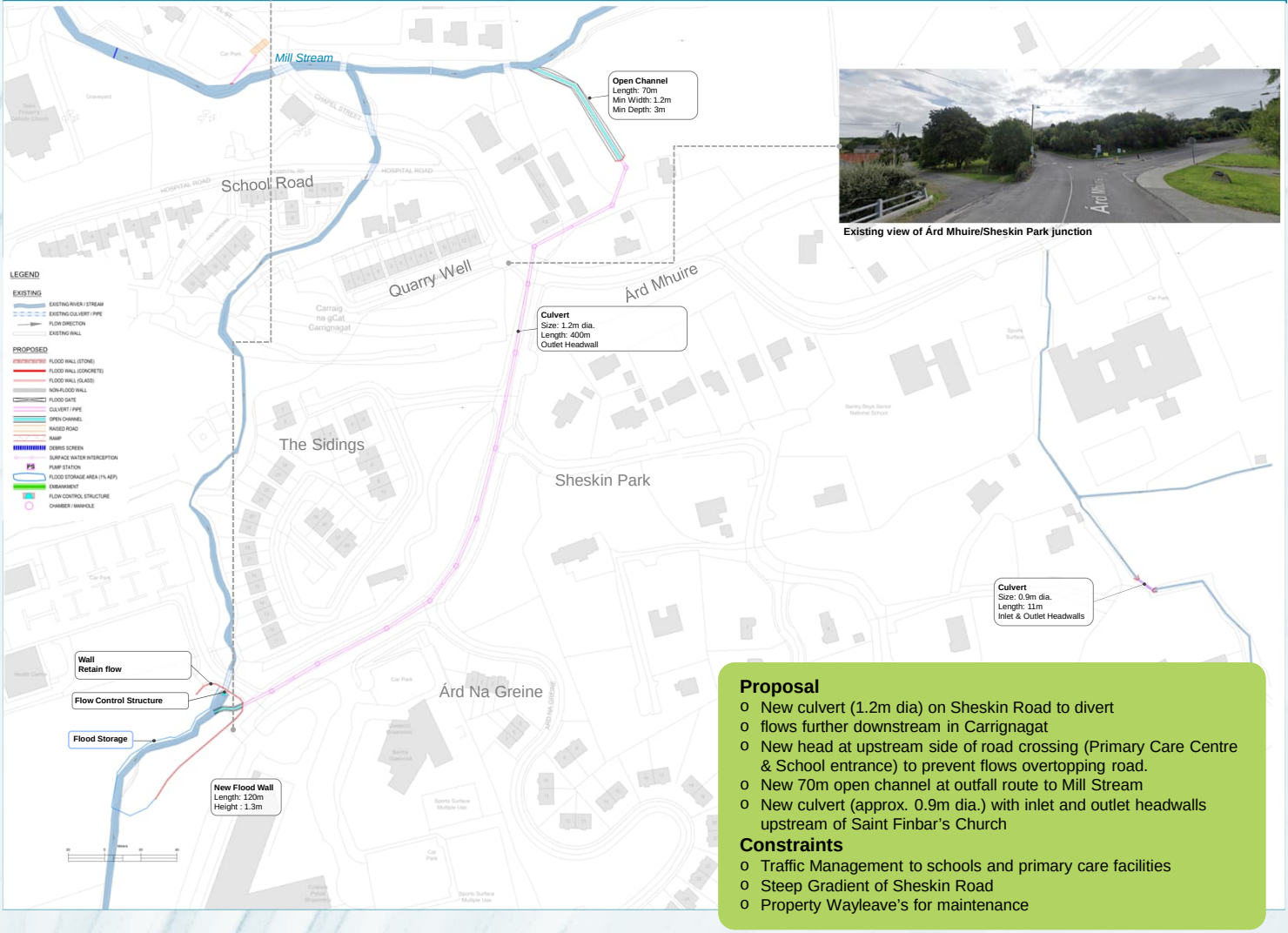


Predicted Flood Extents



Predicted Flood Extents for 1% AEP Fluvial event

Proposed Measure



Existing view of Árd Mhuire/Sheskin Park junction

Proposal

- New culvert (1.2m dia) on Sheskin Road to divert
- flows further downstream in Carrignagat
- New head at upstream side of road crossing (Primary Care Centre & School entrance) to prevent flows overtopping road.
- New 70m open channel at outfall route to Mill Stream
- New culvert (approx. 0.9m dia.) with inlet and outlet headwalls upstream of Saint Finbar's Church

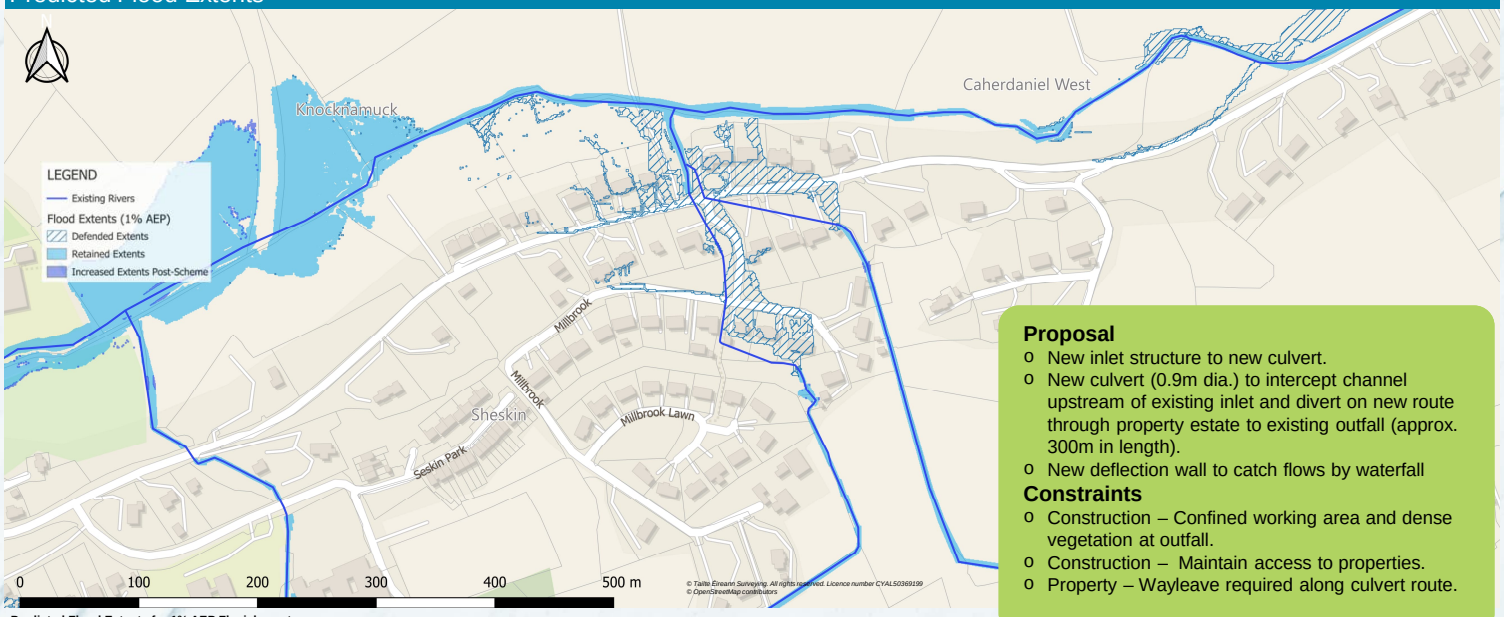
Constraints

- Traffic Management to schools and primary care facilities
- Steep Gradient of Sheskin Road
- Property Wayleave's for maintenance

BANTRY FLOOD RELIEF SCHEME

9 Millbrook (West & East)

Predicted Flood Extents

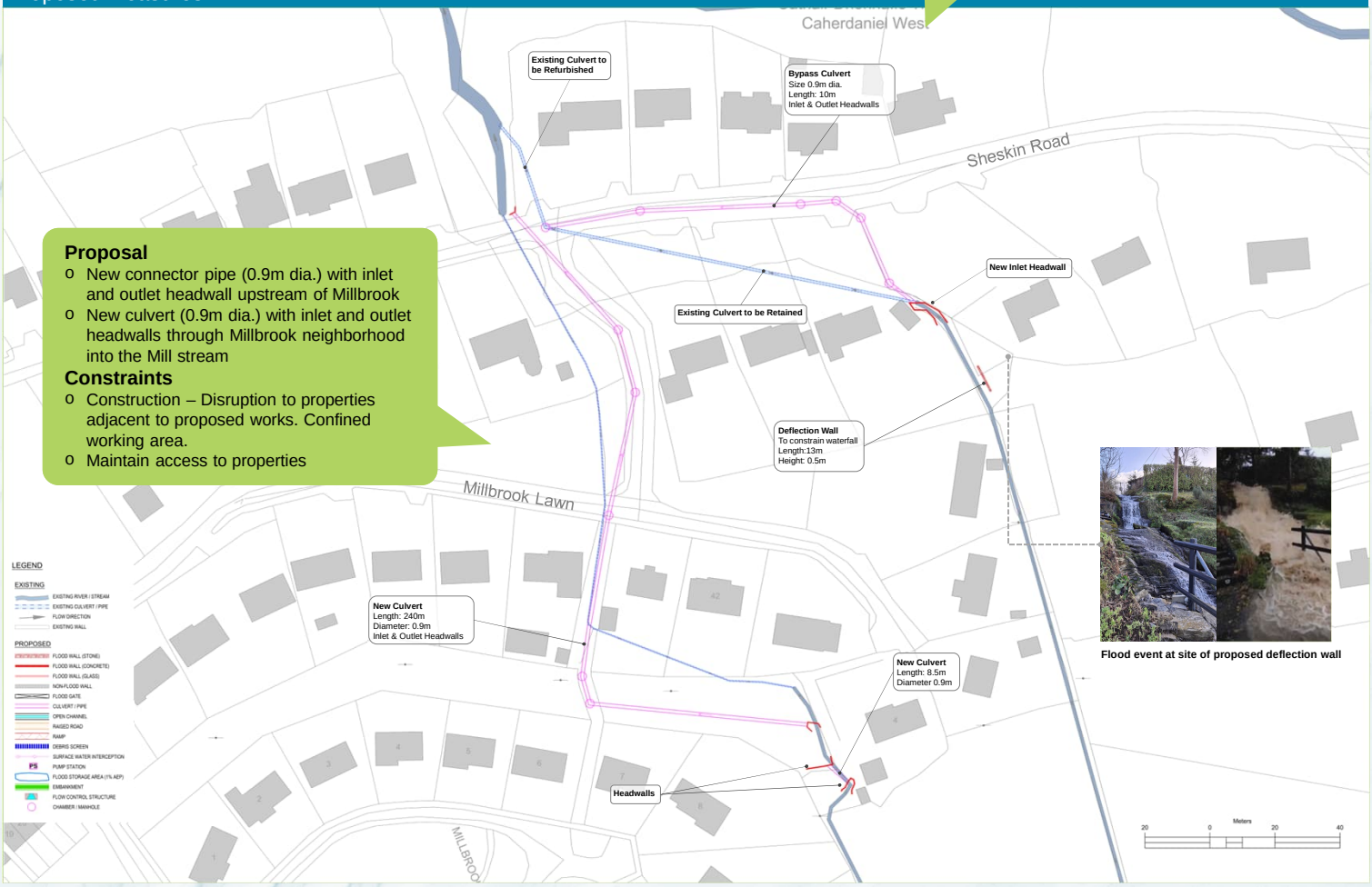


Predicted Flood Extents for 1% AEP Fluvial event

Proposal
- New inlet structure to new culvert.
- New culvert (0.9m dia.) to intercept channel upstream of existing inlet and divert on new route through property estate to existing outfall (approx. 300m in length).
- New deflection wall to catch flows by waterfall

Constraints
- Construction – Confined working area and dense vegetation at outfall.
- Construction – Maintain access to properties.
- Property – Wayleave required along culvert route.

Proposed Measures



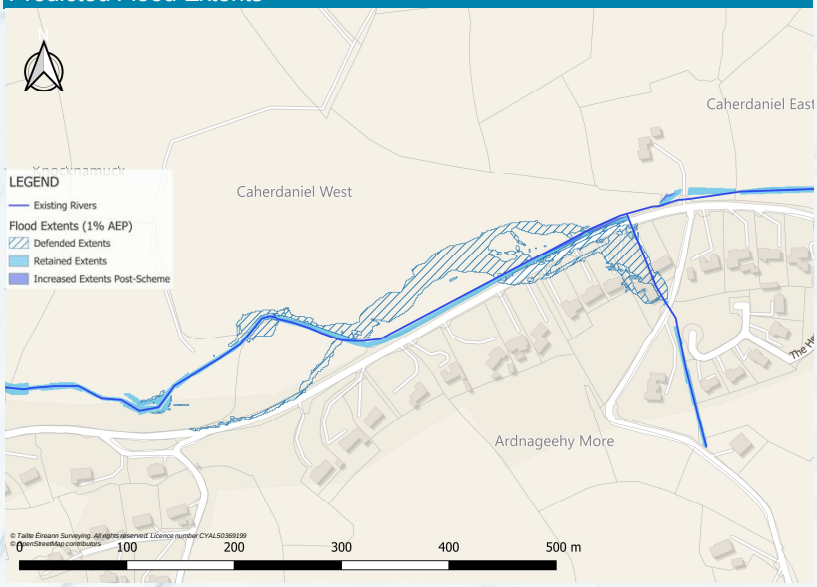
Proposal
- New connector pipe (0.9m dia.) with inlet and outlet headwall upstream of Millbrook
- New culvert (0.9m dia.) with inlet and outlet headwalls through Millbrook neighborhood into the Mill stream

Constraints
- Construction – Disruption to properties adjacent to proposed works. Confined working area.
- Maintain access to properties

Flood event at site of proposed deflection wall

10 Ardnageehy More

Predicted Flood Extents



Predicted Flood Extents for 1% AEP Fluvial event

Proposal

- New culvert (0.9m x 0.9m) to divert under-capacity pipe through residential property. Routed east of property.
- New culvert (1m x 1m) to replace existing 0.8m x 0.5m box culvert (length 30m)
- New open channel to replace existing culvert
- New low-level wall and raised access at upstream end of channel (approx. length 75m).

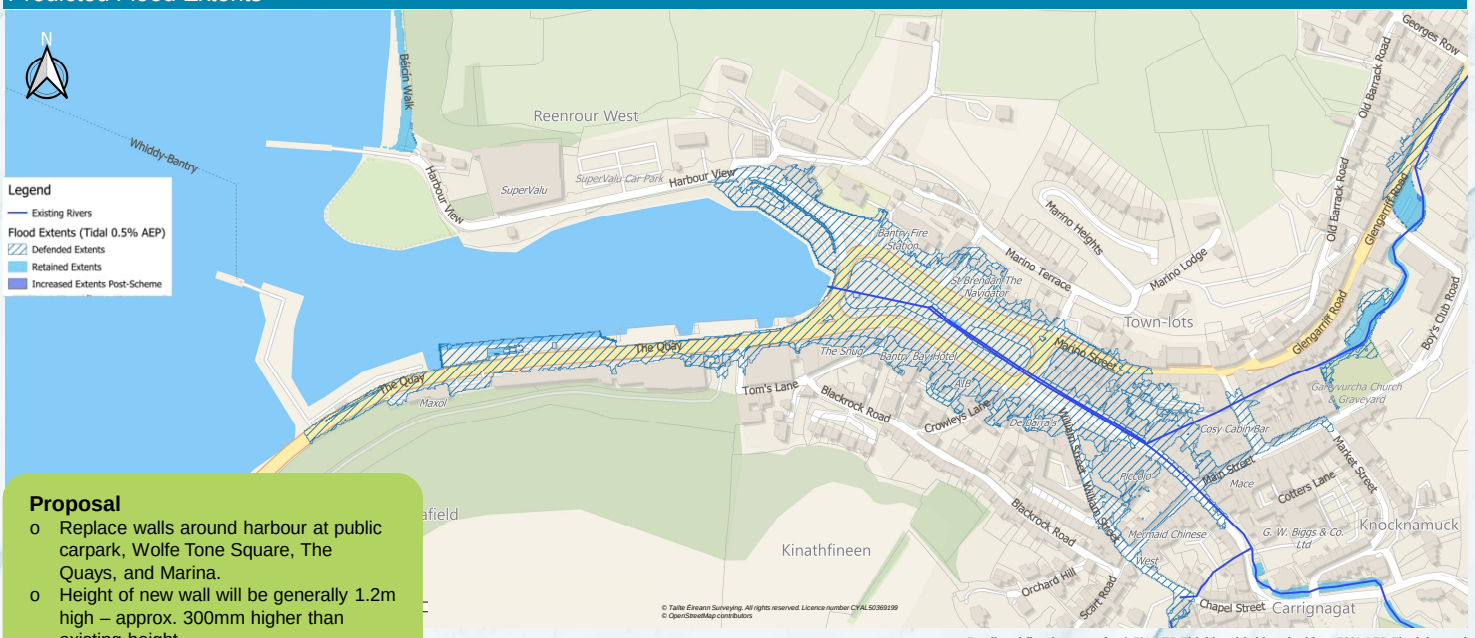
Constraints

- Property – Existing access to be upgraded.
- Property – Boundary walls to be removed and reinstated.
- Utilities – Along proposed works route to be relocated.

Proposed Measure

11 Coastal Defence

Predicted Flood Extents



Predicted flood extents for 0.5% AEP Tidal level (with coincident 50% AEP Fluvial event)

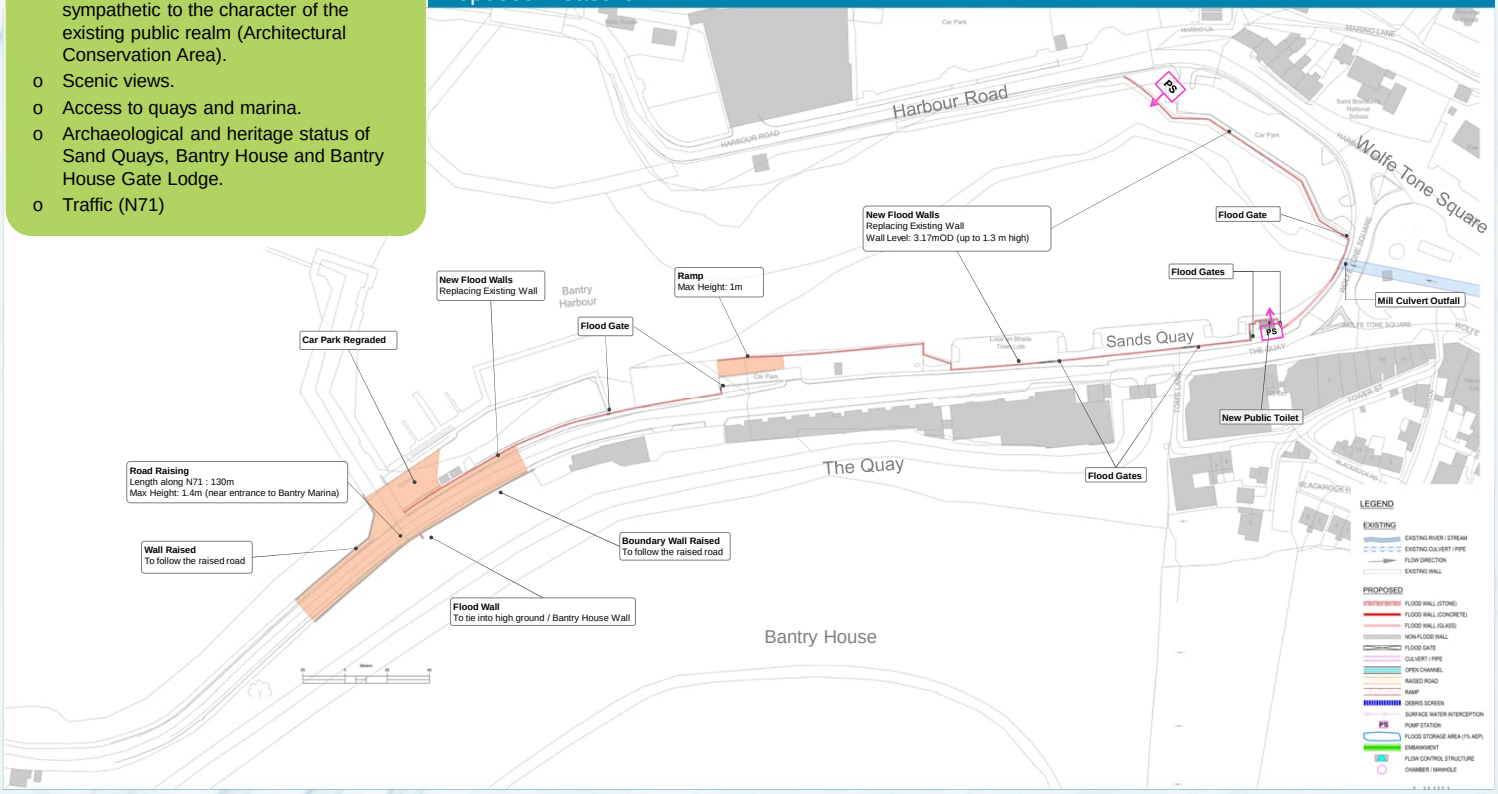
Proposal

- Replace walls around harbour at public carpark, Wolfe Tone Square, The Quays, and Marina.
- Height of new wall will be generally 1.2m high – approx. 300mm higher than existing height.
- Flood gates at existing access points to quays. One access point to be closed.
- Raising of main road near entrance to Bantry Harbour Marina and Pier.

Constraint

- Architectural finish of wall that is sympathetic to the character of the existing public realm (Architectural Conservation Area).
- Scenic views.
- Access to quays and marina.
- Archaeological and heritage status of Sand Quays, Bantry House and Bantry House Gate Lodge.
- Traffic (N71)

Proposed Measure



12 Pluvial Drainage

What is it?

Pluvial drainage is the **stormwater** infrastructure required to convey rainfall from an urban surface to a waterbody.

To determine the requirements of the pluvial measures, it was first necessary to define both the coastal and fluvial options. This isolates the contributions to flooding just to pluvial and allowed for solutions to be developed.

The pluvial measures have thus been defined based on the preferred fluvial and coastal option. The pluvial measures are predominantly confined to Wolfe Tone Square.

The measures proposed fall under three different categories:

- **Overland flow cutoff**
- **Utilisation of existing and proposed gravity systems**
- **Pumping solutions**

View of Wolfe Tone Square looking east

Proposed Measures