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Archaeology

Dunedin Hospital Development, Cadbury Confectionary Ltd Buildings

A Heritage Impact Assessment

Report Prepared for Ministry of Health
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Submitted: May 2020

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Project Details

Archaeological Site No.	I44/817
HNZPT List/Rārangi Kōrero Entry No.	List No. 2143
DCC Heritage Register	Site No. B030
Property Address	280 Cumberland Street
Client	Ministry of Health
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Report Submitted	May 2020
Report Submitted To	Dunedin City Council, Heritage New Zealand Pouhere Taonga, Ministry of Health

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Executive Summary

UOA has been commissioned by the Ministry of Health undertake a heritage impact assessment of the buildings and site area at 280 Cumberland Street (DP 4846, Part Sections 56 and 71, Sections 53 to 55 and 72 to 74, Block XVI, SO 14196). These buildings are referred to as the Cadbury Confectionery Ltd Buildings and have been previously recognised for their heritage values with a Category II listing on the New Zealand Heritage List/Rārangi Kōrero (List No. 2143). These same buildings are also registered as B030 on the 2006 Dunedin City District Plan (Schedules 25.1 and 25.2) and the Second Generation Dunedin City District Plan (2GP) (Schedule A1.1), which affords protection to the facades to Castle and Cumberland Streets. Furthermore, within the extent of the Cadbury Confectionery Ltd Buildings, two archaeological sites are recorded: the Cadbury Factory Site (144/817) and the A & T Burt Site (144/922).

Historical research undertaken as part of this assessment identified that the area encompassed by the Cadbury Confectionery Ltd Buildings was occupied prior to 1900, with evidence of occupation at least as early as the 1860s. Nineteenth century occupants include the New Zealand Distillery Co. and Albion Brewing Co. breweries, A & T Burt premises, the Otago Foundry, NZEEC, Dunedin Iron Works; New Zealand Implement Company and R Hudson and Co. Confectionery factory. The R Hudson and Co Confectionery merged to become Cadbury Fry Hudson in the 1930s (and would eventually become Cadbury Confectionery Ltd) and the company had taken over the entire site by 1950s. The building façades listed by HNZPT and scheduled by the DCC are largely associated with the development of the site from the 1920s to the 1960s. However, these buildings do contain elements of at least four pre-1900 buildings including: an 1875 cellar and an 1868 small mill (also known as the Dairy and Machine House Building); an 1868 kiln and an 1868 granary/malt floor (now part of Cadbury World and the Office Buildings).

Due to development over the twentieth and twenty-first centuries few elements of the nineteenth century buildings are visible in the façades. However, the cellar or Dairy and Machine House Building has been reconstructed recently to reflect its former 1918 façade, while the façades of the remaining buildings have changed little from their 1920s to 1960s construction and alterations. The Cadbury Confectionery Ltd Buildings remain one of the last complexes of the continuous industrial development of nineteenth and twentieth centuries in central Dunedin.

While the new hospital development has been able to be designed to retain the Dairy and Machine House Building, we understand that as a result of implications for cost, compromise to clinical efficiencies, construction complexity, time delays and health and safety concerns, the Ministry of Health has determined it is necessary to seek to demolish six out of seven Cadbury Confectionary Buildings, including their façades. This HIA therefore evaluates the effects of the demolition of those buildings and their facades on the heritage values of the Cadbury Confectionery Ltd Buildings.

Heritage values are complicated and within each value assessed there are several aspects to be considered. For instance, for architectural values of the buildings, the architecture itself, along with integrity, rarity, representativeness, context or group, and vulnerability are to be analysed. By way of summary, our assessment concludes that the overall heritage value of the buildings is of medium significance. Generally, the buildings were assessed as having high historic value for connections to past individuals and companies, and high architectural values for rarity. One building (the Biscuit and Dispatch Building) had high architectural integrity in that it retains significant features from its time of construction, and later periods when key additions were carried out, while the remainder of buildings had low to moderate integrity values. The assessment otherwise found that the buildings and their facades had low architectural merit (in matters other than rarity), moderate representativeness values and moderate context/group value. Overall, the assessment concludes that the loss of the remaining buildings and façades will have a major adverse effect on heritage values but that the adaptive reuse of the Dairy and Machine House Building would have a moderate beneficial effect.

It is important to note that the statutory protections afforded by the Dunedin City District Plan and the 2GP are focused on the façades. This assessment concludes that the architectural merit of the facades contributes the least to their overall heritage value, with architectural rarity and historic values in terms of connection to function, individuals and companies having higher significance. While the impacts on these values cannot be removed or completely remedied, the adverse effects can be reduced through mitigation strategies. To that end, UOA has recommended a number of measures which would mitigate the adverse effect resulting from demolition of the Buildings and their facades, including retention and adaptive reuse of certain buildings, building and other archaeological recording, salvage and reuse of historic materials, preservation or retention of features, building samples and artefacts as well as public interpretation. If these measures are implemented, this assessment concludes that the adverse effect of demolition on the heritage values those Buildings and their facades currently hold will be moderate.

Abbreviations

Abbreviation	Definition
DCC	Dunedin City Council
Heritage New Zealand	Heritage New Zealand Pouhere Taonga
HNZPTA	Heritage New Zealand Pouhere Taonga Act (2014)
IL3	Importance Level 3
IL4	Importance Level 4
NZAA	New Zealand Archaeological Association
RMA	Resource Management Act (1991)
UOA	Underground Overground Archaeology Ltd.

Acknowledgements

Underground Overground Archaeology acknowledges and thanks the following individuals who assisted in this project:

- Chris Scott from the DCC Archives
- Sarah Gallagher and Lynne Campbell at Heritage New Zealand Pouhere Taonga for providing access to the List file for, and further information on, the Cadbury Schweppes Hudson Ltd Buildings (List No. 2143).

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1 Introduction

Underground Overground Archaeology Ltd (UOA) has been commissioned by the Ministry of Health to undertake a Heritage Impact Assessment (HIA) of the buildings and site area at 280 Cumberland Street (DP 4846, Part Sections 56 and 71, Sections 53 to 55 and 72 to 74, Block XVI, SO 14196) (Figure 1-1). This block is subject to a proposal which would see a new Dunedin hospital constructed on this site. The site is currently occupied by a complex of industrial buildings including four pre-1900 structures. This HIA has been prepared to accompany an application to Dunedin City Council (DCC) for consent to demolish those buildings and their facades to enable use of the site for the new Dunedin Hospital development.

The Cadbury Confectionery Ltd Buildings were first listed on the HNZPT List/Rārangi Kōrero in 1982 as a Category 2 Historic Place (List No. 2143). The listing refers to the buildings as the Cadbury Schweppes Hudson Limited Buildings and records the extended façades of four buildings. The factory buildings cover all of DP 1589 and DP 5322. The criteria for classification was not outlined at the time. Thus, as a Category 2 historic place, it is only specified that the buildings are of historical or cultural significance or value. The façades to Castle and Cumberland Streets, across the same property boundaries, were also registered as B030 on the 2006 Dunedin City District Plan (Schedules 25.1 and 25.2) and the Second Generation Dunedin City District Plan (2GP) (Schedule A1.1). The Dairy and Machine House building on Section 74 and the adjacent Section 73 BLK XVI, Dunedin, was incorporated into the Anzac Square/Railway Heritage Precinct (TH11) in the precinct the 2006 Dunedin City District Plan; however, it is no longer part of this precinct (now referred to as the Stuart Street Commercial Heritage Precinct) in the 2GP.

Historical research undertaken as part of this assessment identified that the area encompassed by the Cadbury Confectionery Ltd Buildings was occupied prior to 1900, with evidence of occupation at least as early as the 1860s. Nineteenth century occupants include the New Zealand Distillery Co. and Albion Brewing Co. breweries, A & T Burt premises, the Otago Foundry, NZEEC, Dunedin Iron Works; New Zealand Implement Company and R Hudson and Co. Confectionery factory. The R Hudson and Co Confectionery merged to become Cadbury Fry Hudson in the 1930s (and would eventually become Cadbury Confectionery Ltd) and the company had taken over the entire site by 1950s. The building façades listed by HNZPT and registered by the DCC are largely associated with the development of the site from the 1920s to the 1960s. However, these buildings do contain elements of at least four pre-1900 buildings including: an 1875 cellar and an 1868 small mill (also known as the Dairy and Machine House Building); an 1868 kiln and an 1868 granary/malt floor (now part of Cadbury World and the office buildings).

Due to development over the twentieth and twenty-first centuries few elements of the nineteenth century buildings are visible in the façades. However, the cellar or Dairy and Machine House Building has been restored recently to reflect its former 1918 façade, while the façades of the remaining buildings have changed little from their 1920s to 1960s construction and alterations. The Cadbury Confectionery Ltd Buildings remain one of the last complexes of the continuous industrial development of nineteenth and twentieth centuries in central Dunedin.

An archaeological assessment and archaeological authority from Heritage New Zealand will also be sought. There are four archaeological sites recorded within the block (including that occupied by the modern Cadbury warehouse building); sites I44/817, I44/922, I44/924, and I44/923. Two of these sites are located within the extent of the Cadbury Confectionery Ltd Buildings: the historic Cadbury Factory (I44/817) and the A & T Burt site (I44/922). Determination of archaeological values are based on criteria established by Heritage New Zealand (NZHPT, 2006).



Legend

The Project Area

Orange outline Cadbury Block

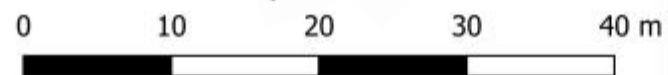
White outline Land parcels

Recorded Archaeological and Heritage Sites

Blue square DCC Character Contributing Buildings

Blue outline Listing buildings at 280 Cumberland Street

Red star Archsite



Dunedin Hospital Development - Cadbury Block

Underground
Overground Archaeology

Aerial imagery (2013) provided by the DCC. Land parcel and roading data sourced from the LINZ Data Service and Licensed for use under the CC BY 4.0 Licence



Figure 1-1. Location of the “Cadbury Block” within the project area.

2 Statutory Requirements

There are two main pieces of legislation that provide protection for heritage values. The Resource Management Act 1991 requires local authorities to set up and operate a district plan that identifies items of importance and provides objectives, policies and rules for how activities that affect these sites must be considered. The Heritage New Zealand Pouhere Taonga Act 2014 establishes the New Zealand Heritage List and protects archaeological sites. Any proposed works that have the potential to affect heritage items are also assessed against the provisions of the International Council on Monuments and Sites (ICOMOS) New Zealand Charter for the Conservation of Places of Cultural Heritage Value (ICOMOS New Zealand Charter 2010).

2.1 Resource Management Act (1991)

The heritage provisions of the Resource Management Act (1991) were strengthened with the Resource Management Amendment Act (2003). The Resource Management Amendment Act (2003) contains a more detailed definition of heritage sites and now considers historic heritage to be a matter of national importance under Section 6. The Act requires City, District and Regional Councils to manage the use, development, and protection of natural and physical resources in a way that provides for the well-being of today's communities while safeguarding the options of future generations.

The Act defines historic heritage as those natural and physical resources that contribute to an understanding and appreciation of New Zealand's history and cultures, derived from archaeological, architectural, cultural, historic, scientific, or technological qualities. Historic heritage includes:

- Historic sites, structures, places and areas,
- Archaeological sites,
- Sites of significance to Māori, including Wahi Tapu; and,
- Surroundings associated with the natural and physical resources.

It should be noted that this definition does not include the 1900 cut-off date for protected archaeological sites as defined by the Heritage New Zealand Pouhere Taonga Act 2014. Any historic feature that can be shown to have significant values must be considered in any resource consent application.

Section 87A of the RMA defines classes of activities, including permitted, controlled, restricted discretionary, discretionary, non-complying, and prohibited, and their requirements for resource consent (if any). These activities are summarised below.

- **Permitted Activity** – an activity that complies with the requirements, conditions and permissions. Resource consent is not required.
- **Controlled Activity** – an activity that must comply with the requirements, conditions and permissions of the district plan, which the council may impose conditions (restricted to the discretionary matters). Resource consent is required.
- **Restricted Discretionary Activity** – an activity that requires resource consent, which the council has the authority to decline consent or grant it and impose conditions (restricted to the discretionary matters) for the matters over which discretion is restricted. If granted, the activity must comply with the requirements, conditions and permissions.
- **Discretionary Activity** – an activity that requires resource consent, which the council has the authority to decline consent or grant it with or without conditions (restricted to the discretionary matters). If granted, the activity must comply with the requirements, conditions and permissions.
- **Non-Complying Activities** – an activity that requires resource consent, which the council may decline the consent or grant it with or without conditions, but only if the Council is satisfied that the requirements of Section 104D are met and the activity must comply with the requirements, conditions, and permissions.
 - **Section 104D** Particular Restrictions for Non-Complying Activities

- (1) Despite any decision made for the purpose of notification in relation to adverse effects, a consent authority may grant a resource consent for a non-complying activity only if it is satisfied that either—
 - (a) the adverse effects of the activity on the environment (other than any effect to which section 104(3)(a)(ii) applies) will be minor; or
 - (b) the application is for an activity that will not be contrary to the objectives and policies of—
 - (i) the relevant plan, if there is a plan but no proposed plan in respect of the activity; or
 - (ii) the relevant proposed plan, if there is a proposed plan but no relevant plan in respect of the activity; or
 - (iii) both the relevant plan and the relevant proposed plan, if there is both a plan and a proposed plan in respect of the activity.
 - (2) To avoid doubt, section 104(2) applies to the determination of an application for a non-complying activity.
- **Prohibited Activities** – an activity for which no resource consent can be made, nor can the council grant consent for it.

2.1.1 *The Dunedin City Council District Plan*

The operative Dunedin City District Plan was released in 1995 and became fully operative in 2007. The proposed Second Generation Dunedin City District Plan (2GP) was notified in September 2016, and as of 7 November 2018, all rules in the proposed 2GP had legal effect, meaning that the rules of both the 2GP and operative District Plan apply. Provisions of the 2GP that are not under appeal are deemed to be operative, while both the operative District Plan and the 2GP rules apply to those provisions of the 2GP under appeal. The objectives, policies and rules of the operative and proposed District Plans are discussed below.

The 2006 District Plan

The District Plan (2006) identifies physical heritage resources worthy of identification in their own right, including sites of townscape and heritage significance, buildings and precincts of townscape and heritage value, and sites of cultural importance, including archaeological sites and those sites of importance to Māori. This plan provides a schedule of protected townscape and heritage buildings and structures in Appendix 25.1. All Category I and II buildings listed on the New Zealand Heritage List/Rārangī Kōrero are included in this Appendix due to their contribution to Dunedin's Townscape through their individual heritage value. Other buildings are part of this schedule as they also contribute to a townscape or heritage precinct's character and thus are considered worthy of protecting. Each building or structure identified is referenced either by their façade (that may include multiple street frontages); the entire external building envelope (all external surfaces of the building) or the bulk appearance (the appearance of the structure from a specific area). The plan also provides a schedule of archaeological sites registered by the New Zealand Historic Places Trust (Appendix 25.2). The schedule does not include all archaeological sites, as there are many more recorded in the New Zealand Archaeological Association (NZAA) site recording scheme, and many that have not been previously recorded. The plan identifies that if properties are within a heritage or townscape precinct, an identified building or heritage site is included within a property, or the property is situated within an urban landscape conservation area, then activities are subject to the provisions outlined in the Townscape Section (13) of the plan.

There are four objectives in the Townscape Section (13) of the District Plan (2006) that specifically relate to heritage. The first is that buildings and parts of buildings, places and sites which are of heritage value are recognised and protected (Objective 13.2.3). The policies that promote this objective include avoidance of demolition of buildings, parts of buildings and other structured identified to be of townscape or heritage value (Policy 13.3.6); excluding signs which adversely impact upon the townscape or heritage values of buildings or precincts (Policy 13.3.7); retaining the natural appearance of exposed stone and brick on building facings within townscape or heritage precincts (Policy 13.3.8); keep alterations to the external design and appearance of all buildings within

identified precincts within the character of the precinct (Policy 13.3.9); encouragement of restoration, conservation, continued use and adaptive reuse of buildings with townscape and heritage values (Policy 13.3.10); and, identification for protection buildings, structures, sites and other features which have heritage value (Policy 13.3.13).

The second objective that relates to heritage is that buildings and places that contribute to the townscape character are recognised and maintained (Objective 13.2.4). On top of Policies 13.3.9 and 13.3.10, the policies that promote this objective also include new buildings on corner sites reinforcing the character of the central City precincts (Policy 13.3.3); and, providing an environment suitable for pedestrians in high pedestrian usage areas (Policy 13.3.11).

The third objective relating to heritage is ensuring that the character of significant townscape and heritage precincts is maintained or enhanced (Objective 13.2.5). On top of Policies 13.3.6 to 13.3.8, the policies that promote this objective also include protecting as well as enhancing the heritage and townscape values of 17 precincts identified in Policy 13.3.4 (including the Anzac Square/Railway Station Precinct); and, requiring any development within identified precincts to maintain and enhance the townscape, heritage character and values of that precinct (Policy 13.3.5).

The fourth objective that relates to heritage is to ensure that development does not adversely affect the character and amenity of the central City precincts (Objective 13.2.6) Policies 13.3.3, 13.3.4 and 13.3.9 as outlined above, promote this objective

Within the sustainable management of natural and physical resources considerations (Section 4) there are two policies that relate to heritage. The first objective is enhancing the amenity values of Dunedin (Objective 4.2.1) and the policy that promotes this is maintaining and enhancing amenity values (Policy 4.3.1). The second objective is ensuring that significant natural and physical resources are appropriately protected (Objective 4.2.4) and the policy that specifically relates to heritage that promotes this is providing for protection of natural and physical resources of the City that commensurate with their local, regional and national significance (Policy 4.3.4).

Heritage is also considered for signage in Section 19 of the District Plan (2006). The first objective relating to heritage is ensuring signs do not adversely affect the townscape and heritage values of buildings (Objective 19.2.3). The policies that promote include Policy 13.3.7, outlined above, as well as controlling the design, location, size and number of signs erected at any given location to avoid, remedy or mitigate any adverse effects including on heritage and townscape values (Policy 19.3.2.) consideration for the erection of signs on heritage or townscape buildings on a case by case basis (Policy 19.3.3).

To meet the objectives and policies of the District Plan (2006), the DCC has established rules that dictate the activities that may affect heritage including outlined in the Townscape Section (Section 13.7) of the plan. Below is a summary of these rules.

- **Rule 13.7.1 Permitted activities.** This rule provides guidance on alterations, additions, erections, and demolition that do not affect listed parts of a scheduled building as well as painting, restoration and repair of buildings on Schedule 25.1 and those located within a townscape or heritage precinct (including the Anzac Square/Railway Station Heritage Precinct).
- **Rule 13.7.2 Controlled activities.** This rule provides guidance on the erection of new buildings (with respect to external design and appearance) and covers assessment matters of which consider the values of the townscape and heritage precinct and the relationship of the building with the setting.
- **Rule 13.7.3 Discretionary Activities (restricted).** This rule provides guidance on additions, alterations, painting, and coverings that do not comply with Rule 13.7.1, as well as the removal or demolition of entire or parts of buildings located within townscape and heritage precincts and those listed in Schedule 25.1 as well as covering assessment matters. The latter includes consideration the building's profiles from public

places; style and character; design and appearance; townscape and heritage significance (and reasons for a listings by the New Zealand Historic Places Trust); relationship to setting; importance to the wider community; precinct values; conservation principles of ICOMOS New Zealand Charter of the Conservation of Places of Cultural Heritage Value; authenticity of architectural design; potential for adaptive reuse, retainment, relocation and for partial retention of part of the building; and the proposed replacement building.

- **Rule 13.7.4 Non-Complying Activities.** This rule provides guidance on the removal or demolition of buildings, parts of buildings and other structures listed in Schedule 25.1 not provided for in Rules 13.7.1 - 13.7.3.

The Second Generation Dunedin City District Plan

The 2GP has defined heritage sites as including both buildings and structures and their associated curtilage, gardens, open spaces, and other landscaping features. Appendix A1.1 of the 2GP is a schedule of protected heritage items and sites, including scheduled heritage buildings, scheduled heritage sites, character contributing buildings, archaeological sites. The plan identifies nine residential heritage precincts and ten commercial heritage precincts. None of these precincts apply to the site.

Heritage is identified as being a significant contributor to Dunedin's identity (Objective 2.4.2) and policies are in place to identify heritage buildings and structures (Policy 2.4.2.1) and develop rules to manage their development (Policy 2.4.2.2) along with their adaptive reuse (Policy 2.4.2.3). The criteria utilised by the DCC to identify significant heritage buildings and structures includes historic and social significance; spiritual/cultural significance, including significance to Māori; design significance; and technological/scientific significance. Heritage is also a key to the District Plan's policy to ensure the city's central business district remains vibrant and provides "the highest level of pedestrian experience that attracts visitors, residents and businesses to Dunedin" (Objective 2.4.3), with policies relating to identifying key pedestrian routes (Policy 3.4.3.1), protection of the heritage streetscape and amenity of the central business district (Policy 2.4.3.2), manage the number of signs to maintain building and streetscape amenity (Policy 2.4.3.3), and maintain or enhance vibrancy and density through rules restricting the distribution of retail and office activity (Policy 2.4.3.4).

The first objective of the 2GP relating to heritage is that scheduled heritage buildings and structures are protected (Objective 13.2.1). The policies that promote this objective include encouraging maintenance and adaptive reuse (Policy 13.2.1.1), require repairs, maintenance and restoration (Policy 13.2.1.2), require earthquake strengthening (Policy 13.2.1.3), enable work to comply with alterations and change of use under the Building Act 2004 (Policy 13.2.1.4), only allow other additions and alterations under discretion (Policy 13.2.1.5), only allow removal for location under specific criteria (Policy 13.2.1.8), and provide for general retail in scheduled heritage buildings to maximise adaptive reuse (Policy 13.2.1.9). Relevantly to the current proposal, Policy 13.2.1.7 is to avoid the demolition unless particular criteria are met including where "demolition is required to allow for significant public benefit that could not otherwise be achieved, and the public benefit outweighs the adverse effects of loss of the building; and there is no reasonable alternative to demolition".

The second heritage objective of the 2GP is that the heritage values of scheduled heritage sites are protected. Policies that address this objective include restrictions on development within and around the heritage site (Policy 13.2.2.1) and only allow for subdivision of scheduled heritage sites under certain circumstances (Policy 13.2.2.2).

The third objective is that heritage streetscape character of heritage precincts is maintained or enhanced. The plan identifies nine residential heritage precincts and ten commercial heritage precincts. Policies that have been established to uphold this objective include require repairs and maintenance, restoration and earthquake strengthening of character contributing buildings (Policy 13.2.3.1).

Table 2-1. Definitions Under the 2GP.

Term	Definition
Building	A structure that includes a roof that is, or could be, fully or partially enclosed with walls. The definition of building includes the parts of buildings defined as building utilities and rooftop structures.
Character-contributing buildings	Buildings identified as character-contributing buildings in Appendix A1.1
Demolition	The complete or partial destruction of a building or structure.
Fabric	The physical material of any building, structure or site, including subsurface material, structures, interior and exterior surfaces, fixtures and fittings.
Façade	The part of a building facing onto any public place.
Heritage Conservation	Safeguarding the cultural heritage value of a building or place, while retaining authenticity and integrity.
Protected Part	The part or parts of a scheduled heritage building, or scheduled heritage structure detailed in Appendix A1.1 - Schedule of Protected Heritage Items and Sites under the heading 'protection required'.
Removal for Relocation	Moving a building from its current location to a new location either on the same or a different site.
Repairs and Maintenance	Work required to make good decayed or damaged fabric of a building or structure, or to prevent deterioration of the fabric, and in the case of a scheduled heritage site, all normal work required to maintain the garden or landscape features or structures. For clarity, this includes: • painting, only where the building or structure was previously painted • re-cladding • replacement of doors, windows, gates and roof; and in relation to an interior, redecoration and all normal work required to maintain the fittings, decoration, trim, surfaces, materials or structures. This definition excludes activities defined as additions and alterations.
Restoration	To accurately return the fabric of a building or structure to a known earlier form by reassembling and reinstating components using new or original materials. For the sake of clarity, restoration includes the removal of later components or additions, except where they are specifically protected in Appendix A1.1.
Scheduled heritage Building	A heritage building listed in Appendix A1.1 - Schedule of Protected heritage Items and Sites.
Scheduled Heritage Site	A heritage site listed in Appendix A1.1 - Schedule of Protected Heritage Items and Sites.

To meet the objectives and policies of the 2GP, the DCC has established rules that dictate the activities that may affect heritage, including:

- **Rule 13.3 Development and Performance Standards.** This rule provides guidance on the colour choices for heritage buildings, materials and design, and requirements relating to archaeological sites.
- **Rule 13.4 Assessment of Controlled Activities.** This rule relates to activities including earthquake strengthening, restoration of a protected façade or scheduled heritage item, and certain alterations to non-character contributing buildings within a heritage precinct.
- **Rule 13.5 Assessment of Restricted Discretionary Activities.** Rule 13.5 considers the assessment of performance standard contraventions that affect a protected part of a heritage building (e.g., materials and design and maximum volume for network utility activities) and heritage precincts (e.g., boundary setbacks, building colour, fence height and design, heights, location/screening of carparking, materials and design, signs, and location of network utility activities).
- **Rule 13.6 Assessment of Restricted Discretionary Activities.** Under Rule 13.5, the council identify the assessment consideration for restricted discretionary activities, activities relating to scheduled heritage sites (e.g., new buildings/structures, parking, earthworks, network utility assets, wind generators, hydro generators, solar panels, etc.), subdivision on a scheduled heritage site, additions and alterations that affect a protected part of a scheduled heritage item, removal of a scheduled heritage building for relocation, and all subdivision activities on sites containing scheduled heritage items. This rule also considers activities that relate to heritage precincts; including new buildings/structures; additions/alterations of character contributing buildings; demolition or removal for location of a character contributing building, non-protected part of a scheduled heritage building, or other building with a street frontage; and all other restricted discretionary public amenities activities.
- **Rule 13.7 Assessment of Discretionary Activities.** Rule 13.7 outlines the discretionary activities on a scheduled heritage site (discretionary transportation activities, discretionary public amenities, natural hazard mitigation earthworks and structures, network utility structures, and substations) and in a heritage precinct (natural hazard mitigation earthworks and structures, network utility structures, and substations).

- **Rule 13.8 Assessment of Non-Complying Activities.** Rule 13.8 includes the assessment of non-complying activities, such as demolition of a protected part of a scheduled heritage building or structure, and assessment of non-complying performance standard contraventions (e.g., archaeological site earthworks and location and screening of car parking).
- **Rule 13.9 Special Information Requirements.** Section 13.9.1 outlines the requirements for demolition of a scheduled heritage building, including
 - A Heritage Impact Assessment addressing the effect the demolition will have on heritage values, including a full discussion of the alternatives considered, including quantified reasons why the alternatives are not reasonable.
 - Where demolition is proposed due to seismic risk, a detailed seismic assessment, fully quantified costs and an economic analysis of seismic upgrade (including a staged upgrade) to the minimum requirements by a Chartered Professional Engineer qualified engineer with demonstrated experience of assessment and seismic upgrade of buildings with the same or similar construction form and materials. The information should include the methods of strengthening considered.
 - Where partial demolition is proposed:
 - Evidence of the structural feasibility of retaining the part of the building proposed for retention.
 - All information provided in support of any resource consent application, including engineering assessments, consideration of alternatives and design statements may be peer reviewed by Council prior to making a decision.

2.2 Heritage New Zealand Pouhere Taonga Act (2014)

The Heritage New Zealand Pouhere Taonga Act (2014) came into effect in May 2014, repealing the Historic Places Act 1993. The purpose of this act is to promote identification, protection, preservation, and conservation of New Zealand’s historical and cultural heritage. HNZPT administers the act and was formerly known as the New Zealand Historic Places Trust (Pouhere Taonga).

Archaeological sites are defined by this act as

- (a) any place in New Zealand, including any building or structure (or part of a building or structure), that--:
 - (i) was associated with human activity that occurred before 1900 or is the site of the wreck of any vessel where the wreck occurred before 1900; and
 - (ii) provides or may provide, through investigation by archaeological methods, evidence relating to the history of New Zealand; and
- (b) includes a site for which a declaration is made under section 43(1)

Additionally, HNZPT has the authority (under section 43(1)) to declare any place to be an archaeological site if the place

- (a) was associated with human activity in or after 1900 or is the site of the wreck of any vessel where that wreck occurred in or after 1900; and
- (b) provides, or may be able to provide, through investigation by archaeological methods, significant evidence relating to the historical and cultural heritage of New Zealand.

Archaeological sites are protected under Section 42 of the act, and it is an offense to carry out work that may “modify or destroy, or cause to be modified or destroyed, the whole or any part of that site if that person knows, or ought reasonably to have suspected, that the site is an archaeological site”, whether or not the site has been previously recorded. Each individual who knowingly damages or destroys an archaeological site without having the appropriate authority is liable, on conviction, to substantial fines (Section 87).

Any person wishing to carry out work on an archaeological site that may modify or destroy any part of the site, including scientific investigations, must first obtain an authority from HNZPT (Sections 44(a,c)). The act stipulates that an application must be sought even if the effects on the archaeological site will be no more than minor as per

Section 44(b). A significant change from the Historic Places Act (1993) is that “an authority is not required to permit work on a building that is an archaeological site unless the work will result in the demolition of the whole of the building” (Section 42(3)).

HNZPT will process the authority application within five working days of its receipt to assess if the application is adequate or if further information is required (Section 47(1)(b)). If the application meets the requirements under Section 47(1)(b), it will be accepted and notice of the determination will be provided within 20 to 40 working days. Most applications will be determined within 20 working days, but additional time may be required in certain circumstances. If HNZPT requires its own assessment of the Maori values for the site, the determination will be made within 30 working days. If the application relates to a particularly complex site, the act permits up to 40 days for the determination to be made. HNZPT will notify the applicant and other affected parties (*e.g.*, the land owner, local authorities, iwi, museums, *etc.*) of the outcome of the application.

Once an authority has been granted, modification of an archaeological site is only allowed following the expiration of the appeals period or after the Environment Court determines any appeals. Any directly affected party has the right to appeal the decision within 15 working days of receiving notice of the determination. HNZPT may impose conditions on the authority that must be adhered to by the authority holder (Section 52). Provision exists for a review of the conditions (see Section 53). The authority remains current for a period of up to 35 years, as specified in the authority. If no period is specified in the authority, it remains current for a period of five years from the commencement date.

The authority is tied to the land for which it applies, regardless of changes in the ownership of the land. Prior to any changes of ownership, the land owner must give notice to HNZPT and advise the succeeding land owner of the authority, its conditions, and terms of consent.

An additional role of HNZPT is maintaining the New Zealand Heritage list, which is a continuation of the Register of Historic Places, Historic Areas, Wahi Tapu, and Wahi Tapu Areas. The list can include archaeological sites. The purpose of the list is to inform members of the public about such places and to assist with their protection under the RMA (1991).

2.3 Protected Objects Act (1975)

The Protected Objects Act (1975) was established to provide protection of certain objects, including protected New Zealand objects that form part of the movable cultural heritage of New Zealand. Protected New Zealand objects are defined by Schedule 4 of the act and includes archaeological objects and taonga tuturu. Under Section 11 of the Protected Objects Act (1975), any newly found Maori cultural objects (taonga tuturi) are automatically the property of the Crown if they are older than fifty years and can only be transferred from the Crown to an individual or group of individuals through the Maori Land Court. Anyone who finds a complete or partial taonga tuturu, accidentally or intentionally is required to notify the Ministry of Culture and Heritage within:

- (a) 28 days of finding the taonga tuturu; or
- (b) 28 days of completing field work undertaken in connection with an archaeological investigation authorised by the HNZPT.

2.4 ICOMOS New Zealand Charter 2010

The ICOMOS New Zealand Charter is a set of guidelines on cultural heritage conservation used in the New Zealand heritage sector by local bodies in district plans and heritage management, and by practitioners and forms a recognised benchmark for conservation standards and practice. A copy of the New Zealand Charter can be found in Appendix B.

3 Methodology

A heritage impact assessment (HIA) is required to accompany a resource consent application where there are likely effects to heritage items. In preparing this HIA, guidance on methodology is considered from *Sustainable Management of Historic Heritage Guidance Information Sheet 9 Preparing a Heritage Impact Assessment* produced by the then New Zealand Historic Places Trust (NZHPT, 2007b) and *Guidance on Heritage Impact Assessments for Cultural World Heritage Properties* (ICOMOS, 2011) (Appendix B). However, UOA recognises that any assessment must be fit for purpose to both the heritage values of a property and the proposed works. UOA conducted detailed documentary research to provide a comprehensive history of the site and associations of with significant individuals and companies. UOA also considered the previous work done identifying heritage values both at the site level as well as in the broader heritage landscape. In order to determine the physical values of the site, a site visit was done during which a comprehensive photographic record was taken for each room. This data informs the significance assessment, which, along with the criteria established by the regional and district plans, guides the evaluation of how demolition may affect the heritage values of the site. Mitigative measures have also been identified and recommended on the basis of those identified values.

3.1 Research to Inform the Significance Assessment

UOA consulted numerous sources of documentary evidence in order to determine the historical context of the project area. The results of the documentary research are provided in Section 4.1. The sources utilised in this research include:

- Land title records (held by Archives New Zealand)
- Historic newspapers (accessed via the Papers Past website)
- Historic maps (accessed via QuickMap)
- Historical photographs of the area and the property (searches were conducted using the DigitalNZ website, Hocken Snapshot, Museum of New Zealand Te Papa Tongarewa – collections online, Alexander Turnbull Library, and Southland Museum)
- Documentary resources including: Farminer 2014, Oakley Gray Architects Ltd (2010),

This assessment also considers the previous work identifying heritage values for both the site and the broader region, including examination of archaeological and heritage reports, as well as documentation in district plans and with Heritage New Zealand. Previously recorded archaeological and heritage sites near the project area can provide information that is valuable for assessing the heritage value of a site, and this was accomplished through examination of entries on ArchSite (the New Zealand Archaeological Associations site recording scheme), HNZPT's Annual Information, and the DCC District Plan and heritage resources.

In addition to the online version of ArchSite, which allows users to view information about individual archaeological site, UOA also subscribes to the ArchSite GIS dataset of all previously recorded approved archaeological sites. This dataset allows UOA to explore the broader distribution of specific archaeological site types across the South Island, which is useful for identifying rarity and uniqueness of site types.

UOA subscribes to the HNZPT's Annual Information (with quarterly updates), which includes Category I and Category 2 listed places, historic areas, wāhi tūpuna (places important to Māori for ancestral significance and associated cultural and traditional values), wāhi tapu (places sacred to Māori in the traditional, spiritual, religious, ritual or mythological sense such as maunga tapu, urupā, funerary sites and punawai), and wāhi tapu areas (areas that contain one or more wāhi tapu). Again, this information is useful for considering rarity and uniqueness of site types, as well as documenting the heritage assets in the surrounding areas. List reports specific to the proposed work are valuable resources, as they include previous work identifying the heritage values of the list entry.

Site visits were undertaken over multiple days by Hayden Cawte, Dawn Cropper, and Megan Lawrence on 11, 18 and 28 April 2019. A comprehensive photographic record was compiled of each room to provide visual documentation of the current state of the property and buildings as well as the integrity of the heritage fabric.

3.2 Significance Assessment of Heritage Values, Assessment of Effects, and Mitigative Measures

Assessment of heritage significance is guided by the criteria outlined in Heritage New Zealand Pouhere Taonga Act 2014, the definition of historic heritage in the Resource Management Act 1991, and best practice standards from HNZPT (NZHPT, 2007a). The assessment criteria used in this assessment build from these sources and are defined in Table 3-1 provided below, which consider the archaeological, architectural, cultural, historic, scientific, and technological value. Specific rankings for each value have been defined by Bowman (2017), and they are utilised here to ensure that heritage values are assessed systematically.

Table 3-1. Assessment criteria for physical, historic, and cultural values (NZHPT, 2007a) with rankings following Bowman (Bowman, 2017).

Archaeological Values	
Archaeological Information	Does the place or area have the potential to contribute information about the human history of the region, or to current archaeological research questions, through investigation using archaeological methods? • High - has the potential for national or regional archaeological values i.e. rare site types, sites from the first phase of settlement, particularly intact physical remains. • Moderate - has the potential for local archaeological values i.e. relatively early, possibility of relatively intact physical remains, representative types. • Low - known to be pre-1900, or has the possibility of pre-1900 evidence, but unlikely to have high or moderate archaeological values.
Architectural Values	
Architectural Merit	Is the place significant because of its design, form, scale, materials, style, ornamentation, period, craftsmanship or other architectural element? • High - highly original, early, ideal, landmark or innovative design, style, use of materials, or craftsmanship for the period. • Moderate - good design, style, use of materials, or craftsmanship for the period • Low - typical design, style use of materials, or craftsmanship for the period
Rarity	Is the place or area, or are features within it, unique, unusual, uncommon or rare at a district, regional or national level or in relation to particular historical themes? • High - first, only remaining or one of very few of the period, locally/regionally/nationally. • Moderate - one of few of the period, locally/regionally/nationally. • Low - common for the period, locally/regionally/nationally.
Representativeness	Is the place or area a good example of its class, for example, in terms of design, type, features, use, technology or time period? • High - has all the key characteristics of architecture or technology of the period. • Moderate - has many of the characteristics of the architecture or technology of the period. • Low - has few characteristics of the architecture or technology or period.
Integrity	Does the place have integrity, retaining significant features from its time of construction, or later periods when important modifications or additions were carried out? • High - unchanged or has had important modifications since construction retaining heritage values. • Moderate - unimportant changes since construction but essential character and most heritage values retained. • Low - character changed significantly with few heritage values remaining
Vulnerability	Is the place vulnerable to deterioration or destruction or is threatened by land use activities? • Yes/no
Context or Group	Is the place or area part of a group of heritage places, a landscape, a townscape or setting which when considered as a whole amplify the heritage values of the place and group/ landscape or extend its significance? • High - principal contributor to the dominant values of the group. • Moderate - compatible with the group but not a principal contributor to the dominant values of the group. • Low - of little importance to the group.
Cultural Values	
Identity	Is the place or area a focus of community, regional or national identity or sense of place, and does it have social value and provide evidence of cultural or historical continuity?

	• High - focus of national or regional community identity, sense of place or social value or has special age value such as constructed within the first 30 years of settlement. • Moderate - focus of local community identity, sense of place or social value or has age value such as construction between 1870 and 1900. • Low – has minor community focus, sense of place or social value.
Public esteem	Is the place held in high public esteem for its heritage or aesthetic values or as a focus of spiritual, political, national or other cultural sentiment? • High - focus of national or regional community identity, sense of place or social value, recommended for listing, discussed in national publications, or received an award at the national, or local level. • Moderate - focus of national or regional community identity, sense of place or social value, recommended for listing, discussed in national publications, or received an award at the national, or local level. • Low – focus of national or regional community identity, sense of place or social value, recommended for listing, discussed in national publications, or received an award at the national, or local level
Commemorative	Does the place have symbolic or commemorative significance to people who use or have used it, or to the descendants of such people, as a result of its special interest, character, landmark, amenity or visual appeal? • High - commemorates national or regional endeavours or people at a national, regional or local level. • Moderate - commemorates national or regional endeavours or people at a national, regional or local level • Low – commemorates national or regional endeavours or people at a national, regional or local level
Education	Could the place contribute, through public education, to people's awareness, understanding and appreciation of New Zealand's history and cultures? • High - commemorates national or regional endeavours or people at a national, regional or local level. • Moderate – commemorates national or regional endeavours or people at a national, regional or local level. • Low – has minor potential for education.
Tangata whenua	Is the place important to tangata whenua for traditional, spiritual, cultural or historical reasons? • Yes/no
Statutory recognition	Does the place or area have recognition in New Zealand legislation or international law including: World Heritage Listing under the World Heritage Convention 1972; registration under the Historic Places Act 1993; is it an archaeological site as defined by the Historic Places Act 1993; is it a statutory acknowledgement under claim settlement legislation; or is it recognised by special legislation? • Yes/no
Historic Values	
People	Is the place associated with the life or works of a well-known or important individual, group or organisation? • High - intimately associated with a group or person of national or regional significance. • Moderate – intimately associated with a group or person of local significance. • Low – minor or peripheral connection to a locally significant group or person.
Events	Is the place associated with an important event in local, regional or national history? • High - intimately associated with events of national or regional significance. • Moderate – intimately associated with events of national or regional significance. • Low – minor or peripheral connection to a locally significant event.
Patterns	Is the place associated with important aspects, processes, themes or patterns of local, regional or national history? • High - intimately associated with events of national or regional significance. • Moderate - intimately associated with pattern of local significance. • Low – minor or peripheral connection to a locally significant pattern.
Scientific	
Scientific	Does the area or place have the potential to provide scientific information about the history of the region? • Yes/no
Technological	
Technology and Engineering	Does the place demonstrate innovative or important methods of construction or design, does it contain unusual construction materials, is it an early example of the use of a particular construction technique or does it have the potential to contribute information about technological or engineering history? • High - highly original, ideal, innovative or early construction design for the period • Moderate - good example of construction design for the period • Low - common construction design for the period

3.3 Streetscape Analysis

Streetscape considers the context of a building amongst its neighbours and surrounding landscape. The streetscape is a significant consideration for heritage buildings, yet the assessment of architectural value largely considers the

building on its own merits and does not consider the wider streetscape value. As noted above, the heritage values identified in Table 3-1 are based on the definition of historic heritage in the RMA 1991, criteria in the HNZPTA 2014, and best practice standards from HNZPT (NZHPT, 2007a).

Streetscape analysis considers the heritage building within its broader setting, and the method used here follows Sheppard (2015). The analysis generally considers the entire street (both sides) on which the building is located from intersection to intersection, except where the street is particularly long or there is a physical barrier (e.g., a hill) that limits the view of the streetscape. The streetscape analysis considers land use, built form (building height, setbacks, width, and separation), architectural character, heritage (fabric and activities), and landscape character (e.g., common vegetation features).

3.4 Assessment of Effects on Heritage Values

The Department for Transport (2008) established a three-stage approach for assessing the effects on heritage, which has been embraced by many heritage practitioners and advocates (Bond & Worthing, 2016; ICOMOS, 2011; NZTA, 2015). This approach requires careful consideration of at three clearly defined stages, (1) assessment of overall level of significance, (2) assessment of the magnitude of impact and (3) determination of the significance of effects, and while it remains a qualitative assessment, there is clear guidance and justification for the decisions made at each stage (DfT, 2008).

Once the heritage values have been identified, it is necessary to consider the overall level of significance, whether the site be significant at the international, national, regional, or local level (Table 3-2). This scale for measuring the level of significance, ranging from very high for sites of international significance to sites of low significance that may represent a site of local significance but having poor preservation or contextual associations.

Table 3-2. Levels of significance (adapted from DfT, 2008).

Level of Significance	Criteria
Very High	- World Heritage Sites - Assets of acknowledged international importance - Assets that can contribute significantly to acknowledged international research objectives - Historical landscapes of international value (designated or not) and extremely well-preserved historic landscapes with exceptional coherence, time depth, or other critical factor(s)
High	- Scheduled asset and undesignated assets of schedulable quality and importance - Category 1 listed buildings and Category 2 listed buildings of special interest. - Other listed buildings that can be shown to have exceptional qualities in their fabric or associations not adequately reflected in their listing category - Conservation areas containing very important buildings - Undesignated structures of clear national importance - Designated and undesignated historic landscapes of outstanding historic interest; undesignated landscapes exhibiting considerable coherence, time depth, or critical factor(s) - Assets that can contribute significantly to acknowledged national research objectives
Medium	- Designated or undesignated assets that contribute to regional research objectives - Category 2 listed buildings - Historic (unlisted) buildings that can be shown to have exceptional qualities in their fabric or historical association - Conservation areas containing important buildings that contribute significantly to their historic character - Historic townscapes or built-up areas with important historic integrity in their buildings, or built settings (e.g., street furniture or other structures) - Designated landscapes of special historic interest (including Category 2 registered parks and gardens); undesignated landscapes that would justify such a designation; averagely well-preserved historic landscapes with reasonable coherence, time depth, or other critical factor(s); landscapes of regional value.
Low	- Designated and undesignated assets of local importance including those comprised by poor preservation and/or poor survival of contextual association - Assets of limited value, but with potential to contribute to local research objectives - Locally listed buildings and historic (unlisted) buildings of modest quality in the fabric or historical association - Historic townscapes or built-up areas of limited historic integrity in their buildings or built settings (e.g., street furniture or other structures) - Robust undesignated historic landscapes; historic landscapes with importance to local interest groups; and historic landscapes whose value is limited by poor preservation and/or poor survival of contextual associations
Negligible	- Assets with very little surviving archaeological interest - Buildings of little architectural or historical note - Landscapes with little significant historical interest

Assessing and evaluating the potential effects on heritage values can be very difficult and subjective. To mitigate against this, UOA follows the defensible system defined by the Department for Transport (2008) and adopted by others, including ICOMOS (ICOMOS, 2011). Using this system, the impacts are first considered to be either beneficial or adverse, including both direct impacts to the site (a primary consequence of the proposed work) or indirect (resulting from a secondary consequence). The assessment of effects considers the magnitude of the proposed work on the heritage asset on a nine-point scale, ranging from a major adverse effect to a major beneficial effect (Table 3-3). The significance of effects can be either adverse or beneficial on a scale ranging from neutral to very large and is determined using the value or overall level of significance and the magnitude of the effects, as shown in the matrix below (Table 3-4).

Table 3-3. Magnitude of the impacts of the proposed work against the heritage values (Department for Transport, 2008).

Magnitude	Description
Major	Change to key historic building elements, such that the asset is totally altered. Comprehensive change to the setting.
Moderate	Change to many key historic building elements, such as the asset is significantly modified. Changes to the setting of an historic building, such that it is significantly modified
Minor	Change to key historic building elements, such that the asset is slightly different. Changes to the setting of an historic building, such that it is noticeably changed.
Negligible	Slight changes to historic building elements or setting that hardly affect it.
No change	No change to fabric or setting.

Table 3-4. Matrix of significance of effects on the heritage values (DfT, 2008).

Heritage Value	Magnitude of Impact				
	No Change	Negligible	Minor	Moderate	Major
Very High	Neutral	Slight	Moderate-Large	Large-Very Large	Very Large
High	Neutral	Slight	Moderate-Slight	Moderate-Large	Large-Very Large
Medium	Neutral	Neutral-Slight	Slight	Moderate	Moderate-Large
Low	Neutral	Neutral-Slight	Neutral-Slight	Slight	Slight-Moderate
Negligible	Neutral	Neutral	Neutral-Slight	Neutral-Slight	Slight

Once the significance of effects on heritage values has been defined, the proposed work is considered against the rules of the District Plan, which have been outlined in Section 2.1.1. The rules are prescriptive based on the inclusion of assets on the Heritage Register. The District Plan also includes matters to be addressed in applications to council, with recommended mitigation measures. The effects are then considered against best practice recommendations, such as the guidelines provided by HNZPT and any local design guidelines, the importance of the buildings or structures, their condition, potential for alternative use, and the benefits of the redevelopment.

HNZPT have provided guidelines on the assessment of adverse effects on heritage values with specific information relating to the façade retention and the demolition or alteration of historic buildings (NZHPT, 2007b). The guidelines are summarised below.

Alterations and Additions to Historic Buildings

HNZPT encourages the adaptation of historic buildings as a way to continue the liveability and utility of the structure but advocates for alterations that result in minimal loss of cultural heritage value. The following important design considerations for alterations and/or additions to heritage buildings are outlined in the above report:

- Retain surviving internal and external heritage fabric as far as possible and disturb, distort or obscure it as little as possible.
- Respect the design, form, scale, materials, workmanship, patina of age, colours, contents, location, curtilage and setting, including alterations that have heritage value.
- Avoid work that will compromise or obscure fabric of heritage value.

- Ensure any new work is of a scale and location that it does not dominate the heritage place and respects its setting.
- New work should be appropriately recorded.

In addition, HNZPT provides checklists to determine the appropriateness of interior and exterior alterations to heritage buildings:

Partial Demolition of Historic Buildings

It is deemed best practice to retain significant heritage buildings in their entirety, and so partial demolition and/or retention of the façades does not comply with conservation best practice. The following considerations should be addressed before proceeding with this activity:

- Any part of a building or structure that will be demolished should be fully recorded and documented both prior to, and during the partial demolition process.
- Partial demolition should not be allowed unless it does not adversely affect the significance and integrity of the place.
- The proposed partial demolition should be limited to parts of the building (including interior) that have been identified in a conservation plan or heritage assessment as having no significance, are not contributory to the significance of the heritage place, are intrusive, or where the partial demolition reveals fabric of higher degree of significance.
- The proposed partial demolition should be limited to parts of the building that are beyond physical repair due to fire or other damage.
- Partial demolition should be informed by the concept of greater or total conservation benefit with respect to a large complex group of structures and buildings. It may be that the removal of minor parts of a building may be justified to achieve the conservation of most significant places on the entire site. All other avenues should be explored before this option is considered and all decisions must be informed by a conservation plan.
- The new structure (behind the façade) should not be visible when viewed from principal viewing points identified in an urban design or heritage assessment.
- Where a façade is to be retained it should include at least one room-depth of the original structure to permit an understanding of the relationship between the original exterior and the interior functions.
- The design of the retained façade should retain the original shape, pitch, covering material and decoration of the roof.
- The retained façade should be subject to active repair and maintenance, retaining original elements and detailing.
- Where modifications to the ground floor frontage of the façade are essential to accommodate a new use, the design should harmonise with the rest of the elevation, reflecting in particular the design of any original fenestration. Modifications to the façade above ground floor level should be avoided.
- The floor levels in the new structure should match existing floor levels. Where this is impracticable care should be taken to ensure floors and/or suspended ceilings do not run horizontally across window openings on the retained façade.
- Any façade retention proposal should ensure that window spaces open into interior spaces. Views to the exterior of the new building or the sky should be avoided.
- The scale and dimensions of the interior spaces immediately behind the façade should be the original interiors, fully restored. Where this is not possible, care should be taken to ensure that interior dimensions and lighting visible from the street is of compatible scale and form.

Demolition of Historic Buildings

HNZPT is opposed to the demolition of historic buildings, except for cases where it is unavoidable due to the structure being beyond repair. Demolition is viewed as inconsistent with sustainable management of resources and

as an irreversible removal of cultural heritage that is often regretted in the future. For cases where this activity is proposed, the following considerations should be taken into account:

- Any building or structure that will be demolished should be fully recorded and documented both prior to, and during the demolition process.
- With regard to a large or complex site, the proposed demolition will not compromise the integrity and significance of the place, streetscape, area or landscape.
- Demolition may be acceptable when a building or structure is considered to be 'beyond repair'. It may be structurally unsafe, may have been damaged by natural event, or may have been irreversibly damaged by fire. This matter often requires evidence from a professional engineering assessment.
- Demolition should be informed by the concept of greater or total conservation benefit with respect to a large complex group of structures and buildings. It may be that the demolition of minor parts of a building may be justified to achieve the conservation of most significant places on the entire site. All other avenues should be explored before this option is considered and all decisions must be informed by a conservation plan.
- All alternatives to demolition should be explored including new and compatible uses, repair and maintenance works, maintenance plans, and appropriate alterations and changes.

4 Background Research

The physical and historical setting of a site provides invaluable contextual information regarding the heritage values of a site. The broader history of Dunedin establishes the environment in which the Cadbury Confectionery Ltd Buildings were established and guides the interpretation of the site's significance at a local level. Likewise, the geographical setting played an important role in determining why people were drawn to Dunedin and how the town was settled. Consideration of the location of the site in relation to its physical setting is important for understanding the history of the region. The landscape played a significant role in determining how the city was settled, and Dunedin's residents considerably altered the natural environment. The following sections provide a general overview of the geomorphology of Dunedin and consider changes that have occurred to the landscape over time and the current built environment.

4.1 Physical Environment and Setting of Dunedin

The geographical setting is important for understanding the archaeology of the region. The landscape played a significant role in determining how the city was settled, and Dunedin's residents considerably altered the natural environment. The following sections provide a general overview of the geomorphology of Dunedin and consider changes that have occurred to the landscape over time and the current built environment.

4.2 Geomorphology

The geomorphology of the area immediately surrounding Dunedin can be characterised by several distinctive landforms, including the Otago Harbour, the Dunedin Volcano, the Taieri Plains, and the Coastal Ranges. The central city lies within an area of relatively low relief and is bounded by a ridge that runs south-west to north-east (Figure 4-1, Figure 4-6). When Dunedin was initially settled, there was little flat land within the central city, with the current flat land along the harbour being the result of an extensive reclamation programme. From the ridge of hills surrounding the central city, the land dips down to the west along the Kaikorai Valley and to the north at the Leith Valley before rising sharply to the ring of hills that surrounds the city. There are numerous peaks along these hills, reaching a maximum height of 739m above sea level at Swampy Summit. The hills are dissected by numerous gullies and valleys with rivers, streams, and creeks, with the prominent water within the city including the Water of Leith and the Kaikorai Stream. Most of the residential areas of the city are hilly, including areas within the Dunedin Volcano and Coastal Ranges. Less than a tenth of the urban area is flat to gently sloping (*i.e.*, less than 8°), which primarily consists of Quaternary valley fill or coastal sediments (Glassey, Barrell, Forsyth, & Macleod, 2003). Both the topography and the drainage systems have played an integral part in how the land was utilised. Caversham is situated just back from the head Otago Harbour and suburbs of the city extend along the coast and harbour to the north-east, to the Taieri Basin to the west, and along the flats and coastal ranges to the south.



Figure 4-1. Photograph of Dunedin with St Kilda in the foreground looking north towards the city and surrounding hills (Glassey et al., 2003).

4.3 Harbour Reclamation

Since the initial settlement of Dunedin, the landscape has been significantly transformed. Dredging and land reclamation are the two most obvious changes to Dunedin's physiography. The survey of the harbour by Captain Stokes in 1850 showed that many areas were very shallow and this significantly restricted access into the harbour (Davis, 2009). In 1859 a plan for the improvement of the harbour was developed, with dredging being of the utmost importance (Davis, 2009). Work concentrated on deepening the outer and inner bars; the latter of which was completely removed through natural scour after the alignment channels at Harington Bend and Deborah Bay (Davis, 2009). The improvements to the harbour also included dredging the Port Chalmers basin and the Victoria Channel, which provided a more direct route between Port Chalmers and Dunedin (Davis, 2009). While dredging was a primary focus, the Harbour Board also constructed training walls within the Upper Harbour and at the entrance to the harbour that directed the flow of water into defined channels (Davis, 2009). It is estimated that between 1875 and 1914 that over seven million cubic metres of sediment were removed from the harbour. Development and maintenance of the harbour continue today.

Dredging and land reclamation were concomitant, with the sediment derived through dredging used to reclaim land (Otago Daily Times, 1911). When Kettle first devised the plan for Dunedin, he drew important roadways straight through the shoreline indicating that his original intention was for there to be some land reclamation. Land reclamation began in 1861 with the Harbour Board being granted "421 acres 3 roods and 13 perches more or less" below the high water mark (Province of Otago, 1862), and in May 1862 this area was officially included within the City of Dunedin (McDonald, 1965). While jetties had been built in the 1850s, intensive land reclamation was not underway until 1863. The reclamation plans had been originally drawn up by the provincial engineer C. R. Sawyer at an estimate cost of £355,000 for reclamation of 136 acres. In March of 1862 the Dunedin Town Board applied to the government for a loan of £10,000, however they were declined so the Board further applied to be able to "hypothecate the rates" (Otago Daily Times, 1862). The article further notes the need of the expansion for the growing town. Furthermore, other accounts note that an area where the line of Princes Street was encroached upon by the shoreline had to be bypassed and was referred to as 'Mud Terrace.' As well as sediment from the harbour, the fill used for the reclamation included the spoil from works on nearby Bell Hill (McDonald, 1965; Otago Daily Times, 1870; Otago Witness, 1863). Rail lines were set up near Gaol Street (now Dunbar Street) in order to transport the spoil to the reclamation grounds (Otago Daily Times, 1870). Using historic maps overlain with the modern Google maps image we are able to track the land reclamation during the nineteenth century (Figure 4-2). Photographs of Dunedin prior to and during the reclamation illustrate the significant change to the landscape (Figure 4-5, Figure 4-6, and Figure 4-7).

From the initial reclamation works until today, the coastline of the Otago has changed radically. Infrastructure works were the primary impetus for early land reclamation, including improvements for the wharves at both Dunedin and Port Chalmers, for the railway between Port Chalmers and Dunedin, and for roading projects (New Zealand Parliament House of Representatives, 1877; Province of Otago, 1862, 1876, 1883, 1909). Roading projects included the widening of Anderson's Bay Road and the construction of embankments across Pelichet Bay (for the railway and road) by prisoner work gangs (Otago Daily Times, 1870; Otago Witness, 1871).



Figure 4-4. Otago Harbour 1865 (Perry, 1865).



Figure 4-5. Otago Harbour from Roslyn *circa* 1890 (Anonymous, 1890).

4.4 Built Environment

Dunedin has a mixture of commercial, industrial, and residential areas, with the central city remaining the commercial hub of Dunedin. This commercial area includes the central business district extending from the Octagon north-east along George Street and the Warehouse Precinct to the south-west of the Octagon. There are industrial areas throughout Dunedin with the two most prominent areas being adjacent to the railway along the inner harbour and Burnside through to Green Island. There are also several smaller commercial centres in suburban areas like Roslyn, Green Island, and South Dunedin. There are numerous smaller satellite industrial areas along the west harbour at Port Chalmers and Ravensbourne, and there is also a light industry and commercial zone along Kaikorai Valley Road. The residential areas extend out from the central city, and the outlying residential areas tend to be focused on transportation routes (the railway in particular), the harbour, and the seaside (Tweedie, 1952).

Dunedin is notable for the planning of large tracts of green space within the city (Figure 4-4). The town belt was part of the original city plan and covers approximately 200 hectares fringing the central city to the west, south, and north. The Dunedin Botanic Gardens comprise the north-east portion of the town belt and cover an area of 28 hectares. These gardens were established in 1863, making them the oldest botanic gardens in New Zealand. The town belt originally terminated to the east of the botanic gardens and the cemetery at Pelichet Bay, also known as Logan Lagoon; however, this land was eventually reclaimed to create Logan Park (McDonald, 1965).



Figure 4-6. The site and plan of Dunedin, 1846-1847 (Forrest, 1964).

4.5 A Brief History of Māori Occupation

Dunedin is well known for its early colonial history and for the presence of numerous Māori archaeological sites and places of cultural importance. There was a concentration of early Māori settlement in southern New Zealand, both coastal and inland, that would contrast later periods. Multiple early sites are found along the coasts within Dunedin city boundaries, including early sites at Waimataitai, Pleasant River, Seacliff, Warrington, Long Beach, Murdering Beach, Kaikai's Beach, Harwood, Papanui Inlet, Little Papanui, Anderson's Bay (Anderson, 1983), St Clair (Glover, 2009), and the mouth of the Kaikorai Stream (Harding, 1957).

The end of the early period saw the decline in population of the southern South Island as food sources such as moa and fur seal became increasingly scarce. The changing reality of life in the southern South Island heralded a string of migrations from North Island Māori that would eventuate in the tenure of Ngāi Tahu throughout the area. This period of migration was roughly concurrent, though not necessarily linked, with large scale changes in South Island cultural expression, manifested in the transition from then early to the late phases of Māori material culture (Hamel, 2001).

Just prior to and at the time of European contact there was a concentration of settlement about the coastal margins of what is now Dunedin's outer harbour and Māori activity throughout what is now Dunedin appears to have been intense (see Entwisle, 1998). There is a rich traditional history associated with the area detailing the genealogy, conflict, and interaction between groups of Ngāi Tahu and Ngāti Momoe about the outer harbour (Beattie, 2009; Taylor, 1952). William Isaac Haberfield, a Whaler based out of Moeraki, estimated in the 1830s the population at the Māori harbour head to be as high as 2000 and up to 500 at Purakanui (Poverty Bay Herald, 1906).

The majority of late/proto-historic Māori sites in the Dunedin area are known through ethnographic sources rather than archaeological survey. These include sites (including several pa) at Warrington, Mapoutahi, Purakanui, Long Beach, Murdering Beach, Te Waiparapara, Pukekura, Tarewai Point, Te Rauone, Otākou, Ruatitoko, Tahakopa, Omate, Te Waipēkapeka, Otiheiti, Koputai, and Otepopo (Hamel, 2001). A small settlement, Ōtepoti, is reported to have existed at the current location of the Dunedin city centre (Taylor, 1952).

4.6 A Brief History of Dunedin

Dunedin was founded as a joint venture between the New Zealand Company and the Lay Association of the Free Church of Scotland. The town was to be the nucleus of the Otago settlement, a planned colony built primarily for protestant Scottish settlers. The town name of Dunedin, the Gaelic name for Edinburgh, had already been settled upon when the land on which the town would be established was decided by Frederick Tuckett, a New Zealand Company surveyor, in 1844. Sealers and whalers were said to have used the harbour possibly as early as 1817. The current corner of Princes and Water Streets is believed to be the place where early Māori had landed their canoes when entering into Otago, and it continued to be used as a landing place by the early European settlers, the first of whom arrived in 1848 (McDonald, 1965; Reed, 1956).

The initial 1840s and 1850s settlement in Dunedin was focused on the Princes Street area to the south of the Octagon, with the first occupied sections clustered around a landing place at the mouth of the Toitu Stream (now Water Street). Residential sections were developed towards the northern and southern ends of Princes Street and up Stafford Street, while a small commercial centre grew up along Princes Street between Jetty Street and Dowling Street. During this period Bell Hill, sitting between this settlement and the Octagon, restricted northward development (Watt, 1972).

Several roads had been formed through the central city. Towards the end of the 1850s work had begun cutting through Bell Hill, which opened up the Octagon area and North Dunedin to settlement. About half of the quarter-acre town sections had been sold by 1857. Photographs from 1860 and 1861 show scattered structures on the slopes and flats of the Octagon and North Dunedin (Figure 5 1). From these photographs, it is clear that streets in these inner-city residential areas had begun to be formed, but most were in a poor state. Most homes away from the town centre appeared to be small (two to four room) cottages; although, “handsome villas were springing up within and without the town belt” (Clark, 1961).

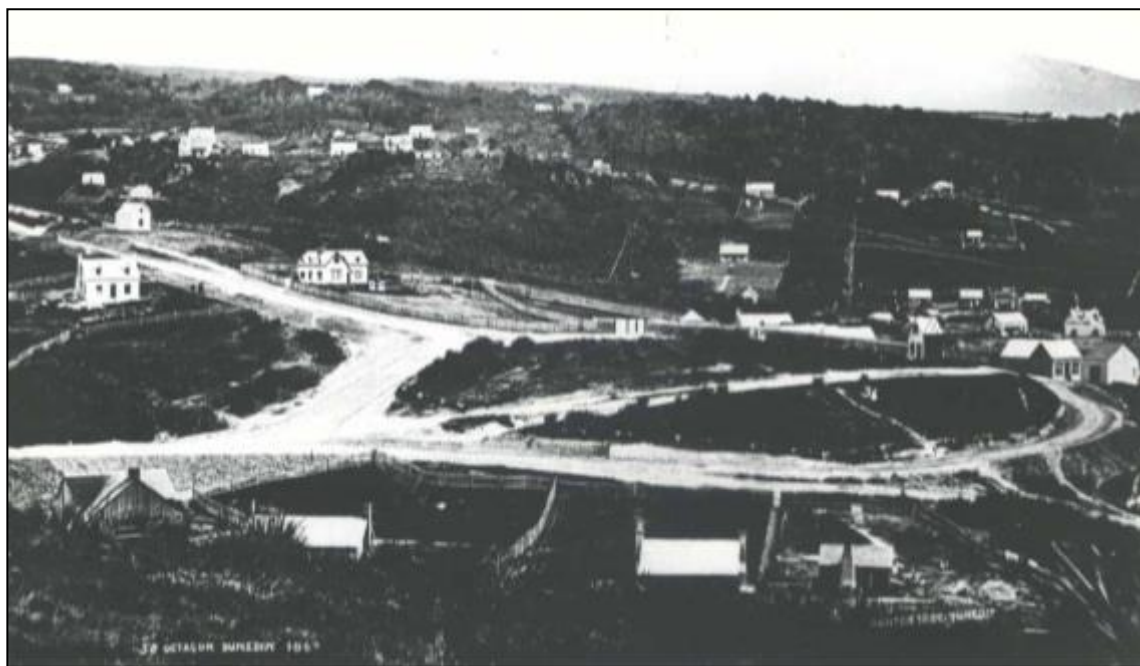


Figure 4-7 The Octagon in 1860, looking north-west (Burton Brothers, 1860).

The arrival of the gold rush and its associated wealth in 1861 saw an extremely rapid development of central Dunedin. The commercial area along Princes Street grew larger, with two storey buildings replacing the modest cottage-like buildings that had been erected previously. Offices clustered here, especially at the exchange area, while retail buildings (and development in general) continued to expand northwards up along George Street and southwards further down Princes Street. Accompanying these developments, hotels appeared all the way from Manor Street in the south to Fredrick Street in the north.

The inner-city residential areas developed in concert with the development of businesses in the town centre. Clusters of tents appeared on undeveloped sections on the hills above Princes Street, and new houses were constructed on the flats to the north and south. It was on these flats that sanitation was regarded as being the worst during the early gold rush years (1860s), with the various streams running down to the foreshore being heavily polluted. The tidal inlet to the north of the octagon was turned into a veritable cesspool (McLintock, 1949). A series of panorama photographs from 1865 clearly shows the aftermath of the gold rush on the inner-city residential areas, with buildings filling the majority of the space within the town belt. Many of these appear to be small cottages.

These developments were accompanied by the physical transformation of the landscape. The gradual removal of Bell Hill continued, and land began to be reclaimed in the harbour. Reclamation work started in the early 1860s and by 1864, with the help of a prisoner work force, properties were ready for sale on the strip of land between Bond and Crawford Streets (McDonald, 1965). Efforts were also made to improve roads.

The general layout of the town centre that arose by the end of the 1860s was to endure into the 1870s and onwards as Dunedin gradually became an industrial and commercial power. Retail areas straddled the Octagon, and store fronts lined the northern end of Princes Street and the southern end of George Street. Offices remained clustered around the exchange area. While the spatial distribution of these enterprises did not change much, the wooden premises they occupied at the end of the gold rush era were gradually replaced by more substantial structures of stone and brick reflecting the growing wealth and stability of the region (Clark, 1961; Watt, 1972). A systematic programme of street formation began in 1874, and by 1878, many of the main streets within the town centre had been much improved (though still quite susceptible to becoming muddy in rain). Streets were laid with packed metal and edged with cobbled gutters and stone kerbs (McDonald, 1965).

Outside of the town centre, the rapid increase in Dunedin's population saw the majority of land within the town belt developed by the 1870s, mostly as residential sections. This is evidenced by the photographic record that shows the urban sprawl of the time as well as by the rapid expansion of the city into the suburbs. Between 1878 and 1886, numerous subdivisions appeared on the suburban sections surrounding Dunedin, and the populations of these suburbs more than doubled. Half of Dunedin's population were living in the suburbs by the 1880s, with Dunedin Central having a population of 23,243 and the suburbs 22,275 (Watt, 1972).

By the end of the nineteenth century, all of the inner-city residential area was occupied, and a distinct variation in the socio-economic character of different parts of the city had arisen. Generally, this was marked by topography. The wealthier developments occupied the hillside around Royal Terrace and London Street, while the houses of the poor were densely clustered in the gully around Stafford Street or on the eastern portions of the north Dunedin flat. The continual growth of the city within an area restricted by the town belt had meant that many of the original quarter acre sections had been significantly subdivided. Housing in the poorer areas was very dense, with some properties only occupying sections of approximately 150m² (Clark, 1961). Even in the wealthier areas, where sections were generally larger, it was rare to encounter an intact quarter-acre town section (Clark, 1961).

An 1864 map of Dunedin and areas of proposed land reclamation shows the centre of the Cadbury Block as within the tidal inlet (Figure 4-8). By 1870, the project area had been entirely reclaimed, with the shoreline running along the east side of Castle Street (Figure 4-2).



Figure 4-8. Detail from 1864 map showing the Cadbury Block partially within the inlet (McKellar & Co Ltd, 1864).

5 A History of the Cadbury Confectionery Ltd Buildings

The Cadbury Confectionery Ltd Buildings is situated on what was once Town Sections 53 to 58 and 68 to 74, part of the block bounded by St Andrew Street to the north, Castle Street to the east, Stuart Street to the south and Cumberland Street to the west. This block was surveyed by Charles Kettle in the 1840s as part of the original Dunedin settlement. At the time of initial survey, much of this block was still within a tidal inlet of the Otago harbour, and settlement of this part of Dunedin did not truly take off until the area was reclaimed in the late 1860s.

This portion of Block XVI was mostly industrial during the nineteenth century, with smaller numbers of commercial and premises and a small number of houses. Block XVI has retained its industrial character throughout the twentieth and into the twenty-first century. Up until recently, the block has been dominated by the expansion Cadbury Confectionery factory. The building development through the nineteenth and twentieth century for the area on which the Cadbury Confectionery Ltd Buildings are situated today is shown in Figure 5-1. The discussion below has been broken up into two sections relating to the two main areas of occupation prior to their amalgamation in 1938 by Cadbury Fry Hudson.

5.1 History of the A & T Burt Site (Site I44/922)

The A & T Burt site comprises the northern half of the present-day extent of the listed Cadbury Confectionery Ltd buildings. The site is made up from historic Town Sections 57 to 59 and 68 to 70, Block XVI Town of Dunedin, and includes SEC 57-59 and 68-70 BLK XVI DP 5322 SO 14196 (part of 280 Cumberland Street). This site extent is based on the shared nineteenth history and use of these properties, which were the location of several foundries that eventually all came to be owned and operated by A & T Burt at the end of the nineteenth century. A summary of key events and land transactions for this site is presented in Table 5-1 below.

5.1.1 1860-1874: Otago Foundry and Others

The first record of occupation on site I44/922 comes from the 1860 rates records that note a foundry as present on Sections 58, 59 and 68, owned and run by David Mason and William Wilson. These sections had been owned by John Hyde Harris, former Dunedin Mayor, since 1857 but had been unoccupied until the foundry was established. The foundry is likely one of the buildings visible at the norther end of Block 16 in the 1861 photograph of the area (Figure 5-2). Mason and Wilson's Otago Foundry was the first such establishment in Dunedin and the foundry undertook the first iron casting at these Cumberland Street premises in 1862 (Otago Witness, 1862a).

A description of the premises a year later describes a pattern shop where patterns or models in wood were prepared for the casting of iron; a fitting room contained “a maze of straps and pulleys in constant motion, each turning a lathe or some revolving machine”; casting rooms in which the moulds from the pattern room were being put to use; a fitting shop where the products were worked to run smoothly; a cupola where the iron is melted for the moulds; and a fire fanned by bellows connected to a steam engine (Otago Daily Times, 1863a). The buildings were neither “expensive nor imposing”. They were looking to expand at this time however the next section they had purchased on the block was yet to be reclaimed (Otago Daily Times, 1863a). The Otago Foundry continued to occupy their Cumberland Street premises until 1892



Figure 5-1 Figure showing all known nineteenth and twentieth century buildings and their initial construction dates at the location Cadbury Confectionery Ltd Buildings Site.

Table 5-1. Summary of key events for the A & T Burt Site.

Year	Event	Source
1857	Unoccupied Sections 58, 59 and 68 owned by John Hyde Harris	DCC Rates Records
1859	Unoccupied Sections 69-72 owned by Frederick H Richardson and Section 57 by John Thompson	DCC Rates Records
1860	William and Mason (Otago Foundry) owned and occupying foundry on Sections 58, 59 and 68	DCC Rates Records
1862	Otago Foundry undertake first iron casting in Otago on site on Sections 58, 59 and 68	Otago Witness, 1862
1869	Sections 57 and 70 occupied by Dunedin Iron Works	Perry, 1980
1874	Otago Foundry, Kauri Timber yard and other commercial/industrial buildings present on site Construction of brick frontage, truncating older iron building on Section 57 Start of construction of building in Section 69	Burton Brothers Studio, 1874
1876	Workshops, foundry and premises on site occupied by A & T Burt on Section 57 and 70 and Otago Foundry on Sections 58, 59, 68 and 69	DCC Rates Records
Late 1870s	Otago Foundry building present on Sections 68 and 69	Burton Brothers Studio, n.d.
1879	Fire damages Otago Foundry blacksmith's shops, fitters' shop and offices	Auckland Star, 1879
1886	Workshops, foundry, offices and premises on site, occupied by A & T Burt on Section 57 and 70 and New Zealand Implement Company on Section 69.	DCC Rates Records
1889	A & T Burt occupy Sections 57 and 70, Otago Foundry Sections 58 and 59, and Begg & Williamson (New Zealand Implement Company) Sections 68 and 69 Kauri Timber and other buildings on Section 58 replaced by extension of the building in Section 59 south	Bare, 1889
1891	Castle Street factory sold to NZEEC	Evening Star, 1891
1892	NZEEC occupy factory on Section 69 Iron buildings have been removed from Section 68 A & T Burt have extended premises into part Section 56 and part Section 58	Jones, 1892
1896	Workshops, foundry, offices and premises on site, occupied by A & T Burt and NZEEC	DCC Rates Records
1898	A & T Burt own and occupy Sections 58 and 59	DCC Rates Records
1899	A & T Burt own and occupy Sections 68 and 69	DCC Rates Records
1902	Extension to building on Sections 56, 57 and 70 Extension to lead pipe shop planned	DP 1589 DCC Archives
1903	Addition of Pattern and Core shop on Section 58 Brick pattern and boiler making building (southern extent) present on west end of Section 69	DCC Archives
1904	Brick moulding shop building replaced iron building at east end of Section 69 by this time Moulding shed had been extended to east end of Section 70 Moulding shed extended south across east end of Section 70	DCC Archives; Dunedin Drainage and Sewerage Board, 1905
1905	Boiler making building extension at the rear present in Sections 58 and 59 Northern extent of boiler making building (iron) in Section 68 present	Dunedin Drainage and Sewerage Board, 1905
1906	Fire in pattern department Alterations made to roof of pattern shop Brick moulding shop replaced by corrugated iron moulders shop	Star, 1906; DCC Archives
1911	Second extension to lead pipe shop planned in 1911	DCC Archives
1918	New pattern shop and store in Section 69	DCC Archives
1922	A & T Burt occupying all buildings on site Brick building moulding shop extended west	Council of the Fire Underwriters Association of New Zealand, 1922
1938	Boiler making building in Sections 58 and 59 extended at the rear A & T Burt sell their property to Cadbury Fry Hudson and move their premises to North East Valley	DP 5322; Auckland Star, 1938; Kynaston, 2012



Figure 5-2 Detail from 1861 photograph with red arrow showing what is likely the Otago Foundry buildings owned by Wilson and Mason (Meluish, 1861). Note this building is around one or two town sections further north than described in the rates records at this time.

Other areas of the site were owned by Frederick H Richardson (Sections 69-72) and John Thompson (Section 57) in 1859 and 1860 but were listed in the rates records as unoccupied. Rieman's 1869 business directory indicates C R Howden & Co as occupants of Section 57, fronting Cumberland Street (Figure 5-3). This company (also known as the New Zealand Distillery Company) opened Dunedin's first distillery on their Cumberland Street property in 1869 and were known around the South Island for their whisky and gin (Cromwell Argus, 1870; Hawkes Bay Herald, 1868). In addition to Section 57, Howden & Co owned Sections 53, 54, 56, 71, 72, 73 and 74 which form the Cadbury Factory site (I44/817) discussed below, but a woodcut shows that, although Sections 56 and 57 were owned by this company, there were no brewery buildings on site. Section 57 and 70 were instead occupied by the Dunedin Iron Works, with a large building fronting Cumberland Street and two smaller buildings on Section 70 (Figure 5-4).

51 Haville Free-Store	52	53	54	55	56 C.R. Howden & Co	57 Distillers	58	59	60 Dunedin Iron Works J. Sparrow	62 Otago Iron W Wilson	63	64 Plant Sawmills
77 Shepherd's Supplies & Holds	W											
76	75	74	73	72	71	70	69	68	67	66	65	61
A												

Figure 5-3. Detail from Rieman's Directory showing commercial occupants on the Cadbury Block in 1869 (Rieman, 1869).

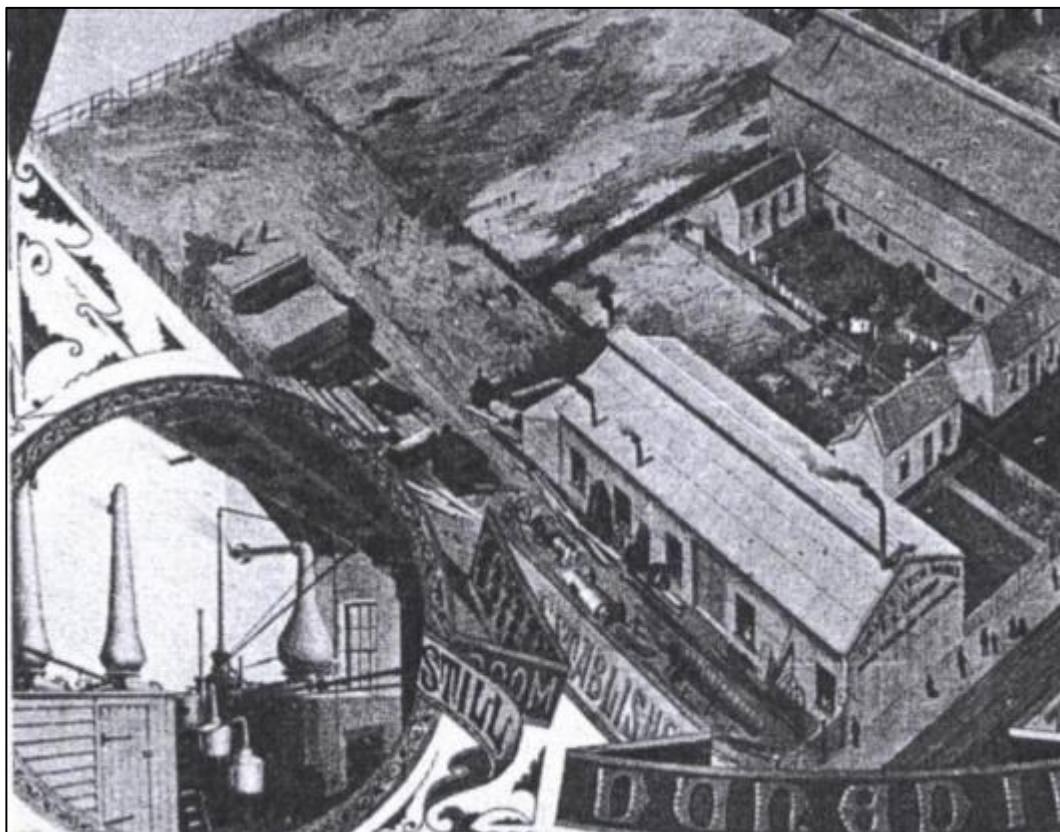


Figure 5-4. Detail from woodcut showing Dunedin Iron Works occupying Sections 57 and 70 in c.1868 (Perry, 1980).

5.1.2 1874-1886: Otago Foundry, A & T Burt and Others

An 1874 photograph (Figure 5-5) of the site shows the building depicted in the c.1868 woodcut as having been recently truncated and a new brick front in the process of construction. Numerous other buildings are present on Sections 58 and 59 to the north, including a small timber building with “Kauri Timber Yard” painted on the side and a larger Otago Foundry building. No buildings are present on the east half of the site. However, the chimney under construction, marks the start of buildings in Section 69.

Another photograph taken at the end of the decade (Figure 5-6) shows the completed front of the two storey iron works building, by this time occupied by engineering firm A & T Burt, and a range of industrial buildings covering most of the site. The 1876 rates records note the owners of Sections 57 and 70 as the NZ Distillery Company and the occupants as A & T Burt, while the remainder of the site was owned by William Wilson and occupied by the Otago Foundry. The foundry had completed chimney and buildings behind in Sections 68 and 69 are also present by the late 1870s. In 1879 a fire that began in the neighbouring McLeod Bros. soap works caused significant damage to the blacksmith shop and three-storey brick building to the north of the Cumberland Street frontage of the site, at the time occupied by the Otago Foundry (Auckland Star, 1879).



Figure 5-5. Detail from 1874 photograph showing approximate outline of site I44/922 in red (Burton Brothers Studio, 1874). Photograph is looking northeast.



Figure 5-6. Detail from late 1870s photograph showing the approximate outline of site I44/922 in red (Burton Brothers Studio, n.d.). Photograph is looking east.

5.1.3 1886-1892: Otago Foundry, A & T Burt and Others

In 1886 the rates records list A & T Burt as the owners and occupiers of Sections 57 and 70, James Richardson as the owner of Section 69 and the New Zealand Implement Company as the occupier, while the remainder of the site was owned by the National Bank of New Zealand. The buildings listed on site at this time include a foundry, engineer workshops, offices and shops. Two smaller industrial firms identified as occupying the site were the New Zealand Electrical and Engineering Company (NZEEC) and the New Zealand Implement Company. The New Zealand Implement Company, also known as Begg & Wilkinson, were manufacturers of agricultural equipment and fencing supplies.

An 1889 block plan reveals more detail of the site occupants and layout (Figure 5-7). The Otago Foundry is still recorded as occupying the portion of the site owned by the National Bank in 1886, suggesting that the business

was bailed out by the bank during the 1880s but continued to function at the site. By this time the Otago Foundry had extended the most northerly building on their premises south replacing the Kauri timber building and other early structures in Section 58. The buildings on the Castle Street frontage of Sections 68 and 69 occupied by engineers Begg & Williamson while A & T Burt continue to occupy their buildings on Section 57 and 70, including the main brick building on Cumberland Street that had been raised to three storeys.

A & T Burt extended their most southern building into part of Section 56 (1892 Rates Records), replacing the cottage on this lot. Most structures on the site were constructed of iron, with the exception of the buildings on the Cumberland Street frontage of A & T Burt's property (visible during and shortly after construction in Figure 5-5 and Figure 5-6) and two timber sheds at the rear of the Otago Foundry. By 1892, the Otago Foundry had vacated their premises and the site was occupied by A & T Burt and the New Zealand Electrical and Engineering Company (Figure 5-7). The New Zealand Electrical and Engineering Company had first purchased a factory on the property in 1891 and by 1892, they had extended the iron building at the eastern end of the Section 69 north while all the buildings on Section 68 had been removed. The 1896 rates records list the occupants of the site as A & T Burt and Thomas Stevenson of the NZEEC.

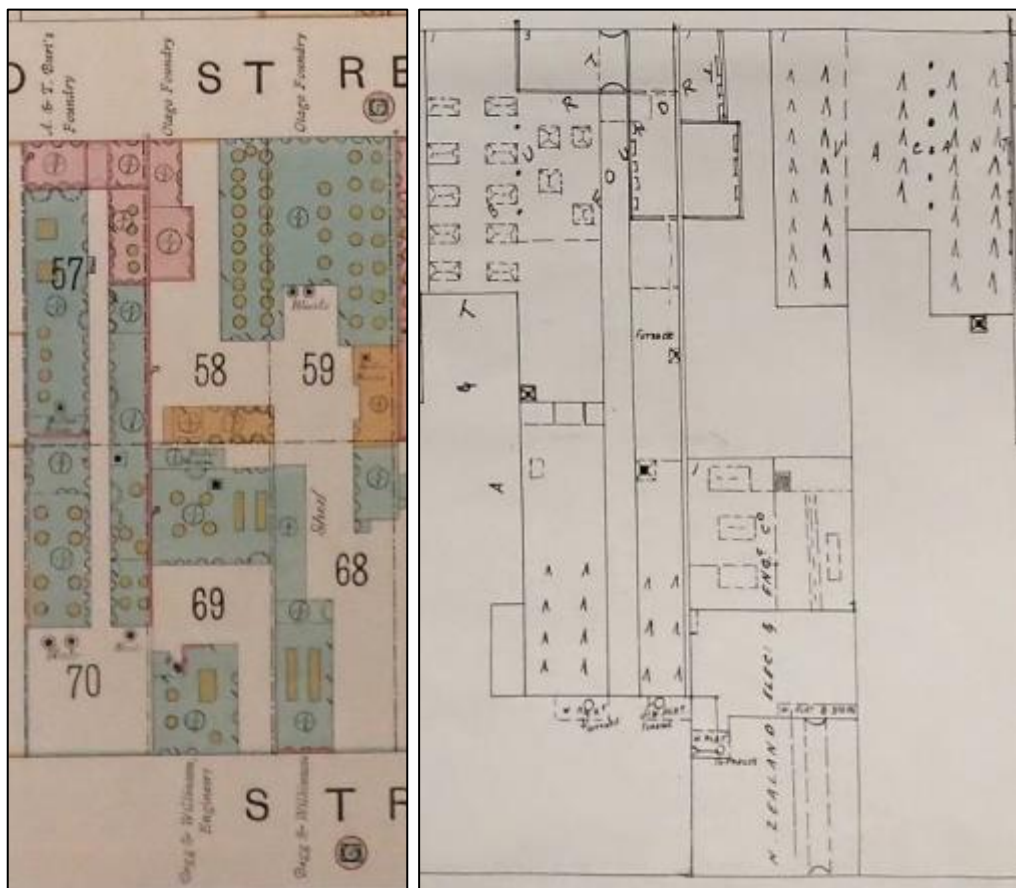


Figure 5-7. Left: detail of 1889 block plan showing brick (pink), timber (yellow) and iron (blue) buildings on site I44/922 (Bare, 1889). Right: detail of 1892 block plan showing buildings on site I44/922 (Jones, 1892).

5.1.4 1892-1938: A & T Burt

In 1898 rates records indicate A & T Burt owned and occupied Sections 58 and 59 and by the following year Sections 68 and 69, effectively taking over the whole site. Their buildings including the large three-storey brick structure (visible in Figure 5-9 and Figure 5-8) known as “the works” (Cyclopedia Company Ltd, 1905). A 1905 account of the works (Cyclopedia Company Limited, 1905) gives an idea of the scale and layout of the buildings on site, several of which were previously occupied by the Otago Foundry. This premises held engineering and blacksmithing departments, workman’s store, dressing shop, iron moulding shop, finishing and pattern shop, brass foundry, coppersmith’s shop, boiler house, boiler and fluming pipe shop, warehouse, and a plumbing shop (Figure

5-10). The interiors of the A & T Burt offices are shown in Figure 5-11 and Figure 5-12 and these were likely located in the main three-storey brick building facing on to Cumberland Street. By this time the brick and iron buildings on the southern portion of Sections 56 as it had been extended east by 1902 (Building No. 1 in Figure 5-10). Many of the factory buildings contained large machinery or other features the remains of which may be encountered during earthworks at the site, including a 16ft deep watertight pit in the iron moulding shop (located behind the main brick building), the brick and concrete floor of the brass foundry and the foundations of large chimneys in the brass foundry and boiler house (Cyclopedia Company Ltd, 1905). Foundations for the larger forges, furnaces and other metal working equipment may also have survived.

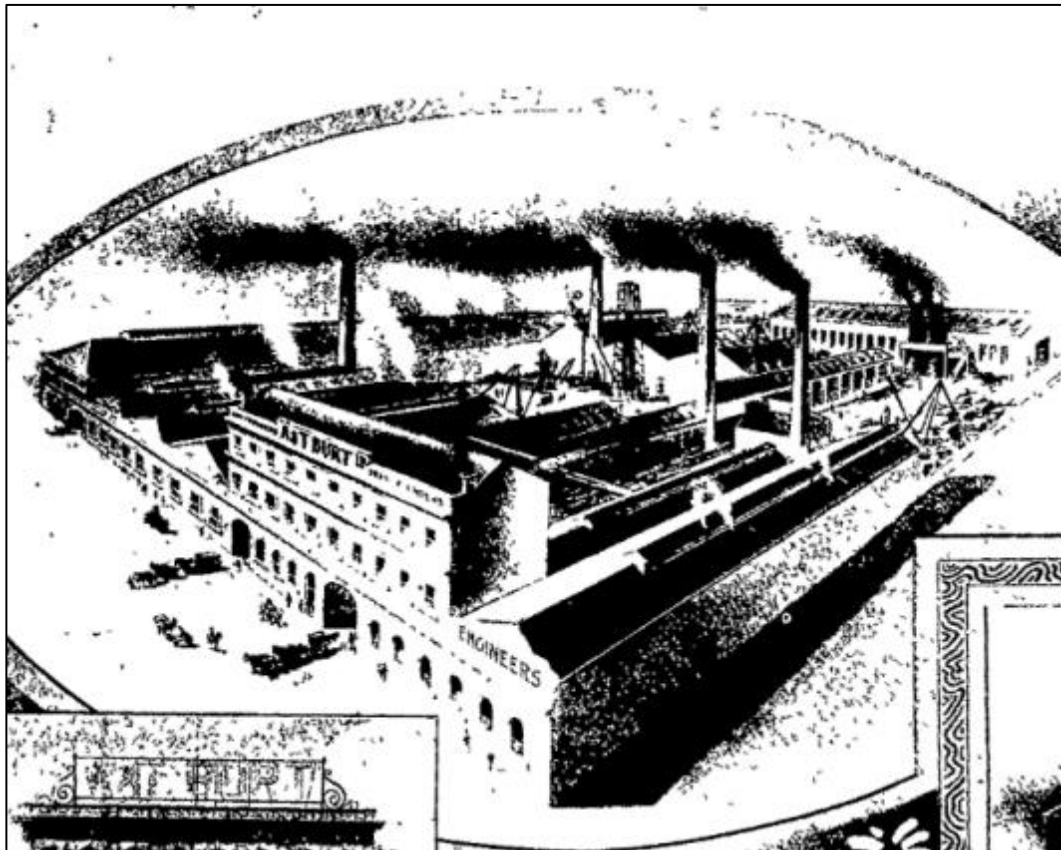


Figure 5-8 A & T Burt premises in 1906 (“Our Industries: No. 9 A & T. Burt, Ltd.,” 1906)



Figure 5-9 1890s-1900s photograph taken sometime looking south at the Cumberland Street façade of the A & T Burt Premises (Anon., n.d.-f).

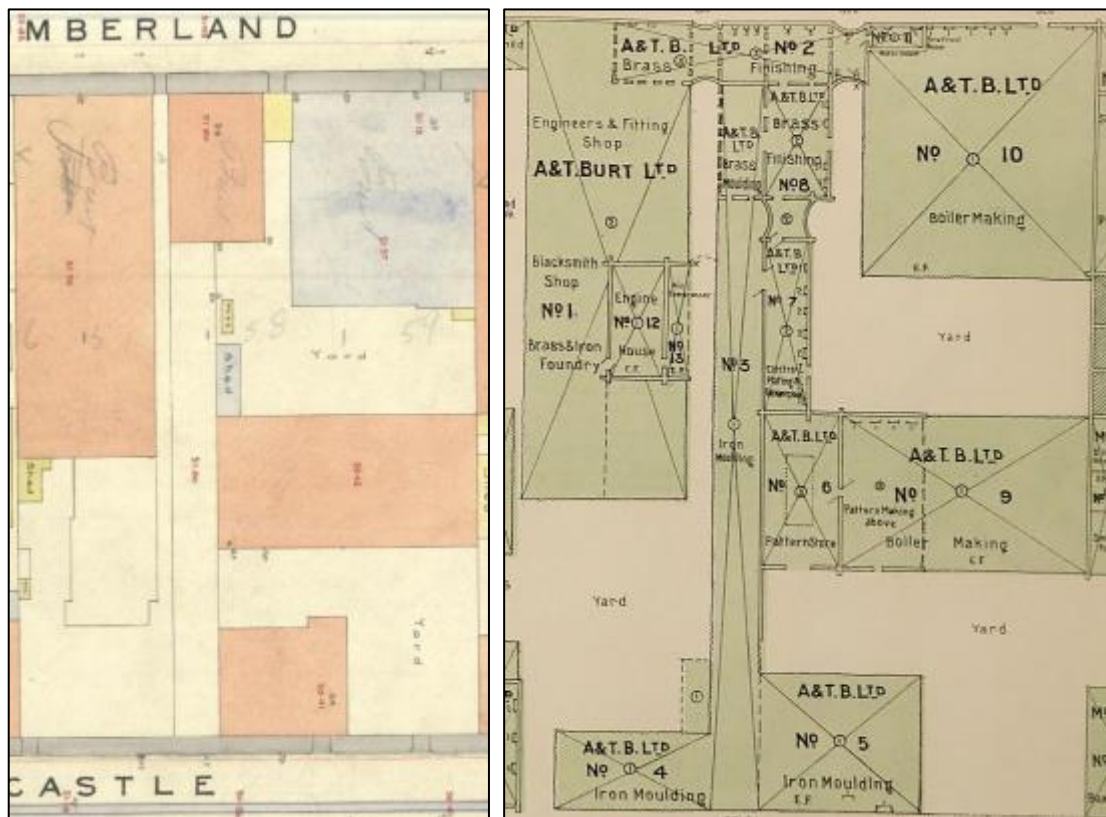


Figure 5-10. Left: detail of 1905 drainage plan showing brick (orange), timber (yellow) and iron (blue) buildings on site I44/922 (Dunedin Drainage and Sewerage Board, 1905). Right: detail from 1922 plan showing buildings and occupants on site I44/922 (Council of the Fire Underwriters Association of New Zealand, 1922).



Figure 5-11 The interior of the general A & T Burt Offices in the late nineteenth or early twentieth century (Anon., n.d.-b)



Figure 5-12 The interior of William Burt's (Alexander's son) Office in the late nineteenth or early twentieth century (Anon., n.d.-d)

Throughout the first two decades of early twentieth century A & T Burt undertook a number of changes to the premises. Most of these changes can be seen in the differences between the 1905 plan and the 1922 plan (Figure 5-10), whereby many pre-1900 buildings were replaced or altered. This included extending the brick and iron buildings on the southern portion of Sections 56 between 1892 and 1902 (Building No. 1 in Figure 5-10). An iron and wood extension was planned for a lead pipe shop at the rear of 1902 and again in 1911 (DCC Archives). (Figure 5-13). This building is visible in the 1906 photograph along with the original lead pipe shop (Figure 5-14). Plans for a second addition in 1911, built before 1922, shows the first extension (Figure 5-15)

Replacing an earlier iron shed and water closet, 1903 plans of a proposed addition in Section 58 show A & T Burt's pattern and core shop (Figure 5-16). The building ran alongside the moulding shop running east-west through the property. A chimney is shown adjacent to the core shop and this possibly aligns with the furnace in the moulding shed shown in the 1892 plans (Figure 5-7). The interior of the core shop is shown in Figure 5-17, showing brick walls of the building along with the windows as shown in the 1903 plan. In the same year as the pattern shop, changes were also made to the pattern store in Section 69 (Figure 5-18). These plans indicate that at least the southern portion of the pattern store, visible across Sections 68 and 69 in the 1905 plans, was present by 1903, and had likely replaced the earlier iron NZEEC building at the same location. The northern extent of this building, made of iron, was either constructed at the same time or was later addition for boiler making. The interior of the pattern store building (Building No. 6 in Figure 5-10) is shown in Figure 5-19. While the pattern and core shop is not shown in the 1905 plan, it had been completed by 1906 as the roof of the building was altered in 1906 (Figure 5-20). This may have been a result of a fire that tore through the pattern department in the same year, causing damages of up to £1000 (Star, 1906).

The pattern shop was shifted in 1918 and moved to Section 69 adjacent to the existing pattern store (Figure 5-21). A new pattern store was also proposed for the first floor however the 1922 plans indicate this was still used for boiler making (Building No. 9 in Figure 5-10). The original pattern shop was replaced by an electroplating and galvanising building (Building No. 7 in Figure 5-10).

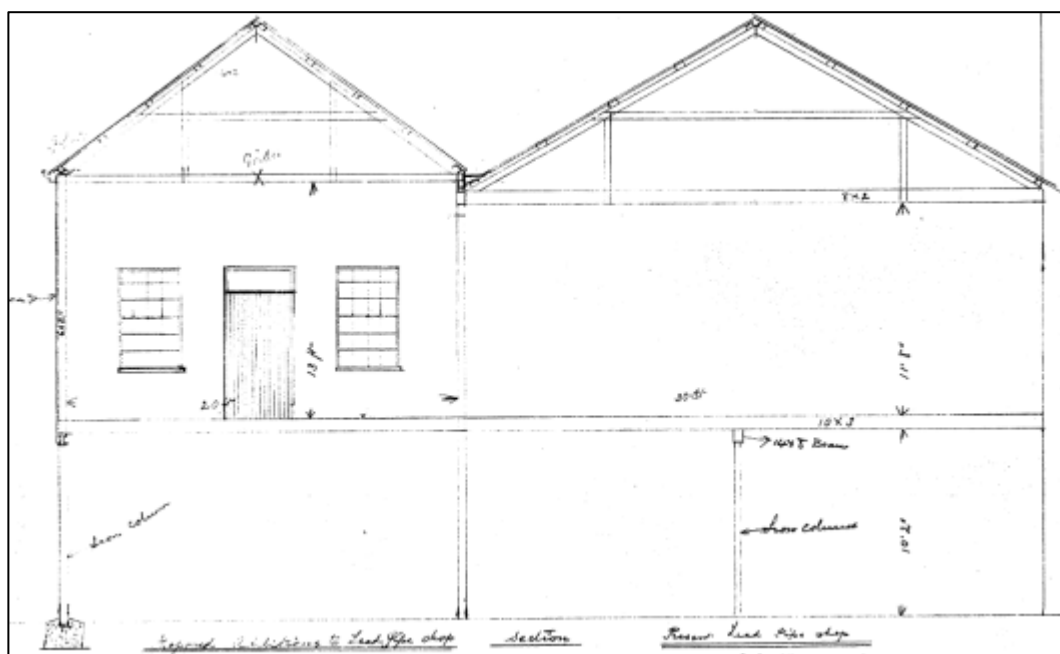


Figure 5-13. 1902 plans for the addition to the lead pipe shop (DCC Archives).

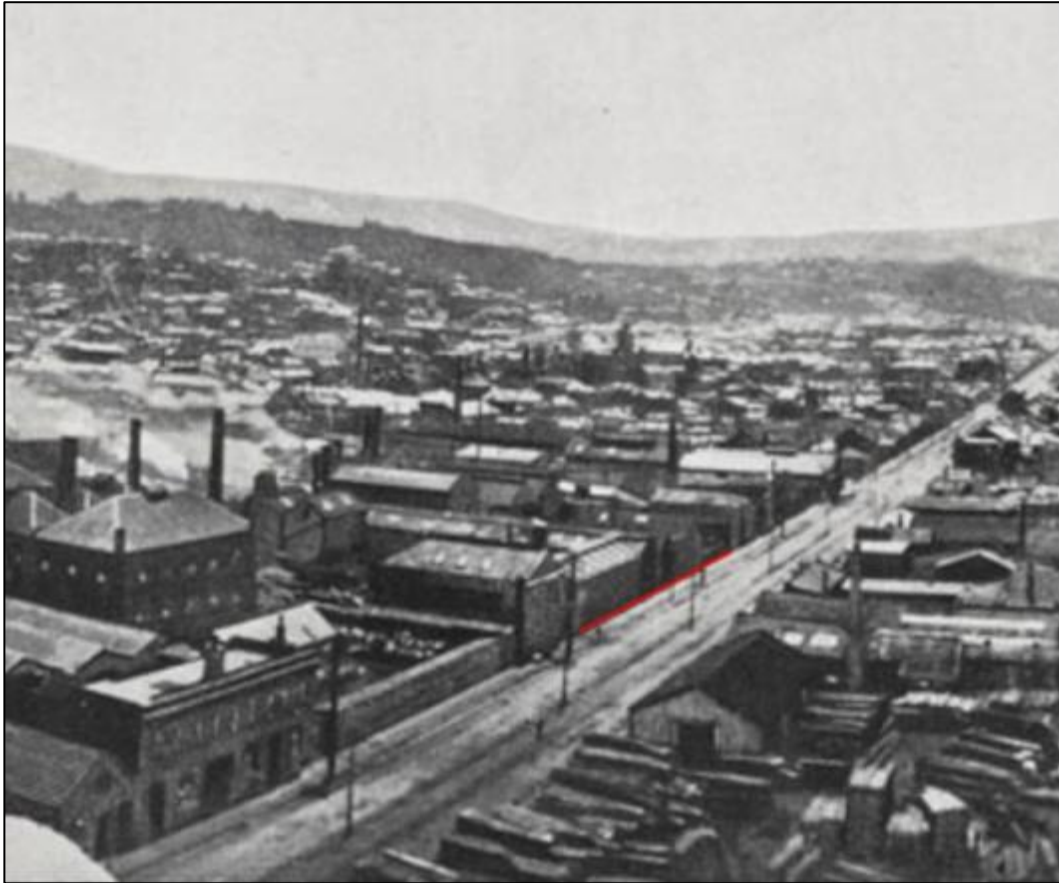


Figure 5-14. Photograph taken in 1906 showing the Castle Street frontage (red line) of the A & T Burt Site (Auckland Weekly News, 1906).

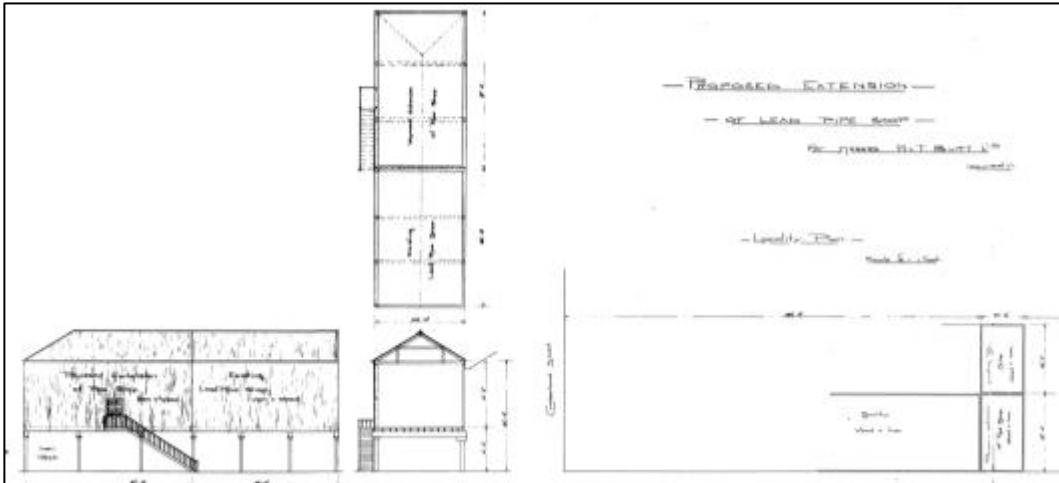


Figure 5-15 1911 plans for second addition to the lead pipe shop (DCC Archives).

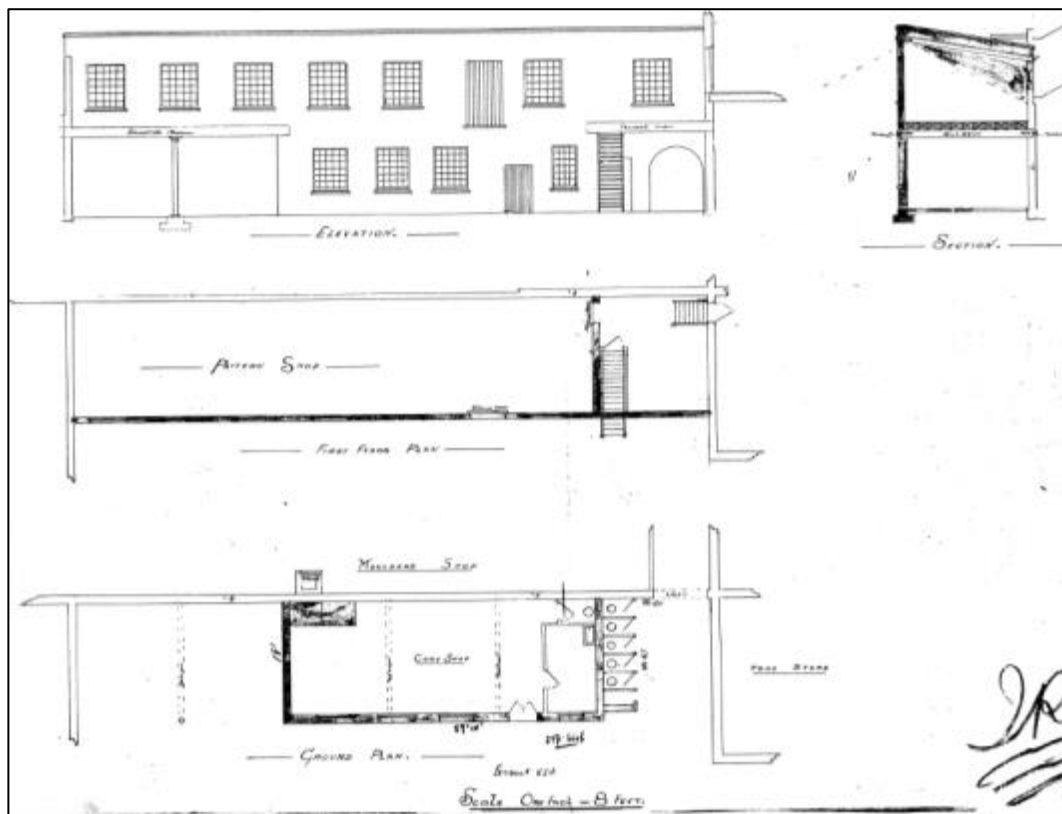


Figure 5-16 1903 plans of the pattern shop and core shop in Section 58 (DCC Archives).



Figure 5-17. View of A & T Burt's core store (Anon., n.d.-a)

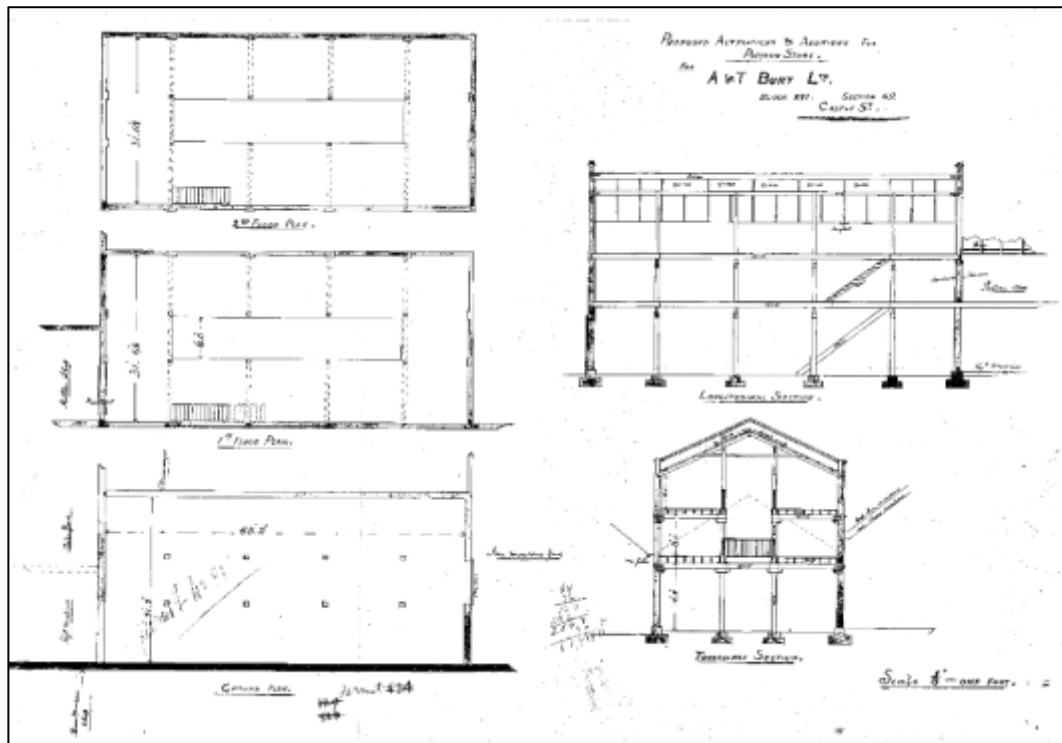


Figure 5-18 1903 alterations and additions for the pattern shop (DCC Archives).



Figure 5-19. View of A & T Burt's pattern store (Anon., n.d.-e).

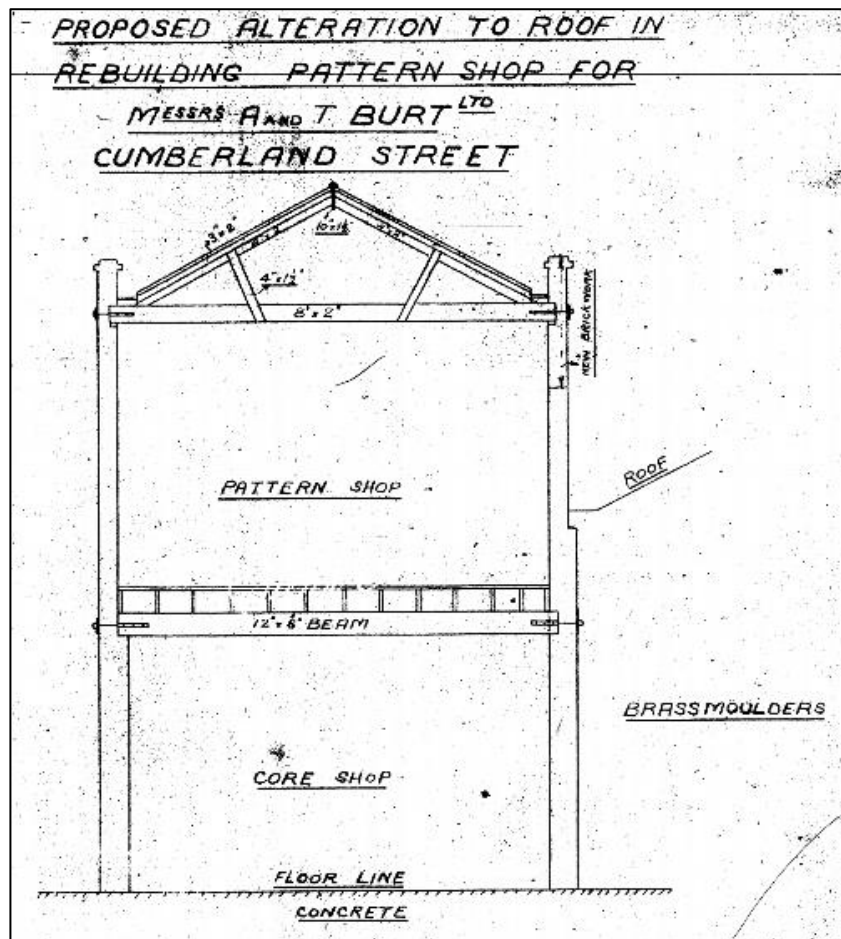


Figure 5-20 1906 plans for roof alterations to the pattern and core shop (DCC Archives)

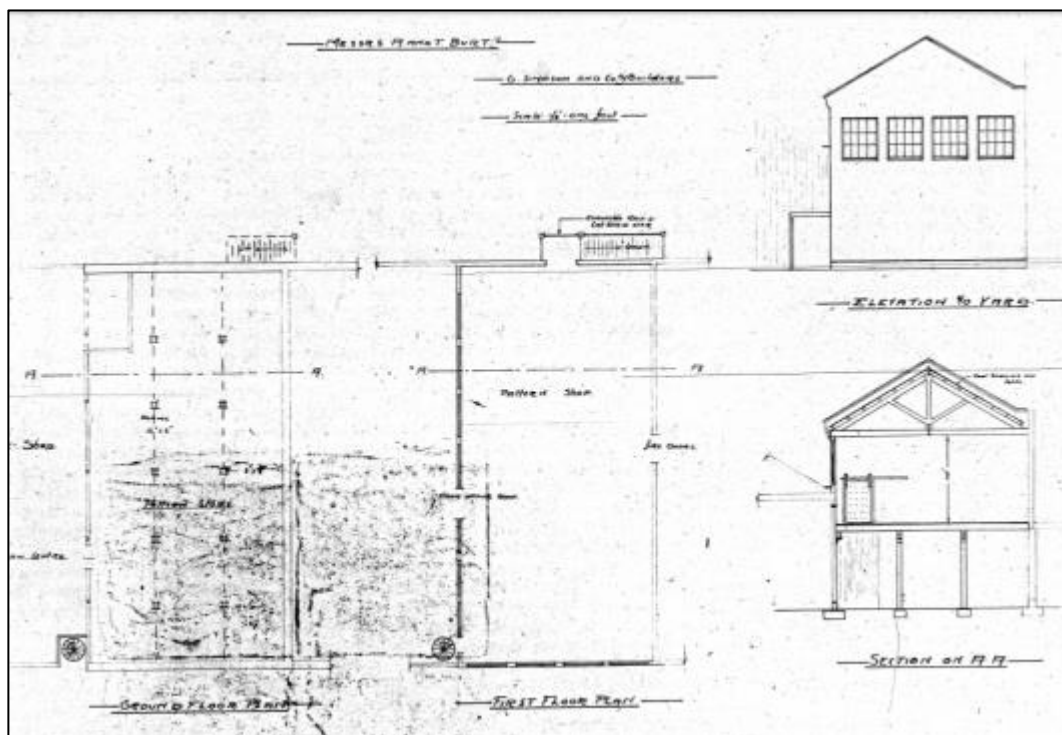


Figure 5-21 1918 plans for a new pattern shop and store on Section 69 (DCC Archives).

At the Castle Street extent of the A & T Burt premises, plans from 1904 indicate that the moulding shed (Building No. 3 in Figure 5-10) had been extended to run the length of Section 70. This building is visible in the 1906 photograph (Figure 5-14). The interior of this building is shown in Figure 5-22 with an iron wall to the west and south and a brick wall to the north as well as unlined earth floor. It is interesting to note that the 1905 plan only shows an outline of the building, perhaps indicating that only a roof line or canopy existed when the survey for the plan was undertaken. The moulding shed ran alongside a brick building (Figure 5-10 and Figure 5-23), that by 1904 had replaced the iron building visible in 1889 plans (Figure 5-7).

Plans show proposed northern and southern iron additions to the moulding shed and shop in 1904 on Sections 69, 70 and 71 (Figure 5-23 and Figure 5-24). The southern building had been constructed by 1906 as it is visible in the 1906 photograph of the Castle Street frontage (Figure 5-14). The interior of the southern building is shown in Figure 5-25 with a slightly different roof framing than shown in the plan. The northern extension is not visible in the 1906 photograph (Figure 5-14). Yet another 1906 image (Figure 5-8), published ten months after the photograph was taken, shows both the northern and southern extensions. It is clear that some artistic license has been taken by the illustrator of the image, yet it suggests that the northern corrugated iron extension, was present by this time replacing the earlier brick building. By 1922, the moulders shop is depicted to have been extended west (Building No. 5 in Figure 5-10).

The final building altered by A & T Burt was the boiler making building in Sections 58 and 59 (Building No. 10 in Figure 5-10). One of the Otago Foundry's earliest buildings, A & T Burt extended the building to the back of the section and connected to the rest of the building between 1892 and 1905, and a second time to the rear between 1927 and 1938 along with a chimney immediately to the north. The second rear addition also included a chimney however had been removed by 1942 (Figure 5-26).

At the end of 1938 A & T Burt sold their property on Cumberland Street to Cadbury Fry Hudson and shifted their premises to North East Valley (Kynaston, 2012). They received £30,000 for the property (Auckland Star, 1938).



Figure 5-22. Photograph looking east of the iron moulding structure (Anon., n.d.-c).

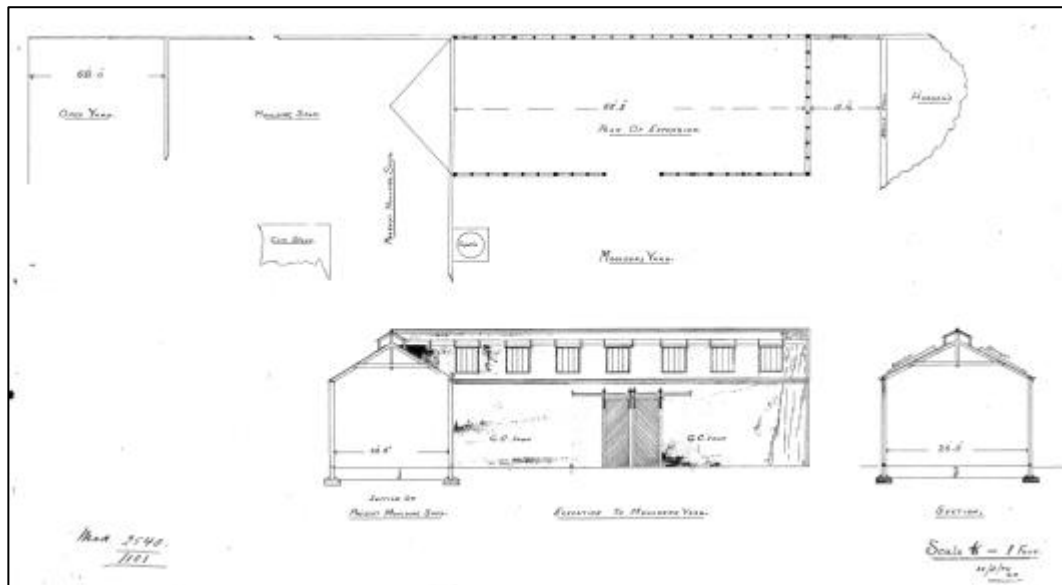


Figure 5-23. 1904 plans looking for the southern extension to the moulders shop constructed before 1906 (DCC Archives).

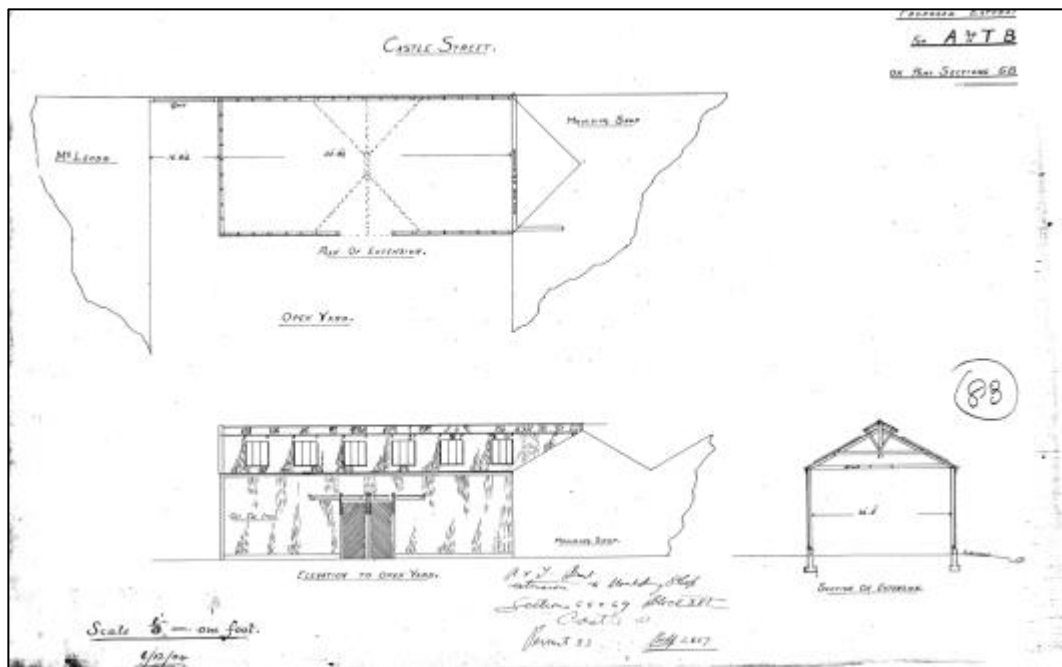


Figure 5-24. 1904 plans for the northern extension to moulder's shop not constructed (DCC Archives).

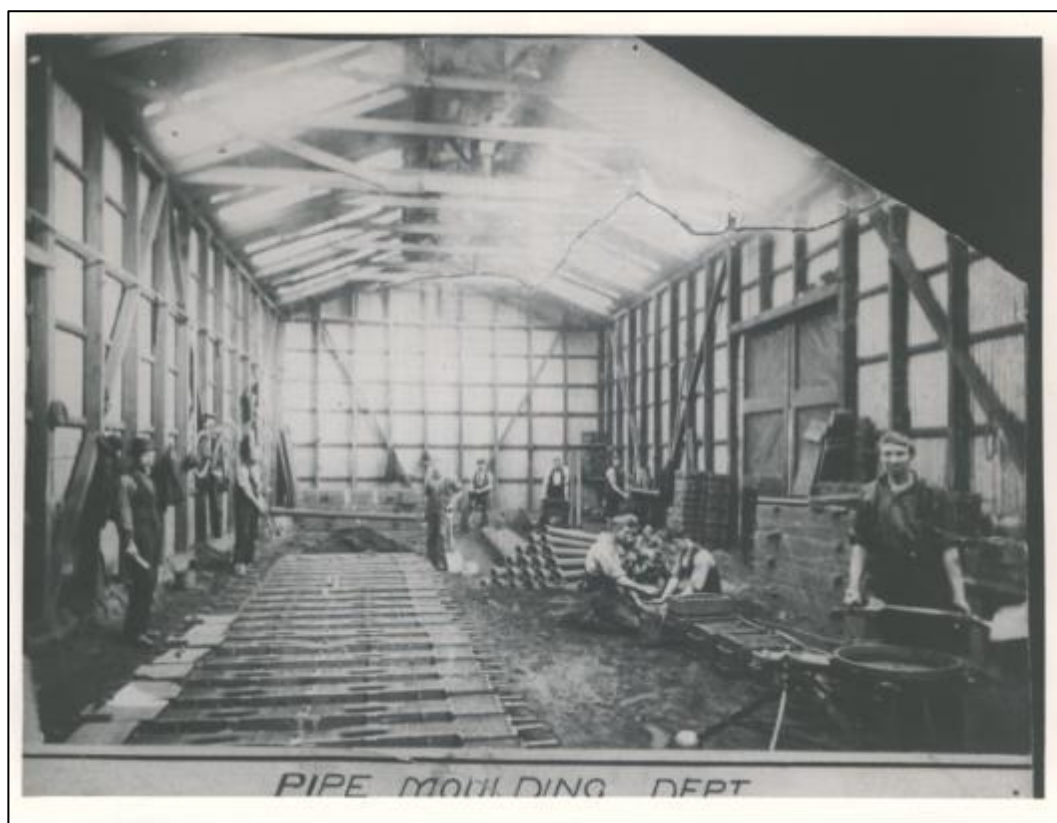


Figure 5-25. Photograph showing the interior of the iron moulding building. Note that the roof framing is different to that showing to the 1904 plans (Anon., n.d.-e).

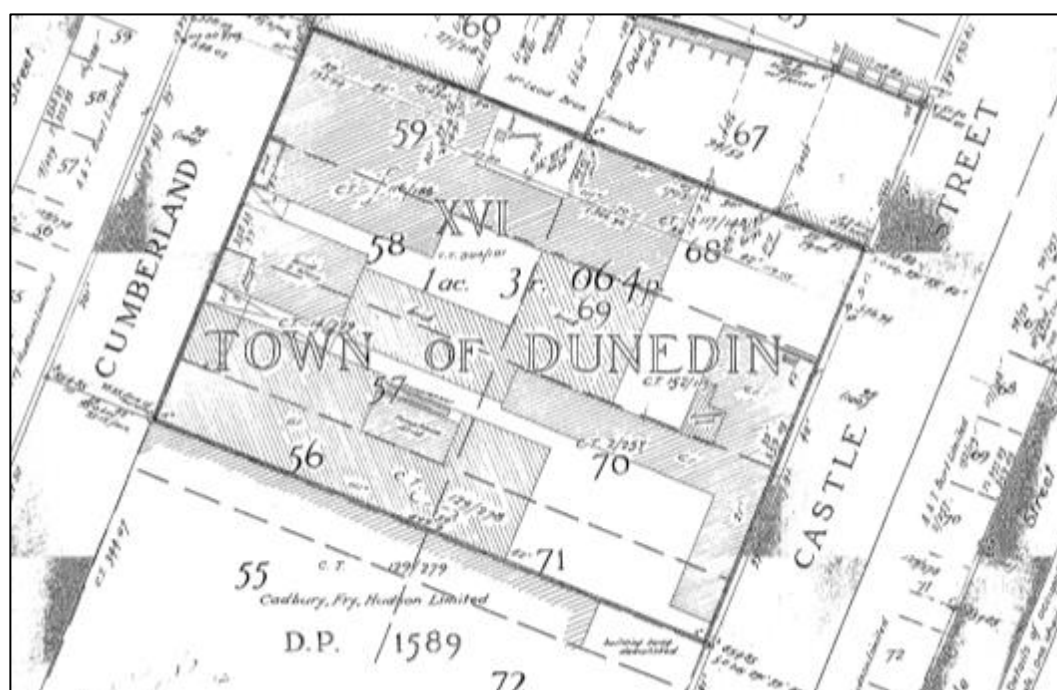


Figure 5-26 DP 5322 showing the layout of the A & T Burt premises in 1938 (note the building being demolished immediately south of the A & T Burt property).

5.2 A History of the Cadbury Factory Site (I44/817)

The Cadbury Factory site comprises the southern half of the present-day extent of the listed Cadbury Confectionery Ltd buildings. The site has been previously recorded as including historic Town Sections 53, 54, 73 and 74, Block XVI Town of Dunedin, but as a result of this assessment the extent has been broadened to include Sections 55, 56, 71 and 72. This site extent is based on the shared nineteenth century history of these properties,

which were owned and occupied by a series of breweries. Multiple previous assessments have been undertaken on part of site I44/817 (mainly focusing on sections 53 and 74), and the following history builds on these reports (Brooks & Jacomb, 2010; A Farminer, 2014; Parkinson, 2011). A summary of key events for this site is presented in Table 5-2 below.

5.2.1 1858-1868: Monson and Brunton

The first recorded occupation at the Cadbury Factory site (I44/817) comes from the 1858 rates records when a house and shop are noted as present on Section 54, owned and occupied by William Henry Monson, who also owned unoccupied Sections 72, 74 and 75. Section 53 was owned by Edward Bowes Cargill by this date but was unoccupied, while the remainder of the sections within the site were not listed in the rates records this year. This may be a result of the majority of the site still being within the tidal inlet. The following year (1859), William Monson is listed as owning and occupying Sections 54 and 73 with “house, shop etc”, and owning the unoccupied Sections 53, 74 and 75. William Monson was an architect and builder and was one half of Monson Brothers with Frederick Kidall Monson until the partnership dissolved in 1860 and William slipped further into debt until he was declared bankrupt in 1864 (Otago Daily Times, 1863d, 1864; Otago Witness, 1860).

By 1861, Monson’s property was listed as occupied by David Brunton along with Sections 55, 56 and 74, and noted as containing “buildings”. Brunton was another builder and so likely continued to use the site in the same way Monson had before him, until he too went into insolvency in 1863 (Otago Daily Times, 1863c). Upon entering insolvency, Brunton’s Cumberland Street property, which he had leased from Edward McGlashan for a term of 14 years from February 1862, was mortgaged to Frederick Joseph Moss and William Darling, who put the leasehold up for auction in early 1863 (Otago Daily Times, 1863b).

Table 5-2. Timeline of key events relating to the Cadbury Confectionery Buildings.

Year	Event	Source
1858	House and shop present on Sec 54, owned and occupied by W H Monson	DCC Rates Records
1859	“House, shop etc” present on Secs 54 and 73, owned and occupied by W H Monson	DCC Rates Records
1861	Buildings present on Secs 53-56, 73 and 74, owned and occupied by David Brunton	DCC Rates Records
1868	New Zealand Distillery Company purchased site, first brewery buildings erected	Parkinson, 2011
1869	Site fully reclaimed, part occupied by C R Howden & Co., distillers	Rieman, 1869
c.1875	Property sold to the Albion Brewing and Malting Co. Above-ground brick beer cellar constructed on Section 74,	Parkinson, 2011
1876	Site owned and occupied by Albion Brewing and Malting Co, part of brewery and three cottages on site	DCC Rates Records
1878	Marshall and Copeland purchase the company and premises and the company becomes Albion Brewing Co.	Otago Daily Times, 1879; Farminer, 2014
1886	Section 56 owned by Bendrix Hallenstein, one house on property, rest of site owned and occupied by John Marshall, Albion Brewing Co. premises on property	DCC Rates Records
1886	Albion Brewing Company declared bankrupt	Leckie, 1996
1887	Marshall and Copeland sell Albion Brewery to Williamson and Murray	Taranaki Herald, 1887
1889	Site owned by Bank of NZ, brewery and two houses on site	DCC Rates Records
1898	Site purchased by R. Hudson & Co.	Farminer, 2014, DCC Rates Records
1901	Biscuit Factory constructed in Sections 72 and 73 Southern extension to the brewery building on Cumberland Street which had been raised two storeys by this time	DCC Archives
1902	Additional Stables, and brick and Iron building present on Section 71. Biscuit factory in Sections 72 and 73 burns down. By this date the façade of the cellar building had been altered from the exposed multi-gable roof line to a masonry façade.	Farminer, 2014; DP 1589;
1902-3	Biscuit factory in Sections 72 and 73 rebuilt	Parkinson, 2011
1904	Second storey added to brick and Iron building on Section 71	DCC Archives
1905	Plans prepared for cloak room in Sections 72 and 73 along Castle Street	DCC Archives
1907	Plans prepared for larger building across Sections 72 and 73 to replace cloak room building	DCC Archives
1908	Waipori power connected to the flour mill	Evening Star, 1908; Findlay, 2009
1909	Plans prepared for mixing and chocolate packing building in Section 54	DCC Archives
c. 1911	Offices established in front of Section 74 by Hudson and Co.	Parkinson, 2011
1915	Plans prepared for extension of mixing room and chocolate packing building west in Section 54 and showing two storey addition to central section of the brewery building on Cumberland Street present at this time in Section 53	DCC Archives

Year	Event	Source
1918	Façade altered on the Dairy building frontage to Castle Street	Brooks & Jacombs, 2010; Farminer, 2014; Parkinson, 2011
1922	By 1922, two remaining cottages on Section 56 removed, buggy building added south of stables on Section 72, kiln and malt house on Section 57 refitted to become carpenter workshop and stores by this time, smutters room added to brewery building (now grain store) and additional floor added to mill in Section 53. Plans prepared for ground floor of new chocolate factory and garage to replace stores and carpenter's workshop on Section 55	Council of the Fire Underwriters Association of New Zealand, 1922; DCC Archives
1924	Rear three storey portion of the Chocolate Factory and Garage Building (concrete) present by this time on Sec 54. Plans prepared for additional floors for the front portion of the chocolate factory and garage in Secs 55 and 56. Plans prepared for Chocolate and Biscuit Factory building at the rear of Secs 71 and 72.	DCC Archives
1926	Fourth storey (with mansard roof) was added to the grain store, dinning and dressing room at the front of Sec 54 while. Top floor altered for use as box factory	DCC Archives
1927	By 1927, an eastern extension confectionary factory had been added behind grain store in Sec 53. Extension of Chocolate and Biscuit Factory east to meet older buildings forming façade along Castle Street in Secs 71 and 72. The 1902-3 biscuit factory was extended east in Secs 72 and 73 to adjoin buildings forming façade along Castle Street	Fire Insurance Plans, 1927
1930	R. Hudson and Co. merge with the Cadbury and Fry companies forming Cadbury Fry Hudson	Barringer, 2000
1931	Construction of 90 ft concrete chimney stack in the engine house in Section 53	Farminer, 2014
1938	A & T Burt sell their property to Cadbury Fry Hudson The pre-1900 eastern brick building forming part of the Chocolate and Biscuit Factory as well as the dining and cloak rooms in Section 71 and 72 replaced by a concrete and steel framed building designed by Miller and White and constructed by William McLellan Ltd.	Auckland Star, 1938; Evening Star, 1939
1940	Renovations to the A & T's engineers and carpenters' shop along Cumberland Street in Section 57	DCC Archives
1942	A & T's iron moulding buildings removed from Sections 69 and 70, and replaced by slit trenches and subsequently air raid shelters. By 1942 the Confectionery factory extension behind the grain store in Section 53 raised to four storeys	DCC Archives
1945	Plans for central boiler house drafted for Sections 57 and 58	DCC Archives
1946	Air raid shelters demolished in 1946	Barringer, 2000
1947	All A & T buildings removed from the property except for refitted engineers and carpenters store on Section 56. A long building was constructed north of the remaining engineers and carpenters store by this time on Section 56. Start of construction of new biscuit factory on Sections 58, 59, 68 and 69 with a dispatch building immediately south in Section 69 and 70. Staff lunchroom had been added to the top of the Dairy and Machine House Building	1947 aerial photographs; Barringer, 2000
1948	Power and services station constructed to the west of the boiler house on Section 69 and 70	DCC Archives
1951	New Biscuit Factory and Dispatch Building completed on Sections 58, 59, 68, 69 and 70	Barringer, 2000
1954	By this time, the façade of the Dairy and Machine House Building on Section 74 was altered (building plastered)	Farminer, 2014
1957	Refitted engineers and carpenters store on Section 56 no longer present	1957 aerial images
c. 1957	The façade of the Dairy and Machine House Building on Section 74 was altered again (brick and plaster removed as well as brick parapet)	Farminer, 2014
1959	Central boiler house extended into Sections 69 and 70. Mill building removed from Section 53.	DCC Archives
1961	Engineering workshops, labs and office building constructed on Secs 56 to 58.	DCC Archives
1966	Covered loading bay built at the location of the removed mill building on Section 53, renovations to first floor offices in Dairy building.	DCC Archives
1968	Two-storey addition to the biscuit factory in Sections 58, 59, 68 and 69	DCC Archives
1969	Central boiler house extended a second time further east on Sections 69 and 70. Pre-1902 boiler house on Section 53 removed by this time.	DCC Archives
1985-6	1902-3 biscuit factory and buildings east along Castle Street replaced by a paved access area	DCC Archives
1991	Crumb silos transferred to the car park	DCC Archives; Barringer 2000
2016/2017	Lunchroom removed and roof replaced on the eastern end of the Dairy and Machine House Building	
2017	90 ft chimney stack in the engine house in Section 53 reduced to 3m	Otago Daily Times, 2017
2018	Dairy building façade in Section 74 was restored to a design based on the 1930s frontage.	

5.2.2 1868-1875: New Zealand Distillery Company

In 1868 the property was purchased by the New Zealand Distillery Company and they commenced construction of their distillery (Figure 5-27). The buildings were constructed of brick and bluestone and had concrete foundations (Perry, 1980). A woodcut print from around 1868 (Figure 5-27) advertised the New Zealand Distillery Company buildings. Pairing this with an 1873 article describing the distillery, it is possible to identify the functions of many of the buildings on the premises. The distillery's buildings included a brick building with malt floor (No. 1) beneath a granary loft at the southwest corner of the property; a kiln (No. 2), malt house (No. 2) and adjacent office to the north of this; another kiln (No. 1) and crushing mill along the southern edge of the property; a

cooperage, and possible small mill, shed and still room located towards the east of the premises; a spirit store likely in the southeast corner containing both a vatting room and a small experimental still; and three cottages to the northwest corner of the premises in Sections 55 and 56 (A Farminer, 2014; Perry, 1980; The Otago Guardian, 1873). It is interesting to note that several buildings had cement floors including both the malt house and malt floor, as well as kiln No. 1 (The Otago Guardian, 1873).

The distillery buildings are visible in an 1874 photograph taken of the site as well as one of the cottages in the northwest corner, fronting Cumberland Street (Figure 5-28). Of these buildings, three - the possible small mill, granary/malt floor and kiln buildings - remain on site today; although, they are highly modified and incorporated into a far larger buildings (the granary/malt floor and kiln are part of the Cadbury World building, while the small mill is part of the Dairy and Machine House Building). It is also possible that the walls of another two buildings (the possible still room and a lean-to to the south of the crushing mill and kiln) exist today.

There were a total of 30 employees, of which the brewer, distiller as well as the engineer occupied the three cottages on the property (Perry, 1980). The lack of development at the rear of the property can be attributed to poor reclamation. As one commenter noted that as the government had failed to complete the reclamation of the tidal area, 'a most unsightly fever-bed is kept at the back of the premises, which must prove highly detrimental to the health of the neighbourhood unless filled before the hot weather sets in.' (The Otago Guardian, 1873).

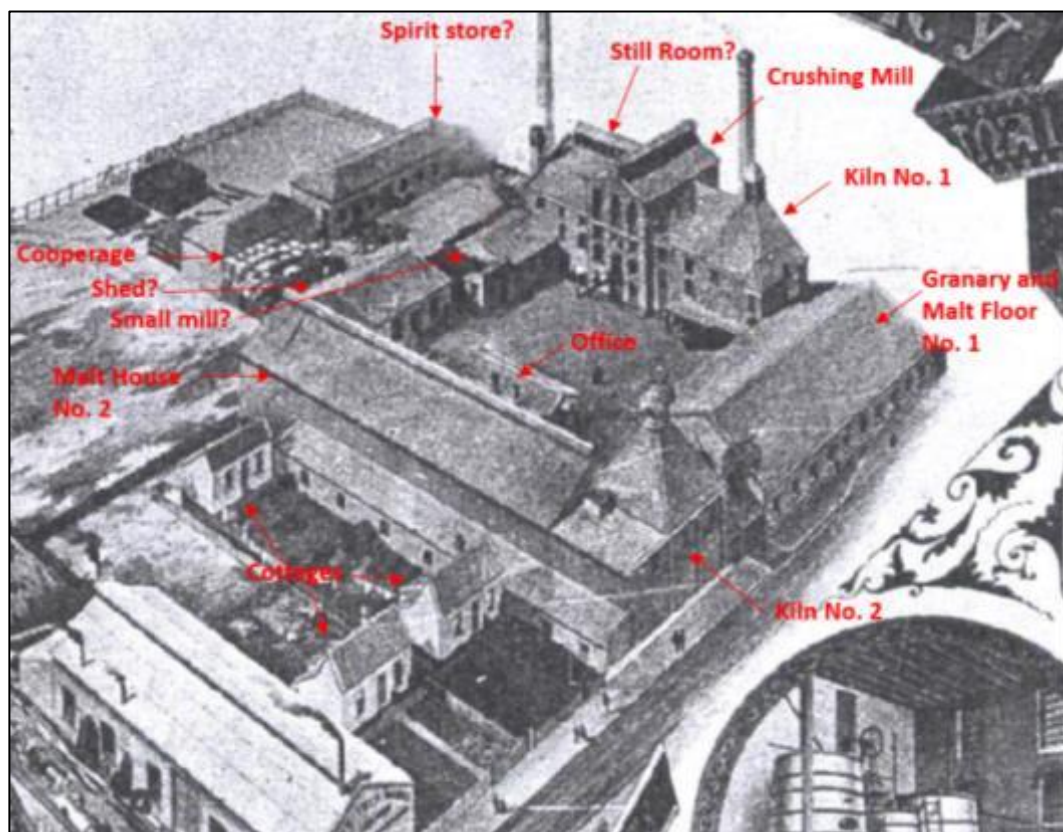


Figure 5-27. A c. 1868 woodcut image showing the New Zealand Distillery Company premises with labels in red of the building functions (Perry, 1980). These functions are based on later plans and from Parkinson (2011) and Farminer (2014). Image is looking southeast.

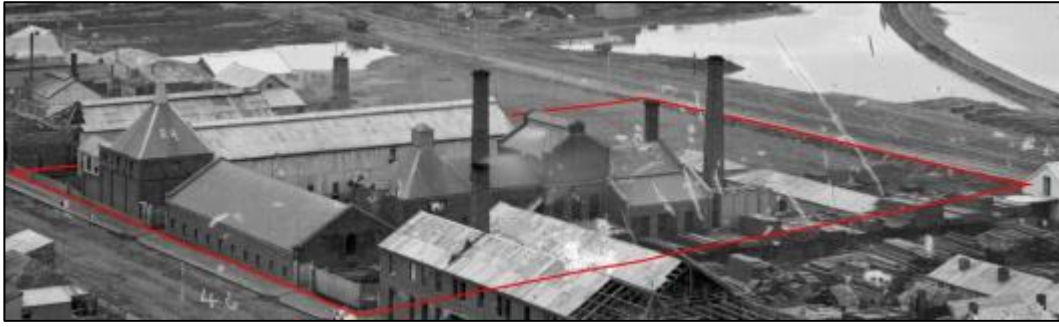


Figure 5-28. Detail from 1874 photograph showing approximate outline of site I44/817 in red (Burton Brothers Studio, 1874). Photograph is looking northeast.

5.2.3 1875-1898 *Albion Brewing Company*

In 1875 the property was purchased by the Albion Brewing Company, and according to Parkinson (2011) and Farminer (2014), an above-ground brick beer cellar was constructed in the southeast corner of the site (Section 74) in 1875, part of which was incorporated into the Dairy and Machine House Building still standing in that location today. The cellar building measured 188ft long by 66ft (57m by 20m) and had a first floor that was used as a granary. Farminer (2014) also argues that the western wall of the cellar incorporated part of the earlier (c.1868-1873) building (the wall of the possible still room) constructed by the New Zealand Distillery Company, as evidenced by the distinctive dogleg in this wall. The cellar can be seen in a late 1870s photograph (Figure 5-29). While it is obscured by crushing mill which by this time had been raised two storeys, it appears the cellar's multi-gable roof extends all the way to Castle Street and does not have a prominent facade. The 1876 rates records note that the entire site was owned by the Albion Brewing Company and contained a brewery and three cottages. The three cottages are clearly visible late 1870s photograph taken further north (Figure 5-30).

In 1878 the property was offered for sale and a plan prepared showing the buildings present (Figure 5-31). The Albion Brewing and Malting Company were taken over by the Albion Brewing Company and the focus of the business shifted purely to beer production. Major changes are visible on the plan, including the addition of the cellar building and the addition of a cooperage building which ran east-west. The old cooperage was to be used as a shed. One unidentified building in the 1868 woodprint, is not visible late 1870s photo and appears to have been replaced with a shed in the 1878 plan. By 1889 this building had been removed.

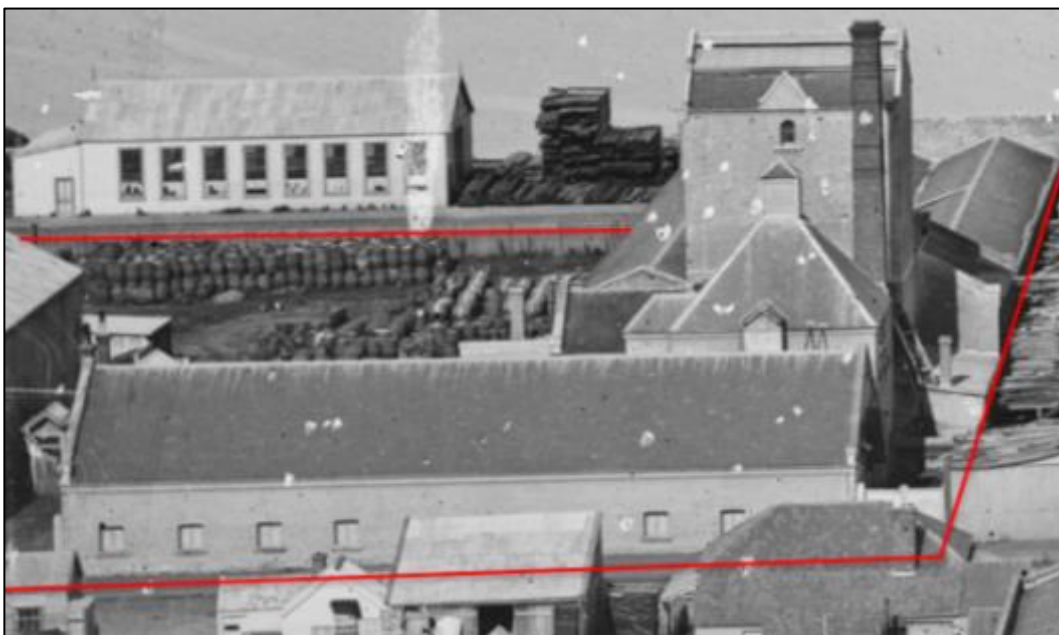


Figure 5-29. Detail from late 1870s photograph showing the approximate outline of site I44/817 in red (Burton Brothers Studio, n.d.). Photograph is looking east. Note the cellar multi-gable roof appears to extend all the way to the Castle Street footpath.

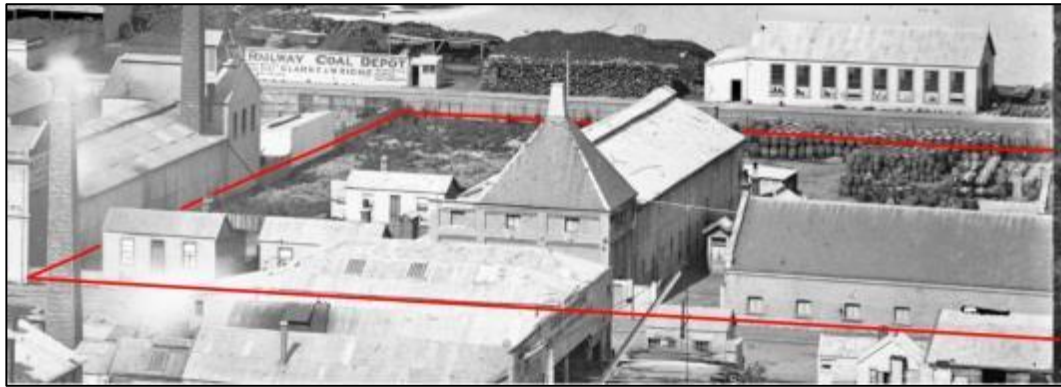


Figure 5-30. Detail from late 1870s photograph showing the approximate outline of site I44/817 in red (Burton Brothers Studio, n.d.). Photograph is looking east.

Marshall and Copeland purchased the Albion Brewing Company on Cumberland Street in 1878. An article produced a year later described the premises:

“The buildings are mainly of brick and stone, with slated roofs. They were originally built for the New Zealand Distillery Company and are of the most thoroughly substantial character... the Albion company added several costly improvements such as a cellar, the estimated cost of which was £2000” (Otago Daily Times, 1879).

The outfit of the buildings wasn’t suited to Marshall and Copeland’s business, so they too made considerable changes replacing everything except for a 12-horse powered engine (Otago Daily Times, 1879). The description that follows indicates however that while substantial internal alterations were made the premises still continued with a number of the existing buildings:

There are two malthouses, No. 1 is a substantial brick building 37 feet by 100 feet... the drying kiln is ... 24 feet square, with a wirecloth floor 16 ft above the fire. The kiln is loaded by steam and the barley is taken in by the same means. This granary also contains eight large airtight malt bins. No. 2 is a building of brick and iron 54 feet by 121 feet... The kiln is 25 feet square with a wirecloth floor, 17 feet above the fire in this instance. Although the kiln is at a distance of over 210 feet from the steam, windless steam is utilised for loading in connection with it also.

A great feature of the Albion Brewing buildings is the extensive cellarage and storage accommodations. The cellar covers over a quarter of an acre. It opens on to Castle Street and is connected with the main railway line by a siding running directly into the centre of it. It is floored with concrete throughout and an excellent system of drainage has been established by means of trap-sinks...the floor slopes in every direction to the sinks...Above the cellar... and communicating with it by a lift, is a floor for the storage of the beer in bulk.

On the Premises is a workshop in which a lathe, small circular saw &c. are fitted up and here a good deal of carpentry work is done, and the spare wood utilised for making the bungs, &c. (Otago Daily Times, 1879).

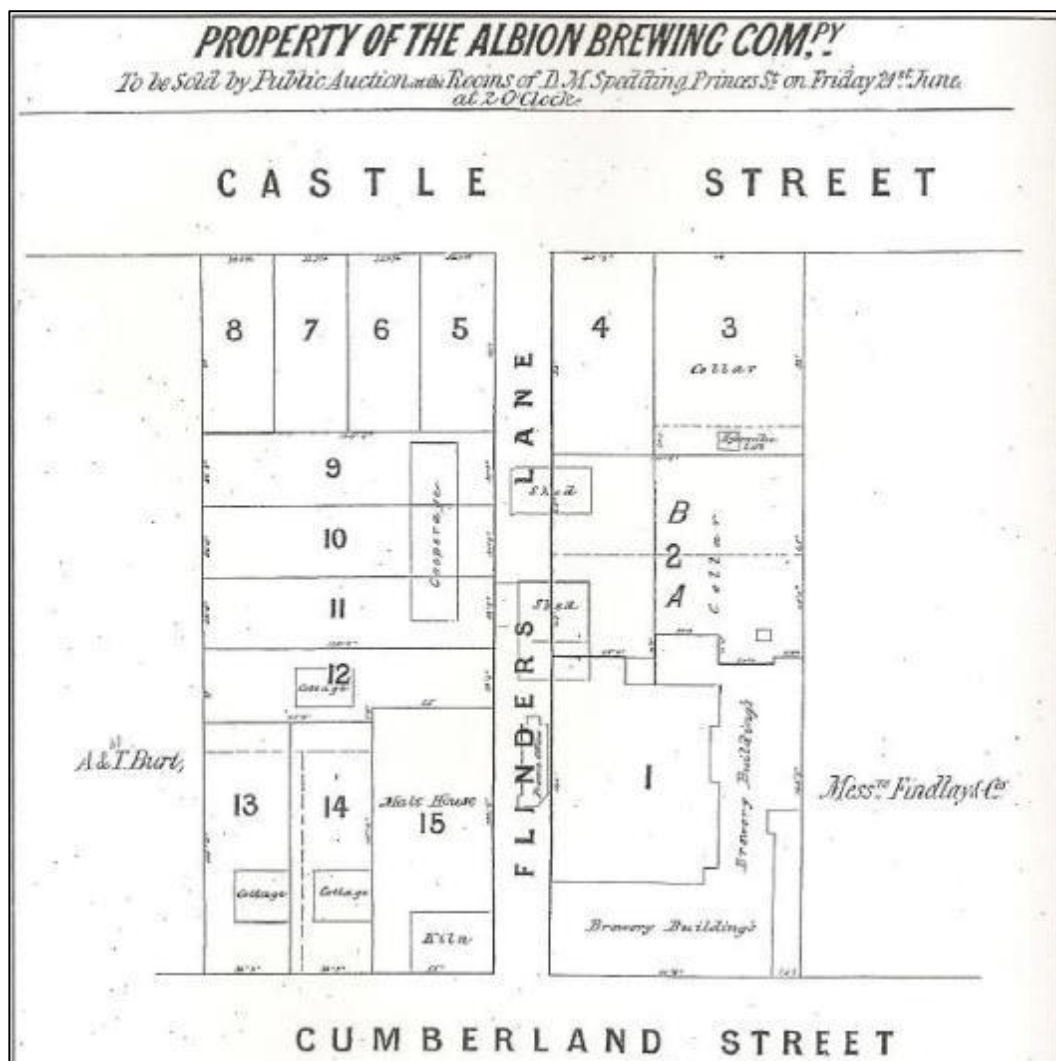


Figure 5-31. Detail from 1878 plan showing buildings on site I44/817 (A Farminer, 2014).

Details on the occupants of the cottages were scant following New Zealand Distillery Company, but they are present on plans until the early twentieth century. The 1886 rates records note that one of the cottages was owned by Bendix Hallenstein, one of the founders of the New Zealand Clothing Factory, the Drapery and General Importing Company and Hallenstein Brothers Ltd (Evening Star, 1905). It is highly unlikely that Hallenstein ever occupied the tiny timber cottage on Section 56, instead he probably purchased it as an investment and let it out to working-class occupants, possibly his own employees or those of the surrounding businesses. The other cottages were likely used for the same purposes by the various brewery owners, as New Zealand Distillery Company had, in a similar way to the workers' housing offered by the Speights brewery on Rattray Street during the nineteenth century (Gillies & Farminer, 2015).

The Albion Brewing Company continued to occupy the site until 1886 when they were declared bankrupt (Leckie, 1997). Marshall and Copeland sold the brewery to Williamson and Murray in 1887 (Taranaki Herald, 1887). The brewery buildings and land were owned by the Bank of New Zealand according to the 1889 rates records, and were periodically used by businesses such as agricultural agents Samuel Orr and Co. to display their wares (in this case farming machinery) to potential customers (Clutha Leader, 1890). Although an 1889 block plan still describes the brewery buildings as housing the Albion Brewery (Figure 5-32). This is likely indicative of G. Lintott & Co. who occupied and used the premises as the Albion Malt Houses (Leckie, 1997). By the time of an 1892 block plan the buildings are labelled as vacant (Figure 5-32), and they remained so until biscuit and confectionery manufacturer Richard Hudson and Co purchased the premises in 1898 (Southland Times, 1898). As noted above in the, the 1892 block plan also indicates that sometime between 1889 and 1892 the most northern cottage was removed from the property and with an A&T Burt building extending into Section 56.

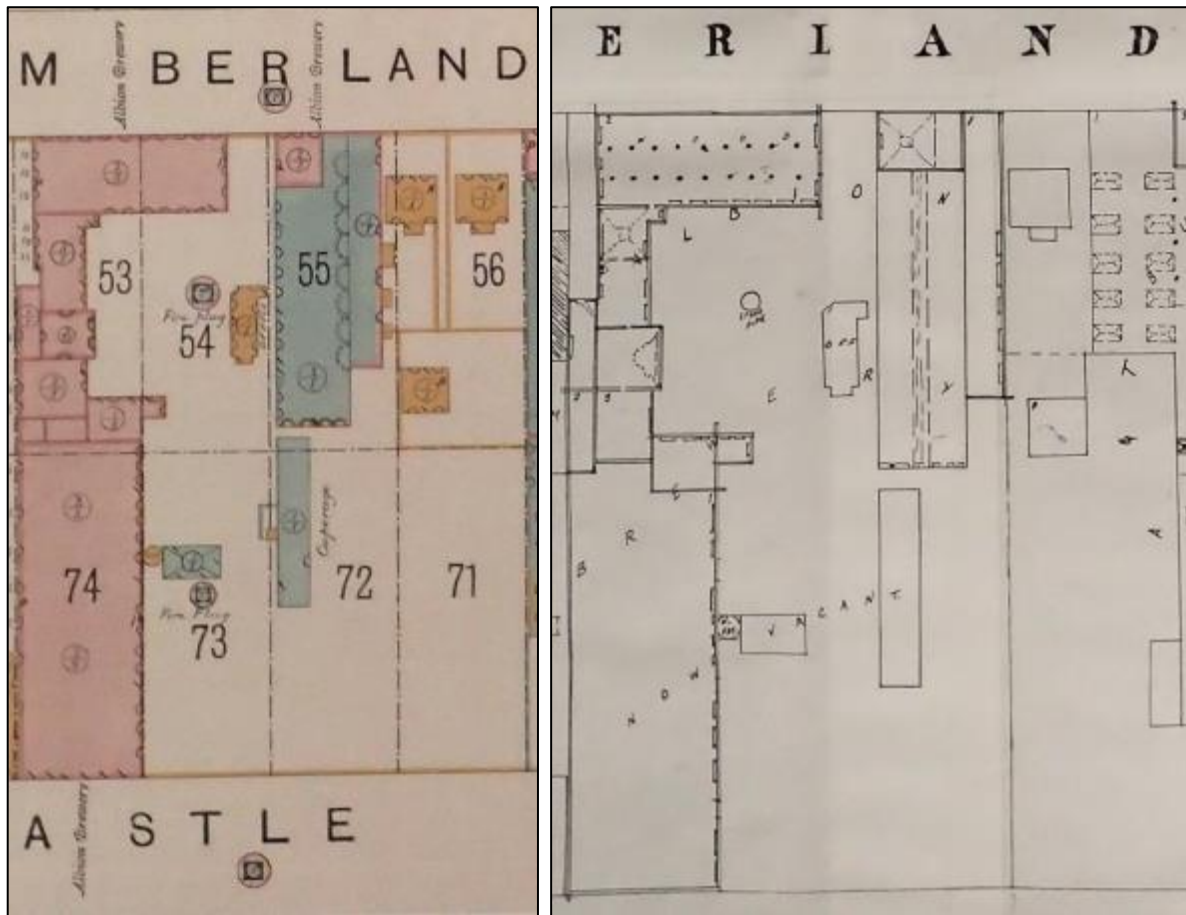


Figure 5-32. Left: detail of 1889 block plan showing brick (pink), timber (yellow) and iron (blue) buildings on site I44/817 (Bare, 1889). Right: detail of 1892 block plan showing buildings on site I44/817 (Jones, 1892).

5.2.4 1898-1930: R. Hudson and Co.

In 1898 R Hudson and Co. purchased the land within Sections 53 to 55, 72 to 74, and part Sections 56 and 71. Yet, the distillery premises at the time did not provide enough space for the expansion of Confectionery and biscuit manufacture (Otago Daily Times, 1900). Of the pre-1900 buildings on the premises, four buildings although heavily altered survive today: the 1868 granary/malt floor, the 1868 kiln, the 1868 possible small mill and the 1875 cellar building (Figure 5-33). The majority of alterations that have impacted these pre-1900 buildings have occurred in the twentieth century.



Figure 5-33 Plan of the Cadbury Block showing the location of site I44/817 (dashed white line), the pre-1900 buildings still present today.

Alterations to the Granary/Malt floor and Kiln Buildings (Cadbury World and Office Buildings)

The brick brewery buildings (granary/malt floor and kiln) along Cumberland Street were altered in nine phases in the late nineteenth and early twentieth century, eventually becoming part of the present-day Cadbury World and offices buildings. **Phase one** took place in 1901, as the building was extended to the south up to the property boundary (DCC archives). At the same time the southern end of the granary/malt floor was raised two storeys while the kiln at the rear was raised one storey so that the entire building was four storeys. The 1901 plan for this work shown in Figure 5-35 indicates that the existing brick work of the granary/malt floor façade was kept on the ground floor though earlier windows had been bricked in by this stage (DCC archives). It is interesting to note that there are slight differences in the facades seen in the 1901 plans and the panoramic view likely taken in 1905 (Figure 5-36). The latter image shows only three bays of windows in contrast to the four visible on the plans. This image also shows that the original northern extent of the granary/malt floor was retained. The raised storeys of the granary/malt floor feature two parallel gables running east-west. The gables are two different sizes, likely as they meet at the location of what was the load bearing southern external wall of the building.

Phase two of construction occurred behind the northern end of the granary/malt floor (DCC archives). Plans from 1909 indicate that a building that would become the mixing room and chocolate packing building in Section 54, was constructed in sections, starting with the rear of the building (Figure 5-37). This building had temporary iron walls to be removed when the building was extended to the west and north.

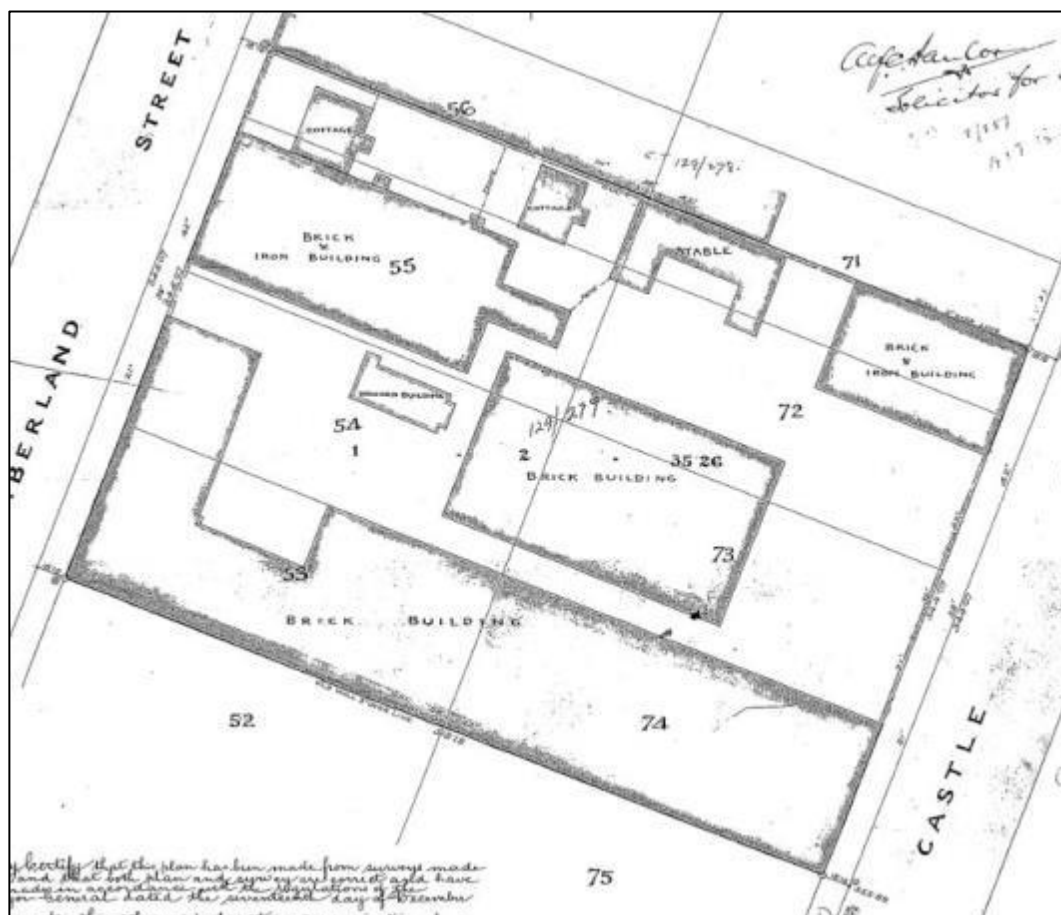


Figure 5-34. Detail from 1902 survey plan showing buildings on site 144/817 (DP 1589).

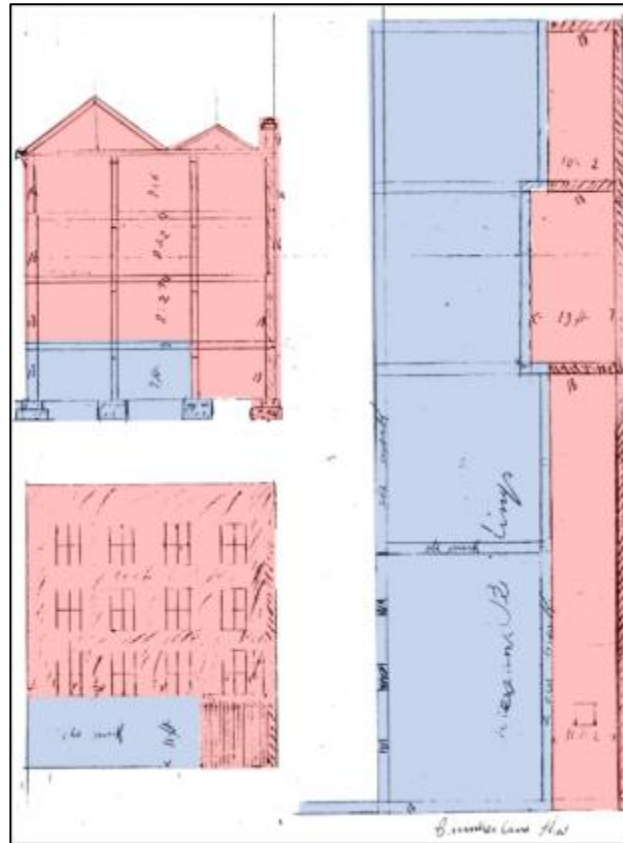


Figure 5-35 1901 plan showing the 1901 Phase one southern and upper extension (hashed lines and highlighted red) to the granary/malt floor and kiln buildings on Cumberland Street (DCC Archives). The 1868 building is highlighted blue. The profile view shows the Cumberland Street façade.



Figure 5-36. April 1901 photograph (top) showing the granary/malt floor building (highlighted blue) prior to the Phase one alterations (Muir and Moodie Studio, 1901). Part of a c. 1905 panoramic view (bottom) showing the 1901 Phase one southern and upper storey extension to the granary/malt floor and kiln buildings (highlighted red) (W Beattie & Co., n.d.). The 1868 central and northern extent of the granary/malt floor building is also visible to the north unaltered (blue). Note the biscuit factory in the background. The top photograph shows the 1901 factory, while the bottom photograph shows the almost identical 1902 building with “Hudsons” advertised on the roof.

Between 1901 and 1915 alterations were made to the central portion of the granary/malt floor (**Phase three**) (DCC archives). A further two storeys were added to match the southern portion of the building as shown in 1915 plans (Figure 5-38). These 1915 plans also show **Phase four**, the western extension of the building in Section 54, which encapsulated the northern extent of the granary/malt floor building. As a result of the multiple phases of construction the floors of the northern extent of the building do not align with the southern extent of the building (Figure 5-35 to Figure 5-37). Accordingly, the central **Phase three** addition aligns with the southern alterations during **Phase one**, while the northern **Phase four** alterations were built to align with the **Phase two** construction. **Phases three** and **four** may have occurred at the same time, but this is not clear.

Phase five comprised a northern extension and third storey added between 1915 and 1922 (Council of the Fire Underwriters Association of New Zealand, 1922). By 1922, the front of building housed a grain store, dinning and dressing room in Section 54 (Figure 5-38). This may have occurred at the same time as the western extension in **Phase four**. The Council of the Fire Underwriters Association of New Zealand 1922 plan indicates further changes in use of the interior of buildings by this time as the granary/malt floor had become a grain store and kiln building housed a smutters room. The building would eventually become what is today the Cadbury World building. The Phase two, four and five alterations are also shown to house a mixing room and chocolate packing department. This would eventually become what is today the offices building.

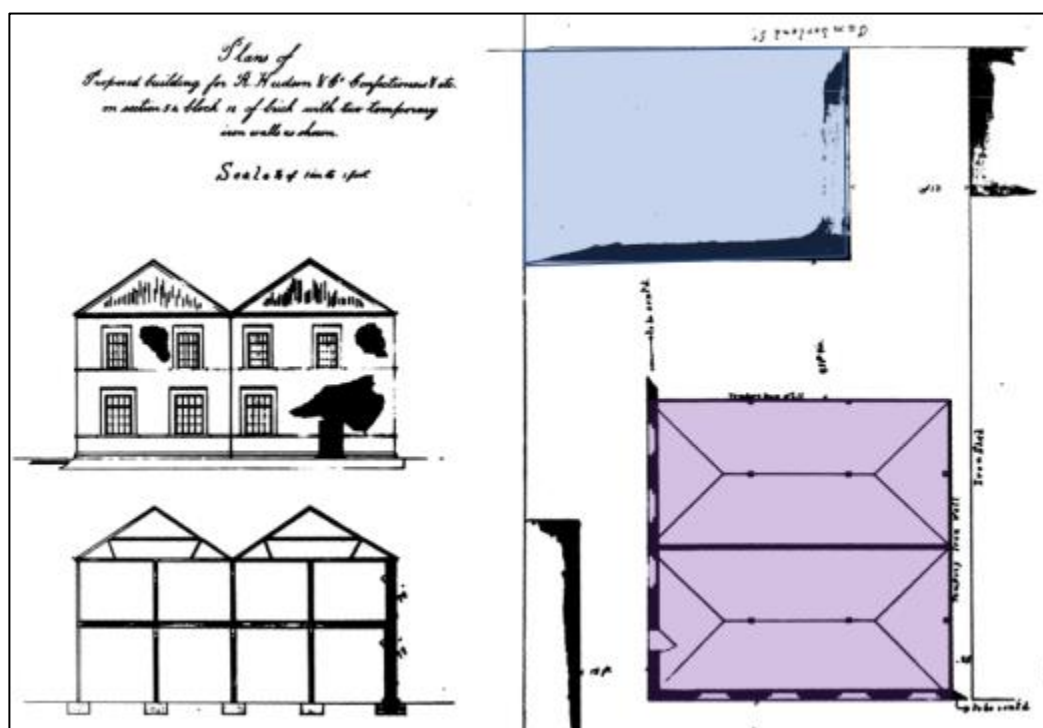


Figure 5-37 1909 plan showing the new building (Phase two) highlight purple that would be extended west to meet the northern extent of the granary/malt floor building highlighted blue. Note the temporary iron walls for further expansion (DCC Archive).



Figure 5-38 1915 plans showing the Cumberland Street façade of the granary/malt floor and kiln buildings (DCC Archive). The original 1868 granary granary/malt floor and kiln buildings are highlighted blue (note that while the mezzanine or first storey of granary/malt floor building is original, the windows were added during Phases one and three). Subsequent alterations are highlighted red for Phase one (1901), yellow for Phase three (1901-1915), and green for Phase four (1915). Phase two (1909) is not visible, even in the plan drawing, as it is immediately out of picture behind Phase four.

The next phase, **Phase six**, represents the construction of a large four storey concrete building to the rear of the mixing room and chocolate packing department. It is possible this concrete structure may have completely replaced the earlier **Phase two** 1909 brick building at this location as well as part of the extensions undertaken in **Phases four** and **five**. The new building is visible in a circa 1922 to 1924 photograph (Frank Duncan and Co. c. 1922-1924). As such, this is possibly the building completed by the Fletcher Construction Co for R. Hudson and Co in 1922 (Progress, 1922). Fletcher Construction Co had had used a concrete distributing method for the first time in the South Island to complete the building.

Between 1922 and 1924 the building was extended to the north (connecting it with the a garage building) (**Phase seven**) (DCC Archives) and by 1926 the fourth storey (with a mansard roof) was added to the front of the building (**Phase eight**) (Figure 5-41 and Figure 5-42), part of which would be used to provide space for a box factory (DCC Archives). Another extension immediately behind the granary/malthouse had been completed by 1927, a confectionery factory (**Phase nine**) (Figure 5-41) This may have occurred during phase eight, however this is unclear. Furthermore while 1927 fire insurance plans show the extension, they do not indicate how many storeys it was at this time. By 1942 aerial photographs indicate it was four storeys in height, aligning with the **Phase six** concrete building to the north.

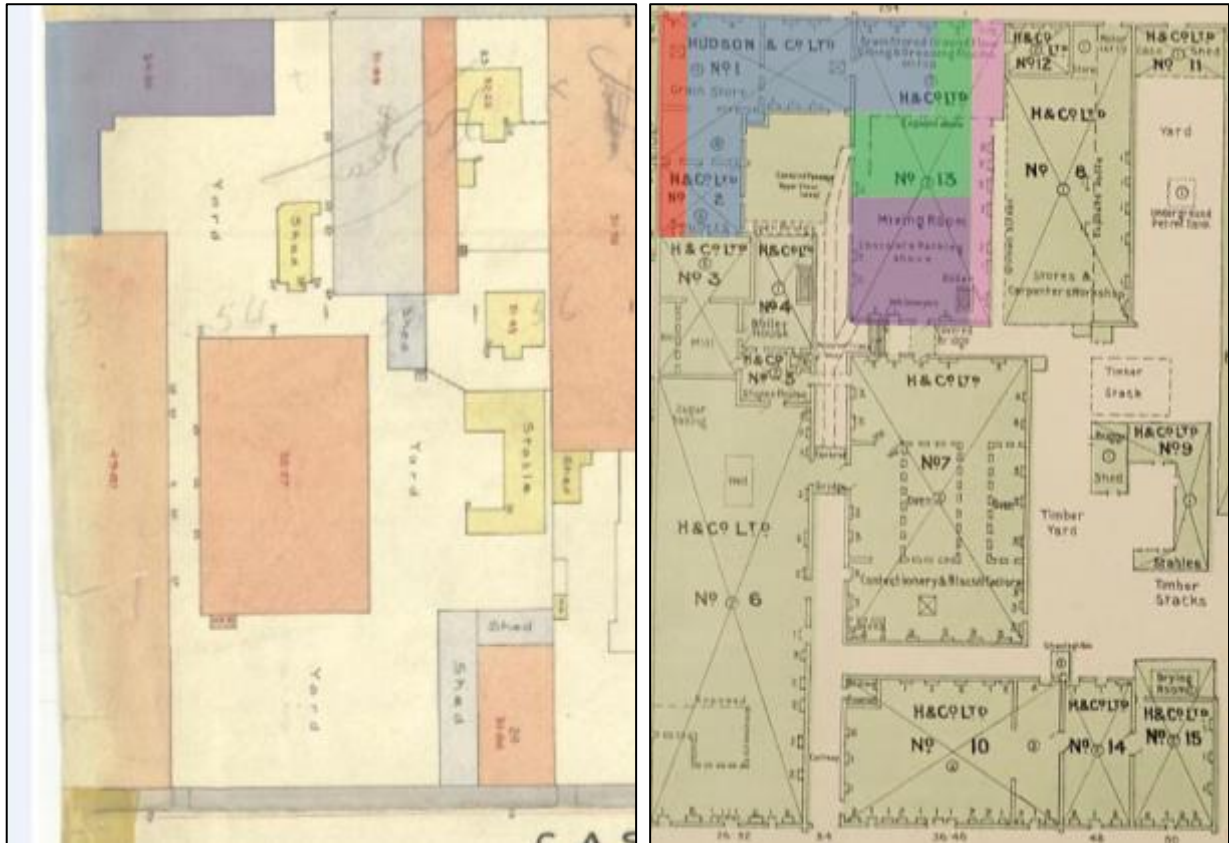


Figure 5-39. Left: detail of 1905 drainage plan showing brick (orange), timber (yellow) and iron (blue) buildings on site I44/817 (Dunedin Drainage and Sewerage Board, 1905). Right: detail from 1922 plan showing buildings and occupants on site I44/817 (Council of the Fire Underwriters Association of New Zealand, 1922). The original 1868 granary granary/malt floor and kiln buildings are highlighted blue. Subsequent alterations are highlighted red for Phase one (undertaken in 1901 and present by 1905 but just out of picture on the right image), purple for Phase two (1909), green for Phase four (1915), and pink for Phase five (1915-1922). Phase three (1901-1915) here is not shown on these plans it featured additional upper floors only rather than a horizontal extension.



Figure 5-40 Circa 1922-1924 photograph showing buildings the alterations granary/malt floor and Kiln buildings (Frank Duncan and Co. c. 1922-1924). The original 1868 granary granary/malt floor and kiln buildings are not visible; however, subsequent alterations are highlighted red for Phase one (1901), yellow for Phase three (1901-1915), green for Phase four (1915), pink for Phase five (1915-1922), and brown for Phase six (1922).

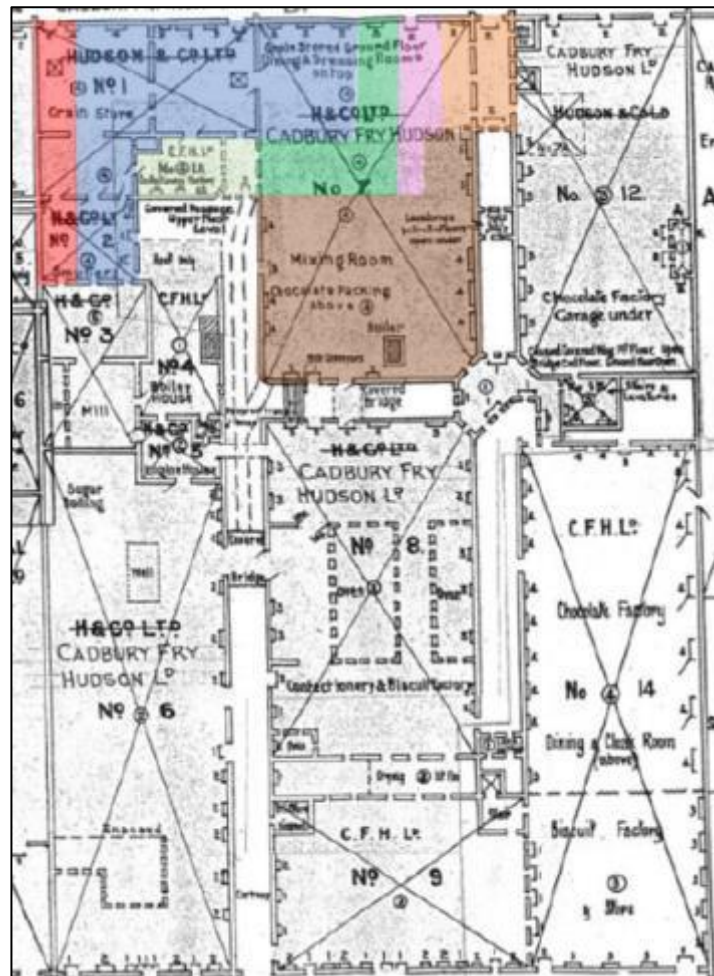


Figure 5-41. 1927 Fire Insurance plans. The original 1868 granary granary/malt floor and kiln buildings are highlighted blue. Subsequent alterations are highlighted red for Phase one (1901), green for Phase four (1915), pink for Phase five (1915-1922), brown for Phase six (1922), orange for Phase seven (1924) and light green for Phase nine (1927). Note that Phase two is not present and the Phases four and five alterations have been shortened as a result of the construction of the Phase six building.



Figure 5-42 Photograph looking east at the Cumberland Street façade showing changes to the original 1868 granary granary/malt floor and kiln buildings are highlighted blue. Subsequent alterations are highlighted red for Phase one (1901), yellow for Phase three (1901-1915), green for Phase four (1915), pink for Phase five (1915-1922), orange for Phase seven (1924) and light blue for Phase eight (1924-1926).

Alterations to the Cellar and Small Mill (Dairy and Machine House Building)

As noted by Farminer (2014) the earliest clear views of the Castle Street frontage are from 1902 and circa 1903-1906 photographs (Figure 5-43 and Figure 5-49). The masonry frontage with a central access way to the more industrial cellar visible is different to those from the late 1870s photographs in which the buildings multi-gable

roof appears to extend all the way to the Castle Street footpath. These early twentieth photographs indicate that the façade had been altered sometime between the late 1870s and 1902. R Hudson and Co. were listed at this address in street directories from 1902 onwards, and by 1910 had converted the Castle Street front of the building into offices. One significant alteration to this building was the façade change in 1918 shown in Figure 5-49 (Brooks & Jacombs, 2010; A Farminer, 2014; Parkinson, 2011). Three windows on the first floor had been removed; an awning, a large doorway and adjacent public double door entranceway installed; and, a redesigned arched parapet with signage was further added. The brick work was exposed, and relief rusticated plasterwork used for the ground floor façade. The central portion of the cellar building itself would become home to a finished goods store and dairy, housing a milk condensing plant. It is unclear when this change occurred except that it was early in Hudson's ownership of the property (Brooks & Jacombs, 2010; A Farminer, 2014; Parkinson, 2011). Plans from 1922 show that a covered bridge was constructed from the second floor of the central cellar building through to the 1902 biscuit factory, providing easy access to the dairy and finished goods store. These same plans show that the pre-1900 possible small mill, now with a second storey added sometime after 1889, had been converted into engine house and it opened to connect through into the cellar building (Figure 5-39).



Figure 5-43. Top: 1902 photograph of the cellar building with the office alterations at the front along Castle Street (red arrow) (Muir and Moodie Studio, 1902).



Figure 5-44. Top: 1903-06 photograph of the biscuit factory in Town Sections 72 and 73 to the left of the offices in Town Section 74. Bottom: altered 1918 façade of the Hudson building in 1928 (Figure 12 in Brooks & Jacombs, 2010).

Pre-1900 buildings and Post-1900 Buildings No Longer Present

Alterations were made to other pre-1900 buildings, and over time they were gradually replaced through the site. Between 1905 and 1922 the two remaining cottages were removed, while the office building labelled shed in the 1905 plan was removed around 1909 when another building was constructed at this location (Phase two of the granary/malt floor alterations discussed above) (Figure 5-45). Plans from 1922 show the mill was still present behind the kiln building in the 1922 building, adjacent to a boiler house and engine house (former possible small mill). Power was also first installed to the flour mill off castle street in 1908. This was the first flour mill to be connected to Waipori Power – the first hydro-electrical generation system to be publicly owned in New Zealand (Evening Star, 1908; Findlay, 2009).

Upon taking over the premises, R Hudson and Co began a series of improvements, constructing numerous new buildings beginning with a new three storey biscuit factory on Sections 72 and 73 in 1901 (Figure 5-34) (Parkinson, 2011). To make way for the factory, the malt house to the northeast was shortened. The factory was 70 ft by 100 ft (Otago Daily Times, 1900) The walls of the factory were strengthened using steel bands left over from the barrels of the distillery. A travelling oven from Hudson's earlier factory in Moray Place was also installed in the new factory (Comer, 1973).

This building was short lived as it was destroyed by fire in mid-1902. Reports suggest that, although the fire was intense and destroyed the biscuit factory and all of its contents, no other parts of the site were significantly affected (Lake County Press, 1902). Within five weeks the factory was producing biscuits again. The walls were left standing due to the steel bands put in place and it was thus possible to cover the structure with a temporary roof. But by 1903 the factory had been completely rebuilt and was operating (Parkinson, 2011). The new building also included one of the first automated Grinnell Sprinkler systems used in Dunedin (Ingram & Clements, 2010). This system proved its worth as eight years later another fire on R Hudson and Co. premises was quickly confined through the successful use of the sprinkler system.

Between 1892 and 1902 two further buildings were also constructed to the north of the biscuit factory. These buildings were stables and a brick building with two adjacent iron sheds. The exact function of the brick building is unclear. It is likely that these buildings were constructed soon after R. Hudson Co took over the property and in 1904 Hudson added a second storey to the brick building (Figure 5-46).

In 1905 plans were submitted to DCC for a brick cloak room building between Castle Street and the biscuit factory. This building can be seen in Figure 5-49 to Figure 5-52. The two photographs also show a substantial wall in front of the cloak room. This building was replaced between 1907 and 1922 by the much larger building across Sections 72 and 73 (Buildings No. 10 and 14 in Figure 5-45) visible in the 1907 plans (Figure 5-50, Figure 5-51 and Figure 5-52) and the 1928 photograph (Figure 5-49). In the 1922 plan this building is shown to extend north and adjoins the earlier brick building, built sometime between 1892 and 1902 in Section 71 (Building No. 15 in Figure 5-45).

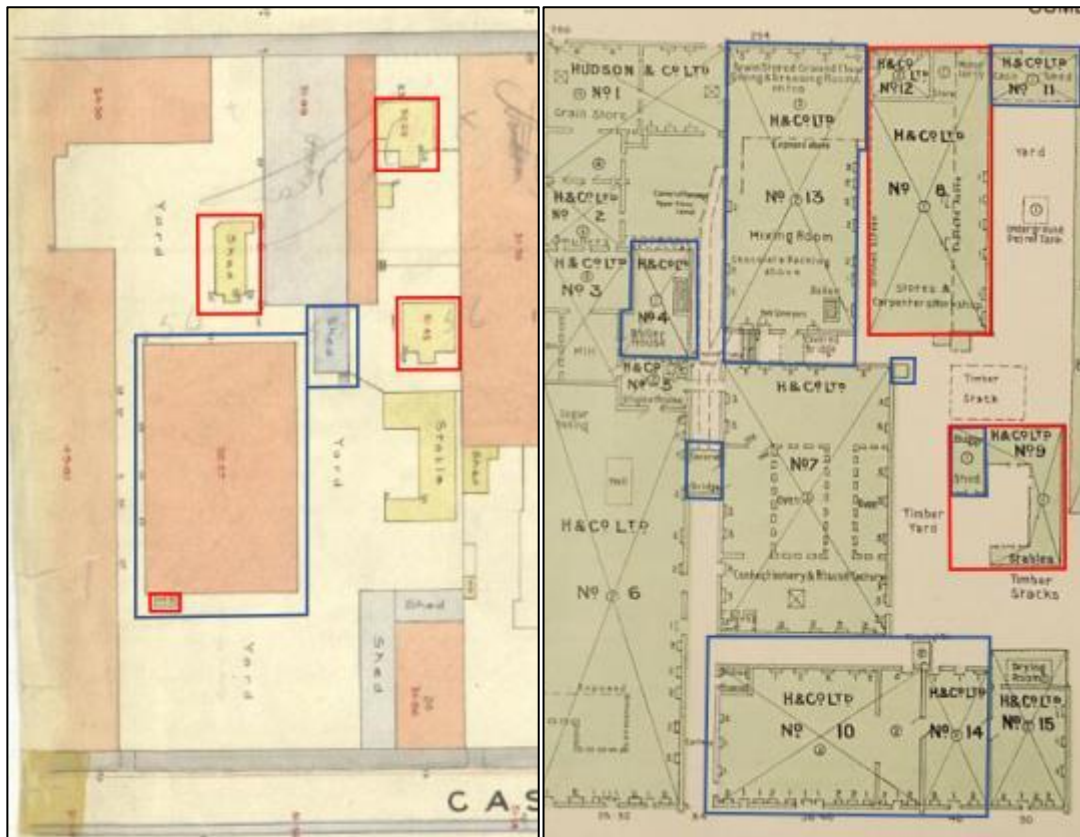


Figure 5-45. Left: detail of 1905 drainage plan showing brick (orange), timber (yellow) and iron (blue) buildings on site I44/817 with pre-1900 buildings removed by 1922 outlined red and buildings constructed between 1898 and 1905 outlined blue (Dunedin Drainage and Sewerage Board, 1905). Right: detail from 1922 plan showing buildings and occupants on site I44/817 with pre-1900 buildings removed by 1930 outlined red and buildings constructed between 1905 and 1922 outlined blue. Building No. 11 had also been removed by 1927 (Council of the Fire Underwriters Association of New Zealand, 1922).

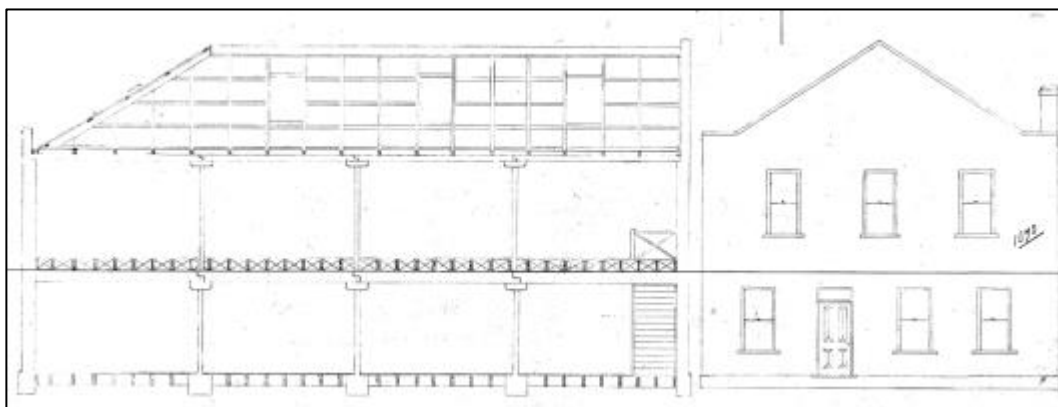


Figure 5-46 1904 plan for a second story for the brick building on Section 71 (DCC Archives).

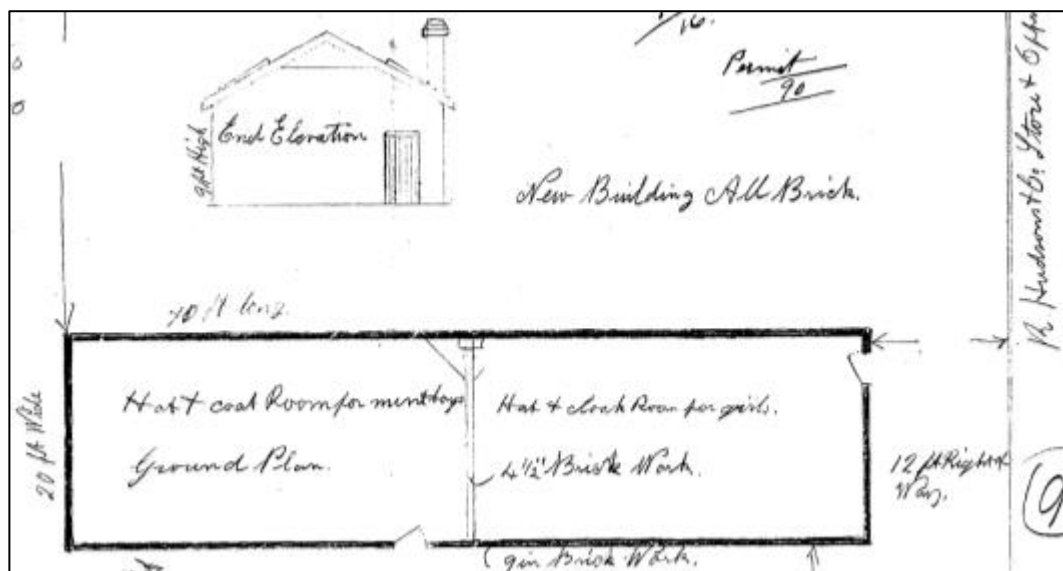


Figure 5-47 Plans for a cloak room in front of the three-storey brick biscuit factory (DCC Archive)

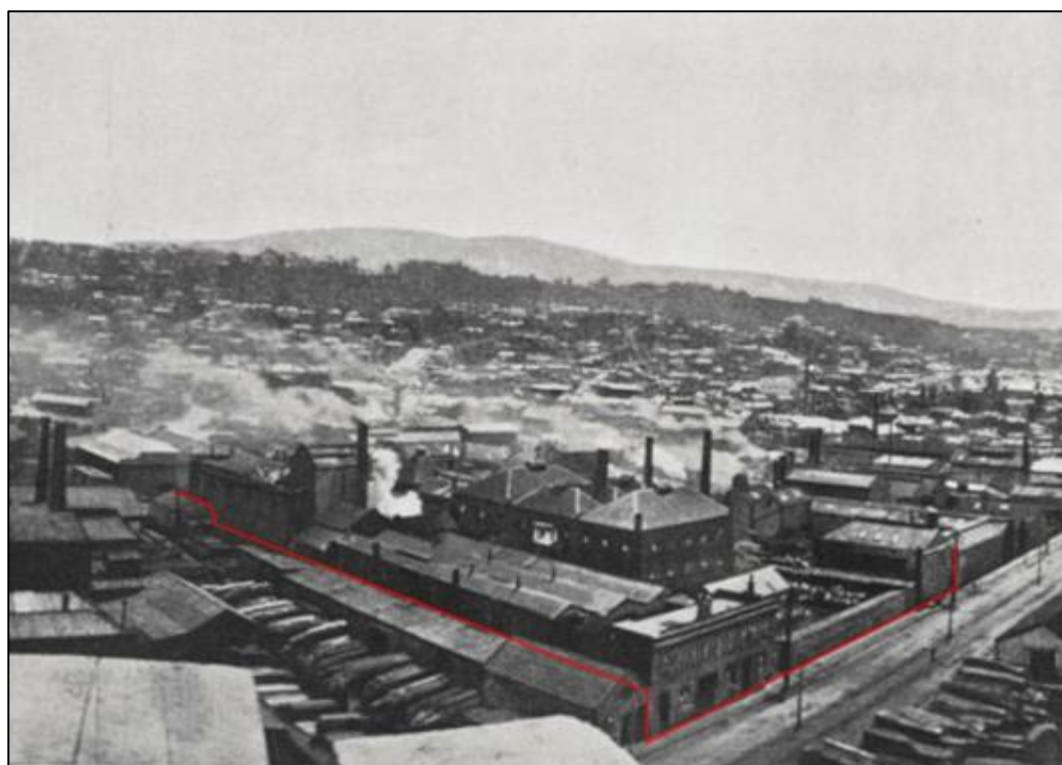


Figure 5-48. Photograph from 1906 showing the southeast end of the Cadbury factory site (Auckland Weekly News, 1906).



Figure 5-49. Top: 1900s photograph of the Biscuit factory in Town Sections 72 and 73 to the left of the offices in Town Section 74. Bottom: altered façade of the Hudson building in 1928 (Figure 12 in Brooks & Jacombs, 2010).

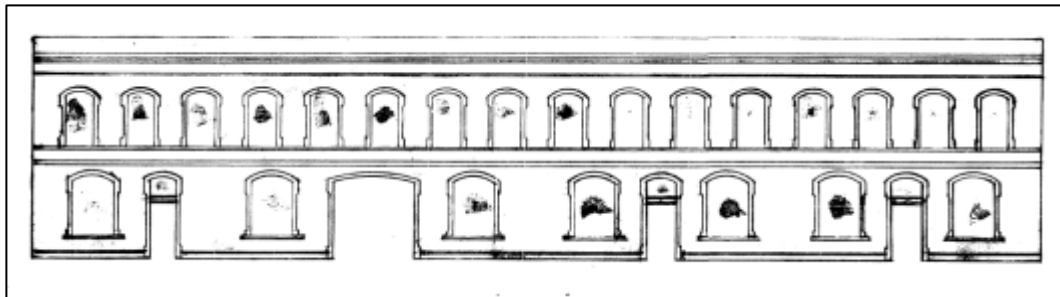


Figure 5-50 1907 plans showing the building façade along Castle Street built between 1907 and 1910 on Sections 72 and 73 (DCC Archive).

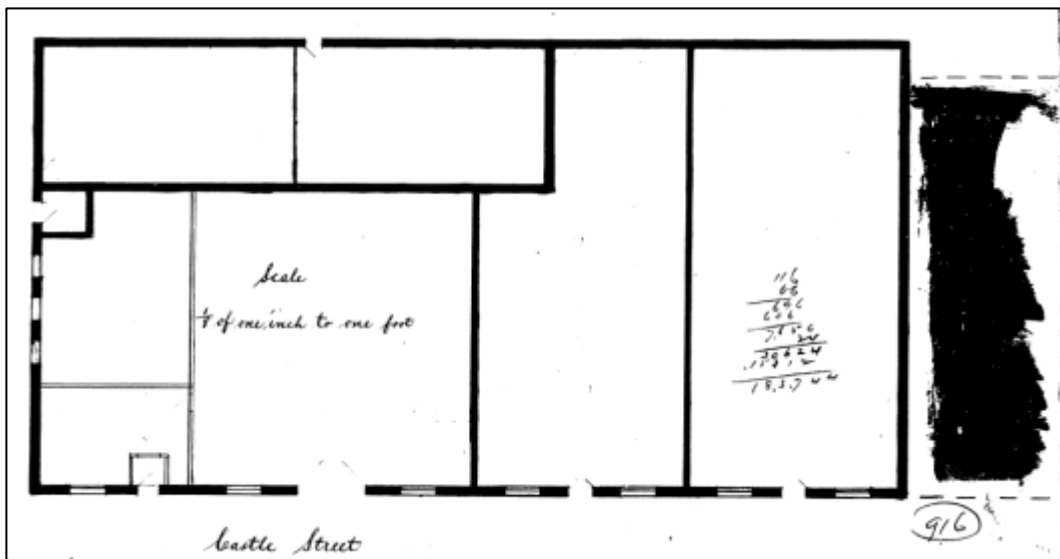


Figure 5-51 1907 plans showing the building along Castle Street built between 1907 and 1910 on Sections 72 and 73 abutting the earlier brick building in Section 71. (DCC Archive).



Figure 5-52. 1922 façade of the Dairy and Office Building and Biscuit factory in Town Section 72 and 73 abutting the earlier brick building in Section 71 (Anon., 1922).

Construction of the Chocolate Factory and Garage Building

The stores and carpenter's workshop (which had been converted in the early twentieth century from the kiln and malt house at this location), had been removed by 1924 (Building No. 8 in Figure 5-45) replaced by a chocolate factory and garage, still present today (Building No. 12 in Figure 5-41). This building had also been constructed in multiple phases. The rear section of the building is visible in the 1922-24 photograph (Figure 5-40) and given this buildings similarity to the upper floors of the mixing room and chocolate packing building to the south, they were likely constructed at the same time. Thus, this section may have been completed by the Fletcher Construction Company in 1922 as well thus forming **Phase one** of construction (Progress, 1922). At the same time or immediately after this the ground floor garage at the front of the building was constructed in **Phase two**. The eastern notch of the rear initial concrete phase can be seen to the rear of 1922 plans for the garage (Figure 5-53). This garage may have been present by the time the 1922-24 photograph was taken; however, the view of this part of the building is obscured. Two extra storeys were added in **Phase three** to the front of the building in 1924 (Figure 5-54). Both the 1922 and 1924 plans (Figure 5-53 and Figure 5-54) show the factory and garage building adjoining to the chocolate packing and mixing room building to the south, indicating that between 1922 and 1924, the latter building had been extended north (Phase seven of the granary/malt floor alterations discussed above). The façade of the Chocolate Factory and Garage Building extended into the chocolate packing and mixing room building to the south.

Construction Chocolate and Biscuit Factory Building

Plans from 1924 indicated that a concrete building was to be built behind the Chocolate Factory and Garage Building (Figure 5-55). The plans indicate that there were to be future extensions east towards Castle Street. By 1927 this building (Building No. 14 in Figure 5-41) had been extended east to connect with the older two most eastern buildings on Sections 71 and 72 (Buildings No. 14 and 15 in Figure 5-45). Together these would form a dining, cloak room, Chocolate and Biscuit Factory

The initial construction and extension of the building saw the removal of the nineteenth century stables buggy building (Building No. 9 in Figure 5-45). The buggy building had been constructed between 1905 and 1922. Later twentieth century excavations for a cocoa storage tank came across a large horse bone possibly associated with the stables (Thomson, n.d.), suggesting archaeological remains associated with the stables have not been completely destroyed. Similarly to the Chocolate and Biscuit Factory in Sections 71 and 72, the 1902-3 biscuit factory was also

extended east to connect with the remaining older buildings forming the Castle Street Façade in Sections 72 and 73 (Buildings No. 8 and 14 in Figure 5-41).

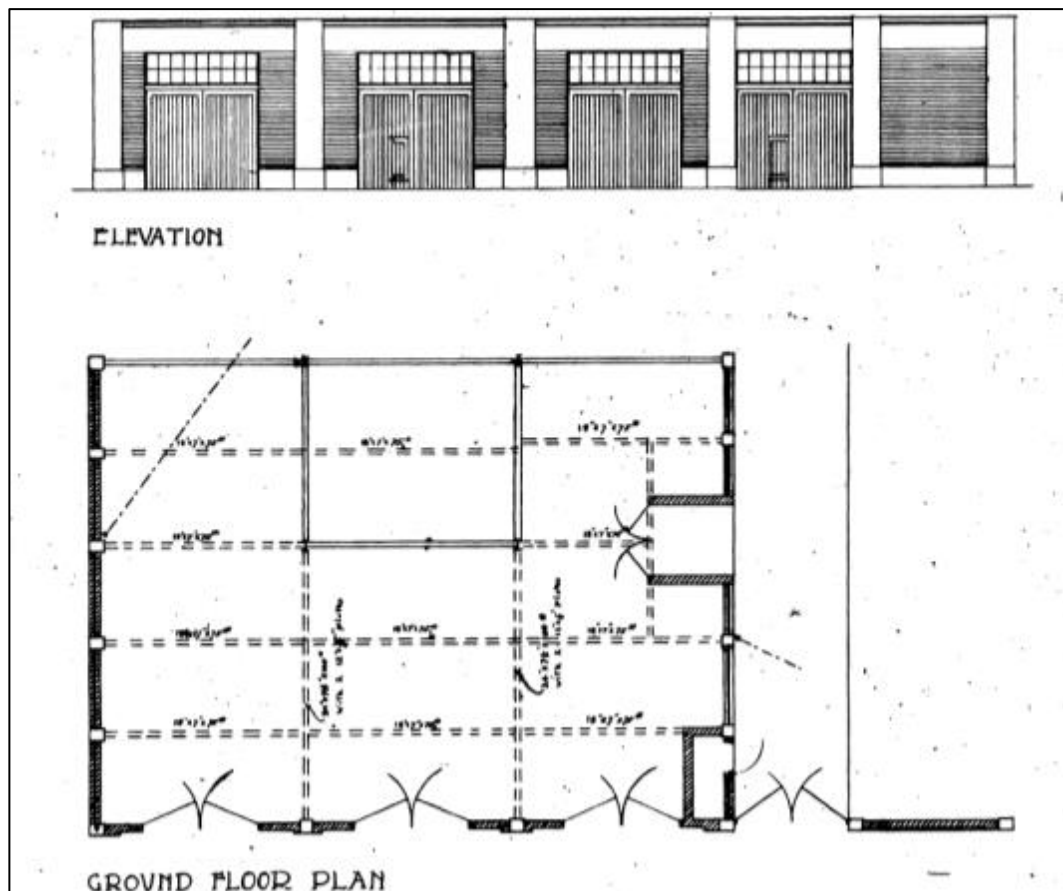


Figure 5-53 1922 plans showing the ground floor and Cumberland Street Façade of Building No. 12 (DCC Archives).

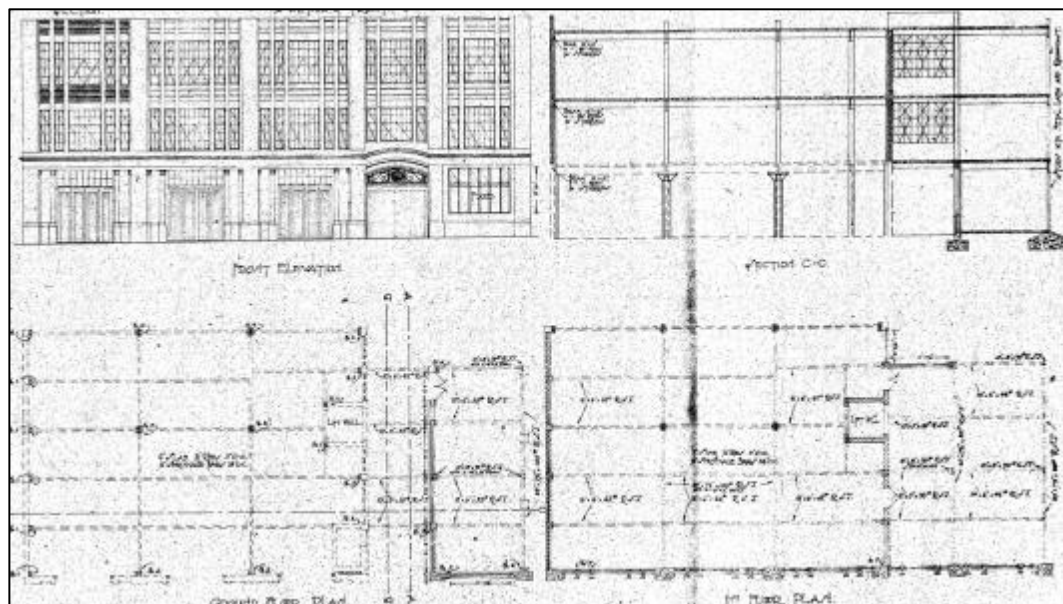


Figure 5-54 1924 plans show two further storeys at the front of Building No. 12.

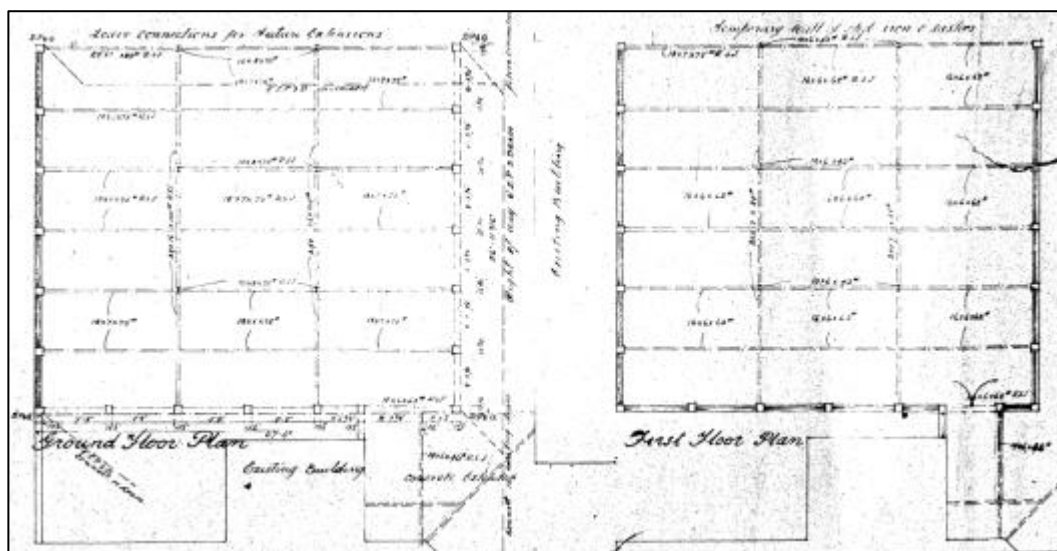


Figure 5-55 1924 plans showing the new factory to be built towards the rear of Sections 71 and 72

5.2.5 1930-Present: Cadbury Fry Hudson Onwards

When the R. Hudson and Co. merged with the Cadbury and Fry companies, Cadbury Fry Hudson was established in 1930 and further alterations to the premises occurred, including modifications to some of the remaining nineteenth century buildings.

Alterations to the Granary/Malt Floor and Kiln Buildings (Cadbury World and Office Buildings)

The most significant change to the pre-1900 granary/malt floor and kiln building or what had become the grain mill (and what would eventually become part of the Cadbury World Building), was the removal of the original pre-1900 mezzanine floor, and the remaining first and ground floors were reinforced in 1959 (Figure 5-56). Plans for this work were prepared by Stevenson and Williams. The last major change to the building was the refitting to establish Cadbury World in 2001 and the Cadbury Café in 2014 on the ground floor.

In 1958 plans were drawn up to replace the timber floors of mixing room and chocolate packing building (later office building) on the ground and floors with reinforced concrete, and it is likely that the work was completed the following year ("Cadbury Site Buildings – Block 1a-6a," n.d.). Originally, the first floor of the mixing room and chocolate packing building (later office building) had incorporated the northern extent of granary/malt floor building; however, the 1958 plans show that the north and east brick walls were removed. The building was eventually refitted for offices and reception in 1983.

Alterations to the Cellar Building and Possible Small Mill (Dairy and Machine House Building)

Early changes to the cellar building by Cadbury, Fry Hudson included the installation of a milk processing plant imported from Bourneville (Building No. 6 in Figure 5-41) (Barringer, 2000), while a 90 ft concrete chimney stack was constructed in the possible small mill in 1931. This building was later referred to as the engine room followed by mixing room (Building No. 5 in Figure 5-41)¹ (A Farminer, 2014). By 1947 a staff lunchroom had been constructed on the top of the cellar building and can be seen in 1958 photograph (Figure 5-57) at the east end of the building (A Farminer, 2014). In 1949, vents were added to the gable roof structure of the cellar building, which likely occurred at the same time as the roof structure and timber floor were removed to be replaced by a steel framework structure at the west end of the building for a milk processing plant (A Farminer, 2014; Oakley Gray Architects Ltd., 2010).

The building façade was altered again in the mid-twentieth century. Between 1947 and 1954 the building was plastered (A Farminer, 2014). In 1957, plans were submitted to the council to modernise the façade (Figure 5-58),

¹ The top of the chimney stack was reduced to 3m in 2017 as it was an earthquake risk (Otago Daily Times, 2017).

which essentially stripped the plaster and brick detailing installed in 1918. The awning was removed and replaced with a smaller canopy while the frontage was completely covered with a plain cement render and new concrete parapet (Figure 5-58 and Figure 5-59). The plans for this alteration were prepared by Miller, White and Dunn.

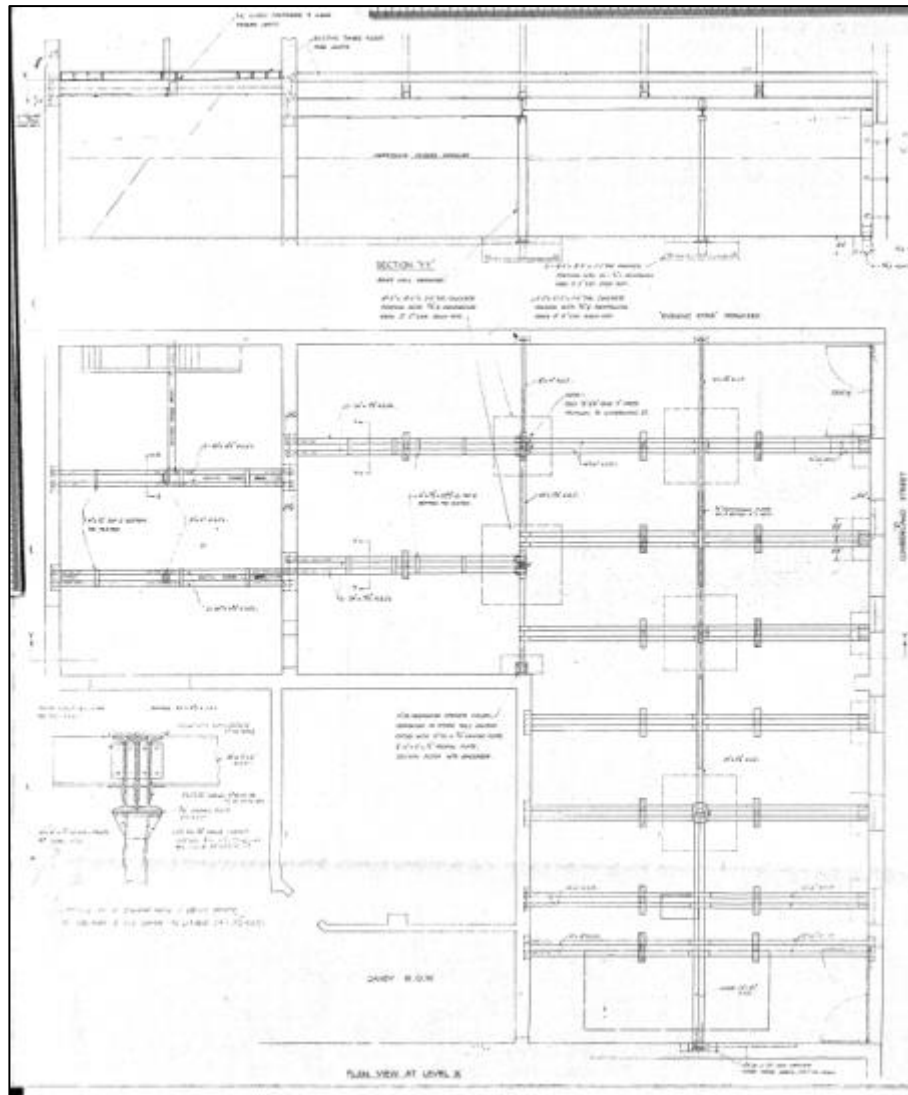


Figure 5-56 Reinforcement plans by Stevenson and Williams for the first floor of the grain mill (former granary/malt floor and kiln building) (DCC Archives Property Files).

Various internal changes were further made to the building with 1959 plans (DCC Archives) indicating that the concrete flooring in the central portion of the building was higher than the southeast corner which was to be built up to the same level at this time (Figure 5-60). The plans further indicate that the floor was to be raised to match the existing level and that stairs were shifted from this same area to slightly further west (Figure 5-60). In the early 1960s the temporary corrugated first floor of the machine house was replaced by brick (Figure 5-61 and Figure 5-62). Major alterations were made to the first floor of the eastern office extent of the cellar building in 1966 (Figure 5-63 and Figure 5-64). Plans of the first-floor show that the offices on the first floor had a unique design with bay windows to the rear looking out over a small garden.

In 2016 and 2017 works began to redevelop and restore the cellar building which had not been used since the mid-2000s (Morris, 2017). The plans for the changes were designed by Origin Consultants, while the engineer for the project was Steve Macknight and the builders Cook Brothers Construction (DCC Archives). During this time, the lunchroom was removed at the eastern end of the building and the roof replaced. However, Mondelez, who owned the company at the time announced the closure of the Dunedin factory. They would go on to sell the land to the Crown for the development of the new Dunedin Hospital. In 2018 they completed the restoration of the façade

(leaving the interior of the building unfinished) as the “last official act” undertaken by the company (Edwards, 2018).

The cellar building façade was reconstructed to a design based on the 1918 frontage. This involved partial demolition of the 1950s and 1960s façade, that had replaced the earlier curved and architecturally designed detailing of the parapet. As such the parapet was reduced and returned to its 1918 curved appearance with central plaster panel. The work repairing and redecorating the timber sash windows (Ryder Consulting Limited, 2016), as well as decorative work to restore the 1918 architectural design, aesthetic and historical value such as plasterwork detailing, mouldings, lintels, ashlar banding, cornices and relief decoration (“HNZPT Listing Documents: List No. 2143,” n.d.).

Plans included removing the ground-floor window in the centre, and enlarging the opening to the wider 1918 doorways, with the ground floor windows either side to be removed, and wider windows added that also matched the 1918 design. These changes were to re-establish the lost architectural and aesthetic values, as well as its historical connections to the Cadbury Fry Hudson company by reigniting its prominence as the main entrance and headquarters (Andrea Farminer, 2016) However the as-built design in 2018 varied slightly as the wide windows are located in the centre of the building, while two double glass doors are situated either side where the windows were previously situated. The doors feature the same plasterwork moulding above as was formerly over the windows in 1918, and thus similar aesthetic and architectural values were still increased through the works, although historic value were lowered slightly by the change of plans.

A two-colour paint scheme was also used. This was to align with standard branding of the Cadbury’s company as well as “break up the surrounding monochromatic streetscape and ... return an element to the Anzac Square/Railway Heritage Precinct” (Ryder Consulting Limited, 2016) Other elements incorporated included restoring a central flagpole to the building. Plans also included the re-installment of canopy over the central portion of the building as it was a considered a significant feature of the 1918 façade again re-establishing its historical connections to the Cadbury Fry Hudson company marking its prominence as the main entrance and headquarters. However, this was not completed during the 2018 changes and marks a distinct difference from the 1918 appearance of the façade (Andrea Farminer, 2016)

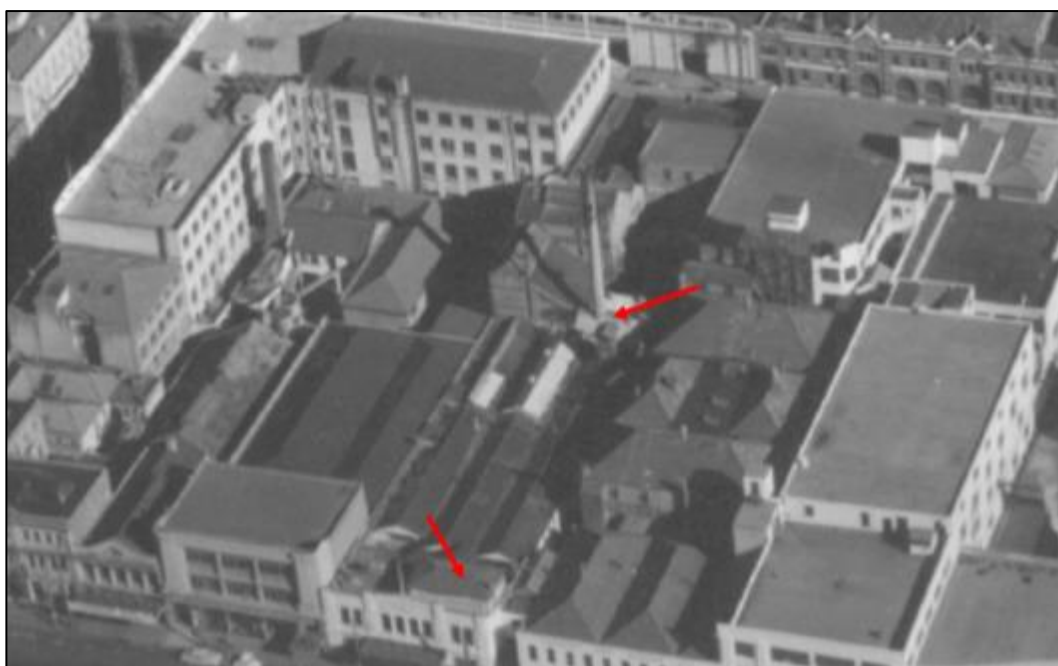


Figure 5-57 1957 aerial photograph showing lunchroom addition to the cellar building and chimney stack alterations to the possible small mill building (red arrows).



Figure 5-58 1957 plan of façade changes (DCC Archives Property Files).

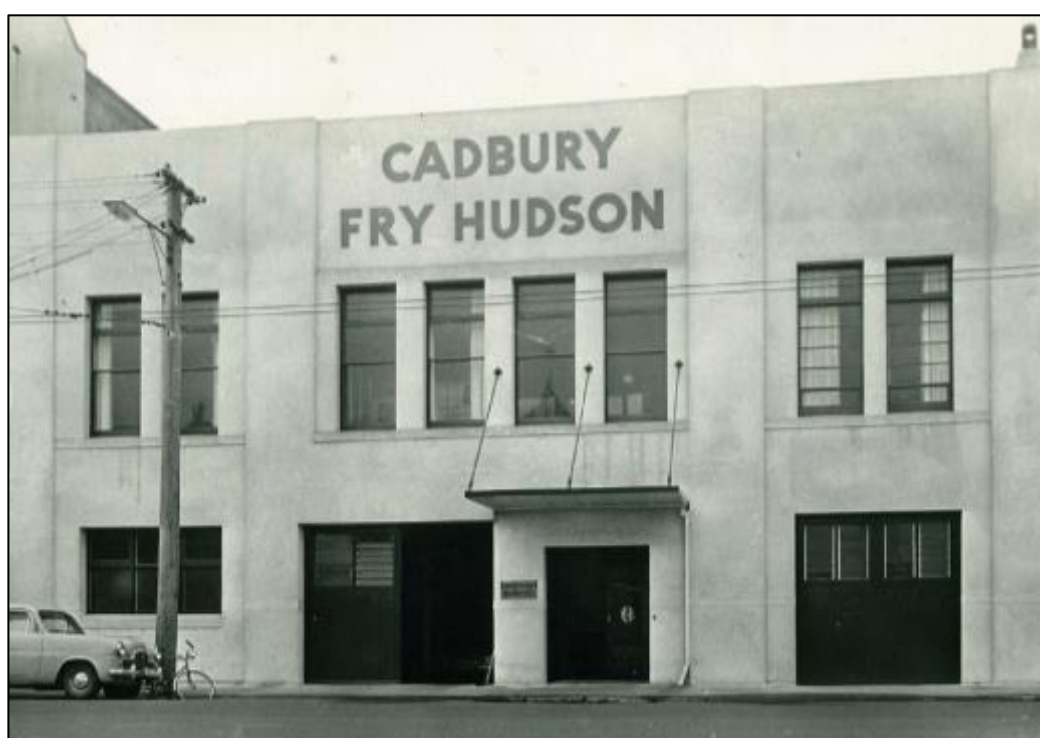


Figure 5-59. Former Dairy and Machine House Building around 1968 showing the later cement plaster render (Figure 13 in Brooks & Jacombs, 2010).

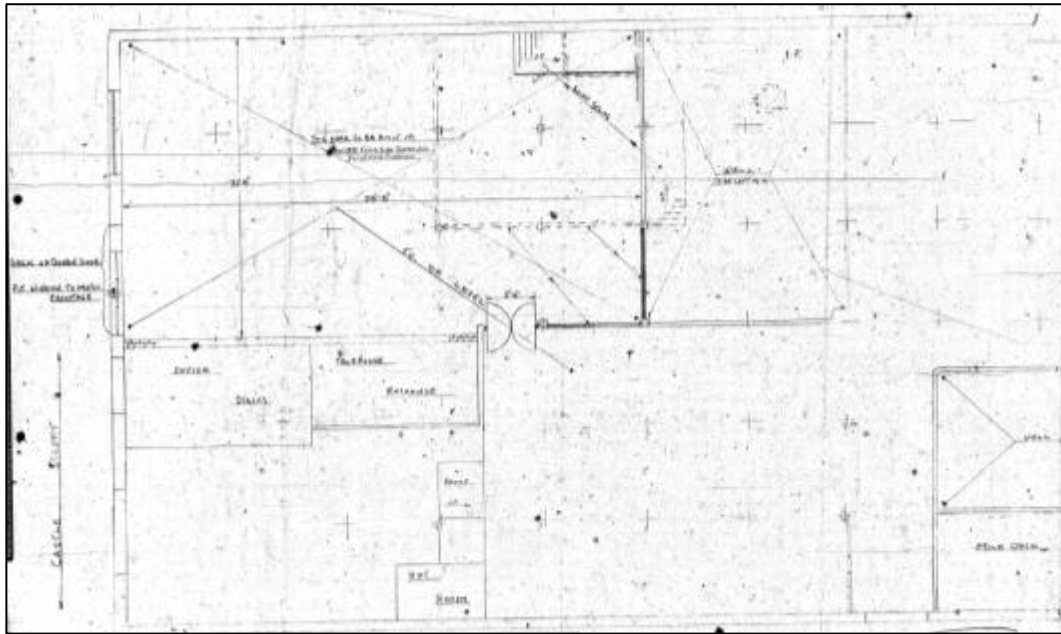


Figure 5-60 1959 plans to extend the concrete floor of the Dairy and Machine House Building. Note that the floor in the southeast corner of the building had to be raised.



Figure 5-61. Likely early 1960s photo showing the demolition of the old boiler house. The rear wall of the machine or former engine house is visible to the left and the cellar building to the right (Figure 13 in Farminer, 2014). The north return wall of the mill or still room building is visible in the centre of the photo.

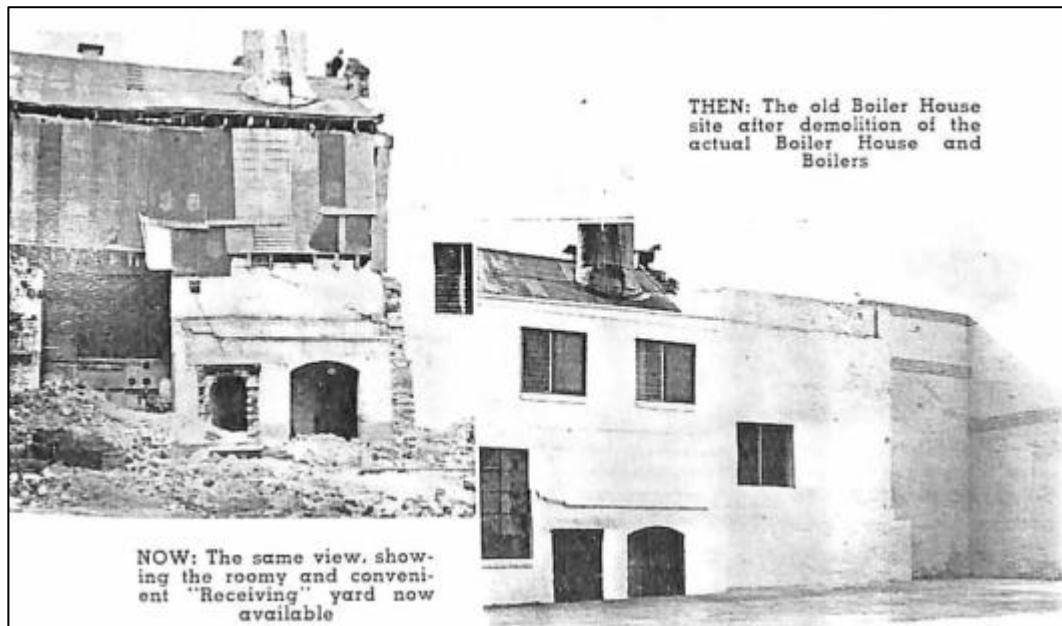


Figure 5-62. Photo of the Cadbury Fry Hudson Limited buildings before and after demolition of the boiler house (Thomson, n.d. : pg. 37). The dog legged wall of the cellar building is visible to the left which is likely the wall of the original still room.

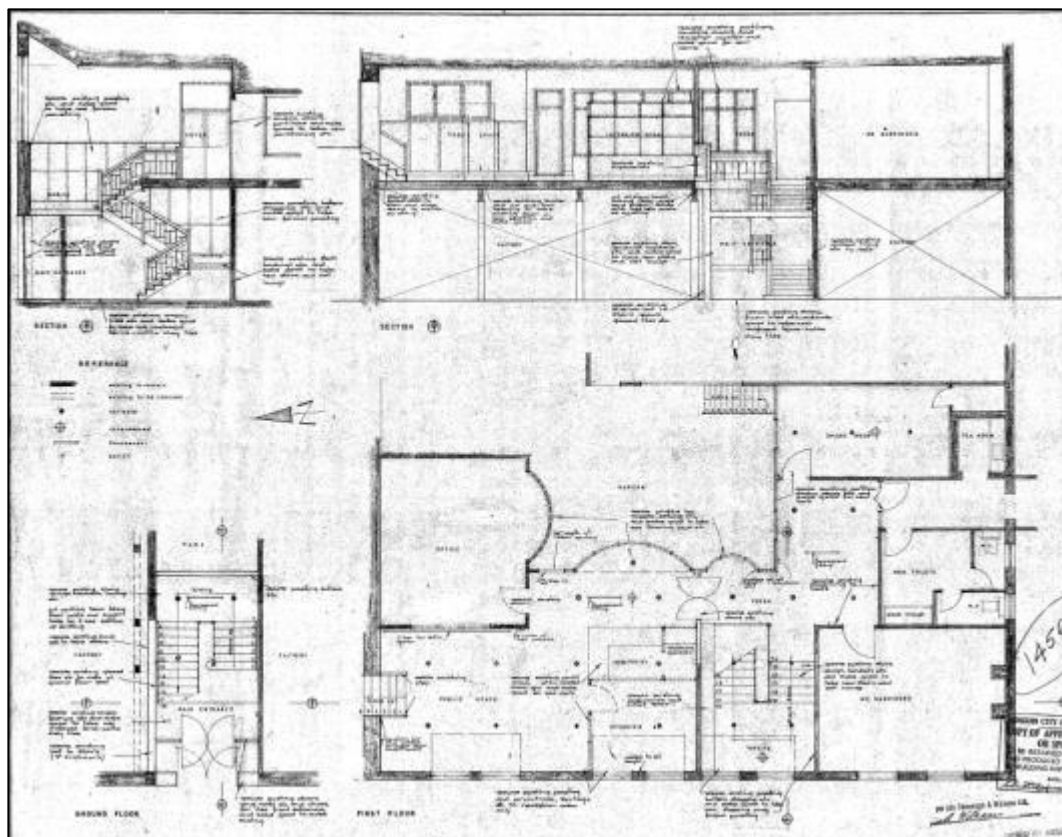


Figure 5-63 Plans by Stevenson and Williams showing the existing offices in 1966 to the first floor offices in the Dairy and Machine House Building (DCC Archives)

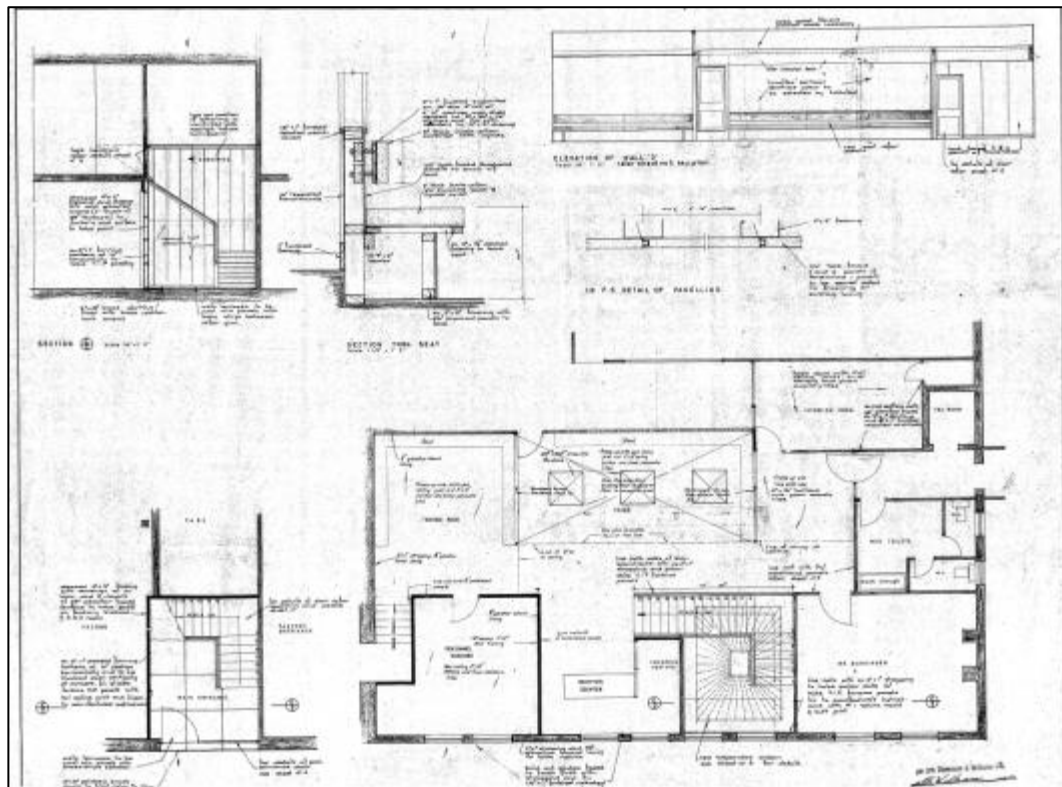


Figure 5-64 Plans by Stevenson and Williams of 1966 alterations to the first floor offices in the Dairy and Machine House Building (DCC Archives).

Alterations to the Chocolate Factory and Garage Building

The main change to the Chocolate Factory and Garage Building was the addition of the penthouse in 1939. This structure sat on top of the building forming the fourth storey. The design of the building façade with a modernist influence was continued up to the newest storey (“Cadbury Site Buildings – Block 1a-6a,” n.d.).

Alterations to the Chocolate and Biscuit Factory Building

Structural support changes and alterations were to the Chocolate and Biscuit Factory in the mid to late 1930s (Building No. 14 in Figure 5-41). These included changes to the ground, first and second floors in 1934 planned by McDowell Smith (Figure 5-65), such as addition of reinforced concrete slabs and the replacement of windows to match the existing windows. Changes to the third floor in 1938 were designed by Miller and White and included the addition of exterior brick walls and timber frame roof forming the cafeteria level as it exists today (Figure 5-66).

The pre-1900 brick building portion of the Chocolate and Biscuit Factory (Part Building No. 14 in Figure 5-41) and the early twentieth century portion (Building No. 15 in Figure 5-45) were also demolished in 1938 (Figure 5-26). The buildings were replaced with 71 by 65 ft, three-storey addition facing out onto Castle Street. The addition contained an additional storeroom and a goods lifts to move product easily. It was also far sturdier than the one preceding it, as it was constructed with steel framing and reinforced concrete. Designed by Miller and White and constructed by William McLellan Ltd the building was “plastered in an attractive manner” (Evening Star, 1939). As noted above Miller and White had also planned the third-floor alterations of the central portion of the chocolate factory building immediately behind suggesting that these changes were made simultaneously.

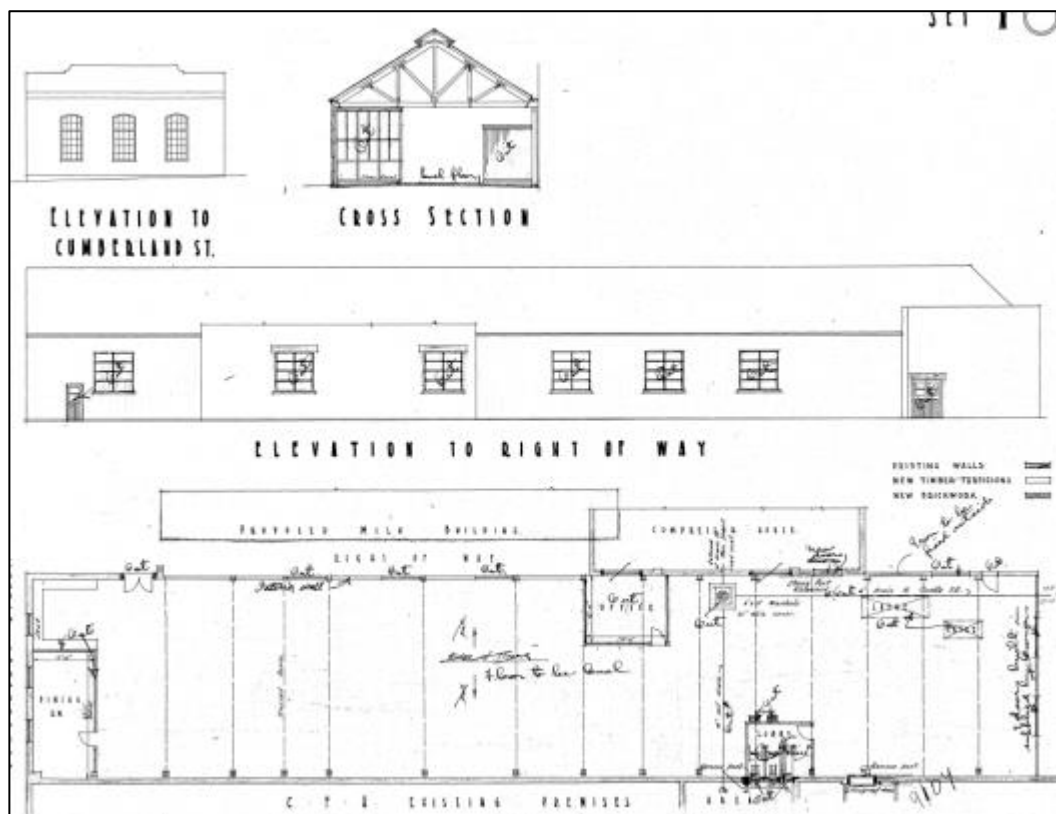


Figure 5-67. 1940 Plan for refitting the Engineers and Fitting shops (No. 1 in 1927 plan) (DDC Archive).

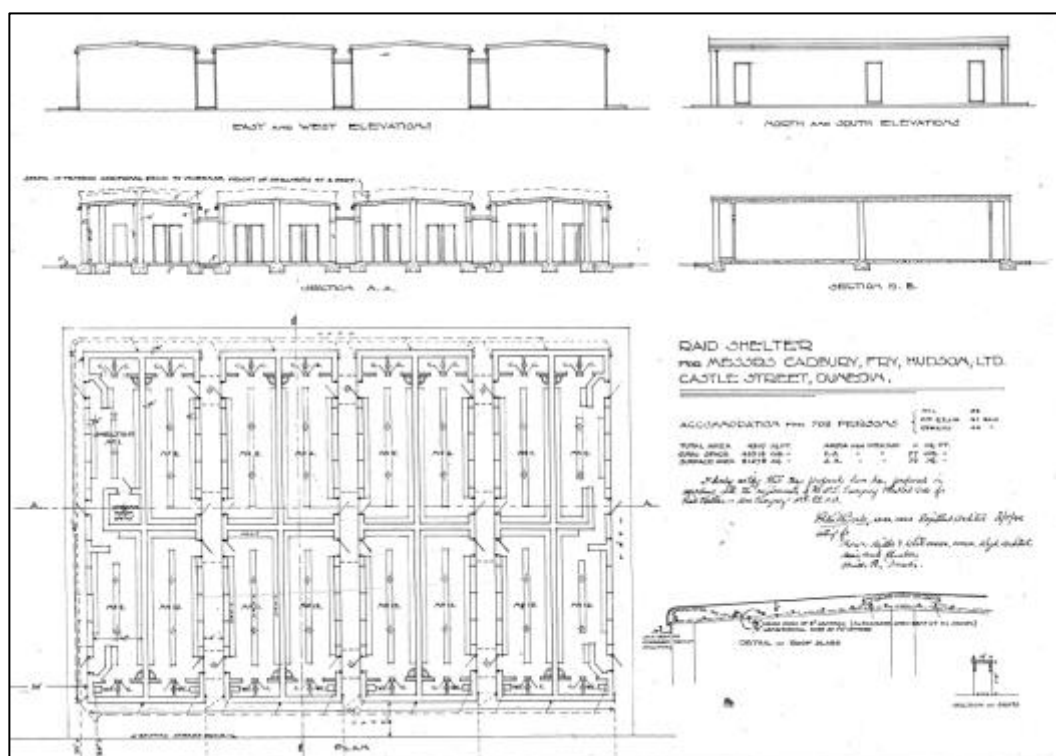


Figure 5-68 1942 plans for air raid shelters (DCC Archives)

Plans were prepared in 1947 for the new building by Miller and White and engineer JRG Hanlon. Aerial images from 1947 show all the buildings along the northern edge of the property had been removed and construction for the new block started in the same year 1947 (Figure 5-69 to Figure 5-71). However, the building, comprising a biscuit factory running between Castle and Cumberland Streets in Block 5A-C and a dispatch building in Block 4C facing out onto Castle Street, was not complete until 1951 (Barringer, 2000). Once the building was complete it

housed two new large electric ovens. Cadbury's was the first factory in New Zealand to install such ovens ("HNZPT Listing Documents: List No. 2143," n.d.). The plans for the dispatch extent of the building only show two storeys with a planned third floor, while the biscuit factory extent was only three storeys with at least one additional storey planned. The lift shafts at the east and west end of the biscuit factory ran to their present-day extents in the plans emphasising the future thought of additional storeys. Seven years later in 1968, the two upper storeys of the biscuit factory (Block 5A to C), and the three upper storeys of the dispatch end of the building (Block 4C), all designed again by Hanlon, were added (Figure 5-74). The façades of each of these buildings still stand largely as they did in the 1960s (Figure 5-72 and Figure 5-75).

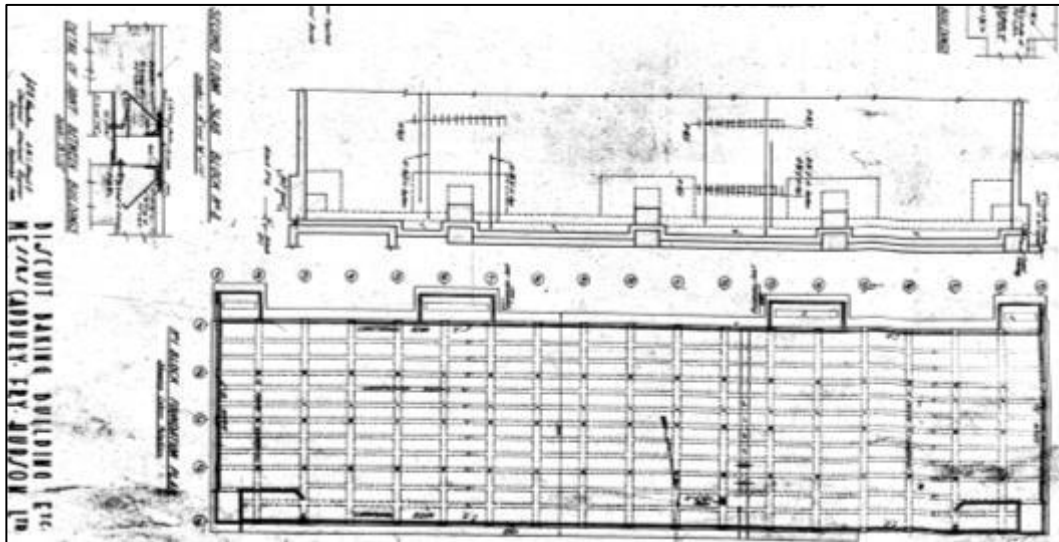


Figure 5-69 1947 plans for the biscuit factory not finished until 1951 (DCC Archives).

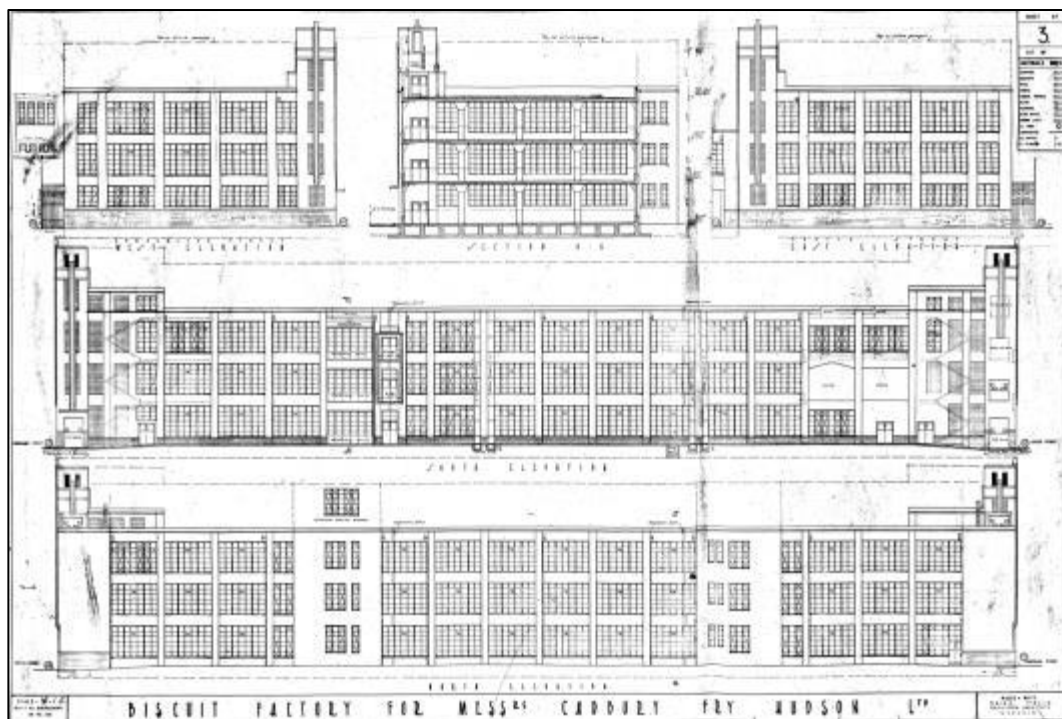


Figure 5-70 1947 plans for the biscuit factory not finished until 1951 (DCC Archives).

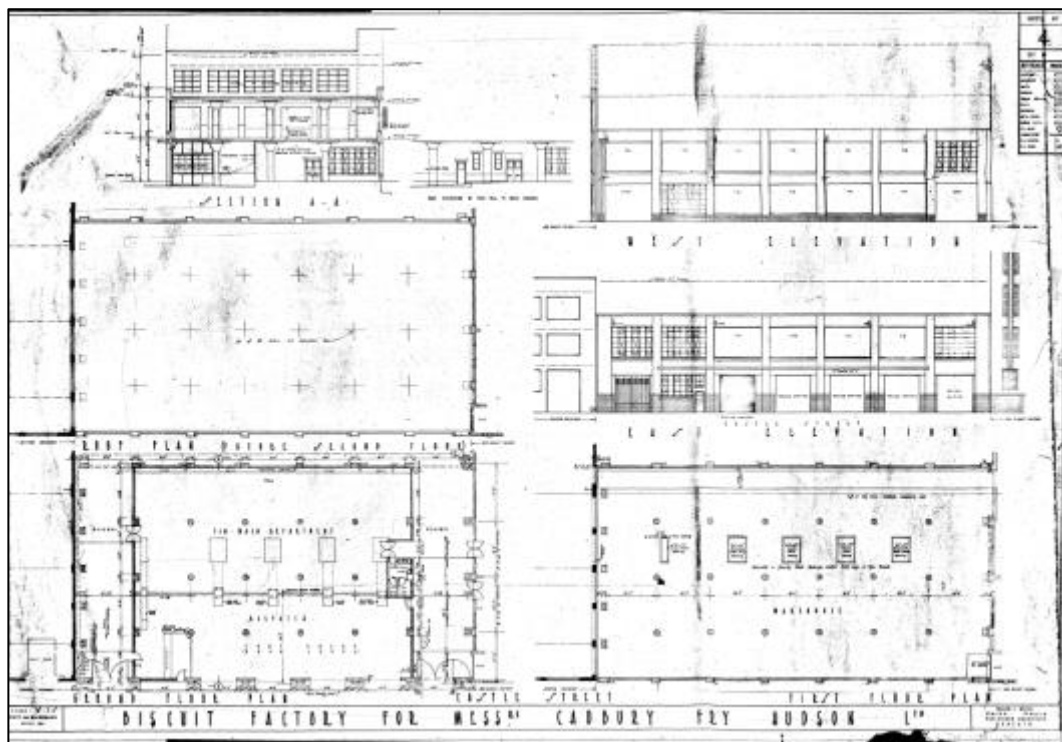


Figure 5-71 1947 plans for the dispatch building not finished until 1951 (DCC Archives)

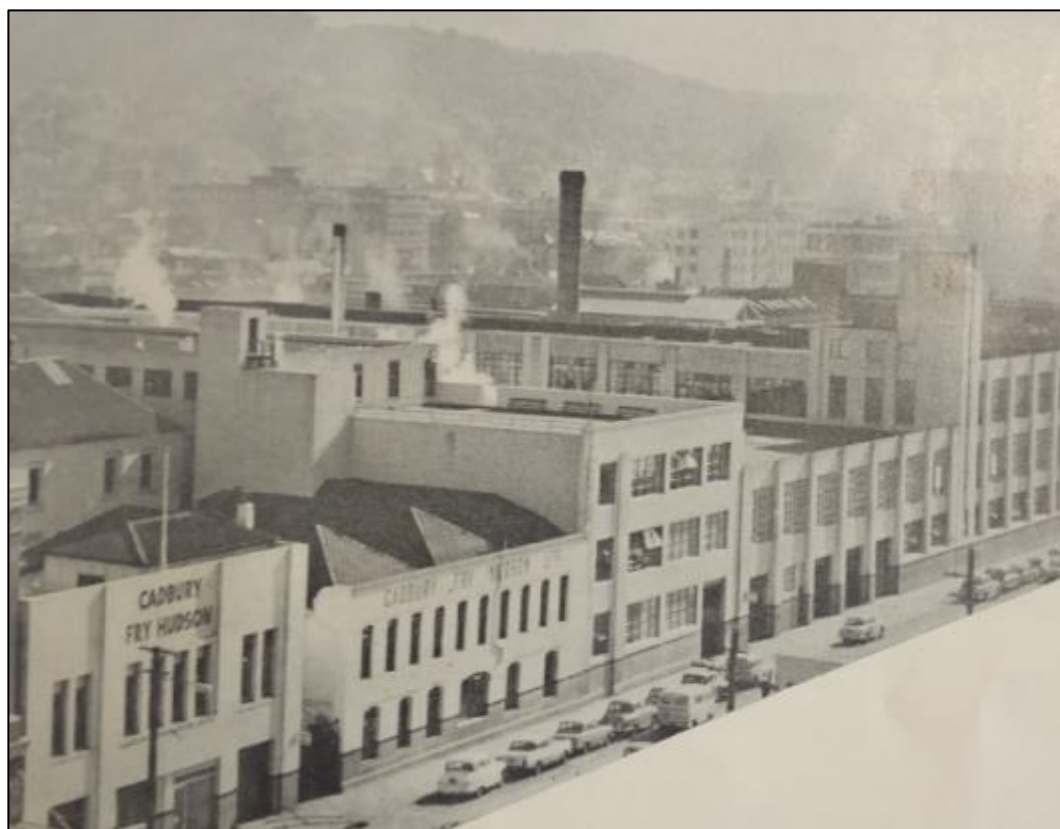


Figure 5-72. Photograph taken in the late 1960s (though before 1868) of the Cadbury Fry Hudson Limited buildings on Castle Street (Smith, 1968: Pg. 17).

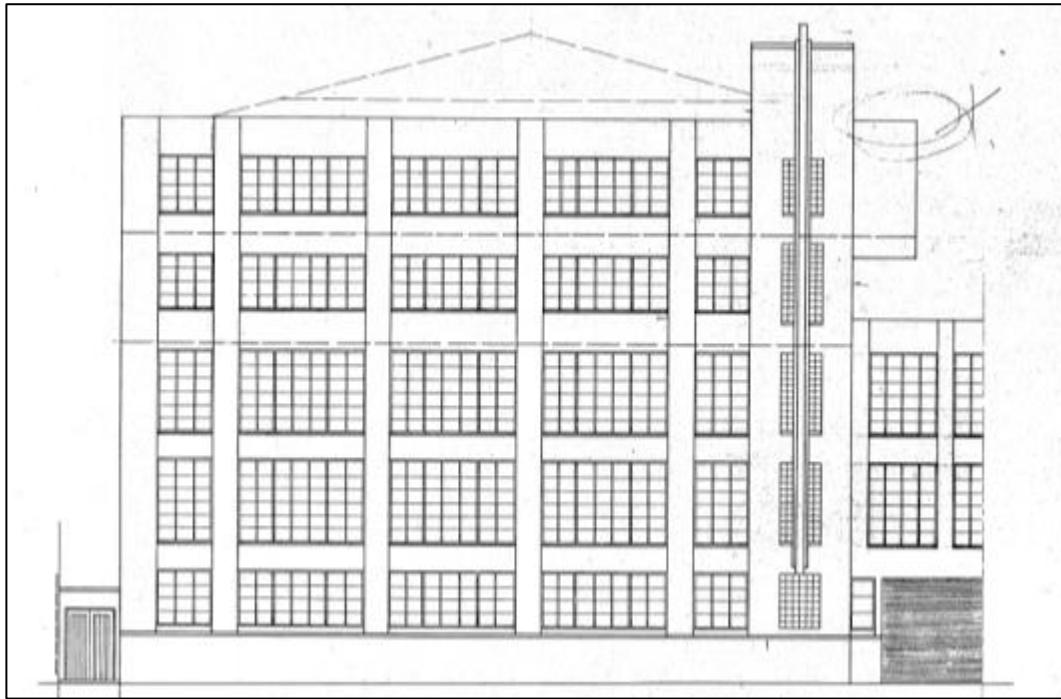


Figure 5-73. 1968 Cumberland Street façade change to Block 5 biscuit factory (DDC Archives).

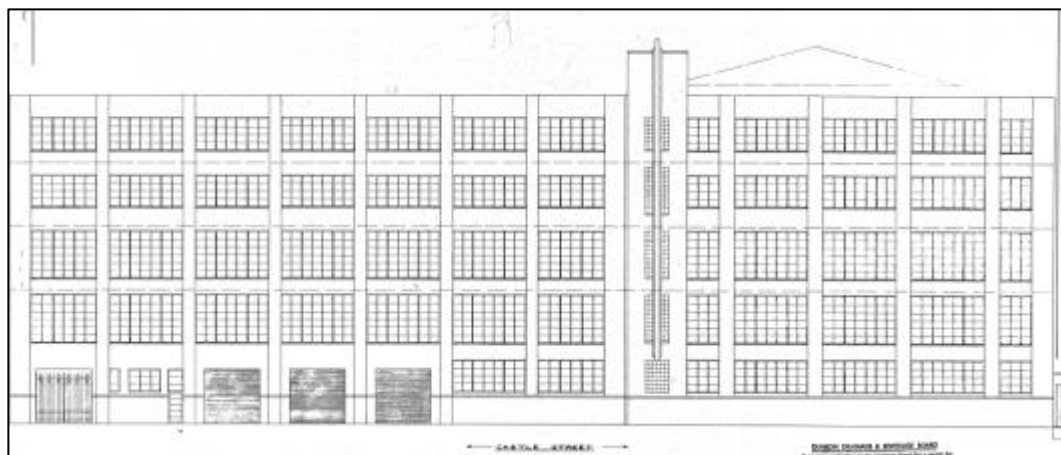


Figure 5-74 1968 Castle Street façade change to Block 4 and 5 Biscuit Factory and Dispatch Building (DDC Archives).

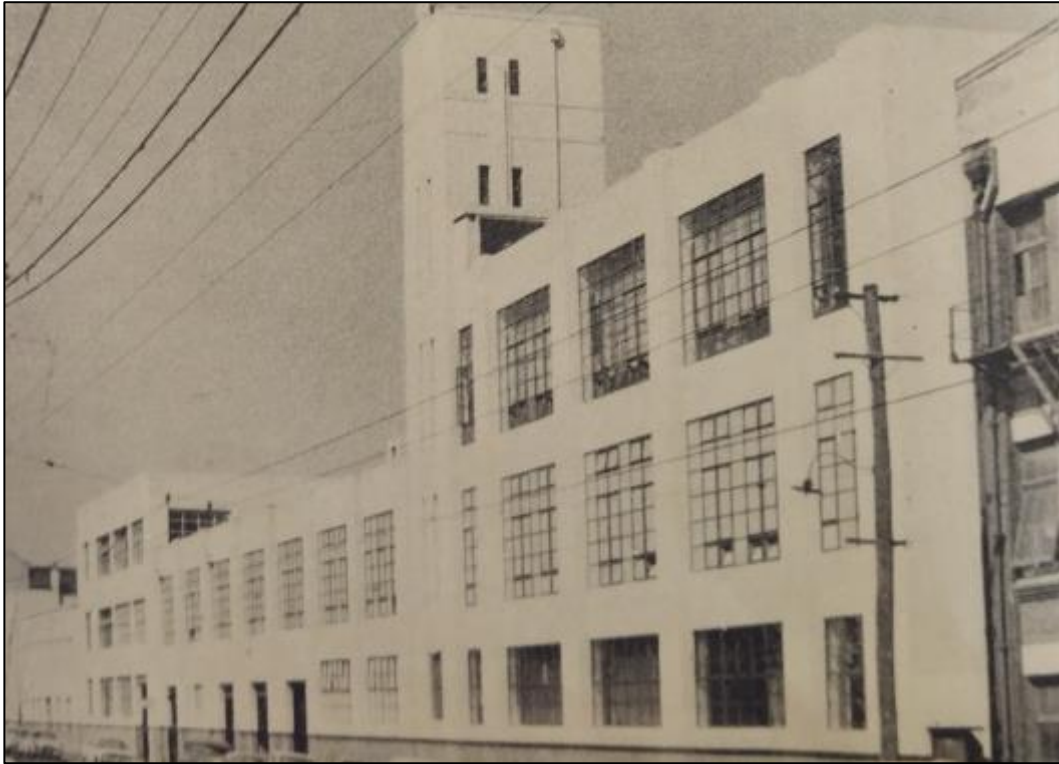


Figure 5-75. Photograph of the Cadbury Fry Hudson Limited in the late 1960s buildings (though before 1968) on Castle Street (Smith, 1968: Pg. 16)

Construction of the Engineering Workshop, Labs and Office Building

Plans for Engineering Workshop, Labs and Office Building (Block 4A) were also designed by the engineer JRG Hanlon in 1960 and the building was constructed soon after constructed in 1961 (Figure 5-76). The footprint of the building has remained unchanged since its initial construction however changes have been made to the building such as 1994 office upgrades on the first floor and essence room upgrade on the second floor (Figure 5-77).

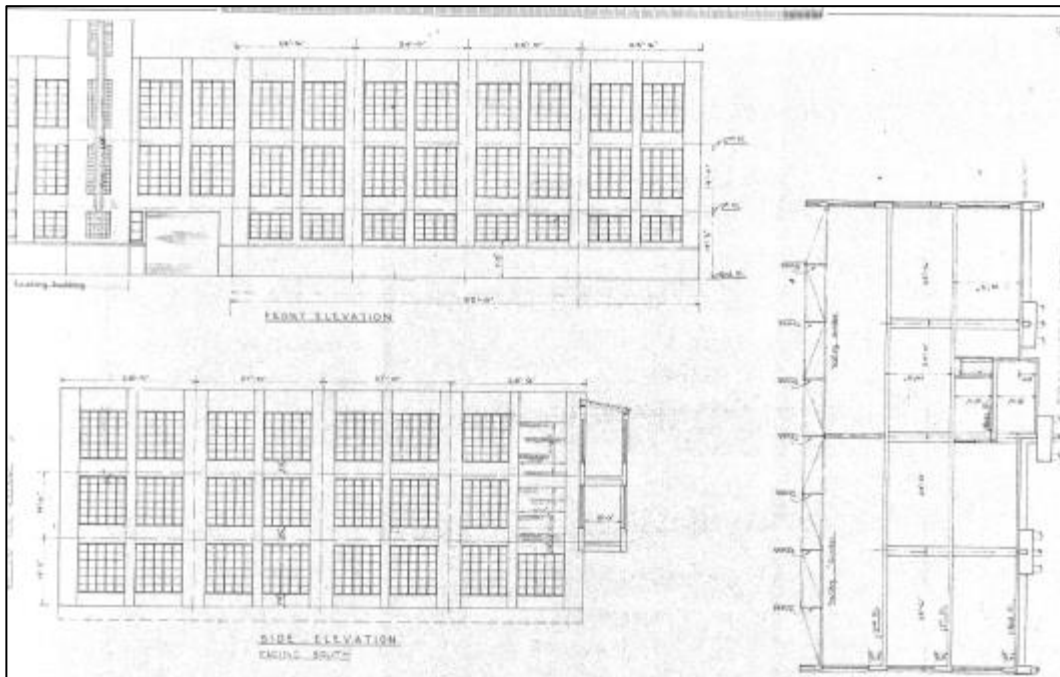


Figure 5-76 1961 plans for engineering workshop, labs and offices building (DCC Archives).



Figure 5-77. 1994 plans of upgrades to offices on first floor (left) and essence room on the second floor (right) of the engineering workshop, labs and offices building.

Other Buildings across the Site

A number of other changes went ahead on the A&T Burt land following the war. In 1945 plans were drafted to construct a central boiler house in Block 4B that would service the entire premises (Figure 5-78). Between 1945 and 1947 aerial photographs show that this building had been constructed with all remaining A & T Burt buildings except for the southern extent of the refitted engineers and carpenters store removed from the site (Figure 5-79). However, even the eastern extent of this store building was altered significantly. An additional long building to the north is also visible in these images. This building was not present in 1945 plans of the property and was likely built around the same time as the boiler house. Following this a power and services station was constructed in Block 4C to the west of the boiler house around 1948 (Figure 5-80). The boiler house itself was extended in 1959 and again in 1969, while water tanks were constructed in immediately behind the dispatch building in Block 4C at the same time.

In 1959, the pre-1900 mill buildings in Block 1B were removed (Buildings No. 3 and 4 in Figure 5 40). The pre-1902 boiler house was also likely removed around the same time as it does not appear in later 1967 aerials (Figure 5 65 and Figure 5 68). This would align with the extension of the central boiler house in 1959 (DCC Archive). Only the engine house remained, which would become the machine house still present today (Farminer, 2014), and a covered loading bay replaced mill buildings in 1966.

Between 1985 and 1986 the 1903 biscuit factory and the buildings in front along Castle Street in Block 2B and 2C were demolished (Retrolens), replaced a carpark and eventually 1950s crumb silos transferred to this space from their earlier location on Cumberland Street in 1991, where Countdown is located today (Figure 5-81), while in 1995 a crumb processing plant was added to the north side of the biscuit factory building.

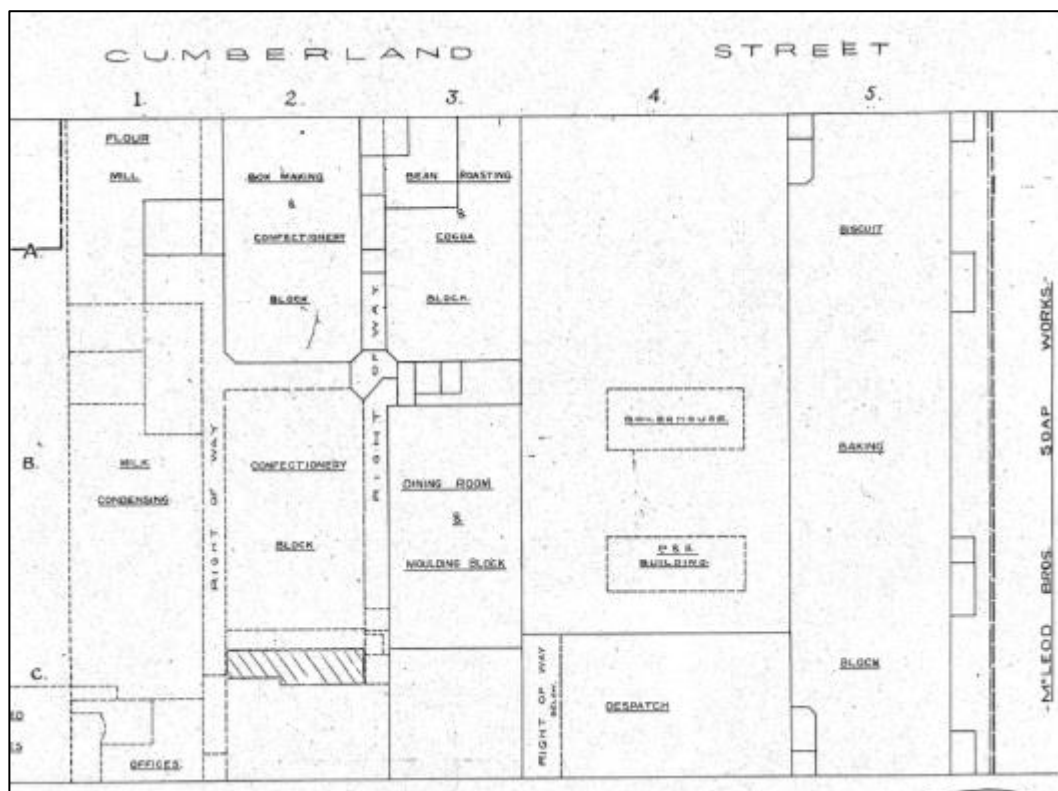


Figure 5-80 1959 plan of the entire Cadbury Confectionery Ltd Buildings showing blocks 1A to 5C.



Figure 5-81. 1991 Plan of entire factory façade except for the south of Block A on Castle Street (DCC Archives). The block 2B and 2C buildings have been removed and the crumb silos built.

5.3 Significant Associations with the Cadbury Confectionery Ltd Buildings Site

The history of the occupants and businesses associated with this site is filled with modernisation in both technologies as well as in labour and employment. But the firms utilising the property participated in wider global networks of trade and exchange, importing raw goods and machinery from Europe and America and exporting finished goods around the country and overseas as well.

5.3.1 C R Howden & Co's and the New Zealand Distilleries Company

The New Zealand Distillery first began operating on 1869 following the enactment of the *Distillation Act* 1868. The company was started by C. R. Howden and R. M Robertson, who had previously operated as wine and spirit merchants. Howden was also known for playing golf near Dunedin at Balmacewan, and he along with others first established Otago Golf Club. Robertson had been a partner in Wright, Stephenson & Co. Ltd which has evolved and today operates as PGG Wrightson. Howden and Robertson were quickly joined by W. J. Larnach, of Larnach's

Castle fame and E. W. Humphries (Perry, 1980). John McGregor was called upon to design the distillery, initially for the corner of Manor and Crawford Streets; however, the location was shifted to Cumberland Street (Perry, 1980).

While they invested a great deal of money into the project, it took a while for endeavour to take off. They had difficulties finding appropriate staff and barley. They had used Kauri to construct their vats but the wood had unfortunately tainted 99,000 litres of product (Perry, 1980). Furthermore, copper for the stills were discovered to be the wrong thickness and would wear out in three years rather than ten first thought.

James Hart was the first managing distiller and claimed to be a descendant of Shakespeare's sister. Duncan McGregor worked as the coadjutor who had come to New Zealand as a gold seeker 18 years earlier. They managed to overcome difficulties and produce the companies first whisky in October 1869 – New Zealand's first whiskey produced under licence (Perry, 1980).

The company stepped away from traditional Scottish manufacture, as the product moved from room to room and did not retrace its steps during the course of its production. The company did import peat from the Isle of Islay costing £10 per tonne as the local peat trialled did not provide adequate flavour (Perry, 1980). American oak was used for casks made on the premises, and the company imported around 17000 grain bags a year; local Green Island coal was used in the factory. Another consideration was the pure water required for the production of the whiskey. Again, the water provided by the Dunedin Water Works Company was found to be unfavourable and for £600, they switched to spring water from the town belt. The water came from the property of a Mr. Logan who would eventually become their distilling manager. Logan had been in New Zealand since 1854 and had been clerk to Captain Cargill, the Superintendent of the province (Perry, 1980). The town belt spring water continued to be used into the twentieth century on the property. A select amount of barley was imported from California when there was a local shortage.

Between 1869 and 1873 the company produced 805,000 litres of spirit from 98,743 bushels of malt and grain, predominantly grown in New Zealand (Perry, 1980). In just four years the company had doubled its sales. Despite overcoming early tribulations and a successful first few years, the company did not last long. Following the abolition of duty preferences for local distilleries, the New Zealand Distilleries were forced to close their doors due to “representation to the government from Scottish Distilleries” (Comer, 1973; C. V. Smith, 1968). In an agreement with the government, the company was paid £20,000 to cease production in 1873 (Perry, 1980).

5.3.2 *Albion Brewing Company*

The Albion Brewing and Malting Company first took over the distillery in 1875. The company was initially formed as a consortium, and its provisional directors includes: James Anderson, W. J. M Larnach, James Brown, George Dobson, H.J. Walter Henry Driver, G.W. Elliot, W.D. Murison, Robert Paterson, Job Wain Jnr, David Proudfoot. It is interesting to note that William Larnach was on the board for both the New Zealand Distillery Company and the Albion Brewing Company. The shareholders included ranged from publicans to storekeepers. W. H. Lathbury was the company's first brewer in 1875 had previously worked at the Tooth & Co.'s Cascade Brewery in Sydney, and he had previously worked in Burton-on-Trent, England (Leckie, 1997). Robert Wilson Eskdale, who had worked as Howden's manager, also went on to manage the New Albion Brewing and Malting Co following the dissolution of the New Zealand Distillery Company. However, his personality was described as not one easily gotten on with (Perry, 1980), and he reportedly did not get on with Lathbury. Eventually Eskdale resigned and was replaced by G. S. Brodrick (Leckie, 1997).

The first brewing at the factory occurred on September the 4th 1875; however, the result was failure and ended in the gutter. Yet by December 1875, Albion beer was on sale. More problems arose with the customs department taking an interest in the remaining equipment of the New Zealand Distillery Company distillery and its potential for producing illegal spirits. The company had to provide a written guarantee that the machinery would not be used while owned by the company, leading to its sale the following year. Further difficulties with staffing and production

resulted in a loss of £2806 in the first eleven months. Things did not get better for the company. Lathbury soon resigned and the staff went from 30 to 12 within eleven months. Despite some profits in 1877, the following year the company posted a loss and they ceased brewing following the wishes of shareholders (Leckie, 1997).

The Albion Brewing Company was purchased by John Marshall and James Copeland in 1878, and they brewed their first batch in January the following year. Marshall and Copeland had been in the brewing business in Dunedin since 1861, and they turned out as much beer as their brewery on the Water of Leith could produce. The brewery went from producing 676 barrels in 1862 to 9500 barrels in 1878. Limited by the size of their brewery, Marshall and Copeland looked to increase production by securing a new and significantly larger brewery. They purchased the Albion Brewing Company premises in June 1878 for £25,000 pounds despite the property being valued at £27,000 (Otago Daily Times, 1879).

Marshall appears to have been an eccentric character, with one article describing him as having “regular dress [that] included a top hat and thigh-length high-polished seaboots” (Auckland Star 1961 in Perry, 1980: 96). Marshall, originated in Antrim, Ireland and had spent a number of years sailing ships with Mediterranean and Russian trade out of Clyde, Scotland.

In an 1879 article stated that the Albion Brewing Company was one of Dunedin leading breweries. The improvements made to the brewery focused on “labour-saving appliances to the fullest extent” (Otago Daily Times, 1879). The firm predominantly used locally grown barley but also received shipments from California. Their hops were imported foremost from Britain, but they also purchased hops from Nelson, Tasmania and again California (Otago Daily Times, 1879). The company further sent a selection of the their products to the 1879 Sydney Exhibition (Otago Daily Times, 1879).

The move to Cumberland Street was not successful for Marshall and Copeland. The partners had overextended their business financially (Kynaston, 2012). The exact details of this financial strain is unclear but there were likely several factors that contributed to the failing of the Marshall and Copeland’s brewery. These included the death of John Marshall’s brother in 1883, the 1880s depression and increasing competition (Jones, 1998; Leckie, 1997). Of the latter, the Speights brewery (established in 1876) had quickly become a keen competitor, who even during the depression years increased their sales. Speights eventually took over the New Zealand and Pacific market of unsuccessful brewery of Marshall and Copeland (Jones, 1998). By 1886 John Marshall had declared himself bankrupt (Leckie, 1997).

5.3.3 *Richard Hudson (1841-1903) and R. Hudson and Co.*

Richard Hudson was born in Chippenham, Wiltshire, England. From the age of 11, he worked for the Great Western Railway in the locomotive and carriage works, and by 14 he shifted away from the 12-hour six day a week shifts to work as a cabin boy out of Bristol (Barringer, 2000). Following three years of sailing aboard cargo ships, Hudson then became a baker’s apprentice. He first arrived in New Zealand after jumped ship in the Lyttleton Harbour from the ‘Indian Empire’ that had travelled from Bristol in 1865 (Comer, 1973; C. V. Smith, 1968). To evade authorities, he established himself under the pseudonym of Daniel Bullock. He joined the gold rushes that had lured him to the country and Hokitika but did not have much luck on the goldfields. He eventually returned to Christchurch and acquired work as a baker for John Griffen of Griffen’s Biscuits fame. At this time, he met and married Mary Ann Riley. After two years of working for Griffen, the couple moved to Dunedin in 1868 (Comer, 1973; C. V. Smith, 1968).

In Dunedin Hudson became a pastry cook in the Arcade between High Street and McLaggan Street. Following the birth of his first son, Richard James in 1869, Hudson purchased his own biscuit baking machine, which had been displayed in the 1865 New Zealand Exhibition, and rented his own bakehouse in Dowling Street. Given the slow patronage to his new store, he looked towards the ships coming into the Otago Harbour to bolster his business and sold his goods from a barrow on the wharves (Comer, 1973; C. V. Smith, 1968).

Hudson eventually had enough money to set up a successful coffee shop in the Arcade. He quickly expanded and was soon producing dessert biscuits, cakes, lollies and comfits (Comer, 1973; C. V. Smith, 1968). He further purchased a Confectionery-making plant and hired a trained confectioner. Adept at working with the machines and adapting them for varying purposes, he was able to produce goods efficiently. Biscuits produced in Hudsons factories included Abernathy, Bedford, Shades of Mother England, while Cracknel, Bath and Madeira cakes were also produced. Women were employed to make lozenges with a wide range of flavours including peppermint, clove, musk, and cayenne (Comer, 1973; C. V. Smith, 1968).

Hudson reinforced his assets by investing in numerous properties and putting in a £450 stake in a steam laundry. Despite difficulties finding skilled staff, the business grew, and Hudson formed a company with Jane Hardwich and Catherine Fenn (Comer, 1973), forming “Excelsior Steam Confectionery and Biscuit Factory – R Hudson & Company Limited, Proprietors.” To house the new factory, they purchased the Masonic Hall on Moray Place, despite fierce opposition from the Masonic Hall Company in 1876 (Barringer, 2000; Comer, 1973). The hall was fitted out as a factory, but it soon became too small, so the building was demolished. At this site Hudson, constructed a new factory and hotel. The front of the new building formed a boarding house and restaurant known as the “Coffee Palace” with hairdresser, baths and dining room, while Hudson’s offices and the factory were at the rear (Barringer, 2000; Comer, 1973; C. V. Smith, 1968).

In 1884, Hudson travelled overseas to visit factories across Europe inspecting and purchasing the newest and latest machinery for the producing cocoa and chocolate. The machinery was brought back to New Zealand in 1885, and it was soon producing the first chocolate manufactured in New Zealand (Comer, 1973; C. V. Smith, 1968). The cocoa and chocolate endeavour saw Hudson hire over 100 employees. They produced cocoa, drinking chocolate as well as homeopathic cocoa. The company expanded to Auckland, Wellington and Christchurch around 1886. The company purchased space on the corner of St Andrew and Cumberland Streets, where they installed one of just two roller flour mills located outside of Great Britain (Comer, 1973; C. V. Smith, 1968). By 1889 the company produced the first moulded chocolates in the southern hemisphere (Otago Daily Times, 1993).

By the late 1800s, Hudson stepped back from his business due to ailing health and his eldest sons started to take on more responsibilities. His attention turned to other matters, such as setting up a public library (Comer, 1973; C. V. Smith, 1968). While, Hudson was the first Dunedin employer to give a half-day holiday to his employees on Saturday, and the firm was later one of the first to instate an eight-hour work day, Richard Hudson had himself worked long hours, 16 to 18 hours days (Comer, 1973; Otago Daily Times, 1930; C. V. Smith, 1968). It has been suggested that such a strenuous work life may have contributed to his shortened life, however, this was considered to be a key factor in the success of the company (Otago Daily Times, 1930).

In 1898 Hudson and Co purchased the Cadbury Factory site. Hudson’s sons each took on various roles in the business: Richard became the company chairman, Rob the works manager, while Ambrose became responsible for the chocolate department, Charles for the flour mill, Arthur for biscuit production, and Bill for the engineering team (Comer, 1973; C. V. Smith, 1968). Upon purchasing the Cumberland Street premises, the innovation of the company continued. The three-storey biscuit factory constructed in 1901 would house two machine ovens made by their own fitting shops. The ovens themselves were 50 feet long, comprised around 15 tons of ironwork and were the first of their kind to be built in the southern hemisphere (Otago Daily Times, 1900) The new premises had to overcome the early trial of the destruction by fire of the new biscuit factory in 1902. Hudson could see the fire from his window and he immediately called the fire brigade even instructing them as to where he would like them to focus their efforts to save important equipment (Comer, 1973; C. V. Smith, 1968). By 9am the next morning Hudson was looking at rebuilding. Through his son Richard, they applied for a bank loan to rebuild, and the bank offered to cover whatever the works cost. In the end this turned out to be a £50,000 loan, which was paid back by 1912.

Following their father’s death (1903), the six sons took over the business, and their mother Mary also took avid interest in the company. They formed a new company with all the sons participating as directors and Richard at the

helm (Comer, 1973). The years between 1903 and 1930 has been referred to as the “Era of the Six Sons” (Cadbury Schweppes Hudson Limited, 1990). Despite their father’s best directions to save the machinery, the fire was taken as an opportunity to modernise the factories machinery. After acquiring the lastest chocolate producing plant and new Gabel Moulding Machines, sales increased. In 1918 the brothers experimented with condensing milk, and in 1919 they purchased a milk condensing plant from overseas (C. V. Smith, 1968). Improved quality and output lead the business to grow rapidly despite setbacks such as a 1923 flood (Figure 5-84), which saw Castle Street under three feet of water and flooding the ground floor of the Castle Street factory (Barringer, 2000). A second flood in the city just six years later again the ground floor of the factory flooded, likely costing the company hundreds of pounds (Otago Daily Times, 1929). Despite these trials, the Hudson company did well in the latter 1920s. During the 1925-26 South Seas Exhibition, the company received a great deal of publicity as their chocolates were amongst those offered as prizes at the event. The Hudsons’ Chocolate was in high demand and soon the slogan “Must be Hudsons” was developed (Comer, 1973; C. V. Smith, 1968).



Figure 5-82. Photo of the R Hudson and Co Chocolate Department around 1906 (Barringer, 2000).



Figure 5-83. Photo of the R Hudson and Co chocolate packing room in 1928 (Otago Daily Times, 1993).



Figure 5-84 Photograph looking the Castle Street façade during the 1923 flood.



Figure 5-85. Advertisement for Hudsons' Chocolate with the new slogan, used even following the merger with Cadburys (Evening Star, 1932).

5.3.4 Cadbury Fry Hudson Ltd

John Cadbury first established himself as a grocer in Birmingham, England in 1824, but within seven years he had moved into the manufacturing of drinking chocolate and cocoa. When John retired in 1861, he left the Cadbury

business to his sons Richard and George. The process of pressing cocoa butter from the cocoa beans was introduced in 1866 to the company (C. V. Smith, 1968)(Barringer, 2000). As a result, the company was able to produce new types of eating chocolates. In 1879 the company established its well-known Bournville factory (Barringer, 2000). Their old factory had become too small for the number of staff and quantity of products creating an unhealthy work environment. Believing that a fate of the business rested in the welfare of its employees, the new factory offered more space and better working conditions, as well as being located close to railway lines and a ready supply of steam to power the factory machinery (Barringer, 2000).

Cadbury began exporting overseas in 1881. In 1897 the company made the first milk chocolate, and within five years they had created a process for producing milk chocolate that was successful in Britain. Milk chocolate and Bourneville Cocoa were key in their international success (Barringer, 2000).

In 1918 Cadbury Brothers amalgamated with another company, Joseph Fry and Sons (Barringer, 2000). Fry and Sons, who like Cadbury, had a history of developing cocoa products steeped in a Quaker ideology. Joseph Fry had first established his business in Bristol from 1728. Both Cadbury and Fry had suffered in their international exports during First World War. Combined, the two companies pushed their overseas markets, establishing factories in places such as Montreal and Claremont, Tasmania (Barringer, 2000). The Claremont factory was Cadburys first overseas, and it bore similarities with Bourneville (Raabus, 2017). Soon after the factory was built, a number of workers cottages were constructed of which a number still stand today and are heritage listed by the Tasmanian Government.



Figure 5-86 Photograph of Cadbury's Claremont Factory (left) and estate established for the workers (right) (Archives office of Tasmania).

Cadbury's exports to New Zealand were increasing in the early twentieth century; however, an increased tax placed on imported chocolate resulted in the decision by Cadbury to manufacture goods in New Zealand. As a result, they joined up with the R. Hudson & Co. forming the Cadbury Fry Hudson Ltd in 1930, with R. Hudson & Co. relinquishing the controlling share in the firm (Comer, 1973; C. V. Smith, 1968).

While the company started to manufacture some of Cadbury and Fry lines, the depression years meant the newly formed company faced difficulties (Otago Daily Times, 1993). The company looked towards further modifications of the factory, especially in departments beyond chocolate, that had been lagging behind. Where possible machinery was introduced to replace hand labour. One key shift in the business model was a focus on marketing. R. Hudson & Co. did not place too much emphasis on advertising as quality of goods was where money should be focused. In contrast Cadburys favoured targeted and efficient advertisements. Despite significantly more money being spent on advertising, while not immediate, they did come to see an upturn in sales after a slow first year following the merger. One successful campaign was "The Chocolate Plane" piloted by Captain MacGregor, a WWI RFC pilot. The plane not only flew executives to their destinations, but also visited numerous centres taking customers for flights (C. V. Smith, 1968). Continuing the good labour relations that Hudson implemented, Cadbury Fry Hudson was one of the first companies to restore the 10 percent wage cut employees had suffered in

1931, and provided the local Dunedin City Council a number of short term loans (C. V. Smith, 1968). The company was likely one of the first in New Zealand to further offer a superannuation scheme for its employees (Barringer, 2000). By the mid-1930s Cadbury Fry Hudson had over 500 employees and was acclaimed for its great contribution to Dunedin's economy as well as producing exemplary goods with one contemporary stating "your products are equal to the finest imported" (Otago Daily Times, 1936).

Further steps to modernise the factory focused on elongated spaces which minimized handling of the products, and to accomplish this, the company looked to the land owned by A & T Burt to the north. Cadbury Fry Hudson purchased the land and established the long building between Castle and Cumberland Street (Barringer, 2000). When designing the building, they considered future expansions, as the building was engineered to be able to cope with another storey. Other considerations of the expansion included: space for production materials, flour mixing at the Cumberland Street end of the new building and space for handling and despatch of the products at the Castle Street end. The tin washing plant was placed so that the tins could be sent to the biscuit ovens for packaging of the biscuits. Similarly a new boiler house was also established for the new building, however it was built in the centre of the premises so that it could cater the entire factory (Barringer, 2000). Approval for the new block was given in 1939, however the war put a halt to developments plans.

While the onset of war created difficulties for the company, it also opened up new sales as well. Just prior to the war, the Department of Industries and Commerce asked Cadbury Fry Hudson to manufacture Bournville Cocoa locally. Despite the financial strain this imposed on the company, they placed the order for the necessary machinery from Bournville. The plant was shipped twice and sunk both times by German U-boats; however, the third shipment of the machinery made it to New Zealand, and the company was producing Bournville Cocoa from 1942 (Barringer, 2000). World War II saw the cancelation of all Confectionery and chocolate lines except for chocolate blocks that stretched the sugar short in supply. The war contracts required three shifts for certain departments and required up to 750 personnel, predominantly woman. As a result of the massive service biscuit contract, nearly all domestic production was discontinued (C. V. Smith, 1968). The company also set up a newsletter called *the Chocolate Soldier* to send overseas news from the company and Dunedin. The newsletter continued well into the second half of the twentieth century (C. V. Smith, 1968). Following World War II the company grew significantly leading the market of production of chocolate and cocoa (Otago Daily Times, 1993).

Following the war, the company expanded, and the potential for a Cadbury factory to be established in the North Island was raised with Bourneville to produce Hudson Biscuits. However, it was not until the 1960s that land was purchased in Papakura for the establishment of another factory. The factory itself completed in 1965, and despite some early setbacks, was soon helping the Dunedin factory with the grown demand for Cadbury products.

A significant move for the company was the 1960 introduction of the Hollerith accounting tabulator, which automated the production of not just invoices and statements but also financial and sales statistics all previously compiled by hand. The technology improved both speed and accuracy (Otago Daily Times, 1993). In 1963 the new "1301" computer was installed at Cadburys, the first New Zealand company to do so (Barringer, 2000).

The company merged with Schweppes to become Cadbury Hudson Limited in 1973, and 13 years later they merged with Cadbury Schweppes Australia, resulting in goods produced in New Zealand travelling to Australia and vice versa. Completing the historical circle, Cadbury took over the Griffin's Confectionery business in 1990 from Britannia Brands (NZ) Limited in exchange for the Hudson Biscuit business (Cadbury Confectionery Limited, n.d.; Otago Daily Times, 1993). The Papakura factory was a part of this exchange (Barringer, 2000), and it still operates today producing Griffins' products. At least part of the 1960s building still exists today.

In 1991 the company became Cadbury Confectionery Ltd, manufacturing goods in Dunedin (on the Cadbury Factory Site) and Avondale, Auckland with a new Confectionery factory in the latter (Cadbury Confectionery Limited, n.d.).



Figure 5-87 Photograph of the 1960s Papakura factory. Fletcher Group Services designed the building, with architect WH Gray (The Fletcher Trust Archive).

5.3.5 *Otago Foundry*

Several of the occupants of the A & T Burt site were prominent businesses in nineteenth and early twentieth century Dunedin. The Otago Foundry, one of the city's earliest large-scale metal working businesses, was established by William Wilson and David Mason. Mason, described as having “a quiet and retiring nature” (Otago Witness, 1896), had arrived in New Zealand around 1856 and with him he had brought a plant to start an ironworks. The foundry undertook the first iron casting at their Cumberland Street premises in 1862 (Otago Witness, 1862b). However, by this time William Wilson was noted to be operating the business with a Mr Selby (Otago Daily Times, 1863a; Otago Witness, 1862b). Mason went on to become the inspector of iron works for the Otago Harbour Board in 1874 and then worked on dredges for the Sew Hoy Mining Company (Findlay, 2009). One article describes the operations under Wilson and Selby (Otago Daily Times, 1863a) as “extensive and important operations” where “only the best artizans [sic] are employed and special training”. The foundry employed around 40 men and it was noted that they received high wages at this time (Otago Daily Times, 1863a).

By the mid-1860s the company was undertaking notable contracts, and items constructed at this time by the company included an iron hulled steamboat for the Harbour Steam Company (Findlay, 2009). The boat was designed by a local engineer, Mr Darling, built “by a resident practical builder of iron builders”, Sparrow, while the local company Briscoe and Co. supplied the materials (Otago Witness, 1867). This was the first time the Harbour Steam Company had relied entirely upon local labour to provide a steamboat. The newspaper report at the time also indicated that once complete, it would “be the largest and finest steamer which had yet been designed and constructed within the Colony” (Otago Witness, 1867). The vessel was expected to be launched from the Otago Foundry (Otago Witness, 1867). Shortly after vacating their Cumberland Street premises in the early 1892, the Otago Foundry was purchased by John McGregor & Co and experienced a resurgence in the early twentieth century (Farquhar, 2006). This firm was responsible for constructing the *SS Earnslaw* in 1912, which still sails on Lake Wakatipu today.

5.3.6 *The Dunedin Iron Works*

The Dunedin Iron Works, established by Robert Sparrow, was another early Dunedin foundry, established next door to the Otago Foundry in the late 1860s. The firm was extremely successful and opened a second plant on newly reclaimed Willis Street in 1874, before being sold in 1894 and rebranded as the Dunedin Foundry (Allport, 2013). One of the Dunedin Iron Works' best-known outputs was the *Platypus*, a submarine designed for accessing alluvial gold deposits and manufactured by the firm in 1873. Sparrow was contracted to construct the hull of the vessel at their Cumberland Street plant by Villaine and Nuttall on behalf of the Submarine Mining Company (West Coast Times, 1873). A newspaper article from August 1873 describes the completed vessel:

“Those who expect to see a very handsome vessel, answering to preconceived notions of ‘a boat,’ will be disappointed. Externally, it is a huge iron shell, having no beauty to recommend it; but, on examination, well adapted to the work it is intended to be put to. It is, in fact, an iron tube of 35ft in extreme length, and 7ft 2in in diameter. It is not, however, of equal size throughout, as about 8ft from the nose it is gradually tapered to what may fairly be described a point – not a mathematical one, having no dimensions; but a material one, pretty well rounded and strongly rivetted... The way in and out of this iron cave is by a manhole at the top, and fitted over this is a dome 5ft 8in high and 3ft 6in in diameter. Around this is a balcony with hand rail and fittings. When inside the door is shut, like Noah’s Ark, from without. In a line with this dome or turret, on each side is what may be termed a paddle-wheel, inclosed [sic] in an air and water-tight cover. The wheels are 8ft in diameter, and 2ft wide, with 32 arms each, to which are attached curvilinear floats or paddles.” (Evening Star, 1873)

The *Platypus* was launched from the Rattray Street jetty on 13 December 1873 in front of a large crowd, most of whom were expecting the vessel to capsize and sink immediately. This did not occur and the submarine was successfully towed to the Stuart Street jetty where it was to receive the finishing touches before its underwater debut (Otago Daily Times, 1873). Despite two relatively successful trials in the Otago Harbour, the *Platypus* never made it to its intended destination of the Molyneux River, instead being abandoned for many years on the Dunedin foreshore before being transported to Barewood Station on the Strath Taieri where part of the vessel served as a water tank (Evening Star, 1928b). Anecdotal evidence suggests that part was also left in Dunedin and utilised as a tank by McLeod Brothers soap and candle works (Bisset, 2019), although no further information could be found to support this claim. Two large sections of the hull are currently on display at the Middelmarsh Museum, but the rest of the vessel is missing.

5.3.7 *A & T Burt*

A & T Burt were another prominent engineering firm established in Dunedin during the early 1860s by Scottish brothers Alexander and Thomas Burt. Both brothers had faced hardship in Scotland and so migrated to Victoria in 1859, and caught by the gold fever, Alexander arrived in New Zealand in 1861 (Kynaston, 2012). After major successes during the Dunstan gold rush of the 1860s, Alexander turned to the plumbing trade, and with Thomas joining him from Australia, they established a shop in Dunedin in 1862 (McDonald, 1965; Parry, 1990). Thomas handled the physical works of the company while Alexander managed the business. One of their first major contracts was providing gas lighting for the 1865 New Zealand Exhibition being held in Dunedin. A & T Burt opened a large retail store, foundry and engineering workshop on the corner of Cumberland and Stuart Streets in 1874, before moving their production centre to further along Cumberland Street to the location of site I44/922 (the northern half of the present-day extent of the listed Cadbury Confectionery Ltd) buildings in the late 1870s (Parry, 1990).

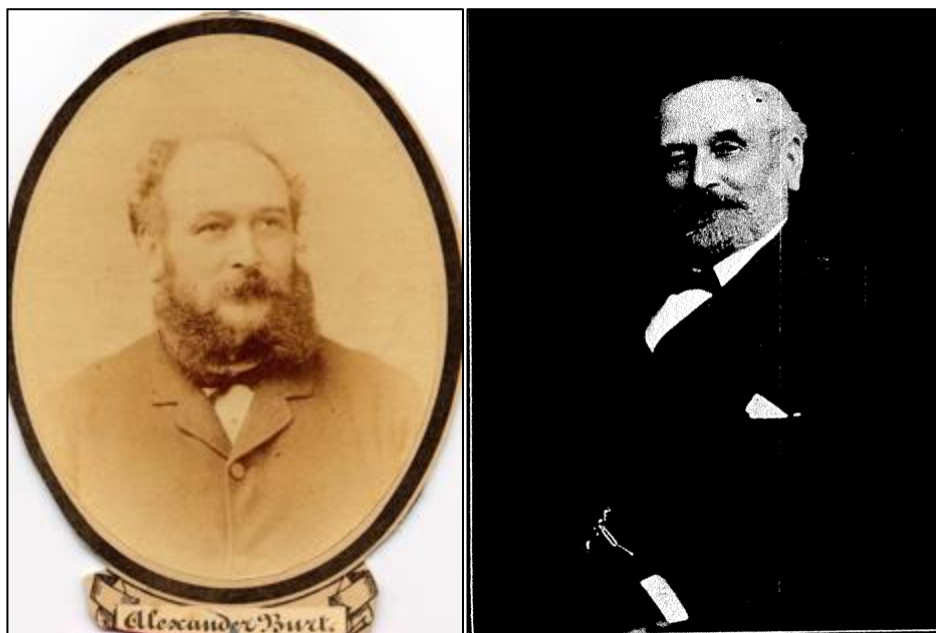


Figure 5-88 Alexander Burt in 1884 (“Alexander Burt,” 1884) from the early twentieth century (Otago Witness, 1920).



Figure 5-89. Photograph of Thomas Burt (Figure from “Dunedin’s Buried History: Burt, Thomas,” 2003).

Despite Thomas’ death in 1884, Alexander continued to expand the firm, and by the early twentieth century the firm had expanded to Wellington, Christchurch, Invercargill, Auckland, Timaru and even London (“A & T Burt Limited,” n.d.; Farquhar, 2006). In Dunedin, their premises extended across the entirety of site I44/922. The company put their products on display, winning many prizes at all three Dunedin exhibitions as well as 1914 Auckland exhibition, and Alexander focused on producing products that would be competitive with imports from overseas (Cyclopedia Company Ltd, 1905; Parry, 1990). In the late nineteenth and early twentieth century, the company was involved with producing mining machinery, railway castings, bridges (Figure 5-90), refrigerating machinery, tramlines (Figure 5-90), mains and service pipes through Dunedin, shipping contracts, distillery plans as well domestic fittings, thus servicing a range of New Zealand industries and sectors (Cyclopedia Company Ltd, 1905). By 1905, the company employed 300 people throughout the country (Kynaston, 2012).

Like other major companies in Dunedin, A & T Burt gave back to the city donating £2000 pounds for a paddling pool and fountain at Moana Pool. Alexander Burt was known for fostering technical education in the city (Otago Witness, 1920). Driven by childhood struggles, Burt supported evening classes at the Caledonian Society, where he was made a life director; he was on the Arthur Street School committee for over thirty years; and he founded the Dunedin Technical School with G. M. Thomson in 1918 (Parry, 1990). When Alexander passed away, he left £300 to the school and the King Edward Technical College assembly hall was named in his honour (Parry, 1990)

A detailed article in 1921 described the contemporary A & T Burt plant and illustrates the variety of works from plumbing to heavy engineering (Otago Daily Times, 1921a):

- The engineering department contained construction projects for the New Zealand Paper Mills, as well as hydraulic rams for a customer and their own warehouse as well as refrigeration machines.
- The foundry contained work for the Wellington State Fire Insurance building and the New Zealand Insurance Company building in Auckland.
- The boiler shop works for boiler-making as well as bridge and building constructions were underway.
- The brass foundry manufactured brass work for the engineers and plumbers, while the brass moulding department supplied brass castings to the engineering department.
- Coppersmiths shops produced copper circulators and boilers.
- The company also manufactured all types of lead pipes, galvanised iron and down pipes and shop spoutings as well as baths and tanks.

The company was also inventing new products with the article noting a “newly patented rapid water heater” was being tested before taking it public (Otago Daily Times, 1921a). The company employed a great number of employees and the article stated that they manufactured more products and designs than any other factory in the country (Otago Daily Times, 1921a).

When Alexander Burt died in 1920, his son William C Burt took over as chairman of directors. William Morley took over in 1930 shifting the focus of the company to importing and merchandising rather than manufacturing.

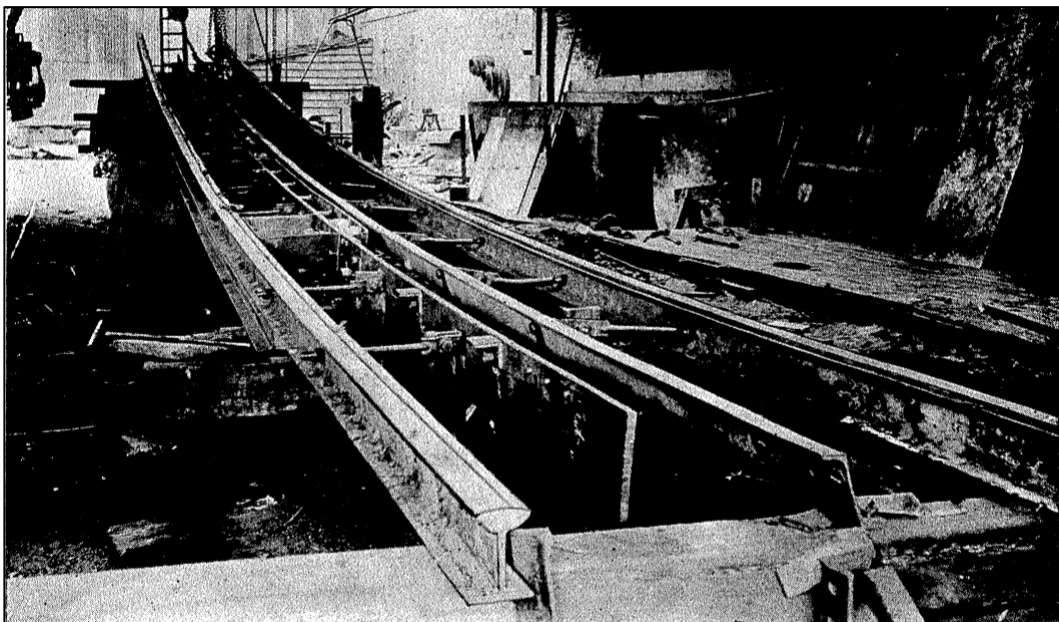


Figure 5-90 Underground work for the Kaikorai Valley Tramline produced by A & T Burt (Otago Witness, 1910).

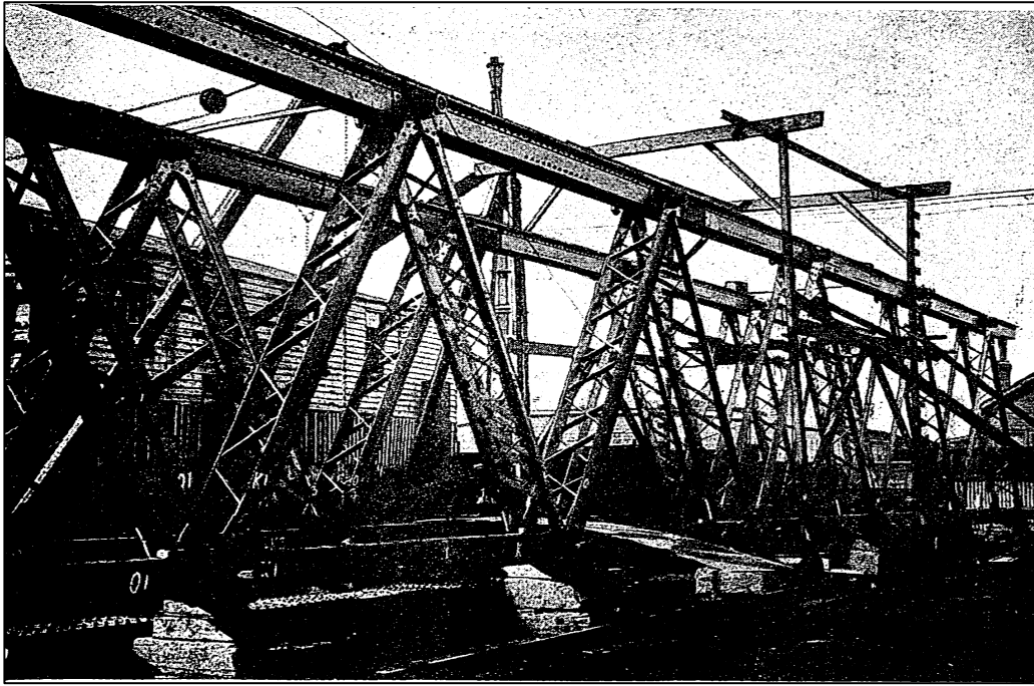


Figure 5-91 Construction of the Claudelands Bridge, Hamilton under construction at A & T Burt's Foundry (Otago Witness, 1908)

5.3.8 NZEEC and New Zealand Implement Company

Two smaller industrial firms, NZEEC and the New Zealand Implement Company, also occupied the A & T Burt Site (Site I44/922). Begg & Wilkinson were manufacturers of agricultural equipment and fencing supplies and occupied the Castle Street frontage of site I44/922 from the mid-1880s to 1889 when the partnership dissolved and Begg continued the business as the New Zealand Engineering and Implement Company (Otago Witness, 1889b). Following this rebranding, the company shifted its focus to the manufacture of flax and gold mining machinery and remodelling its Castle Street premises to make use of all available space (Otago Witness, 1889a). Begg retired in 1891 and sold his Castle Street plant and stock to the NZEEC (Evening Star, 1891). The NZEEC were responsible for providing electrical light to “a very large proportion” of industrial premises across the South Island using a combination of arc and incandescent lights (Mataura Ensign, 1894). In 1893 this company used their technology to project the results of that year’s general election onto the side of the *Otago Daily Times* building and a billboard in Dowling Street (Otago Daily Times, 1893).

5.3.9 John McGregor

John McGregor designed the first New Zealand Distillery Company Building, that was initially to be located at the corner of Crawford and Manor Streets but was eventually built on the Cadbury Factory Site. McGregor was an active architect between the 1860s and 1880s (Entwisle, 2013), and in 1865 he was operating out of the Princess Street Chambers (McDonald, 1965). It is interesting to note that McGregor also shared offices with the well-known architects, H. F Hardy and W.B Armson, and they were closely situated to architects R. A Lawson, David Ross as well as Mason and Clayton. It has been suggested the close proximity of the architects likely increased competition between them, and they did not move to form a professional body (Robert McDougall Art Gallery, 1983). Prior to the New Zealand Distillery Company buildings, he had designed a warehouse at 8 Stafford Street, that had been decorated with a Venetian Gothic Style with Oamaru stone façade; this building has been heavily altered since its initial design but is now scheduled on the Dunedin City District Plan as B273 (the Ross & Glendining Building shown in Figure 5-92). The distillery buildings were far less elaborate in comparison (David Murray, 2015). He also undertook residential designs and is thought to have designed an 1870s brick cottage in Melrose, Roslyn a residence for the lawyer Arthur Nation (partner of a legal firm with Charles Kettle and James Macassey). For a cottage, the building was elaborate, featuring hand-painted ceilings, stained glass, and timber joinery; the residence became known in the late 1800s as ‘Melrose’ (David Murray & Breese, 2016).



Figure 5-92 Early 1900s illustration of the Ross & Glendining Building (Fahey, 1906 in D Murray, 2015). The original 1866 building designed by McGregor is on the right. The entrance visible in the image was in the centre of the original building. The extension was done by Mason & Wales replicating the initial design of the building.

5.3.10 *Fletcher Construction Company*

James Fletcher started in the field of construction in 1909, when he first built a house in Dunedin with Albert Morris. However, it wasn't until 1915 that the Fletcher Bros Ltd was formed, which was renamed the Fletcher Construction Company Ltd four years later when his brothers joined the business (Fletcher Construction, 2019; The University of Auckland Business School, 2010). The company tendered for both large commercial projects and public works including Dunedin's municipal swimming pool and the St Kilda Town Hall (The University of Auckland Business School, 2010). It was early on in the company's history when they undertook the construction of the cement building for R. Hudson and Co. James held strong to deliverable timelines, forming relationships around New Zealand and overseas to enable this (Fletcher Construction, 2019). The company moved to Auckland in 1925, contributing to landmark constructions in Auckland and Wellington during the depression years. Fletcher Holdings was publicly listed in 1940, with the Fletcher Construction Company forming its largest subsidiaries (The University of Auckland Business School, 2010). In the 1950s the company continued to grow yet held on to the values of James Fletcher, undertaking joint ventures with overseas companies to bid for local tenders and working with the government to take on the construction of houses at the Kawerau township. The latter would be New Zealand's largest construction project undertaken at that time (The University of Auckland Business School, 2010). The company still operates today as Fletcher Building Limited, one of New Zealand's largest listed companies.

5.3.11 *Miller and White*

Eric Miller and James H. White formed part of the architects Miller and White, established in 1927, and contributed to Dunedin's built heritage. They had worked separately in the city prior to forming the partnership, and as Miller and White, they had designed the 1929 façade for the Irvine and Stevenson building on St Andrew Street (David Murray, 2014a); additions to the RSA Building in 1938 and 1944 (David Murray, 2014b); the 1939 NZR Road Services building (part of the Otago Settlers Museum); Lawson and Lousely houses on the corner of Pitt Street and Heriot Row; the St John's Building on York Place in 1938 (C. Smith, 2009); and the 1948 Hercus Building of the Otago Medical School (David Murray, 2014a). The University of Otago was one of their key clients, who they had inherited from Edmund Anscombe in 1928. When Miller died in 1948, Ian Gilman Dunn joined the company and the firm became Miller, White and Dunn (Farquhar, 2010). The company was well known for their modernist style (C. Smith, 2009), and this is evident in their design of the 1938 alterations to the chocolate factory and 1957

design to update the façade of the Dairy and Machine House Building. The large open windows featured in the factory lightened the whole factory and gives the factory a distinct light and open feel that influenced the design of future factory buildings on the site.

The modernist approach can also be seen in the alterations of Hudson's family home, designed by Eric Miller; the Hudson family home is located on Tweed Street, Roslyn (HNZPT List No. 373). Miller added a number of unique changes to the home. For instance, the drawing room featured a large bay of windows providing the house with sun and views (Irvine, 2012). The house also featured stain glass windows throughout the building including in the bathroom. These windows along with the associated with Miller, heightened the significance of the house.

5.3.12 *Henry McDowell Smith*

Henry McDowell Smith was an architect who began his career in Newcastle-upon-Tyne, England, before relocating to Dunedin in 1908 to work with Edmund Anscombe. In 1912 he was sent to Invercargill to take the position of branch manager for Anscombe and his new business partner Leslie Coombs (Otago Daily Times, 1912). This partnership was short-lived, however and by the following year McDowell Smith replaced Coombs as partner (Otago Daily Times, 1913; Southland Times, 1913). The business of Anscombe and McDowell Smith flourished, and by 1919 they were advertising as architects, structural engineers and community planners (Otago Daily Times, 1919). McDowell Smith left the company in 1921 to set up his own practice in Dunedin (Otago Daily Times, 1921b) and went on to design numerous early modernist buildings around the country. Like Miller and White, he designed a number of modernist buildings around Dunedin including the Law Courts Hotel in the 1930s, Fletcher offices in around 1950 and the Unipol Gym (formerly the Williamson and Jeffreys building) also around 1950 (C. Smith, 2009). Similar modernist style can be seen reflected in the portion of Block 3B, part of the chocolate factory, designed by McDowell.



Figure 5-93. Law courts hotel, Dunedin (Mattingbn, 2011).

5.3.13 *William McLellan Ltd*

William McLellan Ltd was a key player among Dunedin's construction firm operating between 1910 and 1966 (Farquhar, 2006). The constructed a variety buildings around the city and further afield including the Anglican Cathedral in 1915 (New Zealand Times, 1915), a 1930s radio station at Highcliff (Auckland Star, 1935), the Octagon Theatre (Otago Daily Times, 1940); the Southland hospital (Press, 1933); the Invercargill Post Office (Auckland Star, n.d.). A decade before working on the steel and concrete building for the Cadbury Confectionery Ltd buildings, McLellan Ltd were advertising their skill in steel structural work (Evening Star, 1928a). They also had worked previously with other modernist architects, Mandeno and Fraser. Together they constructed the new banking chambers in Queenstown using reinforced concrete construction (Lake Wakatip Mail, n.d.).

6 Previous Work Identifying Heritage Values

Previously identified heritage sites and places near the project area can also provide information that is valuable for assessing the heritage values and impacts to the wider heritage landscape. UOA carried out comparative analysis using ArchSite (the New Zealand Archaeological Association's site recording scheme), the HNZPT List/Rārangī Kōrero, the DCC Schedule of Townscape and Heritage Buildings and Structures (Schedule 25.1 2006 Dunedin City District Plan), the DCC Schedule of Protected Heritage Items and Sites (Appendix A1.1, 2GP). The results of a brief comparative analysis are documented here.

The collective reference for the buildings at 280 Cumberland Street reported on here varies between the Dunedin District Plans and the HNZPT List/Rārangī Kōrero. The Cadbury Confectionery Buildings Ltd are scheduled as such on the both the 2006 and 2GP Dunedin District Plans. However, on the HNZPT List/Rārangī Kōrero the buildings are currently scheduled as the Cadbury Schweppes Hudson Limited Buildings.

6.1 Previous Recognition of Heritage Value

The Cadbury Confectionery Ltd Buildings are included as a Category 2 Historic Place (List No. 2143) on New Zealand Heritage List/Rārangī Kōrero. The Cadbury Confectionery Ltd Buildings were first listed in 1982 under the Historic Places Act 1980 with a 'C' classification, which indicates that merits preservation because of its historical significance or architectural quality² (pers. com. Sarah Gallagher, Heritage Assessment Advisor, HNZPT, 10 April 2019). When the classification system changed, the listing became a Category 2 Historic Place, which is defined by the HNZPTA 2014 as a place of "historical or cultural heritage significance or value".

The online list entry record refers to the buildings as the Cadbury Schweppes Hudson Limited Buildings and until recently, included reference to the listing being restricted to the façades of four buildings: "Cadbury Schweppes Hudson Limited Buildings (Four Buildings) (Extended Façade)" (HNZPT Listing Documents). A listing report has not been completed by HNZPT, but HNZPT holds a paper file on the site, which includes a two-page *N.Z. Historic Places Trust Buildings Record Form*; a copy of this form is provided in Appendix A. The form, completed in 1993, provides extremely limited information about the buildings in the listing. The factory buildings, covering all DP 1589 and all DP 5322, were recorded to have been made of brick and plaster in a utilitarian style.

There has been some confusion on whether the Castle Street façades of the Dairy and Machine House Building, the Biscuit Factory and Dispatch Building and the Chocolate and Biscuit Factory Building were included in the initial listing for the Cadbury Confectionary Ltd Buildings. A recent technical change request document was prepared by HNZPT for a technical change to the listing to keep their information up to date. In this document they identified that it was unclear if the Castle Street façade was included in the listing (Heritage New Zealand Pouhere Taonga, 2019). The listing includes a photograph of the four buildings thought to be referred to in the original board minutes. However, the listing includes the address 40 Castle Street (now part of 280 Cumberland Street) and 280 Cumberland Street written in next to it. When HNZPT notified owners under the transitional provisions of the Historic Places Act 1993, the address provided was '280 Cumberland Street' yet the legal description provided was 'All DP 1589 and all DP 5322', which includes Dairy and Machine House Building and the other Castle Street façades (Heritage New Zealand Pouhere Taonga, 2019).

As a result of the technical change the listed name became "Cadbury Schweppes Hudson Limited Buildings (Former)" while the address became 280 Cumberland Street, and the legal description is DP 5322 (RT OT304/181), Secs 53-55, 72-74 and Pt Secs 56 and 71, Blk XVI (OT129/279), Otago Land District (Heritage

² Section 35 (1) of the Historic Places Act 1980 states: The trust may from time to time classify buildings according to their historical significance or architectural quality, as follows: (a) Those buildings having such historical significance or architectural quality that their permanent preservation is regarded as essential: (b) Those buildings which merit permanent preservation because of their very great historical significance or architectural quality: (c) Those buildings which merit preservation because of their historical significance or architectural quality: (d) Those buildings which merit recording because of their historical significance or architectural quality.

New Zealand Pouhere Taonga, 2019). This land includes the Dairy and Machine House Building, the rear of the Biscuit Factory and Dispatch Building as well as the Chocolate and Biscuit Factory Building. However, it not explicit in whether the Castle Street façades are considered part of the listing (Heritage New Zealand Pouhere Taonga, 2019).

The Dunedin City District Plans are clearer. The façades to both Cumberland and Castle Streets across the same property boundaries identified in the listing were registered as B030 on the 2006 Dunedin City District Plan (Schedules 25.1 and 25.2) and the 2GP (Schedule A1.1). The former Dairy and Machine House Building on Section 74 and the adjacent Section 73 BLK XVI, Dunedin, was incorporated into the Anzac Square/Railway Heritage Precinct (TH11) in the precinct the 2006 Dunedin City District Plan; however, it is no longer part of this precinct (which is now referred to as the Stuart Street Commercial Heritage Precinct) in the 2GP.

As part of the Cadbury Confectionery Ltd building were within the Anzac Square/Railway Heritage Precinct (TH11), it is important here to identify why the area was identified in the DCC District Plan (Dunedin City Council, 2006). Precincts in Dunedin contribute to the heritage character and townscape of the city, and the Anzac Square/railway Station Precinct have been identified as a result of their significant heritage values (Dunedin City Council, 2006).



Figure 6-1: Map showing previously recorded archaeological and heritage sites in central Dunedin surrounding the Cadbury Block

Anzac Square is one of the Dunedin areas that holds the most continuity in occupation from European settlement and is surrounded by various buildings of architectural significance with the Railway Station, the Law courts and the Dunedin Prison surrounding the open space. Anzac Square and the Railway Station were identified to be a possible ‘anchor’ at the terminus of lower Stuart Street and the area surrounding it, the space was noted to be lacking in definition as it is not an enclosed space on all sides (Dunedin City Council, 2006). One key feature of the Anzac Square/Railway Heritage Precinct was the lack of modern buildings that could undermine the architectural significance of the built heritage in this area. In its 2006 District Plan the council identified a number of values which were to be enhanced in the Precinct. Those that specifically related to the Cadbury Confectionery Ltd Buildings were: the presence of heritage buildings; the height of the buildings defining the area on its norther edge; no modern buildings; buildings adjacent to heritage buildings are comparable in height; street furniture is fitting to the character of the area; colours used in the precinct are subdued and align with the historic character of the area (i.e. unpainted red brick, off-white, cream, and subdued darker colours such as deep green or grey); and minimal signage and signs are not displayed from facades (Dunedin City Council, 2006). As noted above however, no part of the Cadbury site is included in that equivalent Precinct under the 2GP.

6.2 Previous Investigations of the Cadbury Confectionery Limited Buildings (List No. 2143/ District Plan Site No. B030)

Previous investigations of the Cadbury Confectionery Ltd Buildings have focused predominantly on the former Cadbury Dairy and Machine House Building (1875 - former cellar) with the machine house (1868 – former possible small mill) to the rear, which has seen continuous use since their construction. It is important to note that all previous investigations were written when the Dairy and Machine House Building was situated within the Anzac Square/Railway Heritage Precinct (TH11) as defined by the 2006 Dunedin City District Plan. Three key reports have been prepared for the buildings: an archaeological assessment was undertaken by Southern Pacific Archaeological Research (Brooks & Jacombs, 2010), a concurrent cultural heritage assessment was undertaken Oakley Gray Architects Ltd (2010) for potential plans to demolish the building, and review of heritage significance discussing redevelopment options for the Cadbury Confectionery Ltd buildings was prepared by Jackie Gillies + Associates (Farminer, 2014).

Brooks & Jacombs (2010) identified that the age of the Dairy and Machine House Building as well as its connection to Dunedin’s early industrial sector underpinned the **historical values** of the building, as it is one of the last buildings associated with the 1870s brewery operations associated with manufacture of whiskey, beer and Confectionery. Similarly, Oakley Gray Architects Ltd (2010) and Farminer (2014) highlighted the buildings’ associations with an early Dunedin distillery and brewery as well as the biscuit and chocolate factory. Farminer (2014) explicitly acknowledged it was New Zealand’s first legal distillery site, with the oldest structures surviving from 1868 distillery (the former possible small mill and west wall of the Dairy and Machine House Building), 1870s to 1880s associations with the Albion Brewing Company (the main construction of the cellar that would become the Dairy and Machine House Building), as well as the building’s connection with Richard Hudson (the east end of the building housing his offices from around 1918). Overall, the previous investigations considered the buildings to have “considerable historic significance” due to its industrial past and associations with notable organisations (Oakley Gray Architects Ltd., 2010).

In regards to the **architectural value**, all three reports remarked on the significant changes to the Dairy and Machine House Building including multiple façade alterations, internal modifications and the addition of “an intrusive lunchroom” on the roof Oakley Gray Architects Ltd (2010). As such the exterior of the building was undermined architecturally and aesthetically from its original Victorian industrial appearance so that it had little relationship to with its surroundings or neighbourhood (Oakley Gray Architects Ltd., 2010). Aside from the central interior of the Dairy and Machine House Building, which displays a good example of the original Victorian construction, Oakley Gray Architects Ltd (2010) assessed the building to have little evidence of noteworthy design elements. However, all three reports were written prior to the refurbishing of the façade in the 2018. Moreover Brooks & Jacombs (2010) highlighted the potential of the building to provide insight into mid to late nineteenth

century building design, especially archaeological and engineering techniques. Oakley Gray Architects Ltd (2010) also noted that the construction features of the remainder of the building were unlikely to have changed dramatically. Farminer (2014) further highlights that the Dairy holds its footprint and overall form of the original 1875 cellar building and the Machine House retains its 1868 possible small mill footprint and first floor and despite later second floor additions. As such it holds an industrial legacy harking back to the earliest distillery on the site. Farminer (2014) acknowledged that the kauri and rimu trusses and floor structure remained in the central and eastern office areas of the dairy in good condition, and the central section of the building suffered only minor alterations in the twentieth century. However as with Oakley Gray Architects Ltd (2010), it was assessed that the significant changes to other portions of the building detracted from the overall significance of the building as did the overall poor condition.

Oakley Gray Architects Ltd (2010) describe the **technological or scientific values** as significant in relation to the overall purpose of the overall factory site, rather than the building itself being important on its own. Importantly they do note that elements of the central interior of the building holds some rarity value, though the rest of the building has been so modified as to have significant importance as an industrial building. The changes to the altered fabric of the building was identified by Farminer (2014) to inform the technological significance of the building with distinctive changes in requirements for the key functions of the building. As highlighted in the Oakley Gray Architects Ltd (2010) assessment of structural elements, Farminer (2014) again reiterated the importance of the 1875 timber floor and roof structures in relationship to mid-nineteenth century craftsmanship. Later elements of craftsmanship were also highlighted by the 1918-1930s office interiors such as a plaster ceiling, which survived in good condition and can be associated with the Hudsons.

Of note is the identified **social importance** of the building given that the R. Hudson and Co. and the iterations of the Cadbury companies to follow were large employers in Dunedin, right up to the closure of the Cadbury Factory in 2018 (Oakley Gray Architects Ltd., 2010). Farminer (2014) is also more explicit in connecting the **cultural (and spiritual) significance** of the building with the first distillery and establishment of the New Zealand whiskey industry as well as its contribution to Dunedin's brewing culture as well as industrial character. Farminer (2014) further acknowledged the continuous association of the site with chocolate manufacture through the twentieth century as well as the more recent importance of the site for local tourism, emphasised by the identification of the Dairy and Machine House Building as the oldest building on site during Cadbury World tours.

As with the previous reports, the Farminer's (2014) review highlighted its **contextual significance** in relation to nineteenth-century industrial and social aspects of the building's history. While the façade at the time was considered to be of low value aesthetically it was noted to contribute to the townscape in that it enclosed the Cadbury site and was part of the wider Castle Street frontage (Farminer, 2014). Moreover, beyond Castle Street, the building also contributed to the city plan of Dunedin as an early trace of nineteenth century development.

In recognition of the specific **archaeological values** of the building, Brooks & Jacombs (2010) identified the potential to understand more about the construction, modification and use of the building, particularly in the change over time as it moved from a brewery to Confectionery and Dairy and Machine House Building. They along with Farminer (2014) also acknowledged the potential for subsurface remains to exist beneath the building prior to the construction of the cellar. Given the early date of the possible small mill (later machine house) and the cellar (later dairy) built soon after, Farminer (2014) noted that this building has high archaeological value given the original fabric they contain. Farminer (2014) also acknowledged that the alterations to the building provide "a richness and 'time-depth' to the site" in regard to the development of the site and as such are not solely detrimental to the buildings character but add to the story of the building. While the amenity value of the buildings was considered to be low, Farminer (2014) motioned that this would be high value if repairs were made to the building and it was made accessible to the public.

Having examined the building, Oakley Gray Architects Ltd (2010) assigned values of significance to specific elements of the building. Most elements were assessed to be of some significance, no heritage significance or

intrusive (i.e., detract from the overall cultural heritage significance); though some elements were assessed to have higher significance. Throughout the buildings, original brick walls painted and or plastered were considered to have some to considerable significance, except for the painted brick walls of the storage area and the 1870s walls in the tearoom on the first floor which were of considerable significance. Original timber columns throughout the building were assessed to be of considerable significance as well as elements relating to the timber first floor structure. A number of elements throughout the building were also considered to be of considerable significance including: tie rod ends/boss and timber framed windows on the exterior north façade; the exposed bluestone foundation in the interior of the machine house; the east and part south wall of the older original building at the west end of the machine house; the roof and eight light fixed timber framed windows of the storage area; timber window in WC 1; and an existing window in WC 2 (Oakley Gray Architects Ltd., 2010).

The roof of the west end of the machine house had some timber rafters, collar ties, sarking that were considered to be of some to considerable significance, as was the high opening in the original south wall gable. The underside of the first-floor timber structure associated with the original 1870s cellar construction had been altered, with holes filled in or hatches created so it was assessed to be either from considerable to no significance as was the floor in the storage area. Similarly, timber windows in a smoko room on the ground floor had been modified to incorporate glass louvres and was either intrusive or considerable significance as was the carpeted timber floor of the office space (Oakley Gray Architects Ltd., 2010).

6.3 Archaeological Sites within the Project Area

Prior to the start of the hospital development works, there was one recorded archaeological site within the Cadbury Block: site I44/817, the location of a nineteenth century commercial and industrial activity. As described above, this site sits on land that was reclaimed from the foreshore during the 1860s and was subsequently occupied by the New Zealand Distillery Company's distillery complex, the Albion Brewing Company's brewery and R. Hudson & Company's Confectionery factory (ArchSite 2018). Prior to this heritage impact assessment and associated archaeological assessments, only two nineteenth century buildings were noted to have survived on the site, a possible small mill built (also referred to as the machine house) in 1868 for the New Zealand Distillery Company and a ground-level brick cellar built in 1875 for the Albion Brewery. Both buildings were significantly altered for use as a Dairy and Machine House Building for R. Hudson & Co in the early twentieth century. Previous site visits had described the brick cellar/dairy as being in fair condition on the site record form, but this had not been updated since renovations were carried out in late 2017. This site has since been updated with the results of further historic research and site visit results of this report and associated archaeological assessment of effects for the Hospital development.

As part of the archaeological assessment for the Cadbury Block between Stuart Street and St Andrew Street, three other archaeological sites were recorded: sites I44/922, I44/924 and I44/923. The first was the A & T Burt Site which is situated within the extent of the Cadbury Confectionery Ltd buildings, on land that had been reclaimed in the 1860s. The pre-1900 history of the site was also commercial and industrial activity. As described above the site was occupied by the Otago Foundry, Dunedin Iron Works; New Zealand Implement Company, New Zealand Electrical and Engineering Company, and A & T Burt. By 1910, A & T Burt had taken over the entirety of the site.

I44/924 was located immediately adjacent to the Cadbury Confectionery Ltd Buildings and records the location of the McLeod Brothers soap and candle works operating from 1869 onwards, while I44/923 just south of this records the location of 1860s houses as well as Planet sawmills, followed by the Coombes and Sons Cumberland Street tannery and cottages. Interestingly the main tannery building at this site was owned by Richard Hudson of Hudson & Co in 1896 and fitted out as a roller flour milling plant for his biscuit and confectionery company (Otago Daily Times, 1900; DCC Archives). This was two years prior to purchasing the property on which the Cadbury Confectionery Ltd Buildings now stand.

In the wider Dunedin Hospital Development area (including the blocks to the immediate north and west of the site), 18 other sites have been recorded. Two sites I44/894 and I44/895, located in the block bounded by Bow Lane, Castle Street, and Anzac Avenue, are both locations of industrial occupation on land reclaimed from the foreshore in the 1870s and 1880s. Sixteen sites (I44/903 to I44/918) are located in the block bounded by Cumberland, Castle, Hanover, and St Andrew Street. The majority of these sites record domestic occupation. There was significantly less industrial and commercial activity in this block, however the few businesses located across the block included a coal and timber yard (I44/903), dairy (I44/907), shops (I44/909 and I44/908), and a factory (I44/918). Domestic residences were also located at each of these sites. All these sites were recorded as part of an assessment for the Cadbury Carpark block as part of the first stages of the Dunedin hospital development (Woods, 2019b, 2019a).

6.4 Archaeological Sites in Central Dunedin

There are currently 188 recorded archaeological sites in the central Dunedin area, including two Māori and 186 non-Māori sites (note: this does not include pending sites on ArchSite). Section 4 demonstrated that there has been both Māori and colonial occupation in the Dunedin area prior to 1900. The archaeological investigations that have been done in central Dunedin have been limited to areas where development has taken place and as such do not accurately reflect the abundance of archaeological sites in this part of the city. The distribution of archaeological sites in the vicinity of the Dunedin Hospital project area is shown in Figure 6-2.

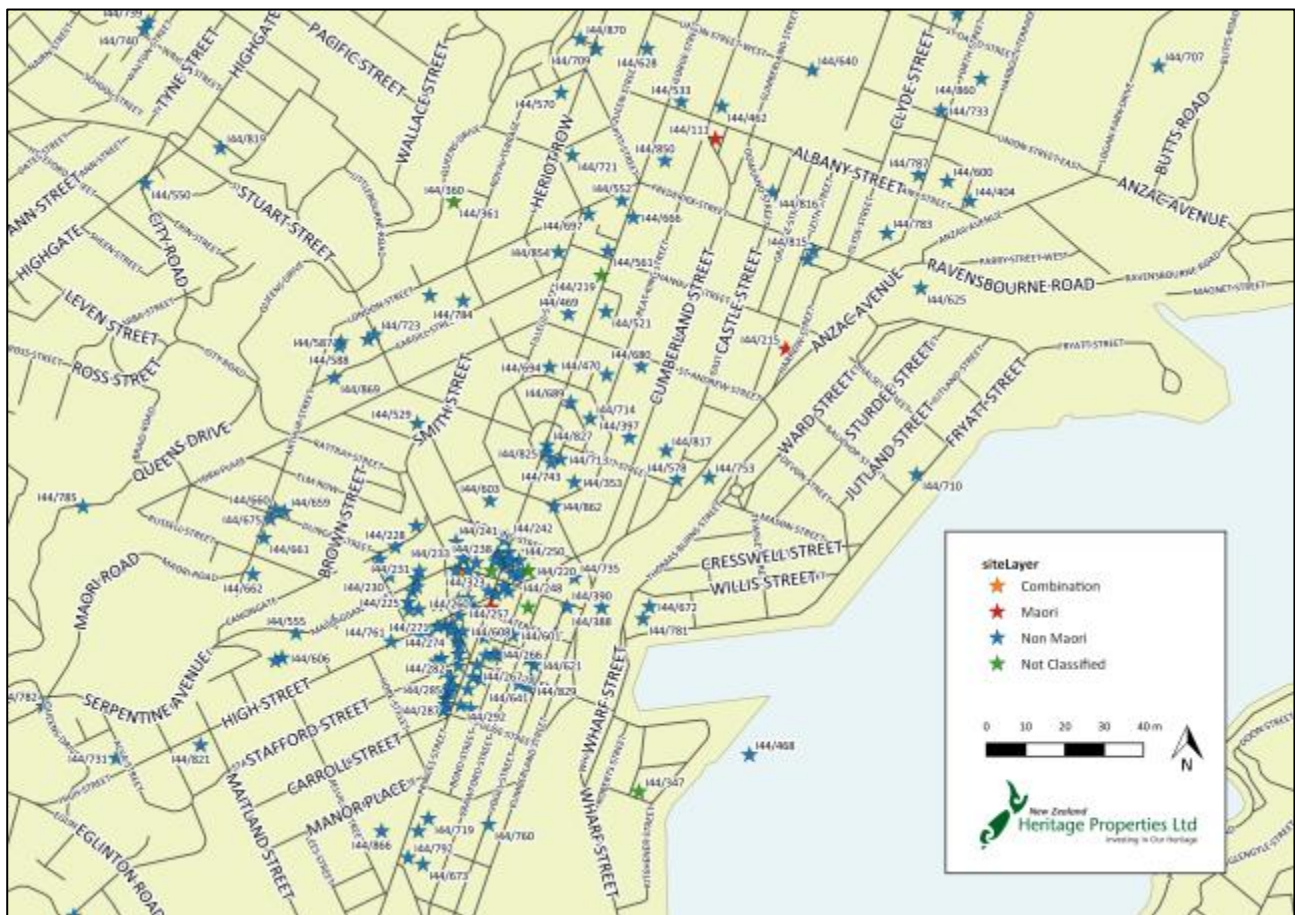


Figure 6-2. Archaeological sites within Central Dunedin.

6.4.1 Māori Sites

There are three previously recorded archaeological site in central Dunedin classified on ArchSite as being Māori; however, one is actually colonial in origin. Site I44/214 is the location of a canoe landing place at the mouth of the Toitū Stream, beneath the junction of Bond and Water Streets. This site was also the landing place for the first Scottish settlers who arrived in 1848. No physical remnants of the landing place are currently visible. Site I44/215

is the location of an adze discovered during drainage excavations on Harrow Street in the early 1990s. This location would have been along the original foreshore and illustrates the possibility of finding Māori archaeological remains in this area. Site I44/111 is classified as Māori on ArchSite and described as a “disturbed midden”; however, a review of the site record form reveals that the midden contained nineteenth century colonial material that was re-deposited on a triangle of land between SH1 and Walsh Street during the 1970s. The location of the two correctly classified Māori sites shows that there is a possibility of encountering Māori archaeological remains during excavations along the original foreshore of central Dunedin.

6.4.2 Colonial Sites

There are 186 previously recorded colonial archaeological sites in the central Dunedin area, with a cluster around the oldest part of town to the south of the Octagon and the remainder of the sites more scattered. The most common site type in this area is commercial/industrial (n=82), which includes sites of nineteenth century stores, warehouses, hotels, foundries, factories and other commercial/industrial premises. These sites are generally found within the modern central business district, either side of the Octagon, and reflect this area’s past as the manufacturing centre of the settlement. Domestic sites account for 55 colonial sites within central Dunedin and include a range of housing types from clusters of small working-class rental accommodation in the centre city to large middle-class estates in the hill suburbs. Twenty-five colonial sites fall under the transport and communication heading and include historic roads, the railway station (I44/390), Jetty Street Wharf (I44/468) and areas of cobbles, setts and nineteenth century kerb and channel. The remaining colonial sites in the area relate to the administrative and recreational development of the city and include sites such as banks, police stations, schools, memorials and council chambers. The spatial distribution of these sites reflects the expansion of Dunedin during the nineteenth century.

6.5 Specific Site Types in the Archaeological Record

This assessment has identified a range of archaeological sites within the hospital project area, and many are types that are regularly found in urban contexts around New Zealand. Undertaking a review of similar sites that have been previously recorded can help inform the assessment of values for the sites within the project area and also provide insights into the types of features, remains and/or material that may be encountered during the proposed works.

6.5.1 Commercial and Industrial Sites

In general, commercial and/or industrial sites are one of the most common archaeological site types in New Zealand. This is partly due to the nature of commercial activity and the regular refitting, altering and redeveloping these buildings undergo throughout their use-lives. Across the South Island, there are more than 500 recorded commercial/industrial sites on the ArchSite database, with examples found in almost every urban area. The nature of these sites is extremely varied due to the wide range of activities that fall under the commercial/industrial heading, however there are some general trends noticeable among those sites that have been investigated. Commercial and industrial scale activities produce more waste than residential occupation, and the type of waste produced is usually more uniform than that found on residential sites.

Several large mixed commercial/industrial sites have been investigated in Dunedin, and all have resulted in large artefact assemblages that tend to fit in with recorded activities on the property, thus allowing for an in depth look at specific industries and companies. At the Farmers site, material and contexts relating to various site occupants were recorded, including a monumental mason, livery stables, cordial factory and bootmakers (Petchey, 2004). Across George Street, development of the Wall Street Mall encountered remains relating to a timber yard, hotels and various shops (Petchey, 2009b). Investigations at 356-358 George Street found deposits of glass chemical bottles from the site’s use as a photography studio in the late nineteenth century (Davies, Cawte, Murray, & Forster-Garbutt, 2016). At each of these sites, the commercial deposits were found alongside, and sometimes mixed within, material relating to domestic occupation. It is highly likely that this will also be the case for the Dunedin Hospital project area.

Mixed commercial/industrial sites investigated in Christchurch have produced similar assemblages and encountered similar archaeological contexts. Perhaps one of the most comparable to the proposed works is the Justice and Emergency Services Precinct in Christchurch that covered 12 town sections (Williams, Garland, & Geary Nichol, 2017). Across this site, 190 archaeological features were recorded and a sample of 13,400 artefact fragments representing a minimum of 5636 items was recovered. Features and deposits were able to be attributed to several known commercial enterprises that occupied parts of the site during the nineteenth century, including a sawmill, foundry, bootmaker, milliner and tailor. In addition to these specific commercial features and deposits, a gully crossing the site was filled with general waste from the surrounding properties. Analysis of the archaeological features and artefacts revealed a clear shift from residential occupation to commercial and industrial at the site. This shift was a gradual one and so there were several decades when people were living among commercial and industrial premises, and often dumping their household waste in the same place as the businesses. A similar, but far smaller, site was investigated in Lyttelton (Tremlett, Garland, & Whybrew, 2017) and similar trends were observed. Large dumps of aerated water bottles and areas stained with coal dust were found amongst more mixed deposits of general refuse and were able to be attributed to Curtis & Co., an aerated water manufacturer and coal merchant who occupied the site during the nineteenth century.

6.5.2 *Brewery Sites*

Just ten breweries have been registered with ArchSite in the South Island, and a further four sites with hop kilns have been recorded. Five previously recorded breweries within Dunedin provide comparisons for those within the project area. Two of these sites are of interest. The first is the Water of Leith Brewery, located at the intersection of Cumberland Street and Duke Street. This brewery was established in 1862 by John Marshall and James Copeland, who operated out of the premises until 1879 (Cable, 2005), the year after they purchased the Albion Brewing Company at the location of the Cadbury Confectionery Ltd buildings. The business was incredibly successful and the largest brewery in Otago it was appreciated locally and overseas (Leckie, 1997). While newspaper reports indicate they did not operate out of the premises after 1879 (Otago Daily Times, 1879), they still continued to own the brewery, until they sold it to Williamson and Murray, along with the Albion brewery, in 1887 (Taranaki Herald, 1887). The Water of Leith brewery was eventually sold to McGavin and Co. in 1899 and became the Union Brewery (Cable, 2005; Hawkes Bay Herald, 1868). The brewery was demolished in 1976 when the Cumberland one-way system was established (Cable, 2005). There was no archaeological report prepared as part of the demolition, nor have there been further subsurface archaeological investigations since this time.

The second site of interest is the Speights Brewery (I44/233), which is the only brewery in the South Island to have had a final report submitted to Heritage New Zealand detailing the archaeology at the site (Gillies & Farminer, 2015). It is suggested that brewery sites will have a common set of inter-related buildings, such as the maltings/brewhouse, cellars, malt kiln, offices, due to the necessary functional requirements (Gillies & Farminer, 2015). Cobbled floors were identified at the Speights Brewery (Gillies & Farminer, 2015), and such features may therefore be expected at the brewery sites identified within the project area.

Elsewhere in the South Island, the Black Eagle Brewery in Invercargill has been investigated archaeologically (Lewis, Cropper, Woods, Cawte, & Scrivener, 2018). Similar structural features to those found at the Speights site were encountered, as well as numerous bottle dumps that enabled changes in bottle manufacture and styles throughout the brewery's life to be examined (Lewis et al., 2018).

6.5.3 *Foundry Sites*

Thirteen foundry sites have been previously recorded on ArchSite in the South Island, three of which are located in Dunedin. These sites include the Vulcan Foundry at 232-242 George Street (I44/521), an unnamed foundry at 154 Dundas Street (I44/712) and the Victoria Foundry at the Otago Dental School Complex (I44/850). All three sites have been excavated a various archaeological remains associated with each of the foundries were identified. During independent archaeological investigations a crucible and iron ore lens were identified at the Vulcan

Foundry (Middleton & Maxwell, 2011); the location of a foundry at 154 Dundas Street was confirmed by the identification of kaolin/firebricks and other nineteenth century deposits as well as a metal slag deposit (Forster-Garbutt, 2017); and, the concrete foundations of the Victoria Foundry was exposed during excavations at this site (Gaffney, Russell, Woods, & Greig, 2018).

As identified above excavations of foundries have occurred elsewhere in the South Island, in particular Christchurch where the majority of foundry sites (eight in total) are located. On top of a number of nineteenth century foundries recorded as part of the Justice and Emergency Services Precinct, other foundries around Christchurch have been identified archaeologically. Excavations have encountered rubbish pits filled with coal ash and metal slag, furnaces, box drains, and concrete pads relating to the P and D Duncan Foundry at 194 Tuam Street (Dooley, Haley, & Dickson, 2018); brick furnaces associated with an unnamed foundry have been exposed at 550 Columbo Street (Dodd, 2011); and, a charcoal stained deposit containing large amounts of metal waste was possibly associated with the Atlas Foundry at 63-65 Manchester Street (Hickey & Tremlett, 2016). Each of these sites highlight the potential of unearthing foundry associated remains within the Cadbury Block.

6.5.4 *Domestic Sites*

In total, 43 historic domestic sites have been recorded on ArchSite in Dunedin with a further ten historic land parcels being recorded. Several of these domestic sites have been investigated and can act as comparisons for those within the project area. Nineteenth century residential occupation sites saw a range of activities through their use life. These sites, unlike today, would have been used for various activities such as growing food and discarding household refuse. The backyard would have also included outbuildings associated with the house, such as the privy, fowl house and coal shed. Two types of remains will most likely be encountered in the project area: rubbish deposit features and structural features associated with the dwellings and outbuildings.

Late nineteenth and early twentieth century household rubbish deposits vary from modern disposal practices. Items during these times were intended to have longer use lives than what we have today, and therefore the majority of deposited items would have been broken or no longer needed for their purpose. On occasion householders did discard unbroken items, but this was generally a result of a major life event such as a marriage (Campbell & Furey, 2013) or as a result of deliberately conspicuous consumption (Woods, 2017). Items that had a short use or single use life were generally made from organic materials which do not survive in the archaeological record. Household refuse disposal and back yard spaces have been recorded at numerous sites in Dunedin, and so they can be used to inform the material and features likely to be encountered during this project. A site at 26 St David Street (I44/568) was occupied by various households from the mid-1860s onwards alongside small commercial premises, however the material recovered appear to all relate to the domestic occupation (Lawrence, 2014). Part of the Wall Street mall site (I44/469) was occupied by a group of small tenanted working-class cottages nestled between commercial and industrial properties and a sheet refuse deposit was attributed to the cottage occupants (Petchey, 2009a). In comparison, the Countdown development in Mosgiel encountered a range of domestic sites due to the extent of the earthworks that were undertaken. A total of 84 pits were identified in the area and were dug for the use of disposing household rubbish (Cropper, D.; Watson, C.; Woods, N.; Cawte, 2018). The sites with the longest history of occupation had the largest number of pits, with 23 pits being the highest number identified for a singular site (Cropper, D.; Watson, C.; Woods, N.; Cawte, 2018).

Structural remains of domestic houses are one of the more prominent features when investigating pre-1900 houses. These remains vary greatly from building footprints, piles and stone floors to retaining walls, cellars and brick work. One site within Dunedin that demonstrates these structural remains is the site at 159 Leith Street (I44/554). This was the site of a domestic residence that was constructed in 1877. The house was demolished and under it were the remains of the original piles (McPherson, Dyer, Taylor, Shaw, & Cawte, 2013). A site with slightly different features is “The Chesnuts” at 403 High Street, Dunedin (I44/821). This was a site of domestic occupation stretching back as early as 1862. The house was demolished in the 1930s, though some structural remains were identifiable at the time of the site visit including several concrete and stone retaining walls (Woods, 2017).

It is suggested that domestic sites will see both types of remains, structural and artefactual. Rubbish deposits will most likely be encountered in the backyard areas of the site, while structural remains may vary across the site depending on the use of the area over time.

6.6 Heritage Sites within Dunedin

Dunedin is well known for its rich built heritage and architectural history. Following European settlement of Dunedin, the earliest buildings were situated around the vicinity of Princes and Rattray Street. The buildings included late Regency cottages and hip and gable roofed houses. A number of the larger two-storey houses featured dormers, while the smaller one storey buildings were often just four roomed cottages. An early commercial building was a large stone store at the end of Jetty Street on the edge of the harbour. Scottish vernacular architectural styles feed into many of the designs around the city such as the Presbyterian church (Findlay, 2009). By 1858 there were 291 houses throughout Dunedin. Most were made of timber (207), 13 brick, 13 iron, 2 stone and 56 made of alternative materials. The latter were predominantly wattle and daub and ponga log (Findlay, 2009).

As noted above in Section 4, following the Otago Gold Rush in 1861, the early cottage structures were replaced by two-storey buildings. Offices clustered in the centre of Dunedin, especially at the exchange area, while retail buildings (and development in general) continued to expand northwards up along George Street and southwards further down Princes Street. Accompanying these developments, hotels appeared all the way from Manor Street in the south to Fredrick Street in the north. Clusters of tents appeared on undeveloped sections on the hills above Princes Street, and new houses were constructed on the flats to the north and south. The inner-city residential areas developed in concert with the development of businesses in the town centre. Many of the 1850s building were incorporated into later structures (Findlay, 2009). Despite this there is little surface remains of the buildings associated with the first decade of occupation in the city. The Victorian/Edwardian appearance of the city still emanates through the design and appearance of later nineteenth century buildings throughout the city.

Following stages of reclamation, industrial areas sprouted in the lower central Dunedin area where low-lying muddy ground was prevalent. The distillery, brewery and factories that occupied the Cadbury Confectionery Ltd Buildings, represent this industrial development (Figure 6-3). Unfortunately, industrial heritage sites have been neglected throughout New Zealand as grand public buildings (e.g., churches and town halls) typically steal the show. However more recently there has been more recognition for the history and the heritage potential of industrial built environment. Dunedin's Warehouse Precinct provides a good example of the positive steps to reinvigorating a landscape of factories and warehouse (Trapeznik, 2014). In this space the heritage, aesthetic, and functional values of these buildings have started to be realised and a number have been restored and repurposed, highlighting a valuable historical landscape in Dunedin's central city.

Within Dunedin, there are 368 items on the New Zealand Heritage List/Rārangi Kōrero. Of these 123 are located with Dunedin's central suburbs (Stuart Street to Frederick Street, Harbourside, High Street to Stuart Street, and Fernhill). The most common type of the listed sites within this central area are commercial items (41), followed by domestic (29) and civic (23) items. Only one item on the List in this area, beyond the Cadbury Confectionery Ltd Buildings, was industrial manufacturing sites: Dunedin Harbourside Historic Area (List No. 7767). However, there are a number of buildings such as the NZ Clothing Company Limited Building (List No. 2159), Crown Milling Company Building (List No. 366), Kempthorne Prosser Building (List No. 4729) and the H.E. Shacklock Buildings (List No. 2160) which have been identified as factory and manufacturing buildings or associated with such activity but have not been categorised as manufacturing buildings in the Listings details (Trapeznik, 2014).

In the immediate vicinity of the Cadbury Confectionery Buildings Ltd there are no other industrial buildings. The Anzac Square/Railway Heritage Precinct (TH11), which Cadbury Confection Buildings Ltd was considered part of in the 2006 Dunedin City District Plan, contains three other listed civic and transport related buildings. The three other buildings that make up this precinct are the Dunedin Railway Station, Platform and Gates (B005; List No. 5); the Dunedin Law Courts (B560, List No. 4374); and, the Dunedin Prison (B269, List No. 4035). Two other

commercial building façades in this Precinct are registered on the District Plan within the TH11 Heritage Precinct: the Station Mews, former Stones Publishers (B004) and McCarthy's buildings on the corner of Stuart and Castle Street (B561).

The proximity of the Cadbury Confectionery Buildings Ltd to the Railway Station is not coincidental, but in fact a reflection of the importance of infrastructure for commercial success. For R. Hudson and Co. and likely other business established nearby the railway station connected their businesses to wider markets and was a pull factor in deciding the location for establishing their businesses.

Other listed items located in close proximity to the Cadbury Confectionery Buildings Ltd include the Allied Press Ltd Building (List No. 2135; B564); Fitness Centre Building (List No. 2153; B565); Security Building (List No. 2216; B567); Allbell Chambers (List No. 2134; B568); and, Stephens Inks Building (List No. 2219; B411). All of these buildings are commercial office buildings. There is only one building, located slightly further away, that is scheduled building that is associated with confectionary: The May & Co. Factory at 249 Cumberland Street (B048). Thus the, the Cadbury Confectionery Buildings Ltd represents one of the last ties to continuous nineteenth and twentieth century manufacturing history in this area.



Figure 6-3 Engraving showing Dunedin in 1875. The block in which the Cadbury Confectionery Ltd Buildings are located is outlined in red. Note the boggy nature of the land in and surrounding the block (Cooke, A. B. in Findlay, 2009: Figure 19).

6.6.1 Other Heritage Sites within Block XVI

There are a number of scheduled heritage buildings located within Block XVI. All buildings to the south of the Cadbury Confectionery Ltd Buildings formed part of the George Street or Lower Stuart Street Townscapes (TH10 and TH11) in the 2006 District Plan. They also form part of the Stuart Street Commercial Heritage Precinct in the 2GP. The Dunedin Allied Press Ltd Building at 52 Stuart Street is scheduled as a heritage building on both the 2006 and 2GP Dunedin City District Plan as B564, protecting facades to Cumberland and Stuart Streets, including all shop fronts. Plans for the new Evening Star building, or what would become known as the Dunedin Allied Press Ltd Building, on the corner of Cumberland and Stuart Streets were designed by Edmund Anscombe in 1926. Two years later the building had been completed (Coulter, 1992). This building is also listed as a Category 2 Listed Place (List No. 2135) on the Rārangi Kōrero/The New Zealand Heritage List.

The building at 2-14 Stuart Street is scheduled as a heritage building on the 2006 and 2GP Dunedin City District Plan as B561, protecting facades to Stuart and Castle Streets. This building was constructed in 1907, designed by architects Walden & Barton (David Murray, 2013) and occupied by A & W McCarthy. McCarthy specialised in

guns, locks, and fishing equipment, while the building itself was home to their offices, shops and workshops (David Murray, 2013). Arthur McCarthy was an interesting individual. As a pacifist he studied both Marxism and socialism, opposed World War I conscription. Moreover he became the United Labour Party's national secretary in 1912 (David Murray, 2013).

There are some changes in the 2GP City District Plan as the three buildings at 18, 28-30 and 52 Stuart Street are scheduled as character contributing buildings (respectively CC062, CC063 and CC702). The building at 18 Stuart Street (CC062) is the only other building on the block constructed prior to 1900. The building was built sometime between 1874 and the late 1880 and according block plans (Bare, 1889), by 1889 was home to the Supreme Court Hotel. The building continued to be used as a hotel into the twentieth century, although it changed names multiple times. These names included Empire Rest (Jones, 1892), City Buffet Hotel (Council of the Fire Underwriters Association of New Zealand, 1922); and Miramar Private Hotel ("Fire Insurance Plans," 1927). The neighbouring building at 28-30 Stuart Street (CC063) was constructed between 1922 and 1927 and was occupied by Mooney and Co. Wool and Skin Merchants in the 1920s ("Fire Insurance Plans," 1927). The last character contributing building is situated on the same land parcel as the Allied Press Building; however, it forms the Castle Street frontage of the property. This is the 1922-7 building that housed International Harvester Co. of N.Z. Ltd and wholesale merchants Riach and McLennan (CC702). Within the same property one other building still present today and constructed in the 1920s facing out to Castle Street was occupied by the Co-operative Dairy Company of Otago ("Fire Insurance Plans," 1927). Part of this building has been removed in the twentieth century but the portion front on to Castle Street still stands.

These buildings predominantly relate to the early twentieth century commercial development of the area, rather than the industrial activity that dominated the block further east. However, it is interesting to note that the Co-operative Dairy Company likely supplied R Hudson and Co. and later Cadbury Fry Hudson with dairy products. Indeed, such a relationship may have spurred their presence at this location.

The building at 249 Cumberland Street (a block further south from the Cadbury Confectionary Ltd Buildings) was designed by George William Gough and constructed in 1900. The building is scheduled on the both the 2006 District Plan and the 2GP as B047 with the building's façade and bulk appearance to Cumberland Street are protected. Of importance to this project, is that the building was constructed as a confectionery factory by H. May & Co. However, following the financial troubles led to the labelling of Henry May as a "wholesale forger" and he allegedly "carried on a system of forging other men's names as endorsement to his bills. It was speculated at the time that his "suicide by drowning in St. Clair Baths" was a result of his business concerns (Evening Post, 1901). In the same years as May's death, R. Wilson & Co. took over the premises for the production of coffees, teas and spices (D Murray, 2013). While the products changed rapidly after initial development, the occupants of the building in the early twentieth century focused on the production of food and drink.

6.6.2 Industrial Heritage Sites within Dunedin

The closest listed industrial buildings to the Cadbury Confectionery Ltd Buildings are those included in the Dunedin Harbourside Historic Area (List No. 7767). This area covers the land between Roberts and Creswell Streets between the current harbourside and the railway line. The buildings in this area are associated with port operations and associated businesses that developed in the early twentieth century, around the same time as the beginnings of the R Hudson & Co.'s factories in Cumberland Street (Beauchop, 2008). This development followed reclamation of the area at the end of the nineteenth century. The key importance of this area is that it was the convergence point of land and sea transportation. While there were many different businesses in the area, all were in some way tied to the servicing of the ships and their cargo (i.e., ships chandlers, harbour boards, marine engineering works, and customs). The port connected Dunedin with the rest of the nation and wider global trade networks. Even before the establishment of this area, Richard Hudson sold his biscuits on the wharves to the seafarers sailing in and out of Dunedin. This marks the importance of a wider market that Richard Hudson tapped into. Like the railway station, the portside offered a direct connection to national and even international markets (Beauchop, 2008). The port also offered a more local space for connections as an epicentre of a variety of

workplaces and their relationships with the wider city, as well as a meeting point for visitors to Dunedin arriving off the incoming ships.

The wider area registered on the list is a product of the long industrial history of the area ranging from engineering to warehouse structures. The facades of the buildings that survive presently reflect their uses, especially the “rhythms of the engineering works and wharf sheds” (Beauchop, 2008). From an architectural perspective the buildings further provide a variety of design ideas and building types. The utilitarian buildings in particular hold an architectural value in the streetscape as their form is a product of the function. These buildings are also important from a technological perspective as not only do the buildings themselves offer different building technologies, but also technological developments associated with the business occupying the buildings. While there are buildings that do not contribute to the historic and architectural values of the area, development of these buildings are recommended to be sympathetic to the wider historic area (Beauchop, 2008).

Some of the buildings within the Dunedin Harbourside Historic Area are located within the Queens Gardens Heritage Precinct (TH12) and three registered buildings on the District Plan (B106, B754, B755). There are 19 other registered items in the Historic Area also registered on the District Plan. These include such industrial buildings as the Iron & Steel Company of New Zealand Ltd Store (B759) and Dunedin Engineering & Steel buildings (B766 and B767). While the Queens Gardens Heritage Precinct is no longer present in the 2GP, all of the heritage items are still registered.

The next closest collection of industrial buildings is that of the Warehouse Precinct. The warehouse precinct was not a specific registered area on the HNZPT List or the 2006 District Plan. However it has been identified as an area of special heritage importance and was reported on by Trapeznik (2014). At this time Trapeznik (2014), identified the area of industrial heritage to cover the land within the bounds of the harbourside, Princes Street, Queens Gardens and the Oval. This was not a recognised precinct on the 2006 District Plan however the area overlapped with the Queens Gardens Heritage Precinct (TH12) and the Vogel Street Heritage Precinct (TH13). In the 2GP, the Warehouse Industrial Commercial Heritage Precinct is registered however it covers land between Rattray, Police Cumberland Streets and stops between Bond and Princess Streets. As the registered items discussed below are still registered on the 2GP, the area identified by Trapeznik (2014) is referred to as the Warehouse precinct.

The buildings include some derelict as well as others that have been revamped to portray the beauty in utilitarian nature of the building in appreciation of the warehouse precincts heritage (Trapeznik, 2014). While the majority of the buildings still standing in this area were warehouses, offices and stores, some buildings are directly associated with historic manufacturing that occurred in the Precinct. This area is a number of buildings relating to different type of industries than seen in and around the Cadbury Confectionery Ltd Buildings. The Hallensteins’ clothing factory opening in Dowling Street in 1883 (List No. 2159; B061). This building, a Category 1 listed place, is notable in that it is unmodified for a warehouse and factory, with a classical façade that is largely unchanged since 1905. It is “considered to be the best of Dunedin’s early warehouses” (HNZPT, n.d.-c). This was one of Hallensteins early factories, with production located on the upper two storeys of the building where 250 to 300 people worked, and the ground floor was used for storage, packing and receiving goods. This building supplied all 36 Hallensteins stores around New Zealand (HNZPT, n.d.-c; Trapeznik, 2014). The first premises of Hallensteins from 1874 is also listed as the Taimex Building (List No. 4745, B508), though there are few details in the Listing for this building (HNZPT, n.d.-c; Trapeznik, 2014).

H. E. Shacklock Buildings (List No. 2160, B498) were the location of Shacklock and Co iron foundry in 1892. Prior to this the building had been a grain and wool store owned by William Larnach. Over the course of the twentieth century the firm extended the premises north and south and expanded their repertoire and continued to produce coal ranges until 1971. The façade of the grain and wool store building was retained although the building itself was extensively modified (Trapeznik, 2014). There are few details for this building in the HNZPT listing.

There are a number of buildings associated with the industrial heritage of the warehouse precinct, in particular the manufacturing of goods that are not on the New Zealand Heritage List however the façades are listed on the Dunedin City District Plan. These include the building at 13 Stafford Street which was used as a clothing factory by TG Pascoe's from 1878 and subsequently by Ross and Glendining in 1889 (B548). The firm had three factories housing a thousand workers near the Exchange (Trapeznik, 2014). Ross and Glendining had their former factory at 8 Stafford Street, which is scheduled along with their warehouse at 167 & 169 High Street, as B273.

Immediately west of the warehouse precinct was the largest drug manufacturer and importer in New Zealand was Kempthorne Prosser and Co. located at the Savemart building on Stafford Street (List No. 4729; B549) and is considered to be a good example of a Victorian industrial building. Kempthorne Prosser and Co. was founded in 1863. Originally, they were located at the Sew Hoy and Sons head office is today, until the 1870s and they moved into the Savemart building, following an earlier drug merchant. Kempthorne Prosser and Co. were successful and formed a public company in 1879 and they company continued to run until the 1970s (HNZPT, n.d.-b).

Just beyond the warehouse district another listed factory building is Crown Milling Company Building (List No. 366; B388) located on Manor Place, which was initially used as a stone mill by Anderson and Mouat from 1867. The brick building has been altered multiple times in the 1870s and 1890s, though the Listing details notes that "the building has benefitted greatly from these alterations and additions". The "functional and quite striking" building is also distinguished as a noteworthy instance of Victorian Industrial architecture (HNZPT, n.d.-a).

Beyond the central city (i.e. Stuart Street to Frederick Street, Harbourside, High Street to Stuart Street, and Fernhill suburbs), only one other building in Dunedin is listed as a manufacturing factory/workshop. This is Romison's Confectionery Works (List No. 9720) (Beauchop, 2018). This building was constructed in 1910, almost a decade after R. Hudson and Co. established their business at the Cumberland and Castle Street premises. The building was used as a factory until the 1940s and Romison was another local confectioner who had established his business in Dunedin in the 1880s. When the Romison retired the business was sold and moved to Oamaru and still operates today as the Rainbow Confectionery. The building was later used as the popular University Bookshop, significantly contributing to the literary culture of Dunedin. The building today survives as a relatively unaltered Edwardian factory. It had been designed by Edmund Anscombe and presents a utilitarian design however its three gabled roof a notable element of the Great King Street streetscape (Beauchop, 2018). This building is not registered on the 2006 District Plan or the 2GP.

Of note throughout the heritage sites throughout Dunedin, and in particular those relating to industrial activity, is that each building reflects the specific uses of the building and the different requirements of the vast array of manufactured goods in Dunedin. There are few industrial manufacturing buildings remaining in the central city, and only one other building, other than the Cadbury Confectionery Ltd buildings, that relate to the manufacture of biscuits and chocolate and no representations of early distillery activity in the city. However, in contrast to the Cadbury Confectionery Ltd Buildings, those industrial manufacturing buildings that do remain are largely unmodified examples of late nineteenth and early twentieth century manufacturing buildings, contributing significantly to the local streetscapes.

7 On-Site Observations

Site visits were undertaken over multiple days by Hayden Cawte, Dawn Cropper, and Megan Lawrence on 11, 18 and 28 April 2019. The purpose of this visit was to make a photographic record of the exterior and interior of the buildings and to assess the visible building fabric, primarily focussing on the facades and any remains of pre-1900 materials or features. An examination of the Cadbury Confectionery Ltd Buildings within the wider streetscape was also considered during the site visit. A detailed photographic record of the Cadbury Confectionery Ltd buildings is included in Appendix B.

7.1 Building Layout

The site is presently occupied by a complex of commercial buildings, separated out into blocks with the buildings labelled south to north as blocks one through five and running west to east labelled A through C (Figure 7-1). These blocks are arbitrary and can refer to one or multiple buildings, however they provide an easy locational reference throughout the wider Cadbury Factory extent. Thus, the buildings in the southwest corner of the property can be easily referred to as Block 1A. There are two further blocks (six and seven) to the north which are beyond the extent of the scheduled and listed Cadbury Confectionery Ltd buildings within Blocks 1A to 5C.

There are seven buildings that form the facades listed as part of the Cadbury Confectionery Ltd (B030 on the 2006 Dunedin City District Plan and the 2GP) or Cadbury Schweppes Hudson Ltd buildings (List No. 2143). The buildings were originally listed on the New Zealand Heritage List/Rārangī Kōrero as the extended façade of four buildings; however, neither 2006 Dunedin City District Plan nor the 2GP specified a number of buildings scheduled. Defined by their historic development from construction, alterations, and the current extents and usage, seven buildings have been identified in this report as forming the façades to Cumberland and Castle Streets. These buildings have been defined as follows:

- **Dairy and Machine House Building (Block 1B-C):** While currently empty, the building incorporates the 1875 cellar and the 1868 possible small mill. Later functions include mixing room machine/engine room, offices and dairy. The building is situated southeast extent of the property and forms the southern extent of the Castle Street façade.
- **Cadbury World Building (Block 1A)** The building incorporates the 1868 granary/malt floor and kiln building and later functions including a grain store and smutters room. The building was converted into Cadbury World in the early 2000s and later a café in 2014. The Cadbury World runs the along southern and western extents of the property forming the southern portion of the Cumberland Street façade.
- **Office Building (Block 2A):** The building incorporates the northern end of 1868 granary/malt floor building, while later construction encapsulated this structure the building was used for other purposes such as grain storage, dining, dressing and mixing rooms and chocolate packing. The building was converted to office and reception in the 1980s. The Office Building runs the western extent of the property forming part of the Cumberland Street façade with adjacent Cadbury World and Chocolate Factory and Garage Building.
- **Chocolate Factory and Garage Building (Block 3A):** Over various phases of construction from the 1920s, this building was used as a chocolate factory and garage. More recent uses for the building include space for raw materials and pilot plant. This building forms the central portion of the Cumberland Street façade.
- **Chocolate and Biscuit Factory (Block 3B-C):** Over various phases of construction from the 1920s, this building was predominantly used as a chocolate factory, as well as a biscuit factory and dining and cloak room. More recent and details uses for the building include space for raw materials, van camp and a cafeteria. This building forms the central portion of the Castle Street façade.
- **Engineering Workshop, Labs, and Offices (Block 4A):** The building was constructed in the 1960s and while changes to the interior have been made, the building footprint has not been altered. The building has been used for food testing as well as board rooms and tour spaces. The building forms part of

Cumberland Street façade immediately adjacent to the Biscuit Factory and Dispatch Building and the Chocolate and Biscuit Factory.

- **Biscuit Factory and Dispatch Building (Block 4C, 5A-C):** Initially constructed in the 1950s, this building was predominantly used as Biscuit Factory and Dispatch Building, however it has been more recently used as a chocolate making factory, engineers' workshop, tin washing, starch packing, enrobing, moulding and drying rooms, mould wash, packing rooms and more. The building forms the northern extent of both the Cumberland Street and Castle Street façades.

The onsite observations below focus on the listed and scheduled buildings; however, there are other buildings located throughout the site. A central boiler room building and powerhouse building (both in Block 4B), are also located within the project area, as is a modern loading bay that separates the dairy and Cadbury World buildings. These buildings, although located within the extent of archaeological sites I44/922 and I44/817, were constructed after 1900 and do not have street façades. As such they are not registered or listed as a heritage buildings structures and they do not trigger building archaeological requirements. Silos accessible from the biscuit and dispatch building do feature prominently in the Castle Street frontage; however, these were relocated to this location in the 1990s. These buildings are only touched on briefly in the following sections. All other areas are paved for pedestrian and vehicle access.

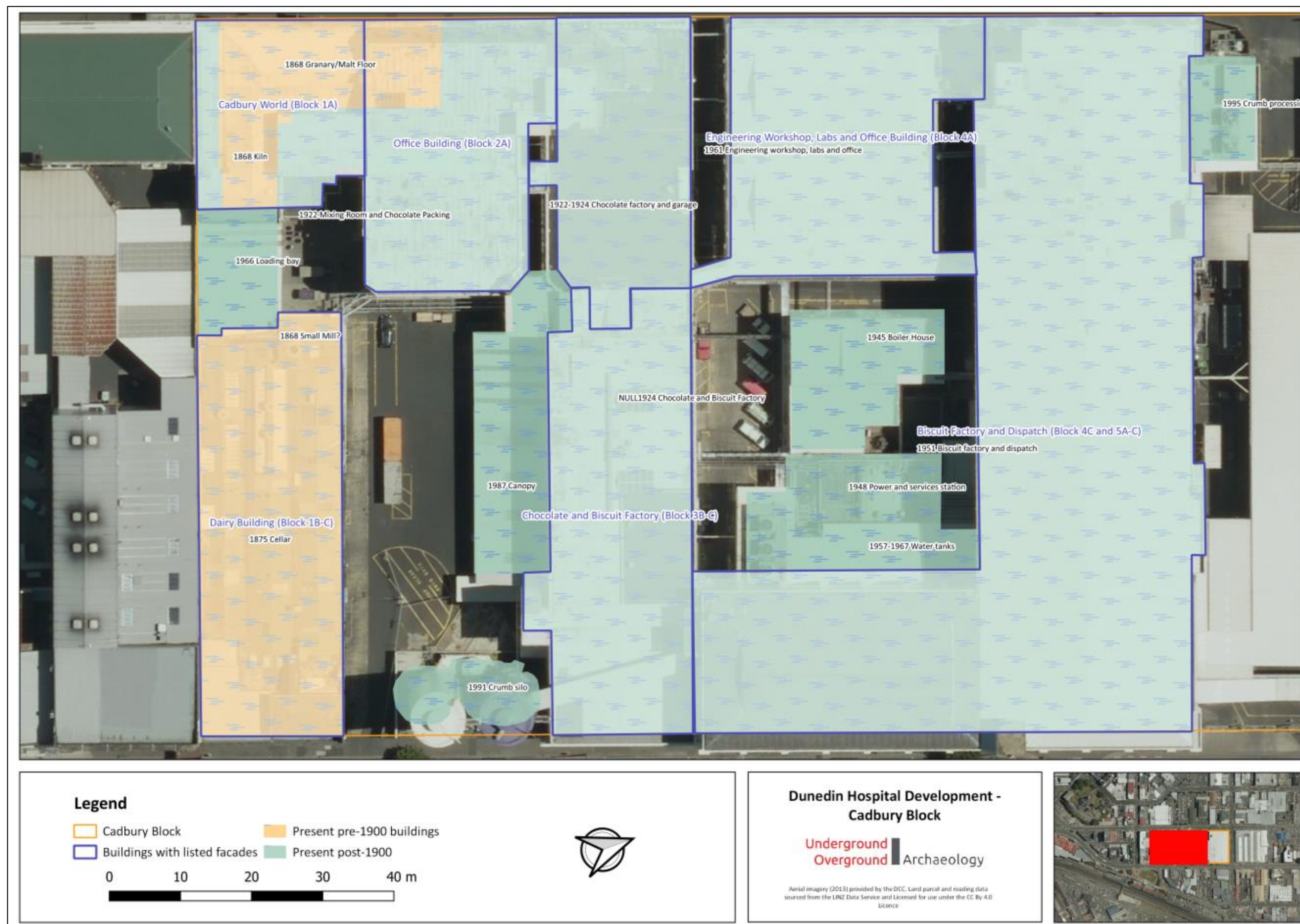


Figure 7-1. Aerial image showing the Cadbury Confectionery Limited Buildings (including the Dairy and Machine House, Cadbury World, Office, Chocolate Factory and Garage, and Biscuit Factory and Dispatch Buildings) with present post-1900 and pre-1900 buildings.

7.2 Dairy and Machine House Building (Block 1B-C)

The Dairy and Machine House Building is situated in the southwest corner of the project area on what was once Sections 53 and 74 Block XVI, forming a Castle Street façade. It is a two-storey building that is rectangular in plan and is currently empty (Table 7-1 and Figure 7-2). While there are two entrances to the building from Castle Street, these entrances remained unused following changes to the façade in 2018. There are also pedestrian and vehicle entrances to the building located along the northern elevation accessed via the paved access area. The first floor of the building could not be accessed due to health and safety concerns of stability.

Table 7-1. Summary of built structures at 280 Cumberland Street: Dairy and Machine House Building (Block 1B-C).

Number of Floors	2
Rooms per Floor	Ground Floor – 4 rooms Floor 1 – Not accessible
Roof style	Multi-gable with cross gable/Single Gable/mono-pitched
Roof Material	Corrugated iron
Windows	Fixed (multi-pane)
Foundations	Unknown
Floors	Concrete
Ceilings	N/A
Wall construction material	Brick
Wall Coverings	Plaster/paint
Floor Covering	Penny tiles (restricted to a small entryway); other areas have no coverings
Distinctive Modifications	• Initial construction of possible small mill in 1868 and cellar around 1875 • Addition of stone masonry façade between late 1870s and 1902 • By around 1910 east end converted to offices • Façade change in 1918 with plaster and brick detailing • Construction of chimney stack to possible small mill building in 1931 • Lunchroom added to the top of the building by 1947 • Timber floor and roof structure at west end of the building replaced with steel framework likely around 1949. • Building façade plaster between 1947 and 1954 • 1957 modernisation of façade striping the plaster and brick detailing • Concrete flooring in southeast corner of building raised to align with central concrete floor in 1959 • Temporary corrugated iron second storey of small mill added between 1889 and 1922 replaced in 1960s by brick • 1966 alterations to the internal layout of first floor • Lunchroom removed and roof replaced between 2016 and 2017 • Façade reconstructed to reflect the 1918 appearance of the building

7.2.1 Exterior

The main elevation of the two-storey brick building faces out onto Castle Street (Figure 7-3). The façade was reconstructed³ in 2018 to reflect the 1918 façade, rather than its earlier Victorian period frontage. As such the top of the building features an arched parapet with further plasterwork embellishments on the pilasters. The windows on the second floor were restored with timber sills. The ground floor does vary slightly from the 1918 façade as the wide windows are located in the centre of the building, while two double glass doors are situated either side where the windows were previously situated. The doors feature the same plasterwork moulding above as was formerly over the windows in 1918, as is simulated rustication achieved using plaster over cement board along the entire ground floor frontage. Unlike the 1918 façade however, the frontage no longer features an awning over the central portion of the ground floor.

The eastern elevation of the building illustrates the distinct purposes of the building with the eastern end forming the offices (converted around 1918, although present at this end of the building from at least 1902), the central portion forming the cellar and early twentieth century dairy and the western end, the small mill and later machine house (Figure 7-4). The walls are plastered brick and the remains of the shortened 90 ft chimney is still visible rising from the small mill (later machine house/engine house). There are three current access points into this side

³ The term reconstructed has been used here instead of restored as the ICOMOS NZ charter defines reconstruction as rebuilding as closely as possible to a documented earlier form, using new materials. In contrast, restoration means to return a place to a known earlier form, by reassembly (i.e., original fabric) and reinstatement, and or by removal of elements that detracted from its cultural heritage value.

of the building: two sliding doors opening into the central Dairy and Machine House Building and one modern roller door opening into the small mill. The cross gable facing east is likely a remnant of a covered bridge, constructed between 1905 and 1922, between the Dairy and Machine House Building and the 1902 biscuit factory.

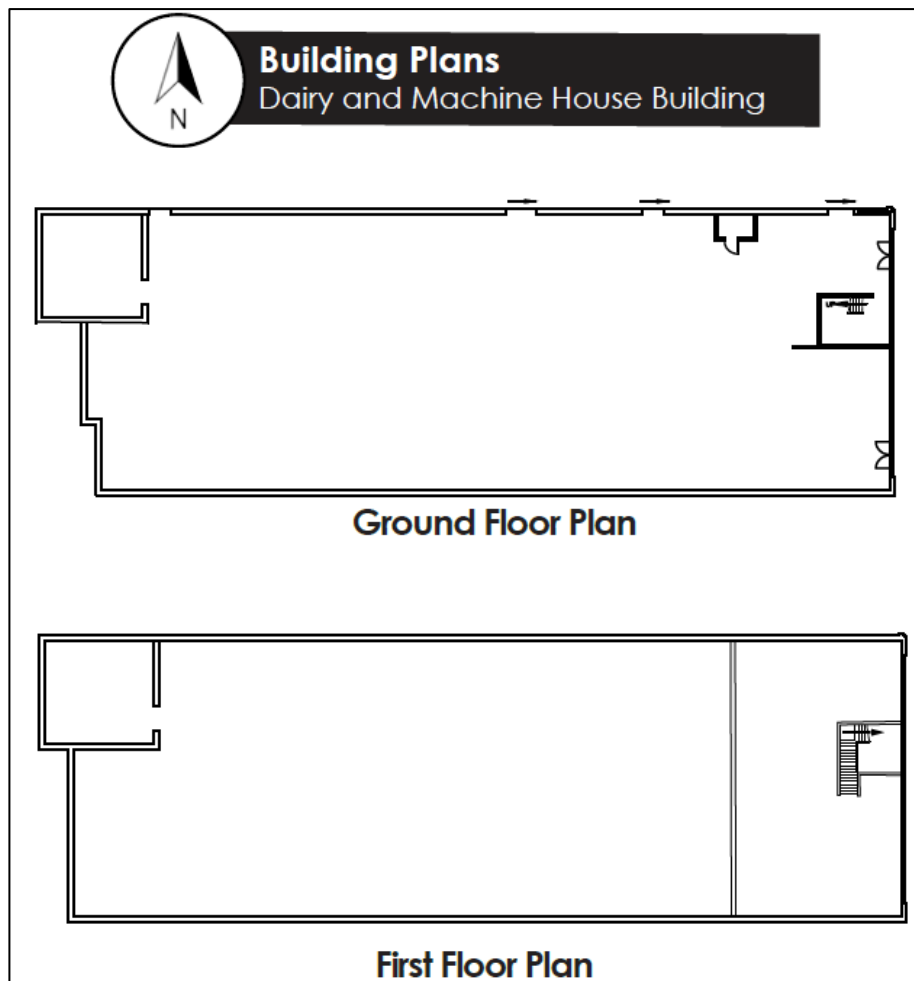


Figure 7-2. Floor plan of the Dairy and Machine House Building, adapted from those supplied from Ritchie Fieldwick at the Southern District Health Board.



Figure 7-3 Photograph looking west at the Castle Street façade of the Dairy and Machine House Building.

The western extent of the small mill features two bricked-in openings that would have originally led into the machine house from the boiler house (Figure 7-5). Above this is the later twentieth century second floor addition to the small mill building, which had replaced the earlier temporary corrugated iron addition. The central Dairy and Machine House Building, and modern covered loading bay further share the former brick wall that ran between the still room and cellar (Figure 7-6). An archway is visible set back from the machine house along the shared wall, suggesting that there was a door or window situated at this location, yet it too is now blocked in (Figure 7-7). From an aerial view, the office extent of the building has a mono-pitched roof, while the central portion of the building features a multi-gable roof with a cross gable in the centre and a number of skylights adjoining the single-gable roof of the machine house.



Figure 7-4 Photograph looking southeast (left) and south (right) at the eastern side of building one showing the three distinct portions: the eastern offices, the central dairy, and the western machine house.



Figure 7-5. Photograph looking east at the western wall of the machine house showing the blocked-in windows. A close-up photograph is shown on the right.



Figure 7-6 Distinct dog-legged wall of the former shared wall between the cellar and the mill (today the Dairy and Machine House Building and covered loading bay).



Figure 7-7 Photograph looking east at the former doorway or window arch located on the shared wall between what was once the cellar and mill

7.2.2 Interior

The interior of the Dairy and Machine House Building has undergone a number of modifications since the 1875 construction of the cellar to accommodate changing functions. The central room is an open space, except for a partitioned stairwell area at the eastern end of the building leading to the second storey. This area was closed off in the 1966 renovations (Figure 5-63 and Figure 5-64). The suspended screen from the second-floor ceiling, visible in the 1966 plans, is still present in the building today (Figure 7-8). The south wall of this partitioned area (Figure 7-9) is formed of brick and may relate to the 1875 construction of the cellar. This wall features two windows that

were blocked prior to 1959, likely when the stair well was installed at this location (Figure 5-60). The location of a former stairwell to the second floor is also visible at the eastern end along the southern wall of the building. There is evidence of a stairwell landing halfway up the stairs (Figure 7-10). These stairs are located further east than the two other stairwells indicated in the 1959 plans suggesting they were used prior to this date (Figure 5-60). At the same height as the landing there are a number of possible joist pockets (Figure 7-10). These ran quite low in comparison to the current floor level, and while the original height of the floor was raised in 1959, it does not appear in older photos of the façade to have been considerably lower than the current level. As such the possible joist pocket locations may have been for a mezzanine level. Later stairs visible on the 1959 plans are located further west (Figure 7-11).

There is a distinct variation in the windows visible between the office portion of the building and the central dairy portion. The former features arched single hung sash windows (one over one) with segmental arches and architraves (Figure 7-12) While the architraves have likely been replaced, the arched windows may be original features of the Victorian design of the building as they are visible in the early 1900s photographs of the building. Between the arched office windows is a smaller rectangular window, which is visible in the early twentieth century photos of the building. The central dairy portion of the building features predominantly fixed single or multi-paned windows. All but one of the first-floor windows feature slight arches. A few multi-paned fixed windows with slight arches are also visible in these early photographs indicating that at least the location of some of the first-floor windows along the eastern elevation of the building are likely associated with the 1875 cellar building.

The entire of the ground floor is paved in cement except for a small area of penny tiles under the stair well in the east office portion of the building and possible concrete tiles in the central dairy portion of the building. Throughout the dairy portion of building there is evidence of raised concrete partitions on the floor that would have once been used for wells and milk decks. The walls of the Dairy and Machine House Building where visible are brick overlaid with plaster and or paint (Figure 7-13). The main feature of the machine house portion of the building was the base of the 1931 90 ft chimney stack.



Figure 7-8. Suspended screen visible in the 1966 plans above the stairwell to the second floor.



Figure 7-9. Photograph looking north at partition wall with two blocked in windows and the bottom of the stairwell leading from the partitioned area to the first floor.



Figure 7-10 On the left is photograph looking south on ground floor of the Dairy and Machine House Building at location of first former staircase. A landing is visible half-way up. On the right is a photograph looking south on ground floor of the Dairy and Machine House Building at possible joist insertion points. These are at the same height as the first former staircase landing and possibly indicate there was a mezzanine floor at this height.



Figure 7-11 Photograph looking west on ground floor of the Dairy and Machine House Building at location of second former staircase visible in 1959 plans.

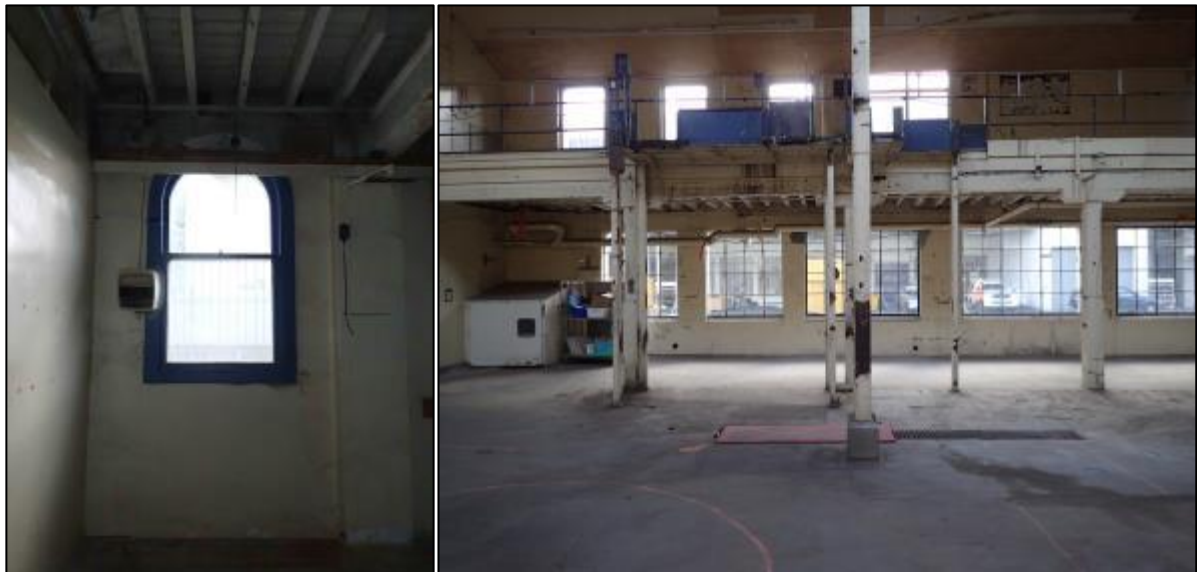


Figure 7-12 Photographs looking north at single hung sash window in the office portion of the Dairy and Machine House Building (left) and at multi-pane fixed windows of the dairy central portion (right).



Figure 7-13 Photograph looking west at the plastered brick wall of ground floor in the machine house building.

7.3 Cadbury World Building (Block 1A)

The Cadbury World building is three to four storeys and runs the along southern and western extents of the site (Table 7-2 and Figure 7-14). It is situated on what was once Sections 53 and 54 Block XVI, forming a Cumberland Street façade immediately adjoining the Office Building (Block 2A). Along this frontage there are two pedestrian entrances.

Table 7-2. Summary of built structures at 280 Cumberland Street: Cadbury World Building (Block 1A).

Number of Floors	3-4
Rooms per Floor	Ground Floor – 8 rooms Floor 1 – 6 Rooms Floor 2 – 3 rooms Floor 3 – 3 (accessible from Office Building)
Roof style	Multi-gable with two cross gables/ Flat pitched roof
Roof Material	Corrugated iron/ concrete
Windows	Fixed (multi-pane) and awning casement windows
Foundations	Shallow spread footings
Floors	Concrete, tongue and groove
Floor Coverings	Linoleum, carpet
Wall Construction Material	Brick
Ceilings	Exposed
Wall Coverings	Plaster/paint/unknown
Distinctive Modifications	• Initial construction granary/malt floor and kiln in 1868 • In 1901 building extended south to property boundary; southern end of granary/malt floor raised two storeys; and, the kiln at the rear was raised one storey. The entire building was thus four storeys • Between 1901 and 1915 two storeys were added to the central portion of the granary and malt floor • Addition of confectionery factory south between 1922-1927 • Removal of mezzanine floor and reinforcement of the remaining ground and first floors in 1959 • Refitting to establish Cadbury World in 2001 • Refitting to establish Cadbury Café in 2014

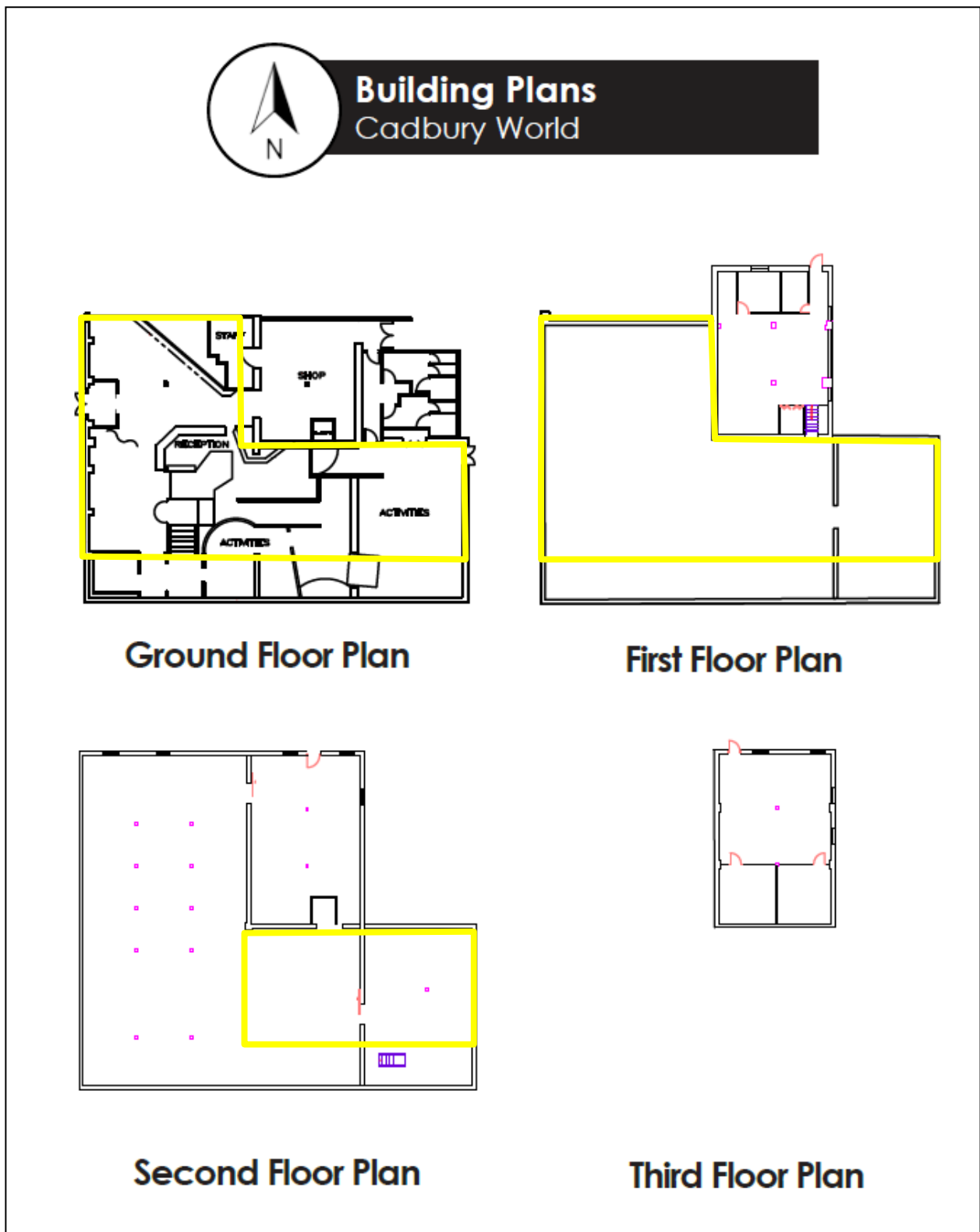


Figure 7-14. Floor plan of the Cadbury World building, adapted from those supplied from Ritchie Fieldwick at the Southern District Health Board. The approximate extent of the pre-1900 buildings are outlined yellow.

7.3.1 Exterior

The façade of the Cadbury World building is a blend of the multiple phases of construction throughout the building (Figure 7-38). Cadbury World is three storeys and features a flat parapet with multiple multi-paned fixed windows and a glass double door with a canopy above. To the north end of Cadbury World is a pedestrian access way with roller door and glass double door access to the cafe, while a modern single pane window is situated to the south where an earlier door was located (visible in 1922 plans). The Cadbury World façade has changed little from its appearance in the early 1920s (Figure 5-40).



Figure 7-15 Photograph looking east at the Cumberland Street façade of Cadbury World.

To the rear of the building above and below a modern loading bay, the southern exterior painted brick wall of the 1868 kiln is visible (Figure 7-16 and Figure 7-17). The addition of the third floor (now second storey) in 1901 is not visible from the exterior; however, the southern extension is discernible. At the location of the southern extension there is a distinct break in the wall where it steps in. This step in may relate to a pre-1900 lean-to established at the rear of the kiln and crushing mill buildings. The step in of the lean-to building continues along the brick wall forming the southern end of the modern loading bay connecting the rear exterior wall of the the Cadbury World and Office Building with the rear of the Dairy and Machine House Building (Figure 7-18). A second, taller pre-1900 lean-to of the still room is also possibly visible to the east of the first lean-to. The wall of the still room lean-to appears to have been raised prior to the late 1870s when a photo shows it to be higher than the first lean-to adjacent to the kiln and crushing mill (Figure 5-29).

Returning to the Cadbury World building, on the east elevation there are two former bricked-in windows visible as is one more on the northern wall along with two modern windows and one vent along in what was the former kiln building (Figure 7-17). There are two entrances to the building through the café (former granary/malt floor), a shop area (former confectionery factory) or through Cadbury World (former kiln building). The roof of Cadbury World (kiln and granary/malt floor), although it has been reclad in the later twentieth century, matches the early 1902 roof line with a multi-gabled roof with a cross gable at the rear (Figure 5-36). Another gable roof crosses the most northern of these gables and runs north. This is likely associated with the later raising of the central portion of the granary/malt floor building between 1901 and 1915. The 1920s addition to the rear forming the Confectionery factory as well as another post-1950s toilet block addition to the rear feature flat-pitched roofs.



Figure 7-16. Photograph looking southwest (left) and west (right) at the eastern wall of the former kiln and northern wall of the former mill building. Note the jut into the wall is on the second storey. This may be associated with pre-1900 lean-to at the rear of the kiln and mill buildings



Figure 7-17 Photograph looking southwest at the eastern and northern wall of former smutters and kiln building. The upper floor was added sometime between 1892 and 1901, while the southern extension of 1901 is visible at the rear. There is one blocked in window on the eastern wall and another on the northern wall.



Figure 7-18 Photograph looking north at wall between Dairy and Machine House Building and the Cadbury World and Office Building. Note that the eastern end of the building has been raised.

7.3.2 Interior – Ground Floor

There were remnants of the pre-1900 granary/malt floor located throughout Cadbury World and café interior. In the café a brick wall running east-west, which was present by 1922 (the presently bricked in doorway is visible in plans from this time), abutted an earlier brick wall running north-south (Figure 5-23 and Figure 5-24). This wall demarcates the east extent of the pre-1900 granary and malt floor. It is unclear if when the east west wall was added, the north-south wall was opened to create an accessway through the building or if the opening was always present to provide access to the rear of the building. The remainder of the brick wall would have formed the granary/malt floor is covered with modern cladding and linings; however, it likely extends through Cadbury World to the south and into the office/reception building to the north.

The mezzanine level of the granary/malt floor, and kiln building was removed in 1959 and the additional steel supports are visible throughout the ground floor of Cadbury World (Figure 7-21). The open mezzanine level windows are partially visible along the west wall of Cadbury World, while three former windows are visible along the form northern external wall of the kiln building (Figure 7-22). There is also evidence for a partition wall or perhaps an external wall, suggesting the building was extended slight south (Figure 7-23)



Figure 7-19. Photographs looking northwest (left) at southern internal partition wall on the ground floor of the Cadbury World Building and northeast (right) at the abutment of the same wall to an earlier external wall to the west. The wall was likely present from 1922. Note the blocked-in doorway on the northern internal wall.

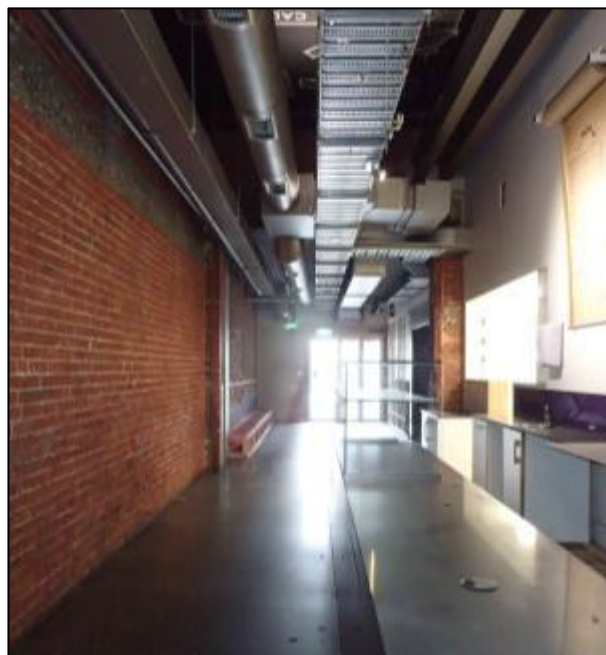


Figure 7-20. Photograph looking west on the ground floor of the Cadbury World building. Note the brick remnant of a north-south wall either side of the room. This is likely the original walls of the granary and malt floor. The opening that they form was present by 1922 and may be associated with the earliest outlay of the building however this is unclear.



Figure 7-21. Photographs looking east (left) and west (right) on the ground floor of the Cadbury World building showing steel beams. Note the windows of the mezzanine floor above the door in the photograph on the left.



Figure 7-22. Photograph of interior wall of Cadbury World building that would have originally form the north exterior wall of the pre-1900 kiln. Note the bricked in windows of what was once the mezzanine level.



Figure 7-23. Detail photograph of interior wall of Cadbury World building that would have originally form the north exterior wall of the pre-1900 kiln showing a possible ground floor partition wall and joist insertion point for the original mezzanine level.

7.3.3 Interior – First floor

During the site visit a number of former doors and windows were identified on the interior of the building, some associated with the pre-1900 layout of the kiln and later smutters room to the east and the open kiln space that adjoined openly with 1891-1901 raised granary/malt floor third storey (now second storey). The east extent of the kiln or smutters room contains three bricked in doorways that may have once provided access to the earlier mill building adjacent to the kiln (Figure 7-24). Another window is also visible bricked in on the northern wall of the same room. Out to the following room west there are three doorways, two had been bricked up while one still opens with a steel roller door, which rolls over the blocked in doorway to the north (Figure 7-25). The blocked door to the south was located within the area of the 1901 extension indicating that it was installed in the twentieth century.

Towards the west of the north extent of the former kiln building, a possible former window frame or doorway is visible (Figure 7-26). The now blocked in feature was either a window constructed prior to the addition of the confectionery factory on the other side of the wall between 1922 and 1942, or a doorway established (possibly from a former window) through into the later addition.

The floor and ceiling of the most easterly room of the former kiln and smutters room displays possible remnants of its former use. There are dark staining and covered holes that may relate to machinery and chimneys used in these buildings (Figure 7-27 and Figure 7-28). There is also evidence of stairs in this room and the large western open room of the kiln and granary/malt floor building that were likely added at the same time the building was extended south in 1901 (Figure 7-29). The floor of the former granary/malt floor, kiln and smutters building was covered with concrete.

The windows facing Cumberland Street from the granary/malt floor building are all multi-pane wood framed windows on the ground and first floors suggesting that the older windows were replaced to match the 1902-1915 raised extent of the building (Figure 7-30).



Figure 7-24 Blocked in doorways and windows in the former kiln building looking east (top right and left and bottom left) and northeast (bottom right).



Figure 7-25 Photographs looking east at two blocked in doorways (top) either side of current doorway (bottom) to the eastern room of the former kiln and smutters room.



Figure 7-26. Photograph looking north at original kiln wall. There is a stone arch visible above the tap area to the east is a diagonal line rising up.



Figure 7-27 Photograph looking north at circular floor stain and covered floor in former kiln building.



Figure 7-28 Photographs showing location of blocked in roof (left) and floor (right) of possible former chimney in former kiln building.



Figure 7-29. Photographs showing former stairwell in the 1901 southern extension looking west in the western area of the former kiln building (left) and southwest in the most easterly room of the same building (right)



Figure 7-30 Photograph looking west at multiple fixed pane window on the first floor of Cadbury World. All windows along the western wall are the same suggesting they were added and older windows replaced to match the 1902 and 1915 windows when the central portion of the granary and malt floor was added or that the new windows were added to match the earlier 1889 to 1901 style of windows.

7.3.4 Interior – Second Floor

On the second floor it is possible to view the roof framing of the raised former granary/malt floor, and kiln building. The central gable running east-west and the adjacent southern extension gable from 1901, as well as the later northern raising extent between 1902 and 1915 feature common roof framing with collar ties (Figure 7-31 and Figure 7-32). Where the east-west gables met the cross gable in the west at the rear of the former kiln building, the building features common roof framing reinforced with steel (Figure 7-33).

As with the first floor, there are a number of blocked in windows or doorways. Two blocked in windows were visible on the north wall of the former granary and malt floor building as well as one smaller window still present (Figure 7-32). These windows are associated with the 1902-1915 upper storey addition as this would have been an exterior wall, established prior to the 1915-1922 raising of the office/reception building immediately north.

Another blocked-in window is visible on the northern wall of the most easterly room of the former kiln building as was a doorway on the eastern wall that would have led through into the mill building (Figure 7-34). Both the window and the doorway are likely associated with the 1889 to 1901 third floor addition (now second floor) to the kiln building. Facing Cumberland Street in the granary/malt floor building are covered four-pane wood-framed fixed windows which had been replaced from the original 12-pane windows. These windows match those of the Office Building at the front and rear of the Office Building, thus were likely changed between 1915 and 1922 with the northern extension and eastern concrete extension of the Office Building.

The floor of the former granary/malt floor, and kiln building was covered with concrete however a small patch of tongue and groove floorboards was exposed beneath in the most eastern room of the building (Figure 7-35). The walls were painted brick.



Figure 7-31 Photograph looking south (left) at column in the second floor of the Cadbury World building with the 1901 southern extension behind and photograph looking west (right) at roof structure of the southern extension.



Figure 7-32 Photograph looking north at the roof framing and the windows of the second floor north wall of the Cadbury World building associated with the 1901-1915 storey addition. Prior to the 1915-1922 raising of the offices and shop building this would have been an exterior wall.



Figure 7-33 Photograph looking north at interior of Cadbury World building showing steel framing added to roof structure and steel columns. Note earlier skylights have been covered.



Figure 7-34 Photograph looking east (left) at a blocked in door way and north (right) at a blocked in window in the second floor of the Cadbury World building the most easterly room of the former kiln building.



Figure 7-35 Photograph of tongue and grove timber underneath concrete of the floor in the second floor of the Cadbury World building.

7.3.5 Interior – Third Floor

Only the later Confectionery factory to the rear of the building had building had four storeys and it is only accessible from the neighbouring Office Building. Painted brick walls are visible in this section of the building, while steel casement windows face out to the south. This window is associated with 1920s or later additions to the building.



Figure 7-36 Photograph of windows on third floor looking east from the confectionery factory towards the rear of Cadbury World.

7.4 Office Building (Block 2A)

The Office Building runs the along western extent of the site (Table 7-3 and Figure 7-37). It is situated on what was once Sections 54 and 55 Block XVI, forming a Cumberland Street façade immediately adjoining the Office Building (Block 2A). Along this frontage there is one pedestrian entrance, as well as a pedestrian and vehicle accessway between this building and the adjacent Chocolate Factory and Garage Building (Block 3A).

Table 7-3. Summary of built structures at 280 Cumberland Street: Office Building (Block 2A).

Number of Floors	4
Rooms per Floor	Ground Floor – 9 rooms Floor 1 – 25 Rooms Floor 2 – 24 rooms Floor 3 – 31 rooms
Roof Style	Flat pitched roof with mansard roof
Roof Material	Bitumen membrane over concrete; tiles on mansard roof, possibly asbestos
Windows	Fixed (multi-pane); casement windows
Foundations	Shallow spread footings
Floors	Concrete, tongue and Groove
Floor Coverings	Linoleum, carpet
Wall Construction Material	Brick and concrete
Ceilings	Softboard or hardboard
Wall Coverings	Paint/Softboard or hardboard
Distinctive Modifications	• Initial construction granary/malt floor and kiln in 1868 (north end incorporated into Office Building) • Western extension of a 1909 brick building encapsulating the northern extent of the granary/malt floor building in 1915 • Third storey addition and extension north between 1915 and 1922 • Large four storey concrete building likely constructed in 1922 replacing the 1909 brick building and part of the 1915 to 1922 extensions • Building extended to the north connecting to the Chocolate Factory and Garage Building between 1922-1924 • By 1926 a fourth storey with a mansard roof was added to the front of the building • First floor rebuilt with a reinforced concrete slab and steel columns for support • Refit for offices and reception in 1983

7.4.1 Exterior

The façade of the Office Building is a blend of the multiple phases of construction throughout the building (Figure 7-38). The Office Building is four storeys and features a mansard roof. One doorway is present at the southern end of the building. It is interesting to note that the ground floor of the southern half of the building façade features very few windows in comparison to the rest of the frontage. This may be a result of the windows of the original granary/malt floor structure being filled in and rather than being realigned to match the extensions and additional storeys added later.

The southern extent of the Office Building façade has changed little from its appearance in the early 1920s (Figure 5-40), aside from the later addition of the fourth storey and mansard roof. There is, however, a distinct difference in the façade marking the extension north that occurred in 1924 and the additions to the adjacent building (Chocolate Factory and Garage Building – Block 3A) that occurred at the same time. This resulted in the Chocolate Factory and Garage Building façade extending south into the Office Building frontage, and it has changed little from this time. This section features larger multi paned windows with plain plaster pilasters running vertically up and down the building. The ground floor features plastered moulding over a large window and runs north to arch over the gates to the vehicle access under the first floor that runs between the office/reception building (Block 2A) and raw materials building (Block 3A).

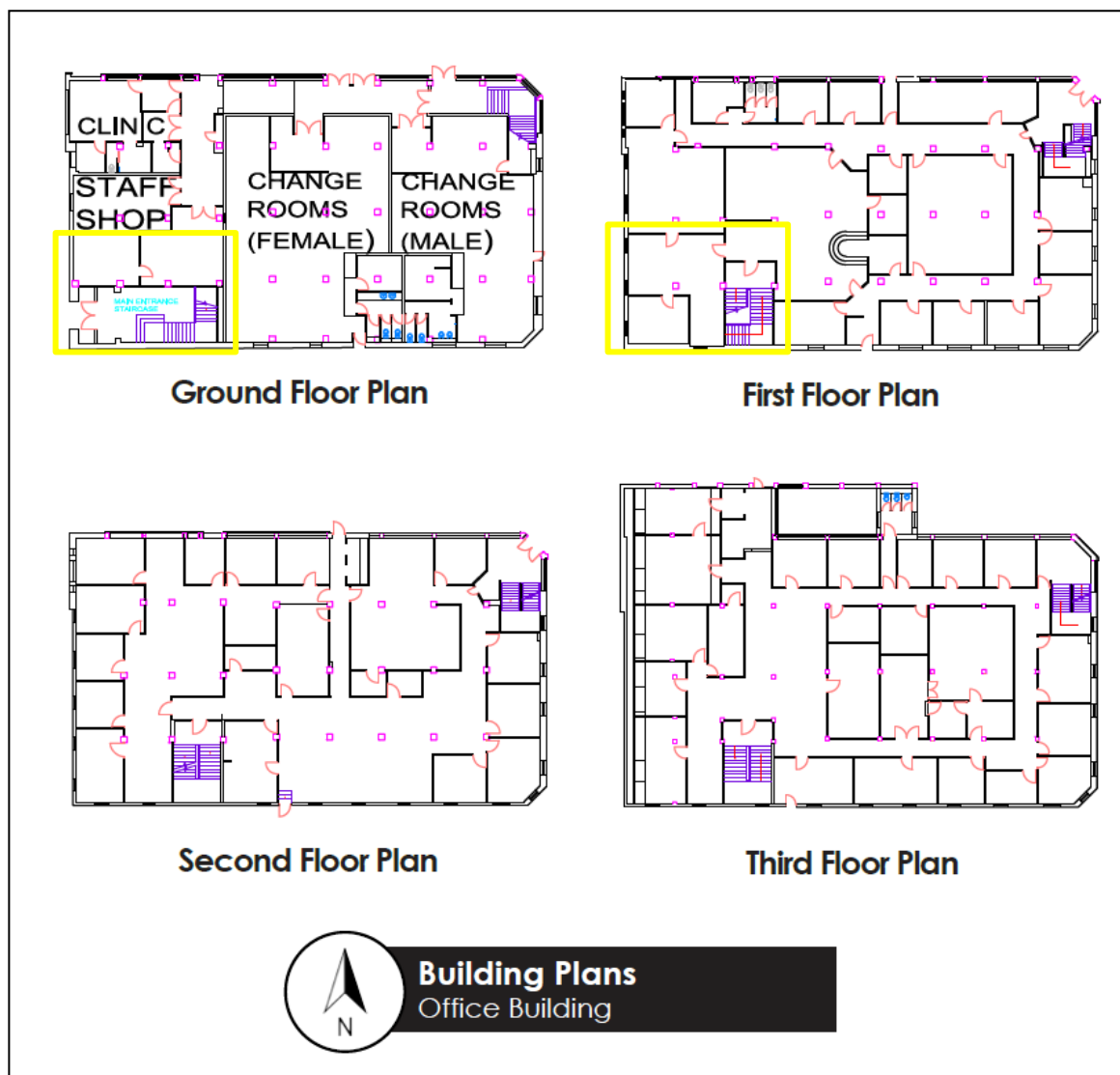


Figure 7-37. Floor plan of the Office Building, adapted from those supplied from Ritchie Fieldwick at the Southern District Health Board. The approximate extent of the pre-1900 building is outlined yellow.



Figure 7-38. Photograph looking east at the Cumberland Street façade of the Office Building.

The rear of the Office Building has a painted plaster finish (Figure 7-39). There are three entrances to this building on the ground floor on its northern and southern elevations. The earliest form of this extent of the building (the 1909 brick structure) is not visible as it was likely replaced in 1922 by a concrete building; however, the 1924 northern extension is visible as the windows are much larger than the four paned fixed windows to the south. The Office Building extent features flat pitched roofs except for the mansard roof visible from Cumberland Street.



Figure 7-39. Photograph looking west at the rear of the Office Building (Block 2A).

7.4.2 Interior

The office extent of the building has been completely refitted with modern wall and floor linings. It is unclear how much of the partition walls and interior fittings have been altered since this occurred in 1983 (Figure 7-43 and Figure 7-44). However, there are some distinctive elements within the building. On the ground floor there is a step up between the rear and front of the building that may be associated with the various stages of alterations and additions made to the buildings in the late nineteenth and early twentieth century (Figure 7-40).

The former exterior windows of the Office Building are visible from the from the later 1922-1927 confectionery factory extension on the first and third floors (Figure 7-41 and Figure 5-44). The windows feature diagonal brick framing at the top of the window and suggest that later additions to the building kept a similar style of window to earlier parts of the building, with pointed brick framing at the top of the window. The first-floor window is associated with the 1915 western addition to the Office Building. Another similar former window was visible from the from the third floor of the latter confectionery factory building while the latter windows are associated with the fourth storey that had been added by 1926.

One key variation on the third floor was the presence of a central computer room, once home to Cadbury's Computer Department. This floor also featured different windows to the rest of the building (Figure 7-45). Facing out from the mansard roof are multi-pane windows, featuring top hung (awning) ventilators. These window types are associated with 1920s addition to the building.



Figure 7-40. Photograph looking west the rise to the front portion of the Dairy and Machine House Building in the 1924 extension.



Figure 7-41. Photograph looking north at a former exterior window of the Office Building (Block 2A) associated with the 1915 western addition to the building. This photograph is taken from the later 1922-1927 addition at the rear of the Cadbury World building on the first floor.



Figure 7-42. Photograph looking north at former exterior windows of the Office Building (Block 2A) associated with the 1915-1922 third storey addition to the building. This photograph is taken from the later 1922-1927 addition at the rear of the Cadbury World building on the third floor.



Figure 7-43 Photograph looking south at office portion of the Dairy and Machine House Building.



Figure 7-44 Photograph looking south at office portion of the Dairy and Machine House Building.



Figure 7-45. Photograph of windows on third floor looking west facing out from the mansard roof.

7.5 Chocolate Factory and Garage Building (Block 3A)

The Chocolate Factory and Garage Building is four storeys and rectangular in plan (Table 7-4 and Figure 5-46). It is situated on what was once Sections 55 and 56 Block XVI, forming a Cumberland Street façade immediately

adjoining the Office Building (Block 2A). There is a pedestrian and vehicle accessway between this building and the adjacent Office Building, as well as two pedestrian entrances along the north and south elevations of the building.

Table 7-4. Summary of built structures at 280 Cumberland Street: Chocolate Factory and Garage Building (Block 3A).

Number of Floors	4
Rooms per Floor	Ground Floor – 4 rooms Floor 1 – 12 rooms Floor 2 – 15 rooms Floor 3 – 8 rooms
Roof Style	Flat pitched roof /hipped roof
Roof Material	Bitumen membrane over concrete/corrugated iron
Windows	Fixed (multi-pane); casement
Foundations	Spread footings, unknown
Floors	Concrete
Floor Coverings	Linoleum
Wall Construction Material	Reinforced concrete
Ceilings	Exposed/Unknown
Wall Coverings	Paint/unknown
Distinctive Modifications	• 1922 construction of the concrete rear of the building • 1922-24 front addition of the garage • 1924 addition of two upper storeys • 1939 addition of penthouse, creating a fourth storey

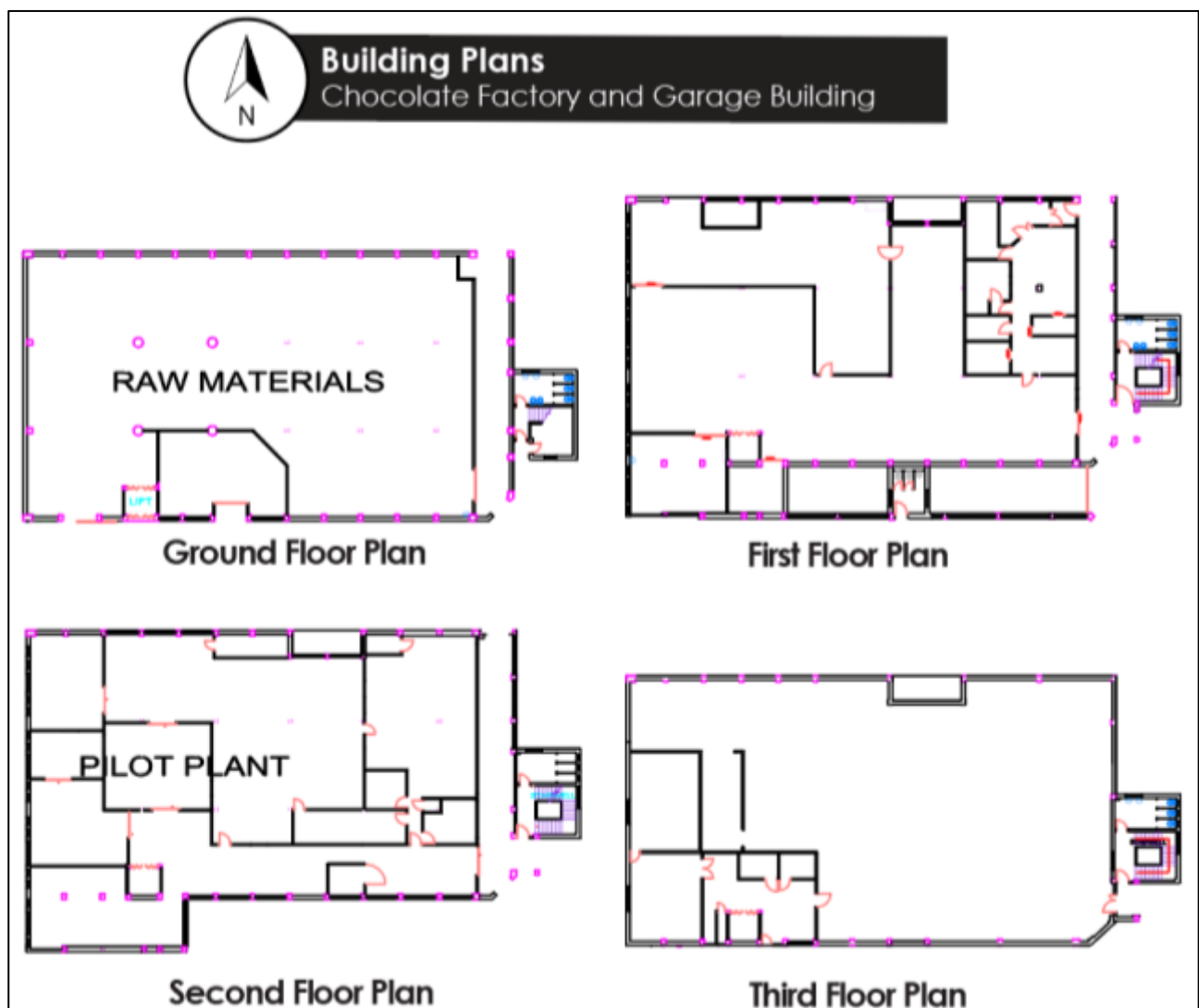


Figure 7-46. Floor plan of the Chocolate Factory and Garage Building, adapted from those supplied from Ritchie Fieldwick at the Southern District Health Board.

7.5.1 Exterior

The Cumberland Street façade of the Chocolate Factory and Garage Building is connected to the Office Building (Block 2A), and there is a clear crossover for where the two buildings meet. This is likely a result of the front portion of the chocolate factory building being constructed around the same time. In 1922 the ground floor façade was designed, and the plain features of this garage design is still visible on the ground floor today. Two storeys were added in 1924, which feature an early modernist influence with the building's ornamentation limited to plain pilasters with some detailing running across the top of the first floor and that incorporates the high arch over a vehicle and pedestrian accessway. The elevation has changed little since 1924, and a prominent feature are its large multi-paned steel windows (Figure 5-54). When the fourth storey was added in 1939, the 1924 detailing was simply extended.

The building largely features a flat pitched roof except for two hipped roof additions to the building along Cumberland Street. Access to the building is possible from open arch at the northern end of the façade on Castle Street.



Figure 7-47 Photograph looking east at the Cumberland Street façade of the chocolate factory building.

7.5.2 Interior

The interior of the building is dominated by factory space, with concrete floors steel framing. The rooms are clearly designed around the buildings function as a garage or factory (Figure 7-51). The floors were either exposed concrete or lined with linoleum. As noted above there is some variation in window stylings with the majority of the building windows being multi-paned with steel sashes with a variety of openings and ventilators.



Figure 7-48 Photograph of the Chocolate Factory and Garage Building looking west at the former garage on the ground floor (left), and looking north at the former factory on the first floor (right).

7.6 Chocolate and Biscuit Factory Building (Block 3B-3C)

The chocolate factory building is four storeys and rectangular in plan (Table 7-5 and Figure 7-49). It is situated on what was once Sections 55, 56, 71 and 72 Block XVI, forming a Castle Street façade immediately adjoining the Biscuit Factory and Dispatch Building to the north (Block 4C-5C). There is a pedestrian accessway at the north end of the Castle Street frontage, and multiple other entrances on the southern, western and northern elevations of the building.

Table 7-5. Summary of built structures at 280 Cumberland Street: Chocolate and Biscuit Factory Building (Block 3B-C).

Number of Floors	4
Rooms per Floor	Ground Floor – 6 rooms Floor 1 – 13 rooms Floor 2 – 1 rooms Floor 3 – 17 rooms
Roof sStyle	Flat pitched roof /hipped roof
Roof Material	Bitumen membrane over concrete/corrugated iron
Windows	Fixed (multi-pane); casement
Foundations	Spread footings, unknown
Floors	Concrete
Floor Coverings	Linoleum
Ceilings	Exposed/softboard or hardboard
Wall Construction Material	Concrete
Wall Coverings	Paint/unknown
Distinctive Modifications	• 1924 construction of the western extent of the building • 1924-1927 extension east to adjoin earlier buildings along Castle Street • 1934 alterations including addition of reinforced concrete slabs, and replacement of windows to match existing • 1938 replacement of the Castle Street end of the building (two pre-1900 and early 1900s buildings) with three-storey reinforced concrete addition with steel framing. In the same year alterations were made to the third floor of the building including the addition of exterior brick walls and timber frame roof forming the cafeteria level as it exists today

7.6.1 Exterior

The eastern end of the Chocolate and Biscuit Factory building was constructed in 1938, replacing the nineteenth and early twentieth century portion of the building. The Castle Street façade features art deco elements with plaster reaming running vertically up and down pilasters at the southern end of the façade. Steel sashes again were utilised; however, the windows at the southern end are also more decorative featuring sympathetic windowpane designs to the plasterworks. Across the top of the building runs decorative yet simple plaster moulding. The façade is unusual in that it is asymmetrical, with ornamentation largely restricted to the south bay of the building. This perhaps signals that there were plans to extend the building further south, but this could not be confirmed during the timing of this assessment.

The buildings largely features a flat pitched roof except for two hipped roof additions to the building along Cumberland Street. Access to the building is possible from open arch at the northern end of the façade on Castle Street.

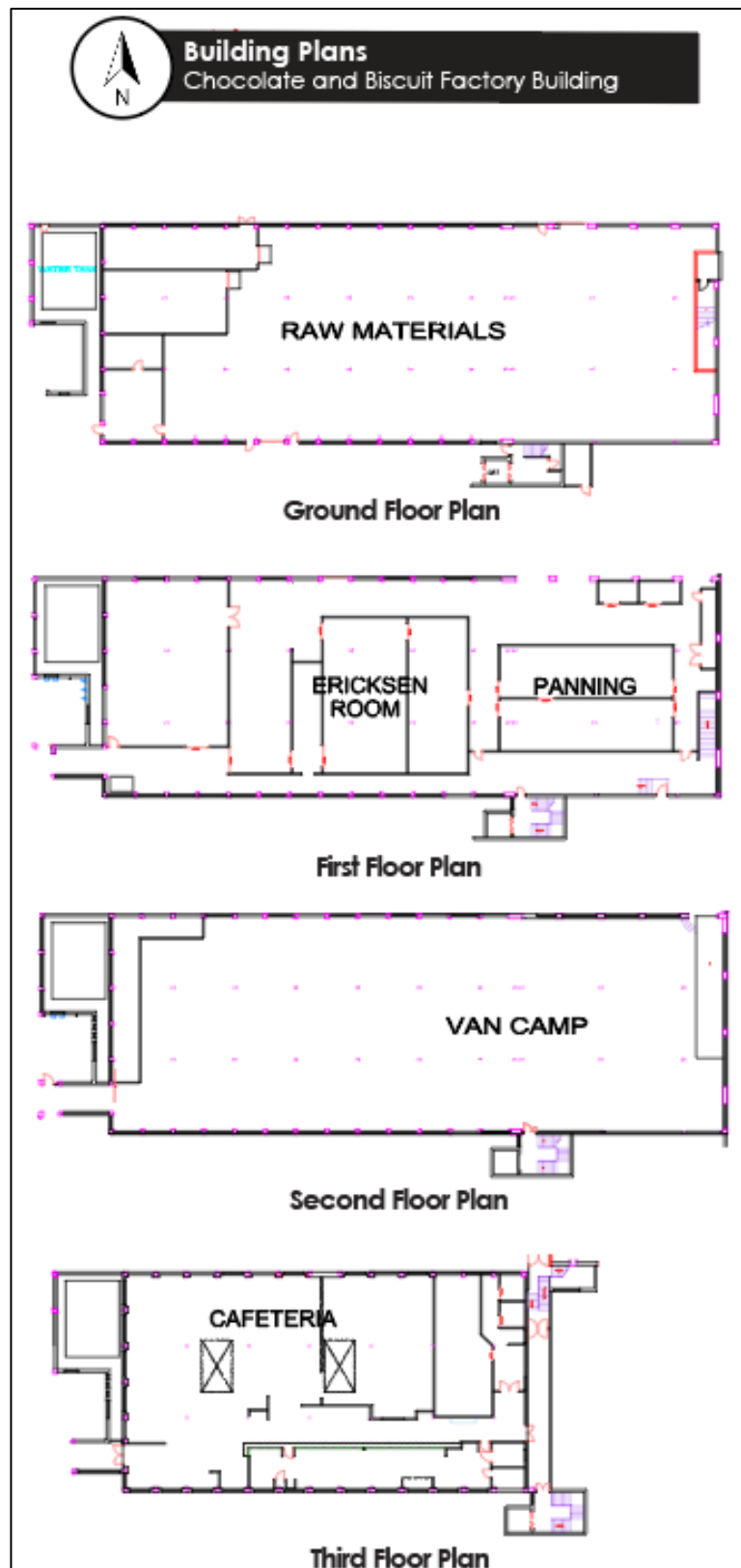


Figure 7-49. Floor plan of the Chocolate and Biscuit Factory building, adapted from those supplied from Ritchie Fieldwick at the Southern District Health Board.

7.6.2 Interior

The interior of the building features predominantly factory space, with concrete floors steel framing. The rooms are clearly designed around the buildings function as a factory and cafeteria (Figure 7-51). The floors were often lined with linoleum through much of the factory. In discrete areas the walls were constructed or lined using different materials, likely marking later additions to the original wall (Figure 7-52). One is the brick wall and door designed by McDowell Smith in 1934. While slightly altered from the initial design, the wall still features the key elements of the design (Figure 5-65) As noted above there is some variation in window stylings with the majority of the building windows being multi-paned steel sashes with a variety of openings and ventilators. The windows on the northern side align with McDowell Smith's plans of the ground and first floor indicating the window styles were to match those already present. Miller and White's 1938 plans of the fourth floor show a variant design (Figure 5-65 and Figure 5-66). It is interesting to note that on the western façade there were more decorative windows present at the south end, which were likely design by Miller and White in 1938, and are a marked contrast with the other more utilitarian windows of the building (Figure 7-53).



Figure 7-50 Photograph looking west at the Castle Street façade of the Chocolate and Biscuit Factory building.



Figure 7-51 Photograph of the Chocolate and Biscuit Factory building looking east at the of the factory space (Block 3b-c) on the second floor (left); and, looking west at the cafeteria on the third floor (right).



Figure 7-52 Photograph looking south at bricked in wall section in the Chocolate and Biscuit Factory (Block 3B-C) on the ground floor (left) and looking south at tongue and groove wall lining on the second floor.



Figure 7-53 Photograph looking south (left) and east (right) at variant multi-pane window on the second floor of the Chocolate and Biscuit Factory building (Block 3B-C) second floor.

7.7 Engineering Workshop, Labs, and Office Building (Block 4A)

The Engineering Workshop, Labs, and Office Building is three storeys and roughly square in plan (Table 7-6 and Figure 7-54). It is situated on what was once Sections 56 to 58 Block XVI, forming a Cumberland Street façade immediately adjoining the Biscuit Factory and Dispatch Building (Block 5A) to the north. Along this frontage there is a pedestrian and vehicle accessway between this building and the adjacent Biscuit Factory and Dispatch Building. Other entrances to the building are situated along the southern and eastern ends of the building.

Table 7-6. Summary of built structures at 280 Cumberland Street: Engineering Workshop, Labs and Office Building (Block 4A).

Number of Floors	3
Rooms per Floor	Ground Floor – 18 rooms Floor 1 – 36 rooms Floor 2 – 8 rooms
Roof Style	Dutch Gable
Roof Material	Coloursteel
Windows	Fixed (multi-pane); casement
Foundations	Driven reinforced concrete piles
Floors	Concrete
Floor Coverings	Linoleum, carpet
Ceilings	Exposed/softboard or hardboard
Wall Construction Material	Reinforced concrete
Wall Coverings	Exposed/softboard or hardboard
Distinctive Modifications	• 1961 construction of building • 1994 upgrades to essence room on the second floor and offices on the first floor

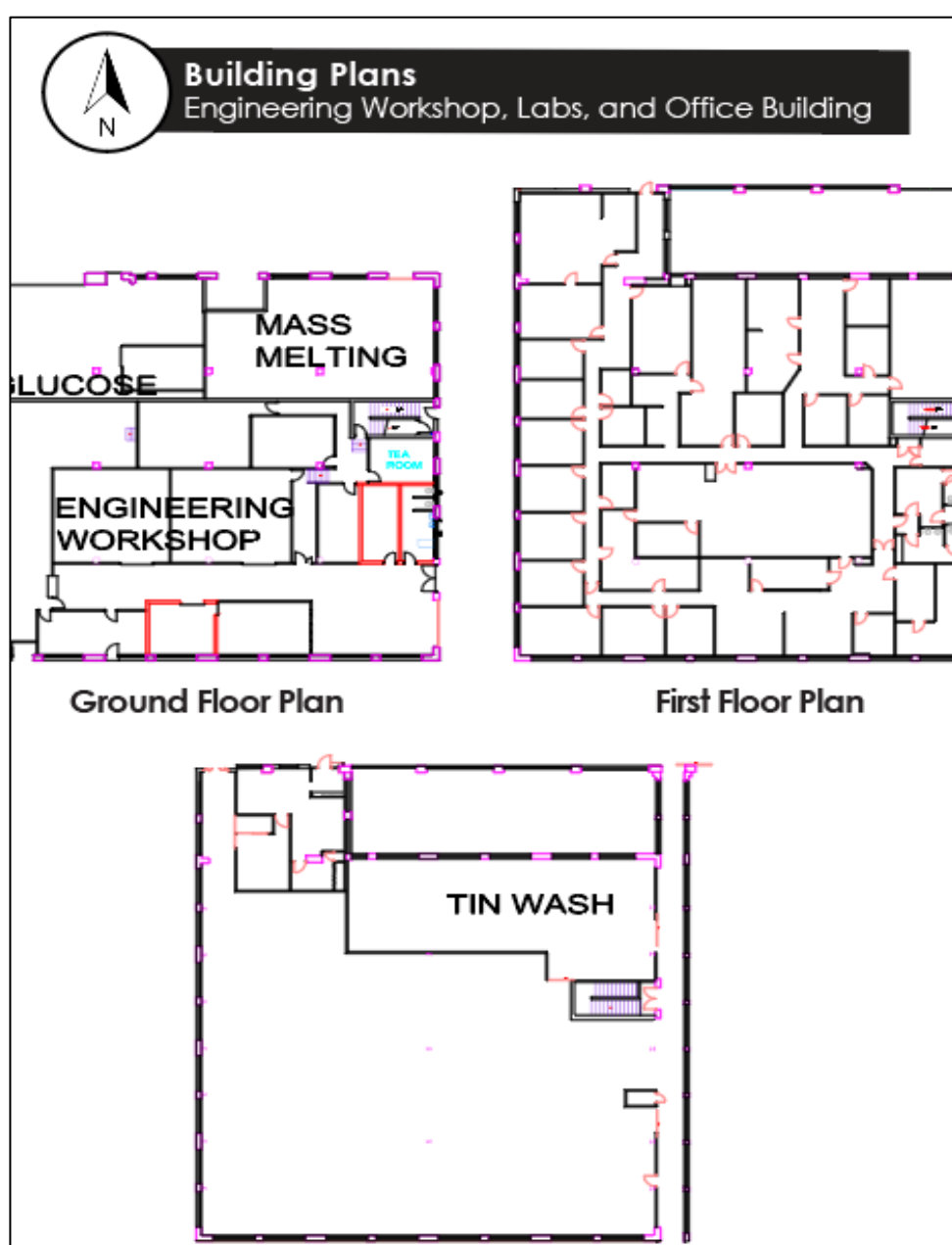


Figure 7-54. Floor plan of the engineering workshop, labs and Office Building, adapted from those supplied from Ritchie Fieldwick at the Southern District Health Board.

7.7.1 Exterior

The façade reflects the utilitarian nature of the building, with few decorative elements (Figure 7-60). There is a vehicle and a pedestrian access way present at the northern end of the building on Cumberland Street. Aside from minor changes, the façade of this building largely remains true to the initial designs and construction of the early 1960s. This building has been designed to match the earlier biscuit and dispatch building to the north with all of the windows on the Cumberland Street frontage are multi-pane steel sashes. Brown tiling featured around the bottom of the building is continuous from the biscuit and dispatch building. The building, although largely utilitarian, also complements the adjacent chocolate factory building façade with pilasters running vertically along the building.



Figure 7-55 Cumberland Street (left) and Castle Street (right) façades of the biscuit and dispatch building.

7.7.2 Interior

The interior of the building predominantly laboratory, factory operations, office space, and occasional rooms for tours, each of the rooms are clearly featuring the functions their space (Figure 7-62). This is the only building with a basement level above which is a mezzanine level. The walls of the basement feature the lower portion of a blocked window and an open window that runs up into the mezzanine level, suggesting suggests that the basement and the mezzanine were later additions to the building. The floors were lined with linoleum or carpet while the ceilings have been covered with soft or hardboard. The majority of the building's windows are multi-paned fixed or casement windows with a variety of openings and ventilators (Figure 7-63).



Figure 7-56 Photographs of Engineering Workshop, Labs, and Office Building looking west at food testing laboratory on the first floor (top left), northwest at Cadbury tour space on the first floor (top right), west at tin wash on the second floor (bottom left) and northwest at office room on the first floor (bottom right).



Figure 7-57 Photograph looking east into basement and Mezzanine from ground level (left) and at basement wall (right). Note the brick infill and the open window running up into the mezzanine level above.

7.8 Biscuit Factory and Dispatch Building (Block 4C and 5A-C)

The biscuit and dispatch building is five storeys and L-shaped in plan (Table 7-7, Figure 7-58 and Figure 7-59). It is situated on what was once Sections 58, 59, 68 and 69 Block XVI, forming Cumberland Street and Castle Street façades. The building immediately adjoins the engineering workshop, labs, and office Building (Block 4A) to the south on Cumberland Street and the Chocolate and Biscuit Factory (Block 3C) on Castle Street, also to the south.

Along the Castle Street frontage there are two pedestrian entrances, as well as a vehicle access way to the south of the building.

Table 7-7. Summary of built structures at 280 Cumberland Street: Biscuit Factory and Dispatch Building (Block 4C and 5A-C).

Number of Floors	5
Rooms per Floor	Ground Floor – 21 rooms Floor 1 – 27 rooms Floor 2 – 29 rooms Floor 3 – 19 rooms Floor 4 – 35 rooms
Roof Style	Dutch Gable
Roof Material	Coloursteel
Windows	Fixed (multi-pane); casement
Foundations	Concrete slab
Floors	Concrete
Floor Coverings	Linoleum
Ceilings	Exposed/softboard or hardboard
Wall Construction Material	Reinforced concrete
Wall Coverings	Exposed/softboard or hardboard
Distinctive Modifications	• 1951 completion of building construction • Addition of two storeys to the biscuit factory and three to the dispatch portion of the building in 1968

7.8.1 Exterior

As with the Engineering Workshop, Labs, and Office Building, the Biscuit Factory and Dispatch Building façades reflect the utilitarian nature of the building with few decorative elements (Figure 7-60). However, the building still complements the adjacent Chocolate Factory and Garage Building façade with pilasters running vertically along the building. A key feature of the east and west façades is the lift shaft which features a slightly more decorative pilaster running the height of the building adorned with long rectangular windows either side up to the fourth floor. There is a pedestrian doorway immediately south of the central lift shaft on the Castle Street frontage, another further south as well as a vehicle entrance at the south corner of the building. There are three covered blocks on the ground level of the Castle Street Frontage, south of the central lift shaft. These are the former vehicle entrances for the dispatch building. Aside from minor changes, the facades of this building largely remain true to the initial designs and construction between the late 1940s and early 1950s, however the upper two storeys of the building have lower ceiling heights, and this is reflected in the building's façades. All of the windows on the Cumberland and Castle Street frontages are multi-pane steel sashes. The brown tiling featured around the bottom of the building that continues around the side elevations and even inside where the later additions have been made to the building.

7.8.2 Interior

The interior of the building predominantly factory space, with no attempts to disguise its concrete and steel construction. The rooms clearly feature the functions of various factory spaces (Figure 7-61 and Figure 7-62). The first and second floors of the factory feature columns with capitals reminiscent of the lotus style (also referred to as mushroom-shaped columns), which were utilised throughout modernist architecture in the 1930s (Figure 7-61 and Figure 7-63).

The floors were often lined with linoleum through much of the factory, while floors and ceilings have simply been painted. As noted above there is some variation in window stylings with the top two floors of the chocolate factory and dispatch building being narrower than the lower floors likely as a result of being a later addition (Figure 7-63).

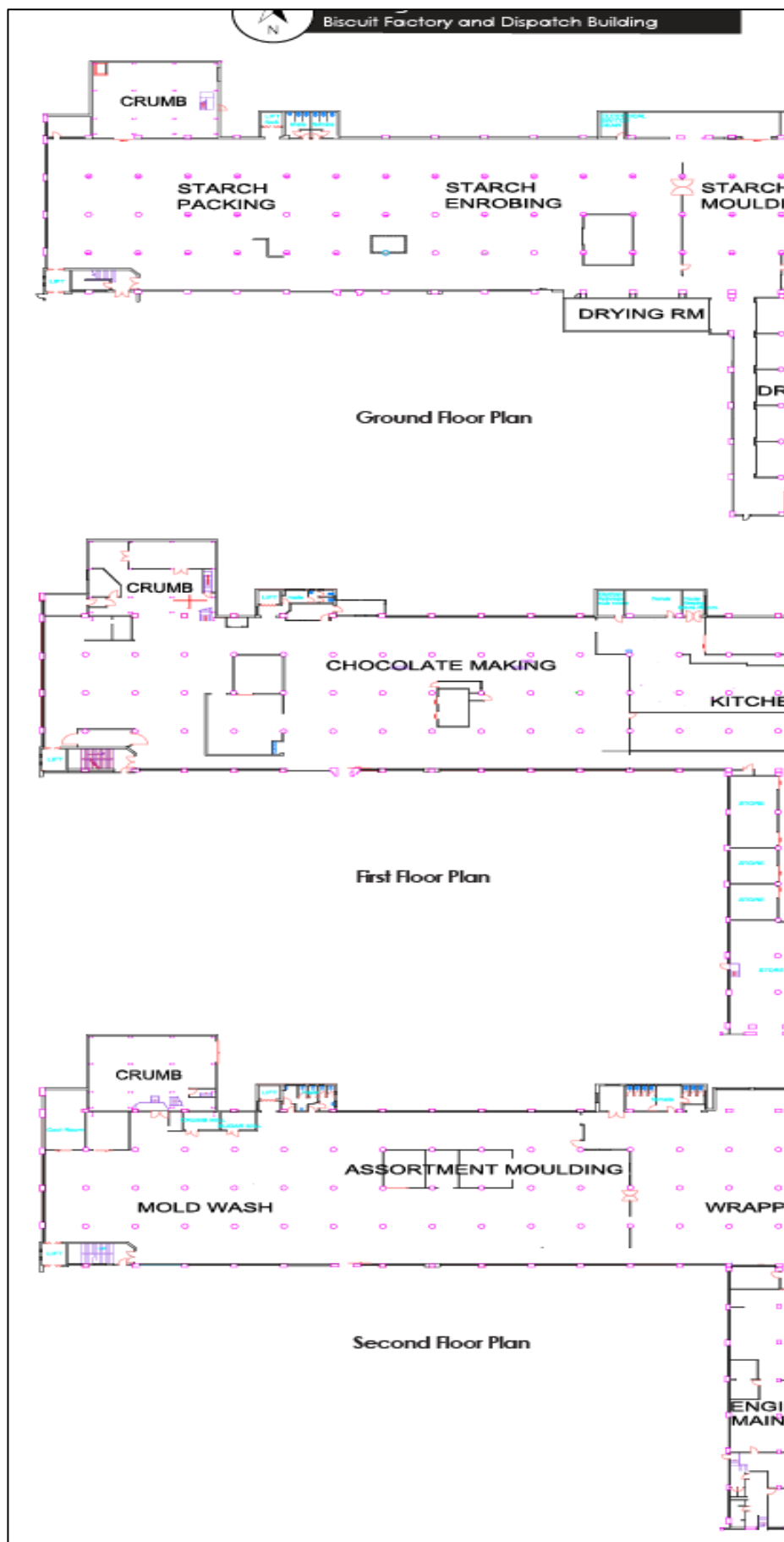


Figure 7-58. Plans of the ground to second floors of the Biscuit Factory and Dispatch Building, adapted from those supplied from Ritchie Fieldwick at the Southern District Health Board.

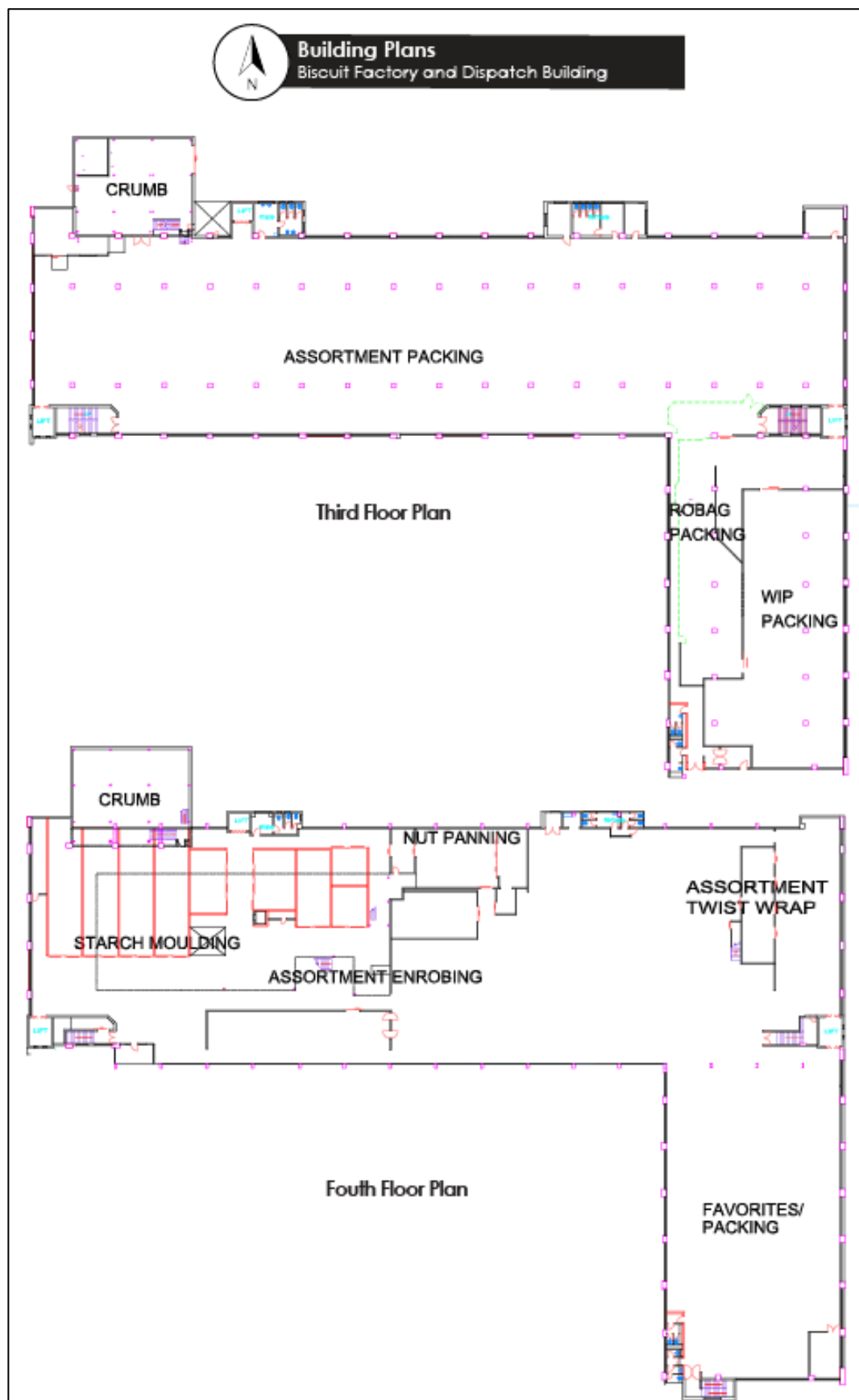


Figure 7-59. Plans of the third and fourth floors of the engineering workshop, labs and Office Building, adapted from those supplied from Ritchie Fieldwick at the Southern District Health Board.



Figure 7-60 Cumberland Street (left) and Castle Street (right) façades of the biscuit and dispatch building.



Figure 7-61 Photograph of the biscuit and dispatch building (Block 5C) on the third floor looking west (left) and on the first floor looking northwest (right).

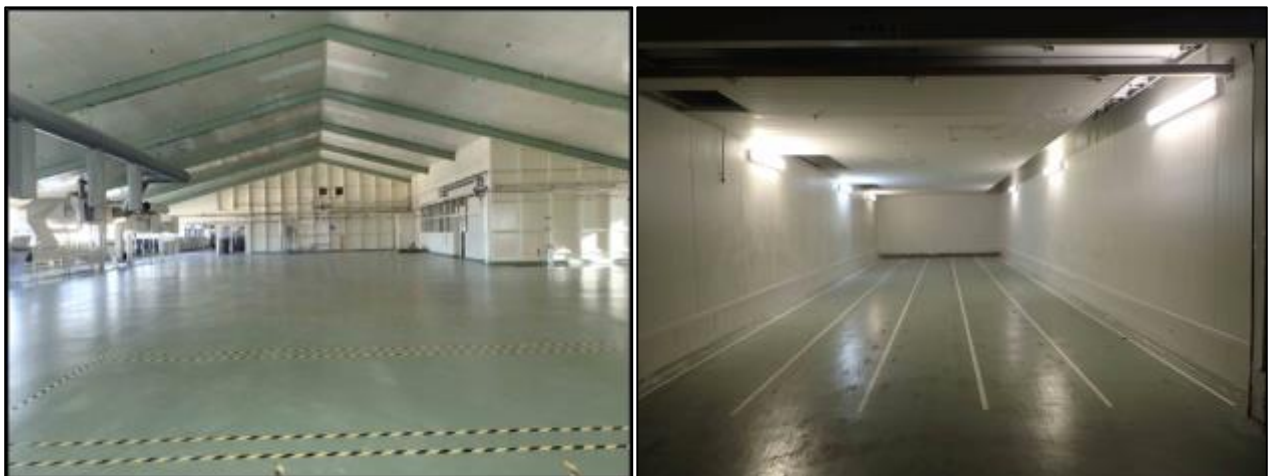


Figure 7-62 Photograph looking west at factory space (Block 5C) on the fourth floor (left) and photograph of drying room in the biscuit and dispatch building (Block 4C) looking west on the ground floor.

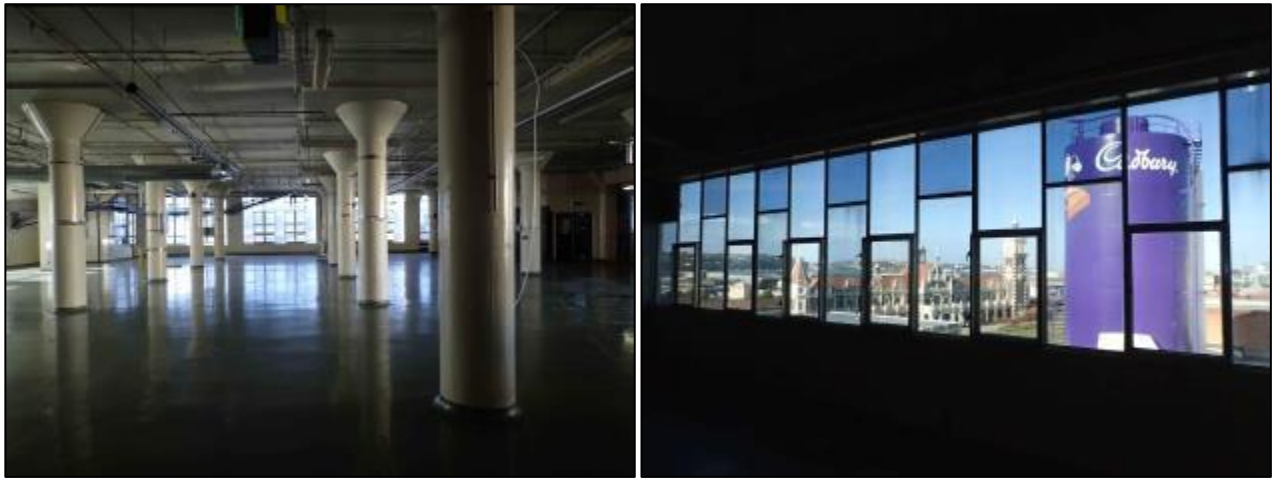


Figure 7-63 Photograph looking east (left) at windows on the second floor (Block 5C); looking southeast (right) at windows on the third floor (Block 5C).

7.9 Streetscape

All seven of the Cadbury Confectionery Ltd Buildings can be considered in relation to each other, as well as other buildings along Castle and Cumberland Streetscapes. The five buildings (Cadbury World Building; Office Building; Chocolate Factory and Garage Building; Biscuit Factory and Dispatch Building; and, Engineering Workshop, Labs, and Office Building) that form the façade along Cumberland Street form a distinct factory block, with no thoroughfare through to Castle Street. The only clear separation between the buildings being a narrow pedestrian and vehicle accessway. There are distinct variations in each of the buildings' designs (from plan undecorated frontages on the Cadbury World building to a modernist inspired Chocolate Factory and Garage building to the north) and height (the northern end of the Biscuit Factory and Dispatch Building is distinctly higher reaching five storeys, while the remaining buildings range from three to four storeys). From the ground level, the blockade formed by the buildings all constructed hard up against the footpath still form a congruous early twentieth century industrial setting along the one-way street system.

It is interesting to contrast this industrial façade with the neighbouring buildings. While the more recent purpose-built warehouse is a comparable modern equivalent of the Cadbury Confectionery Ltd Buildings, purpose built for the factory itself, the remaining buildings on this block are more orientated to Dunedin's commercial businesses rather than industry. The Dunedin Allied Press Ltd Building (List No. 2135 and schedule B564) at 52 Stuart Street for instance was constructed between 1926 and 1928, a similar period to the construction of the Chocolate Factory and Garage Building, yet it is dramatically different to all the Cadbury Confectionery Ltd buildings. The brick building designed by Edmund Anscombe features a far larger number of decorative elements (i.e., plasterwork moulding and combination of exposed brick and plaster render), that creates a far less brute appearance on the roadside, in spite of the building being distinctly taller than the neighbouring Cadbury Confectionery Ltd buildings, while also constructed hard up against the footpath.

On the opposing side of the street, almost all sense of the historic industrial nature of the area has also been lost with the modern instalment of the Countdown supermarket and its associated carpark, as well as the hotel and police buildings to the north. However, to the south of the block on the corner of St. Andrew and Cumberland Streets, is an A & T Burt building. This building pays homage to the iron foundry established across the road where the Cadbury Confectionery Ltd buildings are situated today. Yet, given separation of the Cadbury Confectionery Ltd buildings and the A & T Building by the road, the early twentieth century and distinctly modern commercial buildings, the respective A & T Burt and Cadbury Confectionery Ltd buildings feel isolated and unconnected when travelling down Cumberland Street.

On Castle Street there is a less cohesive façade for the three Cadbury Confectionery Ltd buildings with a frontage to the south (Dairy and Machine House Building; Chocolate and Biscuit Factory building; and Biscuit Factory and

Dispatch Building). The Chocolate and Biscuit Factory building, and the Biscuit Factory and Dispatch Building form a similar industrial streetscape to that presented by the Cadbury Confectionery Ltd buildings on the Cumberland Street façade. Again, while varying from three to five storeys and stylistic architectural differences, the buildings together form a dominant factory appearance right up against the footpath along Castle Street. While starkly different to all other Cadbury Confectionery Ltd buildings the factory buildings are complimented by the marked presence of the two large silos. These are also a direct reflection of factory processes visible from the street.

There is a large gap from the Chocolate and Biscuit Factory and adjacent silos to the Dairy and Machine house building. This gap forms the gated Castle Street vehicle entrance. The Dairy and Machine house building feature more of a commercial or business appearance towards the street, as they were directly associated with the R. Hudson and Co. and later Cadbury Fry Hudson offices. This frontage is more complimentary to other heritage buildings in the area than the chocolate factory, and Biscuit Factory and Dispatch Building. Further south towards St Andrew Street are the former commercial premises of the following businesses: International Harvester Company, Riach & McLennan (wholesale merchants), the Co-operative Dairy Co., and A. & W. McCarthy Ltd (specialists of guns, locks and fishing equipment). The International Harvester Company and Riach & McLennan building is a character contributing building with a protected façade to Castle Street (CC702), while the McCarthy building is scheduled as a Heritage Building (B561), and its façade to Castle and Lower Stuart Streets. Both buildings were constructed in the first couple of decades of the twentieth century and feature Edwardian and modernist elements. Again, they feature more decorative elements than the factory buildings further south (i.e. recessed panels, pilasters, and cornices) however the modest decorative elements are complimentary to those of the dairy building (i.e. arched parapet, plasterwork moulding, and simulated rustication). Overall the Dairy and Machine House Building along with those buildings further south form a cohesive streetscape easily visible from the Anzac square gardens and railway station across the road, that reflects early twentieth century business development along Castle Street.

On the other side of Castle Street there is distinct variation throughout the block. At the southern end, the Anzac Square gardens and the impressive early twentieth century railway station dominate the streetscape, forming a distinct lavish landscape of city infrastructure with the Law Courts on Lower Stuart Street opposite. This is the only green space provided along the Castle Street block. Indeed, in contrast immediately north is a number of one to three storey industrial buildings, many likely established with instalment as a result of the railway itself, as well as a small carpark along the west side of Castle Street. These smaller buildings, despite being part of the late nineteenth and early twentieth industrial landscape do not tower over the street and as a result contrast the Cadbury Confectionery Ltd buildings which dominate the street with their height and lack of thoroughfare. Thus, the factory buildings again feel isolated along the one-way Castle Street, a last remnant of large-scale, continuous century twentieth century factory development.

8 Constraints and Limitations

Minor constraints and limitations affecting this project include limited documentary and photographic records. Not all property records were consulted during the course of this assessment, however, in most cases the rates records and property files were able to provide the necessary details to allow for the development of a relatively comprehensive understanding of nineteenth and twentieth century activity within the Cadbury Factory Block. During the site visit the second storey of the Dairy and Machine House Building (part of Cadbury Confectionery Buildings Ltd) could not be accessed due to health and safety concerns. As a result, the first floor which likely contains elements of the pre-1900 structure could not be examined. Despite this the accrued information was also able to confidently inform the heritage values assessment and assessment of effects on such values.

9 Heritage Values

As is discussed in Section 6, the Cadbury Confectionery Ltd Buildings are included as a Category 2 Historic Place (List No. 2143) on the New Zealand Heritage List/Rārangi Kōrero. Until recently, the HNZPT online list record made explicit reference to the listing relating to the extended facades of four buildings; although, it did not specify which buildings this referred to. The assessment criteria utilised in the HNZPT listing was not outlined at the time. Since being listed in 1982, a review report of the listed buildings has not been undertaken and only a listing file of relevant collated documents are held by HNZPT, and no discussion of these values could be found in this file. Thus, as a Category 2 Historic Place, it is only specified that the buildings are of historical or cultural significance or value.

The Cadbury Confectionery Ltd Buildings are scheduled on the District Plan (B030; 2006, 2018), which states the protection extends only to the Castle and Cumberland Street facades. As such, the facades to the following buildings are protected:

- Dairy and machine house building (Block 1B-C; historically the cellar and possible small mill buildings)
- Cadbury World building (Block 1A; historically incorporated part of the granary/malt floor and kiln buildings),
- Office building (Block 2A; historically incorporated part of the granary/malt floor building),
- Chocolate factory and garage (Block 3A),
- Chocolate and biscuit factory (Block 3B-C)
- Engineering workshop, labs, and offices (Block 4A)
- Biscuit and dispatch building (Block 4C and 5A-C)

It is acknowledged that the other buildings within the complex that do not have street elevations, including the boiler house (constructed 1945 with extensions in 1959 and 1969) and power and services station (built around 1948), have heritage value, but are not protected under the District Plan. Likewise, the 1950s crumb silos were relocated to their current position in 1991 and are also not included in this discussion of heritage values.

While the District Plan protects the street façades of the buildings within the complex, heritage value is far more than their aesthetic from a street view perspective; although, this is certainly an important factor. This assessment considers the archaeological, architectural, historic, scientific, and technological values of the buildings and broader complex, and a detailed assessment of the heritage values of these buildings are provided in Table 9-1 below. The evaluation of the heritage values for the Cadbury Confectionery Ltd Buildings draws from the HNZPT listing documents for List No. 2143, previous heritage reports, and the research undertaken for this report using the criteria outlined in Section 3.2.

Previous heritage, architectural and archaeological assessments of the Cadbury Confectionery Ltd Buildings have predominantly focused on the Dairy and Machine House Building (Brooks & Jacomb, 2010; A Farminer, 2014; Oakley Gray Architects Ltd., 2010; Parkinson, 2011). The most recent review by Farminer (2014) recognising the heritage value of the Dairy and Machine House Building concludes:

Overall, the former Dairy building and Machine House have significant heritage value both as tangible reminders of Dunedin's early settlement and expansion, and as evidence of the industrial/manufacturing history of the site from the 1860s. Within their historic fabric, the two buildings demonstrate the significance of the historic manufacturing link between their original distillery origination, the brewery phase, Hudson's biscuit production period, and the Cadbury Fry Hudson era of Confectionery production right up to the recent use of the building by Cadbury/Mondelez NZ.

Table 9-1 Assessment of heritage values for the Cadbury Confectionery Ltd Buildings.

Archaeological Value	
Archaeological Information	<i>Does the place or area have the potential to contribute information about the human history of the region, or to current archaeological research questions, through investigation using archaeological methods?</i>
Moderate	The Cadbury Confectionery buildings are situated within two archaeological sites which have moderate archaeological information potential: I44/817 and I44/922. Site I44/817 (historic Cadbury site) comprises Town Sections 53-56 and 710-74, Block XVI Town of Dunedin. It includes three of the listed building façades (the Dairy and Machine House Building, Cadbury World and offices, and the chocolate factory) and part of the fourth listed building façade (the Biscuit Factory and Dispatch Building). The remains of four pre-1900 buildings are present or partially present on site. These include the 1868 New Zealand Distillery Company buildings granary/malt floor and kiln buildings incorporated into the present-day Cadbury World and Office Building, and the possible small mill incorporated into the Dairy and Machine House Building. The 1875 cellar constructed for the Albion Brewing Company, is also incorporated into the Dairy and Machine House Building. There are also the possible partial remains of two further buildings, an 1868 lean-to and still room. The condition of the site is poor as all pre-1900 buildings have all been heavily modified in the twentieth century resulting in minimal nineteenth century fabric surviving, and they thus also have a low amenity value. While the Dairy and Machine House Building façade is visible, it was restored to reflect the early twentieth century façade, and no original heritage fabric remains visible on the façade. Similarly, the pre-1900 brewery has been highly modified in the early twentieth century and many earlier features have been removed or masked by these modifications. Beyond buildings, no other archaeological features are visible, and the condition of any subsurface archaeological material is unknown. While commercial and industrial sites are common in Dunedin there are only four other brewery sites in Dunedin, and a final report has only been submitted for investigations into one of these sites: the Speights Brewery (I44/233). Both surface and subsurface archaeological remains at this site possess some contextual value in relation to and reveal information on the development of central Dunedin during the nineteenth century. This includes land reclamation processes; the early Dunedin brewery industry with New Zealand Distillery Company and the Albion Brewing Company operating from the premises in the nineteenth century; as well as the confectionery manufacturing industry, in particular one of Dunedin's most prominent businesses with R Hudson and Co. chocolate and biscuit manufacturers, occupying the site from 1898 through into the twentieth century. Site I44/922 comprises historic Town Sections 57 to 59 and 68 to 70, Block XVI Town of Dunedin, and includes SEC 57-59 and 68-70 BLK XVI DP 5322 SO 14196. It includes one of the listed building façades (the Biscuit Factory and Dispatch Building). No pre-1900 structures or features remain visible at the site, and the presence, location and condition of subsurface features remains is unknown. There is the potential to encounter subsurface remains relating to industrial activity with such foundries as the Otago Foundry and A & T Burt, as well as other industrial companies operating from the site from the 1860s onwards. There are relatively few foundry sites identified in the South Island with only three located in Dunedin. All three sites (I44/521, I44/850, and I44/712) have been previously investigated archaeologically, yet none of these previous investigations have involved excavations over the entire site. The A & T Burt site possesses some contextual value in that the site itself represents an industrial complex of buildings and features. It has additional contextual value when it is considered as part of this area of Dunedin's long history as a manufacturing centre. Archaeological investigations at this site has potential to inform us about several aspects of Dunedin's nineteenth century development, including reclamation, infrastructure and industry. It should also be possible to link archaeological features and/or deposits to those well-known businesses including the Otago Foundry and A & T Burt.
Architectural Values	
Architectural Merit	<i>Is the place significant because of its design, form, scale, materials, style, ornamentation, period, craftsmanship or other architectural element?</i>
Low	Architectural merit considers the overall values embodied within the architecture of a building as a whole, and the building's aesthetic is just one element to be considered. The evaluation of the heritage values of an industrial site will inherently vary from the evaluation of a standalone structure, as they generally comprise a complex of buildings constructed through time, with buildings often having very specific functions. The industrial nature of the complex has meant that buildings have evolved over time with a multitude of extensions and additions that have resulted in the buildings merging together and blurring the lines as to where one building starts and the other begins. Overall, the architectural merit of the complex is low, meaning that is typical to the design, style and use of materials or craftsmanship for the period. The values of each of the four buildings with protected facades are further described below. The Dairy and Machine House Building: the architectural merit of the Dairy and Machine House Building is low (design, form, scale, materials, style, ornamentation, period, and craftsmanship are typical of the period). The Dairy and Machine House Building was constructed in two main phases, including the 1868 possible small mill building and the 1875 cellar, along with significant alterations in the early twentieth century converting the building to a dairy. Throughout the use-life of this building, its façade has been updated in accordance with changing architectural styles, and as such, all historic ornamentation has been lost. The first clear photographs of the façade from 1902

display a clear Victorian frontage with a central access way to the more industrial central cellar portion of the building. This façade was not the original, as late 1870s photographs indicate that the multi-gable roof appears to extend all the way to the Castle Street footpath. It is unclear when the between 1875 and 1902 the masonry frontage was added. In 1918 the façade was altered significantly with the removal of first floor windows, two central doorways added and redesigned arched parapet. On top of this the brick work was exposed and the relief rusticated plasterwork used for the ground floor façade. By this time the cellar behind itself had been converted into a finished foods store and dairy. The building façade was altered again in the mid-twentieth century, with designs prepared by Miller, White and Dunn. By the 1960s had been stripped of the 1918 the plaster and brick detailing, and instead covered with a plain cement render and new concrete parapet. In 2018 the Dairy and Machine House Building façade was reconstructed to a design based on the 1918 frontage, which has considerably improved its aesthetic values. The improved aesthetic merit of this elevation was not without compromise (i.e., the lack of integrity of the façade in particular), but it does provide a strong connection to the history of the site. Moreover, the scale of the building and its massing from a streetscape perspective is much more in keeping with the surrounding commercial buildings on Castle Street, as opposed to the massive buildings located elsewhere in the complex.

The north elevation, which is also visible from the street, is unornamented and features windows of various styles, including some that are believed to be original to the building (e.g., the arched single hung windows). Later alterations to this elevation included the addition of the cross gable marking the location of a covered bridge (since removed) that once connected the dairy to the biscuit factory

The form of the building reflects the additions through time as related to its changing function. While the functions of the central and western portion of the building changed in the twentieth century, very little of the building's architecture did, and the building retained its Victorian industrial nature befitting the use of the building. The building began as the small mill (1868) for the New Zealand Distillery Company, with an extension to the east creating a cellar (1875) for the Albion Brewing Company with excellent access to the railway via a purpose-built siding. In the early twentieth century, R. Hudson and Co. converted the building to a finished goods store and dairy (milk processing plant), coinciding with the 1918 façade update. Later the small mill was converted to an engine house then a mixing room, the façade was modernised again, and a staff room was added above the dairy. Internal changes were made to the entire building, including the replacement of timber floors and the installation and extension of concrete floors.

Cadbury World Building (Block 1A): The architectural merit of the Cadbury World building is **low** (design, form, scale, materials, style, ornamentation, period, and craftsmanship are typical of the period).

The Cadbury World building is the southernmost building on Cumberland Street. The Cadbury World building was constructed over several phases, which is reflected in the building's Cumberland Street façade. The building incorporates part of the 1868 granary/malt floor building along Cumberland Street and the kiln building to the rear; however, with the purchase of the premises by R. Hudson and Co. from the early twentieth century onwards, the modifications overwhelmed the pre-1900 industrial design of the brewery buildings. These changes started with a southern extension, which brought the building to the property boundary, and at the same time, the entire building was raised to four storeys. Between 1901 and 1915, two storeys were added the central portion of the granary/malt floor building, extending the Cadbury World building to its current width.

On the interior, significant alterations have resulted in the loss of the clear granary/malt floor and kiln buildings with the removal of a mezzanine floor in 1959 and consequent reinforcement. While the ground floor was transformed into Cadbury World in 2001 and the Cadbury Café in 2014, the upper floors retain their open plan with traces of the original granary/malt floor and kiln buildings walls still remain.

Office Building (Block 2A): The architectural merit of the Office Building is **low** (design, form, scale, materials, style, ornamentation, period, and craftsmanship are typical of the period).

The Office Building is situated on Cumberland Street to the north of the Block 1A building and south of the chocolate factory and garage (Block 3A), which is easily delineated by its distinctive mansard roof. The building was constructed in multiple phases beginning with the 1868 granary/malt floor building. In 1909, a new building was constructed behind the granary/malt floor building (later replaced with a concrete building), and by 1915 an extension was constructed that not only connected the 1909 building to those along Cumberland Street, but also saw the building extended to the north and raised to two stories. Between 1915 and 1922, another extension was made, creating an additional bay of windows to the north and adding another floor. Based on photographic evidence, a large concrete extension had been created at the rear of the building likely in 1922, replacing the 1909 building. The building was further extended north in 1924 (steel and concrete), creating a connection with the chocolate factory, and by 1926 the fourth storey with a mansard roof was added. At this time, the front of the building served as the grain store on the ground floor with dressing rooms above, while the rear of the building had a mixing room on the lower floor and chocolate packing area above. Around 1959, the north and east wall of the granary/malt floor building was removed during alterations that saw timber floors replaced with reinforced concrete (ground and first floors). In 1983 the mixing and chocolate packing building was refitted for offices and reception.

The façade is a collage of various changes to the building over thirty years, with distinctive elements, such as the mansard roof, a result of these changes rather than the earliest buildings. The façade is further confused by the fact that the frontage of the chocolate factory to the north was extended across part of the Office Building when the connection between these two buildings was established in 1924. There is incongruity between the extent of the mansard roof and the 1924 façade. It is possible that a small remnant of the western wall of the granary/malt floor building remains; however, this can only be confirmed through invasive investigation of the building.

The interior of the building has been extensively modified, with removal of the internal floors and foundations in 1959 and replacement with reinforced concrete and the 1980s interior linings.

Chocolate Factory and Garage (Block 3A): The architectural merit of the chocolate factory and garage is **low** (design, form, scale, materials, style, ornamentation, period, and craftsmanship are typical of the period).

Block 3A is a four-storey building with a frontage to Cumberland Street that sits between the engineering workshop, labs, and offices building (Block 4A) to the north and the Office Building (Block 2A) to the south. The building was built in multiple phases between 1922 and 1930 using reinforced concrete and steel. The first phase of construction in 1922 comprised a low garage out to Cumberland Street with a three-storey factory building to the rear. In 1924, additional floors were added above the garage, bringing the entire building to three storeys; the façade was also extended to the south, thereby connecting the chocolate factory and Office Building. A penthouse was added in 1939, raising the building to four storeys.

The 1924 Cumberland Street façade of the building appears much as it does today with later alterations, such as a 1939 penthouse, aligning with the 1924 design. It features an early modernist influence yet retains a functional and factory appearance with the building's detail limited to pilasters and large multi-square paned windows some of with plaster work detailing running across the top of the first floor and that incorporates the high arch over a vehicle and pedestrian accessway. Unusually, the decoration on the façade is not symmetrical, with the southern end having ornamentation not seen elsewhere on the building.

Internally, structural support changes and alterations were made to the chocolate factory in the mid to late 1930s. These included changes to the ground and first floors in 1934 (designed by McDowell Smith) and changes to the third floor in 1938 (designed by Miller and White), the later forming the cafeteria level as it exists today. Architecturally, the interior of the building reflects its industrial functional requirements.

Chocolate and Biscuit Factory (Block 3B-C): The architectural merit of the Chocolate and Biscuit Factory is **low** (design, form, scale, materials, style, ornamentation, period, and craftsmanship are typical of the period).

The Chocolate and Biscuit Factory is a three-storey building with a frontage to Castle Street, which is situated to the east of the chocolate factory and garage (Block 3A) and to the south of the biscuit and dispatch building (Block 5). The western extent of the building was constructed in 1924 and extended to adjoin nineteenth and early twentieth century building lining the Castle Street frontage by 1927. In 1938, using reinforced concrete and steel nineteenth and early twentieth century portions at the eastern end of the building. The replacement at the eastern end was designed by Miller and White and constructed by William McLellan Ltd while connections to Block 3A were established, the two buildings remain quite distinct.

The Castle Street façade has changed little since 1938, with art deco plaster rearing running vertically up and down pilasters as well as decorative windows at the southern end of the façade. In contrast, the rest of the building is relatively plain, with only decorated with a simple plaster moulding, likely reflecting the industrial and manufacturing functions of the building. The façade is unusual in that it is asymmetrical, with ornamentation restricted to the south bay of the building. This perhaps signals that there were plans to extend the building further south, but this could not be confirmed during the timing of this assessment.

The interior of the building is unadorned, representing the utilitarian function of the space, with few exceptions. An area in the southeast corner of the second floor shows quite different linings, including tongue and groove panelling on a wall and linoleum tiles on the floor, perhaps indicative of a former lunch or staff room.

Engineering Workshop, Labs, and Offices Building (Block 4A): The architectural merit of the engineering workshops, labs, and offices building is **low** (design, form, scale, materials, style, ornamentation, period, and craftsmanship are typical of the period).

The engineering workshop, labs, and offices building is a three-storey reinforced concrete building on Cumberland Street, that has a connection to the biscuit and dispatch building to the north and is separated by an access way to the Chocolate Factory and Garage Building to the south. The building was designed by engineer JRG Hanlon in 1961 and was constructed soon after. The footprint of the building is still the same as it was when the building was first constructed however, there have been some internal modifications such as upgrades to offices on the first floor and the essence room on the second floor in 1994.

The façade of the building is in keeping with the adjacent biscuit and dispatch building (constructed 1951) comprised of ten bays of steel multi-paned windows with unornamented spandrels and columns between. The interior of the building is separated into many small rooms, with linings suiting the different functions of the building (engineering workshop, labs, and offices).

Biscuit and Dispatch Building (Block 4C and 5A-C): The architectural merit of the chocolate factory building is **low** (design, form, scale, materials, style, ornamentation, period, and craftsmanship are typical of the period).

The biscuit and dispatch building is a long L-shaped five-storey reinforced concrete building that extends from Cumberland Street to Castle Street. Plans for a three-storey building were prepared for Cadbury Fry Hudson by Miller and White and engineer JRG Hanlon in 1947; although, the building was not completed until 1951. The portion of the building between Cumberland and Castle Streets (Block 5A-C) was utilised for biscuit baking, while the extension along Castle Street (Block 4C) was the dispatch hub. Two additional storeys were added to the building in 1968, again designed by Hanlon.

The façade reflects the utilitarian nature of the building, with few decorative elements in keeping with the modern style. However, the building still complements the adjacent chocolate factory building façade with a select number of pilasters running vertically along the building. A central feature of the east and west façades is the lift shaft which

	displays a slightly more decorative pilaster running the height of the building adorned with long rectangular glass block windows either side up to the fourth floor. The windows on the lower three stories are multi-paned steel sashes with ventilators, while longer rectangular panes were utilised in the windows on the 1968 upper two stories. The building was designed with long linear production in mind, with the interior spaces being open from one end of the building to the other. The 1951 floors feature large concrete columns with a modern take on the papyrus capitals. The interior finishes represent the utilitarian function of the space.
Rarity High	<i>Is the place or area, or are features within it, unique, unusual, uncommon or rare at a district, regional or national level or in relation to particular historical themes?</i> Architectural rarity is assessed here on a scale of low value, being common for the period, to high value, being the first or one of the very few remaining of the period at a local to national level. Based on the research undertaken for this assessment, UOA considers the Cadbury Confectionery Ltd Buildings to have high rarity. The extant buildings within the complex represent its past functions as a whisky distillery, brewery, and confectionery manufacture. There are a large number of industrial and commercial buildings that survive at a district, regional and national level in New Zealand; however, those relating to the specific functions of brewing and confectionery manufacturing are rare. Moreover, the Cadbury Confectionery Ltd Buildings one of the last representations of wider industrial activity immediately below the Octagon from the 1880s into the twentieth century. The New Zealand Heritage List/Rārangī Kōrero contains no historical information so making meaningful comparisons at a regional or national level is difficult if not impossible. Based on searches of the listing name, there are three other listed breweries across the country (Thorndon Brewer Tower, Wellington; Wards Brewery Historic Area, Christchurch; and Black Horse Brewery, Wetherstons), but no distilleries were identified in the list. There is only one listed building associated with confectionery manufacture: the Romison's Confectionery Works (List No. 9720), which is located in Dunedin and is now occupied by the University Book Shop; although, other buildings associated with food manufacturing are included on the New Zealand Heritage List/Rārangī Kōrero. On ArchSite, thirteen breweries have been recorded nationally, with ten being within the South Island, including Speights Brewery (I44/233), Caversham Brewery (I44/639), Burkes Brewery & Station (I44/864) and the Water of Leith Brewery (I44/382) in Dunedin. The latter has connections to the Cadbury Factory Site, being the former location of Marshall and Copeland's Albion Brewing Company. There are no known confectionery manufacturing sites recorded on ArchSite apart from the Cadbury Factory Site; however, food manufactory sites are better represented.
Representativeness Moderate	<i>Is the place or area a good example of its class, for example, in terms of design, type, features, use, technology or time period?</i> Architectural representativeness is measured on a scale of low, moderate and high, with low representativeness meaning that the building has few characteristics of the architecture or technology of the period, while high representativeness means that the building has all key characteristics. The complex of industrial buildings represents the history of the site and shows the transition in design through time. Most buildings are considered moderate examples of their class, with the exception of the Office Building (Block 2A), which has been heavily modified over multiple phases. The Dairy and Machine House Building: The Dairy and Machine House Building is a moderate example of the pre-1900 industrial architecture, with the building representing one of the few buildings on the site that can still bear witness to the function of the site as a distillery (i.e., small mill, 1868), brewery (cellar extension in 1875), and Confectionery manufacturer (dairy for R. Hudson and Co). The design of the building and its features are typical of its industrial use in the Victorian and Edwardian periods, as demonstrated through the utilitarian finishes (concrete floors, painted brick walls, etc.). As has been noted above, the building's façade has changed over time, reflecting the changing image of R. Hudson and Co and Cadbury Fry Hudson Ltd and their desire to promote the modernity of their company, while in 2018, the façade was restored to reflect the 1918 façade and the long tradition of the company. Cadbury World Building (Block 1A): The Cadbury World building retains a small portion of the New Zealand Distillery Company's 1868 granary and malt floor with additions comprising the bulk of the building between 1901 and 1915. Th while little remains of the initial period of construction, the remainder of the building has many of the characteristics of industrial buildings constructed in the early twentieth century (e.g., brick loadbearing walls and timber columns, girders, joists and floors). Many of the features of these early twentieth century additions remain visible and readable today. As such, the Cadbury World building is considered a moderate example of an early twentieth century industrial building. Office Building (Block 2A): The Office Building was constructed in multiple phases, incorporating a small portion the New Zealand Distillery Company's 1868 granary and malt floor, with much of the building constructed between 1915 and 1926. This building has been heavily modified, and the interior in particular (1980s office fitout); therefore, it is considered to have low representativeness. Chocolate Factory and Garage (Block 3A): The chocolate factory and garage was constructed in phases between 1922 and 1930 and is a moderate example of an industrial building with reinforced concrete construction, with the façade being a good representation of a restrained modern façade. Additions to the building are easily read and are sympathetic to the original design.

	Chocolate and Biscuit Factory (Block 3B-C): The western end of Chocolate and Biscuit Factory was constructed between 1922 and 1927, with the western end of the building constructed in 1938 using reinforced concrete and steel. The building has seen few modifications after 1938, and it has an understated modern façade designed by Miller and White. It is considered to be a moderate example of an industrial building constructed in the 1920s and 1930s. Engineering Workshop, Labs, and Offices Building (Block 4A): Block 4A was designed to house the engineering workshop, labs, and offices and was constructed in 1961. The design, by JRG Hanlon, represents a continuation of the style used in the neighbouring biscuit and dispatch building constructed a decade previously. In contrast to the factory buildings, the scale of Block 4A is much smaller. UOA considers the building to be have a low representativeness. Biscuit and Dispatch Building (Block 4C and 5A-C): The biscuit and dispatch building was constructed in two phases (1951, 1968) is a moderate example of a purpose-built reinforced concrete industrial building, showing the transition in manufacturing process to linear mechanisation. There have been few modifications to the building through its use-life, apart from the addition of two floors in 1968.
Integrity Low to high	<i>Does the place have integrity, retaining significant features from its time of construction, or later periods when important modifications or additions were carried out?</i> Architectural integrity of the buildings in the complex was assessed on the basis that low integrity indicates the character of the building to be changed significantly, with few heritage values remaining, moderate integrity meaning the changes are unimportant and most heritage values remain, and high integrity meaning that the building is unchanged or has had important modifications that retain their heritage value. UOA has found the buildings within the complex to have integrity values that range from high to low. The Dairy and Machine House Building: The Dairy and Machine House Building has a moderate architectural integrity, apart from the restored facade. As noted by Farminer (2014) and Oakley Gray Architects Ltd (2010) distinctive elements of nineteenth century building are still present within the building (i.e., nineteenth century industrial design of the trusses, floor and roof structures of kauri and rimu in the central cellar and eastern office section of the building as well as the multi-gable roof of the building). Both Farminer (2014) and Oakley Gray Architects Ltd (2010) noted the compromised integrity of the building with the addition of such features as the lunchroom on top of the building. Work began on restoration work of the building in 2016, seeing the removal of the intrusive lunchroom and replacement of the roof. In 2018, restoration work was undertaken on the building's façade, creating an appearance similar to the R Hudson and Co. 1918 façade. While this façade no longer retains historic fabric, it creates an important historical connection that the public can interact with. Cadbury World Building (Block 1A): The architectural integrity of the first phase of the building (1868) is low with all but a few brick walls removed; however, there is moderate integrity to the early twentieth century additions that comprise the bulk of the building. The ground floor has been most heavily modified through time; but in the floors above, the early twentieth century fabric remains visible in many areas. In the interior of the building the removal of the southern wall, a mezzanine floor as well as other changes, such as the establishment of the wide entrance through the granary/malt floor building which would be used eventually for the Cadbury Café, means that even if the original fabric could be identified beneath the internal adornments of Cadbury World or café, the pre-1900 structure would be more a reflection of changes and processes that affected the building in the twentieth century than the earliest architectural design of the building. Office Building (Block 2A): UOA considers the Office Building to have low integrity. Not only has the structure seen multiple phases of construction, the interior of the building has been substantially changed, transforming it from its previous industrial use (front - grain store on the ground floor with dressing rooms above; rear - mixing room on the lower floor and chocolate packing area above) to an office building. In 1959, extensive work was carried to allow the replacement of the existing timber floors (ground floor and first floor) with reinforced concrete slabs, necessitating significant modifications to the foundations and replacement of the timber columns with steel columns encased in concrete. While the 1980s interior fit-out largely remains, it is not considered to have heritage value. Chocolate Factory and Garage (Block 3A): The Chocolate Factory and Garage Building was largely built in the 1920s. The integrity of this building is moderate. The building was initially constructed as a single storey garage to Cumberland Street, with a taller chocolate factory to the rear; however, the building was extensively modified several years later bringing the entire building up to three storeys and extending the façade to the south. A fourth storey was added in 1939. The interior of the building has few linings, as such, the concrete walls, columns, and ceiling remain true. The exterior of the building has high integrity, and the fourth floor is easily discernible as a later addition. Chocolate and Biscuit Factory (Block 3B-C): The Chocolate and Biscuit Factory was constructed between 1922 and 1938 and has seen modifications through time, including both internal and external changes. As such, UOA considers the factory to have moderate integrity. Engineering Workshop, Labs, and Offices Building (Block 4A): Block 4A was constructed in 1961, and there have been few external modifications over time. Internally, there are likely to have been numerous changes making the rooms fit for use in their various functions. As such, UOA considers Block 4A to have moderate integrity. Biscuit and Dispatch Building (Block 4C and 5A-C): The Biscuit Factory and Dispatch Building have high architectural integrity. The lower three stories were constructed in 1951, with an additional two stories constructed in 1968. Only minor work on the exterior building as part of routine maintenance and only minor changes to the interior.

Vulnerability Yes	<i>Is the place vulnerable to deterioration or destruction or is threatened by land use activities?</i> The Cadbury factory was closed in 2019 and sold to the Ministry of Health. Without constant use and upkeep of the buildings as purposely designed, the buildings already display signs of deteriorating conditions. However, wider structural issues were certainly present prior to this transaction that have also increased the vulnerability of the buildings considerably. Prior to the closure of the factory, work was underway to convert the Dairy and Machine House Building into the new home of Cadbury World. The roof was replaced, and façade restored; however, significant work remains to be done on the interior of the building. At the time of the assessment survey, the first floor of the Dairy and Machine House Building could not be accessed due to health and safety concerns. UOA also found that areas of the Cadbury World building had been blocked off and appeared to have not been used for some time. When buildings are vacant, even for a short period, they become vulnerable to decay and are often vandalised; however, the Ministry of Health has taken steps to avoid this and has a security company constantly monitor the site. Consideration to the retention of the building façades along Cumberland and Castle Streets was given in a report undertaken by WSP-Opus which identified further inherent structural issues with the buildings (Blacker & Burrough 2019). In the Cadbury World and Office Building, a lack of mechanical connections was noted between the wall and floors, while the walls of Cadbury World and office, chocolate factory, and Biscuit Factory and Dispatch Buildings show signs of damp penetration and external rising damp as well. An initial evaluation procedure identified that these three buildings have ratings of 20% NBS, and the brick façades of the Cadbury World and Office Building in particular would “require significant work to improve their integrity, including upgrading the foundations to mitigate the effects of liquefaction”. With considerations towards the heritage of the existing buildings as well as the design and public safety requirement of the new hospital, WSP-Opus deemed that while “it is possible to retain the façades... their retention will affect the layout and usage of the site, and both the extent and complexity of the construction work required. This will have significant cost, programme and health and safety implications” (Blacker & Burrough 2019).
Context or Group Moderate	<i>Is the place or area part of a group of heritage places, a landscape, a townscape or setting which when considered as a whole amplify the heritage values of the place and group/ landscape or extend its significance?</i> This assessment considered whether the Cadbury Confectionery Ltd Buildings had context or group value, with high value meaning that it is a principal contributor to the dominant values of the group, moderate being compatible with the group, and low being of little importance to the group. Overall, UOA considers the contextual value of the Cadbury Confectionery Ltd Buildings to be moderate. While isolated from other nineteenth century industrial buildings in Dunedin due to removal through twentieth century development, the buildings still hold connections with other heritage buildings, forming central Dunedin townscape that reflects nineteenth and early twentieth century development and entanglement of transportation and commercial businesses. Within Block XVI, there are a number of recognised heritage buildings; however, only one other building is listed: the Dunedin Allied Press Ltd Building (List No. 2135 and schedule B564). This building was constructed between 1926 and 1928, a similar period to the construction of the Chocolate Factory and Garage Building, yet it is dramatically different to all the Cadbury Confectionery Ltd buildings as it features ornate decorative elements, more typical of late Victorian and early Edwardian Renaissance revival commercial architecture. At the south end of Castle Street are the former commercial premises of the following businesses: International Harvester Company, Riach & McLennan (wholesale merchants), the Co-operative Dairy Co., A. & W. McCarthy Ltd (specialists of guns, locks and fishing equipment), as well as Mooney and Co. Wool and Skin Merchants on lower Stuart street. The International Harvester Company and Riach & McLennan building is a character contributing building (CC702), as is the Mooney and Co. Wool and Skin Merchants building (CC062), while the McCarthy building is scheduled as a Heritage Building (B561). The façades to Castle and Lower Stuart Streets of the McCarthy and International Harvester Company buildings are protected. The three buildings were constructed in the first couple of decades of the twentieth century and feature Edwardian and modernist elements. Again, they feature more decorative elements than the factory buildings further south; however, the modest decorative elements are complimentary to those of the dairy and machine house building. One other character contributing building is located in Block XVI, the building at 18 Stuart Street (CC062) and it is the only other building on the block constructed prior to 1900. The building was built sometime between 1874 and the late 1880 and, by 1889 was home to the Supreme Court Hotel (Bare, 1889). In contrast to the industrial Cadbury Confectionery Ltd buildings the premises continued to be used for commercial occupation, as it continued as a hotel into the twentieth century. On the other side of Castle Street there is distinct variation throughout the block. At the southern end, the Anzac Square gardens and the impressive early twentieth century railway station (B005) dominate the streetscape, forming a distinct lavish landscape of city infrastructure with the Law Courts (B0560) on Lower Stuart Street opposite. This is the only green space provided along the Castle Street block. In contrast, immediately north are several one to three storey industrial buildings, many likely established with instalment as a result of the railway itself, as well as a small carpark along the west side of Castle Street. These smaller buildings, despite being part of the late nineteenth and early twentieth industrial landscape do not tower over the street and as a result contrast with the Cadbury Confectionery Ltd buildings which dominate the street with their height and lack of thoroughfare. Thus, the factory buildings again feel isolated along the one-way Castle Street, a last remnant of large-scale, continuous nineteenth and twentieth century factory development.

Cultural Values	
Identity Moderate	<i>Is the place or area a focus of community, regional or national identity or sense of place, and does it have social value and provide evidence of cultural or historical continuity?</i> Identity value was assessed on a scale of low to high, with low being meaning it has a minor contribution, while a high value indicates it to be a focus of national or regional community identity, sense of place or social value or has special age value such as constructed within the first 30 years of settlement. The cultural value of the Cadbury Confectionery Ltd Buildings is moderate. The site has been a site of continuous industrious activity from the 1860s onward, with the northern half of the site being the location of several foundries and later operated by A & T Burt and the southern extent initially having a residential/commercial occupation then transitioning to a distillery, brewery, and confectionery. The products produced by both A & T Burt, the Albion Brewing Company, and R. Hudson and Co. (and their succeeding companies) have received recognition in the local, regional and national identity, but it is Cadbury chocolate in particular that has a strong national identity. Under Marshall and Copeland, the Albion Brewing Company gained local acclaim as one of Dunedin leading breweries and their products were sent overseas as well to the 1879 Sydney Exhibition (Otago Daily Times, 1879). The evolving Cadbury Confectionery companies from 1898 contributed to both local and national identity (Comer, 1973; C. V. Smith, 1968). Under the Hudson's directive the companies increasingly popular through their success at the 1925-26 South Seas Exhibition (Comer, 1973; C. V. Smith, 1968). Later Cadbury Fry Hudson continued establishing the positive press for the company with successful marketing campaigns throughout the country including the 'Cadbury Plane' piloted by Captain MacGregor, a WWI RFC pilot that flew both Cadbury executives as well as customers (C. V. Smith, 1968). During World War II, Cadbury Fry and Hudson kept their deployed employees and others up to date overseas with happenings at the factory and Dunedin, by establishing the <i>Chocolate Soldier</i> newsletter. It was so successful that the newsletter continued following the war (C. V. Smith, 1968). Following World War II, the company grew significantly leading the market of production of chocolate and cocoa. Even in the past twenty years the Cadbury business upheld the Dunedin factory's prominence at local, regional and national levels. This is easily seen in the popularity of the Jaffa race that occurred yearly for 16 years before the last race in 2017. This success and pre-eminence of these companies is a continuation of businesses that operated in buildings no longer present such as the A & T Burt company, an Iron foundry that had considerable standing throughout the country. They constructed or contributed to such notable structures as the Wellington State Fire Insurance Building, the Claudelands Bridge in Hamilton, and the Kaikorai Valley Tramline (Otago Daily Times, 1910, 1921a).
Public esteem Moderate	<i>Is the place held in high public esteem for its heritage or aesthetic values or as a focus of spiritual, political, national or other cultural sentiment?</i> The Cadbury Confectionery Ltd Buildings has moderate public esteem for its heritage values, aesthetic values, and as a place of manufacture. This has been recognised by the listing of the buildings' façades as a Category 2 Historic Place. The existence and persistence of an inner-city chocolate factory garnered high public esteem amongst the local population. The later development of "Cadbury World" extended this esteem to a national and international level.
Commemorative Moderate	<i>Does the place have symbolic or commemorative significance to people who use or have used it, or to the descendants of such people, as a result of its special interest, character, landmark, amenity or visual appeal?</i> The commemorative value of the Cadbury Confectionery Ltd Buildings is moderate, meaning that it commemorates national or regional endeavours or people at a national, regional or local level. The Cadbury Confectionery Ltd buildings have long been a workplace for a large number of Dunedin's population. Even the earlier businesses such as A & T Burt hired relatively large numbers of employees by the early twentieth century and R. Hudson and Co. and later Cadbury iterations continued to hire large numbers of individuals. R Hudson had hired over 100 people from the 1880s and by the mid-1930s Cadbury, Fry and Hudson had over 500 employees. It was acclaimed at this time for its great contribution to Dunedin's economy (Otago Daily Times, 1936). The Cadbury buildings have continued to be a rich source of jobs for Dunedin right up until 2018. As such these buildings likely hold special interest to those individuals who toiled away in the factories and offices as well as their descendants. The buildings, in particular Cadbury World and the Dairy and Machine House Building, were a draw card for tourists and contributed to Dunedin tourism economy. Tours of the factory buildings instilled the history of the Confectionery manufacturers place and as noted by Farminer (2014) the tours highlighted the significance of the age of the Dairy and Machine House Building.
Education Moderate	<i>Could the place contribute, through public education, to people's awareness, understanding and appreciation of New Zealand's history and cultures?</i> Investigation of the archaeology and heritage at this site have the potential to reveal moderate information about nineteenth century industrial development in Dunedin, with details on particular businesses (i.e., breweries and confectionery manufacture) as well as numerous notable New Zealand businesses (e.g., Albion Brewing Company and R. Hudson and Company). Much information has been lost in the constant development of the site over the twentieth century even of the Dairy and Machine House Building which retains the most integrity of its pre-1900 elements. However, as the premises was used for continuous industrial use for over the past 100 years, even later developments seen in the buildings will provide insight into the adaptations and changing nature of the various business operations from the premises.

Tangata whenua No	<i>Is the place important to tangata whenua for traditional, spiritual, cultural or historical reasons?</i> There are no known tangata whenua values associated with the Cadbury Confectionery Ltd Buildings.
Statutory recognition Yes	<i>Does the place or area have recognition in New Zealand legislation or international law including: World Heritage Listing under the World Heritage Convention 1972; registration under the Historic Places Act 1993; is it an archaeological site as defined by the Historic Places Act 1993; is it a statutory acknowledgement under claim settlement legislation; or is it recognised by special legislation?</i> The Cadbury Confectionery Ltd Buildings are included as a Category 2 Historic Place (List No. 2143) on New Zealand Heritage List/Rārangi Kōrero. The Cadbury Confectionery Ltd Buildings were first listed in 1982 under the Historic Places Act 1980 with a 'C' classification, which indicates that merits preservation because of its historical significance or architectural quality (pers. com. Sarah Gallagher, Heritage Assessment Advisor, HNZPT, 10 April 2019). When the classification system changed, the listing became a Category 2 Historic Place, which is defined by the HNZPTA 2014 as a place of "historical or cultural heritage significance or value". The facades to Castle and Cumberland Streets across the same property boundaries were also registered as B030 on the 2006 Dunedin City District Plan (Schedules 25.1 and 25.2) and the 2GP (Schedule A1.1). The Former Cadbury Building on Section 74 and the adjacent Section 73 BLK XVI, Dunedin, was incorporated into the Anzac Square/Railway Heritage Precinct (TH11) in the precinct the 2006 Dunedin City District Plan; however, it is no longer part of this precinct and is now referred to as the Stuart Street Commercial Heritage Precinct in the 2GP. The Cadbury Confectionery Ltd Buildings are also recorded as part of archaeological sites I44/817 and I44/917 on the NZAA site recording scheme, NZAA.
Historic Values	
People High	<i>Is the place associated with the life or works of a well-known or important individual, group or organisation?</i> There are several significant businesses and individuals associated with the operations on the premises of Cadbury Confectionery Ltd Buildings, as well as the architects who designed those buildings. Overall, UOA considers there to be high values as these associations are significant at both regional and national levels, and in some instances internationally. <u>The New Zealand Distillery Company</u> was the first brewery to operate off the premises. Buildings associated with start of this company are still present incorporated into the Cadbury Confectionery Ltd Buildings today. The company started operating in 1869 and was established by C. R. Howden and R. M Robertson, who had previously operated as wine and spirit merchants. Howden was also known for playing golf near Dunedin at Balmacewan, and he along with others first established Otago Golf Club. Robertson had been a partner in Wright, Stephenson & Co. Ltd which has evolved and today operates as PGG Wrightson. Howden and Robertson were quickly joined by W. J. Larnach, of Larnach's Castle fame and E. W. Humphries (S. Perry, 1980). <u>The Albion Brewing and Malting Company</u> first took over the New Zealand Distillery Company distillery in 1875. It was formed as a consortium, amongst which William Larnach was a member. In the same year the company started brewing and they also built the cellar building still incorporated today into the Dairy and Machine House Building. By December 1875, Albion beer was on sale. However, the business never took off. The Albion Brewing Company was purchased by <u>John Marshall</u> and <u>Copeland</u> in 1878 and brewed their first batch in January the following year. They had first started their business in Dunedin in 1861, producing as much beer as their brewery on the Water of Leith could produce. However, with the company's growth they looked for new premises (Otago Daily Times, 1879). By 1879 they were one of Dunedin's leading breweries. In spite of this, move to Cumberland Street was not successful for Marshall and Copeland. The partners were under too much financial strain. This paired with his brother's death in 1883, John Marshall declared himself bankrupt three years later (Leckie, 1997). Richard Hudson (1841-1903) was a prominent Dunedin figure, known as both a businessman as well as for his philanthropic endeavours. He established himself in New Zealand as a baker, training under John Griffen of Griffen's Biscuits and eventually established his own business in Dunedin in 1868 (Comer, 1973; C. V. Smith, 1968). He eventually formed the company <u>R Hudson and Co.</u> and established his confectionery manufacturing premises along Cumberland and Castle Streets in 1898. In the late nineteenth century, Hudson passed his business on to his six sons. <u>Cadbury Fry Hudson Ltd</u> formed in 1930 as an amalgamation of three companies that would continue to operate R. Hudson and Co.'s premises along Cumberland and Castle Streets. These three companies were the <u>Cadbury Company</u>, <u>Fry and Sons</u>, and <u>R. Hudson and Co.</u> Cadbury was established in 1824 in England as grocers but soon entered into the drinking chocolate and cocoa, and eventually the eating chocolate market for which the company is well known for today. Fry and Sons, like Cadbury, had a history of developing cocoa products in England from 1728. Although both Cadbury and Fry had suffered in their international exports during First World War, combined, the two companies pushed their overseas markets. <u>John McGregor</u> was called upon to design the New Zealand Distillery Company distillery, initially for the corner of Manor and Crawford Streets. However, the location was shifted to Cumberland Street (S. Perry, 1980). John McGregor created several other more ornate and elaborate buildings around Dunedin, including the warehouse or factory at 8 Stafford Street, and the Melrose residence in Roslyn.

	The architectural firm <u>Miller and White</u> was established in 1927 by architects Eric Miller and James H. White. The firm has contributed significantly to Dunedin's built heritage designing such buildings as the Irvine and Stevenson building, the 1939 NZR Road Services building (part of the Otago Settlers Museum) and 1938 St John's Building on York Place. Miller and White were known for the early modernist architecture (C. Smith, 2009) and elements of this can be seen in the later extents of the chocolate factory building designed by this firm. <u>Henry McDowell Smith</u> was an architect who began his career in Newcastle-upon-Tyne, England, before relocating to Dunedin in 1908 to work with Edmund Anscombe. McDowell Smith left the company in 1921 to set up his own practice in Dunedin (Otago Daily Times, 1921b) and like Miller and White went on to design numerous early modernist buildings around Dunedin and the country. A similar modernist style can be seen reflected in the portion of the chocolate factory, designed by McDowell Smith. <u>Fletcher Bros. Ltd</u> (1915 to present) was an early twentieth century construction company established by <u>James Fletcher</u>. Fletcher started construction in 1909, when he first constructed a house Dunedin with Albert Morris. The company grew to become one of New Zealand's most well-known construction firms the Fletcher Construction Company. The initial concrete part of one or both of the current Cadbury Confectionery Limited buildings was constructed by the Fletcher Construction company: The Cadbury World and Office Building and the chocolate factory building. <u>William McLellan Ltd</u> was another key player among Dunedin's construction firms operating between 1910 and 1966 (Farquhar, 2006). They constructed a variety of buildings around the city and further afield including the Octagon Theatre, the Southland hospital and the Invercargill Post Office. A decade before working on the steel and concrete building for the Cadbury buildings (the eastern extent of the chocolate factory), McLellan Ltd were advertising their skill in steel structural work (Evening Star, 1928a). They also had worked previously with other modernist architects, Mandeno and Fraser. Together they constructed the new banking chambers in Queenstown, another reinforced concrete building (Lake Wakatip Mail, n.d.). Although no buildings relating to the following individuals or business exist on the premises, they contribute to the historic values of the land on which the Cadbury Confectionery Buildings stand today. <u>The Otago Foundry</u> was established by <u>William Wilson</u> and <u>David Mason</u> and was the first such foundry in Dunedin, one of the city's earliest large-scale metal working businesses. The foundry undertook the first iron casting at the Cumberland Street premises in 1862. However, by this time William Wilson was noted to be operating the business with a <u>Mr Selby</u>. By the mid-1860s the company was undertaking notable contracts including an iron hulled steamboat, for the Harbour Steam Company (Findlay, 2009). Shortly after vacating their Cumberland Street premises in the early 1892, the Otago Foundry was purchased by John McGregor & Co and experienced a resurgence in the early twentieth century (Farquhar, 2006). <u>The Dunedin Iron Works</u> was established by Robert Sparrow in the late 1860s. The firm was extremely successful and opened a second plant on newly reclaimed Willis Street in 1874, before being sold in 1894 and rebranded as the Dunedin Foundry (Allport, 2013). One of the Dunedin Iron Works' best-known outputs was the Platypus, a submarine designed for accessing alluvial gold deposits and manufactured by the firm in 1873 (West Coast Times, 1873). <u>A & T Burt</u> were another prominent engineering firm established in Dunedin during the early 1860s by Scottish brothers <u>Alexander and Thomas Burt</u>. After major successes during the Dunstan gold rush of the 1860s, Alexander turned to the plumbing trade, and with Thomas joining him from Australia they established a shop in Dunedin in 1862 (McDonald, 1965; Parry, 1990). Thomas handled the physical works of the company while Alexander managed the business. One of their first major contracts was providing gas lighting for the 1865 New Zealand Exhibition being held in Dunedin. A & T Burt moved their production centre to Cumberland Street to the location of the Cadbury Confectionery Ltd Building in the late 1870s (Parry, 1990). The company was involved with producing mining machinery, railway castings, bridges (refrigerating machinery, tramlines mains and service pipes through Dunedin, shipping contracts, distillery plans as well domestic fittings, thus servicing a range of New Zealand industries and sectors (Cyclopedia Company Ltd, 1905). Like other major companies in Dunedin, A & T Burt gave back to the city donating £2000 pounds for a paddling pool and fountain at Moana Pool. Alexander Burt was further known for his philanthropic natures as he fostered technical education in the city (Otago Witness, 1920).
Events Moderate	<i>Is the place associated with an important event in local, regional or national history?</i> UOA has determined there to be moderate associations with events of a national and regional significance. There are a number of events associated with the occupants of the Cadbury Confectionery Ltd buildings. With the enactment of the <i>Distillation Act</i> 1868, New Zealand Distillery Company became New Zealand's first legal distillery. The Act not only made distillation legal but also made it profitable for entrepreneurs in the Whiskey markets as it did not set excise duty unreasonably high (Perry, 1980). In direct contrast, following the abolition of duty preferences by the government for local distilleries, the New Zealand Distillery Company were forced to close their doors. This was not the only instance where national changes in laws affected the direction of companies associated with the Cadbury Confectionery Buildings. Cadbury's exports to New Zealand were increasing in the early twentieth century however an increased tax placed on imported chocolate resulted in the decision by the Cadbury company to manufacture goods in New Zealand and started looking to build a new factory in New Zealand. As a result, they joined up with the Hudson Brothers forming Cadbury Fry Hudson Ltd in 1930, with Hudson relinquishing the controlling share in the firm (Comer, 1973; C. V. Smith, 1968). World War II had a major impact on the site. Not only did Cadbury Fry Hudson establish air raid shelters (now removed), but the direction of the company's production shifted incredibly, opening new markets while closing others.

	World War II saw, except for chocolate blocks that stretched the sugar short in supply, the cancelation of all Confectionery and chocolate lines. However, war contracts required three shifts for certain departments and required up to 750 personnel, predominantly woman. As a result of the massive Service Biscuit contract, nearly all domestic production was discontinued (C. V. Smith, 1968). Many of the business operating on the premises had a great deal to do with various exhibitions. A & T Burt won a number of prizes at all three Dunedin Exhibitions as well as 1914 Auckland exhibition (Cyclopedia Company Ltd, 1905; Parry, 1990). One of their first major contracts was providing gas lighting for the 1865 New Zealand Exhibition being held in Dunedin. As noted above, under Marshall and Copeland Albion Brewing Company products were sent overseas as well to the 1879 Sydney Exhibition (Otago Daily Times, 1879). While under the Hudsons' directive the companies became household names through their success at the 1925-26 South Seas Exhibition (Comer, 1973; C. V. Smith, 1968).
Patterns Moderate	<i>Is the place associated with important aspects, processes, themes or patterns of local, regional or national history?</i> The Cadbury Confectionery Limited buildings are associated with two main themes, significant at a local level. The first is leading in cutting edge manufacturing techniques and innovations which drove the success of the businesses. The second is the betterment of employment welfare by the various businesses. From the outset the New Zealand Distillery Company were undertaking novel ideas. Not only did they produced New Zealand's first whiskey produced under licence In October 1869 (S. Perry, 1980b), but the manufacturing process did not follow the traditional Scottish manufacture, something that was likely reflected in the distillery's building itself. The New Zealand Distillery Company had the product moved from room to room, rather than retrace its steps during the course of its production. When Marshall and Copeland purchased the Albion Brewing Company, they made vast improvements to the brewery which focused on "labour-saving appliances to the fullest extent" (Otago Daily Times, 1879). With Hudson taken over the premises, the changes made for the confectionery manufacturing also featured novel ideas. In the newly constructed three-storey biscuit factory in 1901, the company would house two machine ovens made by their own fitting shops. The ovens themselves would be 50ft in length, comprise around 15 tons of ironwork and were the first of their kind to be built in the southern hemisphere (Otago Daily Times, 1900). The building itself was strengthened using steel bands left over from the barrels of the distillery, which were a significant factor in enabling quick reuse of factory as the walls still stood following the 1902 fire, until the factory could be completely rebuilt (Comer, 1973; Parkinson, 2011). The post-fire rebuild also featured state of the art technology: one of the first automated Grinnell Sprinkler systems used in Dunedin (Ingram & Clements, 2010). During the Era of the Six Sons, the fire was taken as an opportunity to further modernise the factories machinery. The Hudson sons acquired the latest chocolate producing plant and new Gabel Moulding Machines, increasing their sales. When power was also first installed to the flour mill off Castle Street in 1908, this was the first flour mill to connected to Waipori Power – the first hydro-electrical generation system to be publicly owned in New Zealand (Evening Star, 1908; Findlay, 2009). While this building is no longer present, sub-surface remains of this connection may exist. When the company became Cadbury, Fry and Hudson the newly formed firm looked towards further modifications of the factory, especially in departments beyond chocolate, that had been lagging. Where possible machinery was introduced to replace hand labour (C. V. Smith, 1968). Further steps to modernise the factory focused on elongated spaces which minimized handling of the products. The best space was the land owned by A & T Burt to the north. Cadbury Fry Hudson purchased the land and established the long building between Castle and Cumberland Street (Barringer, 2000). Other considerations of the expansion included: space for production materials, flour mixing at the Cumberland Street end of the new building and space for handling and despatch of the products at the Castle Street end. The tin washing plant was placed so that the tins could be sent to the biscuit ovens for packaging of the biscuits. Similarly, a new boiler house was also established for the new building, however it was built in the centre of the premises so that it could cater the entire factory efficiently (Barringer, 2000). The 1951 biscuit factory also was home cutting edge technology with two new large electric ovens. Cadbury's was the first factory in New Zealand to install such ovens ("HNZPT Listing Documents: List No. 2143," n.d.). A more recent technological development for the company was the 1960 introduction of the Hollerith accounting Tabulator. This technology allowed the production of not just invoices and statements but also financial and sales statistics all previously compiled by hand. The technology improved both speed and accuracy (Otago Daily Times, 1993). In 1963 the new "1301" computer was installed at Cadburys, the first New Zealand company to do so (Barringer, 2000). This was also Dunedin's first computer and is now of the main attractions of the <i>Dunedin goes Digital</i> exhibit at Toitū Museum. One of Richard Hudson's early decisions as a business owner was consideration to the employment and care of his employees as a healthy business model. He was the first Dunedin employer to give a half-day holiday to his employees on Saturday, and the firm was later one of the first to instate an eight-hour workday (Comer, 1973; C. V. Smith, 1968). Continuing good labour relations that Hudson implemented, Cadbury Fry and Hudson was one of the first companies to restore the 10 percent wage cut employees had suffered in 1931 and lent the local Dunedin City Council a number of short-term loans (C. V. Smith, 1968). The company was likely one of the first in New Zealand to further offer a superannuation scheme for its employees (Barringer, 2000). Although any buildings relating to the Otago Foundry have been removed, even this early company was at the centre of local developments. It was the city's earliest large-scale metal working businesses. They were part of the construction of the iron hulled steamboat, which was the first time the Harbour Steam Company had relied entirely

	upon local labour to provide a steamboat (Otago Witness, 1867). The foundry had a positive reputation of employment from the outset as it was noted that they received high wages for the 1860s (Otago Daily Times, 1863a).
Technological Value	
Technology and Engineering	<i>Does the place demonstrate innovative or important methods of construction or design, does it contain unusual construction materials, is it an early example of the use of a particular construction technique or does it have the potential to contribute information about technological or engineering history?</i>
Low to Moderate	As discussed above, the innovative manufacturing processes were a significant historical pattern to the Cadbury Confectionery Ltd Buildings; however, the buildings themselves were generally constructed using standard methods. While not necessarily an engineering innovation, great craftsmanship is shown in how well-executed the numerous additions to the buildings. Moreover, the forethought of the engineers who designed many of the buildings to accommodate future expansion should not be overlooked. Overall, UOA has found the technological value to vary across the buildings on site from low (common construction design for the period) to high (highly original or innovative early construction design for the period). Many of the machines that were once in the building would have been considered to have high technological values; however, these were removed when the building was sold. Many of the plans for these buildings were left in the Office Building, and UOA recommended they be offered to Hocken Collections, University of Otago. The Dairy and Machine House Building: The technological value of the Dairy and Machine House Building is low. Traditional building techniques and standard materials were utilised in the building's construction, with the brick walls being the tangible link to the building's early construction. On the interior, the timber columns, bolsters, beams, joists and flooring are typical materials. The dairy originally had a concrete floor, which is of note for the period; however, it is unknown if this floor remains in situ beneath the modern concrete slab laid in 1959. Cadbury World Building (Block 1A): The technical value of the Cadbury World building is low. Traditional material and methods, including brick load-bearing walls and timber columns, bolsters, beams, joists, and flooring, were utilised in the construction of the granary and malt floor as well as the early twentieth century additions. One point of interest is the use of a concrete floor in the 1868 kiln. Concrete was an available material, but not widely utilised in the 1860s; it is possible that this early slab remains in situ beneath the modern floor. Office Building (Block 2A): The early phases of the Office Building utilised standard building techniques; however, the 1922 concrete addition constructed by Fletcher in 1922 using a concrete distributing method that was used for the first time in the South Island; as such, the technological value for this portion of the building is considered moderate. Chocolate Factory and Garage (Block 3A): Part of Block 3A was constructed in 1922 at the same time as the concrete extension to Block 2A, also utilising, for the first time a new concrete distributing method; therefore, the technological value for this portion of the building is considered moderate. A further concrete and steel extension was made in 1924, bringing the building to three storeys. A fourth storey was added in 1939. Chocolate and Biscuit Factory (Block 3B-C): This three-storey building was constructed using concrete and steel. No technological innovations were identified in the construction of this building. Engineering Workshop, Labs, and Offices Building (Block 4A): Block 4A was constructed in 1961 using reinforced concrete. No technological innovations were identified in the construction of this building. Biscuit and Dispatch Building (Block 4C and 5A-C): This large building was constructed in 1951, with an additional two storeys added in 1968. No technological innovations were identified in the construction of this building.
Scientific Value	
Scientific	<i>Does the area or place have the potential to provide scientific information about the history of the region?</i>
Yes	The Cadbury Confectionery limited buildings can contribute to scientific information of the region's history. As highlighted by Oakley Gray (2010) for the Dairy and Machine House Buildings, the Cadbury Confectionery Ltd Buildings on the whole hold scientific value through their association with use as a Confectionery factory, but also as a brewery and distillery as well. The complex can provide insight into the development of buildings in response to manufacturing processes in both industries as well as adaptive reuse of spaces moving from one industry to another and underlining guiding principles of factory organisation.

9.1 Summary of Heritage Values

As demonstrated by the assessment above, the individual heritage values for the Cadbury Confectionery Ltd Buildings range from low to high with greater value placed on the historic values of the site (particularly its connection to companies and individuals) rather than its architectural (with the exception of architectural rarity and integrity), technological or scientific values which are generally low to moderate.

The assessment of architectural values includes consideration of architectural merit, rarity, representativeness, integrity, vulnerability, and context or group. This assessment has identified that the Cadbury Confectionery Ltd Buildings have high architectural rarity. The Cadbury Confectionery Ltd Buildings represent a rare complex of industrial buildings surviving at the heart of Dunedin's central business district. In the 1860s when Cadbury site and A & T Burt site saw their first industrial occupation, they were amongst many others in the area. Slowly the manufacturers were pushed out of central Dunedin and concentrated to the south of the Octagon. The extant buildings in the complex are reminders of the past functions of the site, including a distillery, brewery and confectionery. While there are several archaeological sites associated with breweries across the country, distilleries and confectioneries are under-represented amongst previously recognised heritage and archaeological sites.

In terms of architectural integrity, most of the buildings within the complex have been highly modified, and as such, only the Biscuit Factory and Dispatch Building was determined to have high architectural integrity, as it represents an intact structure that has not been heavily modified. The Biscuit and Dispatch Building was constructed in 1951 with a further two storeys added in 1968, with the latter being a discrete and easily readable addition. The Dairy and Machine House Building retains a tangible link to distillery, brewery, and confectionery factory that operated from the site and is the best remaining example of these early phases of construction (1868 and 1875) within the complex. Similarly, the Cadbury World Building, although extended on multiple occasions, still retains visible elements of the 1868 distillery buildings and has considerable heritage fabric from the early twentieth century additions.

In contrast, the buildings in the complex including their facades have low value in terms of their architectural merit. They are typical to the design, style and use of materials or craftsmanship of the period. The buildings are good examples of their time period in terms of design, type, and technology, and as such are observed to have moderate architectural representativeness. While isolated from other nineteenth century industrial buildings in Dunedin, the buildings still hold connections with other heritage buildings, forming central Dunedin townscape that reflects nineteenth and early twentieth century development and entanglement of transportation and commercial businesses. Thus the complex is considered to have moderate context or group values.

Archaeologically the buildings have moderate information potential. While the condition of the site is poor and the amenity value low, with all pre-1900 building heavily modified in the twentieth century, there is potential to gather archaeological information on brewery, distillery and confectionary manufacture sites. Few such site types have been recorded let alone archaeologically investigated in Dunedin or around the country. The archaeological contextual value as it represents an industrial complex and can be considered in Dunedin's wider history as a manufacturing centre.

The buildings hold scientific value through their association with use as a Confectionery factory, but also as a brewery and distillery as well. However, technical values for the building have been assessed to be low to moderate. Most of the buildings were constructed using traditional building techniques and standard materials and thus were considered to be of low technical value. The only variation are the Office and Chocolate Factory and Garage buildings for which a concrete distributing method was used for the first time in the South Island. Thus, it is considered that these buildings hold moderate technical values.

The assessment of historic values includes associations with people, events, and patterns. UOA has found that the Cadbury Confectionery Ltd Buildings have strong connections to many individuals and companies that are significant at a local, regional, national and international level. As a result, the building has moderate cultural values associated with identity, public esteem, commemoration, and education and the buildings are listed as a Category II listed Place (List No. 2143). The success of the confectionery and the longevity of the site are particularly due to its association with Richard Hudson, R Hudson and Co and Cadbury Fry Hudson (and its iterations) whose drive for innovation to streamline not only their manufacturing process but also business management saw their products become a household staple.

Other names and businesses associated with the buildings include the New Zealand Distillery Company, the first legal distillery in the company along with architects such as Henry McDowell Smith, Miller and White. Even key names in New Zealand's construction history have been associated with the Cadbury Confectionery Ltd Buildings. The buildings are further associated with a number of key events and patterns in New Zealand's history at both a regional and national stage. National law changes affected the businesses associated with the site while they in turn contributed to regional and national exhibitions, showcasing their products in the late nineteenth and early twentieth century. Cadbury Fry further contributed to war efforts during World War II and were affected by the event. Not only was there the construction of air raid shelters on the property the company's production shifted incredibly during this period. Moreover, the companies were associated with betterment of employment welfare as well as cutting edge manufacturing techniques and innovations which drove the success of the businesses. For these reasons, the historic value of the buildings in terms of their connection to individuals and companies is considered high.

9.2 Conclusion on Heritage Significance

The overall level of significance of the Cadbury Confectionery Ltd Buildings has been assessed to be **medium**. This assessment is based several factors. The buildings within the complex are associated to past operations as a whisky distillery, brewery, and confectionery factory, for which there are few examples recorded around the country, let alone Dunedin. While they hold low significance in terms of their architectural merit and varying levels of architectural integrity most buildings are considered moderate examples of their class. The buildings hold scientific value through their association with use as a confectionery factory, but also as a brewery and distillery as well, while technical values ranging from low to moderate with most buildings constructed using traditional building techniques and standard materials. The Cadbury Confectionery Ltd Buildings have significant associations with individuals and companies and hold the potential to contribute to regional studies of urban industrial and commercial development through contributions to wider patterns and event. However, the buildings also have moderate to high value historical associations with individuals, companies and events varying in significance from a local to international level. It is the buildings historical or cultural heritage significance or value have led to the complex being list in as a Category 2 Historic Place (List No. 2143) on New Zealand Heritage List/Rārangī Kōrero. The Cadbury Confectionery Ltd buildings are prominent and visible cultural ties to the histories of these individuals and companies easily accessible to the public, especially through the most visual aspect of the structures: the façades.

10 Description of Proposed Work

The current Dunedin hospital is in poor condition and does not have the capacity to adequately service the health care needs of Dunedin and the lower South Island. The development of a new hospital in the city will therefore provide “a once in a generation opportunity to build modern and sustainable hospital facilities” that will not only serve the region’s current population, but will be able to be more efficiently integrated into Dunedin’s health-education sector (Ministry of Health, 2019b). The new hospital will provide a setting for nurturing the best possible future health care workers as well as enabling world leading healthcare research to take place in Dunedin. After public engagement and careful consideration of possible hospital sites, the Ministry of Health chose a central city location as it allowed for a flat building site that is close to the existing hospital, university and polytechnic, and will be easily accessible by public transport. The new Dunedin hospital development will be the largest single hospital build ever in New Zealand and one of the largest building projects in Dunedin’s history

The new hospital buildings are expected to be required to be built to Importance Level 4 (IL4) facilities as defined in AS/NZS 1170 Structural Design Actions. IL4 buildings must be constructed in such a way that they remain operational following a disaster, such as an earthquake, and include a variety of buildings such as hospitals, fire stations, police station, power stations, air traffic control towers, water treatment facilities. Construction of the buildings, as well as excavations for site clearance, services and landscaping will also likely require extensive earthworks across the site.

The configuration and layout of the new Hospital buildings has been the subject of extensive evaluation over a significant period of time with respect to clinical optimisation, cost, constructability, future flexibility, consentability and expediency.

An initial Preliminary Site Masterplan was released in December 2018 and indicated a preferred location of the Hospital which extended across the Cadbury site and onto the northern block (known as the Wilsons site). Specifically, the new Acute Services Building was identified to be located on the Cadbury Site, and the new Ambulatory Services Centre on the Wilsons Site to the north. Further analysis and costing of that layout option was subsequently completed in 2019 which led to a further options evaluation process. Similar criteria including clinical performance, affordability and flexibility were again used to identify the preferred site layout. Options identified as part of that process included locating the NDH entirely on the Cadbury site, entirely on the Wilsons Block or across both sites as per the original masterplan. Subsequent review in late 2019 and the early part of 2020 has seen the preliminary masterplan decision upheld and results in the Block and Stack design presented as part of this application. Concept design is being progressed on this configuration.

It is clear that some of these spatial arrangements may have enabled the retention of the Cadbury buildings or their facades (Flowers, 2019). However, there are several reasons identified in both the initial masterplan work (Flowers, 2019) and in the subsequent re-evaluation work as to why the proposed spatial arrangement resulting in the requirement for demolition remains preferred including that the configuration results in:

- Optimisation of clinical outcomes;
- The most cost-effective solution to providing the required services
- The largest and tallest building being located furthest to the south providing a preferred urban form within the context of the wider CBD;
- The main hospital entrances being closer to the bus hub and the centre of Dunedin;
- An enhanced opportunity to place public outdoor amenity along the north and west sides of the site making the most of sun and daylight;
- Utilisation of the more favourable soil conditions of the Cadbury Block and,
- Retention of the existing electricity sub-station in the short term;

- Utilisation of land already owned by the Crown, allowing for commencement of the works to start sooner (delays would increase the clinical and health and safety risks of remaining in the current premises any longer than necessary).

When considering the retention of buildings and facades on the property, several factors were important for the effective functioning of the hospital (Flowers, 2019). These include clinical relationship and area needs, public and emergency care activities, and clinical flows. The layout of the new building is based on the areas required by each of the hospital departments, their functional relationships with other departments and access points. Consequently, the building design is not readily compatible with retaining the remaining Cadbury Confectionary Ltd Buildings. These buildings do not meet the IL4 standard and most building are 20% NBS against an IL2 standard, significantly less than IL4 standard, and the new hospital would need to meet 100% NBS (Flowers, 2019). The current buildings and their floor levels would not be efficient for “fit-for-purpose acute clinical activities” and while adaptive reuse may be considered, it would require fitting acute clinical activities on other areas of the site, which is not achievable. Moreover, the hospital activities require specific heights (based of inputs from hydrologists, structural and service engineers and health planners) that do not align with the current floor levels of the Cadbury Confectionary Ltd buildings. Such practical matters as transfer of patient beds, logistics trolleys and wheelchairs, are not easily facilitated by the current buildings (Flowers, 2019).

As described in further detail below, alternatives to complete retention and reuse of the buildings were also thoroughly investigated. These included alternative scenarios to enable retention of the facades such as constructing different types of support, deconstruction and reconstruction, and construction of replica facades. However, these options have also been discounted on the basis of structural engineering challenges and the fact that it “would compromise optimal and efficient clinical planning” (Flowers, 2019). The new building would likely be base isolated, which would make either retaining and integrating the buildings or just their façades “extremely problematic”, increasing the engineering difficulty of the development that would require “overly-restrictive” and be an “unacceptable burden on the construction of the new hospital” (Flowers, 2019). The retention of part of a building would need to consider fall risk, with particular concern given to the functionality of and access to the hospital following a disaster, and a collapse zone would be required around the remain structure(s). Even the use of replicas was deemed unsuitable for the hospital, as it would still face the same issues as the existing façades. In regard to access, drop-off areas are critical in the effective operation of the hospital and the set back of the building west-northwest greatly increases the public amenity values of the new development.

Other factors that contributed to the decision against retaining the facades include: clinical and support flow; vehicle and public access; floor level alignment; project cost and programme; optimal locations for emergency vehicles; provision of a ground floor well enough above the flood plain (2m above street level) and readily accessible from the street; and flexibility in future planning and expansion (Flowers, 2019).

10.1 Alternative Options – Façade Retention

The Ministry of Health commissioned WSP Opus (Blacker & Burrough 2019) to assess, from an engineering perspective, options which would enable retention of the facades of the Cadbury Confectionery Ltd Buildings (excluding the Dairy and Machine House Building). The report assesses the structural condition of the façades; identifies façade retention options (including the design of temporary bracing structures); and evaluates these options. The conclusions of that report are summarised below.

If retained, the façades would need to be designed to meet 100% New Building Standard as an IL4 structure to meet the requirement that the building be operational following a 1 in 500-year earthquake (Blacker & Burrough 2019). At a minimum, temporary support of the façades (which may be necessary for several years) would need to be designed to an Importance Level 2 (or 3) standard. Currently the initial seismic assessments indicate that the oldest buildings are approximately 20% New Building Standard (IL2) (Blacker & Burrough 2019). Most of the older buildings’ façades (Cadbury World, office, chocolate factory and garage, and Chocolate and Biscuit Factory

buildings) were noted to suffer from rising damp. The Cadbury World building also suffered from water ingress and isolated fine cracks, while the Chocolate Factory and Garage Building (Block 3A) also had damp in the roof and penthouse (Blacker & Burrough 2019). The façades of the newer engineering workshops, labs, and Office Building and the Biscuit Factory and Dispatch Building were generally good although the later showed some signs of wear and tear (Blacker & Burrough 2019).

As described in further detail in the following section, various temporary and permanent support options were considered along with deconstruction and reconstruction and the instalment of a glass fibre reinforce concrete (GRC) replica. Those options were then assessed in the Opus report using Red Amber Green (RAG) analysis that considers the following factors: cost, time, heritage impact, hospital impact, buildability, traffic disruption, and seismic resilience (Table 10-1). The RAG analysis concludes that the baseline option (a clear site for the new hospital) was the only option to receive the most favourable rating (Green) on all considerations, other than heritage where it unsurprisingly received the least favourable rating (Red) (Blacker & Burrough 2019). The next closest option was a glass fibre reinforce concrete (GRC) replica (discussed further below), which received Green rankings for four factors. The impact of this option on heritage was also identified as the least favourable option (Blacker & Burrough 2019). All remaining options were otherwise generally identified to have some impact (Amber) or be less favourable against the factors, with some receiving at most one Green rating (Blacker & Burrough 2019). None of the options received a most favourable rating (Green) for their impact on heritage.

Overall, the Opus report determined that while it would be technically feasible to retain the façades, doing so (through any of the options) would significantly affect the layout and usage of the site, and impact the extent of construction work required which would in turn have significant cost, programme and health and safety implications (Blacker & Burrough 2019). Each of the retention options was identified to have negative impacts on such aspects as clinical planning and user experience, seismic resilience, building methodology, cost and construction programme (Flowers, 2019). This was especially so for the Cadbury World and Office buildings which have suffered from damp penetration and a great deal of work would be involved in increasing their integrity. Moreover, there is potential the buildings are susceptible to liquefaction. As they are not reinforced, they are vulnerable to ground movement, and the foundations would require strengthening (Blacker & Burrough 2019). Following the options presented the Ministry of Health architects, CCM architects stated, “it is our opinion that all of the retention options would severely restrict the optimal and efficient planning of a modern fit-for-purpose acute hospital” (Flowers, 2019).

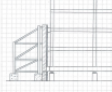
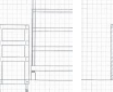
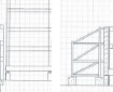
Consideration	Option								
	Baseline	1a	1b	2a	2b	3a	3b	4	5
	New Hospital 'Clear' Site							Deconstruct and Reconstruct	GRC Replica
Cost	G	A	R	A	A	R	R	R	A
Time	G	A	R	A	R	A	R	R	G
Impact on Heritage	R	A	A	A	A	A	A	R	R
Impact on Hospital	G	R	R	R	R	R	R	R	A
Buildability	G	A	R	G	R	A	R	A	G
Traffic Disruption	G	R	G	R	G	R	G	G	G
Seismic Resilience	G	A	A	R	R	A	A	A	G

Table 10-1. Table showing the Red Amber Green (RAG) analysis for alternative façade retention options (Blacker & Burrough 2019: Table 4). Red: least favourable option; Amber: some level of impact; Green: most favourable options.

10.1.1 Heritage Impacts of Façade Retention Options – General Discussion

While the District Plan extends protection to the building facades along Cumberland and Castle Street, UOA considers partial demolition or façade retention to be a less desirable option. Retention of a building's façade as a purely aesthetic feature that does not relate to the structure behind it, also known as facadism (Curl, 2006), is one way to reduce the loss of heritage value. Those with interests in heritage tend to view this approach negatively and as an option chosen by developers as an afterthought (Bargery, 2005); and HNZPT have previously stated that facadism is not consistent with best practice (NZHPT, 2007b). In many cases, the rest of the building is not fit for purpose and the retention of the façade is the best possible outcome, and it is undoubtedly a more positive outcome than the total loss of a heritage building. The main argument against this approach is that the façade becomes separated from and unrelated to what is behind it, an issue which is amplified if the new structure is of a totally different scale to its predecessor as would be the case here. Some schools of architecture view this as a positive, arguing that it makes a statement that the place is connected to the past but not restricted by it (Schumacher, 2010). It is also often the case that the façades chosen for retention are those viewed as most aesthetically pleasing, while some that may be more representative of plainer vernacular architecture that better characterises an area are removed (the celebration of the “exceptional” rather than the everyday), leaving an inaccurate depiction of the street or area's past.

Option 1a: Exterior Temporary Support Structure

This option will involve erecting a temporary support structure on the exterior of the façade prior to the deconstruction of the buildings behind (Figure 10-1). The façades would be cut and the base isolated at the same level as the main structure. This deconstruction would need to be carefully undertaken, especially in the vicinity of the façade. The original façade may require the insertion of joints to allow for articulation in the upper levels. This approach will heavily impact the pavements, roads and even buried services located along the Cumberland and Castle Streets State highways (Blacker & Burrough 2019). This is one of the least expensive options, with an estimated total cost of \$47,000,000 (Rider Levett Bucknall Christchurch, 2019).

Option 1b: Interior Temporary Support Structure

This approach is the same as Option 1a except the temporary support would be constructed on the interior of the current building prior to its deconstruction (Figure 10-1). This would mean the support would not extend into the state highways, only short-term scaffolding. The installation of the supports in this manner would be onerous and create a number of construction difficulties. The challenges include, but are not limited to, the temporary framing that need to be designed in section, placed by hand and fixed together on site; the support foundations that need to be constructed inside the existing buildings (large precast units will not be practical in the building); and construction of new structures that will have to be built around the supports and the connecting to the façade (Blacker & Burrough 2019). This is one of the middling options price wise, with an estimated total cost of \$58,800,000 (Rider Levett Bucknall Christchurch, 2019).

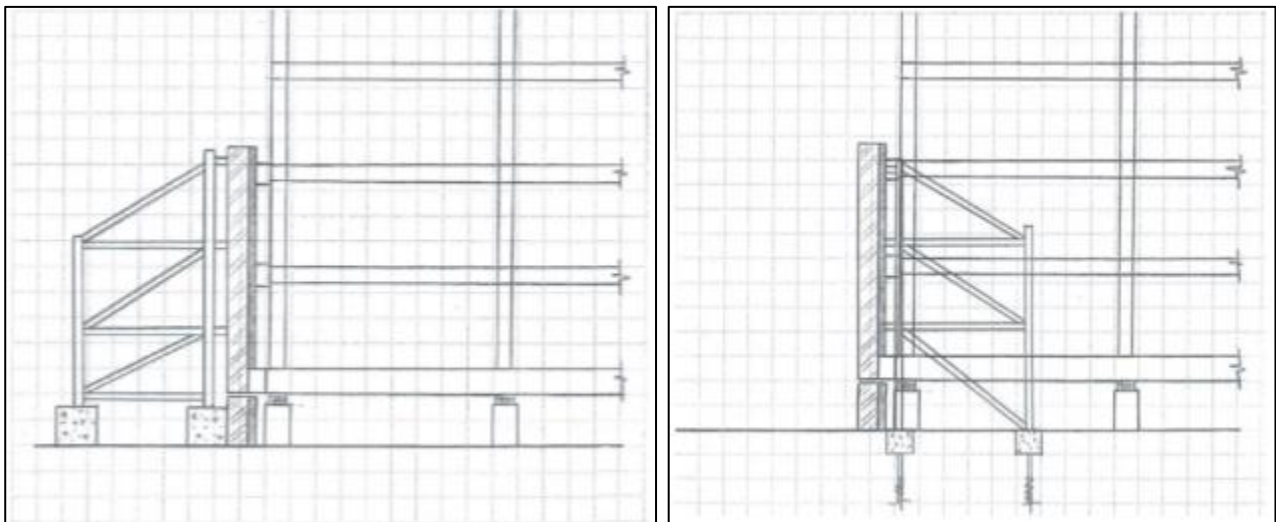


Figure 10-1. Hand sketch representations of Options 1a (left) and 1b (right) (Blacker & Burrough 2019: Figures 2 and 3).

10.1.2 Heritage Impacts of Options 1a and 1b

Both options received an Amber rating for heritage impact in the RAG analysis, indicating that they would result in some level of negative impact on heritage values. That rating results from the disturbance and interference with the original heritage fabric that would occur through the necessary modifications (for Option 1a) and base separation required for both options.

While not the least favourable of the options assessed, these options will result in some adverse impacts on the heritage value of the facades. More specifically, the exterior temporary support structure used in Option 1a would require irreversible modifications to the existing structure (such as insertion joints for articulation with the upper levels) and the original heritage fabric. Separating the façade through the base isolation (required for both options) will also result in impact to the heritage fabric of the façades.

Option 2a: Exterior Temporary Support Structure and Independent Support Behind

This option will involve erecting a temporary support structure with a new independent support structure on piled foundations constructed behind, either with steel or concrete framing (Figure 10-2). A seismic gap would be created between the support structure and the new building. The foundations would need to be compatible with the façade which may require underpinning the façade. Again, the temporary structure would encroach on the state highways (Blacker & Burrough 2019). This is again one of the middling options price wise, with an estimated total cost of \$63,800,000 (Rider Levett Bucknall Christchurch, 2019).

Option 2b: Interior Temporary Support Structure and Independent Support Behind

This approach is the same as Option 2a except the temporary support would be constructed on the interior of the current building (Figure 10-2). This approach will involve designing and building the new supporting structure

around the temporary support structure. Again, the temporary structure would encroach on the state highways (Blacker & Burrough 2019). This is one of the most expensive options, with an estimated total cost of \$69,800,000 (Rider Levett Bucknall Christchurch, 2019).

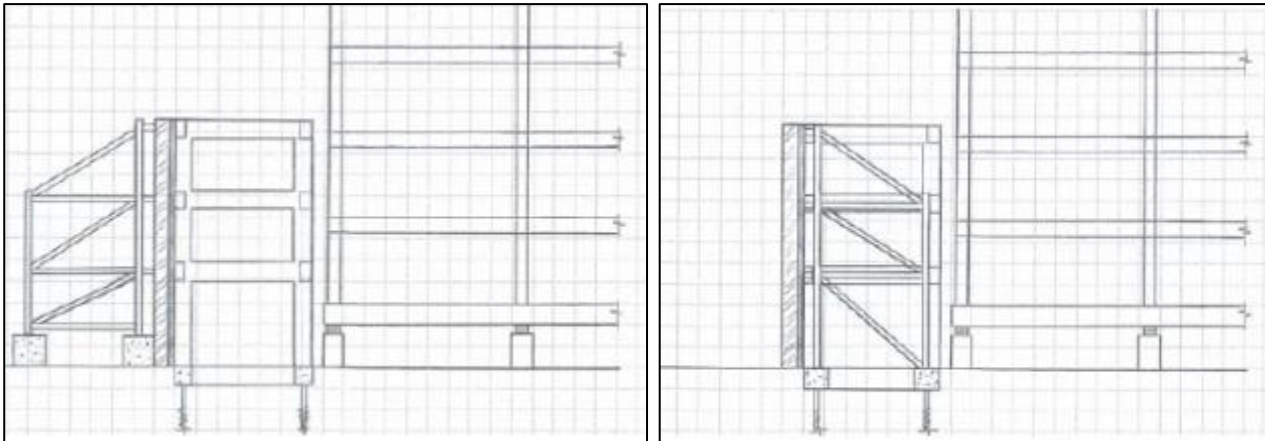


Figure 10-2. Hand sketch representations of Options 2a (left) and 2b (right) (Blacker & Burrough 2019: Figures 4 and 5).

10.1.3 Heritage Impacts of Options 2a and 2b

These options also received an Amber rating for heritage impact in the RAG analysis, indicating that they would result in some level of negative impact on heritage values.

Both options would require seismic gaps, with the temporary support structures on the exterior (Option 2a) or interior (Option 2b) with independent supports behind. Consequently, while some amenity value would be retained, in particular for Option 2b, the façades will be physically separated and disconnected from the new structures, thus not actively part of the new building and detracting from the utility of the remaining heritage structures.

Option 3a: Exterior Temporary Support Structure and Permanent Support Structure Founded on the Base Isolation Layer of the New Hospital Buildings

This option will involve erecting the façade with its own independent support structure on the same base isolation layer as the newly constructed hospital building (Figure 10-3). This would provide increased hazard protection as it would reduce seismic forces on the façade as well as the differential movement between the façade and the new building. The façade would be cut at the level of the base isolation layer. A seismic gap would be created between the support structure and the new building. Again, a temporary support structure would be required on the exterior of the building, extending into the State Highways (Blacker & Burrough 2019). This is one of the most expensive options, with an estimated total cost of \$66,200,000 (Rider Levett Bucknall Christchurch, 2019).

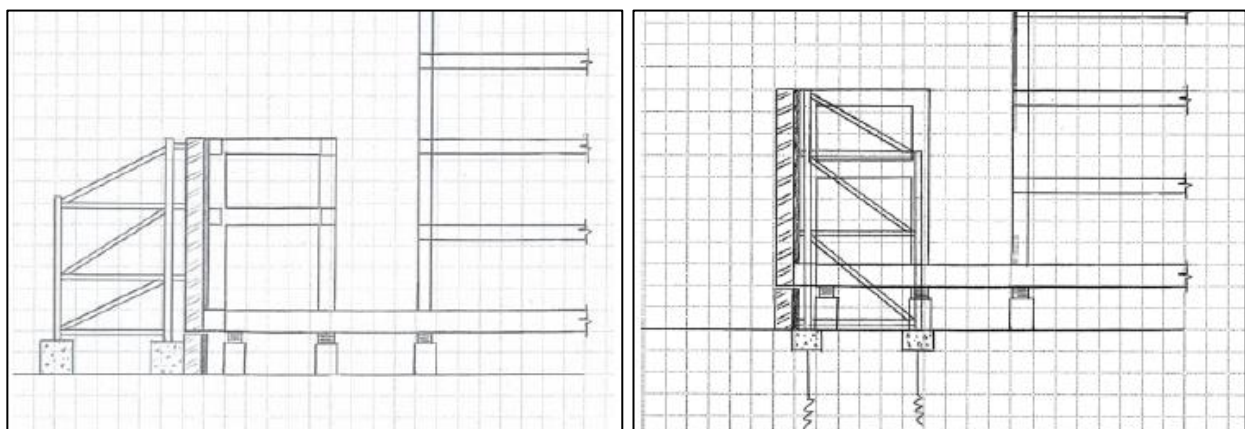


Figure 10-3. Hand sketch representations of Options 3a and 3b (Blacker & Burrough 2019: Figure 6 and 8).

Option 3b: Exterior Temporary Support Structure and Permanent Support Structure Founded on the Base Isolation Layer of the New Hospital Buildings

This approach is the same as Option 3b except the temporary support would be constructed on the interior of the current building prior to its deconstruction. This approach would be much more difficult as it would involve constructing the isolation plane around the temporary support structure that would then be modified so that it is supported on the base isolation plane. Then the construction could begin on the permanent support structure and new building (Blacker & Burrough 2019). This is the most expensive option, with an estimated total cost of \$74,600,000 (Rider Levett Bucknall Christchurch, 2019).

10.1.4 Heritage Impacts of Options 3a and 3b

These options also received an Amber rating on the RAG analysis, resulting from the impact on the heritage fabric that would occur through the necessary modifications and base separation required for both options.

As with Options 1a and 1b, Options 3a and 3b require the base isolation of the façades, which will impact the heritage fabric. Both options also require seismic gaps with the temporary support structure on exterior (Option 3a) or interior (Option 3b) and the permanent support structure founded on the base isolation layer. As such, the façades would again be separated from the hospital building. Consequently, while some amenity value would be retained, in particular for Option 2b, the façades will be physically separated and disconnected from the new structures, thus not actively part of the new building and detracting from the utility of the remaining heritage structures.

Option 4: Deconstruct and Reconstruct

This option only considers the buildings with brick façades and does not include those with concrete façades. The approach would involve dismantling the brick facades brick by brick and then rebuilding them along with the new structure. As a result, this approach would not need a temporary support. The brick walls could then be reinforced horizontally in mortar joints. Cores running through the brick work would provide support (Blacker & Burrough 2019). This is one of the lower cost but still expensive options, with an estimated total cost of \$51,000,000 (Rider Levett Bucknall Christchurch, 2019).

10.1.5 Heritage Impact of Option 4

This option received a Red rating for heritage in the RAG analysis, indicating an unfavourable impact.

While there would be the reuse of original masonry under this option, this approach would significantly affect the integrity of the façades and would result in the loss of heritage fabric. For the Cadbury World Building, which was constructed in multiple phases, this would blur the lines between these distinct periods of construction. Such a scenario directly contravenes the ICOMOS NZ charter, which advocates for minimum intervention, and HNZPT's (2007b) guidelines, which advise that "partial demolition should not be allowed unless it does not adversely affect the significance and integrity of the place" and should retain original elements and detailing with modifications above the ground floor avoided. Even at a best-case scenario where each brick was removed, labelled and replaced in its exact position, there would be significant loss to the heritage values and would compromise the integrity of the original techniques.

Option 5: Replica Façade

In this method, a GRC replica of the façades would be made and attached to the new building structure. Panels with joins in between would make up the GRC, allowing for seismic event movement. These panels would be attached to the building on a steel frame mound. This lightweight replica would provide more useable space for the new hospital buildings (Blacker & Burrough 2019). This is the lowest cost (but still relatively expensive) option, with an estimated total cost of \$32,600,000 (Rider Levett Bucknall Christchurch, 2019).

10.1.6 *Heritage Impact of Option 5*

This option also received a Red rating in the RAG analysis. In terms of alternatives to demolition of the facades, this option would have the most negative impact on the heritage values of the Cadbury Confectionary Ltd Buildings.

Multiple international charters and guidelines disagree with or do not recommend the use of replicas or reconstruction for the protection of heritage buildings. For instance, the Riga charter views reconstruction as misrepresenting the remains or evidence of the past and that structures should be reflective of the period in which they were constructed. This does not necessitate that new buildings mar the historic landscape in which they are constructed but can be designed and constructed in a way that is sympathetic and maintain the context they are built into (ICCROM, Latvian National Commission for UNESCO, & State Inspection for Heritage Protection of Latvia, 2000; Khalaf, 2017). Although more recent consideration has been given to replicas being compatible with both intangible and tangible heritage, there are a number of conditions that are considered alongside this. Buildings should maintain local construction cultures such as traditional craftsmanship and techniques, constructed with available materials that can portray the sense of place. However, this is the exception and replicas are considered unfavourable imitations of the past structures (Smith 2006 and Khalaf 2016 in Khalaf, 2017).

The Venice Charter also protects the truth of historical charters following along the lines of architecture should not try to ‘raise the dead’ (ICOMOS, 1964; Khalaf, 2017; Ruskin, 1890). It is considered dishonest to the building’s history and gives an untrue form of the building’s change over time. In this light both restoration and reconstruction are both considered negatively. In the Venice Charter, if new work is required then it must be distinct from the original and clearly identifiable or else it represents a false sense of history (ICOMOS, 1964; Khalaf, 2017). The reconstruction of a removed building or other cultural resource is not considered to be heritage conservation in the Canada’s Historic Places standards and guidelines. Instead the standards for interventions of built structures defers to the idea that “it is better to preserve than to repair, better to repair than to restore, better to restore than to reconstruct” (Didron 1839 in Canada’s Historic Places, 2003), placing reconstruction and replicas as the lowest form of heritage protection. Following this, the guidelines recommends repairs as opposed to reconstructions for elements important to defining the heritage value of a heritage place. If the same principles are applied to the retention of façades for the Cadbury Confectionary Ltd Buildings, replicas it should be the last option considered prior to demolition.

While the assessment detailed in this report was undertaken in the context of the original Preliminary Site Masterplan (as generally replicated in the current Block and Stack) consideration has been given to the implications for heritage values of locating all of the NDH entirely on the Cadbury site and whether that would result in any material difference to the findings. A review has confirmed that the change in layout would have no material impact on the findings of the original assessment. Put simply, only the option of locating on the Wilsons Block in its entirety would result in any material change to these findings and that option has been rejected for clinical, financial, timing, future flexibility and other reasons.

On that basis, the Ministry of Health has determined that it is necessary to seek the complete demolition of all of the former Cadbury Buildings except for the Dairy and Machine House Building on Castle Street. No other buildings or parts thereof (including façades) of the Cadbury Confectionery Ltd Buildings, recorded as Category 2 Historic Place (List No. 2143) and scheduled as heritage items on the DCC District Plan (Item B030), will be retained. As previously stated, the preferred spatial arrangement of the buildings will still allow for the retention and adaptive reuse of the Dairy and Machine House.

11 Assessment of Effects on Heritage Values

The Ministry of Health propose to demolish all buildings within the project area except for the Dairy and Machine House Building in the southeast corner of the site. The removed buildings will make way for the construction of the new Dunedin Hospital. The Dairy and Machine House Building will be retained and will be adaptively reused for non-clinical use. Such a building does not need to meet as high building code requirements as will be necessary for other hospital buildings. No other buildings or parts thereof within the Cadbury Confectionery Ltd Buildings, recorded as Category 2 Historic Place (List No. 2143) and scheduled as heritage items on the DCC District Plan (Item B030), will be retained.

This section assesses the effects of the proposed demolition of the Cadbury Confectionery Ltd Buildings and their facades and the adaptive reuse of the Dairy and Machine House Building on their heritage values of the Cadbury Confectionery Buildings Ltd using the methods outlined in Section 3.1. The assessment of effects considers the level of significance and the magnitude of the impacts against the heritage values to provide a determination of the significance of effects. As set out in the tables below (Table 11-1 and 11-2) the level of magnitude of those respective effects range from major adverse to major beneficial. As set out in the significance of heritage values range from negligible to very high. The effects are then considered against best practice recommendations, the importance of the buildings or structures, their condition, and their potential for alternative use.

A separate archaeological assessment has been completed that considers the potential impacts to archaeology (Woods & Lawrence, 2019) as required under the Heritage New Zealand Pouhere Taonga Act 2014. An archaeological authority application will be lodged with HNZPT, as it will be required to demolish any pre-1900 building and to undertake earthworks that may encounter subsurface archaeology.

Table 11-1. Magnitude of the impacts of the proposed work against the heritage values (Department for Transport, 2008).

Magnitude	Description
Major	Change to key historic building elements, such that the asset is totally altered. Comprehensive change to the setting.
Moderate	Change to many key historic building elements, such as the asset is significantly modified. Changes to the setting of an historic building, such that it is significantly modified
Minor	Change to key historic building elements, such that the asset is slightly different. Changes to the setting of an historic building, such that it is noticeably changed.
Negligible	Slight changes to historic building elements or setting that hardly affect it.
No change	No change to fabric or setting.

major	moderate	minor	negligible	neutral	negligible	minor	moderate	major
ADVERSE					BENEFICIAL			

Table 11-2. Matrix of significance of effects on the heritage values (DfT, 2008).

Heritage Value	Magnitude of Impact				
	No Change	Negligible	Minor	Moderate	Major
Very High	Neutral	Slight	Moderate-Large	Large-Very Large	Very Large
High	Neutral	Slight	Moderate-Slight	Moderate-Large	Large-Very Large
Medium	Neutral	Neutral-Slight	Slight	Moderate	Moderate-Large
Low	Neutral	Neutral-Slight	Neutral-Slight	Slight	Slight-Moderate
Negligible	Neutral	Neutral	Neutral-Slight	Neutral-Slight	Slight

11.1 Adaptive Reuse of the Dairy and Machine House Building

The Ministry of Health propose to adaptively reuse the Dairy and Machine House Building. Although building has low architectural merit, the building footprint and façade represent the changing functions of the building since it was first constructed in 1868 (small mill) and 1875 (cellar). The building has retained its Victorian industrial form with distinctive elements of the nineteenth century building are still present within the building as well as the retention of the building footprint providing a moderate integrity assessed for the building. It is also moderate

representation of such architecture with elements of the nineteenth century building existing within the building. On the other hand, the façade reflects its later adaption in the early twentieth century for confectionery and was restored to this period in the 2010s. Despite no longer retaining historic fabric, the reconstructed façade provides a historical connection to the building and its past use in a visual format that can be seen and appreciated by the public. There are few buildings in New Zealand that are associated with a whiskey distillery, brewery and confectionery manufacture and culturally and historically the building holds ties to the entire history of the wider site and these functions. The Dairy and Machine House Building is complimentary to its neighbouring buildings to the south such as the McCarthy Building (B561), forming a historic streetscape representative of Dunedin's early twentieth century commerce and industry.

The plans for the new hospital are currently in the design phase so the exact details for modifications to this building are not available. However, it has been proposed that the building be used for non-clinical purposes. As such it can be assumed there will be considerable changes to the interior of the building, as the ground floor is largely an open spaced with a cement floor and brick walls separating the main staircase. Moreover, the first floor is currently inaccessible due to health and safety concerns and strengthening, and repairs would be required before access to this floor could be realised before consideration is given to interior design for an alternative use. Retention of the building, in particular the façade and building footprint, will however retain the historic values of the building, especially as proposed non-clinical use of the building will allow for “less – sterile” activities such as office space, cafe/hospitality or ancillary retail that would encourage integration with, and exposure of, heritage elements. The openness of the building as a hospital through which much of the public will pass through, will enable to an extent an appreciation of the building for both past and present functions, rather than the private building that would remain largely closed to the public.

The ICOMOS NZ Charter states that “where the use of a place is integral to its cultural heritage value, that use should be retained”. Ideally, it is desirous to maintain the intended function of a building for which it was built; however, this building has seen significant transformations through its life history. The benefit of it being adaptively reused and actively occupied far outweighs any adverse effects caused through change in function. Furthermore, adaptive reuse of heritage buildings is promoted by the DCC District Plan, by HNZPT, and by ICOMOS New Zealand. The District Plan (2006) and 2GP specifically promote restoration, conservation and adaptive reuse of heritage buildings (Policies 13.3.10 and 13.2.1.1 respectively). HNZPT encourages the adaptation of historic buildings as a way to continue the liveability and utility of the structure but advocates for alterations that result in minimal loss of cultural heritage value (NZHPT, 2007b). Both ICOMOS NZ and HNZPT identify that additions and alterations should be compatible and reversible to avoid adverse effects to the heritage values of the building.

Assessment: Moderate beneficial effect. The adaptive reuse of the Dairy and Machine House Building will have an overall moderate beneficial effect, with a balance of the positive effects outweighing the minor adverse effects identified. Most significantly in terms of positive benefits, the building will be retained, maintained and actively utilised as part of the new hospital, bringing new life into not only the building but the entire site. It is yet unknown how much will be altered throughout the building except that the main form of the building will be retained as will the recently restored frontage. The former ties the building to its earliest functions as part of a whiskey and distillery while the latter ties the building to its use as part of the confectionary manufacturer.

Recommendations: As there are currently no specific plans for the adaptive reuse of the building that can be evaluated, UOA recommends that the alterations to the building be guided by a conservation plan. Previously, a cultural heritage assessment was prepared by Oakley Grey Architects, which has provided a heritage inventory. Given the recent work on the building, UOA recommends that this be reviewed and updated to a conservation plan to guide the proposed works. A cyclical maintenance plan should also be commissioned (or included in the conservation plan) to promote the active management of the heritage building.

The design for alterations of the building should take into account the recommendations of the ICOMOS NZ Charter 2010 and HNZPT (NZHPT, 2007b). The guidelines from HNZPT advocate that the adaptive reuse of historic buildings should consider the following points.

- Retain surviving internal and external heritage fabric as far as possible and disturb, distort or obscure it as little as possible.
- Respect the design, form, scale, materials, workmanship, patina of age, colours, contents, location, curtilage and setting, including alterations that have heritage value.
- Avoid work that will compromise or obscure fabric of heritage value.
- Ensure any new work is of a scale and location that it does not dominate the heritage place and respects its setting.
- New work should be appropriately recorded.

Plans for the design for the building should be submitted to HNZPT and the DCC for prior approval.

11.2 Demolition of the Remaining Listed and Scheduled Buildings

The new hospital development requires the removal of the Cadbury Confectionery Buildings Ltd, except for the Dairy and Machine House Building. These buildings include: the **Cadbury World Building (Block 1A)** that incorporates the 1868 granary/malt floor and kiln building and was eventually converted into Cadbury World in the early 2000s; the **Office Building (Block 2A)** used for grain storage, dining, dressing and mixing rooms and chocolate packing, the building incorporated the northern end of 1868 granary/malt floor building that was later encapsulated by further construction in the early twentieth century; the **Chocolate Factory and Garage Building (Block 3A)** constructed over various phases from the 1920s and used as a chocolate factory and garage; the **Chocolate and Biscuit Factory (Block 3B-C)** built over various phases from the 1920s and predominantly used as a chocolate factory, as well as a biscuit factory and dining and cloak room; the **Engineering Workshop, Labs, and Office Building (Block 4A)** constructed in the 1960s and used for food testing as well as board rooms and tour spaces; and, the **Biscuit Factory and Dispatch Building (Block 4C, 5A-C)** that was constructed in the 1950s and predominantly used as Biscuit Factory and Dispatch Building.

The **Cadbury World Building** is one of three buildings on the premises which is associated with the 1860s occupation of the site, in particular the distillery. Later adapted for the brewery and confectionery manufacture, the building has served as part of the Cadbury factory into the twenty-first century most recently as a key attraction as the Cadbury World and Café, drawing Dunedin, New Zealand and overseas visitors. Although one of the few buildings that have historic associations with a distillery, brewery and confectionery factory, the building is considered to have low architectural merit especially in consideration of its earliest functions. The building was altered over various stages, alterations that have overwhelmed the initial pre-1900 industrial design associated with the distillery and brewery on both the interior and exterior. Little remains of the earliest forms of the building; however, many of the additions to the building were made in the early twentieth century for use as part of the confectionery factory. Thus, this building is more reflective of an early twentieth century industrial building.

The **Office Building** is the last of the three buildings on the premises which is associated with the 1860s occupation of the site, in particularly the distillery. However, the northern end of the granary and malt floor that forms part of the building has been swamped by multiple additions in the early twentieth century. The building has been heavily modified, especially the interior and has low integrity values. It is notable however that the 1922 concrete addition was constructed using a concrete distributing method for the first time in the South Island.

The **Chocolate Factory and Garage Building** and the **Chocolate and Biscuit Factory building** are associated with the early twentieth century development of the confectionery factory under R Hudson and Co and Cadbury Fry Hudson in the 1920s and 1930s. It is notable that the 1922 concrete portion of the Chocolate and Garage

building was also built with concrete distributing method. The buildings are good examples of reinforced concrete construction reflected early twentieth century construction and, despite modifications, use of the buildings.

The **Engineering Workshop, Labs, and Office Building** is a 1960s building associated with the development of Cadbury Fry Hudson to the north of the site. This building continued similar style and design seen in the Biscuit Factory and Dispatch Building constructed in the decade before.

The **Biscuit Factory and Dispatch Building** is a 1950s building associated with the development of Cadbury Fry Hudson to the north of the site. After a long period of planning this building was a purpose-built reinforced concrete building reflecting transitions of manufacturing processes of the time. This was the only building identified to have high architectural value as aside from an addition in the late 1960s only minor works on the exterior building as part of routine maintenance and only minor changes to the interior.

As highlighted above buildings relating to brewing and confectionery manufacture are rare. In the centre of Dunedin there is further few industrial buildings left in an area that was once home to various industrial factories. The buildings are also rare remnants of the continuous industrious activity from the 1860s industrial activity located immediately below the Octagon and are associated with companies that gained national and international acclaim. Considering the various architectural attributes evaluated above, UOA found there to be low architectural merit, moderate representativeness and moderate context/group value, while high values were identified for rarity and integrity (only the one 1950s building). The industrial nature of the Cadbury Confectionery Ltd Buildings mean they have been built and altered to suit a very specific purpose, and generally lower emphasis was given by the architects to creating an outstanding architectural feature with resulting flat and relatively monotonous facades.

Assessment: Major adverse effect. Demolition of the remaining Buildings and their facades is considered to have a major adverse effect upon the heritage values of the Cadbury Confectionery Ltd Buildings as an overall complex as there is total alteration of key historic building elements and a comprehensive change to the setting. Demolition will result in the physical loss of six of these buildings which have heritage significance. It will also reduce the contextual value of the Dairy and Machine House Building that will remain on site.

As noted in this assessment, the statutory protections under the 2GP are focused on the façades of these buildings. The façades however reflect the values for the entirety of the buildings. They are the physical reminder of all other values, presenting the industrial heritage of the building to the public. Thus, demolition will significantly affect all heritage values of these façades as well as the buildings themselves, particularly given the limited ability to mitigate effects on such values. It is however the conclusion of this assessment that the architectural merit (being one facet of architectural value) of the façades contributes the least to their overall heritage value. Their most significant heritage value instead lies in their architectural rarity and their connection to individuals and companies of historic importance. While the impacts on these values cannot be removed or completely remedied, the adverse effects can be reduced through mitigation strategies. To that end and as discussed in further detail in the next section, it is UOA's opinion that implementation of appropriate measures would mitigate the major adverse effect of demolishing the buildings and facades on heritage values.

Recommendations: First and foremost, UOA recommends the retention of these buildings, in particular the Cadbury World Building. If this is not feasible, it is then recommended that façade retention Options 1 to 3 be considered for the Cadbury Confectionery Ltd Buildings. UOA advises against Options 4 and 5 as they have significant adverse effects on the heritage values.

If financial, health and safety, clinical, and construction practicalities indicate there is no reasonable alternative to demolition, UOA recommends that the mitigation measures described in the next section are implemented through any resource consent for demolition.

11.3 Effects on Surrounding Heritage Items

According to the ICOMOS NZ charter, the setting of a place is a vital component of its cultural heritage value, and where possible the nature and character of the setting (in this case the streetscape) should be maintained during redevelopment if at all possible (ICOMOS, 2010). The Cadbury Confectionery Ltd Buildings are industrial in nature, characterised by nineteenth and early twentieth century factory buildings most of which are between one and three-storeys.

As identified above, the Cadbury Confectionery Ltd Buildings are some of the few remaining buildings relating to continuous 1860s to early twentieth century industry in the area below the Octagon. While there are a number of heritage buildings located on the same block, most were constructed in the early twentieth century and relate to Dunedin's commercial business rather than industry. Such buildings include the Dunedin Allied Press Ltd Building (List No. 2135 and schedule B564) at 52 Stuart Street, the McCarthy Building, scheduled as a Heritage Building (B561), at the corner of Castle and Lower Stuart Streets, or the International Harvester Company and Riach & McLennan building that a character contributing building with a protected façade to Castle Street (CC702). With the construction of the Countdown Supermarket, the hotel and police buildings the only other building of an industrial nature along Cumberland Street is an A & T Burt Building. Presently, there is a lack of cohesive industrial feeling that would have once formed the streetscape along Cumberland Street as a result of twentieth century development. The loss of the Cadbury Confectionery Ltd Building will however be another reduction in the industrial presence along this street.

On Castle Street, the Chocolate and Biscuit Factory building, and the Biscuit Factory and Dispatch Building form a similar industrial streetscape to that presented by the Cadbury Confectionery Ltd buildings on the Cumberland Street façade. The Dairy and Machine House Building features more of a commercial or business appearance towards the street, likely as it was directly associated with the R. Hudson and Co. and later Cadbury Fry Hudson offices. This frontage is more complimentary to other heritage buildings in the area than the Chocolate Factory, and Biscuit Factory and Dispatch Buildings. Overall the Dairy and Machine House Building along with those buildings further south form a cohesive and complimentary streetscape easily visible from the Anzac Square Gardens and railway station across the road, that reflects early twentieth century business development along Castle Street.

Assessment: Overall UOA considers that Cadbury Confectionery Ltd Buildings as representations of late nineteenth and early twentieth century industrial townscape are presently isolated in their current setting. However, their removal from the site and the construction of the new hospital will still have an impact on the surrounding heritage buildings such as Dunedin Allied Press Building on Cumberland Street and the McCarthy Building or the International Harvester Company and Riach & McLennan building on Castle Street. As final plans for the new hospital are not yet complete, the full effects of the development on surrounding heritage items are not yet known. UOA recommend that the design consider potential effects on the adjacent heritage buildings to ensure that negative impacts are minimised. Such considerations include shading, scale and mass, fenestration and setback. The retention of the more commercial and decorative façade of the Dairy and Machine House Building will complement those commercial buildings further south and contribute to the wider heritage landscape visible from the Anzac Square Gardens and railway station.

11.4 Summary and Overall Assessment of Effects on Heritage Values

The proposed new hospital development will result in the loss of six Cadbury Confectionery Ltd Buildings. One building, the Dairy and Machine House, will be retained as reused as an administrative building. No other façades of the Cadbury Confectionery Ltd Buildings, recorded as Category 2 Historic Place (List No. 2143) and scheduled as heritage items on the DCC District Plan (Item B030), will be retained. The removed buildings will make way for the construction of the new Dunedin Hospital.

This assessment has concluded that overall the heritage value of the Cadbury Confectionary Ltd Buildings is **medium**. The above assessment has concluded that the adaptive reuse of the Dairy and Machine House Building will have a **moderate beneficial impact** on those values, while demolition of the remaining six buildings and their facades will have a **major adverse impact**.

Using these conclusions regarding the heritage value and magnitude of impact in the matrix below, UOA considers that the proposed new Hospital development (and more particularly, the adaptive reuse of the Dairy and Machine House Building and demolition of the six remaining buildings) will have a **moderate to large adverse effect** on the heritage values of the Cadbury Confectionary Ltd Buildings (Table 11-3). That conclusion does not take into account the impact of implementing the mitigation measures described in the following section. As set out in that section, if those measures are implemented, UOA considers that the magnitude of the impact or adverse effect would be considered **moderate**.

Table 11-3. Matrix of significance of effects on the overall heritage values (DfT, 2008).

Heritage Value	Magnitude of Impact				
	No Change	Negligible	Minor	Moderate	Major
Very High	Neutral	Slight	Moderate-Large	Large-Very Large	Very Large
High	Neutral	Slight	Moderate-Slight	Moderate-Large	Large-Very Large
Medium	Neutral	Neutral-Slight	Slight	Moderate	Moderate-Large
Low	Neutral	Neutral-Slight	Neutral-Slight	Slight	Slight-Moderate
Negligible	Neutral	Neutral	Neutral-Slight	Neutral-Slight	Slight

11.5 New Zealand Heritage List/Rārangi Kōrero and DCC District Plans Schedules

As it is proposed that all buildings, apart from the Dairy and Machine House Building, are removed from the site, both the New Zealand Heritage List/Rārangi Kōrero and heritage schedules for the DCC district plans will need to be updated. Given the lack of clarity on whether or not the Dairy and Machine House Building is included in List No. 2143, it is not clear if a new listing for the retained building will be required or if a change to the current listing removing all other Cadbury Confectionary Ltd buildings would suffice. Either way OUA recommends that the Dairy Building façade and envelope be included on the List given the buildings' age, that it contains both features of both the original building and changes made to the building over time, as well as its historical ties the wider Cadbury complex. It is similarly recommended that the 2GP scheduling be restricted to solely the façade and envelope of Dairy and Machine House Building.

11.6 Archaeological Requirements and the Demolition of Pre-1900 Buildings

While the effects to archaeology are not a focus of this HIA, the requirements under the HNZPTA 2014 are discussed briefly here as there is potential for overlap with the resource consent decision. Moreover, it is important to understand at the design stage, the implications of the HNZPTA 2014 when considering the future of buildings within the complex that were constructed prior to 1900.

The assessment survey has confirmed that remains of pre-1900 buildings are present on the south side of the site, namely in the Dairy and Machine House Building fronting on to Castle Street and within the Cadbury World and Office Buildings on Cumberland Street. As such, demolition of these buildings or earthworks across the site would trigger the requirement of an archaeological authority, with typical conditions being recording of demolished, archaeological monitoring of earthworks, recording of all archaeological evidence, and reporting on the results of investigations.

The archaeological authority would be required, which would stipulate recording of the building(s) prior to demolition. On the basis of the result of the heritage assessment, it is probable that at least the pre-1900 buildings would require a minimum of a Level II recording should they be demolished. As defined by HNZPT (2018), a Level II recording would include a minimum of:

- Measured drawings of all principal interior and exterior elevations.
- Recording of the principal parts of the internal timber frame of the building or structure (as necessary).

- Measured drawings of overall building/structure, including where relevant, all floor plans, ceiling plans and roof plans
- Subfloor plans, including floor joists, bearers, wall footings or piles.
- Plans and sections (as necessary) to record ceiling joists and roof structures.
- Cross sections to show interaction of building elements and spaces (as necessary).
- Detailed written description of the structural elements.
- Detailed written description of the exterior.
- Detailed written description of each room.
- Detailed written description of the building's/structure's development over time (potentially including a stratigraphic matrix or matrices).
- Extensive photography.
- Selective sampling of historic fabric.

12 Mitigation Measures

As noted in the previous section, the proposed work required for the new hospital development will have both beneficial and adverse effects on the heritage values of the Cadbury Confectionary Ltd Buildings and their façades. Mitigation is a useful tool to reduce or remove unnecessary adverse effects and to offset those adverse effects that cannot be otherwise avoided. There are few hard and fast rules for mitigation, as this needs to be considered on an individual basis for each project. Mitigative measures proposed here include undertaking the proposed work under the guidance of conservation principals, building recording, reuse of building materials, and public interpretation.

12.1 Retention and Adaptive Reuse

Adaptation of historic places requires a careful balance to ensure that the heritage values are not significantly altered. The District Plan provides protection to the Cumberland Street and Castle Street façades; therefore, the retention of one or more complete buildings could be considered mitigation to offset the loss of other heritage values. Should it not be feasible to adapt all heritage buildings or their façades, considerations should be given to the full retention of one or more buildings. As noted above, UOA identifies the Dairy and Machine House Building and the Cadbury World building as candidates for complete retention.

The Dairy and Machine House Building is an ideal candidate for such an option, as it is the clearest example that retains clear physical manifestations of the past functions of the site as a whisky distillery, brewery, and confectionery manufacture, and the restored façade provides a strong historical connection for the public. Unlike the other buildings on the complex, the smaller scale of the Dairy and Machine House Building makes it a strong candidate for adaptation. Cadbury World building would also be a candidate for retention, given that it has phases of construction associated with the distillery and confectionery and the upper floors retain significant heritage fabric from the early twentieth century modifications. Retention and adaptive reuse of heritage buildings should include a design that will see the building(s) be actively utilised for hospital activity. Adaptation of historic buildings is promoted by the DCC, and is specifically identified in Policy 2.4.2.3 of the 2GP. The ICOMOS NZ Charter (2010) identifies that adaptation of historic buildings is often required to ensure their continued use, and HNZPT (2007b) encourages the adaptation of historic buildings as a way to continue the liveability and utility of the structure but advocates for alterations that result in minimal loss of cultural heritage value. Both ICOMOS NZ and HNZPT identify that additions and alterations should be compatible and reversible to avoid adverse effects to the heritage values of the building.

Presently only the Dairy and Machine House Building has been selected for retention by the Ministry of Health. The Dairy and Machine House Building will be a significant heritage building that will form a key part of the development. Its adaptive reuse secures not just the future of the building which has continuous historic ties to the entire history of the site from an 1868 whiskey distillery to confectionary manufacture from the turn of the century. Although plans have not been finalised, the commitment to adaptively reuse the Dairy and Machine House Building will require considerable investment through strengthening, repairs and proposed fit out costs for its future use. This works offsets to an extent the loss of the remaining six Cadbury Confectionery Ltd buildings. Furthermore, the reuse of the building will reinvigorate the building, introducing a new stage in the history of the complex that will be shared with the community as it will be a part of the hospital that will be seen by the greatest numbers of public visitors.

Adaptive reuse of historic buildings must be done in a sympathetic manner to ensure that heritage fabric is not lost or compromised, and the integrity of the building remains. UOA recommends that all work be guided by an updated conservation plan with interventions be kept to a minimum and their placement will be modelled prior to any work so that they have the least effect possible. A conservation plan is a robust but flexible document that provides a description of the building(s) and setting, defines their significance (including a heritage inventory), develops policies for future use, and provides advice for its care and management (Kerr, 2013). It is recommended

that the conservation provides clear guidance for adaptation, repair, restoration, execution of works, and maintenance. Furthermore, all work should be done in accordance with the ICOMOS NZ charter, and guidance from HNZPT (2007d) to ensure that the heritage values are not affected by the adaptation. Design Plans for the building should be submitted to HNZPT and the DCC for prior approval.

Maintaining historic buildings requires a higher level of planning than many modern buildings, and it is important that repairs and maintenance are informed by heritage specialists and guided by a conservation plan or cyclical maintenance plan. Such specialists may include those who could reliably comment on the walls, roofing and windows. A cyclical maintenance plan is essential for the active management of any heritage building. Maintenance is defined as “routine, cyclical, non-destructive actions necessary to slow the deterioration of a historic place. It entails periodic inspection; routine, cyclical, non-destructive cleaning; minor repair and refinishing operations; replacement of damaged or deteriorated materials that are impractical to save” (Parks Canada, 2004). Maintenance is often the most cost-effective way of preserving built heritage, and measures as simple as removing debris from gutters can save the building from significant damage if done regularly. A cyclical maintenance plan should be prepared that provides an outline of simple schedule of maintenance and/or repairs done on a seasonal or annual basis, and it is recommended that the heritage building is surveyed following significant weather events. Problems or changes to the buildings and site should be identified and managed in accordance with a conservation plan, cyclical maintenance plan, or professional heritage advice.

Documentation of changes to the heritage building and its fabric is recommended by ICOMOS NZ and HNZPT (2007d), and it is also briefly mentioned in the assessment matters in the District Plan. UOA recommends that any repair or maintenance work is systematically recorded and that a record of this work be supplied to the DCC to keep on file with the property record, thereby creating a permanent archive of the changes to the buildings. At a minimum, this record should include:

- A plan showing where the work was undertaken
- Photographs before, during, and after the alteration
- A description of the work done, and the materials and methods used
- The name of the contractor
- Date the work was completed.

12.2 Mitigation of the Effects of Demolition and Construction

The demolition and construction works must be carefully managed to ensure that there are no unexpected adverse effects on the remaining heritage buildings. While there is space at the vehicle entrance and area surrounding the Dairy and Machine House to the north, to the west the modern and older buildings to be demolished are built up against the building along with the ground concrete pads of these buildings and the vehicle areas. As a result, measures must be in place to ensure that the Dairy and Machine House Building is protected during removal of these buildings and the concrete pads.

Consideration must also be given to the foundations of the new hospital and if the selected design may affect the Dairy and Machine House Building foundations. UOA recommends that vibration management plan should be put in place to monitor any effects of vibrations during the earthworks and construction on the surrounding buildings. The selected construction methods should aim also to mitigate vibrations; for example, screw piles will be used over driven piles, where required.

12.3 Recording of the Cadbury Confectionery Buildings to be Demolished

As noted previously, the recording of the Cadbury World and Office Buildings is a requirement under the HNZPTA; for the pre-1900 portions of the buildings. Therefore, the recording should not be considered mitigation against its demolition. Specific recommendations regarding the recording of the Cadbury World and Office Buildings were made in the archaeological assessment (Woods & Lawrence, 2019), including that HNZPT

grant an archaeological authority permitting the demolition of the Cadbury World and Office Buildings and they be recorded to a Level II standard as defined by HNZPT (2018), all earthworks be monitored by an archaeologist, and a final report documenting the results of the archaeological investigations be completed.

Building recording of the remaining four Cadbury Confectionary Ltd buildings (Chocolate Factory and Garage Building, the Chocolate and biscuit factory, the Engineering Workshop, Labs, and Office Building, and, the Biscuit Factory and Dispatch Building) and the post 1900 modifications to the Cadbury World and Office Buildings is recommended as a mitigative measure to offset the loss of this. UOA recommends that this recording be done to a minimum of a Level II standard as defined by HNZPT (2018). As such, this would include a minimum of:

- Measured drawings of all principal interior and exterior elevations.
- Recording of the principal parts of the internal timber frame of the building or structure (as necessary).
- Measured drawings of overall building/structure, including where relevant, all floor plans, ceiling plans and roof plans
- Subfloor plans, including floor joists, bearers, wall footings or piles.
- Plans and sections (as necessary) to record ceiling joists and roof structures.
- Cross sections to show interaction of building elements and spaces (as necessary).
- Detailed written description of the structural elements.
- Detailed written description of the exterior.
- Detailed written description of each room.
- Detailed written description of the building's/structure's development over time (potentially including a stratigraphic matrix or matrices).
- Extensive photography.
- Selective sampling of historic fabric.

12.4 Salvage and Reuse of Historic Materials

When historic buildings cannot be adapted or moved, potential exists to reuse and recycle building materials. Historic buildings and structures contain a rich assemblage of building materials, and this is a valuable resource. Building materials that are good candidates for reuse, included stone, brick, timber, timber flooring, windows, doors, architraves and ceiling linings. Brick and timber are the easiest materials to reuse and incorporate into the new build because of their versatility, and even when materials are no longer structurally sound, they can be re-used (e.g., using bricks for paving, timber for linings and finishes, etc.). Historic bricks have a wonderful patina that simply cannot be replicated and are tangible pieces of the past that can be easily introduced into the new build (Figure 12-1). Similarly, historic timber is also a good candidate for reuse and recycling and bring a warmth that new timbers cannot replicate. The materials could also be considered for use in landscaping plans such as brick utilised in hard landscaping. There are possible distinct windows throughout the Cadbury Confectionary Ltd Buildings, as shown in Figure 12-2, that could be recycled, repurposed and feature in the new hospital building. While some distinct windows may be more recent additions, they all would help to display and retain the history of the site right up to 2019 in a physical and visible way.

UOA recommends that materials from the six Cadbury Confectionary Ltd Buildings are utilised in the redevelopment where possible or provided to interest groups where appropriate. Further consideration should be given to timber or joinery being salvaged with preference given to their use in the redevelopment or off-site. As such, UOA recommends that where potential items for reuse are identified, they be carefully removed from the buildings and stored for potential reuse in the new hospital development where possible.



Figure 12-1 Examples of exposed and partially exposed brick from the Cadbury World building that might be salvaged and reused elsewhere in the hospital development.



Figure 12-2. Detailing of windows in the Chocolate and Biscuit Factory building (left) and Biscuit Factory and Dispatch Building (right) that could be considered for recycling into the new hospital building.

12.5 In Situ Preservation of Archaeological Materials.

One of the most tangible ways to maintain a site's links to past occupation and incorporate these into the new design is through the preservation of historical or archaeological features in situ where encountered. Incorporating extant archaeological and historic features in the new hospital development could be through either displays built into the new buildings or in the wider landscaping of the block. Such features that may be considered for in situ preservation include cobbled floors, brick or stone lined wells, cellars, or rare archaeological material such as the remains of an early timber or ponga building. Such mitigation is dependent on what is identified, their location, and the flexibility of the design.

12.6 Public Interpretation

Public interpretation is a commonly used means to offset adverse effects on heritage values, and there are many different ways that information can be shared. The methods chosen to disseminate the story of the Cadbury Confectionary Ltd Buildings should comply with the *ICOMOS Charter for the Interpretation and Presentation of Cultural Heritage Sites* (2008), which defines interpretation broadly as:

The full range of potential activities intended to heighten public awareness and enhance understanding of cultural heritage site. These can include print and electronic publications, public lectures, on-site and directly related off-site installations, educational programmes, community activities, and ongoing research, training, and evaluation of the interpretation process itself.

How information is shared should consider the audience, as different types of dissemination will be more appropriate for audiences of different ages, levels of accessibility, and levels of connection to the site. For example, what appeals and encourages interaction with individuals in one age range, may not be appropriate to another. Importantly, the information should be relatable to the experiences of the audience. The fact that the proposed redevelopment is a public hospital means that there is enormous potential within the institution for multi-layered interpretation of the site, the business, individuals and events important to this complex. Various methods of public interpretation should be considered by the Ministry of Health. Such outreach could begin from demolition phases of development and continue throughout the entire development process. For instance, measures to engage the public during demolition and redevelopment, could include active hoardings with viewing areas and public interpretation. Following the completion of the hospital targeted public interpretation can be undertaken within the hospital complex itself. This can be achieved through the display of material, items, stories within an area(s) of the new build, placeholders and way finders, as well as the reuse of materials in street furniture, signage, within the buildings. In addition, other infrastructure that could be explored include visual reconstructions (e.g., 3D models, augmented reality, virtual reality, etc.), presentations that includes oral histories, and off-site archiving of written information. Applications or online presentation of such are other facets which could, with careful consideration and integration, weave together the various narratives of the Cadbury Confectionary Ltd Buildings and early histories of the site. Such interpretations could be provided on the hospital website itself or accessed through a link on the Hospital website to a separate webpage created. Successful applications and websites have been made for historic sites present and long gone such as Waikato Wars Driving Tour (<https://www.heritage.org.nz/apps/the-waikato-war>) or the Christchurch based High Street Stories (<http://www.highstreetstories.co.nz/>). These resources weave together photographs, oral histories, architecture, archaeology and augmented realities to provide public access to the past histories of places.

The types of interpretation used should also address research themes that are significant at a local and national level. A series of themes were proposed in a *National Research Framework* (NZHPT, 2007b), and those appropriate to this project include contributions to reconstruction of regional histories, sense of place, and the archaeology of identity. More specifically, these research themes could explore the occupation of the site prior to the construction the whiskey distillery in 1868; the establishment of the distillery and later brewery on the site; the establishment of the Hudson's confectionary factory; important individuals and business associated with the site; significant business processes and development from the 1860s through to the early twentieth century; and significant architects associated with the Cadbury Confectionary Ltd Buildings.

12.7 Retention of Building Samples and Artefact Assemblages

The artefact assemblage collected during the new hospital development earthworks will be highly significant to material culture studies in Dunedin and provide comparative data that could be incorporated into national and global studies. While standard artefact analysis will be undertaken in the preparation for the final archaeological report following the works, there are many aspects and analyses that such a consultancy report will not feasibly include. However, more detailed and nuanced research-driven analyses could be facilitated through such institutions as the University of Otago, Toitū Otago Settlers Museum, or Otago Museum if the artefact assemblages are retained. In this light, UOA recommend that such institutions be consulted that would consider storing and making the assemblage available for future analyses. Allowances would need to be made for storage and curation costs (i.e. storage space, archival boxes and bags), especially for organic material that would require specialist conservation.

12.8 Hospital Design

The design process for the new hospital development should adopt principals of modern urban design in any new development to provide a benefit over the current site coverage and street activation. The industrial nature of the Cadbury Confectionery Ltd Buildings mean they have been built and altered to suit a very specific purpose, and generally lower emphasis was given by the architects to creating an outstanding architectural feature with resulting flat and relatively monotonous facades. As such, the buildings dominate the block, essentially creating an imposing barrier between Cumberland and Castle Street, which discourages the flow of people or generate foot traffic.

Any proposed development of this site should consider massing, setback and textures that contribute to streetscape and encourage movements of people and connections to other key locations. This would be an improvement on the current site layout and the lack of street activation. Any new design should further contribute positively to the streetscape, encourage pedestrian flows where possible, and form connections, through design, to other blocks and precincts. Temporary and permanent effects on surrounding historic heritage should also be considered, for example, the adjacent Otago Daily Times building. Consideration to incorporating design features or elements on the new hospital that pays homage to the history of the site and the current facades should also be undertaken.

12.9 Management of Effects Through Mitigation

Evaluation of the effectiveness of mitigation methods is subjective. While it is acknowledged by ICOMOS that such measures can be used to avoid, reduce and compensate adverse impacts (ICOMOS, 2011), quantification of the effects of mitigation has been discussed little in heritage literature. In this light, only some heritage impact assessments have considered and weighed general mitigation strategies the more specific use of such measures as relocation of works, relocation of heritage structures, recording of structures and public interpretation and engagement (Bowman, 2013; Cushing, Nithiyanantham, Cary, Yildiz, & Bush, 2019; Howell-Meurs, 2018). Yet more often, assessments in New Zealand only identify mitigation strategies including public interpretation, public viewing opportunities, salvaging building material, building recording, archaeological investigation (A. Brown & Burnett, 2015; J. Brown, 2018; Cropper, Woods, & Scrivener, 2018; Stevens, 2019).

As described by Walton (1999) “professional judgements often have to be made about the desirability of mitigation or protection on the basis of limited evidence” and while based on accepted procedures and best practice, heritage assessments are largely based in the heritage consultants knowledge of the region and subject. Overall the consideration towards the minimisation of negative impact is taken from a baseline position of what was likely to have occurred if the project was proposed (NZTA, 2015). Thus, the following assessment is a culmination of the understanding of heritage values, effects of the proposed works and the mitigation strategies, weighing the positive heritage outcomes against the negative effects of the proposed hospital development on the Cadbury Confectionary Ltd Buildings complex. The mitigation strategies encompass adaptive reuse, salvage, preservation, recording of both the heritage buildings and subsurface archaeological remains, retention of building and artefact samples, considerations for the heritage streetscape, public dissemination of the significant histories of the site. These proposed strategies aim to effectively reclaim some of the heritage values associated site lost with the removal of the buildings. UOA considers that if the mitigation strategies are implemented then significance of effects on the overall heritage values will be **moderate**.

Table 12-1. Matrix of significance of effects on the overall heritage values if mitigation measures are implemented (DfT, 2008).

Heritage Value	Magnitude of Impact				
	No Change	Negligible	Minor	Moderate	Major
Very High	Neutral	Slight	Moderate-Large	Large-Very Large	Very Large
High	Neutral	Slight	Moderate-Slight	Moderate-Large	Large-Very Large
Medium	Neutral	Neutral-Slight	Slight	Moderate	Moderate-Large
Low	Neutral	Neutral-Slight	Neutral-Slight	Slight	Slight-Moderate
Negligible	Neutral	Neutral	Neutral-Slight	Neutral-Slight	Slight

13 Conclusion and Recommendations

UOA has been commissioned by the Ministry of Health undertake a heritage impact assessment of the buildings and site area at 280 Cumberland Street (DP 4846, Part Sections 56 and 71, Sections 53 to 55 and 72 to 74, Block XVI, SO 14196). These buildings are referred to as the Cadbury Confectionery Ltd Buildings and have been previously recognised for their heritage values with a Category II listing on the New Zealand Heritage List/Rārangī Kōrero (List No. 2143). Consequently, these same buildings are also registered as B030 on the 2006 Dunedin City District Plan (Schedules 25.1 and 25.2) and the 2GP (Schedule A1.1), which affords protection to the facades to Castle and Cumberland Streets. Furthermore, within the extent of the Cadbury Confectionery Ltd Buildings, two archaeological sites are recorded: the Cadbury Factory Site (I44/817) and the A & T Burt Site (I44/922).

The current Dunedin hospital is in poor condition and does not have the capacity to adequately service the health care needs of Dunedin and the lower South Island. A proposal has been presented that would see the establishment of a new hospital framed by Castle Street and Cumberland Street to the east and west, and Hanover Street and the former Cadbury factory site to the north and south. .

Given the findings of this assessment, the values are such that reuse of the existing buildings should be considered in the first instance as promoted by the DCC in the District Plan (2006, 2018), HNZPT (2007b) and ICOMOS NZ (2010). However, due to costs, health and safety concerns, compromised clinical outcomes, and construction programmes, the Ministry of Health has determined that it is necessary to seek the complete demolition of all former Cadbury Buildings except for the Dairy and Machine House Building on Castle Street. No other buildings or parts thereof (including façades) of the Cadbury Confectionery Ltd Buildings, recorded as Category 2 Historic Place (List No. 2143) and scheduled as heritage items on the DCC District Plan (Item B030), will be retained. Although final plans for the new hospital buildings are yet to be completed; construction of the buildings, as well as excavations for site clearance, services and landscaping will also likely require extensive earthworks across the site.

The six buildings to be demolished include the **Cadbury World Building (Block 1A)**, that incorporates the 1868 granary/malt floor and kiln building and was eventually converted into Cadbury World in the early 2000s; the **Office Building (Block 2A)** that incorporates the northern end of 1868 granary/malt floor building, while later construction encapsulated this structure the building was used for other purposes such as grain storage, dining, dressing and mixing rooms and chocolate packing; the **Chocolate Factory and Garage Building (Block 3A)** that was constructed over various phases from the 1920s and was used as a chocolate factory and garage; the **Chocolate and Biscuit Factory (Block 3B-C)** that was built over various phases from the 1920s and predominantly used as a chocolate factory, as well as a biscuit factory and dining and cloak room; the **Engineering Workshop, Labs, and Office Building (Block 4A)** constructed in the 1960s and used for food testing as well as board rooms and tour spaces; and, the **Biscuit Factory and Dispatch Building (Block 4C, 5A-C)** that was constructed in the 1950s and predominantly used as Biscuit Factory and Dispatch Building.

One building will be retained: the **Dairy and Machine House Building (Block 1B-C)**. The rear portion of this building was once a small mill constructed in 1868 in association with the whiskey distillery, and an 1875 cellar associated with the later brewery forms the remainder of the building. While the building has been continuously been adapted for different functions, the building has retained its Victorian industrial form and elements of the nineteenth century building existing within the building today. The façade reflects its later adaptation in the early twentieth century as part of Hudson's confectionery factory and it was restored to this period in the 2010s. Despite no longer retaining historic fabric the façade provides a historical connection to the building and its past use presented to the public. There are few buildings in New Zealand that are associated with the functions a whiskey distillery, brewery and confectionery manufacture and culturally and historically the building holds ties to the entire history of the wider site and these functions. The retention and proposed adaptive reuse of this building will have a beneficial impact on the heritage values of this site.

The statutory protections under the Dunedin City District Plan and the 2GP are limited to the façades of the Cadbury Confectionery Ltd Buildings, and as the most publicly visible aspect of the buildings, the facades reflect the heritage values of the entirety of the structures. This assessment has taken into account all heritage values, including archaeological, architectural (including architectural merit, integrity, rarity, representativeness, context or group, and vulnerability), cultural values (identity, public esteem, commemorative, education, tangata whenua, and statutory recognition), historic values (people, events, and patterns), scientific values, and technological values. Overall, the assessment of heritage values shows the Cadbury Confectionery Ltd Buildings to have moderate heritage value. This assessment has identified that the adaptive reuse of the Dairy and Machine House Building will have a moderate beneficial impact on those values, while demolition of the remaining six buildings and their facades will have a major adverse impact. Based on the evaluation of the heritage values and magnitude of impact, UOA considers that proposed new hospital development (specifically, the adaptive reuse of the Dairy and Machine House Building and demolition of the six remaining buildings) will have a **moderate to large adverse effect on** the heritage values of the Cadbury Confectionery Ltd Buildings. While the effects on these values cannot be removed or completely remedied, the adverse effects can be reduced through mitigation strategies. Mitigation for effects to historical and cultural values requires measures that maintain connection with the past, and methods that recognise the cultural values within the development. With these mitigation strategies in place, UOA considers that the overall adverse effect on the heritage values could be reduced to moderate.

The demolition of the remaining buildings and their protected facades to enable the new hospital development on the site is considered to have a major adverse impact on the heritage values of the site and its buildings. As the buildings' overall heritage value is considered to be of medium significance, the impact of that major adverse effect is assessed as moderate to large. If the recommended mitigation measures are implemented (including retention and adaptive reuse of the Dairy and Machine House Building), the severity of the adverse effect would be reduced and would be classified as moderate.

Mitigation identified that will reduce the adverse effects include:

- The District Plan provides protection to the Cumberland Street and Castle Street facades; therefore, the retention of one or more complete buildings could be considered mitigation to offset the loss of other heritage values. As noted above, UOA identifies the Dairy and Machine House Building and the Cadbury World building as candidates for complete retention.
- Consideration should be given to the preservation of the protected facades if the buildings cannot be retained.
- Within buildings that are retained and adapted, a record of alterations to historic fabric should be compiled and a cyclical maintenance plan should be developed. Works should be guided by an updated conservation plan with interventions be kept to a minimum and their placement be modelled prior to any work so that they have the least effect possible.
- The New Zealand Heritage List/Rārangi Kōrero and the DCC 2GP should be updated to protect the façade and envelope of the Dairy and Machine House Building.
- Detailed building recording should be undertaken for any heritage buildings to be demolished. Note that recording of pre-1900 buildings will be required under the HNZPTA 2014 and cannot be seen as mitigation under the RMA process. UOA would recommend that for any post-1900 building to be demolished, it be recorded to a Level II standard as defined by HNZPT (2018), as in most instances there are existing and detailed plans available for these buildings. Level II recording would require, at a minimum,
 - Measured drawings of all principal interior and exterior elevations.
 - Recording of the principal parts of the internal timber frame of the building or structure (as necessary).
 - Measured drawings of overall building/structure, including where relevant, all floor plans, ceiling plans and roof plans
 - Subfloor plans, including floor joists, bearers, wall footings or piles.

- Plans and sections (as necessary) to record ceiling joists and roof structures.
 - Cross sections to show interaction of building elements and spaces (as necessary).
 - Detailed written description of the structural elements.
 - Detailed written description of the exterior.
 - Detailed written description of each room.
 - Detailed written description of the building's/structure's development over time (potentially including a stratigraphic matrix or matrices).
 - Extensive photography.
 - Selective sampling of historic fabric.
- A demolition plan should be in place to ensure there are no adverse effects to heritage buildings within the complex or in the surrounding area.
 - Salvage and reuse of heritage building materials within the new build or provided to interest groups where appropriate
 - Preservation of historical or archaeological features in situ for incorporation into the new hospital development either displayed in the new buildings or part of the wider landscaping of the block.
 - Include measures to engage the public during demolition and redevelopment, such as active hoardings with viewing areas and public interpretation.
 - Targeted public interpretation within the hospital complex. This can be achieved through the display of material, items, stories, within an area(s) of the new build/campus- way finding, reuse of materials in street furniture, signage, within the campus or buildings.
 - The hospital design should consider the heritage values of the heritage building remaining on the block along Cumberland and Castles Street and consider massing, setback and textures that contribute to streetscape and encourage movements of people and connections to other key locations

13.1 Further Considerations

Given the number of pre-1900 buildings (or portions of) that remain, the size of the post-1900 structures, as well as the dense nature of subsurface sites, the amount of post-consent heritage and archaeological works required are likely to be significant and should be factored into both budget and timeline requirements.

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Appendix A. N.Z. Historic Places Trust Buildings Record Form

N.Z. HISTORIC PLACES TRUST BUILDINGS RECORD FORM		COMPUTER No: 2143
		HP FILE No:
		NAME of Building/Structure Cadbury Confectionery Buildings (formerly Cadbury Schweppes Hudson)
		REGION Otago
		LOCAL BODY Dunedin City Council
		CITY/TOWN Dunedin
		STREET AND No. 40 Castle Street
		DISTRICT SCHEME DETAILS Not listed
		IF BUILDING IS PART OF AN HISTORIC AREA, ENTER NAME OF PRECINCT OR CONSERVATION AREA
		ARCHITECTURAL INFORMATION:
		Style Utilitarian
		Construction Brick & plaster
		Materials " " "
		Architect/s
		Engineer/s
		Builder/s
		Date of Construction Most constructed after the fire of 1902
		Associated Buildings
		Use/s Factory
		Condition of Building Good
RECOMMENDED CLASSIFICATION		(This record form was completed June, 1993)
Research by Debbie Coulter		Inspected by

HISTORICAL INFORMATION

HISTORY

Richard Hudson, founder of the firm R. Hudson & Co., which continues today as Cadbury Confectionery, first built on this site in 1900. Although the three-storey factory he erected was gutted by fire in 1902, Hudson embarked on a re-building programme and the company continues to operate from the site today. Before Hudson purchased the site, it was home to New Zealand's (then) only whiskey distillery, which had been closed by the government as a result of representations from Scottish distillers.

Richard Hudson was born in England circa 1841 - a time when there was much poverty following the Industrial Revolution. He was orphaned at the age of nine years and after working as a belt runner in the locomotive and carriage body works of the Great Western Railway, he went to sea at the age of fourteen years. Three years later he returned to England to become apprenticed to the bakery trade. In 1865 Hudson came to New Zealand on the sailing ship Indian Empire.

After a brief period at the Hokitika goldfields with little success, he travelled to Christchurch, where he obtained a job with John Griffin, baker, (who later founded the famous biscuit firm of Griffin's). In Christchurch he married Mary Ann Riley and the couple went south in 1868 to Dunedin, which was enjoying the gold boom.

After a number of jobs, Richard Hudson decided to go out on his own and purchased a biscuit baking machine, rented a bakehouse and started making biscuits and pies. As business was slow initially, Hudson began to sell ships' biscuits to the vessels visiting the harbour. He sold the biscuits from a barrow down at the wharves. It was from this small beginning that Hudson built up his business into a large biscuit and chocolate manufacturing firm. Important in the firm's history were Hudson's investigations into the chocolate and cocoa markets. In 1884 he visited various European factories. He eventually purchased a plant from a French firm and a successful chocolate, claimed to be the first in the Southern Hemisphere, was duly produced. It is said Hudson obtained his recipe from England.

CRITERIA FOR CLASSIFICATION (Please tick box or encircle letter as applicable. If necessary add brief (e.g. one word) explanation.)

- 1 a b c [.....]
- 2 a b c d e f g [.....]
- 3 ☐ [.....]
- 4 a b c d e [.....]
- 5 ☐ [.....]
- 6 ☐ [.....]
- 7 ☐ [.....]
- 8 ☐ [.....]
- 9 a b c [.....]
- 10 ☐ [.....]
- 11 ☐ [.....]
- 12 ☐ [.....]
- 13 a b [.....]
- 14 ☐ [.....]
- 15 ☐ [.....]

REFERENCES (Write on separate sheets as necessary)

Hudson died in 1903, not long after the fire in his new factory. The firm however continued as a company run by Hudson's six sons who were directors.

In 1930 the company Hudson had founded joined with Cadbury Fry to become Cadbury Fry Hudson Ltd. From 1973 until 1991 the company was known as Cadbury Schweppes Hudson Ltd. Today its title is Cadbury Confectionery Ltd reflecting a recent change in emphasis to solely chocolate and confectionery manufacture. (In 1990 the Hudson biscuit business was sold and the Griffins sugar confectionery business acquired).

Sources - refer to attached sheet

Appendix B. ICOMOS New Zealand Charter for the Conservation of Places of Cultural Heritage Value

ICOMOS New Zealand Charter for the Conservation of Places of Cultural Heritage Value

Revised 2010

Preamble

New Zealand retains a unique assemblage of **places of cultural heritage value** relating to its indigenous and more recent peoples. These areas, **cultural landscapes** and features, buildings and **structures**, gardens, archaeological sites, traditional sites, monuments, and sacred **places** are treasures of distinctive value that have accrued meanings over time. New Zealand shares a general responsibility with the rest of humanity to safeguard its cultural heritage **places** for present and future generations. More specifically, the people of New Zealand have particular ways of perceiving, relating to, and conserving their cultural heritage **places**.

Following the spirit of the International Charter for the Conservation and Restoration of Monuments and Sites (the Venice Charter - 1964), this charter sets out principles to guide the **conservation of places of cultural heritage value** in New Zealand. It is a statement of professional principles for members of ICOMOS New Zealand.

This charter is also intended to guide all those involved in the various aspects of **conservation** work, including owners, guardians, managers, developers, planners, architects, engineers, craftspeople and those in the construction trades, heritage practitioners and advisors, and local and central government authorities. It offers guidance for communities, organisations, and individuals involved with the **conservation** and management of cultural heritage **places**.

This charter should be made an integral part of statutory or regulatory heritage management policies or plans, and should provide support for decision makers in statutory or regulatory processes.

Each article of this charter must be read in the light of all the others. Words in bold in the text are defined in the definitions section of this charter.

This revised charter was adopted by the New Zealand National Committee of the International Council on Monuments and Sites at its meeting on 4 September 2010.

Purpose of conservation

1. The purpose of conservation

The purpose of **conservation** is to care for **places of cultural heritage value**.

In general, such **places**:

- (i) have lasting values and can be appreciated in their own right;
- (ii) inform us about the past and the cultures of those who came before us;
- (iii) provide tangible evidence of the continuity between past, present, and future;
- (iv) underpin and reinforce community identity and relationships to ancestors and the land; and
- (v) provide a measure against which the achievements of the present can be compared.

It is the purpose of **conservation** to retain and reveal such values, and to support the ongoing meanings and functions of **places of cultural heritage value**, in the interests of present and future generations.

Appendix C. Photographic Record