

In concluding my report I have pleasure in calling attention to the ready and efficient assistance I have received from the Inspector, the officer in charge of the Land Transfer branch, the officers in charge of the plotting and compilation of the block-maps in Christchurch and Timaru, the Chief Draughtsman and the Accountant, and the other officers generally.

JOHN H. BAKER,
Chief Surveyor.

MINOR TRIANGULATION, 1879-80.

Closing Errors.

Survey District.	Lines.	Survey by	Survey by	Difference.	Error per Mile.	Mean Error per Mile.
Arowhenua ...	{	W. Kitson (old work)	H. Maitland.			
		20,041.6	20,047.8	6.2	2.47	
		A-H 31,855.6	31,851.4	4.2	1.05	
		H-J 26,514.3	26,510.2	4.1	1.24	1.32
Pareora ...	{	J-S 11,801.4	11,798.9	2.5	1.70	
		S-Q 32,859.9	32,860.5	0.6	0.13	
		T. Maben.	W. A. Harper.			
Mackenzie ...	{	31,742.1	31,744.5	2.4	0.60	
		E-G 19,496.1	19,496.0	0.1	0.04	0.32
			H. Maitland.			
Opawa ...	{	O-M 27,049.0	27,046.7	2.3	0.68	
		M-K 28,970.8	28,970.1	0.7	0.19	0.44
			W. A. Harper.			
Burke and Mackenzie ...	{	B-S 29,536.6	29,539.6	3.0	0.81	
		S-U 25,858.6	25,864.7	6.1	1.65	
		U-V 25,417.2	25,419.7	2.5	0.79	
		V-DD 20,786.7	20,787.1	0.4	0.15	
		DD-BB 17,602.9	17,606.3	3.4	1.55	0.81
Pukaki East and Gladstone	{	BB-P 22,663.2	22,666.9	3.7	1.31	
		P-Q 30,862.5	30,865.4	2.9	0.75	
		Q-VV 21,879.0	21,878.6	0.4	0.15	
		VV-S 12,879.4	12,879.6	0.2	0.12	
		J. E. Pickett.	J. S. Welch.			
Christchurch ...	{	N-M 10,314.5	10,315.7	1.2	0.93	
		M-A 11,796.0	11,795.7	0.3	0.20	0.56
		C. W. Adams (Standard Survey).	J. E. Pickett.			
Christchurch ...	{	P-J 10,584.00	10,581.5	2.5	1.89	
		N-O 7,765.12	7,765.0	0.12	0.10	1.00
		C. W. Adams (Standard Survey).	J. S. Welch.			
Christchurch ...	{	Q-N 17,489.47	17,487.5	1.97	0.92	0.92
		J. E. F. Coyle.	H. Maitland.			
		H-G 26,914.8	26,910.2	4.6	1.37	
Opuha ...	{	G-I 34,301.4	34,304.6	3.2	0.75	
Tengawi...	{	I-L 27,162.0	27,162.3	0.3	0.09	
		L-M 34,634.3	34,630.9	3.4	0.79	0.99
Opihi ...	{	M-W 27,042.2	27,036.4	5.8	1.72	
		W-Q 25,528.3	25,524.3	4.0	1.25	
		H. Maitland.	H. Maitland.			
Opihi ...	{	Q-V 19,354.6	19,352.1	2.5	1.03	
		V-U 22,969.0	22,968.5	0.5	0.17	
		U-R 31,869.3	31,869.4	0.1	0.03	
		R-S 21,728.3	21,728.2	0.1	0.04	
Opawa and Tengawi ...	{	S-T 25,595.8	25,593.5	2.3	0.72	
		T-A 19,747.2	19,746.8	0.4	0.16	
		A-C 35,787.0	35,781.8	5.2	1.16	
		C-F 17,396.5	17,394.5	2.0	0.92	
		F-U 22,201.0	22,198.1	2.9	1.05	0.58
Burke and Tengawi ...	{	U-W 12,184.0	12,184.5	0.5	0.33	
		W-O 21,318.7	21,319.1	0.4	0.15	
		O-U 22,950.2	22,948.4	1.8	0.63	
Opawa...	{	U-A 24,787.0	24,783.4	3.6	1.16	

Mean error per mile of the whole of the above = 0.78.

WESTLAND.

The work done during the year ending 30th June, 1880, consists of:—

MAJOR TRIANGULATION.

Total area completed, 325,683 acres, at a cost of 1.07d. per acre.

In my last report I expressed the hope to be able to carry this work to Karangarua River, and to complete 500 square miles, equal to 320,000 acres. As to area, I have succeeded; but the major triangulation does not extend to Karangarua River—it barely reaches Weheka, or Cook's River. The reason is that the services of Mr. Roberts, the officer employed at this survey, were, with your sanction, engaged in carrying the Westland triangulation across the main dividing range into Canterbury *via* head-waters of the Big Wanganui River. Amongst great and exceptional difficulties this was