

Appendix A: ¹⁸

Terms of Reference – Royal Commission of Inquiry into Building Failure Caused by the Canterbury Earthquake

Elizabeth the Second, by the Grace of God Queen of New Zealand and her Other Realms and Territories, Head of the Commonwealth, Defender of the Faith:

To The Honourable MARK LESLIE SMITH COOPER, of Auckland, Judge of the High Court of New Zealand; Sir RONALD POWELL CARTER, KNZM, of Auckland, Engineer and Strategic Adviser; and RICHARD COLLINGWOOD FENWICK, of Christchurch, Associate Professor of Civil Engineering:

GREETING:

Recitals

WHEREAS the Canterbury region, including Christchurch City, suffered an earthquake on 4 September 2010 and numerous aftershocks, for example—

- (a) the 26 December 2010 (or Boxing Day) aftershock; and
- (b) the 22 February 2011 aftershock:

WHEREAS approximately 180 people died of injuries suffered in the 22 February 2011 aftershock, with most of those deaths caused by injuries suffered wholly or partly because of the failure of certain buildings in the Christchurch City central business district (**CBD**), namely the following 2 buildings:

- (a) the Canterbury Television (or CTV) Building; and
- (b) the Pyne Gould Corporation (or PGC) Building:

WHEREAS other buildings in the Christchurch City CBD, or in suburban commercial or residential areas in the Canterbury region, failed in the Canterbury earthquakes, causing injury and death:

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WHEREAS a number of buildings in the Christchurch City CBD have been identified as unsafe to enter following the 22 February 2011 aftershock, and accordingly have been identified with a red card to prevent persons from entering them:

WHEREAS the Department of Building and Housing has begun to investigate the causes of the failure of 4 buildings in the Christchurch City CBD (the **4 specified buildings**), namely the 2 buildings specified above, and the following 2 other buildings:

- (a) the Forsyth Barr Building; and
- (b) the Hotel Grand Chancellor Building:

WHEREAS it is desirable to inquire into the building failures in the Christchurch City CBD, to establish—

- (a) why the 4 specified buildings failed severely; and
- (b) why the failure of those buildings caused such extensive injury and death; and
- (c) why certain buildings failed severely while others failed less severely or there was no readily perceptible failure:

WHEREAS the results of the inquiry should be available to inform decision-making on rebuilding and repair work in the Christchurch City CBD and other areas of the Canterbury region:

Appointment and order of reference

KNOW YE that We, reposing trust and confidence in your integrity, knowledge, and ability, do, by this Our Commission, nominate, constitute, and appoint you, The Honourable MARK LESLIE SMITH COOPER, Sir RONALD POWELL CARTER, and RICHARD COLLINGWOOD FENWICK, to be a Commission to inquire into and report (making any interim or final recommendations that you think fit) upon (having regard, in the case of paragraphs (a) to (c), to the nature and severity of the Canterbury earthquakes)—

Inquiry into sample of buildings and 4 specified buildings

- (a) in relation to a reasonably representative sample of buildings in the Christchurch City CBD, including the 4 specified buildings as well as buildings that did not fail or did not fail severely in the Canterbury earthquakes—
 - (i) why some buildings failed severely; and
 - (ii) why the failure of some buildings caused extensive injury and death; and
 - (iii) why buildings differed in the extent to which—
 - (A) they failed as a result of the Canterbury earthquakes; and
 - (B) their failure caused injury and death; and
 - (iv) the nature of the land associated with the buildings inquired into under this paragraph and how it was affected by the Canterbury earthquakes; and
 - (v) whether there were particular features of a building (or a pattern of features) that contributed to whether a building failed, including (but not limited to) factors such as—
 - (A) the age of the building; and
 - (B) the location of the building; and
 - (C) the design, construction, and maintenance of the building; and
 - (D) the design and availability of safety features such as escape routes; and
- (b) in relation to all of the buildings inquired into under paragraph (a), or a selection of them that you consider appropriate but including the 4 specified buildings,—
 - (i) whether those buildings (as originally designed and constructed and, if applicable, as altered and maintained) complied with earthquake-risk and other legal and best-practice requirements (if any) that were current—
 - (A) when those buildings were designed and constructed; and
 - (B) on or before 4 September 2010; and
 - (ii) whether, on or before 4 September 2010, those buildings had been identified as “earthquake-prone” or were the subject of required or voluntary measures (for example, alterations or strengthening) to make the buildings less susceptible to earthquake risk, and the compliance or standards they had achieved; and
- (c) in relation to the buildings inquired into under paragraph (b), the nature and effectiveness of any assessment of them, and of any remedial work carried out on them, after the 4 September 2010 earthquake, or after the 26 December 2010 (or Boxing Day) aftershock, but before the 22 February 2011 aftershock; and

Inquiry into legal and best-practice requirements

- (d) the adequacy of the current legal and best-practice requirements for the design, construction, and maintenance of buildings in central business districts in New Zealand to address the known risk of earthquakes and, in particular—
 - (i) the extent to which the knowledge and measurement of seismic events have been used in setting legal and best-practice requirements for earthquake-risk management in respect of building design,

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- construction, and maintenance; and
- (ii) the legal requirements for buildings that are “earthquake-prone” under section 122 of the Building Act 2004 and associated regulations, including—
 - (A) the buildings that are, and those that should be, treated by the law as “earthquake-prone”; and
 - (B) the extent to which existing buildings are, and should be, required by law to meet requirements for the design, construction, and maintenance of new buildings; and
 - (C) the enforcement of legal requirements; and
- (iii) the requirements for existing buildings that are not, as a matter of law, “earthquake-prone”, and do not meet current legal and best-practice requirements for the design, construction, and maintenance of new buildings, including whether, to what extent, and over what period they should be required to meet those requirements; and
- (iv) the roles of central government, local government, the building and construction industry, and other elements of the private sector in developing and enforcing legal and best-practice requirements; and
- (v) the legal and best-practice requirements for the assessment of, and for remedial work carried out on, buildings after any earthquake, having regard to lessons from the Canterbury earthquakes; and
- (vi) how the matters specified in subparagraphs (i) to (v) compare with any similar matters in other countries; and

Other incidental matters arising

- (e) any other matters arising out of, or relating to, the foregoing that come to the Commission’s notice in the course of its inquiries and that it considers it should investigate:

Matters upon or for which recommendations required

And, without limiting the order of reference set out above, We declare and direct that this Our Commission also requires you to make both interim and final recommendations upon or for—

- (a) any measures necessary or desirable to prevent or minimise the failure of buildings in New Zealand due to earthquakes likely to occur during the lifetime of those buildings; and
- (b) the cost of those measures; and
- (c) the adequacy of legal and best-practice requirements for building design, construction, and maintenance insofar as those requirements apply to managing risks of building failure caused by earthquakes:

Exclusions from inquiry and scope of recommendations

But, We declare that you are not, under this Our Commission, to inquire into, determine, or report in an interim or final way upon the following matters (but paragraph (b) does not limit the generality of your order of reference, or of your required recommendations):

- (a) whether any questions of liability arise; and
- (b) matters for which the Minister for Canterbury Earthquake Recovery, the Canterbury Earthquake Recovery Authority, or both are responsible, such as design, planning, or options for rebuilding in the Christchurch City CBD; and
- (c) the role and response of any person acting under the Civil Defence Emergency Management Act 2002, or providing any emergency or recovery services or other response, after the 22 February 2011 aftershock:

Definitions

And, We declare that, in this Our Commission, unless the context otherwise requires,—

best-practice requirements includes any New Zealand, overseas country’s, or international standards that are not legal requirements

Canterbury earthquakes means any earthquakes or aftershocks in the Canterbury region—

- (a) on or after 4 September 2010; and
- (b) before or on 22 February 2011

Christchurch City CBD means the area bounded by the following:

- (a) the 4 avenues (Bealey Avenue, Fitzgerald Avenue, Moorhouse Avenue, and Deans Avenue); and
- (b) Harper Avenue

failure, in relation to a building, includes the following, regardless of their nature or level of severity:

- (a) the collapse of the building; and
- (b) damage to the building; and
- (c) other failure of the building

legal requirements includes requirements of an enactment (for example, the building code):

Appointment of chairperson

And We appoint you, The Honourable MARK LESLIE SMITH COOPER, to be the chairperson of the Commission:

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Power to adjourn

And for better enabling you to carry this Our Commission into effect, you are authorised and empowered, subject to the provisions of this Our Commission, to make and conduct any inquiry or investigation under this Our Commission in the manner and at any time and place that you think expedient, with power to adjourn from time to time and from place to place as you think fit, and so that this Our Commission will continue in force and that inquiry may at any time and place be resumed although not regularly adjourned from time to time or from place to place:

Information and views, relevant expertise, and research

And you are directed, in carrying this Our Commission into effect, to consider whether to do, and to do if you think fit, the following:

- (a) adopt procedures that facilitate the provision of information or views related to any of the matters referred to in the order of reference above; and
- (b) use relevant expertise, including consultancy services and secretarial services; and
- (c) conduct, where appropriate, your own research; and
- (d) determine the sequence of your inquiry, having regard to the availability of the outcome of the investigation by the Department of Building and Housing and other essential information, and the need to produce an interim report:

General provisions

And, without limiting any of your other powers to hear proceedings in private or to exclude any person from any of your proceedings, you are empowered to exclude any person from any hearing, including a hearing at which evidence is being taken, if you think it proper to do so:

And you are strictly charged and directed that you may not at any time publish or otherwise disclose, except to His Excellency the Governor-General of New Zealand in pursuance of this Our Commission or by His Excellency's direction, the contents or purport of any interim or final report so made or to be made by you:

And it is declared that the powers conferred by this Our Commission are exercisable despite the absence at any time of any 1 member appointed by this Our Commission, so long as the Chairperson, or a member deputed by the Chairperson to act in the place of the Chairperson, and at least 1 other member, are present and concur in the exercise of the powers:

Interim and final reporting dates

And, using all due diligence, you are required to report to His Excellency the Governor-General of New Zealand in writing under your hands as follows:

- (a) not later than 11 October 2011, an interim report, with interim recommendations that inform early decision-making on rebuilding and repair work that forms part of the recovery from the Canterbury earthquakes; and
- (b) not later than 11 April 2012, a final report:

And, lastly, it is declared that these presents are issued under the authority of the Letters Patent of Her Majesty Queen Elizabeth the Second constituting the office of Governor-General of New Zealand, dated 28 October 1983*, and under the authority of and subject to the provisions of the Commissions of Inquiry Act 1908, and with the advice and consent of the Executive Council of New Zealand.

In witness whereof We have caused this Our Commission to be issued and the Seal of New Zealand to be hereunto affixed at Wellington this 11th day of April 2011.

Witness Our Trusty and Well-beloved The Right Honourable Sir Anand Satyanand, Chancellor and Principal Knight Grand Companion of Our New Zealand Order of Merit, Principal Companion of Our Service Order, Governor-General and Commander-in-Chief in and over Our Realm of New Zealand.

ANAND SATYANAND, Governor-General.

By His Excellency's Command—

JOHN KEY, Prime Minister.

Approved in Council—

REBECCA KITTERIDGE, Clerk of the Executive Council.

*SR 1983/225

Appendix B:

Estimation of URM building population and distribution

Several sources of data were utilised for estimating the number of URM buildings in existence throughout the country: the official population data of New Zealand between 1900 and 1940 (Census and Statistics Office, 1890–1950), a survey of potentially earthquake prone commercial buildings in Auckland City conducted by Auckland City Council in 2008 in conjunction with the research team, and data provided by Wellington City Council and Christchurch City Council.

In surveying potentially earthquake prone commercial buildings in Auckland City, a total of 1335 buildings were identified to have been constructed before 1940. Although buildings with a construction date up to and including 2007 were surveyed, very few URM buildings were found to have been built in Auckland City after 1940. Therefore, only pre-1940 buildings were considered. Of the 1335 buildings, 28.9% were URM, 35.3% were timber, 16.3% were comprised of reinforced concrete frame and brick infill, 1.1% were reinforced masonry, 17.8% were reinforced concrete frame or shear wall buildings and 0.6% were moment resisting steel or braced steel buildings. Using the associated construction date of each building the total sample was grouped according to decade. Pre-1900 was considered as a single grouping. Table B.1 shows the number of buildings identified in the survey according to their construction date.

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Table B.1 Auckland City pre-1940 potentially earthquake prone buildings

	Pre-1900	1901-1910	1911-1920	1921-1930	1931-1940	Total	Percentage
URM	6	24	16	277	63	385	28.9%
Timber	3	21	16	341	90	417	35.3%
Brick infill	4	13	4	123	74	217	16.3%
Reinforced masonry	0	0	0	10	5	15	1.1%
Reinforced concrete	1	7	7	152	71	238	17.8%
Steel	0	0	0	5	3	8	0.6%
Total	15	65	45	907	304	1335	100%

In order to estimate the number of URM buildings in other parts of the country, the data from Auckland City Council were extrapolated using official population data. In the late 19th and early 20th Century, New Zealand was divided into the following provinces: Auckland, Taranaki, Hawkes Bay, Wellington, Marlborough, Nelson, Canterbury and Otago-and-Southland. Auckland Province was made up of the area of the North Island from Taupo and north (everywhere which currently celebrates Auckland Anniversary Day) (Census and Statistics Office, 1890–1950). Consequently, the area over which Auckland City Council has jurisdiction in 2009 is only a part of the former Auckland Province, and the current boundaries of this jurisdiction are equivalent to that of the Eden County up until 1940. This county historically included the boroughs of Auckland City, Mt Albert, Mt Eden, Newmarket, Parnell, Onehunga, Grey Lynn, One Tree Hill, and also Ellerslie Town District. The proportion of the population of the historic Auckland province which is made up by the current Auckland City was found using the population data from official New Zealand Year Books (Census and Statistics Office, 1890–1950). The average population of Auckland City and other parts of Auckland Province are shown in Figure B.1.

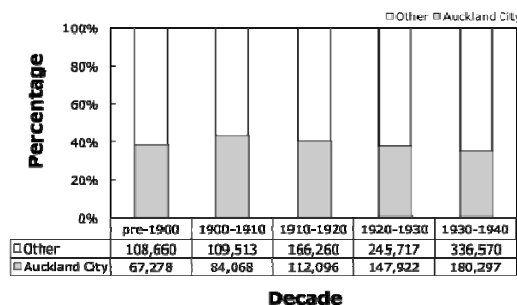


Figure B.1 Proportion of population in the former Auckland Province living in the equivalent current Auckland City

Using the same proportional relationships shown in Figure B.1, the number of currently existing URM buildings in the historic Auckland Province was estimated based on the number of currently existing URM buildings in Auckland City. For example, in the decade 1900–1910, Auckland City made up 43% of the population of Auckland Province. It is assumed that building prevalence was approximately proportional to population and that the rate of building demolition has been uniform throughout the former Auckland

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Province. There are 24 URM buildings identified from that decade now existing in Auckland City, and assuming these also make up 43% of the total number of buildings in the historic Auckland Province, then there are 55 existing URM buildings which were built between 1900 and 1910 in the whole of the equivalent Auckland Province today. Similarly, an indicative URM-buildings-per-capita ratio is determined. These data are summarised in Table B.2, clearly showing that the majority of URM buildings were constructed in the decade 1920 – 1930.

Table B.2 Population data and URM buildings for Auckland City and Auckland Province

	Pre-1900	1901-1910	1911-1920	1921-1930	1931-1940
Population of former Auckland Province	175,938	193,581	278,357	393,639	516,886
Population of equivalent current Auckland City	67,278	84,068	112,096	147,922	180,297
Proportion Auckland City/Province	38.2%	43.0%	41.1%	37.5%	35.2%
Actual current Auckland City URM buildings	6	24	16	277	63
Estimated current Auckland Province URM buildings	16	55	40	737	178
Estimated current URM buildings per 100,000 people	9.1	28.4	14.4	187.2	34.4

In addition to the data provided from Auckland City Council and extrapolated to estimate the number of URM buildings in the historic Auckland Province, similar methods were used to extrapolate the data provided by Wellington City Council and Christchurch City Council. Based on official provincial populations of the time, the number of URM buildings currently remaining in the historic provinces of Taranaki, Marlborough, Nelson and Westland were also estimated assuming the same ratio of URM buildings per 100,000 people as in Auckland Province, as in the absence of specific data there is believed to be no evidence available to suggest that the ratio of URM buildings per 100,000 people in Auckland is not valid for these provinces.

Based on evidence provided in Hopkins (2009), it was considered inappropriate to assume a similar buildings per capita ratio as in Auckland for the remaining provinces of Hawke's Bay and Otago-and-Southland. When legislative guidance was introduced in 1968 (New Zealand Parliament, 1968) for assessing and upgrading earthquake prone buildings, Auckland and Wellington City Councils took a strong interest in strengthening URM buildings whilst Christchurch and Dunedin City Councils took a more passive approach to implementing the legislation. Consequently, the rate of seismic retrofit and/or demolition and reconstruction in Auckland and Wellington was significantly different from that in Dunedin and Christchurch. Dunedin is the largest city in the former Otago-and-Southland Province and its rate of redevelopment was assumed to be characteristic of the whole province. Consequently, the number of buildings remaining in Otago-and-Southland was estimated using the buildings per 100,000 people ratio of Canterbury.

The 1931 M7.1 earthquake in Hawke's Bay destroyed a significant number of URM buildings in the Hawke's Bay Province, especially in Napier. As a consequence of this and the resulting awareness of the vulnerability of URM buildings, the number of

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remaining buildings in Hawke's Bay can be expected to be less than what would be estimated using the relationships outlined above. Nevertheless, there is no data available on the actual number of URM buildings in Hawke's Bay, and because of this, the ratio of URM buildings per 100,000 people in Hawke's Bay was estimated to be half that of Auckland's. The estimated number of existing URM buildings in each province (calculated prior to the 2010/2011 Canterbury earthquake swarm) is shown in Table 2.2 and in Figure B.2, and the construction date of URM buildings nationwide is shown in Figure B.3, and are grouped according to the first year in each decade. This information again shows that the majority of existing URM buildings nationwide derive from the decade 1920–1930.

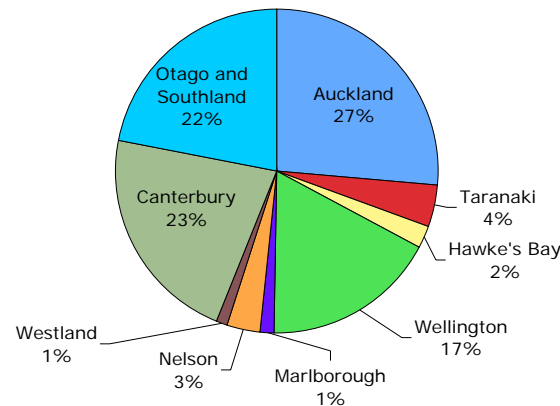


Figure B.2 Estimated provincial populations of URM buildings (data compiled prior to 22 September 2010)

It is acknowledged that the data presented here are useful primarily as an initial estimation only and may not accurately represent the number of URM buildings in other regions outside of Auckland, especially in smaller towns. The number of buildings from a particular decade in Auckland captures only those buildings which still exist, rather than all the buildings which were constructed in that time period, and the rate of demolition and redevelopment in Auckland City may not be representative of the comparable rate in other parts of the country. Whereas in Auckland economic factors may have provided a stimulus for demolition of older URM buildings and development of newer structures, this may have not been the case in smaller towns. Smaller cities such as Wanganui, Timaru and Oamaru did not receive equivalent levels of investment and development in the 1960s and 1970s for economic reasons, and consequently many old buildings which would have otherwise been demolished in that time period still exist now (McKinnon, 2008). Moreover, legislation governing the seismic performance of existing buildings may have resulted in different rates of development. For example, Blenheim is in a higher seismic zone ($Z = 0.33$) than New Plymouth ($Z = 0.18$) and if a building in Blenheim which was determined to be earthquake risk and subsequently demolished was instead situated in New Plymouth, because of the lower seismicity, it may have been found to not be earthquake risk. Finally, this is not an estimation of the number of earthquake prone buildings in New Zealand, apart from the inference that many URM buildings are likely to meet the criteria of being earthquake prone.

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In addition to the above estimate of the number of URM buildings in New Zealand, data on the New Zealand building stock were obtained from Property IQ, a part of Quotable Value Ltd (QV), which is a valuation and property information company in New Zealand. QV collects building information and conducts building valuations for rating purposes for most New Zealand Territorial Authorities. In the council valuation data, the building material and age (decade), among other data elements, is recorded. The building material refers to the wall cladding and is not a comment on the load carrying materials of the structure. It was assumed that no URM buildings were constructed in New Zealand after 1950 (Stacpoole & Beaven, 1972) and that buildings with a brick veneer but other materials for the load bearing parts of the structure (for example, timber frame buildings with a brick veneer) are recorded as “mixed materials” in the database. All entries for buildings constructed in New Zealand before 1950 and with “brick” recorded as the cladding description in the QV database were extracted. While it is acknowledged that a cladding description recorded as “brick” can include brick, brick veneer, adobe and rammed earth as the material type, it was considered that such an extraction of data would be a legitimate reflection of the URM building stock in New Zealand.

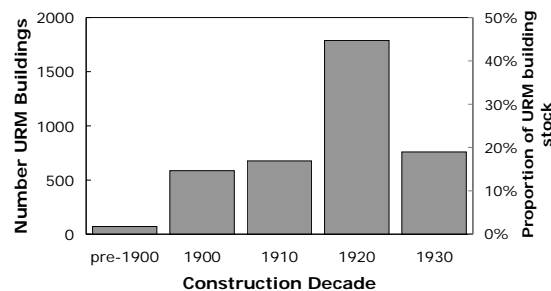


Figure B.3 Construction decade of URM buildings in New Zealand

These records were analysed according to construction date, building height and financial value. Table B.3 shows the decade in which each URM building was built. Brick buildings with mixed age are entered on the QV database as pre-1950, but their exact age is indeterminate from the data recorded. The number of URM buildings with a confirmed construction date are shown in Figure B.4, and are grouped according to the first year in each decade.

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Table B.3 Number of URM buildings from QV according to construction decade

Decade	URM Buildings
1871 – 1880	43
1881 – 1890	23
1891 – 1900	71
1901 – 1910	469
1911 – 1920	646
1921 – 1930	878
1931 – 1940	514
1941 – 1950	218
Mixed	725
Total	3589

Figure B.4 clearly shows a trend where the number of URM buildings initially increased until the end of the 1920s, and subsequently declined. This trend follows the increasing rate of European immigration and associated infrastructure development in New Zealand in the early 20th Century, until the 1931 M7.8 Hawke's Bay earthquake, after which URM was no longer considered a favourable building material.

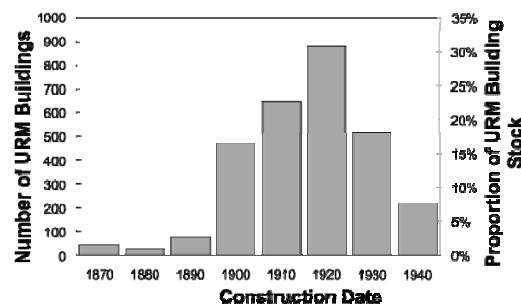


Figure B.4 Number of URM buildings from QV according to construction decade

Appendix C:

List of demolished buildings

Table C.1 reports the details of buildings in Christchurch that have been demolished following the 2010/2011 Canterbury earthquake swarm. 224 buildings are reported in Table C.1.

**Table C.1 Christchurch building demolished following the 2010/2011
Canterbury earthquake swarm (as at 25 July 2011)**

No.	Street	Construction Type	Status	Property
240	Armagh Street	non-URM	Non-Heritage	Amicus House Residential 16
32	Armagh Street	URM	Heritage	Christ's College - Cranmer Centre (ex-ChCh Girls)
52	Armagh Street	URM	Heritage	Windsor Hotel
182	Armagh Street	URM	Non-Heritage	Chen's Kitchen Grand Total 102
195	Armagh Street	URM	Non-Heritage	Music Institute Commercial 86
245	Armagh Street	URM	Non-Heritage	Hairdresser
247	Armagh Street	URM	Non-Heritage	Laundrette
249	Armagh Street	URM	Non-Heritage	Dairy and Sinbad Foods
184-186	Armagh Street	URM	Non-Heritage	Tax Link & Yumi Sushi
272	Barbadoes Street	URM	Non-Heritage	Frauenreisehouse Women's Hospital
21	Bealey Avenue	URM	Heritage	Carlton Hotel (Legally 1 Papanui Rd)
18	Bedford Row	URM	Non-Heritage	
167	Bowhill Road	non-URM	Non-Heritage	Fish & Chip Shop
137	Caledonian Road	unknown	Non-Heritage	House & Garage
35	Cambridge Terrace	non-URM	Non-Heritage	Rolleston Courts Apts

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82	Cashel Street	URM	Non-Heritage	The Bog & The Vault
86	Cashel Street	URM	Non-Heritage	Trade Aid
88	Cashel Street	URM	Heritage	Cafe Blue
94	Cashel Street	URM	Non-Heritage	Last Train to India
109	Cashel Street	URM	Heritage	Cashel Mall Block (Former Press & Weekly Press Building)
116	Cashel Street	URM	Non-Heritage	Flight Centre
181	Cashel Street	URM	Non-Heritage	Sushi Q, Cashel Liquor Centre, Cashel Convenience
236	Cashel Street	URM	Heritage	St Paul's Church
274	Cashel Street	URM	Heritage	The Provincial
112-112a	Cashel Street	URM	Non-Heritage	Acquisitions / Eden Alley / Harris Dental Ltd
208-210	Cashel Street	URM	Non-Heritage	Enabling Better Business / Comcare Trust
2	Cashmere Road	unknown	Non-Heritage	4 x Rental Units
1/8	Cashmere Road	URM	Non-Heritage	Cashmere Seafood-fish&chip and New Just Thai
32	Cathedral Square	URM	Heritage	The Press Building
53	Cathedral Square	URM	Heritage	Chancery Chambers
2	Chester Street	URM	Heritage	Stratham House - Cathedral Grammar
6	Circuit Street	unknown	Heritage	Elizabeth House
992	Colombo Street	unknown	Non-Heritage	
382	Colombo Street	URM	Non-Heritage	The Great Opportunity Shop & Dairy
386	Colombo Street	URM	Heritage	Antiques and Collectables
388	Colombo Street	URM	Heritage	Sydenham Book Exchange
390	Colombo Street	URM	Heritage	Triton Dairy
392	Colombo Street	URM	Heritage	Image Photo & Frame
394	Colombo Street	URM	Heritage	Image Photo & Frame
398	Colombo Street	URM	Heritage	Sydenham Stationary
400	Colombo Street	URM	Heritage	
402	Colombo Street	URM	Heritage	
404	Colombo Street	URM	Heritage	Ascot TV
406	Colombo Street	URM	Heritage	Ascot TV
439	Colombo Street	URM	Non-Heritage	
441	Colombo Street	URM	Non-Heritage	Churchill Tavern
457	Colombo Street	URM	Non-Heritage	Vacuum Cleaner Repairs
480	Colombo Street	URM	Non-Heritage	Rob Roys Scottish Bar
482	Colombo Street	URM	Non-Heritage	
484	Colombo Street	URM	Non-Heritage	Change of Status to previous release
490	Colombo Street	URM	Non-Heritage	Metro Imports
494	Colombo Street	URM	Non-Heritage	Kashmir Building
590	Colombo Street	URM	Non-Heritage	Joyful Restaurant & adjacent Bakery
592	Colombo Street	URM	Non-Heritage	

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593	Colombo Street	URM	Non-Heritage	Southern Ink
595	Colombo Street	URM	Non-Heritage	Lotus Heart
597	Colombo Street	URM	Non-Heritage	Original Haircuts
599	Colombo Street	URM	Non-Heritage	Sushi Dining Kinji
615	Colombo Street	URM	Heritage	Austral Building
618	Colombo Street	URM	Non-Heritage	Adult Cash Discounter
620	Colombo Street	URM	Non-Heritage	Falconer's Shoe Store
622	Colombo Street	URM	Non-Heritage	Computer Centre
624	Colombo Street	URM	Non-Heritage	
626	Colombo Street	URM	Heritage	Bean Bags & Beyond
773	Colombo Street	URM	Non-Heritage	Bettys Liquor Store
783	Colombo Street	URM	Non-Heritage	Metro Caf�
789	Colombo Street	URM	Non-Heritage	The Orange Tree, Footprints Organic Caf�
800	Colombo Street	URM	Non-Heritage	Sala Thai
801	Colombo Street	URM	Non-Heritage	Dusty Old Things Antiques
803	Colombo Street	URM	Non-Heritage	The Painted Room
805	Colombo Street	URM	Non-Heritage	Kim's Restaurant
807	Colombo Street	URM	Non-Heritage	Kildonan House
809	Colombo Street	URM	Non-Heritage	Studio Works
811	Colombo Street	URM	Non-Heritage	Caf� Valentino Restaurant
813	Colombo Street	URM	Non-Heritage	Caf� Valentino Restaurant
815	Colombo Street	URM	Non-Heritage	Caf� Valentino Restaurant
819	Colombo Street	URM	Non-Heritage	Phu Thai
1/492	Colombo Street	URM	Non-Heritage	Modern Engravers
1049-1047	Colombo Street	URM	Heritage	St Albans Community Centre
2/492	Colombo Street	URM	Non-Heritage	Speedway Bookshop
380A	Colombo Street	URM	Non-Heritage	Tasty Tucker Bakery
384-384A	Colombo Street	URM	Non-Heritage	Fish'n'Chips & Eve's Gifts
461-469	Colombo Street	URM	Heritage	Storage Sheds
595A	Colombo Street	URM	Non-Heritage	Billiken Restaurant
597A	Colombo Street	URM	Non-Heritage	Longhorn Leather Shop
599A	Colombo Street	URM	Non-Heritage	Hi Tech Books
601-601A	Colombo Street	URM	Non-Heritage	Pleasure Plus, Longhorn Leather Shop
753-759	Colombo Street	URM	Heritage	2-storey commercial
803a	Colombo Street	URM	Non-Heritage	The Painted Room
804-806	Colombo Street	URM	Non-Heritage	
808-812	Colombo Street	URM	Non-Heritage	Gallery 810, Welcome Dairy, Bodhi Tree
159	Deans Avenue	URM	Non-Heritage	Hunter Lounge Suites
1/462	Durham Street	non-URM	Non-Heritage	
2/462	Durham Street	non-URM	Non-Heritage	
3/462	Durham Street	non-URM	Non-Heritage	

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188-192	Ferry Road	unknown	Non-Heritage	Restaurant Schwass / Footstep Shoe Repairs
360	Ferry Road	URM	Non-Heritage	
454	Ferry Road	URM	Non-Heritage	Yazu Hair Design
455	Ferry Road	URM	Non-Heritage	Dowsons Shoes
580	Ferry Road	URM	Heritage	A&T Burt Building (former Nugget Factory)
628	Ferry Road	URM	Non-Heritage	Big Eds Takeaways
689	Ferry Road	URM	Heritage	
697	Ferry Road	URM	Heritage	Ferry Road Law Centre
452A	Ferry Road	URM	Non-Heritage	Tan's Chinese Takeaways
454A	Ferry Road	URM	Non-Heritage	St. Martins Pottery
215	Fitzgerald Avenue	unknown	Non-Heritage	
97	Fitzgerald Avenue	non-URM	Non-Heritage	Block Wall on Boundary
466	Gloucester Street	unknown	Non-Heritage	Boarding House
192	Gloucester Street	non-URM	Non-Heritage	The Clinic
198	Gloucester Street	non-URM	Heritage - Significant	TVNZ Building
241	Gloucester Street	non-URM	Non-Heritage	Stonehurst Backpackers
94	Gloucester Street	URM	Heritage	The Garage
96	Gloucester Street	URM	Heritage	Gusto Beijing Duck
173	Gloucester Street	URM	Non-Heritage	Map World, City Fish & Chips, McCammon Dairy and Bebols
174	Gloucester Street	URM	Non-Heritage	Tulsi
194	Gloucester Street	URM	Heritage	Wave House (Old Winnie Bagoes)
701	Gloucester Street	URM	Non-Heritage	T Bakery
703-709	Gloucester Street	URM	Non-Heritage	
5	Heaton Street	unknown	Non-Heritage	House and Garage
47	Hereford Street	non-URM	Heritage - Significant	St Elmos Courts
190-192	Hereford Street	non-URM	Heritage - Significant	Kenton Chambers
84	Hereford Street	URM	Heritage	Mythai (former NZ Trust and Loan Building)
104	Hereford Street	URM	Non-Heritage	Yorkshire House - Poppy Thai, French Cafe
106	Hereford Street	URM	Non-Heritage	Yorkshire House - Poppy Thai, French Cafe
126	Hereford Street	URM	Non-Heritage	OPSM
134	Hereford Street	URM	Heritage	Hanafins Camera & Video
136	Hereford Street	URM	Heritage	Hanafins Camera & Video
198	Hereford Street	URM	Heritage	Youth Health Centre
202	Hereford Street	URM	Heritage	NZ Prints
203	Hereford Street	URM	Heritage	Avonmore House / Interiors House
234	Hereford Street	URM	Non-Heritage	Church Hall
234	Hereford Street	URM	Non-Heritage	The Vicarage

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234	Hereford Street	URM	Heritage	Church of St John the Baptist
170	High Street	URM	Heritage	Head Over Heels
172	High Street	URM	Heritage	Former Knights Butchery
174	High Street	URM	Non-Heritage	Embassy
278	High Street	URM	Heritage	Hanafins Camera & Video
255	Kilmore Street	unknown	Non-Heritage	Octo Ltd
257	Kilmore Street	unknown	Non-Heritage	
132	Kilmore Street	URM	Non-Heritage	Thrifty Car Rental
135	Kilmore Street	URM	Heritage	Caledonian Hall
222	Kilmore Street	URM	Non-Heritage	The Herbal Dispensary
229	Kilmore Street	URM	Heritage	Piko Wholefoods (also known as 359 Barbadoes)
54	Lichfield Street	URM	Non-Heritage	R&R Sport
84	Lichfield Street	URM	Heritage	Fazazz
114	Lichfield Street	URM	Heritage	The Honey Pot Caf�
115	Lichfield Street	URM	Non-Heritage	Rod Hair Textiles
116	Lichfield Street	URM	Heritage	Ruben Blades
119	Lichfield Street	URM	Non-Heritage	Cotura Fashions
121	Lichfield Street	URM	Non-Heritage	Cotura Fashions
127	Lichfield Street	URM	Non-Heritage	Sound People, I R Thompson & Assoc, The Travel Doctor
6	London Street	URM	Heritage	Mazey Building
9	London Street	URM	Heritage	Empire Hotel
24	London Street	URM	Heritage	Harbourlight Theatre
36	London Street	URM	Heritage	Coastal Living Design Store
38	London Street	URM	Non-Heritage	Lyttleton Fisheries, Fish and Chip Shop
40	London Street	URM	Non-Heritage	Lava Bar
42	London Street	URM	Heritage	Volcano Caf�
44	London Street	URM	Heritage	The Albion
249	Madras Street	non-URM	Non-Heritage	CTV
271	Madras Street	non-URM	Non-Heritage - Significant	Harcourts Grenadier
192	Madras Street	URM	Heritage	Nurse Maude Building
204	Madras Street	URM	Non-Heritage	Florian Building
268	Madras Street	URM	Heritage	Charlie's Backpackers
253-255	Madras Street	URM	Heritage	Arrow international
11	Main North	URM	Road	Non-Heritage
91-93	Main Road	non-URM	Non-Heritage	Redcliffs Library
87	Manchester Street	URM	Non-Heritage	Beverley Studios
105	Manchester Street	URM	Heritage	H Pannells Boot Emporium
107	Manchester Street	URM	Heritage	Budapest Restaurant
109	Manchester Street	URM	Heritage	John Dary Menswear
110	Manchester Street	URM	Non-Heritage	Nee Hao Asian Delight/Soho/Players/Galaxy Records

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204	Manchester Street	URM	Non-Heritage	Iconic Bar
211	Manchester Street	URM	Non-Heritage	Le Plonk
265	Manchester Street	URM	Non-Heritage	Map World, City Fish & Chips, McCammon Dairy and Bebols
293	Manchester Street	URM	Non-Heritage	Subway
141-147	Manchester Street	URM	Non-Heritage	
69-73	Manchester Street	URM	Heritage	Cecil House
20	Marsden Street	unknown	Non-Heritage	
376	Montreal Street	non-URM	Non-Heritage - Significant	Strategy House
192	Moorhouse Avenue	URM	Heritage	Crown Hotel
24	Norwich Quay	URM	Non-Heritage	Lyttelton Hotel
34	Norwich Quay	URM	Heritage	The Royal Hotel
165	Papanui Road	URM	Heritage	Hall
196	Papanui Road	URM	Non-Heritage	Villa Antiques
198	Papanui Road	URM	Non-Heritage	Cookery Nook & Chicotis
203	Papanui Road	URM	Non-Heritage	
204	Papanui Road	URM	Non-Heritage	Kudos hairdressers
507	Papanui Road	URM	Non-Heritage	Joe Butler Real Estate
509	Papanui Road	URM	Non-Heritage	Memories Caf�
196A	Papanui Road	URM	Non-Heritage	Love in a Basket
202A	Papanui Road	URM	Non-Heritage	Mansfield Antiques & Momo Sushi
86	Port Hills	non-URM	Road	Non-Heritage Jaishaan Diary
2	Reserve Terrace	URM	Heritage	Time Ball Station
7	Riccarton Road	URM	Heritage	St Christophers Avonhead Bookshop
102A&B	Riccarton Road	URM	Non-Heritage	Computeera Ltd
33D	Rolleston Avenue	URM	Non-Heritage	Christs College (English Block)
244A	Salisbury Street	non-URM	Non-Heritage	Flats
310	St Asaph	URM	Street	Non-Heritage
270	St Asaph Street	URM	Non-Heritage	Southlander Bar
33	Stoke Street	unknown	Non-Heritage	
1	Sumner Road	URM	Heritage	Former Library
160	Tuam Street	URM	Non-Heritage	Canterbury Music Planet
178	Tuam Street	URM	Heritage	Chillis - Also known as 622 - 624 Colombo St
180	Tuam Street	URM	Heritage	
217	Tuam Street	URM	Non-Heritage	Atami Bath House
221	Tuam Street	URM	Non-Heritage	Portobello
223	Tuam Street	URM	Non-Heritage	Global Fabrics / Edward Gibbons
230	Tuam Street	URM	Heritage	Edison Hall (Workshop, Witchery)
232	Tuam Street	URM	Heritage	Domo and Witchery
236	Tuam Street	URM	Heritage	Domo
50	Victoria Street	non-URM	Non-Heritage - Significant	NZ College of Early Childhood Education
167	Victoria Street	non-URM	Non-Heritage	Significant Fidelity House
3	Wades Avenue	URM	Non-Heritage	St Martins Library

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16	Wakefield Avenue	URM	Non-Heritage	Sumner Community Centre
92	Wilsons Road	non-URM	Non-Heritage	New World St Martins
14	Wise Street	URM	Heritage	Addington Flour Mil-Grain Store Building
378	Worcester Street	non-URM	Non-Heritage	Shops on Street front
143	Worcester Street	URM	Heritage	Lonsdale House - Gopals + Pedros
387	Worcester Street	URM	Non-Heritage	
389	Worcester Street	URM	Non-Heritage	Wicks Fish Supply
391	Worcester Street	URM	Non-Heritage	
395	Worcester Street	URM	Non-Heritage	Marcel's Picnic
393A	Worcester Street	URM	Non-Heritage	Chemist Shop