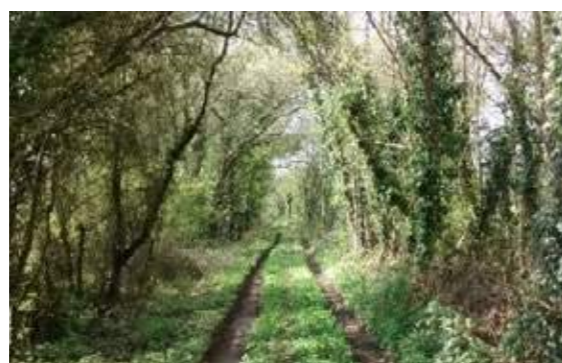


SE-001 Usk to Pontypool Feasibility Study



Produced as part of Sustrans'
Linking Up Project

December 2018





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SE-001 Usk to Pontypool Feasibility Study

Executive Summary

This report summarises the results of the feasibility study Sustrans has conducted for the development of the traffic free walking and cycling path between Usk and Pontypool. 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 the Usk Trail Access Group (UTAG) and other local stakeholders to identify preferred options for the improvement of the link between Usk and Pontypool. Moreover, with the contribution of the BRO Partnership and Gwyrdd, Usk local community has been engaged and training has been delivered.

As a result of this work, the 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.

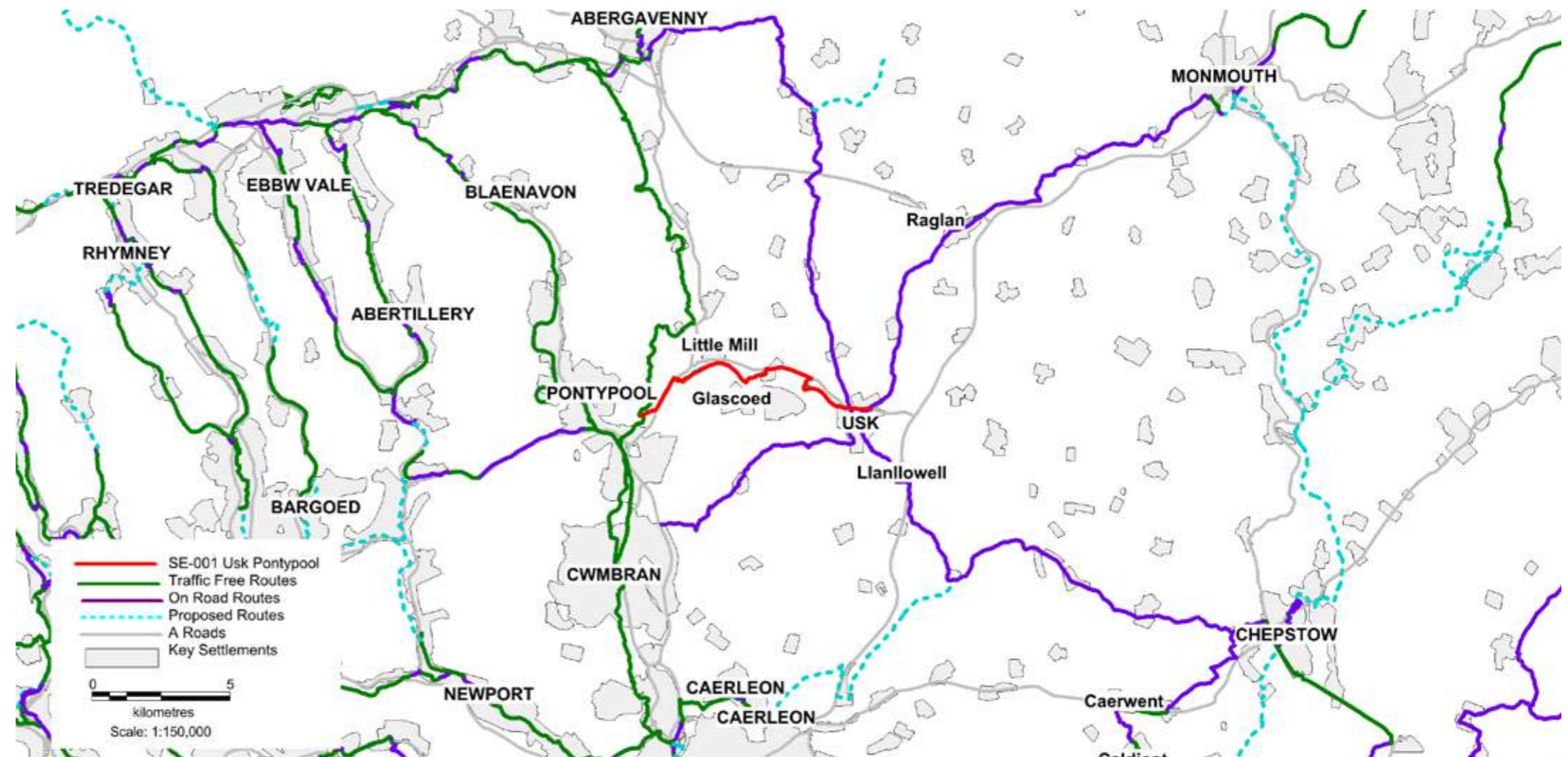
I. General information about the scheme

a. Context

Sustrans has supported UTAG, Monmouthshire County Council and Torfaen County Council in conducting this feasibility study on a new link that will connect Usk to Pontypool using a traffic free route. 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 standards and will mostly follow the dismantled railway line.

In 2008 local residents approached key landowners along the alignment of the disused railway line to see if development of a traffic free path was possible. In 2012, meetings were held with the key stakeholders to try and create a cycle track along the full length of the railway from Little Mill to Usk. However, it soon became apparent that the route would need to divert away from a munitions factory for the central section owing to concerns from the landowner.

Regional map showing location of Usk to Pontypool route



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In 2014, Usk Trail Access Group (UTAG) was formed by local parents from the Usk area to try and drive the project forward. As a result of the group's persistence and actions, and with some support from Sustrans to carry on ecological surveys, UTAG submitted two planning applications, gaining planning consent on one of them in October 2018.

b. The route

The route will link Usk and Pontypool and could have connections to NCN with route 42 and 423 in Usk and route 49 near Pontypool on the Monmouthshire and Brecon Canal. Although the proposed route runs parallel to the existing NCN route 423, NCN 423 is only suitable for very experienced cyclists because of the gradient. The proposed route will be safe and suitable for all users because of its distance from major roads and reduced gradients.

Several options have been considered so far (on road route on the A472, shared use path adjacent to the A472), and have been discarded because they do not match the requirements of the Active Travel Guidance nor the NCN standards.

II. Detailed proposal

a. Suggested alignment

From Usk to Little Mill, the proposed route follows the disused railway where possible but deviates around the BAE site for operational reasons. It is possible in the future that if operation conditions change the more direct route along the disused line will be able to be followed. The route would then join the A4042 – Usk Road and run on a

segregated path adjacent to this, up to the Monmouthshire and Brecon Canal and onto Pontypool via NCN route 49.

b. Engineering

Several engineering solutions will be needed in order to provide a path suitable for shared use cycling, walking and horse riding, with acceptable gradients in specific sections (i.e. access from Usk Island to the Coleg Gwent land) and to make sure the route doesn't impact negatively on existing agricultural operations.

Maps 2-3 (Island Usk to BAE east gate)

c. Ecology

An walkover survey and preliminary ecological assessment of the route was conducted in the spring of 2017, followed by a Great Crested Newt (May 2017) and a Dormice survey (September and October 2017). No evidence of these species was found, but precautionary measures will be taken in order to avoid any disturbance during construction.

A badger survey was conducted in January 2018 and badgers etts identified. A bats surveys will also be needed, as well as surveys of trees, in case of removal of any tree with potential roost features.

d. Cost

These cost estimates are subject to detailed design and safety audit considerations. The costs are for construction only and an allowance will need to be made for design, project management, and contingency. They are exclusive of VAT where applicable.

Costs have been developed for the sections covering Maps 2-3 and 5-6.

Route section	Description of route	Section Distance (m)	Option 1 Walk	Option 2 Walk & Cycle	Option 3 Walk, Cycle, Horse	Spot Infrastructure	Notes
1	Road crossing of the A472	45	900	5,400	6,750	60,240	Road crossing design subject to highways approval. Suggested design is to have an Island in road centre (See Usk to Little Mill Greenway feasibility study). Alternative would be a toucan @£60,000. Cyclist warning signs 2@£120.
2	Access ramp	122	2,440	14,640	18,300	15,000	Access ramp to be constructed using cut and fill. Unknown if existing material is suitable. Will also require tree removal.
3	Access ramp to bridge 6	248	4,960	29,760	37,200	14,800	Additional costs to bridge 6 to ensure no maintenance would be required for 20 years, £14,800
4	Bridge 6 to Bridge 7	281	5,620	33,720	42,150	18,230	Additional costs to bridge 7 to ensure no maintenance would be required for 20 years, £13,000. Possible stock fence to segregate route 281m @£10.64. Gates and cattle grids and each end of section, 2 @£1120
5	Bridge 7 to bridge 8	409	8,180	49,080	61,350	28,152	Additional costs to bridge 8 to ensure no maintenance would be required for 20 years, £13,500, 2 farm crossings @ £5150, stock fence 409m @£10.64
6	Bridge 8 to bridge 9	513	10,260	61,560	76,950	7,698.3	Bridge 9 has been repairs so no additional costs for bridge. Possible stock fence to segregate route 513m @£10.64. Gates and cattle grids and each end of section, 2 @£1120
7	Bridge 9 and farm access track	243	4,860	29,160	36,450	8,638.4	Additional surfacing @£48m2 to allow walkers and cyclists to share route with farm vehicles. Possible stock fence to segregate route 60m @£10.64. Gates and cattle grids and each end of section, 2 @£1120
8	Open fields or woodland	237	4,740	28,440	35,550	5,000	Additional gates and modification to field entrance including resitting water trough.
9	Access track to A472	228	4,560	27,360	34,200	18,720	Additional surfacing @£48m2 and changes to gates 1 @"1120. Additional wooden fencing to maintain privacy, 80m @£100/m
	Sub Total		46,520	279,120	348,900	176,478	
	Total walking					222,998	
	Total walking & Cycling					455,598	
	Total Walking Cycling and Horses					525,378	Preferred option

Maps 5-6, Glascoed Lane to Little Mill Section

Route section	Description of route	Section Distance (m)	Option 1 Walk	Option 2 Walk & Cycle	Option 3 Walk, Cycle, Horse	Spot Infrastructure	Notes
18	Bridge 10 to Bridge 11	280	5600	33600	42000	49798	Additional costs to bridge 10 and 11 to ensure no maintenance would be required for 20 years, £19,000 and £11,500. Ramp access from Glascoed lane to existing disused railway line. Ramp from bridge 10 3.5x6x70 plus embankment at 45deg would require 750m3 of material @ £25.73/m3-
19	Bridge 11 to Bridge 12	315	6300	37800	47250	41298	Additional costs to bridge 12 to ensure no maintenance required for 20 years, £22,000 . Ramp access from bridge to existing disused railway line. Ramp from bridge 10 3.5x6x70 plus embankment at 45deg would require 750m3 of material @ £25.73/m3-
20	Bridge 12 to bridge 13	564	11280	67680	84600	21150	Additional costs to bridge 13 to ensure no maintenance required for 20 years, £16000. farm crossings @ £5150
21	Bridge 13 to footpath	315	6300	37800	47250	4000	Cattle crossings and access gates
	Sub Total		29480	176880	221100	116245	
	Total walking					145725	
	Total walking & Cycling					293125	
	Total Walking Cycling and Horses					337345	Preferred option



Examples of directional signs and short robust posts

e. 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 (especially on the wide open spaces of the common) 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 40 signs will need to be required to effectively provide good directional signing. At each end of the route destination signage will be provided on conventional metal sign posts. Signs on the common needs to be in keeping with the area and short robust posts with minimal signing are recommended.

f. Future maintenance

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. 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. Thinking about who will use the route – will

horses ride along it, will tractors cross it, how will maintenance vehicles access the path (and turn)? Pedestrians and cyclists don't normally cause a great deal of wear and tear. It is often other users and the weather that have more of an impact on the condition of the path.

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 2.5m. 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. More details on maintenance can be found here: <http://www.sustrans.org.uk/our-services/what-we-do/route-design-and-construction/route-design-resources/maintenance-walking-and>.

Sustrans Volunteers recruited from local communities will be able to help with some aspects of maintenance including checking signing, and collecting litter and cutting back vegetation on some traffic-free sections.

III. Stakeholder Engagement

Local stakeholders were engaged fully in the design process to make sure the route is suitable to local needs and will be used in the future. The BRO Partnership supported Sustrans in this activity. An Online survey was conducted in July and August 2017 to obtain initial feedback from local key stakeholders about the perceived impacts of the routes on daily commute and tourism activities. A Stakeholder Group was formed with the participation of Monmouthshire CC, Torfaen CC, UTAG and the land owners. Stakeholder meetings have been held quarterly to discuss the alignment, the issues and opportunities of the route and the opportunities for local businesses to benefit from the route. Community consultations were held in Summer 2018 to raise awareness about the project and collect residents' feedback about the path. 35 residents were consulted.

IV. Marketing

Marketing and training activities will be developed and delivered in 2018 with the support of the BRO Partnership and Gwyrdd.

A toolkit will be developed containing top tips about how community groups can start planning a new walking and cycling path in their area. The toolkit will also contain hints about promoting existing paths and information about economic benefits of walking and cycling infrastructure. A website will also be available, 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, Pembrokeshire CC, etc. This will allow a wider audience to find out about the new route. The production of a simple and informative map will help with content provision for both online and printed material opportunities, and can also be distributed to local residents and businesses. Publicity through press coverage and social media around an official launch will also help generate local, regional and possibly national awareness. Activities such as guided walks and rides for some or the entire new route would help local residents understand the new cycling opportunities it creates.

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

Sustrans' Research and Monitoring Unit (RMU) is contributing to provide evidence that will 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 85,035 cycling trips and 94,733 walking trips per year (respectively +92% and +26% above usage with current infrastructure), the benefits are:

- Total economic benefits of £
- Health benefits of £
- Overall economic benefits

In order to provide additional monitoring data, it is recommended to install at least one automatic counter on a traffic-free sections of the route.

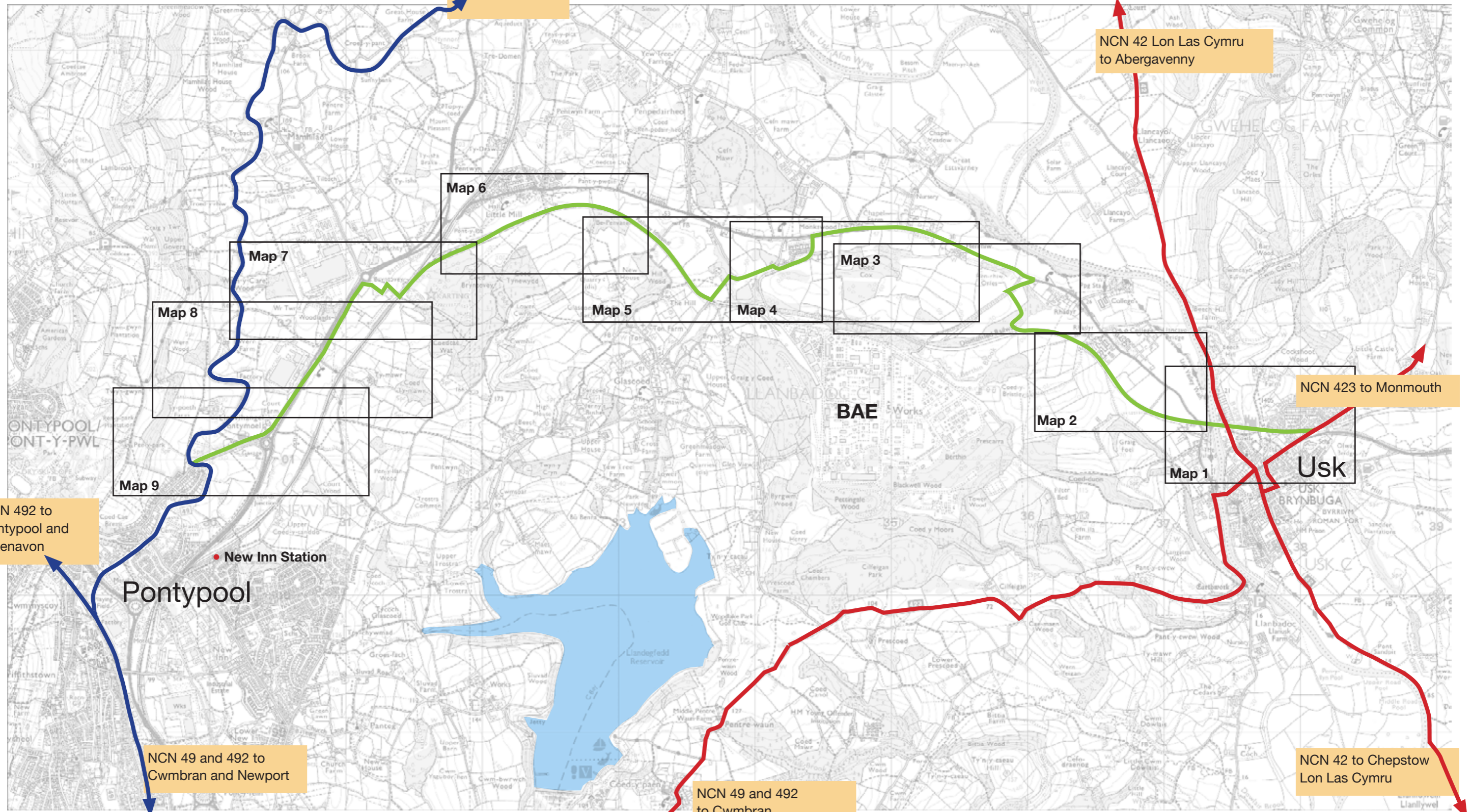
VII. Funding

Initial funding has been secured by Monmouthshire and Torfaen CC through the Local Transport Fund (Welsh Government) and this will allow progress in terms of feasibility work and design on several sections of the future path. We recommend to consider the following funding sources for the construction and promotion of the path:

- a. Transport Grants managed by the Welsh Government, namely Local Transport Fund, Active travel Fund and Safe Routes in Communities fund. These funds can be pivotal to allow construction
- b. 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)

- Proposed NCN route 466
- Existing NCN traffic free
- Existing NCN on Highway

Overview map - SE001 Usk to Pontypool

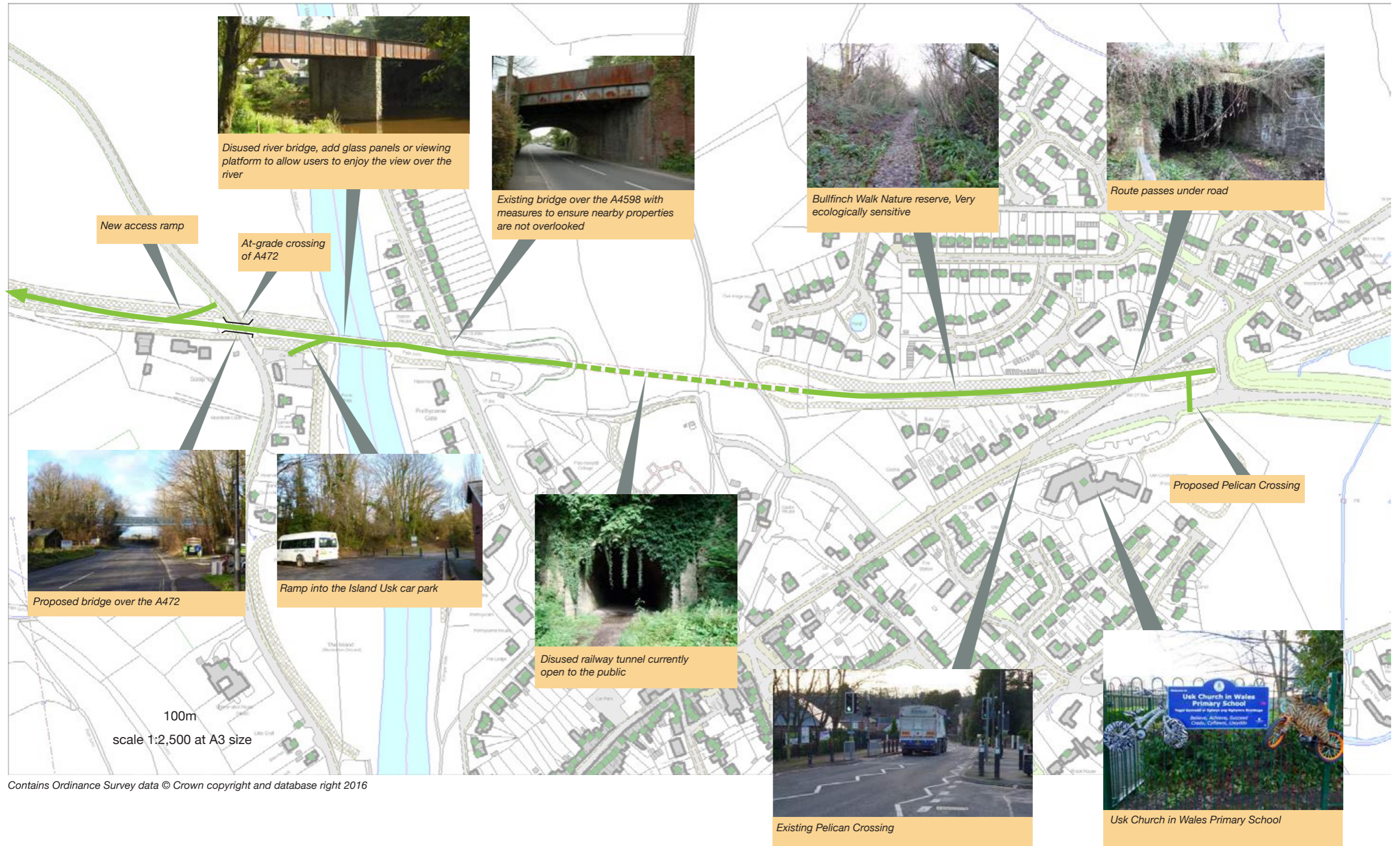


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- Proposed NCN route 466
- Proposed NCN route 466 running through tunnel

Map 1 - SE001 Usk to Pontypool



Proposed NCN route 466
Possible future link

Map 2 - SE001 Usk to Pontypool



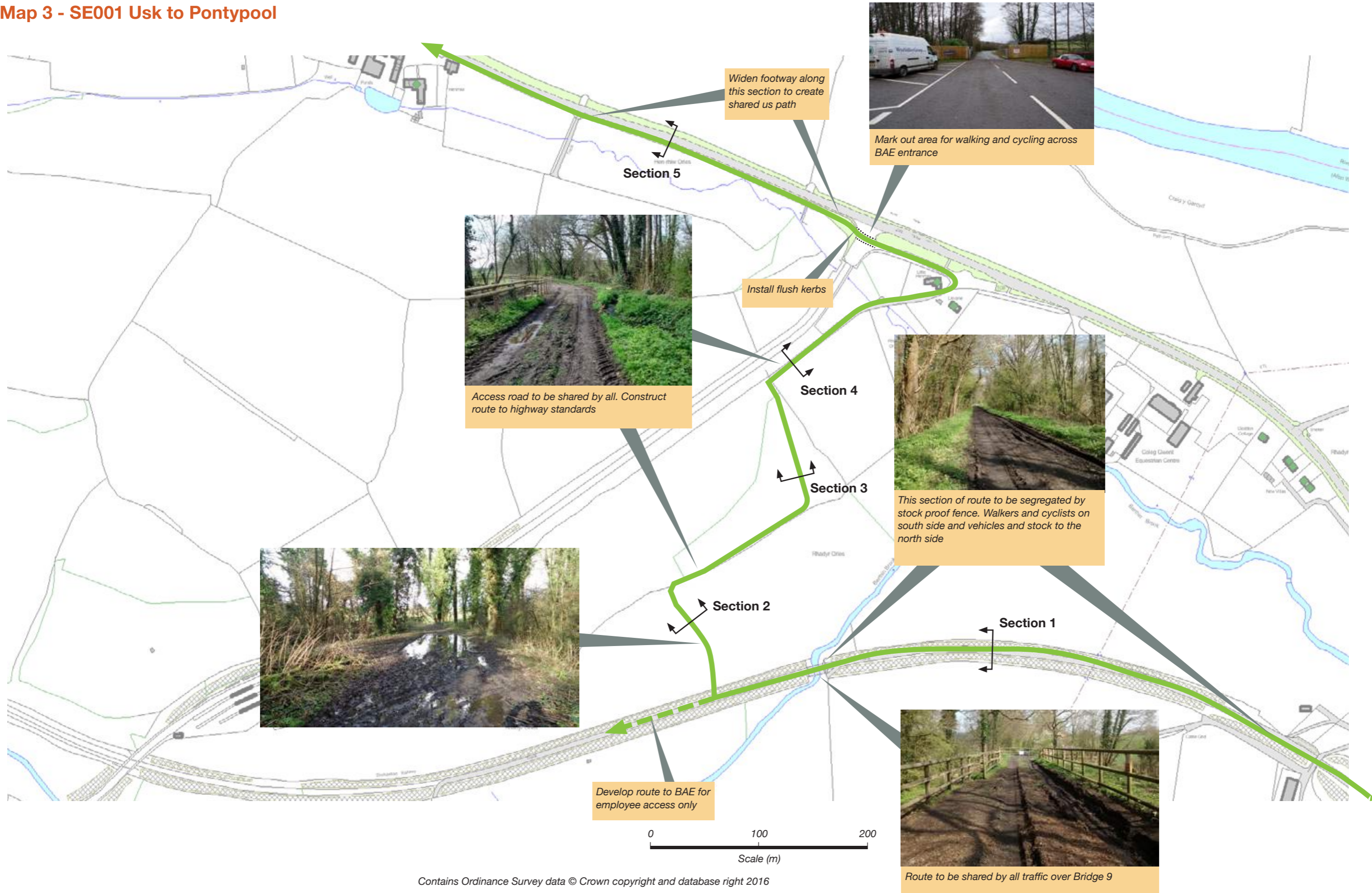
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Proposed NCN route 466

Possible future link

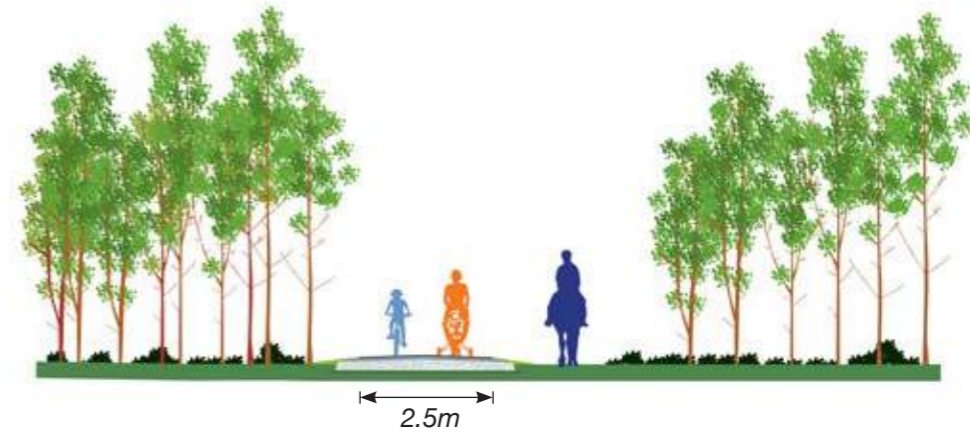
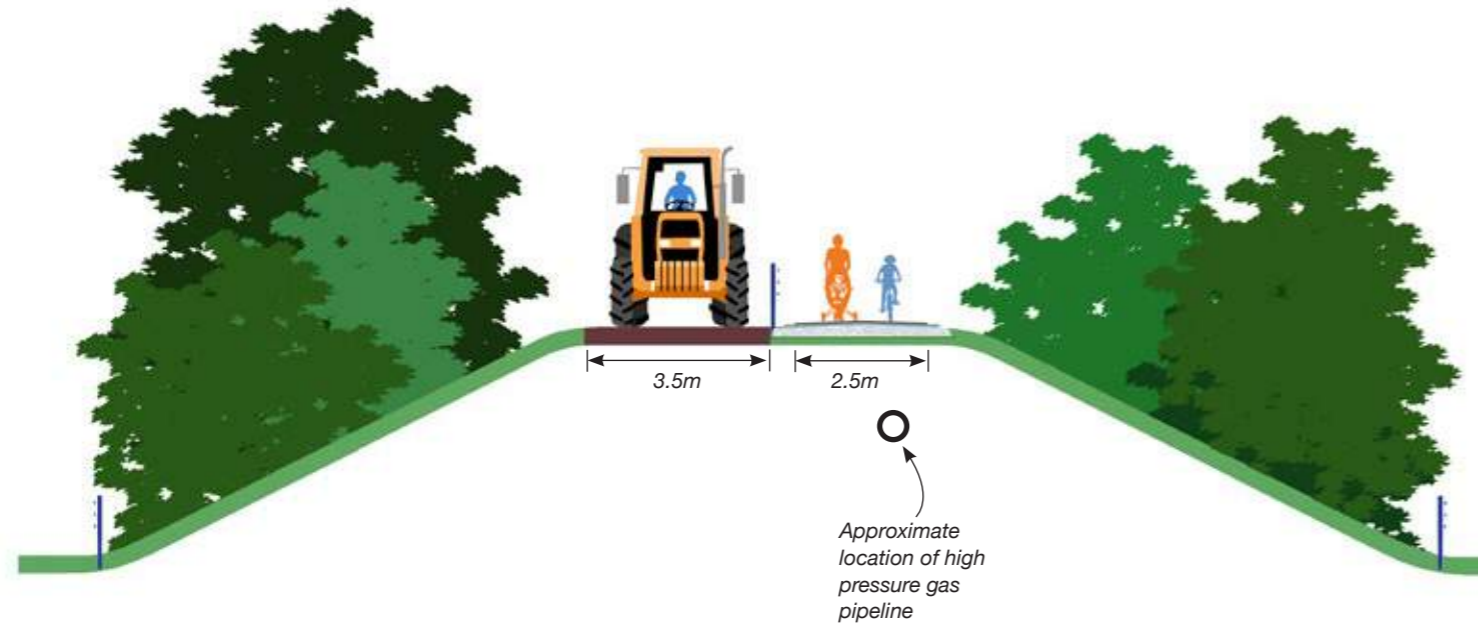
Map 3 - SE001 Usk to Pontypool



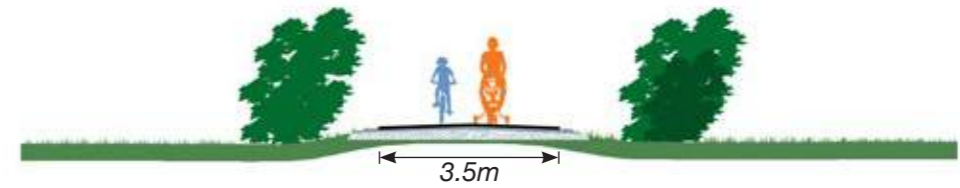
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Map 3 - SE001 Usk to Pontypool (cross-sections)

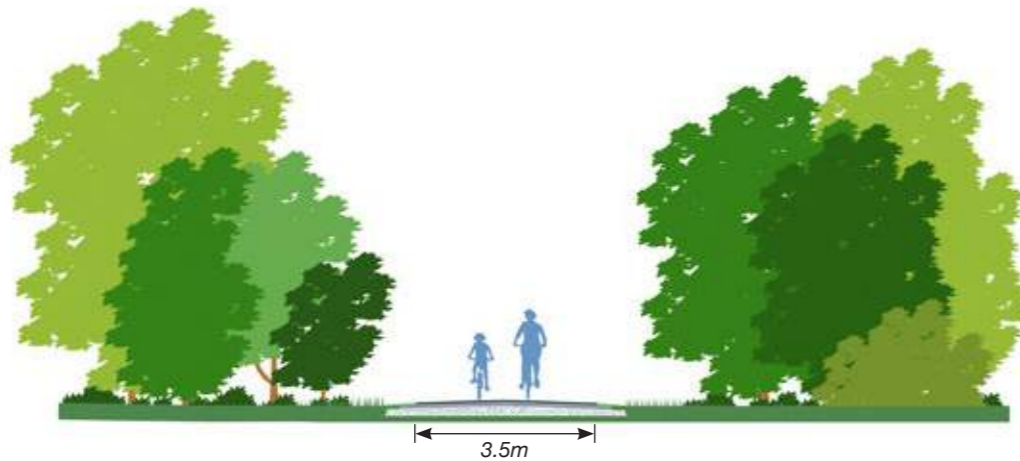
Section 1 - Path constructed to standard SD - 01, farm access side left as existing



Section 3 - New 2.5m wide path through wood with verge for horse riders



Section 4 - Shared path built to highway standard



Section 2 - New 3.5m wide path through woodland built to highway standard



Section 5 - Showing path adjacent to A472

Map 4 - SE001 Usk to Pontypool

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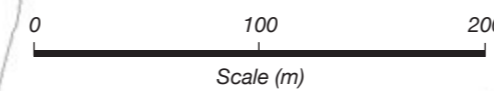
Alignment of route to be decided here



Alignment of route here not decided



End of existing shared use path



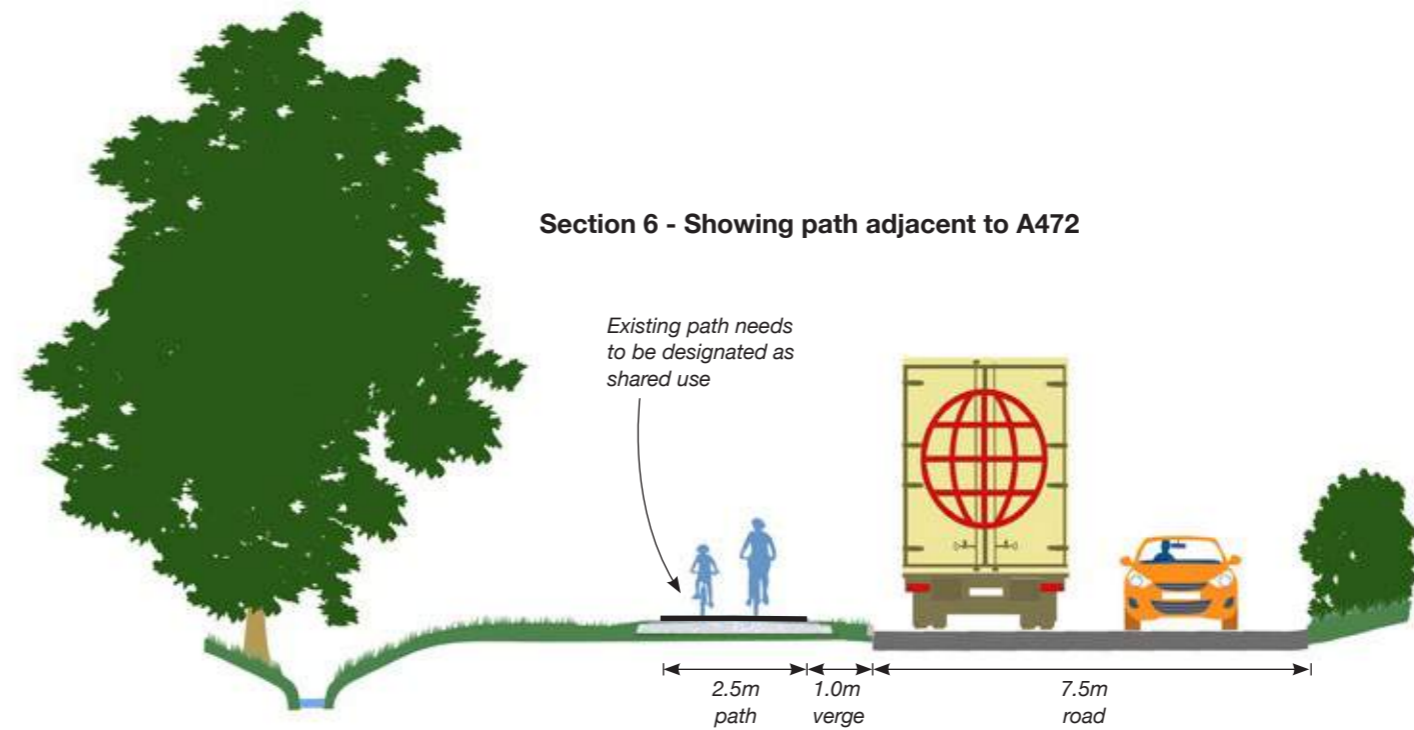
Scale (m)

Section 6

Existing path needs to be designated as shared use

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Section 6 - Showing path adjacent to A472



Existing path needs to be designated as shared use

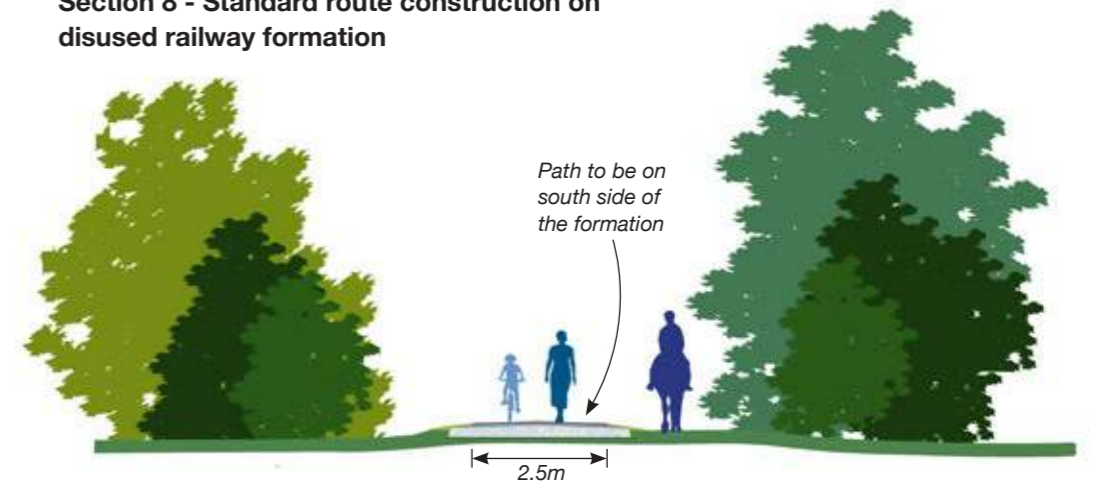


Map 5 - SE001 Usk to Pontypool

Section 7 - Route on traffic-calmed lane
possible future route on inside of hedge if land can be obtained



Section 8 - Standard route construction on disused railway formation



Path to be constructed in the centre of Bridge 11. Install new railings, Standard route 2.5m wide with horse construction



Shared use path constructed on south side of the railway formation

Route on traffic calmed highway. Possible future route on inside of hedge if land can be obtained

Alignment of route to be decided here



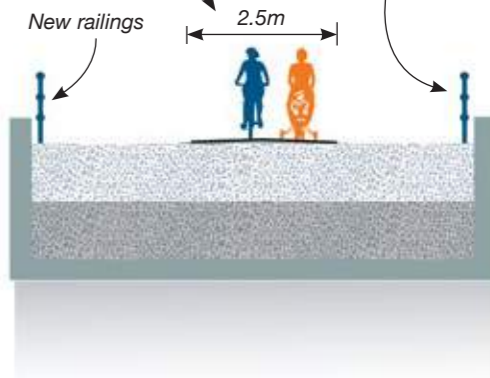
Bridge 12. Access ramp to be formed to link with Bridleway

Section 9

Section 7

Path to be constructed in the centre of the bridge. Install new railings, Standard route 2.5m wide with horse construction

New railings



Section 9 - Path to be constructed on the centre of bridge



Bridge 10. Ramp from road down to railway formation

Section 8

Develop route on disused railway to BAE for employees

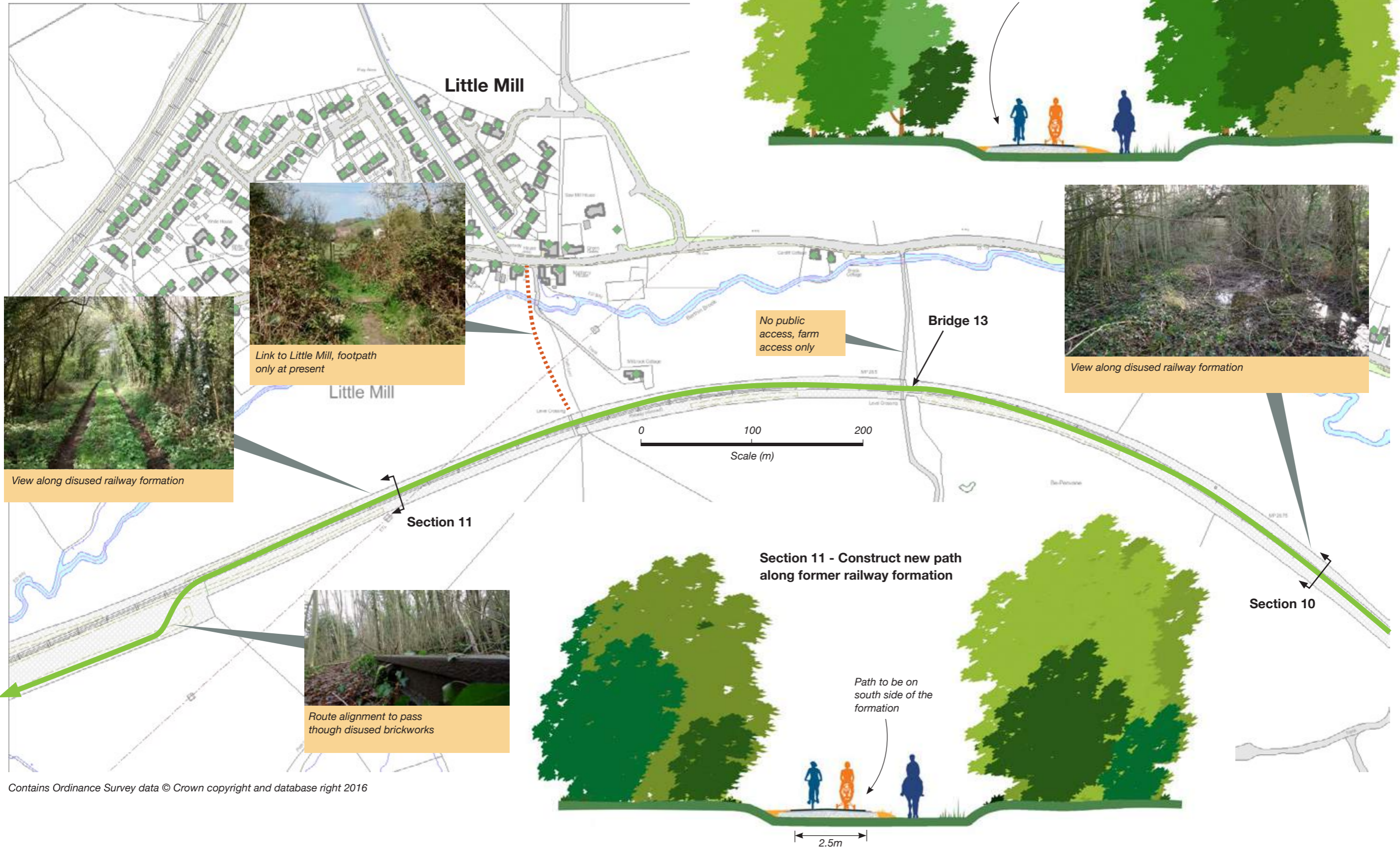
- Proposed NCN route 466
- - - - - Possible future link

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Map 6 - SE001 Usk to Pontypool

- Proposed NCN route 466
- Footpath to Little Mill



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Map 7 - SE001 Usk to Pontypool



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- Proposed NCN route 466
- NCN 49 - Monmouth and Brecon Canal
- Possible future link

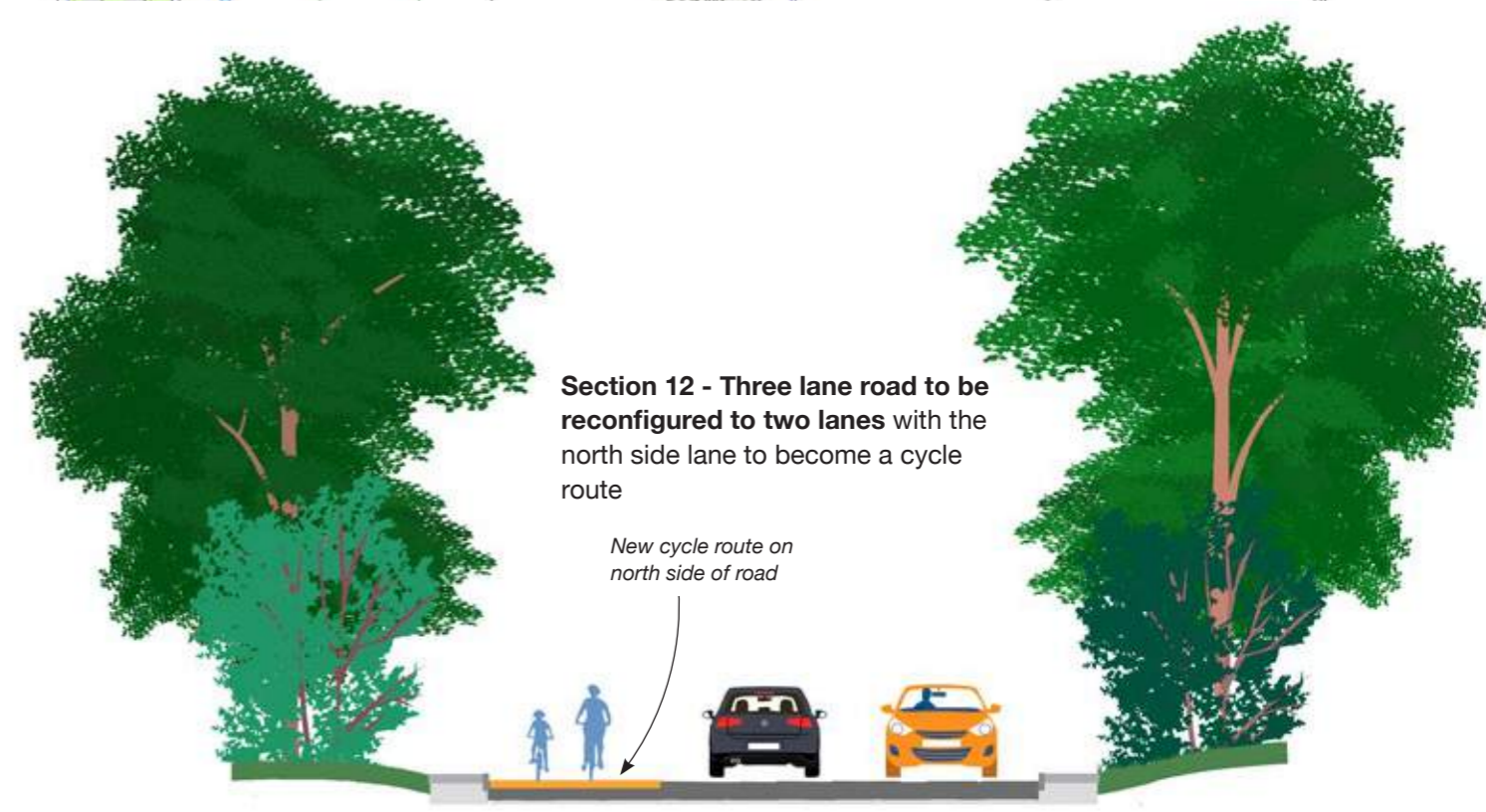
Map 8 - SE001 Usk to Pontypool



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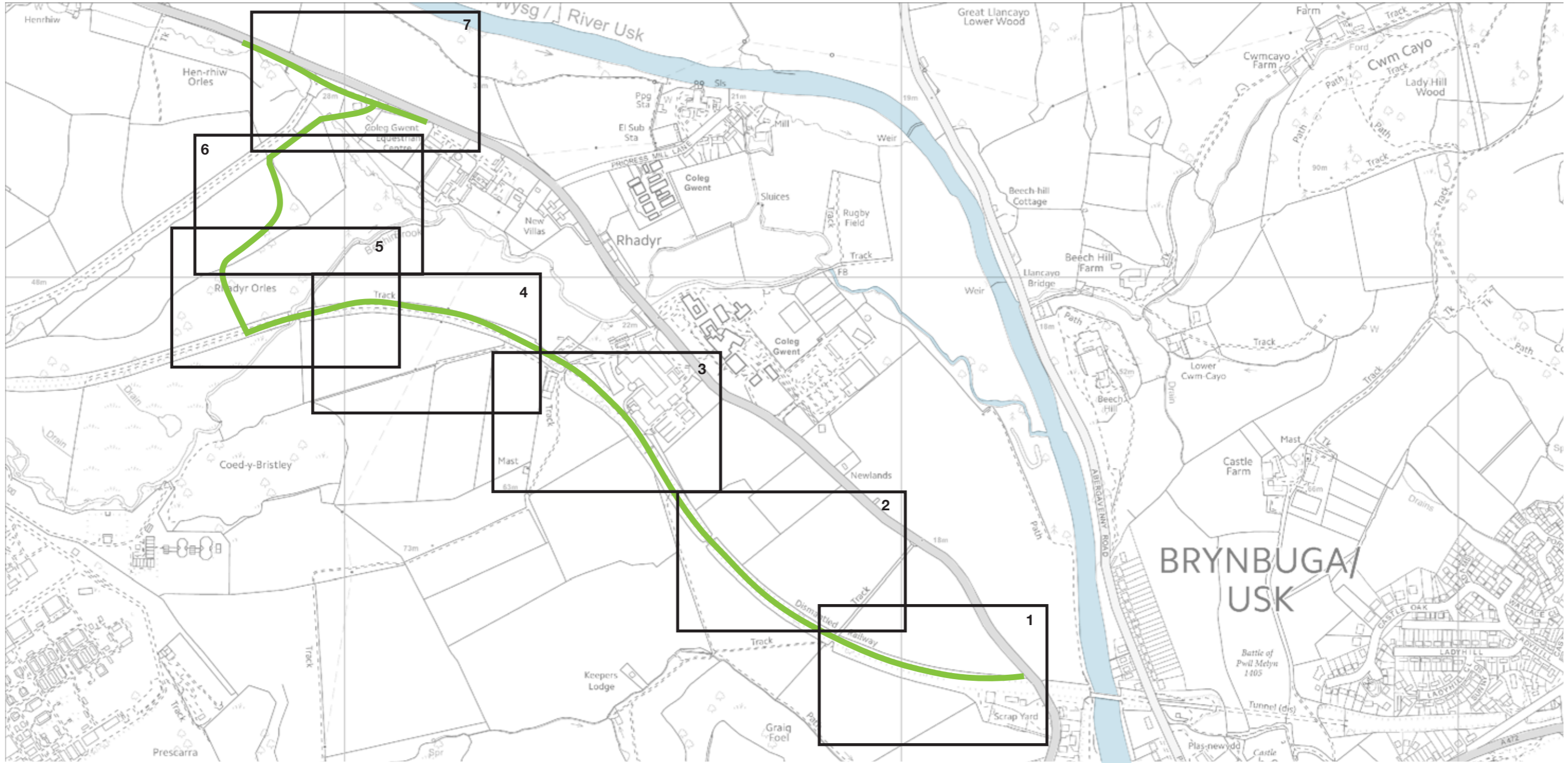
- Proposed NCN route 466
- NCN 49 - Monmouth and Brecon Canal
- Possible future link

Map 9 - SE001 Usk to Pontypool



NCN route 49, Pontypool 3km and Newport 15km

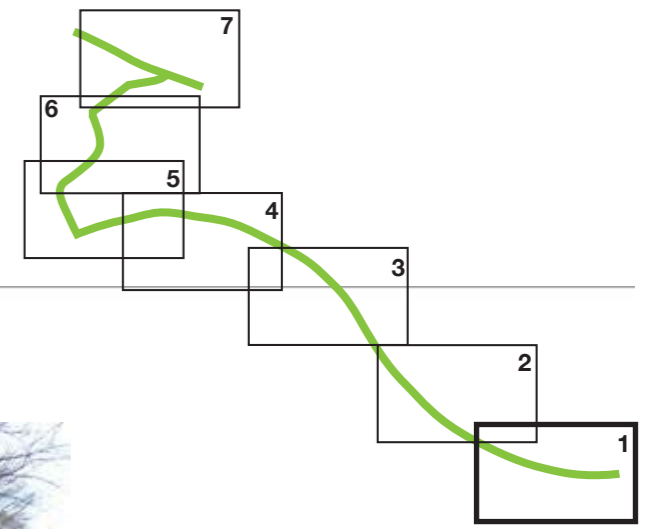
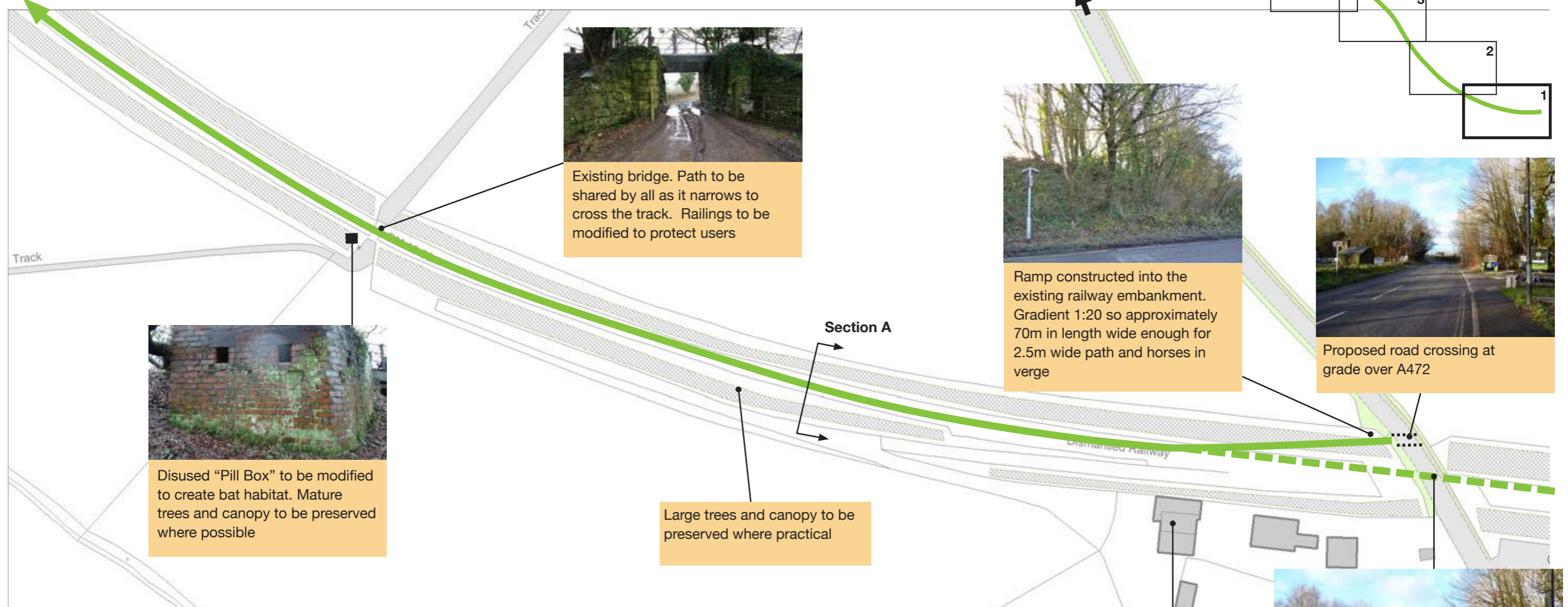
Appendix - Usk to Coleg Gwent Equestrian Centre - detailed plans



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Proposed NCN route 466

Appendix - Map 1 - SE001 Usk to Pontypool



Existing bridge. Path to be shared by all as it narrows to cross the track. Railings to be modified to protect users



Ramp constructed into the existing railway embankment. Gradient 1:20 so approximately 70m in length wide enough for 2.5m wide path and horses in verge



Proposed road crossing at grade over A472

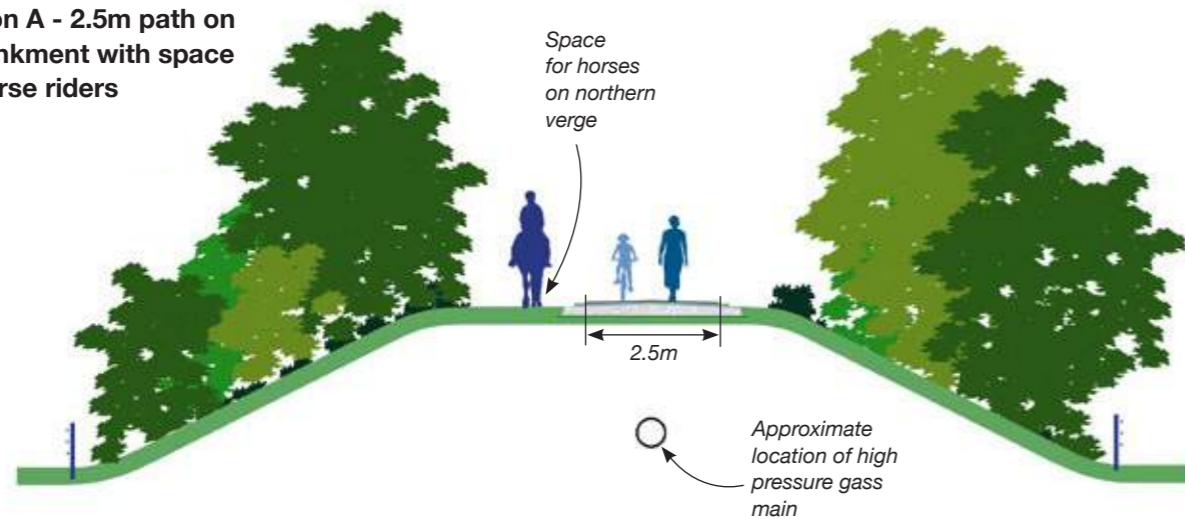


Disused "Pill Box" to be modified to create bat habitat. Mature trees and canopy to be preserved where possible

Section A

Large trees and canopy to be preserved where practical

Section A - 2.5m path on embankment with space for horse riders



Existing businesses. Ramp and path to be constructed to minimise the buildings being overlooked.



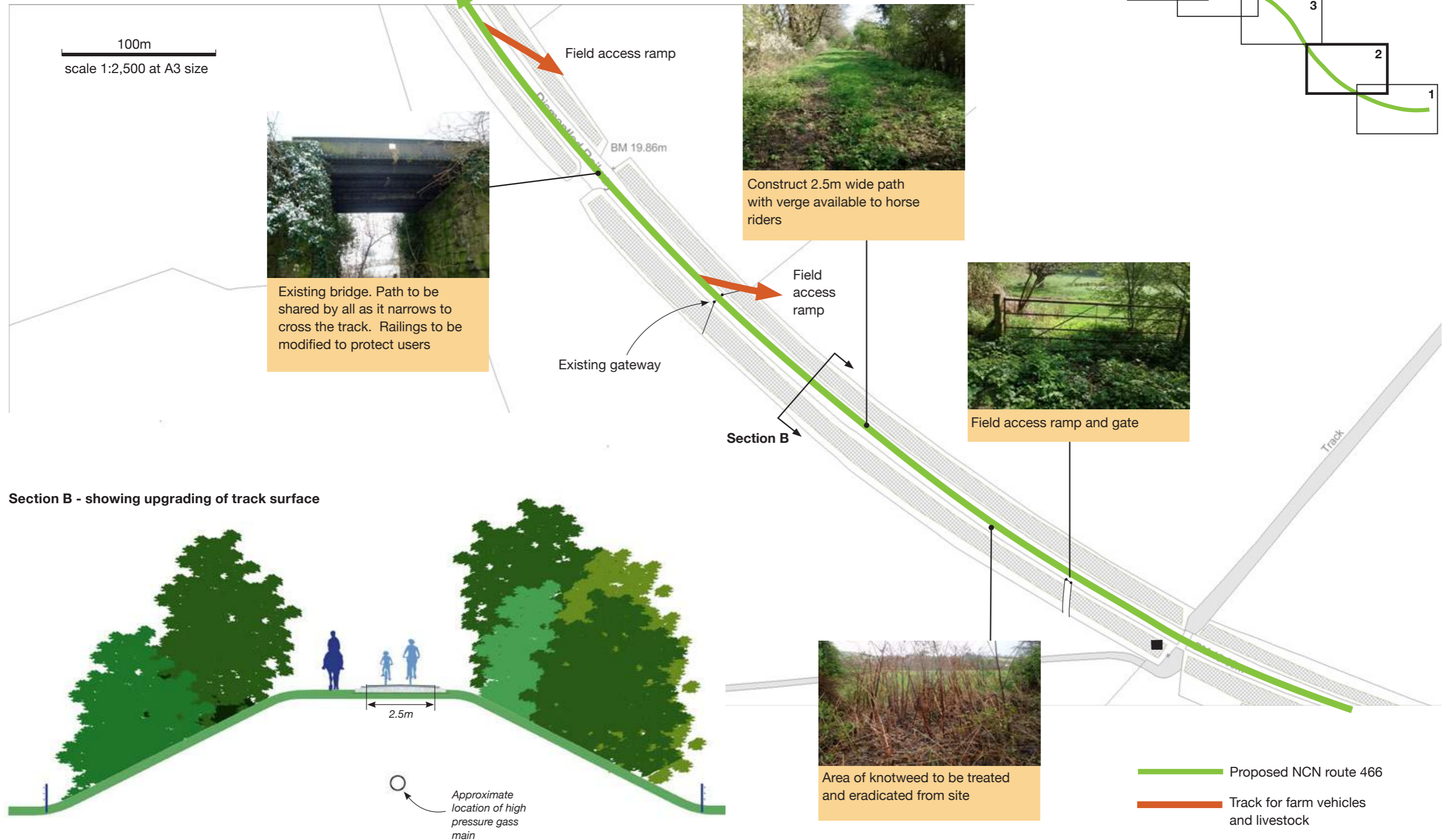
Proposed bridge over the A472

- Proposed NCN Route 466
- Proposed NCN Route 466

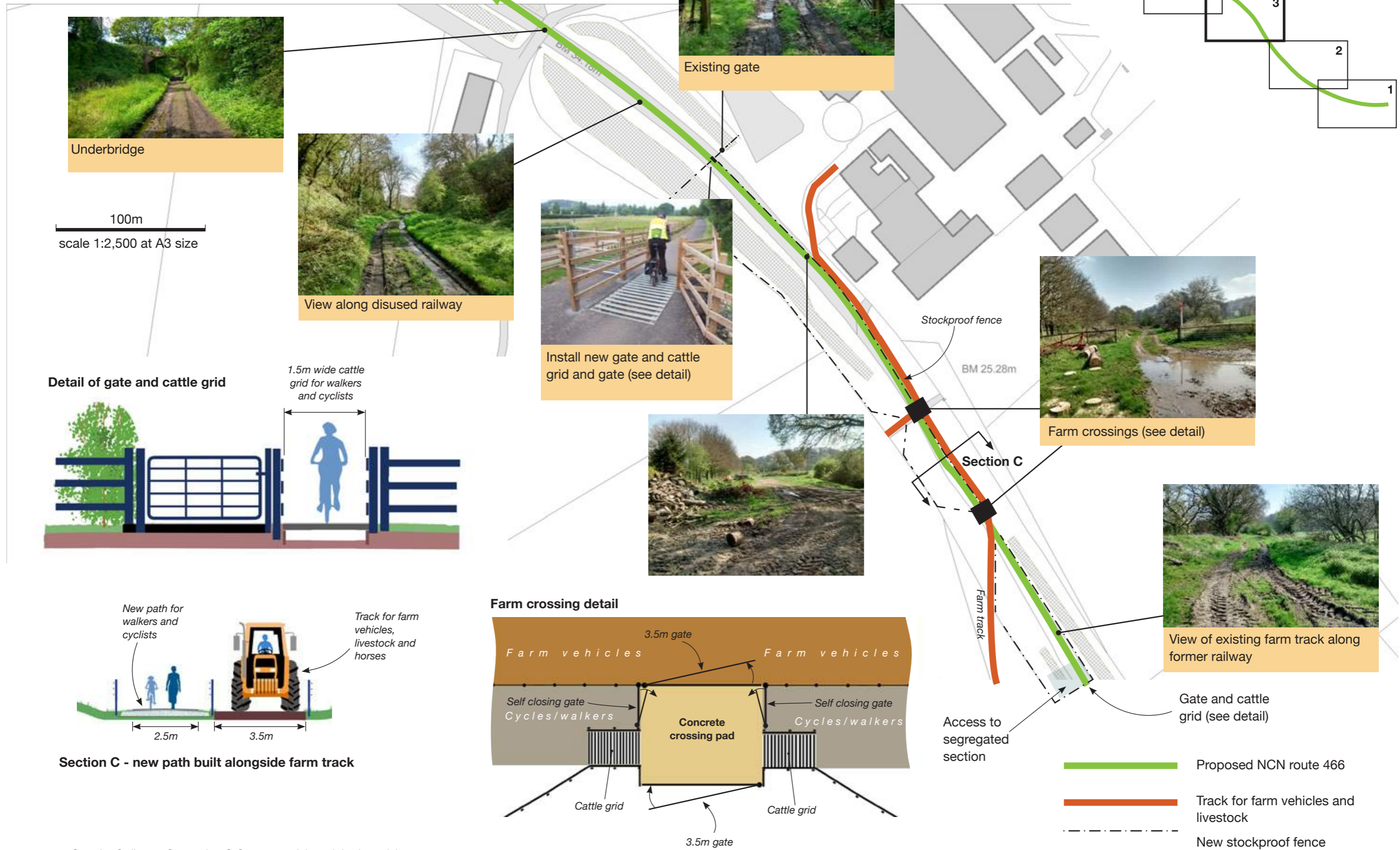
100m
scale 1:2,500 at A3 size

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Appendix - Map 2 - SE001 Usk to Pontypool



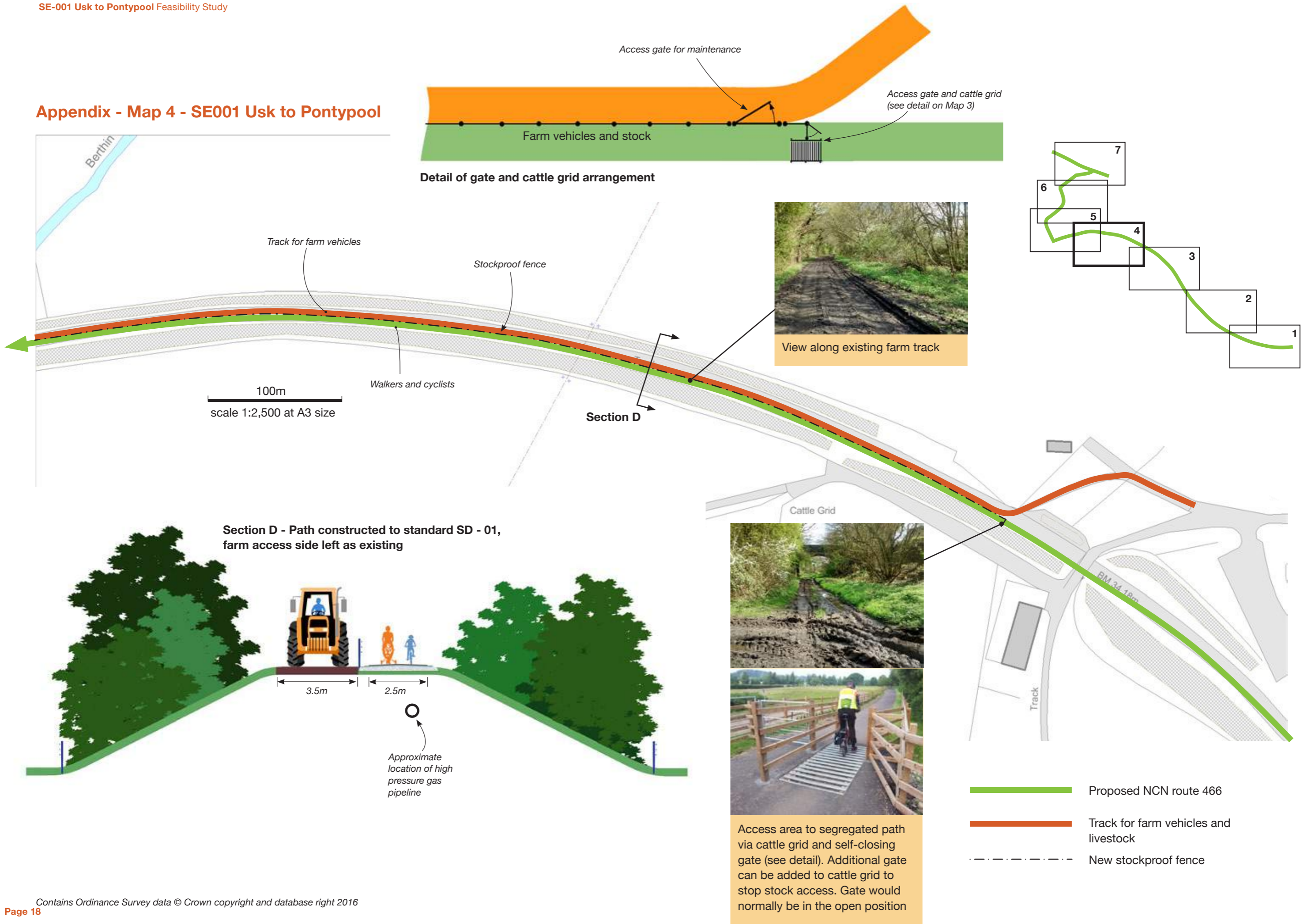
Appendix - Map 3 - SE001 Usk to Pontypool



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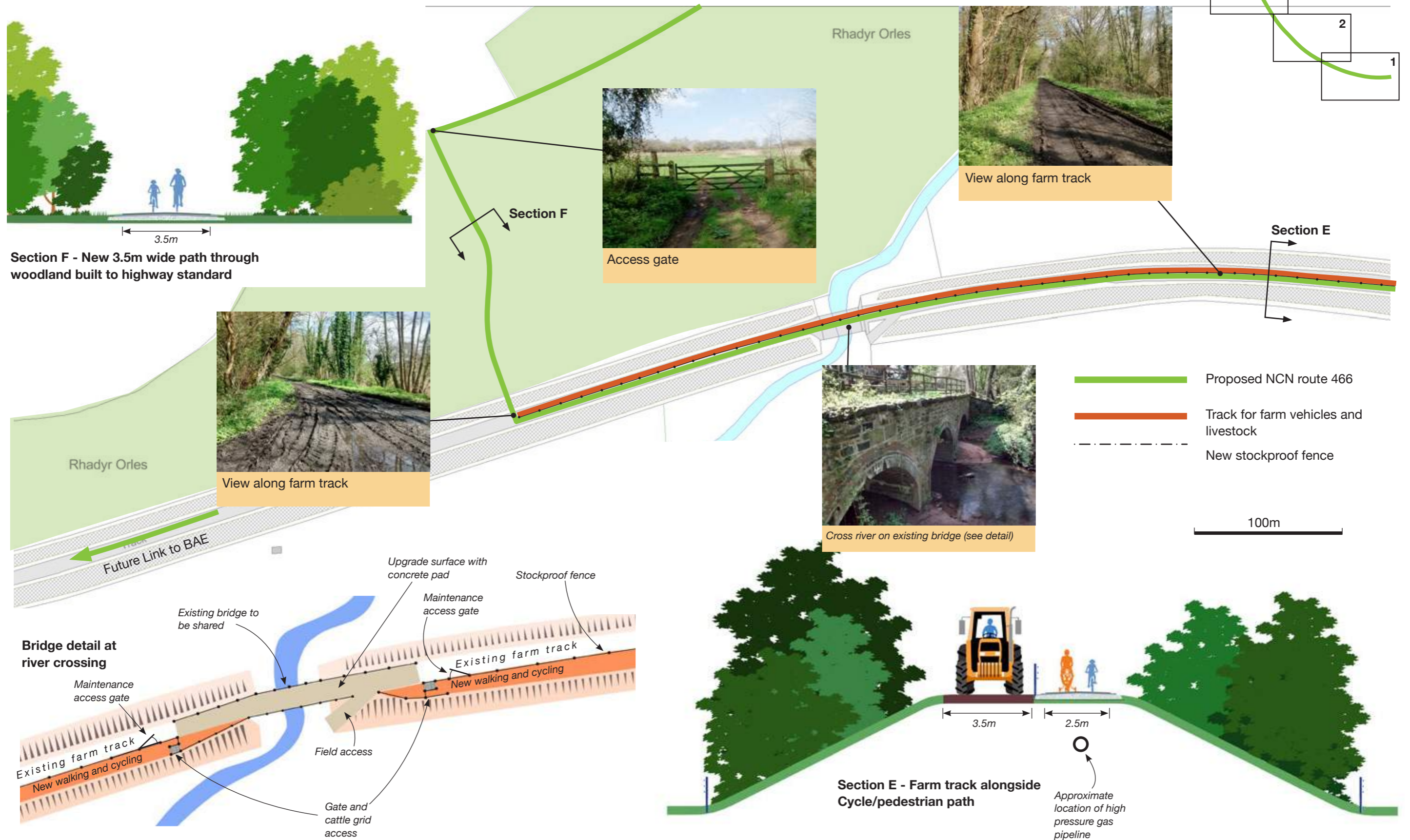
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Appendix - Map 4 - SE001 Usk to Pontypool



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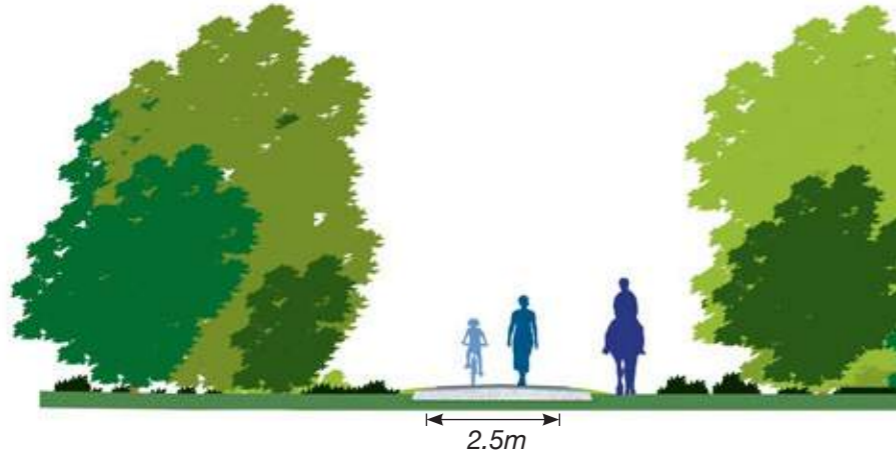
Appendix - Map 5 - SE001 Usk to Pontypool



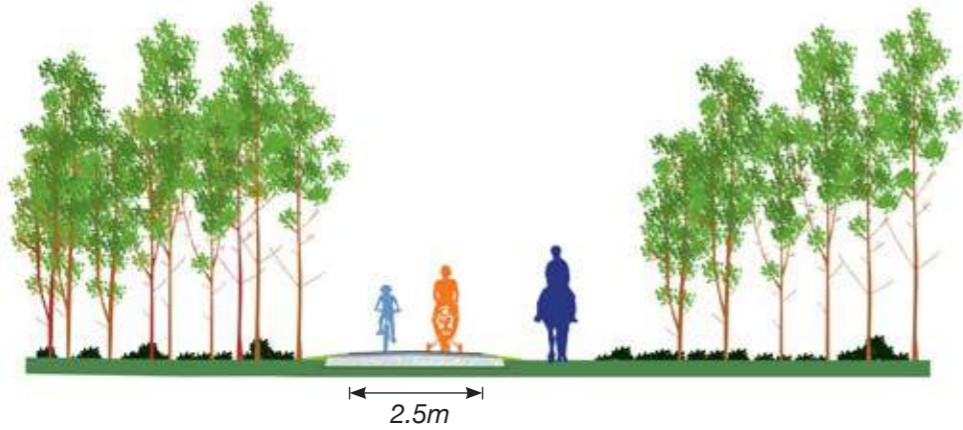
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Appendix - Map 6 - SE001 Usk to Pontypool

Section G - New 2.5m wide path through wood with verge for horse riders



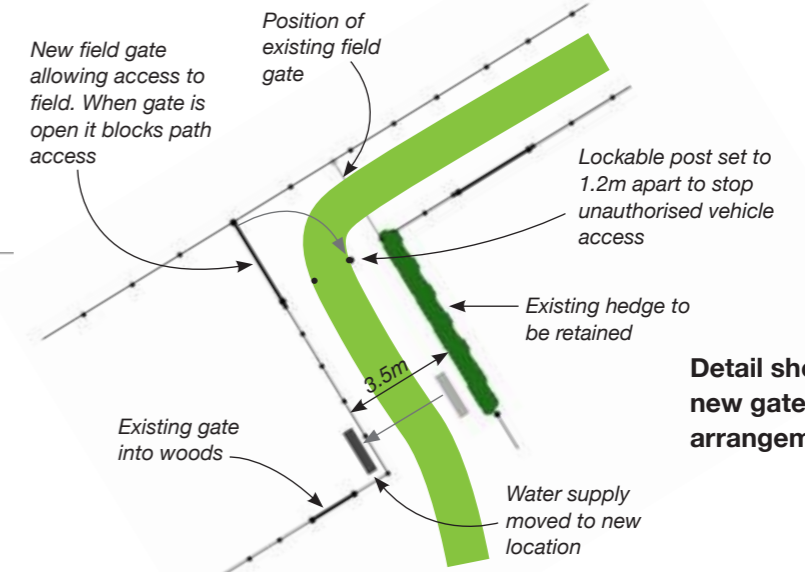
Section H - New 2.5m wide path through wood with verge for horse riders



View along woodland track



Existing gate onto farm track (see detail right)



Detail showing new gate arrangement

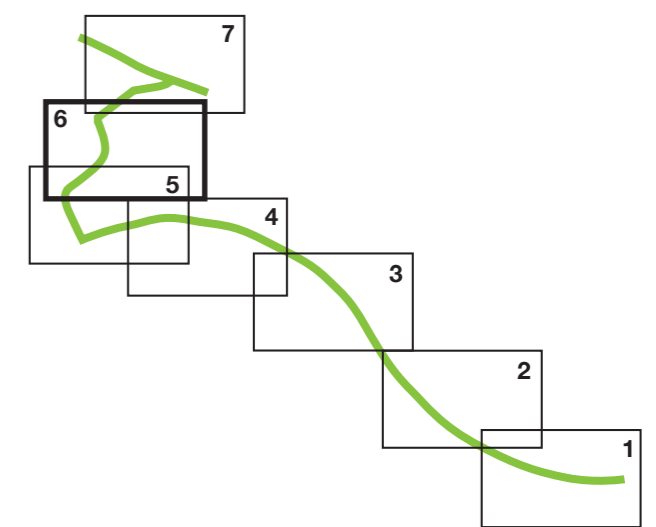
100m
scale 1:2,500 at A3 size



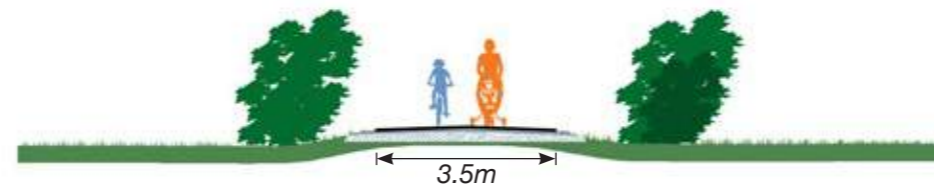
Create new path through woodland



Himalayan balsam



Path to pass through existing wooded area and alignment to fit in with woodland management plan. Area needs to be cleared of Himalayan balsam

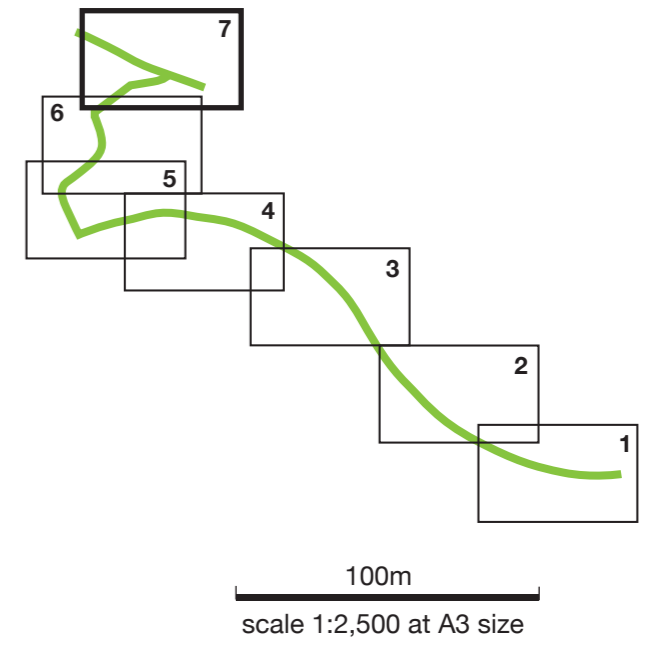


Section I - Shared path built to highway standard

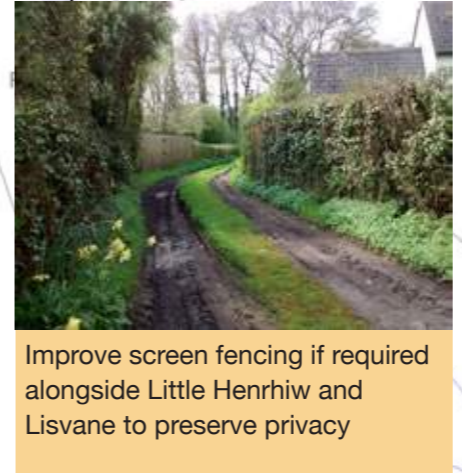
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Proposed NCN route 466

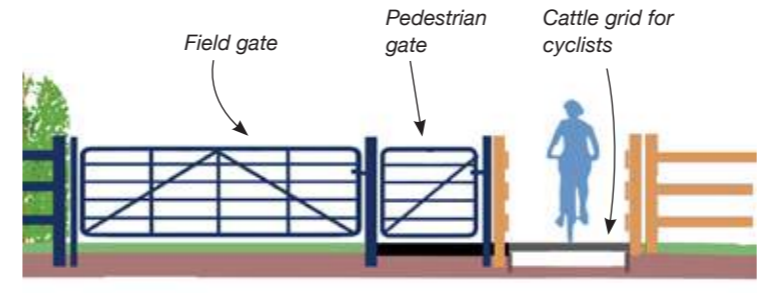
Appendix - Map 7 - SE001 Usk to Pontypool



- Binding Margin -



New gate arrangement (see detail on map 6)



- Proposed NCN route 466
- - - - Link to Gwent College

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Section J - Showing path adjacent to A472

Detail showing gate and cattle grid arrangement