

**Report to** Norwich Highways Agency committee  
22 March 2018  
**Report of** Head of city development services  
**Subject** Transport for Norwich – Review of Essex Street Cycle  
Contraflow

**Item**

**6**

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### **Purpose**

To seek approval to consult on the proposed changes to Essex Street that will increase safety and reduce conflict for all users.

### **Recommendation**

To:

- (1) agree to consult on the scheme detailed in appendix 1.
- (2) note that any representations received will be considered at a future meeting of the committee.

### **Corporate and service priorities**

The report helps to meet the corporate priority a safe, clean and low carbon city

### **Financial implications**

The proposals contained in this report are estimated to cost £15k and will be funded by the Cycle Ambition Grant

**Ward/s:** Town Close

**Cabinet member:** Councillor Mike Stonard - Sustainable and inclusive growth

### **Contact officers**

Ed Parnaby, Transportation Planner 01603 212446

Bruce Bentley, Principal Transportation Planner 01603 212445

### **Background documents**

The Avenues to Vauxhall Street, Stage 4 safety audit

Sustrans, Essex Street feasibility study (May 2017)

# Report

## Background

1. The pink pedalway cycle route runs east-west across Norwich. Essex Street forms a key part of this route owing to its alignment with the highly used section of cycle route along The Avenues.
2. Previously a one-way street for all traffic, the routing of the pink pedalway, allowing two-way cycling on Essex Street was agreed by this committee in July 2014. The associated works were completed in November 2015 which included introduction of westbound contraflow cycling.
3. The scheme was subject to a stage 2 safety audit in February 2015 at the design stage and a stage 3 safety audit in December 2015 after implementation. Following a public question raised by Cllr Corlett at this committee in March 2017, a stage 4 safety audit was completed in April 2017.

## Consideration

4. Since the implementation of the scheme, there has been no significant change in the reported accident figures, which remain low in both frequency and severity. The stage 4 safety audit concluded that although no injury accidents have been reported on Essex Street, the potential for conflict is clear. The safety audit recommended that consideration be given to the need for mitigation measures or changes to the scheme.
5. Aside from the safety audit, concerns over conflict between vehicles and cycles on Essex Street have been raised by the public. Such conflict is also seen in the video monitoring carried out as part of the stage 4 safety audit.
6. The concerns more specifically refer to:
  - a) Motor vehicles being driven at excessive speed
  - b) Motor vehicles being driven illegally in a contraflow direction
  - c) Contraflow cyclists feeling pressured or at risk when meeting an oncoming motor vehicle
  - d) With-flow cyclists feeling pressured or at risk when followed closely by motor vehicles
  - e) Pedestrians feeling at risk if with-flow motor vehicles mount the footway to overtake with-flow cyclists
  - f) Pedestrians feeling at risk if contraflow cyclists mount the footway to avoid an oncoming motor vehicle
7. A week-long 24 hour a day count in 2017 recorded 1,200 vehicles per day traveling eastbound with another 180 with-flow cycles and 60 contra-flow cycles per day.
8. The survey shows that the average speed in Essex Street is 18.7mph and the 85<sup>th</sup> percentile speed is 23.9mph which indicates very good compliance with the 20mph speed limit. However, 351 drivers of the 9507 vehicles recorded were traveling over 30mph and 40 of those were over 50mph. These excessive speeds are above what is normally expected on roads with an average speed

below 20mph. With two-way cycling in a confined space, there is a need for vehicle speeds to be managed here more carefully than on most city streets.

9. Illegal driving against the one-way legal order has been recorded on the survey and was also observed during the daytime hours in the on-site review.
10. During ten hours of intermittent recording, seven instances of contraflow cycling on the southern footway were observed. No instances of drivers overtaking on the footway were observed. With-flow cyclists were pressured by following vehicles.

### **Independent review**

11. It was decided that it would be useful for an independent party to conduct a review of the Essex Street contra-flow scheme. To that end, Sustrans (experts in cycle design and the country's leading charity that promotes walking and cycling) were commissioned to do this. They were tasked with considering ways to resolve both the perceived and actual safety concerns in Essex Street.
12. Their report made a number of recommendations that could be considered. These were;
  - a) Mark the full length of Essex Street with an advisory contra-flow cycle lane
  - b) Introduced more 20mph signs and roundels to reinforce the 20mph restriction
  - c) Review the signage at the Unthank Road junction
  - d) Consider speed tables or pinch points to reduce traffic speeds
  - e) Redesign the Unthank Road junction by amending radii and paving materials
  - f) Consider converting the zebra crossing on Unthank Road to a parallel pedestrian and cycle crossing with shared use approaches
  - g) Change the priority at the Essex Street / Suffolk Square junction and realign the junction to reinforce the one way restriction.
  - h) Encourage delivery drivers to park in Tesco Express car park not on Essex Street.
13. Options physical traffic calming (d) and a parallel pedestrian and cycle crossing (f) had already been considered as part of the initial design for the Essex Street scheme and had been subject to consultation in 2014, when they did not find favour with the public. Additionally, in respect of the traffic speeds, given that the compliance with the 20mph speed limit is already very good, and that the agreed policy of this committee is that traffic calming should only be considered in streets where the existing average speeds are above 26mph a traditional traffic calming scheme is not considered appropriate for Essex Street.
14. Redesigning the junction of Unthank Road and Essex Street (e) would be expensive and would not directly address the concerns in Essex Street itself, and therefore it is not proposed to adopt this proposal. The city council has no powers to require Tesco's to use their car park for deliveries (h), so this option has been rejected.

15. The remaining suggestions are believed to have significant merit and have been incorporated into a scheme design which it is believed will reduce vehicle speeds, reinforce the one way restriction for motor vehicles and discourage rat running traffic. The design is shown on the plan attached as appendix 1 and consists of
- a) Change junction priority at Essex Street / Suffolk Square so that vehicles leaving Essex Street have to give way to traffic on Suffolk Square. This will crucially give better adherence to the one-way order and slow down traffic. It was also reduce the appeal of using Essex Street as a cut through route. Making the street safer and speeds lower is likely to encourage cyclists to stay in the carriageway and avoid the footway thereby improving comfort for pedestrians.
  - b) Build a traffic island with a 1.50m wide cycle bypass to protect entry into the cycle contraflow facility. This will protect contraflow cycle movements into Essex Street, requiring drivers to slow and further discourage driving against the one-way order
  - c) Install new 20mph roundels on Essex Street to highlight to drivers leaving Unthank Road that they are in a 20mph zone. This will reduce pressure on people cycling both with-flow and contraflow along Essex Street.
  - d) Introduce sections of marked contraflow cycle lane to further highlight to drivers the presence of cyclists.

## **Conclusion**

16. One option is to leave this scheme as it is with a safety record that shows a low level of recorded slight injuries in the surrounding streets (and nothing recorded for serious injuries). However, owing to the demands on Essex Street from parked cars, restricted width and the need for two-way cycling on this part of the pink pedalway there is potential for conflict between vehicles and cycles. There are also concerns raised within the Stage 4 safety audit and the report from Sustrans that make a clear case for improvement.
17. The measures outlined above will reduce speeds, increase adherence to one-way order, make clearer the space for cycling and reduce conflict.
18. It is proposed that consultation takes place on the proposals in May, with the results being considered by this committee in September. Should the changes be approved, implementation will take place in the autumn.

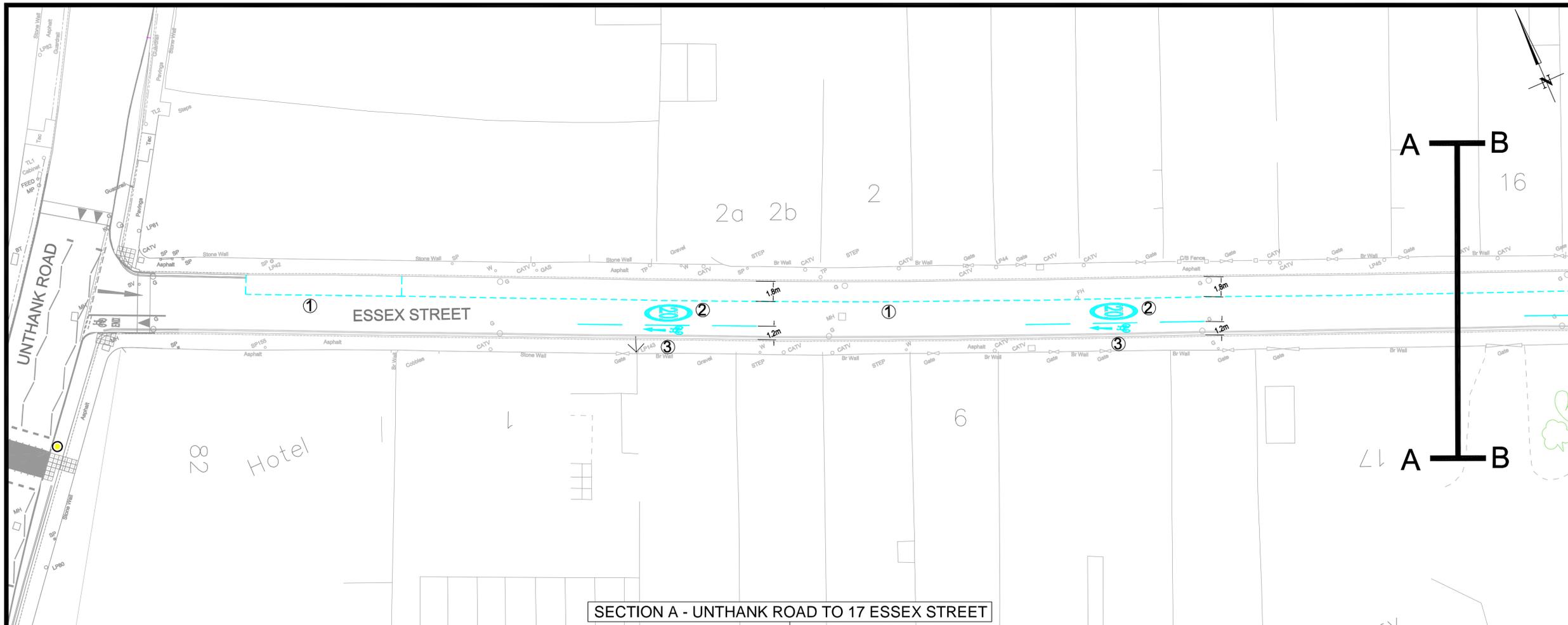
| <b>Report author to complete</b>  |  |
|-----------------------------------|--|
| <b>Committee:</b>                 | Norwich Highways Agency Committee                |
| <b>Committee date:</b>            | 22 March 2018                                    |
| <b>Director / Head of service</b> | Andy Watt  |
| <b>Report subject:</b>            | Essex Street cycle contraflow                    |
| <b>Date assessed:</b>             | 06/02/2017                                       |
| <b>Description:</b>               | To agree consultation on changes to Essex Street |

|  | Impact                              |                                     |                          |  |
|--|-------------------------------------|-------------------------------------|--------------------------|--|
| <b>Economic<br/>(please add an 'x' as appropriate)</b>                                 | <b>Neutral</b>                      | <b>Positive</b>                     | <b>Negative</b>          | <b>Comments</b>  |
| <b>Finance (value for money)</b>   | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input type="checkbox"/> | The proposals give significant safety and comfort improvements.  |
| <b>Other departments and services<br/>e.g. office facilities, customer<br/>contact</b> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/> |  |
| <b>ICT services</b>  | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/> |  |
| <b>Economic development</b>  | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input type="checkbox"/> | This scheme helps to encourage sustainable travel to benefit the city and everyone who lives and works here. |
| <b>Financial inclusion</b>   | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input type="checkbox"/> | This scheme promotes cycling and walking, which are inclusive and low cost forms of transport.               |
|  |                                     |                                     |                          |  |
| <b>Social<br/>(please add an 'x' as appropriate)</b>                                   | <b>Neutral</b>                      | <b>Positive</b>                     | <b>Negative</b>          | <b>Comments</b>  |
| <b>Safeguarding children and adults</b>  | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/> |  |
| <b><u>S17 crime and disorder act 1998</u></b>  | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/> |  |
| <b>Human Rights Act 1998</b>   | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/> |  |
| <b>Health and well being</b>   | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input type="checkbox"/> | Improvements will lower speeds, reduce conflict and promote active travel.                                   |
|  |                                     |                                     |                          |  |

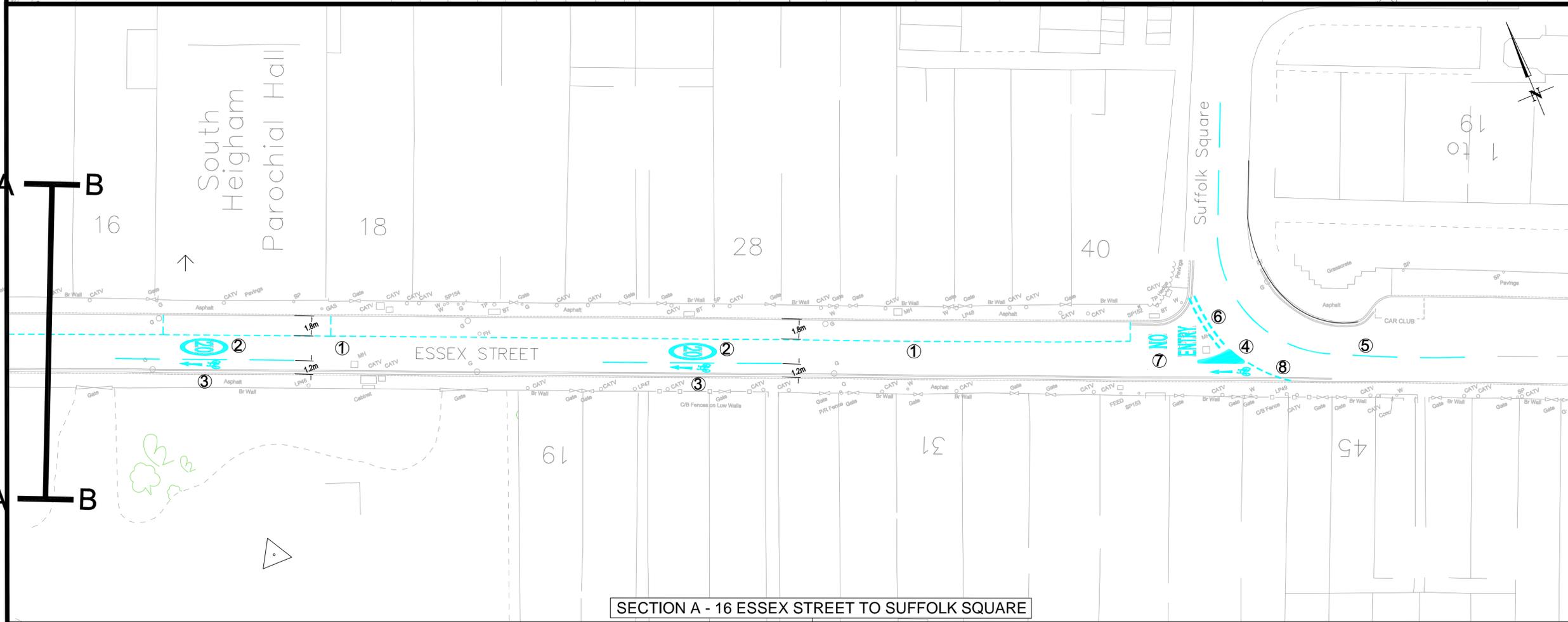
|  | Impact                              |                                     |                          |   |
|--|-------------------------------------|-------------------------------------|--------------------------|---|
| Equality and diversity<br>(please add an 'x' as appropriate) | Neutral                             | Positive                            | Negative                 | Comments  |
| Relations between groups<br>(cohesion)                       | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/> |   |
| Eliminating discrimination &<br>harassment                   | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/> |   |
| Advancing equality of opportunity                            | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/> |   |
| Environmental<br>(please add an 'x' as appropriate)          | Neutral                             | Positive                            | Negative                 | Comments  |
| Transportation   | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input type="checkbox"/> | This scheme helps to meet the corporate priority of a safe, clean and low carbon city   |
| Natural and built environment                                | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input type="checkbox"/> | This scheme will not have any adverse effects on the environment, but by encouraging non motorised travel will help improve air quality.              |
| Waste minimisation & resource<br>use                         | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/> |   |
| Pollution  | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input type="checkbox"/> | This scheme will help improve air quality by encouraging non motorised forms of travel  |
| Sustainable procurement                                      | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/> |   |
| Energy and climate change                                    | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input type="checkbox"/> | The scheme contributes to the corporate priority 'a safe, clean and low carbon city' by encouraging cycle use, reducing car use and vehicle emissions |

|                                    | Impact                   |                                     |                          |   |
|------------------------------------|--------------------------|-------------------------------------|--------------------------|---|
| (Please add an 'x' as appropriate) | Neutral                  | Positive                            | Negative                 | Comments  |
| Risk management                    | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | The changes outlined in this report are based on detail risk analysis contained in the level 4 RSA, video survey and report by Sustrans |

| Recommendations from impact assessment |   |
|--|---|
| <b>Positive</b>                        |   |
|  | This scheme will reduce risk to vulnerable road users |
| <b>Negative</b>                        |   |
|  | N/A   |
| <b>Neutral</b>                         |   |
|  | N/A   |
| <b>Issues</b>                          |   |
|  | N/A   |



SECTION A - UNTHANK ROAD TO 17 ESSEX STREET



SECTION A - 16 ESSEX STREET TO SUFFOLK SQUARE

NOTES

LEGEND

- ① Diag 1028.4 Edge of parking bay marking offset 1.8m from kerb face
- ② Diag 1065 20mph 4.3m in dia
- ③ Diag 1004 3nr 4m marks offset from kerb 1.2m, refresh existing Diag 1057 cycle symbol 1.215 & Diag 1059 2m arrow
- ④ Splitter island 50mm in height size as shown, for further details see std drawing NCD 700-06
- ⑤ Diag 1004 road marking 4m line 2m gap
- ⑥ Diag 1003A give way road marking
- ⑦ Diag 1046 No Entry, height 1.6m
- ⑧ Diag 1009 start of cycle lane

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REVISIONS

| No. | Date | Notes | Int. | Ckd. |
|-----|------|-------|------|------|
|     |      |       |      |      |

DRAFT

Title  
CCAG Project 8

Stage 4 Safety Audit Amendments

|                   |                          |
|-------------------|--------------------------|
| Scale(s) 1:200    |                          |
| Date<br>JAN 18    | DWG. No.<br>CCAG8-CON-20 |
| Designed by<br>TC | NEG. No.                 |
| Drawn by<br>TC    |                          |
| Checked By        |                          |

Andy Watt  
Head of City Development Services  
City Hall, Norwich, NR2 1NH  
tel 0344 980 3333  
highways@norwich.gov.uk