

Report to Norwich highways agency committee

Item

15 September 2016

Report of Head of city development services

5

Subject Transport for Norwich – Cycling improvements
St Clements Hill

Purpose

To consider the responses to St Clements Hill junction improvements and 20mph area statutory consultation and approve the amended proposals for installation.

Recommendation

To:

- (1) note the responses to the consultation
- (2) approve the installation of:
 - (a) Traffic calming on Elm Grove Lane as shown on plan no.CCAG2-36-025
 - (b) Improvements to the junction of Millcroft with St Clements Hill, consisting of a raised table, kerb realignment and amended proposals for double yellow lines as shown on plan no.CCAG2-36-027
 - (c) Install the existing zebra crossing at the Magdalen Road and St Clements Hill junction on a raised table and provide a raised table on St Clements Hill to the north of that junction as shown on plan no.CCAG2-36-026. This arrangement includes kerb realignment and the provision of cycle racks.
- (3) ask the head of city development services to complete the necessary statutory process associated with the installation of the 20mph Speed restriction Order for the area shown on plan no. CCAG2-36-028 and the Traffic Regulation Order for the proposed waiting restrictions on St Clements Hill and Millcroft.

Corporate and service priorities

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

Financial implications

The budget for the scheme is £150,000 to be funded from the Department for transport, City Cycling Ambition Grant .

Ward/s: Sewell and Catton Grove

Cabinet member: Councillor Bremner – Environment and sustainable development

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Background documents

None

Report

Strategic Objectives

1. Norwich and its surrounding area is becoming an increasingly popular area to live, work and visit. It is the number one shopping destination in the Eastern Region and becoming one of the Nation's premier cultural centres. To ensure the Greater Norwich Area continues to be popular and grow, the transport systems need to be able to cope with the increased demand.
2. Norwich is a medieval city with a narrow road system; incorporating a 21st century transport system to cope with the increased demand without sacrificing highway space for a particular transport mode or at the expense of green space and historic buildings is challenging.
3. The Norwich area Transportation Strategy (NATS), now more widely known as Transport for Norwich (TfN), is the adopted strategy which will deliver the transport improvements needed over the next 15 plus years. The strategy recognises everybody's journeys are different and does not look to force people to use one particular mode. It does look to give people viable options on how they choose to travel and actively promote sustainable transport. To do this in some areas of the network there needs to be a re-balance of the highway space available.
4. The Strategy details the plan for future delivery of improvements in order to develop sustainable transport, reduce congestion and improve air quality within the Greater Norwich area. The strategy has already delivered key improvements such as the award winning Norwich Bus Station, St Augustine's Gyratory, a network of Park & Ride facilities, St Stephens and Chapel Field North and various Bus Rapid Transit (BRT) improvements. It also includes the recently completed Postwick hub and the Northern Distributor Road which is due for completion late 2017.
5. The implementation plan for the Norwich Area Transportation Strategy (NATSIP) was agreed by Norfolk County Council in April 2010 and updated in November 2013 ([see link for updated implementation plan http://www.norfolk.gov.uk/view/NCC158241](http://www.norfolk.gov.uk/view/NCC158241)). The plan sets out the range of transport measures, together with their general intended phasing, for delivery over the short to medium term.
6. The plan has now been updated to take account of what has been delivered since 2010, and to reflect the latest position on future scheme delivery, given progress with implementation, and now that the growth plans for the area are more clear ([see joint core strategy document: http://www.greaternorwichgrowth.org.uk/dmsdocument/1953](http://www.greaternorwichgrowth.org.uk/dmsdocument/1953)).
7. Cycling is on the increase for both recreation and commuting nationally and the area has a thriving cycling community. The implementation of a City wide cycling network (see link to cycle map <http://www.norwich.gov.uk/TransportAndStreets/Transport/Cycling/Documents/CyclingMapFront.pdf>) is a key part of the Transport for Norwich Strategy as by delivering a comprehensive city network this reduces a number of short distance car journeys removing pressure on the network, as well as offering improving quality of life and the health benefits that have been well documented.

8. The Greater Norwich area is one of eight urban areas across the country that has been successful in bidding for Cycle Ambition funding from the Department for Transport to comprehensively improve the quality of cycling infrastructure across the Norwich cycle network a copy of the application documents can be found here <http://www.norwich.gov.uk/TransportAndStreets/Transport/Cycling/Pages/CycleCityAmbitionGrant2015.aspx>.
9. This scheme is a key part of the blue pedalway.

Background

10. The aim of this project is to improve the cyclists journey along St Clement's Hill, especially past the southern Sewell College entrance opposite Millcroft and improve pedestrian access to local amenities. It is also aimed at improving local connections to the blue pedalway by installing a wide area of 20mph zone in this residential area.
11. The proposals were agreed for consultation by the chair and vice chair of this committee along with the local members of Sewell and Catton Grove.

Consultation

12. The statutory advertisement was carried out on 22 July 2016. The advert was placed in the local paper, street notices were positioned in strategic positions on street, transportation consultees were contacted and residents and businesses in the local areas affected by the proposed road works were written to. The closing date for responses after three weeks of consultation was 16 August 2016.
13. Plan of the advertised proposals can be found on the city council web site here https://www.norwich.gov.uk/info/20238/current_consultations/1838/st_clements_hill_20mph
14. In total 41 responses were received from residents, associations and businesses. The results table below shows the overall stated response to the main areas of the consultation. A summary of each of the responses and their concerns are shown in Appendix 1.

	Agree	Object	Concerns with design details
20mph zone in general	18	1	
Elm Grove Lane traffic calming	9	6	7
St Clements Hill / Millcroft	6	6	13
St Clements Hill / Magdalen Road	3	12	18

20mph extension

15. Most responses either agreed with the introduction of the 20mph zone extension or did not refer to it but gave concerns on the specific design at locations. For this reason it seems fair to deduce that the majority of respondents have no objection to the 20mph extension in general.

Elm Green Lane

16. The number of respondents agreeing with the proposed traffic calming on Elm Grove Lane was marginally higher than the objections. Some concerns were voiced on the design of speed hump and suggesting the proposed speed humps were not cycle friendly. The main objections were that the responder believed the humps were not necessary due to the number of parked cars and existing speed of traffic.

Millcroft / St Clements Hill junction

17. Most respondents did not voice an opinion on the overall design of the junction improvement, but did express concern at either the removal of pedestrian guardrails or the length of proposed double yellow lines due to limited space for residents parking. Many were concerned with the safety of children at this junction due to the entrance to Sewell Park Academy and Sewell Park.

Magdalen Road / St Clements Hill junction

18. Nine respondents stated that they felt the north bound cycle lane at the above junction was not needed. Some said they felt it was safer and easier for cyclists to stay on the road and take the left turn, but help was needed turning right out of St Clements Hill at this junction, which the proposals do not address. Nine respondents advised the cycle lane would cause conflict between cyclists and pedestrians. Five respondents stated that the proposed cycle stands were not needed and five were concerned with the positioning of the existing car club bay on St Clements Hill. Deliveries to the local public house were also a concern.
19. The Norfolk and Norwich Association for the Blind (NNAB) and the Guide dogs Association stressed that the cyclepath, which would cut through the tactile paving for the zebra, would be unsafe for Visibly Impaired People (VIPs), causing conflict between pedestrians and cyclists. They suggested as the cycle lane would probably be used by cyclists travelling in both directions at speed, this would only increase the danger. The 25mm upstand on the edge of the cyclepath was considered appropriate.
20. Sewell community group agreed with the 20mph extension and traffic calming on Elm Grove Lane. They consider the cycle lane on Magdalen Road junction is not needed, or the tree and cycle racks. They do not agree with the double yellow lines on Millcroft or the removal of the guard railings outside the entrance to Sewell Park Academy.
21. The Whalebone Public House Agree with the introduction of the 20mph zone extension and with minimum parking restrictions around junctions to allow parking for residents. They believe the proposed cycle lane outside their PH would cause conflict between cyclists and pedestrians and customers. They were concerned with deliveries that need direct access to the cellar trap door and advised there were no

alternative acceptable places for the delivery lorries to unload than the present area used.

22. Norwich Cycling Campaign welcomed the proposed 20mph extension and traffic calming on Elm Grove Lane. Agreed proposals to the Millcroft junction with St Clements Hill would provide marginal benefits to cyclists as will the proposed cycle lane at the Magdalen Road junction. However they would prefer a scheme that assisted cyclists turning right into Magdalen Road from St Clements Hill. The main concerns with the proposed cycle lane is the possibility of conflict with pedestrians and the difficulty for cyclists re-joining St Clements Hill which would be made worse with the existing car club space.
23. Sewell ward councillors (Councillors Julie Brociek-Coulton and Ed Coleshill) agreed with the introduction of the 20mph area and objected to the proposals outside the Whalebone PH on Magdalen Road (cycle lane, tree and cycle parking). They both suggested the railings at the Millcroft junction should remain and the double yellow lines on Millcroft were not needed. Notes from a residents meeting held by the Sewell councillors explain that the general feeling was that they agreed with the position of the local ward members and also concerned with deliveries to the Whalebone PH. They would prefer either a mini roundabout or signalised junction at the Magdalen Road junction and requested that the speed humps on Elm Grove Lane would be the full width of the road.

Discussion

24. The general agreement with the introduction of the 20mph extension is welcome and shows that the public supports the aims of Norwich City Council to work towards a 20mph speed limit in all suitable residential areas.
25. There is some resistance to the installation of speed humps to act as traffic calming on some roads. However, if the public wants 20mph areas, it is necessary for those areas to be self-enforcing. Guidance from the Department for Transport (DfT) advises that in areas where existing traffic speeds are 24mph or over, then it is recommended to provide traffic calming if a 20mph speed limit is introduced. The existing average traffic speeds on Elm Grove Lane in an easterly direction were recorded as 26mph. The traffic calming has been designed to work in an environment with parked vehicles and cyclists. The inconvenience to drivers of the speed humps is outweighed by the benefit to cyclists and pedestrians in a 20mph environment.
26. At the Millcroft / St Clements Hill junction, the proposed speed table and kerb realignment, with advisory cycle lane are considered appropriate for a 20mph area. Recent guidance from the DfT advises to remove pedestrian guardrails where they are not considered essential for road safety to reduce street clutter, make the environment more "open" and encourage awareness of other road users. A number of objections to the removal of these railings were stated as there is an entrance to Sewell Park Academy and Sewell Park at this junction. However, this is the vehicle access to the main administration building of the Academy and is not used by a large number of school children. The path accessing Sewell Park has staggered barriers that will stop young children running out onto the road. The proposed double yellow lines at this junction provide an area with no parked cars which allows sufficient road width for vehicles to pass at the signed giveway sections on St Clements Hill.

27. The proposed double yellow lines on Millcroft are to enable good visibility and manoeuvring at this junction. However as Millcroft is a small residential cul-de-sac with limited vehicle movements, it is considered suitable to shorten the proposed restrictions to cover just the raised table into Millcroft. This will allow enough space for an extra two vehicles to park.

28. Many concerns of the usefulness of the cycle lane at the Magdalen Road junction have been voiced with doubts over the benefit it will give to cyclists and the possibility of conflicts with pedestrians. Alternative solutions to concerns at this junction such as a mini roundabout or a signalised junction have been suggested, but these are not appropriate due to the geography of the junction, budget limitations and suitability for this 20mph environment. The position of the existing car club space on St Clements Hill is considered suitable on this 20mph road which will be further enhanced by the proposed raised table at the junction. In consideration of the responses received it is proposed to not install the cycle lane at this junction.

Conclusion

29. It is recommended to install:-

- the 20mph area as advertised with the traffic calming on Elm Grove Lane
- Millcroft junction proposals with reduced double yellow lines into Millcroft and including the removal of guard railing
- The raised table on St Clements Hill by the junction with Magdalen Road and install the existing zebra on a raised table with associated works.

30. Plans showing details of the proposed scheme and junction improvements at Millcroft and Magdalen Road can be found attached as appendices 2, 3, 4 and 5.

No. of responses from residents	Comments received	Officer comments
<u>General</u>		
18	Agrees to 20mph scheme in general	Support welcome
<u>Elm Grove Lane proposals</u>		
9	Agrees to Elm Grove Lane proposals	Support welcome
1	Would like some double yellow lines on the south side of Elm Grove Lane (for passing places) and at junctions (for safety).	It is not felt necessary to control exact positioning of residential cars in a 20mph zone.
5	Objects to speed humps as parked cars already slows traffic	The average recorded speed on Elm Grove Lane was 26mph for eastbound traffic. West bound traffic was 23mph, probably due to the parked vehicles. DfT recommends traffic calming in roads with this existing speed.
3	Speed humps can damage vehicles and peoples health.	Traffic calming is designed for vehicles travelling at 20mph, as long as drivers keep to this speed, the effect on vehicles or passengers is minimal.
1	Speed humps on Elm Grove Lane (EGL) will increase the blockage of traffic making it more difficult to travel.	DfT research has shown that slower speeds do not cause congestion. If drivers keep to the 20mph speed limit there will be less acceleration and braking, reducing car emissions.
1	Speed humps cause drivers to brake and then accelerate causing noise and exhaust fumes.	See above.
1	Speed humps will not address hazards on the road such as diver visibility and blind spot due to the hill.	All roads have hazards, the slower the vehicle the greater time the driver has to react to safety issues.

No. of responses from residents	Comments received	Officer comments
1	As a cyclist and motorcyclist I find speed humps highly dangerous, especially at night and particularly down a steep hill such as Elm Grove Lane.	The speed humps are designed for all traffic and as such a cyclist or motorcyclist should be able to negotiate them at an appropriate speed.
2	Speed humps and cushions cause discomfort and inconvenience to cyclists.	Traffic calming is necessary on some roads to keep traffic speed down to 20mph. The benefit to cyclists of reduced traffic speeds should outweigh the inconvenience.
3	Money would be better spent on maintaining the roads.	The budget for this proposal is specifically allocated for cycling improvements and cannot be used as revenue for highways maintenance. However where we are installing items on the highway, the road will be resurfaced where necessary.
1	Concerned that the speed hump design will force cyclists into the path of vehicles.	The design is for a full width hump with a drainage channel at the kerb edge. The recommended position for cyclists to take on the highway is around 1m from the kerb edge. In this position there will be no need for the cyclist to move into the road.
2	Access to driveways should not be blocked by speed humps.	All speed humps are positioned away from private drives.
1	Traffic calming is needed on Chamberlin Road.	Chamberlin Road is a residential street with a relatively low number of vehicles. The speed of vehicles is unlikely to exceed the average speed suggested by the DfT for traffic calming intervention.
<u>Millcroft junction proposals</u>		
5	Objects to the removal of pedestrian guard rails that are necessary for the safety of children from Sewell Park Academy and the park.	Recent guidance from the DfT advises to remove pedestrian guardrails to reduce street clutter, make the environment more “open” and encourage awareness of other road users. In this 20mph area guardrails are not necessary.

No. of responses from residents	Comments received	Officer comments
4	Concerned with less residents parking with the proposed double yellow lines at the Millcroft / St Clements Hill junction.	Residents parking is important, however for road safety reasons it is necessary not to park near junctions and where the road is too narrow.
1	Has witnessed no accidents at this junction in 14 years, the junction does not need “fixing”.	Traffic accident records do not give the full picture of an area. These proposals are to make cycling more enjoyable and to enhance the area by removing street clutter.
1	The raised table at the junction is too long and will not slow traffic.	It is important for the raised table to cover the complete junction and road narrowing to aid pedestrians crossing the road and to slow traffic.
2	Would like to see proposed double yellow lines on St Clements Hill extended further north. Traffic is frequently blocked as cars need to wait by parked cars for the giveway system. The road is not wide enough for parking and two way traffic.	The length of the double yellow lines on St Clements Hill have been designed to allow a medium sized lorry to comfortably wait in an area where they can be passed by oncoming vehicles. It is necessary to leave room for residents parking and parked cars do have the added benefit of slowing traffic down.
2	The proposed small section of cycle lane is not needed; resources should concentrate on more substantial provisions on main routes.	The proposed section of cycle lane at the Millcroft junction is designed to make drivers more aware of cyclists and give a priority to cyclists travelling up hill on this narrow section of road. As stated in the report, this scheme forms part of a larger scheme to enhance the complete blue pedalway.
2	Displaced cars from the proposed double yellow lines will just move further up the hill and into side roads.	It is recognised that waiting restrictions push parking further along the road, for this reason the proposal covers the area essential for road safety or traffic flow.
1	Suggests provision of parking lay-bys on St Clements Hill.	As previously stated, the budget for this proposal is specifically allocated for cycling improvements and cannot be used for other highway improvements. A lay-by for cars would not provide a benefit to cyclists.

No. of responses from residents	Comments received	Officer comments
2	The area should be “residents only” parking.	For an area to be considered for a residents permit area a majority of residents need to be in agreement. At present there are no proposals to carry out a Controlled Parking Zone review in this area.
<u>Magdalen Road junction proposals</u>		
2	Agrees with raised tables.	Support welcome.
	The raised table for the zebra will not help.	The proposed raised table at the zebra crossing will slow traffic which in turn will make it easier for cyclists to turn right at this junction.
2	Traffic signals at crossing or junction are needed.	A signal junction at the Magdalen Road junction would not be suitable in this 20mph area, the raised table at the Zebra crossing will help slow traffic down and make manoeuvres easier for all road users.
1	Suggests a mini roundabout at the junction.	A mini roundabout was considered for this junction at design stage but due to the geometry of the road layout it was considered not possible.
4	It is very difficult for cyclists to turn right (south) from St Clements Hill into Magdalen Road.	The proposed raised table at the Zebra crossing will help slow traffic down and make manoeuvres easier for all road users.
3	The cycle path is not necessary	The cycle path would give an easier route for cyclists travelling north.
1	The cycle stands will not be used and are unnecessary.	It is important to enhance the environment and improve cycling facilities where possible to encourage cycling. It is also important to plan for the future and likely increase in cyclists.
2	The proposed tree is not necessary and will cause visibility problems at the junction.	As above, it is important to enhance the environment. The tree position will not to obstruct road users views at the junction.

No. of responses from residents	Comments received	Officer comments
5	There will be a conflict between cyclists and pedestrians / pedestrian crossing.	This is a possibility and the design has been chosen to minimise this.
3	The cycle lane at Magdalen Road junction will encourage cyclists to stay on footpath.	There will always be some who chose to cycle on the pavement. There will be adequate signs and road markings to indicate to the rider that they should re-join the carriageway.
1	Agrees it is difficult for pedestrians to cross St Clements Hill at its junction with Magdalen Road.	For this reason the raised table will slow traffic and the enhanced crossing point will help pedestrians negotiate crossing the road.
2	Concerned with the recent introduction of the car club bay on St Clements Hill as it is close to the junction with Magdalen Road.	The recently positioned car club space was installed after consultation. It is considered a suitable position in this 20mph area, but will be reviewed if a nearby development is proposed.
1	Realigning the kerb at the Magdalen Road junction will increase traffic congestion and fumes. Suggests realignment of Denmark Road junction.	The realigning of the kerb at Magdalen Road is necessary to incorporate the raised table for the zebra crossing. It will also slow traffic further turning into St Clements Hill. Denmark Road junction is considered suitable.
1	The raised table at the zebra on Magdalen Road near the junction with St Clements Hill will make hand signals dangerous for cyclists, especially when wet.	It is important for cyclist to control their bikes when riding over a raised table, but a hand signal could be given prior to the table.
1	Extra signage will add to street clutter.	The proposal of making the southern section of St Clements Hill into a 20mph zone (rather than a limit as existing) will reduce the number of signs necessary in the area.
<u>Other comments</u>		
1	Traffic calming is needed on Woodcock Road (between Catton Grove Road and Wall Road)	Woodcock Road is outside this scheme.

No. of responses from residents	Comments received	Officer comments
3	Roads and pavements in the area need maintaining.	As stated previously, the budget for this proposal is specifically allocated for cycling improvements and cannot be used as revenue for highways maintenance.
1	Concerned with the traffic impact on surrounding roads when construction is underway.	There will be a temporary increase in traffic on neighbouring roads whilst construction takes place. If a road closure is necessary, traffic will be diverted onto suitable roads.
1	Would like to see more enforcement of 20mph speed limits.	As we are all aware, police resources are limited, this is why traffic calming is needed in some areas to make the scheme self enforcing.
1	Would like traffic calming on Lawson Road	Lawson Road is outside this scheme.
2	Would like Waterloo Road / Magdalen Road junction included in scheme and the 20mph zone extended further south on Magdalen Road.	Magdalen Road from its junction with Magpie Road to the junction with St Clements Hill will be considered in a separate scheme in the Transport for Norwich programme.
1	Why more cycle lanes? They do not pay for road upkeep.	Road traffic is increasing, putting more strain on the highway network, whilst at the same time people are becoming less fit. Many journeys are relatively short and could easily be carried out by walking or cycling. These proposals are to encourage walking and cycling for those able to. Every journey taken without a motorised vehicle helps the environment and leaves more space on the road for essential journeys.
1	Many people cannot cycle and rely on motorised vehicles.	See above.
1	Proposals will be a waste of money	See above.
1	The consultation finishes before the Sewell Park Academy head teacher is available.	The Sewell Park academy has been contact by letter and email. Any response received when the school opens can be verbally added to the report at committee.

No. of responses from residents	Comments received	Officer comments
<u>Responses from organisations</u>		
<p>Norfolk and Norwich Association for the Blind</p>	<p>Concerning the Magdalen Road junction:- The proposed cycle lane dissects through the tactile paving to the zebra, this is extremely unsafe for visually impaired people (VIPs) who would not be aware of the cycle lane. This arrangement relies on all people being able to see and have full mobility. The design should be changed to keep the cycle way away from the tactile paving. There is nothing to stop south bound cyclists using the cycle lane, probably at speed down hill. This action was observed on site. Agree with the design of 25mm upstand demarcation of the cycle lane as a tactile marker for VIPs. The existing bollards on the pavement are trip hazards for VIPs due to their colour and size. This will be made worse by the proposals as they will be more isolated. The new proposals make this junction worse for VIPs than the present situation.</p>	<p>The NNABs concerns are accepted and agree there is a potential for conflict between cyclists and pedestrians at the Magdalen Road junction. The existing bollards that have been indicated as hazards will be replaced.</p>

No. of responses from residents	Comments received	Officer comments
Sewell Community Group	<p>Agrees with speed humps on Elm Grove Lane and 20mph extension.</p> <p>Cycle lane on Magdalen Road is not needed, or tree or cycle racks.</p> <p>Agree with the yellow lines on St Clements Hill, but not Millcroft due to loss of parking spaces.</p> <p>Railings outside the school entrance should not be removed for safety.</p>	<p>Support welcome for the 20mph and traffic calming. Agree there is a potential for conflict between cyclists and pedestrians at the Magdalen Road junction. The yellow lines on Millcroft could be shortened, but the junction must be protected from parked vehicles for drivers and pedestrians' visibility. Recent guidance from the DfT advises to remove pedestrian guardrails to reduce street clutter, make the environment more "open" and encourage awareness of other road users. In this 20mph area guardrails are not necessary.</p>
The Whalebone PH	<p>Agree with minimum parking restrictions around junctions</p> <p>Believes the cycle path on Magdalen Road junction would be dangerous with fast cyclists conflicting with pedestrians and customers.</p> <p>Concerns with deliveries; at present delivery lorry parks on footpath in front of PH next to the cellar trap door. The new design would not allow this.</p> <p>There are no acceptable alternative places to park to unload large numbers of heavy barrels and kegs. One large delivery takes around 1 hour.</p>	<p>Support welcome for the 20mph zone. Agree there is a potential for conflict between cyclists and pedestrians at the Magdalen Road junction. Concerns with deliveries understood.</p>

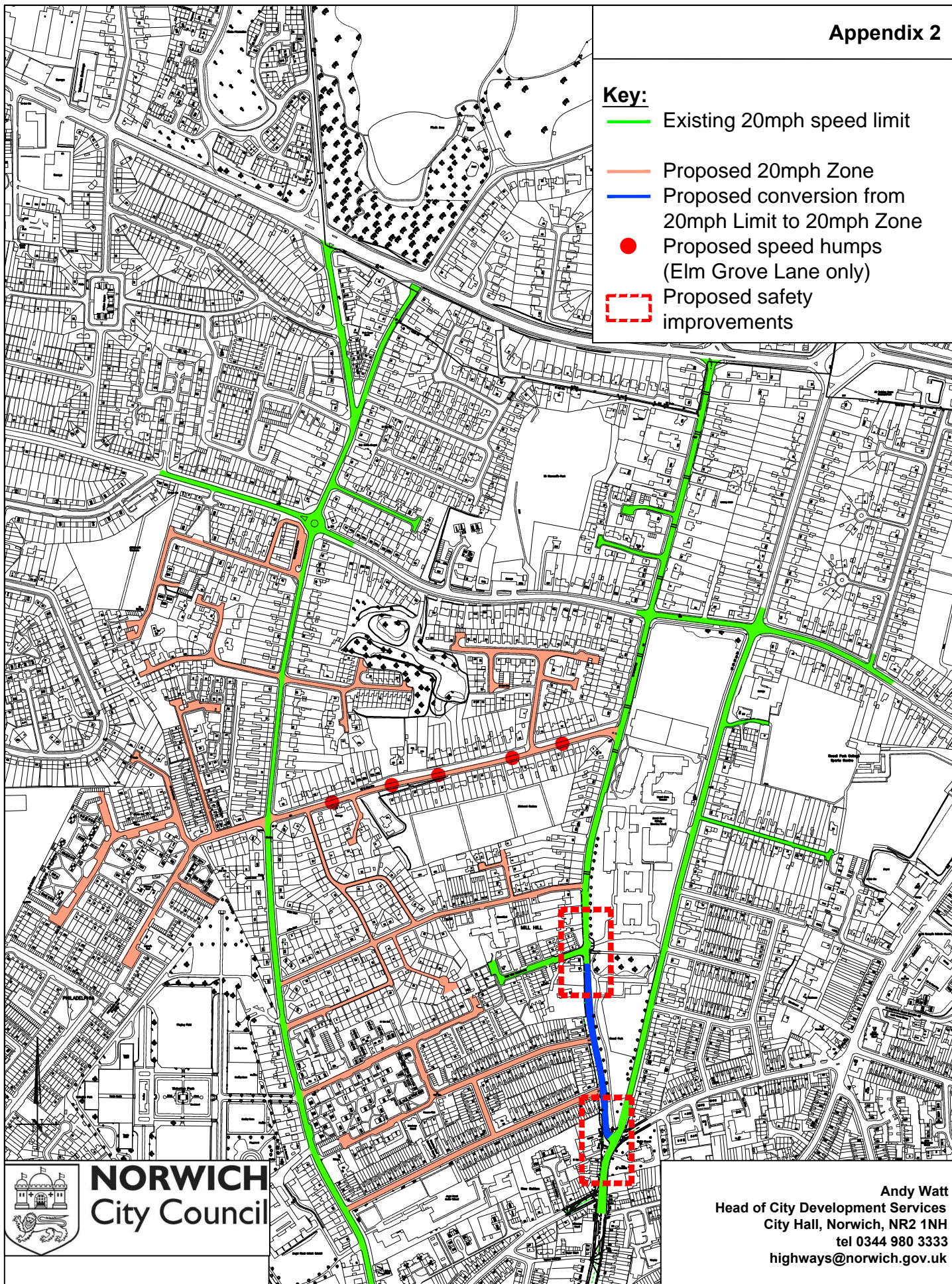
No. of responses from residents	Comments received	Officer comments
Sewell ward councillors	<p>At the Magdalen Road junction, do not agree with the cycle track, tree or cycle racks.</p> <p>At the St Clements Hill / Millcroft junction, the railings should remain and the double yellow lines on Millcroft are not needed.</p>	<p>Support welcome for the 20mph and traffic calming. Agree there is a potential for conflict between cyclists and pedestrians at the Magdalen Road junction. The yellow lines on Millcroft could be shortened, but the junction must be protected from parked vehicles for drivers and pedestrians visibility. Recent guidance from the DfT advises to remove pedestrian guardrails to reduce street clutter, make the environment more “open” and encourage awareness of other road users. In this 20mph area guardrails are not necessary.</p>
Sewell residents meeting	<p>Magdalen Road junction, do not agree with the cycle track, tree or cycle racks. Concerns with cycle speeds, collisions with pedestrians, nearby vehicle accesses, visibility at the junction and car club space position. Also concerns for the Whalebone deliveries.</p> <p>Would prefer a traffic signal crossing instead of the existing zebra at the Magdalen Road junction.</p> <p>Millcroft junction, the yellow lines on St Clements Hill and Millcroft should be reduced as parking is limited. The footpath buildouts and pedestrian guardrails should remain. Drivers visibility needs improving when emerging from Millcroft.</p> <p>Consider a mini roundabout at the Magdalen Road junction.</p> <p>Elm Grove Lane speed humps should be the full width of the road.</p>	<p>Agree there is a potential for conflict between cyclists and pedestrians at the Magdalen Road junction. A traffic signal pedestrian crossing is not considered necessary in a 20mph zone. The proposed raised table will slow traffic down and help pedestrians feel more confident on the zebra crossing.</p> <p>The proposed yellow lines on St Clements Hill are necessary to allow free passage of vehicles. However, the ones advertised for Millcroft could be shortened, but the junction must be protected from parked vehicles for drivers and pedestrians visibility. Recent guidance from the DfT advises to remove pedestrian guardrails to reduce street clutter, make the environment more “open” and encourage awareness of other road users. In this 20mph area guardrails are not necessary. A mini roundabout at the Magdalen Road junction is not possible due to the alignment of the joining roads. The proposed speed humps on Elm Grove Lane are full road width except for a drainage gully on each kerb line.</p>

No. of responses from residents	Comments received	Officer comments
Norwich Cycling Campaign	<p>Agree to the 20mph extension</p> <p>Agree to traffic calming on Elm Grove Lane to slow traffic.</p> <p>Agree to Millcroft junction improvements</p> <p>The design of Magdalen Road junction will provide some benefit to cyclists, but would prefer a scheme that helps cyclists turning right out of St Clements Hill. Parked vehicles at this junction cause a hazard. There could be conflict with pedestrians on the proposed cycle lane and with vehicles as they re-join the carriageway. Suggest moving the existing car club space further from the junction.</p>	<p>Support welcomed for the scheme. Agree there is a potential for conflict between cyclists and pedestrians at the Magdalen Road junction.</p>
Guide dogs association	<p>Concerning the Magdalen Road junction:-</p> <p>The proposed cycle lane dissects through the tactile paving to the zebra, this is extremely unsafe for visually impaired people (VIPs). Tactile paving has to be unobstructed.</p> <p>Cycles are hard for VIPs to hear, and will travel both ways on this proposed cycle lane.</p> <p>The existing bollards on the pavement are a trip hazard for VIPs due to their poor colour contrast and size.</p> <p>The cycle lane should have a navigable edge on both sides</p>	<p>The Guide dog association concerns accepted and agree there is a potential for conflict between cyclists and pedestrians at the Magdalen Road junction. The existing bollards that have been indicated as hazards will be replaced.</p>

No. of responses from residents	Comments received	Officer comments
Local business owner	<p>Agrees with speed restriction Feels there is no problem with cycling on St Clements Hill, money could be better spent. Concerned vehicle accesses near the Magdalen Road junction would cause a hazard to cyclists on the cycle lane. Suggest moving the existing car club space further from the junction</p>	<p>Support for the 20mph welcomed. It is important to encourage cycling by enhancing the environment where possible. Agree there is a potential for conflict between cyclists and pedestrians at the Magdalen Road junction.</p>

Key:



- Existing 20mph speed limit
- Proposed 20mph Zone
- Proposed conversion from 20mph Limit to 20mph Zone
- Proposed speed humps (Elm Grove Lane only)
- Proposed safety improvements



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Title Transport For Norwich St Clements Hill Traffic Calming Proposed 20mph changes	Date	Scale(s)				
	22-07-2016	NTS	No.	Date	Notes	REVISIONS
	Drawn By	Designed By				
	JG	AE				
Checked By	NEG. No.					
LA						
DWG. No.						
CCAG2-36-028						

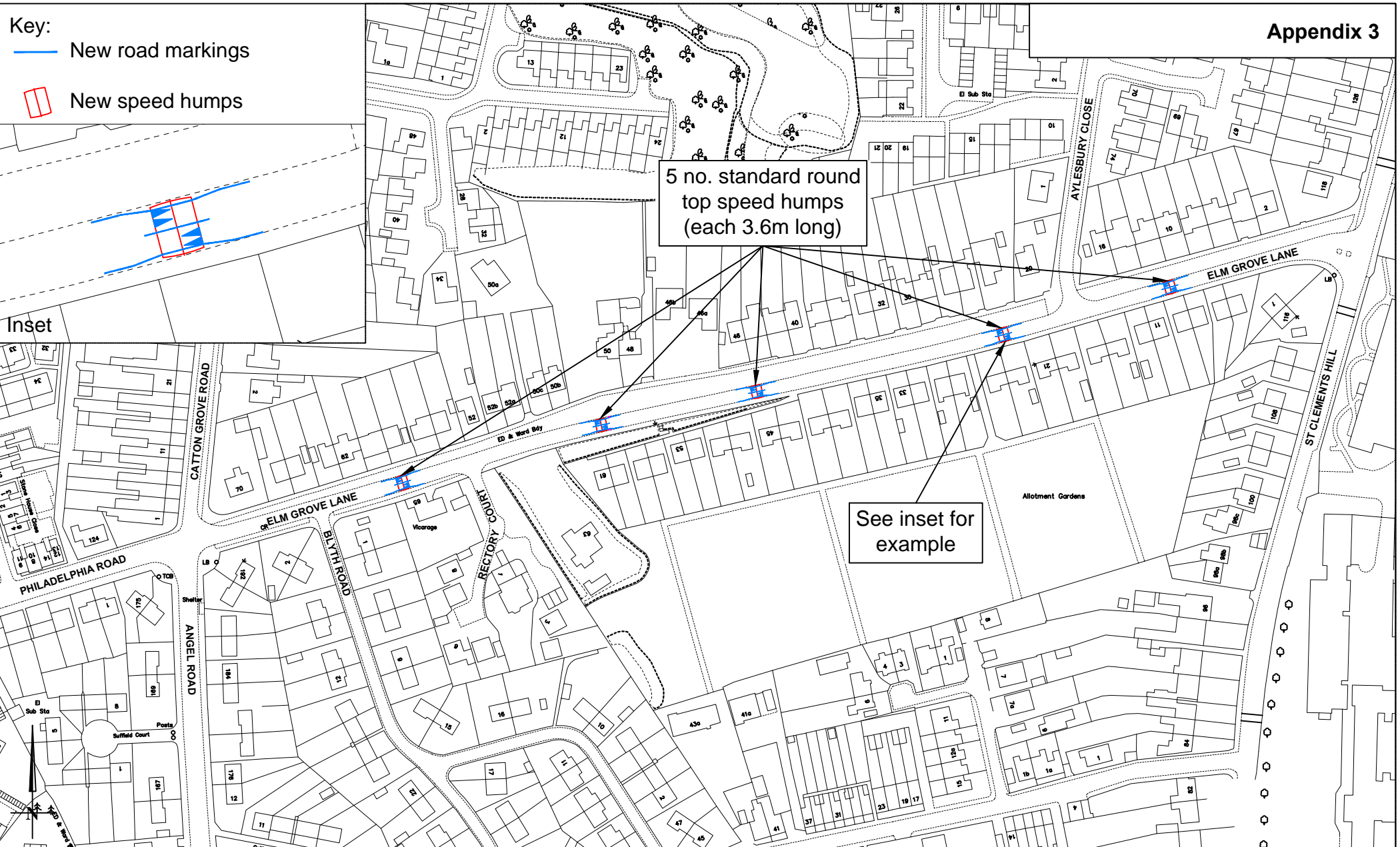
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Key:
 New road markings
 New speed humps

Inset

5 no. standard round top speed humps (each 3.6m long)

See inset for example

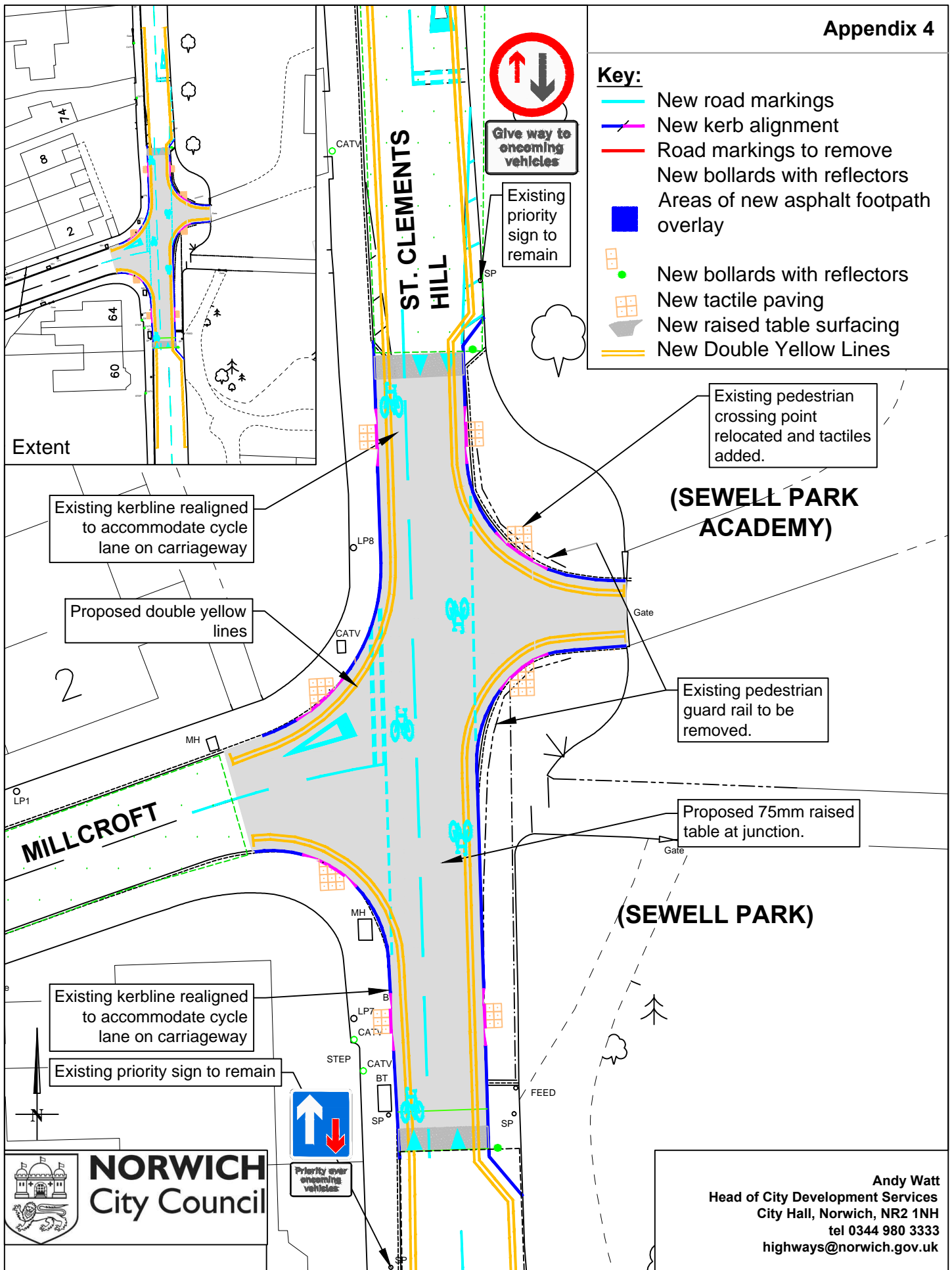


NORWICH City Council
 Title
 Transport For Norwich
 St Clements Hill
 Traffic Calming
 Elm Grove Lane Speed hump locations

No.	Date	Notes	REVISIONS	Int.	Ckd.	Date	Scale(s)
						21/07/2016	NTS
						Drawn By JG	Designed By AE
						Checked By AE	NEG. No.
						DWG. No. CCAG2-36-025	

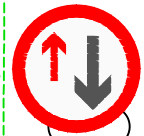
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Key:

- New road markings
- New kerb alignment
- Road markings to remove
- New bollards with reflectors
- Areas of new asphalt footpath overlay
- New bollards with reflectors
- New tactile paving
- New raised table surfacing
- New Double Yellow Lines



Give way to oncoming vehicles

Existing priority sign to remain

Existing pedestrian crossing point relocated and tactiles added.

(SEWELL PARK ACADEMY)

Existing pedestrian guard rail to be removed.

Proposed 75mm raised table at junction.

(SEWELL PARK)

Existing kerbline realigned to accommodate cycle lane on carriageway

Proposed double yellow lines

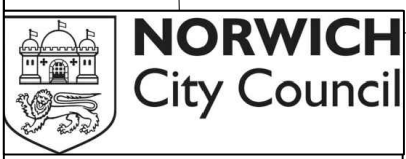
Existing kerbline realigned to accommodate cycle lane on carriageway

Existing priority sign to remain



Priority over oncoming vehicles

Extent



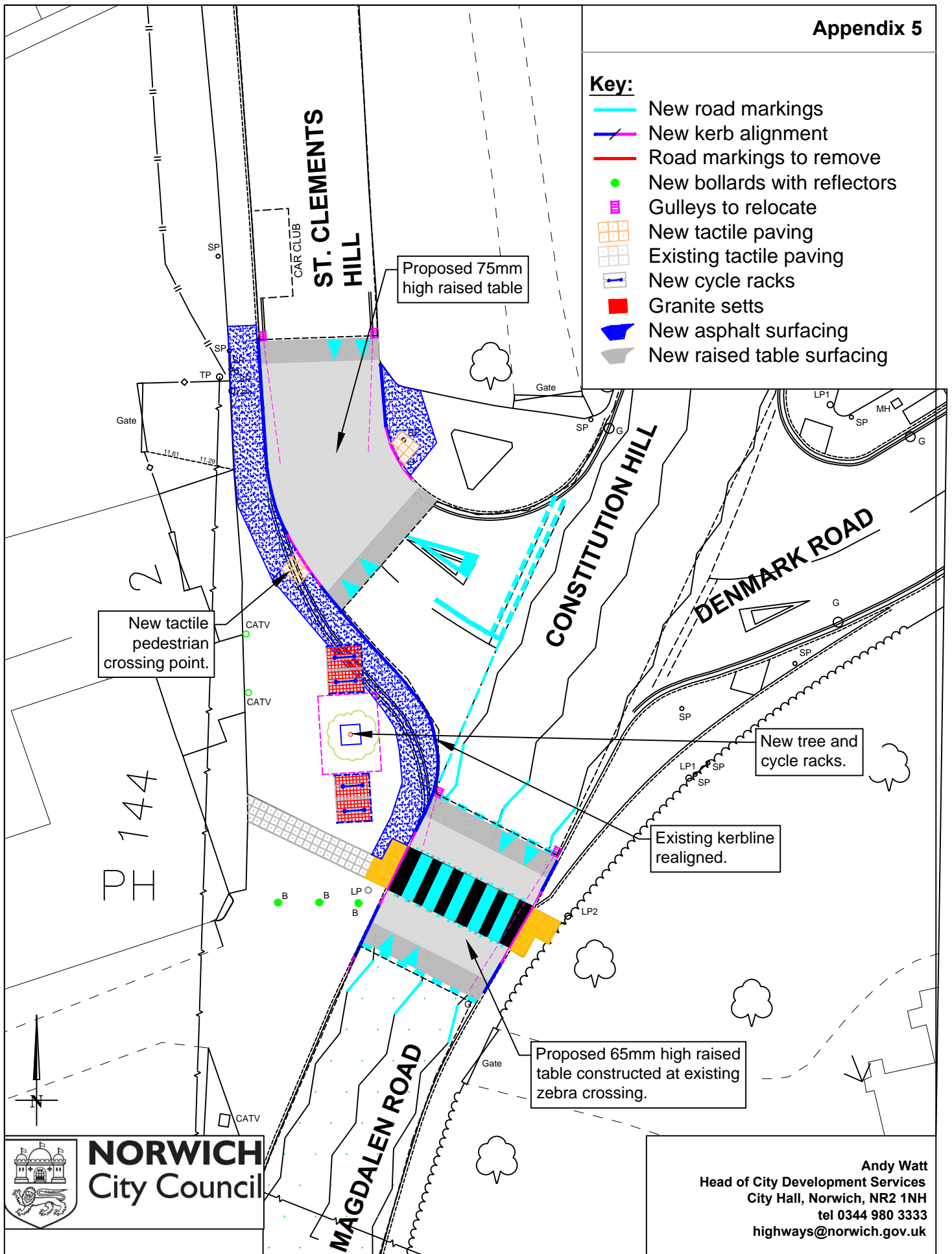
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Title Transport For Norwich St Clements Hill Traffic Calming Proposed St Clements Hill / Millcroft junction layout	Date	22-07-2016	Scale(s)	NTS	No.	Date	Notes	REVISIONS	Int.	Ckd.
	Drawn By	JG/AE	Designed By	AE						
	Checked By	LA	NEG. No.							
	DWG. No.	CCAG2-36-027								

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Key:

- New road markings
- New kerb alignment
- Road markings to remove
- New bollards with reflectors
- Gulleys to relocate
- New tactile paving
- Existing tactile paving
- New cycle racks
- Granite setts
- New asphalt surfacing
- New raised table surfacing



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Title Transport For Norwich St Clements Hill Traffic Calming Proposed Magdalen Rd / St Clements Hill junction layout	Date	Scale(s)	No.	Date	Notes	REVISIONS	Int.	Ckd.
	22-07-2016	NTS						
	Drawn By	Designed By						
	JG/AE	AE						
	Checked By	NEG. No.						
LA								
DWG. No.	<small>© Crown Copyright and database right 2011. Ordnance Survey 100019747.</small>							
CCAG2-36-026								