Kingston St Mary to Taunton

Feasibility Study

Client: Kingston St Mary Parish Council

August 2022





About Sustrans

Sustrans is the charity making it easier for people to walk and cycle.

We are engineers and educators, experts and advocates. We connect people and places, create liveable neighbourhoods, transform the school run and deliver a happier, healthier commute.

Sustrans works in partnership, bringing people together to find the right solutions. We make the case for walking and cycling by using robust evidence and showing what can be done.

We are grounded in communities and believe that grassroots support combined with political leadership drives real change, fast.

Join us on our journey. www.sustrans.org.uk

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Revision	Description	Date
1	Report issued to client	27/06/22
1.1	costs added	07/07/22
1.2	client comments addressed	09/08/22

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1 Introduction

Purpose of this study

This feasibility study has been commissioned by Kingston St Mary Parish Council (KSMPC) as part of the 2022 Neighbourhood Plan exercise. This has been done in order to evaluate potential options for a multi user path approximately 3km long, connecting the village of Kingston St Mary with Taunton and onwards onto National Cycle Network route 3.

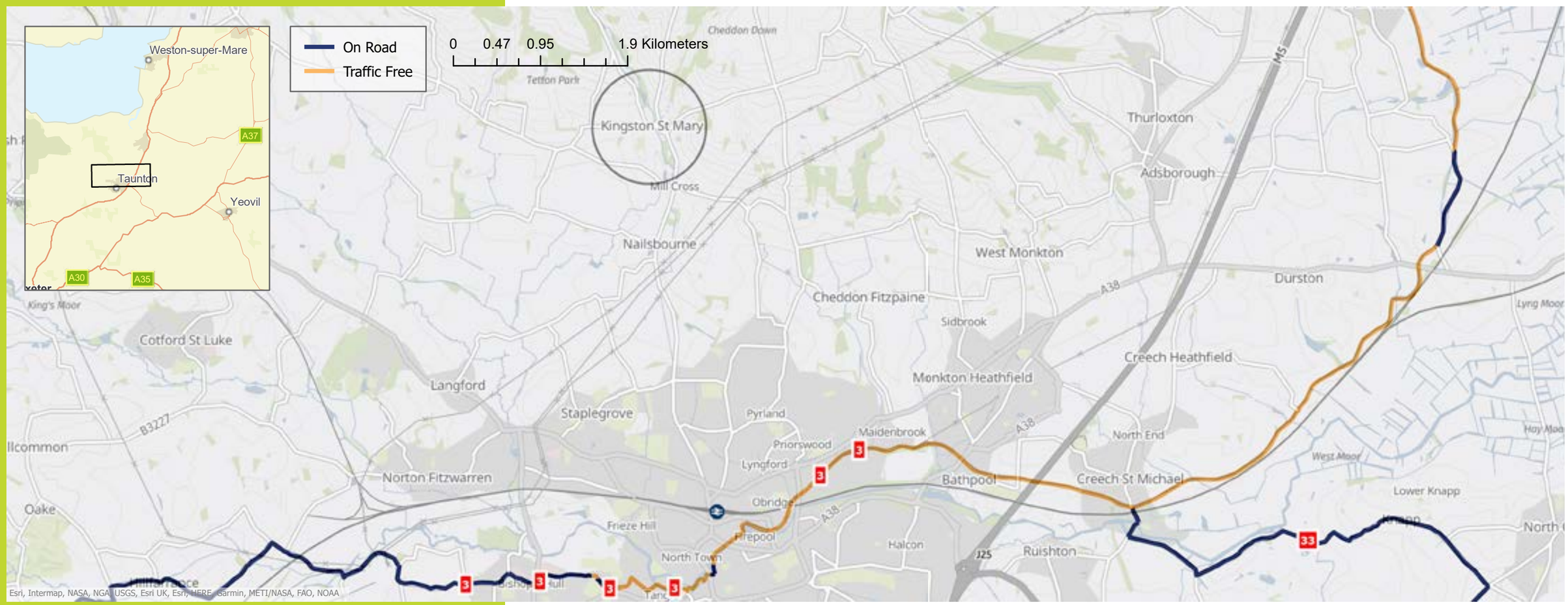
Currently the route options comprise of narrow country roads which have a national speed limit (40mph in places) which excludes use by most cyclists and many other users including pedestrians.

The background to this work is the 2016 Household Survey, conducted by the Kingston Community Partnership (KCP), on which the 2017 Community Plan was based. The results of the household survey on cycling and walking showed that for a sizeable majority, it is very important to have traffic free pedestrian and cycle routes that join Kingston St Mary village to North Taunton. 73% of all households think this is important or extremely important* and, for 2 in every 5 households (44%), it is of the utmost importance*.
(*Data provided by the KCP)

The recommendations of the Community Plan in respect of an Active Travel route to Taunton were to:

- Launch and publicise a campaigning organisation to drive forward the wishes of the community on safe traffic free routes for pedestrians and cyclists. Kingston Area Pedestrian and Cycling Campaign (KAPACC) was established in early 2017 for this purpose, working together with Taunton Area Cycling Campaign (TACC).
- Work with TDBC (now Somerset West and Taunton Council (SWT) and Somerset County Council (SCC)) and others to prioritise the installation of good quality cycle/pedestrian routes within the development area of the North Taunton (Staplegrove) urban development.
- Seek a new traffic free cycle and pedestrian route between Kingston St Mary and Taunton.
- Explore opportunities to extend the above route to connect to quiet lanes around the parish, using existing bridleways and 'green lanes'.

An award from Locality to fund the Neighbourhood Plan has enabled this Feasibility Study.



2 Background and context

Sustrans and the National Cycle Network

Sustrans are custodians of the National Cycle Network, a UK-wide network of traffic-free paths for everyone, connecting cities, towns and countryside.

We bring people together to create places with clean air and green spaces, where friends and facilities are just a short walk away. We believe everyone should be able to thrive without having to use a car.

Our vision is to create a UK-wide network of safe and accessible traffic-free paths for everyone.

We want the Network to:

- be wide enough for all users
- be cared for and well maintained
- have a smooth surface
- be clearly and consistently signed
- be fully accessible to everyone
- feel safe

The National Cycle Network brings huge benefits to the UK's economy and improves people's health and wellbeing. In 2019-20 an estimated:

- 4.2 million people used the network
- 70.9 million car trips were saved by using the Network
- £1.64 billion was spent in local business by leisure and tourist users
- £21.5 million was saved by the NHS through the Network's impact on people's health

Active travel in the UK

In July 2020 the UK government published 'Gear Change: a bold vision for cycling and walking' outlining its intent to kick off 'the most radical change to our cities since the arrival of mass motoring'.

This ambitious plan - backed up by £2 billion of new funding for walking and cycling - sets out a vision a step change in provision for active travel in this country.

The report notes the contribution made by active travel to:

- Health and wellbeing
- Easing congestion
- Increasing footfall for local businesses
- Improving environmental and air quality
- Reducing transport CO_2 emissions

In particular the report encourages the use of bicycles for everyday trips that replace car journeys - not simply as a form of recreation.

'Cycling and walking measures are no longer seen as an afterthought but have moved to the very heart of considerations for all transport policy and planning, at all levels of leadership.'

Department for Transport - Gear Change Report 2020



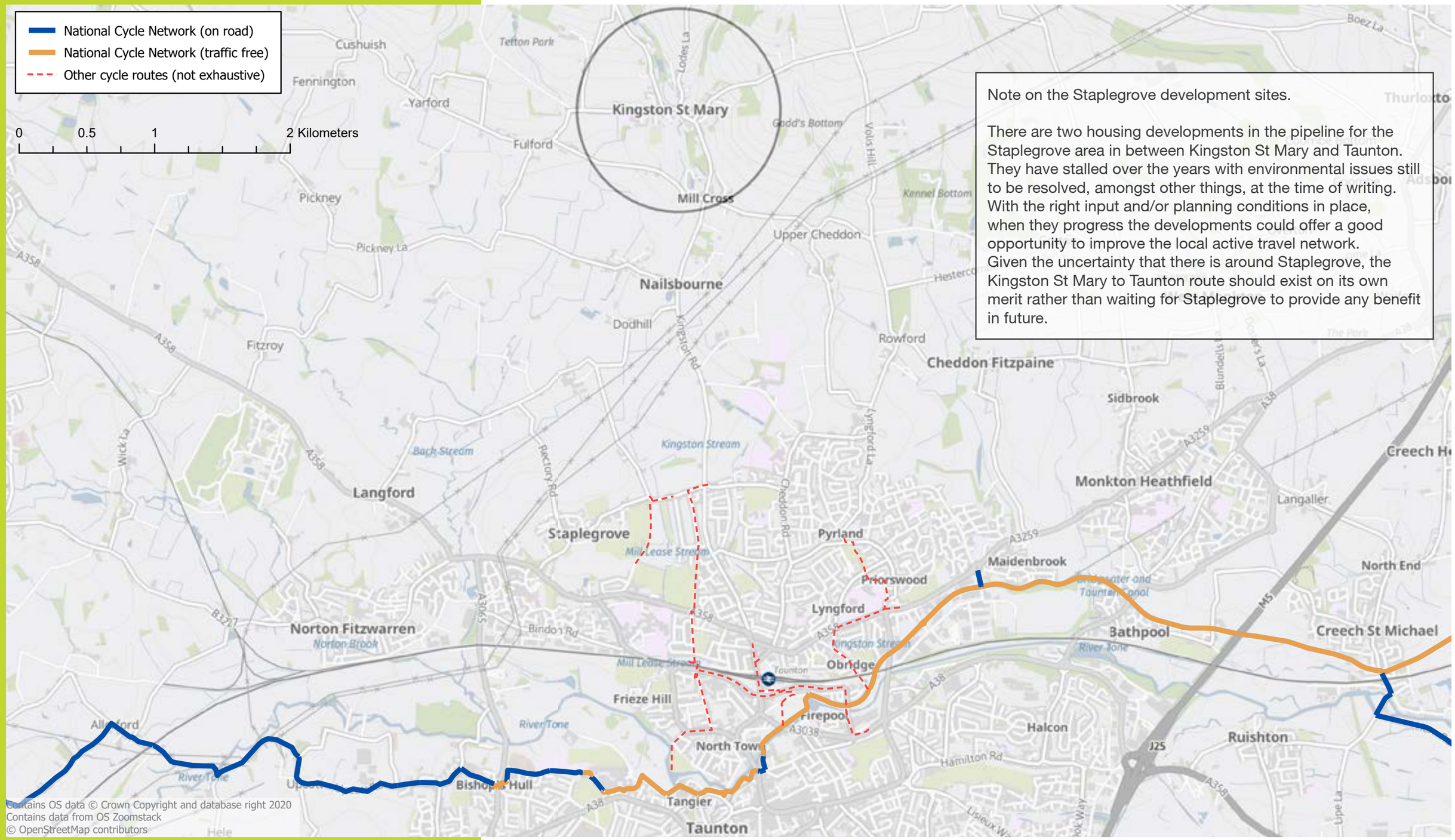
Kingston St Mary to Taunton - Kingston St Mary Parish Council

3 The strategic case

Kingston St Mary within the existing network

Kingston St Mary is situated about 5 km to the north of existing traffic-free walking and cycling routes including NCN 3 in Taunton. The direct route is along Taunton Road which has a speed limit up to 40 mph, but is a busy, winding country road, no more than 6m wide.

The alternative route using Dodhill Road and Whitmore Lane is narrower still at up to 3m wide, with a national speed limit and very limited passing space when faced with motor vehicles including farm traffic in either direction. Consequently the majority of people would not be expected to feel comfortable walking, wheeling (wheelchairs, scooters etc.) or cycling on these (see next page).



Note on the Staplegrove development sites.

There are two housing developments in the pipeline for the Staplegrove area in between Kingston St Mary and Taunton. They have stalled over the years with environmental issues still to be resolved, amongst other things, at the time of writing. With the right input and/or planning conditions in place, when they progress the developments could offer a good opportunity to improve the local active travel network. Given the uncertainty that there is around Staplegrove, the Kingston St Mary to Taunton route should exist on its own merit rather than waiting for Staplegrove to provide any benefit in future.

Propensity to Cycle Tool

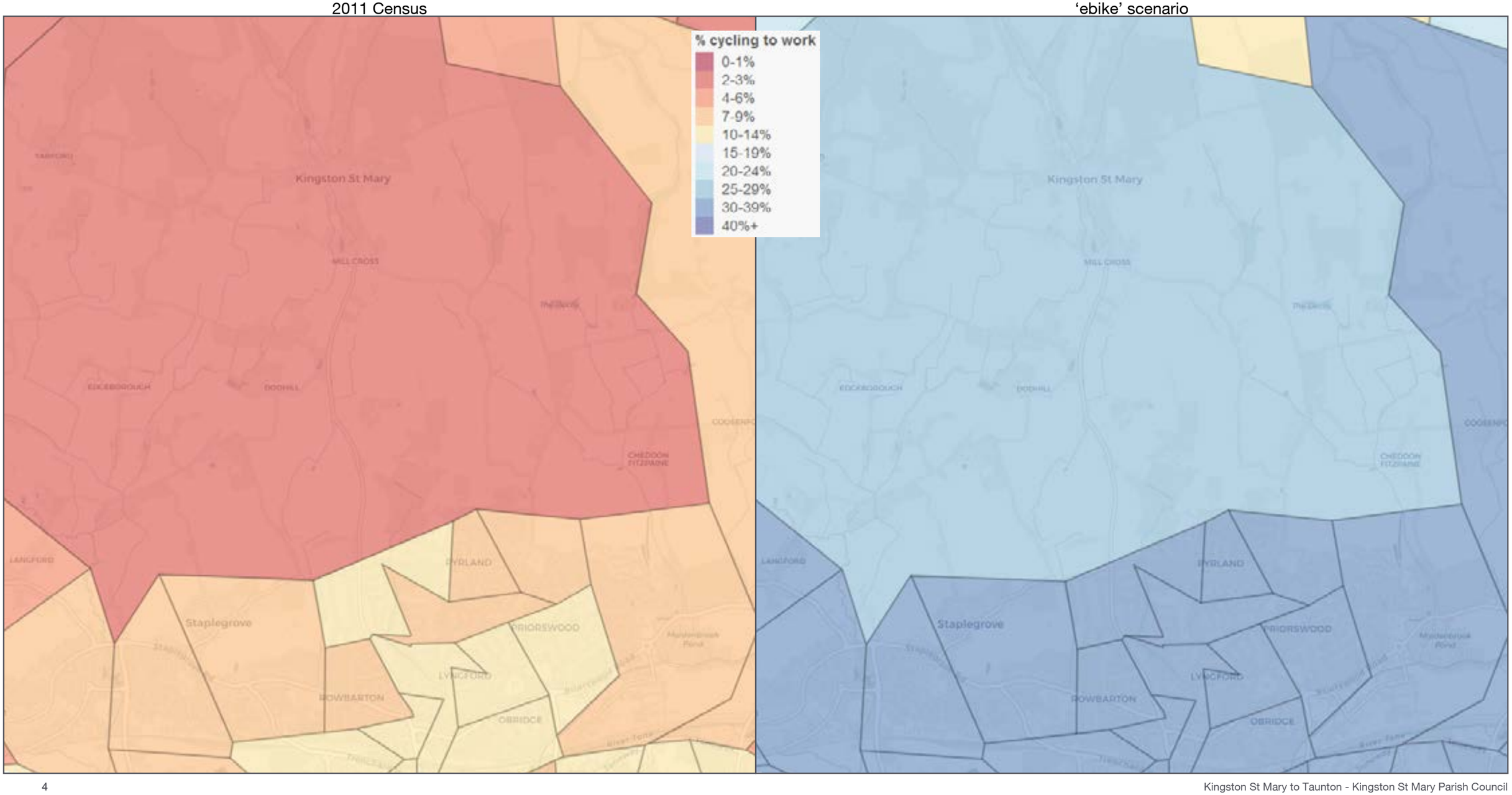
The images below show data from the Propensity to Cycle Tool (PCT) (Lovelace et al. (2017) and Goodman et al. (2019)). The PCT was designed to assist transport planners and policy makers to prioritise investments and interventions to promote cycling. The PCT answers the question: 'where is cycling currently common and where does cycling have the greatest potential to grow?'.

The maps below show the results from the PCT under two different scenarios. In these scenarios cycling potential is calculated using a function based on trip distance (people are more likely to cycle a shorter trip than a longer trip) and hilliness (people are less likely to cycle a trip involving hills).

The map on the left shows data for commuting journeys from the 2011 UK census. The map on the right shows a 'ebike' scenario, showing how likely a person with an ebike would be to cycle that journey. For more information about the scenarios visit the PCT website (www.pct.bike).

2011 Census

'ebike' scenario



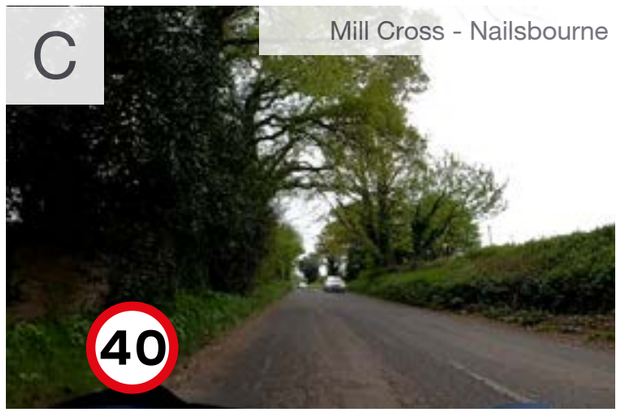
Existing travel corridors

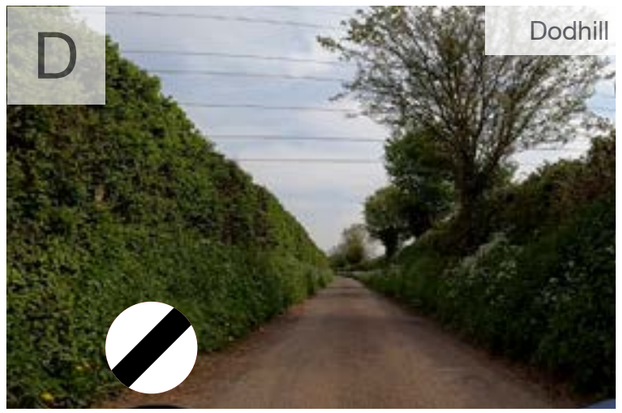
Whilst Kingston St Mary is only a short distance from Taunton, the roads are narrow, winding, and even with a 40 mph speed limit, quite hostile for people walking, wheeling and cycling. A quieter back road route is even narrower and has a national speed limit (60 mph). The UK Department for Transport's guidance for cycle infrastructure outlines an evidence-based approach for evaluating existing cycle provision (see table below right). On this basis, section A of the main route into Kingston St Mary is suitable for some people to cycle on with a speed limit of 20mph and motor traffic flows of approximately 3000 per day. This section will still exclude some potential users. At section B just outside the village, the road changes to a 30 mph limit. Cycling in mixed traffic here is not suitable for most people. Further along Taunton Road after Mill Cross at section C, the speed limit increases again to 40 mph.

At section D, the back road route through Dodhill, there is a national speed limit along a road no wider than 3m. This section is also classified as excluding most potential users in the table below.













Speed Limit[1]	Motor Traffic Flow (pcu/24 hour)[2]	Protected Space for Cycling: Fully Kerbed Cycle Track	Protected Space for Cycling: Stepped Cycle Track	Protected Space for Cycling: Light Segregation	Cycle Lane (mandatory/ advisory)	Mixed Traffic
20mph[3]	0					
	2000					A
	4000					
	6000+					
30mph	0					
	2000					B
	4000					
	6000+					
40mph	Any					C,E
50mph	Any					(D - 60mph)

'Appropriate protection from motor traffic on highways'
Figure 4.1, LTN 1/20 Cycle Infrastructure Design, UK Department for Transport

Provision suitable for most people

Provision not suitable for all people and will exclude some potential users and/or have safety concerns

Provision suitable for few people and will exclude most potential users and/or have safety concerns

NOTES:

1. If the 85th percentile speed is more than 10% above the speed limit the next highest speed limit should be applied

2. The recommended provision assumes that the peak hour motor traffic flow is no more than 10% of the 24 hour flow

3. In rural areas achieving speeds of 20mph may be difficult, and so shared routes with speeds of up to 30mph will be generally acceptable with motor vehicle flows of up to 1000 pcu/24 hour

Quiet Lanes status

It is worth reflecting on the classification of 'Quiet Lanes' status.

Sustrans' definition of a quiet lane or quiet-way road is one that:

- has a speed limit of 40mph, with a daily traffic flow of less than 1,000 vehicles in rural areas, 20mph and 2,500 vehicles in built-up areas
- includes traffic signs and road markings to highlight the speed limit and that people driving a vehicle should expect to encounter people walking, cycling or riding a horse in the road and drive accordingly
- provides good visibility to enable all users to see each other.

Actual (i.e. 85th percentile) vehicle speeds should be below the speed limit and it may be necessary to implement measures to enforce the speed limit. Similarly, where the existing traffic flow exceeds the quiet-way criteria it may be possible to implement measures to reduce the traffic flow, making the road suitable to be part of the Network.

The UK DfT Cycle Infrastructure Design Guide (LTN 1/20) states that:

"Quiet Lanes designation ... may be appropriate on rural lanes where actual speeds are under 40mph, and motor traffic volumes are less than 1,000 per day. The intention is to indicate to road users that the whole surface of a lane is likely to be used by pedestrians, equestrians and cyclists as well as motorised traffic. DfT Circular 02/2006 gives information about the process and recommended criteria for creating a Home Zone or Quiet Lane."

Quiet Lanes may be designated by the Local Authority under the Quiet Lanes and Home Zones (England) Regulations 2006.

Extensive engagement with the local community and stakeholders is essential for the successful implementation of quiet-way measures.

Monitoring of traffic speeds and volumes will also be important, both before and after implementation to determine the effectiveness of the measures.

These two requirements will dictate that a scheme to implement quiet-way measures will require multi-year funding.

The costs associated with the physical measures are likely to be relatively low. The NCN cost estimating tool uses a works cost (before any of the uplifts) of between £5,000 and £10,000 / km. The engagement and monitoring costs also need to be considered and may be a greater element of the costs. As above, funding will need to be available for a number of years post completion of a scheme.



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4 Route options appraisal

Overview of routes (described north to south)

This report will evaluate 3 options for connecting Kingston St Mary to Taunton and the National Cycle Network Route 3. Red lines on the map show Parish boundaries.

1. Kingston Road route (described north to south)

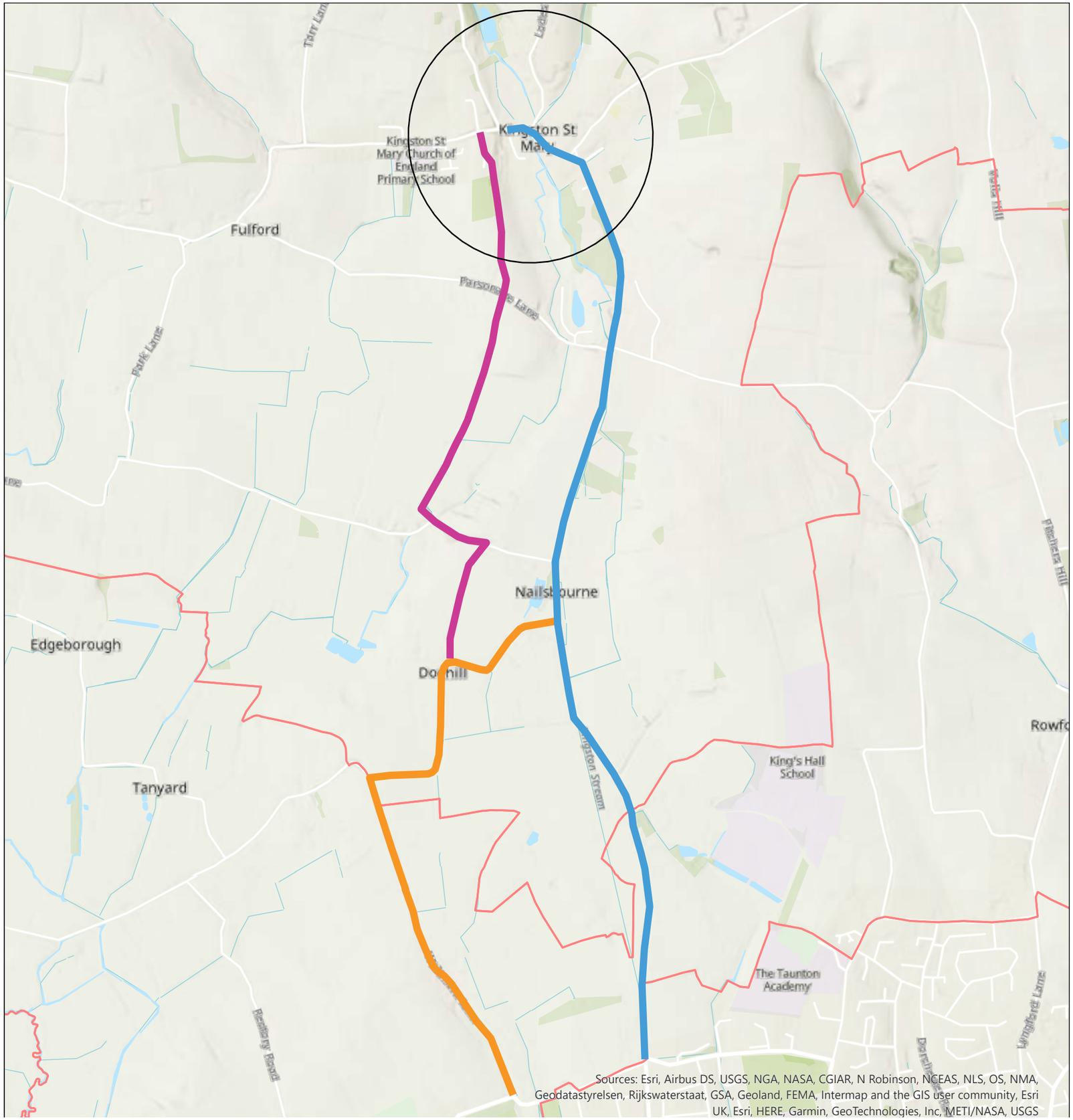
Starting in Kingston St Mary, this route runs southwards along Taunton Road without deviation until it reaches the junction with Corkscrew Lane at the north of Taunton. This would then link into the existing signed cycle route to the town centre and NCN 3 beyond.

2. Right of Way route (described north to south)

A public footpath provides an alternative option leaving Kingston St Mary to the south. This route is essentially parallel to Taunton Road until reaching Nailsbourne where it joins Nailsbourne Road. From here there is another footpath leading south towards Dodhill, where it would link with option 3, or it could continue on to Taunton Road linking with either route option south.

3. Dodhill Route (described north to south)

This option starts along the same route as option 1 until reaching the Dodhill junction. At this point, it turns to the west onto Dodhill Road. After a few twists and turns, this route turns south onto Whitmore Lane and continues on until reaching the start of a traffic-free path at Corkscrew Lane. From here the route continues east until reaching the existing signed route into Taunton town centre.



Kingston St Mary to Taunton - Kingston St Mary Parish Council

Landscape and land use

1. Kingston Road route (described north to south)

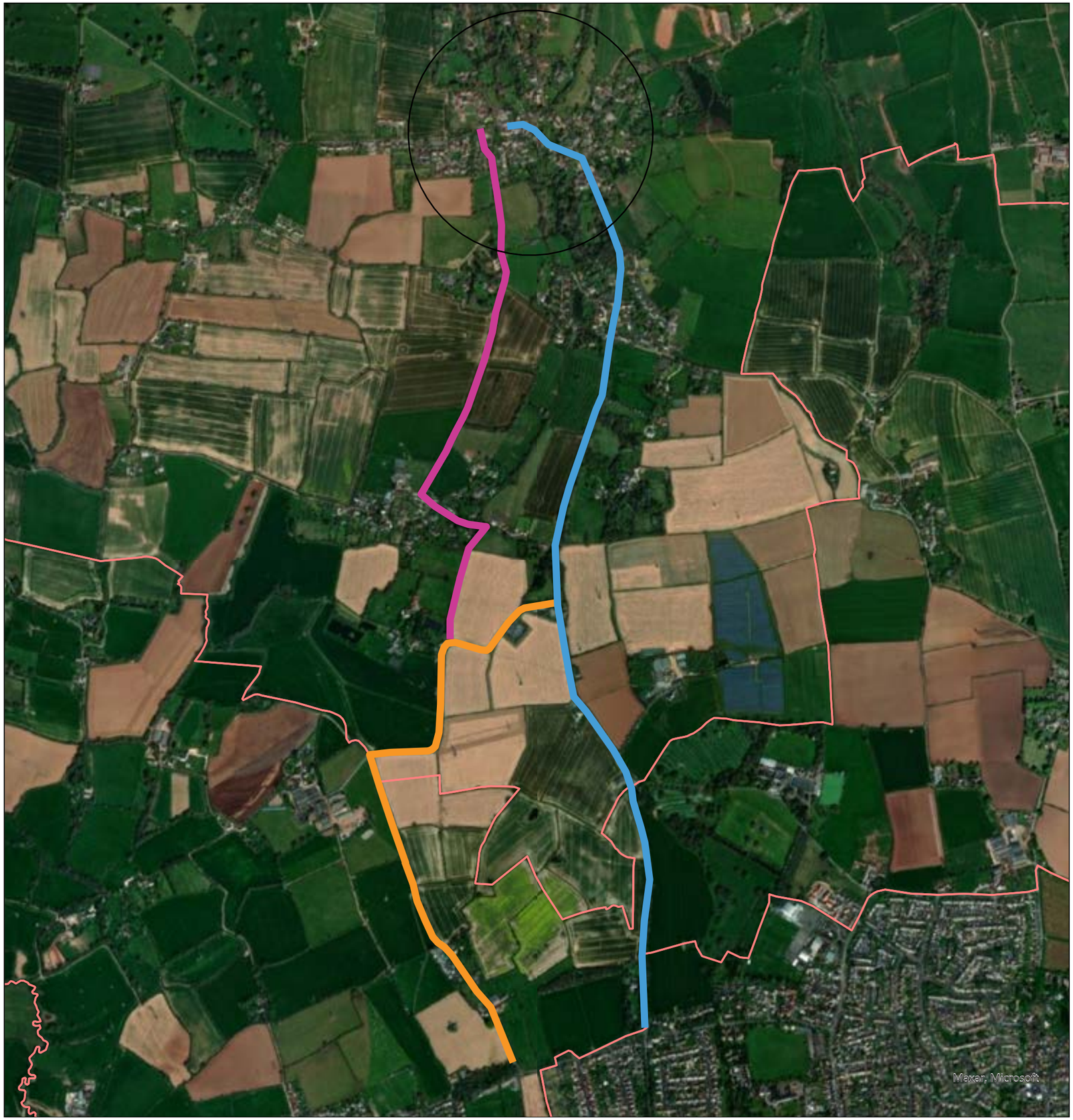
- Once this route has left the village, the land to both sides of the route is predominantly agricultural, with some farms and dwellings, and a few small sections of woodland.

2. RoW route described north to south)

- The land along this route is initially residential until outside the village of Kingston St Mary, and is then predominantly agricultural land, with some farms and dwellings.

3. Dodhill Route (described north to south) from the split at Dodhill

- The land along this route is initially agricultural with some farms and dwellings. There is a larger cluster of dwellings and farm buildings at the southern end of Whitmore Lane.



Kingston St Mary to Taunton - Kingston St Mary Parish Council

Existing Public Rights of Way

Existing public rights of way are show as purple dotted lines on the map. These are all public footpaths.

1. Kingston Road route (described north to south)

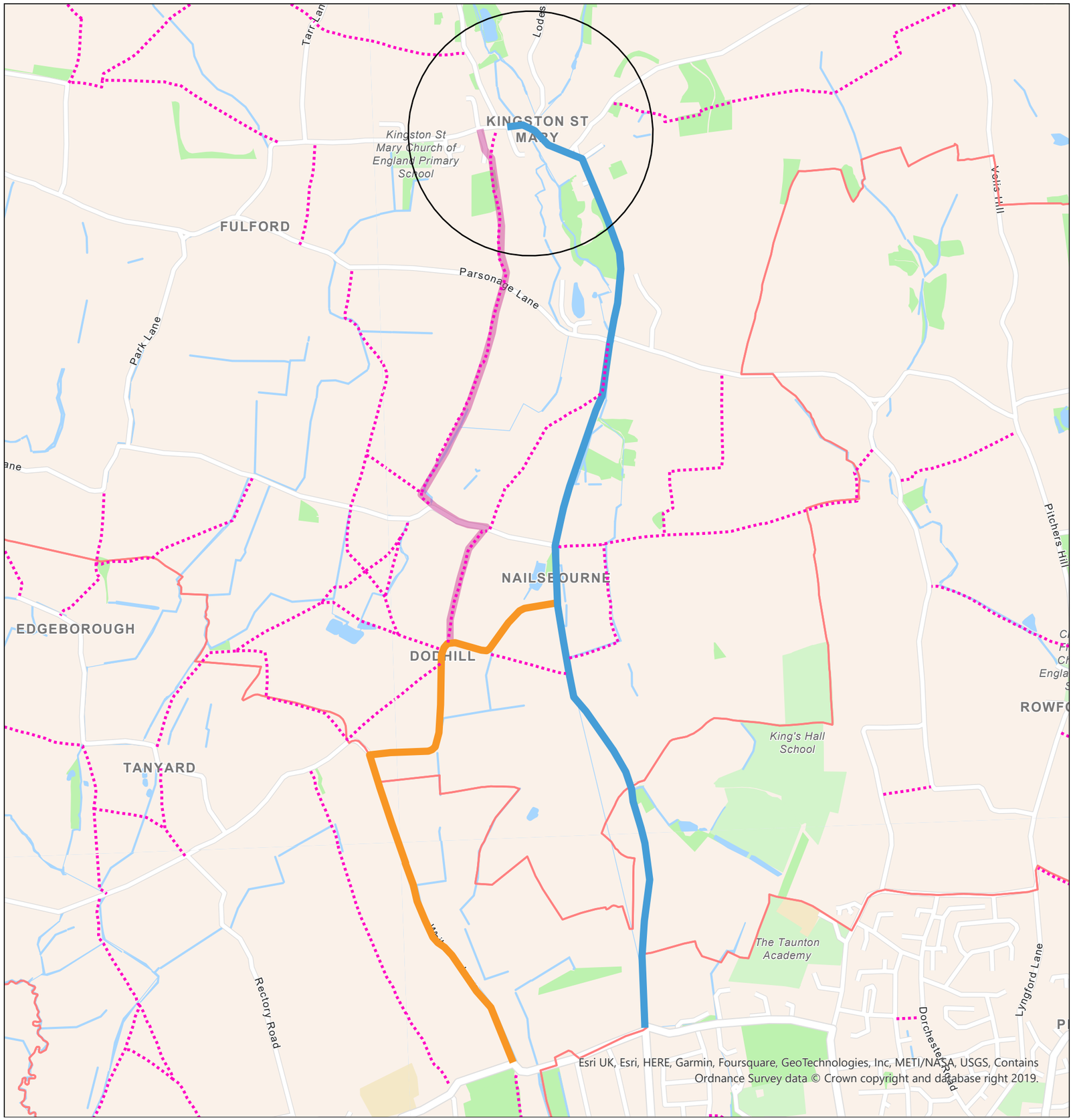
- This route follows the main Taunton Road, and there is only one short section of public footpath along this alignment.

2. RoW route (N to S)

- After leaving the public highway the route passes along public footpaths crossing Parsonage Lane, joining Nailsbourne Road briefly until it reaches Dodhill Road.
- If then joins route 3, which joins Whitmore Lane before arriving in Taunton.

3. Dodhill Route (described north to south)

- This route follows public roads and has the same short section of public footpath as route 1.



Symbology key

On subsequent pages, photographs and descriptions are accompanied by symbols showing key factors to be considered at that point on the route. It is important to stress that these are indicative, and may be somewhat subjective - they are used to convey a feel for the section and not necessarily based on detailed surveys.

It should also be made clear that they are simply representing the **existing** section of path; therefore the presence of several symbols does not mean that the section cannot be brought up to an appropriate standard, but rather that it may be less suitable than other sections.

Steep gradients



- Sections with steep gradients

Rough surface



- Current surface not comfortably rideable. The absence of this symbol does not mean that the current route meets Sustrans standards for surface quality laid out in our Paths for Everyone report, and surfacing will often still be required.

Narrow path



- Traffic-free sections: path will need widening to meet requirements outlined in LTN 1/20 Table 5-2
- On-road sections: primary riding position likely to be necessary, minimum overtaking clearances unlikely to be met

Ecology considerations



- Vegetation clearance or felling of trees likely to be required, or
- Possible habitat loss, or
- Roots crossing path

Barriers



- Barrier modification or removal required

Vehicular traffic



- On-road route shared with vehicular traffic, or
- Road crossing required

Kingston Road route summary (1)

Strengths:

- It is the most direct route
- Potential for traffic-free route behind hedgeline once out of Kingston St Mary. This route may be to the east or west of the road, or a mixture with crossing points. However, this will be dependant on ecological surveys and landowner negotiations to define where such a path may be possible. These are mentioned in the next steps section of the report (p41).

Weaknesses:

- Constrained width through Kingston St Mary
- Requires 20mph speed limit where the route is on-road
- High vehicle speeds once out of the village requires traffic-free multi-user path
- Requires infrastructure changes for traffic-free path on highway, verges, and private land
- Multiple landowners would need to be engaged

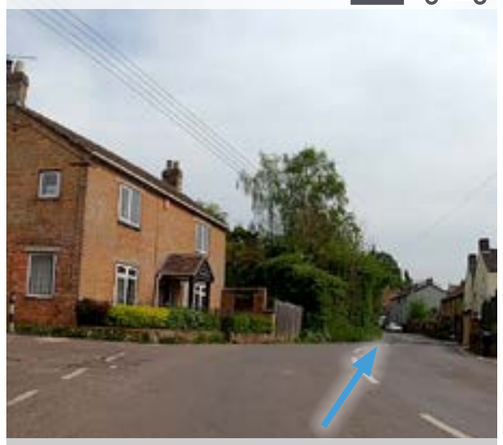


1



- 20 mph road through village
- Narrow with on-street parking

2



- Steeper section through village

3



- Narrow section due to on-road parking
- Potential conflict point as oncoming vehicles use left hand lane in image above

4



- Road steepens
- Narrow section due to on-road parking
- Potential conflict point as oncoming vehicles use left hand lane in image above.

5



- Road flattens out
- 20 mph speed limit continues

6



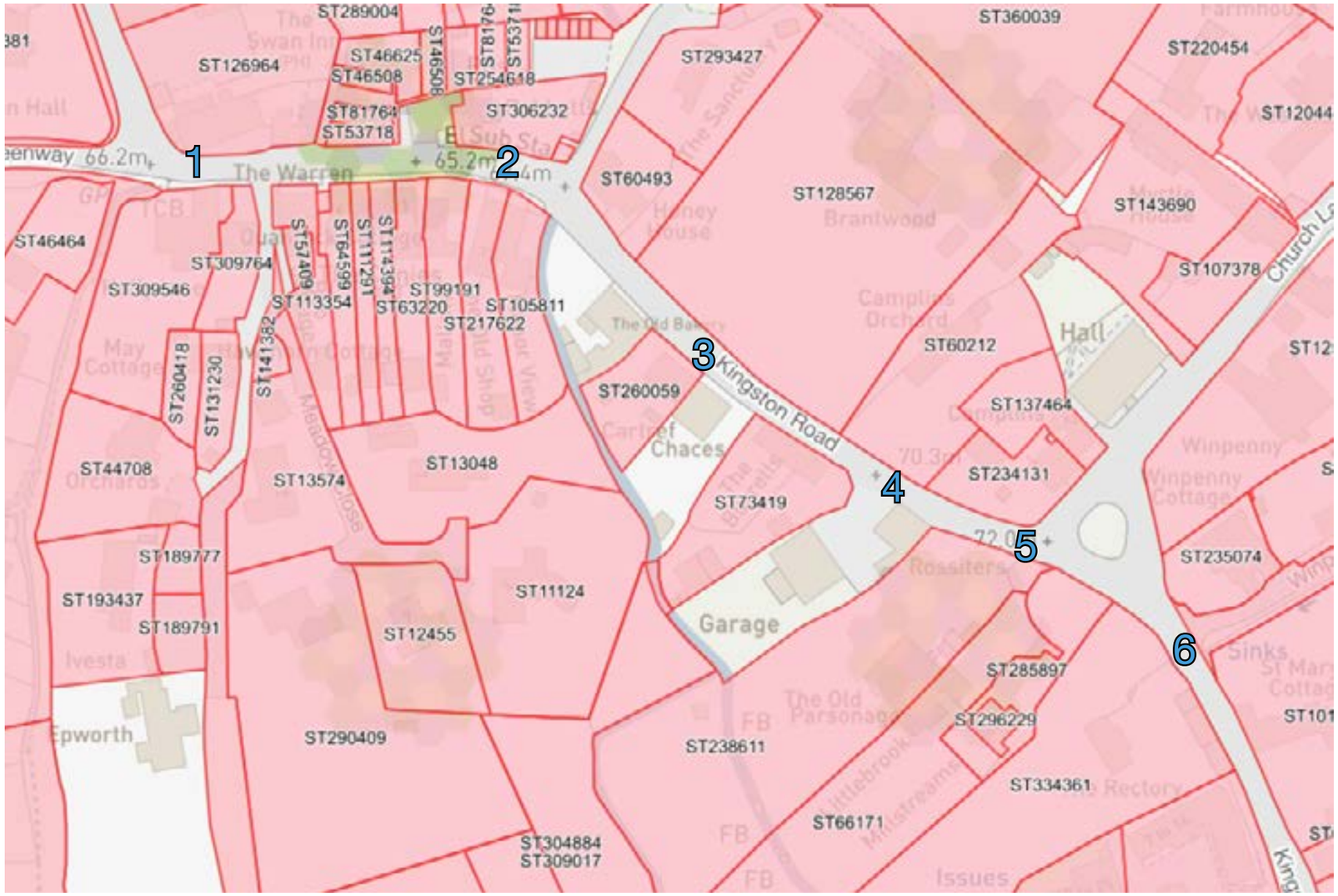
- 20 mph section through village

Kingston Road route summary (1)

Landowners:

- Landowners for this section are likely to be less important as it is entirely on-road and therefore likely to be within the highway boundary on adopted roads.





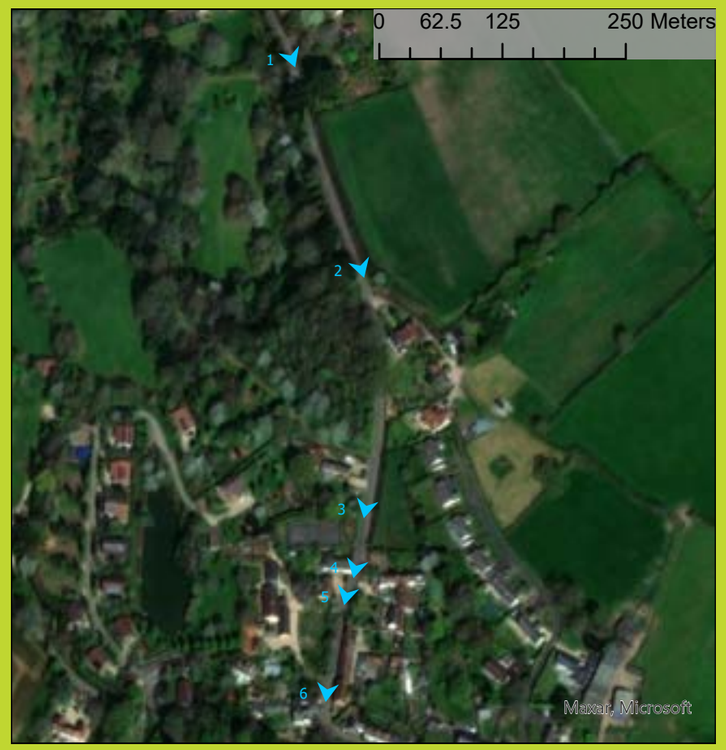
Kingston Road route summary (2)

Strengths:

- It is the most direct route
- Potential for traffic-free route behind hedgeline once out of Kingston St Mary. This route may be to the east or west of the road, or a mixture with crossing points. However, this will be dependant on ecological surveys and landowner negotiations to define where such a path may be possible. These are mentioned in the next steps section of the report on page 38.

Weaknesses:

- Constrained width through Kingston St Mary
- Requires 20mph speed limit where the route is on-road
- High vehicle speeds once out of the village requires traffic-free multi-user path
- Requires infrastructure changes for traffic-free path on highway, verges, and private land
- Multiple landowners would need to be engaged



1



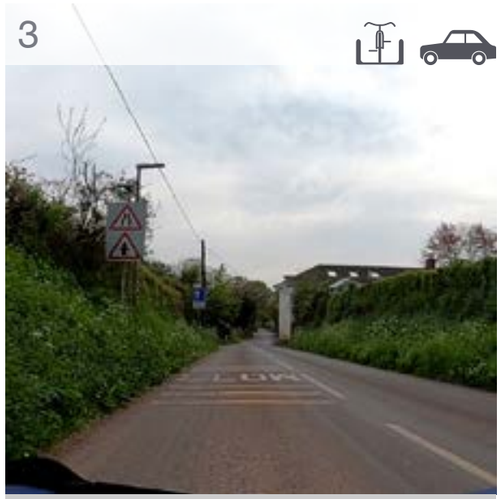
- 20 mph speed limit
- Limited forward visibility for overtaking vehicles

2



- Start of 30 mph speed limit

3



- Approach to narrowing in road
- Potential conflict point due to limited visibility
- Limited space for overtaking vehicles

4



- Narrow road
- Potential conflict point with oncoming vehicles
- No space for overtaking vehicles

5



- Road narrows due to on-street parking
- Potential conflict with oncoming vehicles using other lane
- Limited space for overtaking

6

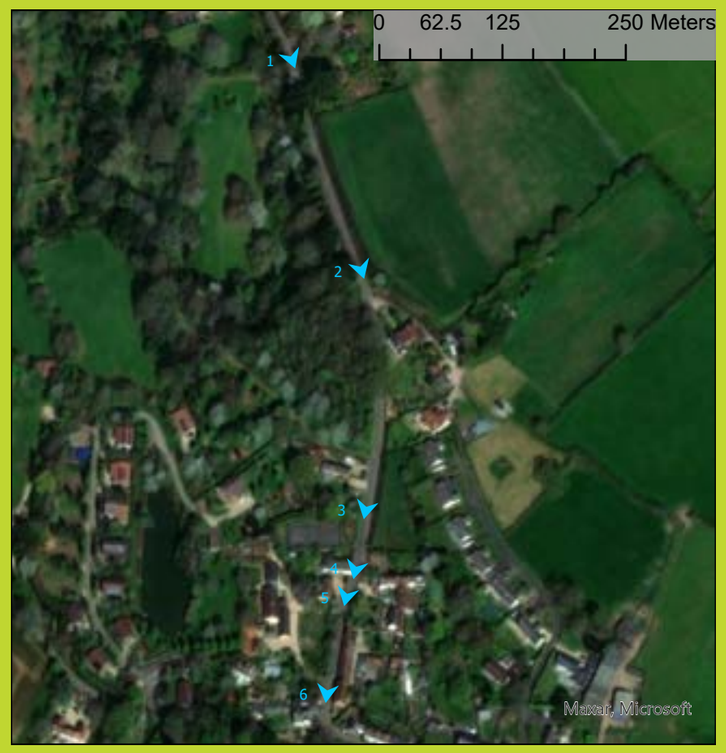


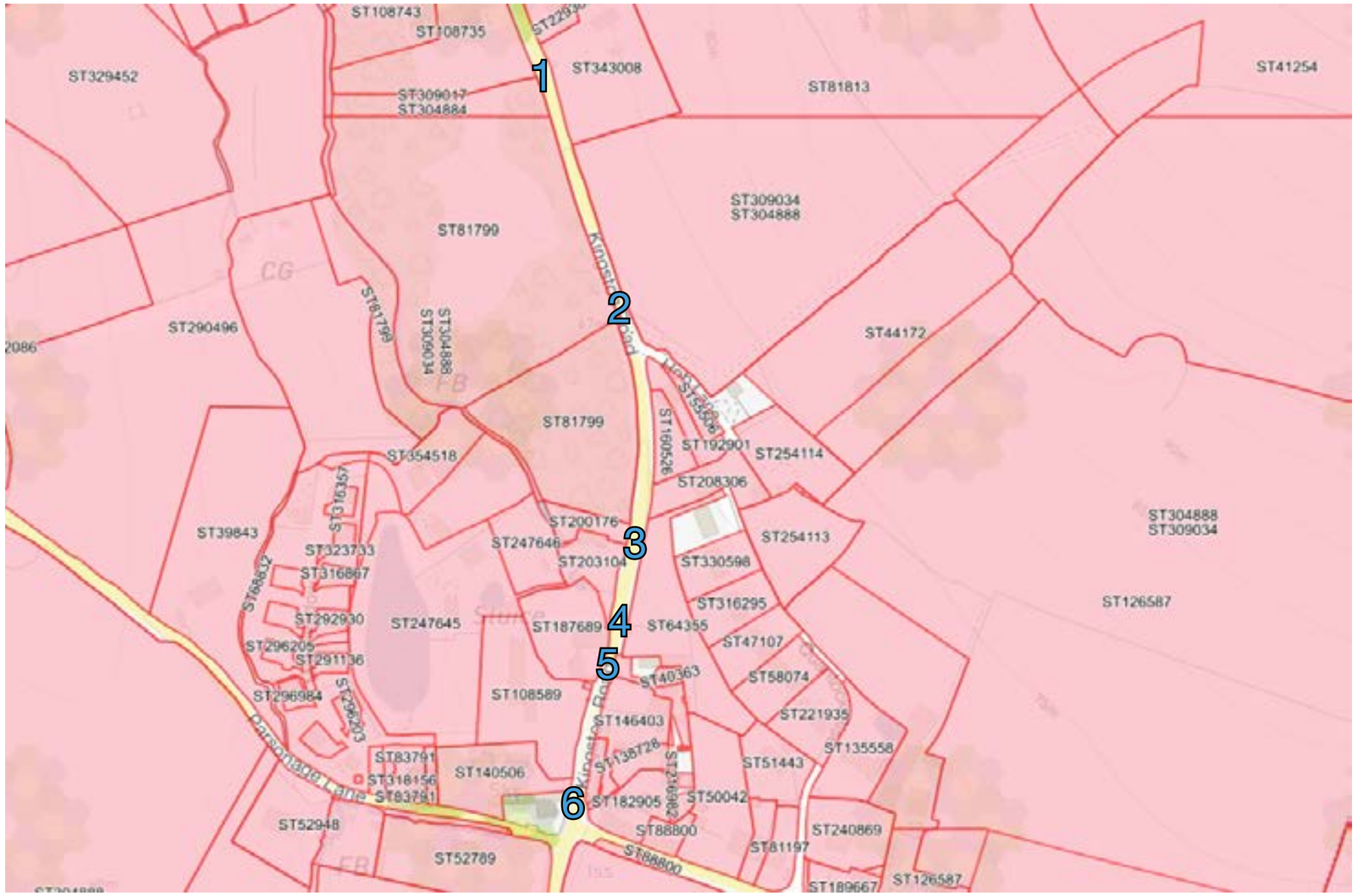
- Mill cross junction

Kingston Road route summary (2)

Landowners:

- Landowners for this section are likely to be less important as it is entirely on-road and therefore likely to be within the highway boundary on adopted roads.





Kingston Road route summary (3)

Strengths:

- It is the most direct route
- Potential for traffic-free route behind hedgeline once out of Kingston St Mary. This route may be to the east or west of the road, or a mixture with crossing points. However, this will be dependant on ecological surveys and landowner negotiations to define where such a path may be possible. These are mentioned in the next steps section of the report on page 38.

Weaknesses:

- Constrained width through Kingston St Mary
- Requires 20mph speed limit where the route is on-road
- High vehicle speeds once out of the village requires traffic-free multi-user path
- Requires infrastructure changes for traffic-free path on highway, verges, and private land
- Multiple landowners would need to be engaged

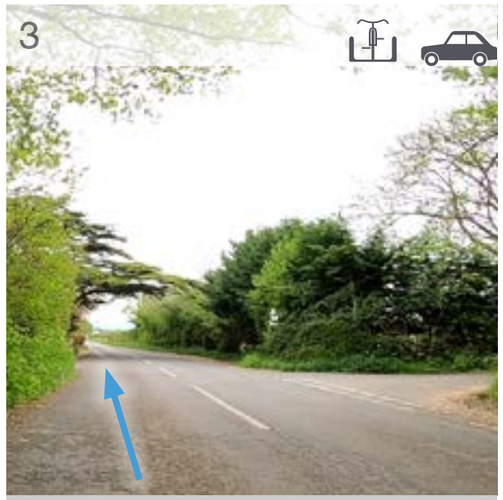




- 40mph limit



- Junction to Nailsbourne



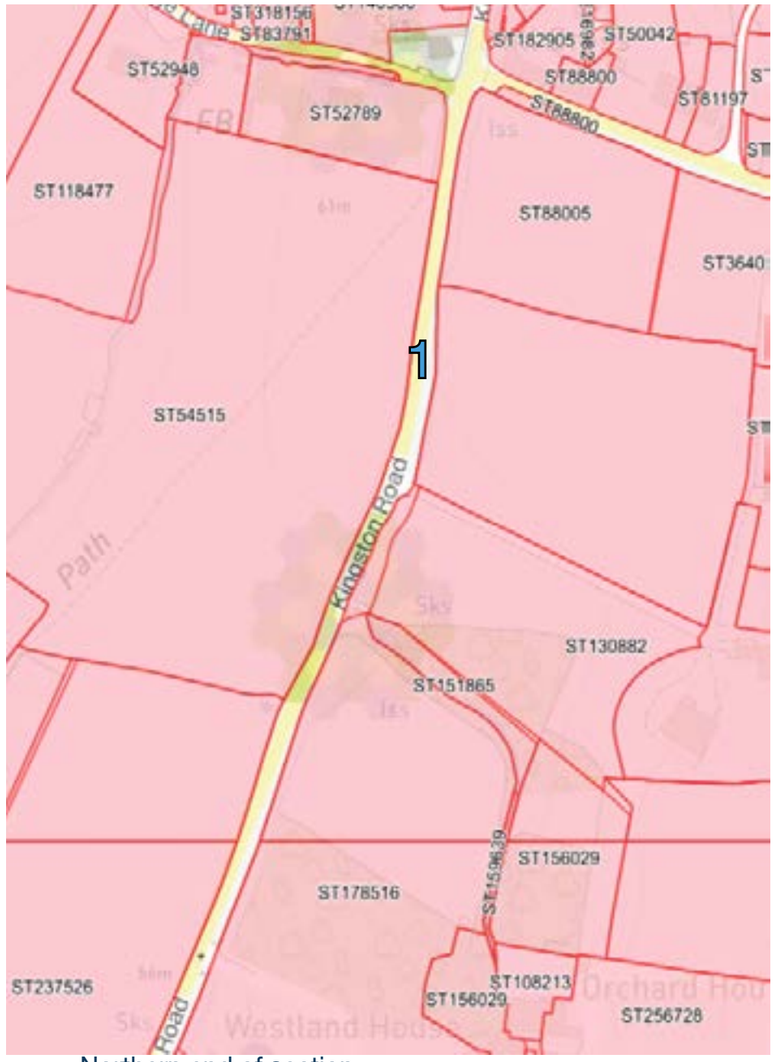
- Junction to Dodhill

Kingston Road route summary (3)

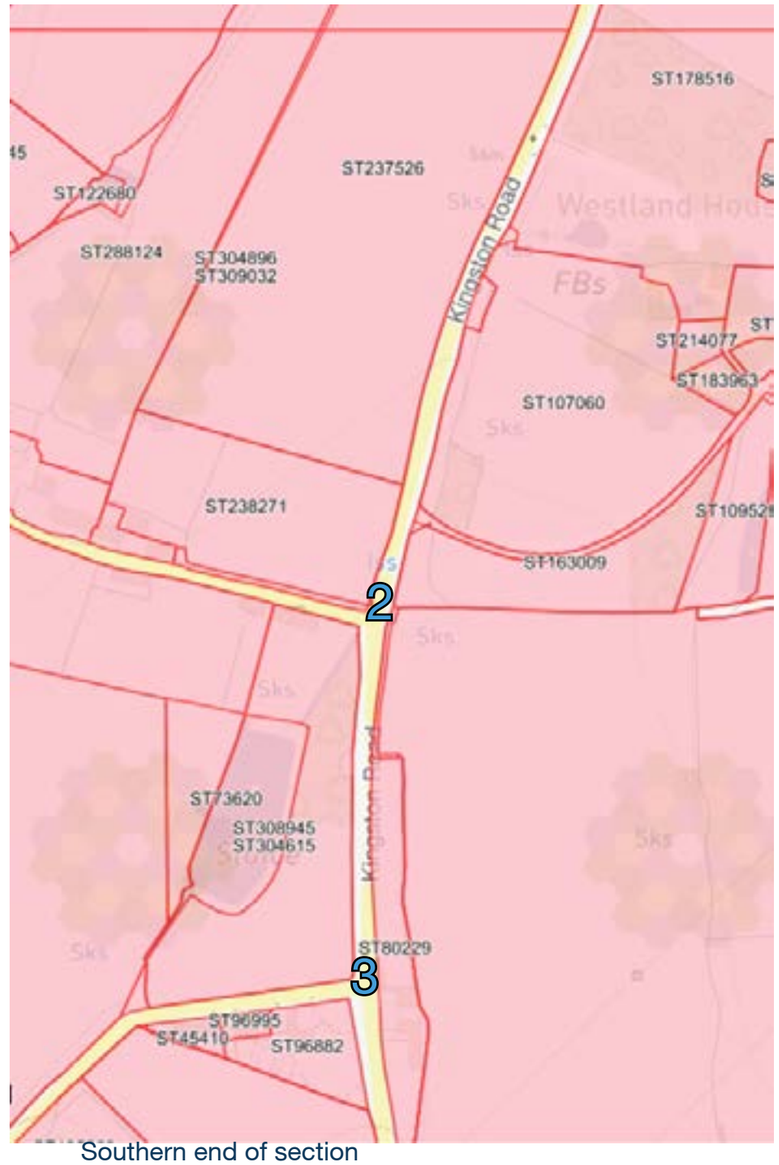
Landowners:

- Some of the land titles for this section are shown on the map to the right.
- These would be important to engage with if progressing with a traffic-free path for this section.





Northern end of section



Southern end of section

Kingston Road route summary (4)

Strengths:

- It is the most direct route
- Potential for traffic-free route behind hedgeline once out of Kingston St Mary. This route may be to the east or west of the road, or a mixture with crossing points. However, this will be dependant on ecological surveys and landowner negotiations to define where such a path may be possible. These are mentioned in the next steps section of the report on page 38.

Weaknesses:

- Constrained width through Kingston St Mary
- Requires 20mph speed limit where the route is on-road
- High vehicle speeds once out of the village requires traffic-free multi-user path
- Requires infrastructure changes for traffic-free path on highway, verges, and private land
- Multiple landowners would need to be engaged



1



- After the Dodhill junction, the road continues and is winding and narrow in places
- Limited space for overtaking

2



- Second warning sign about the narrow road
- Limited space for overtaking

3



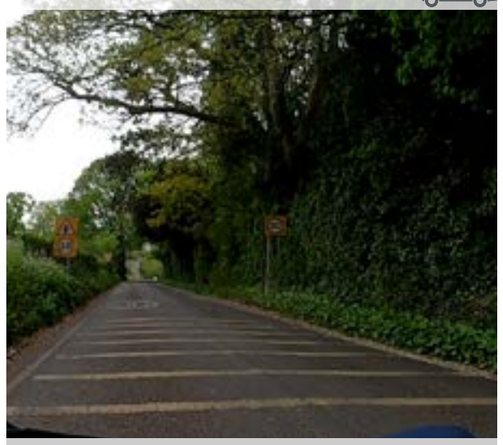
- A particularly narrow section

4



- Narrow road at one of the better points for forward visibility

5



- Start of 30 mph limit to the north of Taunton

6



- Route reaches outskirts of Taunton
- Cycle route continues along road to the right
- Pedestrian crossing just ahead

Kingston Road route summary (4)

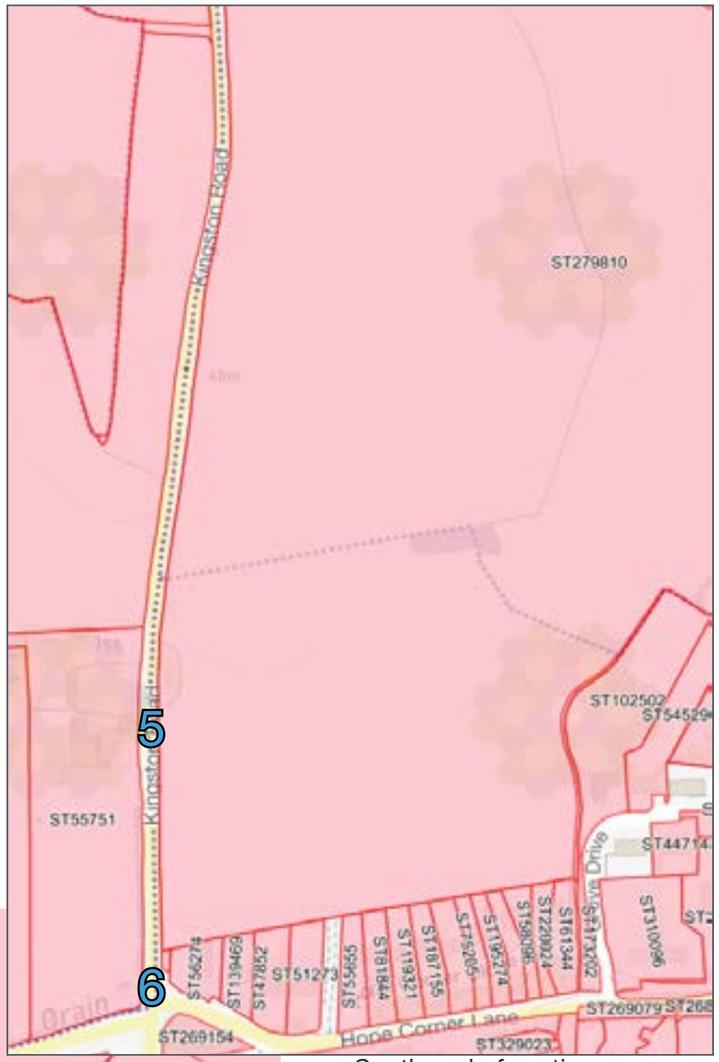
Landowners:

- Some of the land titles for this section are shown on the map to the right.

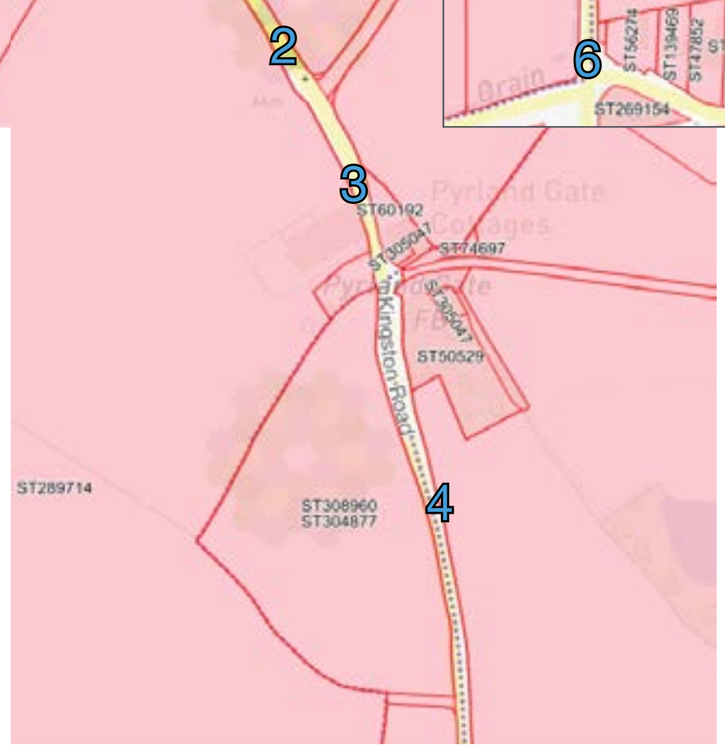




North end of section



South end of section



Right of Way route summary (1)

Strengths:

- Potential for a traffic-free route from Kingston St Mary. The exact alignment would depend on ecological surveys and landowner negotiations to define where such a path may be possible. These are mentioned in the next steps section of the report on page 38.
- Links directly with the village of Nailsbourne
- Provides a route for people walking, wheeling and cycling

Weaknesses:

- Requires changing public footpath to bridleway or permissive path
- Would require landowner permission involving multiple landowners
- Some poor surfaces would need widening and resurfacing
- Some sections see lots of water during periods of rainfall and need drainage to be carefully considered.
- Would need to consider speed limit reduction through Nailsbourne



1



- Very steep on-road section
- 20 mph speed limit through village

2



- Continues steeply to the left

3



- Narrow with parked cars
- Route levels out and turns to the left in the cul-de-sac

4



- Route continues on pavement and public footpaths

5



- Narrow footpath with barriers, preventing access to many groups of people

6



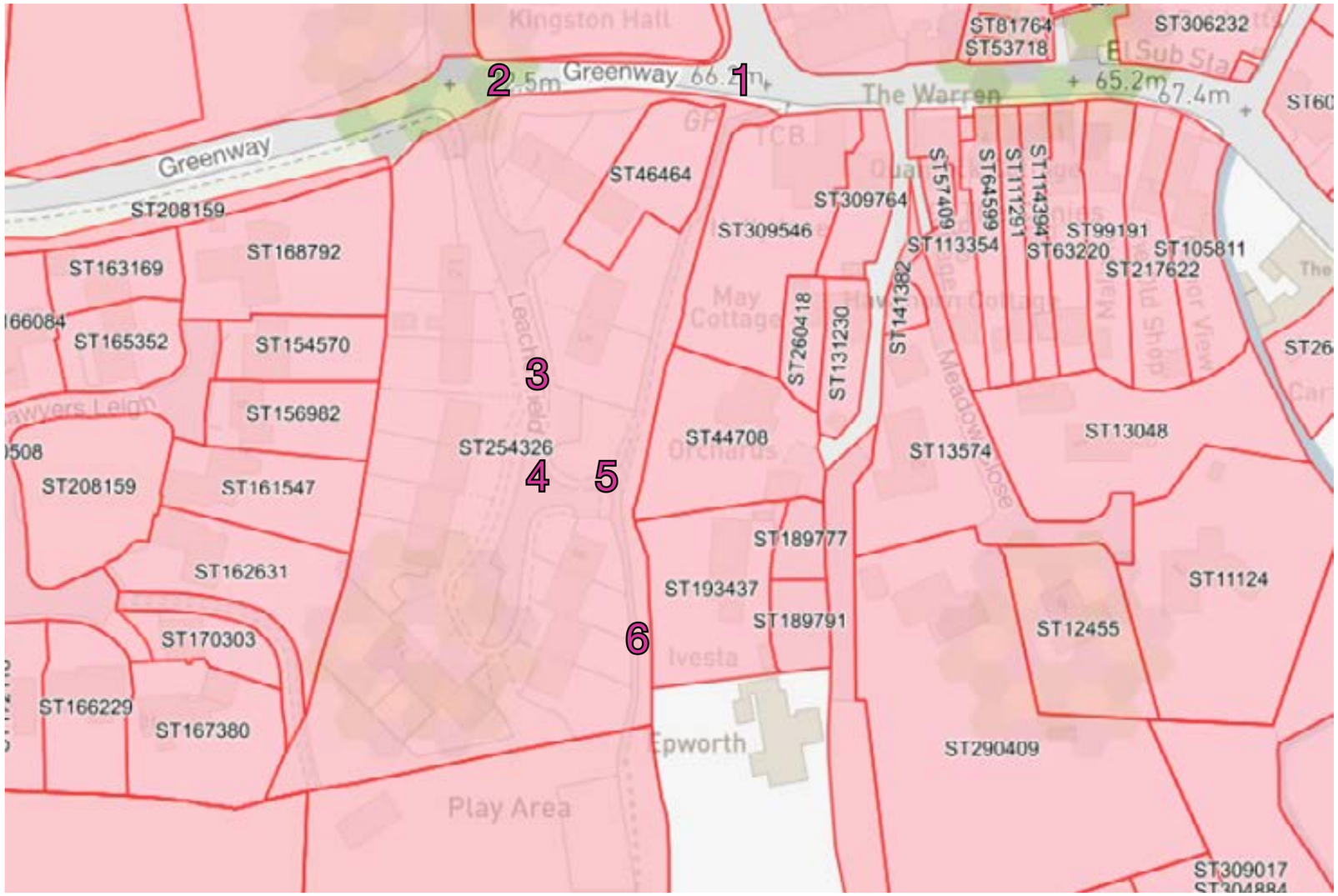
- Narrow footpath
- Fences on both sides and ditches to left

Right of Way route summary (1)

Landowners:

- Part of this section is on road, and likely to be adopted highway
- Somerset West and Taunton Council is the main landowner in this section (ST254326)





Right of Way route summary (2)

Strengths:

- Potential for a traffic-free route from Kingston St Mary. The exact alignment would depend on ecological surveys and landowner negotiations to define where such a path may be possible. These are mentioned in the next steps section of the report on page 38.
- Links directly with the village of Nailsbourne
- Provides a route for people walking, wheeling and cycling

Weaknesses:

- Requires changing public footpath to bridleway or permissive path
- Would require landowner permission involving multiple landowners
- Poor surface would need widening and resurfacing
- Some sections see lots of water during periods of rainfall
- Would need to consider speed limit reduction through Nailsbourne



1



- Narrow dirt path with ditch to left, fence and playground to right

2



- Narrow dirt path
- Uneven with barriers and gates along the route

3



- Path become wider along side of field
- Gates prevent easy access to all path users

4



- Wider path through field

5



- Route passes through field to narrow gate

6



- Narrow gate and footpath

Right of Way route summary (2)

Landowners:

- It will be important to engage with landowners along this section. The public footpath alignment passes along some field margins, and across other fields.
- Landowner map is shown to the right.





Right of Way route summary (3)

Strengths:

- Potential for a traffic-free route from Kingston St Mary. The exact alignment would depend on ecological surveys and landowner negotiations to define where such a path may be possible. These are mentioned in the next steps section of the report on page 38.
- Links directly with the village of Nailsbourne
- Provides a route for people walking, wheeling and cycling

Weaknesses:

- Requires changing public footpath to bridleway or permissive path
- Would require landowner permission involving multiple landowners
- Poor surface would need widening and resurfacing
- Some sections see lots of water during periods of rainfall
- Would need to consider speed limit reduction through Nailsbourne



1



- Uneven path continues along public footpath

2



- Route crosses Parsonage Lane, arrow shown from north to south along route
- Need to manage crossing carefully in accordance with LTN 1/20

3



- Uneven dirt path continues along the side of fields
- Uneven with barriers along the route
- Gates prevent easy access along route

4



- Path continues with small stream in ditch to the side.

5



- A section of the path which remains very wet even during dry periods
- Would need drainage to be considered very carefully to ensure path is usable all year round

6



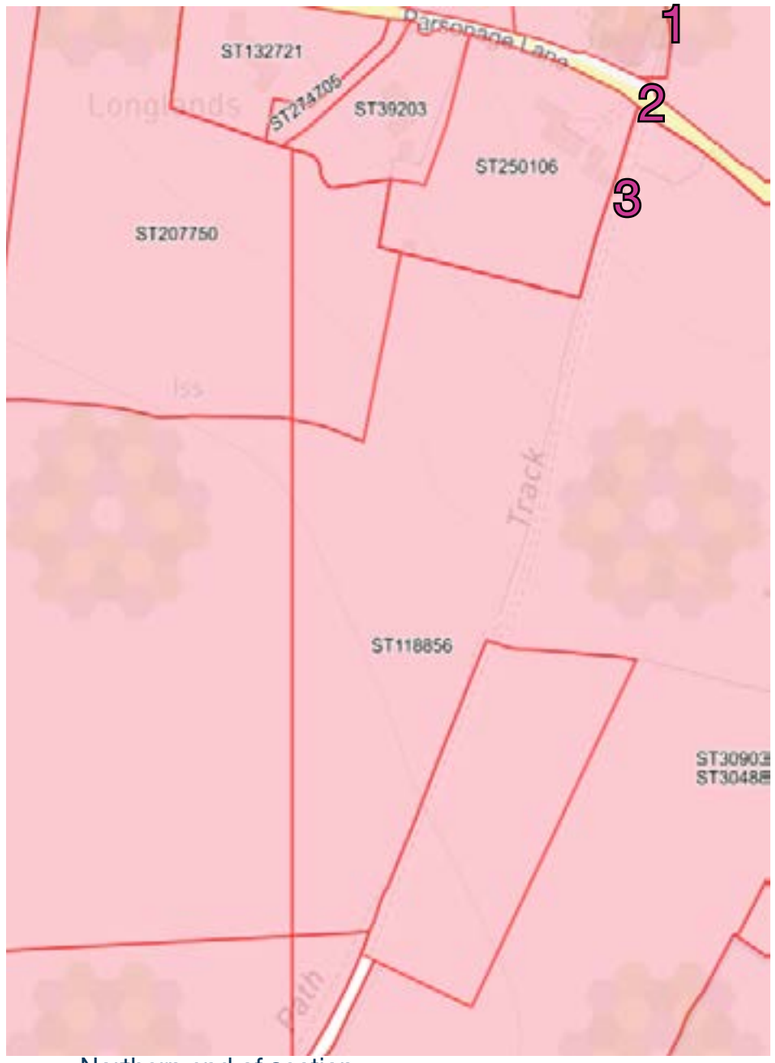
- Route turns to left (east) and continues on a farm access track

Right of Way route summary (3)

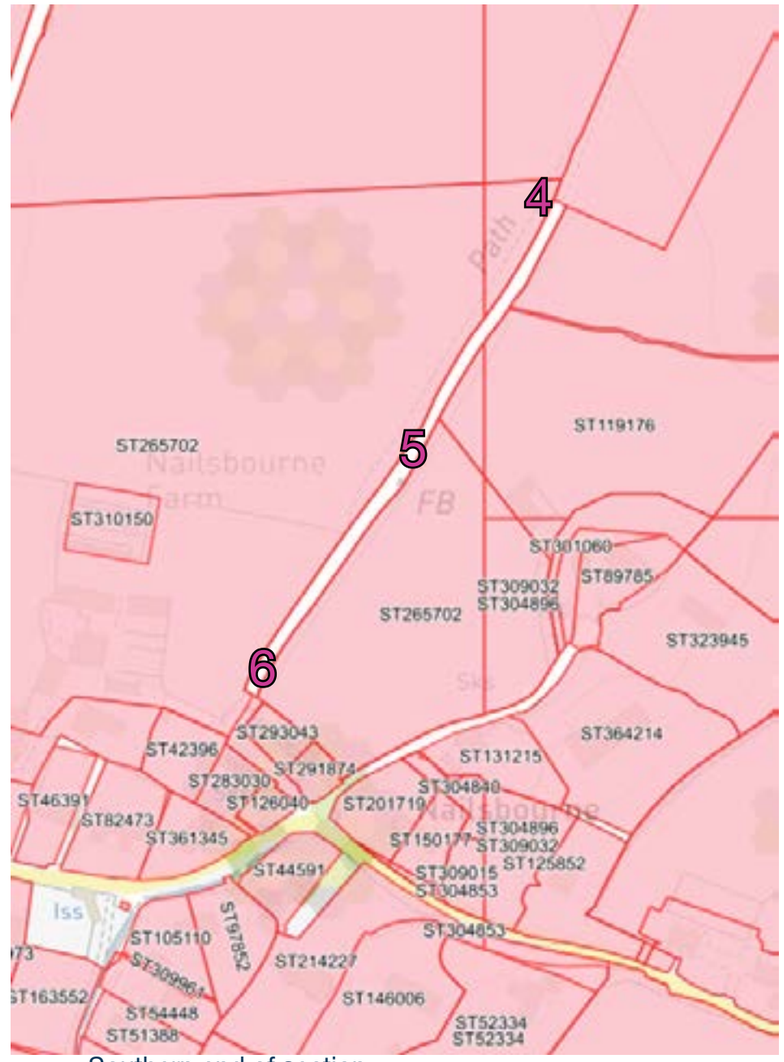
Landowners:

- It will be important to engage with landowners along this section. The public footpath alignment passes along some field margins, and across other fields.
- Landowner map is shown to the right.





Northern end of section



Southern end of section

Right of Way route summary (4)

Strengths:

- Potential for a traffic-free route from Kingston St Mary. The exact alignment would depend on ecological surveys and landowner negotiations to define where such a path may be possible. These are mentioned in the next steps section of the report on page 38.
- Links directly with the village of Nailsbourne
- Provides a route for people walking, wheeling and cycling

Weaknesses:

- Requires changing public footpath to bridleway or permissive path
- Would require landowner permission involving multiple landowners
- Poor surface would need widening and resurfacing
- Some sections see lots of water during periods of rainfall
- Would need to consider speed limit reduction through Nailsbourne



1



- Farm access road joins the road through Nailsbourne
- This has a national speed limit which would need changing in line with LTN1/20 in order to be suitable for this route

2



- Narrow road heads left out of Nailsbourne to the east

3



- Road is very narrow, with no room for overtaking
- Occasional passing places in the verge
- Steep uphill route heading east out of the village of Nailsbourne

4



- Route turns left following a public footpath along the driveway to a property

5



- The public footpath goes up a step, through a gate and back onto dirt paths

6

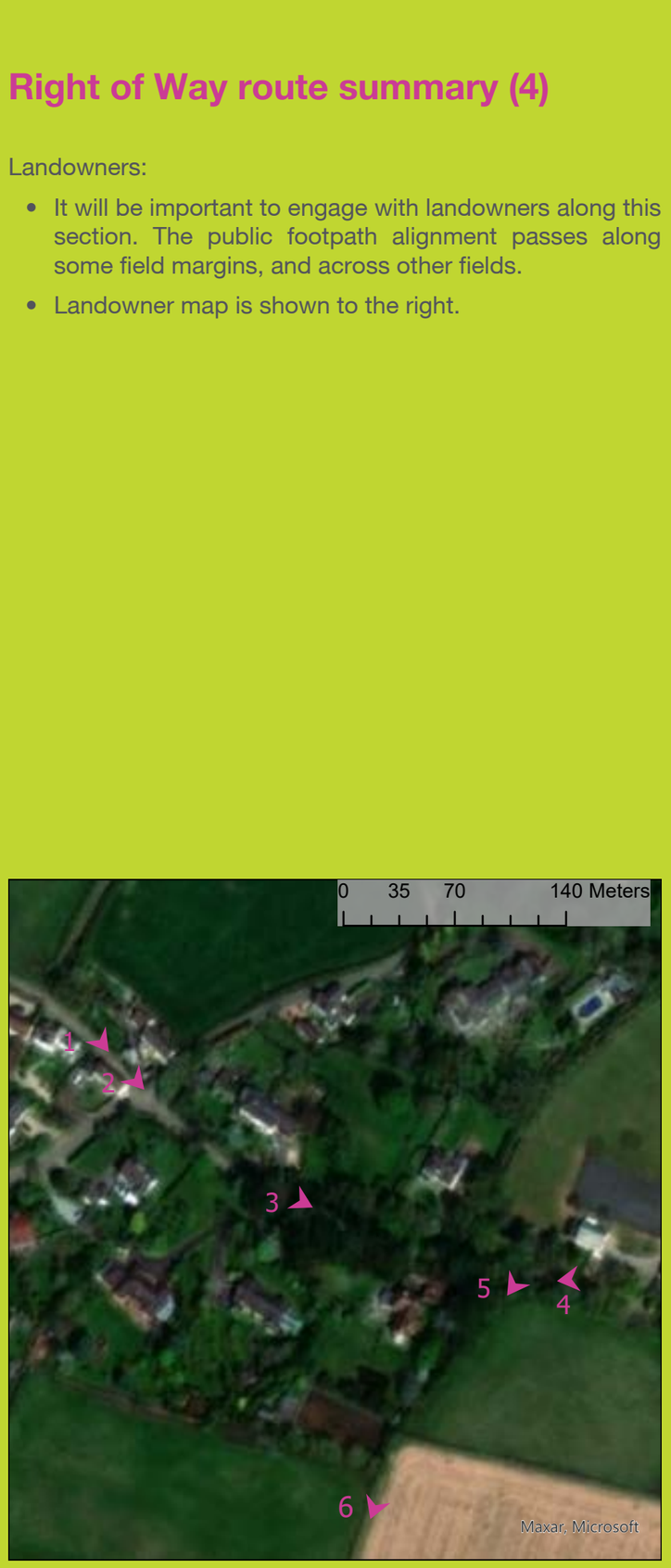


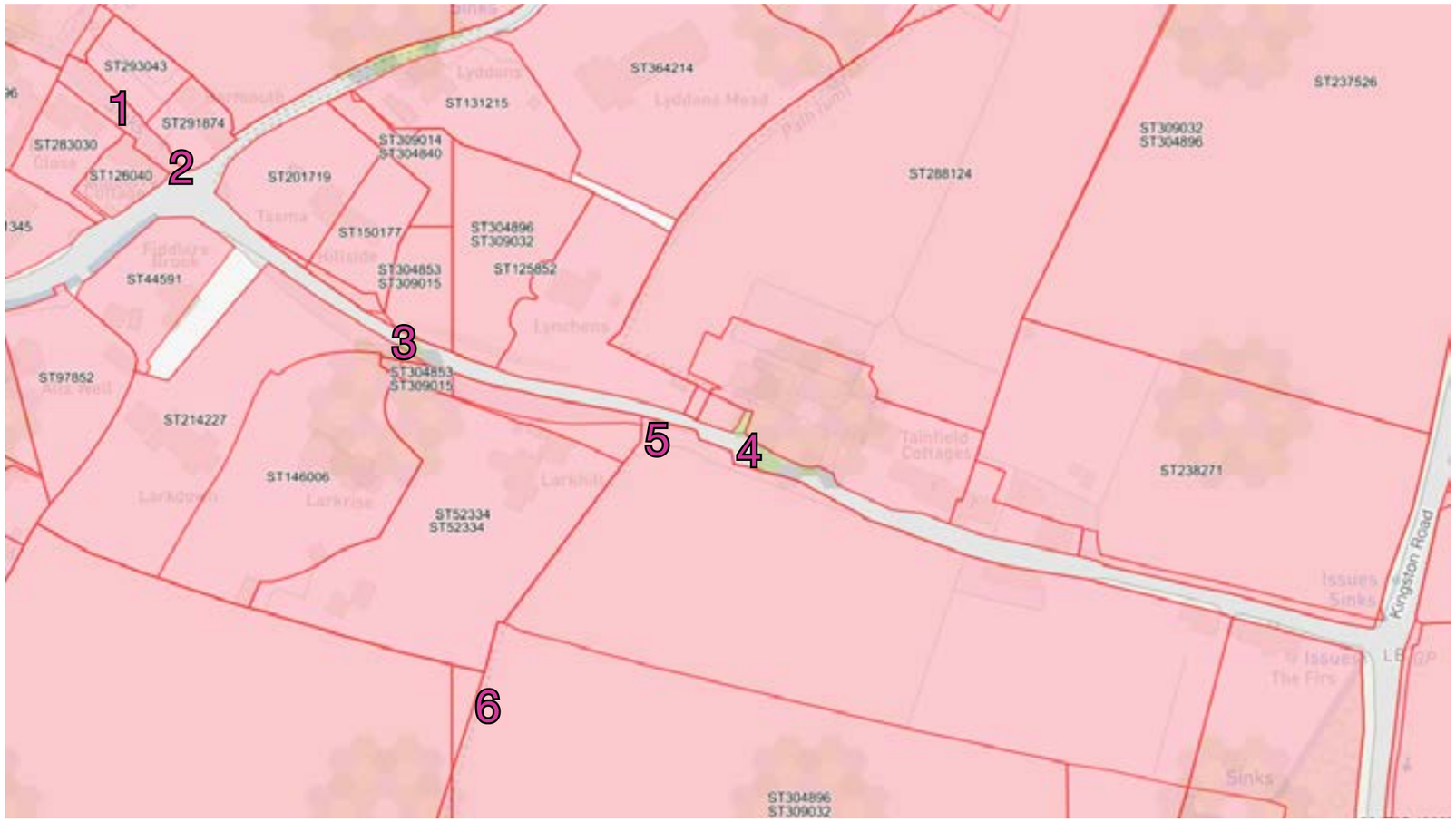
- Uneven paths along edge of field
- Route continues along field until reaching a farm gate at Dodhill Road
- This route then joins the Dodhill alignment (see below)

Right of Way route summary (4)

Landowners:

- It will be important to engage with landowners along this section. The public footpath alignment passes along some field margins, and across other fields.
- Landowner map is shown to the right.







Land titles on approach to Dodhill Road

3. Dodhill Route route summary from Dodhill junction (1)

Strengths:

- Quieter route could be considered more scenic

Weaknesses:

- Less direct
- Requires quietway status for Dodhill Road, or a traffic-free path to be built on the verge or behind hedges
- Quietway status would require speed limit changes, signage and other measures to limit motor vehicle use
- Traffic-free path would require infrastructure changes to highway, verges, and/or on private land. The traffic-free path could be on either side of the road and the exact alignment would depend on ecological surveys and landowner negotiations to define where such a path may be possible. These are mentioned in the next steps section of the report on page 38.



1



- Right turn on a 40mph road

2



- Very narrow road and national speed limit
- One of very few passing places is seen on the left in the image above

3



- Very narrow road and national speed limit
- Limited visibility around corners
- Bumpy and muddy field entrances serve as passing places

4



- Very narrow road, national speed limit
- Limited visibility around corner to left
- Right of way route joins here (purple arrow)

5



- Very narrow road, national speed limit
- Very muddy/uneven with loose dirt depending on time of year

6

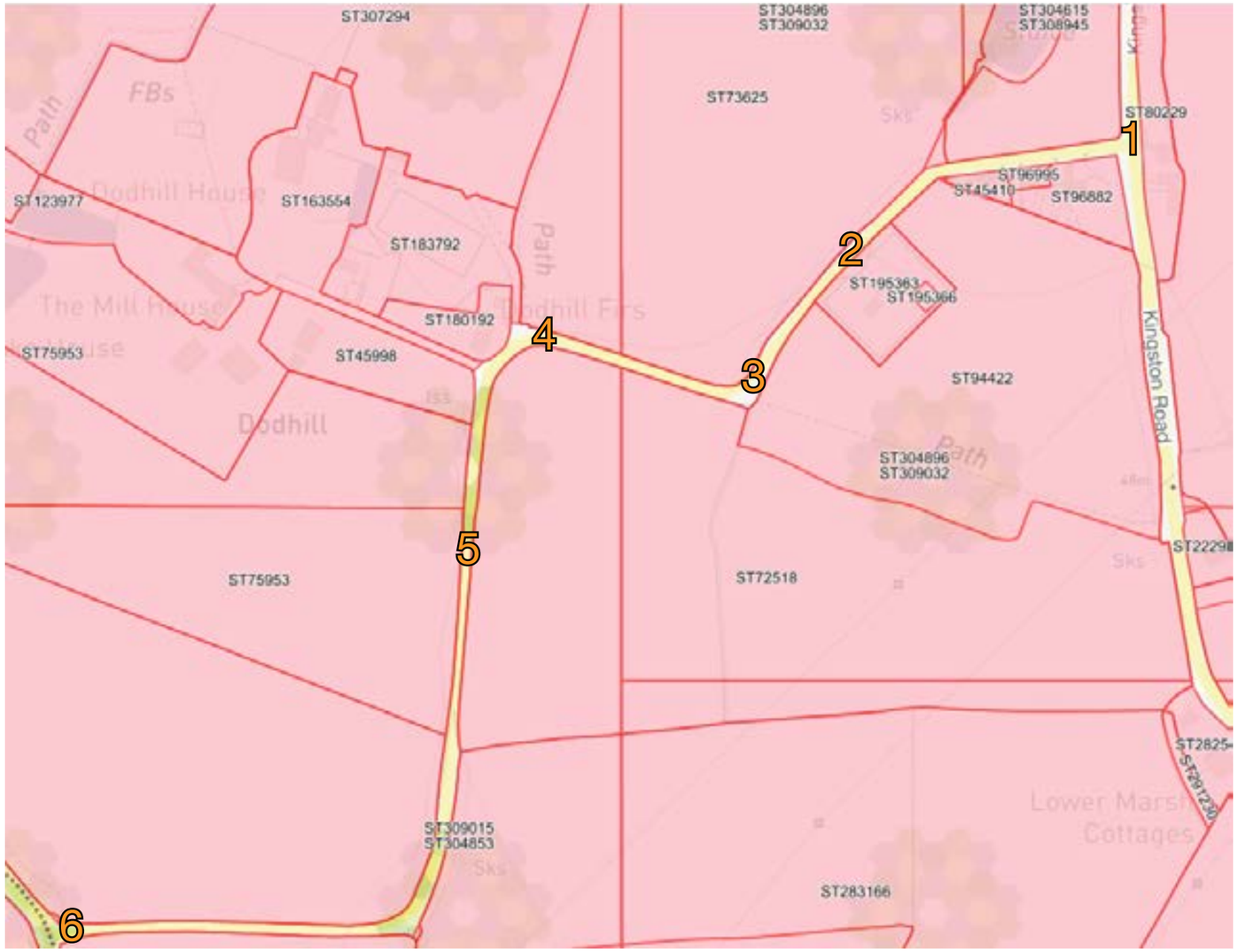


- Route turns left heading south towards Taunton
- Continues on very narrow, single vehicle width roads at national speed limit

3. Dodhill Route route summary from Dodhill junction (1)

Landowners:

- Landowners for this section are likely to be less important as it is entirely on-road and therefore likely to be within the highway boundary on adopted roads.
- Landowner map is shown to the right.





3. Dodhill Route route summary from Dodhill junction (2)

Strengths:

- Quieter route could be considered more scenic and attractive

Weaknesses:

- Less direct
- Requires quietway status for Dodhill Road, or a traffic-free path to be built on the verge or behind hedges
- Quiet lanes status would require speed limit changes, signage and other measures to limit motor vehicle use
- Traffic-free path would require infrastructure changes to highway, verges, and/or on private land. The traffic-free path could be on either side of the road and the exact alignment would depend on ecological surveys and landowner negotiations to define where such a path may be possible. These are mentioned in the next steps section of the report on page 38.



1



- Narrow road with national speed limit
- Very muddy, debris on road depending on time of year
- Limited overtaking/passing places

2



- There are a number of corners on this route with very limited visibility
- National speed limit

3



- Very narrow road and national speed limit
- Uneven road surface and muddy, covered in debris at different times of year

4



- Very narrow road, national speed limit
- Limited overtaking/passing places

5



- Route joins traffic-free path alongside Corkscrew Lane
- Traffic-free path is very narrow (<1.5m)

6



- Route crosses Corkscrew Lane (30 mph) and turns left continuing along traffic-free paths

3. Dodhill Route route summary from Dodhill junction (2)

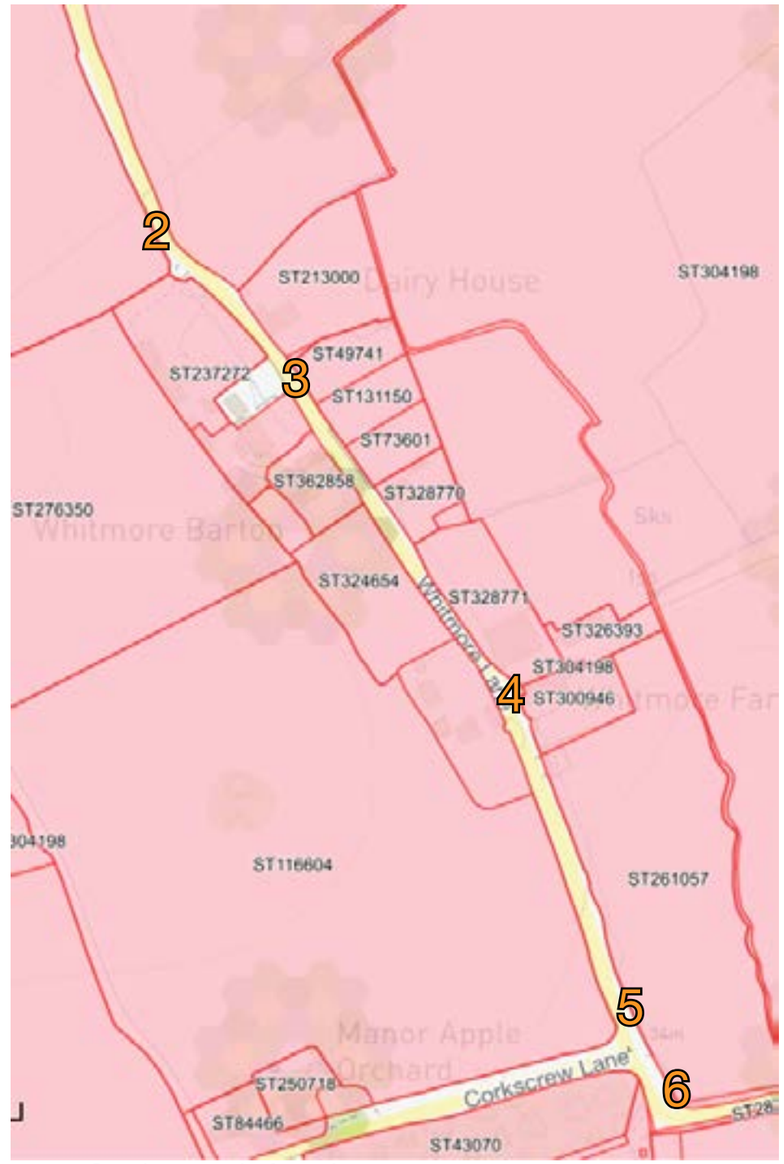
Landowners:

- It will be important to engage with landowners along this section. The public footpath alignment passes along some field margins, and across other fields.
- Landowner map is shown to the right.





Northern end of section



Southern end of section

5 Surface materials

Relevance

The path surface is a key factor of user experience. A smooth, dry, continuous surface will provide a more inclusive and accessible route than a muddy, rutted surface. To achieve a positive user experience, a sealed path surface is recommended.

Four of the key factors that may inform surface choice for options discussed in this report are:

- Use of paths by other stakeholders, such as Forestry Commission vehicles, walkers and private residences
- Maintenance liability
- Aesthetics in a rural / natural setting
- Skid resistance and speed on a steep hill that is likely to experience considerable leaf litter in the autumn

Design standards

Highways England document 'CD 239 Footway and Cycleway Pavement Design' sets out the requirements for new footway and cycleway pavement construction, including specific specifications for where heavy-vehicle use may occur - as appears likely if a Forestry Commission track is upgraded.

The quality of a path's surface can influence the ability of a path to shed water efficiently. Hand-laid surfaces have the tendency to be less even than a machine-laid surface. This can lead to more standing water being encountered along a path. A machine-laid path will provide a more consistent and even surface. This will encourage water to shed and reduce the likelihood of ice occurring during colder weather.

Common construction materials

Path surfaces are typically composed of layers of bituminous material. The size of aggregate used in the surface course may commonly vary from 6mm (where a very smooth finish is desired) to 20mm+ (where a coarser surface is deemed more appropriate).

Concerns may be raised where sealed surfaces are proposed within rural areas. Their introduction could be considered to 'urbanise' natural environments. To alleviate these concerns, designers can specify alternative surface course materials.

For example, white quartz chippings can be rolled into a bituminous surface. This will to reduce the intensity of what would otherwise be an entirely black coloured surface. Designers should also keep in mind that a new bituminous surface would lose it colour intensity with time. Photographic examples of this colour loss may be useful in managing stakeholder concerns.

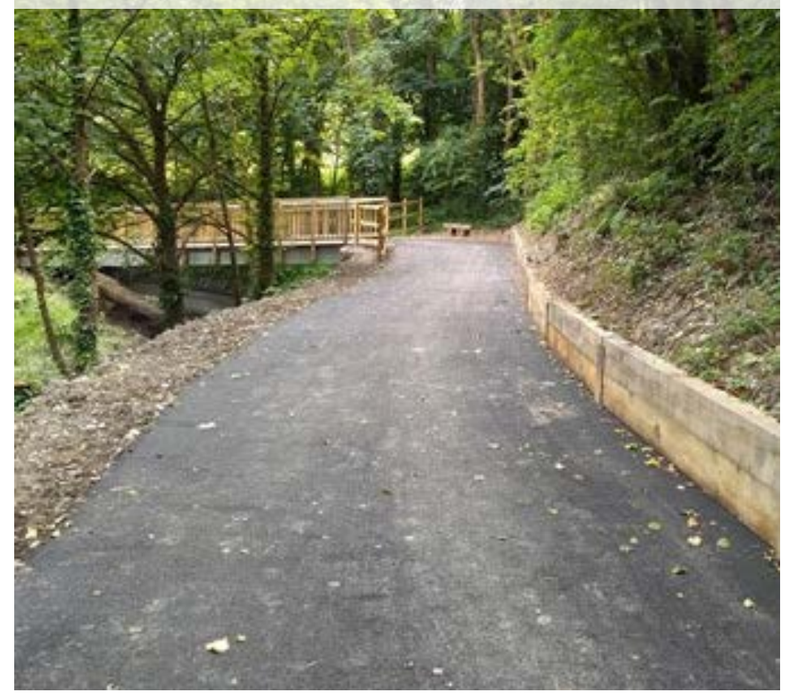
Another option is to apply a surface dressing to a sealed path - giving the durability of a sealed surface but improving skid resistance and modifying the visual qualities. This can be achieved through spray application of an emulsion bituminous binder via a spray tanker onto the new or existing sealed path, followed immediately by the application of aggregate chippings such as pea shingle or granite stone. This gives the appearance of loose gravel but in the form of a bound surface.

Paths for Everyone

In Sustrans' 2018 Paths for Everyone report, one of the two strategic priorities to be outlined going forward is to "make the National Cycle Network accessible for everyone".

In order to achieve this, a commitment has been made to work towards paths that are both wide enough for all users, and improve surfaces so they can be enjoyed by all legitimate users. As such a path with an unsealed surface is unlikely to be considered for addition to the network.

Typical sealed asphalt surface



Typical surface dressing on top of sealed asphalt surface



Kingston St Mary to Taunton - Kingston St Mary Parish Council

6 Land and permissions

Introduction

Cyclists have a right to ride on:

- Bridleways
- Cycle tracks
- Byways open to all traffic (BOATs)
- Restricted byways

Cyclists do not have a right to ride on:

- Footpaths

Creation of a new cycle route

Creating a traffic-free route will require prior agreement with landowners.

There are a number of different ways in which a traffic-free route can be developed, including the acquisition of the land, creation of a public right of way, or a legal arrangement involving the relevant highway or other authority.

Landowners may have reservations or objections about the creation of a traffic-free route affecting their land. These are more likely to be successfully resolved if each landowner is sufficiently engaged with the proposals as early as possible in the design process.

Approaches to creating a new cycle route

Some of the more common approaches to creating a new cycle route are listed in the right hand panel. However a more comprehensive overview is provided in LTN 1/20 Appendix C and the Sustrans website, from which much of the information on this page has been taken.

1. Creation of a new permissive route

Where a traffic-free route is not being created as a public right of way, a permissive path can be created with the agreement of the landowner. This is usually necessary when the land is acquired under a lease or a licence.

Landowners may prefer the creation of a permissive path, as no public rights being created allows more flexibility to divert or close the route should circumstances dictate. However, this can give the route less long-term security and vulnerability to closure in the future.

2. Creation of cycle track alongside highway

Under the Highways Act 1980 Section 65, a highway authority may - in or by the side of a highway maintainable at the public expense - construct a cycle track as part of the highway

3. Conversion of a public footpath into a cycle track

To facilitate cycling, it is possible to convert all or part of a public footpath to a cycle track by making a Cycle Tracks Order (CTO) under Section 3 of the Cycle Tracks Act 1984 and the Cycle Tracks Regulations 1984. On conversion from a public footpath to a cycle track, the cycle track becomes a highway maintainable at public expense, even if the footpath had not previously had that status. According to LTN 1/20:

> "Public consultation is a mandatory requirement for conversions carried out under the 1984 Act.
>
> The Regulations specify that, before making the order, a local highway authority has to consult:
>
> a. one or more organisations representing persons who use the footpath involved or who are likely to be affected by any provision of the proposed order;
> b. any other local authority, parish council or community council within whose area the footpath is situated;
> c. those statutory undertakers whose operational land is crossed by the footpath; and
> d. the chief officer of police for the police area.
>
> Where the footpath crosses agricultural land, the authority will need to obtain consent from the land owner(s). If there are no objections or objections are withdrawn, the order can be confirmed by the local highway authority. If there are un-withdrawn objections, the order can be confirmed by the Secretary of State, who may decide that a local public inquiry is first required.
>
> In practice, the Cycle Tracks Act is often not used, even though it was intended to help local authorities to rationalise existing rights of way to permit cycling more widely. Walking advocates, such as The Ramblers, oppose many applications due to the loss of the footpath from the definitive map (and subsequently from published O.S. maps)."

4. Creation/conversion of a new/existing right of way

a. A creation agreement

A Highway Authority or other Local Authority through a 'public path creation agreement' with the landowner can create public Rights of Way under Section 25 of the Highways Act 1980.

b. A creation order

In certain circumstances, Public Rights of Way can also be created through a 'public path creation order' made by a Highway Authority, other Local Authority, Strategic Highways Authority or the Secretary of State under Section 26 of the Highways Act 1980.

c. Express or presumed dedication

Alternatively, a landowner may seek to 'dedicate' their land for use as a public right of way, either expressly or by presumption or by "deemed dedication" following 20 years' public use.

7 Level of Service appraisal

Requirement	Kingston Road	Right of way - described to Dodhill	Dodhill - described from Dodhill junction
Cohesion	• Connects Kingston St Mary with eastern end of signed cycle route to Taunton and NCN 3. • Provides a route for cycling, but if there remain sections without pavements in Kingston St Mary, it doesn't cater for people walking or wheeling.	• Connects Kingston St Mary with Dodhill (and follows Dodhill route from there to Taunton). • In addition this route connects the village of Nailsbourne to Kingston St Mary and Taunton. • With quietway treatment on Dodhill route, would cater for people walking, wheeling and cycling.	• Provides an alternative southern route after starting on either of the Kingston Road or Right of way routes. • If treated as a quietway, or with a traffic-free path, would cater for people walking, wheeling and cycling.
Directness	• 3 km route length. Deviation factor of 1 as this is the most direct route. • Approximately 150 m of steep climbing in Kingston St Mary, the rest is mostly flat or very shallow gradients.	• 3.5 km including Dodhill Route to Taunton. This gives a deviation factor of 1.16 which is classed as green in LTN1/20. • Approximately 90 m of steep climbing in Kingston St Mary and 110 m climbing to the east of Nailsbourne. • Two road crossings required (Parsonage Lane and Corkscrew Lane)	• 3.7 km including northern section of Kingston Road route. This gives a deviation factor of 1.23 which is classed as amber in LTN1/20. • Predominantly flat route, some shallow gradients • One road crossing required (Corkscrew Lane)
Safety	• All currently on-road. • Quiet narrow country lane (with some blind bends) for entire on-road section. Currently up to 40mph speed limit. • The creation of a traffic-free path is recommended along as much of this route as possible.	• Mostly traffic-free, with short sections on-road in Kingston St Mary and through Nailsbourne. • Quiet narrow residential cul-de-sac in Kingston St Mary. Narrow country road with national speed limit in Nailsbourne. • A reduction in speed limit, or Quiet Lanes designation would be recommended.	• All currently on-road. • Quiet narrow country lane (with blind bends) for entire route. Currently 60mph speed limit but actual speeds will be far lower. • A traffic-free path, or Quiet Lanes designation is recommended.
Comfort	• Any new traffic-free route should be built to current (LTN1/20) standards with a high quality sealed surface. • New multi-user traffic-free paths should be 3m minimum width.	• The footpath sections would need to be upgraded and should be built to current (LTN1/20) standards with a high quality sealed surface. • New multi-user traffic-free paths should be 3m minimum width.	• Any new traffic-free route should be built to current (LTN1/20) standards with a high quality sealed surface. • New multi-user traffic-free paths should be 3m minimum width.
Attractiveness	• Route expected to be unlit due to rural environment. • Route is relatively isolated from other activity and people.	• Route expected to be unlit due to rural environment. • Route is relatively isolated from other activity and people.	• Route expected to be unlit due to rural environment. • Route is relatively isolated from other activity and people.

Requirement	Kingston Road	Right of way - described to Dodhill	Dodhill - described from Dodhill junction
Environment	• If a traffic-free route is created away from the carriageway, then there will be some environmental/ecological implications.	• Some hedgerow removal may be required to gain the width needed for a multi-user path. • May require loss of existing grassland habitat, and some scrub / tree loss at points along the route.	• If a Quiet Lanes designation is applied there will be limited impact on the environment, as no loss of hedgerows or other habitat will be needed. • If on the other hand, a traffic-free route is created away from the carriageway, then there will be some environmental/ ecological implications.
Land	• On-road sections are exclusively on public highway. • Especially where the road has a 40 mph speed limit, a traffic-free path is recommended. This would involve working with local landowners to establish a route alignment away from the carriageway.	• On-road section is exclusively on public highway. • Traffic-free sections run across land owned by multiple landowners.	• This on-road section is exclusively on public highway. Creating a traffic-free path would involve working with local landowners, changing to Quiet Lanes designation would be entirely on highway.
Summary	– The most direct route. People are more likely to use direct routes compared with those which deviate more. – While this could be a good route for people cycling, it wouldn't cater as well to those walking or wheeling unless traffic-free sections are provided through Kingston St Mary to Mill Cross. – Would need speed limit reductions for on-road sections. – Creation of a traffic-free path away from the carriageway would be needed from Mill Cross (if not before) continuing along Kingston Road to Taunton.	– A less direct route, but within a reasonable deviation. – Would provide a traffic-free multi-user path between Kingston St Mary and Nailsbourne/Dodhill. – Would link in with the Dodhill route providing a traffic-free multi-user path or Quiet Lane to Taunton.	– The least direct route. – Provides a Quiet Lane option for the southern end of the other two routes. – A traffic-free multi-user path is also an option, which would create a route suitable for people walking, wheeling and cycling.

8 Cost Estimate

1. Kingston Road route

This is a costing for the route from Kingston St Mary as a quiet-way to Mill Cross, joining a traffic-free path at Mill Cross to Taunton.

This capital cost estimate is built using an internal Sustrans cost estimating tool. This tool has been used on a number of Department for Transport projects.

This estimate does not include the costs associated with land negotiations and land purchase as this is unknown at this stage of this feasibility study.

An optimism bias of 44% has been added to the right hand column in order to take account of the inevitable uncertainties at this stage of feasibility work. It is reasonable to estimate the capital cost of this route will be somewhere between £1 million and £1.5 million.

The percentage oncosts for this scheme (Project Management, Design, Ecology etc.) are derived from Sustrans norms, however if the project is delivered by a different mechanism there are likely to be different costs.

These costs are based on construction taking place as some point in the year 2022. As construction will probably take place in the years that follow 2022, inflation will need to be taken into account.

	Unit	Base rate	Quantity	Cost	Cost plus 44% optimism bias
EXTERNAL COSTS					
New 3 metre wide traffic-free route (ex land costs)	m	£192	2200m	£422,400	£608,256
Quiet-way treatment	m	£12	840m	£10,080	£14,515
Ancillary items, fencing, drainage, signs	%	10%		£43,248	£62,277
Contractor preliminary works	%	17%		£73,522	£105,871
Surveys (Topographical, utilities etc.)	%	1.5%		£6,487	£9,342
Ecology	%	8.5%		£36,761	£52,936
Biodiversity offsetting	%	up to 20%		£86,496	£124,554
Comms external costs	%			£2,500	£3,600
Community engagement resources & equipment	%	0.1%		£556	£800
VAT	%	20%		£136,410	£196,430
STAFF TIME					
Project management		12%		£66,688	£96,031
Design & Preparation	%	12%		£66,688	£96,031
CDM site supervision	%	0.75%		£1,905	£2,744
Legal / planning support	%	0.5%		£2,779	£4,001
Community engagement & volunteer support	%	2.5%		£13,893	£20,007
Regional communications	%	0.75%		£4,168	£6,002
CONTINGENCY					
Works contingency (incl. VAT)	%	10%		£55,574	£80,026
Staff time contingency	%	10%		£15,422	£22,207
Total				**£1,047,240**	**£1,508,025**

Cost Estimation

2. Right of way route

This is a costing for a traffic-free path from Kingston St Mary to Dodhill, with a short section of quiet-way at Nailsbourne. At Dodhill this follows along roads treated as quiet-ways to Taunton (named as Dodhill Route in the pages above).

This capital cost estimate is built using an internal Sustrans cost estimating tool. This tool has been used on a number of Department for Transport projects.

This estimate does not include the costs associated with land negotiations and land purchase as this is unknown at this stage of this feasibility study.

An optimism bias of 44% has been added to the right hand column in order to take account of the inevitable uncertainties at this stage of feasibility work. It is reasonable to estimate the capital cost of this route will be somewhere between £836,016 and £1.2 million.

The percentage oncosts for this scheme (Project Management, Design, Ecology etc.) are derived from Sustrans norms, however if the project is delivered by a different mechanism there are likely to be different costs.

These costs are based on construction taking place as some point in the year 2022. As construction will probably take place in the years that follow 2022, inflation will need to be taken into account.

	Unit	Base rate	Quantity	Cost	Cost plus 44% optimism bias
EXTERNAL COSTS					
New 3 metre wide traffic-free route (ex land costs)	m	£192	1450m	£278,400	£400,896
Widen existing traffic-free route by 1m and resurface	Item	£120	85	£10,200	£14,688
Quiet-way treatment	m	£12	2200	£26,400	£38,016
Barrier removal	Item	£6,000	5	£30,000	£43,200
Ancillary items, fencing, drainage, signs	%	10%		£34,500	£49,680
Contractor preliminary works	%	17%		£58,650	£84,456
Surveys (Topographical, utilities etc.)	%	1.5%		£5,175	£7,452
Ecology	%	8.5%		£29,325	£42,228
Biodiversity offsetting	%	up to 20%		£69,000	£99,360
Comms external costs	%			£2,500	£3,600
Community engagement resources & equipment	%	0.1%		£443	£638
VAT	%	20%		£108,919	£156,843
STAFF TIME					
Project management	%	12%		£53,199	£76,607
Design & Preparation	%	12%		£53,199	£76,607
CDM site supervision	%	0.75%		£2,588	£3,726
Legal / planning support	%	0.5%		£2,217	£3,192
Community engagement & volunteer support	%	2.5%		£11,083	£15,960
Regional communications	%	0.75%		£3,325	£4,788
CONTINGENCY					
Works contingency (incl. VAT)	%	10%		£44,333	£63,839
Staff time contingency	%	10%		£12,561	£18,088
Total				**£836,016**	**£1,203,863**

Cost Estimation

3. Dodhill Route

This cost estimation follows a route suggested by Kingston St Mary Parish Council. It starts from Kingston St Mary along Kingston Road to Mill Cross with a quiet lane treatment where it joins a traffic-free path along either existing rights of way or at the side of the carriageway to meet up with Dodhill Lane. At Dodhill lane a quiet lane treatment is assumed. If a traffic-free path is preferred, the costs would likely be similar to or higher than the Kingston Road route.

This capital cost estimate is built using an internal Sustrans cost estimating tool. This tool has been used on a number of Department for Transport projects.

This estimate does not include the costs associated with land negotiations and land purchase as this is unknown at this stage of this feasibility study.

An optimism bias of 44% has been added to the right hand column in order to take account of the inevitable uncertainties at this stage of feasibility work. It is reasonable to estimate the capital cost of this route will be somewhere between £600,000 and £900,000.

The percentage oncosts for this scheme (Project Management, Design, Ecology etc.) are derived from Sustrans norms, however if the project is delivered by a different mechanism there are likely to be different costs.

These costs are based on construction taking place as some point in the year 2022. As construction will probably take place in the years that follow 2022, inflation will need to be taken into account.

	Unit	Base rate	Quantity	Cost	Cost plus 44% optimism bias
EXTERNAL COSTS					
New 3 metre wide traffic-free route (ex land costs)	m	£192	1150m	£220,800	£317,952
Widen existing traffic-free route by 1m and resurface	m	£120	35m	£4,200	£6,048
Quiet-way treatment	m	£12	2420	£29,040	£41,818
Ancillary items, fencing, drainage, signs	%	10%		£25,404	£36,582
Contractor preliminary works	%	17%		£43,187	£62,189
Surveys (Topographical, utilities etc.)	%	1.5%		£3,811	£5,487
Ecology	%	8.5%		£21,593	£31,094
Biodiversity offsetting	%	up to 20%		£50,808	£73,164
Comms external costs	%			£2,500	£3,600
Community engagement resources & equipment	%	0.1%		£326	£470
VAT	%	20%		£80,334	£115,681
STAFF TIME					
Project management		12%		£39,173	£56,409
Design & Preparation	%	12%		£39,173	£56,409
CDM site supervision	%	0.75%		£1,905	£2,744
Legal / planning support	%	0.5%		£1,632	£2,350
Community engagement & volunteer support	%	2.5%		£8,161	£11,752
Regional communications	%	0.75%		£2,448	£3,526
CONTINGENCY					
Works contingency (incl. VAT)	%	10%		£32,644	£47,008
Staff time contingency	%	10%		£9,249	£13,319
Total				**£616,389**	**£887,601**

9 Summary and next steps

Preferred route alignment

At this early stage the preferred route alignment is the **Kingston Road route**. Given the information gathered for this study, this route has been selected because it is the most direct route between Kingston St Mary and Taunton, and there is the potential to build a high quality multi-user path. As stated in the core design principles of LTN 1/20, “Directness can be measured in both distance and time, and so routes should provide the shortest and fastest way of travelling from place to place”. People should not need to walk or cycle a longer distance route compared to people driving.

The key next steps are to investigate the ecology and enter into landowner negotiations for the preferred route. Both of these are critical to establishing in more detail, which is the most feasible route. A Preliminary Ecological Appraisal (PEA) should be conducted as soon as possible in order to understand any ecological constraints, as these can impact the deliverability of a route.

Route Summary

The **Kingston Road route** is the most direct and therefore stands out. Direct routes are always preferable. It would provide a suitable route for people cycling if motor vehicle speeds could be reduced wherever people have to mix with traffic, while a traffic-free path should be built starting as far north towards Kingston St Mary as possible. As for all of the route options, particular care would be needed with provision for people walking and wheeling through Kingston St Mary; currently there is no footpath and they have to mix with motor traffic on the road.

The **Right of way route** would provide a traffic-free route between Kingston St Mary and Nailsbourne which would cater to people walking, wheeling and cycling. At Dodhill, it could continue on road with either quiet-way designation or a traffic-free path and would provide a multi-user route all the way to Taunton. This is less direct though, and as such people may be less likely to use it.

The **Dodhill route** provides an alternative route south after following the northern section of the Kingston Road route. Care would need to be given to the design of the transition from Kingston Road at Dodhill. The route from Dodhill to Taunton could be given a quiet-way designation, reducing traffic speeds and volumes, or a traffic-free multi-user path could be created away from the carriageway. This is less direct than the Kingston Road route, meaning people may be less likely to use it and instead continue along the main road.

Next steps

Engage with stakeholders

This may include but is not limited to:

- Landowners on the route
- Landowners adjacent to the route
- Local businesses
- Local walking, cycling and other interest groups in the area
- Local authorities
- Local politicians at all levels – Parish Councillor to MP
- Statutory interests

We recommend open and transparent communication with all parties, clearly setting out the proposal and the benefits to the local community. Some opposition may be encountered, but it is better to know about this at an early stage before too much time and money is spent on developing a preferred route.

Enter land negotiations

Early engagement with landowners is of paramount importance, as without the good will of landowners we are very limited in our ambitions to create more walking and cycling paths for future generations in the UK.

Produce preliminary design drawings

These plans will be detailed enough to assess the physical works required to build the route, but will not generally be sufficient for construction. Local authority engineers may want to comment on the designs, especially if they are being asked to maintain the route.

All stakeholders will need to be consulted and given the opportunity to make comments that can influence the designs. Public consultation is recommended, both online and through drop-in exhibitions. This is a valuable opportunity to demonstrate support for the route and to identify any concerns about the proposals.

Consider planning permission and other consents

Most traffic free routes away from the highway will need planning permission, but this should be checked with the local planning authority. They can also advise on the planning process, the documentation required and the planning fee. Preliminary designs at a scale of 1:2500 or larger will be required, along with a Design and Access Statement, Preliminary Ecological Appraisal (PEA) and Flood Risk Assessment if necessary.

Consider funding

It is important to ensure at this point that the project is costed and funding sources allocated.

Detailed Design

Detailed drawings and cross-sections, typically at a scale of 1:500 will be needed to instruct contractors and to gain approval from local authorities. These drawings will include all the details of construction method, materials, earthworks, drainage, fencing and access controls needed to build the route.

Construction

The contractor will be asked to provide a construction programme and duration for the works. There may be seasonal or ecological constraints that will affect start times, but a minimum of three months should be given to appoint the contractor and allow them to mobilise. Frequent supervision of the works is needed to ensure that the path is built to the appropriate standard and the correct materials are used. Landowners and other stakeholders will need to be informed as work progresses and to arrange access for plant, materials and equipment.

Promotion

When the route is completed and ready for use, it is important to inform everyone that it exists. A celebratory event involving the local community is a good starting point and local press will often send a reporter or photographer. Social media can complement more traditional press releases and printed material. A programme of events, walks and rides can also help to raise the profile and get more people involved.

Maintenance

Although this is the last section, maintenance should be considered at the outset. Good design and construction can help to reduce long term maintenance costs, but all paths will need regular attention to keep them in good condition. The best solution is for the local authority to adopt the path as part of their highway network, although they will welcome local volunteer input in litter picking, vegetation clearance and reporting of major issues.

If the route is to be part of the National Cycle Network, Sustrans volunteers will be able to help with maintenance, both for routine tasks and occasional workdays. If there is no local volunteer group, Sustrans can help establish one and provide materials and support to get started.