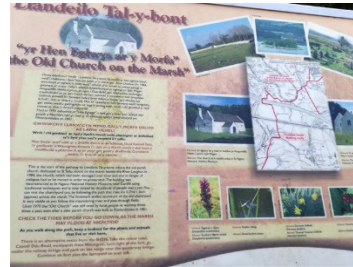


SWW-039 Pontarddulais to Grovesend Link



Discussion document V1 Produced as part of Sustrans' Linking Up Project
June 2019



GWYRDD





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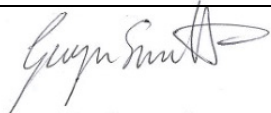
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Pontarddulais to Grovesend Link

Executive Summary

This report summarises the results of the feasibility study Sustrans has conducted for the development of a new traffic free walking and cycling path to connect Pontarddulais to Grovesend (Swansea Council), to join the existing traffic free path linking to Gowerton and to National Cycle Network Route 4. The report is addressed to local authorities and community groups and is aimed at supporting funding applications for the construction of the route.

Between 2016 and 2019, through RDP funding awarded by the Welsh Government, Sustrans has worked with local stakeholders to identify preferred options for the link.

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

I General information about the scheme

a Context

Sustrans has conducted this feasibility study to develop a new link between Pontarddulais and Grovesend. 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.

b The route

The new path will provide a traffic free link between Pontarddulais and Grovesend. The route is also part of Swansea Council Integrated Network Map (INM) designated as an aspirational project (AS0007), considered as part of the wider strategic development of walking and cycling links into the Clyne Valley. Route design needs to take into account topographical and biodiversity constraints. This report details the options that have been researched by Sustrans in partnership with Swansea Council, Pontarddulais Town Council, Friends of Coed Bach Park, Wheelrights and local residents.

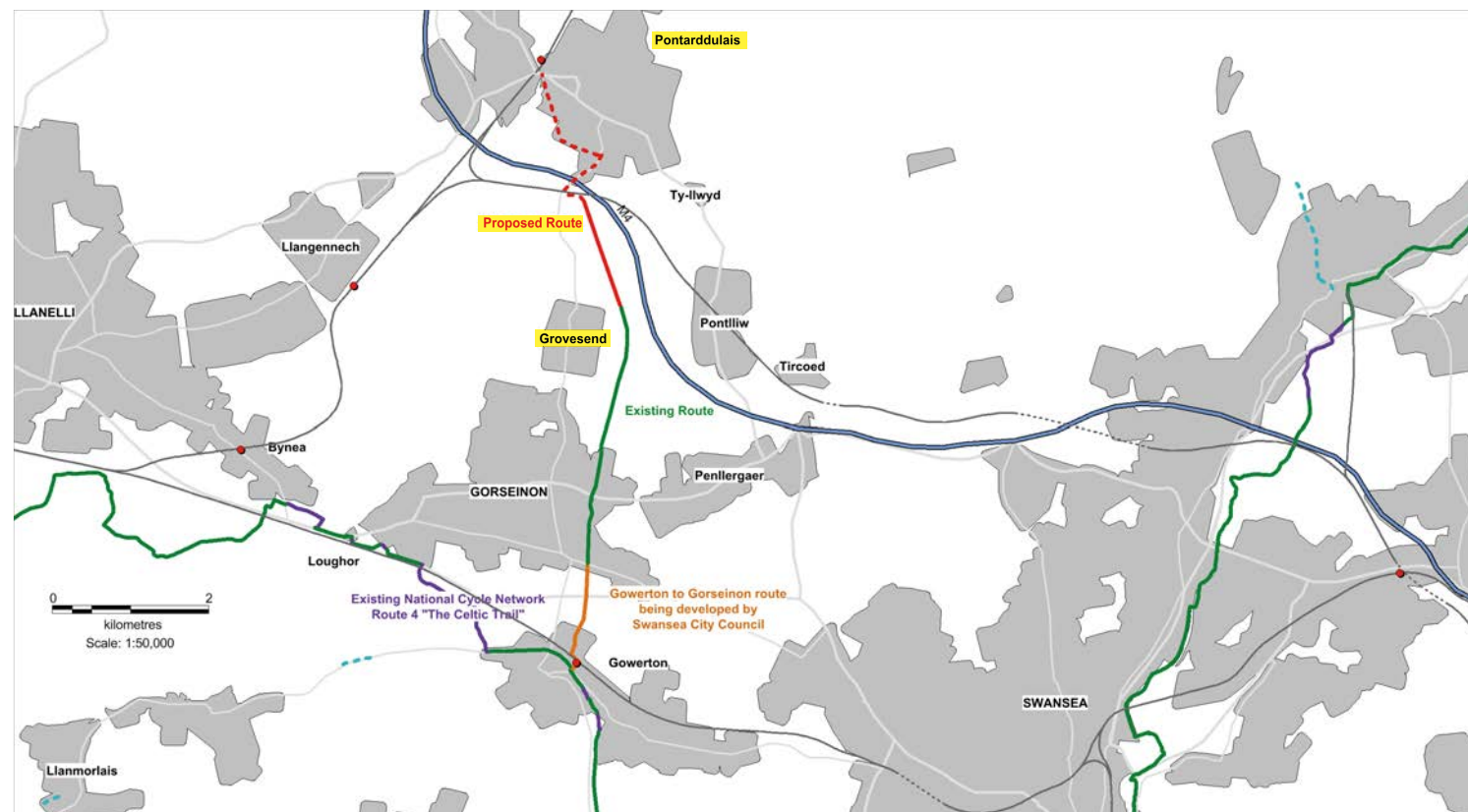


Figure 1 - Pontarddulais to Grovesend Link - Contains Ordnance Survey data © Crown copyright and database right 2016

Pontarddulais to Grovesend Link

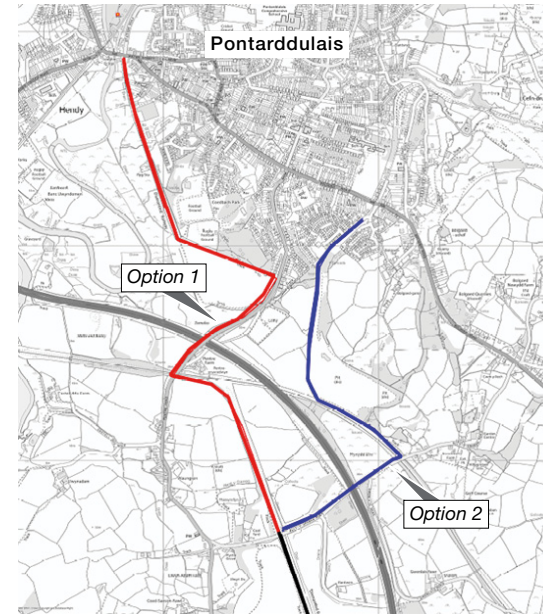
II Detailed proposal

Option 1 (red line) Preferred alignment

This option follows the former railway track bed from the terminus of the existing shared use path as far as the embankment to the south of the live rail line. However the route then continues west, parallel to the railway embankment to emerge on to the B4296 just south of the bridge carrying the road over the railway. The route then utilises the road bridges to cross the railway and the M4 before entering Pontarddulais. This option will require agreement between Swansea Council and Network Rail to accommodate safe walking and cycling infrastructure along the railway bridge as well as on road cycling infrastructure and speed restriction measures to ensure NCN standards are achieved on the public highway. Positive discussions have been held with the landowners along the old railway track bed.

Option 2 (blue line) Long term additional option

This option uses Allt Y Graban bending east after the first section along the railway. Then the alignment turns north again emerging on the dismantled colliery site. This option doesn't seem achievable at the moment because of land ownership and topographical issues.



III Option 1 – Engineering: design solution proposed and major new structures needed

Station Road to Allt Y Graban Road

From Station Road, where the existing multi user path ends, there are two options for continuing the route. The former track bed in the base of the cutting is heavily overgrown and standing water forms for most of the year. Parallel with and to the west of the cutting a rough track marked as a bridleway (on British Horse Society maps) is clearly used by pedestrians and possibly cyclists. This land is designated common land and therefore any formal route through it would be classed as a reduction in common grazing land. Although this second option would have advantages as it would require less drainage provision, a reduced thickness of sub base and no need for timber edging, the importance of common land status and the difficulties in building a path across it are a considerable hurdle to overcome.

Allt Y Graban Road to Railway Bridge

From Allt-Y Graban Road the former railway alignment continues north to Pentre Farm rising to a heavily overgrown embankment. For this route section there is no possible parallel route with farm land bordering the railway. At Pentre Farm the railway alignment would previously have linked into the existing operational railway. The farm is provided with a cattle creep under the live railway and the path will need to pass on top of this structure at the same time being far enough away from the live railway to satisfy Network Rail safety considerations.

Between the cattle creep and Pentre Road the land rises then falls away to leave a steep bank up to the road. A narrow rough track used by Network Rail staff provides access between the road and railway.

In order to address the level change from Pentre Road a corner of Pentre Farm land would be required to allow the construction of an access ramp.

The existing bridge is approximately six metres wide without footways although footways are present on the west side of Pentre Road as far as the bridge parapets. Safety barriers are present on all four approaches to the bridge. Swansea Council is working to look at the options to link the route from Pentre Farm to a shared use path alongside Pentre Road on the west side of the bridge, which could be:

- 1 Bridge replacement: the existing bridge is included in Network Rail Control Programme 6 and funding is available for improvements. A new bridge could be designed with a wider deck allowing the inclusion of facilities for pedestrians and cyclists. Five years would be an optimistic estimate for the opening of a new bridge.
- 2 Construction of a new pedestrian and cycle bridge alongside the existing railway bridge.
- 3 Introducing traffic management measures along the bridge. This measure would only be considered as an interim measure before a more definite solution (1 or 2).

Railway Bridge into town

Between the railway and motorway bridge the path is for the most part set back from the edge of carriageway. On the approach to the motorway bridge a safety barrier runs behind the footway limiting the available width to widen. The footways across the Motorway itself are a little over 2 metres in width with parapets below the required 1.4 metres. The south eastern verge has no footway but is wider in places than the northern verge.

There is a medium pressure gas main that crosses Pentre Road between the Railway and Motorway bridges. A high pressure gas main crosses the road further north within the built up area. Therefore, any works taking place within three metres of mains will need to be carried out with the permission and supervision of Wales and Western Utilities.

IV Ecology

A Preliminary Ecological Appraisal has been conducted to assess the possible impacts of the proposed works on nature conservation sites, habitats and protected or notable fauna.

None of the route options are considered likely to give rise to any significant adverse effects on any internationally, or nationally designated sites. It is considered possible that progression of either Option 1 or 2 would likely have a minor non-significant beneficial effect on coastal and estuarine habitats associated with Carmarthen Bay and Estuaries SAC, as the paths would provide suitable alternative recreational opportunities for potential users of the SAC.

Options 1 and 2 in the absence of mitigation would have a significant adverse effect on four non-statutory wildlife sites of conservation importance – Coed Bach Park SINC, Loughor to Penlleagaer Railway SINC, Waungron to Gowerton Line SINC and Waungron Marsh SINC. Development of either option would result in the loss of between 0.0004 – 3.4% of the habitat designated within these sites. Path construction and subsequent operation would also increase existing edge and disturbance effects within these habitats.

Based on the observed level changes associated with Option 2, it is recommended that this option is not progressed as vegetation clearance and ground works along the edge of the live railway line would need to be highly extensive in order for a path with a reasonable gradient to be built.

Option 1 is also considered likely to have a negative, non-significant effect on the M4 Corridor SINC, although the anticipated scale of habitat loss in comparison to the overall size of the site is very small (0.08%).

V Cost Estimate – Option 1

Station Road to Allt Y Graban Road	Description	Estimate
A Former railway alignment (Bridleway)	Vegetation clearance and new path construction	£160,900
B Former railway alignment (path in cutting)	Vegetation clearance and new path construction (including an extra thickness of sub base and timber edging)	£255,000
Station Road and Allt-Y-Graban Road	Access points	£2,900
Station Road and Allt-Y-Graban Road	Direction signing	£2,200
Total (A)		£166,000
Total (B)		£260,000
Allt Y Graban Road to M4 Bridge	Description	Estimate
Former railway alignment around Pentre Farm	Path construction (including an extra thickness of sub base and timber edging), vegetation clearance and a ramp	£287,000
Pentre Road	Access control	£1,500
Pentre Road and Allt-Y-Graban Road	Signing	£1,500
Total		£290,000
Pentre Road Railway Bridge (Grovesend Bridge)	Description	Estimate
Pentre Road Railway Bridge	New Network Rail Bridge	TBC *
Pentre Road Railway Bridge	New pedestrian and cycle bridge	£2,000,000
Pentre Road Railway Bridge	Signals and carriageway narrowing over the existing bridge	£60,000
Pentre Road M4 bridge	Description	Estimate
Motorway Bridge	Widen footway into the carriageway. Add parapet extension	£62,400
Pentre Road	Widen footway / new path construction	£34,800
Pentre Road	Access control and signing (direction and regulatory)	£4,000
Total		£101,200 + VAT

* **Pentre Road Railway Bridge (Grovesend Bridge) estimate:**

Depending on the option that will be agreed for the Bridge, the total cost for the project could vary between £711,200 and £2,651,200 in case a walking and cycling bridge was added to the existing bridge. At the moment it is not possible to make forecasts in relation to the cost of a brand new railway bridge.

VI 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 40 signs will 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 need to be in keeping with the area and short robust posts with minimal signing are recommended.



Examples of directional signs

VII Future maintenance

A route management plan will need to be agreed with the collaboration of the landowners, Sustrans 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. 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 be ridden 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.

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

VIII Stakeholder Engagement

Local stakeholders have been engaged in the process to make sure the route is suitable for 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 daily commute and tourism activities. A Stakeholder Group has been formed with the participation of Swansea Council officers, Wheelrights, Local County and Town Cllr, Friends of Coed Bach Park group, and local residents. Stakeholder meetings have been held to discuss the alignment, the project was presented to Pontarddulais Town Council and several public events have been organised to engage with the community.

IX 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 best practices 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, Swansea Council, 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.

X 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 us to generate figures on the economic impacts of the path over 20 years. Under the middle scenario, where the shared use path sees 11,049 cycling trips and 27,815 walking trips per year (respectively +72% and +26% above usage with current infrastructure), the benefits are:

- Total economic benefits of £1,049,706
- Health benefits of £ 696,597
- Recreational expenditure of £ 262,525

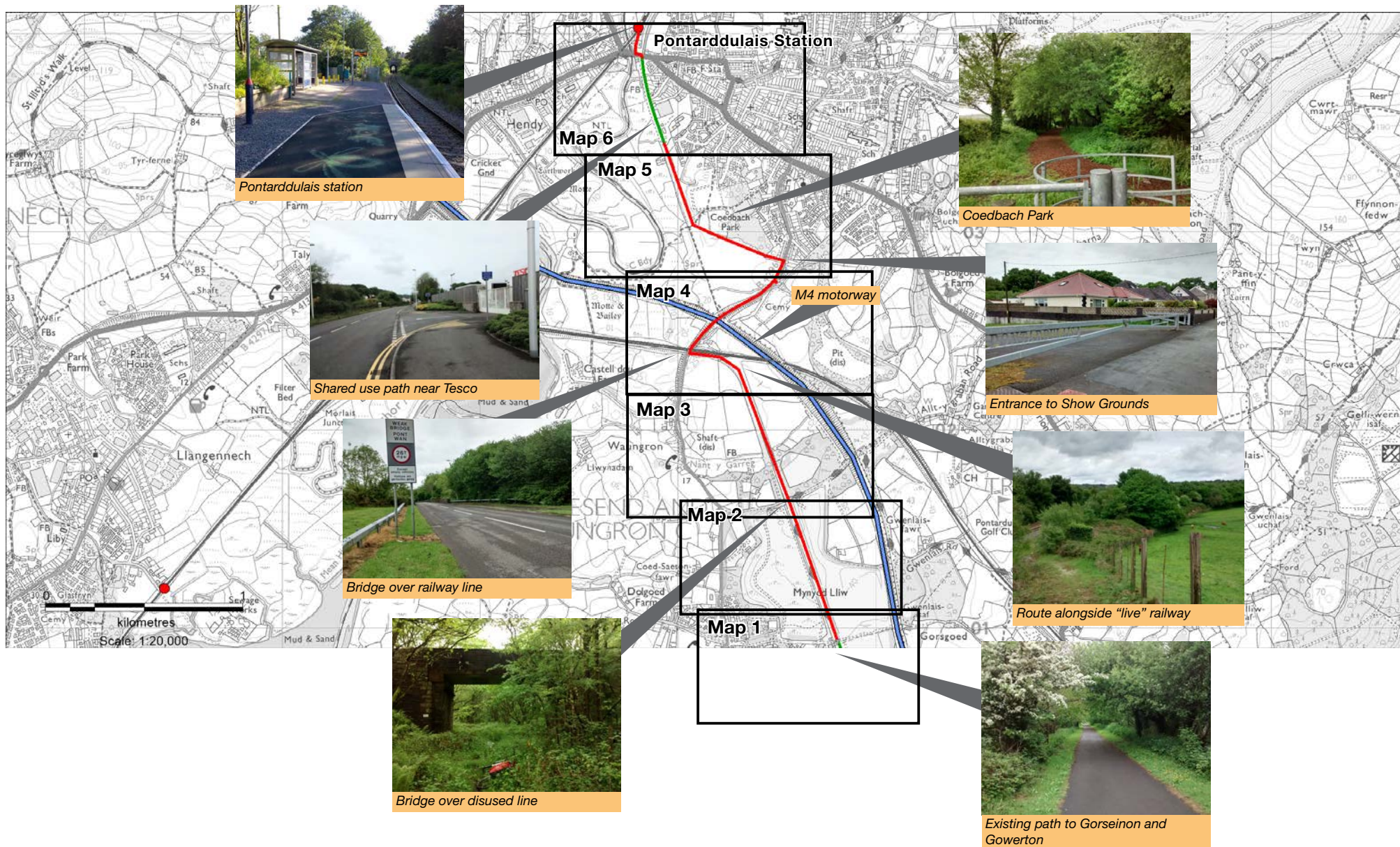
In order to provide additional monitoring data, it is recommended to install at least one automatic counter on a traffic-free section of the route.

XI Funding

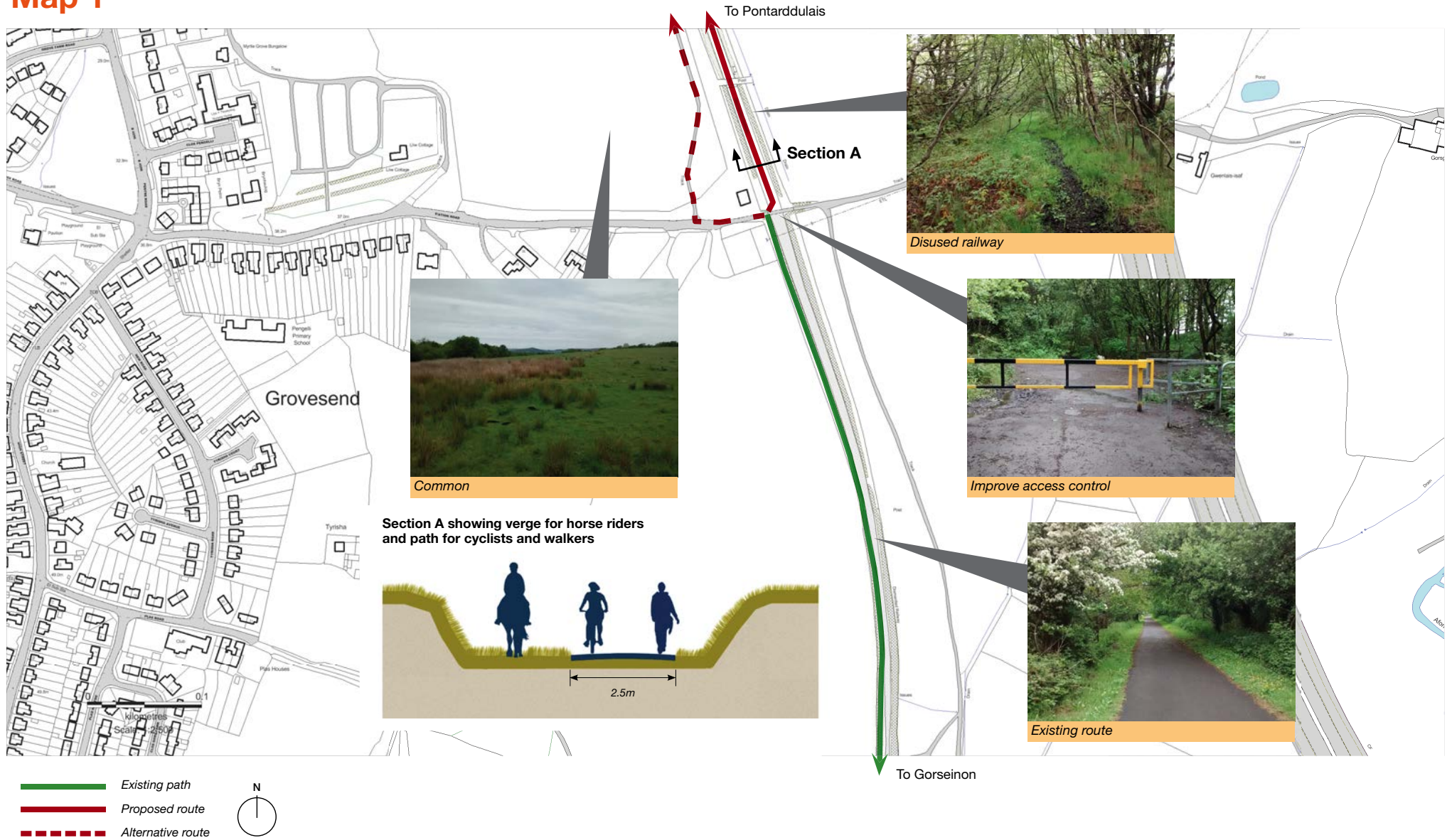
We recommend to consider the following funding sources for the construction and promotion of the path:

- 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
- National Lottery Community Fund - <https://www.tnlcommunityfund.org.uk/>
- Landfill Disposals Tax Communities Scheme - <https://www.wcva.org.uk/funding/landfill-disposals-tax-communities-scheme>
or <https://bit.ly/2HLNK0S>
- Mynydd y Gwair Community Benefit Fund <https://www.scvs.org.uk/myg-commfund>
- 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).

Overall scheme map SWW-039 Pontarddulais

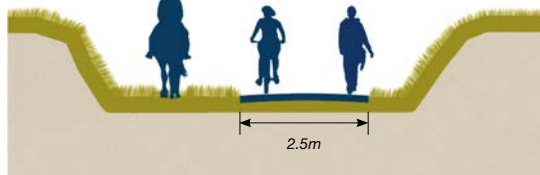
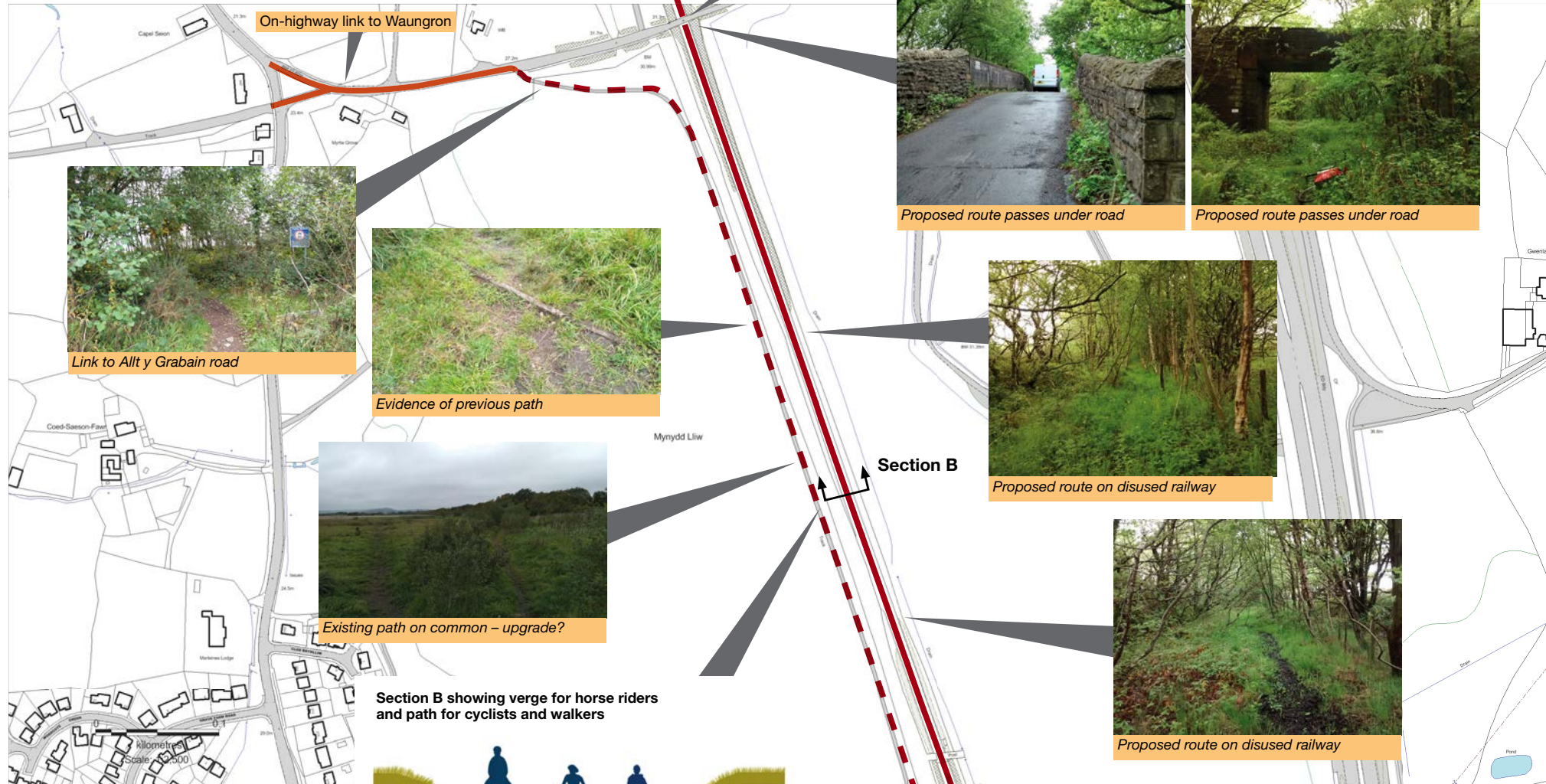


Map 1



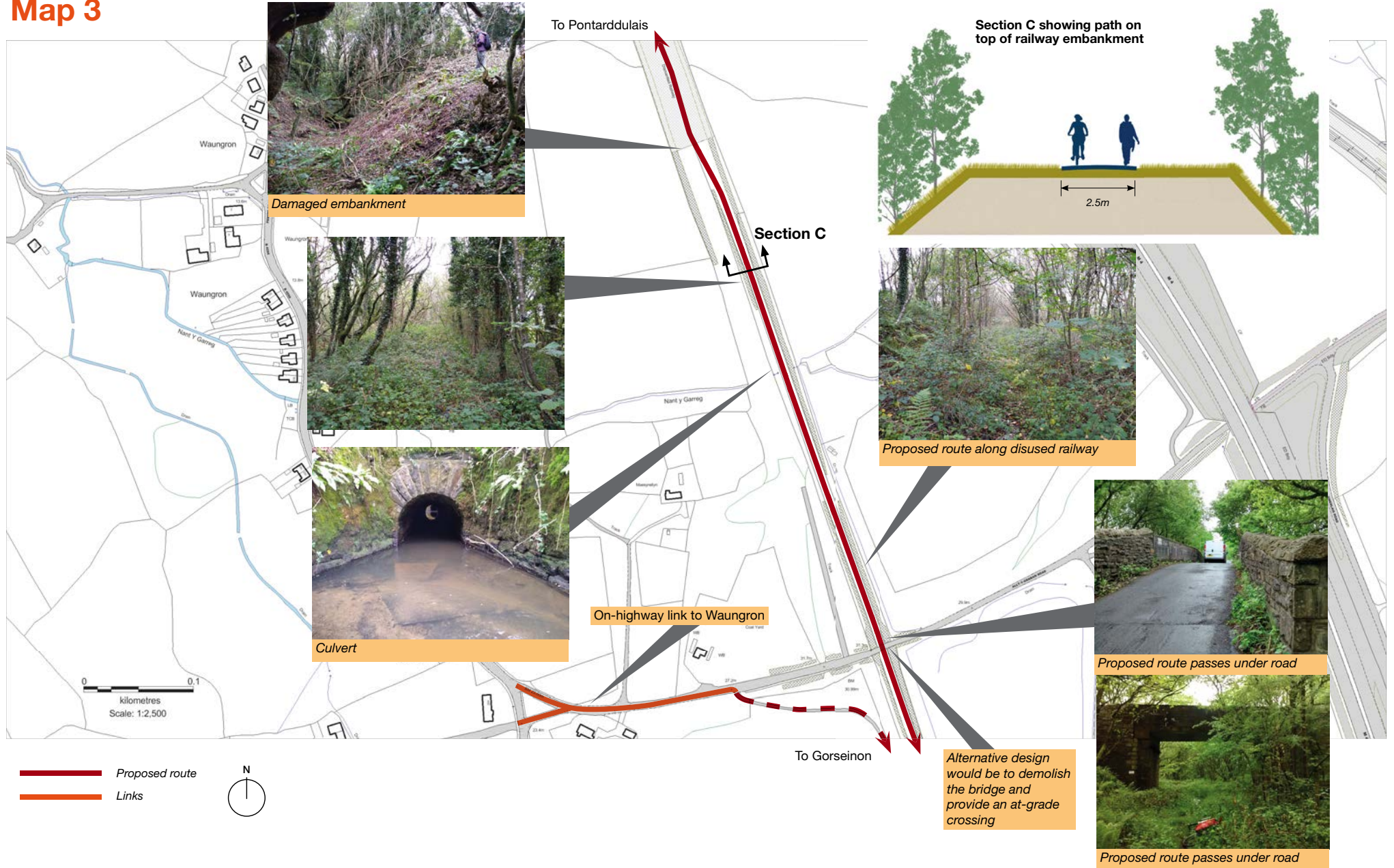
Map 2

Alternative design would be to demolish the bridge and provide an at-grade crossing

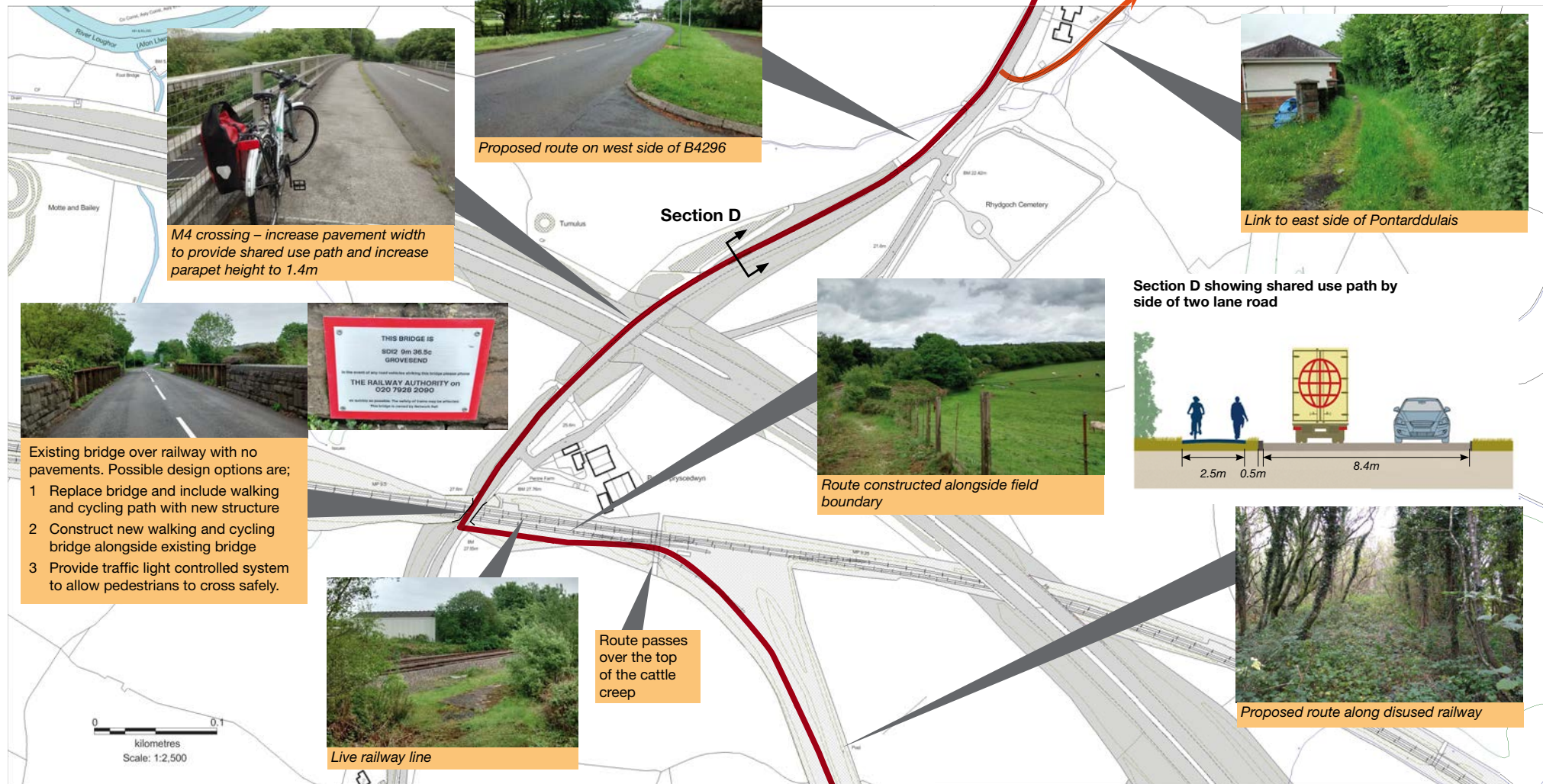


- Binding Margin -

Map 3



Map 4



M4 crossing – increase pavement width to provide shared use path and increase parapet height to 1.4m



Proposed route on west side of B4296



Link to east side of Pontarddulais



Existing bridge over railway with no pavements. Possible design options are;

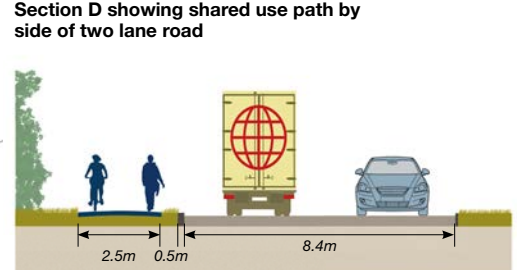
- 1 Replace bridge and include walking and cycling path with new structure
- 2 Construct new walking and cycling bridge alongside existing bridge
- 3 Provide traffic light controlled system to allow pedestrians to cross safely.



THIS BRIDGE IS 8012 9m 36.5c GROVESEND
In the event of any road works affecting this bridge please contact THE RAILWAY AUTHORITY on 020 7928 2090



Route constructed alongside field boundary



Section D showing shared use path by side of two lane road

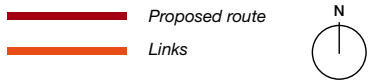


Live railway line

Route passes over the top of the cattle creep



Proposed route along disused railway



- Binding Margin -

Map 5



Map 6



- Proposed route
- Links
- Existing shared use path



- Binding Margin -

