

**Report to** Norwich highways agency committee  
24 July 2014  
**Report of** Head of city development services  
**Subject** Push the Pedalways - The Avenues

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**Item**  
**7**

## **Purpose**

To approve for statutory consultation the pedalway proposals for The Avenues between Bluebell Road and Elizabeth Fry Road

## **Recommendation**

Members are recommended to;

- 1) Note the results of the consultation on the options for The Avenues
- 2) Ask the Head of city development services to carry out public consultation and the necessary statutory procedures in relation to introducing the proposals shown on plan numbers PE4073-MMD-301739CA04-fea-0090 &0091 and listed below;
  - a) Continuous one way cycle tracks 2m-2.2m in width on both sides of The Avenues between Bluebell Road and Colman Road built over the verge with a low kerb separating them from the carriageway
  - b) Speed reducing crossing tables for cyclists and pedestrians travelling along The Avenues at the following side roads: George Borrow Road, Lovelace Road, Stannard Road and the entrances to Bluebell allotments; at the junction of Bluebell Road and Cow Drive; and across Bluebell Road north of The Avenues
  - c) The provision of cycle tracks partly separated from the footway on the north side of The Avenues linking to the toucan crossing over Colman Road
  - d) Extending the existing 20mph restrictions so that all streets within the area bounded by Earlham Road, Bluebell Road, Jessop Road and Christchurch Road are covered by a 20mph restriction. Bluebell Road between Earlham Road and North Park Avenue and North Park Avenue will also be subject to the 20mph restriction. The area is shown on the plan attached as appendix 8
  - e) The reinforcement of sufficient verge space with a porous material on The Avenues between Stannard Road and Bluebell Road to allow residents' to park cars off the carriageway, without obstructing the cycle tracks, and access parking within the curtilage of their properties while minimising damage to verges and trees and with vehicles physically prevented from accessing other areas of verge

- f) Alterations to the traffic signals at the junction of Colman Road and The Avenues to:
- i. give cyclists dedicated signals that release them to cross Colman Road several seconds ahead of vehicles;
  - ii. provide a signalised pedestrian crossing over Colman Road immediately to the south of The Avenues with raised table courtesy crossings at the entrances to the service lanes;
  - iii. convert the crossing over Colman Road immediately to the north of The Avenues into a toucan crossing that cyclists can ride across alongside pedestrians;
  - iv. advanced stop boxes enlarged to 7.5m.

### **Corporate and service priorities**

The report helps to meet the corporate priority of a safe and clean city and the service plan priority to implement the Local Transport Plan and Norwich Area Transportation Strategy.

### **Financial implications**

£850,000 is available from the Push the Pedalways programme budget to implement this project including the extension of the 20mph speed limit in the surrounding area.

**Ward/s:** University

**Cabinet member:** Cllr Stonard, cabinet member for environment, development and transport.

### **Contact officers**

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### **Background documents**

Consultation material available online at

<http://www.norwich.gov.uk/TransportAndStreets/Transport/Cycling/Pages/TheAvenuesConsultation.aspx>

Consultation responses

# Report

## Background

1. Members will be aware that the City Council has received £3.7M of cycle city ambition grant funding from the Department for Transport to fund the Push the Pedalways programme of cycling infrastructure improvements. These are concentrated on the pink pedalway between the Norfolk and Norwich Hospital / UEA and Heartsease / Salhouse Road, along with some important, strategic links to that route such as Magdalen Street. This funding is supplemented by £2M of local funding contributions.
2. The programme consists of a range of individual projects and this report is about project 4 – The Avenues, which seeks to improve the cycling provision along The Avenues between Bluebell Road and Elizabeth Fry Road.

## Issues to be addressed

3. The section of The Avenues between Bluebell Road and Colman Road is the most heavily used street by cyclists in the city. On one weekday in November 2013 1,642 cyclists were observed using it between 7am and 7pm. Levels are even higher during warmer months.
4. There is a segregated footpath / cycle track on the northern side of The Avenues between the verge and property boundaries. However it is too narrow for comfortable two-way use and cyclists are forced to give way at the side road junctions, making it unattractive for cyclists. On that November day only a quarter of cyclists used the off carriageway facility and three quarters cycled on the carriageway.
5. The carriageway is 5.5m wide for most of its' length, widening out at the Colman Road end, subject to a 20mph speed restriction and has speed cushions placed at intervals along it. However on an average weekday 65% of vehicles exceed that 20mph restriction.
6. Surveys show that on an average weekday 3050 motor vehicles use The Avenues between 7am and 7pm and other these 57% are classed as through traffic, which is traffic that simply drives straight through the street from one end to the other without stopping. This volume and speed of traffic can be intimidating for cyclists on the carriageway.
7. The accident rate for the section of The Avenues between Bluebell Road and Elizabeth Fry Road is high, with 27 injury accidents recorded in the 5 years ending May 2014. Of these 18 involved cyclists and 3 pedestrians. The focus of the accidents are the Colman Road signalled junction where 5 of the 9 recorded accidents involved cyclists and George Borrow Road junction where 6 of the 8 involved cyclists. This high level of accidents partly reflects that large volumes of cyclists using the route compared to other roads in the city but also gives a clear indication that safety needs to be improved along the route.
8. Along the length of The Avenues there are wide verges, however over the years these have been eroded by vehicles parking on them or being driven across them to access parking within gardens, resulting in drainage problems and soil compaction which could ultimately compromise the lifespan of the trees. There are a number of

properly constructed authorised vehicle crossovers but many residents use the verge as an informal crossover.

9. The pink pedalway connects across Bluebell Road then along Cow Drive through to the UEA via a toucan crossing on Bluebell Road. Given the numbers of cyclists using the route the access to the toucan is restricted and not convenient for those cyclists who choose to use the shared footway / cycleway. There is also poor compliance of the 20mph limit in the vicinity of the toucan crossing.
10. The Colman Road / The Avenues signalled junction, also known as Bunnett Square, is negotiated by significant numbers of cyclists every day. The access roads into the parades of shops on both sides of Colman Road mean that the crossing distance for cyclists travelling along The Avenues is long and is likely to be a contributory factor into the lack of compliance with the signal control, particularly by cyclists. Additionally the southern arm of Colman Road has no pedestrian crossing even though many pedestrians cross there.

### **Possible solutions**

11. A multidisciplinary team of officers considered all of the above issues and came up with a number of design options that address the problems. These were then tested against a set of criteria looking at what effect each option would have on a number of factors such as ease, comfort and safety for cyclists, impact on local residents, environmental concerns and effects on traffic.
12. For Bluebell Road and Bunnett Square just one design solution for each was considered suitable to take forward to public consultation, whereas along the length of The Avenues there were several options that had merit for accommodating cycling, dealing with through traffic and providing for parking . These are detailed below.

### **Bluebell Road**

13. The solution for Bluebell Road involved retaining the existing toucan crossing and introducing a speed table on Bluebell Road to the north of The Avenues, along with a junction table at the Bluebell Road / Cow Drive junction. These will have the effect of reducing speeds on Bluebell Road and providing additional, informal crossing points for cyclists. It was also suggested that the existing 20mph zone be extended to the north of the junction with The Avenues. A diagram showing these proposals is attached as appendix 1.

### **The Avenues**

14. Three options for The Avenues were presented;
  - Option 1 – A closure of The Avenues to the west of the allotment entrance near George Borrow Road with the verges protected around the trees, and a permeable surface provided to accommodate parking
  - Option 2 - A closure of The Avenues to the west of the allotment entrance near George Borrow Road with parking provided on the carriageway and maximum verge protection

- Option 3 – No closure, improved traffic calming features along The Avenues, advisory cycle lanes on the existing carriageway, verges protected around the trees and a permeable surface provided to accommodate parking
15. For options 1 and 2, the closure could either be a full closure to all vehicles, or buses could be allowed through. All three options featured speed tables at the junctions of The Avenues with Lovelace Road and George Borrow Road. These options are shown on the diagrams attached as appendix 2

### **Bunnett Square (junction of Colman Road and The Avenues)**

16. To resolve the issues for cyclists and pedestrians at the signalled junction on the ring road the following solutions were considered to be the most effective.
- The provision of large advanced stop line boxes for cyclists along with low level traffic signals and an early release for cyclists, subject to obtaining special authorisation from the Department for Transport.
  - The conversion of the crossing on the northern arm of Colman Road to a toucan with associated cycle tracks to connect to it.
  - Improvements to the service lane entrances to the shopping parades, reducing the crossing distance for pedestrians and cyclists and the inclusion of the this arm of the junction in the formal crossing facilities
  - The removal of the bus stop layby on the north side of the eastern arm of The Avenues to enable a better transition for cyclist back onto the carriageway.
  - Priority for cycles crossing the entrance of Stannard Road
  - A review of all guard-railing with the potential for some to be removed
17. A diagram of the proposals is attached as appendix 3

### **Consultation**

18. Consultation was carried out with local residents and stakeholders between 2 June and 23 June 2014. Letters were sent to 3144 residents and businesses in the area bounded by Colman Road, Bluebell Road, North Park Avenues, Jessop Road and Christchurch Road and 522 allotment holders informing them that details of the project options were available online alongside a survey about the options. It also invited them to an exhibition at the scout hut next to St Anne's Church on 18 June. Plans were deposited at Earlham Library and Millennium Library. Key stakeholders were also informed of the consultation.
19. 336 responses to the survey were received along with 45 letters and emails. Around 100 people attended the exhibition.
20. The responses received to the consultation have been analysed, breaking down the responses into the area people came from: The Avenues itself, the local area between Earlham Road, Bluebell Road, North Park Avenue and Colman Road, the rest of Norwich, and those from outside the city.

## Bluebell Road

21. The table below shows the breakdown of responses to the questionnaire received on the proposals for Bluebell Road.

Address of respondent	Total No of responses	Agree	Partly agree	Disagree	No opinion stated
The Avenues	30	15	11	2	2
Local area	57	29	18	9	1
Norwich	193	105	67	19	3
Outside of Norwich	6	4	2	0	0
Address unknown	45	10	12	3	20
Total	331	163	110	32	26

22. It can be seen from the table above that the majority of respondents either fully support or partly support the proposals. The reason people gave for making the choice that they did are recorded in appendix 4, along with an officer response to any issues raised. Any comments made in the letters and emails received are also captured in appendix 4.

23. There was only one issue raised that has led to a change to the proposed scheme. A number of people queried why the 20mph restriction did not extend along Bluebell Road to the Earlham Road junction, especially given that the new City Academy has an entrance along this length. It is therefore proposed to extend the scope of the 20mph restriction to cover this section.

24. As the response was strongly in favour of the proposal for Bluebell Road it is proposed that this scheme is adopted and the necessary legal orders progressed for amending the speed restriction orders and introducing the speed tables.

## The Avenues

25. The table below shows the breakdown of responses to the survey on the question of which option for The Avenues is preferred. In addition to the responses recorded in the table below, of the people who responded outside of the survey and expressed an opinion, 3 choose option one, 1 chose option 2, 2 chose option 3 and 2 said they opposed all options.

Address of respondent	Total No of responses	Option 1	Option 2	Option 3	None of the options	No opinion stated
The Avenues	30	14	2	7	6	1
Local area	57	4	4	28	21	0
Norwich	193	88	34	51	20	0
Outside of Norwich	6	2	2	1	1	0
Address unknown	45	3	1	3	6	32
Total	331	111	43	90	54	32

26. The local ward members carried out their own survey with people living in and around The Avenues which of the 3 options were preferred; 4 people selected option one, 2 option two and 44 option 3. They also asked whether people supported the introduction of a 20mph restriction across the whole area; 41 did support it, while 7 did not.

27. This table looks at the additional question that was asked as to whether any road closure introduced should include a bus access or not.

Address of respondent	Total No of responses	Complete closure	Bus Gate	No closure	No opinion stated
The Avenues	30	11	5	13	1
Local area	57	2	6	49	0
Norwich	193	71	50	71	1
Outside of Norwich	6	0	4	2	0
Address unknown	45	1	11	9	24
Total	331	85	76	144	26

28. It can be seen from the above that while Option 1 (closure with verge parking) received the most support it was still only preferred by about a third of respondents. While half of the residents of The Avenues who responded preferred option 1 only 7% (4 out of 57) of those living in the local area favoured option 1, presumably because some would experience increased traffic levels in their streets and inconvenience reaching their homes by vehicle.

29. Looking at the question of whether there should be a closure, 161 respondents supported some form of closure, either full closure or bus gate, with 144 saying that they wanted the road left open. Again the results from the local area are different to the overall picture with 62 respondents (71%) from The Avenues and the local area preferring the road to be left open, and only 24 respondents (29%) wanting any form of closure.

30. Both the First Group who operate bus services in the area and the University of East Anglia made strong representations against any form of traffic management that prevented buses from using the length of The Avenues between Bluebell Road and Colman Road. Both parties see the route as being key in improving buses services between the city centre and the University, as well as offering potential improvements to services to the hospital and the research park. First recently announced their intention of running a 10 minute frequency service along The Avenues starting in September 2014.
31. The table attached as appendix 5 summarises the comments received on the options for The Avenues both as part of the survey response and the letters and emails received. Officer responses are included with any issues raised.
32. It is clear from the results of the online survey and the letters and emails received that there is not a clear favourite among the options offered. Given the need to improve cycling infrastructure, a desire not to frustrate the improvement to bus services and the unpopularity of the full-time closure expressed through the consultation by local residents, officers investigated whether there were any alternative options that would improve cycling and satisfy the concerns raised.
33. The morning peak is the time when the traffic is at its highest and it is also the peak time for cycling. As a variation of option 1 the exclusion of general traffic (but not buses) between 7:30 am and 9:30 am on weekdays would see significant benefits for cyclists at the time when problems are at their worst without inconveniencing local residents for the majority of the day. However it does not offer any real improvements for cyclists outside of the morning peak period and the proposed introduction of frequent bus services by First would worsen conditions for cycling at those times compared to the present situation.
34. At the feasibility stage an option of providing stepped cycle lanes adjacent to the main carriageway was considered. These protected cycle tracks would offer a safer and more comfortable cycling experience than current conditions or the painted advisory lanes on the carriageway that featured in the consultation version of option 3. However this was significantly more expensive than the options that were consulted on and there were concerns about how it could be built without damaging the trees.
35. Following the consultation, further work has been undertaken to assess how the cyclepath can be implemented without damaging the trees. One method would be to build up the levels (rather than excavate down) thereby implementing a 'no dig' methodology, this has scenario has involved the arboricultural officers who are fully on board with this innovative solution. It solves the root protection issues but there are potentially some trees sited too close to the highway which would then not allow the 2 metre width of cyclepath to be constructed 500mm away from the tree bole. In these cases the arboricultural officer will look at any of the trees and assess the condition of the trees and if they have been compromised from the many years of car parking would accept removal and mitigation tree planting in line with accepted guidelines. This would also have the benefit of diversifying the age structure of the trees on the road. It must be stressed that this approach would only be taken where the tree is compromised and no healthy tree would be removed. One small tree will be moved but this would be replanted as it has only been in place a few years and perfectly capable of being transplanted further away from the highway. . New trees will be planted.



36. At all the side roads and the allotment entrances speed tables will be provided across the side roads to provide the cyclists with a continuous route along The Avenues and to highlight that cyclists have priority over the side road traffic. New traffic calming features will be introduced on the main carriageway on The Avenues to improve compliance with the 20mph speed restriction. In order for there to be room to accommodate parking on the verges as part of the recommended option and to improve conditions for pedestrians it will be necessary to remove the existing cycle track on the north side of the verge. Residents would be able to drive across the cycle tracks to reach their parking areas.
37. As the revised option involves lifting the level of the carriageway it provides a collateral benefit of providing the opportunity to resolve the long standing drainage problems on The Avenues.
38. This option is more expensive than the original budget but it is believed that this extra expense is necessary in order to provide a scheme that satisfies the broadest range of interests expressed through the consultation. It will be funded by reallocating money from other Push the Pedalways projects.

### **Bunnett Square**

39. The table below shows the responses to the Bunnett Square proposals

Address of respondent	Total No of responses	Agree	Partly agree	Disagree	No opinion stated
The Avenues	30	18	7	2	3
Local area	57	31	20	4	2
Norwich	193	106	77	9	1
Outside of Norwich	6	3	3	0	0
Address unknown	45	4	2	1	38
Total	331	162	109	16	44

40. It can be seen from the table above that the majority of respondents either fully support or partly support the proposals. The reason people gave for making the choice that they did are recorded in appendix 6, along with an officer response to any issues raised. Any comments made in the letters and emails received are also captured in appendix 6. It is therefore proposed that the plans for Bunnett Square should be implemented.

### **20mph speed restrictions**

41. As detailed in a separate report on this agenda, project 19 of the Push the Pedalways programme seeks to introduce 20 mph speed restrictions in the vicinity of the pink pedalway. For The Avenues area this will include extending the existing restrictions into the streets shown on the plan attached as appendix 8. This shows that physical

traffic calming will be required in Bluebell Road, and George Borrow Road, to achieve compliance with the new speed limit. The details of these measures will be confirmed in the coming weeks with ward members and the chair and vice chair and will be included in the next round of consultation for The Avenues.

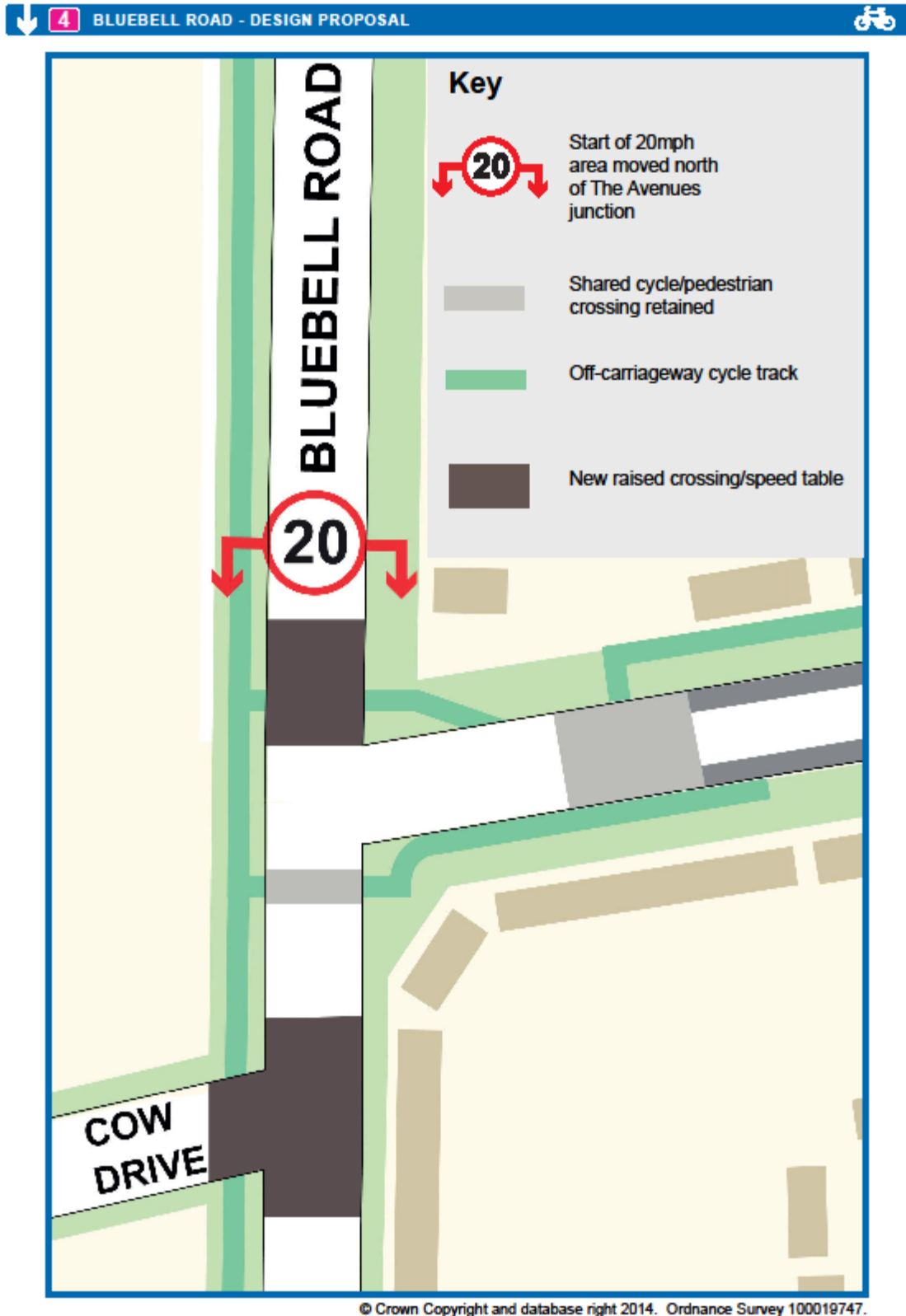
### **The Avenues between Elizabeth Fry Road and Recreation Road**

42. The original extent of project 4 included the section of The Avenues between Elizabeth Fry Road and Christchurch Road. However as further feasibility work was carried out and traffic data collated it became apparent that given the low volumes of traffic in that section and the very low accident rate (2 accidents in 5 years, 1 involving a cyclist) resources would be spent more effectively improving the western end of The Avenues and the junction with the ring road, which have a higher rate of accidents based on similar cycling numbers. A number of respondents and visitors to the exhibition asked for improvements on The Avenues in the vicinity of the Christchurch Road junction as there are problems at school drop off and collection times with vehicles parked on the verges. School parking related problems are a city wide problem and notoriously difficult to resolve. Tackling the problem at this location does not have the same benefits for cyclists as it does on the outer section of The Avenues and is not achievable within current budgets.

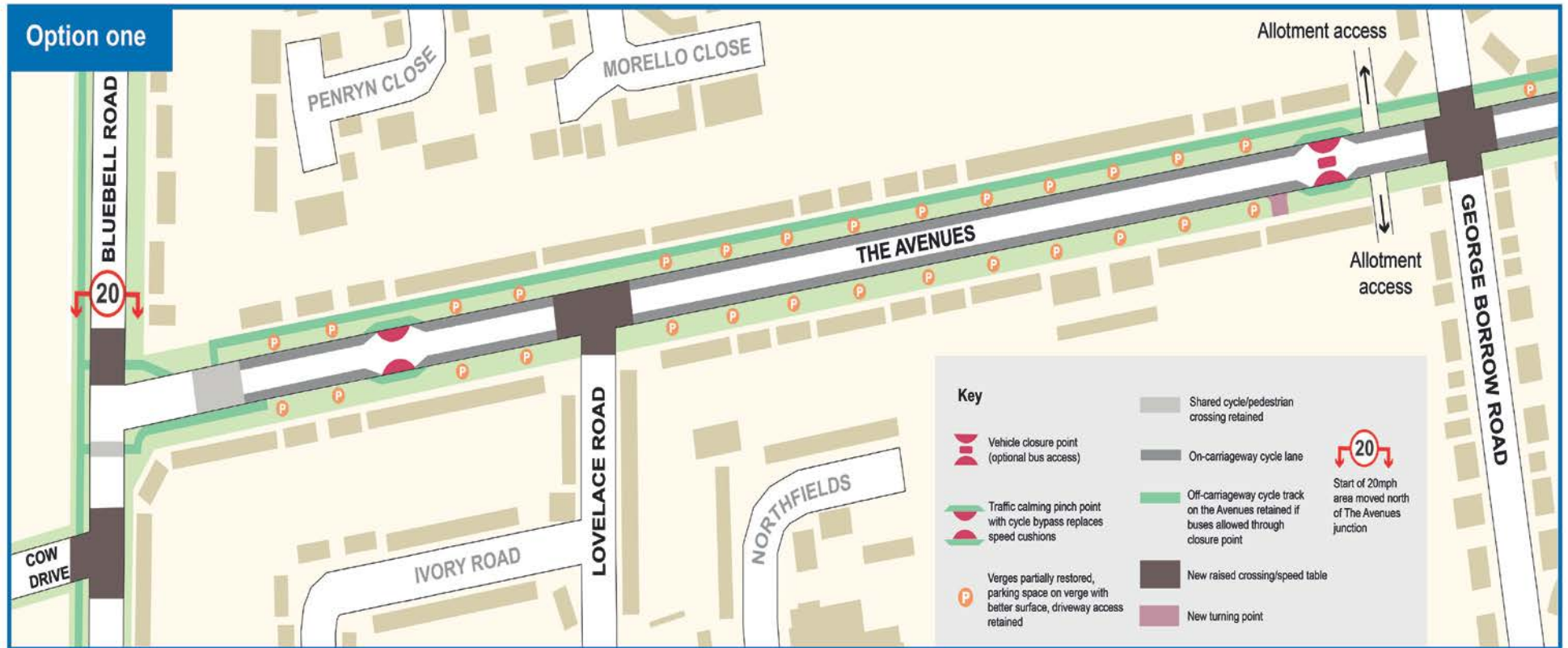
### **The way forward**

43. Statutory consultation is required on the changes identified to the 20mph speed restrictions in the area, the construction of the cycle tracks, the creation of the part shared footpath / cycleway on the approaches to the signalled junction at Colman Road and for the speed tables that are proposed. In addition to this it is proposed that a public consultation is carried out on the detailed design of the overall scheme. This will take place in September with the results brought before your November meeting for determination.
44. Work on implementing the scheme will start in spring 2015, with the works at the signalled junction taking place during the university summer recess.

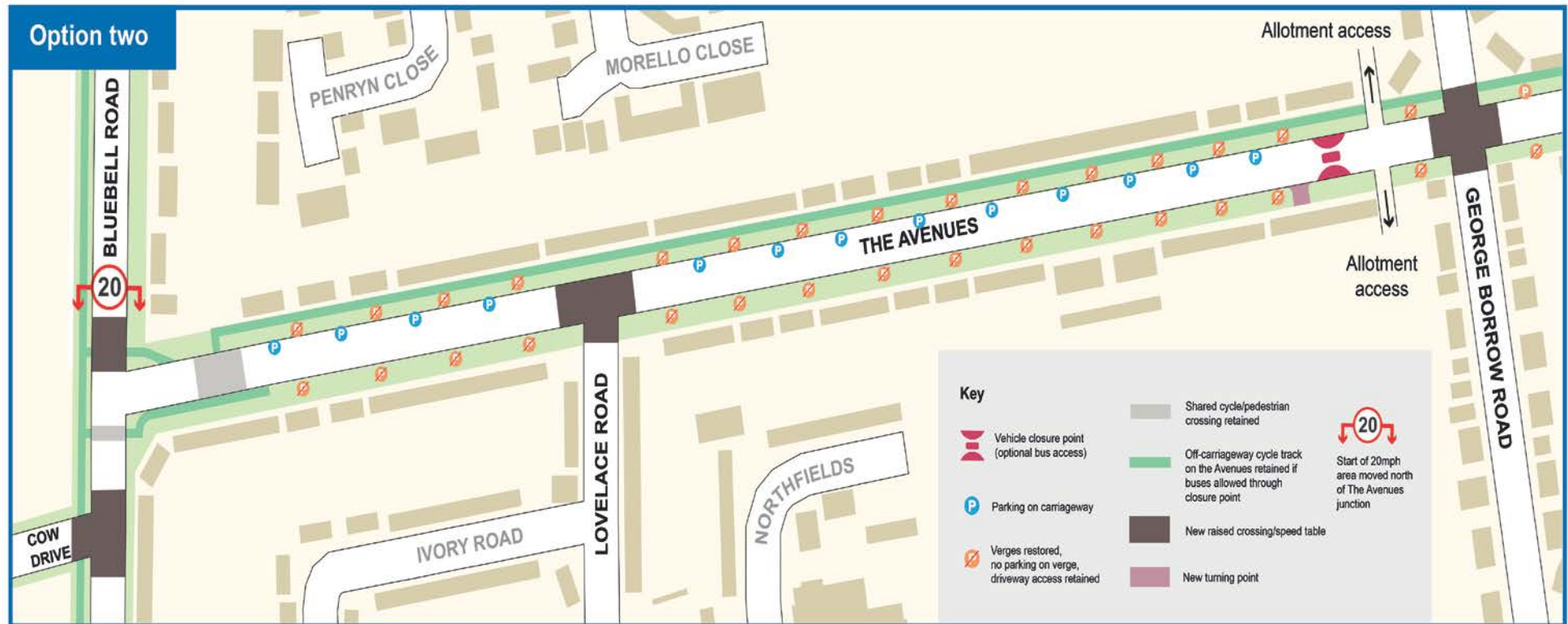
## Appendix 1 – Bluebell Road Proposals



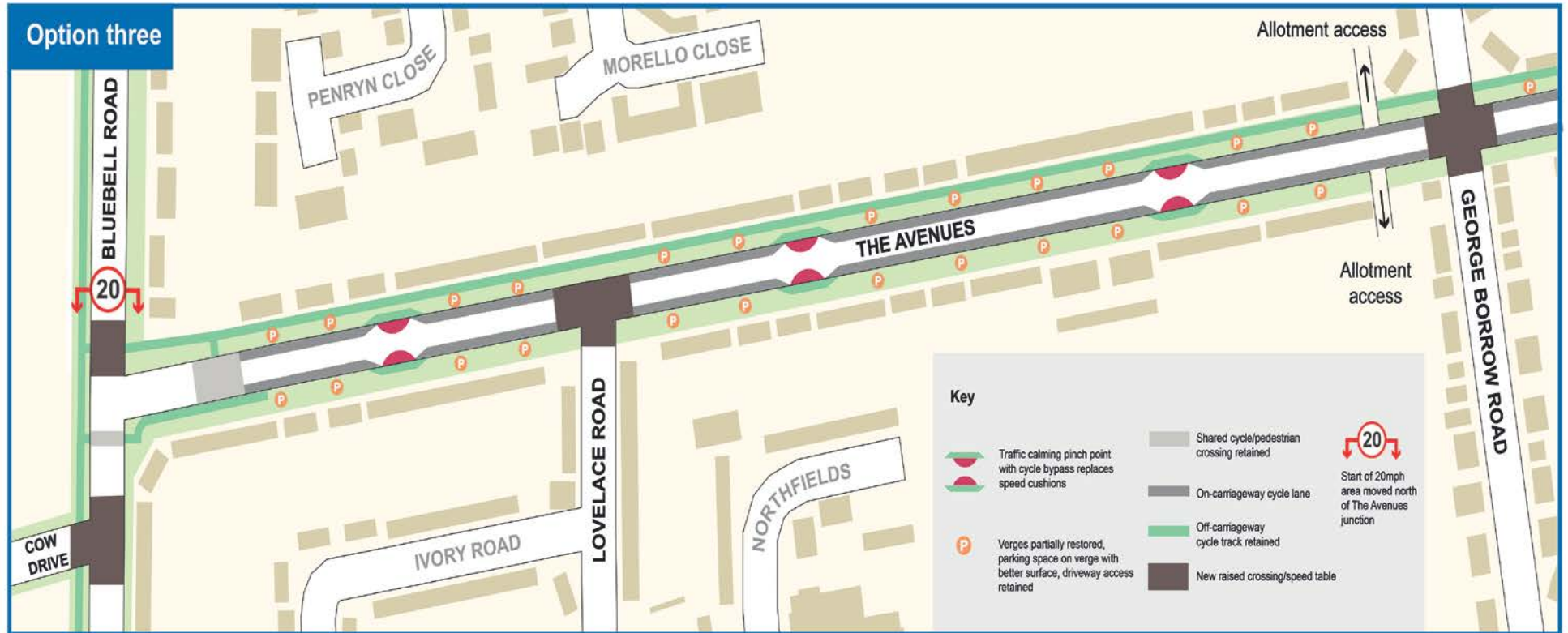
## Appendix 2 – The Avenues Options



## Appendix 2 – The Avenues Options



## Appendix 2 – The Avenues Options





## Appendix 3 – Bunnett Square (The Avenues / Colman Road) proposals



### BUNNETT SQUARE

- ❶ Cyclists and pedestrians cross entrance to Stannard Road on a raised table while vehicles give way to them.
- ❷ Cycle track connects to combined cyclist and pedestrian crossing.
- ❸ Traffic signals for cyclists allow them to start a few seconds before vehicles plus extended waiting box for cyclists.
- ❹ Review railings on both sides of Colman Road for possible removal.
- ❺ New signal controlled crossing for pedestrians (and possibly cyclists) over Colman Road to the south of The Avenues with raised table and unsignalised crossings on service lanes.
- ❻ Combined cyclist and pedestrian crossing.
- ❼ Bus stop lay-by removed.
- ❽ New cycle track connection to crossing of Colman Road (may need to dismount at crossing).

#### Appendix 4 - Bluebell Road comments

Ref	Issue raised	Officer response
BB1	Concerns about pedestrians and cyclists sharing the crossings and paths at the Bluebell Road / Avenues junction	There have been shared use arrangements in this area for a number of years. It is acknowledged that these are not ideal and the proposals seek to improve the current situation, by offering alternative crossing point on Bluebell Road via the raised table. Given the space constraints in the area it is not possible to provide fully segregated facilities
BB2	20mph restriction on Bluebell Road is unnecessary, the limit on Bluebell Road should be 30mph	There is an existing 20mph speed limit on Bluebell Road between The Avenues and North Park Avenue. Given the high volumes of pedestrians and cyclists crossing the road and homes front onto it a 20mph speed restriction is appropriate
BB3	Dislike of the proposed speed tables as they are inconvenient for cyclists and motorists and cause discomfort for bus passengers	The purpose of the speed tables is twofold; they slow vehicle speeds and provide places where pedestrians and cyclists can cross. The speed tables will be designed to accommodate bus turning movements.
BB4	The 20mph restriction should be extended to include the section of Bluebell Road between The Avenues and the Fiveways junction	This suggestion has merit as it there is an entrance to the City Academy in this section of Bluebell Road. The proposals have been amended to accommodate this.
BB5	The existing provision is adequate and there is no justification for changing it.	While there are facilities to help pedestrians and cyclists across Bluebell Road they are is room for improvement. This is reflected in the accident statistics for the junction that show there were 4 injury accidents at the junction, 2 involving pedestrians and 1 cyclist.
BB6	There is no need for a second crossing point on Bluebell Road, everyone should use the existing Toucan	For pedestrians and cyclists travelling between City Academy and The Avenues the Toucan crossing is away from the desire line. A second, uncontrolled crossing to the north of The Avenues will cater for this movement. As it is on a raised table it will act as an additional traffic calming feature to help enforce the 20mph restriction



Appendix 4 - Bluebell Road comments

Ref	Issue raised	Officer response
BB7	The existing 20mph zone is not enforced	The latest guidance from the Department For Transport, backed up by the advice from the police says that 20mph restrictions should be self-enforcing. The additional measures proposed for Bluebell Road should achieve this.
BB8	The existing toucan crossing should be replaced with a zebra crossing	The Toucan crossing was introduced a number of years ago. National guidance today would suggest that a zebra crossing would be a more suitable form of crossing at this location. However it would be expensive to make the change. The time to review the nature of the crossing will be when the signal equipment in the Toucan reaches the end of its serviceable life.

## Appendix 5 – The Avenues Comments

Ref	Issue raised	Officer response
AV1	Any closure of The Avenues will displace traffic onto already congested roads such as Earlham Road	The Avenues is a residential road that is not designed to carry through traffic, that is the function of the main road network. The traffic model suggests that there are a number of different alternative routes that any traffic displaced from The Avenues may take.
AV2	Any closure of The Avenues will displace traffic onto unsuitable residential roads such as Northfields & George Borrow Road.	The traffic modelling suggests that there will be a negative impact on the surrounding residential roads should a closure of The Avenues be implemented. Had the decision been to close The Avenues then traffic calming would have been provided to mitigate the effects of the additional traffic in more of the surrounding roads.
AV3	<p>The proposal to protect the verges and insist that cars are parked on the road will cause problems because;</p> <ul style="list-style-type: none"> <li>• Cars will be damaged</li> <li>• Residents dislike their cars not being close to the properties</li> <li>• Drivers will open car doors into the path of cyclists</li> <li>• It will look ugly; at the moment the trees hide the cars.</li> </ul>	<p>The proposal to force parking to take place on the carriageway is only compatible with a complete closure option, as the traffic volumes will be significantly less. Removing all vehicles from the verges would afford the opportunity to return the verges to their original state and would protect the health and the future of the distinctive avenue of trees that gives The Avenues its' name.</p> <p>It is clear from the consultation that this idea is very unpopular and it will not be progressed.</p>
AV4	Pinch points are unpopular with both cyclists and drivers	In the past pinch points have caused problems for cyclists as they either make them feel squeezed, or any cycle bypasses that are included are substandard and difficult to clean. The proposed design for The Avenues will overcome this issue. However as a stepped cycle lane is now proposed cyclists will not be affected, should pinch points be selected as the traffic calming method for the street.
AV5	Vehicle speeds on The Avenues are too high	This is acknowledged. Surveys show that over 65% of vehicles in an average week exceeded the 20mph speed restriction. As part of the revised proposals for The Avenues more effective traffic calming will be provided.

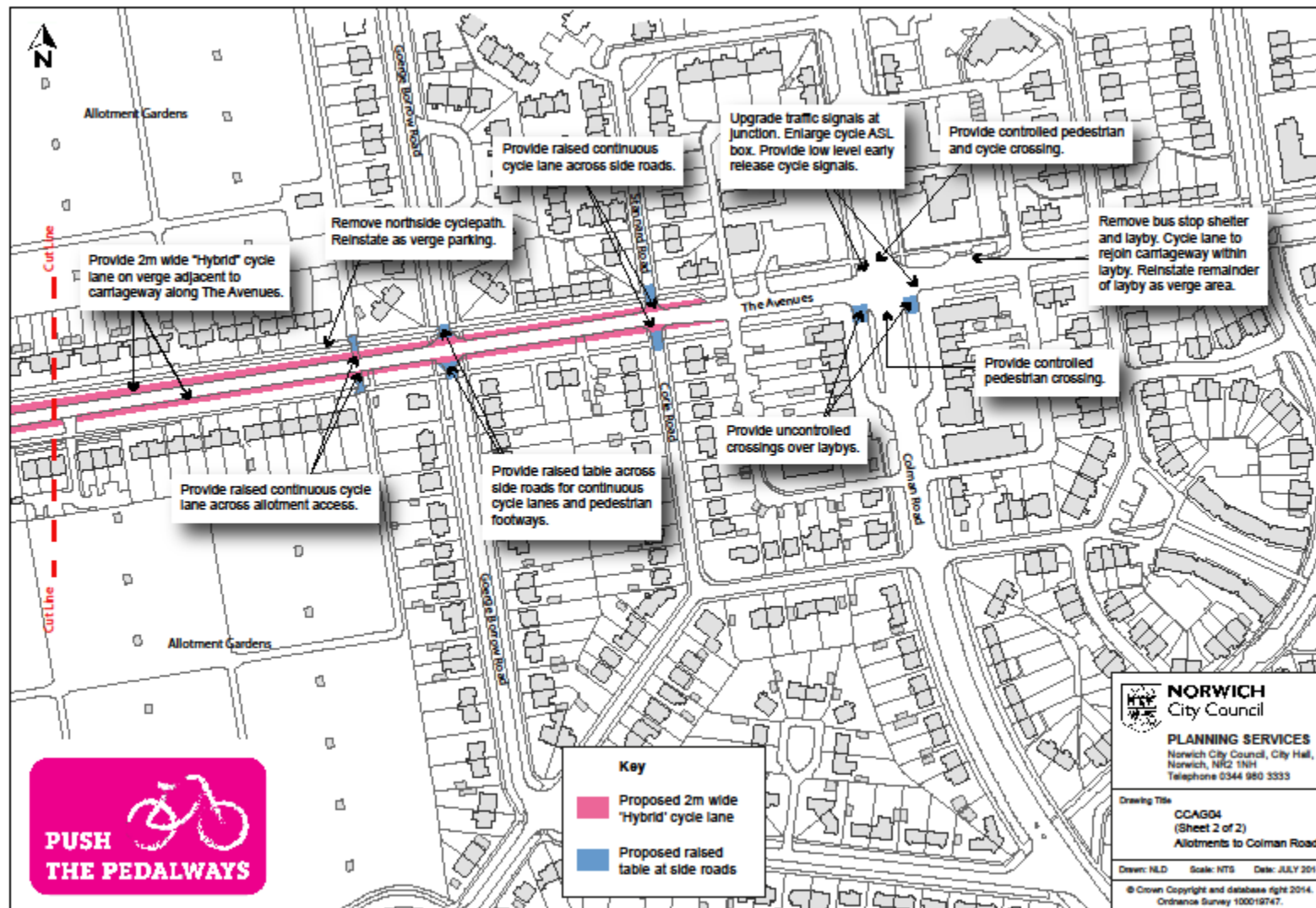
## Appendix 5 – The Avenues Comments

Ref	Issue raised	Officer response
AV6	Cyclists should be encouraged to use the existing cycle track on the north side of The Avenues.	Surveys show that less than a quarter of cyclists on The Avenues use the cycle track. There are a number of reasons for this; cyclists are forced to give way at side roads, the track is substandard width and cannot accommodate the number of cyclists using The Avenues and the connections at either end of the cycle track are inadequate.
AV7	Cycle tracks should be provided on the verge	This option was originally rejected on the grounds of costs and potential impact on trees. However that decision has been reviewed in light of the consultation responses and a scheme of stepped cycle lanes on the verge is now proposed,
AV8	There is no need to make improvements for cyclists along The Avenues, cycling is already well catered for.	While there are some facilities for cyclists along The Avenues they are inadequate for the large number of cyclists that use the road. The accident statistics detailed in paragraph 7 highlight the need for improvements
AV9	It is not a good idea to mix buses and cyclists	It is standard practice in the city for cyclists to share the bus priority measures. However it is accepted that high numbers of cyclists sharing a narrow carriageway with a high frequency bus service is not comfortable or conducive to a growth in cycling levels. This was one of the main considerations for revisiting the proposals and proposed a stepped cycle lane that gives cyclists their own space.
AV10	Buses must be allowed to use The Avenues	When the proposals were first formulated no buses ran along the central section of the Avenues where the closure point was proposed. In light of the consultation response, no closure is now proposed and The Avenues will be available for buses to use.
AV11	There are only problems for cyclists during the morning peak hour.	The morning peak hour is the time when the problems for cyclists are most acute; however cyclists can feel intimidated by vehicles at other times too.

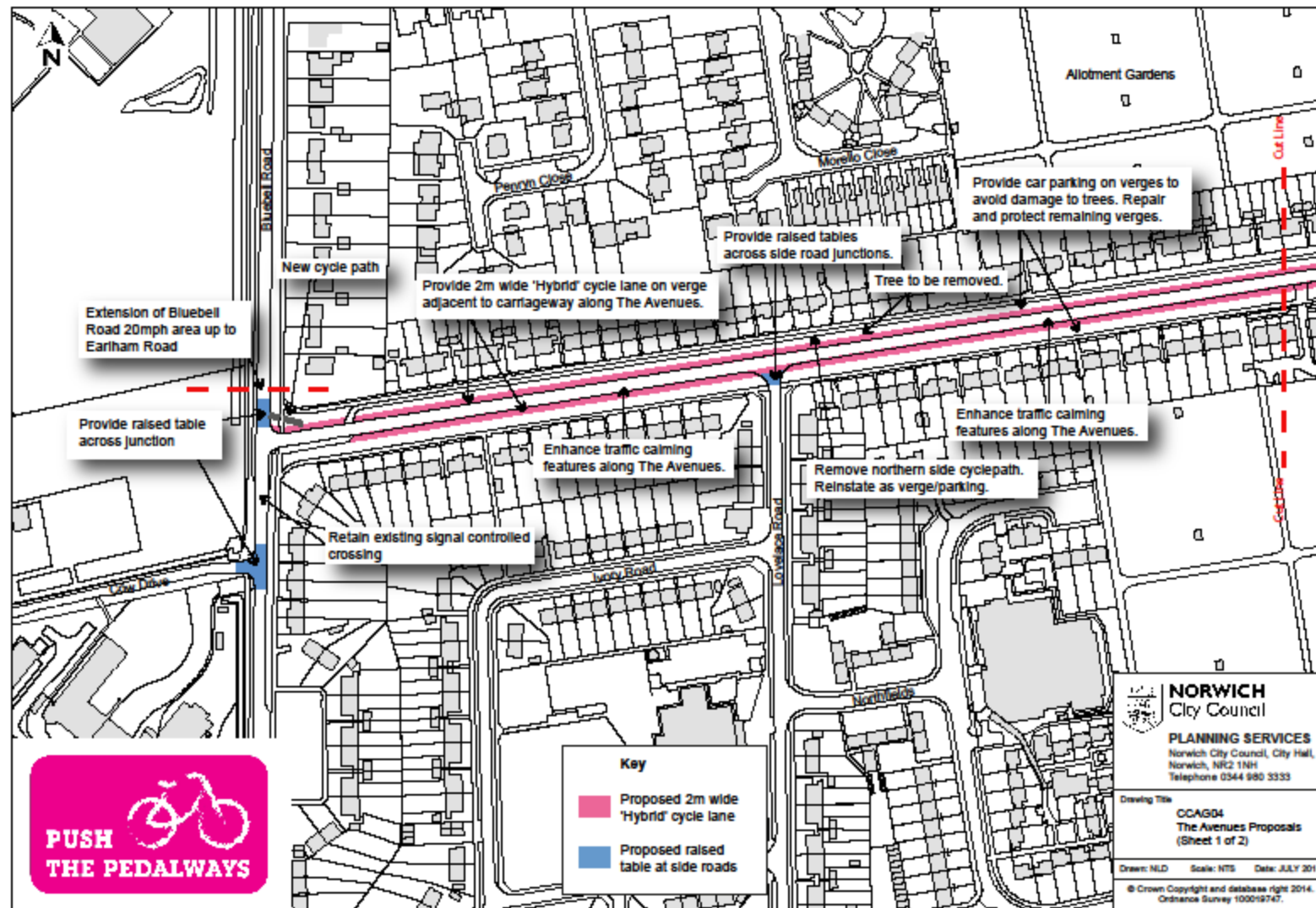
## Appendix 5 – The Avenues Comments

Ref	Issue raised	Officer response
AV12	No parking should be allowed on the verge	If parking was not allowed on the verge then the verges and trees could be protected. However it is clear from the consultation that parking on the road is not popular with the local residents, therefore the proposed scheme will allow parking on a specially designed porous surface on sections of the verge, while protecting the most vulnerable areas around trees.

## Appendix 6 – The Avenues revised proposals



## Appendix 6 – The Avenues revised proposals



## Appendix 7 – Bunnett Square Comments

Ref	Issue raised	Officer response
BS1	Cyclists should not be forced to dismount when crossing Colman Road	There are 3 ways cyclists can cross Earlham Road. They can stay on the carriageway and take advantage of the enlarged advanced stop line and early release for cyclists, they can use the Toucan crossing to the immediate north of the junction or they can use the pedestrian crossing to the immediate south of the junction. If they use the first two options there is no requirement to dismount, it is only on the last option that they must do this.
BS2	Pedestrians and cyclists should not be expected to share the crossings of the outer ring road.	The crossing on the north side of the junction is a Toucan crossing that has been enlarged specifically to be used by both pedestrians and cyclists. The crossing on the south side of the junction is for pedestrians only as it is not possible to provide sufficient widths to accommodate cyclists as well. It is not possible to provide a crossing of the ring road for cyclists that is fully segregated from both vehicles and pedestrians without adversely affecting the capacity of the junction.
BS3	The guard railing at the junction should not be removed	Key panels of guard-railing will remain where they are needed for safety reasons, however much of the existing guard railing is unnecessary and unsightly. This will be removed.
BS4	The side road speed tables at the junctions are unsafe and will be ignored by drivers.	The speed tables are there to ensure that drivers give way to pedestrians and cyclists on The Avenues. They will be clearly signed, and will highlight to drivers that they should expect to see cyclists on The Avenues and they are required to give way to them. This is a common design standard across the country.
BS5	The bus stop layby should be retained	Removing the layby allows cyclists to make a direct transition back onto the carriageway of The Avenues if they have chosen to use the Toucan crossing. The layby is used by a service that runs 3 times a day weekdays only, a layby is unnecessary when the usage is so low. Additionally it is known that the service that uses the stop is likely to be withdrawn in the near future

## Appendix 8 – 20mph proposals

