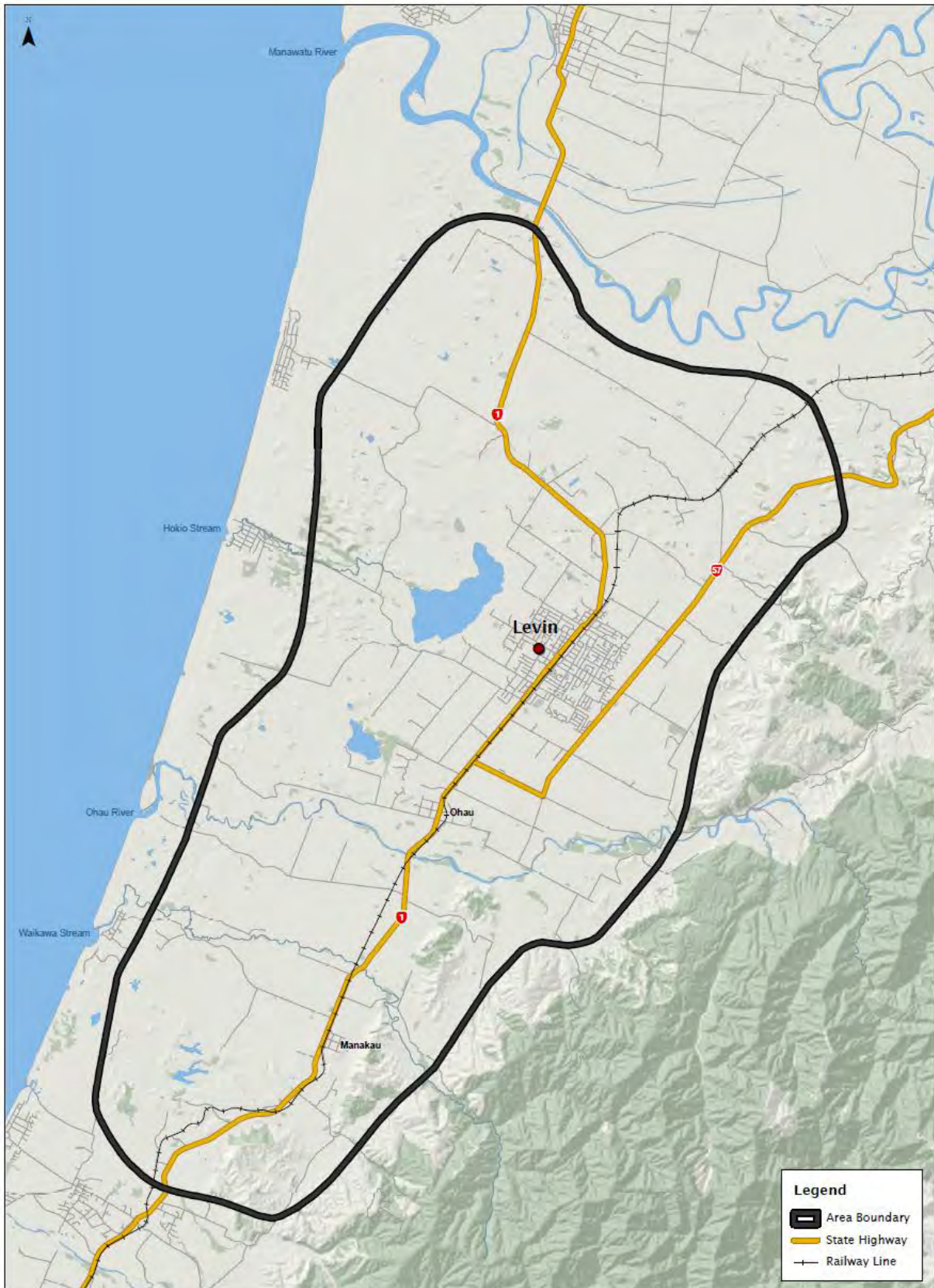


Appendix A Location Plan



Appendix B Traffic Surveys and Volume Data

Traffic Surveys

Four different types of traffic surveys were undertaken as follows:

- **Origin-Destination** surveys. These were undertaken for MWH by TEAM at nine locations, comprising Automatic Number Plate Recognition (ANPR) video surveys at three external sites (SH1 north, SH1 south and SH57) and six internal sites, on Tuesday 10 May 2011 during fine weather. The surveyed three periods were basically 7:30 – 9:15 am; 11:00 am – 2:00 pm; 3:30 – 5:30 pm. Some problems occurred with one camera during the morning peak (site 3).
- **Link** surveys. The special link surveys comprised quarter hour manual classified counts, namely light vehicle (car), truck and bus undertaken by TEAM at the same nine O-D survey locations for 7:15 – 9:15 am; 11:00 am – 2:00 pm; 3:30 – 5:30 pm, Tuesday 10 May.
- **Intersection** surveys. The special intersection surveys comprised quarter hour video classified turn counts, namely light vehicle (car), truck and bus undertaken by TEAM at the various locations for 7:00 – 9:00 am; 11:00 am – 2:00 pm; 4:00 – 6:00 pm, Tuesday 10 May. At critical intersections video image processing was undertaken for all turning movements, but at most intersection the main through movement flows were not derived in accordance with the agreed survey scope.
- **Travel time** surveys. Travel time surveys of SH1 between SH57 and Queen Street, Queen Street East between SH1 and SH57, and SH57 between Potts Road and SH1 were undertaken on Wed/Thu 3/4 August 2011 using a Garmin GPS unit, the intent being to assist the validation process.

As part of the agreement TEAM provided various spreadsheets of the survey data and a certain amount of analysis. However we undertook considerable further analysis as follows:

TEAM Origin-Destination and Travel Time surveys

We requested and obtained from TEAM the spreadsheets for each site-direction-period containing the recognised number plates, time-stamp, vehicle type and engine size. We developed a spreadsheet which reproduced the key external-external O-D flows but distinguished these separately for Light (LV) and Heavy Vehicles (HV which included buses) and filtered out the last approximately 20 minutes of records for the inbound site. Also the output was distinguished between those stopping and not stopping in Levin and the analysis period could be altered to see the effect on the observed proportions of LV and HV through traffic.

The same spreadsheet output the average travel time between the external O-D sites based on the observed time, rather than to the nearest minute as provided by TEAM. The TEAM supplied spreadsheet was enhanced however to derive the mean and standard deviation of travel for every O-D combination for the valid travel time range as specified by the analyst. Generally a ten minute window was specified outside of which we presumed the vehicle had stopped in Levin.

TEAM link control and intersection surveys

We copied in the various TEAM spreadsheets into a single spreadsheet with colour-coded tabs, adding hourly tallies of the quarter hour link and intersection flows for convenience. We also added a reformatted copy of the site locations and a list of all intersections surveyed.

To facilitate the calibration and validation processes, we created a diagrammatic (not to scale) representation of the hourly turn flow and link counts (at the southern end we also included the HV counts). This diagram workbook fits onto eight A3 landscape pages and thus is not appended.

HDC MetroCount surveys

After examining the HDC records of traffic surveys we requested and obtained the MetroCount .EC0 files which we then proceeded to process using MCREPORT and our specialist procedure adapted for this study. The Total and HV flows for the 7:00 - 9:00 am, 9:00 am - 4:00 pm and 4:00 - 6:00 pm average Monday to Thursday periods were extracted as well as key hourly flows and input into our link count spreadsheet. The total inbound and outbound observed flows for a cordon around Levin township was

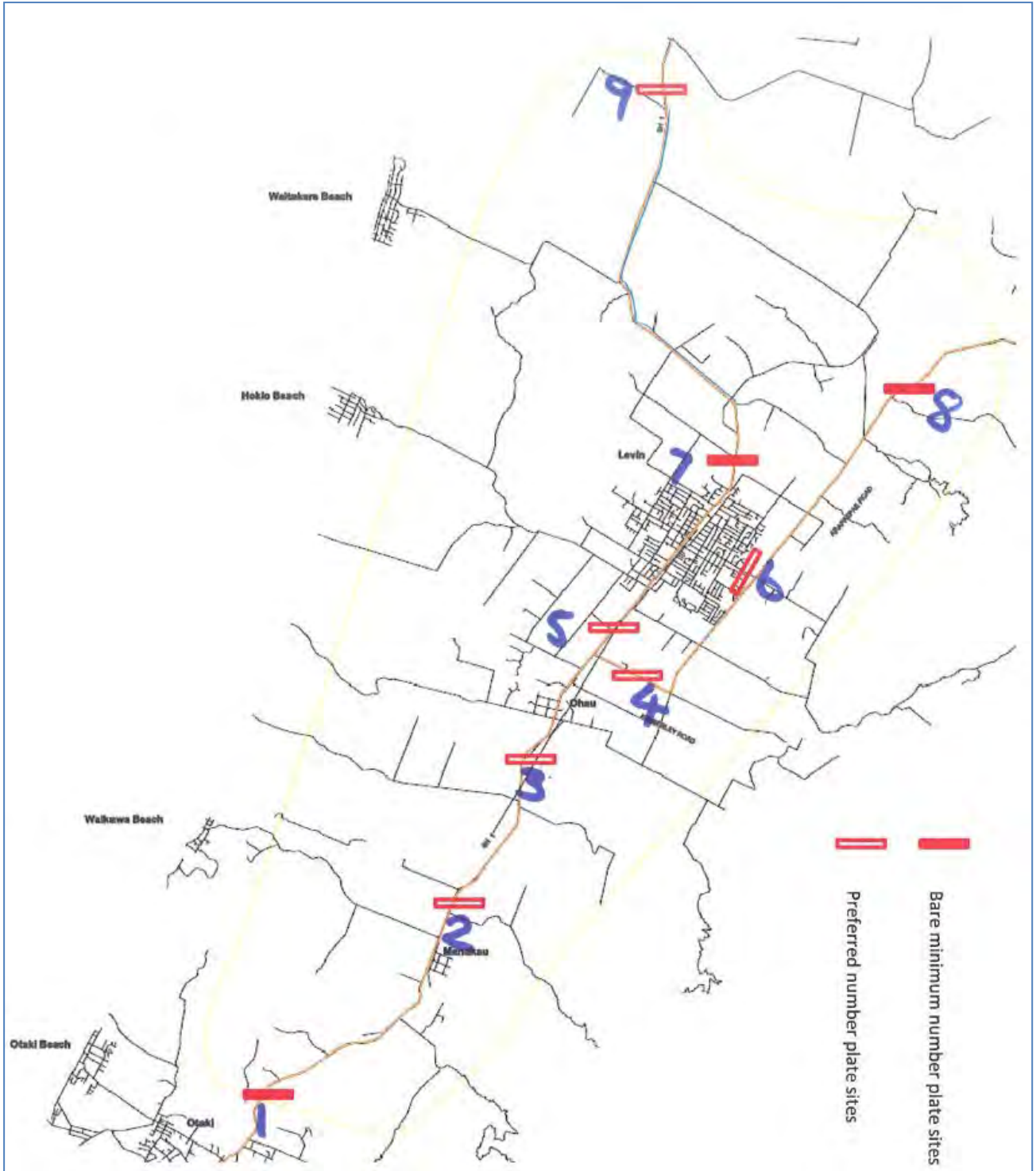
derived, from which it was concluded that for the 11:00 am – 12:00 noon, 12:00 – 1:00 pm and 1:00 – 2:00 pm interpeak hours the ratio of inbound/outbound flows was close to 50 %/50 % in all three periods and on this basis the 11:00 am-12:00 noon period was chosen as being representative of the interpeak period. This is the same as for the Opus Ōtaki study. There was little difference between the 7:45-8:45 and 8:00-9:00 am flows and likewise for the 4:15 - 5:15 pm and 4:30 - 5:30 pm flows; the 8:00 – 9:00 am and 4:30 - 5:30 pm hours were selected as representative of the AM and PM peak periods respectively.

NZTA Traffic Monitoring System (TMS) link sites

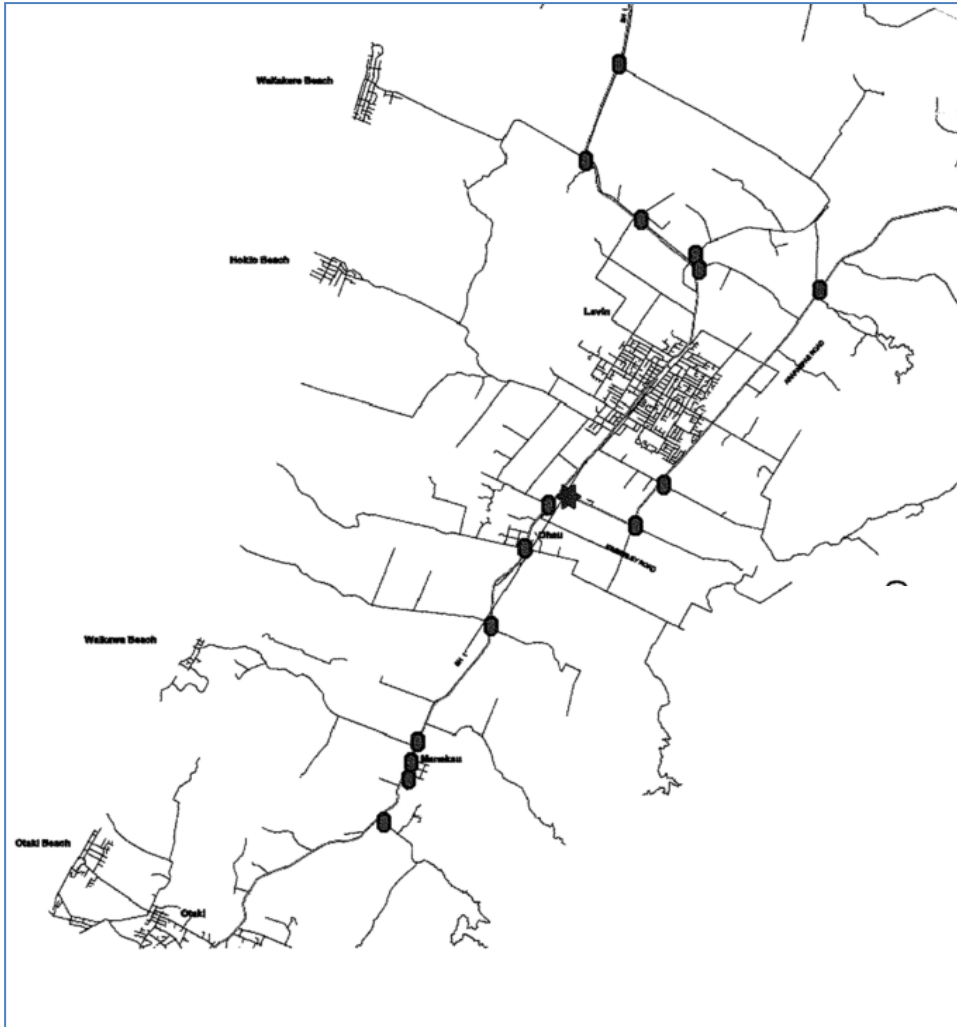
We processed the TMS site data for selected weeks to derive the period flows. Using our special procedures (refer ARRB 2010 Conference paper by David Wanty) we also derived the LV and HV growth at the Ohau rail overbridge continuous site for the different time periods using the historical data which we possess that is not available from the TMS website. From this we concluded that traffic growth of approximately (nearest 0.5 %) 1.5 % and 2.0 % per annum (relative to the 2010 values) is fairly representative across all three periods for light and heavy vehicles respectively. Also a design hour two-way flow equivalent to 11 % AADT appears reasonable.

MWH travel time surveys within Levin

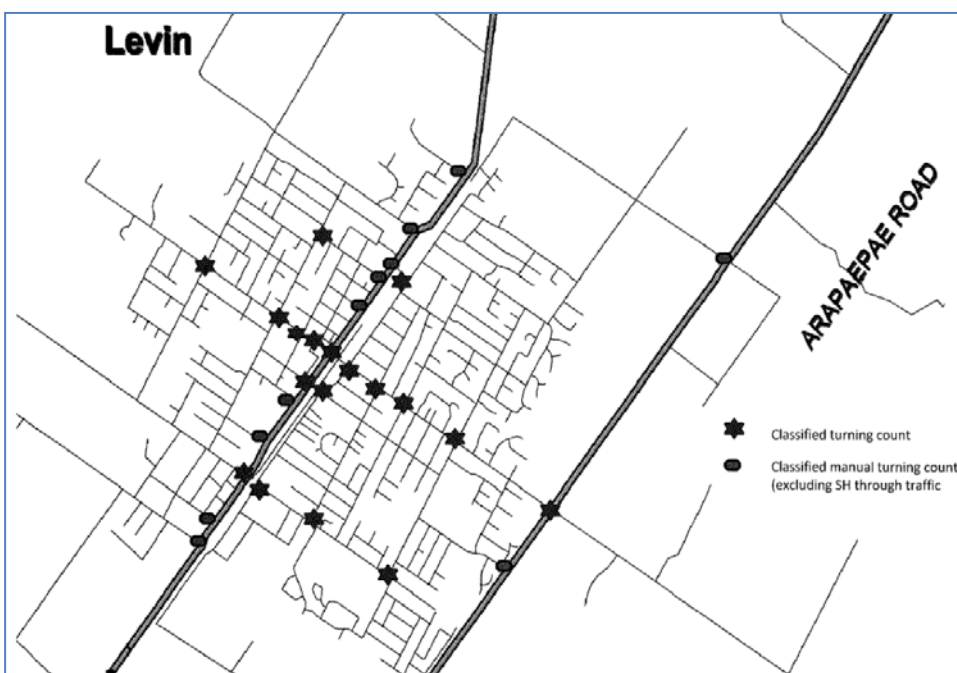
We developed a spreadsheet for processing the GPS records (every second) particular for this study. We derived the average and variation in travel times for different links / routes for each period.

Origin-Destination Survey Locations


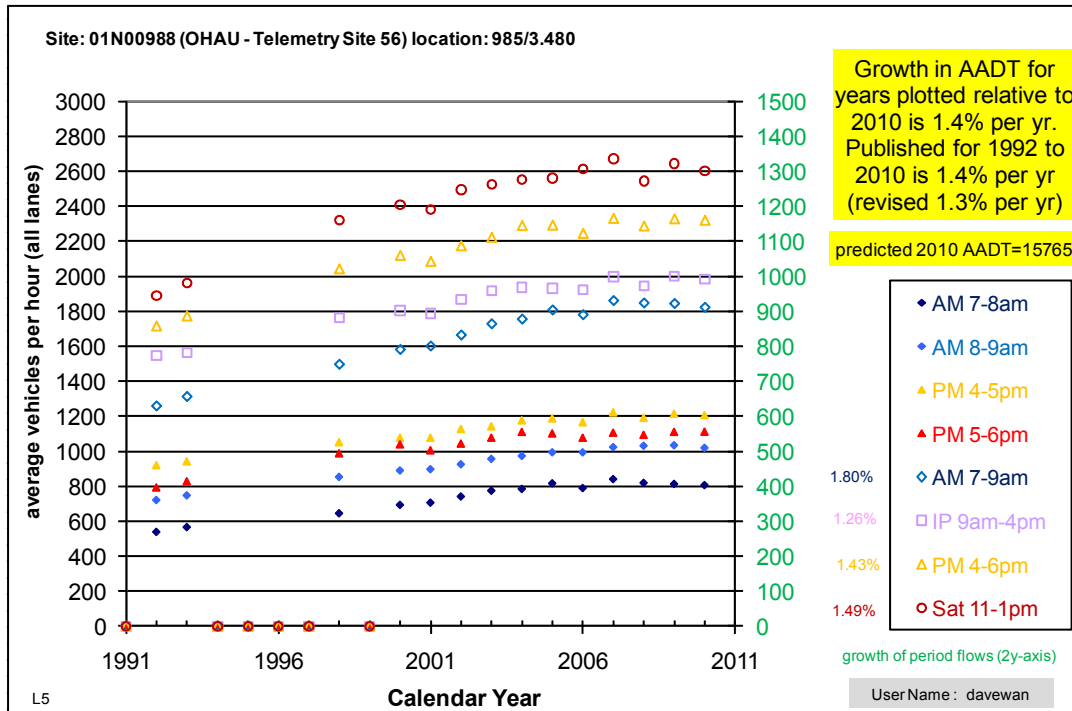
Actual site locations varied from those shown for sites 7 (between Gordon Pl and Roslyn Rd) and site 9 (between Koputaroa Rd and Oturoa Road); site 1 was immediately north of Taylors Rd.

Intersection Survey Locations

INTERSECTIONS

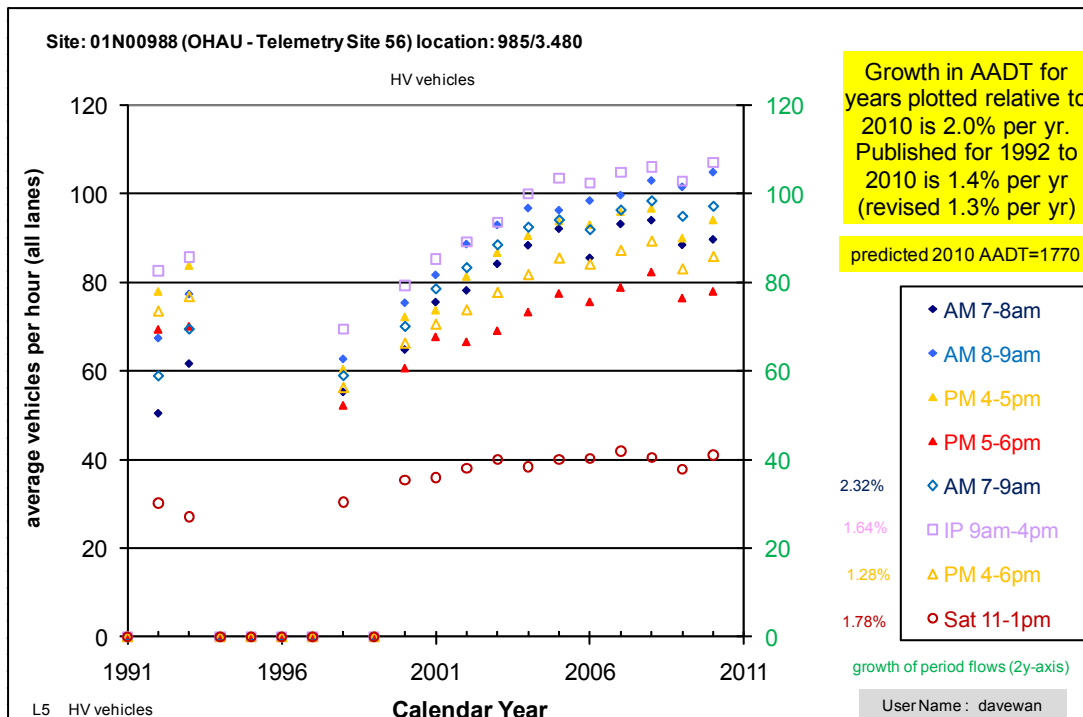
- Koputaroa Rd-SH1
- Waitarere Beach Rd-SH 1
- Kawiu Rd-SH 1
- Heatherlea East Rd-SH1
- Gordon Pl-SH1
- Keepa St-SH 1
- Stuckey St-SH1
- Durham St-SH1
- Devon St-SH 1
- York St-SH 1
- Tyne St-SH 1
- Honi Taipua St-SH 1
- Hokio Beach Rd-SH 1
- Mokena Kohere St - SH 1
- Buller Rd-SH 1
- Kuku Beach Rd - SH 1
- Waikawa Beach Road-SH 1
- South Manakau Rd-SH 1
- Meadowvale Dr-SH 57
- Kawiu Rd-Te Whanga Rd
- Ave North Rd-Koputaroa Rd-SH1
- Muhunoa East Rd - SH 1
- Tararua Rd-SH57
- Travistock Rd-SH 57
- Roslyn Rd -Waihou Rd - SH 57
- Kimberley Rd - SH 57
- SH 1 - SH 57
- Liverpool St-Bartholomew Rd
- Liverpool St-Winchester St
- Liverpool St-Cambridge St
- Queen St-Bristol St
- Tyne St-Cambridge St
- York St-Weraroa St
- SH 1-Makomako Rd
- Queen St-Queenwood Rd
- Queen St-SH 57
- Queen St-Bartholomew Rd
- Queen St-Winchester St
- Cambridge St-Bath St
- Queen St-Cambridge St
- Queen St-SH 1
- Bath St-SH 1
- Queen St-Salisbury St
- Queen St-Weraroa Rd
- Queen St-Tiro Tiro Rd
- Kawiu Rd-Te Whanga Rd
- Ave North Rd-Koputaroa-SH1
- Muhunoa East Rd - SH 1
- Tararua Rd-SH57
- Travistock Rd-SH 57
- Roslyn Rd -Waihou Rd -SH 57
- Kimberley Rd - SH 57



1992-2010 Traffic Growth by period at SH1 Ohau south

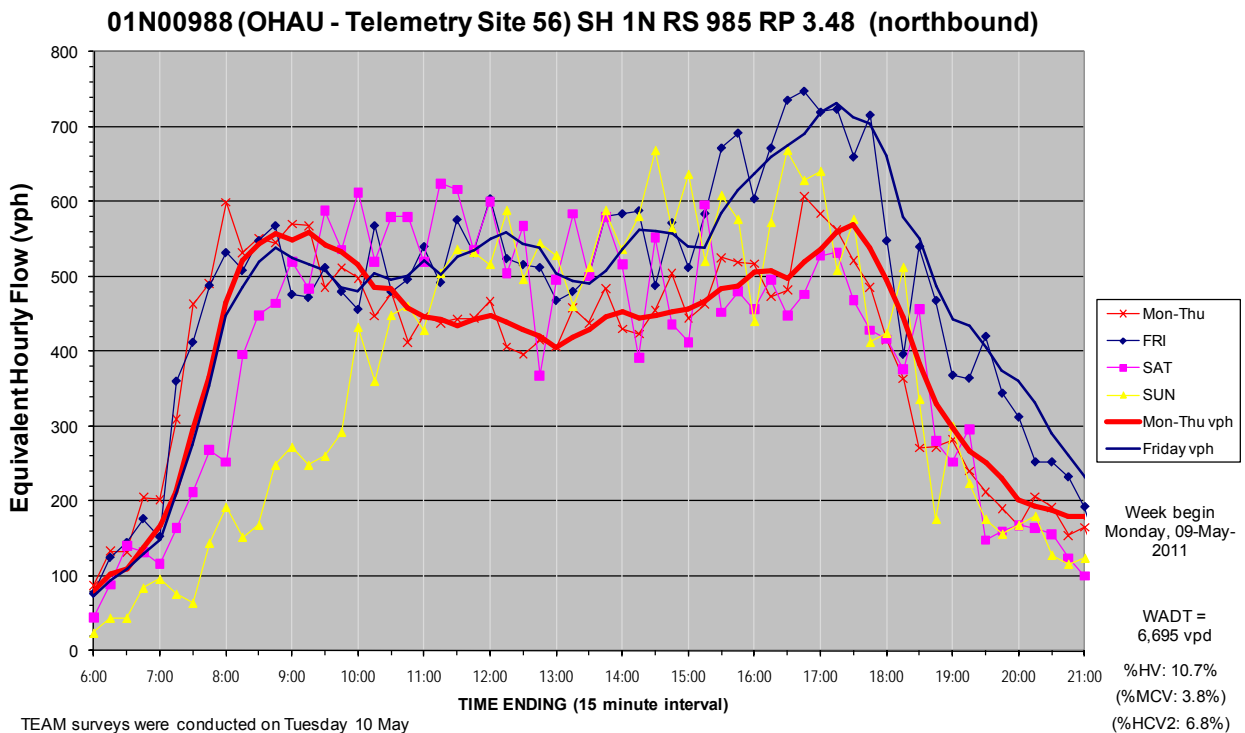
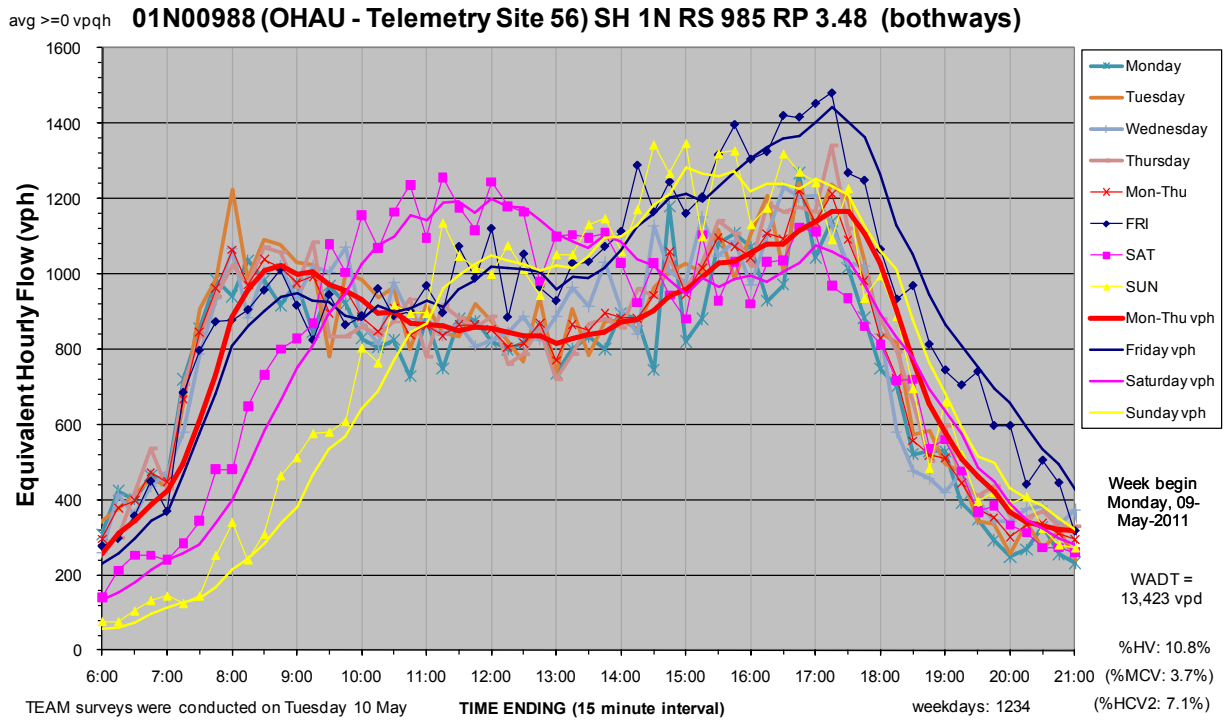


Two-way all vehicles



Two-way heavy vehicles

Ohau south flows for mid-May 2011



The %HCV1 (and %BUS) are included within the %MCV and %HCV2 figures.

Appendix C Crash Data

POLICE CRASH LIST REPORT

2006-2010 Crashes

Run on: 17 Aug 2011

Crash List: N_OL_all sections_inc_NI

Total Injury Crashes: 178
 Total Non-Injury Crashes: 298

Deaths 19
 Serious Injuries 57
 Minor Injuries 196

Crash Movement	Number	%
Overtaking Crashes	42	9
Straight Road Lost Control/Head On	80	17
Bend - Lost Control/Head On	70	15
Rear End/Obstruction	158	33
Crossing/Turning	98	21
Pedestrian Crashes	16	3
Miscellaneous Crashes	12	3
Total	476	100 %

Crash Type	Single Party	Multiple Party	Total
Intersection	27	135	162
MidBlock	117	197	314
Total	144	332	476

Location	Local road	State Highway	Total
Urban road	0	126	126
Open road	0	350	350
Total	0	476	476

Environment	Light/Overcast	Dark/Twilight	Total
Dry	243	96	339
Wet	83	52	135
Icy	2	0	2
Total	328	148	476

Drivers at fault or part fault in Injury crashes	Male	Female	Total
15-19 years	23	10	33
20-24	10	6	16
25-29	7	2	9
30-39	13	9	22
40-49	18	11	29
50-59	15	11	26
60-69	4	7	11
70+	19	6	25
Total	109	62	171

Drivers at fault or part fault in Injury crashes	Male	Female	Total
Full	79	40	119
Learner	6	4	10
Restricted	14	13	27
Never licensed	3	1	4
Disqualified	2	0	2
Overseas	2	1	3
Expired	2	0	2
Other/Unknown	7	4	11
Total	115	63	178

Injury crash factors (*)	No.Inj.Crashes	% Inj.Crashes
Alcohol	28	16
Too fast	20	11
Failed Giveaway/Stop	42	24
Failed Keep Left	10	6
Overtaking	6	3
Incorrect Lane/posn	20	11
Poor handling	25	14
Poor Observation	67	38
Poor judgement	19	11
Fatigue	20	11
Disabled/old/ill	8	4
Pedestrian factors	11	6
Vehicle factors	20	11
Other	9	5
Total	305	171 %

(*) factors are counted once against a crash - ie two fatigued drivers count as one fatigue crash factor.

Day/Period	0000-0259	0300-0559	0600-0859	0900-1159	1200-1459	1500-1759	1800-2059	2100-2400	Total
Mon	1	1	6	8	11	17	4	1	49
Tue	4	3	7	17	11	15	9	4	70
Wed	0	2	10	10	8	14	11	2	57
Thu	3	2	8	9	13	13	2	3	53
Fri	0	2	4	20	18	25	12	7	88
Sat	5	8	7	12	15	14	11	9	81
Sun	2	5	5	8	7	28	16	7	78
Total	15	23	47	84	83	126	65	33	476

Month of year	Injury	%	Non-Injury	%	Total	%
Jan	21	12	30	10	51	11
Feb	11	6	30	10	41	9
Mar	18	10	22	7	40	8
Apr	17	10	30	10	47	10
May	18	10	26	9	44	9
Jun	10	6	19	6	29	6
Jul	13	7	26	9	39	8
Aug	14	8	25	8	39	8
Sep	12	7	19	6	31	7
Oct	17	10	26	9	43	9
Nov	13	7	20	7	33	7
Dec	14	8	25	8	39	8
Total	178	100 %	298	100 %	476	100 %

Crash (inj.) nos.	Fatal	Serious	Minor	Non-Inj	Total
2006	6 (7)	9 (15)	22 (39)	63 (-)	100 (61)
2007	3 (4)	10 (17)	19 (28)	63 (-)	95 (49)
2008	1 (1)	5 (7)	28 (40)	66 (-)	100 (48)
2009	4 (7)	8 (10)	29 (51)	51 (-)	92 (68)
2010	0 (0)	7 (8)	27 (38)	55 (-)	89 (46)
Total	14 (19)	39 (57)	125 (196)	298 (-)	476 (272)

Note: last 5 years of crashes shown

First Street	D I R	Second street or landmark	Crash Number	Date	Day	Time	Factors and Roles	O B J E C T S	C U R S E	W L L S	W J C M S	Total Inj	P C Y	Map Coordinates
Distance				DD/MM/YYYY	DDD	HHMM	M D V R M VN VVV T 1 234	A is for vehicle 1 B is for veh 2 etc						
1N/954/12.048		800N WHIROKINO ROAD	2813289	01/11/2008	Sat	0025	CA CS1 112A 135A 804 817		B	R	D DN F	N C 100	1	1793338 5513566
1N/954/12.157		2000S NEWTH ROAD	2652293	19/05/2006	Fri	1540	CB TS1 129A 406A		B	R	D B F	N C 100		1793299 5513464
1N/954/12.157		2000S NEWTH ROAD	201053629	25/06/2010	Fri	1138	FA CN1V 110A 181A 407A			R	D B F	N C 100		1793299 5513464
1N/954/12.157		2000S NEWTH ROAD	2851524	01/04/2008	Tue	1445	QG VN14 682A		D	E	D O F	N C 100		1793299 5513464
1N/954/12.248		600N WHIROKINO ROAD	2750131	22/01/2007	Mon	0900	DA 4S1 136A 633A			E	W O L	N C 100		1793266 5513379
1N/954/12.304		A WHIROKINO TRESTLE	201050419	01/01/2010	Fri	1350	FA CN1C 331A			R	D O F	N C 100		1793246 5513327
1N/954/12.304		A WHIROKINO TRESTLE	2611004	20/01/2006	Fri	1606	QG TS1TC 682A 137B		BD	R	D B F	N C 100	2	1793246 5513327
1N/954/12.348		500N WHIROKINO ROAD	2657159	27/09/2006	Wed	1320	FA TS14 331A			R	W O L	N C 100		1793230 5513286
1N/954/12.648		200N WHIROKINO ROAD	201011620	24/02/2010	Wed	1340	CC TS1 132A 331A		B	R	D B F	N C 100	1	1793122 5513006
1N/954/12.848		A WHIROKINO ROAD	2811538	01/04/2008	Tue	0746	FD CS1CC 331A 901			R	W O H	N C 100	1	1793049 5512820
1N/954/12.885		I WHIROKINO ROAD	2755531	27/09/2007	Thu	0745	QG VN1T 682A			R	D B F X N P	100		1793049 5512819
1N/954/13.035		150S WHIROKINO ROAD	2851300	01/04/2008	Tue	0745	FA CN1C 331A 901			R	W DN H	N C 100		1792995 5512680
1N/954/13.124		A MANAWATU RIVER BR	2655688	14/11/2006	Tue	2209	BA CS1T 103A 357A			R	W DN L	N L 100		1792963 5512596
1N/967/0		1540N OTUROA ROAD	201011583	25/03/2010	Thu	1004	CB 4N1 132A 357A		E	R	D O F	N C 100	2	1792953 5512568
1N/967/0.01		1530N OTUROA ROAD	201056188	05/12/2010	Sun	1120	CA 4N1 406A 615A			R	D B F	N C 100		1792948 5512559
1N/967/0.48		1060N OTUROA ROAD	2651333	27/03/2006	Mon	0640	DA 4S1 131A		FV	M	W O L	N C 100		1792794 5512116
1N/967/0.481		750S MATAKARAPA ROAD	2850233	02/01/2008	Wed	1224	FD VN1C 181A 402A			E	D B F	N C 100		1792794 5512115
1N/967/0.531		800S WHIROKINO ROAD	2855682	02/11/2008	Sun	2240	CA CS1 112A 817		B	R	D DN F	N C 100		1792788 5512066
1N/967/1.14		400N OTUROA ROAD	2713929	30/12/2007	Sun	0836	CB VN1 136A 631A		C	R	D B F	N C 100	4	1792831 5511459
1N/967/1.55		10S OTUROA ROAD	2650841	25/02/2006	Sat	1314	DA CN1 136A 621A		AEF	E	D O F T N C	100		1792876 5511052
1N/967/1.94		400S OTUROA ROAD	2656323	02/12/2006	Sat	2105	EC CN1 911		W	R	D DN F	N C 100		1792883 5510664
1N/967/2.1		560S OTUROA ROAD	2857210	08/12/2008	Mon	0920	GC CS14 381B 929			R	D B F D N C	100		1792860 5510505
1N/967/2.108		1200N KOPUTAROA ROAD	2754750	16/08/2007	Thu	1525	AC CN1V 152A 159A			R	D O F	N C 100		1792859 5510498
1N/967/2.54		1000S OTUROA ROAD	2851971	28/04/2008	Mon	0730	EC TN1V 370A 660B		D	R	W O F	N C 100		1792795 5510070
1N/967/2.668		640N KOPUTAROA ROAD	2610063	05/08/2006	Sat	0600	BE CN1T 106A 111A 121A			E	D DN F	N C 100	2	1792773 5509944
1N/967/2.968		340N KOPUTAROA ROAD	2613701	21/12/2006	Thu	1205	MC CN14 300B 372B 927			R	W O L D N C	100	1	1792702 5509654
1N/967/3.158		150N KOPUTAROA ROAD	2955518	31/10/2009	Sat	1130	CB CS1 134A 358A		F	R	D B F	N C 100		1792632 5509477
1N/967/3.208		100N KOPUTAROA ROAD	201011041	17/01/2010	Sun	1942	AD 4N1 136A 630A		CF	R	D B F	N C 100	1	1792613 5509431
1N/967/3.308		I KOPUTAROA ROAD	2952710	28/05/2009	Thu	1728	JA VS1V 302B			R	D DO F T G C	100		1792575 5509338
1N/967/3.708		400S KOPUTAROA ROAD	2653704	21/07/2006	Fri	1120	GE 4S1O 387A 604B 929			R	D B F D N N	100		1792432 5508965
1N/967/4.288		980S KOPUTAROA ROAD	2711997	23/04/2007	Mon	1405	MC CN1L 670A 372B 930			R	D B F D N C	100	1	1792219 5508425
1N/967/4.294		1600N WAITARERE BEACH ROAD	2751799	28/04/2007	Sat	1911	AD VN1 112A 135A 801		F	R	W DO F	N C 100		1792217 5508420
1N/967/4.694		1200N WAITARERE BEACH ROAD	201050360	08/02/2010	Mon	1150	DB CS1 410A			E	D B F	N C 100		1792072 5508047
1N/967/5.394		500N WAITARERE BEACH ROAD	2656115	26/11/2006	Sun	2315	CB CS1 134A 903		V	R	W DN L	N C 100		1791865 5507378
1N/967/5.394		500N WAITARERE BEACH ROAD	2612978	19/08/2006	Sat	1540	AA CN1CM 372A 137B		C	R	D B F	N C 100	1	1791865 5507378
1N/967/5.494		400N WAITARERE BEACH ROAD	2613676	15/10/2006	Sun	1615	AD CS1T 154A 159A 402A		F	R	D O F	N C 100	1	1791835 5507282
1N/967/5.644		250N WAITARERE BEACH ROAD	2910016	17/02/2009	Tue	2300	BE CS1T 103A 134A 350A		TT	R	D DN F	N C 100	3	1791789 5507139

First Street	D I R	Second street or landmark	Crash Number	Date	Day	Time	Factors and Roles	O B J E C T S	C U R S E	W E I G H T	L E V E L	W I D T H	J O I N T	C O N T A C T	M O D E L	S E R I E S	Total Inj	P E R S O N S	C O U N T Y	Map C O O R D I N A T E S	
Distance				DD/MM/YYYY	DDD	HHMM	M D V R M VN VVV T 1 234	A B	C E T	D E T	E R L	F T R	G S M	H C T	I K L	J R N	K E T	L F S M A E I T R N	M A G G E	N E E	
1N/967/5.894	I	WAITARERE BEACH ROAD	2951494	07/02/2009	Sat	1120	JACN1T 321B														1791777 5506895
1N/967/5.894	I	WAITARERE BEACH ROAD	2913390	26/10/2009	Mon	1508	JAVN1C 145A 302B 387B														1791777 5506895
1N/967/6.201		50N PAEROA ROAD	2910031	25/03/2009	Wed	1123	BCCN1C 121A 410A 106B														1791954 5506647
1N/967/6.694		800S WAITARERE BEACH ROAD	2711435	18/03/2007	Sun	0156	DA CW1 103A														1792047 5506167
1N/967/6.788		700N CLAY ROAD	2811575	21/03/2008	Fri	2040	DA CN1 410A														1792061 5506075
1N/967/6.894		1000S WAITARERE BEACH ROAD	2953544	29/04/2009	Wed	1935	DA 4N1 111A														1792102 5505977
1N/967/6.979		510N CLAY ROAD	201012751	12/09/2010	Sun	0521	DB CS1 103A 131A 632A														1792153 5505912
1N/967/7.458		30N CLAY ROAD	2751863	10/03/2007	Sat	1352	DA TS1 121A 134A 410A														1792549 5505643
1N/967/7.488	I	CLAY ROAD	2812042	13/05/2008	Tue	0940	GC CN1C 174B 353B 372B														1792573 5505624
1N/967/7.588		100S CLAY ROAD	2911054	22/01/2009	Thu	0400	CB CN1 410A														1792649 5505560
1N/967/7.858		370S CLAY ROAD	2853496	11/07/2008	Fri	1548	CB VN1 129A 351A														1792855 5505385
1N/967/7.9		200N TE WHANGA ROAD	2751690	07/04/2007	Sat	1704	MO CS1 101A 386A														1792888 5505357
1N/967/8.05		50N KAWIU ROAD	2851262	25/02/2008	Mon	1857	FA CN14 103A 110A 506A 517A														1793002 5505260
1N/967/8.06		40N KAWIU ROAD	2752409	04/04/2007	Wed	1926	DA CS1 135A 355A 901														1793009 5505253
1N/967/8.08		20N KAWIU ROAD	2612574	04/08/2006	Fri	1303	CC CN1 410A														1793025 5505240
1N/967/8.1	I	KAWIU ROAD	2850010	03/01/2008	Thu	1750	JACW1C 301B 375B														1793040 5505227
1N/967/8.1	I	KAWIU ROAD	201011465	21/03/2010	Sun	1515	LB SN1C 303B 382B														1793040 5505227
1N/967/8.1	I	TE WHANGA ROAD	2856099	17/11/2008	Mon	1000	FA CW1C 181A 191B														1793040 5505227
1N/967/8.1	I	TE WHANGA ROAD	2613165	23/10/2006	Mon	1745	GC CN1C 181A 387A 174B														1793040 5505227
1N/967/8.302		200E KAWIU ROAD	201012865	05/09/2010	Sun	2130	CC VS1 410A														1793191 5505097
1N/967/8.947		1000N KOPUTAROA ROAD	2851543	17/02/2008	Sun	0608	CC TN1 687A														1793684 5504679
1N/967/9.1		1000E KAWIU ROAD	2954353	19/08/2009	Wed	2330	CB CE1 137A														1793801 5504579
1N/967/9.102		1000S TE WHANGA ROAD	201012586	17/08/2010	Tue	0945	CB VS1 134A 410A														1793801 5504579
1N/967/9.197		750N KOPUTAROA ROAD	2650704	08/01/2006	Sun	0620	CB CN1 134A 410A														1793874 5504517
1N/967/9.667		280W KOPUTAROA ROAD	2650259	20/01/2006	Fri	2344	AD CW1 137A 156A 832														1794232 5504212
1N/967/9.948	I	KOPUTAROA ROAD	201012847	03/08/2010	Tue	0750	LB CE1CV 303B														1794443 5504028
1N/967/9.977		30E KOPUTAROA ROAD	2813752	16/12/2008	Tue	2325	GC CW1C 372B 377B 927														1794465 5504008
1N/967/10.247		300S AVENUE NORTH ROAD	2811766	21/04/2008	Mon	1600	FA CS1C 112A 181A														1794599 5503780
1N/967/10.293		200S HEATHERLEA EAST ROAD	201055610	13/11/2010	Sat	0320	DA 4S1 410A														1794608 5503736
1N/967/10.71		100N AVENUE NORTH ROAD	2751069	09/03/2007	Fri	1134	FD CN1C 333A 351A 927														1794648 5503319
1N/967/10.9		90S AVENUE NORTH ROAD	201051142	19/03/2010	Fri	2338	AD 4S1 137A 410A														1794661 5503130
1N/967/10.922		500N LINDSAY ROAD	2754955	28/08/2007	Tue	0750	CC CS1 135A 195A 801														1794660 5503107
1N/967/11.322		100N LINDSAY ROAD	2654243	09/08/2006	Wed	0454	QG TS1 195A 682A 910														1794608 5502711
1N/967/11.322		100N LINDSAY ROAD	2956353	12/11/2009	Thu	0240	EC CN1 370A 912														1794608 5502711
1N/967/11.397		25N LINDSAY ROAD	2911180	17/02/2009	Tue	1615	AD CS1 112A 137A 153A														1794597 5502637
1N/967/11.422	I	LINDSAY ROAD	2912191	08/06/2009	Mon	1810	GD CS1T 331A 507A														1794593 5502612
1N/967/11.422	I	LINDSAY ROAD	2953181	27/06/2009	Sat	1659	CB VN14 353B 440B														1794593 5502612

First Street	D I R	Second street or landmark	Crash Number	Date	Day	Time	Factors and Roles	O B J E C T S	C U R S E	W E I G H T	L E V E L	W I N D O W S	J E C T O R S	C O N D I T I O N	M O D E L	S E A T B E L T	Total Inj	P E R S O N S	C O U N T Y	Map C O O R D I N A T E S
Distance				DD/MM/YYYY	DDD	HHMM	M D V R M VN VVV T 1 234	A is for vehicle 1 B is for veh 2 etc												
1N/967/13.545		40S EXETER ST	201011178	23/01/2010	Sat	2138	JACN1S 105B 308B 602B 929										050	1	54	1793545 5500868
1N/967/13.555		50S EXETER ST	2751019	11/03/2007	Sun	1640	MC CS1C 372B 671B										050			1793539 5500861
1N/967/13.598		30N STANLEY ST	2653449	19/07/2006	Wed	1534	JACN1C 308B 375B 924										050			1793512 5500828
1N/967/13.628		I STANLEY ST	2750466	16/02/2007	Fri	1104	MO CS14 145A 372A										050			1793493 5500805
1N/967/13.63		I STANLEY ST	201054369	18/08/2010	Wed	1205	FD OS1T 181A 386A										050			1793493 5500805
1N/967/13.63		I STANLEY ST	201053112	04/06/2010	Fri	1640	FD CS1C 331A 352A										050			1793493 5500805
1N/967/13.705		50N QUEEN ST EAST	2713559	13/11/2007	Tue	1934	MC CN1C 101A 372B 377B										050	1		1793443 5500746
1N/967/13.755		I QUEEN ST EAST	2955642	24/10/2009	Sat	0645	LB CS1C 303B 375B										050			1793411 5500708
1N/967/13.755		I QUEEN ST EAST	2652289	19/05/2006	Fri	1240	DA CN1 133A 430A		IS								050			1793411 5500708
1N/967/13.755		I QUEEN ST EAST	2655185	22/10/2006	Sun	2215	DACN1 112A 410A		IS								050			1793411 5500708
1N/967/13.755		I QUEEN ST WEST	2950184	03/01/2009	Sat	1930	FE TN1C 181A 387A										050			1793411 5500708
1N/967/13.757		I QUEEN ST EAST	201056337	18/12/2010	Sat	1205	FE TN14 181A										050			1793411 5500708
1N/967/13.757		I QUEEN ST WEST	2612550	23/07/2006	Sun	1350	NB VE2E 718B										050	1 14		1793411 5500708
1N/967/13.757		I QUEEN ST WEST	2913299	13/11/2009	Fri	1100	NF CE2E 307A 353A										050	1 84		1793411 5500708
1N/967/13.775		20S QUEEN ST EAST	2613404	02/11/2006	Thu	1850	NA CS1E 352A 711B										050	1 79		1793398 5500692
1N/967/13.795		40S QUEEN ST WEST	2755387	20/09/2007	Thu	1709	MC CN1C 372B										050			1793386 5500677
1N/967/13.835		80S QUEEN ST EAST	2913048	29/09/2009	Tue	1200	MF CN1T 381A										050	1		1793361 5500646
1N/967/13.854		150N BATH ST	2751691	05/04/2007	Thu	1702	MF CS1V 371B										050			1793348 5500631
1N/967/13.855		100S QUEEN ST EAST	2650865	04/03/2006	Sat	1200	MF CN1V 371B										050			1793348 5500630
1N/967/13.855		100S QUEEN ST EAST	2912712	26/08/2009	Wed	1655	FD CS1CCC 331A										050	1		1793348 5500630
1N/967/13.855		100S QUEEN ST WEST	2912254	24/06/2009	Wed	1255	NG CS1E 730B										050	1 89		1793348 5500630
1N/967/13.855		100S QUEEN ST WEST	2912510	26/07/2009	Sun	1232	NA CN1E 711B										050	1 23		1793348 5500630
1N/967/13.855		100S QUEEN ST WEST	2855550	16/10/2008	Thu	1350	MO VN14 386A		M								050			1793348 5500630
1N/967/13.857		100S QUEEN ST WEST	201012221	22/06/2010	Tue	1258	MO CS1S 372A 671A										050	1 33		1793348 5500630
1N/967/13.934		70N BATH ST	2856652	31/08/2008	Sun	2030	MF CN14 371B										050			1793298 5500568
1N/967/13.974		30N BATH ST	2754032	20/07/2007	Fri	1829	MA CN1C 103B 374B										050			1793273 5500537
1N/967/13.976		30N BATH ST	201055673	12/11/2010	Fri	1530	FD 4S1CCC 331A 402A										050			1793273 5500537
1N/967/13.984		20N BATH ST	2754031	24/07/2007	Tue	1209	FD CS1C4 331A 351A										050			1793267 5500530
1N/967/13.989		15N BATH ST	2911849	01/05/2009	Fri	1025	NA CS1E 711B 712B										050	1 41		1793263 5500526
1N/967/13.994		10N BATH ST	2854707	05/08/2008	Tue	1055	MO TN1V 386A 440B 817										050			1793260 5500522
1N/967/14.004		I BATH ST	2852127	06/05/2008	Tue	1100	HA CE2C 322A										050			1793254 5500514
1N/967/14.004		I BATH ST	2712092	15/05/2007	Tue	1550	NA CS1 322A 503A										050	1 44		1793254 5500514
1N/967/14.004		I BATH ST	2654930	28/09/2006	Thu	1120	MO CN14 386A 517A										050			1793254 5500514
1N/967/14.004		I BATH ST	2654313	07/09/2006	Thu	1110	MA TS1C 373B										050			1793254 5500514
1N/967/14.004		I BATH ST	2755381	21/09/2007	Fri	1105	FD VN1CC 331A										050			1793254 5500514
1N/967/14.004		I BATH ST	2950653	09/02/2009	Mon	0543	EC CS1 377A 901		IP								050			1793254 5500514
1N/967/14.004		I BATH ST	2950142	05/01/2009	Mon	1012	FE VS1VC 181A										050			1793254 5500514

First Street	D I R	Second street or landmark	Crash Number	Date	Day	Time	Factors and Roles	O B J E C T S	C U R S E	W E I G H T	L E V E L	W I N D O W S	J O I N T S	C O N T R I B U T I O N	M O D E L	S E A T B E L T	Total Inj	P E R C E N T	C O O R D I N A T E S	Map C o o r d i n a t e s
Distance				DD/MM/YYYY	DDD	HHMM	T 1 234													
1N/967/14.004	I	BATH ST	2912060	21/05/2009	Thu	1549	NA VN1 322A										050	1	73	1793254 5500514
1N/967/14.004	I	BATH ST	2856913	28/11/2008	Fri	1635	FD CN1C 181A 352A 817										050			1793254 5500514
1N/967/14.006	I	BATH ST	2712477	20/07/2007	Fri	1000	NF XE2E 307A 376A										050	1	83	1793254 5500513
1N/967/14.006	I	BATH ST	201013735	09/12/2010	Thu	1242	NC TW2E 378A 671A 718B										050	1	83	1793254 5500513
1N/967/14.006	I	BATH ST	2713244	13/10/2007	Sat	1951	HA CW2T 322A										050	1		1793254 5500513
1N/967/14.026	20S	BATH ST	201054884	05/10/2010	Tue	1240	JA CN1C 205A 308B 314B 925										050			1793241 5500498
1N/967/14.121	25N	DURHAM ST	2756832	23/11/2007	Fri	1030	FD CN1CC 331A 352A										050			1793180 5500424
1N/967/14.126	20N	DURHAM ST	2751846	13/04/2007	Fri	1915	FD CN1C 331A 353A										050			1793177 5500420
1N/967/14.146	I	DURHAM ST	2652159	15/05/2006	Mon	1724	FD CN1CC 331A										050			1793164 5500405
1N/967/14.146	I	DURHAM ST	201050508	08/02/2010	Mon	1150	LB CN1C 303B 387B										050			1793164 5500405
1N/967/14.313	200N	STUCKEY ST	2855332	10/10/2008	Fri	1715	FD CN1CCC 331A 352A										050			1793057 5500275
1N/967/14.403	110N	STUCKEY ST	2652691	03/06/2006	Sat	1500	MC CS1C 363B 372B 902										050			1792999 5500206
1N/967/14.413	100N	STUCKEY ST	2712858	29/08/2007	Wed	2050	NA CS1E 370A 105B 713B 722B										050	1	36	1792993 5500198
1N/967/14.423	90N	STUCKEY ST	2854760	08/09/2008	Mon	0830	MA VS1V 373B 671B										050			1792987 5500190
1N/967/14.493	20N	STUCKEY ST	2651152	14/03/2006	Tue	2045	MC TN1V 355B 372B										050			1792942 5500136
1N/967/14.536	20S	STUCKEY ST	2757472	19/12/2007	Wed	1624	GO VS1X 181A										050			1792920 5500103
1N/967/14.664	100N	MAKO MAKO ROAD	2650805	22/02/2006	Wed	1410	EA CN1CV 386A 410A										050			1792859 5499991
1N/967/14.696	I	LIVERPOOL RAILWAY CROSSIN	201013052	16/10/2010	Sat	0920	MC VS1V 330B 372B										050	2		1792840 5499966
1N/967/14.696	I	LIVERPOOL RAILWAY CROSSIN	2911271	23/02/2009	Mon	1700	KB TN1P 372B 507B										050	1		1792840 5499966
1N/967/14.696	I	LIVERPOOL RAILWAY CROSSIN	2954321	02/05/2009	Sat	1100	NA CW2 353A 402A 387B										050			1792840 5499966
1N/967/14.696	I	SOUTH LANE	2850015	01/01/2008	Tue	2005	LB CS1C 303B 402B 410B										050			1792840 5499966
MAKO MAKO ROAD	I	1N/967/14.764	2853602	24/06/2008	Tue	1210	KA SN1C 100A 129A 370A										050			1792799 5499911
1N/967/14.764	I	LIVERPOOL ST	201052816	11/06/2010	Fri	1610	KA CW1C 302B 375B										050			1792799 5499911
1N/967/14.764	I	MAKO MAKO ROAD	2912266	12/05/2009	Tue	2029	LB 4S1C 101B 303B										050	2		1792799 5499911
1N/967/14.764	I	MAKO MAKO ROAD	2755715	02/10/2007	Tue	0221	DC CE1 130A										050			1792799 5499911
1N/967/14.764	I	MAKO MAKO ROAD	2855941	24/10/2008	Fri	1501	JA 4N1C 302B 386B										050			1792799 5499911
1N/967/14.764	I	MAKO MAKO ROAD	2811739	14/04/2008	Mon	1203	FD CN1M 181A										050	1		1792799 5499911
1N/967/14.764	I	MAKO MAKO ROAD	201056636	30/12/2010	Thu	1210	KB CS1C 302B										050			1792799 5499911
1N/967/14.864	100S	MAKO MAKO ROAD	2851969	29/04/2008	Tue	1037	AC TN1V 159A										070			1792735 5499834
1N/967/14.884	I	WARD ST	2754161	09/07/2007	Mon	0915	FB CE2C 512A										050			1792723 5499819
1N/967/14.904	20S	WARD ST	2712890	13/07/2007	Fri	1850	CB 4N1V 104A 517A										050	1		1792710 5499803
1N/967/15.005	I	RINA ST	2650081	27/01/2006	Fri	1629	MC CS1C 372B										050			1792645 5499726
1N/967/15.033	30S	RINA ST	2951449	21/03/2009	Sat	1230	EA CN14 350A 370A										050			1792626 5499703
1N/967/15.063	60S	RINA ST	2956827	18/12/2009	Fri	1220	MC CS1C 372B 671B										050			1792607 5499680
1N/967/15.132	I	KEEPA ST	2751087	16/03/2007	Fri	0654	KB TS1C 350B 382B										050			1792563 5499627
1N/967/15.133	I	KEEPA ST	201054078	30/07/2010	Fri	1550	MC CN1C 333A 372B										050			1792563 5499627
1N/967/15.263	50N	HOKIO BEACH ROAD	2911742	15/04/2009	Wed	1330	GB CN1T 181A 929										100	1		1792481 5499526

First Street	D I R	Second street or landmark	Crash Number	Date	Day	Time	Factors and Roles	O B J E C T S	C U R S E	W E I G H T	L E V E L	W I N D O W S	J O I N T S	C O N T R O L	M O D E L	S E A T B E L T	Total Inj	P E R S O N S	C O U N T Y	Map C O O R D I N A T E S				
Distance				DD/MM/YYYY	DDD	HHMM	M D V R M VN VVV T 1 234	A is for vehicle 1	B is for veh 2 etc								T R N E E							
1N/967/15.313	I	HOKIO BEACH ROAD	2811261	29/01/2008	Tue	1300	MC CS1C 372B 817			R	D	B	F	T	G	C	050	1		1792458 5499482				
1N/967/15.313	I	HOKIO BEACH ROAD	2854708	02/09/2008	Tue	0949	LB CN1CV 303B 375B			R	D	B	F	T	G	R	050			1792458 5499482				
1N/967/15.353		40S HOKIO BEACH ROAD	2750351	25/01/2007	Thu	1239	JA TN1C 308B 387B 922			R	D	O	F	D	N	C	070			1792439 5499447				
1N/967/15.393		80S HOKIO BEACH ROAD	2850008	03/01/2008	Thu	0840	CC CN1 410A			P	R	D	O	F	N	P	070			1792413 5499417				
1N/967/15.413		100S HOKIO BEACH ROAD	2852281	14/05/2008	Wed	1130	AC VN1C 372B			R	D	B	F	N	C	070				1792400 5499401				
1N/967/15.413		100S HOKIO BEACH ROAD	2752267	09/05/2007	Wed	0900	GD CS14 331A 351A 927			R	D	O	F	D	N	C	070				1792400 5499401			
1N/967/15.463		150S HOKIO BEACH ROAD	2951367	03/03/2009	Tue	0700	GD CS14 181A 387A 193B 928			R	D	O	F	D	N	P	050				1792368 5499363			
1N/967/15.463		150S HOKIO BEACH ROAD	2852165	06/05/2008	Tue	1025	FD 4N1C 181A			R	D	B	F	N	C	070					1792368 5499363			
1N/967/15.613		300S HOKIO BEACH ROAD	2913157	25/10/2009	Sun	1125	CB CN1 129A 501A			P	R	D	B	F	N	L	070	1			1792271 5499248			
1N/967/15.713		400S HOKIO BEACH ROAD	2651317	19/04/2006	Wed	0540	EE TN1C 358B 374B			Q	R	D	DN	F	N	C	070				1792207 5499172			
1N/967/15.759	I	TARARUA ROAD RAILWAY CROS	2850515	16/02/2008	Sat	0839	FA CN1C 331A			R	W	O	F	T	N	C	070				1792178 5499137			
1N/967/15.813		500S HOKIO BEACH ROAD	2812365	04/07/2008	Fri	2120	MC MS1C 372B			R	W	DO	L	N	L	070	1				1792143 5499095			
1N/967/15.813		500S HOKIO BEACH ROAD	2654816	09/09/2006	Sat	1120	MC VS1C 372B			R	D	B	F	N	P	070					1792143 5499095			
1N/967/16.163		850S HOKIO BEACH ROAD	2953152	01/07/2009	Wed	2225	EC CS1C 370A 341B			D	R	D	DN	F	N	C	100				1791923 5498822			
1N/967/16.259		500S TARARUA ROAD RAILWAY CROS	2954135	06/08/2009	Thu	1402	LB CN1C 303B 375B 920			R	D	B	F	D	N	C	070				1791863 5498749			
1N/967/16.378		300N BOULTON ROAD	2755801	30/09/2007	Sun	1739	GD 4S1C 181A 927			R	W	O	H	D	N	L	100				1791787 5498656			
1N/967/16.378		300N BOULTON ROAD	2611976	20/05/2006	Sat	1254	CB TN14 410A			FMP	R	D	B	F	N	C	100	1			1791787 5498656			
1N/967/16.416		1000N SH 57	2611905	23/04/2006	Sun	0226	CB VN1 102A 514A 631A			P	R	D	DO	F	N	C	100	1			1791763 5498627			
1N/967/16.528		150N BOULTON ROAD	2851732	24/03/2008	Mon	1502	FD CS1C4 331A			R	D	B	F	N	L	100					1791691 5498541			
1N/967/16.678	I	BOULTON ROAD	2656831	26/11/2006	Sun	1800	GC CS1C 132A 171B 193B 372B			R	W	O	L	T	N	L	100				1791595 5498425			
1N/967/17.021		400N SH 57	2951868	13/04/2009	Mon	1605	FD CS1VV 331A			R	D	B	F	N	C	100					1791375 5498163			
1N/967/17.141		280N KIMBERLEY ROAD	2813738	20/12/2008	Sat	1454	MC CN1C 381B			R	W	O	H	N	C	100	1				1791299 5498071			
1N/967/17.321		100N KIMBERLEY ROAD	2713264	08/10/2007	Mon	1410	GC CS1P 174B 372B 927			R	W	O	L	D	N	L	100	1				1791178 5497937		
1N/967/17.321		100N KIMBERLEY ROAD	201012910	23/09/2010	Thu	1230	QG TN1T 682A			DF	R	D	B	F	N	C	100	1				1791178 5497937		
1N/967/17.321		100N SH 57	201050945	13/03/2010	Sat	2109	EA CN1C 352A 441B 443B			M	E	D	DO	F	N	L	100					1791178 5497937		
1N/967/17.321		100N SH 57	2851964	27/04/2008	Sun	1840	FD CS1CCV 331A 351A 181D			R	W	DN	H	N	C	100						1791178 5497937		
1N/967/17.361		60N SH 57	201013627	25/12/2010	Sat	1315	CC CS1 103A			F	R	D	B	F	N	L	100	1				1791151 5497908		
1N/967/17.371		50N KIMBERLEY ROAD	2650229	19/01/2006	Thu	1300	LB 4N1V 303B 375B 921			R	D	O	F	D	N	L	100					1791145 5497900		
1N/967/17.401		20N SH 57 KIMBERLEY	2857229	30/12/2008	Tue	1157	CB CN1 130A 354A			P	R	W	O	F	N	C	100					1791124 5497878		
1N/985/0	I	KIMBERLEY ROAD	2912494	30/07/2009	Thu	1150	CB CN1 350A 363A 902			FS	R	D	B	F	T	G	C	100	1				1791111 5497863	
1N/985/0	I	KIMBERLEY ROAD	2750267	02/02/2007	Fri	1940	DA 4N1 501A			FS	R	D	B	F	T	S	C	100					1791111 5497863	
1N/985/0	I	KIMBERLEY ROAD	2652794	17/06/2006	Sat	1700	JA CS1C 302B 375B			R	D	TF	F	T	G	R	100						1791111 5497863	
1N/985/0	I	KIMBERLEY ROAD	2613395	15/12/2006	Fri	0756	CB CN1 410A			FPS	R	D	B	F	T	G	L	100	1				1791111 5497863	
1N/985/0	I	KIMBERLEY ROAD	201011586	02/04/2010	Fri	1010	LB CS1C 303B 382B 404B			R	D	O	F	T	G	R	100	5					1791111 5497863	
1N/985/0	I	KIMBERLEY ROAD	201055314	14/10/2010	Thu	1620	CB CN1 350A 403A			FPS	R	D	B	F	T	G	R	100						1791111 5497863
1N/985/0	I	KIMBERLY ROAD	201056647	08/10/2010	Fri	1730	JA 4S1C 670A 302B 375B			R	D	O	F	T	G	C	100							1791111 5497863
1N/985/0	I	KIMBERLY ROAD	2950638	22/02/2009	Sun	1630	LB TS1C 303B 386B			R	D	B	F	T	S	R	100							1791111 5497863

First Street	D I R	Second street or landmark	Crash Number	Date	Day	Time	Factors and Roles	O B J E C T S	C U R S E	W E I G H T	L E V E L	W I N D O W S	J O I N T S	C O N T R I B U T I O N	M O D E S	S E V E R I T Y	Total Inj	P E R C E N T I A L	C O O R D I N A T E S	Map C o o r d i n a t e s	
Distance				DD/MM/YYYY	DDD	HHMM	T 1 234														
1N/985/2.158		2000N KUKU BEACH ROAD	2955583	17/10/2009	Sat	2125	EC CS1 370A 910	W	E	W	DN	L	N	C	100				1790074	5496020	
1N/985/2.235		400S MUHUNOA WEST ROAD	2757739	19/10/2007	Fri	2130	AC CN1T 386A		R	D	DO	F	N	C	100				1790037	5495953	
1N/985/2.255		A BISHOPS ROAD	2654976	24/09/2006	Sun	2025	BB CN1C 101A 124A	T	M	W	DO	L	T	S	C	100			1790024	5495937	
1N/985/2.291		I BISHOPS ROAD	2754608	28/05/2007	Mon	1708	JA CS1C 301B 377B 830		E	D	TF	F	T	S	C	100			1790002	5495909	
1N/985/2.335		500S MUHUNOA WEST ROAD	2611917	27/05/2006	Sat	1250	FD CN1CCC 331A 181B 181C		R	W	O	H	N	L	100	1	2		1789971	5495878	
1N/985/2.385		550S MUHUNOA EAST ROAD	2757446	15/09/2007	Sat	1908	EC CN1C 370A 912	WW	E	W	DN	L	N	L	100				1789934	5495844	
1N/985/2.628		I PARAKAWAU ROAD	201054959	27/08/2010	Fri	1140	AC CS1T 137A 372A		R	W	O	L	T	N	L	100			1789747	5495682	
1N/985/2.732		100S PARAKAWAU ROAD	2652386	20/05/2006	Sat	1135	FD CN1VCV 181A		R	D	B	F	N	L	100				1789666	5495625	
1N/985/2.828		200S PARAKAWAU ROAD	201054618	04/09/2010	Sat	0509	EA TW1T 129A 605B	M	R	D	DN	F	N	C	100				1789584	5495567	
1N/985/2.833		200S PARAKAWAU ROAD	201052405	06/05/2010	Thu	1157	FD CS1CCV 182A 191A 500A		R	D	O	F	N	C	100				1789584	5495567	
1N/985/2.998		1160N KUKU BEACH ROAD	2950926	27/03/2009	Fri	1300	BC 4S1V 129A		E	D	O	F	N	C	100				1789463	5495456	
1N/985/3.058		A OHAU RIV BR	201011358	02/03/2010	Tue	2352	DB 4S1 102A 109A 410A	B	M	D	DN	F	N	C	100	1			1789428	5495407	
1N/985/3.058		A OHAU RIV BR	2955340	15/10/2009	Thu	0830	QO 4S1C 668A	D	E	D	B	F	N	C	100				1789428	5495407	
1N/985/3.058		A OHAU RIV BR	2954979	07/08/2009	Fri	1755	QG ON1C 660A 812		M	D	TN	F	N	C	100				1789428	5495407	
1N/985/3.058		A OHAU RIV BR	2854541	20/08/2008	Wed	1844	DB CS1 129A 351A 402A	B	E	D	DN	F	N	C	100				1789428	5495407	
1N/985/3.108		50S OHAU RIV BR	2850354	08/02/2008	Fri	1720	CC VS1V 136A 631A 137B		R	D	B	F	N	L	100				1789404	5495363	
1N/985/3.265		A OHAU RLY OBR	2950643	20/02/2009	Fri	1035	DB CS1 132A 181A	B	E	W	O	L	N	C	100				1789365	5495212	
1N/985/3.486		800N KUKU EAST ROAD	2755497	26/09/2007	Wed	1539	FD CN1TC 181A 927		R	D	B	F	D	N	C	100				1789351	5494991
1N/985/3.658		500N KUKU BEACH ROAD	2950637	20/02/2009	Fri	1052	FD CN1VC 331A 353A 901		R	W	O	H	N	L	100				1789341	5494820	
1N/985/3.678		480N KUKU BEACH ROAD	2650523	29/01/2006	Sun	1700	GD CN1CC 331A 929		R	D	B	F	D	N	L	100				1789339	5494800
1N/985/3.954		200N KUKU BEACH ROAD	201056806	18/12/2010	Sat	2330	CB 4S1 101A	F	R	D	DO	F	N	L	100				1789321	5494520	
1N/985/3.958		200N KUKU BEACH ROAD	201011718	05/04/2010	Mon	1620	BO CN1M 205A		R	D	B	F	N	C	100	1			1789321	5494520	
1N/985/4.158		I KUKU BEACH ROAD	2812206	07/06/2008	Sat	1213	JA CN1C 302B 375B		R	W	O	L	T	G	C	100	2			1789307	5494321
1N/985/4.158		I KUKU BEACH ROAD	2654127	14/07/2006	Fri	1443	DA CS1 111A 131A 430A	P	R	D	O	F	T	G	C	100				1789307	5494321
1N/985/4.158		I KUKU BEACH ROAD	2612268	16/06/2006	Fri	0908	JA CN1C 302B 352B 375B	P	R	W	O	L	T	G	P	100	1			1789307	5494321
1N/985/4.208		50S KUKU BEACH ROAD	2856441	06/12/2008	Sat	1228	EC CN1C 370A 911 929	WW	R	D	B	F	D	N	C	100				1789303	5494271
1N/985/4.282		I KUKU EAST ROAD	2950252	25/01/2009	Sun	1130	CA CN1 130A 351A	F	R	D	B	F	T	N	C	100				1789298	5494193
1N/985/4.286		I KUKU EAST ROAD	2754157	20/07/2007	Fri	1930	EC VS1 370A 911	W	R	D	DO	F	X	N	L	100				1789298	5494193
1N/985/4.332		50S KUKU EAST ROAD	2851657	13/04/2008	Sun	1300	CB VS1 132A 330A 912	B	R	D	B	F	N	C	100				1789295	5494143	
1N/985/4.382		100S KUKU EAST ROAD	2952862	19/06/2009	Fri	1920	FD TN1V 101A 331A		E	D	DN	F	N	L	100				1789292	5494093	
1N/985/4.482		200S KUKU EAST ROAD	2952901	20/06/2009	Sat	1141	AF TN1 129A	F	R	D	O	F	N	C	100				1789287	5493993	
1N/985/4.522		240S KUKU EAST ROAD	2711035	21/01/2007	Sun	1727	FD CS1CCC 331A 353A		R	W	O	L	N	C	100	1			1789284	5493953	
1N/985/4.554		400S KUKU BEACH ROAD	2855127	30/09/2008	Tue	0925	GE CN1O 155A 160A 333A 817	F	E	W	O	F	N	L	100				1789283	5493921	
1N/985/4.654		500S KUKU BEACH ROAD	2950250	26/01/2009	Mon	2125	DB CN1 911	TW	E	D	DN	F	N	C	100				1789270	5493822	
1N/985/5.154		1000S KUKU BEACH ROAD	2650134	06/01/2006	Fri	1430	FD CS1C 181A 330A		R	D	B	F	N	L	100				1788989	5493414	
1N/985/5.154		1000S KUKU BEACH ROAD	201055089	08/10/2010	Fri	2005	EC CN1 912	W	E	D	DO	F	N	L	100				1788989	5493414	
1N/985/5.582		1300S KUKU EAST ROAD	2754962	27/07/2007	Fri	0515	MO TS1 129A 603A	FV	R	D	DN	F	N	L	100				1788720	5493081	

First Street	D I R	Second street or landmark	Crash Number	Date	Day	Time	Factors and Roles	O B J E C T S	C U R S E	W E I G H T	L E V E L	W I D T H	J O I N T S	C O N T A C T	M O D E L	S E R I E S	Total Inj	P E R S O N S	C O U N T Y	Map C O O R D I N A T E S	
Distance				DD/MM/YYYY	DDD	HHMM	T 1 234	T	S	R	L	T	T	R	N	E		E			
1N/985/5.597		1450N WHAKAHO ROAD	201056121	11/12/2010	Sat	1340	AD CN1 132A 137A 181A			R	D	B	F	N	C	100				1788710 5493070	
1N/985/5.647		1400N WHAKAHO ROAD	201051821	30/04/2010	Fri	1626	GC TN1C 181A 171B 404B 801 927			R	W	O	H	D	N	L	100			1788679 5493031	
1N/985/5.902		1620S KUKU EAST ROAD	2654743	14/09/2006	Thu	0852	GD TS1C 137A 363A 902 920			R	D	B	F	D	N	L	100			1788518 5492833	
1N/985/6.037		1010N WHAKAHO ROAD	2853313	02/07/2008	Wed	1930	GC TN1C 160A 174B 372B 404B 926			R	D	DO	F	D	N	C	100			1788433 5492728	
1N/985/6.116		2000N WAIKAWA BEACH ROAD	2754752	28/08/2007	Tue	2202	DA TN1C 137A 121B			B	S	D	DN	F	N	L	100			1788383 5492666	
1N/985/6.247		800N WHAKAHO ROAD	2955176	10/10/2009	Sat	0040	EC TS1 370A 821			TX	R	D	DN	F	N	C	100			1788305 5492562	
1N/985/6.351		A WAIKAWA BR	201054892	24/08/2010	Tue	1700	QG VN14 682A			D	E	D	B	F	N	C	100			1788248 5492475	
1N/985/6.447		600N WHAKAHO ROAD	2656939	28/12/2006	Thu	1008	CC CN1 130A			V	R	D	O	F	N	C	100			1788185 5492403	
1N/985/6.551		200S WAIKAWA BR	2810073	26/11/2008	Wed	1154	DA CS1 106A 359A			T	E	W	O	L	N	C	100	1		1788102 5492340	
1N/985/6.627		420N WHAKAHO ROAD	2813001	10/09/2008	Wed	1920	BC CS1C 121A 404A				M	D	DN	F	N	L	100	1		1788038 5492300	
1N/985/6.747		300N WHAKAHO ROAD	2613776	06/11/2006	Mon	0817	BF CS1CC 136A 631A 197C			BGB	M	W	O	L	N	C	100	1	3	1787930 5492247	
1N/985/6.822		50N MANAKAU N RLY OBR	201056440	13/12/2010	Mon	1452	FD CN1C 181A 191B				E	D	B	F	N	L	100			1787878 5492194	
1N/985/6.847		200N WHAKAHO ROAD	2652639	11/06/2006	Sun	2240	BA VS1T 120A				R	D	DN	F	N	C	100			1787861 5492176	
1N/985/6.847		200N WHAKAHO ROAD	2850494	10/02/2008	Sun	1912	DA TN1 130A			EFS	M	W	O	H	N	C	100			1787861 5492176	
1N/985/6.872		A MANAKAU N RLY OBR	201054370	11/09/2010	Sat	0030	DB CS1 103A 110A 402A			B	E	W	DN	L	N	C	100			1787844 5492157	
1N/985/6.897		150N WHAKAHO ROAD	2911919	09/05/2009	Sat	2040	DA CS1 104A 111A			T	M	W	DN	H	N	C	100	1		1787827 5492139	
1N/985/6.947		100N WHAKAHO ROAD	2850333	12/02/2008	Tue	0730	FD 4S1CV 181A				M	W	O	F	N	L	100			1787794 5492102	
1N/985/6.967		80N WHAKAHO ROAD	201013266	06/11/2010	Sat	0422	DB CS1 102A 111A 402A			PT	M	D	DN	F	N	L	100	1		1787781 5492086	
1N/985/6.977		70N WHAKAHO ROAD	2710010	23/01/2007	Tue	1615	BF CN1T 106A 130A 359A 402A			G	M	W	O	L	N	L	100	2		1787775 5492078	
1N/985/6.997		50N WHAKAHO ROAD	2912061	22/05/2009	Fri	1003	QG TS1CCC 191A 170D				M	W	O	L	N	L	100	1		1787768 5492060	
1N/985/7.017		30N WHAKAHO ROAD	201012464	20/06/2010	Sun	1600	DA CN1 403A 801			B	M	W	O	F	N	L	100	1		1787761 5492041	
1N/985/7.027		20N WHAKAHO ROAD	2656321	05/12/2006	Tue	0515	DA TN1 137A			B	M	D	TF	F	N	C	100			1787757 5492032	
1N/985/7.047		I WHAKAHO ROAD	2655714	23/10/2006	Mon	1435	GD CS1C 378A 442B 831				M	W	O	L	T	N	L	100			1787750 5492013
1N/985/7.047		I WHAKAHO ROAD	2713763	28/11/2007	Wed	0810	GC CS14 372B				M	D	B	F	T	S	C	100	1		1787750 5492013
1N/985/7.076		400N NORTH MANAKAU ROAD	2955196	05/10/2009	Mon	1059	FD CS1CCC 331A 927				R	D	O	F	D	N	L	100			1787740 5491988
1N/985/7.079		30S WHAKAHO ROAD	2911117	04/02/2009	Wed	2048	DB CS1 111A 632A 662A			FT	E	W	TN	L	N	L	100	1		1787739 5491985	
1N/985/7.247		200S WHAKAHO ROAD	201056294	21/12/2010	Tue	1618	FD VN1V 181A 197B				R	W	O	L	N	C	100			1787678 5491827	
1N/985/7.274		200N NORTH MANAKAU ROAD	201013630	28/07/2010	Wed	1731	CC 4N1 136A 622A			FP	R	D	DN	F	N	L	100	1	1	1787668 5491802	
1N/985/7.524		50S NORTH MANAKAU ROAD	201012873	22/09/2010	Wed	1950	CC VS1 102A 130A			FPV	R	D	DO	F	N	L	100	1		1787577 5491568	
1N/985/7.616		500N WAIKAWA BEACH ROAD	2611761	18/04/2006	Tue	1745	FD CS1C 331A				R	W	O	L	N	C	100	1		1787544 5491482	
1N/985/7.816		300N WAIKAWA BEACH ROAD	201056699	30/11/2010	Tue	0755	AC TS1T 372A			CFZ	R	D	O	F	N	L	100			1787471 5491296	
1N/985/7.846		270N WAIKAWA BEACH ROAD	2954417	21/08/2009	Fri	0850	FA 4S1CT 197A 191B 155C				R	D	O	F	N	L	100			1787460 5491268	
1N/985/7.974		500S NORTH MANAKAU ROAD	2853297	28/06/2008	Sat	0410	CB CN1 402A 410A			F	R	W	DN	L	N	C	100			1787414 5491149	
1N/985/8.066		50N WAIKAWA BEACH ROAD	2953875	31/07/2009	Fri	1701	FD CN1C 197A 331A 358A				R	D	TF	F	N	C	100			1787380 5491063	
1N/985/8.101		15N WAIKAWA BEACH ROAD	2750867	04/03/2007	Sun	1919	EA CN1C 129A 358A			FMP	R	D	B	F	N	C	100			1787368 5491030	
1N/985/8.116		I WAIKAWA BEACH ROAD	2953284	09/04/2009	Thu	1100	FD CN1CC 181A 191C				R	D	O	F	T	N	C	100			1787362 5491016
1N/985/8.196		80S WAIKAWA BEACH ROAD	2711969	24/03/2007	Sat	1653	AD CS1TT 134A 151A 153A				R	D	B	F	N	C	100	1		1787332 5490942	

First Street	D I R	Second street or landmark	Crash Number	Date DD/MM/YYYY	Day	Time DDD HHMM	Factors and Roles M D V R M VN VVV T 1 234	O B J E C T S	C U R S E	W E I G H T	L E V E L	W I D T H	J O I N T	C O N T A I N E R	M O D E L	S E A T B E L T	Total Inj	P E R S O N S	C O U N T Y	Map C O O R D I N A T E S
1N/985/8.39		100N MOKENA KOHERE ST	2712650	27/07/2007	Fri	1124	MC VS1C 372B										1			1787260 5490763
1N/985/8.41		80N MOKENA KOHERE ST	2712706	01/07/2007	Sun	1145	GC CS1C 351B 370B 640B 921										2			1787252 5490744
1N/985/8.49		I MOKENA KOHERE ST	201051654	11/04/2010	Sun	1650	JA CS14 301B 375B 507B													1787223 5490670
1N/985/8.49		I MOKENA KOHERE ST	2856293	25/11/2008	Tue	0435	CB CS1 129A 410A	KP												1787223 5490670
1N/985/8.633		140S MOKENA KOHERE ST	2952904	23/05/2009	Sat	1602	BA TS1C 412A 137B 197B	R												1787171 5490540
1N/985/8.74		250S MOKENA KOHERE ST	201056722	24/12/2010	Fri	1420	JA CN14 308B 382B 921													1787131 5490438
1N/985/8.769		650S WAIKAWA BEACH ROAD	201050628	07/02/2010	Sun	1538	GC CS14 372B 921													1787121 5490412
1N/985/8.777		500N GLEESON ROAD	201056927	08/12/2010	Wed	0720	QG VS1 665A	FS												1787117 5490403
1N/985/8.779		500N GLEESON ROAD	2851946	27/04/2008	Sun	1530	MB MN14 103B 372B 929													1787117 5490403
1N/985/8.973		I MANAKAU RAIL UNDERPASS	2713513	12/10/2007	Fri	2330	DB CS1 103A 111A 692A	CP									1			1787046 5490222
1N/985/8.979		300N GLEESON ROAD	2753755	08/07/2007	Sun	1800	FD CS1C 331A													1787044 5490217
1N/985/9.073		100S MANAKAU RAIL UNDERPASS	2950036	03/01/2009	Sat	1508	FD CS1C 181A													1787010 5490129
1N/985/9.079		200N GLEESON ROAD	2757153	16/12/2007	Sun	1600	QG TS1C 682A	D												1787008 5490124
1N/985/9.08		200N GLEESON ROAD	201052188	24/05/2010	Mon	1910	CA CS1 135A 339A 817	V												1787008 5490124
1N/985/9.179		100N GLEESON ROAD	2912041	05/05/2009	Tue	1025	CB CN1 501A	F									1			1786971 5490031
1N/985/9.277		I GLEESON ROAD	2813704	06/12/2008	Sat	0745	EC MN1T 370A 682B 804	D									1			1786935 5489938
1N/985/9.277		I GLEESON ROAD	2710094	09/11/2007	Fri	1245	LB CN1C 303B										1 2 1			1786935 5489938
1N/985/9.279		I GLEESON ROAD	2651289	21/03/2006	Tue	1436	EO TS1T 129A	Q												1786934 5489937
1N/985/9.477		200S GLEESON ROAD	2851264	27/03/2008	Thu	1225	GO CS1C 145B													1786890 5489745
1N/985/9.693		700N SOUTH MANAKAU ROAD	2754150	02/07/2007	Mon	0655	DA VS1 135A 137A 801													1786893 5489531
1N/985/9.877		600S GLEESON ROAD	2611178	29/01/2006	Sun	1300	GC CS1C 300B 372B 927										1 2			1786797 5489377
1N/985/9.893		500N SOUTH MANAKAU ROAD	201012467	25/07/2010	Sun	1805	BB 4S1CC 104A 504A										2			1786786 5489366
1N/985/10.05		A WAIAUTI STM BR	201011409	20/03/2010	Sat	2309	BF CW14 129A 353A 817	G									2			1786647 5489295
1N/985/10.093		300N SOUTH MANAKAU ROAD	2757118	02/09/2007	Sun	0307	DA CN1 135A 801	F												1786610 5489273
1N/985/10.193		200N SOUTH MANAKAU ROAD	2955072	10/10/2009	Sat	0315	QG CS1 666A	V												1786537 5489205
1N/985/10.293		100N SOUTH MANAKAU ROAD	2757548	15/12/2007	Sat	0246	EC CN1 370A 911	W												1786463 5489137
1N/985/10.363		30N SOUTH MANAKAU ROAD	2750158	21/01/2007	Sun	1925	CB CN1 132A 137A 350A	PS												1786412 5489090
1N/985/10.393		I SOUTH MANAKAU ROAD	2753053	10/06/2007	Sun	0340	CC CS1 411A 412A	F												1786390 5489069
1N/985/10.393		I SOUTH MANAKAU ROAD	2811096	24/01/2008	Thu	0120	KA TS1C 103B 301B 375B										1			1786390 5489069
1N/985/10.397		I SOUTH MANAKAU ROAD	2813271	27/10/2008	Mon	1509	GC CN1C 129A 350A	F									1			1786390 5489070
1N/985/10.427		30S SOUTH MANAKAU ROAD	2711782	21/01/2007	Sun	2130	FF CN1T 117A 132A										1			1786368 5489049
1N/985/10.447		50S SOUTH MANAKAU ROAD	201050485	16/02/2010	Tue	1150	AC CS1T 184A													1786353 5489036
1N/985/10.597		200S SOUTH MANAKAU ROAD	2756548	11/11/2007	Sun	1229	QG CN1C 668A	D												1786243 5488934
1N/985/10.598		200S SOUTH MANAKAU ROAD	201053518	31/07/2010	Sat	0600	CB CS1 412A	EF												1786243 5488934
1N/985/10.637		280N ATKINS ROAD	2754782	19/08/2007	Sun	1750	FD CS14CC 181A 191B													1786214 5488907
1N/985/10.697		300S SOUTH MANAKAU ROAD	2713364	21/09/2007	Fri	1410	AD CN1 130A	F									1			1786170 5488865
1N/985/10.917		I ATKINS ROAD	2711891	05/04/2007	Thu	0759	JA TN1C 302B										1 1			1786020 5488705

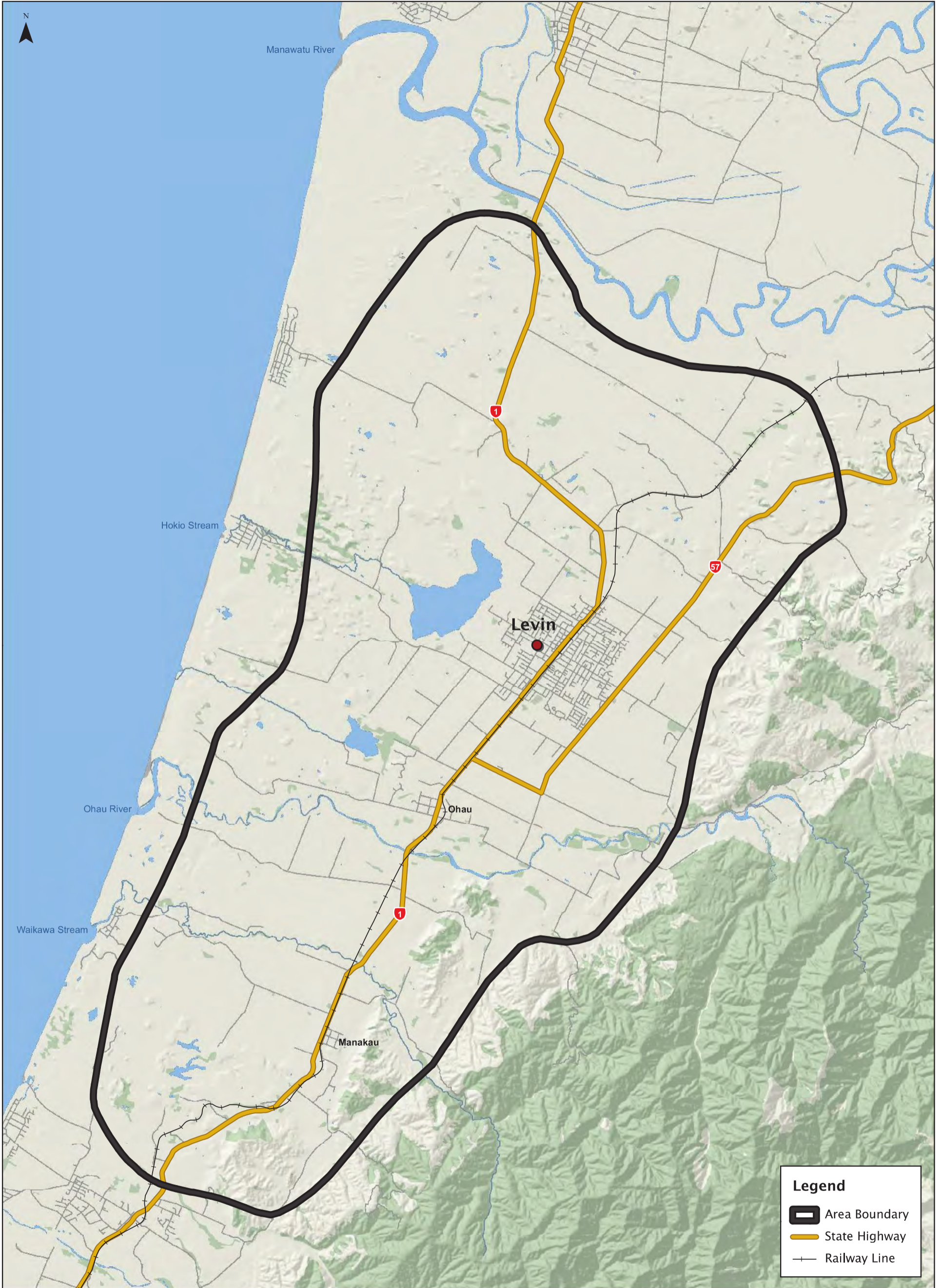
First Street	D I R	Second street or landmark	Crash Number	Date	Day	Time	Factors and Roles	O B J E C T S	C U R S E	W E I G H T	L E V E L	W I N D O W S	J O I N T S	C O N T R O L	M O D E L	S E A T B E L T	Total Inj	P E R S O N S	C O U N T Y	Map C o o r d i n a t e s		
Distance				DD/MM/YYYY	DDD	HHMM	T 1 234															
1N/985/10.947		30S ATKINS ROAD	2850104	20/01/2008	Sun	2025	CB CS1 410A	FT	R	D	TN	F	N	C	100					1785999	5488684	
1N/995/0.262		280S PUKEHOU RLY OBR	2852676	11/05/2008	Sun	0730	DA 4N1 132A 410A		E	W	B	L	N	C	100					1785598	5488466	
1N/995/0.359		600S ATKINS ROAD	201052812	20/06/2010	Sun	1510	FF CS1VC 181A		R	W	O	H	N	L	100					1785501	5488460	
1N/995/0.939		310N FOREST LAKES ROAD	201011390	01/03/2010	Mon	1300	DA MN1C 668A	D	E	D	B	F	N	L	100		1			1784937	5488346	
1N/995/1.229		20N FOREST LAKES ROAD	2952475	07/04/2009	Tue	1830	CB CS1 130A 402A	C	R	D	DN	F	T	S	L	100				1784687	5488201	
1N/995/1.249		I FOREST LAKES ROAD	2912802	30/08/2009	Sun	1721	GD CS14C 331A 181C		R	W	O	H	T	N	L	100		1	2		1784670	5488189
1N/995/1.249		I FOREST LAKES ROAD	2856215	20/11/2008	Thu	0738	JA CN1C 301B		R	D	B	F	T	S	L	100				1784670	5488189	
1N/995/1.249		I FOREST LAKES ROAD	2911791	03/04/2009	Fri	1950	GD CS1VCC 331A 181C		R	D	TO	F	T	S	L	100		2	1		1784670	5488189
1N/995/1.249		I FOREST LAKES ROAD	2911295	25/02/2009	Wed	0640	DC CE24 113A 321A 402A	E	R	D	O	F	T	S	C	100		1		1784670	5488189	
1N/995/1.249		I FOREST LAKES ROAD	201050830	05/03/2010	Fri	1600	GE VS1C 197A 193B		M	D	B	F	T	N	L	100				1784670	5488189	
1N/995/1.249		I FOREST LAKES ROAD	2611420	19/03/2006	Sun	1410	LB CN1C4 103B 303B		R	W	O	F	T	G	L	100		2		1784670	5488189	
1N/995/1.249		I FOREST LAKES ROAD	2912263	26/06/2009	Fri	1755	GD 4S1C4B 331A 904		R	W	DO	M	T	N	L	100		1		1784670	5488189	
1N/995/1.309		60S FOREST LAKES ROAD	2854080	04/08/2008	Mon	0755	AD CN1VT 363A 372A 671A 902	T	R	W	B	F	N	L	100				1784621	5488155		
1N/995/1.549		300S FOREST LAKES ROAD	2652060	18/04/2006	Tue	1430	FD CS1CCC 181A		E	W	O	H	N	L	100				1784425	5488017		
1N/995/1.649		400S FOREST LAKES ROAD	2656212	03/12/2006	Sun	1635	FD CN1CCC 181A 191D 920		R	D	O	F	D	N	L	100				1784343	5487960	
1N/995/1.899		650S FOREST LAKES ROAD	2911007	02/01/2009	Fri	0715	DB CN1 410A	F	E	D	O	F	N	L	100		2			1784136	5487820	
1N/995/1.949		700S FOREST LAKES ROAD	2610033	26/04/2006	Wed	1947	AF CN14CC 381A 134B 137B 920		E	W	DN	L	D	N	C	100		1	2		1784091	5487797
1N/995/2.203		1100N TAYLORS ROAD	201012491	11/07/2010	Sun	1730	AF VS1V 132A 155A 386A	C	R	D	DN	F	N	L	100		1			1783852	5487716	
1N/995/2.627		50W LAWLORS ROAD	2652561	18/04/2006	Tue	1630	AC CS1V 372A		R	D	B	F	N	C	100				1783457	5487560		
1N/995/2.803		500N TAYLORS ROAD	2611069	05/01/2006	Thu	1730	BF VS1C 132A 801	EF	E	W	O	L	N	L	100		1			1783298	5487486	
1N/995/2.903		400N TAYLORS ROAD	2812475	14/05/2008	Wed	0840	BF CS14 400A 410A	G	E	D	B	F	N	L	100		1			1783218	5487427	
1N/995/2.923		380N TAYLORS ROAD	2911753	26/04/2009	Sun	0500	DB VS1 134A 410A		E	D	DN	F	N	C	100		1			1783204	5487412	
1N/995/3.103		200N TAYLORS ROAD	2756543	20/10/2007	Sat	0955	DB CS1 137A 407A	F	E	W	O	L	N	L	100				1783105	5487262		
1N/995/3.203		100N TAYLORS ROAD	201051467	11/04/2010	Sun	1004	GB TE14 158B 387B 902 927		R	D	B	F	D	N	L	100				1783057	5487175	
1N/995/3.253		50N TAYLORS ROAD	2951665	14/01/2009	Wed	1532	CC 4N1 410A	F	R	D	TF	F	N	L	100				1783032	5487131		
1N/995/3.273		30N TAYLORS ROAD	2953567	12/07/2009	Sun	1640	FD CS1C 112A		R	D	B	F	N	C	100				1783022	5487114		
1N/995/3.283		20N TAYLORS ROAD	2756427	30/09/2007	Sun	1500	FD VN1CC 181A		R	D	O	F	N	L	100				1783018	5487105		
1N/995/3.303		I TAYLORS ROAD	2812784	10/08/2008	Sun	1610	GD CS1C 333A 363A 902		R	D	B	F	T	G	C	100		1	1		1783008	5487088
1N/995/3.303		I TAYLORS ROAD	2853253	02/05/2008	Fri	1040	QG CN1C 682A	D	R	D	O	F	T	G	L	100				1783008	5487088	
1N/995/3.403		100S TAYLORS ROAD	2714096	01/10/2007	Mon	0320	DB CN1 134A 402A 800	GV	M	W	DN	L	N	C	100		1			1782961	5487000	
1N/995/3.503		200S TAYLORS ROAD	2613427	19/11/2006	Sun	1140	DA CN1C 372A 501A		E	D	O	F	N	L	100		2			1782914	5486911	
1N/995/3.572		800N WAITOHU VALLEY ROAD	2953182	07/07/2009	Tue	0300	DA CN1 410A	G	E	D	DN	F	N	C	100				1782887	5486847		
1N/995/3.603		300S TAYLORS ROAD	2656712	27/12/2006	Wed	1639	FD CS1C 112A 331A 337A		R	W	O	L	N	L	100				1782881	5486817		
1N/995/4.072		300N WAITOHU VALLEY ROAD	2712441	18/06/2007	Mon	0810	BC VN1C 121A 410A		E	D	B	F	N	L	100		2			1782908	5486357	
1N/995/4.173		200N WAITOHU VALLEY ROAD	2851611	16/01/2008	Wed	1340	FD 4N1CC 181A		R	D	B	F	N	L	100				1782857	5486272		
1N/995/4.223		150N WAITOHU VALLEY ROAD	201051475	17/04/2010	Sat	1202	AB VN1V 110A 331A		E	D	B	F	N	L	100				1782824	5486234		
1N/995/4.363		10N WAITOHU VALLEY ROAD	2711002	03/01/2007	Wed	1614	FD CS1CC 331A 351A		R	D	B	F	T	N	050		1			1782732	5486130	

First Street	D I R	Second street or landmark	Crash Number	Date	Day	Time	Factors and Roles	O B J E C T S	C U R S E	W E I G H T	L E V E L	W I N D O W S	J O I N T S	C O N T R O L	M O D E L	S E A T B E L T	Total Inj	P E R S O N S	C O U N T Y	Map C O O R D I N A T E S
Distance				DD/MM/YYYY	DDD	HHMM	T 1 234	T	S	R	L	T	T	R	N	E				
1N/995/4.373	I	WAITOHU VALLEY ROAD	2655032	14/10/2006	Sat	1507	CB VN1 410A	P	R	D	O	F	T	N	L	050				1782725 5486122
1N/995/4.383	I	10S WAITOHU VALLEY ROAD	2711376	26/02/2007	Mon	0534	CB CN1 410A	P	R	D	DO	F	T	N	C	050	1			1782719 5486114
1N/995/4.423	I	50S WAITOHU VALLEY ROAD	2851090	29/02/2008	Fri	1720	FD CS1CCC 181A		R	D	B	F	N	C	050					1782693 5486084
57/0/0.1	I	100E SH 1N	2956812	17/10/2009	Sat	0512	CB TW1 129A 410A	V	R	D	DF	F	N	C	100					1791200 5497818
57/0/0.58	I	580E SH 1N	2952891	08/05/2009	Fri	1135	AO CW1C 357A 512A		R	W	O	H	N	L	060					1791631 5497607
57/0/0.873	I	TUI GLEN DRIVE	2712242	01/06/2007	Fri	1100	DA MW1 613A		R	D	O	F	T	G	L	100	1			1791894 5497479
57/0/1.66	I	430W ARAPAEPAE ROAD	2956816	24/12/2009	Thu	2130	EC CE1 914	W	R	D	DN	F	N	C	100					1792599 5497129
57/0/1.97	I	120W ARAPAEPAE ROAD	2853931	02/08/2008	Sat	1815	GE CE1V 160A 387A 929	V	R	W	DN	L	D	N	C	100				1792877 5496991
57/0/1.99	I	100W ARAPAEPAE ROAD	2651949	10/05/2006	Wed	1709	AC CW14 512A 514B 517B	V	R	D	O	F	N	R	100					1792895 5496983
57/0/2.083	I	ARAPAEPAE ROAD	2651986	10/05/2006	Wed	1406	LB TN2C 301A 375A		R	D	O	F	X	S	R	100				1792985 5496938
57/0/2.083	I	KIMBERLEY ROAD	2750969	10/03/2007	Sat	1450	JA CE2C 113A 302A		M	D	B	F	X	G	R	100				1792985 5496938
57/0/2.09	I	ARAPAEPAE ROAD	2653791	03/08/2006	Thu	1155	DB CE1 112A 132A	F	R	W	O	L	X	G	R	100				1792985 5496938
57/0/2.09	I	ARAPAEPAE ROAD	2753809	01/07/2007	Sun	1828	DB CW1 335A 400A	FT	R	W	O	L	X	G	C	100				1792985 5496938
57/0/2.09	I	KIMBERLEY ROAD	2950464	21/02/2009	Sat	1620	DB CE1V 111A		R	D	B	F	X	G	P	100				1792985 5496938
57/0/2.09	I	KIMBERLEY ROAD	2855058	15/07/2008	Tue	1622	DA CS1 111A	FS	R	D	B	F	X	S	P	100				1792985 5496938
57/0/2.09	I	KIMBERLEY ROAD	2813502	15/11/2008	Sat	0623	DA CS1 103A 132A 524A	V	R	D	DO	F	X	S	R	100	3			1792985 5496938
57/0/2.09	I	KIMBERLEY ROAD	2757451	09/12/2007	Sun	1541	DA CS1 111A 135A 402A 801	FP	R	W	O	H	X	N	R	100				1792985 5496938
57/0/2.09	I	KIMBERLEY ROAD	2751692	27/02/2007	Tue	0015	DA CW1 111A 135A 801	FGV	R	W	DO	L	X	G	C	100				1792985 5496938
57/0/2.09	I	KIMBERLEY ROAD	2711071	04/01/2007	Thu	1020	HA 4S1C 302B	S	S	D	B	F	X	G	C	100	2	1		1792985 5496938
57/0/2.09 KIMBERLEY	I	ARAPAEPAE ROAD	2611114	14/01/2006	Sat	0946	JA CE1T 113A 302A		R	W	O	F	X	G	R	050	1	3		1792985 5496938
57/0/2.29	I	200N KIMBERLEY ROAD	2952292	06/05/2009	Wed	0735	FA CS1C 101A 386A		R	W	O	H	N	C	100					1793049 5497128
57/0/2.623	I	850S TARARUA ROAD	2612976	30/09/2006	Sat	1848	BC CS1CC 332A 410A	PP	E	D	DN	F	N	C	100	2				1793175 5497434
57/0/3.468	I	TARARUA ROAD	2757117	13/12/2007	Thu	0300	KB TS1C 102B 321B 375B		R	D	DO	F	X	S	C	100				1793715 5498090
57/0/3.473	I	TARARUA ROAD	2813228	17/10/2008	Fri	1745	HA CW2C 301A 375A 501A		R	D	B	F	X	S	L	100	1			1793715 5498090
57/0/3.473	I	TARARUA ROAD	2754172	05/07/2007	Thu	1110	JA TN1C 301B 382B		R	W	B	F	X	S	C	100				1793715 5498090
57/0/3.473	I	TARARUA ROAD	2714104	02/12/2007	Sun	1900	AD CN1 103A 137A 532A	P	R	D	B	F	X	G	C	100	2			1793715 5498090
57/0/3.473	I	TARARUA ROAD	2650262	13/01/2006	Fri	0930	HA CN1CT 301B 375B 817		R	D	B	F	X	S	C	100				1793715 5498090
57/0/3.473	I	TARARUA ROAD	2754081	30/06/2007	Sat	1430	GD TN1C 181A 333A	F	R	D	B	F	X	S	R	100				1793715 5498090
57/0/4.541	I	530S MEADOWVALE DRIVE	201052782	15/06/2010	Tue	1507	GB CS1C4 157A 158A 387A 927	M	R	D	B	F	D	N	C	100				1794403 5498913
57/0/5.24	I	170N MEADOWVALE DRIVE	2753049	20/04/2007	Fri	2345	AD CN1 112A 402A 634A	FT	R	D	DO	F	N	C	100					1794848 5499452
57/0/5.581	I	QUEEN ST EAST	2811484	05/03/2008	Wed	1000	LB CS1C 303B		R	W	O	L	X	S	R	100	1			1795065 5499715
57/0/5.581	I	QUEEN ST EAST	2850657	20/02/2008	Wed	1703	HA CW2C 301A 382A		R	D	B	F	X	S	C	100				1795065 5499715
57/0/5.581	I	QUEEN ST EAST	2756831	02/12/2007	Sun	1225	CB CN1C 137A 303B	IS	R	D	B	F	X	G	R	100				1795065 5499715
57/0/5.581	I	QUEEN ST EAST	2652470	06/06/2006	Tue	0943	HA CN1C 301B 375B		R	D	O	F	X	S	R	100				1795065 5499715
57/0/5.581	I	QUEEN ST EAST	2912622	21/08/2009	Fri	1850	LB MN1C 303B 375B		R	D	DO	F	X	S	R	100	1			1795065 5499715
57/0/5.581	I	QUEEN ST EAST	2650816	05/02/2006	Sun	1615	LB CN1C 303B 382B		R	D	O	F	X	S	R	100				1795065 5499715
57/0/5.581	I	QUEEN ST EAST	2613226	21/10/2006	Sat	2253	HA CS1C 321B		R	W	DF	L	X	S	C	100	2	1		1795065 5499715

First Street	D I R	Second street or landmark	Crash Number	Date	Day	Time	Factors and Roles	O B J E C T S	C U R S E	W E I G H T	L E V E L	W I D T H	J O I N T S	C O N T A C T	M O D E L	S E R I E S	Total Inj	P E R S O N S	C O U N T Y	Map C o o r d i n a t e s	
Distance				DD/MM/YYYY	DDD	HHMM	T 1 234	T	S	R	L	T	T	R	N	E		E			
57/0/5.581	I	QUEEN ST EAST	2612370	19/07/2006	Wed	2004 LB 4N1C	303B			R	W	DO	L	X	S	R	100	1		1795065 5499715	
57/0/5.581	I	QUEEN ST EAST	2612093	24/05/2006	Wed	1340 FB CE1T	112A 331A			R	W	O	L	T	S	R	050	1		1795065 5499715	
57/0/5.581	I	QUEEN ST EAST	2611121	24/01/2006	Tue	1150 LB CS1C	303B 377B			R	D	B	F	X	S	R	100	1		1795065 5499715	
57/0/5.581	I	QUEEN ST EAST	2611105	10/01/2006	Tue	1350 JA VN1C	301B 375B			R	D	B	F	X	S	C	100	3		1795065 5499715	
57/0/5.581	I	QUEEN ST EAST	2655019	18/10/2006	Wed	1057 HA VS14	301B	F		R	D	B	F	X	S	C	100			1795065 5499715	
57/0/5.581	I	QUEEN ST EAST	2610105	19/12/2006	Tue	0700 GD TS1C	181A	F		R	D	B	F	X	S	P	070	1		1795065 5499715	
57/0/5.586	I	QUEEN ST EAST	201012530	27/07/2010	Tue	1541 HA CE2C	301A 375A			R	D	O	F	X	S	C	100	1		1795065 5499715	
57/0/5.641	I	SLIP ROAD	2656564	25/12/2006	Mon	1425 FA CW2C	181A 817			R	W	O	L	T	S	C	100			1795104 5499762	
57/0/5.781	200N	QUEEN ST EAST	2713323	21/10/2007	Sun	1545 CC MS1C	137A 160A 181A 144B 927			R	D	B	F	D	N	C	100	1		1795193 5499870	
57/0/5.786	200N	QUEEN ST EAST	2910001	01/01/2009	Thu	0130 PA CN1E	105B 702B 724B			R	D	DN	F	N	C	100	1	33		1795193 5499869	
57/0/5.931	350N	QUEEN ST EAST	2611232	10/02/2006	Fri	1515 KB CS1C	137A 308B 927	P		R	W	O	H	D	N	C	100	1		1795289 5499985	
57/0/6.381	800N	QUEEN ST EAST	2911595	13/04/2009	Mon	1730 MC CN1V	372B			R	D	TF	N	C	100	100	1			1795576 5500332	
57/0/6.411	830N	QUEEN ST EAST	2813065	23/08/2008	Sat	1600 FA 4N1C	331A	P		R	W	O	L	N	C	100	3			1795595 5500355	
57/0/6.638	300S	WAIHOU ROAD	201053517	25/07/2010	Sun	0650 GC CN1C	333A 174B 929	V		R	D	TN	F	D	N	C	100				1795740 5500528
57/0/7.037	100N	WAIHOU ROAD	2713345	02/09/2007	Sun	2100 CC 4S1	125A 350A 692A	FT		R	D	DN	F	N	C	100	1			1795995 5500837	
57/0/7.327	320S	ROSLYN ROAD	2912869	23/09/2009	Wed	1638 LB CS1C	303B 929			E	D	O	F	D	N	C	100	1			1796180 5501061
57/0/7.449	200S	WAIHOU ROAD	201012065	29/05/2010	Sat	0100 CB CN1	103A	V		R	D	DN	F	N	C	100	1			1796257 5501153	
57/0/7.547	100S	ROSLYN ROAD	2753287	14/06/2007	Thu	1800 CC VS1	136A 668A	F		R	D	DO	F	N	C	100	100			1796320 5501231	
57/0/7.557	90S	ROSLYN ROAD	2751596	10/04/2007	Tue	0930 CB 4S1	410A	FT		R	W	O	L	N	L	100	100			1796326 5501238	
57/0/7.581	2000N	QUEEN ST EAST	2656892	04/11/2006	Sat	1040 FA CS1C	181A 351A 191B			R	D	O	F	N	C	100	100			1796341 5501256	
57/0/8.23	50N	MCDONALD ROAD	2652207	20/05/2006	Sat	1500 MA TN1T	134B 407B	FV		R	D	B	F	N	C	100	100			1796754 5501750	
57/0/8.28	100N	MCDONALD ROAD	2813262	26/10/2008	Sun	1705 CB CN1	134A 358A 400A	FV		R	D	B	F	N	C	100	1			1796786 5501788	
57/0/8.44	260N	MCDONALD ROAD	2856102	18/11/2008	Tue	1040 CA VN1	680A	FV		R	W	O	L	N	C	100	100			1796889 5501911	
57/0/8.76	580N	MCDONALD ROAD	2613380	26/10/2006	Thu	0644 CC 4N1	125A 410A	FPV		R	W	TN	L	N	C	100	1			1797087 5502162	
57/0/8.81	300S	HEATHERLEA EAST ROAD	2811525	28/03/2008	Fri	2000 BA CS1V	103A 125A			R	D	DN	F	N	C	100	1			1797115 5502203	
57/0/8.94	170S	HEATHERLEA EAST ROAD	2651114	04/04/2006	Tue	0245 FA 4N1C	116A 116B 817			R	W	DN	L	N	N	100	100			1797188 5502311	
57/0/9.01	100S	HEATHERLEA EAST ROAD	2651724	11/04/2006	Tue	2028 CB CN1	116A 817			R	D	DN	F	N	N	100	100			1797227 5502369	
57/0/9.01	100S	HEATHERLEA EAST ROAD	2751870	26/03/2007	Mon	1530 LB CS1C	303B 929			R	D	B	F	D	N	C	100	100			1797227 5502369
57/0/9.129	25N	HEATHERLEA EAST ROAD	2652018	17/04/2006	Mon	1440 FD VN1C	331A 351A 817			R	D	O	F	N	N	100	100			1797297 5502473	
57/0/9.134	30N	HEATHERLEA EAST ROAD	2610045	04/06/2006	Sun	0516 CC CN1	103A 116A 135A 339A 817	EZ		R	D	DO	F	N	N	100	1	1		1797300 5502477	
57/0/9.134	30N	HEATHERLEA EAST ROAD	2652228	19/05/2006	Fri	2255 CB CN1	101A 116A 517A	GR		R	D	DN	F	N	C	100	100			1797300 5502477	
57/0/9.164	60N	HEATHERLEA EAST ROAD	2612110	03/06/2006	Sat	2040 BE CN1C	116A 337A 351A 817	BX		R	W	DN	F	N	N	100	2			1797316 5502502	
57/0/9.184	80N	HEATHERLEA EAST ROAD	2652690	03/06/2006	Sat	1730 EC TS1	817 824	R		R	W	DN	H	N	N	100	100			1797327 5502519	
57/0/9.254	150N	HEATHERLEA EAST ROAD	2855922	07/11/2008	Fri	1245 FA CS1C	500A			R	D	B	F	N	C	100	100			1797366 5502577	
57/0/9.43	320N	HEATHERLEA EAST ROAD	201012720	05/09/2010	Sun	1825 GC VN1S	105B 174B 534B			R	W	DO	H	N	C	100	1	49		1797461 5502718	
57/0/9.704	200S	TAVISTOCK ROAD	2813121	17/08/2008	Sun	1110 CC CN1EE4	110A 132A 803	Q		R	I	O	S	N	C	100	2	1	44		1797618 5502950
57/0/9.904	I	TAVISTOCK ROAD	2813770	24/12/2008	Wed	1645 LB 4N1C	426A 303B 375B			R	W	O	L	X	G	C	100	2			1797729 5503116

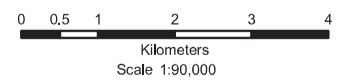
First Street	D I R	Second street or landmark	Crash Number	Date	Day	Time	Factors and Roles	O B J E C T S	C U R S E	W I T H	L E S S	W I T H	J U S T	C O N T	M I S T	S E R V I C E	Total Inj	P E R S O N S	C O U N T	Map C O O R D I N A T E S	
Distance				DD/MM/YYYY	DDD	HHMM	T 1 234	A I S I S I S	B I S I S I S	C E T E R S M	E T R S M	E T R S M	T R N	T R N	T R N	T R N	T R N	T R N	T R N	T R N	
57/0/9.935		25N TAVISTOCK ROAD	2753864	11/07/2007	Wed	1415	CB CN1 410A			V	R	D	O	F	N	C	100				1797743 5503137
57/0/10.01		100N TAVISTOCK ROAD	2653815	04/07/2006	Tue	1800	MO CS1 131A			V	R	W	DN	L	N	C	100				1797785 5503199
57/0/10.126		1000S POTTS ROAD	2812008	10/05/2008	Sat	0450	CB CS1 410A			F	R	D	DN	F	N	C	100	2			1797849 5503295
57/0/10.626		500S POTTS ROAD	2651808	11/02/2006	Sat	0130	CB CS1 103A 358A 524A			V	R	D	DN	F	N	C	100				1798129 5503710
57/0/10.726		400S POTTS ROAD	2753110	05/06/2007	Tue	1721	CC CN1C 112A 137A 372B			F	R	W	DN	L	N	C	100				1798185 5503793
57/0/10.826		300S POTTS ROAD	201011260	20/02/2010	Sat	1425	CB VS1 501A			V	R	D	O	F	N	C	100	2			1798240 5503876
57/0/11.026		100S POTTS ROAD	2912582	03/08/2009	Mon	1300	BE VS1C 410A				R	D	B	F	N	C	100	1			1798355 5504039
57/0/11.096		30S POTTS ROAD	2911312	06/03/2009	Fri	0345	CC CN1 112A 135A 801			C	R	W	DN	H	N	C	100	1			1798404 5504089
57/0/11.126		I POTTS ROAD	2650123	25/01/2006	Wed	0728	DA VN1 104A 134A 358A				E	D	B	F	T	S	C	100			1798426 5504109
57/0/11.126		I POTTS ROAD	201055386	29/10/2010	Fri	1322	DA CN1 111A 326A 357A 514A			K	E	D	B	F	T	N	L	100			1798426 5504109
57/0/11.626		500N POTTS ROAD	2855184	16/08/2008	Sat	0900	AD CN1 110A 135A 803			TV	M	I	O	H	N	C	100				1798872 5504332
57/0/11.856		730N POTTS ROAD	2913351	28/11/2009	Sat	1915	DB TS1 104A 111A 135A 801 929			F	E	W	DN	H	N	C	100	1			1799071 5504448
57/0/12.126		1000N POTTS ROAD	2710027	31/03/2007	Sat	0300	DB CN1 103A 131A 532A				E	W	DN	L	N	C	100	1			1799271 5504628
57/0/12.126		1000N POTTS ROAD	2657267	27/08/2006	Sun	1710	CB CN1 410A			FV	R	D	B	F	N	C	100				1799271 5504628
57/0/12.626		1500N POTTS ROAD	2752355	21/05/2007	Mon	1755	CB CN1 129A 134A 402A			V	R	D	DN	F	N	C	100				1799574 5505025
57/0/12.726		1600N POTTS ROAD	2613786	31/10/2006	Tue	1848	CC CS1 410A			FT	R	D	TN	F	N	C	100	1			1799641 5505100
57/0/12.756		1630N POTTS ROAD	2712186	04/04/2007	Wed	1153	DB CS1 136A 631A			PV	E	D	O	F	N	C	100	1			1799664 5505119
57/0/13.076		7490N QUEEN ST EAST	201056438	21/12/2010	Tue	1307	QG CN1 406A 665A			F	R	D	O	F	N	C	100				1799961 5505230
57/0/13.126		2000N POTTS ROAD	201053040	06/07/2010	Tue	1630	AO CW1C 357A 512A				R	D	O	F	N	C	100				1800009 5505241
57/0/13.126		2000N POTTS ROAD	2813847	30/12/2008	Tue	0500	CB CN1 410A			CF	R	W	DN	F	N	C	100	2			1800009 5505241
57/0/13.126		2000N POTTS ROAD	2850083	18/01/2008	Fri	1357	BF CS1V 131A			V	M	D	B	F	N	C	100				1800009 5505241
57/0/13.157		2000S TE ROHENGAROAD	2952088	02/05/2009	Sat	0610	EC CN1 915			W	E	D	DN	F	N	C	100				1800040 5505248
57/0/13.386		2260N POTTS ROAD	2910028	13/03/2009	Fri	1735	AD CN1 110A 130A 403A			FP	R	D	B	F	N	C	100	1	1		1800263 5505299
57/0/13.657		1500S TE ROHENGAROAD	2855970	19/11/2008	Wed	0851	CB CS1 510A			F	R	D	O	F	N	C	100				1800527 5505359
57/0/13.957		1200W TE ROHENGAROAD	201011022	07/01/2010	Thu	0700	BA CW1T 125A			PV	R	D	O	F	N	C	100	1	2		1800820 5505425
57/0/14.126		3000N POTTS ROAD	2813727	28/11/2008	Fri	1408	CB CN1 102A 129A			V	R	D	B	F	N	L	100	1			1800984 5505464
57/0/14.307		850W TE ROHENGAROAD	2711983	18/04/2007	Wed	1704	BF CE1CC 111A 131A 630A				M	D	O	F	N	C	100	4			1801163 5505489
57/0/14.857		300W TE ROHENGAROAD	2911986	21/07/2009	Tue	1855	PO CN1E 370A 105B 702B				R	D	DN	F	N	C	100	1	34		1801690 5505339
57/0/14.907		250W TE ROHENGAROAD	2811865	25/04/2008	Fri	0403	DB VW1 103A 129A 410A			FP	E	D	DN	F	N	C	100	1			1801738 5505323
57/0/15.35		200N TE ROHENGAROAD	2912761	30/08/2009	Sun	0515	BF CN1C 132A 137A 103B 205B			CC	E	D	DN	F	N	L	100	2			1802164 5505368
57/0/15.452		300N TE ROHENGAROAD	201051558	19/03/2010	Fri	2200	CB CN1 137A 801 915				R	W	DO	L	N	L	100				1802236 5505437
57/0/15.639		1200S HEIGHTS ROAD	2750221	06/01/2007	Sat	1051	CA 4N1 406A				R	D	B	F	N	C	100				1802315 5505607
57/0/15.839		1000S BUCKLEY ROAD	2613076	24/09/2006	Sun	1520	DB 4N1 688A				E	D	O	F	N	C	100	1			1802346 5505805
57/0/15.939		900S BUCKLEY ROAD	2611196	21/02/2006	Tue	1746	CB CS1 410A			FT	R	D	B	F	N	L	100	2			1802360 5505904
57/0/16.319		520S BUCKLEY ROAD	2753220	18/05/2007	Fri	0854	CB TN1 501A			CV	R	D	O	F	N	C	100				1802415 5506280
57/0/16.579		260S BUCKLEY ROAD	2713265	12/10/2007	Fri	1250	DB CS1 410A			CV	E	D	B	F	N	C	100	1			1802466 5506534

Appendix D Constraint Maps



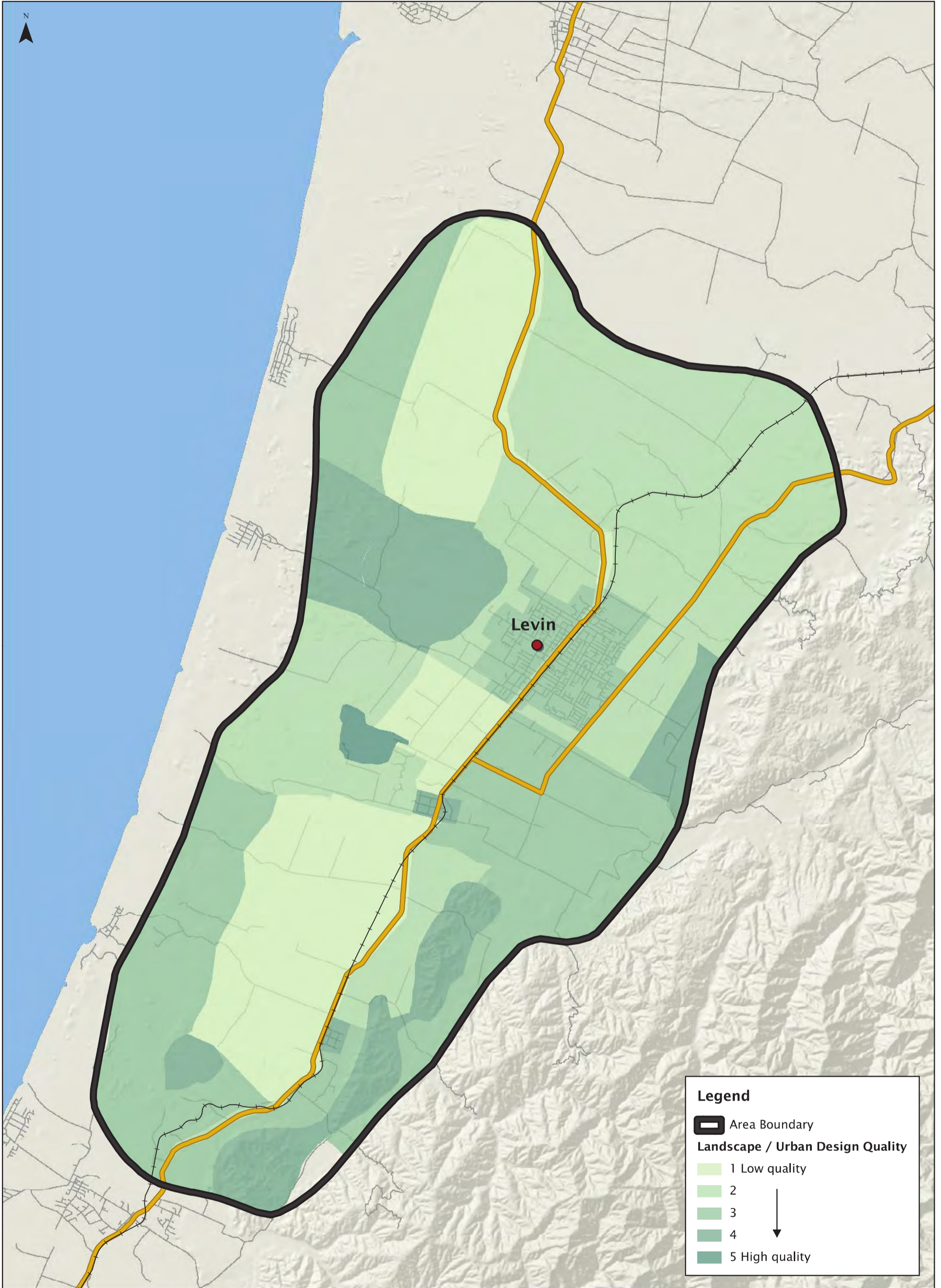
**Otaki to North of Levin Expressway
Area Study
Map 1. Geography**

This document is produced for internal use only and has not been approved for external release. Its conclusions are based on the information currently available to NZTA and may change as further information becomes available either internally or externally. While all reasonable skill and care has been exercised in collating and presenting this information, MWH accepts no liability for any loss, damage, injury or expense (whether direct, indirect or consequential) arising out of the provision of this information or its use.









Original map size: A3
Date: June 2011
Map 1, Final version



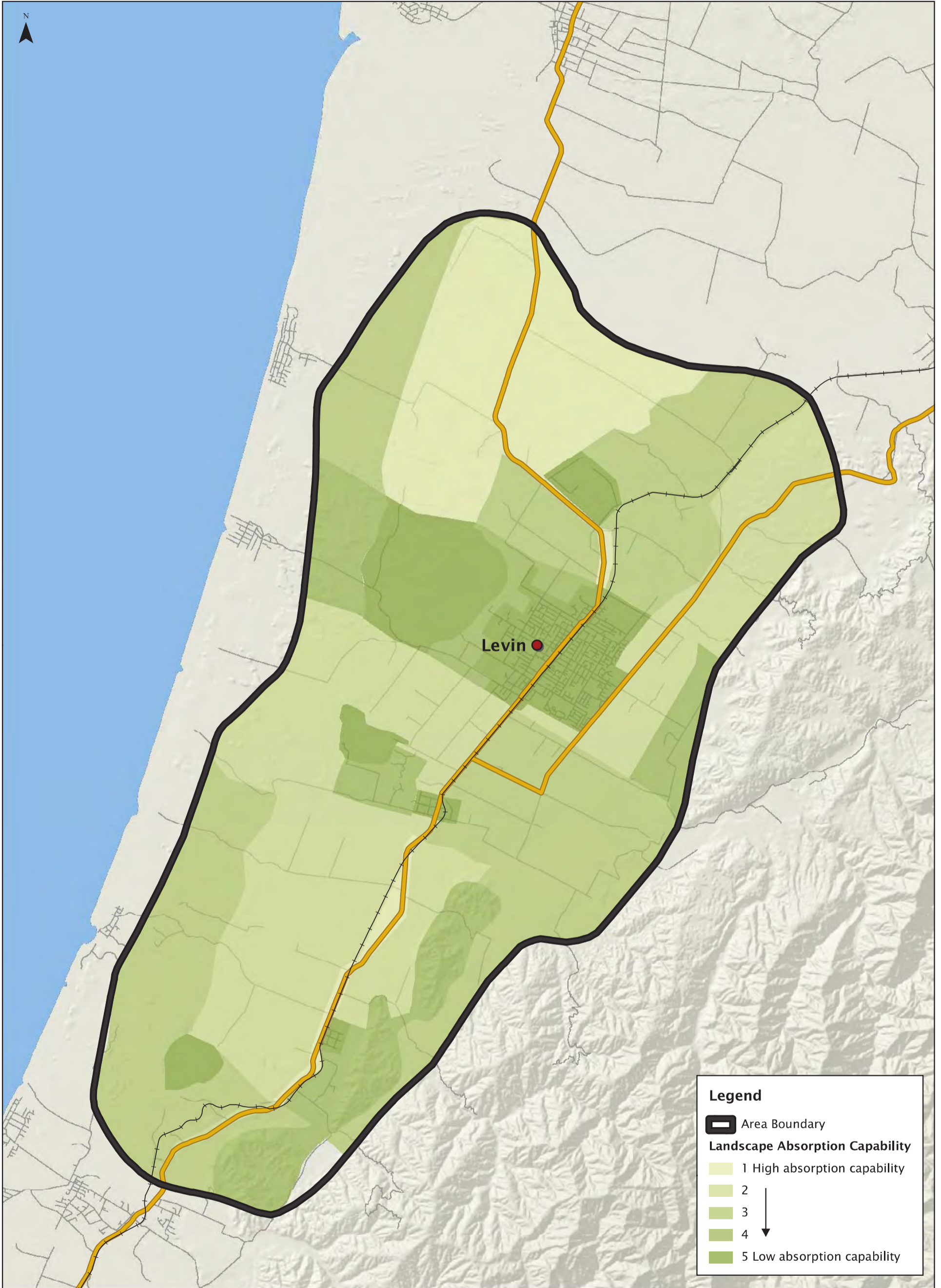


Legend

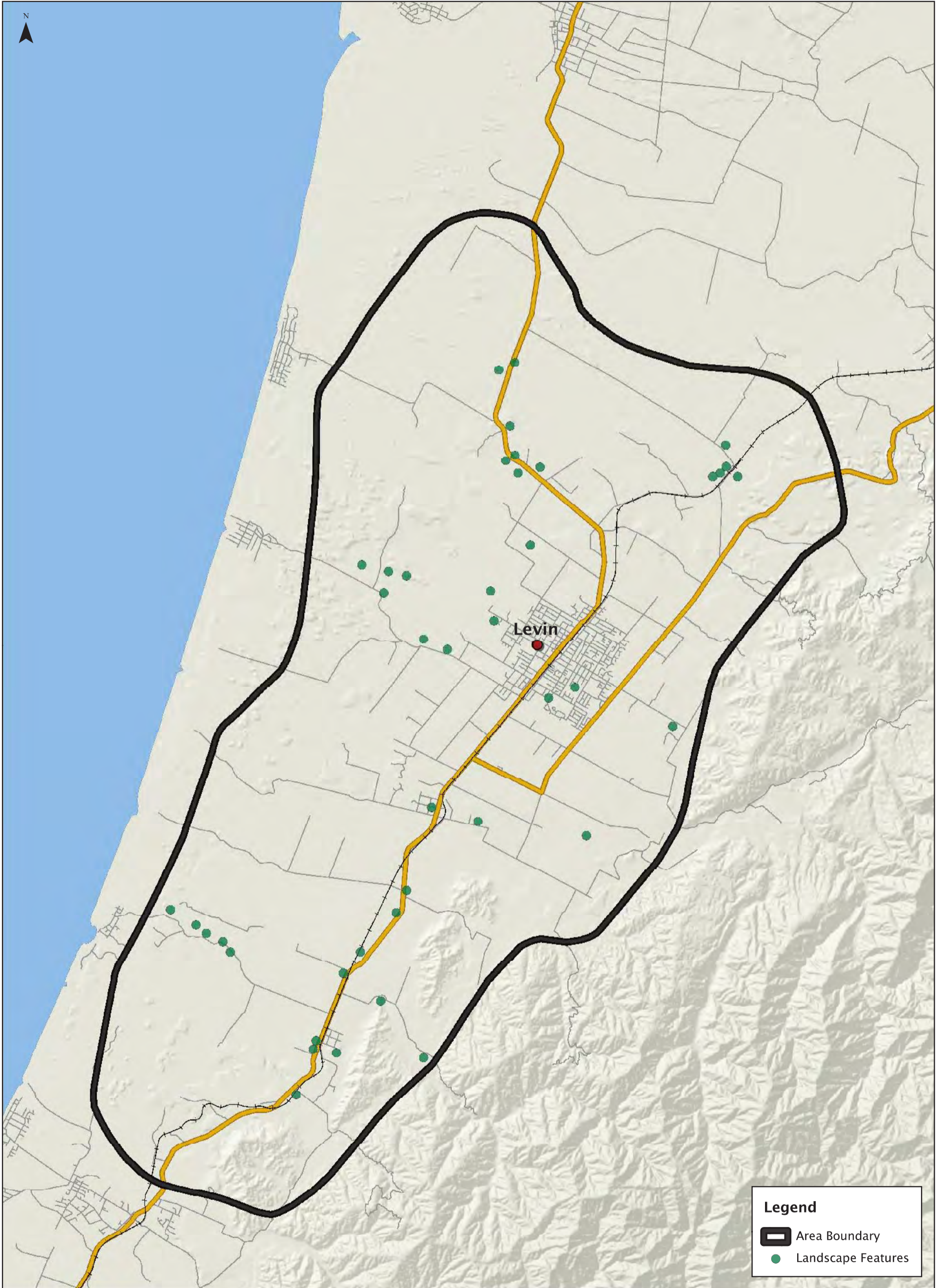
-  Area Boundary
- Landscape / Urban Design Quality**
-  1 Low quality
-  2
-  3
-  4
-  5 High quality

↓



This document is produced for internal use only and has not been approved for external release. Its conclusions are based on the information currently available to NZTA and may change as further information becomes available either internally or externally. While all reasonable skill and care has been exercised in collating and presenting this information, MWH accepts no liability for any loss, damage, injury or expense (whether direct, indirect or consequential) arising out of the provision of this information or its use.



This document is produced for internal use only and has not been approved for external release. Its conclusions are based on the information currently available to NZTA and may change as further information becomes available either internally or externally. While all reasonable skill and care has been exercised in collating and presenting this information, MWH accepts no liability for any loss, damage, injury or expense (whether direct, indirect or consequential) arising out of the provision of this information or its use.



Legend

-  Area Boundary
-  Landscape Features

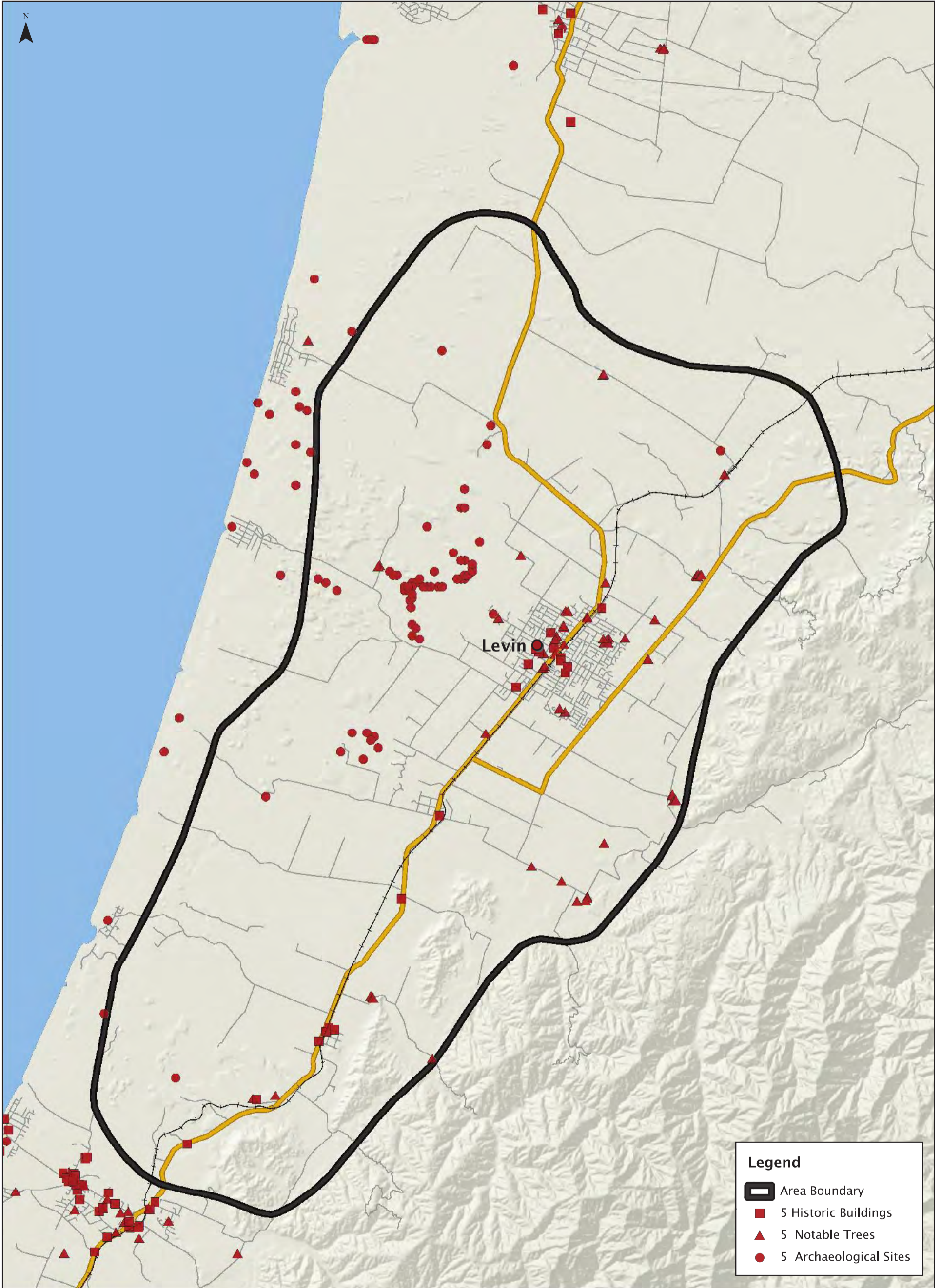
0 0.5 1 2 3 4
 Kilometers
 Scale 1:90,000

Original map size: A3
 Date: June 2011
 Map 4, Final version 





 NZ TRANSPORT AGENCY
 WAKA KO'AHI

**Otaki to North of Levin Expressway
 Area Study
 Map 4. Landscape Features**

This document is produced for internal use only and has not been approved for external release. Its conclusions are based on the information currently available to NZTA and may change as further information becomes available either internally or externally. While all reasonable skill and care has been exercised in collating and presenting this information, MWH accepts no liability for any loss, damage, injury or expense (whether direct, indirect or consequential) arising out of the provision of this information or its use.

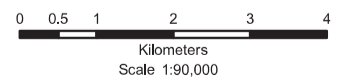


Legend

-  Area Boundary
-  5 Historic Buildings
-  5 Notable Trees
-  5 Archaeological Sites



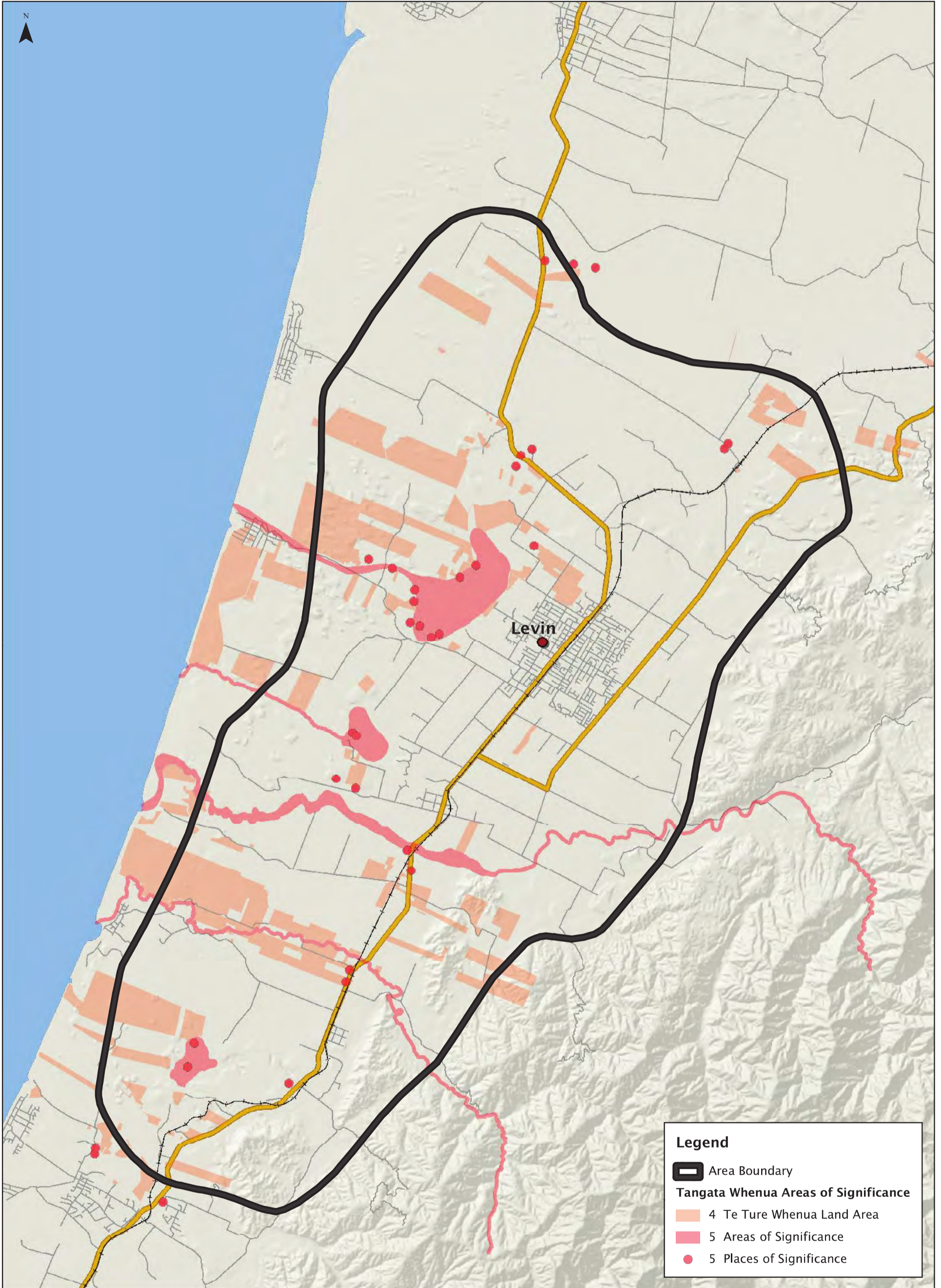
**Otaki to North of Levin Expressway
Area Study
Map 5. Heritage Areas**







Original map size: A3
Date: June 2011
Map 5, Final version



This document is produced for internal use only and has not been approved for external release. Its conclusions are based on the information currently available to NZTA and may change as further information becomes available either internally or externally. While all reasonable skill and care has been exercised in collating and presenting this information, MWH accepts no liability for any loss, damage, injury or expense (whether direct, indirect or consequential) arising out of the provision of this information or its use.

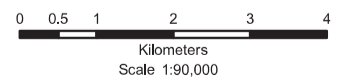


Legend

-  Area Boundary
- Tangata Whenua Areas of Significance**
-  4 Te Ture Whenua Land Area
-  5 Areas of Significance
-  5 Places of Significance



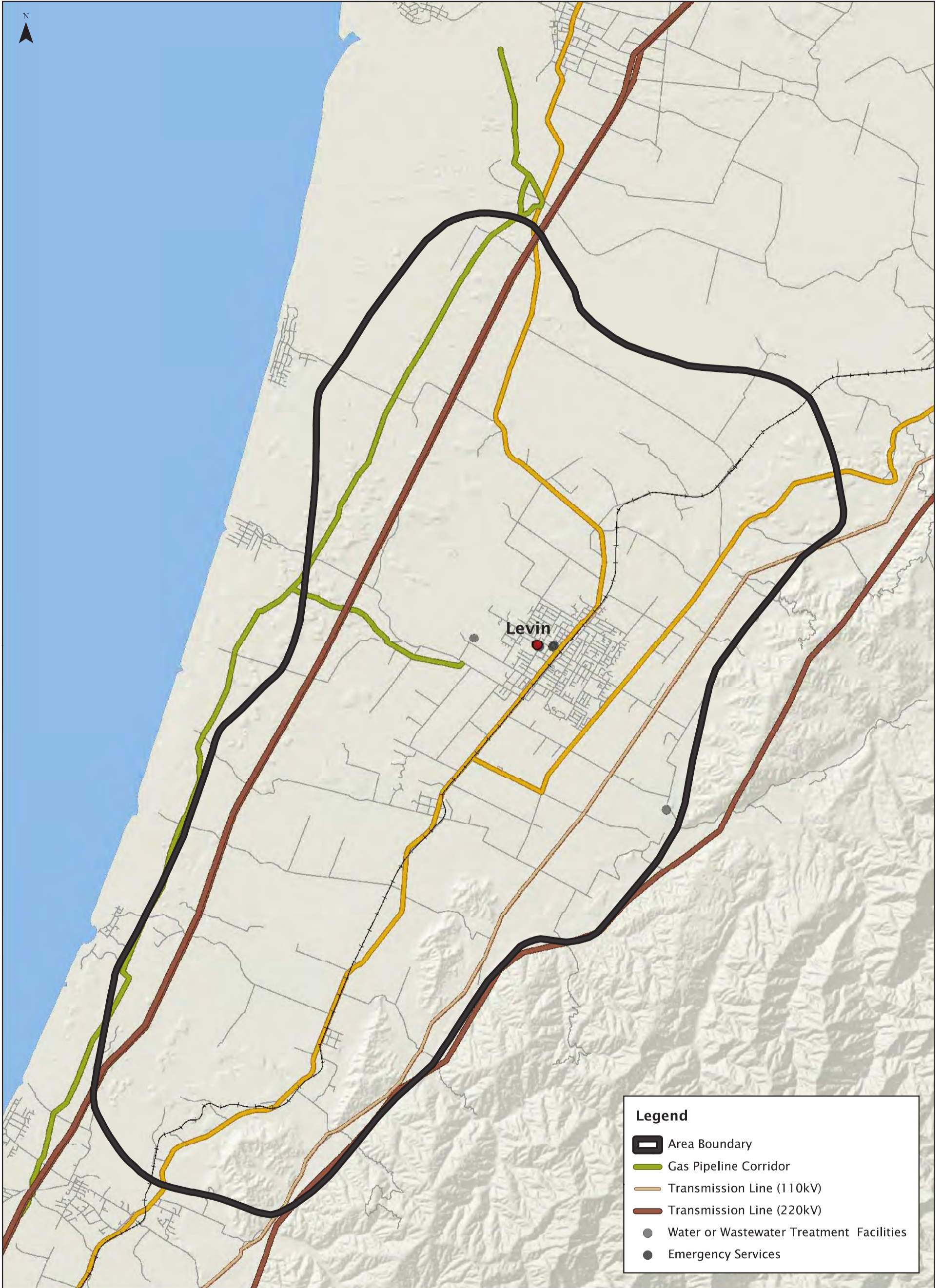
**Otaki to North of Levin Expressway
Area Study
Map 6. Tangata Whenua Areas of Significance**



Original map size: A3
Date: June 2011
Map 6, Final version

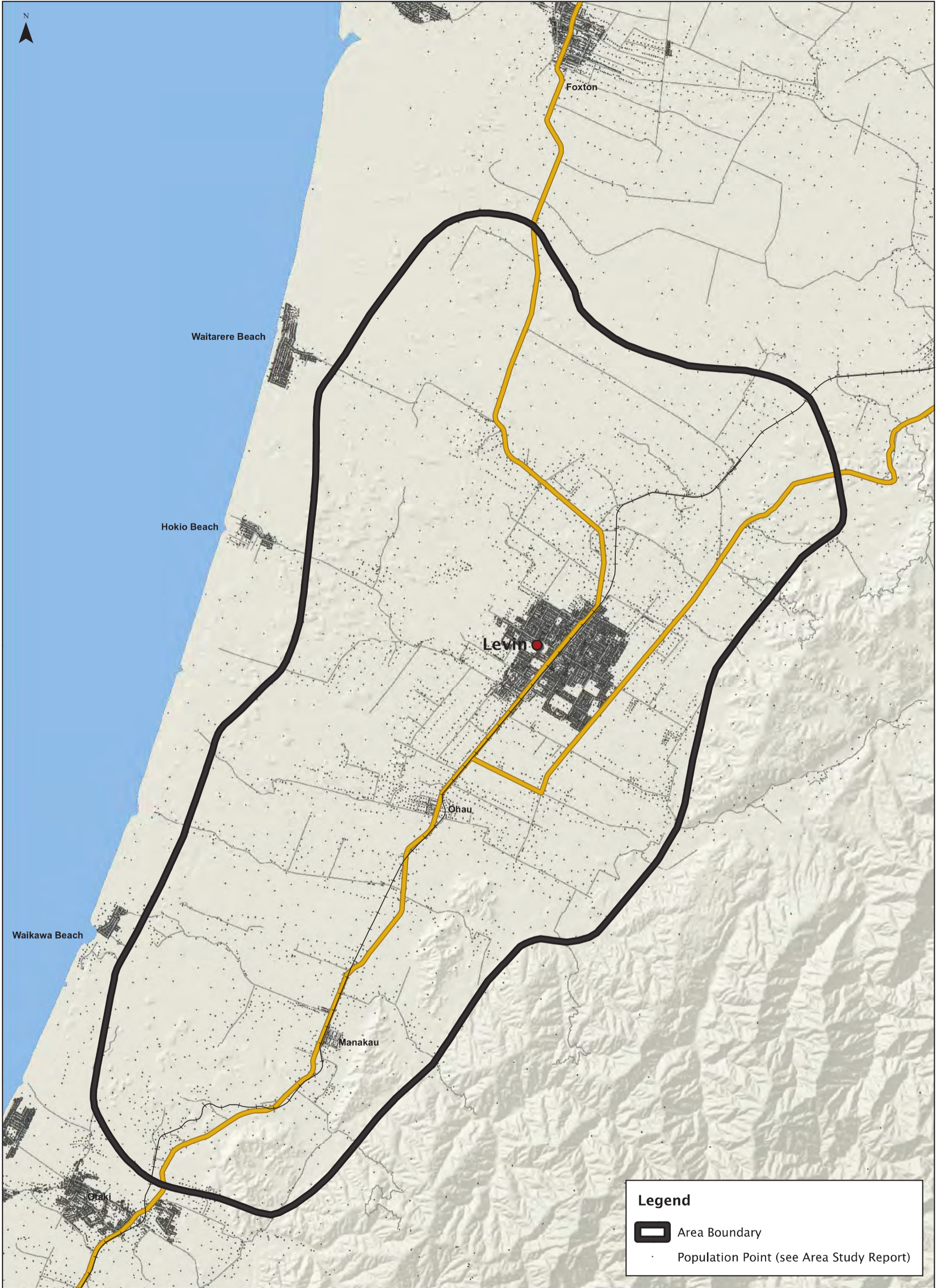


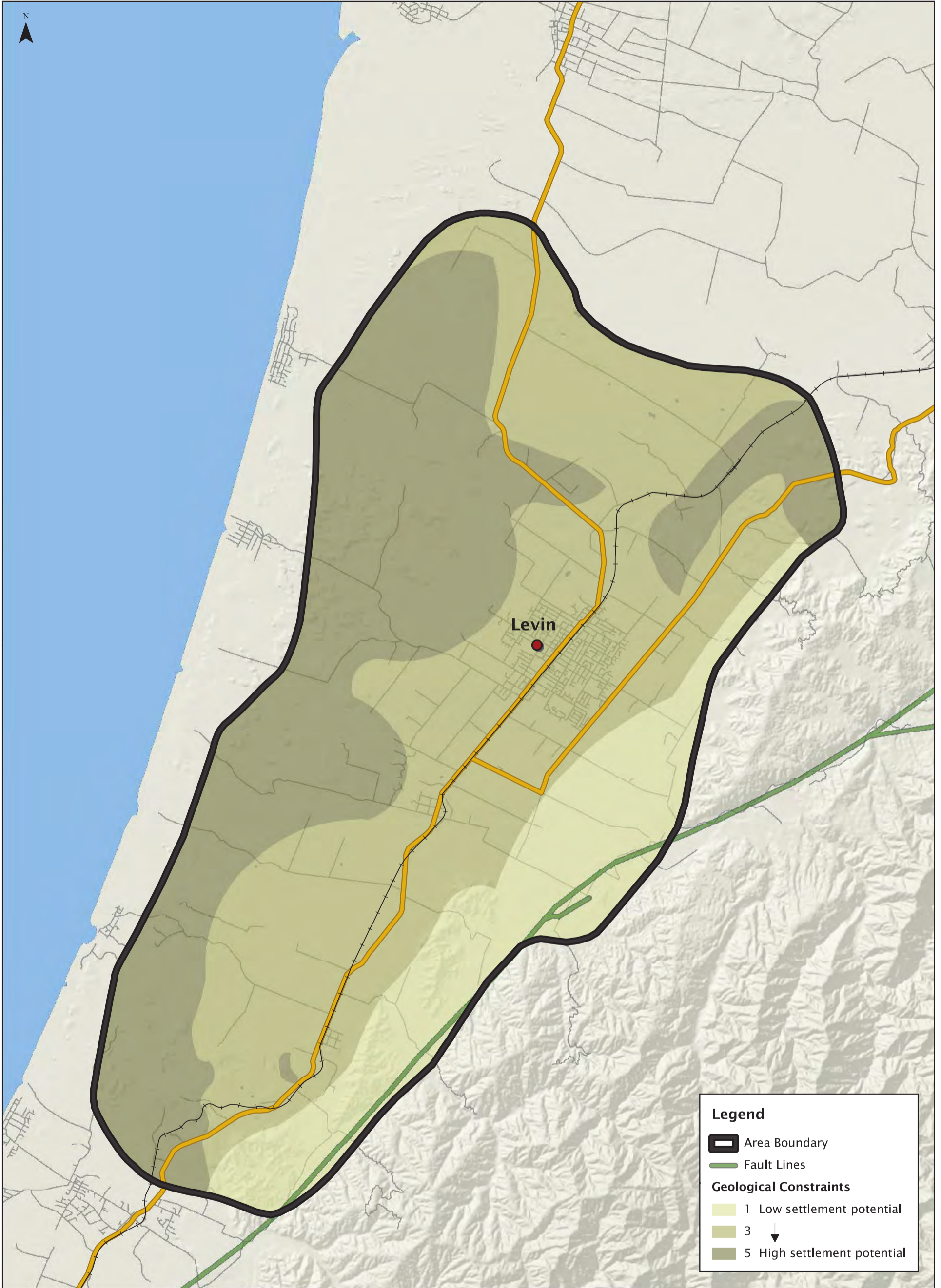
This document is produced for internal use only and has not been approved for external release. Its conclusions are based on the information currently available to NZTA and may change as further information becomes available either internally or externally. While all reasonable skill and care has been exercised in collating and presenting this information, MWH accepts no liability for any loss, damage, injury or expense (whether direct, indirect or consequential) arising out of the provision of this information or its use.





Legend

- Area Boundary
- Gas Pipeline Corridor
- Transmission Line (110kV)
- Transmission Line (220kV)
- Water or Wastewater Treatment Facilities
- Emergency Services






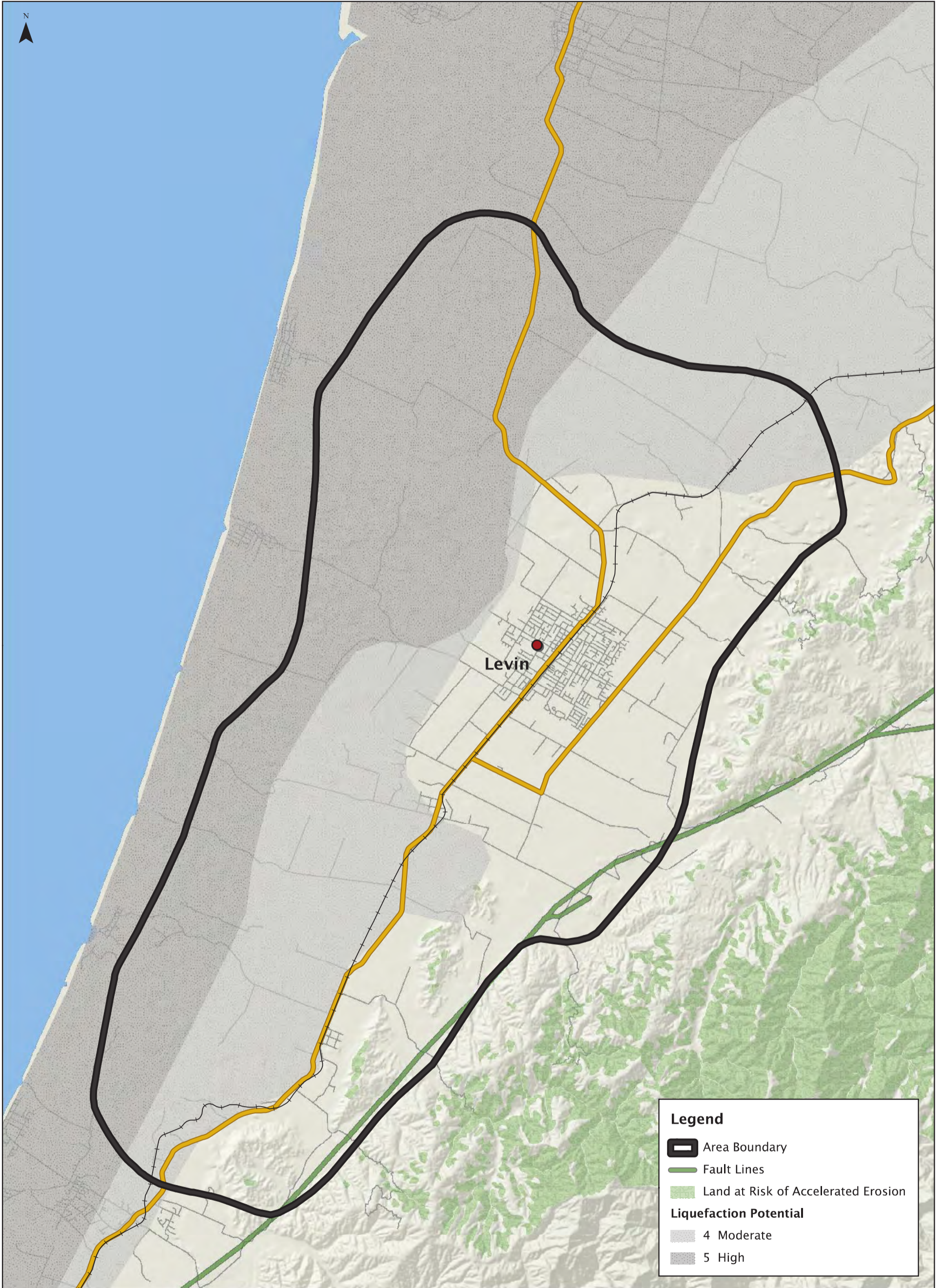


Legend




-  Area Boundary
-  Fault Lines

Geological Constraints



-  1 Low settlement potential
-  3 ↓
-  5 High settlement potential



Legend

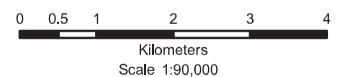
-  Area Boundary
-  Fault Lines
-  Land at Risk of Accelerated Erosion

Liquefaction Potential

-  4 Moderate
-  5 High



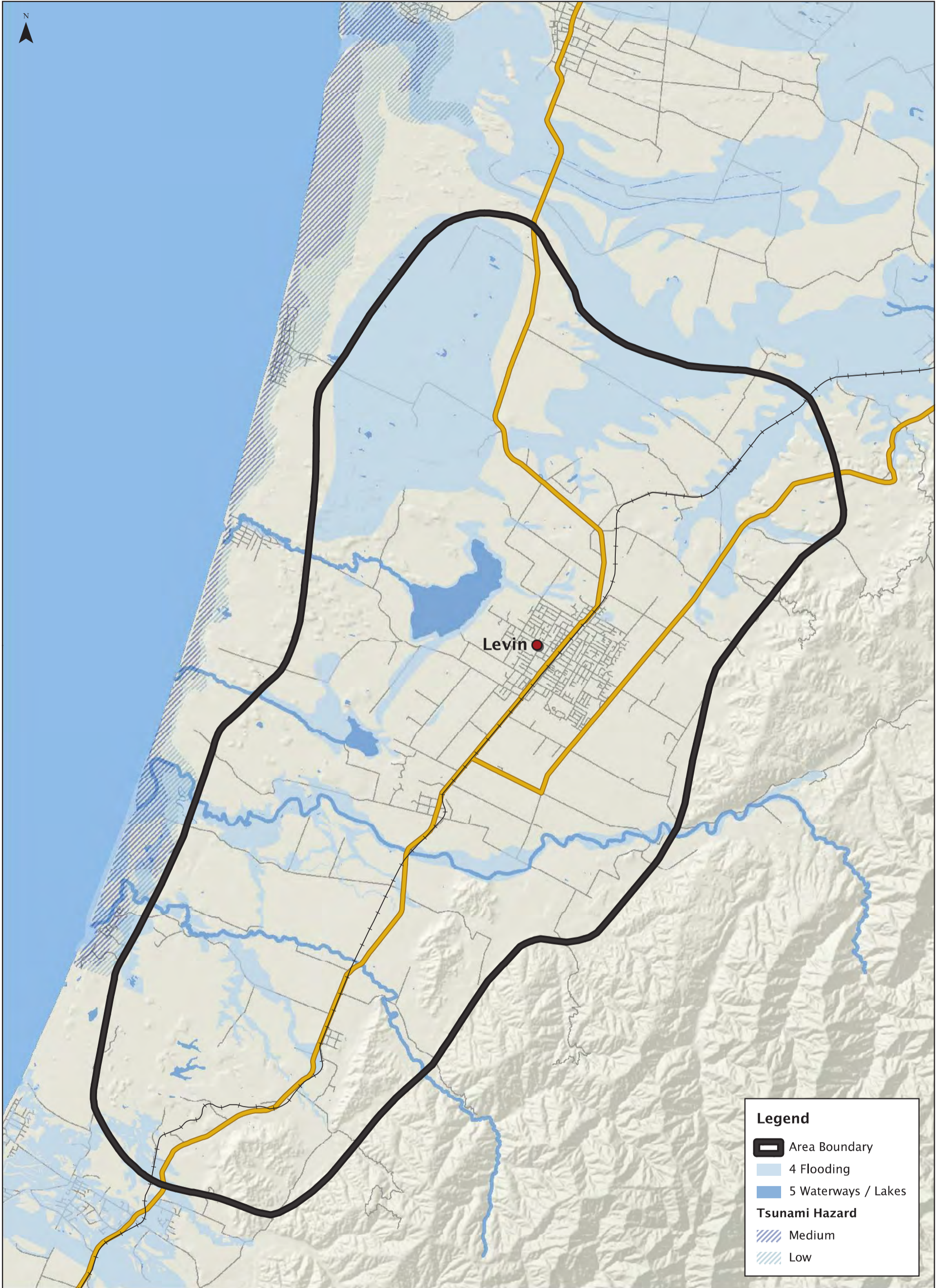
**Otaki to North of Levin Expressway
Area Study
Map 10. Natural Hazards**






Original map size: A3
Date: June 2011
Map 10, Final version





This document is produced for internal use only and has not been approved for external release. Its conclusions are based on the information currently available to NZTA and may change as further information becomes available either internally or externally. While all reasonable skill and care has been exercised in collating and presenting this information, MWH accepts no liability for any loss, damage, injury or expense (whether direct, indirect or consequential) arising out of the provision of this information or its use.



Legend

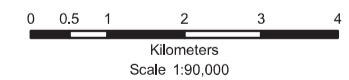
-  Area Boundary
-  4 Flooding
-  5 Waterways / Lakes

Tsunami Hazard

-  Medium
-  Low



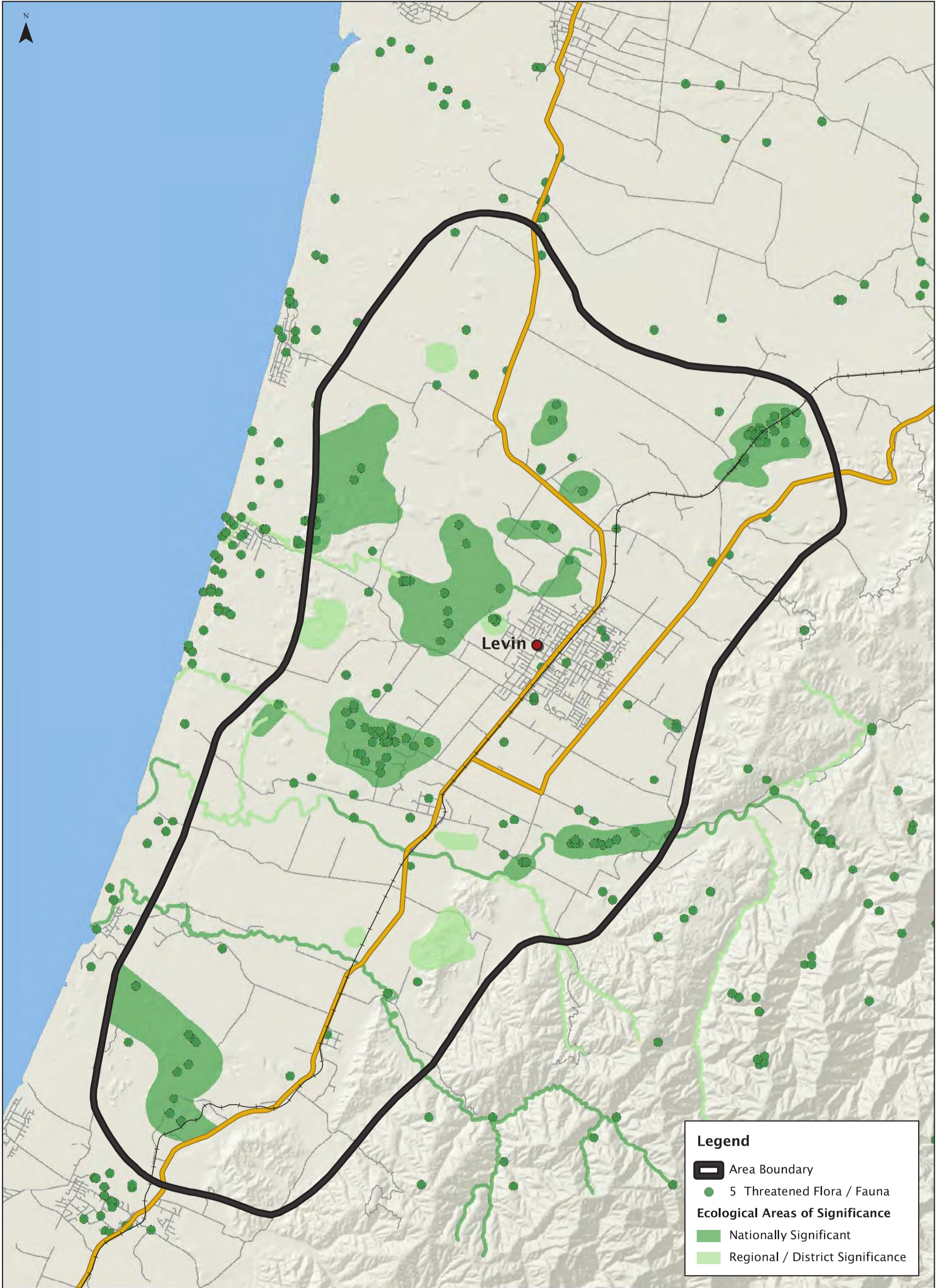
**Otaki to North of Levin Expressway
Area Study
Map 11. Flooding**





This document is produced for internal use only and has not been approved for external release. Its conclusions are based on the information currently available to NZTA and may change as further information becomes available either internally or externally. While all reasonable skill and care has been exercised in collating and presenting this information, MWH accepts no liability for any loss, damage, injury or expense (whether direct, indirect or consequential) arising out of the provision of this information or its use.

Original map size: A3
Date: June 2011
Map 11, Final version







Legend

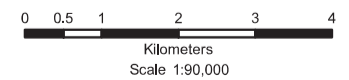
-  Area Boundary
-  5 Threatened Flora / Fauna

Ecological Areas of Significance

-  Nationally Significant
-  Regional / District Significance



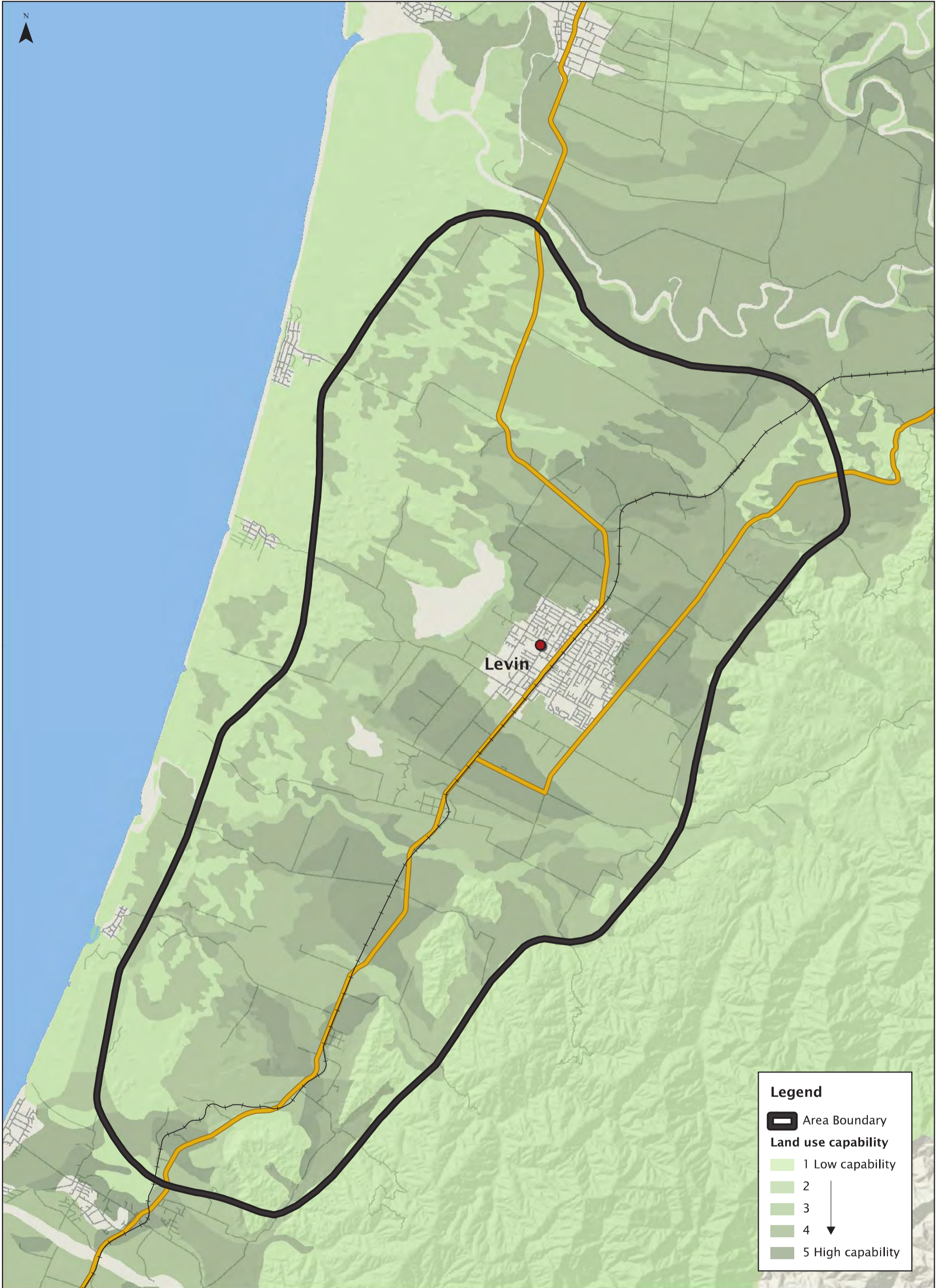
**Otaki to North of Levin Expressway
Area Study
Map 12. Ecological Areas of Significance**




Original map size: A3
Date: June 2011
Map 12, Final version




This document is produced for internal use only and has not been approved for external release. Its conclusions are based on the information currently available to NZTA and may change as further information becomes available either internally or externally. While all reasonable skill and care has been exercised in collating and presenting this information, MWH accepts no liability for any loss, damage, injury or expense (whether direct, indirect or consequential) arising out of the provision of this information or its use.





Legend


 Area Boundary


Land use capability

 1 Low capability

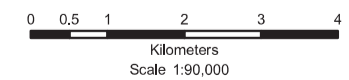
 2

 3

 4

 5 High capability

↓

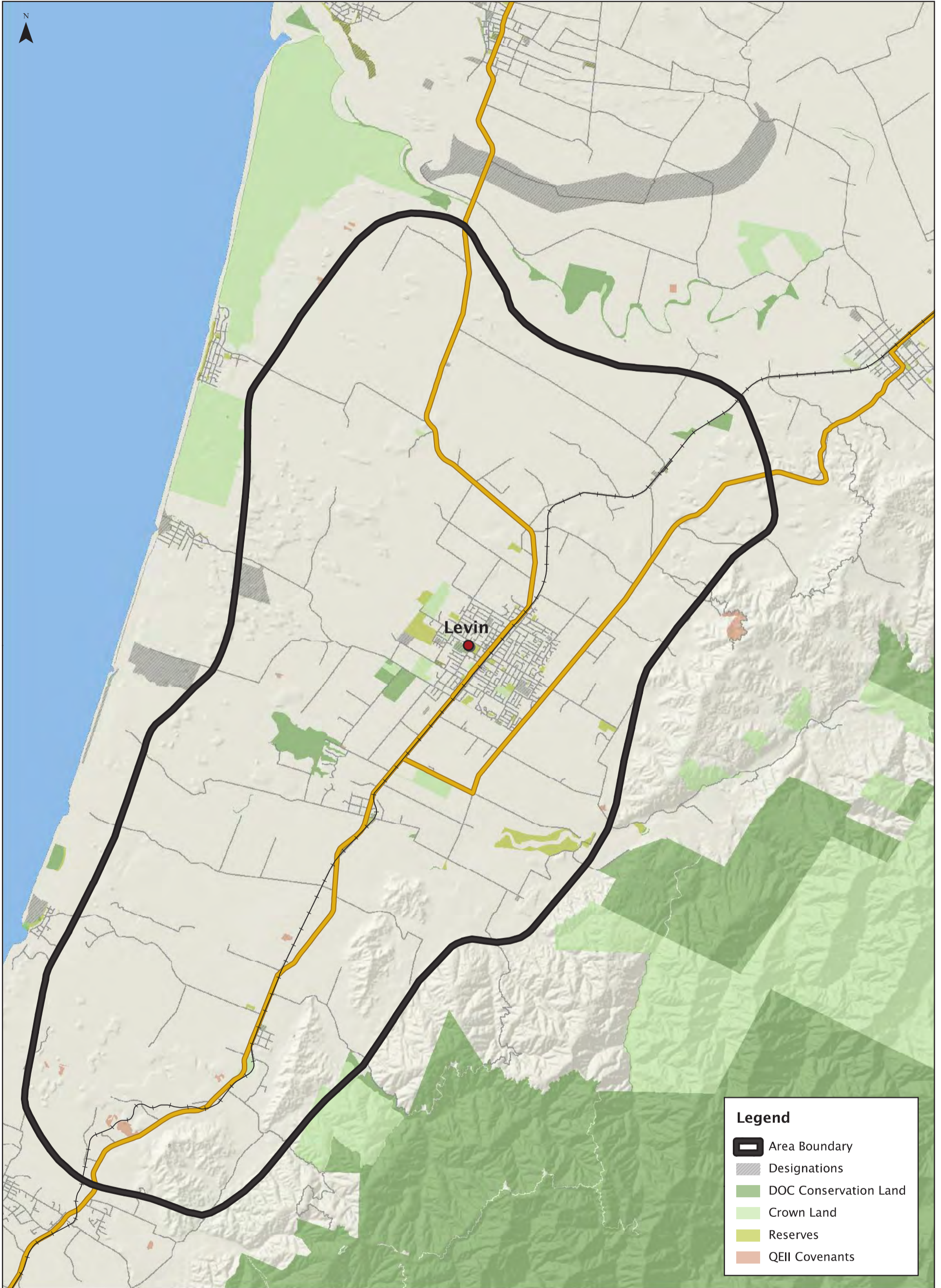


Original map size: A3
 Date: June 2011
 Map 13, Final version










**Otaki to North of Levin Expressway
 Area Study
 Map 13. Land Use Capability**

This document is produced for internal use only and has not been approved for external release. Its conclusions are based on the information currently available to NZTA and may change as further information becomes available either internally or externally. While all reasonable skill and care has been exercised in collating and presenting this information, MWH accepts no liability for any loss, damage, injury or expense (whether direct, indirect or consequential) arising out of the provision of this information or its use.

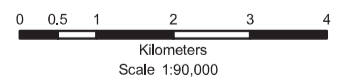


Legend

-  Area Boundary
-  Designations
-  DOC Conservation Land
-  Crown Land
-  Reserves
-  QEII Covenants



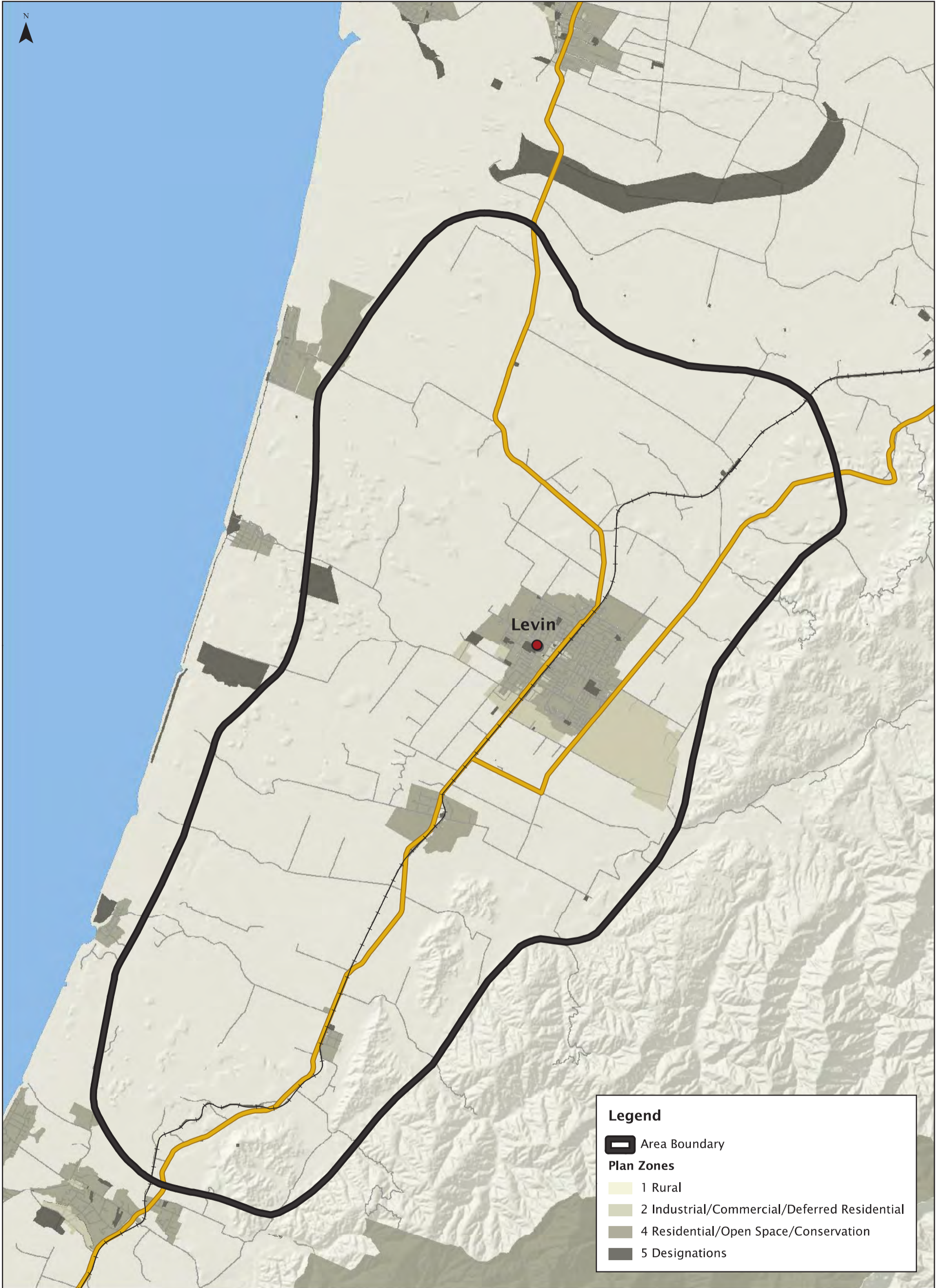
**Otaki to North of Levin Expressway
Area Study
Map 14. Land Ownership**



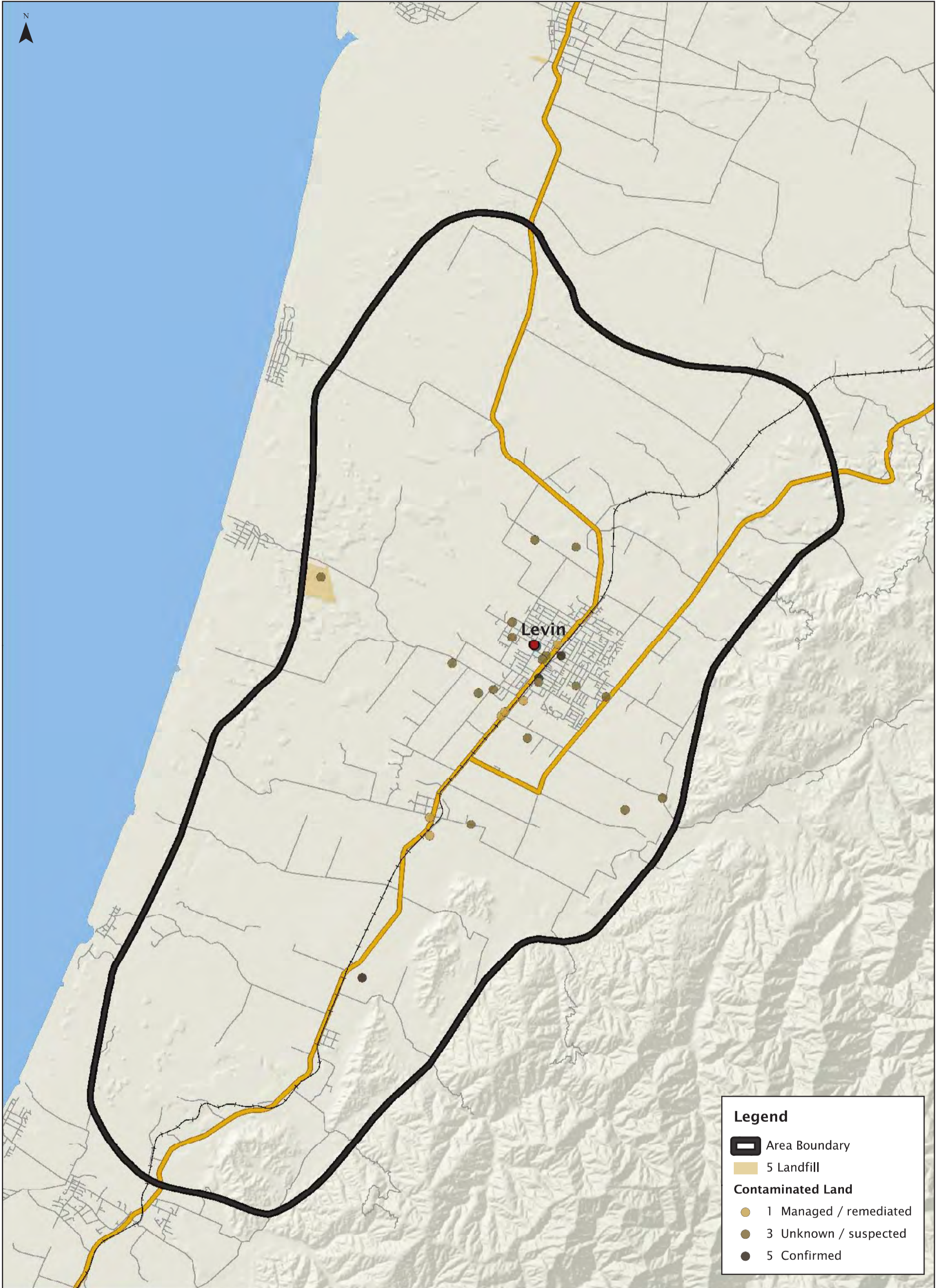
Original map size: A3
Date: June 2011
Map 14, Final version



This document is produced for internal use only and has not been approved for external release. Its conclusions are based on the information currently available to NZTA and may change as further information becomes available either internally or externally. While all reasonable skill and care has been exercised in collating and presenting this information, MWH accepts no liability for any loss, damage, injury or expense (whether direct, indirect or consequential) arising out of the provision of this information or its use.



This document is produced for internal use only and has not been approved for external release. Its conclusions are based on the information currently available to NZTA and may change as further information becomes available either internally or externally. While all reasonable skill and care has been exercised in collating and presenting this information, MWH accepts no liability for any loss, damage, injury or expense (whether direct, indirect or consequential) arising out of the provision of this information or its use.



Legend

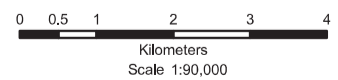
- Area Boundary
- 5 Landfill

Contaminated Land

- 1 Managed / remediated
- 3 Unknown / suspected
- 5 Confirmed

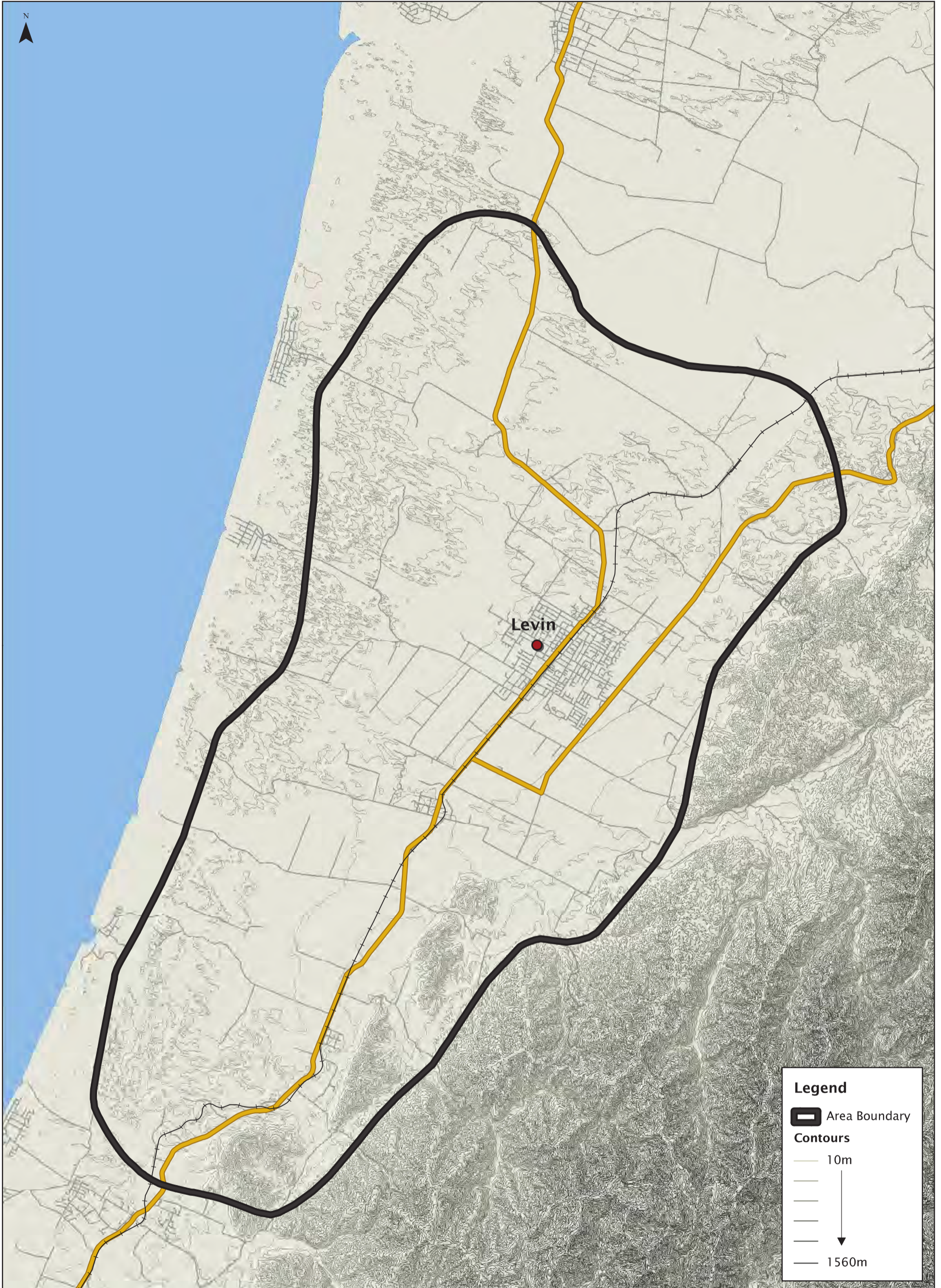


**Otaki to North of Levin Expressway
Area Study
Map 16. Contaminated Land / Hazards**




Original map size: A3
Date: June 2011
Map 16, Final version


This document is produced for internal use only and has not been approved for external release. Its conclusions are based on the information currently available to NZTA and may change as further information becomes available either internally or externally. While all reasonable skill and care has been exercised in collating and presenting this information, MWH accepts no liability for any loss, damage, injury or expense (whether direct, indirect or consequential) arising out of the provision of this information or its use.





Legend


 Area Boundary


Contours


 10m

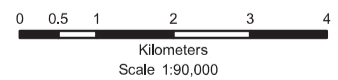








 1560m



Original map size: A3
 Date: June 2011
 Map 17, Final version



**Otaki to North of Levin Expressway
 Area Study
 Map 17. Contours**

This document is produced for internal use only and has not been approved for external release. Its conclusions are based on the information currently available to NZTA and may change as further information becomes available either internally or externally. While all reasonable skill and care has been exercised in collating and presenting this information, MWH accepts no liability for any loss, damage, injury or expense (whether direct, indirect or consequential) arising out of the provision of this information or its use.