#### Index

Inventories are ordered and numbered, as exhibited, for sites recommended for listing.

Heritage item inventories					
Alexa	Alexandria				
1-4		Removed			
5.	2-6 Birmingham Street	Former Walter Barr Pty Ltd factory			
6.	22-30 Birmingham Street	Former Sil-Ora Dental Products factory			
7.	27 Birmingham Street	Electricity Substation No. 375			
8.	29-33 Birmingham Street	Former H. G. Whittle & Sons factory			
9.	602-612 Botany Road (and 27-31 Ralph Street)	Former Coote & Jorgenson Engineers factory			
10.	684 Botany Road	Former White Way service station			
11.	47-49 Bourke Road	Former Q Store			
12.	138-196 Bourke Road	Former Commonwealth Industrial Gases oxygen factory and demonstration block			
13.	16 Euston Road	Electricity Substation No. 117			
14.	40A-42 Maddox Street (and 58-68 Euston Road)	Former Alexandria Spinning Mills			
15.	1-3 Mandible Street	Former Standard Telephones & Cables industrial building			
16.		Removed			
17.	124 McEvoy Street	Former Electricity Substation No. 152			
18.	52-54 O'Riordan Street	Former National Motor Springs igloo building			
19.	82 O'Riordan Street	Electricity Substation No. 225			
20.	38 Ralph Street	Former Wilson Bros Willow Ware factory			
21.	212-214 Wyndham Street	Former Electric Light Substation No. 89			
Anna	indale				
22.	1B Booth Street	Sewage Pumping Station No. 3			
Cam	perdown				
23.	6-10 Mallett Street	Former Grace Bros Repository			
24.	64-106 Mallett Street	Former Bonds Industries complex including interiors, Substation No. 181, Chesty Bond Mural and former commercial building façade for "Bonds Cafeteria" at 97- 99 Church Street			
Darli	ngton				
25.	2-10 Golden Grove Street	Former Jones IXL factory garage			
26.	181 Lawson Street	Former McMurtrie, Kellermann & Co factory (The Foundry)			
Erski	ineville				
27.	7-19 Coulson Street	Former Bakewell Brothers south-east warehouse building			
28.	127 Railway Parade	Former factory chimney stack			
29.	18-20 Victoria Street	Former Cleveland Shoe Company factory			
Forest Lodge					
30.	19 Ross Street	Electricity Substation No. 267			

Gleb					
31.	113 Mitchell Street	Former Glebe Volunteer Fire Station			
	town				
32.	10-12 Egan Street	Former Sydney Confectionery Company factory			
33.	197-207 Wilson Street	Former F. W. Gissing factory			
	Redfern				
34.	53-63 Great Buckingham Street (and 611-619 Elizabeth Street)	Former A. Hordern & Sons factory complex			
35.	99 Renwick Street	Electricity Substation No.112			
Rose	ebery				
36.	6-8 Crewe Place	Former Wrigley's factory			
37.	85-113 Dunning Avenue	Rosella Preserving and Manufacturing Co. factory			
38.	88 Dunning Avenue	Electricity Substation No.192			
39.	115-133 Dunning Avenue	Former Commonwealth Weaving Mills and Frederick Rose factory			
40.	120 Dunning Avenue	Former Otis Elevator Co. factory			
41.	135-151 Dunning Avenue	Former Westinghouse factory			
42.	142 Dunning Avenue	Electricity Substation No. 128			
43.	1-11 Hayes Road	Former R. C. Henderson Ltd factory			
44.	61-71 Mentmore Avenue (and 34 Morley Avenue)	Former Cyclone Fence and Gate Co factory			
Surr	y Hills				
<b>45</b> .	268-274 Devonshire Street	Former Edward Hill & Co factory			
46.	470-484 Elizabeth Street	Former W. C. Penfold & Co factory			
47.	5 Fitzroy Place	Electricity Substation No. 229			
48.	1-15 Foveaux Street	Former Farleigh Nettheim & Co Ltd warehouse			
49.	47-97 Marlborough Street	Former David Jones factory			
<b>50</b> .	13-15 Marshall Street	Former Allington Stoveworks factory			
51.	11-13 Randle Street	Former R. C. Henderson Ltd factory			
<b>52</b> .	4-34 Wentworth Avenue	Former warehouse group			
Sydr	пеу				
<b>53</b> .	115 Clarence Street	Former Noyes Bros warehouse			
54.	185 Clarence Street	Former Shelley warehouse			
<b>55</b> .	193-195 Clarence Street	Shorter House			
56.	123-129 Clarence Street (and 252-258 Kent Street)	Former Edwards Dunlop & Co warehouses			
<b>57</b> .	426-430 Kent Street	Former Grace House warehouse			
Ultin	10				
58.	10-16 Bay Street	Part Bay Street Depot			
Wate	erloo				
59.	723 Elizabeth Street	Former William Brooks factory			
60.	378 George Street	Electricity Substation No. 75			
61.	-	Removed			
	The state of the s				

Zetla	and	
62.	146-158 Joynton Avenue	Former Joseph Lucas showroom, workshop and office
	servation area inventories	
Alex	andria	
63.	North Alexandria industrial I	neritage conservation area
Alex	andria & Beaconsfield	

# **Inventory 41**

SHI number 5062472 Study number

Item name: Former Westinghouse factory including interiors

Location: 135-151 Dunning Avenue Rosebery 2018 Sydney

Address: 135-151 Dunning Avenue Planning: Sydney South

Suburb/nearest town: Rosebery 2018

Local govt area: Sydney Parish:

State: NSW County:

Other/former names: Buzacott & Co, Rosebery Engine Works, Electricity Meter Manufacturing Co, Westinghouse Rosebery, Government Annex N

Area/group/complex: Group ID:

Aboriginal area: Eora

Curtilage/boundary: As described in Sydney Local Environmental Plan

Item type: Built Group: Manufacturing and Processing Category: Other - Manufacturing & Processing

Owner: Private - Corporate

Admin codes: Code 2: Code 3:

**Current use:** 

Former uses: Industrial

Assessed significance: Local Endorsed significance:

SHI number 5062472 Study number

Item name: Former Westinghouse factory including interiors

Location: 135-151 Dunning Avenue Rosebery 2018 Sydney

Statement of Purpose-built in 1921-1937 for major engine, electrical gear and household appliance manufacturers, Buzacott significance: & Co, the former Rosebery Engine Works and Westinghouse Rosebery factory represents the model industrial development of Rosebery during the inter-war period. The continuous use of these buildings and site for manufacturing machinery and appliances for most of the twentieth century also provide evidence of the formerly widespread engineering industry in Rosebery.

> The buildings on this site are historically significant for their connection to the Australian production of stationary engines, pumps, electrical gear, Westinghouse refrigerators and appliances. The scale of the site and factory buildings demonstrates the growth and success of Rosebery Engine Works and Westinghouse Rosebery, as a major Australian manufacturer of these products. It also provides evidence of the importance of Sydney's engineering industry and the growing popularity of electrical appliances during the inter-war and post-war years of the twentieth century.

> As the place where engines, electrical gear and domestic refrigerators were made from the 1920s to the 1960s, the site also represents major technological advancements of the twentieth century in developing labour-saving machinery, and the fundamental changes these brought for Australian farms, cities and homes at the time. Products made at this site helped to build Sydney's electrical network and contributed to the widespread introduction of refrigerators into Australian homes.

The site is also historically significant for its association with Australian's contribution to World War II, through its use as government annex 15, a 'shadow factory' which manufactured munitions for the Australian armed forces, specifically the fuses and primers used in explosives.

The buildings provide evidence of one of Sydney's first planned suburbs, as some of the earliest surviving industrial buildings constructed on the Rosebery subdivision planned by John Sulman in 1911-20 as a model suburb for both housing and industry. The period, form, layout and use of the buildings record the original subdivision pattern and location of the planned industrial blocks between Botany Road and Primrose Avenue.

For its connection to manufacturing munitions for World War II, Champion and other engines and pumps used on farms and in cities, and the well-known Westinghouse fridges and appliances found in many Australian homes from the 1920s to the 1960s, the site may hold significance to the Australian community.

The factory buildings represent a good example of a large low-scale industrial complex of southern Sydney from the inter-war period. The buildings demonstrate the industrial building typology which contains administrative and manufacturing in distinctly different building forms, including a single-storey sawtooth-roof factory over a large area, a separate substantial double-height brick foundry, and a more architecturally distinctive office or showroom on the street frontage.

The construction of the buildings represent early to mid-twentieth century industrial building techniques,

SHI number 5062472 Study number

Item name: Former Westinghouse factory including interiors

Location: 135-151 Dunning Avenue Rosebery 2018 Sydney

employing repeated modular forms and timber structures to span large distances, and sawtooth roofs with side lantern windows to light large internal spaces. The building designs demonstrate typical features of inter-war style of architecture applied to utilitarian buildings including the heavy masonry construction, unadorned brick walls and pattern of vertically proportioned windows.

The buildings on this site make important contributions to the streetscapes of Dunning and Mentmore Avenues and Harcourt Parade. The full-site coverage of buildings extending across half a block of land and three street frontages make the buildings visible in the round from a number of near and distant vantage points. The repetition of sawtooth and gabled roof profiles along Mentmore and Dunning Avenues, consistent materials and inter-war period of the buildings create distinctive and cohesive streetscapes along these two main avenues. The buildings also form part of a consistent group of inter-war industrial buildings in Rosebery.

The former Westinghouse factory complex forms part of one of the largest known collections of industrial and warehouse buildings of its kind in Australia, which records City of Sydney's past as one of only two historic industrial heartlands in Australia. This collection of buildings provides evidence of Australia's twentieth century transformation through industrialisation when Sydney became one of the largest industrialised cities in the South Pacific.

The former industrial buildings are of local heritage significance in terms of their historical, association, aesthetic and representative values.

High significance: 1920s-1930s sawtooth-roofed factory and north-west brick foundry, including brick walls, roof trusses, columns, foundry gantry, surviving timber windows and Dunning and Mentmore Avenue street elevations. Moderate significance: 1940s-1960s alterations and additions for Westinghouse including southern office addition. No significance: Aluminium windows and other recent minor alterations.

SHI number 5062472 Study number

Item name: Former Westinghouse factory including interiors

Location: 135-151 Dunning Avenue Rosebery 2018 Sydney

#### Historical notes of provenance:

Historical notes Early development of the locality:

This site forms part of the land of the Gadigal people, the traditional custodians of land within the City of Sydney council boundaries. For information about the Aboriginal history of the local area see the City's Barani website: http://www.sydneybarani.com.au/

The suburb of Rosebery was once part of a vast sand dune system covered by heath, low scrub, creeks and freshwater wetlands that dominated the landscape of the southern suburbs of Sydney. It provided habitat for a range of fauna such as birds, fish and eels, and was a good food source for the Gadigal, the local Aboriginal people.

The land that today incorporates the areas of Alexandria, Waterloo, Zetland and Rosebery was originally one large estate. Originally granted to former convict and public servant William Hutchinson in 1823, the estate, its buildings and water mill, were then sold to Daniel Cooper and Solomon Levy in 1825 before Cooper became its sole owner in 1833.

The land of the Cooper Estate was progressively subdivided into small acreages and sold from 1872.

Before the development of Rosebery into a residential and industrial estate, the suburb was popular for its racecourse which opened in 1906.

The suburb of Rosebery derives its name from Archibald Primrose, Earl of Rosebery and Prime Minister of England from 1894-95, who visited Sydney in 1883-84. Many of the street names of Rosebery are associated with British parliamentarians including Morley Avenue, Crewe Place and Asquith Avenue.

The Rosebery Estate was planned as a model industrial suburb by John Sulman and developed by Stanton and Sons between 1911 and 1920. The land was purchased for £24,000 in 1912 by the Town Planning Company of Australia, as part of 273 acres of the Waterloo Estate. John Sulman exhibited his design for Rosebery in the Town Planning Association of NSW exhibition in 1913. Most lots were still vacant until 1924, possibly due to the outbreak of World War I.

Based on the garden suburb model, Rosebery was planned as 'model factories and model homes' with detached housing for workers located close to industrial employment sites. Sulman's plan incorporated residential, commercial and industrial facilities as well as recreational and community facilities. Similarly to Dacey Gardens which was also planned by John Sulman, Rosebery was one of the first planned suburbs in Sydney, and amongst the earliest inter-war garden suburbs.

Secondary industries declined in the area from the 1970s as industry expanded to the outer suburbs.

#### Industrial history:

As one of only two major centres for historic Australian industry during the period when industry was centred in cities, Sydney's industrial development is part of the national history of industrialisation. Australia's industrialisation formed part of the 'second industrial revolution' which began during the mid-nineteenth century. This second revolution was driven by major technological innovations including the invention of the internal combustion engine and the assembly line, development of electricity, the construction of canals, railways and electric-power lines.

Sydney's twentieth century industrial development records when and how Sydney became one of the largest industrialised cities in the South Pacific and the diversification of Australia's economy beyond primary industry. Together with Melbourne, Sydney's twentieth century industrial boom expanded Australia's economy from the 'sheep's back' to the 'industry stack' or from primary production to manufacturing. By 1947 more Australians were working in city industries than in farms or mines.

SHI number 5062472 Study number

Item name: Former Westinghouse factory including interiors

Location: 135-151 Dunning Avenue Rosebery 2018 Sydney

Sydney's industrial development not only impacted on the national economy. Twentieth-century industry in Sydney also played a major role in developing Australia's self-sufficiency, growth, urbanisation, society and its contribution to the war effort for World War II. Sydney's industrial development has affected the lives of many Australians directly and indirectly, whether through the number of workers employed, goods and technology produced, the prosperity it engendered, or the social change and urban environments it generated.

Buzacott & Co history:

Buzacott & Company Ltd was originally founded in 1849 in Sydney as an engineering merchant business by Mr A B Armstrong. It continued to be run by descendants of Armstrongs and Buzacotts well into the twentieth century. The company name changed to Buzacott & Company in 1890. Buzacott & Company Ltd became a major Australian manufacturer and supplier of engines and agricultural equipment, such as fences, gates, pumps, wool presses, elevators, corn crushers and chaff cutters. Later they became major manufacturers of Westinghouse refrigerators.

Rosebery Engine Works Ltd began as the engine and pump manufacturing division of Buzacott, and in 1923 became an incorporated company.

In 1932, Buzacott began manufacturing commercial refrigerators when it purchased the refrigeration activity of Wormald Bros Ltd to make "Austral" commercial refrigerators. By 1933, the company began investigating manufacturing domestic refrigerators through an association with an established American firm to take advantage of their research and development. After visiting America, Buzacott selected Westinghouse because of its advanced design, although the machines were more difficult to manufacture. Buzacott began producing refrigerators identical to Westinghouse's in January 1934 using locally made cabinets and imported units.

In 1935, Westinghouse gave Rosebery Engine Works the right to manufacture and sell nearly all Westinghouse products. The name of the company then changed to Westinghouse Rosebery Ltd, and thereafter to Westinghouse Sales and Rosebery Ltd.

Following financial and management difficulties, the Email group of companies took over the firm in 1940. This concentrated the resources of the combined organisation on complete local production of sealed-unit refrigerators.

(Peter Arfanis, 1992, http://from.ph/119703, accessed 25 Sept 2014)

Engines history:

From the late nineteenth century, petrol engines gradually supplanted steam engines for running a wide range of machines, and in turn petrol engines were largely supplanted by electric motors.

The Champion was a successful small petrol engine made by the large Sydney company, Westinghouse Rosebery, based on the American-designed Fuller and Johnson engine. With hopper cooling and a fuel tank between the skids, and weighing only 240 pounds (109 kg), it was easy to mount on wheeled transport, making the Champion a self-contained mobile source of power. Engines of this type were used in rural areas for driving chaff cutters, small saw benches, pumps and orchard sprayers. These engines were also commonly used in both rural and urban areas for powering concrete mixers.

Both Westinghouse Rosebery in NSW and Toowoomba Foundry in Queensland made these engines in large quantities, beginning in the 1920s when tariff protection made local manufacturing viable. The production of small petrol engines continued in Australia until the 1970s, when reduced tariff protection led to increased competition from cheaper imported engines.

In the twenty first century, petrol and diesel engines still compete with electric motors in the concrete mixer market, and engine-driven mixers are still used on remote and green-field building sites. While most concrete is

SHI number 5062472 Study number

Item name: Former Westinghouse factory including interiors

Location: 135-151 Dunning Avenue Rosebery 2018 Sydney

mixed in large batching plants and delivered by truck, small concrete mixers are used for home renovation jobs for mixing mortar and plaster.

(Debbie Rudder and Noel Svensson, Powerhouse Museum, 2010, http://from.ph/123366, accessed 26 March 2015)

Refrigeration history:

Ice was the principle means of refrigeration until the late nineteenth century. In the United States and Australia, non-mechanical refrigerators, known as iceboxes or icechests, were used to keep perishable food fresh. Iceboxes continued to be used as the primary source of refrigeration for many families into the mid twentieth century.

A shortage of natural ice in 1890 provided an impetus to experiment with mechanical means of making ice. This ultimately resulted in the creation of domestic refrigerators. In 1913, the first domestic refrigerator sold in America was a manually operated machine produced by Mr J.M. Larsen. In 1918, the first automatic mechanical refrigerators were sold. Sixty-seven of these refrigerators, made by Kelvinator and engineered by E.J. Copeland, were sold in this year. In 1926, the General Electric Monitor Top came onto the market 'after eleven years of experimenting' (Althouse 1952, p. 2). By 1940. the North American market was dominated by four manufacturers: General Electric, Westinghouse, Kelvinator, and Frigidaire (Cowan 1983, p 139).

Other Australian manufacturers gradually entered the refrigerator market including A.G. Healing in the late 1930s: Charles Hope, Colda, and Kirby (an Australian company with licensing agreements with two American refrigeration companies, Crosley and Tecumseh) in the mid 1940s. Some American manufacturers established plants in Australia to manufacture domestically: for example General Motors in 1926, Kelvinator and Westinghouse.

The development of affordable, mass produced white goods impacted on the design of household kitchens. In the post-World War II period, 'the major components of the kitchen - the range, the refrigerator and the sink - were designed to be placed one next to the other' (Ierley 1999, p. 247). In 1945, this concept was developed further as manufacturers set standard dimensions for kitchen units and appliances.

By 1955, 77% of all homes in Brisbane, 83% in Sydney, and 67% in Melbourne owned refrigerators. By 1964, it was estimated that 94% of all Australian households owned a refrigerator (Dingle 1998, p.124).

(Museum Victoria, http://museumvictoria.com.au/collections/themes/710/domestic-refrigeration-refrigerators, accessed 25 March 2015)

Site history:

An engineering works was first built on this site in 1921 for Buzacott & Co's Rosebery Engine Works, which later became Westinghouse Rosebery. This company was a major engineering enterprise for manufacturing stationary engines, powerhouse and electrical gear, and later white goods, in particular domestic refrigerators. During World War II, the factory also operated as a government annex to supply munitions to the Australian armed forces, making the fuses and primers used in explosives. The site was in continuous use by this company from the 1920s to the 1960s, and subsequently by other companies for manufacturing refrigerators for most of the twentieth century.

A certificate of title was issued on 30 June 1921 to Buzacott & Co Ltd for lots 371-386 of deposited plan 7534, covering the whole block of land (CT 3199 f 190). A new manufacturing works was then built for the company in Dunning Avenue, Rosebery. (Peter Arfanis, 1992, http://from.ph/119703, accessed 25 Sept 2014)

In 1921, Buzacott & Co Ltd, engineer's works and gate factory, was first listed in the Sands directory (Sands, Directory, 1921, p 799).

Location: 135-151 Dunning Avenue Rosebery 2018 Sydney

The subject buildings were constructed on the land subdivision which formed part of John Sulman's and Richard Stanton's plan for a model suburb for industry and workers housing. The undated subdivision plan from approximately 1914 was named the 'Rosebery model and industrial suburb'. The deposited plan for this subdivision was surveyed on 5 March 1914 (DP 7534). These plans show that Hayes Road was initially named Ackland Way and Dunning Avenue was formerly Pauls Road.

The factory was constructed on ten of the original industrial allotments (lots 374-383) of this subdivision when the block bound by Hayes Road, Dunning Road, Mentmore Avenue and Harcourt Parade was evenly divided into 16 land parcels. These parcels were known as lots 371-378 fronting Dunning Avenue and 379-386 fronting Mentmore Avenue. These industrial lots were larger than residential lots, however were not overly large. Most industrial buildings like the subject buildings were constructed over multiple lots.

The industrial lots typically measured approximately 100 feet wide and 130-140 feet deep. In the original plan, industrial lots of these larger dimensions were located on the land between Epson Road to the north, Harcourt Parade to the south, the lanes behind Botany Road to the west and Primrose Avenue to the east. Further east, the plan laid out residential lots distinguished by their narrower measurements generally of 30-40 feet wide and 130-150 feet deep (Inheritage, Heritage Assessment Report of the Rosebery Estate, 2006).

In 1922, shortly after the factory's construction, an electrical substation was built on the opposite side of Dunning Ave to supply electricity to this and other factories in the area.

The factory was photographed in 1922 as part of a series of Sydney panoramas. The 1922 panorama photo taken from Harcourt Parade looking north-east down Dunning Avenue and Harcourt Parade documents the first buildings constructed along Dunning Avenue for Buzacott & Company. The office building constructed on the south-west corner of the site is shown clearly with projecting lettered signage mounted on its roof. Also shown in this photos are the earliest parts of the factory, comprising five sawtooth roofs behind the office, and the large gabled building believed to be the foundry at the northern-end of the site. This photograph documents the original Harcourt Parade elevation including the former small wing contained under a half-hipped roof. The remainder of the block to the north appears to contain no other buildings by 1922. The newly erected electrical poles and wires connected to the opposite substation are also evident in this photo (National Library of Australia, Panorama of Mark Foys Limited and Buzacotts and Company Limited, Mascot, 1922, http://nla.gov.au/nla.pic-vn6154688-sd-cd)

The 1922 panorama photo of the estate north of Harcourt Pararde also documents the spectrum of early development of the model industrial suburb, including Mark Foys Limited mills located on the opposite side of Dunning Avenue and a Federation house located on the opposite side of Harcourt Parade (National Library of Australia, Panorama of Mark Foys Limited and Buzacotts and Company Limited, Mascot, 1922, http://nla.gov.au/nla.pic-vn6154688-sd-cd).

Another panoramic photo of Rosebery from the early 1920s shows this building in the distance, viewed from the sand dunes to the north-east, on land to the east of Rosebery Avenue and north of Crewe Place. While very distant, this photograph reveals that the six southern-most sawtooth roofs and large gabled foundry building were constructed on the site first. This photo also illustrates the few industrial buildings constructed in Rosebery by this time. (National Library of Australia, Panorama of Nestle and Anglo Swiss Condensed Milk Company and Wrigleys Australia Limited, Sydney, EB Studios, 1917-1925, http://nla.gov.au/nla.pic-vn6154685-sd-cd)

On 28 January 1924, the property was transferred to Rosebery Engine Works Ltd (CT 3199 f 190), a division of Buzacott & Co. Part of the land was leased to Buzacott & Co Ltd on 18 February 1924 (CT 3199 f 190).

Alan E Buzacott (1899-1983) became a director of Henry Lane (Australia) Ltd, and was appointed chief engineer for Rosebery Engine Works Ltd, the engine and pump manufacturing division of Buzacott & Co Ltd. (Debbie Rudder and Noel Svensson, Powerhouse Museum, 2010,

http://www.powerhousemuseum.com/collection/database/?

irn=123366&utm\_source=api&utm\_medium=api&utm\_campaign=828f4d948d537cf, accessed 26 March 2015)

SHI number 5062472 Study number

Item name: Former Westinghouse factory including interiors

Location: 135-151 Dunning Avenue Rosebery 2018 Sydney

In the 1930s, Rosebery Engine Works sold part of the undeveloped block. On 24 April 1933, lots 371-372 and 385-386 were transferred to Commonwealth Weaving Mils Ltd (CT 3199 f 190). Lots 373, 384, and part of lots 374 and 383 were transferred to Frederick Rose Ltd on 3 October 1934 (CT 4576 f 248). On 15 November 1934, a new certificate of title was issued to Rosebery Engine Works Ltd for the subject residue land, which included lots 375-382 and part of lots 374 and 383 (CT 4658 f 95).

On 29 October 1934, a valuation of the subject land owned by Rosebery Engine Works, comprising lots 375-382 and part of lots 374 and 383 Ltd, recorded the buildings constructed by this time. This included a brick and fibro factory, a residence of five rooms, a brick foundry and a brick garage on the site (Valuer-General, Valuation List, Waterloo, SRNSW 19/9457, No 784). When compared with the earliest available photographs of the 1920s panoramic photos noted above and 1943 aerial photograph, it could be concluded that the brick and fibro factory referred to the sawtooth-roofed building and the foundry likely referred to the large double-height brick gabled building at the northern end of this site on Dunning Avenue. It is unclear from the 1920s and 1943 aerial photograph which buildings likely comprised the residence and garage. These building may have been demolished by the time of the 1943 aerial photograph.

In 1935, Westinghouse, the manufacturer of refrigerators based in the United States, signed an agreement with Rosebery Engine Works Ltd to manufacture and sell its products. The company name was then changed to Westinghouse Rosebery Ltd and later to Westinghouse Sales and Rosebery Ltd. The Powerhouse Museum holds an extensive archive of the records on this group of companies. (SMH, 14 June 1935, p 12; http://www.powerhousemuseum.com/collection/database/? irn=119703&utm source=api&utm medium=api&utm campaign=828f4d948d537cf, accessed 25 Sept 2014)

By 6 April 1936, the factory had been extended (Valuer-General, Valuation List, Waterloo, SRNSW 19/9457, No 784). Additions, including a sawtooth corrugated fibro roof, had been made to the factory by the time of the next land valuation on 5 August 1937 (Valuer-General, Valuation List, Waterloo, SRNSW 19/9457, No 784). These likely included the northern sawtooth and gabled buildings along Mentmore Avenue, which were not shown as constructed in the earlier 1920s panorama photo, but were built by 1943 when the first known aerial photograph documented the site.

By 1940, Westinghouse Rosebery Ltd, with its head office at 13 Market Street Sydney, was one of the major manufacturers of electrical switchgear and stationary engines in Australia. At its Rosebery factory, the company manufactured powerhouse and substation switchgear in metal clad or cubicle types, circuit breakers, instrument transformers, and outdoor metering outfits. The factory supplied the largest number of transformers to the Sydney Municipal Council from the mid-1920s to the 1950s for building Sydney's electrical network (Pennington 2012). The factory at this size also manufactured benzene, kerosene and crude oil stationary engines (Directory of Manufacturers of Australia, C E S Turner & Sons, Sydney and Melbourne, 1939-40, p 129, 156).

During World War II, the Electricity Meter Manufacturing Co Pty Ltd (Westinghouse Rosebery Works) operated as Annex Number 15. This annex was a 'shadow factory' for the Australian government where munitions were made for the Australian military forces during the war. This site produced fuses and primers; essentially the timers and blasting caps which ignited explosives. (Australian Munitions Digest, 1942, CRS A5954, Item 484/1, Chap 7, App II, p 1)

The Commonwealth Department of Munitions, following its establishment in 1939, developed these annexes based on the British 'shadow factory' programme. This was where existing civilian firms were provided with buildings and machinery in semi-separate facilities ready to produce munitions when needed. These annexes were built on land owned by private companies that was then leased to the Commonwealth. Alternatively, private companies operated the annexes with their own equipment and staff on behalf of the Commonwealth. (D P Mellor, The Role of Science and Industry, p.30)

By 1943, the aerial photograph records that the site was completely covered with buildings, except for the small building setback from Harcourt Parade and strips of land off Dunning Avenue either side of the large gabled

SHI number 5062472 Study number

Item name: Former Westinghouse factory including interiors

Location: 135-151 Dunning Avenue Rosebery 2018 Sydney

building at the north end of the site. By this time, the south end of the site had been developed boundary-to-boundary by seven sawtoooth roofs running east-west. A small section of separate parapeted roof likely containing the original office is shown at the south-west corner of this building. (1943 Aerial photograph, SIX, LPI)

At the north end of the site, by 1943, the current large gabled-roof building is recorded as occupying approximately half the width of the block, possibly comprising the foundry described in the earlier valuation. Two smaller sawtooth roofs abut its south elevation, unconnected to the other sawtooth roofs. The southern factory building is shown as extending along the eastern half of the site behind the foundry, contained under a series of seven sawtooth and gabled roofs fronting Mentmore Avenue. (1943 Aerial photograph, SIX, LPI)

In 1945, the valuation of 9 July recorded that an amenities block and canteen had been added to the site (Valuer-General, Valuation List, Waterloo, SRNSW 19/9457, No 784).

In 1947, Westinghouse Rosebery Pty Ltd was noted as manufacturing electrical appliances and equipment and operating as electrical engineers (Wise, Directory, 1947, p 416). Refrigerators and other electrical goods were produced on the site.

By 1949, an aerial photograph records that the building form was unchanged from the configuration shown in the 1943 aerial.

In 1959, Westinghouse, with architect S C Van Breda, added office space, an indent store and a tea preparation room on the first floor adjoining the factory stairs. This is likely the addition located on the south-west corner of the building at the corner of Harcourt Parade and Dunning Avenue. In 1960, architect W F Thomson designed further additions to the first floor office partitions.

While they did not purchase the property until 1969, in 1964 Email applied for an allocation of street numbers. As the entrances to the factory and office blocks were in Dunning Avenue, numbers 135 to 151 Dunning Avenue were allocated to the site.

In 1969, the property was transferred to Email Ltd on 29 January (CT 4658 f 95). Email continued to produce electrical goods at this site.

Email's original business was manufacturing electric, gas and water meters, which were found in many houses throughout Australia. Email was also one of the largest Australian manufacturers of white goods. They produced a large range of domestic and commercial refrigerators, freezers, electric ranges, gas stoves, microwave ovens, dishwashers, room and air conditioners, washing machines and clothes dryers. The company was initially incorporated in New South Wales in 1934 as Electricity Meter & Allied Industries Ltd, renamed as Email, an acronym of its full name, in 1951. Email also manufactured other household appliances including radio parts and refrigerators, building products, industrial products and metal distributions, amongst production lines in the company. (Australian Science and Technology Heritage Centre, Technology in Australia 1799-1988, Whitegoods or consumer durables, 2000, http://www.austehc.unimelb.edu.au/tia/886.html#3584, accessed 17 March 2015)

During the 1960s, applications for additions to the complex included a concrete roof, a first floor office, a rebuilt foreman's office, a spray booth and a doorway/staircase.

An aerial photograph from 1975 records some minor additions to the buildings since the 1949 aerial. A small rear extension to the northern-most sawtooth roof is recorded in the 1975 aerial, in the location of a previous small free-standing building and open space to the north of the foundry building. The office addition on the south-east corner of this building, located in the previous building setback from Harcourt Parade, is also shown as constructed by 1975 along Dunning Avenue. No further changes to the building form appear to have been made after this period because the building form is otherwise unchanged from that recorded in the 1975 aerial.

SHI number 5062472 Study number

Item name: Former Westinghouse factory including interiors

Location: 135-151 Dunning Avenue Rosebery 2018 Sydney

Subsequent minor additions to the site included construction of an underground tank and petrol pump at 151 Dunning Avenue in 1977. In the 1980s, proposed alterations included cladding a wall, replacing four windows, resurfacing the car park, landscaping the garden and installing a loading bay and roller door to the Mentmore Road façade. In 1990, a roller door was added to the loading dock in Dunning Avenue.

In December 1996, Aristocrat Technologies Australia Pty Ltd purchased the site. Anecdotal evidence from Aristocrat suggests that the site was used by Cutler Hammer (who merged with Westinghouse's electrical distribution and control business unit in 1994) to manufacture refrigeration units, before Aristocrat subsequently used the buildings for storage (City Plan Heritage 2003).

Themes:National themeState themeLocal theme3. EconomyIndustryWarehouses3. EconomyCommerceWarehouses

Designer: Unknown (earlier buildings), S C Van Breda (1959 office additon)

Builder: Unknown

Year started: 1921 Year completed: 1937 Circa: Yes

SHI number 5062472 Study number

Item name: Former Westinghouse factory including interiors

Location: 135-151 Dunning Avenue Rosebery 2018 Sydney

Physical description: The factory on this site was built in 1921 and extended in 1937 for Buzacott & Co's Rosebery Engine Works, which later became Westinghouse Rosebery. The large, mostly single-storey building occupies half the block of land with two long street frontages to Dunning Avenue and Mentmore Avenue and a shorter street frontage to Harcourt Parade

> The building demonstrates the typical modular construction of an inter-war factory with load-bearing brick walls around the perimeter of the site, timber and steel-framed structure and concrete slab floors. The large open internal spaces are evenly divided into bays by timber columns supporting the interconnected sawtooth and gabled roofs. The timber roof trusses are exposed internally and southern windows of the sawtooth roofs light the interiors. The sawtooth roofs run east-west, some spanning the full width of the site between Dunning Avenue and Mentmore Avenue. The northern gabled roofs have steel trusses.

Windows are typically vertically proportioned with timber frames or later aluminium replacements, some with metal louvres. Roof cladding, originally asbestos in some cases, is now corrugated metal.

While the Mentmore Avenue elevation is a continuous line of 14 brick bays, formed by 12 sawtooth and two gabled roofs exposed in profile, these bays appear to have been constructed in two stages. The seven southern-most bays of the sawtooth roof appear to have been part of the original 1921 construction, while the northern bays were an early addition for expanding the factory in approximately 1937, located behind the formerly external rear wall of the foundry building. The two different stages of sawtooth-roof bays were constructed in the same style and materials, with only subtle differences distinguishing the two externally, such as the brick lintels.

Two of the three bays at the northern end of the site fronting Mentmore Avenue were constructed with gabled roofs, presumably to allow the double-height vehicular entrance to the site behind the former foundry building. This extra clearance may have reflected the differing requirements for manufacturing the Westinghouse fridges and other appliances at the site from the 1930s.

The brickwork is exposed, except for the render of the original office building and the south wall of the sawtooth factory facing Harcourt Parade which has been clad with metal sheeting.

As is typical for this building typology and period, an office is attached to the factory, located at the south-west corner of the site. This original office comprises a two-storey rendered brick building with a gabled roof concealed by a parapet wall. The office spans the width of two sawtooth bays, with its main frontage to Dunning Avenue. The Dunning Avenue wall was raised to form a parapet wall and its windows altered likely in circa 1959 when the two- storey office addition was constructed within the building setback from Harcourt Parade.

The other original building located at the north-west corner of the site fronting Dunning Avenue comprises a large double-height building with a gabled roof. The parapeted gable on the street frontage follows the profile of the raised ridge ventilation. The ventilated roof form, scale of the building and its more solid, English bond brick construction, differing to the factory construction, suggest this building was constructed as the foundry noted in early historic records. The building was originally free-standing before the sawtooth factory bays were extended to its rear, as evident from its rear eastern wall, which contains original external windows at the junction with the later sawtooth roof form. Internally, the former foundry contains original or early gantries along the internal face of the Dunning Avenue elevation and a small mezzanine level. Openings along its northern wall have been altered, as revealed by scarring or different brickwork along this wall.

Most of the interior office areas have been renovated but the original tiling remains in the vestibule and toilets.

With no setbacks from three of its boundaries, the building forms continuous street walls with the adjoining

SHI number 5062472 Study number

Item name: Former Westinghouse factory including interiors

Location: 135-151 Dunning Avenue Rosebery 2018 Sydney

building along the full length of the block along Dunning and Mentmore Avenues between the cross-streets of Hayes Road to the north and Harcourt Parade to the south. The repetition of sawtooth and gabled roof profiles and consistent building materials and inter-war period of construction create distinctive and cohesive streetscapes along Dunning and Mentmore Avenue.

Category: Complex. Style: Inter-war. Storeys: 1-2. Façade: Face brick. Roofs: Sawtooth and gable.

Physical condition Good

level:

Physical condition:

Archaeological Not assessed

potential level:

Archaeological Artefact Heritage assessed the site as generally having a low level of archaeological

potential Detail: potential

SHI number 5062472 Study number

Item name: Former Westinghouse factory including interiors

Location: 135-151 Dunning Avenue Rosebery 2018 Sydney

Modification dates: Timeline of known dates of changes to the site:

30 June 1921

Certificate of title issued to Buzacott & Co Ltd for lots 371-386 of DP 7534

1922

Panoramic photographs record the buildings constructed on the site by this time, including the south-eastern office building, connected northern sawtooth roof factory (shown as 5 sawtooth roofs on Dunning and 6 sawtooth roofs on Mentmore Avenue), plus the large double-height gabled roof building at the northern-most end of the site

28 January 1924

Rosebery Engine Works Ltd purchased the site

18 February 1924

Part of the land leased to Buzacott & Co Ltd

24 April 1933

Sale of lots 371-372 and 385-386 to Commonwealth Weaving Mils Ltd

3 October 1934

Sale of lots 373, 384, and part of lots 374 and 383 to Frederick Rose Ltd

29 October 1934

Valuation of lots 375-382 and part of lots 374 and 383 owned by Rosebery Engine Works Ltd, engineers, of Dunning Ave, shown site contains brick and fibro factory, residence of five rooms, brick foundry and brick garage

15 November 1934

Certificate of title issued to Rosebery Engine Works Ltd for lots 375-382 and part of lots 374 and 383

6 April 1936

Factory extended, likely including part of the northern sawtooth and gabled buildings along Mentmore Avenue

5 August 1937

Factory extended including sawtooth corrugated fibro roof, likely including the remainder or all the northern sawtooth and gabled buildings along Mentmore Avenue

23 November 1937

Mortgage to Bank of New South Wales by Westinghouse Sales and Rosebery Ltd, formerly Rosebery Engine Works Ltd

1940-45

During World War II, the Electricity Meter Manufacturing Co Pty Ltd (Westinghouse Rosebery Works) operated as Annex Number 15 producing fuses and primers

9 July 1945

Construction of amenities block and canteen

1950

Survey shows site occupied by Westinghouse Rosebery Pty Ltd and Air Control Equipment Pty Ltd

1956

Survey shows site occupied by Westinghouse Rosebery Pty Ltd

Location: 135-151 Dunning Avenue Rosebery 2018 Sydney

1959

Westinghouse, with architect S C Van Breda, added office space, an indent store and a tea preparation room on the first floor adjoining the factory stairs

Architect W F Thomson designed additions to the first floor office partitions.

29 January 1969

Ownership transferred to Email Ltd

Construction of underground tank and petrol pump at 151 Dunning Avenue

1980s

Wall reclad, four windows replaced, car park resurfaced, garden landscaping, and new loading bay and roller door to the Mentmore Road facade installed

1990

Roller door added to the loading dock in Dunning Avenue

8 December 2014

New use and works approved for whole block, including re-use of existing buildings as a child care centre, warehousing, industrial retail, light industrial, high tech industrial tenancies, food and drink premises, growers markets and associated works and car parking for 137 vehicles (D/2014/278)

#### **Recommended** Retain and conserve the inter-war buildings.

#### management:

A Statement of Heritage Impact should accompany development applications.

Archival photographic recording, in accordance with Heritage Council guidelines, should be undertaken before major changes.

Do not paint, render or seal exposed brick walls.

Maintain original or early brickwork, timber windows, pattern of façade fenestration, sawtooth and gabled roof forms and framework of timber and steel trusses and columns.

Consider new uses for the buildings that will re-use and expose their industrial features to retain their former industrial character as an integral part of the new use. Alterations for a new use, including changes for compliance with Australian building standards, should allow the essential form of the buildings to remain readily identifiable.

Management: Management category

Management name

Statutory Instrument

List on a Local Environmental Plan (LEP)

Further comments: Heritage Inventory sheets are often not comprehensive, and should be regarded as a general guide only. Inventory sheets are based on information available, and often do not include the social history of sites and buildings. Inventory sheets are constantly updated by the City as further information becomes available. An inventory sheet with little information may simply indicate that there has been no building work done to the item recently: it does not mean that items are not significant. Further research is always recommended as part of preparation of development proposals for heritage items, and is necessary in preparation of Heritage Impact Assessments and Conservation Management Plans, so that the significance of heritage items can be fully assessed prior to submitting development applications.

Location: 135-151 Dunning Avenue Rosebery 2018 Sydney

Criteria a): [Historical significance

Purpose-built in 1921-1937 for major engine, electrical gear and household appliance manufacturers, Buzacott & Co, the former Rosebery Engine Works and Westinghouse Rosebery factory represents the model industrial development of Rosebery during the inter-war period. The continuous use of these buildings and site for manufacturing machinery and appliances for most of the twentieth century also provide evidence of the formerly widespread engineering industry in Rosebery.

The buildings on this site are historically significant for their connection to the Australian production of stationary engines, pumps, electrical gear, Westinghouse refrigerators and appliances. The scale of the site and factory buildings demonstrates the growth and success of Rosebery Engine Works and Westinghouse Rosebery, as a major Australian manufacturer of these products. It also provides evidence of the importance of Sydney's engineering industry and the growing popularity of electrical appliances during the inter-war and post-war years of the twentieth century.

As the place where engines, electrical gear and domestic refrigerators were made from the 1920s to the 1960s, the site also represents major technological advancements of the twentieth century in developing labour-saving machinery, and the fundamental changes these brought for Australian farms, cities and homes at the time. Products made at this site helped to build Sydney's electrical network and contributed to the widespread introduction of refrigerators into Australian homes.

The site is also historically significant for its association with Australian's contribution to World War II, through its use as government annex 15, a 'shadow factory' which manufactured munitions for the Australian armed forces, specifically the fuses and primers used in explosives.

The buildings provide evidence of one of Sydney's first planned suburbs, as some of the earliest surviving industrial buildings constructed on the Rosebery subdivision planned by John Sulman in 1911-20 as a model suburb for both housing and industry. The period, form, layout and use of the buildings record the original subdivision pattern and location of the planned industrial blocks between Botany Road and Primrose Avenue.

The former Westinghouse factory complex forms part of one of the largest known collections of industrial and warehouse buildings of its kind in Australia, which records City of Sydney's past as one of only two historic industrial heartlands in Australia. This collection of buildings provides evidence of Australia's twentieth century transformation through industrialisation when Sydney became one of the largest industrialised cities in the South Pacific

Criteria b): The factory has significant associations with the major engineering manufacturers, Buzacott & Co's Rosebery [Historical Engine Works, later renamed Westinghouse Rosebery, from the 1920s to the 1960s, and the engines, pumps, association electrical gear and Westinghouse appliances made at this site during this period. The buildings are also significance] associated with John Sulman and Richard Stanton, reflecting their plans and subdivision of 1911-1920 for the area as a model suburb for industry and worker's housing.

2014

Item name: Former Westinghouse factory including interiors

Location: 135-151 Dunning Avenue Rosebery 2018 Sydney

[Aesthetic/ Technical significance

The factory buildings represent a good example of a large low-scale industrial complex of southern Sydney from the inter-war period. The buildings demonstrate the industrial building typology which contains administrative and manufacturing in distinctly different building forms, including a single-storey sawtooth-roof factory over a large area, a separate substantial double-height brick foundry, and a more architecturally distinctive office or showroom on the street frontage.

The construction of the buildings represent early to mid-twentieth century industrial building techniques, employing repeated modular forms and timber structures to span large distances, and sawtooth roofs with side lantern windows to light large internal spaces. The building designs demonstrate typical features of inter-war style of architecture applied to utilitarian buildings including the heavy masonry construction, unadorned brick walls and pattern of vertically proportioned windows.

The buildings on this site make important contributions to the streetscapes of Dunning and Mentmore Avenues and Harcourt Parade. The full-site coverage of buildings extending across half a block of land and three street frontages make the buildings visible in the round from a number of near and distant vantage points. The repetition of sawtooth and gabled roof profiles along Mentmore and Dunning Avenues, consistent materials and inter-war period of the buildings create distinctive and cohesive streetscapes along these two main avenues.

The buildings also form part of a consistent group of inter-war industrial buildings in Rosebery.

Criteria d): [Social/Cultural significance]

Social assessment requires further study to ascertain its value for the local community. For its connection to manufacturing munitions for World War II, Champion and other engines and pumps used on farms and in cities, and the well-known Westinghouse fridges and appliances found in many Australian homes from the 1920s to the 1960s, the site may hold significance to the Australian community. The site may also have significance to local residents as part of the planned model suburb of Rosebery.

Criteria e): Research significancel

The building may offer research potential into the history of twentieth-century planning of model suburbs by John Sulman and Richard Stanton.

Criteria f): [Rarity] The buildings represent some of the earliest surviving industrial buildings constructed on the Rosebery subdivision planned by John Sulman and Richard Stanton between 1911-1920 as a model suburb for both housing and industry.

Criteria g): The buildings represent a good example of a large low-scale industrial complex from the inter-war period and [Representative] the industrial development of the planned model suburb of Rosebery.

Intactness/Integrity: Largely intact

City Plan Heritage

References:	Author	Title	Year
	City Plan Heritage	Heritage Report: 102-108, 85-151 Dunning Ave, Rosebery	2003
	Artefact Heritage	Heritage impact Statement: 115-151 Dunning Avenue, Roseber	2014
	Rod Howard & Associates Pty Ltd	Statement of Heritage Impact: 115-151 Dunning Avenue, Rose	2009
	Frances Pollon	The book of Sydney suburbs	1996
	Higinbotham & Robinson	Alexandria, Sydney	1890
	Scott Cumming	Chimneys and Change: Post European Environmental Impact in	2004
	City of Sydney/ City Building Surveyo	City Building Surveyors Detail Sheets	1956
	RTA	Aerial Photographs of Sydney May-June 1943	1943
	City of Sydney	Aerial Survey of the City of Sydney	1949
	Dr Terry Kass	Industrial and warehouse buildings research - site history	2014
Studies:	Author Title	Number	Year

City of Sydney Industrial and Warehouse Buildings Heritage

SHI number **5062472** Study number

Item name: Former Westinghouse factory including interiors

**Location:** 135-151 Dunning Avenue Rosebery 2018 Sydney

Parcels:Parcel codeLot numberSection numberPlan codePlan numberLOTBDP330260

Latitude: Longitude:

Location validity: Spatial accuracy:

Map name: Map scale:

AMG zone: Easting: Northing:

Listing: Name Title Number ListingDate

City of Sydney Industrial and Ware Heritage study

**Data entry:** Data first entered: 06/08/2014 Data updated: 25/09/2015 Status: Completed

**Location:** 135-151 Dunning Avenue Rosebery 2018 Sydney

Image:



Caption: Northern buildings viewed from Mentmore Avenue

Copy right: City of Sydney

Image by: Claudine Loffi

**Image date:** 14/03/2014

Image number:

Image url: http://www.environment.nsw.gov.au/maritimeheritageapp/resources/Heritage/shi/WebAP

P/3453bf9ea8ca76047c897aaa5bfaa5f3cb2.JPG

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P/Thumb\_test3453bf9ea8ca76047c897aaa5bfaa5f3cb2.JPG

**Location:** 135-151 Dunning Avenue Rosebery 2018 Sydney

Image:



Caption: Mentmore Avenue streetscape of sawtooth roofs, looking south

Copy right: City of Sydney

Image by: Claudine Loffi

**Image date:** 14/03/2014

Image number:

Image url: http://www.environment.nsw.gov.au/maritimeheritageapp/resources/Heritage/shi/WebAP

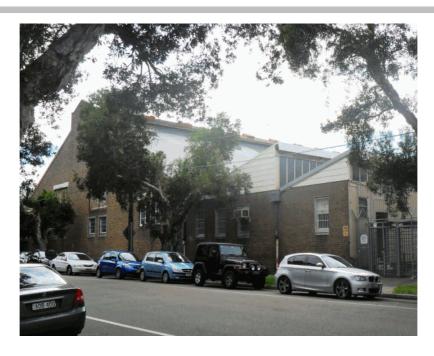
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 $\textbf{Thumbnail url:} \quad \text{http://www.environment.nsw.gov.au/maritimeheritageapp/resources/Heritage/shi/WebAP}$ 

P/Thumb\_test3459b38d402fab64269bf9f84056bb4ae43.JPG

**Location:** 135-151 Dunning Avenue Rosebery 2018 Sydney

Image:



Caption: Large gabled building on Dunning Avenue, likely the former foundry

Copy right: City of Sydney

Image by: Claudine Loffi

**Image date:** 14/03/2014

Image number:

Image url: http://www.environment.nsw.gov.au/maritimeheritageapp/resources/Heritage/shi/WebAP

P/3451475096616d74f569adc4d4077cfe9b1.JPG

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P/Thumb\_test3451475096616d74f569adc4d4077cfe9b1.JPG

**Location:** 135-151 Dunning Avenue Rosebery 2018 Sydney

Image:



Caption: Part of the group of five southern sawtooth roofs fronting Dunning Avenue

Copy right: City of Sydney

Image by: City Plan Heritage and JCIS Consultants

**Image date:** 05/09/2013

Image number:

Image url: http://www.environment.nsw.gov.au/maritimeheritageapp/resources/Heritage/shi/WebAP

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P/Thumb\_test345ea8593b3251b4df3b186283feaeab0f2.jpg

**Location:** 135-151 Dunning Avenue Rosebery 2018 Sydney

Image:



Caption: Original office building on Dunning Avenue near the corner of Harcourt Parade

Copy right: City of Sydney

Image by: Claudine Loffi

**Image date:** 14/03/2014

Image number:

Image url: http://www.environment.nsw.gov.au/maritimeheritageapp/resources/Heritage/shi/WebAP

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P/Thumb\_test3457f90495d30e64b0f8ffcc0bd5ce7e4d4.JPG

**Location:** 135-151 Dunning Avenue Rosebery 2018 Sydney

Image:



Caption: Office addition from circa 1959 on Harcourt Parade elevation

Copy right: City of Sydney

Image by: City Plan Heritage and JCIS Consultants

**Image date:** 05/09/2013

Image number:

Image url: http://www.environment.nsw.gov.au/maritimeheritageapp/resources/Heritage/shi/WebAP

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P/Thumb\_test3456b950b435b5746b78c85c0b4f17fc88a.jpg

**Location:** 135-151 Dunning Avenue Rosebery 2018 Sydney

Image:



Caption: Part of the re-clad Harcourt Parade elevation and sawtooth roofs looking north along

Mentmore Avenue

Copy right: City of Sydney

Image by: City Plan Heritage and JCIS Consultants

**Image date:** 05/09/2013

Image number:

Image url: http://www.environment.nsw.gov.au/maritimeheritageapp/resources/Heritage/shi/WebAP

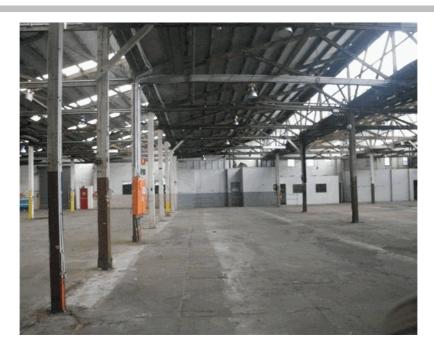
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P/Thumb\_test34558190017b4e44807a8f2fd42fa12e319.jpg

**Location:** 135-151 Dunning Avenue Rosebery 2018 Sydney

Image:



Caption: Factory interiors showing one sawtooth bay along the east-west axis

Copy right: City of Sydney

Image by: Claudine Loffi

**Image date:** 25/07/2014

Image number:

Image url: http://www.environment.nsw.gov.au/maritimeheritageapp/resources/Heritage/shi/WebAP

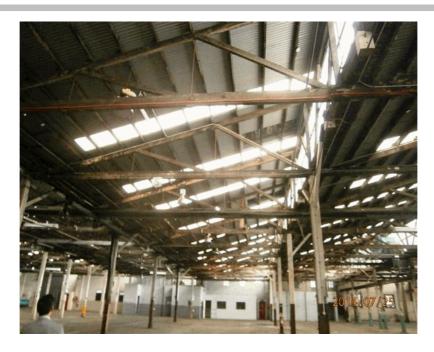
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**Location:** 135-151 Dunning Avenue Rosebery 2018 Sydney

Image:



Caption: Factory interiors showing timber structure for sawtooth roofs

Copy right: City of Sydney

Image by: Hui Wang

Image date: 25/07/2014

Image number:

Image url: http://www.environment.nsw.gov.au/maritimeheritageapp/resources/Heritage/shi/WebAP

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**Location:** 135-151 Dunning Avenue Rosebery 2018 Sydney

Image:



Caption: Factory interiors along the north-south axis showing the sawtooth roof windows

Copy right: City of Sydney

Image by: Claudine Loffi

Image date: 25/07/2014

Image number:

Image url: http://www.environment.nsw.gov.au/maritimeheritageapp/resources/Heritage/shi/WebAP

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P/Thumb\_test34555595464803349f78389a98a8c19d2bf.JPG

**Location:** 135-151 Dunning Avenue Rosebery 2018 Sydney

Image:



Caption: Eastern wall and interiors of large gabled building viewed from east, likely the former

foundry

Copy right: City of Sydney

Image by: Claudine Loffi

Image date: 25/07/2014

Image number:

Image url: http://www.environment.nsw.gov.au/maritimeheritageapp/resources/Heritage/shi/WebAP

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P/Thumb\_test345e75ef8f428ed4a61b9f8e48691262dae.JPG

**Location:** 135-151 Dunning Avenue Rosebery 2018 Sydney

Image:



Caption: Gabled building interiors, looking east towards Mentmore Avenue

Copy right: City of Sydney

Image by: Claudine Loffi

**Image date:** 25/07/2014

Image number:

Image url: http://www.environment.nsw.gov.au/maritimeheritageapp/resources/Heritage/shi/WebAP

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P/Thumb\_test345f448467871d34019bd33f3798f1060ed.JPG

**Location:** 135-151 Dunning Avenue Rosebery 2018 Sydney

Image:



Caption: Gabled building interior and gantry along the Dunning Avenue frontage

Copy right: City of Sydney

Image by: Hui Wang

Image date: 25/07/2014

Image number:

Image url: http://www.environment.nsw.gov.au/maritimeheritageapp/resources/Heritage/shi/WebAP

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P/Thumb\_test3456776c1103ca7459f8ad1fd478a8ae26c.JPG

**Location:** 135-151 Dunning Avenue Rosebery 2018 Sydney

Image:



Caption: Full 1922 panorama photograph of the factory and surrounds (pic-vn6154688)

Copy right: National Library of Australia

Image by: E B Studios (National Library of Australia)

**Image date:** 01/01/2022

Image number:

Image url: http://www.environment.nsw.gov.au/maritimeheritageapp/resources/Heritage/shi/WebAP

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P/Thumb\_test3456032d25101d14b9e81037615a6fedad7.jpg

**Location:** 135-151 Dunning Avenue Rosebery 2018 Sydney

Image:



Caption: The factory in 1922 viewed from Harcourt Parade, shown in part of a 1922 panorama

photograph

Copy right: National Library of Australia (pic-vn6154688)

Image by: E B Studios (National Library of Australia)

**Image date:** 01/01/1922

Image number:

Image url: http://www.environment.nsw.gov.au/maritimeheritageapp/resources/Heritage/shi/WebAP

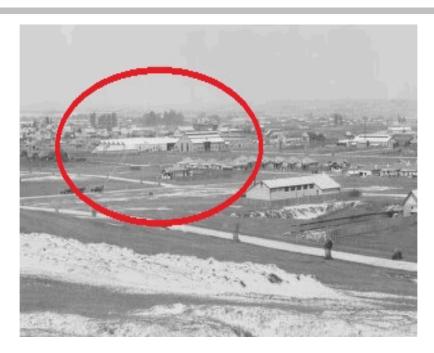
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**Location:** 135-151 Dunning Avenue Rosebery 2018 Sydney

Image:



Caption: Extract of circa 1921-25 panorama showing the subject buildings in the distance

(nla.pic-vn6154685)

Copy right: National Library of Australia

Image by: E B Studios (National Library of Australia)

**Image date:** 01/01/1922

Image number:

Image url: http://www.environment.nsw.gov.au/maritimeheritageapp/resources/Heritage/shi/WebAP

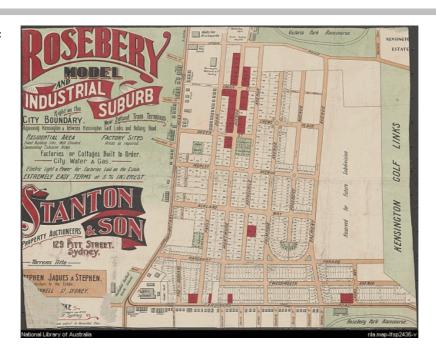
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P/Thumb\_test34552929c00246f46b5bfd0c489f134209e.jpg

**Location:** 135-151 Dunning Avenue Rosebery 2018 Sydney

Image:



Caption: Subdivision plan for the area from circa 1914 (Hayes shown as Ackland Way, Dunning as

Pauls Road)

Copy right: National Library of Australia

Image by: Stanton & Son (ID 43586275)

**Image date:** 01/01/1914

Image number:

Image url: http://www.environment.nsw.gov.au/maritimeheritageapp/resources/Heritage/shi/WebAP

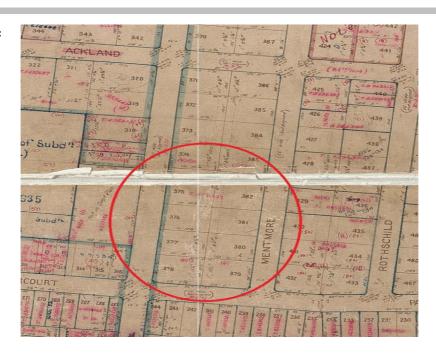
P/34508bf91b330494921b430e3950b6f1739.jpg

 $\textbf{Thumbnail url:} \quad \text{http://www.environment.nsw.gov.au/maritimeheritageapp/resources/Heritage/shi/WebAP}$ 

P/Thumb\_test34508bf91b330494921b430e3950b6f1739.jpg

**Location:** 135-151 Dunning Avenue Rosebery 2018 Sydney

Image:



Caption: Extract of 1914 deposited plan (DP 7534) showing the original subdivision lots

Copy right: Land and Property Information

Image by: William Henry Howard, Surveyor

**Image date:** 05/03/1914

Image number:

Image url: http://www.environment.nsw.gov.au/maritimeheritageapp/resources/Heritage/shi/WebAP

P/3459ed32393f17d47cf87780f19cbc4b915.jpg

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P/Thumb\_test3459ed32393f17d47cf87780f19cbc4b915.jpg

**Location:** 135-151 Dunning Avenue Rosebery 2018 Sydney

Image:



Caption: 1943 aerial showing the buildings constructed by this time on the subject site circled

Copy right: NSW Land and Property Information, SIX

Image by: RTA

**Image date:** 01/01/1943

Image number:

Image url: http://www.environment.nsw.gov.au/maritimeheritageapp/resources/Heritage/shi/WebAP

P/345d2d4d1f3859d452d9d43fa7b716dba2c.jpg

Thumbnail url: http://www.environment.nsw.gov.au/maritimeheritageapp/resources/Heritage/shi/WebAP

P/Thumb\_test345d2d4d1f3859d452d9d43fa7b716dba2c.jpg

**Location:** 135-151 Dunning Avenue Rosebery 2018 Sydney

Image:



Caption: 1949 aerial showing little change to the buildings on the site by this time

Copy right: City of Sydney archives

Image by: City of Sydney

**Image date:** 15/12/1949

Image number:

Image url: http://www.environment.nsw.gov.au/maritimeheritageapp/resources/Heritage/shi/WebAP

P/345f7993abad88842ec97555b28ac07f36a.jpg

Thumbnail url: http://www.environment.nsw.gov.au/maritimeheritageapp/resources/Heritage/shi/WebAP

P/Thumb\_test345f7993abad88842ec97555b28ac07f36a.jpg

**Location:** 135-151 Dunning Avenue Rosebery 2018 Sydney

Image:



Caption: Current aerial photograph showing the subject site circled

Copy right: City of Sydney

Image by: City of Sydney

**Image date:** 01/01/2011

Image number:

Image url: http://www.environment.nsw.gov.au/maritimeheritageapp/resources/Heritage/shi/WebAP

P/345b7ed95bb03304027b94ae2484105c93e.jpg

Thumbnail url: http://www.environment.nsw.gov.au/maritimeheritageapp/resources/Heritage/shi/WebAP

P/Thumb\_test345b7ed95bb03304027b94ae2484105c93e.jpg

**Location:** 135-151 Dunning Avenue Rosebery 2018 Sydney

Image:



Caption: A drag saw made in 1928 by Rosebery Engine Works

(https://ehive.com/account/4899/object/2824)

Copy right: Ehive

Image by: Ehive

Image date:

Image number:

Image url: http://www.environment.nsw.gov.au/maritimeheritageapp/resources/Heritage/shi/WebAP

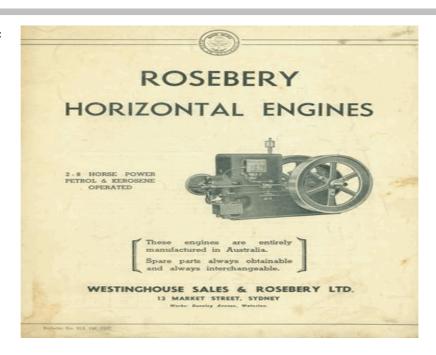
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Thumbnail url: http://www.environment.nsw.gov.au/maritimeheritageapp/resources/Heritage/shi/WebAP

P/Thumb\_test3455abc1082af814319ab3005b154b8616b.jpg

Location: 135-151 Dunning Avenue Rosebery 2018 Sydney

Image:



Caption: 1938 (circa) booklet on the petrol and kerosene horizontal engines made at this site

Copy right: Museum Victoria

Image by: Museum Victoria (Reg. No: TL 49252)

**Image date:** 01/01/1938

Image number:

 $\textbf{Image url:} \quad \text{http://www.environment.nsw.gov.au/maritimeheritageapp/resources/Heritage/shi/WebAP} \\$ 

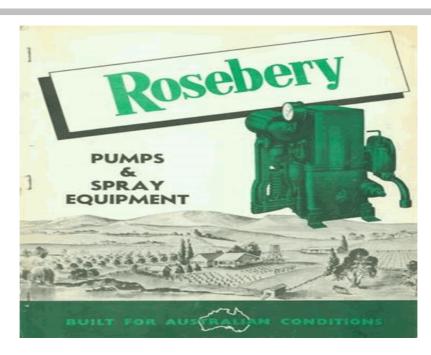
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Thumbnail url: http://www.environment.nsw.gov.au/maritimeheritageapp/resources/Heritage/shi/WebAP

P/Thumb\_test34569f2dca4b5234fee9711025ff768b836.jpg

**Location:** 135-151 Dunning Avenue Rosebery 2018 Sydney

Image:



Caption: 1950 (circa) instruction manual for pumps manufactured by Westinghouse Rosebery

Copy right: Museum Victoria

Image by: Museum Victoria (Reg. No: TL 48294)

**Image date:** 01/01/1950

Image number:

Image url: http://www.environment.nsw.gov.au/maritimeheritageapp/resources/Heritage/shi/WebAP

P/3455f6e348bbeff45bc942bb8491056d98f.jpg

Thumbnail url: http://www.environment.nsw.gov.au/maritimeheritageapp/resources/Heritage/shi/WebAP

P/Thumb\_test3455f6e348bbeff45bc942bb8491056d98f.jpg

**Location:** 135-151 Dunning Avenue Rosebery 2018 Sydney

Image:



Caption: 1950s advertisement for Westinghouse refrigerators made at this site

Copy right: Women's Weekly

Image by: Women's Weekly, 14 Oct 1953, p 51

**Image date:** 14/10/1953

Image number:

Image url: http://www.environment.nsw.gov.au/maritimeheritageapp/resources/Heritage/shi/WebAP

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Thumbnail url: http://www.environment.nsw.gov.au/maritimeheritageapp/resources/Heritage/shi/WebAP

P/Thumb\_test3455b1aaeb5899f43cb8f77193f197d1fe8.jpg

# Inventory 42

SHI number 5062473 Study number

Item name: Electricity Substation No. 128 including interiors

Location: 142 Dunning Avenue Rosebery 2018 Sydney

Address: 142 Dunning Avenue Planning: Sydney South

Suburb/nearest town: Rosebery 2018

Local govt area: Sydney Parish: Alexandria

State: NSW County: Cumberland

Other/former names: Dunning Avenue substation

Area/group/complex: Group ID:

Aboriginal area: Eora

Curtilage/boundary: As described in Sydney Local Environmental Plan

Item type: Built Group: Utilities - Electricity Category: Electricity Transformer/Substation

Owner: State Government

Admin codes: Code 2: Code 3:

Current use: Electricity substation

Former uses: Electricity substation

Assessed significance: Local Endorsed significance:

SHI number 5062473 Study number

Item name: Electricity Substation No. 128 including interiors

Location: 142 Dunning Avenue Rosebery 2018 Sydney

Statement of Built in 1922, Electricity Substation No. 128 represents a surviving example of the original network of more significance: than 360 substations built by Sydney Municipal Council from 1904 to 1936, which first supplied electricity to Sydney's industries and houses. The period and location of the substation records the expansion of Sydney's electricity network and the growth of electricity use in Rosebery. The building also marks the major changes electricity brought for Rosebery's growth, development and population.

> Aesthetically, the building demonstrates the characteristic modest form, quality of design and construction for Sydney's substations, which were designed to a higher standard than required for their function in order to integrate into their established urban contexts by reflecting neighbouring architecture or popular styles of the time.

Electricity Substation No. 128 represents a good example of a simply detailed, purpose-designed and built substation from the inter-war period. It demonstrates typical characteristics of this architectural period including the heavy geometric massing, symmetrical building form, roof form concealed behind a parapet wall, original signage, multi-paned timber windows and an emphatic centrally-placed portal. The gabled parapet wall, half face brick and half rendered finishes, bullnose brick detailing around the entrance and window sills and integrated identification signs with relief lettering demonstrates an attention to detail and ornamentation for a simple utilitarian building. The building contributes to the streetscape of Dunning Avenue and is a significant example of civic architecture in the area.

In terms of technical value in the history of substation design, the substation may also represent the first substation built with an open-topped area for electricity transformers.

Electricity Substation No. 128 forms part of one of the largest known collections of industrial and warehouse buildings of its kind in Australia, which records City of Sydney's past as one of only two historic industrial heartlands in Australia. This collection of buildings provides evidence of Australia's twentieth century transformation through industrialisation when Sydney became one of the largest industrialised cities in the South Pacific.

Electricity Substation No. 128 and the other surviving substations demonstrate the fundamental role that electricity played in powering Australia's industrialisation and how technological innovations of the time, specifically electricity, defined Sydney's industrial development during the twentieth century. Often constructed to service the high energy demands of factories in the near vicinity, the number, concentration and location of substations provide markers of twentieth century industrial centres and factories in the way that chimney stacks mark the location of factories predating electricity.

The larger number of substations in Rosebery demonstrates its history as a major industrial area mostly developed after the advent of electricity and before substations of this kind were no longer needed for supplying electricity. Rosebery's Dunning Avenue was mostly occupied by industries during the first half of the twentieth century, interspersed with blocks of worker's housing, as a result of its Sulman-designed town plan as a model factories and homes suburb.

Electricity Substation No. 128 is of local heritage significance in terms of its historical, aesthetic and representative values.

SHI number 5062473 Study number

Item name: Electricity Substation No. 128 including interiors

Location: 142 Dunning Avenue Rosebery 2018 Sydney

#### Historical notes of provenance:

Historical notes Early development of the locality:

This site forms part of the land of the Gadigal people, the traditional custodians of land within the City of Sydney council boundaries. For information about the Aboriginal history of the local area see the City's Barani website: http://www.sydneybarani.com.au/

The suburb of Rosebery was once part of a vast sand dune system covered by heath, low scrub, creeks and freshwater wetlands that dominated the landscape of the southern suburbs of Sydney. It provided habitat for a range of fauna such as birds, fish and eels, and was a good food source for the Gadigal, the local Aboriginal people.

The land that today incorporates the areas of Alexandria, Waterloo, Zetland and Rosebery was originally one large estate. Originally granted to former convict and public servant William Hutchinson in 1823, the estate, its buildings and water mill, were then sold to Daniel Cooper and Solomon Levy in 1825 before Cooper became its sole owner in 1833.

The land of the Cooper Estate was progressively subdivided into small acreages and sold from 1872.

Before the development of Rosebery into a residential and industrial estate, the suburb was popular for its racecourse which opened in 1906.

The suburb of Rosebery derives its name from Archibald Primrose, Earl of Rosebery and Prime Minister of England from 1894-95, who visited Sydney in 1883-84. Many of the street names of Rosebery are associated with British parliamentarians including Morley Avenue, Crewe Place and Asquith Avenue.

The Rosebery Estate was planned as a model industrial suburb by John Sulman and developed by Stanton and Sons between 1911 and 1920. The land was purchased for £24,000 in 1912 by the Town Planning Company of Australia, as part of 273 acres of the Waterloo Estate. John Sulman exhibited his design for Rosebery in the Town Planning Association of NSW exhibition in 1913. Most lots were still vacant until 1924, possibly due to the outbreak of World War I.

Based on the garden suburb model, Rosebery was planned as 'model factories and model homes' with detached housing for workers located close to industrial employment sites. Sulman's plan incorporated residential, commercial and industrial facilities as well as recreational and community facilities. Similarly to Dacey Gardens which was also planned by John Sulman, Rosebery was one of the first planned suburbs in Sydney, and amongst the earliest inter-war garden suburbs.

Secondary industries declined in the area from the 1970s as industry expanded to the outer suburbs.

#### Industrial history:

As one of only two major centres for historic Australian industry during the period when industry was centred in cities, Sydney's industrial development is part of the national history of industrialisation. Australia's industrialisation formed part of the 'second industrial revolution' which began during the mid-nineteenth century. This second revolution was driven by major technological innovations including the invention of the internal combustion engine and the assembly line, development of electricity, the construction of canals, railways and electric-power lines.

Sydney's twentieth century industrial development records when and how Sydney became one of the largest industrialised cities in the South Pacific and the diversification of Australia's economy beyond primary industry. Together with Melbourne, Sydney's twentieth century industrial boom expanded Australia's economy from the 'sheep's back' to the 'industry stack' or from primary production to manufacturing. By 1947 more Australians were working in city industries than in farms or mines.

SHI number 5062473 Study number

Item name: Electricity Substation No. 128 including interiors

Location: 142 Dunning Avenue Rosebery 2018 Sydney

Sydney's industrial development not only impacted on the national economy. Twentieth-century industry in Sydney also played a major role in developing Australia's self-sufficiency, growth, urbanisation, society and its contribution to the war effort for World War II. Sydney's industrial development has affected the lives of many Australians directly and indirectly, whether through the number of workers employed, goods and technology produced, the prosperity it engendered, or the social change and urban environments it generated.

#### Substations history:

One of the major innovations in industry during the nineteenth century was the development of electricity as a power and lighting source, which rivalled and then replaced water and steam power. The mills and workshops of the earlier Industrial Revolution in Britain and North America were mainly water and steam powered, whereas Australia's twentieth century industrial buildings were powered by electricity.

As part of supplying electricity to Sydney's houses and industries for the first time, Sydney Council built Sydney's first power stations and substations during the first half of the twentieth century. Sydney Council, then known as Sydney Municipal Council or the Municipal Council of Sydney, was charged with supplying electricity to Sydney city and surrounding areas in 1896 through the law named the Municipal Council of Sydney Electric Lighting Bill passed on 16th October 1896. Electricity supply was managed through the council's department known by a number of names: the Electric Lighting Committee, the Electric Light Department and the Electricity Department from 1920 to 1935. From 1936 the electricity undertaking was named Sydney County Council when it was reformed as a separate authority as a result of the Gas & Electricity Act of 1935. The various names for the council and subsequent electrical authority are recorded in the initials and building names inscribed in substation facades.

Sydney's first power station at Pyrmont began operating in 1904. The large network of substations were constructed in strategic locations to supply power from these power stations to individual customers and other electricity networks. Their specific purpose was to house machinery to convert high voltage electricity for industrial or domestic use. Substations were often erected in close proximity to factories to service their high energy demands. Consequently the number, concentration and location of substations provide markers of twentieth-century factories and industrial centres in the way that chimney stacks marked factories pre-dating electricity.

Rosebery demonstrates this pattern with its larger number of substations reflecting its history as a major industrial area mostly developed after the advent of electricity and before substations of this kind were no longer needed for supplying electricity.

Rosebery's Dunning Avenue was mostly occupied by industries during the first half of the twentieth century, interspersed with blocks of worker's housing, as a result of its Sulman-designed town plan as a model factories and homes suburb. By 1956, these surrounding industries included the British General Electric Co. to the immediate west, the Doon Manufacturing Co. to the immediate north and the large Mark Foys Woollen Mills to the immediate south. The factories for Westinghouse Rosebery, Consolidated Beverage Co and Bonds Industries were located directly opposite on the other side of Dunning Avenue.

The period and location of surviving substations record the progressive extension of Sydney's electrical network from the centre of Sydney to surrounding areas, the scale and importance of this network, and the fundamental changes electricity brought for Sydney's growth, development and society. Sydney Municipal Council built its first substations at Town Hall, Taylor Square, Woolloomooloo and Ultimo, followed by Glebe, Newtown, Camperdown and surrounding areas. From 1904 to 1935, Sydney Council built more than 360 substations and almost 400 pole transformers throughout Sydney and surrounding suburbs. More continued to be built in the following decades. The Energy Australia (AusGrid) heritage and conservation register records that 33 of the surviving substations are located within the City of Sydney. This number excludes those no longer owned or operated by the electricity supplier.

Each substation has its own number inscribed on the building facade, which reflects its role in the broader

SHI number 5062473 Study number

Item name: Electricity Substation No. 128 including interiors

Location: 142 Dunning Avenue Rosebery 2018 Sydney

electrical network and generally the total number, sequence and period of construction, with some exceptions where disused numbers were reallocated. Most substations were constructed in established urban areas on a small portion of land acquired or subdivided specifically for this purpose. These buildings, while modest in scale and different in function to surrounding buildings, were designed and constructed to a good standard, in a style designed to harmonise with surrounding architecture, in order to reduce community fears or resistance to the incursion of this new technology and impacts on the appearance of streets.

The rise of electricity during the late nineteenth century, and in particular small motors for driving machinery and electrical lights, changed the configuration of industrial buildings and machinery. Electricity meant that factories could be designed with a more flexible layout because small electric motors eliminated the need for belt and shaft drives from the steam plant. Factory building design became less reliant on windows for natural light and gas lighting ventilation because of the advent of electric lighting. Electricity also created a new market for factories to produce the new consumer goods reliant on electric power, such as fridges, washing machines, telephones, stoves, ice cream, and the engineering for electric lights, trains and trams.

#### Site history:

The substation was built in 1922 to supply electricity to the new factory of Buzacott & Co's Rosebery Engine Works (which later became Westinghouse Rosebery) on the opposite side of Dunning Avenue. The substation was connected to the network in January 1923.

The substation also supplied electricity to Mark Foy's Woollen Mills on nearby Harcourt Parade and low-voltage street mains in the vicinity.

According to Pennington (2012), this substation may have been the first substation built with an open-topped area for the transformers.

Themes: National theme State theme Local theme

4. Settlement Utilities Electricity Substation

3. Economy Technology Electricity

Designer: Sydney Municipal Council

**Builder:** Sydney Municipal Council

Year started: 1922 Year completed: 1922 Circa: No

SHI number 5062473 Study number

Item name: Electricity Substation No. 128 including interiors

Location: 142 Dunning Avenue Rosebery 2018 Sydney

Physical description: Substation No. 128 was built by Sydney Municipal Council in 1922. The substation comprises a single-storey brick building contained under a pitched roof concealed behind a parapet wall. A separate timber fence provides access to the side transformer yard.

> This simply detailed, purpose-designed and built substation from the inter-war period exhibits typical characteristics of the this period of architecture including the heavy geometric massing, symmetrical building form, roof form concealed behind a parapet wall, original signage, multi-paned timber windows and an emphatic centrally placed portal. The gabled parapet wall, half face brick and half rendered finishes, bullnose brick detailing around the entrance and window sills and integrated identification signs demonstrates an attention to detail and ornamentation for a simple utilitarian building.

> Original relief lettered signage documents the origins of the building and the substation's number within Sydney's electricity network. Another framed relief sign between these two plates has been covered.

The windows have been partly screened by metal grills. The central entrance contains a steel roller shutter door with smaller inset personnel door.

Internally, the roof, foundations and floor structures have not been inspected by the authors.

Category: Individual building. Style: Inter-war. Storeys: One. Facade: Face brick and cement render. Roof: Gabled corrugated metal roof.

Physical condition Good

level:

**Physical condition:** 

Archaeological Not assessed

potential level:

Archaeological potential Detail:

Modification dates: During the 1960s, the original switchboard was replaced with the present low-voltage switchboard.

Roof cladding, gutters, downpipes, roller door and transformer yard fence have also been replaced.

SHI number 5062473 Study number

Item name: Electricity Substation No. 128 including interiors

Location: 142 Dunning Avenue Rosebery 2018 Sydney

Recommended The building should be retained and conserved. management:

> A Heritage Assessment and Heritage Impact Statement should be prepared for the building prior to any major works being undertaken.

All conservation, adaptive reuse and future development should be undertaken in accordance with the Australia ICOMOS Charter for Places of Cultural Significance (The Burra Charter).

Archival photographic recording, in accordance with Heritage Council guidelines, should be undertaken before major changes.

No vertical additions should be made to the building.

Do not paint, render or seal existing face brickwork.

Face brick and rendered finishes, timber-framed windows, original signage, parapeted gable, brick detailing and other original features of the substation should be maintained and conserved.

Consider uncovering the boarded sign above the entrance.

New uses for the building are to complement and enhance the internal and external character of the building by conserving and interpreting significant fabric and spatial qualities. Alterations for a new use, including changes for compliance with Australian building standards, should allow the essential form of the building to remain readily identifiable.

Management: Management category Management name

> Statutory Instrument List on a Local Environmental Plan (LEP)

Further comments: Heritage Inventory sheets are often not comprehensive, and should be regarded as a general guide only. Inventory sheets are based on information available, and often do not include the social history of sites and buildings. Inventory sheets are constantly updated by the City as further information becomes available. An inventory sheet with little information may simply indicate that there has been no building work done to the item recently: it does not mean that items are not significant. Further research is always recommended as part of preparation of development proposals for heritage items, and is necessary in preparation of Heritage Impact Assessments and Conservation Management Plans, so that the significance of heritage items can be fully assessed prior to submitting development applications.

Location: 142 Dunning Avenue Rosebery 2018 Sydney

[Historical significancel

Built in 1922, Electricity Substation No. 128 represents a surviving example of the original network of more than 360 substations built by Sydney Municipal Council from 1904 to 1936, which first supplied electricity to Sydney's industries and houses. The period and location of the substation records the expansion of Sydney's electricity network and the growth of electricity use in Rosebery. The building also marks the major changes electricity brought for Rosebery's growth, development and population.

Electricity Substation No. 128 forms part of one of the largest known collections of industrial and warehouse buildings of its kind in Australia, which records City of Sydney's past as one of only two historic industrial heartlands in Australia. This collection of buildings provides evidence of Australia's twentieth century transformation through industrialisation when Sydney became one of the largest industrialised cities in the South Pacific.

Electricity Substation No. 128 and the other surviving substations demonstrate the fundamental role that electricity played in powering Australia's industrialisation and how technological innovations of the time, specifically electricity, defined Sydney's industrial development during the twentieth century. Often constructed to service the high energy demands of factories in the near vicinity, the number, concentration and location of substations provide markers of twentieth century industrial centres and factories in the way that chimney stacks mark the location of factories predating electricity.

The larger number of substations in Rosebery demonstrates its history as a major industrial area mostly developed after the advent of electricity and before substations of this kind were no longer needed for supplying electricity. Rosebery's Dunning Avenue was mostly occupied by industries during the first half of the twentieth century, interspersed with blocks of worker's housing, as a result of its Sulman-designed town plan as a model factories and homes suburb.

Criteria b): [Historical association significance|

The substation has significant associations with the Municipal Council of Sydney, which constructed the building as part of its early twentieth-century responsibility for the generation and distribution of electricity throughout the greater Sydney area from 1904 until 1936.

The substation is also associated with the former factories and mills for which it was built including the then new factory of Buzacott & Co's Rosebery Engine Works (later Westinghouse Rosebery), Mark Foys Woollen Mills (since demolished), and the transformer factory of Electrical Plant Manufacturers; the largest transformer supplier to Sydney Municipal Council from the mid 1920s to the 1950s.

[Aesthetic/ Technical significance]

Criteria c): Aesthetically, the building demonstrates the characteristic modest form, quality of design and construction for Sydney's substations, which were designed to a higher standard than required for their function in order to integrate into their established urban contexts by reflecting neighbouring architecture or popular styles of the

> Electricity Substation No. 128 is a good example of a simply detailed, purpose-designed and built substation from the inter-war period. It demonstrates typical characteristics of this architectural period including the heavy geometric massing, symmetrical building form, roof form concealed behind a parapet wall, original signage, multi-paned timber windows and an emphatic centrally placed portal. The gabled parapet wall, half face brick and half rendered finishes, bullnose brick detailing around the entrance and window sills and integrated identification signs with relief lettering demonstrates an attention to detail and ornamentation for a simple utilitarian building. The building contributes to the streetscape of Dunning Avenue and is a significant example of civic architecture in the area.

The substation may also represent the first substation built with an open-topped area for the electricity transformers.

[Social/Cultural

Criteria d): Social significance requires further study to ascertain its value to communities. The building may have value to community members with an interest in the history, buildings and technology for Sydney's electrification or the significance | history of Rosebery.

SHI number 5062473 Study number

Item name: Electricity Substation No. 128 including interiors

Location: 142 Dunning Avenue Rosebery 2018 Sydney

Criteria e): The building may offer research potential into the evolution of technology for electricity supply and

[Research architectural design for substations in Sydney, in particular the development of open-topped areas for electricity

significance transformers.

Criteria f): The substation may also represent the first substation built with an open-topped area for the electricity

[Rarity] transformers.

**Criteria g):** The building represents a good example of a substation from the inter-war period.

[Representative]

The substation forms part of a collection of extant substations, which together represent the growth of Sydney's electrical network and the major change that electricity brought for Sydney's growth, development and

population during the twentieth century, in particular for the development of industry.

Of more than 360 originally built by Sydney Municipal Council from 1904 to 1930 in metropolitan Sydney, the current Energy Australia (AusGrid) heritage and conservation register records that 33 surviving substations are located in the City of Sydney. This number excludes those no longer owned or operated by the electricity

located in the City of Sydney. This number excludes those no longer owned or supplier.

Intactness/Integrity: Intact externally

References: Author Title Year

James Pennington Electricity Substations of the Sydney Municipal Council, pp.59 2012 Wilkenfeld and SpearittMacLaren Nor Energy Australia Heritage Register Review 2004 Wilkenfeld and Spearitt Electrifying Sydney 2004 Scott Cumming Chimneys and Change: Post European Environmental Impact ii 2004 Higinbotham & Robinson Alexandria. Sydney 1890 Higinbotham & Robinson Waterloo Sydney 1890 Schwager Brooks and Partners Pty Ltd Energy Australia (Ausgrid) section 170 heritage and conservati 2007 TZG Architects and Orwell & Peter Pl Conservation Management Plan: Substation No. 6 and Undergr 2002

Studies: Author Title Number Year

City Plan Heritage City of Sydney Industrial & Warehouse Buildings Heritage 5 2014

Parcels: Parcel code Lot number Section number Plan code Plan number

LOT 10 DP 829392

Latitude: Longitude:

Location validity: Spatial accuracy:

Map name: Map scale:

AMG zone: Easting: Northing:

Listing: Name Title Number ListingDate

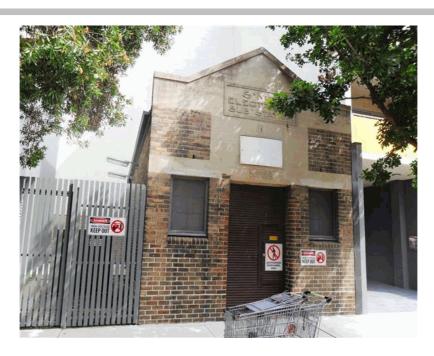
Substation No.128 Heritage Act - s.170 NSW State agency heritage r<sub>1</sub> 3430394 01/11/1994

City of Sydney Industrial and Ware Heritage study

**Data entry:** Data first entered: 06/08/2014 Data updated: 14/05/2015 Status: Completed

**Location:** 142 Dunning Avenue Rosebery 2018 Sydney

Image:



Caption: Front elevation of the substation on Dunning Avenue

Copy right: City of Sydney

Image by: Claudine Loffi

**Image date:** 01/04/2014

Image number:

Image url: http://www.environment.nsw.gov.au/maritimeheritageapp/resources/Heritage/shi/WebAP

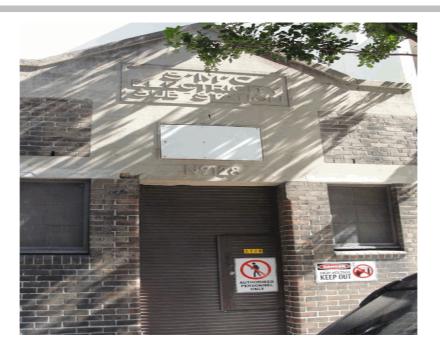
P/34554a082ed91554e33abb9a602fccf6ad0.JPG

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P/Thumb\_test34554a082ed91554e33abb9a602fccf6ad0.JPG

**Location:** 142 Dunning Avenue Rosebery 2018 Sydney

Image:



Caption: Detail of openings and signage

Copy right: City of Sydney

Image by: City Plan Heritage and JCIS Consultants

**Image date:** 05/09/2013

Image number:

mage url: http://www.environment.nsw.gov.au/maritimeheritageapp/resources/Heritage/shi/WebAP

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P/Thumb\_test34530597a9dbff6440495d21dcfd345ed37.jpg

**Location:** 142 Dunning Avenue Rosebery 2018 Sydney

Image:



Caption: Substation and surrounds

Copy right: City of Sydney

Image by: Claudine Loffi

**Image date:** 01/04/2014

Image number:

Image url: http://www.environment.nsw.gov.au/maritimeheritageapp/resources/Heritage/shi/WebAP

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P/Thumb\_test3455bfe970b49e44a5fb91929d481cd7968.JPG

**Location:** 142 Dunning Avenue Rosebery 2018 Sydney

Image:



Caption: Substation in 2008 as recorded in Pennington (2012) publication

Copy right: James Pennington

Image by: James Pennington

**Image date:** 01/01/2008

Image number:

Image url: http://www.environment.nsw.gov.au/maritimeheritageapp/resources/Heritage/shi/WebAP

P/345d4b9dde43fd442d9a3421263bf8c6999.jpg

 $\textbf{Thumbnail url:} \quad \text{http://www.environment.nsw.gov.au/maritimeheritageapp/resources/Heritage/shi/WebAP}$ 

P/Thumb\_test345d4b9dde43fd442d9a3421263bf8c6999.jpg

**Location:** 142 Dunning Avenue Rosebery 2018 Sydney

Image:





Caption: Interior of the substation in 2008

Copy right: James Pennington

Image by: James Pennington

**Image date:** 01/01/2008

Image number:

Image url: http://www.environment.nsw.gov.au/maritimeheritageapp/resources/Heritage/shi/WebAP

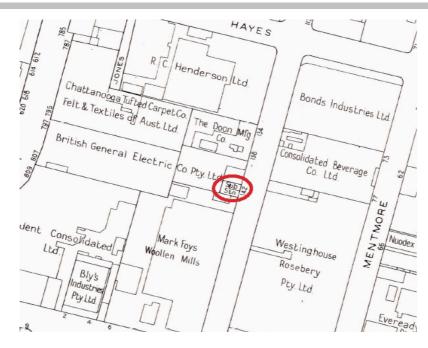
P/34525cf4f00332947fe9fcf84b0b9b7ae4d.jpg

 $\textbf{Thumbnail url:} \quad \text{http://www.environment.nsw.gov.au/maritimeheritageapp/resources/Heritage/shi/WebAP}$ 

P/Thumb\_test34525cf4f00332947fe9fcf84b0b9b7ae4d.jpg

Location: 142 Dunning Avenue Rosebery 2018 Sydney

Image:



Caption: 1956 detail sheet showing subject substation and surrounding industries

Copy right: City of Sydney

Image by: City Building Surveyors Department, City of Sydney

**Image date:** 01/01/1956

Image number:

 $\textbf{Image url:} \quad \text{http://www.environment.nsw.gov.au/maritimeheritageapp/resources/Heritage/shi/WebAP} \\$ 

P/345572ca8624c864d40972dfa8b4d03a2b1.jpg

 $\textbf{Thumbnail url:} \quad \text{http://www.environment.nsw.gov.au/maritimeheritageapp/resources/Heritage/shi/WebAP}$ 

P/Thumb\_test345572ca8624c864d40972dfa8b4d03a2b1.jpg

# Inventory 43

SHI number **5062474** Study number

**Group ID:** 

Item name: Former R. C. Henderson Ltd factory including interiors

**Location:** 1-11 Hayes Road Rosebery 2018 Sydney

Address: 1-11 Hayes Road Planning: Sydney South

Suburb/nearest town: Rosebery 2018

Local govt area: Sydney Parish:

State: NSW County:

Other/former names: General Motors Industries, Electricity Meter & Allied Industries Ltd (Email), Sports Wallet Australia, Signature Prints

Aboriginal area: Eora

Area/group/complex:

Curtilage/boundary: Building on corner of Jones Lanes and Hayes Road, as described in Sydney Local Environmental Plan

Item type: Built Group: Manufacturing and Processing Category: Other - Manufacturing & Processing

Owner:

Admin codes: Code 2: Code 3:

Current use: Commercial / industrial

Former uses: Factory

Assessed significance: Local Endorsed significance:

SHI number 5062474 Study number

Item name: Former R. C. Henderson Ltd factory including interiors

Location: 1-11 Hayes Road Rosebery 2018 Sydney

Statement of Built in 1920 for ladies hat manufacturers, R C Henderson, this former factory building represents the model significance: industrial development of Rosebery during the early decades of the twentieth century. The building is historically significant for its connection to the Australian production of felt and straw hats, which were sold throughout Australia and exported overseas. Through its original use for millinery from 1920s-1950s and subsequent use for electrical appliances engineering, the building also provides evidence of the formerly widespread textiles and engineering industries in Rosebery.

> As an expansion of Henderson's operations from its main Surry Hills factory, the building demonstrates the growth and success of this firm and Sydney's millinery industry during the early twentieth century. It provides evidence of the scale of the hat industry from an era when hats were an important part of women's attire. The cessation of this use for Henderson's in the 1950s demonstrates the retraction of the hat industry, associated with social changes and the emancipation of women during the twentieth century.

The building also provides evidence of one of Sydney's first planned suburbs, as one of the earliest surviving industrial buildings constructed on the Rosebery subdivision planned by John Sulman in 1911-20 as a model suburb for both housing and industry. The period, form, orientation and use of the building record the original subdivision pattern, size of the industrial lots, and location of the planned industrial blocks between Botany Road and Primrose Avenue.

The building represents a good example of a modest factory from the inter-war period. The building demonstrates typical architectural features of this period with some elements from the free classical style applied to a utilitarian building, including pediments, moulded entablature, decorative stepped parapet concealing the gabled roofs, arched vents with keystones, vertically proportioned openings, brick piers, and evidence of original contrasting finishes of render and face brickwork. The two gabled roofs with ridge vents, clerestory and western lantern, similar to a sawtooth roof, demonstrate the building's original industrial use and design to ventilate and bring natural light into the interiors.

The building makes an important contribution to the streetscapes of Hayes Road and Jones Lane, marking the entrance to the inter-war industrial precinct from Botany Road. With its corner position, no setback from either street and inter-war features, the building is a distinctive feature in the streetscapes of Hayes Road and Jones Lane, which is visible in the round from a number of near and distant vantage points. The building forms part of a group of inter-war industrial buildings between Botany Road and Mentmore Avenue, which give the area a cohesive character.

The building may have value to the community of former workers of R.C. Henderson, and to the general community for its connection to the well-known Henderson hats from the 1920s to the 1950s.

The former HC Henderson factory forms part of one of the largest known collections of industrial and warehouse buildings of its kind in Australia, which records City of Sydney's past as one of only two historic industrial heartlands in Australia. This collection of buildings provides evidence of Australia's twentieth century transformation through industrialisation when Sydney became one of the largest industrialised cities in the South Pacific.

The former factory is of local heritage significance in terms of its historical, association, aesthetic and representative values.

SHI number 5062474 Study number

Item name: Former R. C. Henderson Ltd factory including interiors

Location: 1-11 Hayes Road Rosebery 2018 Sydney

Historical notes of provenance:

Historical notes Early development of the locality:

This site forms part of the land of the Gadigal people, the traditional custodians of land within the City of Sydney council boundaries. For information about the Aboriginal history of the local area see the City's Barani website: http://www.sydneybarani.com.au/

The suburb of Rosebery was once part of a vast sand dune system covered by heath, low scrub, creeks and freshwater wetlands that dominated the landscape of the southern suburbs of Sydney. It provided habitat for a range of fauna such as birds, fish and eels, and was a good food source for the Gadigal, the local Aboriginal people.

The land that today incorporates the areas of Alexandria, Waterloo, Zetland and Rosebery was originally one large estate. Originally granted to former convict and public servant William Hutchinson in 1823, the estate, its buildings and water mill, were then sold to Daniel Cooper and Solomon Levy in 1825 before Cooper became its sole owner in 1833.

The land of the Cooper Estate was progressively subdivided into small acreages and sold from 1872.

Before the development of Rosebery into a residential and industrial estate, the suburb was popular for its racecourse which opened in 1906.

The suburb of Rosebery derives its name from Archibald Primrose, Earl of Rosebery and Prime Minister of England from 1894-95, who visited Sydney in 1883-84. Many of the street names of Rosebery are associated with British parliamentarians including Morley Avenue, Crewe Place and Asquith Avenue.

The Rosebery Estate was planned as a model industrial suburb by John Sulman and developed by Stanton and Sons between 1911 and 1920. The land was purchased for £24,000 in 1912 by the Town Planning Company of Australia, as part of 273 acres of the Waterloo Estate. John Sulman exhibited his design for Rosebery in the Town Planning Association of NSW exhibition in 1913. Most lots were still vacant until 1924, possibly due to the outbreak of World War I.

Based on the garden suburb model, Rosebery was planned as 'model factories and model homes' with detached housing for workers located close to industrial employment sites. Sulman's plan incorporated residential, commercial and industrial facilities as well as recreational and community facilities. Similarly to Dacey Gardens which was also planned by John Sulman, Rosebery was one of the first planned suburbs in Sydney, and amongst the earliest inter-war garden suburbs.

Secondary industries declined in the area from the 1970s as industry expanded to the outer suburbs.

Industrial history:

As one of only two major centres for historic Australian industry during the period when industry was centred in cities, Sydney's industrial development is part of the national history of industrialisation. Australia's industrialisation formed part of the 'second industrial revolution' which began during the mid-nineteenth century. This second revolution was driven by major technological innovations including the invention of the internal combustion engine and the assembly line, development of electricity, the construction of canals, railways and electric-power lines.

Sydney's twentieth century industrial development records when and how Sydney became one of the largest industrialised cities in the South Pacific and the diversification of Australia's economy beyond primary industry. Together with Melbourne, Sydney's twentieth century industrial boom expanded Australia's economy from the 'sheep's back' to the 'industry stack' or from primary production to manufacturing. By 1947 more Australians were working in city industries than in farms or mines.

SHI number 5062474 Study number

Item name: Former R. C. Henderson Ltd factory including interiors

Location: 1-11 Hayes Road Rosebery 2018 Sydney

Sydney's industrial development not only impacted on the national economy. Twentieth-century industry in Sydney also played a major role in developing Australia's self-sufficiency, growth, urbanisation, society and its contribution to the war effort for World War II. Sydney's industrial development has affected the lives of many Australians directly and indirectly, whether through the number of workers employed, goods and technology produced, the prosperity it engendered, or the social change and urban environments it generated.

Site history:

R C Henderson Pty Ltd was a noted producer of ladies hats in Sydney, operating from 1905 into the 1950s. The company made felt hats, panama hats and straw hats, along with ladies millinery (Directory of Manufacturers of Australia, C E S Turner & Sons, Sydney and Melbourne, 1939-40, p 232-3, 82). As its business expanded, R C Henderson purchased land on Hayes Road in Rosebery in 1920 to establish its dye works and felt mill, as well as a factory to process the material for straw hats.

Other felt hat makers in NSW included J Bardsley & Sons at Leichhardt, Dunkerley at Bourke Street in Waterloo, and Arthur P Stewart (Akubra) at 129 York Street. However, these other firms appear to have mainly produced men's hats.

R C Henderson, of 189 Clarence Street, manufacturer of ladies hats, was first registered as a firm on 11 January 1905 with Charles Alfred Henderson and Rolla Crosby Henderson running the business (Registers of Firms, SRNSW 2/8537, No 13777). R C Henderson Pty Ltd was registered as a company on 24 May 1913 (ASIC Company search, 24 Sept 2014).

The building was constructed in 1920 on the land subdivision which formed part of John Sulman's and Richard Stanton's plan for a model suburb for industry and workers housing. The undated subdivision plan from approximately 1914 was named the 'Rosebery model and industrial suburb'. The deposited plan for this subdivision was surveyed on 5 March 1914 (DP 7534). These plans show that Hayes Road was initially named Ackland Way and Dunning Avenue was formerly Pauls Road.

The building is situated within one of the original industrial allotments (lot 322) of this subdivision when the land between Jones Lane and Dunning Avenue was divided into four similarly-sized land parcels (lots 319-322). Two of these lots, lots 321-322, faced Hayes Road (then Ackland Way), while the other two, lots 319-320, addressed the cross-street of Dunning Avenue (then Pauls Road).

These industrial lots were larger than residential lots, however were not overly large. Most industrial buildings would be constructed over multiple lots. The industrial lots typically measured approximately 100 feet wide and 130-140 feet deep, however those on the south side of Hayes Road had slightly different dimensions at approximately 90 feet wide and 200 feet deep. In the original plan, industrial lots of these larger dimensions were located on the land between Epson Road to the north, Harcourt Avenue to the south, the lanes behind Botany Road to the west and Primrose Avenue to the east. Further east, the plan laid out residential lots distinguished by their narrower measurements generally of 30-40 feet wide and 130-150 feet deep (Inheritage, Heritage Assessment Report of the Rosebery Estate, 2006).

A certificate of title for lot 322 DP 7534 was issued to R C Henderson Ltd on 26 November 1920 (CT 3131 f 73). The first entry for the factory in the Sands directory appeared in 1921 as 'Anderson's Hat and Dye Works' [sic] at this address on the south side of Hayes Road (Sands, Directory, 1921, p 801). By 1923, the entry in the Sands directory had been corrected to R C Henderson (Sands, Directory, 1923, p 816).

R C Henderson Pty Ltd was a major manufacturer of ladies hats using Australian wool. Their hats were sold under the brand name of Platypus. The company's main factory was located on Randle Street in Surry Hills from 1912, whilst its dye works and felt mill were located on Hayes Road in Rosebery from 1920. At the Rosebery works, the company dyed and bleached straw and braid used for its straw hats. In the manufacture of the hats, the Henderson factory used large quantities of artificial flowers, and trimmings using Australian materials. Henderson hats were sold in Australia and exported to Java, the Malay states, South Africa and other overseas

SHI number 5062474 Study number

Item name: Former R. C. Henderson Ltd factory including interiors

Location: 1-11 Hayes Road Rosebery 2018 Sydney

destinations (Sunday Times, 22 Nov 1925, p 5).

A valuation of lots 319-322 DP 7534 owned by R C Henderson Limited on 1 August 1926 records that the land contained a brick factory with an iron roof, a brick boiler house with an iron roof, and an iron and fibro garage on the site (Valuer-General, Valuation List, Waterloo 19/9458, No 1575).

It was not until 10 April 1930 that a certificate of title for the land on the corner of Dunning Avenue and Hayes Road, comprising lots 319-321 of DP 7534, was issued to R C Henderson Ltd (CT 4395 f 169), suggesting that the eastern part of the former Henderson site fronting Dunning Avenue was developed after the western portion of the site.

The company was listed at the same address in 1936 (Wise, Directory, 1936, p 345).

By 6 April 1942, a furnace and furniture store of brick and a corrugated fibro roof had been added to the original factory (Valuer-General, Valuation List, Waterloo 19/9458, No 1575). The 1943 aerial photograph records the original buildings constructed on lot 322, purchased in 1920, as well as other buildings constructed on lot 321 to the east (1943 aerial photo, SIX, LPI).

On 26 August 1948, a new land valuation showed an amenities block had also been constructed on the site (Valuer-General, Valuation List, Waterloo 19/9458, No 1575).

The company founder, R C Henderson, died on 5 May 1949 (SMH, 7 May 1949 p 5). In November 1950, R C Henderson Ltd became a public company (SMH, 10 Nov 1950, p 7). The sale of shares helped to pay the death duties on Henderson's deceased estate (The Argus, 11 March 1950, p 10).

An amalgamated certificate of title was issued for lots 319-322 on 26 July 1957 (CT 7329 f 163). Previously, the site had been transferred to Car Repairs Pty Ltd on 5 December 1956, but the transfer was not registered on the land title until 23 August 1957 (CT 7329 f 163). On 13 October 1958, the company applied to subdivide the land into three lots (Hayes Rd R C Henderson Ltd, Street cards, NSCA).

The land for the new lots 1 and 2 were sold to G M Industries Pty Ltd on 25 March 1959 (CT 7329 f 163). G M Industries was likely General Motors Industries, the major American electrical appliance and automobile manufacturer, which acquired Holden in 1931 and used this brand name in Australia from 1948.

G M Industries Pty Ltd proposed various alterations to buildings on this site during the late 1950s and early 1960s. On 19 June 1959, it proposed extensions to use the building for manufacturing air conditioning equipment (Hayes Rd R C Henderson Ltd, Street cards, NSCA). On 2 June 1960, G M Industries proposed additions to the factory at an estimated cost of £16,000. Shortly after, on 29 August 1960, the company proposed further additions to the factory for its use for manufacturing polyester resins (Hayes Rd R C Henderson Ltd, Street cards, NSCA).

In 1970, Email Building Service proposed alterations and additions with works valued at \$9,300 on 10 July (1-3 Hayes Rd, Street cards, NSCA). Historic photos of the Email works in Rosebery just before this application in 1968 describe the factory as a 'press shop' and appear to show the production of press metal, possibly for the casing of products they made. No specific address is given for these photos to confirm whether they show the subject Email works or another located elsewhere in Rosebery.

Email's original business was manufacturing electric, gas and water meters, which were found in many houses throughout Australia. Email was also one of the largest Australian manufacturers of white goods. They produced a large range of domestic and commercial refrigerators, freezers, electric ranges, gas stoves, microwave ovens, dishwashers, room and air conditioners, washing machines and clothes dryers. The company was initially incorporated in New South Wales in 1934 as Electricity Meter & Allied Industries Ltd, renamed as Email, an acronym of its full name, in 1951. Email also manufactured other household appliances including radio parts and refrigerators, building products, industrial products and metal distributions. (Australian Science and Technology

SHI number 5062474 Study number

Item name: Former R. C. Henderson Ltd factory including interiors

Location: 1-11 Hayes Road Rosebery 2018 Sydney

> Heritage Centre, Technology in Australia 1799-1988, Whitegoods or consumer durables, 2000, http://www.austehc.unimelb.edu.au/tia/886.html#3584, accessed 17 March 2015)

During the 1980s, minor alterations, additions and changes of use were proposed. On 3 May 1984, additions at an estimated cost of \$6,000 were proposed, followed by alterations valued at \$8,000 proposed on 29 January 1985 (1-3 Hayes Rd, Street cards, NSCA). On 21 May 1985, an application sought to use the building as a workshop for repairing computer equipment (1-11 Hayes Rd, Street cards, NSCA). Cizola Pty Ltd applied on 22 August 1985 to use 1 Hayes Rd for manufacturing light reflectors and to store sun control film (1-11 Hayes Rd, Street cards, NSCA).

Themes:	National theme	State theme	Local theme
	3. Economy	Commerce	Warehouses
	3. Economy	Industry	Activities associated with the n
	3. Economy	Commerce	Warehouses
	4. Settlement	Towns, suburbs and villages	Development

Designer: Unknown Builder: Unknown

Year started: 1920 Year completed: 1920 Circa: Yes

Physical description: The subject building at the west end of this site was constructed in 1920 as a factory for R. C. Henderson. It comprises a single-storey building located on the corner of Hayes Road and Jones Lane, with no set-back from either street. The building is constructed of brick walls, contained under two gabled roofs of different sizes clad with corrugated iron. The roof forms incorporate vents and clerestories along the ridge lines and a side lantern on the western elevation along Jones Lang, similar to a sawtooth roof, for ventilating and lighting the interiors. The roof is concealed on the street frontage by a parapet wall.

> The building is designed in inter-war period with elements of the free classical style. It exhibits typical features of this period applied to a utilitarian building including pediments, moulded entablature, decorative stepped parapet concealing the gabled roofs, arched vents with keystones, vertically proportioned openings and brick piers. While painted, the external walls show evidence of the original contrasting finishes of render above the lintel and face brickwork below. Some original timber-framed windows survive, however the windows in the side roof lantern along Jones Lane have been replaced.

> While stylistically similar, the two sections of the building contained under the separate gabled roofs illustrate some differences. The eastern gable is the smaller of the two. The smaller scale of this roof is reflected on the street facade through the shallower pitch of the pediment, and evident from the rear profile of the building. The eastern section of the building contained under the smaller gabled roof is also divided into bays by regular brick piers, unlike the western section of the building.

Internally, the roof, foundations and floor structures have not been inspected by the authors.

Category: Individual building. Style: Inter-war with free classical elements. Storeys: One. Roof: Gables with vents and lantern lights. Roof cladding: Corrugated iron roof. Facade: Rendered brick above lintel, painted brick below. Rear/Side walls: Painted brick. Windows: Timber or aluminium.

Physical condition Good

level:

**Physical condition:** 

Archaeological Not assessed

potential level:

Archaeological potential Detail:

SHI number 5062474 Study number

Item name: Former R. C. Henderson Ltd factory including interiors

Location: 1-11 Hayes Road Rosebery 2018 Sydney

Modification dates: Timeline of known dates for changes to the site:

26 November 1920

Certificate of title for lot 322 DP 7534 issued to R C Henderson Ltd

1921

The firm was first listed in the Sands Directory as 'Anderson's Hat and Dye Works' [sic]

1 August 1926

Land valuation for lots 319-322 DP 7534 owned by R C Henderson Limited records that a brick factory with iron roof, brick boiler house with iron roof, iron garage and iron and fibro garage were constructed on the site

10 April 1930

Certificate of title for lots 319-321 DP 7534, facing Dunning Avenue and Hayes Road, issued to R C Henderson Ltd

6 April 1942

Furnace and furniture store added of brick and corrugated fibro roof

26 August 1948

Factory now included an amenities block

26 July 1957

Combined certificate of title issued for lots 319-322 (1-11 Hayes Road)

5 December 1956

Car Repairs Pty Ltd purchased the site

13 October 1958

Subdivision of site into three lots

25 March 1959

Sale of new lots 1 and 2 to G M Industries Pty Ltd

19 June 1959

G M Industries Pty Ltd proposed extensions and use for manufacturing air conditioning equipment

2 June 1960

GM Industries proposed additions to factory at an estimated cost of £16,000

29 August 1960

G M Industries Pty Ltd proposed additions and use for manufacturing polyester resins

10 July 1970

Email Building Service proposed alterations and additions with works valued at \$9,300

3 May 1984

Application for alterations to factory at an estimated cost of \$6,000

29 January 1985

Application for alterations to factory with works valued at \$8,000

21 May 1985

Application to use building as workshop for repairing computer equipment

Item name: Former R. C. Henderson Ltd factory including interiors

Location: 1-11 Hayes Road Rosebery 2018 Sydney

22 August 1985

Application by Cizola Pty Ltd to use Number 1 to manufacture light reflectors and to store sun control film Recommended The inter-war building should be retained and conserved.

#### management:

A Heritage Assessment and Heritage Impact Statement should be prepared for the building prior to any major works being undertaken.

All conservation, adaptive reuse and future development should be undertaken in accordance with the Australia ICOMOS Charter for Places of Cultural Significance (The Burra Charter).

Archival photographic recording, in accordance with Heritage Council guidelines, should be undertaken before major changes.

Maintain the original gabled roofs, vents, clerestory and side lantern, parapet wall, brickwork, timber windows, arched vents, moulded entablature and other original architectural detailing.

Consider removal of paint to formerly unpainted external walls below the lintel. For repainting, use a colour scheme appropriate to the inter-war period of the building, which highlights its decorative details in different tones.

Locate new signage within the entablature using separate painted lettering in a similar manner to the original, as shown in the historic photograph.

Consider new uses for the building that will re-use and expose its industrial features to retain its former industrial character as an integral part of the new use. Alterations for a new use, including changes for compliance with Australian building standards, should allow the essential form of the building to remain readily identifiable.

**Management:** 

Management category Management name

Statutory Instrument List on a Local Environmental Plan (LEP)

Further comments: Heritage Inventory sheets are often not comprehensive, and should be regarded as a general guide only. Inventory sheets are based on information available, and often do not include the social history of sites and buildings. Inventory sheets are constantly updated by the City as further information becomes available. An inventory sheet with little information may simply indicate that there has been no building work done to the item recently: it does not mean that items are not significant. Further research is always recommended as part of preparation of development proposals for heritage items, and is necessary in preparation of Heritage Impact Assessments and Conservation Management Plans, so that the significance of heritage items can be fully assessed prior to submitting development applications.

Item name: Former R. C. Henderson Ltd factory including interiors

Location: 1-11 Hayes Road Rosebery 2018 Sydney

Criteria a): [Historical significancel

Built in 1920 for ladies hat manufacturers, R C Henderson, this former factory building represents the model industrial development of Rosebery during the early decades of the twentieth century. The building is historically significant for its connection to the Australian production of felt and straw hats, which were sold throughout Australia and exported overseas. Through its original use for millinery from 1920s-1950s and subsequent use for electrical appliances engineering, the building also provides evidence of the formerly widespread textiles and engineering industries in Rosebery.

As an expansion of Henderson's operations from its main Surry Hills factory, the building demonstrates the growth and success of this firm and Sydney's millinery industry during the early twentieth century. It provides evidence of the scale of the hat industry from an era when hats were an important part of women's attire. The cessation of this use for Henderson's in the 1950s demonstrates the retraction of the hat industry, associated with social changes and the emancipation of women during the twentieth century.

The building also provides evidence of one of Sydney's first planned suburbs, as one of the earliest surviving industrial buildings constructed on the Rosebery subdivision planned by John Sulman in 1911-20 as a model suburb for both housing and industry. The period, form, orientation and use of the building record the original subdivision pattern, size of the industrial lots, and location of the planned industrial blocks between Botany Road and Primrose Avenue.

The former HC Henderson factory forms part of one of the largest known collections of industrial and warehouse buildings of its kind in Australia, which records City of Sydney's past as one of only two historic industrial heartlands in Australia. This collection of buildings provides evidence of Australia's twentieth century transformation through industrialisation when Sydney became one of the largest industrialised cities in the South Pacific.

Criteria b): The building has significant associations with noted hat manufacturers, R C Henderson, from the 1920s-1950s, [Historical] who built the factory, and the felt and straw hats partly manufactured at this site during this period for R C association Henderson. The building is also associated with John Sulman and Richard Stanton, reflecting their plans and **significance**] subdivision of 1911-20 for the area as a model suburb for industry and worker's housing.

> The building was subsequently associated with the major American electrical appliance and automobile manufacturer, General Motors Industries, from 1959-1960s, when it was used for manufacturing air conditioning equipment and polyester resins, and then with one of Australia's largest manufacturers of white goods, Email (formerly Electricity Meter & Allied Industries Ltd), in the 1960s-1970s.

Criteria c): Technical

The building represents a good example of a modest factory from the inter-war period. The building demonstrates typical architectural features of this period with some elements from the free classical style applied to a utilitarian building, including pediments, moulded entablature, decorative stepped parapet significance | concealing the gabled roofs, arched vents with keystones, vertically proportioned openings, brick piers, and evidence of original contrasting finishes of render and face brickwork. The two gabled roofs with ridge vents and western lantern, similar to a sawtooth roof, demonstrate the building's original industrial use and design to ventilate and bring natural light into the interiors.

> The building makes an important contribution to the streetscapes of Hayes Road and Jones Lane, marking the entrance to the inter-war industrial precinct from Botany Road. With its corner position, no setback from either street and inter-war features, the building is a distinctive feature in the streetscapes of Hayes Road and Jones Lane, which is visible in the round from a number of near and distant vantage points. The building forms part of a group of inter-war industrial buildings between Botany Road and Mentmore Avenue, which give the area a cohesive character.

Criteria d): Social significance requires further study to ascertain its value for the local community. The building may have [Social/Cultural value to the community of former workers of R.C. Henderson, and to the general community for its connection significance to the well-known Henderson hats from the 1920s to the 1950s.

SHI number 5062474 Study number

Item name: Former R. C. Henderson Ltd factory including interiors

Location: 1-11 Hayes Road Rosebery 2018 Sydney

Criteria e): The building may offer research potential into the history of twentieth-century planning of model suburbs by

[Research John Sulman and Richard Stanton.

significance]

Criteria f): The building is rare locally as one of the earliest surviving industrial buildings constructed on the Rosebery

[Rarity] subdivision planned by John Sulman and Richard Stanton between 1911-1920 as a model suburb for both

housing and industry.

Criteria g): The building represents a good example of a modest factory from the inter-war period and the industrial

[Representative] development of the planned model industrial suburb of Rosebery.

Intactness/Integrity: Relatively intact externally

References: Author Title Year

Dr Terry Kass Industrial and warehouse buildings research - site history 2014

Inheritage Heirtage Assessment Report of Rosebery Estate 2006

Scott Cumming Chimneys and Change: Post European Environmental Impact ii 2004

Sydney Morning Herald Advertisement for Henderson Hats 1921

Jack Hickson R.C. Henderson Factory at Rosebery 1958

The Argus, Melbourne - 11 March 195 R.C. Henderson

Studies: Author Title Number Year

City Plan Heritage City of Sydney Industrial & Warehouse Buildings Heritage 2014

Parcels: Parcel code Lot number Section number Plan code Plan number

LOT 1 DP 411415

Latitude: Longitude:

Location validity: Spatial accuracy:

Map name: Map scale:

AMG zone: Easting: Northing:

Listing: Name Title Number ListingDate

City of Sydney Industrial and Ware Heritage study

**Data entry:** Data first entered: 06/08/2014 Data updated: 21/05/2015 Status: Completed

Location: 1-11 Hayes Road Rosebery 2018 Sydney

Image:



Caption: Hayes Road and Jones Lane elevations viewed from the north-west

Copy right: City of Sydney

Image by: Claudine Loffi

**Image date:** 03/03/2014

Image number:

Image url: http://www.environment.nsw.gov.au/maritimeheritageapp/resources/Heritage/shi/WebAP

P/345386132a78e9e43078a12a5c3aee13ca2.JPG

Thumbnail url: http://www.environment.nsw.gov.au/maritimeheritageapp/resources/Heritage/shi/WebAP

P/Thumb\_test345386132a78e9e43078a12a5c3aee13ca2.JPG

Location: 1-11 Hayes Road Rosebery 2018 Sydney

Image:



Caption: North and east elevations viewed from the north-east from Hayes Road

Copy right: City of Sydney

Image by: Claudine Loffi

**Image date:** 03/03/2014

Image number:

Image url: http://www.environment.nsw.gov.au/maritimeheritageapp/resources/Heritage/shi/WebAP

P/345cde17298cac7429cb95540c0fe364a42.JPG

Thumbnail url: http://www.environment.nsw.gov.au/maritimeheritageapp/resources/Heritage/shi/WebAP

P/Thumb\_test345cde17298cac7429cb95540c0fe364a42.JPG

Location: 1-11 Hayes Road Rosebery 2018 Sydney

Image:



Caption: North-west corner viewed from the west

Copy right: City of Sydney

Image by: Claudine Loffi

**Image date:** 03/03/2014

Image number:

Image url: http://www.environment.nsw.gov.au/maritimeheritageapp/resources/Heritage/shi/WebAP

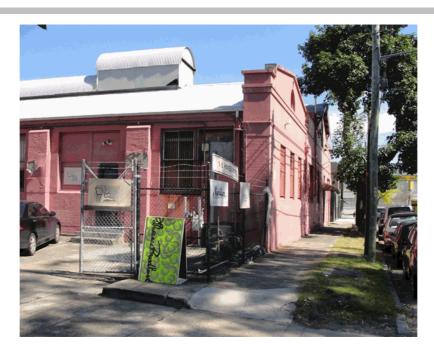
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Thumbnail url: http://www.environment.nsw.gov.au/maritimeheritageapp/resources/Heritage/shi/WebAP

P/Thumb\_test3453760e7f607684d92aa7290d57f18a834.JPG

Location: 1-11 Hayes Road Rosebery 2018 Sydney

Image:



Caption: Part of north and east elevations viewed from the east

Copy right: City of Sydney

Image by: City Plan Heritage and JCIS Consultants

**Image date:** 05/09/2013

Image number:

Image url: http://www.environment.nsw.gov.au/maritimeheritageapp/resources/Heritage/shi/WebAP

P/345e38e0283f9f940f48a26241988c18914.jpg

Thumbnail url: http://www.environment.nsw.gov.au/maritimeheritageapp/resources/Heritage/shi/WebAP

P/Thumb\_test345e38e0283f9f940f48a26241988c18914.jpg

Location: 1-11 Hayes Road Rosebery 2018 Sydney

Image:



Caption: The building in 1968 with the original Henderson Hats signage

Copy right: State Library of NSW

Image by: Jack Hickson (d7\_05373, SLNSW)

**Image date:** 26/05/1968

#### Image number:

Image url: http://www.environment.nsw.gov.au/maritimeheritageapp/resources/Heritage/shi/WebAP

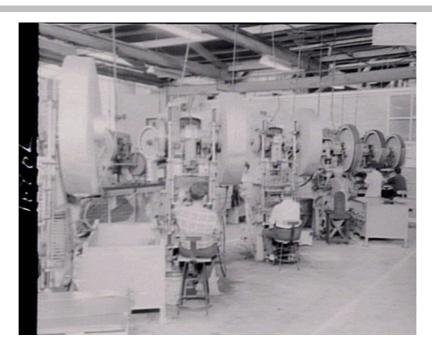
P/345ba8b0d13b2ba4eed8710ced26c07c682.jpg

Thumbnail url: http://www.environment.nsw.gov.au/maritimeheritageapp/resources/Heritage/shi/WebAP

P/Thumb\_test345ba8b0d13b2ba4eed8710ced26c07c682.jpg

Location: 1-11 Hayes Road Rosebery 2018 Sydney

Image:



Caption: Email press shop in Rosebery in 1968 at an unrecorded address, possibly showing this

building

Copy right: State Library of NSW

Image by: State Library (d1\_35984)

**Image date:** 01/11/1968

Image number:

Image url: http://www.environment.nsw.gov.au/maritimeheritageapp/resources/Heritage/shi/WebAP

P/345e0e79e0904f842d7a6058c42983768b5.jpg

 $\textbf{Thumbnail url:} \quad \text{http://www.environment.nsw.gov.au/maritimeheritageapp/resources/Heritage/shi/WebAP}$ 

P/Thumb\_test345e0e79e0904f842d7a6058c42983768b5.jpg

Location: 1-11 Hayes Road Rosebery 2018 Sydney

Image:



Caption: Email press shop in Rosebery in 1968 at an unrecorded address, possibly showing this

building

Copy right: State Library of NSW

Image by: State Library (d2\_36795)

**Image date:** 01/11/1968

Image number:

Image url: http://www.environment.nsw.gov.au/maritimeheritageapp/resources/Heritage/shi/WebAP

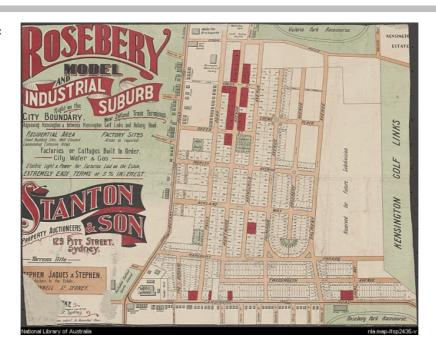
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P/Thumb\_test34512308238f2814d459d194a2157a1e7cc.jpg

Location: 1-11 Hayes Road Rosebery 2018 Sydney

Image:



Caption: Subdivision plan for the area from circa 1914 (Hayes shown as Ackland Way, Dunning as

Pauls Road)

Copy right: National Library of Australia

Image by: Stanton & Son (ID 43586275)

**Image date:** 01/01/1914

Image number:

Image url: http://www.environment.nsw.gov.au/maritimeheritageapp/resources/Heritage/shi/WebAP

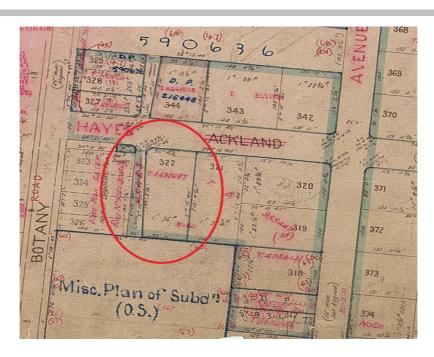
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Thumbnail url: http://www.environment.nsw.gov.au/maritimeheritageapp/resources/Heritage/shi/WebAP

P/Thumb\_test34502d2f400b176492fb363abbd7a4c985a.jpg

Location: 1-11 Hayes Road Rosebery 2018 Sydney

Image:



Caption: Extract of 1914 deposited plan (DP 7534) showing the original subdivision and street

name changes

Copy right: Land and Property Information

Image by: William Henry Howard, Surveyor

**Image date:** 05/03/1914

Image number:

Image url: http://www.environment.nsw.gov.au/maritimeheritageapp/resources/Heritage/shi/WebAP

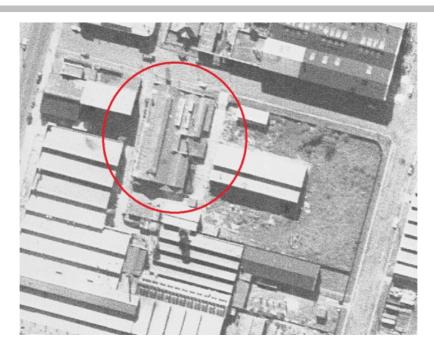
P/34562f97738ab79447ab4bec58020f18de3.jpg

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P/Thumb\_test34562f97738ab79447ab4bec58020f18de3.jpg

Location: 1-11 Hayes Road Rosebery 2018 Sydney

Image:



Caption: 1943 aerial of the building showing the other buildings to east before their extension

Copy right: Lands and Property Information, SIX maps

Image by: RTA

**Image date:** 01/01/1943

Image number:

 $\textbf{Image url:} \quad \text{http://www.environment.nsw.gov.au/maritimeheritageapp/resources/Heritage/shi/WebAP} \\$ 

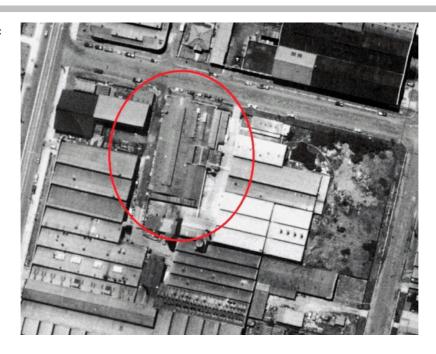
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P/Thumb\_test345a23c8eb1c9bb400da539df35e0a09427.jpg

Location: 1-11 Hayes Road Rosebery 2018 Sydney

Image:



Caption: 1949 aerial of the area showing the subject building and surrounding development

Copy right: City of Sydney

Image by: City of Sydney

**Image date:** 01/01/1949

Image number:

Image url: http://www.environment.nsw.gov.au/maritimeheritageapp/resources/Heritage/shi/WebAP

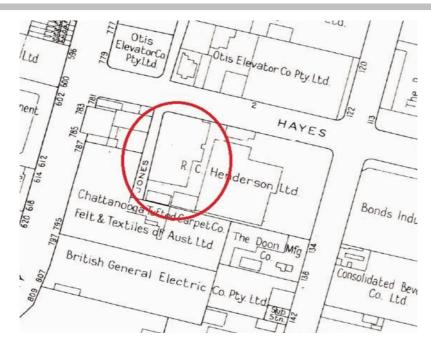
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P/Thumb\_test345ace3c661c16647c8bb9c569d90b648b3.jpg

Location: 1-11 Hayes Road Rosebery 2018 Sydney

Image:



Caption: 1956 detail sheet showing the building circled and surrounding industries

Copy right: City of Sydney

Image by: City Building Surveyors Department, City of Sydney

**Image date:** 01/01/1956

Image number:

Image url: http://www.environment.nsw.gov.au/maritimeheritageapp/resources/Heritage/shi/WebAP

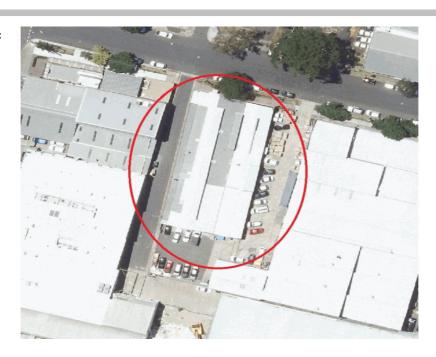
P/3452c45b9a16bba4fdf92037bbdabaa8b71.jpg

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P/Thumb\_test3452c45b9a16bba4fdf92037bbdabaa8b71.jpg

Location: 1-11 Hayes Road Rosebery 2018 Sydney

Image:



Caption: Current aerial of the subject building circled

Copy right: City of Sydney

Image by: City of Sydney

**Image date:** 01/01/2014

Image number:

mage url: http://www.environment.nsw.gov.au/maritimeheritageapp/resources/Heritage/shi/WebAP

P/345ef14b1501a2b4299800093aafa7d5901.jpg

 $\textbf{Thumbnail url:} \quad \text{http://www.environment.nsw.gov.au/maritimeheritageapp/resources/Heritage/shi/WebAP}$ 

P/Thumb\_test345ef14b1501a2b4299800093aafa7d5901.jpg

Location: 1-11 Hayes Road Rosebery 2018 Sydney

Image:



Caption: Main Henderson's factory at Surry Hills showing subsequent hat finishing

Copy right: State Library of NSW

Image by: State Library (d1\_46940)

**Image date:** 03/03/1949

Image number:

Image url: http://www.environment.nsw.gov.au/maritimeheritageapp/resources/Heritage/shi/WebAP

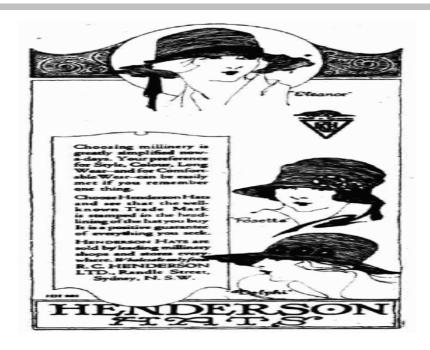
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P/Thumb\_test34513d04ba3a86644bfb0c385a8bc965193.jpg

Location: 1-11 Hayes Road Rosebery 2018 Sydney

Image:



Caption: 1921 advertisement of Henderson Hats showing the hats made when the factory was

constructed

Copy right: National Library of Australia

Image by: Sydney Morning Herald

**Image date:** 07/09/1921

Image number:

Image url: http://www.environment.nsw.gov.au/maritimeheritageapp/resources/Heritage/shi/WebAP

P/345aac4304e6f6f425186a31eda79ce9961.jpg

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P/Thumb\_test345aac4304e6f6f425186a31eda79ce9961.jpg

Location: 1-11 Hayes Road Rosebery 2018 Sydney

Image:



Caption: 1930s Henderson Hats marketing, styles and the 'Paris' hat illustrated in this 1932

advertisement

Copy right: National Library of Australia

Image by: The Grenfell Record

**Image date:** 31/03/1932

Image number:

Image url: http://www.environment.nsw.gov.au/maritimeheritageapp/resources/Heritage/shi/WebAP

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P/Thumb\_test3452378d5ebcd4d4c36adf4ecaee24a595d.jpg

Location: 1-11 Hayes Road Rosebery 2018 Sydney

Image:



Caption: 1944 advertisement for 1940s hats made of 'Flexafelt' treated at this site (Women's

Weekly, 1944)

Copy right: Women's Weekly

Image by: Women's Weekly, 4 Nov 1944, p 6

**Image date:** 04/11/1944

Image number:

Image url: http://www.environment.nsw.gov.au/maritimeheritageapp/resources/Heritage/shi/WebAP

P/3451afb7b8b2121467b81ed42014819b1eb.jpg

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P/Thumb\_test3451afb7b8b2121467b81ed42014819b1eb.jpg

# Inventory 44

SHI number **5062475** Study number

Item name: Former Cyclone Fence and Gate Co buildings including part of internal structure, Morley

Avenue building setback and fence

Location: 61-71 Mentmore Avenue Rosebery 2018 Sydney

Address: 61-71 Mentmore Avenue Planning: Sydney South

Suburb/nearest town: Rosebery 2018

Local govt area: Sydney Parish: Alexandria

State: NSW County: Cumberland

Address: 34 Morley Avenue Planning: Sydney South

Suburb/nearest town: Rosebery 2018

Local govt area: Sydney Parish:

State: NSW County:

Other/former names: Cyclone Company of Australia Limited, Cyclone Pty Ltd

Area/group/complex: Group ID:

Aboriginal area: Eora

Curtilage/boundary: As described in Sydney Local Environmental Plan

Item type: Built Group: Manufacturing and Processing Category: Factory/ Plant

Owner:

Admin codes: Code 2: Code 3:

**Current use:** 

Former uses: Factory, warehouse

Assessed significance: Local Endorsed significance:

SHI number 5062475 Study number

Item name: Former Cyclone Fence and Gate Co buildings including part of internal structure, Morley

Avenue building setback and fence

Location: 61-71 Mentmore Avenue Rosebery 2018 Sydney

Statement of Purpose-built in 1937 for major wire fence manufacturers, Cyclone Fence and Gate Co, the former Cyclone significance: factory represents the model industrial development of Rosebery during the inter-war period. The factory is historically significant for its connection to Australian manufacturing of building supplies during the mid-twentieth century and as evidence of this formerly widespread industry of Rosebery.

> As the main Sydney factory for Cyclone during the inter-war and post-war period, the buildings are historically significant for their connection to the Australian production of Cyclone welded wire and steel gates, fences, play equipment, scaffolding and other wire and steel products used in Australian homes and farms from the 1930s to the 1950s. The construction and scale of this former factory demonstrates the growth of the company and the popularity of Cyclone products, which became key streetscape elements of Australian suburbia and rural landscapes during the inter-war and post-war years. The factory is also associated with technological innovations of the late nineteenth and early twentieth century in the use of woven and welded steel as an affordable and lower-maintenance alternative to timber or iron fencing for homes and farms.

> The former factory provides evidence of one of Sydney's first planned suburbs, as surviving inter-war industrial buildings constructed on the Rosebery subdivision planned by John Sulman in 1911-20 as a model suburb for both housing and industry. The period, form, layout and use of the buildings record the original subdivision pattern and location of the planned industrial blocks between Botany Road and Primrose Avenue. The inclusion of a landscaped setback on Morley Avenue into the development of an industrial site demonstrates the ideals of the model suburb for quality factories and housing.

For its connection to manufacturing the Cyclone fences, gates and other wire and steel products found in many Australian homes and farms from the 1930s to the 1950s, the site may hold significance to the Australian community.

The factory and office buildings represent a good example of a large low-scale industrial complex of southern Sydney from the inter-war period. The buildings demonstrate the industrial building typology which contains administrative and manufacturing in distinctly different building forms, including a single-storey factory over a large area, and a more architecturally distinctive office on the street frontage.

The office and factory buildings demonstrate good examples of inter-war utilitarian architecture with elements of the stripped classical, Art Deco and functionalist styles from this period. The buildings exhibit typical features of these styles including the heavy masonry construction, unadorned brick walls, pronounced symmetry and entrance on Morley Avenue, high parapet walls, vertical emphasis of the office building façade divided into bays by engaged piers, and contrasting horizontal emphasis of the attached factory. Decoration is characteristically restrained, limited to the stepped profile of the office parapet wall, contrasting brickwork for the continuous lintels along the factory façade, relief brickwork details, stepped recessed entry on Morley Avenue, and the pattern of vertically proportioned openings including original timber windows with horizontal glazing bars on Morley Avenue.

The buildings within their landscaped setting make important contributions to the streetscapes of Morley and Mentmore Avenues, forming part of a consistent group of inter-war industrial buildings in Rosebery. Despite alterations to the factory roof and window frames, the buildings retain a high degree of overall architectural integrity.

The former Cyclone factory forms part of one of the largest known collections of industrial and warehouse buildings of its kind in Australia, which records City of Sydney's past as one of only two historic industrial heartlands in Australia. This collection of buildings provides evidence of Australia's twentieth century transformation through industrialisation when Sydney became one of the largest industrialised cities in the South Pacific.

The buildings are of local heritage significance in terms of their historical, association, aesthetic and representative values.

SHI number 5062475
Study number

Item name: Former Cyclone Fence and Gate Co buildings including part of internal structure, Morley

Avenue building setback and fence

**Location:** 61-71 Mentmore Avenue Rosebery 2018 Sydney

#### Historical notes of provenance:

Historical notes Early development of the locality:

This site forms part of the land of the Gadigal people, the traditional custodians of land within the City of Sydney council boundaries. For information about the Aboriginal history of the local area see the City's Barani website: http://www.sydneybarani.com.au/

The suburb of Rosebery was once part of a vast sand dune system covered by heath, low scrub, creeks and freshwater wetlands that dominated the landscape of the southern suburbs of Sydney. It provided habitat for a range of fauna such as birds, fish and eels, and was a good food source for the Gadigal, the local Aboriginal people.

The land that today incorporates the areas of Alexandria, Waterloo, Zetland and Rosebery was originally one large estate. Originally granted to former convict and public servant William Hutchinson in 1823, the estate, its buildings and water mill, were then sold to Daniel Cooper and Solomon Levy in 1825 before Cooper became its sole owner in 1833.

The land of the Cooper Estate was progressively subdivided into small acreages and sold from 1872.

Before the development of Rosebery into a residential and industrial estate, the suburb was popular for its racecourse which opened in 1906.

The suburb of Rosebery derives its name from Archibald Primrose, Earl of Rosebery and Prime Minister of England from 1894-95, who visited Sydney in 1883-84. Many of the street names of Rosebery are associated with British parliamentarians including Morley Avenue, Crewe Place and Asquith Avenue.

The Rosebery Estate was planned as a model industrial suburb by John Sulman and developed by Stanton and Sons between 1911 and 1920. The land was purchased for £24,000 in 1912 by the Town Planning Company of Australia, as part of 273 acres of the Waterloo Estate. John Sulman exhibited his design for Rosebery in the Town Planning Association of NSW exhibition in 1913. Most lots were still vacant until 1924, possibly due to the outbreak of World War I.

Based on the garden suburb model, Rosebery was planned as 'model factories and model homes' with detached housing for workers located close to industrial employment sites. Sulman's plan incorporated residential, commercial and industrial facilities as well as recreational and community facilities. Similarly to Dacey Gardens which was also planned by John Sulman, Rosebery was one of the first planned suburbs in Sydney, and amongst the earliest inter-war garden suburbs.

Secondary industries declined in the area from the 1970s as industry expanded to the outer suburbs.

Industrial history:

As one of only two major centres for historic Australian industry during the period when industry was centred in cities, Sydney's industrial development is part of the national history of industrialisation. Australia's industrialisation formed part of the 'second industrial revolution' which began during the mid-nineteenth century. This second revolution was driven by major technological innovations including the invention of the internal combustion engine and the assembly line, development of electricity, the construction of canals, railways and electric-power lines.

Sydney's twentieth century industrial development records when and how Sydney became one of the largest industrialised cities in the South Pacific and the diversification of Australia's economy beyond primary industry. Together with Melbourne, Sydney's twentieth century industrial boom expanded Australia's economy from the 'sheep's back' to the 'industry stack' or from primary production to manufacturing. By 1947 more Australians were working in city industries than in farms or mines.

SHI number 5062475
Study number

Item name: Former Cyclone Fence and Gate Co buildings including part of internal structure, Morley

Avenue building setback and fence

**Location:** 61-71 Mentmore Avenue Rosebery 2018 Sydney

Sydney's industrial development not only impacted on the national economy. Twentieth-century industry in Sydney also played a major role in developing Australia's self-sufficiency, growth, urbanisation, society and its contribution to the war effort for World War II. Sydney's industrial development has affected the lives of many Australians directly and indirectly, whether through the number of workers employed, goods and technology produced, the prosperity it engendered, or the social change and urban environments it generated.

Early Cyclone history:

The Cyclone Company of Australia Limited was founded in Melbourne 1898 by Leonard Chambers as the Cyclone Woven Wire Fence Company. The first Cyclone fence erected in Australia was installed in November of 1898. A.J. Chambers worked for Cyclone Co. for 35 years, retiring as General Manager in 1946. (State Library of NSW, http://acms.sl.nsw.gov.au/item/itemDetailPaged.aspx?itemID=446802, accessed 7 April 2015)

Initially all the wire and pickets had to be imported from the United States as the Australian steel industry was then non-existent.

By 1912 Cyclone was well established. Cyclone Pty Ltd registered in Victoria as Cyclone Pty Ltd on 9 February, just before World War I (The 'Digest' Year Book of Public Companies Australia & New Zealand, 1949, Jobson's Publications Pty Ltd, Sydney, p 85).

During the war, like many manufacturing businesses, Cyclone experienced difficulties, particularly in acquiring supplies of raw materials. Deliveries of imported goods were extremely unreliable and the prices high. Wire then cost an exorbitant 7 pounds a ton.

The company name changed to Cyclone Fence and Gate Co Pty Ltd on 12 May 1925 (The 'Digest' Year Book of Public Companies Australia & New Zealand, 1949, Jobson's Publications Pty Ltd, Sydney, p 85).

(Cyclone history, http://www.boral.com.au/history/Ch4\_6.html, accessed 7 April 2015)

Site history:

The Cyclone Fence and Gate Co constructed its Sydney factory at this Rosebery site in 1937. The company was one of the major Australian producers of welded wire and steel gates, fences, play equipment, scaffolding and other wire and steel products used in Australian homes and farms during the inter-war and post-war years. Cyclone products made at this site became key streetscape elements of Australian suburbia and rural landscapes. Cyclone's woven steel wire products provided an affordable and lower-maintenance alternative to timber or iron fencing and gates for homes and farms.

On 10 December 1936, lots 387-392, DP 7534, on Mentmore Avenue were transferred to the Cyclone Fence and Gate Co Pty Ltd (C T 3379 f 101). A new Certificate of Title for lots 387-392 (later lot A DP 335264) was issued on 4 March 1937 (C T 4826 f 216).

A valuation of lots 387-392, DP 7534, owned by Cyclone Fence and Gate Co Pty Ltd, of Gipps Street, Abbotsford, Victoria, dated 15 March 1937, recorded that the land was still vacant at this time (Valuer-General, Valuation List, Waterloo, SRNSW 19/9457, No 1925).

The subdivision of the land for these allotments formed part of John Sulman's and Richard Stanton's plan for a model suburb for industry and workers housing. The undated subdivision plan from approximately 1914 was named the 'Rosebery model and industrial suburb'. The deposited plan for this subdivision was surveyed on 5 March 1914 (DP 7534). These plans show that Hayes Road was initially named Ackland Way and Dunning Avenue was formerly Pauls Road.

The Cyclone site is located on six of the original industrial allotments of this subdivision, lots 387-392, when the block bound by Dunning, Morley and Mentmore Avenues and Hayes Road was evenly divided into 12 industrial

SHI number 5062475
Study number

Item name: Former Cyclone Fence and Gate Co buildings including part of internal structure, Morley

Avenue building setback and fence

**Location:** 61-71 Mentmore Avenue Rosebery 2018 Sydney

lots. These industrial lots were larger than residential lots, however were not overly large. Most industrial buildings like the subject buildings were constructed over multiple lots.

The industrial lots typically measured approximately 100 feet wide and 130-140 feet deep. In the original plan, industrial lots of these larger dimensions were located on the land between Epson Road to the north, Harcourt Parade to the south, the lanes behind Botany Road to the west and Primrose Avenue to the east. Further east, the plan laid out residential lots distinguished by their narrower measurements generally of 30-40 feet wide and 130-150 feet deep (Inheritage, Heritage Assessment Report of the Rosebery Estate, 2006).

M V E Woodforde called tenders in April 1937 for a large factory in Mentmore Avenue for the Cyclone Fence and Gate Co Pty Ltd, which would have 45,000 square feet of floor space. The front section would be of two storeys and include an office block (SMH 20 April 1937, p 5). It was announced on 11 May 1937 that a contract had been let to Hutcherson Bros for an additional factory building for the Cyclone Fence and Gate Co (SMH 11 May 1937 p 8).

The factory construction was published in the Building journal in 1937. This journal reported that the building replaced the former Cylone works in Euston Road, which had become too small. The publication also detailed the building construction, noting that the main brick façade containing the offices was of two storeys and that the structure of slim steel stanchions maximised the floor area for the manufacturing works. Materials and suppliers reported in this article included roof cladding of corrugated asbestos sheet, windows glazing bards supplied by Wunderlich, window frames of steel, supplied by Aquila Steel Co Pty Ltd, and office floors supplied by Thatcher and Oberg. Photographs taken for this journal from 1937 by Sam Hood document the building when it was first constructed including the original sawtooth factory roof with southern lantern windows. (Building, 24 Nov 1937, p 50, 52; Sam Hood photographs, Nov 1937, State Library of NSW)

A new Certificate of Title for lot A of Deposited Plan 335264 was issued to the Cyclone Fence and Gate Co Pty Ltd on 29 July 1937 (C T 4860 f 39). The address of the company in the valuation list was changed to Morley Avenue, Rosebery, on 16 June 1938.

In 1937 the company became the Australian agency for tubular scaffold fittings manufactured by London and Midland Steel Scaffolding Co. Cyclone scaffolding was later used for major constructions in Sydney, most notably including building the Sydney Opera House (Cyclone history, http://www.boral.com.au/history/Ch4\_6.html, accessed 7 April 2015).

By April 1939 a new valuation for the property recorded that a brick factory and office with a corrugated fibro sawtooth roof had been built on the site (Valuer-General, Valuation List, Waterloo 19/9457, No 1925).

In 1940, the Cyclone Fence and Gate Co Pty Ltd, at Morley Avenue, Rosebery, was listed as a producer of wire fences and gates, steel fences and gates and collapsible gates in the manufactures directory (Directory of Manufacturers of Australia, C E S Turner & Sons, Sydney and Melbourne, 1939-40, p 193-4).

The 1943 and 1949 aerial photographs record that the buildings were mainly constructed on the northern part of the site as currently, and that the factory was originally contained under twelve sawtooth roofs (1943 aerial photograph, SIX, LPI). The 1945 Workplace survey confirmed that the company was still producing wire fences and gates (1945 workplace survey (SRNSW 7/6848)).

During World War II, Cyclone, with its expertise in the wire industry, was quickly requisitioned to provide supplies for the military. The wartime demands stretched the capabilities both of the company's plants and personnel to their limit. Consequently, by the time peace was declared in 1945, Cyclone's civilian trade had declined. (Cyclone history, http://www.boral.com.au/history/Ch4 6.html, accessed 7 April 2015)

In 1950 the Cyclone Company proposed to erect a bulk store of tubular steel at the rear, in an application lodged on 19 September. On 27 August 1952, the company proposed to erect a building for storage of raw materials (Morley Avenue Cyclone Company of Aust, Street cards, NSCA).

SHI number 5062475
Study number

Item name: Former Cyclone Fence and Gate Co buildings including part of internal structure, Morley

Avenue building setback and fence

**Location:** 61-71 Mentmore Avenue Rosebery 2018 Sydney

In 1958, Cyclone began manufacturing aluminium windows due to increasing demand for this product. They also introduced a new range of hand and garden tools (Cyclone history, http://www.boral.com.au/history/Ch4\_6.html, accessed 7 April 2015).

The property was transferred to Rootes (Australia) Ltd on 16 December 1960 (C T 4860 f 39). In 1961 Rootes (Australia) Ltd proposed alterations and additions to use the site as a depot for receiving assembled motor vehicles, in an application lodged on 27 March 1961 (61-71 Mentmore Ave, Street cards, NCSA).

On 26 July 1966, the property was transferred to Chrysler Australia Ltd, a motor vehicle manufacturer and assembler (C T 4860 f 39).

W F Dobson Pty Ltd became the new owners on 6 June 1972 (C T 4860 f 39). Auction firm Geoff K Gray Pty Ltd applied on 1 July 1972 to use the property as an auction warehouse (61-71 Mentmore Ave, Street cards, NCSA).

In 1981 ownership transferred to the Perpetual Trustee Company Ltd, registered on the land title on 3 July 1981 (C T 4860 f 39). Geoff K Gray Pty Ltd continued to use the site. A lease to that firm was registered on 7 August 1981, which expired on 19 June 1991. Ownership then transfered to E K Nominees Pty Ltd on 25 January 1988 (C T 4860 f 39).

In approximately 1995 the sawtooth roofs of the main central factory building were replaced by the current gabled roof with a single ridge line running north-south.

Themes: National theme
3. Economy
Commerce
Industry
Factories

3. Economy Industry Activities associated with the n

Designer: M V E WoodfordeBuilder: Hutcherson Bros

Year started: 1937 Year completed: 1937 Circa: Yes

SHI number 5062475 Study number

Item name: Former Cyclone Fence and Gate Co buildings including part of internal structure, Morley

Avenue building setback and fence

Location: 61-71 Mentmore Avenue Rosebery 2018 Sydney

Physical description: The listing encompasses the former factory, office and south warehouse buildings, including the internal structure of the north office building and south warehouse, Morley Avenue building setback and fence.

> The buildings were constructed as an office and factory for the Cyclone Fence and Gate Co in 1937. The buildings are constructed of face brick of two tones with hipped roof for the office and gabled roof for the factory, both roofs concealed behind parapet walls. The office building fronting Morley Avenue is two-storeys, while the factory located behind along Mentmore Avenue is single-storey.

The buildings occupy half of the block fronting Mentmore Avenue between Morley Avenue and Hayes Road, with no setback from Mentmore Avenue and a large setback from Hayes Road and Morley Avenue. The setback on Morley is landscaped, surrounded by a low wall. The rear setback from Hayes Road is paved in concrete, enclosed by a wire fence (most likely Cyclone) and containing secondary buildings and parking. The two main building frontages are to Morley and Mentmore Avenues.

The two-storey office building fronting Morley Avenue is the most architecturally distinctive of the two buildings with a symmetrical facade divided into three main bays, divided by regularly-placed engaged piers along the two side bays and punctured by single and paired timber windows with vertical glazing bars and flat arches between the piers. The central bay contains paired windows placed on either side of the entrance on the ground floor and three pairs of windows evenly spaced on the second storey. The centrally-placed entrance is framed by a geometric stepped recess. Attached to the office on the western boundary fronting Morley Avenue is a single-storey garage with parapet wall, constructed of the same bricks as the office.

The factory building is a large single-storey building with its main frontage to Mentmore Avenue. The building forms a long street wall along Mentmore Avenue with its consistent face brickwork, pattern of openings and straight parapet wall. Contrasting brick bands form continuous lintels and sills to emphasise the horizontal proportions of this façade. Window openings are vertically-proportioned. Some narrower window openings are grouped together in sets of three. Two larger openings provide vehicular access along this elevation. The windows along this façade appear to have been replaced by aluminium frames. A narrow building is attached to the rear of the factory, contained under a gabled roof, setback along the side boundary.

The office and factory buildings date from the inter-war period, with elements of the stripped classical, Art Deco and functionalist architectural styles. The buildings exhibit typical features of these styles including the heavy masonry construction, unadorned brick walls, pronounced symmetry and entrance on Morley Avenue, high parapet walls, vertical emphasis of the office building façade divided into bays by engaged piers, and contrasting horizontal emphasis of the attached factory. Decoration is characteristically restrained, limited to the stepped profile of the office parapet wall, contrasting brickwork for the continuous lintels along the factory façade, relief brickwork details, stepped recessed entry on Morley Avenue, and the pattern of vertically proportioned openings including original timber windows with horizontal glazing bars on Morley Avenue.

The original sawtooth roof structure of the factory has been replaced by a gabled roof.

Despite changes to the factory roof and window frames, the buildings retain a high degree of overall architectural integrity.

Category: Complex. Style: Inter-war with elements of stripped classical, Art Deco and functionalist. Storeys: One and two. Façade: face brick. Side/Rear Walls: face brick. Roofs: Hipped (office) and gabled (factory) with corrugated metal cladding.

Physical condition Good

level:

**Physical condition:** 

SHI number 5062475 Study number

Item name: Former Cyclone Fence and Gate Co buildings including part of internal structure, Morley

Avenue building setback and fence

**Location:** 61-71 Mentmore Avenue Rosebery 2018 Sydney

Archaeological Not assessed

potential level: Archaeological potential Detail:

SHI number 5062475
Study number

Item name: Former Cyclone Fence and Gate Co buildings including part of internal structure, Morley

Avenue building setback and fence

**Location:** 61-71 Mentmore Avenue Rosebery 2018 Sydney

Modification dates: 9 February 1914

Registered in Victoria as Cyclone Pty Ltd

12 May 1925

Name changed to Cyclone Fence and Gate Co Pty Ltd

10 December 1936

Transfer of lots 387-392 to Cyclone Fence and Gate Co Pty Ltd

4 March 1937

Certificate of Title for lots 387-392 DP 7534 (later lot A DP 335264) issued to Cyclone Fence and Gate Co Pty Ltd

15 March 1937

Valuation of lots 387-392 DP 7534, owned by Cyclone Fence and Gate Co Pty Ltd, of Gipps Street, Abbotsford, Victoria, showed land was vacant

20 April 1937

Tenders called by M V E Woodforde for large factory for Cyclone Fence and Gate Co Pty Ltd in Mentmore Avenue to have 45,000 square feet of floor space

11 May 1937

Contract let to Hutcherson Bros for an additional factory building for Cyclone Fence and Gate Co

29 July 1937

Certificate of Title for lot A [DP 335264] issued to Cyclone Fence and Gate Co Pty Ltd  $\,$ 

3 April 1939

Valuation shows there was now a brick factory, and office with a corrugated fibro saw tooth roof on site

1940

Cyclone Fence and Gate Co Pty Ltd., Morley Avenue were producers of wire fences and gates, steel fences and gates and collapsible gates

1943

Aerial photo shows buildings mainly on northern part of site

1945

Workplace survey shows company produces wire fences and gates

19 September 1950

DA by Cyclone Company of Aust to erect bulk store of tubular steel at rear

27 August 1952

DA to erect building for storage of raw materials

16 December 1960

Transferred to Rootes (Australia) Ltd

27 March 1961

DA by Rootes (Australia) Ltd for alterations and additions to use as a depot for receiving assembled motor vehicles

26 July 1966

SHI number **5062475** Study number

Item name: Former Cyclone Fence and Gate Co buildings including part of internal structure, Morley

Avenue building setback and fence

**Location:** 61-71 Mentmore Avenue Rosebery 2018 Sydney

Transfer to Chrysler Australia Ltd

6 June 1972

Transfer to W F Dobson Pty Ltd

1 July 1972

DA by Geoff K Gray Pty Ltd to use as auction warehouse

3 July 1981

Transfer to Perpetual Trustee Company Ltd registered

7 August 1981

Lease to Geoff K Gray Pty Ltd expiring on 19 June 1991 registered

25 January 1988

Transfer to E K Nominees Pty Ltd registered

1995 approximately

Factory sawtooth roofs replaced by single gabled roof

12 June 2014

Approved application for adaptive re-use of southern former warehouse as whiskey distillery and food and drink premises (D/2014/185)

15 July 2014

Approved application for adaptive reuse of the existing building for light industrial, industrial retail tenancies with ancillary food and drink premises, kiosks, markets and neighbourhood shops (D/2014/677)

SHI number 5062475 Study number

Item name: Former Cyclone Fence and Gate Co buildings including part of internal structure, Morley

Avenue building setback and fence

Location: 61-71 Mentmore Avenue Rosebery 2018 Sydney

Recommended The listing encompasses the former factory, office and south warehouse buildings, including the internal management: structure of the north office building and south warehouse, Morley Avenue building setback and fence. These features should be retained and conserved.

A Statement of Heritage Impact should accompany development applications affecting these features.

All conservation, adaptive reuse and future development should be undertaken in accordance with the Australia ICOMOS Charter for Places of Cultural Significance (The Burra Charter).

Archival photographic recording, in accordance with Heritage Council guidelines, should be undertaken before major changes.

Maintain the existing building setback from Morley Avenue, landscaping and low brick wall.

Maintain original building features of the former factory, office and warehouse, including the engaged piers, symmetry of the Morley Avenue facade, parapet walls, face brickwork, vertically proportioned openings, timber windows, Morley Avenue entrance and surrounds, other original architectural detailing.

Do not paint, seal or render unpainted brick walls.

Locate new signage along the parapet wall using separate lettering in a similar manner to the original, as shown in the historic photograph.

Consider new uses for the buildings that will re-use and expose their industrial features to retain their former industrial character as an integral part of the new use.

Alterations for a new use, including changes for compliance with Australian building standards, should allow the essential form of the buildings to remain readily identifiable.

Management:

Management category

Management name

Statutory Instrument

List on a Local Environmental Plan (LEP)

Further comments: Heritage Inventory sheets are often not comprehensive, and should be regarded as a general guide only. Inventory sheets are based on information available, and often do not include the social history of sites and buildings. Inventory sheets are constantly updated by the City as further information becomes available. An inventory sheet with little information may simply indicate that there has been no building work done to the item recently: it does not mean that items are not significant. Further research is always recommended as part of preparation of development proposals for heritage items, and is necessary in preparation of Heritage Impact Assessments and Conservation Management Plans, so that the significance of heritage items can be fully assessed prior to submitting development applications.

Item name: Former Cyclone Fence and Gate Co buildings including part of internal structure, Morley

Avenue building setback and fence

Location: 61-71 Mentmore Avenue Rosebery 2018 Sydney

[Historical significancel

Purpose-built in 1937 for major wire fence manufacturers, Cyclone Fence and Gate Co, the former Cyclone factory represents the model industrial development of Rosebery during the inter-war period. The factory is historically significant for its connection to the Australian manufacturing of building supplies during the mid-twentieth century and as evidence of this formerly widespread industry of Rosebery.

As the main Sydney factory for Cyclone during the inter-war and post-war period, the buildings are historically significant for their connection to the Australian production of Cyclone welded wire and steel gates, fences, play equipment, scaffolding and other wire and steel products used in Australian homes and farms from the 1930s to the 1950s. The construction and scale of this former factory demonstrates the growth of the company and the popularity of Cyclone products, which became key streetscape elements of Australian suburbia and rural landscapes during the inter-war and post-war years. The factory is also associated with technological innovations of the late nineteenth and early twentieth century in the use of woven and welded steel as an affordable and lower-maintenance alternative to timber or iron fencing for homes and farms.

The former factory provides evidence of one of Sydney's first planned suburbs, as surviving inter-war industrial buildings constructed on the Rosebery subdivision planned by John Sulman in 1911-20 as a model suburb for both housing and industry. The period, form, layout and use of the buildings record the original subdivision pattern and location of the planned industrial blocks between Botany Road and Primrose Avenue. The inclusion of a landscaped setback on Morley Avenue into the development of an industrial site demonstrates the ideals of the model suburb for quality factories and housing.

The former Cyclone factory forms part of one of the largest known collections of industrial and warehouse buildings of its kind in Australia, which records City of Sydney's past as one of only two historic industrial heartlands in Australia. This collection of buildings provides evidence of Australia's twentieth century transformation through industrialisation when Sydney became one of the largest industrialised cities in the South Pacific.

Criteria b): The buildings have significant associations with the Cyclone Fence and Gate Co and the widely used woven and [Historical] welded wire and steel products they manufactured at this site from the 1930s to the 1950s. The buildings are association also associated with John Sulman and Richard Stanton, reflecting their plans and subdivision of 1911-1920 for **significance**] the area as a model suburb for industry and worker's housing.

[Aesthetic/

Criteria c): The factory and office buildings represent a good example of a large low-scale industrial complex of southern Sydney from the inter-war period. The buildings demonstrate the industrial building typology which contains Technical administrative and manufacturing in distinctly different building forms, including a single-storey factory over a significance] large area, and a more architecturally distinctive office on the street frontage.

> The office and factory buildings demonstrate good examples of inter-war utilitarian architecture with elements of the stripped classical, Art Deco and functionalist styles from this period. The buildings exhibit typical features of these styles including the heavy masonry construction, unadorned brick walls, pronounced symmetry and entrance on Morley Avenue, high parapet walls, vertical emphasis of the office building façade divided into bays by engaged piers, and contrasting horizontal emphasis of the attached factory. Decoration is characteristically restrained, limited to the stepped profile of the office parapet wall, contrasting brickwork for the continuous lintels along the factory façade, relief brickwork details, stepped recessed entry on Morley Avenue, and the pattern of vertically proportioned openings including original timber windows with horizontal glazing bars on Morley Avenue.

> The buildings make important contributions to the streetscapes of Morley and Mentmore Avenues, forming part of a consistent group of inter-war industrial buildings in Rosebery. Despite alterations to the factory roof and window frames, the buildings retain a high degree of overall architectural integrity. The landscaped setback on Morley Avenue contributes to the setting of the factory and office, reflecting the model suburb ideals of the town plan for Rosebery.

SHI number 5062475
Study number

Item name: Former Cyclone Fence and Gate Co buildings including part of internal structure, Morley

Avenue building setback and fence

**Location:** 61-71 Mentmore Avenue Rosebery 2018 Sydney

Criteria d): [Social/Cultural significance] Social significance requires further study to ascertain its value for the local community. The site may hold significance to the Australian community for its connection to manufacturing the Cyclone fences, gates and other wire and steel products, which were found in many Australian homes and farms from the 1930s to the

1950s

Criteria e): [Research significance]

Criteria e): The buildings may offer research potential into the history of twentieth-century planning of model suburbs by

[Research John Sulman and Richard Stanton.

Criteria f):

[Rarity]

Criteria g): The factory and office buildings represent good examples of a large low-scale industrial complex from the

[Representative] inter-war period and the industrial development of the planned model suburb of Rosebery.

Intactness/Integrity: Largely intact externally

References: Author Title Year

Building Building, 24 Nov 1937 1937

Dr Terry Kass Industrial and warehouse buildings research - site history 2014

Scott Cumming Chimneys and Change: Post European Environmental Impact ii 2004

City of Sydney/ City Building Survey City Building Surveyors Detail Sheets 1956

Sydney Morning Herald Advertising - 11th February 1938 1938

Studies: Author Title Number Year

City Plan Heritage City of Sydney Industrial & Warehouse Buildings Heritage 5 2014

Parcels: Parcel code Lot number Section number Plan code Plan number

LOT A DP 335264

Latitude: Longitude:

Location validity: Spatial accuracy:

Map name: Map scale:

AMG zone: Easting: Northing:

Listing: Name Title Number ListingDate

City of Sydney Industrial and Ware Heritage study

**Data entry:** Data first entered: 06/08/2014 Data updated: 25/09/2015 Status: Completed

SHI number 5062475
Study number

Item name: Former Cyclone Fence and Gate Co buildings including part of internal structure, Morley

Avenue building setback and fence

**Location:** 61-71 Mentmore Avenue Rosebery 2018 Sydney

Image:



Caption: Morley Avenue elevation of office building

Copy right: City of Sydney

Image by: City Plan Heritage and JCIS Consultants

**Image date:** 05/09/2013

Image number:

Image url: http://www.environment.nsw.gov.au/maritimeheritageapp/resources/Heritage/shi/WebAP

P/3454a4e280eb0fa468d9a9b0b9dfac0e652.jpg

Thumbnail url: http://www.environment.nsw.gov.au/maritimeheritageapp/resources/Heritage/shi/WebAP

P/Thumb\_test3454a4e280eb0fa468d9a9b0b9dfac0e652.jpg

SHI number **5062475** Study number

Item name: Former Cyclone Fence and Gate Co buildings including part of internal structure, Morley

Avenue building setback and fence

**Location:** 61-71 Mentmore Avenue Rosebery 2018 Sydney

Image:



Caption: Detail of main entrance on Morley Avenue

Copy right: City of Sydney

Image by: Claudine Loffi

**Image date:** 03/03/2014

Image number:

Image url: http://www.environment.nsw.gov.au/maritimeheritageapp/resources/Heritage/shi/WebAP

P/345c51199a3da914da0a9178982459e5c6f.JPG

 $\textbf{Thumbnail url:} \quad \text{http://www.environment.nsw.gov.au/maritimeheritageapp/resources/Heritage/shi/WebAP}$ 

P/Thumb\_test345c51199a3da914da0a9178982459e5c6f.JPG

SHI number 5062475
Study number

Item name: Former Cyclone Fence and Gate Co buildings including part of internal structure, Morley

Avenue building setback and fence

**Location:** 61-71 Mentmore Avenue Rosebery 2018 Sydney

Image:



Caption: Mentmore Avenue elevation looking north towards office building fronting Morley Avenue

Copy right: City of Sydney

Image by: Claudine Loffi

**Image date:** 03/03/2014

Image number:

Image url: http://www.environment.nsw.gov.au/maritimeheritageapp/resources/Heritage/shi/WebAP

P/34529b1caf001664f38a85450b2a5468ac4.JPG

 $\textbf{Thumbnail url:} \quad \text{http://www.environment.nsw.gov.au/maritimeheritageapp/resources/Heritage/shi/WebAP}$ 

P/Thumb\_test34529b1caf001664f38a85450b2a5468ac4.JPG

SHI number **5062475** Study number

Item name: Former Cyclone Fence and Gate Co buildings including part of internal structure, Morley

Avenue building setback and fence

**Location:** 61-71 Mentmore Avenue Rosebery 2018 Sydney

Image:



Caption: South end of Mentmore Avenue elevation

Copy right: City of Sydney

Image by: Claudine Loffi

**Image date:** 03/03/2014

Image number:

Image url: http://www.environment.nsw.gov.au/maritimeheritageapp/resources/Heritage/shi/WebAP

P/3452a2ddd8f6d58482387b336ff0ed4d4ce.JPG

 $\textbf{Thumbnail url:} \quad \text{http://www.environment.nsw.gov.au/maritimeheritageapp/resources/Heritage/shi/WebAP}$ 

P/Thumb\_test3452a2ddd8f6d58482387b336ff0ed4d4ce.JPG

SHI number 5062475
Study number

Item name: Former Cyclone Fence and Gate Co buildings including part of internal structure, Morley

Avenue building setback and fence

**Location:** 61-71 Mentmore Avenue Rosebery 2018 Sydney

Image:



Caption: The factory in 1937 shortly after construction, photographed for publication in the Building

journal

Copy right: State Library of New South Wales

Image by: Sam Hood (hood\_08836)

**Image date:** 01/11/1937

Image number:

Image url: http://www.environment.nsw.gov.au/maritimeheritageapp/resources/Heritage/shi/WebAP

P/345113d56047c224024be7c7fbb6b93343e.jpg

 $\textbf{Thumbnail url:} \quad \text{http://www.environment.nsw.gov.au/maritimeheritageapp/resources/Heritage/shi/WebAP}$ 

P/Thumb\_test345113d56047c224024be7c7fbb6b93343e.jpg

SHI number 5062475
Study number

Item name: Former Cyclone Fence and Gate Co buildings including part of internal structure, Morley

Avenue building setback and fence

**Location:** 61-71 Mentmore Avenue Rosebery 2018 Sydney

Image:



Caption: Morley Street elevation in 1937, photographed for publication in the Building journal

Copy right: State Library of New South Wales

Image by: Sam Hood (hood\_08837)

**Image date:** 01/11/1937

Image number:

Image url: http://www.environment.nsw.gov.au/maritimeheritageapp/resources/Heritage/shi/WebAP

P/34555febbe03b0e4ba1ad1fb07121136fd3.jpg

 $\textbf{Thumbnail url:} \quad \text{http://www.environment.nsw.gov.au/maritimeheritageapp/resources/Heritage/shi/WebAP}$ 

P/Thumb\_test34555febbe03b0e4ba1ad1fb07121136fd3.jpg

SHI number 5062475
Study number

Item name: Former Cyclone Fence and Gate Co buildings including part of internal structure, Morley

Avenue building setback and fence

**Location:** 61-71 Mentmore Avenue Rosebery 2018 Sydney

Image:



Caption: Morley Street entrance in 1937, photographed for publication in the Building journal

Copy right: State Library of New South Wales

Image by: Sam Hood (hood\_08843)

**Image date:** 01/11/1937

Image number:

Image url: http://www.environment.nsw.gov.au/maritimeheritageapp/resources/Heritage/shi/WebAP

P/3455f4b82ecad45488880199c6790e2d30e.jpg

 $\textbf{Thumbnail url:} \quad \text{http://www.environment.nsw.gov.au/maritimeheritageapp/resources/Heritage/shi/WebAP}$ 

P/Thumb\_test3455f4b82ecad45488880199c6790e2d30e.jpg

Avenue building setback and fence

**Location:** 61-71 Mentmore Avenue Rosebery 2018 Sydney

Image:



Caption: Interiors under original sawtooth roof in 1937, photographed for publication in the Building

journal

Copy right: State Library of New South Wales

Image by: Sam Hood (hood\_08840)

**Image date:** 01/11/1937

Image number:

Image url: http://www.environment.nsw.gov.au/maritimeheritageapp/resources/Heritage/shi/WebAP

P/345351dbb9255074201b90b010baf24672f.jpg

 $\textbf{Thumbnail url:} \quad \text{http://www.environment.nsw.gov.au/maritimeheritageapp/resources/Heritage/shi/WebAP}$ 

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SHI number **5062475** Study number

Item name: Former Cyclone Fence and Gate Co buildings including part of internal structure, Morley

Avenue building setback and fence

**Location:** 61-71 Mentmore Avenue Rosebery 2018 Sydney

Image:



Caption: Interiors under original sawtooth roof in 1937, photographed for publication in the Building

journal

Copy right: State Library of New South Wales

Image by: Sam Hood (hood\_08842)

**Image date:** 01/11/1937

Image number:

Image url: http://www.environment.nsw.gov.au/maritimeheritageapp/resources/Heritage/shi/WebAP

P/3456a7f182f99654d47b94cb549c09e7736.jpg

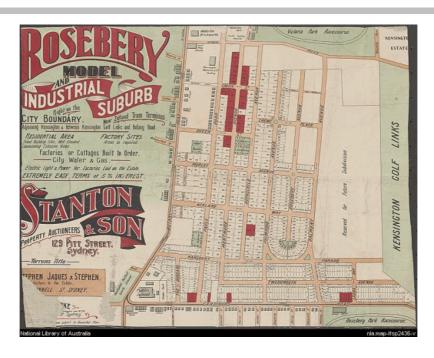
Thumbnail url: http://www.environment.nsw.gov.au/maritimeheritageapp/resources/Heritage/shi/WebAP

P/Thumb\_test3456a7f182f99654d47b94cb549c09e7736.jpg

Avenue building setback and fence

**Location:** 61-71 Mentmore Avenue Rosebery 2018 Sydney

Image:



Caption: Subdivision plan for the area from circa 1914 (Hayes shown as Ackland Way, Dunning as

Pauls Road)

Copy right: National Library of Australia

Image by: Stanton & Son (ID 43586275)

**Image date:** 01/01/1914

Image number:

Image url: http://www.environment.nsw.gov.au/maritimeheritageapp/resources/Heritage/shi/WebAP

P/3452a25a6c6bb3e465e88749f04962ec82c.jpg

Thumbnail url: http://www.environment.nsw.gov.au/maritimeheritageapp/resources/Heritage/shi/WebAP

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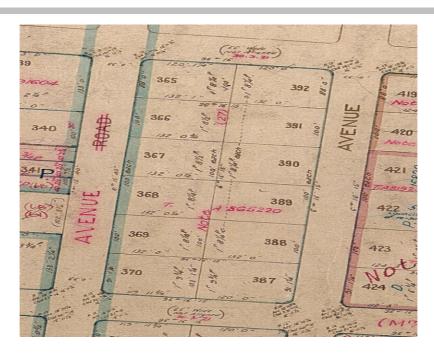
SHI number **5062475** Study number

Item name: Former Cyclone Fence and Gate Co buildings including part of internal structure, Morley

Avenue building setback and fence

**Location:** 61-71 Mentmore Avenue Rosebery 2018 Sydney

Image:



Caption: Extract of 1914 deposited plan (DP 7534) showing the original subdivision lots

Copy right: Land and Property Information

Image by: William Henry Howard, Surveyor

**Image date:** 05/03/1914

Image number:

Image url: http://www.environment.nsw.gov.au/maritimeheritageapp/resources/Heritage/shi/WebAP

P/34568dc38004d354f6aa1057b17b75501b5.jpg

 $\textbf{Thumbnail url:} \quad \text{http://www.environment.nsw.gov.au/maritimeheritageapp/resources/Heritage/shi/WebAP}$ 

P/Thumb\_test34568dc38004d354f6aa1057b17b75501b5.jpg

SHI number 5062475
Study number

Item name: Former Cyclone Fence and Gate Co buildings including part of internal structure, Morley

Avenue building setback and fence

**Location:** 61-71 Mentmore Avenue Rosebery 2018 Sydney

Image:



Caption: 1949 aerial showing the buildings constructed on the subject site, circled, by this time

Copy right: City of Sydney

Image by: City of Sydney

**Image date:** 15/12/1949

Image number:

Image url: http://www.environment.nsw.gov.au/maritimeheritageapp/resources/Heritage/shi/WebAP

P/34568c6fc80afb148e48a02dac4b6aa4f68.jpg

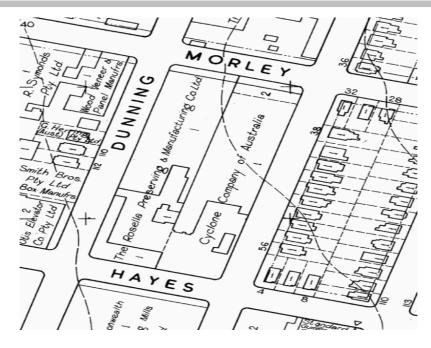
 $\textbf{Thumbnail url:} \quad \text{http://www.environment.nsw.gov.au/maritimeheritageapp/resources/Heritage/shi/WebAP}$ 

P/Thumb\_test34568c6fc80afb148e48a02dac4b6aa4f68.jpg

Avenue building setback and fence

**Location:** 61-71 Mentmore Avenue Rosebery 2018 Sydney

Image:



Caption: 1950 survey of the Cyclone factory showing storeys and building outline by this time

Copy right: City of Sydney

Image by: City of Sydney

**Image date:** 01/01/1950

Image number:

Image url: http://www.environment.nsw.gov.au/maritimeheritageapp/resources/Heritage/shi/WebAP

P/345a973094e403940dba8d0b0dfc74b9d43.jpg

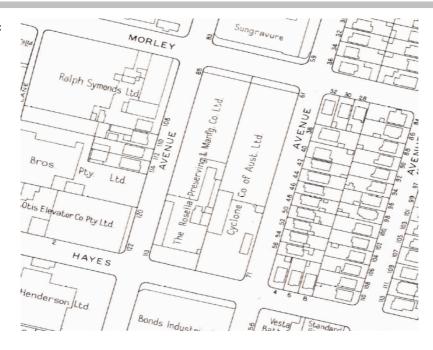
 $\textbf{Thumbnail url:} \quad \text{http://www.environment.nsw.gov.au/maritimeheritageapp/resources/Heritage/shi/WebAP}$ 

P/Thumb\_test345a973094e403940dba8d0b0dfc74b9d43.jpg

Avenue building setback and fence

**Location:** 61-71 Mentmore Avenue Rosebery 2018 Sydney

Image:



Caption: 1956 detail sheet showing the subject Cyclone factory site and buliding outline at this time

Copy right: City of Sydney

Image by: City of Sydney

**Image date:** 01/01/1956

Image number:

Image url: http://www.environment.nsw.gov.au/maritimeheritageapp/resources/Heritage/shi/WebAP

P/3457b60b04b8a2b4033ab28935720516004.jpg

 $\textbf{Thumbnail url:} \quad \text{http://www.environment.nsw.gov.au/maritimeheritageapp/resources/Heritage/shi/WebAP}$ 

P/Thumb\_test3457b60b04b8a2b4033ab28935720516004.jpg

SHI number 5062475
Study number

Item name: Former Cyclone Fence and Gate Co buildings including part of internal structure, Morley

Avenue building setback and fence

**Location:** 61-71 Mentmore Avenue Rosebery 2018 Sydney

Image:



Caption: Current aerial with signifcant features circled

Copy right: City of Sydney

Image by: City of Sydney

**Image date:** 01/01/2014

Image number:

Image url: http://www.environment.nsw.gov.au/maritimeheritageapp/resources/Heritage/shi/WebAP

P/3453ed0b19aeef1426d8aa218cce9129405.jpg

Thumbnail url: http://www.environment.nsw.gov.au/maritimeheritageapp/resources/Heritage/shi/WebAP

P/Thumb\_test3453ed0b19aeef1426d8aa218cce9129405.jpg

SHI number 5062475
Study number

Item name: Former Cyclone Fence and Gate Co buildings including part of internal structure, Morley

Avenue building setback and fence

**Location:** 61-71 Mentmore Avenue Rosebery 2018 Sydney

Image:



Caption: Cyclone fencing display at Royal Easter Show showing their range of products from circa

1930s

Copy right: Mitchell Library

Image by: Sam Hood (a359151)

Image date:

Image number:

Image url: http://www.environment.nsw.gov.au/maritimeheritageapp/resources/Heritage/shi/WebAP

P/3457e5dcf3e319744aab47612f7fa5c4cbe.jpg

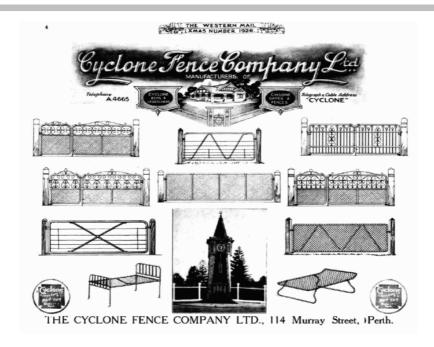
Thumbnail url: http://www.environment.nsw.gov.au/maritimeheritageapp/resources/Heritage/shi/WebAP

P/Thumb\_test3457e5dcf3e319744aab47612f7fa5c4cbe.jpg

Avenue building setback and fence

**Location:** 61-71 Mentmore Avenue Rosebery 2018 Sydney

Image:



Caption: Cyclone products illustrated in this 1926 advertisement before the factory construction

Copy right:

Image by: Western Mail

**Image date:** 25/12/1926

Image number:

Image url: http://www.environment.nsw.gov.au/maritimeheritageapp/resources/Heritage/shi/WebAP

P/3457ae35111d68e4147b1d8b7dd38abee1d.jpg

 $\textbf{Thumbnail url:} \quad \text{http://www.environment.nsw.gov.au/maritimeheritageapp/resources/Heritage/shi/WebAP}$ 

P/Thumb\_test3457ae35111d68e4147b1d8b7dd38abee1d.jpg

Avenue building setback and fence

**Location:** 61-71 Mentmore Avenue Rosebery 2018 Sydney

Image:



Caption: Cyclone flyscreens advertising from the 1940s

Copy right: Womens Weekly

Image by: Womens Weekly

**Image date:** 07/09/1947

Image number:

Image url: http://www.environment.nsw.gov.au/maritimeheritageapp/resources/Heritage/shi/WebAP

P/3458e9d46f555074d93bc8e1005aa1f77a2.jpg

Thumbnail url: http://www.environment.nsw.gov.au/maritimeheritageapp/resources/Heritage/shi/WebAP

P/Thumb\_test3458e9d46f555074d93bc8e1005aa1f77a2.jpg

Avenue building setback and fence

**Location:** 61-71 Mentmore Avenue Rosebery 2018 Sydney

Image:



Caption: 1950s advertisement for Cyclone fences

Copy right: The Land

Image by: The Land

**Image date:** 21/05/1954

Image number:

Image url: http://www.environment.nsw.gov.au/maritimeheritageapp/resources/Heritage/shi/WebAP

P/34534862fad4af048cf885643dc817e0dd8.jpg

Thumbnail url: http://www.environment.nsw.gov.au/maritimeheritageapp/resources/Heritage/shi/WebAP

P/Thumb\_test34534862fad4af048cf885643dc817e0dd8.jpg

Avenue building setback and fence

**Location:** 61-71 Mentmore Avenue Rosebery 2018 Sydney

Image:



Caption: 1954 advertisements for other Cyclone products for home recreation

Copy right: Sydney Morning Herald

Image by: Sydney Morning Herald

**Image date:** 14/06/1954

Image number:

tage url: http://www.environment.nsw.gov.au/maritimeheritageapp/resources/Heritage/shi/WebAP

P/345c63b68a094b54f64a634fd17dd2b7990.jpg

 $\textbf{Thumbnail url:} \quad \text{http://www.environment.nsw.gov.au/maritimeheritageapp/resources/Heritage/shi/WebAP}$ 

P/Thumb\_test345c63b68a094b54f64a634fd17dd2b7990.jpg

Avenue building setback and fence

**Location:** 61-71 Mentmore Avenue Rosebery 2018 Sydney

Image:



Caption: Sydney Opera House under construction using Cyclone scaffolding

Copy right:

Image by: Boral (http://www.boral.com.au/history/Ch4\_6.html)

Image date:

Image number:

Image url: http://www.environment.nsw.gov.au/maritimeheritageapp/resources/Heritage/shi/WebAP

P/345d1d5407c4da4446eadd1b1d775b73eff.jpg

 $\textbf{Thumbnail url:} \quad \text{http://www.environment.nsw.gov.au/maritimeheritageapp/resources/Heritage/shi/WebAP}$ 

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