

Background map provided by Openstreetmap

This report has been produced by Letchworth Cyclists. Letchworth Cyclists are a group of active local cyclists, with representatives from the town's cycling groups, who are working towards making Letchworth a cycling town. Transition Town Letchworth coordinates the group's activities (www.transitionletchworth.org/letchworth-cyclists, email: ttletchworth@gmail.com or tel: 01462601903).

Introduction

In June 2017 Letchworth Cyclists produced a Letchworth Garden City Cycle Network Proposal. At this time the town had a few short sections of disjointed cycle tracks and council plans existed to make a limited number of additions. With few cycle plans coming to fruition over the years, the car is now the predominant mode of transport in the town. Cyclists either brave the roads or use the pavements (illegal under the present legislation and a danger to pedestrians) and cycling rates are low.

The 2017 Letchworth Garden City Cycle Network Proposal was shared with all the relevant bodies, but with transport planning processes being driven top down it has only been possible to get the odd scheme incorporated into transport plans. The concept that the town should be working towards a comprehensive cycle network, like those that can be found in Dutch towns, has yet to be recognised.

With the Covid19 lockdown and renewed interest in cycling Letchworth Cyclists have revisited the original cycle network proposal with the aim of:

- Presenting the network proposal as a set of schemes that could be delivered in a piecemeal way.
- Re-viewing if the original cycle network proposal could be delivered more cost effectively by reorganising road space rather than building off-road cycle tracks.
- Adding in schemes that help pedestrians to navigate busy roads (so the plan could be adopted as North Herts District Councils Cycle and Walking Strategy for Letchworth, avoiding the need to fund any more reports and using the money saved to start implementing the network).

Finding Space for Cycling on Challenging Roads

On major roads where two lanes of traffic can flow, without obstruction, there is often insufficient spare road or pavement space for cycling, so schemes have been proposed which introduce one-way systems to release a carriageway lane for cycling.

On Letchworth's narrow residential roads (predominantly in older areas of the town) roads are effectively single lane due to on-street parking and there would be no benefit from introducing a one-way system. However, on a number of these streets it has been identified that careful siting of bollards (or plant boxes) could remove through traffic and quieten the road for cycling. This option appears particularly useful on school routes, where it is hoped it will help discourage dropping of children at the school gate.

On the 'core' road network, where cyclists have to compete with heavy and fast traffic, the plan has proposals for segregated cycle tracks and lanes. The plan includes the use of reinforced mesh with grass planted in it so that cycle tracks can be introduced on grass verges without any detriment to the green street scene or damage to tree roots. Provision of segregated cycle tracks and lanes, avoids the need for cyclists having to share space with pedestrians, making the pavements a pleasanter environment to walk.

Where possible we have aligned the cycle network to cross busy roads at the same place where pedestrian crossings already exist. The existing crossing then only needs to be adapted to support cyclists as well as pedestrians (pelican to toucan, zebra to parallel (Tiger) crossing).

Letchworth is fortunate to have plenty of green space and paths. Fortuitously, some of these are around roundabouts in the proposed cycle network and these roundabouts can be easily changed to 'Dutch' roundabouts by the addition of a cycle track and parallel (Tiger) crossings.

The glossary to this document provides more detail on solutions in the proposed cycle network.

Methodology

Cyclists have been surveyed and observed in order to identify the on-road and off-road routes and tracks they are using. For example, on Norton Way North cyclists are often observed utilising the pavements by the railway bridge suggesting that a cycle track is required in this location (railway crossing points are

limited, forcing vehicles, cycles and pedestrians to converge at the crossing points). At the south end of the Jackman's Estate, tracks on the grass verge are already marking out the extension required to the existing Greenway cycle track.

Considering how and why people need to get from one location to another has been a critical part of designing the network and its scheme. The group considered the routes from housing areas to schools, work and leisure areas and then used this information in the design of the cycle network across the town.

Whilst concentrating on the routes within the town, connections to neighbouring towns cycle routes have also been incorporated into the cycle network.

Where changes have been required to the road network, minimising disruption for vehicle accessibility has been a factor in deciding on a cycle route solution. However, the expectation is that for many residents, the benefit of an improved cycling route from their property will outweigh any vehicle accessibility issues.

Schemes

This report describes the methodology, glossary definitions and implementation plan for a set of schemes that can be delivered in stages, but once completed would provide a full cycle network across Letchworth. The detailed scheme information can be accessed either:

- 1. Online in an Openstreet map (which can be accessed from the webpage transitionletchworth.org/letchworth-cyclists). Detailed descriptions can be obtained by clicking on each of the 'peardrops'. This is a good option if you wish to zoom in and view the map alongside the detailed description.
- 2. Through a partner document entitled "The Community Plan for a Letchworth Cycling and Walking Network Plan The Schemes" which provides the detailed description of schemes grouped by areas of the town. Each scheme element has been given a priority (levels 1 to 4), with level 1 being the highest priority. The priority has been assigned based on the assessment of how the change proposed will influence people's willingness to cycle; the expected level of utilisation of the cycle route; and the importance of the scheme in providing a connected network. The schemes ID is displayed in bold if it includes changes aimed at improving walking routes.

Implementation

Letchworth Cyclists would like NHDC to adopt this community led vision for Letchworth's Cycling and Walking Network (improving or adapting the proposed schemes if consultation processes elicit a better solution or if changes are necessary to adhere to national guidelines).

Once adopted as the towns cycling and walking plan a phased implementation should then be undertaken each time funding can be secured, starting with priority 1 schemes. Additionally, whenever road or pavement maintenance is carried out around the town, the list of schemes should be reviewed to see if any of them can be implemented as part of the proposed work as this will reduce costs. Lastly, if there are opportunities to deliver connections in the cycle network through the provision of cycle tracks in some of the planned new housing estates, the estate plans should incorporate these cycle tracks so they can be implemented as part of the development.

This phased implementation will help with tight authority budgets but time will need to be given for the schemes to prove their success. Until a good percentage of the cycle schemes are in place the cycle take-up will be slow and the expectations from the first third of the implementation of the schemes need to be low and realistic. Once there are a good number of schemes in place people will be able to see the vision and will then start to change their mode of transport.

Several schemes recorded in the cycling plan have notes to cut back overgrown hedges so that some of the pavement space is recovered. Overgrown vegetation and tree roots are a current problem on the verges

and pavements and have been neglected in the past. Routine cutting back of vegetation and maintenance of hedges to ensure visibility, space and safety will be an important element of the walking and cycling network.

Benefits of Adopting the Letchworth Garden City Cycling and Walking Network

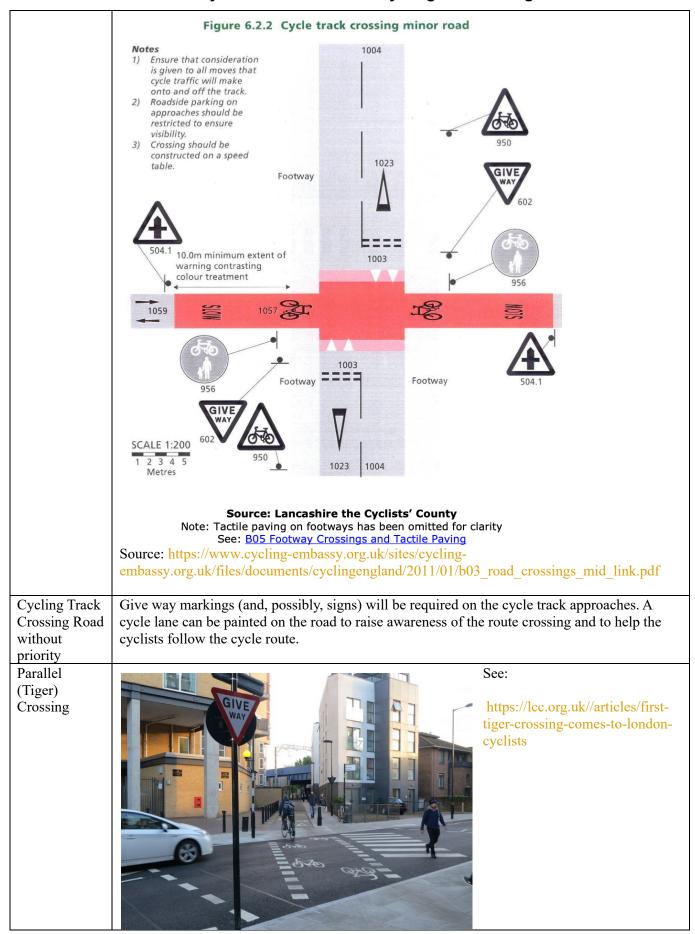
It is critical for both the environment and public health that solutions are put in place to support people to switch from motor vehicles to cycling, walking and public transport. The recent COVID19 crisis has shown that when safe opportunities exist to cycle, people will choose to cycle. So, provision of a public cycle network that is safe and easy to use will stimulate a natural shift by people to a cleaner and healthier transport network.

Appendix A: The Glossary

Cycle Lane	Refers to a marked space for cyclists on a road but has no physical segregation from other traffic. The preferred width is 2m but should be at least 1.5m. ¹ It will have priority over side roads.		
Segregated Cycle Lane	Refers to a marked space for cyclists on a road which has physical segregation from other traffic. The preferred width is 2m but should be at least 1.5m. It will have priority over side roads.		
Cycle Track	Refers to off road space for cycling, separated from pedestrians and other traffic. If the track has priority over any roads it crosses it can be marked on the road. It will generally have priority over minor junctions. Width required depends on traffic flow (High – 2.5m, Medium, 2.2m and Low 1.5m) and if its two-way then the widths increase (High – 4m, Medium, 3m and Low 2m) ¹ .		
Shared pedestrian-cycle path	A space which can be used by both pedestrians and cyclists but not by other vehicles. To help maintain slower cycling speeds on shared paths they will not generally have priority at junctions.		
Dutch Roundabout	How it works Parallel pedestrian and cycle crossing Additional give-way marking to reinforce presence of crossing QUEEN EDITH'S WAY ROUNDABOUT		
	Vehicle overrun CYCLIST FENDON ROAD Source: The Times, 16 June 2018. Soa https://www.youtube.com/youtub2v=EP5148_h5Eo		
Cycling Track Crossing Road with priority	See https://www.youtube.com/watch?v=FR5148_h5Eo A cycle lane can have priority on a 20mph road where it is on a flat top hump. Cyclist priority junction on flat-topped road hump, Thetford Picture: Rob Marshall		

¹ Source: Waltham Forest Mini-Holland Design Guide

Draft - version 2 – October 2020



Reinforced grass Cycle Track Option for existing Grass Verges Interlocking plastic grids laid on top of a type 1 (or similar) base. The plastic grids are typically around 1 foot square in size, and are connected to each other like puzzle pieces. Some products are made from 100% recycled plastic. The grid sections are then filled with soil and seeded. In locations where ground conditions prevent excavation for the subbase, such as over tree roots, the path may need to be constructed on the existing ground surface. Interlocking plastic grids are laid on top of the existing ground and are filled with Type 1 subbase; the path is then finished with a base course and porous wearing course. This solution is suitable for short sections of path where the path needs to blend in completely with nature but there is already provision for regular cutting. Heavy or turning vehicles can cause damage, so the cycle track may need protecting from vehicles.

Benefits include:

- Grass surface can be maintained.
- Reinforced grass surfaces are permeable.
- The path adapts very well to ground undulations.
- The finished surface allows trafficking by light vehicles.
- This surface can work in areas that are prone to flooding.
- Above ground, no dig, construction avoids tree root severance or soil compaction, which can
 be seriously detrimental to tree health. The three dimensional cellular confinement system
 distributes the vertical load on the sub soil and protects tree roots. Only surface vegetation
 need be removed.

Suppliers / brands

- "Netpave" has been successfully used by Sustrans for some paths along beaches.
- CellWeb marketed by Geosynthetics Ltd has been used on the Cheshunt Connect2 scheme
- Terram Geocell System is an alternative no dig system.
- Not all products are well suited to forming bends in the path alignment.

Costs

Approx £20 / m2 on NCN 7 southwest of Glasgow (material and labour)



NCN 7 in Lochwinnoch

Grass surface in Leighton Linslade

Source: Cycle Path Surface Options, Technical Information Note No. 8, Sustrans, January 2012

Appendix B: Improvements / Rerouting of Bus Routes

The Cycling and Walking Network plan includes a proposal to redesign the area outside the train station into a Bus station. This would remedy the current 'chaotic' situation where bus stops are scattered in surrounding roads, making it challenging for those unfamiliar with the local buses to find the correct bus stop. Town Centre stops A, B, D and G should be relocated into the Bus Station (and possibly C and H). Stop E will be lost due to the one-way system. A stop could be placed outside Discover Letchworth (closer to Morrisons exit and entrance) replacing Stop H and Plinston Bus Stop.

Listed below are Letchworth bus routes along with an impact assessment from road changes identified in the proposed cycle network:

53: Circular round Letchworth – Town Centre, Wilbury, Westbury and Lordship Estates Will be affected by Bridge Road proposal. Could be diverted via Norton Way North.

<u>55: Letchworth to Stevenage – Town Centre, Grange, Industrial Estate, Jackmans</u> Not affected by proposals.

97: Hitchin to Stotfold/Arlesey - Westbury, Town Centre, Wilbury
Will be affected by Bridge Road proposal. Could be diverted via Norton Way North.

98: Hitchin to Baldock - Westbury, Town Centre, Industrial Estate (Third Avenue)
Will be affected by the Station Road proposal but could use same Town Centre loop as Bus 55.

90: Letchworth to Ashwell and Morden/Royston – Town Centre, Industrial Estate (Pixmore Avenue and Third Avenue)

Will be affected by the Station Road proposal but could use same Town Centre loop as Bus 55.

91: Letchworth to Royston via Baldock and Newnham – Town Centre, Industrial Estate (Pixmore Avenue)

Will be affected by the Station Road proposal but could use same Town Centre loop as Bus 55.

386: Hitchin to Bishops Stortford – Town Centre

Will be affected by the Station Road proposal but could use same Town Centre loop as Bus 55.

Consideration could be given to rerouting via Norton Way South and removing the bus stops from Pixmore Way leaving more space for cycle tracks as these bus stops appear only to support 4 buses a day.

W7: Letchworth to Arlesey and beyond – Town Centre, Industrial Estate (Third Avenue) Will be affected by Bridge Road proposal. Could be diverted via Norton Way North.

Appendix C: Walking Routes

Providing a comprehensive cycle network will improve pedestrians experience as cyclists should have their own space and no longer have to encroach on pedestrian pavements. In addition, this plan includes a number of enhancements to the existing walking network.

Crossing Points

There are a number of roads in Letchworth which pedestrians have identified as hazardous and can take a significant time to cross at peak traffic times. Many of these roads are on popular walking routes, including school routes. To ensure walking is a pleasant and safe experience Letchworth's Cycling and Walking Network Plan addresses problem pedestrian road crossing points. Introduction of 20mph speed restrictions on a number of roads will give rise to safer pedestrian road crossings (e.g. TE3a, TE5b). Other remedial actions proposed include the introduction of a pedestrian crossing, preventing on-road parking where it reduces visibility, providing islands out into the road or in the middle of the road to improve visibility and crossing opportunities and redesigning road space to simplify traffic movements where pedestrians are crossing.

Locations where the plan includes road crossing improvements for pedestrians are:

cations where the plan includes road crossing improvements for pedestrians are:	C -1
Location	Scheme
St Paul's Roundabout	TE1
Crossing Norton Way North to Norton Common / Outdoor Pool	TE5a
Pixmore School	TE6
Eastcheap and Leys Avenue High Streets	TC3b
Pixmore Way where it links to Gernon Way	TC5b
Across Norton Way South (at Station Road end of Howard Gardens)	TE4d
Onto Broadway Gardens	TW5
Across Broadway by Sollershott Roundabout	TW3
Across Pixmore Way near the Nexus	TC5c
Across Bridge Road,	TW7b
Across Icknield Road by Quadrant,	TW9b
Bedford Road / Icknield Way intersection	TW11a
Across Highfield by Highfield and St Thomas More Schools	WE5b
Across A505 at Greenway Crossings	WE7b
Spring Road by West View	WE9c
Wilbury School Rear Entrance	WY5
Bedford Road by St Thomas Church	WY6b
Norton Road by Eastholm	Gla
Southfields on the Grange	G4b
Wilbury Road by Standalone Farm	G9b
Norton Road to St Nicholas School	NE1b
Hillshott School	NE6
Pixmore Avenue by Ridge Road	NE8a
Leisure Centre	IN1c
Avenue one by Second Avenue	IN2b
Crossing Green Lane by Works Road	IN5b
Works Road by Dunham Lane	IN5c
Green Lane / Icknield Way Intersection	IN7b
By Lordship Farm School	L1c, L4b, L7d
Baldock Lane in Willian Village	L2a
Willian Way/A505/Norton Way South intersection (diagonal path marked)	L4b
Baldock Lane by the A505	L11c
Radburn Way by By Kings Community Church	J7b

Footpath Improvements

Along with regular maintenance to repair uneven pavements the council should seek to achieve the following footpath improvements whenever carriageway repairs are undertaken:

- Ensuring street lighting illuminates paths (not just roads).
- Widening paths so they can be used safely by those with pushchairs or wheelchairs (e.g. on Souberie Avenue and the north side pavement of the A505 near Briar Patch Lane)

Opening Up More Direct Walking Routes

The following proposed improvements facilitate more direct walking routes:

- Northern access into the Railway Station (TW8a)
- Extending the Norton Common East West path to reach the outdoor swimming pool (TW10b)
- Adding links from the Greenway to the Leisure Centre (IN10e, J1b).
- Providing access to Highfield School from the Greenway (WE6)
- Removal of unnecessary barriers on Croft Lane which restrict pram / mobility scooter access. (NE5b)
- Replacing steps with ramps to open routes up to those with prams / mobility scooters. (NE8b, IN1b, J5b)

The following additional improvements would facilitate more direct walking routes:

- Reducing the time that the Garden Square Shopping Centre and the Arcade are locked up.
- Redesigning the Railway Station so the bridge within the station can become a walking / cycling route connecting the North and South of Letchworth (moving the ticket gates to the platforms).
- Providing a walking route through the centre of the industrial estate from Dunham Lane (opposite the connecting path to Pixmore Avenue) through to Jubilee Road.

Appendix D: Feedback from Organisations with Interest and Expertise in Promoting Cycling

A bold and audacious plan for cycle lanes everywhere! Transition Network

"As a club we would like to wish you all the very best with your proposal and personally I think that any scheme to encourage younger cyclists more safely into the enjoyment of the sport and generally encourage a healthier lifestyle is a very positive step forward"

Freedom Tri Club

"We are pleased to hear that Letchworth Cyclists are championing safer cycling in North Hertfordshire to encourage healthier lifestyles, improve air quality, and support local residents to make more sustainable travel choices. Waltham Forest Council has experience in introducing walking and cycling infrastructure though the Enjoy Waltham Forest programme over the past six years and would be happy to provide insight and share best practice if required."

Waltham Forest Council

"The aims of the Community Plan for Letchworth Cycling and Walking Report aligns well with the current work on sustainable transport in the Smart Mobility Unit (SMU) at the University. The work of the Smart Mobility Unit promotes joint research and collaboration with community based projects local authorities/government bodies, also interacts with independent organisations such as yourselves.

Based on the concepts and level of detail in the report the SMU would consider using this work as part of a future Letchworth based project for student learning and projects. We wish you luck in obtaining approval of your report accepted by the relevant authorities and for initiatives outlined within it to be implemented over time to the benefit of the local community."

Dr Scott Copsey, Director of Smart Mobility Unit. University of Hertfordshire

We sell and maintain bicycles to many people in Hertfordshire, giving them advice and listening to their comments on safe cycling. The report aims are fully in-line with those that we promote. We wish you success with your ideas and hope that you can move them forward.

Trisports. 48 Station Rd, Letchworth Garden City SG6 3BE