

Chichester City LCWIP

Appendix B

Cycling audit & route assessments



June 2020



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1. Introduction

To assess how safe and convenient it is to cycle around Chichester, a desk-based study was carried out to assess the level of cycling skills needed to use the highway network. This was followed up by a number of site visits to confirm the desk research and investigate crossing points on the network.

The process was based on Transport Initiatives' Cycle Skills Network Audit, scaled back for speed and cost-effectiveness (omitting an area-wide assessment of paths and cycle tracks). Detailed plans of the audit are given below, followed by assessments of the identified routes.

Family cycling, South Street



NCN 2 path between Chichester station and Chichester College



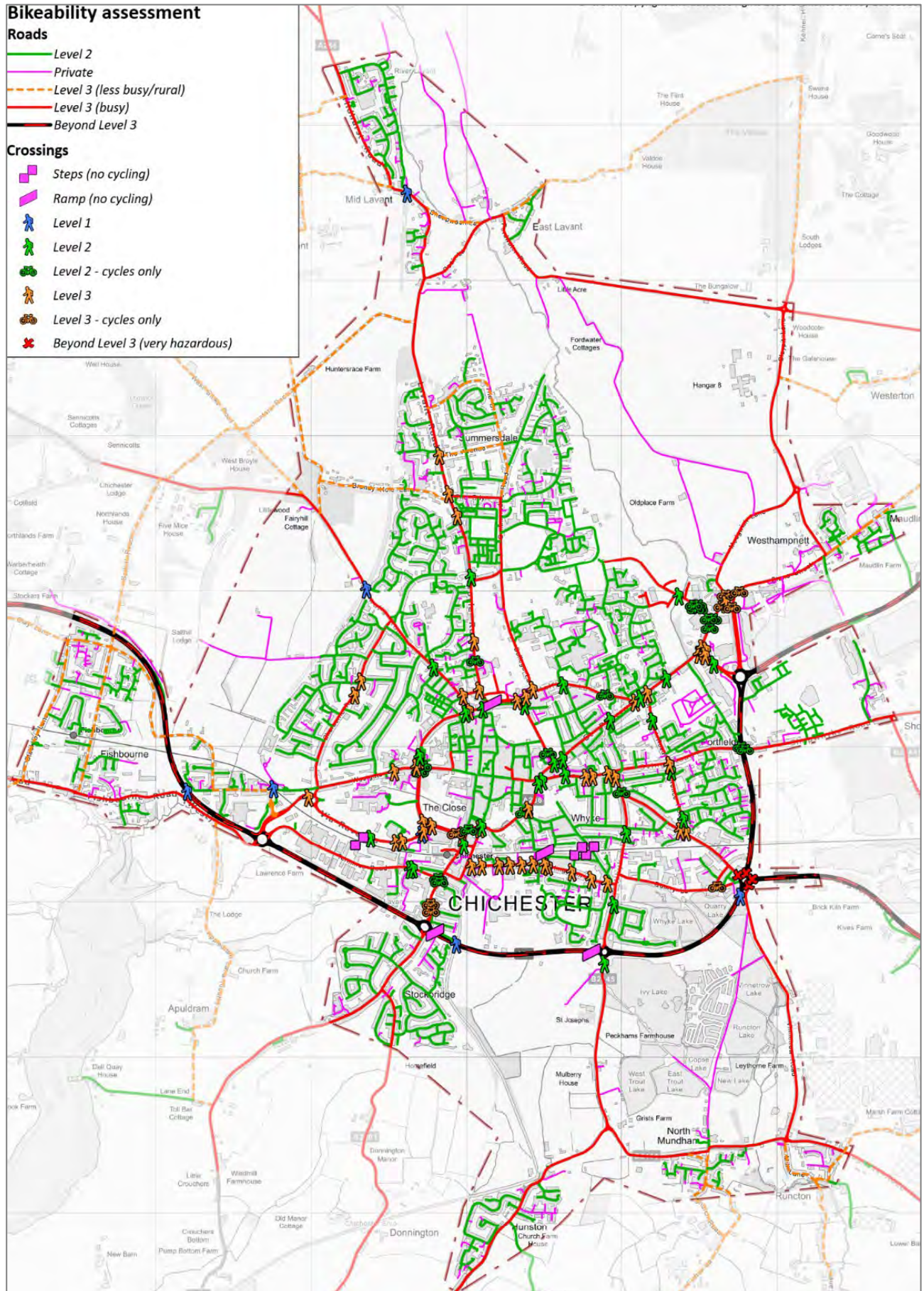
2. Cycle audit plans

Table 1 sets out the Bikeability assessment levels used in the following plans.

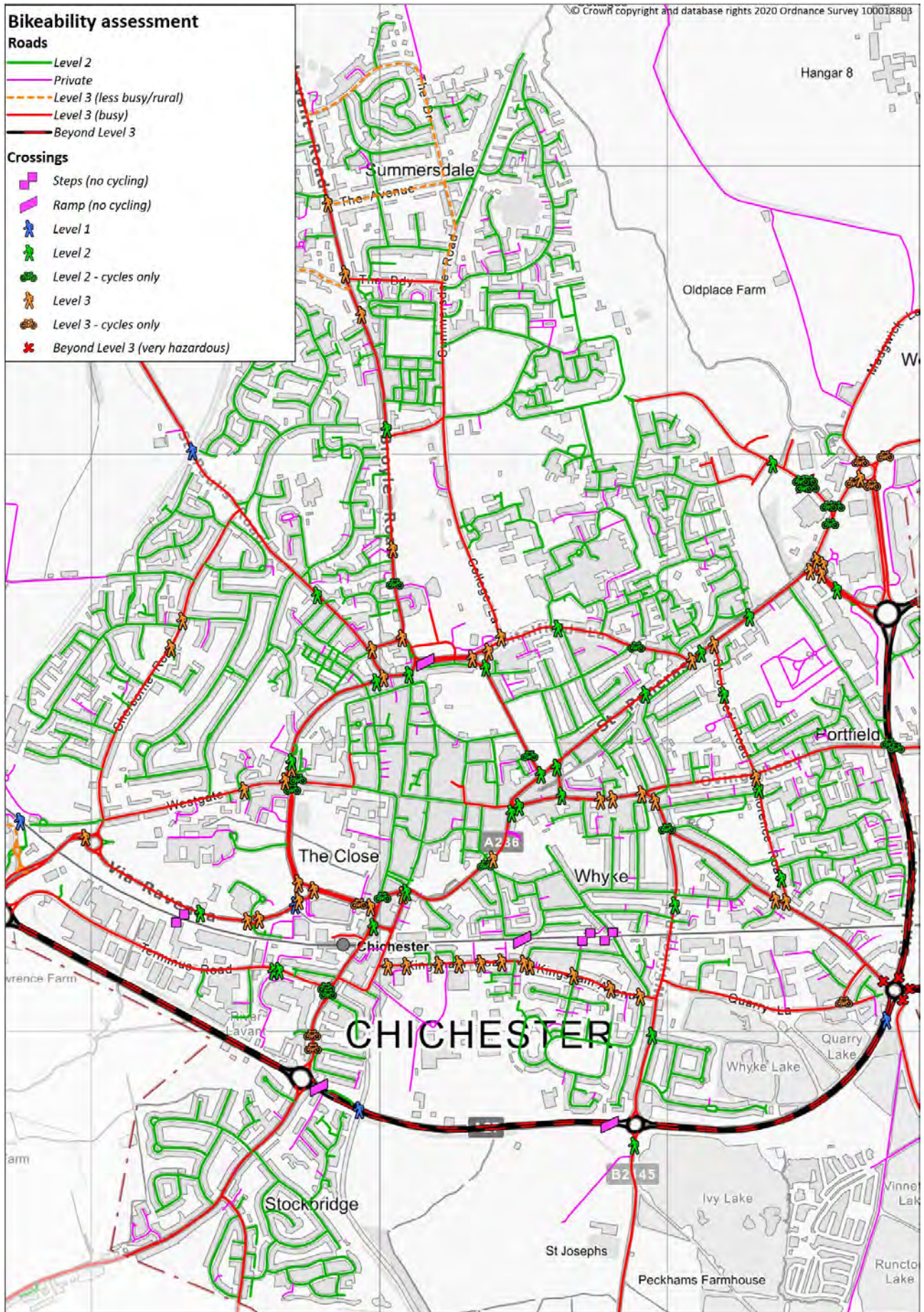
Table 1: Bikeability assessment audit levels

Level	Type	Description
Level 2	Road	Residential or other quiet street, suitable for most people cycling including older children (i.e. with skills equivalent to Level 2 Bikeability)
Private	Road	Private street – access may be allowed at some times (generally similar to Level 2)
Level 3 (less busy/ rural)	Road	Busier road in urban areas (e.g. rat run) or minor road in rural areas with lower traffic but high speeds, generally only suitable for less risk averse cyclists
Level 3 (busy)	Road	Busy road only suitable for less risk averse cyclists (i.e. with skills equivalent to Level 3 Bikeability)
Beyond Level 3	Road	Very busy road with fast moving traffic, unsuitable even for experienced cyclists (e.g. A27)
Steps	Crossing	Grade-separated crossing (bridge or subway) with steps
Ramp	Crossing	Grade-separated crossing with ramp but cycling prohibited
Level 1	Crossing	Grade-separated crossing with ramp with cycling allowed
Level 2	Crossing	Higher quality/protected crossing – walking only
Level 2 – cycles	Crossing	Higher quality/protected crossing – walking & cycling (or cycling-only)
Level 2	Crossing	Lower quality/unprotected crossing – walking only
Level 2 – cycles	Crossing	Lower quality/unprotected crossing – walking & cycling (or cycling-only)
Beyond Level 3	Crossing	Very hazardous crossing for any user

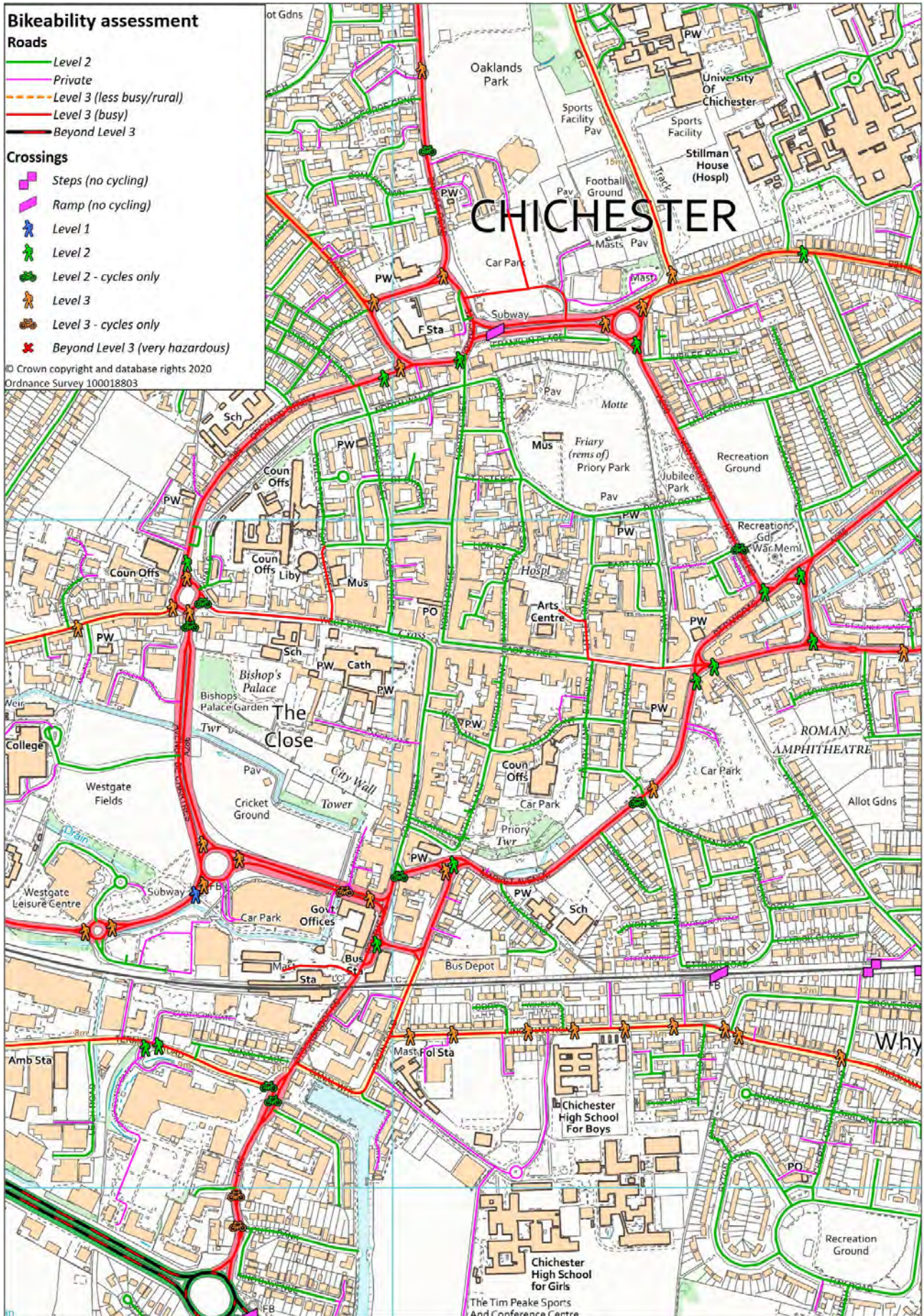
Plan 1: Bikeability assessment of roads and crossings in the LCWIP area



Plan 2: Bikeability assessment of roads and crossings in the Chichester city area



Plan 3: Bikeability assessment of roads and crossings in Chichester city centre

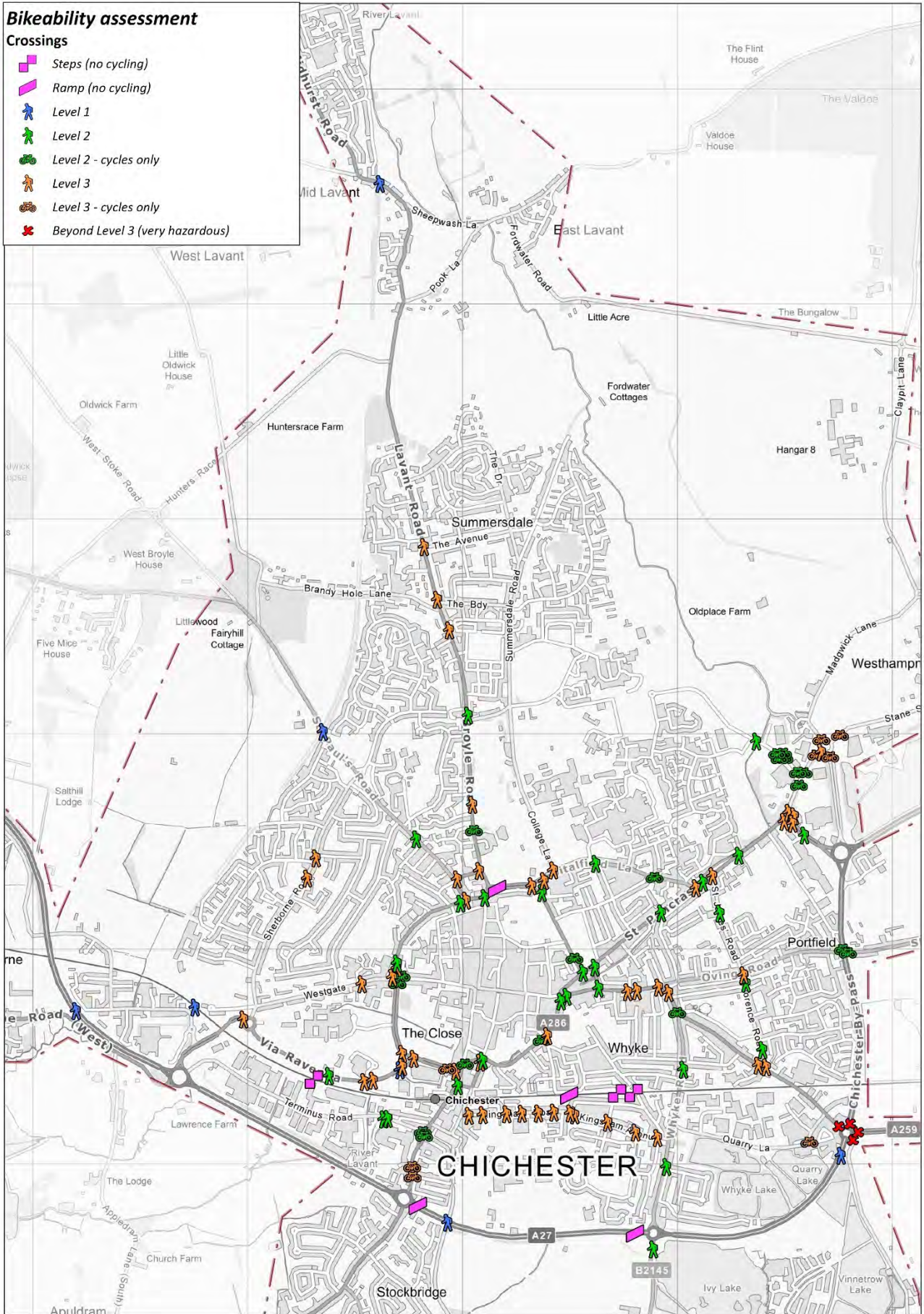


Plan 4. Crossings

Bikeability assessment

Crossings

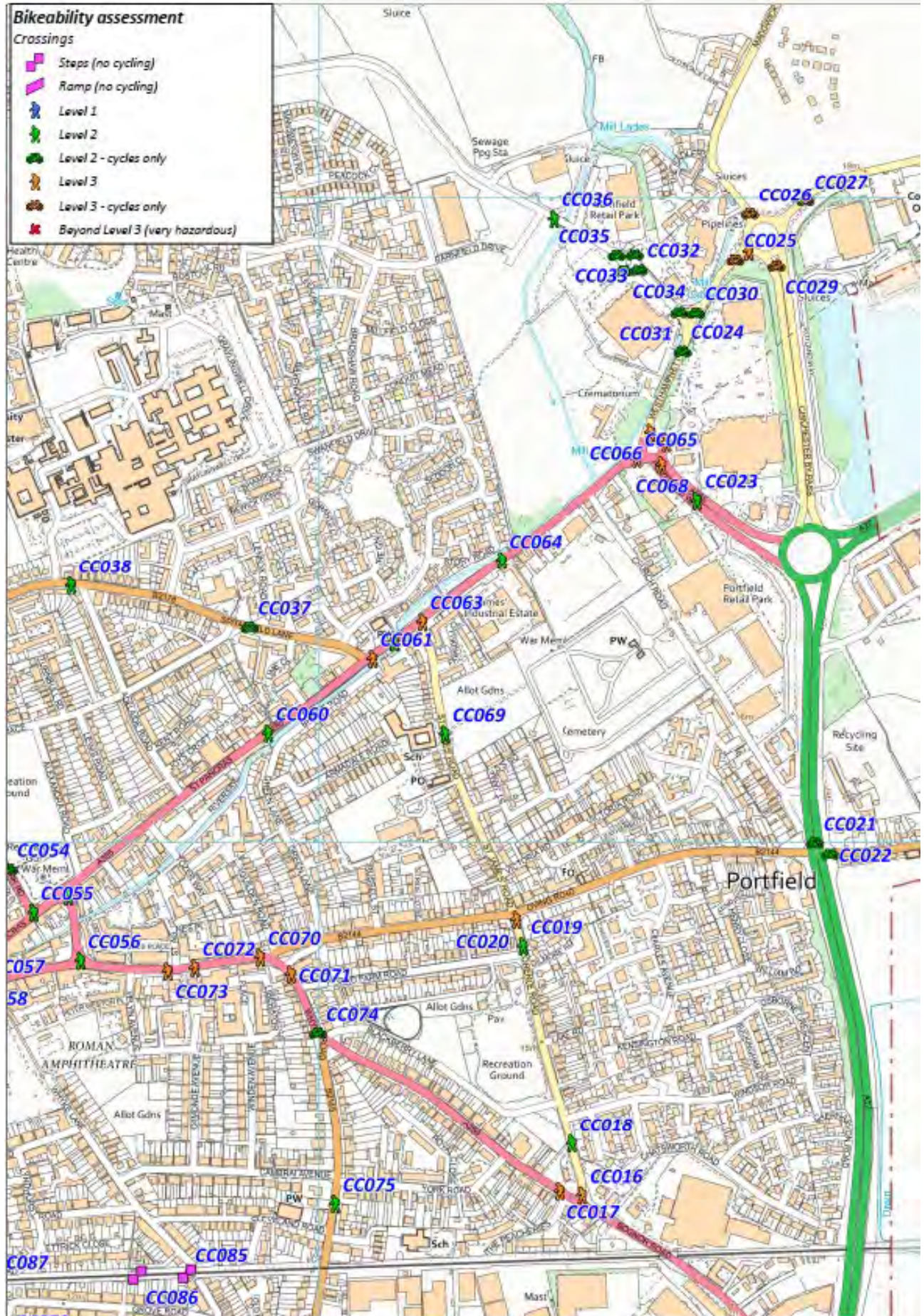
- Steps (no cycling)
- Ramp (no cycling)
- Level 1
- Level 2
- Level 2 - cycles only
- Level 3
- Level 3 - cycles only
- Beyond Level 3 (very hazardous)



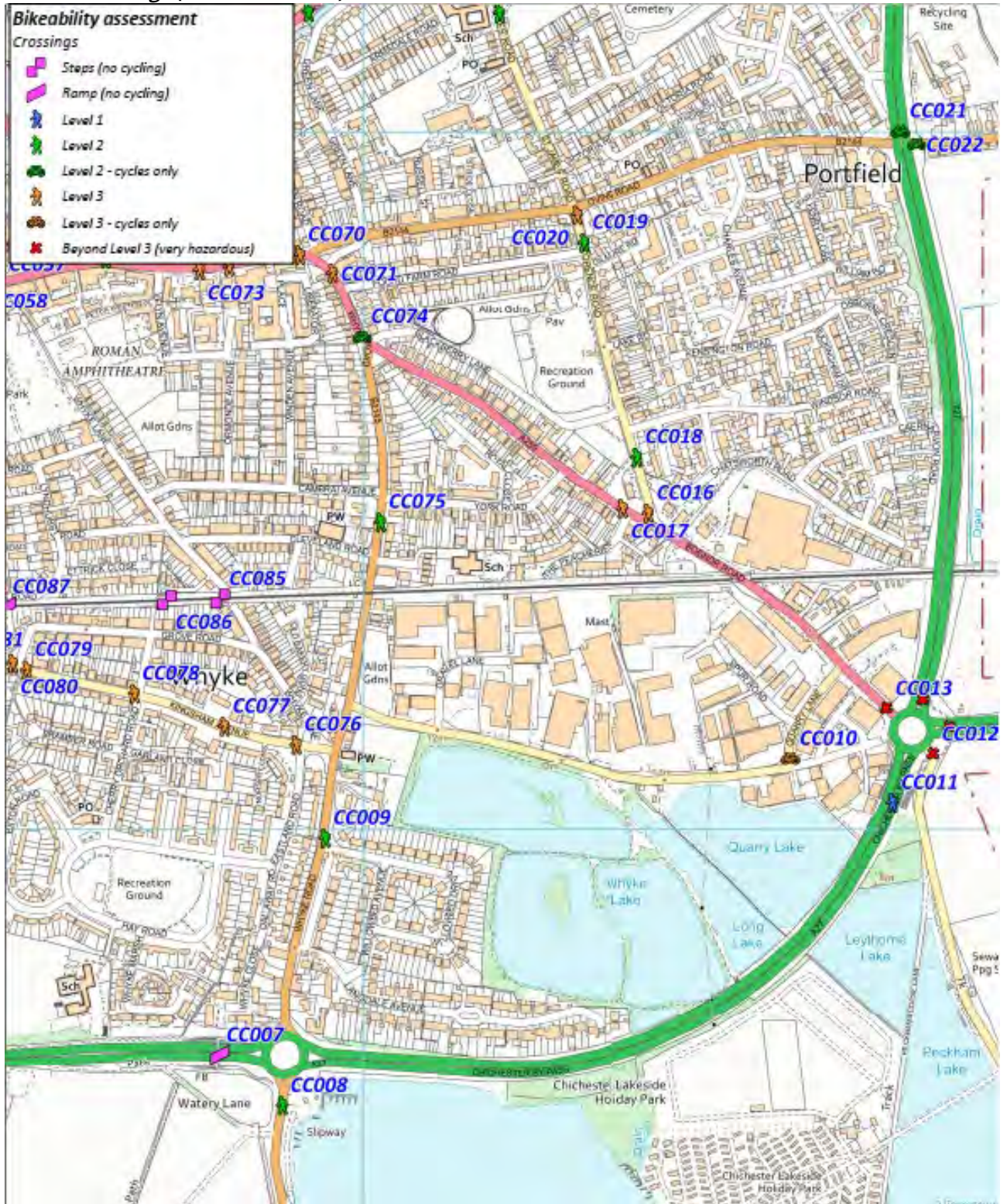
Plan 5. Crossings (north-west area)



Plan 6. Crossings (north-east area)



Plan 7. Crossings (south-east area)



Plan 8. Crossings (south-west area)

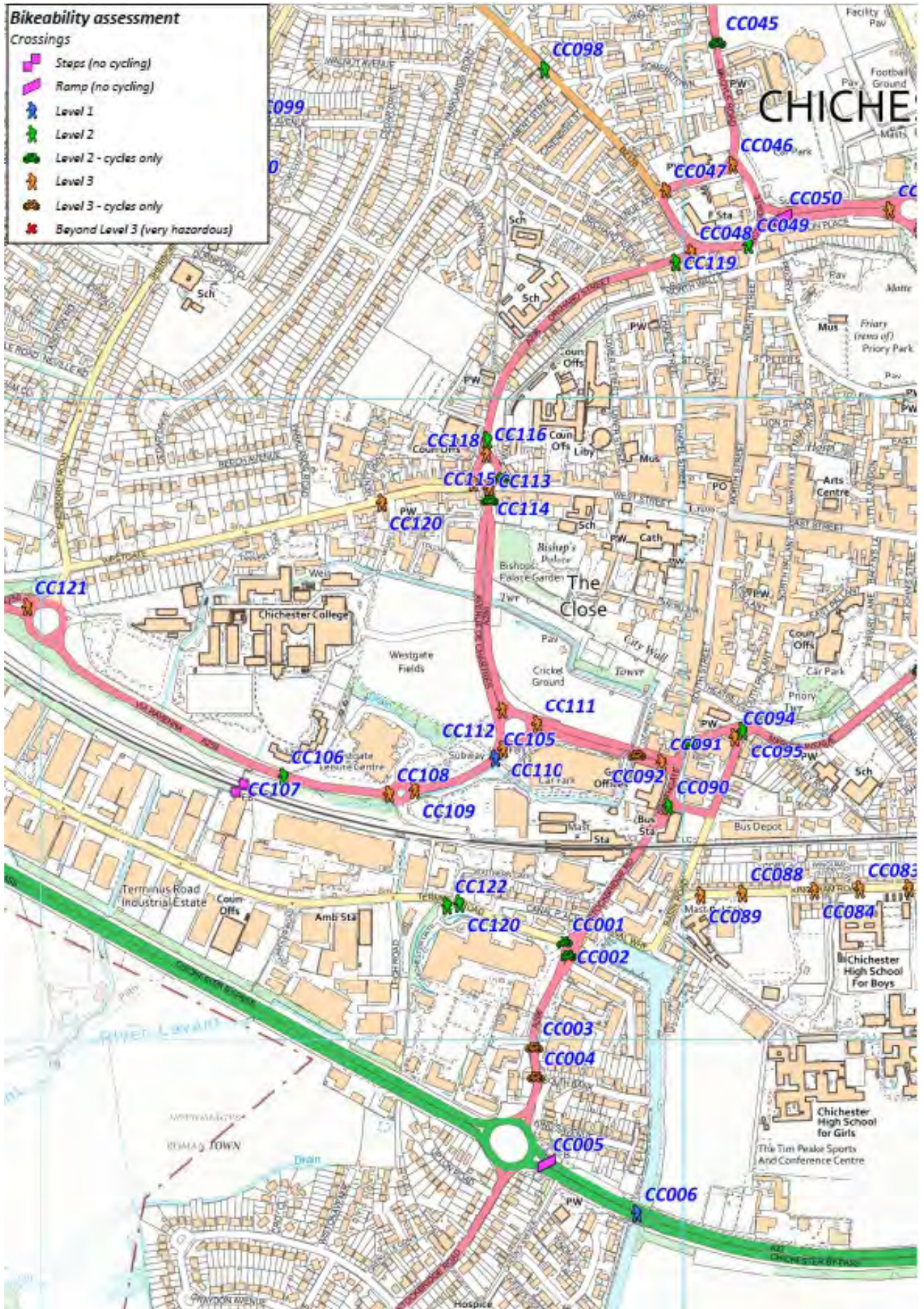


Table 2. Schedule of Crossings

Ref	Crossing type	Level	Gateway	Comments
CC001	Toucan phase	2.1	Existing shared	
CC002	Toucan phase	2.1	Existing shared	Adequate for pedestrians but the intention is that southbound cyclists turn into very sub-standard cycle lane so Level 3 for cyclists
CC003	Refuge	3.1	Existing pedestrian & potential shared	
CC004	Cycle only refuge into cycle lane	3.1	Potential cycle	Lane is narrow & lost in vegetation
CC005	Footbridge	0.5	Existing pedestrian & potential shared	
CC006	Under bridge	1	Existing shared	
CC007	Footbridge	0.5	Existing pedestrian & potential shared	
CC008	Refuge	2	Existing pedestrian & potential shared	
CC009	Puffin	2	EP	
CC010	Dropped kerbs	3.1	Potential shared	
CC011	Footbridge	1	Existing shared	
CC012	Dropped kerbs	4	Potential shared	Awful
CC013	Dropped kerbs	4	Potential shared	Awful
CC014	Island	4	Potential shared	5 lanes of fast moving traffic to cross
CC015	Reservation	4	Potential shared	It may be wide but it is still very hazardous getting to it
CC016	Refuge	3		Narrow & no tactile
CC017	Refuge	3		Narrow & no tactile
CC018	Puffin	2	Existing pedestrian & potential shared	
CC019	Puffin	2		
CC020	Refuge	3		Narrow
CC021	Toucan phase with reservation	2.1		
CC022	Cycle only phase	2.1		Pointless as you need level 3 skills to get to it along the very hazardous Shopwhyke Road
CC023	Puffin with reservation	2	Existing pedestrian & potential shared	
CC024	Toucan	2.1	Existing shared	
CC025	Dropped kerbs	3.1		
CC026	Island	3.1		
CC027	Dropped kerbs	3.1		
CC028	Island	3		
CC029	Reservation	3.1		All this roundabout should be tightened up
CC030	Island	2.1	Existing shared	
CC031	Island	2.1	Existing shared	
CC032	Island	2.1	Existing shared	
CC033	Island	2.1	Existing shared	

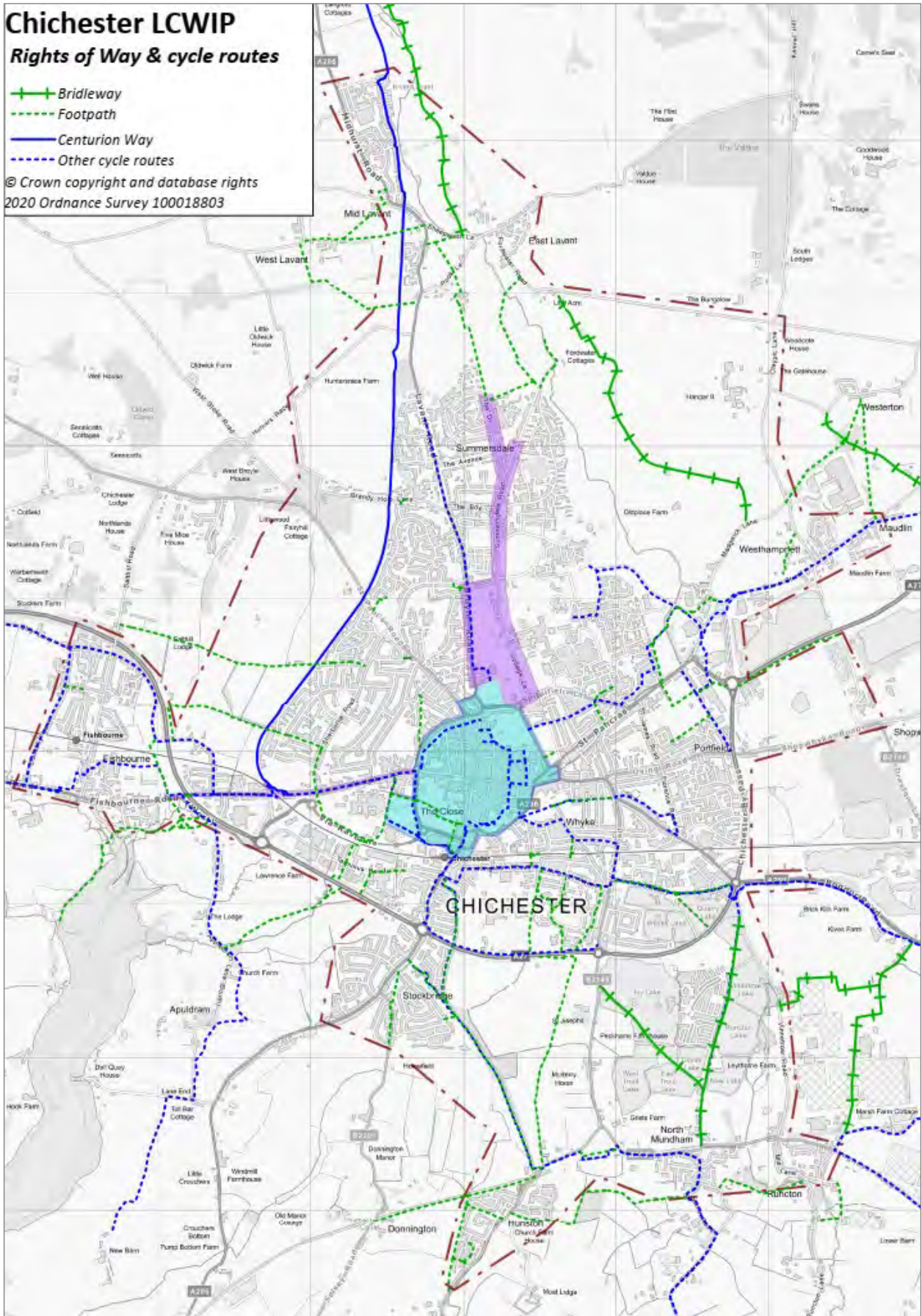
Ref	Crossing type	Level	Gateway	Comments
CC034	Island	2.1	Existing shared	
CC035	Island	2.1	Existing shared	
CC036	Puffin	2	Existing pedestrian	
CC037	Toucan	2.1	Existing shared	
CC038	Pelican	2	Existing pedestrian & potential shared	
CC039	Refuge	3		Narrow
CC040	Refuge	3	Potential shared	Narrow & no tactile
CC041	Refuge	3		Narrow & no tactile
CC042	Refuge	3		Narrow
CC043	Puffin	2	Existing pedestrian & potential shared	
CC044	Refuge	3		Steps on east side render this redundant for other than access to bus stop
CC045	Toucan	2.1	Existing shared	
CC046	Island	3		Alignment of dropped kerbs is terrible to accommodate hazardous cycle give way & just puts everyone at more risk
CC047	Island	3		Only access from east side of St Pauls Road to centre of gyratory. Angle of crossing awful & signs in island obstruct badly
CC048	Island	3		No tactile & no proper dropped kerb on south side where pedestrians are pitched into a bus stop
CC049	Island	2		Not great
CC050	Subway	0.5	Existing pedestrian & potential shared	
CC051	Reservation	3		Two lanes of fast approaching traffic. No tactile
CC052	Island	2		No tactile
CC053	Island	3		Poor sightlines on south side
CC054	Toucan	2.1	Existing shared	
CC055	3 way island	2		No tactile on north/south arm
CC056	3 way island	2		No tactile
CC057	Puffin	2		
CC058	Puffin	2		
CC059	3 way island	2		No tactile
CC060	Puffin	2	Existing pedestrian & potential shared	
CC061	Refuge	3		Narrow & no tactile
CC062	Puffin	2	Existing pedestrian & potential shared	
CC063	Refuge	3		Narrow & no tactile
CC064	Pelican	2	Existing pedestrian & potential shared	
CC065	Island	3		Wide fast approaches
CC066	Island	3		Wide fast approaches
CC067	Island	3		Wide fast approaches

Ref	Crossing type	Level	Gateway	Comments
CC068	Island	3		Wide fast approaches
CC069	Pelican	2		
CC070	Refuge	3		Narrow & no tactile
CC071	Refuge	3		Narrow & no tactile
CC072	Refuge	3		Narrow
CC073	Refuge	3		Narrow
CC074	Toucan	2.1	Existing shared	
CC075	Puffin	2	Potential shared	Potential only if changed & moved to desire line by junction
CC076	Raised junction	3	Potential shared	
CC077	Raised table	3		
CC078	Raised junction	3	Potential shared	
CC079	Raised junction	3	Potential shared	
CC080	Raised junction	3	Potential shared	
CC081	Raised table with build out	3	Potential shared	
CC082	Raised table with build out	3		
CC083	Raised table with build out	3	Potential shared	
CC084	Raised table with build out	3	Potential shared	
CC085	Footbridge	0	Potential shared	Steps only
CC086	Footbridge	0	Potential shared	Steps only
CC087	Footbridge	0.5	Existing pedestrian & potential shared	
CC088	Raised table with build out	3		
CC089	Raised table with build out	3		
CC090	3 way pelican with island	2	Existing pedestrian & potential shared	
CC091	Puffin with reservation	3	Existing pedestrian & potential shared	
CC092	Cycle gaps	3.1	Potential cycle	Awful
CC093	Toucan	2.1	Existing shared	
CC094	Island	3		To/from island. Poor sightlines. Should be signals
CC095	Puffin with island	2	Existing pedestrian & potential shared	Staggered
CC096	Toucan	2.1	Existing shared	
CC097	Refuge	3		Narrow & no tactile
CC098	Puffin	2		
CC099	Raised junction	3	Potential shared	
CC100	Raised table	3		
CC101	Footbridge	1	Existing shared	Railway, Westgate
CC102	Subway	1	Existing shared	A27, Fishbourne
CC103	Bridge	1	Existing shared	
CC104	Subway	1	Existing shared	Centurion Way, Lavant

Ref	Crossing type	Level	Gateway	Comments
CC105	Subway	1	Existing shared	
CC106	Puffin	2	Existing pedestrian & potential shared	
CC107	Footbridge	0	Potential shared	Steps only
CC108	Island	3	Potential shared	Tapers narrow & wide approaches. No tactile
CC109	Island	3	Potential shared	Tapers to narrow & wide approaches. No tactile
CC110	Island	3	Potential shared	Wide fast approaches & no tactile
CC111	Reservation	3		Wide fast approaches & no tactile
CC112	Reservation	3		Wide fast approaches & no tactile
CC113	Toucan	2.1	Existing shared	
CC114	Island	3		Narrow & no tactile
CC115	Island	2.1	Existing shared	
CC116	Island	3	Potential shared	Narrow & no tactile
CC117	Island	3	Potential shared	Narrow & no tactile
CC118	Puffin	2	Existing pedestrian & potential shared	
CC119	Puffin	2	Existing pedestrian & potential shared	Not quite on desire line
CC120	Semi raised junction	3	Potential shared	Only raised & not much on one side
CC121	Island	3	Potential shared	Two lane fast approaches. No tactile
CC122	Pedestrian phase with refuge	2		No tactile in refuge
CC120	Pedestrian phase	2		

Only 43% of crossings are Level 1 or 2 (including cycle crossings). This is very low compared to other areas studied in the UK.

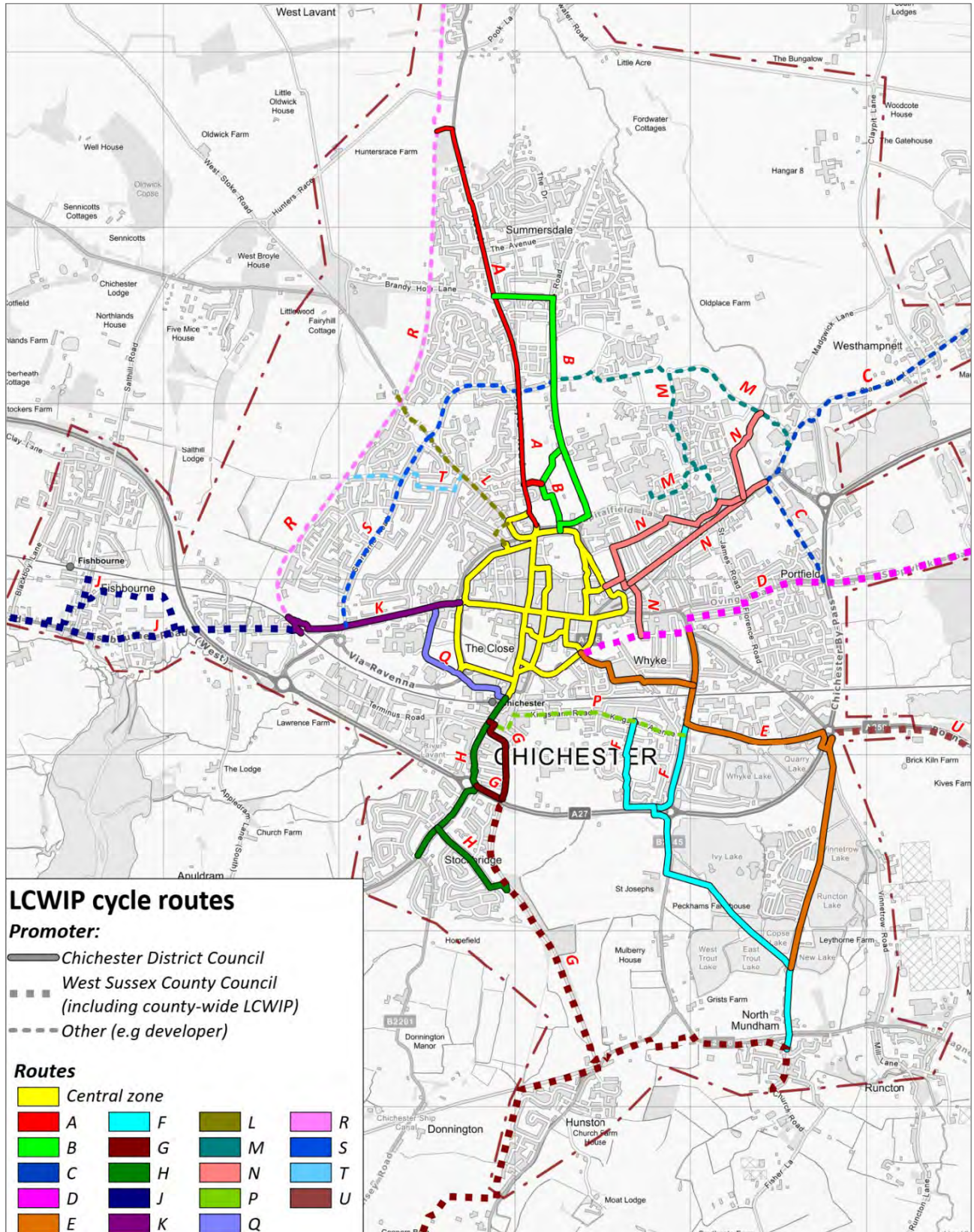
Plan 9. Cycle routes (blue) and Rights of Way (green)



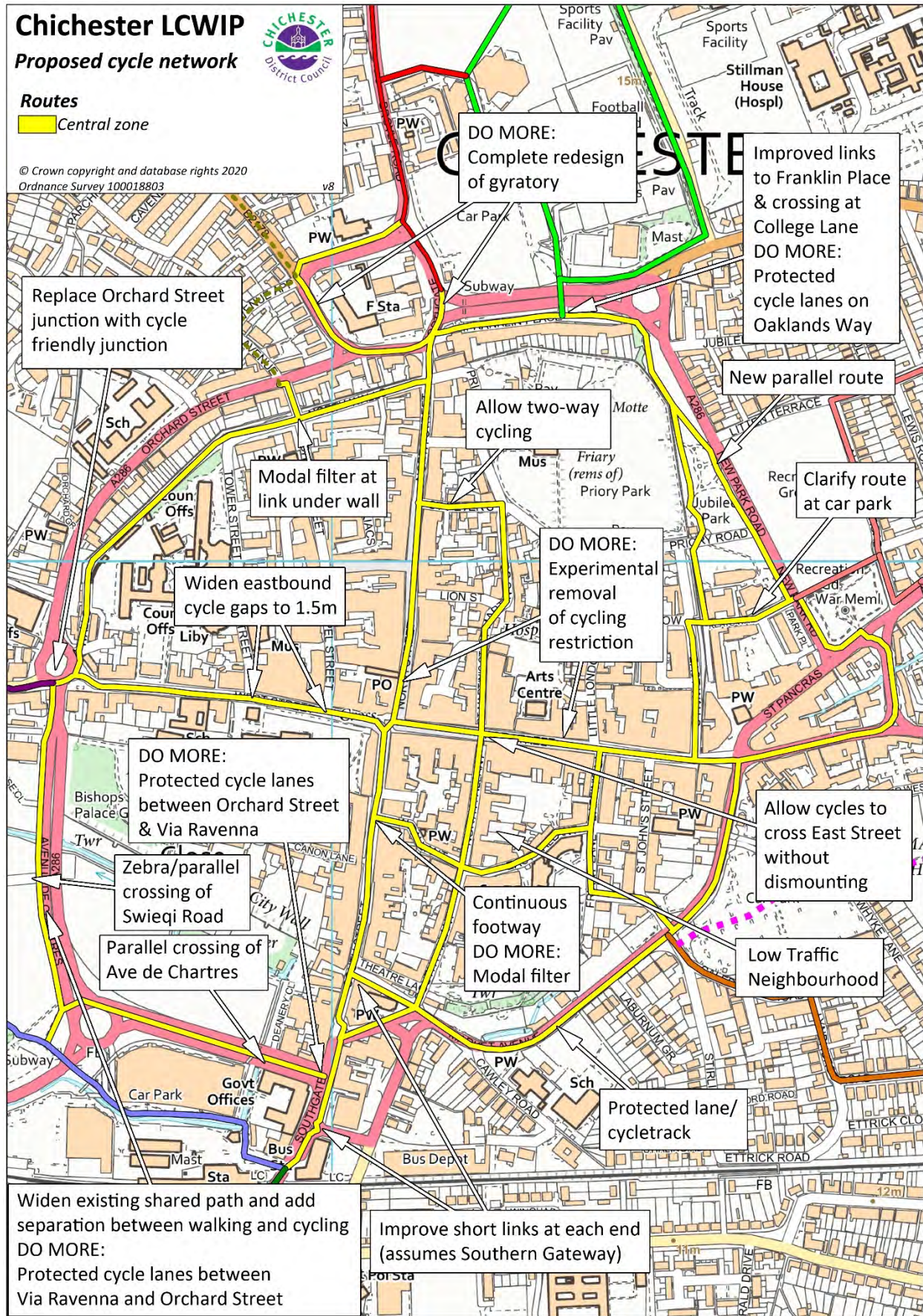
3. Route proposals & assessments

The plans below show the proposed interventions for the routes to be promoted by CDC. The Route Selection Tool (RST) assessment is also shown for these routes, apart from the core area where there are individual links rather than longer defined routes.

Plan 10. Proposed cycle routes

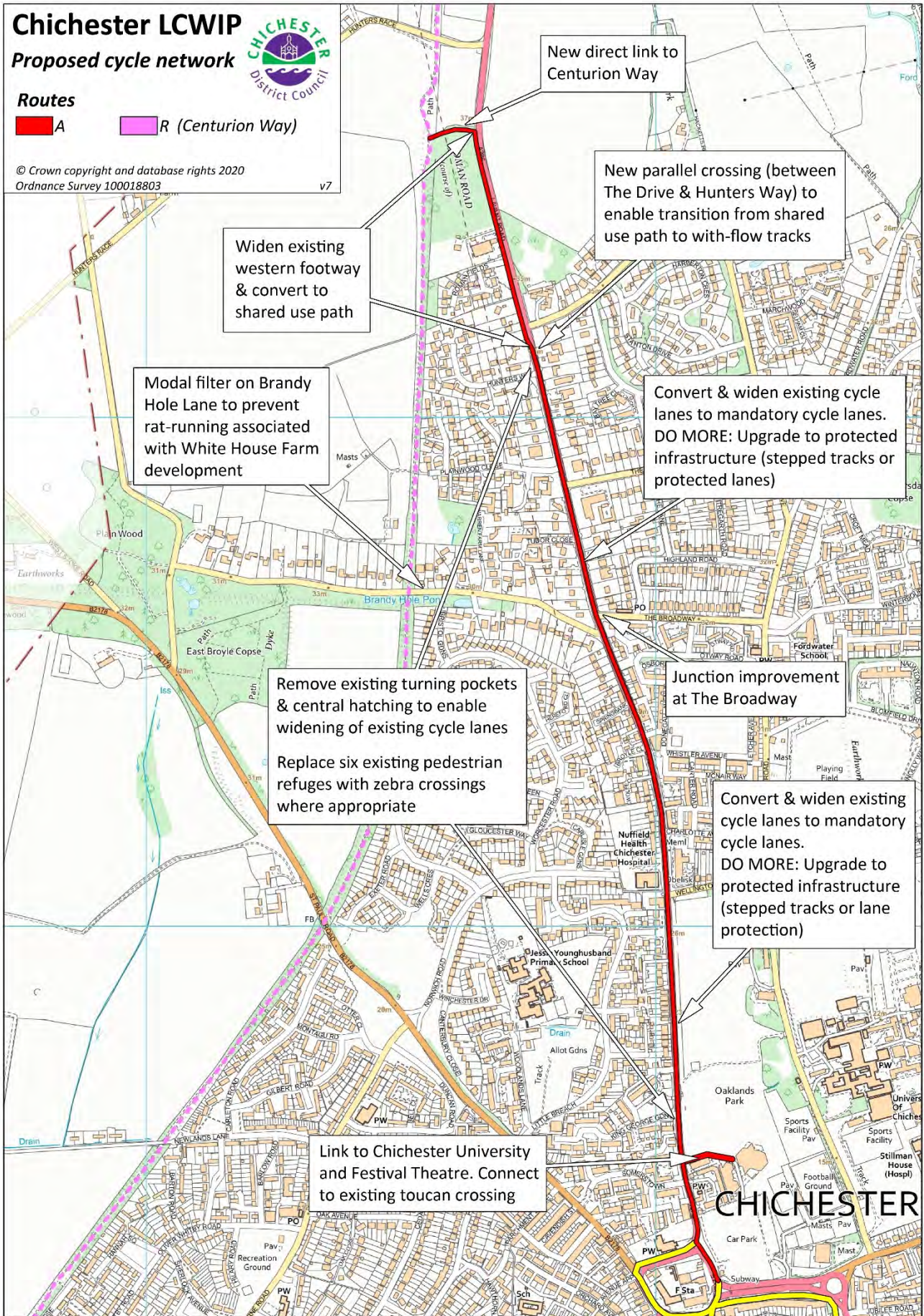


Plan 11. Proposed interventions in core area



Route A – Lavant

Plan 12. Proposed interventions – Route A

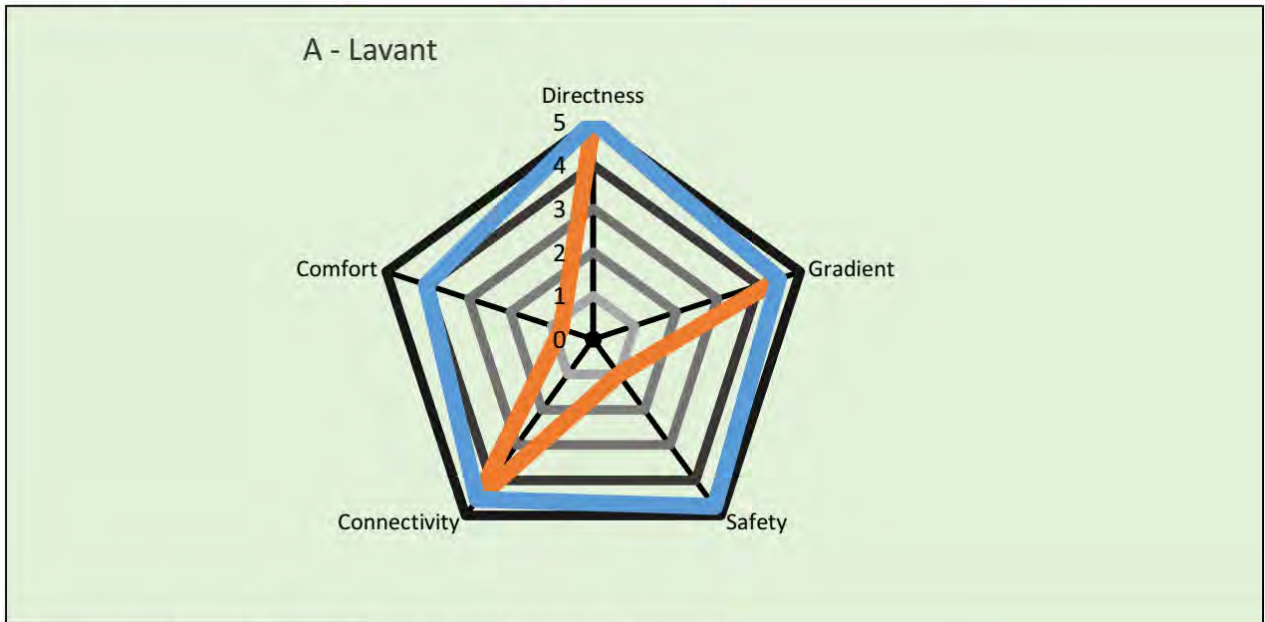


Local Cycling and Walking Infrastructure Plan: Route Selection Tool

ROUTE SUMMARY

Route Name	A - Lavant
Overall Length	2.4km
Name of Assessor(s)	Justin Yim
Date of Assessment	Updated 18/02/2019

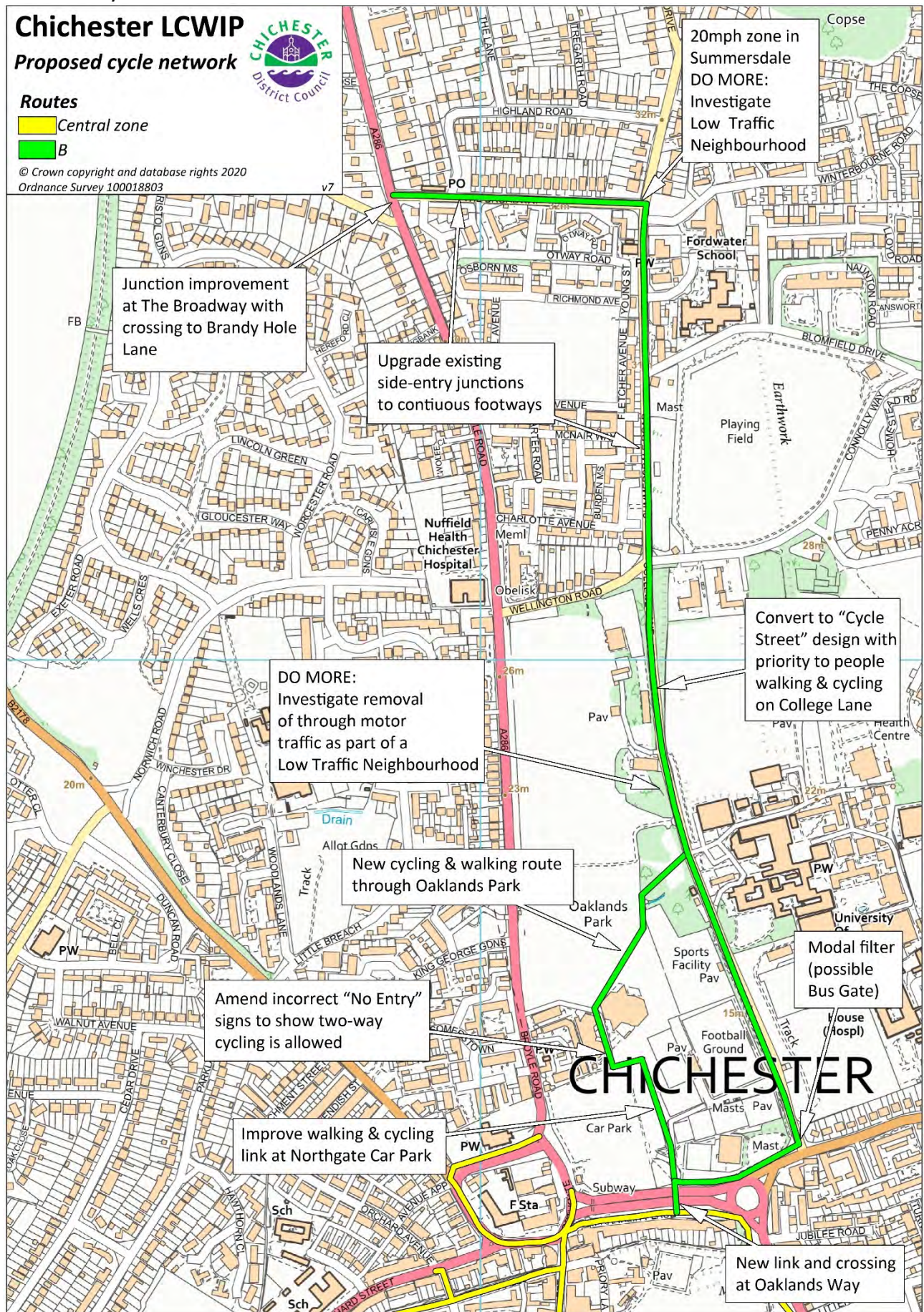
Performance Scores		
Criterion	Existing	Potential
Directness	5.00	5.00
Gradient	4.48	4.48
Safety	0.99	4.74
Connectivity	4.54	4.54
Comfort	0.78	4.04



Number of Existing Critical Junctions/Crossings	6
Number of Potential Critical Junctions/Crossings	1
Description of Improvements	Introduction of new segregated facilities along Lavant Road and new section of shared use path introduced at northern end to connect with Centurion Way
Indicative Cost	£750,000 - £2,000,000

Route B - University

Plan 13. Proposed interventions - Route B

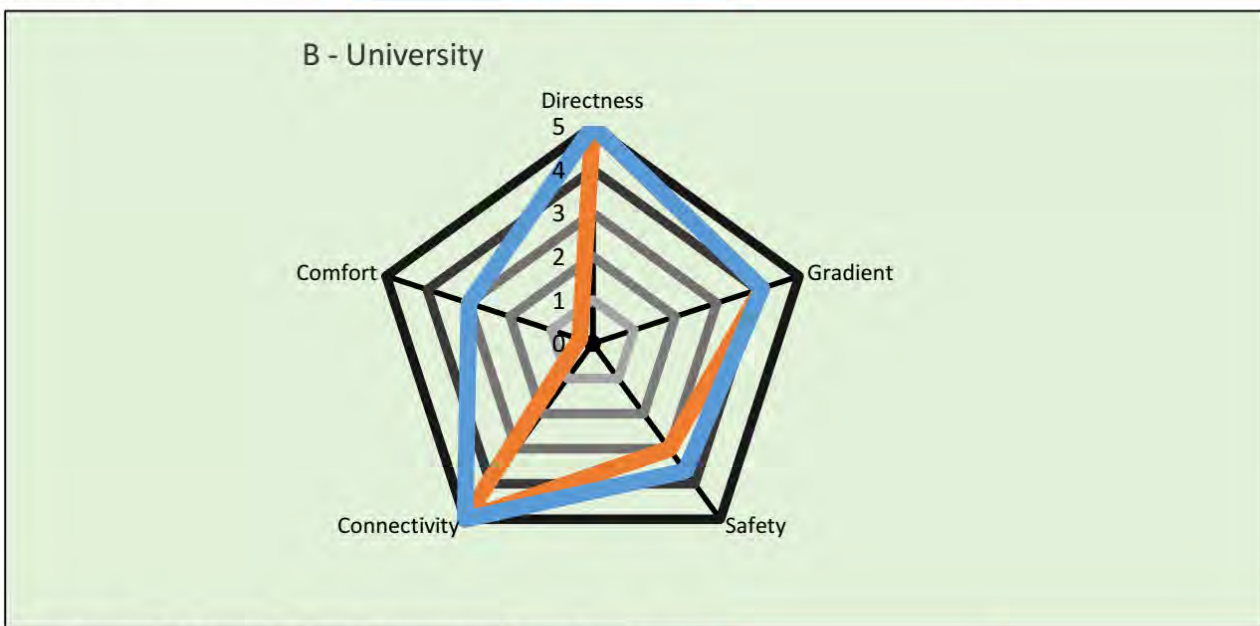


Local Cycling and Walking Infrastructure Plan: Route Selection Tool

ROUTE SUMMARY

Route Name	B - University
Overall Length	1.54km
Name of Assessor(s)	Justin Yim
Date of Assessment	17 December 2019

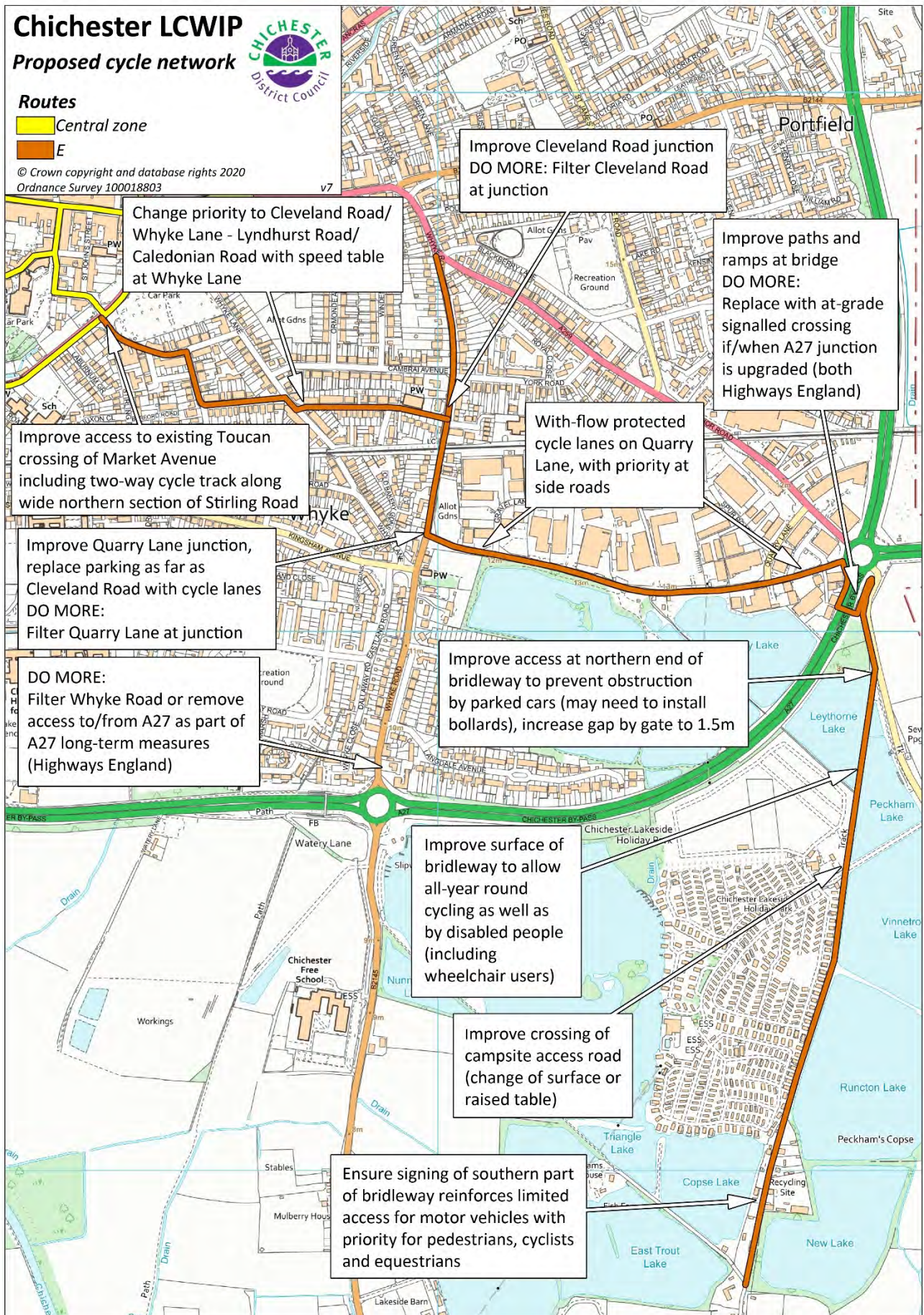
Criterion	Performance Scores	
	Existing	Potential
Directness	5.00	5.00
Gradient	4.09	4.09
Safety	3.00	3.63
Connectivity	5.00	5.00
Comfort	0.32	3.00



Number of Existing Critical Junctions/Crossings	5
Number of Potential Critical Junctions/Crossings	2
Description of Improvements	Cycle street proposals on College Lane and local junction improvements on the Broadway
Indicative Cost	£172,000 - £872,000

Route E - Vinnetrow

Plan 14. Proposed interventions - Route E

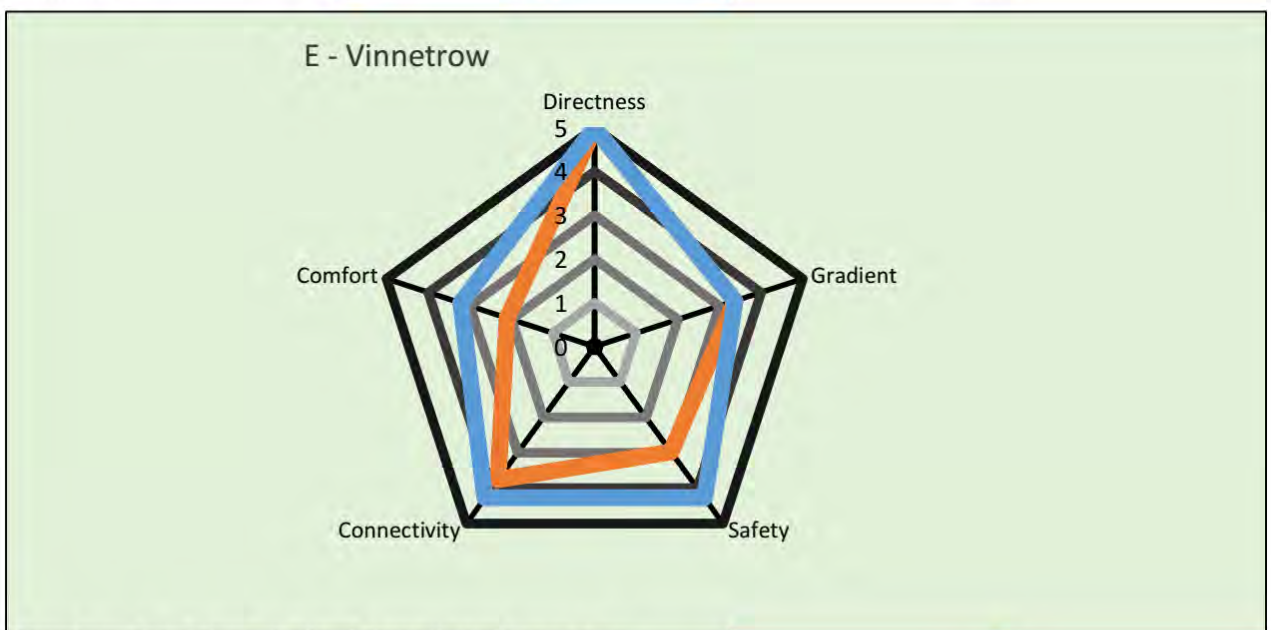


Local Cycling and Walking Infrastructure Plan: Route Selection Tool

ROUTE SUMMARY

Route Name	E - Vinnetrow
Overall Length	3.6km
Name of Assessor(s)	Justin Yim
Date of Assessment	Updated 19/02/2020

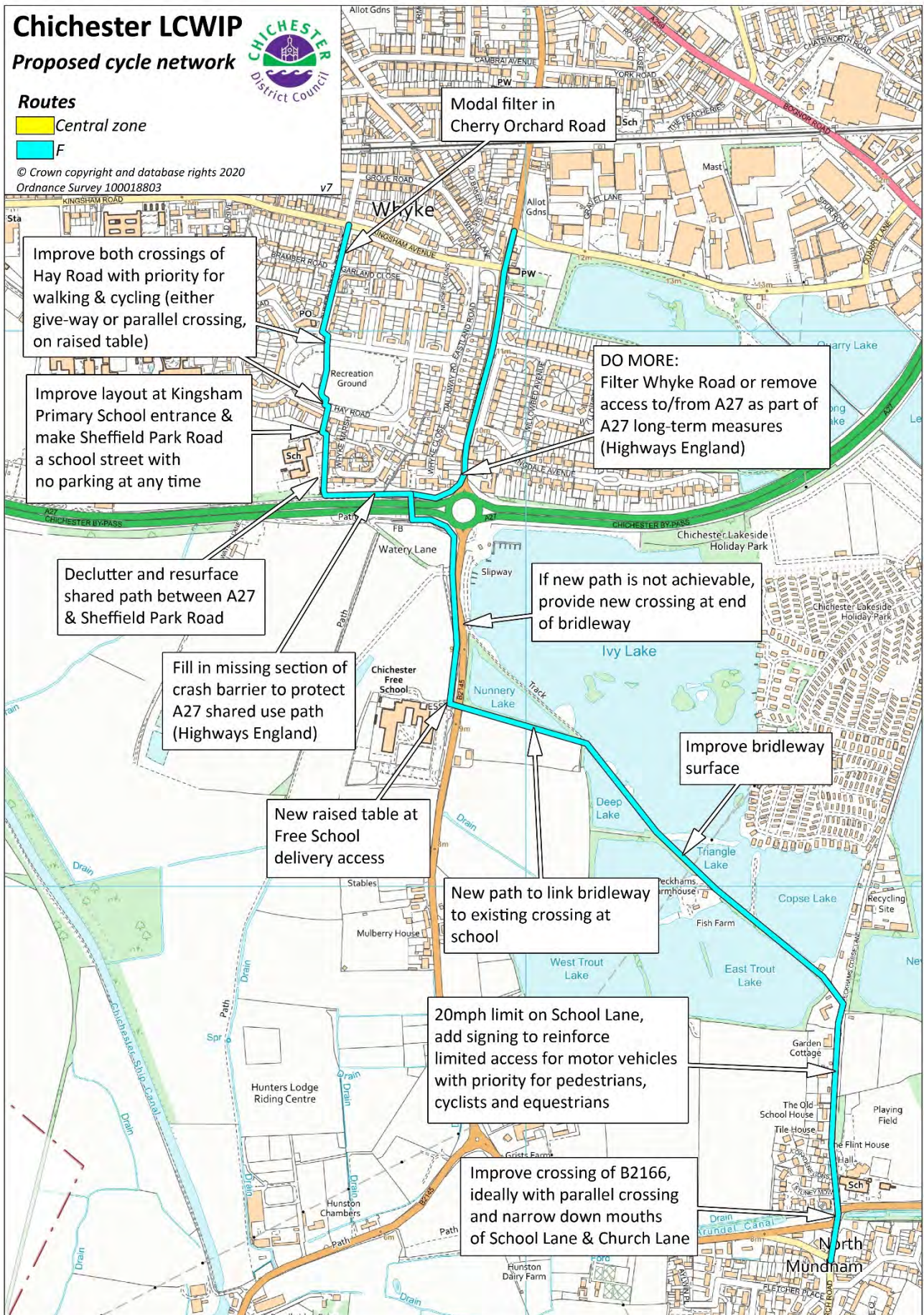
Performance Scores		
Criterion	Existing	Potential
Directness	5.00	5.00
Gradient	3.37	3.37
Safety	2.97	4.27
Connectivity	3.76	4.27
Comfort	2.11	3.21



Number of Existing Critical Junctions/Crossings	14
Number of Potential Critical Junctions/Crossings	6
Description of Improvements	New protected facilities for cycling especially on Quarry Lane and upgrades to local existing facilities where necessary
Indicative Cost	£1,193,000 - £1,318,000

Route F – North Mundham

Plan 15. Proposed interventions – Route F

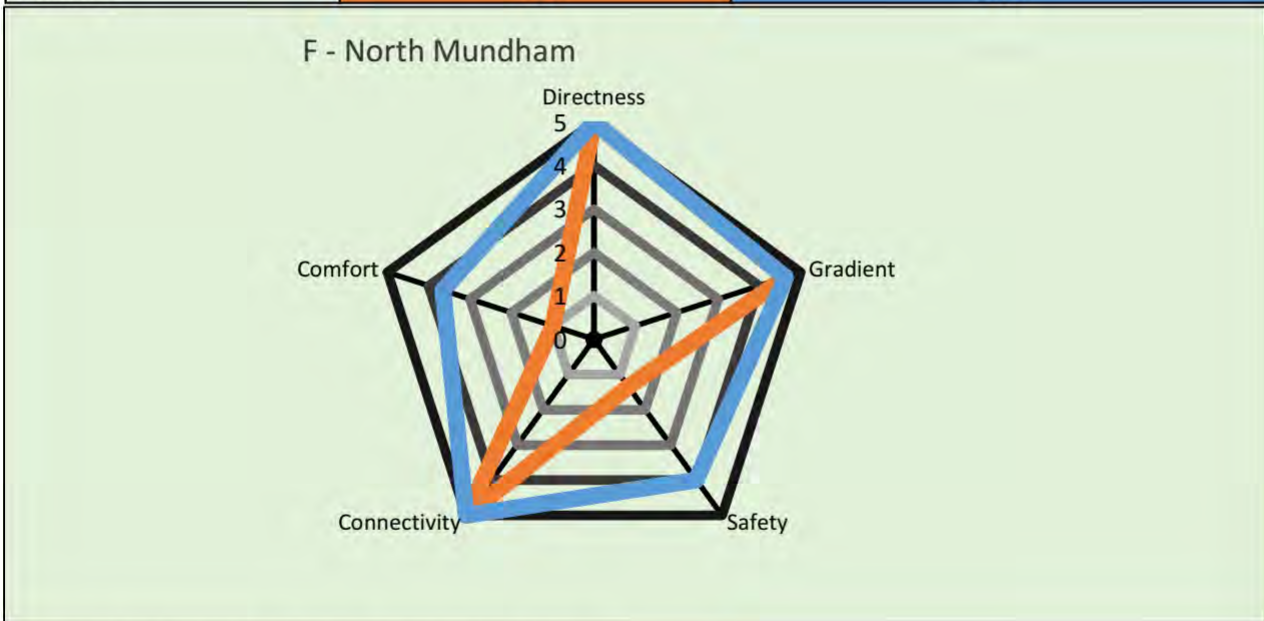


Local Cycling and Walking Infrastructure Plan: Route Selection Tool

ROUTE SUMMARY

Route Name	F - North Mundham
Overall Length	2.5km
Name of Assessor(s)	Justin Yim
Date of Assessment	18 December 2019

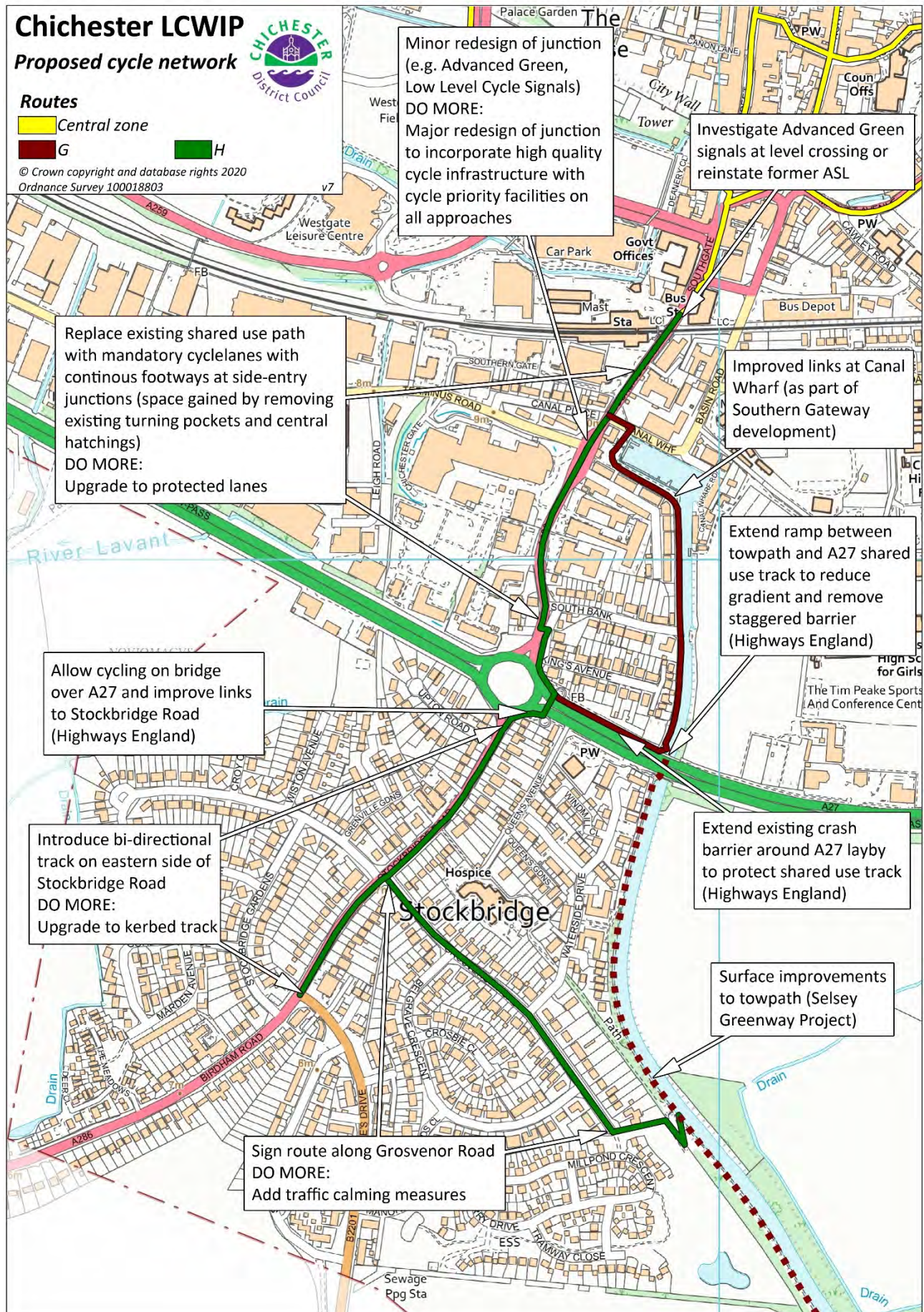
Criterion	Performance Scores	
	Existing	Potential
Directness	5.00	5.00
Gradient	4.63	4.63
Safety	1.34	4.00
Connectivity	5.00	5.00
Comfort	1.00	3.66



Number of Existing Critical Junctions/Crossings	6
Number of Potential Critical Junctions/Crossings	0
Description of Improvements	Removal of through traffic, filtered permeability & improvements in Whyke and by the Free School. Improved surface on path to North Mundham
Indicative Cost	£300,000 - £505,000

Routes G - Chichester Canal & H - Stockbridge

Plan 16. Proposed interventions - Routes G & H

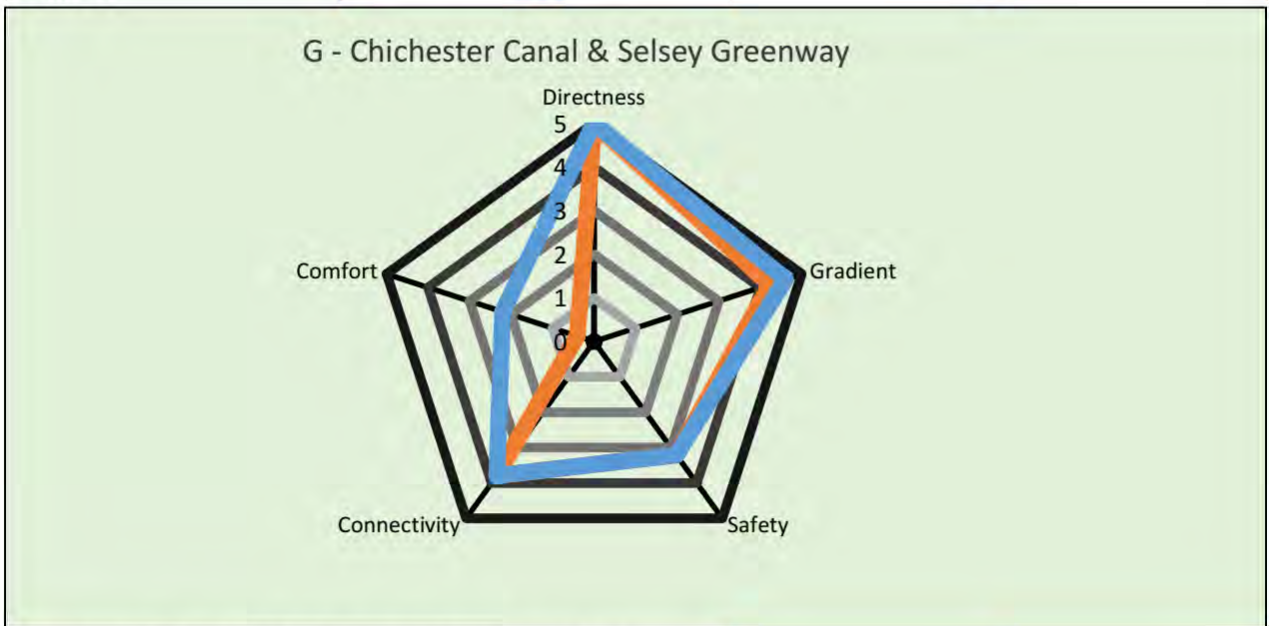


Local Cycling and Walking Infrastructure Plan: Route Selection Tool

ROUTE SUMMARY

Route Name	G - Chichester Canal & Selsey Greenway
Overall Length	4.9km
Name of Assessor(s)	Justin Yim
Date of Assessment	17 December 2019

Criterion	Performance Scores	
	Existing	Potential
Directness	5.00	5.00
Gradient	4.23	4.61
Safety	3.20	3.20
Connectivity	3.80	3.80
Comfort	0.41	2.20



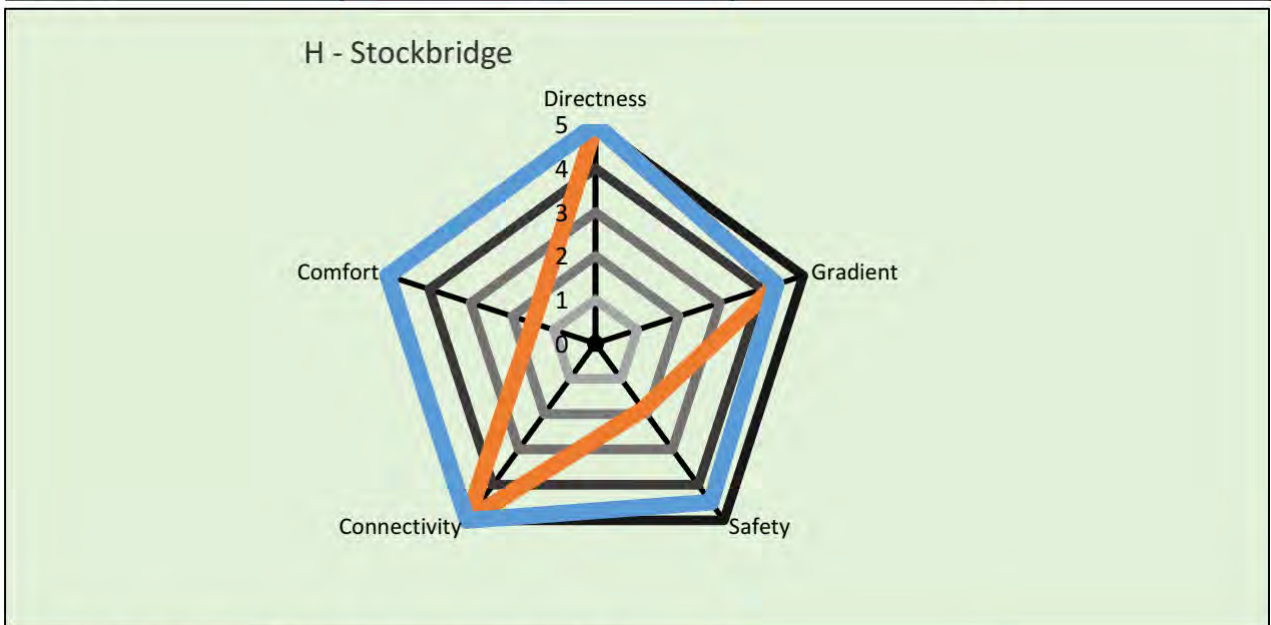
Number of Existing Critical Junctions/Crossings	0
Number of Potential Critical Junctions/Crossings	0
Description of Improvements	Improved surfacing and access between canal towpath and A27 Better links at Basin Road
Indicative Cost	£141,000 - £241,000 (northern section only)

Local Cycling and Walking Infrastructure Plan: Route Selection Tool

ROUTE SUMMARY

Route Name	H - Stockbridge
Overall Length	1.1km
Name of Assessor(s)	Justin Yim
Date of Assessment	18 December 2019

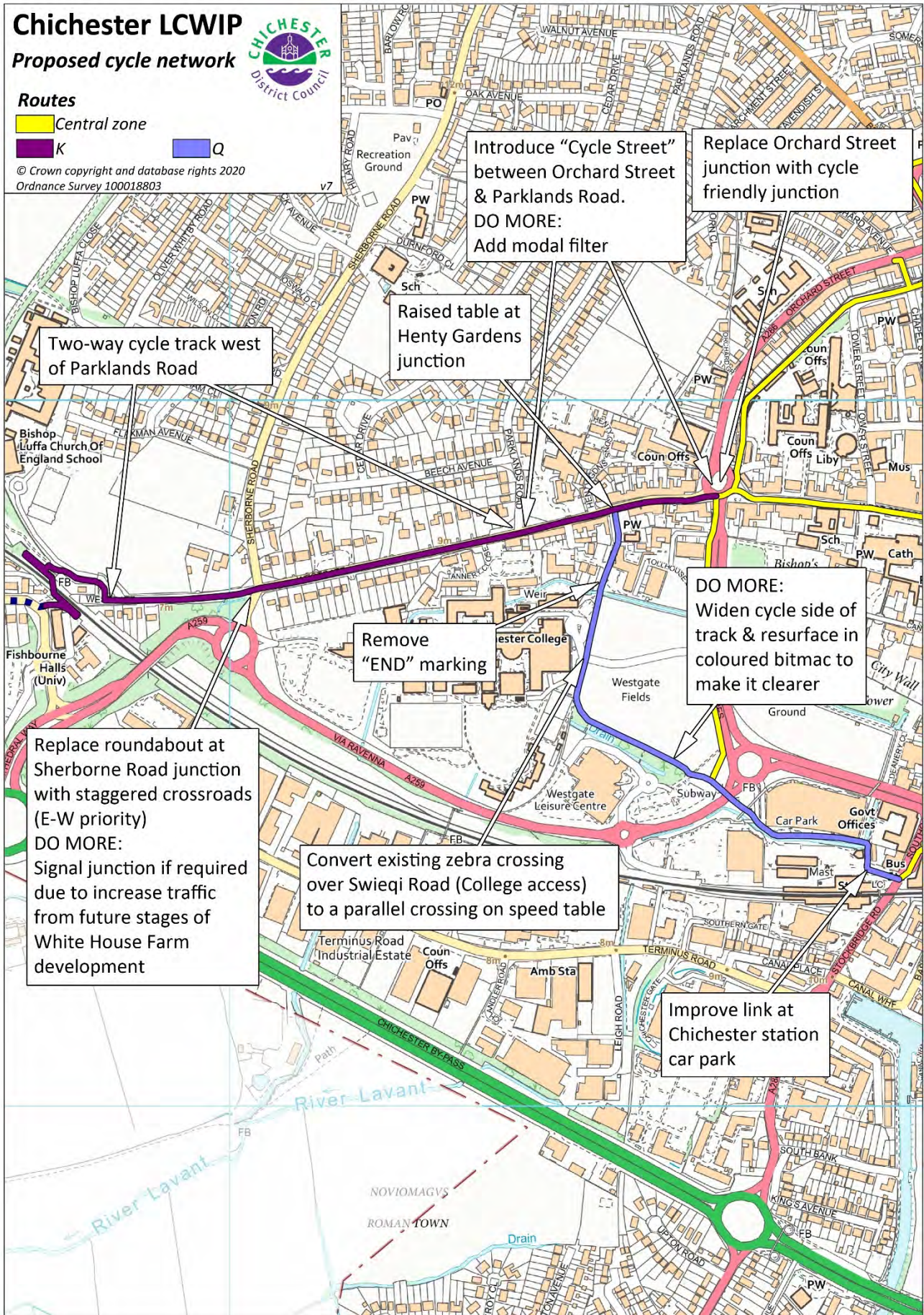
Criterion	Performance Scores	
	Existing	Potential
Directness	5.00	5.00
Gradient	4.34	4.34
Safety	1.86	4.49
Connectivity	5.00	5.00
Comfort	1.51	5.00



Number of Existing Critical Junctions/Crossings	12
Number of Potential Critical Junctions/Crossings	1
Description of Improvements	<p>Remove existing shared use path and replace with mandatory cycle lanes in both directions with conversion of all existing side-entry junctions along the route to continuous footway provision. Remove existing turning pockets and central hatchings.</p> <p>Upgrade junction of Stockbridge Road/Terminus Road to incorporate proposed cycle tracks/lanes, include cycle priority facilities on all approaches and introduce pedestrian crossing facilities on all arms.</p>
Indicative Cost	£818,000 - £1,888,000

Routes K - Westgate & Q - College

Plan 17. Proposed interventions - Routes K & Q

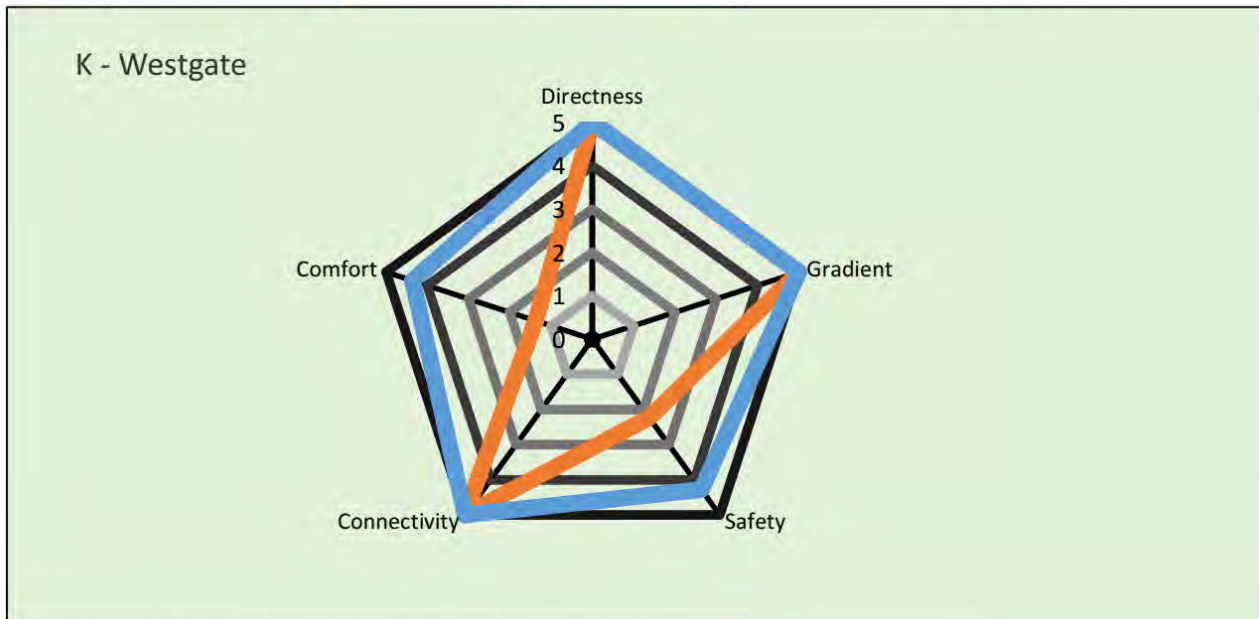


Local Cycling and Walking Infrastructure Plan: Route Selection Tool

ROUTE SUMMARY

Route Name	K - Westgate
Overall Length	1.2km
Name of Assessor(s)	Steve Essex
Date of Assessment	16 June 2020

Criterion	Performance Scores	
	Existing	Potential
Directness	5.00	5.00
Gradient	5.00	5.00
Safety	2.23	4.27
Connectivity	5.00	5.00
Comfort	1.37	4.36



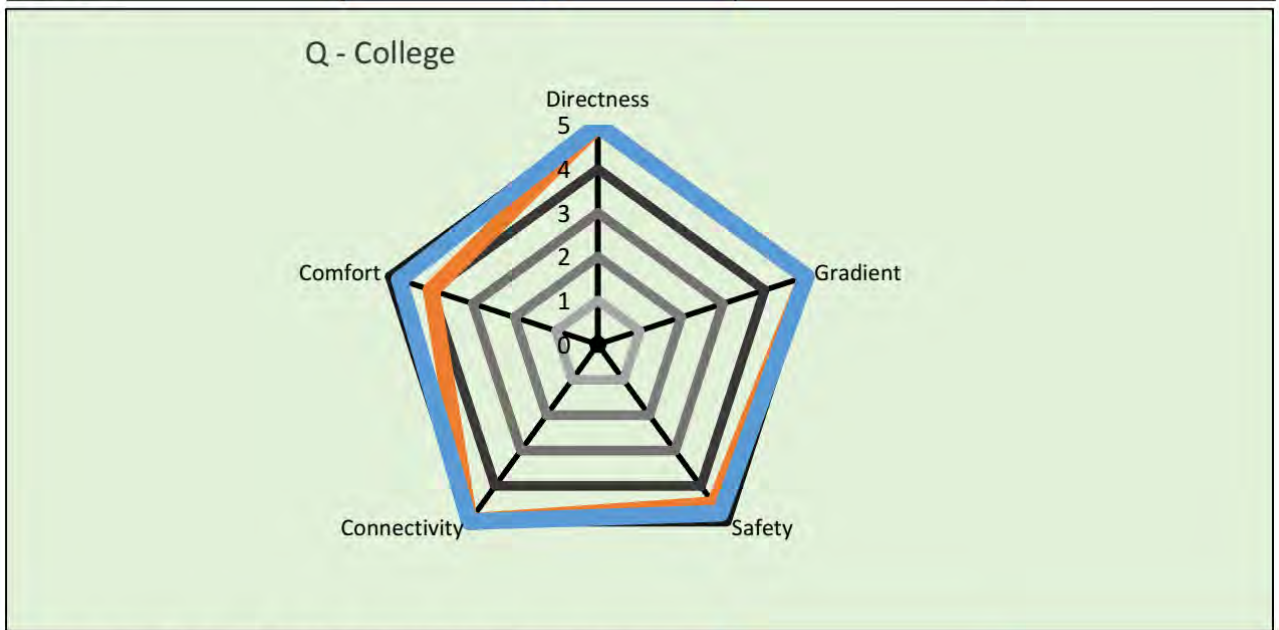
Number of Existing Critical Junctions/Crossings	2
Number of Potential Critical Junctions/Crossings	0
Description of Improvements	Options of traffic calming, light segregated cycle facilities or 2 way track between Orchard Street & Sherborne Rd, with 2 way track to west. Replace Sherborne Rd roundabout with safer junction.
Indicative Cost	£510,000 - £790,000

Local Cycling and Walking Infrastructure Plan: Route Selection Tool

ROUTE SUMMARY

Route Name	Q - College
Overall Length	0.8km
Name of Assessor(s)	Justin Yim
Date of Assessment	12 December 2019

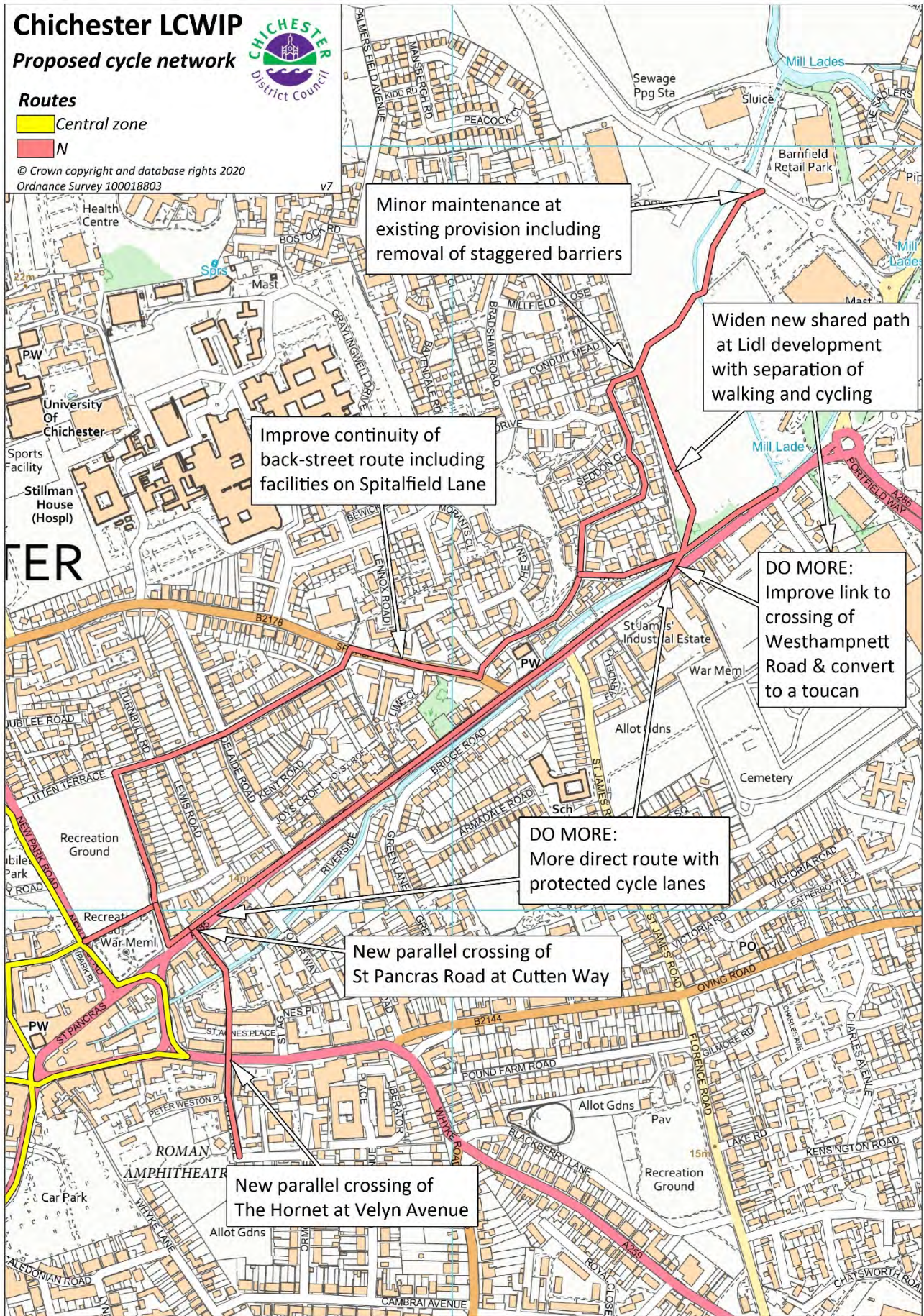
Criterion	Performance Scores	
	Existing	Potential
Directness	5.00	5.00
Gradient	5.00	5.00
Safety	4.53	4.76
Connectivity	5.00	5.00
Comfort	4.00	4.76



Number of Existing Critical Junctions/Crossings	0
Number of Potential Critical Junctions/Crossings	0
Description of Improvements	Improved crossing of Swieqi Road (Chichester College access road) to maintain cycle and pedestrian priority Improved links at Chichester station
Indicative Cost	£80,000 - £150,000

Route N – St Pancras

Plan 18. Proposed interventions – Route N

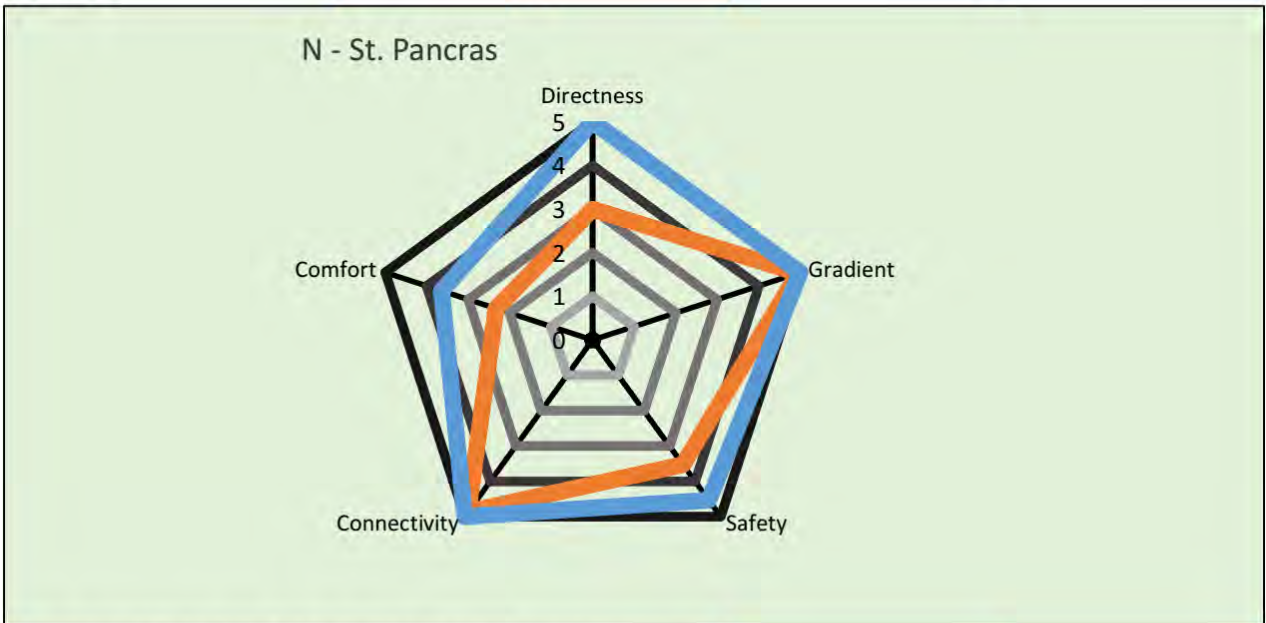


Local Cycling and Walking Infrastructure Plan: Route Selection Tool

ROUTE SUMMARY

Route Name	N - St. Pancras
Overall Length	1.6km
Name of Assessor(s)	Justin Yim
Date of Assessment	12 December 2019

Criterion	Performance Scores	
	Existing	Potential
Directness	3.00	5.00
Gradient	4.95	5.00
Safety	3.53	4.54
Connectivity	4.86	5.00
Comfort	2.33	3.64



Number of Existing Critical Junctions/Crossings	9
Number of Potential Critical Junctions/Crossings	0
Description of Improvements	Introduce protected cycle facilities on St. Pancras Road with link to hospital
Indicative Cost	£149,000 - £703,000