TORBAY COUNCIL

Report No: Env/15/04

Title: TWEENAWAY CROSS - JUNCTION IMPROVEMENT SCHEME

To: The Executive on 30 March 2004

1. Purpose

1.1 The purpose of this Report is to provide additional information for a proposed improvement scheme at Tweenaway Cross, Paignton. The objective of the scheme is to provide additional capacity without causing deterioration in pedestrian facilities on the already congested junction. This would enable the junction to accommodate existing traffic growth and traffic from the proposed development sites to the south of the junction at Yannons Farm and White Rock. Following on from this, the design proposed would form the basis of a detailed planning application, which could then be used in Section 106 agreements with developers as an identified scheme to which contributions can be made.

2. Relationship to Corporate Priorities

2.1 The improvement to Tweenaway Cross is in accordance with the Council's Corporate Aim to have excellent access and communication to, from and within the Bay, by reducing traffic congestion and accidents.

3. Recommendations

3.1 That the principles of an improvement scheme to Tweenaway Cross and the magnitude of the improvement, as set out in Section 6 of this report, be agreed.

4. Reasons for Recommendation

- 4.1 To enable the scheme for the improvement of Tweenaway Cross to be progressed further in accordance with the Council's Local Transport Plan (LTP) Capital Programme.
- 4.2 To agree the principles of the scheme to enable it to form the basis of a detailed planning application to be submitted by the end of 2004.
- 4.3 To have a recognised scheme for improvement to the junction, to enable Torbay Council to obtain developer contributions towards the total cost of the scheme.
- 4.4 To enable the land necessary for the improvement to be acquired and / or arrange exchanges of land where possible if land required is not directly available.
- 4.5 To enable any further sources of funding to be identified

5. Background

5.1 The Tweenaway Cross road junction on the Torbay Ring Road has an existing congestion problem, with approaches operating at capacity in peak periods, and is recognised in Torbay Local Plan as one of two major junctions (including Windy Corner), which restrict traffic

flow along the Western Corridor. Also of significance is the location of Paignton Community College with 2 campuses, on one either side of the junction (one off Borough Road and the other off Waterleat Road), which results in a high pedestrian movement at the junction at peak times.

- 5.2 Finance for the scheme is available within the Local Transport Plan Funding and from possible contributions received from developers of sites adjacent to Brixham Road. The Council Local Transport Plan (2001 2006) capital programme of works allocated £1.08m towards the scheme.
- 5.3 There is a large amount of Local Plan development to be released along the Western Corridor, to the south of Tweenaway Cross, and it has been recognised that 75% of the traffic generated by these developments will pass through Tweenaway Cross, as it forms the key route to and from the north, east and west of Torbay.
- The report, 'Transportation Assessment: Impact of employment development adjacent to Torbay Ring Road, Paignton' produced by Parson Brinckerhoff for Torbay Council identified a junction improvement scheme for Tweenaway Cross that meant the junction would operate no worse in the future, with all the development traffic, than it is now. With regards to the urban nature of the junction and conditions on the surrounding network, this was considered at the time to be an acceptable situation.
- 5.5 The other option of a major bypass scheme has been discounted on environmental and cost terms.
- 5.6 In addition to this, at a recent workshop between Torbay Council, Parsons Brinckerhoff and Devon County Council, several ideas were explored to improve the operation at Tweenaway Cross in terms of junction layout, capacity, pedestrian options etc. These have been detailed in Tables 6, 7 & 8 of Annex 1 and indicative layouts of each option are given in Appendix I.
- 5.7 A summary of these options is given in Table 1 in terms of the level of capacity provided, cost of improvement and environmental impact. The rankings are preliminary and represent a best estimate. The environmental assessment is shown in more detail in Table 7 of Annex 1 and is based on the number of properties that will be affected by each option. However, this assessment does not take into account factors like noise pollution, vibration etc. It is important to note that in general when congestion is relieved the environmental conditions can improve in the immediate vicinity, including a reduction in noise levels and vibration levels, and an improvement in air quality by reducing air borne pollutants. For more detailed information refer to section 4.3 of the report in Annex 1.
- 5.8 The choice of option will heavily rely on the size of funds available for the junction improvement. The cost of the scheme should be balanced against the capacity demand placed on the junction by existing traffic and additional development traffic featured in the Local Plan. Other considerations include:
 - Land take issues;
 - Visual intrusion;
 - Public acceptability; and
 - Current national transport policy, which recommends that additional road capacity should only be provided where absolutely necessary.

Table 1 – Scheme Options Summary

Options	Degree of	Estimated	Environmental
	Saturation	Cost (£m)	Impact
1 Do Minimum	120%	0	0
2 Local Plan Inquiry Scheme (widening of	107%	1.5	7
approaches)			
3 Large Signalised Junction	90%	3.1	102
4 Signalised Roundabout (square-about)	76%	5.1	58
5 Diverting some movements along side	105%	0.5	75
roads			
6 Flyover for the north south movement	81%	10	108
7 Displaced Right Turn junction	91%	4	95

Note: The environmental impact scores are a sum of the properties affected by the option; for a breakdown of the environmental impact see Table 7 in Annex 1

- 5.9 Table 1 above shows that the signalised roundabout option is a compromise between capacity and environmental effects in comparison to the schemes.
- 5.10 A major constraint to improving this junction is the large amount of private land ownership in close proximity of the junction. Torbay Council owns some of the properties around the centre of the junction, as indicated in Figure 3 of Annex 1. Further dwellings would have to be obtained to enable the majority of the above options to be constructed.
- 5.11 One of the issues to be assessed is the need for pedestrian facilities at the junction and a variety of options have been assessed in terms of cost, environmental impact, capacity and accessibility implications. These are described in more detail in section 4.3 of Annex 1 and are summarised in Table 2 below.
- 5.12 The high pedestrian demand at certain points in the day is due to Paignton Community College. Discussions have taken place with the local school and the aim is to involve some of the students in progressing a pedestrian scheme at the junction.

Table 2 – Pedestrian Options

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Options	Cost	Safety	Capacity	Inconvenience	Visual impact
1 Displaced pedestrian crossing	×	✓	✓	-	-
2 Pedestrian footbridge	×	✓	✓	×	×
3 Existing layout – walk with traffic	√	×	×	-	-

Key to symbols: \times = The option will have a negative impact on the criteria \checkmark = The option will have a positive impact on the criteria

Note: In all 3 options, pedestrians will still be able to cross at the junction, although the amount of time given in the signal timings to pedestrians will vary

5.13 The displaced pedestrian crossing would involve the provision of pedestrian crossings upstream of Tweenaway Cross on separate arms of the junction and the existing pedestrian facilities at the junction would be kept but with less time allocated for pedestrians to cross the road. The displaced pedestrian crossing will aim to be a more attractive option for pedestrians to use.

- 5.14 The pedestrian footbridge would have a high visual impact on the surrounding area as the junction is at the bottom of a sag curve and the bridge will be highly visible on all approaches to the junction.
- 5.15 The existing layout represents no change; if the junction is widened, this will represent a worsening in conditions for pedestrians as they will have to cross a wider road with more lanes of traffic.

6. Summary of Recommendation

- 6.1 From the above information, it is recommended that the Council progresses Option 2 from the Local Plan Inquiry, which is relatively inexpensive, will operate with a small level of congestion in the peak periods and have a small impact on nearby properties. This can be progressed with the option to displace the pedestrian facilities away from the junction [Option I in Table 2]. This option is intended to be pursued with assistance from students from Paignton Community College to identify pedestrian desire lines and appropriate pedestrian crossing points. The additional funding [c.£0.42M] can be secured from the developers of major employment land sites to the south of Tweenaway Cross.
- 6.2 Whilst Option 5 [diverting some vehicular movements along side roads] is not recommended for adoption, there may be some potential for the improvement of Borough Road, subject to consultation with Paignton Community College and the provision of appropriate traffic calming facilities.
- 6.3 A larger scheme could be progressed at the junction; such as displacing the right turns [Option 7 in Table 1]. However, this solution will cost significantly more and will have a larger environmental impact than some of the other options, although it would result in a higher level of capacity at the junction.

7. Next Steps

- 7.1 Following on from this committee, the next steps in progressing this scheme would be to continue the consultation with the college and take the approved scheme and rejected options to a public consultation. Leaflets and exhibitions could be organised and would take roughly four weeks to prepare, an estimated start date would be mid May, with the consultation period through to the end of June.
- 7.2 Analysis of the results of the consultation would be completed over the summer and the detailed design of the preferred scheme and environmental statement would be provided in the autumn.

Mike Yeo Director of Environment Services

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IMPLICATIONS, CONSULTATION AND OTHER INFORMATION

Part 1

Does the proposal have implications for the following issues?

Insert name of Responsible officer

Legal (including Human Rights)	Acquisition of the small area of land not in Council ownership will involve legal input; a public inquiry is considered unlikely	Bill Norman
Financial – Revenue	Scheme progression and maintenance of the UTC scheme at Tweenaways Cross will become part of the revenue programme	Adrian O'Rourke
Financial – Capital Plan	It is envisaged that around £1.08 million would be sourced from the LTP, with the remainder from Section 106 Agreements with prospective developers in relation to major employment and commercial schemes on the Ring Road	Richard Thorpe
Human resources (including equal opportunities)	The consultation and detailed planning of the proposed junction improvement will involve significant amounts of Officer time	Sue Draper
Property	Most of the required land is in Council ownership; the exception being a sliver of land in the south east quadrant, as shown on Plans 4 and 43519/1/P2 in the attached papers.	

Part 2

These sections must be completed by the author of the Report.

Does the proposal have implications for the following issues?			
	Please give details as appropriate		
Sustainability	Yes	This scheme will promote transport integration,	
		including more reliable public transport, as well as	
		enhanced pedestrian and cycling movements	
Crime and Disorder	Yes	This scheme is anticipated to reduce accidents	
*OfSTED Post Inspection	No		
Action Plan			
*Social Services Action	No		
Plan			
*Change Management Plan	No		

 $oldsymbol{*}$ not applicable to reports to Licensing, Development Control and Area Development Committees

Does the proposal have implications for the following Directorates? If so, please inform the relevant Director.			
Please give details as appropriate			
Chief Executive/Corporate	Yes	Preparation and implementation of CPO and Legal	
Services		Agreements for Land Acquisition.	
Education Services	Yes	Improved pedestrian links between the two Paignton	
		College campuses	
Environment Services	Yes	Scheme preparation, Design and Contract Preparation	
		and Supervision.	
Social Services	No		
Strategic Services	Yes	Capital Programme Management and Monitoring.	

Part 4

Is the proposal contrary to or does it propo amendment to the Policy Framework contrary to (or not wholly in accordance wit the Council's budget?	or Vac	Fill in Box 1	No	✓	Fill in Box 2
1. Details of the nature and extent of committees.	f consultation w	rith stakehol	ders and	l relevant	select
2. Details and outcome of consultation	, as appropriate.				

Part 5

T 4 1 T/ D !!! 1 1!	,	Reference Number	
Is the proposal a Key Decision in relation	to Vac		
an Executive function?	ies	X24/2003	

Part 6

Wards

Blatchcombe Ward

Appendices

Annex 1 – Tweenaway Cross Junction Improvement Scheme (Parsons Brinckerhoff) TUE43519A/15.1/1/0

Documents available in Members' Room

None

Background Papers:

The following documents/files were used to compile this report:

Parsons Brinckerhoff – Transportation Assessment: Impact of Employment Development adjacent to the Torbay Ring Road, Paignton