Growing the cycle network in Exeter

Proposals from the Exeter Cycling Campaign

June 2020

Contents

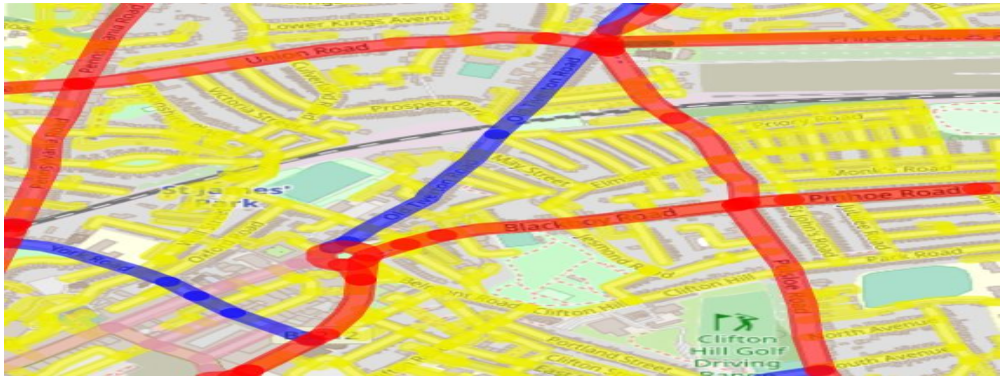
1. About this report

The Exeter Cycling Campaign are pleased to respond to Devon County Council Transport Team's invitation to make proposals for linking routes into the strategic cycle network.

The Exeter Cycling Campaign's vision is that the city is made accessible for people of all ages and abilities, using all forms of bike, to travel on safe, convenient and connected cycle paths. Significantly increasing the cycling modal share plays an important role in addressing climate breakdown, reducing pollution, alleviating congestion and making our city more liveable.

Evidence from other cities demonstrates that this modal shift can be achieved by having a dense network of cycle routes. The Campaign has previously produced an exemplar of what such a dense network should look like in the '2030 Network Plan'.

This report summarises the work from Campaign supporters across the city to identify the priority cycle links into the strategic cycle network. Building these 'linking routes' will be an important step in moving from a few strategic cycle routes to a network of cycle paths across the city.

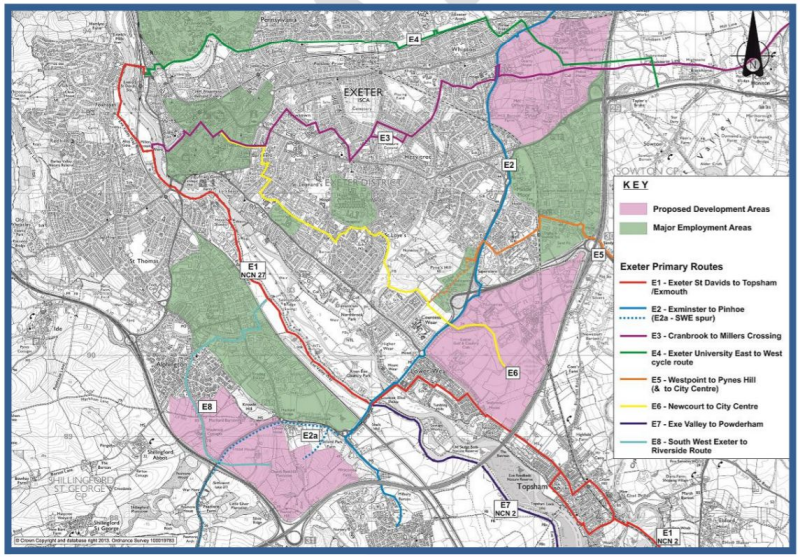


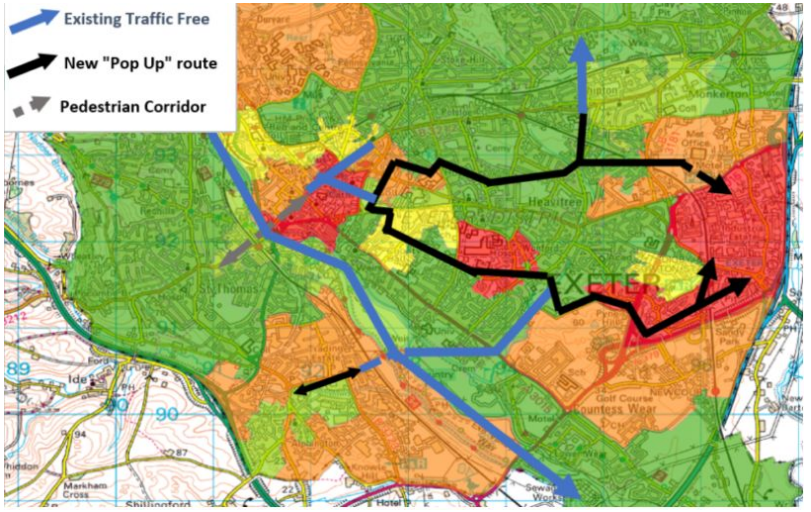
2. Context

Since the approval in 2015 of the Multi-Use Trail Strategy Devon County Council have been working to deliver the strategic cycle paths promised in this strategy. The last five years has seen phases of the E4 route rolled out from the east of the city. The planning for the E3 route is well developed.

More recently (09May20) the Department for Transport has issued statutory guidance in response to covid-19. This has created the opportunity to "*deliver a lasting transformative change*" and creates the expectation that "*local authorities [should] make significant changes to their road layouts to give more space to cyclists and pedestrians*". It also calls for these interventions to be designed properly: "*Facilities should be segregated as far as possible, i.e. with physical measures separating cyclists and other traffic. Lanes indicated by road markings only are very unlikely to be sufficient to deliver the level of change needed, especially in the longer term*"). This government guidance, with statutory backing, has created the conditions to swiftly deliver pop-up infrastructure and expedite the delivery of routes for people walking and cycling.

The routes DCC are considering as making covid-safe are outlined here.



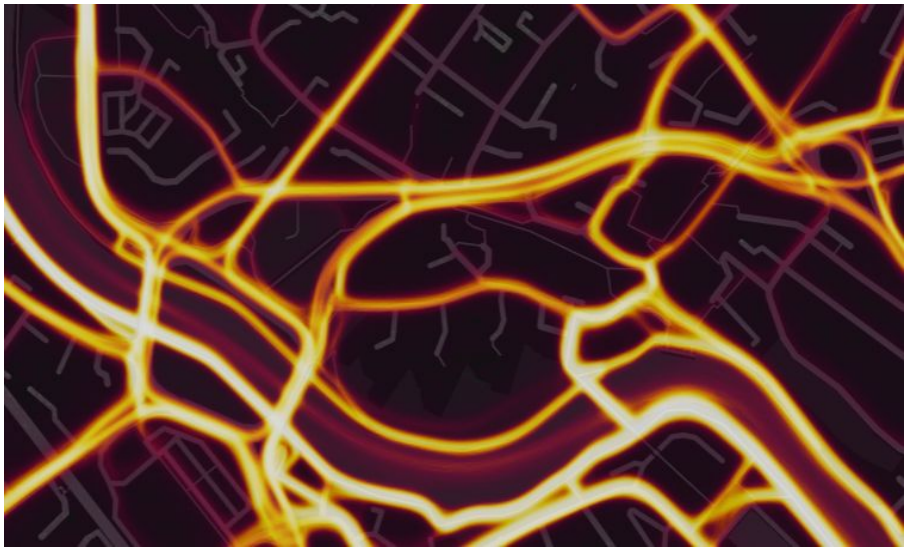


3. Methodology

Campaign volunteers identified the priority linking routes into the strategic cycle network in the following way:

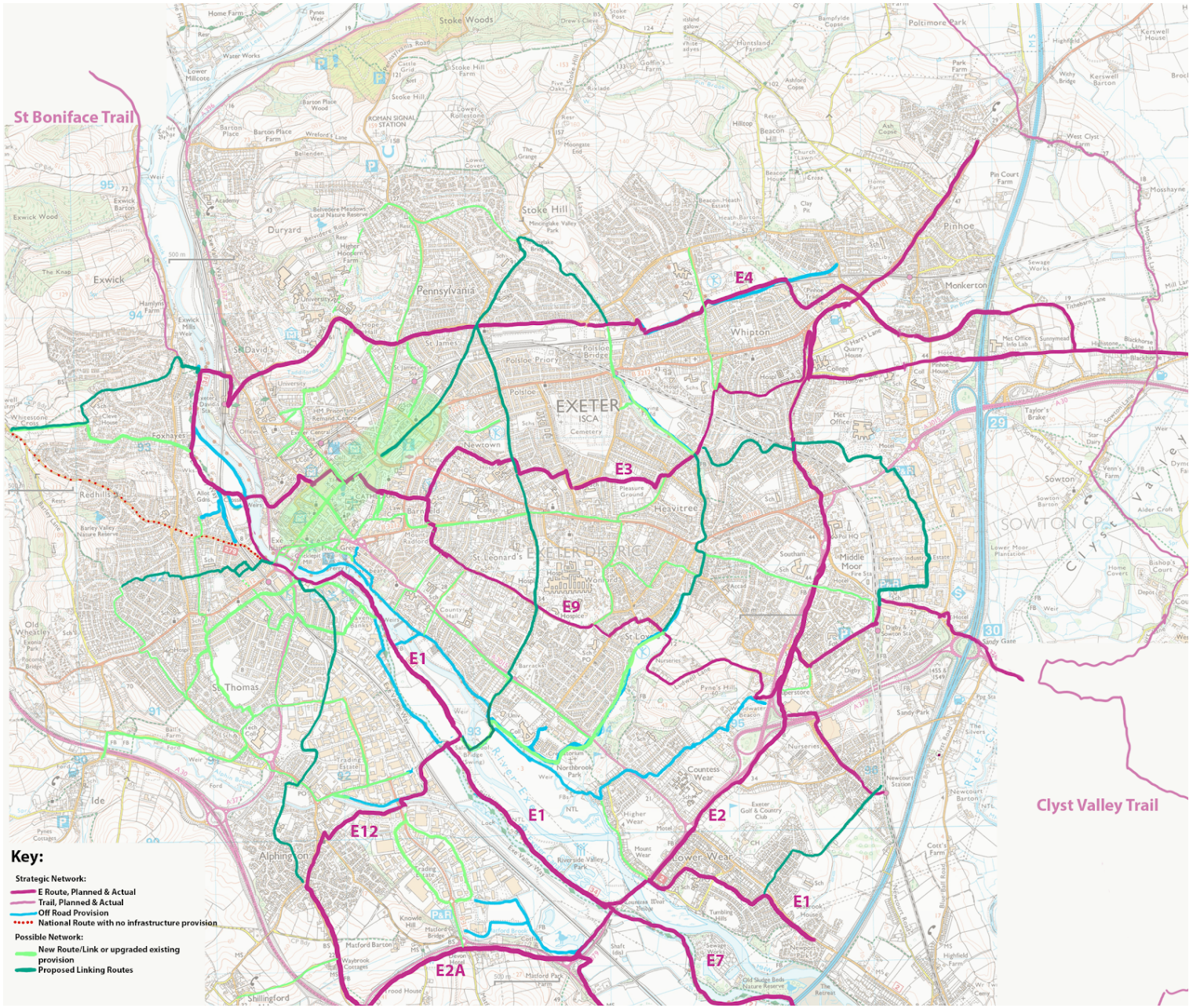
- A review of Strava heat maps to identify where people are currently cycling in the city[1].
- Using the Propensity to Cycle tool to analyse to/from locations for commuters[2].
- Review the Campaign Quick Wins report to identify links and blocks to accessing the strategic cycle network.
- Reviewing results from a recent survey of Campaign supporters about the routes they wish to make but find difficult / intimidating.
- Campaign supporters on-the-ground experience of using and linking to the strategic cycle routes.

Note that where strategic routes or named trails are already planned, we have not sought to suggest improvements to these within this document. We have worked on the basis that when complete these will offer high quality cycle infrastructure for the length of these routes.



[1] We recognise that Strava data is probably more representative of sports cyclists but does nonetheless give contemporary information of routes used, including commuters.
[2] We recognise this tool uses 2011 census data

This resulted in a network of proposed links into the strategic cycle routes (shown in green)



These links were then prioritised, with weight being given to:

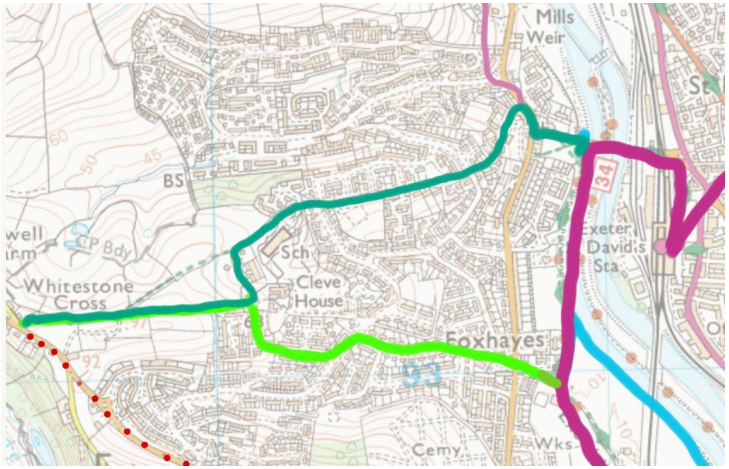
- High employment areas (Sowton, Marsh Barton and city centre)
- Key employment and educational locations (particularly the RD&E)
- Access from areas of the city poorly served by cycle paths (particularly west of the river and Alphington)
- Areas of new development (e.g. SW Exeter and Newcourt)
- Gaps in the strategic cycle network (e.g. north-to-south routes)

This identified eleven priority routes (shown in dark green) across the city which join the existing (and planned) strategic cycle routes and thereby begin to grow the cycle network.

4. Proposals

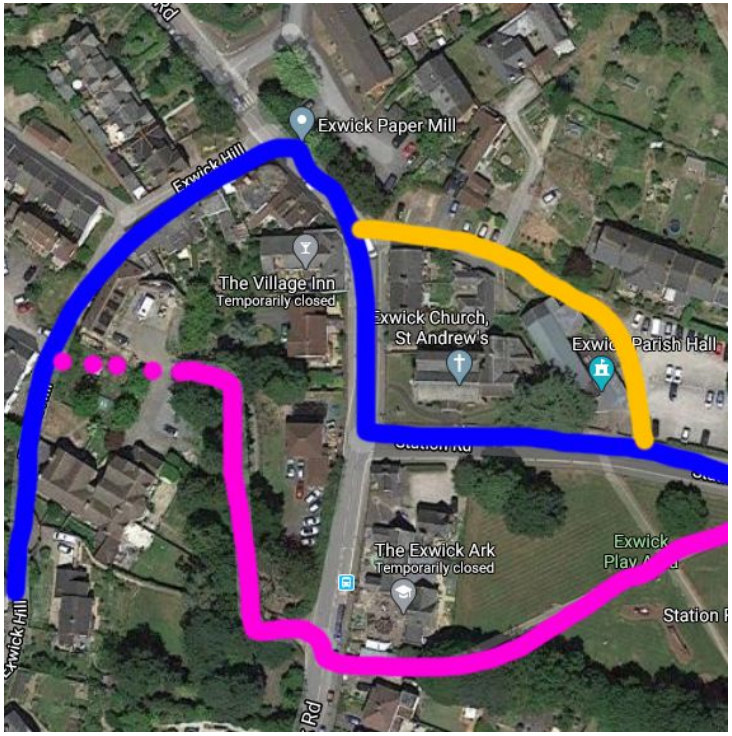
The priority linking routes are described below:

4.1 Exwick Heights Link



Strategic Purpose

Link through a residential section of Exwick, including a primary school. Provides an additional link between the national cycle route 279 and St Davids station.
Promote cycling at Exwick Heights primary school.
Link for Exwick to E1 and E4 (and St James Secondary School for which Exwick is catchment)



Modifications Suggested

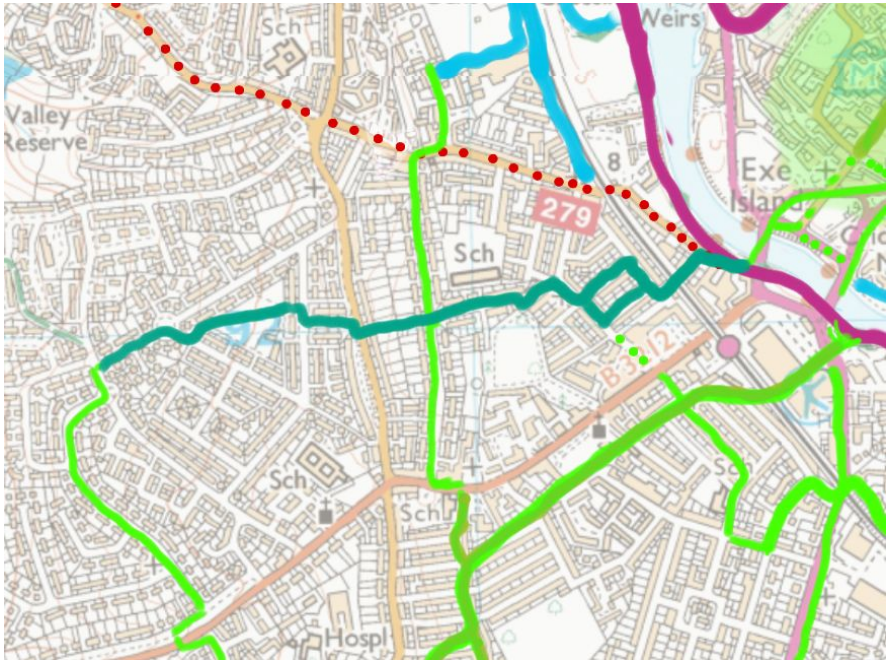
- Rework junction at Exwick Hill, Moorland Way, Knowle Drive and Higher Exwick Hill to allow easy continuation on Exwick Hill (currently a tight wiggle and no dropped kerbs/crossing provision)
- Consider closing Exwick Lane to through traffic between Peterborough Rd and Redhils to promote active transport to school from Nadderwater
- Consideration to be given to options at the bottom of Exwick Hill (see image to the right).
    - Blue - The current route on the road has a tricky right turn with minimal visibility. There is often a fair amount of traffic travelling to/from Cowley Bridge by the back road. A modal filter on St Andrew's Road could resolve this and may provide a key link for the planned St Boniface Trail.
    - Pink - An off road route providing adequate space can be provided, but would require crossing of private property. A Tiger crossing could then be added across Exwick Road.

- Yellow - Eliminates some of the main road, but still requires the tricky right turn and still requires access via private property. Links up a private road and the parish hall car park to become a bike pass through.

4.2 St Thomas (Central)

Strategic Purpose

Link the large St Thomas estate through to exe bridges.
Provides a link past Montgomery primary school to the E1 and the city centre.



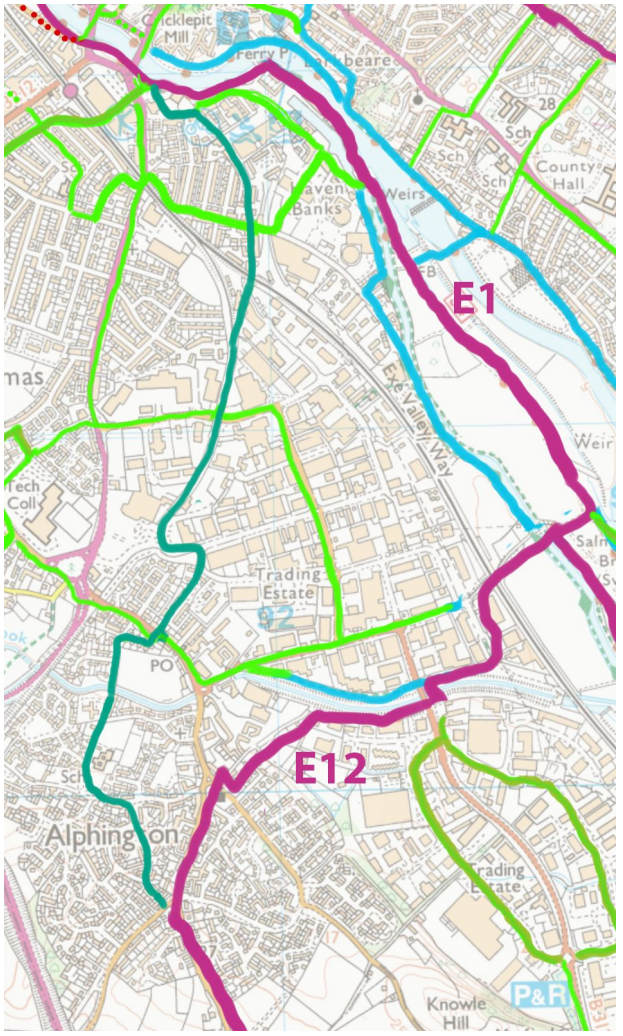
Modifications Suggested

- Link from Okehampton Place to the existing crossing at Exe Bridges (avoiding installing an additional crossing over Okehampton Road)
- Cycle lane through the non-road arch at Okehampton Place (currently bollards and blocked by parked cars)
- Split the route at Clinton / Cleveland Streets to allow one way systems to be observed. Consider making these sections Home Zone style.
- Open the central gap in the modal filter between Clarence Road and Maple Road (currently there is a gap in the planters with a bollard and raised kerbs). This would need a small no parking box on the Maple Rd side to keep access clear.
- Review the width of the bollards in the path between Wardrew Road and Buddle lane
- Consider a tiger crossing at Wardrew Rd to provide a more child-friendly crossing (this is a key link down to St Thomas Pleasure Grounds and associated play equipment)
- A crossing over Buddle Lane to link with Savile Road.
- A track over Merrivale Road Play Area with exit on to the access lane off Locarno Road

4.3 Alphington to Exe Bridges Link

Strategic Purpose

Link Alphington village through to the Exe Bridges without a detour sideways to the E1 at Clapperbrook Lane. Provides improved access to key consumer retail, leisure and employment areas of Marsh Barton.
Links in with E12 in Alphington.
Improves the infrastructure near (but not quite at) West Exe school - final link across from Sainsburys would not be difficult.
Runs directly past Alphington primary school linking it into the E12 and the new development areas.



Modifications Suggested

- Cycle link from E1 onto new infrastructure along Haven Road / Water Lane / Tan Lane
- Access from Tan lane onto old railway line siding
- Convert railway siding into raised greenway route
- Provide access to route from Marsh Barton Road
- Provide exits from railway line at:
  - Marsh Green Road West (access to Sainsburys and West Exe School)
  - Ashton Road (retail, leisure and Scout HQ)
  - Retail Park Close / Marsh Barton Road (retail, leisure and access to dance studio)
  - Woodville Road (residential and access to allotments)
  - Consider a possible spur along the existing private track to the back of The Range & Aldi
- Link from Sainsbury's to Legion Way via Marsh Green Road West and Grace Road West
- Upgrade the pedestrian crossing at Church Road (between Legion Way and Mill Lane) to accommodate cyclists
- Review bollard spacing on Mill Lane
- Cycle link through Alphington village from the primary school to the E12

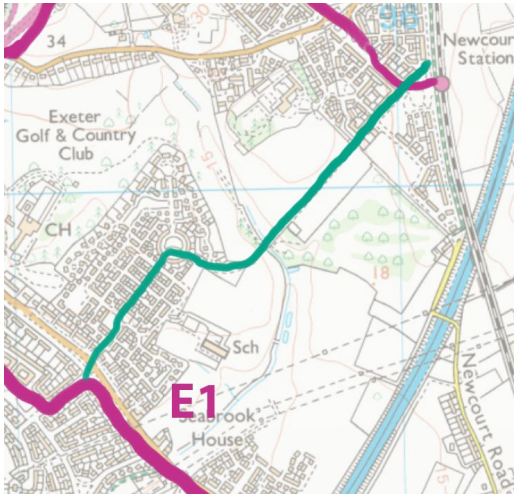
4.4 Newcourt Link

Strategic Purpose

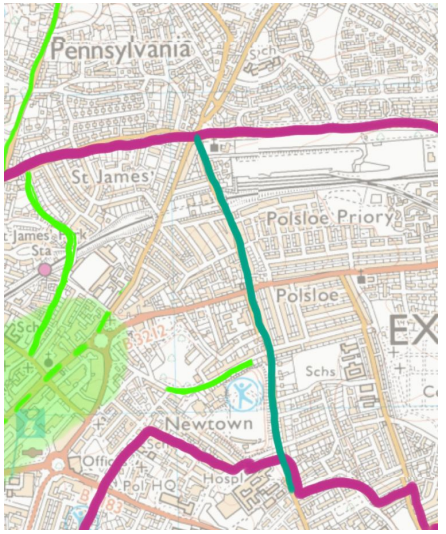
Link from Newcourt train station and Newcourt estate to the E1 river route. Provides access to Trinity School.

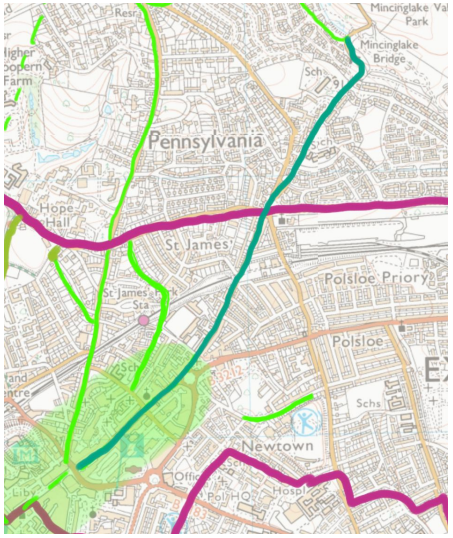
Modifications Suggested

- Footfall along Admiral Way north of Endeavour Way is possibly low enough to enable the path to be shared use.
- Consider taking the link route along Vernon Crescent past the school and widen the cut-through between Vernon Crescent and Admiral Way. Provide a safe (raised) crossing for people cycling to gain the north side of Admiral Way.
- Prevent cars being parked along Admiral Way, and especially cars parked straddling the foot/cycle way.
- Rework the junction where Admiral Way meets the service road parallel to Topsham Road to make it safe for children to cross safely (i.e. priority to pedestrians and cyclists)
- Rework the tight angles on both sides of the Topsham Road and insert a pelican crossing to make it safe for people to cross Topsham Road.



4.5 E4 to E3 Links: Mount Pleasant Road & Old Tiverton Road



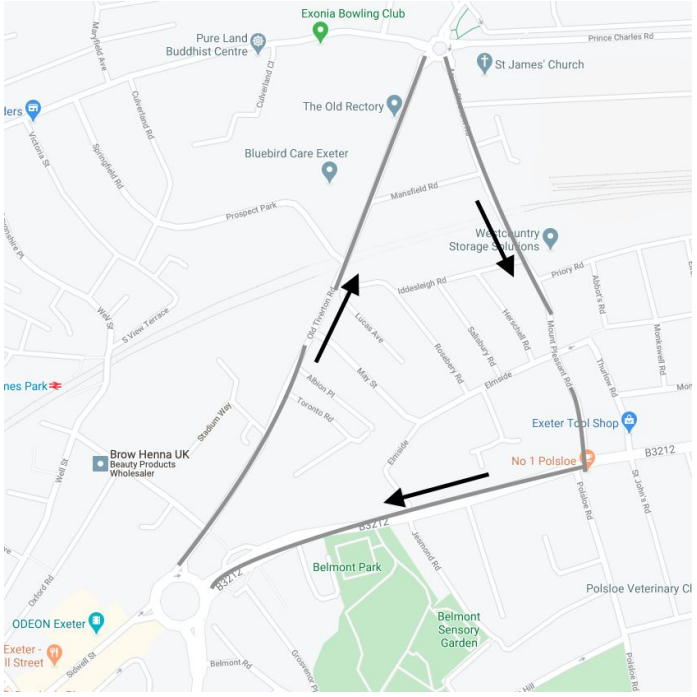


Strategic Purpose

Link from E4 into city centre and from E4 to the important proposed north-south link route.
Opens up the strong desire lines for cyclists along Old Tiverton Road and Mount Pleasant Road.

Modifications Suggested

- Introduce one way circulation around Mount Pleasant Road, Blackboy Road, Old Tiverton Road, freeing up road space.
- Add bi-directional, protected cycle path along Mount Pleasant Road and Old Tiverton Road
- Remove on street car parking on Mount Pleasant Road, Blackboy Road, Old Tiverton Road.



4.6 Mincinglake Valley Park

Strategic Purpose

Links E4 with the residential area of Stoke Hill as well as access close to Stoke Hill Pre-School and Stoke Hill Junior School.

Modifications Suggested

- Adapt entrances and exits to the park to ensure they are cycle friendly.
- Resurfacing one continuous route from one end of the park to the other with a sealed surface..
- Build upwards on the one steep gradient that is around a bend making it a less steep, but longer slope.
- A safe crossing point for cycles and pedestrians is needed on Calthorpe Road at the join to Mincinglake Valley Park.

4.7 Polsloe Road & Barrack Road Link

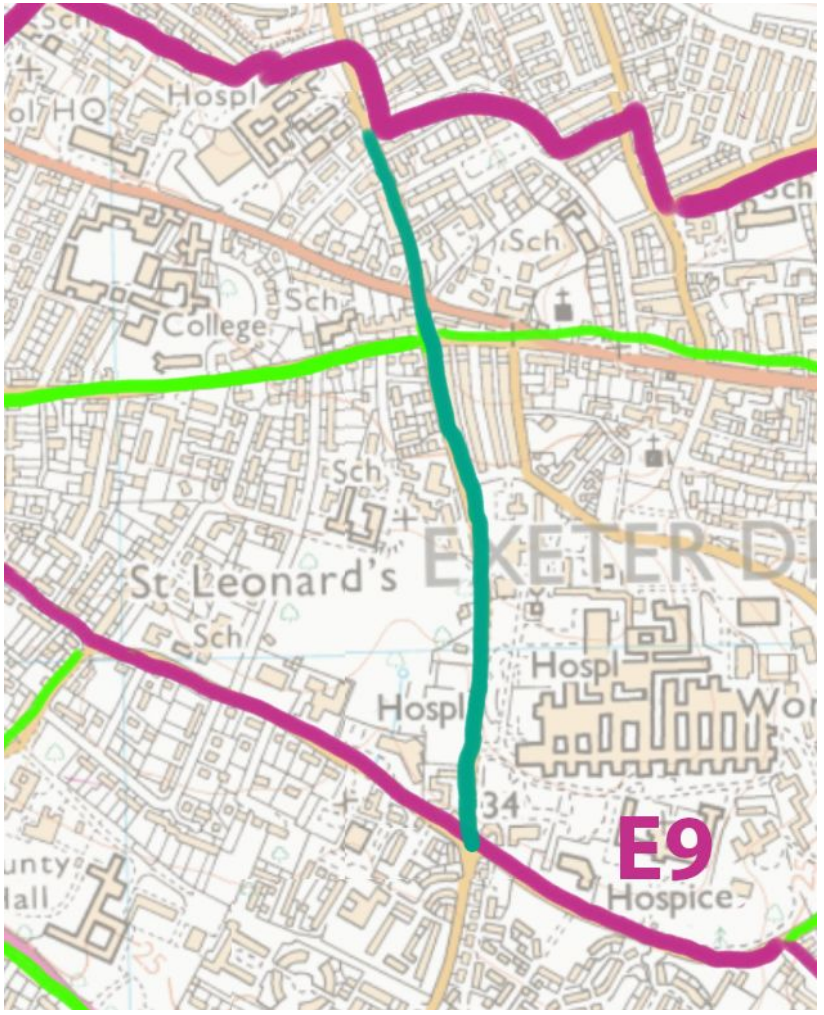
Strategic Purpose

Links the E3 & E9 strategic networks together providing part of a key North to South link. This route will link to the main site and Heavitree site of the Royal Devon and Exeter Foundation Trust (RD&E), one of the largest employers in Exeter.

This route also passes close to a number of schools and via the strategic routes this also links these key employment regions to a number of residential areas.

Modifications Suggested

- Create space for segregated, protected cycle provision by:
  - Removing on street parking along the length of Polsloe Road and Barrack Road
  - Removing the 4 x right turn lanes between Barrack Road (Wonford Road Junction and the Magdalen Road Junction)
  - Work with the RD&E to request to use some of the green space running along Barrack Road so that the footpath can be relocated, providing more space for cycle provision on Barrack Road.



4.8 Barrack Road to Canal Link

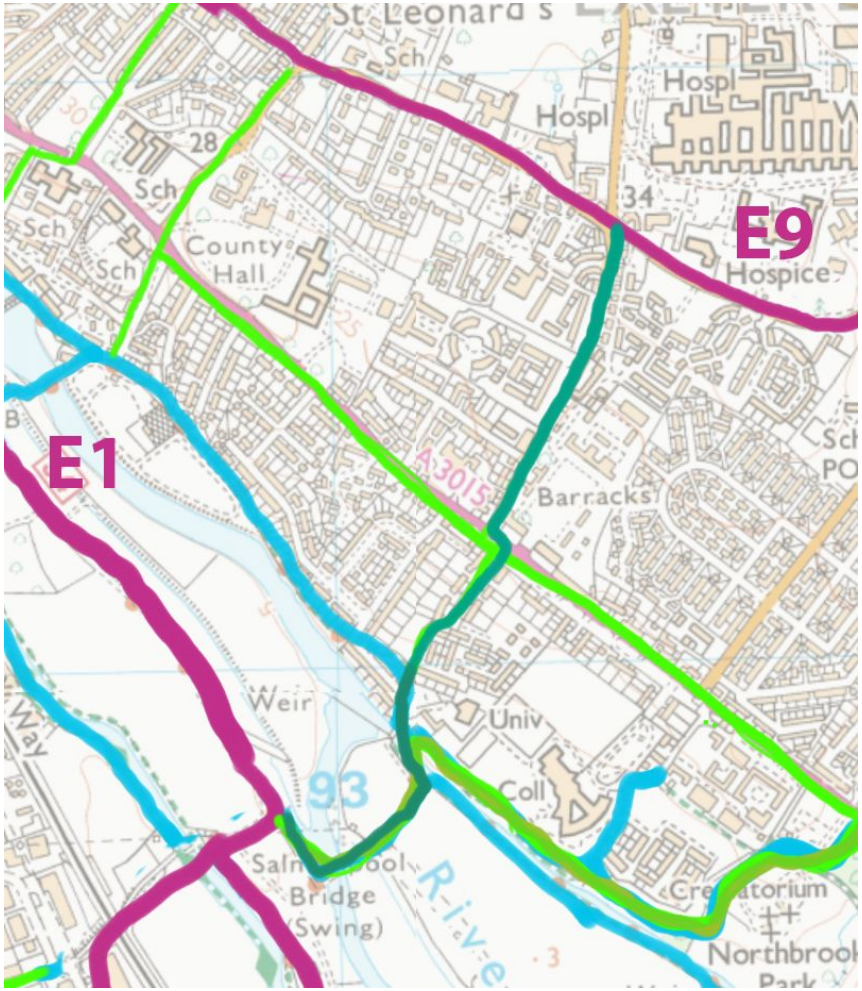
Strategic Purpose

Links the E9 & E1 strategic networks together providing part of a key North to South link. This route will link the canal part way towards the main site of the Royal Devon and Exeter Foundation Trust (RD&E), one of the largest employers in Exeter.

This route also provides a link to Isca Academy and to a number of residential areas including St Leonards and the areas already served by the E9..

Modifications Suggested

- Create space for segregated, protected cycle provision by:
  - Removing the 3 x right turn lanes between Barrack Road (Wonford Road Junction and the Topsham Road Junction)
- Consider replacing pedestrian islands with Tiger Crossings allowing cycles and pedestrians to cross the road safely.
- Where segregated lanes already exist, increase the width as much as possible and ensure they are protected from traffic.
- The Barrack Road / Topsham Road junction needs to be redesigned with cycling in mind ideally incorporating Earl Richards Road as a cycle route to the canal as this is closer to the junction and a lower gradient than Salmonpool Lane.



4.9 E9 to Sowton Industrial Estate Link

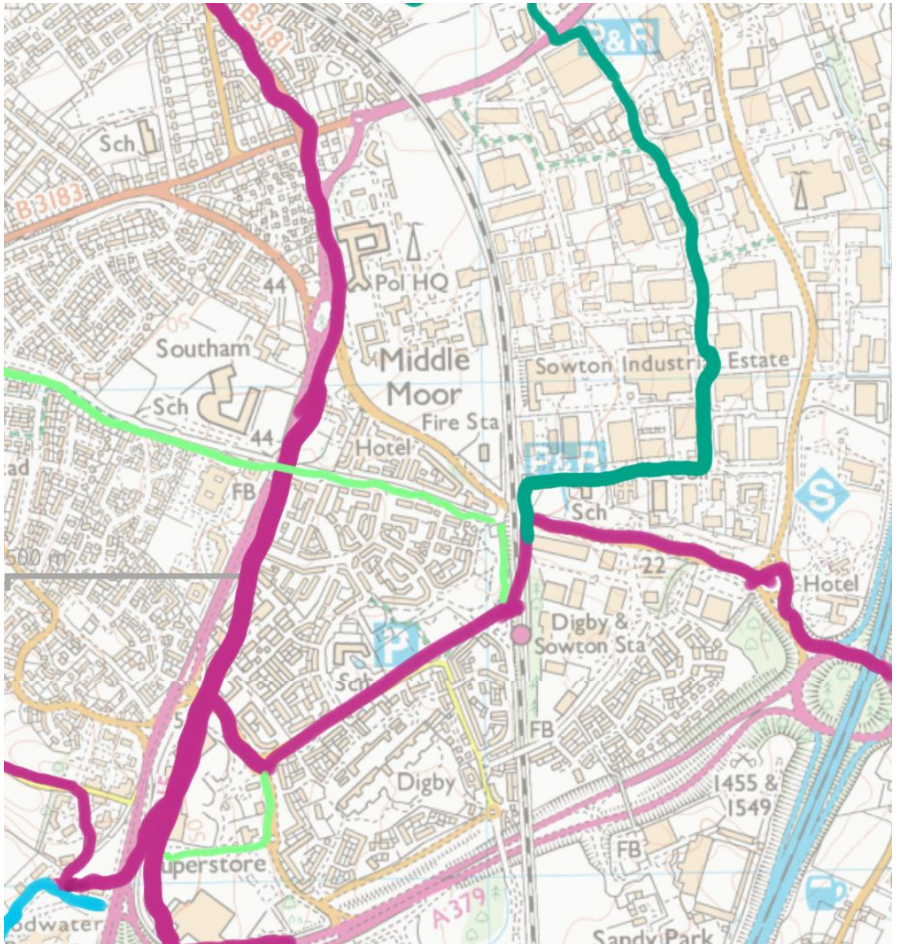
Strategic Purpose

Sowton Industrial Estate and the Met Office area have been highlighted by Devon County Council as major employment areas, equal in numbers to the city centre. The area is currently served by some cycle and pedestrian links, but is generally very car-centric.

In recent documents and press releases DCC have focused on the need to improve access for people on bikes and foot to these large areas of employment. This route links this area to the proposed E9 strategic cycle route.

The modifications suggested also provide improvements around the Tesco superstore off Rydon Lane, better access to Digby and Sowton railway station and improved access for cycles to both Sowton and Honiton Road park and ride sites. This is important during the Covid-19 period of social distancing, when fewer people will be able to travel by bus. Providing better cycle links from the Park and Ride car parks encourages those people to continue using them, and to cycle to their final destination.

The first part of this link is in pink on the map as it was previously labelled as the E5 but no recent references to this could be found.



Modifications suggested:

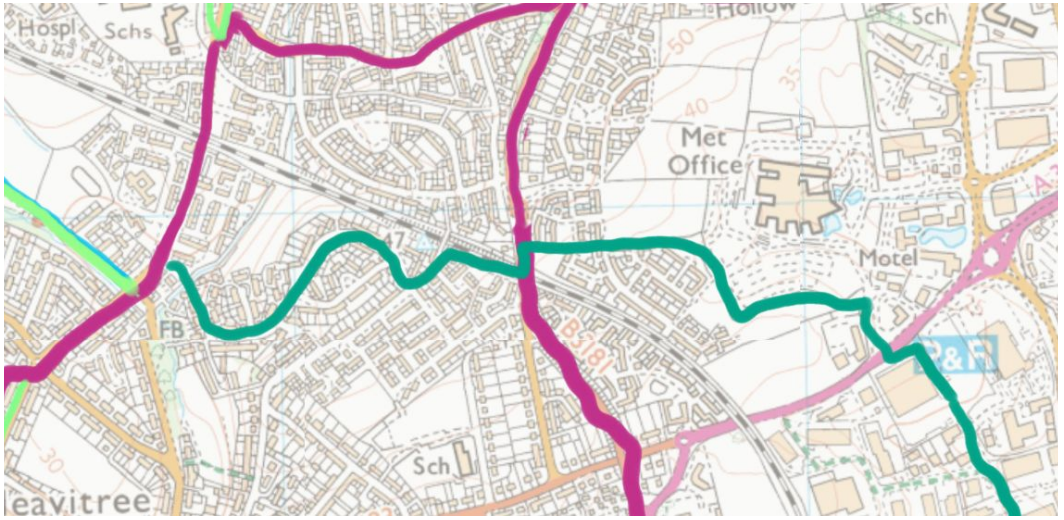
- Dividing line on shared path from zebra crossing at KFC to end of path along Digby Drive. Whilst we are not fans of painted on solutions, a dividing line on a shared path does give guidance to everyone, helping people navigate the shared space. This is important here where there is a blind corner creating a potential conflict.

- Move cycle/foot crossing to be in desire line across Etonhurst Close. The existing side road priority is good, but the current design takes cyclists and pedestrians out of their desire line and includes a blind corner on a shared path. Straighten this out, and add a raised table to make this crossing much more cycle and pedestrian friendly.
- Convert advisory cycle lanes both sides of Kestral Way/Bittern Road to mandatory lanes protected by wands, and extend full length of industrial estate. This road is frequently used by HGVs and cyclists need their own dedicated space. The advisory lanes show the width is there, however they are frequently ignored, especially around the traffic islands, creating a dangerous interaction. Parking is also currently permitted in the cycle lanes, creating dangerous obstacles for people on bikes.
- Remove traffic islands along Kestral Way – they create dangerous pinch points. Convert to zebra crossings to improve crossings for pedestrians
- Remove on street parking on Pynes Hill between Ludwell Lane and Rydon Lane.
- Straighten out approach towards the cycle crossing on Rydon Lane. Currently cyclists are expected to make a sharp left onto a shared path, and then there are two traffic light phases to take them across Rydon Lane. Straighten out this approach to avoid the need to use the shared path and you also remove the first traffic light phase.
- Remove barriers at entrance to cycle path on the west side of Russell Way at the zebra crossing. These overlapping barriers are very difficult for cyclists to negotiate and prevent access for non-standard bikes.

4.10 E3 to Sowton Industrial Estate

Strategic Purpose

Sowton Industrial Estate and the Met Office area have been highlighted by Devon County Council as major employment areas, equal in numbers to the city centre. The area is currently served by some cycle and pedestrian links, but is generally very car-centric. In recent documents and press releases DCC have focused on the need to improve access for people on bikes and foot to these large areas of employment. This route brings people into the area from the west and the proposed E3 strategic cycle route.



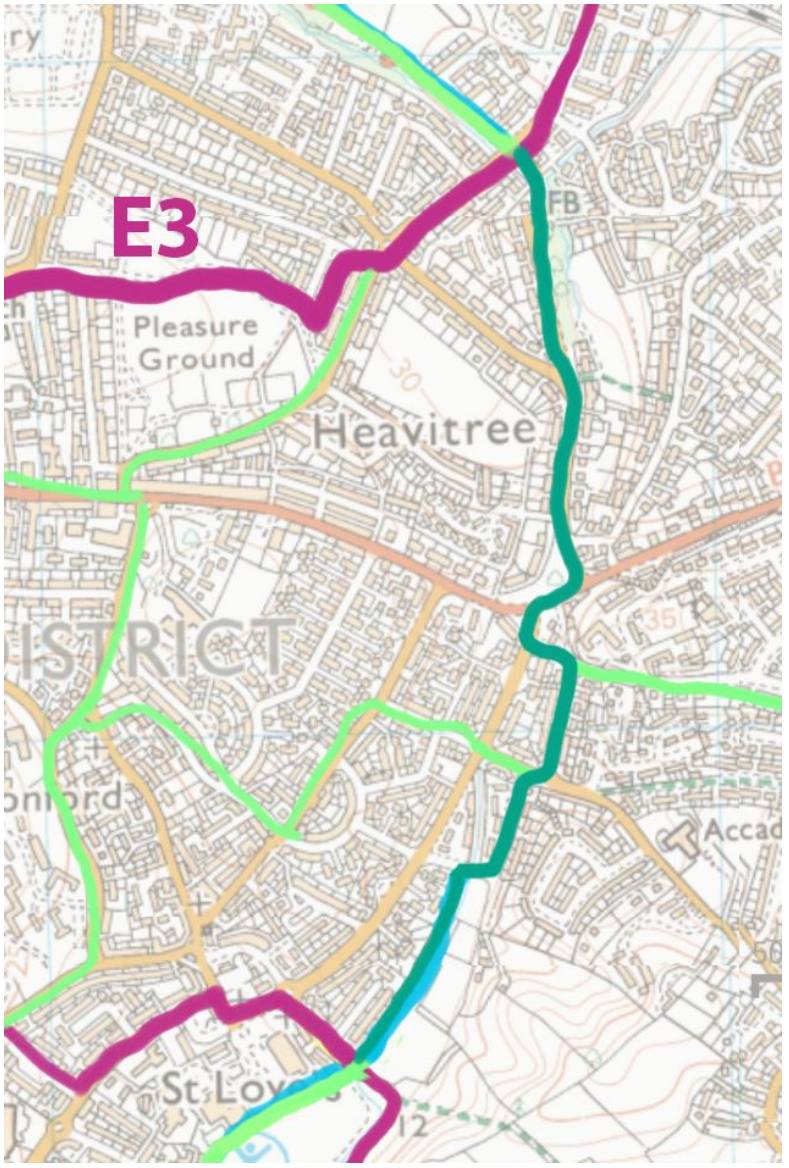
Modifications suggested:

- Dividing line on shared path Honiton Road from zebra crossing to Fitzroy Road at crossing to get on to path heading west. We don't necessarily like painted on solutions, but a painted strip along shared paths makes it clear where each mode should be. It helps people navigate the shared space. There used to be a line here, you can see the scar where it has been removed. This is important in this area where there is a bus stop and a blind corner, both increasing the chances of conflict.
- Offset dropped kerbs at Fitzroy Road crossing to continue desire line from path to shared path. The current layout requires two 90° turns. Offsetting the dropped kerbs maintains the desire line across this road.
- Dividing line on shared path east side of Hill Barton Road to Birchy Barton Hill. We don't necessarily like painted on solutions, but a painted strip along shared paths makes it clear where each mode should be. Lots of pedestrian traffic on this section, so it is important to be clear. Bollards on this section could be removed as the lane is not wide enough for motor traffic and this would allow non-standard bycicles and mobility scooters better access.
- Modal filter Thornpark Rise. Prevent travel between Whipton Lane and Hill Barton Road. Reduces Traffic on this section. Placing the modal filter at Bramley Avenue avoids interference with existing bus routes.

4.11 E3 to E9 Through Heavitree

Strategic Purpose

The current proposed strategic routes do not provide for north-south travel around the city. This link joins the E3 & E9 strategic routes through a dense residential neighbourhood. It also links in Heavitree Road – a major arterial route and runs close to St Peters School, Lidl and the RD&E.



Modifications suggested:

- Modal filter on the northern ends of Vaughan Road and Sweetbriar Lane where they join Whipton Road. This prevents these roads being used as a route between Heavitree Road and Pinhoe Road, which currently creates large amounts of traffic.
- Advance Stop Line for cycles at lights at southern end of Sweetbriar Lane.
- Convert advisory bike lanes to mandatory and install wands both sides of Heavitree Road between Sweetbriar Lane and Vaughan Road. This intersection is a major obstacle in the route between E3 and E9. Heavitree Road is very busy. It is appropriate people on bikes have dedicated highway space, even over this short section. The advisory lanes exist, so the space is there. Alternatively give cycles a dedicated phase at the lights to make the journey through this intersection. Permit bikes ahead of cars in all directions i.e. Sweetbriar Lane, Heavitree Road and Rifford Road lights would all be green for bikes at the same time.
- Remove on street parking at western end of Quarry Lane.
- Convert advisory cycle lane on Quarry Lane to mandatory and protect with wands. This will create a link to St Peters School.
- At the northern end of Rifford Road convert the central hatched area into a mandatory cycle lane with wands on the right hand side to provide access for cyclists turning right out of Quarry Lane to reach the advance stop line at the end of Rifford Road.

- Modal filter at the Quarry Lane end of Heath Road. A busy rat run for people avoiding the lights at the end of Rifford Road. Close this route off and keep cars on Rifford Road to create a quiet street for cycles. This modal filter also reduces traffic on Quarry Lane, Woodwater Lane and Broadfield Road which all suffer from rat running.
- At Woodwater Lane access to Ludwell Playing Fields remove gate and concrete block and replacewith bollards. The current access is difficult for bikes and probably impossible for cargo bikes or bikes with trailers. Replacing them with removable bollards keeps the park access secure to vehicles, but provides the appropriate space for cycles.
- Widen and re-pave path running between Woodwater Lane and Ludwell Lane. The path here is not 3m wide, and is formed from rough asphalt. Widening will allow sufficient space for it to be used as a shared path. Re-paving will make the experience much nicer.
- With the removal of through traffic on Ludwell Lane consider expanding the green spaces to create a pocket park to replace the road (roughly sketched below) removing the need for any modal filters at the junction and removing the need for the gates at the current entrances.
- If the above is not possible then instead remove gates on either side of this road and replace with bollards, permitting access for non-standard bikes.

5. Conclusions

These priority linking routes are the Campaign's views of the most important interventions to build the cycle network to link in areas of employment, education and new build estates.

Opening up the proposed priority linking routes to and between the strategic cycle routes begins to build the 'network' of routes for people to cycle safely in the city.

These will build towards delivering the Campaign's vision of a city made accessible for people of all ages and abilities to travel on safe, convenient and connected cycle paths. Significantly increasing the cycling modal share in this way plays an important part in addressing climate breakdown, reducing pollution, alleviating congestion and making our city more liveable.