

Flint to Connah's Quay Coastal Link – NCN 5



Produced as part of Sustrans' Linking Up Project
June 2019



GWYRDD





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 Registered Charity No. 326550 (England and Wales)
 SC039263 (Scotland)
 VAT Registration No. 416740656

Document Control Sheet

Project Title:	Flint to Connah's Quay Coastal Link

Document Progression

Compiled By:	GE	
Reviewed By:	EB	
Approved For Issue By:	RJ	

Document History

Issue	Date	Status	Checked and approved for Issue
1	May 2019	Drafted	
2	May 2019	Drafted	
3	June 2019	Final Draft	

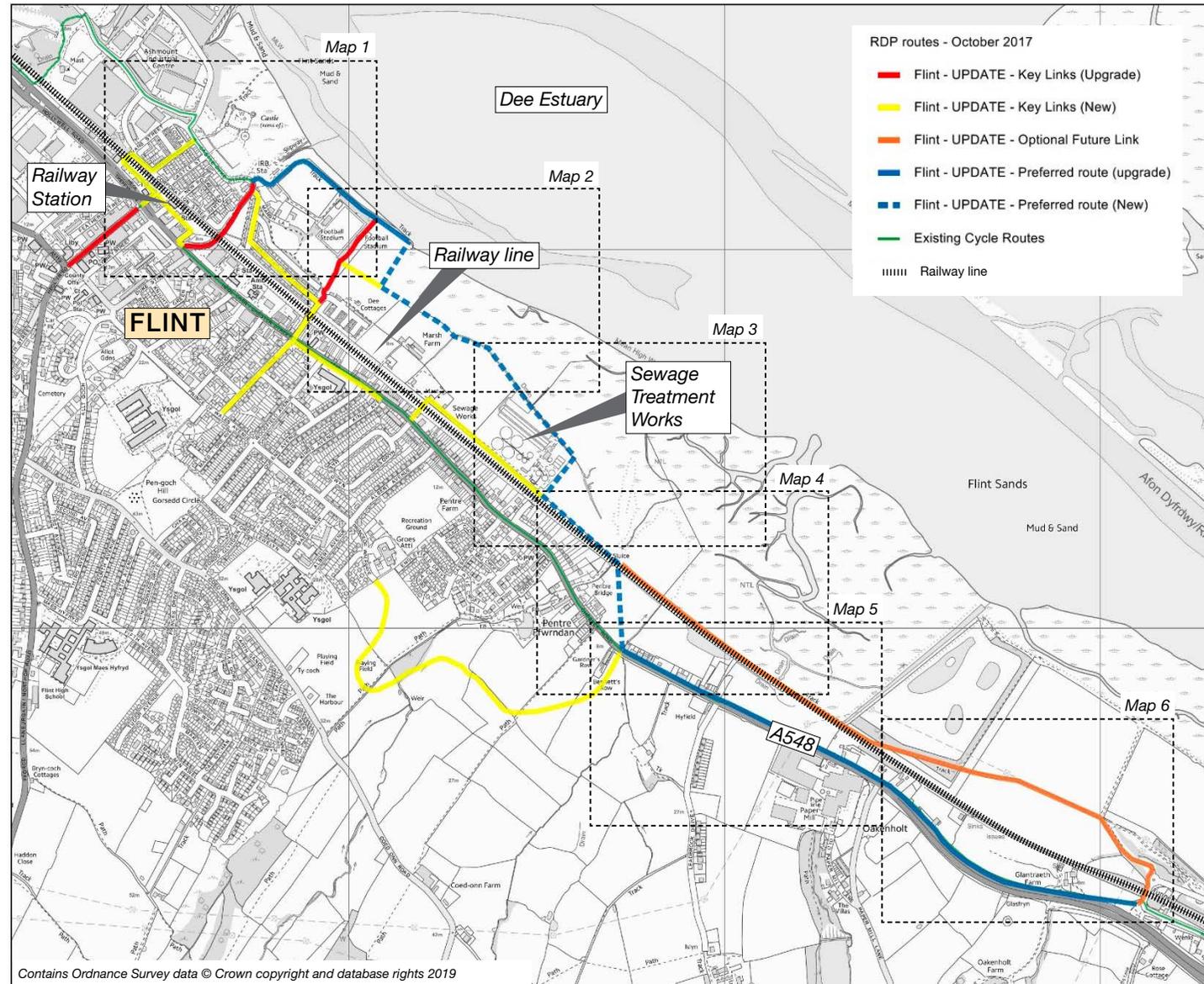
Flint to Connah's Quay Coastal Link – NCN 5

Executive Summary

This report summarises the results of the feasibility study Sustrans has conducted for the development of the traffic free walking and cycling route to upgrade the existing link between Flint and Connah's Quay along NCN Route 5, linking Chester to Holyhead. The report is addressed to local authorities and community groups and is aimed at supporting funding applications for the delivery of the route.

Between 2016 and 2019, through RDP funding awarded by the Welsh Government, Sustrans has worked with Flintshire County Council and local stakeholders to identify options for the preferred route and associated links.

As a result of this work, this report presents the preferred alignment, provides information about the cost of the route and highlights the benefits the route can have on the local economy, health and the environment.



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This map was produced by admin on 23 October 2017 Scale 1:10000



0 0.50.10.150.20.250.30.350.4 kilometres

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I General information about the scheme

a Context

Sustrans has conducted this feasibility study to re-align the existing section of NCN 5 between Flint and Connah's Quay. The work is part of the Rural Development Programme implementation and relates to the wider context set by the Wellbeing of Future Generation Act (2015). The route will be developed according to the Design Guidance set out in the Active Travel (Wales) Act 2013.

b The route

The new section will provide a traffic free link between Flint and the existing NCN 5 route on the south-east side of the town as it heads to Connah's Quay, which currently runs along a very busy road (A548). The majority of the route is also part of the Wales Coast Path and is covered by Flintshire County Council's Integrated Network Map (INM) designated as a medium term priority project 'INM F3 and F3A' and has been included as an Activation Project in the Paths for Everyone report published by Sustrans in 2018. The route design needs to take into account landownership, potential flooding and biodiversity constraints. This report details the preferred option that has been researched by Sustrans with the agreement of Flintshire CC, Natural Resources Wales (NRW) & Network Rail, as well as feedback from local stakeholders including Flint Town Council and the local schools.

II Detailed proposal

a Suggested alignment

This element of the Linking Up project starts/ends in the area known locally as the Flint Foreshore, which contains Flint Castle, the RNLI Lifeboat Station as well as Flint Town football club and Flint rugby club. The connections to Flint town centre and the wider residential areas and key destinations within the community are picked up under the 'Flint Links' part of this project. A separate project is also looking at the Flint Foreshore in terms of developing a new visitor centre for the castle and surrounding facilities and this will include improved walking & cycling links, Sustrans has been involved in this project and continues to engage with it as the proposals move forward.

Heading in a south-easterly direction from the Foreshore area there is an existing tarmac shared use (walk/cycle) promenade alongside the river which connects to the Dee Cottages and a Public Right of Way (Footpath 80) that is the main alignment of the Wales Coast Path, as well as a number of minor stone based footpaths that connect to the various amenity areas.



Existing Flint Promenade looking north-west towards Flint Castle

The proposed alignment continues along Footpath 80 as it continues in a south-easterly direction onto the River Dee Saltmarsh, the current footpath runs along the edge of the saltmarsh (see Ecology section below) and the proposal is to construct the new shared use walk/cycle route along the southern boundary of the marsh where the ground raises up to meet the adjacent farmland. By constructing a new facility

on the edge of the saltmarsh the Public Right of Way can be re-aligned which has environmental benefits in removing access from the saltmarsh.



Existing boardwalk on NCN 568 connecting Flintshire to the Wirral

The proposed path then follows this southern boundary to the sewage treatment works and the path can be built up on a bench of appropriate fill material or on a section of boardwalk where the higher land drops away. At the northern-eastern corner of the sewage treatment works the proposed path alignment re-joins the current alignment of the Wales Coast Path and follows the edge of the field back towards the railway. At this location the existing footpath crosses the railway at a Network Rail managed level crossing, but the proposed new path will follow the northern side of the railway in a southerly direction towards an existing Sluice and at a location that has previously had another level crossing.

The initial proposal of following the coastal alignment all the way along the northern side of the railway was postponed at an early stage in the process due to possible negative impacts on internationally important bird populations within the RSPB owned and managed section. This option has not been removed completely as there is a lot of strong support to develop this route from the local population within Flint and its surrounds. At all the stakeholder meetings and public consultation sessions the option to continue along the coast was raised and there would be merit in re-evaluating this option at a future date.

A second preferred option is currently being explored which continues from the Sluice, over the railway on a new bridge and ramped structure and continues to join the existing route between Flint and Connah's Quay located on Chester Road (A548), which will be upgraded to Active Travel Design Standards. A section of this traffic free section was delivered by Flintshire CC during 2018 but further works are required to upgrade the existing path back towards the Rockcliffe area. At the Chester Road tie in the new path would also connect to the new Croes Atti development and provide sustainable transport opportunities to the new residents within this estate.

This preferred solution would provide active travel links for day to day use and would also contribute to spread the benefits of leisure tourists into the town.



b Engineering (design solution proposed + major new structures needed)

Several engineering solutions will be needed in order to provide a path suitable for shared use (walking and cycling). These solutions take into account the ecological elements along the path and provide, when necessary, mitigations measures. The major engineering input will be needed in relation to the proposed railway crossing and to the new boardwalk section close to the saltmarsh.

c Ecology

An outline desktop research study was conducted in June 2017 with a focus on the estuary option, which has then been abandoned because disturbance to internationally important bird populations and loss of internationally important habitats have been identified as potential impacts of the proposal. Consequently, Option 2 has been proposed as an alternative to avoid these impacts.

Following discussions with National Resources Wales (NRW) and an additional site survey, two specific surveys have been recommended and are currently being conducted: a winter bird survey and a National Vegetation Classification (NCV) survey. Both will be concluded in June 2019 and the outcomes will feed into the future development of the project and potential mitigation measures.

d Land

There are a number of landowners effected by the preferred route alignment and discussions have been ongoing with them during the project development stage. The landowners are a mix of third party private parties as well as Flintshire CC and organisations such as the RSPB (who own and manage the coastal route alignment that is currently on hold). The majority of the landowners are behind the project and can see the benefits that the development of the path will bring to the area, though these are still issues to be overcome prior to any construction phase moving forward.

e Cost

The outline cost estimate for the option suggested is **£2.5m**.

The costs below are indicative only, intended to give a budget estimate of the main costs associated with the construction of the proposed path to the prescribed design standards as previously recommended.

It must be noted that the above costs do not include:

- Land acquisition
- Detailed design
- Site Supervision
- Monitoring
- Contract management
- Legal fees
- Preliminaries
- Lighting
- Ecological mitigation
- Waste disposal
- Service diversions
- Insurance

Typical additional costs to cover some of the above items can be up to 30% of the construction phase costs and so all costs should be reviewed at each stage of the project's development.

The costs have been estimated to attempt to reflect the worst case, i.e. the most expensive estimate but they only give a guide to the levels of funding required. Additional contingency costs should be added to cover unforeseen costs and these should be reviewed throughout the design process.

It is recommended that as more detailed cost estimates are developed, the additional costs for the links are reviewed and updated for future funding applications.

Route Section	Description of Route	Section Length (m)	Outline Cost	Notes
1a	Existing Promenade to Dee Cottages access gate: new shared use path to AT Design Standards	165	165 x £210/m £ 34,650	Typical 3m wide tarmac surfaced shared use path
1b	Dee Cottages access gate back to existing Dee Cottages shared use path: new shared use path to AT Design Standards	150	150 x £210/m £ 31,500	Typical 3m wide tarmac surfaced shared use path
2	Dee Cottages access gate to boardwalk: new shared use path to AT Design Standards	200	200 x £400/m £ 80,000	Approximately 0.5m high earthwork bench; 3m wide tarmac surfaced shared use path; fencing and hedge planting; removal of existing structures from current footpath
3	Boardwalk: new boardwalk	180	180 x £400/m £ 72,000	Similar to Burton Marsh Greenway boardwalk
4	Boardwalk to Bridge: new shared use path to AT Design Standards	600	600 x £300/m £ 180,000	Typical 3m wide tarmac surfaced shared use path; drainage ditch crossings; fencing and farm crossings
5	New rail bridge and ramps: new bridge and approach ramps	-	£1,500,000	Network Rail approved bridge and approach ramps – incorporating viewing platform on northern (coastal) side
6	Rail Bridge to A548 Chester Road: new shared use path to AT Design Standards	280	280 x £300/m £ 84,000	Typical 3m wide tarmac surfaced shared use path; drainage ditch crossing; fencing and field access
7	A548 Chester Road to Rockcliffe: upgraded shared use path to AT Design Standards	1300	1300 x £150/m £ 195,000	3m wide tarmac surfaced shared use path with verge strips (does not include section that was upgraded in 2018)
8	Signing / Interpretation / Benches / Artwork / Monitoring etc	3100	£60,000	
	TOTAL		Say £ 2,250,000	+ VAT

f Signing

The proposed route needs to be sufficiently well signed so that it is easy to follow in both directions. A balance should be struck between providing clear and reliable information, avoiding visual clutter and unnecessary maintenance liability that excessive signing can cause. Care is needed when considering their design and placement. Cyclists Dismount or End of Route signs are not appropriate and will not be necessary on this route. Cycle specific route signing also raises awareness of cyclists amongst other road users and helps to promote the route. It is estimated that around 20 signs will be required to effectively provide good directional signing. At each end of the route and on key junctions, destination signage will be provided on conventional metal sign posts with suitable repeater signs along the route.



Examples of repeater sign, directional signs and short robust posts

g Future maintenance

A route management plan will need to be agreed with the collaboration of the land owners, Flintshire CC and the local Sustrans volunteering group. Overall, a route that is kept in good condition will be more useful, attractive and popular than one allowed to deteriorate. It will promote walking and cycling and increase use. Maintenance can sometimes seem like an afterthought compared to the exciting world of designing and building new routes, but having invested time and money by building the route, it is important that it remains attractive to users. Maintenance should be considered as part of the route development process long before construction starts. A thoughtful design will mean less maintenance in the future. For this route a sealed tarmac surface is proposed at a width of 3.0m as this will be a Primary route in terms of the Active Travel Act Design Standards. The surface will have a long life needing little maintenance. A question often asked by funders is how will you maintain the investment they are making? Sometimes money can be put aside from the capital source into a separate fund for future maintenance. Irrespective of what the ultimate arrangement will be, it is essential that the project team has agreed the future maintenance arrangements early in the project's development.

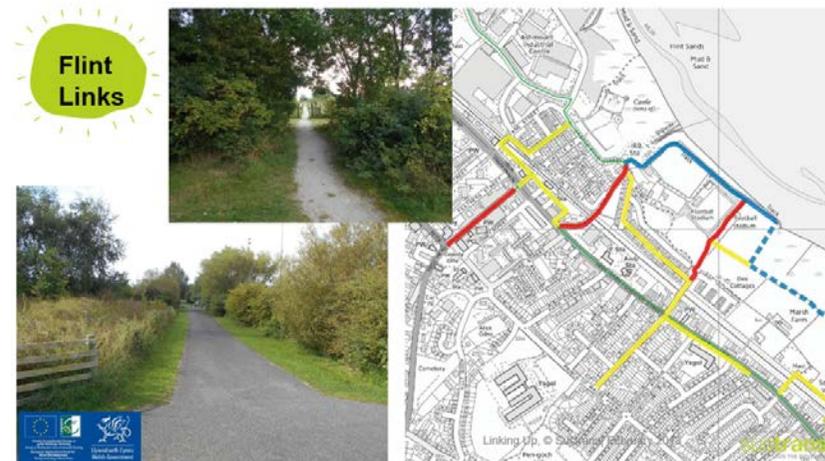
The local Sustrans Volunteer group is very active and will be able to help with some aspects of maintenance including checking signing, collecting litter and cutting back vegetation.

III Stakeholder Engagement

Local stakeholders have been engaged in the process to make sure the route is suitable to local needs and will be used in the future. The BRO Partnership has supported Sustrans in this activity. An online survey was conducted between March and April 2017 to gather initial feedback from local stakeholders about the perceived impacts of the route on the daily commute and tourism activities. A Stakeholder Group has been formed with the participation of Flintshire CC officers, NRW, Cadw, Flint Town Cllrs and the local Sustrans Volunteering group. Three stakeholder meetings have been held to discuss the alignment, and the project was presented to both Flint and Connah's Quay Town Councils, which are supportive of the proposed plans.

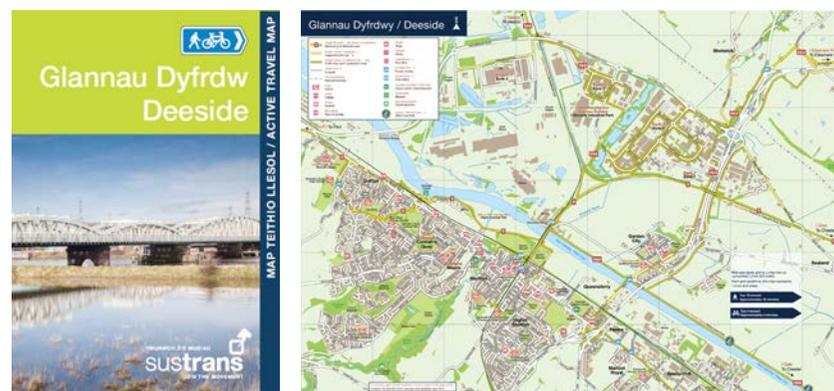


Example of consultation event material in Flint Town Centre



IV Marketing

Marketing and training activities have been delivered with the support of the BRO Partnership and Gwyrdd. A toolkit was developed containing top tips about how community groups can make the case and contribute to the improvement of new walking and cycling links in their area. The toolkit also contains hints about promoting existing paths and information about economic benefits of walking and cycling infrastructure. The “Linking Up” website is now available (www.linkingup.wales) which is useful for sharing information about the progress on the construction of the path and about its promotion. Locally, signing will also help to raise awareness about the existence of the route. Information about the route will be added to relevant websites such those managed by Sustrans, Flintshire CC, etc. The production of a simple and informative map will help with content provision for both online and printed material opportunities. Publicity through press coverage and social media around an official launch will also help generate local, regional and national awareness. Guided walks and rides along the new route would help local residents understand the new walking and cycling opportunities it creates.



Examples of existing East Flintshire promotional leaflet and new Deeside area Active Travel map

V Monitoring and reporting / Making the case for a new link

Sustrans' Research and Monitoring Unit (RMU) has provided evidence to support future funding application bids. A literature review was produced to provide case studies related to the positive impacts of walking and cycling routes on wellbeing, local economy and ecology. Counter data have been provided by the local authority and will constitute baseline data. An economic impact study has been conducted by Sustrans' Research and Monitoring Unit. Estimates of current usage on the route have been provided using data from local counters near the site and data from Route Users' Surveys conducted in comparable sites around Wales. The Infrastructure Impact Tool has then been used to get an estimate of the increased usage generated by the new infrastructure, which then allowed to generate figures on the economic impacts of the path over 20 years. Under the middle scenario, where the shared use path sees 38,835 cycling trips and 71,757 walking trips per year (respectively +72% and +26% above usage with current infrastructure), the benefits are:

- Total economic benefits of £ 1,577,844
- Health benefits of £ 581,588
- Recreational expenditure of £ 613,487

In order to provide additional monitoring data, it is recommended that at least one automatic counter is installed on the traffic-free sections of the route and future route user face to face surveys are carried out to obtain more detailed user information.

VI Funding

Initial funding has been secured by Flintshire CC, in particular:

- Welsh Government transport grant (Local Transport Fund) funding was used to widen some sections of the A548 in 2018
- Welsh Government transport grant (Active Travel Design Fund) funding has allowed further feasibility work, ecological surveys and to focus on the outline bridge design during FY 2018/2019 with some carry over into 2019/2020.

It is recommended that consideration of the following funding sources for the construction and promotional phases of the path development:

- Transport Grants managed by the Welsh Government, namely the Local Transport Fund, Active Travel Fund and Safe Routes in Communities fund. These funds can be used to further enhance the design, planning and consents stage as well as being pivotal to allow construction to move forward.
- Tourism Grants managed by Visit Wales, mainly for small scale infrastructure, signing and promotion, in particular:
 - Regional Tourism Engagement Fund (RTEF - revenue)
 - Tourism Product Innovation Fund (TPIF - revenue)
 - Tourism Amenity Investment Support (TAIS - capital).

VII Next Steps

As noted previously, dedicated active travel funding has been used to further enhance the development of this project in terms of ecological surveys and outline designs. These elements still need further development as well as a number of additional tasks and it is recommended that the following are progressed under the next stage of the project:

- Further land ownership negotiations with outline agreements drafted (including any mitigation measures);
- Complete the ecological surveys and share with the relevant stakeholders;
- On-going liaison with NRW in relation to ecological and flood defence issues prior to any formal consents being submitted;
- On-going liaison with the wider stakeholder group to maintain the wider support for the project;
- Further engagement with Network Rail over the outline design for the rail bridge and associated structures;
- Prepare a full outline design and engage with Flintshire CC planning department prior to any formal consents being submitted;
- Maximise any opportunities for links to the main coastal alignment as and when required;
- Further engagement with the Welsh Government transport grant officials to investigate the longer terms funding opportunities (sections alongside the A548 could be developed at an earlier stage to split the overall costs of the project);
- Update monitoring and evaluation plans as the project develops.



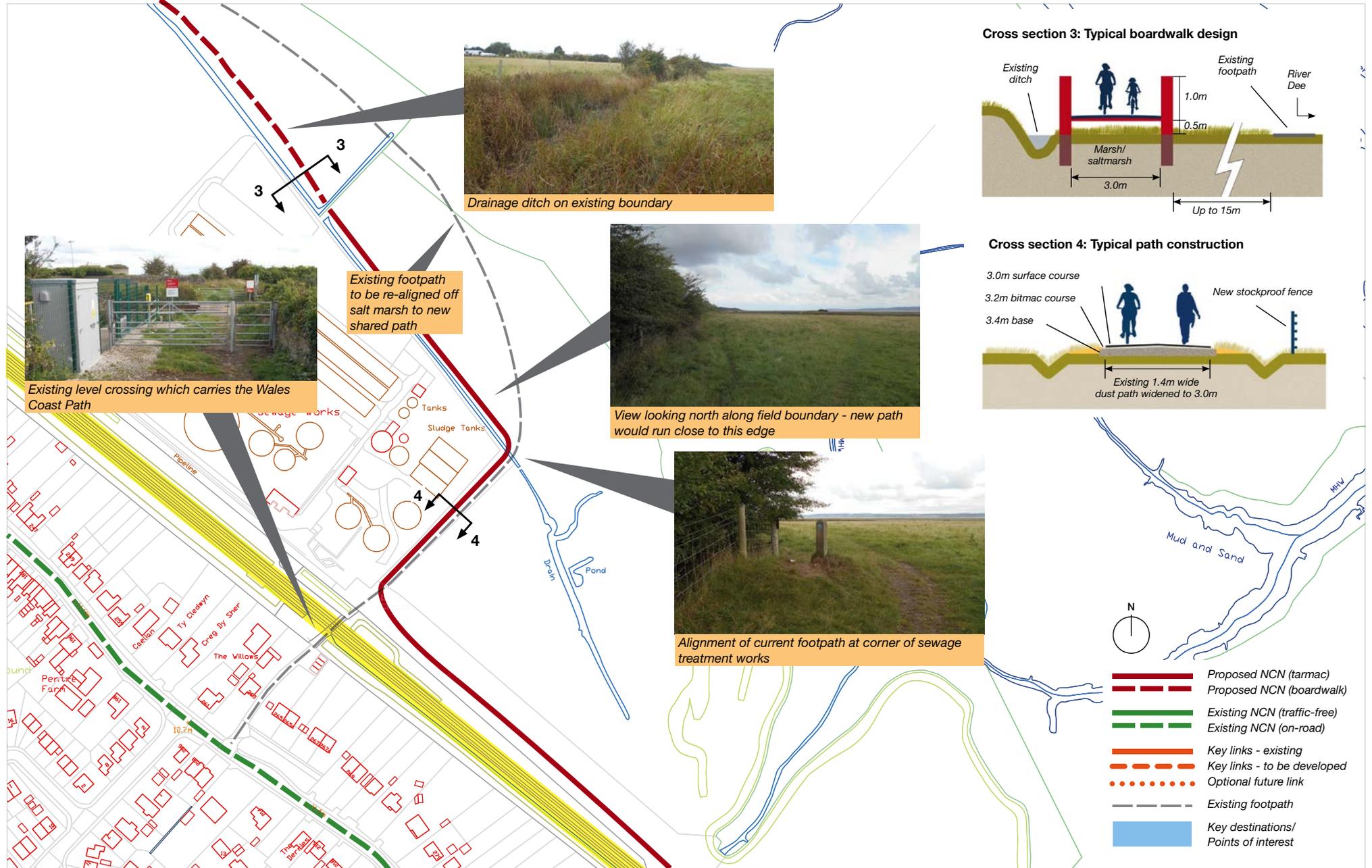
Sectional Overview and Plans

Flint to Connah's Quay Coastal Link, NCN5: Map 2



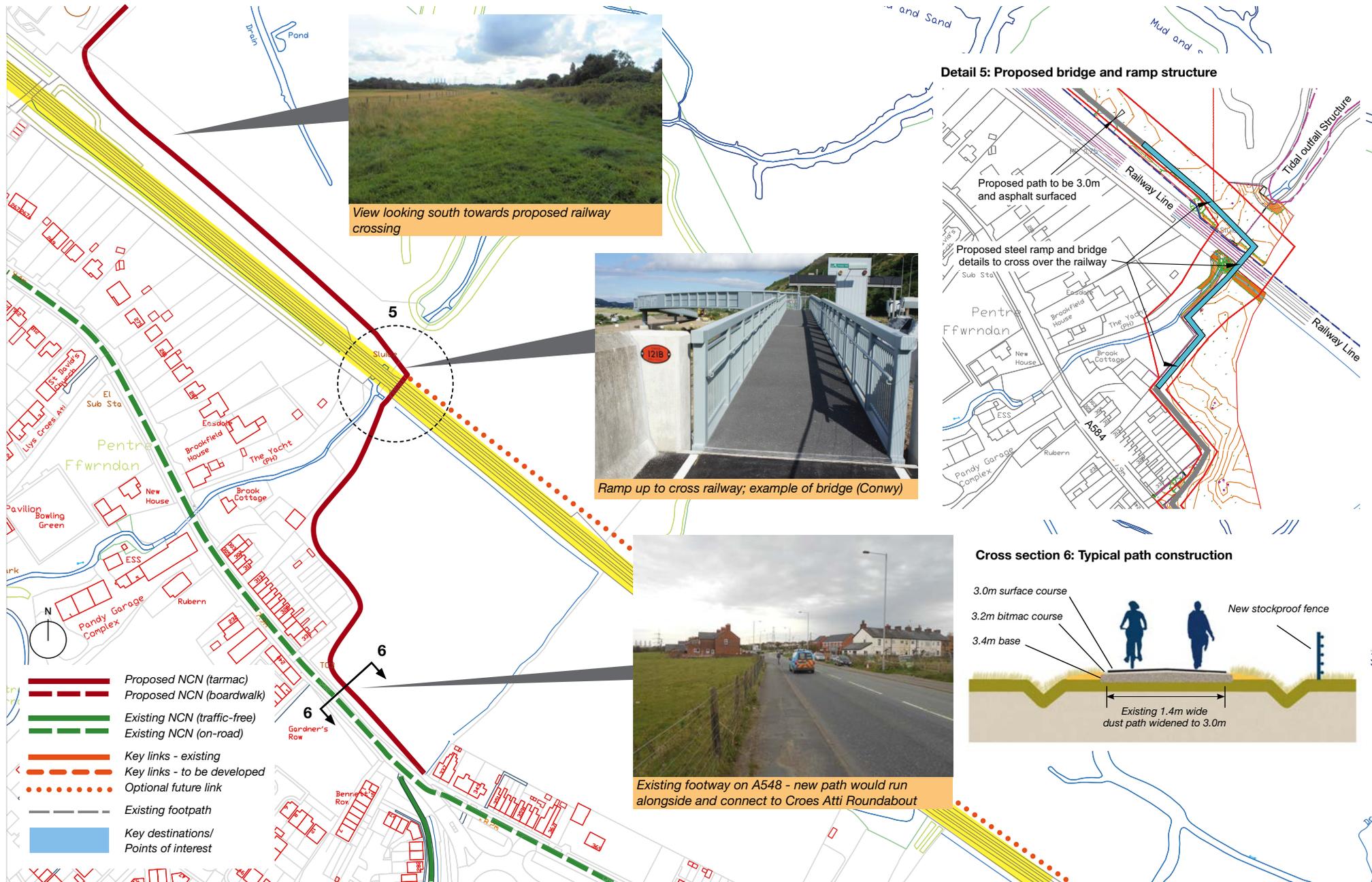
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Flint to Connah's Quay Coastal Link, NCN5: Map 3

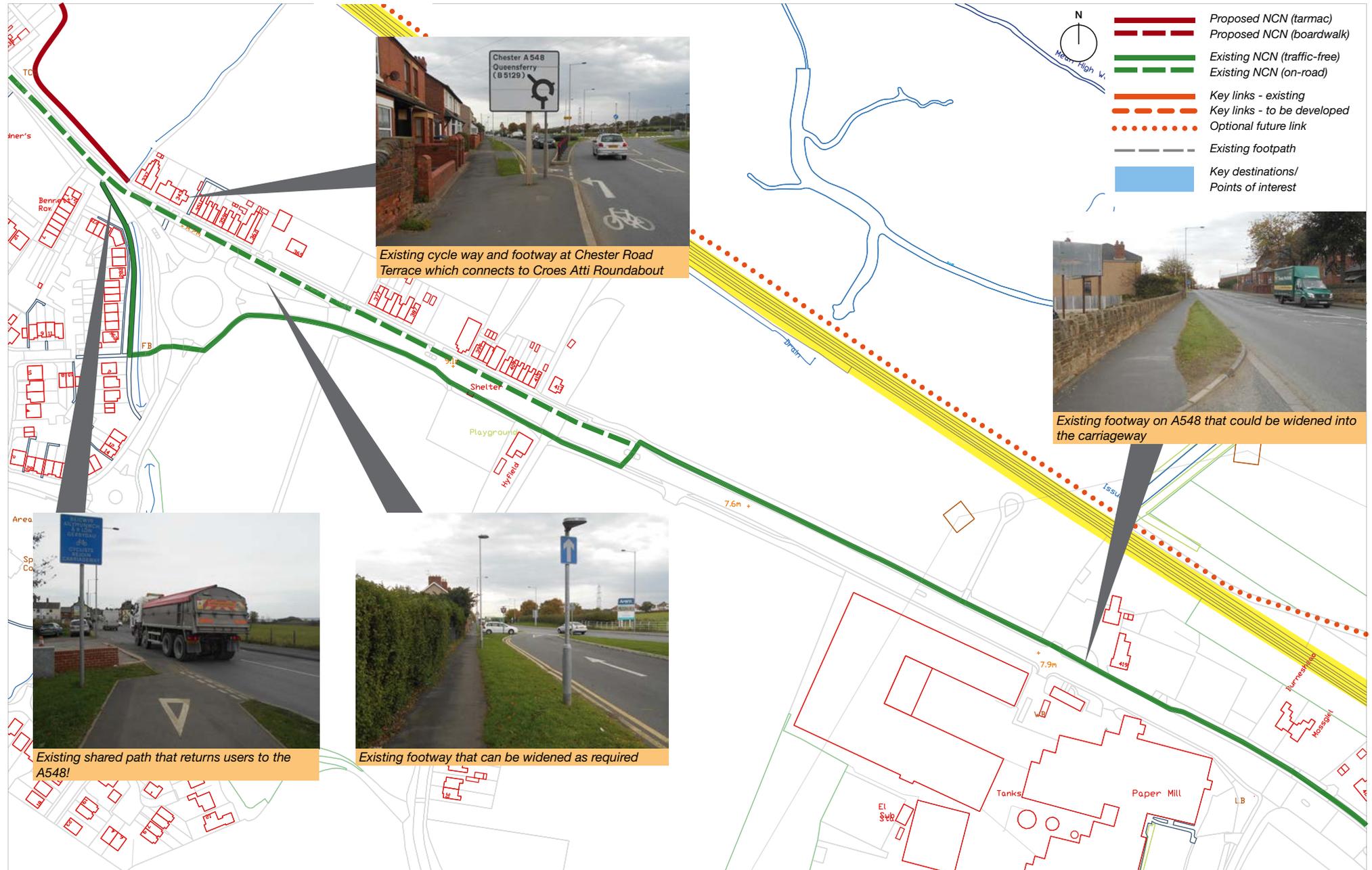


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Flint to Connah's Quay Coastal Link, NCN5: Map 4



Flint to Connah's Quay Coastal Link, NCN5: Map 5



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Flint to Connah's Quay Coastal Link, NCN5: Map 6

