

Agenda Item	5
Report No	BIDS/010/20

HIGHLAND COUNCIL

Committee: Black Isle, Dingwall and Seaforth

Date: 13 October 2020

Report Title: Dingwall Temporary 20 mph Speed Limit and associated Traffic Calming

Report By: Executive Chief Officer Infrastructure and Environment

1. Purpose/Executive Summary

- 1.1 This report is brought to the Dingwall, Seaforth and Black Isle Committee to provide members with the background to, and rationale behind the introduction of the temporary 20 mph limit and associated traffic calming in Dingwall, with particular focus on Back Road and the concerns that have been raised locally following installation.
- 1.2 Recognition that design guidance dictates that when observed vehicle speeds are high, that 20mph signs are to be augmented with physical traffic calming measures.

2. Recommendations

- 2.1 Members are asked to note the evidence led design process which determined the 20 mph limit extents and locations of the associated traffic calming in Dingwall.
- 2.2 Members are asked to approve the retention of the temporary traffic calming features on Back Road and Burn Place, Dingwall.

3. Implications

- 3.1 Resource – Any alteration or removal will attract additional costs but these would be eligible for recovery through the grant award. It is noted that these measures were installed under temporary powers and their removal has been budgeted for in the grant award.
- 3.2 Legal – Any traffic calming removal will result in the need for the temporary 20 mph limit extents to be changed which will result in the necessary amendment of the Temporary Traffic Regulation Order (TTRO). It should be noted that there is no associated consultation/objection process associated with a TTRO.

- 3.3 Community (Equality, Poverty and Rural) – The 20mph limit is installed to benefit and encourage active travel, noting this will particularly benefit individuals who do not have alternative travel choices.
- 3.4 Climate Change / Carbon Clever – Reduced traffic speed has a positive effect on the street environment and reduces carbon emissions. Reduced speed limits also support a modal shift from cars to cycling and walking which has a positive contribution to reducing carbon emissions.
- 3.5 Risk – Removal of the temporary traffic calming, and speed limit will risk the implementation of the proposed permanent 20 mph limit and associated active travel and safety improvements for Dingwall, that derive from such implementation.
- 3.6 Gaelic - None arising from this report.

4. Background

- 4.1 As part of the Council's strategy to introduce 20 mph speed limits as a measure to improve road safety, and provide an environment to encourage walking and cycling, plans were drawn up to introduce a 20 mph speed limit on various residential streets and active travel routes throughout Dingwall. At the Ross and Cromarty Area Committee of 31st January 2018 it was reported that the local members fully supported the introduction of the 20mph speed limit in Dingwall on road safety grounds, approved the proposed Road Traffic Regulation Order and agreed to the implementation of the proposed scheme in the event there were no sustained objections.

Following on from the committee meeting the extents were amended at a Ward Business meeting on the 17th of June 2019 to remove part of Back Road, Old Evanton Road, Newton Road and Craig Road. This was due to the level of traffic calming required to install the limit in accordance to the guidance. Millbank Road, Chestnut Road and Neil Gunn Road were added in at the request of the Community Council.

The implementation of this formal scheme was being progressed when 19 days into the 21 day statutory public consultation period the statutory consultation had to be halted due to COVID-19 lockdown restrictions.

- 4.2 As it was not possible to progress with the permanent order as planned, the scheme was paused.
- 4.3 As a response to the pandemic, Scottish Government introduced the Spaces for People fund – to provide temporary measures to support physical distancing and also encourage walking, wheeling and cycling – and invited rapid grant applications from statutory bodies. An application was made by Highland Council to the Spaces for People fund, managed by Sustrans, for the 20mph limit in Dingwall as 20mph limits were identified as eligible projects utilising a Temporary Traffic Regulation Order (TTRO). These emergency measures are designed to encourage a modal shift to active travel for essential journeys and aid social distancing during the pandemic. The temporary 20 mph limit has the same extents as previously approved for the proposed permanent limit and the temporary traffic calming has been placed at most of the locations identified in the permanent proposal. This TTRO as published allows the features and speed limit to be in place for up to 18 months.

Appendix 1 contains the permanent proposals.

Appendix 2 contains the temporary measures as installed.

4.3 After installation of the temporary measures, there have been several public complaints pertaining to the traffic calming that was placed on Back Road and Burn Place. The focus of the complaints in relation to the measures installed on Back Road raised concern around the perceived lack of forward visibility while negotiating the temporary traffic island. Council Officers from the Project Design Unit and the Road Safety Team carried out a site inspection and found the feature to have the required visibility at the give way line. It was decided however that moving the island 9 metres closer to the junction with Strathpeffer Road would improve the visibility in advance of the give way line making it feel better for drivers. This proposed relocation was taken to a meeting with the Dingwall and Seaforth Ward Members. Unfortunately, a decision could not be reached at this meeting regarding relocation as some members sought removal of the traffic calming feature instead. It was determined that the most appropriate action was relocation on the understanding that a paper be taken to this committee, so a decision can be taken on their retention or removal.

5. 20 mph Design Process

5.1 When designing 20 mph schemes The Highland Council follows Government guidance set out in 'Setting Local Speed Limits: Guidance for Local Authorities: Enterprise, Transport and Lifelong Learning Department (ETLLD) Circular No 1/2006', 'The 'Traffic Signs Regulations and General Directions' (TSRGD) and Transport Scotland's 'Good Practice Guide on 20mph Speed Restrictions, Review June 2016, Version 2'. When installing these 20 mph limits the existing mean average vehicle speeds are required to be below 24 mph to enable the 20 mph limit to be installed without traffic calming. The existing mean average speeds recorded on Back Road during the survey period of 28th October to 3rd November 2019 were 30.7 mph uphill and 32.1 mph downhill. Clearly these are well above the 24 mph threshold thus traffic calming was installed to reduce vehicle speeds and allow the reduced limit to be installed in accordance with the guidance. A summary of the recorded speed data is provided in **Appendix 3**.

5.2 The rationale behind the section of Back Road being included in the 20 mph limit is as follows:

- This section forms part of a key active travel route for residents living to the north west of Back Road.
- Maggie's wood is popular with recreational walkers. 72 pedestrians were recorded using the area around the traffic calming feature between 07:00 hrs and 19:00 hrs on the 29th of October 2019. See **Appendix 4**.
- Back Road is a wide fast road which is a significant barrier to active travel users with 60% of vehicles traveling in excess of the 30 mph speed limit and 18% traveling in excess of 35 mph.

6. Benefits of a 20 mph limit

6.1 There are numerous sources of evidence for the benefits of reducing speed limits to 20 mph, the following provides a sample of these:

- Important benefits of 20 mph schemes include quality of life and community benefits, and encouragement of healthier and more sustainable transport modes such as walking and cycling. Kirkby, T (2002), Memorandum by Kingston upon

Hull City Council (RTS 152) – 20 mph zones in Kingston upon Hull, Select Committee on Transport, Local Government and the Regions, Appendices to the Minutes of Evidence.

- A 1 mph reduction in average speed can reduce the collision frequency by around 6%. Taylor, M. C., Lynam, D. A. and Baruya, A. (2000), TRL Report 421 – The Effects of Drivers' Speed on the Frequency of Road Accidents. Crowthorne: TRL
- Benefits of reduced speeds on casualty reduction. Grundy, C., et al. (2009) Effect of 20 mph traffic speed zones on road injuries in London, 1986–2006: controlled interrupted time series analysis. British Medical Journal 339: b4469
- Children cannot reliably detect a vehicle approaching at speeds higher than approximately 25 mph”. Wann, J. Poulter, D., Purcell, C. (2011). Reduced Sensitivity to Visual Looming Inflates the Risk Posed by Speeding Vehicles When Children Try to Cross the Road, Psychological Science, 22(4) pp. 429–434

6.2 An additional benefit of the feature on Back Road is that it significantly reduces the carriageway width pedestrians have to cross, resulting in pedestrians spending half as much time on a road. The reduced vehicle speeds also mean pedestrians have a longer time from when the vehicles become visible until they reach the crossing point. This is of benefit to all users but particularly those with impaired mobility, children and the elderly.

7.0 On Site Observations

7.1 Following concerns about the installations a site visit was carried out on the 18th of August 2020 with the Project Design Unit and Road Safety Team in attendance. The officers were on site at Back Road between 08:30 and 09:15 and attended Burn Place at 16:15 to 18:00. An earlier site visit to Back Road was carried out by a member of the Road Safety Team between 16:30 and 17:30 on the 4th of August 2020. The weather on the 18th was dry and overcast with a damp road surface for both sites. Traffic volumes on both occasions were light to moderate.

7.2 During the site visit on Back Road Officers stood in a location that gave them clear line of site of the traffic calming but not in view of approaching motorists to not cause changes in driver behaviour due to the presence of high visibility clothing. During the time on site the island was seen to be controlling vehicle speeds very well with most vehicles reducing their speed prior to the build out and being able to maintain a smooth speed through the restriction. No delays were observed to traffic flow in either direction. Several pedestrians were observed crossing the road on or near the island, this included a group of primary school aged children who continued into Maggie's Wood. There were no observed issues that would suggest drivers were having difficulty negotiating the island. Busses and large vehicles have been seen negotiating the feature without difficulty but on this occasion a service bus was observed to give the island a wide berth resulting in the nose of the vehicle encroaching on the off-side pavement.

8.0 Options

8.1 In cognisance of moving forward, the following options are available for Back Road, Dingwall:

- Retain the traffic calming feature and speed limit as it currently is for the continued duration of the 18 month TTRO.

- Replace the existing temporary traffic calming with vertical traffic calming by using bolt down speed cushions to retain the 20 mph limit. This will reduce the safety of pedestrians crossing the road at this location.
- Remove the traffic calming feature and the 20 mph limit from Back Road

Designation: Executive Chief Officer Infrastructure and Environment

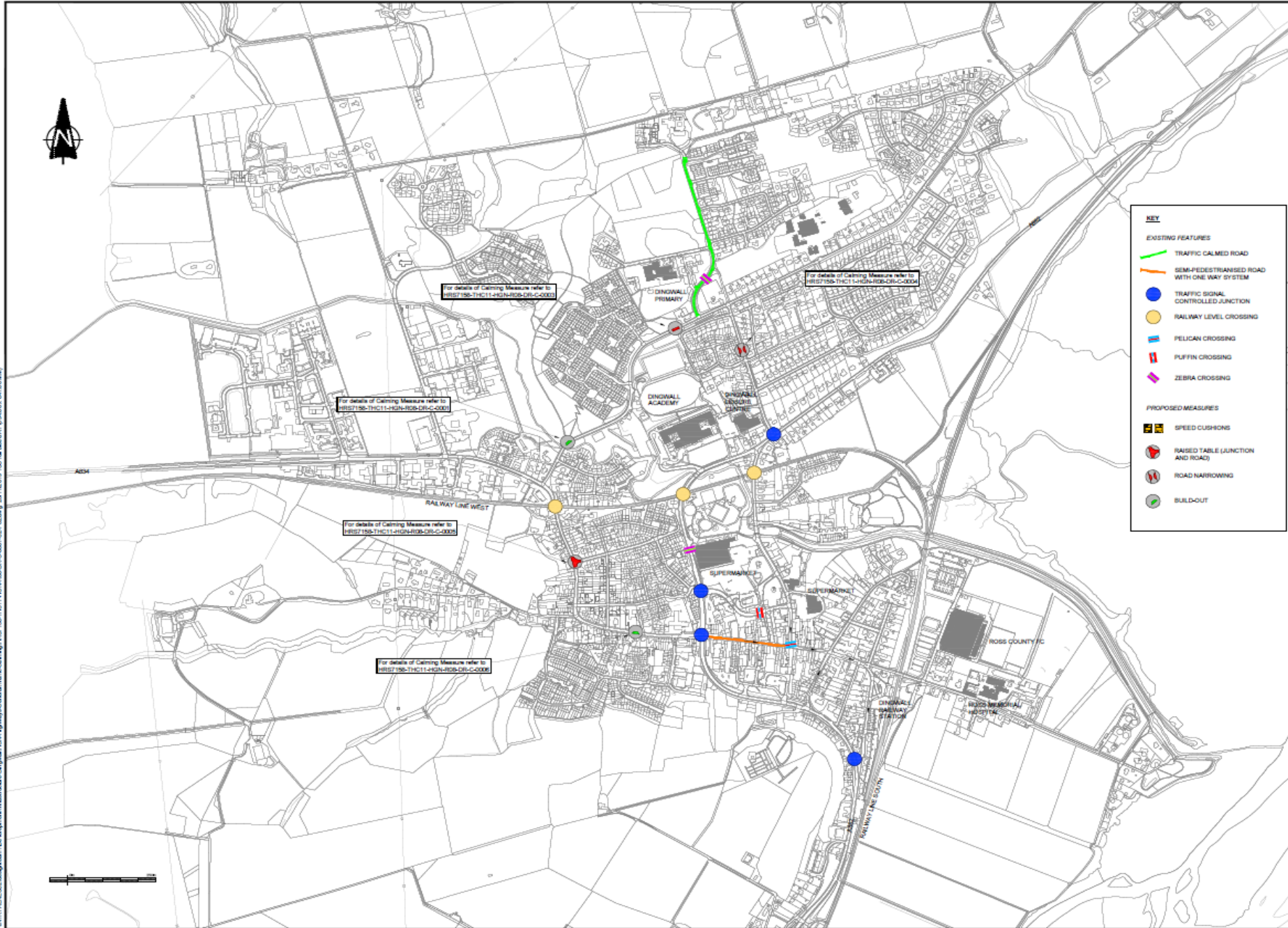
Date: 9 September 2020

Author: Ross Bartlett, Technician

Background Papers:

- Ross and Cromarty Area Committee, 31st January 2018, Item 6
- Planning Development and Infrastructure Committee, 2nd of November 2016, item

Appendix 1



KEY

EXISTING FEATURES

- TRAFFIC CALMED ROAD
- SEMI-PEDESTRIANISED ROAD WITH ONE WAY SYSTEM
- TRAFFIC SIGNAL CONTROLLED JUNCTION
- RAILWAY LEVEL CROSSING
- PELICAN CROSSING
- PUFFIN CROSSING
- ZEBRA CROSSING

PROPOSED MEASURES

- SPEED CUSHIONS
- RAISED TABLE (JUNCTION AND ROAD)
- ROAD NARROWING
- BUILD-OUT

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Sum Place traffic calming measure revised	Drawn By	Check By	Drawn Date	Check Date	Rev
	BSJ	BSJ	25/11/2019		R02
Revision Details					

The Highland Council
 Comhairle na Gàidhealtachd

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Project
Development Infrastructure Dingwall

Title
TRAFFIC CALMING DINGWALL

Scale (at A1)
1:5000

Drawn: BSJ Date: 01/11/2019
 Checked: BSJ Date: 25/11/2019

Project Code	Originator	System
HR57158 - THC11 - HGN		
- R00 - DR - C - 0001		
Location	Type	Area Number
S2		P02

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Appendix 3

All data for 28th October to 3rd November 2019

Highland Council Speed Survey - Back Road West End - EASTBOUND - UPHILL

Grand Total

Time	Total	Mean	Vpp	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin
			85	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75
				10	15	20	25	30	35	40	45	50	55	60	65	70	75	80
--	12505	30.7	34.9	4	26	51	702	5158	4690	1471	331	57	14	0	0	0	0	0

Recorded speed (mph)	Total	% over
greater than 30	6563	52%
greater than 35	1873	15%

Highland Council Speed Survey - Back Road West End - WESTBOUND - DOWNHILL

Grand Total

Time	Total	Mean	Vpp	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin	Vbin
			85	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75
				10	15	20	25	30	35	40	45	50	55	60	65	70	75	80
--	10660	32.1	35.8	0	3	30	359	2818	5162	1915	308	59	5	1	0	0	0	0

Recorded speed (mph)	Total	% over
greater than 30	7450	70%
greater than 35	2288	21%

Combined percentage of vehicles over the speed limit.

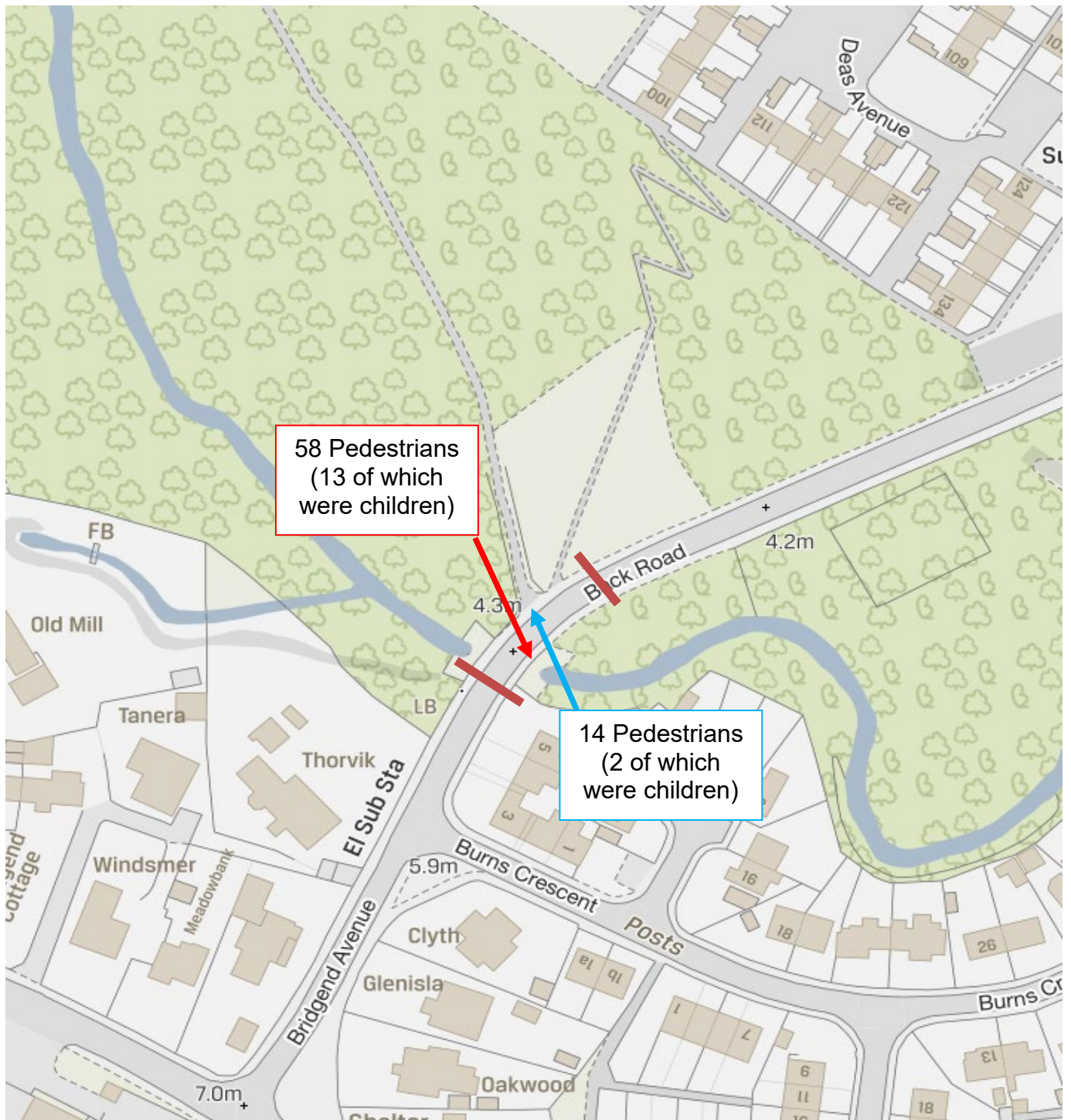
Recorded speed (mph)	Total	% over
greater than 30	14013	60%
greater than 35	4161	18%

Vehicle numbers are for the full 7 days of the count.

Appendix 4

12 hour pedestrian crossing survey, 07:00 hrs to 19:00 hrs on Tuesday 29th October 2019.

Back Road Dingwall - Zone 1				29 OCTOBER 2019		
A to B = Towards School				B to A = Away From School		
TIME	ADULT	CHILD	ELDERLY / DISABLED	ADULT	CHILD	ELDERLY / DISABLED
07:00	0	0	0	0	0	0
07:15	0	0	0	0	0	0
07:30	0	0	0	0	0	0
07:45	0	0	0	0	0	0
08:00	0	0	0	0	0	0
08:15	1	0	0	0	0	0
08:30	1	0	0	1	0	0
08:45	1	0	0	1	1	0
09:00	2	1	0	0	0	0
09:15	3	0	0	0	0	0
09:30	1	0	0	0	0	0
09:45	0	0	0	0	0	0
10:00	3	0	0	0	0	0
10:15	1	0	0	0	0	0
10:30	1	0	0	0	0	0
10:45	1	0	0	0	0	0
11:00	1	0	0	0	0	0
11:15	4	0	0	0	0	0
11:30	2	0	0	0	0	0
11:45	1	0	0	0	0	0
12:00	1	0	0	0	0	0
12:15	2	0	0	0	0	0
12:30	1	0	0	0	0	0
12:45	1	0	0	1	0	0
13:00	0	0	0	0	0	0
13:15	0	0	0	2	0	0
13:30	0	0	0	0	0	0
13:45	0	0	0	0	0	0
14:00	0	0	0	1	0	0
14:15	1	0	0	0	0	0
14:30	0	0	0	1	0	0
14:45	0	0	0	1	0	0
15:00	1	0	0	0	1	0
15:15	2	10	0	0	0	0
15:30	1	0	0	0	0	0
15:45	3	1	0	0	0	0
16:00	1	0	0	1	0	0
16:15	0	0	0	1	0	0
16:30	1	0	0	0	0	0
16:45	0	0	0	0	0	0
17:00	1	0	0	1	0	0
17:15	0	0	0	1	0	0
17:30	0	0	0	0	0	0
17:45	0	0	0	0	0	0
18:00	1	1	0	0	0	0
18:15	3	0	0	0	0	0
18:30	0	0	0	0	0	0
18:45	2	0	0	0	0	0
TOTALS	45	13	0	12	2	0
TOTALS BY DIRECTION		58				
		14				
		72				



Summary and location of pedestrian survey