

Key requirement	Factor	Design principle	Indicators	Critical	0 (Red)	1 (Amber)	2 (Green)	Score	Comments
Safety		A high proportion of collisions involving cyclists occur at junctions. Junctions therefore need particular attention to reduce the risk of collision. Junction treatments include: Minor/side roads – cyclist priority and/or speed reduction across side roads Major roads – separation of cyclists from motor traffic through junctions.	13. Conflicting movements at junctions		Side road junctions frequent and/ or untreated. Major junctions, conflicting cycle/ motor traffic movements not separated	Side road junctions infrequent and with effective entry treatments. Major junctions, principal conflicting cycle/ motor traffic movements separated.	Side roads closed or treated to blend in with footway. Major junctions, all conflicting cycle/motor traffic streams separated.	2	
	Avoid complex design	Avoid complex designs which require users to process large amounts of information. Good network design should be self-explanatory and self-evident to all road users. All users should understand where they and other road users should be and what movements they might make.	14. Legible road markings and road layout		Faded, old, unclear, complex road markings/ unclear or unfamiliar road layout	Generally legible road markings and road layout but some elements could be improved	Clear, understandable, simple road markings and road layout	2	
	Consider and reduce risk from kerbside activity	Routes should be assessed in terms of all multi-functional uses of a street including car parking, bus stops, parking, including collision with opened door.	15. Conflict with kerbside activity	Narrow cycle lanes <1.5m or less (including any buffer) alongside parking/loading	Significant conflict with kerbside activity (eg nearside cycle lane < 2m (including buffer) wide alongside kerbside parking)	Some conflict with kerbside activity – eg less frequent activity on nearside of cyclists, min 2m cycle lanes including buffer.	No/very limited conflict with kerbside activity or width of cycle lane including buffer exceeds 3m.	2	
	Reduce severity of collisions where they do occur	Wherever possible routes should include “evasion room” (such as grass verges) and avoid any unnecessary physical hazards such as guardrail, build outs, etc. to reduce the severity of a collision should it occur.	16. Evasion room and unnecessary hazards		Cyclists at risk of being trapped by physical hazards along more than half of the route.	The number of physical hazards could be further reduced	The route includes evasion room and avoids any physical hazards.	1	

Key requirement	Factor	Design principle	Indicators	Critical	0 (Red)	1 (Amber)	2 (Green)	Score	Comments
Comfort	Surface quality	Density of defects including non cycle friendly ironworks, raised/sunken covers/ gullies, potholes, poor quality carriageway paint (eg from previous cycle lane)	17. Major and minor defects		Numerous minor defects or any number of major defects	Minor and occasional defects	Smooth high grip surface	1	
		Pavement or carriageway construction providing smooth and level surface	18. Surface type		Any bumpy, unbound, slippery, and potentially hazardous surface.	Hand-laid materials, concrete pavements with frequent joints.	Machine laid smooth and non-slip surface – eg Thin Surfacing, or firm and closely jointed blocks undisturbed by turning heavy vehicles.	1	Clean / Replace the surfacing near the Almond Hill Junior School where required.
	Effective width without conflict	Cyclists should be able to comfortably cycle without risk of conflict with other users both on and off road.	19. Desirable minimum widths according to volume of cyclists and route type (where cyclists are separated from motor vehicles).		More than 25% of the route includes cycle provision with widths which are no more than 25% below desirable minimum values.	No more than 25% of the route includes cycle provision with widths which are no more than 25% below desirable minimum	Recommended widths are maintained throughout whole route	1	
	Wayfinding	Non-local cyclists should be able to navigate the routes without the need to refer to maps.	20. Signing		Route signing is poor with signs missing at key decision points.	Gaps identified in route signing which could be improved	Route is well signed with signs located at all decision points and junctions	2	

Key requirement	Factor	Design principle	Indicators	Critical	0 (Red)	1 (Amber)	2 (Green)	Score	Comments
Attractiveness	Social safety and perceived vulnerability of user	Routes should be appealing and be perceived as safe and usable. Well used, well maintained, lit, overlooked routes are more attractive and therefore more likely to be used.	21. Lighting		Most or all of route is unlit	Short and infrequent unlit/ poorly lit sections	Route is lit to highway standards throughout	1	Improve lighting near the Almond Hill Junior school
			22. Isolation		Route is generally away from activity	Route is mainly overlooked and is not far from activity throughout its length	Route is overlooked throughout its length	1	
	Impact on pedestrians, including people with disabilities	Introduction of dedicated on-road cycle provision can enable people to cycle on-road rather than using footways which are not suitable for shared use. Introducing cycling onto well used footpaths may reduce the quality of provision for both users, particularly if the shared use path does not meet recommended widths.	23. Impact on pedestrians, Pedestrian Comfort Level based on Pedestrian Comfort guide for London (Section 6.1)		Route impacts negatively on pedestrian provision, Pedestrian Comfort is at Level C or below.	No impact on pedestrian provision or Pedestrian Comfort Level remains at B or above.	Pedestrian provision enhanced by cycling provision, or Pedestrian Comfort Level remains at A	2	
	Minimise street clutter	Signing required to support scheme layout	24. Signs informative and consistent but not overbearing or of inappropriate size		Large number of signs needed, difficult to follow and/ or leading to clutter	Moderate amount of signing particularly around junctions.	Signing for wayfinding purposes only and not causing additional obstruction.	2	
	Secure cycle parking	Ease of access to secure cycle parking within businesses and on-street	25. Evidence of bicycles parked to street furniture or cycle stands		No additional cycle parking provided or inadequate provision in insecure nonoverlooked areas	Some secure cycle parking provided but not enough to meet demand	Secure cycle parking provided, sufficient to meet demand	2	
Audit Score Total								41/50	0

Appendix A: Cycling Level of Service Tool - Route 1.1 - 2.4km to Almond Hill Junior School

Key requirement	Factor	Design principle	Indicators	Critical	0 (Red)	1 (Amber)	2 (Green)	Score	Comments
Cohesion	Connections	Cyclists should be able to easily and safely join and navigate along different sections of the same route and between different routes in the network.	1. Ability to join/leave route safely and easily: consider left and right turns		Cyclists cannot connect to other routes without dismounting	Cyclists can connect to other routes with minimal disruption to their journey	Cyclists have dedicated connections to other routes provided, with no interruption to their journey	1	
	Continuity and Wayfinding	Routes should be complete with no gaps in provision. 'End of route' signs should not be installed – cyclists should be shown how the route continues. Cyclists should not be 'abandoned', particularly at junctions where provision may be required to ensure safe crossing movements.	2. Provision for cyclists throughout the whole length of the route		Cyclists are 'abandoned' at points along the route with no clear indication of how to continue their journey.	The route is made up of discrete sections, but cyclists can clearly understand how to navigate between them, including through junctions.	Cyclists are provided with a continuous route, including through junctions	1	
	Density of network	Cycle networks should provide a mesh (or grid) of routes across the town or city. The density of the network is the distance between the routes which make up the grid pattern. The ultimate aim should be a network with a mesh width of 250m.	3. Density of routes based on mesh width ie distances between primary and secondary routes within the network		Route contributes to a network density mesh width >1000	Route contributes to a network density mesh width 250 – 1000m	Route contributes to a network density mesh width <250m	2	
Directness	Distance	Routes should follow the shortest option available and be as near to the 'as-the-crow-flies' distance as possible.	4. Deviation of route Deviation Factor is calculated by dividing the actual distance along the route by the straight line (crow-fly) distance, or shortest road alternative.		Deviation factor against straight line or shortest road alternative >1.4	Deviation factor against straight line or shortest road alternative 1.2 – 1.4	Deviation factor against straight line or shortest road alternative <1.2	1	

Key requirement	Factor	Design principle	Indicators	Critical	0 (Red)	1 (Amber)	2 (Green)	Score	Comments
Directness	Time: Frequency of required stops or give ways	The number of times a cyclist has to stop or loses right of way on a route should be minimised. This includes stopping and give ways at junctions or crossings, motorcycle barriers, pedestrian-only zones etc.	5. Stopping and give way frequency		The number of stops or give ways on the route is more than 4 per km	The number of stops or give ways on the route is between 2 and 4 per km	The number of stops or give ways on the route is less than 2 per km	1	
	Time: Delay at junctions	The length of delay caused by junctions should be minimised. This includes assessing impact of multiple or single stage crossings, signal timings, toucan crossings etc.	6. Delay at junctions		Delay for cyclists at junctions is greater than for motor vehicles	Delay for cyclists at junctions is similar to delay for motor vehicles	Delay is shorter than for motor vehicles or cyclists are not required to stop at junctions (eg bypass at signals)	1	
	Time: Delay on links	The length of delay caused by not being able to bypass slow moving traffic.	7. Ability to maintain own speed on links		Cyclists travel at speed of slowest vehicle (including a cycle) ahead	Cyclists can usually pass slow traffic and other cyclists	Cyclists can always choose an appropriate speed.	1	
	Gradients	Routes should avoid steep gradients where possible. Uphill sections increase time, effort and discomfort. Where these are encountered, routes should be planned to minimise climbing gradient and allow users to retain momentum gained on the descent.	8. Gradient		Route includes sections steeper than the gradients recommended in Chapter 5	There are no sections of route steeper than the gradients recommended in Chapter 5	There are no sections of route which steeper than 2%	1	

Key requirement	Factor	Design principle	Indicators	Critical	0 (Red)	1 (Amber)	2 (Green)	Score	Comments
Safety	Reduce/ remove speed differences where cyclists are sharing the carriageway	Where cyclists and motor vehicles are sharing the carriageway, the key to reducing severity of collisions is reducing the speeds of motor vehicles so that they more closely match that of cyclists. This is particularly important at points where risk of collision is greater, such as at junctions.	9. Motor traffic speed on approach and through junctions where cyclists are sharing the carriageway through the junction	85th percentile > 37mph (60kph)	85th percentile >30mph	85th percentile 20mph-30mph	85th percentile <20mph	0	
			10. Motor traffic speed on sections of shared carriageway	85th percentile > 37mph (60kph)	85th percentile >30mph	85th percentile 20mph-30mph	85th percentile <20mph	0	
	Avoid high motor traffic volumes where cyclists are sharing the carriageway	Cyclists should not be required to share the carriageway with high volumes of motor vehicles. This is particularly important at points where risk of collision is greater, such as at junctions.	11. Motor traffic volume on sections of shared carriageway, expressed as vehicles per peak hour	>10000 AADT, or >5% HGV	5000-10000 AADT and 2-5%HGV	2500-5000 and <2% HGV	0-2500 AADT	0	
	Risk of collision	Where speed differences and high motor vehicle flows cannot be reduced cyclists should be separated from traffic – see Figure 4.1. This separation can be achieved at varying degrees through on-road cycle lanes, hybrid tracks and off-road provision. Such segregation should reduce the risk of collision from beside or behind the cyclist.	12. Segregation to reduce risk of collision alongside or from behind	Cyclists sharing carriageway – nearside lane in critical range between 3.2m and 3.9m wide and traffic volumes prevent motor vehicles moving easily into opposite lane to pass cyclists.	Cyclists in unrestricted traffic lanes outside critical range (3.2m to 3.9m) or in cycle lanes less than 1.8m wide.	Cyclists in cycle lanes at least 1.8m wide on-carriageway; 85th percentile motor traffic speed max 30mph.	Cyclists on route away from motor traffic (off road provision) or in off-carriageway cycle track. Cyclists in hybrid/light segregated track; 85th percentile motor traffic speed max 30mph.	0	

Key requirement	Factor	Design principle	Indicators	Critical	0 (Red)	1 (Amber)	2 (Green)	Score	Comments
Safety		A high proportion of collisions involving cyclists occur at junctions. Junctions therefore need particular attention to reduce the risk of collision. Junction treatments include: Minor/side roads – cyclist priority and/or speed reduction across side roads Major roads – separation of cyclists from motor traffic through junctions.	13. Conflicting movements at junctions		Side road junctions frequent and/ or untreated. Major junctions, conflicting cycle/ motor traffic movements not separated	Side road junctions infrequent and with effective entry treatments. Major junctions, principal conflicting cycle/ motor traffic movements separated.	Side roads closed or treated to blend in with footway. Major junctions, all conflicting cycle/motor traffic streams separated.	0	
	Avoid complex design	Avoid complex designs which require users to process large amounts of information. Good network design should be self-explanatory and self-evident to all road users. All users should understand where they and other road users should be and what movements they might make.	14. Legible road markings and road layout		Faded, old, unclear, complex road markings/ unclear or unfamiliar road layout	Generally legible road markings and road layout but some elements could be improved	Clear, understandable, simple road markings and road layout	0	
	Consider and reduce risk from kerbside activity	Routes should be assessed in terms of all multi-functional uses of a street including car parking, bus stops, parking, including collision with opened door.	15. Conflict with kerbside activity	Narrow cycle lanes <1.5m or less (including any buffer) alongside parking/loading	Significant conflict with kerbside activity (eg nearside cycle lane < 2m (including buffer) wide alongside kerbside parking)	Some conflict with kerbside activity – eg less frequent activity on nearside of cyclists, min 2m cycle lanes including buffer.	No/very limited conflict with kerbside activity or width of cycle lane including buffer exceeds 3m.	0	
	Reduce severity of collisions where they do occur	Wherever possible routes should include “evasion room” (such as grass verges) and avoid any unnecessary physical hazards such as guardrail, build outs, etc. to reduce the severity of a collision should it occur.	16. Evasion room and unnecessary hazards		Cyclists at risk of being trapped by physical hazards along more than half of the route.	The number of physical hazards could be further reduced	The route includes evasion room and avoids any physical hazards.	1	

Key requirement	Factor	Design principle	Indicators	Critical	0 (Red)	1 (Amber)	2 (Green)	Score	Comments
Comfort	Surface quality	Density of defects including non cycle friendly ironworks, raised/sunken covers/ gullies, potholes, poor quality carriageway paint (eg from previous cycle lane)	17. Major and minor defects		Numerous minor defects or any number of major defects	Minor and occasional defects	Smooth high grip surface	1	
		Pavement or carriageway construction providing smooth and level surface	18. Surface type		Any bumpy, unbound, slippery, and potentially hazardous surface.	Hand-laid materials, concrete pavements with frequent joints.	Machine laid smooth and non-slip surface – eg Thin Surfacing, or firm and closely jointed blocks undisturbed by turning heavy vehicles.	1	Clean / Replace the surfacing near the Almond Hill Junior School where required.
	Effective width without conflict	Cyclists should be able to comfortably cycle without risk of conflict with other users both on and off road.	19. Desirable minimum widths according to volume of cyclists and route type (where cyclists are separated from motor vehicles).		More than 25% of the route includes cycle provision with widths which are no more than 25% below desirable minimum values.	No more than 25% of the route includes cycle provision with widths which are no more than 25% below desirable minimum	Recommended widths are maintained throughout whole route	1	
	Wayfinding	Non-local cyclists should be able to navigate the routes without the need to refer to maps.	20. Signing		Route signing is poor with signs missing at key decision points.	Gaps identified in route signing which could be improved	Route is well signed with signs located at all decision points and junctions	1	

Key requirement	Factor	Design principle	Indicators	Critical	0 (Red)	1 (Amber)	2 (Green)	Score	Comments
Attractiveness	Social safety and perceived vulnerability of user	Routes should be appealing and be perceived as safe and usable. Well used, well maintained, lit, overlooked routes are more attractive and therefore more likely to be used.	21. Lighting		Most or all of route is unlit	Short and infrequent unlit/ poorly lit sections	Route is lit to highway standards throughout	0	Improve lighting near the Almond Hill Junior school
			22. Isolation		Route is generally away from activity	Route is mainly overlooked and is not far from activity throughout its length	Route is overlooked throughout its length	0	
	Impact on pedestrians, including people with disabilities	Introduction of dedicated on-road cycle provision can enable people to cycle on-road rather than using footways which are not suitable for shared use. Introducing cycling onto well used footpaths may reduce the quality of provision for both users, particularly if the shared use path does not meet recommended widths.	23. Impact on pedestrians, Pedestrian Comfort Level based on Pedestrian Comfort guide for London (Section 6.1)		Route impacts negatively on pedestrian provision, Pedestrian Comfort is at Level C or below.	No impact on pedestrian provision or Pedestrian Comfort remains at B or above.	Pedestrian provision enhanced by cycling provision, or Pedestrian Comfort Level remains at A	0	
	Minimise street clutter	Signing required to support scheme layout	24. Signs informative and consistent but not overbearing or of inappropriate size		Large number of signs needed, difficult to follow and/ or leading to clutter	Moderate amount of signing particularly around junctions.	Signing for wayfinding purposes only and not causing additional obstruction.	0	
	Secure cycle parking	Ease of access to secure cycle parking within businesses and on-street	25. Evidence of bicycles parked to street furniture or cycle stands		No additional cycle parking provided or inadequate provision in insecure nonoverlooked areas	Some secure cycle parking provided but not enough to meet demand	Secure cycle parking provided, sufficient to meet demand	1	
	Audit Score Total							14/50	Route unsuitable for cyclist, which have to share narrow link

			with cars, that could lead to potential conflicts
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Appendix A: Cycling Level of Service Tool - Route 1.2 - 3.2km to The Leys Primary and Nursery School, Giles Junior Sand Nursery and Infants' School, Trotts Hill School, Almond Hill Junior School

Key requirement	Factor	Design principle	Indicators	Critical	0 (Red)	1 (Amber)	2 (Green)	Score	Comments
Cohesion	Connections	Cyclists should be able to easily and safely join and navigate along different sections of the same route and between different routes in the network.	1. Ability to join/leave route safely and easily: consider left and right turns		Cyclists cannot connect to other routes without dismounting	Cyclists can connect to other routes with minimal disruption to their journey	Cyclists have dedicated connections to other routes provided, with no interruption to their journey	1	
	Continuity and Wayfinding	Routes should be complete with no gaps in provision. 'End of route' signs should not be installed – cyclists should be shown how the route continues. Cyclists should not be 'abandoned', particularly at junctions where provision may be required to ensure safe crossing movements.	2. Provision for cyclists throughout the whole length of the route		Cyclists are 'abandoned' at points along the route with no clear indication of how to continue their journey.	The route is made up of discrete sections, but cyclists can clearly understand how to navigate between them, including through junctions.	Cyclists are provided with a continuous route, including through junctions	1	
	Density of network	Cycle networks should provide a mesh (or grid) of routes across the town or city. The density of the network is the distance between the routes which make up the grid pattern. The ultimate aim should be a network with a mesh width of 250m.	3. Density of routes based on mesh width ie distances between primary and secondary routes within the network		Route contributes to a network density mesh width >1000	Route contributes to a network density mesh width 250 – 1000m	Route contributes to a network density mesh width <250m	2	
Directness	Distance	Routes should follow the shortest option available and be as near to the 'as-the-crow-flies' distance as possible.	4. Deviation of route Deviation Factor is calculated by dividing the actual distance along the route by the straight line (crow-fly) distance, or shortest road alternative.		Deviation factor against straight line or shortest road alternative >1.4	Deviation factor against straight line or shortest road alternative 1.2 – 1.4	Deviation factor against straight line or shortest road alternative <1.2	1	

Key requirement	Factor	Design principle	Indicators	Critical	0 (Red)	1 (Amber)	2 (Green)	Score	Comments
Directness	Time: Frequency of required stops or give ways	The number of times a cyclist has to stop or loses right of way on a route should be minimised. This includes stopping and give ways at junctions or crossings, motorcycle barriers, pedestrian-only zones etc.	5. Stopping and give way frequency		The number of stops or give ways on the route is more than 4 per km	The number of stops or give ways on the route is between 2 and 4 per km	The number of stops or give ways on the route is less than 2 per km	2	
	Time: Delay at junctions	The length of delay caused by junctions should be minimised. This includes assessing impact of multiple or single stage crossings, signal timings, toucan crossings etc.	6. Delay at junctions		Delay for cyclists at junctions is greater than for motor vehicles	Delay for cyclists at junctions is similar to delay for motor vehicles	Delay is shorter than for motor vehicles or cyclists are not required to stop at junctions (eg bypass at signals)	2	
	Time: Delay on links	The length of delay caused by not being able to bypass slow moving traffic.	7. Ability to maintain own speed on links		Cyclists travel at speed of slowest vehicle (including a cycle) ahead	Cyclists can usually pass slow traffic and other cyclists	Cyclists can always choose an appropriate speed.	2	
	Gradients	Routes should avoid steep gradients where possible. Uphill sections increase time, effort and discomfort. Where these are encountered, routes should be planned to minimise climbing gradient and allow users to retain momentum gained on the descent.	8. Gradient		Route includes sections steeper than the gradients recommended in Chapter 5	There are no sections of route steeper than the gradients recommended in Chapter 5	There are no sections of route which steeper than 2%	1	

Key requirement	Factor	Design principle	Indicators	Critical	0 (Red)	1 (Amber)	2 (Green)	Score	Comments
Safety	Reduce/ remove speed differences where cyclists are sharing the carriageway	Where cyclists and motor vehicles are sharing the carriageway, the key to reducing severity of collisions is reducing the speeds of motor vehicles so that they more closely match that of cyclists. This is particularly important at points where risk of collision is greater, such as at junctions.	9. Motor traffic speed on approach and through junctions where cyclists are sharing the carriageway through the junction	85th percentile > 37mph (60kph)	85th percentile >30mph	85th percentile 20mph-30mph	85th percentile <20mph	2	
			10. Motor traffic speed on sections of shared carriageway	85th percentile > 37mph (60kph)	85th percentile >30mph	85th percentile 20mph-30mph	85th percentile <20mph	2	
	Avoid high motor traffic volumes where cyclists are sharing the carriageway	Cyclists should not be required to share the carriageway with high volumes of motor vehicles. This is particularly important at points where risk of collision is greater, such as at junctions.	11. Motor traffic volume on sections of shared carriageway, expressed as vehicles per peak hour	>10000 AADT, or >5% HGV	5000-10000 AADT and 2-5%HGV	2500-5000 and <2% HGV	0-2500 AADT	2	
	Risk of collision	Where speed differences and high motor vehicle flows cannot be reduced cyclists should be separated from traffic – see Figure 4.1. This separation can be achieved at varying degrees through on-road cycle lanes, hybrid tracks and off-road provision. Such segregation should reduce the risk of collision from beside or behind the cyclist.	12. Segregation to reduce risk of collision alongside or from behind	Cyclists sharing carriageway – nearside lane in critical range between 3.2m and 3.9m wide and traffic volumes prevent motor vehicles moving easily into opposite lane to pass cyclists.	Cyclists in unrestricted traffic lanes outside critical range (3.2m to 3.9m) or in cycle lanes less than 1.8m wide.	Cyclists in cycle lanes at least 1.8m wide on-carriageway; 85th percentile motor traffic speed max 30mph.	Cyclists on route away from motor traffic (off road provision) or in off-carriageway cycle track. Cyclists in hybrid/light segregated track; 85th percentile motor traffic speed max 30mph.	1	

Key requirement	Factor	Design principle	Indicators	Critical	0 (Red)	1 (Amber)	2 (Green)	Score	Comments
Safety		A high proportion of collisions involving cyclists occur at junctions. Junctions therefore need particular attention to reduce the risk of collision. Junction treatments include: Minor/side roads – cyclist priority and/or speed reduction across side roads Major roads – separation of cyclists from motor traffic through junctions.	13. Conflicting movements at junctions		Side road junctions frequent and/ or untreated. Major junctions, conflicting cycle/ motor traffic movements not separated	Side road junctions infrequent and with effective entry treatments. Major junctions, principal conflicting cycle/ motor traffic movements separated.	Side roads closed or treated to blend in with footway. Major junctions, all conflicting cycle/motor traffic streams separated.	1	
	Avoid complex design	Avoid complex designs which require users to process large amounts of information. Good network design should be self-explanatory and self-evident to all road users. All users should understand where they and other road users should be and what movements they might make.	14. Legible road markings and road layout		Faded, old, unclear, complex road markings/ unclear or unfamiliar road layout	Generally legible road markings and road layout but some elements could be improved	Clear, understandable, simple road markings and road layout	1	
	Consider and reduce risk from kerbside activity	Routes should be assessed in terms of all multi-functional uses of a street including car parking, bus stops, parking, including collision with opened door.	15. Conflict with kerbside activity	Narrow cycle lanes <1.5m or less (including any buffer) alongside parking/loading	Significant conflict with kerbside activity (eg nearside cycle lane < 2m (including buffer) wide alongside kerbside parking)	Some conflict with kerbside activity – eg less frequent activity on nearside of cyclists, min 2m cycle lanes including buffer.	No/very limited conflict with kerbside activity or width of cycle lane including buffer exceeds 3m.	1	
	Reduce severity of collisions where they do occur	Wherever possible routes should include “evasion room” (such as grass verges) and avoid any unnecessary physical hazards such as guardrail, build outs, etc. to reduce the severity of a collision should it occur.	16. Evasion room and unnecessary hazards		Cyclists at risk of being trapped by physical hazards along more than half of the route.	The number of physical hazards could be further reduced	The route includes evasion room and avoids any physical hazards.	1	

Key requirement	Factor	Design principle	Indicators	Critical	0 (Red)	1 (Amber)	2 (Green)	Score	Comments
Comfort	Surface quality	Density of defects including non cycle friendly ironworks, raised/sunken covers/ gullies, potholes, poor quality carriageway paint (eg from previous cycle lane)	17. Major and minor defects		Numerous minor defects or any number of major defects	Minor and occasional defects	Smooth high grip surface	1	
		Pavement or carriageway construction providing smooth and level surface	18. Surface type		Any bumpy, unbound, slippery, and potentially hazardous surface.	Hand-laid materials, concrete pavements with frequent joints.	Machine laid smooth and non-slip surface – eg Thin Surfacing, or firm and closely jointed blocks undisturbed by turning heavy vehicles.	0	Replace the surfacing under the Martins Way / Canterbury Way / Grace Wy roundabout; Replace the surfacing along Martins Way where required; Replace the paving slabs with bituminous surfacing by St Nicolas Playground; Clean / Replace the surfacing near St Nicolas Playground and Canterbury Lane; Remove the BT cabinet by playground to widen the cycleway; No direct route by St Nicolas Playground results in cycling tracks left on ground, possibility to provide more direct cycleway; Poor surfacing and gradients near Giles Junior School, improvements are possible; Relocate bin from the footway on the turn to cycleway by Giles School;

									Improve surfacing from St Nicolas Park into Great Ashby Way.
	Effective width without conflict	Cyclists should be able to comfortably cycle without risk of conflict with other users both on and off road.	19. Desirable minimum widths according to volume of cyclists and route type (where cyclists are separated from motor vehicles).		More than 25% of the route includes cycle provision with widths which are no more than 25% below desirable minimum values.	No more than 25% of the route includes cycle provision with widths which are no more than 25% below desirable minimum	Recommended widths are maintained throughout whole route	1	
	Wayfinding	Non-local cyclists should be able to navigate the routes without the need to refer to maps.	20. Signing		Route signing is poor with signs missing at key decision points.	Gaps identified in route signing which could be improved	Route is well signed with signs located at all decision points and junctions	1	

Key requirement	Factor	Design principle	Indicators	Critical	0 (Red)	1 (Amber)	2 (Green)	Score	Comments
Attractiveness	Social safety and perceived vulnerability of user	Routes should be appealing and be perceived as safe and usable. Well used, well maintained, lit, overlooked routes are more attractive and therefore more likely to be used.	21. Lighting		Most or all of route is unlit	Short and infrequent unlit/ poorly lit sections	Route is lit to highway standards throughout	1	Improve lighting near the Almond Hill Junior school
			22. Isolation		Route is generally away from activity	Route is mainly overlooked and is not far from activity throughout its length	Route is overlooked throughout its length	1	
	Impact on pedestrians, including people with disabilities	Introduction of dedicated on-road cycle provision can enable people to cycle on-road rather than using footways which are not suitable for shared use. Introducing cycling onto well used footpaths may reduce the quality of provision for both users, particularly if the shared use path does not meet recommended widths.	23. Impact on pedestrians, Pedestrian Comfort Level based on Pedestrian Comfort guide for London (Section 6.1)		Route impacts negatively on pedestrian provision, Pedestrian Comfort is at Level C or below.	No impact on pedestrian provision or Pedestrian Comfort Level remains at B or above.	Pedestrian provision enhanced by cycling provision, or Pedestrian Comfort Level remains at A	1	
	Minimise street clutter	Signing required to support scheme layout	24. Signs informative and consistent but not overbearing or of inappropriate size		Large number of signs needed, difficult to follow and/ or leading to clutter	Moderate amount of signing particularly around junctions.	Signing for wayfinding purposes only and not causing additional obstruction.	1	
	Secure cycle parking	Ease of access to secure cycle parking within businesses and on-street	25. Evidence of bicycles parked to street furniture or cycle stands		No additional cycle parking provided or inadequate provision in insecure nonoverlooked areas	Some secure cycle parking provided but not enough to meet demand	Secure cycle parking provided, sufficient to meet demand	1	
Audit Score Total								31/50	0

Appendix A: Cycling Level of Service Tool - Route 2 - 2.0km to The Oval Community Centre, Co-op Food - Stevenage - The Oval, Shell Petrol Station

Key requirement	Factor	Design principle	Indicators	Critical	0 (Red)	1 (Amber)	2 (Green)	Score	Comments
Cohesion	Connections	Cyclists should be able to easily and safely join and navigate along different sections of the same route and between different routes in the network.	1. Ability to join/leave route safely and easily: consider left and right turns		Cyclists cannot connect to other routes without dismounting	Cyclists can connect to other routes with minimal disruption to their journey	Cyclists have dedicated connections to other routes provided, with no interruption to their journey	1	
	Continuity and Wayfinding	Routes should be complete with no gaps in provision. 'End of route' signs should not be installed – cyclists should be shown how the route continues. Cyclists should not be 'abandoned', particularly at junctions where provision may be required to ensure safe crossing movements.	2. Provision for cyclists throughout the whole length of the route		Cyclists are 'abandoned' at points along the route with no clear indication of how to continue their journey.	The route is made up of discrete sections, but cyclists can clearly understand how to navigate between them, including through junctions.	Cyclists are provided with a continuous route, including through junctions	1	
	Density of network	Cycle networks should provide a mesh (or grid) of routes across the town or city. The density of the network is the distance between the routes which make up the grid pattern. The ultimate aim should be a network with a mesh width of 250m.	3. Density of routes based on mesh width ie distances between primary and secondary routes within the network		Route contributes to a network density mesh width >1000	Route contributes to a network density mesh width 250 – 1000m	Route contributes to a network density mesh width <250m	2	
Directness	Distance	Routes should follow the shortest option available and be as near to the 'as-the-crow-flies' distance as possible.	4. Deviation of route Deviation Factor is calculated by dividing the actual distance along the route by the straight line (crow-fly) distance, or shortest road alternative.		Deviation factor against straight line or shortest road alternative >1.4	Deviation factor against straight line or shortest road alternative 1.2 – 1.4	Deviation factor against straight line or shortest road alternative <1.2	1	

Key requirement	Factor	Design principle	Indicators	Critical	0 (Red)	1 (Amber)	2 (Green)	Score	Comments
Directness	Time: Frequency of required stops or give ways	The number of times a cyclist has to stop or loses right of way on a route should be minimised. This includes stopping and give ways at junctions or crossings, motorcycle barriers, pedestrian-only zones etc.	5. Stopping and give way frequency		The number of stops or give ways on the route is more than 4 per km	The number of stops or give ways on the route is between 2 and 4 per km	The number of stops or give ways on the route is less than 2 per km	1	
	Time: Delay at junctions	The length of delay caused by junctions should be minimised. This includes assessing impact of multiple or single stage crossings, signal timings, toucan crossings etc.	6. Delay at junctions		Delay for cyclists at junctions is greater than for motor vehicles	Delay for cyclists at junctions is similar to delay for motor vehicles	Delay is shorter than for motor vehicles or cyclists are not required to stop at junctions (eg bypass at signals)	1	
	Time: Delay on links	The length of delay caused by not being able to bypass slow moving traffic.	7. Ability to maintain own speed on links		Cyclists travel at speed of slowest vehicle (including a cycle) ahead	Cyclists can usually pass slow traffic and other cyclists	Cyclists can always choose an appropriate speed.	2	
	Gradients	Routes should avoid steep gradients where possible. Uphill sections increase time, effort and discomfort. Where these are encountered, routes should be planned to minimise climbing gradient and allow users to retain momentum gained on the descent.	8. Gradient		Route includes sections steeper than the gradients recommended in Chapter 5	There are no sections of route steeper than the gradients recommended in Chapter 5	There are no sections of route which steeper than 2%	1	

Key requirement	Factor	Design principle	Indicators	Critical	0 (Red)	1 (Amber)	2 (Green)	Score	Comments
Safety	Reduce/ remove speed differences where cyclists are sharing the carriageway	Where cyclists and motor vehicles are sharing the carriageway, the key to reducing severity of collisions is reducing the speeds of motor vehicles so that they more closely match that of cyclists. This is particularly important at points where risk of collision is greater, such as at junctions.	9. Motor traffic speed on approach and through junctions where cyclists are sharing the carriageway through the junction	85th percentile > 37mph (60kph)	85th percentile >30mph	85th percentile 20mph-30mph	85th percentile <20mph	1	
			10. Motor traffic speed on sections of shared carriageway	85th percentile > 37mph (60kph)	85th percentile >30mph	85th percentile 20mph-30mph	85th percentile <20mph	1	
	Avoid high motor traffic volumes where cyclists are sharing the carriageway	Cyclists should not be required to share the carriageway with high volumes of motor vehicles. This is particularly important at points where risk of collision is greater, such as at junctions.	11. Motor traffic volume on sections of shared carriageway, expressed as vehicles per peak hour	>10000 AADT, or >5% HGV	5000-10000 AADT and 2-5%HGV	2500-5000 and <2% HGV	0-2500 AADT	2	
	Risk of collision	Where speed differences and high motor vehicle flows cannot be reduced cyclists should be separated from traffic – see Figure 4.1. This separation can be achieved at varying degrees through on-road cycle lanes, hybrid tracks and off-road provision. Such segregation should reduce the risk of collision from beside or behind the cyclist.	12. Segregation to reduce risk of collision alongside or from behind	Cyclists sharing carriageway – nearside lane in critical range between 3.2m and 3.9m wide and traffic volumes prevent motor vehicles moving easily into opposite lane to pass cyclists.	Cyclists in unrestricted traffic lanes outside critical range (3.2m to 3.9m) or in cycle lanes less than 1.8m wide.	Cyclists in cycle lanes at least 1.8m wide on-carriageway; 85th percentile motor traffic speed max 30mph.	Cyclists on route away from motor traffic (off road provision) or in off-carriageway cycle track. Cyclists in hybrid/light segregated track; 85th percentile motor traffic speed max 30mph.	1	

Key requirement	Factor	Design principle	Indicators	Critical	0 (Red)	1 (Amber)	2 (Green)	Score	Comments
Safety		A high proportion of collisions involving cyclists occur at junctions. Junctions therefore need particular attention to reduce the risk of collision. Junction treatments include: Minor/side roads – cyclist priority and/or speed reduction across side roads Major roads – separation of cyclists from motor traffic through junctions.	13. Conflicting movements at junctions		Side road junctions frequent and/ or untreated. Major junctions, conflicting cycle/ motor traffic movements not separated	Side road junctions infrequent and with effective entry treatments. Major junctions, principal conflicting cycle/ motor traffic movements separated.	Side roads closed or treated to blend in with footway. Major junctions, all conflicting cycle/motor traffic streams separated.	1	
	Avoid complex design	Avoid complex designs which require users to process large amounts of information. Good network design should be self-explanatory and self-evident to all road users. All users should understand where they and other road users should be and what movements they might make.	14. Legible road markings and road layout		Faded, old, unclear, complex road markings/ unclear or unfamiliar road layout	Generally legible road markings and road layout but some elements could be improved	Clear, understandable, simple road markings and road layout	1	
	Consider and reduce risk from kerbside activity	Routes should be assessed in terms of all multi-functional uses of a street including car parking, bus stops, parking, including collision with opened door.	15. Conflict with kerbside activity	Narrow cycle lanes <1.5m or less (including any buffer) alongside parking/loading	Significant conflict with kerbside activity (eg nearside cycle lane < 2m (including buffer) wide alongside kerbside parking)	Some conflict with kerbside activity – eg less frequent activity on nearside of cyclists, min 2m cycle lanes including buffer.	No/very limited conflict with kerbside activity or width of cycle lane including buffer exceeds 3m.	2	
	Reduce severity of collisions where they do occur	Wherever possible routes should include “evasion room” (such as grass verges) and avoid any unnecessary physical hazards such as guardrail, build outs, etc. to reduce the severity of a collision should it occur.	16. Evasion room and unnecessary hazards		Cyclists at risk of being trapped by physical hazards along more than half of the route.	The number of physical hazards could be further reduced	The route includes evasion room and avoids any physical hazards.	1	

Key requirement	Factor	Design principle	Indicators	Critical	0 (Red)	1 (Amber)	2 (Green)	Score	Comments
Comfort	Surface quality	Density of defects including non cycle friendly ironworks, raised/sunken covers/ gullies, potholes, poor quality carriageway paint (eg from previous cycle lane)	17. Major and minor defects		Numerous minor defects or any number of major defects	Minor and occasional defects	Smooth high grip surface	0	
		Pavement or carriageway construction providing smooth and level surface	18. Surface type		Any bumpy, unbound, slippery, and potentially hazardous surface.	Hand-laid materials, concrete pavements with frequent joints.	Machine laid smooth and non-slip surface – eg Thin Surfacing, or firm and closely jointed blocks undisturbed by turning heavy vehicles.	0	Clean / Replace the surfacing behind the dwellings near St Nicolas Park;
	Effective width without conflict	Cyclists should be able to comfortably cycle without risk of conflict with other users both on and off road.	19. Desirable minimum widths according to volume of cyclists and route type (where cyclists are separated from motor vehicles).		More than 25% of the route includes cycle provision with widths which are no more than 25% below desirable minimum values.	No more than 25% of the route includes cycle provision with widths which are no more than 25% below desirable minimum	Recommended widths are maintained throughout whole route	0	
	Wayfinding	Non-local cyclists should be able to navigate the routes without the need to refer to maps.	20. Signing		Route signing is poor with signs missing at key decision points.	Gaps identified in route signing which could be improved	Route is well signed with signs located at all decision points and junctions	1	

Key requirement	Factor	Design principle	Indicators	Critical	0 (Red)	1 (Amber)	2 (Green)	Score	Comments
Attractiveness	Social safety and perceived vulnerability of user	Routes should be appealing and be perceived as safe and usable. Well used, well maintained, lit, overlooked routes are more attractive and therefore more likely to be used.	21. Lighting		Most or all of route is unlit	Short and infrequent unlit/ poorly lit sections	Route is lit to highway standards throughout	1	Improve lighting near the St Nicolas Park Forest and beyond;
			22. Isolation		Route is generally away from activity	Route is mainly overlooked and is not far from activity throughout its length	Route is overlooked throughout its length	0	
	Impact on pedestrians, including people with disabilities	Introduction of dedicated on-road cycle provision can enable people to cycle on-road rather than using footways which are not suitable for shared use. Introducing cycling onto well used footpaths may reduce the quality of provision for both users, particularly if the shared use path does not meet recommended widths.	23. Impact on pedestrians, Pedestrian Comfort Level based on Pedestrian Comfort guide for London (Section 6.1)		Route impacts negatively on pedestrian provision, Pedestrian Comfort is at Level C or below.	No impact on pedestrian provision or Pedestrian Comfort remains at B or above.	Pedestrian provision enhanced by cycling provision, or Pedestrian Comfort Level remains at A	1	
	Minimise street clutter	Signing required to support scheme layout	24. Signs informative and consistent but not overbearing or of inappropriate size		Large number of signs needed, difficult to follow and/ or leading to clutter	Moderate amount of signing particularly around junctions.	Signing for wayfinding purposes only and not causing additional obstruction.	1	
	Secure cycle parking	Ease of access to secure cycle parking within businesses and on-street	25. Evidence of bicycles parked to street furniture or cycle stands		No additional cycle parking provided or inadequate provision in insecure nonoverlooked areas	Some secure cycle parking provided but not enough to meet demand	Secure cycle parking provided, sufficient to meet demand	2	
Audit Score Total								26/50	0

Appendix A: Cycling Level of Service Tool – Route 2.1 – 1.7km to The Oval Community Centre, Co-op Food - Stevenage - The Oval, Shell Petrol Station Martins Wood Primary School and The Noble School Secondary School

Key requirement	Factor	Design principle	Indicators	Critical	0 (Red)	1 (Amber)	2 (Green)	Score	Comments
Cohesion	Connections	Cyclists should be able to easily and safely join and navigate along different sections of the same route and between different routes in the network.	1. Ability to join/leave route safely and easily: consider left and right turns		Cyclists cannot connect to other routes without dismounting	Cyclists can connect to other routes with minimal disruption to their journey	Cyclists have dedicated connections to other routes provided, with no interruption to their journey	1	
	Continuity and Wayfinding	Routes should be complete with no gaps in provision. 'End of route' signs should not be installed – cyclists should be shown how the route continues. Cyclists should not be 'abandoned', particularly at junctions where provision may be required to ensure safe crossing movements.	2. Provision for cyclists throughout the whole length of the route		Cyclists are 'abandoned' at points along the route with no clear indication of how to continue their journey.	The route is made up of discrete sections, but cyclists can clearly understand how to navigate between them, including through junctions.	Cyclists are provided with a continuous route, including through junctions	1	
	Density of network	Cycle networks should provide a mesh (or grid) of routes across the town or city. The density of the network is the distance between the routes which make up the grid pattern. The ultimate aim should be a network with a mesh width of 250m.	3. Density of routes based on mesh width ie distances between primary and secondary routes within the network		Route contributes to a network density mesh width >1000	Route contributes to a network density mesh width 250 – 1000m	Route contributes to a network density mesh width <250m	2	
Directness	Distance	Routes should follow the shortest option available and be as near to the 'as-the-crow-flies' distance as possible.	4. Deviation of route Deviation Factor is calculated by dividing the actual distance along the route by the straight line (crow-fly) distance, or shortest road alternative.		Deviation factor against straight line or shortest road alternative >1.4	Deviation factor against straight line or shortest road alternative 1.2 – 1.4	Deviation factor against straight line or shortest road alternative <1.2	1	

Key requirement	Factor	Design principle	Indicators	Critical	0 (Red)	1 (Amber)	2 (Green)	Score	Comments
Directness	Time: Frequency of required stops or give ways	The number of times a cyclist has to stop or loses right of way on a route should be minimised. This includes stopping and give ways at junctions or crossings, motorcycle barriers, pedestrian-only zones etc.	5. Stopping and give way frequency		The number of stops or give ways on the route is more than 4 per km	The number of stops or give ways on the route is between 2 and 4 per km	The number of stops or give ways on the route is less than 2 per km	1	
	Time: Delay at junctions	The length of delay caused by junctions should be minimised. This includes assessing impact of multiple or single stage crossings, signal timings, toucan crossings etc.	6. Delay at junctions		Delay for cyclists at junctions is greater than for motor vehicles	Delay for cyclists at junctions is similar to delay for motor vehicles	Delay is shorter than for motor vehicles or cyclists are not required to stop at junctions (eg bypass at signals)	2	
	Time: Delay on links	The length of delay caused by not being able to bypass slow moving traffic.	7. Ability to maintain own speed on links		Cyclists travel at speed of slowest vehicle (including a cycle) ahead	Cyclists can usually pass slow traffic and other cyclists	Cyclists can always choose an appropriate speed.	2	
	Gradients	Routes should avoid steep gradients where possible. Uphill sections increase time, effort and discomfort. Where these are encountered, routes should be planned to minimise climbing gradient and allow users to retain momentum gained on the descent.	8. Gradient		Route includes sections steeper than the gradients recommended in Chapter 5	There are no sections of route steeper than the gradients recommended in Chapter 5	There are no sections of route which steeper than 2%	1	

Key requirement	Factor	Design principle	Indicators	Critical	0 (Red)	1 (Amber)	2 (Green)	Score	Comments
Safety	Reduce/ remove speed differences where cyclists are sharing the carriageway	Where cyclists and motor vehicles are sharing the carriageway, the key to reducing severity of collisions is reducing the speeds of motor vehicles so that they more closely match that of cyclists. This is particularly important at points where risk of collision is greater, such as at junctions.	9. Motor traffic speed on approach and through junctions where cyclists are sharing the carriageway through the junction	85th percentile > 37mph (60kph)	85th percentile >30mph	85th percentile 20mph-30mph	85th percentile <20mph	1	
			10. Motor traffic speed on sections of shared carriageway	85th percentile > 37mph (60kph)	85th percentile >30mph	85th percentile 20mph-30mph	85th percentile <20mph	1	
	Avoid high motor traffic volumes where cyclists are sharing the carriageway	Cyclists should not be required to share the carriageway with high volumes of motor vehicles. This is particularly important at points where risk of collision is greater, such as at junctions.	11. Motor traffic volume on sections of shared carriageway, expressed as vehicles per peak hour	>10000 AADT, or >5% HGV	5000-10000 AADT and 2-5%HGV	2500-5000 and <2% HGV	0-2500 AADT	2	
	Risk of collision	Where speed differences and high motor vehicle flows cannot be reduced cyclists should be separated from traffic – see Figure 4.1. This separation can be achieved at varying degrees through on-road cycle lanes, hybrid tracks and off-road provision. Such segregation should reduce the risk of collision from beside or behind the cyclist.	12. Segregation to reduce risk of collision alongside or from behind	Cyclists sharing carriageway – nearside lane in critical range between 3.2m and 3.9m wide and traffic volumes prevent motor vehicles moving easily into opposite lane to pass cyclists.	Cyclists in unrestricted traffic lanes outside critical range (3.2m to 3.9m) or in cycle lanes less than 1.8m wide.	Cyclists in cycle lanes at least 1.8m wide on-carriageway; 85th percentile motor traffic speed max 30mph.	Cyclists on route away from motor traffic (off road provision) or in off-carriageway cycle track. Cyclists in hybrid/light segregated track; 85th percentile motor traffic speed max 30mph.	1	

Key requirement	Factor	Design principle	Indicators	Critical	0 (Red)	1 (Amber)	2 (Green)	Score	Comments
Safety		A high proportion of collisions involving cyclists occur at junctions. Junctions therefore need particular attention to reduce the risk of collision. Junction treatments include: Minor/side roads – cyclist priority and/or speed reduction across side roads Major roads – separation of cyclists from motor traffic through junctions.	13. Conflicting movements at junctions		Side road junctions frequent and/ or untreated. Major junctions, conflicting cycle/ motor traffic movements not separated	Side road junctions infrequent and with effective entry treatments. Major junctions, principal conflicting cycle/ motor traffic movements separated.	Side roads closed or treated to blend in with footway. Major junctions, all conflicting cycle/motor traffic streams separated.	2	
	Avoid complex design	Avoid complex designs which require users to process large amounts of information. Good network design should be self-explanatory and self-evident to all road users. All users should understand where they and other road users should be and what movements they might make.	14. Legible road markings and road layout		Faded, old, unclear, complex road markings/ unclear or unfamiliar road layout	Generally legible road markings and road layout but some elements could be improved	Clear, understandable, simple road markings and road layout	2	
	Consider and reduce risk from kerbside activity	Routes should be assessed in terms of all multi-functional uses of a street including car parking, bus stops, parking, including collision with opened door.	15. Conflict with kerbside activity	Narrow cycle lanes <1.5m or less (including any buffer) alongside parking/loading	Significant conflict with kerbside activity (eg nearside cycle lane < 2m (including buffer) wide alongside kerbside parking)	Some conflict with kerbside activity – eg less frequent activity on nearside of cyclists, min 2m cycle lanes including buffer.	No/very limited conflict with kerbside activity or width of cycle lane including buffer exceeds 3m.	1	
	Reduce severity of collisions where they do occur	Wherever possible routes should include “evasion room” (such as grass verges) and avoid any unnecessary physical hazards such as guardrail, build outs, etc. to reduce the severity of a collision should it occur.	16. Evasion room and unnecessary hazards		Cyclists at risk of being trapped by physical hazards along more than half of the route.	The number of physical hazards could be further reduced	The route includes evasion room and avoids any physical hazards.	1	

Key requirement	Factor	Design principle	Indicators	Critical	0 (Red)	1 (Amber)	2 (Green)	Score	Comments
Comfort	Surface quality	Density of defects including non cycle friendly ironworks, raised/sunken covers/ gullies, potholes, poor quality carriageway paint (eg from previous cycle lane)	17. Major and minor defects		Numerous minor defects or any number of major defects	Minor and occasional defects	Smooth high grip surface	1	
		Pavement or carriageway construction providing smooth and level surface	18. Surface type		Any bumpy, unbound, slippery, and potentially hazardous surface.	Hand-laid materials, concrete pavements with frequent joints.	Machine laid smooth and non-slip surface – eg Thin Surfacing, or firm and closely jointed blocks undisturbed by turning heavy vehicles.	1	Clean / Replace the surfacing behind the dwellings near St Nicolas Park Forest and towards Martins Way;
	Effective width without conflict	Cyclists should be able to comfortably cycle without risk of conflict with other users both on and off road.	19. Desirable minimum widths according to volume of cyclists and route type (where cyclists are separated from motor vehicles).		More than 25% of the route includes cycle provision with widths which are no more than 25% below desirable minimum values.	No more than 25% of the route includes cycle provision with widths which are no more than 25% below desirable minimum	Recommended widths are maintained throughout whole route	1	
	Wayfinding	Non-local cyclists should be able to navigate the routes without the need to refer to maps.	20. Signing		Route signing is poor with signs missing at key decision points.	Gaps identified in route signing which could be improved	Route is well signed with signs located at all decision points and junctions	1	

Key requirement	Factor	Design principle	Indicators	Critical	0 (Red)	1 (Amber)	2 (Green)	Score	Comments
Attractiveness	Social safety and perceived vulnerability of user	Routes should be appealing and be perceived as safe and usable. Well used, well maintained, lit, overlooked routes are more attractive and therefore more likely to be used.	21. Lighting		Most or all of route is unlit	Short and infrequent unlit/ poorly lit sections	Route is lit to highway standards throughout	1	Improve lighting near the St Nicolas Park Forest and beyond;
			22. Isolation		Route is generally away from activity	Route is mainly overlooked and is not far from activity throughout its length	Route is overlooked throughout its length	1	
	Impact on pedestrians, including people with disabilities	Introduction of dedicated on-road cycle provision can enable people to cycle on-road rather than using footways which are not suitable for shared use. Introducing cycling onto well used footpaths may reduce the quality of provision for both users, particularly if the shared use path does not meet recommended widths.	23. Impact on pedestrians, Pedestrian Comfort Level based on Pedestrian Comfort guide for London (Section 6.1)		Route impacts negatively on pedestrian provision, Pedestrian Comfort is at Level C or below.	No impact on pedestrian provision or Pedestrian Comfort remains at B or above.	Pedestrian provision enhanced by cycling provision, or Pedestrian Comfort Level remains at A	1	
	Minimise street clutter	Signing required to support scheme layout	24. Signs informative and consistent but not overbearing or of inappropriate size		Large number of signs needed, difficult to follow and/ or leading to clutter	Moderate amount of signing particularly around junctions.	Signing for wayfinding purposes only and not causing additional obstruction.	1	
	Secure cycle parking	Ease of access to secure cycle parking within businesses and on-street	25. Evidence of bicycles parked to street furniture or cycle stands		No additional cycle parking provided or inadequate provision in insecure nonoverlooked areas	Some secure cycle parking provided but not enough to meet demand	Secure cycle parking provided, sufficient to meet demand	2	
Audit Score Total								32/50	0

Appendix A: Cycling Level of Service Tool – Route 3 – 2.5km to Employment Area, Martins Wood Primary School and The Noble School Secondary School

Key requirement	Factor	Design principle	Indicators	Critical	0 (Red)	1 (Amber)	2 (Green)	Score	Comments
Cohesion	Connections	Cyclists should be able to easily and safely join and navigate along different sections of the same route and between different routes in the network.	1. Ability to join/leave route safely and easily: consider left and right turns		Cyclists cannot connect to other routes without dismounting	Cyclists can connect to other routes with minimal disruption to their journey	Cyclists have dedicated connections to other routes provided, with no interruption to their journey	2	
	Continuity and Wayfinding	Routes should be complete with no gaps in provision. 'End of route' signs should not be installed – cyclists should be shown how the route continues. Cyclists should not be 'abandoned', particularly at junctions where provision may be required to ensure safe crossing movements.	2. Provision for cyclists throughout the whole length of the route		Cyclists are 'abandoned' at points along the route with no clear indication of how to continue their journey.	The route is made up of discrete sections, but cyclists can clearly understand how to navigate between them, including through junctions.	Cyclists are provided with a continuous route, including through junctions	2	
	Density of network	Cycle networks should provide a mesh (or grid) of routes across the town or city. The density of the network is the distance between the routes which make up the grid pattern. The ultimate aim should be a network with a mesh width of 250m.	3. Density of routes based on mesh width ie distances between primary and secondary routes within the network		Route contributes to a network density mesh width >1000	Route contributes to a network density mesh width 250 – 1000m	Route contributes to a network density mesh width <250m	2	
Directness	Distance	Routes should follow the shortest option available and be as near to the 'as-the-crow-flies' distance as possible.	4. Deviation of route Deviation Factor is calculated by dividing the actual distance along the route by the straight line (crow-fly) distance, or shortest road alternative.		Deviation factor against straight line or shortest road alternative >1.4	Deviation factor against straight line or shortest road alternative 1.2 – 1.4	Deviation factor against straight line or shortest road alternative <1.2	1	

Key requirement	Factor	Design principle	Indicators	Critical	0 (Red)	1 (Amber)	2 (Green)	Score	Comments
Directness	Time: Frequency of required stops or give ways	The number of times a cyclist has to stop or loses right of way on a route should be minimised. This includes stopping and give ways at junctions or crossings, motorcycle barriers, pedestrian-only zones etc.	5. Stopping and give way frequency		The number of stops or give ways on the route is more than 4 per km	The number of stops or give ways on the route is between 2 and 4 per km	The number of stops or give ways on the route is less than 2 per km	2	
	Time: Delay at junctions	The length of delay caused by junctions should be minimised. This includes assessing impact of multiple or single stage crossings, signal timings, toucan crossings etc.	6. Delay at junctions		Delay for cyclists at junctions is greater than for motor vehicles	Delay for cyclists at junctions is similar to delay for motor vehicles	Delay is shorter than for motor vehicles or cyclists are not required to stop at junctions (eg bypass at signals)	2	
	Time: Delay on links	The length of delay caused by not being able to bypass slow moving traffic.	7. Ability to maintain own speed on links		Cyclists travel at speed of slowest vehicle (including a cycle) ahead	Cyclists can usually pass slow traffic and other cyclists	Cyclists can always choose an appropriate speed.	2	
	Gradients	Routes should avoid steep gradients where possible. Uphill sections increase time, effort and discomfort. Where these are encountered, routes should be planned to minimise climbing gradient and allow users to retain momentum gained on the descent.	8. Gradient		Route includes sections steeper than the gradients recommended in Chapter 5	There are no sections of route steeper than the gradients recommended in Chapter 5	There are no sections of route which steeper than 2%	1	

Key requirement	Factor	Design principle	Indicators	Critical	0 (Red)	1 (Amber)	2 (Green)	Score	Comments
Safety	Reduce/ remove speed differences where cyclists are sharing the carriageway	Where cyclists and motor vehicles are sharing the carriageway, the key to reducing severity of collisions is reducing the speeds of motor vehicles so that they more closely match that of cyclists. This is particularly important at points where risk of collision is greater, such as at junctions.	9. Motor traffic speed on approach and through junctions where cyclists are sharing the carriageway through the junction	85th percentile > 37mph (60kph)	85th percentile >30mph	85th percentile 20mph-30mph	85th percentile <20mph	1	
			10. Motor traffic speed on sections of shared carriageway	85th percentile > 37mph (60kph)	85th percentile >30mph	85th percentile 20mph-30mph	85th percentile <20mph	1	
	Avoid high motor traffic volumes where cyclists are sharing the carriageway	Cyclists should not be required to share the carriageway with high volumes of motor vehicles. This is particularly important at points where risk of collision is greater, such as at junctions.	11. Motor traffic volume on sections of shared carriageway, expressed as vehicles per peak hour	>10000 AADT, or >5% HGV	5000-10000 AADT and 2-5%HGV	2500-5000 and <2% HGV	0-2500 AADT	2	
	Risk of collision	Where speed differences and high motor vehicle flows cannot be reduced cyclists should be separated from traffic – see Figure 4.1. This separation can be achieved at varying degrees through on-road cycle lanes, hybrid tracks and off-road provision. Such segregation should reduce the risk of collision from beside or behind the cyclist.	12. Segregation to reduce risk of collision alongside or from behind	Cyclists sharing carriageway – nearside lane in critical range between 3.2m and 3.9m wide and traffic volumes prevent motor vehicles moving easily into opposite lane to pass cyclists.	Cyclists in unrestricted traffic lanes outside critical range (3.2m to 3.9m) or in cycle lanes less than 1.8m wide.	Cyclists in cycle lanes at least 1.8m wide on-carriageway; 85th percentile motor traffic speed max 30mph.	Cyclists on route away from motor traffic (off road provision) or in off-carriageway cycle track. Cyclists in hybrid/light segregated track; 85th percentile motor traffic speed max 30mph.	2	

Key requirement	Factor	Design principle	Indicators	Critical	0 (Red)	1 (Amber)	2 (Green)	Score	Comments
Safety		A high proportion of collisions involving cyclists occur at junctions. Junctions therefore need particular attention to reduce the risk of collision. Junction treatments include: Minor/side roads – cyclist priority and/or speed reduction across side roads Major roads – separation of cyclists from motor traffic through junctions.	13. Conflicting movements at junctions		Side road junctions frequent and/ or untreated. Major junctions, conflicting cycle/ motor traffic movements not separated	Side road junctions infrequent and with effective entry treatments. Major junctions, principal conflicting cycle/ motor traffic movements separated.	Side roads closed or treated to blend in with footway. Major junctions, all conflicting cycle/motor traffic streams separated.	2	
	Avoid complex design	Avoid complex designs which require users to process large amounts of information. Good network design should be self-explanatory and self-evident to all road users. All users should understand where they and other road users should be and what movements they might make.	14. Legible road markings and road layout		Faded, old, unclear, complex road markings/ unclear or unfamiliar road layout	Generally legible road markings and road layout but some elements could be improved	Clear, understandable, simple road markings and road layout	2	
	Consider and reduce risk from kerbside activity	Routes should be assessed in terms of all multi-functional uses of a street including car parking, bus stops, parking, including collision with opened door.	15. Conflict with kerbside activity	Narrow cycle lanes <1.5m or less (including any buffer) alongside parking/loading	Significant conflict with kerbside activity (eg nearside cycle lane < 2m (including buffer) wide alongside kerbside parking)	Some conflict with kerbside activity – eg less frequent activity on nearside of cyclists, min 2m cycle lanes including buffer.	No/very limited conflict with kerbside activity or width of cycle lane including buffer exceeds 3m.	2	
	Reduce severity of collisions where they do occur	Wherever possible routes should include “evasion room” (such as grass verges) and avoid any unnecessary physical hazards such as guardrail, build outs, etc. to reduce the severity of a collision should it occur.	16. Evasion room and unnecessary hazards		Cyclists at risk of being trapped by physical hazards along more than half of the route.	The number of physical hazards could be further reduced	The route includes evasion room and avoids any physical hazards.	1	

Key requirement	Factor	Design principle	Indicators	Critical	0 (Red)	1 (Amber)	2 (Green)	Score	Comments
Comfort	Surface quality	Density of defects including non cycle friendly ironworks, raised/sunken covers/ gullies, potholes, poor quality carriageway paint (eg from previous cycle lane)	17. Major and minor defects		Numerous minor defects or any number of major defects	Minor and occasional defects	Smooth high grip surface	1	
		Pavement or carriageway construction providing smooth and level surface	18. Surface type		Any bumpy, unbound, slippery, and potentially hazardous surface.	Hand-laid materials, concrete pavements with frequent joints.	Machine laid smooth and non-slip surface – eg Thin Surfacing, or firm and closely jointed blocks undisturbed by turning heavy vehicles.	1	Clean / Replace the surfacing behind the dwellings near St Nicolas Park Forest and towards Martins Way;
	Effective width without conflict	Cyclists should be able to comfortably cycle without risk of conflict with other users both on and off road.	19. Desirable minimum widths according to volume of cyclists and route type (where cyclists are separated from motor vehicles).		More than 25% of the route includes cycle provision with widths which are no more than 25% below desirable minimum values.	No more than 25% of the route includes cycle provision with widths which are no more than 25% below desirable minimum	Recommended widths are maintained throughout whole route	1	
	Wayfinding	Non-local cyclists should be able to navigate the routes without the need to refer to maps.	20. Signing		Route signing is poor with signs missing at key decision points.	Gaps identified in route signing which could be improved	Route is well signed with signs located at all decision points and junctions	1	

Key requirement	Factor	Design principle	Indicators	Critical	0 (Red)	1 (Amber)	2 (Green)	Score	Comments
Attractiveness	Social safety and perceived vulnerability of user	Routes should be appealing and be perceived as safe and usable. Well used, well maintained, lit, overlooked routes are more attractive and therefore more likely to be used.	21. Lighting		Most or all of route is unlit	Short and infrequent unlit/ poorly lit sections	Route is lit to highway standards throughout	1	Improve lighting near schools
			22. Isolation		Route is generally away from activity	Route is mainly overlooked and is not far from activity throughout its length	Route is overlooked throughout its length	1	
	Impact on pedestrians, including people with disabilities	Introduction of dedicated on-road cycle provision can enable people to cycle on-road rather than using footways which are not suitable for shared use. Introducing cycling onto well used footpaths may reduce the quality of provision for both users, particularly if the shared use path does not meet recommended widths.	23. Impact on pedestrians, Pedestrian Comfort Level based on Pedestrian Comfort guide for London (Section 6.1)		Route impacts negatively on pedestrian provision, Pedestrian Comfort is at Level C or below.	No impact on pedestrian provision or Pedestrian Comfort Level remains at B or above.	Pedestrian provision enhanced by cycling provision, or Pedestrian Comfort Level remains at A	2	
	Minimise street clutter	Signing required to support scheme layout	24. Signs informative and consistent but not overbearing or of inappropriate size		Large number of signs needed, difficult to follow and/ or leading to clutter	Moderate amount of signing particularly around junctions.	Signing for wayfinding purposes only and not causing additional obstruction.	2	
	Secure cycle parking	Ease of access to secure cycle parking within businesses and on-street	25. Evidence of bicycles parked to street furniture or cycle stands		No additional cycle parking provided or inadequate provision in insecure nonoverlooked areas	Some secure cycle parking provided but not enough to meet demand	Secure cycle parking provided, sufficient to meet demand	2	
Audit Score Total								39/50	0

Appendix A: Cycling Level of Service Tool – Route 3.1 – 1.4km to Employment Area, Martins Wood

Key requirement	Factor	Design principle	Indicators	Critical	0 (Red)	1 (Amber)	2 (Green)	Score	Comments
Cohesion	Connections	Cyclists should be able to easily and safely join and navigate along different sections of the same route and between different routes in the network.	1. Ability to join/leave route safely and easily: consider left and right turns		Cyclists cannot connect to other routes without dismounting	Cyclists can connect to other routes with minimal disruption to their journey	Cyclists have dedicated connections to other routes provided, with no interruption to their journey	2	
	Continuity and Wayfinding	Routes should be complete with no gaps in provision. 'End of route' signs should not be installed – cyclists should be shown how the route continues. Cyclists should not be 'abandoned', particularly at junctions where provision may be required to ensure safe crossing movements.	2. Provision for cyclists throughout the whole length of the route		Cyclists are 'abandoned' at points along the route with no clear indication of how to continue their journey.	The route is made up of discrete sections, but cyclists can clearly understand how to navigate between them, including through junctions.	Cyclists are provided with a continuous route, including through junctions	2	
	Density of network	Cycle networks should provide a mesh (or grid) of routes across the town or city. The density of the network is the distance between the routes which make up the grid pattern. The ultimate aim should be a network with a mesh width of 250m.	3. Density of routes based on mesh width ie distances between primary and secondary routes within the network		Route contributes to a network density mesh width >1000	Route contributes to a network density mesh width 250 – 1000m	Route contributes to a network density mesh width <250m	2	
Directness	Distance	Routes should follow the shortest option available and be as near to the 'as-the-crow-flies' distance as possible.	4. Deviation of route Deviation Factor is calculated by dividing the actual distance along the route by the straight line (crow-fly) distance, or shortest road alternative.		Deviation factor against straight line or shortest road alternative >1.4	Deviation factor against straight line or shortest road alternative 1.2 – 1.4	Deviation factor against straight line or shortest road alternative <1.2	1	

Key requirement	Factor	Design principle	Indicators	Critical	0 (Red)	1 (Amber)	2 (Green)	Score	Comments
Directness	Time: Frequency of required stops or give ways	The number of times a cyclist has to stop or loses right of way on a route should be minimised. This includes stopping and give ways at junctions or crossings, motorcycle barriers, pedestrian-only zones etc.	5. Stopping and give way frequency		The number of stops or give ways on the route is more than 4 per km	The number of stops or give ways on the route is between 2 and 4 per km	The number of stops or give ways on the route is less than 2 per km	2	
	Time: Delay at junctions	The length of delay caused by junctions should be minimised. This includes assessing impact of multiple or single stage crossings, signal timings, toucan crossings etc.	6. Delay at junctions		Delay for cyclists at junctions is greater than for motor vehicles	Delay for cyclists at junctions is similar to delay for motor vehicles	Delay is shorter than for motor vehicles or cyclists are not required to stop at junctions (eg bypass at signals)	2	
	Time: Delay on links	The length of delay caused by not being able to bypass slow moving traffic.	7. Ability to maintain own speed on links		Cyclists travel at speed of slowest vehicle (including a cycle) ahead	Cyclists can usually pass slow traffic and other cyclists	Cyclists can always choose an appropriate speed.	2	
	Gradients	Routes should avoid steep gradients where possible. Uphill sections increase time, effort and discomfort. Where these are encountered, routes should be planned to minimise climbing gradient and allow users to retain momentum gained on the descent.	8. Gradient		Route includes sections steeper than the gradients recommended in Chapter 5	There are no sections of route steeper than the gradients recommended in Chapter 5	There are no sections of route which steeper than 2%	1	

Key requirement	Factor	Design principle	Indicators	Critical	0 (Red)	1 (Amber)	2 (Green)	Score	Comments
Safety	Reduce/ remove speed differences where cyclists are sharing the carriageway	Where cyclists and motor vehicles are sharing the carriageway, the key to reducing severity of collisions is reducing the speeds of motor vehicles so that they more closely match that of cyclists. This is particularly important at points where risk of collision is greater, such as at junctions.	9. Motor traffic speed on approach and through junctions where cyclists are sharing the carriageway through the junction	85th percentile > 37mph (60kph)	85th percentile >30mph	85th percentile 20mph-30mph	85th percentile <20mph	1	
			10. Motor traffic speed on sections of shared carriageway	85th percentile > 37mph (60kph)	85th percentile >30mph	85th percentile 20mph-30mph	85th percentile <20mph	1	
	Avoid high motor traffic volumes where cyclists are sharing the carriageway	Cyclists should not be required to share the carriageway with high volumes of motor vehicles. This is particularly important at points where risk of collision is greater, such as at junctions.	11. Motor traffic volume on sections of shared carriageway, expressed as vehicles per peak hour	>10000 AADT, or >5% HGV	5000-10000 AADT and 2-5%HGV	2500-5000 and <2% HGV	0-2500 AADT	2	
	Risk of collision	Where speed differences and high motor vehicle flows cannot be reduced cyclists should be separated from traffic – see Figure 4.1. This separation can be achieved at varying degrees through on-road cycle lanes, hybrid tracks and off-road provision. Such segregation should reduce the risk of collision from beside or behind the cyclist.	12. Segregation to reduce risk of collision alongside or from behind	Cyclists sharing carriageway – nearside lane in critical range between 3.2m and 3.9m wide and traffic volumes prevent motor vehicles moving easily into opposite lane to pass cyclists.	Cyclists in unrestricted traffic lanes outside critical range (3.2m to 3.9m) or in cycle lanes less than 1.8m wide.	Cyclists in cycle lanes at least 1.8m wide on-carriageway; 85th percentile motor traffic speed max 30mph.	Cyclists on route away from motor traffic (off road provision) or in off-carriageway cycle track. Cyclists in hybrid/light segregated track; 85th percentile motor traffic speed max 30mph.	1	

Key requirement	Factor	Design principle	Indicators	Critical	0 (Red)	1 (Amber)	2 (Green)	Score	Comments
Safety		A high proportion of collisions involving cyclists occur at junctions. Junctions therefore need particular attention to reduce the risk of collision. Junction treatments include: Minor/side roads – cyclist priority and/or speed reduction across side roads Major roads – separation of cyclists from motor traffic through junctions.	13. Conflicting movements at junctions		Side road junctions frequent and/ or untreated. Major junctions, conflicting cycle/ motor traffic movements not separated	Side road junctions infrequent and with effective entry treatments. Major junctions, principal conflicting cycle/ motor traffic movements separated.	Side roads closed or treated to blend in with footway. Major junctions, all conflicting cycle/motor traffic streams separated.	2	
	Avoid complex design	Avoid complex designs which require users to process large amounts of information. Good network design should be self-explanatory and self-evident to all road users. All users should understand where they and other road users should be and what movements they might make.	14. Legible road markings and road layout		Faded, old, unclear, complex road markings/ unclear or unfamiliar road layout	Generally legible road markings and road layout but some elements could be improved	Clear, understandable, simple road markings and road layout	1	
	Consider and reduce risk from kerbside activity	Routes should be assessed in terms of all multi-functional uses of a street including car parking, bus stops, parking, including collision with opened door.	15. Conflict with kerbside activity	Narrow cycle lanes <1.5m or less (including any buffer) alongside parking/loading	Significant conflict with kerbside activity (eg nearside cycle lane < 2m (including buffer) wide alongside kerbside parking)	Some conflict with kerbside activity – eg less frequent activity on nearside of cyclists, min 2m cycle lanes including buffer.	No/very limited conflict with kerbside activity or width of cycle lane including buffer exceeds 3m.	1	
	Reduce severity of collisions where they do occur	Wherever possible routes should include “evasion room” (such as grass verges) and avoid any unnecessary physical hazards such as guardrail, build outs, etc. to reduce the severity of a collision should it occur.	16. Evasion room and unnecessary hazards		Cyclists at risk of being trapped by physical hazards along more than half of the route.	The number of physical hazards could be further reduced	The route includes evasion room and avoids any physical hazards.	1	

Key requirement	Factor	Design principle	Indicators	Critical	0 (Red)	1 (Amber)	2 (Green)	Score	Comments
Comfort	Surface quality	Density of defects including non cycle friendly ironworks, raised/sunken covers/ gullies, potholes, poor quality carriageway paint (eg from previous cycle lane)	17. Major and minor defects		Numerous minor defects or any number of major defects	Minor and occasional defects	Smooth high grip surface	1	
		Pavement or carriageway construction providing smooth and level surface	18. Surface type		Any bumpy, unbound, slippery, and potentially hazardous surface.	Hand-laid materials, concrete pavements with frequent joints.	Machine laid smooth and non-slip surface – eg Thin Surfacing, or firm and closely jointed blocks undisturbed by turning heavy vehicles.	1	Replace old tactile paving;
	Effective width without conflict	Cyclists should be able to comfortably cycle without risk of conflict with other users both on and off road.	19. Desirable minimum widths according to volume of cyclists and route type (where cyclists are separated from motor vehicles).		More than 25% of the route includes cycle provision with widths which are no more than 25% below desirable minimum values.	No more than 25% of the route includes cycle provision with widths which are no more than 25% below desirable minimum	Recommended widths are maintained throughout whole route	1	
	Wayfinding	Non-local cyclists should be able to navigate the routes without the need to refer to maps.	20. Signing		Route signing is poor with signs missing at key decision points.	Gaps identified in route signing which could be improved	Route is well signed with signs located at all decision points and junctions	1	

Key requirement	Factor	Design principle	Indicators	Critical	0 (Red)	1 (Amber)	2 (Green)	Score	Comments
Attractiveness	Social safety and perceived vulnerability of user	Routes should be appealing and be perceived as safe and usable. Well used, well maintained, lit, overlooked routes are more attractive and therefore more likely to be used.	21. Lighting		Most or all of route is unlit	Short and infrequent unlit/ poorly lit sections	Route is lit to highway standards throughout	1	
			22. Isolation		Route is generally away from activity	Route is mainly overlooked and is not far from activity throughout its length	Route is overlooked throughout its length	1	
	Impact on pedestrians, including people with disabilities	Introduction of dedicated on-road cycle provision can enable people to cycle on-road rather than using footways which are not suitable for shared use. Introducing cycling onto well used footpaths may reduce the quality of provision for both users, particularly if the shared use path does not meet recommended widths.	23. Impact on pedestrians, Pedestrian Comfort Level based on Pedestrian Comfort guide for London (Section 6.1)		Route impacts negatively on pedestrian provision, Pedestrian Comfort is at Level C or below.	No impact on pedestrian provision or Pedestrian Comfort remains at B or above.	Pedestrian provision enhanced by cycling provision, or Pedestrian Comfort Level remains at A	1	
	Minimise street clutter	Signing required to support scheme layout	24. Signs informative and consistent but not overbearing or of inappropriate size		Large number of signs needed, difficult to follow and/ or leading to clutter	Moderate amount of signing particularly around junctions.	Signing for wayfinding purposes only and not causing additional obstruction.	1	
	Secure cycle parking	Ease of access to secure cycle parking within businesses and on-street	25. Evidence of bicycles parked to street furniture or cycle stands		No additional cycle parking provided or inadequate provision in insecure nonoverlooked areas	Some secure cycle parking provided but not enough to meet demand	Secure cycle parking provided, sufficient to meet demand	2	
Audit Score Total								34/50	0

PROJECT TITLE: Land off Mendip Way, Great Ashby

DATE: March 2025

Accessibility Audit Walking and Cycling Routes, Land Off Mendip Way, Great Ashby

Introduction

1. This Accessibility Audit Walking and Cycling Routes Summary has been prepared by Woods Hardwick Ltd on behalf of Picture Estates Ltd in support of an outline Planning Application for a proposed mixed-use development on land known as 'Land off Mendip Way, Great Ashby' in Stevenage.
2. This document was prepared in addition to the main Accessibility Audit document for the site, both documents should be read together. This Summary document focuses on the proposed improvements to the walking and cyclist network.
3. The key walking routes from the site that have been identified in Accessibility Audit and have been audited using the Walking Route Audit Tool (WRAT). The findings of the WRAT audit tool analysis show, that the primary focus on the improvements should be given to Route 1 which is a route from the main site access on Mendip Way to Round Diamond School and nearest supermarket and also Route 2.0, 2.1 and 2.2 which is the PROW Bridleway.
4. The key cycling routes from the site that have been identified in Accessibility Audit and audited using the Cycling Level of Service Tool and Junction Assessment Tool provided in LTN 1/20 Appendix A and B. For the broader discussion on the findings of the audit please refer to walking and cycling section of the Accessibility Audit document. Consistent with those findings, primary focus on the improvements has been given to ensuring optimal cycle connectivity through the main access on Mendip Way and through the bridleway linking into the southeastern boundary of the site. Further improvements are also being proposed to Routes 1.0, which form part of a cycleway to the Stevenage Train Station and also wider cycleway network, and to Routes 1.2, 2.0 and 2.1 around and across St Nicholas Park and to Route 3.0 which leads to the nearest secondary school.
5. All proposed improvements are listed in Table 1 below. The proposed improvements are also illustrated on Accessibility Audit Walking and Cycling Routes Possible Improvements drawings shown in Figure 1 and 2, also included within **Appendix A**.
6. The proposed improvements were categorised by their priority - prioritised improvements and optional non-essential improvements to be considered. The ownership information is provided next to each of the proposed improvements.
7. The cost estimates were also obtained for the proposed works, they are included within **Appendix B**. The total cost of providing improvements to all walking routes is approx. £71,148, while the total cost of providing improvements to all cycling routes is £1,227,048. The cost estimate excludes the cost of providing the bus service, which is to be confirmed.
8. Based on the information contained within this document, it can be appreciated what possible improvements are likely to make the walking and cycling routes more sustainable, safe and attractive for pedestrians, cyclists and other users.
9. Based on the information collected to date all prioritised improvements falls within adopted highway boundaries, apart from the bridleway (Section from the site up to Fairfield Way Bus Stop), which is subject to an absolute lease to North Hertfordshire District Council (which is expected to grant its consent to these improvements).
10. The ownership of non-essential improvements to be considered falls within third party landownerships, therefore outside of the control of applicant. The Highway Authority could use their powers under Section 228 of the Highway Act to undertake the necessary works. The ownership information maps are also included within **Appendix C**.

11. Based on the above, it is proposed that all prioritised improvements would be delivered by the developer, while the contribution would be paid in relation to the optional non-essential improvements.

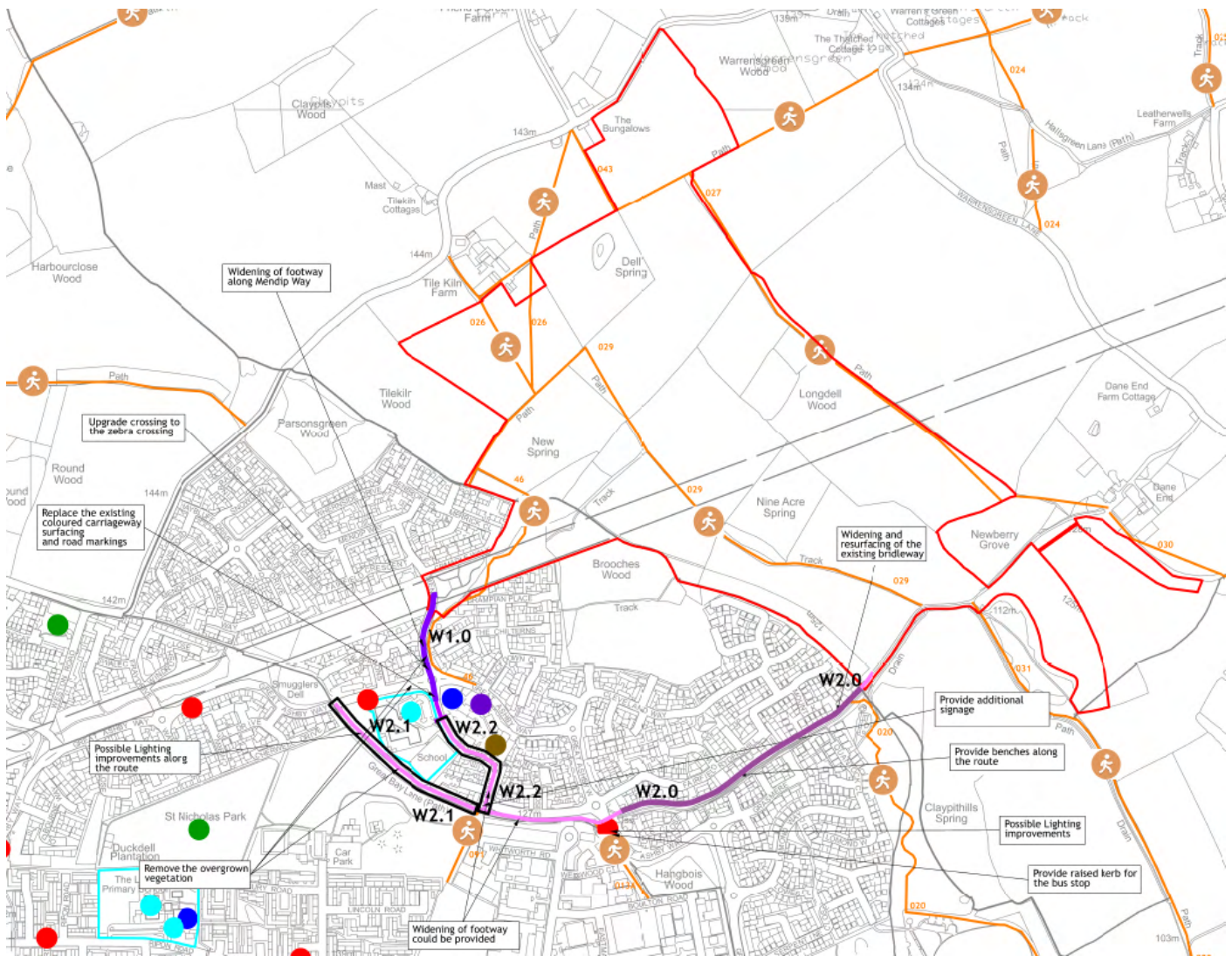


Figure 1. Accessibility Audit Walking Routes Possible Improvements

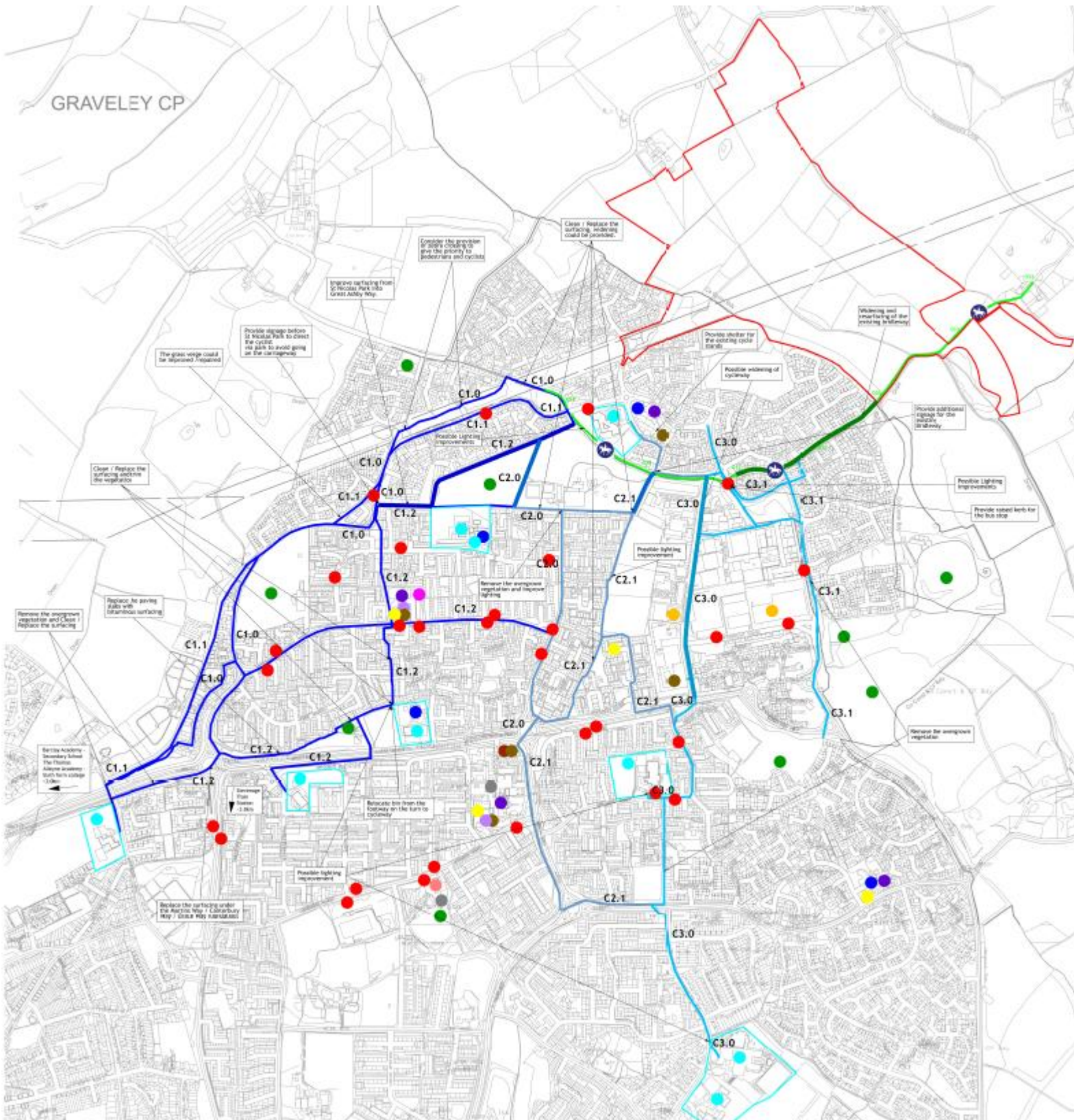


Figure 2. Accessibility Audit Cycling Routes Possible Improvements

Appendices

Appendix A	Mitigation Improvements drawings
Appendix B	Preliminary Cost Estimate
Appendix C	Ownership information

Table 1: Accessibility Audit Walking and Cycling Routes

Location	Prioritised Improvements	Options for non-essential improvements to be considered	Ownership
Walking Route 1.0	Upgrade existing crossing at Mendip Way/Great Ashby roundabout to zebra crossing on Great Ashby East arm (existing two-stage crossing is 1.8m wide; 6.2m and 5.8m long with 3.5m wide island between); Whitehorse Lane arm (existing two-stage crossing is 1.8m wide; 5.1m and 5.4m long with 2.4m wide island between) and Mendip Way arm (existing two-stage crossing is 1.8m wide; 5.0m and 5.5m long with 2.3m wide island between) - <i>see Photo 1, 2 & 3</i>	- Provide shelter (approx. Length 5.0 x Width 2.0 x Height 2.0m) for the existing cycle stands near the Budgens supermarket located at The Neighbourhood Centre, Whitehorse Lane - <i>see Photo 4</i> - Remove the overgrown vegetation along eastern footway on Mendip Way; - Replace the existing coloured carriageway surfacing and road markings near the pedestrian crossing by Round Diamond School;	Hertfordshire County Council adopted highway land (Crossing at Mendip Way) Private Land (Shelter)
Walking Route 2.0	- Provide raised kerb for the Fairfield Way bus stop, which is approx. 4.0m long, raised kerb height to be 100mm-140mm - <i>see Photo 5</i> <i>See Bridleway Improvements</i>	- Additional 1x lamp post at the Fairfield Way bus stop - <i>see Photo 5</i>; - Consider providing 2-3 benches along the route, which is approx. 775m long;	Hertfordshire County Council adopted highway land (Bus Stop) Hertfordshire County Council adopted highway land / CCB (Stevenage) Limited (Bus Stop and Bridleway Section from the site up to Fairfield Way Bus Stop)
Walking Route 2.1	_____	<i>See Bridleway Improvements</i>	_____
Walking Route 2.2	Consider providing a signage post for the existing Bridgeway near 36 Whitehorse Lane - <i>see Photo 6</i>	_____	Hertfordshire County Council adopted highway land
Walking Route 3.0	_____	- Replace the surfacing where required along Great Ashby Way between Mendip Way/Great Ashby Way roundabout and St Nicolas Park (to be provided by GA1) - Remove the overgrown vegetation where required	_____
Bridleway (Section from the site up to Fairfield Way Bus Stop)	Resurfacing of existing approx. 3.0. wide route 570m long route (1.5m asphalt) to provide 3.0m wide shared cycleway/footway - <i>see Photo 7</i>		CCB Stevenage Limited Freehold / North Hertfordshire District Council absolute lease / Hertfordshire County Council unclear extent of adopted bridleway

Bridleway (Section from Fairfield Way Bus Stop to St Nicolas Park) Bridleway (Section behind St Nicolas Park)		• Widening and resurfacing of 2.0/3.0m wide approx. 235m long route (various width) to provide 3.0m wide shared cycleway/footway - <i>see Photo 8</i> • Improve lighting along approx. 235m long route • Remove the overgrown vegetation • Improve lighting along St Nicolas Park, approx. 340m long route • Remove the overgrown vegetation along St Nicolas Park route;	CCB (Stevenage) Limited Freehold / Hertfordshire County Council unclear extent of adopted bridleway Unregistered Land / Hertfordshire County Council unclear extent of adopted bridleway
Mendip Way between the site access and Mendip Way/Great Ashby Way Roundabout	• Widening and resurfacing of 1.8/2.0m wide approx. 145m long route (various width) to provide 3.0m wide shared cycleway/footway (excluding new site access shared cycleway/footway) - <i>see Photo 9</i>		Hertfordshire County Council adopted highway land Improvements within adopted highway boundaries
Cycling Route 1.0		• Widening and resurfacing of existing 2.0m wide route to provide 3.0m wide shared cycleway /footway; approx. 230m long route north of Great Ashby Way towards Mendip Way along Bridleway and beyond up to the cycle lane - <i>see Photo 10 (to be provided by GA1)</i> • Two road dropped crossings on Bray Drive (existing crossing is 3.6m wide; 6.8m long) and with good signage and tactile provision on Orwell Avenue (existing crossing is 3.2m wide; 5.75m long), consider the zebra crossing at this location to give the priority to pedestrians and cyclists - <i>see Photo 11 & 12</i> • Improve lighting (to be provided by GA1) • Remove the overgrown vegetation near Almond Hill Junior School and Weston Road bridge • Clean / Replace the surfacing near the Almond Hill Junior School where required.	Hertfordshire County Council adopted highway land (proposed crossings)
Cycling Route 1.1		• The grass verge could be improved /repaired where required	
Cycling Route 1.2		• Resurfacing of existing track to provide shared cycleway / footway; approx. 175m long route between St Nicolas Park and Weston Road - <i>see Photo 13</i> • Widening and resurfacing of existing 1.5m wide track to provide 3.0m wide shared cycleway / footway; approx. 440m long	Stevenage Borough Council / CCB (Stevenage) Limited -route (between St Nicolas Park and Weston Road) Stevenage Urban District Council (along St Nicolas Park)

		route along St Nicolas Park - see Photo 14 • Improve lighting near the school 1 x lamp post • Clean / Replace the surfacing near St Nicolas Playground and Canterbury Lane; • Trim the hedge near St Nicolas Playground and York Road; • Relocate bin from the footway on the turn to cycleway by Giles School; • Replace the surfacing under the Martins Way / Canterbury Way / Grace Way roundabout; along Martins Way and from St Nicolas Park into Great Ashby Way • Replace the paving slabs with bituminous surfacing by St Nicolas Playground;	
Cycling Route 2.0		• Widening of cycleway in St Nicolas Park could be provided along the central crossing link approx. 230m long currently 1.0/1.2m wide track - see Photo 15; • Improve lighting along the central crossing link approx. 230m; • Remove the overgrown vegetation near St Nicolas Park; • Clean / Replace the surfacing near St Nicolas Park.	Stevenage Urban District Council
Cycling Route 2.1		• Widening of existing 1.0m wide track to provide 3.0m wide shared cycleway / footway; approx. 145m long route on the eastern boundary of St Nicolas Park - see Photo 16; • Improve lighting of approx. 575m of route along St Nicolas Park and Forest; • Clean / Replace the surfacing behind the dwellings near St Nicolas Park Forest and towards Martins Way; • Remove the overgrown vegetation as required.	Stevenage Urban District Council Freehold
Cycling Route 3.0		• Widening and resurfacing of approx. 700m long 1.0/2.0m wide route along Wedgwood Way to provide 3.0m wide shared cycleway/footway - see Photo 17; • Improve lighting near schools 2 x lamp post; • Remove the overgrown vegetation as required.	Hertfordshire County Council adopted highway land (along Wedgwood Way)
Cycling Route 3.1		• Trim the overgrown vegetation as required. • Replace old tactile paving	
Additional Improvements	New Bus Service 'SB12' to be provided on every half an hour basis from the site to provide new direct links to Lister Hospital, Stevenage Old Town, John Henry Newman school and Stevenage Interchange.		

Photo 1 - Walking Route 1.0

Upgrade existing crossing to zebra crossing on Great Ashby East arm of Mendip Way/Great Ashby roundabout (existing two-stage crossing is 1.8m wide; 6.2m and 5.8m long with 3.5m wide island between)



Photo 2 - Walking Route 1.0

Upgrade existing crossing to zebra crossing on Whitehorse Lane arm of Mendip Way/Great Ashby (existing two-stage crossing is 1.8m wide; 5.1m and 5.4m long with 2.4m wide island between)



Photo 3 - Walking Route 1.0

Upgrade existing crossing to zebra crossing on Mendip Way arm of Mendip Way/Great Ashby roundabout (existing two-stage crossing is 1.8m wide; 5.0m and 5.5m long with 2.3m wide island between)



Photo 4 - Walking Route 1.0

Provide shelter (approx. Length 5.0 x Width 2.0 x Height 2.0m) for the existing cycle stands near the Budgens supermarket located at The Neighbourhood Centre, Whitehorse Lane



Photo 5 - Walking Route 2.0

Provide raised kerb for the Fairfield Way bus stop, which is approx. 4.0m long, raised kerb height to be 100mm-140mm; and additional 1x lamp post at the Fairfield Way bus stop



Photo 6 - Walking Route 2.2

Consider providing a signage post for the existing Bridgeway near 36 Whitehorse Lane



Photo 7 - Bridleway (Section from the site up to Fairfield Way Bus Stop)

Resurfacing of existing approx. 3.0. wide route 570m long route (1.5m asphalt) to provide 3.0m wide shared cycleway/footway



Photo 8 - Bridleway (Section from Fairfield Way Bus Stop to St Nicolas Park)

Widening and resurfacing of 2.0/3.0m wide approx. 235m long route (various width) to provide 3.0m wide shared cycleway/footway



Photo 9 - Mendip Way between the site access and Mendip Way/Great Ashby Way Roundabout

Widening and resurfacing of 1.8/2.0m wide approx. 145m long route (various width) to provide 3.0m wide shared cycleway/footway (excluding new site access shared cycleway/footway)



Photo 10 - Cycling Route 1.0

Widening and resurfacing of existing 2.0m wide route to provide 3.0m wide shared cycleway /footway; approx. 230m long route north of Great Ashby Way towards Mendip Way along Bridleway and beyond up to the cycle lane



Photo 11 - Cycling Route 1.0

Dropped crossings on Bray Drive (existing crossing is 3.6m wide; 6.8m long), consider the zebra crossing at this location to give the priority to pedestrians and cyclists



Photo 12 - Cycling Route 1.0

Dropped crossings on Orwell Avenue (existing crossing is 3.2m wide; 5.75m long), consider the zebra crossing at this location to give the priority to pedestrians and cyclists



Photo 13 - Cycling Route 1.2

Widening and resurfacing of existing 1.0m wide track to provide 3.0m wide shared cycleway / footway; approx. 175m long route between St Nicolas Park and Weston Road



Photo 14 - Cycling Route 1.2

Widening and resurfacing of existing 1.5m wide track to provide 3.0m wide shared cycleway / footway; approx. 440m long route along St Nicolas Park



Photo 15 - Cycling Route 2.0

Widening of cycleway in St Nicolas Park could be provided along the central crossing link approx. 230m long currently 1.0/1.2m wide track



Photo 16 - Cycling Route 2.1

Widening of existing 1.0m wide track to provide 3.0m wide shared cycleway / footway; approx. 145m long route on the eastern boundary of St Nicolas Park

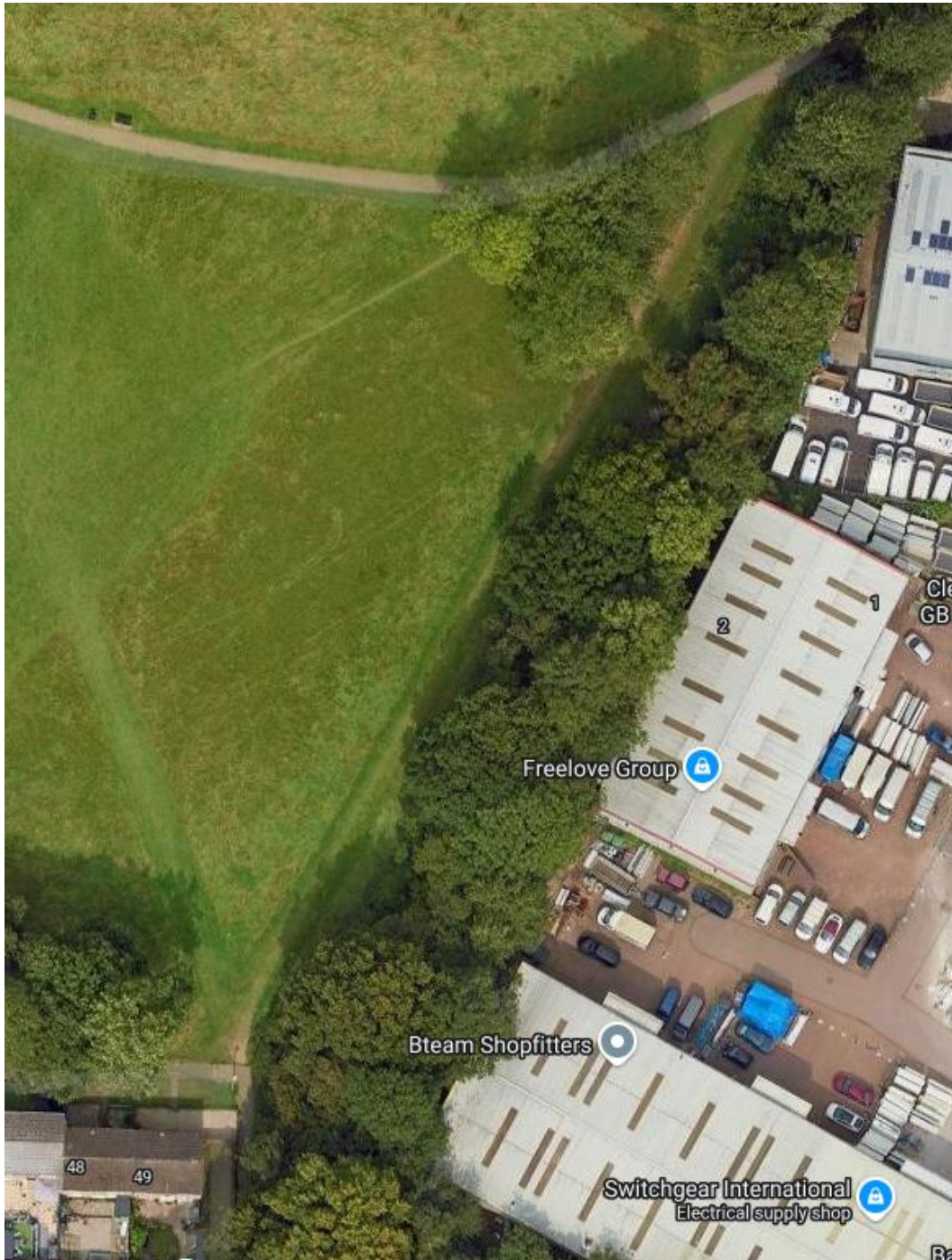


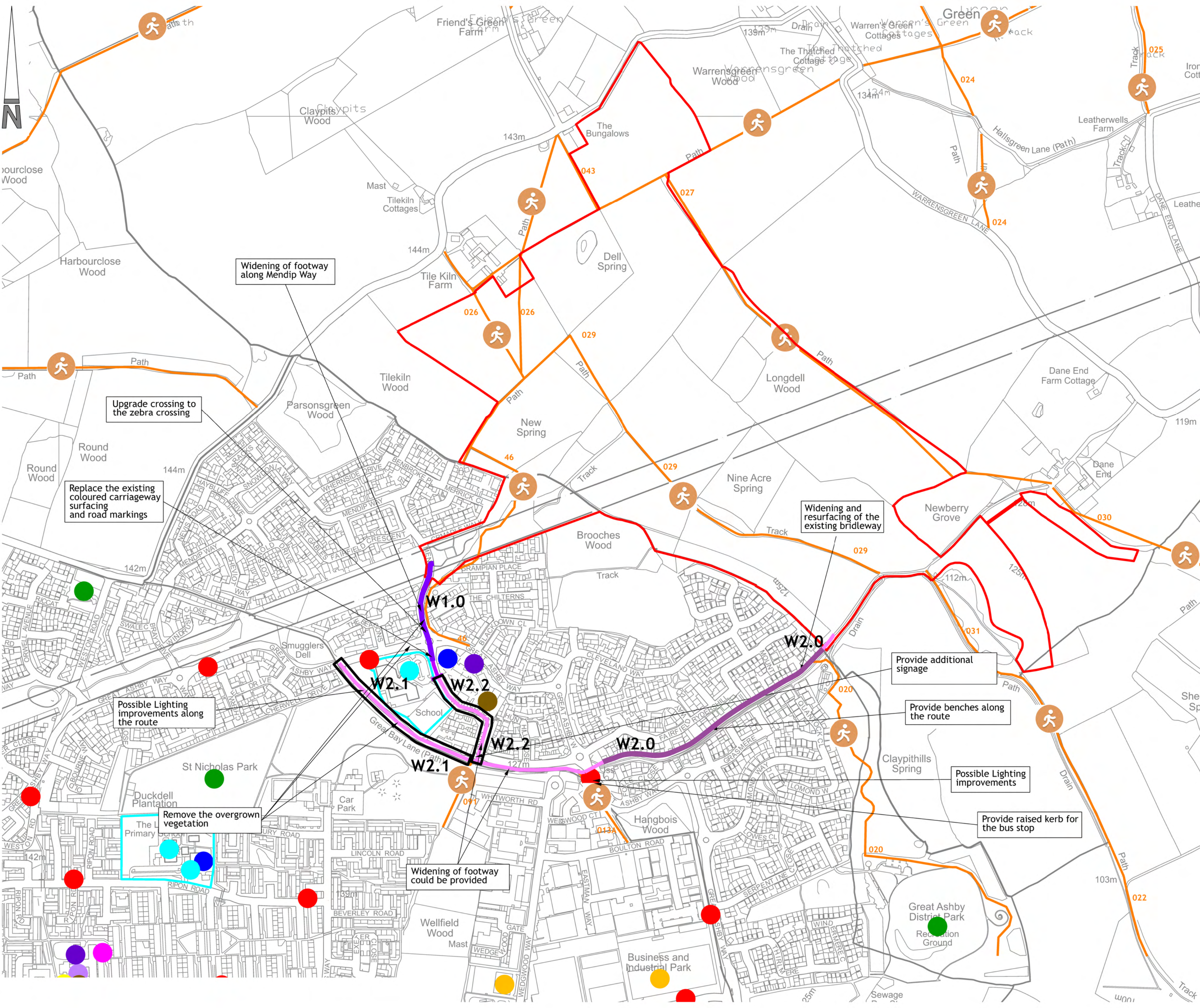
Photo 17 - Cycling Route 3.0

Widening and resurfacing of approx. 700m long 1.0/2.0m wide route along Wedgwood Way to provide 3.0m wide shared cycleway/footway



Appendix A

Mitigation Improvements drawings



NOTES

- Contractors must check all dimensions on site. Only figured dimensions are to be worked from. Discrepancies must be reported to the Architect or Engineer before proceeding. © This drawing is copyright.
- All plans and drawings are drawn true to stated scales and can be used for the purpose of planning only. Responsibility is not accepted for errors made by others in scaling from this drawing.
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SAFETY, HEALTH AND ENVIRONMENTAL

There are no exceptional risks associated with these works. Refer to the designers risk assessment for the full assessment of risks.

- KEY**
- Application Site
 - Public Right of Way - Foopath
 - Accessibility Audit Walking Route 1.0 (WRAT)
 - Walking Route 1 Possible widening location
 - Accessibility Audit Walking Route 2.0 (WRAT)
 - Accessibility Audit Walking Route 2.1 (WRAT)
 - Accessibility Audit Walking Route 2.2 (WRAT)
 - Walking Route 2 Possible widening location
 - Bus Stop
 - School
 - Nursery / Pre-School
 - Employment Centres
 - Community Halls
 - Pharmacy
 - GP Surgery
 - Convenience Shop
 - Cafe / Pub / Restaurant
 - Park / Outdoor space
 - Places of Worship

D	Updated to suit LHA comments	IK	GBR	31/03/2025
C	Updated to suit latest proposals	IK	GBR	13/02/2025
B	Updated to suit LHA comments	IK	GBR	14/11/2024
A	Updated to suit LHA comments	IK	GBR	06/11/2024
REV	DESCRIPTION	DRN	CHD	DATE
 PRELIMINARY	 INFORMATION	 TENDER		
 CONSTRUCTION	 AS BUILT			

SCALE 1:5000 @ A2 DATE October 2024

DRAWN IK CHK GBR

DRAWING NO. 19244-ASHB-5-121 REV D

TITLE LAND NORTH EAST OF GREAT ASHBY STEVENAGE

DETAILS ACCESSIBILITY AUDIT WALKING ROUTES POSSIBLE IMPROVEMENTS

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There are no exceptional risks associated with these works. Refer to the designers risk assessment for the full assessment of risks.

Application Site	
Bridleway	
Bridleway Possible mitigation location	
Accessibility Audit Cycling Route 1.0 (LTN 1/20)	
Accessibility Audit Cycling Route 1.1 (LTN 1/20)	
Accessibility Audit Cycling Route 1.2 (LTN 1/20)	
Cycling Route 1 Possible mitigation location	
Accessibility Audit Cycling Route 2.0 (LTN 1/20)	
Accessibility Audit Cycling Route 2.1 (LTN 1/20)	
Cycling Route 2 Possible mitigation location	
Accessibility Audit Cycling Route 3.0 (LTN 1/20)	
Accessibility Audit Cycling Route 3.1 (LTN 1/20)	
Cycling Route 3 Possible mitigation location	

-  Bus Stop
-  School
-  Nursery / Pre-School
-  Employment Centres
-  Community Halls
-  Pharmacy
-  GP Surgery
-  Convenience Shop
-  Cafe / Pub / Restaurant
-  Park / Outdoor space
-  Places of Worship

☒ PRELIMINARY ☐ INFORMATION ☐ TENDER
☐ CONSTRUCTION ☐ AS BUILT

SCALE 1:5000 @ A0 DATE October 2024

DRAWN IK CHK GBR

DRAWING NO. 19244-ASHB-5-122 REV C

TITLE LAND NORTH EAST OF GREAT ASHBY
STEVENAGE

DETAILS

ACCESSIBILITY AUDIT CYCLE ROUTES
POSSIBLE IMPROVEMENTS



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Appendix B

Preliminary Cost Estimate

HIGHWAY WORKS PRELIMINARY COST ESTIMATE

FOR INFORMATION



No.9 Journey Campus
Castle Park
Cambridge
CB3 0AX

Scheme: **Land North East of Great Ashby, Stevenage (SG1 6DR)**

Reference: 2406-043 Table 1: Accessibility Audit Walking Routes

Prepared by: R. Clarke

Checked by: J. Hopkins

Date: 27.01.25

Date: 20.02.25

<u>Item</u>	<u>Item Total</u>
Route 1.0	£49,850.32
Route 1.1	N/A
Route 2.0 (Bridleway improvements covered in cycling audit estimate)	£21,154.68
Route 2.1 (Bridleway improvements covered in cycling audit estimate)	N/A
Route 2.2	£143.00
Route 3.0 (provided by GA1)	N/A
Total Cost Estimate:	£71,148

Notes:

1. All values given in this estimate are net of VAT and as such VAT at the applicable rate should be added
2. The rates used in this estimate have been obtained from the 2025 SPON'S Price Library and Highway Contractors Rates where required.
3. The works estimates includes an allowance of 15% for Preliminaries & 15% for Contingencies
4. This cost estimate relates to the design drawing referenced above.
5. Now allowance for Statutory Undertakers Diversionary / Protection Works
6. No allowance for design, local authority, or legal fees
7. The sums above are estimates only and should be treated as such, subject to checking by the project QS

Highway Works Cost Estimate				
Land North East of Great Ashby, Stevenage (SG1 6DR)				
Route 1.0				
Description	Unit	Quantity	Net Rate	Net Total
Series 101: Traffic Management				
Establish and maintain agreed Traffic and Pedestrian Management Layout	item	3	£3,000	£9,000.00
Site Toilets / welfare	item	3	£500	£1,500.00
Series 200: Site Clearance				
General site clearance	ha	0.02	£9,091.17	£181.82
Series 600: Earthworks				
Excavation of tarmacam	m ³	60	£22.55	£1,353.00
Disposal of unacceptable material U1				
using 10 tonnes capacity tipping lorry for on-site or off-site use; haul distance to tip not exceeding 10 Km	m ³	60	£77.90	£4,674.00
Compaction of fill material in sub-base or capping layers under verges, central reserves or side slopes (allowance)	m ³	33	£4.94	£163.02
Series 1100: Kerbs, Footways & Paved Areas				
EF PCC edgings laid straight or curved not exceeding 12m radius 150x50mm; ST2 bedded, jointed and pointed in cement mortar	m	20	£11.62	£232.40
Foundations to kerbs, dropped kerbs,channels and edgings; mass concrete 450 x 150mm	m	20	£12.33	£246.60
Paved area 70mm thick; comprising binder course 50mm thick and surface course 20mm thick	m ²	50	£34.59	£1,729.50
150 mm thick concrete GEN3 or ST4 to BS 8500	m ²	50	£30.95	£1,547.50
Tactile paving	m ²	8	£27.32	£218.56
Series 1200: Traffic Signs and Road Markings				
Zebra Crossing	nr	1	£12,500.00	£12,500.00
Miscellaneous				
Cycle shelter 5x2x2m	nr	1	£5,000.00	£5,000.00
Sub-Total =			£38,346.40	
Contingencies (15%) & Preliminaries (15%) =			£11,503.92	
TOTAL Construction Estimate=			£49,850.32	

Highway Works Cost Estimate				
Land North East of Great Ashby, Stevenage (SG1 6DR)				
Route 2.0				
<u>Description</u>	<u>Unit</u>	<u>Quantity</u>	<u>Net Rate</u>	<u>Net Total</u>
Series 101: Traffic Management				
Establish and maintain agreed Traffic and Pedestrian Management Layout	item	2	£3,000	£6,000.00
Site Toilets / welfare	item	2	£500	£1,000.00
Series 200: Site Clearance				
General site clearance	ha		£9,091.17	£0.00
Series 600: Earthworks				
Excavation of tarmacam	m ³	10	£22.55	£225.50
Disposal of unacceptable material U1				
using 10 tonnes capacity tipping lorry for on-site or off-site use; haul distance to tip not exceeding 10 Km	m ³	10	£77.90	£779.00
Compaction of fill material in sub-base or capping layers under verges, central reserves or side slopes (allowance)	m ³	10	£4.94	£49.40
Series 1100: Kerbs, Footways & Paved Areas				
Bus Boarder Kerb	m	4	£193.27	£773.08
Foundations to kerbs, dropped kerbs, channels and edgings; mass concrete 450 x 150mm	m	4	£24.00	£96.00
Paved area 70mm thick; comprising binder course 50mm thick and surface course 20mm thick	m ²	15	£34.59	£518.85
150 mm thick concrete GEN3 or ST4 to BS 8500	m ²	15	£30.95	£464.25
Series 1300: Road Lighting Columns				
Galvanized steel road lighting columns to BS EN 40 with flange plate base - 4.0m nominal height	nr	1	£323.47	£323.47
Lantern unit with photo-electric control set to switch on at 100 lux; lamps 55 W SON (P226); to suit 4 m and 5 m columns	nr	1	£476.55	£476.55
Series 1400: Electrical work for lighting				
Locating buried road lighting and traffic signs cable	m	10	£46.13	£461.30
in carriageways, footways, bridge decks and paved areas				
Excavate trench for cable or duct	m	10	£27.68	£276.80
300 to 450 mm wide; depth not exceeding 1.5 m				
Cable; in trench not exceeding 1.5 m deep	m	10	£6.84	£68.40
Straight joint in 2 core PVC/SWA/PVC cable	nr	2	£68.30	£136.60
Galvanized steel feeder pillars	nr	0	£1,135.41	£0.00
Earth electrodes providing minimal protection using earth rods, plates or stops and protective tape and joint	nr	1	£425.75	£425.75
Brick chamber with galvanized steel cover and frame; depth to uppermost surface of base slab	nr	1	£1,197.88	£1,197.88
DNO Connection for feeder pillar	nr	1	£3,000.00	£3,000.00
Miscellaneous				
Timber bench 2m long	nr	3	£1,083.94	£3,251.82
Sub-Total =				£16,272.83
Contingencies (15%) & Preliminaries (15%) =				£4,881.85
TOTAL Construction Estimate=				£21,154.68

Highway Works Cost Estimate				
Land North East of Great Ashby, Stevenage (SG1 6DR)				
Route 2.0				
<u>Description</u>	<u>Unit</u>	<u>Quantity</u>	<u>Net Rate</u>	<u>Net Total</u>
Series 1200: Traffic Signs and Road Markings				
New sign	nr	1	£110.00	£110.00
Sub-Total =				£110.00
Contingencies (15%) & Preliminaries (15%) =				£33.00
TOTAL Construction Estimate=				£143.00

**HIGHWAY WORKS PRELIMINARY
COST ESTIMATE**

FOR INFORMATION



No.9 Journey Campus
Castle Park
Cambridge
CB3 0AX

Scheme: **Land North East of Great Ashby, Stevenage (SG1 6DR)**

Reference: 2406-043 Table 2: Accessibility Audit Cycling Routes

Prepared by: R. Clarke

Checked by: John Hopkins

Date: 27.01.25

Date: 20.02.25

<u>Item</u>	<u>Item Total</u>
Bridleway (Site to Fairfield Way Bus Stop)	£121,307.27
Bridleway (Section from Fairfield Way Bus Stop to St Nicolas Park)	£97,309.04
Bridleway (Section behind St Nicolas Park)	£68,809.90
Mendip Way between the site access and Mendip Way / Great Ashby Way Roundabout	£42,164.36
Route 1.0 (not including GA1 improvements)	£61,094.21
Route 1.1	N/A
Route 1.2	£151,741.10
Route 2.0	£145,519.63
Route 2.1	£188,187.89
Route 3.0	£350,914.99
Route 3.1	N/A
Total Cost Estimate:	£1,227,048

Notes:

1. All values given in this estimate are net of VAT and as such VAT at the applicable rate should be added
2. The rates used in this estimate have been obtained from the 2025 SPON'S Price Library and Highway Contractors Rates where required.
3. The works estimates includes an allowance of 15% for Preliminaries & 15% for Contingencies
4. This cost estimate relates to the design drawing referenced above.
5. Now allowance for Statutory Undertakers Diversionary / Protection Works
6. No allowance for design, local authority, or legal fees
7. The sums above are estimates only and should be treated as such, subject to checking by the project QS

Highway Works Cost Estimate				
Land North East of Great Ashby, Stevenage (SG1 6DR)				
Bridleway (Site to Fairfield Way Bus Stop)				
<u>Description</u>	<u>Unit</u>	<u>Quantity</u>	<u>Net Rate</u>	<u>Net Total</u>
Series 101: Traffic Management				
Establish and maintain agreed Traffic and Pedestrian Management Layout	item	6	£1,500	£9,000.00
Site Toilets / welfare	item	6	£500	£3,000.00
Series 200: Site Clearance				
General site clearance	ha	0.09	£9,091.17	£818.21
Series 600: Earthworks				
Excavation of acceptable material excluding Class 5 A in cutting and other excavation	m ³	188	£7.33	£1,378.04
Disposal of acceptable material excluding Class 5 A using 10 tonnes capacity tipping lorry for on-site or off-site use; haul distance to tip not exceeding 10 Km	m ³	188	£46.79	£8,796.52
Compaction of fill material in sub-base or capping layers under verges, central reserves or side slopes (allowance)	m ³	128	£4.94	£632.32
Series 1100: Kerbs, Footways & Paved Areas				
EF PCC edgings laid straight or curved not exceeding 12m radius 150x50mm; ST2 bedded, jointed and pointed in cement mortar	m	570	£11.62	£6,623.40
Foundations to kerbs, dropped kerbs, channels and edgings; mass concrete 450 x 150mm	m	570	£12.33	£7,028.10
Paved area 70mm thick; comprising binder course 50mm thick and surface course 20mm thick	m ²	855	£34.59	£29,574.45
150 mm thick concrete GEN3 or ST4 to BS 8500	m ²	855	£30.95	£26,462.25
Sub-Total =				£93,313.29
Contingencies (15%) & Preliminaries (15%) =				£27,993.99
TOTAL Construction Estimate=				£121,307.27

Highway Works Cost Estimate				
Land North East of Great Ashby, Stevenage (SG1 6DR)				
Bridleway (Section from Fairfield Way Bus Stop to St Nicolas Park)				
<u>Description</u>	<u>Unit</u>	<u>Quantity</u>	<u>Net Rate</u>	<u>Net Total</u>
Series 101: Traffic Management				
Establish and maintain agreed Traffic and Pedestrian Management Layout	item	4	£1,500	£6,000.00
Site Toilets / welfare	item	4	£500	£2,000.00
Series 200: Site Clearance				
General site clearance	ha	0.04	£9,091.17	£363.65
Series 600: Earthworks				
Excavation of acceptable material excluding Class 5 A in cutting and other excavation	m ³	78	£7.33	£571.74
Disposal of acceptable material excluding Class 5 A using 10 tonnes capacity tipping lorry for on-site or off-site use; haul distance to tip not exceeding 10 Km	m ³	78	£46.79	£3,649.62
Compaction of fill material in sub-base or capping layers under verges, central reserves or side slopes (allowance)	m ³	53	£4.94	£261.82
Series 1100: Kerbs, Footways & Paved Areas				
EF PCC edgings laid straight or curved not exceeding 12m radius 150x50mm; ST2 bedded, jointed and pointed in cement mortar	m	235	£11.62	£2,730.70
Foundations to kerbs, dropped kerbs, channels and edgings; mass concrete 450 x 150mm	m	235	£12.33	£2,897.55
Paved area 70mm thick; comprising binder course 50mm thick and surface course 20mm thick	m ²	353	£34.59	£12,210.27
150 mm thick concrete GEN3 or ST4 to BS 8500	m ²	353	£30.95	£10,925.35
Series 1300: Road Lighting Columns				
Galvanized steel road lighting columns to BS EN 40 with flange plate base - 4.0m nominal height	nr	8	£323.47	£2,587.76
Lantern unit with photo-electric control set to switch on at 100 lux; lamps 55 W SON (P226); to suit 4 m and 5 m columns	nr	8	£476.55	£3,812.40
Series 1400: Electrical work for lighting				
Locating buried road lighting and traffic signs cable in carriageways, footways, bridge decks and paved areas	m	20	£46.13	£922.60
Excavate trench for cable or duct 300 to 450 mm wide; depth not exceeding 1.5 m	m	235	£27.68	£6,504.80
Cable; in trench not exceeding 1.5 m deep	m	235	£6.84	£1,607.40
Straight joint in 2 core PVC/SWA/PVC cable	nr	10	£68.30	£683.00
Galvanized steel feeder pillars	nr	1	£1,135.41	£1,135.41
Earth electrodes providing minimal protection using earth rods, plates or stops and protective tape and joint	nr	8	£425.75	£3,406.00
Brick chamber with galvanized steel cover and frame; depth to uppermost surface of base slab	nr	8	£1,197.88	£9,583.04
DNO Connection for feeder pillar	nr	1	£3,000.00	£3,000.00
Sub-Total =			£74,853.11	
Contingencies (15%) & Preliminaries (15%) =			£22,455.93	
TOTAL Construction Estimate=			£97,309.04	

Highway Works Cost Estimate				
Land North East of Great Ashby, Stevenage (SG1 6DR)				
Bridleway (Section behind St Nicolas Park)				
<u>Description</u>	<u>Unit</u>	<u>Quantity</u>	<u>Net Rate</u>	<u>Net Total</u>
Series 101: Traffic Management				
Establish and maintain agreed Traffic and Pedestrian Management Layout	item	2	£1,500	£3,000.00
Site Toilets / welfare	item	2	£500	£1,000.00
Series 200: Site Clearance				
General site clearance	ha	0.02	£9,091.17	£181.82
Series 600: Earthworks				
Excavation of acceptable material excluding Class 5 A in cutting and other excavation	m ³	5	£7.33	£36.65
Disposal of acceptable material excluding Class 5 A using 10 tonnes capacity tipping lorry for on-site or off-site use; haul distance to tip not exceeding 10 Km	m ³	5	£46.79	£233.95
Series 1300: Road Lighting Columns				
Galvanized steel road lighting columns to BS EN 40 with flange plate base - 4.0m nominal height	nr	11	£323.47	£3,558.17
Lantern unit with photo-electric control set to switch on at 100 lux; lamps 55 W SON (P226); to suit 4 m and 5 m columns	nr	11	£476.55	£5,242.05
Series 1400: Electrical work for lighting				
Locating buried road lighting and traffic signs cable in carriageways, footways, bridge decks and paved areas	m	20	£46.13	£922.60
Excavate trench for cable or duct 300 to 450 mm wide; depth not exceeding 1.5 m	m	340	£27.68	£9,411.20
Cable; in trench not exceeding 1.5 m deep	m	340	£6.84	£2,325.60
Straight joint in 2 core PVC/SWA/PVC cable	nr	13	£68.30	£887.90
Galvanized steel feeder pillars	nr	2	£1,135.41	£2,270.82
Earth electrodes providing minimal protection using earth rods, plates or stops and protective tape and joint	nr	11	£425.75	£4,683.25
Brick chamber with galvanized steel cover and frame; depth to uppermost surface of base slab	nr	11	£1,197.88	£13,176.68
DNO Connection for feeder pillar	nr	2	£3,000.00	£6,000.00
Sub-Total =				£52,930.69
Contingencies (15%) & Preliminaries (15%) =				£15,879.21
TOTAL Construction Estimate=				£68,809.90

Highway Works Cost Estimate				
Land North East of Great Ashby, Stevenage (SG1 6DR)				
Mendip Way between the site access and Mendip Way / Great Ashby Way Roundabout				
<u>Description</u>	<u>Unit</u>	<u>Quantity</u>	<u>Net Rate</u>	<u>Net Total</u>
Series 101: Traffic Management				
Establish and maintain agreed Traffic and Pedestrian Management Layout	item	3	£3,000	£9,000.00
Site Toilets / welfare	item	3	£500	£1,500.00
Series 200: Site Clearance				
General site clearance	ha	0.02	£9,091.17	£181.82
Precast concrete edgings	m	145.00	£8.49	£1,231.05
Series 600: Earthworks				
Excavation of acceptable material including Class 5 A in cutting and other excavation	m ³	48	£7.33	£351.84
Disposal of acceptable material including Class 5 A using 10 tonnes capacity tipping lorry for on-site or off-site use; haul distance to tip not exceeding 10 Km	m ³	48	£46.79	£2,245.92
Compaction of fill material in sub-base or capping layers under verges, central reserves or side slopes (allowance)	m ³	33	£4.94	£163.02
Series 1100: Kerbs, Footways & Paved Areas				
EF PCC edgings laid straight or curved not exceeding 12m radius 150x50mm; ST2 bedded, jointed and pointed in cement mortar	m	145	£11.62	£1,684.90
Foundations to kerbs, dropped kerbs, channels and edgings; mass concrete 450 x 150mm	m	145	£12.33	£1,787.85
Paved area 70mm thick; comprising binder course 50mm thick and surface course 20mm thick	m ²	218	£34.59	£7,540.62
150 mm thick concrete GEN3 or ST4 to BS 8500	m ²	218	£30.95	£6,747.10
Sub-Total =				£32,434.12
Contingencies (15%) & Preliminaries (15%) =				£9,730.24
TOTAL Construction Estimate=				£42,164.36

Highway Works Cost Estimate				
Land North East of Great Ashby, Stevenage (SG1 6DR)				
Route 1.0				
<u>Description</u>	<u>Unit</u>	<u>Quantity</u>	<u>Net Rate</u>	<u>Net Total</u>
Series 101: Traffic Management				
Establish and maintain agreed Traffic and Pedestrian Management Layout	item	3	£3,000	£9,000.00
Site Toilets / welfare	item	3	£500	£1,500.00
Series 200: Site Clearance				
General site clearance	ha	0.02	£9,091.17	£181.82
Series 600: Earthworks				
Excavation of tarmacam	m ³	76	£22.55	£1,713.80
Disposal of unacceptable material U1 using 10 tonnes capacity tipping lorry for on-site or off-site use; haul distance to tip not exceeding 10 Km	m ³	76	£77.90	£5,920.40
Compaction of fill material in sub-base or capping layers under verges, central reserves or side slopes (allowance)	m ³	33	£4.94	£163.02
Series 1100: Kerbs, Footways & Paved Areas				
EF PCC edgings laid straight or curved not exceeding 12m radius 150x50mm; ST2 bedded, jointed and pointed in cement mortar	m	10	£11.62	£116.20
Foundations to kerbs, dropped kerbs, channels and edgings; mass concrete 450 x 150mm	m	10	£12.33	£123.30
Paved area 70mm thick; comprising binder course 50mm thick and surface course 20mm thick	m ²	50	£34.59	£1,729.50
150 mm thick concrete GEN3 or ST4 to BS 8500	m ²	50	£30.95	£1,547.50
Tactile paving	m ²	8	£27.32	
Series 1200: Traffic Signs and Road Markings				
Zebra Crossing	nr	2	£12,500.00	£25,000.00
Sub-Total =				£46,995.54
Contingencies (15%) & Preliminaries (15%) =				£14,098.66
TOTAL Construction Estimate=				£61,094.21