

The background image is a scenic view of a river valley, likely the Shannon River, with a grassy foreground and a wooden fence. A semi-transparent map of the town of Shannon is overlaid on the image, showing the town's layout, roads, and green spaces. The map is rendered in a light blue and grey color scheme, allowing the natural landscape to remain visible. The title 'SHANNON TOWN GREEN INFRASTRUCTURE PLAN' is centered in the lower half of the image, in a white, bold, sans-serif font.

SHANNON TOWN GREEN INFRASTRUCTURE PLAN

January 2013

Clare County Council



Shannon Town Green Infrastructure Plan

FINAL

January 2013

Page

1. Introduction

1.1	General Requirements and Approach	1
1.2	Green Infrastructure Generally	2
1.3	Embankment of the Shannon Estuary	3
1.4	The Town Park	4

2. Concept Development

2.1	Priority Areas	5
2.2	Shannon LAP: Proposed Cycle Routes	6
2.3	Clare Trails Steering Group Proposed Loop Walks	7
2.4	All Proposed Walking Routes	8
2.5	Proposed Priority Routes	9
2.6	Green Infrastructure Concept Plan	10

3. The Shannon Loop

3.1	Proposed Route Plan	11
3.2	Route Plans	12
3.3	Route Design Guide	21

4. Green Infrastructure Design Guide

4.1	General Proposals	22
4.2	Embankment of Shannon Estuary	23
4.3	Shannon Wetlands	24
4.4	Town Park	25
4.5	Tullyvarraga Hill	32
4.6	Tullyglass Hill	33
4.7	Green Corridors and Key Nodes	34





Clare County Council - Shannon Town Green Infrastructure Context Plan

General Requirements

The overall aim of the project is the production of a Green Infrastructure Plan and Design Guide for the green infrastructure and development of Shannon Town, and a more detailed design proposal for Shannon Town Park.

The main requirements for each are:

- Green infrastructure plan and design guide for the green infrastructure and development of Shannon, having regard to the Shannon Town and Environs Local Area Plan 2012-2018, including the proposed circulation routes, with a subsequent focus on key green infrastructure areas and their interconnecting green corridors.
- Detailed design proposal for Shannon Town Park based on, and consistent with the concepts and designs of the outcome of the Green Infrastructure Plan and Design Guide for the future development of the area of Shannon.

General Approach

The project needs to build upon the Green Infrastructure and Place Making objectives as proposed in the Shannon Town and Environs LAP (2012-2018) and would be developed in the strategic context of the Comhar document "Creating Green Infrastructure for Ireland" (August 2010), as well as other Best Practice examples from Ireland and Europe in relation to Green Infrastructure.

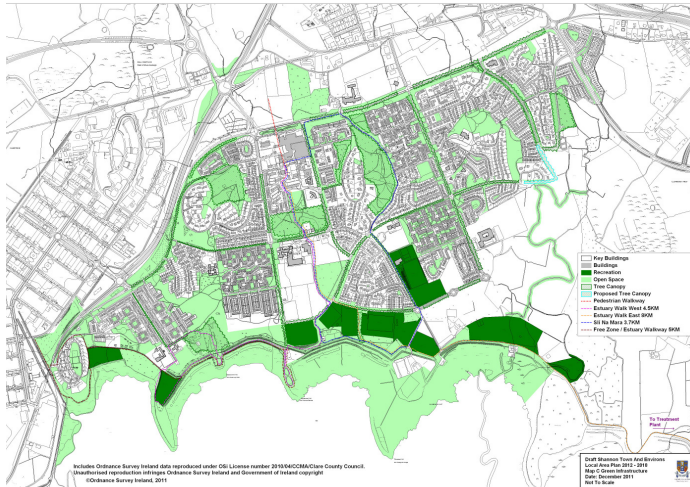
One of the key considerations will be the creation of common themes and language throughout Shannon Town, with a particular emphasis on connectivity between habitats as can be achieved by linking up interconnecting green corridors and proposed circulation routes as outlined in the LAP.

The proposals should aim to strengthen or create wildlife corridors and inter-connection, with the development of an overall theme for reflected in the proposed works.

In relation to Shannon Town Park, it is recognised that this important environmental resource could be better utilised by members of the public and that linkages with other green infrastructure areas in Shannon could be considerably improved. Essential considerations for the improvement of the Park include improved access and linkage, enhanced provision for people of all ages and levels of mobility, measures for increasing biodiversity, and general appearance and useability up-grade.

The plans and costings will be to a stage that will allow for application for funding for implementation of the projects proposed. The Shannon Town Park is required to be designed to a level that would enable a planning application (if required) to be prepared.

Following the Screening for Appropriate Assessment, it is concluded that the Shannon Green Infrastructure Design Guide will not impact on the Natura 2000 Site Network and therefore does not require an Appropriate Assessment (Stage Two of the Habitats Directive Assessment). Similarly, the Shannon Green Infrastructure Design Guide has been through a Screening for Strategic Environment Assessment and is found not to require further Strategic Environment Assessment.



Shannon Town and Environs Local Area Plan 2012-2018, Map C Green Infrastructure



General Estuary view

Policy Context

A European Commission Communication on Biodiversity (January 2010), acknowledges the importance of Green Infrastructure in the biodiversity agenda. Comhar Sustainable Development Council (SDC), together with similar councils participating on the network of European Environment and Sustainable Development Councils (EEAC), advocates that Green Infrastructure, and the protection and enhancement of ecosystem goods and services, should be viewed as critical infrastructure, in the same way as transport and energy networks and as vital to sustainable development.

The protection and development of Green Infrastructure has also been identified by Comhar SDC as one of the priority areas in its proposals for a 'Green New Deal for Ireland'. The Council promotes the need to proactively develop Green Infrastructure and ecological connectivity and address fragmentation, and that this will have the dual function of enhancing biodiversity and improving resilience and adaptation to climate change.

Green Infrastructure is generally defined as a network of green spaces that help conserve natural ecosystems and provide benefits to human populations through water purification, flood control, carbon capture, food production and recreation. Generally such spaces include woodlands, coastlines, flood plains, hedgerows, city parks and street trees.

The main emphasis of the development proposals is on connectivity between habitats, both within and adjoining the site, as can be achieved by linking up inter-connecting green corridors and proposed circulation routes. The proposed landscape infrastructure aims to strengthen or create wildlife corridors and inter-connection, for the benefit of biodiversity, enhanced outdoor recreational opportunities, visual amenity and general well-being.

County Development Plan 2011-2017 Policy

The Shannon Town Green Infrastructure Plan sits within the policy framework of the Clare County Development Plan 2011-2017, particularly County Development Plan Chapter 12, Tourism and Objective 12.6, Sustainable Tourism and Eco-Tourism -

'To promote the sustainable development of walking, cycling, adventure sports, outdoor activities and their associated infrastructure throughout the County'.

Chapter 17, Natural Heritage, of the Clare County Development Plan (2011-2017) sets out Clare County Council's obligations in relation to the environment and biodiversity, and recognises the natural heritage of the county as one of its greatest assets. In the Clare County Development Plan (2011-2017) Green Infrastructure and the Comhar Sustainable Development Council (SDC) publication 'Creating a Green Infrastructure for Ireland 2010' proposals set the context for the development of Green Infrastructure Plans - as a planning tool to deliver a network of high quality green spaces and as a multi-functional resource capable of delivering a wide range of environmental and quality of life benefits for local communities. Particularly in relation to biodiversity, open space and recreation, sustainable water management, archaeological and architectural heritage and landscape. It is also a strategic aim in Chapter 17, Natural Heritage, to increase education and awareness of our Natural Heritage and to promote sustainable development in harmony with local biodiversity.

Shannon Town and Environs Local Area Plan 2012-2018 and County Clare Heritage Plan 2011-2017 Policy

The Green Infrastructure theme is followed through in Chapter 11 of the Shannon Town and Environs Local Area Plan (2012-2018), where an integrated and coherent Green Infrastructure Framework for Shannon sets out the green network and encourages walking, cycling and recreation. It is on this basis that the Shannon Green Infrastructure Design Guide was developed.

Specific Shannon Town and Environs Local Area Plan (2012-2018) Objectives include:

Objective 11.1- To identify and map key open spaces, wildlife hubs, corridors and circulation routes throughout the Plan area.
Objective 11.2- To identify and map key recreational areas and recreational routes throughout the Plan area.
Objective 11.3- To connect the component elements of the town through the delivery of an integrated Green Infrastructure network, i.e. the town centre with the

residential areas, the Industrial Zone, the Airport, and the Estuary.

Objective 11.4- To increase the amenity value of key recreational areas / corridors through the enhancement with, and protection of, biodiversity.

Objective 11.5- To identify areas for additional tree planting / species enhancement in order to improve connectivity and linkages between existing corridors, open spaces and wooded areas.

Green Infrastructure is further emphasised in Objective 8 of the County Clare Heritage Plan (2011-2017) - *'To identify, protect and enhance the best examples of natural and semi-natural habitats of local importance',* and associated Action 4 - *'Identify ecological and wildlife corridors and support the development of Green Infrastructure in urban areas for public amenity practices. Undertake research and a survey of hedgerows in the County'.*

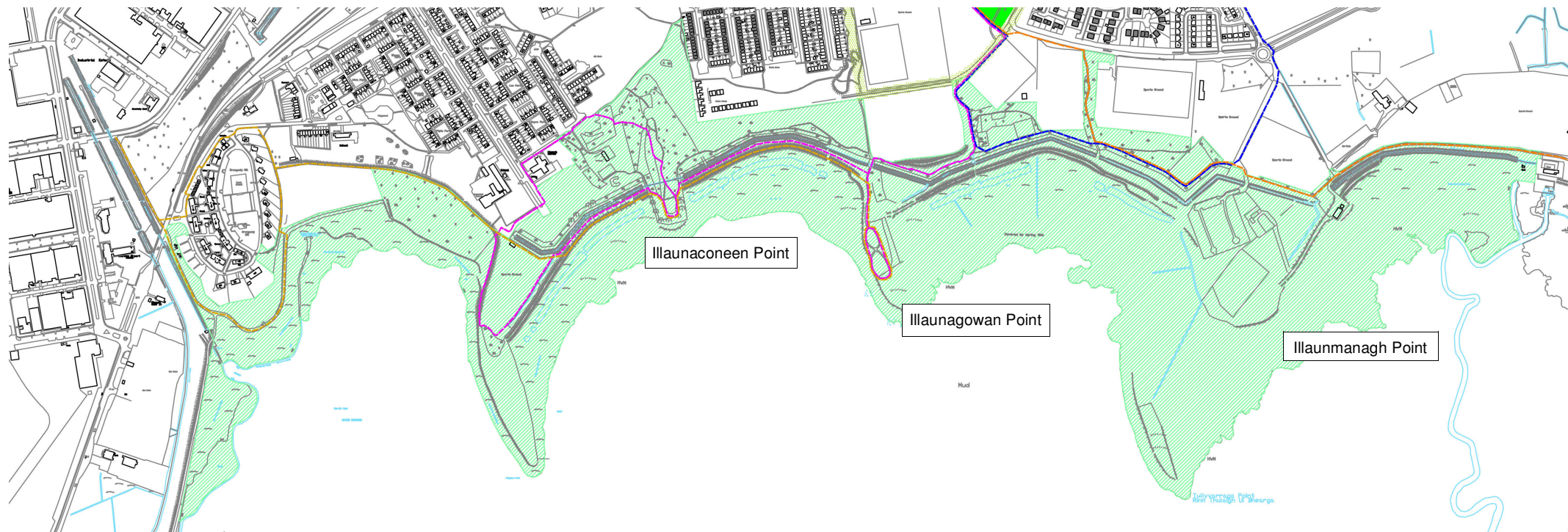
The Shannon Green Infrastructure Plan

Looped walks (11.7.5)

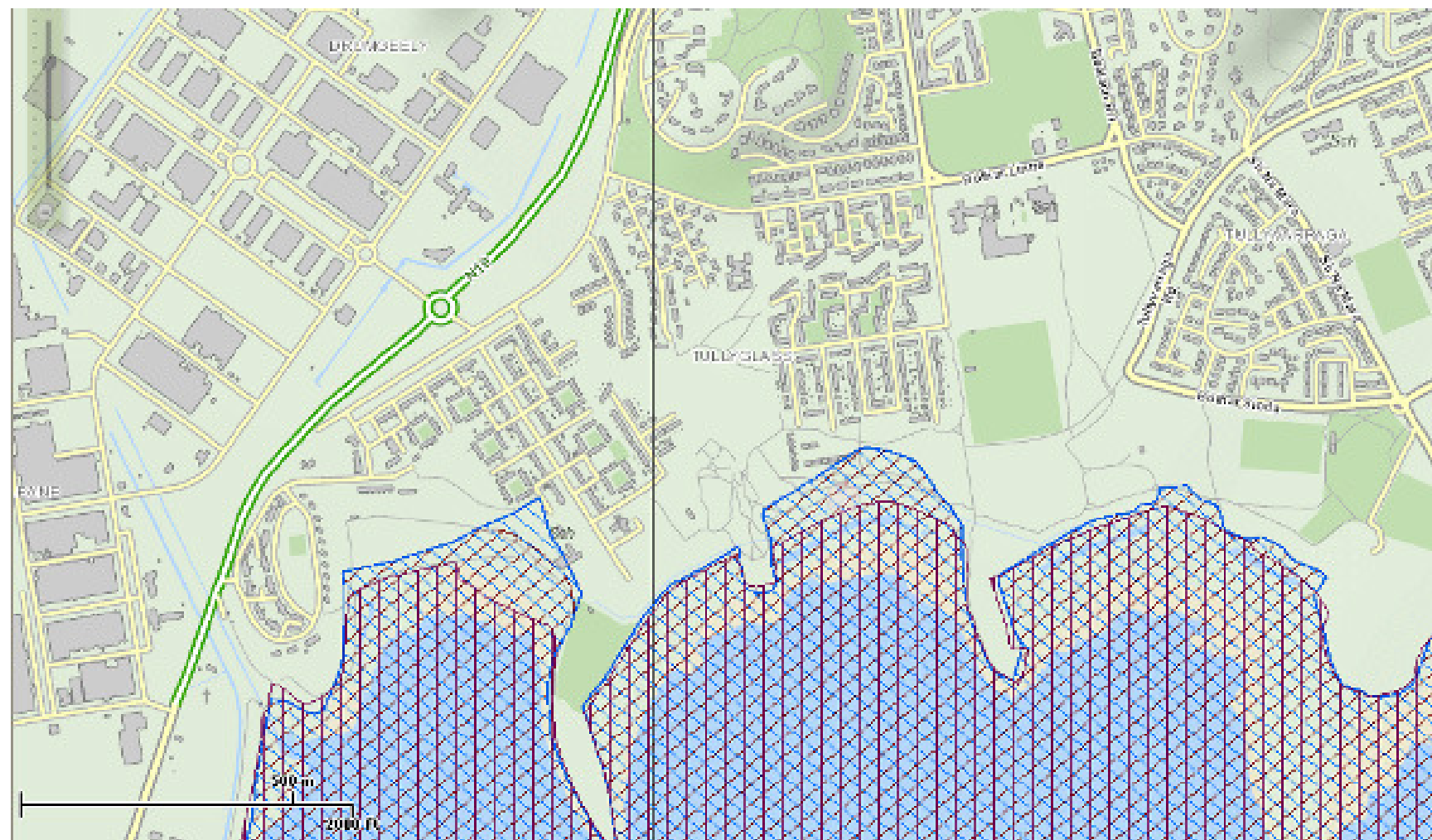
A total of four looped walks are proposed within the Local Area Plan area. Three of the walks start in the town centre and would be advertised by way of a display board and map, colour coded according to route.

By commencing three of the walks in the town centre, it is intended to reinforce the plan goal of a vibrant and viable town centre that has increased activity, social use and is an attractive place in which to spend time, meet people and to recreate. The town centre also provides ample existing parking provision (surface and multi-storey) and its central location and existing function provides an appropriate base from which to commence the walking trails.

The fourth trail begins in the Shannon Free Zone and the development and promotion of this trail will tie in with the overall objective to increase linkages between the industrial zone and the rest of the town. By formalising and promoting a Free Zone Estuary trail, it is anticipated that this would attract a greater percentage of the 7,000 daily commuters to avail of this recreational opportunity and ultimately spend more time in Shannon.



General Location Plan



NPWS Map of Special Protected Areas, Lower River Shannon

Key Features:

The Lower River Shannon SAC lies partly within, and adjacent to the Shannon Town and Environs Local Area Plan (2012-2018) area. This ecologically important area includes extensive intertidal mudflats, fringed with saltmarsh vegetation, which provide important habitat for over-wintering wildfowl and waders, as well as a wide range of other Natura 2000 designated habitats.

The River Shannon and River Fergus Estuaries SPA overlaps with the Lower River Shannon SAC. The Shannon estuary is recognised as the most important site in Ireland for over-wintering wildfowl and waders, and provides important breeding grounds for birds during the summer season.

As part of the estuarine land of the River Shannon and River Fergus Estuaries SPA falls within the Shannon Town and Environs boundary, there are specific policies for protection within the Local Area Plan. Policy OS4 (11.5.2 Shannon Estuary) defines the protected area as incorporating the entire landward side of the Shannon estuary within the town boundary, including the tidal mudflats, the flood protection barrier, Illaunmanagh Point, Illaunagowan Point and Illaunaconeen Point. The Local Area Plan proposals for this extensive area include:

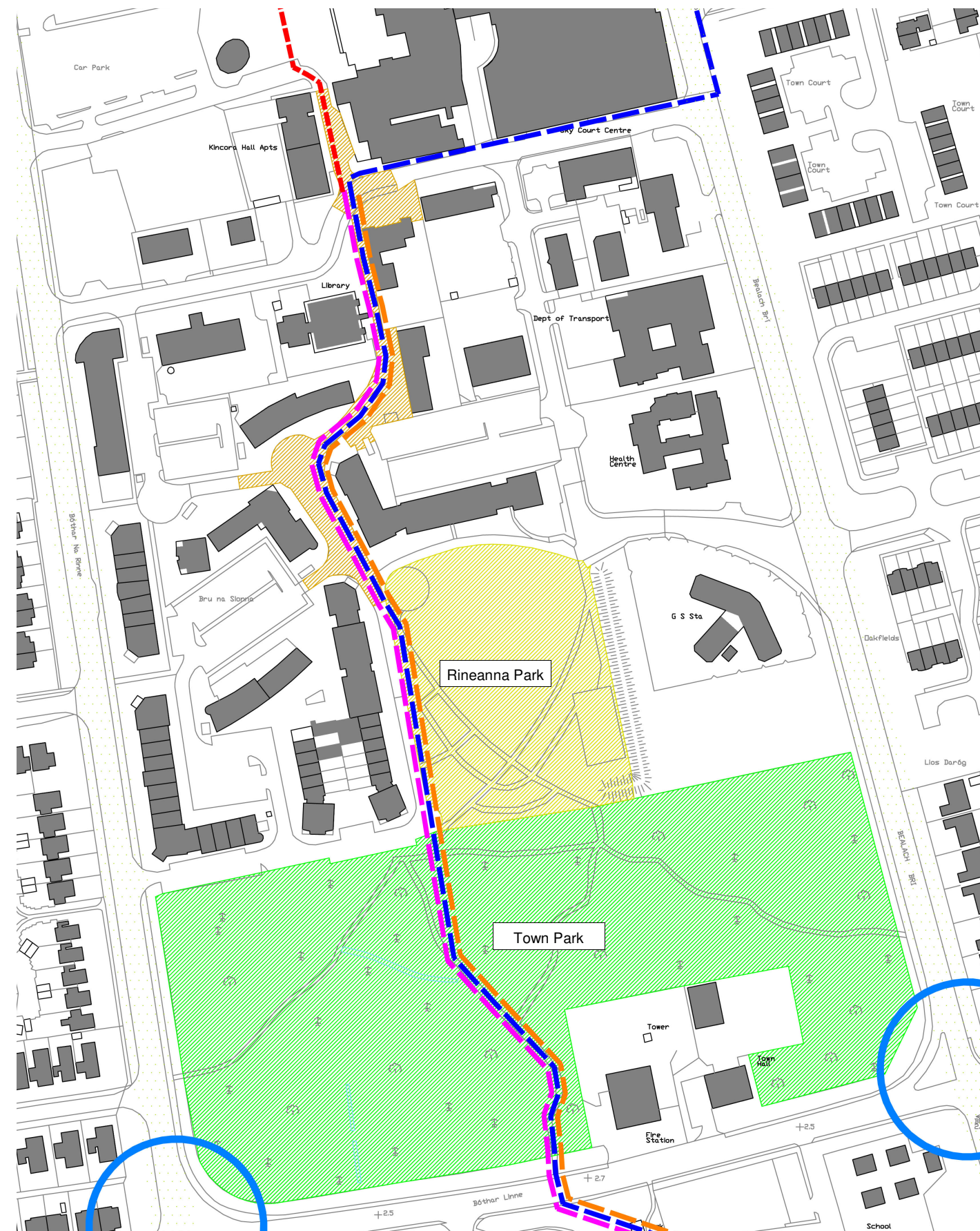
- Enhancing the safety and walkability of existing walkways;
- Trimming back or felling some vegetation;
- Appropriate signage, and the erection of bird hides in consultation with NPWS, Clare Biodiversity Ltd and Birdwatch Ireland.

The inclusion of lighting, fencing or works which would require heavy machinery or earth movements is unlikely.

It is also proposed to develop a tourist information centre at Illaunagowan Point to promote the estuary for ecologically sensitive tourist-related development. Although this would be located to allow a view of the estuary, it would not be expected to result in any visual impact on the shoreline, reduce the amenity of the area, or negatively impact on the Estuary, its flora or its fauna, particularly in relation to wildfowl and waders.



Existing views of the park



Plan of Town Park with walking routes as proposed by the Shannon Town & Environs LAP

Key Features

The Town Park comprises a dense mix of mature deciduous trees, originally planted by Shannon Development, with important circulation routes linking the town centre to the school and leisure centre, and to the Shannon Estuary via the wetlands area. To the north of the wooded area is Rineanna Park, a more formal amenity area of open grassland, clumps of trees, footpaths and a ball court. The two parks contrast strongly in character and together provide great opportunities for developing a wide range of amenity recreation facilities.

Main Requirements

The principles of Green Infrastructure and Place-making are intended to underlie the approach to revitalising the town park, while increasing connectivity and linkages with other green infrastructure areas in Shannon.

The improvement strategy for the town park must take full account of the environmental, urban and social context of the site, while also maximising the potential of its pivotal location. The proposed scheme needs to cater for:

- Public amenity
- People of all ages
- Varying levels of mobility
- Biodiversity and Place-making requirements in their design and planting schemes
- Accommodation of existing desire lines
- Good interface between external park boundaries and surrounding areas

In particular the scheme should consider the provision of flexible civic space(s)/informal space(s) in order to accommodate:

- Various forms of activity and relaxation
- Provision for assembly and/or performance
- Use in both daylight/after dark
- Passive surveillance

2. Concept Development

2.1 PRIORITY AREAS

The priority areas for developing the Shannon Town Green Infrastructure Plan, as identified in the Brief, comprise:

1. Embankment of The Shannon Estuary
2. Shannon Wetlands
3. Town Park
4. Tullyvarraga Hill
5. Tullyglass Hill

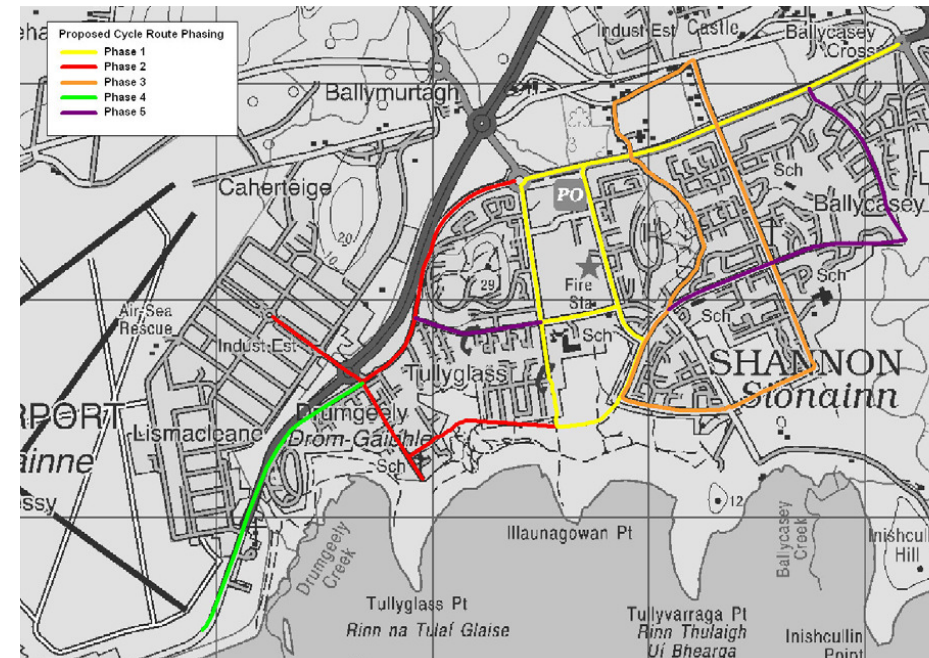


2. Concept Development

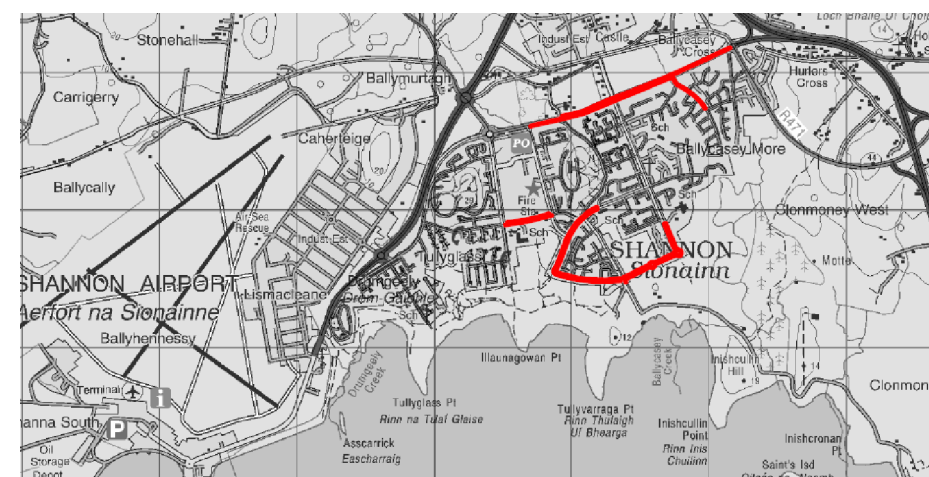
2.2 THE SHANNON LAP: Proposed Cycle Routes

Cycling Policy (11.7.3)

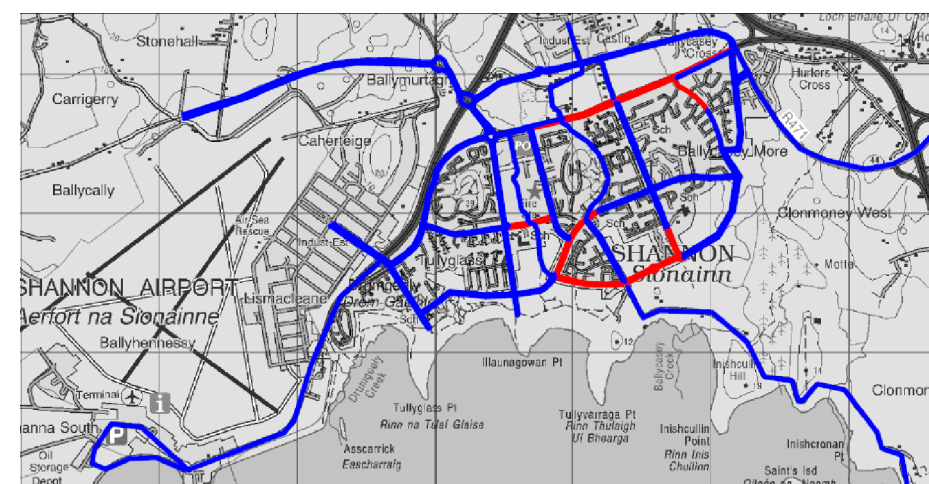
Cycle lanes and cycle tracks will be installed or constructed as part of a coherent plan which will begin with routes around the Town Centre and will then progress on a phased basis emanating from the Town Centre. Linkage with the current network and the surrounding area cycle network should be a priority. In addition, the proposed Cycling Strategy also identifies cycle parking facilities, including within the town centre, which enable the cyclist to safely leave their bicycle in a secure position. Such facilities could be located in the town square, the industrial areas and at the airport.



Proposed Cycle Route Phasing



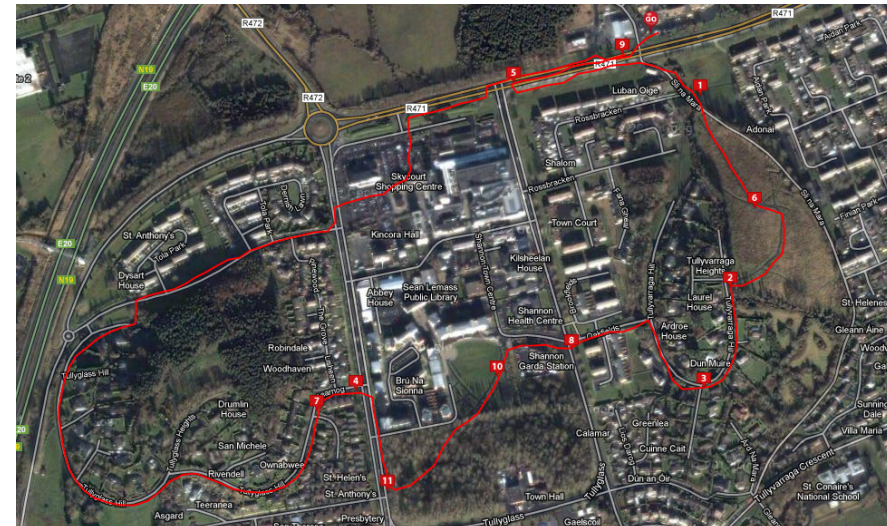
Existing Cycle Routes



Proposed and Existing Cycle Routes

2. Concept Development

2.3 CLARE TRAILS STEERING GROUP Proposed Loop Walks



Shannon Town Loop 1 (4km)



Shannon Town Loop 2 (8.5km)



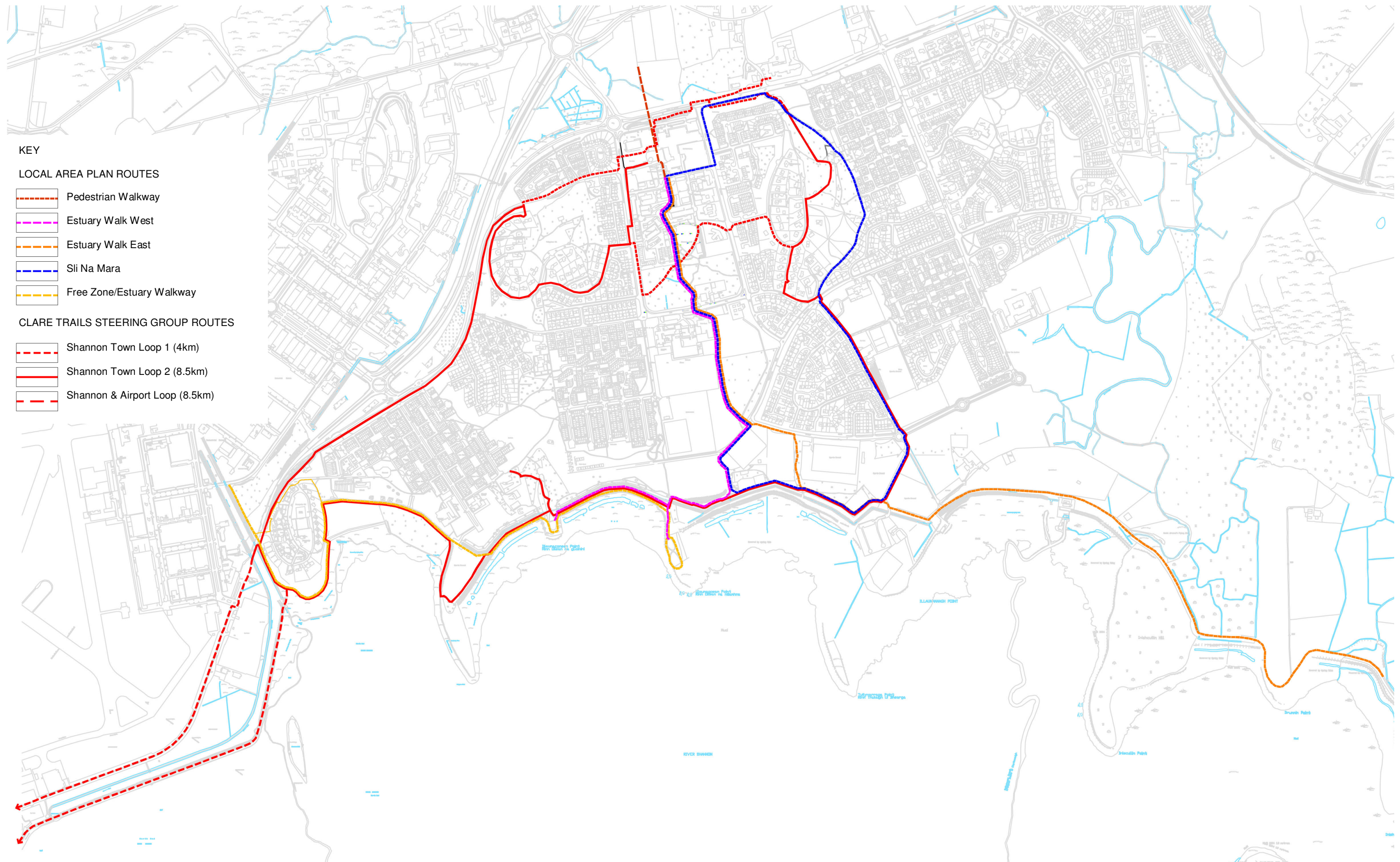
Shannon Town & Airport Loop 3 (8.5km)

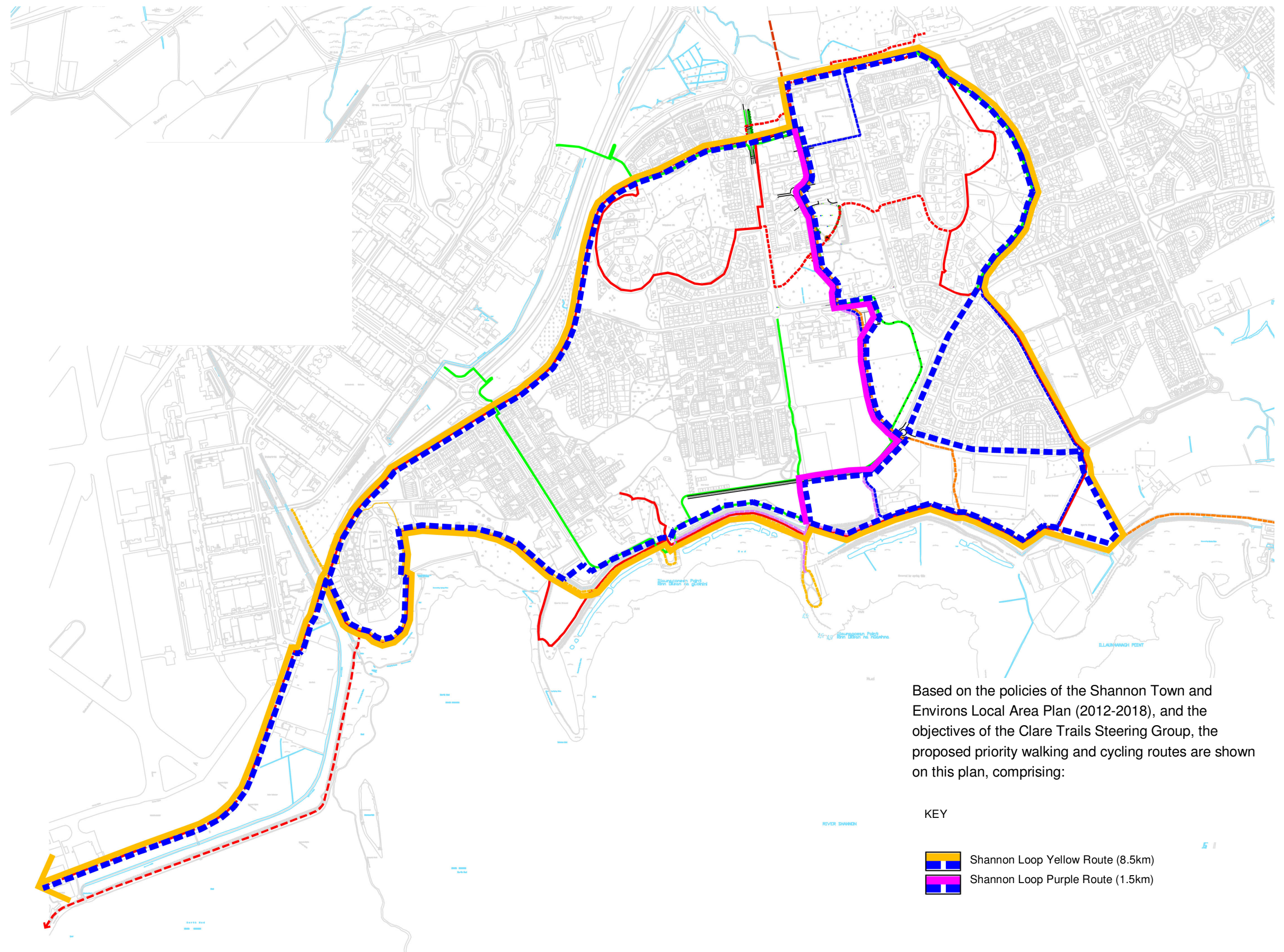
The Clare Trails Steering Group have looked at the possibility of three Looped Walks around Shannon Town and extending to the Airport, as part of a 3-year plan for the development, enhancement and promotion of trails in Co. Clare.

The Steering Group identifies the many benefits of trails generally, including improving the local economy through tourism, providing opportunities to improve fitness, making our communities more liveable, and preserving open space.

2. Concept Development

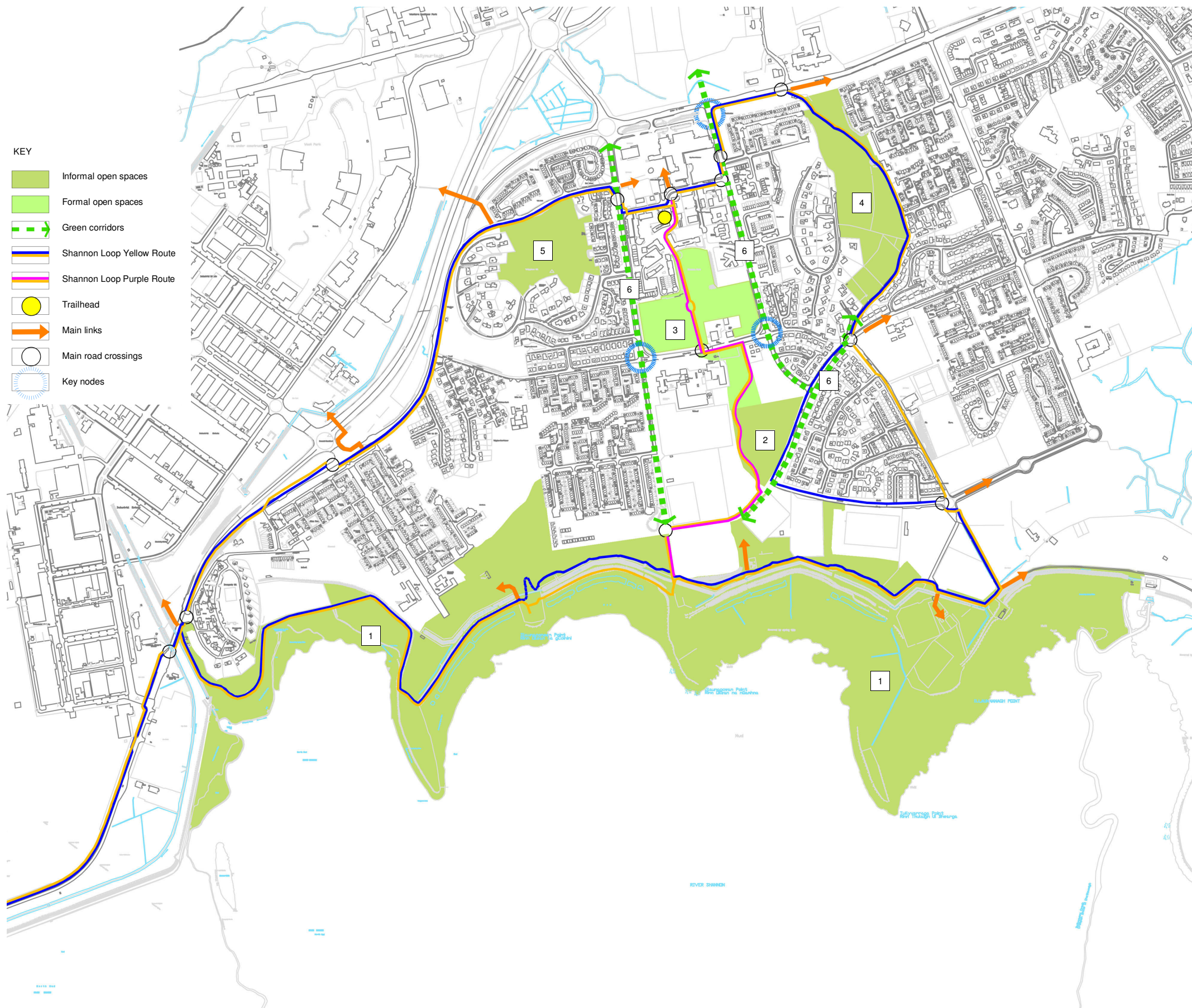
2.4 ALL PROPOSED WALKING ROUTES





2. Concept Development

2.6 GREEN INFRASTRUCTURE CONCEPT PLAN



Key Features:

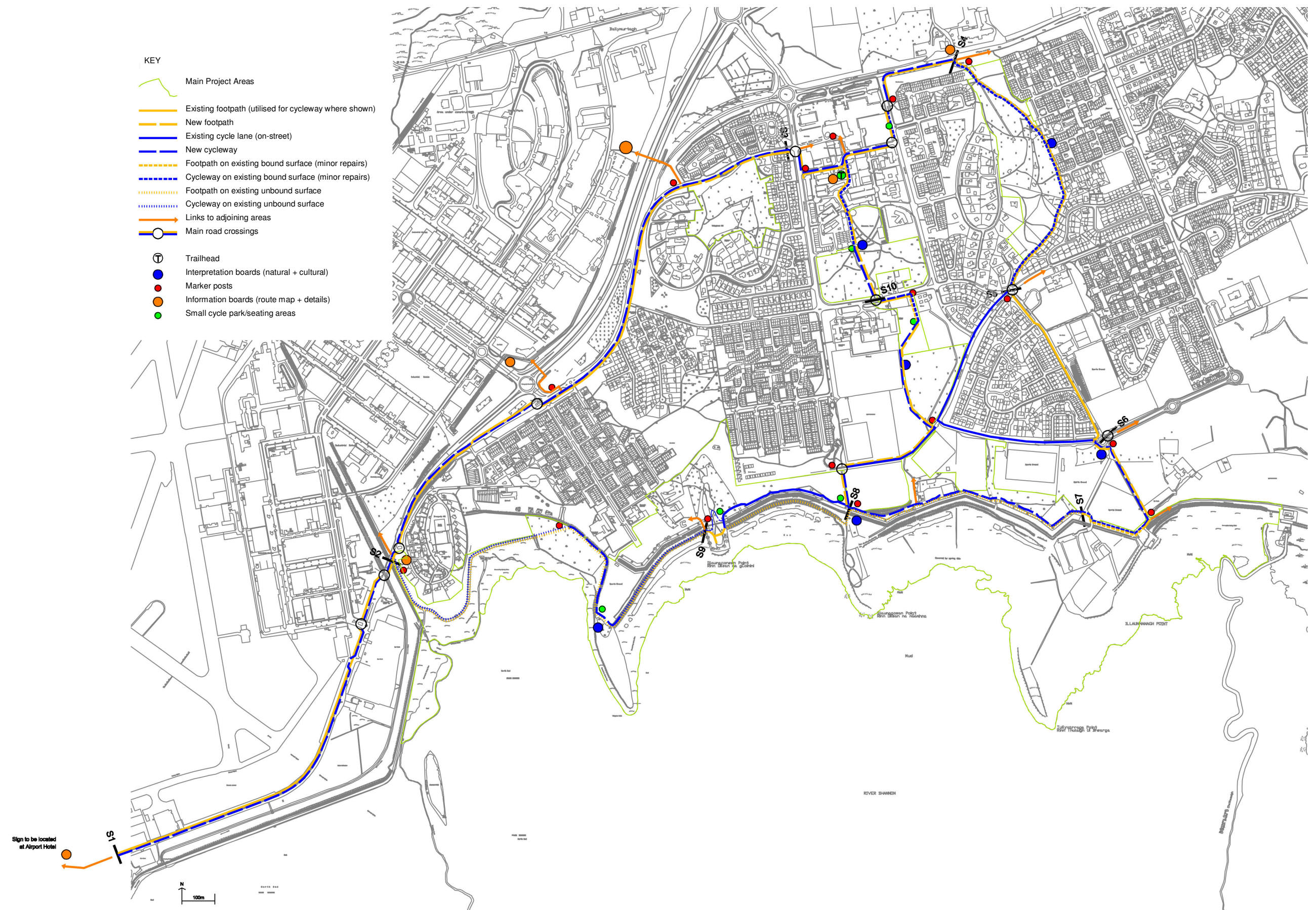
- Continuous cycle/footpath loop around Shannon Town Centre and along the embankment of Shannon Estuary.
- Links to the main loop from the Airport, Shannon Business Park and surrounding residential areas.
- Cycle/footpath spine route providing shorter loop opportunities and direct linkage between town centre and the Shannon Estuary.
- Lighting along the urban sections of the main loop and spine (not along the estuaryside).
- New information, interpretative and directional signage around the loops.
- Provision of a Trailhead outside the town library.
- Creation of a new Town Park through removal of existing over-mature trees and with provision for new woodland planting.
- Convenient and safer connections along the spine from the Leisure Centre, Secondary School and Town Hall, to the town centre, via the new Town Park.
- Development of Green Corridors along Bealach Bri and Bóthar Na Rinne, with cycle lanes, improved road crossings, new/replacement trees and hedges.
- Up-grading of key road junctions as 'nodes' along the proposed footpath/cycle loops.
- Up-grading of the Shannon Wetlands for amenity and nature conservation interests.
- General open space improvements to Tullyvarraga Hill and Tullyglass Hill.

3. The Shannon Loop

3.1 PROPOSED ROUTE PLAN

3. The Shannon Loop

















3.1 PROPOSED ROUTE PLAN



3. The Shannon Loop

3.2 ROUTE PLANS: S1 Airport Park Inn Hotel to S2 Drumgeely Hill

KEY

-  Main Project Areas
-  Existing footpath (utilised for cycleway where shown)
-  New footpath
-  Existing cycle lane (on-street)
-  New cycleway
-  Footpath on existing bound surface (minor repairs)
-  Cycleway on existing bound surface (minor repairs)
-  Footpath on existing unbound surface
-  Cycleway on existing unbound surface
-  Links to adjoining areas
-  Main road crossings
-  Trail Head
-  Interpretation Boards (natural + cultural heritage)
-  Marker Posts
-  Information Boards (route map + details)
-  Small Cycle Park/Seating Areas

Sign located at Airport
Park Inn Hotel and
cycleway continued

S1

N

100m

Proposed Route Plan



Park Inn Hotel, Shannon Airport



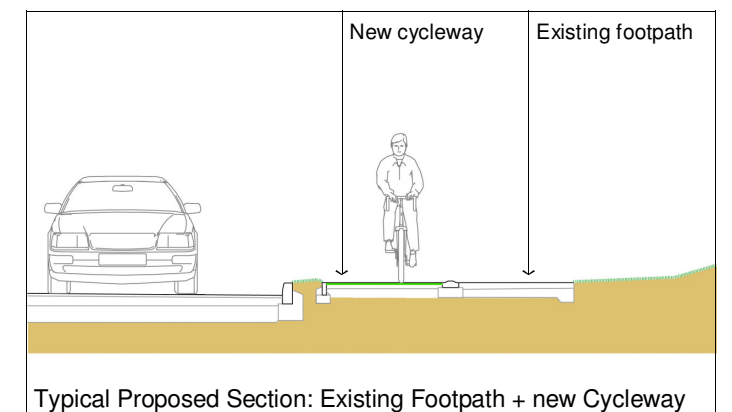
1.1 Existing footpath and grass verge



1.2 Existing footpath and grass verges



















1.3 Existing footpath and planted verge

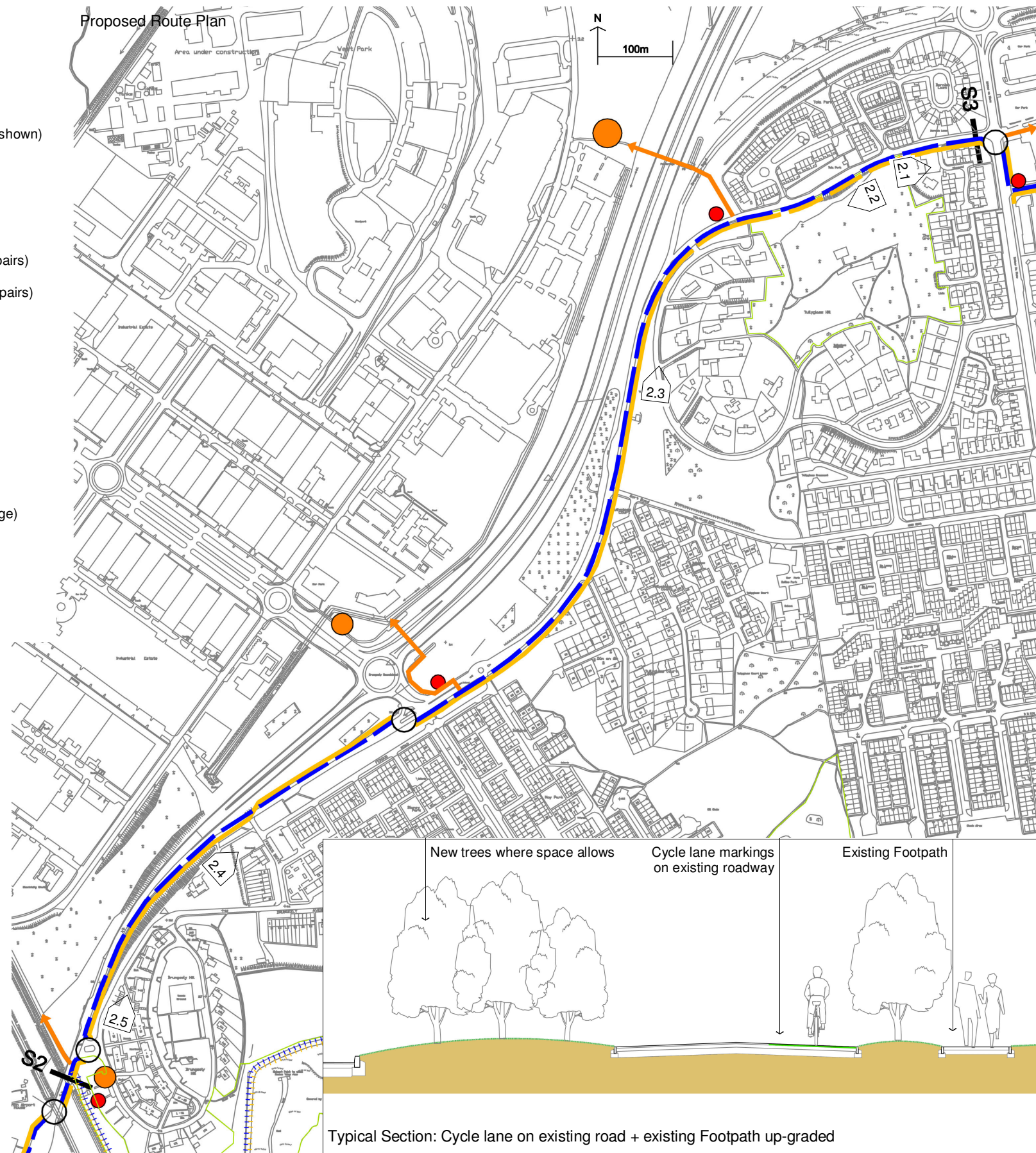


3. The Shannon Loop

3.2 ROUTE PLANS: S2 Drumgeely Hill to S3 Bóthar na Rinne

KEY

-  Main Project Areas
-  Existing footpath (utilised for cycleway where shown)
-  New footpath
-  Existing cycle lane (on-street)
-  New cycleway
-  Footpath on existing bound surface (minor repairs)
-  Cycleway on existing bound surface (minor repairs)
-  Footpath on existing unbound surface
-  Cycleway on existing unbound surface
-  Links to adjoining areas
-  Main road crossings
-  Trail Head
-  Interpretation Boards (natural + cultural heritage)
-  Marker Posts
-  Information Boards (route map + details)
-  Small Cycle Park/Seating Areas



2.1 Existing footpath and grass verge



2.2 Grass verge only



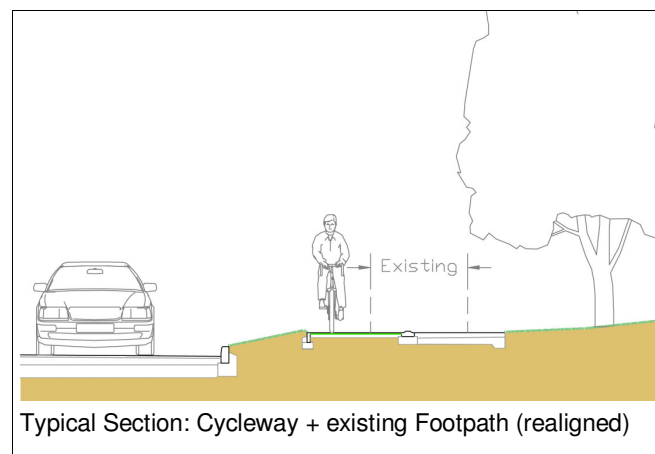
2.3 Existing footpath and grass verges



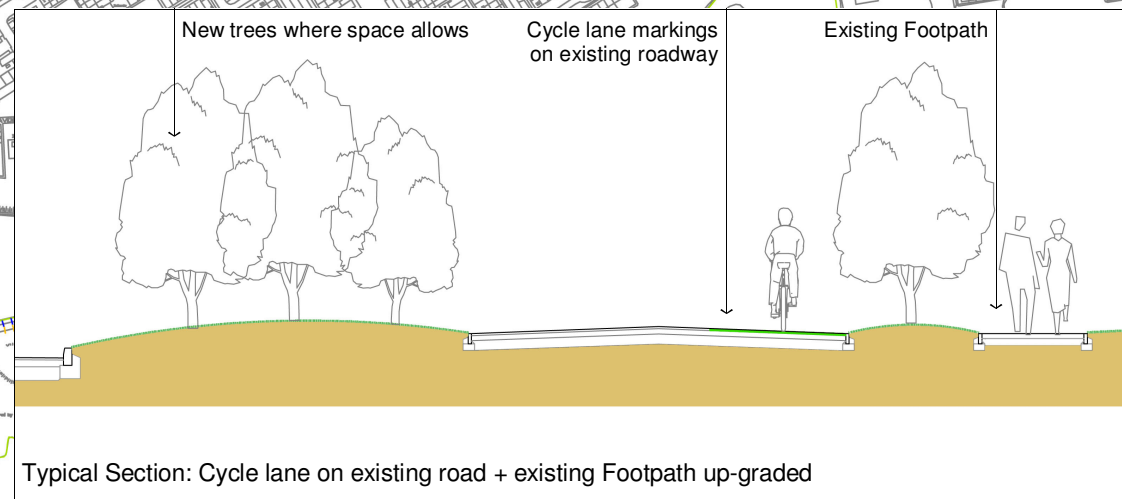
2.4 Disused road and footpath



2.5 Existing footpath and grass verges



Typical Section: Cycleway + existing Footpath (realigned)



















Typical Section: Cycle lane on existing road + existing Footpath up-graded

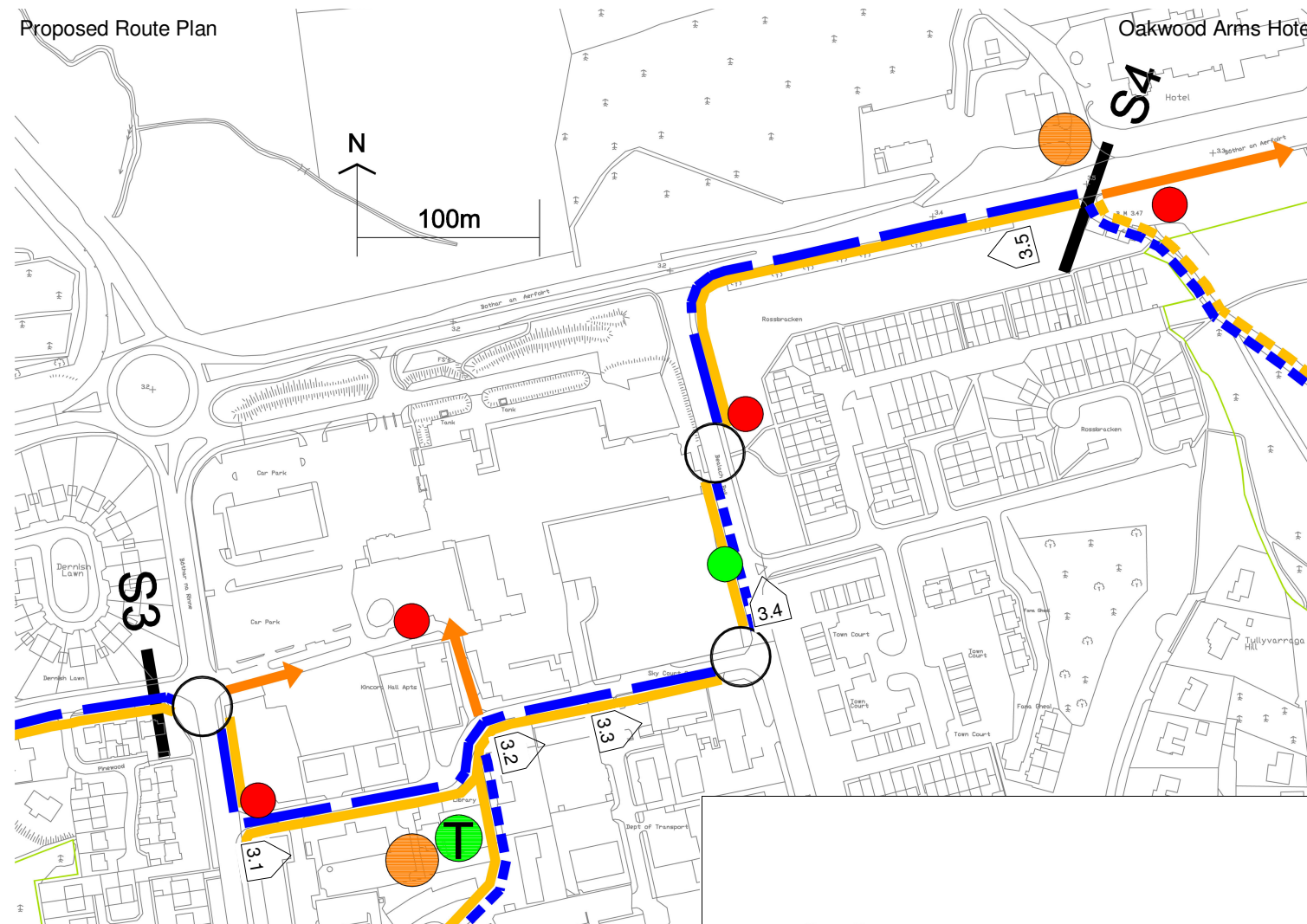
3. The Shannon Loop

3.2 ROUTE PLANS: S3 Bothar na Rinne to S4 Sli na Mara

KEY

-  Main Project Areas
-  Existing footpath (utilised for cycleway where shown)
-  New footpath
-  Existing cycle lane (on-street)
-  New cycleway
-  Footpath on existing bound surface (minor repairs)
-  Cycleway on existing bound surface (minor repairs)
-  Footpath on existing unbound surface
-  Cycleway on existing unbound surface
-  Links to adjoining areas
-  Main road crossings
-  Trail Head
-  Interpretation Boards (natural + cultural heritage)
-  Marker Posts
-  Information Boards (route map + details)
-  Small Cycle Park/Seating Areas

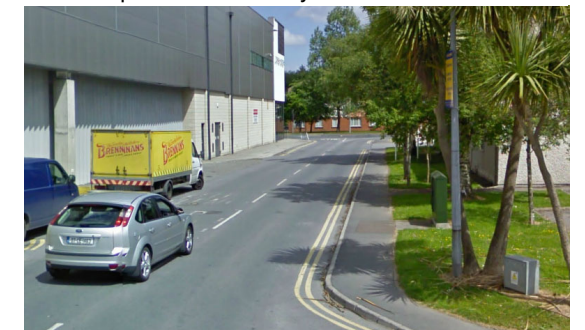
Proposed Route Plan



3.5 Footpath and wide grass verge



3.4 Footpath and roadway



3.3 Footpath and roadway



3.2 Footpath and hard verges



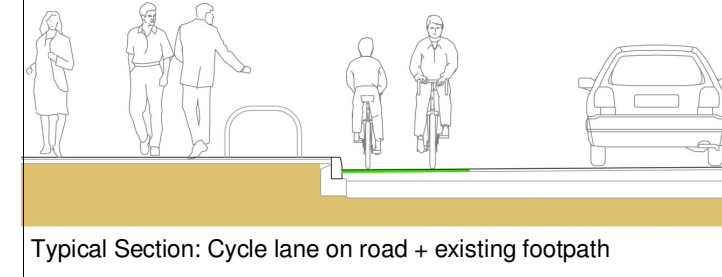
3.1 Footpath and grass verges



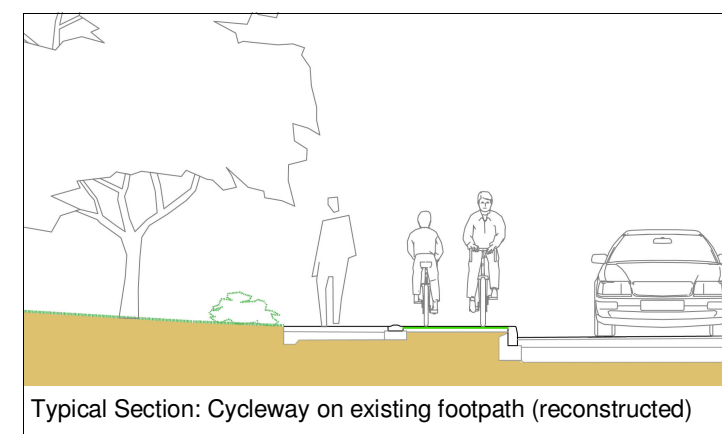
Existing cycle parking to side of Dunnes Stores



Illustrative view as proposed



Typical Section: Cycle lane on road + existing footpath



















Typical Section: Cycleway on existing footpath (reconstructed)

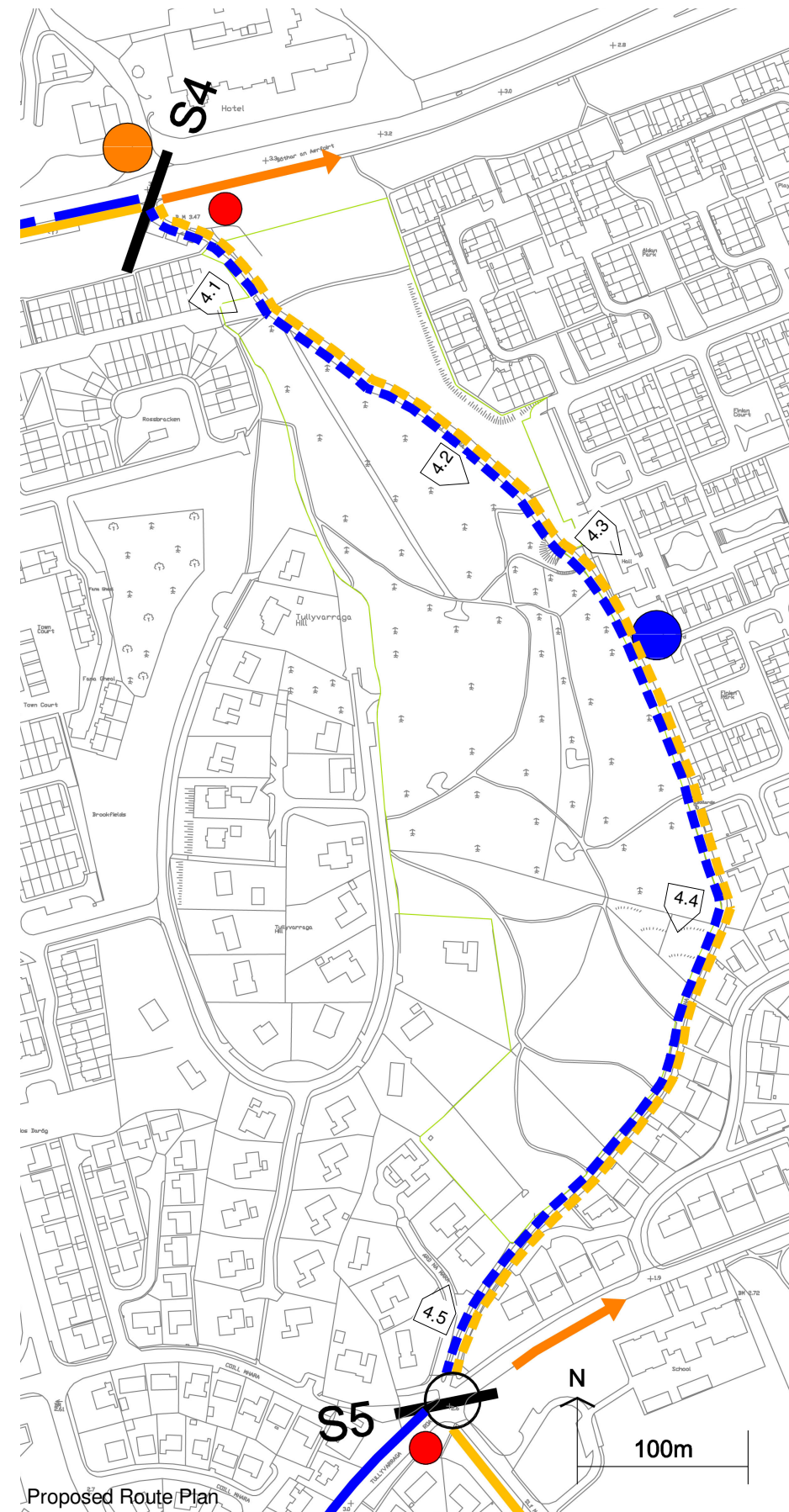
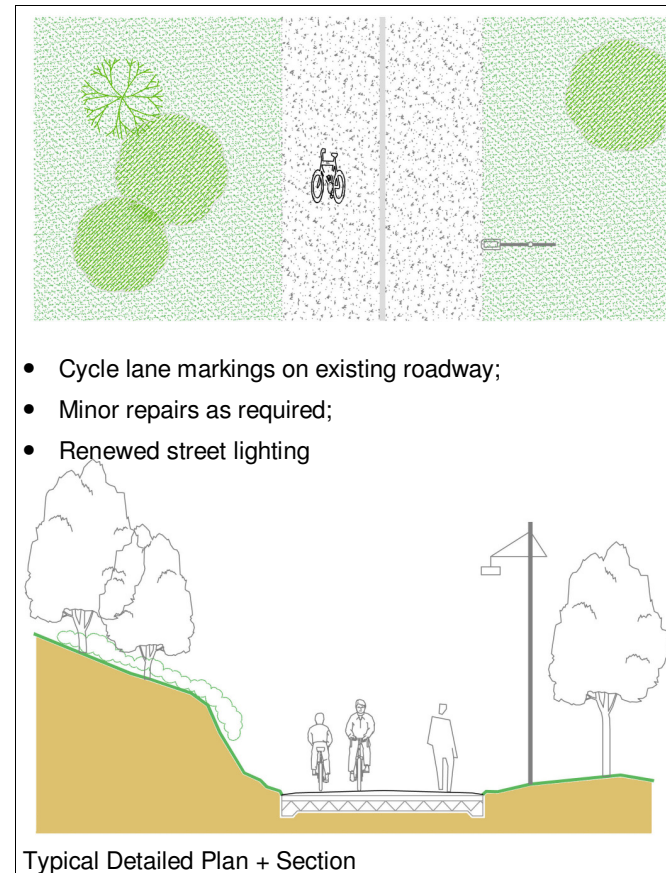
3. The Shannon Loop

3.2 ROUTE PLANS: S4 Sli na Mara to S5 Tullyvarraga Road

KEY

-  Main Project Areas
-  Existing footpath (utilised for cycleway where shown)
-  New footpath
-  Existing cycle lane (on-street)
-  New cycleway
-  Footpath on existing bound surface (minor repairs)
-  Cycleway on existing bound surface (minor repairs)
-  Footpath on existing unbound surface
-  Cycleway on existing unbound surface
-  Links to adjoining areas
-  Main road crossings
-  Trail Head
-  Interpretation Boards (natural + cultural heritage)
-  Marker Posts
-  Information Boards (route map + details)
-  Small Cycle Park/Seating Areas

Refer Also to Section 4.5:
Tullyvarraga Hill Design Guide



4.1 Entry along existing roadway



4.2 Existing roadway through woodland



4.3 Existing roadway behind Community Hall



4.4 Existing roadway behind houses



















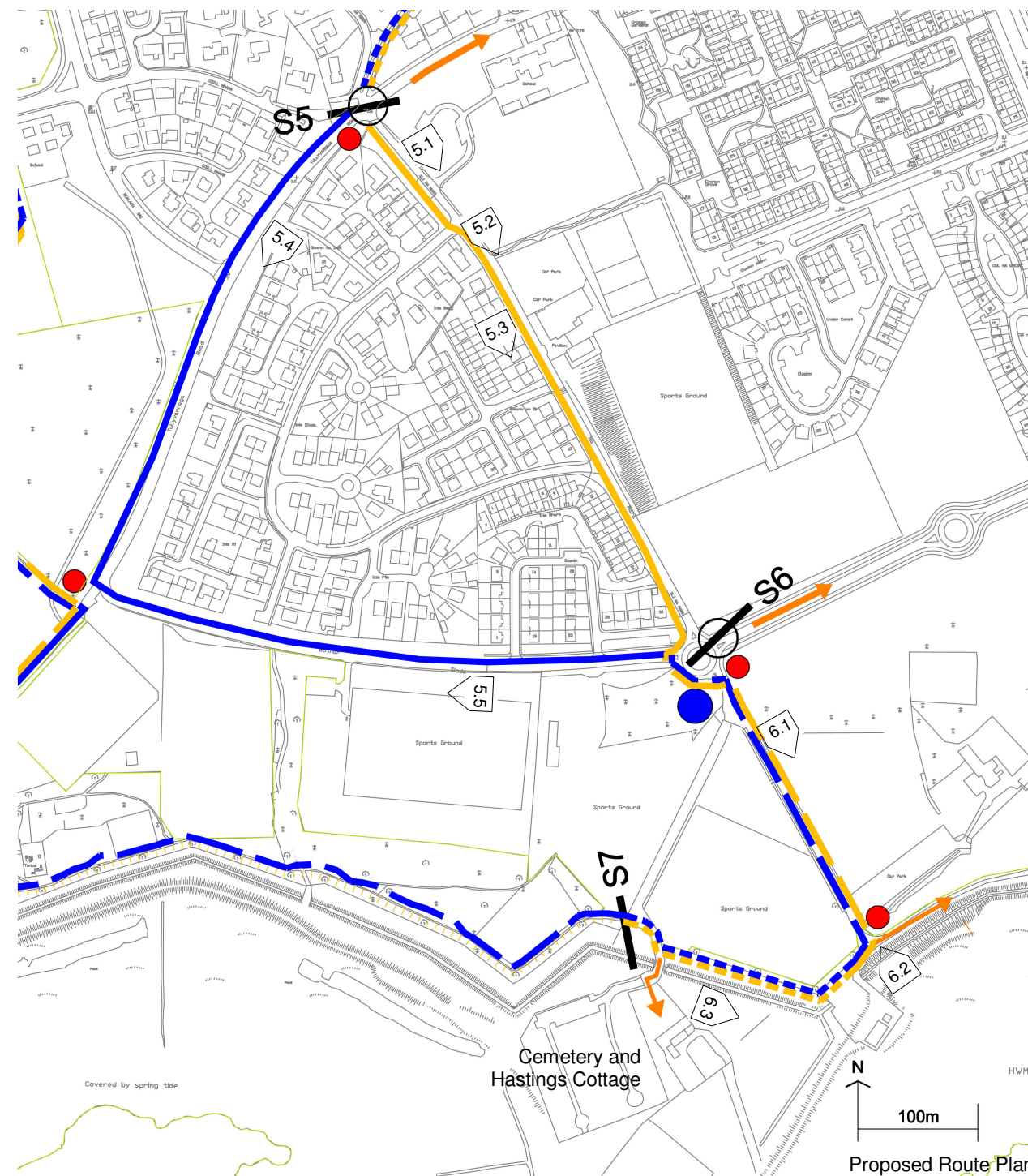
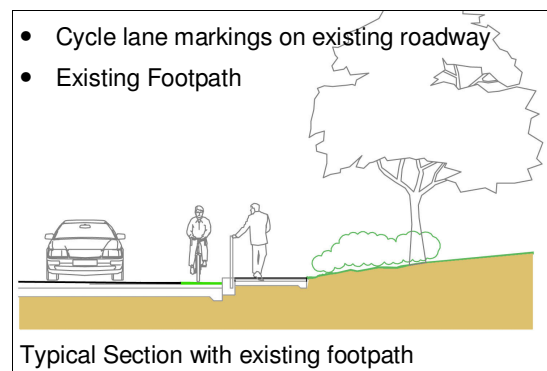
4.5 Entry from Tullyvarraga Road

3. The Shannon Loop

3.2 ROUTE PLANS: S5 Tullyvarraga Road to S7 Estuaryside Cemetery

KEY

-  Main Project Areas
-  Existing footpath (utilised for cycleway where shown)
-  New footpath
-  Existing cycle lane (on-street)
-  New cycleway
-  Footpath on existing bound surface (minor repairs)
-  Cycleway on existing bound surface (minor repairs)
-  Footpath on existing unbound surface
-  Cycleway on existing unbound surface
-  Links to adjoining areas
-  Main road crossings
-  Trail Head
-  Interpretation Boards (natural + cultural heritage)
-  Marker Posts
-  Information Boards (route map + details)
-  Small Cycle Park/Seating Areas



5.1 Existing footpath Inis Mhara east side



5.2 End of existing footpath at Sports Ground



5.3 Existing footpath Inis Mhara west side



5.4 Existing cycle lanes Tullyvarraga Crescent



5.5 Existing cycle lanes Tullyvarraga Crescent



6.3 No existing footpath



6.2 Existing utility infrastructure



















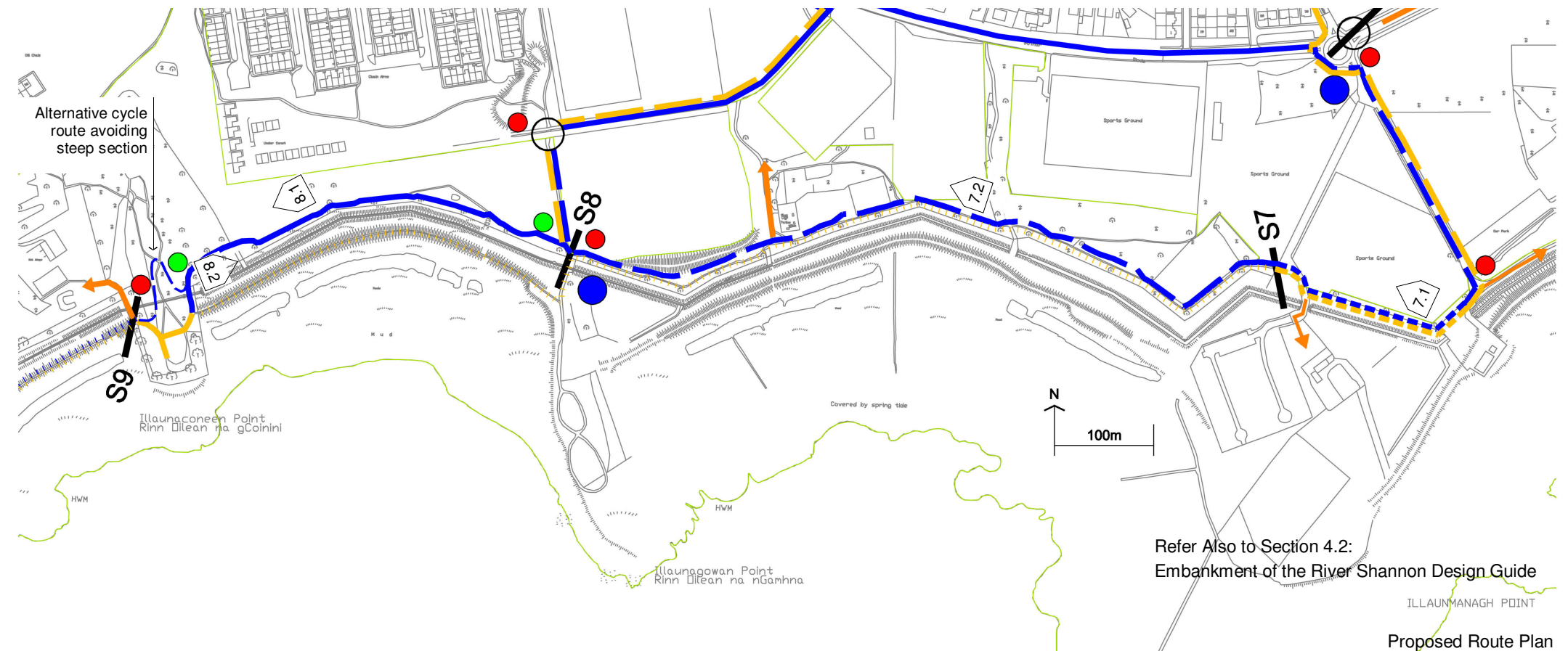
6.1 Existing track to Estuaryside

3. The Shannon Loop

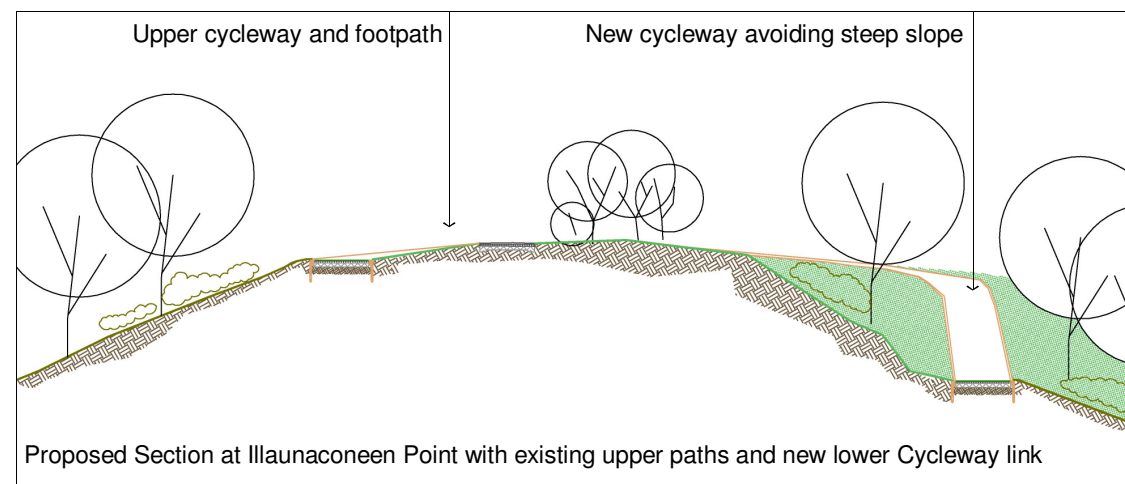
3.2 ROUTE PLANS: S7 Estuaryside Cemetery to S9 Illaunaconeen Point

KEY

-  Main Project Areas
-  Existing footpath (utilised for cycleway where shown)
-  New footpath
-  Existing cycle lane (on-street)
-  New cycleway
-  Footpath on existing bound surface (minor repairs)
-  Cycleway on existing bound surface (minor repairs)
-  Footpath on existing unbound surface
-  Cycleway on existing unbound surface
-  Links to adjoining areas
-  Main road crossings
-  Trail Head
-  Interpretation Boards (natural + cultural heritage)
-  Marker Posts
-  Information Boards (route map + details)
-  Small Cycle Park/Seating Areas



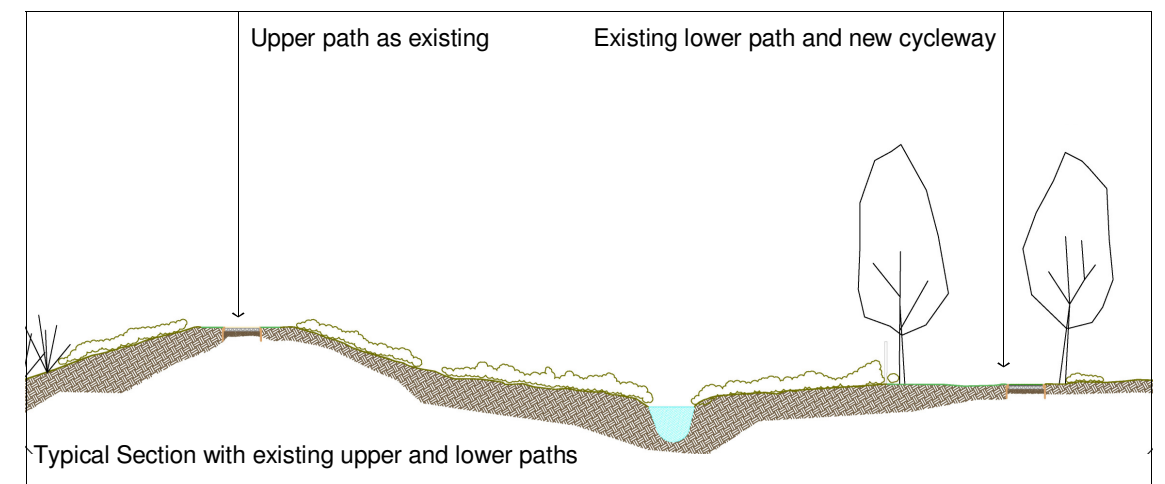
Steep section of path approaching the Point



8.2 Existing unbound footpath (upper)



8.1 Existing unbound footpath (lower)



7.2 Existing unbound footpath (lower)



















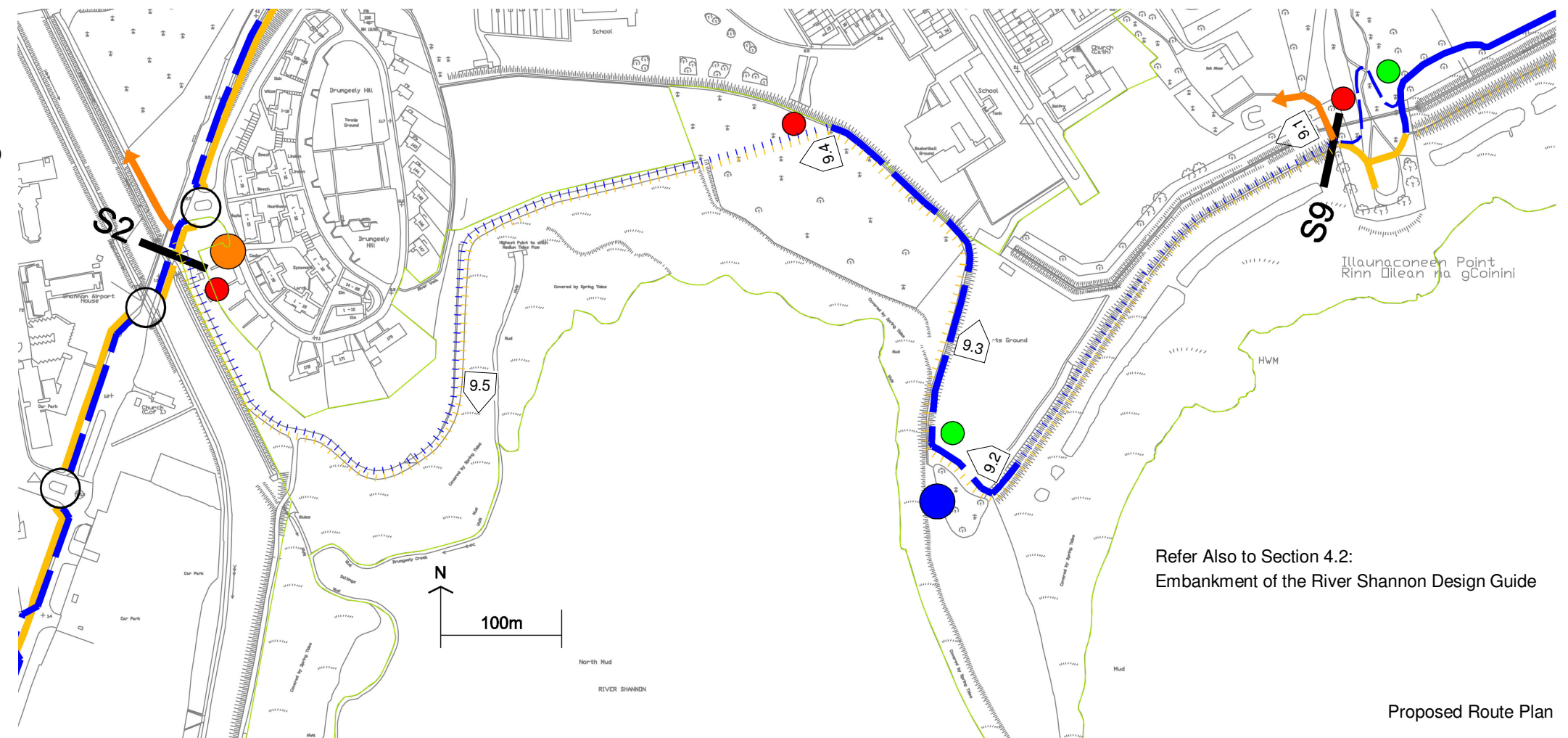
7.1 Existing unbound footpath (lower)

3. The Shannon Loop

3.2 ROUTE PLANS: S9 Illaunaconeen Point to S2 Drumgeely Hill

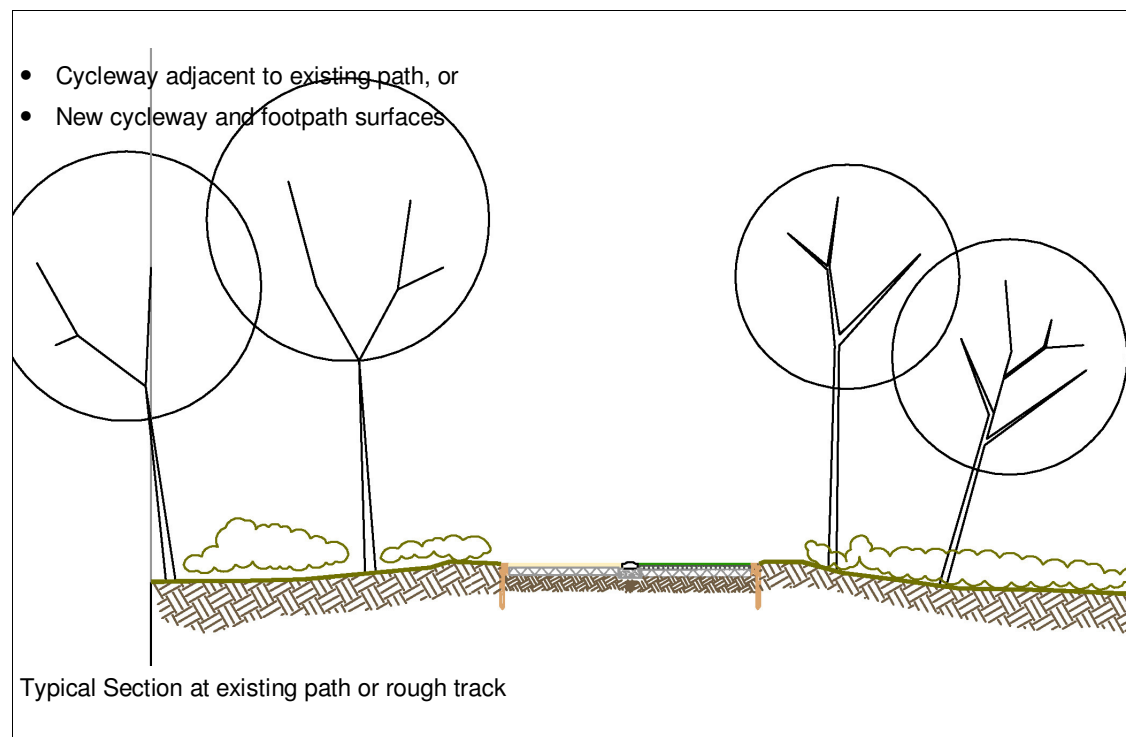
KEY

-  Main Project Areas
-  Existing footpath (utilised for cycleway where shown)
-  New footpath
-  Existing cycle lane (on-street)
-  New cycleway
-  Footpath on existing bound surface (minor repairs)
-  Cycleway on existing bound surface (minor repairs)
-  Footpath on existing unbound surface
-  Cycleway on existing unbound surface
-  Links to adjoining areas
-  Main road crossings
-  Trail Head
-  Interpretation Boards (natural + cultural heritage)
-  Marker Posts
-  Information Boards (route map + details)
-  Small Cycle Park/Seating Areas



Refer Also to Section 4.2:
Embankment of the River Shannon Design Guide

Proposed Route Plan



Typical Section at existing path or rough track



9.5 Existing rough track



9.4 Existing unbound footpath (lower)



9.3 Existing unbound footpath (lower)



9.2 Existing unbound footpath (lower)



















9.1 Existing unbound footpath (upper)

3. The Shannon Loop

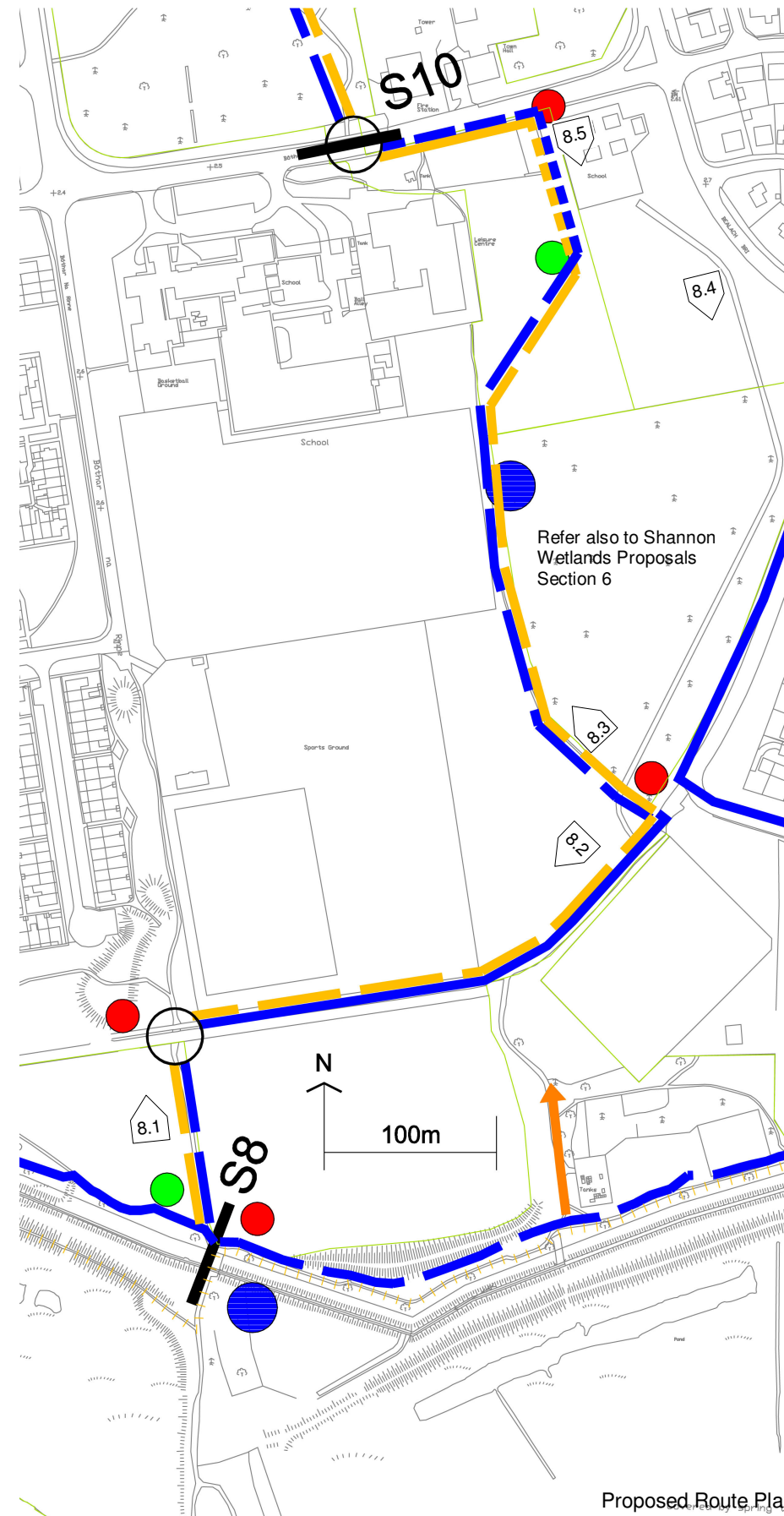
3.2 ROUTE PLANS: S8 Illaunagowan Point to S10 Bóthar Linne

KEY

-  Main Project Areas
-  Existing footpath (utilised for cycleway where shown)
-  New footpath
-  Existing cycle lane (on-street)
-  New cycleway
-  Footpath on existing bound surface (minor repairs)
-  Cycleway on existing bound surface (minor repairs)
-  Footpath on existing unbound surface
-  Cycleway on existing unbound surface
-  Links to adjoining areas
-  Main road crossings
-  Trail Head
-  Interpretation Boards (natural + cultural heritage)
-  Marker Posts
-  Information Boards (route map + details)
-  Small Cycle Park/Seating Areas



Illustrative view of new on-street cycle lane



Proposed Route Plan



8.5 Existing footpath and car park



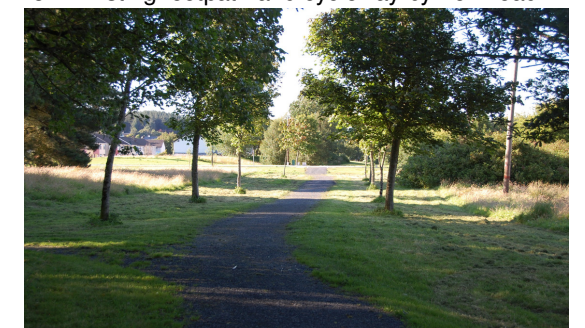
8.4 Existing footpath to east of area



8.3 Existing footpath exiting the area



8.2 Existing footpath and cycleway by new road



8.1 Existing footpath link to Estuaryside



















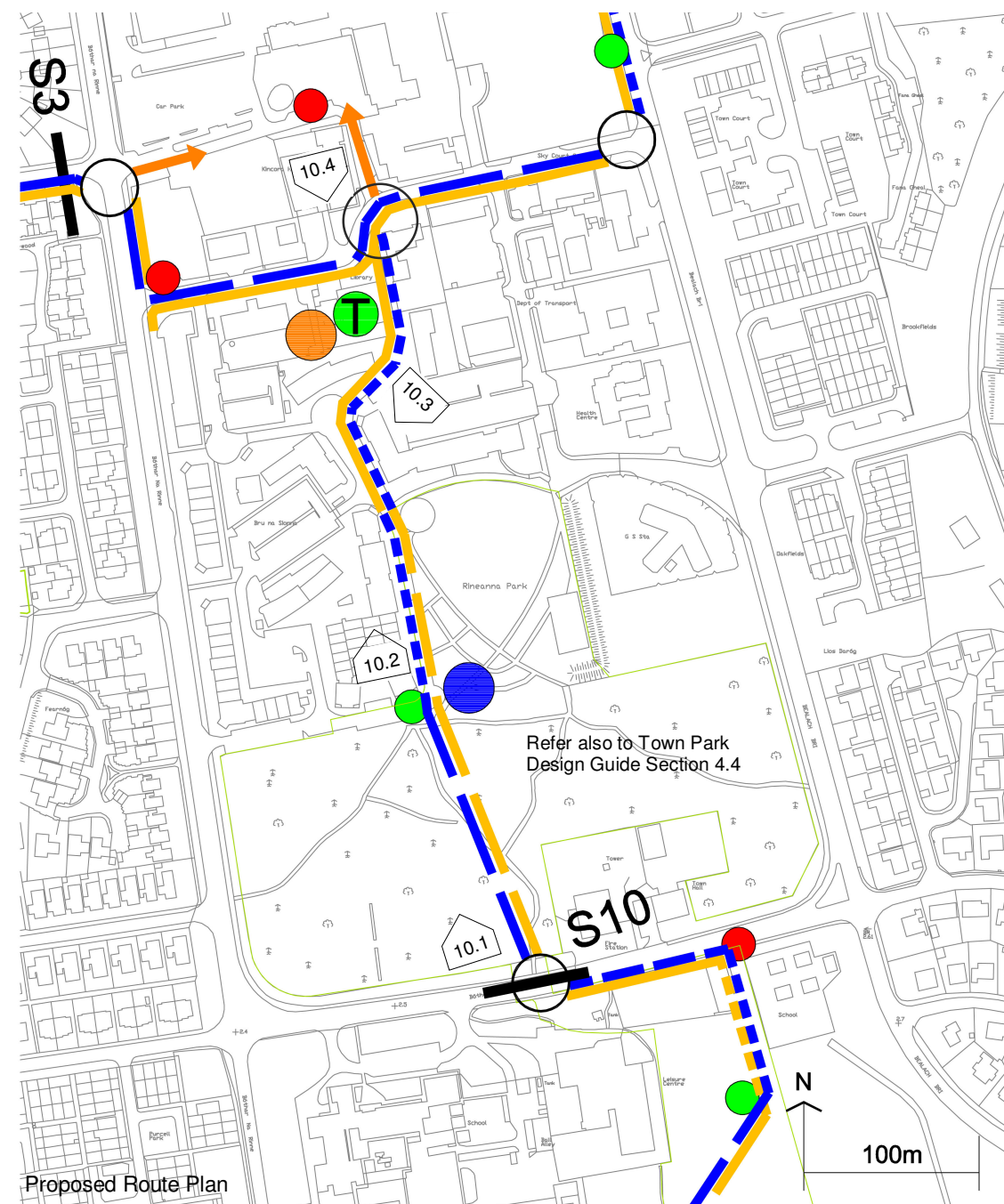
Proposed location of pedestrian crossing on Bóthar Linne

3. The Shannon Loop

3.2 ROUTE PLANS: S10 Bóthar Linne to Library Trailhead

KEY

-  Main Project Areas
-  Existing footpath (utilised for cycleway where shown)
-  New footpath
-  Existing cycle lane (on-street)
-  New cycleway
-  Footpath on existing bound surface (minor repairs)
-  Cycleway on existing bound surface (minor repairs)
-  Footpath on existing unbound surface
-  Cycleway on existing unbound surface
-  Links to adjoining areas
-  Main road crossings
-  Trail Head
-  Interpretation Boards (natural + cultural heritage)
-  Marker Posts
-  Information Boards (route map + details)
-  Small Cycle Park/Seating Areas



Cycleway and footpath by Library as proposed



10.4 Existing path by Library



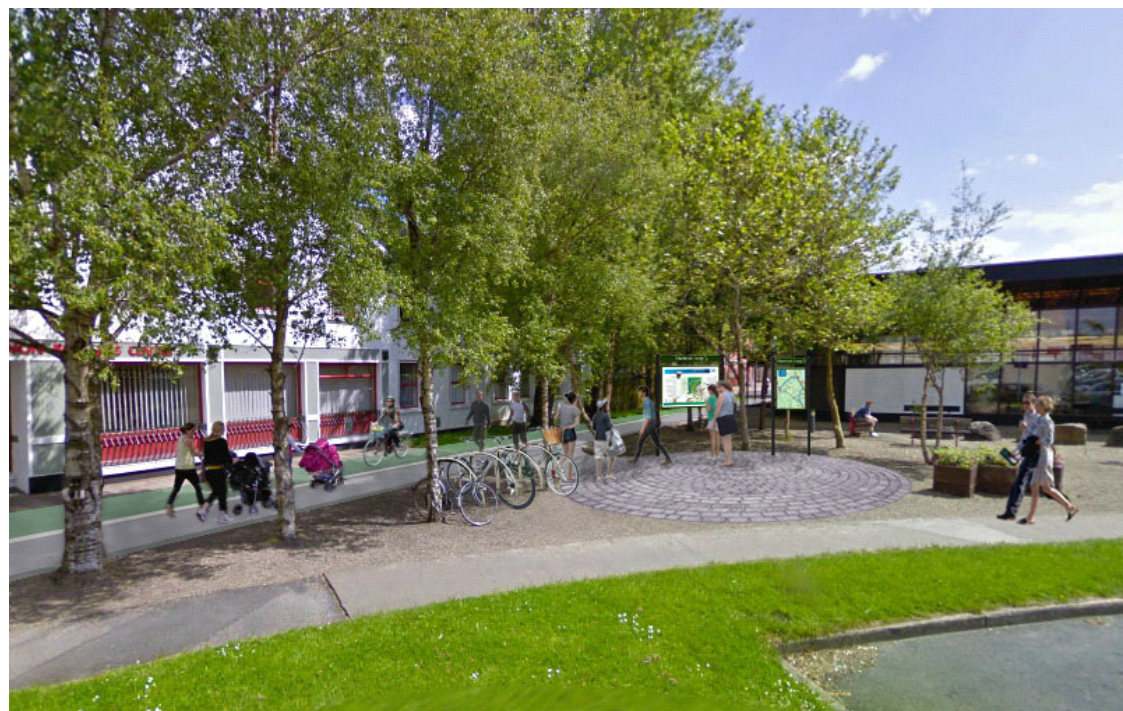
10.3 Pathway through apartments



10.2 Existing roadway by apartments



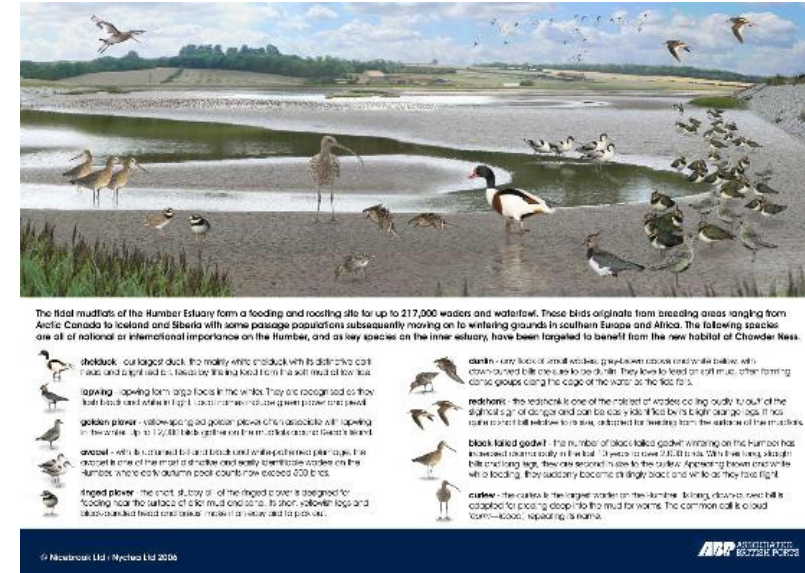
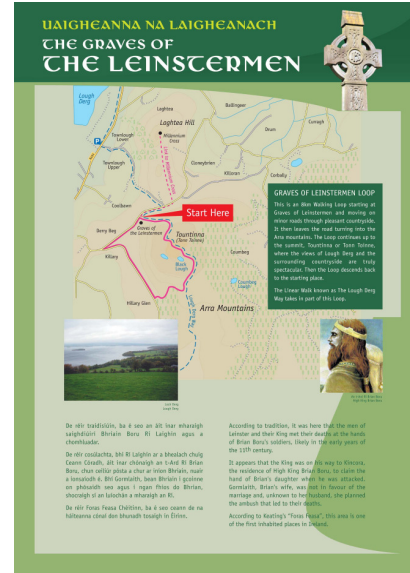
10.1 Existing woodland path



Illustrative view of Trailhead as proposed

3. The Shannon Loop

3.3 DESIGN GUIDE

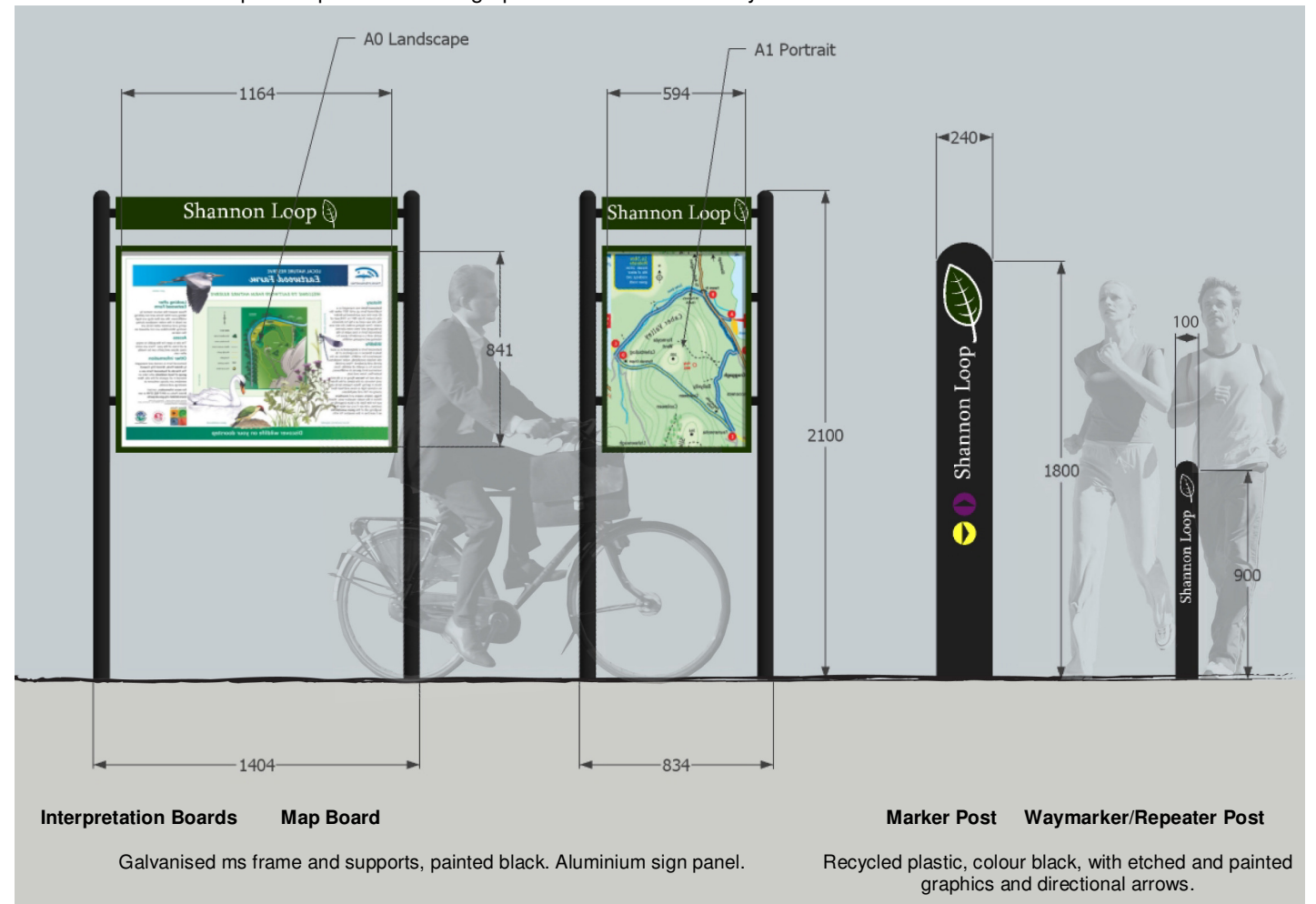


Possible Interpretation themes:

- Importance of the estuary for wildfowl and waders
- Flooding and embankments around Shannon Town
- Bronze Age history of the Shannon estuary
- Development of Shannon New Town
- Natural history of the Shannon Wetlands

Typical Loop Walk graphics - Shannon Development

Sample interpretation board graphics for Shannon Estuary

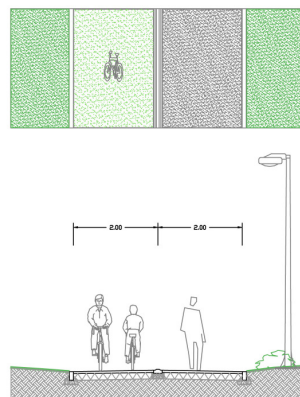


Proposed sign types

Preliminary Quantities (refer Sections 3.2 and 4 for locations):

Urban areas (Town Centre):

- Cycleway
75mm thick bitmac wearing course (coloured green) and base course, on 150mm sub-base CL804
- PC concrete edge kerbs and PC concrete profiled delineator kerb on conc founds
- Footpath
50mm bitmac wearing course, on 150mm sub-base CL804
- Street lights, LED solar or wind-powered



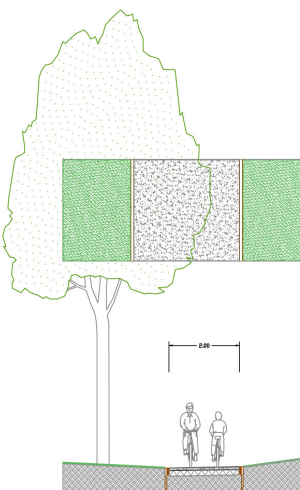
Delineator kerb



Waymarker post

Rural Areas (Estuaryside):

- Cycleway
50mm self-binding limestone aggregate 0-10mm, on 150mm sub-base CL804
- Treated softwood edge boards and stakes
- Note: French drain to be provided one side of cycleway in wet areas or where water table is high








Typical cycleway details



Illustrative view - shared path/cycleway (Estuaryside)



KEY

-  Shannon Loop Yellow Route
-  Interpretation Boards (natural + cultural heritage)
-  Marker Posts
-  Information Boards (route map + details)
-  Small Cycle Park/Seating Areas



Incidental recreational facilities, such as seating, picnic tables, bird hides, lookout points and small cycle parks, to be incorporated at nodal points where they can be integrated with the landscape

Tourist information centre at Illaunagowan Point, as proposed by LAP, to promote the estuary for ecologically sensitive tourist-related development. This would be located to allow a view of the estuary, while not resulting in adverse visual impact on the shoreline, reduce the amenity of the area, or negatively impact on the Estuary, its flora or its fauna.

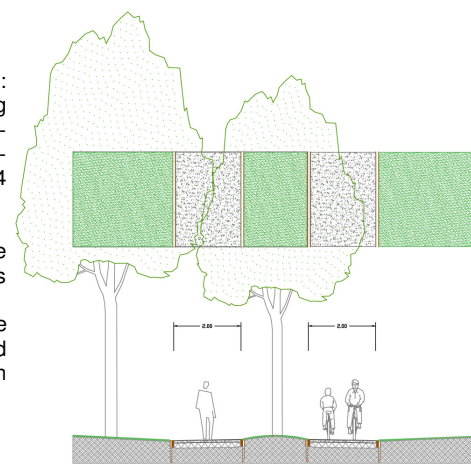


Eco-Plastic site furniture

Cycleway and Footpath:
50mm self-binding
limestone aggregate 0-
10mm, on 150mm sub-
base CL804

Treated softwood edge
boards and stakes

Note: French drain to be
provided in wet areas and
where water table is high



Footpath and cycleway details



Illustrative views of shared path/cycleway



KEY

- Shannon Loop Purple Route
- Interpretation Boards (natural + cultural heritage)
- Marker Posts
- Information Boards (route map + details)
- Small Cycle Park/Seating Areas



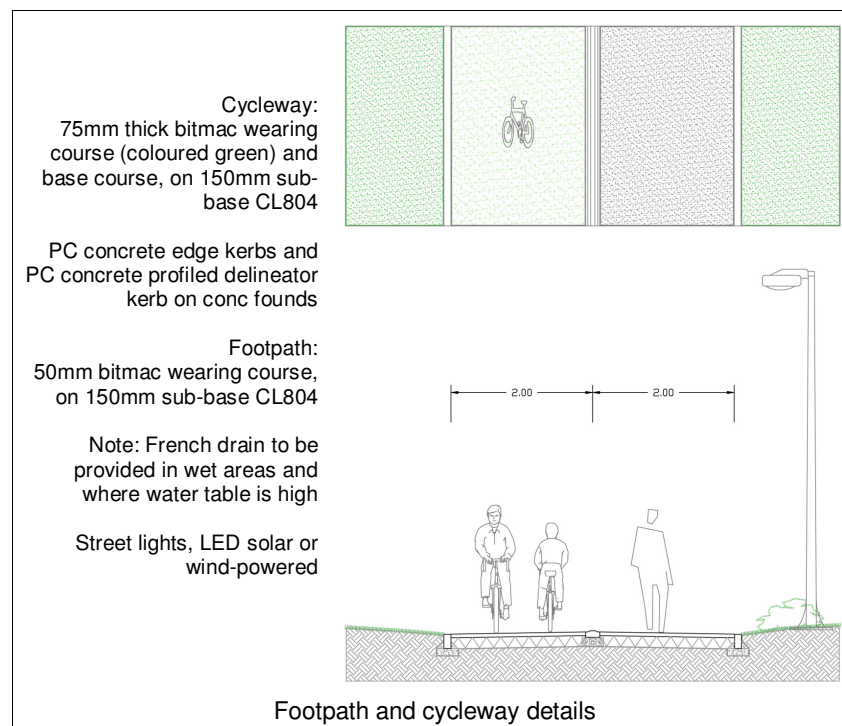
Typical boardwalk through aquatic planting

- Native hedge to boundaries of extended Gaelscoil site
- Edible landscape zone: Fruit trees and berry hedges
- Informal footpath loop from existing path
- Low mound
- Shallow scrape with marginal aquatic planting and boardwalk (location indicative)
- Shannon Loop Purple Route: combined cycleway/footpath with lighting
- Shallow scrape with marginal aquatic planting and boardwalk (location indicative)



Key Features:

- The planned restoration of the site to its original natural state is currently being undertaken by Dúchas na Sionna, including clearing of dumped material, the removal of invasive vegetation, and re-surfacing of the main footpath.
- Proposed 'edible landscape' zone to north of area as transition between informal landscape and parkland, also providing an educational resource.
- Boundaries of extended Gaelscoil to be defined by suitable security fence and planted with native hedgerow.
- Existing conifers across the area to be progressively removed and replaced with native deciduous trees.
- New combined footpath and cycleway to western edge, with lighting, as part of Shannon Loop Purple Route.
- New footpath link to existing, recently re-surfaced, path on eastern side of site, providing a looped walk around the area.
- Two shallow scrapes formed in suitable low-lying areas to encourage wetland habitat of native aquatic and marginal plants.
- Optional boardwalks across the scrapes to enhance the visitor experience and to limit disturbance of the developing habitat.
- Interpretation sign on nature conservation interests of the area; marker posts each end of the route; and small cycle park/seating area close to existing play area.



Existing conifers in vicinity of proposed scrape



Existing footpath to east side (recently re-surfaced)



Aerial photo as existing

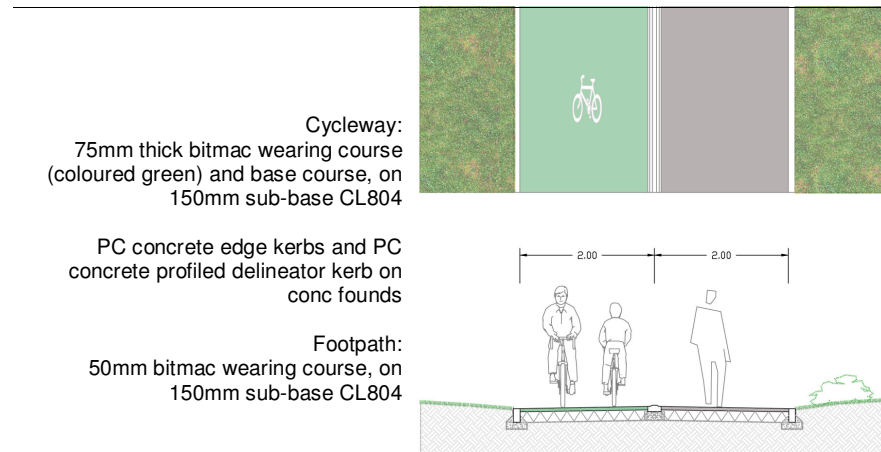
KEY (Softworks)		KEY (Hardworks)	
	Existing trees retained		Main footpaths
	Existing scrub retained		Main cycleways
	Amenity trees		Other cycle lanes
	Signature trees		Existing footpaths
	Woodland planting		Low walls
	Mown grass		Anti-skid surface
	Rough grassland		Play surface
	Ornamental shrubs		Trim trail
	Ornamental hedges		Existing play facilities
	Native hedges		Seating pods
			Boundary fencing
			Lighting
			Cycle access control



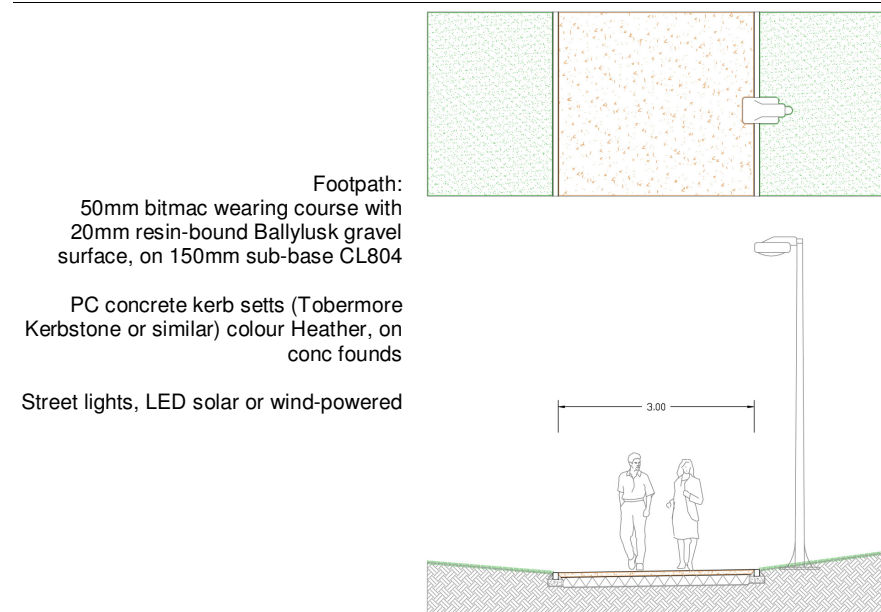
Masterplan Proposals

Main Areas:

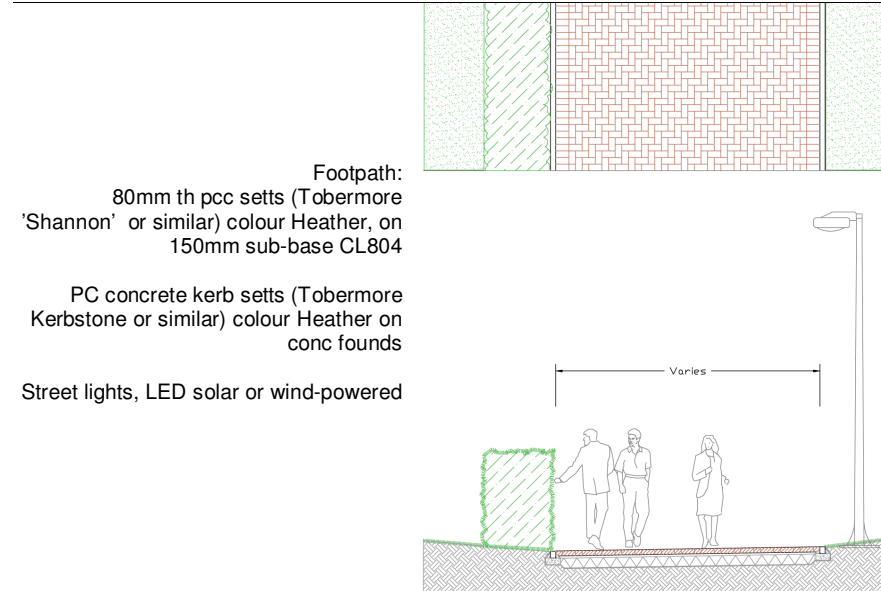
1. Rineanna Park
2. Existing Apartments
3. Garda Station
4. Town Hall + Fire Station
5. Existing woodland
6. Existing play area
7. Leisure Centre
8. Shannon Wetlands



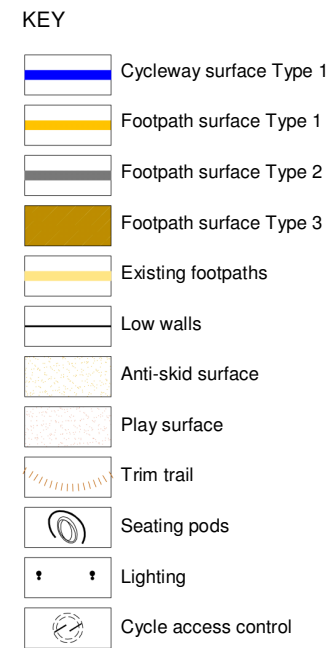
Cycleway Type 1 coloured asphalt and Footpath Type 1 bitmac



Footpath Type 2 bitmac with resin-bound aggregate

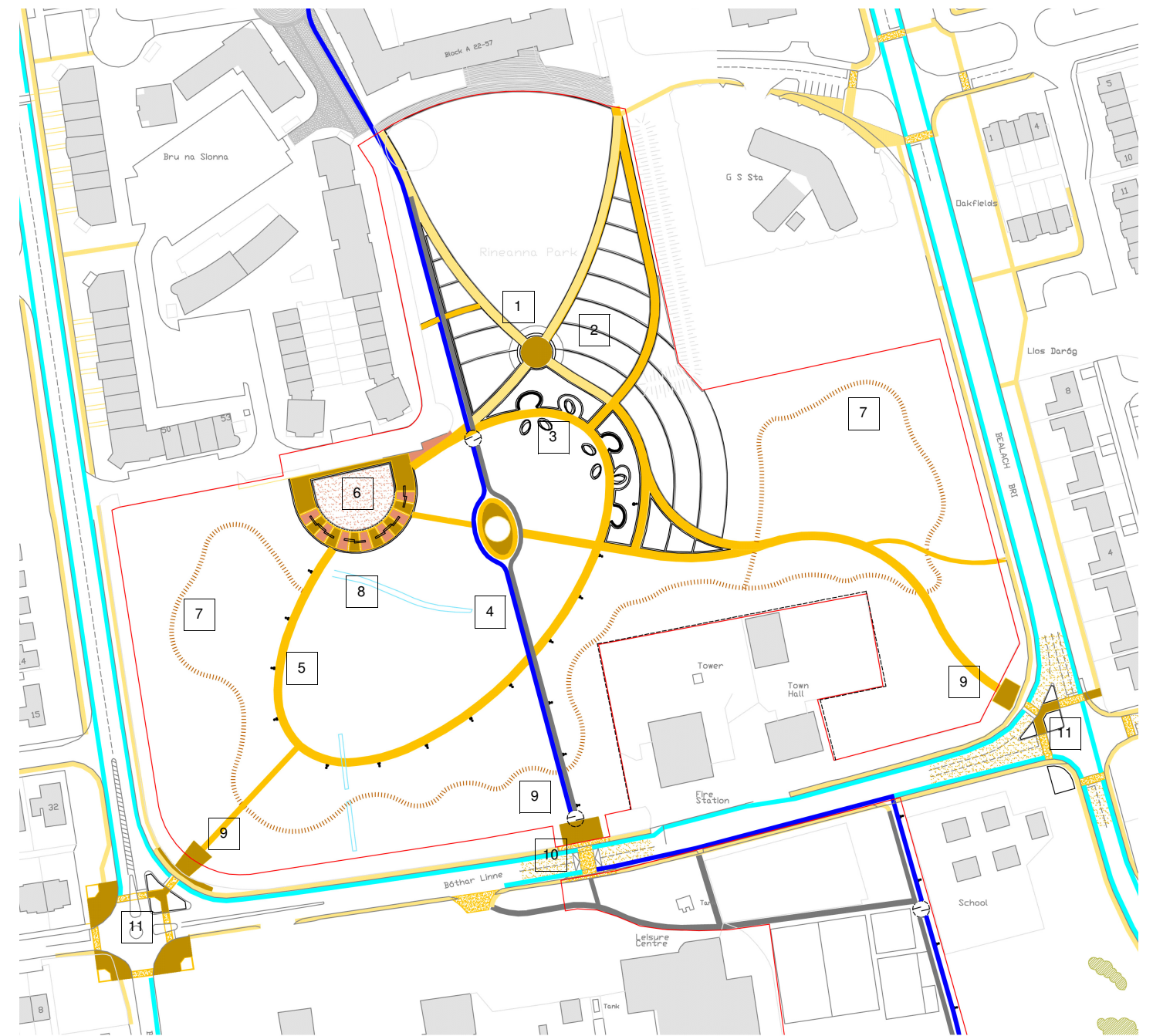


Footpath Type 3: PCC Setts



Main Features:

1. Seating node
2. Grass/shrub terraces
3. Seating pods
4. Main cycle/footpath route (Shannon Loop Purple Route)
5. Oval footpath
6. Activity area + seating terrace
7. Trim trail + exercise stations
8. Existing ditch (to be culverted)
9. Feature entranceways
10. Controlled pedestrian crossing
11. Green Corridor nodes (refer Section 4.7)



Hardworks Proposals

4. Green Infrastructure Design Guide

4.4 TOWN PARK Reference Images



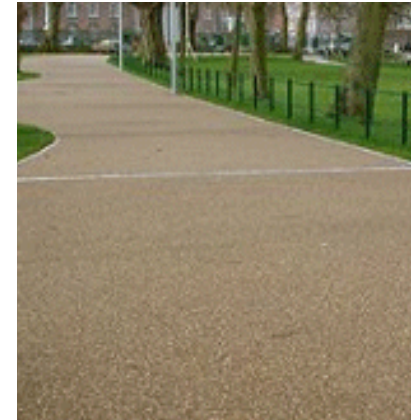
Cycle track + kerb



Typical green on-street cycle lane



Resin-bound aggregate - Ballylusk gravel



Tobermore 'Shannon' paving and edge



Typical informal cycle track



Typical grass terraces (with or without concrete steps)



Trim trail exercise equipment for all age groups



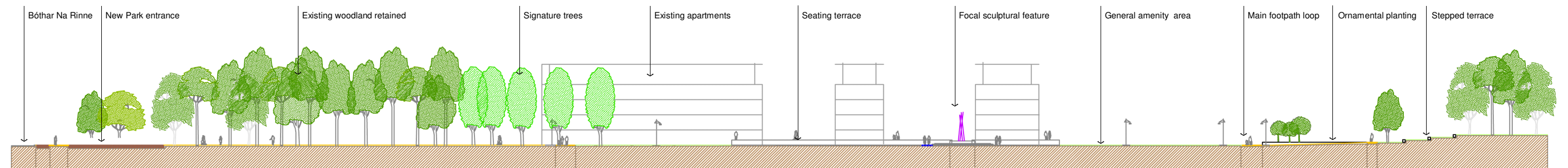
Solar-powered lights, or provision of wind turbine to power new lighting



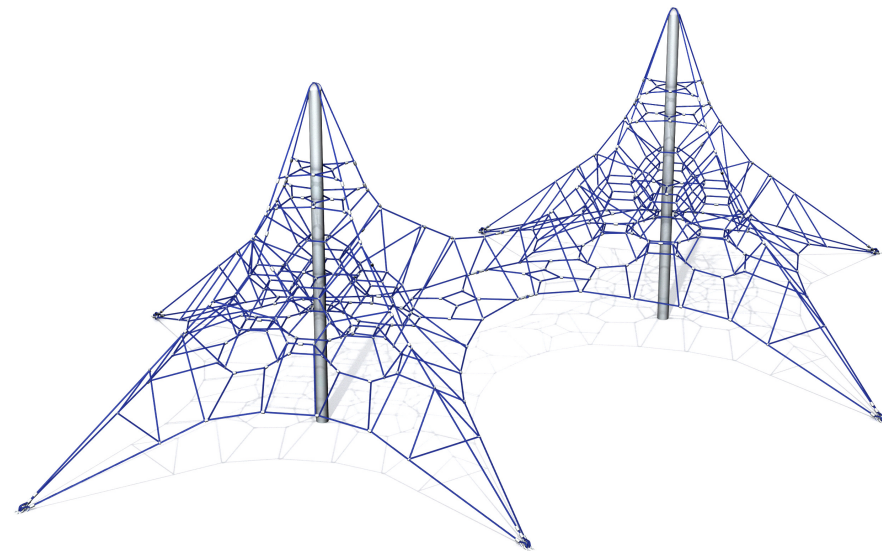
'Centreline' seating by Benchmark for seating node and terrace



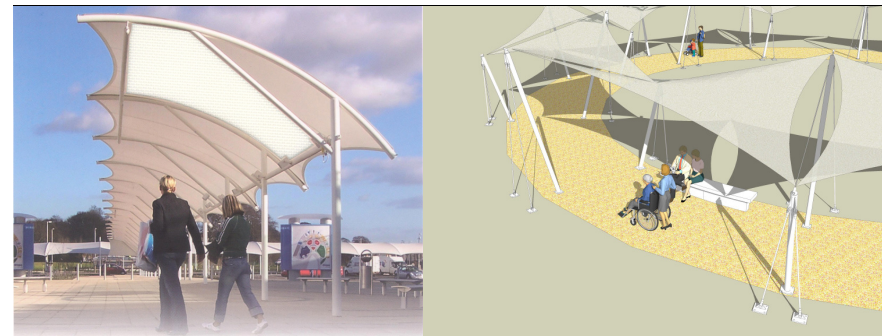
Illustrative seat pods as proposed



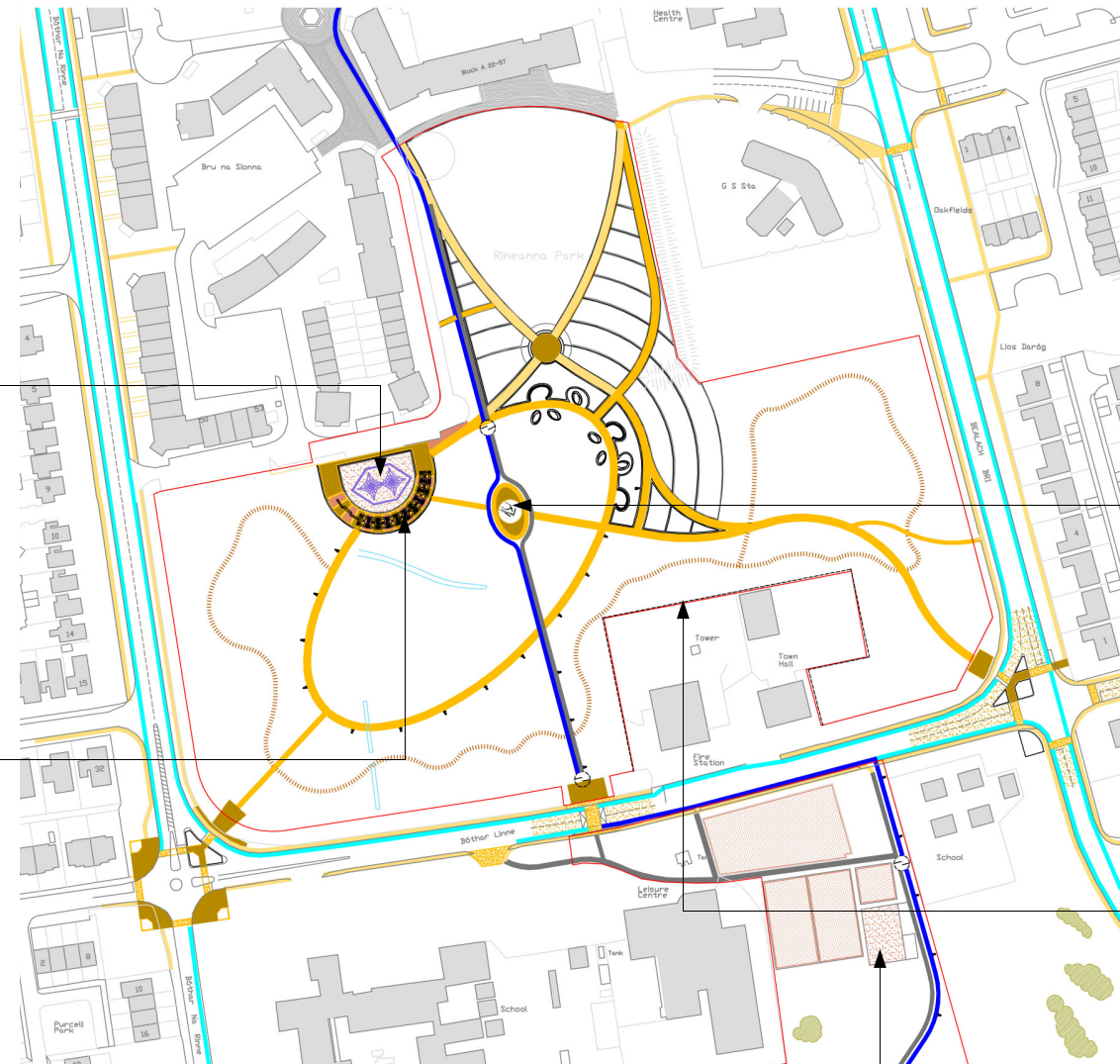
Long Section through Town Park as proposed



Activity play equipment



Covered seating/viewing area - lightweight structure



Focal sculptural feature - approx. 7.5m high, possibly depicting reeds of the Shannon estuary



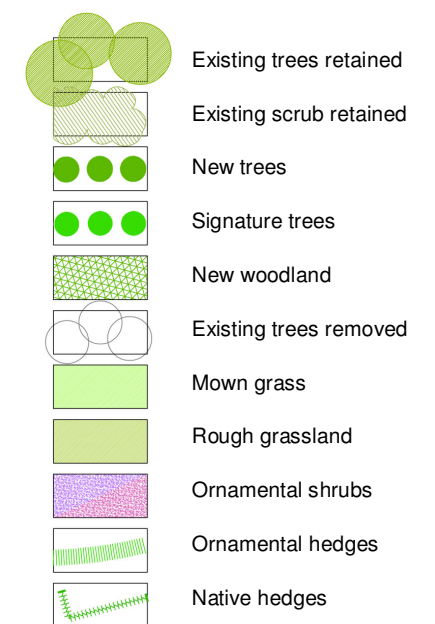
Perimeter fencing to Fire Station and Town Hall



Multi-use Games Area (MUGA)



KEY



Notes:

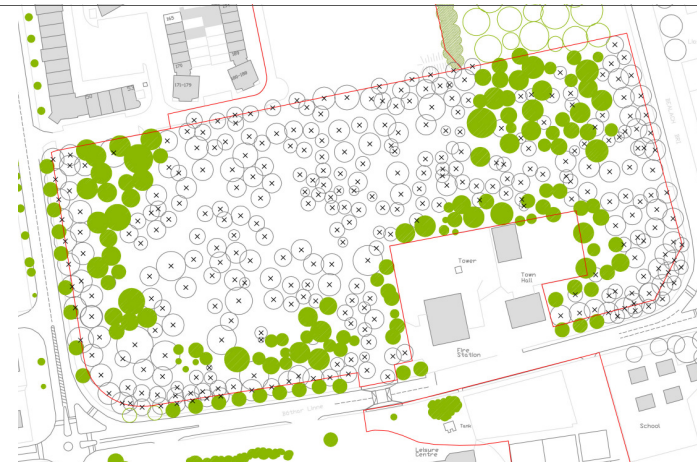
1. Existing over-mature and suppressed poplar trees removed, and oval open space created as centre piece of public park, with new woodland planting to edges.
2. Existing over-mature perimeter poplar trees removed (as proposed as part of Clare CoCo routine maintenance works). New perimeter native hedge and woodland.
3. Existing poplar trees thinned, retaining best specimens in medium term, opening-up rough grassland areas.
4. Ornamental shrub and perennial planting in defined beds.
5. For planting along adjoining roads refer Section 6 Main Green Corridors.

Softworks Proposals Plan



STAGE A:

- Existing Woodland (total area 4.2ha)
- Identify trees to be removed



STAGE B:

- Existing trees to be removed (approx 350no.)
- Existing trees to be retained (approx 150no.)



STAGE C:

- Plant new woodlands (7,500 sq.m.)
- Plant perimeter native hedges (500 m)



STAGE D:

- Remove retained trees
- Assess requirement for additional new woodland, and native hedge around Fire Station / Town Hall boundary

NEW WOODLAND COMPOSITION (subject to soil analysis):

Climax spp: oak, ash, pine
Sub-climax: downy birch, hazel
Pioneer spp: downy birch, hazel, pine
Understorey spp: holly, hawthorn, willow, cherry, etc.
Shrub edge spp: assorted native shrubs

PROPOSED SPECIES MIX (subject to soil analysis):

40%	Ash	<i>Fraxinus excelsior</i>	In pure groups
25%	Pedunculate oak	<i>Quercus robur</i>	In pure groups
15%	Hazel	<i>Corylus avellana</i>	Scattered throughout
10%	Scots Pine	<i>Pinus sylvestris</i>	In clumps throughout
5%	Downy birch	<i>Betula pubescens</i>	Scattered throughout
5%	Other minor species (at least three of the following)		Alongside edges and glades
	Hawthorn	<i>Crataegus monogyna</i>	
	Holly	<i>Ilex aquifolium</i>	
	Spindle	<i>Euonymus europaeus</i>	
	Rowan	<i>Sorbus aucuparia</i>	
	Wild cherry	<i>Prunus avium</i>	
	Crab apple	<i>Malus sylvestris</i>	

MANAGEMENT OBJECTIVE

To progressively replace the existing plantation with a 2 or 3-storey high new woodland with greater diversity of species and enhanced biodiversity. The upper canopy will be of oak and ash, in which the predominant long term climax species will be oak. Conifers and occasional sub-climax trees and a coppiced under-storey are to be retained. The woodland is to be bordered by a mixed shrub edge and interspersed with open grassland glades. Manage the climax species on a rotation of approx. 150 years.

MANAGEMENT PRESCRIPTIONS



YEARS 1-5
Remove over-mature Poplars and suppressed/diseased trees
Plant new woodland.
Weed control and replacement of failures.



YEARS 5-10
Thin pioneer species and edge shrubs.



YEARS 5-15
Remove remaining trees from original plantation.
Review the need for additional new woodland.



YEARS 15-20
Thin main body of new woodland to favour climax and under-storey spp.
Thin pioneer species and shrub edge.

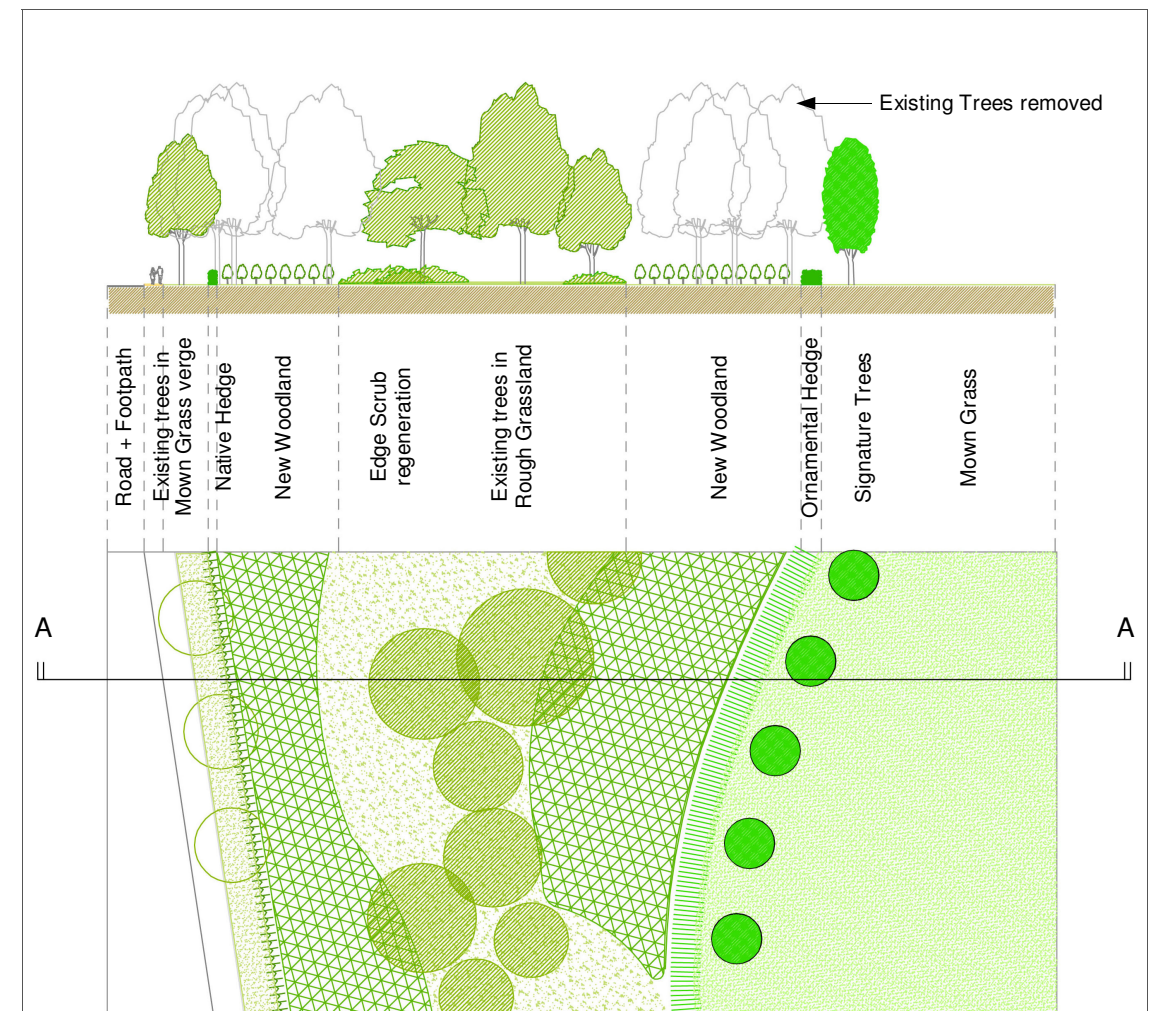


YEARS 20-25
Thin main body of woodland to favour climax and under-storey spp.
Thin pioneer species and shrub edge.

YEARS 25+
Review every five years and thin as necessary

WOODLAND MANAGEMENT POLICY

Plant pioneer species to edges and interspersed throughout woodland area. Thin to favour the climax and under-storey species. Provide conditions suitable for the retention of occasional sub-climax and under-storey species. Within the climax blocks, remove weak and suppressed trees first. Coppice the under-storey species as necessary within the thinning regime to release the climax species.



Typical Detailed Plan and Section A-A



Aucuba japonica 'Rozannie'

Berberis 'Red Chief'



Ceanothus 'Blue Mound'

Cotinus 'Grace'



Choisya 'Aztec Pearl'

Cotoneaster 'Gnom'



Forsythia 'Mini-Gold'

Lavandula 'Munstead'



Mahonia 'Apollo'

Skimmia 'Kew Green'

PROPOSED AMENITY SPECIES

Amenity Trees:

Maple	<i>Acer campestre</i> 'Elsrijk'	Streets
Doorenbos Birch	<i>Betula utilis</i>	Streets/groups
Hornbeam	<i>Carpinus betulus</i> 'Frans Fontaine'	Streets
Ash	<i>FraxinusExcelsior</i> 'Westhof's Glorie'	Streets
Pine	<i>Pinus sylvestris</i>	Streets/groups

Signature Trees:

Cypress oak	<i>Quercus fastigiata</i>	Rows
-------------	---------------------------	------

Ornamental Hedges:

Laurel	<i>Prunus laurocerasus</i>
Christmas Berry	<i>Photinia x fraseri</i> 'Red Robin'

Ornamental Shrubs:

Aucuba	<i>Aucuba japonica</i> 'Rozannie'
Berberis	<i>Berberis thunbergii</i> 'Red Chief'
Ceanothus	<i>Ceanothus</i> 'Blue Mound'
Choisya	<i>Choisya</i> 'Aztec Pearl'
Smoke Bush	<i>Cotinus</i> 'Grace'
Cotoneaster	<i>Cotoneaster</i> 'Gnom'
Forsythia	<i>Forsythia</i> 'Mini-Gold'
Lavender	<i>Lavandula</i> 'Munstead'
Mahonia	<i>Mahonia</i> 'Apollo'
Skimmia	<i>Skimmia confusa</i> 'Kew Green'



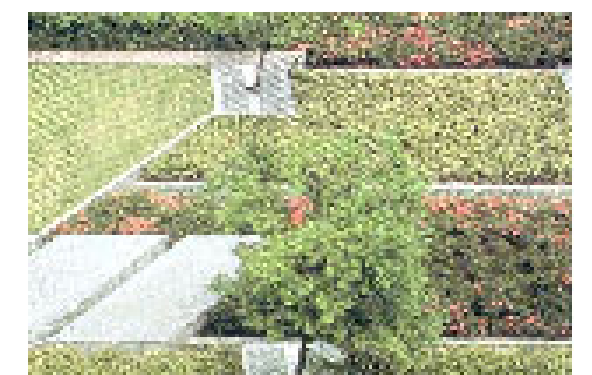
Signature trees (*Quercus fastigiata*)



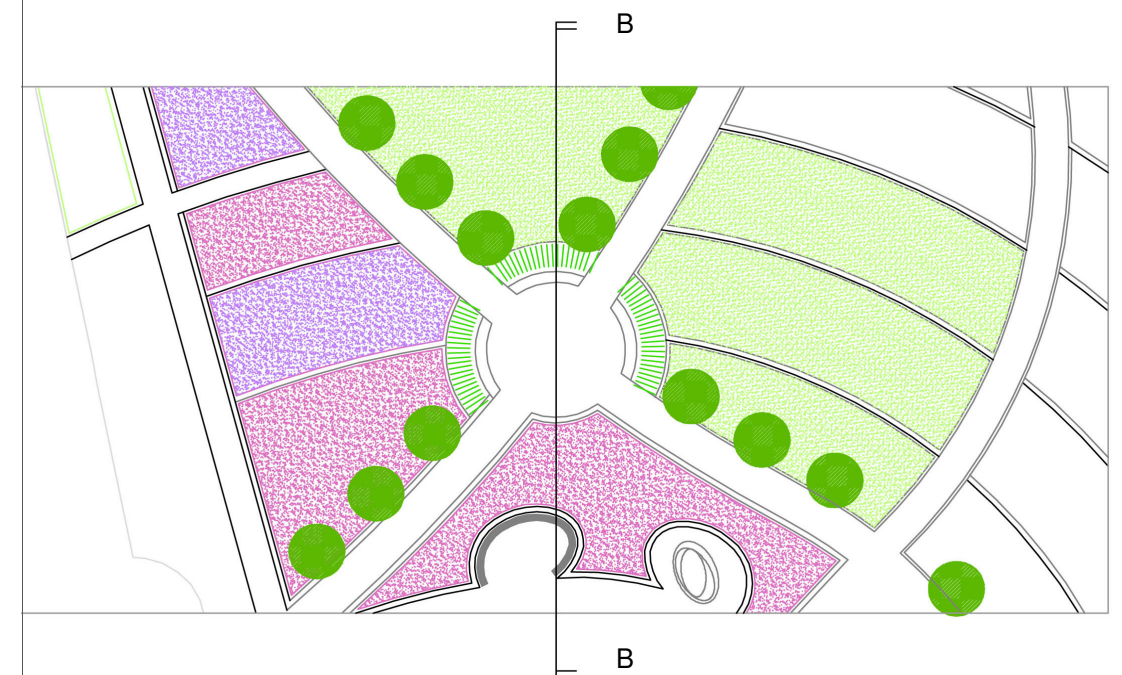
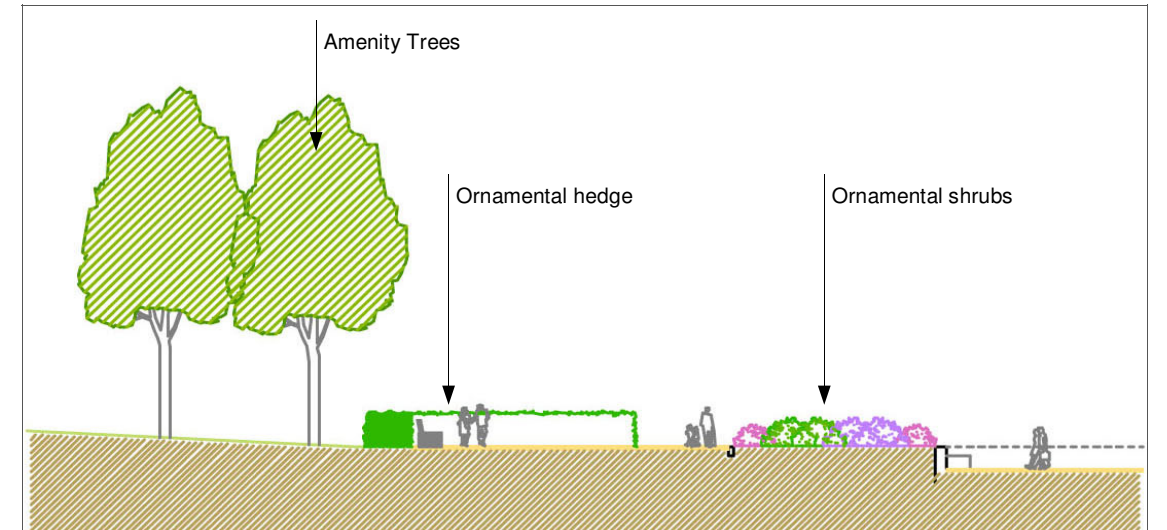
Accent trees
(*Pinus sylvestris*)



Hedge planting - Laurel + Photinia 'Red Robin'



Ornamental shrub planting



Typical Detailed Plan and Section B-B

- KEY
- Shannon Loop Yellow Route
 - Interpretation Boards (natural + cultural heritage)
 - Marker Posts
 - Information Boards (route map + details)
 - Small Cycle Park/Seating Areas

Shared surface footpath and cycleway along Sli Na Mara

Area of natural regeneration

Existing track up-graded as alternative 'off-road' cycle/footpath route



Key Features

This large wooded area, interspersed with open green areas, was initially developed as a Neighbourhood Scheme operated by the Dept. of Agriculture (now expired) for the emerging New Town, providing amenity space, walking routes and pedestrian connectivity, and opportunities for bio-diversity enhancement.

It is intended that the Sli Na Mara Way, which passes through the area from north to south and is the oldest walking route in Shannon, will be enhanced for both walking and cycling along its length. In addition, many of the existing street lights along Sli Na Mara are damaged and need to be replaced to ensure optimum safe use of the resource.

- Footpath and cycleway along Sli Na Mara, Shannon Loop Yellow Route, with markings and minor surface repairs as required, restricted vehicle access at entrances, and replacement street lighting.
- Manage areas of recently cleared vegetation for natural regeneration, including removal of invasive species and encouraging growth of pioneer species (e.g. Birch, Alder, Willow, Hazel).
- Retain an open and wide walkway through the woodland and plant additional fruit trees.
- Manage the area as an educational resource for local schools.
- Existing track across the hill up-graded as alternative 'off-road' cycle/footpath route and extended southwards to join Sli Na Mara Way.
- Information Board at entry from Murphy's Cottage Restaurant, Marker Posts each end, Interpretation Board (on nature conservation interest) by Community Hall, and Repeater/Waymarker posts along route at approx. 250m intervals.



Illustrative view of existing track with cycle markings

Masterplan Proposals

- KEY
- Shannon Loop Yellow Route
 - Interpretation Boards (natural + cultural heritage)
 - Marker Posts
 - Information Boards (route map + details)
 - Small Cycle Park/Seating Areas



Masterplan Proposals

Key Features

This elevated predominantly coniferous wooded area, with pockets of open wet areas, is an important landmark in the town and highly visible from the town centre. It is surrounded by residential developments with mature gardens which contribute to the biodiversity of the area. These are separated from Drumgeely Road by a mown green embankment with pockets of scrub and trees.

- Combined footpath/cycleway, Shannon Loop Yellow Route, to northern edge of site.
- Develop management programme for phased clearance of conifers, removal of invasive species and encouraging the growth of native pioneer species (e.g. Birch, Alder, Willow, Hazel) - refer also Town Park Woodland proposals.
- Review access provision and up-grading of footpath routes as required.



General view towards Hill from town centre



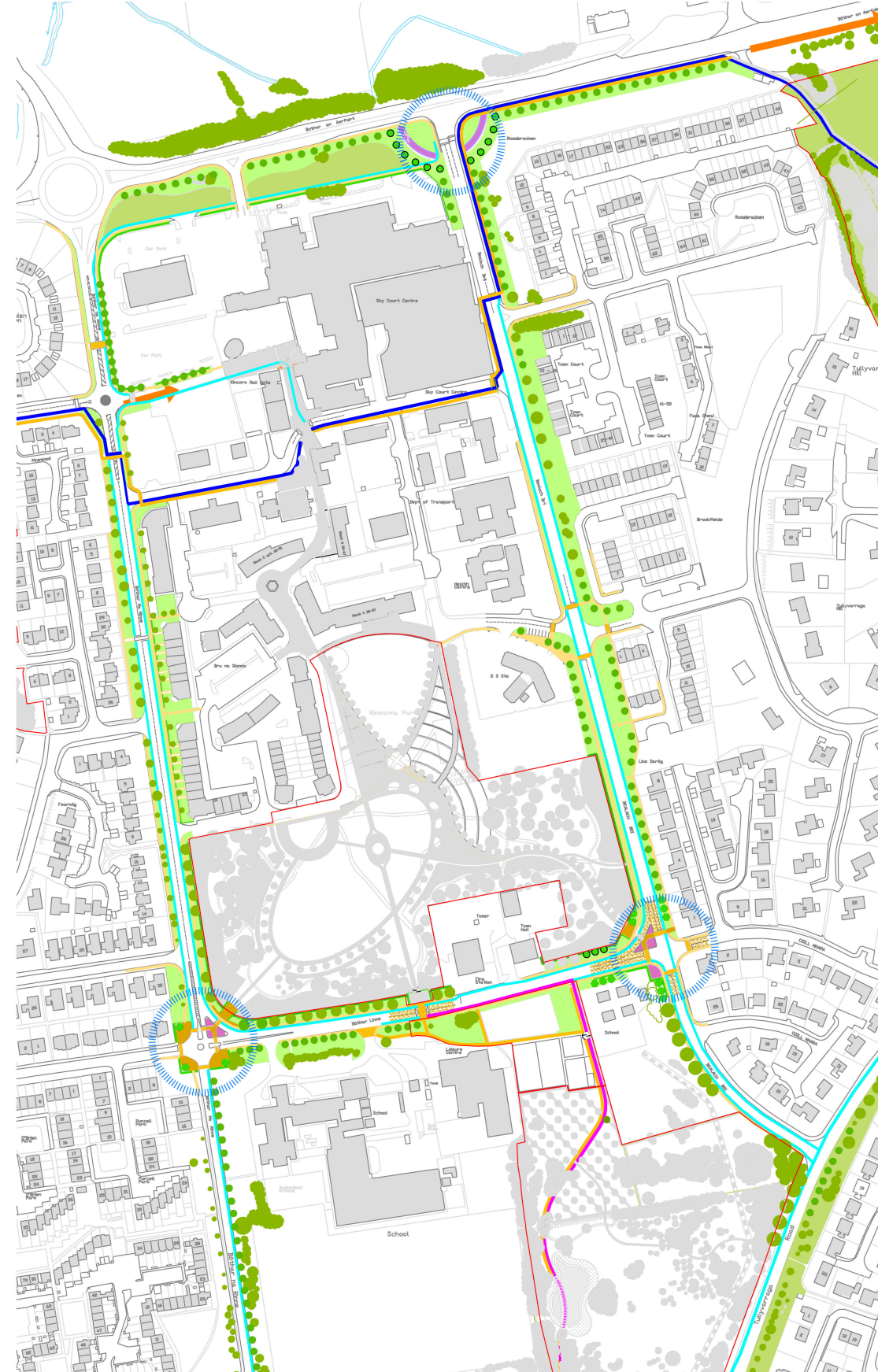
Northern edge of woodland

4. Green Infrastructure Design Guide

4.7 GREEN CORRIDORS AND NODES



Aerial view of central area



Proposals plan

Key Features

The two main roads of Bealach Brí and Bóthar Na Rinne, running southwards from Bóthar an Aerfoirt (R471) towards the estuary either side of the commercial centre, are important Green Corridors with extensive treelines and shrubs. They also contain smaller access roads, which allow for corridors linking to Tullyglass Hill and Tullyvarragh Hill, as well as linking into Sli Na Mara.

The main corridors also offer opportunities for improved pedestrian circulation (e.g. up-graded crossings and junctions) and for cycleways. Any proposals for enhancing the corridors will need to have regard of these requirements and road safety considerations.

In addition, the main junctions of these corridors are important nodes with opportunities for enhancing place-making and way-finding. To be more easily understood, the junctions need to be spatially distinct from the route, such as providing a landmark or unique feature to aid recognition. Unnecessary visual clutter and infrastructure equipment that may detract from the place-making character of the nodes should be removed wherever practicable.

Bealach Brí:

- Continuous on-street cycle lanes each side of road
- Improved pedestrian crossings, particularly at the junction by the Garda Station and Health Centre
- Improved nodes at junctions with Bóthar an Aerfoirt and Bóthar Linne
- Progressive removal of over-mature poplars, allowing existing secondary trees to develop
- New amenity trees where required to supplement existing
- Native hedge to boundary with Town Park

Bóthar Na Rinne:

- Screening of car park and creation of focal point
- Continuous on-street cycle lanes each side of road
- Possible junction improvements and traffic calming measures at entry to town centre car parks and square
- Boundary improvements to Lidl car park
- New/replacement ornamental hedges to frontages of apartments
- New amenity trees where required to supplement existing



Bóthar Na Rinne proposals plan



Bóthar Na Rinne

- Screening of car park and creation of focal point
- Continuous on-street cycle lanes each side of road
- New/replacement ornamental hedges to frontages of apartments
- New amenity trees where required to supplement existing



Bealach Brí proposals plan



Bealach Brí

- Continuous on-street cycle lanes each side of road
- Over-mature poplars removed and existing under-storey trees allowed to develop
- New amenity trees where required to supplement existing



Existing over mature poplars



Illustrative view with poplars removed



Node A as existing



Node A: Junction of Bóthar an Aerfoirt (R471) and Bealach Brí

- Enhanced entrance feature of low semi-circular stone wall with amenity planting
- Semi-circle of Signature trees
- Amenity trees continued along Bóthar an Aerfoirt (to replace over-mature poplars)
- Low stone wall feature extended westwards towards Lidl, along toe of existing mounds, with mown grass to road edge and wildflower grassland to rear



Node B as existing



Node B: Junction of Bealach Brí and Bóthar Linne

- New entrance feature to Town Park (paved area defined by ornamental hedges, and with welcome sign)
- Improved pedestrian crossings
- Ornamental shrub planting within road island and to southside of junction
- Signature trees in groups of three each side of the junction
- Native hedges to boundaries of Town Park and Gaelscoil



Node C as existing



Node C: Junction of Bóthar Linne and Bóthar Na Rinne

- New entrance feature to Town Park (paved area defined by ornamental hedges, and with welcome sign)
- Improved pedestrian crossings (future provision for signalised junction)
- Ornamental shrub planting within road island
- Signature trees in three paved corners of junction, defined by ornamental hedging