Kerb Priorities for 2018/19 and 2019/20

TO Whangamata Community Board
FROM Matt Lamb - Roading Engineer

DATE 24 October 2018

SUBJECT Kerb Priorities for 2018/19 and 2019/20

1 Purpose of Report

The purpose of the report is to seek feedback from the Whangamata Community Board on the kerb programmes for the 2018/19 and 2019/20 financial years.

2 Background

Staff have completed a site investigation and updated the kerb programme from the 2014 prioritised list, including adding some sites and changing proposed treatments. This programme review is designed to ensure proposed treatments are fit for purpose and minimise the risk of road surface water runoff from road berms onto private property.

3 Issue

Confirmation is required from the Whangamata Community Board on the kerb construction work programmes for the 2018/19 and 2019/20 financial years to allow design and physical work to commence.

4 Discussion

The 2018/19 and 2019/20 Annual Plan local roading budgets for nib kerb are as follows:

Nib Kerb Construction 2018/19 = \$257,047 Nib Kerb Construction 2019/20 = \$263,481

Staff completed a site inspection and recommend some areas which have been identified for nib kerb will be more appropriately treated with a mountable kerb. The mountable kerb provides some stormwater control to stop runoff onto properties which are lower than the road, while still being traversable for vehicles and trailers.

The current allocated budget will not be sufficient to complete all the identified sites.

There are other areas in Whangamata that would benefit from having a kerb that are not on the current kerb construction work programme.

Staff propose that approximately \$5,000 of the 2018/19 budget is used to retrofit a mountable kerb in place of a section of nib kerb where there is a runoff issue onto private property. The street requiring this treatment is Pipi Road.

There is also a section of nib kerb requiring realignment to avoid encroachment onto private property on Winifred Avenue where staff propose approximately \$5,000 of the 2018/19 budget is used to complete the kerb realignment work required.

Below are examples where differing road berm features require the different kerb treatments, nib kerb vs mountable kerb.



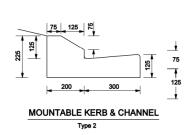
Nib kerb treatment is appropriate where the adjoing properties are higher than the road level and there is sufficient berm width to create a shallow swale for surface water runoff and soakage without significant earthworks.

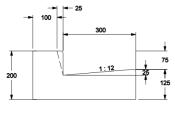


Mountable kerb is appropriate where the adjoining properties are lower than the road level to prevent runoff entering private property.

Typical mountable kerb profile:

Typical vertical kerb profile:





VERTICAL KERB & CHANNEL

The kerb priority list is detailed in Table 1

<u>Table 1 – Nib Kerb Construction Priority List</u>

Priority - 1 = easy design no SW issues - design and undertake work asap. Priority - 2 = Some SW solutions needed - design to start with associated SW solutions explored and costed	Comm. Board Priority	Construction year	Design Comments	Road Name	Cway Start (m)	Cway End (m)	Start Name	End Name	Lanes	Road Length	Kerb length	Addition al width required	Kerb amount \$	Pavement amount \$	Seal amount \$	Total Estimated Cost	Cway Width	ADT Estimate	% Heavies	cway_h rarchy
			Replace section of nib kerb with mountable kerb to																	
1			control road SW runoff onto private property	PIPI RD	0	399	ISLAND VIEW RD	OCEAN RD	2	399	50	0	\$ 4,750	\$ -	\$ 150	\$ 4,900				LOCAL
1			New nib kerb realigned around curve	WINIFRED AVE	200	323	DIANA AVE	RANFURLY RD	2	123	50	0	\$ 4,750	\$ -	\$ 150					LOCAL
1	1		Nib kerb	SHORT RD	0	143	OCEAN RD	BEVERLY TCE	2	143	286	0	\$27,170	\$ 1,158	\$ 1,430	\$ 29,758	6.6	144	3	LOCAL
			Further design needed - #115 flooding of properties and garages caused by lack of kerbing or stormwater																	
2	1		system - requires additional xcesspits and pipework	DIANA AVE	0	257	WINIFRED AVE	END	2	257	514	0	\$48,830	\$ 2,082	\$ 2,570	\$ 53,482	6	72	2	LOCAL
			#120B flooding in cul de sac possibly entering Mooloo Cres via walkway which connects the two																	
2	1		streets	ST PATRICKS ROW (WHANGAMATA)	0	183	BEVERLY TCE	START ISLAND RHS	2	183	366	0	\$34,770	\$ 1,482	\$ 1,830	\$ 38,082	6.5	72	2	LOCAL
2	1		Mountable kerb required from the first curve - investigation into drainage required	ST PATRICKS ROW (WHANGAMATA)	183	249	START ISLAND RHS	END ISLAND RHS	1	66	132	0	\$12,540	\$ 535	\$ 660	\$ 13,735	6.5	41	2	LOCAL
2	3		Would be opportunity to increase/tidy up carparking at the roadend	BARROWCLOUGH RD	594	737	START ISLAND RHS	END ISLAND RHS		143	286	1.9	\$27.170	\$ 16,139	\$ 6,292	\$ 49,601	4.1	103	_	LOCAL
2	3		at the roadend	BARROWCLOUGH RD	594	/3/	START ISLAND RHS	END ISLAND RHS	1	143	280	1.9	\$27,170	\$ 16,139		\$ 194,458		103		LUCAL
			Mountable kerb. Will need investigation into drainage. Substantial edgebreak	KIWI RD	0	285	ACHILLES AVE	KEA ST	2	285	540	0.9	\$51,300	\$ 14,434	\$ 6,480		5.1	138	3	LOCAL
2			G. Commission Com	KIWI RD	285		KEA ST	WILLIAMSON RD	2	303	555	0.9	\$52,725			\$ 74,220		135	3	LOCAL
2	3		Mountable kerb.	BARROWCLOUGH RD	0		MARTYN RD	LEIGHTON RD	2	135	270	0.6	\$25,650			\$ 32,891		180	3	LOCAL
2	3		Mountable kerb.	BARROWCLOUGH RD	135	267	LEIGHTON RD	RUTHERFORD RD	2	132	264	0.7	\$25,080	\$ 5,489	\$ 2,640			181	3	LOCAL
																\$ 212,534				
2	3		Mountable kerb.	BARROWCLOUGH RD	267	398	RUTHERFORD RD	BOND RD	2	131	262	0.6	\$24,890	\$ 4,669	\$ 2,358	\$ 31,917	5.4	187	3	LOCAL
2	3		203 & 219 flood of garage due to undersized catchpit - reccomendation replace existing cespitwith double and incerase connectons sieze from 150mmm to 300mm	BARROWCLOUGH RD	398	528	BOND RD	PORT RD (EAST)	2	130	260	0.6	\$24,700	\$ 4,633	\$ 2,340	\$ 31,673	5.4	175	3	LOCAL
2	3		Mountable kerb.	BARROWCLOUGH RD	540	594	PORT RD (WEST)	START ISLAND RHS	2	54	108	1.2	\$10,260		\$ 1,620		4.8	144		LOCAL
2			Mountable kerb required to prevent runoff onto properties	GIVEN AVE	695	868	ISLAND VIEW RD	MARY RD	2	173	460	0.3	\$43,700	\$ 4,099	\$ 2,760		5.7	154	3	LOCAL
2	3			RUTHERFORD RD	0	113	AICKEN RD	CASEMENT RD	2	113	226	1	\$21,470		\$ 2,938			134	3	LOCAL
2	3			RUTHERFORD RD	113		CASEMENT RD	HETHERINGTON RD	2	112	224	1	\$21,280		\$ 2,912			134	3	LOCAL
2	3			RUTHERFORD RD	225		HETHERINGTON RD	THE SQUARE (SOUTH)	2	68	136	0	\$12,920		\$ 680			134	3	LOCAL
2 2	3	-		RUTHERFORD RD RUTHERFORD RD	293 362	428	THE SQUARE (SOUTH) TUCK RD	TUCK RD THE SQUARE (NORTH)	2	69 66	138 132	0	\$13,110 \$12,540		\$ 690 \$ 660		6.6	134 134	3	LOCAL
2	3			RUTHERFORD RD	428	496	THE SQUARE (NORTH)	BARROWCLOUGH RD	2	68	136	0	\$12,940		\$ 680			122	3	LOCAL
2	3		Mountable kerb required for full length with drainage		496	622	BARROWCLOUGH RD	HARBOUR VIEW RD	2	126	252	0	\$23,940		\$ 1,260			134	3	LOCAL
2	3	İ	investigation	RUTHERFORD RD	622	745	HARBOUR VIEW RD	BEACH RD	2	123	246	0	\$23,370		\$ 1,230			134	3	LOCAL
2	3		Good soakage - area around 2015-2019 tuck road	TUCK RD	0	261	RUTHERFORD RD	PORT RD	1	261	522	0.3	\$49,590		\$ 3,132		5.7	93	2	LOCAL
2	3		has had a number of reported flooding problems,	TUCK RD	261	315	PORT RD	START ISLAND RHS	1	54	108	0	\$10,260		\$ 540			72	2	LOCAL
2	3		they have a low lying basin at the back fo properties	TUCK RD	315	434	START ISLAND RHS	END ISLAND RHS	1	119	238	2.5	\$22,610	\$ 17,672	\$ 6,664	\$ 46,946	3.5	51	2	LOCAL
2	3		Mountable kerb with catchpit and lead at cul de sac Mountable kerb - drainage investigation required	MAKO RD THE SQUARE	0	81	MARTYN RD RUTHERFORD RD (SOUTH)	END RUTHERFORD RD (NORTH)	2	81 415	162 830	1.9	\$15,390 \$78.850	\$ 9,142		\$ 28,096 \$ 110,996	4.1 5.1	51 31	2	LOCAL
2	,	I	Wouldable kerb - dramage investigation required	THE SQUARE	U	413	ROTHERFORD RD (300TH)	ROTHERFORD RD (NORTH)		413	030	0.9	370,030	\$ 22,100		\$ 554,702		31		LUCAL
																\$ 961,694				
																, 222,334				
												Breakd		ts for 2018/19:						
														\$ 257,047.00						
														\$ 25,704.70						
									Pi					\$ 11,527.29 \$ 219,815.01						
										Ph				\$ 219,815.01						
														\$ 197,833.51						
												Breakd		ts for 2019/20:						
														\$ 263,481.00						
									-					\$ 9,221.84						
									Prof. services fees (design of 2019/20 sites) = Physical works (incl. P & G items) = \$254,259.17											
										Physical works (incl. P & G items) = \$ 254,259.17 Preliminary & general = \$ 25,425.92										
											Pr	reliminary 8	& general =	\$ 25,425,92						

5 Suggested resolution(s)

That the Whangamata Community Board:

- 1. Receives the 'Kerb priorities for 2018/19 and 2019/20' report, dated 24 October 2018.
- 2. Approves the proposed Whangamata kerb construction work programme construction for 2018/19 and 2019/20.