

FORMER METROPOLITAN FARM



Bull ranch - June 2020



Head of the road - June 2020



Sub-carrier with concrete outlets - June 2020



Main carrier - June 2020



Cocoroc 1920s shed - June 2020



Cocoroc swimming pool - June 2020



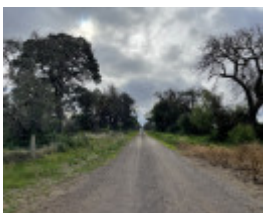
Cocoroc sports pavilion - June 2020



Cocoroc farm hall and Water Tank - June 2020



Remnant plantings along former MOS course - July 2021



Eastern extent (55E Road) - July 2021



Southern extent (80S Road) - July 2021

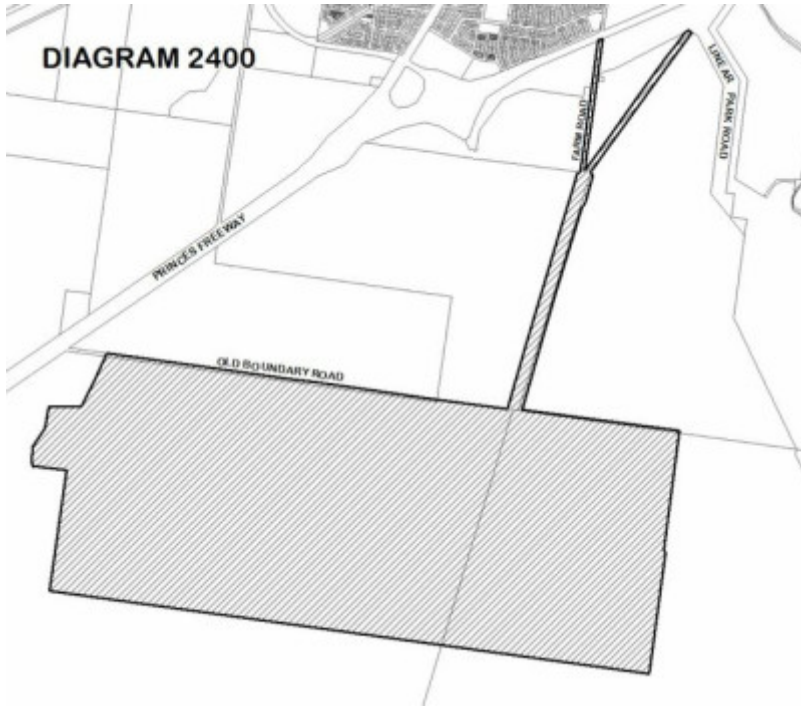
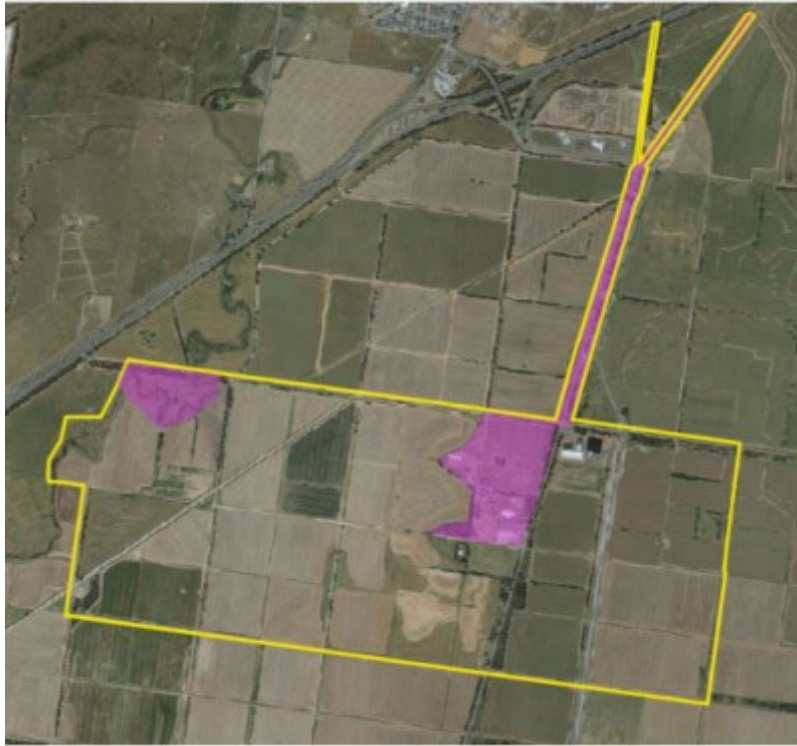


DIAGRAM 2400

DIAGRAM H2400



Aerial diagram of extent of registration



Zone 1 is shown shaded in purple. Zone 2 is shown unshaded.

Permit exemption diagram showing Zone 1 and Zone 2

Location

FARM ROAD COCOROC, WYNDHAM CITY

Municipality

WYNDHAM CITY

Level of significance

Registered

Victorian Heritage Register (VHR) Number

H2400

VHR Registration

October 21, 2021

Heritage Listing

Victorian Heritage Register

Statement of Significance

Last updated on - December 19, 2023

What is significant?

The Former Metropolitan Farm is a sewage treatment farm established by the Melbourne and Metropolitan Board of Works (MMBW) in 1892. It is characterised by its broad, flat agricultural landscape divided by roads laid out in a grid further defined by a system of carriers, sub-carriers and drains. The place includes remnants of the former MMBW township of Cocoroc, early agricultural structures and mature plantings.

How is it significant?

The Former Metropolitan Farm is of historical, archaeological and technical significance to the State of Victoria. It satisfies the following criterion for inclusion in the Victorian Heritage Register:

Criterion A

Importance to the course, or pattern, of Victoria's cultural history.

Criterion C

Potential to yield information that will contribute to an understanding of Victoria's cultural history.

Criterion D

Importance in demonstrating the principal characteristics of a class of cultural places and objects.

Criterion F

Importance in demonstrating a high degree of creative or technical achievement at a particular period.

Criterion H

Special association with the life or works of a person, or group of persons, of importance in Victoria's history.

Why is it significant?

The Former Metropolitan Farm is historically significant as a key element of the Melbourne metropolitan sewerage system. As the place where all of Melbourne's sewage was sent and treated from 1897 until 1940 it has played a vital role in the health and sanitation of the city. Prior to the construction of the sewerage system, human waste in metropolitan Melbourne was generally emptied into the streets and natural water courses resulting in widespread pollution and frequent outbreaks of diseases such as typhoid. The sewerage system, including the Former Metropolitan Farm, was a major engineering achievement for the State led directly to dramatic improvements in sanitation and public health in metropolitan Melbourne.

(Criterion A)

The Former Metropolitan Farm is archaeologically significant for its potential to contain features, deposits and artefacts that relate to both the early operation of the place as well as its occupation by MMBW workers and their families over several decades. The information likely to be yielded through archaeological investigation, will meaningfully contribute to an understanding of a place that has played an important role in Victoria's history and is likely to yield information that is not already well documented or readily available through other sources.

(Criterion C)

The Former Metropolitan Farm is significant as a notable example of a sewage treatment facility. It has the principal characteristics of the class which reflect the era of its establishment and early operation, including a large, flat land area and grid layout to provide for land filtration. It is pivotal and influential being the first facility of its type established in Victoria and a model for other facilities established subsequently.
(Criterion D)

The Former Metropolitan Farm is technically significant as a key component of the Melbourne centralised sewerage system, which was a major engineering achievement for the era. The project converted what was a pastoral landscape into a vast filtration system for treating all of metropolitan Melbourne's sewage. The Former Metropolitan Farm represents the adaptation of the land filtration technique to a vast scale and demonstrates the skilful application of surveying, planning and grading.
(Criterion F)

The Former Metropolitan Farm is significant for its association with the Melbourne Metropolitan Board of Works (MMBW) which was initially established to plan and construct a sewerage system for metropolitan Melbourne and went on to provide vital sewerage and water services for the city until 1992. The MMBW established and developed the Metropolitan Farm from 1890–1992 and is widely associated with the place. In addition to being a key functional element of Melbourne's sewerage system, the Former Metropolitan Farm was a 'government town' for a large community of resident MMBW workers and their families from the 1890s until the 1970s, and has a special association with the MMBW.
(Criterion H)

Permit Exemptions

General Exemptions:

General exemptions apply to all places and objects included in the Victorian Heritage Register (VHR). General exemptions have been designed to allow everyday activities, maintenance and changes to your property, which don't harm its cultural heritage significance, to proceed without the need to obtain approvals under the Heritage Act 2017.

Places of worship: In some circumstances, you can alter a place of worship to accommodate religious practices without a permit, but you must [notify](#) the Executive Director of Heritage Victoria before you start the works or activities at least 20 business days before the works or activities are to commence.

Subdivision/consolidation: Permit exemptions exist for some subdivisions and consolidations. If the subdivision or consolidation is in accordance with a planning permit granted under Part 4 of the *Planning and Environment Act 1987* and the application for the planning permit was referred to the Executive Director of Heritage Victoria as a determining referral authority, a permit is not required.

Specific exemptions may also apply to your registered place or object. If applicable, these are listed below. Specific exemptions are tailored to the conservation and management needs of an individual registered place or object and set out works and activities that are exempt from the requirements of a permit. Specific exemptions prevail if they conflict with general exemptions.

Find out more about heritage permit exemptions [here](#).

Specific Exemptions:

Introduction

The purpose of this information is to assist owners and other interested parties when considering or making decisions regarding works to a registered place or object. It is recommended that any proposed works be discussed with an officer of Heritage Victoria prior to making a permit application. Discussing proposed works will

assist in answering questions the owner may have and aid any decisions regarding works to the place or object.

It is acknowledged that alterations and other works may be required to keep places and objects in good repair and adapt them for use into the future. However, under the Heritage Act 2017 a person must not knowingly, recklessly or negligently remove, relocate or demolish, damage or despoil, develop or alter or excavate all or any part of any part of a registered place without approval. It should be noted that the definition of 'develop' in the Act includes any works on, over or under the place.

If a person wishes to undertake works or activities in relation to a registered place or registered object, they must apply to the Executive Director for a permit. The purpose of a permit is to enable appropriate change to a place or object and to effectively manage adverse impacts on the cultural heritage significance of a place or object as a consequence of change. If an owner is uncertain whether a heritage permit is required, it is recommended that Heritage Victoria be contacted.

Permits are required for anything which alters the place or object, unless a permit exemption is granted. Permit exemptions usually cover routine maintenance and upkeep issues faced by owners as well as minor works or works to the elements of the place or object that are not significant. They may include appropriate works that are specified in a conservation management plan. Permit exemptions can be granted at the time of registration (under section 38 of the Heritage Act) or after registration (under section 92 of the Heritage Act). It should be noted that the addition of new buildings to the registered place, as well as alterations to the interior and exterior of existing buildings requires a permit, unless a specific permit exemption is granted.

Overview of significance

The cultural heritage significance of the Former Metropolitan Farm lies in the remaining infrastructure of the MMBW's initial land filtration scheme including the main approach to the farm via Metropolitan Farm Road, visible and sub-surface remains of the Main Outfall Sewer, subsurface remains of the No. 1 Pumping Station, the 'Head of the Road' and main east and west carriers. It also includes the built structures associated with the Former Metropolitan Farm's early operation including remnant early plantings, Cocoroc township and the bull ranch.

Significance of Zone 1

Zone 1 recognises that there is a concentration of significant built and archaeological fabric in these areas. This includes built structures, archaeology related to Cocoroc township and the Main Outfall sewer, and remnant early plantings. These features are associated with the operation of the Former Metropolitan Farm between the 1890s and 1920s and include:

- Grid layout of roads
- Visible and sub-surface remains of the Main Outfall Sewer
- Subsurface remains of No. 1 Pumping Station
- Remnant early tree plantings
- The 'Head of the Road', Main East and Main West carriers
- Cocoroc township (including 1890s stable, early 1900s dwelling, farm hall and sports pavilion)
- 1920s bull ranch.

Zone 1 also includes buildings and structures which are not of cultural heritage significance (those constructed after 1970). These include:

- Modern machinery sheds, workshops, garages and shelters
- Sheds on 25 West Road (between 40 South and Old Boundary Roads)
- Administrative centre in Cocoroc constructed 2020-21
- Odour control facility
- Areas of the Western Trunk Sewer and other post-1970 operational infrastructure.

Significance of Zone 2

There is potential for there to be features of State-level cultural heritage significance to be dispersed across the remainder of the extent of registration. Significant fabric which may be dispersed across the extent of registration includes (but is not limited to) carriers, sub carriers, sluice gates and cast-iron flumes installed between the 1890s and 1920s for the purpose of land filtration. Some of this may currently not be visible or easily accessible.

Fabric which is not of cultural heritage significance includes the recycled water disinfection plant at the south-east intersection of Metropolitan Farm Road and Old Boundary Road, and all other modern buildings, structures and infrastructure (post-1970s).

Disrepair of a registered place or object

Under section 152 of the Act, the owner of a registered place or registered object must not allow that place or object to fall into disrepair. At the time of recommendation (2021), several buildings of cultural heritage significance were in poor condition. These buildings should not be allowed to fall further into disrepair. At a minimum these buildings should be secured and made watertight to arrest further deterioration.

Failure to maintain registered place or registered object

Under section 153 of the Act, the owner of a registered place or registered object must not fail to maintain that place or object to the extent that its conservation is threatened.

Conservation management plans and Significance Assessments

Lovell Chen prepared a revised Conservation Management Plan for the whole of the Western Treatment Plant in 2008. This was complemented by a Significance Assessment prepared by Biosis Research in 2010, which provided specific guidance on the location of specific features and areas of cultural heritage significance. Both documents will assist in understanding the significance of different buildings and features.

Considering that a representative portion of the Western Treatment Plant is recommended for inclusion in the VHR, it is recommended that a revised Significance Assessment is prepared to assist Melbourne Water in the management of the proposed registration.

The Conservation Management Plan should also be updated to account for the place's inclusion in the Victorian Heritage Register.

Aboriginal cultural heritage

It is noted that all of the Western Treatment Plant is within an area of Cultural Heritage Sensitivity and that Registered Aboriginal places are known to exist within proposed extent of registration. If works are proposed which have the potential to disturb or have an impact on Aboriginal cultural heritage it is necessary to contact First Peoples – State Relations (formerly Aboriginal Victoria) to ascertain any requirements under the Aboriginal Heritage Act 2006. If any Aboriginal cultural heritage is discovered or exposed at any time it is necessary to immediately contact Aboriginal Victoria to ascertain requirements under the Aboriginal Heritage Act 2006.

Other approvals

Please be aware that approval from other authorities (such as local government) may be required to undertake works.

Water Tank (VHR H1416)

Dual permit applications will not be required for work within the area where the registration of the Water Tank (VHR H1416) and Former Metropolitan Farm overlap. For works to the Water Tank that are not exempted in the existing registration, a permit application for the Water Tank should be sought. The area of land surrounding the Water Tank is subject to the landscape exemptions outlined below.

Archaeology

Zone 1

Zone 1 is highly likely to contain archaeology of State-level significance. Ground disturbing works in this area have potential to harm the State-level cultural heritage significance of the place. In general, all ground disturbing works in this area will require a permit or consent from Heritage Victoria. Contact the Archaeology team at Heritage Victoria to discuss future works.

Zone 2

There is potential for archaeology of State-level significance to be dispersed across the site. If major ground disturbance is planned within the extent of registration the Archaeology team at Heritage Victoria should be contacted.

It is noted that under the Heritage Act 2017, all archaeology in the State of Victoria 75 years and over is covered by blanket protections. If any archaeological features or deposits are found during works (including those exempted below), works must cease and Heritage Victoria is to be contacted immediately.

Notes

- All planned works should ideally be informed by a Conservation Management Plan prepared for the place. The Executive Director is not bound by any Conservation Management Plan and permits still must be obtained for works suggested in any Conservation Management Plan.
- Nothing in this determination prevents the Heritage Council from amending or rescinding all or any of the permit exemptions.
- Nothing in this determination exempts owners or their agents from the responsibility to seek relevant planning or building permits where applicable.

General Conditions

- All exempted alterations are to be planned and carried out in a manner which prevents damage to the significant fabric of the registered Former Metropolitan Farm.
- Should it become apparent during further inspection or the carrying out of works that original or previously unknown, hidden or inaccessible details of the Former Metropolitan Farm are revealed which relate to the significance of the Former Metropolitan Farm, then the exemption covering such works must cease and Heritage Victoria must be notified as soon as possible.

Specific Permit Exemptions

The following categories of works or activities (permit exemptions) do not require a permit from Heritage Victoria. They are considered not to cause harm to the cultural heritage significance of the Former Metropolitan Farm and have been developed in consultation with the owner.

ZONE 1

Security

- Works and activities required to prevent unauthorised access and to secure the site.

Emergencies

- Works or activities, including emergency stabilisation, necessary to secure safety in an emergency where a structure or feature has been irreparably damaged or destabilised and poses a safety risk to people. The Executive Director, Heritage Victoria, must be notified within seven days of the commencement of these works or activities.

Temporary structures

- The installation and/or erection of temporary elements associated with short term works or public events where there is no requirement to secure structure via driven metal stakes: This includes:
 - Temporary fencing, scaffolding, hoardings or signage which are not affixed to significant buildings or features.
 - Temporary built or mobile structures such as amenities or site office vans.
 - Temporary (lightweight) structures such as shelters, marquees and tents which are weighted down with sandbags or water tanks.

Roads

- Maintenance and repair of existing roadways, shoulders and verges including grading, line marking, and works to the road surface.
- Maintenance, repair, replacement and installation of safety critical roadway infrastructure including gates, barriers and cattle grids.

Cleaning

Cleaning including the removal of surface deposits and biological growths.

Landscape

Hard landscaping

- Maintenance, repair, replacement and installation of signage, light masts and the like provided they are not affixed to significant buildings or features and installation does not impact on historical archaeological features and deposits.
- Repair and maintenance of existing hardstand areas such as carparks and driveways.
- Maintenance, repair and replacement of existing fencing in like materials.

Trees and plants

- Works and activities required for landscape management (excluding trees) including slashing and mowing, removal of dead shrubs, planting, and removal of environmental and noxious weeds in a manner that does not disturb historical archaeological features or deposits.
- Management and maintenance of trees including formative and remedial pruning, removal of deadwood and pest and disease control. For mature trees likely dating from the early decades of the place's establishment, including windbreak along Metropolitan Farm Road, these works should be carried out by a qualified arborist.
- Like for like replacement of trees within windbreak along Metropolitan Farm Road
- Emergency tree works required to ensure public and workplace safety.
- Fire suppression and firefighting activities such as fuel reduction burns and fire control line construction, provided heritage features and values of the place are identified and protected.

Agricultural activities

- Activities required for the suppression of pests and vermin that do not involve subsurface disturbance.

Buildings, structures and features of cultural heritage significance

- Basic works and activities to secure buildings and arrest further deterioration including removing vegetation, clearing gutters and drains, shuttering windows, replacing roofs using sympathetic material and otherwise making watertight.
- Minor repairs and maintenance which replaces like with like. Repairs and maintenance must maximise protection and retention of significant fabric and include the conservation of existing details or elements. Any repairs and maintenance must not exacerbate the decay of significant fabric due to chemical incompatibility of new materials, obscure fabric or limit access to such fabric for future maintenance.
- Painting of previously painted external and internal surfaces in the same colour, finish and product type provided that preparation or painting does not remove all evidence of earlier paint finishes or schemes. This exemption does not apply to areas where there are specialist paint techniques such as hand painted signs, or to unpainted, oiled or varnished surfaces.
- Maintenance, repair and replacement of existing overhead and underground services such as plumbing, electrical, surveillance systems, communications and fire services which does not involve changes in location or scale, or additional trenching.
- Repair to, or removal of items such as antennae; aerials; and air conditioners and associated pipe work, ducting and wiring.
- Installation, removal or replacement of smoke detectors and fire extinguishers.
- Installation, removal or replacement of existing electrical wiring. If wiring is currently exposed, it should remain exposed. If it is fully concealed it should remain fully concealed.

Buildings, features and structures of no cultural heritage significance

All the permit exemptions for buildings, features and structures of cultural heritage significance listed above, plus:

- All activities to post-1970 essential operational infrastructure. where this does not harm features of cultural heritage significance.
- All painting and repainting.
- All maintenance and repair works.
- All internal and external works within the existing footprint of the buildings or structures that does not involve subsurface disturbance.

- Demolition to the surface of the existing ground level (to grade).

ZONE 2

All the permit exemptions for Zone 1, plus:

- All activities required for the continuation of existing agricultural practices being irrigation, cultivation, cropping, grazing and animal husbandry and provided there is no modification of existing paddock layout or impact on carriers and sub-carriers, sluice gates or other significant features. This permit exemption does not cover the construction of new buildings.
- Activities required for the suppression of pests and vermin that does not impact significant above ground or sub-surface fabric.

Theme

4. Transforming and managing the land 6. Building towns cities and the garden state

Construction dates 1892,

Heritage Act Categories Registered place, Registered archaeological place,

Other Names WERRIBEE SEWAGE FARM, WESTERN TREATMENT PLANT, METROPOLITAN SEWAGE FARM, MMBW FARM,

Hermes Number 22732

Property Number

History

Management of human waste in Melbourne prior to 1897

During the early decades of its settlement, Melbourne dealt with the disposal of human waste in much the same way as other urban centres and it was deposited directly into backyard cesspits or poured down public street drains.^[1] Cesspits were unlined pits dug at the bottom of household gardens to facilitate absorption of the waste into soil. Following the discovery of gold in 1851, these methods were no longer viable for Melbourne's exponentially growing population. Increasingly frequent typhoid outbreaks and severe pollution of the Yarra River spurred the need for a modern solution. Although the establishment of the Yan Yean Water Supply System (VHR H2333) had secured a fresh water supply for Melbourne, disposal of human waste remained an issue.

Melbourne's cesspit system was effectively halted by the *Public Health Amendment Act 1876*, which allowed local health boards to forcibly close and prohibit the construction of backyard cesspits. Some municipalities introduced the night pan collection system, in which licensed personnel (nightmen) transported household waste via horse-drawn cart to the outer edges of Melbourne. However, by the 1880s this system could not keep up with the amount of waste generated by Australia's largest city. Recurring typhoid outbreaks and high infant mortality rates spurred the appointment of a Royal Sanitation Commission in 1888, tasked with finding a solution to Melbourne's public health crisis.

Establishment and role of the Melbourne and Metropolitan Board of Works (MMBW)

Between 1888 and 1889, the Royal Commission consulted with local and interstate engineers on the options available for dealing with Melbourne's sewage crisis. The Commission also engaged the eminent British civil engineer James Mansergh to undertake a feasibility study for a new underground sewerage system.^[2] While awaiting the delivery of Mansergh's report, the Commission and municipal councils commenced discussions on the formation of a central authority for managing both water and sewerage – a metropolitan board of works.

A copy of the proposed Melbourne and Metropolitan Board of Works Bill was presented to Mansergh during his visit to Melbourne, which he considered in his final recommendations to the Commission. Following the delivery of Mansergh's final report in September 1890, the Bill was submitted to the Victorian Parliament and the *Melbourne and Metropolitan Board of Works Act 1890* subsequently passed. The Act established Melbourne's first central authority for water and sewerage, the Melbourne and Metropolitan Board of Works (MMBW) and laid out the terms of its operation. Under the Act, the MMBW was granted full authority of Melbourne's water supplies (the Yan Yean and Watts catchments) and proposed sewerage system. Among its many statutory responsibilities was the establishment of sewage farms in Victoria.^[3]

Construction of the Melbourne sewerage system

Mansergh's report recommended building pumping stations at both South Yarra and Spotswood and establishing treatment farms at Mordialloc and Werribee. The newly appointed MMBW Engineer in Chief William Thwaites advocated strongly for the adoption of a scheme that comprised a single pumping station at Spotswood and a single sewage farm at Werribee. In November 1891 the MMBW formally adopted Thwaites's preferred scheme. The proposed scheme was a massive integrated system that would take sewage from individual premises in metropolitan Melbourne to the Sewerage Farm at Werribee, where it would be treated before being discharged into Port Phillip Bay. It consisted of connections to water closets in homes and businesses, a network of underground pipes which delivered sewage by gravity to a steam-powered Sewerage Pumping Station at Spotswood (VHR H1555), a rising main from Spotswood to Brooklyn, the Main Outfall Sewer (VHR H1932) which ran from Brooklyn to Werribee and the sewage farm at Werribee. Works began with a highly detailed survey of the Melbourne metropolitan area to determine ground levels across the region. Plans were also needed to accurately record the use of each property in Melbourne in order to predict the demands on the sewage system. The survey itself was a major technical achievement for the period and continues to provide a valuable archival resource.

Construction of the Melbourne centralised sewerage system began with the sewage farm at Werribee in May 1892 and worked back towards Melbourne to ensure that the entire system was operational prior to connection to individual properties. In August 1897 the first properties, located in Port Melbourne, were connected to the system. At a ceremony on 5 February 1898 the Governor of Victoria lifted a sluice allowing the first sewage from central Melbourne to flow to Werribee. The Governor and his party then travelled to Werribee to witness its

arrival. Flushing water closets represented an enormous improvement in the everyday standard of living for many Melburnians. The construction of the system was all the more remarkable because it was achieved during the Depression of the 1890s. Local and international finance was crucial to funding works and the project supported many local contractors and kept hundreds of men employed.^[4]

Establishment of the sewage farm at Werribee and the town of Cocoroc

The establishment of a sewage farm at Werribee was Mansergh's key recommendation in his report to the Royal Commission. Mansergh argued that a farm was the most utilitarian means of processing human waste, as waste could be used to irrigate crops for livestock grazing. This method, known as land filtration, was already being utilised in some areas of England. According to Mansergh, the soil at Werribee ('a loamy chocolate earth') would respond well to the treatment of sewage and yield plentiful crops. A contour survey of the proposed sewage farm was a priority soon after the establishment of the MMBW.^[5] Although Melbourne was in the midst of an economic depression, construction of the Sewage Farm and metropolitan sewerage network commenced in 1892.^[6]

The Sewage Farm, soon after renamed the *Metropolitan Farm*, was established on 8,847 acres (3,580 hectares) of land the MMBW had purchased from the prominent Chirnside family in 1891. The Farm was divided into zones for irrigation, livestock grazing, tree plantations, roads, township sites and MMBW reserves. The Metropolitan Farm commenced operation quickly. Between 1892 and 1894, the town of Cocoroc was established to accommodate farm employees and their families. Agricultural activities began by 1893, and initially included tenant farmers. From the point of its surveying and construction to its operation, the Metropolitan Farm provided a large source of employment during the 1890s.^[7]

Expansion and development of the Metropolitan Farm

Throughout the first half of the twentieth century the MMBW progressively expanded the Metropolitan Farm beyond the 8,847 acres (3,580 hectares) initially purchased in 1891. In 1912, an additional 305 acres (123 hectares) was purchased along Port Phillip Bay and in 1913 an additional 252 acres (101 hectares) was purchased along the western boundary. In 1914, 811 acres (328 hectares) was purchased along the northern boundary. In the 1920s, large land purchases were added, including areas west of Little River. Despite the construction of a second sewage treatment facility at Mordialloc in 1940, there were still substantial demands placed on the Metropolitan Farm by Melbourne's growing post-war population. A second pumping station was erected at Murtcaim in 1948-49. Other post-war modernisation included the lining of carriers and channels with concrete. By the 1970s the Number 1 Pumping Station had been replaced. Large parts of the Main Outfall Sewer were replaced by the Western Trunk Sewer in the 1980s.

Developments in sewage treatment at the Metropolitan Farm

From the establishment of the Farm until the 1920s, sewage was treated through land filtration. Much of the site was configured into half-mile (0.8km) blocks, divided by access roads in a grid formation. Each half-mile block was then split into four 20-acre (8 hectare) paddocks, which were further divided into 10 by 20 chain (200 by 400 metre) blocks by a series of carriers and drains. Carriers transported sewage to the graded blocks of flat land which were then flooded. The paddocks were individually graded to slope in opposite directions, allowing gravity to distribute sewage evenly over the land. Sewage either evaporated or was slowly filtered through the land. Grass growing from the enriched soil provided feed for livestock. A system of drains moved filtered effluent into Port Phillip Bay.

Land filtration was initially the only method of treatment for sewage at the Werribee Farm until grass filtration was

introduced in 1926. Lagoon treatment was trialled in the 1930s in a series of large constructed ponds along the Port Phillip Bay foreshore, but the method received complaints from the Department of Health. A combination of land and grass filtration was used until the 1950s when an improved form of lagoon treatment began to predominate. Much of the original 1890s 10 by 20 chain paddock configuration was re-worked in the 1960s. By the 1970s the Metropolitan Farm utilised over 200 lagoons across 1500 hectares. Irrigation is still central to the Western Treatment Plant's operation though now uses recycled water, rather than sewage. Much of the irrigation system utilises the pre-existing carrier and channel system.

Agriculture at the Metropolitan Farm

In the early 1890s, while the Metropolitan Farm was being established, the MMBW leased areas to tenant farmers. The MMBW established its own agricultural operations soon after. Agriculture, particularly the grazing of sheep and cattle, was integral to the place's sewage treatment methods. The land filtration method produced rich irrigated land for livestock. Intensive farming of the land was vital to the cyclic operation of the Farm – land filtration being most effective if grass was kept short. Farming operations also helped the MMBW produce profits from a major landholding. By 1894, 70,000 trees had been planted and further windbreaks of pines, sugar gums and blue gums sourced from the MMBW's Yan Yean nursery were planted in 1897.^[8] Sheep grazing began in 1899 and the Farm supported 41,000 sheep by 1909. By 1910 substantial cattle herds were established. Cropping also proved successful, with the Farm's maize receiving particular commendation. By the 1920s the Farm became known for its fine stud cattle which were frequently awarded at agricultural shows. The Bull Ranch was established in 1928 to accommodate the stud breeding programs. Cattle numbers reached 16,000 by 1933. The Farm played an important role in food production during World War II. Agricultural operations continued to expand and diversify in the second half of the twentieth century. They continue to this day under a variety of leasehold arrangements.

Living and working at the Metropolitan Farm

People began living at the Metropolitan Farm soon after the land was purchased by the MMBW. Townships were designed from the early 1890s to house the Farm's staff and their families onsite. In 1893, the MMBW relocated a 150,000 gallon Water Tank (VHR H1416) from East Melbourne to a new township site to provide potable water. Plans for the new township from 1894 show the layout of the town that comprised 72 allotments. The school at Cocoroc as it became known opened in 1895. Early development of the township included weatherboard cottages, agricultural buildings, gardens and recreational facilities.

The population at the Farm increased gradually through the first decades of the twentieth century. By 1915, 171 men were employed on the Farm, mostly as labourers responsible for farming operations and building and maintaining drains. Watermen operated sluice gates and controlled the flow of water over paddocks. Stockmen employed to drive livestock between paddocks were also a large proportion of the Farm's employees. In 1939 it was reported that the Farm had a resident population of 439, plus three schools and a post office. While community life was centred around Cocoroc there were other settlements further towards Port Philip Bay at South Cocoroc and further west at Murtaim. Managers tended to live in separate residences along Metropolitan Farm Road or elsewhere on the Farm. The population of the Farm reached its height in the 1950s.

Although the MMBW had established townships before to attract and provide for workers on specific projects, these townships tended to disband once the project was complete.^[9] Cocoroc, in contrast, was a large and permanent MMBW 'government town'. Community life focussed around recreational facilities which included a swimming pool, community hall and football field. The community at the Metropolitan Farm fielded several sporting teams. Many families lived and worked at the Farm for several generations. From the 1960s, as

mechanisation of the Farm's processes and car ownership increased, the resident population of the Farm decreased. Most of the houses in Cocoroc and in other areas of the Farm were demolished in the 1970s.

Key references used to prepare this assessment

Biosis Research, *Western Treatment Plant, Werribee: Significance Assessment*, 2010.

Dingle, T., 'The life and times of the Chadwickian solution', in Troy, P. (ed.), *Troubled Waters: Confronting the Water Crisis in Australia's Cities*, ANU Press, 2008.

Dingle, T. & Rasmussen, C., *Vital connections: Melbourne and its Board of Works 1891-1991*, McPhee Gribble, 1991.

Engineering Heritage Victoria, *Nomination for the Engineering Heritage Australia Heritage Recognition Program: Melbourne Sewerage System, Nineteenth Century Scheme*, 2014.

Laurent, R., *Werribee Farm: growing up at Melbourne Water's Western Treatment Plant, back in the 1950s*, 2018.

Lovell Chen Architects & Heritage Consultants, 'Western Treatment Plant Conservation Management Plan', 2008.

Miller, P., 'The Sewers of Melbourne: Planning and Building the System', *Historic Environment*, volume 8 issues 3&4, 1991.

Miller, P., 'Melbourne's main outfall sewer: an engineering achievement of the 1890s', *Australian Journal of Multi-disciplinary Engineering*, v. 3, issue 1, 2015.

Minchinton, B. & Hayes, S., 'Dating Melbourne's cesspits: digging through the archives', *Provenance: The Journal of Public Record Office Victoria*, issue 16, 2018.

Penrose, H., *Werribee Harm: a history 1892-2000*, Melbourne Water, 2001

'The sanitary condition of Melbourne: Mr. Mansergh's report on sewage disposal', *The Age*, 24 September 1890.

[1] T. Dingle, 'The life and times of the Chadwickian solution', in P. Troy (ed.) *Troubled Waters: Confronting the Water Crisis in Australia's Cities*, ANU Press, 2008, p. 13. [2] Lovell Chen Architects & Heritage Consultants, 'Western Treatment Plant Conservation Management Plan', 2008, p. 9. [3] *Melbourne and Metropolitan Board of Works Act 1890*, s.79. [4] T. Dingle & C. Rasmussen, *Vital connections: Melbourne and its Board of Works 1891-1991*, McPhee Gribble, 1991, p. 55; Dingle & Rasmussen, p. 71. [5] Dingle & Rasmussen, p. 53. [6] Lovell Chen Architects & Heritage Consultants, p. 10. [7] H. Penrose, *Werribee Harm: a history 1892-2000*, Melbourne Water, 2001, p. 10. [8] Penrose, p. 2. [9] Dingle & Rasmussen, p. 221.

Sanitation in 19thC Melbourne

From the late 1840s until 1866, human 'manure' was simply dumped on an allotment on the corner of Mount Alexander and City Roads. Cesspits proliferated across the suburbs, and were subject to leakages and overflowing. Drainage outflows containing sewage frequently ended up in the Yarra. The problem became increasingly pressing against the background of Melbourne's steadily growing population, which rose from 126,000 in 1861 to half a million by 1892.

The hygienic threat was far more serious than the aesthetic one. Poor sanitation cursed Melbourne with excessively high rates of infectious diseases, which only increased as the city grew and population densities became higher. When compared to other cities of similar size and development, this was an anomaly.

Graeme Davison has commented that "A Melbournian in the 1880s was much more likely to die of typhoid than was a British town dweller. In the period 1885-89 the death rate per 10,000 people due to typhoid was 8.62 compared with 6.67 in the period 1880-84. In London it was only 1.7 per 10,000 people in 1886, and for 27 larger British towns the rate averaged only 2.8."

The Mansergh Report

A leading advocate for reform from the 1860s onwards was Melbourne Town Clerk, Edmund Fitzgibbon. In seeking solutions to the city's problems, Fitzgibbon drew heavily on the experience of his native London, which had a large Metropolitan Board of Works composed of municipal representatives.[1]

In 1888 at the instigation of the municipal councils, a Royal Sanitary Commission was called to create a new board empowered to create and operate a new sewage system for the city. As well as appointing Gresswell, the Commission invited eminent British civil engineer James Mansergh to conduct a feasibility study tabling options for a comprehensive new, underground city sewage system. The Mansergh Report was submitted in August 1890.[2]

In the report Mansergh described the three possible methods of sewage disposal.

1st. Discharge of the sewage in its natural untreated condition into the sea or a large tidal river.

2nd. The removal of the suspended solids and a part of the dissolved impurities in the process of precipitation by means of chemical re-agents; the discharge of the clarified liquid into the natural watercourses and the disposal of the precipitate either usefully or otherwise upon land.

3rd. Passing sewage over the land for the irrigation of growing crops and the filtration of the liquid through the subsoil.[3]

Eight options were presented for the new sewage system, employing variously the three methods. The Yarra clearly lacked the necessary tidal movements for effective raw sewage disposal. The nearest feasible outlet to the open ocean at Cape Schank was prohibitively expensive, while a nearer alternative outlet to Western Port Bay at Quail Island would have caused pollution across a large area. Chemical treatment was rejected because of its high annual operating costs, which would have increased over time. The arrangement Mansergh favoured most involved channelling water borne sewage to land filtration farms at Werribee and Mordialloc with the assistance of two pumping stations. Stormwater drainage was to be managed independently of the sewerage network. [4]

Eventually, a modified version of Mansergh's recommended option was approved, with all the sewage being sent to a single farm at Werribee, via a single pumping station at Spotswood.

Sewerage Processing Methods

The work of separation and deposition is effected in open tanks of brickwork, or concrete, which require to have a capacity - under varying circumstances - ranging between half and the whole of one day's normal volume of sewage.

By the late nineteenth century, three basic methods had been developed for disposing of town sewage on a large scale. The most unsophisticated of these simply involved releasing the waste into the sea or a tidal river in a completely unprocessed form.

A second method for disposing of sewage was chemical treatment. This involved removing suspended solids from water borne sewage by adding chemical agents such as lime, sulphate of ammonia, sulphate and other chemicals. The effluent could then be released into natural waterways with much less impact than raw sewage. The deposited solids were collected and after the removal of water content were typically used as agricultural manure.

A third method of sewage disposal was land filtration. This involved channelling water born raw sewage onto a system of irrigated pastures which screened solids from the liquid as it passed through the soil.

Additional processing methods have been developed in the twentieth century. The two systems which have been used in Melbourne's sewage treatment system are grass filtration and lagoon treatment.

With grass filtration it is necessary to initially screen the sewage to remove larger solids. This is typically done in shallow settling basins. Grass filtration involves the continual trickling of sedimented waste water over graded bays containing a dense sward of fine stemmed grass, Italian Ryegrass (*Lolium multiflorum*).

Modern lagoon processing can deal with raw sewage, though earlier lagoon systems also required the removal of solids.

Wastewater is treated by prolonged passage through a series of connected ponds which contain high concentrations of naturally occurring bacteria.

MMBW

Having selected the form the new sewer would take, the Commission's next step was to create a body to implement the proposal. *The Melbourne and Metropolitan Board of Works Act* was passed in 1890, with the first meeting of the new board held on 18 March 1891.[5]

The MMBW Board consisted of 39 representatives from each of Melbourne's municipalities, with an additional position of chairman. The representatives were chosen by local councillors, with Edmund Fitzgibbon elected as first chairman. An Engineer-in-Chief was also appointed, William Thwaites, who subsequently designed and oversaw the construction of the new system. The Board was given full responsibility for the construction and maintenance of the sewers and treatment facilities, and was empowered to levy rates. From 1 July 1891, the Board also took over provision of Melbourne's water supply.[6] The Board's motto was 'Publica Salus Mea Merces' (Public Health is My Reward).

The onset of the 1890s depression disrupted the Board's initial plans to raise loans in London to finance the works. After an initial float in London in 1892, a series of loans were floated in Melbourne which successfully raised the necessary funds for works to proceed, though the financial position of the Board remained precarious. Legislation confirming the regime of rates and permitting the Board to charge the householder for the cost of installing sanitary appliances was not passed until 1897.[7]

The Werribee Site

In the nineteenth century, the Chirnside family played a leading role in the development of the area, a role derived from substantial pastoral wealth. Thomas and his brother Andrew gradually purchased additional land holdings, coming to own 81,068 acres in Werribee and Point Cook by 1880, their properties extending west as far as Little River.[8] They also owned various other properties of a similar magnitude across western Victoria. At Werribee they grazed large numbers of sheep and constructed various facilities associated with a large sheep station. In 1872 they built their manorial residence, Werribee Park, on the eastern side of the Werribee River, where the family lived in grandeur.

The Chirnside estate had reached its zenith by the time of the deaths of Thomas Chirnside in 1887 and Andrew Chirnside in 1890. Their heirs found the estate increasingly difficult to maintain financially, and began selling portions of land. In 1891 the Melbourne and Metropolitan Board of Works purchased 8,847 acres of land from the family for a new sewage treatment farm, paying £157,772 in debentures.[9] The land was situated west of the Werribee River. At £17,10s an acre, the land was approximately one quarter the cost of

alternative sites at Mordialloc.[10] The relative cheapness of land at Werribee was a key reason why Melbourne's sewage treatment facility was originally located at one site instead of in two farms on opposite sides of Port Phillip Bay as envisaged by Mansergh.

Construction of System

Work on the construction of the new sewerage system commenced with the turning of the first sod for the main sewer outfall at Werribee by the Victorian Governor, the Earl of Hopetoun on 19 May, 1892.

The system consisted of eight parts. These were (1) house connections, (2) reticulation sewers, (3) branch sewers, (4) main sewers, (5) Spotswood Pumping Station, (6) Rising Main, (7) Main Outfall Sewer and (8) Werribee Farm.[11] A massive project was begun to survey each of the city's suburbs in detail, collecting enough information about land elevations and building locations to enable workers to connect every house. Full scale construction began in late 1892 at the lower end of the network in order for the system to be fully operational by the time suburbs were ready to be connected. Land was also acquired in Spotswood, where the main pumping station was to be located.

At Werribee, the 8,847 acres purchased from the Chirnsides was subdivided for specific uses. 7,227 acres were for irrigation, 915 for grazing, 357 acres for tree plantations, 230 acres for roads, 102 acres for township sites and 16 acres for Board of Works reserves.[12] Provision was made for town sites because the operation of the sewerage system and other farming activities required an extensive labour force, who needed the convenience of on site accommodation. Work began on grading the allotments and laying a grid of water pipes, roads, flumes and sewer pipes. Irrigation basins were laid out in 40 metre by 40 metre squares in a configuration known as square check or terrace irrigation. A small pumping station was constructed on the eastern side of Metropolitan Farm Road immediately south of its intersection with Boundary Road.

Agricultural activities commenced at the farm in the early 1890s. Because large areas of the site were not immediately required, it was decided to lease out allotments to tenant farmers. 4,850 tons of hay were produced in 1894. The establishment of a farming operation was a by-product of its primary role to process Melbourne's sewage as cheaply as possible. Land filtration created lush pastures which in turn required grazing to keep in good condition. Furthermore, the promotion of agricultural activities was a way of maximising the financial returns of the Board's assets. It was initially planned to use the irrigated allotments for dairy farming, market gardening, and fodder crops.

The old Melbourne city water tank at Eastern Hill was dismantled and then relocated to one of the several planned township sites on the farm in 1893 at a cost of £1,128. It was used as a back-up water source in case the main water supply failed. An 1894 plan shows the layout of this town, which was in the north-west section of the property. Later known as Cocoroc, it featured a grid of 72 allotments, on which six cottages are shown. North

of these there is a large landscaped park with a geometric network of paths, with the old Eastern Hill tank located on the south side of this. The town reserve remained relatively undeveloped for some decades, with a gradual accumulation of houses and recreational facilities on the south side of the park until the late 1940s.

On 19 May 1897, the All England Eleven Hotel at Port Melbourne became the first Melbourne property to be connected to the new system.[13] Central Melbourne was linked on 5 February 1898, with the Governor Lord Brassey raising the penstock to start the system flowing at a special ceremony.

Development of the Treatment System

Apart from Melbourne's population growth, the farm's processing capacity required expansion because demand on its processing plant varied according to climatic conditions, causing it to become stressed under certain conditions.

Sewage treatment methods at the Farm had to provide for three conditions, viz. summer conditions in which the sewage is absorbed by the land; winter conditions in which the ability of the land to absorb water is greatly reduced; and wet weather conditions in which the flow is greatly increased as the result of infiltration into the sewer system.[14]

The farm originally processed sewage only using land filtration, which had limited capacity to deal with periods of peak demand. The initial practice of releasing processed effluent into Port Phillip Bay was the subject of some controversy. Shallow tidal ponds where effluent was accumulated and released are thought to have been built along the Cocoroc coast at the southern end of Metropolitan Road. Experiments using a second treatment method, grass filtration, began in 1926. While this method required the construction of new sedimentation tanks and weirs, by 1930 its adoption significantly increased the capacity of the farm to deal with the demands of winter and periods of wet weather.[15] In the mid-1930s, a third method of processing was introduced, lagoon purification.[16] This used natural processes to treat the sewage, with purified effluent eventually released into the bay.

The physical expansion of the farm site began in 1912, when 305 acres of Crown land along the shoreline was acquired in order to establish settling ponds for winter outflows. Sewage outflow in excess of the farm's capacity was passed through these sedimentation lagoons before being released into Port Phillip Bay. An additional 252 acres were purchased along the western boundary in 1913, and a further 811 acres along the northern side the following year.[17] By 1926, further acquisitions along the northern and western boundaries, including 7,709 acres west of Little River, brought the farm up to 21,312 acres in size.

As well as upgrading the sewage treatment facilities at Werribee, the Board opened a second treatment plant at Braeside farm at Mordialloc in October 1940. Initially serving 16,000 people, it had the capacity to expand to service 60,000, and served the growing populations of the southeast suburbs,[18] helping to ease demand on the Werribee facility.

Expansion and Diversification of Agriculture

Sheep grazing began in 1899, when 11,230 sheep were purchased. [19] Meat and wool production became moderately profitable. In 1902, 100 cattle were trialled. The experiment was successful, but substantial herds were not established at the farm until 1910. The farm was soon carrying large numbers of livestock, reflecting the greatly enhanced productivity irrigation brought to the pastures. 3,000 acres of land at Cocoroc, which had carried 6,000 sheep prior to irrigation, supported 41,000 sheep, 800 cattle and 130 horses by 1909.[20] A shearing shed was constructed on the northwest corner of South and Metropolitan Roads in 1903-04, and was extended two years later.

Cattle were soon the most profitable livestock. There was a stud breeding program in the 1920s using Hereford, Shorthorn and Aberdeen Angus studs. A stud shed was built at the southern end of Old Boundary Road in 1927/28. Stockyards were built at the same site and elsewhere on the farm.

Cattle numbers swelled to between 6,000 and 7,000 during the 1910s and 20s, reaching 16,000 by 1933. Crisis erupted that year however, with the discovery on the farm of the larval form of human tapeworm (known as beef measles). The parasite's life cycle involves human and bovine hosts, with transmission to humans occurs via the consumption of meat containing cysts. Public hysteria ensued, and despite appropriate measures by the Board to identify and control the problem, legislation was passed late in 1935 to prohibit the sale of meat from animals grazed on sewage irrigated pastures. Not until 1942 was the ban lifted in the face of wartime beef shortages. Stud breeding was re-established in the late 1940s.

Because of the beef measles crisis, there was a shift in emphasis to sheep farming. By 1938, livestock on the farm consisted of 8,774 cattle, 25,822 sheep and 2,507 horses. A new shearing shed was constructed on the northeast corner of Boundary and Metropolitan Roads in 1937/38 and another along Beach Road at Murtcaim in 1939/40. Elsewhere on the farm, development by 1938 included '80 miles [128 kilometres] of roads, 426 miles [681 kilometres] of fences, 329,000 trees which are added to at the rate of 10,000 per annum

The Townships

A small permanent population developed at the farm. The erection of workmen's cottages had begun as soon as the farm opened, and as the population grew, community facilities were also built. By 1933, houses were concentrated along two parallel north-south roads slightly north of original planned township site next to the Werribee River, and at the Cocoroc township site. Additional houses were scattered through the rest of the site. It was reported six years later that the farm had 'a population of 439 including 240 employees, 3 State Schools, a Post Office, a Church, and a Hall, with 88 residences for employees and offices for the staff.'

The town of Cocoroc developed slowly during this period. An undated plan appears to show development by the early 1940s.[21] There were about twenty houses, with most of the housing allotments still unoccupied. An evolving recreational precinct located on the southern side of the town reserve included a bowling green, tennis courts, sports oval and pavilion. Across the western boundary road a rectangular swimming pool is shown. This was presumably filled in when a new pool and change rooms were constructed to the east of the old water tank in 1942/43.[22] A small group of farm buildings developed east of the sports oval along Metropolitan Road, and included workshops, storage sheds and an administrative office. Along the coastline, there was some development relating to recreational activities. Fishermen's huts were built at Beacon Point and Kirk Point. A jetty had been constructed before the turn of the century and is believed to have been located near the eastern end of what is now Jetty Road. Various timber groynes had been built along the foreshore by 1946 and purified effluent was drained into the bay from at least nine different locations.

With the outbreak of WWII, the Federal government compulsorily acquired a lease on a triangular section of land in the northern corner of the property for use as an aerodrome. Five timber framed hangars were built at the site by the US Army Air Force, along with accommodation for servicemen and other facilities.[23] Use of the site was restored to the MMBW in the early 1950s, with the Board purchasing from the Commonwealth the five hangers and two timber workshops for £4,500.

Site History 1945-2000

In 1948/49 approval was given for a second pumping station to be built at Murtcaim along with inlet channels, gates and screens at an estimated cost of £3,800.

In the 1950 a program was begun to line flumes, irrigation channels and lagoon banks with concrete. In September 1964 a new modern pumping station with much greater capacity was opened at Brooklyn, replacing the original facility at Spotswood. The same year it was decided to build a major new sewage treatment plant at Carrum, which became known as the South Eastern Purification Plant. Melbourne was divided into four zones, the eastern zone serviced by the new facility, while the western, central and northern zones continued to be served by the Metropolitan Farm. This configuration was more in line with Mansergh's original vision, and reduced the pressure on Werribee Farm. By the late 1970s, the original Number 1 Pumping Station along Metropolitan Farm Road had been replaced with a modern new facility located slightly further north.

The number of outlets draining purified effluent into the bay had been reduced to four by 1970. The original Main Outfall Sewer connecting the Spotswood, then Brooklyn Pumping Stations to the Metropolitan Farm was replaced by a new Western Trunk Sewer, with construction works beginning in 1984.

Sheep grazing was briefly discontinued between 1949 and 1950, before being reintroduced in 1955.[24] This and other agricultural activities such as cattle farming continued at the farm through this period up to the present day. There has been a consolidation of associated stockyards, machinery and storage facilities, most notably at the Murtcaim stock centre and another stock centre near the Cocoroc township. Several RAAF army huts were relocated to these sites and were converted for use by staff and for storage.

Historians Tony Dingle and Carolyn Rasmussen have commented on the demise of the township of Cocoroc.

By the first few decades after the Second World War, Cocoroc had grown into a well serviced community and a considerable number of houses in the area immediately southeast of the Werribee River. From the 1960s, the farm's population began to decline.

Widespread car ownership allowed people to commute to work on the Farm each day from Werribee or further field. As the cost of maintaining the township and renovating the aging houses mounted, the Board shut the township down. The village community fell apart. As one worker explained 'us folk owned this place but now you're just here for the eight hours and get off as fast as you can'.

Almost all the houses at Cocoroc were demolished in the late 1970s, as were most others on the farm.

A large modern administrative and technical centre was constructed at the northern end of the site off Metropolitan Road near the Princes Highway entrance in 1977. Designed by architect J Dale Fisher, the complex contained offices, laboratories, workshops and storage areas, set in landscaped surrounds.

By the late 1990s the farm was known as the Western Treatment Plant. After a century of operation, it was servicing over 1.6 million people in Melbourne's central, northern and western suburbs, processing 500 million litres daily. This represented around 52% of Melbourne's sewage output.[25] Approximately 45% of the raw sewage was processed using modern lagoons, with the remainder treated using land and grass filtration and old lagoons.

[1] Graeme Davison, David Dunstan and Chris McConville (editors), *The Outcasts of Melbourne*, p. 164.

[2] F L King, *Melbourne and Metropolitan Board of Works*, p. 16.

[3] J Mansergh, *Report on the Sewerage and Sewage Disposal of the Proposed Melbourne Metropolitan District*, p. 31.

[4] J Mansergh, *Report on the Sewerage and Sewage Disposal of the Proposed Melbourne Metropolitan District*, pp. 85, 101.

- [5] F L King, *Melbourne and Metropolitan Board of Works*, p. 6.
- [6] M Lewis, *Melbourne: The City's History and Development*, p. 67.
- [7] T Dingle and C Rasmussen, *Vital Connections*, p. 78.
- [8] Robert Sands Pty Ltd, 'Buildings on the Werribee Field Development Site at the Melbourne Metropolitan Farm Werribee, Significance Analysis', p. 2.
- [10] K N James (editor), *Werribee: The First One Hundred Years*, p. 63.
- [11] T Dingle and C Rasmussen, *Vital Connections*, pp. 69-70.
- [12] K N James (editor), *Werribee: The First One Hundred Years*, p. 4.
- [13] Quoted in *Living City*, (Vol 24) Spring/Summer 1979, p. 11.
- [14] K N James (editor), *Werribee: The First One Hundred Years*, p. 68.
- [15] T Dingle and C Rasmussen, *Vital Connections*, p. 162.
- [16] K N James (editor), *Werribee: The First One Hundred Years*, p. 69.
- [17] K N James (editor), *Werribee: The First One Hundred Years*, p. 64.
- [18] T Dingle and C Rasmussen, *Vital Connections*, p. 200.
- [19] K N James (editor), *Werribee: The First One Hundred Years*, p. 69.
- [20] K N James (editor), *Werribee: The First One Hundred Years*, p. 65.
- [21] Drawing 5503/01/019, Melbourne Water Drawing Collection.
- [22] MMBW, 'Notice Papers, Minutes, Returns, Reports and Memoranda', 1942/43, p. 310
- [23] Robert Sands Pty Ltd, 'Buildings on the Werribee Field Development Site at the Melbourne Metropolitan Farm Werribee, Significance Analysis', p. 6.
- [24] K N James (editor), *Werribee: The First One Hundred Years*, p. 69.
- [25] Melbourne Water, *Western Treatment Plant* (booklet), p. 6.

Extent of Registration

NOTICE OF REGISTRATION

As Executive Director for the purpose of the Heritage Act 2017, I give notice under section 53 that the Victorian Heritage Register is amended by including a place in the Heritage Register:

Number: H2400

Category: Registered Place, Registered Archaeological Place

Place: Former Metropolitan Farm

Location: Farm Road, Cocoroc

Municipality: Wyndham City Council

All of the place shown hatched on Diagram 2400 encompassing part of Crown Allotment 3 Section 11 Parish of Cocoroc; Lots 1, 2, 3, 4, 5 on Title Plan 966485; Lots 1, 2, 3, 4, 5, 6, 7, 10, 12, 14, 15, 16, 17, 18, 19, 20, 21, 22, 24, and 26 on Title Plan 857854; Lot 1 and 2 on Title Plan 393775; Lot 1 on Title Plan 747468; Lot 1 on Title Plan 835882; part of Lot 1 on Plan of Subdivision 809285; part of Lot C on Plan of Subdivision 542648; and part of the road reserves of Farm Road and Old Boundary Road.

21 October 2021

STEVEN AVERY

Executive Director

This place/object may be included in the Victorian Heritage Register pursuant to the Heritage Act 2017. Check the Victorian Heritage Database, selecting 'Heritage Victoria' as the place source.

For further details about Heritage Overlay places, contact the relevant local council or go to Planning Schemes Online <http://planningschemes.dpcd.vic.gov.au/>