

## 8. SOUTH NEW BRIGHTON SCHOOL VARIABLE SPEED LIMIT

<b>General Manager responsible:</b>	General Manager City Environment, DDI 941-8656
<b>Officer responsible:</b>	Transport and Greenspace Manager
<b>Author:</b>	David Pinkney, Project Manager, Capital Programme Team Transport

### PURPOSE OF REPORT

1. The purpose of this report for the Board to endorse the installation of a new variable speed limit ( 40 km/h the school zone) in Estuary Road at South New Brighton School and that the Board recommend to the Council that it approve a new variable speed limit and include it in the Christchurch City Speed Limits Register.

### EXECUTIVE SUMMARY

2. The Council has a programme of installing 40 km/h variable speed limits (known as “school zones”) outside schools according to a prioritisation process. To date eighteen schools have benefited from this treatment. A further school, South New Brighton School on Estuary Road, has been selected as a school that would benefit from having 40/50 km/h variable speed limit installed. One “school zone” is required for the school on Estuary Road. The “school zone” will operate on school days, for no more than 45 minutes in the morning at a time between 8am and 9am, and for no more than 45 minutes in the afternoon at a time between 2.30pm. and 3.30pm.
3. Now that the Council has formalised the Christchurch City Council Speed Limits Bylaw 2005, it can resolve to make these new variable speed limits. Accordingly, infrastructure for these variable speed limits cannot be commissioned until they have been formally resolved by the Council.

### FINANCIAL IMPLICATIONS

4. The funding for this project will initially be managed out of the Ocean Outfall budget, South New Brighton School is programmed for the 2009/10 financial year. The Council has allocated, under its LTCCP commitments, \$100,000 per annum for temporary School Speed Zone signage. The \$30,000 estimate to complete South New Brighton School will require an internal transfer from the School Speed Zone Budget in 2009/10 back into the Ocean Outfall project, which should be nearing completion.
5. The recommendations of this report align with 2006-16 LTCCP budgets.

### LEGAL CONSIDERATIONS

6. The proposed variable speed limit complies with the conditions specified and published by the Director of Land Transport New Zealand in the *New Zealand Gazette* (2/6/2005, No. 86, page 2051) approving a variable speed limit of 40 km/h in school zones and setting out conditions for those speed limits. A copy of that notice is shown in **Attachment 2**. A Council resolution is required to implement the speed limit restrictions and traffic management changes.

### ALIGNMENT WITH LTCCP AND ACTIVITY MANAGEMENT PLANS

7. This report’s recommendations support the project objectives as outlined in the 2006-16 LTCCP.
8. This project aligns with the Transport and Greenspace Unit’s Our Community Plan 2006-16.

### ALIGNMENT WITH STRATEGIES

9. This project is consistent with key Council strategies including the Road Safety Strategy, Pedestrian Strategy and Safe Routes to School Strategy.

## CONSULTATION FULFILMENT

10. The South New Brighton Board of Trustees have been informed in writing of the proposed variable speed limits and have expressed support in writing of the installation of variable speed limits at their school. Information newsletters have been made available to all the families of children attending the school. Property owners and residents have received a newsletter about the signage to be installed outside their properties; these properties have also been visited, and given a minimum of 14 days to make submissions about these. No written submissions have been received from property owners and residents in response to the newsletter as set out in **Attachment 1**. No submissions requiring actions needing to be addressed were received.
11. Before the Council can set a variable speed limit pursuant to Clause 5(1) of the Christchurch City Speed Limits Bylaw 2005, the public consultation requirements set out in Section 7.1 of the Land Transport Rule Setting of Speed Limits 2003 Rule 54001 must be complied with. Section 7.1(2) provides that the persons that must be consulted before the Council sets a speed limit are:
  - (a) road controlling authorities that are responsible for roads that join, or are near, the road on which the speed limit is to be set or changed; and
  - (b) a territorial authority that is affected by the existing or proposed speed limit; and
  - (c) any local community that the road controlling authority considers to be affected by the proposed speed limit;
  - (d) and the Commissioner of Police, and
  - (e) the Chief Executive Officer of the New Zealand Automobile Association Incorporated, and
  - (f) the Chief Executive Officer of the Road Transport Forum New Zealand; and
  - (g) other organisation or road user group that the road controlling authority considers to be affected by the proposed speed limit; and
  - (h) The Director of Land Transport New Zealand.
12. Section 7.1(3) of the Rule provides:

A road controlling authority must consult by writing to the persons in 7.1(2) advising them of the proposed speed limit and giving them a reasonable time, which must be specified in the letter, to make submissions on the proposal. In terms of Section 7.1(2)(a) and 7.1(2)(b) there are no road controlling authorities or territorial authorities that are required to be consulted in respect of any of the proposed variable speed limits.
13. The representatives of the Commissioner of Police, the Director of Land Transport New Zealand, the Chief Executive Officer of the New Zealand Automobile Association Incorporated and the Chief Executive Officer of the Road Transport Forum of New Zealand have received written advice of the proposed new variable speed limit in accordance with Section 7.1(2) (d), (e), (f) and (h). No other organisation or road user group is considered affected by the proposed speed limits. No neighbouring road controlling authority is affected. Support for the proposed variable speed limits has been received in writing from the New Zealand Police and from Land Transport New Zealand.

## STAFF RECOMMENDATION

That the Board advise the Council:

- (a) That it is satisfied that the consultation undertaken by the Council in respect of the proposals to set the new variable speed limit of 40 km/h specified below meets the requirements of Section 7.1 of the Land Transport Setting of Speed Limits Rule 2003.

That the Board recommend to the Council:

- (b) That pursuant to Clause 5(1) of the Christchurch City Speed Limits Bylaw 2005 a variable speed limit of 40 km/h apply on Estuary Road, 340 meters commencing at a point 10 metres northwest from the intersection of Beatty Street and extending in a northwesterly direction to a point 50 metres northwest from the intersection of Cradock Street.
- (c) When the steady state LED display 40 km/h legend in the variable speed limit sign is illuminated on any school day during the following times:
  - (i) 35 minutes before the start of school until the start of school, and
  - (ii) 20 minutes at the end of school, beginning no earlier than five minutes before the end of school; and
  - (iii) 10 minutes at any other time when at least 50 children cross the road or enter or leave vehicles at the roadside.
- (d) That the abovementioned variable speed limits shall come into force on the date of adoption of this resolution.

## **BACKGROUND ON THE SOUTH NEW BRIGHT SPEED ZONE**

14. Due to the extensive works currently underway in and around this area, as part of the Ocean Outfall Project and the future kerb and channel renewal on Bridge Street in 2008/09, staff were request to investigate installing 40 km/h speed zones outside this school earlier than planned in the School Speed Zone programme. South Brighton School is ranked high on the list but funding for this is several years out. Funding for this will be project managed internally and will not affect the current roll-out programme for other schools around the city.

## **THE OBJECTIVES**

15. The objectives of a school zone are to:
  - (a) Slow approaching motorists, who are driving too fast for the conditions (pedestrians hit by a vehicle travelling at 70 km/h have a 95% risk of death, whereas this risk decreases dramatically at lower speeds i.e. 5% risk at 30 km/h)
  - (b) Raise awareness of the approaching motorist (a motorist in an alert state can potentially react up to one second faster than when not in an alert state. For example, at 65 km/hr vehicles are travelling at 18 metres per second, a distance that may be critical to saving a pedestrian casualty).
  - (c) Creating a safer environment for children needing to cross a roadway at the school.
16. There is a need to establish a set of selection criteria so that each school can be compared and prioritised. The criteria have been established as:

## **Road Environment**

17. Issues to be addressed are land use, road engineering, approach visibility, traffic growth potential, and urban fringe and alignment issues. Sites are scored according to the following, where zero is considered an ideal environment, and ranging to four being considered a difficult road environment.
18. An example of an ideal road environment can be:
  - (i) A roadway with good approach visibility i.e. visibility not obstructed by horizontal or vertical alignment changes.
  - (ii) Zero distractions created by advertising clutter on the roadside.
  - (iii) No land uses which generate activity such as entering or exiting traffic from sites or heavy parking demand, not associated with the school.
19. Where the ideal road environment does not exist, school frontage roads will be assessed for a school zone based on the following scoring rational:
  - 0 = ideal road environment
  - 1 = low level of distractions, low level of other land use traffic generation, and average approach visibility.
  - 2 = medium level of distractions, medium level of other land use traffic generation, and low approach visibility.
  - 3 = high level of distractions, high level of other land use traffic generation. And poor approach visibility.
  - 4 = Very high level of distractions, very high level of other land use traffic generation, and very poor approach visibility.
20. While it may be debated that an ideal road environment is conducive to a higher speed environment and therefore should be scored high rather than low, the ideal road environment reduces the potential for approaching vehicles to be operated by unaware motorists. The scoring for other criteria accounts for speed and other issues. South New Brighton School scored two in this category.

## **Kerbside Activity**

21. Consideration of activity outside the school.
- 0 = A minimal problem.
  - 1 = low/median activity, i.e. activity is similar to surrounding land use parking activity.
  - 2 = full demand i.e. all available kerbside occupied.
  - 3 = full demand with some parking disturbance i.e. double parking, reversing.
  - 4 = a situation of chronic parking congestion and manoeuvring. Roadway may effectively be narrowed to one lane.
22. The degree of parking activity may create a situation whereby the approaching motorist is distracted by this activity. Children may attempt crossing the roadway by walking out between parked cars. Double parking further compromises the inter-visibility by the physical obstruction to sight lines. While not a desirable activity, the reality is that children may be on the roadway when getting into/out of cars, on the driver's (road side) of the vehicle. South New Brighton School scored three in this category.

## **Number of Heavy Vehicles (Trucks, Buses etc)**

23. Assessment of the number of Heavy Vehicles passing the school gate where
- 0 = virtually none.
  - 1 = low.
  - 2 = low/medium.
  - 3 = medium/high.
  - 4 = very high.
24. Where heavy vehicles are present, the potential risk to child safety increases. There have been a number of child fatalities, where the child has collided with a heavy vehicle. While the vehicle operator is not necessarily at fault, the fact is, that heavy vehicles are unforgiving when colliding with a person. South New Brighton School scored two in this category.

## **Cyclists**

25. Assessment of cyclist activity within the zones, where
- 0 = indicates very few cyclists
  - 1 = low level
  - 2 = medium level
  - 3 = high level
  - 4 = very high level, at locations with Intermediate / Secondary schools adjacent.
26. Where a greater number of cyclists occur, travelling to and from school, children tend to bunch (riding two, sometimes three abreast). Also, in greater numbers, the probability of unexpected manoeuvres (sudden changes of direction/road crossings etc), can increase. South New Brighton School scored two in this category.

## **Motor Vehicle Operating Speeds**

27. Assessment of the 85th percentile speed of vehicles at the school crossing at peak times, where
- 0 = below 45 km/h school zone not warranted below 45 km/h in LTSA. Note 37.
  - 1 = 45-49 km/h
  - 2 = 50-54 km/h
  - 3 = 55-60 km/h
  - 4 = 60-69 km/h
  - 5 = 70-79 km/h
  - 6 = 80 km/h, and above.
28. The stopping distance increases exponentially, with an increase in vehicle speed. This creates a potential safety risk to the cyclist or pedestrian, as identified in the opening statement of objectives, and the comment relating to alertness/reaction time. South New Brighton scored two in this category.

## **Motor Vehicle Volume**

29. Assessment of the average daily total, where
- 0 = below 3,000 vehicles
  - 1 = 3,000-4,000 vehicles
  - 2 = 4,000-6,000 vehicles
  - 3 = 6,000-8,000 vehicles
  - 4 = 8,000+ vehicles.
30. In Christchurch, the traffic volume during the morning peak traffic hour, when school children are arriving at school, is typically 10% of the daily traffic volume. For example, a road with 6,000 vehicles per day, will have about 600 vehicles per peak morning hour, or one vehicle every six seconds, on average, passing the school when children are arriving. These volume rates give an indication of the level of road use activity at the critical time and the relative difficulty of gap selection etc. South New Brighton scored two in this category.

## **Level of Crossing Activity**

31. Assessment of school related road crossing activity, numbers and duration, where:
- 0 = usually zero pedestrians i.e. dropped off by car or do not need to cross the roadway.
  - 1 = low 1-19 school pedestrians
  - 2 = medium 20-50 school pedestrians
  - 3 = high above 50 school pedestrians
32. Where there is relatively low activity, school staff can generally manage children crossing the roadway. South New Brighton School scored three in this category.

## **Road Status**

33. Assessment of the road network classifications, where
- 1 = Local
  - 2 = Collector
  - 3 = Minor Arterial
  - 4 = Major Arterial.
34. The status of the road provides an indication of the general awareness of passing motorists. For example, a local road generally has motorists who live locally with a high awareness of the road environment outside the school. A major arterial road may have a significant number of motorists passing, who are on a longer journey, with no local knowledge of the road environment. South New Brighton School scored two in this category.

## **Community Interest**

35. An issue to be addressed is the level of community involvement and sensitivity, where a score of zero indicates no community concern raised to the Council, to a score of four which reflects substantial community lobbying, ie political involvement and meetings held. South New Brighton scored four in this category.

## **THE OPTIONS**

36. There are two options; the preferred option is to install a temporary 40 km/h speed limit using electronic and static signage that operates during the daily opening and closing periods of South New Brighton School. The other option is to do nothing.

## ASSESSMENT OF OPTIONS

### The Preferred Option

37. South New Brighton School using the above criteria ranks equal fifth in the present school prioritisation.

	<b>Benefits (current and future)</b>	<b>Costs (current and future)</b>
<b>Social</b>	Improved pedestrian safety for school children.	Nil.
<b>Cultural</b>	Nil.	Nil.
<b>Environmental</b>	Nil.	Additional roadside signage.
<b>Economic</b>	Nil	Capital expenditure and maintenance.

**Extent to which community outcomes are achieved:**

Primary alignment with community outcome *“Our City provides a choice of housing, easy mobility and access to open spaces, and a range of utilities that allow people to enjoy an acceptable quality of life”* by providing a safe transportation network.

**Impact on the Council’s capacity and responsibilities:**

No impact

**Effects on Maori:**

It is considered that there are no effects on Maori.

**Consistency with existing Council policies:**

Consistent with the Road Safety Strategy particularly in respect to designing and managing roads with appropriate speed environments and providing safe facilities for pedestrians.

**Views and preferences of persons affected or likely to have an interest:**

All affected parties have been contacted and all responses indicated support of the proposal.

**Other relevant matters:**

Nil.

**Maintain the Status Quo.**

38. Maintaining the status quo or doing nothing will achieve nothing for the community. The South New Brighton School has requested that something be done to lower vehicle speeds on this section of Estuary Road when school children are crossing the road. To do nothing will maintain a possibly hazardous situation.

	<b>Benefits (current and future)</b>	<b>Costs (current and future)</b>
<b>Social</b>	Nil	Potential for pedestrian crossing crashes with time.
<b>Cultural</b>	Nil	Nil
<b>Environmental</b>	Nil	Nil
<b>Economic</b>	No capital expenditure or on going maintenance costs.	Nil

**Extent to which community outcomes are achieved:**

Maintaining the status quo is not aligned to any Community Outcomes.

**Impact on Council's capacity and responsibilities:**

No impact

**Effects on Maori:**

It is considered that there are no effects on Maori.

**Consistency with existing Council policies:**

Maintaining the status quo is not consistent with the Road Safety Strategy or the CCC Financial Plan and Programme 2004 and conflicts with the objectives of the asset management plan.

**Views and preferences of persons affected or likely to have an interest:**

Given that feedback in support was received for the option distributed for public consultation it is considered that there is some support for not maintaining the status quo.

**Other relevant matters:**

Nil.