



0 500m 1km 2km

Figure A-8: Route 5: College Link

Key:

— College Link (Indicative)

NOTE: Potential routes shown are indicative and are subject to change as a result of consultation, feasibility and design.



5a An informal route is currently signed through the super market car park to the Old Fort/Great Glen way. This is also the quickest route to the college from the bus/train station. A formalised route would improve pedestrian and cyclist safety through the busy car park.



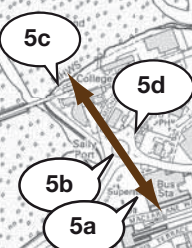
5b There are dropped crossings on the arms of the roundabout, however pedestrians and cyclists must cross three lanes of traffic.



5c The footways at the roundabout and to Carmichael Way could be widened and converted to shared use.



5d The gateway to the traffic free route behind the fast food restaurant is ill defined and the surfacing could be improved.



AN GEARASDAN/
FORT WILLIAM





0 500m 1km 2km

Figure A-9: Route 6: Town Centre Links (pedestrian only)

NOTE: Potential routes shown are indicative and are subject to change as a result of consultation, feasibility and design.



6a Handrail provision is good for each set of steps.



6b Parts of these well used steps to the town centre are not overlooked and may benefit from installation of CCTV.



6c The steps provide a good short cut to the town centre. However there is evidence of drinking and urination.





0 500m 1km 2km

Figure A-10: Route 7: Puggy Lane Link

Key:

■■■■■■ Puggy Line Link

NOTE: Potential routes shown are indicative and are subject to change as a result of consultation, feasibility and design.



7a This section of the Puggy Line from Wades Road to Macdonald Road has been surfaced is well used by local people. There is no lighting.



7b This section of the Puggy Line is unsurfaced and overgrown but is still used as a short cut to the A82.



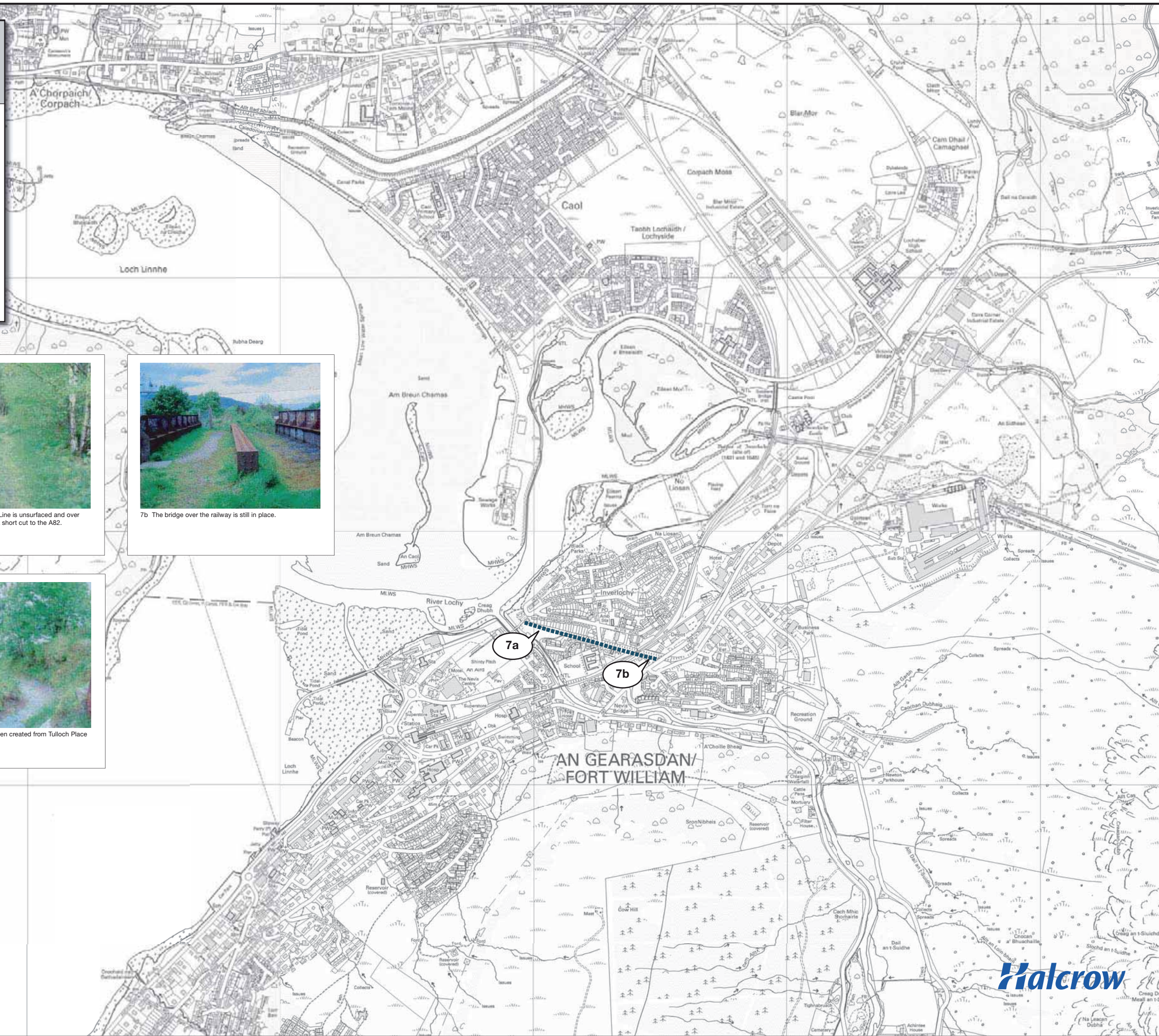
7b The bridge over the railway is still in place.



7b A new bridge from the Puggy Line over the A82 could connect to Ben Nevis Drive and provide a traffic free link to the Industrial Estate, Business Park and football ground as well as the small residential community of Claggan.



7b An informal access has been created from Tulloch Place to the Puggy Line.



Appendix B: Examples of Case Studies Relating to Removal of Centre Lines

NEW LAYOUT ON FELIXSTOWE ROAD, MARTLESHAM, SUFFOLK

Background

Felixstowe Road is part of the old main road between Woodbridge and Felixstowe, now bypassed by the A12. It is a C class road (subject to a 30 mph speed limit) linking the communities of old and new Martlesham. It is the only direct route for pedestrians and cyclists, but is also used by many motorists as the 'back route' into Martlesham. The road is subject to a 30 mph speed limit and carries some 4500 vpd, including over 150 cyclists.



Problem

There has been a substantial growth in traffic on the Felixstowe Road in recent years due to a number of factors, and it is perceived by drivers as a 'short cut', particularly at peak times. This made conditions increasingly difficult for local people, especially pedestrians and cyclists for whom this is an essential route. There was no footway and the road was poorly lit. Cyclists were deterred by experiences of being 'squeezed' by traffic passing too close and too fast. Although there were no serious injury accidents there were many anecdotal accounts of near misses that fuelled concern about safety. Calls for improvements to the road became a 'local issue' which was taken up by the Parish Council. The PC made requests for a footway and other improvements. With the development of the National Cycle Network through the area it became clear that Felixstowe Road was an essential link in National Cycle Route 1 and therefore any improvement to the road also needed to include 'cycle-friendly' measures.

Main objectives: (See expanded section at end of document)

- To improve safety and encourage more cycling and walking.
- To enhance its status as a quiet, minor road for local people.
- To encourage through traffic to use the A12 bypass.
- To reduce average traffic speed (to gain compliance with speed limit).

Funding

Construction of the scheme was made possible by Tesco Stores, who provided £75,000 of funding for the new footway along the road. Sustrans provided £40,000 for the cost of the shared-use paths adjacent to the junction with Anson Road and the marking of cycle lanes. Suffolk County Council (SCC) covered the remaining cost of resurfacing part of the road and the gateway treatments and signs, etc. from the LTP budget, of approx. £20,000.

Description of scheme



SCC originally investigated the possibility of providing a shared use footway/cycleway to keep both pedestrians and cyclists off the carriageway, but to make the facility safe for shared use would have required a path of at least 3m wide. This would have meant taking road space and narrowing the carriageway to an extent where two large vehicles would have been unable to pass. The chosen layout therefore includes cycle lanes on the carriageway that can be used by vehicles when clear, to enable drivers to pass safely at any point along the road. The final scheme, installed in July 2005, has a 6.5m carriageway width, split between two 1.5m cycle lanes and a single 3.5m central traffic lane. On one short section it narrows

to just below 6m width, with 1.3m cycle lanes and a 3.2m central lane.

The layout chosen recognises that some large vehicles and buses need to use the road and at peak times traffic flows can be heavy. A separate footway for pedestrians has been constructed and advisory cycle lanes marked on each side of the carriageway to cater for cyclists, leaving a single central lane for vehicles.

The cycle lanes are 'advisory', which means that vehicles may over-run them when the lanes are clear of cyclists, to pass oncoming traffic when necessary. The purpose of the cycle lanes is to define the space that cyclists need on the road and to raise the motorists' awareness of the presence of cyclists and the requirement to keep clear and not overtake too closely.

Safety

Some individuals have raised concerns about the safety of the new layout. It might be helpful to consider the operation of the network of minor roads throughout the county. Felixstowe Road is part of approximately 3000 miles of 'C' and 'U' class roads in Suffolk and in many places these roads include sections of single carriageway where vehicles have to pull in and wait for oncoming traffic to pass. These roads generally have a low accident record because the majority of drivers behave in an appropriate manner to the conditions and visibility on the road. The single carriageway on Felixstowe Road has the advantage that vehicles can pass at any point along the road. If cyclists are present on the road ahead of them then drivers should slow down and wait behind the cyclists until the road is clear of oncoming traffic and it is safe to overtake. In the past many cyclists were intimidated by drivers trying to overtake them at the same time as avoiding oncoming traffic. This led to dangerous situations when the cyclists (and pedestrians) were squeezed against the edge of the road.

From the feedback received so far and from the experience of SCC design staff using the road by bicycle themselves, it is apparent that the new layout has achieved an improvement in driver behaviour when cyclists are present on the road. Pedestrians, who previously had to walk along the edge of the road, are now able to use the new footway. There has been an increase in these sustainable forms of travel since the scheme was installed.



This type of road layout has been used successfully in various locations around the examples include Cotmer Road, Lowestoft, Great Oakley, Essex (NCN 1). Faversham, Kent (NCN 4), Bristol Road, Scunthorpe and numerous examples from the continent where this layout is becoming increasingly common on many minor roads.

A stage three Safety Audit has been carried out and small amendments have been implemented to meet various minor points raised in the report.

There is always a period of adjustment as drivers become accustomed to using a new layout and during this time the operation of the road will continue to be closely monitored and traffic counts carried out. However, there have not been any incidents since the scheme was installed.

Monitoring

Monitoring has been carried out at regular intervals on Felixstowe Road since before this scheme was constructed. This has shown a steady rise in traffic levels as drivers diverted onto this road to avoid the A12 roundabout, very low pedestrian levels (as then no footway) and a static level of cyclists (mostly the more experienced cycling commuters).

Since installation of the new layout monitoring has been carried out on three occasions (in September, October '05 & March, April, June '06). This has shown a substantial reduction in overall vehicle flows, down by approximately 1100 vehicles per day.

There has been positive feedback from cyclists and pedestrians using the route. Cycle numbers were static over the winter but have recently shown an increase of 6.5% from April to June last year, as the more 'tentative' cyclists are gradually encouraged back by the improved facilities. (See also 'Objectives of the Scheme 1.' at the end of this document).

Pedestrian numbers have increased by 12% during the same period. It should not be overlooked that while Felixstowe Road is seen as a cycle scheme, in fact the majority of the money was spent on the new footway, not the cycle lanes.

Support and opposition

A number of e-mails from cyclists have been received confirming that they find the new layout an improvement. We have also received a small number of objections which fall roughly into two groups: Firstly the cyclists who complain we have not done enough to improve their safety and request more radical measures such as closing the road to vehicular traffic. This type of measure was investigated but lacked wider support and would inconvenience many essential service providers. Secondly, the



motorists who object to the presence of the cycle lane markings on the carriageway, which they feel are unsafe. It may be that the real problem here is that these individuals are accustomed to driving at higher speed, based on the assumption that there is always space to pass oncoming vehicles at any point, with little awareness of the possible presence or safety of cyclists. These complainants are therefore (unwittingly) acknowledging the effectiveness of the scheme in encouraging them to slow down and anticipate the presence of cyclists on the road ahead. Another common objection by motorists was the perceived unaware of the external

sources of the majority of funding.

One anomaly is that even opponents of the scheme have welcomed the provision of the new footway as a 'good thing', even though pedestrian use is currently still very low and the footway consumed the vast majority of the funds. The marking of the cycle lanes is really the only contentious aspect of the scheme, although this appears to have had the maximum benefit to users for the minimum cost of two white lines.

Objectives of the scheme and results to date:

1) Encourage more cycling and walking on this route by improving the facilities for those modes.

Result: The 12-hour count in October '05 recorded 183 cyclists using the road. This represents a 22% increase, compared to the count from July 2003. This is a very good result, given that countywide cycling growth is static. The growth of cycling makes a significant contribution to reduction of CO2 emissions and congestion.

2) Increase driver awareness that this is a primary cycle route (part of National Cycle Route 1) and encourage drivers to behave more carefully when overtaking cyclists, (compared to the previous situation - which was frequently intimidating for cyclists).

Result: A higher percentage of drivers are waiting behind cyclists when oncoming traffic is present, before overtaking. The majority of cyclists that have commented on the new layout are pleased and feel it has made a significant improvement. (Although it is acknowledged that no road layout can stop the small minority of speeding or aggressive drivers).

3) Encourage more through traffic to use the A12 bypass. (To reduce the large increase in traffic on Felixstowe Road over the last 5 years).

Result: Vehicle numbers on this road increased steadily for several years but after the scheme was installed they fell by approx. 1100 vehicles per day. Total vehicle flows on the road (at approx. 4,500 vpd) are now at the lowest recorded level since before the year 2000. However, it is accepted that the road can still be busy, especially at peak times when there are queues to join the A12. Ultimately the solution to this problem will come if more people choose to travel sustainably. The encouragement of walking and cycling on Felixstowe Road is a step in the right direction.

4) Reduce average traffic speeds (at least to gain compliance with the speed limit).

Result: The monitoring data is not showing any significant change in average speed levels, which are currently at 32.5 mph (average mean combined flows). However, when traffic levels reduce, average speed often increases, so maintaining the same average may in fact signify a modest improvement. Various visual speed reduction measures have been employed, such as gateway structures, patches of buff surfacing combined with 30 mph roundels and 'SLOW' markings. This reinforces the message to drivers to comply with the speed limit and proceed with care on the road. It has not been possible to use vertical speed reduction measures such as speed humps or cushions because street lighting levels are currently insufficient and because the road is a bus route.

Enforcement

The local Police beat officer has agreed to visit the road regularly to check on driver behaviour and use a mobile speed gun if necessary